



 **Gripper**

pneumatic

SOMMER
automatic

Parallel Grippers

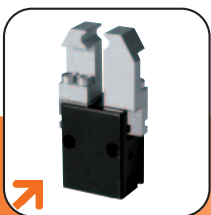
with T-slot Guides

Order no.	Stroke per jaw [mm]	Gripping force [N] max.	Page
Product Information GP400-B-Serie			16
GP403N, NC, NO-B	3	90	20
GP404N, NC, NO-B	4	155	22
GP404S, SC, SO-B	2	350	22
GP406N, NC, NO-B	6	290	24
GP406S, SC, SO-B	3	650	24
GP408N, NC, NO-B	8	560	26
GP408S, SC, SO-B	4	1.260	26
GP410N, NC, NO-B	10	780	34
GP410S, SC, SO-B	5	1.760	34
GP412N, NC, NO-B	12	1.400	36
GP412S, SC, SO-B	6	3.000	36
GP416N, NC, NO-B	16	2.050	38
GP416S, SC, SO-B	8	4.550	38
GP420N, NC, NO-B	20	3.200	40
GP420S, SC, SO-B	10	7.000	40
GP430N, NC, NO-B	30	6.900	42
GP430S, SC, SO-B	15	15.000	42



with Extended T-slot Guides

Order no.	Stroke per jaw [mm]	Gripping force [N] max.	Page
Product Information MGP800-Serie			42
MGP801N	1	8	46
MGP802N	2	19	48
MGP803N	3	42	50
MGP803NC	3	60	50
MGP804N	4	66	52
MGP804NC	4	95	52
MGP806N	6	119	54
MGP806NC	6	132	54





with Roller Guides

Order no.	Stroke per jaw [mm]	Gripping force [N] max.	Page
Product Information GP12-B bis GP100-B			58
GP12-B	3	8,4	62
GP19-B	4	36	64
GP30-B	5	94	66
GP45-B	5	118	68
GP75-B	10	220	70
GP100-B	13	450	72



with Flat Guides

Order no.	Stroke per jaw [mm]	Gripping force [N] max.	Page
Product Information SGP-Serie			76
SGP14N	2	39	80
SGP14NC	2	39	80
SGP25N	4	170	82
SGP25NC	4	170	82
SGP35N	6	305	84
SGP35NC	6	305	84



with Bearing Guides

Order no.	Stroke per jaw [mm]	Gripping force [N] max.	Page
Product Information zu GP103 bis GP115			88
GP103	3	41	92
GP104	4	104	94
GP105	5	230	96
GP110	10	430	98
GP115	15	1.000	100



Parallel Grippers

with Extended T-slot Guides

Order no.	Stroke per jaw [mm]	Gripping force [N] max.	Page
Product Information GP600-Serie			104
GP604N, NC, NO	4	150	108
GP604S, SC, SO	2	340	108
GP608N, NC, NO	8	520	110
GP608S, SC, SO	4	1.180	110
GP612N, NC, NO	12	1.300	112
GP612S, SC, SO	6	2.950	112



with Square Guides

Order no.	Stroke per jaw [mm]	Gripping force [N] max.	Page
Product Information GP224 bis GP280S-99			116
GP224-B	12	170	120
GP224-B-99	12	160	120
GP224S-B	6	335	120
GP224S-B-99	6	335	120
GP240-B	20	510	122
GP240-B-99	20	435	122
GP240S-B	8	1.290	122
GP240S-B-99	8	1.105	122
GP260	30	800	124
GP260-99	30	665	124
GP260S	10	2.480	124
GP260S-99	10	2.120	124
GP280	40	1.690	126
GP280-99	40	1.390	126
GP280S	15	4.500	126
GP280S-99	15	3.690	126





with Sealed Round Guides

Order no.	Stroke per jaw [mm]	Gripping force [N] max.	Page
Product Information GP1200-Serie			130
GP1224N, NC, NO	12	155	134
GP1240N, NC, NO	20	465	136
GP1260N, NC, NO	30	780	138
GP1280N, NC, NO	40	1.550	140



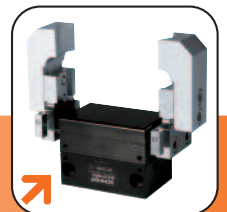
with Sealed 4-Sided Guides

Order no.	Stroke per jaw [mm]	Gripping force [N] max.	Page
Product Information GP1800-B-Serie			144
GP1803N, NC, NO-B	3	90	148
GP1804N, NC, NO-B	4	155	150
GP1806N, NC, NO-B	6	290	152
GP1808N, NC, NO-B	8	560	154
GP1810N, NC, NO-B	10	780	156
GP1812N, NC, NO-B	12	1400	158
GP1816N, NC, NO-B	16	2050	160
GP1820N, NC, NO-B	20	3200	162
GP1830N, NC, NO-B	30	6900	164



with Sealed and Rust Resistant Guides

Order no.	Stroke per jaw [mm]	Gripping force [N] max.	Page
Product Information GP206 und GP210			168
GP206N	3	155	172
GP210N	5	465	174



Long Stroke **Grippers**

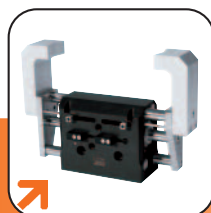
with T-slot Guides

Order no.	Stroke per jaw [mm]	Gripping force [N] max.	Page
Product Information GH6000-Serie			178
GH6040-B	40	145	182
GH6060-B	60	145	184
GH6080-B	80	145	186
GH6140-B	40	455	188
GH6160-B	60	455	190
GH6180-B	80	455	192
GH6240-B	40	1.275	194
GH6260-B	60	1.275	196
GH6280-B	80	1.275	198
GH62100-B	100	1.275	200
GH62150-B	150	1.275	202
GH6460-B	60	3.250	204
GH64100-B	100	3.250	206
GH64150-B	150	3.250	208
GH64200-B	200	3.250	210
GHK6140			212
GHK6160			212
GHK6180			212
GHK6240			212
GHK6260			212
GHK6280			212
GHK62100			212
GHK62150			212
GHK6460			212
GHK64100			212
GHK64150			212
GHK64200			212



with Round Guides

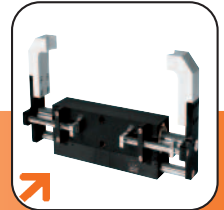
Order no.	Stroke per jaw [mm]	Gripping force [N] max.	Page
Product Information GH5000-Serie			216
GH5230	30	1.050	220
GH5260	60	1.050	222





with Round Guides

Order no.	Stroke per jaw [mm]	Gripping force [N] max.	Page
Product Information GH90 bis GH200			226
GH90	45	140	230
GH100	50	800	232
GH150	75	800	234
GH200	100	800	236



with Linear Guides

Order no.	Stroke per jaw [mm]	Gripping force [N] max.	Page
Product Information GH7600-Serie			240
GH7665	65	8.500	244
GH76100	100	8.500	246



Three-Jaw-Grippers

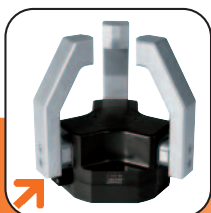
with T-slot Guides

Order no.	Stroke per jaw [mm]	Gripping force [N] max.	Page
Product Information GD300-B-Serie			250
GD303N, NC, NO-B	3	255	254
GD304N, NC, NO-B	4	560	256
GD304S, SC, SO-B	2	1.160	256
GD306N, NC, NO-B	6	800	258
GD306S, SC, SO-B	3	1.700	258
GD308N, NC, NO-B	8	1.125	260
GD308S, SC, SO-B	4	2.440	260
GD310N, NC, NO-B	10	1.800	262
GD310S, SC, SO-B	5	4.000	262
GD312N, NC, NO-B	12	3.250	264
GD312S, SC, SO-B	6	7.000	264
GD316N, NC, NO-B	16	6.800	266
GD316S, SC, SO-B	8	14.100	266
GD320N-B	20	7.100	268
GD320S-B	10	15.800	268
GD330N-B	30	15.200	270



with Sealed 4-sided Guides

Order no.	Stroke per jaw [mm]	Gripping force [N] max.	Page
Product Information GD1700-B-Serie			276
GD1704N, NC, NO-B	4	400	280
GD1706N, NC, NO-B	6	560	282
GD1708N, NC, NO-B	8	950	284
GD1710N, NC, NO-B	10	1.400	286
GD1712N, NC, NO-B	12	2.250	288
GD1716N, NC, NO-B	16	4.700	290
GD1720N-B	20	5.250	292





with T-slot Guides

Order no.	Stroke per jaw [mm]	Gripping force [N] max.	Page
Product Information GD500-Serie			296
GD530	30	1.300	300
GD540	40	2.480	302
GD560	60	2.480	304



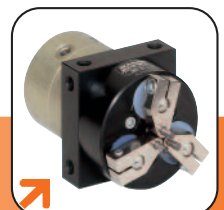
with Sealed and Rust Resistant Guides

Order no.	Stroke per jaw [mm]	Gripping force [N] max.	Page
Product Information GD46 bis GD160			308
GD46N	3	270	312
GD70N	4	1.180	314
GD110N	6	1.700	316
GD110S	3	3.300	316
GD160N	8	2.320	318
GD160S	4	4.580	318



with Long Stroke

Order no.	Stroke per jaw [mm]	Gripping force [N] max.	Page
Product Information GD1-B bis GD50			322
GD1-B	130	0,12	326
GD10	130	1	328
GD50	120	9	330



Angular Grippers

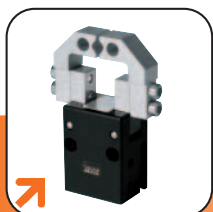
Pivoting Arm Gripper

Order no.	Stroke per jaw [mm]	Gripping force [N] max.	Page
Product Information GK-Serie			334
GK15N	90	70	338
GK15NC	90	100	338
GK20N	90	150	340
GK20NC	90	210	340
GK25N	90	440	342
GK25NC	90	610	342
GK35N	90	950	344
GK35NC	90	1.250	344
GK40N	90	1.400	346
GK40NC	90	1.820	346
GK50N	90	3.500	348
GK50NC	90	4.250	348



Mini-Angular Gripper

Order no.	Stroke per jaw [mm]	Gripping moment [N] max.	Page
Product Information MGW800-Serie			352
MGW801N	37,5	0,03	356
MGW802N	37,5	0,05	358
MGW803N	37,5	0,23	360
MGW803NC	37,5	0,31	360
MGW804N	37,5	0,41	362
MGW804NC	37,5	0,52	362
MGW806N	37,5	1,02	364
MGW806NC	37,5	1,10	364



Angular Gripper

Order no.	Stroke per jaw [mm]	Gripping moment [N] max.	Page
Product Information SGW-Serie			368
SGW14N	23	0,8	372
SGW14NC	23	0,8	372
SGW25N	23	3,5	374
SGW25NC	23	3,5	374
SGW35N	23	10,0	376
SGW35NC	23	10,0	376





Angular Gripper

Order no.	Stroke per jaw [mm]	Gripping moment [N] max.	Page
Product Information GG-Serie			380
GG25N, NC	35	4,1	384
GG32N, NC	35	9,0	386
GG50N, NC	35	45,0	388
GG70N, NC	35	122,0	390
GG100N, NC	35	264,0	392



Angular Gripper

Order no.	Stroke per jaw [mm]	Gripping moment [N] max.	Page
Product Information GG2000-Serie			396
GG2060N	90	29	398



Finger Gripper

Order no.	Stroke per jaw [mm]	Gripping moment [N] max.	Page
Product Information GZ-Serie			402
GZ8-16E	5	0,12	406
GZ8-16D	5	0,15	408
GZ11-18E	4,5	0,48	410
GZ18-23D	3,5	1,10	412
GZ25-35E	4	4,00	414
GZ25-35G	4	5,40	416
GZ25-35D	4	5,40	418
GZ55-65D	4	5,40	420



Mini-Finger-Gripper

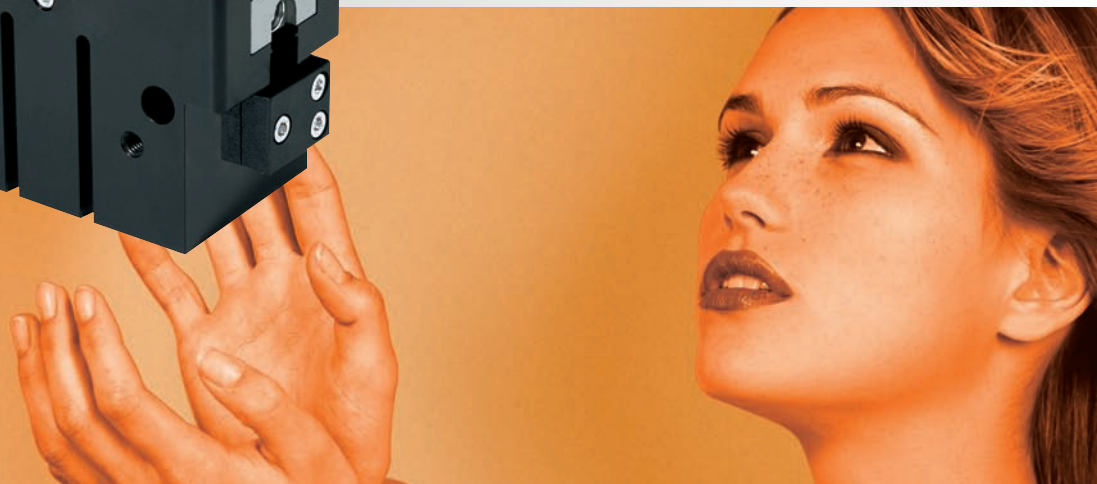
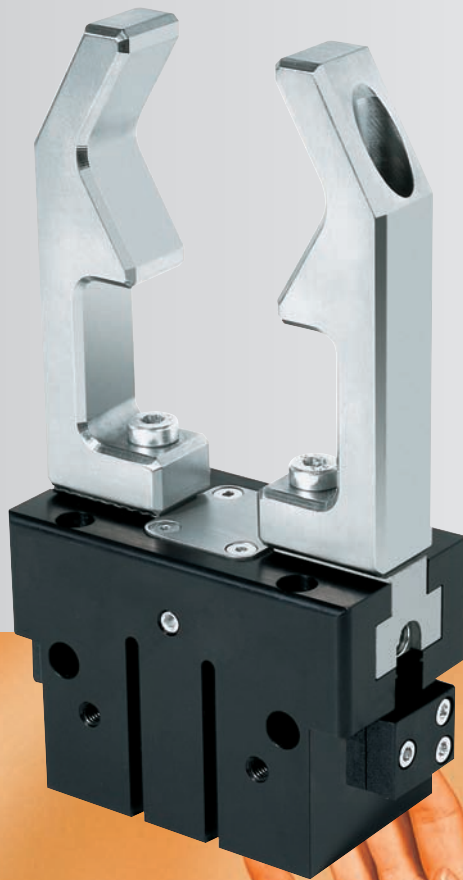
Order no.	Stroke per jaw [mm]	Gripping moment [N] max.	Page
Product Information GM-Serie			424
GM10	3,5	0,12	428
GM16	3,5	0,20	430
GM16D	3,5	0,40	430
GM22D	3,5	0,55	432





Parallel Grippers

pneumatic



GP400-B Series

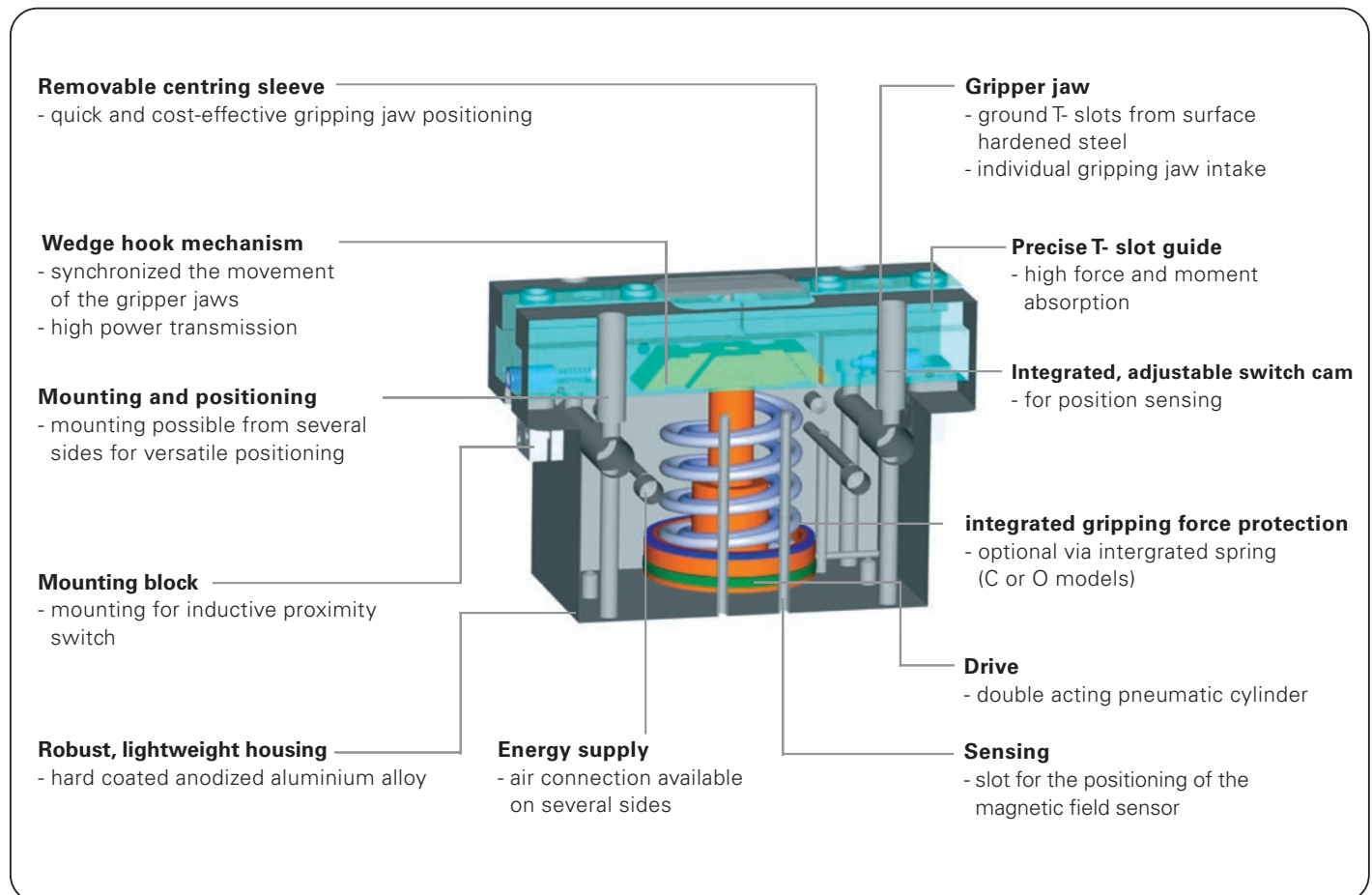
SOMMER
automatic

Parallel Gripper

Features

- Stable, overlapping T-slot guide for finger lengths up to 250 mm jaw length
- Position sensing of the gripper jaw via inductive proximity switch
- Available with mechanical gripping force safety device and different stroke force combinations
- Dust protection for use in dirty environments as accessories available

Functional diagram



Terms

- Gripping force:** arithmetic sum of the individual forces occurring at the jaws
- Closing/opening time:** required time for the gripper jaws to cover the maximum stroke distance
- Repeatability:** at end stops after 50/100 consecutive cycles
- Cycle:** one complete movement of the piston forward and back
- Maintenance:** recommended at 10 mil. cycles (please see the owner's manual for conditions, download from www.sommer-automatic.com)
- long maintenance intervals keep costs down
 - long lifespan



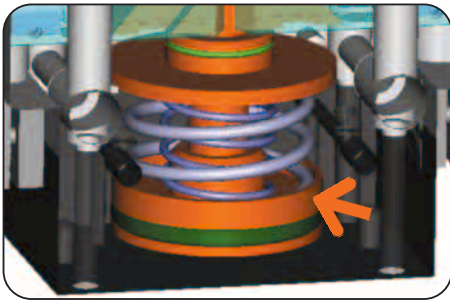
Model guide

- N:** Standard design (long stroke - standard force)
- S:** Heavy-duty design (short stroke - large force)
- C:** For external gripping, self-locking, spring closing
- O:** For internal gripping, self-locking spring opening

Order no.	Stroke per jaw	Gripping force in opening	Gripping force in closing	Self-locking via
GP403N-B	3 mm	85 N	85 N	DSV*
GP403NC-B	3 mm	-	90 N	Spring
GP403NO-B	3 mm	90 N	-	Spring
GP404N-B	4 mm	160 N	160 N	DSV*
GP404NC-B	4 mm	-	155 N	Spring
GP404NO-B	4 mm	155 N	-	Spring
GP404S-B	2 mm	360 N	360 N	DSV*
GP404SC-B	2 mm	-	350 N	Spring
GP404SO-B	2 mm	350 N	-	Spring
GP406N-B	6 mm	280 N	280 N	DSV*
GP406NC-B	6 mm	-	290 N	Spring
GP406NO-B	6 mm	290 N	-	Spring
GP406S-B	3 mm	620 N	620 N	DSV*
GP406SC-B	3 mm	-	650 N	Spring
GP406SO-B	3 mm	650 N	-	Spring
GP408N-B	8 mm	550 N	550 N	DSV*
GP408NC-B	8 mm	-	560 N	Spring
GP408NO-B	8 mm	560 N	-	Spring
GP408S-B	4 mm	1150 N	1150 N	DSV*
GP408SC-B	4 mm	-	1260 N	Spring
GP408SO-B	4 mm	1260 N	-	Spring
GP410N-B	10 mm	735 N	735 N	DSV*
GP410NC-B	10 mm	-	780 N	Spring
GP410NO-B	10 mm	780 N	-	Spring
GP410S-B	5 mm	1630 N	1630 N	DSV*
GP410SC-B	5 mm	-	1760 N	Spring
GP410SO-B	5 mm	1760 N	-	Spring
GP412N-B	12 mm	1165 N	1165 N	DSV*
GP412NC-B	12 mm	-	1400 N	Spring
GP412NO-B	12 mm	1400 N	-	Spring
GP412S-B	6 mm	2590 N	2590 N	DSV*
GP412SC-B	6 mm	-	3000 N	Spring
GP412SO-B	6 mm	3000 N	-	Spring
GP416N-B	16 mm	1915 N	1915 N	DSV*
GP416NC-B	16 mm	-	2050 N	Spring
GP416NO-B	16 mm	2050 N	-	Spring
GP416S-B	8 mm	4260 N	4260 N	DSV*
GP416SC-B	8 mm	-	4550 N	Spring
GP416SO-B	8 mm	4550 N	-	Spring
GP420N-B	20 mm	3085 N	3085 N	DSV*
GP420NC-B	20 mm	-	3200 N	Spring
GP420NO-B	20 mm	3200 N	-	Spring
GP420S-B	10 mm	6865 N	6865 N	DSV*
GP420SC-B	10 mm	-	7000 N	Spring
GP420SO-B	10 mm	7000 N	-	Spring
GP430N-B	30 mm	6670 N	6670 N	DSV*
GP430NC-B	30 mm	-	6900 N	Spring
GP430NO-B	30 mm	6900 N	-	Spring
GP430S-B	15 mm	14850 N	14850 N	DSV*
GP430SC-B	15 mm	-	15000 N	Spring
GP430SO-B	15 mm	15000 N	-	Spring

*DSV = Pressure safety valve (Bst.-Nr. DSV1/8)

Parallel **Gripper**



Drive

N and S Models:

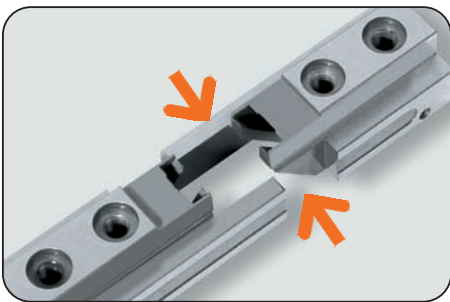
Double acting pneumatic cylinder

- maximum power in both opening and closing
- gripping force up to 15000 N

NC, NO and SC, SO Models:

Double acting pneumatic cylinders with integrated spring as mechanical safety device (in the event of pressure loss)

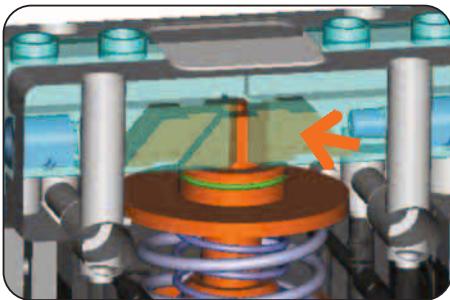
- optimum coordination of drive force and gripping force secured by spring



Guidance

Ground T-slot from surface hardened steel

- T-slot for maximum force and moment resistance
- high precision, due to low play guide
- ground gripper jaws



Power transfer

Wedge hook mechanism with mechanical restricted guides

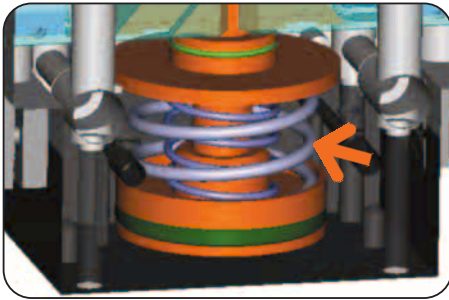
- optimum transmission of power to gripping-force
- self-centering
- synchronized
- high repeatability



Gripper jaw positioning

Individual gripping jaw positioning via centering sleeves

- precise positioning of individual gripping jaws
- quick, cost-effective and therefore economical jaw changing
- space-saving design



Gripping force safety device

N and S Models:

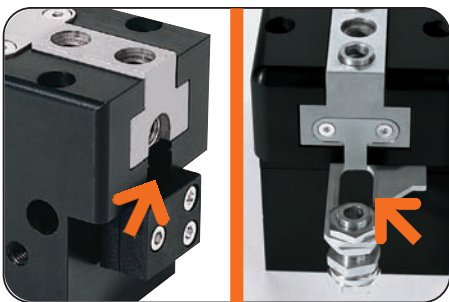
External pressure-retention safety valve

- gripping-force retention through the use of optional pressure retention safety-valve (Part No. DSV1/8).

NC, No and SC, SO Models:

Energy retention through spring mounted in cylinder

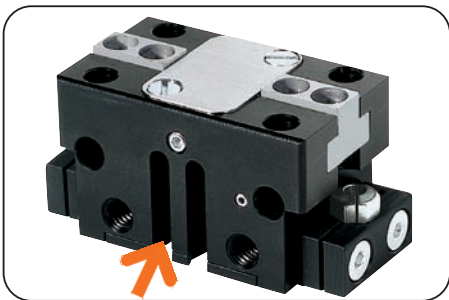
- permanent maintenance of gripping force retention
- compact design



Positioning sensing

via inductive proximity switch

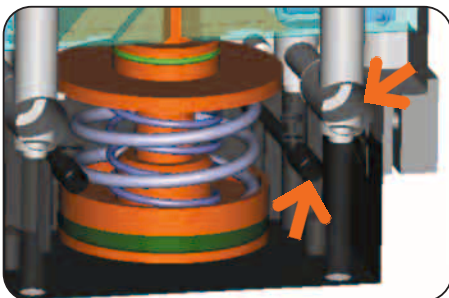
- adjustable via eccentric bush (GP403-B and GP404-B) or adjustable switch cam (GP406-B up to GP430-B)
- direct sensing of the gripper-jaw-position
- alternate sensing KHA for bracket mounting as accessory available



Positioning sensing

via magnetic field sensor

- compact design
- for magnetic field sensor with bracket for C-nut



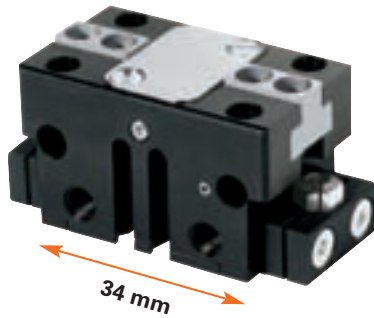
Connections

Energy supply, attachment and positioning possibilities.

Adaptable to multiple mounting configuration

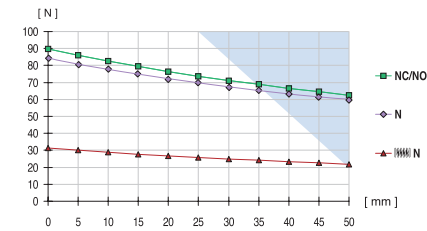
- optimal integration into the workroom through individual mounting situation
- tubeless directly connected possibility (no additional hose needed)

Parallel Gripper



Gripping force diagram

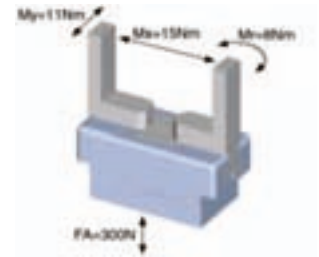
Gripping force as a function of jaw length.



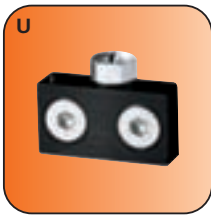
Colored area: increased wear and tear to be expected

Forces and Moments

Max allowable forces and moments on jaws.



Included with purchase



Mounting block
Order no. KB3-03

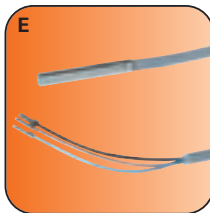


Centring sleeve
Order no. BDST40400

Accessory list



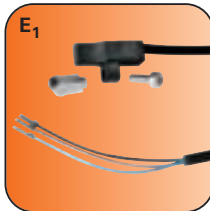
Pneumatic fittings
Order no. WVM5



Proximity switch
Order no. NJ3-E2-03



Universal jaw (set)
Order no. UB403 (Al)
Order no. UB403ST (St)



Magnetic field sensor
Order no. MFS103KHC42



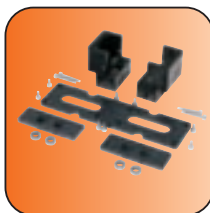
Cable straight plug
Order no. KAG500



Plug 3-pole
Order no. S12-G-3

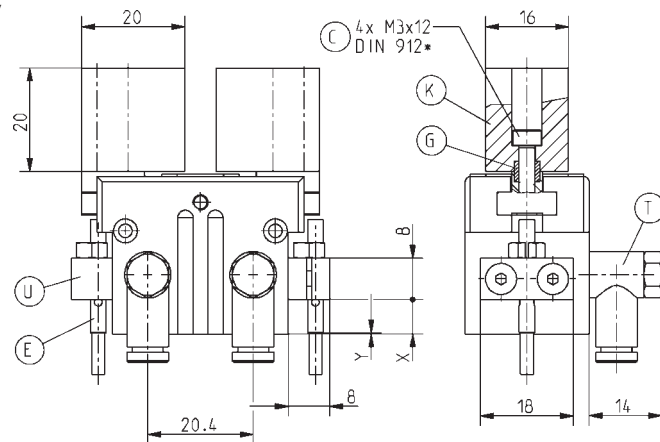


Pressure safety valve
Order no. DSV1/8



Dust protection
on request

Accessory

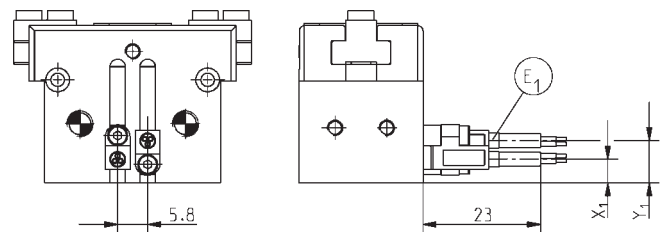


X = GP 403 NC-B/NO-B 6.7
GP 403 N-B 0.2

Y = GP 403 NC-B/NO-B 0.2
GP 403 N-B -6.3

* equivalent to DIN EN ISO 4762

Magnetic field sensor



GP 403	N-B	NC-B	NO-B
X ₁	~3.5	~4.5	~15.0
Y ₁	~7.0	~8.0	~17.5

Subject to change without prior notice



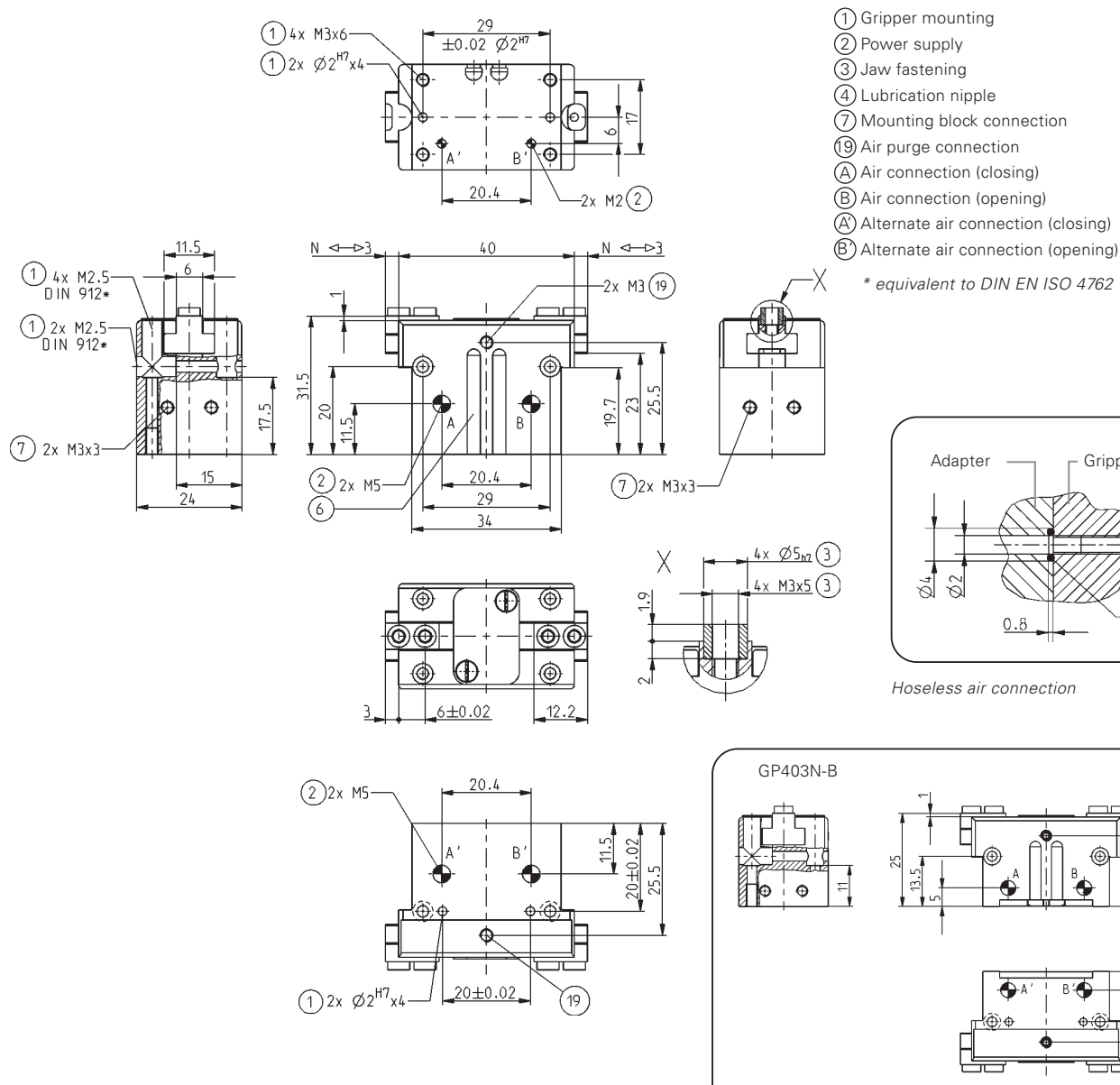
Order no.:	GP403N-B	GP403NC-B	GP403NO-B
Stroke per jaw [mm]:	3	3	3
Gripping force in closing and opening [N]:	85	-	-
Gripping force in closing [N]:	-	90	-
Gripping force in opening [N]:	-	-	90
Recommended workpiece weight [g]*:	296	459	459
Gripping force secured by spring min./max. [N]:	-	32	32
Closing time/opening time [s]:	0,015	0,02	0,02
Repeatability +/- [mm]:	0,025	0,025	0,025
Min./max. operating pressure [bar]:	3/8	5/8	5/8
Min./max. operating temperature [°C]**:	5/80	5/80	5/80
Air volumen per cycle [cm³]:	3,2	3	3
Weight [g]:	82	96	96

All data measured at 6 bar

* Value determined with friction coefficient $\mu = 0.1$ and safety factor $v = 2$

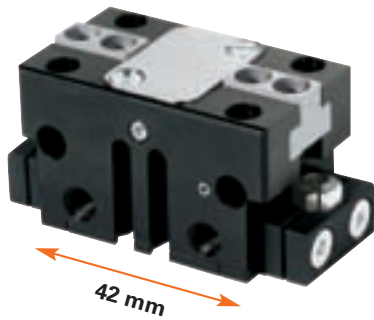
** High-temperature-resistant model (up to 150°) add T to part number

GP403NC-B
GP403NO-B



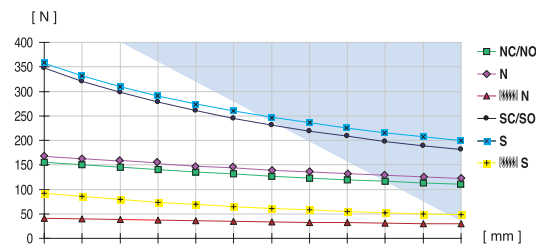
Subject to change without prior notice

Parallel Gripper



Gripping force diagram

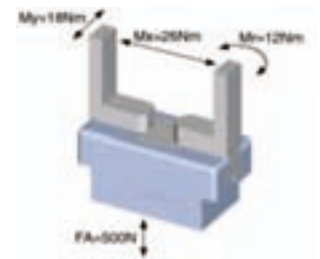
Gripping force as a function of jaw length.



Colored area: increased wear and tear to be expected

Forces and Moments

Max allowable forces and moments on jaws.



Included with purchase



Mounting block
Order no. KB3-08

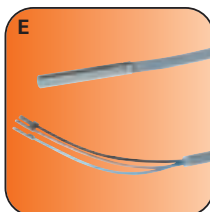


Centring sleeve
Order no. BDST40400

Accessory list



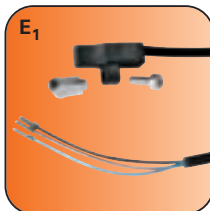
Pneumatic fittings
Order no. WVM5



Proximity switch
Order no. NJ3-E2-03



Universal jaw (set)
Order no. UB404 (Al)
Order no. UB404ST (St)



Magnetic field sensor
Order no. MFS103KHC42



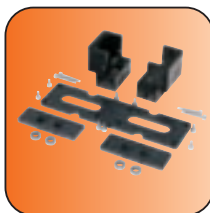
Cable straight plug
Order no. KAG500



Plug 3- pole
Order no. S12-G-3

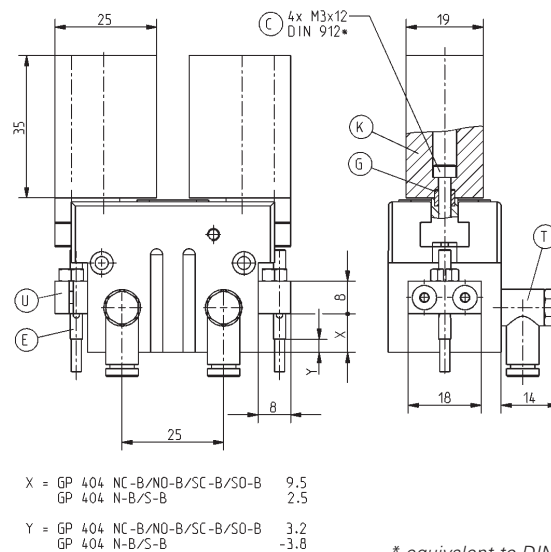


Pressure safety valve
Order no. DSV1/8



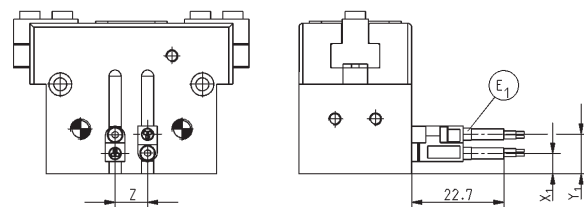
*Dust protection
on request*

Accessory



* equivalent to DIN EN ISO 4762

Magnetic field sensor



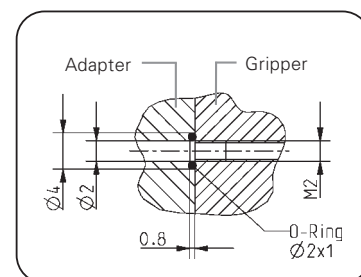
GP 404-B	N/S	NC/SC	NO/SC
X ₁	~8.5	~5.0	~15.5
X ₁	~13.0	~9.5	~20.0
Z	6.0	8.0	8.0

Subject to change without prior notice

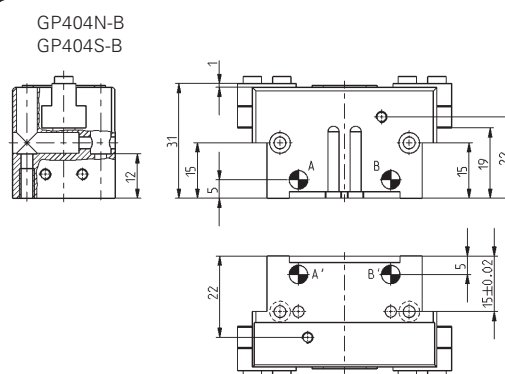
All data measured at 6 bar

* Value determined with friction coefficient $\mu = 0.1$ and safety factor $\nu = 2$

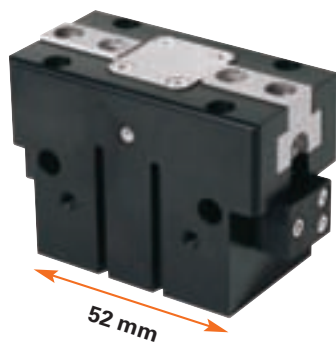
** High-temperature-resistant model (up to 150°) add T to part number



Hoseless air connection

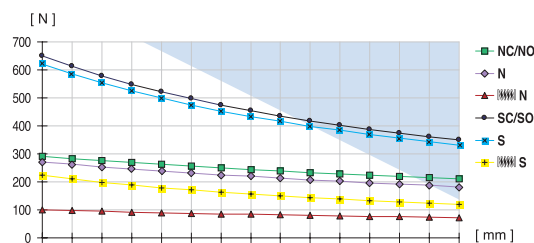


Parallel Gripper



Gripping force diagram

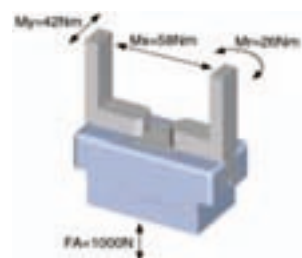
Gripping force as a function of jaw length.



Colored area: increased wear and tear to be expected

Forces and Moments

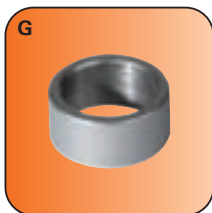
Max allowable forces and moments on jaws.



Included with purchase



Mounting block
Order no. KB8K



Centring sleeve
Order no. BDST40600

Accessory list



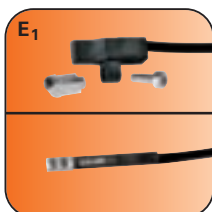
Pneumatic fittings
Order no. WVM5



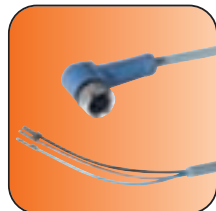
Proximity switch
Order no. NJ8-E2S



Universal jaw (set)
Order no. UB406 (Al)
Order no. UB406ST (St)



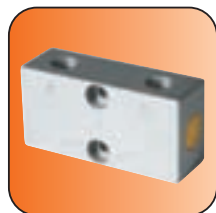
Magnetic field sensor
Order no. MFS103KHC42
Order no. MFS303KHC30



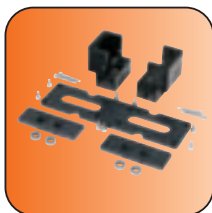
Cable angled plug
Order no. KAW500



Plug 3- pole
Order no. S12-G-3

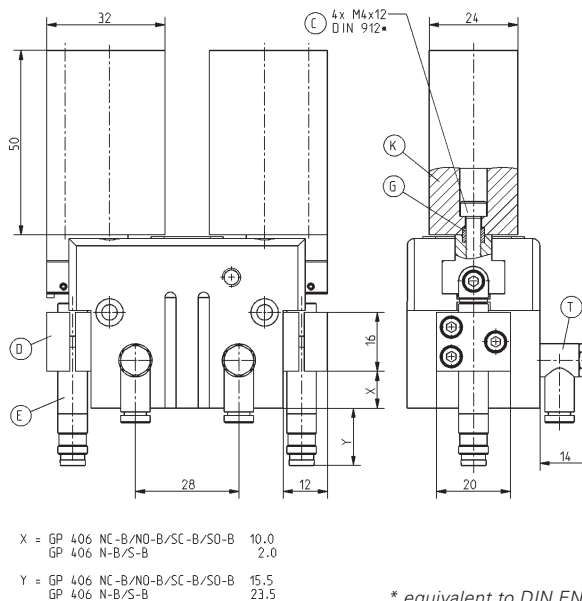


Pressure safety valve
Order no. DSV1/8



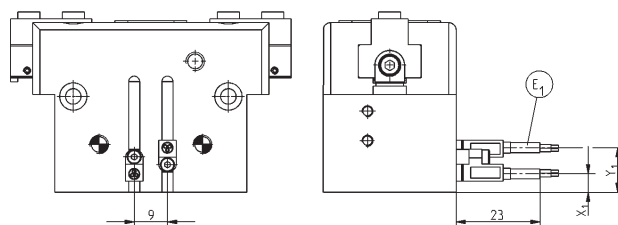
Dust protection
on request

Accessory



* equivalent to DIN EN ISO 4762

Magnetic field sensor



GP406-B	N/S	NC/SC	NO/SO
X ₁	~ 9.0	~ 5.0	~17.0
Y ₁	~16.0	~12.0	~24.0

Subject to change without prior notice

All data measured at 6 bar

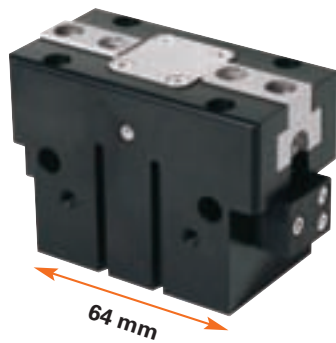
* Value determined with friction coefficient $\mu = 0.1$ and safety factor $\nu = 2$

** High-temperature-resistant model (up to 150°) add T to part number



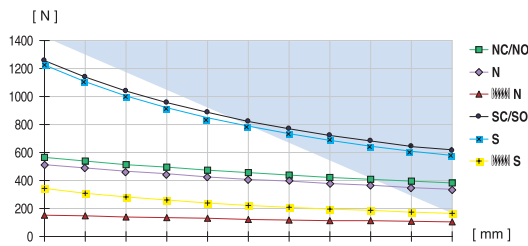
SOMMER
automatic

Parallel Gripper



Gripping force diagram

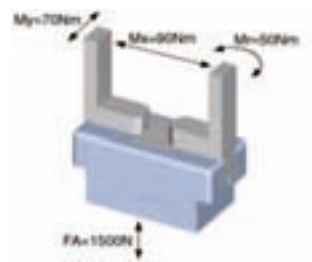
Gripping force as a function of jaw length.



Colored area: increased wear and tear to be expected

Forces and Moments

Max allowable forces and moments on jaws.



Included with purchase



Mounting block
Order no. KB8K

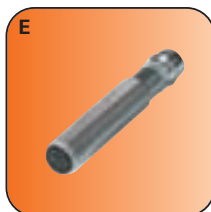


Centring sleeve
Order no. BDST40800

Accessory list



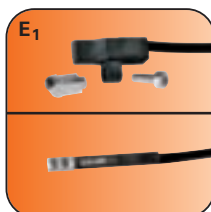
Pneumatic fittings
Order no. WVM5



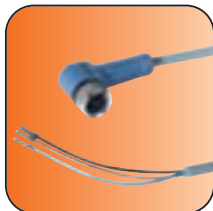
Proximity switch
Order no. NJ8-E2S



Universal jaw (set)
Order no. UB408 (Al)
Order no. UB408ST (St)



Magnetic field sensor
Order no. MFS103KHC42
Order no. MFS303KHC30



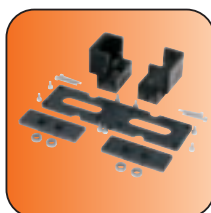
Cable angled plug
Order no. KAW500



Plug 3- pole
Order no. S12-G-3

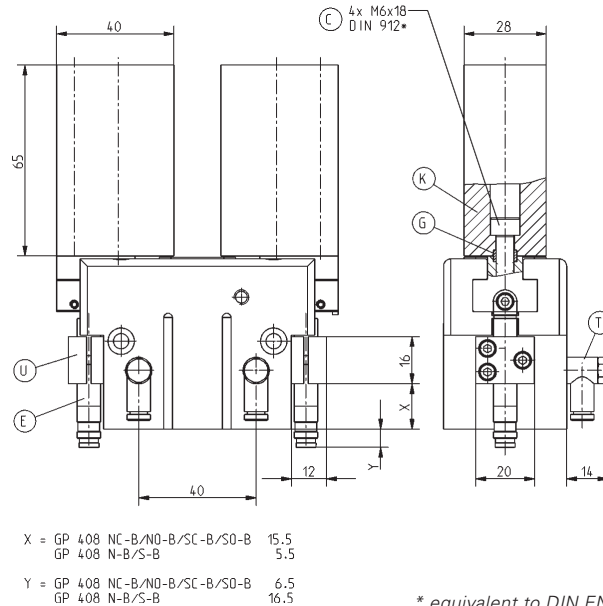


Pressure safety valve
Order no. DSV1/8



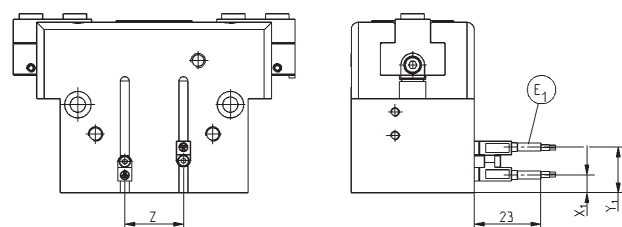
Dust protection
on request

Accessory



* equivalent to DIN EN ISO 4762

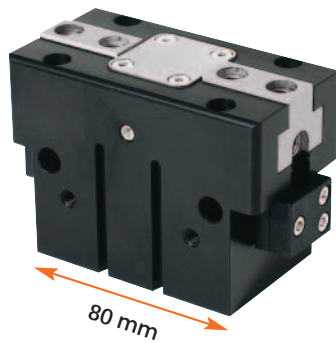
Magnetic field sensor



GP 408-B	N/S	NC/SC	NO/SO
X ₁	~11.5	~ 6.0	~21.5
Y ₁	~21.0	~15.5	~31.0
Z	18.0	20.0	20.0

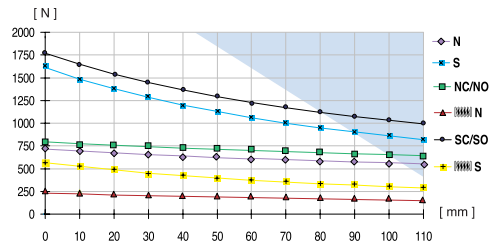
Subject to change without prior notice

Parallel Gripper



Gripping force diagram

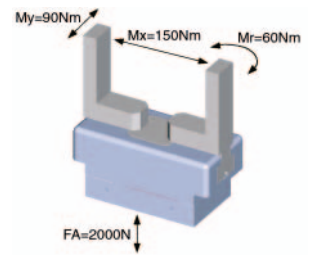
Gripping force in relation to the jaw length



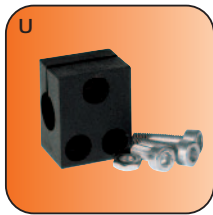
Colored area: increased wear and tear to be expected

Forces and moments

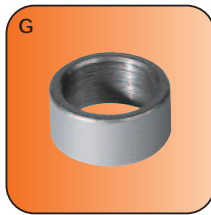
Max allowable forces and moments on jaws



Included with purchase



Mounting block
Order no. KB8K



Centring sleeve
Order no. BDST41000

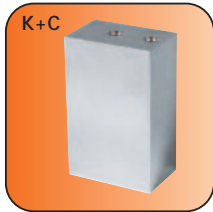
Accessory list



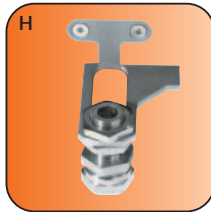
Pneumatic fittings
Order no. WV1/8x6



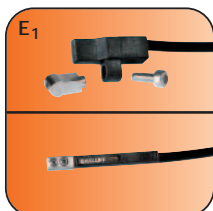
Proximity switch
Order no. NJ8-E2S



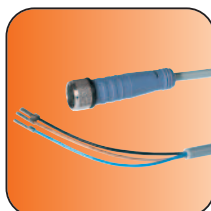
Universal jaw (set)
Order no. UB410 (Al)
Order no. UB410ST (St)



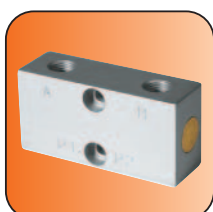
Alternate proximity bracket
Order no. KHA410-B-8



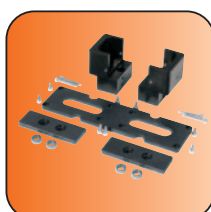
Magnetic field sensor
Order no. MFS103KHC42
Order no. MFS303KHC30



Cable straight plug
Order no. KAG500

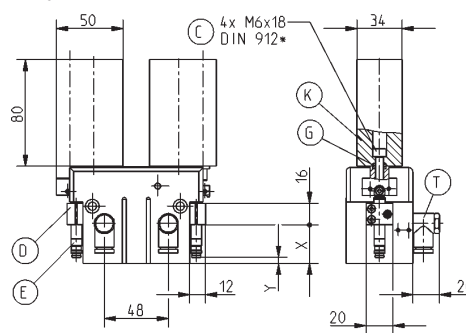


Pressure safety valve
Order no. DSV1/8



Dust protection
on request

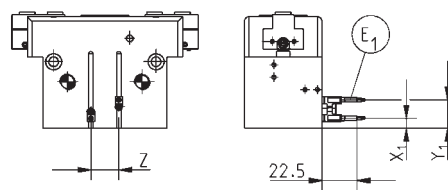
Accessory



X = GP 410 NC-B/NO-B/SC-B/SO-B 29
GP 410 N-B/S-B 11
Y = GP 410 NC-B/NO-B/SC-B/SO-B 4.5
GP 410 N-B/S-B -13.6

* equivalent to DIN EN ISO 4762

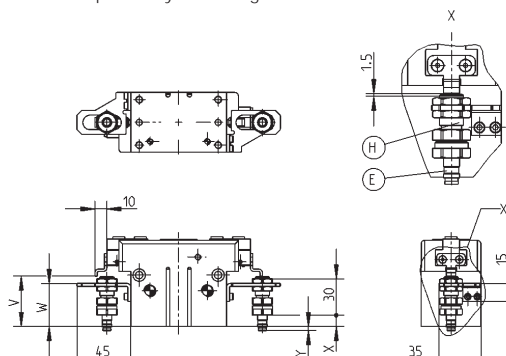
Magnetic field sensor



GP 410-B	N/S	NC/SC	NO/SO
X ₁	~13.5	~ 6.5	~26.5
Y ₁	~25.5	~18.5	~38.5
Z	20.0	18.0	18.0

GP 410-B	N/S	NC/SC	NO/SO
X ₁	~13.5	~ 6.5	~26.5
Y ₁	~25.5	~18.5	~38.5
Z	20.0	18.0	18.0

Alternate proximity mounting



V = GP 410 NC-B/NO-B/SC-B/SO-B 42
GP 410 N-B/S-B 24

W = GP 410 NC-B/NO-B/SC-B/SO-B 36
GP 410 N-B/S-B 18

X = GP 410 NC-B/NO-B/SC-B/SO-B 9.5
GP 410 N-B/S-B -8.5

Y = GP 410 NC-B/NO-B/SC-B/SO-B 3.5
GP 410 N-B/S-B 21.5

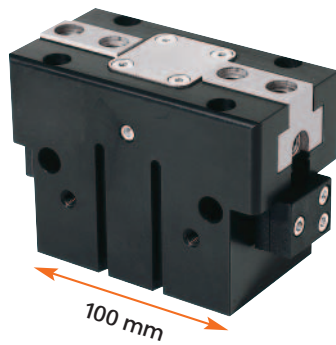
Subject to change without prior notice

** High-temperature-resistant model (up to 150°) add T to part number



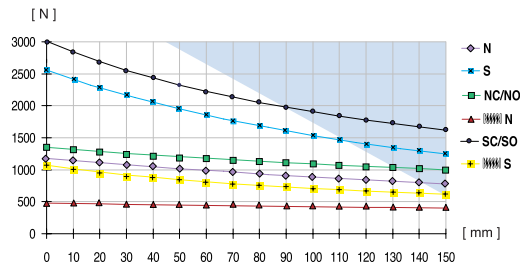
29

Parallel Gripper



Gripping force diagram

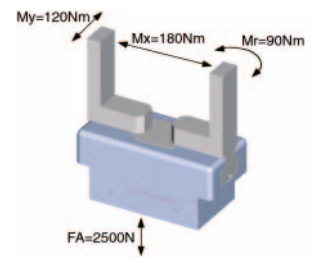
Gripping force as a function of jaw length.



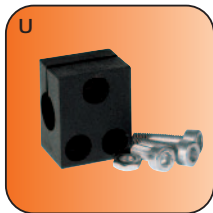
Colored area: increased wear and tear to be expected

Forces and Moments

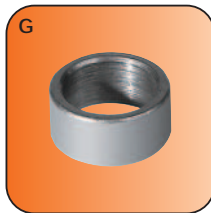
Max allowable forces and moments on jaws.



Included with purchase



Mounting block
Order no. KB8K



Centring sleeve
Order no. BDST41000

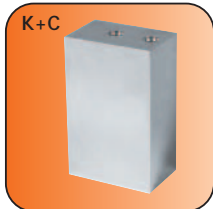
Accessory list



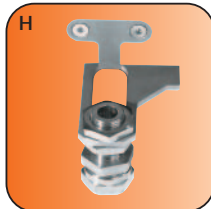
Pneumatic fittings
Order no. WV1/8x6



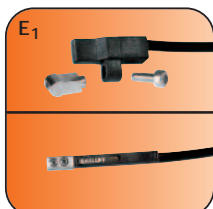
Proximity switch
Order no. NJ8-E2S



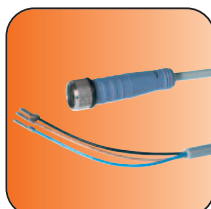
Universal jaw (set)
Order no. UB412 (Al)
Order no. UB412ST (St)



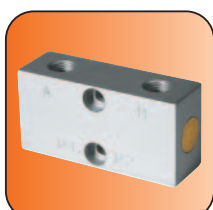
Alternate proximity bracket
Order no. KHA412-B-8



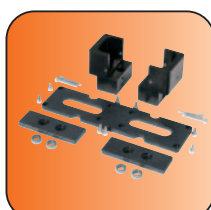
Magnetic field sensor
Order no. MFS103KHC42
Order no. MFS303KHC30



Cable straight plug
Order no. KAG500

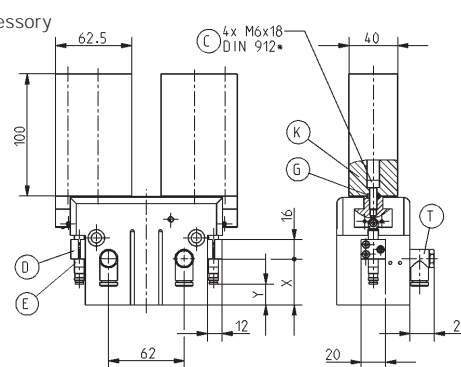


Pressure safety valve
Order no. DSV1/8



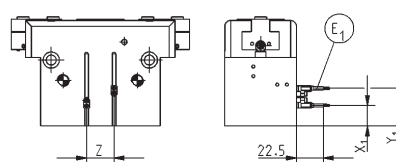
Dust protection
on request

Accessory



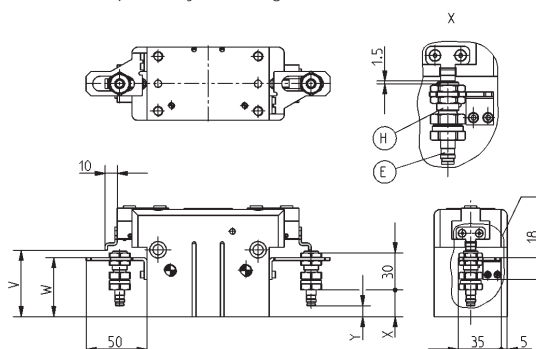
X =	GP 412 NC-B/NO-B/SC-B/SO-B	37.5
	GP 412 N-B/S-B	12.5
Y =	GP 412 NC-B/NO-B/SC-B/SO-B	17
	GP 412 N-B/S-B	-8

Magnetic field sensor



GP 412-B	N/S	NC/SC	NO/SO
X ₁	-13.5	-17.0	-28.5
Y ₁	-27.0	-31.5	-42.5
Z	28.0	23.0	23.0

Alternate proximity mounting

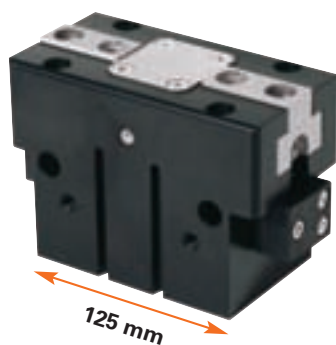


V =	GP 412 NC-B/NO-B/SC-B/SO-B	54.5
	GP 412 N-B/S-B	29.5
W =	GP 412 NC-B/NO-B/SC-B/SO-B	48.5
	GP 412 N-B/S-B	23.5
X =	GP 412 NC-B/NO-B/SC-B/SO-B	22.0
	GP 412 N-B/S-B	-3.0
Y =	GP 412 NC-B/NO-B/SC-B/SO-B	9.7
	GP 412 N-B/S-B	-16.0

subject to change without prior notice

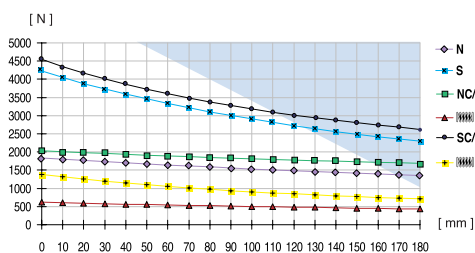
** High-temperature-resistant model (up to 150°) add T to part number

Parallel Gripper



Gripping force diagram

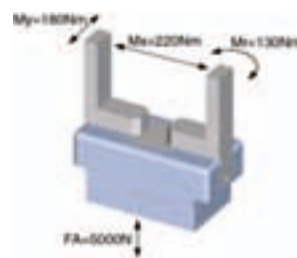
Gripping force as a function of jaw length.



Colored area: increased wear and tear to be expected

Forces and Moments

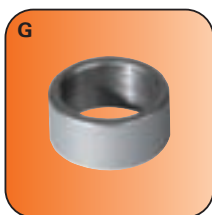
Max allowable forces and moments on jaws.



Included with purchase



Mounting block
Order no. KB8K



Centring sleeve
Order no. BDST41600

Accessory list



Pneumatic fittings
Order no. WV1/8x8



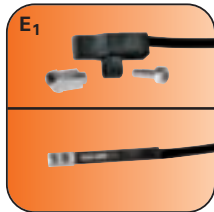
Proximity switch
Order no. NJ8-E2S



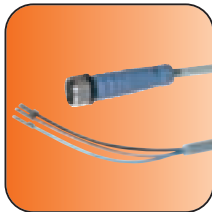
Universal jaw (set)
Order no. UB416 (Al)
Order no. UB416ST (St)



Alternate proximity bracket
Order no. KHA416-B-8



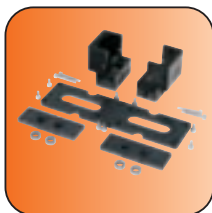
Magnetic field sensor
Order no. MFS103KHC42
Order no. MFS303KHC30



Cable straight plug
Order no. KAG500

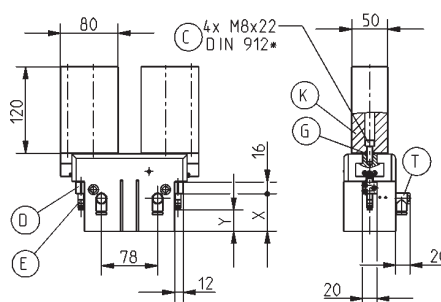


Pressure safety valve
Order no. DSV1/8



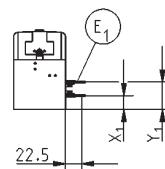
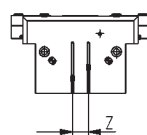
*Dust protection
on request*

Accessory



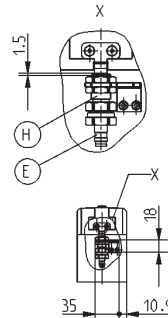
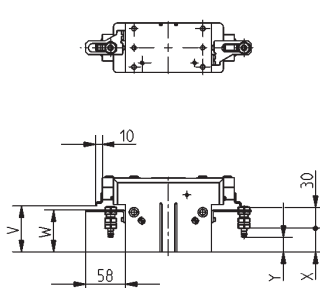
X =	GP	416	NC-B/NO-B/SC-B/SO-B	52.0
	GP	416	N-B/S-B	22.0
Y =	GP	416	NC-B/NO-B/SC-B/SO-B	29.5
	GP	416	N-B/S-B	-0.6

Magnetic field sensor



GP 416-B	N/S	NC/SC	NO/SO
X ₁	~16.5	~19.0	~31.5
Y ₁	~36.5	~38.0	~50.5
Z	37.0	22.0	22.0

Alternate proximity mounting



V = GP 416 NC-B/NO-B/SC-B/SO-B 67
GP 416 N-B/S-B 37

W = GP 416 NC-B/NO-B/SC-B/SO-B 61
GP 416 N-B/S-B 31

X = GP 416 NC-B/NO-B/SC-B/SO-B 34.5
GP 416 N-B/S-B 4.5

Y = GP 416 NC-B/NO-B/SC-B/SO-B 21.5
GP 416 N-B/S-B -8.6

subject to change without prior notice



Order no.:	GP416N-B	GP416NC-B	GP416NO-B	GP416S-B	GP416SC-B	GP416SO-B
Stroke per jaw [mm]:	16	16	16	8	8	8
Gripping force in closing and opening [N]:	1915	-	-	4260	-	-
Gripping force in closing [N]:	-	2050	-	-	4550	-
Gripping force in opening [N]:	-	-	2050	-	-	4550
Recommended workpiece weight [kg]*:	9,8	10,4	10,4	21,7	23,2	23,2
Gripping force secured by spring min./max. [N]:	-	650	650	-	1400	1400
Closing time/opening time [s]:	0,2	0,25	0,25	0,2	0,25	0,25
Repeatability +/- [mm]:	0,025	0,025	0,025	0,025	0,025	0,025
Min./max. operating pressure [bar]:	3/8	5/8	5/8	3/8	5/8	5/8
Min./max. operating pressure [°C]**:	5/80	5/80	5/80	5/80	5/80	5/80
Air volume per cycle [cm³]:	153	183	183	153	183	183
Weight [g]:	2,9	3,4	3,4	2,9	3,4	3,4

All data measured at 6 bar

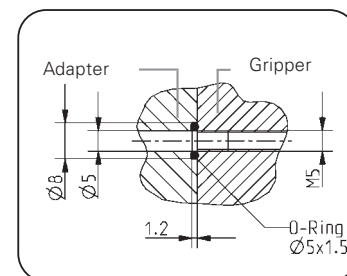
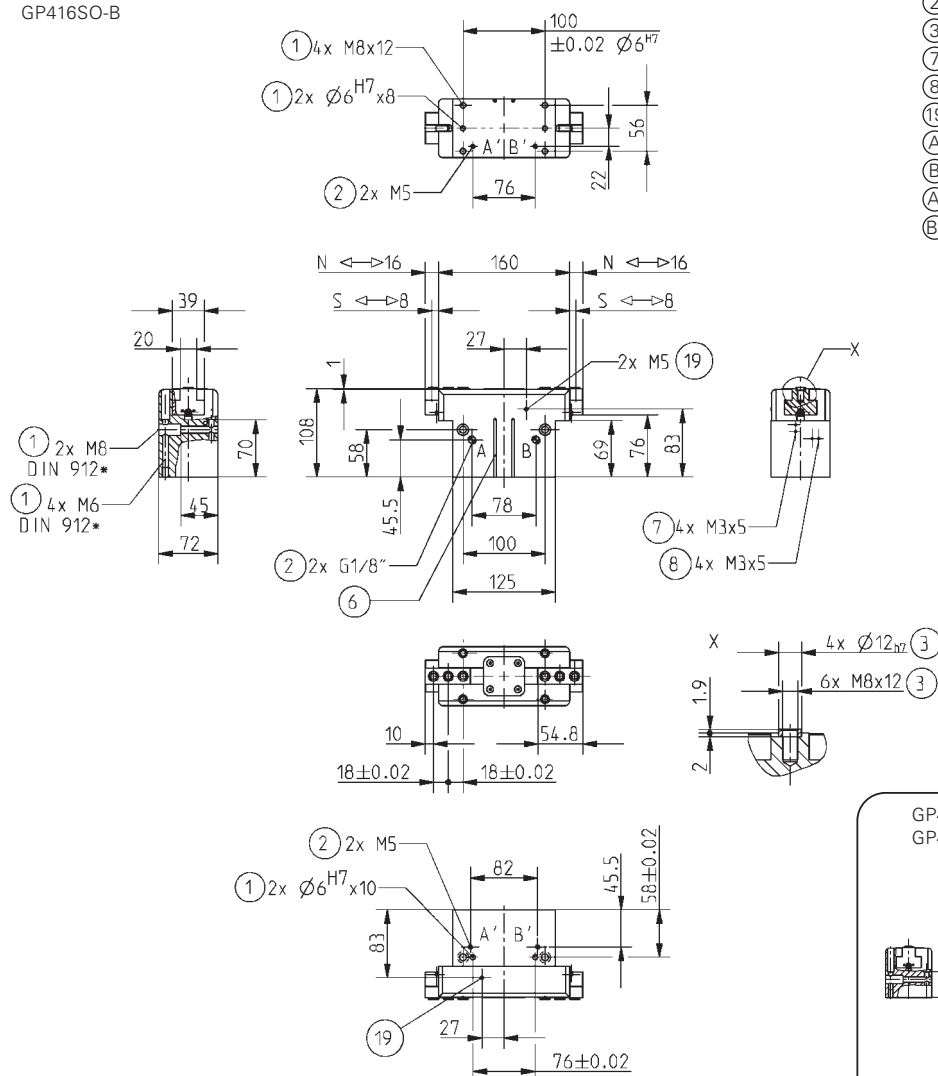
* Value determined with friction coefficient $\mu=0.1$ and safety factor $v = 2$

** High-temperature-resistant model (up to 150°) add T to part number

GP416NC-B
GP416NO-B
GP416SC-B
GP416SO-B

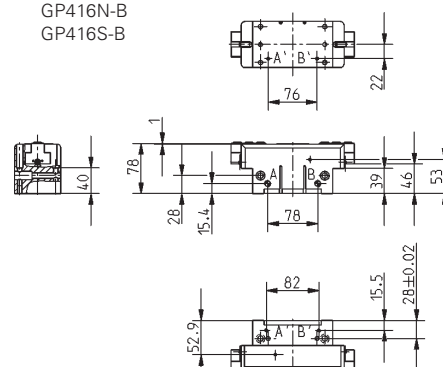
- ① Gripper mounting
- ② Power supply
- ③ Jaw fastening
- ⑦ Mounting block connection
- ⑧ Mounting for alternate prox. switch bracket
- ①⑨ Air purge connection
- Ⓐ Air connection (closing)
- Ⓑ Air connection (opening)
- Ⓐ Alternate air connection (closing)
- Ⓑ Alternate air connection (opening)

* equivalent to DIN EN ISO 4762



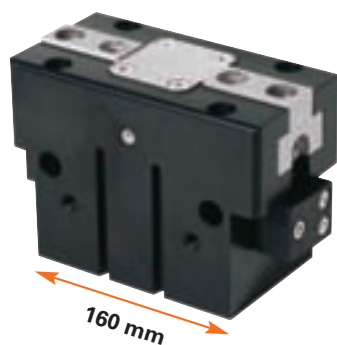
Hoseless air connection

GP416N-B
GP416S-B



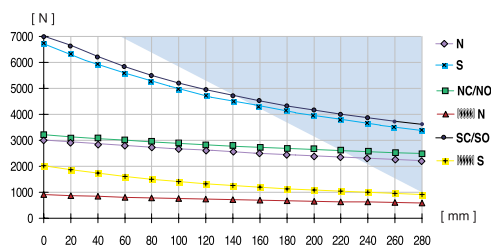
subject to change without prior notice

Parallel Gripper



Gripping force diagram

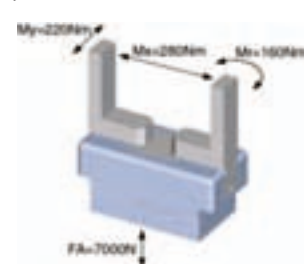
Gripping force as a function of jaw length.



Colored area: increased wear and tear to be expected

Forces and Moments

Max allowable forces and moments on jaws.



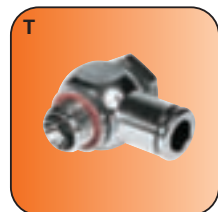
Included with purchase



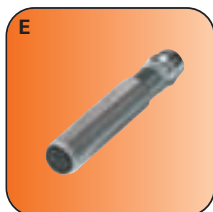
Mounting block
Order no. KB8K



Centring sleeve
Order no. BDST42000



Pneumatic fittings
Order no. WV1/8x8



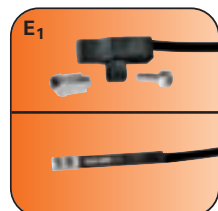
Proximity switch
Order no. NJ8-E2S



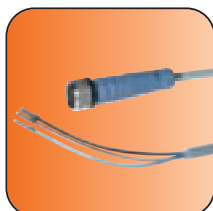
Universal jaw (set)
Order no. UB420 (Al)
Order no. UB420ST (St)



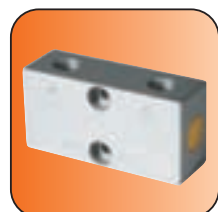
Alternate proximity bracket
Order no. KHA420-B-8



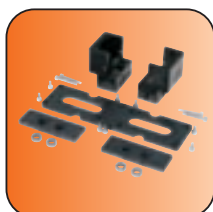
Magnetic field sensor
Order no. MFS103KHC42
Order no. MFS303KHC30



Cable straight plug
Order no. KAG500

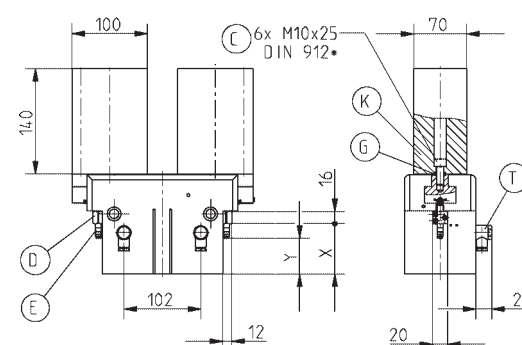


Pressure safety valve
Order no. DSV1/8



Dust protection
on request

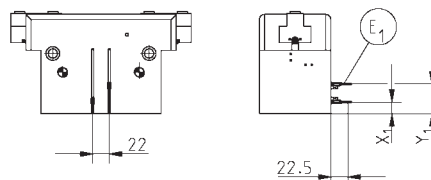
Accessory



X = GP 420 NC-B/NO-B/SC-B/SO-B	67
GP 420 N-B/S-B	31
Y = GP 420 NC-B/NO-B/SC-B/SO-B	47.5
GP 420 N-B/S-B	11.5

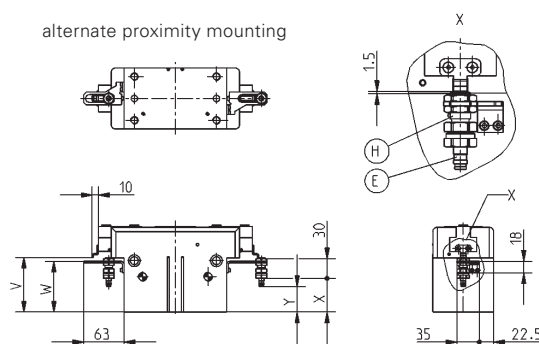
* equivalent to DIN EN ISO 4762

Magnetic field sensor



GP 420-B	N/S	NC/SC	NO/SO
X ₁	~17.0	~15.5	~43.0
Y ₁	~41.0	~39.5	~68.5

alternate proximity mounting



V = GP 420 NC-B/NO-B/SC-B/SO-B	85
GP 420 N-B/S-B	49
W = GP 420 NC-B/NO-B/SC-B/SO-B	79
GP 420 N-B/S-B	43
X = GP 420 NC-B/NO-B/SC-B/SO-B	52.5
GP 420 N-B/S-B	16.5
Y = GP 420 NC-B/NO-B/SC-B/SO-B	39.5
GP 420 N-B/S-B	3.5

subject to change without prior notice



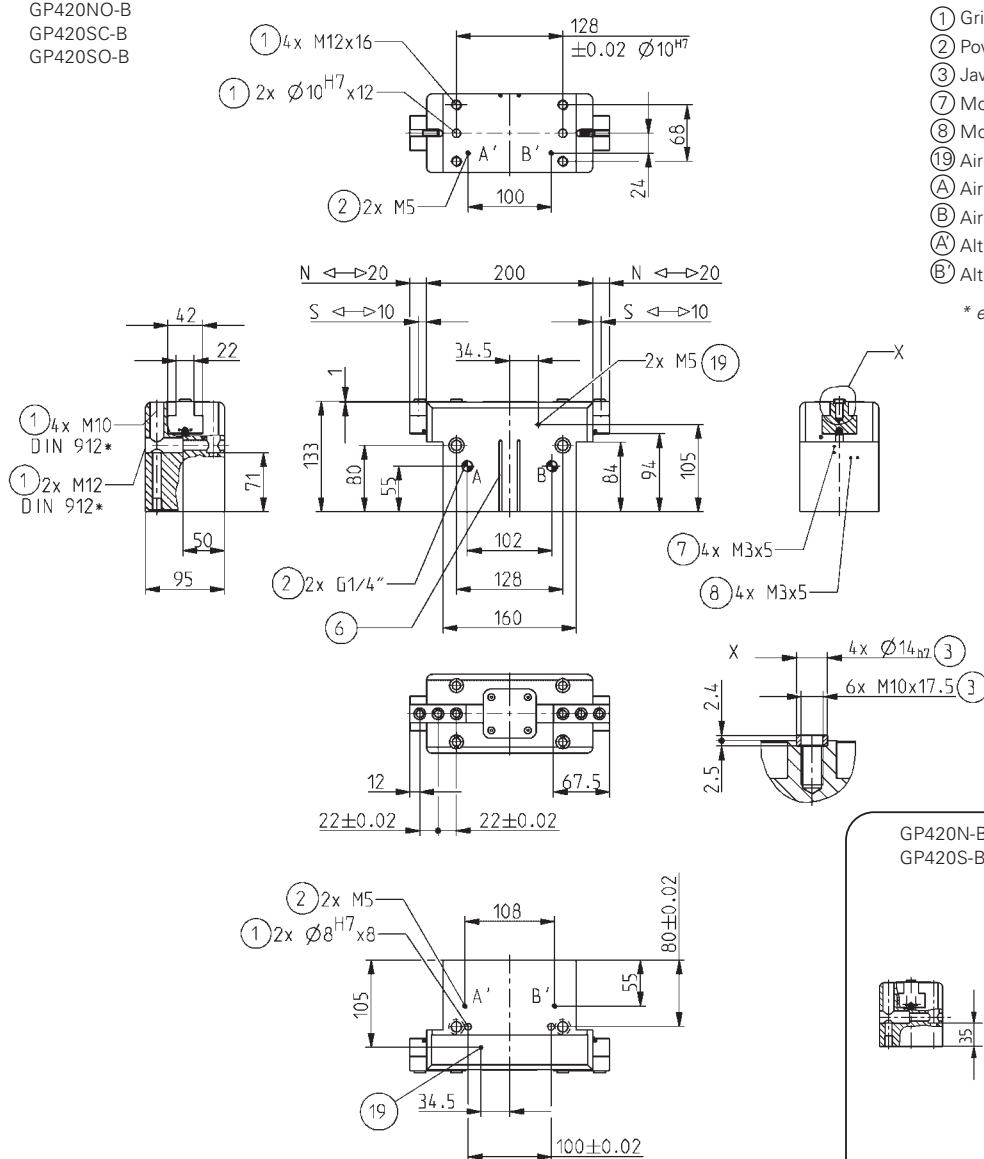
Order no.:	GP420N-B	GP420NC-B	GP420NO-B	GP420S-B	GP420SC-B	GP420SO-B
Stroke per jaw [mm]:	20	20	20	10	10	10
Gripping force in closing and opening [N]:	3085	-	-	6865	-	-
Gripping force in closing [N]:	-	3200	-	-	7000	-
Gripping force in opening [N]:	-	-	3200	-	-	7000
Recommended workpiece weight [kg]*:	15,7	16,3	16,3	35	35,7	35,7
Gripping force secured by spring min./max. [N]:	-	900	900	-	1900	1900
Closing time/opening time [s]:	0,3	0,35	0,35	0,3	0,35	0,35
Repeatability +/- [mm]:	0,025	0,025	0,025	0,025	0,025	0,025
Min./max. operating pressure [bar]:	3/8	5/8	5/8	3/8	5/8	5/8
Min./max. operating pressure [°C]**:	5/80	5/80	5/80	5/80	5/80	5/80
Air volume per cycle [cm³]:	310	583	583	310	583	583
Weight [g]:	5,5	6,7	6,7	5,5	6,7	6,7

All data measured at 6 bar

* Value determined with friction coefficient $\mu=0.1$ and safety factor $v = 2$

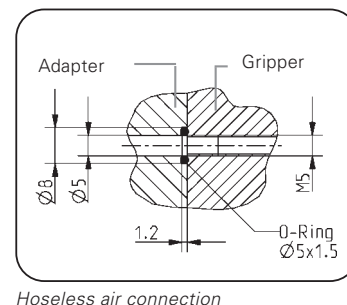
** High-temperature-resistant model (up to 150°) add T to part number

GP420NC-B
GP420NO-B
GP420SC-B
GP420SO-B

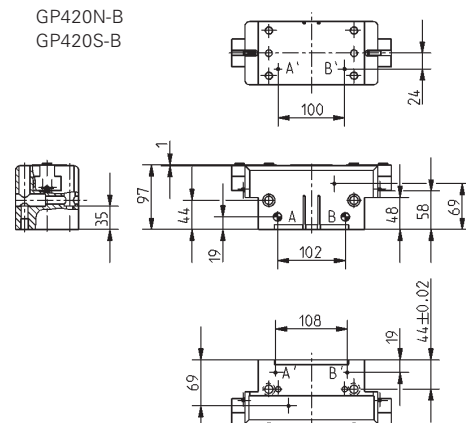


- ① Gripper mounting
- ② Power supply
- ③ Jaw fastening
- ⑦ Mounting block connection
- ⑧ Mounting for alternate prox. switch bracket
- ⑨ Air purge connection
- Ⓐ Air connection (closing)
- Ⓑ Air connection (opening)
- Ⓐ Alternate air connection (closing)
- Ⓑ Alternate air connection (opening)

* equivalent to DIN EN ISO 4762

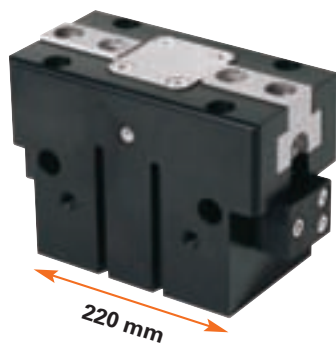


GP420N-B
GP420S-B



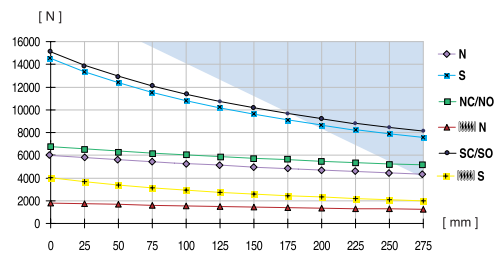
subject to change without prior notice

Parallel Gripper



Gripping force diagram

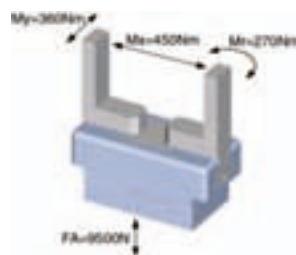
Gripping force as a function of jaw length.



Colored area: increased wear and tear to be expected

Forces and Moments

Max allowable forces and moments on jaws.



included with purchase

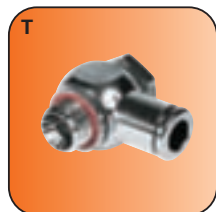


Mounting block
Order no. KB8K

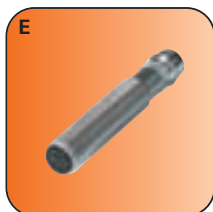


Centring sleeve
Order no. BDST43000

Accessory list



Pneumatic fittings
Order no. WV1/4x8



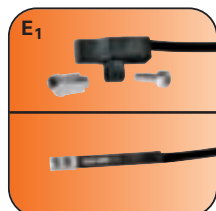
Proximity switch
Order no. NJ8-E2S



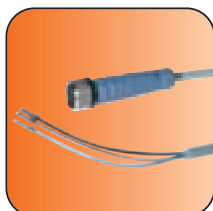
Universal jaw (set)
Order no. UB430 (Al)
Order no. UB430ST (St)



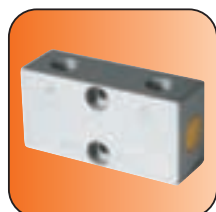
Alternate proximity bracket
Order no. KHA430-B-8



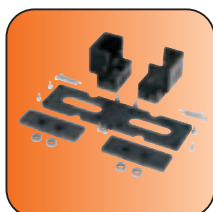
Magnetic field sensor
Order no. MFS103KHC42
Order no. MFS303KHC30



Cable straight plug
Order no. KAG500

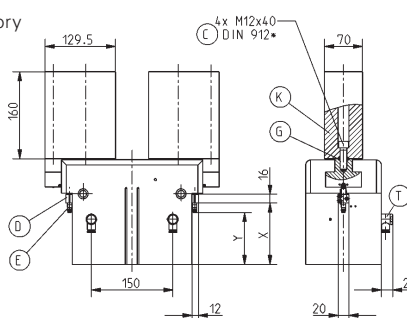


Pressure safety valve
Order no. DSV1/8



Dust protection
on request

Accessory

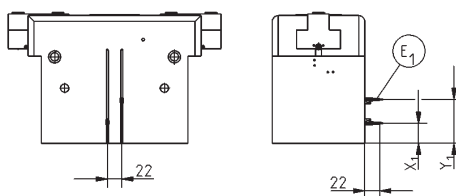


X = GP 430 NC-B/NO-B/SC-B/SO-B 113
GP 430 N-B/S-B 49
Y = GP 430 NC-B/NO-B/SC-B/SO-B 96.4
GP 430 N-B/S-B 32.4

X = GP 430 NC-B/NO-B/SC-B/SO-B 113
GP 430 N-B/S-B 49
Y = GP 430 NC-B/NO-B/SC-B/SO-B 96.4
GP 430 N-B/S-B 32.4

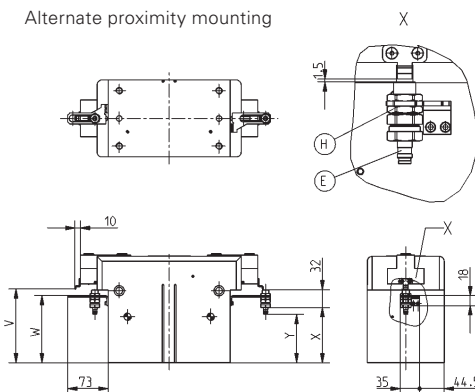
* equivalent to DIN EN ISO 4762

Magnetic field sensor



GP 430-B	N/S	NC/SC	NO/SO
X ₁	~22.5	~30.0	~68.5
Y ₁	~58.5	~66.0	~104.0

Alternate proximity mounting



V = GP 430 NC-B/NO-B/SC-B/SO-B 133
GP 430 N-B/S-B 69
W = GP 430 NC-B/NO-B/SC-B/SO-B 127
GP 430 N-B/S-B 63

X = GP 420 NC-B/NO-B/SC-B/SO-B 99.5
GP 420 N-B/S-B 35.5
Y = GP 420 NC-B/NO-B/SC-B/SO-B 87.2
GP 420 N-B/S-B 23.2

* equivalent to DIN EN ISO 4762

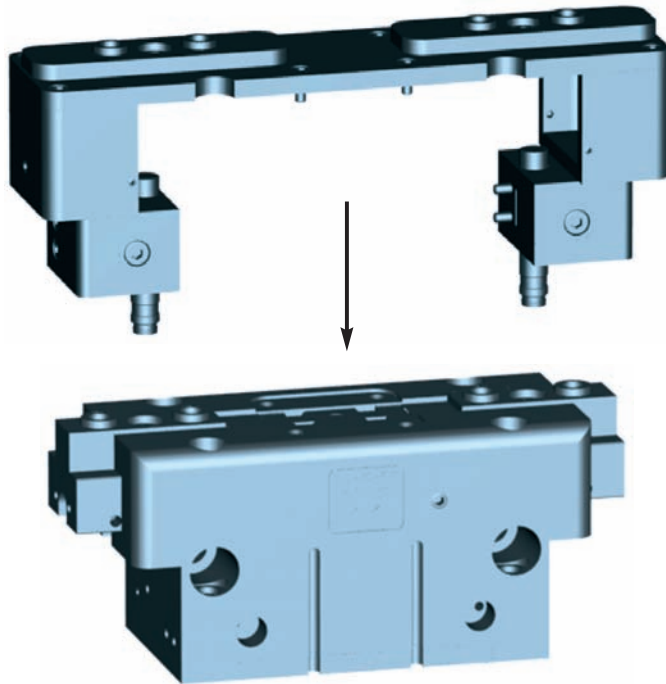
subject to change without prior notice

Dust cover

➤ Features

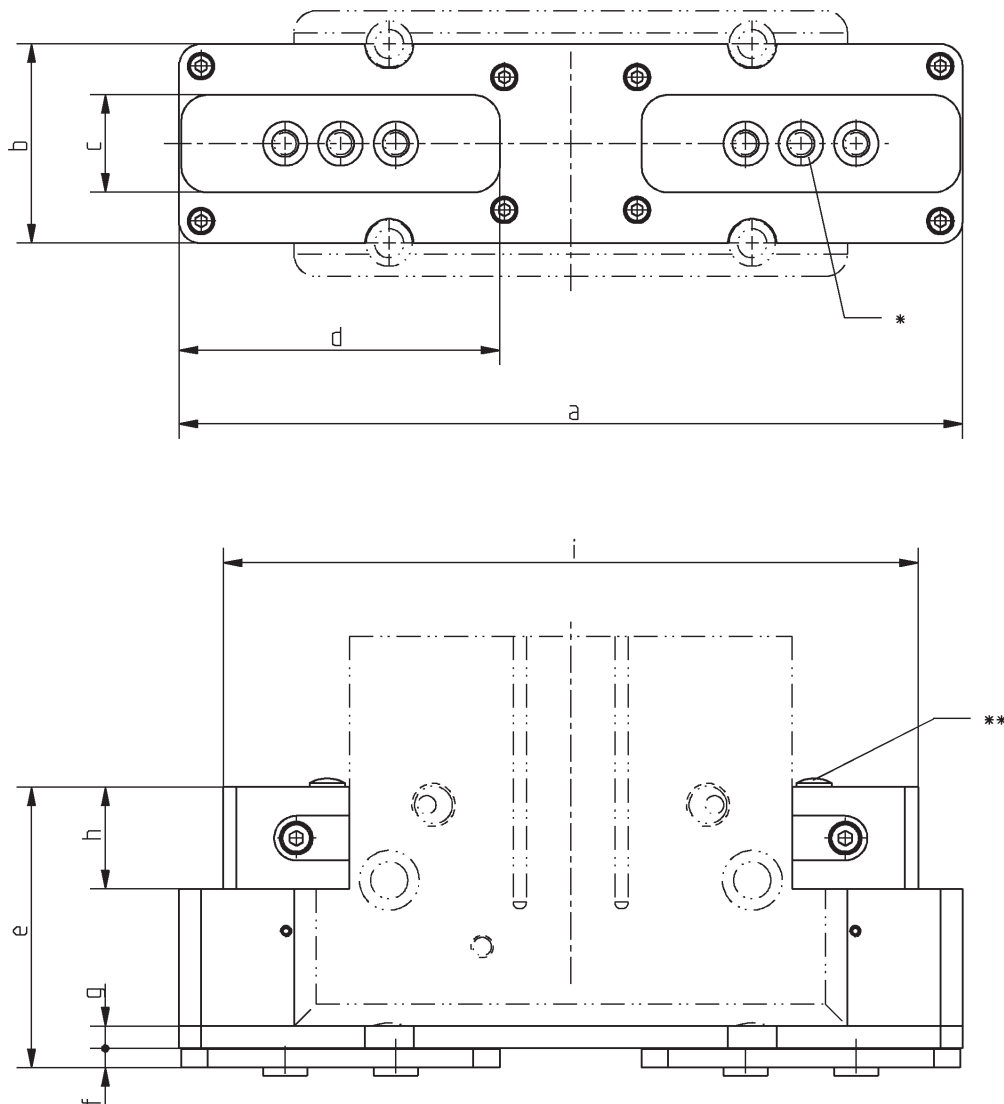
- Standardised dust cover
- Easy to upgrade for all GP400-B models
- Allows use in dirty environment
- Integrated mounting blocks for intake of inductive proximity switches

Dust cover





Order no.:	PR410-B	PR412-B	PR416-B	PR420-B	PR430-B
Mass A [mm]:	144,0	177	231,0	292,0	394,0
Mass B [mm]:	38,0	45,0	56,0	68,0	100,0
Mass C [mm]:	22,0	22,0	25,0	30,0	38,0
Mass D [mm]:	61,5	72,5	72,5	93,5	118,5
Mass E [mm]:	53,3	63,3	66,3	78,1	95,1
Mass F [mm]:	4,3	4,3	4,3	6,1	8,1
Mass G [mm]:	5,0	5,0	6,0	6,0	6,0
Mass H [mm]:	16,5	23,0	18,0	18,0	20,0
Mass I [mm]:	124,0	157,0	182,0	217,0	307,0



* For gripping jaw intake, see corresponding gripper type

** For proximity switch, see corresponding gripper type
straight pin to close unused mounting blocks included with purchase





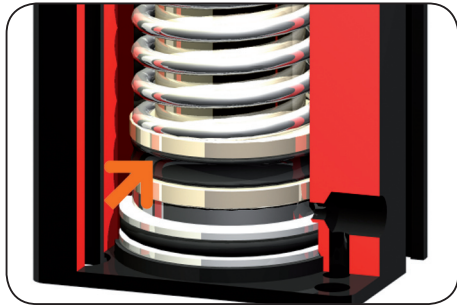
Series MGP

Parallel Gripper pneumatic

SOMMER
automatic
your application - our focus.

Parallel Gripper

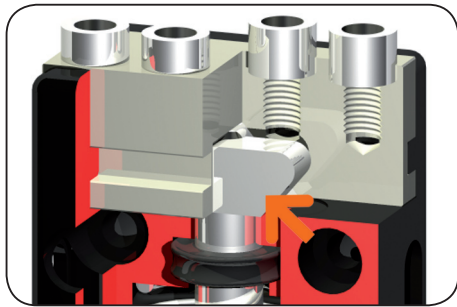
Highlights



Drive

double acting pneumatic cylinder

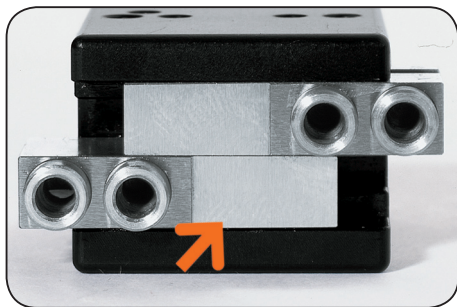
- maximum power in both opening and closing
- NC models additionally equipped with spring as mechanical safety locking device (in case of pressure loss)



Power transfer

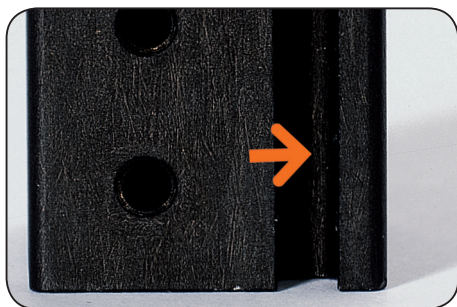
Wedge hook mechanism with mechanical restricted guides

- high gripping force as a result of optimal direction change of driving force into gripping force
- central gripping realized by synchronized compulsory guides



Guidance

- Flat guides for maximum force and torque absorption
- Gripper jaws made of grinded and hardened steel ensure precision and a long durability



Position sensing

direct piston position sensing via magnetic field sensors

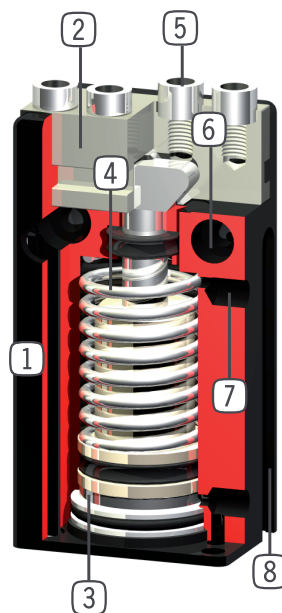
- high process reliability due to controlled gripping jaw movement
- integrated position sensing for compact design and to minimized the interfering contour

Terms

Gripping force:	arithmetic sum of the individual forces occurring at the jaws
Closing/opening time:	required time for the gripper jaws to cover the maximum stroke distance
Repeatability:	dispersion at end stop positions during 50/100 consecutive cycles
Cycle:	one complete movement of the piston forward and back
Maintenance:	maintenance free to 10 mil. cycles (please see the owner's manual for details, download from www.sommer-automatic.com) - long maintenance intervals keep costs down - long durability

Functional diagram

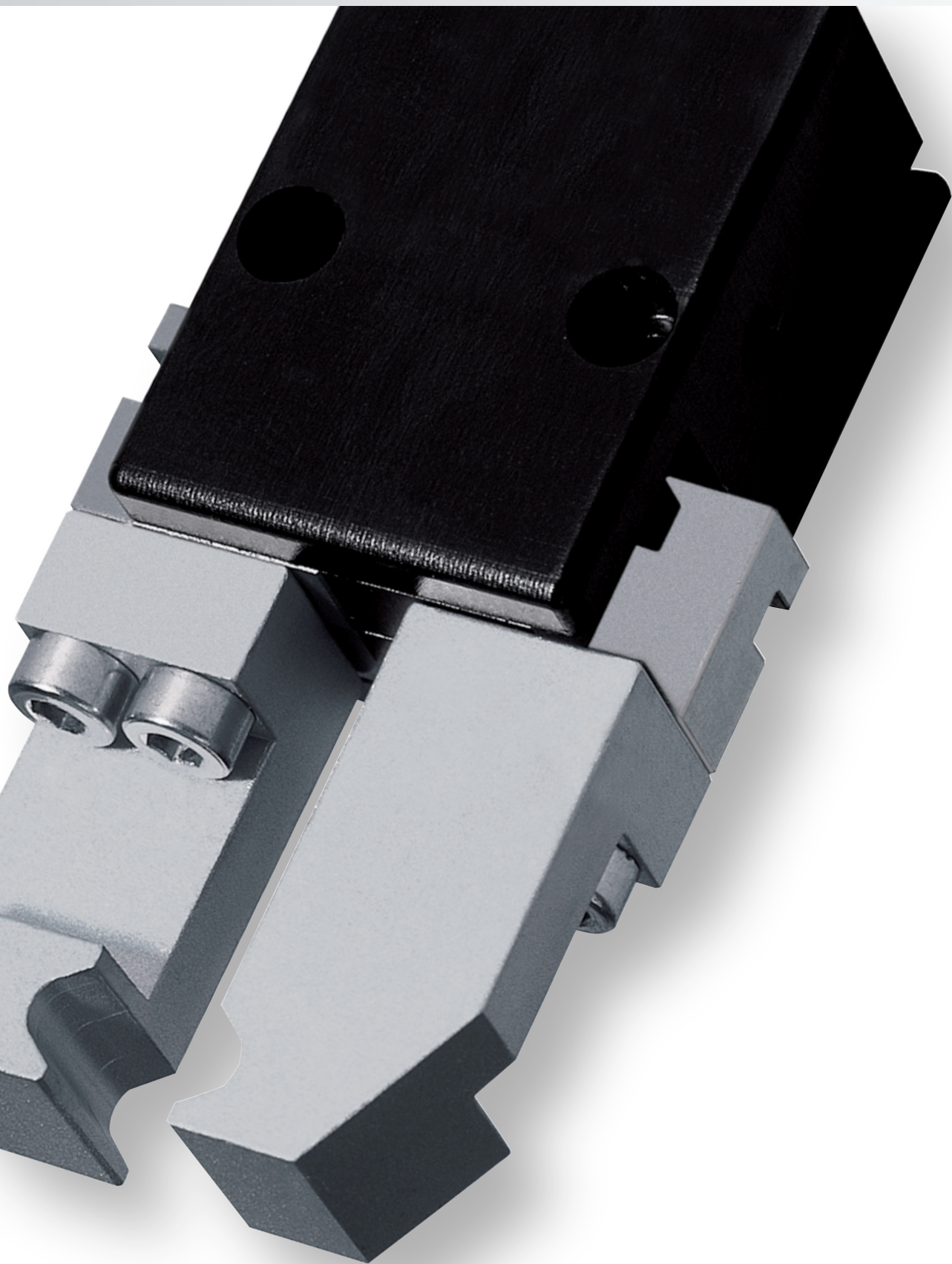
- | | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>1 Robust, lightweight housing</p> <ul style="list-style-type: none"> - hard coated aluminium alloy <p>2 Gripper jaw</p> <ul style="list-style-type: none"> - individual gripping jaw mounting | <p>5 Removable centering sleeve</p> <ul style="list-style-type: none"> - quick and economical positioning of the jaws <p>6 Mounting and positioning</p> <ul style="list-style-type: none"> - mounting possible at several sides - individual positioning of the gripper flexible |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|



- | | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>3 Position sensing</p> <ul style="list-style-type: none"> - permanent magnet for direct position sensing of piston movement (starting from size 803) <p>4 Integrated gripping force safety locking device</p> <ul style="list-style-type: none"> - spring integrated into cylinder as energy storage (starting from size 803) | <p>7 Energy supply</p> <ul style="list-style-type: none"> - at several sides possible <p>8 Integrated slot</p> <ul style="list-style-type: none"> - mounting and positioning of magnetic field sensors (starting from size 803) |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Parallel Gripper

Size		Page	without integrated gripping force protection	with integrated gripping force protection
MGP801	MGP801N	10	■	
MGP802	MGP802N	12	■	
MGP803	MGP803N	14	■	
	MGP803NC	14		■
MGP804	MGP804N	16	■	
	MGP804NC	16		■
MGP806	MGP806N	18	■	
	MGP806NC	18		■
MGP808	MGP808N	20	■	
	MGP808NC	20		■
MGP810	MGP810N	22	■	
	MGP810NC	22		■
MGP812	MGP812N	24	■	
	MGP812NC	24		■

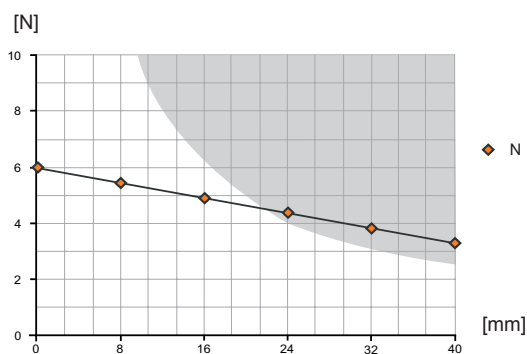


Parallel Gripper



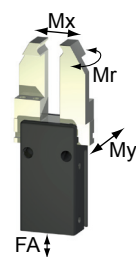
Picture shows MGP801N

Gripping force diagram
Gripping force as a function of jaw length.



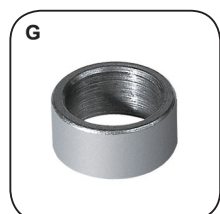
Coloured area: a higher wear and tear has to be taken into consideration, possibly reduction of pressure

Forces and torques
Max allowable forces and torques on jaw.



Mr [Nm]:	0,8
Mx [Nm]:	2,5
My [Nm]:	1
FA [N]:	54

Included in scope of delivery



Centering sleeve
Order no. BDST80100

Recommended accessories

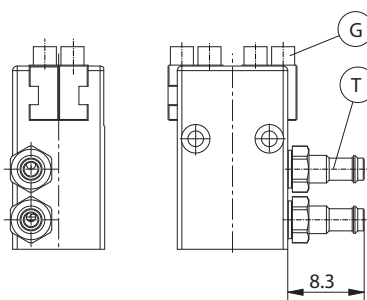


Pneumatic fittings
Order no. GVM3



Pressure safety valve
Order no. DSV1/8

Accessory



Subject to change without prior notice



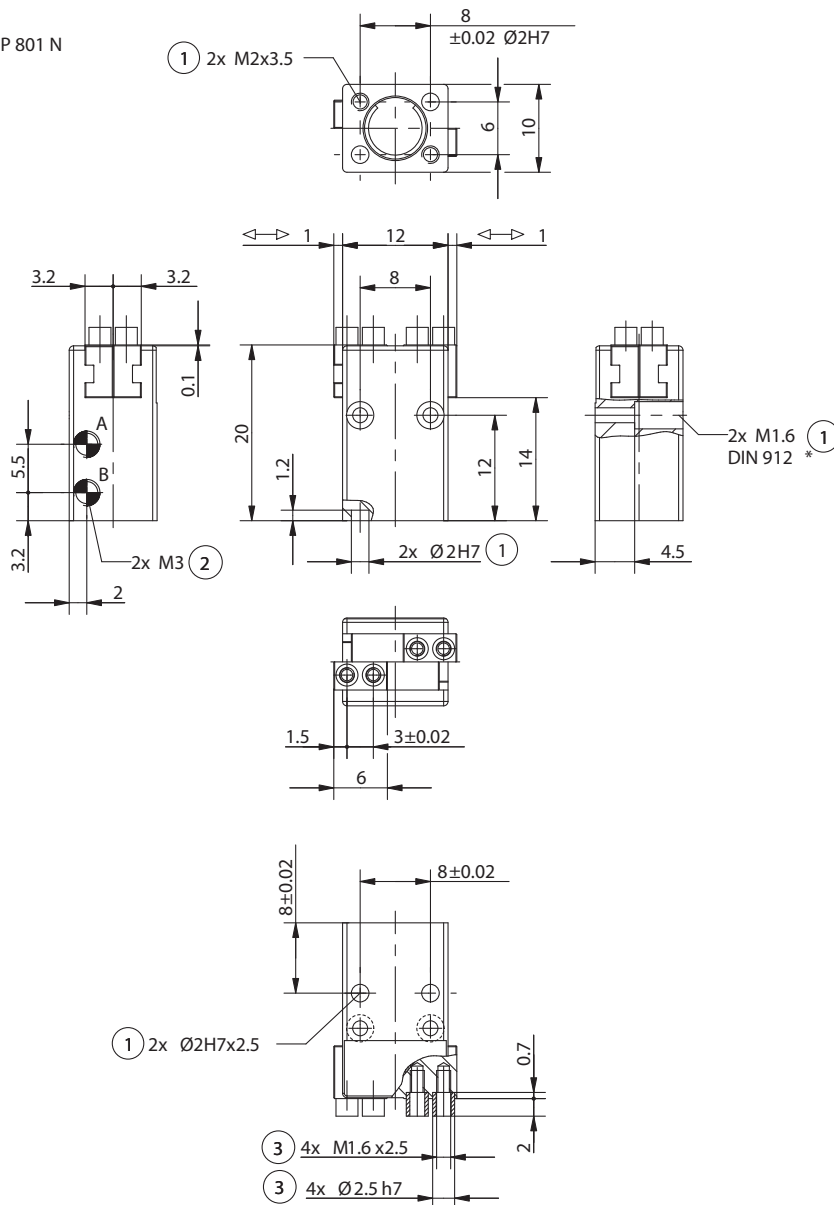
Order no.:	MGP801N
Stroke per jaw [mm]:	1
Gripping force in closing [N]:	6
Gripping force in opening [N]:	8
Recommended workpiece weight [kg]*:	0,03
Gripping force secured by spring min. [N]:	-
Closing time / opening time [s]:	0,01 / 0,01
Repeatability +/- [mm]:	0,02
Min. operating pressure [bar]:	3
Max. operating pressure [bar]:	8
Min/max. operating temperature [°C]**:	5-80
Air volume per cycle [cm³]:	0,09
Weight [kg]:	0,008

All data measured at 6 bar

* Value determined with friction coefficient $\mu=0,1$ and safety factor $v=2$

** High-temperature-resistant model (up to 150°C) add T to part number

MGP 801 N



- ① Gripper mounting
- ② Power supply
- ③ Jaw fastening
- ③ Adapter
- ③ Gripper
- Ⓐ Air connection (closing)
- Ⓑ Air connection (opening)

*according to DIN EN ISO 4762

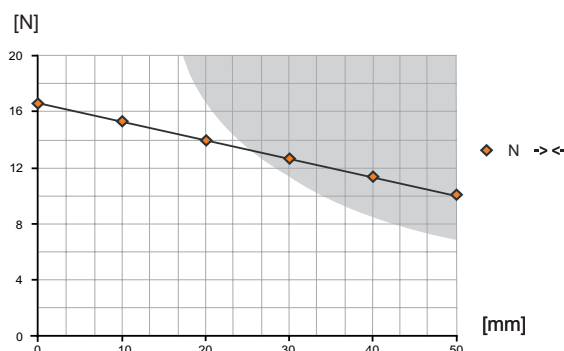
Subject to change without prior notice

Parallel Gripper



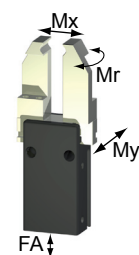
Picture shows MGP802N

Gripping force diagram
Gripping force as a function of jaw length.



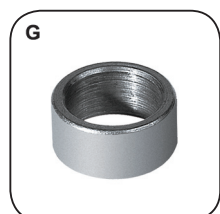
Coloured area: a higher wear and tear has to be taken into consideration, possibly reduction of pressure

Forces and torques
Max allowable forces and torques on jaw.



Mr [Nm]:	1,4
Mx [Nm]:	3,5
My [Nm]:	1,8
FA [N]:	88

Included in scope of delivery



Centering sleeve
Order no. BDST80200

Recommended accessories

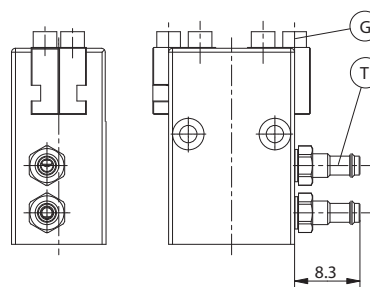


Pneumatic fittings
Order no. GVM3



Pressure safety valve
Order no. DSV1/8

Accessory



Subject to change without prior notice



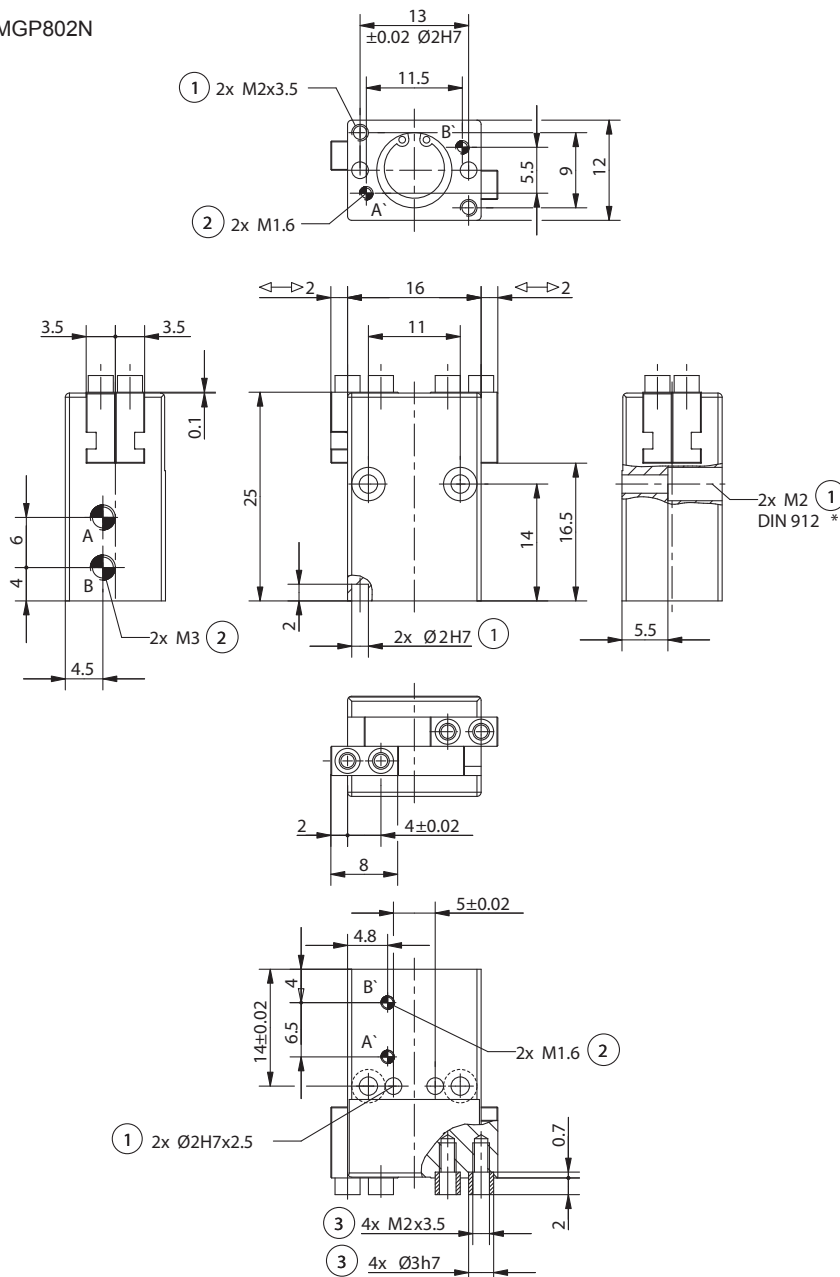
Order no.:	MGP802N
Stroke per jaw [mm]:	2
Gripping force in closing [N]:	16
Gripping force in opening [N]:	19
Recommended workpiece weight [kg]*:	0,08
Gripping force secured by spring min. [N]:	-
Closing time / opening time [s]:	0,01 / 0,01
Repeatability +/- [mm]:	0,02
Min. operating pressure [bar]:	3
Max. operating pressure [bar]:	8
Min/max. operating temperature [°C]**:	5-80
Air volume per cycle [cm³]:	0,26
Weight [kg]:	0,016

All data measured at 6 bar

* Value determined with friction coefficient $\mu=0,1$ and safety factor $v=2$

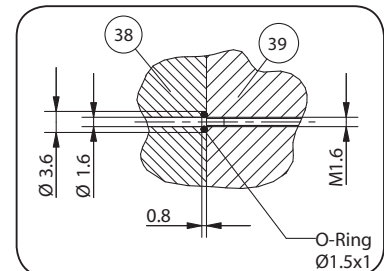
** High-temperature-resistant model (up to 150°C) add T to part number

MGP802N



- ① Gripper mounting
- ② Power supply
- ③ Jaw fastening
- 38 Adapter
- 39 Gripper
- A Air connection (closing)
- B Air connection (opening)
- A' Alternate air connection (closing)
- B' Alternate air connection (opening)

*according to DIN EN ISO 4762



hoseless power supply

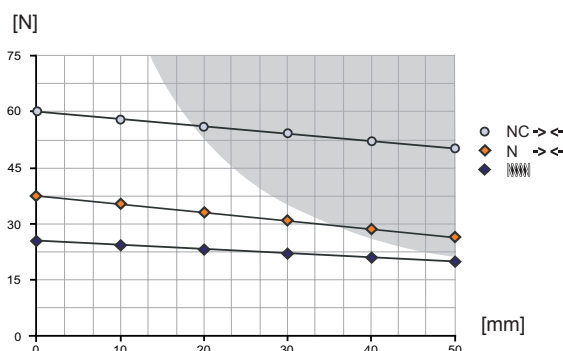
Subject to change without prior notice

Parallel Gripper



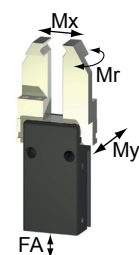
Picture shows MGP803N

Gripping force diagram
Gripping force as a function of jaw length.



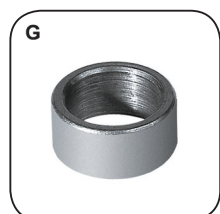
Coloured area: a higher wear and tear has to be taken into consideration, possibly reduction of pressure

Forces and torques
Max allowable forces and torques on jaw.



Mr [Nm]:	1,8
Mx [Nm]:	5,5
My [Nm]:	2,2
FA [N]:	140

Included in scope of delivery



Centering sleeve
Order no. BDST80320

Recommended accessories



Pneumatic fittings
Order no. WVM3



Proximity switch
Order no. MFS103KHC42



Proximity switch
Order no. MFS103SKHC42



Cable angled plug
Order no. KAW500

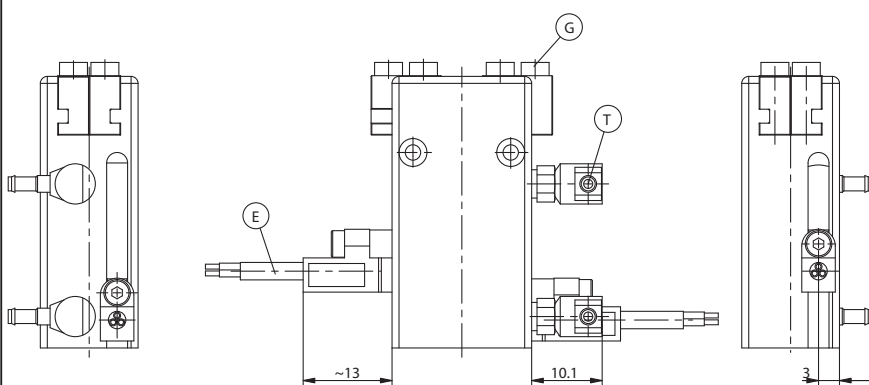


Plug 3-pole
Order no. S12-G-3



Pressure safety valve
Order no. DSV1/8

Accessory



Subject to change without prior notice



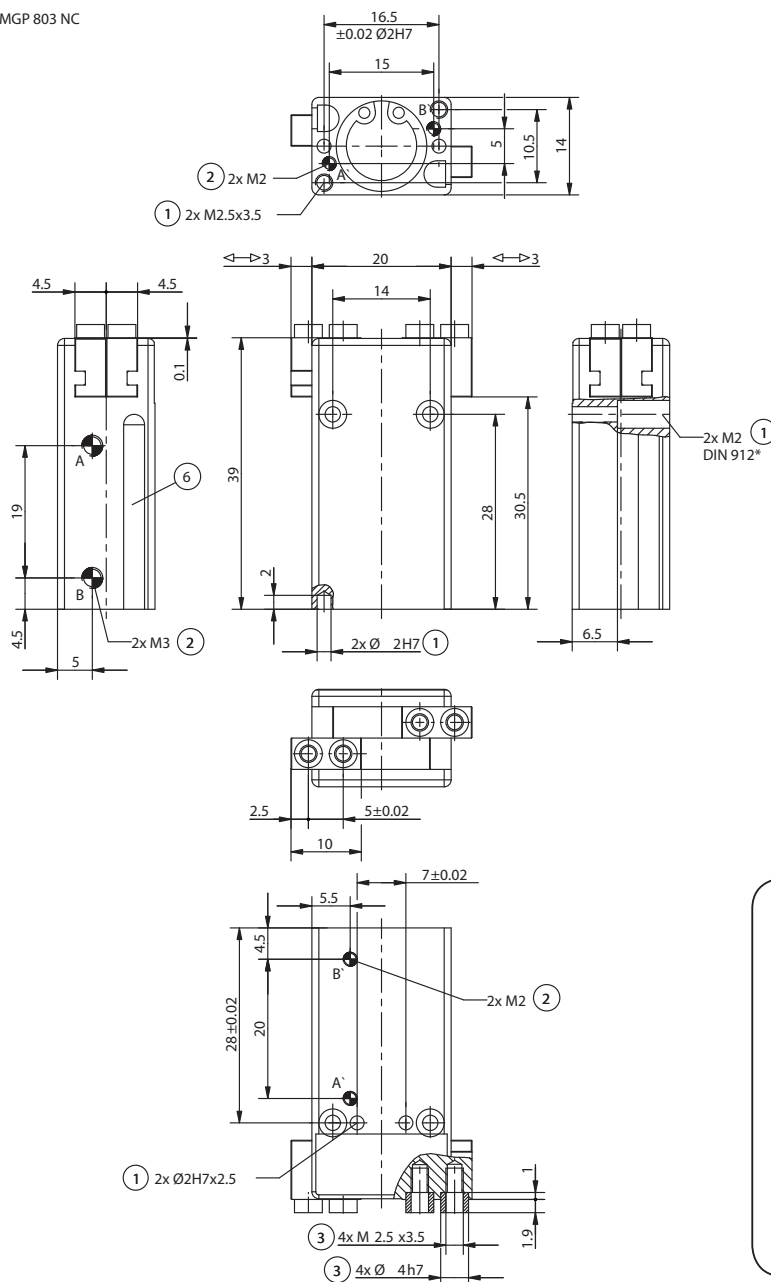
Order no.:	MGP803N	MGP803NC
Stroke per jaw [mm]:	3	3
Gripping force in closing [N]:	36	55
Gripping force in opening [N]:	42	-
Recommended workpiece weight [kg]*:	0,18	0,28
Gripping force secured by spring min. [N]:	-	28
Closing time / opening time [s]:	0,01 / 0,01	0,01 / 0,03
Repeatability +/- [mm]:	0,02	0,02
Min. operating pressure [bar]:	3	4
Max. operating pressure [bar]:	8	8
Min/max. operating temperature [°C]**:	5-80	5-80
Air volume per cycle [cm³]:	0,8	1,1
Weight [kg]:	0,025	0,035

All data measured at 6 bar

* Value determined with friction coefficient $\mu=0,1$ and safety factor $v=2$

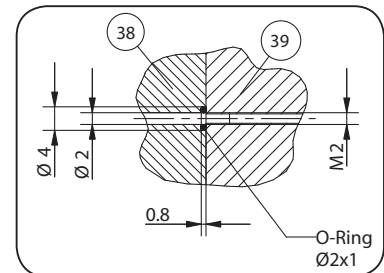
** High-temperature-resistant model (up to 150°C) add T to part number

MGP 803 NC

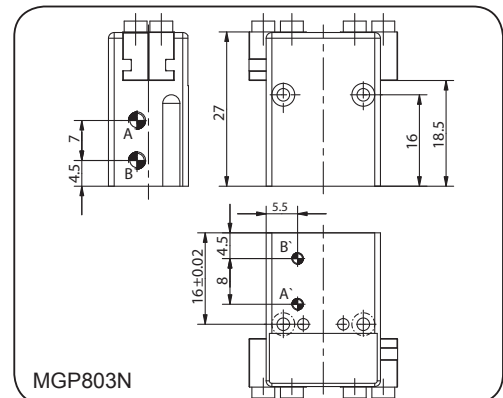


- ① Gripper mounting
- ② Power supply
- ③ Jaw fastening
- ⑥ Slot for magnetic field sensor
- ③⑧ Adapter
- ③⑨ Gripper
- ⑨ Air connection (closing)
- ⑩ Air connection (opening)
- ⑪ Alternate air connection (closing)
- ⑫ Alternate air connection (opening)

*according to DIN EN ISO 4762



hoseless power supply



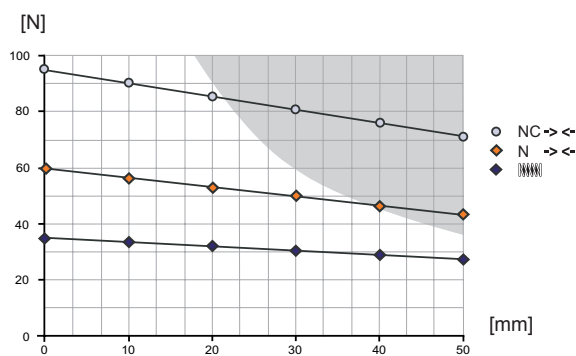
Subject to change without prior notice

Parallel Gripper



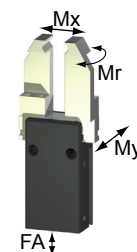
Picture shows MGP804N

Gripping force diagram
Gripping force as a function of jaw length.



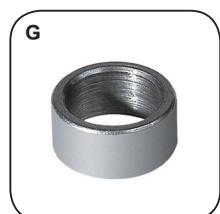
Coloured area: a higher wear and tear has to be taken into consideration, possibly reduction of pressure

Forces and torques
Max allowable forces and torques on jaw.



Mr [Nm]:	2,7
Mx [Nm]:	6,5
My [Nm]:	2,9
FA [N]:	228

Included in scope of delivery



Centering sleeve
Order no. BDST80320

Recommended accessories



Pneumatic fittings
Order no. WVM3



Proximity switch
Order no. MFS103KHC42



Proximity switch
Order no. MFS103SKHC42



Cable angled plug
Order no. KAW500

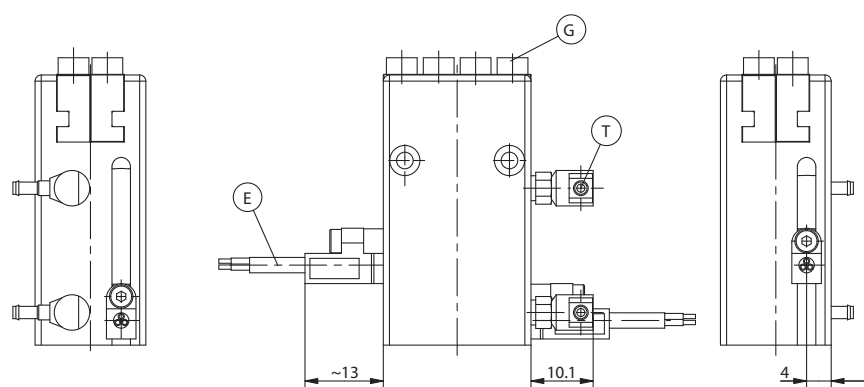


Plug 3-pole
Order no. S12-G-3



Pressure safety valve
Order no. DSV1/8

Accessory



Subject to change without prior notice



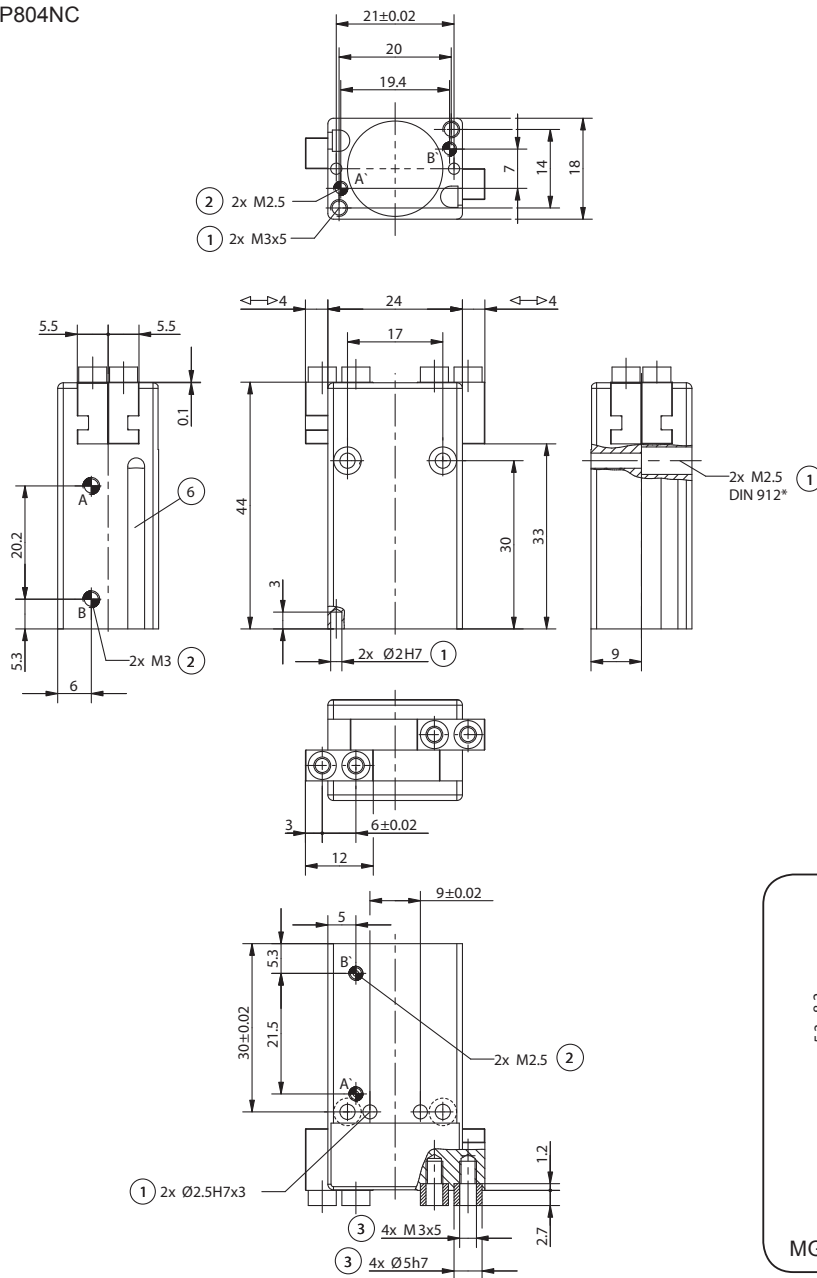
Order no.:	MGP804N	MGP804NC
Stroke per jaw [mm]:	4	4
Gripping force in closing [N]:	59	89
Gripping force in opening [N]:	66	-
Recommended workpiece weight [kg]*:	0,3	0,45
Gripping force secured by spring min. [N]:	-	30
Closing time / opening time [s]:	0,02 / 0,02	0,02 / 0,04
Repeatability +/- [mm]:	0,02	0,02
Min. operating pressure [bar]:	3	4
Max. operating pressure [bar]:	8	8
Min/max. operating temperature [°C]**:	5-80	5-80
Air volume per cycle [cm³]:	1,9	2,5
Weight [kg]:	0,05	0,07

All data measured at 6 bar

* Value determined with friction coefficient $\mu=0,1$ and safety factor $v=2$

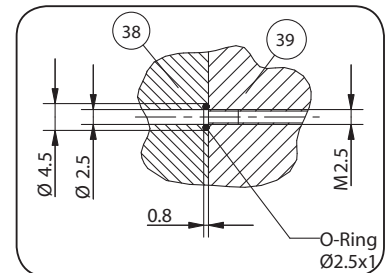
** High-temperature-resistant model (up to 150°C) add T to part number

MGP804NC

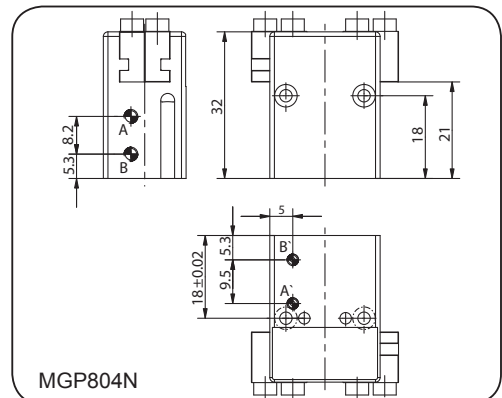


- ① Gripper mounting
- ② Power supply
- ③ Jaw fastening
- ⑥ Slot for magnetic field sensor
- ③⑧ Adapter
- ③⑨ Gripper
- Ⓐ Air connection (closing)
- Ⓑ Air connection (opening)
- Ⓐ Alternate air connection (closing)
- Ⓑ Alternate air connection (opening)

*according to DIN EN ISO 4762



hoseless power supply



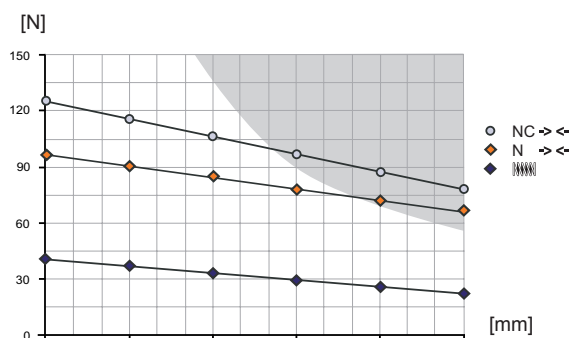
Subject to change without prior notice

Parallel Gripper



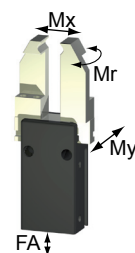
Picture shows MGP806N

Gripping force diagram
Gripping force as a function of jaw length.



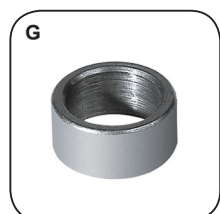
Coloured area: a higher wear and tear has to be taken into consideration, possibly reduction of pressure

Forces and torques
Max allowable forces and torques on jaw.



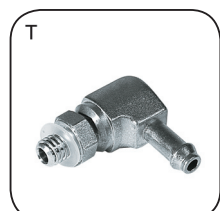
Mr [Nm]:	4
Mx [Nm]:	14,5
My [Nm]:	4,5
FA [N]:	330

Included in scope of delivery



Centering sleeve
Order no. BDST40600

Recommended accessories



Pneumatic fittings
Order no. WVM3



Proximity switch
Order no. MFS103KHC42



Proximity switch
Order no. MFS103SKHC42



Cable angled plug
Order no. KAW500

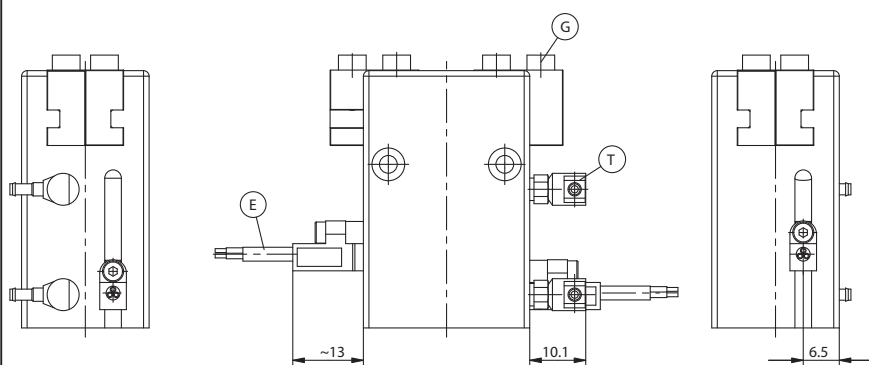


Plug 3- pole
Order no. S12-G-3



Pressure safety valve
Order no. DSV1/8

Accessory



Subject to change without prior notice



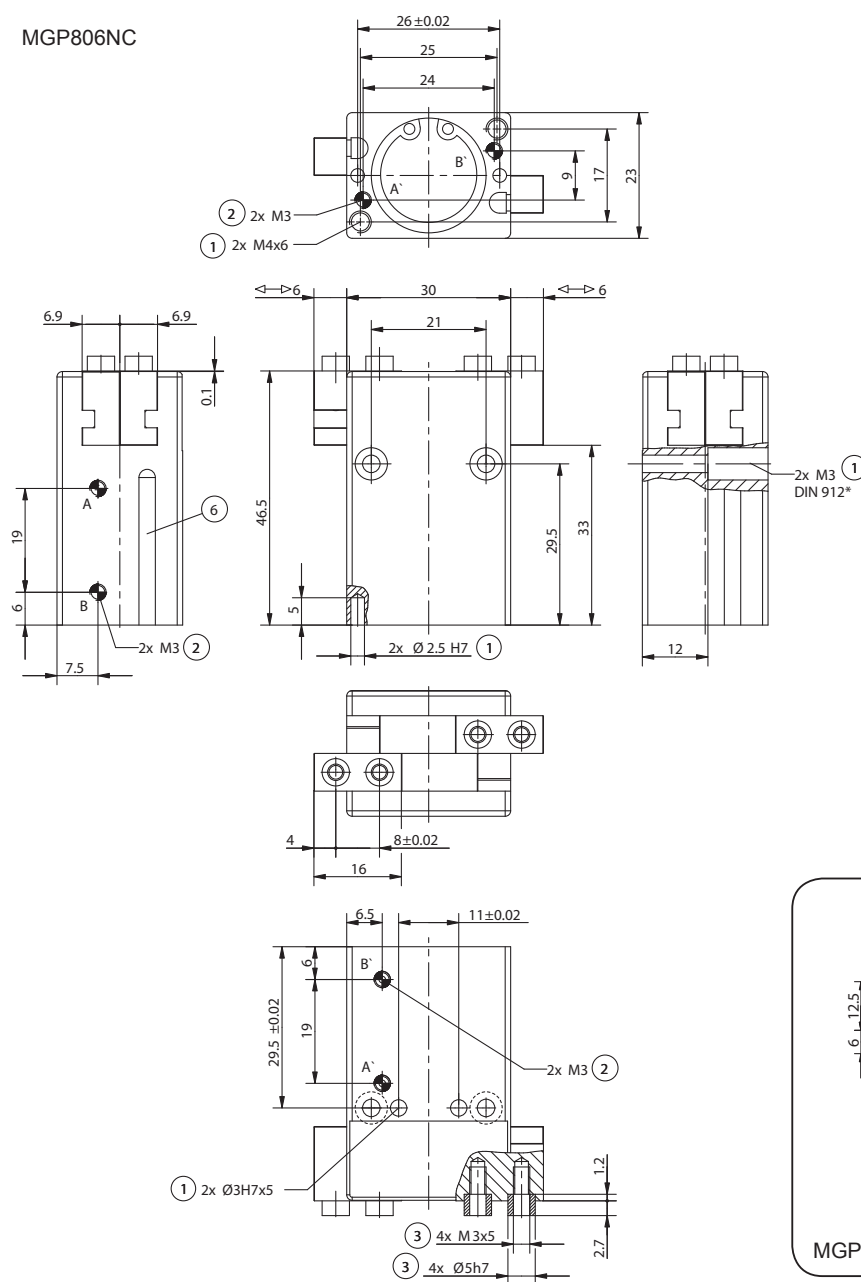
Order no.:	MGP806N	MGP806NC
Stroke per jaw [mm]:	6	6
Gripping force in closing [N]:	100	130
Gripping force in opening [N]:	119	-
Recommended workpiece weight [kg]*:	0,5	0,7
Gripping force secured by spring min. [N]:	-	30
Closing time / opening time [s]:	0,02 / 0,02	0,02 / 0,04
Repeatability +/- [mm]:	0,02	0,02
Min. operating pressure [bar]:	3	4
Max. operating pressure [bar]:	8	8
Min/max. operating temperature [°C]**:	5-80	5-80
Air volume per cycle [cm³]:	4,2	5,4
Weight [kg]:	0,1	0,11

All data measured at 6 bar

* Value determined with friction coefficient $\mu=0,1$ and safety factor $v=2$

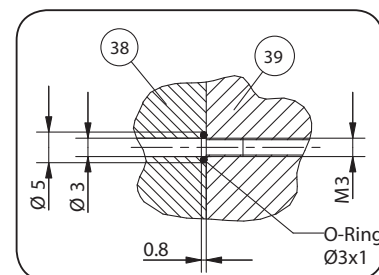
** High-temperature-resistant model (up to 150°C) add T to part number

MGP806NC

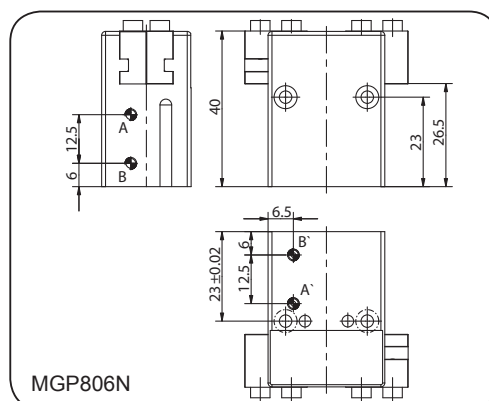


- ① Gripper mounting
- ② Power supply
- ③ Jaw fastening
- ④ Slot for magnetic field sensor
- ⑤ Adapter
- ⑥ Gripper
- A Air connection (closing)
- B Air connection (opening)
- A' Alternate air connection (closing)
- B' Alternate air connection (opening)

*according to DIN EN ISO 4762



hoseless power supply



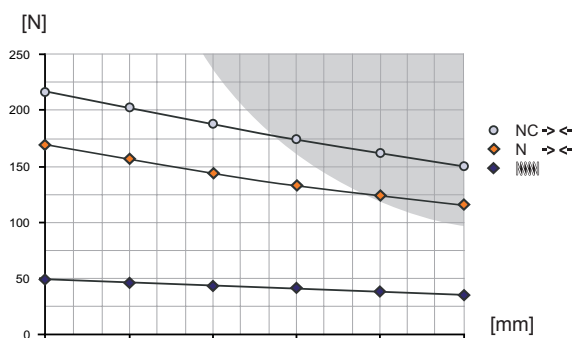
Subject to change without prior notice

Parallel Gripper



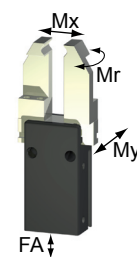
Picture shows MGP808N

Gripping force diagram
Gripping force as a function of jaw length.



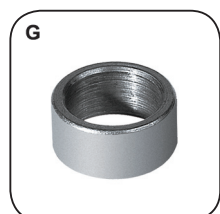
Coloured area: a higher wear and tear has to be taken into consideration, possibly reduction of pressure

Forces and torques
Max allowable forces and torques on jaw.



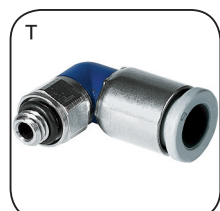
Mr [Nm]:	6,2
Mx [Nm]:	21
My [Nm]:	7,3
FA [N]:	450

Included in scope of delivery



Centering sleeve
Order no. BDST40600

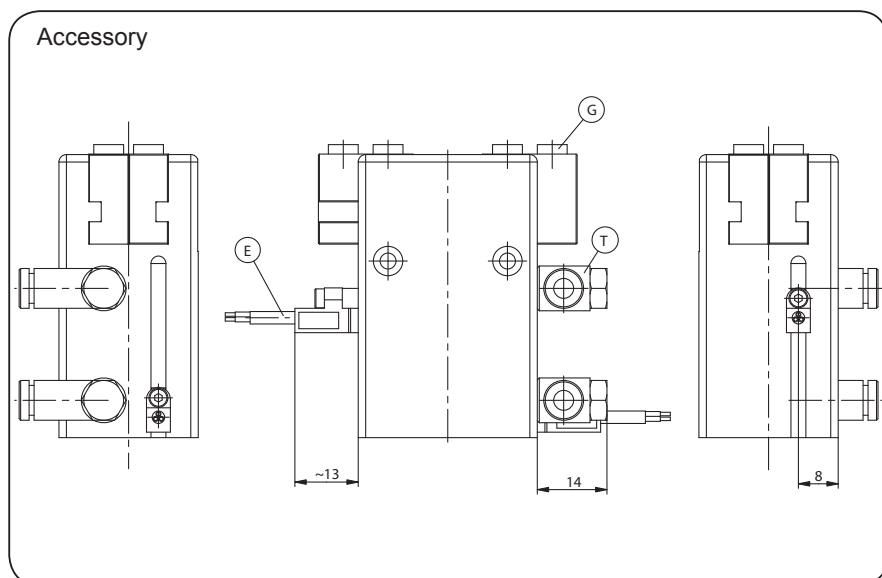
Recommended accessories



Pneumatic fittings
Order no. WVM5



Proximity switch
Order no. MFS103KHC42



Subject to change without prior notice



Proximity switch
Order no. MFS103SKHC42



Cable angled plug
Order no. KAW500



Plug 3-pole
Order no. S12-G-3



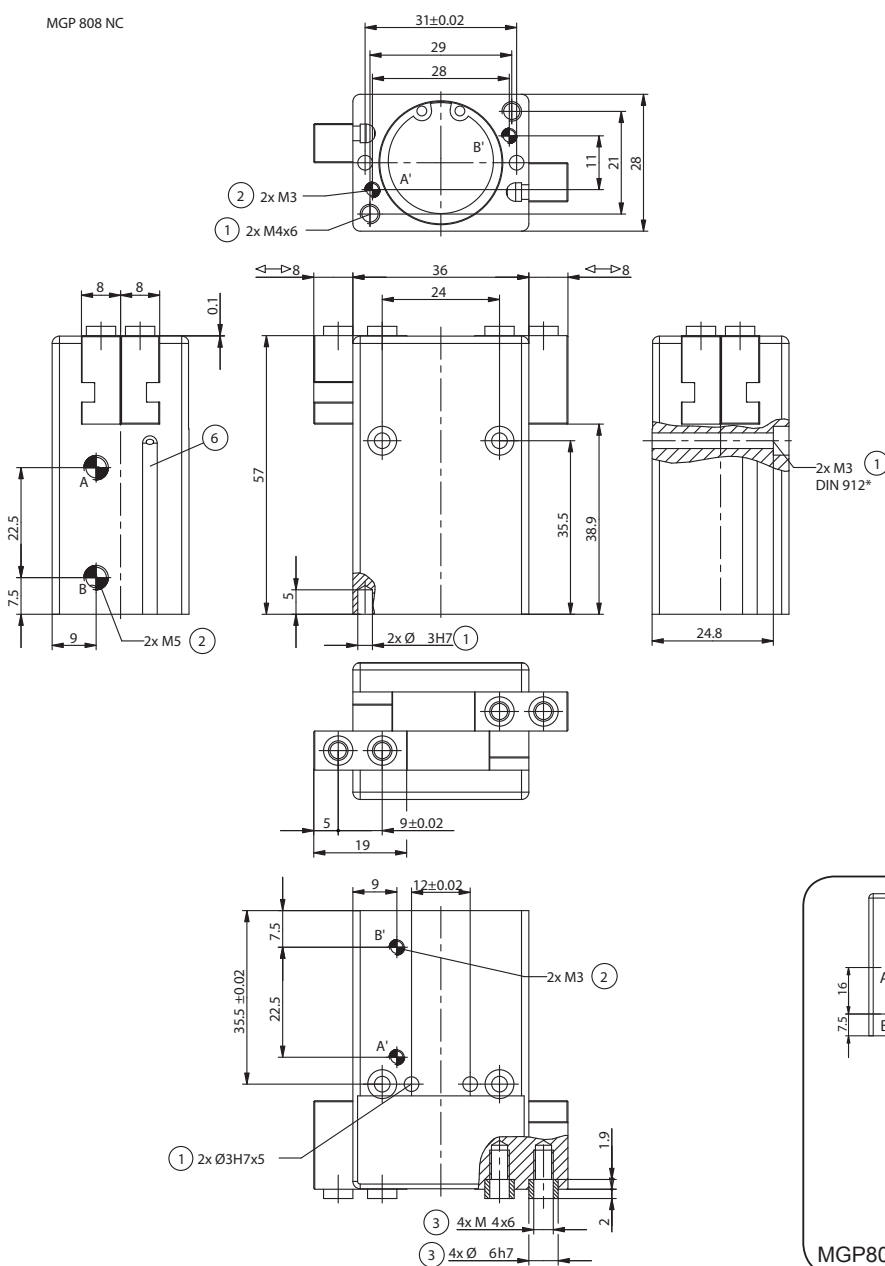
Pressure safety valve
Order no. DSV1/8

Order no.:	MGP808N	MGP808NC
Stroke per jaw [mm]:	8	8
Gripping force in closing [N]:	170	220
Gripping force in opening [N]:	192	-
Recommended workpiece weight [kg]*:	0,8	1,1
Gripping force secured by spring min. [N]:	-	50
Closing time / opening time [s]:	0,04 / 0,04	0,04 / 0,06
Repeatability +/- [mm]:	0,02	0,02
Min. operating pressure [bar]:	3	4
Max. operating pressure [bar]:	8	8
Min/max. operating temperature [°C]**:	5-80	5-80
Air volume per cycle [cm³]:	8,4	11,3
Weight [kg]:	0,16	0,18

All data measured at 6 bar

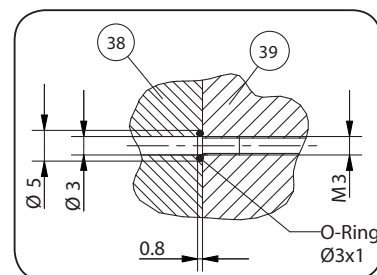
* Value determined with friction coefficient $\mu=0,1$ and safety factor $\gamma=2$

** High-temperature-resistant model (up to 150°C) add T to part number

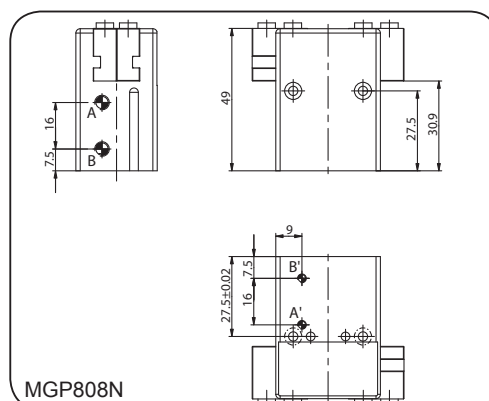


- ① Gripper mounting
- ② Power supply
- ③ Jaw fastening
- ⑥ Slot for magnetic field sensor
- ③⑧ Adapter
- ③⑨ Gripper
- Ⓐ Air connection (closing)
- Ⓑ Air connection (opening)
- Ⓐ Alternate air connection (closing)
- Ⓑ Alternate air connection (opening)

*according to DIN EN ISO 4762



hoseless power supply



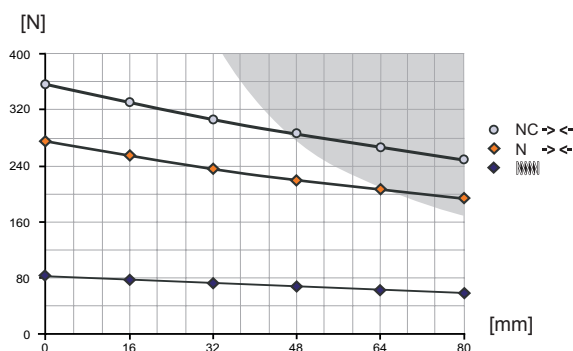
Subject to change without prior notice

Parallel Gripper



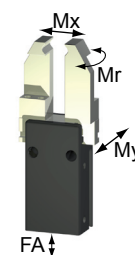
Picture shows MGP810N

Gripping force diagram
Gripping force as a function of jaw length.



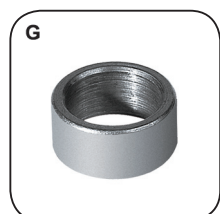
Coloured area: a higher wear and tear has to be taken into consideration, possibly reduction of pressure

Forces and torques
Max allowable forces and torques on jaw.



Mr [Nm]:	8,8
Mx [Nm]:	32
My [Nm]:	11,7
FA [N]:	588

Included in scope of delivery



Centering sleeve
Order no. BDST07540

Recommended accessories



Pneumatic fittings
Order no. WVM5



Proximity switch
Order no. MFS103KHC42



Proximity switch
Order no. MFS103SKHC42



Cable angled plug
Order no. KAW500

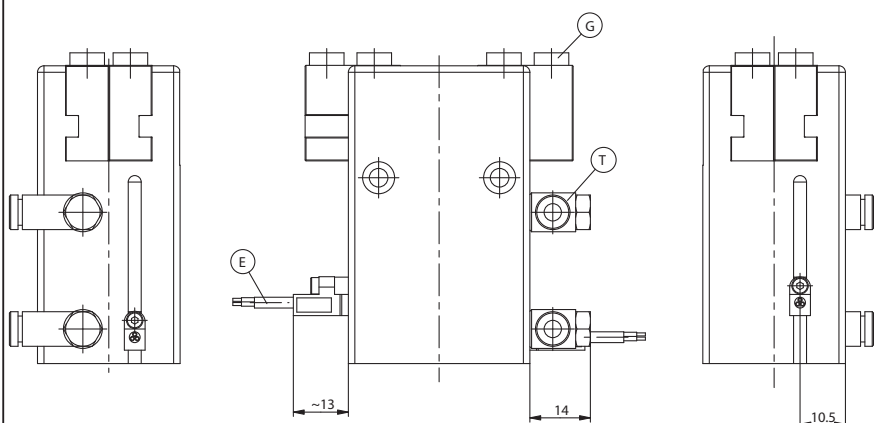


Plug 3- pole
Order no. S12-G-3



Pressure safety valve
Order no. DSV1/8

Accessory



Subject to change without prior notice



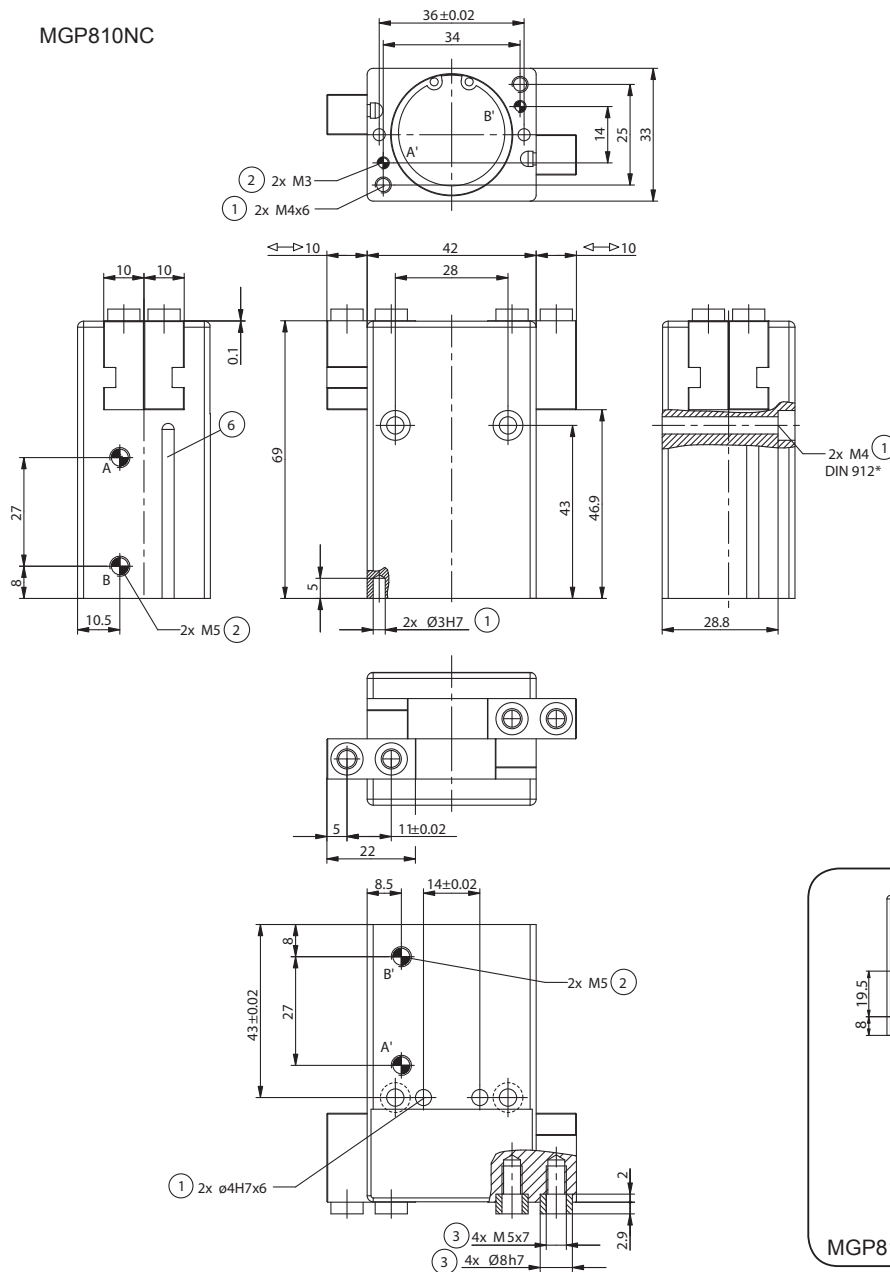
Order no.:	MGP810N	MGP810NC
Stroke per jaw [mm]:	10	10
Gripping force in closing [N]:	270	350
Gripping force in opening [N]:	311	-
Recommended workpiece weight [kg]*:	1,4	1,8
Gripping force secured by spring min. [N]:	-	80
Closing time / opening time [s]:	0,04 / 0,04	0,04 / 0,06
Repeatability +/- [mm]:	0,02	0,02
Min. operating pressure [bar]:	3	4
Max. operating pressure [bar]:	8	8
Min/max. operating temperature [°C]**:	5-80	5-80
Air volume per cycle [cm³]:	15,2	20,5
Weight [kg]:	0,28	0,32

All data measured at 6 bar

* Value determined with friction coefficient $\mu=0,1$ and safety factor $v=2$

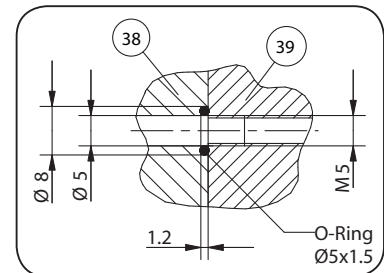
** High-temperature-resistant model (up to 150°C) add T to part number

MGP810NC

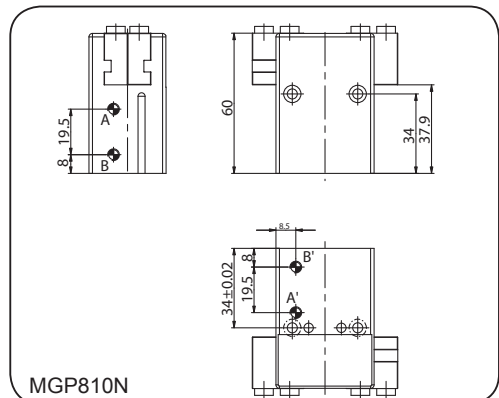


- ① Gripper mounting
- ② Power supply
- ③ Jaw fastening
- ⑥ Slot for magnetic field sensor
- 38 Adapter
- 39 Gripper
- A Air connection (closing)
- B Air connection (opening)
- A' Alternate air connection (closing)
- B' Alternate air connection (opening)

*according to DIN EN ISO 4762



hoseless power supply



MGP810N

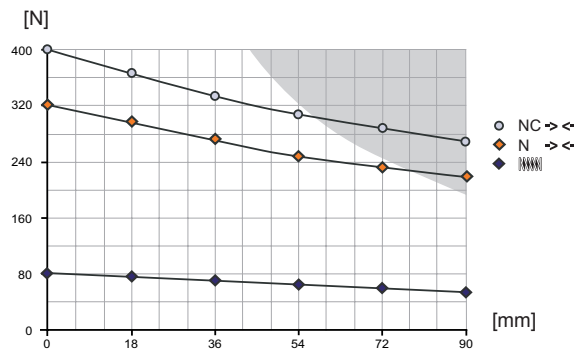
Subject to change without prior notice

Parallel Gripper



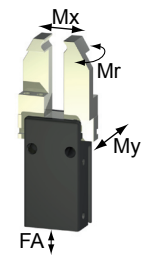
Picture shows MGP812N

Gripping force diagram
Gripping force as a function of jaw length.



Coloured area: a higher wear and tear has to be taken into consideration, possibly reduction of pressure

Forces and torques
Max allowable forces and torques on jaw.



Mr [Nm]:	11,3
Mx [Nm]:	42
My [Nm]:	15,6
FA [N]:	792

Included in scope of delivery

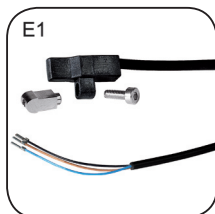


Centering sleeve
Order no. BDST07540

Recommended accessories



Pneumatic fittings
Order no. WVM5



Proximity switch
Order no. MFS103KHC42



Proximity switch
Order no. MFS103SKHC42



Cable angled plug
Order no. KAW500

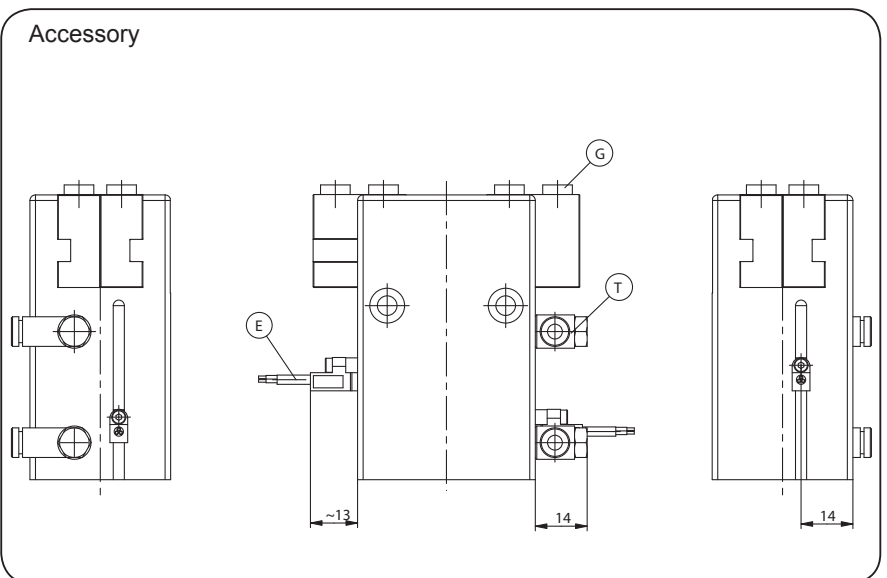


Plug 3-pole
Order no. S12-G-3



Pressure safety valve
Order no. DSV1/8

Accessory



Subject to change without prior notice



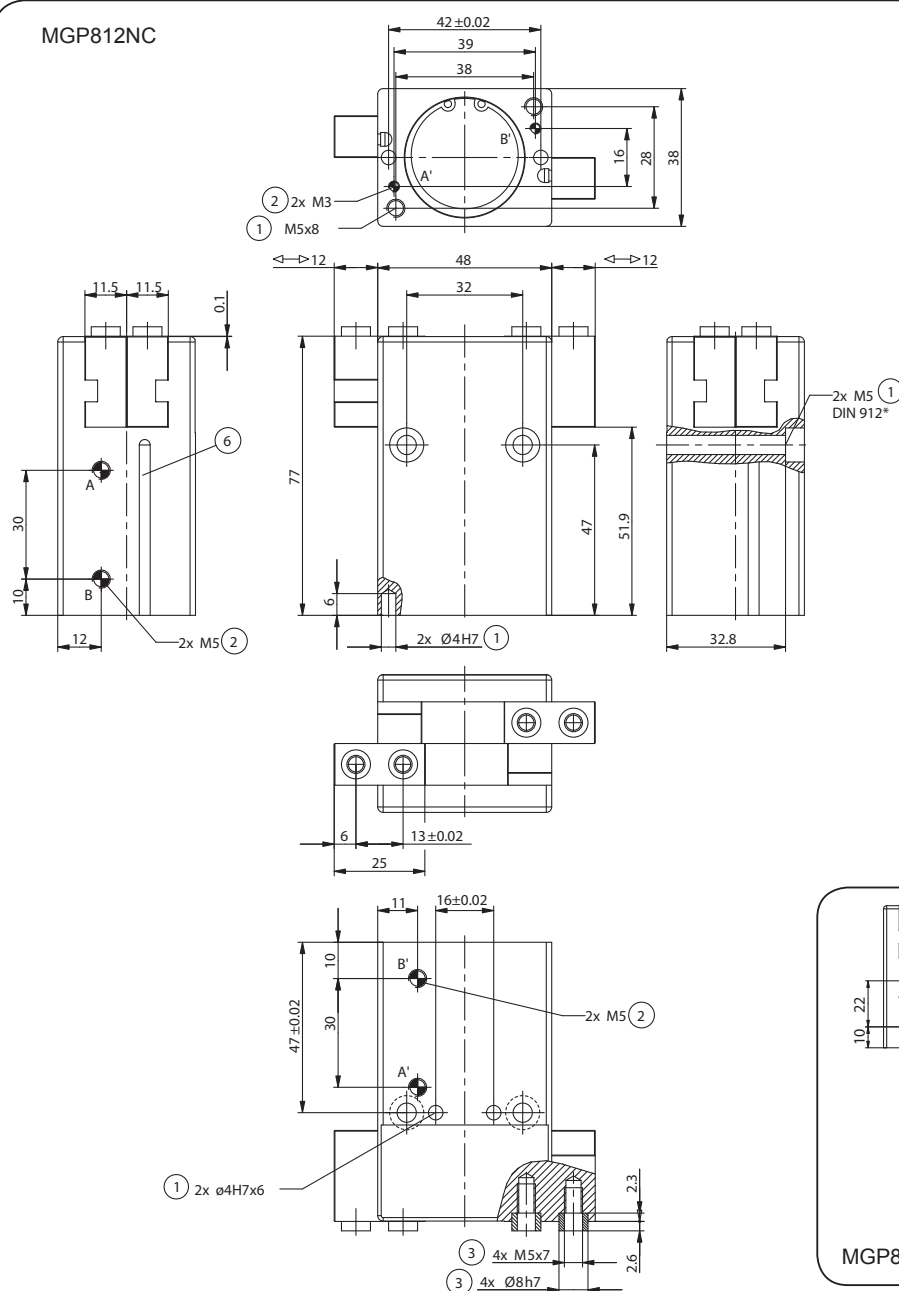
Order no.:	MGP812N	MGP812NC
Stroke per jaw [mm]:	12	12
Gripping force in closing [N]:	320	400
Gripping force in opening [N]:	353	-
Recommended workpiece weight [kg]*:	1,6	2
Gripping force secured by spring min. [N]:	-	80
Closing time / opening time [s]:	0,06 / 0,06	0,06 / 0,08
Repeatability +/- [mm]:	0,02	0,02
Min. operating pressure [bar]:	3	4
Max. operating pressure [bar]:	8	8
Min/max. operating temperature [°C]**:	5-80	5-80
Air volume per cycle [cm³]:	22,3	28,1
Weight [kg]:	0,41	0,46

All data measured at 6 bar

* Value determined with friction coefficient $\mu=0,1$ and safety factor $v=2$

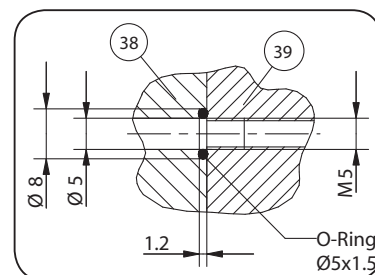
** High-temperature-resistant model (up to 150°C) add T to part number

MGP812NC

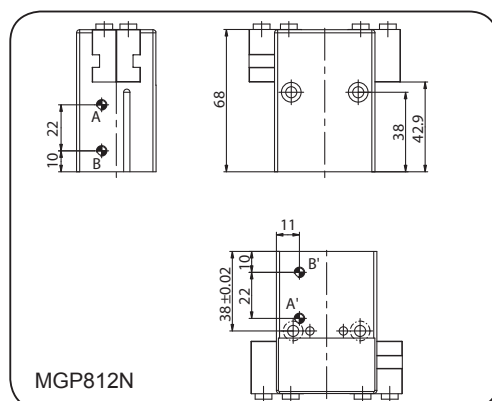


- ① Gripper mounting
- ② Power supply
- ③ Jaw fastening
- ⑥ Slot for magnetic field sensor
- 38 Adapter
- 39 Gripper
- A Air connection (closing)
- B Air connection (opening)
- A' Alternate air connection (closing)
- B' Alternate air connection (opening)

*according to DIN EN ISO 4762



hoseless power supply



MGP812N

Subject to change without prior notice



*Parallel **Gripper***

pneumatic



GP 12-B

GP 19-B

GP 30-B

GP 45-B

GP 75-B

GP100-B

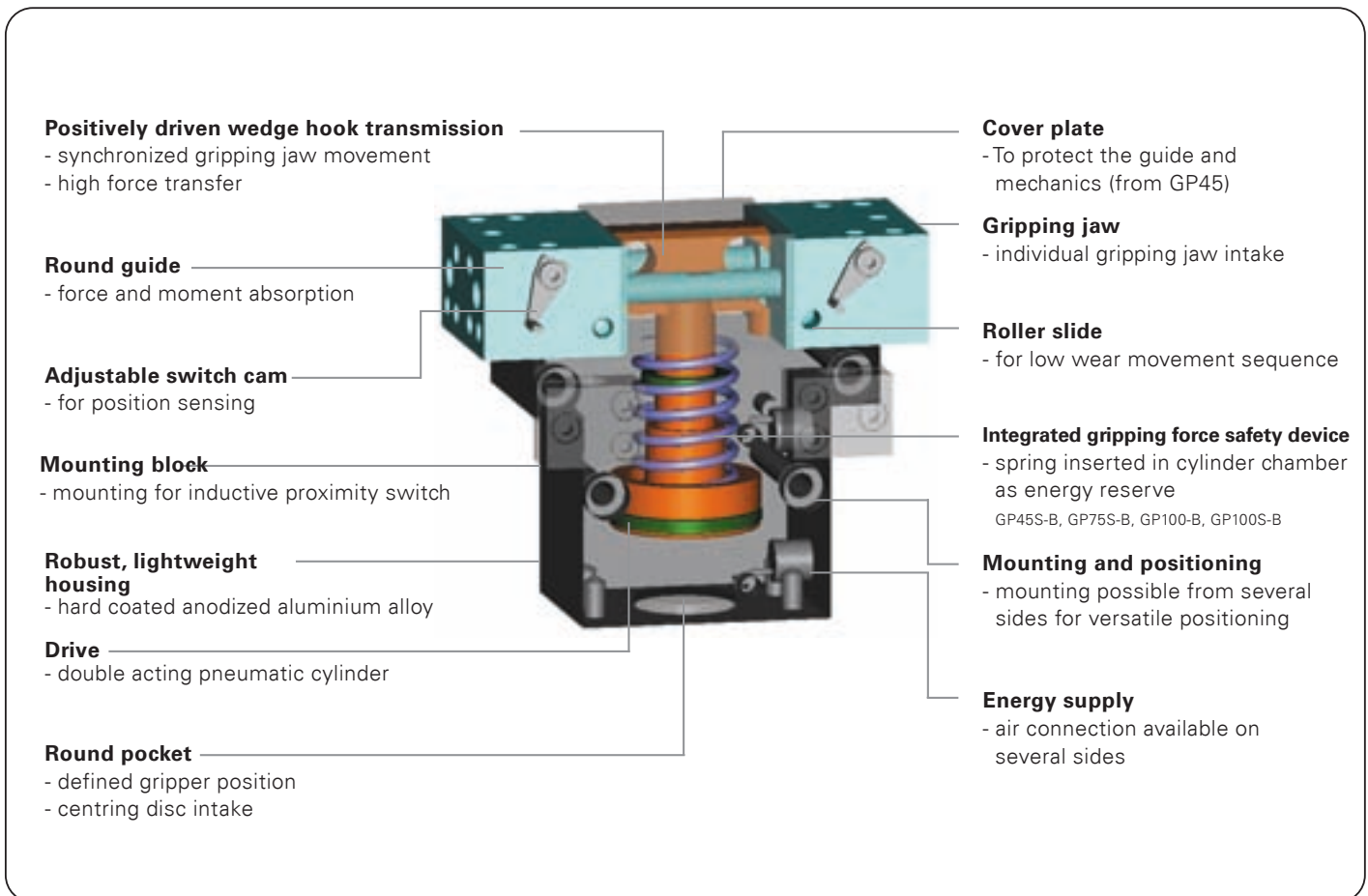
SOMMER
automatic

Parallel Gripper

Features

- low friction and loss force transfer due to roller slide
- six sizes and ten designs with strokes of 3 to 13 mm per jaw and gripping force up to 5250 N
- designs with mechanical gripping force safety device

Functional diagram





Terms

- Gripping force:** arithmetic sum of the individual forces occurring at the jaws
- Closing/opening time:** required time for the gripper jaws to cover the maximum stroke distance
- Repeatability:** at end stops positions at 50/100 consecutive cycles
- Cycle:** one complete movement of the piston forward and back
- Maintenance:** recommended at 10 mil. cycles
(please see the owner's manual for conditions,
download from www.sommer-automatic.com)
- long maintenance intervals keep costs down
 - long lifespan

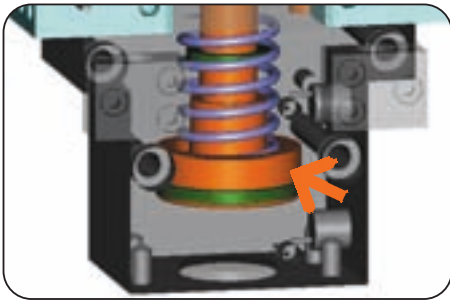
Model guides

- B:** Model line
- S:** For external gripping, gripping force safety under drop in pressure from integral spring, GP100S also has a steeper crank for greater gripping force and reduced stroke
- 99:** without interdrated spring

Order no.	Stroke per jaw	Gripping force in opening	Gripping force in closing	Self-locking via
GP12-B	3 mm	4 N	8,4 N	DSV*
GP19-B	4 mm	26 N	36 N	DSV*
GP30-B	5 mm	76 N	94 N	DSV*
GP45-B	5 mm	155 N	118 N	DSV*
GP45S-B	5 mm	-	190 N	Spring
GP75-B	10 mm	260 N	220 N	DSV*
GP75S-B	10 mm	-	275 N	Spring
GP100-B	13 mm	-	450 N	Spring
GP100-B-99	13 mm	450 N	-	DSV*
GP100S-B	8 mm	-	5250 N	Spring (combined with crank with increasing steeper angle)

*DSV = Pressure safety valves (Order no. DSV1/8)

Parallel **Gripper**



Drive

S Model:

Double acting pneumatic cylinder with integrated mechanical gripping force safety device

- optimum coordination of drive force and gripping moment secured by spring

Double acting pneumatic cylinder

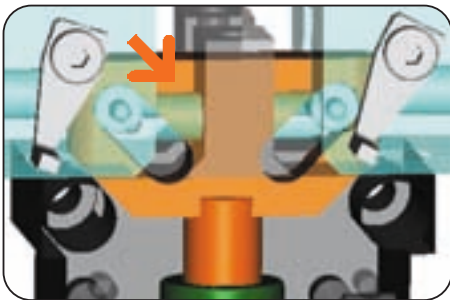
- maximum drive force when opening and closing
- high gripping force up to 5250 N



Guidance

Dual round guide rods

- hardened steel shafts
- hard-anodized aluminum jaw

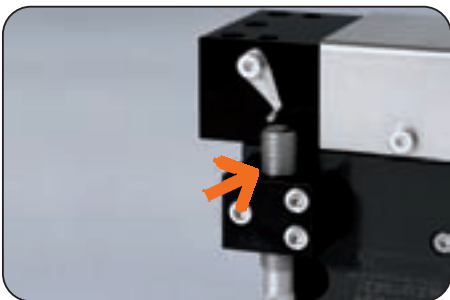


Power transfer

Wedge hook mechanism with roller slide

- low friction steering of drive force in gripping force
- central tensioning
- synchronized
- high repeat accuracy

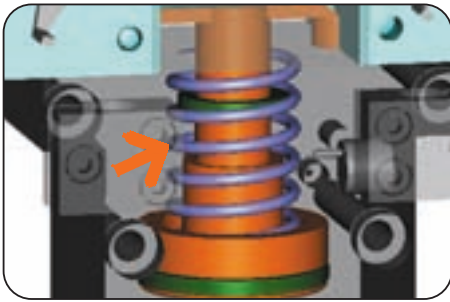
reflected integrated crank for maximum force when closing
(GP12-B/GP19-B/GP30-B)



Position sensing

switch cam installed on gripper jaw for position recognition

- process safe
- adjustable
- useable for inductive proximity switch of 3 to 12 mm diameter



Gripping force safety device

S Models:

spring intergrated into cylinder as energy reserve

- permanent maintenance of gripping force
- compact design

Standard Models:

External pressure-retention safety valve

- Gripping force safety possible by addition of pressure safety valve (Part. No. DSV1/8). The inevitable leakage in the pneumatic circuit restricts the time of this type of gripping force safety.



Connections

Energy supply, attachment and positioning possibilities

flexibility possible on several sides

- optimum integration into the workroom through individual mounting situation

defined gripper position with centring disc or pin

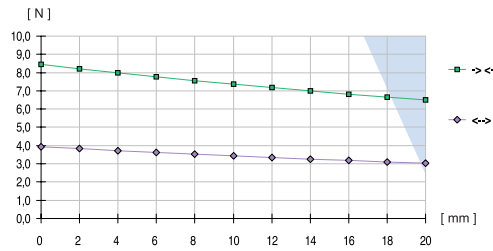
- precise gripper positioning

Parallel Gripper



Gripping force diagram

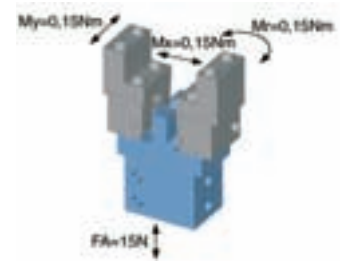
Gripping force in relation to the jaw length



Colored area: increased wear and tear to be expected.

Forces and moments

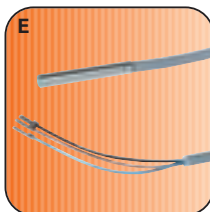
Max allowable forces and moments on jaws



Accessory list



Mounting block
Order no. KB3M



Proximity switch
Order no. NJ3-E2-03



Pneumatic fittings
Order no. WVM3



Pneumatic fittings
Order no. GVM3



Centring disc
Order no. ZE10Hx6



Universal jaw (set)
Order no. UB12 (Al)

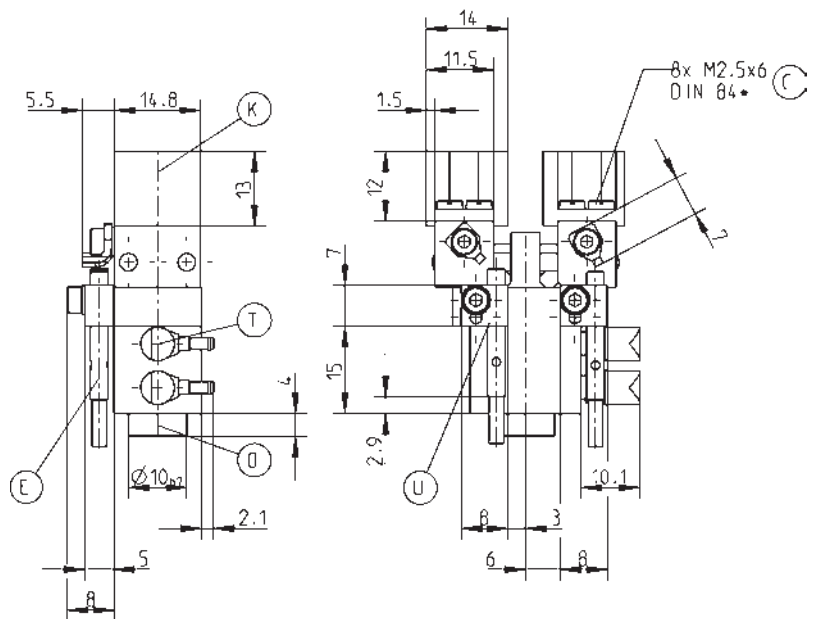


Plug 3-pole
Order no. S12-G-3



Pressure safety valves
Order no. DSV1/8

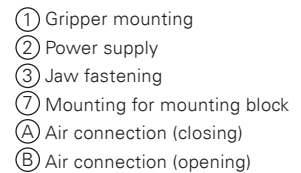
Accessory



* equivalent to DIN EN ISO 1207

subject to change without prior notice

**** High-temperature-resistant model (up to 150°) add T to part number**

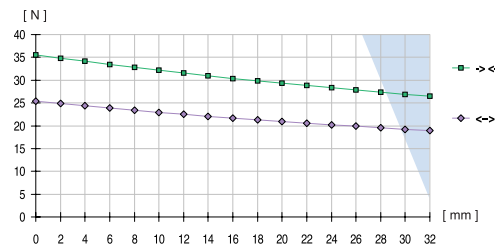


Parallel Gripper



Gripping force diagram

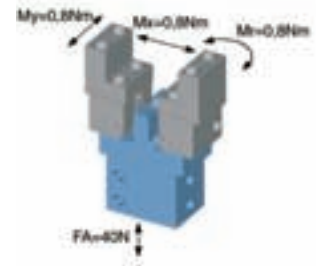
Gripping force as a function of jaw length.



Colored area: increased wear and tear to be expected

Forces and Moments

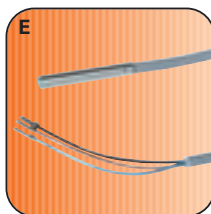
Max allowable forces and moments on jaws.



Accessory list



Mounting block
Order no. KB3



Proximity switch
Order no. NJ3-E2



Pneumatic fittings
Order no. WVM5



Pneumatic fittings
Order no. GVM5



Centring disc
Order no. ZE12H7x4



Universal jaw (set)
Order no. UB19 (Al)
Order no. UB19ST (St)

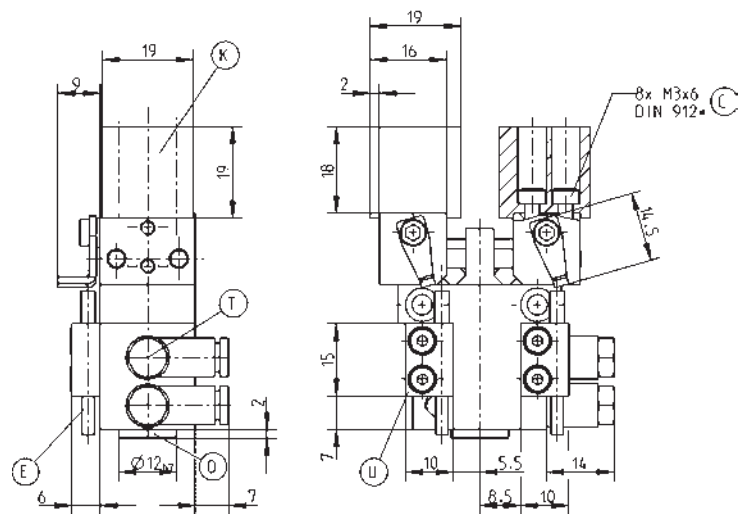


Plug 3-pole
Order no. S12-G-3



Pressure safety valve
Order no. DSV1/8

Accessory



* equivalent to DIN EN ISO 4762

subject to change without prior notice

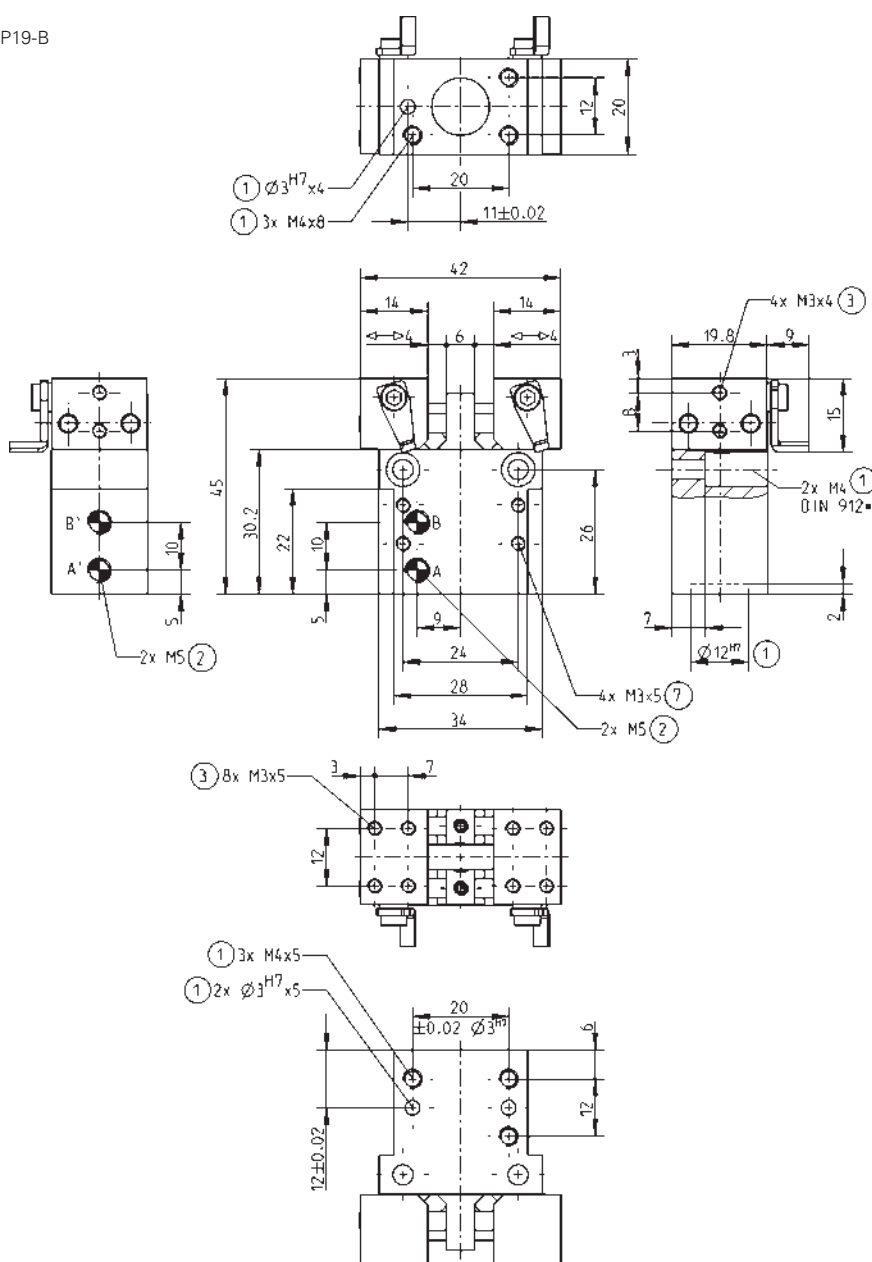
Order no.:	GP19-B
Stroke per jaw [mm]:	4
Gripping force in closing [N]:	36
Gripping force in opening [N]:	26
Gripping force in opening [N]:	133
Recommended workpiece weight [kg]*:	-
Closing time/opening time [s]:	0,02
Repeatability +/- [mm]:	0,05
Min./max. operating pressure [bar]:	3/8
Min./max. operating pressure [°C]**:	5/80
Air volume per cycle [cm ³]:	1
Weight [g]:	81

All data measured at 6 bar

* Value determined with friction coefficient $\mu=0.1$ and safety factor $\nu = 2$

** High-temperature-resistant model (up to 150°) add T to part number

GP19-B

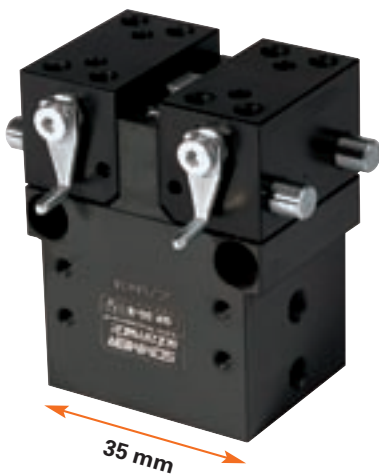


- ① Gripper mounting
- ② Power supply
- ③ Jaw fastening
- ⑦ Mounting for mounting block
- A) Air connection (closing)
- B) Air connection (opening)
- A) Alternate air connection (closing)
- B) Alternate air connection (opening)

* equivalent to DIN EN ISO 4762

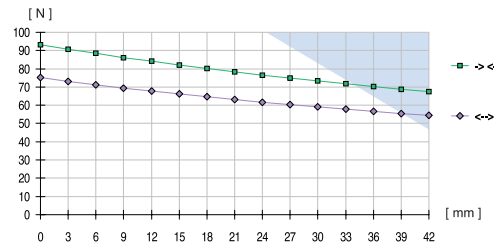
subject to change without prior notice

Parallel Gripper



Gripping force diagram

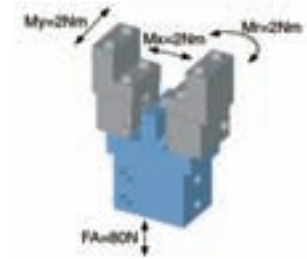
Gripping force as a function of jaw length.



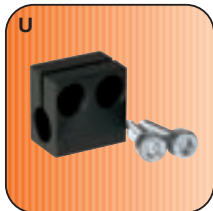
Colored area: increased wear and tear to be expected

Forces and Moments

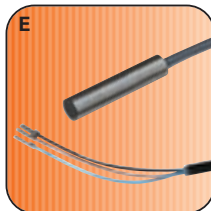
Max allowable forces and moments on jaws.



Accessory list



Mounting block
Order no. KB5



Proximity switch
Order no. NJ5-E2



Pneumatic fittings
Order no. WVM5



Pneumatic fittings
Order no. GVM5



Centring disc
Order no. ZE15H7x4



Universal jaw (set)
Order no. UB30 (Al)
Order no. UB30ST (St)

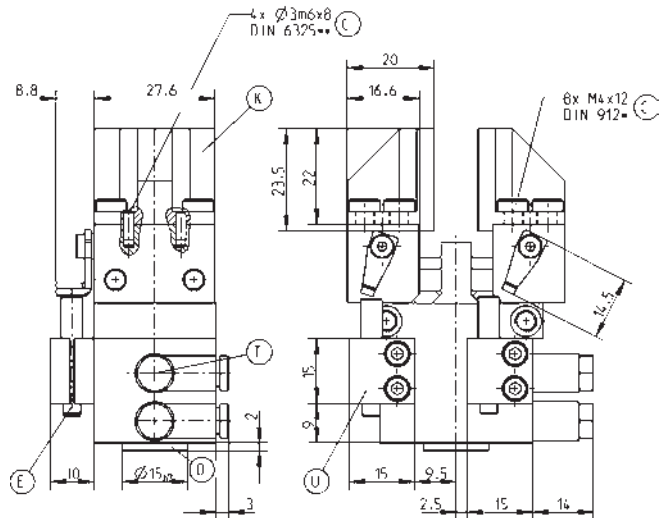


Plug 3-pole
Order no. S12-G-3



Pressure safety valves
Order no. DSV1/8

Accessory



* equivalent to DIN EN ISO 4762
** equivalent to DIN EN ISO 28734

subject to change without prior notice

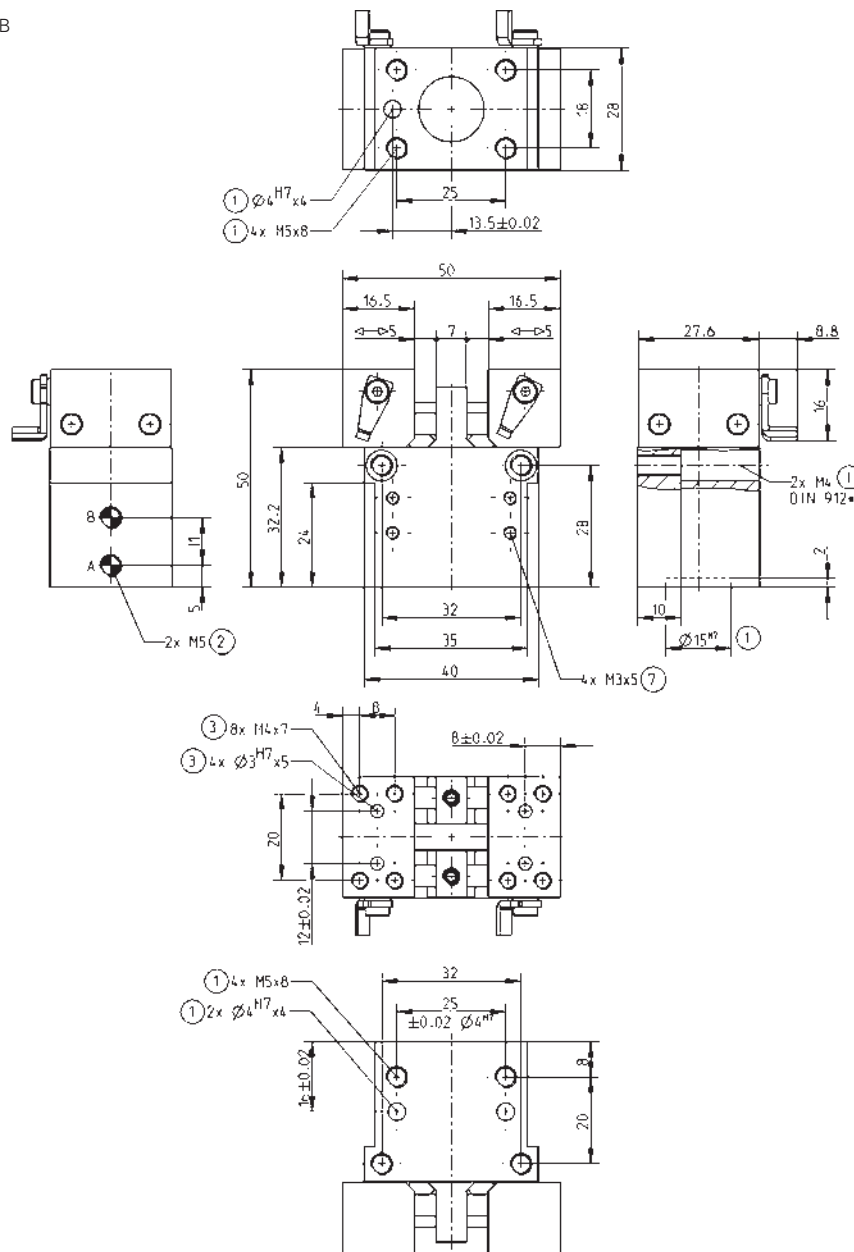
Order no.:	GP30-B
Stroke per jaw [mm]:	5
Gripping force in closing [N]:	94
Gripping force in opening [N]:	76
Recommended workpiece weight [g]*:	387
Gripping force secured by spring min./max. [N]:	-
Closing time/opening time [s]:	0,02
Repeatability +/- [mm]:	0,05
Min./max. operating pressure [bar]:	3/8
Min./max. operating temperature [°C]**:	5/80
Air volume per cycle [cm³]:	0,3
Weight [g]:	152

All data measured at 6 bar

* Value determined with friction coefficient $\mu = 0.1$ and safety factor $v = 2$,

** High-temperature-resistant model (up to 150°) add T to part number

GP30-B



- ① Gripper mounting
- ② Power supply
- ③ Jaw fastening
- ⑦ Mounting for mounting block
- A Air connection (closing)
- B Air connection (opening)

* equivalent to DIN EN ISO 4762

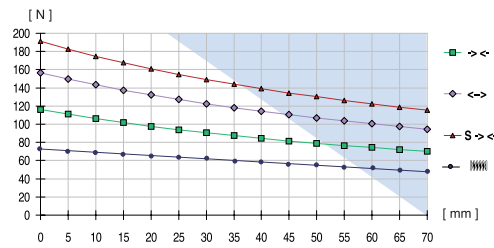
Subject to change without prior notice

Parallel Gripper



Gripping force diagram

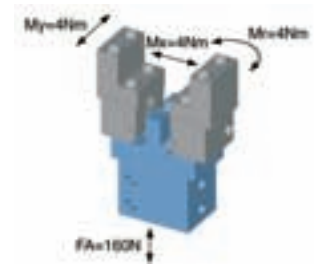
Gripping force as a function of jaw length.



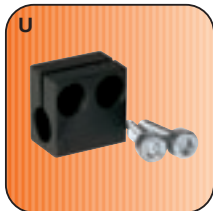
Colored area: increased wear and tear to be expected

Forces and moments

Max allowable forces and moments on jaws



Accessory list



Mounting block
Order no. KB6.5



Proximity switch
Order no. NJ6.5-E2S



Pneumatic fittings
Order no. WVM5



Centring disc
Order no. ZE20H7x4



Universal jaw (set)
Order no. UB45 (Al)
Order no. UB45ST (St)



Cable angled plug
Order no. KAW500

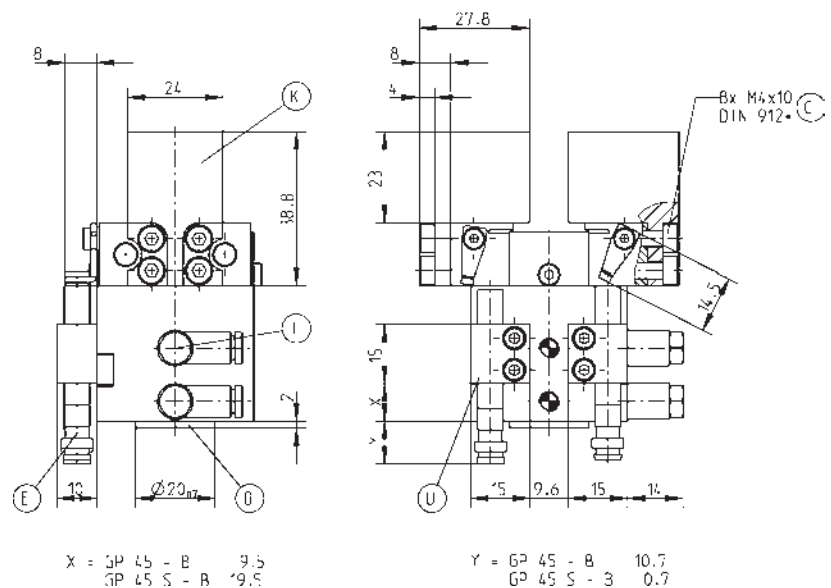


Plug 3-pole
Order no. S12-G-3



Pressure safety valves
Order no. DSV1/8

Accessory



* equivalent to DIN EN ISO 4762

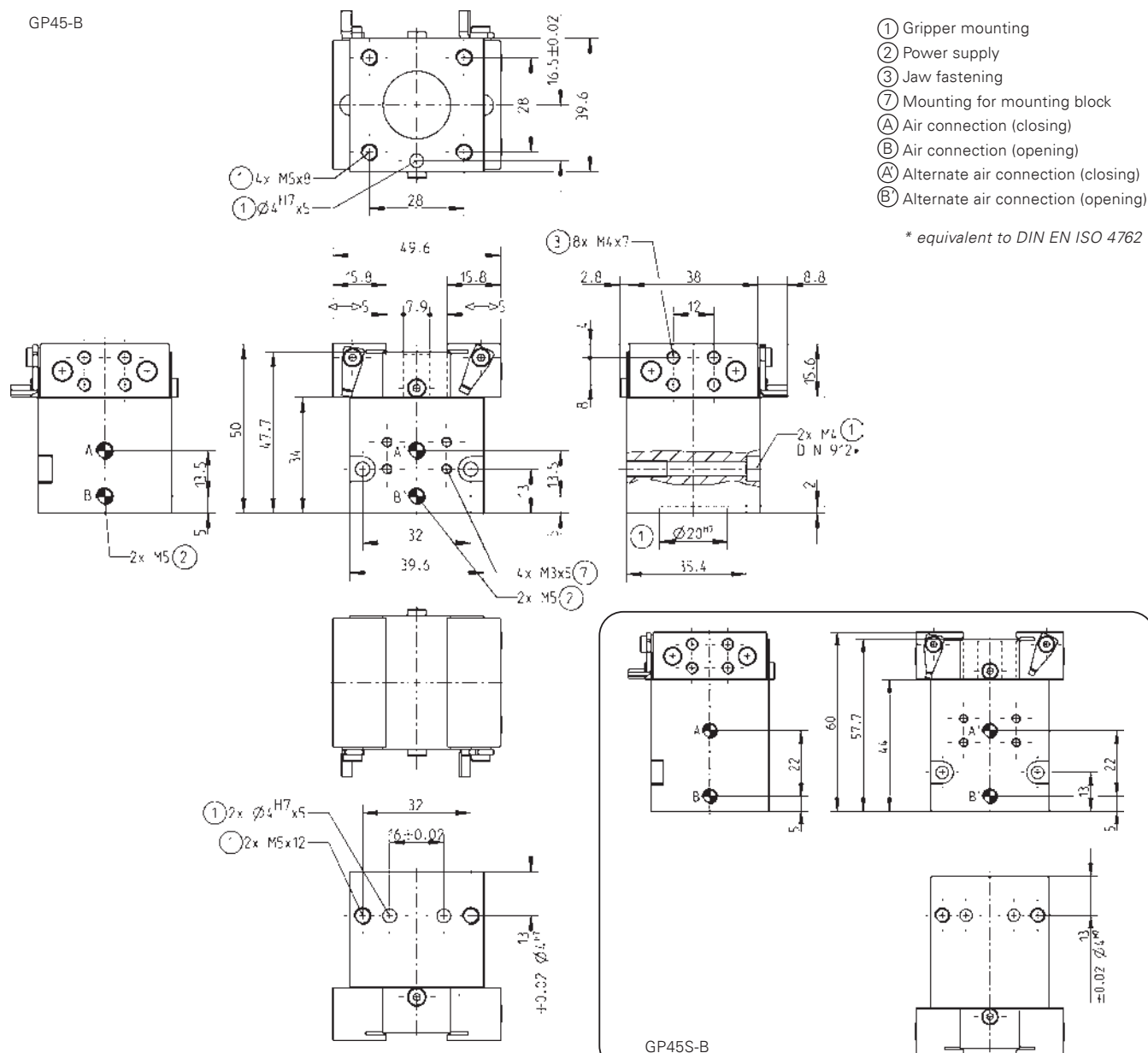
subject to change without prior notice

Order no.:	GP45-B	GP45S-B
Stroke per jaw [mm]:	5	5
Gripping force in closing [N]:	118	190
Gripping force in opening [N]:	155	-
Recommended workpiece weight [g]*:	790	968
Gripping force secured by spring min./max. [N]:	-	75
Closing time/opening time [s]:	0,03	0,04
Repeatability +/- [mm]:	0,05	0,05
Min./max. operating pressure [bar]:	3/8	5/8
Min./max. operating temperature [°C]**:	5/80	5/80
Air volume per cycle [cm³]:	4	8
Weight [g]:	255	300

All data measured at 6 bar

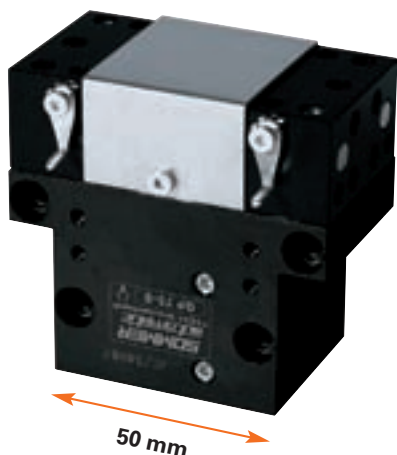
* Value determined with friction coefficient $\mu = 0.1$ and safety factor $v = 2$,

** High-temperature-resistant model (up to 150°) add T to part number



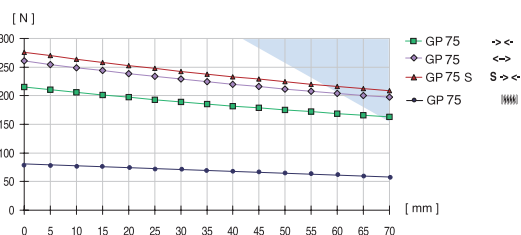
Subject to change without prior notice

Parallel Gripper



Gripping force diagram

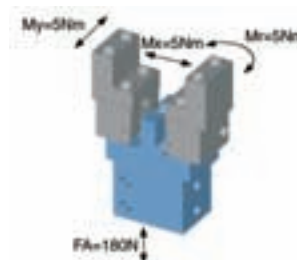
Gripping force as a function of jaw length.



Colored area: increased wear and tear to be expected

Forces and Moments

Max allowable forces and moments on jaws.



Included with purchase



Mounting block
Order no. KB8K

Accessory list



Pneumatic fittings
Order no. WV1/8x6



Proximity switch
Order no. NJ8-E2S



Centring disc
Order no. ZE20H7x4



Universal jaw (set)
Order no. UB75 (Al)
Order no. UB75ST (St)

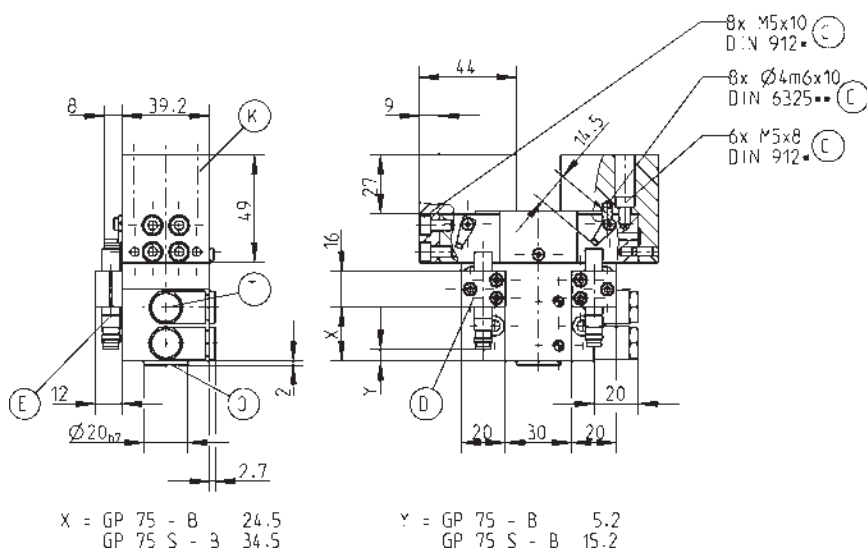


Cable angled plug
Order no. KAW500



Pressure safety valves
Order no. DSV1/8

Accessory



* equivalent to DIN EN ISO 4762
** equivalent to DIN EN ISO 28734

subject to change without prior notice

** High-temperature-resistant model (up to 150°) add T to part number

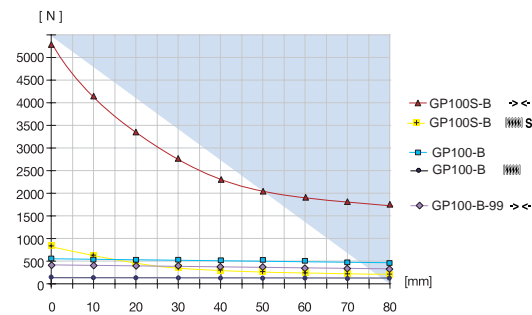


Parallel Gripper



Gripping force diagram

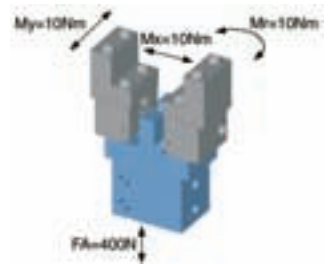
Gripping force as a function of jaw length.



Colored area: increased wear and tear to be expected

Forces and Moments

Max allowable forces and moments on jaws.



Included with purchase



Mounting block
Order no. KB8K

Accessory list



Pneumatic fittings
Order no. WV1/8x6



Proximity switch
Order no. NJ8-E2S



Centring disc
Order no. ZE30H7x4



Universal jaw (set)
Order no. UB100-B (A/I)

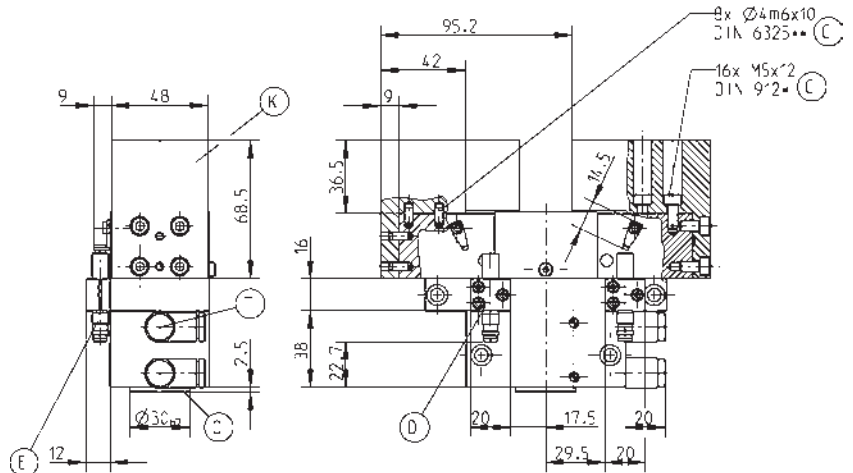


Cable angled plug
Order no. KAW500



Pressure safety valves
Order no. DSV1/8

Accessory



* equivalent to DIN EN ISO 4762
** equivalent to DIN EN ISO 28734

subject to change without prior notice

All data measured at 6 bar

* Increased gripping force in closing is restricted to a stroke up to 0,8 mm from jaw stroke to end position, due to manufacturing design

** Value determined with friction coefficient $\mu = 0.1$ and safety factor $\nu = 2$

*** Value determined with friction coefficient $\mu = 0.1$ and safety factor $\nu = 2$ and jaw length 50 mm (see *)

**** High-temperature-resistant model (up to 150°) add T to part number

Technical drawing of a mechanical assembly, showing five views: front, top, left side, right side, and bottom. The drawing includes dimensions and callouts for various components.

Front View: Shows a central circular feature with a diameter of $\varnothing 6$ H7 x 8. The overall width is 64, and the height is 30. The distance from the center to the top and bottom edges is 32 ± 0.02. The total height of the assembly is 49.4.

Top View: Shows a rectangular plate with a width of 120 and a height of 87. The central feature is a circle with a diameter of $\varnothing 6$ H7 x 8. The distance from the center to the top and bottom edges is 32 ± 0.02. The total height of the assembly is 49.4.

Left Side View: Shows a rectangular plate with a width of 43.3 and a height of 23. The distance from the center to the top and bottom edges is 32 ± 0.02. The total height of the assembly is 49.4.

Right Side View: Shows a rectangular plate with a width of 120 and a height of 87. The central feature is a circle with a diameter of $\varnothing 6$ H7 x 8. The distance from the center to the top and bottom edges is 32 ± 0.02. The total height of the assembly is 49.4.

Bottom View: Shows a rectangular plate with a width of 120 and a height of 87. The central feature is a circle with a diameter of $\varnothing 6$ H7 x 8. The distance from the center to the top and bottom edges is 32 ± 0.02. The total height of the assembly is 49.4.

Callouts and Dimensions:

- 1 $\varnothing 6$ H7 x 8
- 1 4x M8 x 10
- 1 4x M6 DIN 912
- 2 2x G1/8"
- 7 4x M3 x 5
- 2x M5
- 3 8x M5 x 10
- 3 4x $\varnothing 4$ H7 x 6
- 1 $\varnothing 30$ m
- 4x $\varnothing 4$ H7 x 6
- 8x M5 x 8
- 2x $\varnothing 6$ H7 x 8
- 1 4x M6 x 14

- ① Gripper mounting
- ② Power supply
- ③ Jaw fastening
- ⑦ Mounting for mounting block
- Ⓐ Air connection (closing)
- Ⓑ Air connection (opening)
- Ⓐ Alternate air connection (closing)
- Ⓑ Alternate air connection (opening)

* equivalent to DIN EN ISO 4762



Parallel Grippers

pneumatic



SGP Series

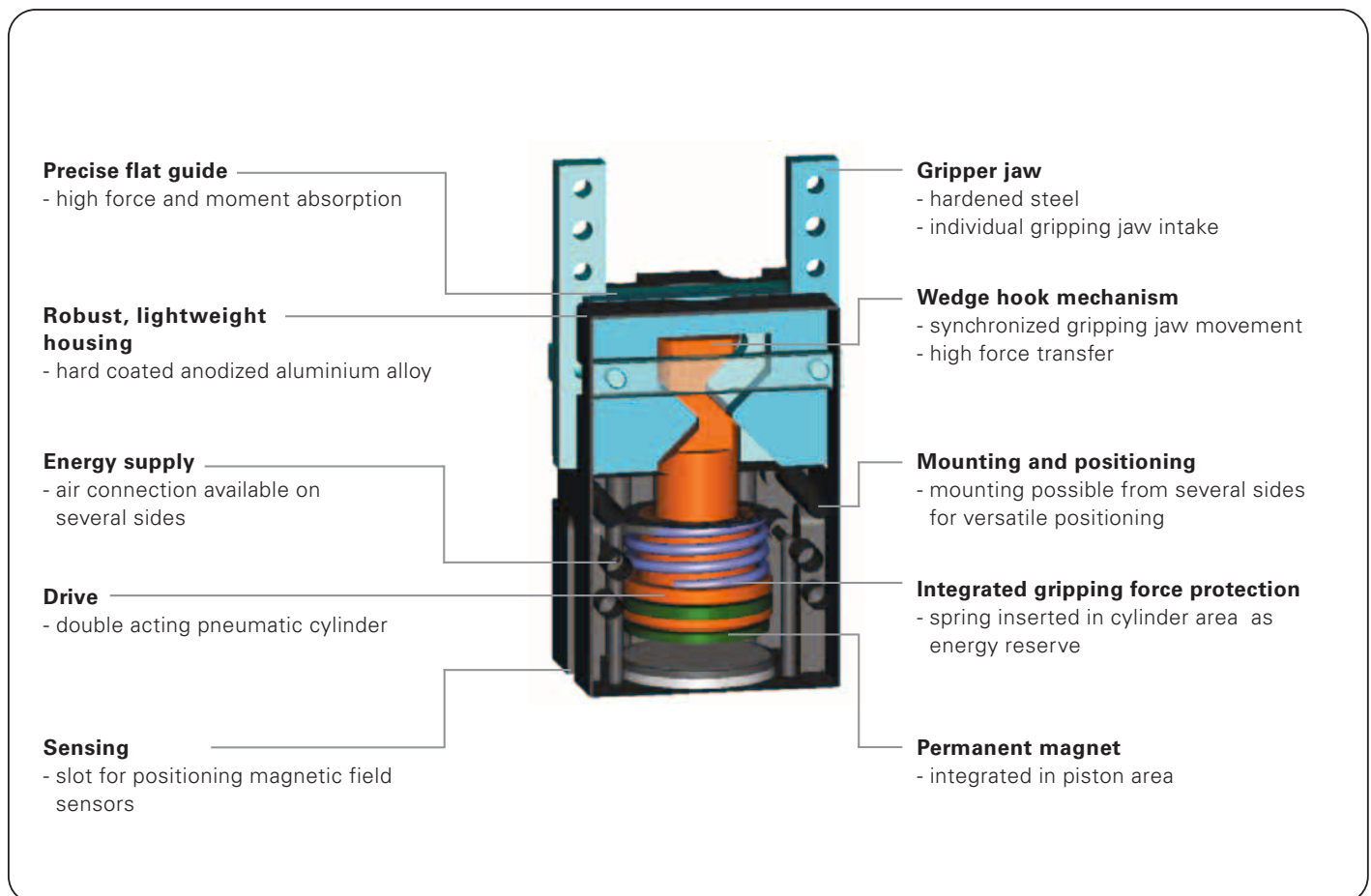
SOMMER
automatic

Parallel Gripper

Features

- stable flat guides for gripping jaws up to 100 mm jaw length
- indirect position sensing for piston position using magnetic field sensors
- design with mechanical gripping force device

Functional diagram





Terms

- Gripping force:** arithmetic sum of the individual forces occurring at the jaws
- Closing/opening time:** required time for the gripper jaws to cover the maximum stroke distance
- Repeatability:** at end stops after 50/100 consecutive cycles
- Cycle:** one complete movement of the piston forward and back
- Maintenance:** recommended at 10 mil. cycles
(please see the owner's manual for conditions,
download from www.sommer-automatic.com)
- long maintenance intervals keep costs down
 - long lifespan

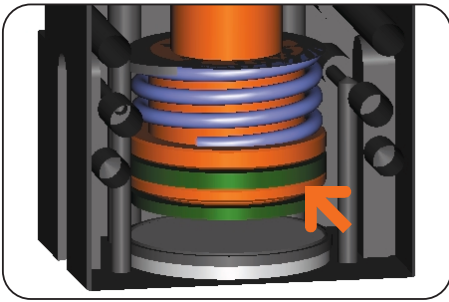
Model guide

- N:** Double acting cylinder
- C:** For external gripping, self-locking, spring closing

Order no.	Stroke per jaw	Gripping force in opening	Gripping force in closing	Self-locking via
SGP14N	2 mm	39 N	14 N	DSV*
SGP14NC	2 mm	-	39 N	Spring
SGP25N	4 mm	170 N	110 N	DSV*
SGP25NC	4 mm	-	170 N	Spring
SGP35N	6 mm	305 N	245 N	DSV*
SGP35NC	6 mm	-	305 N	Spring

*DSV = Pressure safety valves (Order no. DSV1/8)

Parallel **Gripper**



Drive

N Models:

Double acting pneumatic cylinder

- maximum power in both opening and closing
- gripping force up to 305 N

NC Models:

Double acting pneumatic cylinder with integrated mechanical gripping force safety

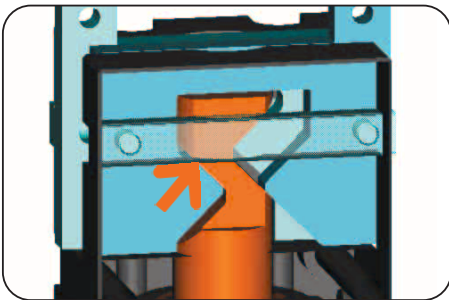
- optimum coordination of drive force and gripping force secured by spring



Guidance

Flat-guide from steel

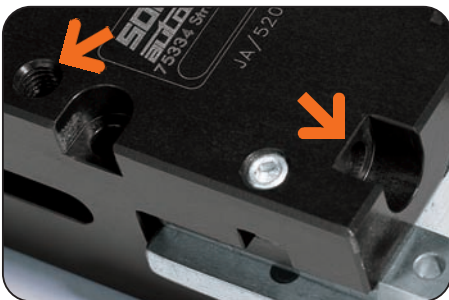
- flat guide for maximum force and moment resistance
- jaw movement guided over entire stroke length within the housing
- high precision, due to low play guide



Power transfer

Wedge hook mechanism

- optimum transmission of power to gripping
- self-centering
- synchronized
- high repeat accuracy

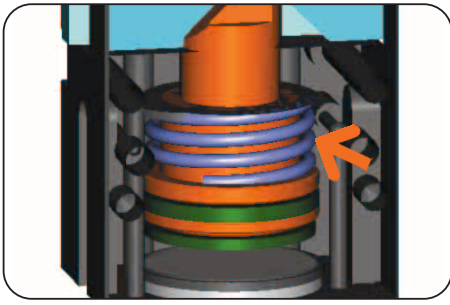


Connections

Energy supply, attachment and positioning possibilities

Adaptable to multiple mounting configuration

- optimal integration into the workroom through individual mounting situation
- tubeless directly-connected possibility (no additional hose needed)



Gripping force safety device

NC Models:

spring integrated into cylinder as energy reserve

- permanent maintenance of gripping force
- compact design

N Models:

External pressure safety valve

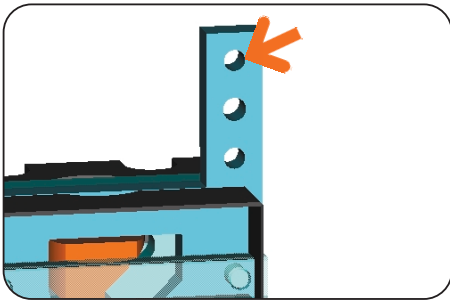
- Gripping force safety possible by addition of pressure safety valve (Part. No. DSV1/8). The inevitable leakage in the pneumatic circuit restricts the time of this type of gripping force safety.



Position sensing

indirect piston-retrieval of the piston-position through magnetic field sensor

- process feedback
- compact
- for magnetic field sensors with T-slot mounting holder



Positioning of tooling fingers

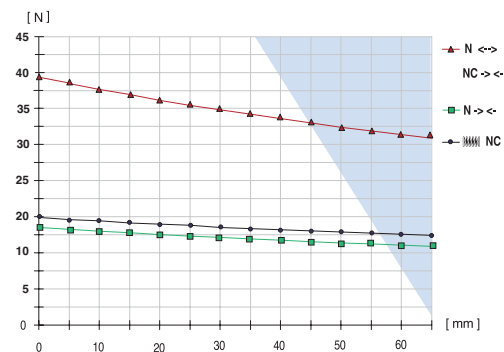
- via locating sleeves and threaded holes
- precise positioning of individual gripping jaw

Parallel Gripper



Gripping force diagram

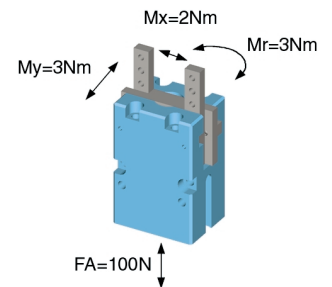
Gripping force as a function of jaw length.



Colored area: increased wear and tear to be expected

Forces and Moments

Max allowable forces and moments on jaws.



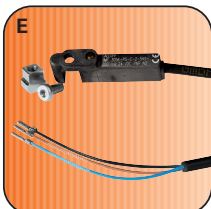
Accessory list



Pneumatic fittings
Order no. WVM3



Pneumatic fittings
Order no. GVM3



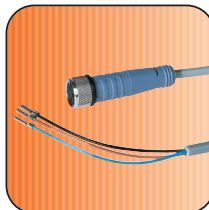
Magnetic field sensor
Order no. MFS305KHT20



Magnetic field sensor
Order no. MFS305SKHT20



Cable angled plug
Order no. KAW500



Cable straight plug
Order no. KAG500

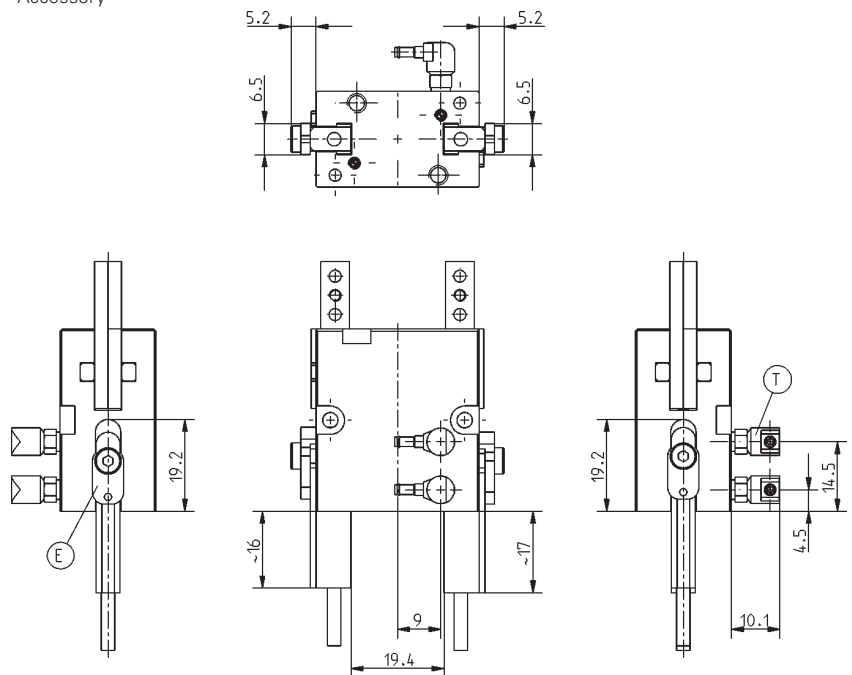


Plug 3-pole
Order no. S12-G-3



Pressure safety valve
Order no. DSV1/8

Accessory



Subject to change without prior notice

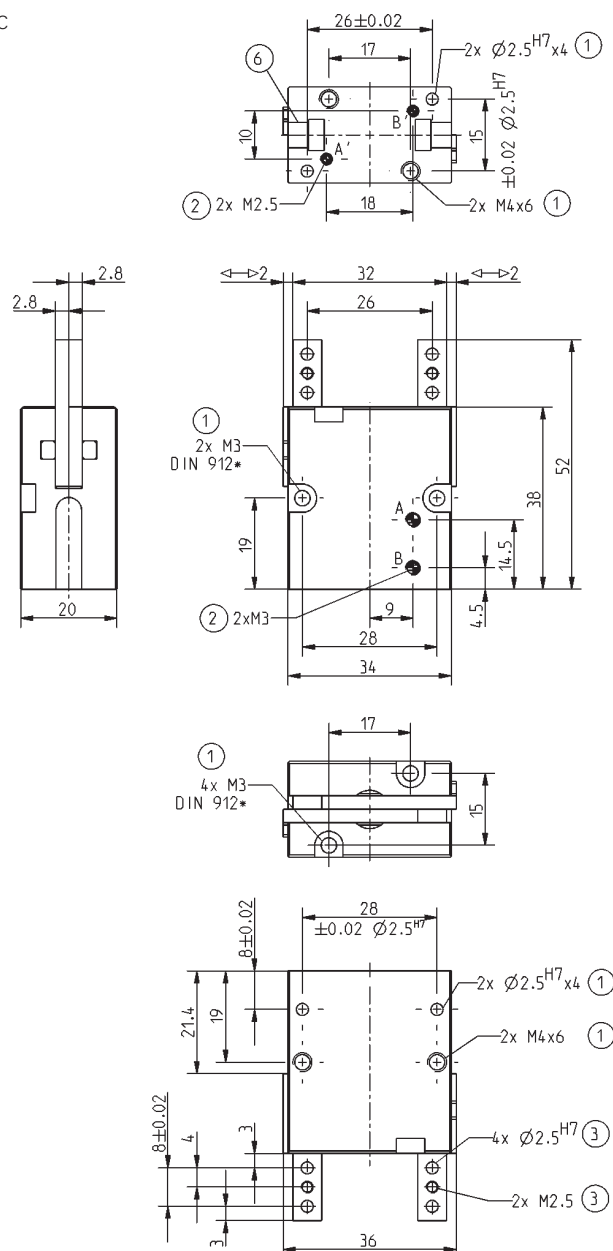
Order no.:	SGP14N	SGP14NC
Stroke per jaw [mm]:	2	2
Gripping force in closing [N]:	14	39
Gripping force in opening [N]:	39	-
Recommended workpiece weight [g]*:	71	199
Gripping force secured by spring min./max. [N]:	-	25
Closing time/opening time [s]:	0.01	0.02
Repeatability +/- [mm]:	0.05	0.05
Min./max. operating pressure [bar]:	3/8	5/8
Min./max. operating temperature [°C]**:	5/80	5/80
Air volume per cycle [cm³]:	0.8	0.8
Weight [g]:	90	90

All data measured at 6 bar

* Value determined with friction coefficient $\mu = 0.1$ and safety factor $\nu = 2$,

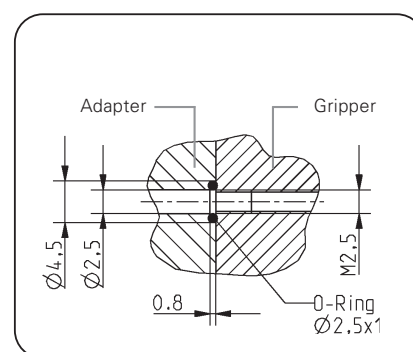
** High-temperature-resistant model (up to 150°C) add T to part number

SGP14N/NC



- ① Gripper mounting
- ② Power supply
- ③ Jaw fastening
- ⑥ Slot for magnetic field sensor
- A Air connection (closing)
- B Air connection (opening)
- A' Alternate air connection (closing)
- B' Alternate air connection (opening)

* equivalent to DIN EN ISO 4762



Hoseless air connection

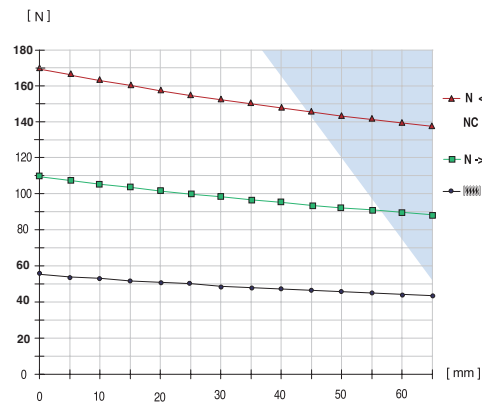
Subject to change without prior notice

Parallel Gripper



Gripping force diagram

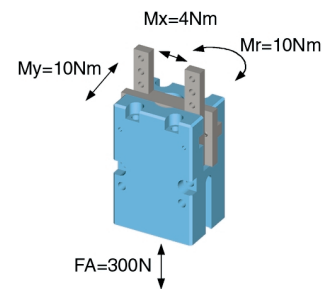
Gripping force as a function of jaw length.



Colored area: increased wear and tear to be expected

Forces and Moments

Max allowable forces and moments on jaws.



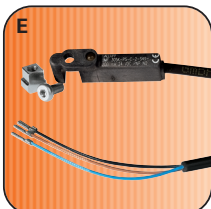
Accessory list



Pneumatic fittings
Order no. WVM5



Pneumatic fittings
Order no. GVM5



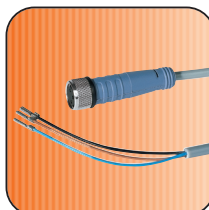
Magnetic field sensor
Order no. MFS305KHT20



Magnetic field sensor
Order no. MFS305SKHT20



Cable angled plug
Order no. KAW500



Cable straight plug
Order no. KAG500

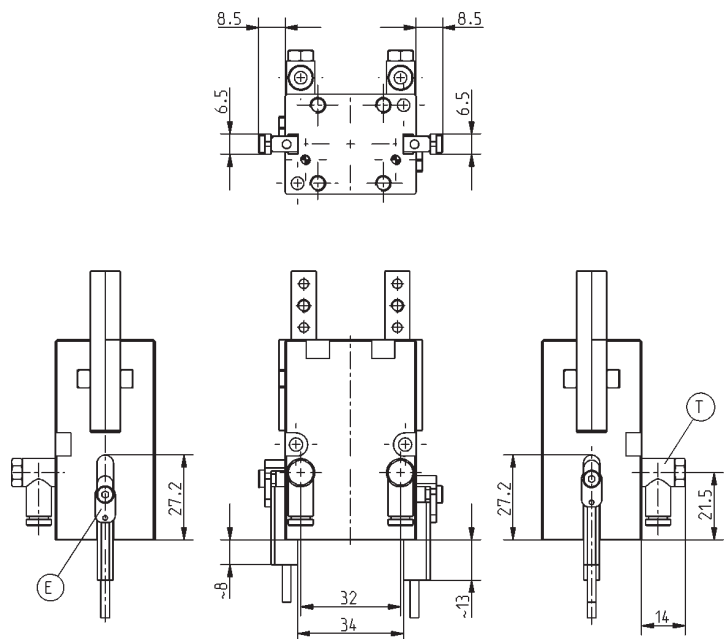


Plug 3-pole
Order no. S12-G-3



Pressure safety valve
Order no. DSV1/8

Accessory



Subject to change without prior notice

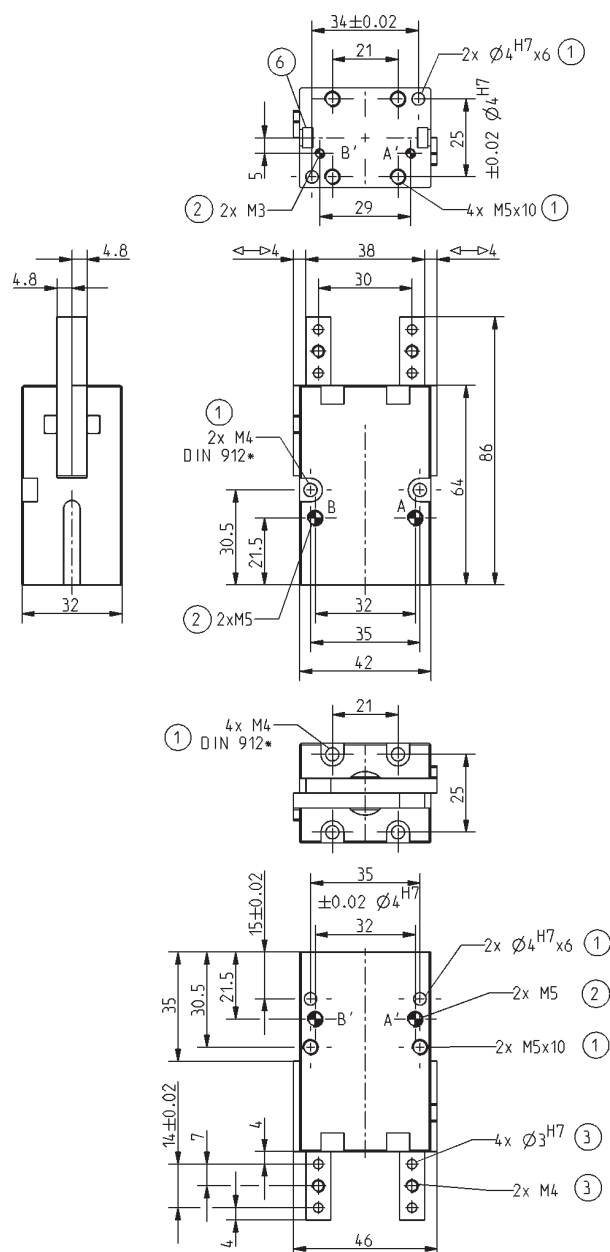
Order no.:	SGP25N	SGP25NC
Stroke per jaw [mm]:	4	4
Gripping force in closing [N]:	110	170
Gripping force in opening [N]:	170	-
Recommended workpiece weight [g]*:	561	866
Gripping force secured by spring min./max. [N]:	-	60
Closing time/opening time [s]:	0.02	0.03
Repeatability +/- [mm]:	0.05	0.05
Min./max. operating pressure [bar]:	3/8	5/8
Min./max. operating temperature [°C]**:	5/80	5/80
Air volume per cycle [cm³]:	5	5
Weight [g]:	310	320

All data measured at 6 bar

* Value determined with friction coefficient $\mu = 0.1$ and safety factor $v = 2$,

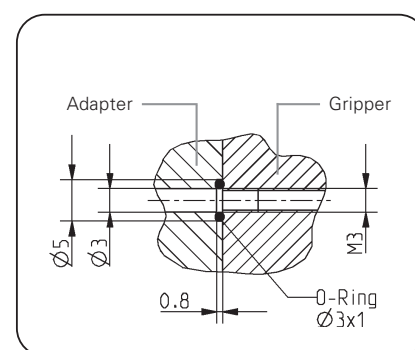
** High-temperature-resistant model (up to 150°C) add T to part number

SGP25N/NC



- ① Gripper mounting
- ② Power supply
- ③ Jaw fastening
- ⑥ Slot for magnetic field sensor
- A Air connection (closing)
- B Air connection (opening)
- A' Alternate air connection (closing)
- B' Alternate air connection (opening)

* equivalent to DIN EN ISO 4762



Hoseless air connection

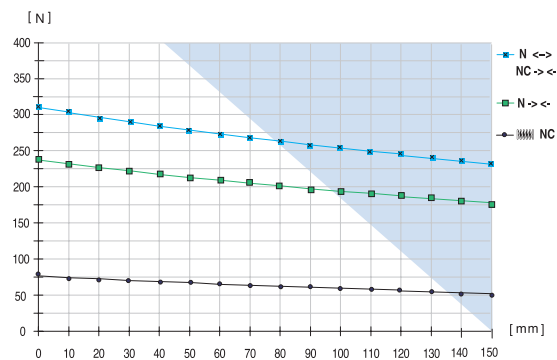
Subject to change without prior notice

Parallel Gripper



Gripping force diagram

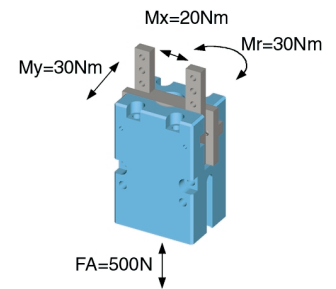
Gripping force as a function of jaw length.



Colored area: increased wear and tear to be expected

Forces and Moments

Max allowable forces and moments on jaws.



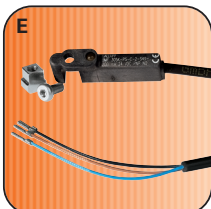
Accessory list



Pneumatic fittings
Order no. WVM5



Pneumatic fittings
Order no. GVM5



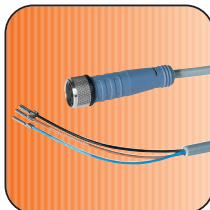
Magnetic field sensor
Order no. MFS305KHT20



Magnetic field sensor
Order no. MFS305SKHT20



Cable angled plug
Order no. KAW500



Cable straight plug
Order no. KAG500

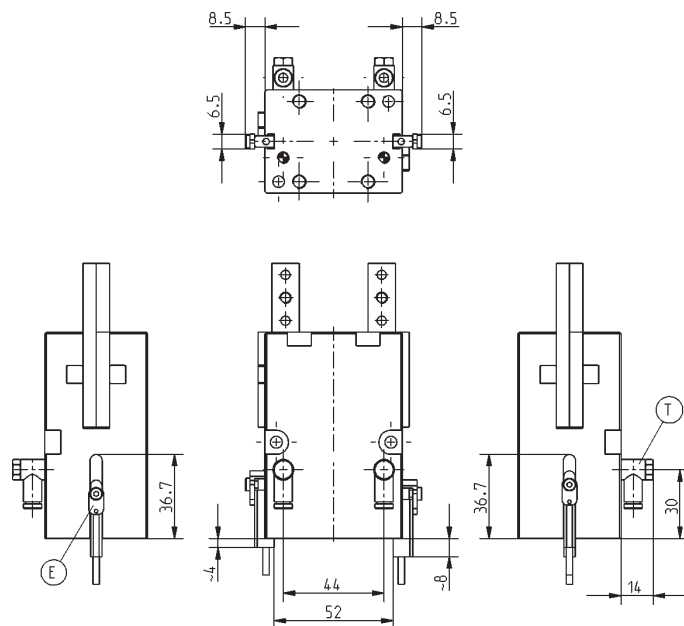


Plug 3-pole
Order no. S12-G-3



Pressure safety valve
Order no. DSV1/8

Accessory

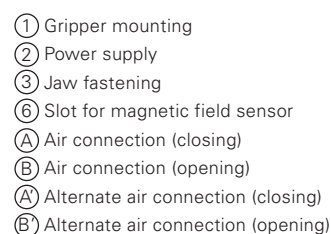


Subject to change without prior notice

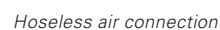
All data measured at 6 bar

* Value determined with friction coefficient $\mu = 0.1$ and safety factor $\nu = 2$

** High-temperature-resistant model (up to 150°C) add T to part number



* equivalent to DIN EN ISO 4762



Subject to change without prior notice



Parallel Grippers

pneumatic



GP103

GP104

GP105

GP110

GP115

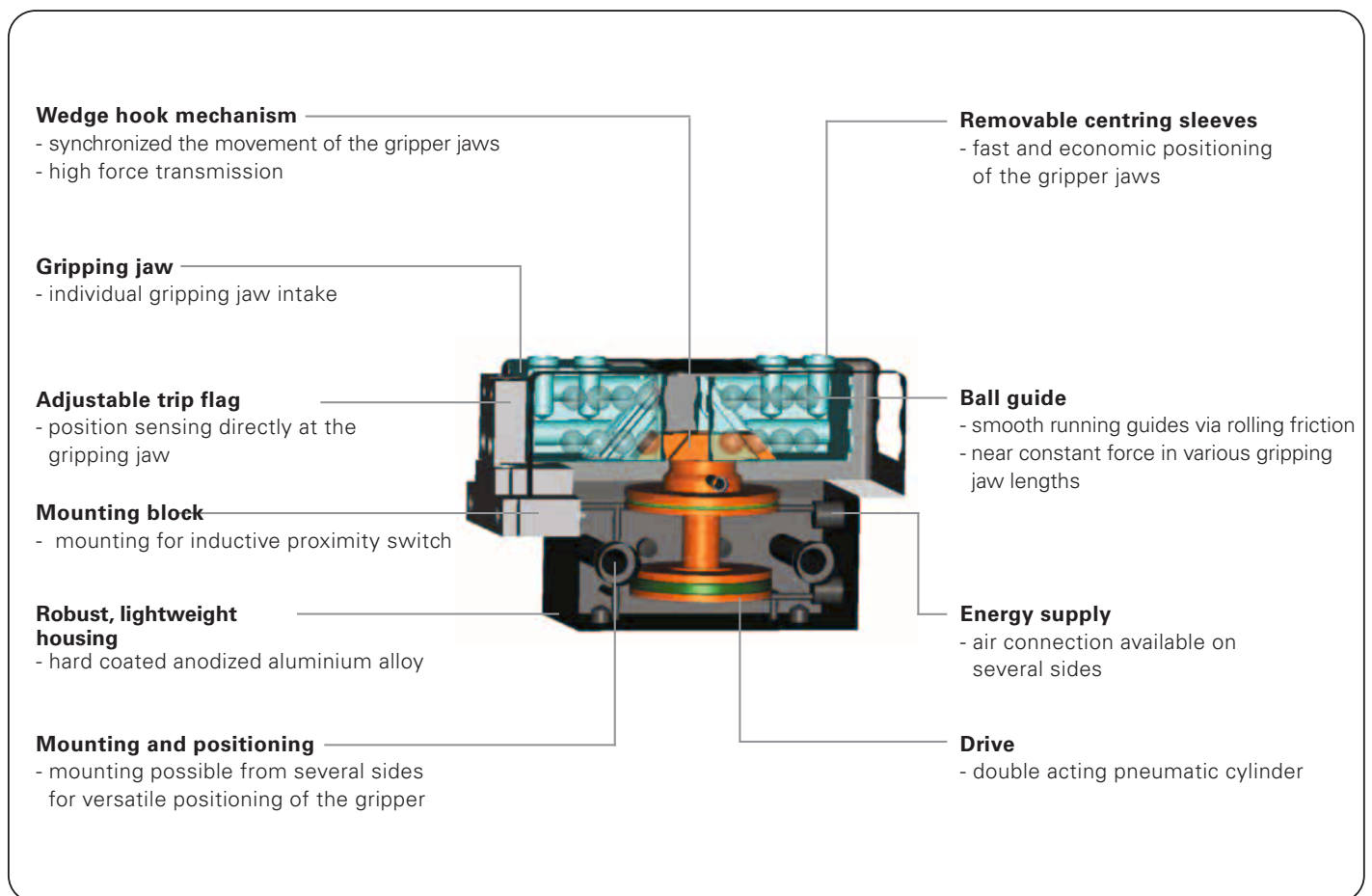
SOMMER
automatic

Parallel Gripper

Features

- smooth gripping jaw guide on quadruple bearing guides
- little-to-on loss of gripping force at longer jaw lengths
- very narrow design made possible by bearing races built into housing

Functional diagram





Terms

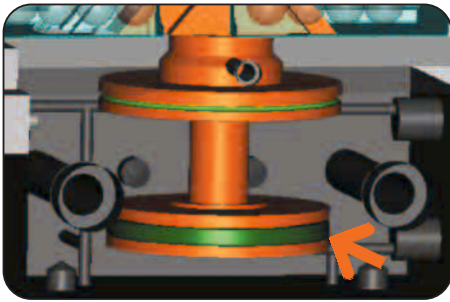
- Gripping force:** arithmetic sum of the individual forces occurring at the jaws
- Closing/opening time:** required time for the gripper jaws to cover the maximum stroke distance
- Repeatability:** at end stops after 50/100 consecutive cycles
- Gripping force device:** by using a pressure safety valve (order no. DSV1/8), which prevents loss of tension force if there is a drop in pressure. The inevitable leakage in the pneumatic circuit restricts the time of this type of gripping force safety.
- Cycle:** one complete movement of the piston forward and back
- Maintenance:** recommended at 10 mil. cycles
(please see the owner's manual for conditions, download from www.sommer-automatic.com)
- low operating costs due to longer maintenance
 - long lifespan

Model guide

Order no.	Stroke per jaw	Gripping force in opening	Gripping force in closing	Self-locking via
GP103	3 mm	41 N	21 N	DSV*
GP104	4 mm	104 N	84 N	DSV*
GP105	5 mm	230 N	210 N	DSV*
GP110	10 mm	430 N	380 N	DSV*
GP115	15 mm	1000 N	930 N	DSV*

*DSV = Pressure safety valves (Order no. DSV1/8)

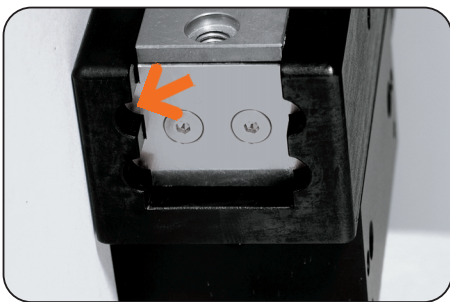
Parallel **Gripper**



Drive

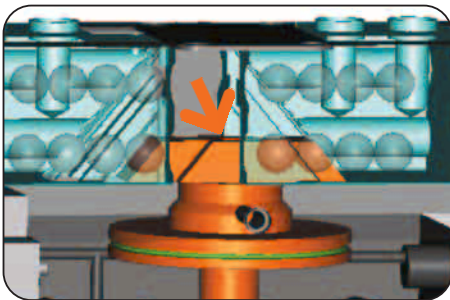
Double acting pneumatic cylinder

- maximum power in both opening and closing
- gripping force up to 1000 N



Ball bearing guides

- very smooth movement
- virtually unchanged gripping force with different gripping jaw lengths
- high precision, due to low play guide



Power transfer

Wedge hook mechanism

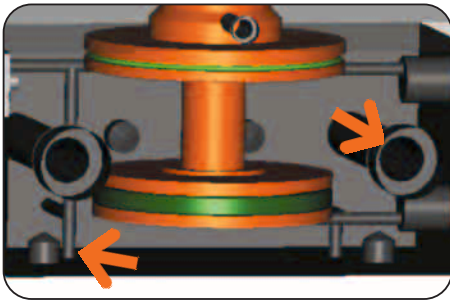
- optimum transmission of power to gripping force
- centering sleeves
- synchronized
- high repeat accuracy



Position sensing

switch cam installed on gripper jaw for positioning recognition

- process safe
- adjustable
- compact



Connections

Energy supply, attachment and positioning possibilities

Adaptable to multiple mounting configuration

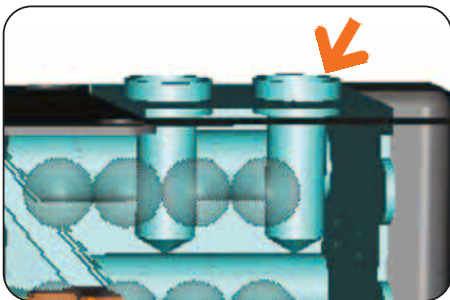
- optimal integration into the workroom through individual mounting situation
- tubeless direct-connected possibility (no additional hose needed)



Maintenance

Lubrication of the mechanics and guides thru the intergrated lubrication port

- service friendly
- time saving
- standardized

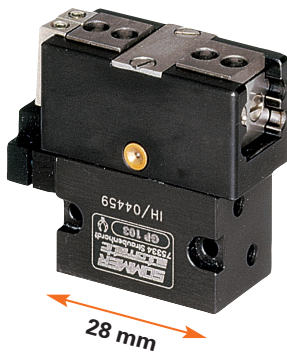


Gripping jaw positioning

Positioning of the tooling fingers via centering sleeves

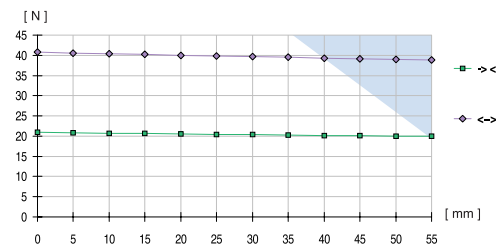
- precise positioning of individual gripping jaws
- quick, cost-effective and therefore economical jaw changing
- space saving design

Parallel Gripper



Gripping force diagram

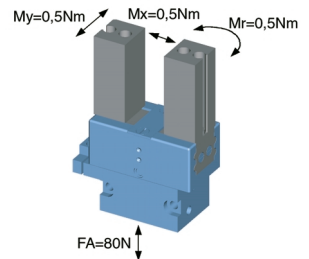
Gripping force as a function of jaw length.



Colored area: increased wear and tear to be expected

Forces and Moments

Max allowable forces and moments on jaws.



Included with purchase



Mounting block
Order no. KB4-02

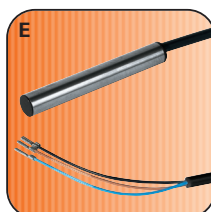


Centring sleeve
Order no. BDST10300

Accessory list



Pneumatic fittings
Order no. WVM3



Proximity switch
Order no. NJ4-E2

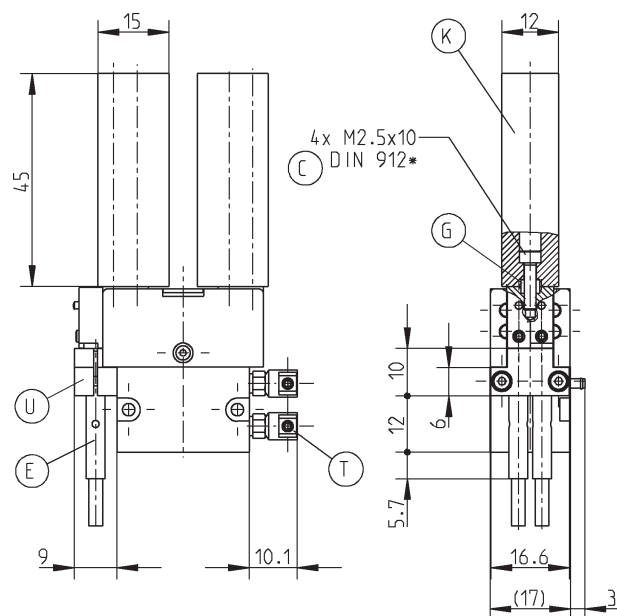


Universal jaw (set)
Order no. UB103 (Al)
Order no. UB103ST (St)



Pressure safety valve
Order no. DSV1/8

Accessory



* equivalent to DIN EN ISO 4762

Subject to change without prior notice

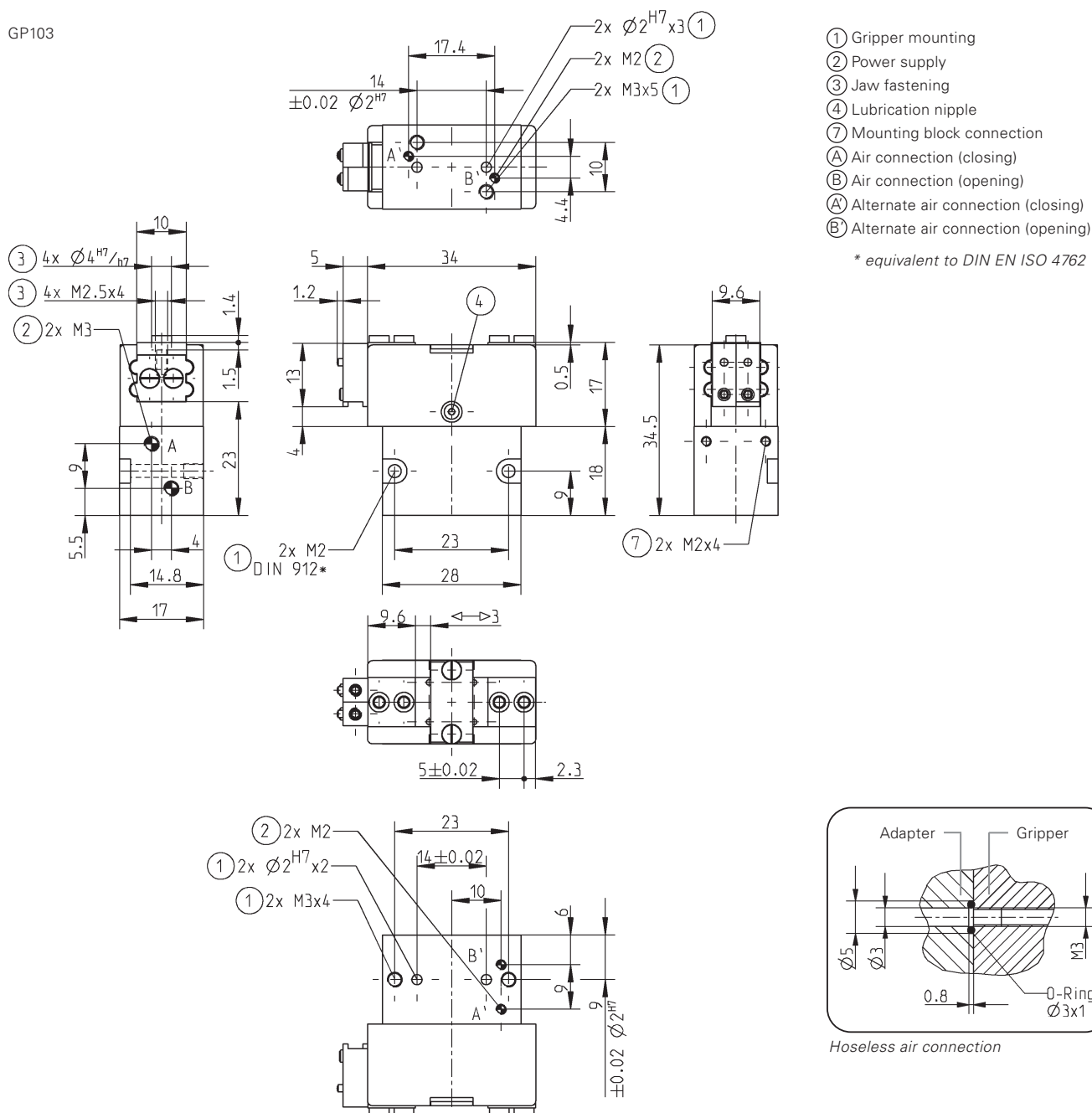
Order no.:	GP103
Stroke per jaw [mm]:	3
Gripping force in closing [N]:	21
Gripping force in opening [N]:	41
Recommended workpiece weight [g]*:	107
Closing time/opening time [s]:	0,02
Repeatability +/- [mm]:	0,05
Min./max. operating pressure [bar]:	3/8
Min./max. operating temperature [°C]**:	5/80
Air volume per cycle [cm³]:	1
Weight [g]:	92

All data measured at 6 bar

* Value determined with friction coefficient $\mu = 0.1$ and safety factor $v = 2$

** High-temperature-resistant model (up to 150°C) add T to part number

GP103



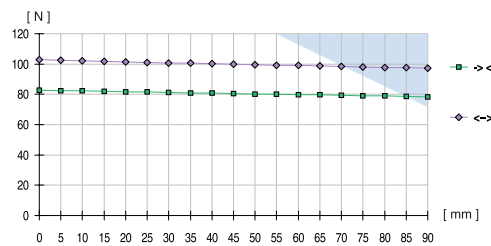
Subject to change without prior notice

Parallel Gripper



Gripping force diagram

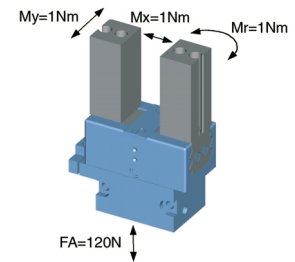
Gripping force as a function of jaw length.



Colored area: increased wear and tear to be expected

Forces and Moments

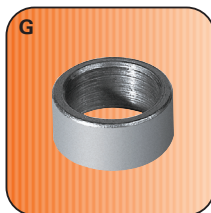
Max allowable forces and moments on jaws.



Included with purchase



Mounting block
Order no. KB4-03

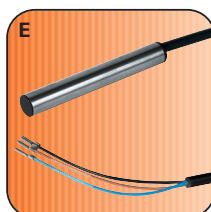


Centring sleeve
Order no. BDST40400

Accessory list



Pneumatic fittings
Order no. WVM5



Proximity switch
Order no. NJ4-E2

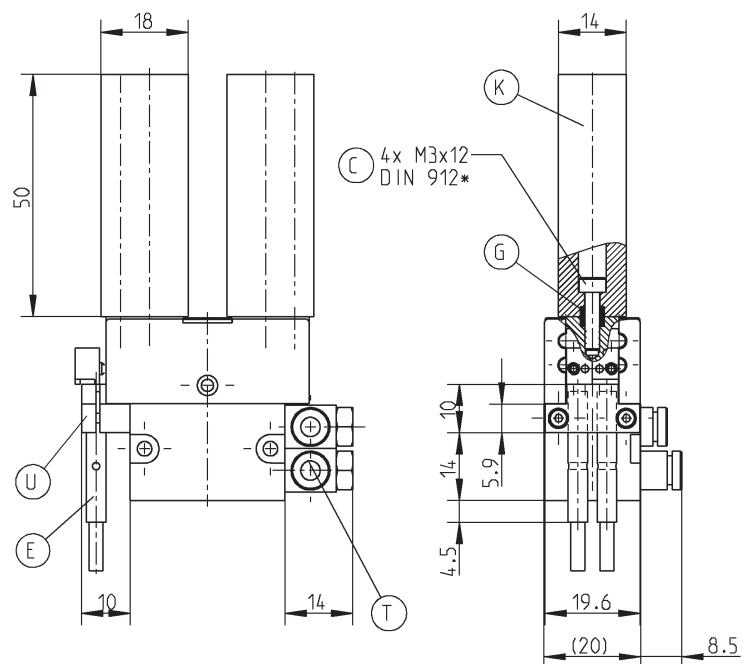


Universal jaw (set)
Order no. UB104 (Al)
Order no. UB104ST (St)



Pressure safety valve
Order no. DSV1/8

Accessory



* equivalent to DIN EN ISO 4762

Subject to change without prior notice



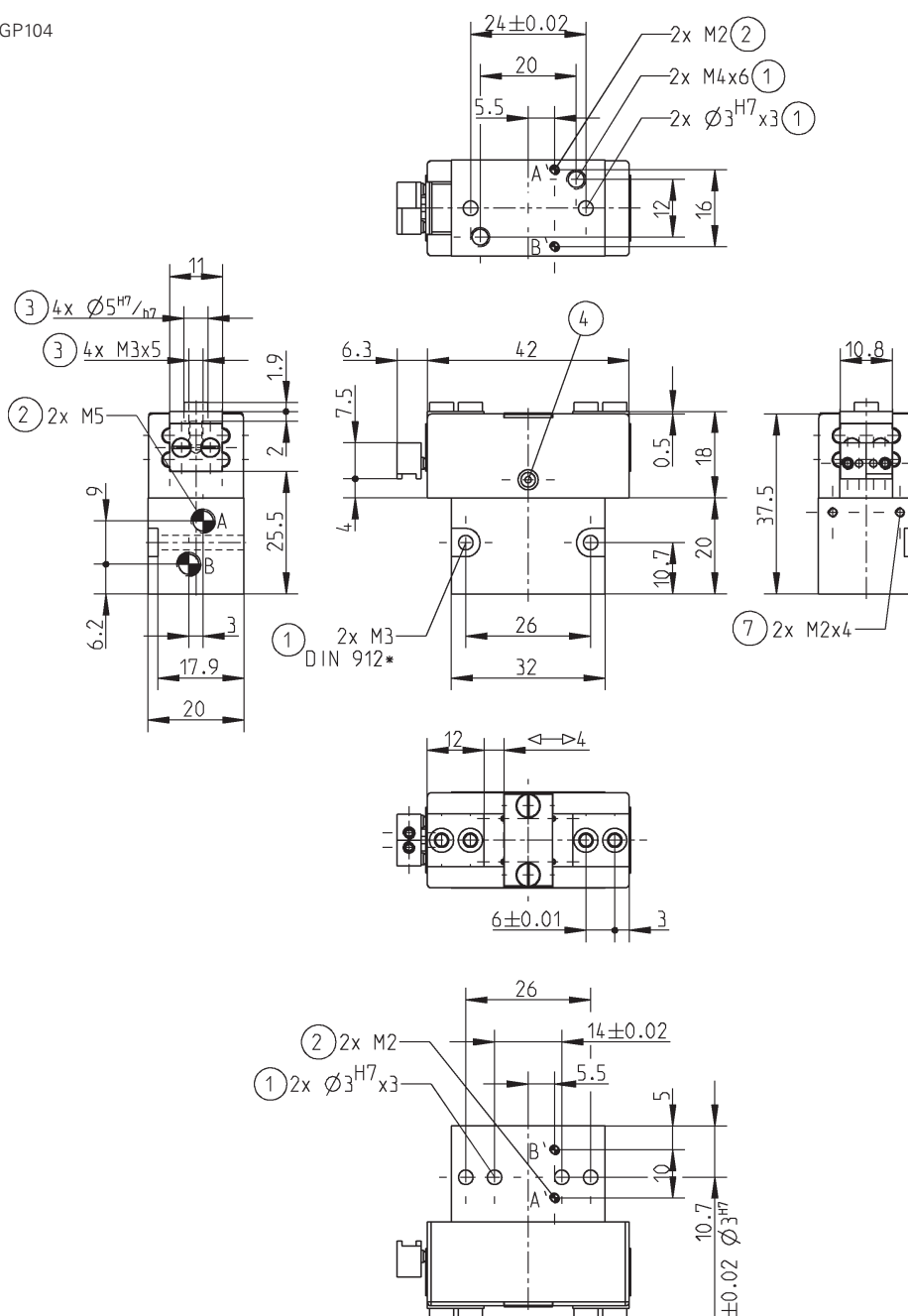
Order no.:	GP104
Stroke per jaw [mm]:	4
Gripping force in closing [N]:	84
Gripping force in opening [N]:	104
Recommended workpiece weight [g]*:	428
Closing time/opening time [s]:	0,02
Repeatability +/- [mm]:	0,05
Min./max. operating pressure [bar]:	3/8
Min./max. operating temperature [°C]**:	5/80
Air volume per cycle [cm³]:	2
Weight [g]:	139

All data measured at 6 bar

* Value determined with friction coefficient $\mu = 0.1$ and safety factor $v = 2$

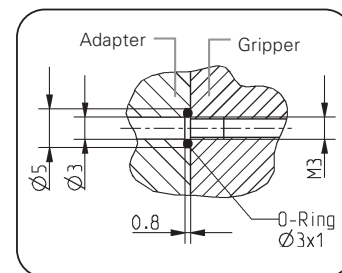
** High-temperature-resistant model (up to 150°C) add T to part number

GP104



- ① Gripper mounting
- ② Power supply
- ③ Jaw fastening
- ④ Lubrication nipple
- ⑦ Mounting block connection
- A) Air connection (closing)
- B) Air connection (opening)
- A') Alternate air connection (closing)
- B') Alternate air connection (opening)

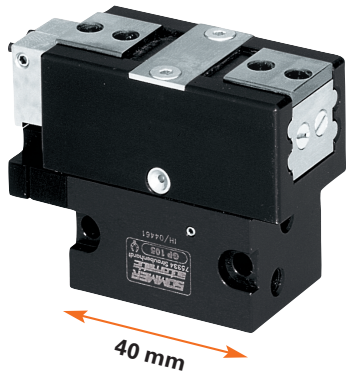
* equivalent to DIN EN ISO 4762



Hoseless air connection

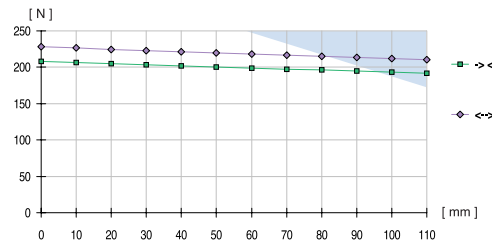
Subject to change without prior notice

Parallel Gripper



Gripping force diagram

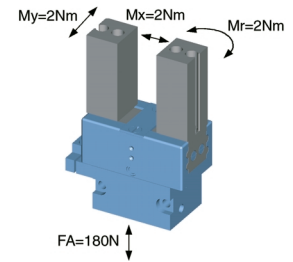
Gripping force as a function of jaw length.



Colored area: increased wear and tear to be expected

Forces and Moments

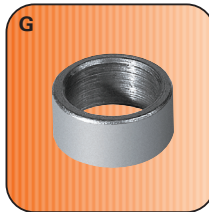
Max allowable forces and moments on jaws.



Included with purchase



Mounting block
Order no. KB6.5-03

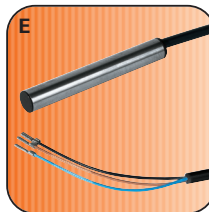


Centring sleeve
Order no. BDST40400

Accessory list



Pneumatic fittings
Order no. WVM5



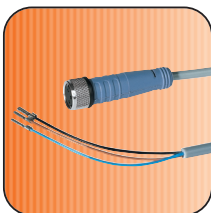
Proximity switch
Order no. NJ6.5-E2S



Universal jaw (set)
Order no. UB105 (Al)
Order no. UB105ST (St)



Cable angled plug
Order no. KAW500

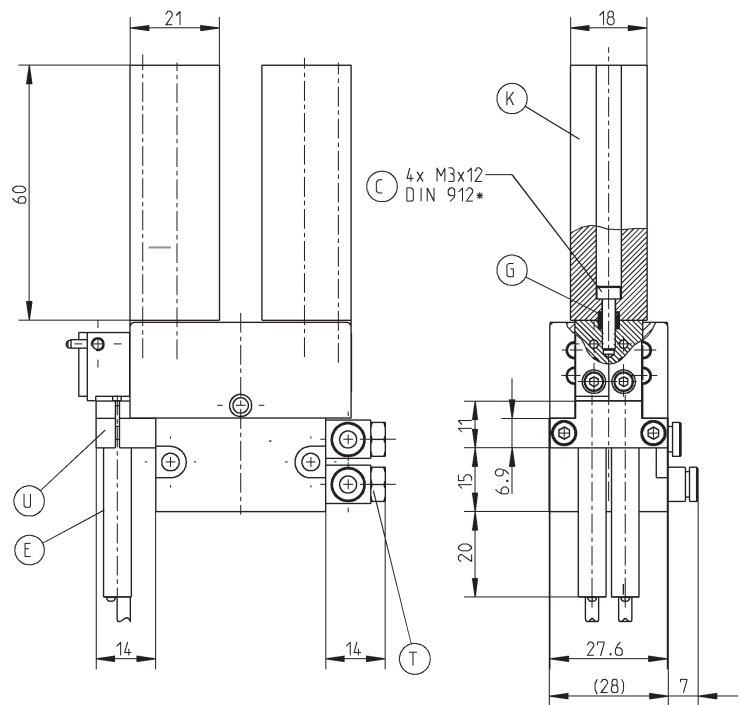


Cable straight plug
Order no. KAG500



Pressure safety valve
Order no. DSV1/8

Accessory



* equivalent to DIN EN ISO 4762

Subject to change without prior notice



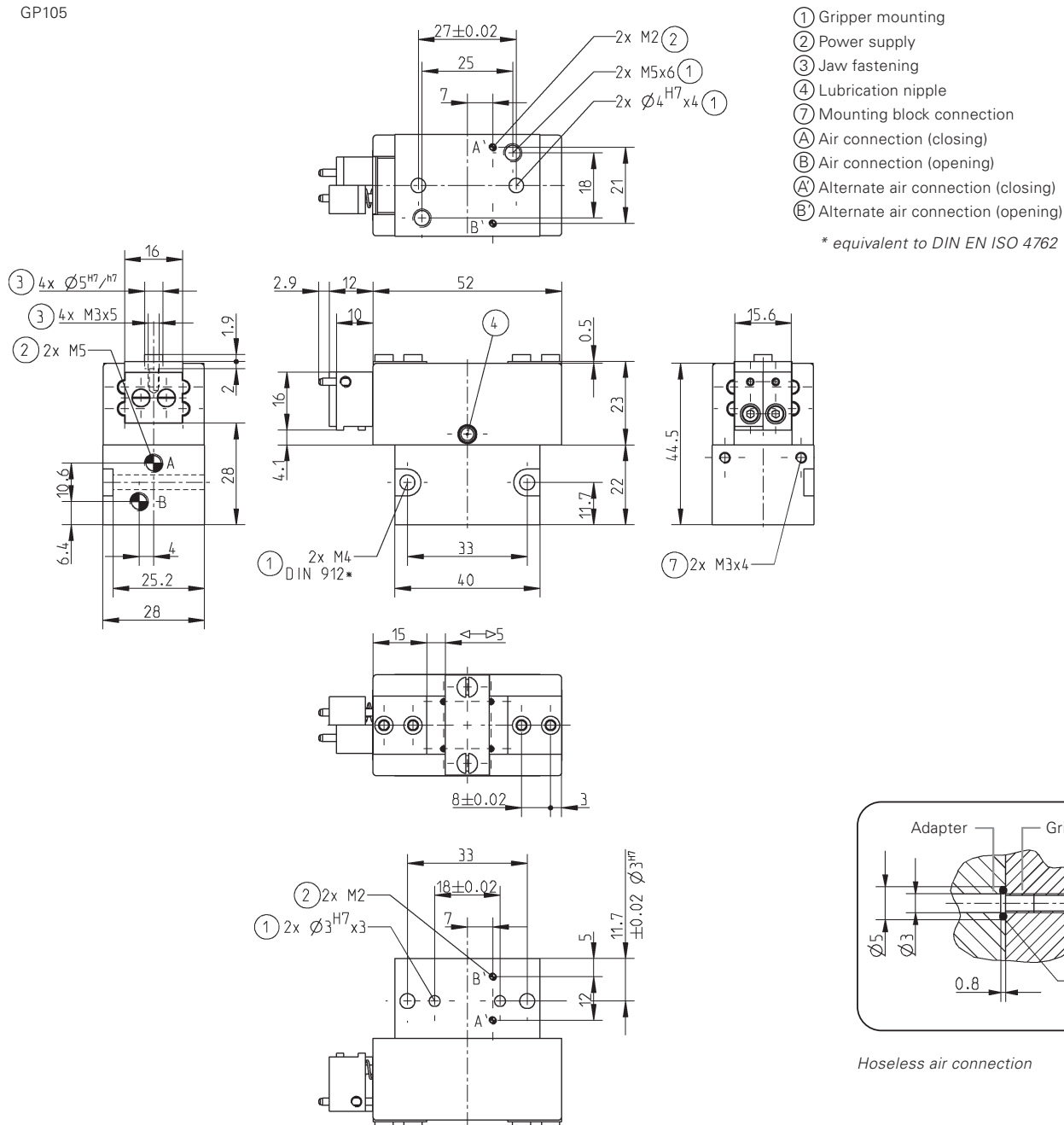
Order no.:	GP105
Stroke per jaw [mm]:	5
Gripping force in closing [N]:	210
Gripping force in opening [N]:	230
Recommended workpiece weight [kg]*:	1,1
Closing time/opening time [s]:	0,03
Repeatability +/- [mm]:	0,05
Min./max. operating pressure [bar]:	3/8
Min./max. operating temperature [°C]**:	5/80
Air volume per cycle [cm³]:	4
Weight [g]:	310

All data measured at 6 bar

* Value determined with friction coefficient $\mu = 0.1$ and safety factor $v = 2$

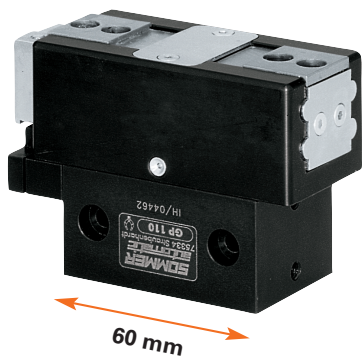
** High-temperature-resistant model (up to 150°C) add T to part number

GP105



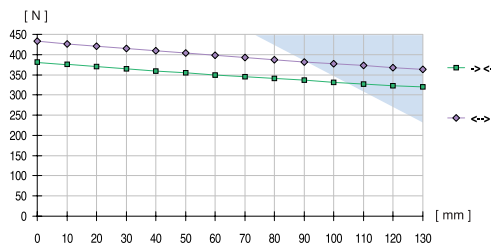
Subject to change without prior notice

Parallel Gripper



Gripping force diagram

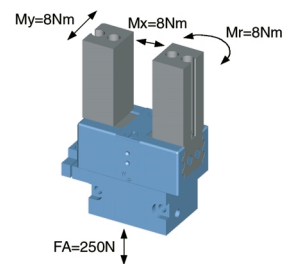
Gripping force as a function of jaw length.



Colored area: increased wear and tear to be expected

Forces and Moments

Max allowable forces and moments on jaws.



Included with purchase



Mounting block
Order no. KB8-25



Centring sleeve
Order no. BDST40800

Accessory list



Pneumatic fittings
Order no. WVM5



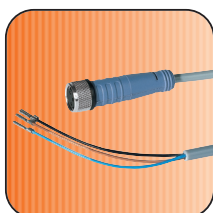
Proximity switch
Order no. NJ8-E2S



Universal jaw (set)
Order no. UB110P (Al)
Order no. UB110PST (St)



Cable angled plug
Order no. KAW500

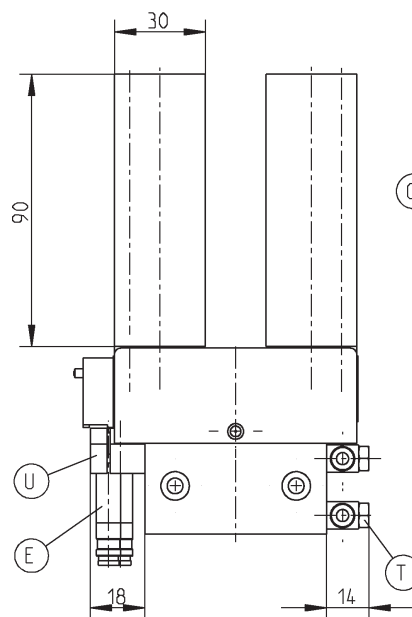


Cable straight plug
Order no. KAG500

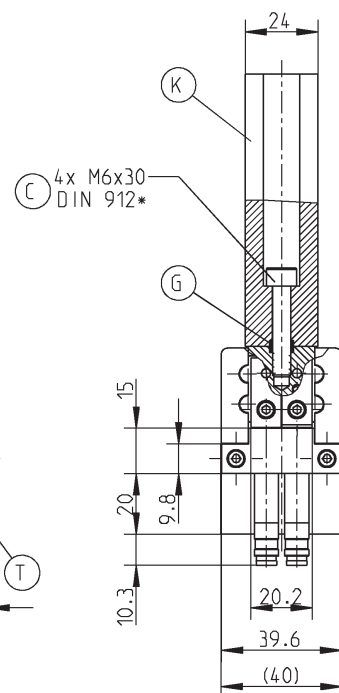


Pressure safety valve
Order no. DSV1/8

Accessory



* equivalent to DIN EN ISO 4762



Subject to change without prior notice

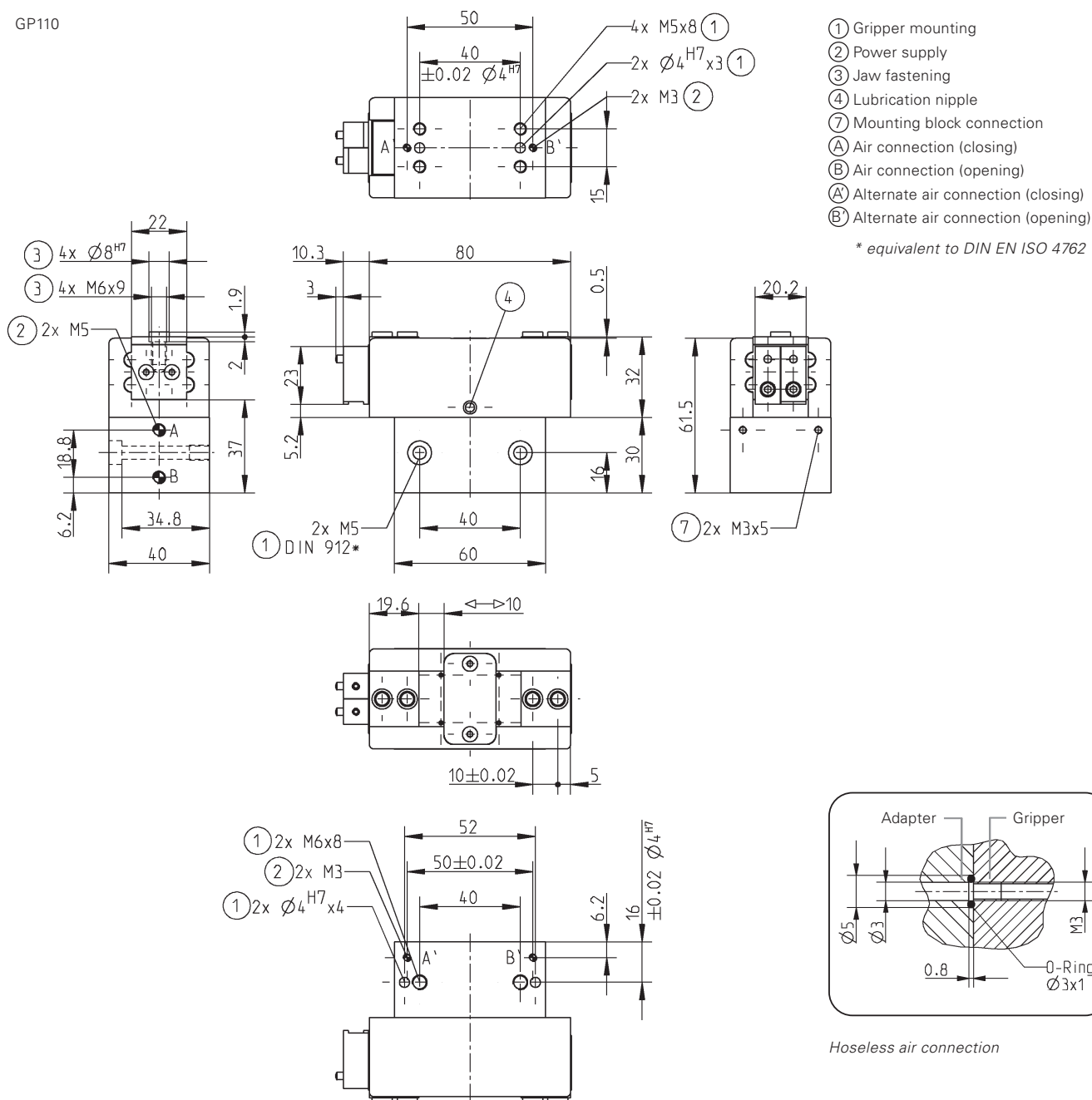
Order no.:	GP110
Stroke per jaw [mm]:	10
Gripping force in closing [N]:	380
Gripping force in opening [N]:	430
Recommended workpiece weight [kg]*:	1,9
Closing time/opening time [s]:	0,07
Repeatability +/- [mm]:	0,05
Min./max. operating pressure [bar]:	3/8
Min./max. operating temperature [°C]**:	5/80
Air volume per cycle [cm³]:	17
Weight [g]:	900

All data measured at 6 bar

* Value determined with friction coefficient $\mu = 0.1$ and safety factor $\nu = 2$

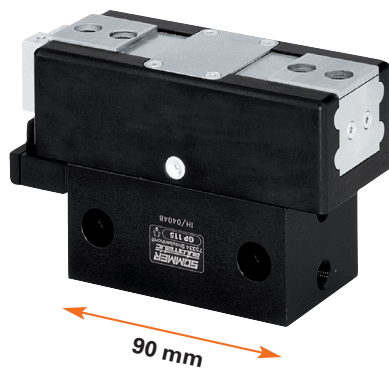
** High-temperature-resistant model (up to 150°C) add T to part number

GP110



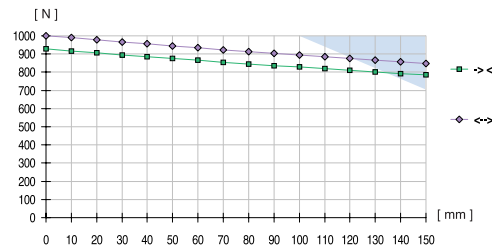
Subject to change without prior notice

Parallel Gripper



Gripping force diagram

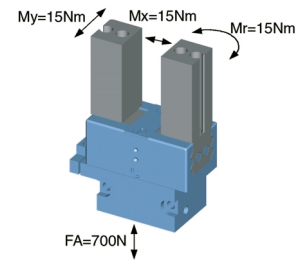
Gripping force as a function of jaw length.



Colored area: increased wear and tear to be expected

Forces and Moments

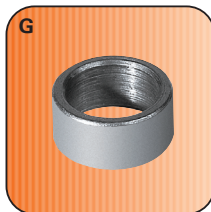
Max allowable forces and moments on jaws.



Included with purchase



Mounting block
Order no. KB8-26



Centring sleeve
Order no. BDST11500

Accessory list



Pneumatic fittings
Order no. WV1/8x8



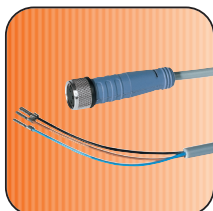
Proximity switch
Order no. NJ8-E2S



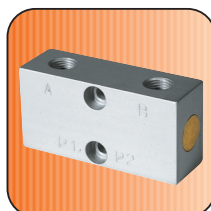
Universal jaw (set)
Order no. UB115 (Al)
Order no. UB115ST (St)



Cable angled plug
Order no. KAW500

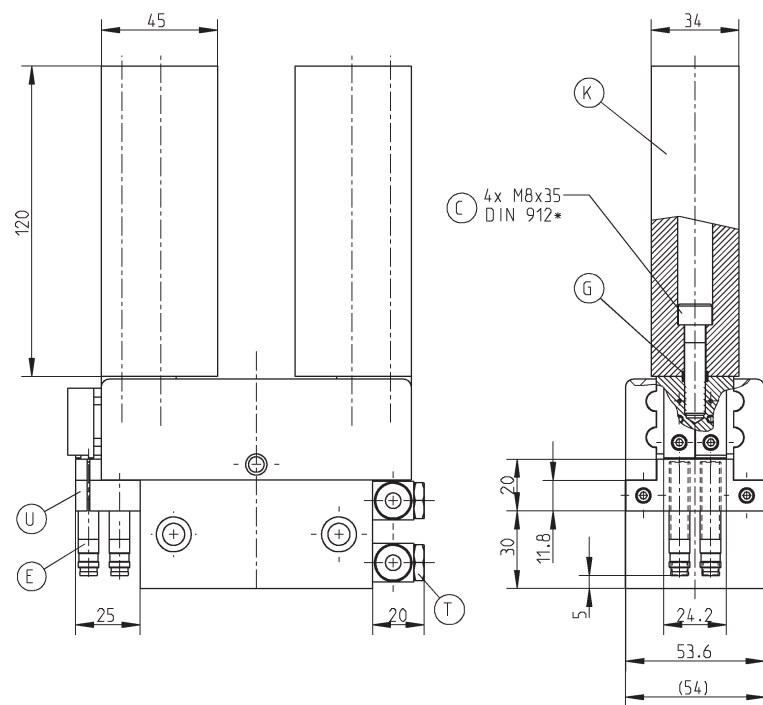


Cable straight plug
Order no. KAG500



Pressure safety valve
Order no. DSV1/8

Accessory



* equivalent to DIN EN ISO 4762

Subject to change without prior notice

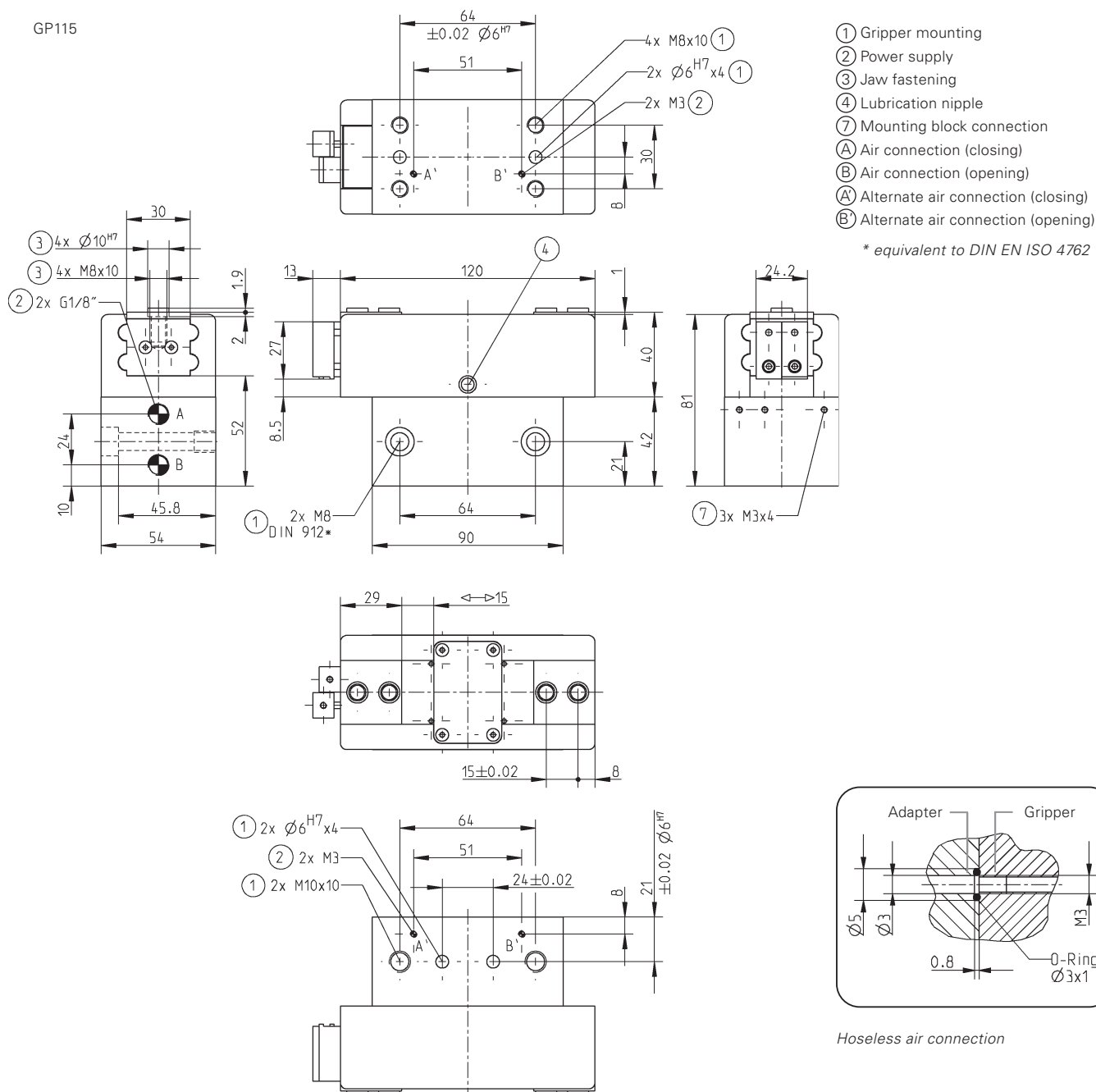
Order no.:	GP115
Stroke per jaw [mm]:	15
Gripping force in closing [N]:	930
Gripping force in opening [N]:	1000
Recommended workpiece weight [kg]*:	4,7
Closing time/opening time [s]:	0,08
Repeatability +/- [mm]:	0,05
Min./max. operating pressure [bar]:	3/8
Min./max. operating temperature [°C]**:	5/80
Air volume per cycle [cm³]:	57
Weight [kg]:	2,3

All data measured at 6 bar

* Value determined with friction coefficient $\mu = 0.1$ and safety factor $v = 2$

** High-temperature-resistant model (up to 150°C) add T to part number

GP115



Subject to change without prior notice



Parallel Grippers

pneumatic



GP600 Series

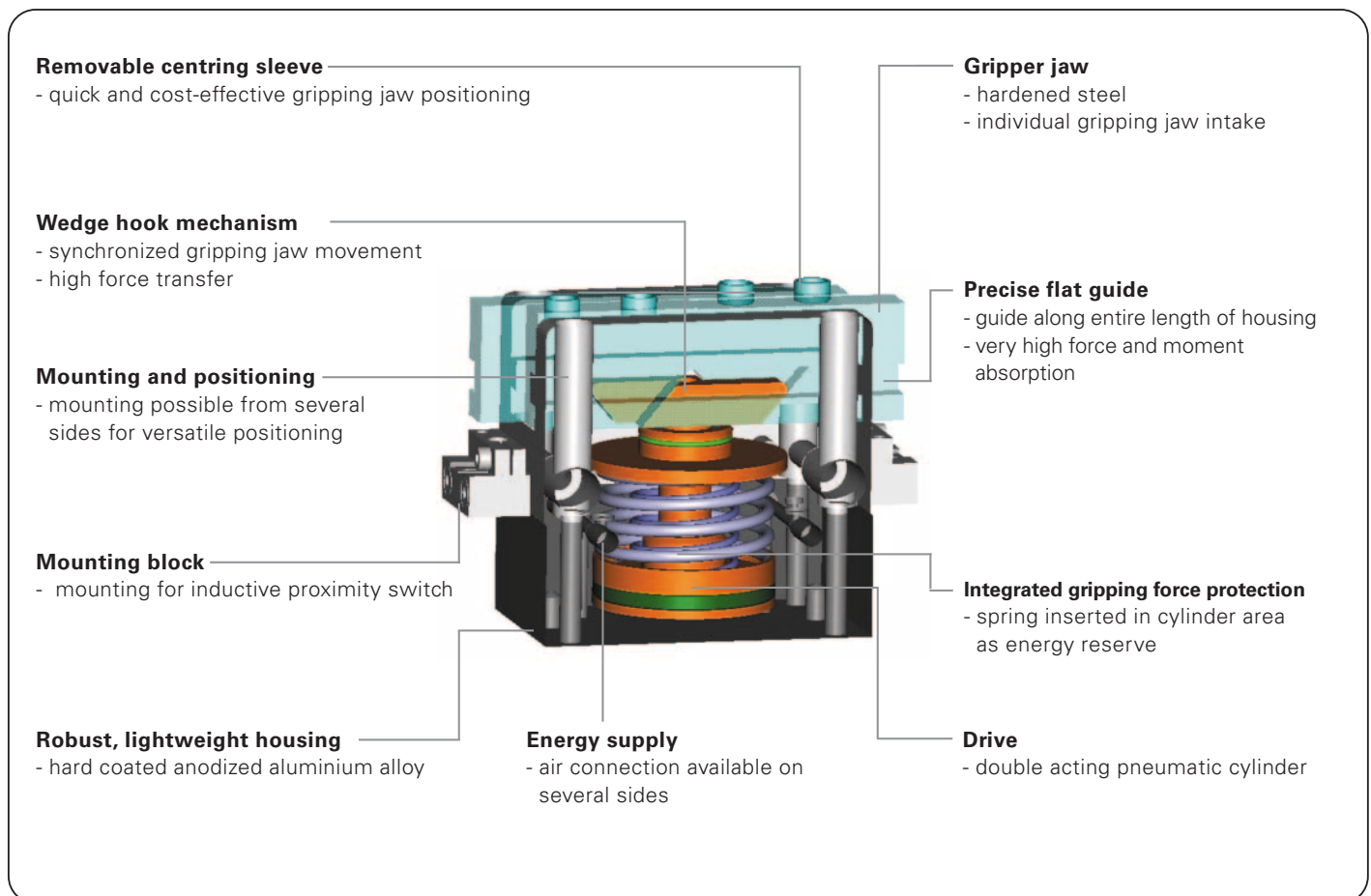
SOMMER
automatic

Parallel Gripper

Features

- stable flat guide for gripping jaws up to 180 mm long
- direct gripping jaw position sensing by inductive proximity switch
- design with mechanical gripping force safety device and different stroke force combinations

Functional diagram





Terms

- Gripping force:** arithmetic sum of the individual forces occurring at the jaws
- Closing/opening time:** required time for the gripper jaws to cover the maximum stroke distance
- Repeatability:** at end stops after 50/100 consecutive cycles
- Cycle:** one complete movement of the piston forward and back
- Maintenance:** recommended at 10 mil. cycles
(please see the owner's manual for conditions, download from www.sommer-automatic.com)
- long maintenance intervals keep costs down
 - long lifespan

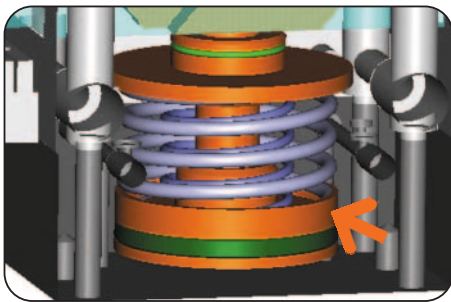
Model guide

- N:** Standard design (long stroke - standard force)
- S:** Heavy-duty design (short stroke - large force)
- C:** For external gripping, self-locking, spring closing
- O:** For internal gripping, self-locking, spring opening

Order no.	Stroke per jaw	Gripping force in opening	Gripping force in closing	Self-locking via
GP604N	4 mm	110 N	110 N	DSV*
GP604NC	4 mm	-	150 N	Spring
GP604NO	4 mm	150 N	-	Spring
GP604S	2 mm	250 N	250 N	DSV*
GP604SC	2 mm	-	340 N	Spring
GP604SO	2 mm	340 N	-	Spring
GP608N	8 mm	380 N	380 N	DSV*
GP608NC	8 mm	-	520 N	Spring
GP608NO	8 mm	520 N	-	Spring
GP608S	4 mm	850 N	850 N	DSV*
GP608SC	4 mm	-	1180 N	Spring
GP608SO	4 mm	1180 N	-	Spring
GP612N	12 mm	900 N	900 N	DSV*
GP612NC	12 mm	-	1300 N	Spring
GP612NO	12 mm	1300 N	-	Spring
GP612S	6 mm	1900 N	1900 N	DSV*
GP612SC	6 mm	-	2950 N	Spring
GP612SO	6 mm	2950 N	-	Spring

*DSV = Pressure safety valves (Order no. DSV1/8)

Parallel **Gripper**



Drive

N and S Models:

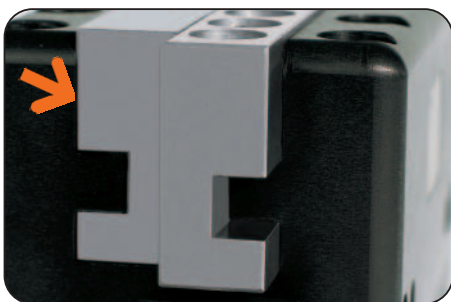
Double acting pneumatic cylinder

- maximum power in both opening and closing
- gripping force up to 2950 N

NC, NO and SC, SO Models:

Double acting pneumatic cylinder with integrated mechanical gripping force safety device

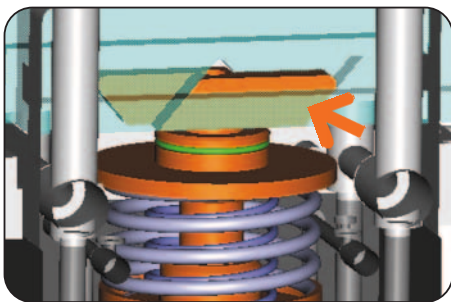
- optimum coordination of drive force and gripping force secured by spring



Guidance

Ground flat guide in hardened steel

- flat guide for maximum force and moment resistance
- jaw movement guided over entire stroke length within the housing
- high precision due to low play guide



Power transfer

Wedge hook mechanism with different ratios

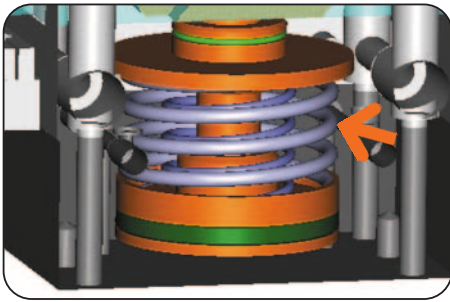
- optimum transmission of power to gripping force
- self-centering
- synchronized
- high repeat accuracy



Gripping jaw positioning

Positioning of the tooling fingers via centering sleeves

- precise positioning of individual gripping jaws
- quick, cost-effective and therefore economical jaw changing
- space-saving



Gripping force safety device

NC, NO and SC, SO Models:

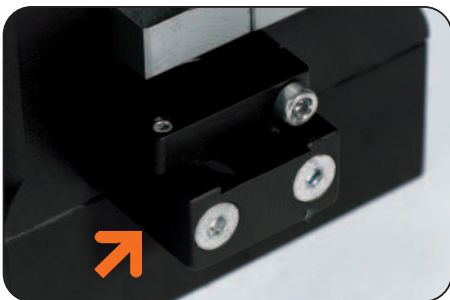
Energy retention through spring mounted in cylinder

- reliable mechanical grip force retention
- compact design

N and S Models:

External pressure-retention safety valve

- Gripping force safety possible by addition of pressure safety valve (Part. No. DSV1/8). The inevitable leakage in the pneumatic circuit restricts the time of this type of gripping force safety.

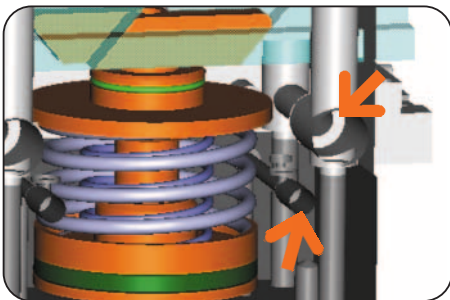


Position sensing

Sensing for jaw positioning via intergrated prox. flags

Direct position sensing of the gripper jaw via trip flag intergrated in jaw

- adjustable thru prox. switch bracket
- direct sensing of the gripper-jaw-position
- compact design



Connections

Energy supply, attachment and positioning possibilities

Adaptable to multiple mounting configuration

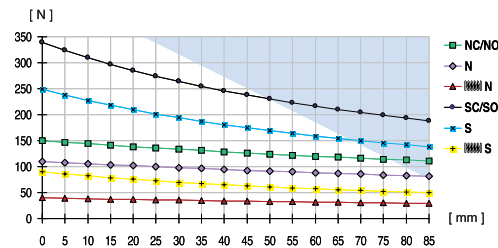
- optimal integration into the workroom through individual mounting-situation
- tubeless directly-connected possibility (no additional hose needed)

Parallel Gripper



Gripping force diagram

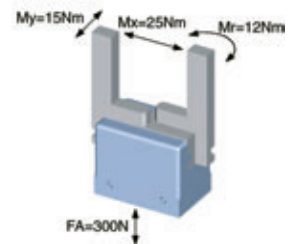
Gripping force as a function of jaw length.



Colored area: increased wear and tear to be expected

Forces and Moments

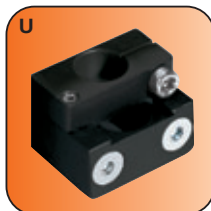
Max allowable forces and moments on jaws.



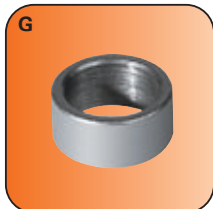
Included with purchase



Mounting block (left)
Order no. KB3-06

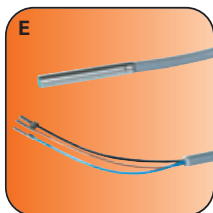


Mounting block (right)
Order no. KB3-05



Centring sleeve
Order no. BDST40400

Accessory list



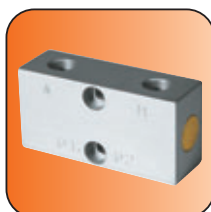
Proximity switch
Order no. NJ3-E2-03



Pneumatic fittings
Order no. WVM5

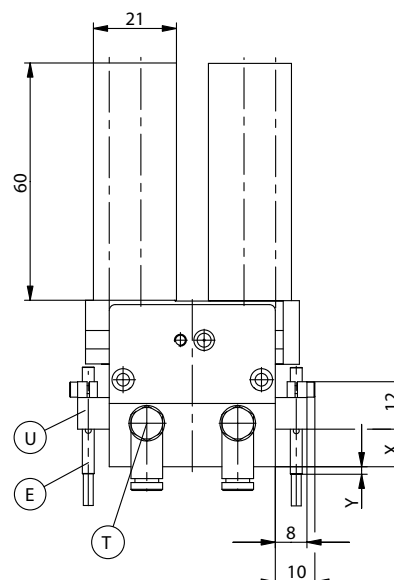


Universal jaw (set)
Order no. UB604 (Al)
Order no. UB604ST (St)

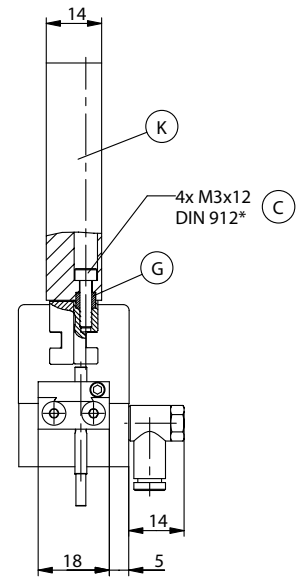


Pressure safety valve
Order no. DSV1/8

Accessory



Y = GP 604 NC/NO/SC/SO 3.0
GP 604 N/S -3.8



X = GP 604 NC/NO/SC/SO 9.5
GP 604 N/S 2.5

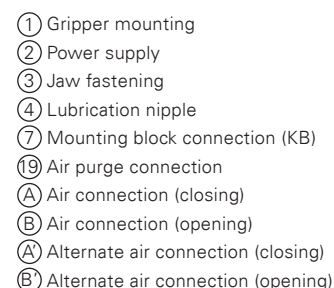
* equivalent to DIN EN ISO 4762

Subject to change without prior notice

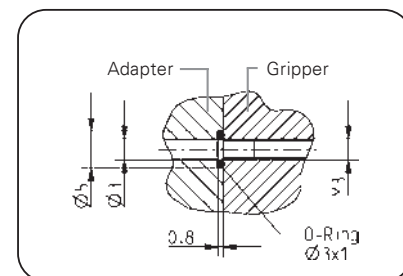
All data measured at 6 bar

* Value determined with friction coefficient $\mu = 0.1$ and safety factor $\gamma = 2$

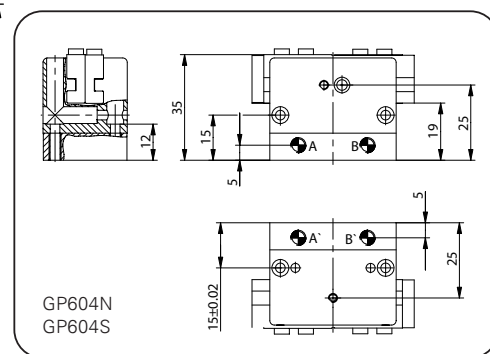
** High-temperature-resistant model (up to 150°C) add T to part number



* equivalent to DIN EN ISO 4762

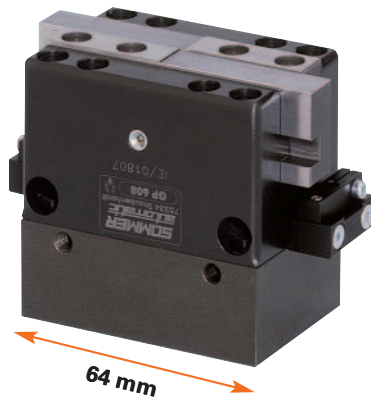


Hoseless air connection



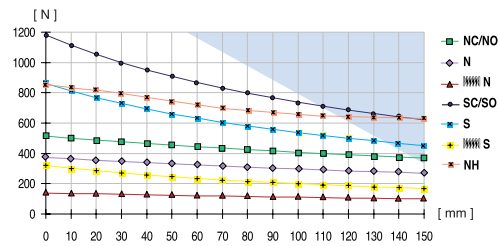
Subject to change without prior notice

Parallel Gripper



Gripping force diagram

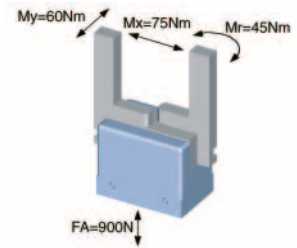
Gripping force as a function of jaw length.



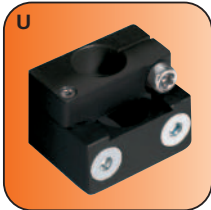
Colored area: increased wear and tear to be expected

Forces and Moments

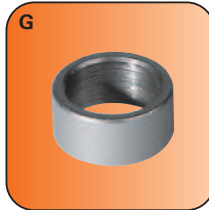
Max allowable forces and moments on jaws.



Included with purchase

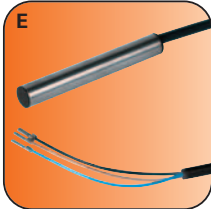


Mounting block
Order no. KB4-01

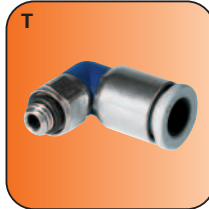


Centring sleeve
Order no. BDST60800

Accessory list



Proximity switch
Order no. NJ4-E2



Pneumatic fittings
Order no. WVM5



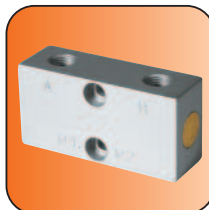
Pneumatic fittings
Order no. GVM5



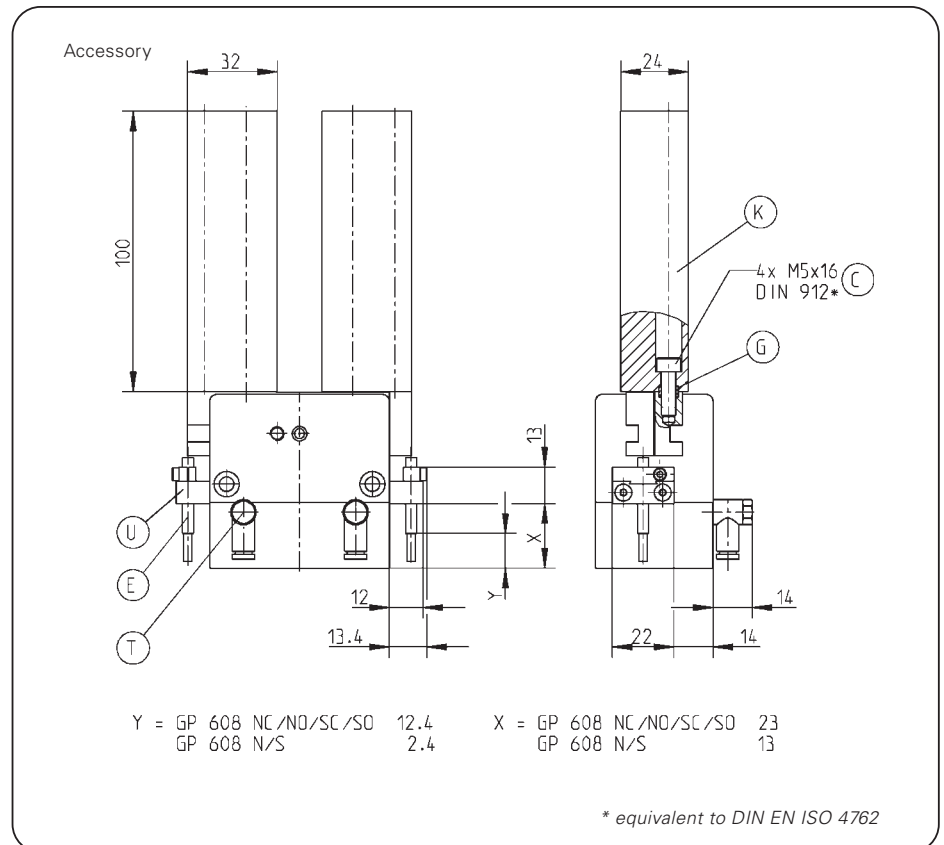
Universal jaw (set)
Order no. UB608 (Al)
Order no. UB608ST (St)



Plug
Order no. S12-G-3



Pressure safety valve
Order no. DSV1/8



Subject to change without prior notice

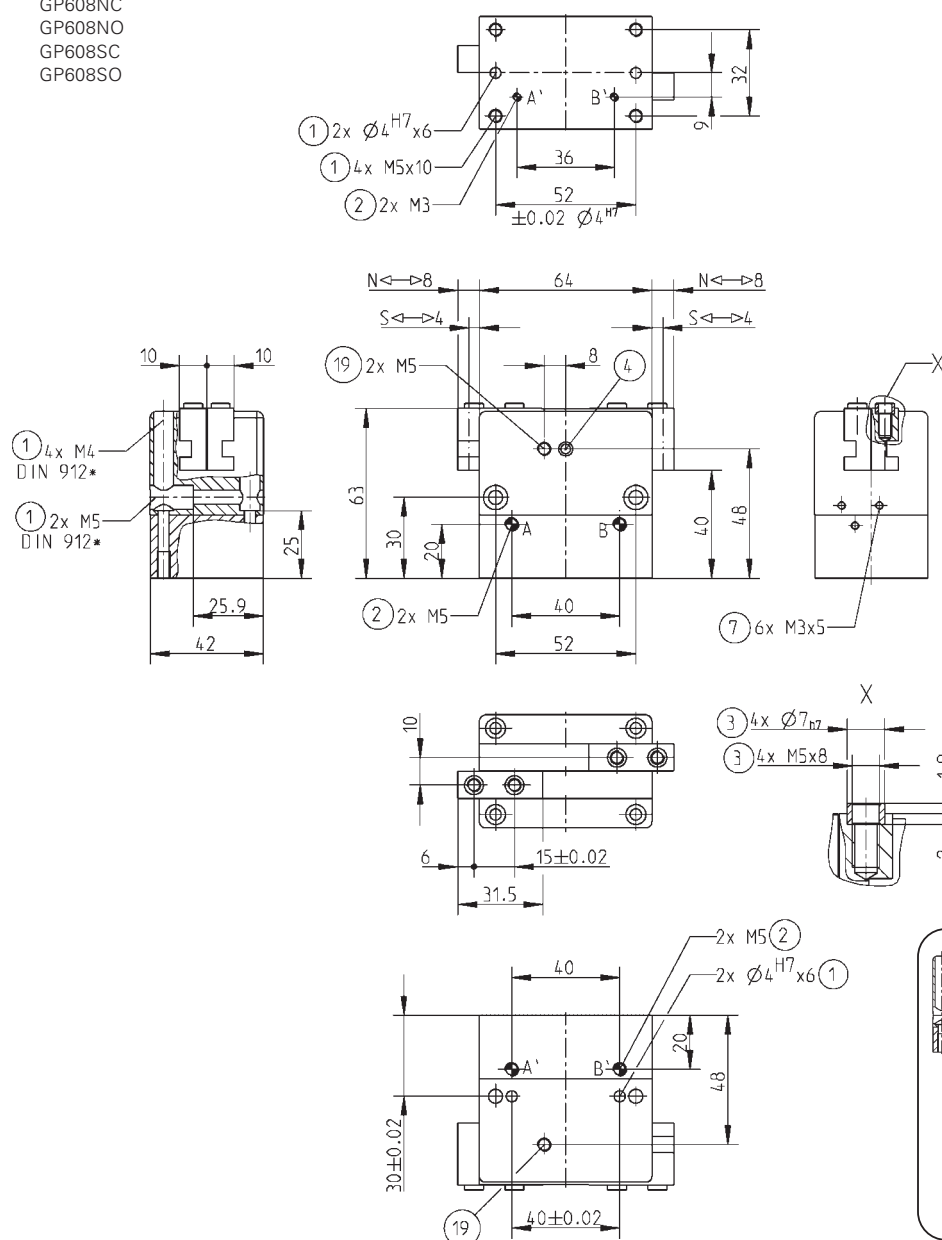
Order no.:	GP608N	GP608NC	GP608NO	GP608S	GP608SC	GP608SO
Stroke per jaw [mm]:	8	8	8	4	4	4
Gripping force in closing and opening [N]:	380	-	-	850	-	-
Gripping force in closing [N]:	-	520	-	-	1180	-
Gripping force in opening [N]:	-	-	520	-	-	1180
Recommended workpiece weight [kg]*:	1,9	2,7	2,7	4,3	6,0	6,0
Gripping force secured by spring min./max. [N]:	-	140	140	-	330	330
Closing time/opening time [s]:	0,04	0,05	0,05	0,04	0,05	0,05
Repeatability +/- [mm]:	0,025	0,025	0,025	0,025	0,025	0,025
Min./max. operating pressure [bar]:	3/8	5/8	5/8	3/8	5/8	5/8
Min./max. operating temperature [°C]**:	5/80	5/80	5/80	5/80	5/80	5/80
Air volume per cycle [cm³]:	18	27	27	18	18	27
Weight [g]:	510	590	590	510	590	590

All data measured at 6 bar

* Value determined with friction coefficient $\mu = 0.1$ and safety factor $v = 2$

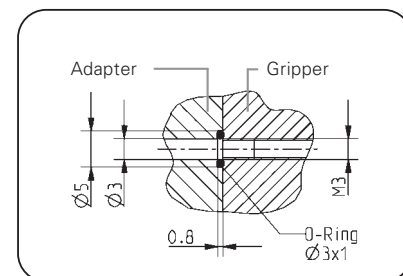
** High-temperature-resistant model (up to 150°C) add T to part number

GP608NC
GP608NO
GP608SC
GP608SO

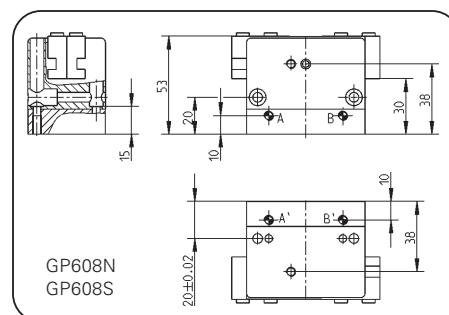


- ① Gripper mounting
- ② Power supply
- ③ Jaw fastening
- ④ Lubrication nipple
- ⑦ Mounting block connection (KB)
- ①⑨ Air purge connection
- Ⓐ Air connection (closing)
- Ⓑ Air connection (opening)
- Ⓐ Alternate air connection (closing)
- Ⓑ Alternate air connection (opening)

* equivalent to DIN EN ISO 4762



Hoseless air connection



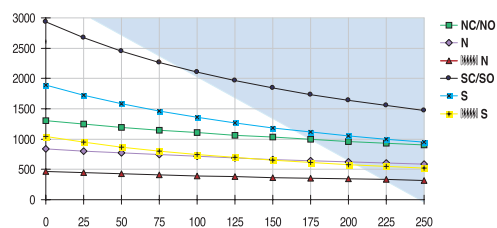
Subject to change without prior notice

Parallel Gripper



Gripping force diagram

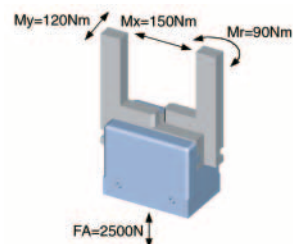
Gripping force as a function of jaw length.



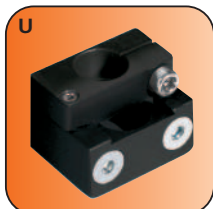
Colored area: increased wear and tear to be expected

Forces and Moments

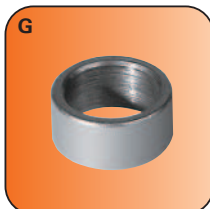
Max allowable forces and moments on jaws.



Included with purchase



Mounting block
Order no. KB8-22



Centring sleeve
Order no. BDST41000

Accessory list



Proximity switch
Order no. NJ8-E2S



Pneumatic fittings
Order no. WV1/8x6



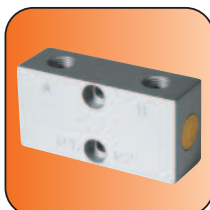
Universal jaw (set)
Order no. UB612 (Al)
Order no. UB612ST (St)



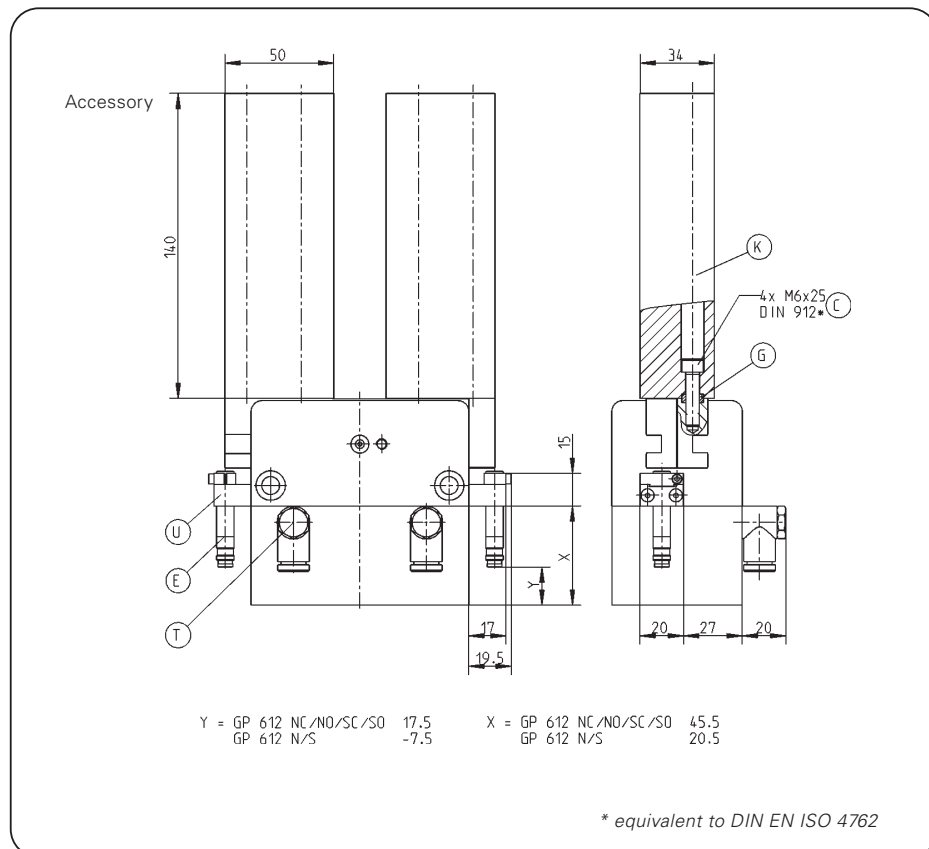
Cable angled plug
Order no. KAW500



Plug
Order no. S12-G-3



Pressure safety valve
Order no. DSV1/8

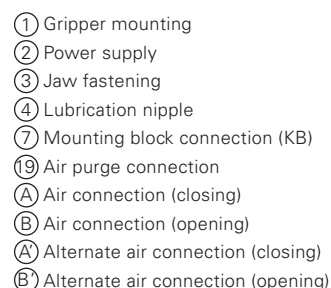


Subject to change without prior notice

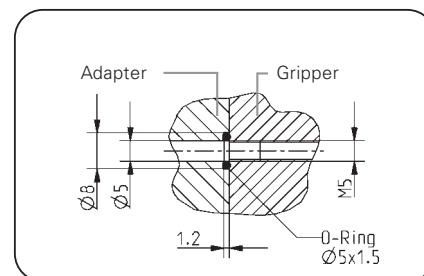
All data measured at 6 bar

* Value determined with friction coefficient $\mu = 0.1$ and safety factor $\gamma = 2$

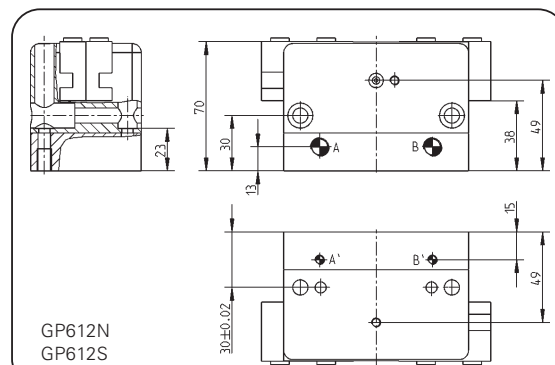
** High-temperature-resistant model (up to 150°C) add T to part number



* equivalent to DIN EN ISO 4762



Hoseless air connection

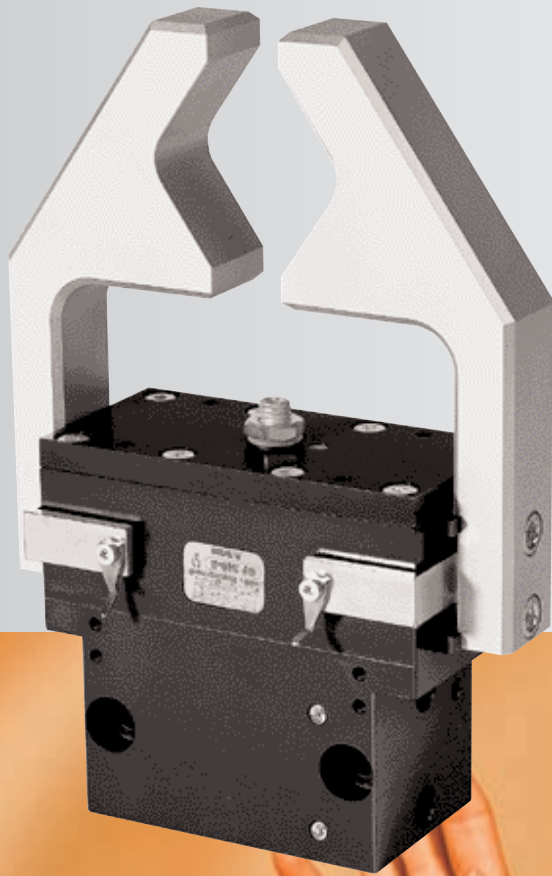


SOMMER
automatic



Parallel Grippers

pneumatic



GP224-B

GP240-B

GP260

GP280

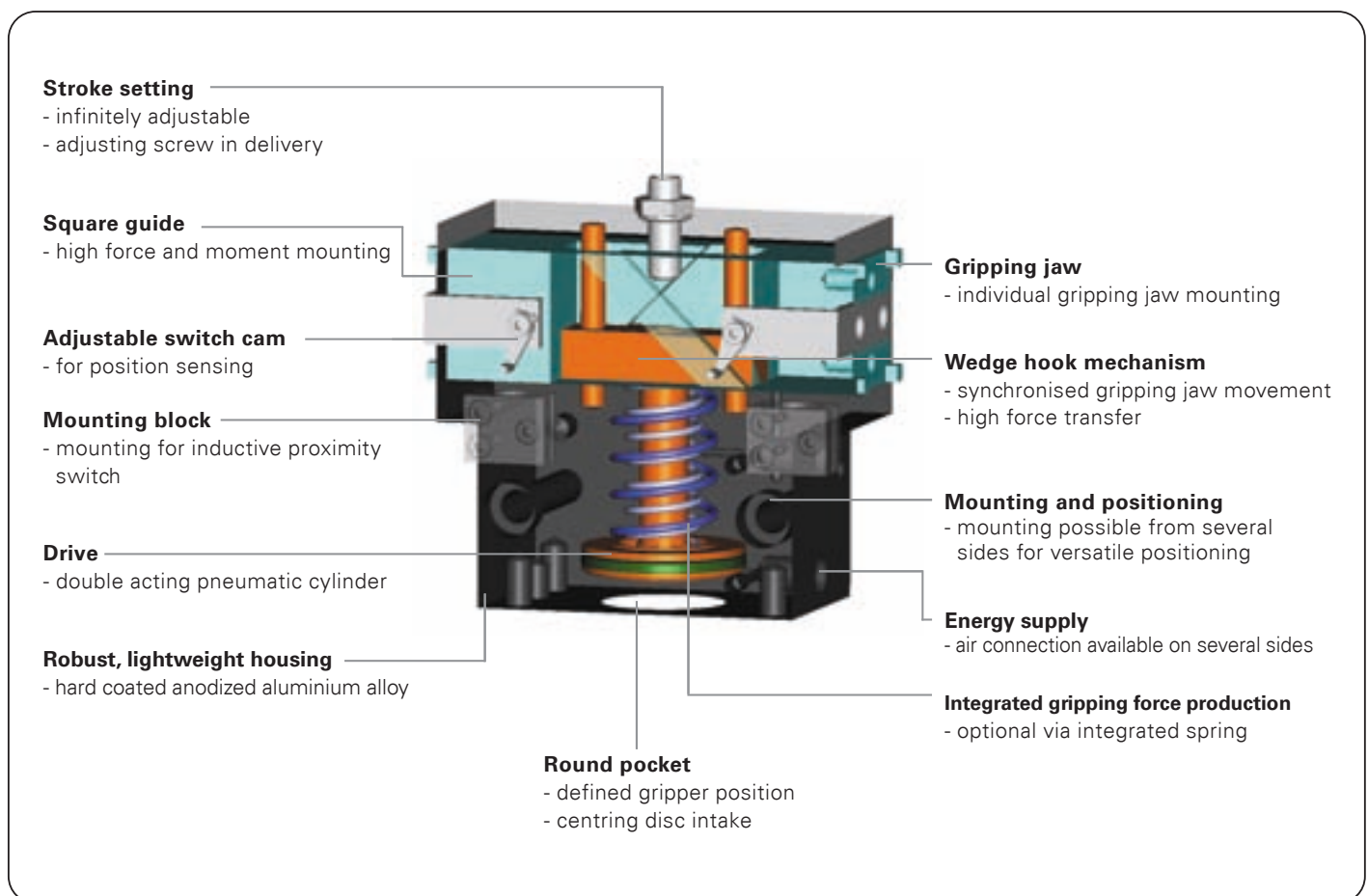
SOMMER
automatic

Parallel Gripper

Features

- dust-protected, overlapping square guide for high force and moment intake
- infinitely adjustable stroke up to 40 mm per jaw due to integrated adjusting screw
- design with mechanical gripping force safety device

Functional diagram





Terms

Gripping force:	arithmetic sum of the individual forces occurring at the jaws
Closing/opening time:	required time for the gripper jaws to cover the maximum stroke distance
Repeatability:	at end stops after 50/100 consecutive cycles
Cycle:	one complete movement of the piston forward and back
Maintenance:	recommended at 5 mil. cycles (please see the owner's manual for conditions, download from www.sommer-automatic.com) <ul style="list-style-type: none"> • long maintenance intervals keep costs down • long lifespan

Model guide

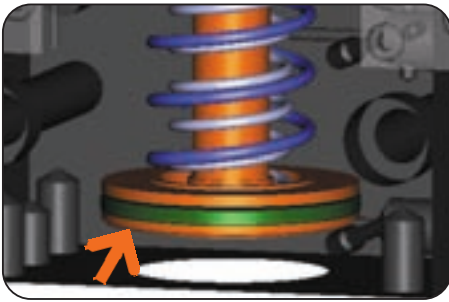
-B:	Model series
-99:	double acting cylinder without integrated spring
S:	double acting cylinders, grip force safety device via integrated spring and steeper wedge angel for higher grip force and reduced stroke
S-99:	double acting cylinder without integrated spring, steeper wedge angel for higher grip force and reduced stroke

Note: GP260 & GP280 are double acting cylinders with intergrated spring as a gripping force safety device while in closed position.

Order no.	Stroke per jaw	Gripping force in opening	Gripping force in closing	Self-locking via
GP224-B	12 mm	-	170 N	Spring
GP224-B-99	12 mm	160 N	160 N	DSV*
GP224-S-B	6 mm	-	335 N	Spring
GP224-S-B-99	6 mm	335 N	335 N	DSV*
GP240-B	20 mm	-	510 N	Spring
GP240-B-99	20 mm	435 N	435 N	DSV*
GP240S-B	8 mm	-	1290 N	Spring
GP240S-B-99	8 mm	1105 N	1105 N	DSV*
GP260	30 mm	-	800 N	Spring
GP260-99	30 mm	665 N	665 N	DSV*
GP260S	10 mm	-	2480 N	Spring
GP260S-99	10 mm	2120 N	2120 N	DSV*
GP280	40 mm	-	1690 N	Spring
GP280-99	40 mm	1390 N	1390 N	DSV*
GP280S	15 mm	-	4500 N	Spring
GP280S-99	15 mm	3690 N	3690 N	DSV*

*DSV = Pressure safety valves (Order no. DSV1/8)

Parallel **Gripper**



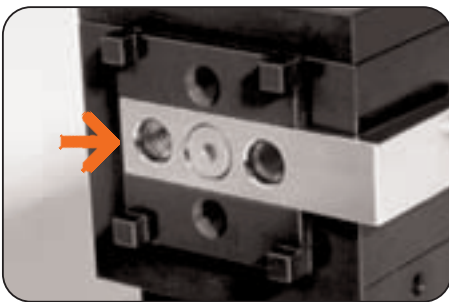
Drive

Double acting pneumatic cylinder with integrated mechanical gripping force safety device

- optimum transmission of power and gripping force secured by spring
- maximum power in both opening and closing
- gripping force up to 4500 N

-99 Model:

Double acting pneumatic cylinder



Guidance

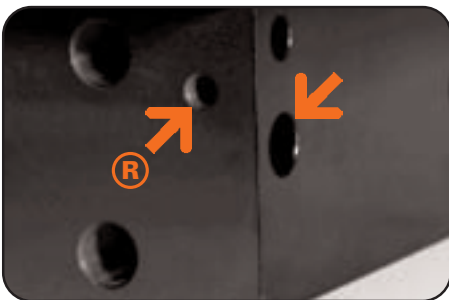
- overlapping flat guides for stability
- protected from dirt, dust and liquids through wipers at the gripper jaw
- high precision, due to low play guide



Power transfer

Wedge hook mechanism with different ratio

- optimum transmission of power to gripping force
- self-centering
- synchronized
- high repeat accuracy

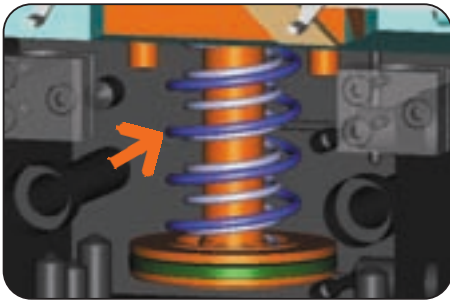


Connections

Energy supply, attachment and positioning possibilities

Adaptable to multiple mounting configurations

- optimal integration into the application through versatile mounting-options
- Connection for the (R) ventilation of the wedge/slide area for pressure equalization



Gripping force safety device

Standard Models:

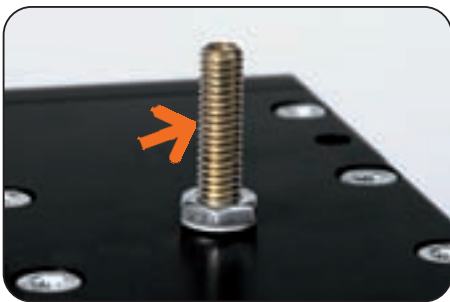
spring intergrated into cylinder as energy reserve

- permanent maintenance of gripping force
- compact design

-99 Models:

External pressure-retention safety valve

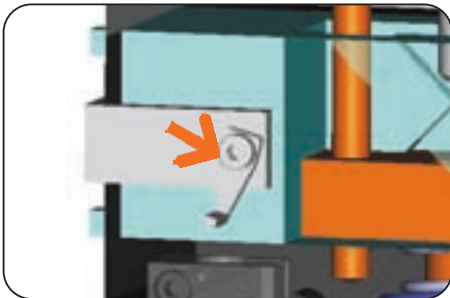
- Gripping force safety possible by addition of pressure safety valve (Part. No. DSV1/8). The inevitable leakage in the pneumatic circuit restricts the time of this type of gripping force safety.



Stroke adjustment

Adjustable opening-stroke

- infinite

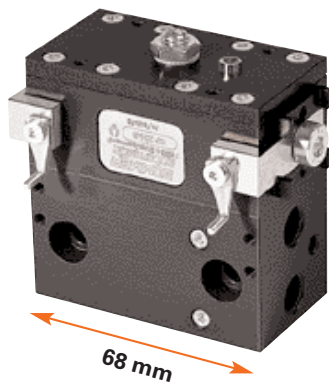


Position sensing

Trip flag mounted to gripper jaw

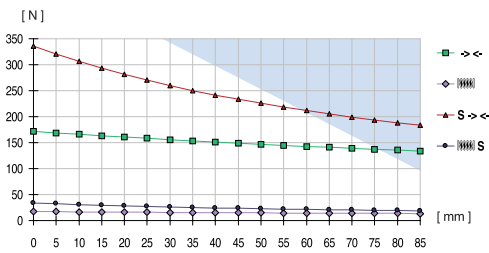
- direct sensing
- adjustable
- for inductive proximity switch of 3 thru 12 mm diameters

Parallel Gripper



Gripping force diagram

Gripping force as a function of jaw length.

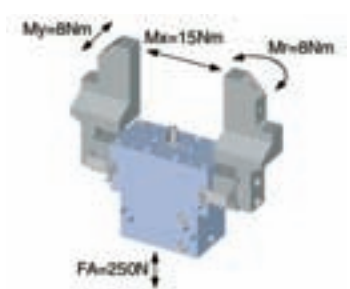


Colored area: increased wear and tear to be expected

measured from top edge of housing ◆

Forces and Moments

Max allowable forces and moments on jaws.



Included with purchase



Mounting block
Order no. KB8K

Accessory list



Pneumatic fittings
Order no. WV1/8x6



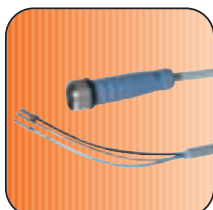
Proximity switch
Order no. NJ8-E2S



Centring disc
Order no. ZE15H7x4



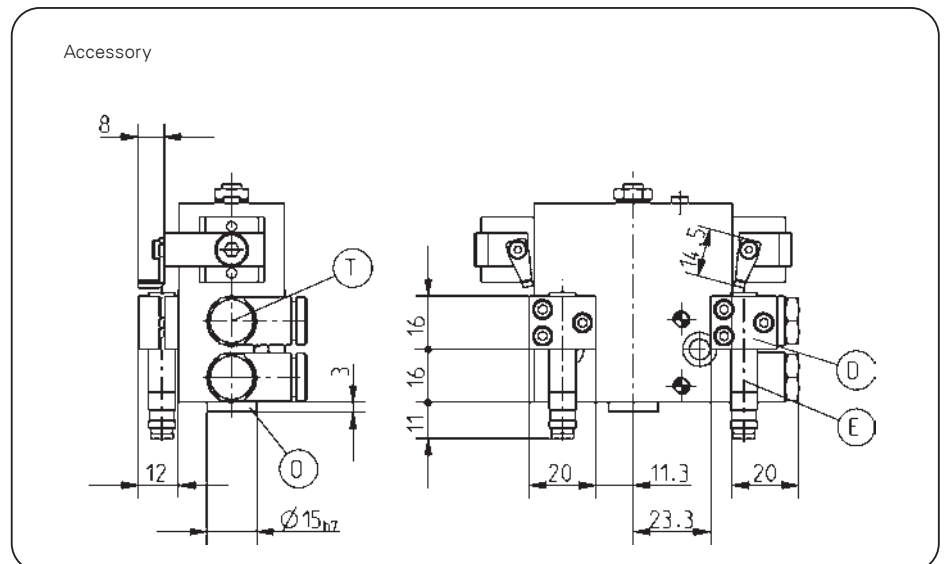
Cable angled plug
Order no. KAW500



Cable straight plug
Order no. KAG500



Pressure safety valve
Order no. DSV1/8



Subject to change without prior notice



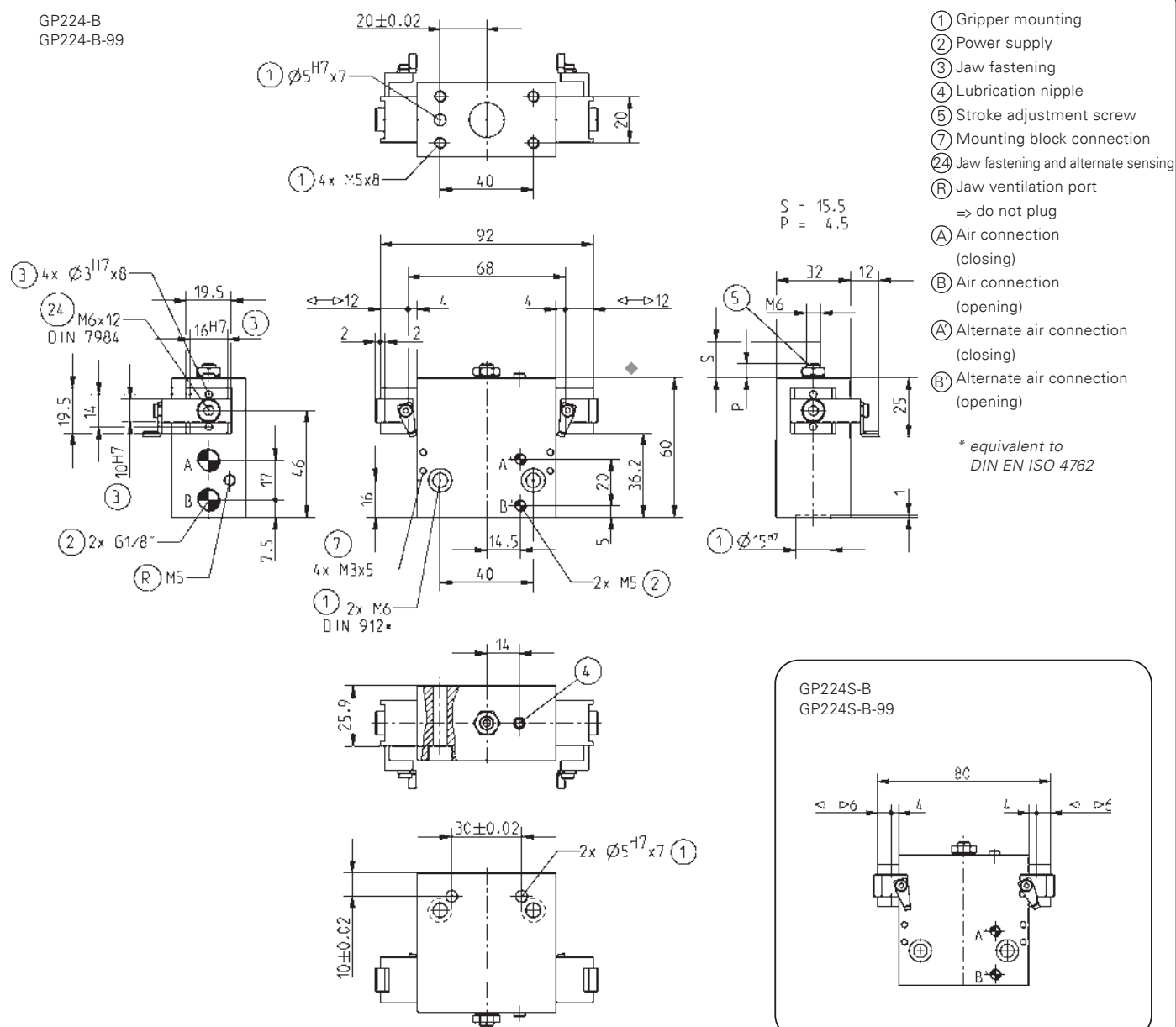
Order no.:	GP224-B	GP224S-B	GP224-B-99	GP224S-B-99
Stroke per jaw [mm]:	12	6	12	6
Gripping force in closing and opening [N]:	-	-	160	335
Gripping force in closing [N]:	170	335	-	-
Recommended workpiece weight [kg]*:	0,87	1,71	0,82	1,53
Gripping force secured by spring min./max. [N]:	10	35	-	-
Closing time/opening time [s]:	0,06	0,06	0,04	0,04
Repeatability +/- [mm]:	0,05	0,05	0,05	0,05
Min./max. operating pressure [bar]:	5/8	5/8	3/8	3/8
Min./max. operating temperature [°C]**:	5/80	5/80	5/80	5/80
Air volume per cycle [cm³]:	12	12	12	12
Weight [g]:	420	420	420	420

All data measured at 6 bar

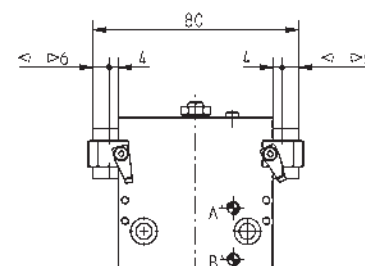
* Value determined with friction coefficient $\mu = 0.1$ and safety factor $v = 2$

** High-temperature-resistant model (up to 150°C) add T to part number

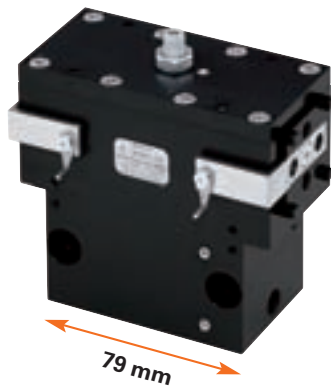
GP224-B
GP224-B-99



GP224S-B
GP224S-B-99

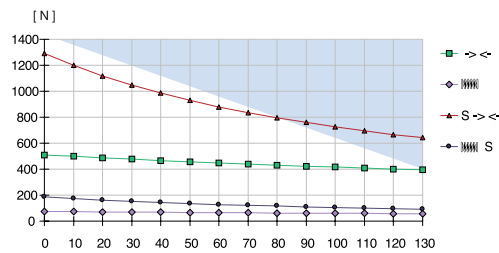


Parallel Gripper



Gripping force diagram

Gripping force as a function of jaw length.

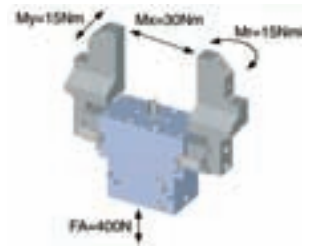


Colored area: increased wear and tear to be expected

measured from top edge of housing \blacklozenge

Forces and Moments

Max allowable forces and moments on jaws.



Included with purchase



Mounting block
Order no. KB8K

Accessory list



Pneumatic fittings
Order no. WV1/8x6



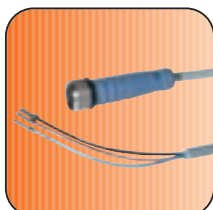
Proximity switch
Order no. NJ8-E2S



Centring disc
Order no. ZE30H7x4



Cable angled plug
Order no. KAW500

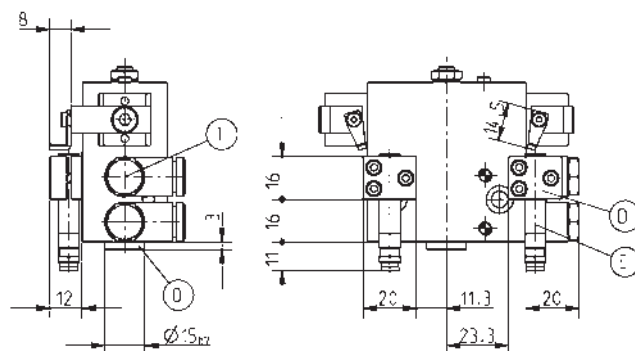


Cable straight plug
Order no. KAG500



Pressure safety valve
Order no. DSV1/8

Accessory

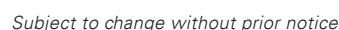


Subject to change without prior notice

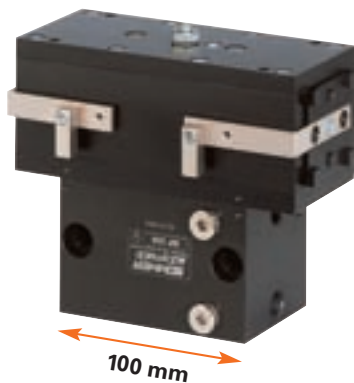
All data measured at 6 bar

* Value determined with friction coefficient $\mu = 0.1$ and safety factor $\gamma = 2$

** High-temperature-resistant model (up to 150°C) add T to part number

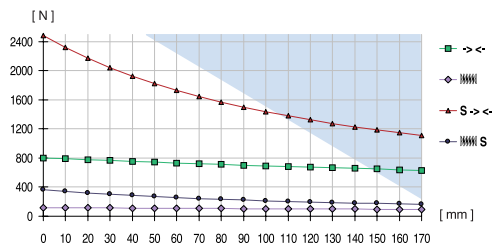


Parallel Gripper



Gripping force diagram

Gripping force as a function of jaw length.

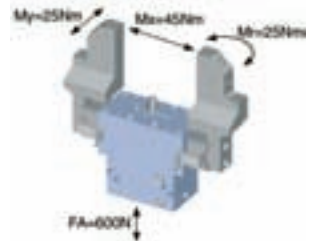


Colored area: increased wear and tear to be expected

measured from top edge of housing ♦

Forces and Moments

Max allowable forces and moments on jaws.



Included with purchase



Mounting block
Order no. KB8K

Accessory list



Pneumatic fittings
Order no. WV1/4x8



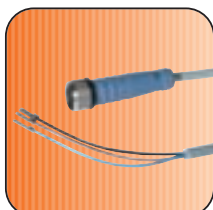
Proximity switch
Order no. NJ8-E2S



Centring disc
Order no. ZE40H7x6



Cable angled plug
Order no. KAW500

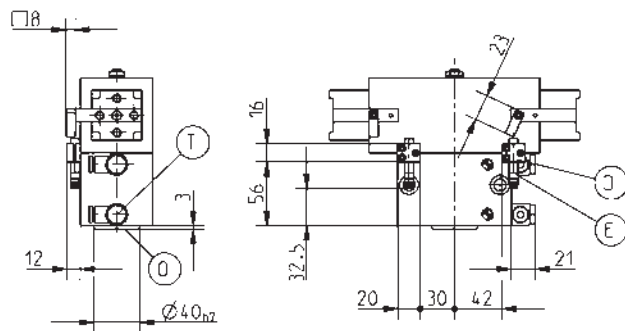


Cable straight plug
Order no. KAG500



Pressure safety valve
Order no. DSV1/8

Accessory

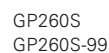


Subject to change without prior notice

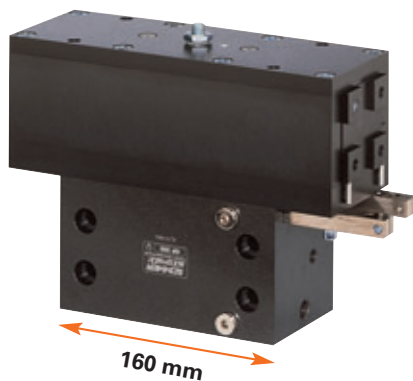
All data measured at 6 bar

* Value determined with friction coefficient $\mu = 0.1$ and safety factor $\nu = 2$

** High-temperature-resistant model (up to 150°C) add T to part number

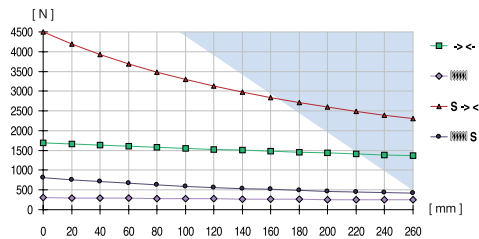


Parallel Gripper



Gripping force diagram

Gripping force as a function of jaw length.

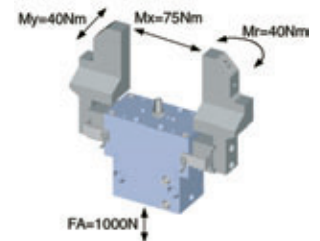


Colored area: increased wear and tear to be expected

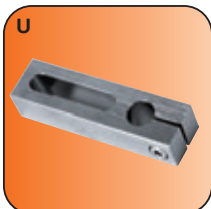
measured from top edge of housing ◆

Forces and Moments

Max allowable forces and moments on jaws.



Included with purchase



Mounting block
Order no. KB8-23+
KB8-24

Accessory list



Pneumatic fittings
Order no. WV1/4x8



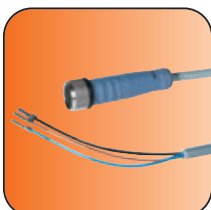
Proximity switch
Order no. NJ8-E2S



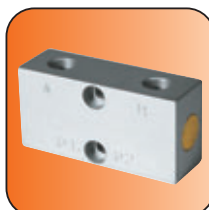
Centring disc
Order no. ZE45H7x6



Cable angled plug
Order no. KAW500

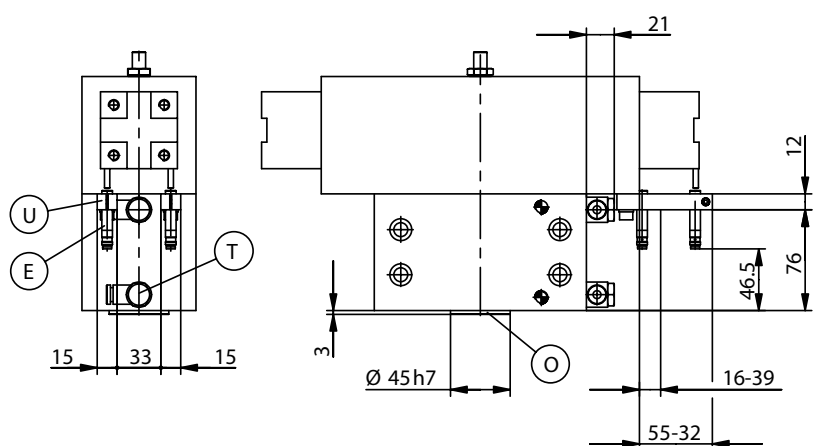


Cable straight plug
Order no. KAG500



Pressure safety valve
Order no. DSV1/8

Accessory

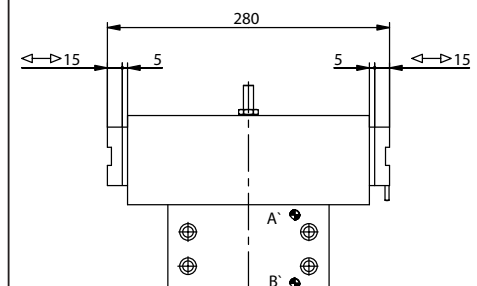


Subject to change without prior notice

All data measured at 6 bar

* Value determined with friction coefficient $\mu = 0.1$ and safety factor $\nu = 2$

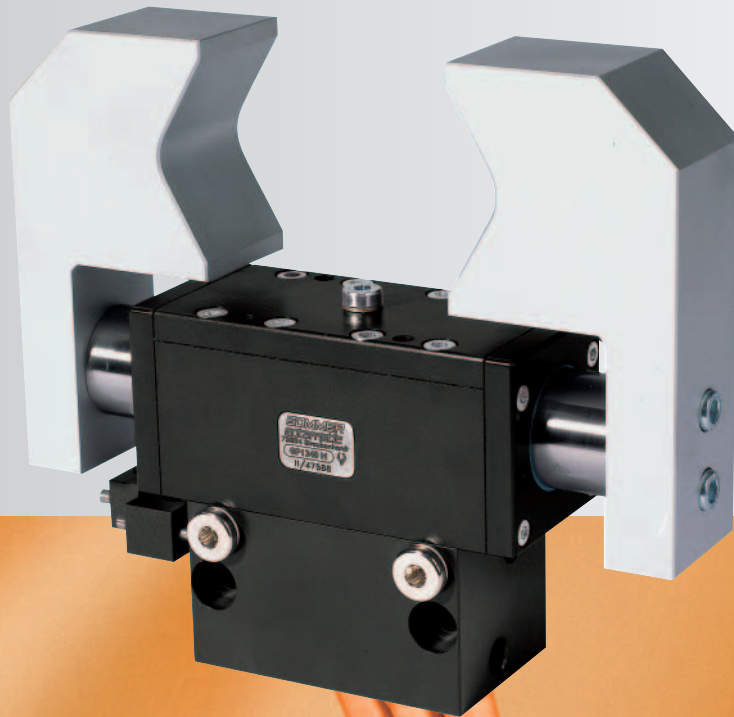
**** High-temperature-resistant model (up to 150°C) add T to part number**





Parallel Grippers

pneumatic



GP1200 Series

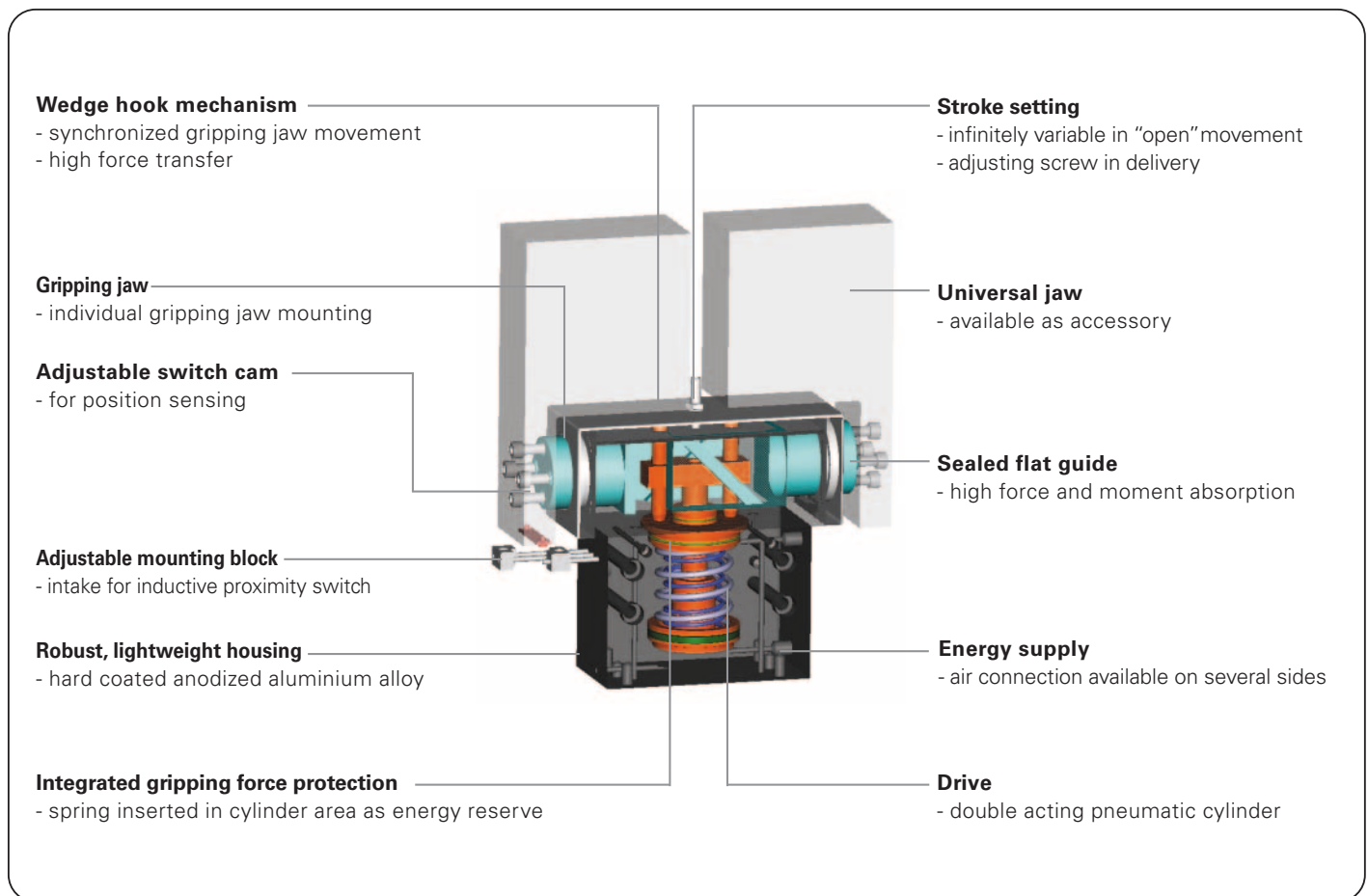
SOMMER
automatic

Parallel Gripper

Features

- stable overlapping flat guide for gripping jaws up to 220 mm long
- sealed by round guide with wiper between jaw and housing
- design with mechanical gripping force safety

Functional diagram



Terms

Gripping force:	arithmetic sum of the individual forces occurring at the jaws
Closing/opening time:	required time for the gripper jaws to cover the maximum stroke distance
Repeatability:	at end stops after 50/100 consecutive cycles
Cycle:	one complete movement of the piston forward and back
Maintenance:	recommended at 1.5 mil. cycles (please see the owner's manual for conditions, download from www.sommer-automatic.com)

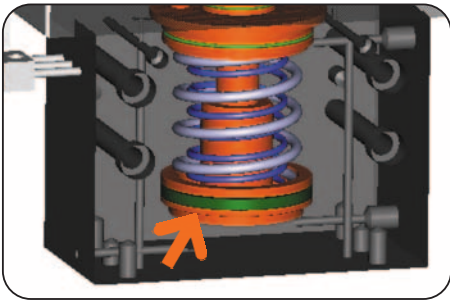
Model guide

N:	Standard design (long stroke - standard force)
C:	For external gripping, self-locking, spring closing
O:	For internal gripping, self-locking, spring opening

Order no.	Stroke per jaw	Gripping force in opening	Gripping force in closing	Self-locking via
GP1224N	12 mm	130 N	130 N	DSV*
GP1224NC	12 mm	-	155 N	Spring
GP1224NO	12 mm	155 N	-	Spring
GP1240N	20 mm	365 N	365 N	DSV*
GP1240NC	20 mm	-	465 N	Spring
GP1240NO	20 mm	465 N	-	Spring
GP1260N	30 mm	580 N	580 N	DSV*
GP1260NC	30 mm	-	780 N	Spring
GP1260NO	30 mm	780 N	-	Spring
GP1280N	40 mm	1160 N	1160 N	DSV*
GP1280NC	40 mm	-	1550 N	Spring
GP1280NO	40 mm	1550 N	-	Spring

*DSV = Pressure safety valves (Order no. DSV1/8)

Parallel **Gripper**



Drive

N Models:

Double acting pneumatic cylinder

- maximum power in both opening and closing
- gripping force up to 1550 N

NC and NO Models:

Double acting pneumatic cylinder with integrated mechanical gripping force safety device

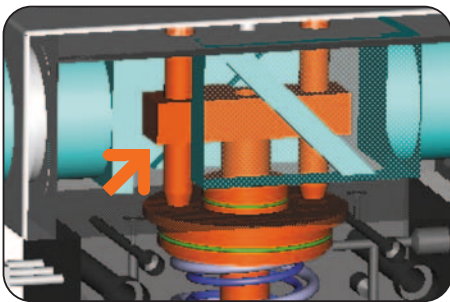
- optimum coordination of drive force and gripping force secured by spring



Guidance

overlapping flat guide with round gripper jaw extension

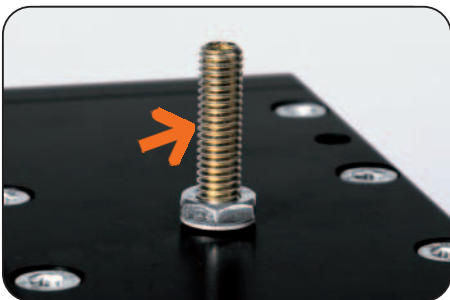
- flat guide for high force and moment resistance
- overlapping guide for optimum guide ratio
- high precision due to low play guide
- sealed on round gripper jaw extension with additional wiper



Power transfer

Wedge hook mechanism

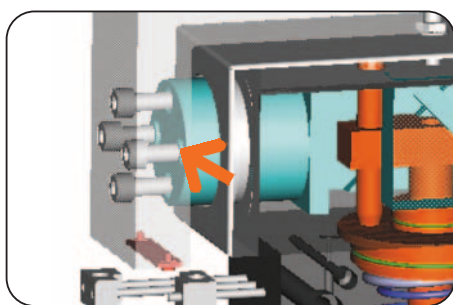
- optimum transmission of drive force in gripping force
- self-centering
- synchronization
- high repeat accuracy



Lifting-attitude

Adjustable opening stroke

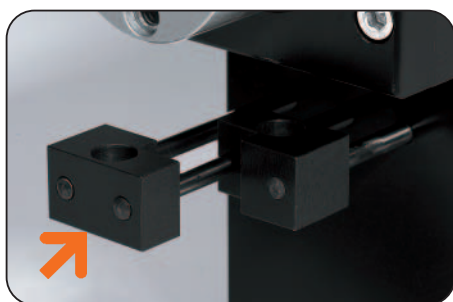
- infinitely adjustable



Gripping jaw positioning

individual gripping jaw positioning via centering sleeves

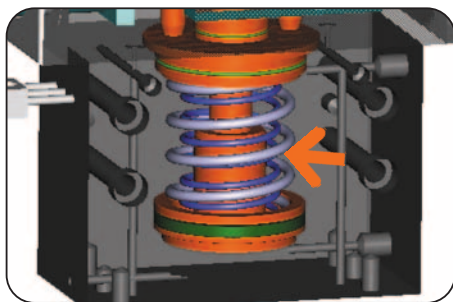
- precise positioning of individual gripper fingers
- quick, cost-effective and therefore economical jaw changing
- space saving



Position sensing

Mounting for inductive proximity switch

- for direct gripping jaw sensing
- compact design
- process safe



Gripping force safety device

NC and NO Models

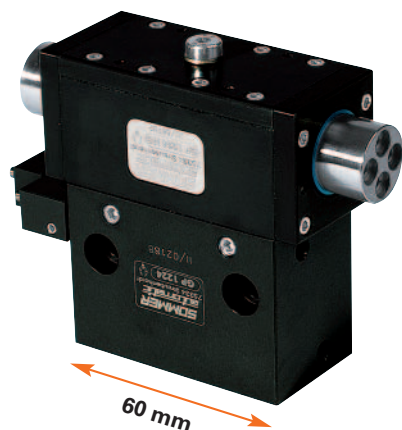
Energy retention through spring mounted in cylinder

- reliable mechanical gripping force retention
- compact design

N Models external pressure-retention safety valve

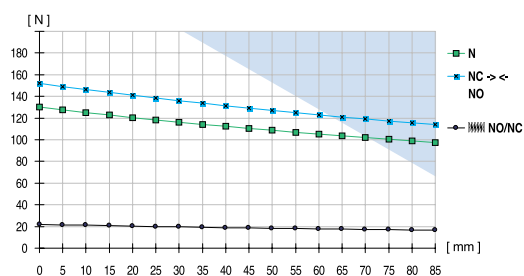
- Gripping force safety possible by addition of pressure safety valve (Part. No. DSV1/8). The inevitable leakage in the pneumatic circuit restricts the time of this type of gripping force safety.

Parallel Gripper



Gripping force diagram

Gripping force as a function of jaw length.

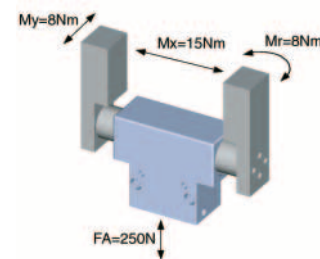


Colored area: increased wear and tear to be expected

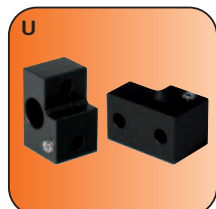
measured from top edge of housing ♦

Forces and Moments

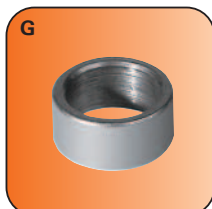
Max allowable forces and moments on jaws.



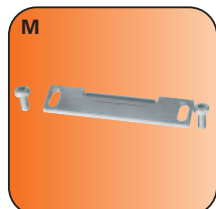
Included with purchase



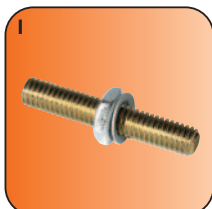
Mounting block
Order no. KB6.5-01



Centring sleeve
Order no. BDST40600



Switch cam + screw
Order no. SN0005



Stroke adjustment screw
Order no. HES0004

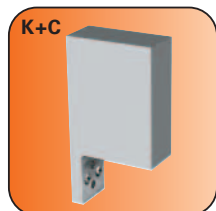
Accessory list



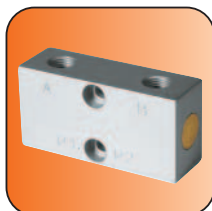
Pneumatic fittings
Order no. WVM5



Proximity switch
Order no. NJ6.5-E2S

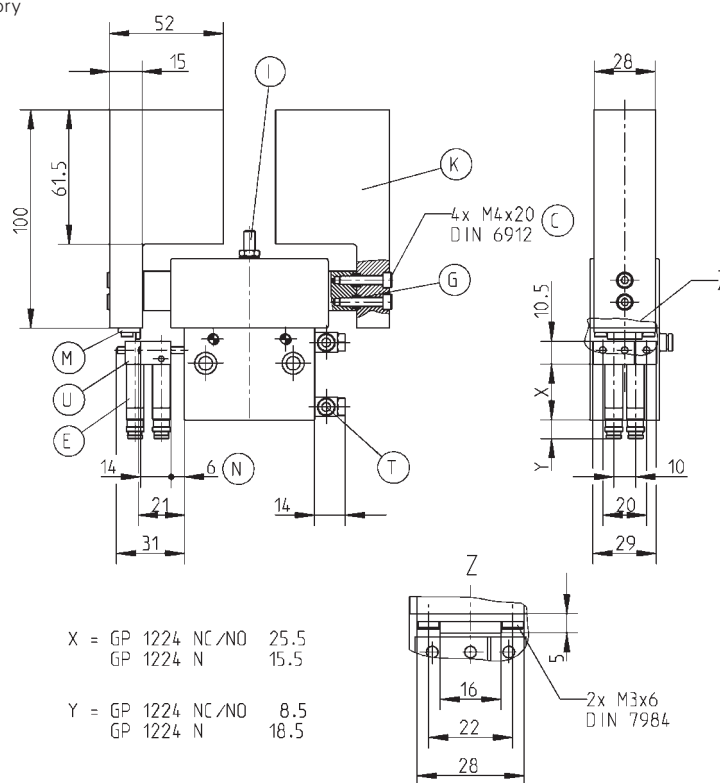


Universal jaw (set)
Order no. UB1224 (Al)
Order no. UB1224ST (St)



Pressure safety valve
Order no. DSV1/8

Accessory



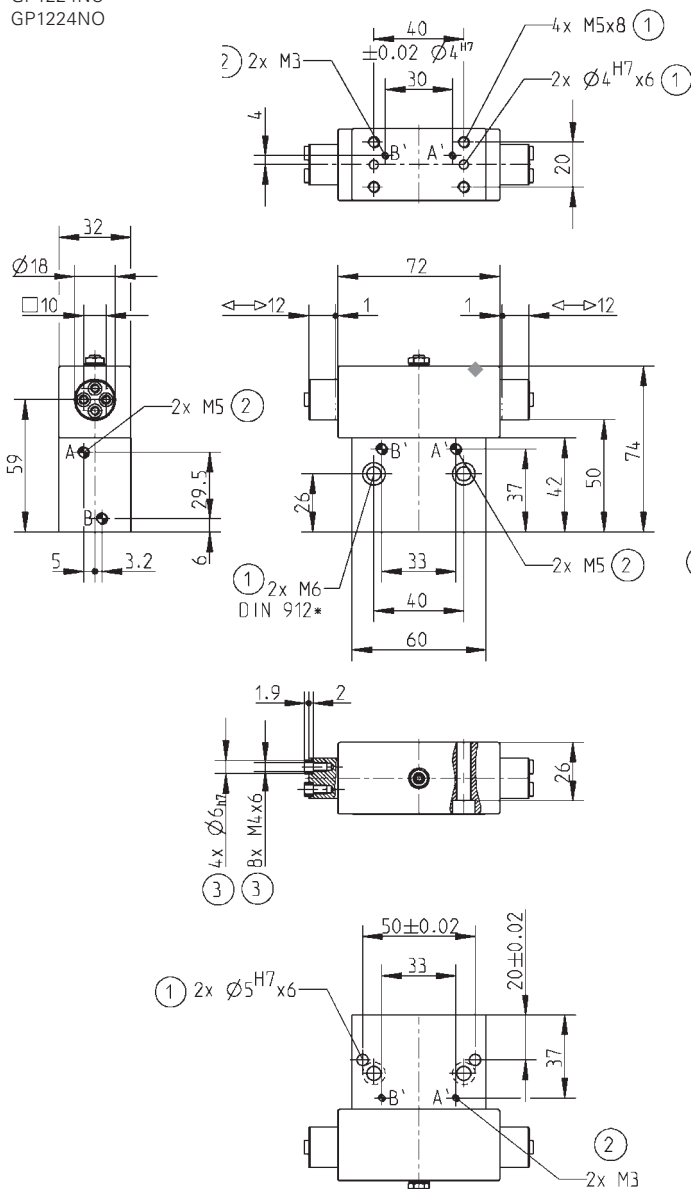
Order no.:	GP1224N	GP1224NC	GP1224NO
Stroke per jaw [mm]:	12	12	12
Gripping force in closing and opening [N]:	130	-	-
Gripping force in closing [N]:	-	155	-
Gripping force in opening [N]:	-	-	155
Recommended workpiece weight [kg]*:	0,66	0,79	0,79
Gripping force secured by spring min./max. [N]:	-	25	25
Closing time/opening time [s]:	0,04	0,05	0,05
Repeatability +/- [mm]:	0,05	0,05	0,05
Min./max. operating pressure [bar]:	4/8	5/8	5/8
Min./max. operating temperature [°C]**:	5/80	5/80	5/80
Air volume per cycle [cm³]:	12	17,5	17,5
Weight [g]:	480	530	550

All data measured at 6 bar

* Value determined with friction coefficient $\mu = 0.1$ and safety factor $v = 2$

** High-temperature-resistant model (up to 150°C) add T to part number

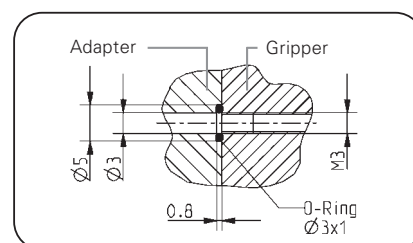
GP1224NC
GP1224NO



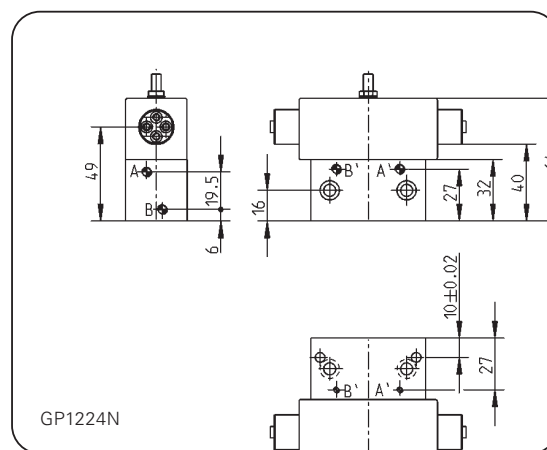
S = 12.8
P = 3.8

- ① Gripper mounting
- ② Power supply
- ③ Jaw fastening
- ⑤ Stroke adjustment screw
- ⑦ Mounting for mounting block
- A Air connection (closing)
- B Air connection (opening)
- A' Alternate air connection (closing)
- B' Alternate air connection (opening)

* equivalent to DIN EN ISO 4762

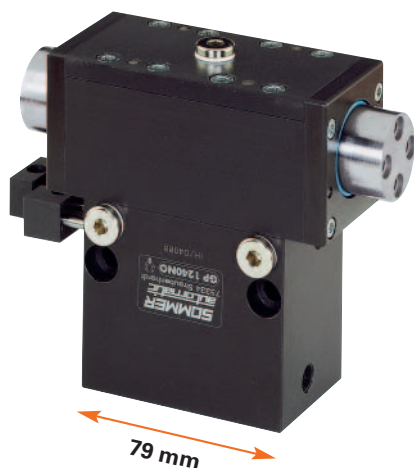


Hoseless air connection



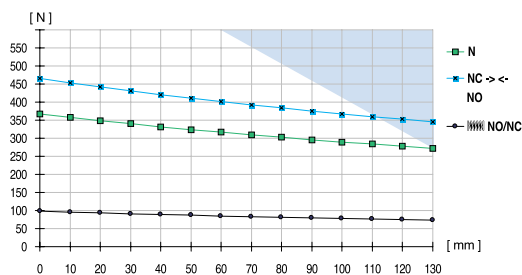
Subject to change without prior notice

Parallel Gripper



Gripping force diagram

Gripping force as a function of jaw length.

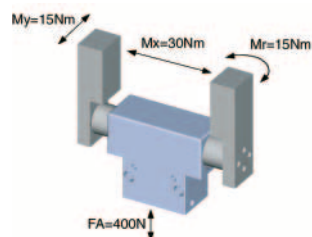


Colored area: increased wear and tear to be expected

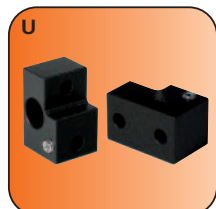
measured from top edge of housing ♦

Forces and Moments

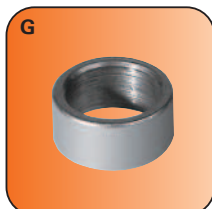
Max allowable forces and moments on jaws.



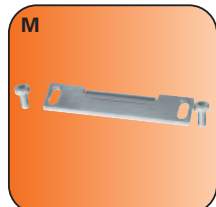
Included with purchase



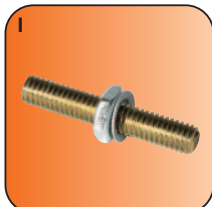
Mounting block
Order no. KB8-07



Centring sleeve
Order no. BDST40800



Switch cam + screw
Order no. SN0006



Stroke adjustment screw
Order no. HES0005

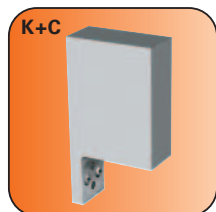
Accessory list



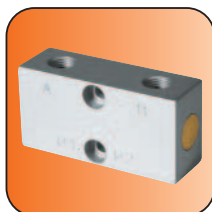
Pneumatic fittings
Order no. WV1/8x6



Proximity switch
Order no. NJ8-E2S

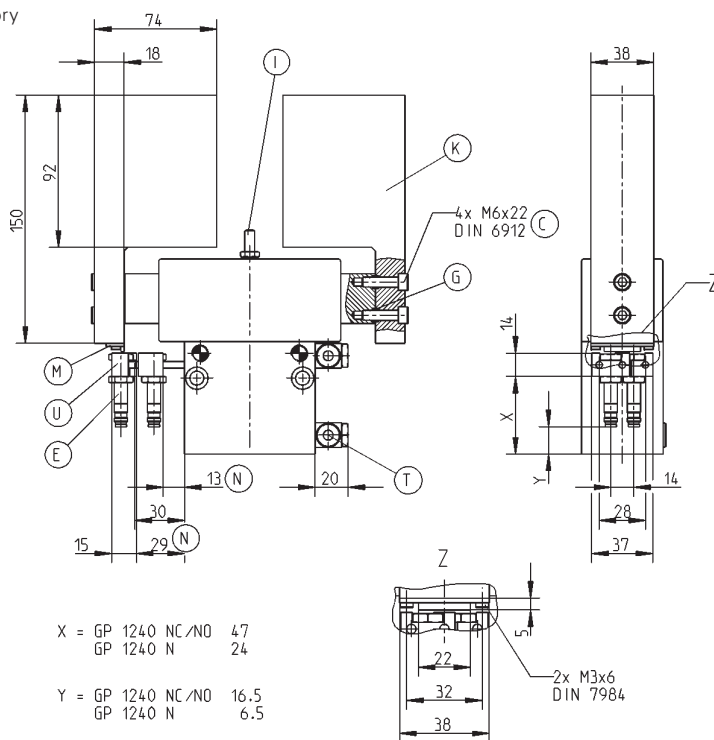


Universal jaw (set)
Order no. UB1240 (Al)
Order no. UB1240ST (Stl)



Pressure safety valve
Order no. DSV1/8

Accessory



X =	GP 1240 NC/NO	47
	GP 1240 N	24
Y =	GP 1240 NC/NO	16.5
	GP 1240 N	6.5

(N) Sensing specific dimensions

Subject to change without prior notice



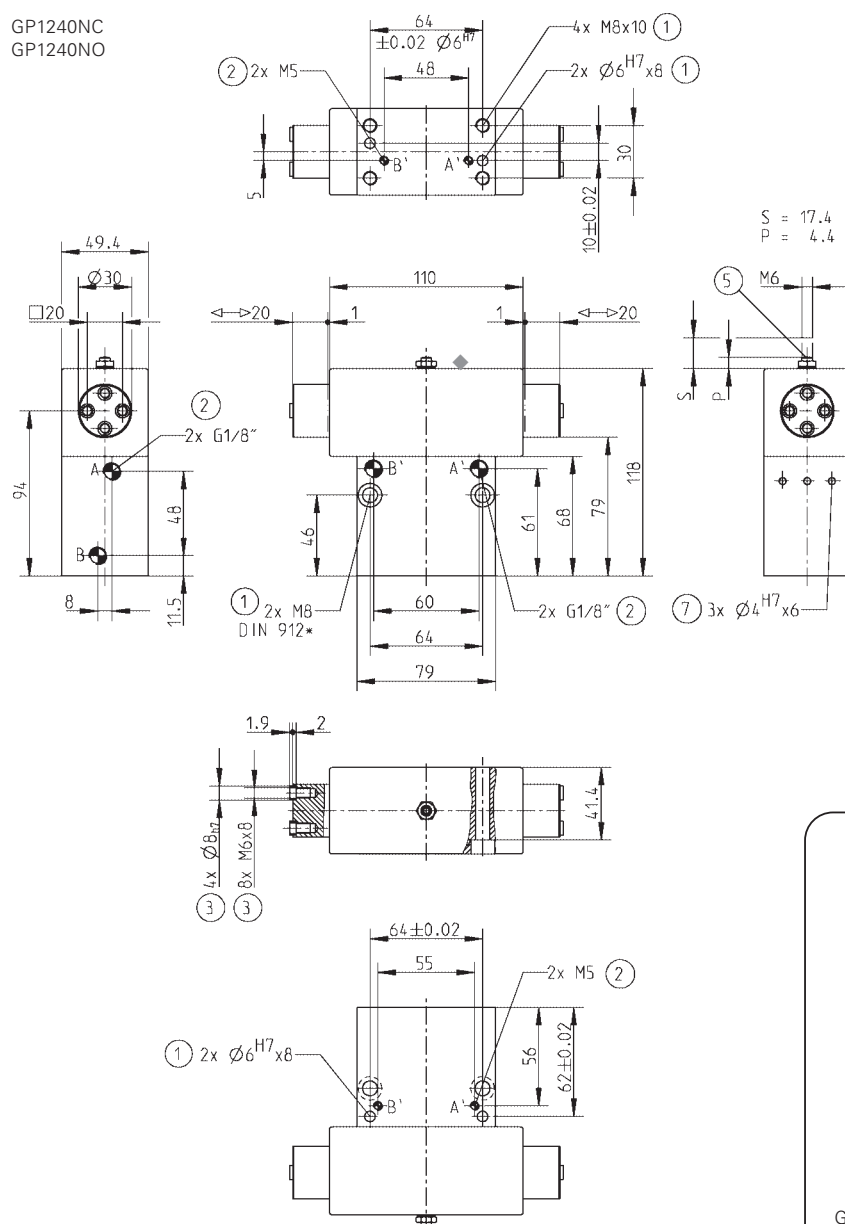
Order no.:	GP1240N	GP1240NC	GP1240NO
Stroke per jaw [mm]:	20	20	20
Gripping force in closing and opening [N]:	365	-	-
Gripping force in closing [N]:	-	465	-
Gripping force in opening [N]:	-	-	465
Recommended workpiece weight [kg]*:	1,86	2,37	2,37
Gripping force secured by spring min./max. [N]:	-	100	100
Closing time/opening time [s]:	0,06	0,08	0,08
Repeatability +/- [mm]:	0,05	0,05	0,05
Min./max. operating pressure [bar]:	3/8	5/8	5/8
Min./max. operating temperature [°C]**:	5/80	5/80	5/80
Air volume per cycle [cm³]:	49	65,5	65,5
Weight [kg]:	1,7	1,9	1,9

All data measured at 6 bar

* Value determined with friction coefficient $\mu = 0.1$ and safety factor $v = 2$

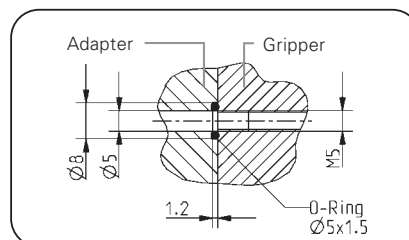
** High-temperature-resistant model (up to 150°C) add T to part number

GP1240NC
GP1240NO

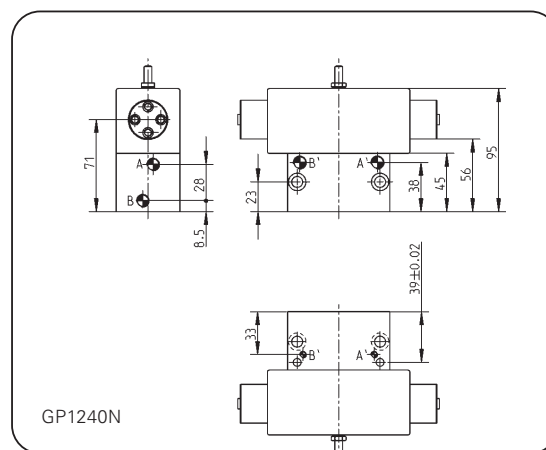


- ① Gripper mounting
- ② Power supply
- ③ Jaw fastening
- ⑤ Stroke adjustment screw
- ⑦ Mounting for mounting block
- A) Air connection (closing)
- B) Air connection (opening)
- A') Alternate air connection (closing)
- B') Alternate air connection (opening)

* equivalent to DIN EN ISO 4762

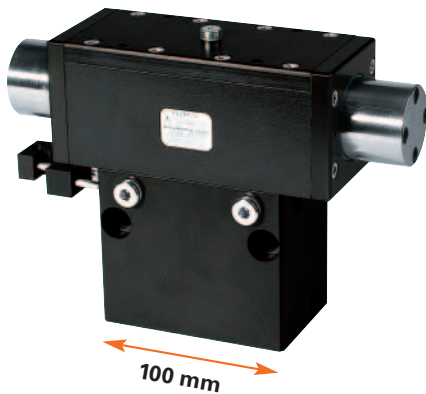


Hoseless air connection



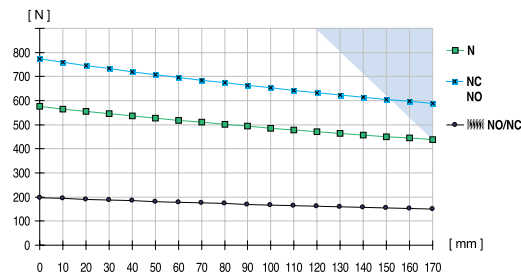
Subject to change without prior notice

Parallel Gripper



Gripping force diagram

Gripping force as a function of jaw length.

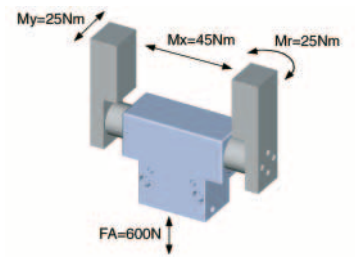


Colored area: increased wear and tear to be expected

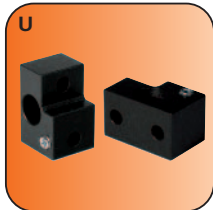
measured from top edge of housing ♦

Forces and Moments

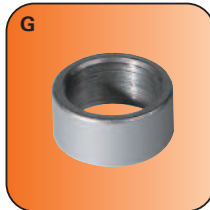
Max allowable forces and moments on jaws.



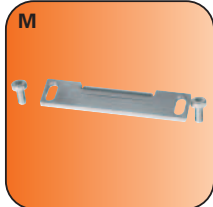
Included with purchase



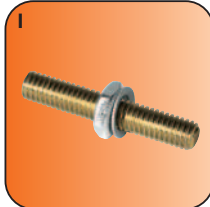
Mounting block
Order no. KB8-07



Centring sleeve
Order no. BDST40800



Switch cam + screw
Order no. SN0007



Stroke adjustment screw
Order no. HES0005

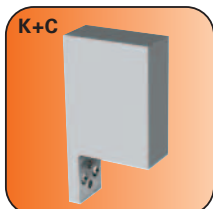
Accessory list



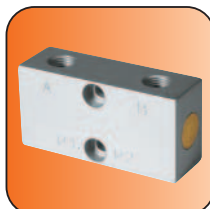
Pneumatic fittings
Order no. WV1/4x8



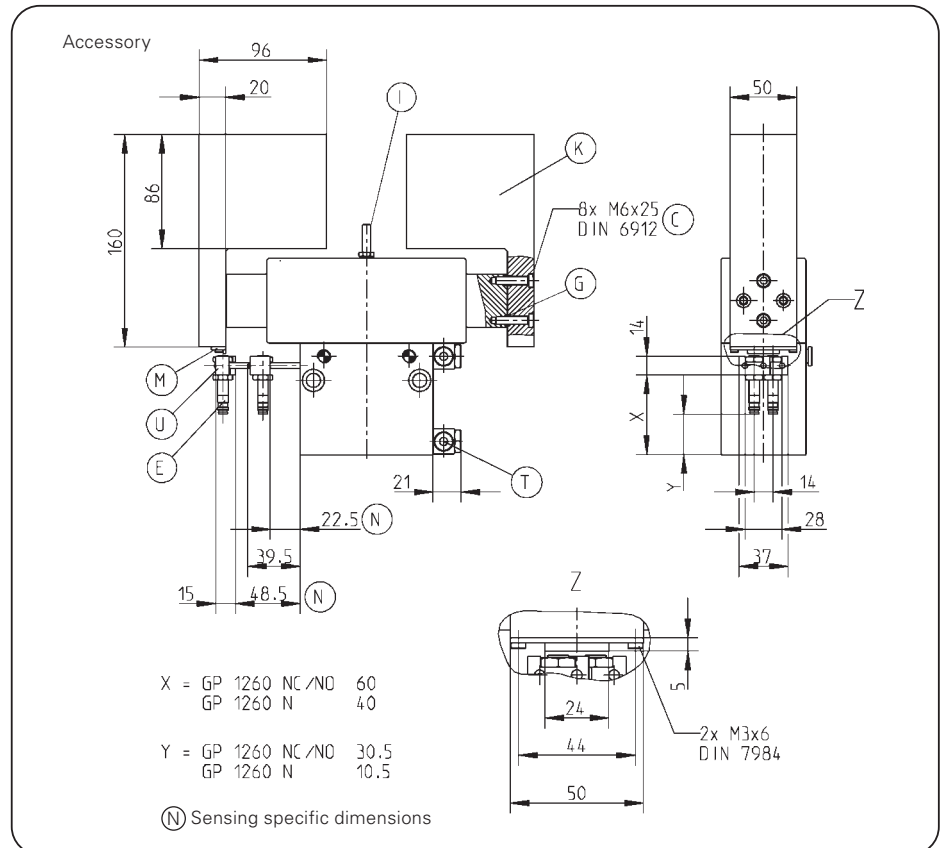
Proximity switch
Order no. NJ8-E2S



Universal jaw (set)
Order no. UB1260 (Al)
Order no. UB1260ST (St)



Pressure safety valve
Order no. DSV1/8

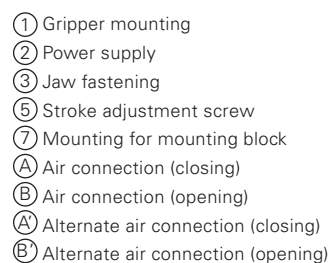


Subject to change without prior notice

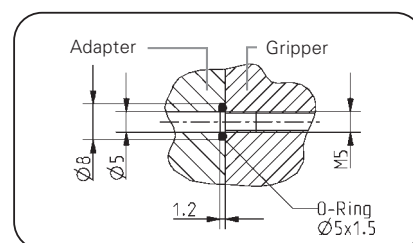
All data measured at 6 bar

* Value determined with friction coefficient $\mu = 0.1$ and safety factor $\gamma = 2$

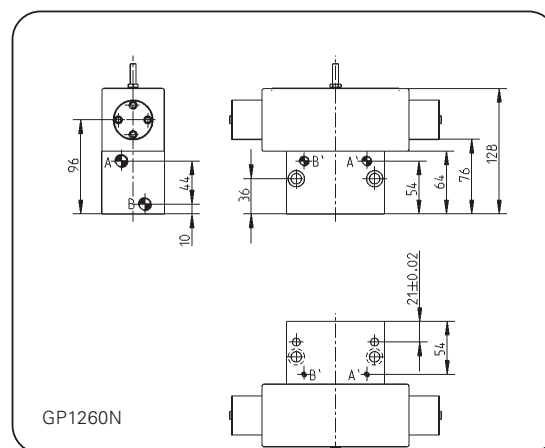
** High-temperature-resistant model (up to 150°C) add T to part number



* equivalent to DIN EN ISO 4762



Hoseless air connection



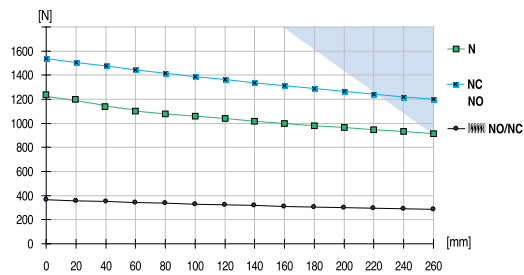
SOMMER
automatic

Parallel Gripper



Gripping force diagram

Gripping force as a function of jaw length.

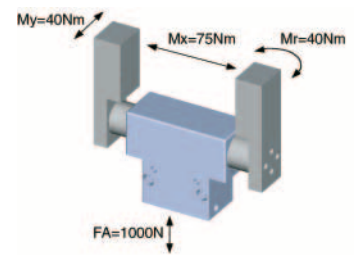


Colored area: increased wear and tear to be expected

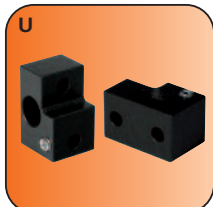
measured from top edge of housing ♦

Forces and Moments

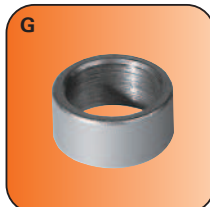
Max allowable forces and moments on jaws.



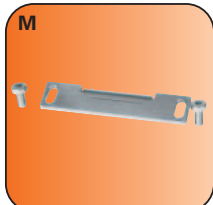
Included with purchase



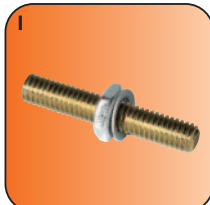
Mounting block
Order no. KB8-07



Centring sleeve
Order no. BDST41600



Switch cam + screw
Order no. SN0007



Stroke adjustment screw
Order no. HES0006

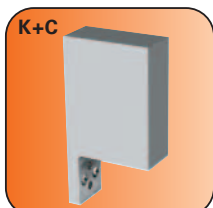
Accessory list



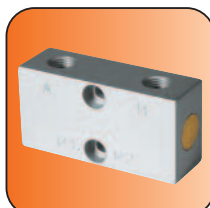
Pneumatic fittings
Order no. WV1/4x8



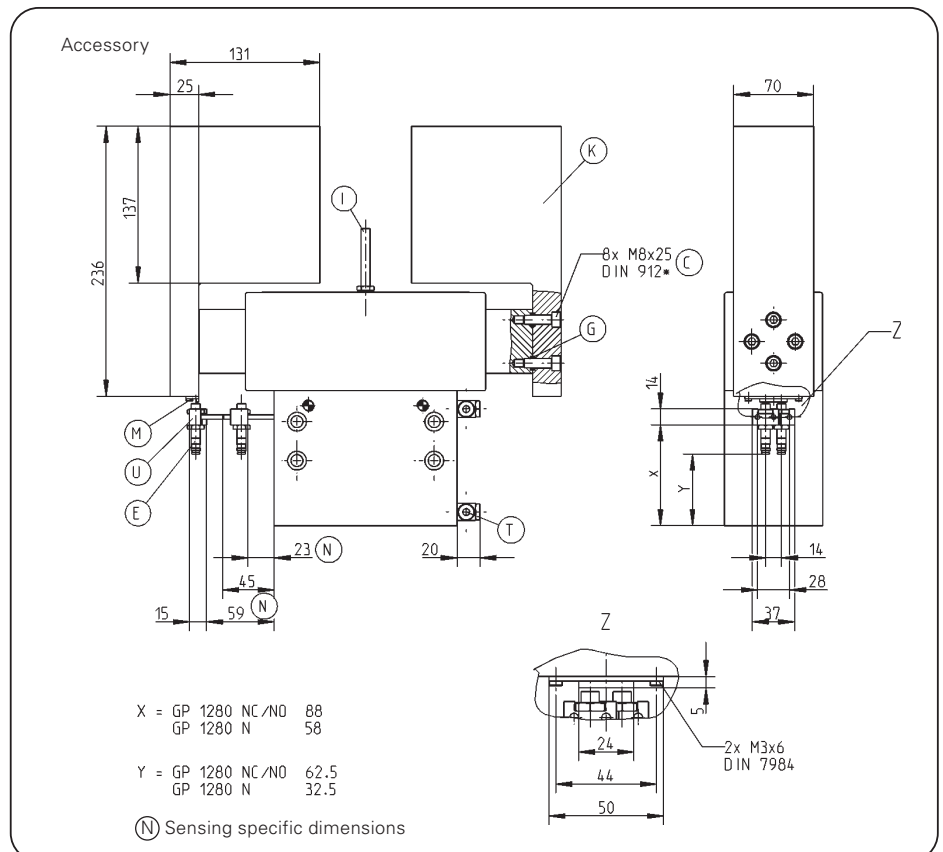
Proximity switch
Order no. NJ8-E2S



Universal jaw (set)
Order no. UB1280 (Al)
Order no. UB1280ST (St)



Pressure safety valve
Order no. DSV1/8



Subject to change without prior notice

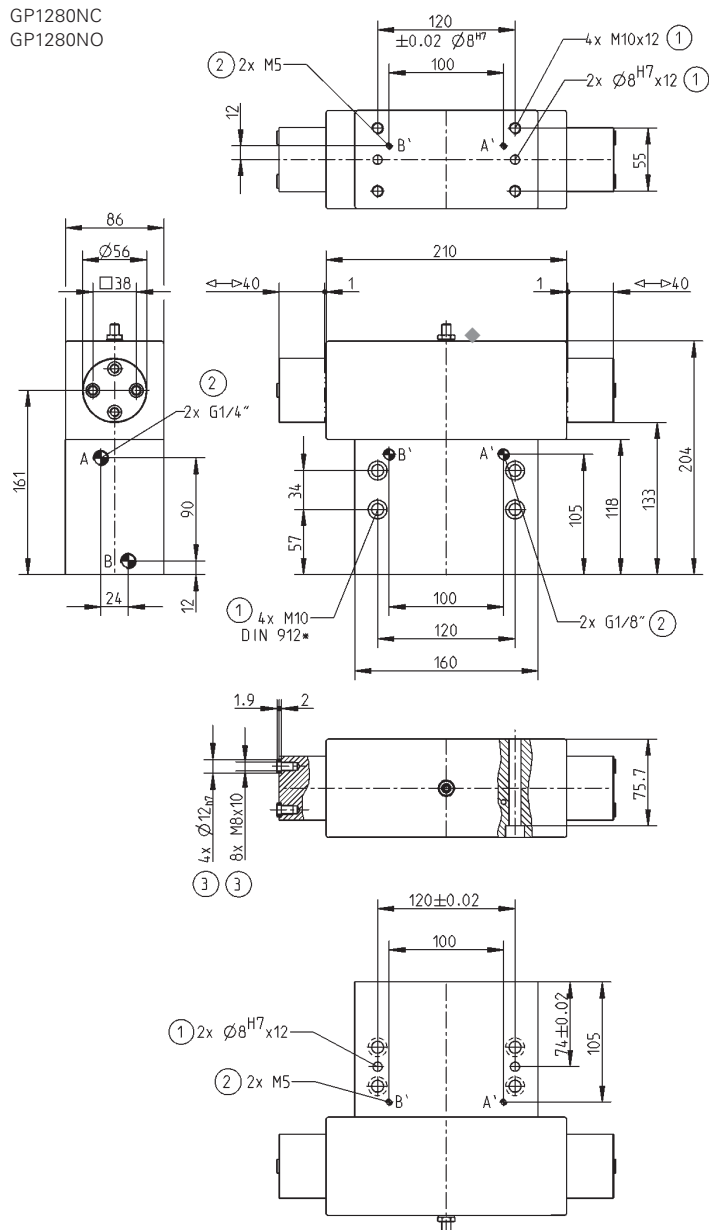
Order no.:	GP1280N	GP1280NC	GP1280NO
Stroke per jaw [mm]:	40	40	40
Gripping force in closing and opening [N]:	1160	-	-
Gripping force in closing [N]:	-	1550	-
Gripping force in opening [N]:	-	-	1550
Recommended workpiece weight [kg]*:	5,9	7,9	7,9
Gripping force secured by spring min./max. [N]:	-	390	390
Closing time/opening time [s]:	0,15	0,2	0,2
Repeatability +/- [mm]:	0,05	0,05	0,05
Min./max. operating pressure [bar]:	4/8	5/8	5/8
Min./max. operating temperature [°C]**:	5/80	5/80	5/80
Air volume per cycle [cm³]:	300	380	380
Weight [kg]:	9,4	10,5	10,5

All data measured at 6 bar

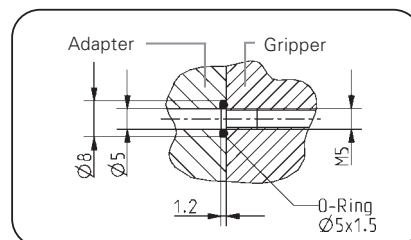
* Value determined with friction coefficient $\mu = 0.1$ and safety factor $v = 2$

** High-temperature-resistant model (up to 150°C) add T to part number

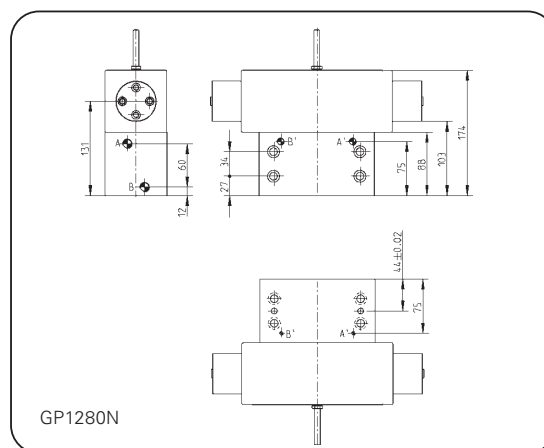
GP1280NC
GP1280NO



- ① Gripper mounting
 - ② Power supply
 - ③ Jaw fastening
 - ⑤ Stroke adjustment screw
 - ⑦ Mounting for mounting block
 - A Air connection (closing)
 - B Air connection (opening)
 - A' Alternate air connection (closing)
 - B' Alternate air connection (opening)
- * equivalent to DIN EN ISO 4762



Hoseless air connection



GP1280N

Subject to change without prior notice



Parallel Grippers

pneumatic



GP1800-B Series

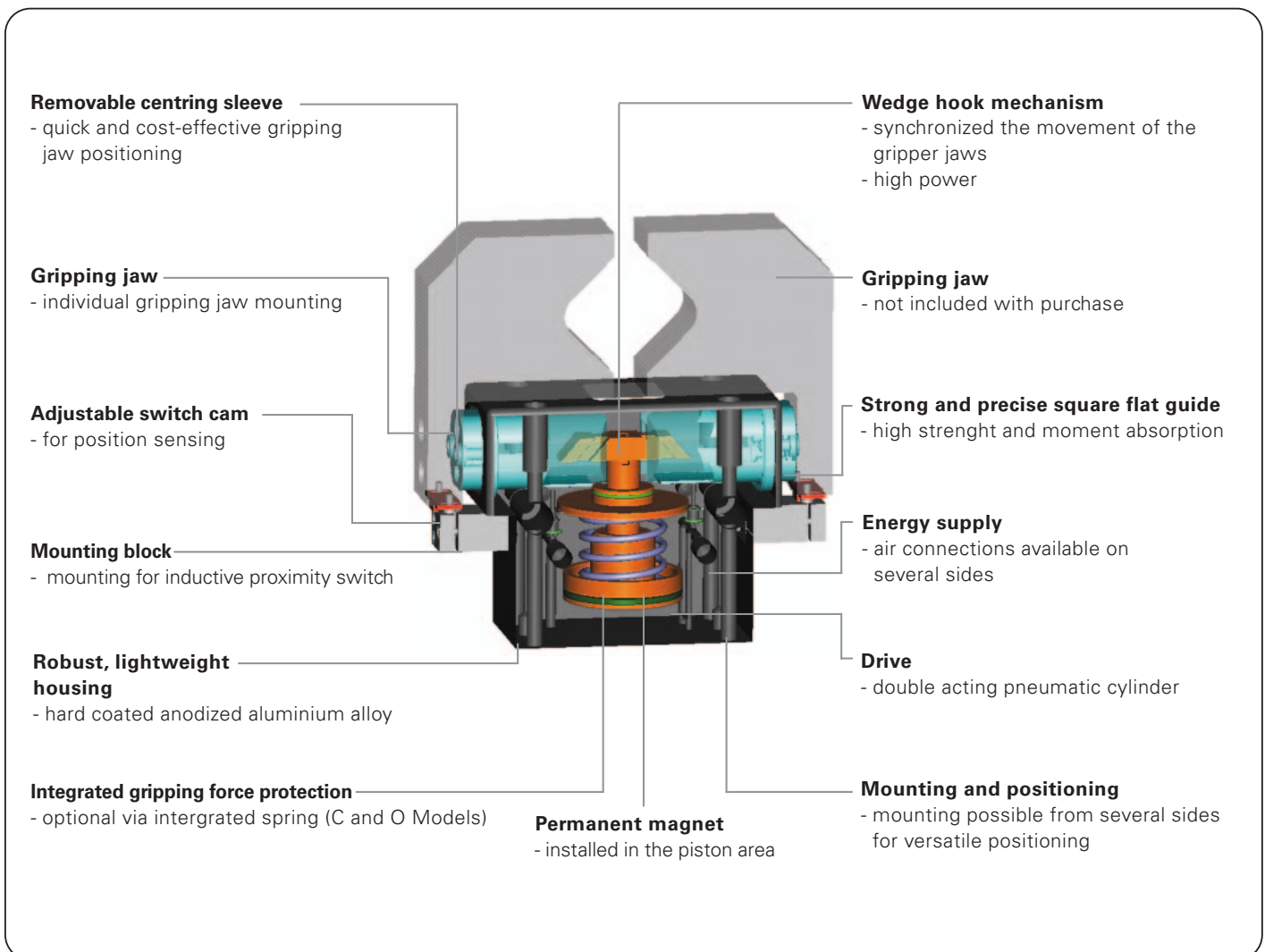
SOMMER
automatic

Parallel Gripper

Features

- stable and rotation-free square flat guide for gripping jaws up to 200 mm long
- optimal sealing of the gripper-jaw through round jaws and flexible seals
- available with mechanical gripping force safety device

Functional diagram





Terms

Gripping force:	arithmetic sum of the individual forces occurring at the jaws
Closing/opening time:	required time for the gripper jaws to cover the maximum stroke distance
Repetition accuracy:	at end stops after 50/100 consecutive cycles
Cycle:	one complete movement of the piston forward and back
Maintenance:	recommended at 5 mil. cycles (please see the owner's manual for conditions, download from www.sommer-automatic.com) <ul style="list-style-type: none"> • long maintenance intervals keep costs down • long lifespan

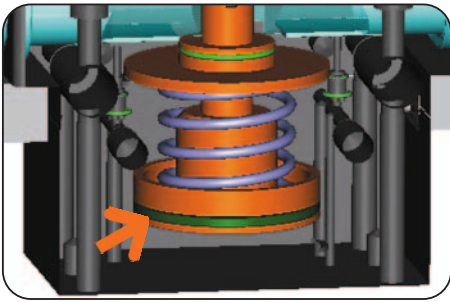
Model guide

N:	Standard design (long stroke - standard force)
C:	For external gripping, self-locking, spring closing
O:	For internal gripping, self-locking, spring opening

Order no.	Stroke per jaw	Gripping force in opening	Gripping force in closing	Self-locking via
GP1803N-B	3 mm	85 N	85 N	DSV*
GP1803NC-B	3 mm	-	90 N	Spring
GP1803NO-B	3 mm	90 N	-	Spring
GP1804N-B	4 mm	160 N	160 N	DSV*
GP1804NC-B	4 mm	-	155 N	Spring
GP1804NO-B	4 mm	155 N	-	Spring
GP1806N-B	6 mm	280 N	280 N	DSV*
GP1806NC-B	6 mm	-	290 N	Spring
GP1806NO-B	6 mm	290 N	-	Spring
GP1808N-B	8 mm	550 N	550 N	DSV*
GP1808NC-B	8 mm	-	560 N	Spring
GP1808NO-B	8 mm	560 N	-	Spring
GP1810N-B	10 mm	735 N	735 N	DSV*
GP1810NC-B	10 mm	-	780 N	Spring
GP1810NO-B	10 mm	780 N	-	Spring
GP1812N-B	12 mm	1165 N	1165 N	DSV*
GP1812NC-B	12 mm	-	1400 N	Spring
GP1812NO-B	12 mm	1400 N	-	Spring
GP1816N-B	16 mm	1915 N	1915 N	DSV*
GP1816NC-B	16 mm	-	2050 N	Spring
GP1816NO-B	16 mm	2050 N	-	Spring
GP1820N-B	20 mm	3085 N	3085 N	DSV*
GP1820NC-B	20 mm	-	3200 N	Spring
GP1820NO-B	20 mm	3200 N	-	Spring
GP1830N-B	30 mm	6670 N	6670 N	DSV*
GP1830NO-B	30 mm	-	6900 N	Spring
GP1830NC-B	30 mm	6900 N	-	Spring

*DSV= Pressure safety valves (Order no. DSV1/8)

Parallel **Gripper**



Drive

N Models:

Double acting pneumatic cylinder

- maximum power in both opening and closing
- gripping force up to 6900 N

NC and NO Models:

Double acting pneumatic cylinder with integrated mechanical gripping force safety device

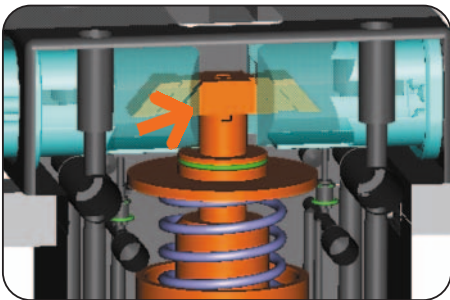
- optimum coordination of drive force and gripping force secured by spring



Guidance

Sealed square guide

- for high force and moment absorption
- high precision due to low play guide
- sealed with additional wiper



Power transfer

Wedge hook mechanism

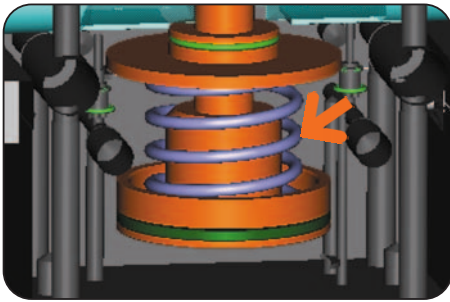
- optimum transmission of power to gripping force
- self-centering
- synchronized
- high repeat accuracy



Gripping jaw positioning

Positioning of the tooling fingers via centering sleeves

- precise positioning of individual gripping jaws
- quick, cost-effective and therefore economical jaw changing
- space saving design



Gripping force safety device

NC and NO Models:

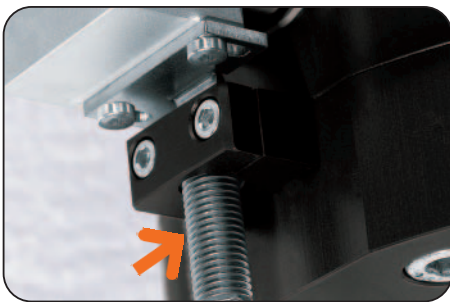
spring intergrated into cylinder as energy reserve

- reliable mechanical grip-force retention
- compact design

N Models:

External pressure safety valve

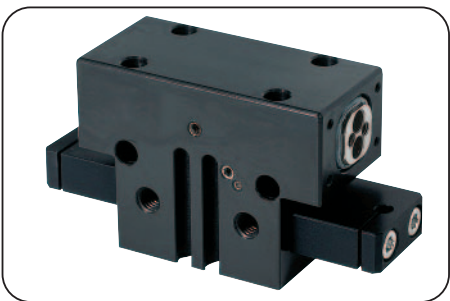
- Gripping force safety possible by addition of pressure safety valve (Part. No. DSV1/8). The inevitable leakage in the pneumatic circuit restricts the time of this type of gripping force safety.



Position sensing

of gripper jaws via inductive proximity switch

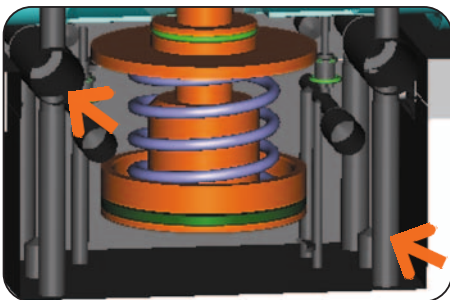
- direct sensing of the gripper jaw position
- for inductive proximity switch with $\varnothing 3$ mm or $\varnothing 8$ mm
- alternate sensing KHA for bracket mounting as accessory available



Position sensing

via magnetic field sensor

- compact designed
- for magnetic field sensor with bracket for C-slot



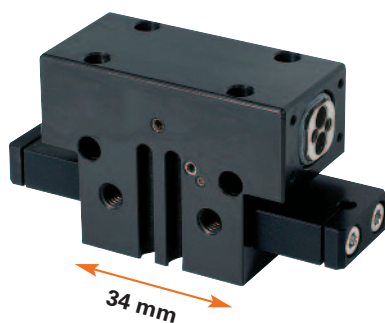
Connections

Energy supply, attachment and positioning possibilities

Adaptable to multiple mounting configuration

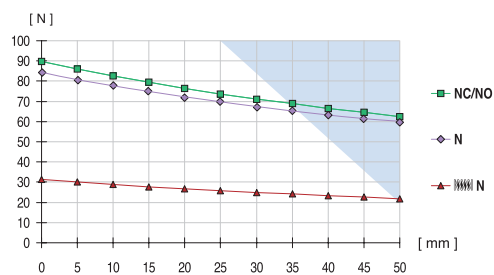
- optimal integration into the workroom through individual mounting situation
- tubeless directly-connected possibility (no additional hose needed)

Parallel Gripper



Gripping force diagram

Gripping force as a function of jaw length.

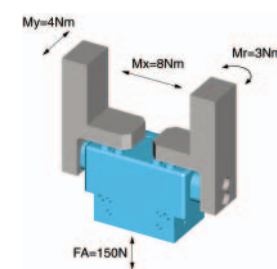


Colored area: increased wear and tear to be expected

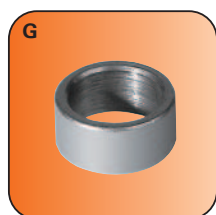
measured from top edge of housing

Forces and Moments

Max allowable forces and moments on jaws.



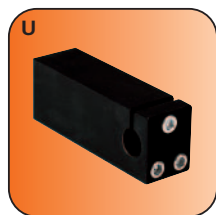
Included with purchase



Centring sleeve

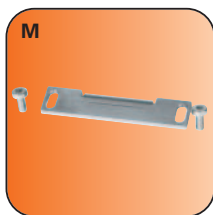
Order no. BDST80310

Accessory list



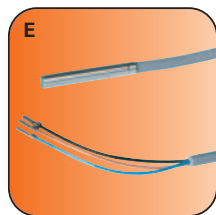
Mounting block

Order no. KB3-01



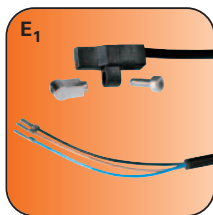
Switch cam + screw

Order no. SN0001



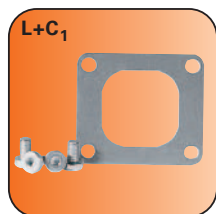
Proximity switch

Order no. NJ3-E2-03



Magnetic field sensor

Order no. MFS103KHC42



Cover plate (set)

Order no. ADB1803-B



Pneumatic fittings

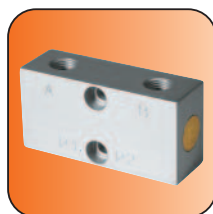
Order no. WVM5



Universal jaw (set)

Order no. UB1803 (Al)

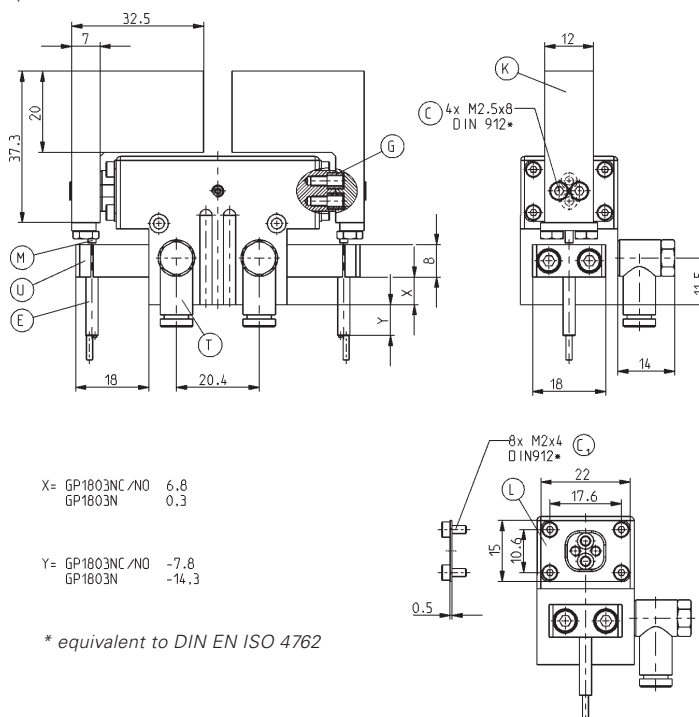
Order no. UB1803ST (St)



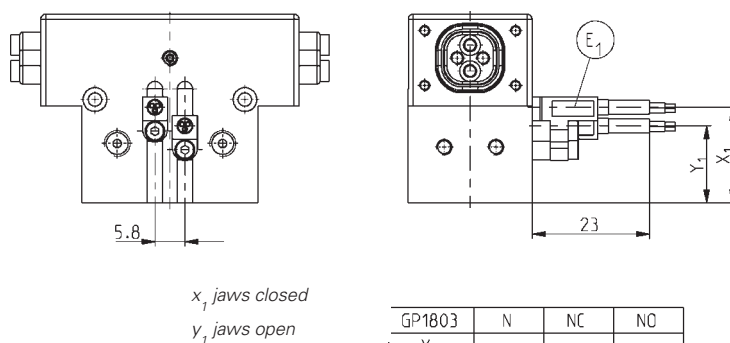
Pressure safety valve

Order no. DSV1/8

Accessory



Magnetic field sensor



GP1803	N	NC	NO
X_1	~12	~19	~8
Y_1	~8	~15	~5

Subject to change without prior notice

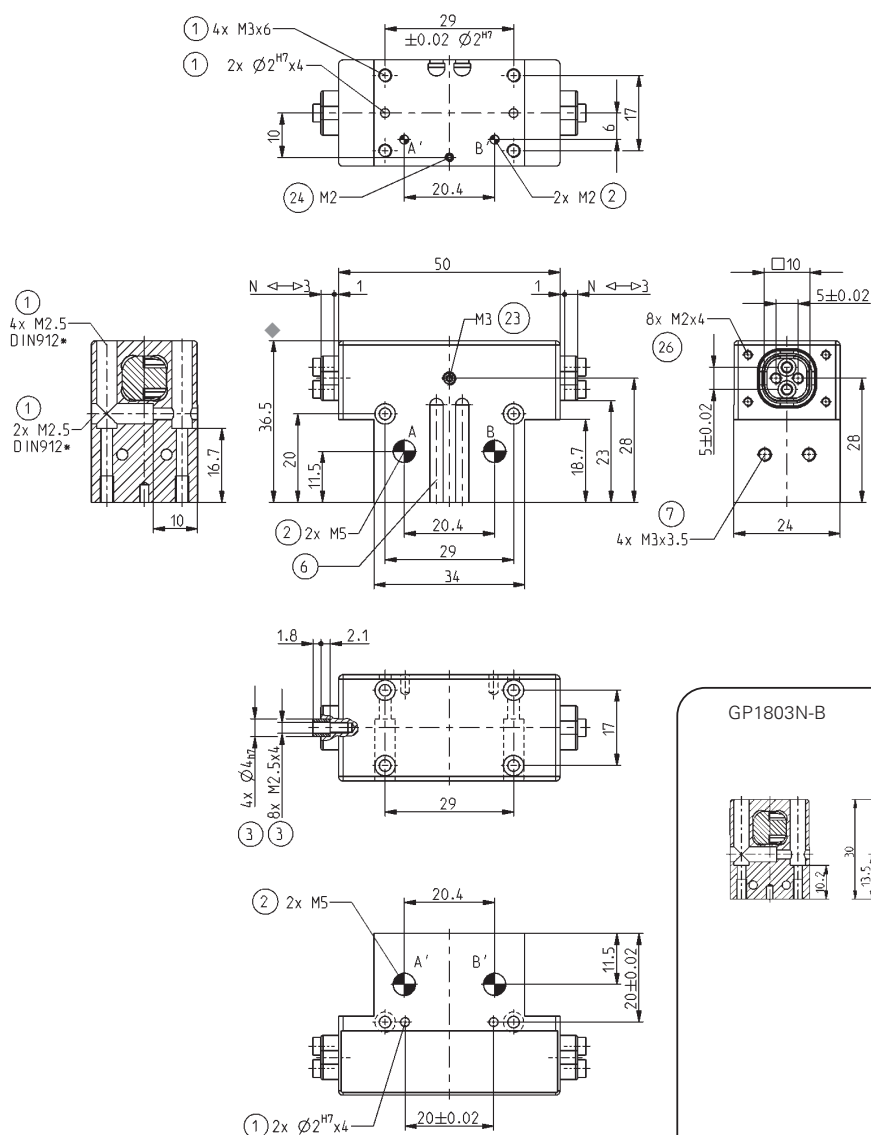
Order no.:	GP1803N-B	GP1803NC-B	GP1803NO-B
Stroke per jaw [mm]:	3	3	3
Gripping force in closing and opening [N]:	85	-	-
Gripping force in closing [N]:	-	90	-
Gripping force in opening [N]:	-	-	90
Recommended workpiece weight [g]*:	296	459	459
Gripping force secured by spring min./max. [N]:	-	32	32
Closing time/opening time [s]:	0,015	0,02	0,02
Repeatability +/- [mm]:	0,05	0,05	0,05
Min./max. operating pressure [bar]:	3/8	5/8	5/8
Min./max. operating temperature [°C]**:	5/80	5/80	5/80
Air volume per cycle [cm³]:	3,2	3	3
Weight [g]:	120	135	135

All data measured at 6 bar

* Value determined with friction coefficient $\mu = 0.1$ and safety factor $v = 2$

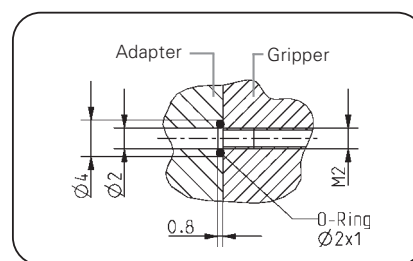
** High-temperature-resistant model (up to 150°) add T to part number

GP1803NC/NO-B



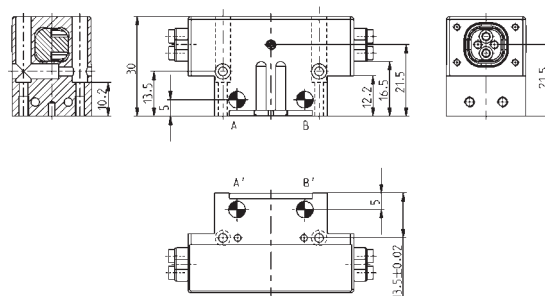
- ① Gripper mounting
- ② Power supply
- ③ Jaw fastening
- ⑥ Slot for magnetic field sensor
- ⑦ Mounting block connection
- ②③ Ventilation or air purge connection
- ②④ Ventilation or alternate air purge connection
- ②⑥ Fixing cover plate
- ②⑥ Air connection (closing)
- ②⑥ Air connection (opening)
- ②⑥ Alternate air connection (closing)
- ②⑥ Alternate air connection (opening)

* equivalent to DIN EN ISO 4762

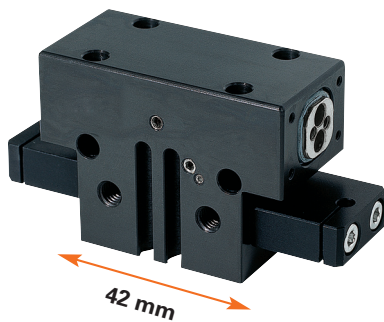


Hoseless air connection

GP1803N-B

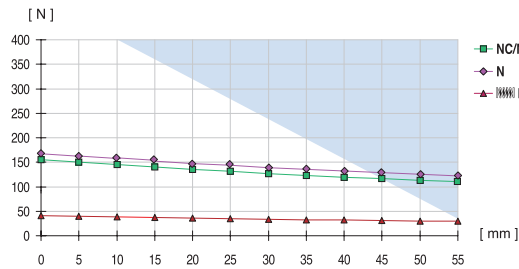


Parallel Gripper



Gripping force diagram

Gripping force as a function of jaw length.

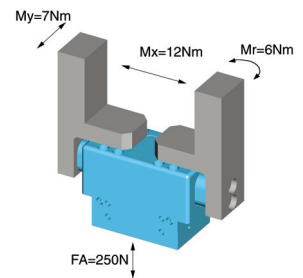


Colored area: increased wear and tear to be expected

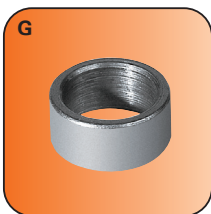
measured from top edge of housing ♦

Forces and Moments

Max allowable forces and moments on jaws.



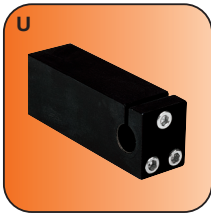
Included with purchase



Centring sleeve

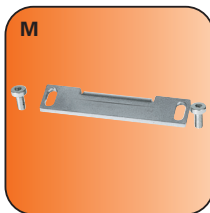
Order no. BDST40400

Accessory list



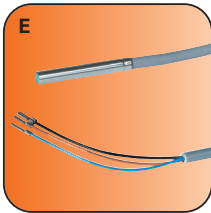
Mounting block

Order no. KB3-01 + KB3-02



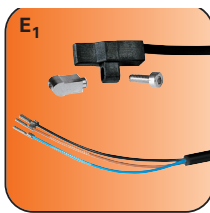
Switch cam + screw

Order no. SN0001



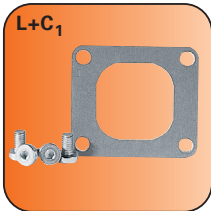
Proximity switch

Order no. NJ3-E2-03



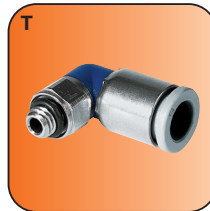
Magnetic field sensor

Order no. MFS103KHC42



Cover plate (set)

Order no. ADB1804-B



Pneumatic fittings

Order no. WVM5



Universal jaw (set)

Order no. UB1804 (Al)

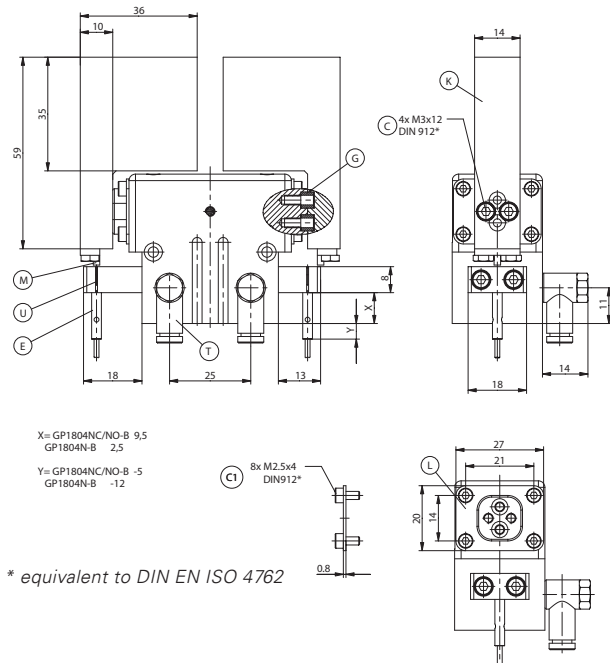
Order no. UB1804ST (St)



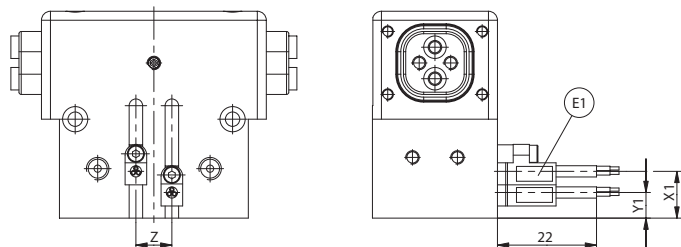
Pressure safety valve

Order no. DSV1/8

Accessory



Magnetic field sensor



x_1 jaws closed

y_1 jaws open

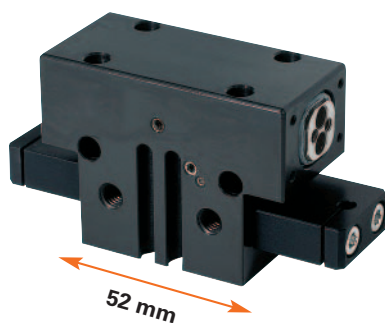
GP1804	N/S	NC/SC	NO/SO
X1	~13	~20	~10
Y1	~9	~15	~5
Z	6	8	8

Subject to change without prior notice

** High-temperature-resistant model (up to 150°) add T to part number

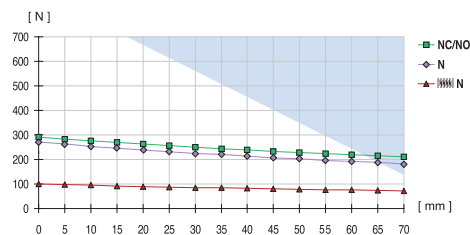


Parallel Gripper



Gripping force diagram

Gripping force as a function of jaw length.

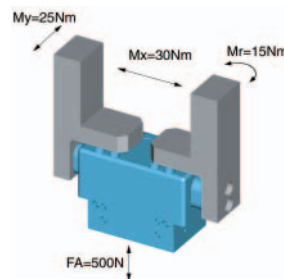


Colored area: increased wear and tear to be expected

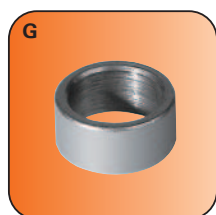
measured from top edge of housing ◆

Forces and Moments

Max allowable forces and moments on jaws.

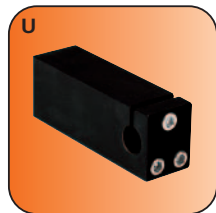


Included with purchase

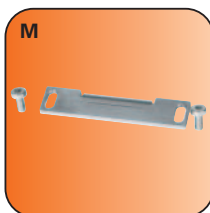


Centring sleeve
Order no. BDST40600

Accessory list



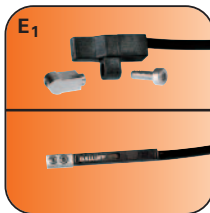
Mounting block
Order no. KB8-05 +KB8-11



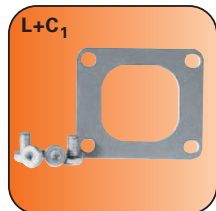
Switch cam + screw
Order no. SN0002



Proximity switch
Order no. NJ8-E2S



Magnetic field sensor
Order no. MFS103KHC42
Order no. MFS303KHC30



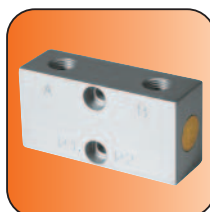
Cover plate (set)
Order no. ADB1806-B



Pneumatic fittings
Order no. WVM5

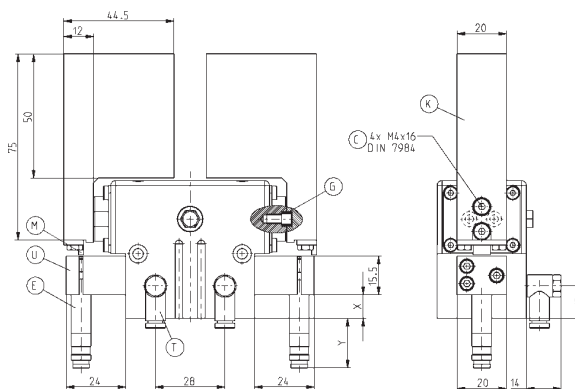


Universal jaw (set)
Order no. UB1806 (Al)
Order no. UB1806ST (St)



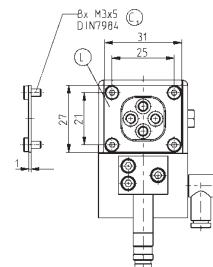
Pressure safety valve
Order no. DSV1/8

Accessory

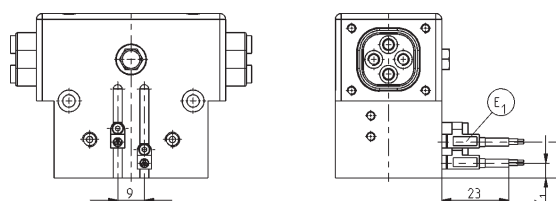


X = GP1806NC/NO-B 9.5
GP1806N-B 1.5
Y = GP1806NC/NO-B -20
GP1806N-B -28

* equivalent to DIN EN ISO 4762



Magnetic field sensor



x_1 jaws closed

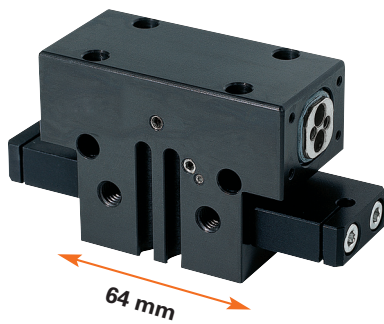
y_1 jaws open

306	N/S	NC/SC	NO/SD
1	~16	~24	~12
1	~9	~17	~5

Subject to change without prior notice

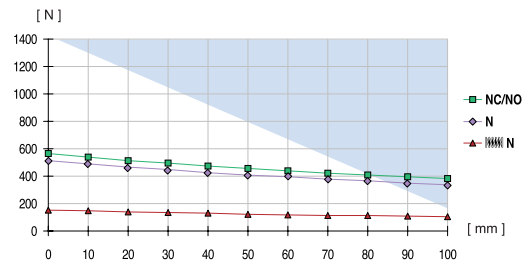
** High-temperature-resistant model (up to 150°) add T to part number

Parallel Gripper



Gripping force diagram

Gripping force as a function of jaw length.

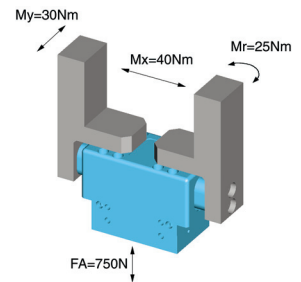


Colored area: increased wear and tear to be expected

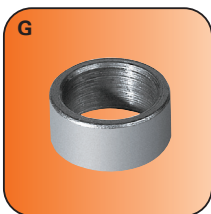
measured from top edge of housing ◆

Forces and Moments

Max allowable forces and moments on jaws.

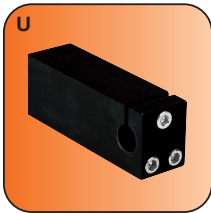


Included with purchase

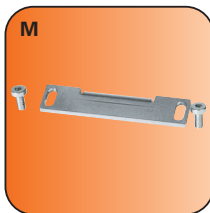


Centring sleeve
Order no. BDST40800

Accessory list



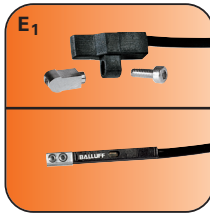
Mounting block
Order no. KB8-05 + KB8-11



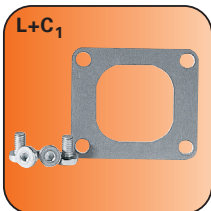
Switch cam + screw
Order no. SN0003



Proximity switch
Order no. NJ8-E2S



Magnetic field sensor
Order no. MFS103KHC42
Order no. MFS303KHC30



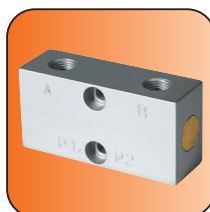
Cover plate (set)
Order no. ADB1808-B



Pneumatic fittings
Order no. WV1/8x8

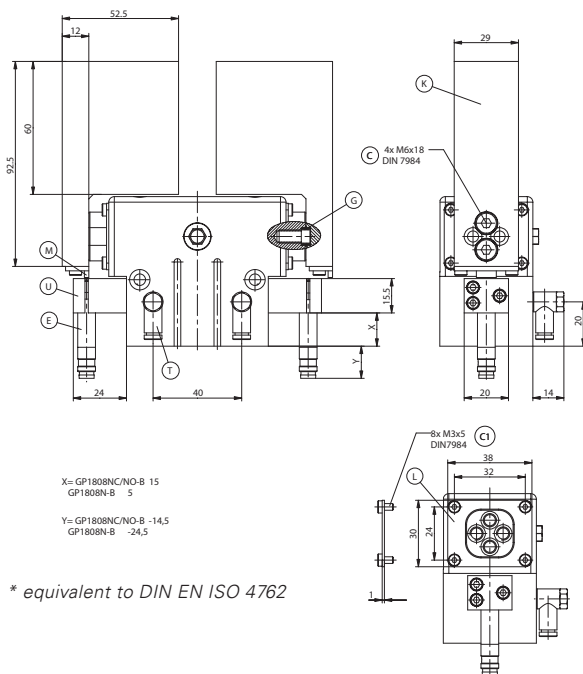


Universal jaw (set)
Order no. UB1808 (Al)
Order no. UB1808ST (St)

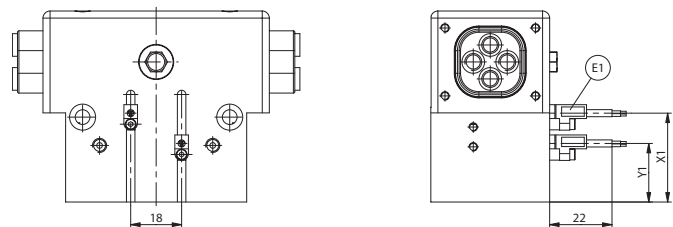


Pressure safety valve
Order no. DSV1/8

Accessory



Magnetic field sensor



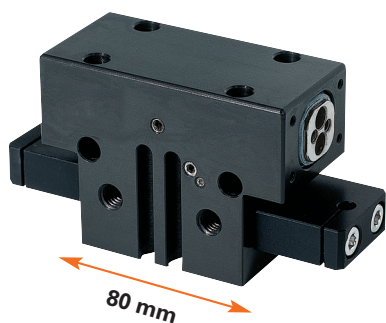
x_1 jaws closed
 y_1 jaws open

GP1808	N/S	NC/SC	NO/SO
X1	~21	~32	~16
Y1	~11	~21	~6

Subject to change without prior notice

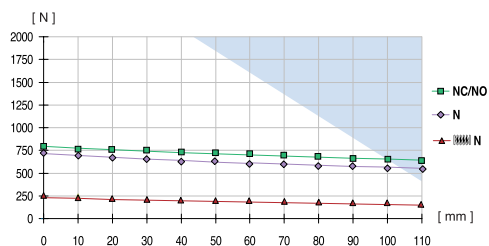
** High-temperature-resistant model (up to 150°) add T to part number

Parallel Gripper



Gripping force diagram

Gripping force as a function of jaw length.

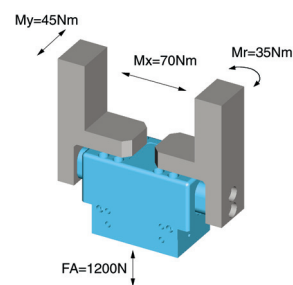


Colored area: increased wear and tear to be expected

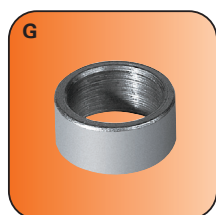
measured from top edge of housing ♦

Forces and Moments

Max allowable forces and moments on jaws.



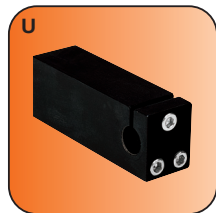
Included with purchase



Centring sleeve

Order no. BDST41000

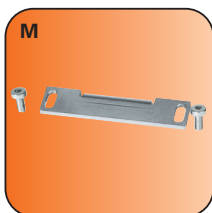
Accessory list



Mounting block

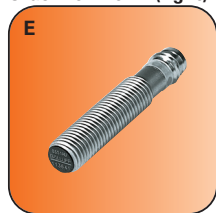
Order no. KB8-04)

Order no KB8-44 (right)



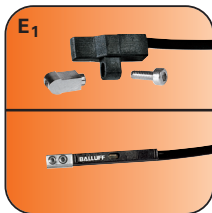
switch cam + screw

Order no. SN0004



Proximity switch

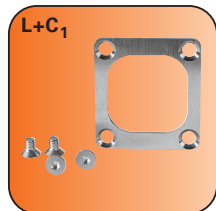
Order no. NJ8-E2S



Magnetic field sensor

Order no. MFS103KHC42

Order no MFS303KHC30



Cover plate (set)

Order no. ADB1810-B



Pneumatic fittings

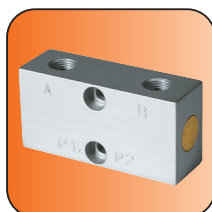
Order no. WV1/8x6



Universal jaw (set)

Order no. UB1810 (Al)

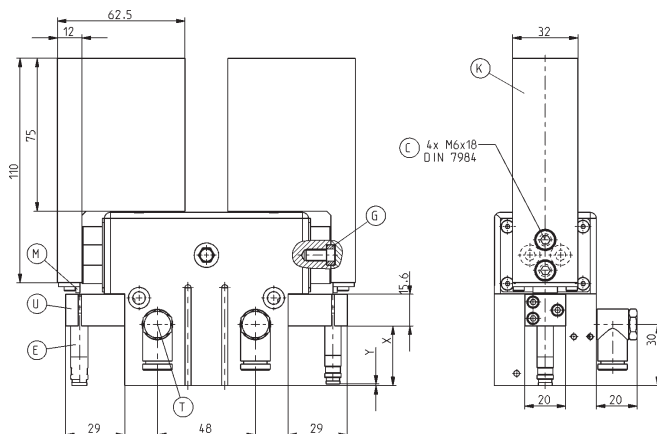
Order no. UB1810ST (St)



Pressure safety valve

Order no. DSV1/8

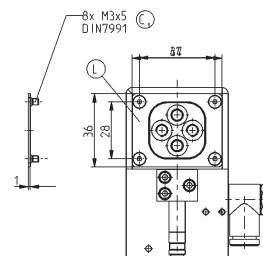
Accessory



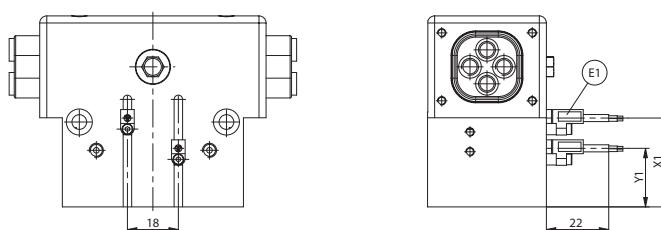
X = GP1810NC / NO-B 29,2
GP1810N-B 11,2

Y = GP1810NC / NO-B 0
GP1810N-B -18

* equivalent to DIN EN ISO 4762



Magnetic field sensor



x_1 jaws closed

y_1 jaws open

GP1808	N/S	NC/SC	NO/SO
X1	~21	~32	~16
Y1	~11	~21	~6

Subject to change without prior notice

All data measured at 6 bar

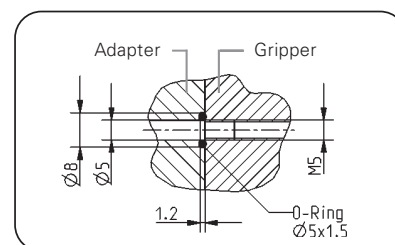
* Value determined with friction coefficient $\mu = 0.1$ and safety factor $\gamma = 2$

** High-temperature-resistant model (up to 150°) add T to part number

[illegible]

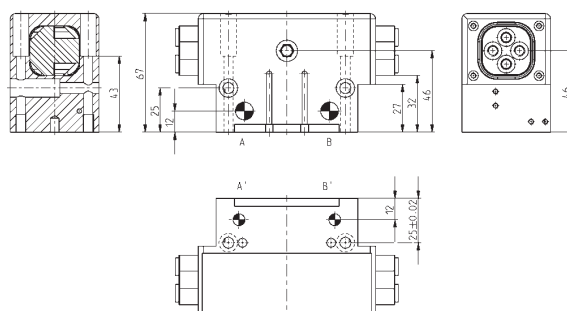
- ① Gripper mounting
- ② Power supply
- ③ Jaw fastening
- ⑥ Slot for magnetic field sensor
- ⑦ Mounting block connection
- 23 Ventilation or air purge connection
- 24 Ventilation or alternate air purge connection
- 26 Fixing cover plate
- (A) Air connection (closing)
- (B) Air connection (opening)
- (A') Alternate air connection (closing)
- (B') Alternate air connection (opening)

* equivalent to DIN EN ISO 4762

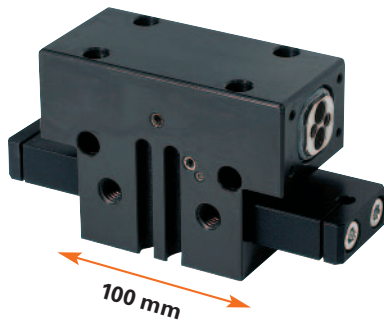


Hoseless air connection

GP1810N-B

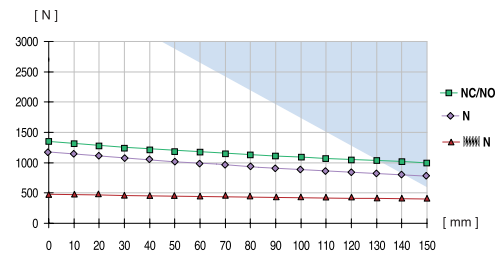


Parallel Gripper



Gripping force diagram

Gripping force as a function of jaw length.

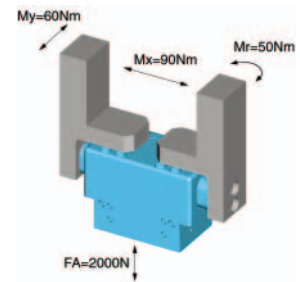


Colored area: increased wear and tear to be expected

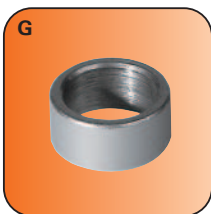
measured from top edge of housing ◆

Forces and Moments

Max allowable forces and moments on jaws.



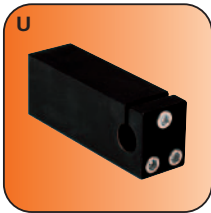
Included with purchase



Centring sleeve

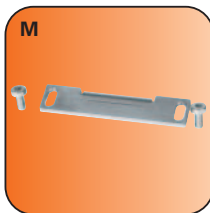
Order no. BDST41000

Accessory list



Mounting block

Order no. KB8/18 + KB8/19



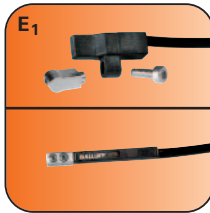
switch cam + screw

Order no. SN0004



Proximity switch

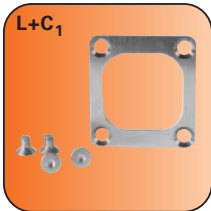
Order no. NJ8-E2S



Magnetic field sensor

Order no. MFS103KHC42

Order no. MFS303KHC30



Cover plate (set)

Order no. ADB1812B



Pneumatic fittings

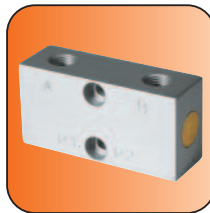
Order no. WV1/8x6



Universal jaw (set)

Order no. UB1812 (Al)

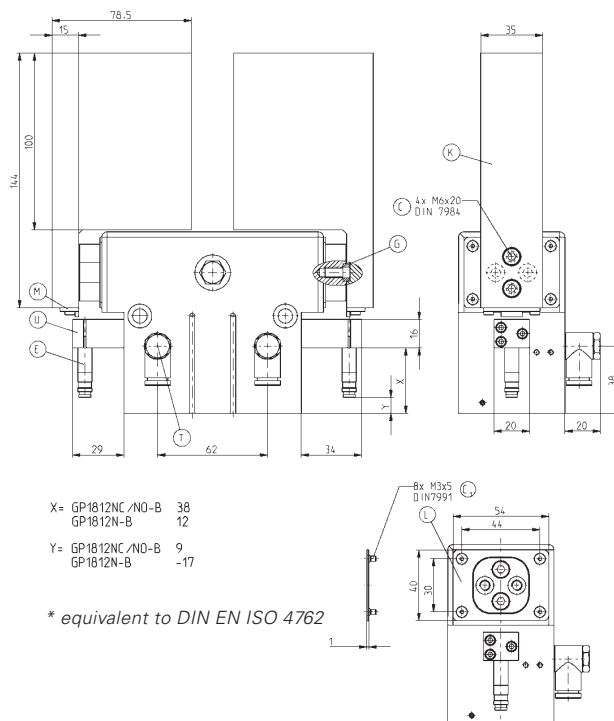
Order no. UB1812ST (St)



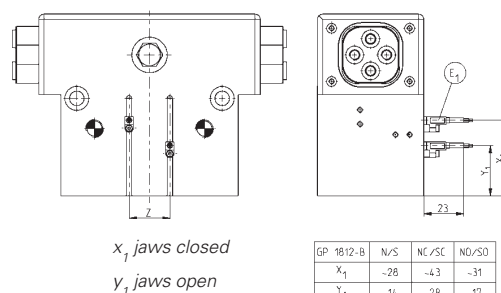
Pressure safety valve

Order no. DSV1/8

Accessory



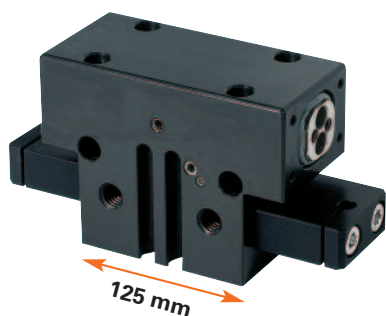
Magnetic field sensor



Subject to change without prior notice

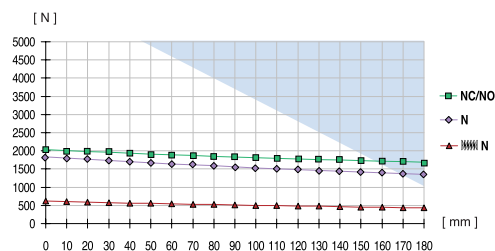
** High-temperature-resistant model (up to 150°) add T to part number

Parallel Gripper



Gripping force diagram

Gripping force as a function of jaw length.

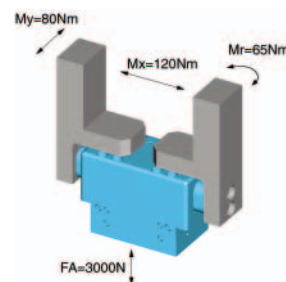


Colored area: increased wear and tear to be expected

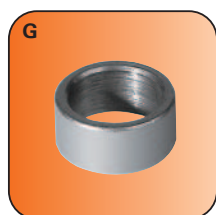
measured from top edge of housing ♦

Forces and Moments

Max allowable forces and moments on jaws.

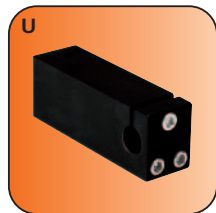


Included with purchase

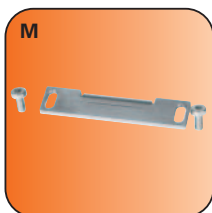


Centring sleeve
Order no. BDST41600

Accessory list



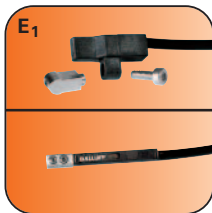
Mounting block
Order no. KB8-13 +KB8-09



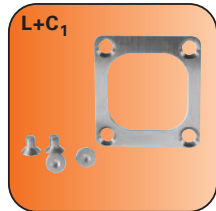
Switch cam + screw
Order no. SN0004



Proximity switch
Order no. NJ8-E2S



Magnetic field sensor
Order no. MFS103KHC42
Order no. MFS303KHC30



Cover plate (set)
Order no. ADB1816-B



Pneumatic fittings
Order no. WV1/8x6

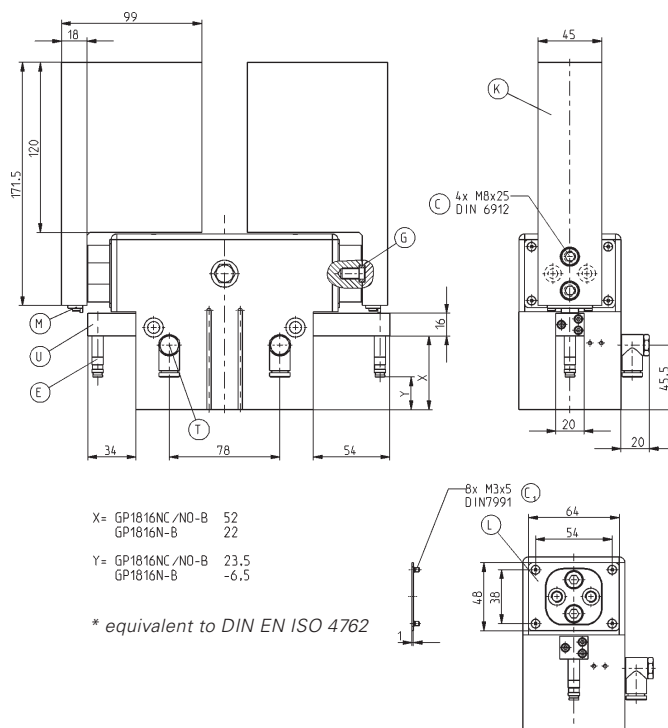


Universal jaw (set)
Order no. UB1816 (Al)
Order no. UB1816ST (St)

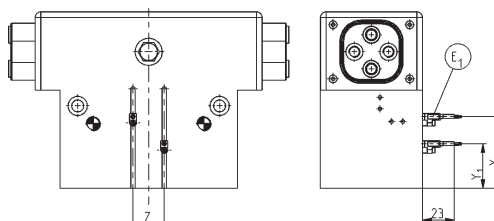


Pressure safety valve
Order no. DSV1/8

Accessory



Magnetic field sensor



x_1 jaws closed

y_1 jaws open

GP 1816-B	N/S	NC/SC	NO/SO
x_1	~36	~51	~38
y_1	~17	~31	~19
Z	37	22	22

Subject to change without prior notice



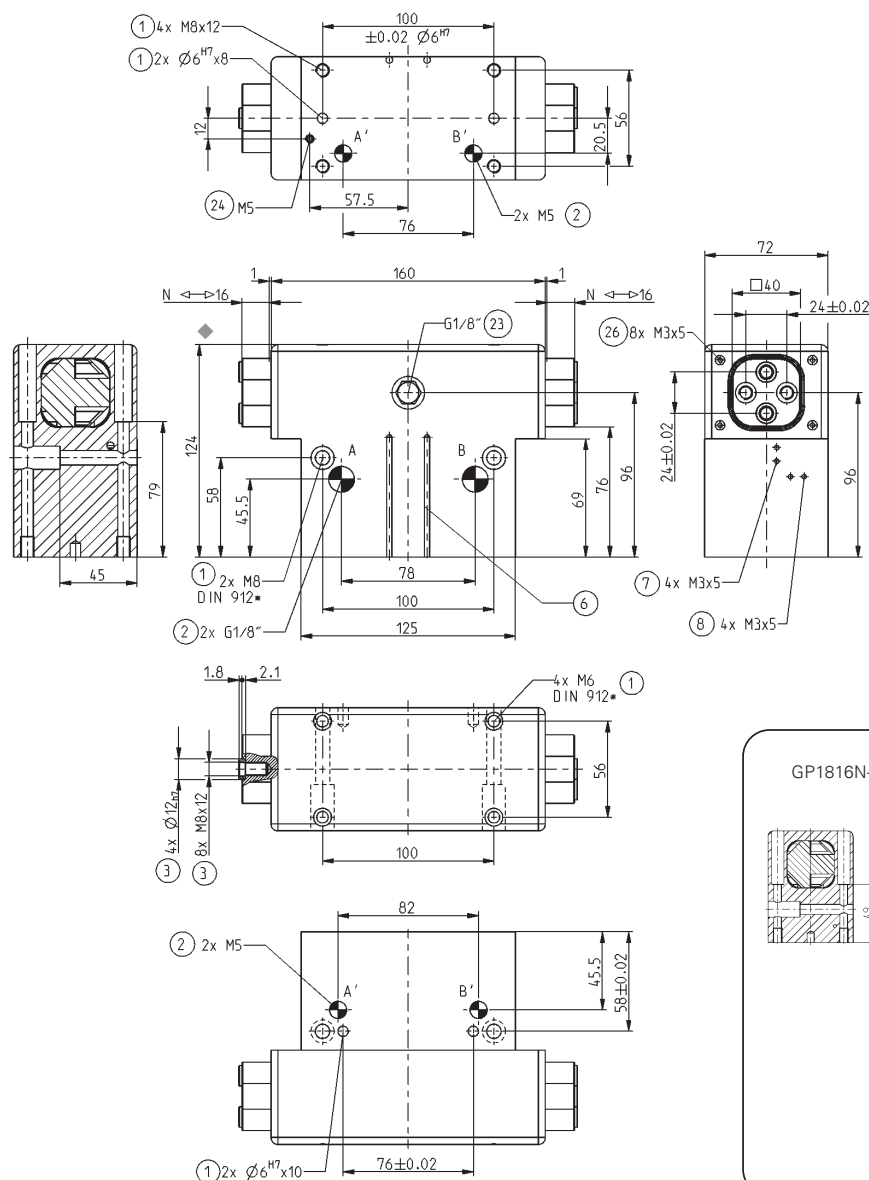
Order no:	GP1816N-B	GP1816NC-B	GP1816NO-B
Stroke per jaw [mm]:	16	16	16
Gripping force in opening and closing [N]:	1950	-	-
Gripping force in closing [N]:	-	2050	-
Gripping force in opening [N]:	-	-	2050
Recommended workpiece weight [kg]*:	9,8	10,4	10,4
Gripping force secured by spring min./max. [N]:	-	650	650
Closing time/opening time [s]:	0,2	0,3	0,3
Repeatability +/- [mm]:	0,05	0,05	0,05
Min./max. operating pressure [bar]:	3/8	5/8	5/8
Min./max. operating temperature [°C]**:	5/80	5/80	5/80
Air volume per cycle [cm³]:	153	183	183
Weight [kg]:	3,65	4,25	4,25

All data measured at 6 bar

* Value determined with friction coefficient $\mu = 0.1$ and safety factor $\nu = 2$

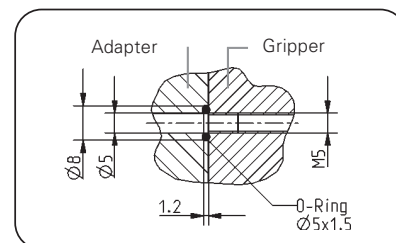
** High-temperature-resistant model (up to 150°) add T to part number

GP1816NC/NO-B



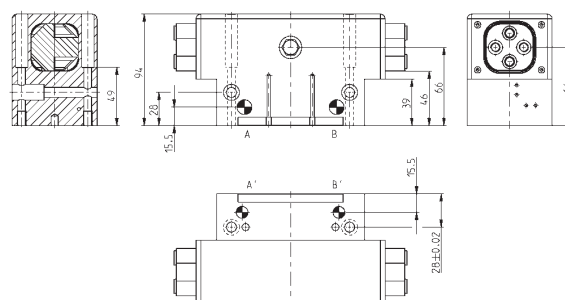
- ① Gripper mounting
- ② Power supply
- ③ Jaw fastening
- ⑥ Slot for magnetic field sensor
- ⑦ Mounting block connection
- ②③ Ventilation or air purge connection
- ②④ Ventilation or alternate air purge connection
- ②⑥ Fixing cover plate
- ②⑥ Air connection (closing)
- ②⑥ Air connection (opening)
- ②⑥ Alternate air connection (closing)
- ②⑥ Alternate air connection (opening)

* equivalent to DIN EN ISO 4762



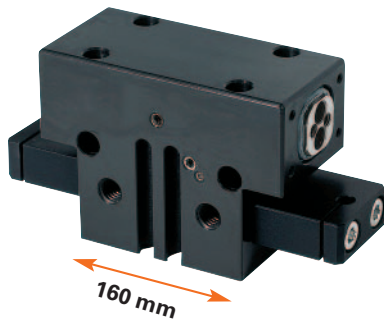
Hoseless air connection

GP1816N-B



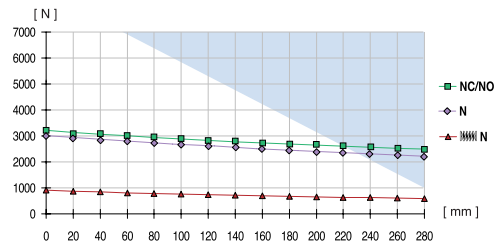
Subject to change without prior notice

Parallel Gripper



Gripping force diagram

Gripping force as a function of jaw length.

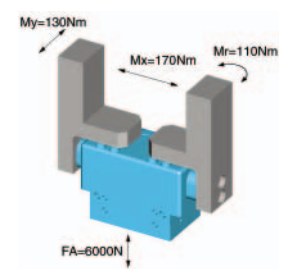


Colored area: increased wear and tear to be expected

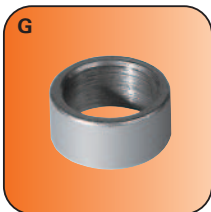
measured from top edge of housing ◆

Forces and Moments

Max allowable forces and moments on jaws.



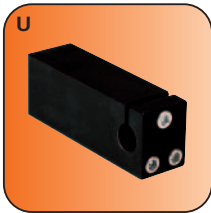
Included with purchase



Centring sleeve

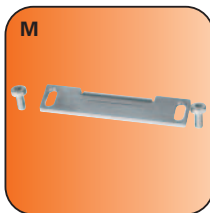
Order no. BDST42000

Accessory list



Mounting block

Order no. KB8-13 + KB8-09



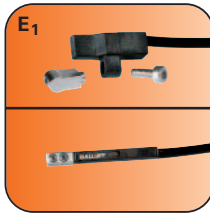
Switch cam + screw

Order no. SN0004



NProximity switch

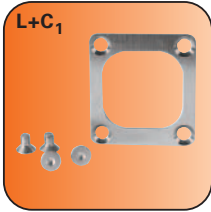
Order no. NJ8-E2S



Magnetic field sensor

Order no. MFS103KHC42

Order no. MFS303KHC30



Cover plate (set)

Order no. ADB1820-B



Pneumatic fittings

Order no. WV1/4x8



Universal jaw (set)

Order no. UB1820 (Al)

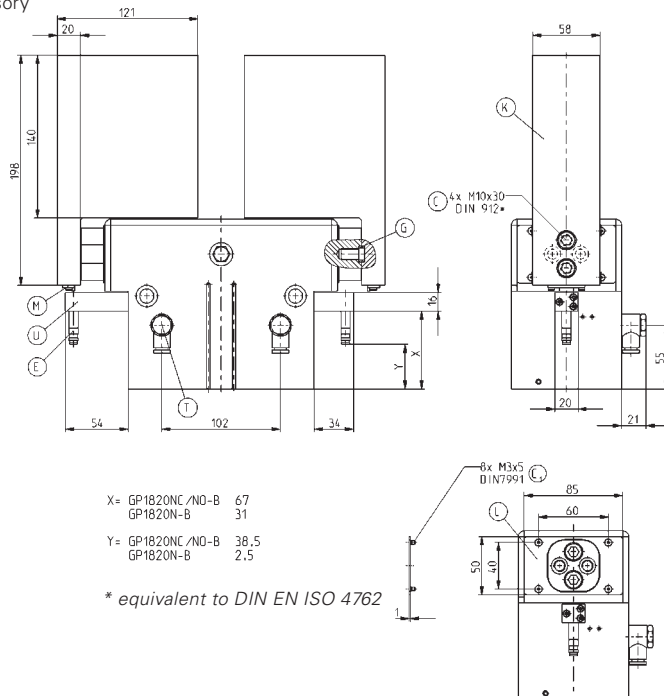
Order no. UB1820ST (St)



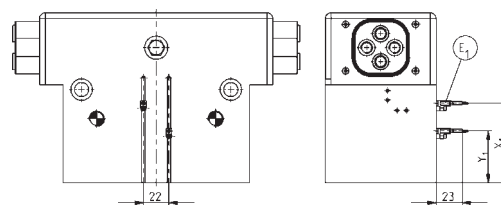
Pressure safety valve

Order no. DSV1/8

Accessory



Magnetic field sensor



x_1 jaws closed

y_1 jaws open

GP 1820-B	N/S	NC/SC	NO/SO
x_1	-41	-68	-41
y_1	-17	-45	-17

Subject to change without prior notice

All data measured at 6 bar

* Value determined with friction coefficient $\mu = 0.1$ and safety factor $\gamma = 2$

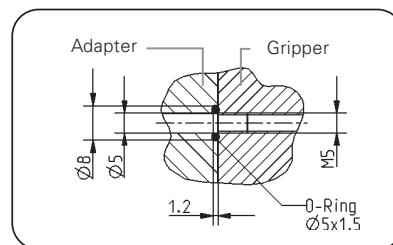
** High-temperature-resistant model (up to 150°) add T to part number

Technical drawing of the GP1820N valve assembly, showing multiple views and dimensions:

- Top View:** Shows the main body with dimensions 128 (width), 100 (length), and 68 (height). It includes 4x M12x16 bolts (1), 2x Ø10^{H7}x12 pins (1), 2x M5 screws (2), and 2x M5 screws (2). Port locations A' and B' are marked. A distance of 74 is indicated from the left edge to the center of port A'.
- Front View:** Shows the main body with dimensions 200 (width), 116 (height), and 146 (height). It includes 2x M12 DIN 912* bolts (1), 2x G1/4" ports (2), and 8x M3x5 screws (7). Port locations A and B are marked. A distance of 102 is indicated between the centers of ports A and B.
- Side View:** Shows the main body with dimensions 92 (height) and 50 (width). It includes 2x G1/4" ports (2).
- End View:** Shows the main body with dimensions 95 (width), 24±0.02 (height), and 116 (height). It includes 8x M3x5 screws (7) and 4x M3x5 screws (8).
- Bottom View:** Shows the main body with dimensions 128 (width), 68 (height), and 108 (length). It includes 4x M10 DIN 912* bolts (1), 2x M5 screws (2), and 2x Ø8^{H7}x8 pins (1).
- Detail View:** Shows a cross-section of the main body with dimensions 2.3 and 2.6.

- ① Gripper mounting
- ② Power supply
- ③ Jaw fastening
- ⑥ Slot for magnetic field sensor
- ⑦ Mounting block connection
- ⑬ Ventilation or air purge connection
- ⑭ Ventilation or alternate air purge connection
- ⑳ Fixing cover plate
- (A) Air connection (closing)
- (B) Air connection (opening)
- (A') Alternate air connection (closing)
- (B') Alternate air connection (opening)

* equivalent to DIN EN ISO 4762



Hoseless air connection

[illegible]

All data measured at 6 bar

* Value determined with friction coefficient $\mu = 0.1$ and safety factor $\gamma = 2$

** High-temperature-resistant model (up to 150°) add T to part number

Technical drawing of the GP1830N-B hydraulic cylinder, showing front, side, and end views with dimensions and part numbers.

Front View (Top):

- Dimensions: 180 (total width), $\pm 0.02 \text{ } \varnothing 10^{H7}$ (piston rod diameter), 100 (rod extension), 150 (total length), 100 (mounting bracket width), 27 (mounting bracket height), 24 (rod diameter), 100 (total height).
- Part Numbers: 1) 4x M12x16, 1) 2x $\varnothing 10^{H7} \times 12$, 24) M5, 2) 2x M5.
- Mounting Points: A', B'.

Front View (Bottom):

- Dimensions: 260 (total width), 1 (flange thickness), 130 (flange diameter), 83 (flange height), 152 (rod diameter), 180 (rod length), 220 (total length), 173 (total height), 14.3 (rod diameter), 131 (rod length).
- Part Numbers: 1) 2x M12 DIN 912*, 2) 2x G1/4", 23) G1/8", 26) 8x M3x5.
- Mounting Points: A, B.

Side View (Right):

- Dimensions: 139 (total width), 60 (flange diameter), 34 ± 0.02 (flange height), 173 (total height).
- Part Numbers: 7) 4x M3x5, 8) 4x M3x5.

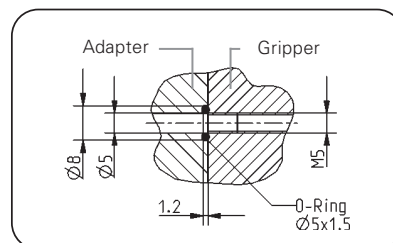
End View (Bottom):

- Dimensions: 180 (total width), 100 (rod extension), 152 (rod diameter), 83 (rod length), 130 ± 0.02 (total height).
- Part Numbers: 1) 4x M10 DIN 912*, 2) 2x M5.
- Mounting Points: A', B'.

GP1830N-B

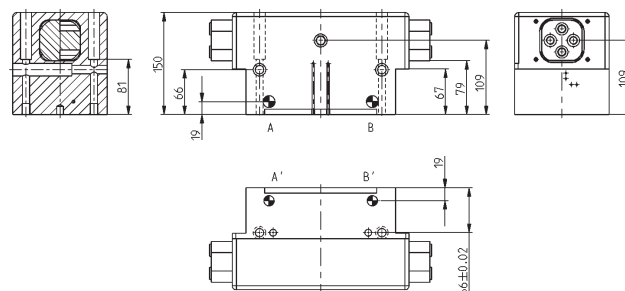
- ① Gripper mounting
- ② Power supply
- ③ Jaw fastening
- ⑥ Slot for magnetic field sensor
- ⑦ Mounting block connection
- ②③ Ventilation or air purge connection
- ②④ Ventilation or alternate air purge connection
- ②⑥ Fixing cover plate
- (A) Air connection (closing)
- (B) Air connection (opening)
- (A') Alternate air connection (closing)
- (B') Alternate air connection (opening)

* equivalent to DIN EN ISO 4762



Hoseless air connection

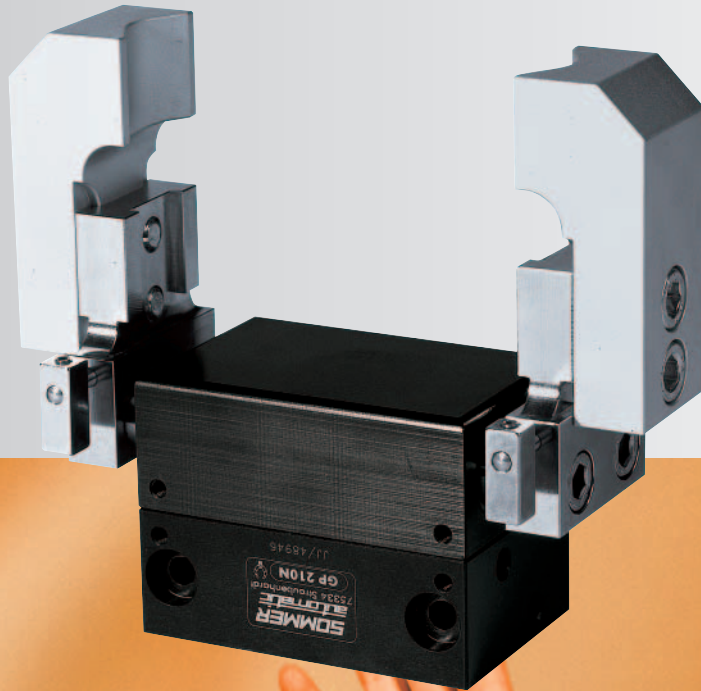
GP1830N-B





Parallel Grippers

pneumatic



GP206
GP210

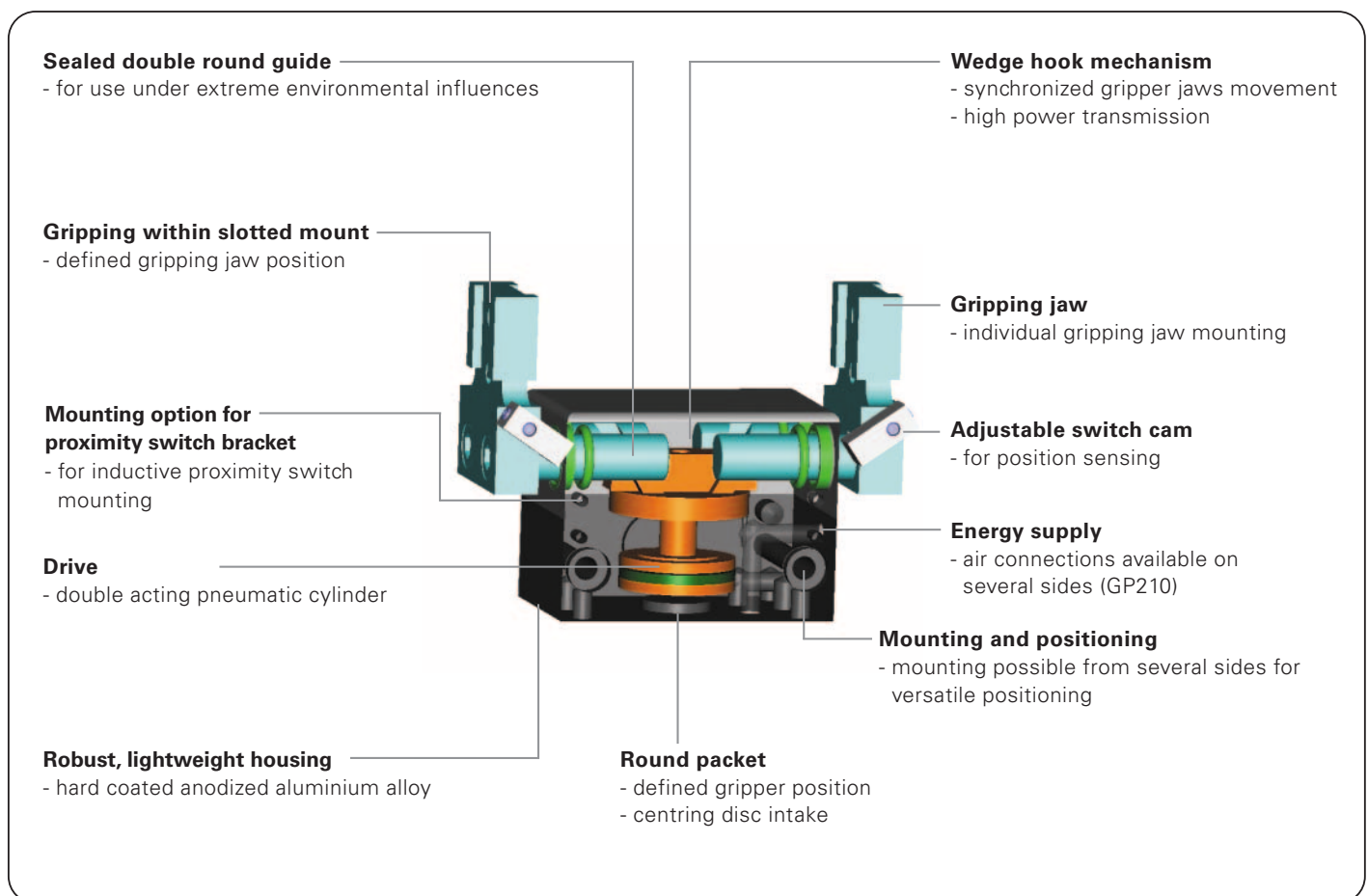
SOMMER
automatic

Parallel Gripper

Features

- sealed, double round guide, corrosion resistant for use under extreme environmental influences
- available with 3 or 5 mm stroke per jaw and gripping force up to 465 N
- corrosion resistant due to hard anodised aluminium or chemically nickel-plated steel components

Functional diagram



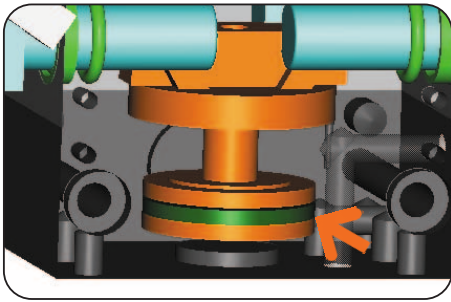
Terms

Gripping force:	arithmetic sum of the individual forces occurring at the jaws
Closing/opening time:	required time for the gripper jaws to cover the maximum stroke distance
Repeatability:	at end stops after 50/100 consecutive cycles
Gripping force safety device:	by using a pressure safety valve (order no. DSV1/8), which prevents loss of tension force if there is a drop in pressure. The inevitable leakage in the pneumatic circuit restricts the time of this type of gripping force safety.
Cycle:	one complete movement of the piston forward and back
Maintenance:	recommended at 1.5 mil. cycles (please see the owner's manual for conditions, download from www.sommer-automatic.com)

Order no.	Stroke per jaw	Gripping force in opening	Gripping force in closing	Self-locking via
GP206N	3 mm	155N	95N	DSV*
GP210N	5 mm	465N	280N	DSV*

*DSV = Pressure safety valves (Order no. DSV1/8)

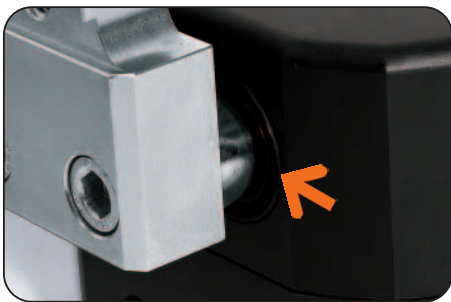
Parallel **Gripper**



Drive

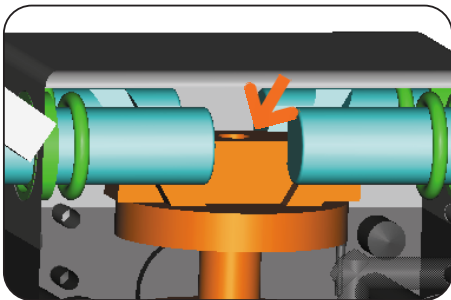
Double acting pneumatic cylinder

- maximum power in both opening and closing
- gripping force up to 465 N



Guidance

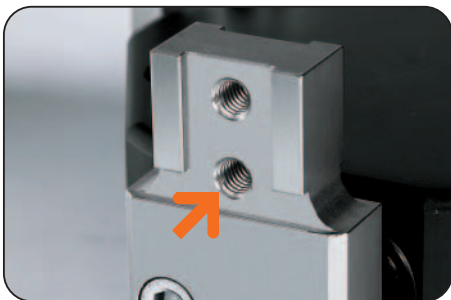
- double round guide
- sealed
- corrosion resistant, chemically nickel-plated guide rods



Power transfer

Wedge hook mechanism

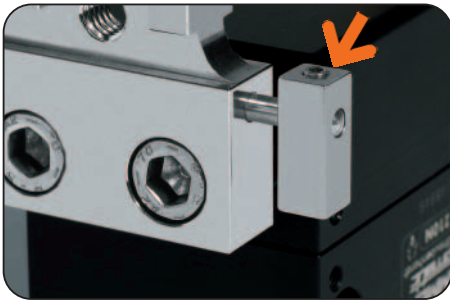
- optimum transmission of drive force in gripping force
- self-centering
- synchronized
- high repeat accuracy



Gripping jaw positioning

Individual gripping jaw positioning via groove with fit H7

- precise positioning of individual gripping jaw
- space saving mounting

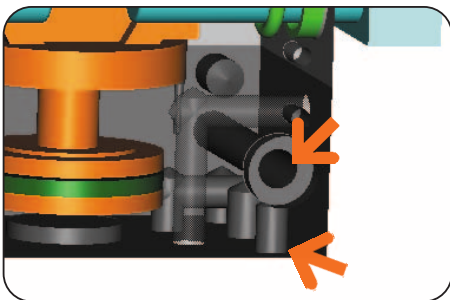


Position sensing

switch cam for position sensing

switch cam mounted directly on gripper jaw

- adjustable
- process safe



Connections

Energy supply, attachment and positioning possibilities

Adaptable to multiple mounting configuration

- optimal integration into the workroom through individual mounting situation
- tubeless direct connection possibility (no additional hose needed)

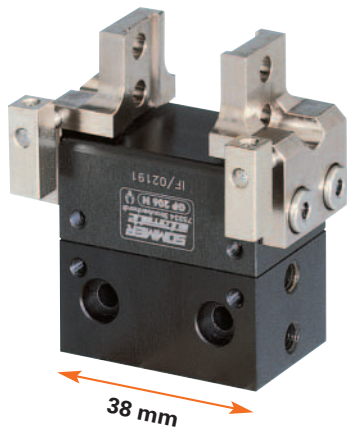


Defined gripper position with centring disc

Precise gripper positioning

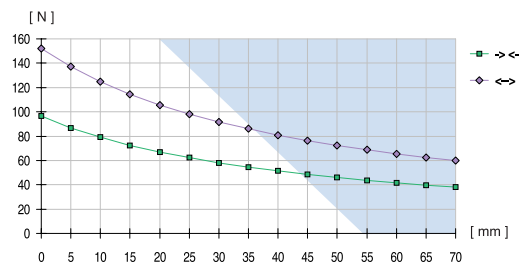
- centring disc available as accessory
- safe design costs

Parallel Gripper



Gripping force diagram

Gripping force as a function of jaw length.

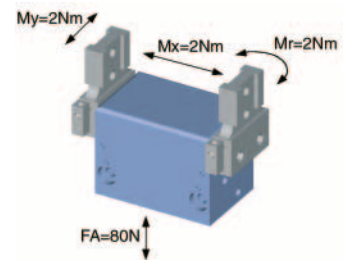


Colored area: increased wear and tear to be expected

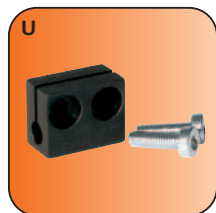
measured from top edge of housing ◆

Forces and Moments

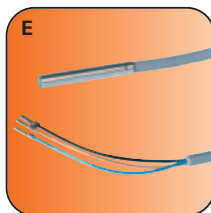
Max allowable forces and moments on jaws.



Accessory list



Mounting block
Order no. KB3



Proximity switch
Order no. NJ3-E2



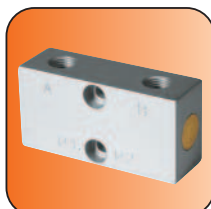
Pneumatic fittings
Order no. WVM5



Centring disc
Order no. ZE12H7x4

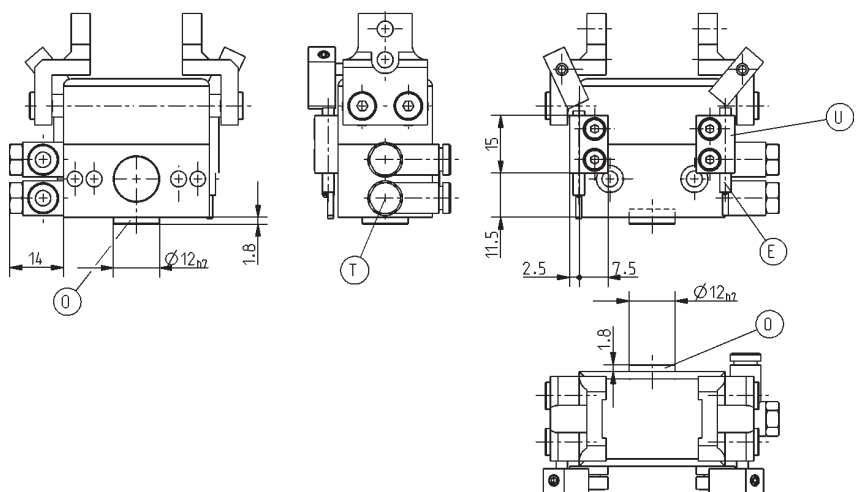


Plug 3- pole
Order no. S12-G-3



Pressure safety valve
Order no. DSV1/8

Accessory



Subject to change without prior notice

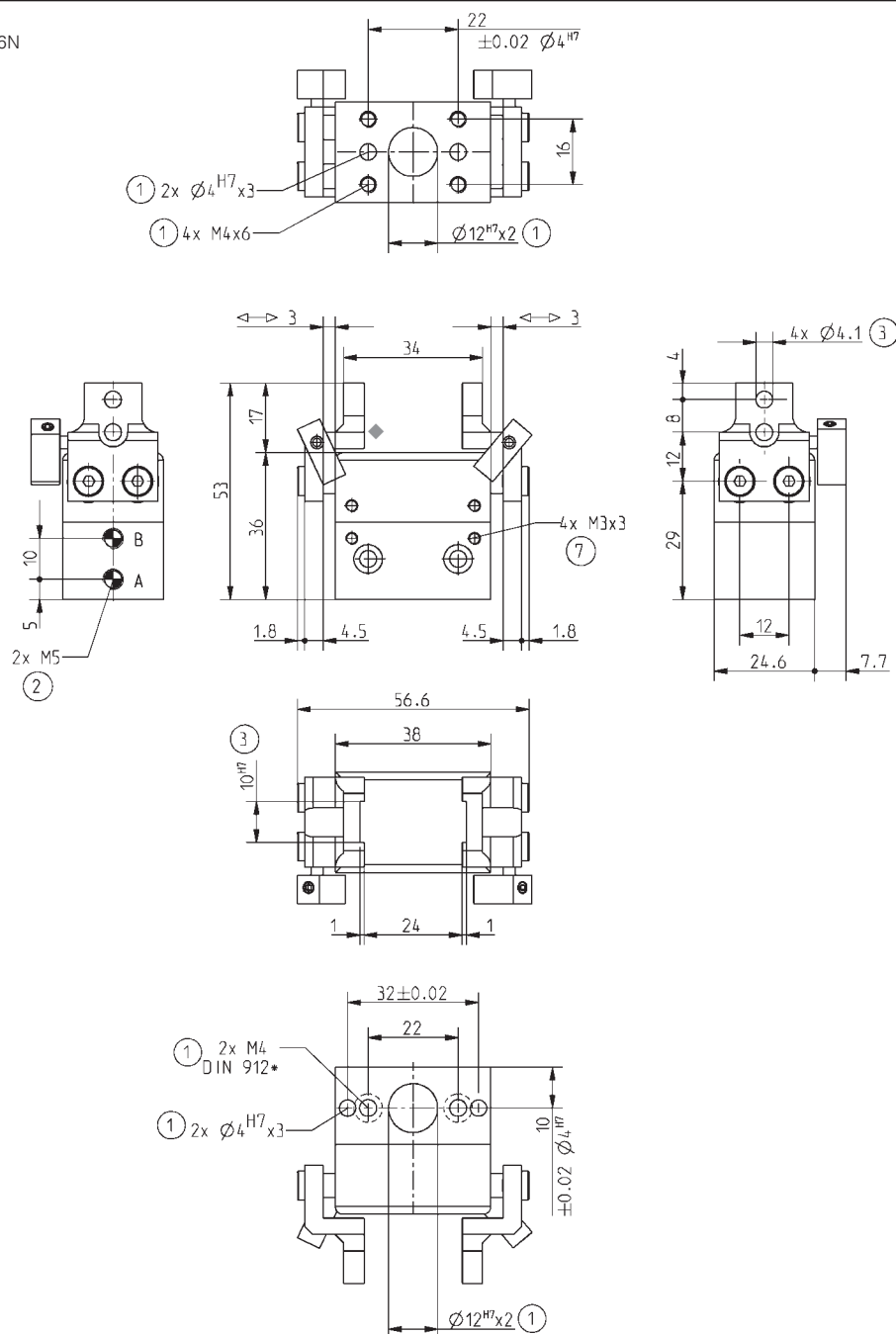
Order no.:	GP206N
Stroke per jaw [mm]:	3
Gripping force in closing [N]:	95
Gripping force in opening [N]:	155
Recommended workpiece weight [g]*:	484
Closing time/opening time [s]:	0,03
Repeatability +/- [mm]:	0,05
Min./max. operating pressure [bar]:	3/8
Min./max. operating temperature [°C]**:	5/80
Air volume per cycle [cm³]:	4
Weight [g]:	136

All data measured at 6 bar

* Value determined with friction coefficient $\mu = 0,1$ and safety factor $\nu = 2$

** High-temperature-resistant model (up to 150°C) add T to part number

GP206N

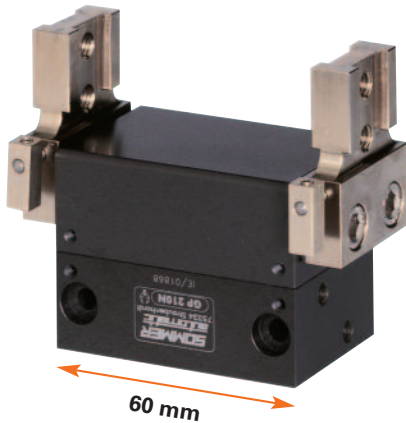


- ① Gripper mounting
- ② Power supply
- ③ Jaw fastening
- ⑦ Mounting for mounting block
- A Air connection (closing)
- B Air connection (opening)

* equivalent to DIN EN ISO 4762

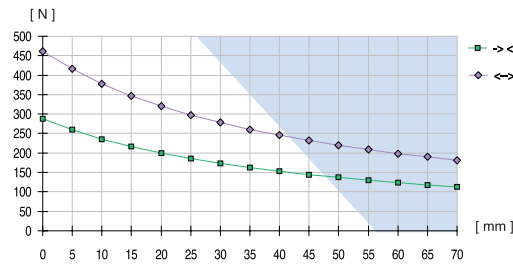
Subject to change without prior notice

Parallel Gripper



Gripping force diagram

Gripping force as a function of jaw length.

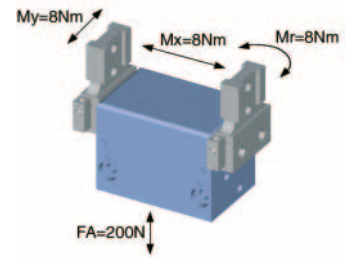


Colored area: increased wear and tear to be expected

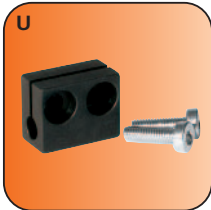
measured from top edge of housing ♦

Forces and Moments

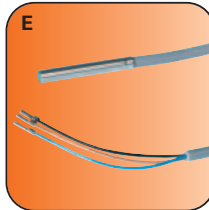
Max allowable forces and moments on jaws.



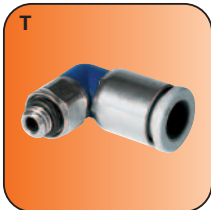
Accessory list



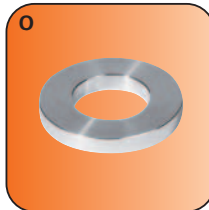
Mounting block
Order no. KB3



Proximity switch
Order no. NJ3-E2-03



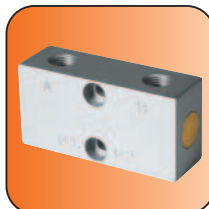
Pneumatic fittings
Order no. WVM5



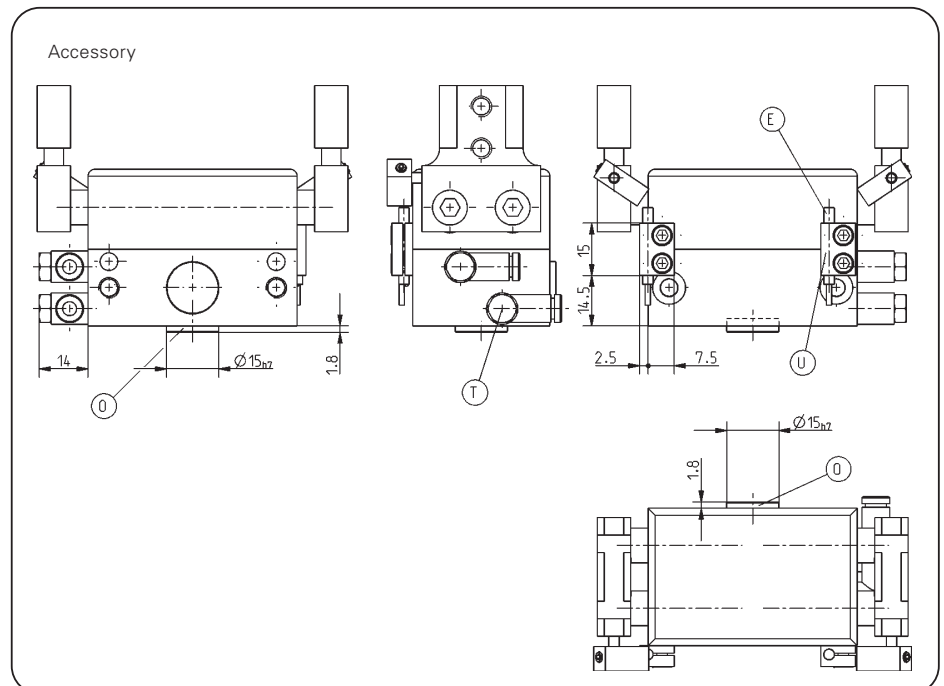
Centring disc
Order no. ZE15H7x4



Plug 3- pole
Order no. S12-G-3



Pressure safety valve
Order no. DSV1/8



Subject to change without prior notice

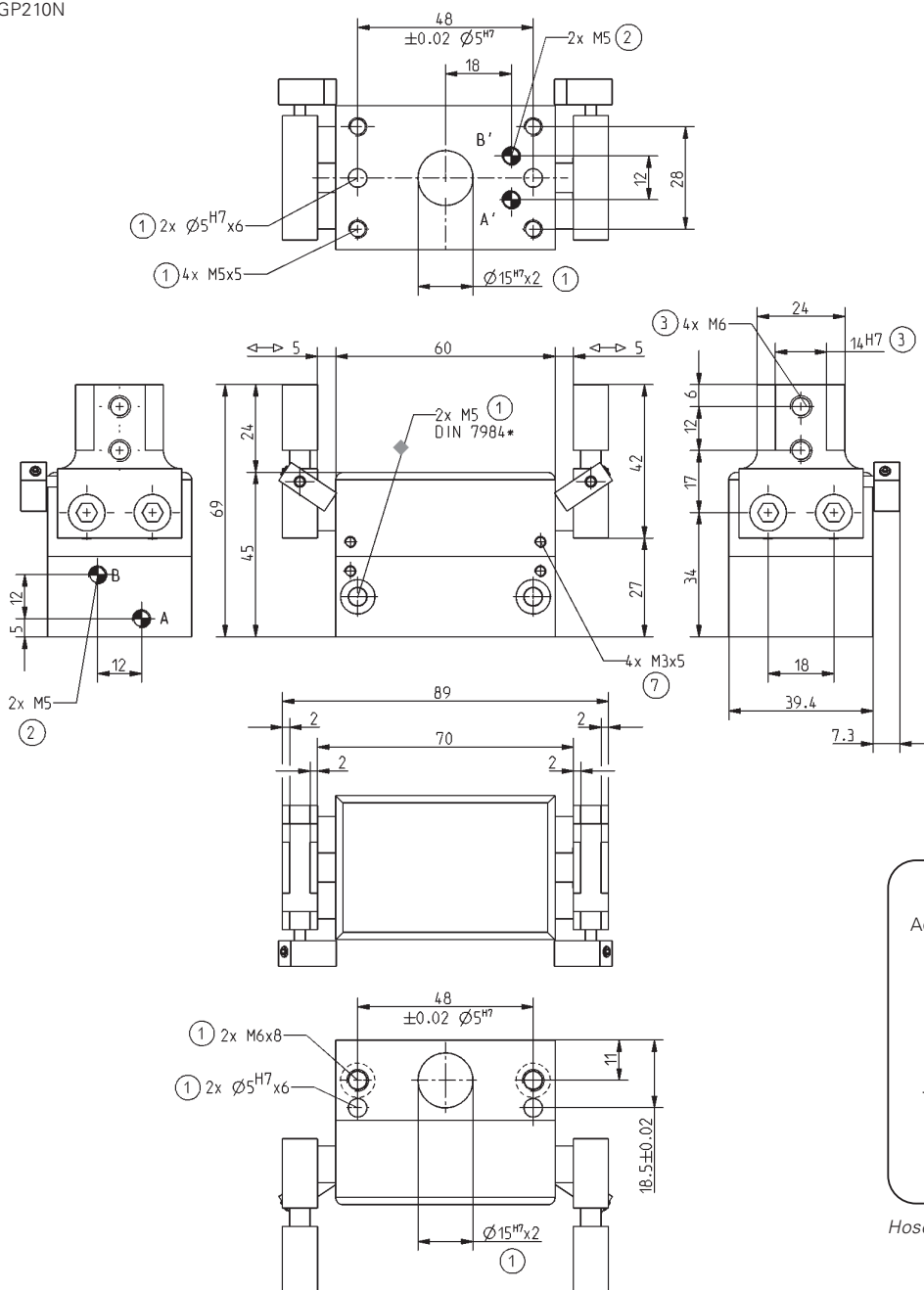
Order no.:	GP210N
Stroke per jaw [mm]:	5
Gripping force in closing [N]:	280
Gripping force in opening [N]:	465
Recommended workpiece weight [kg]*:	1,4
Closing time/opening time [s]:	0,05
Repeatability [mm]:	0,05
Min./max. operating pressure [bar]:	3/8
Min./max. operating temperature [°C]**:	5/80
Air volume per cycle [cm³]:	33
Weight [g]:	425

All data measured at 6 bar

* Value determined with friction coefficient $\mu = 0,1$ and safety factor $v = 2$

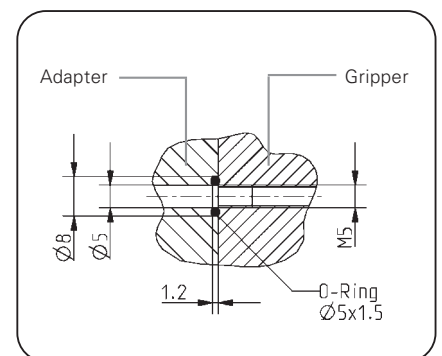
** High-temperature-resistant model (up to 150°C) add T to part number

GP210N



- ① Gripper mounting
- ② Power supply
- ③ Jaw fastening
- ⑦ Mounting for mounting block
- A Air connection (closing)
- B Air connection (opening)
- A' Alternate air connection (closing)
- B' Alternate air connection (opening)

* equivalent to DIN EN ISO 4762



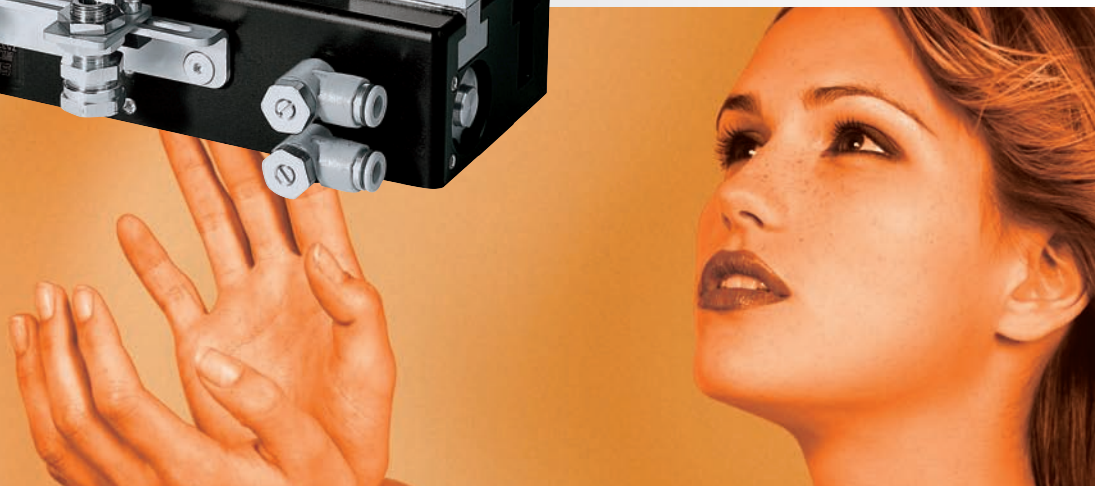
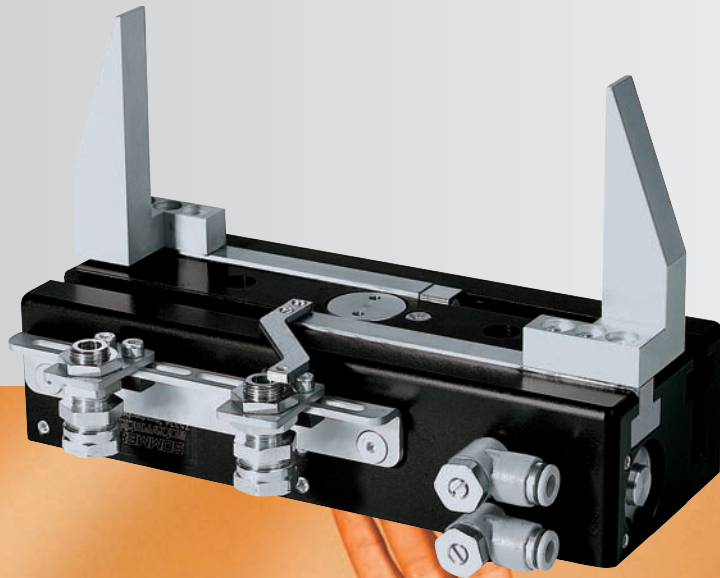
Hoseless air connection

Subject to change without prior notice



*Long Stroke **Grippers***

pneumatic



GH6000-B Series

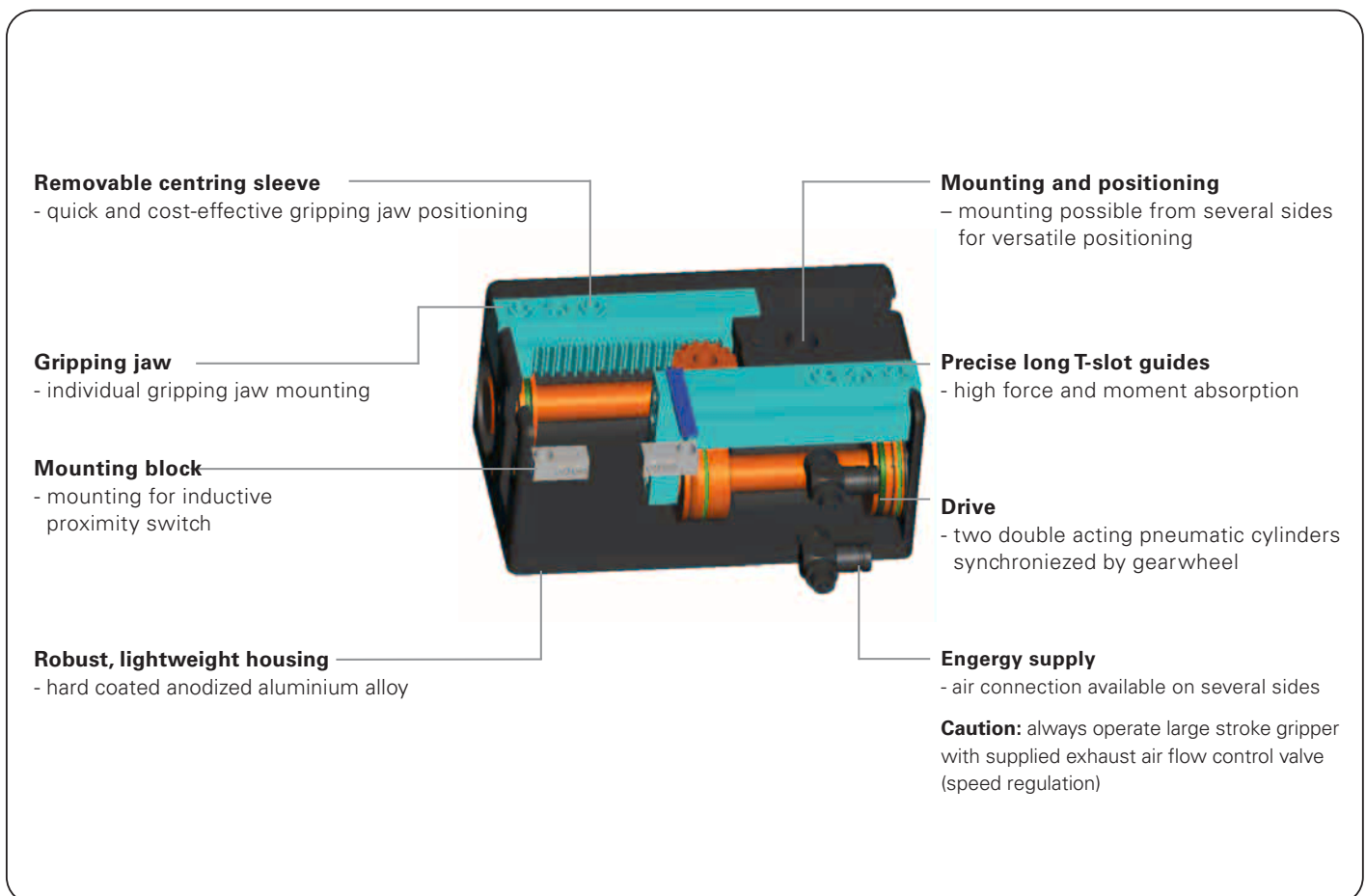
SOMMER
automatic

Long Stroke Gripper

Features

- long stroke up to 200 mm per jaw
- stable T-slot guide, completely over the entire length of the housing
- for gripping jaws with a length up to 600 mm
- low overall height because cylinders and guides are arranged side by side

Functional diagram





Terms

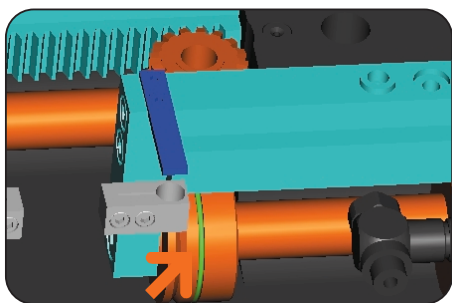
- Gripping force:** arithmetic sum of the individual forces occurring at the jaws
- Closing/opening time:** required time for the gripper jaws to cover the maximum stroke distance
- Repeatability:** at end stops after 50/100 consecutive cycles
- Gripping force safety device:** by using a pressure safety valve (order no. DSV1/8), which prevents loss of tension force if there is a drop in pressure. The inevitable leakage in the pneumatic circuit restricts the time of this type of gripping force safety.
- Cycle:** one complete movement of the piston forward and back
- Maintenance:** recommended at 10 mil. cycles
(please see the owner's manual for conditions, download from www.sommer-automatic.com)
- long maintenance intervals keep costs down
 - long lifespan

Model guide

Order no.	Stroke per jaw	Gripping force in opening	Gripping force in closing	Self-locking via
GH6040-B	40 mm	115 N	145 N	DSV*
GH6060-B	60 mm	115 N	145 N	DSV*
GH6080-B	80 mm	115 N	145 N	DSV*
GH6140-B	40 mm	370 N	455 N	DSV*
GH6160-B	60 mm	370 N	455 N	DSV*
GH6180-B	80 mm	370 N	455 N	DSV*
GH6240-B	40 mm	1060 N	1275 N	DSV*
GH6260-B	60 mm	1060 N	1275 N	DSV*
GH6280-B	80 mm	1060 N	1275 N	DSV*
GH62100-B	100 mm	1060 N	1275 N	DSV*
GH62150-B	150 mm	1060 N	1275 N	DSV*
GH6460-B	60 mm	3000 N	3250 N	DSV*
GH64100-B	100 mm	3000 N	3250 N	DSV*
GH64150-B	150 mm	3000 N	3250 N	DSV*
GH64200-B	200 mm	3000 N	3250 N	DSV*

*DSV = Pressure safety valves (Order no. DSV1/8)

Long Stroke **Gripper**



Drive

Two double acting pneumatic cylinders

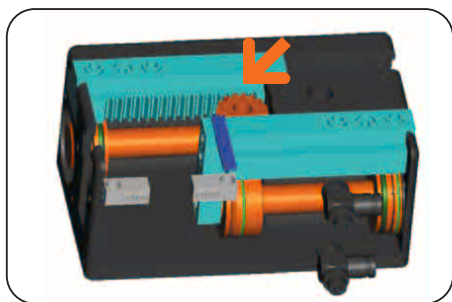
- maximum power in both opening and closing
- high gripping force up to 3250 N



Guidance

robust T-slot guide

- T groove guide for maximum force and moment resistant
- high precision due to low play guide



Power transfer

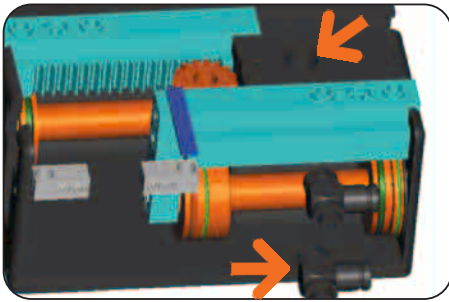
Direct drive synchronized via gearwheel

- optimum force transfer of drive force in gripping force
- self-centering
- synchronized
- high repeatability



Mounting flange with recessed sides

- no rotation when mounted
- ensures smooth running of the guides

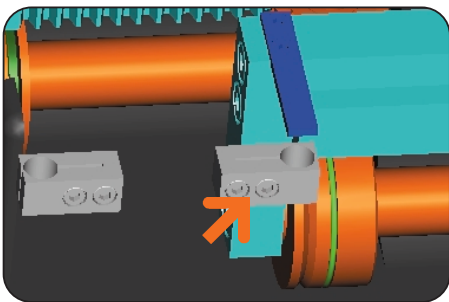


Connection

Energy supply, attachment and positioning possibilities

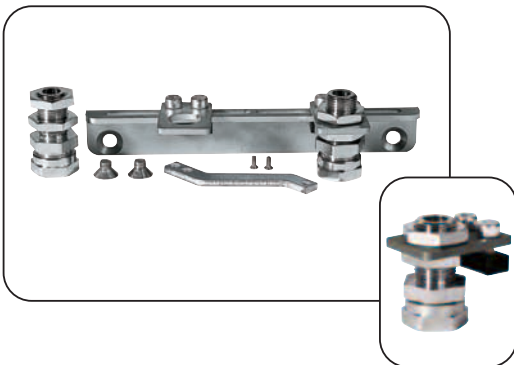
Adaptable to multiple mounting configurations

- optimal integration into the application through individual mounting situation
- tubeless direct connection possible (no additional hose needed)
- exhaust air flow control valve for speed regulation



Position sensing

- process safe due to direct gripper jaw position sensing
- compact design
- GH6040-B up to GH6080-B additional possibility for position sensing via magnetic field sensor



Alternative position sensing

Bracket for inductive proximity switch up to 12 mm diameter, as accessory available

- process safe due to direct gripper jaw position sensing
- compact design

KHAZ as accessory available, allows inquiry of additional gripper positions

- in conjunction with the KHA, e.g. the following position inquiries are possible. Gripper closed, tool available, gripper open.

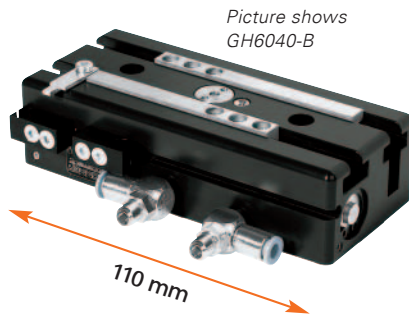


Gripping jaw positioning

individual gripping jaw positioning via centring sleeve

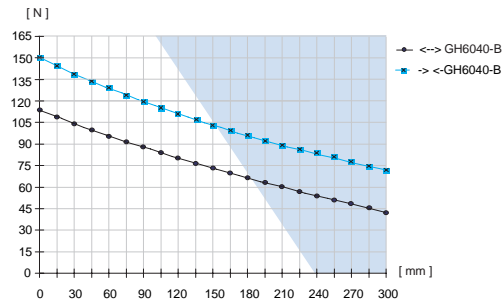
- precise positioning of individual gripping jaws
- quick, cost-effective and therefore economical jaw changing

Long Stroke **Gripper**



Gripping force diagram

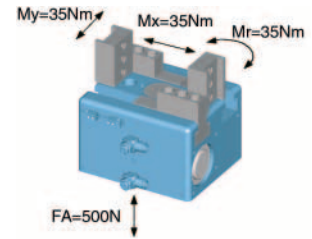
Gripping force as a function jaw length.



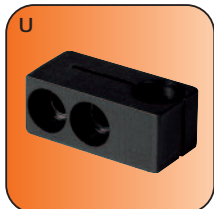
Colored area: increased wear and tear to be expected

Forces and Moments

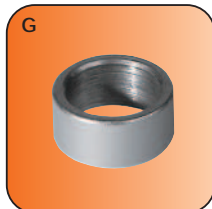
Max allowable forces and moments on jaws.



Included with purchase



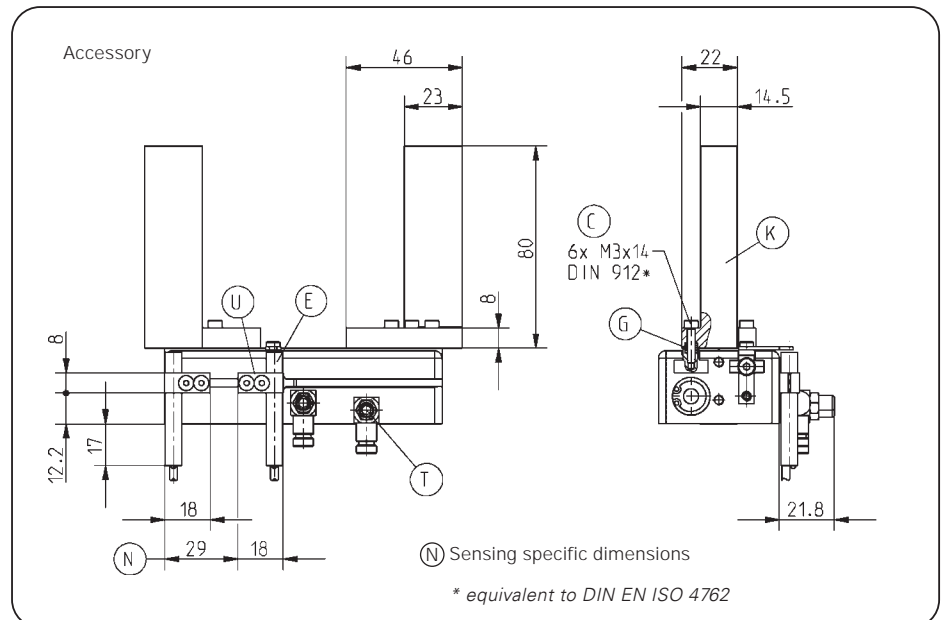
Mounting block
Order no. KB6.5-04



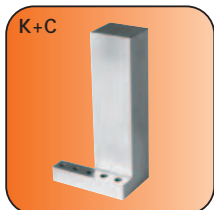
Centring sleeve
Order no. BDST40400



Pneumatic fittings
Order no. DRVM5x4



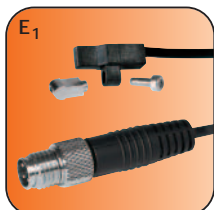
Accessory list



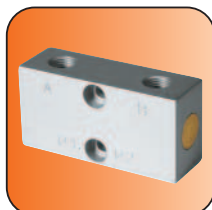
Universal jaw (set)
Order no. UB6000-B



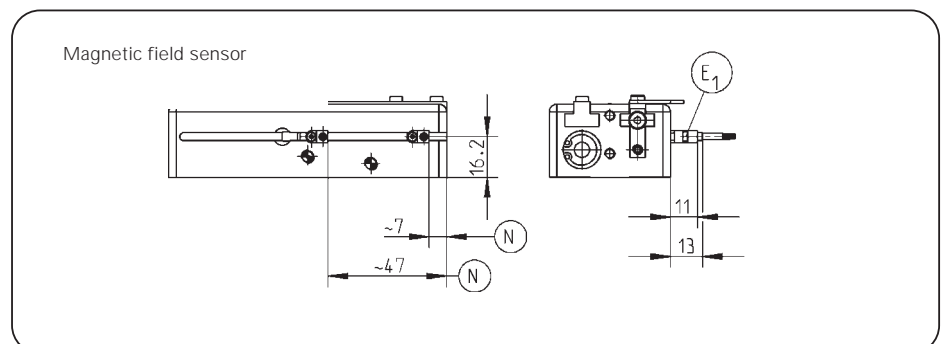
Proximity switch
Order no. NJ6.5-E2S



Magnetic field sensor
Order no. MFS103SKHC42



Pressure safety valve
Order no. DSV1/8



Subject to change without prior notice

GH6040-B

Todos los datos verificados con 6 bar
All data measured at 6 bar

* Coeficiente de fricción $\mu = 0.1$ y factor de seguridad $\gamma = 2$
 * Value determined with friction coefficient $\mu = 0.1$ and safety factor $\gamma = 2$

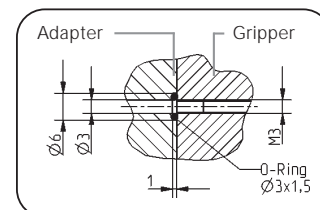
*** Para temperaturas hasta 150°C usar referencia con T
High-temperature-resistant model (up to 150°C) add T to part number

Technical drawing of a mechanical assembly, showing multiple views and dimensions. The drawing includes the following components and dimensions:

- Top View:** Shows a rectangular plate with dimensions 80 ± 0.02 (width) and 48 (height). It features two M3 screws (2x M3) and two Ø4 H7 x6 screws (2x Ø4 H7 x6). The distance between the centerlines of the Ø4 screws is 60. The distance from the top edge to the centerline of the Ø4 screws is 35. The distance from the bottom edge to the centerline of the Ø4 screws is 13.5. The distance from the left edge to the centerline of the Ø4 screws is 6.5. The distance from the right edge to the centerline of the Ø4 screws is 5. The distance from the top edge to the centerline of the M3 screws is 20. The distance from the bottom edge to the centerline of the M3 screws is 16.2.
- Front View:** Shows a rectangular plate with dimensions 80 ± 0.02 (width) and 30 (height). It features two M5 screws (2x M5) and two Ø4 H7 x4 screws (2x Ø4 H7 x4). The distance between the centerlines of the Ø4 screws is 60. The distance from the top edge to the centerline of the Ø4 screws is 29. The distance from the bottom edge to the centerline of the Ø4 screws is 16.2. The distance from the left edge to the centerline of the Ø4 screws is 25. The distance from the right edge to the centerline of the Ø4 screws is 30. The distance from the top edge to the centerline of the M5 screws is 2.8. The distance from the bottom edge to the centerline of the M5 screws is 5.5.
- Side View:** Shows a rectangular plate with dimensions 80 ± 0.02 (width) and 40 (height). It features two M4 DIN 912* screws (2x M4 DIN 912*) and two Ø4 H7 x4 screws (2x Ø4 H7 x4). The distance between the centerlines of the Ø4 screws is 60. The distance from the top edge to the centerline of the Ø4 screws is 22. The distance from the bottom edge to the centerline of the Ø4 screws is 12. The distance from the left edge to the centerline of the Ø4 screws is 4. The distance from the right edge to the centerline of the Ø4 screws is 5. The distance from the top edge to the centerline of the M4 screws is 8 ± 0.02. The distance from the bottom edge to the centerline of the M4 screws is 8 ± 0.02.
- Bottom View:** Shows a rectangular plate with dimensions 80 (width) and 19 (height). It features four M4 x6 screws (4x M4 x6) and two Ø4 H7 x4 screws (2x Ø4 H7 x4). The distance between the centerlines of the Ø4 screws is 60. The distance from the top edge to the centerline of the Ø4 screws is 12. The distance from the bottom edge to the centerline of the Ø4 screws is 5. The distance from the left edge to the centerline of the Ø4 screws is 4. The distance from the right edge to the centerline of the Ø4 screws is 5. The distance from the top edge to the centerline of the M4 screws is 8 ± 0.02. The distance from the bottom edge to the centerline of the M4 screws is 8 ± 0.02.
- Isometric View:** Shows the assembly in a 3D perspective. It includes dimensions for the distance between the centerlines of the Ø4 screws (60), the distance from the top edge to the centerline of the Ø4 screws (29), the distance from the bottom edge to the centerline of the Ø4 screws (16.2), the distance from the left edge to the centerline of the Ø4 screws (25), the distance from the right edge to the centerline of the Ø4 screws (30), the distance from the top edge to the centerline of the M5 screws (2.8), and the distance from the bottom edge to the centerline of the M5 screws (5.5).

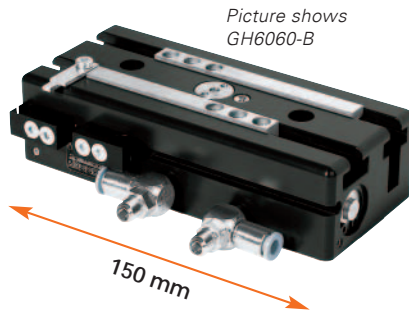
- ① Gripper mounting
- ② Power supply
- ③ Jaw fastening
- ④ Lubrication nipple
- ⑥ Slot for magnetic field sensor
- ⑦ Mounting block connection
- (A) Air connection (closing)
- (B) Air connection (opening)
- (A) Alternate air connection (closing)
- (B) Alternate air connection (opening)

* equivalent to DIN EN ISO 4762



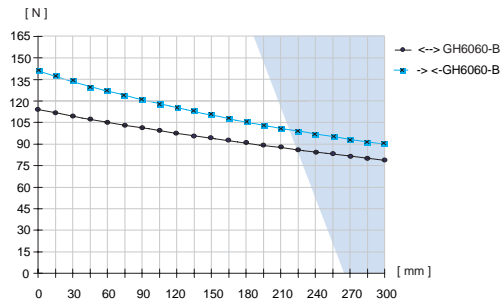
Hoseless air connection

Long Stroke **Gripper**



Gripping force diagram

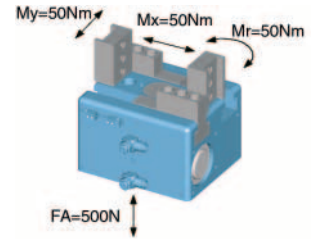
Gripping force as a function jaw length.



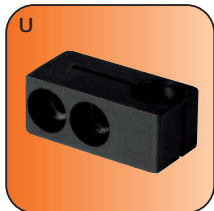
Colored area: increased wear and tear to be expected

Forces and Moments

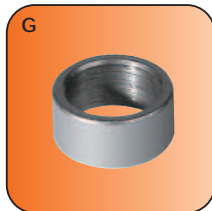
Max allowable forces and moments on jaws.



Included with purchase



Mounting block
Order no. KB6.5-04

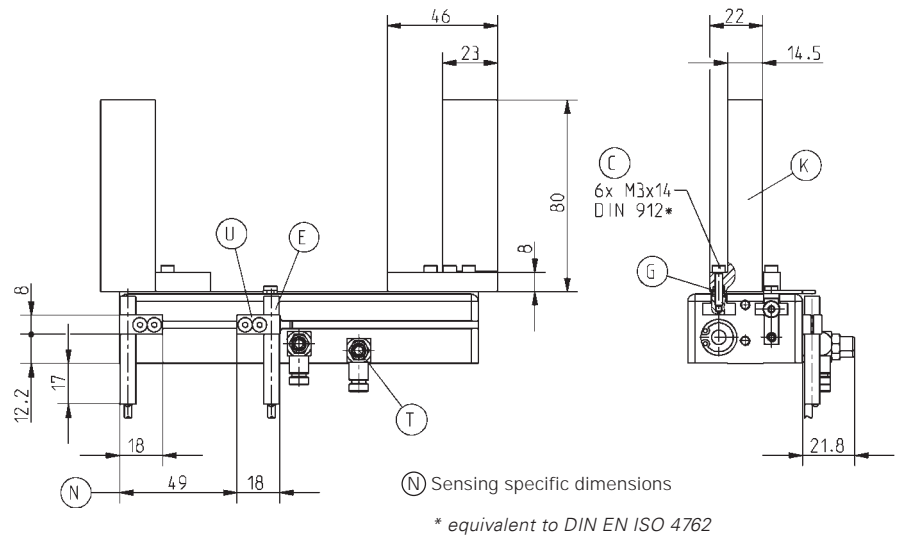


Centring sleeve
Order no. BDST40400



Pneumatic fittings
Order no. DRVM5x4

Accessory



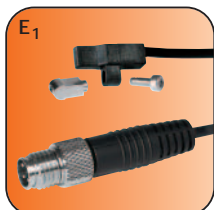
Accessory list



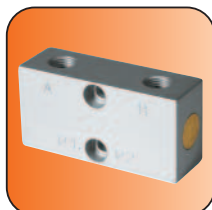
Universal jaw (set)
Order no. UB6000-B



Proximity switch
Order no. NJ6.5-E2S

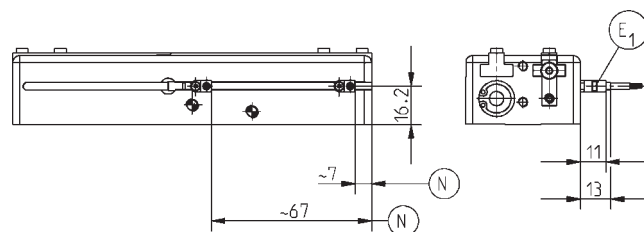


Magnetic field sensor
Order no. MFS103SKHC42



Pressure safety valve
Order no. DSV1/8

Magnetic field sensor



Subject to change without prior notice

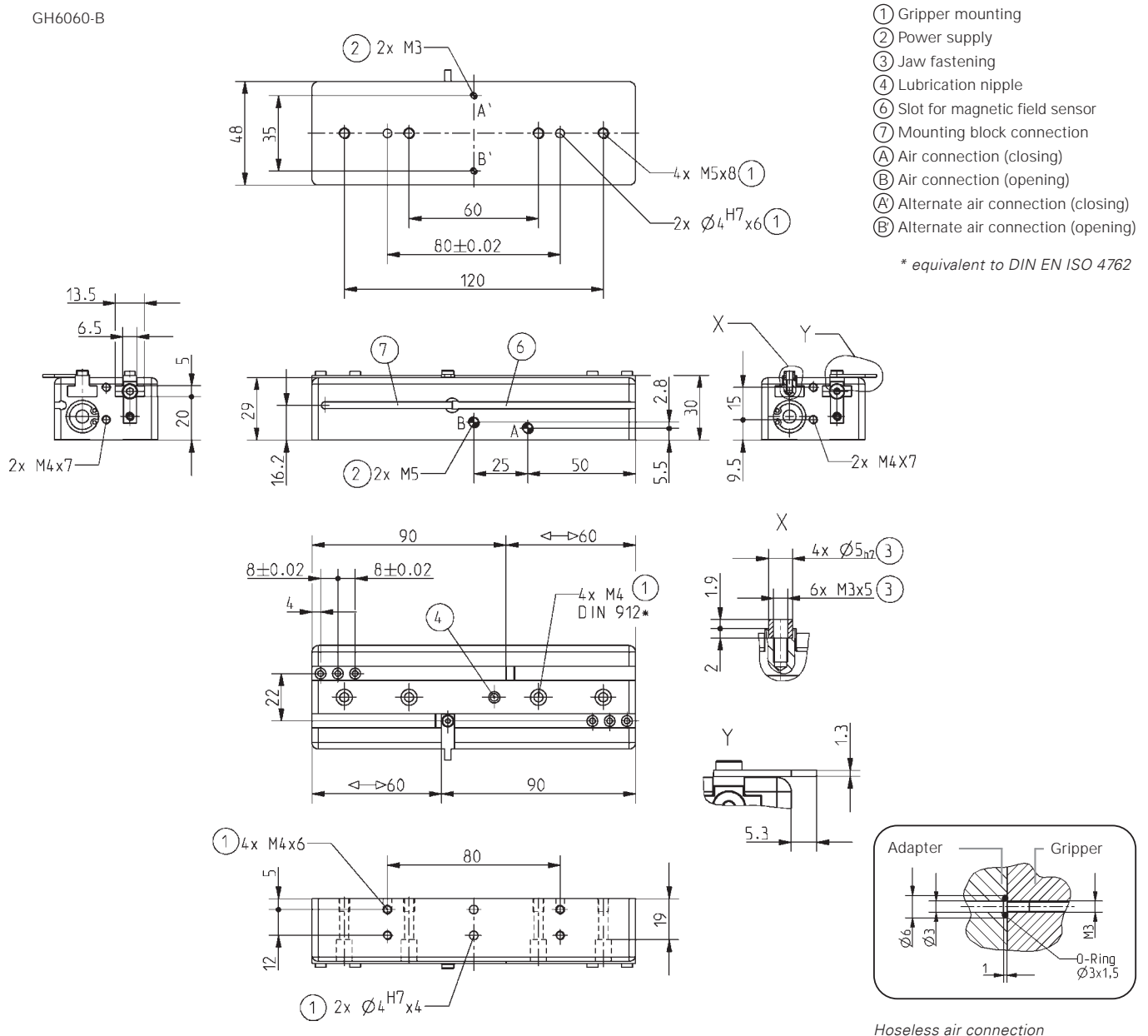
Magnetic field sensor with mounting holder

Order no.:	GH6060-B
Stroke per jaw [mm]:	60
Gripping force in closing [N]:	145
Gripping force in opening [N]:	115
Recommended workpiece weight [g]*:	586
Closing time/opening time [s]:	0,25
Repeatability +/- [mm]:	0,05
Min./max. operating pressure [bar]:	3/8
Min./max. operating temperature [°C]**:	5/80
Air volume per cycle [cm³]:	30
Weight [g]:	606

All data measured at 6 bar

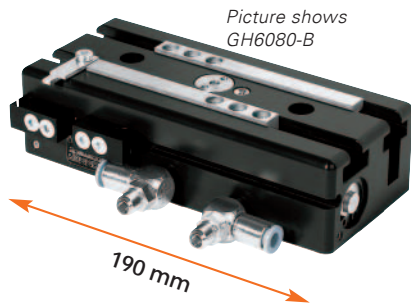
* Value determined with friction coefficient $\mu = 0.1$ and safety factor $v = 2$

** High-temperature-resistant model (up to 150°C) add T to part number



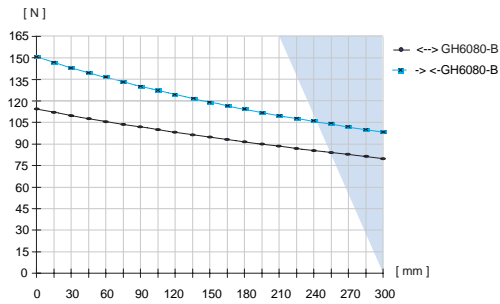
Subject to change without prior notice

Long Stroke **Gripper**



Gripping force diagram

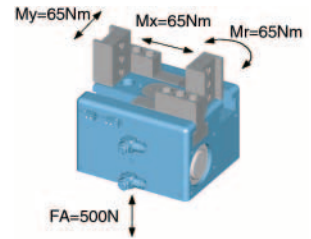
Gripping force as a function jaw length.



Colored area: increased wear and tear to be expected

Forces and Moments

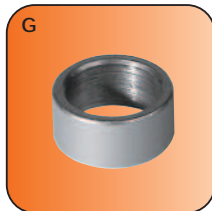
Max allowable forces and moments on jaws.



Included with purchase



Mounting block
Order no. KB6.5-04

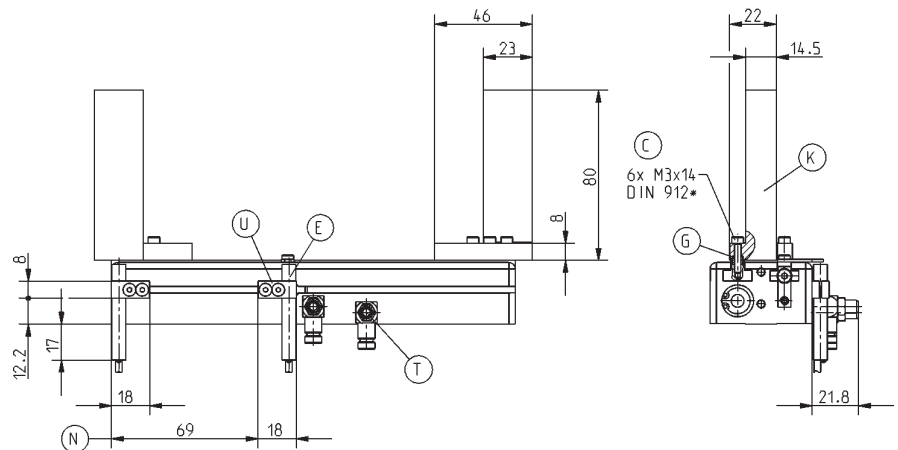


Centring sleeve
Order no. BDST40400



Pneumatic fittings
Order no. DRVM5x4

Accessory



(N) Sensing specific dimensions

* equivalent to DIN EN ISO 4762

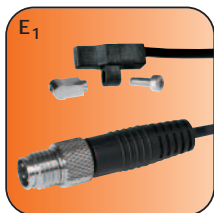
Accessory list



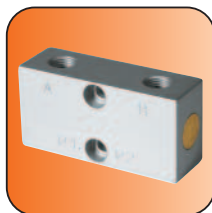
Universal jaw (set)
Order no. UB6000-B



Proximity switch
Order no. NJ6.5-E2S

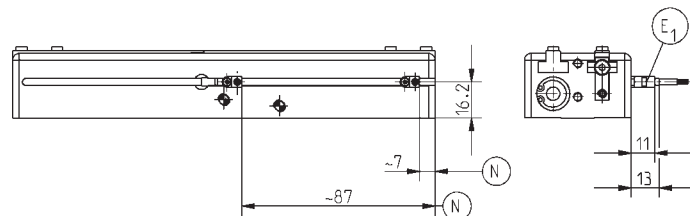


Magnetic field sensor
Order no. MFS103SKHC42



Pressure safety valve
Order no. DSV1/8

Magnetic field sensor



Subject to change without prior notice

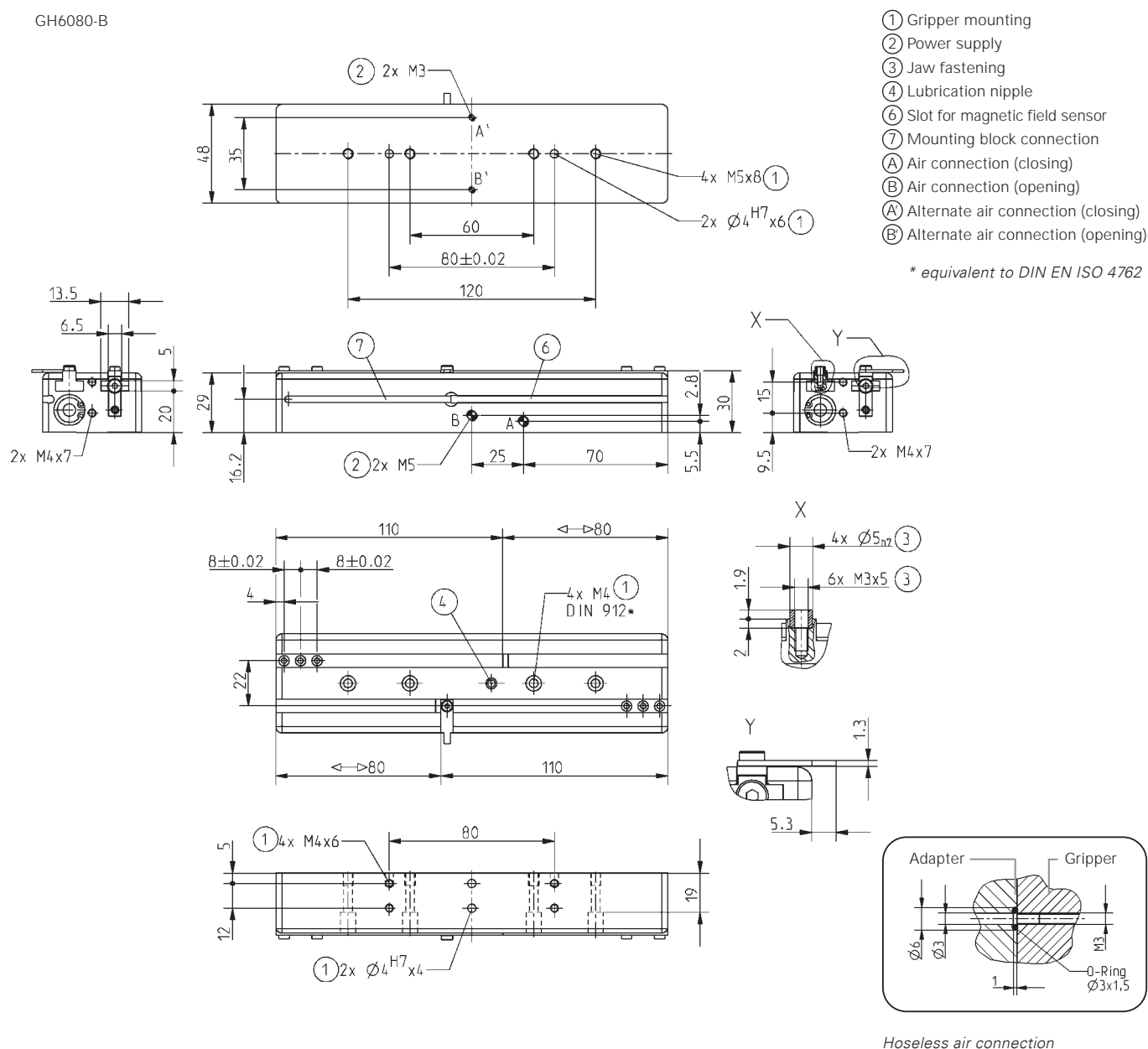
Magnetic field sensor with mounting holder

Order no.:	GH6080-B
Stroke per jaw [mm]:	80
Gripping force in closing [N]:	145
Gripping force in opening [N]:	115
Recommended workpiece weight [g]*:	586
Closing time/opening time [s]:	0,3
Repeatability +/- [mm]:	0,05
Min./max. operating pressure [bar]:	3/8
Min./max. operating temperature [°C]**:	5/80
Air volume per cycle [cm³]:	40
Weight [g]:	745

All data measured at 6 bar

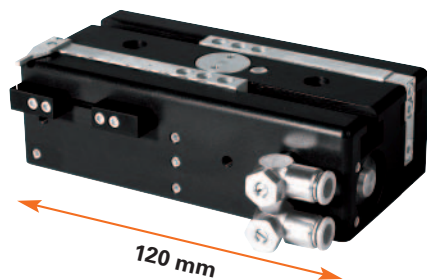
* Value determined with friction coefficient $\mu = 0.1$ and safety factor $v = 2$

** High-temperature-resistant model (up to 150°C) add T to part number



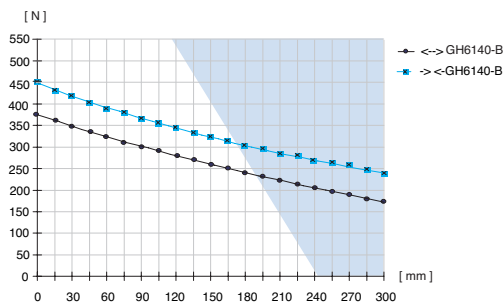
Subject to change without prior notice

Long Stroke **Gripper**



Gripping force diagram

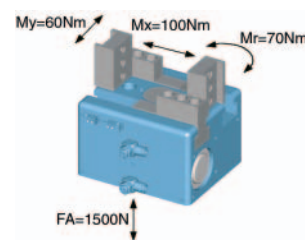
Gripping force as a function jaw length.



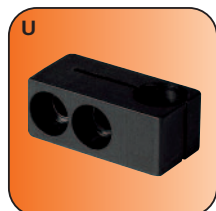
Colored area: increased wear and tear to be expected

Forces and Moments

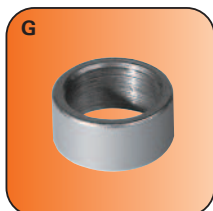
Max allowable forces and moments on jaws.



Included with purchase



Mounting block
Order no. KB8-27

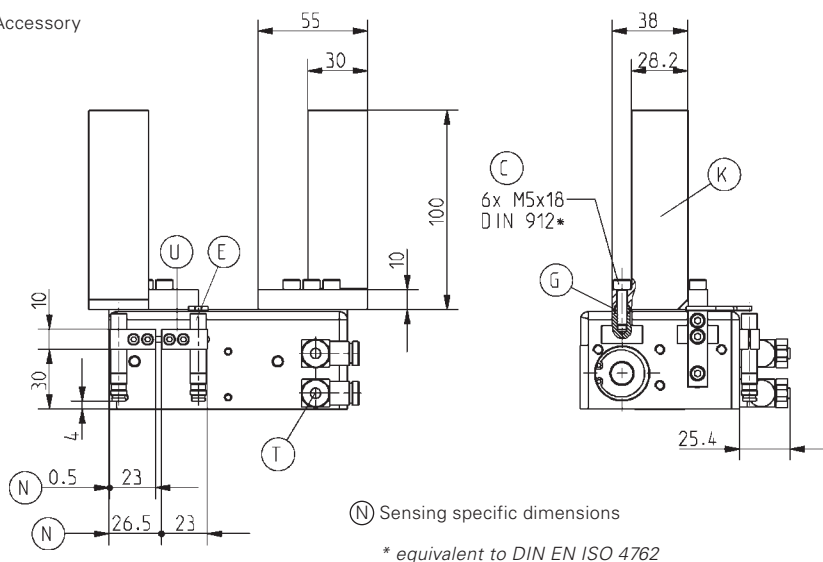


Centring sleeve
Order no. BDST60800



Pneumatic fittings
Order no. DRV1/8x8

Accessory



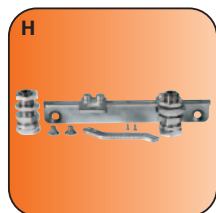
Accessory list



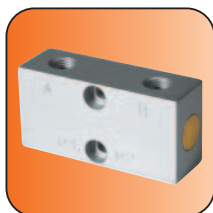
Universal jaw (set)
Order no. UB6100-B



Proximity switch
Order no. NJ8-E2S

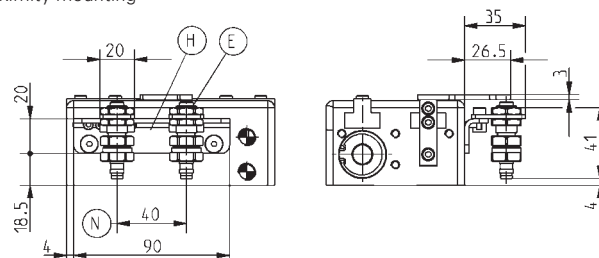


Alternate proximity bracket
Order no. KHA6140-B-8



Pressure safety valve
Order no. DSV1/8

Alternate proximity mounting



Subject to change without prior notice



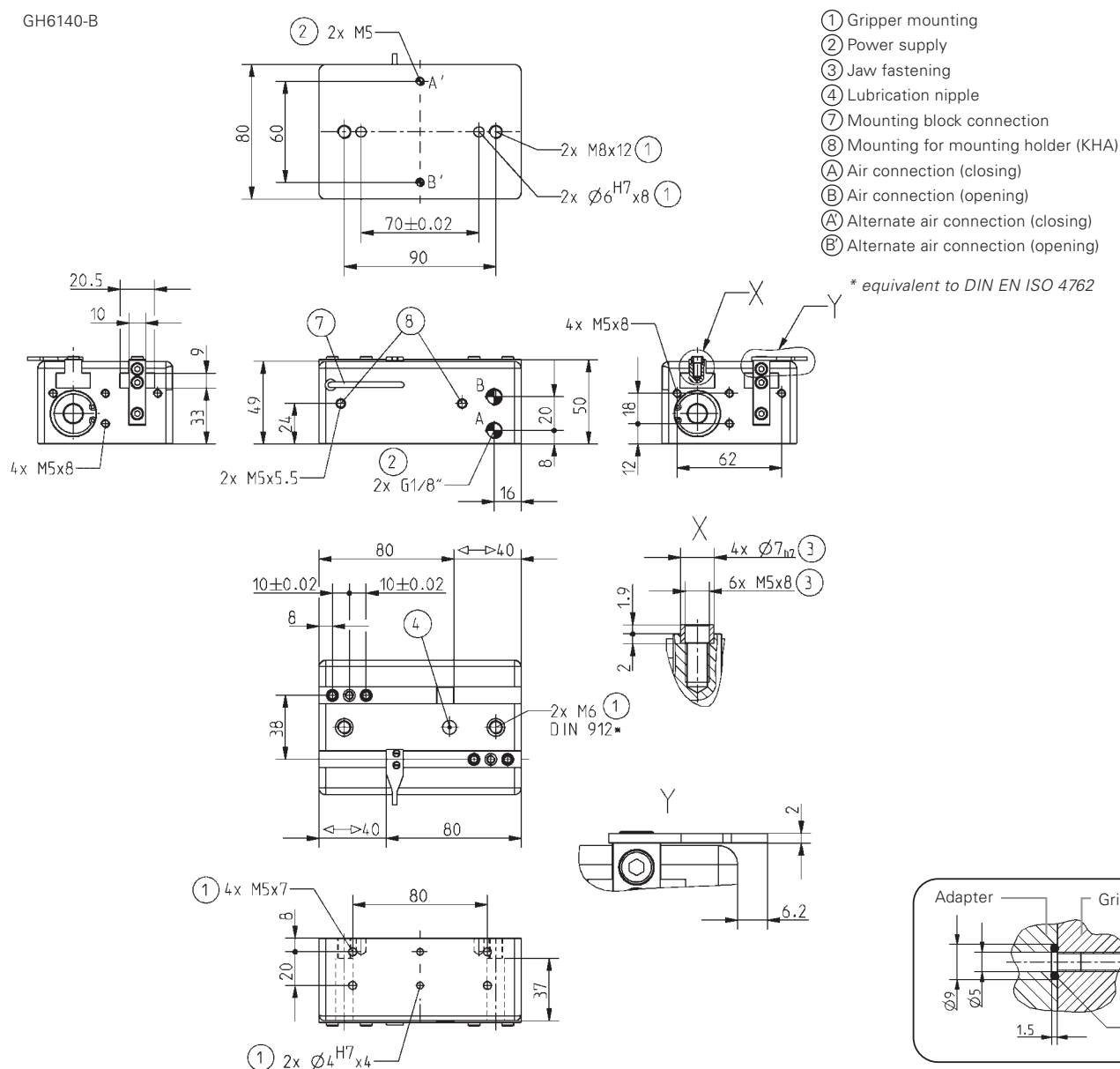
Order no.:	GH6140-B
Stroke per jaw [mm]:	40
Gripping force in closing [N]:	455
Gripping force in opening [N]:	370
Recommended workpiece weight [kg]*:	1,9
Closing time/opening time [s]:	0,25
Repeatability +/- [mm]:	0,05
Min./max. operating pressure [bar]:	3/8
Min./max. operating temperature [°C]**:	5/80
Air volume per cycle [cm³]:	73
Weight [kg]:	1,5

All data measured at 6 bar

* Value determined with friction coefficient $\mu = 0.1$ and safety factor $v = 2$

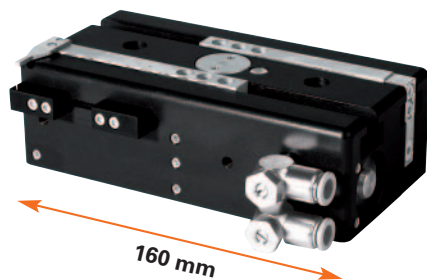
** High-temperature-resistant model (up to 150°C) add T to part number

GH6140-B



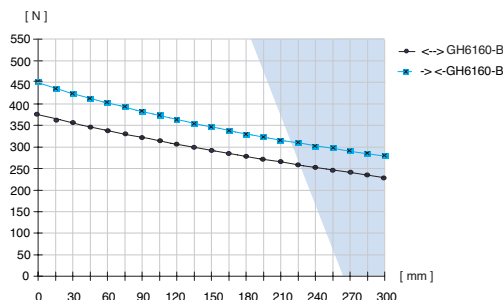
Subject to change without prior notice

Long Stroke **Gripper**



Gripping force diagram

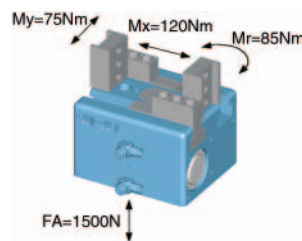
Gripping force as a function jaw length.



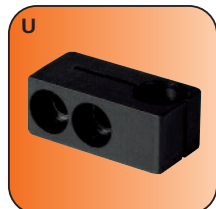
Colored area: increased wear and tear to be expected

Forces and Moments

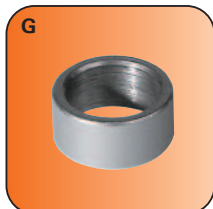
Max allowable forces and moments on jaws.



Included with purchase



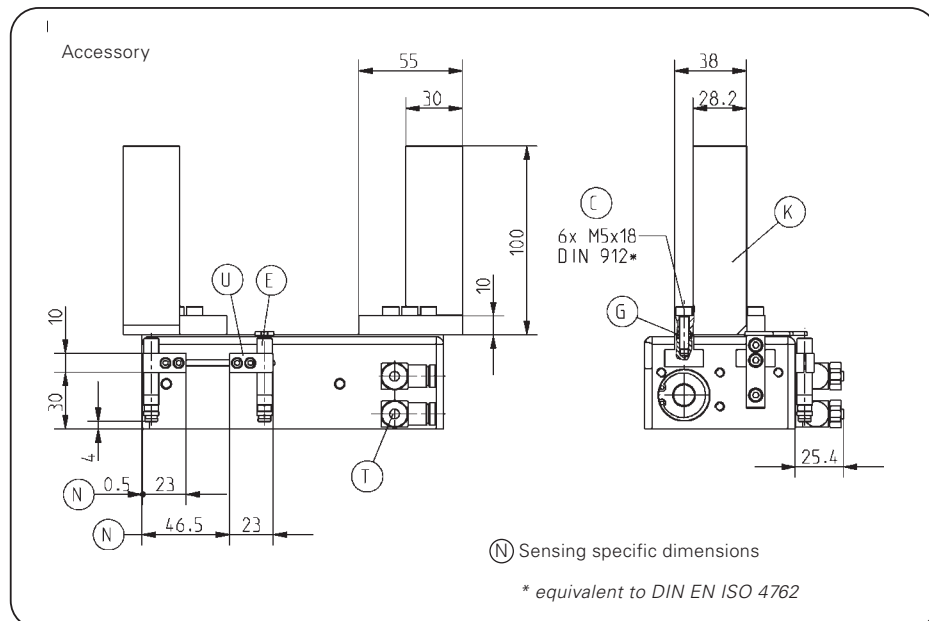
Mounting block
Order no. KB8-27



Centring sleeve
Order no. BDST60800



Pneumatic fittings
Order no. DRV1/8x8



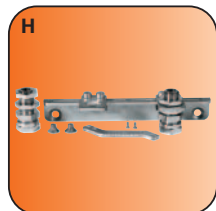
Accessory list



Universal jaw (set)
Order no. UB6100-B



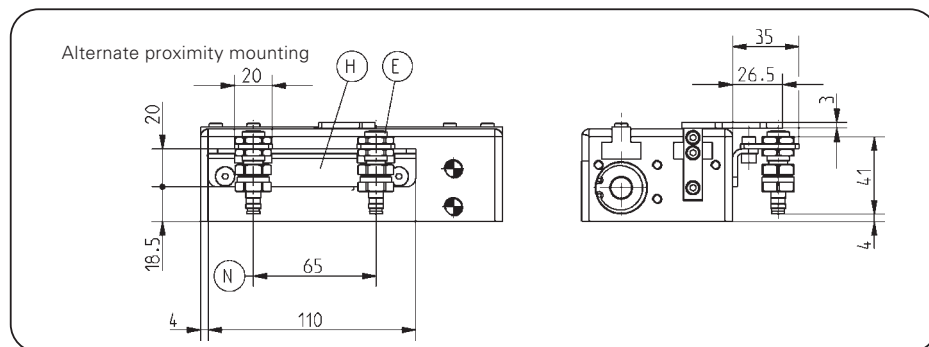
Proximity switch
Order no. NJ8-E2S



Alternate proximity bracket
Order no. KHA6160-B-8



Pressure safety valve
Order no. DSV1/8



Subject to change without prior notice

GH6160-B

60

60

60

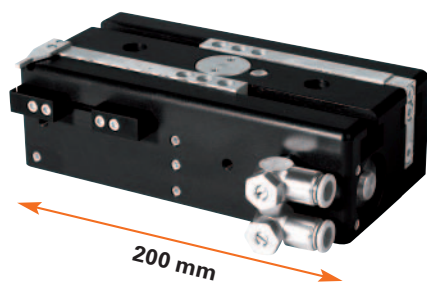
60



subject to change without prior notice

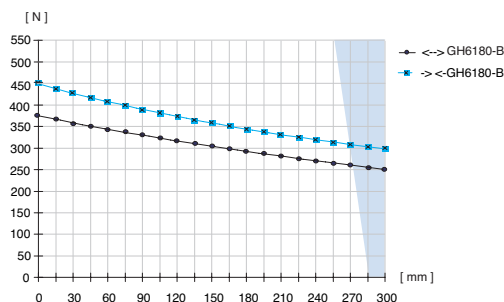
Subject to change without prior notice

Long Stroke **Gripper**



Gripping force diagram

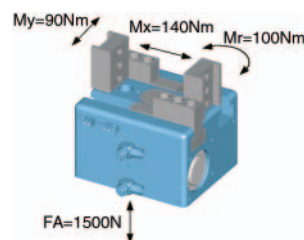
Gripping force as a function jaw length.



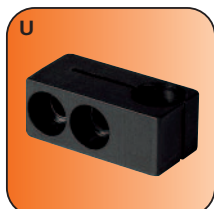
Colored area: increased wear and tear to be expected

Forces and Moments

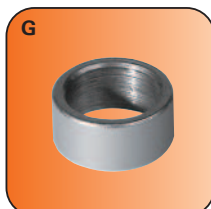
Max allowable forces and moments on jaws.



Included with purchase



Mounting block
Order no. KB8-27

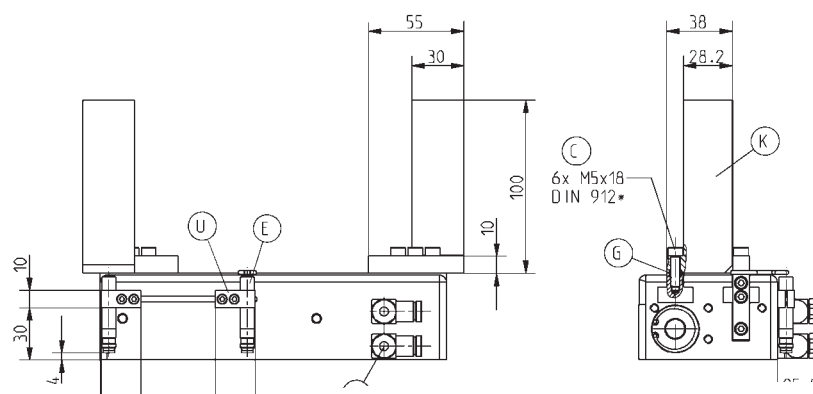


Centring sleeve
Order no. BDST60800



Pneumatic fittings
Order no. DRV1/8x8

Accessory



(N) Sensing specific dimensions

* equivalent to DIN EN ISO 4762

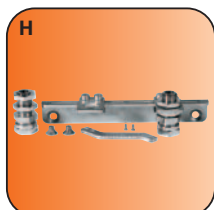
Accessory list



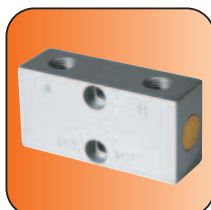
Universal jaw (set)
Order no. UB6100-B



Proximity switch
Order no. NJ8-E2S

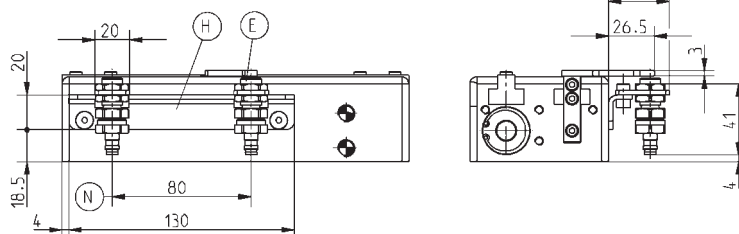


Alternate proximity bracket
Order no. KHA6180-B-8



Pressure safety valve
Order no. DSV1/8

Alternate proximity mounting



Subject to change without prior notice

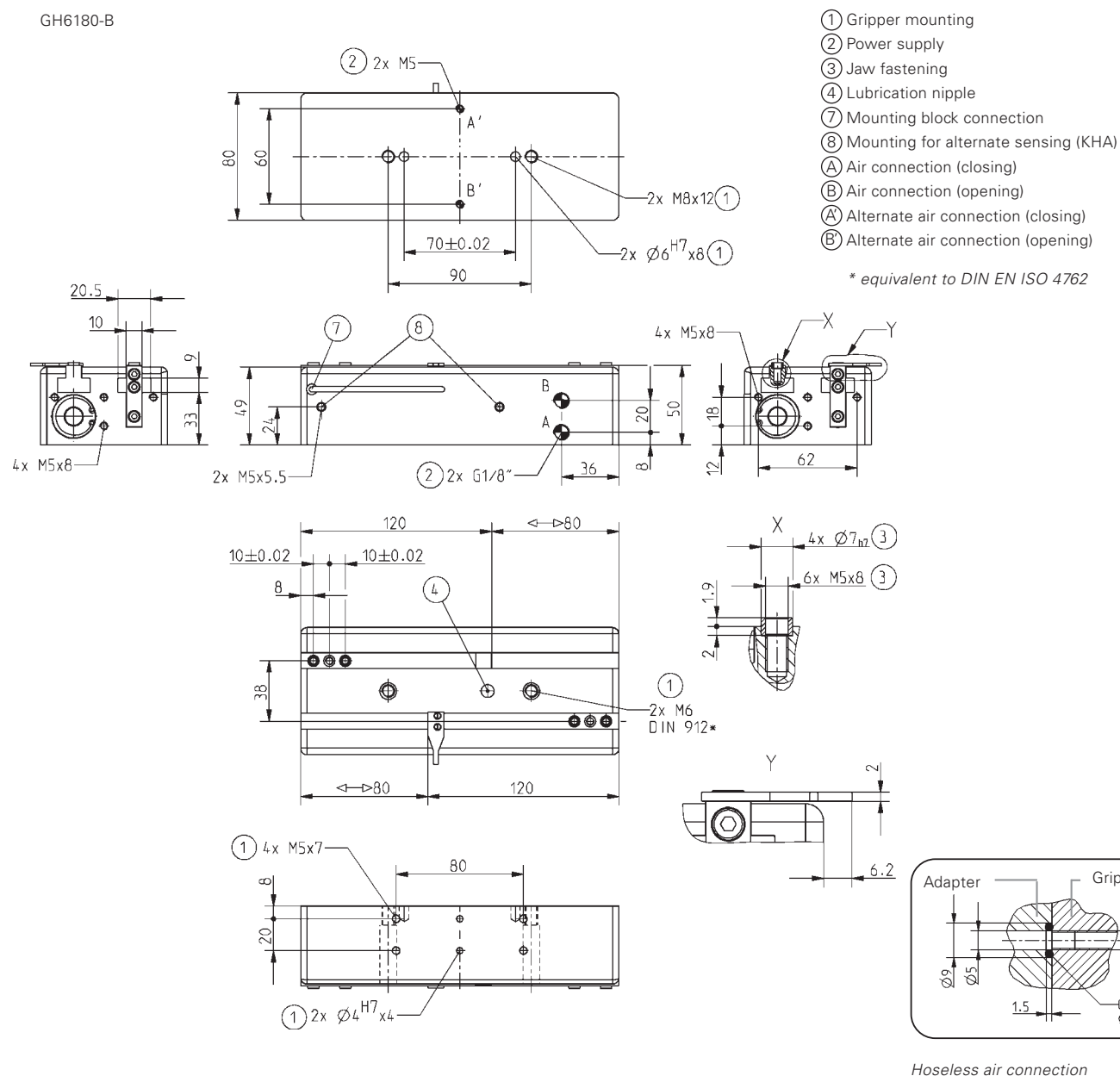
GH6180-B

Stroke per jaw [mm]:	80
Gripping force in closing [N]:	455
Gripping force in opening [N]:	370
Recommended workpiece weight [kg]*:	1,9
Closing time/opening time [s]:	0,35
Repeatability +/- [mm]:	0,05
Min./max. operating pressure [bar]:	3/8
Min./max. operating temperature [°C]**:	5/80
Air volume per cycle [cm³]:	145
Weight [kg]:	2,2

All data measured at 6 bar

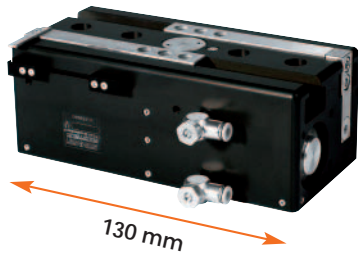
* Value determined with friction coefficient $\mu = 0.1$ and safety factor $\gamma = 2$

** High-temperature-resistant model (up to 150°C) add T to part number



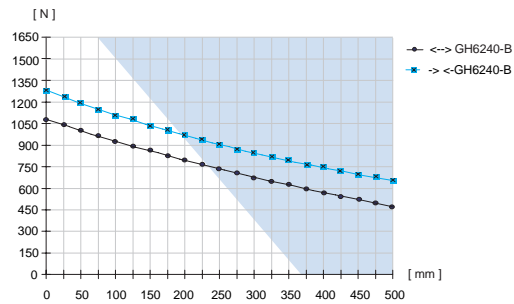
Subject to change without prior notice

Long Stroke **Gripper**



Gripping force diagram

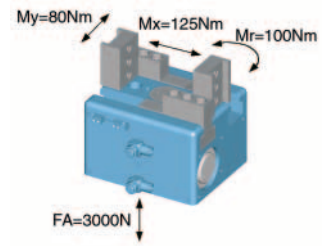
Gripping force as a function jaw length.



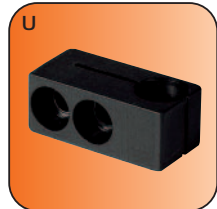
Colored area: increased wear and tear to be expected

Forces and Moments

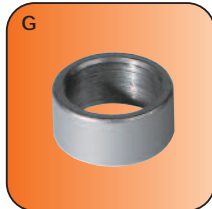
Max allowable forces and moments on jaws.



Included with purchase



Mounting block
Order no. KB8-28

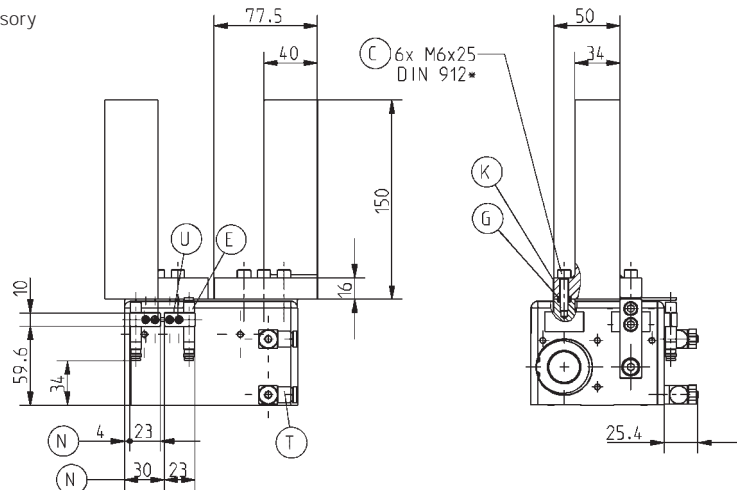


Centring sleeve
Order no. BDST41000



Pneumatic fittings
Order no. DRV1/8x8

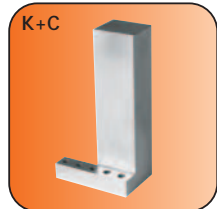
Accessory



(N) Sensing specific dimensions

* equivalent to DIN EN ISO 4762

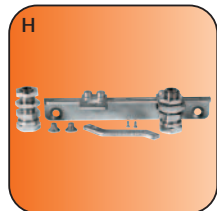
Accessory list



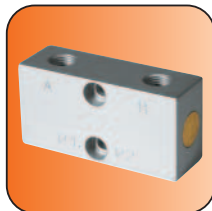
Universal jaw (set)
Order no. UB6200-B



Proximity switch
Order no. NJ8-E2S

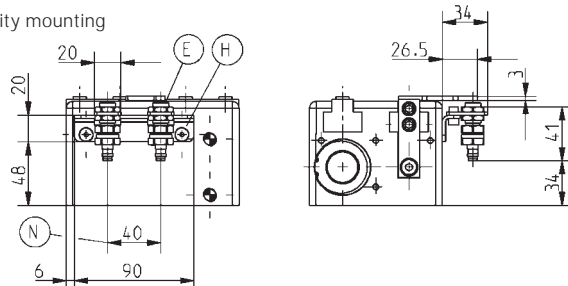


Alternate proximity bracket
Order no. KHA6240-B-8



Pressure safety valve
Order no. DSV1/8

Alternate proximity mounting



Subject to change without prior notice

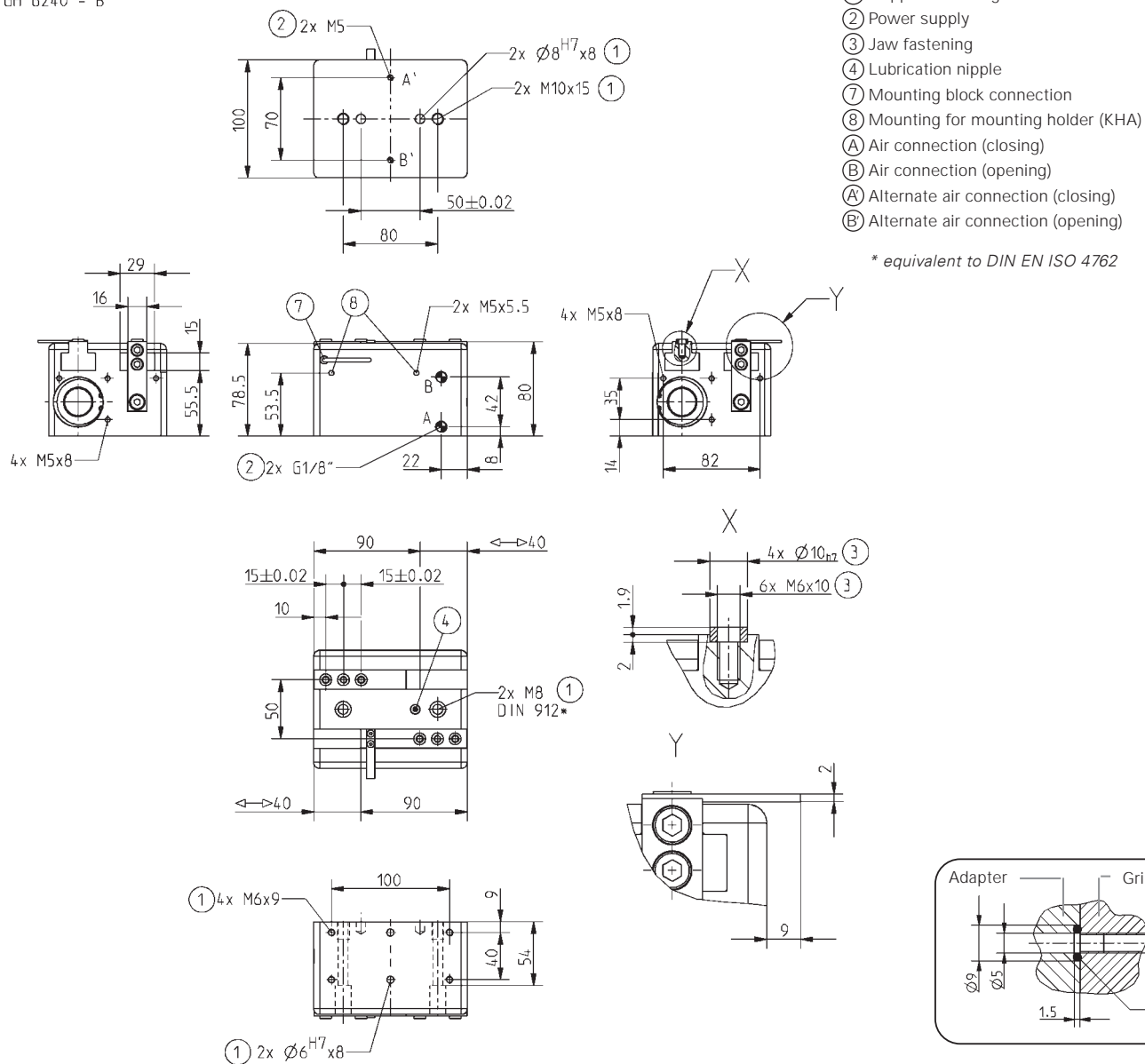
Order no.:	GH6240-B
Stroke per jaw [mm]:	40
Gripping force in closing [N]:	1275
Gripping force in opening [N]:	1060
Recommended workpiece weight [kg]*:	5,4
Closing time/opening time [s]:	0,3
Repeatability +/- [mm]:	0,05
Min./max. operating pressure [bar]:	3/8
Min./max. operating temperature [°C]**:	5/80
Air volume per cycle [cm³]:	183
Weight [kg]:	3,3

All data measured at 6 bar

* Value determined with friction coefficient $\mu = 0.1$ and safety factor $v = 2$

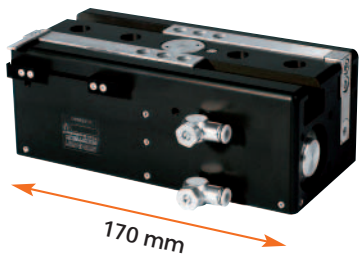
** High-temperature-resistant model (up to 150°C) add T to part number

GH 6240-B



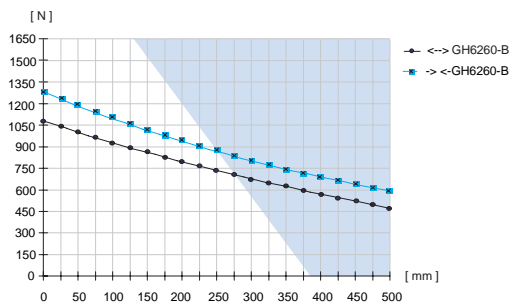
Subject to change without prior notice

Long Stroke **Gripper**



Gripping force diagram

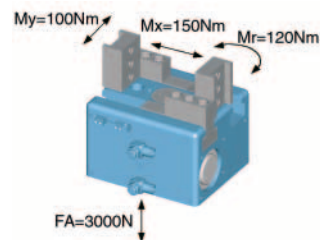
Gripping force as a function jaw length.



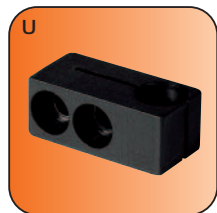
Colored area: increased wear and tear to be expected

Forces and Moments

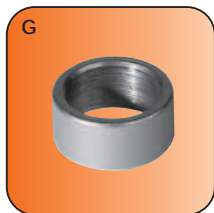
Max allowable forces and moments on jaws.



Included with purchase



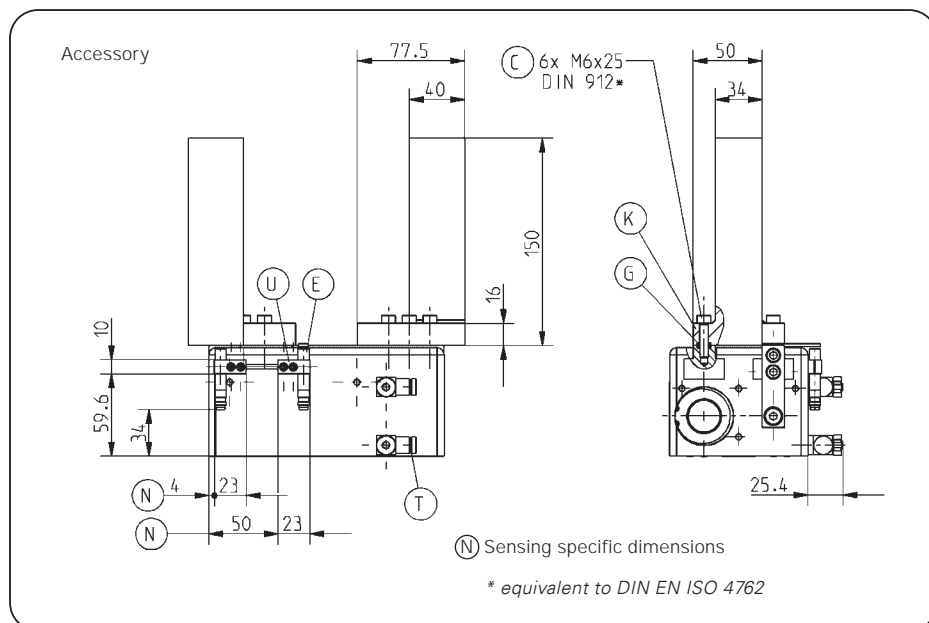
Mounting block
Order no. KB8-28



Centring sleeve
Order no. BDST41000



Pneumatic fittings
Order no. DRV1/8x8



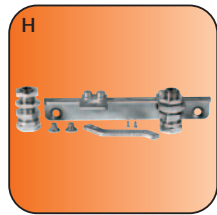
Accessory list



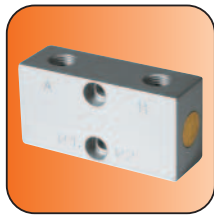
Universal jaw (set)
Order no. UB6200-B



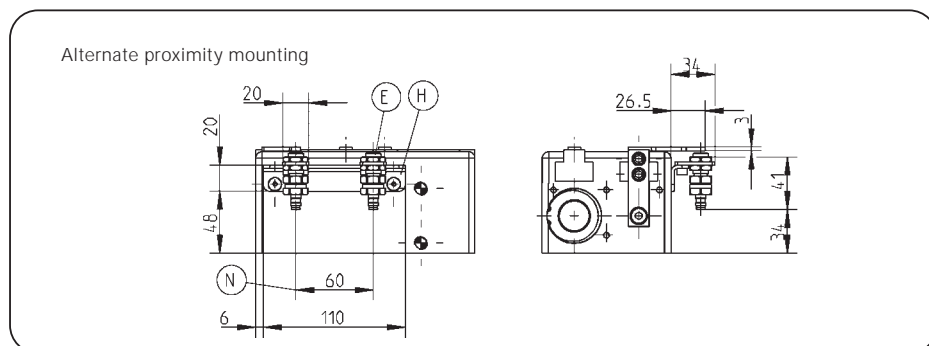
Proximity switch
Order no. NJ8-E2S



Alternate proximity bracket
Order no. KHA6260-B-8



Pressure safety valve
Order no. DSV1/8



Subject to change without prior notice

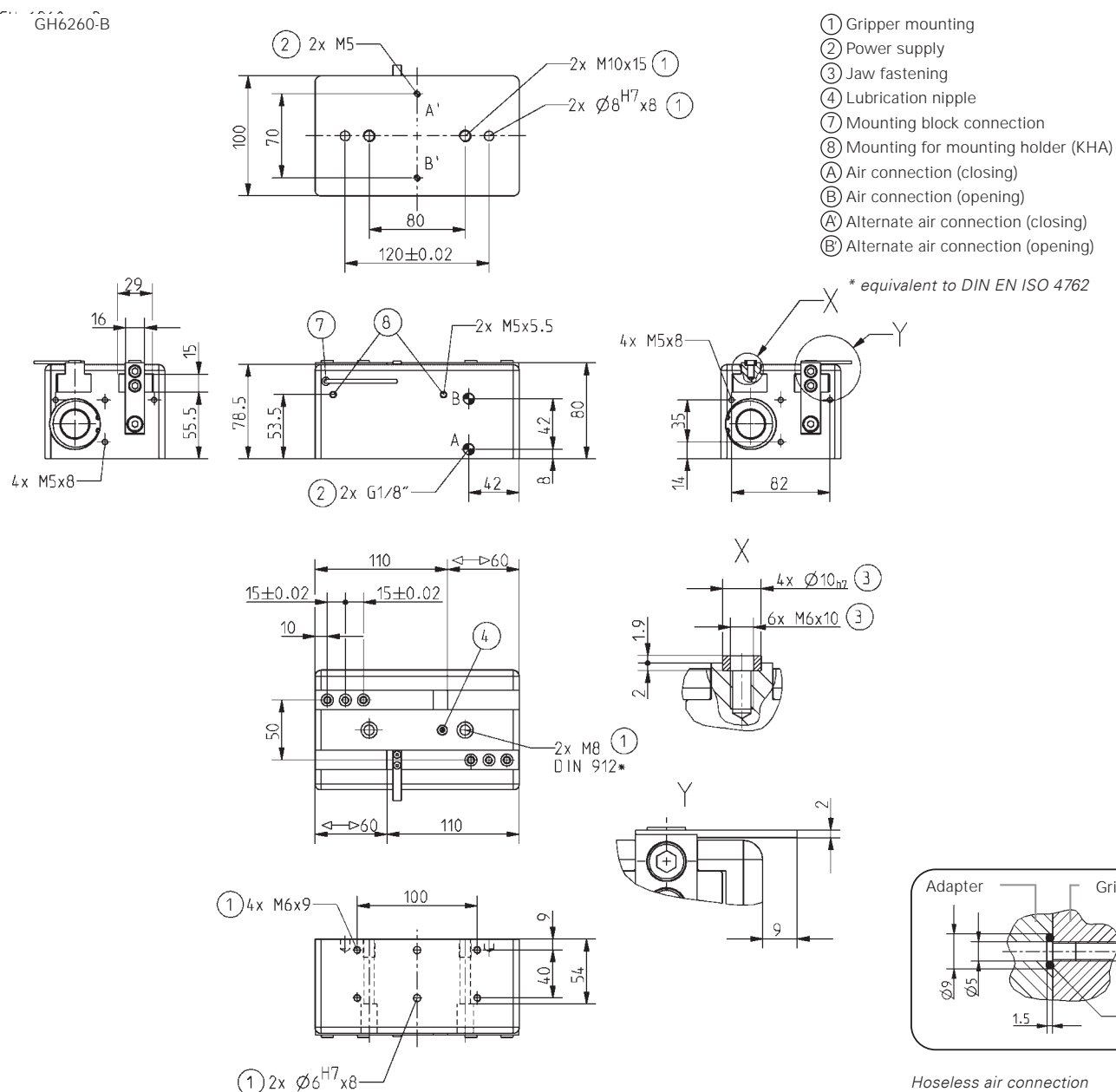
Order no.:	GH6260-B
Stroke per jaw [mm]:	60
Gripping force in closing [N]:	1275
Gripping force in opening [N]:	1060
Recommended workpiece weight [kg]*:	5,4
Closing time/opening time [s]:	0,35
Repeatability +/- [mm]:	0,05
Min./max. operating pressure [bar]:	3/8
Min./max. operating temperature [°C]**:	5/80
Air volume per cycle [cm³]:	275
Weight [kg]:	4,1

All data measured at 6 bar

* Value determined with friction coefficient $\mu = 0.1$ and safety factor $v = 2$

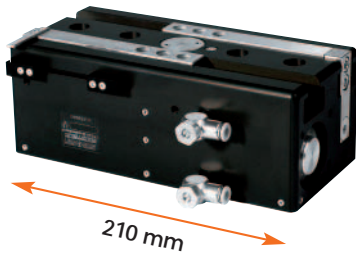
** High-temperature-resistant model (up to 150°C) add T to part number

GH6260-B



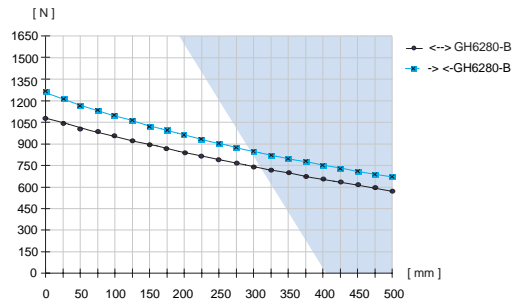
Subject to change without prior notice

Long Stroke **Gripper**



Gripping force diagram

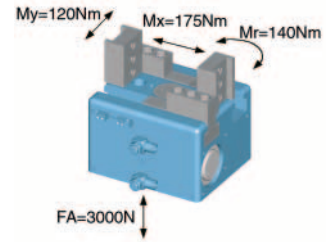
Gripping force as a function jaw length.



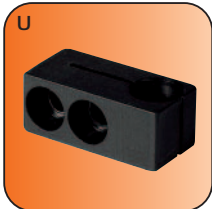
Colored area: increased wear and tear to be expected

Forces and Moments

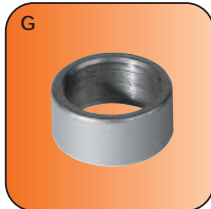
Max allowable forces and moments on jaws.



Included with purchase



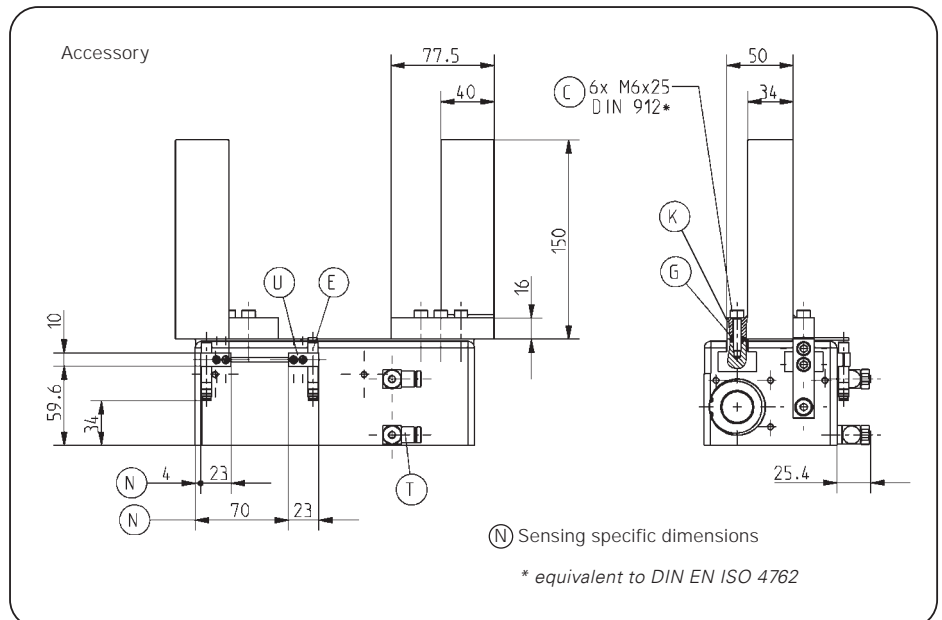
Mounting block
Order no. KB8-28



Centring sleeve
Order no. BDST41000



Pneumatic fittings
Order no. DRV1/8x8



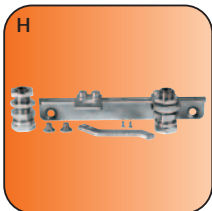
Accessory list



Universal jaw (set)
Order no. UB6200-B



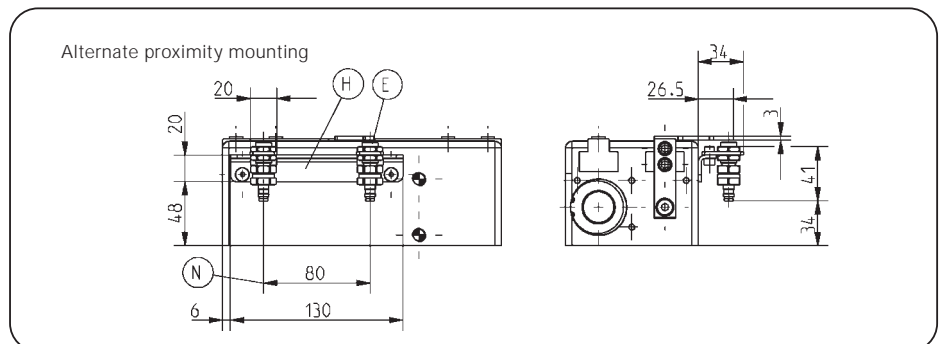
Proximity switch
Order no. NJ8-E2S



Alternate proximity bracket
Order no. KHA6280-B-8



Pressure safety valve
Order no. DSV1/8



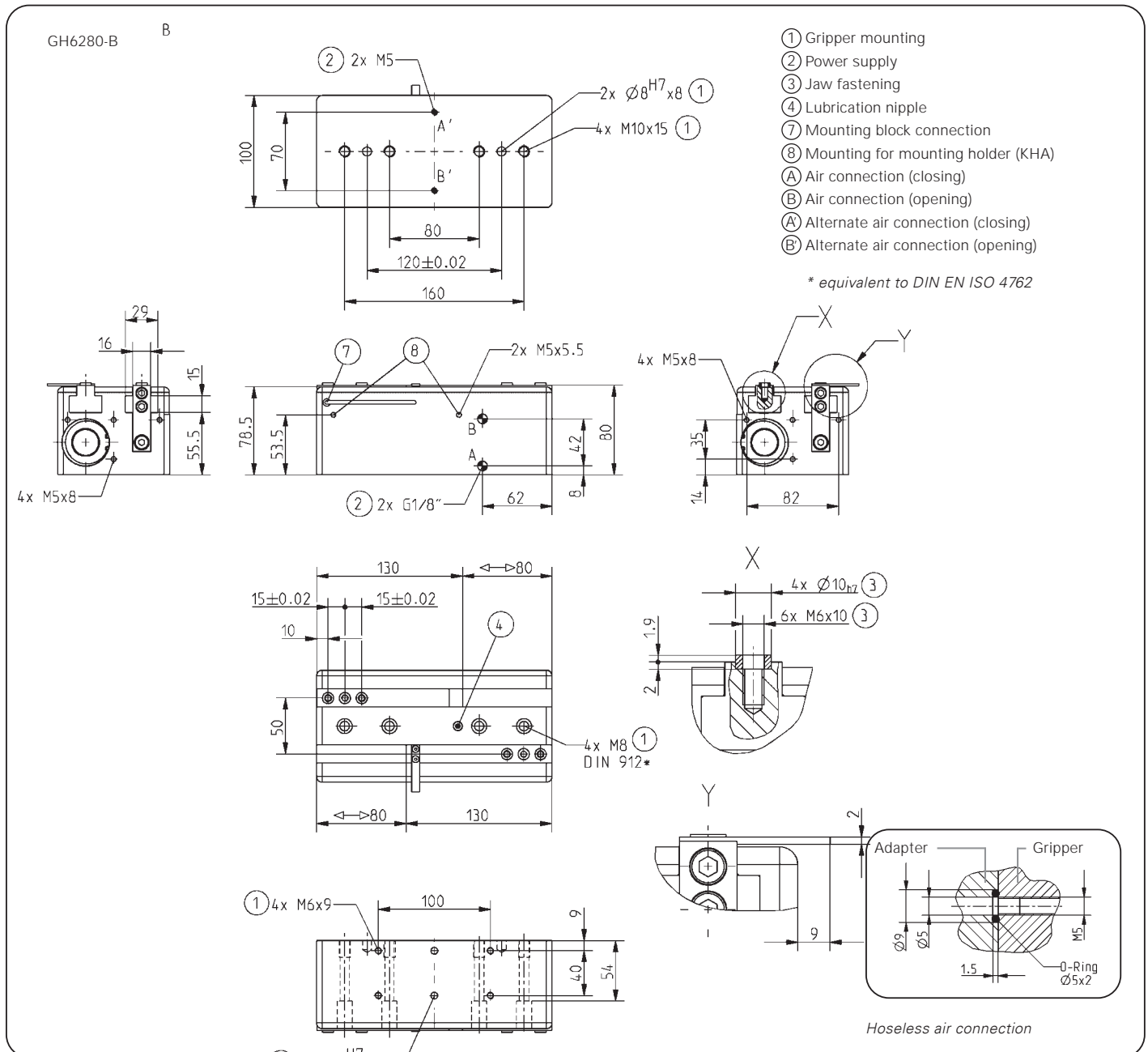
Subject to change without prior notice

Order no.:	GH6280-B
Stroke per jaw [mm]:	80
Gripping force in closing [N]:	1275
Gripping force in opening [N]:	1060
Recommended workpiece weight [kg]*:	5,4
Closing time/opening time [s]:	0,4
Repeatability +/- [mm]:	0,05
Min./max. operating pressure [bar]:	3/8
Min./max. operating temperature [°C]**:	5/80
Air volume per cycle [cm³]:	367
Weight [kg]:	4,8

All data measured at 6 bar

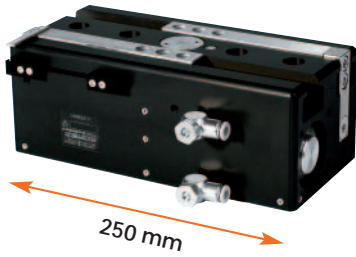
* Value determined with friction coefficient $\mu = 0.1$ and safety factor $v = 2$

** High-temperature-resistant model (up to 150°C) add T to part number



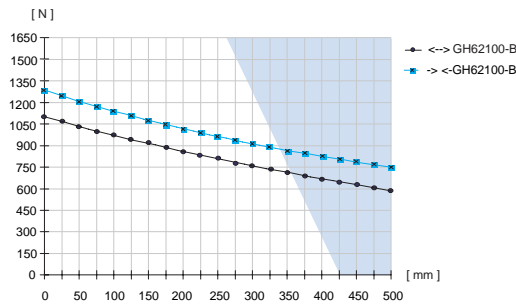
Subject to change without prior notice

Long Stroke **Gripper**



Gripping force diagram

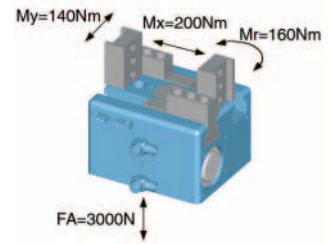
Gripping force as a function jaw length.



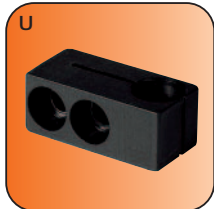
Colored area: increased wear and tear to be expected

Forces and Moments

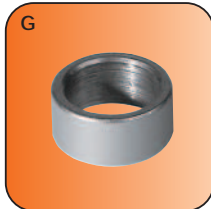
Max allowable forces and moments on jaws.



Included with purchase



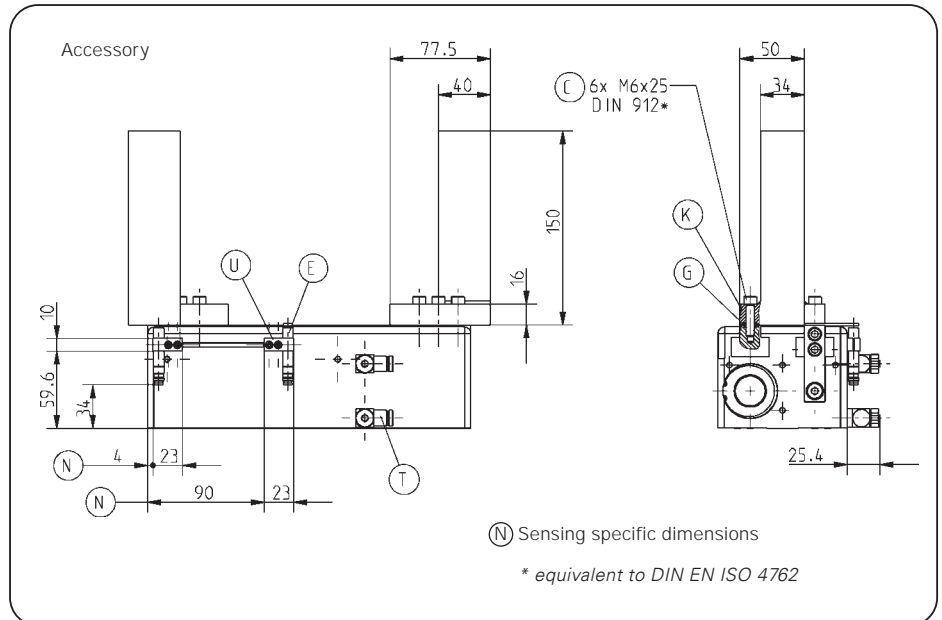
Mounting block
Order no. KB8-28



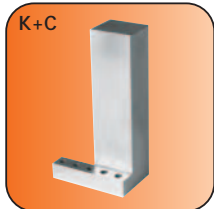
Centring sleeve
Order no. BDST41000



Pneumatic fittings
Order no. DRV1/8x8



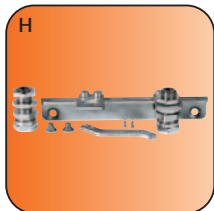
Accessory list



Universal jaw (set)
Order no. UB6200-B



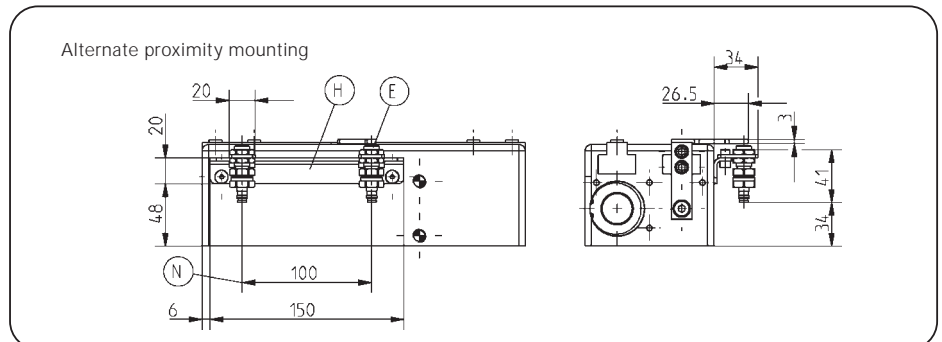
Proximity switch
Order no. NJ8-E2S



Alternate proximity bracket
Order no. KHA62100-B-8



Pressure safety valve
Order no. DSV1/8



Subject to change without prior notice

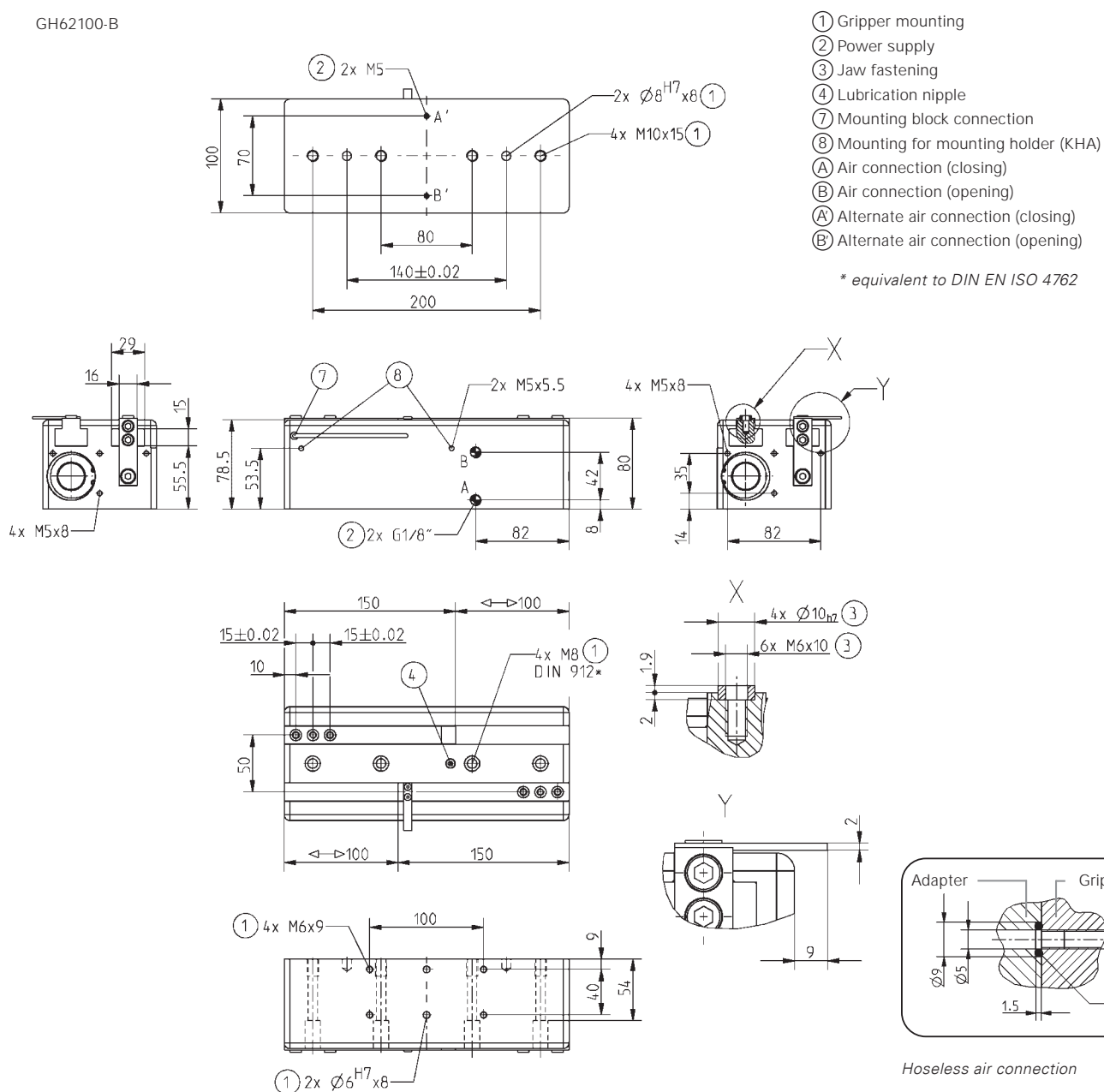
Order no.:	GH62100-B
Stroke per jaw [mm]:	100
Gripping force in closing [N]:	1275
Gripping force in opening [N]:	1060
Recommended workpiece weight [kg]*:	5,4
Closing time/opening time [s]:	0,45
Repeatability +/- [mm]:	0,05
Min./max. operating pressure [bar]:	3/8
Min./max. operating temperature [°C]**:	5/80
Air volume per cycle [cm³]:	458
Weight [kg]:	5,6

All data measured at 6 bar

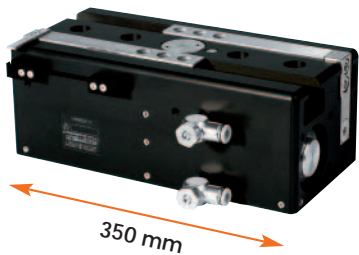
* Value determined with friction coefficient $\mu = 0.1$ and safety factor $v = 2$

** High-temperature-resistant model (up to 150°C) add T to part number

GH62100-B

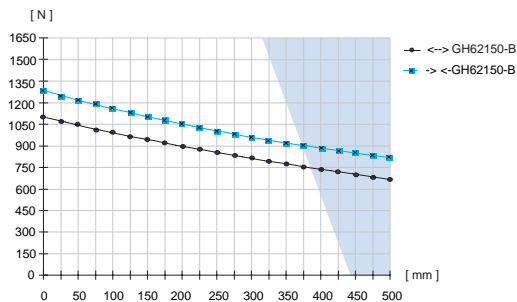


Long Stroke **Gripper**



Gripping force diagram

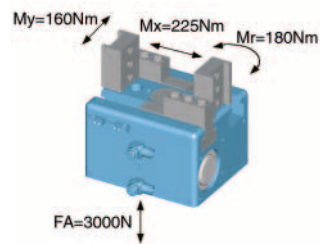
Gripping force as a function jaw length.



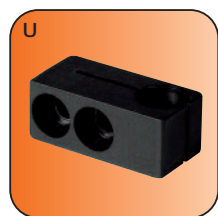
Colored area: increased wear and tear to be expected

Forces and Moments

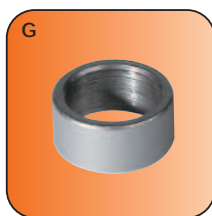
Max allowable forces and moments on jaws.



Included with purchase



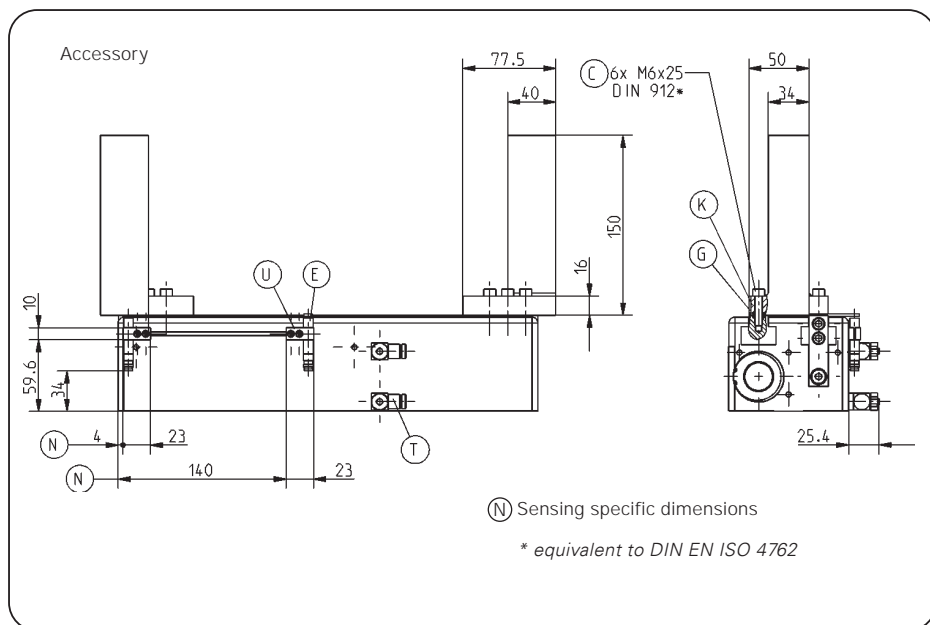
Mounting block
Order no. KB8-28



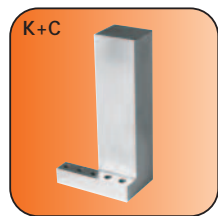
Centring sleeve
Order no. BDST41000



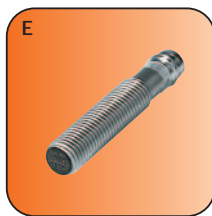
Pneumatic fittings
Order no. DRV1/8x8



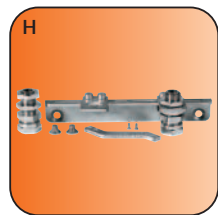
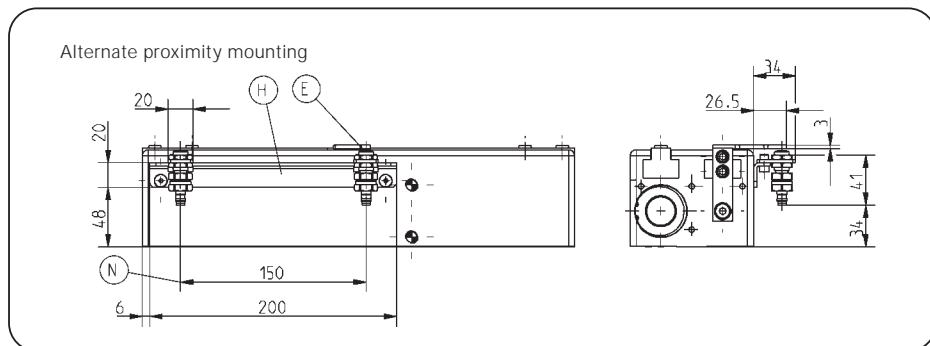
Accessory list



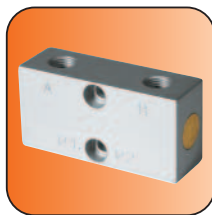
Universal jaw (set)
Order no. UB6200-B



Proximity switch
Order no. NJ8-E2S



Alternate proximity bracket
Order no. KHA62150-B-8



Pressure safety valve
Order no. DSV1/8

Subject to change without prior notice

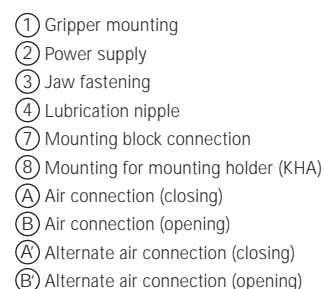
GH62150-B

All data measured at 6 bar

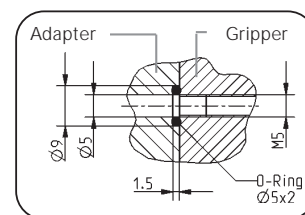
* Value determined with friction coefficient $\mu = 0.1$ and safety factor $\gamma = 2$

** High-temperature-resistant model (up to 150°C) add T to part number

GH62150-B



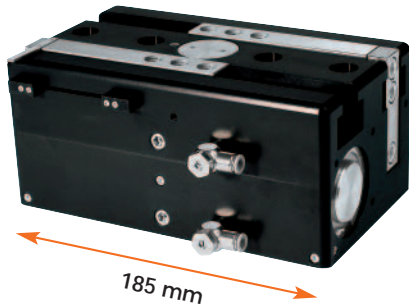
* equivalent to DIN EN ISO 4762



Hoseless air connection

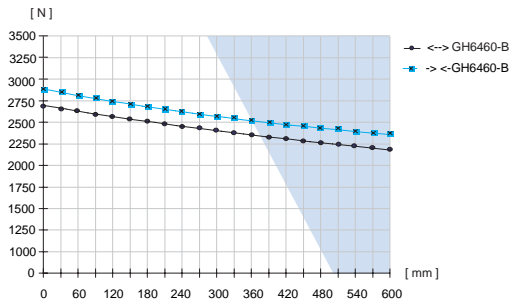
Subject to change without prior notice

Long Stroke **Gripper**



Gripping force diagram

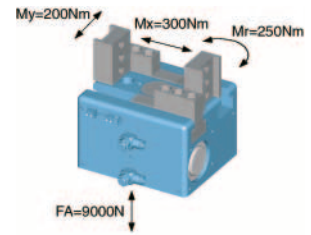
Gripping force as a function jaw length.



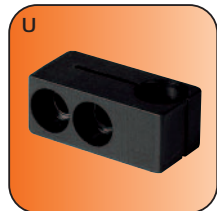
Colored area: increased wear and tear to be expected

Forces and Moments

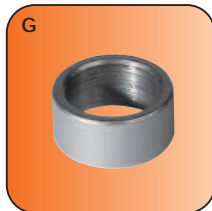
Max allowable forces and moments on jaws.



Included with purchase



Mounting block
Order no. KB8-28

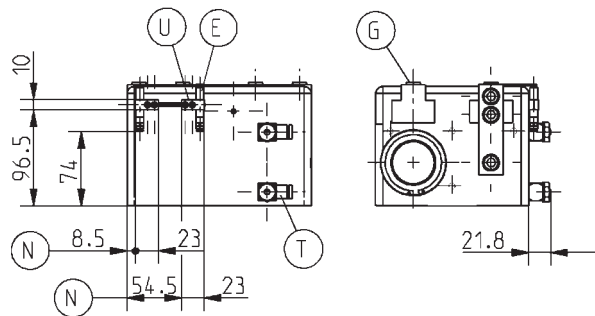


Centring sleeve
Order no. BDST42000



Pneumatic fittings
Order no. DRV1/4x8

Accessory



(N) Sensing specific dimensions

* equivalent to DIN EN ISO 4762

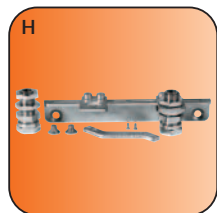
Accessory list



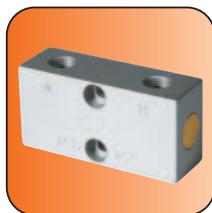
Proximity switch
Order no. NJ8-E2S



Cable angled plug
Order no. KAW500

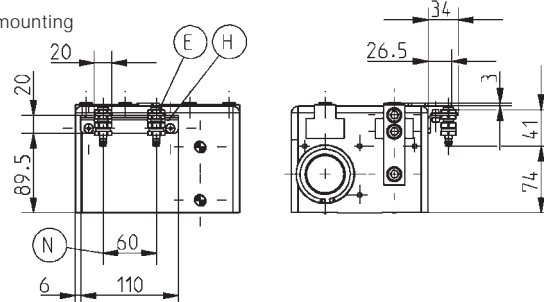


Alternate proximity bracket
Order no. KHA6460-B-8



Pressure safety valve
Order no. DSV1/8

Alternate proximity mounting



Subject to change without prior notice



Order no.:	GH6460-B
Stroke per jaw [mm]:	60
Gripping force in closing [N]:	3250
Gripping force in opening [N]:	3000
Recommended workpiece weight [kg]*:	15,3
Closing time/opening time [s]:	0,4
Repeatability +/- [mm]:	0,05
Min./max. operating pressure [bar]:	3/8
Min./max. operating temperature [°C]**:	5/80
Air volume per cycle [cm³]:	400
Weight [kg]:	10,4

All data measured at 6 bar

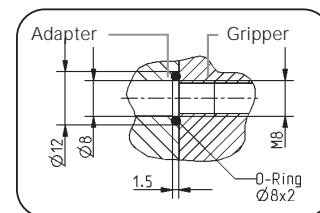
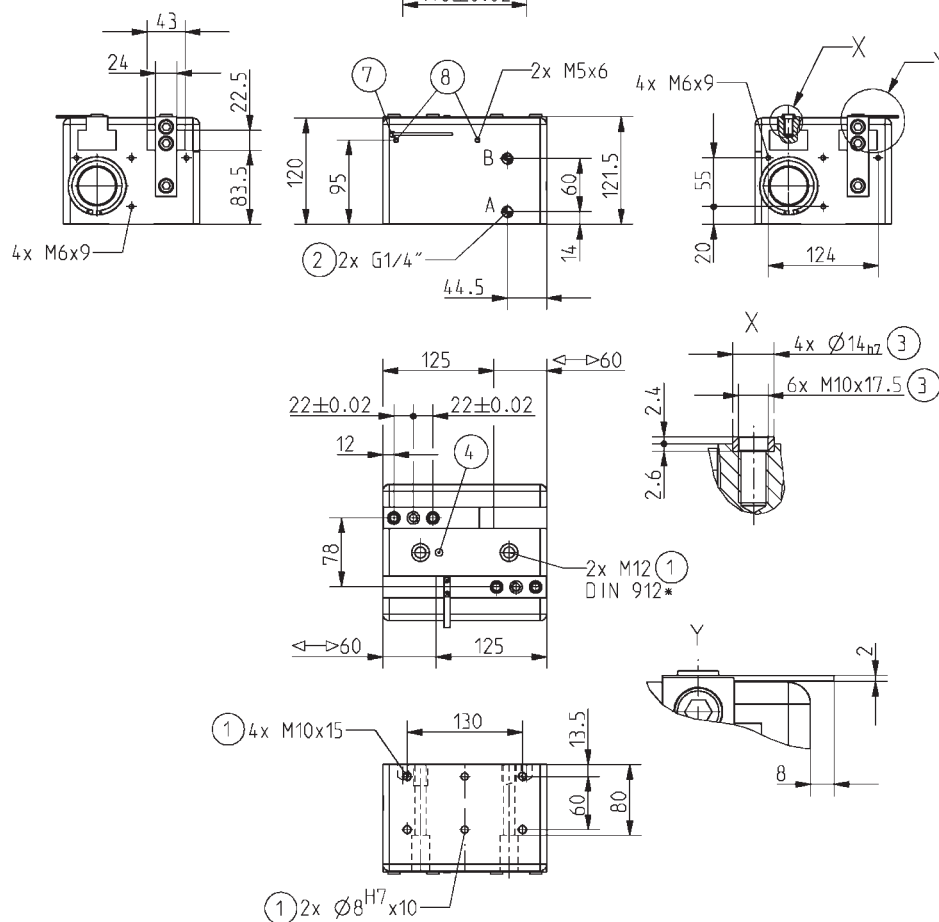
* Value determined with friction coefficient $\mu = 0.1$ and safety factor $v = 2$

** High-temperature-resistant model (up to 150°C) add T to part number

GH6460-B

- ① Gripper mounting
- ② Power supply
- ③ Jaw fastening
- ④ Lubrication nipple
- ⑦ Mounting block connection
- ⑧ Mounting for mounting holder (KHA)
- A Air connection (closing)
- B Air connection (opening)
- A Alternate air connection (closing)
- B Alternate air connection (opening)

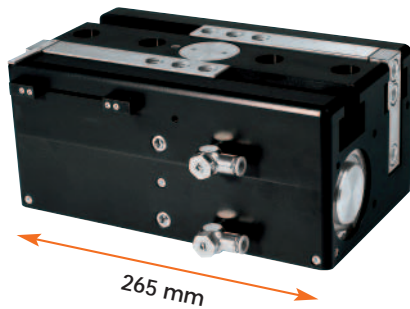
* equivalent to DIN EN ISO 4762



Hoseless air connection

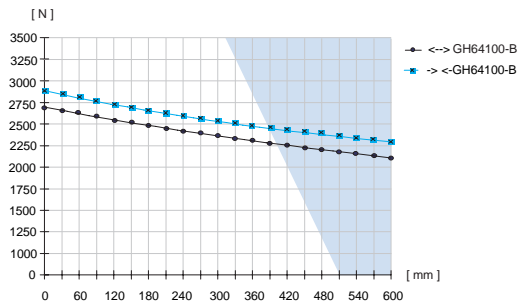
Subject to change without prior notice

Long Stroke **Gripper**



Gripping force diagram

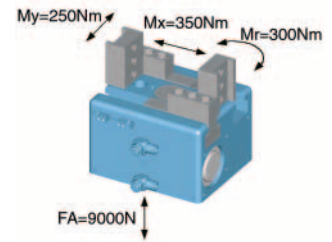
Gripping force as a function jaw length.



Colored area: increased wear and tear to be expected

Forces and Moments

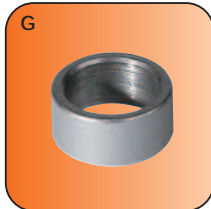
Max allowable forces and moments on jaws.



Included with purchase



Mounting block
Order no. KB8-28

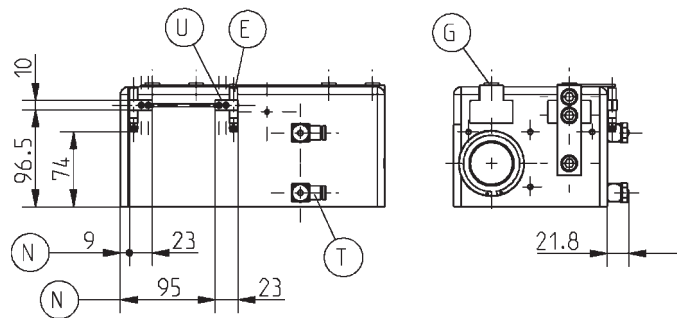


Centring sleeve
Order no. BDST42000



Pneumatic fittings
Order no. DRV1/4x8

Accessory



(N) Sensing specific dimensions

* equivalent to DIN EN ISO 4762

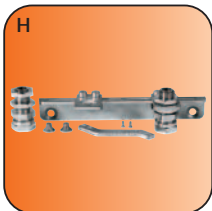
Accessory list



Proximity switch
Order no. NJ8-E2S



Cable angled plug
Order no. KAW500

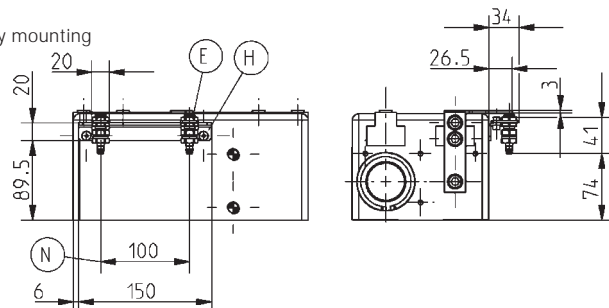


Alternate proximity bracket
Order no. KHA64100-B-8



Pressure safety valve
Order no. DSV1/8

Alternate proximity mounting



Subject to change without prior notice

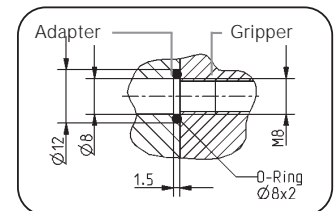
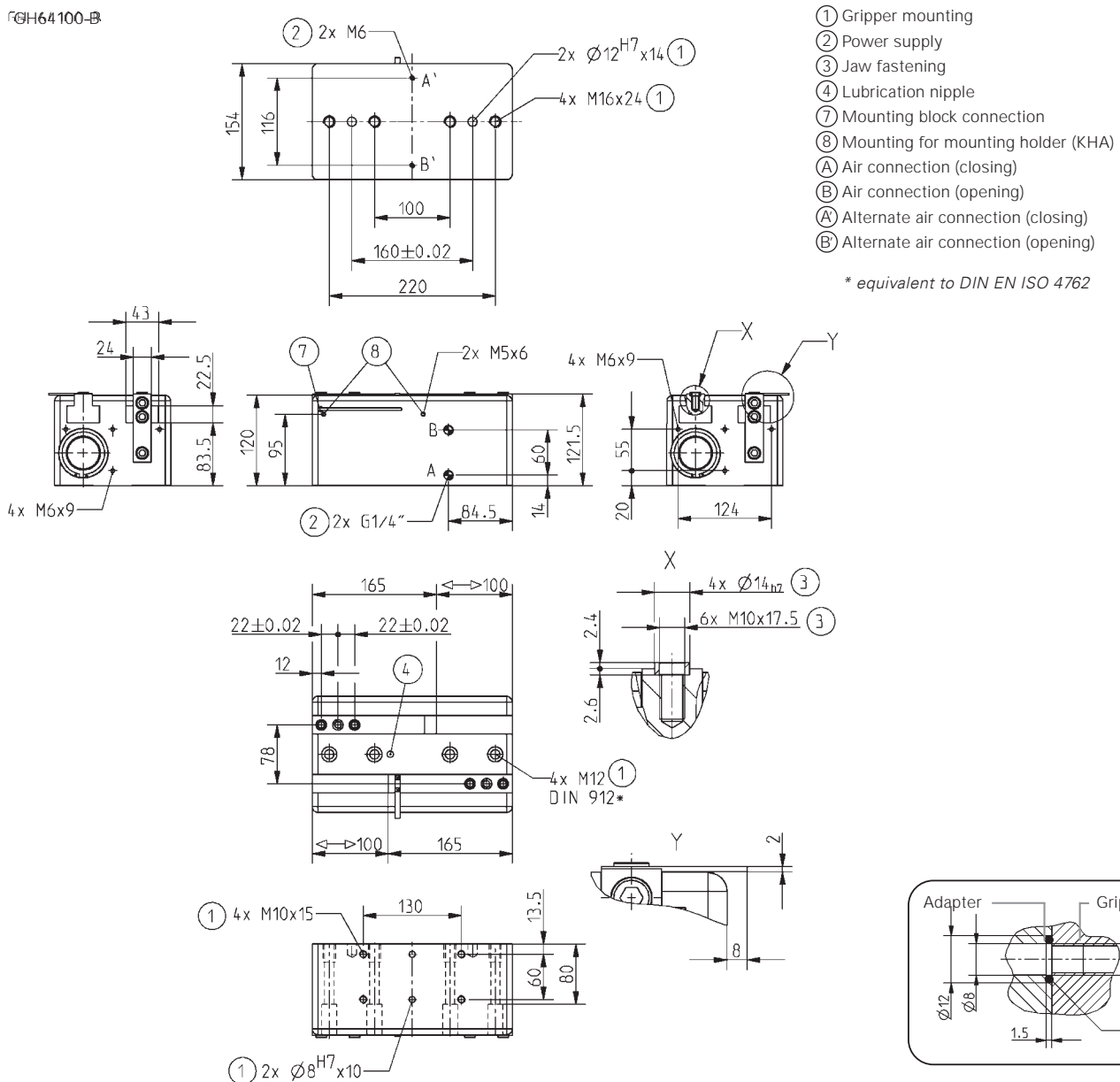
Order no.:	GH64100-B
Stroke per jaw [mm]:	100
Gripping force in closing [N]:	3250
Gripping force in opening [N]:	3000
Recommended workpiece weight [kg]*:	15,3
Closing time/opening time [s]:	0,7
Repeatability +/- [mm]:	0,05
Min./max. operating pressure [bar]:	3/8
Min./max. operating temperature [°C]**:	5/80
Air volume per cycle [cm³]:	683
Weight [kg]:	13,7

All data measured at 6 bar

* Value determined with friction coefficient $\mu = 0.1$ and safety factor $v = 2$

** High-temperature-resistant model (up to 150°C) add T to part number

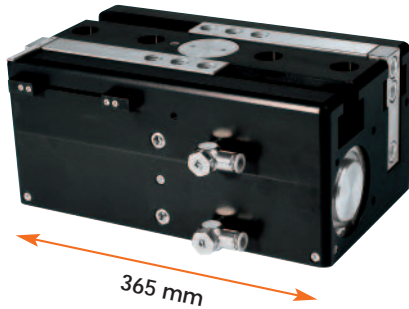
GH64100-B



Hoseless air connection

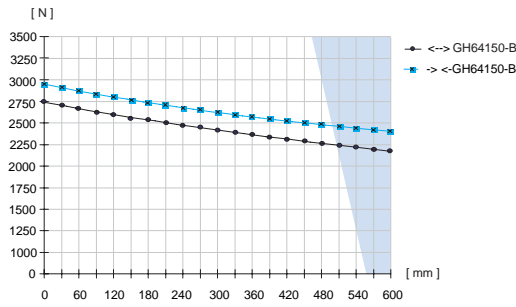
Subject to change without prior notice

Long Stroke **Gripper**



Gripping force diagram

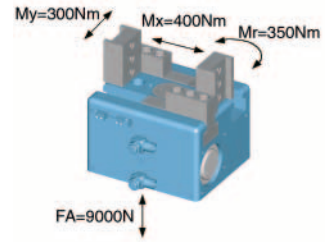
Gripping force as a function jaw length.



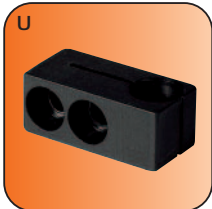
Colored area: increased wear and tear to be expected

Forces and Moments

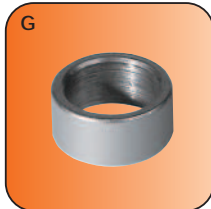
Max allowable forces and moments on jaws.



Included with purchase



Mounting block
Order no. KB8-28

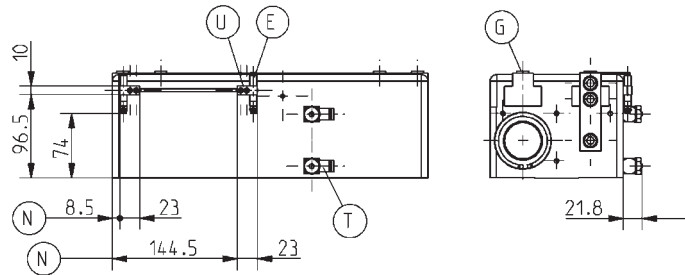


Centring sleeve
Order no. BDST42000



Pneumatic fittings
Order no. DRV1/4x8

Accessory



(N) Sensing specific dimensions

* equivalent to DIN EN ISO 4762

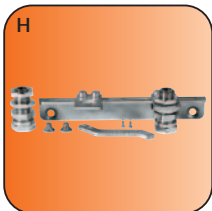
Accessory list



Proximity switch
Order no. NJ8-E2S



Cable angled plug
Order no. KAW500

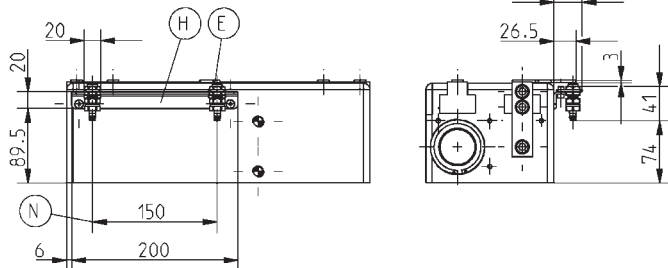


Alternate proximity bracket
Order no. KHA64150-B-8



Pressure safety valve
Order no. DSV1/8

Alternate proximity mounting



Subject to change without prior notice

GH64150-B

All data measured at 6 bar

* Value determined with friction coefficient $\mu = 0.1$ and safety factor $\nu = 2$

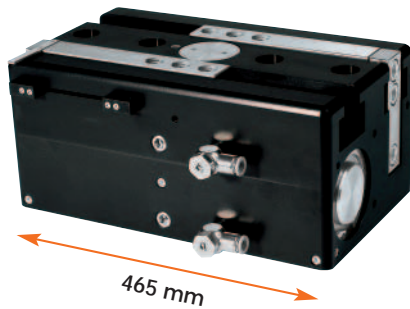
**** High-temperature-resistant model (up to 150°C) add T to part number**



Hoseless air connection

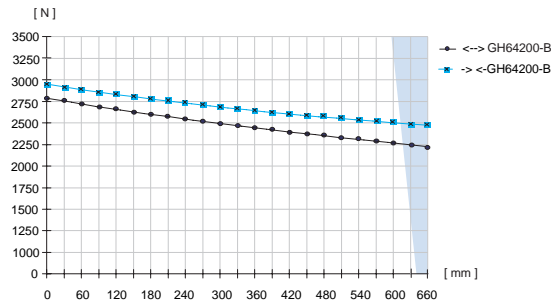
Subject to change without prior notice

Long Stroke **Gripper**



Gripping force diagram

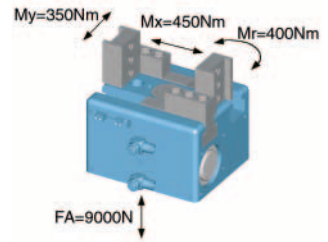
Gripping force as a function jaw length.



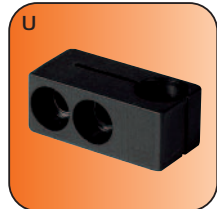
Colored area: increased wear and tear to be expected

Forces and Moments

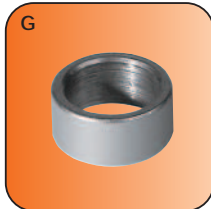
Max allowable forces and moments on jaws.



Included with purchase



Mounting block
Order no. KB8-28

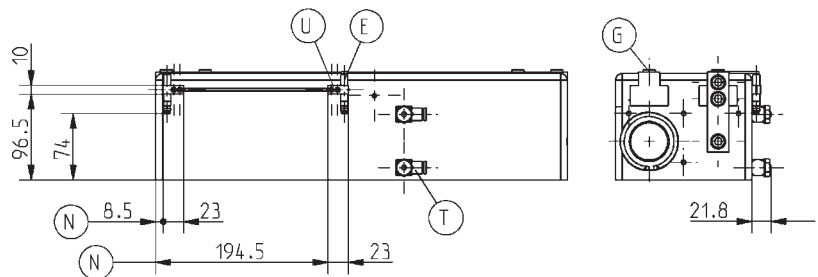


Centring sleeve
Order no. BDST42000



Pneumatic fittings
Order no. DRV1/4x8

Accessory



(N) Sensing specific dimensions

* equivalent to DIN EN ISO 4762

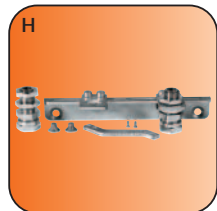
Accessory list



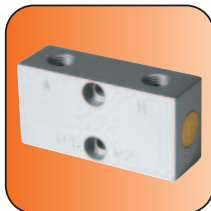
Proximity switch
Order no. NJ8-E2S



Cable angled plug
Order no. KAW500

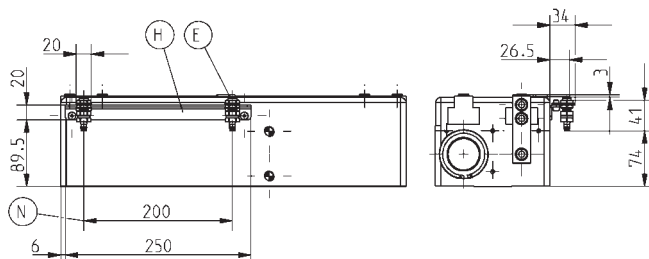


Alternate proximity bracket
Order no. KHA64200-B-8



Pressure safety valve
Order no. DSV1/8

Alternate proximity mounting



Subject to change without prior notice

GH64200-B

All data measured at 6 bar

* Value determined with friction coefficient $\mu = 0.1$ and safety factor $\gamma = 2$

** High-temperature-resistant model (up to 150°C) add T to part number



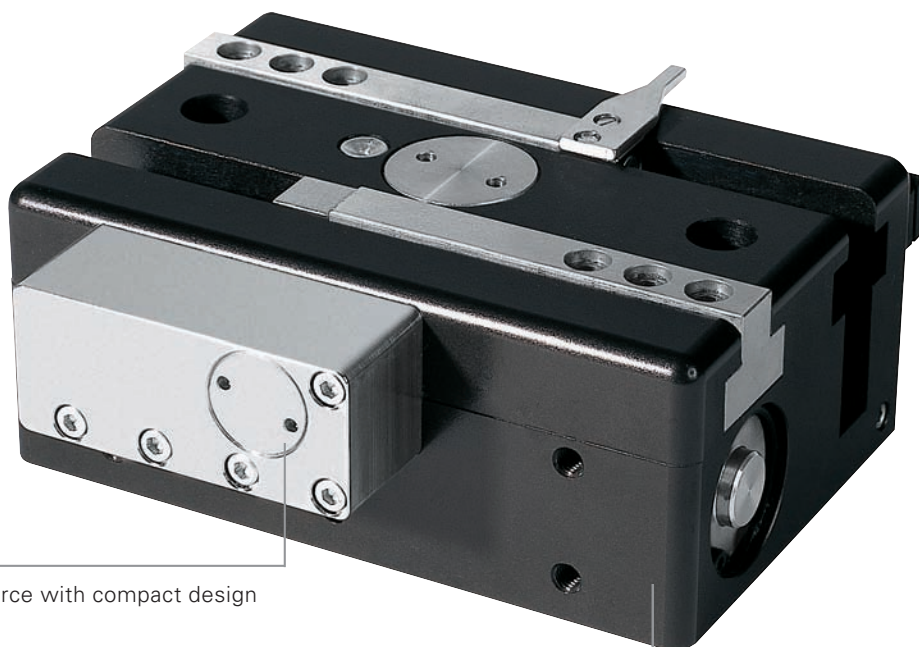
Hoseless air connection

Subject to change without prior notice

Long Stroke **Gripper**

Features

- Workpiece safety* under drop in pressure via clamping element
- Dimensions based on standard GH6000-B series gripper
- Long stroke, up to 200 mm per jaw
- Stable T groove guide, completely guided over the entire length of the housing
- For gripping jaw with a length of up to 600 mm
- Compact design, because cylinders and guides are arranged side by side



Clamping element

- highest retention force with compact design

Standard gripper

- except for side screw-on option, all dimensions match the standard gripper

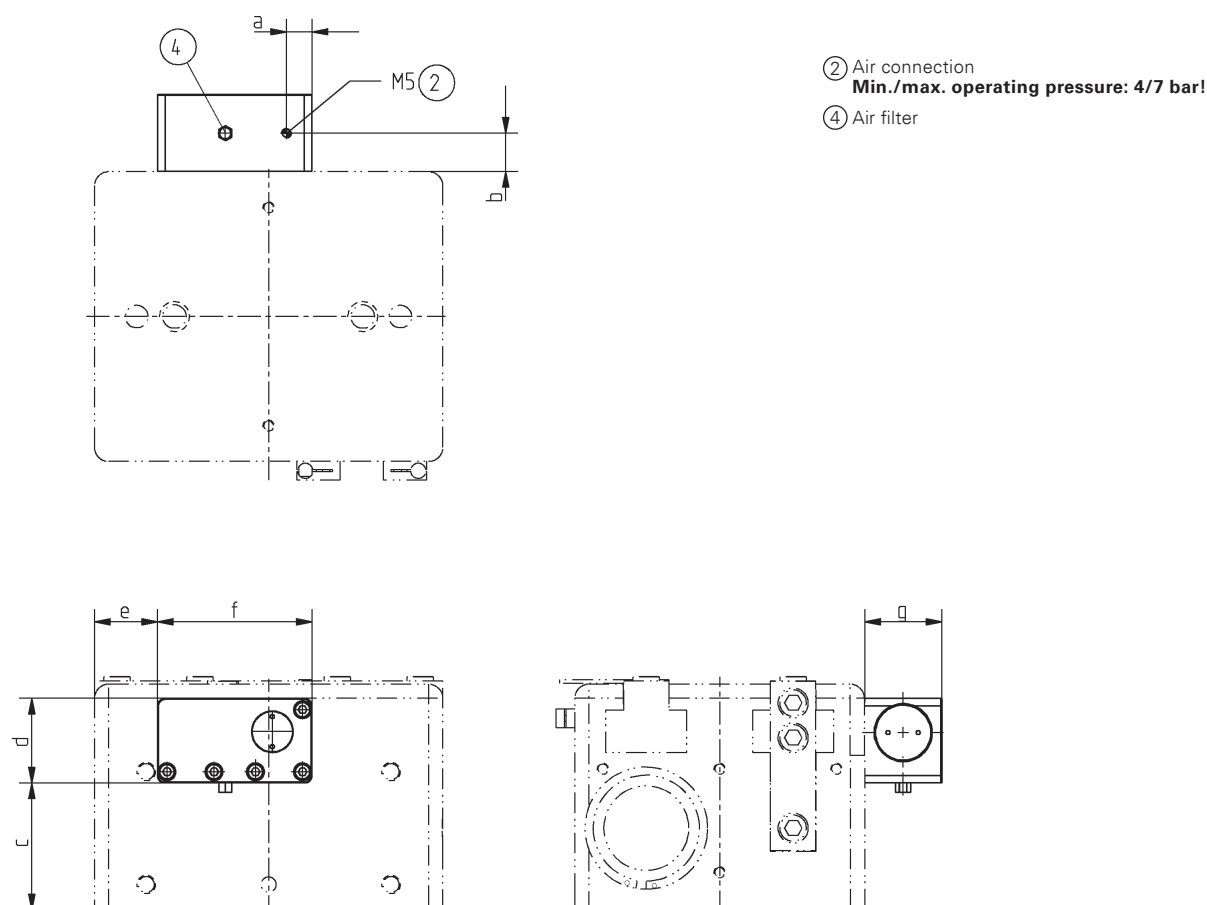
* positive locking gripping jaw design required

Order no.:	GHK6140	GHK6160	GHK6180
Dimension a [mm]:	9,6	9,6	9,6
Dimension b [mm]:	10,5	10,5	10,5
Dimension c [mm]:	21,7	21,7	21,7
Dimension d [mm]:	25	25	25
Dimension e [mm]:	17,5	37,5	57,5
Dimension f [mm]:	58	58	58
Dimension g [mm]:	22	22	22

Order no.:	GHK6240	GHK6260	GHK6280	GHK62100	GHK62150
Dimension a [mm]:	15	15	15	15	15
Dimension b [mm]:	14	14	14	14	14
Dimension c [mm]:	39,5	39,5	39,5	39,5	39,5
Dimension d [mm]:	35	35	35	35	35
Dimension e [mm]:	20	40	60	80	130
Dimension f [mm]:	66	66	66	66	66
Dimension g [mm]:	27	27	27	27	27

Order no.:	GHK6460	GHK64100	GHK64150	GHK64200
Dimension a [mm]:	13,5	13,5	13,5	13,5
Dimension b [mm]:	20,5	20,5	20,5	20,5
Dimension c [mm]:	67,4	67,4	67,4	67,4
Dimension d [mm]:	45	45	45	45
Dimension e [mm]:	33,5	73,5	123,5	173,5
Dimension f [mm]:	82	82	82	82
Dimension g [mm]:	41	41	41	41

For unlisted dimensions, see standard gripper

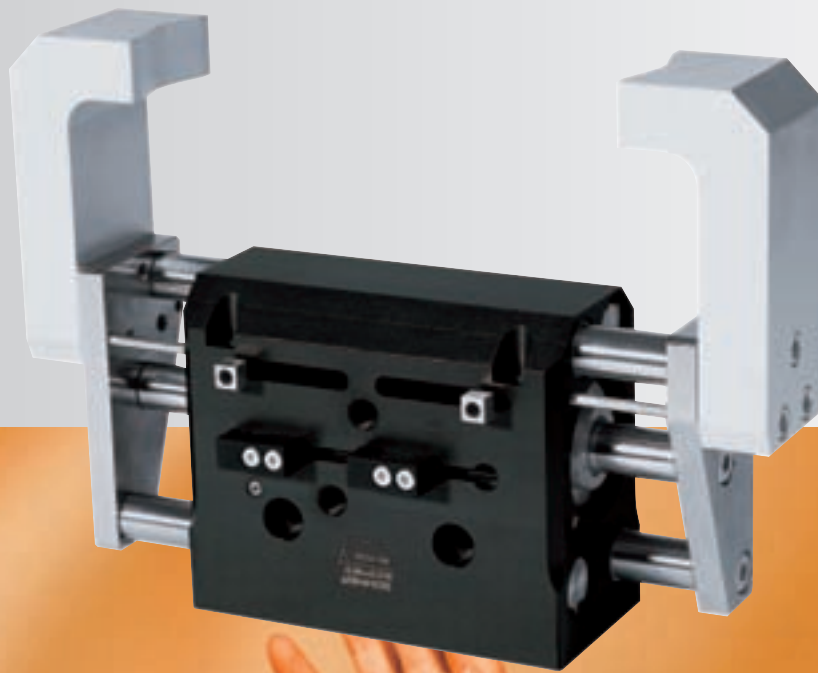


Subject to change without prior notice



Long Stroke **Grippers**

pneumatic



GH5000 Series

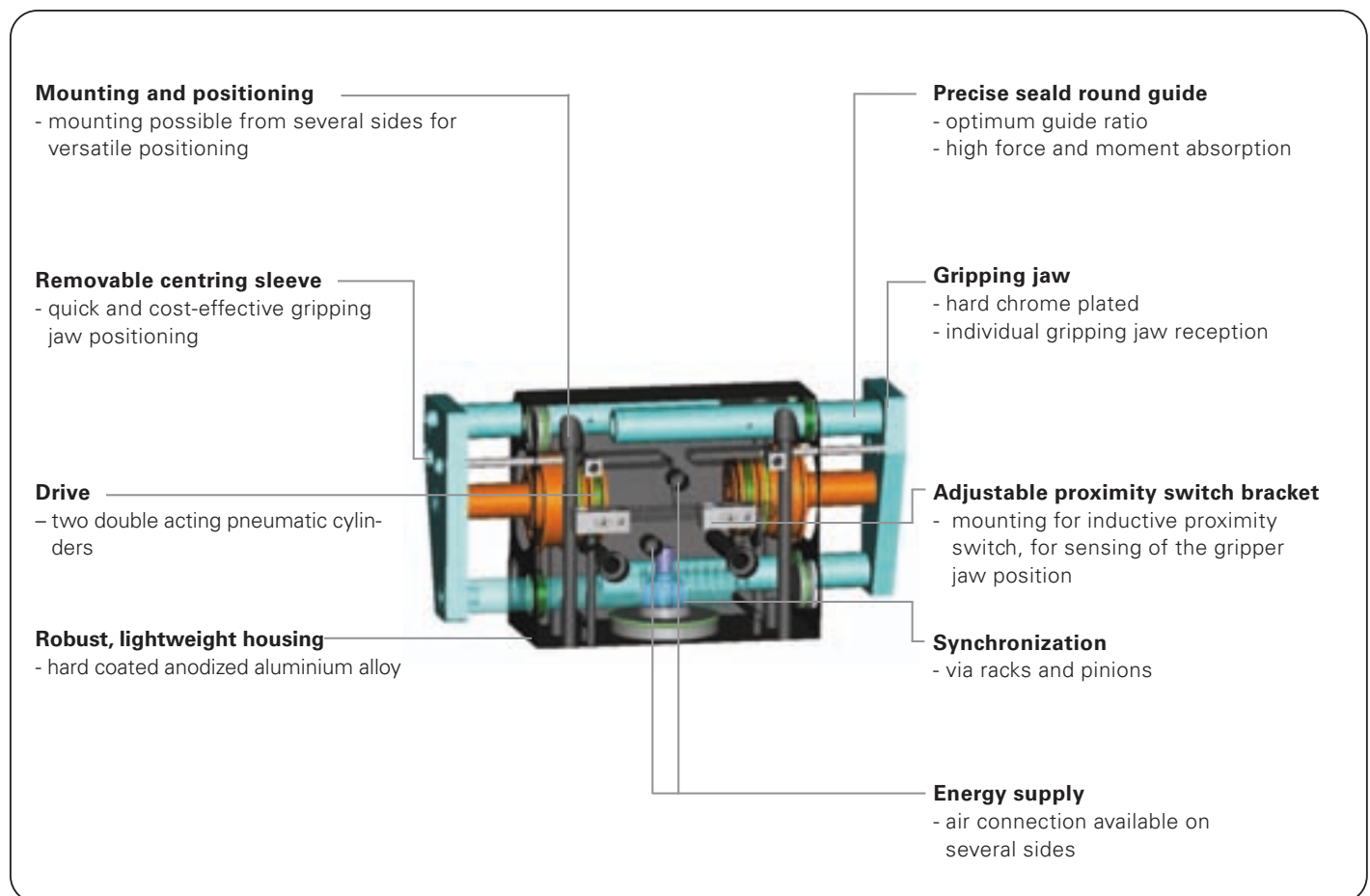
SOMMER
automatic

Long Stroke **Gripper**

➤ Features

- robust and resistant to rotation through triple round guides
- maximum power through 2x direct drive
- can be used in dirty/wet environments due to sealed round guides

Functional diagram





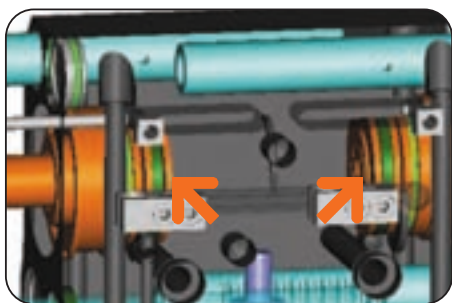
Terms

- Gripping force:** arithmetic sum of the individual forces occurring at the jaws
- Closing/opening time:** required time for the gripper jaws to cover the maximum stroke distance
- Repeatability:** at end stops after 50/100 consecutive cycles
- Gripping force safety device:** by using a pressure safety valve (order no. DSV1/8), which prevents loss of tension force if there is a drop in pressure. The inevitable leakage in the pneumatic circuit restricts the time of this type of gripping force safety.
- Cycle:** one complete movement of the piston forward and back
- Maintenance:** recommended at 1.5 mil. cycles
(please see the owner's manual for conditions, download from www.sommer-automatic.com)
- long lifespan

Model guide

Order no.	Stroke per jaw	Gripping force in opening	Gripping force in closing	Self-locking via
GH5230	30 mm	1050 N	800 N	Pressure safety valve
GH5260	60 mm	1050 N	800 N	Pressure safety valve

Long Stroke **Gripper**



Drive

Two double acting pneumatic cylinders

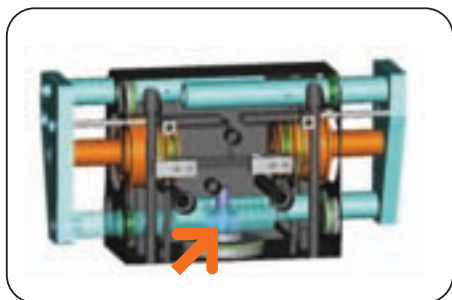
- maximum power of both opening and closing
- high gripping force up to 1050 N



Guidance

Triple round guide

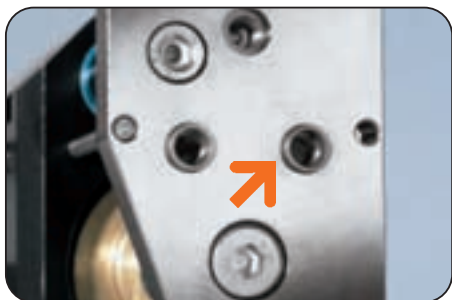
- high precision
- overlapping
- sealed



Power transfer

Direct drive synchronized via pinion gear

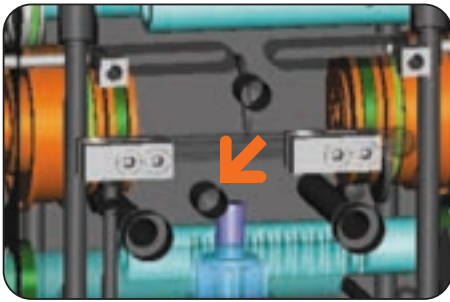
- maximum gripping force
- self centering
- synchronized
- high repeat accuracy



Gripping jaw positioning

individual gripping jaw positioning via centering sleeves

- precise positioning of individual gripping jaws
- quick, cost-effective and therefore economical jaw changing
- space saving design



Connections

Energy supply, attachment and positioning possibilities

Adaptable to multiple mounting configurations

- optimum integration into the application through versatile mounting-options
- tubeless directly connected possibility (no additional hoses needed)
- flow control air connection used for speed regulation

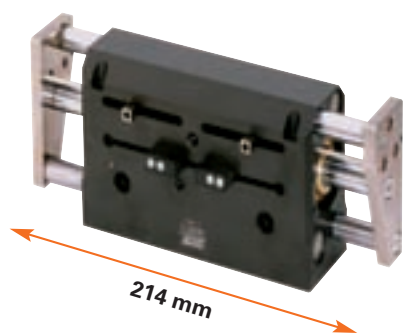


Position sensing

of gripping-position via inductive proximity switch

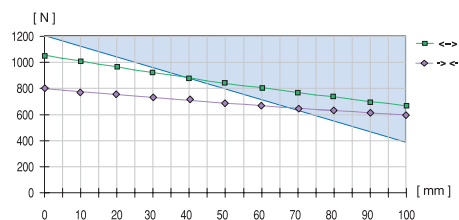
- compact design
- for inductive proximity switch with 8 mm diameter

Long Stroke **Gripper**



Gripping force diagram

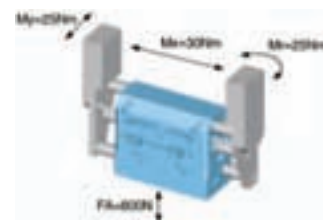
Gripping force as a function jaw length.



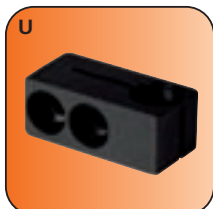
Colored area: increased wear and tear to be expected measured from top edge of housing ♦

Forces and Moments

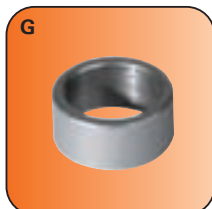
Max allowable forces and moments on jaws.



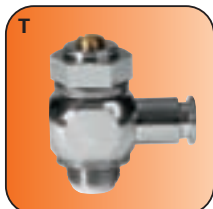
Included with purchase



Mounting block
Order no. KB8-29



Centring sleeve
Order no. BDST40800



Pneumatic fittings
Order no. DRV1/8x6

Accessory list



Proximity switch
Order no. NJ8-E2S



Cable angled plug
Order no. KAW500

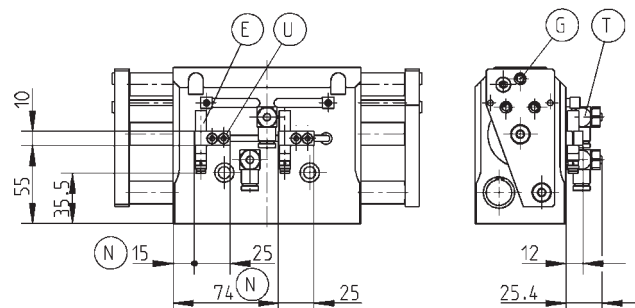


Plug 3- pole
Order no. S12-G-3



Pressure safety valve
Order no. DSV1/8

Accessory



(N) Sensing specific dimensions

Subject to change without prior notice



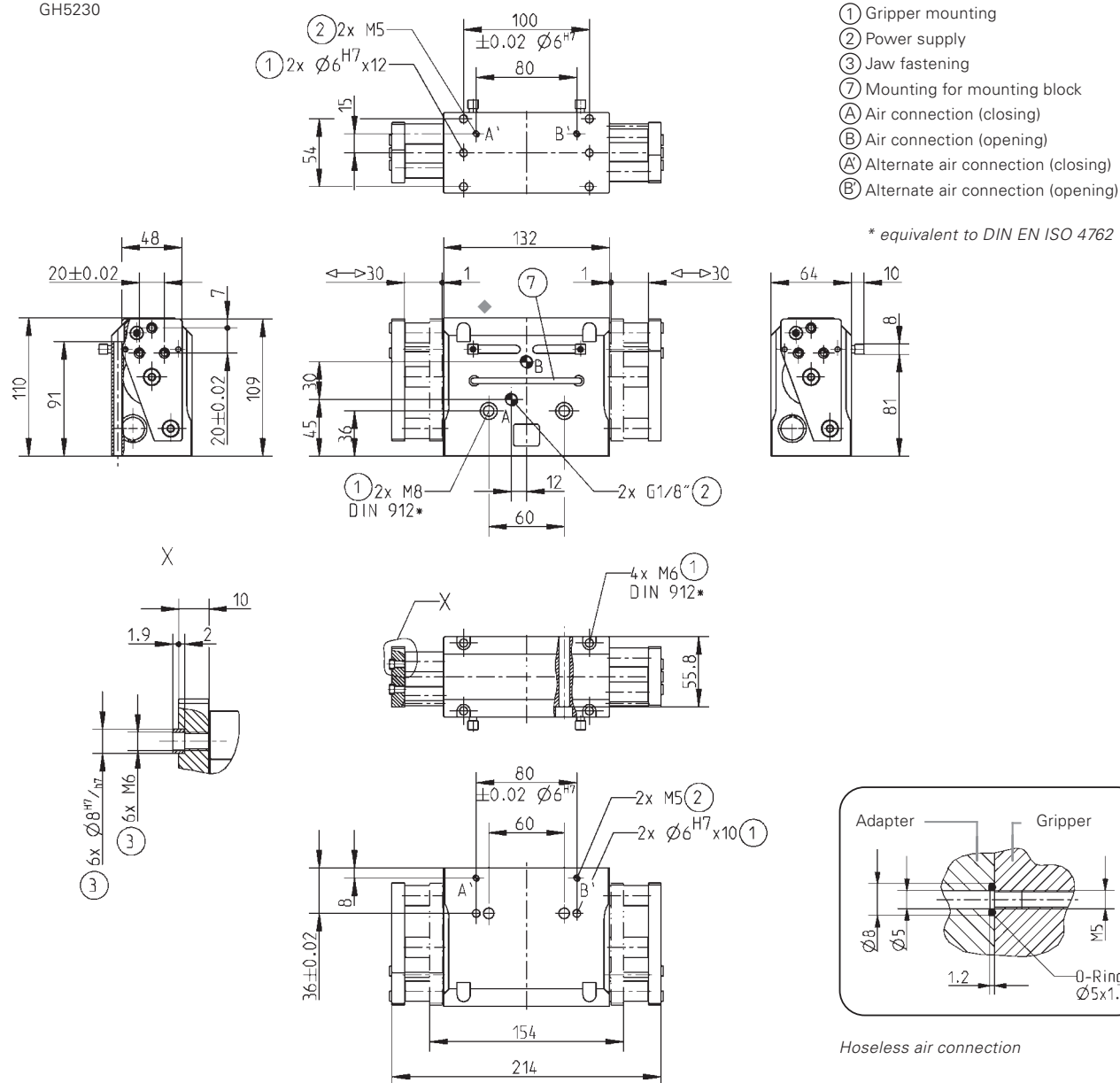
Order no.:	GH5230
Stroke per jaw [mm]:	30
Gripping force in closing [N]:	800
Gripping force in opening [N]:	1050
Recommended workpiece weight [kg]*:	4,1
Closing time/opening time [s]:	0,3
Repeatability +/- [mm]:	0,05
Min./max. operating pressure [bar]:	3/8
Min./max. operating temperature [°C]**:	5/80
Air volume per cycle [cm³]:	140
Weight [kg]:	3,64

All data measured at 6 bar

* Value determined with friction coefficient $\mu = 0.1$ and safety factor $\nu = 2$

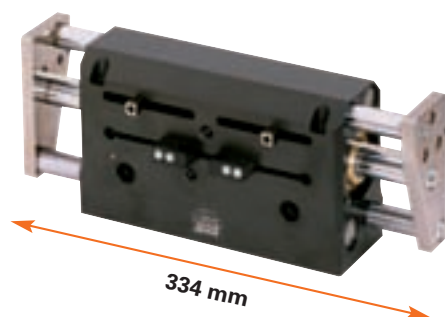
** High-temperature-resistant model (up to 150°C) add T to part number

GH5230



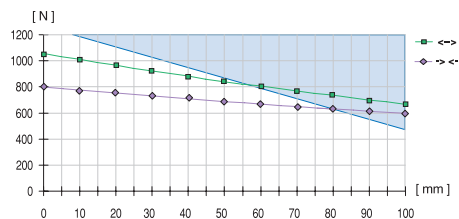
Subject to change without prior notice

Long Stroke **Gripper**



Gripping force diagram

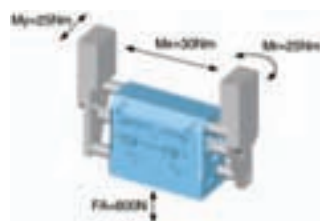
Gripping force as a function jaw length.



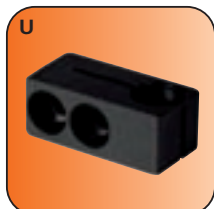
Colored area: increased wear and tear to be expected measured from top edge of housing ◆

Forces and Moments

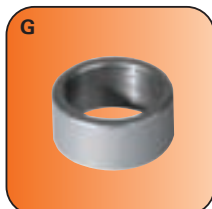
Max allowable forces and moments on jaws.



Included with purchase



Mounting block
Order no. KB8-29



Centring sleeve
Order no. BDST40800

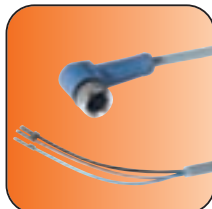


Pneumatic fittings
Order no. DRV1/8x6

Accessory list



Proximity switch
Order no. NJ8-E2S



Cable angled plug
Order no. KAW500

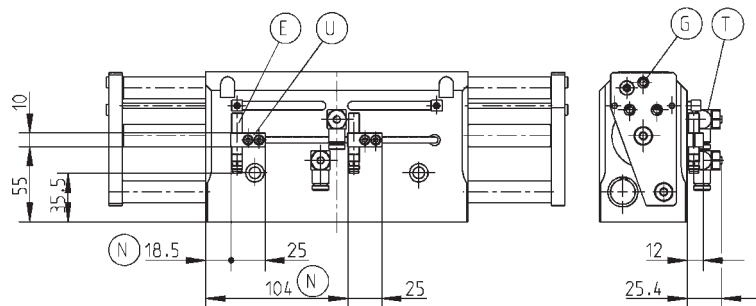


Plug 3- pole
Order no. S12-G-3



Pressure safety valve
Order no. DSV1/8

Accessoires



(N) Sensing specific dimensions

Subject to change without prior notice

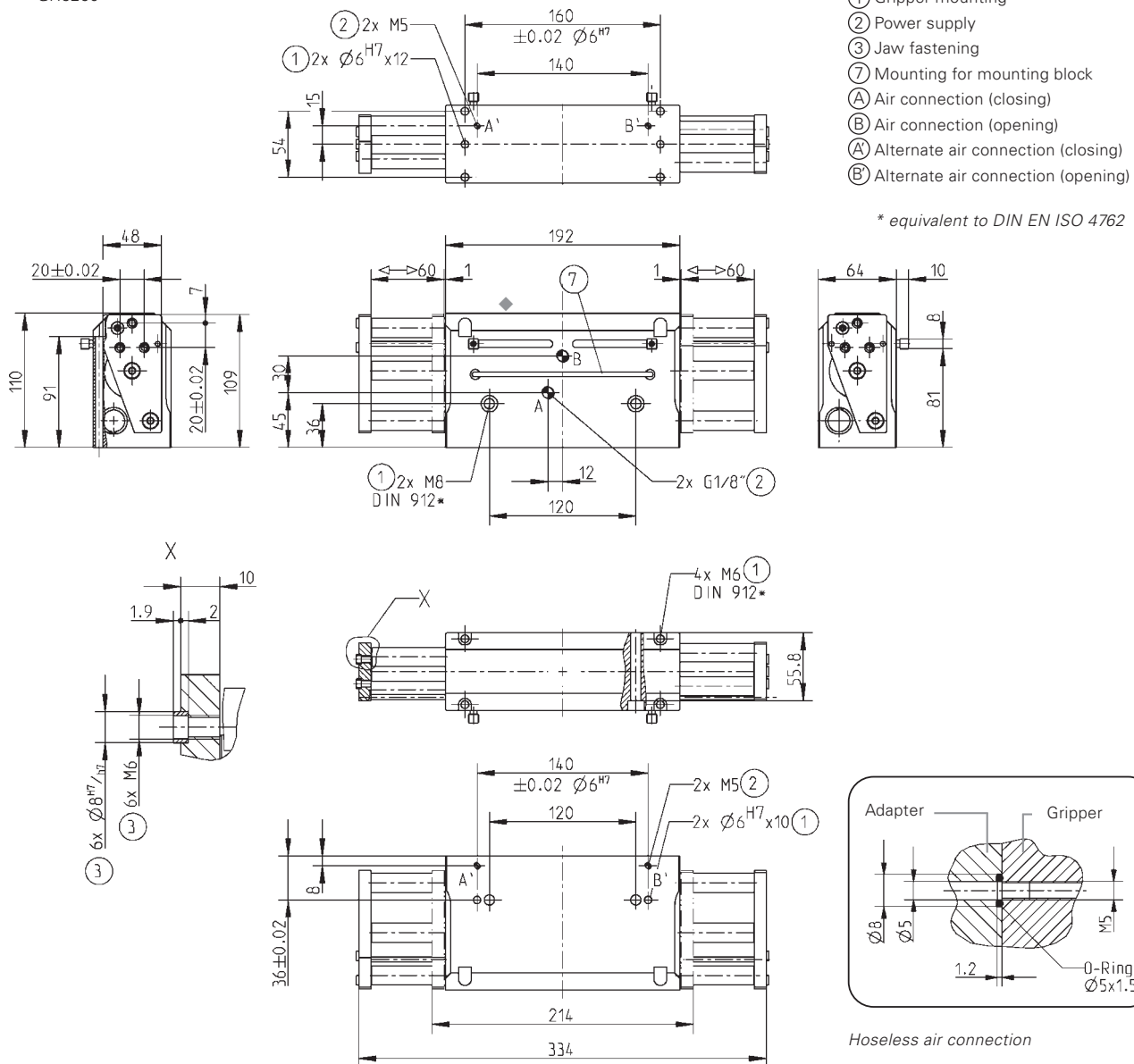
Order no.:	GH5260
Stroke per jaw [mm]:	60
Gripping force in closing [N]:	800
Gripping force in opening [N]:	1050
Recommended workpiece weight [kg]*:	4,1
Closing time/opening time [s]:	0,05
Repeatability +/- [mm]:	0,05
Min./max. operating pressure [bar]:	3/8
Min./max. operating temperature [°C]**:	5/80
Air volume per cycle [cm³]:	280
Weight [kg]:	5

All data measured at 6 bar

* Value determined with friction coefficient $\mu = 0.1$ and safety factor $\nu = 2$

** High-temperature-resistant model (up to 150°C) add T to part number

GH5260



Subject to change without prior notice



Long Stroke **Grippers**

pneumatic



GH90

GH100

GH150

GH200

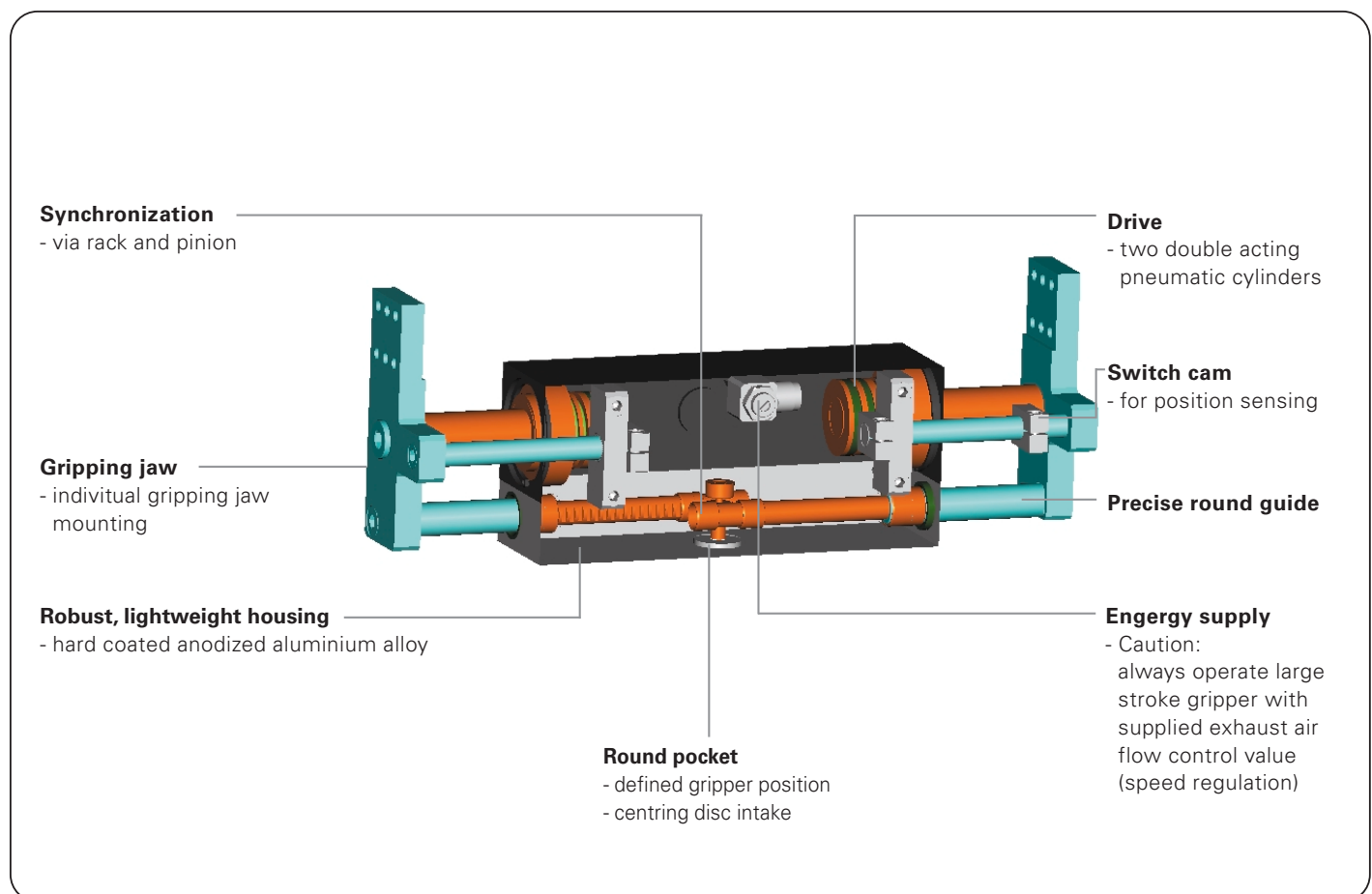
SOMMER
automatic

Long Stroke **Gripper**

➤ Features

- long stroke up to 200 mm
- synchronized, directly driven centrally gripping
- traditionally reliability, proven thousandfold

Functional diagram



Terms

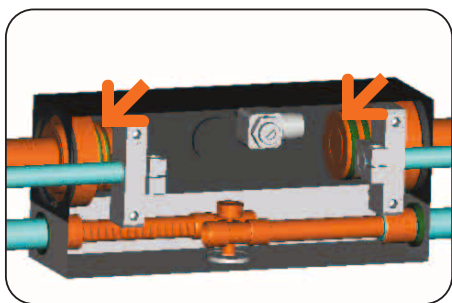
- Gripping force:** arithmetic sum of the individual forces occurring at the jaws
- Closing/opening time:** required time for the gripper jaws to cover the maximum stroke distance
- Repeatability:** at end stops after 50/100 consecutive cycles
- Grip force safety device:** by using a pressure safety valve (order no. DSV1/8), which prevents loss of tension force if there is a drop in pressure. The inevitable leakage in the pneumatic circuit restricts the time of this type of gripping force safety.
- Cycle:** one complete movement of the piston forward and back
- Maintenance:** recommended at 10 mil. cycles
(please see the owner's manual for conditions, download from www.sommer-automatic.com)
- long maintenance intervals keep costs down
 - long lifespan

Model guide

Order no.	Stroke per jaw	Gripping force in opening	Gripping force in closing	Self-locking via
GH90	45 mm	115 N	140 N	DSV*
GH100	50 mm	800 N	480 N	DSV*
GH150	75 mm	800 N	480 N	DSV*
GH200	100 mm	800 N	480 N	DSV*

**DSV= Pressure safety valves (Order no.DSV1/8)*

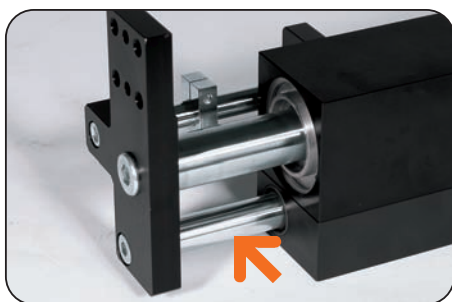
Long Stroke **Gripper**



Drive

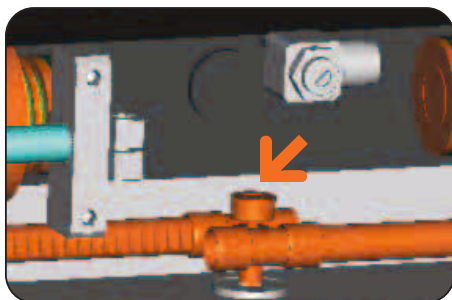
Two double acting pneumatic cylinders

- high power in both opening and closing
- gripping force up to 800 N



Guidance

- double round guides



Power transfer

Direct drive synchronized via rack and pinion

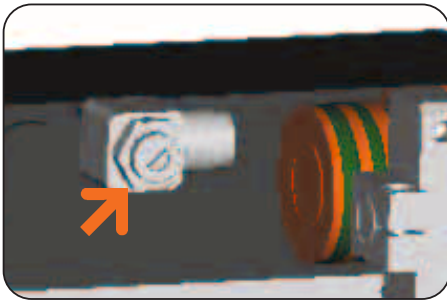
- optimum transmission of power to gripping force
- self-centering
- synchronized
- high repeat accuracy



Position sensing

Direct position sensing through adjustable trip flags

- direct sensing of the gripper jaw position
- mounting for inductive proximity switches from $\varnothing 3$ up to 12 mm



Energy supply

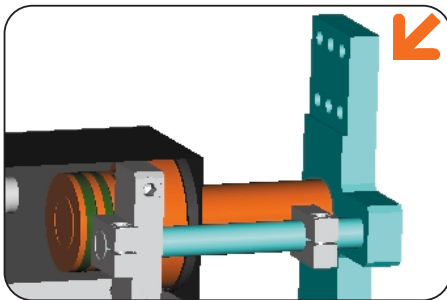
- supplied exhaust air flow control valve
- for optimum speed-regulation



Connections

Energy supply, attachment and positioning-possibilities
Adaptable to multiple mounting configuration

- optimum integration into the application through versatile mounting-options location
- defined gripper position by means of centering disc or dowel pin



Gripping jaw positioning

of individual gripping jaws via centering sleeves

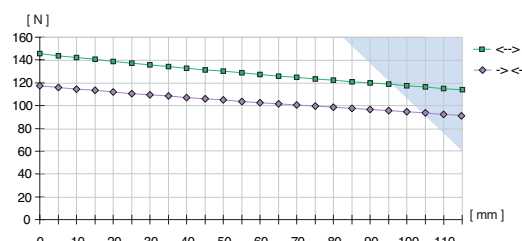
- flexible gripping-jaw-connection on outside or inside of jaw plate
- precise positioning of the individual gripping jaws by thread and pins

Long Stroke **Gripper**



Gripping force diagram

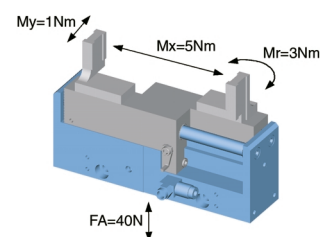
Gripping force as a function of jaw length.



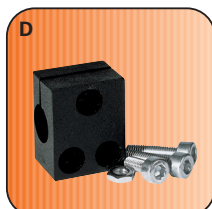
Colored area: increased wear and tear to be expected

Forces and Moments

Max allowable forces and moments on jaws.



Included with purchase



Mounting block
Order no. KB8K



Pneumatic fittings
Order no. DRVM5x4

Accessory list



Universal jaw (set)
Order no. UB90



Proximity switch
Order no. NJ8-E2S



Centring disc
Order no. ZE10H7x6



Cable angled plug
Order no. KAW500

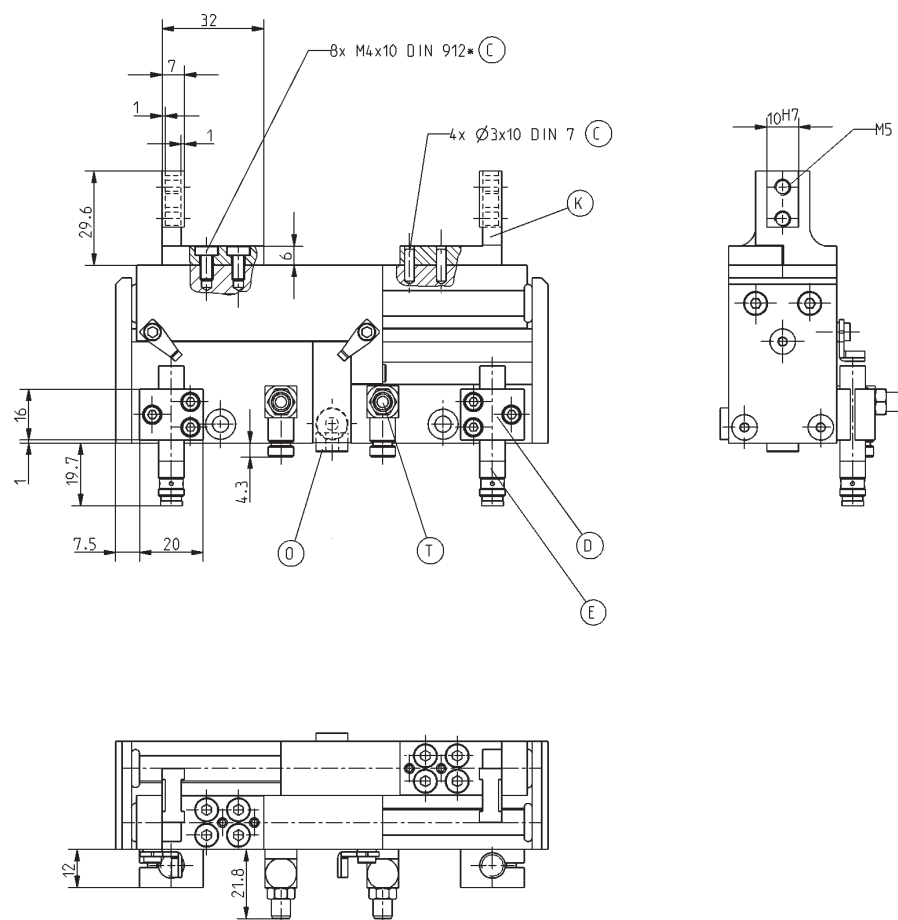


Plug 3-pole
Order no. S12-G-3



Pressure safety valve
Order no. DSV1/8

Accessory



* equivalent to DIN EN ISO 4762

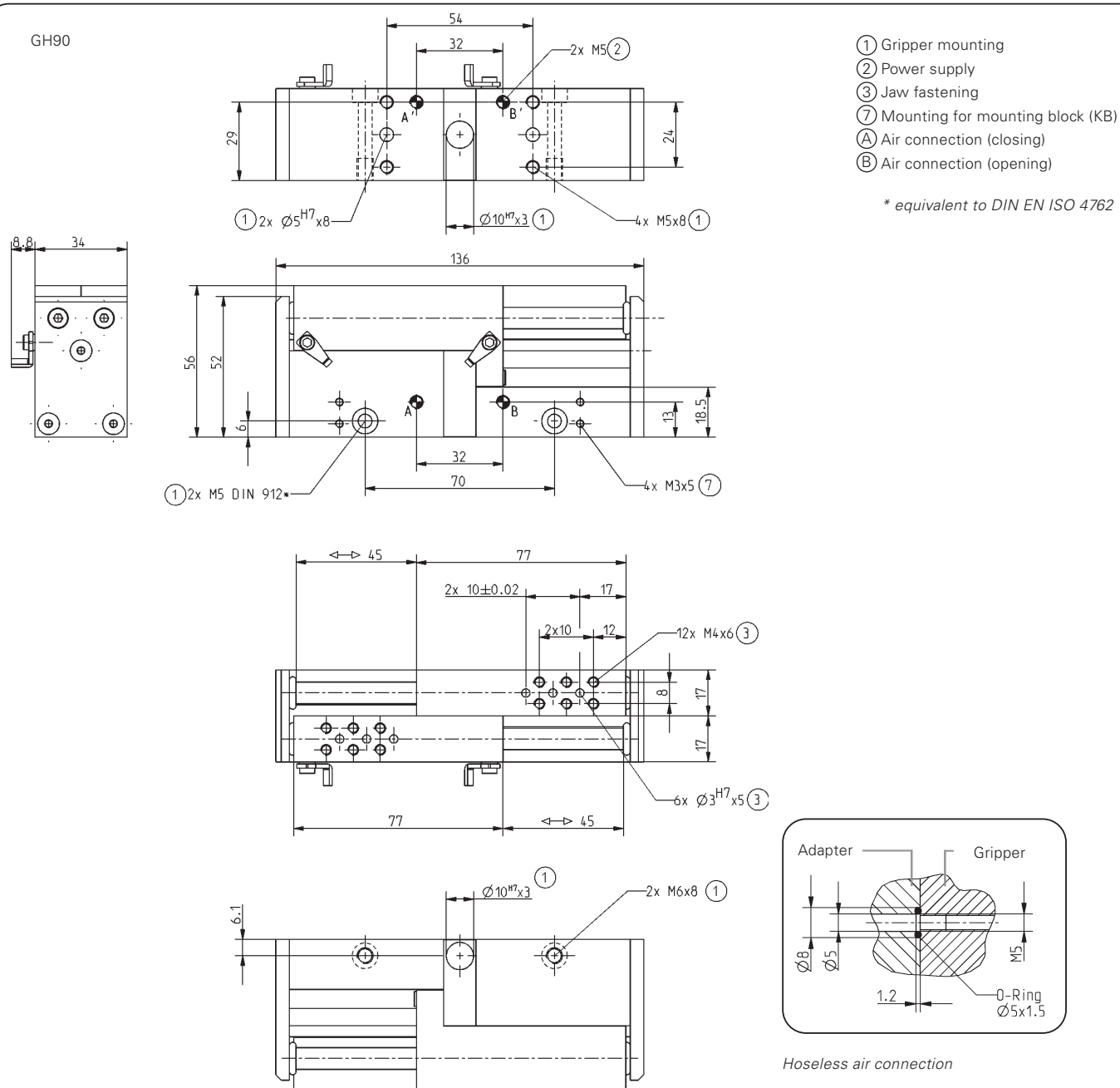
Subject to change without prior notice

Order no.:	GH90
Stroke per jaw [mm]:	45
Gripping force in closing [N]:	140
Gripping force in opening [N]:	115
Recommended workpiece weight [g]*:	586
Closing time/opening time [s]:	0,15
Repeatability +/- [mm]:	0,05
Min./max. operating pressure [bar]:	4/8
Min./max. operating temperature [°C]**:	5/80
Air volume per cycle [cm³]:	22
Weight [g]:	665

All data measured at 6 bar

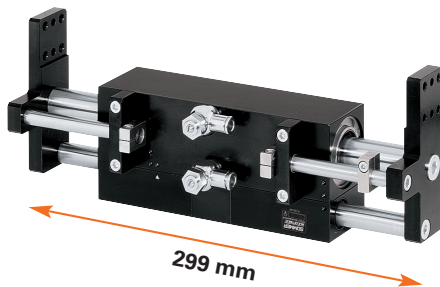
* Value determined with friction coefficient $\mu = 0.1$ and safety factor $v = 2$

** High-temperature-resistant model (up to 150°C) add T to part number



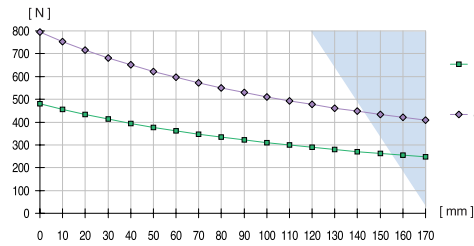
Subject to change without prior notice

Long Stroke **Gripper**



Gripping force diagram

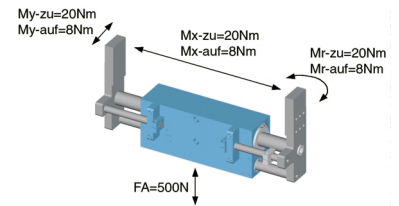
Gripping force as a function of jaw length.



Colored area: increased wear and tear to be expected

Forces and Moments

Max allowable forces and moments on jaws.

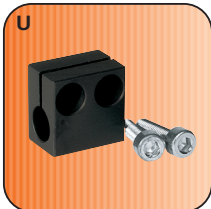


Included with purchase



Pneumatic fittings
Order no. DRV1/8x6

Accessory list



Mounting block
Order no. KB6.5



Proximity switch
Order no. NJ6.5-E2S



Centring disc
Order no. ZE20H7x4



Cable angled plug
Order no. KAW500

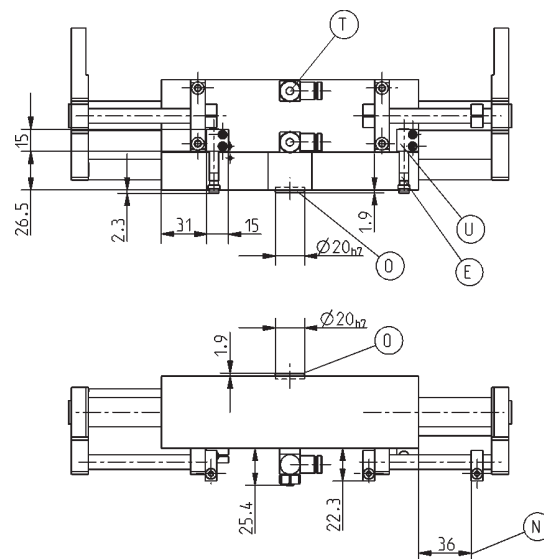


Plug 3-pole
Order no. S12-G-3



Pressure safety valve
Order no. DSV1/8

Accessory



(N) Sensing specific dimensions

Subject to change without prior notice

GH100

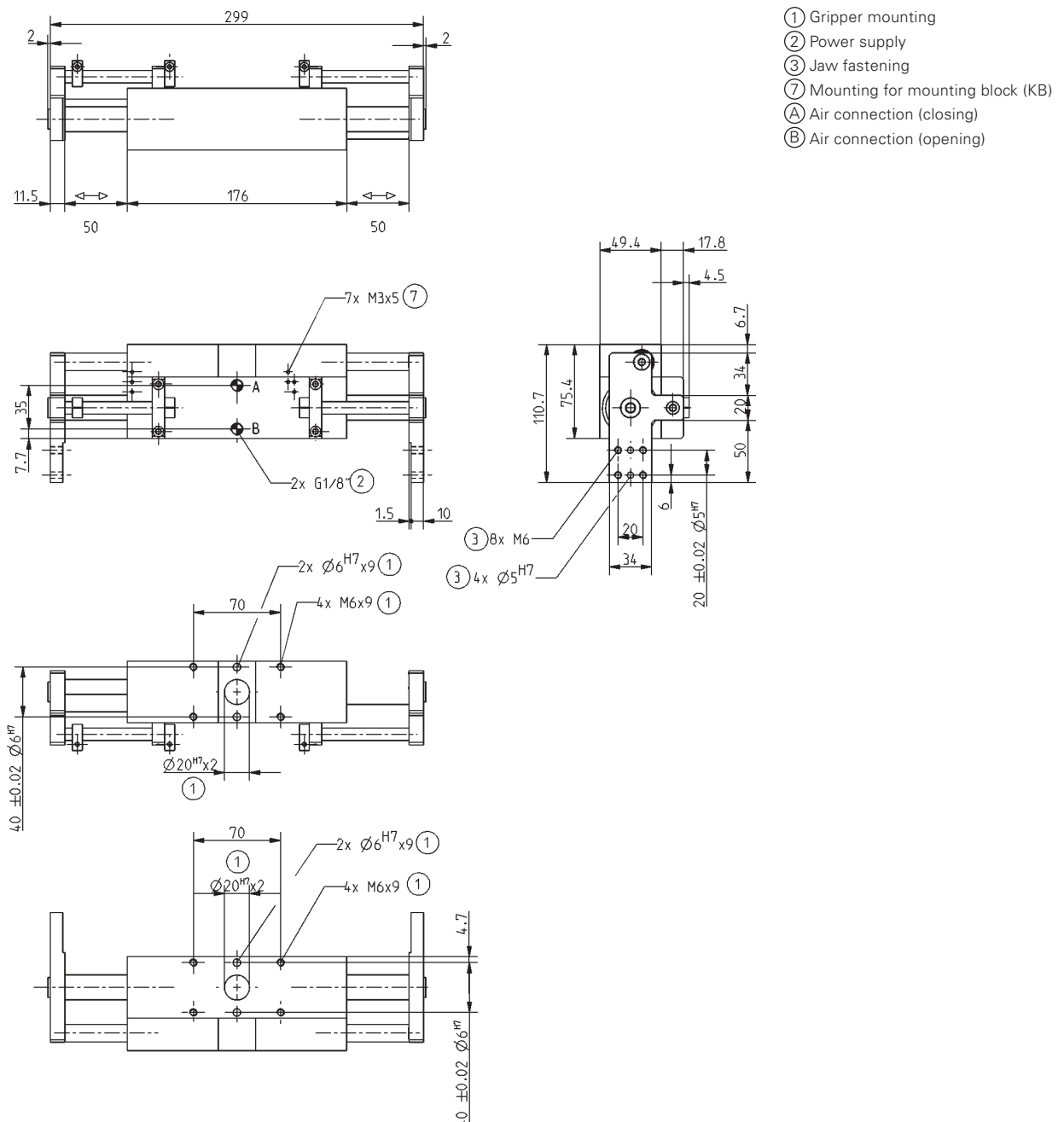
Stroke per jaw [mm]:	50
Gripping force in closing [N]:	480
Gripping force in opening [N]:	800
Recommended workpiece weight [kg]*:	2,4
Closing time/opening time [s]:	0,3
Repeatability +/- [mm]:	0,05
Min./max. operating pressure [bar]:	3/8
Min./max. operating temperature [°C]**:	5/80
Air volume per cycle [cm³]:	125
Weight [kg]:	2,75

All data measured at 6 bar

* Value determined with friction coefficient $\mu = 0.1$ and safety factor $\nu = 2$

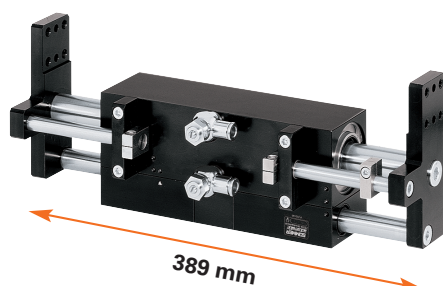
** High-temperature-resistant model (up to 150°C) add T to part number

GH100



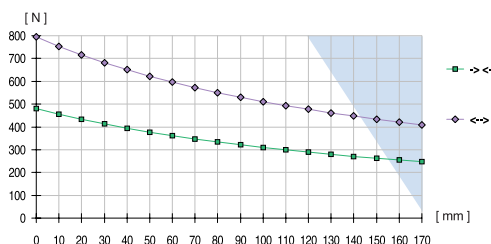
Subject to change without prior notice

Long Stroke **Gripper**



Gripping force diagram

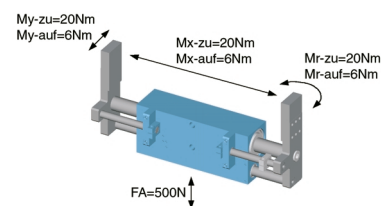
Gripping force as a function of jaw length.



Colored area: increased wear and tear to be expected

Forces and Moments

Max allowable forces and moments on jaws.

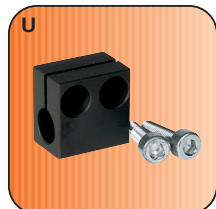


Included with purchase



Pneumatic fittings
Order no. DRV1/8x6

Accessory list



Mounting block
Order no. KB6.5



Proximity switch
Order no. NJ6.5-E2S



Centring disc
Order no. ZE20H7x4



Cable angled plug
Order no. KAW500

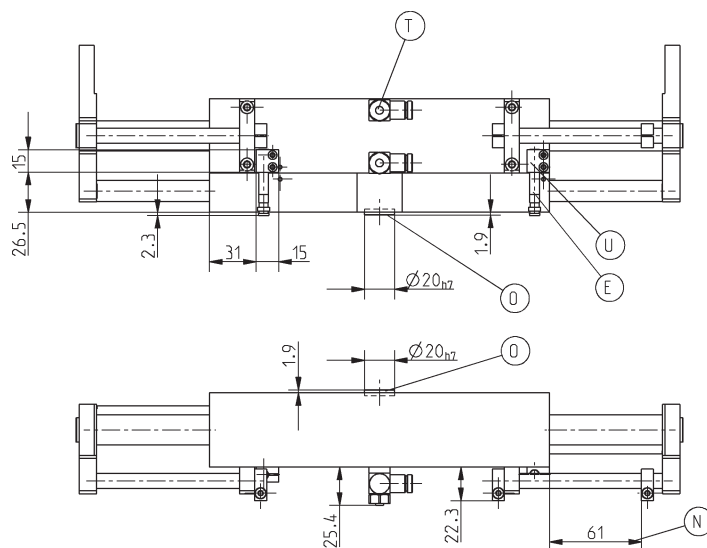


Plug 3-pole
Order no. S12-G-3



Pressure safety valve
Order no. DSV1/8

Accessory



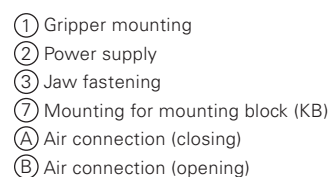
(N) Sensing specific dimensions

Subject to change without prior notice

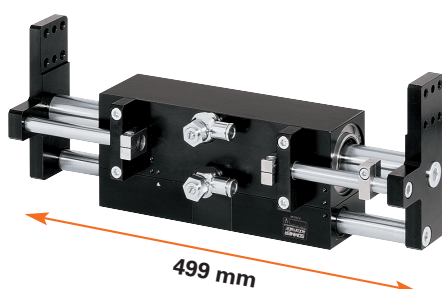
All data measured at 6 bar

* Value determined with friction coefficient $\mu = 0.1$ and safety factor $\nu = 2$

** High-temperature-resistant model (up to 150°C) add T to part number

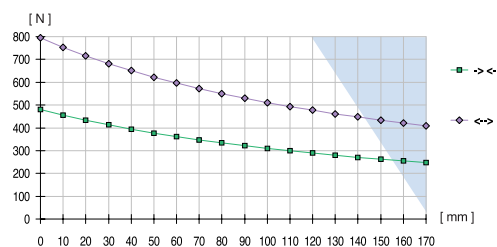


Long Stroke **Gripper**



Gripping force diagram

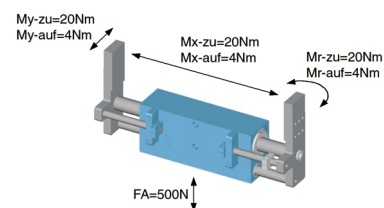
Gripping force as a function of jaw length.



Colored area: increased wear and tear to be expected

Forces and Moments

Max allowable forces and moments on jaws.

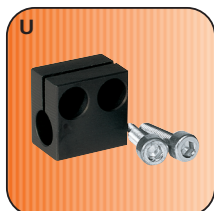


Included with purchase



Pneumatic fittings
Bst.-Nr. DRV1/8x6

Accessory list



Mounting block
Order no. KB6.5



Proximity switch
Order no. NJ6.5-E2S



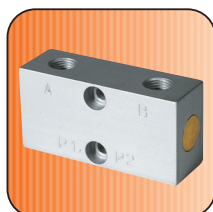
Centring disc
Order no. ZE20H7x4



Cable angled plug
Order no. KAW500

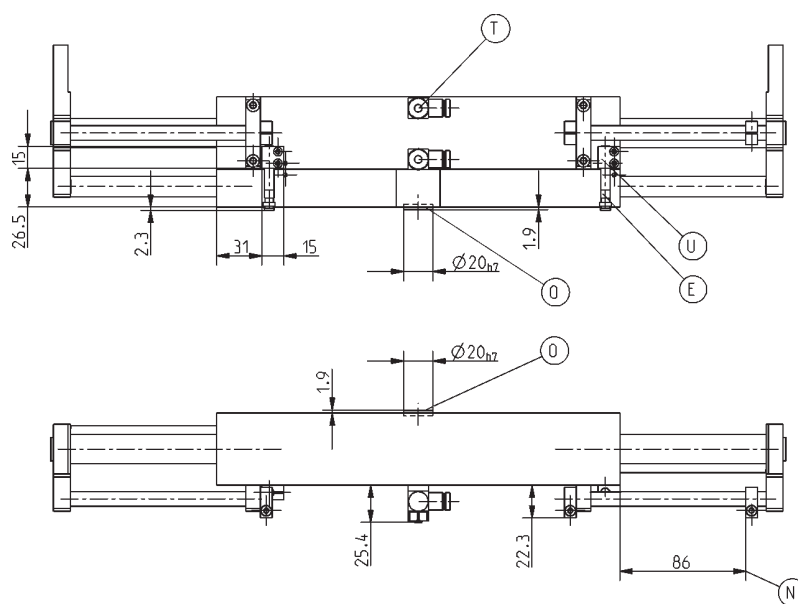


Plug 3-pole
Order no. S12-G-3



Pressure safety valve
Order no. DSV1/8

Accessory



(N) Sensing specific dimensions

Subject to change without prior notice

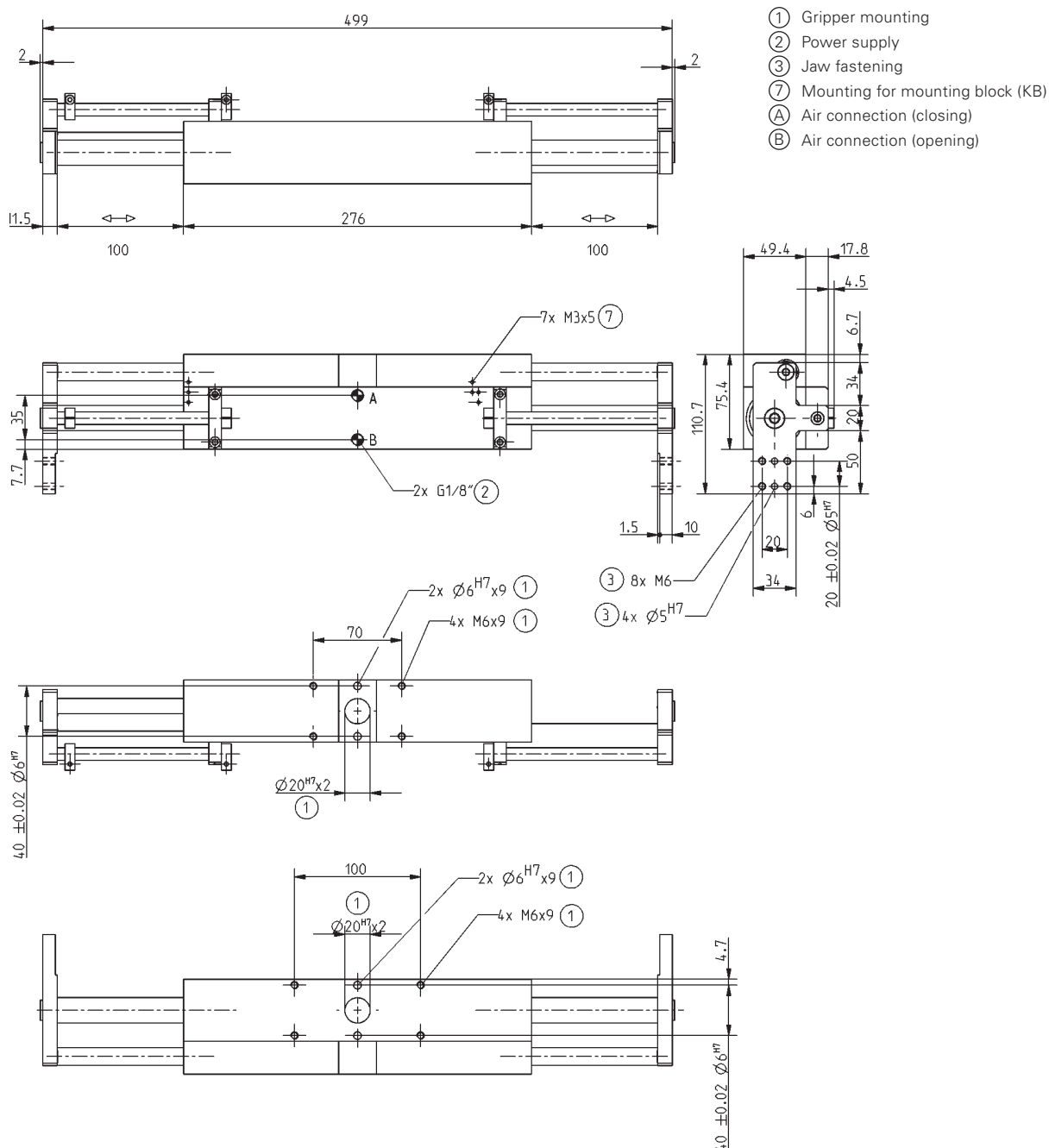
Order no.:	GH200
Stroke per jaw [mm]:	100
Gripping force in closing [N]:	480
Gripping force in opening [N]:	800
Recommended workpiece weight [kg]*:	2,4
Closing time/opening time [s]:	1,2
Repeatability +/- [mm]:	0,05
Min./max. operating pressure [bar]:	3/8
Min./max. operating temperature [°C]**:	5/80
Air volume per cycle [cm³]:	250
Weight [kg]:	3,9

All data measured at 6 bar

* Value determined with friction coefficient $\mu = 0.1$ and safety factor $v = 2$

** High-temperature-resistant model (up to 150°C) add T to part number

GH200

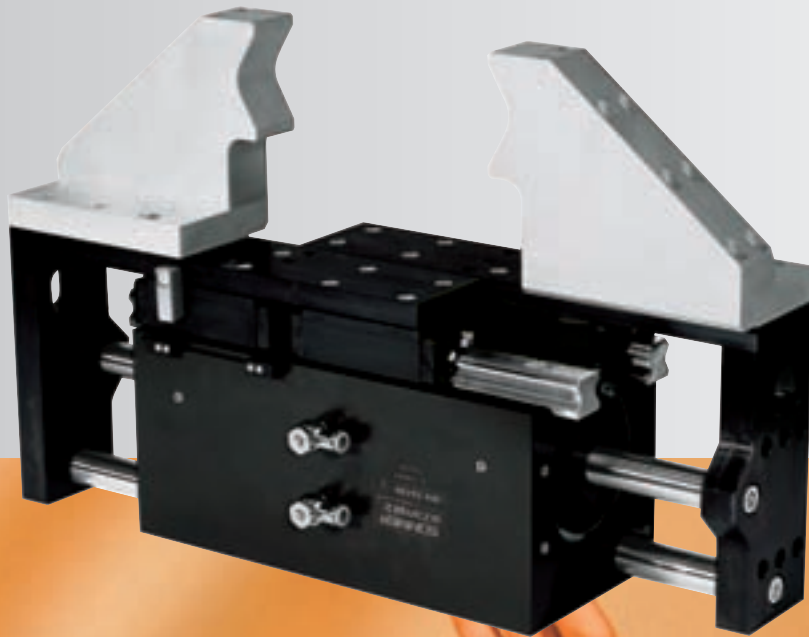


Subject to change without prior notice



Long Stroke **Grippers**

pneumatic



GH7600 Series

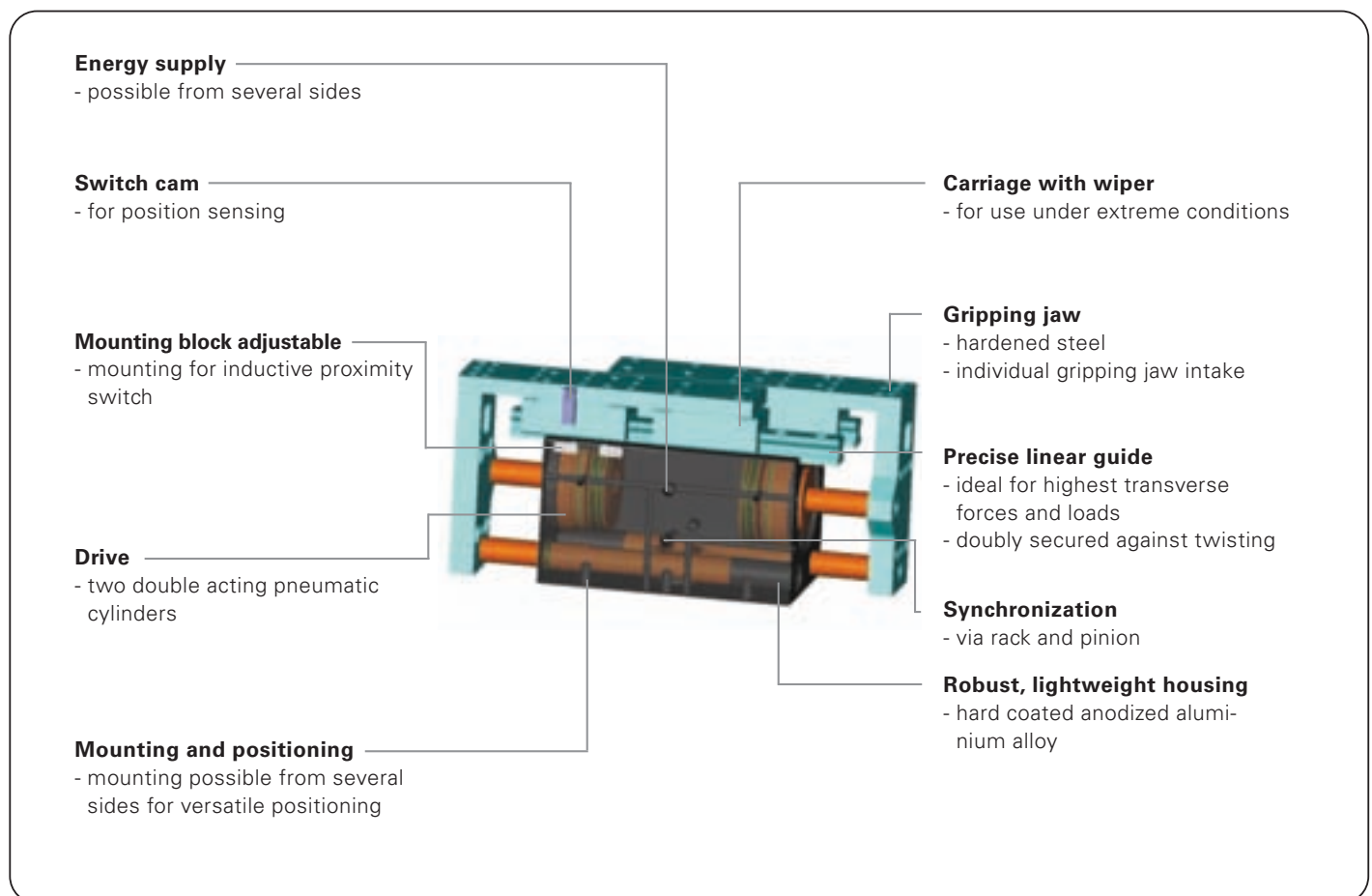
SOMMER
automatic

Long Stroke **Gripper**

➤ Features

- highly loadable linear guide, ideal for highest transvers forces and moments
- Long stroke up to 100 mm per jaw
- maximum force from two double acting pneumatic cylinders

Functional diagramm



Terms

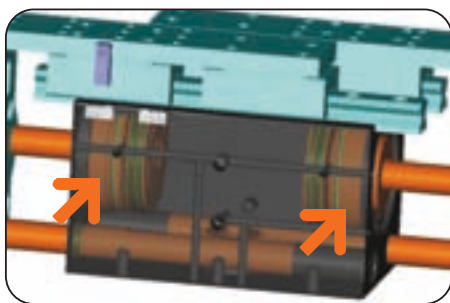
- Gripping force:** arithmetic sum of the individual forces occurring at the jaws
- Closing/opening time:** required time for the gripper jaws to cover the maximum stroke distance
- Repeatability:** at end stops after 50/100 consecutive cycles
- Gripping force safety device:** by using a pressure safety valve (order no. DSV1/8), which prevents loss of tension force if there is a drop in pressure. The inevitable leakage in the pneumatic circuit restricts the time of this type of gripping force safety.
- Cycle:** one complete movement of the piston forward and back
- Maintenance:** recommended at 10 mil. cycles
(please see the owner's manual for conditions, download from www.sommer-automatic.com)
- long maintenance intervals keep costs down
 - long lifespan

Model guide

Order no.	Stroke per jaw	Gripping force in opening	Gripping force in closing	Self-locking via
GH 7665	65 mm	8500 N	8000 N	DSV*
GH76100	100 mm	8500 N	8000 N	DSV*

**DSV= Pressure safety valve (Order no.DSV1/8)*

Long Stroke **Gripper**



Drive

Two double acting pneumatic cylinders

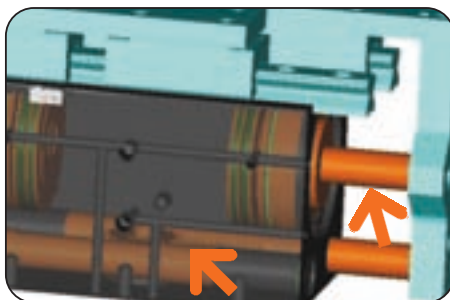
- maximum power of both opening and closing
- high gripping force up to 8500 N



Guidance

Heavy load linear guide

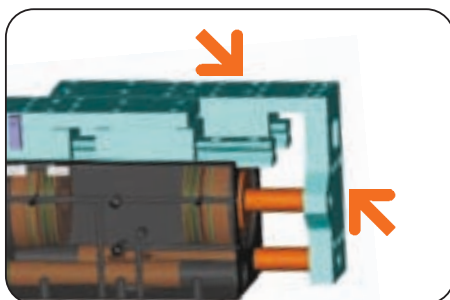
- ideal for highest transverse forces and moment intake
- 2 x 2 carriage with wipers
- for use under extreme conditions



Power transfer

Direct drive synchronized via gearwheel

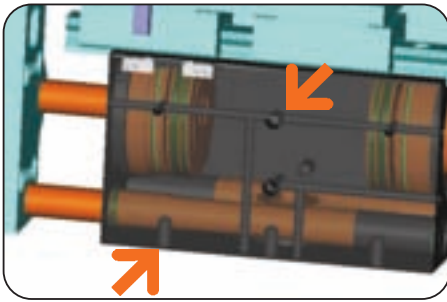
- optimum transmission of power to gripping force
- self-centering
- synchronized
- high repeatability



Gripping jaw positioning

individual gripping jaw positioning via centering sleeves

- precise positioning of individual gripping jaws
- quick, cost-effective and therefore economical jaw changing



Connections

Energy supply, attachment and positioning possibilities.

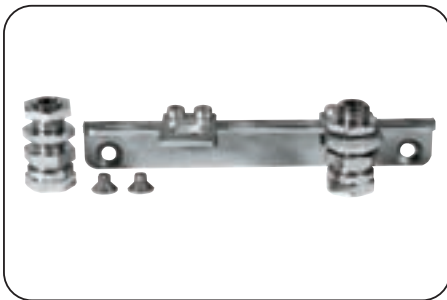
Adaptable to multiple mounting configurations.

- optimal integration into the workroom through individual mounting situation
- tubeless direct connection possibility (no additional hose needed)



Switch cam for position sensing

- direct sensing of the gripper jaw position
- compact design



Alternative position sensing KHA

Bracket for inductive proximity switch, up to 12 mm diameter, as accessory available

- process safe due to direct gripper jaw position sensing
- compact design

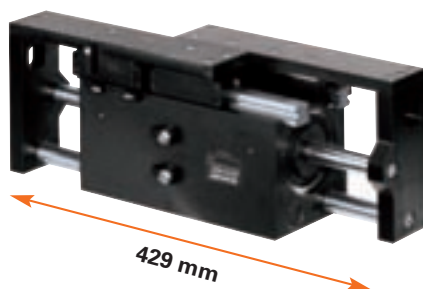


Alternative position sensing KHAZ

Available as accessory, allows inquiry of additional gripper positions

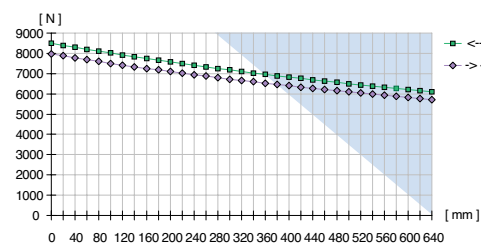
- in conjunction with the KHA, e.g. the following position inquiries are possible. Gripper closed, tool available, gripper open.

Long Stroke **Gripper**



Gripping force diagram

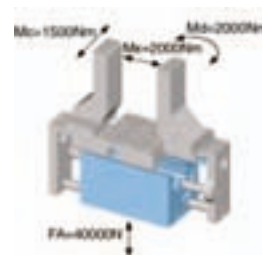
Gripping force as a function jaw length.



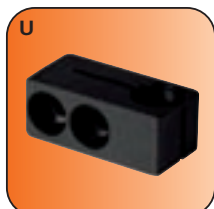
Colored area: increased wear and tear to be expected

Forces and Moments

Max allowable forces and moments on jaws.



Included with purchase



Mounting block
Order no. KB8-28

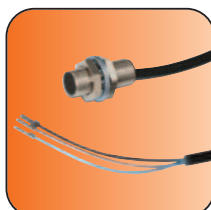


Pneumatic fittings
Order no. DRV1/4x8

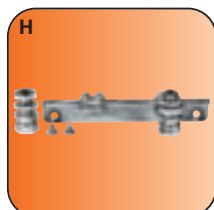
Accessory list



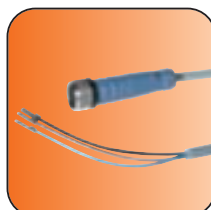
Proximity switch
Order no. NJ8-E2S



Proximity switch
Order no. NJ8-E2



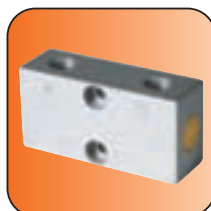
Alternate proximity bracket
Order no. KHA7665-8



Cable straight plug
Order no. KAG500

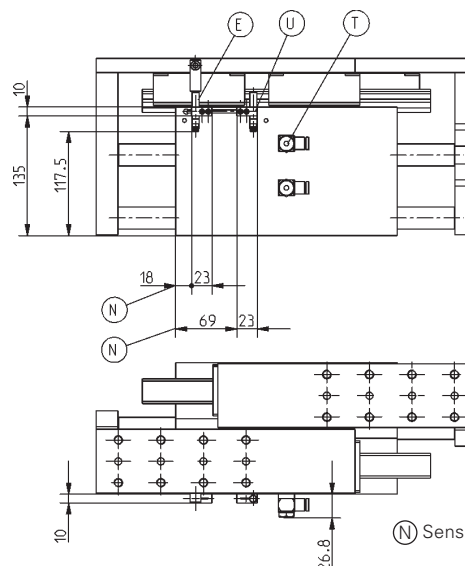


Plug 3-pole
Order no. S12-G-3



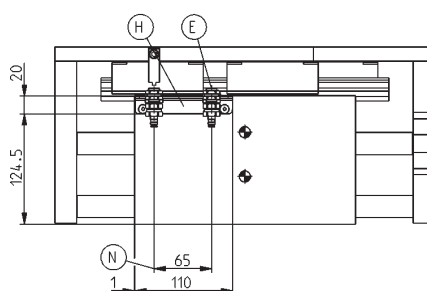
Pressure safety valve
Order no. DSV1/8

Accessory

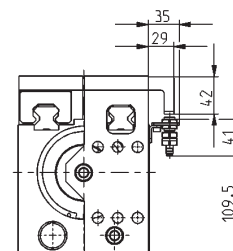


(N) Sensing specific dimensions

alternate proximity mounting



(N) Sensing specific dimensions



Subject to change without prior notice

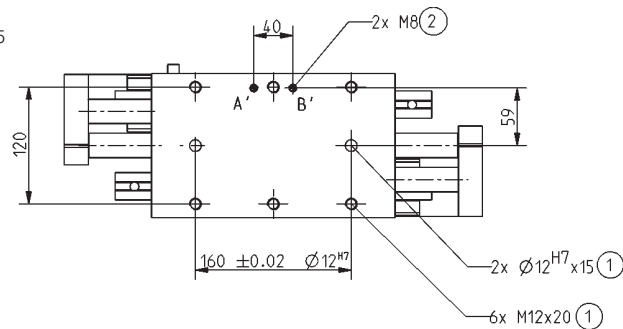
Order no.:	GH7665
Stroke per jaw [mm]:	65
Gripping force in closing [N]:	8000
Gripping force in opening [N]:	8500
Recommended workpiece weight [kg]*:	40,8
Closing time/opening time [s]:	1,1
Repeatability +/- [mm]:	0,05
Min./max. operating pressure [bar]:	3/8
Min./max. operating temperature [°C]**:	5/80
Air volume per cycle [cm³]:	900
Weight [kg]:	31

All data measured at 6 bar

* Value determined with friction coefficient $\mu = 0.1$ and safety factor $\nu = 2$

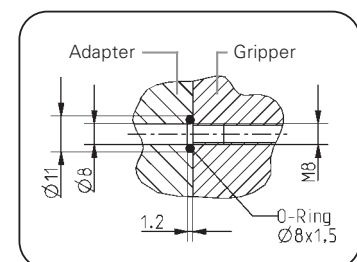
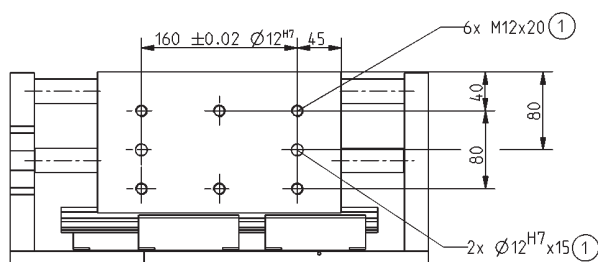
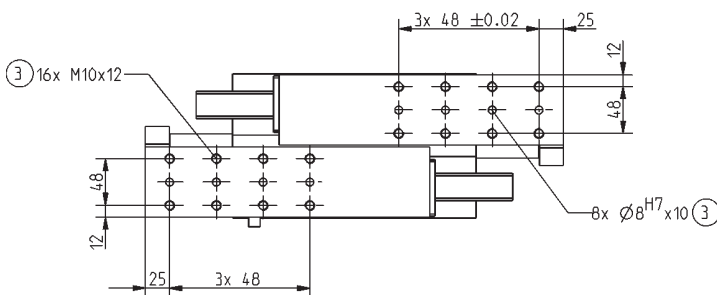
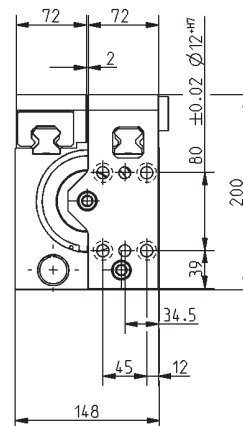
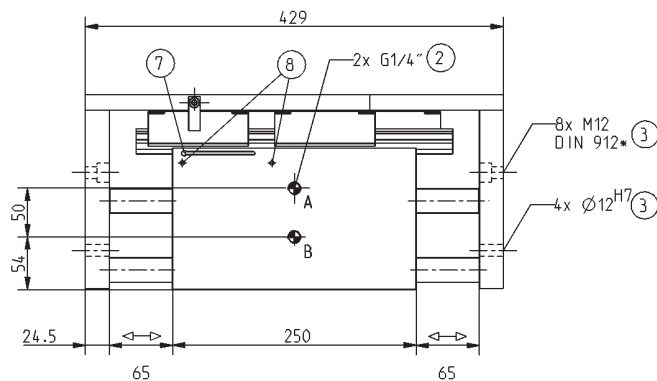
** High-temperature-resistant model (up to 150°C) add T to part number

GH7665



- ① Gripper mounting
- ② Power supply
- ③ Jaw fastening
- ⑦ Mounting for mounting block
- ⑧ Mounting for mounting holder (KHA)
- Ⓐ Air connection (closing)
- Ⓑ Air connection (opening)
- Ⓐ Alternate air connection (closing)
- Ⓑ Alternate air connection (opening)

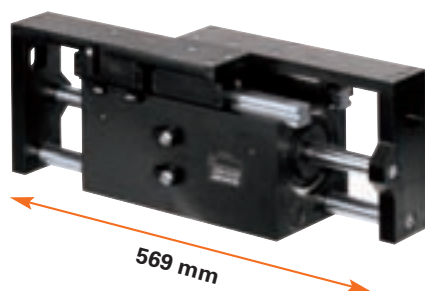
* equivalent to DIN EN ISO 4762



Hoseless air connection

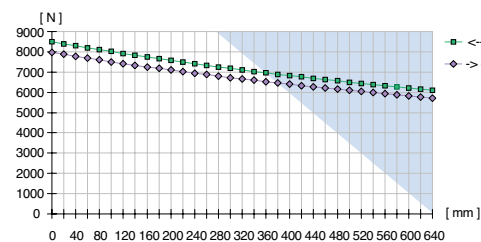
Subject to change without prior notice

Long Stroke **Gripper**



Gripping force diagram

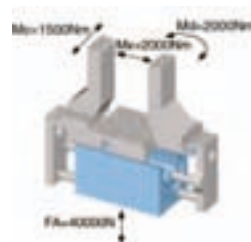
Gripping force as a function jaw length.



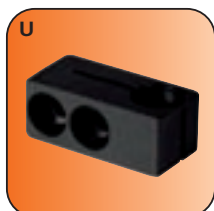
Colored area: increased wear and tear to be expected measured from top edge of housing ♦

Forces and Moments

Max allowable forces and moments on jaws.



Included with purchase

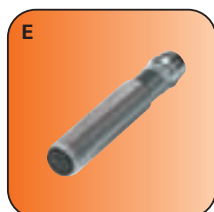


Mounting block
Order no. KB8-28

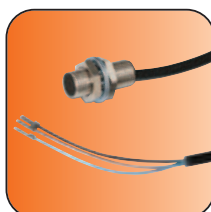


Pneumatic fittings
Order no. DRV1/4x8

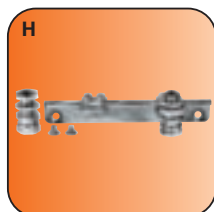
Accessory list



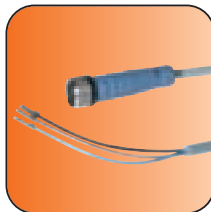
Proximity switch
Order no. NJ8-E2S



Proximity switch
Order no. NJ8-E2



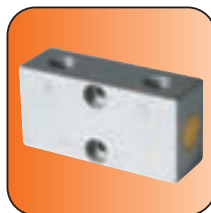
Alternate proximity bracket
Order no. KHA76100-8



Cable straight plug
Order no. KAG500

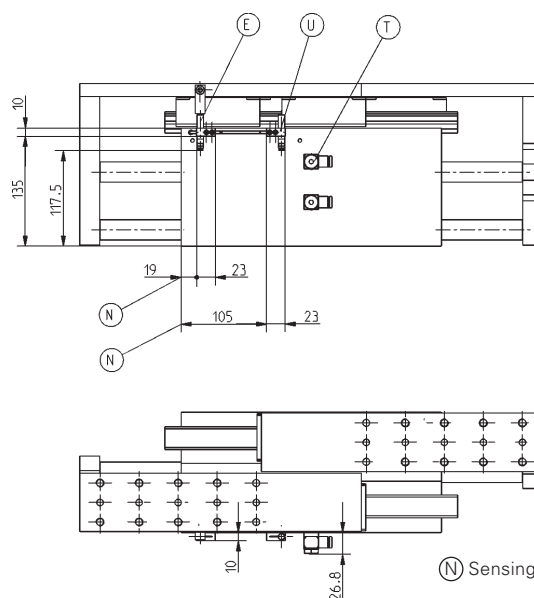


Plug 3-pole
Order no. S12-G-3



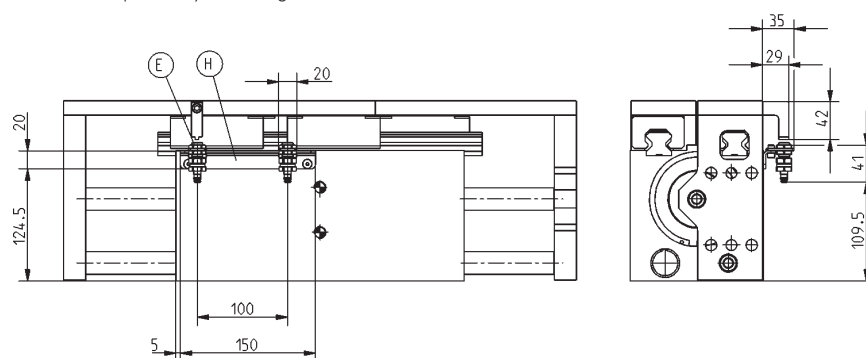
Pressure safety valve
Order no. DSV1/8

Accessory



(N) Sensing specific dimensions

alternate proximity mounting



(N) Sensing specific dimensions

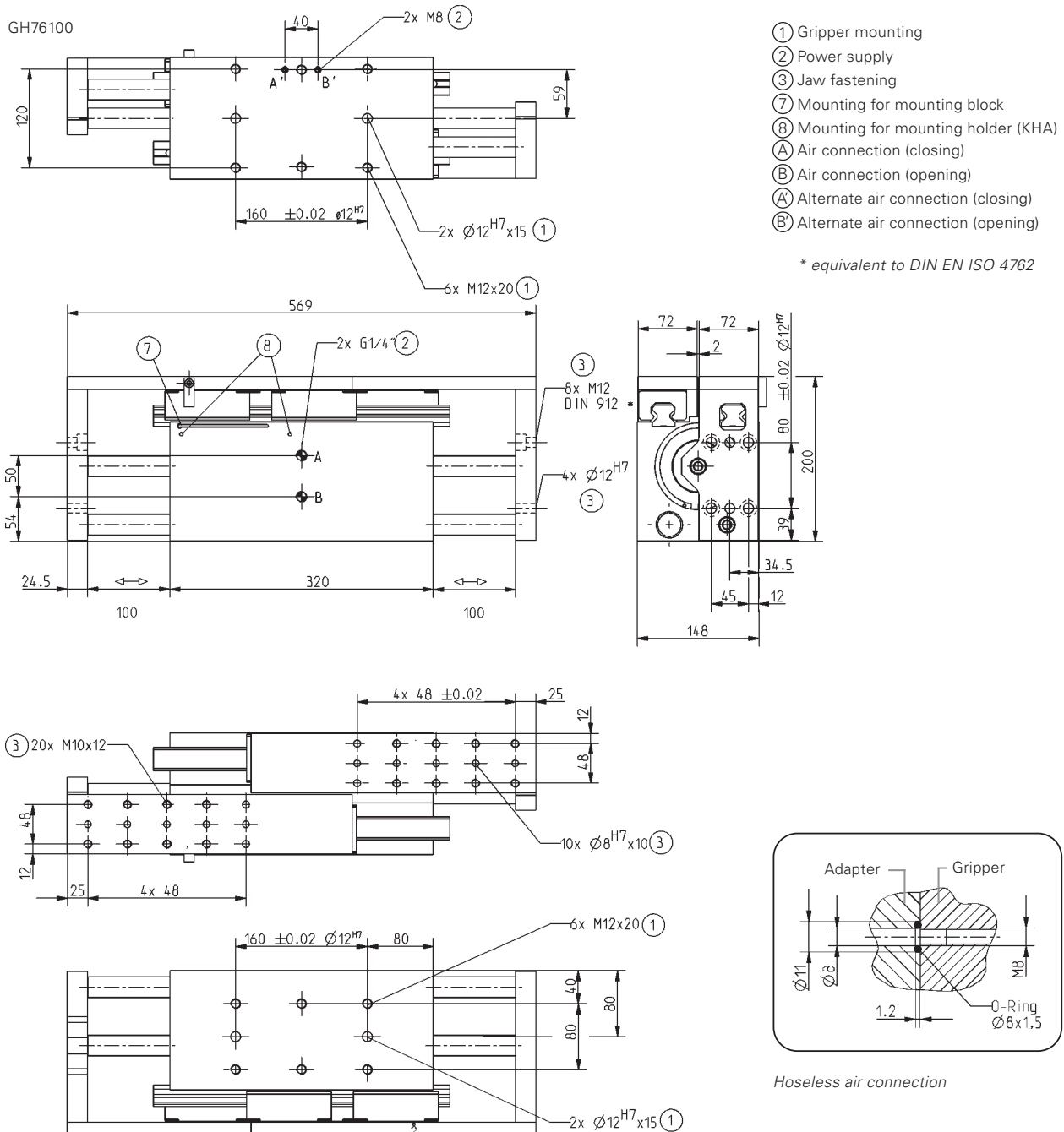
Subject to change without prior notice

Order no.:	GH76100
Stroke per jaw [mm]:	100
Gripping force in closing [N]:	8000
Gripping force in opening [N]:	8500
Recommended workpiece weight [kg]*:	40,8
Closing time/opening time [s]:	1,5
Repeatability +/- [mm]:	0,05
Min./max. operating pressure [bar]:	3/8
Min./max. operating temperature [°C]**:	5/80
Air volume per cycle [cm³]:	1500
Weight [kg]:	36

All data measured at 6 bar

* Value determined with friction coefficient $\mu = 0.1$ and safety factor $\nu = 2$

** High-temperature-resistant model (up to 150°C) add T to part number



Subject to change without prior notice



*Three-Jaw **Grippers***

pneumatic



GD300 Series

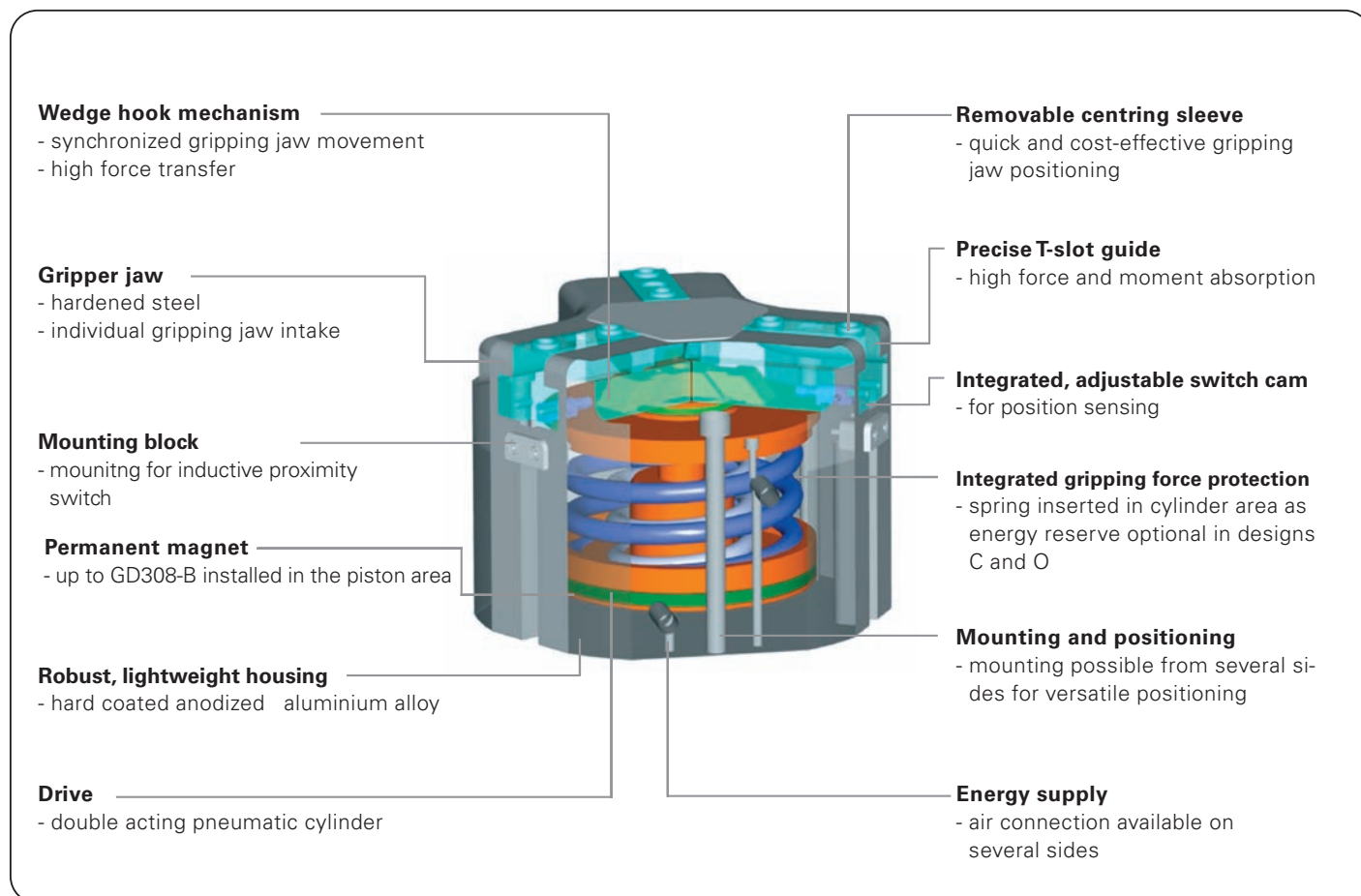
SOMMER
automatic

Three-Jaw Gripper

Features

- stable T-slot guide for highest moment absorption and maximum loads
- position sensing via inductive proximity switch or magnetic field sensor possible (up to GD308-B)
- sensing of 3 position via inductive proximity switch possible (GD310-B thru GD330-B)
- Dust protection for use in dirty environments as accessories available

Functional diagram



Terms

Gripping force:	arithmetic sum of the individual forces occurring at the jaws
Closing/opening time:	required time for the gripper jaws to cover the maximum stroke distance
Repeatability:	at end stops after 50/100 consecutive cycles
Cycle:	one complete movement of the piston forward and back
Maintenance:	recommended at 10 mil. cycles (please see the owner's manual for conditions, download from www.sommer-automatic.com) <ul style="list-style-type: none">• long maintenance intervals keep costs down• long lifespan

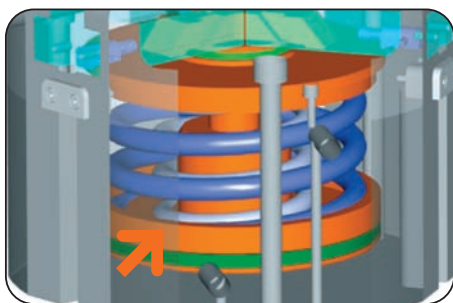
Model guide

- N:** Standard design (long stroke - standard force)
- S:** Heavy-duty design (short stroke - large force)
- C:** For external gripping, self-locking, spring closing
- O:** For internal gripping, self-locking, spring opening

Order no.	Stroke per jaw	Gripping force in opening	Gripping force in closing	Self-locking via
GD303N-B	3 mm	190 N	190 N	DSV*
GD303NC-B	3 mm	-	255 N	Spring
GD303NO-B	3 mm	255 N	-	Spring
GD304N-B	4 mm	420 N	420 N	DSV*
GD304NC-B	4 mm	-	560 N	Spring
GD304NO-B	4 mm	560 N	-	Spring
GD304S-B	2 mm	850 N	850 N	DSV*
GD304SC-B	2 mm	-	1160 N	Spring
GD304SO-B	2 mm	1160 N	-	Spring
GD306N-B	6 mm	550 N	550 N	DSV*
GD306NC-B	6 mm	-	800 N	Spring
GD306NO-B	6 mm	800 N	-	Spring
GD306S-B	3 mm	1150 N	1150 N	DSV*
GD306SC-B	3 mm	-	1700 N	Spring
GD306SO-B	3 mm	1700 N	-	Spring
GD308N-B	8 mm	875 N	875 N	DSV*
GD308NC-B	8 mm	-	1125 N	Spring
GD308NO-B	8 mm	1125 N	-	Spring
GD308S-B	4 mm	1850 N	1850 N	DSV*
GD308SC-B	4 mm	-	2440 N	Spring
GD308SO-B	4 mm	2440 N	-	Spring
GD310N-B	10 mm	1400 N	1400 N	DSV*
GD310NC-B	10 mm	-	1800 N	Spring
GD310NO-B	10 mm	1800 N	-	Spring
GD310S-B	5 mm	3000 N	3000 N	DSV*
GD310SC-B	5 mm	-	4000 N	Spring
GD310SO-B	5 mm	4000 N	-	Spring
GD312N-B	12 mm	2500 N	2500 N	DSV*
GD312NC-B	12 mm	-	3250 N	Spring
GD312NO-B	12 mm	3250 N	-	Spring
GD312S-B	6 mm	5500 N	5500 N	DSV*
GD312SC-B	6 mm	-	7000 N	Spring
GD312SO-B	6 mm	7000 N	-	Spring
GD316N-B	16 mm	5000 N	5000 N	DSV*
GD316NC-B	16 mm	-	6800 N	Spring
GD316NO-B	16 mm	6800 N	-	Spring
GD316S-B	8 mm	10500 N	10500 N	DSV*
GD316SC-B	8 mm	-	14100 N	Spring
GD316SO-B	8 mm	14100 N	-	Spring
GD320N-B	20 mm	7100 N	7100 N	DSV*
GD320S-B	10 mm	15800 N	15800 N	DSV*
GD330N-B	30 mm	15200 N	15200 N	DSV*
GD330S-B	15 mm	32000 N	32000 N	DSV*

*DSV = Pressure safety valve (Order no. DSV1/8)

Three-Jaw **Gripper**



Drive

N and S Models

Double acting pneumatic cylinder

- maximum power in both opening and closing
- gripping force up to 32000 N

NC, NO and SC, SO Models

Double acting pneumatic cylinder with integrated (spring as mechanical safety device)

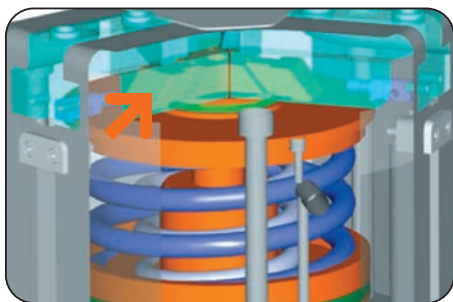
- optimum coordination of drive force and gripping force secured by spring



Guidance

Ground T-slot guide in surface hardened steel

- T-slot guide for maximum force and moment resistance
- ground gripper jaws
- high precision due to low play guide



Power transfer

Wedge hook mechanism with mechanical restricted guides

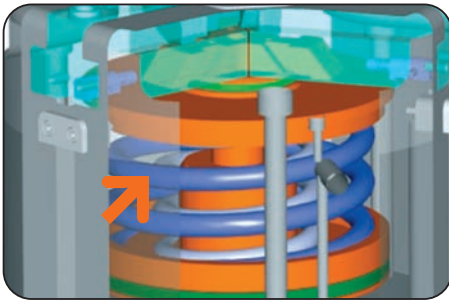
- optimum transmission of power to gripping force
- self-centering
- synchronized jaw movement
- high repeatability



Gripping jaw positioning

individual gripping jaw positioning via centring sleeves

- precise positioning of individual gripping jaws
- quick, cost-effective and therefore economical jaw changing
- space-saving design



Gripping force safety device

NC, NO and SC, SO Models

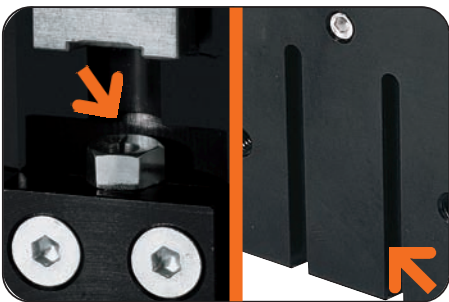
spring integrated into cylinder as energy reserve

- permanent maintenance of gripping force
- compact design

N and S Models

External pressure safety valve

- Gripping force safety possible by addition of a pressure safety valve (order no.DSV1/8). The inevitable leakage in the pneumatic circuit restricts the time of this type of gripping force safety.



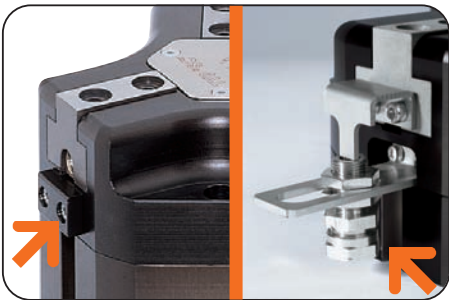
Position sensing GD303-B up to GD308-B

Mounting for inductive proximity switch

- adjustable via eccentric sleeve (GD303-B/GD304-B) or adjustable switch cam (GD306-B/GD308-B)
- process safe due to direct gripper jaw position sensing

via magnetic field sensor

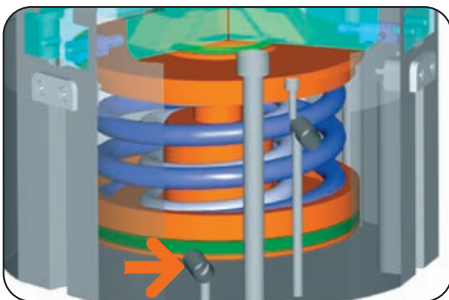
- compact design
- for magnetic field sensor with bracket for C-slot



Position sensing GD310-B up to GD330-B

via inductive proximity switch

- sensing of 3 position possible
- process safe due to direct gripper jaw position sensing
- alternate sensing KHA for bracket mounting as accessories available



Connections

Energy supply, attachment and positioning possibilities

Adaptable to multiple mounting configuration

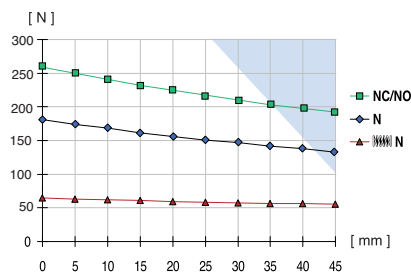
- optimal integration into the workroom through individual mounting situation
- tubeless direct connection possibility (no additional hose needed)

Three-Jaw Gripper



Gripping force diagram

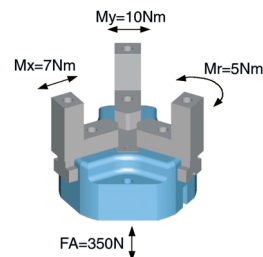
Gripping force as a function of jaw length.



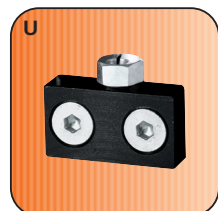
Colored area: increased wear and tear to be expected

Forces and Moments

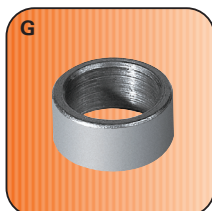
Max allowable forces and moments on jaws.



Included with purchase



Mounting block
Order no. KB3-07

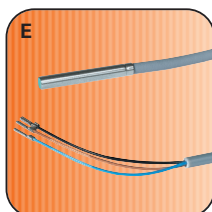


Centring sleeve
Order no. BDST40400

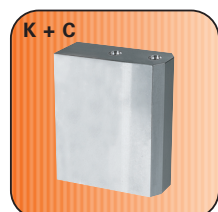
Accessory list



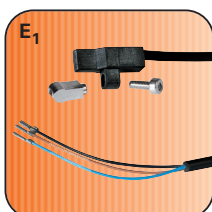
Pneumatic fittings
Order no. WVM5



Proximity switch
Order no. NJ3-E2-03



Universal jaw
Order no. UB303 (Al)
Order no. UB303ST (St)



Magnetic field sensor
Order no. MFS103KHC42



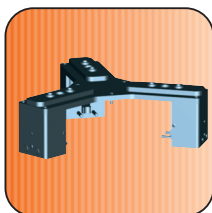
Magnetic field sensor
Order no. MFS103SKHC40



Plug 3-pole
Order no. S12-G-3

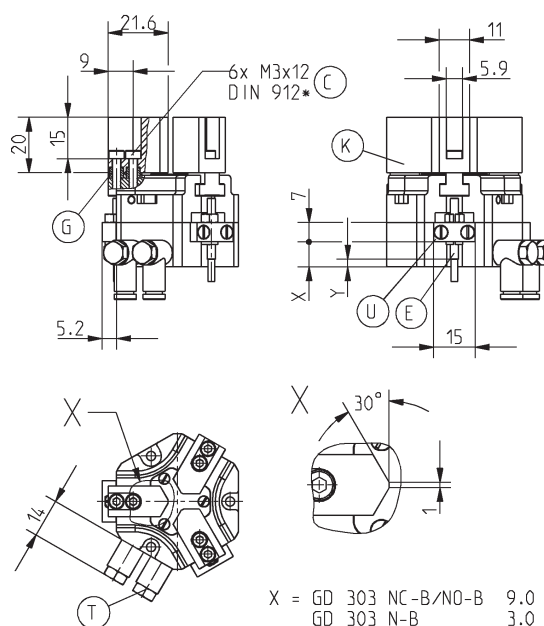


Pressure safety valve
Order no. DSV1/8



Dust protection
on request

Accessory

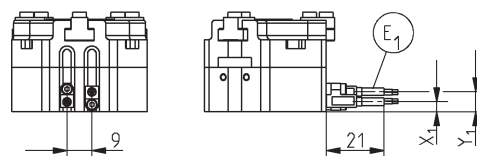


X = GD 303 NC-B/NO-B 9.0
GD 303 N-B 3.0

Y = GD 303 NC-B/NO-B 2.7
GD 303 N-B -3.3

* equivalent to DIN EN ISO 4762

Magnetic field sensor



GD 303-B	N	NC	NO
X_1	~ 3.5	~ 3.5	~14.0
Y_1	~ 7.0	~ 7.0	~17.5

Subject to change without prior notice



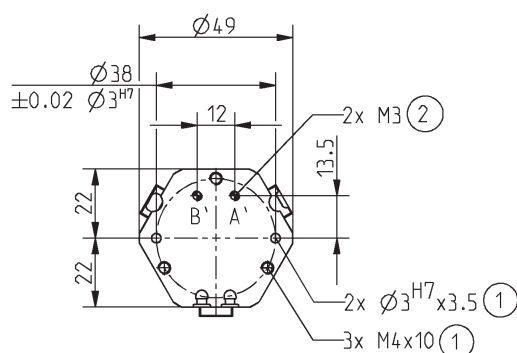
Order no.:	GD303N-B	GD303NC-B	GD303NO-B
Stroke per jaw [mm]:	3	3	3
Gripping force in closing and opening [N]:	190	-	-
Gripping force in closing [N]:	-	255	-
Gripping force in opening [N]:	-	-	255
Recommended workpiece weight [kg]*:	0,97	1,3	1,3
Gripping force secured by spring min./max. [N]:	-	80	80
Closing time/opening time [s]:	0,015	0,02	0,02
Repeatability +/- [mm]:	0,05	0,05	0,05
Min./max. operating pressure [bar]:	3/8	5/8	5/8
Min./max. operating temperature [°C]**:	5/80	5/80	5/80
Air volume per cycle [cm³]:	3,5	7	7
Weight [g]:	150	190	190

All data measured at 6 bar

* Value determined with friction coefficient $\mu = 0.1$ and safety factor $\nu = 2$

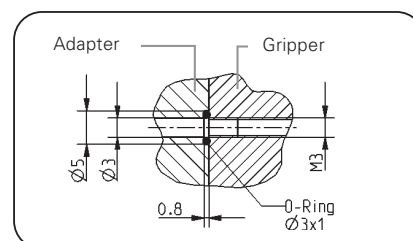
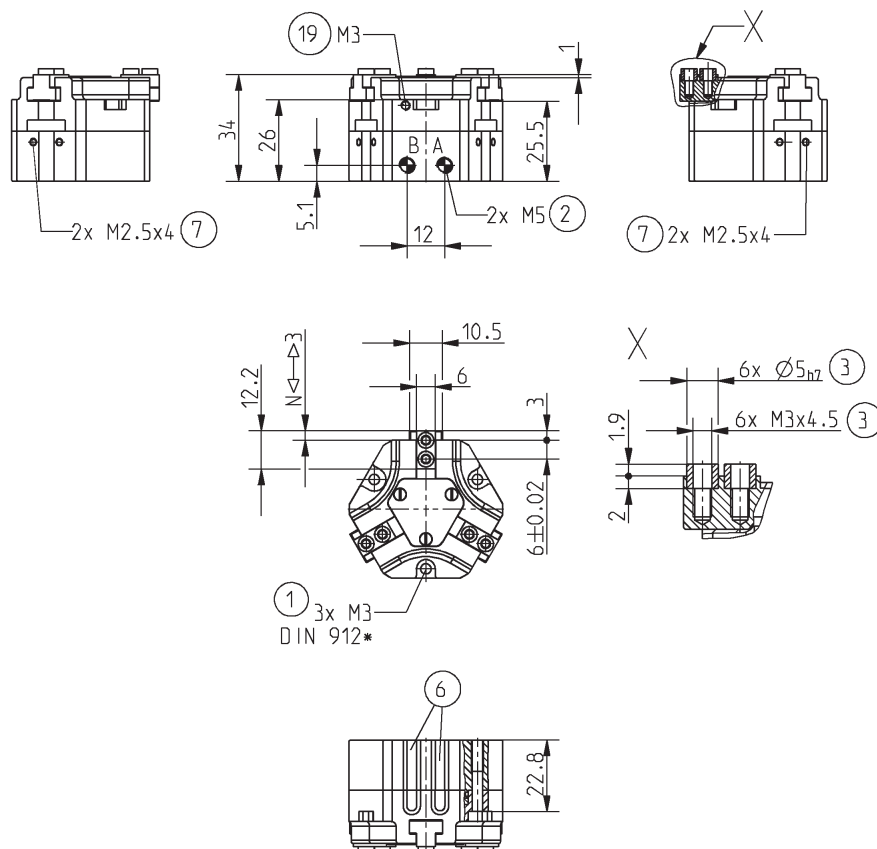
** High-temperature-resistant model (up to 150°) add T to part number

GD303NC-B
GD303NO-B

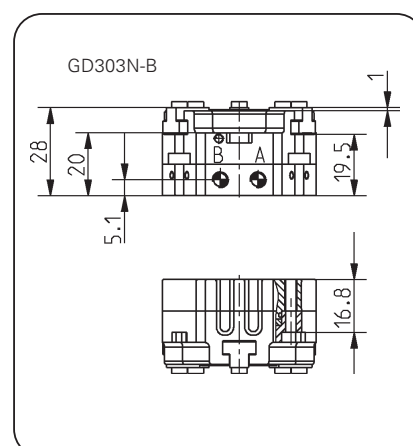


- ① Gripper mounting
- ② Power supply
- ③ Jaw fastening
- ④ Lubrication nipple
- ⑦ Mounting block connection (KB)
- ①⑨ Air purge connection
- Ⓐ Air connection (closing)
- Ⓑ Air connection (opening)
- Ⓐ Alternate air connection (closing)
- Ⓑ Alternate air connection (opening)

* equivalent to DIN EN ISO 4762

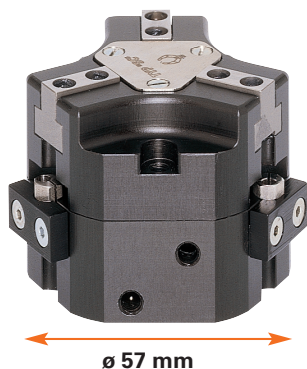


Hoseless air connection



Subject to change without prior notice

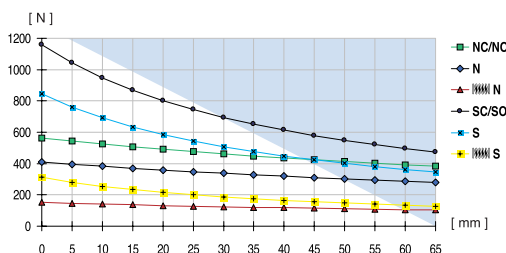
Three-Jaw Gripper



ø 57 mm

Gripping force diagram

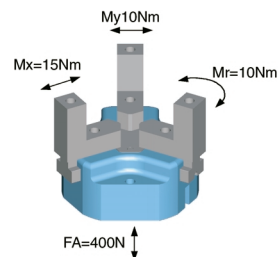
Gripping force as a function of jaw length.



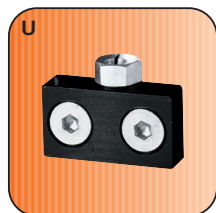
Colored area: increased wear and tear to be expected

Forces and Moments

Max allowable forces and moments on jaws.

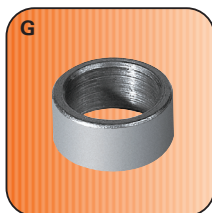


Included with purchase



Mounting block

Order no. KB3-08



Centring sleeve

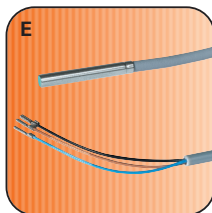
Order no. BDST40400

Accessory list



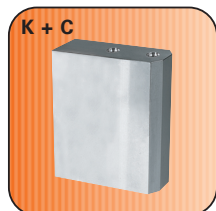
Pneumatic fittings

Order no. WVM5



Proximity switch

Order no. NJ3-E2-03



Universal jaw

Order no. UB304 (Al)

Order no. UB304ST (St)



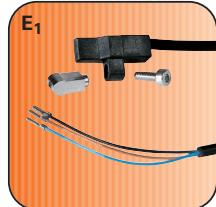
Pressing star

Order no. ADS304C/O

for GD304NC/NO/SC/SO

Order no. ADS304N/S

for GD304N/S



Magnetic field sensor

Order no. MFS103KHC42



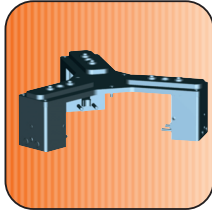
Plug 3-pole

Order no. S12-G-3



Pressure safety valve

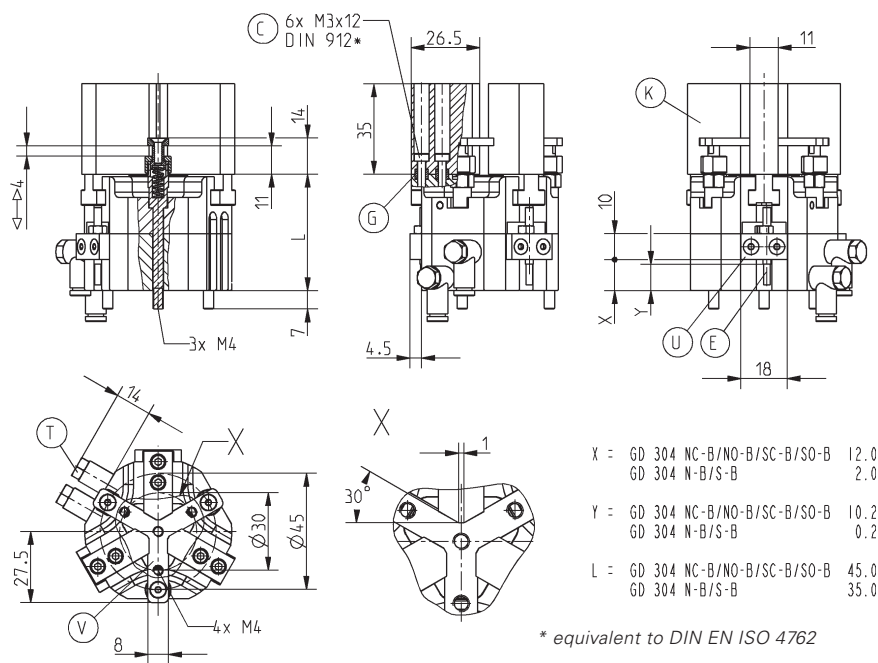
Order no. DSV1/8



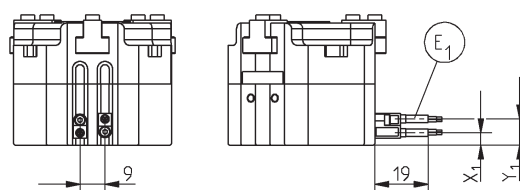
Dust protection

on request

Accessory



Magnetic field sensor



GD 304-B	N/S	NC/SC	NO/SO
X_1	~ 4.5	~ 4.5	~20.0
Y_1	~ 9.5	~ 9.5	~24.5

Subject to change without prior notice



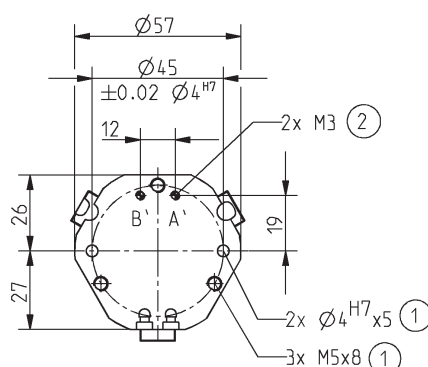
Order no.:	GD304N-B	GD304NC-B	GD304NO-B	GD304S-B	GD304SC-B	GD304SO-B
Stroke per jaw [mm]:	4	4	4	2	2	2
Gripping force in closing and opening [N]:	420	-	-	850	-	-
Gripping force in closing [N]:	-	560	-	-	1160	-
Gripping force in opening [N]:	-	-	560	-	-	1160
Recommended workpiece weight [kg]*:	2,1	2,9	2,9	4,3	5,9	5,9
Gripping force secured by spring min./max. [N]:	-	140	140	-	310	310
Closing time/opening time [s]:	0,02	0,025	0,025	0,02	0,025	0,025
Repeatability +/- [mm]:	0,05	0,05	0,05	0,05	0,05	0,05
Min./max. operating pressure. [bar]:	3/8	5/8	5/8	3/8	5/8	5/8
Min./max. operating temperature [°C]**:	5/80	5/80	5/80	5/80	5/80	5/80
Air volume per cycle [cm³]:	9	18	18	9	18	18
Weight [g]:	270	340	340	270	340	340

All data measured at 6 bar

* Value determined with friction coefficient $\mu = 0.1$ and safety factor $\nu = 2$

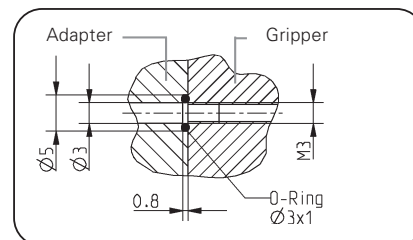
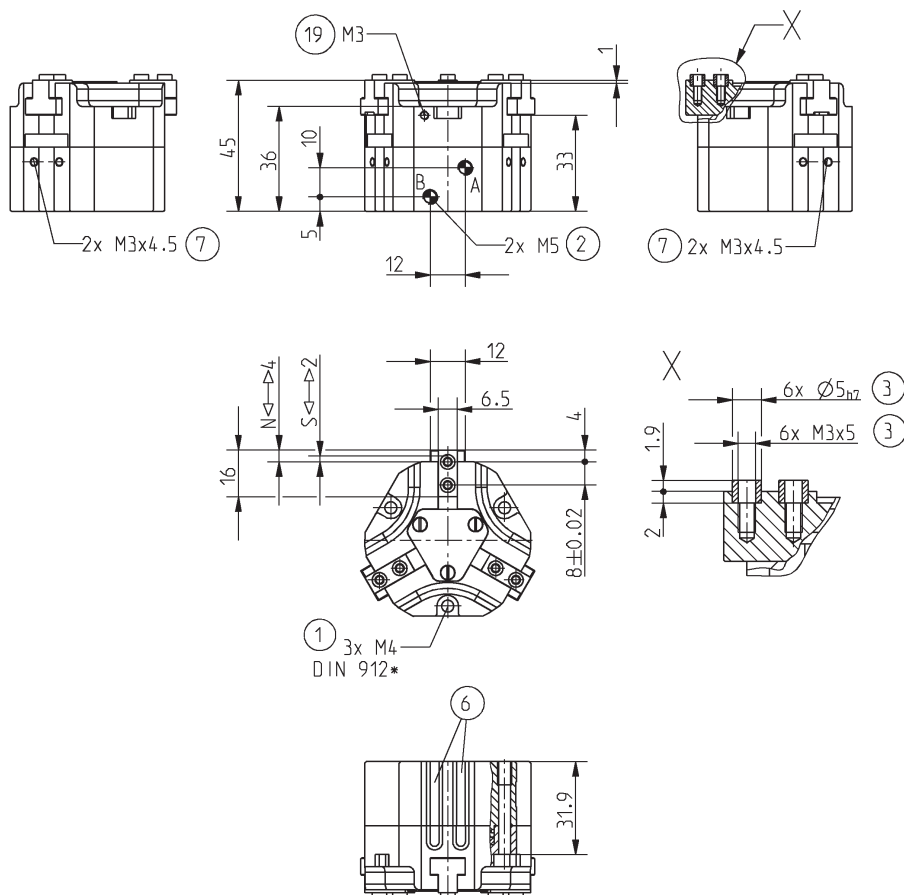
** High-temperature-resistant model (up to 150°) add T to part number

GD304NC-B
GD304NO-B
GD304SC-B
GD304SO-B

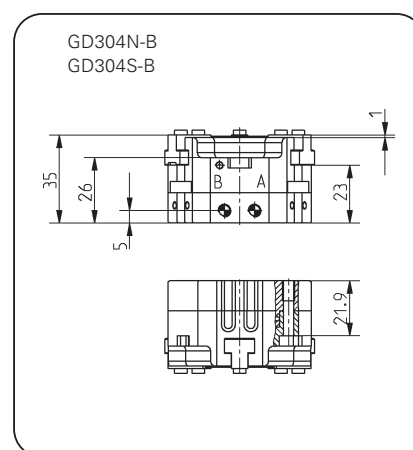


- ① Gripper mounting
- ② Power supply
- ③ Jaw fastening
- ④ Lubrication nipple
- ⑦ Mounting block connection (KB)
- ①⑨ Air purge connection
- ① Air connection (closing)
- ② Air connection (opening)
- ① Air alternate air connection (closing)
- ② Air alternate air connection (opening)

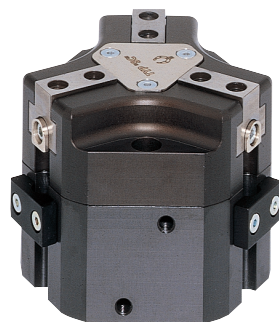
* equivalent to DIN EN ISO 4762



Hoseless air connection



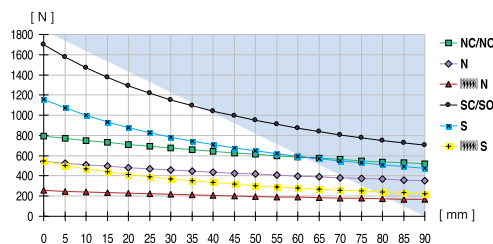
Three-Jaw Gripper



ø 74 mm

Gripping force diagram

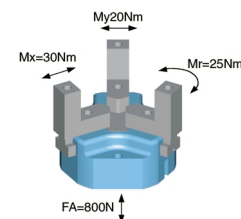
Gripping force as a function of jaw length.



Colored area: increased wear and tear to be expected

Forces and Moments

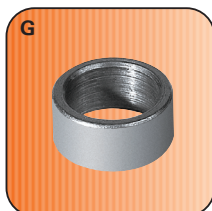
Max allowable forces and moments on jaws.



Included with purchase



Mounting block
Order no. K8-39



Centring sleeve
Order no. BDST40600

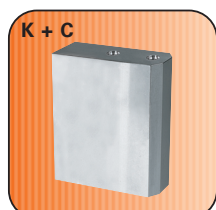
Accessory list



Pneumatic fittings
Order no. WVM5



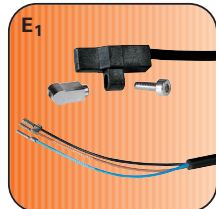
Proximity switch
Order no. NJ8-E2S



Universal jaw (set)
Order no. UB306 (Al)
Order no. UB306ST (St)



Pressing star
Order no. ADS306C/O
for GD306NC/NO/SC/SO
Order no. ADS306N/S
for GD306N/S



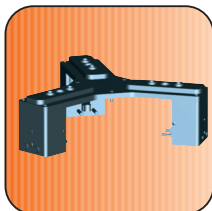
Magnetic field sensor
Order no. MFS103KHC42



Magnetic field sensor
Order no. MFS303KHC30

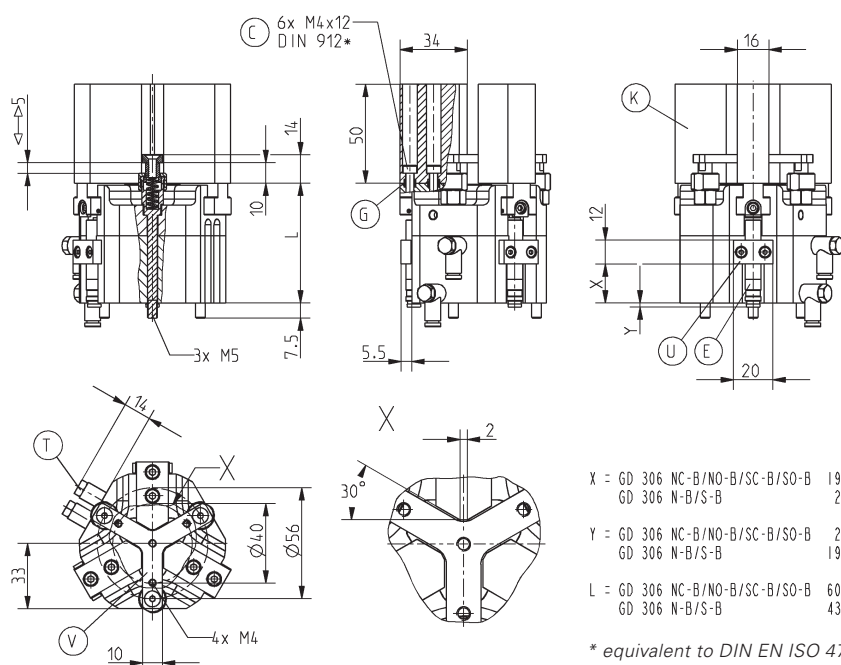


Pressure safety valve
Order no. DSV1/8

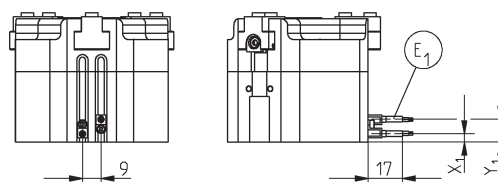


Dust protection
on request

Accessory



Magnetic field sensor



GD 306-B	N/S	NC/SC	NO/SO
X ₁	~ 4.0	~ 4.0	~29.0
Y ₁	~11.0	~11.0	~35.5

Subject to change without prior notice



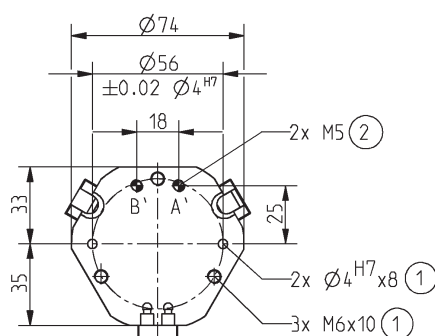
Order no.:	GD306N-B	GD306NC-B	GD306NO-B	GD306S-B	GD306SC-B	GD306SO-B
Stroke per jaw [mm]:	6	6	6	3	3	3
Gripping force in closing and opening [N]:	550	-	-	1150	-	-
Gripping force in closing [N]:	-	800	-	-	1700	-
Gripping force in opening [N]:	-	-	800	-	-	1700
Recommended workpiece weight [kg]*:	2,8	4,1	4,1	5,9	8,7	8,7
Gripping force secured by spring min./max. [N]:	-	250	250	-	550	550
Closing time/opening time [s]:	0,03	0,04	0,04	0,03	0,04	0,04
Repeatability +/- [mm]:	0,05	0,05	0,05	0,05	0,05	0,05
Min./max. operating pressure [bar]:	3/8	5/8	5/8	3/8	5/8	5/8
Min./max. operating temperature [°C]**:	5/80	5/80	5/80	5/80	5/80	5/80
Air volume per cycle [cm³]:	18	40	40	18	40	40
Weight [g]:	550	700	700	550	700	700

All data measured at 6 bar

* Value determined with friction coefficient $\mu = 0.1$ and safety factor $\nu = 2$

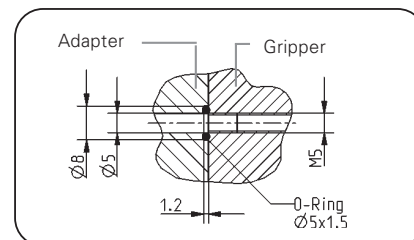
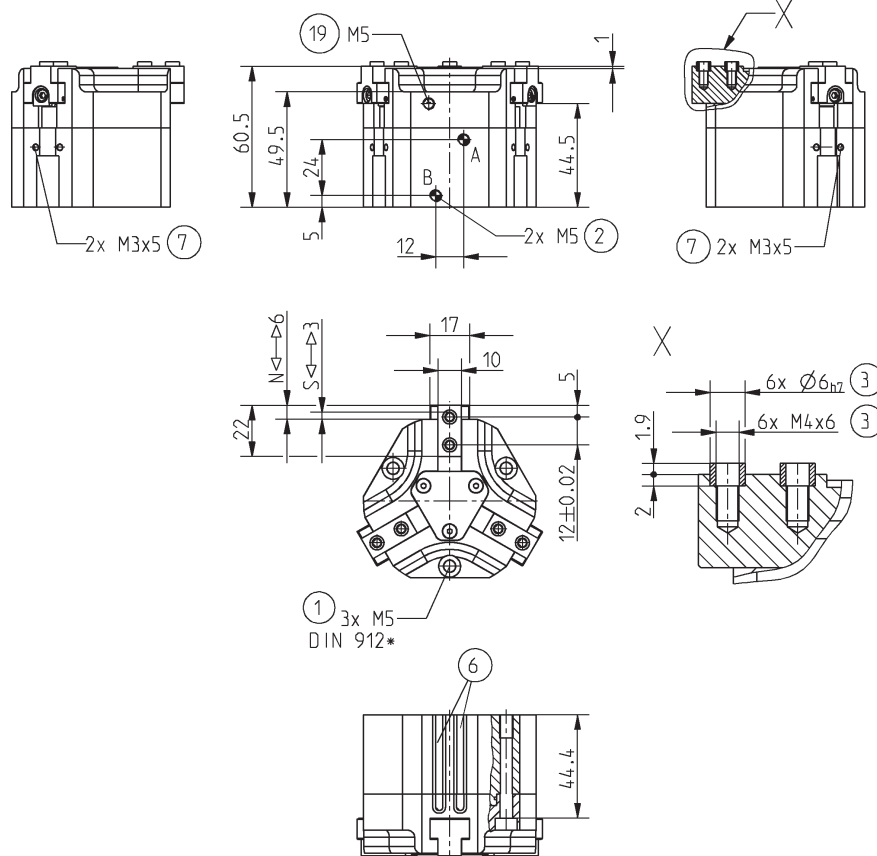
** High-temperature-resistant model (up to 150°) add T to part number

GD306NC-B
GD306NO-B
GD306SC-B
GD306SO-B



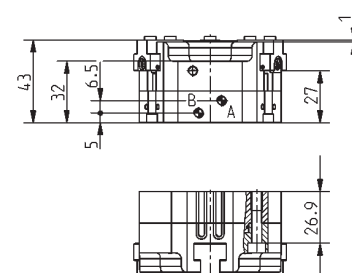
- ① Gripper mounting
- ② Power supply
- ③ Jaw fastening
- ④ Lubrication nipple
- ⑦ Mounting block connection (KB)
- ⑨ Air purge connection
- Ⓐ Air connection (closing)
- Ⓑ Air connection (opening)
- Ⓐ Alternate air connection (closing)
- Ⓑ Alternate air connection (opening)

* equivalent to DIN EN ISO 4762

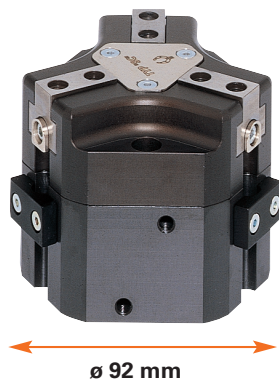


Hoseless air connection

GD306N-B
GD306S-B

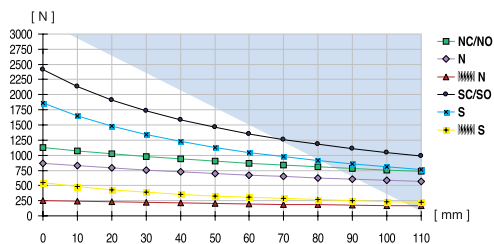


Three-Jaw **Gripper**



Gripping force diagram

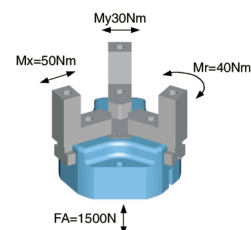
Gripping force as a function of jaw length.



Colored area: increased wear and tear to be expected

Forces and Moments

Max allowable forces and moments on jaws.



Included with purchase



Mounting block
Order no. KB8-30



Centring sleeve
Order no. BDST40800

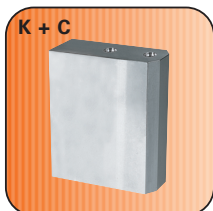
Accessory list



Pneumatic fittings
Order no. WV1/8x6



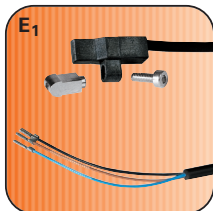
Proximity switch
Order no. NJ8-E2S



Universal jaw (set)
Order no. UB308 (Al)
Order no. UB308ST (St)



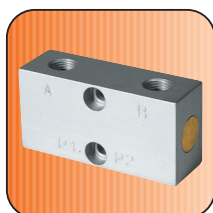
Pressing star
Order no. **ADS308C/O**
for GD308NC/NO/SC/SO
Order no. **ADS308N/S**
for GD308N/S



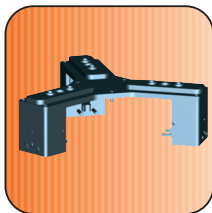
Magnetic field sensor
Order no. MFS103KHC42



Magnetic field sensor
Order no. MFS303KHC30

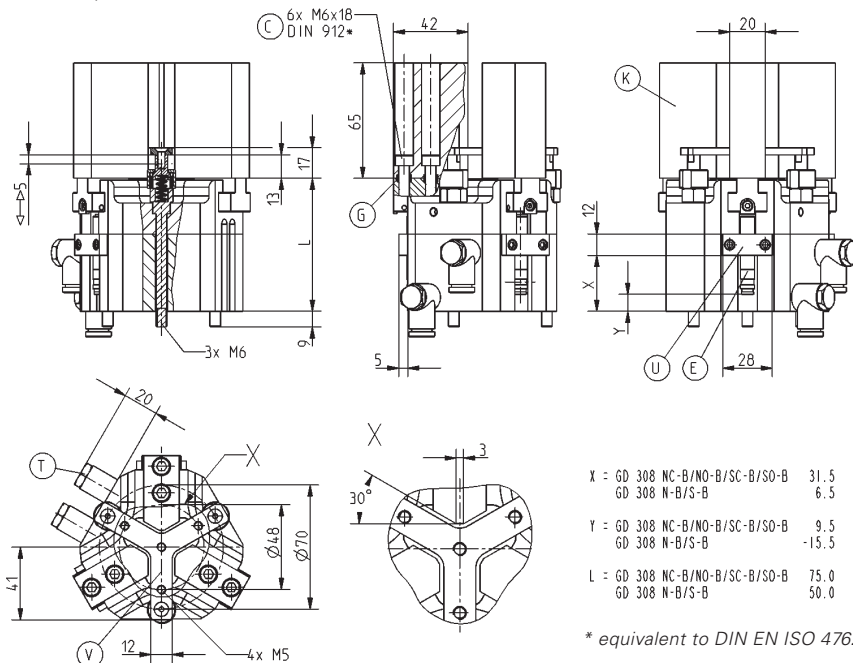


Pressure safety valve
Order no. DSV1/8



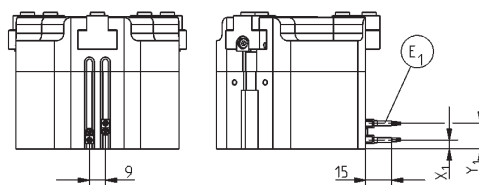
*Dust protection
on request*

Accessory



* equivalent to DIN EN ISO 4762

Magnetic field sensor



GD308-B	N/S	NC/SC	NO/SO
X_1	~ 5.0	~ 5.0	~35.5
Y_1	~14.5	~14.5	~45.0

Subject to change without prior notice



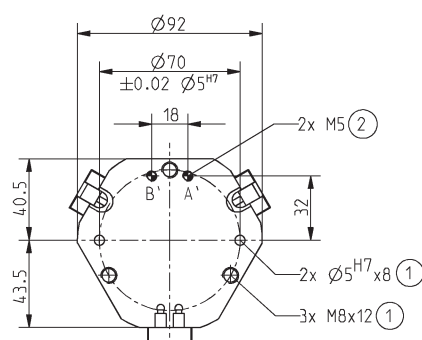
Bestellnummer:	GD308N-B	GD308NC-B	GD308NO-B	GD308S-B	GD308SC-B	GD308SO-B
Stroke per jaw [mm]:	8	8	8	4	4	4
Gripping force in closing and opening [N]:	875	-	-	1850	-	-
Gripping force in closing [N]:	-	1125	-	-	2440	-
Gripping force in opening [N]:	-	-	1125	-	-	2440
Recommended workpiece weight [kg]*:	4,5	5,7	5,7	9,4	12,4	12,4
Gripping force secured by spring min./max. [N]:	-	250	250	-	590	590
Closing time/opening time [s]:	0,05	0,06	0,06	0,05	0,06	0,06
Repeatability +/- [mm]:	0,05	0,05	0,05	0,05	0,05	0,05
Min./max. operating pressure [bar]:	3/8	5/8	5/8	3/8	5/8	5/8
Min./max. operating temperature [°C]**:	5/80	5/80	5/80	5/80	5/80	5/80
Air volume per cycle [cm³]:	36	85	85	36	85	85
Gewicht [kg]:	1	1,3	1,3	1	1,3	1,3

All data measured at 6 bar

* Value determined with friction coefficient $\mu = 0.1$ and safety factor $\nu = 2$

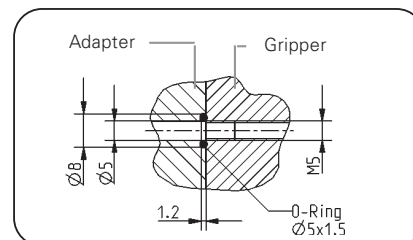
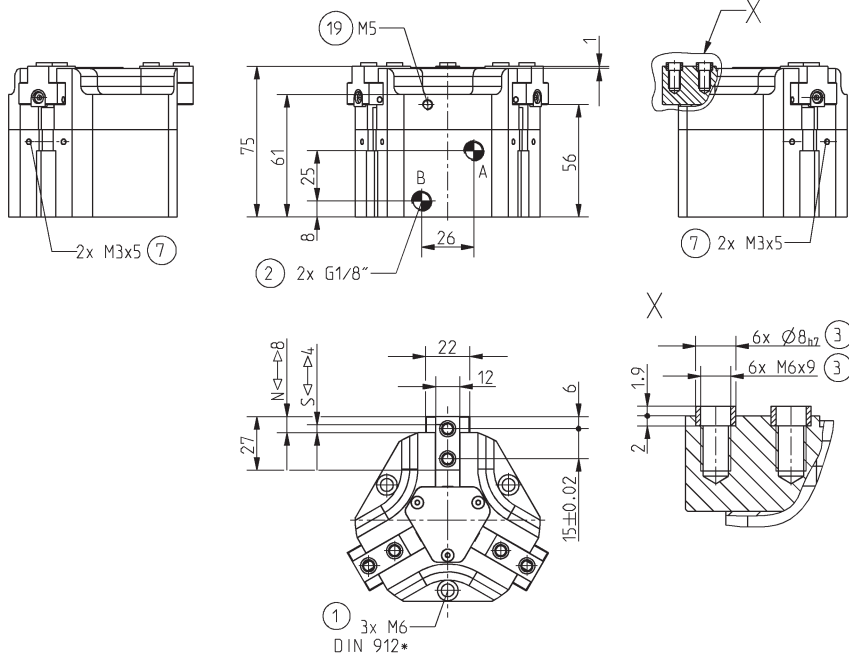
** High-temperature-resistant model (up to 150°) add T to part number

GD308NC-B
GD308NO-B
GD308SC-B
GD308SO-B



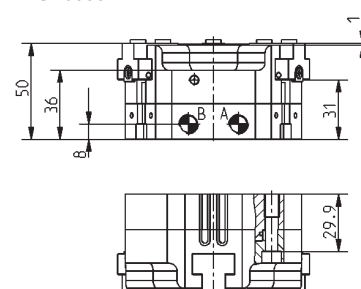
- ① Gripper mounting
- ② Power supply
- ③ Jaw fastening
- ④ Lubrication nipple
- ⑦ Mounting block connection (KB)
- ⑨ Air purge connection
- Ⓐ Air connection (closing)
- Ⓑ Air connection (opening)
- Ⓐ Alternate air connection (closing)
- Ⓑ Alternate air connection (opening)

* equivalent to DIN EN ISO 4762

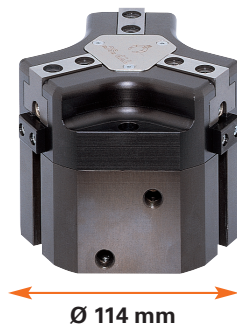


Hoseless air connection

GD308N-B
GD308S-B

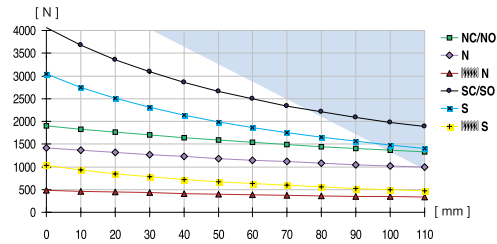


Three-Jaw Gripper



Gripping force diagram

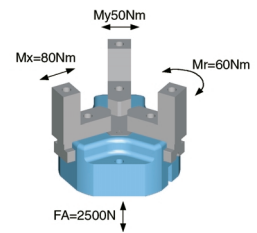
Gripping force as a function of jaw length.



Colored area: increased wear and tear to be expected

Forces and Moments

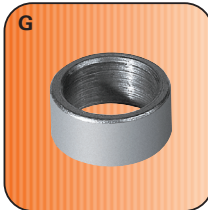
Max allowable forces and moments on jaws.



Included with purchase



Klemmbock
Order no. KB8-31



Zentrierhülse
Order no. BDST41000

Accessory list



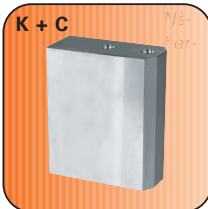
Pneumatic fittings
Order no. WV1/8x6



Proximity switch
Order no. NJ8-E2S



Pressing star
Order no. ADS310C/O
for GD310NC/NO/SC/SO-B
Order no. ADS310N/S
for GD310N/S-B



Universal jaw (set)
Order no. UB310 (Al)
Order no. UB310ST (St)



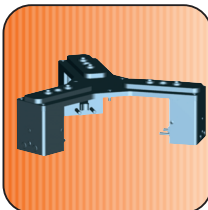
Alternate proximity bracket
Order no. KHA310-B-8



Cable angled plug
Order no. KAW500

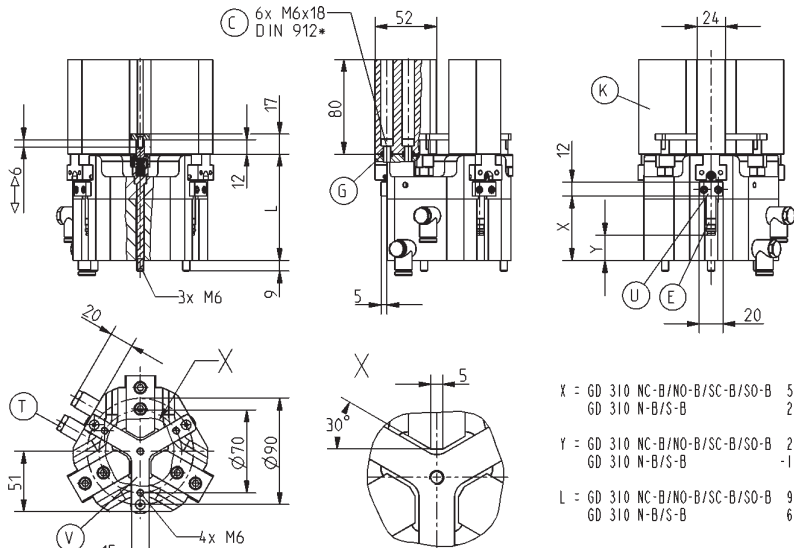


Pressure safety valve
Order no. DSV1/8



Dust protection
on request

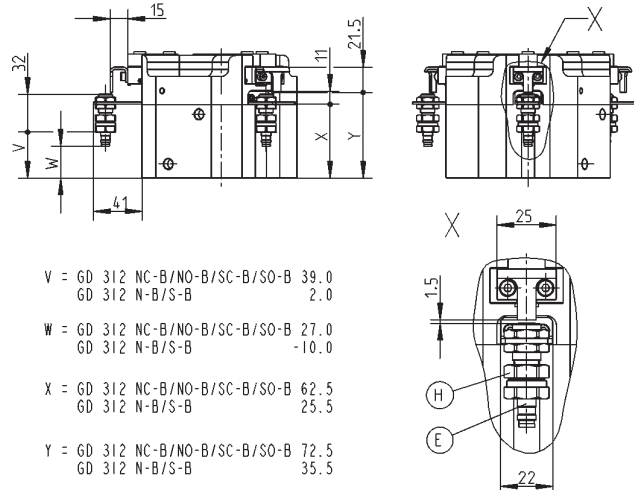
Accessory



X =	GD 310 NC-B/NO-B/SC-B/SO-B	54.5
	GD 310 N-B/S-B	24.5
Y =	GD 310 NC-B/NO-B/SC-B/SO-B	21.5
	GD 310 N-B/S-B	-10.5
L =	GD 310 NC-B/NO-B/SC-B/SO-B	90.0
	GD 310 N-B/S-B	60.0

* equivalent to DIN EN ISO 4762

Alternate proximity mounting



V =	GD 312 NC-B/NO-B/SC-B/SO-B	39.0
	GD 312 N-B/S-B	2.0
W =	GD 312 NC-B/NO-B/SC-B/SO-B	27.0
	GD 312 N-B/S-B	-10.0
X =	GD 312 NC-B/NO-B/SC-B/SO-B	62.5
	GD 312 N-B/S-B	25.5
Y =	GD 312 NC-B/NO-B/SC-B/SO-B	72.5
	GD 312 N-B/S-B	35.5

Subject to change without prior notice



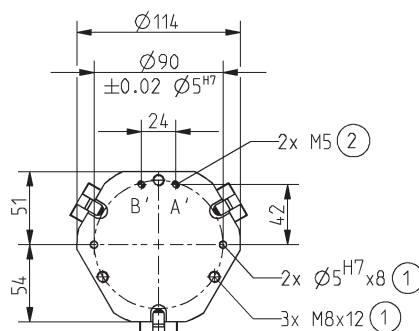
Order no.:	GD310N-B	GD310NC-B	GD310NO-B	GD310S-B	GD310SC-B	GD310SO-B
Stroke per jaw [mm]:	10	10	10	5	5	5
Gripping force in closing and opening [N]:	1400	-	-	3000	-	-
Gripping force in closing [N]:	-	1800	-	-	4000	-
Gripping force in opening [N]:	-	-	1800	-	-	4000
Recommended workpiece weight [kg]*:	7,1	9,2	9,2	15,3	20,4	20,4
Gripping force secured by spring min./max. [N]:	-	400	440	-	1000	1000
Closing time/opening time [s]:	0,08	0,1	0,1	0,08	0,1	0,1
Repeatability [mm]:	0,05	0,05	0,05	0,05	0,05	0,05
Min./max. operating pressure [bar]:	3/8	5/8	5/8	3/8	5/8	5/8
Min./max. operating temperature [°C]**:	5/80	5/80	5/80	5/80	5/80	5/80
Air volume per cycle [cm³]:	74	150	150	74	150	150
Weight [kg]:	1,8	2,4	2,4	1,8	2,4	2,4

All data measured at 6 bar

* Value determined with friction coefficient $\mu = 0.1$ and safety factor $v = 2$

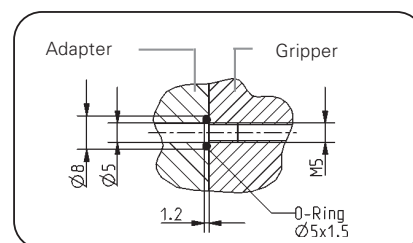
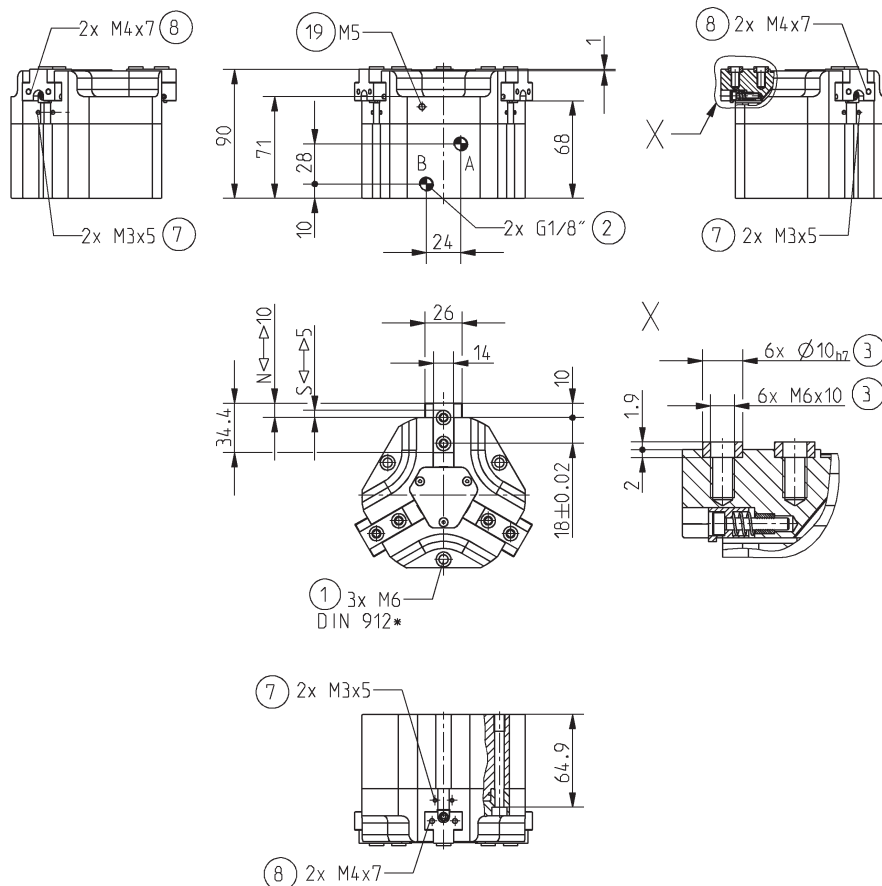
** High-temperature-resistant model (up to 150°C) add T to part number

GD310NC-B
GD310NO-B
GD310SC-B
GD310SO-B

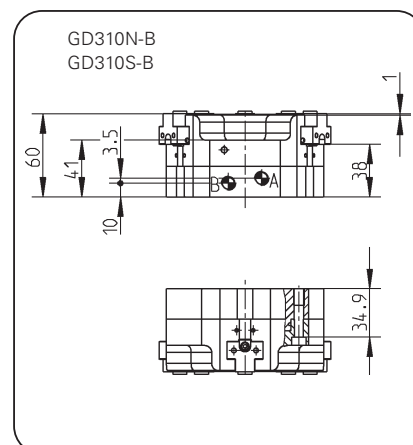


- ① Gripper mounting
- ② Power supply
- ③ Jaw fastening
- ④ Lubrication nipple
- ⑦ Mounting block connection (KB)
- ⑧ Mounting for mounting holder (KHA)
- ⑨ Air purge connection
- Ⓐ Air connection (closing)
- Ⓑ Air connection (opening)
- Ⓐ Alternate air connection (closing)
- Ⓑ Alternate air connection (opening)

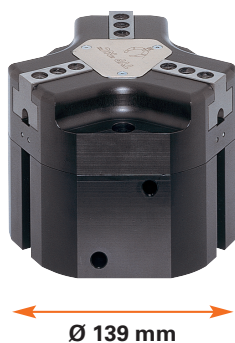
* equivalent to DIN EN ISO 4762



Hoseless air connection

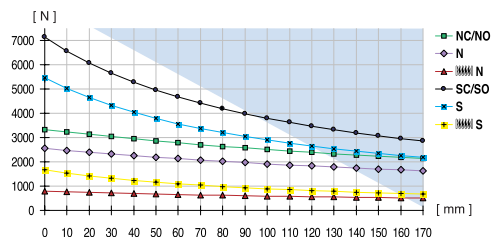


Three-Jaw Gripper



Gripping force diagram

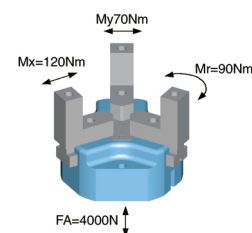
Gripping force as a function of jaw length.



Colored area: increased wear and tear to be expected

Forces and Moments

Max allowable forces and moments on jaws.



Included with purchase



Mounting block
Order no. KB8-32



Centring sleeve
Order no. BDST41000



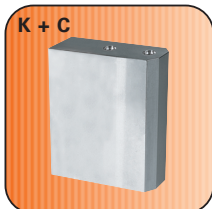
Pneumatic fittings
Order no. WV1/8x6



Proximity switch
Order no. NJ8-E2S



Pressing star
Order no. ADS312C/O
for GD312NC/NO/SC/SO-B
Order no. ADS312N/S
for GD312N/S-B



Universal jaw
Order no. UB312 (Al)
Order no. UB312ST (St)



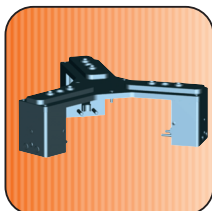
Alternate proximity bracket
Order no. KHA312-B-8



Cable angled plug
Order no. KAW500

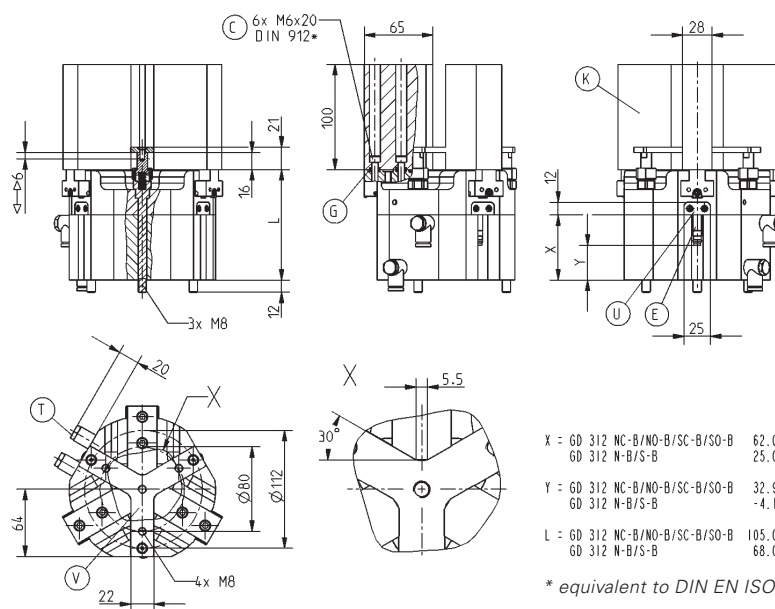


Pressure safety valve
Order no. DSV1/8

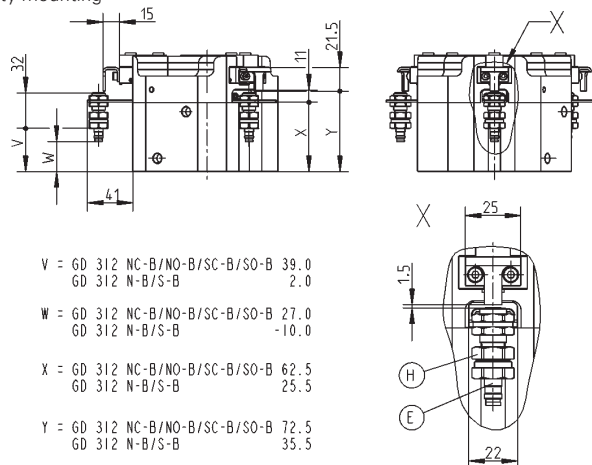


Dust protection
on request

Accessory



Alternate proximity mounting



Subject to change without prior notice



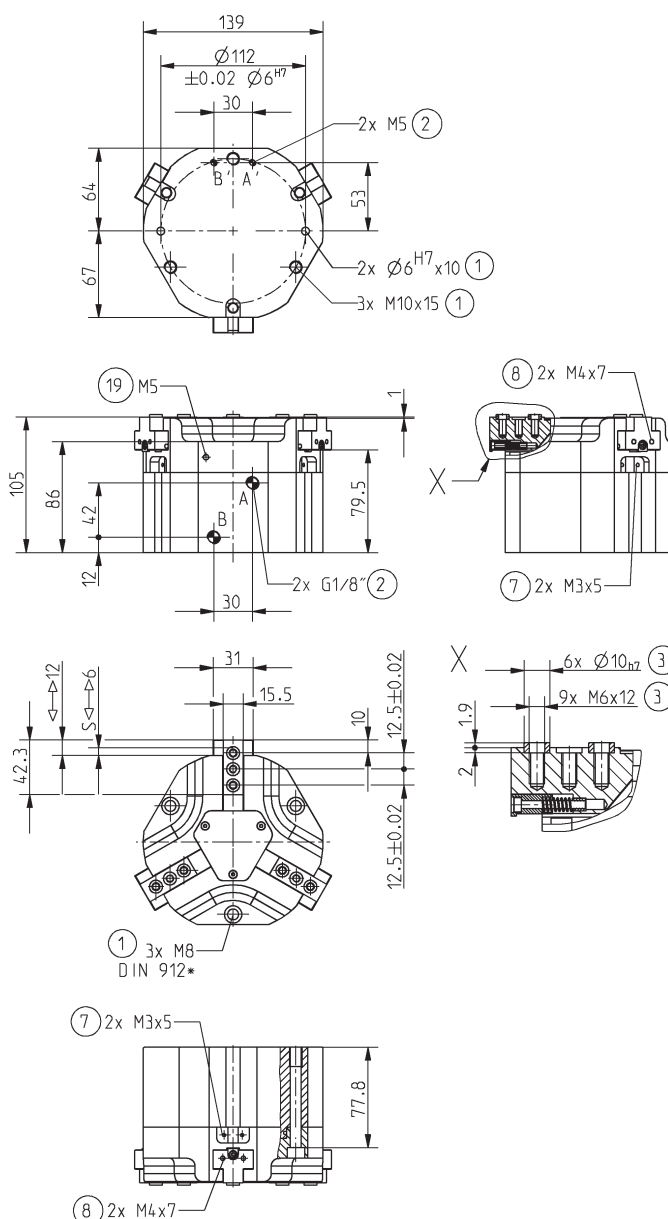
Order no.:	GD312N-B	GD312NC-B	GD312NO-B	GD312S-B	GD312SC-B	GD312SO-B
Stroke per jaw [mm]:	12	12	12	6	6	6
Gripping force in closing and opening [N]:	2500	-	-	5500	-	-
Gripping force in closing [N]:	-	3250	-	-	7000	-
Gripping force in opening [N]:	-	-	3250	-	-	7000
Recommended workpiece weight [kg]*:	12,7	16,6	16,6	28	35,7	35,7
Gripping force secured by spring min./max. [N]:	-	750	750	-	1500	1500
Closing time/opening time [s]:	0,15	0,2	0,2	0,15	0,2	0,2
Repeatability [mm]:	0,05	0,05	0,05	0,05	0,05	0,05
Min./max. operating pressure [bar]:	3/8	5/8	5/8	3/8	5/8	5/8
Min./max. operating temperature [°C]**:	5/80	5/80	5/80	5/80	5/80	5/80
Air volume per cycle [cm³]:	162	350	350	162	350	350
Weight [kg]:	3,1	4,8	4,8	3,1	4,8	4,8

All data measured at 6 bar

* Value determined with friction coefficient $\mu = 0.1$ and safety factor $\nu = 2$

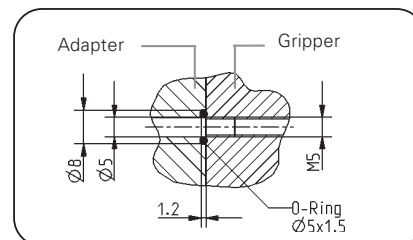
** High-temperature-resistant model (up to 150°C) add T to part number

GD312NC-B
GD312NO-B
GD312SC-B
GD312SO-B

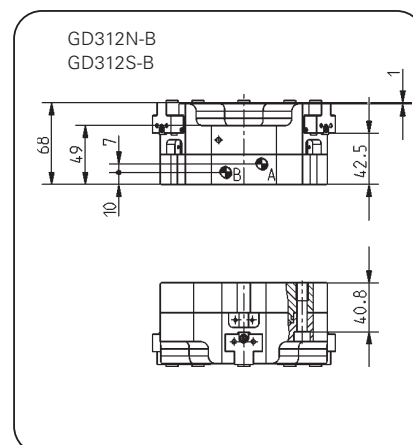


- ① Gripper mounting
- ② Power supply
- ③ Jaw fastening
- ④ Lubrication nipple
- ⑦ Mounting block connection (KB)
- ⑧ Mounting for mounting holder (KHA)
- ⑨ Air purge connection
- A Air connection (closing)
- B Air connection (opening)
- A Alternate air connection (closing)
- B Alternate air connection (opening)

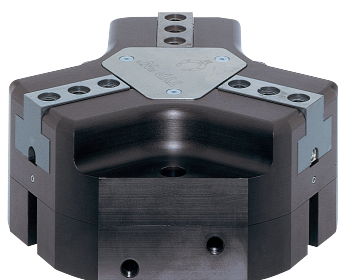
* equivalent to DIN EN ISO 4762



Hoseless air connection



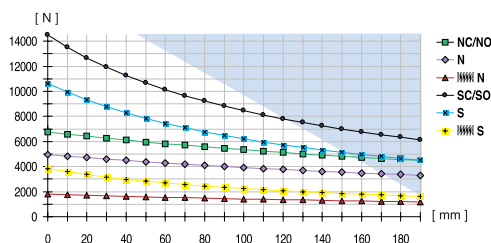
Three-Jaw Gripper



Ø 179 mm

Gripping force diagram

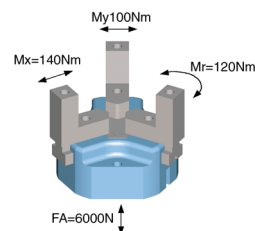
Gripping force as a function of jaw length.



Colored area: increased wear and tear to be expected

Forces and Moments

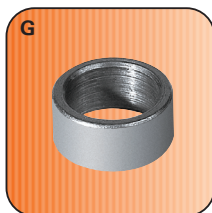
Max allowable forces and moments on jaws.



Included with purchase



Mounting block
Order no. KB8-33



Centring sleeve
Order no. BDST41600

Accessory list



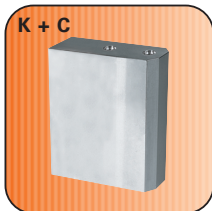
Pneumatic fittings
Order no. WV1/8x6



Proximity switch
Order no. NJ8-E2S



Pressing star
Order no. ADS316C/O
for GD316NC/NO/SC/SO-B
Order no. ADS316N/S
for GD316N/S-B



Universal jaw
Order no. UB316 (Al)
Order no. UB316ST (St)



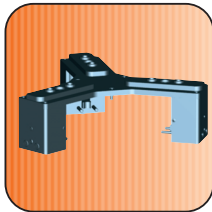
Alternate proximity bracket
Order no. KHA316-B-8



Cable angled plug
Order no. KAW500

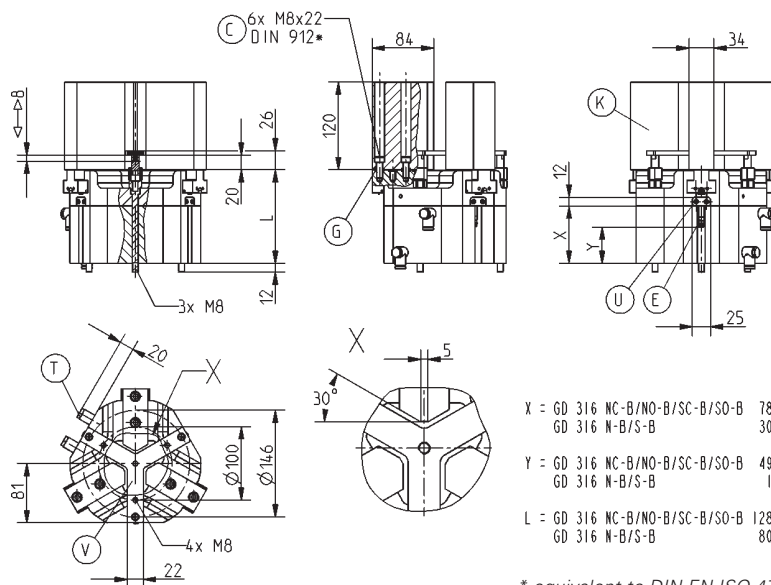


Pressure safety valve
Order no. DSV1/8

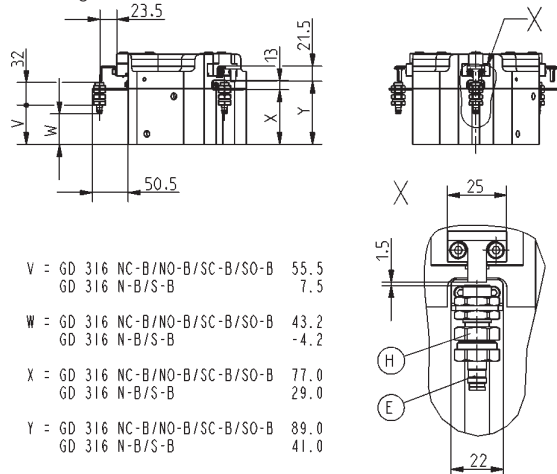


Dust protection
on request

Accessory



Alternate proximity mounting



Subject to change without prior notice



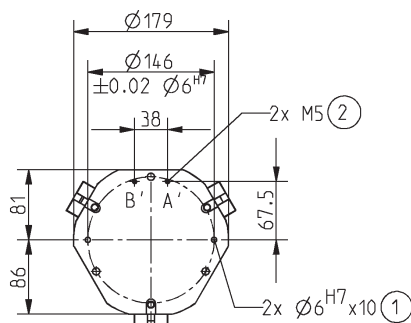
Order no.:	GD316N-B	GD316NC-B	GD316NO-B	GD316S-B	GD316SC-B	GD316SO-B
Stroke per jaw [mm]:	16	16	16	8	8	8
Gripping force in closing and opening [N]:	5000	-	-	10500	-	-
Gripping force in closing [N]:	-	6800	-	-	14100	-
Gripping force in opening [N]:	-	-	6800	-	-	14100
Recommended workpiece weight [kg]*:	25,5	34,7	34,7	53,5	71,9	71,9
Gripping force secured by spring min./max. [N]:	-	1800	1800	-	3600	3600
Closing time/opening time [s]:	0,3	0,4	0,4	0,3	0,4	0,4
Repeatability [mm]:	0,05	0,05	0,05	0,05	0,05	0,05
Min./max. operating pressure [bar]:	3/8	5/8	5/8	3/8	5/8	5/8
Min./max. operating temperature [°C]**:	5/80	5/80	5/80	5/80	5/80	5/80
Air volume per cycle [cm³]:	395	783	783	395	783	783
Weight [kg]:	5,9	9,3	9,3	5,9	9,3	9,3

All data measured at 6 bar

* Value determined with friction coefficient $\mu = 0.1$ and safety factor $\nu = 2$

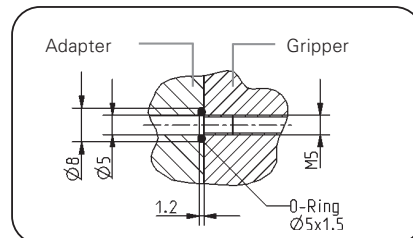
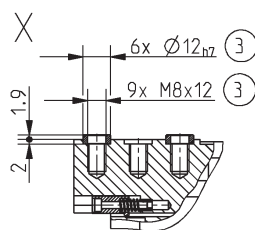
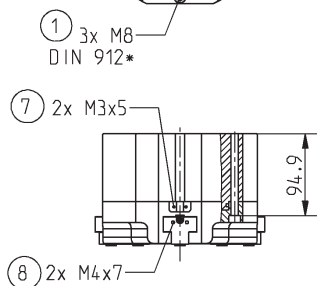
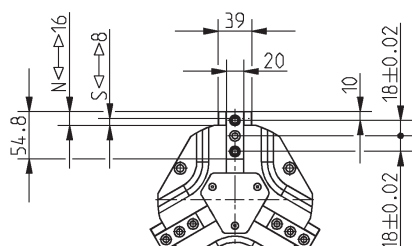
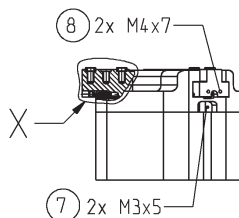
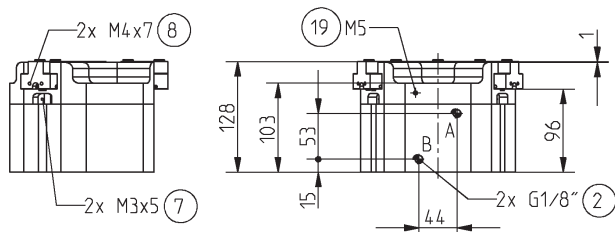
** High-temperature-resistant model (up to 150°C) add T to part number

GD316NC-B
GD316NO-B
GD316SC-B
GD316SO-B

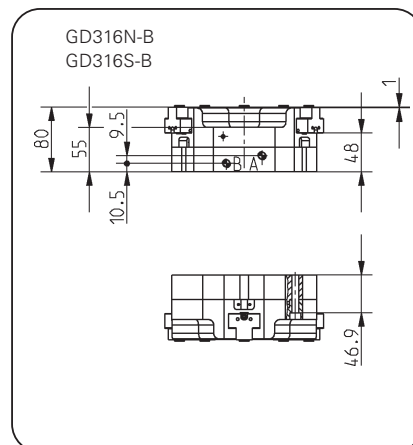


- ① Gripper mounting
- ② Power supply
- ③ Jaw fastening
- ④ Lubrication nipple
- ⑦ Mounting block connection (KB)
- ⑧ Mounting for mounting holder (KHA)
- ⑨ Air purge connection
- Ⓐ Air connection (closing)
- Ⓑ Air connection (opening)
- Ⓐ Alternate air connection (closing)
- Ⓑ Alternate air connection (opening)

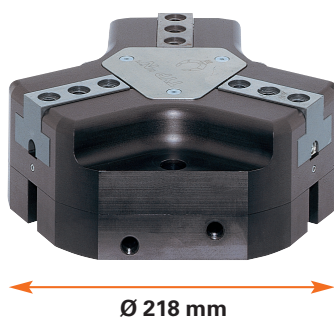
* equivalent to DIN EN ISO 4762



Hoseless air connection

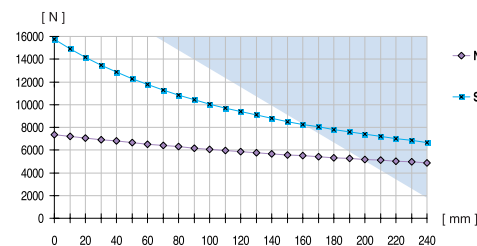


Three-Jaw Gripper



Gripping force diagram

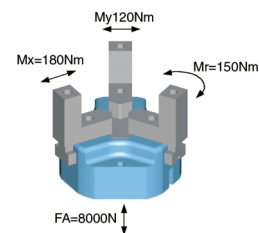
Gripping force as a function of jaw length.



Colored area: increased wear and tear to be expected

Forces and Moments

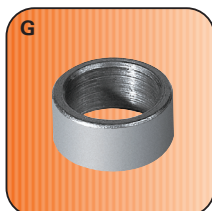
Max allowable forces and moments on jaws.



Included with purchase



Mounting block
Order no. KB8-34



Centring sleeve
Order no. BDST42000

Accessory list



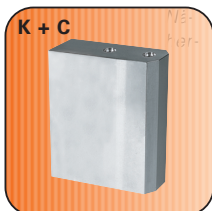
Pneumatic fittings
Order no. WV1/4x8



Proximity switch
Order no. NJ8-E2S



Pressing star
Order no. ADS320N/S
for GD320N/S-B



Universal jaw
Order no. UB320 (Al)
Order no. UB320ST (St)



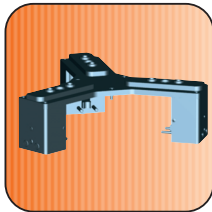
Alternate proximity bracket
Order no. KHA320-B-8



Cable angled plug
Order no. KAW500

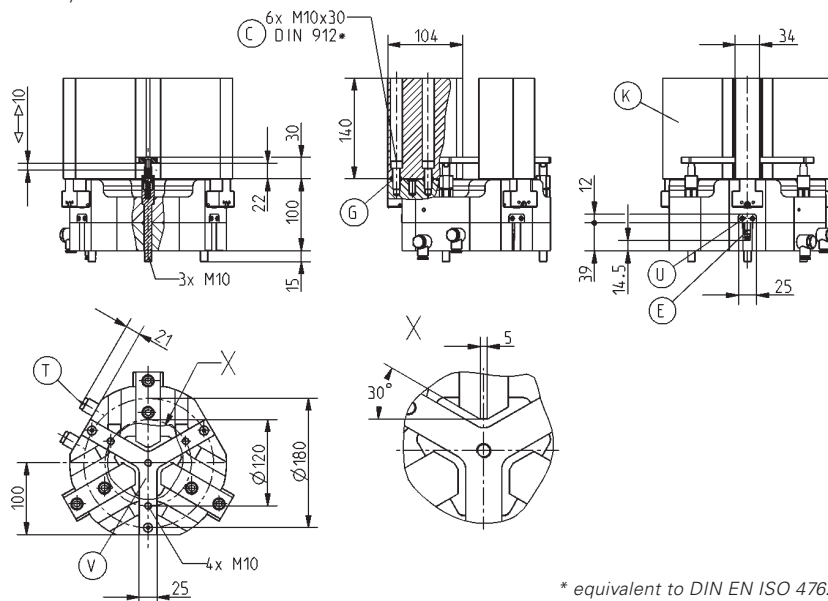


Pressure safety valve
Order no. DSV1/8

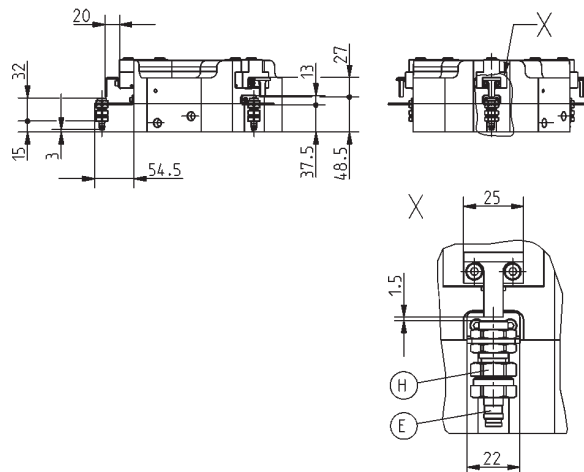


Dust protection
on request

Accessory



Alternate proximity mounting



Subject to change without prior notice



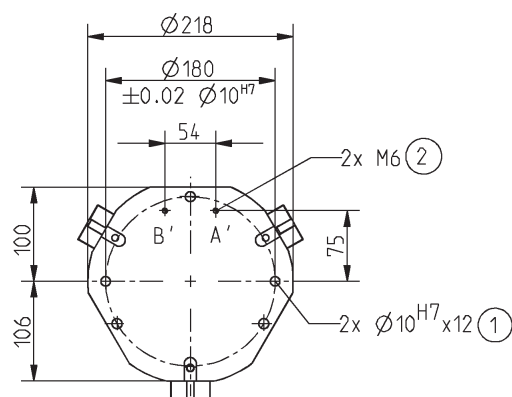
Order no.:	GD320N-B	GD320S-B
Stroke per jaw [mm]:	20	10
Gripping force in closing and opening [N]:	7100	15800
Recommended workpiece weight [kg]*:	36,2	80,5
Closing time/opening time [s]:	0,5	0,5
Repeatability [mm]:	0,05	0,05
Min./max. operating pressure [bar]:	3/8	3/8
Min./max. operating temperature [°C]**:	5/80	5/80
Air volume per cycle [cm³]:	733	733
Weight [kg]:	10,6	10,6

All data measured at 6 bar

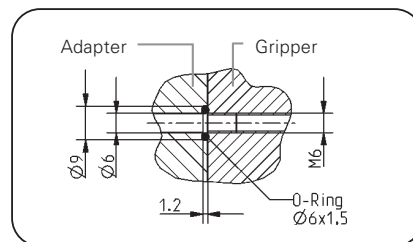
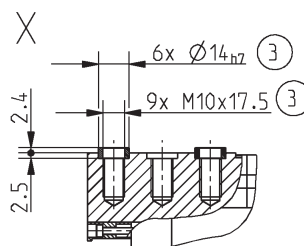
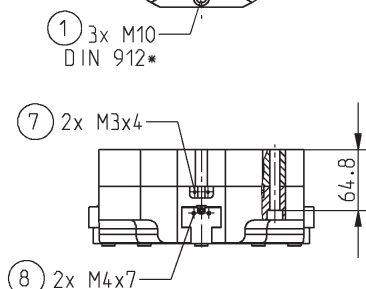
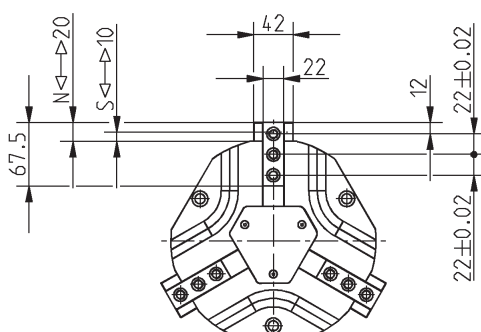
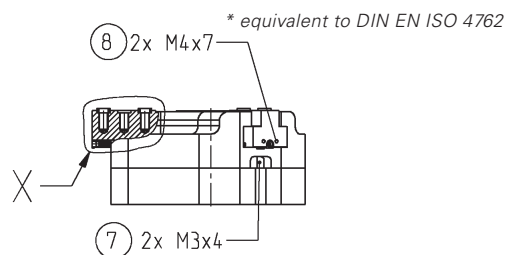
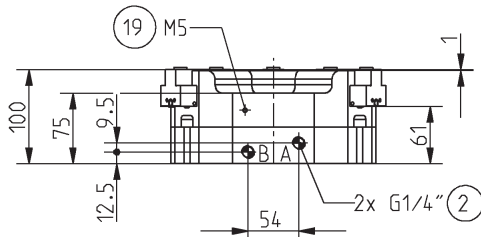
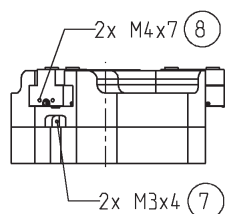
* Value determined with friction coefficient $\mu = 0.1$ and safety factor $\nu = 2$

** High-temperature-resistant model (up to 150 °C) add T to part number

GD320N-B
GD320S-B



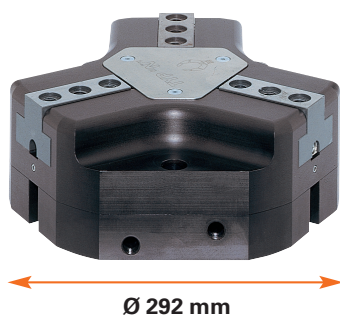
- ① Gripper mounting
- ② Power supply
- ③ Jaw fastening
- ④ Lubrication nipple
- ⑦ Mounting block connection (KB)
- ⑧ Mounting for mounting holder (KHA)
- ⑨ Air purge connection
- Ⓐ Air connection (closing)
- Ⓑ Air connection (opening)
- Ⓐ Alternate air connection (closing)
- Ⓑ Alternate air connection (opening)



Hoseless air connection

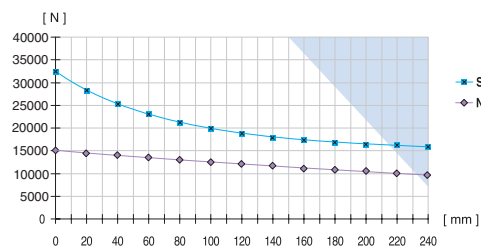
Subject to change without prior notice

Three-Jaw Gripper



Gripping force diagram

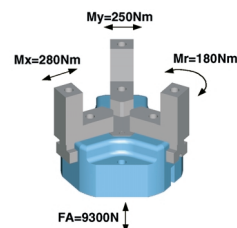
Gripping force as a function of jaw length.



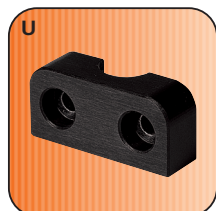
Colored area: increased wear and tear to be expected

Forces and Moments

Max allowable forces and moments on jaws.



Included with purchase



Mounting block
Order no. KB8-34



Centring sleeve
Order no. BDST43000

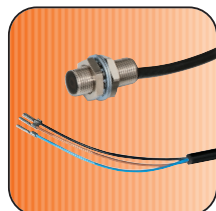
Accessory list



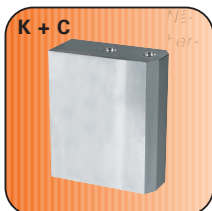
Pneumatic fittings
Order no. WV1/4x8



Proximity switch
Order no. NJ8-E2S



Proximity switch
Order no. NJ8-E2



Universal jaw
Order no. UB330 (Al)
Order no. UB330ST (St)



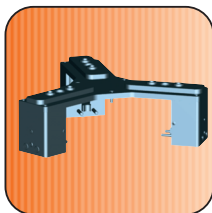
Alternate proximity bracket
Order no. KHA330-B-8



Cable angled plug
Order no. KAW500

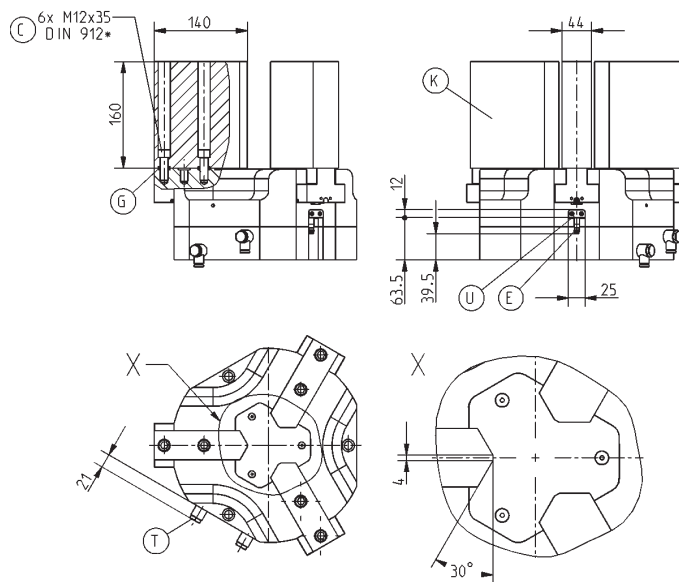


Pressure safety valve
Order no. DSV1/8



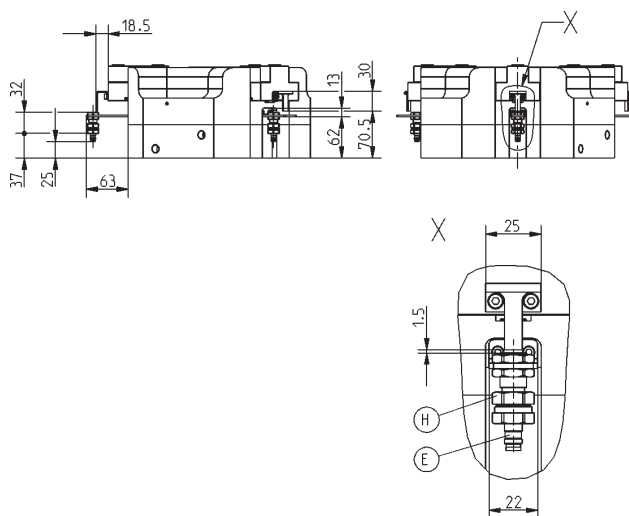
Dust protection
on request

Accessory



* equivalent to DIN EN ISO 4762

Alternate proximity mounting



Subject to change without prior notice

Order no.:

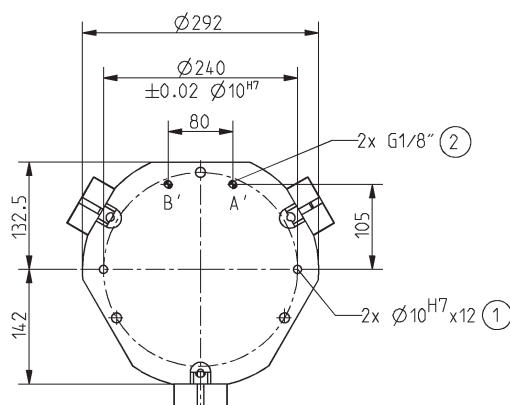
	GD330N-B	GD330S-B
Stroke per jaw [mm]:	30	15
Gripping force in closing and opening [N]:	15200	32000
Recommended workpiece weight [kg]*:	77,5	163
Closing time/opening time [s]:	0,8	0,8
Repeatability [mm]:	0,05	0,05
Min./max. operating pressure [bar]:	3/8	3/8
Min./max. operating temperature [°C]**:	5/80	5/8
Air volume per cycle [cm³]:	1034	1034
Weight [kg]:	26,2	26,2

All data measured at 6 bar

* Value determined with friction coefficient $\mu = 0.1$ and safety factor $\nu = 2$

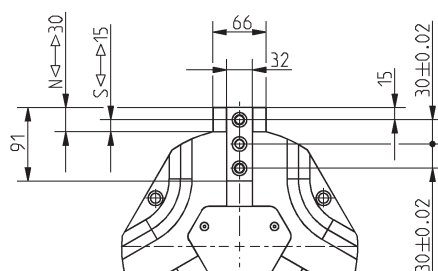
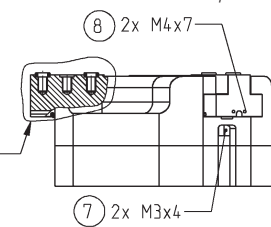
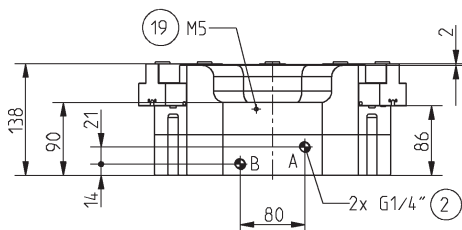
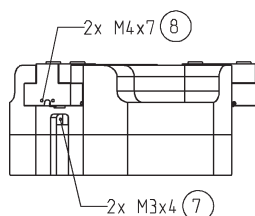
** High-temperature-resistant model (up to 150 °C) add T to part number

GD330N-B
GD330S-B



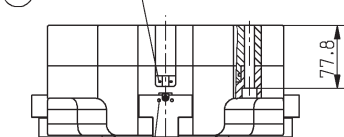
- ① Gripper mounting
- ② Power supply
- ③ Jaw fastening
- ④ Lubrication nipple
- ⑦ Mounting block connection (KB)
- ⑧ Mounting for mounting holder (KHA)
- ⑨ Air purge connection
- Ⓐ Air connection (closing)
- Ⓑ Air connection (opening)
- Ⓐ Alternate air connection (closing)
- Ⓑ Alternate air connection (opening)

* equivalent to DIN EN ISO 4762

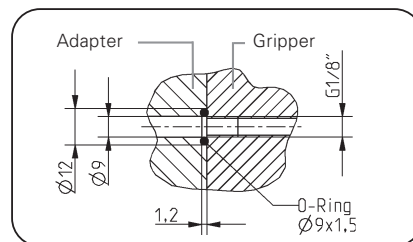
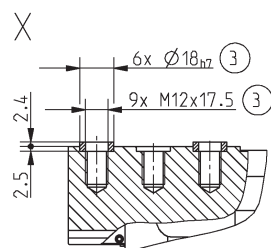


① 3x M12
DIN 912*

⑦ 2x M3x4



⑧ 2x M4x7



Hoseless air connection

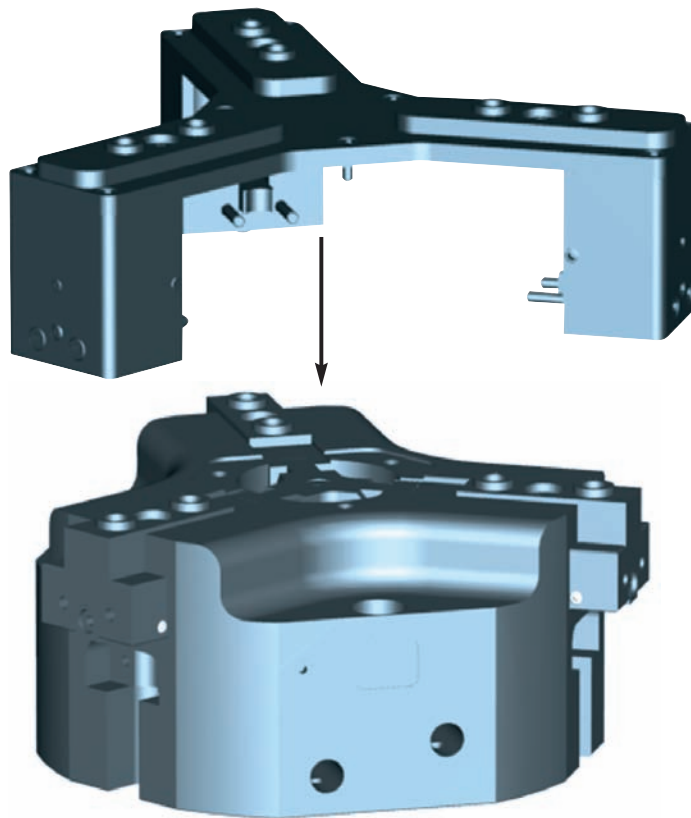
Subject to change without prior notice

Dust cover

➤ Dust cover

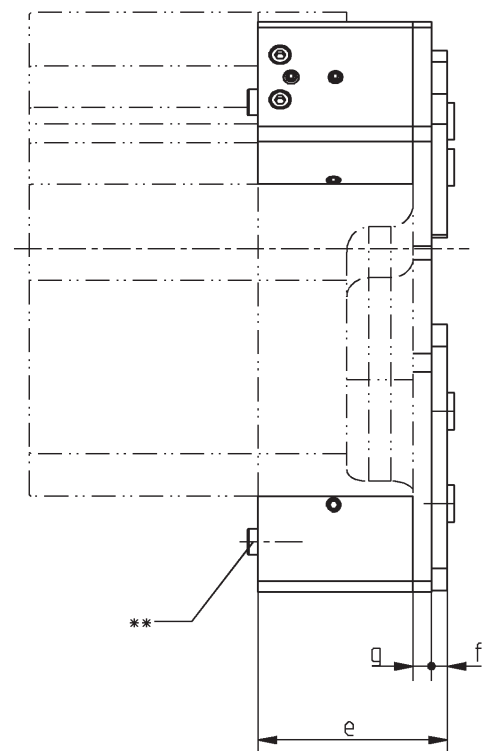
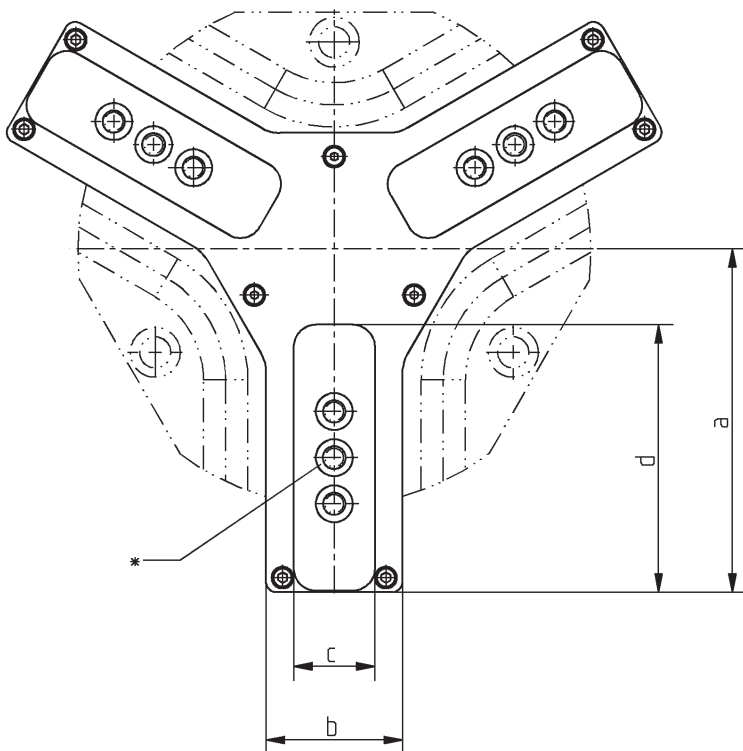
- Standardised dust cover
- Easy to upgrade for all GD300-B models
- Allows use in dirty environment
- Integrated mounting blocks for intake of inductive proximity switches

Dust cover





Order no.:	PR310-B	PR312-B	PR316-B	PR320-B	PR330-B
Dimension A [mm]:	77,5	93,0	123,0	151,5	208,0
Dimension B [mm]:	36,0	37,0	49,5	50,5	69,0
Dimension C [mm]:	22,0	22,0	25,0	30,0	38,0
Dimension D [mm]:	61,5	72,5	72,5	93,5	118,5
Dimension E [mm]:	44,3	51,3	58,8	72,1	100,1
Dimension F [mm]:	4,3	4,3	4,3	6,1	8,1
Dimension G [mm]:	5,0	5,0	6,0	6,0	6,0

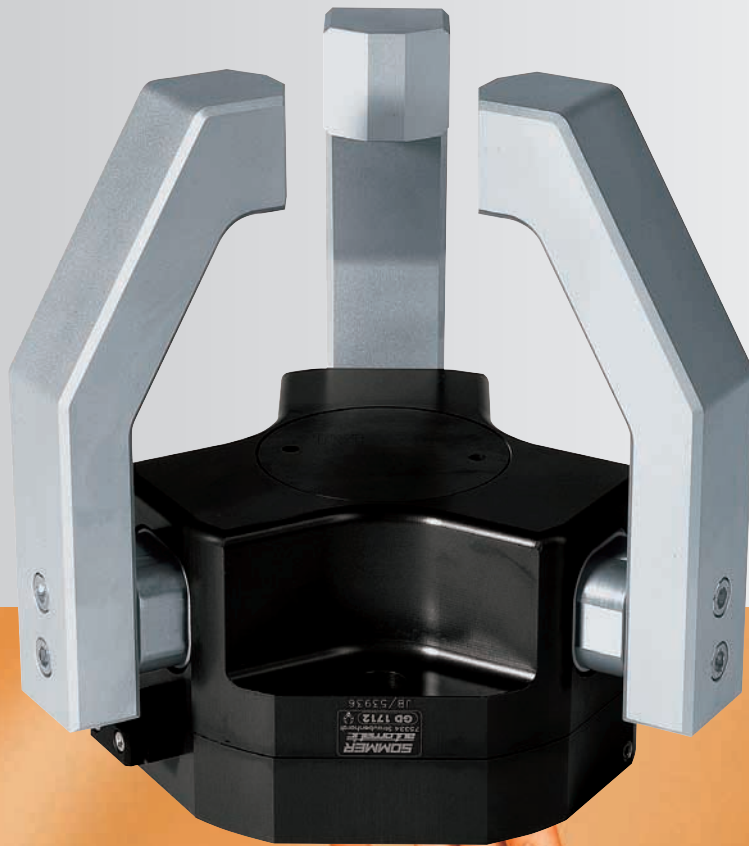


* For gripping jaw intake, see corresponding gripper type
 ** For proximity switch, see corresponding gripper type
 straight pin to close unused mounting blocks included in delivery.



*Three-Jaw **Grippers***

pneumatic



GD1700-B Series

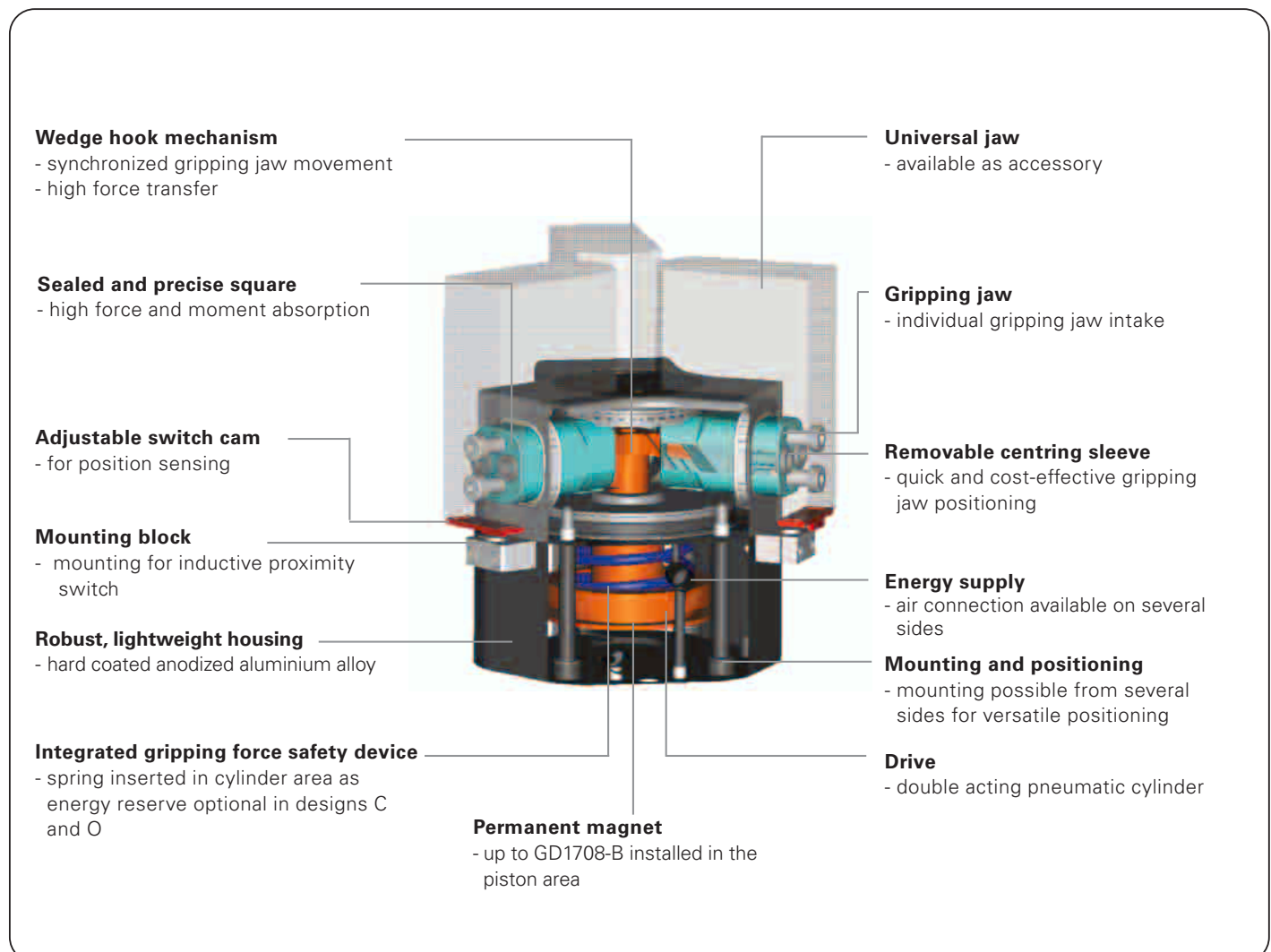
SOMMER
automatic

Three-Jaw Gripper

Features

- stable, sealed, square flat guide for use under extreme conditions
- position sensing via inductive proximity switch or magnetic field sensor possible (up to GD1708-B)
- sensing of 3 position via inductive proximity switch possible (up to GD1710-B thru GD1720-B)
- design with mechanical gripping force safety device

Functional diagram





Terms

- Gripping force:** arithmetic sum of the individual forces occurring at the jaws
- Closing/opening time:** required time for the gripper jaws to cover the maximum stroke distance
- Repeatability:** at end stops after 50/100 consecutive cycles
- Cycle:** one complete movement of the piston forward and back
- Maintenance:** recommended at 5 mil. cycles
(please see the owner's manual for conditions,
download from www.sommer-automatic.com)
- long maintenance intervals keep costs down
 - long lifespan

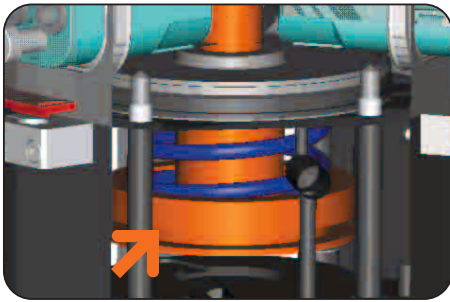
Model guide

- N:** Standard design (long stroke - standard force)
- C:** For external gripping, self-locking, spring closing
- O:** For internal gripping, self-locking, spring opening

Order no.	Stroke per jaw	Gripping force in opening	Gripping force in closing	Self-locking via
GD1704N-B	4 mm	280 N	280 N	DSV*
GD1704NC-B	4 mm	-	400 N	Spring
GD1704NO-B	4 mm	400 N	-	Spring
GD1706N-B	6 mm	380 N	380 N	DSV*
GD1706NC-B	6 mm	-	560 N	Spring
GD1706NO-B	6 mm	560 N	-	Spring
GD1708N-B	8 mm	660 N	660 N	DSV*
GD1708NC-B	8 mm	-	950 N	Spring
GD1708NO-B	8 mm	950 N	-	Spring
GD1710N-B	10 mm	960 N	960 N	DSV*
GD1710NC-B	10 mm	-	1400 N	Spring
GD1710NO-B	10 mm	1400 N	-	Spring
GD1712N-B	12 mm	1700 N	1700 N	DSV*
GD1712NC-B	12 mm	-	2250 N	Spring
GD1712NO-B	12 mm	2250 N	-	Spring
GDD1716N-B	16 mm	3500 N	3500 N	DSV*
GDD1716NC-B	16 mm	-	4700 N	Spring
GDD1716NO-B	16 mm	4700 N	-	Spring
GD1720N-B	20 mm	5250 N	5250 N	DSV*

*DSV = Pressure safety valves (Order no.DSV1/8)

Three-Jaw **Gripper**



Drive

N Model

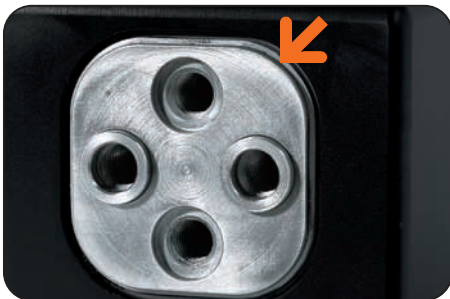
Double acting pneumatic cylinder

- Maximum drive force when opening and closing
- high gripping force up to 5250 N

NC and NO Model

Double acting pneumatic cylinder with integrated mechanical gripping force safety device

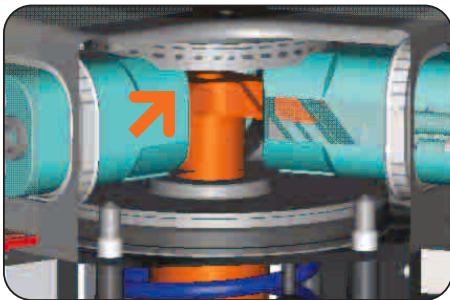
- optimum coordination of drive force and gripping force secured by spring



Guidance

sealed square guide

- for high force and moment resistance
- high precision due to low play guide
- sealed with additional wiper



Power transfer

Wedge hook mechanism

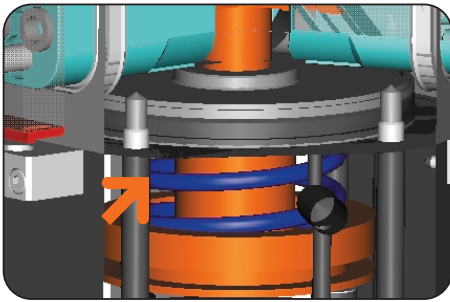
- optimum transmission of drive force in gripping force
- self-centering
- synchronization
- high repeatability



Gripping jaw positioning

individual gripping jaw intake via centring sleeve

- precise positioning of individual gripping jaws
- quick, cost-effective and therefore economical jaw changing
- space-saving fixing



Gripping force safety device

NC and NO Models:

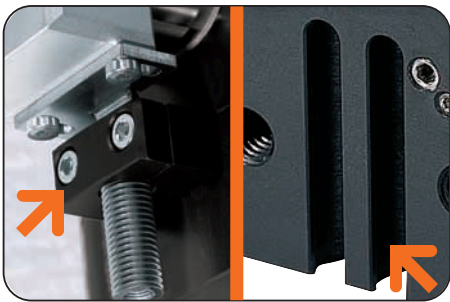
spring intergrated into cylinder as energy reserve

- reliable mechanical gripping force retention
- compact design

N Models:

External pressure safety valve

- Gripping force safety possible by addition of pressure safety valve (Part. No. DSV1/8). The inevitable leakage in the pneumatic circuit restricts the time of this type of gripping force safety.



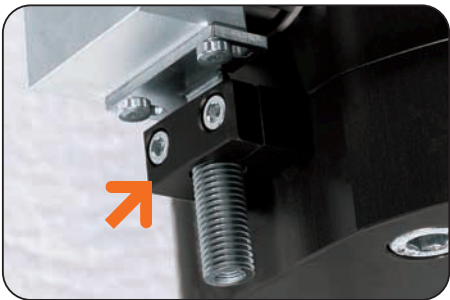
Positioning sensing GD1704-B up to GD1708-B

via inductive proximity switch

- direct sensing of the gripper-jaw position
- available as accessory

via magnetic field sensor

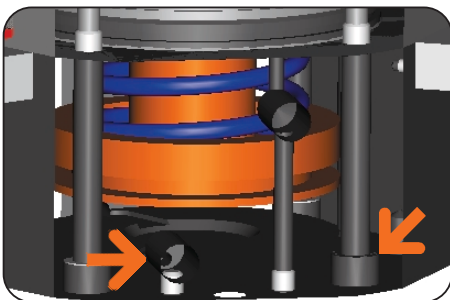
- compact design
- for magnetic field sensor with bracket for C-slot



Positioning sensing GD1710-B up to GD1720-B

via inductive proximity switch

- sensing of 3 position possible
- direct sensing of the gripper jaw position



Connections

Energy supply, attachment and positioning possibilities

Adaptable to multiple mounting configuration

- optimal integration into the workroom through individual mounting situation
- tubeless direct connection possibility (no additional hose needed)

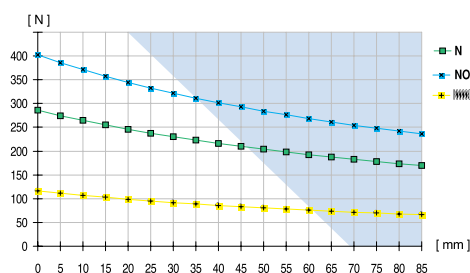
Three-Jaw **Gripper**



Ø 57 mm

Gripping force diagram

Gripping force as a function of jaw length.

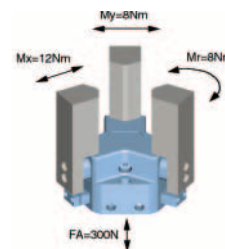


Colored area: increased wear and tear to be expected

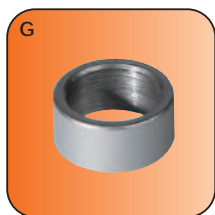
measured from top edge of housing ♦

Forces and Moments

Max allowable forces and moments on jaws.

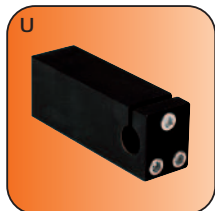


Included with purchase

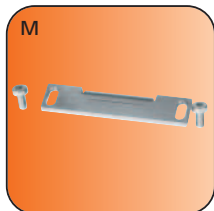


Centring sleeve
Order no. BDST40400

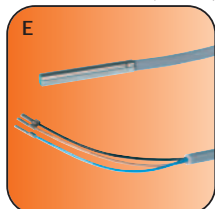
Accessory list



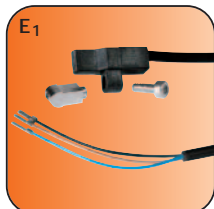
Mounting block
Order no. KB3-01 (18 mm)
Order no. KB3-02 (13 mm)



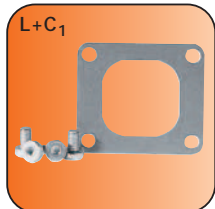
Switch cam + screws
Order no. SN0001



Proximity switch
Order no. NJ3-E2-03



Magnetic field sensor
Order no. MFS103KHC42



Cover plate (set)
Order no. ADB1704-B



Pneumatic fittings
Order no. WVM5

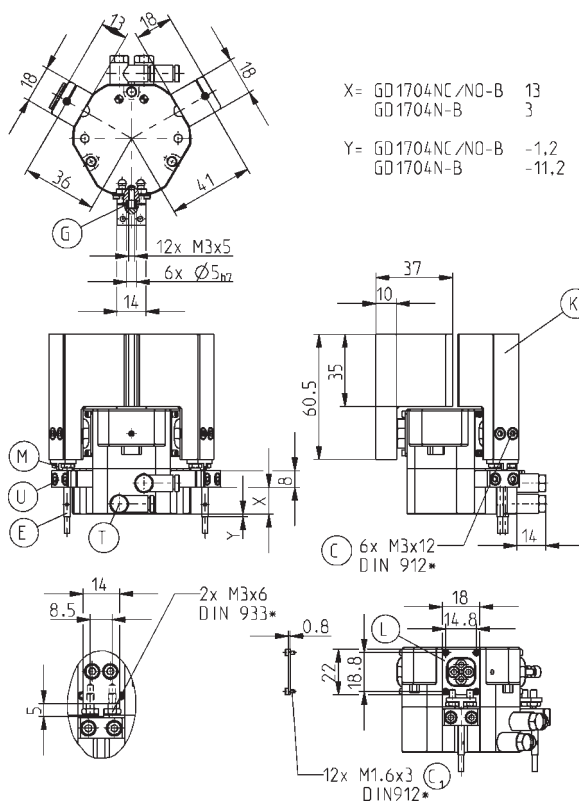


Universal jaw (set)
Order no. UB1704 (Al)
Order no. UB1704ST (St)

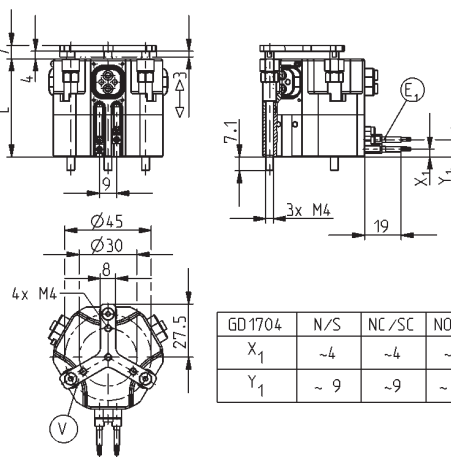


Pressing star
Order no. ADS1704C/O
Order no. ADS1704N/S

Accessory



Pressing star



GD1704	N/S	NC/SC	NO/SC
X_1	~ 4	~ 4	~ 20
Y_1	~ 9	~ 9	~ 24

L = GD1704NC /NO 51
GD1704N /S 41

Subject to change without prior notice

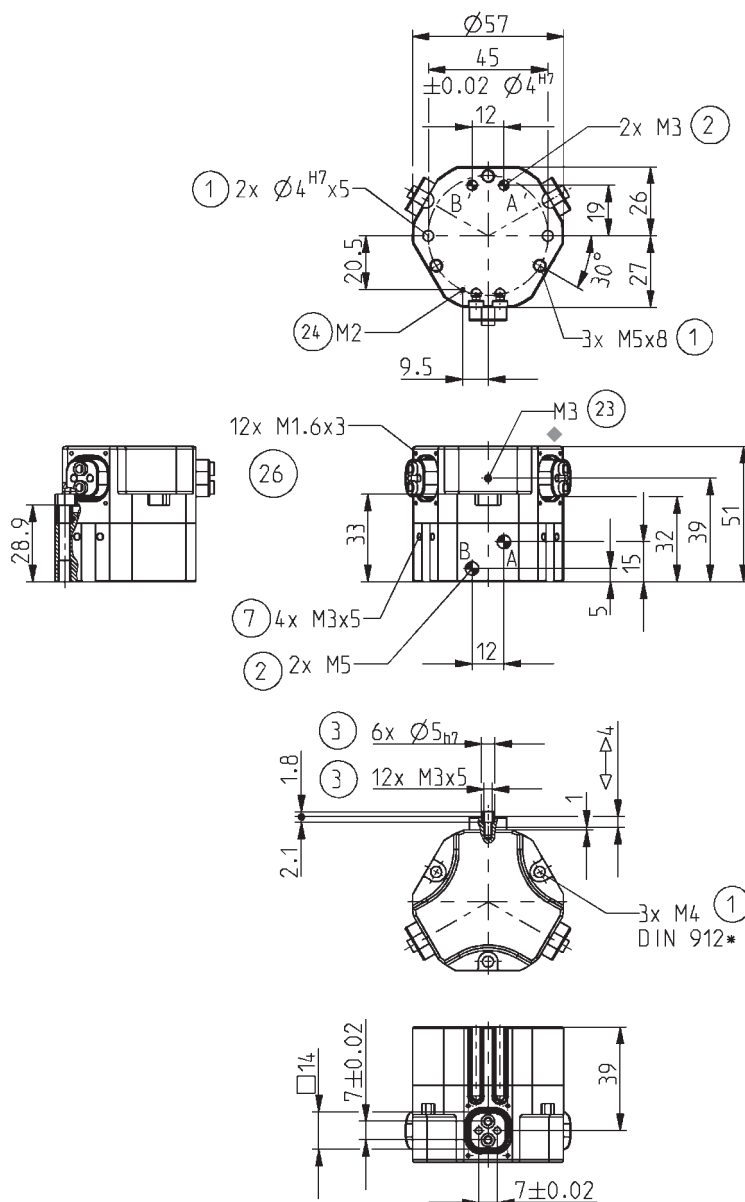
Order no.:	GD1704N-B	GD1704NC-B	GD1704NO-B
Stroke per jaw [mm]:	4	4	4
Gripping force in closing [N]:	280	400	-
Gripping force in opening [N]:	280	-	400
Recommended workpiece weight [kg]*:	1,4	2	2
Gripping force secured by spring min./max [N]:	-	120	120
Closing time/opening time [s]:	0,02	0,025	0,025
Repeatability +/- [mm]:	0,05	0,05	0,05
Min./max. operating pressure [bar]:	3/8	5/8	5/8
Min./max. operating temperature. [°C]**:	5/80	5/80	5/80
Air volume per cycle [cm³]:	12	20	20
Weight [g]:	350	410	410

All data measured at 6 bar

* Value determined with friction coefficient $\mu = 0.1$ and safety factor $v = 2$

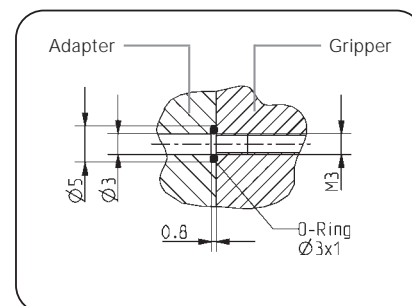
** High-temperature-resistant model (up to 150°) add T to part number

GD1704NC-B
GD1704NO-B



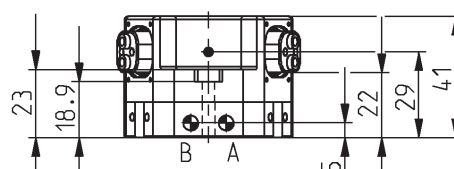
- ① Gripper mounting
- ② Power supply
- ③ Jaw fastening
- ⑦ Mounting block connection
- ②③ Ventilation or air purge connection
- ②④ Ventilation or alternate air purge connection
- ②⑤ Jaw back ventilation
- A Air connection (closing)
- B Air connection (opening)
- A Air connection alternate (closing)
- B Air connection alternate (opening)

* equivalent to DIN EN ISO 4762



Hoseless air connection

GD1704N-B



Subject to change without prior notice

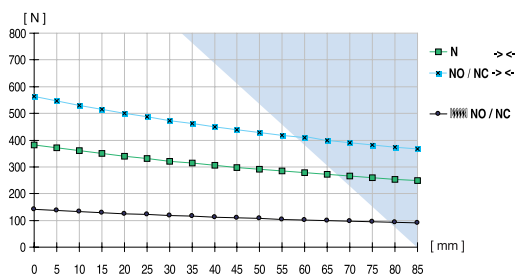
Three-Jaw Gripper



Ø 74 mm

Gripping force diagram

Gripping force as a function of jaw length.

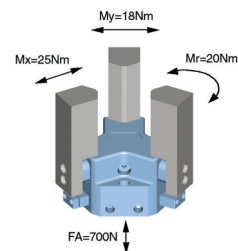


Colored area: increased wear and tear to be expected

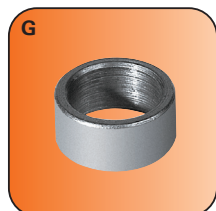
measured from top edge of housing

Forces and Moments

Max allowable forces and moments on jaws.

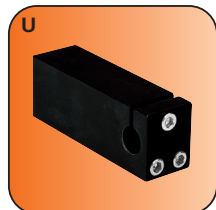


Included with purchase

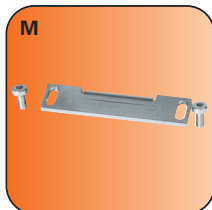


Centring sleeve
Order no. BDST40600

Accessory list



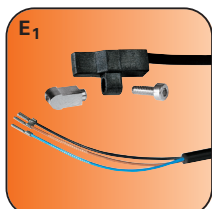
Mounting block
Order no. KB8-02



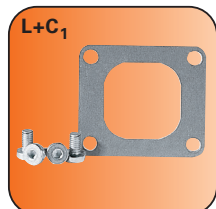
Switch cam + screws
Order no. SN0002



Proximity switch
Order no. NJ8-E2S



Magnetic field sensor
Order no. MFS103KHC42



Cover plate (set)
Order no. ADB1706-B



Pneumatic fittings
Order no. WV1/8x6

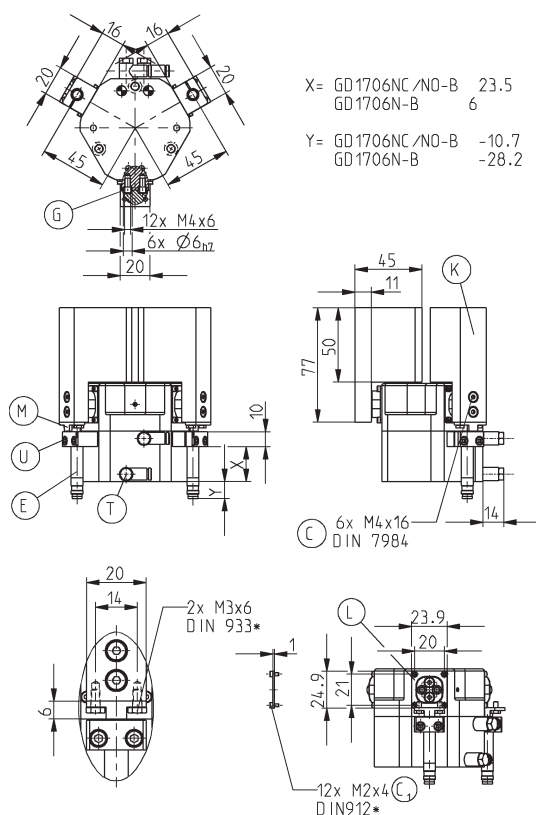


Universal jaw (set)
Order no. UB1706 (Al)
Order no. UB1706ST (St)

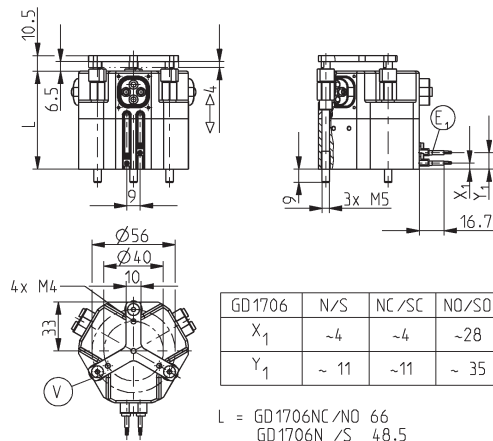


Pressing star
Order no. ADS1706C/O
Order no. ADS1706N/S

Accessory



Pressing star



Subject to change without prior notice

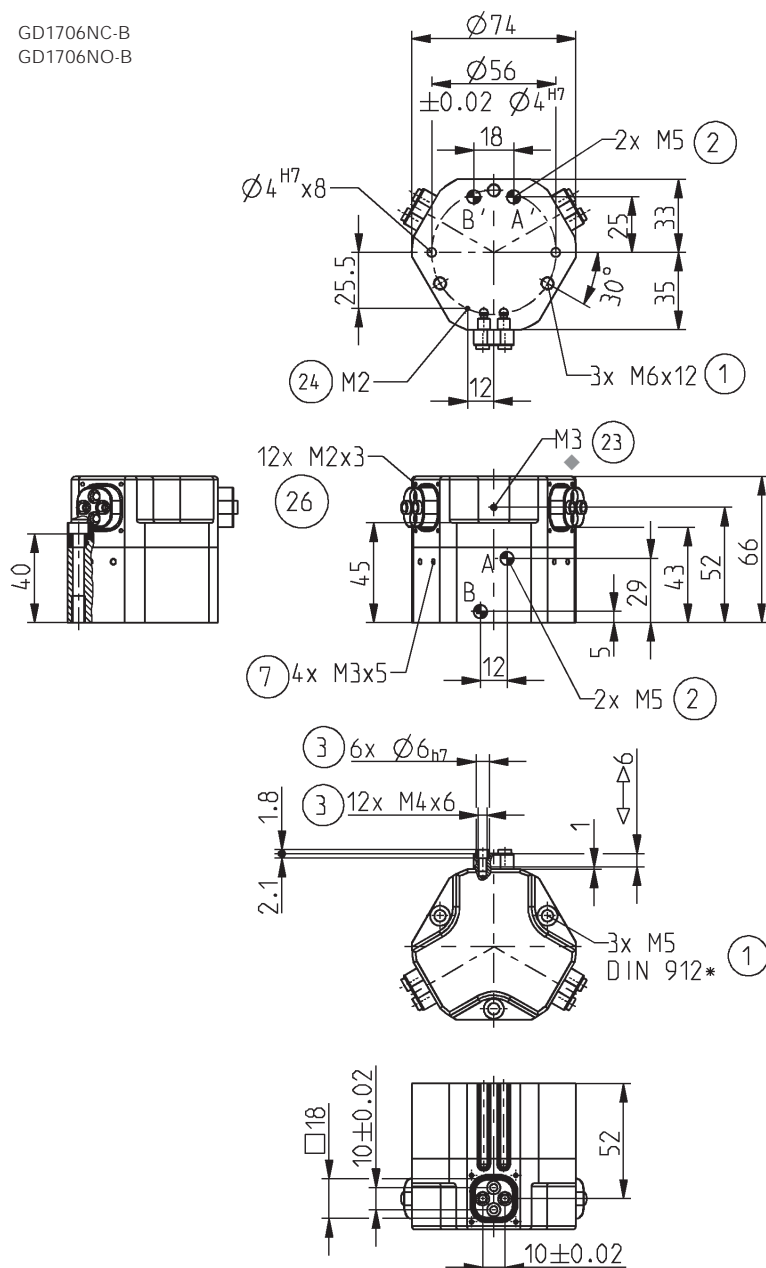
Order no.:	GD1706N-B	GD1706NC-B	GD1706NO-B
Stroke per jaw [mm]:	6	6	6
Gripping force in closing [N]:	380	560	-
Gripping force in opening [N]:	380	-	560
Recommened workpiece weight [kg]*:	1,9	2,9	2,9
Gripping force secured by spring min./max [N]:	-	180	180
Closing time/opening time [s]:	0,03	0,04	0,04
Rebeatibility +/- [mm]:	0,05	0,05	0,05
Min./max. operating pressure [bar]:	3/8	5/8	5/8
Min./max. operating temperature [°C]**:	5/80	5/80	5/80
Air volume per cycle [cm³]:	12	20	20
Weight [g]:	650	850	850

All data measured at 6 bar

* Value determined with friction coefficient $\mu = 0.1$ and safety factor $v = 2$

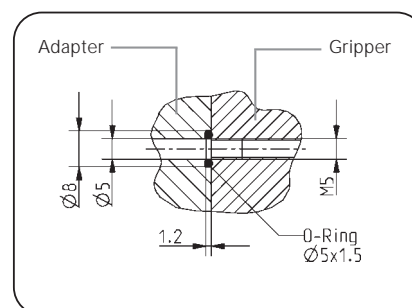
** High-temperature-resistant model (up to 150°) add T to part number

GD1706NC-B
GD1706NO-B



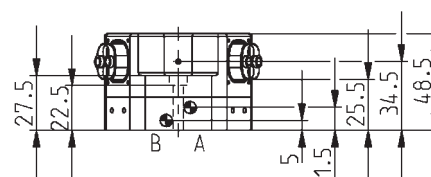
- ① Gripper mounting
- ② Power supply
- ③ Jaw fastening
- ⑦ Mounting block connection
- ②③ Ventilation or air purge connection
- ②④ Ventilation or alternate air purge connection
- ②⑤ Jaw back ventilation
- ② A Air connection (closing)
- ② B Air connection (opening)
- ② A Air connection alternate (closing)
- ② B Air connection alternate (opening)

* equivalent to DIN EN ISO 4762



Hoseless air connection

GD1706N-B



Subject to change without prior notice

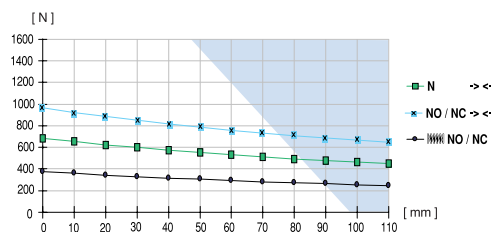
Three-Jaw **Gripper**



Ø 92 mm

Gripping force diagram

Gripping force as a function of jaw length.

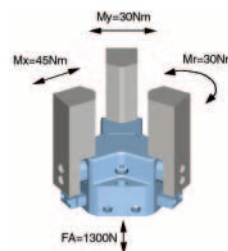


Colored area: increased wear and tear to be expected

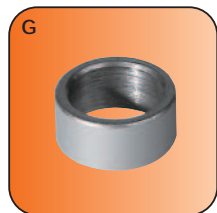
measured from top edge of housing ♦

Forces and Moments

Max allowable forces and moments on jaws.



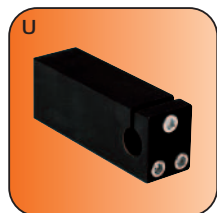
Included with purchase



Centring sleeve

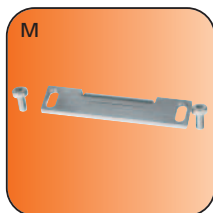
Order no. BDST40800

Accessory list



Mounting block

Order no. KB8-02



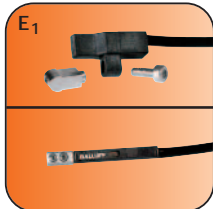
Switch cam + screws

Order no. SN0003



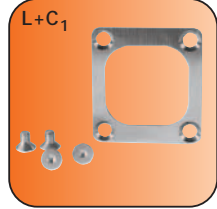
Proximity switch

Proximity Switch
Order no. NJ8-E2S



Magnetic field sensor

Order no. MFS103KHC42
Order no. MFS303KHC30



Cover plate (set)

Order no. ADB1708-B



Pneumatic fittings

Order no. WV1/8x6



Universal jaw (set)

Order no. UB1708 (All)

Order no. UB1708ST (*St*)

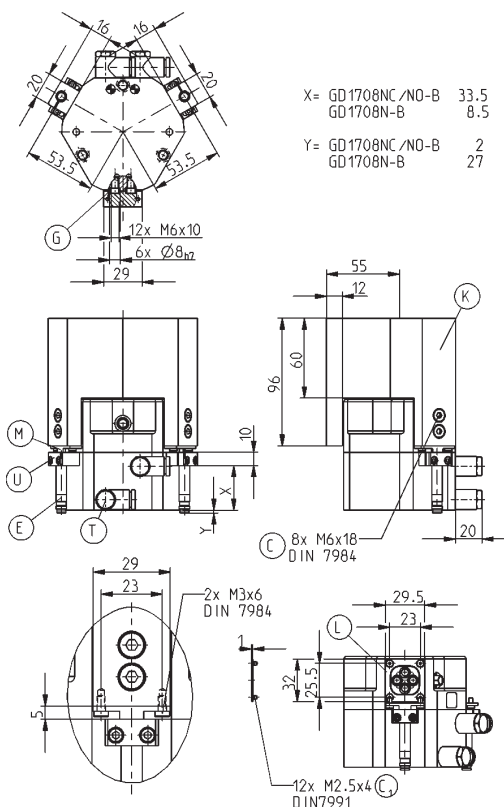


Pressing star

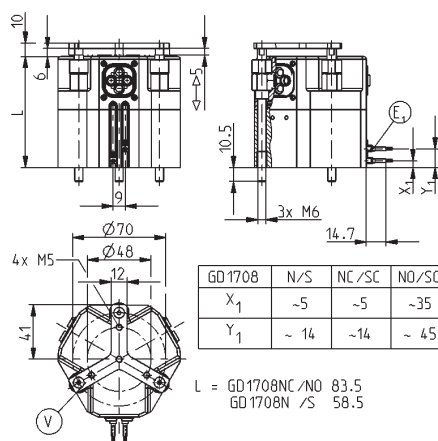
Order no. ADS1708C/O

Order no. ADS1708N/S

Accessory



Pressing star



Subject to change without prior notice

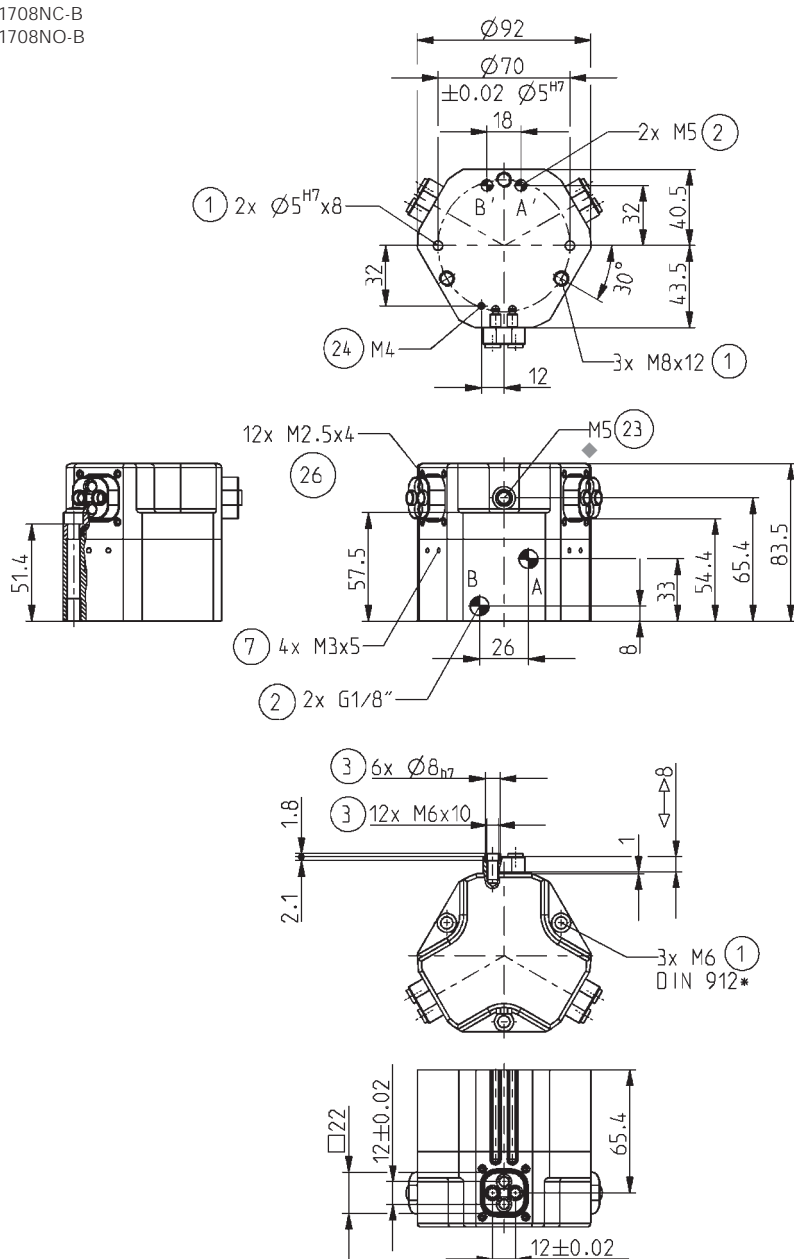
Order no.:	GD1708N-B	GD1708NC-B	GD1708NO-B
Stroke per jaw [mm]:	8	8	8
Gripping force in closing [N]:	660	950	-
Gripping force in opening [N]:	660	-	950
Recommended workpiece weight [kg]*:	3,4	4,8	4,8
Gripping force secured by spring min./max [N]:	-	290	290
Closing time/opening time [s]:	0,1	0,12	0,12
Repeatability +/- [mm]:	0,05	0,06	0,06
Min./max. operating pressure [bar]:	3/8	5/8	5/8
Min./max. operating temperature [°C]**:	5/80	5/80	5/80
Air volume per cycle [cm³]:	47	96	96
Weight [kg]:	0,9	1,5	1,5

All data measured at 6 bar

* Value determined with friction coefficient $\mu = 0.1$ and safety factor $v = 2$

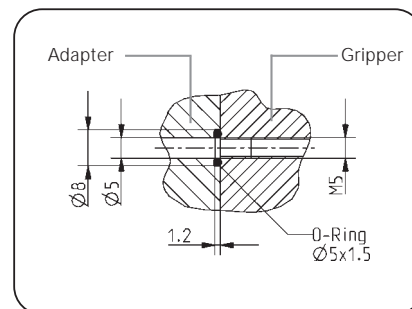
** High-temperature-resistant model (up to 150°) add T to part number

GD1708NC-B
GD1708NO-B



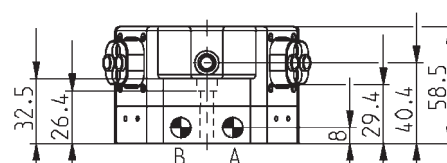
- ① Gripper mounting
- ② Power supply
- ③ Jaw fastening
- ⑦ Mounting block connection
- ②③ Ventilation or air purge connection
- ②④ Ventilation or alternate air purge connection
- ②⑤ Jaw back ventilation
- Ⓐ Air connection (closing)
- Ⓑ Air connection (opening)
- Ⓐ Air connection alternate (closing)
- Ⓑ Air connection alternate (opening)

* equivalent to DIN EN ISO 4762



Hoseless air connection

GD1708N-B



Subject to change without prior notice

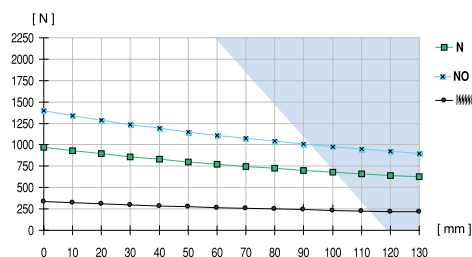
Three-Jaw **Gripper**



Ø 114 mm

Gripping force diagram

Gripping force as a function of jaw length.

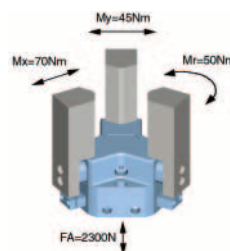


Colored area: increased wear and tear to be expected

measured from top edge of housing ♦

Forces and Moments

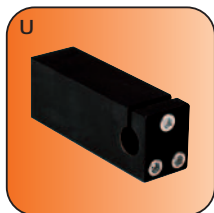
Max allowable forces and moments on jaws.



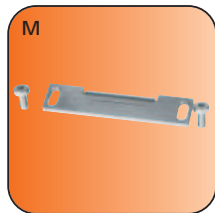
Included with purchase



Centring sleeve
Order no. BDST41000



Mounting block
Order no. KB8-03

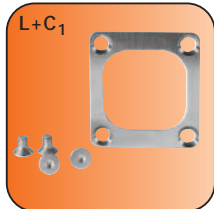


Switch cam + screws
Order no. SN0004

Accessory list



Proximity switch
Order no. NJ8-E2S



Cover plate (set)
Order no. ADB1710-B



Pneumatic fittings
Order no. WV1/8x6



Pressure safety valve
Order no. DSV1/8

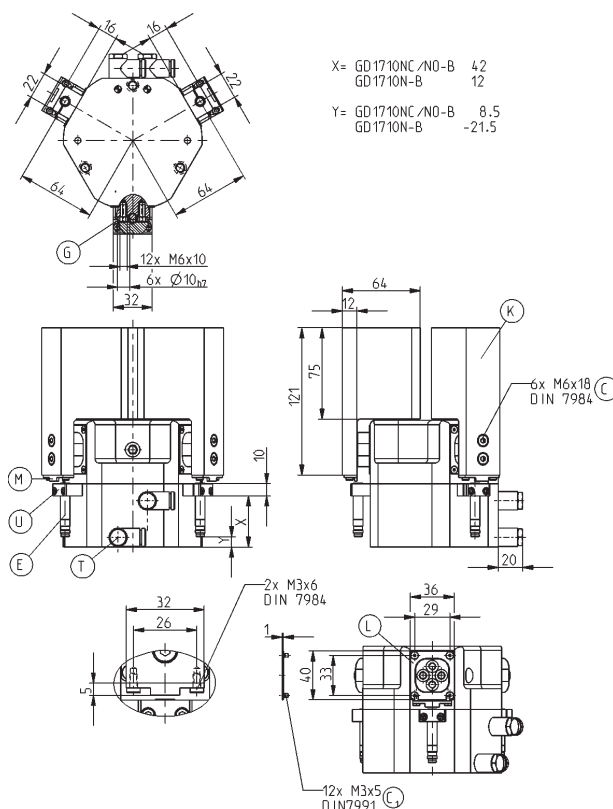


Universal jaw (set)
Order no. UB1710 (Al)
Order no. UB1710ST (St)

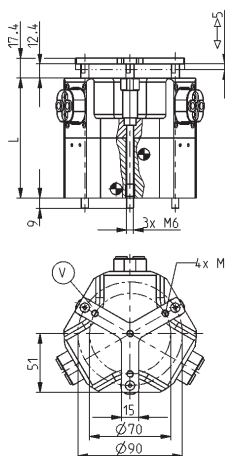


Pressing star
Order no. ADS1710C/O
Order no. ADS1710N/S

Accessory



Pressing star



L = GD1710NC /NO 104
GD1710N /S 74

Subject to change without prior notice



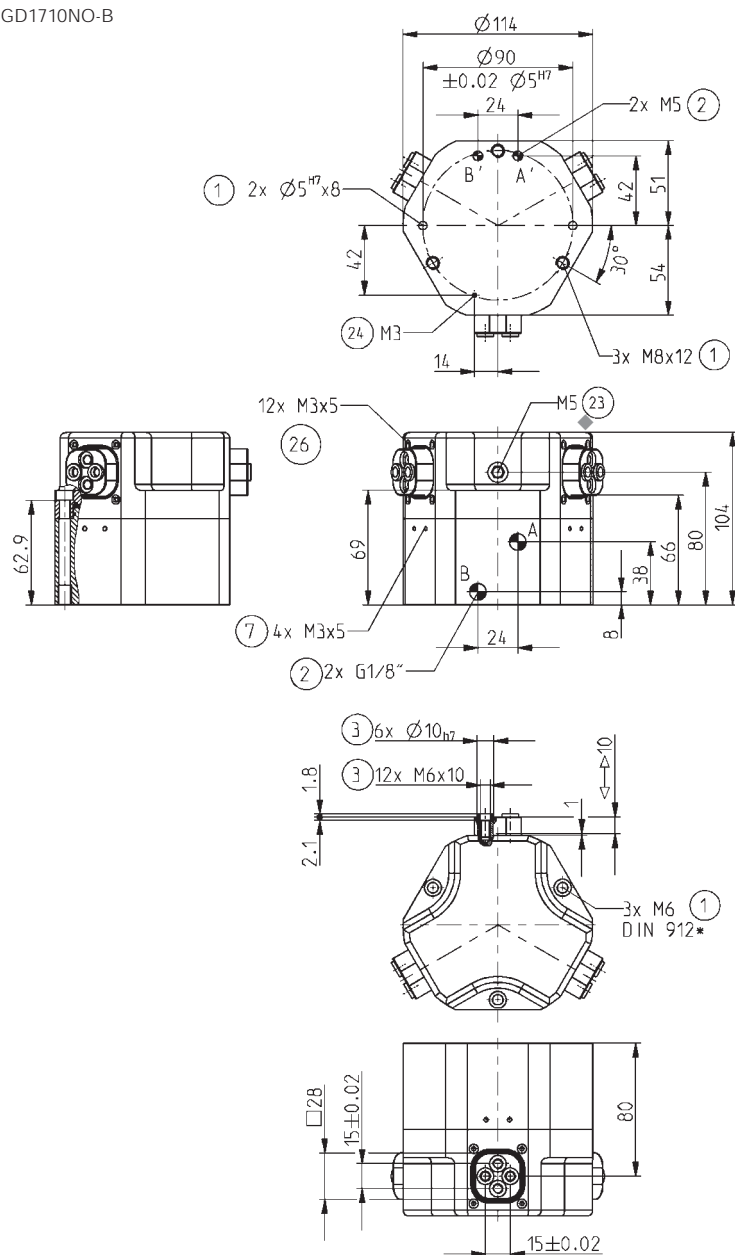
Order no.:	GD1710N-B	GD1710NC-B	GD1710NO-B
Stroke per jaw [mm]:	10	10	10
Gripping force in closing [N]:	960	1400	-
Gripping force in opening [N]:	960	-	1400
Recommended workpiece weight [kg]*:	4,9	7,1	7,1
Gripping force secured by spring min./max [N]:	-	240	240
Closing time/opening time [s]:	0,08	0,1	0,1
Repeatability +/- [mm]:	0,05	0,05	0,05
Min./max. operating pressure [bar]:	3/8	5/8	5/8
Min./max. operating temperature. [°C]**:	5/80	5/80	5/80
Air volume per cycle [cm³]:	92	168	168
Weight [kg]:	2,4	2,8	2,8

All data measured at 6 bar

* Value determined with friction coefficient $\mu = 0.1$ and safety factor $v = 2$

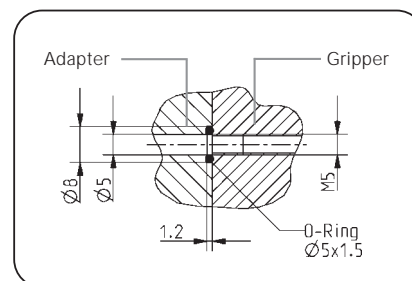
** High-temperature-resistant model (up to 150°) add T to part number

GD1710NC-B
GD1710NO-B



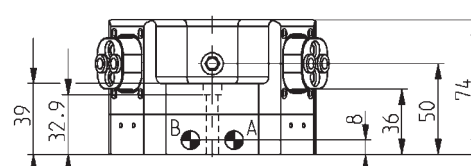
- ① Gripper mounting
- ② Power supply
- ③ Jaw fastening
- ⑦ Mounting block connection
- ②③ Ventilation or air purge connection
- ②④ Ventilation or alternate air purge connection
- ②⑤ Jaw back ventilation
- ① Air connection (closing)
- ① Air connection (opening)
- ① Air connection alternate (closing)
- ① Air connection alternate (opening)

* equivalent to DIN EN ISO 4762



Hoseless air connection

GD1710N-B



Subject to change without prior notice

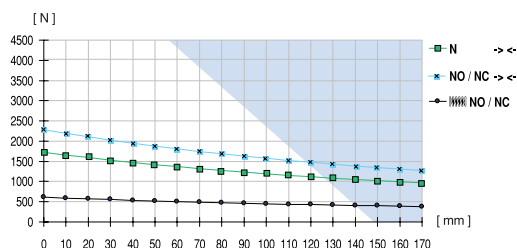
Three-Jaw Gripper



Ø 139 mm

Gripping force diagram

Gripping force as a function of jaw length.

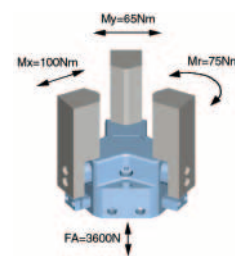


Colored area: increased wear and tear to be expected

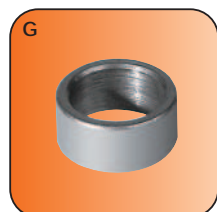
measured from top edge of housing ♦

Forces and Moments

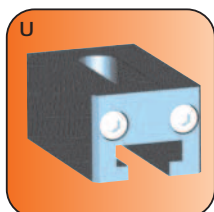
Max allowable forces and moments on jaws.



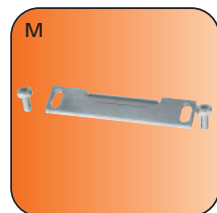
Included with purchase



Centring sleeve
Order no. BDST41000



Mounting block
Order no. KB8-25

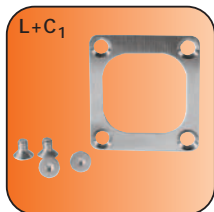


Switch cam + screws
Order no. SN0004

Accessory list



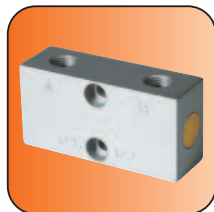
Proximity switch
Order no. NJ8-E2S



Cover plate (set)
Order no. ADB1712-B



Pneumatic fittings
Order no. WV1/8x6



Pressure safety valve
Order no. DSV1/8

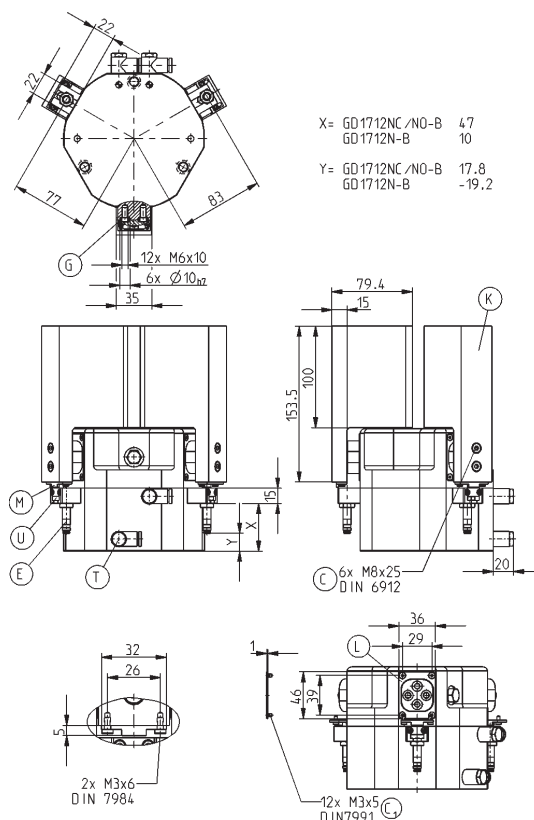


Universal jaw (set)
Order no. UB1712 (Al)
Order no. UB1712ST (St)

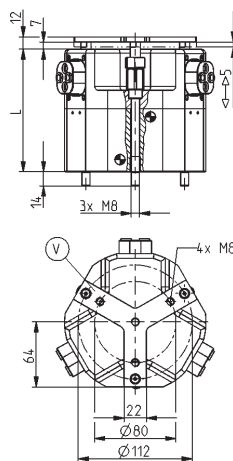


Pressing star
Order no. ADS1712C/O
Order no. ADS1712N/S

Accessory



Pressing star



Subject to change without prior notice

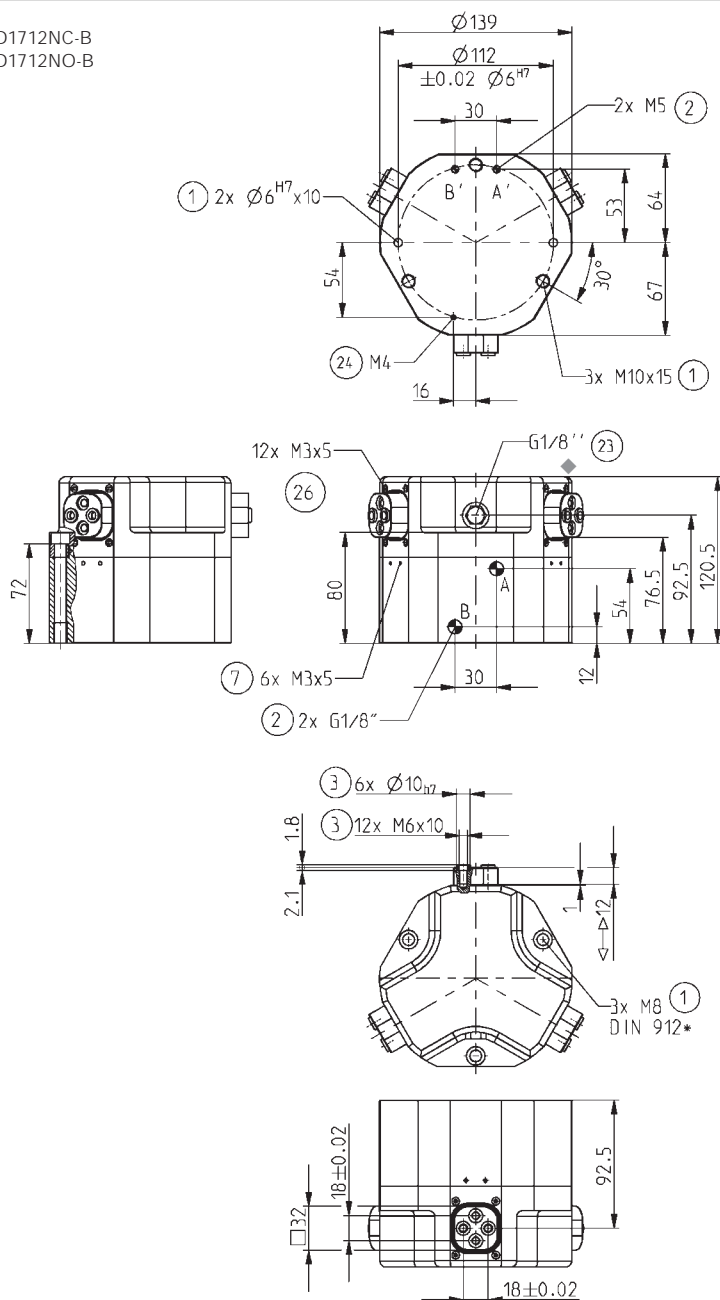
Order no.:	GD1712N-B	GD1712NC-B	GD1712NO-B
Stroke per jaw [mm]:	12	12	12
Gripping force in closing [N]:	1700	2250	-
Gripping force in opening [N]:	1700	-	2250
Recommended workpiece weight [kg]*:	8,7	11,5	11,5
Gripping force secured by spring min./max [N]:	-	550	550
Closing time/opening time [s]:	0,15	0,2	0,2
Repeatability +/- [mm]:	0,05	0,05	0,05
Min./max. operating pressure [bar]:	3/8	5/8	5/8
Min./max. operating temperature [°C]**:	5/80	5/80	5/80
Air volume per cycle [cm³]:	183	350	350
Weight [kg]:	3,6	5,3	5,3

All data measured at 6 bar

* Value determined with friction coefficient $\mu = 0.1$ and safety factor $v = 2$

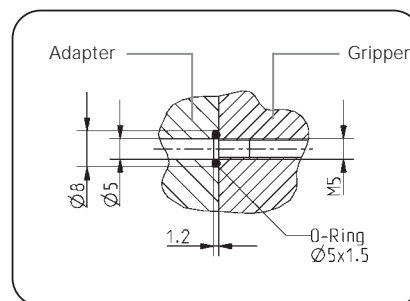
** High-temperature-resistant model (up to 150°) add T to part number

GD1712NC-B
GD1712NO-B



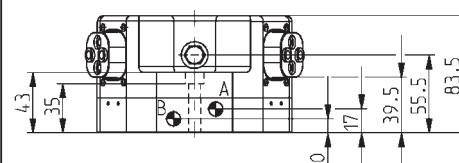
- ① Gripper mounting
- ② Power supply
- ③ Jaw fastening
- ⑦ Mounting block connection
- ②③ Ventilation or air purge connection
- ②④ Ventilation or alternate air purge connection
- ②⑤ Jaw back ventilation
- A Air connection (closing)
- B Air connection (opening)
- A Air connection alternate (closing)
- B Air connection alternate (opening)

* equivalent to DIN EN ISO 4762



Hoseless air connection

GD1712N-B



Subject to change without prior notice

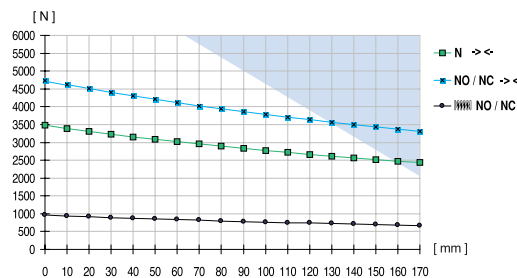
Three-Jaw Gripper



Ø 179 mm

Gripping force diagram

Gripping force as a function of jaw length.

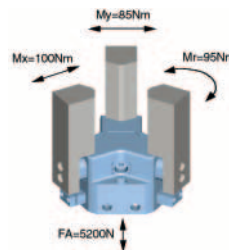


Colored area: increased wear and tear to be expected

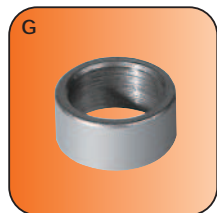
measured from top edge of housing ◆

Forces and Moments

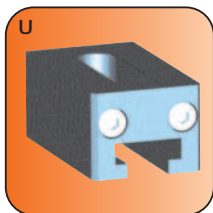
Max allowable forces and moments on jaws.



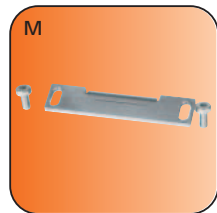
Included with purchase



Centring sleeve
Order no. BDST41600



Mounting block
Order no. KB8-26

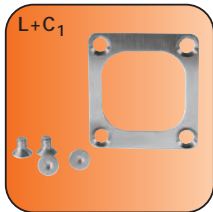


Switch cam + screws
Order no. SN0004

Accessory list



Proximity switch
Order no. NJ8-E2S



Cover plate (set)
Order no. ADB1716-B



Pneumatic fittings
Order no. WV1/8x6



Pressure safety valve
Order no. DSV1/8

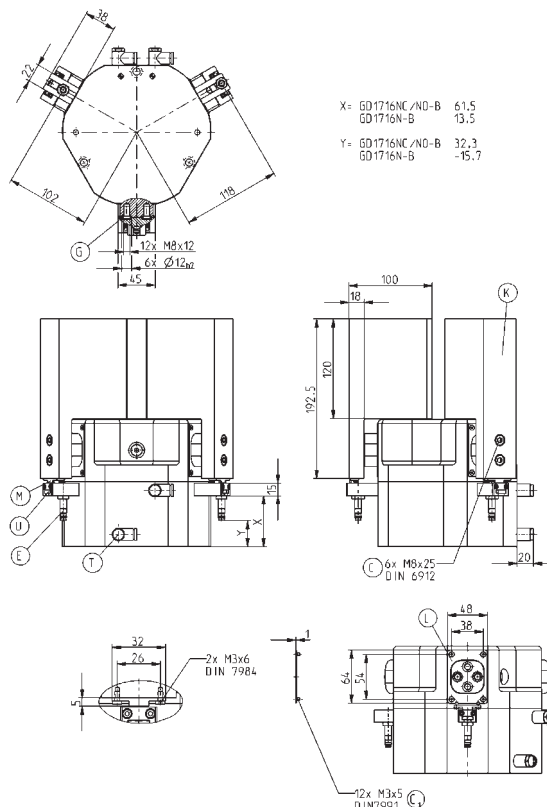


Universal jaw (set)
Order no. UB1716 (Al)
Order no. UB1716ST (St)

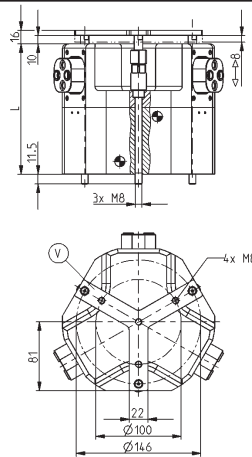


Pressing star
Order no. ADS1716C/O
Order no. ADS1716N/S

Accessory



Pressing star



L = GD1716NC/NO 153.5
GD1716N/S 105.5

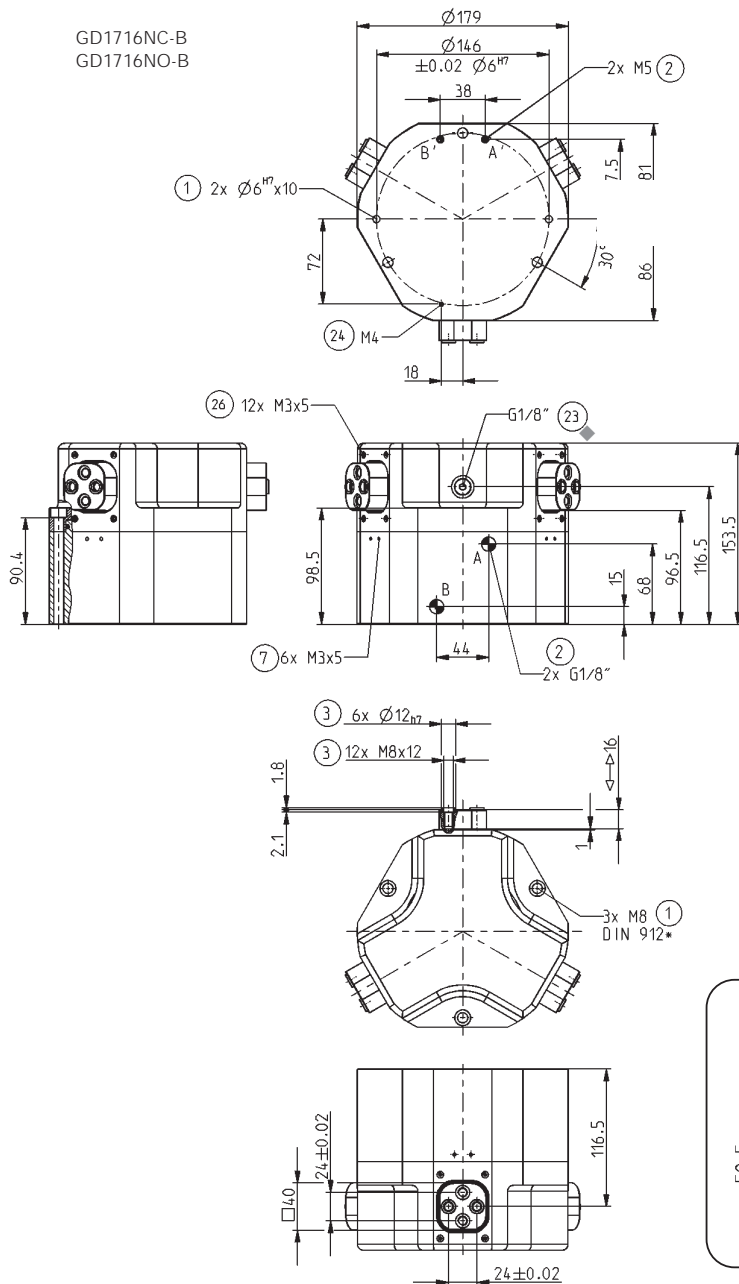
Subject to change without prior notice

Order no.:	GD1716N-B	GD1716NC-B	GD1716NO-B
Stroke per jaw [mm]:	16	16	16
Gripping force in closing [N]:	3500	4700	-
Gripping force in opening [N]:	3500	-	4700
Recommened workpiece weight [kg]*:	17,8	24	24
Gripping force secured by spring min./max [N]:	-	1200	1200
Closing time/opening time [s]:	0,3	0,4	0,4
Rebeatibility +/- [mm]:	0,05	0,05	0,05
Min./max. operating pressure [bar]:	3/8	5/8	5/8
Min./max. operating temperature [°C]**:	5/80	5/80	5/80
Air volume per cycle [cm³]:	465	750	750
Weight [kg]:	6,5	8,5	8,5

All data measured at 6 bar

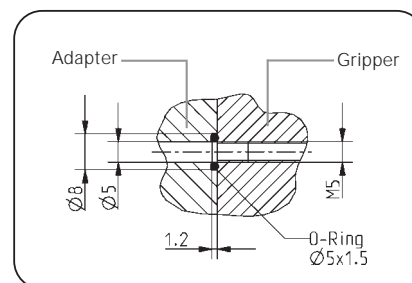
* Value determined with friction coefficient $\mu = 0.1$ and safety factor $v = 2$

** High-temperature-resistant model (up to 150°) add T to part number

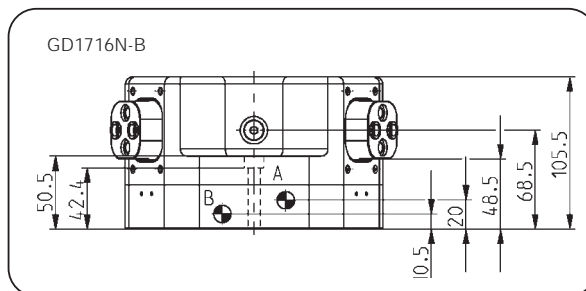


- ① Gripper mounting
- ② Power supply
- ③ Jaw fastening
- ⑦ Mounting block connection
- ②③ Ventilation or air purge connection
- ②④ Ventilation or alternate air purge connection
- ②⑤ Jaw back ventilation
- ②⑥ Fixing plate
- Ⓐ Air connection (closing)
- Ⓑ Air connection (opening)
- Ⓐ Air connection alternate (closing)
- Ⓑ Air connection alternate (opening)

* equivalent to DIN EN ISO 4762



Hoseless air connection



Subject to change without prior notice

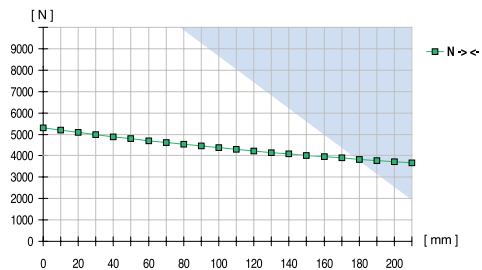
Three-Jaw **Gripper**



Ø 218 mm

Gripping force diagram

Gripping force as a function of jaw length.

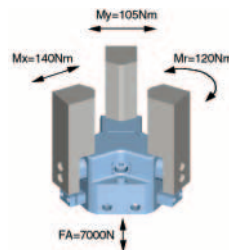


Colored area: increased wear and tear to be expected

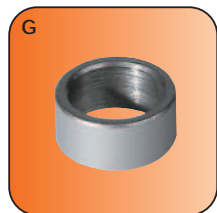
measured from top edge of housing ♦

Forces and Moments

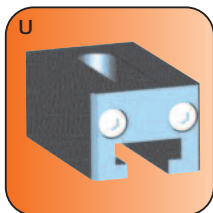
Max allowable forces and moments on jaws.



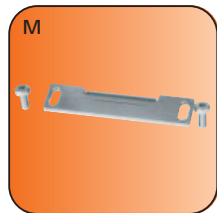
Included with purchase



Centring sleeve
Order no. BDST42000

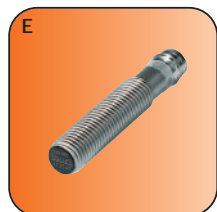


Mounting block
Order no.KB8-27

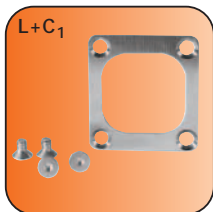


Switch cam + screws
Order no. SN0004

Accessory list



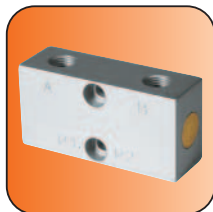
Proximity switch
Order no. NJ8-E2S



Cover plate (set)
Order no. ADB1720-B



Pneumatic fittings
Order no. WVM5



Pressure safety valve
Order no. DSV1/8

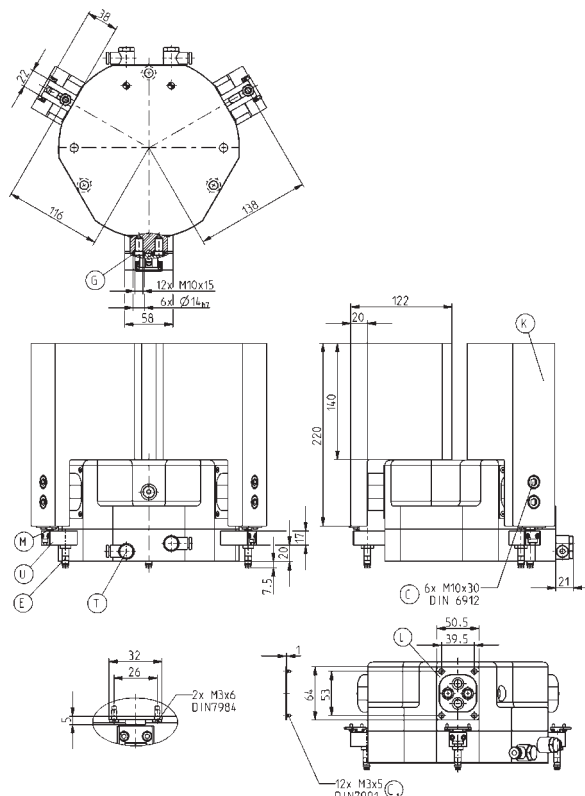


Universal jaw (set)
Order no. UB1720 (Al)
Order no. UB1720ST (St)

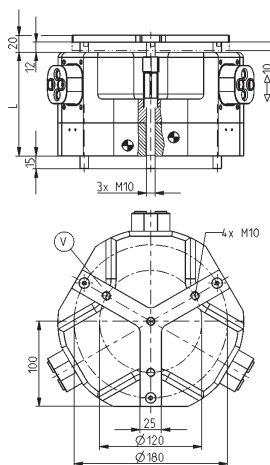


Pressing star
Order no. ADS1720C/O
Order no. ADS1720N/S

Accessory



Pressing star



L = GD1720N/S 122

Subject to change without prior notice

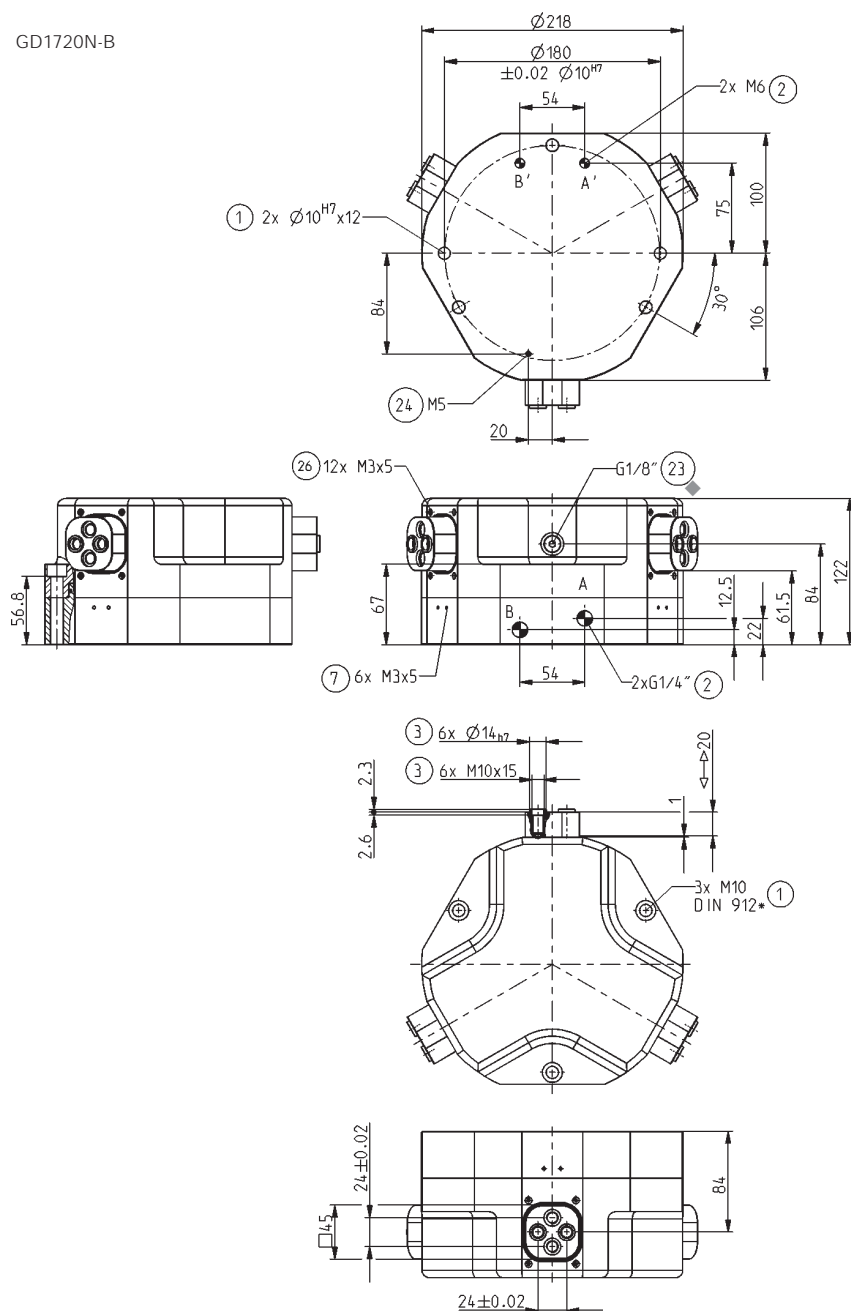
Order no.:	GD1720N-B
Stroke per jaw [mm]:	20
Gripping force in opening and closing [N]:	5250
Gripping force in closing [N]:	5250
Gripping force in opening [N]:	26,8
Recommended workpiece weight [kg]*:	-
Gripping force secured by spring min./max. [N]:	0,40
Closing time/opening time [s]:	0,05
Repeatability +/- [mm]:	3/8
Min./max. operating pressure [bar]:	5/80
Min./max. operating temperature [°C]**:	850
Air volume per cycle [cm³]:	13,4
Weight [kg]:	

All data measured at 6 bar

* Value determined with friction coefficient $\mu = 0.1$ and safety factor $\nu = 2$

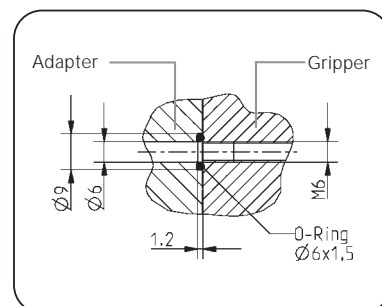
** High-temperature-resistant model (up to 150°) add T to part number

GD1720N-B



- ① Gripper mounting
- ② Power supply
- ③ Jaw fastening
- ⑦ Mounting block connection
- ②③ Ventilation or air purge connection
- ②④ Ventilation or alternate air purge connection
- ②⑤ Jaw back ventilation
- ②⑥ Fixing plate
- A) Air connection (closing)
- B) Air connection (opening)
- A') Air connection alternate (closing)
- B') Air connection alternate (opening)

* equivalent to DIN EN ISO 4762

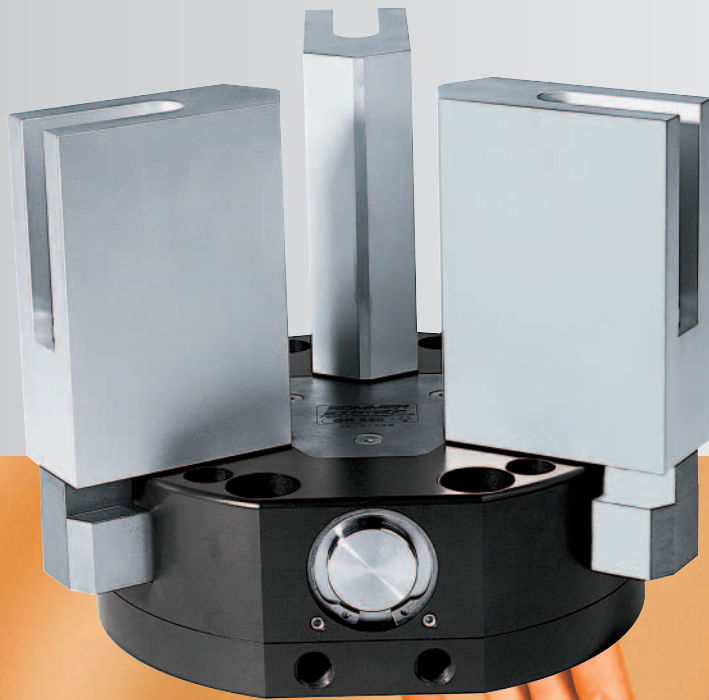


Hoseless air connection

Subject to change without prior notice



Long-Stroke Three-Jaw **Grippers** *pneumatic*



GD500 Series

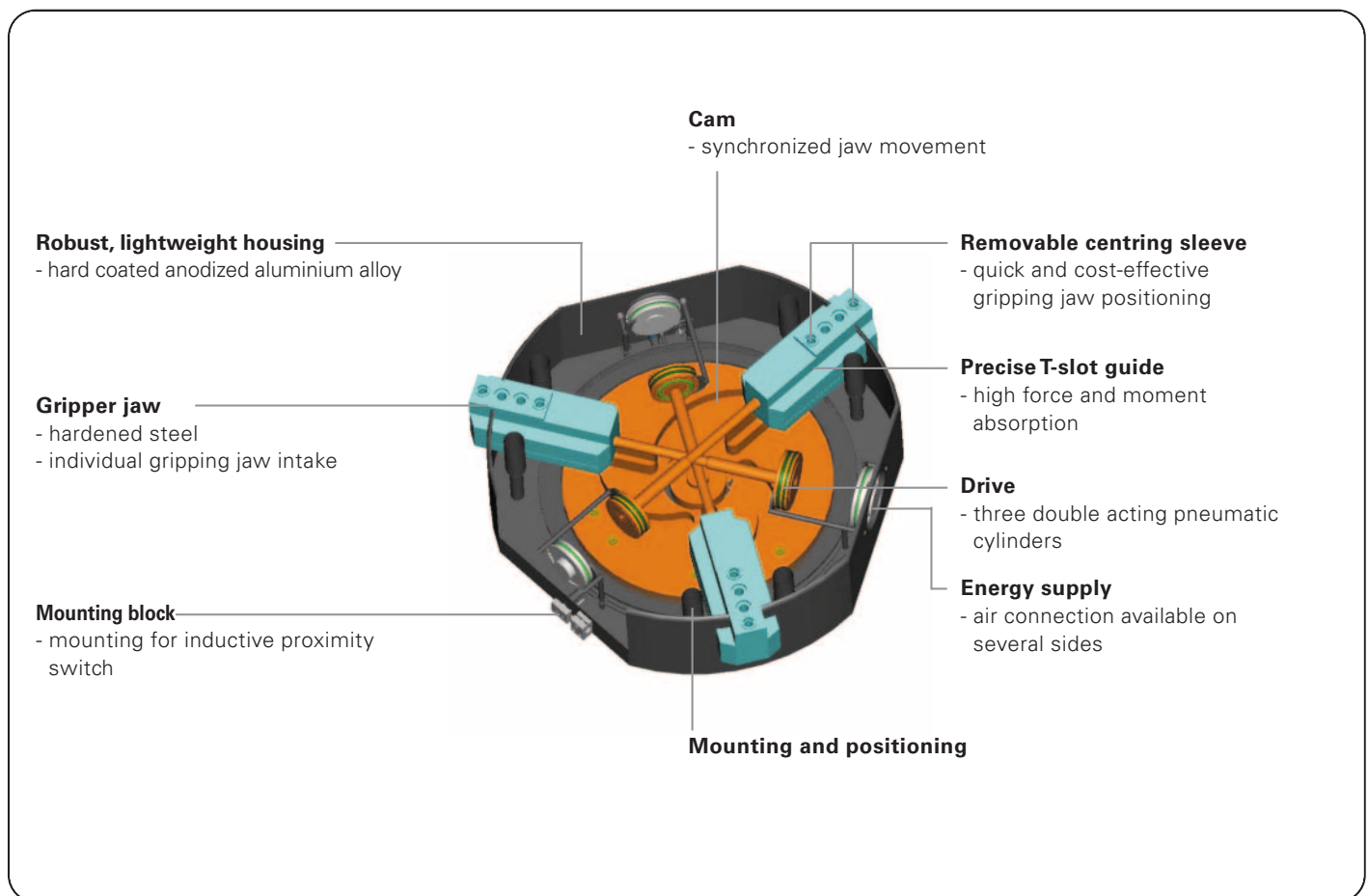
SOMMER
automatic

Long-Stroke Three-Jaw **Gripper**

➤ Features

- stable T-slot guide for gripping jaws up to 280 mm long
- long stroke, up to 60 mm per jaw
- flat design, large force. Maximum height 100 mm with 2480 N

Functional diagram





Terms

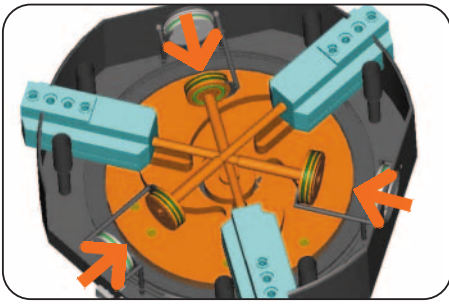
- Gripping force:** arithmetic sum of the individual forces occurring at the jaws
- Closing/opening time:** required time for the gripper jaws to cover the maximum stroke distance
- Repeatability:** at end stops after 50/100 consecutive cycles
- Gripping force safety device:** by using a pressure safety valve (order no. DSV1/8), which prevents loss of tension force if there is a drop in pressure. The inevitable leakage in the pneumatic circuit restricts the time of this type of gripping force safety.
- Cycle:** one complete movement of the piston forward and back
- Maintenance:** recommended at 10 mil. cycles
(please see the owner's manual for conditions, download from www.sommer-automatic.com)
- long maintenance intervals keep costs down
 - long lifespan

Model guide

Order no.	Stroke per jaw	Gripping force in opening	Gripping force in closing	Self-locking via
GD530	30 mm	1300 N	1300 N	DSV*
GD540	40 mm	2480 N	2480 N	DSV*
GD560	60 mm	2480 N	2480 N	DSV*

*DSV= Pressure safety valves (Order no. DSV1/8)

Long-Stroke Three-Jaw **Gripper**



Drive

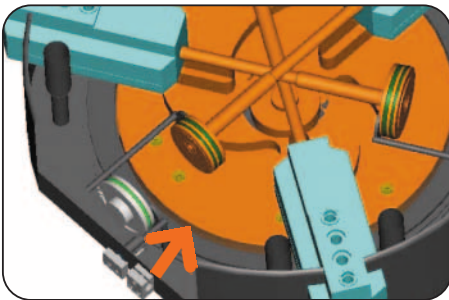
- Three double acting pneumatic cylinder
- maximum gripping force when opening and closing at minor overall height



Guidance

Stable T-Slot guide

- T-slot guide for maximum force and moment absorption
- high precision due to low play guiden
- ground gripper jaws for optimal guide behavior



Power transfer

Direct drive synchronised via cam disc

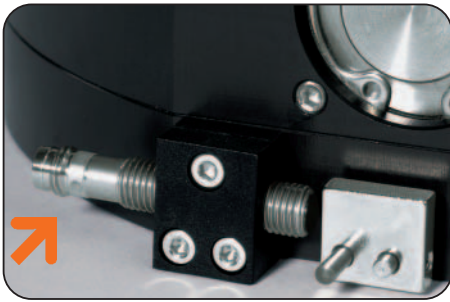
- optimum transmission of drive force in gripping force
- self-centering
- synchronized
- high repeatability



Gripping jaw positioning

individual gripping jaw positioning via centring sleeves

- precise positioning of individual gripping jaws
- quick, cost-effective and therefore economical jaw changing
- space-saving design



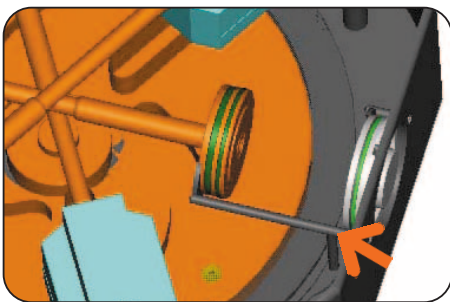
Position sensing

Gripper jaw position sensing via inductive proximity switch

- process safe due to jaw position sensing
- compact

Alternate sensor mounting for switches up to 12 mm diameter

- individual



Energy supply

Adaptable to multiple mounting configuration

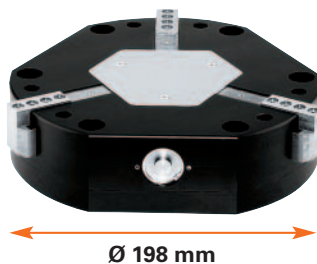
- optimum integration in workroom through individual mounting situation
- tubless direct connection possibility (no additional hose needed)



Connections

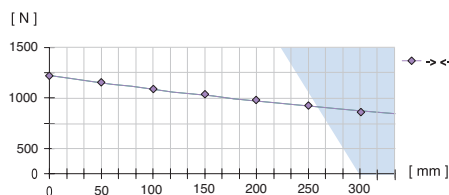
- optimal integration into the machine room

Long-Stroke Three-Jaw Gripper



Gripping force diagram

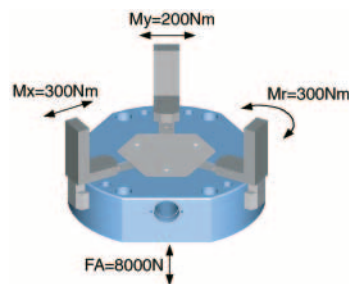
Gripping force as a function of jaw length.



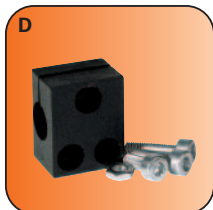
Colored area: increased wear and tear to be expected

Forces and Moments

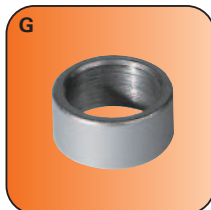
Max allowable forces and moments on jaws.



Included with purchase



Mounting block
Order no. KB8K

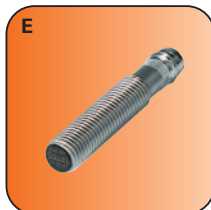


Centring sleeve
Order no. BDST41600

Accessory list



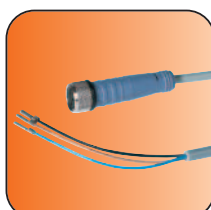
Pneumatic fittings
Order no. WV1/4x8



Proximity switch
Order no. NJ8-E2S



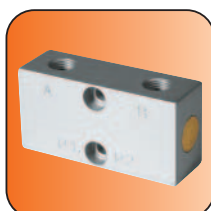
Cable angled plug
Order no. KAW500



Cable straight plug
Order no. KAG500

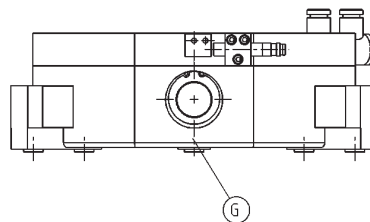
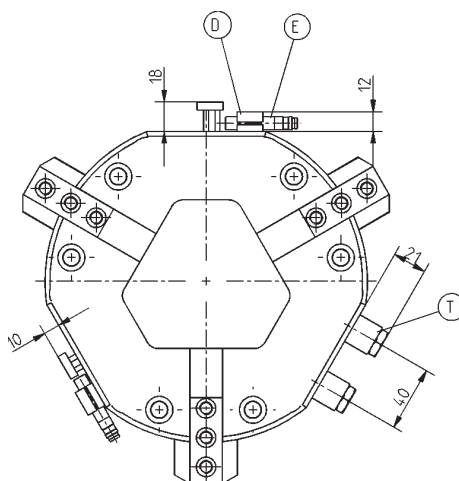


Plug 3- pole
Order no. S12-G-3



Pressure safety valve
Order no. DSV1/8

Accessory



Subject to change without prior notice

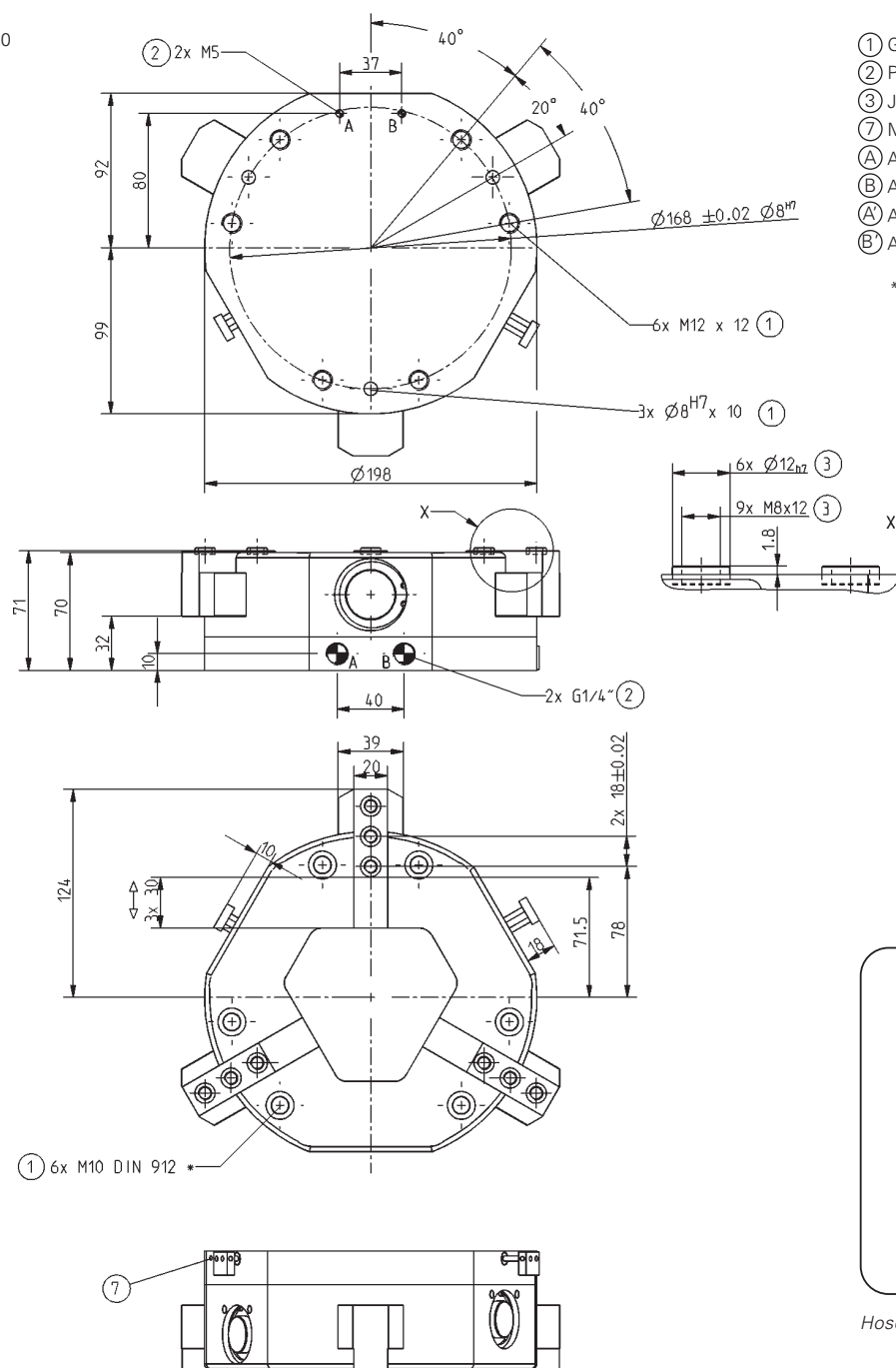
Order no.:	GD530
Stroke per jaw [mm]:	30
Gripping force in closing and opening [N]:	1300
Recommended workpiece weight [kg]*:	6,6
Closing time/opening time [s]:	0,3
Repeatability [mm]:	0,05
Min./max. operating pressure [bar]:	3/8
Min./max. operating temperature [°C]**:	5/80
Air volume per cycle [cm³]:	170
Weight [kg]:	7,4

All data measured at 6 bar

* Value determined with friction coefficient $\mu = 0.1$ and safety factor $v = 2$

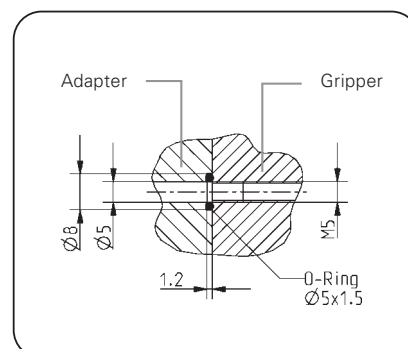
** High-temperature-resistant model (up to 150°) add T to part number

GD530



- ① Gripper mounting
- ② Power supply
- ③ Jaw fastening
- ⑦ Mounting for mounting block
- A Air connection (closing)
- B Air connection (opening)
- A Alternate air connection (closing)
- B Alternate air connection (opening)

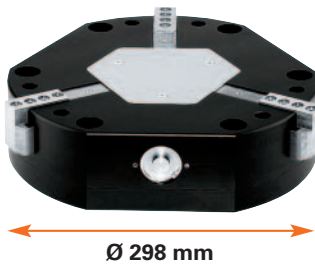
* equivalent to DIN EN ISO 4762



Hoseless air connection

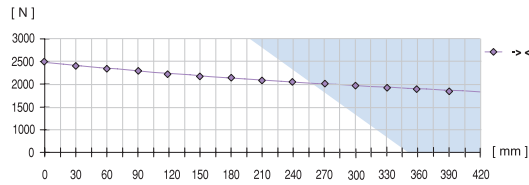
Subject to change without prior notice

Long-Stroke Three-Jaw Gripper



Gripping force diagram

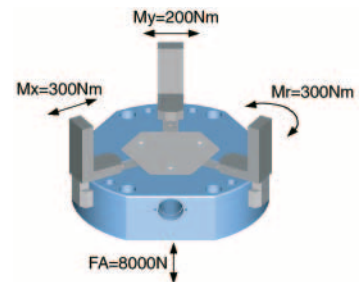
Gripping force as a function of jaw length.



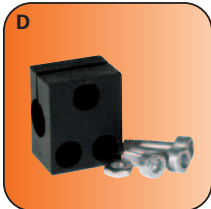
Colored area: increased wear and tear to be expected

Forces and Moments

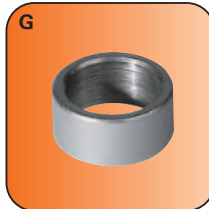
Max allowable forces and moments on jaws.



Included with purchase



Mounting block
Order no. KB8K

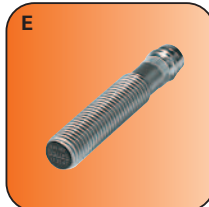


Centring sleeve
Order no. BDST42000

Accessory list



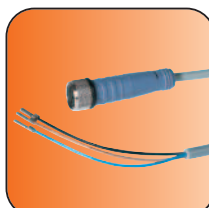
Pneumatic fittings
Order no. WV1/4x8



Proximity switch
Order no. NJ8-E2S



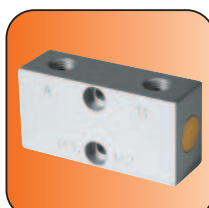
Cable angled plug
Order no. KAW500



Cable straight plug
Order no. KAG500

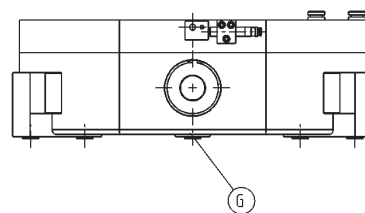
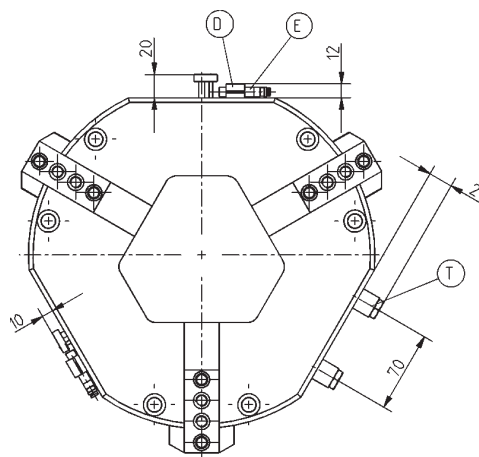


Plug 3- pole
Order no. S12-G-3



Pressure safety valve
Order no. DSV1/8

Accessory



Subject to change without prior notice

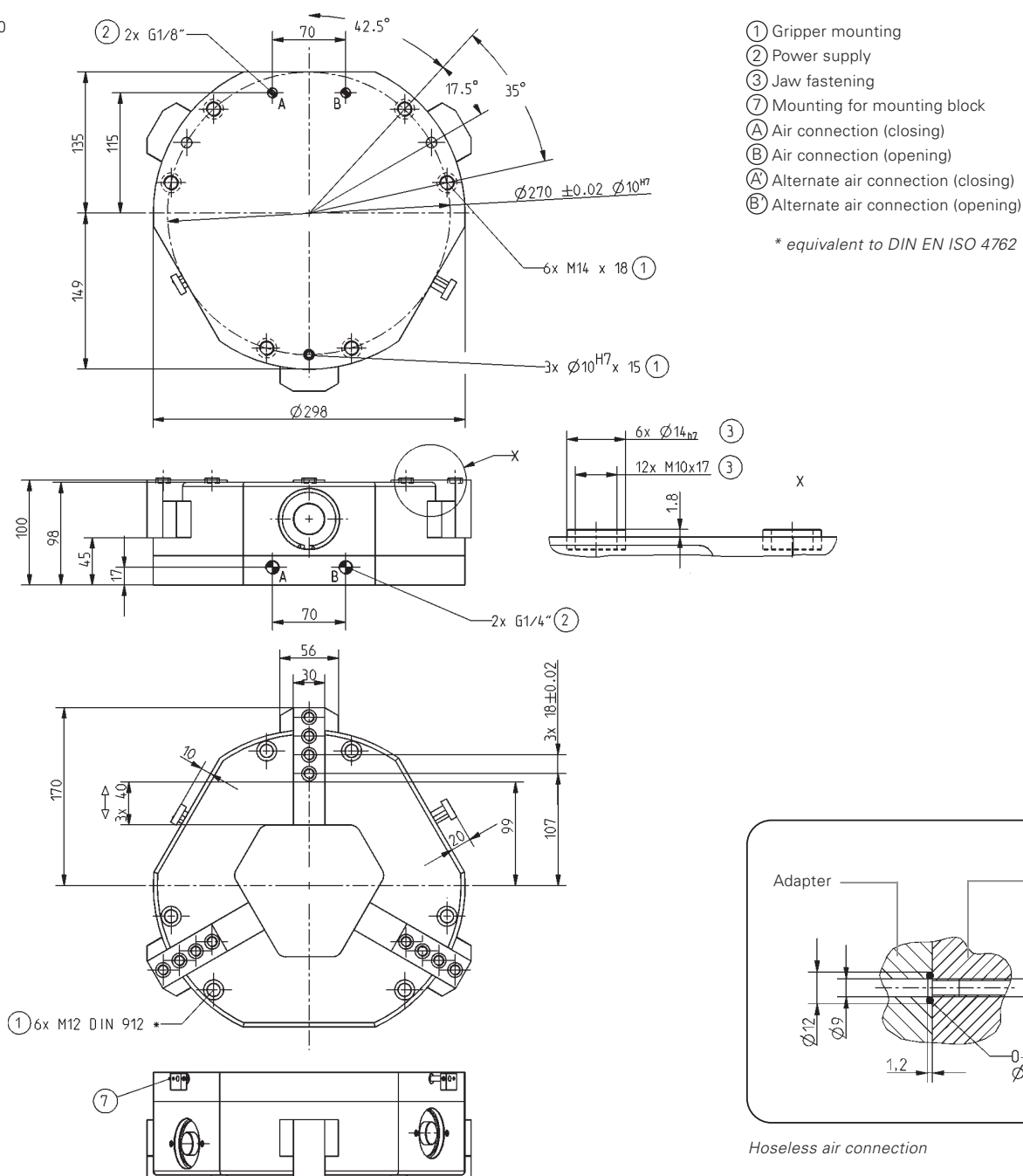
Order no.:	GD540
Stroke per jaw [mm]:	40
Gripping force in closing and opening [N]:	2480
Recommended workpiece weight [kg]*:	12,6
Closing time/opening time [s]:	0,35
Repeatability [mm]:	0,05
Min./max. operating pressure min./max. [bar]:	3/8
Min./max. operating temperature [°C]**:	5/80
Air volume per cycle [cm³]:	440
Weight [kg]:	19

All data measured at 6 bar

* Value determined with friction coefficient $\mu = 0.1$ and safety factor $v = 2$

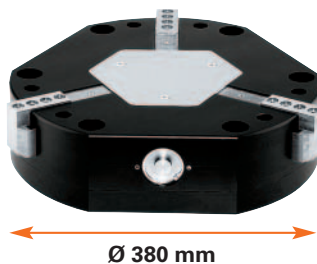
** High-temperature-resistant model (up to 150°) add T to part number

GD540



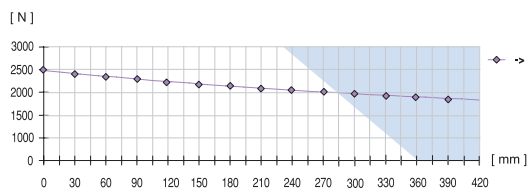
Subject to change without prior notice

Long-Stroke Three-Jaw Gripper



Gripping force diagram

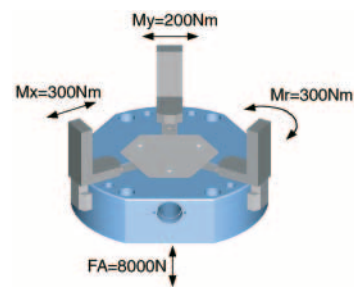
Gripping force as a function of jaw length.



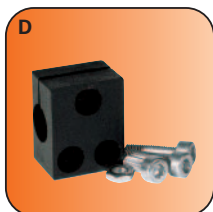
Colored area: increased wear and tear to be expected

Forces and Moments

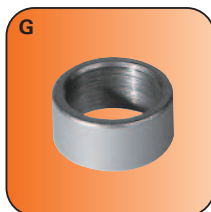
Max allowable forces and moments on jaws.



Included with purchase



Mounting block
Order no. KB8K



Centring sleeve
Order no. BDST42000

Accessory list



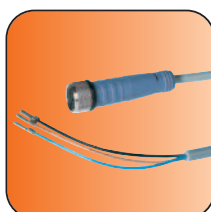
Pneumatic fittings
Order no. WV1/4x8



Proximity switch
Order no. NJ8-E2S



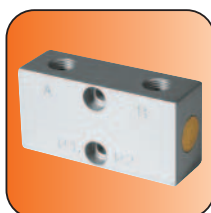
Cable angled plug
Order no. KAW500



Cable straight plug
Order no. KAG500

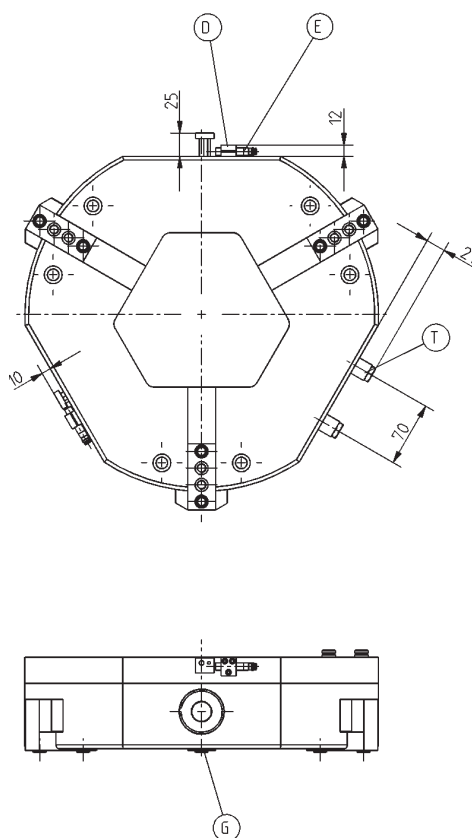


Plug 3- pole
Order no. S12-G-3



Pressure safety valve
Order no. DSV1/8

Accessory



Subject to change without prior notice

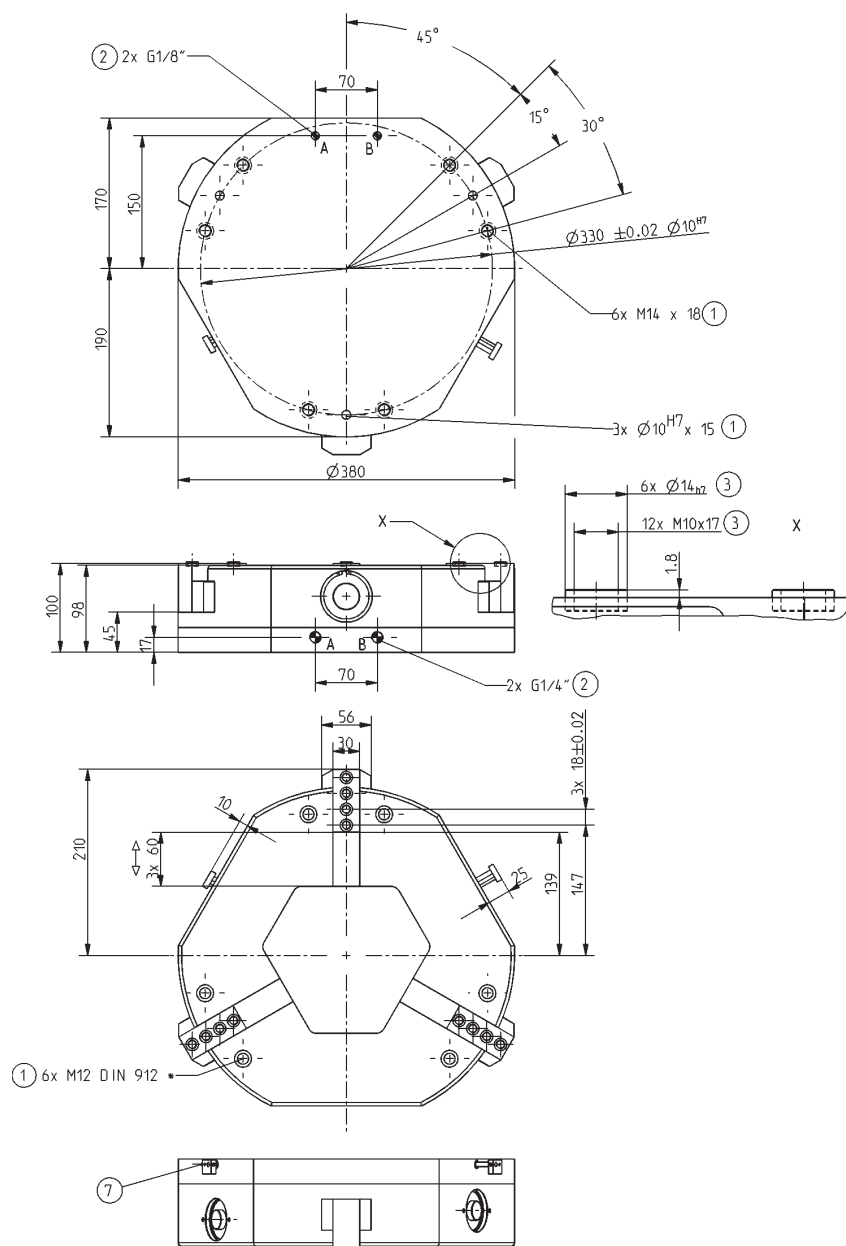
Order no.:	GD560
Stroke per jaw [mm]:	60
Gripping force in closing and opening [N]:	2480
Recommended workpiece weight [kg]*:	12,6
Closing time/opening time [s]:	0,45
Repeatability +/- [mm]:	0,05
Min./max. operating pressure [bar]:	3/8
Min./max. operating temperature [°C]**:	5/80
Air volume per cycle [cm³]:	650
Weight [kg]:	29

All data measured at 6 bar

* Value determined with friction coefficient $\mu = 0.1$ and safety factor $v = 2$

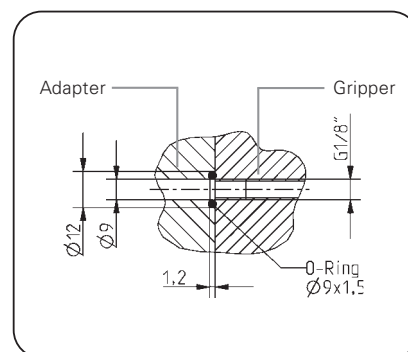
** High-temperature-resistant model (up to 150°) add T to part number

GD560



- ① Gripper mounting
- ② Power supply
- ③ Jaw fastening
- ⑦ Mounting for mounting block
- A Air connection (closing)
- B Air connection (opening)
- A Alternate air connection (closing)
- B Alternate air connection (opening)

* equivalent to DIN EN ISO 4762



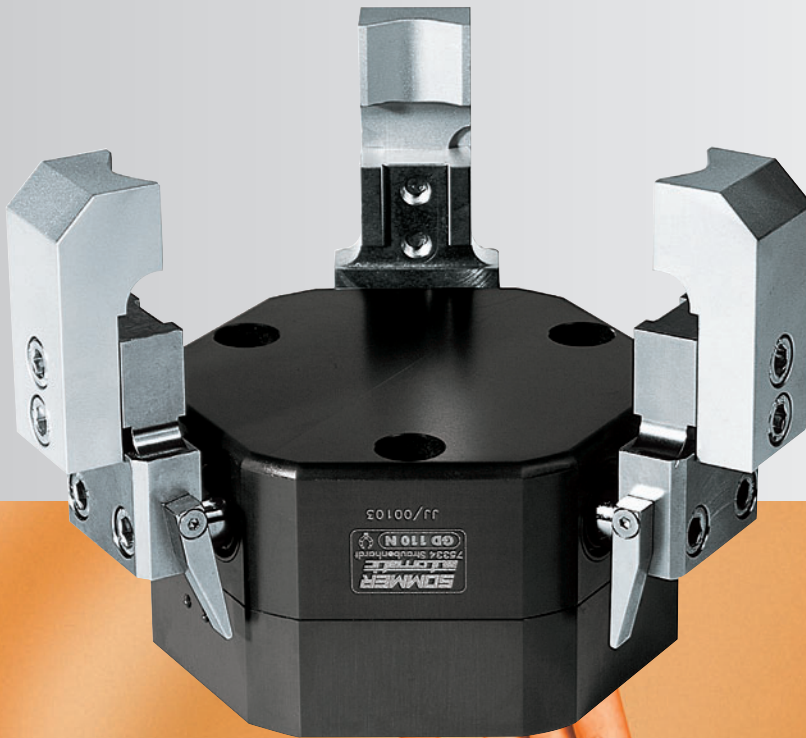
Hoseless air connection

Subject to change without prior notice



Three-Jaw **Grippers**

pneumatic



GD46
GD70
GD110
GD160

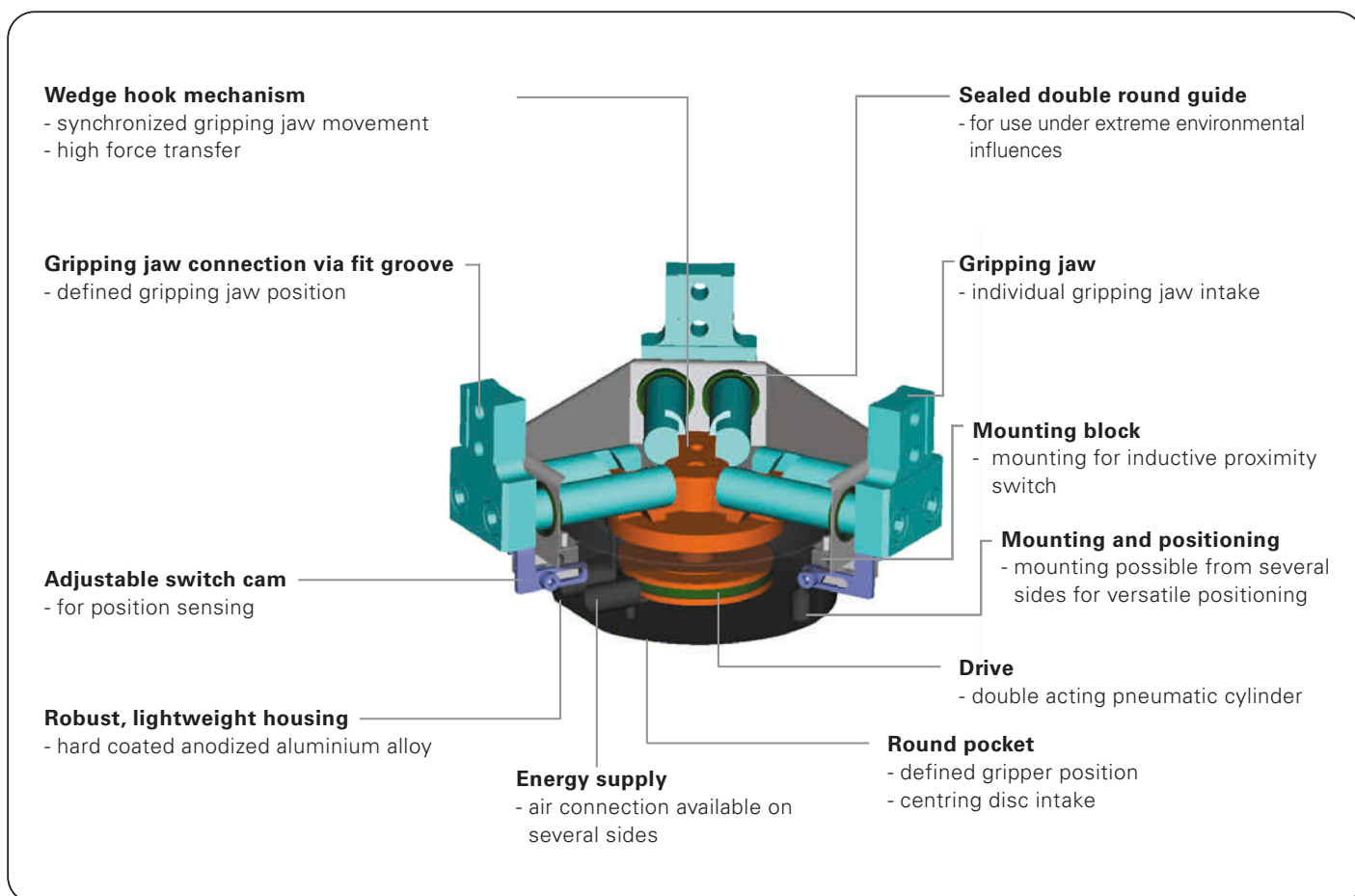
SOMMER
automatic

Three-Jaw Gripper

Features

- sealed, double round guide, rust resistant for use in dirty/wet environment
- available with up to 8 mm stroke per jaw and gripping force up to 4580 N
- corrosion resistant due to hard anodised aluminium or chemically nickel-plated steel components

Functional diagram





Terms

Gripping force:	arithmetic sum of the individual forces occurring at the jaws
Closing/opening time:	required time for the gripper jaws to cover the maximum stroke distance
Repeatability:	at end stops after 50/100 consecutive cycles
Gripping force safety:	by using a pressure safety valve (order no. DSV1/8), which prevents loss of tension force if there is a drop in pressure. The inevitable leakage in the pneumatic circuit restricts the time of this type of gripping force safety.
Cycle:	one complete movement of the piston forward and back
Maintenance:	recommended at 1.5 mil. cycles (please see the owner's manual for conditions, download from www.sommer-automatic.com)

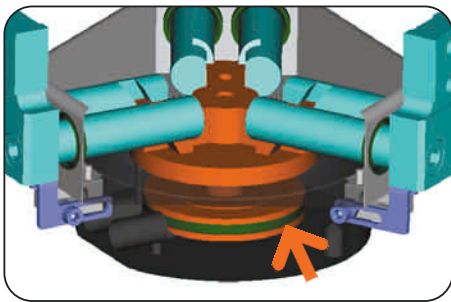
Model guide

N:	Standard design (long stroke - standard force)
S:	Heavy-duty design (short stroke - large force)

Order no.	Stroke per jaw	Gripping force in opening	Gripping force in closing	Self-locking via
GD46N	3 mm	270 N	200 N	DSV*
GD70N	4 mm	1180 N	740 N	DSV*
GD110N	6 mm	1700 N	1200 N	DSV*
GD110S	3 mm	3300 N	2800 N	DSV*
GD160N	8 mm	2320 N	1740 N	DSV*
GD160S	4 mm	4580 N	4160 N	DSV*

*DSV= Pressure safety valves (Order no. DSV1/8)

Three-Jaw **Gripper**



Drive

N and S Models

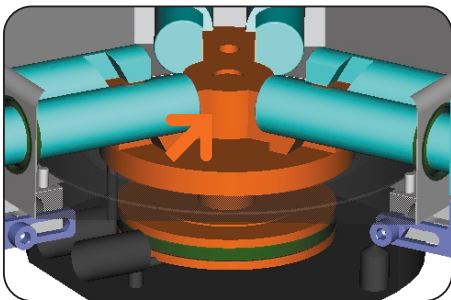
Double acting pneumatic cylinder

- maximum power in both opening and closing
- gripping force up to 4580 N



Guidance

- double round guide
- sealed
- corrosion resistant, chemically nickel-plated guide rods



Power transfer

Wedge hook mechanism with mechanical restricted guides

- optimum transmission of power to gripping force
- self-centering
- synchronized
- high repeatability



Gripping jaw positioning

Individual gripping jaw positioning

- precise positioning of individual gripping jaw
- space-saving design

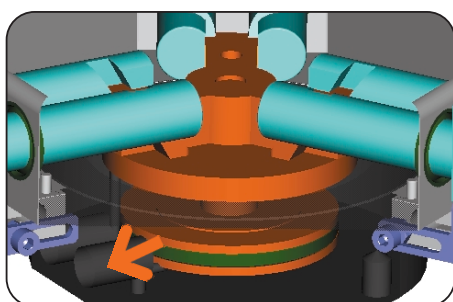


Position sensing

switch cam for position sensing

switch cam mounted directly on gripper jaw

- adjustable
- process safe



Connections

Energy supply, attachment and positioning possibilities

Adaptable to multiple mounting configuration

- optimal integration into the workroom through individual mounting situation
- tubeless direct connection possibility (no additional hose needed)

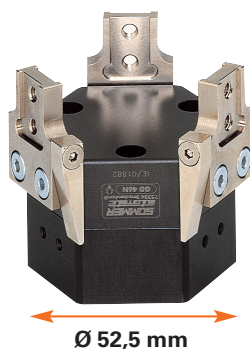


Positive gripper position with centring disc

Precise gripper positioning

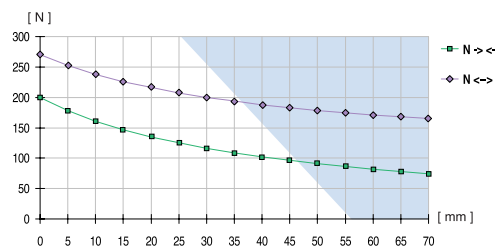
- centring disc available as accessory
- safe design costs

Three-Jaw Gripper



Gripping force diagram

Gripping force as a function of jaw length.

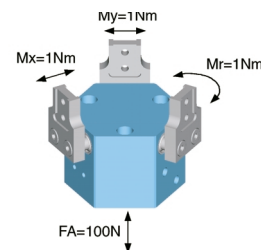


Colored area: increased wear and tear to be expected

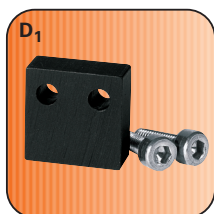
measured from top edge of housing ♦

Forces and Moments

Max allowable forces and moments on jaws.

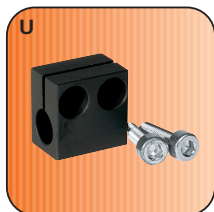


Included with purchase



Distance piece
Order no. BGEH11020

Accessory list



Mounting block
Order no. KB6.5



Proximity switch
Order no. NJ6.5-E2S



Pneumatic fittings
Order no. WVM5



Centring disc
Order no. ZE15H7x4

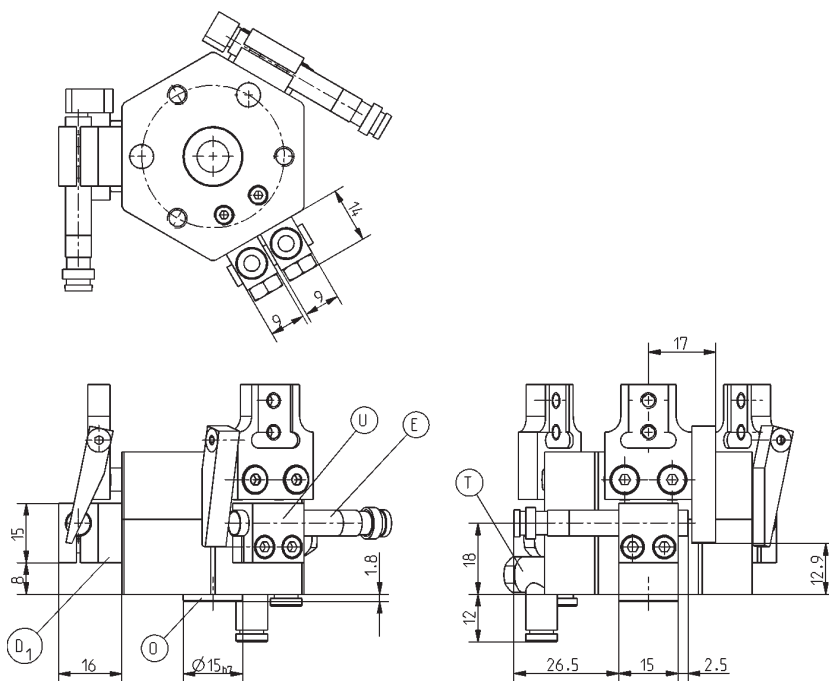


Cable angled plug
Order no. KAW500



Pressure safety valve
Order no. DSV1/8

Accessory



Subject to change without prior notice

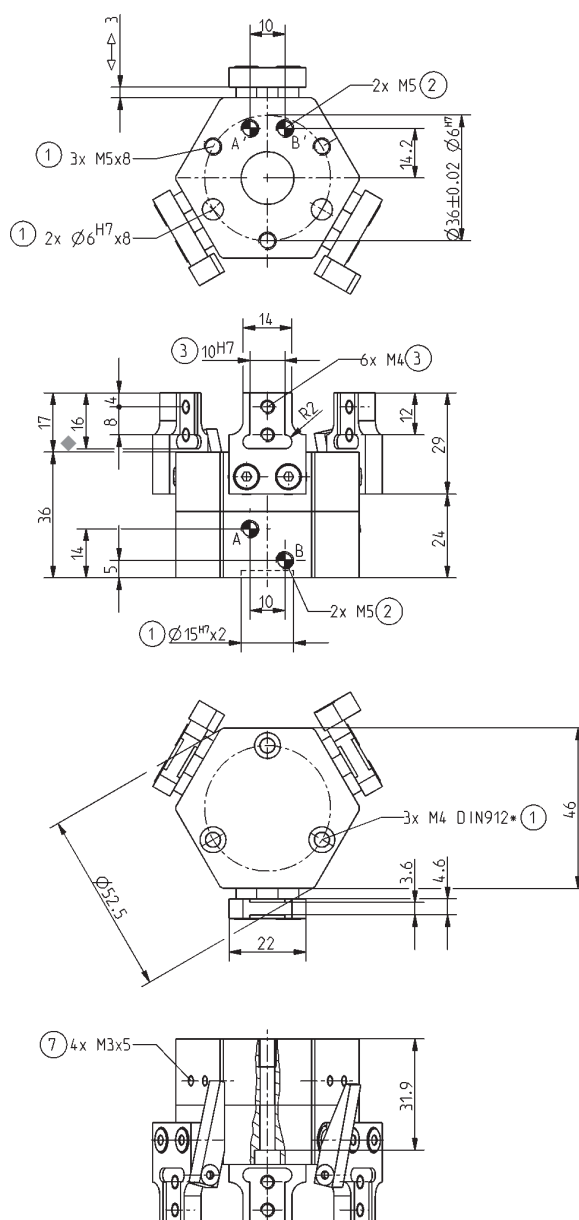
Order no.:	GD46N
Stroke per jaw [mm]:	3
Gripping force in closing [N]:	200
Gripping force in opening [N]:	270
Recommended workpiece weight [kg]*:	1
Closing time/opening time [s]:	0,03
Repeatability [mm]:	0,1
Min./max. operating pressure [bar]:	3/8
Min./max. operating temperature [°C]**:	5/80
Air volume per cycle [cm³]:	5
Weight [g]:	250

All data measured at 6 bar

* Value determined with friction coefficient $\mu = 0.1$ and safety factor $\nu = 2$

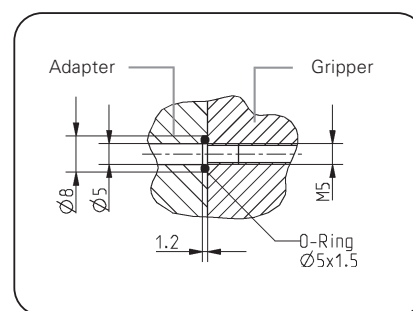
** High-temperature-resistant model (up to 150°) add T to part number

GD46N



- ① Gripper mounting
- ② Power supply
- ③ Jaw fastening
- ⑦ Mounting for mounting block
- A Air connection (closing)
- B Air connection (opening)
- A Alternate air connection (closing)
- B Alternate air connection (opening)

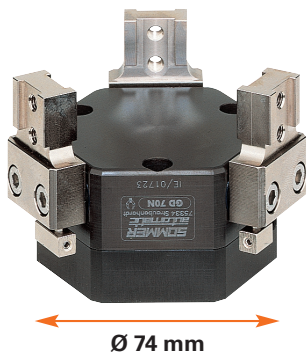
* equivalent to DIN EN ISO 4762



Hoseless air connection

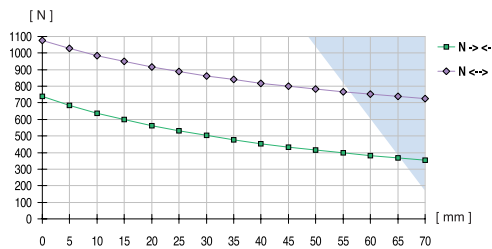
Subject to change without prior notice

Three-Jaw Gripper



Gripping force diagram

Gripping force as a function of jaw length.

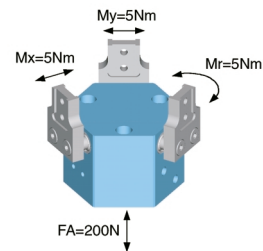


Colored area: increased wear and tear to be expected

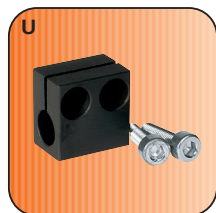
measured from top edge of housing ♦

Forces and Moments

Max allowable forces and moments on jaws.



Accessory list



Mounting block
Order no. KB6.5



Proximity switch
Order no. NJ6.5-E2S



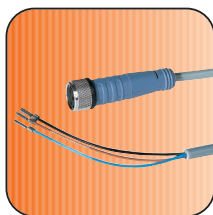
Pneumatic fittings
Order no. WV1/8x6



Centring disc
Order no. ZE20H7x4



Cable angled plug
Order no. KAW500



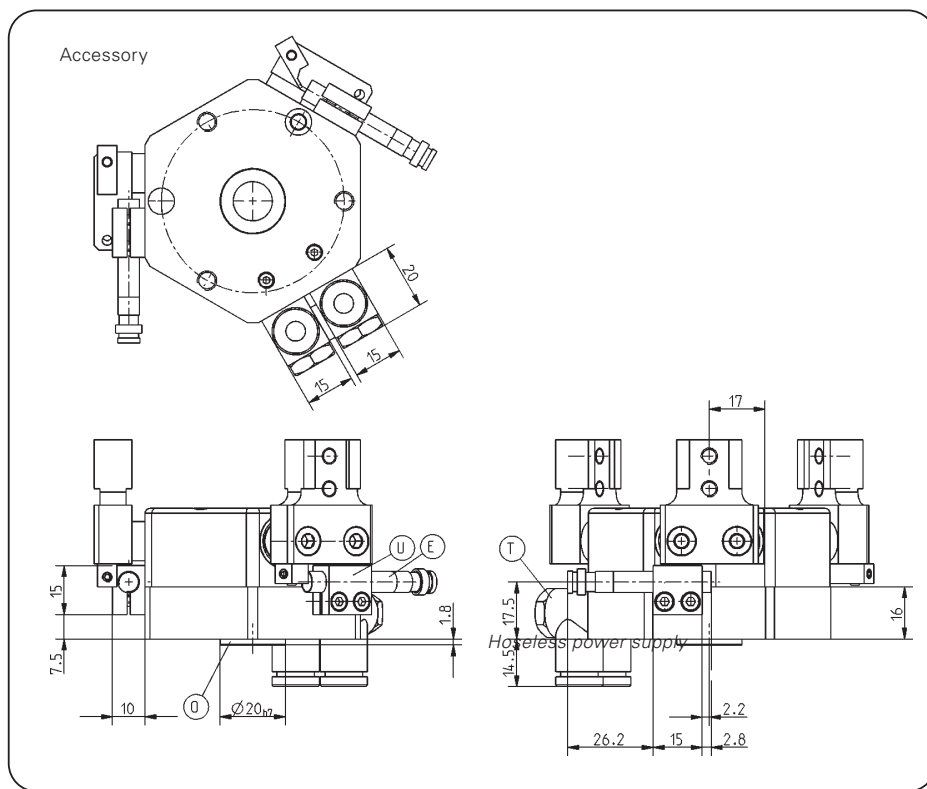
Cable straight plug
Order no. KAG500



Plug 3-pole
Order no. S12-G-3



Pressure safety valve
Order no. DSV1/8



Subject to change without prior notice

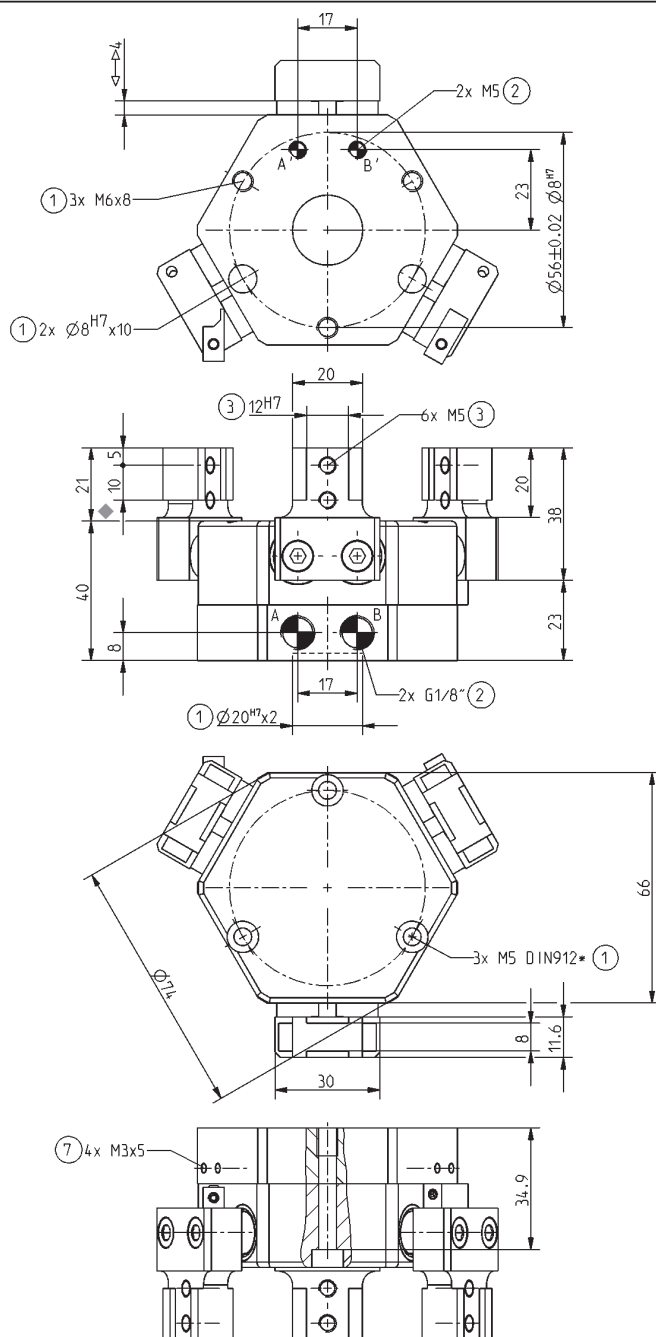
Order no.:	GD70N
Stroke per jaw [mm]:	4
Gripping force in closing [N]:	740
Gripping force in opening [N]:	1180
Recommended workpiece weight [kg]*:	3,8
Closing time/opening time [s]:	0,04
Repeatability [mm]:	0,1
Min./max. operating pressure [bar]:	3/8
Min./max. operating temperature [°C]**:	5/80
Air volume per cycle [cm³]:	25
Weight [g]:	640

All data measured at 6 bar

* Value determined with friction coefficient $\mu = 0.1$ and safety factor $v = 2$

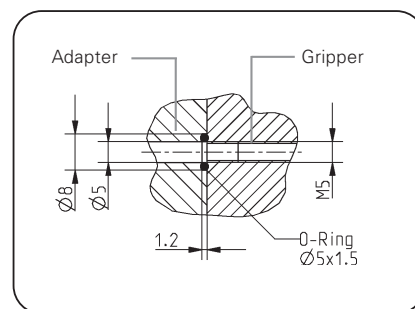
** High-temperature-resistant model (up to 150°) add T to part number

GD70N



- ① Gripper mounting
- ② Power supply
- ③ Jaw fastening
- ⑦ Mounting for mounting block
- A Air connection (closing)
- B Air connection (opening)
- A' Alternate air connection (closing)
- B' Alternate air connection (opening)

* equivalent to DIN EN ISO 4762



Hoseless air connection

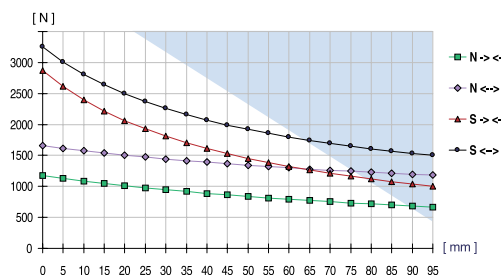
Subject to change without prior notice

Three-Jaw Gripper



Gripping force diagram

Gripping force as a function of jaw length.

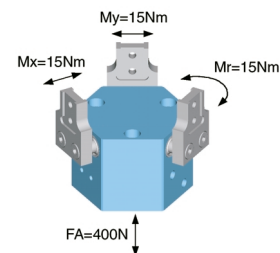


Colored area: increased wear and tear to be expected

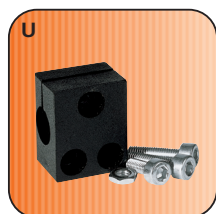
measured from top edge of housing ◆

Forces and Moments

Max allowable forces and moments on jaws.



Included with purchase



Mounting block
Order no. KB8K/03



Distance piece
Order no. BGEH11020

Accessory list



Pneumatic fittings
Order no. WV1/8x6



Proximity switch
Order no. NJ8-E2S



Centring disc
Order no. ZE30H7x4



Cable angled plug
Order no. KAW500

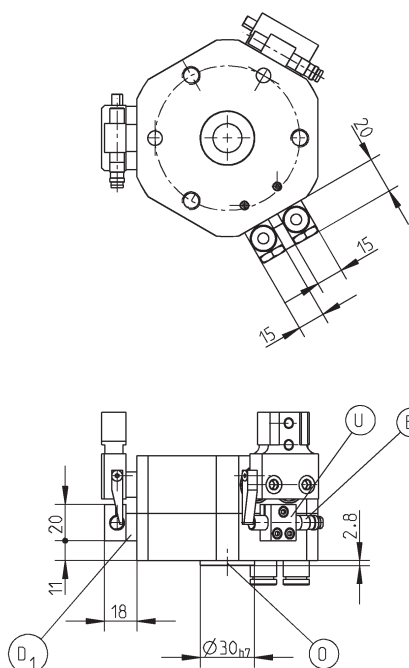


Plug 3-pole
Order no. S12-G-3



Pressure safety valve
Order no. DSV1/8

Accessory



Subject to change without prior notice

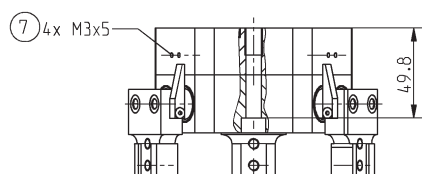
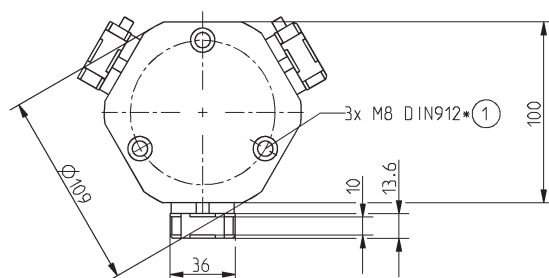
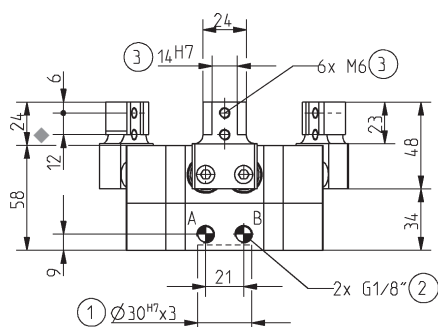
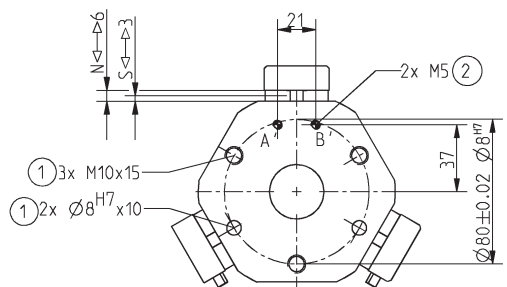
Order no.:	GD110N	GD110S
Stroke per jaw [mm]:	6	3
Gripping force in closing [N]:	1200	2800
Gripping force in opening [N]:	1700	3300
Recommended workpiece weight [kg]*:	6,1	14,3
Closing time/opening time [s]:	0,05	0,05
Repeatability [mm]:	0,1	0,1
Min./max. operating pressure [bar]:	3/8	3/8
Min./max. operating temperature [°C]**:	5/80	5/80
Air volume per cycle [cm³]:	47	47
Weight [kg]:	1,8	1,8

All data measured at 6 bar

* Value determined with friction coefficient $\mu = 0.1$ and safety factor $v = 2$

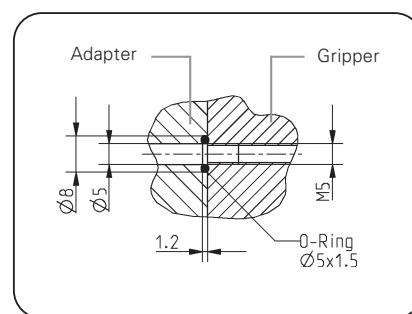
** High-temperature-resistant model (up to 150°) add T to part number

GD110N/S



- ① Gripper mounting
- ② Power supply
- ③ Jaw fastening
- ⑦ Mounting for mounting block
- A Air connection (closing)
- B Air connection (opening)
- A' Alternate air connection (closing)
- B' Alternate air connection (opening)

* equivalent to DIN EN ISO 4762



Hoseless air connection

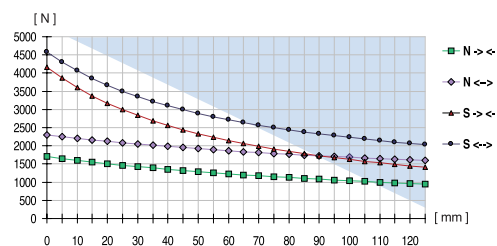
Subject to change without prior notice

Three-Jaw Gripper



Gripping force diagram

Gripping force as a function of jaw length.

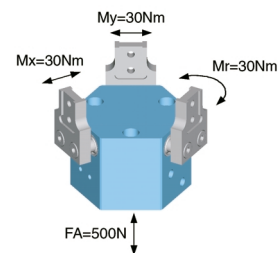


Colored area: increased wear and tear to be expected

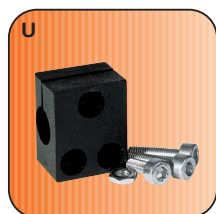
measured from top edge of housing ◆

Forces and Moments

Max allowable forces and moments on jaws.



Included with purchase



Mounting block
Order no. KB8K/03

Accessory list



Pneumatic fittings
Order no. WV1/4x6



Proximity switch
Order no. NJ8-E2S



Centring disc
Order no. ZE25H7x6



Cable angled plug
Order no. KAW500

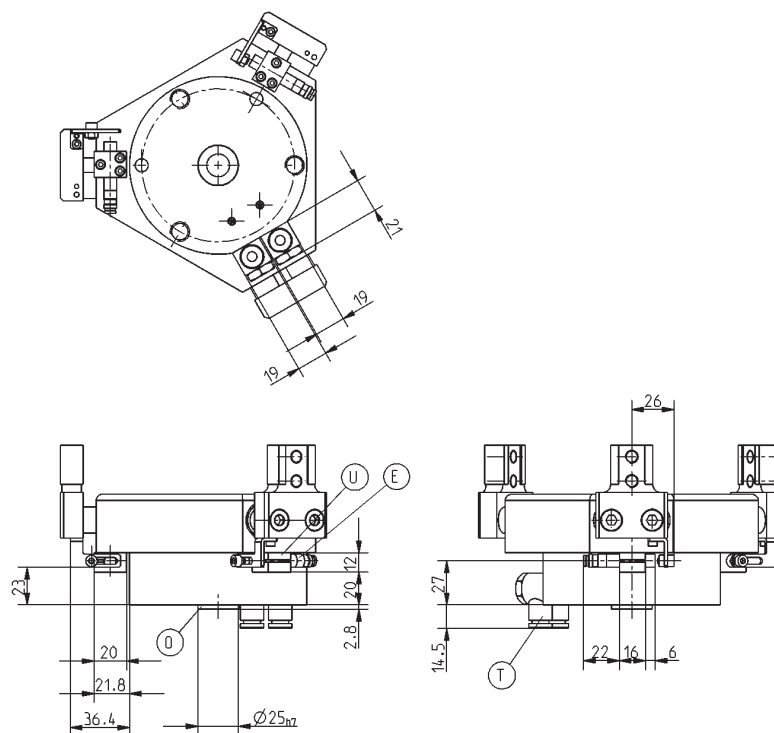


Plug 3-pole
Order no. S12-G-3



Pressure safety valve
Order no. DSV1/8

Accessory



Subject to change without prior notice

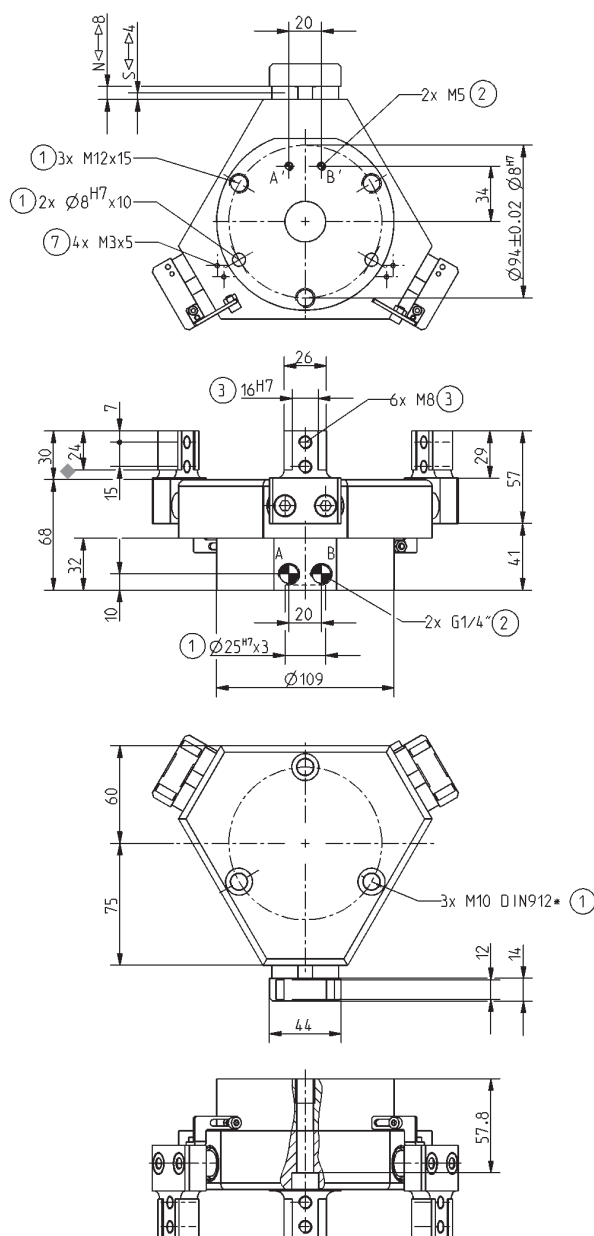
Order no.:	GD160N	GD160S
Stroke per jaw [mm]:	8	4
Gripping force in closing [N]:	1740	4160
Gripping force in opening [N]:	2320	4580
Recommended workpiece weight [kg]*:	8,9	21,2
Closing time/opening time [s]:	0,08	0,08
Repeatability [mm]:	0,1	0,1
Min./max. operating pressure [bar]:	3/8	3/8
Min./max. operating temperature [°C]**:	5/80	5/80
Air volume per cycle [cm³]:	73	73
Weight [kg]:	3,1	3,1

All data measured at 6 bar

* Value determined with friction coefficient $\mu = 0.1$ and safety factor $v = 2$

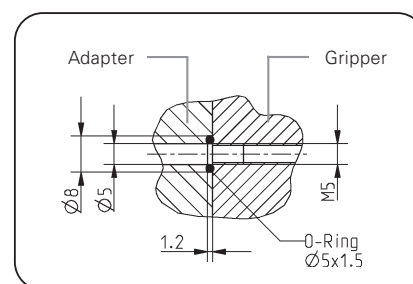
** High-temperature-resistant model (up to 150°) add T to part number

GD160N/S



- ① Gripper mounting
- ② Power supply
- ③ Jaw fastening
- ⑦ Mounting for mounting block
- A Air connection (closing)
- B Air connection (opening)
- A' Alternate air connection (closing)
- B' Alternate air connection (opening)

* equivalent to DIN EN ISO 4762



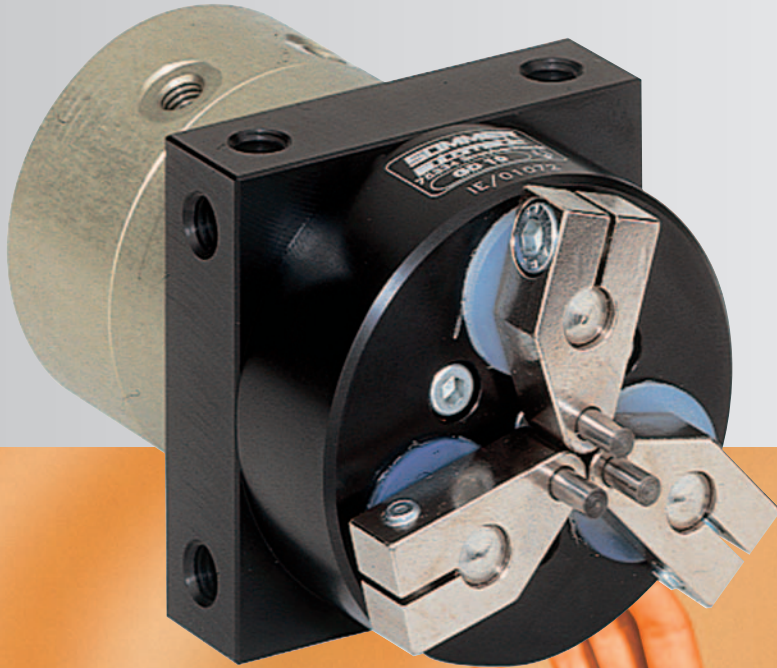
Hoseless air connection

Subject to change without prior notice



Three-Point **Grippers**

pneumatic



GD1-B

GD10

GD50

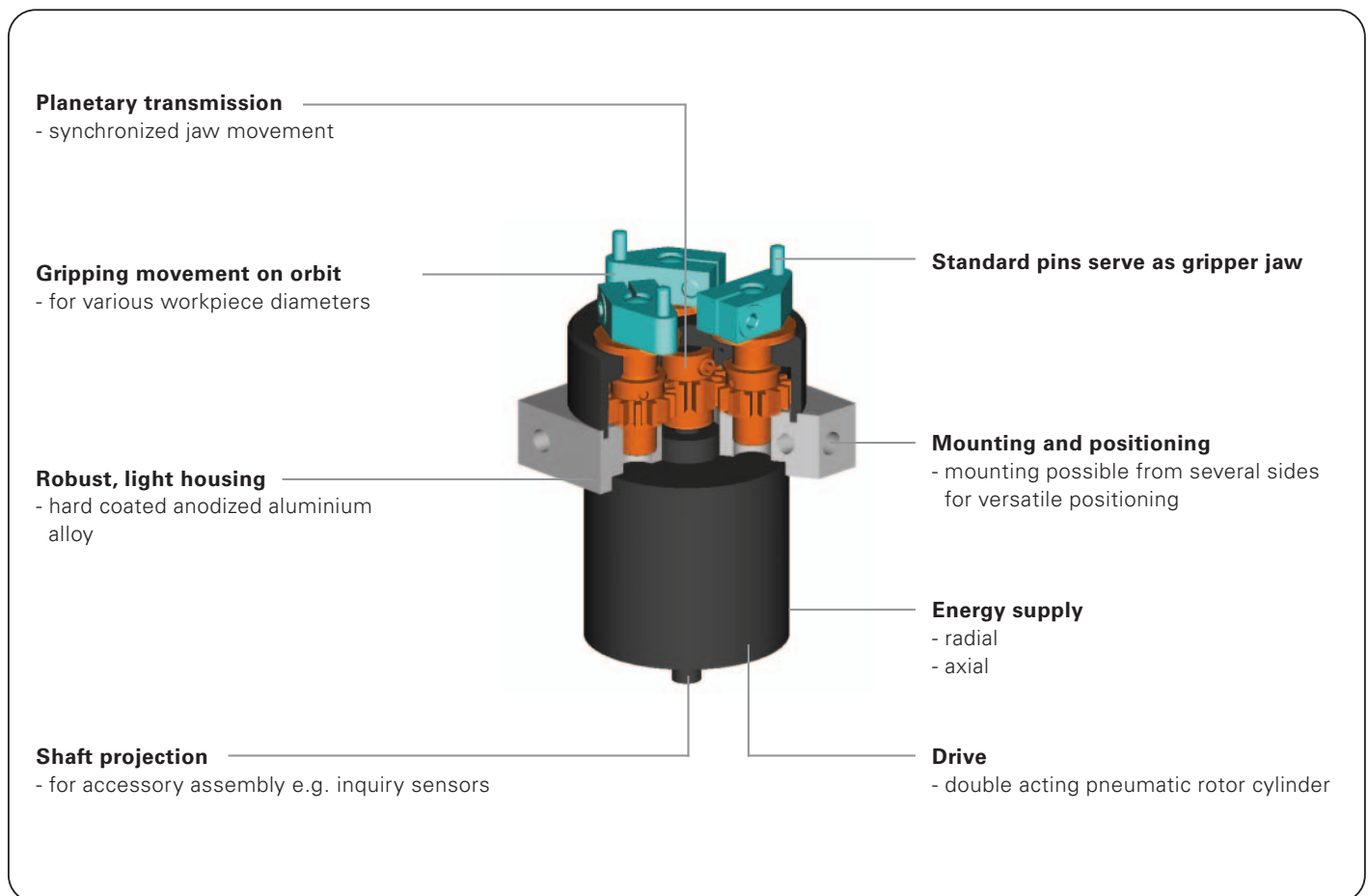
SOMMER
automatic

Three-Point **Gripper**

➤ Features

- ideally for parts with different diameter
- long stroke through circle movement from up to 130° per jaw
- available in three sizes, up to 9 Nm gripping moment

Functional diagram





Terms

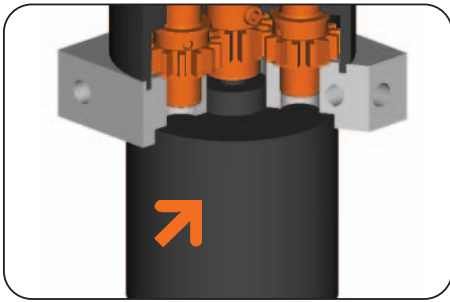
- Gripping force:** arithmetic sum of the individual forces occurring at the jaws
- Closing/opening time:** required time for the gripper jaws to cover the maximum stroke distance
- Repeatability:** at end stops after 50/100 consecutive cycles
- Gripping force safety device:** by using a pressure safety valve (order no. DSV1/8), which prevents loss of tension force if there is a drop in pressure. The inevitable leakage in the pneumatic circuit restricts the time of this type of gripping force safety.
- Cycle:** one complete movement of the piston forward and back
- Maintenance:** recommended at 10 mil. cycles
(please see the owner's manual for conditions,
download from www.sommer-automatic.com)
- long maintenance intervals keep costs down
 - long lifespan

Model guide

Order no.	Grip diameter in closing min. / max.	Grip diameter in opening min. / max.	Gripping moment	Self-locking via
GD1-B	3 / 22 mm	8 / 25 mm	0,12 Nm	DSV*
GD10	5 / 45 mm	11 / 50 mm	1 Nm	DSV*
GD50	9 / 62 mm	22 / 76 mm	9 Nm	DSV*

*DSV= Pressure safety valves (Order no. DSV1/8)

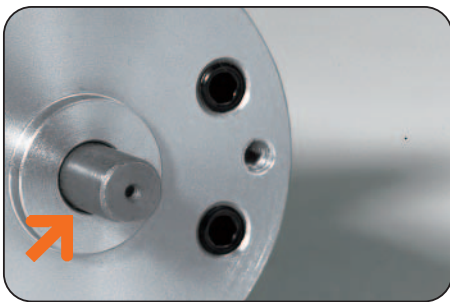
Three-Point **Gripper**



Drive

Double acting pneumatic rotor cylinder

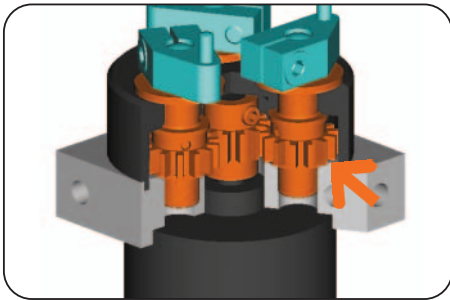
- high power in both opening and closing
- high gripping moment up to 9 Nm



Drive shaft

Rear shaft projection for mounting accessories

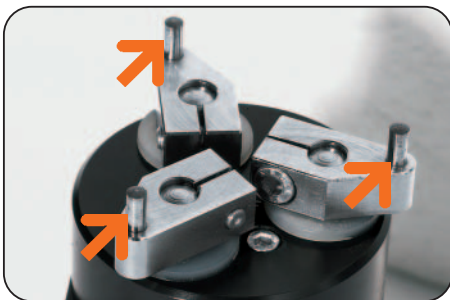
- infinitely variable stroke adjustment with accessory "rotation restriction"
- gripping position sensing with accessory "rotation restriction plus stop-stroke adjusting screw plus sensor"



Power transfer

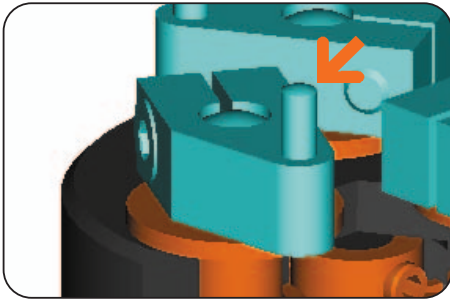
Planetary transmission

- optimum transmission of drive force in gripping force
- self-centering
- synchronized
- high repeatability



Gripping via circular movement

- ideal for parts with different diameters
- gripping diameter up to 76 mm
- large stroke with small design



Standard pin as gripping jaw

- ready for use immediately
- no design effort
- can be replaced with longer standard pins



Mounting

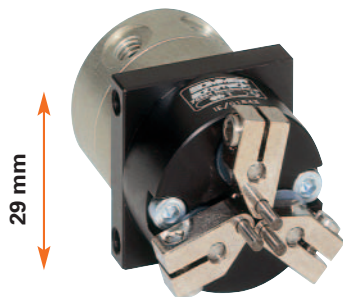
flexibility possible on several sides

- optimum integration into the application

Three-Point **Gripper**

Forces and Moments

Max allowable forces and moments on jaws.



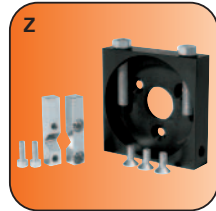
Accessory list



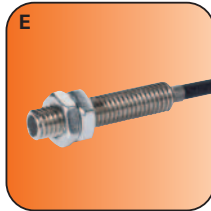
Pneumatic fittings
Order no. WVM5



Pneumatic fittings
Order no. GVM5



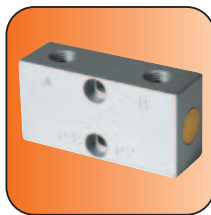
Rotation limiter
Order no. DB1-B



Proximity switch
Order no. NJ3-E2/02

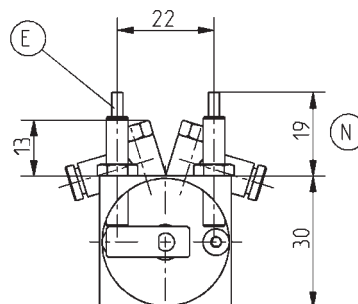


Plug 3- pole
Order no. S12-G-3

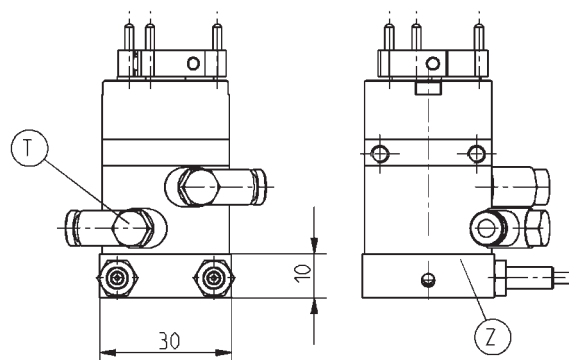


Pressure safety valve
Order no. DSV1/8

Accessory



(N) sensing specific dimensions



Subject to change without prior notice

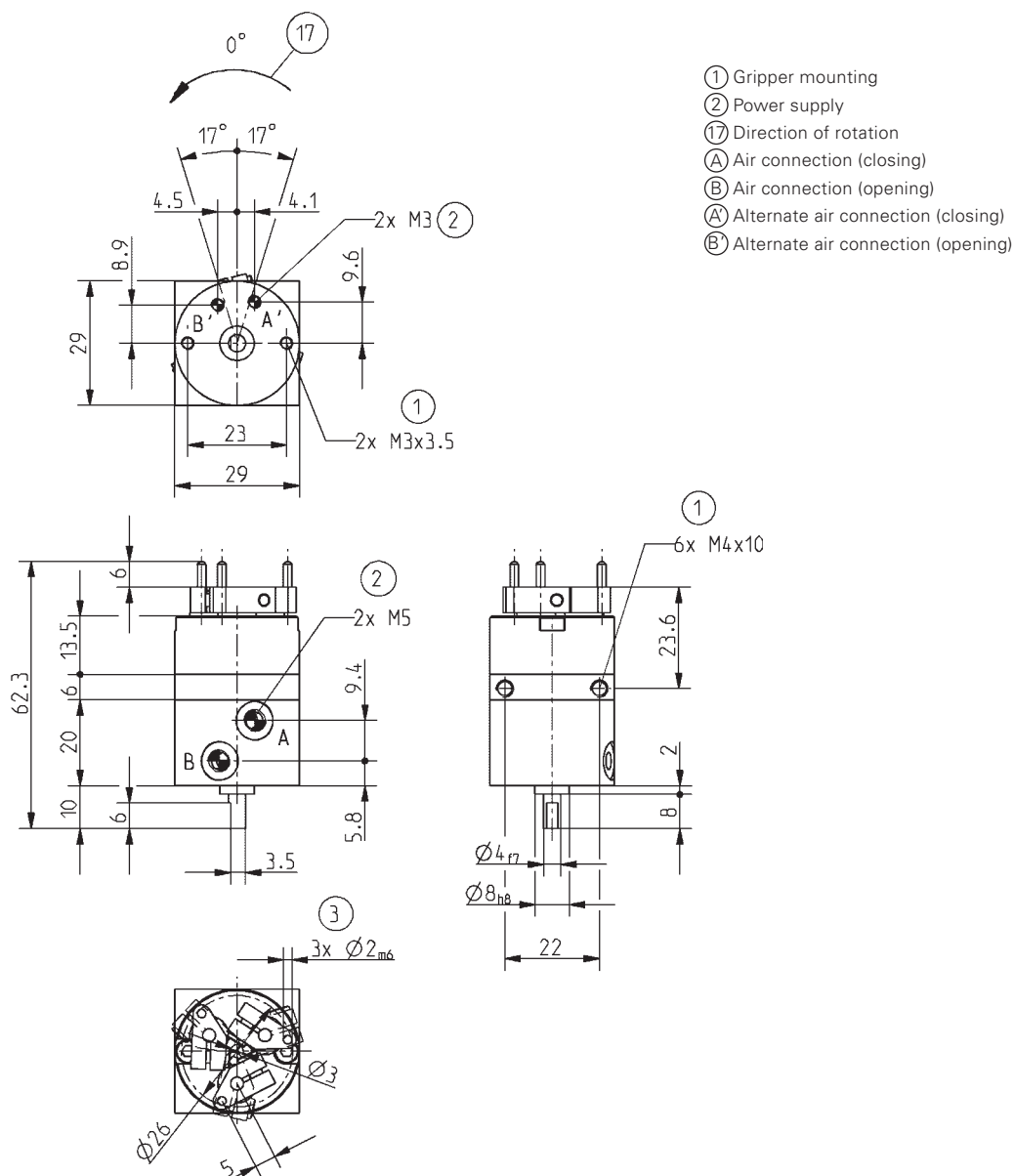


Order no.:	GD1-B
Stroke per jaw [°]:	130
Grip diameter in closing min./max [mm]:	3/22
Grip diameter in opening min./max. [mm]:	7/26
Gripping moment in closing and opening [Nm]:	0,12
Recommended workpiece weight [g]*:	122
Closing time/opening time [s]:	0,02
Repeatability +/- [mm]:	0,1
Min./max. operating pressure [bar]:	3/8
Min./max. operating temperature [°C]:	5/60
Air volume per cycle [cm³]:	2,8
Weight [g]:	83

All data measured at 6 bar

* Value determined with friction coefficient $\mu = 0.1$ and safety factor $v = 2$

GD1-B



Subject to change without prior notice

Three-Point **Gripper**

Forces and Moments

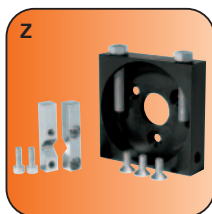
Max allowable forces and moments on jaws.



Accessory list



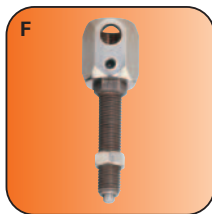
Pneumatic fittings
Order no. WVM5



Rotation limiter
Order no. DB10



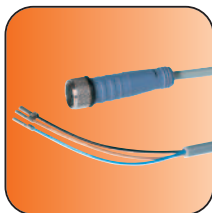
Proximity switch
Order no. NJ12-E2S



Stop-stroke adjusting screw
Order no. AI-M8x1-38
Order no. AI-M8x1-53



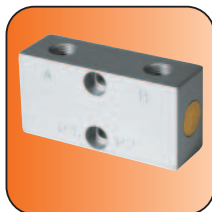
Cable angled plug
Order no. KAW500



Cable straight plug
Order no. KAG500

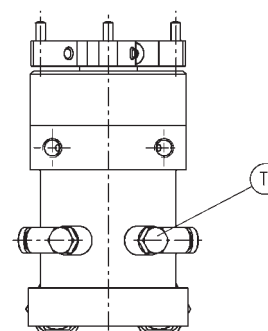
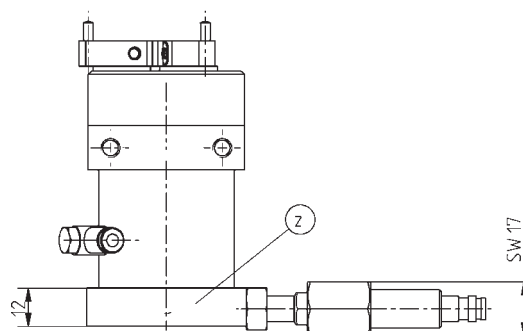
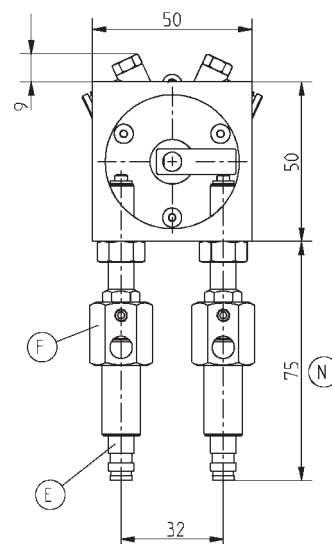


Plug
Order no. S12-G-3



Pressure safety valve
Order no. DSV1/8

Accessory



(N) sensing specific dimensions

Subject to change without prior notice

* Value determined with friction coefficient $\mu = 0.1$ and safety factor $\nu = 2$

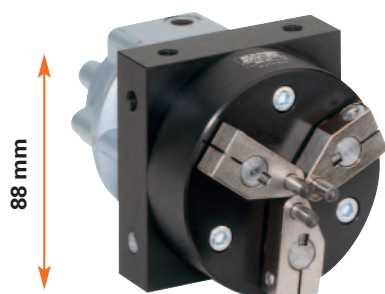


329

Three-Point **Gripper**

Forces and Moments

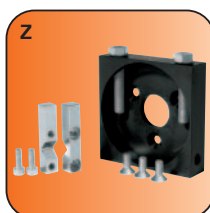
Max allowable forces and moments on jaws.



Accessory list



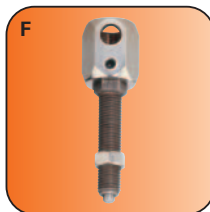
Pneumatic fittings
Order no. WV1/8x8



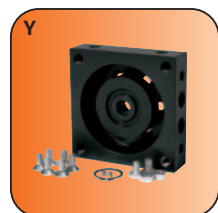
Rotation limiter
Order no. DB50



Proximity switch
Order no. NJ12-E2S



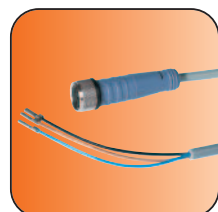
Stop-stroke adjusting screw
Order no. AI-M8x1-38
Order no. AI-M8x1-53



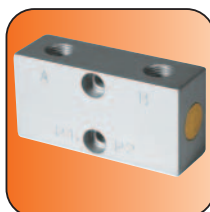
Inquiry for interim position
Order no. GF50



Cable angled plug
Order no. KAW500

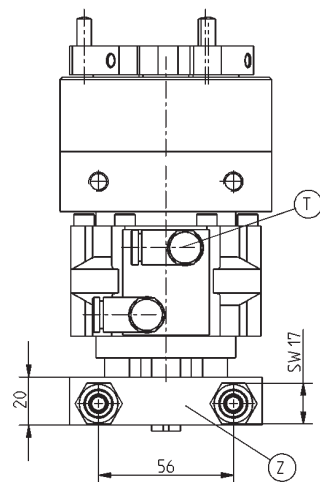
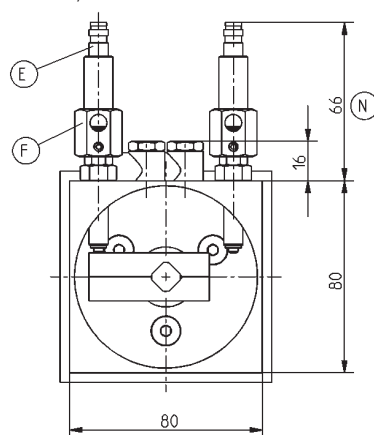


Cable straight plug
Order no. KAG500



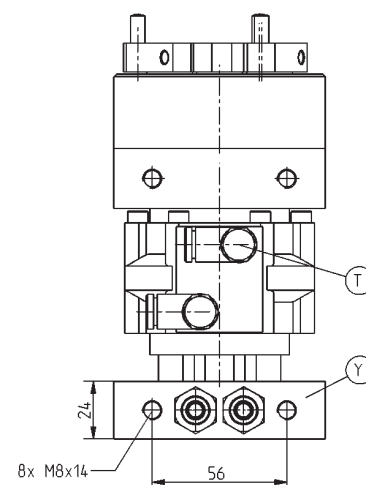
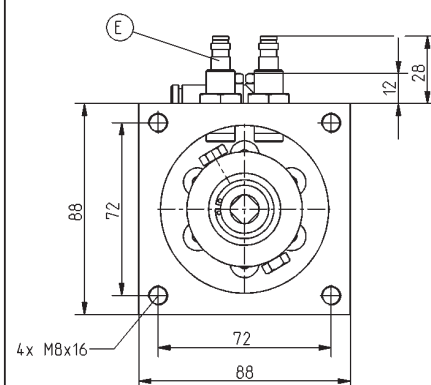
Pressure safety valve
Order no. DSV1/8

Accessory



(N) sensing specific dimensions

Accessory



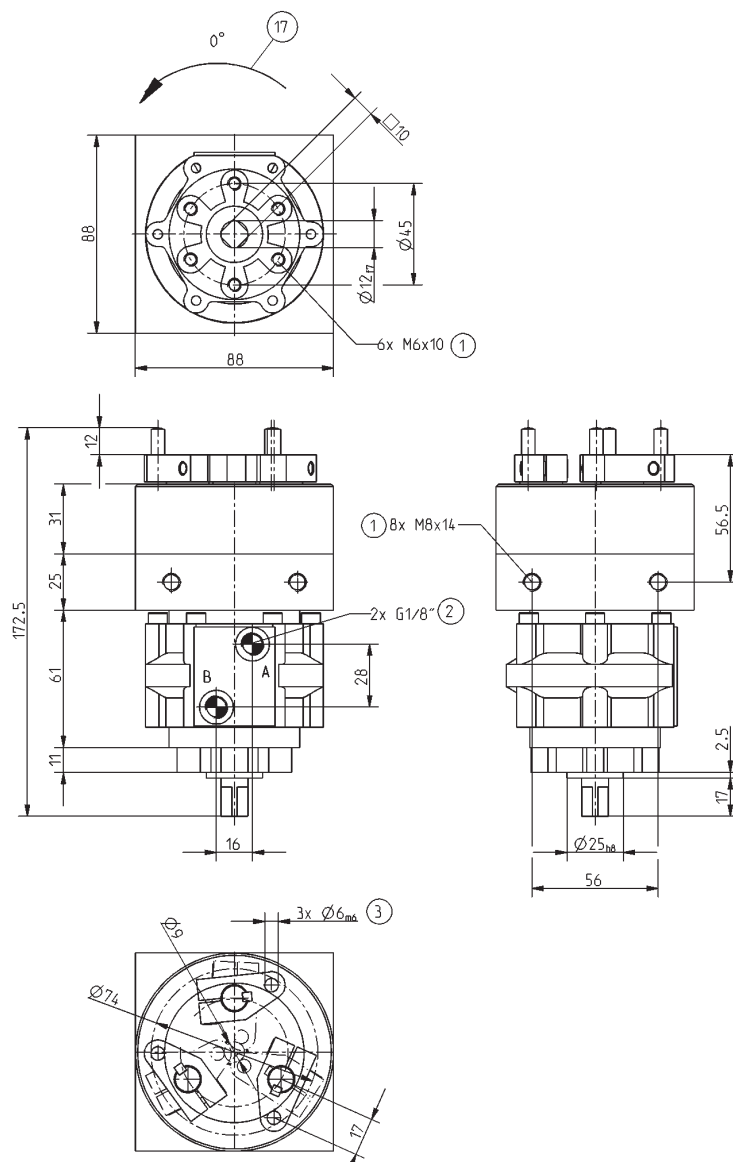
Subject to change without prior notice

Order no.:	GD50
Stroke per jaw [°]:	120
Grip diameter in closing min./max. [mm]:	9/62
Grip diameter in opening min./max. [mm]:	21/74
Gripping moment in closing and opening [Nm]:	9
Recommended workpiece weight [kg]*:	2,7
Closing time/opening time [s]:	0,09
Repeatability +/- [mm]:	0,1
Min./max. operating pressure [bar]:	3/8
Min./max. operating temperature [°C]:	5/60
Air volume per cycle [cm³]:	102
Weight [kg]:	2

All data measured at 6 bar

* Value determined with friction coefficient $\mu = 0.1$ and safety factor $v = 2$

GD50



Subject to change without prior notice

Subject to change without prior notice



*Pivoting Arm **Grippers***

pneumatic



GK Series

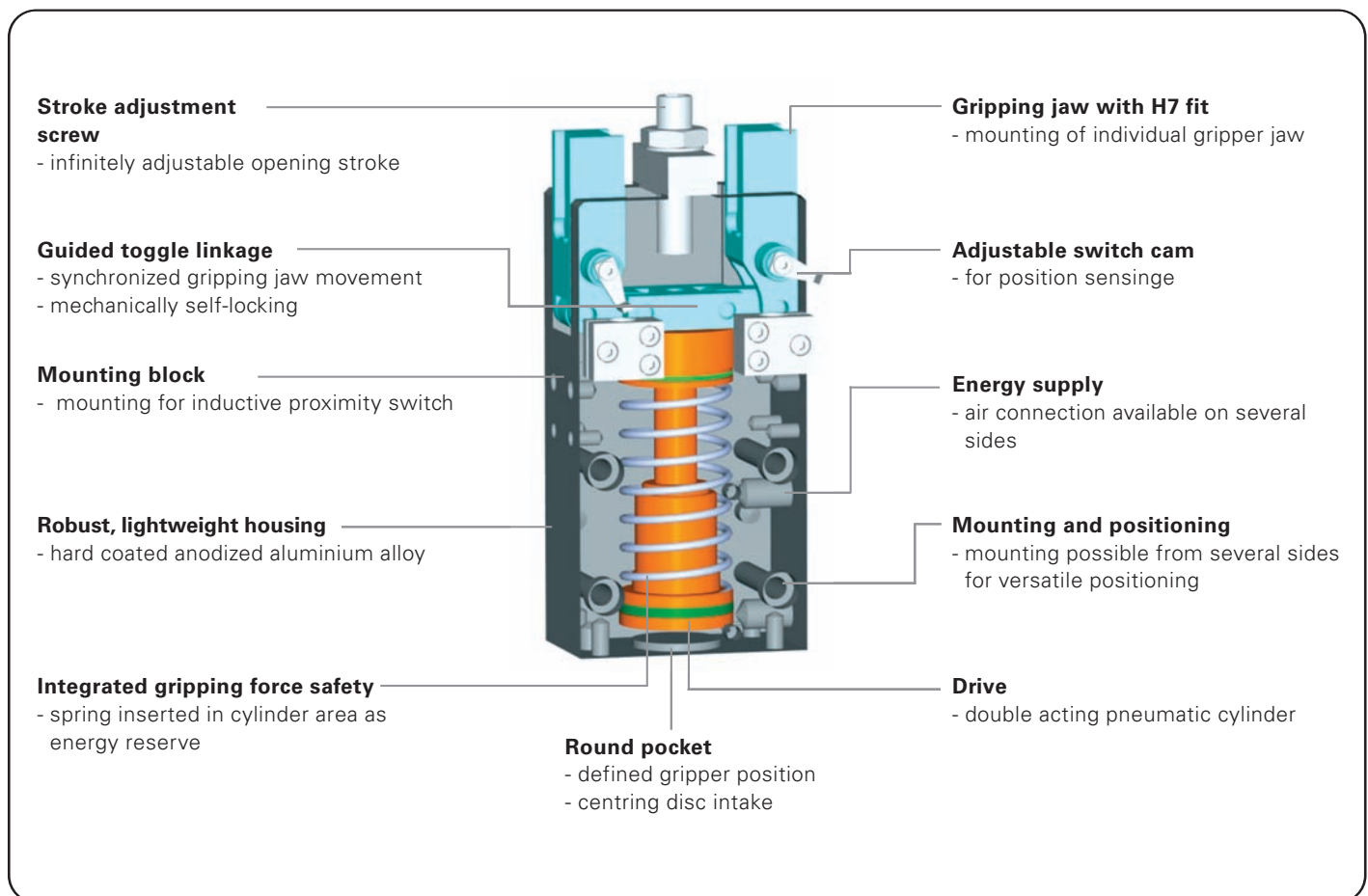
SOMMER
automatic

Pivoting Arm **Gripper**

Features

- high gripping force in closing due through built-in toggle linkage
- infinitely adjustable opening angle from 1 to 180°
- mechanically self-locking, when the gripper is in full closed position

Functional diagram



Terms

- Gripping force:** arithmetic sum of the individual forces occurring at the jaws
- Closing/opening time:** time required by the gripping jaws to turn through the entire distance
- Repeatability:** at end stops after 50/100 consecutive cycles
- Cycle:** one complete movement of the piston forward and back
- Maintenance:** recommended at 5 mil. cycles
(please see the owner's manual for conditions,
download from www.sommer-automatic.com)
- long maintenance intervals keep costs down
 - long lifespan

Model guide

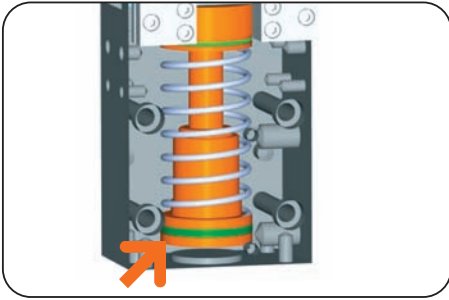
- N:** external gripping, mechanical self-locking at 0° opening angle
- C:** external gripping, mechanical self-locking at 0° opening angle and spring closing

Order no.	Stroke per jaw	Gripping force in closing *	Gripping moment in closing	Self-locking via **
GK15N	90°	70 N	1,2 Nm	DSV/MS
GK15NC	90°	100 N	1,6 Nm	Spring/MS
GK20N	90°	150 N	3 Nm	DSV/MS
GK20NC	90°	210 N	4,2 Nm	Spring//MS
GK25N	90°	440 N	10,5 Nm	DSV/MS
GK25NC	90°	610 N	14,5 Nm	Spring//MS
GK35N	90°	950 N	27,5 Nm	DSV/MS
GK35NC	90°	1250 N	36,5 Nm	Spring/MS
GK40N	90°	1400 N	47 Nm	DSV/MS
GK40NC	90°	1820 N	62 Nm	Spring//MS
GK50N	90°	3500 N	150 Nm	DSV/MS
GK50NC	90°	4250 N	183 Nm	Spring//MS

* measured at 10 mm from top edge of housing and 1° opening angle

** DSV = Pressure safety valves (Order no. DSV1/8); MS = mechanical self-locking at 0° opening-angles

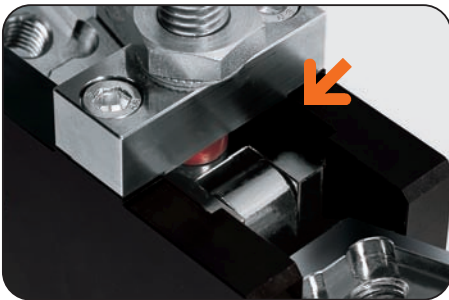
Pivoting Arm **Gripper**



Drive

Double acting pneumatic cylinder

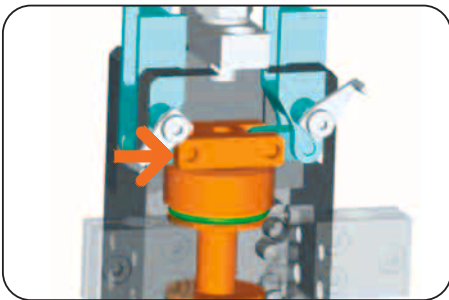
- high gripping force up to 4250 N



Guidance

Guide bushings for linkage/pivot in the side plates

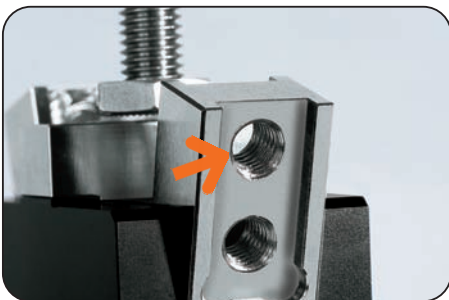
- for higher repeatability
- precise guide
- play free



Power transfer

Wedge hook mechanism

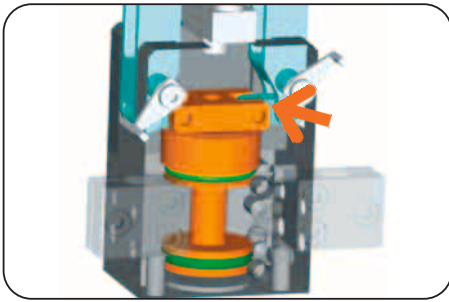
- optimum transmission of drive force in gripping force
- self-centering
- synchronisation
- high repeatability



Gripping jaw positioning

Mounting of gripper jaws in slot with H7 fit

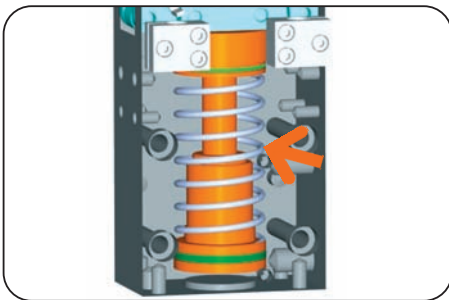
- precise positioning of individual gripping jaws
- high precision when changing the gripping jaw
- quick, cost-effective and therefore economical jaw changing
- space-saving fixing



Gripping force safety device N Model

Mechanical self-locking at 1° opening angle and pressure safety valve

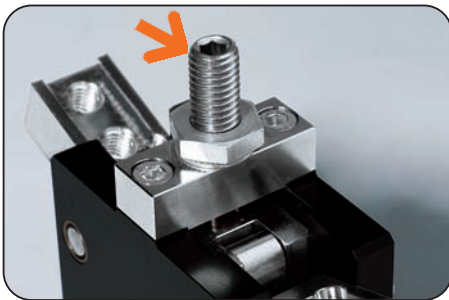
- gripping force safety possible by addition of a pressure safety valve (order no. DSV1/8). The inevitable leakage in the pneumatic circuit restricts the time of this type of gripping force safety.



Gripping force safety device NC Model

Mechanical self-locking at 1° opening angle and spring as gripping force protection

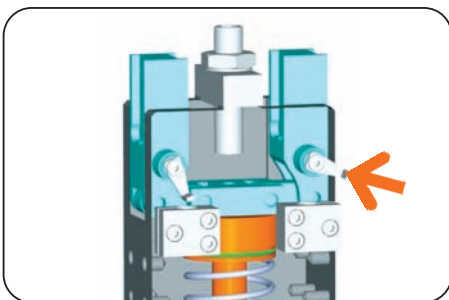
- permanent maintenance of gripping force
- compact design



Stroke adjustment

Infinitely adjustable stroke of 1 – 180°

- flexible

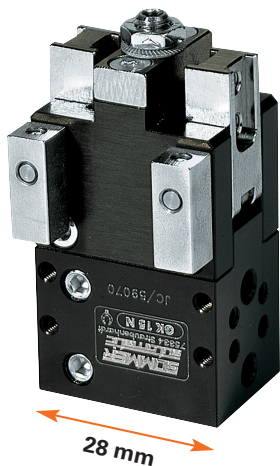


Position sensing

Gripper jaw position sensing via switch cam installed in rotation point

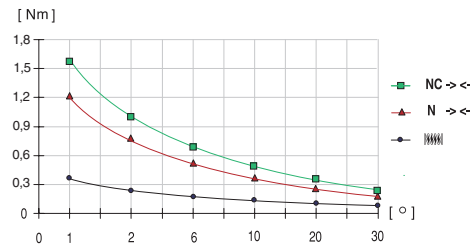
- process safe
- compact
- inductive proximity switches of 3 – 12 mm diameter possible

Pivoting Arm **Gripper**



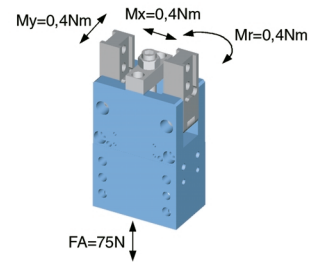
Gripping moment diagram

Shows the gripping moment as a function of the opening angle



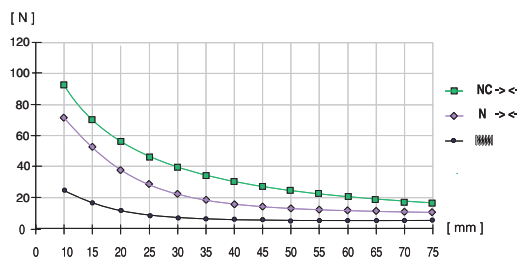
Forces and Moments

Max allowable forces and moments on jaws.



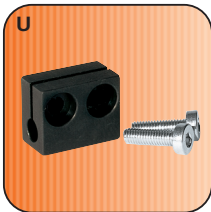
Gripping force diagram

Gripping force as a function of jaw length (measured at 1° opening angle)

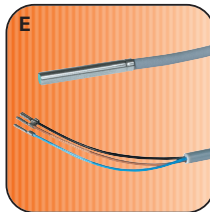


measured from top edge of housing ♦

Accessory list



Mounting block
Order no. KB3



Proximity switch
Order no. NJ3-E2-03



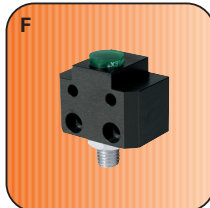
Pneumatic fittings
Order no. GVM5



Pneumatic fittings
Order no. WVM5



Centring disc
Order no. ZE12H7x4



Bumper blocks (pair)
Order no. PB15N

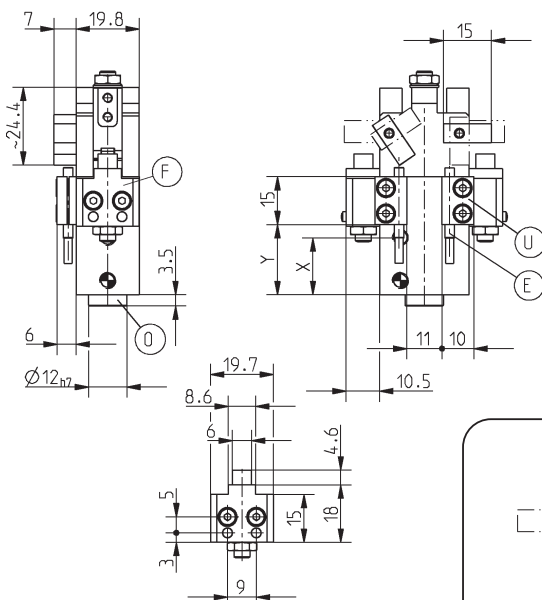


Plug 3-pole
Order no. S12-G-3



Pressure safety valve
Order no. DSV1/8

Accessory



Subject to change without prior notice

All data measured at 6 bar

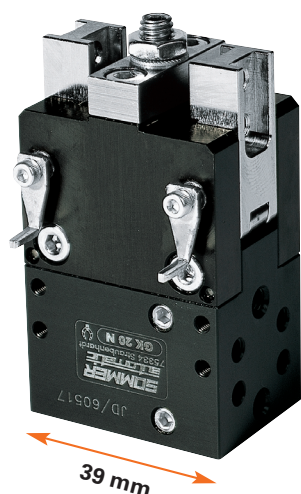
* measured at 10 mm from top edge of housing ♦ and 1° opening angle

** Value determined with friction coefficient $\mu = 0.1$ and safety factor $\nu = 2$, distance from top edge of housing $\blacklozenge = 30$ mm

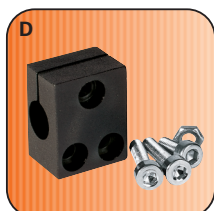
*** High-temperature-resistant model (up to 150 °C) add T to part number



Pivoting Arm **Gripper**



Included with purchase



Mounting block
Order no. KB8K

Accessory list



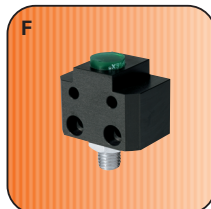
Pneumatic fittings
Order no. GVM5



Proximity switch
Order no. NJ8-E2S



Centring disc
Order no. ZE20H7x4



Bumper blocks (pair)
Order no. PB20N



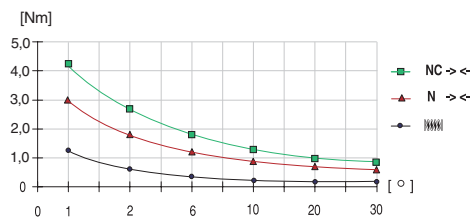
Cable angled plug
Order no. KAW500



Pressure safety valve
Order no. DSV1/8

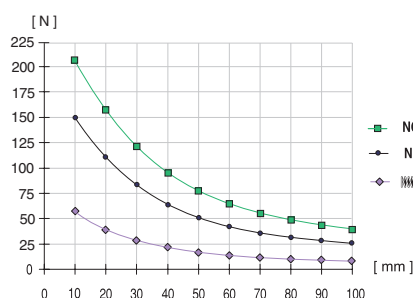
Gripping moment diagram

Shows the gripping moment as a function of the opening angle



Gripping force diagram

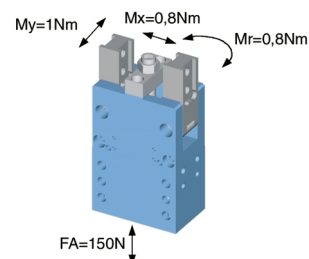
Gripping force as a function of jaw length (measured at 1° opening angle)



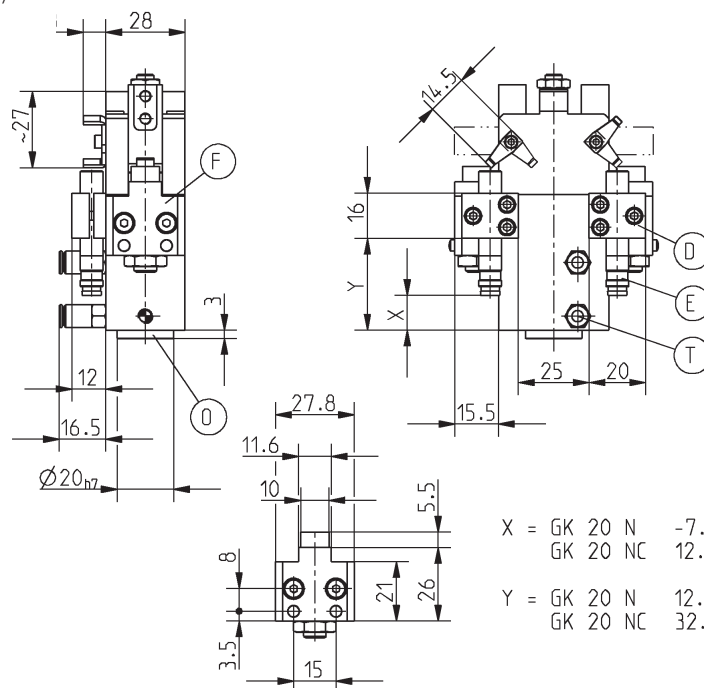
measured from top edge of housing

Forces and Moments

Max allowable forces and moments on jaws.



Accessory



Subject to change without prior notice

All data measured at 6 bar
 * measured at 10 mm from top edge of housing ◆ and 1° opening angle
 ** Value determined with friction coefficient $\mu = 0.1$ and safety factor $v = 2$, distance from top edge of housing ◆ = 40 mm
 *** High-temperature-resistant model (up to 150 °C) add T to part number



Pivoting Arm **Gripper**



Included with purchase



Mounting block
Order no. KB8K

Accessory list



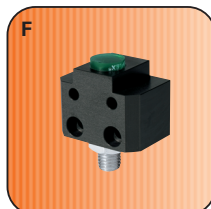
Pneumatic fittings
Order no. GVM5



Proximity switch
Order no. NJ8-E2S



Centring disc
Order no. ZE20H7x4



Bumper blocks (pair)
Order no. PB25N



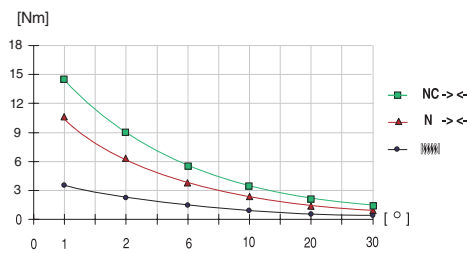
Cable angled plug
Order no. KAW500



Pressure safety valve
Order no. DSV1/8

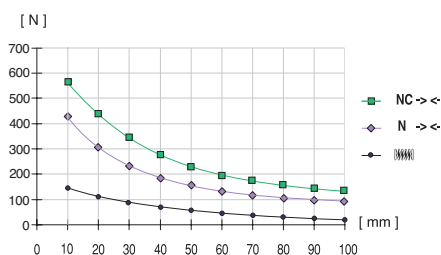
Gripping moment diagram

Shows the gripping moment as a function of the opening angle



Gripping force diagram

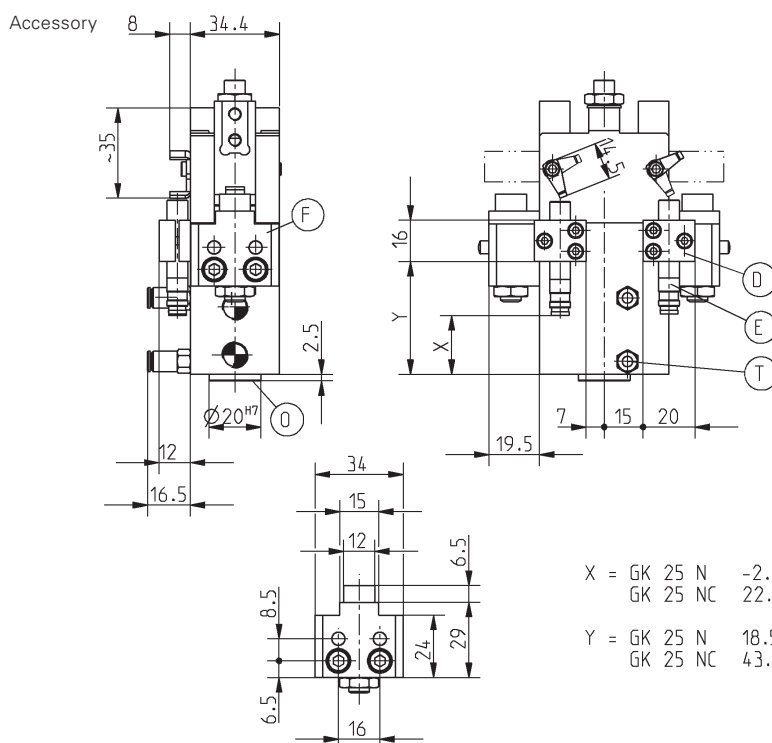
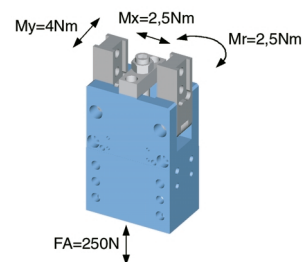
*Gripping force as a function of jaw length
(measured at 1° opening angle)*



measured from top edge of housing ◆

Forces and Moments

Max allowable forces and moments on jaws.



X =	GK	25	N	-2.3
	GK	25	NC	22.7
Y =	GK	25	N	18.5
	GK	25	NC	43.5

Subject to change without prior notice

All data measured at 6 bar

* measured at 10 mm from top edge of housing ♦ and 1° opening angle

** Value determined with friction coefficient $\mu = 0.1$ and safety factor $\nu = 2$, distance from top edge of housing $\blacklozenge = 50$ mm

*** High-temperature-resistant model (up to 150 °C) add T to part number

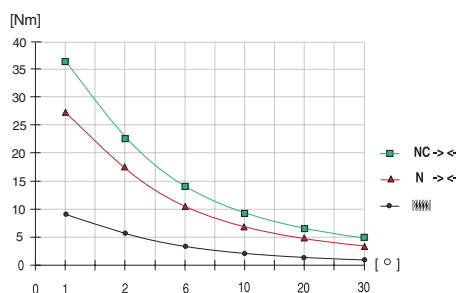


Pivoting Arm **Gripper**



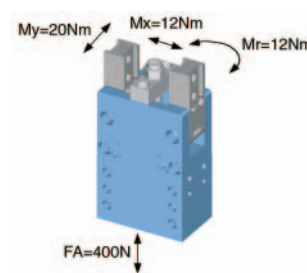
Gripping moment diagram

Shows the gripping moment as a function of the opening angle



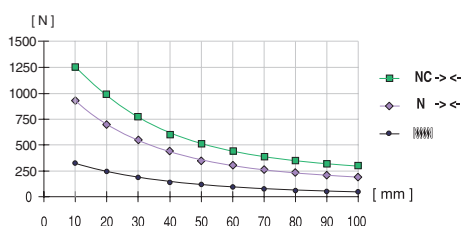
Forces and Moments

Max allowable forces and moments on jaws.



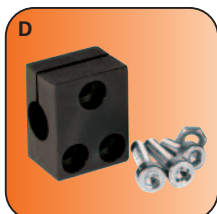
Gripping force diagram

Gripping force as a function of jaw length (measured at 1° opening angle)



measured from top edge of housing ◆

Included with purchase



Mounting block
Order no. KB8K

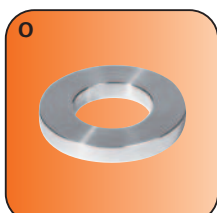
Accessory list



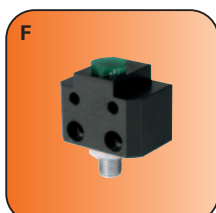
Pneumatic fittings
Order no. WVM5



Proximity switch
Order no. NJ8-E2S



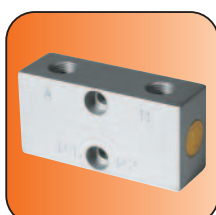
Centring disc
Order no. ZE25H7x6



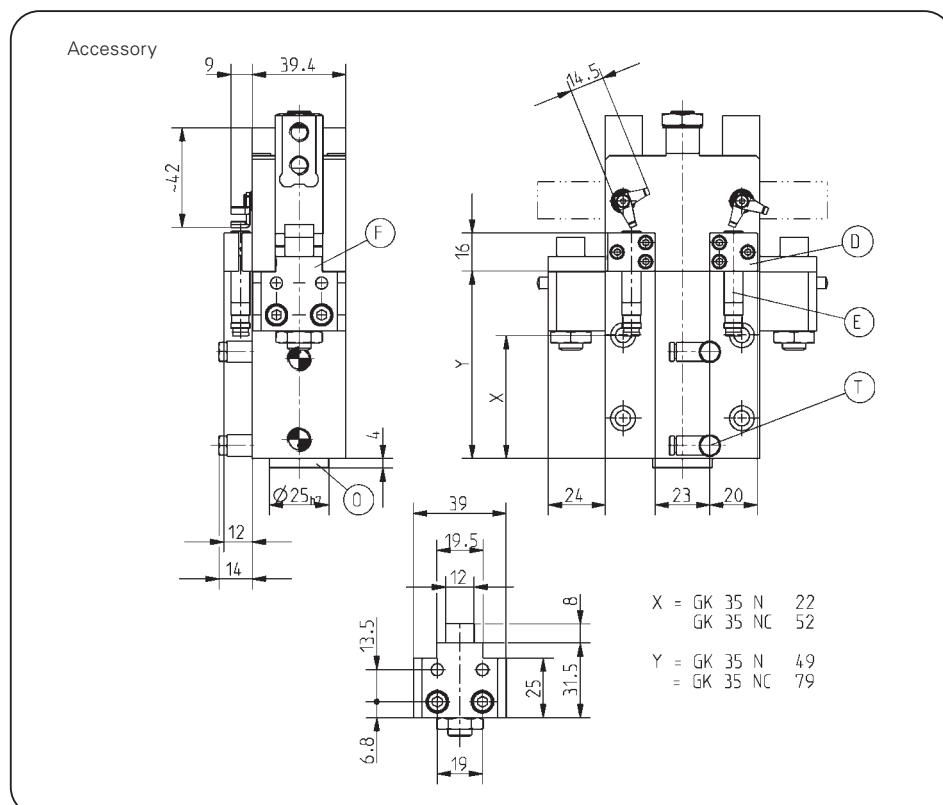
Bumper blocks (pair)
Order no. PB35N



Cable angled plug
Order no. KAW500



Pressure safety valve
Order no. DSV1/8



Subject to change without prior notice

Order no.:	GK35N	GK35NC
Stroke per jaw [°]:	90	90
Gripping moment in closing [Nm]:	27,5	36,5
Gripping force in closing [N]*:	950	1250
Recommended workpiece weight [kg]**:	1,8	2,3
Closing time/opening time [s]:	0,25	0,35
Repeatability +/- [mm]:	0,1	0,1
Min./max. operating pressure [bar]:	3/8	5/8
Min./max. operating temperature [°C]***:	5/80	5/80
Air volume per cycle [cm³]:	43	50
Weight [kg]:	0,9	1,2

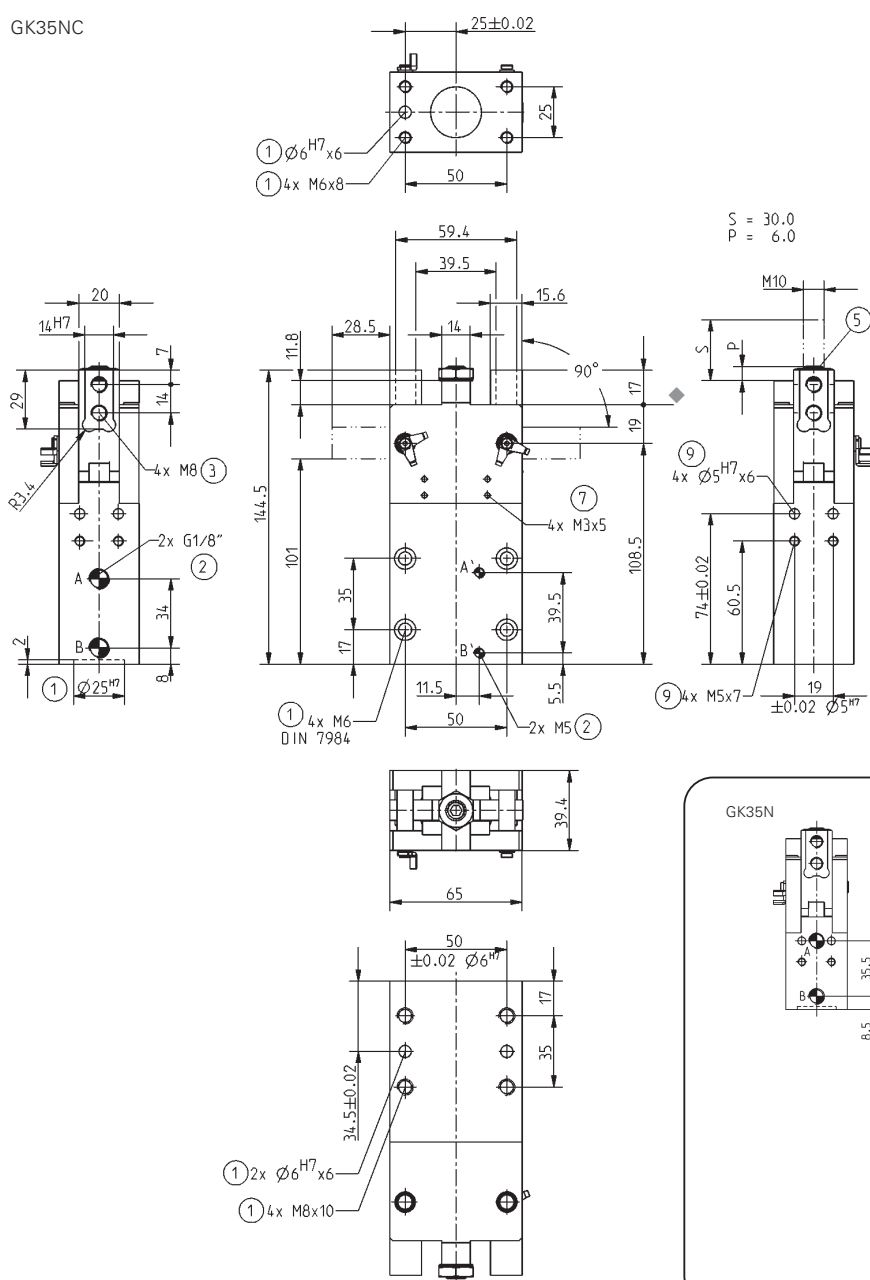
All data measured at 6 bar

* measured at 10 mm from top edge of housing ♦ and 1° opening angle

** Value determined with friction coefficient $\mu = 0.1$ and safety factor $v = 2$, distance from top edge of housing ♦ = 60 mm

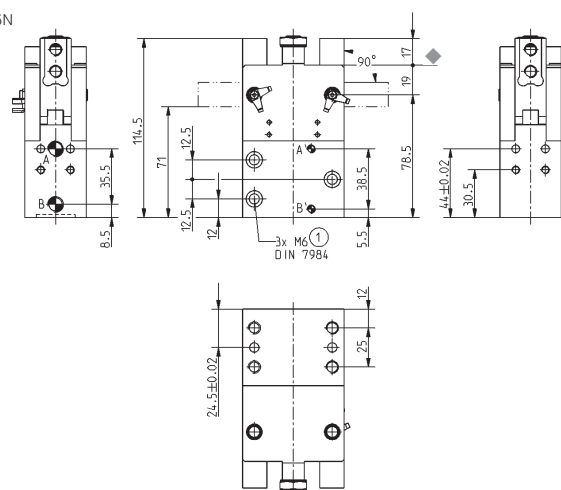
*** High-temperature-resistant model (up to 150 °C) add T to part number

GK35NC



- ① Gripper mounting
- ② Power supply
- ③ Jaw fastener
- ⑤ Stroke adjustment screw
- ⑦ Mounting for mounting block
- ⑨ Mounting for bumper block
- A) Air connection (closing)
- B) Air connection (opening)
- A) Alternate air connection (closing)
- B) Alternate air connection (opening)

GK35N

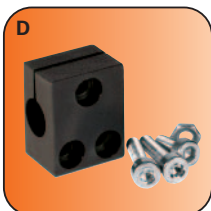


Subject to change without prior notice

Pivoting Arm **Gripper**



Included with purchase



Mounting block
Order no. KB8K

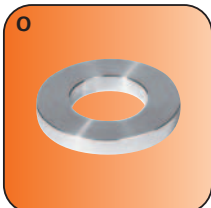
Accessory list



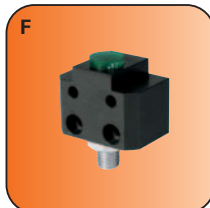
Pneumatic fittings
Order no. WVM5



Proximity switch
Order no. NJ8-E2S



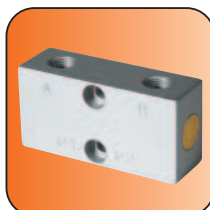
Centring disc
Order no. ZE30H7x4



Bumper blocks (pair)
Order no. PB40N



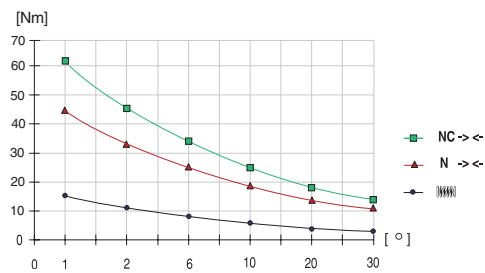
Cable angled plug
Order no. KAW500



Pressure safety valve
Order no. DSV1/8

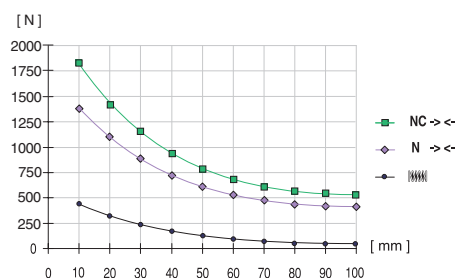
Gripping moment diagram

Shows the gripping moment as a function of the opening angle



Gripping force diagram

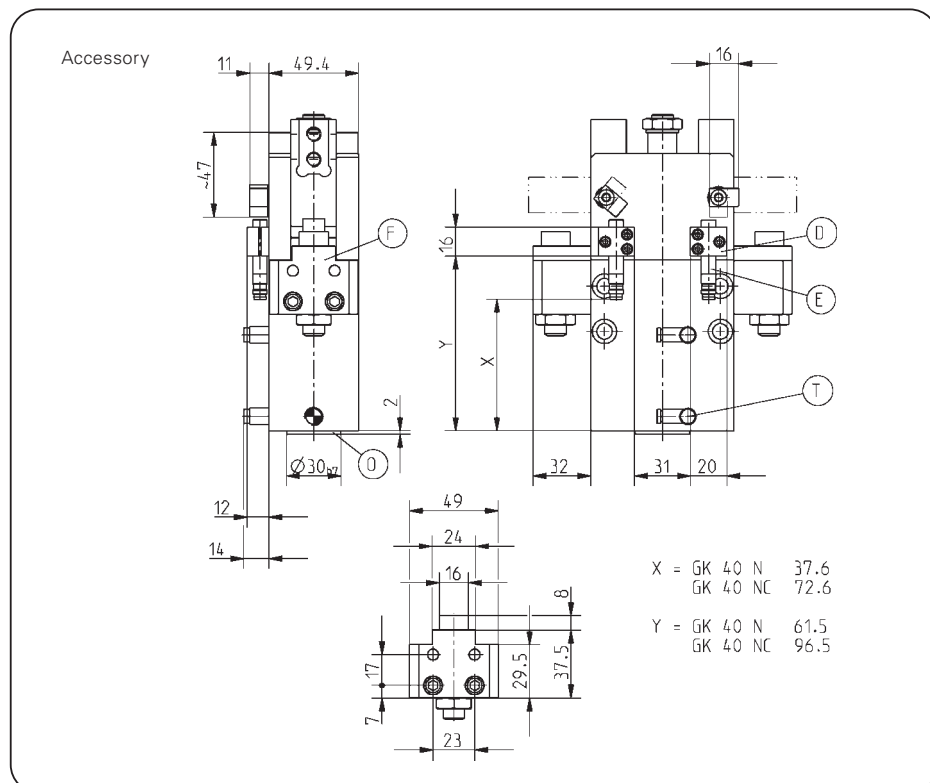
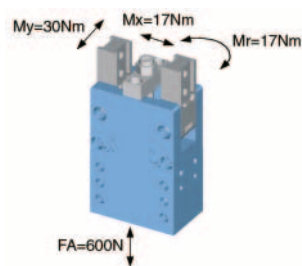
*Gripping force as a function of jaw length
(measured at 1° opening angle)*



measured from top edge of housing ♦

Forces and Moments

Max allowable forces and moments on jaws.



Subject to change without prior notice

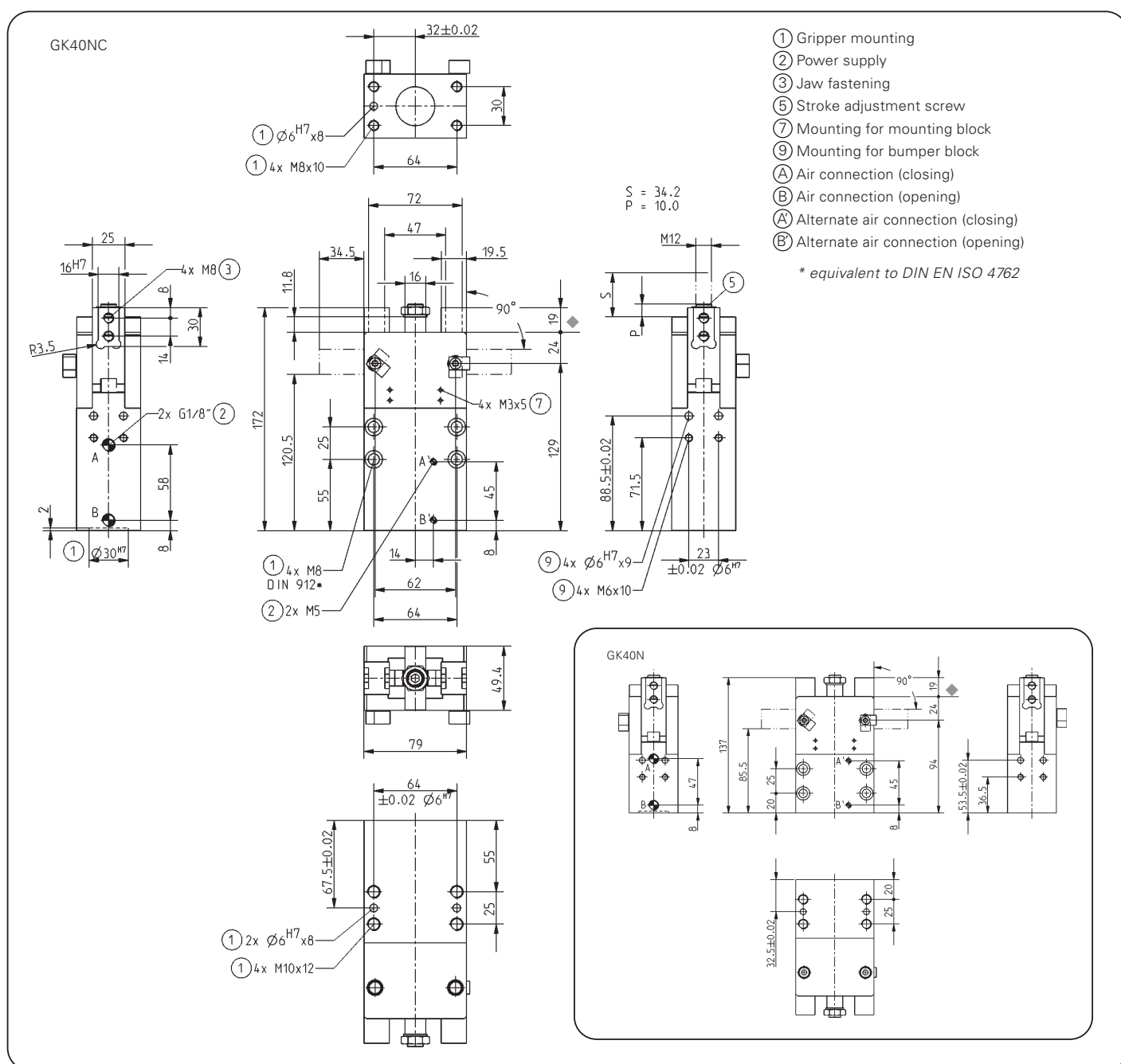
Order no.:	GK40N	GK40NC
Stroke per jaw [°]:	90	90
Gripping moment in closing [Nm]:	47	62
Gripping force in closing [N]*:	1400	1820
Recommended workpiece weight [kg]**:	2,6	3,3
Closing time/opening time [s]:	0,25	0,35
Repeatability +/- [mm]:	0,1	0,1
Min./max. operating pressure [bar]:	3/8	5/8
Min./max. operating temperature [°C]**:	5/80	5/80
Air volume per cycle [cm³]:	78	90
Weight [kg]:	1,7	2,2

Alle Daten gemessen bei 6 bar

* measured at 10 mm from top edge of housing ♦ and 1° opening angle

** Value determined with friction coefficient $\mu = 0.1$ and safety factor $v = 2$, distance from top edge of housing ♦ = 70 mm

*** High-temperature-resistant model (up to 150 °C) add T to part number



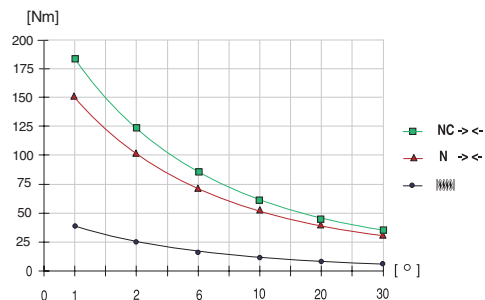
Subject to change without prior notice

Pivoting Arm **Gripper**



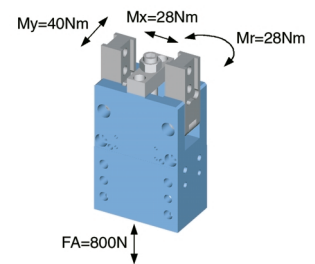
Gripping moment diagram

Shows the gripping moment as a function of the opening angle



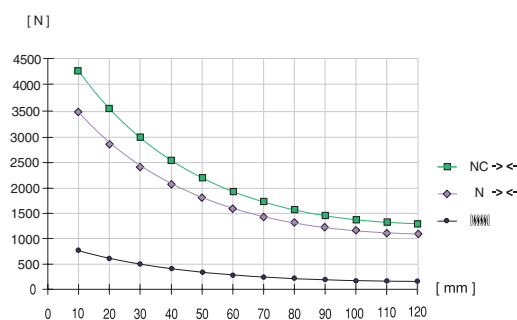
Forces and Moments

Max allowable forces and moments on jaws.



Gripping force diagram

Gripping force as a function of jaw length (measured at 1° opening angle)



measured from top edge of housing ◆

Included with purchase



Mounting block
Order no. KB8K

Accessory list



Pneumatic fittings
Order no. WV1/4x6



Proximity switch
Order no. NJ8-E2S



Centring disc
Order no. ZE30H7x6



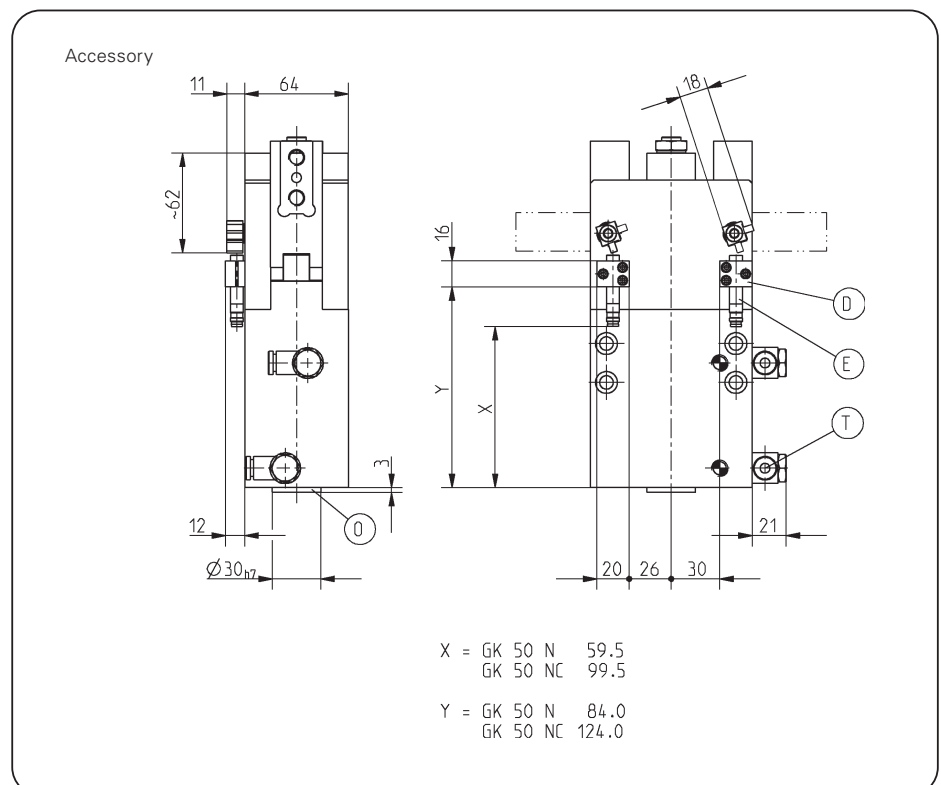
Cable angled plug
Order no. KAW500



Plug 3-pole
Order no. S12-G-3

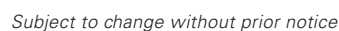


Pressure safety valve
Order no. DSV1/8



Subject to change without prior notice

All data measured at 6 bar
 * measured at 10 mm from top edge of housing◆ and 1° opening angle
 ** Value determined with friction coefficient $\mu = 0.1$ and safety factor $v = 2$, distance from top edge of housing ◆ = 80 mm
 *** High-temperature-resistant model (up to 150 °C) add T to part number







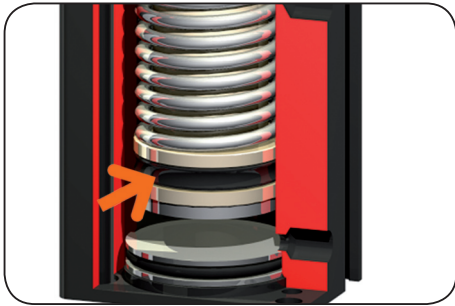
Series MGW

Angular Gripper pneumatic

SOMMER
automatic
your application - our focus.

Angular Gripper

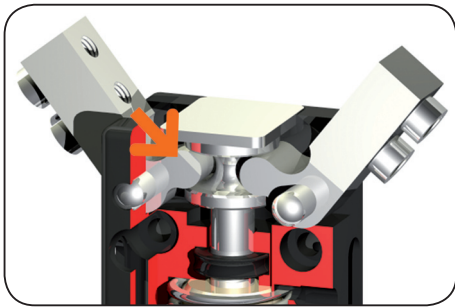
Highlights



Drive

double acting pneumatic cylinder

- maximum power in both opening and closing
- NC models additionally equipped with spring as mechanical safety locking device (in case of pressure loss)



Power transfer

Wedge hook mechanism with mechanical restricted guides

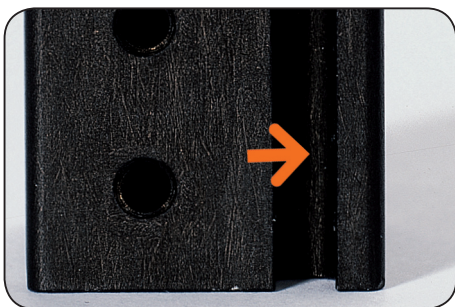
- high gripping force as a result of optimal direction change of driving force into gripping force
- central gripping realized by synchronized compulsory guides
- functional parts made of grinded and hardened steel ensure precision and a long durability



Gripping jaw positioning

precise positioning of individual gripping jaws

- quick and therefore economical jaw changing due to simple handling
- anti-twist protection by double fixing of the gripping jaws



Position sensing

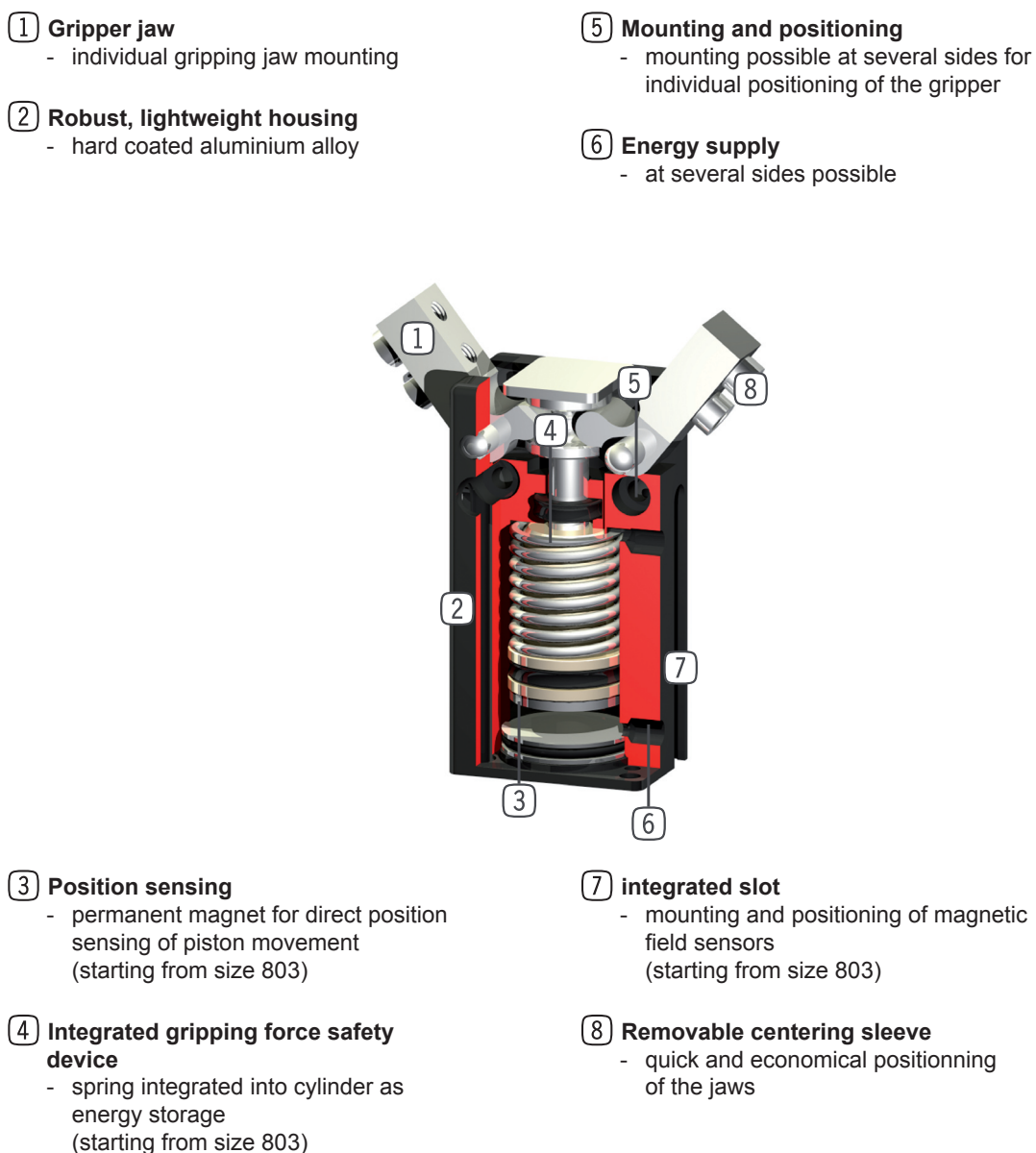
direct piston position sensing via magnetic field sensors

- high process reliability as a result of controlled gripping jaw movement
- integrated position sensing for compact design and minimized interfering contour

Terms

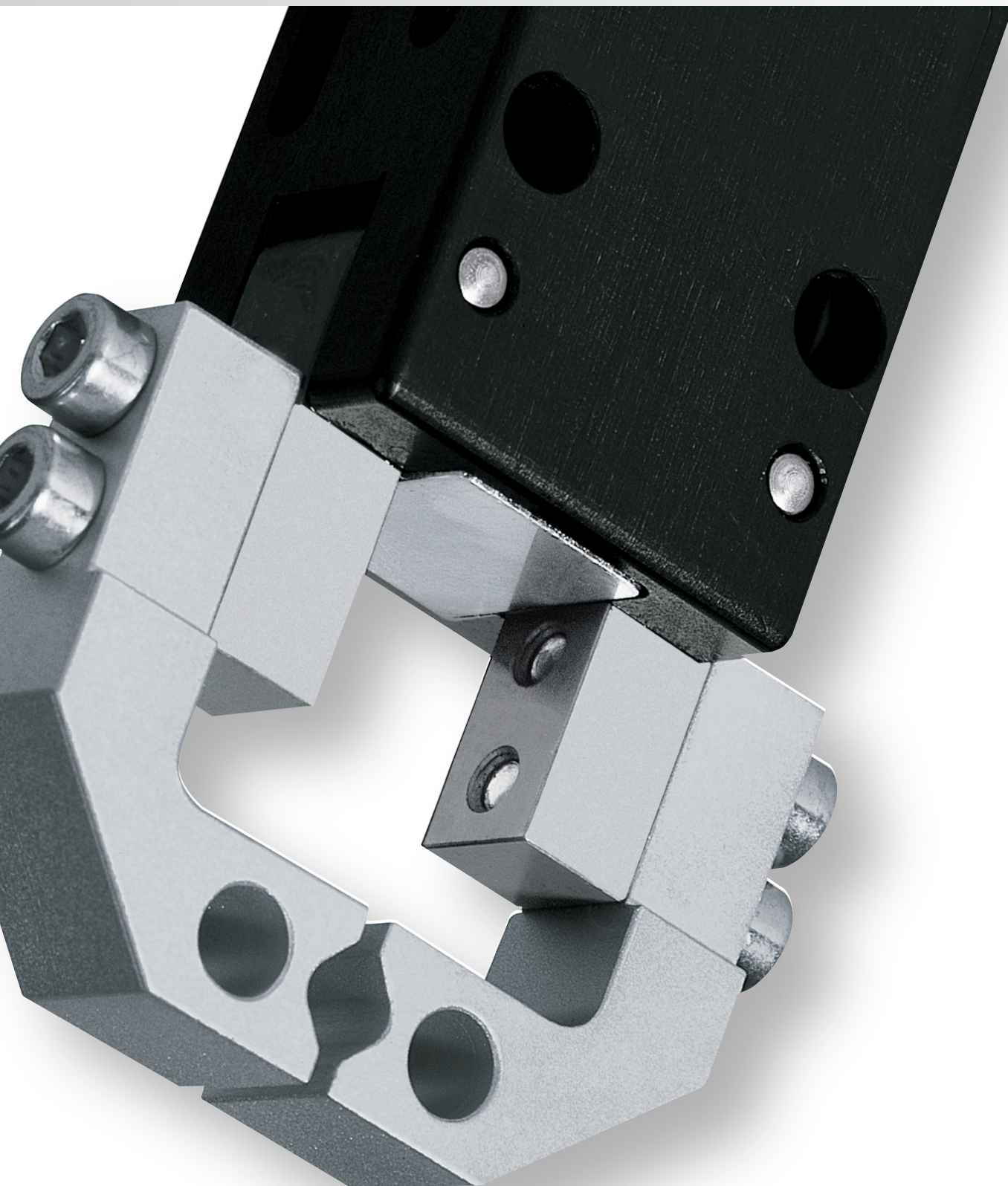
Gripping force:	arithmetic sum of the individual forces occurring at the jaws
Closing/opening time:	required time for the gripper jaws to cover the maximum stroke distance
Repeatability:	dispersion at end stop positions during 50/100 consecutive cycles
Cycle:	one complete movement of the piston forward and back
Maintenance:	maintenance free to 10 mil. cycles (please see the owner's manual for details, download from www.sommer-automatic.com) - long maintenance intervals keep costs down - long durability

Functional diagram



Angular Gripper

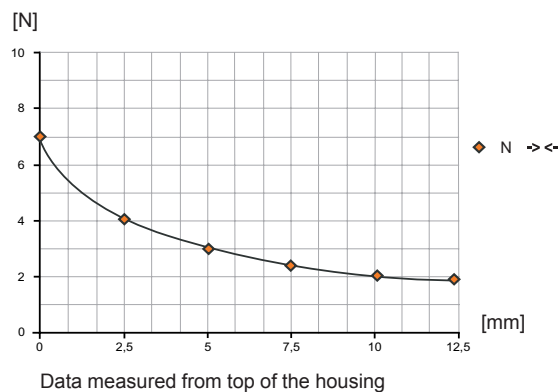
Size		Page	without integrated gripping force protection	with integrated gripping force protection
MGW801	MGW801N	10	■	
MGW802	MGW802N	12	■	
MGW803	MGW803N	14	■	
	MGW803NC	14		■
MGW804	MGW804N	16	■	
	MGW804NC	16		■
MGW806	MGW806N	18	■	
	MGW806NC	18		■
MGW808	MGW808N	20	■	
	MGW808NC	20		■
MGW810	MGW810N	22	■	
	MGW810NC	22		■
MGW812	MGW812N	24	■	
	MGW812NC	24		■



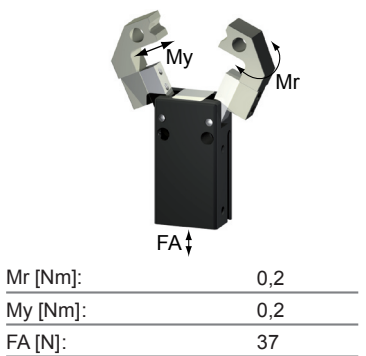
Angular Gripper



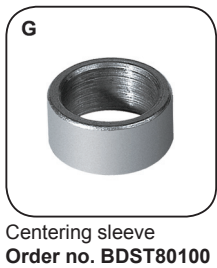
Gripping force diagram
Gripping force as a function of jaw length.



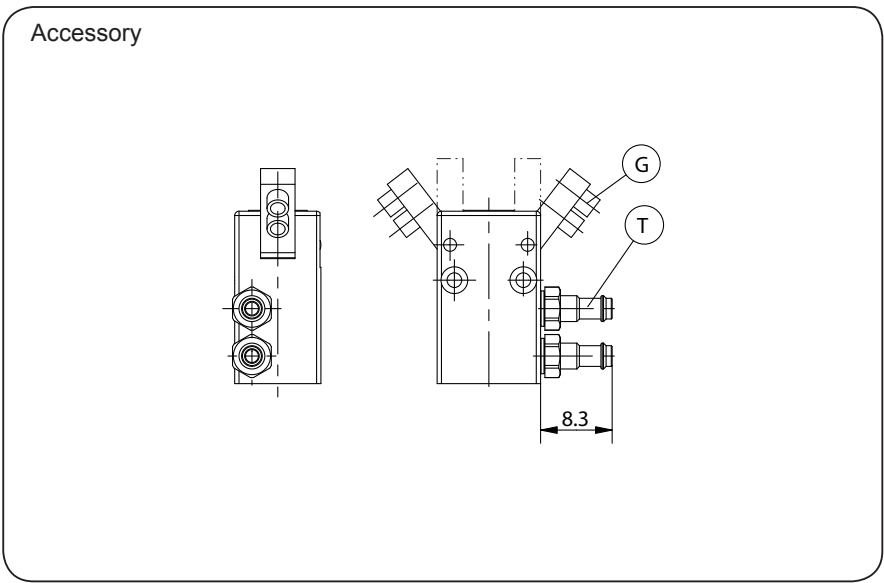
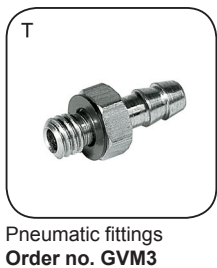
Forces and torques
Max allowable forces and torques on jaw.



Included in scope of delivery



Recommended accessories



Subject to change without prior notice



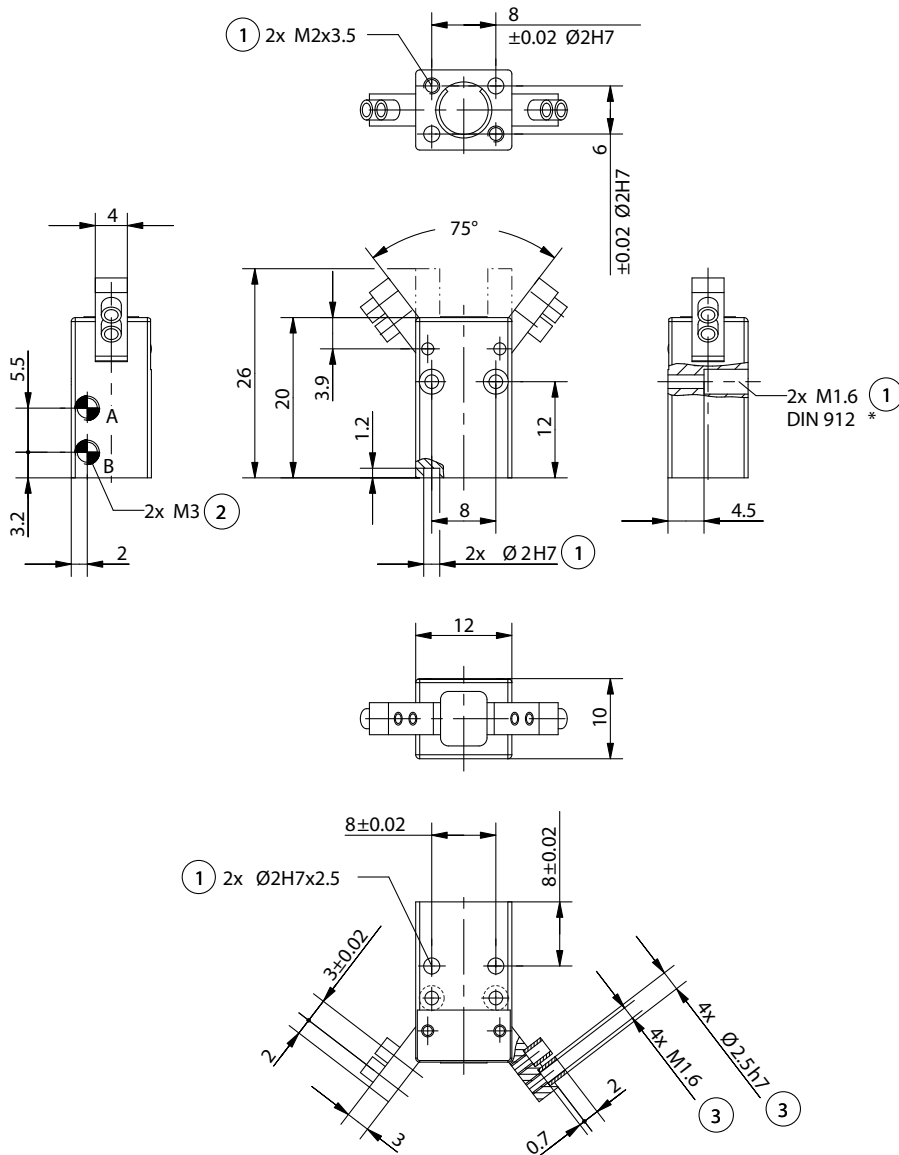
Order no.:	MGW801N
Stroke per jaw [°]:	37,5
Gripping torque in closing [Nm]:	0,025
Gripping torque in opening [Nm]:	0,03
Recommended workpiece weight [kg]*:	0,013
Gripping torque secured by spring min. [Nm]:	-
Closing time / opening time [s]:	0,01 / 0,01
Repeatability +/- [mm]:	0,02
Min. operating pressure [bar]:	3
Max. operating pressure [bar]:	8
Min/max. operating temperature [°C]**:	5-80
Air volume per cycle [cm³]:	0,14
Weight [kg]:	0,008

All data measured at 6 bar

* Value determined with friction coefficient $\mu=0,1$ and safety factor $v=2$
distance from top of the housing 6 mm

** High-temperature-resistant model (up to 150°C) add T to part number

MGW801N

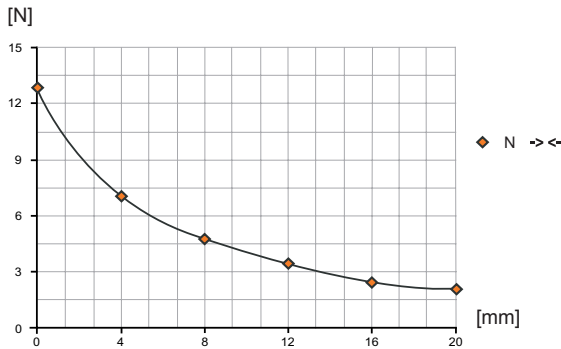


Angular Gripper



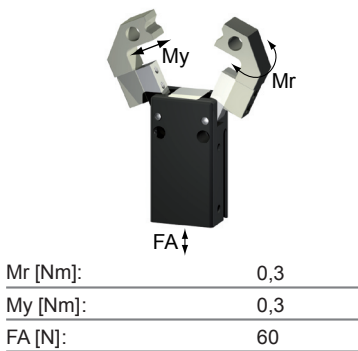
Picture shows MGW802N

Gripping force diagram
Gripping force as a function of jaw length.



Data measured from top of the housing

Forces and torques
Max allowable forces and torques on jaw.



Included in scope of delivery



Centering sleeve
Order no. BDST80200

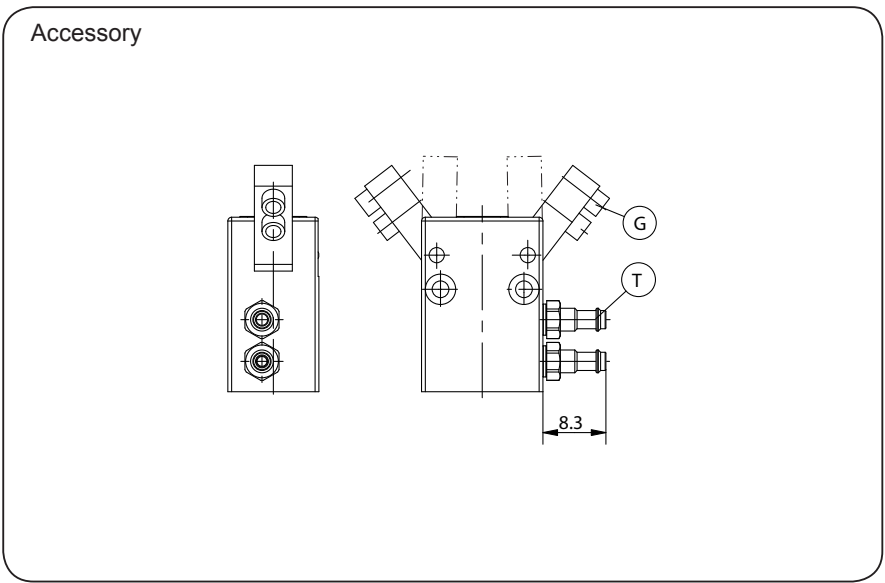
Recommended accessories



Pneumatic fittings
Order no. GVM3



Pressure safety valve
Order no. DSV1/8



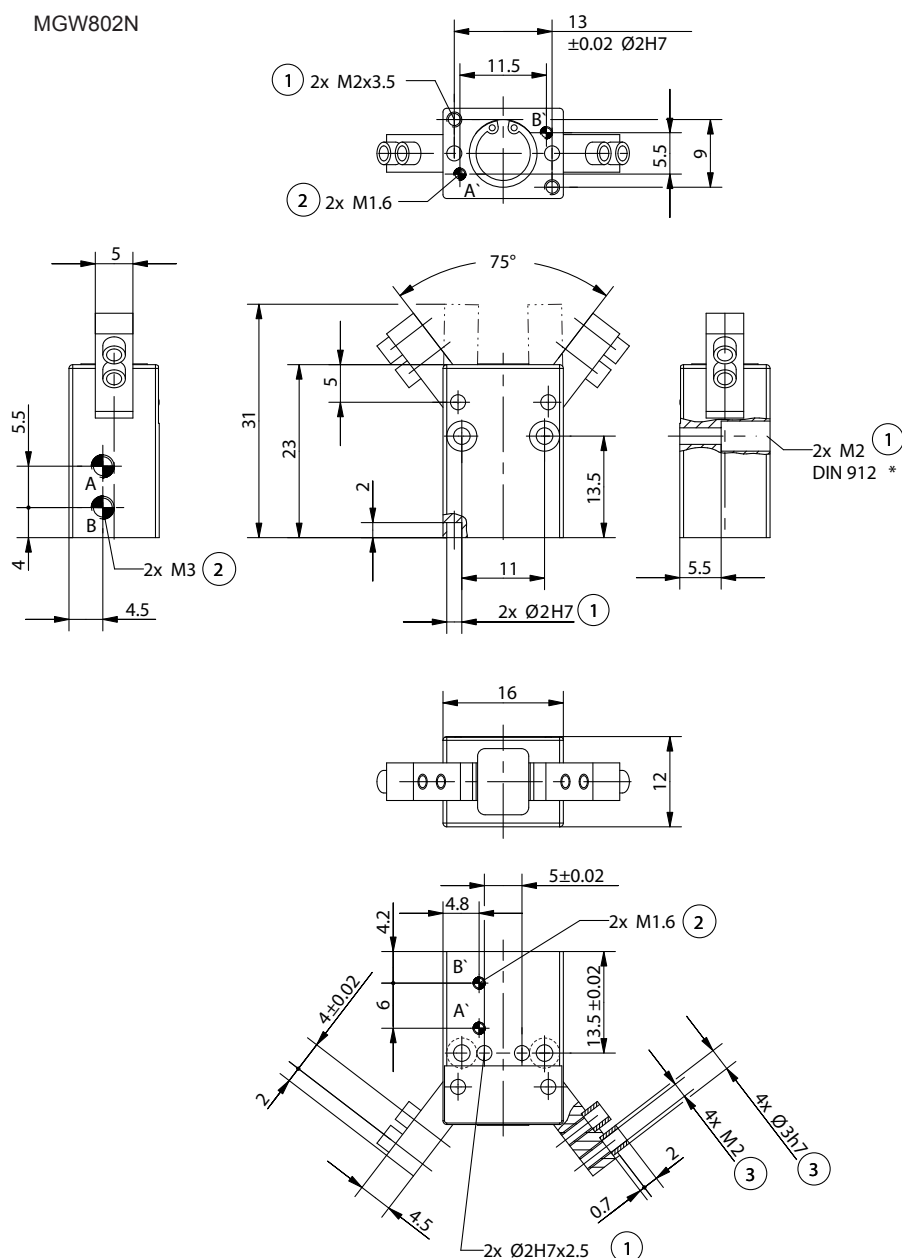
Subject to change without prior notice

Order no.:	MGW802N
Stroke per jaw [°]:	37,5
Gripping torque in closing [Nm]:	0,045
Gripping torque in opening [Nm]:	0,05
Recommended workpiece weight [kg]*:	0,018
Gripping torque secured by spring min. [Nm]:	-
Closing time / opening time [s]:	0,01 / 0,01
Repeatability +/- [mm]:	0,02
Min. operating pressure [bar]:	3
Max. operating pressure [bar]:	8
Min/max. operating temperature [°C]**:	5-80
Air volume per cycle [cm³]:	0,22
Weight [kg]:	0,014

All data measured at 6 bar

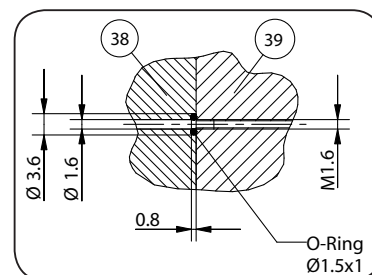
* Value determined with friction coefficient $\mu=0,1$ and safety factor $v=2$
distance from top of the housing 8 mm

** High-temperature-resistant model (up to 150°C) add T to part number



- ① Gripper mounting
- ② Power supply
- ③ Jaw fastening
- ④ Adapter
- ⑤ Gripper
- Ⓐ Air connection (closing)
- Ⓑ Air connection (opening)
- Ⓐ Alternate air connection (closing)
- Ⓑ Alternate air connection (opening)

*according to DIN EN ISO 4762



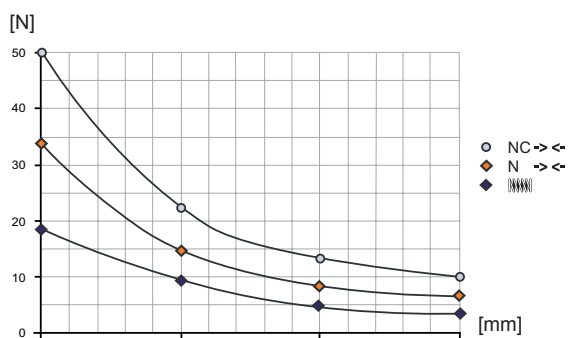
hoseless power supply

Angular Gripper



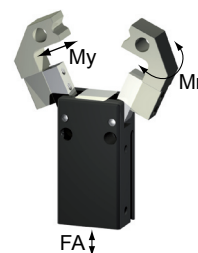
Picture shows MGW803N

Gripping force diagram
Gripping force as a function of jaw length.



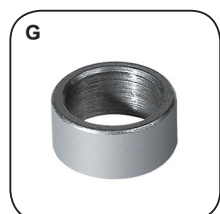
Data measured from top of the housing

Forces and torques
Max allowable forces and torques on jaw.



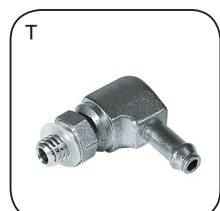
Mr [Nm]:	0,4
My [Nm]:	0,4
FA [N]:	90

Included in scope of delivery



Centering sleeve
Order no. BDST80320

Recommended accessories



Pneumatic fittings
Order no. WVM3



Proximity switch
Order no. MFS103KHC42



Proximity switch
Order no. MFS103SKHC42



Cable angled plug
Order no. KAW500

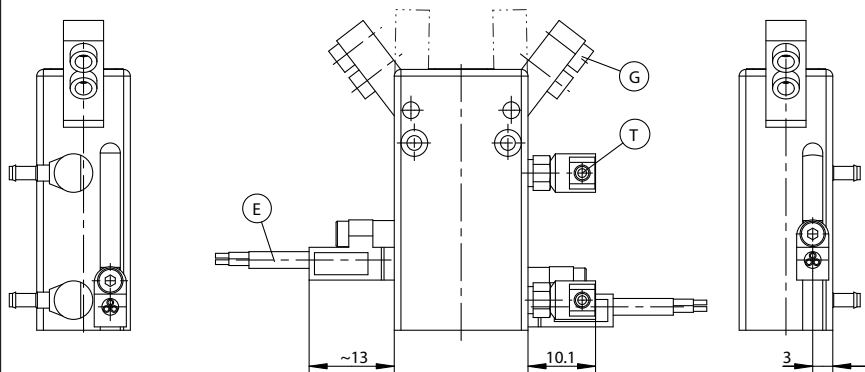


Plug 3 pole
Order no. S12-G-3



Pressure safety valve
Order no. DSV1/8

Accessory



Subject to change without prior notice

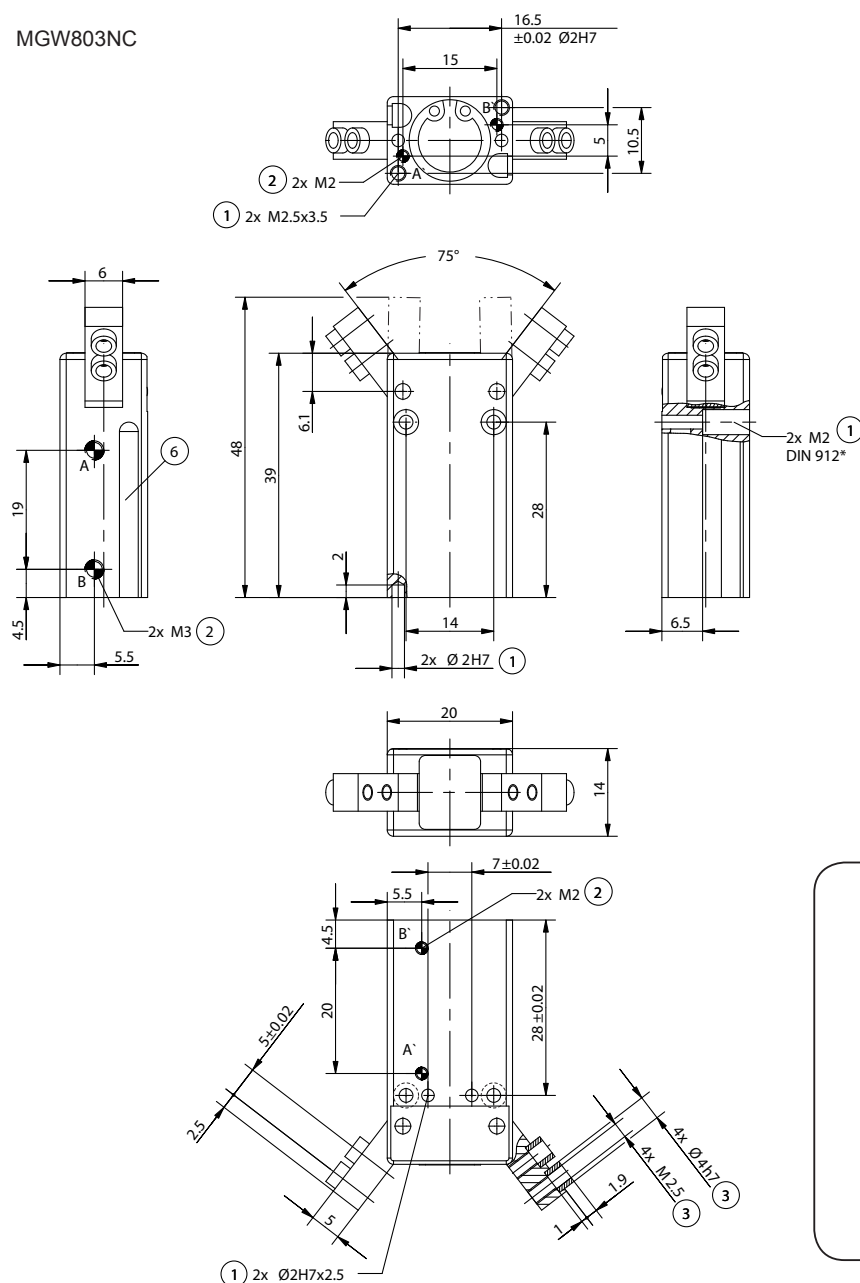
Order no.:	MGW803N	MGW803NC
Stroke per jaw [°]:	37,5	37,5
Gripping torque in closing [Nm]:	0,2	0,3
Gripping torque in opening [Nm]:	0,23	-
Recommended workpiece weight [kg]*:	0,07	0,1
Gripping torque secured by spring min. [Nm]:	-	0,09
Closing time / opening time [s]:	0,01 / 0,01	0,01 / 0,02
Repeatability +/- [mm]:	0,02	0,02
Min. operating pressure [bar]:	3	4
Max. operating pressure [bar]:	8	8
Min/max. operating temperature [°C]**:	5-80	5-80
Air volume per cycle [cm³]:	0,64	1
Weight [kg]:	0,025	0,039

All data measured at 6 bar

* Value determined with friction coefficient $\mu=0,1$ and safety factor $v=2$
distance from top of the housing 9 mm

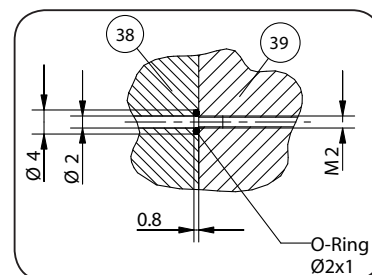
** High-temperature-resistant model (up to 150°C) add T to part number

MGW803NC

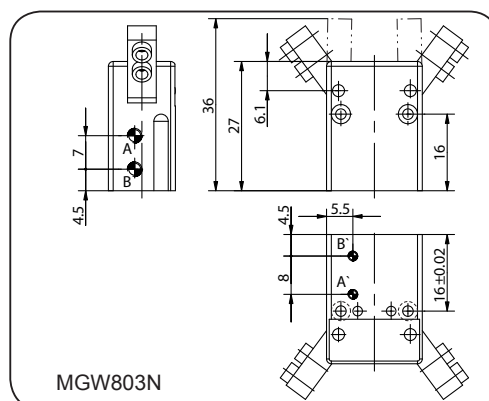


- ① Gripper mounting
- ② Power supply
- ③ Jaw fastening
- ⑥ Slot for magnetic field sensor
- ③⑧ Adapter
- ③⑨ Gripper
- Ⓐ Air connection (closing)
- Ⓑ Air connection (opening)
- Ⓐ Alternate air connection (closing)
- Ⓑ Alternate air connection (opening)

*according to DIN EN ISO 4762



hoseless power supply



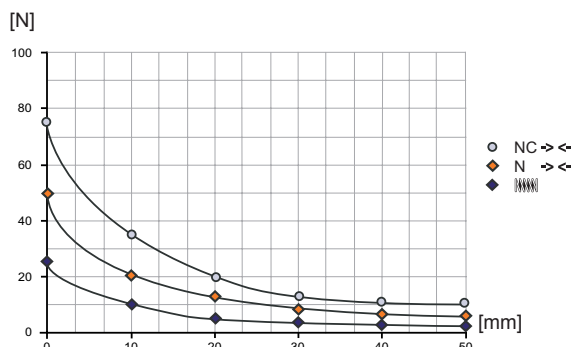
Subject to change without prior notice

Angular Gripper



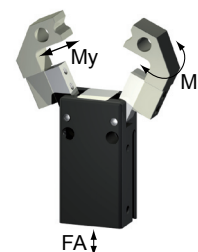
Picture shows MGW804N

Gripping force diagram
Gripping force as a function of jaw length.



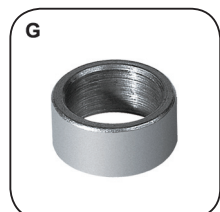
Data measured from top of the housing

Forces and torques
Max allowable forces and torques on jaw.



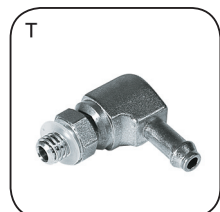
Mr [Nm]:	0,5
My [Nm]:	0,5
FA [N]:	150

Included in scope of delivery

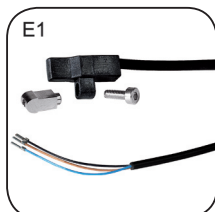


Centering sleeve
Order no. BDST40400

Recommended accessories



Pneumatic fittings
Order no. WVM3



Proximity switch
Order no. MFS103KHC42



Proximity switch
Order no. MFS103SKHC42



Cable angled plug
Order no. KAW500

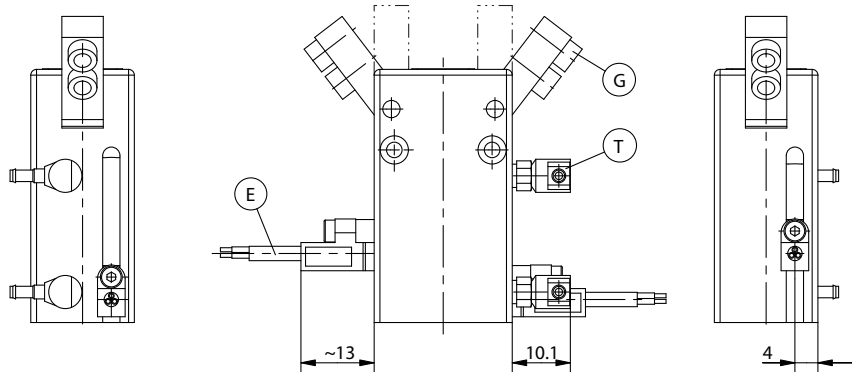


Plug 3 pole
Order no. S12-G-3



Pressure safety valve
Order no. DSV1/8

Accessory



Subject to change without prior notice



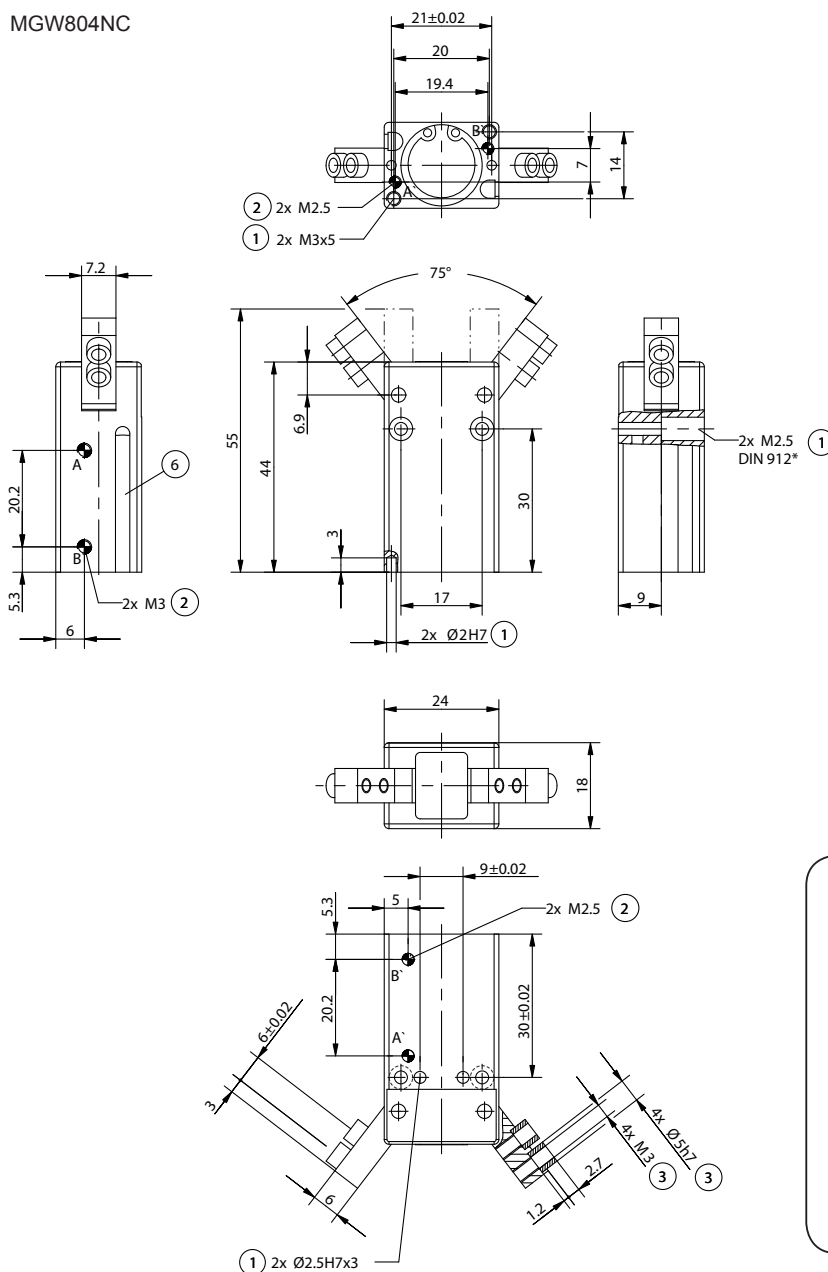
Order no.:	MGW804N	MGW804NC
Stroke per jaw [°]:	37,5	37,5
Gripping torque in closing [Nm]:	0,35	0,5
Gripping torque in opening [Nm]:	0,41	-
Recommended workpiece weight [kg]*:	0,1	0,15
Gripping torque secured by spring min. [Nm]:	-	0,14
Closing time / opening time [s]:	0,02 / 0,02	0,02 / 0,03
Repeatability +/- [mm]:	0,02	0,02
Min. operating pressure [bar]:	3	4
Max. operating pressure [bar]:	8	8
Min/max. operating temperature [°C]**:	5-80	5-80
Air volume per cycle [cm³]:	1,4	2
Weight [kg]:	0,052	0,081

All data measured at 6 bar

* Value determined with friction coefficient $\mu=0,1$ and safety factor $v=2$
distance from top of the housing 11 mm

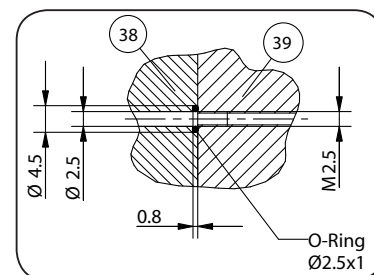
** High-temperature-resistant model (up to 150°C) add T to part number

MGW804NC

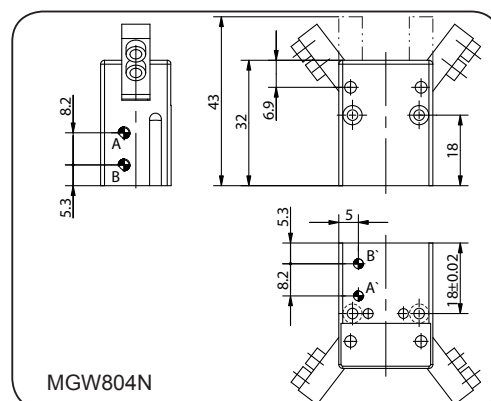


- ① Gripper mounting
- ② Power supply
- ③ Jaw fastening
- ⑥ Slot for magnetic field sensor
- ③⑧ Adapter
- ③⑨ Gripper
- Ⓐ Air connection (closing)
- Ⓑ Air connection (opening)
- Ⓐ Alternate air connection (closing)
- Ⓑ Alternate air connection (opening)

*according to DIN EN ISO 4762



hoseless power supply



MGW804N

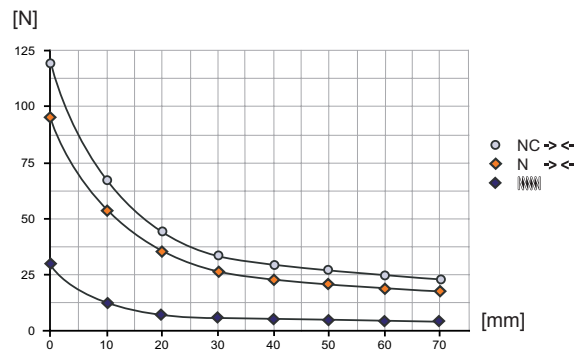
Subject to change without prior notice

Angular Gripper



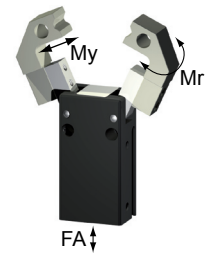
Picture shows MGW806N

Gripping force diagram
Gripping force as a function of jaw length.



Data measured from top of the housing

Forces and torques
Max allowable forces and torques on jaw.



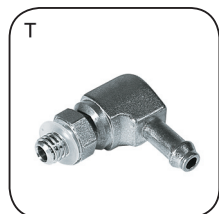
Mr [Nm]:	0,7
My [Nm]:	0,7
FA [N]:	260

Included in scope of delivery

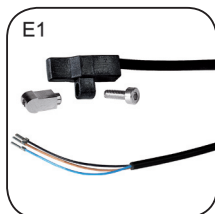


Centering sleeve
Order no. BDST40600

Recommended accessories



Pneumatic fittings
Order no. WVM3



Proximity switch
Order no. MFS103KHC42



Proximity switch
Order no. MFS103SKHC42



Cable angled plug
Order no. KAW500

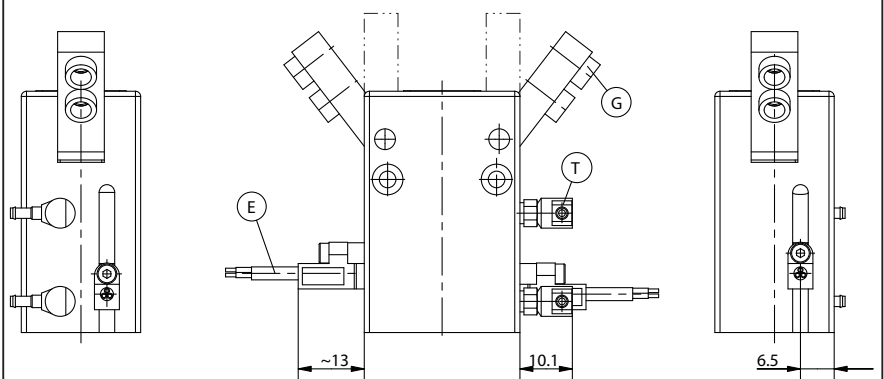


Plug 3 pole
Order no. S12-G-3



Pressure safety valve
Order no. DSV1/8

Accessory



Subject to change without prior notice



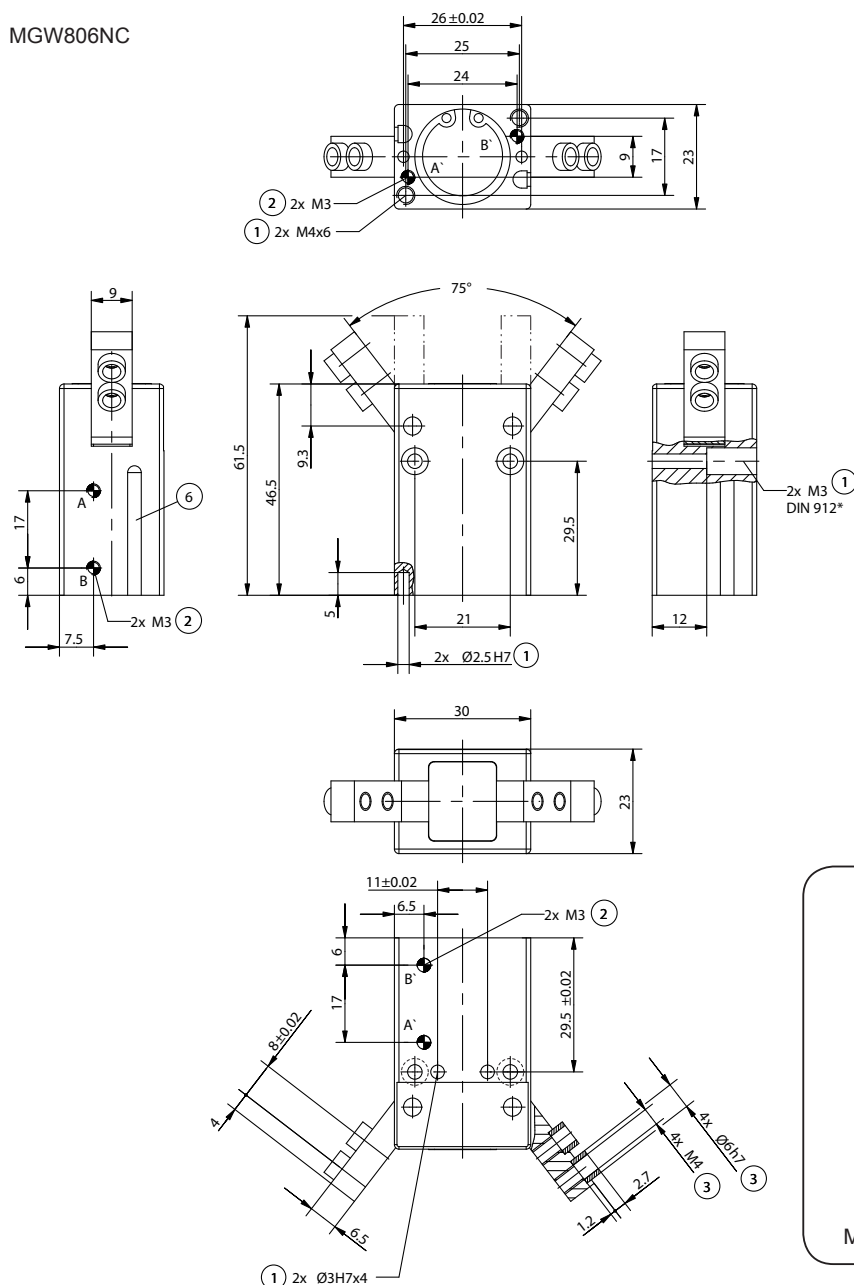
Order no.:	MGW806N	MGW806NC
Stroke per jaw [°]:	37,5	37,5
Gripping torque in closing [Nm]:	0,85	1,1
Gripping torque in opening [Nm]:	1,02	-
Recommended workpiece weight [kg]*:	0,18	0,23
Gripping torque secured by spring min. [Nm]:	-	0,25
Closing time / opening time [s]:	0,02 / 0,02	0,02 / 0,04
Repeatability +/- [mm]:	0,02	0,02
Min. operating pressure [bar]:	3	4
Max. operating pressure [bar]:	8	8
Min/max. operating temperature [°C]**:	5-80	5-80
Air volume per cycle [cm³]:	2,4	3,4
Weight [kg]:	0,102	0,117

All data measured at 6 bar

* Value determined with friction coefficient $\mu=0,1$ and safety factor $v=2$
distance from top of the housing 15 mm

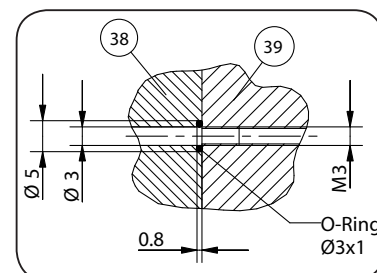
** High-temperature-resistant model (up to 150°C) add T to part number

MGW806NC

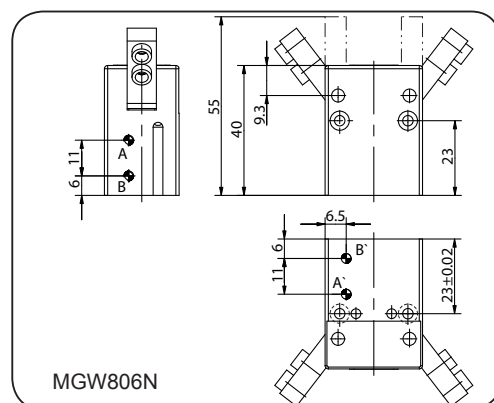


- ① Gripper mounting
- ② Power supply
- ③ Jaw fastening
- ⑥ Slot for magnetic field sensor
- 38 Adapter
- 39 Gripper
- A Air connection (closing)
- B Air connection (opening)
- A' Alternate air connection (closing)
- B' Alternate air connection (opening)

*according to DIN EN ISO 4762



hoseless power supply



MGW806N

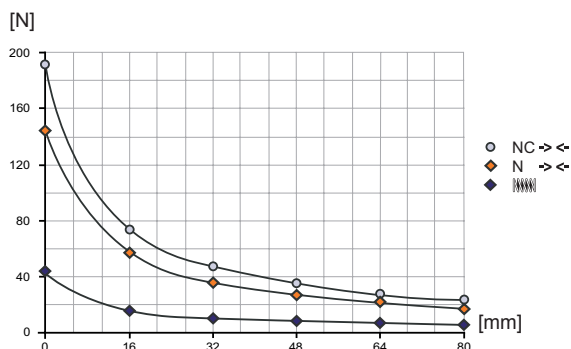
Subject to change without prior notice

Angular Gripper



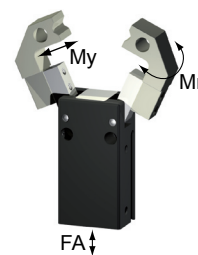
Picture shows MGW808N

Gripping force diagram
Gripping force as a function of jaw length.



Data measured from top of the housing

Forces and torques
Max allowable forces and torques on jaw.



Mr [Nm]:	1,3
My [Nm]:	1,3
FA [N]:	430

Included in scope of delivery



Centering sleeve
Order no. BDST40600

Recommended accessories



Pneumatic fittings
Order no. WVM3



Proximity switch
Order no. MFS103KHC42



Proximity switch
Order no. MFS103SKHC42



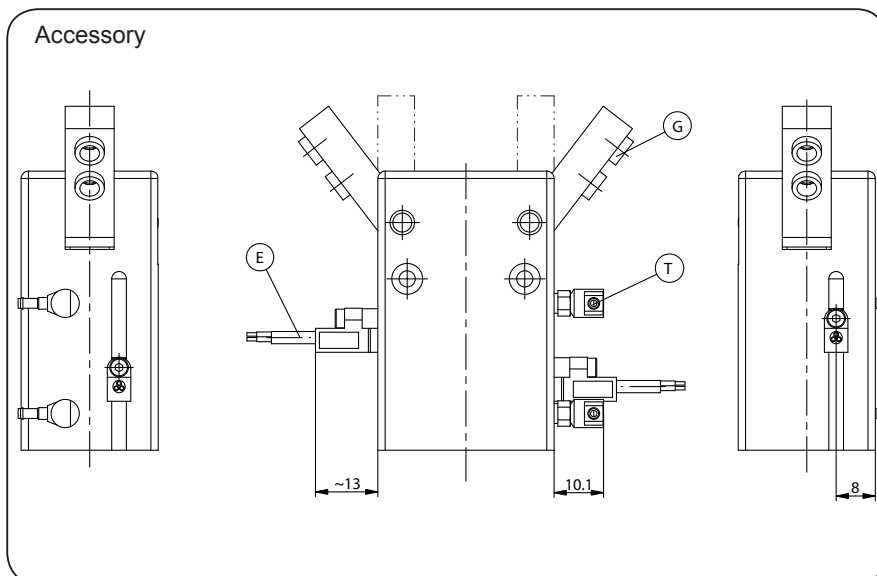
Cable angled plug
Order no. KAW500



Plug 3 pole
Order no. S12-G-3



Pressure safety valve
Order no. DSV1/8



Subject to change without prior notice



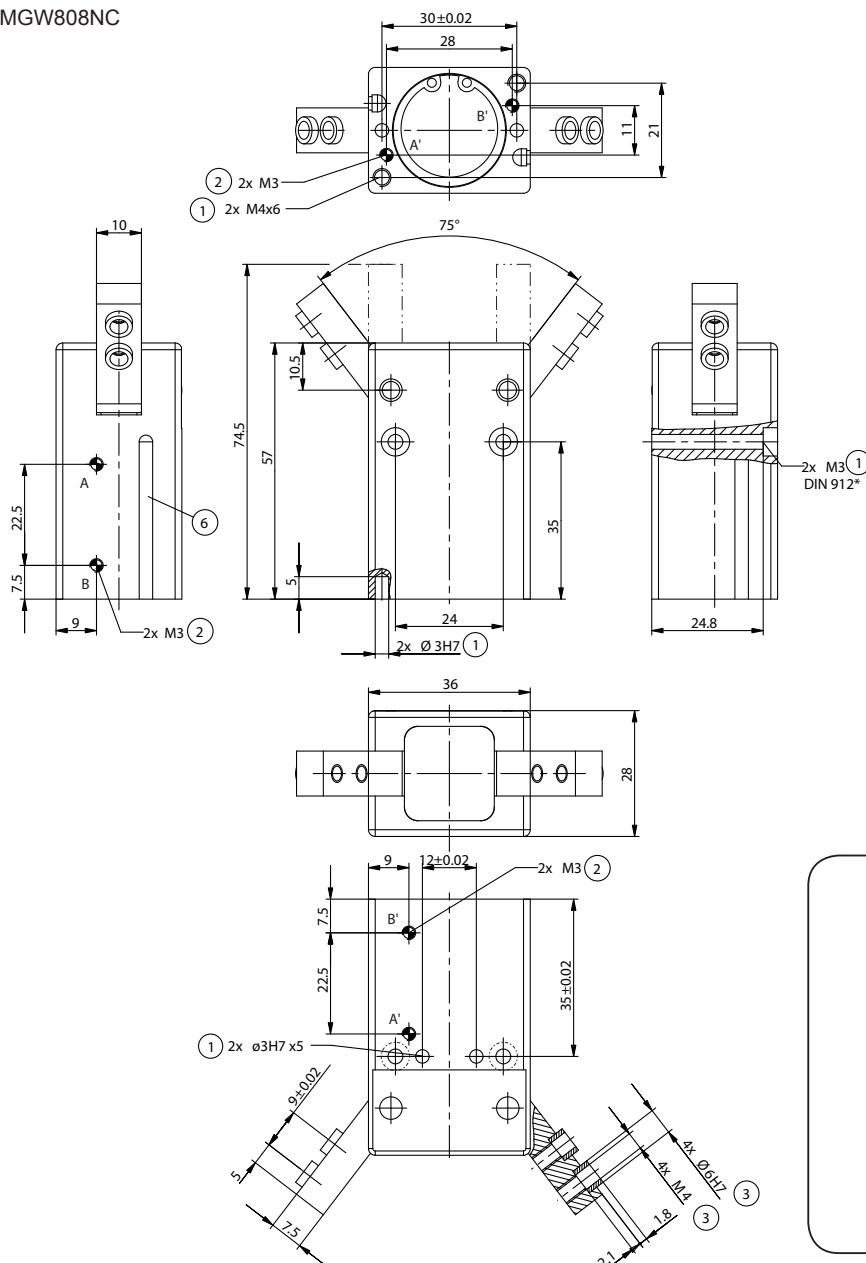
Order no.:	MGW808N	MGW808NC
Stroke per jaw [°]:	37,5	37,5
Gripping torque in closing [Nm]:	1,55	1,9
Gripping torque in opening [Nm]:	1,76	-
Recommended workpiece weight [kg]*:	0,28	0,35
Gripping torque secured by spring min. [Nm]:	-	0,43
Closing time / opening time [s]:	0,02 / 0,02	0,02 / 0,04
Repeatability +/- [mm]:	0,02	0,02
Min. operating pressure [bar]:	3	4
Max. operating pressure [bar]:	8	8
Min/max. operating temperature [°C]**:	5-80	5-80
Air volume per cycle [cm³]:	8,1	10,5
Weight [kg]:	0,18	0,19

All data measured at 6 bar

* Value determined with friction coefficient $\mu=0,1$ and safety factor $v=2$
distance from top of the housing 17,5 mm

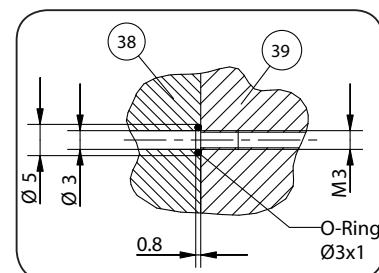
** High-temperature-resistant model (up to 150°C) add T to part number

MGW808NC

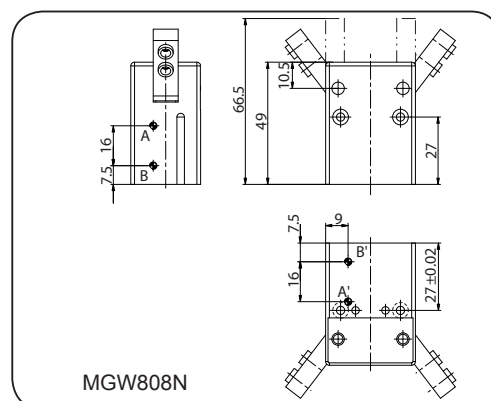


- ① Gripper mounting
- ② Power supply
- ③ Jaw fastening
- ⑥ Slot for magnetic field sensor
- ③⑧ Adapter
- ③⑨ Gripper
- Ⓐ Air connection (closing)
- Ⓑ Air connection (opening)
- Ⓐ Alternate air connection (closing)
- Ⓑ Alternate air connection (opening)

*according to DIN EN ISO 4762



hoseless power supply



MGW808N

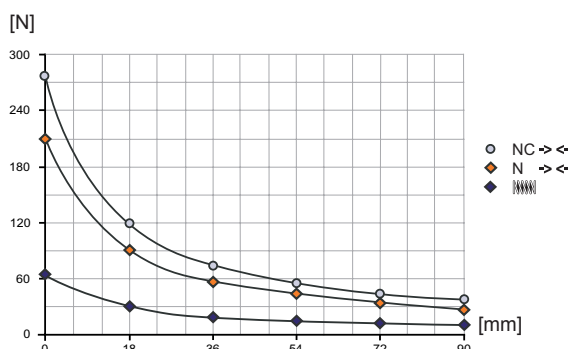
Subject to change without prior notice

Angular Gripper



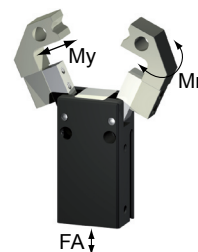
Picture shows MGW810N

Gripping force diagram
Gripping force as a function of jaw length.



Data measured from top of the housing

Forces and torques
Max allowable forces and torques on jaw.



Mr [Nm]:	1,6
My [Nm]:	1,6
FA [N]:	500

Included in scope of delivery

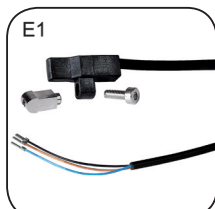


Centering sleeve
Order no. BDST07540

Recommended accessories



Pneumatic fittings
Order no. WVM5



Proximity switch
Order no. MFS103KHC42



Proximity switch
Order no. MFS103SKHC42



Cable angled plug
Order no. KAW500

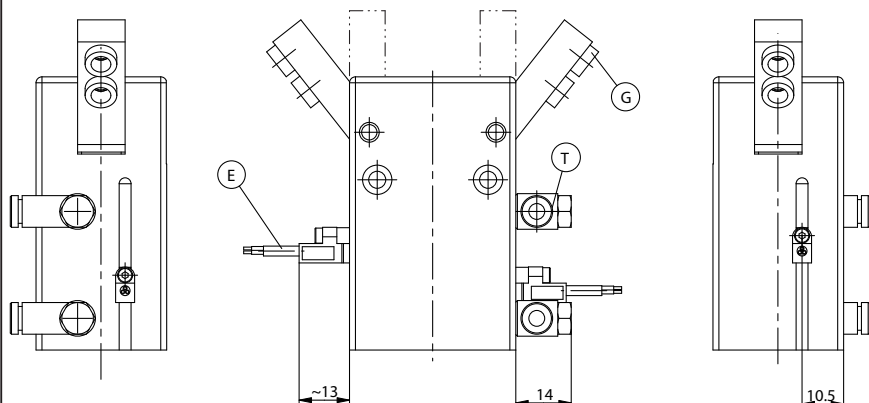


Plug 3 pole
Order no. S12-G-3



Pressure safety valve
Order no. DSV1/8

Accessory



Subject to change without prior notice



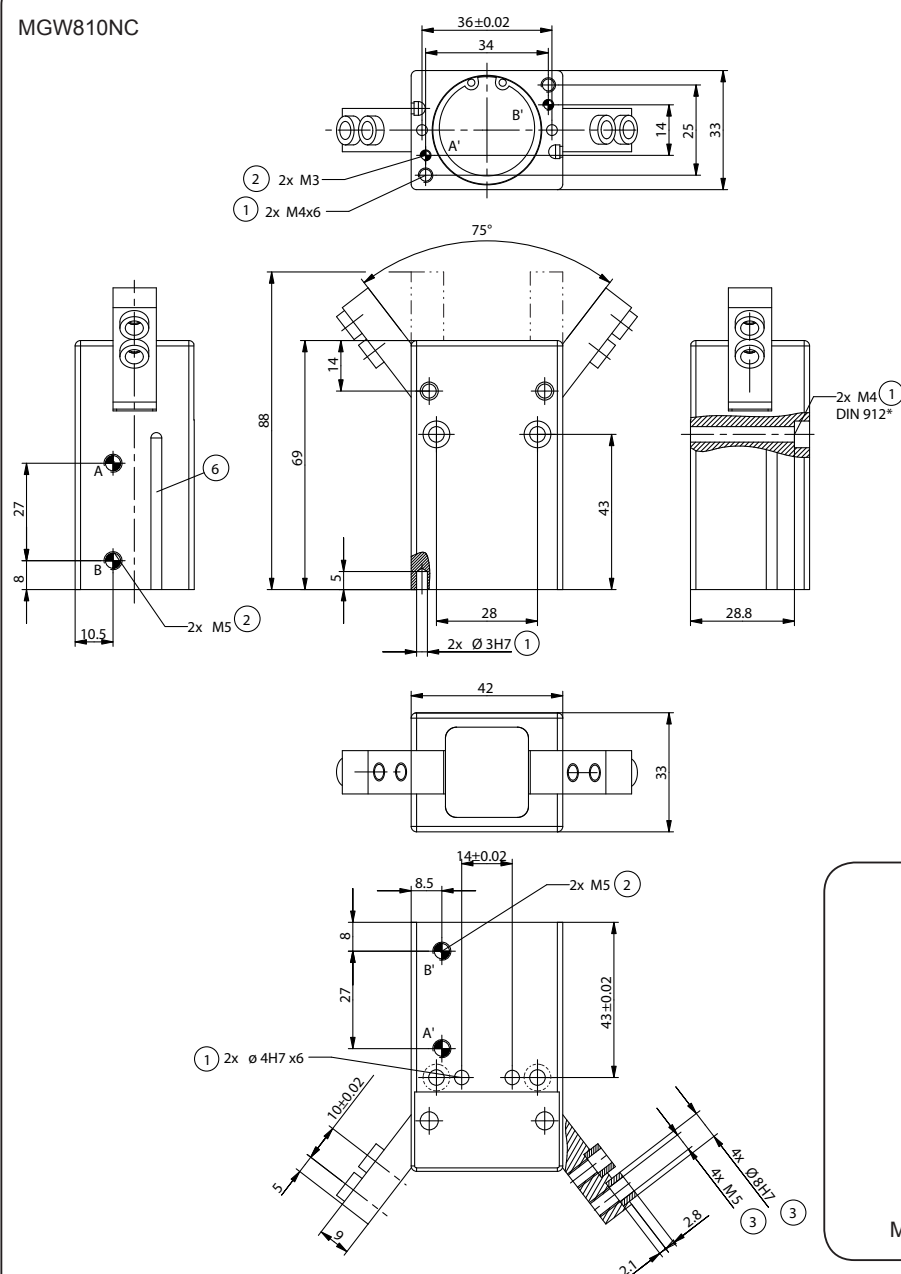
Order no.:	MGW810N	MGW810NC
Stroke per jaw [°]:	37,5	37,5
Gripping torque in closing [Nm]:	2,9	3,8
Gripping torque in opening [Nm]:	3,3	-
Recommended workpiece weight [kg]*:	0,45	0,6
Gripping torque secured by spring min. [Nm]:	-	0,91
Closing time / opening time [s]:	0,03 / 0,03	0,03 / 0,06
Repeatability +/- [mm]:	0,02	0,02
Min. operating pressure [bar]:	3	4
Max. operating pressure [bar]:	8	8
Min/max. operating temperature [°C]**:	5-80	5-80
Air volume per cycle [cm³]:	14,1	18,4
Weight [kg]:	0,275	0,31

All data measured at 6 bar

* Value determined with friction coefficient $\mu=0,1$ and safety factor $v=2$
distance from top of the housing 19 mm

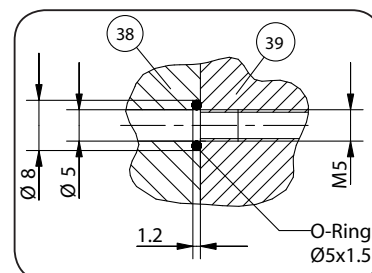
** High-temperature-resistant model (up to 150°C) add T to part number

MGW810NC

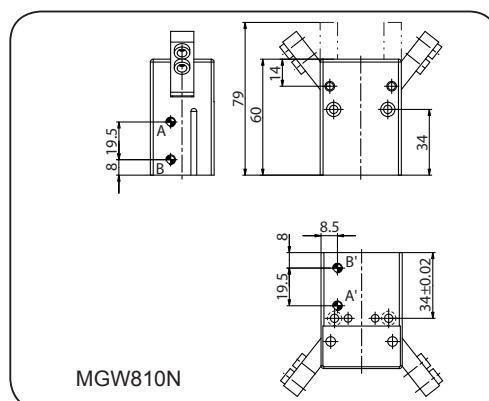


- ① Gripper mounting
- ② Power supply
- ③ Jaw fastening
- ④ Slot for magnetic field sensor
- ⑤ Adapter
- ⑥ Gripper
- ⑦ Air connection (closing)
- ⑧ Air connection (opening)
- ⑨ Alternate air connection (closing)
- ⑩ Alternate air connection (opening)

*according to DIN EN ISO 4762



hoseless power supply



MGW810N

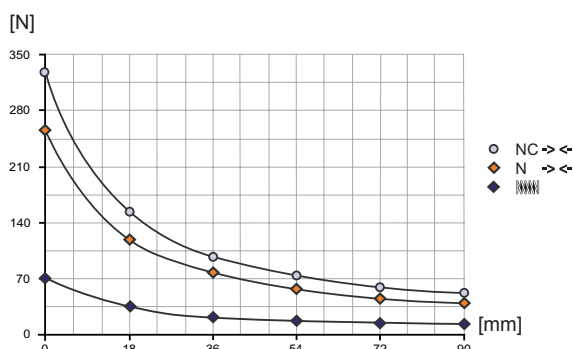
Subject to change without prior notice

Angular Gripper



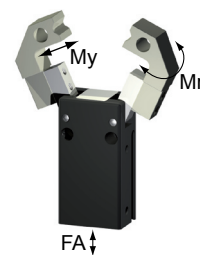
Picture shows MGW812N

Gripping force diagram
Gripping force as a function of jaw length.



Data measured from top of the housing

Forces and torques
Max allowable forces and torques on jaw.



Mr [Nm]:	2,3
My [Nm]:	2,3
FA [N]:	720

Included in scope of delivery

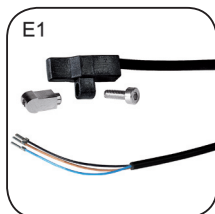


Centering sleeve
Order no. BDST07540

Recommended accessories



Pneumatic fittings
Order no. WVM5



Proximity switch
Order no. MFS103KHC42



Proximity switch
Order no. MFS103SKHC42



Cable angled plug
Order no. KAW500

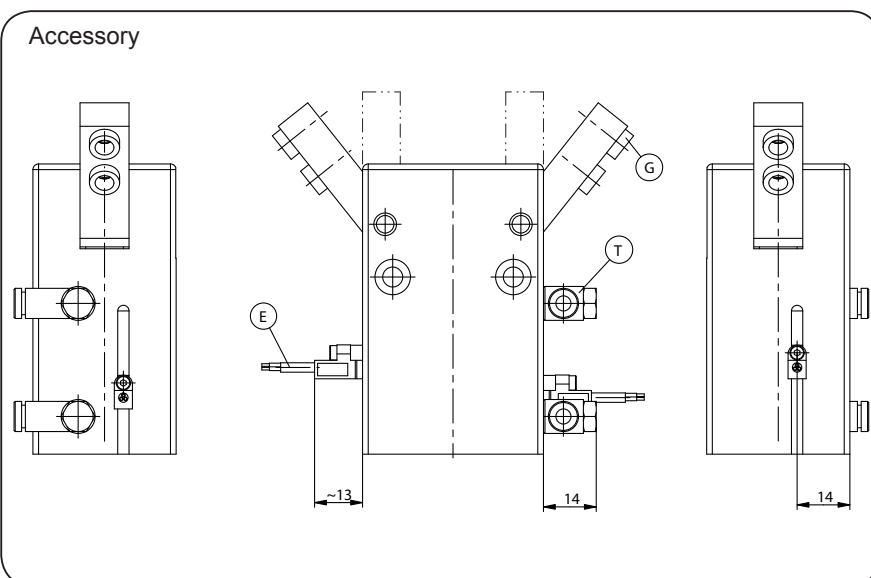


Plug 3 pole
Order no. S12-G-3



Pressure safety valve
Order no. DSV1/8

Accessory



Subject to change without prior notice



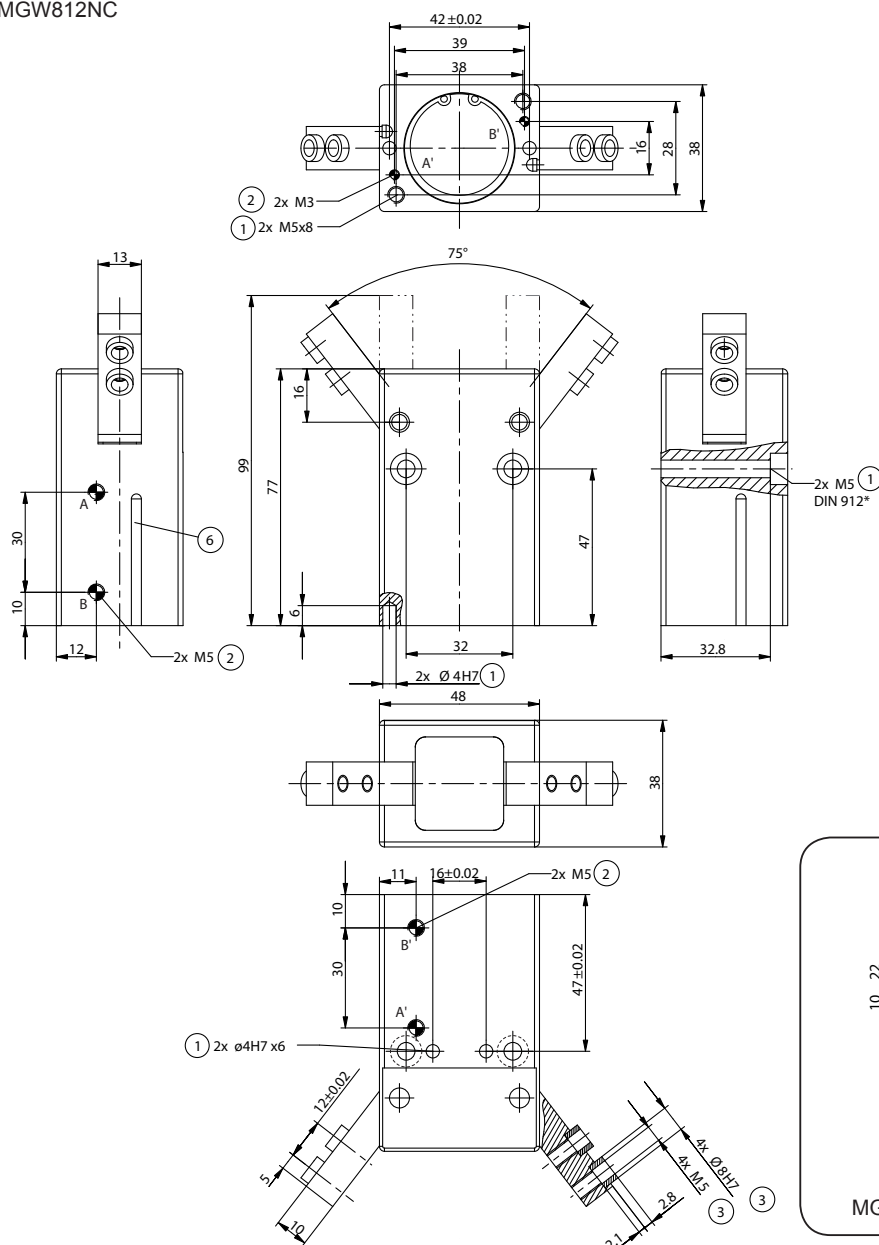
Order no.:	MGW812N	MGW812NC
Stroke per jaw [°]:	37,5	37,5
Gripping torque in closing [Nm]:	4,1	5,2
Gripping torque in opening [Nm]:	4,55	-
Recommended workpiece weight [kg]*:	0,55	0,7
Gripping torque secured by spring min. [Nm]:	-	1,13
Closing time / opening time [s]:	0,03 / 0,03	0,03 / 0,06
Repeatability +/- [mm]:	0,02	0,02
Min. operating pressure [bar]:	3	4
Max. operating pressure [bar]:	8	8
Min/max. operating temperature [°C]**:	5-80	5-80
Air volume per cycle [cm³]:	22,1	27,6
Weight [kg]:	0,4	0,45

All data measured at 6 bar

* Value determined with friction coefficient $\mu=0,1$ and safety factor $v=2$
distance from top of the housing 22 mm

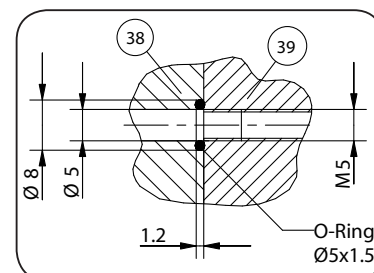
** High-temperature-resistant model (up to 150°C) add T to part number

MGW812NC

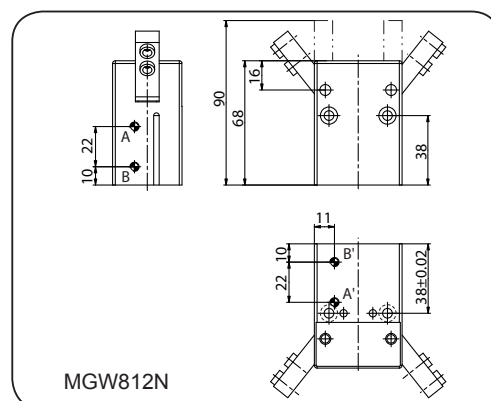


- ① Gripper mounting
- ② Power supply
- ③ Jaw fastening
- ⑥ Slot for magnetic field sensor
- ③⑧ Adapter
- ③⑨ Gripper
- Ⓐ Air connection (closing)
- Ⓑ Air connection (opening)
- Ⓐ Alternate air connection (closing)
- Ⓑ Alternate air connection (opening)

*according to DIN EN ISO 4762



hoseless power supply



MGW812N

Subject to change without prior notice



Angular Grippers

pneumatic



SGW Series

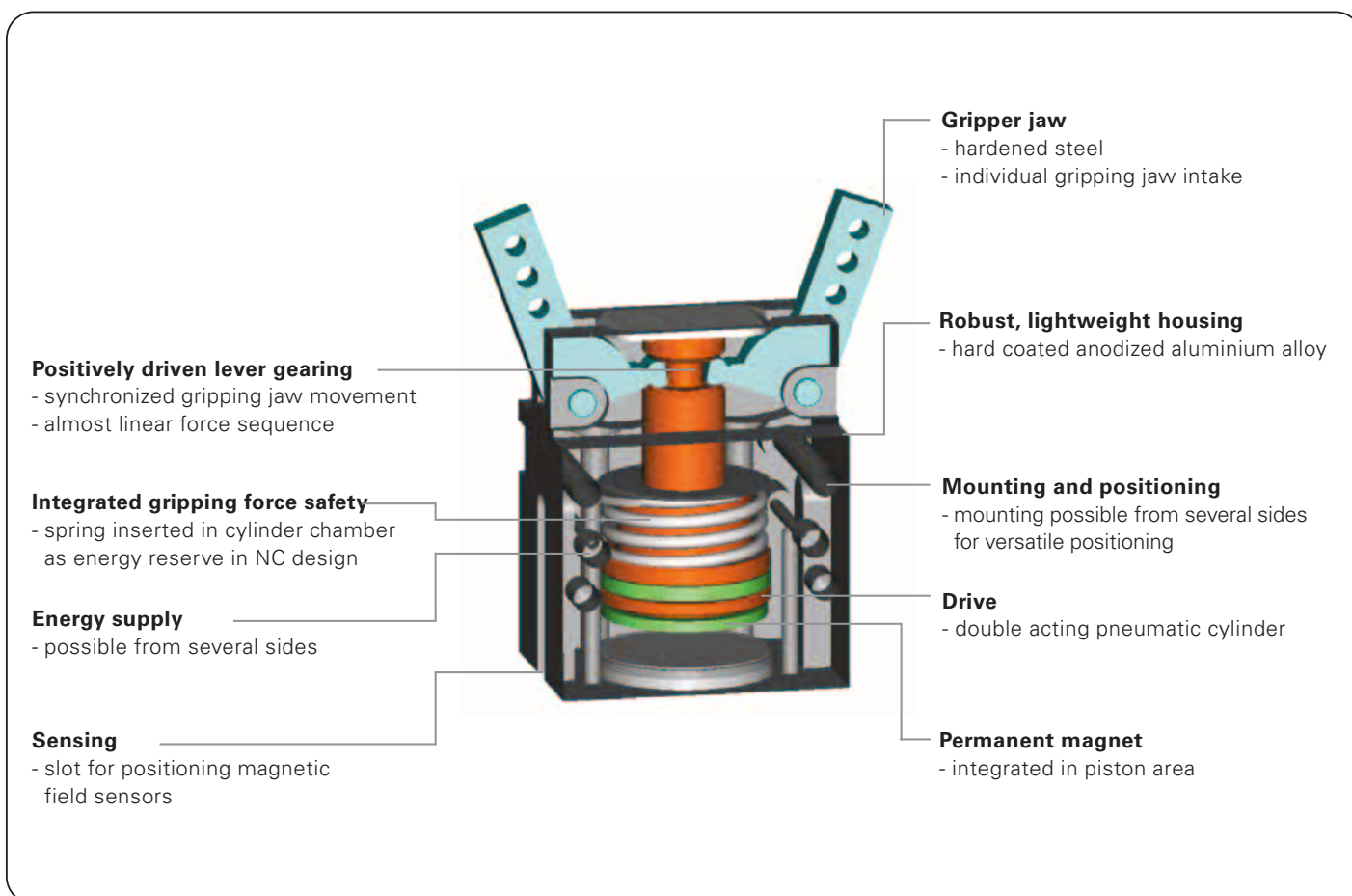
SOMMER
automatic

Angular Gripper

Features

- available in three sizes with 23° stroke per jaw and gripping moment up to 10 Nm
- indirect position sensing for piston position using magnetic field sensors
- design with mechanical gripping force safety device

Functional diagram



Terms

- Gripping force:** arithmetic sum of the individual forces occurring at the jaws
- Closing/opening time:** time required by the gripping jaws to turn through the entire angle
- Repeatability:** at end stops after 50/100 consecutive cycles
- Cycle:** one complete movement of the piston forward and back
- Maintenance:** recommended at 10 mil. cycles
(please see the owner's manual for conditions,
download from www.sommer-automatic.com)
- long maintenance intervals keep costs down
 - long lifespan

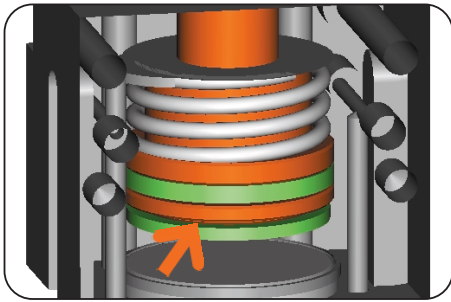
Model guide

- N:** Standard design (long stroke - standard force)
- C:** For external gripping, self-locking, spring closing

Order no.	Stroke per jaw	Gripping torque in opening	Gripping torque in closing	Self-locking via
SGW14N	23°	0,8 Nm	0,5 Nm	DSV*
SGW14NC	23°	-	0,8 Nm	Spring
SGW25N	23°	3,5 Nm	2,5 Nm	DSV*
SGW25NC	23°	-	3,5 Nm	Spring
SGW35N	23°	10 Nm	8 Nm	DSV*
SGW35NC	23°	-	10 Nm	Spring

*DSV= Pressure safety valves (Order no. DSV1/8)

Angular **Gripper**



Drive

NC Models:

Double acting pneumatic cylinder with integrated mechanical gripping force safety device

- optimum coordination of drive force and gripping moment secured by spring

N Models:

Double acting pneumatic cylinder

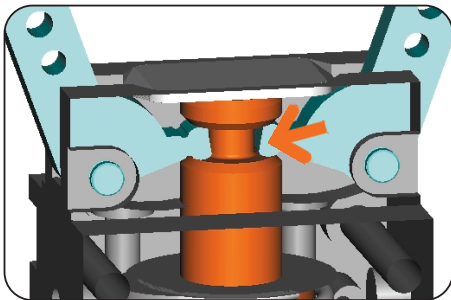
- maximum power in both opening and closing
- gripping torque up to 10 Nm



Connections

Mounting and positioning options

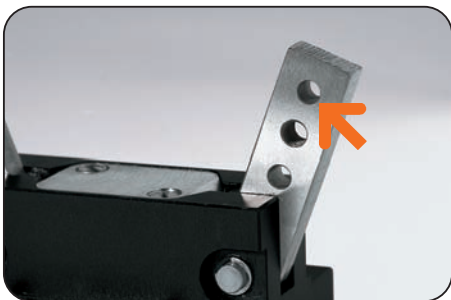
- Installation location as desired
- optimal utilization to the application parameters
- cost effective design



Power transfer

Positively driven lever gearing

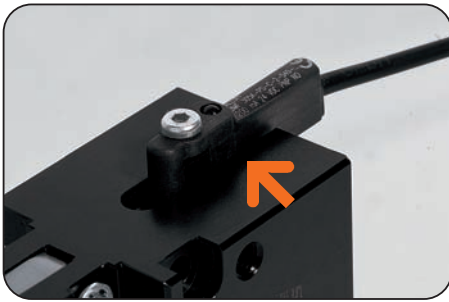
- optimum transmission of drive force in gripping force
- self-centering
- synchronization
- high repeatability



Gripping jaw positioning

individual gripping jaw positioning via centring sleeve

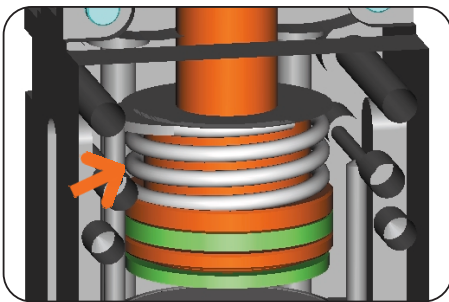
- precise positioning of individual gripping jaws
- quick, cost-effective and therefore economical jaw changing
- space-saving fixing



Position sensing

indirect piston position sensing via magnetic field sensors

- process safe
- compact
- for magnetic field sensors with T-slot bracket



Gripping force safety device

NC Models:

spring integrated into cylinder as energy reserve

- permanent maintenance of gripping force
- compact design

N Models: External pressure safety valve

- Gripping force safety possible by addition of a pressure safety valve (order no. DSV1/8). The inevitable leakage in the pneumatic circuit restricts the time of this type of gripping force safety.



Energy supply

flexibility possible on several sides

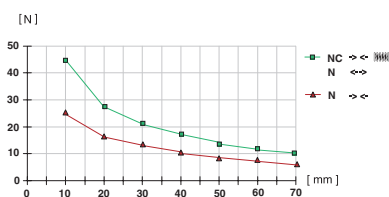
- optimum integration into the workroom through individual connection option
- tubeless direct connection possibility, no additional interference contours

Angular Gripper



Gripping force diagram

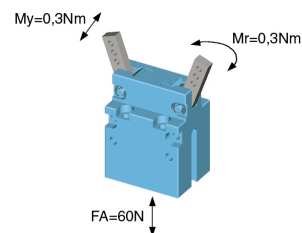
Gripping force as a function of jaw length.



measured from top edge of housing ◆

Forces and Moments

Max allowable forces and moments on jaws.



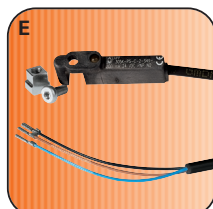
Accessory list



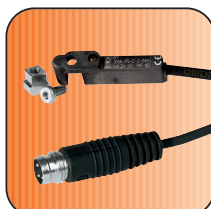
Pneumatic fittings
Order no. WVM3



Pneumatic fittings
Order no. GVM3



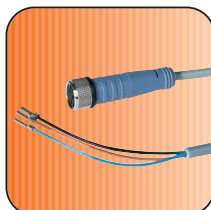
Magnetic field sensor
Order no. MFS305KHT20



Magnetic field sensor
Order no. MFS305SKHT20



Cable angled plug
Order no. KAW500



Cable straight plug
Order no. KAG500

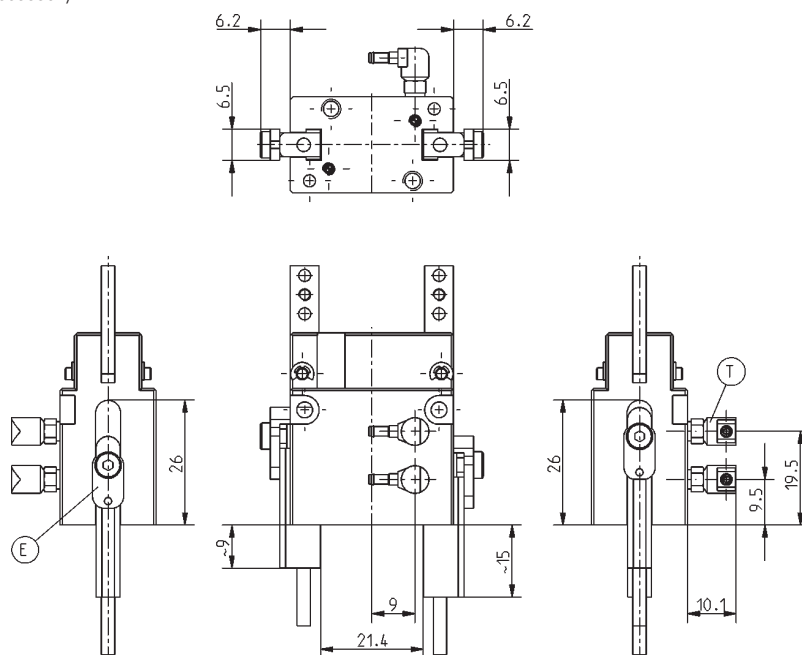


Plug 3-pole
Order no. S12-G-3



Pressure safety valve
Order no. DSV1/8

Accessory



Subject to change without prior notice

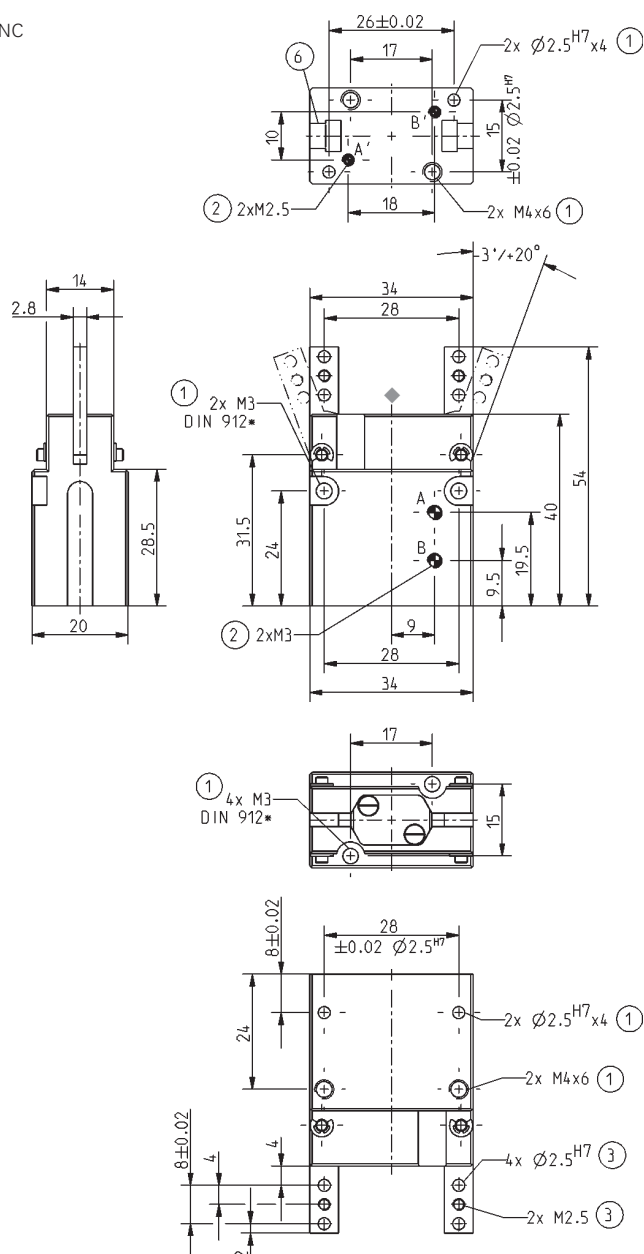
Order no.:	SGW14N	SGW14NC
Stroke per jaw [°]:	23	23
Gripping torque in closing [Nm]:	0,5	0,8
Gripping torque in opening [Nm]:	0,8	-
Recommended workpiece weight [g]*:	66	106
Min. gripping force secured by spring [N]:	-	35
Closing time/opening time [s]:	0,01	0,02
Repeatability [mm]:	0,1	0,1
Min./max. operating pressure [bar]:	3/8	5/8
Min./max. operating temperature [°C]**:	5/80	5/80
Air volume per cycle [cm³]:	1,8	1,8
Weight [g]:	75	75

All data measured at 6 bar

* Value determined with friction coefficient $\mu = 0.1$ and safety factor $v = 2$, distance from top edge of housing $\blacklozenge = 30$ mm

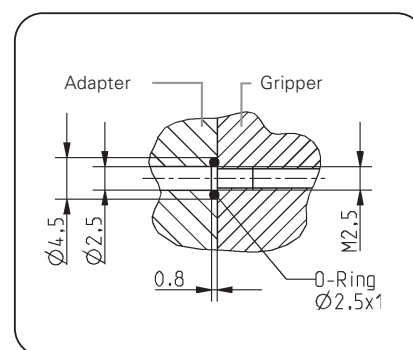
** High-temperature-resistant model (up to 150°) add T to part number

SGW14N/NC



- ① Gripper mounting
- ② Power supply
- ③ Jaw fastening
- ⑥ Slot for Magnetic field sensor
- A Air connection (closing)
- B Air connection (opening)
- A' Alternate air connection (closing)
- B' Alternate air connection (opening)

* equivalent to DIN EN ISO 4762



Hoseless air connection

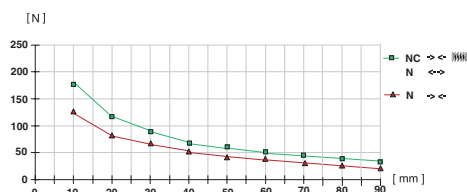
Subject to change without prior notice

Angular Gripper



Gripping force diagram

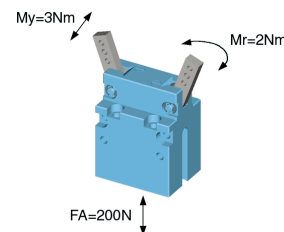
Gripping force as a function of jaw length.



measured from top edge of housing ◆

Forces and Moments

Max allowable forces and moments on jaws.



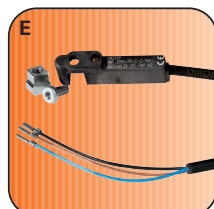
Accessory list



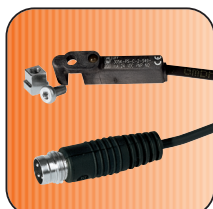
Pneumatic fittings
Order no. WVM5



Pneumatic fittings
Order no. GVM5



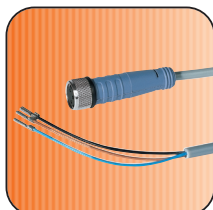
Magnetic field sensor
Order no. MFS305KHT20



Magnetic field sensor
Order no. MFS305SKHT20



Cable angled plug
Order no. KAW500



Cable straight plug
Order no. KAG500

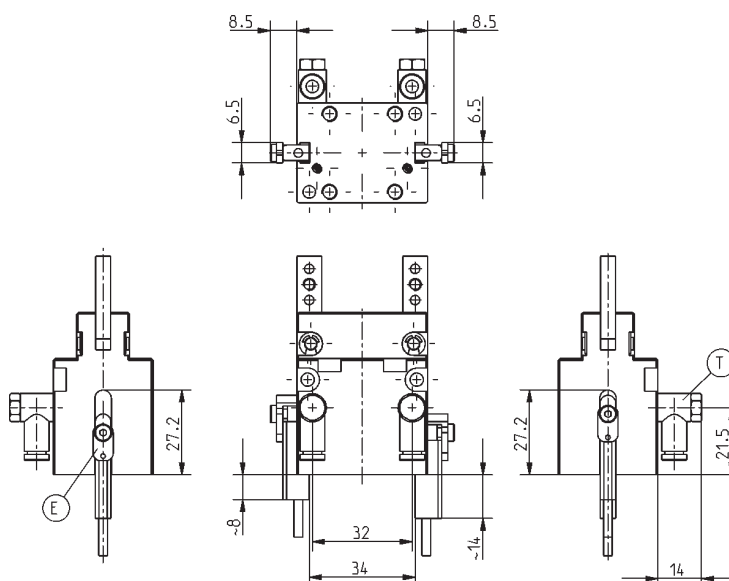


Plug 3-pole
Order no. S12-G-3



Pressure safety valve
Order no. DSV1/8

Accessory



Subject to change without prior notice

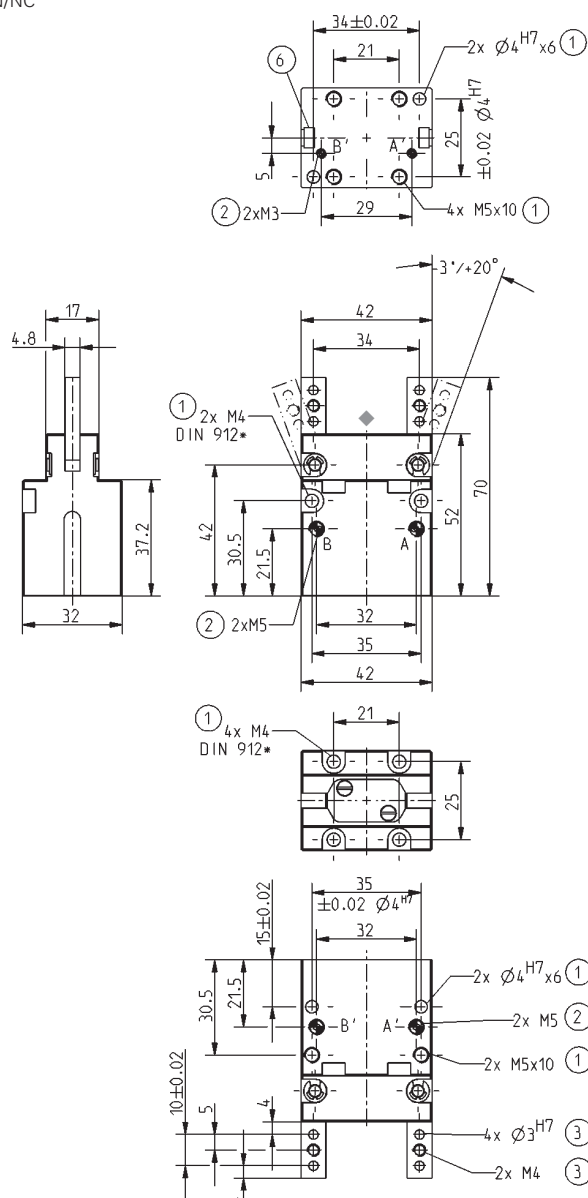
Order no.:	SGW25N	SGW25NC
Stroke per jaw [°]:	23	23
Gripping torque in closing [Nm]:	2,5	3,5
Gripping torque in opening [Nm]:	3,5	-
Recommended workpiece weight [kg]*:	0,3	0,4
Min. gripping force secured by spring [N]:	-	100
Closing time/opening time [s]:	0,02	0,03
Repeatability [mm]:	0,1	0,1
Min./max. operating pressure [bar]:	3/8	5/8
Min./max. operating temperature [°C]**:	5/80	5/80
Air volume per cycle [cm³]:	5	5
Weight [g]:	205	210

All data measured at 6 bar

* Value determined with friction coefficient $\mu = 0.1$ and safety factor $v = 2$, distance from top edge of housing $\blacklozenge = 30$ mm

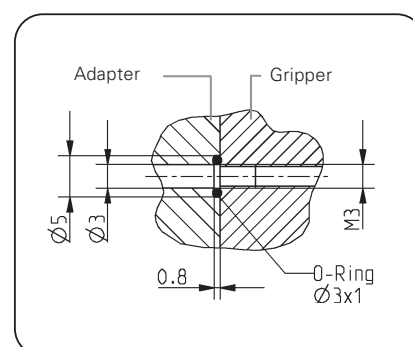
** High-temperature-resistant model (up to 150°) add T to part number

SGW25N/NC



- ① Gripper mounting
- ② Power supply
- ③ Jaw fastening
- ⑥ Slot for Magnetic field sensor
- A Air connection (closing)
- B Air connection (opening)
- A' Alternate air connection (closing)
- B' Alternate air connection (opening)

* equivalent to DIN EN ISO 4762



Hoseless air connection

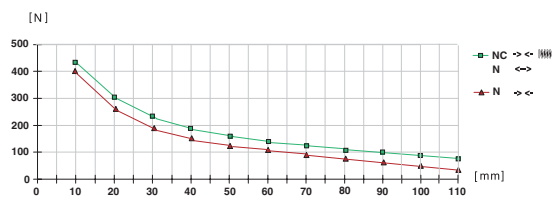
Subject to change without prior notice

Angular Gripper



Gripping force diagram

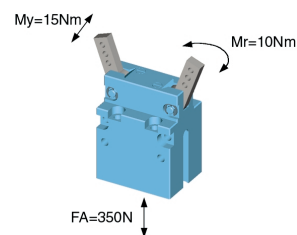
Gripping force as a function of jaw length.



measured from top edge of housing ♦

Forces and Moments

Max allowable forces and moments on jaws.



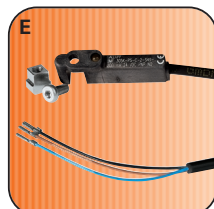
Accessory list



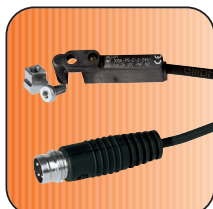
Pneumatic fittings
Order no. WVM5



Pneumatic fittings
Order no. GVM5



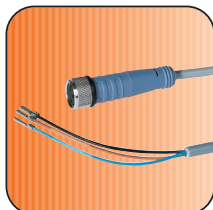
Magnetic field sensor
Order no. MFS305KHT20



Magnetic field sensor
Order no. MFS305SKHT20



Cable angled plug
Order no. KAW500



Cable straight plug
Order no. KAG500

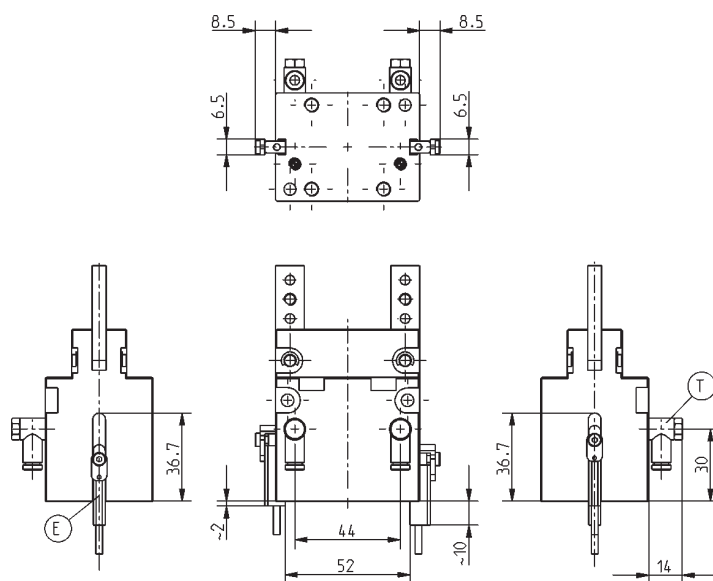


Plug 3-pole
Order no. S12-G-3



Pressure safety valve
Order no. DSV1/8

Accessory



Subject to change without prior notice

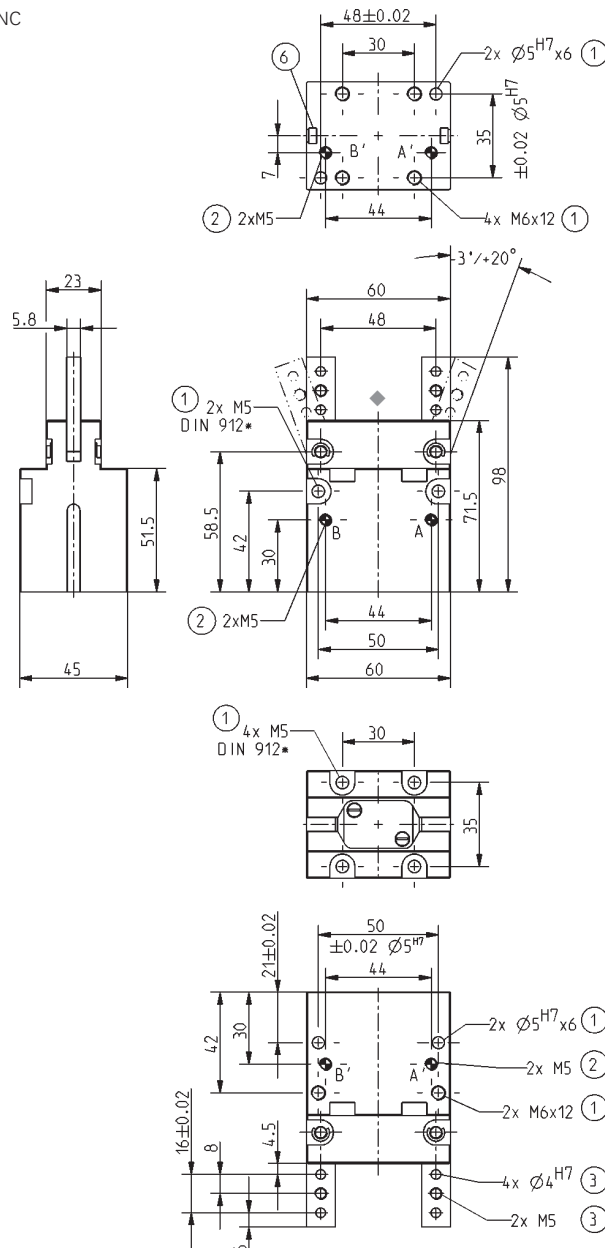
Order no.:	SGW35N	SGW35NC
Stroke per jaw [°]:	23	23
Gripping torque in closing [Nm]:	8	10
Gripping torque in opening [Nm]:	10	-
Recommended workpiece weight [kg]*:	0,6	0,8
Min. gripping force secured by spring [N]:	-	153
Closing time/opening time [s]:	0,05	0,06
Repeatability [mm]:	0,1	0,1
Min./max. operating pressure [bar]:	3/8	5/8
Min./max. operating temperature [°C]**:	5/80	5/80
Air volume per cycle [cm³]:	18	18
Weight [g]:	560	580

All data measured at 6 bar

* Value determined with friction coefficient $\mu = 0.1$ and safety factor $v = 2$, distance from top edge of housing $\blacklozenge = 30$ mm

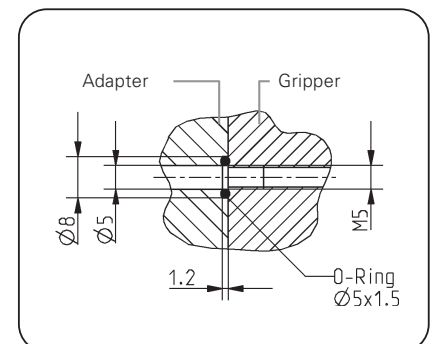
** High-temperature-resistant model (up to 150°) add T to part number

SGW35N/NC



- ① Gripper mounting
- ② Power supply
- ③ Jaw fastening
- ⑥ Slot for Magnetic field sensor
- A Air connection (closing)
- B Air connection (opening)
- A' Alternate air connection (closing)
- B' Alternate air connection (opening)

* equivalent to DIN EN ISO 4762



Hoseless air connection

Subject to change without prior notice



Angular **Grippers**

pneumatic



GG Series

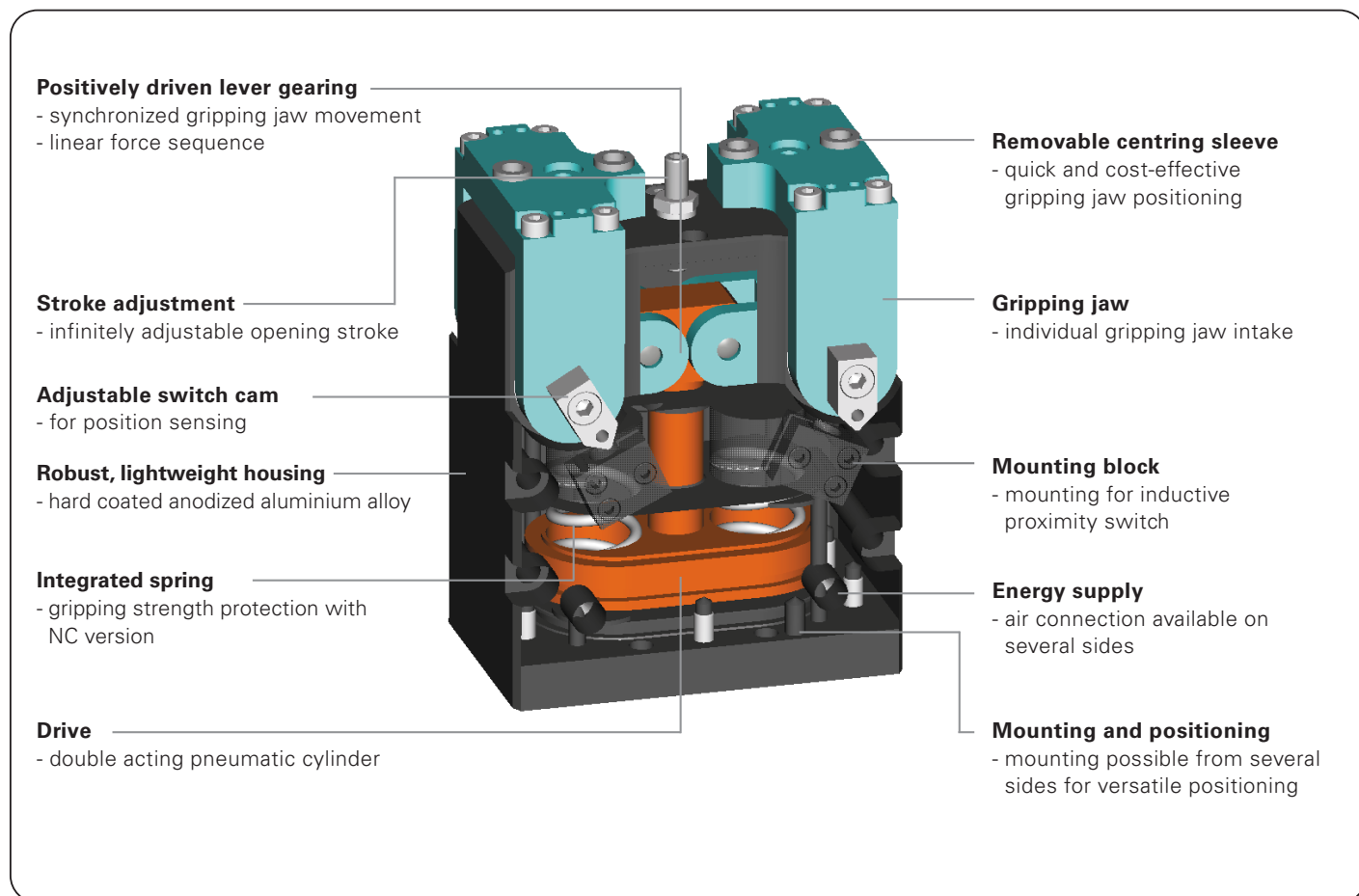
SOMMER
automatic

Angular Gripper

Features

- infinitely adjustable stroke up to 35° per jaw due to integrated adjusting screw
- sealed mechanics via sealing ring in rotation point
- design with mechanical gripping force safety device

Functional diagram



Terms

- Gripping force:** arithmetic sum of the individual forces occurring at the jaws
- Closing/opening time:** time required by the gripping jaws to turn through the entire angle
- Repeatability:** at end stops after 50/100 consecutive cycles
- Cycle:** one complete movement of the piston forward and back
- Maintenance:** recommended at 10 mil. cycles
(please see the owner's manual for conditions, download from www.sommer-automatic.com)
- long maintenance intervals keep costs down
 - long lifespan

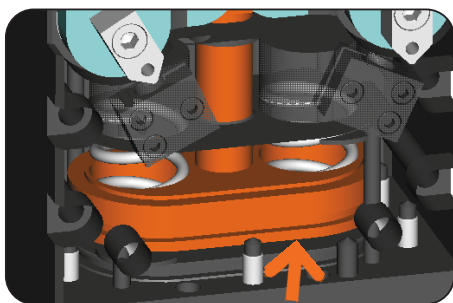
Model guide

- N:** Standard design (long stroke - standard force)
- C:** For external gripping, self-locking, spring closing

Order no.	Stroke per jaw	Gripping torque in opening	Gripping torque in closing	Self-locking via
GG25N	35°	3,3 Nm	3,3 Nm	DSV*
GG25NC	35°	-	4,1 Nm	Spring
GG32N	35°	7,9 Nm	7,9 Nm	DSV*
GG32NC	35°	-	9 Nm	Spring
GG50N	35°	32 Nm	32 Nm	DSV*
GG50NC	35°	-	45 Nm	Spring
GG70N	35°	87 Nm	87 Nm	DSV*
GG70NC	35°	-	122 Nm	Spring
GG100N	35°	198 Nm	198 Nm	DSV*
GG100NC	35°	-	264 Nm	Spring

*DSV= Pressure safety valves (Order no. DSV1/8)

Angular **Gripper**



Drive

NC Models

Double acting pneumatic cylinder with oval pistons and integrated mechanical gripping force safety device

- optimum coordination of drive force and gripping moment secured by spring

N Models

Double acting pneumatic cylinder with oval pistons

- Maximum drive moment due to approx. 30% greater piston surface than similar round pistons
- higher gripping torque up to 264 Nm



Sealed rotation point

- For use under extreme conditions
- stable double sided bearing



Power transfer

Positively driven lever gearing with linear force sequence

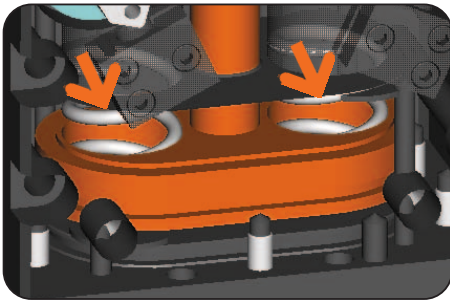
- optimum transmission of drive force in gripping force
- self-centering
- synchronization
- high repeatability



Gripping jaw positioning

individual gripping jaw positioning via centring sleeve

- precise positioning of individual gripping jaws
- quick, cost-effective and therefore economical jaw changing
- space-saving fixing



Gripping force safety device

NC Models

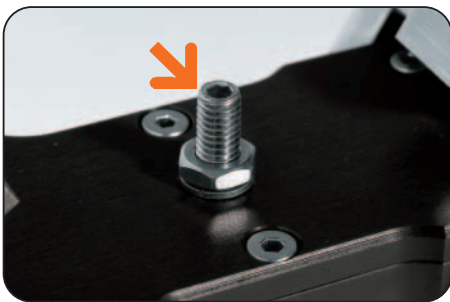
Energy retention through spring mounted cylinder

- reliable mechanical gripping force retention
- compact design

N Model

External pressure-retention safety valve

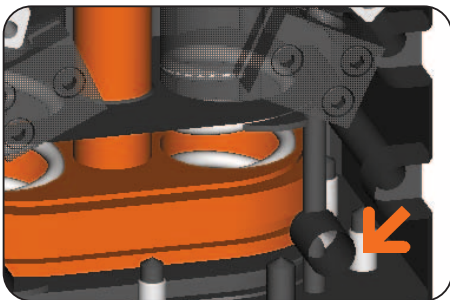
- Gripping force safety possible by addition of pressure safety valve (Part. No. DSV1/8). The inevitable leakage in the pneumatic circuit restricts the time of this type of gripping force safety.



Stroke adjustment

Adjustable opening stroke

- infinitely variable
- individual
- easily accessible

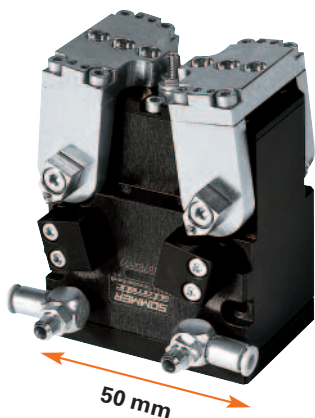


Energy supply

Flexibility at several sides possibly

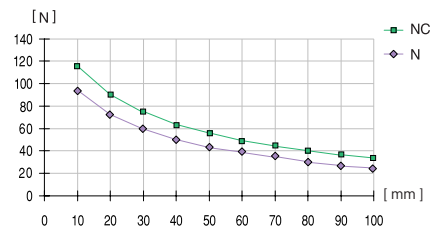
- optimum integration into the workroom through individual connection option
- tubeless direct connection possible, no additional interference contours

Angular Gripper



Gripping force diagram

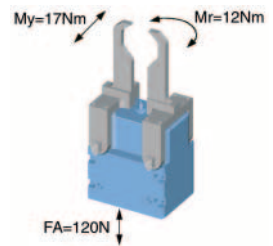
Gripping force as a function of jaw length.



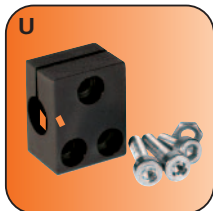
measured from top edge of gripper jaws ◆

Forces and Moments

Max allowable forces and moments on jaws.



Included with purchase



Mounting block
Order no. KB3-04

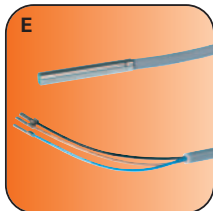


Centring sleeve
Order no. BDST40400



Pneumatic fittings
Order no. DRVM5x4

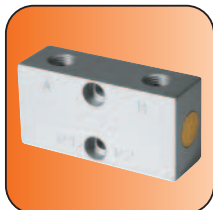
Accessory list



Proximity switch
Order no. NJ3-E2-03

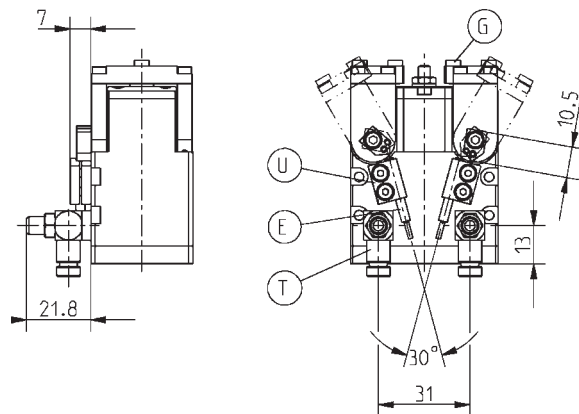


Plug 3-pole
Order no. S12-G-3



Pressure safety valve
Order no. DSV1/8

Accessory



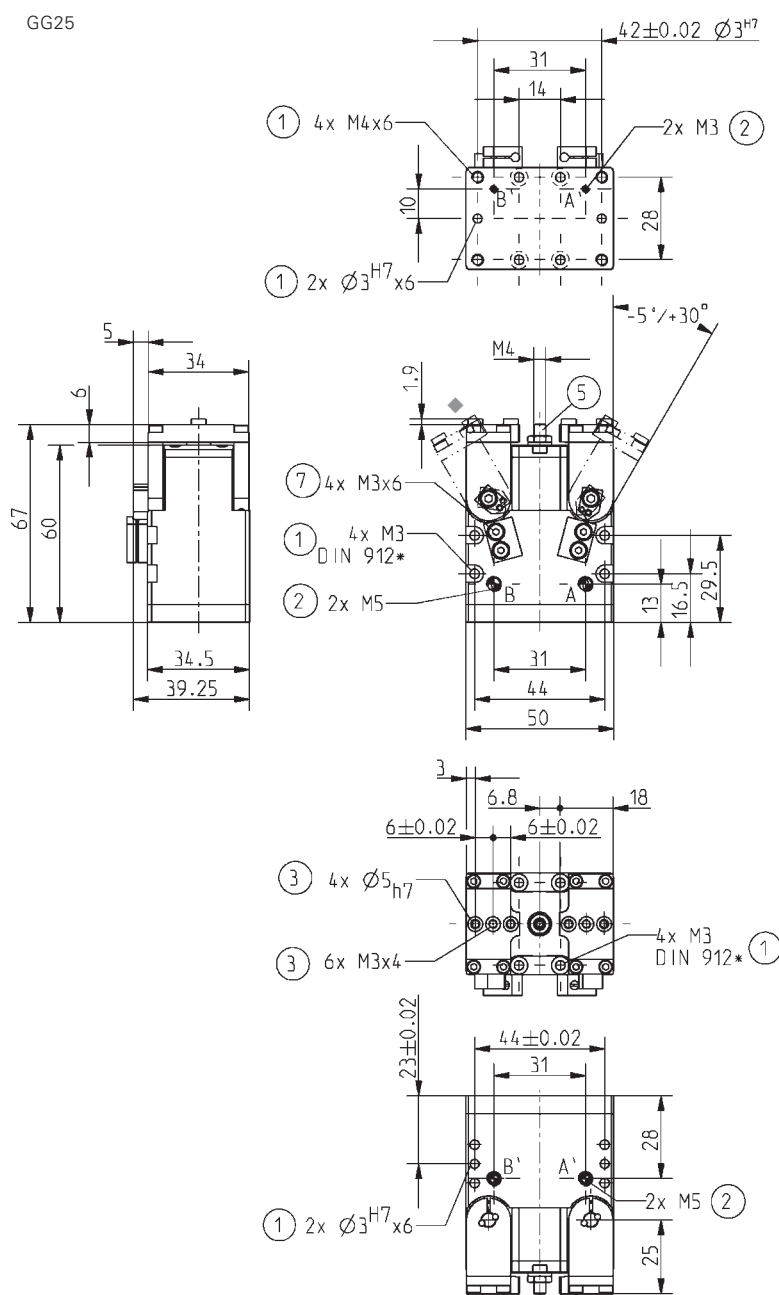
Subject to change without prior notice

Order no.:	GG25N	GG25NC
Stroke per jaw [°]:	35	35
Gripping torque in closing and opening [Nm]:	3,3	-
Gripping torque in closing [Nm]:	-	4,1
Recommended workpiece weight [kg]*:	0,3	0,3
Min. gripping force secured by spring [N]:	-	82
Closing time/opening time [s]:	0,03	0,04
Repeatability [mm]:	0,05	0,05
Min./max. operating pressure [bar]:	3/8	5/8
Min./max. operating temperature [°C]**:	5/80	5/80
Air volume per cycle [cm³]:	13	13
Weight [kg]:	0,34	0,34

All data measured at 6 bar

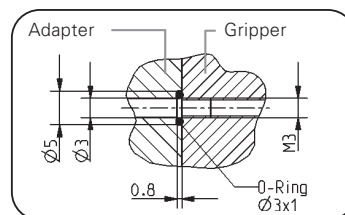
* Value determined with friction coefficient $\mu = 0.1$ and safety factor $v = 2$, distance from top edge of gripper jaws $\blacklozenge = 40$ mm

** High-temperature-resistant model (up to 150 °C) add T to part number



- ① Gripper mounting
- ② Power supply
- ③ Jaw fastening
- ⑤ Stroke adjustment screw
- ⑦ Mounting for mounting block
- A Air connection (closing)
- B Air connection (opening)
- A' Alternate air connection (closing)
- B' Alternate air connection (opening)

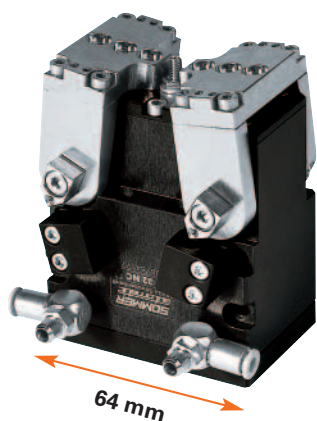
* equivalent to DIN EN ISO 4762



Hoseless air connection

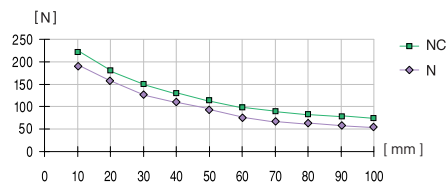
Subject to change without prior notice

Angular Gripper



Gripping force diagram

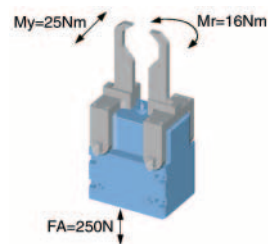
Gripping force as a function of jaw length.



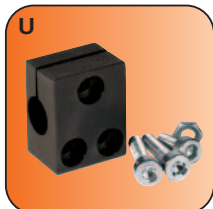
measured from top edge of gripper jaws ♦

Forces and Moments

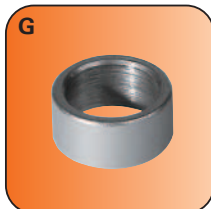
Max allowable forces and moments on jaws.



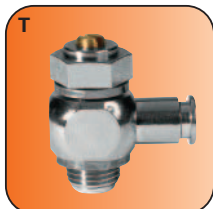
Included with purchase



Mounting block
Order no. KB6.5-03



Centring sleeve
Order no. BDST60800



Pneumatic fittings
Order no. DRVM5x4

Accessory list



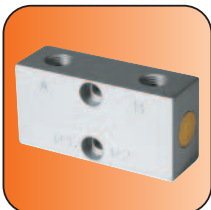
Proximity switch
Order no. NJ6.5-E2S



Cable angled plug
Order no. KAW500

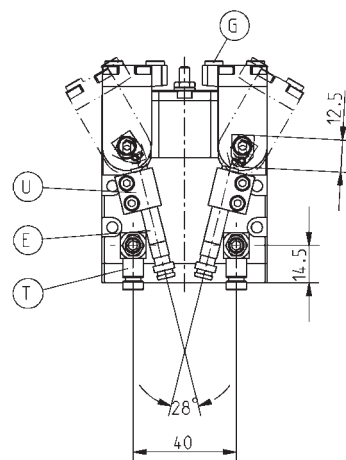
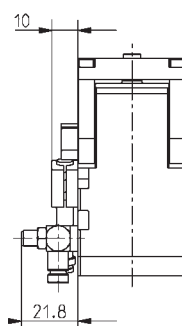


Plug 3-pole
Order no. S12-G-3



Pressure safety valve
Order no. DSV1/8

Accessory



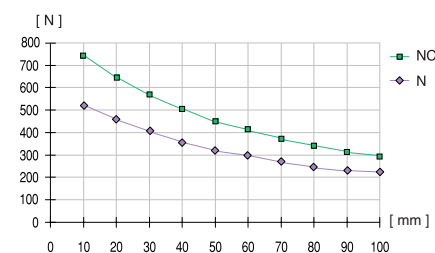
Subject to change without prior notice

Angular Gripper



Gripping force diagram

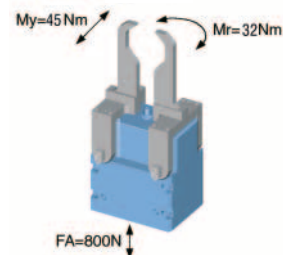
Gripping force as a function of jaw length.



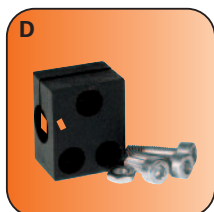
measured from top edge of gripper jaws ◆

Forces and Moments

Max allowable forces and moments on jaws.



Included with purchase



Mounting block
Order no. KB8K



Centring sleeve
Order no. BDST41000

Accessory list



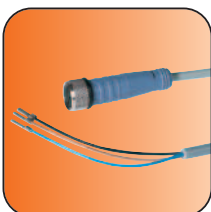
Pneumatic fittings
Order no. WV1/8x6



Proximity switch
Order no. NJ8-E2S



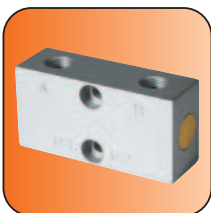
Cable angled plug
Order no. KAW500



Cable straight plug
Order no. KAG500

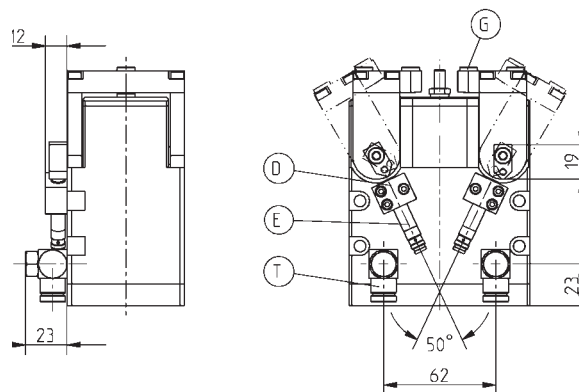


Plug 3-pole
Order no. S12-G-3



Pressure safety valve
Order no. DSV1/8

Accessory



Subject to change without prior notice

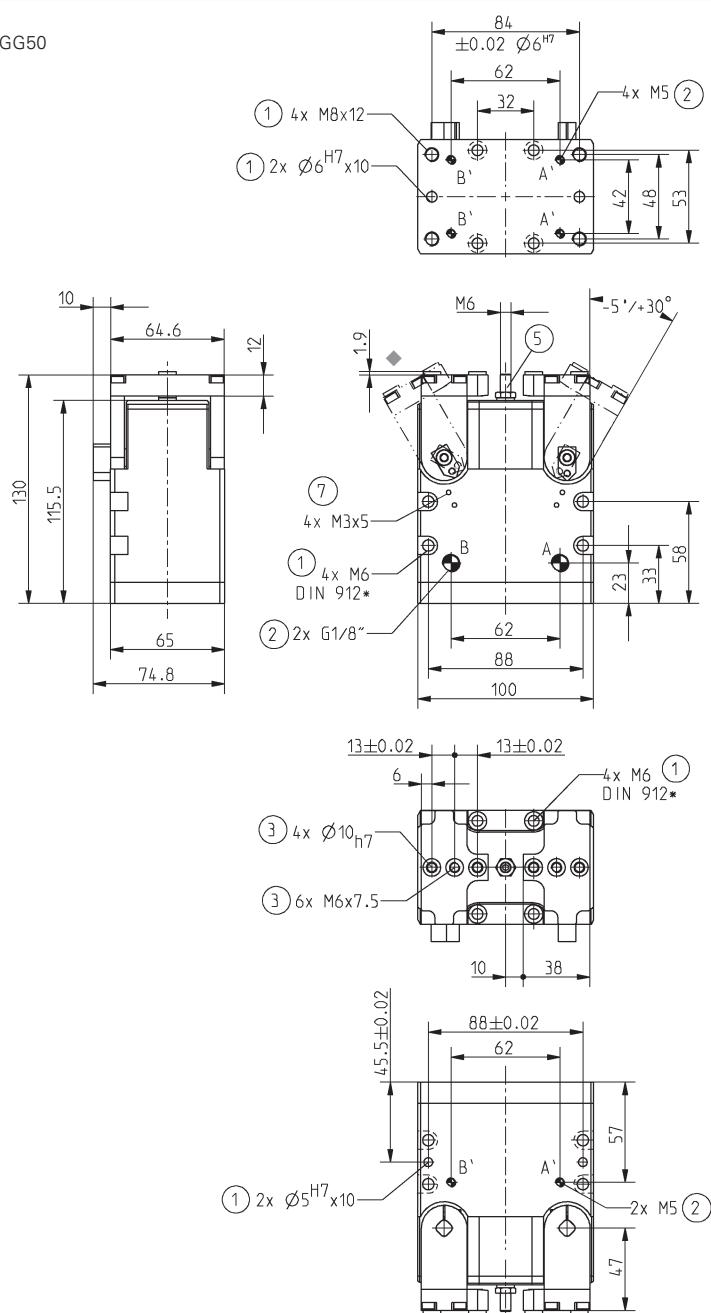
Order no.:	GG50N	GG50NC
Stroke per jaw [°]:	35	35
Gripping torque in closing and opening [Nm]:	32	-
Gripping torque in closing [Nm]:	-	45
Recommended workpiece weight [kg]*:	1,5	2,1
Min. gripping force secured by spring [N]:	-	400
Closing time/opening time [s]:	0,05	0,09
Repeatability [mm]:	0,05	0,05
Min./max. operating pressure [bar]:	3/8	5/8
Min./max. operating temperature [°C]**:	5/80	5/80
Air volume per cycle [cm³]:	109	109
Weight [kg]:	2,3	2,5

All data measured at 6 bar

* Value determined with friction coefficient $\mu = 0.1$ and safety factor $v = 2$, distance from top edge of gripper jaws $\blacklozenge = 60$ mm

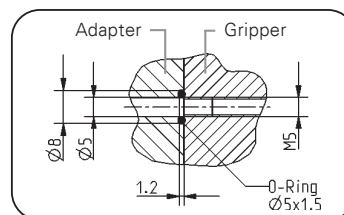
** High-temperature-resistant model (up to 150 °C) add T to part number

GG50



- ① Gripper mounting
- ② Power supply
- ③ Jaw fastening
- ⑤ Stroke adjustment screw
- ⑦ Mounting for mounting block
- A Air connection (closing)
- B Air connection (opening)
- A' Alternate air connection (closing)
- B' Alternate air connection (opening)

* equivalent to DIN EN ISO 4762



Hoseless air connection

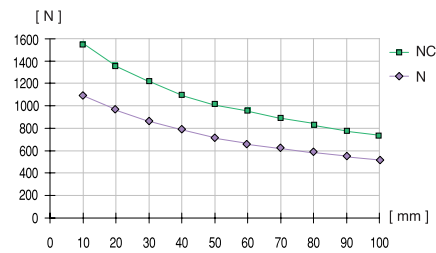
Subject to change without prior notice

Angular Gripper



Gripping force diagram

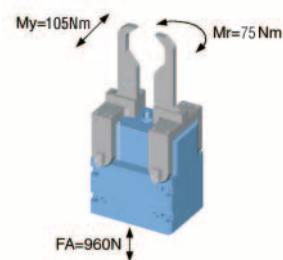
Gripping force as a function of jaw length.



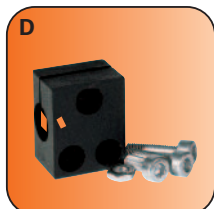
measured from top edge of gripper jaws ◆

Forces and Moments

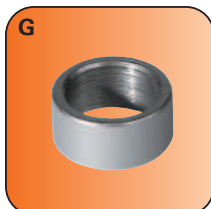
Max allowable forces and moments on jaws.



Included with purchase



Mounting block
Order no. KB8K



Centring sleeve
Order no. BDST41600

Accessory list



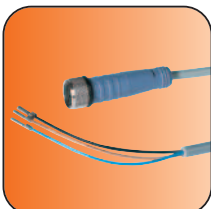
Pneumatic fittings
Order no. WV1/8x8



Proximity switch
Order no. NJ8-E2S



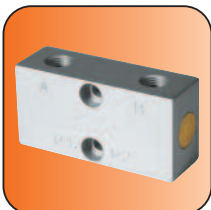
Cable angled plug
Order no. KAW500



Cable straight plug
Order no. KAG500

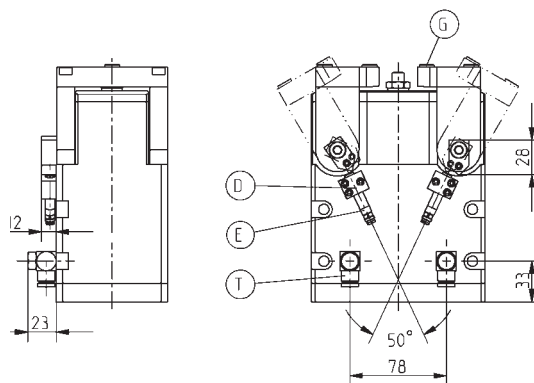


Plug 3-pole
Order no. S12-G-3



Pressure safety valve
Order no. DSV1/8

Accessory



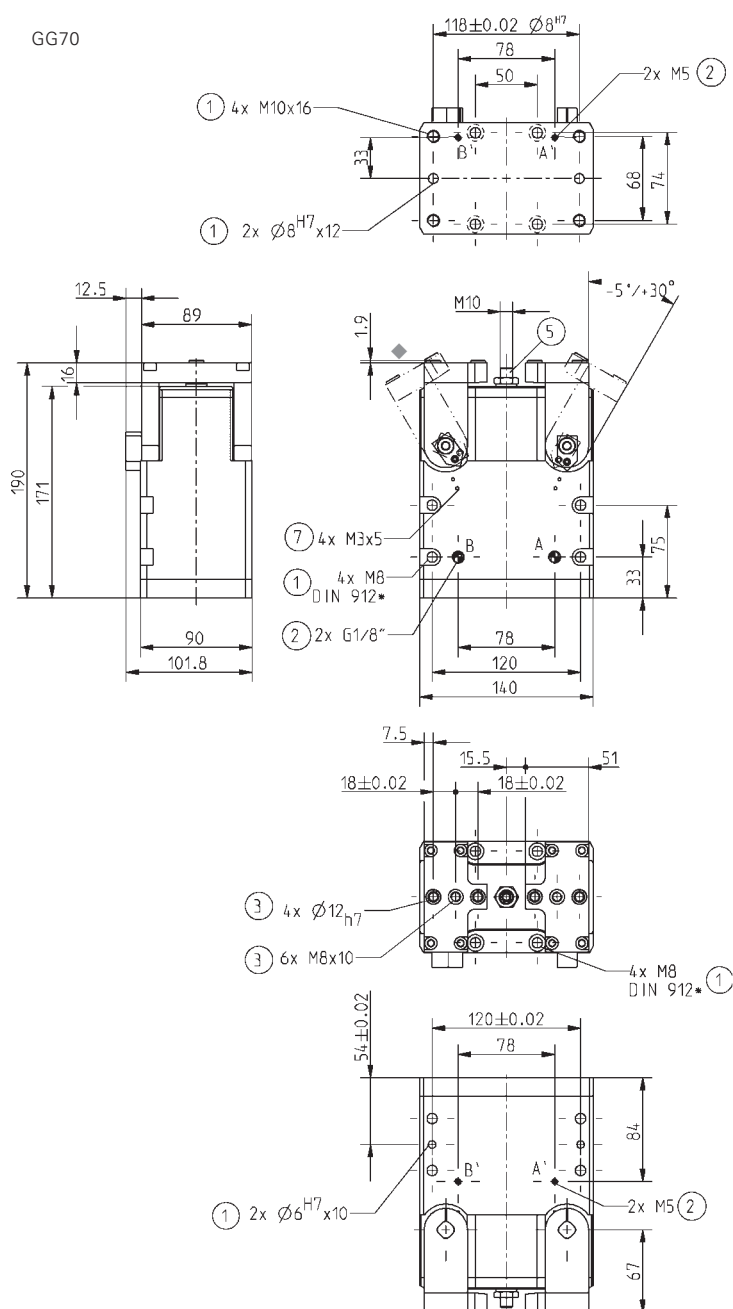
Subject to change without prior notice

Order no.:	GG70N	GG70NC
Stroke per jaw [°]:	35	35
Gripping torque in closing and opening [Nm]:	87	-
Gripping torque in closing [Nm]:	-	122
Recommended workpiece weight [kg]*:	3,2	4,5
Min. gripping force secured by spring [N]:	-	773
Closing time/opening time [s]:	0,1	0,16
Repeatability [mm]:	0,05	0,05
Min./max. operating pressure [bar]:	3/8	5/8
Min./max. operating temperature [°C]**:	5/80	5/80
Air volume per cycle [cm³]:	285	285
Weight [kg]:	6,6	6,9

All data measured at 6 bar

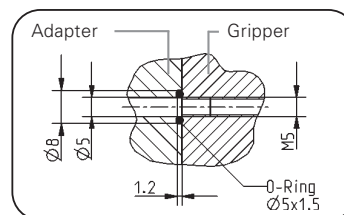
* Value determined with friction coefficient $\mu = 0.1$ and safety factor $v = 2$, distance from top edge of gripper jaws $\blacklozenge = 70$ mm

** High-temperature-resistant model (up to 150 °C) add T to part number



- ① Gripper mounting
- ② Power supply
- ③ Jaw fastening
- ⑤ Stroke adjustment screw
- ⑦ Mounting for mounting block
- A Air connection (closing)
- B Air connection (opening)
- A' Alternate air connection (closing)
- B' Alternate air connection (opening)

* equivalent to DIN EN ISO 4762



Hoseless air connection

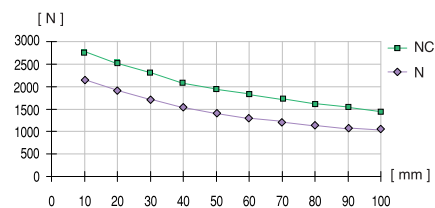
Subject to change without prior notice

Angular Gripper



Gripping force diagram

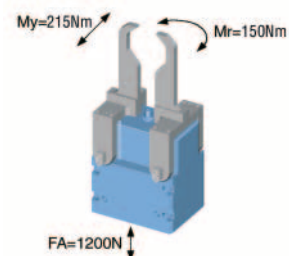
Gripping force as a function of jaw length.



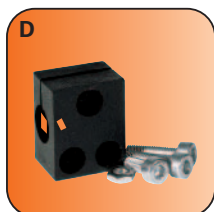
measured from top edge of gripper jaws ◆

Forces and Moments

Max allowable forces and moments on jaws.



Included with purchase



Mounting block
Order no. KB8K



Centring sleeve
Order no. BDST42000

Accessory list



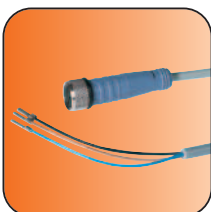
Pneumatic fittings
Order no. WV1/4x8



Proximity switch
Order no. NJ8-E2S



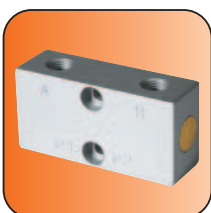
Cable angled plug
Order no. KAW500



Cable straight plug
Order no. KAG500

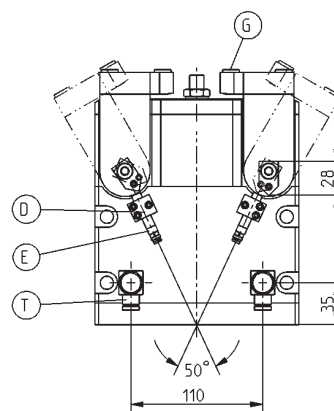
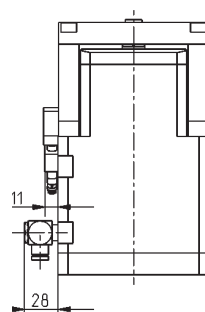


Plug 3-pole
Order no. S12-G-3



Pressure safety valve
Order no. DSV1/8

Accessory



Subject to change without prior notice

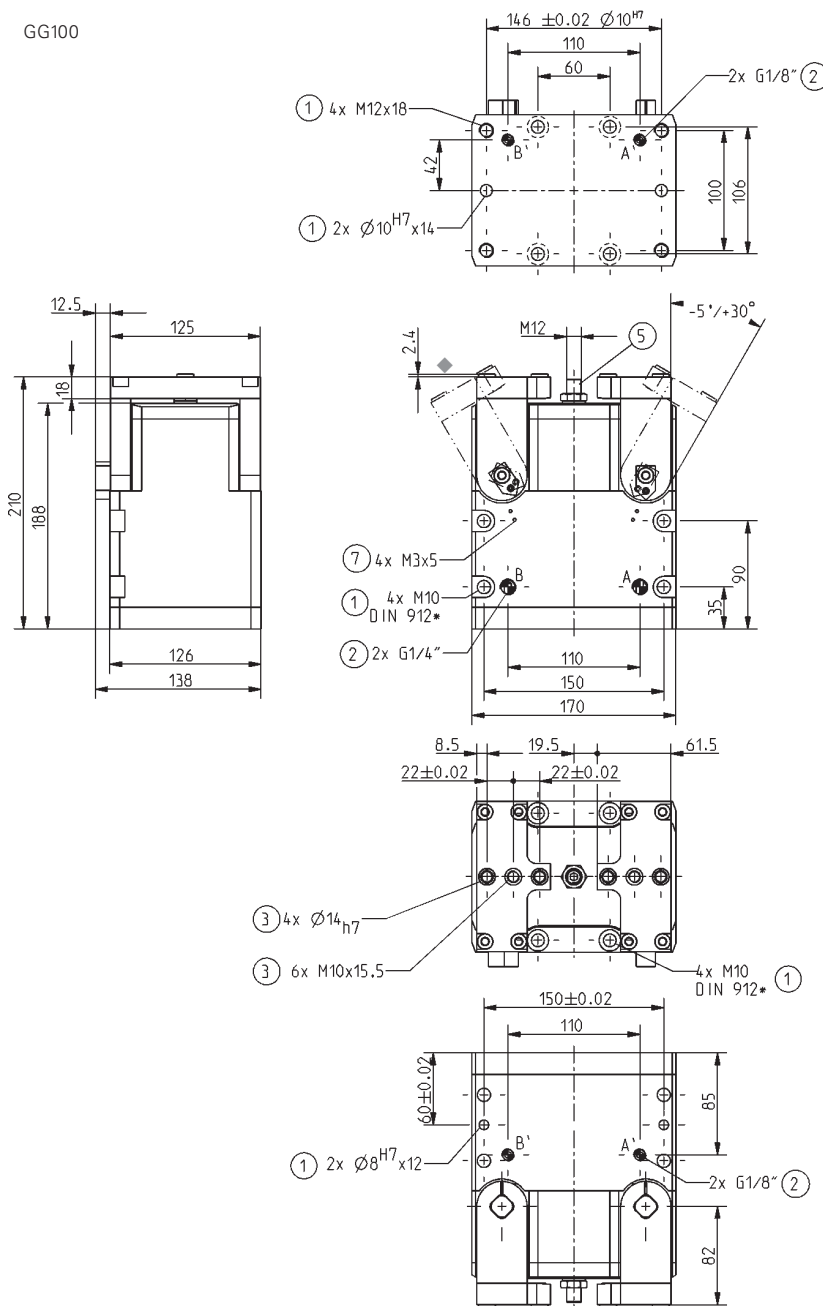
Order no.:	GG100N	GG100NC
Stroke per jaw [°]:	35	35
Gripping torque in closing and opening [Nm]:	198	-
Gripping torque in closing [Nm]:	-	264
Recommended workpiece weight [kg]*:	6,2	8,3
Min. gripping force secured by spring [N]:	-	1528
Closing time/opening time [s]:	0,2	0,4
Repeatability [mm]:	0,05	0,05
Min./max. operating pressure [bar]:	3/8	5/8
Min./max. operating temperature [°C]**:	5/80	5/80
Air volume per cycle [cm³]:	700	700
Weight [kg]:	12,5	13

All data measured at 6 bar

* Value determined with friction coefficient $\mu = 0.1$ and safety factor $v = 2$, distance from top edge of gripper jaws $\blacklozenge = 80$ mm

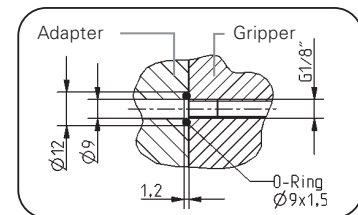
** High-temperature-resistant model (up to 150 °C) add T to part number

GG100



- ① Gripper mounting
- ② Power supply
- ③ Jaw fastening
- ⑤ Stroke adjustment screw
- ⑦ Mounting for mounting block
- ④ Air connection (closing)
- ⑥ Air connection (opening)
- ⑧ Alternate air connection (closing)
- ⑩ Alternate air connection (opening)

* equivalent to DIN EN ISO 4762



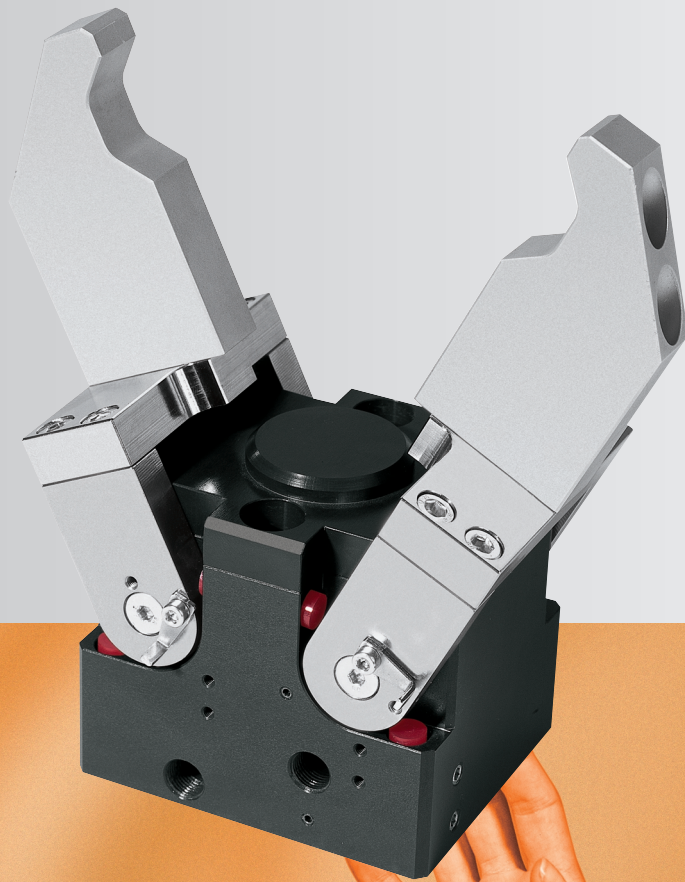
Hoseless air connection

Subject to change without prior notice



*Angular **Grippers***

pneumatic



GG 2000 Series

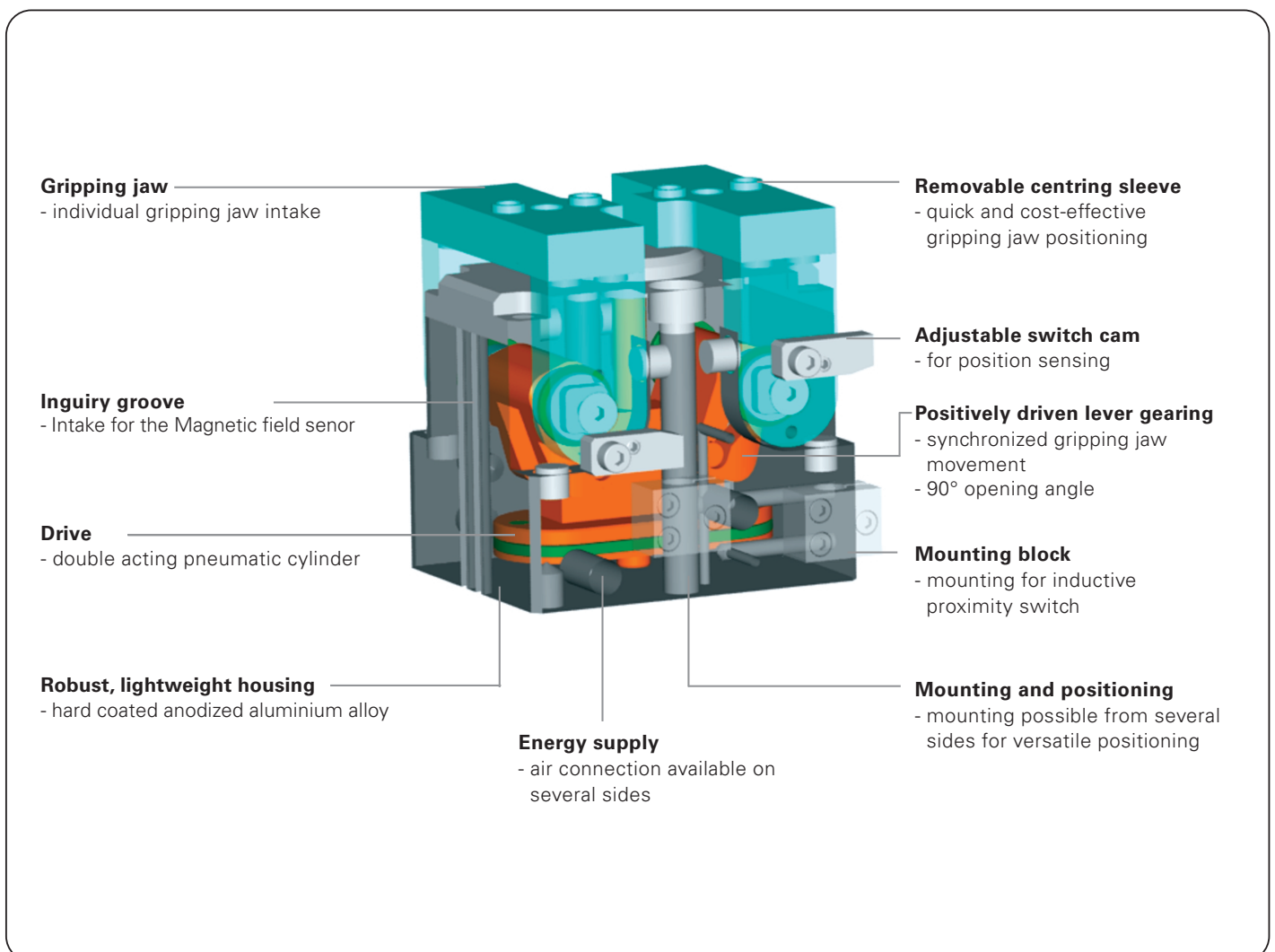
SOMMER
automatic

Angular Gripper

Features

- infinitely adjustable stroke up to 90° per jaw
- sealed mechanics via sealing ring in rotation point
- position sensing via inductive proximity switch or magnetic field sensor possible

Functional diagram

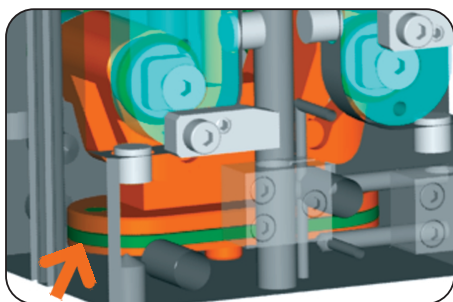


Terms

Gripping force:	arithmetic sum of the individual forces occurring at the jaws
Closing/opening time:	time required by the gripping jaws to turn through the entire angle
Repeatability:	at end stops after 50/100 consecutive cycles
Cycle:	one complete movement of the piston forward and back
Maintenance:	recommended at 10 mil. cycles (please see the owner's manual for conditions, download from www.sommer-automatic.com)
	<ul style="list-style-type: none"> • long maintenance intervals keep costs down • long lifespan

Order no.	Stroke per jaw	Gripping torque in opening	Gripping torque in closing	Self-locking via
GG2060N	90°	29 Nm	29 Nm	DSV *

*DSV= Pressure safety valves (Order no. DSV1/8)



Drive

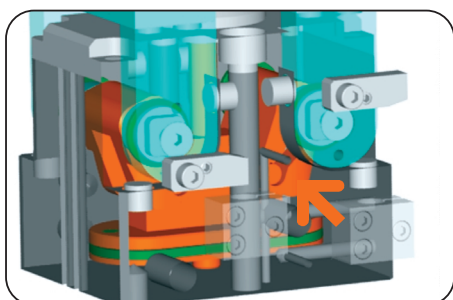
Double acting pneumatic cylinder with oval pistons

- Maximum drive moment by closing and opening
- gripping torque up to 29 Nm



Sealed pivot point

- For use under extreme conditions
- stable double sided bearing
- 90° opening angle per jaw

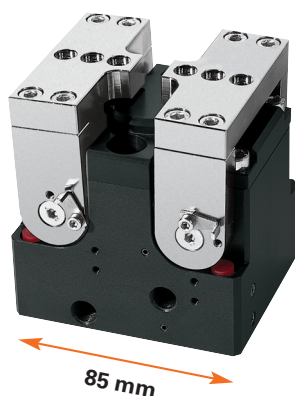


Power transfer

Positively driven lever gearing with linear force sequence

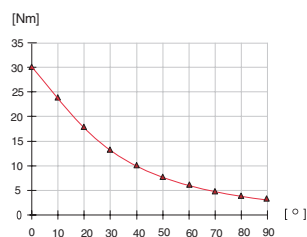
- optimum transmission of power to gripping force
- self-centering
- synchronization
- high repeatability

Angular Gripper



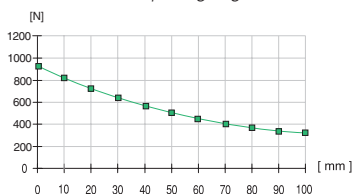
Gripping moment diagram

Gripping force as a function of jaw length.



Gripping force diagram

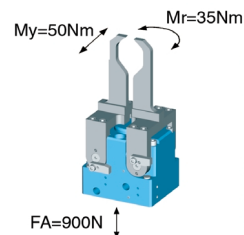
Gripping force in relation to the jaw length, measured at 0° opening angle.



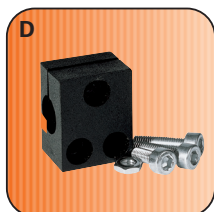
measured from top edge of gripper jaws ◆

Forces and Moments

Max allowable forces and moments on jaws.



Included with purchase



Mounting block
Order no. KB8K



Centring sleeve
Order no. BDST40800

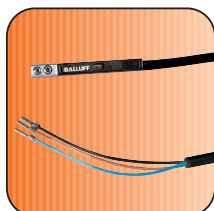
Accessory list



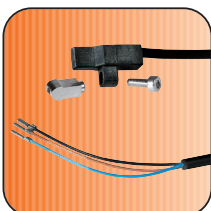
Pneumatic fittings
Order no. WV1/8x6



Proximity switch
Order no. NJ8-E2S



Magnetic field sensor
Order no. MFS303KHC30



Magnetic field sensor
Order no. MFS103KHC42

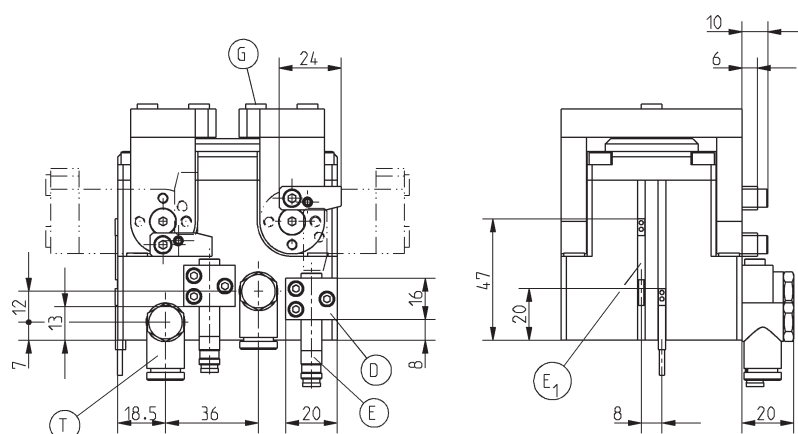


Plug 3-pole
Order no. S12-G-3



Pressure safety valve
Order no. DSV1/8

Accessory



Subject to change without prior notice



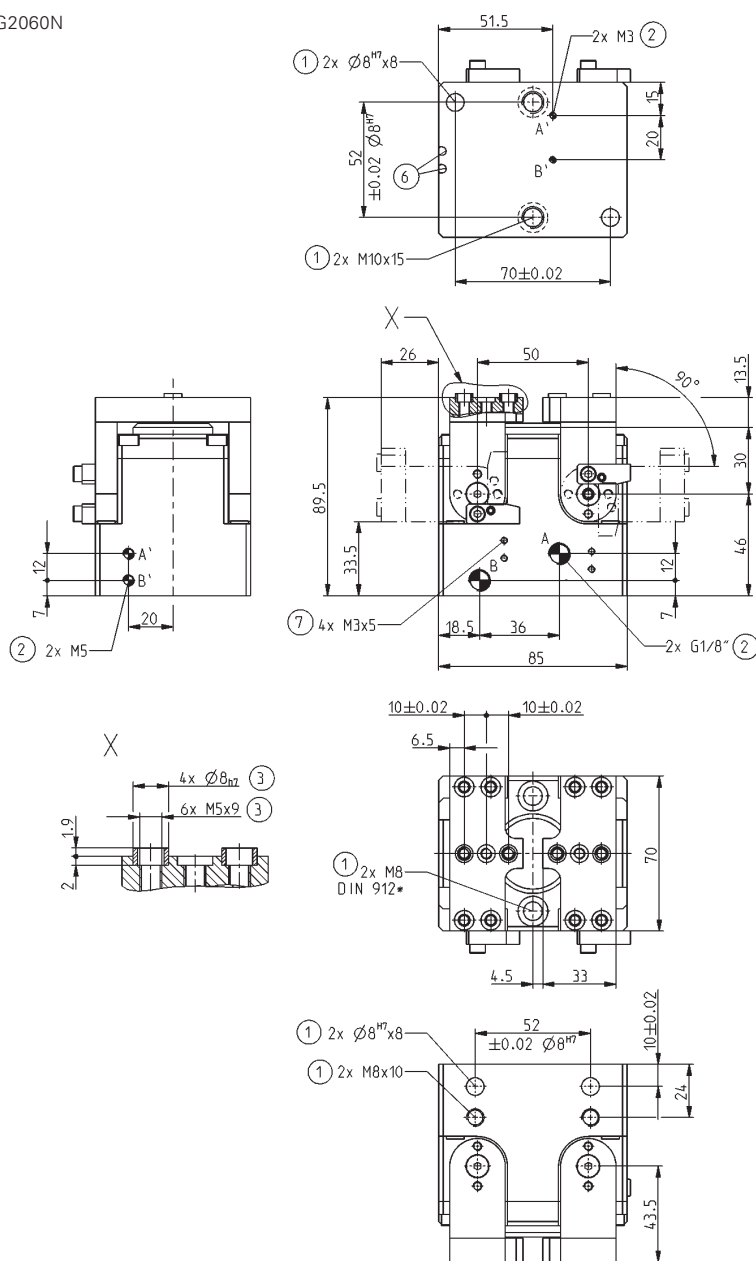
Order no.:	GG2060N
Stroke per jaw [°]:	90
Gripping torque in closing and opening [Nm]:	29
Recommended workpiece weight [kg]*:	1,4
Closing time/opening time [s]:	0,2
Repeatability +/- [mm]:	0,1
Min./mass. operating pressure [bar]:	3/8
Min./mass. operating temperature [°C]**:	5/80
Air volume per cycle [cm³]:	55
Weight [kg]:	1,9

All data measured at 6 bar

* Value determined with friction coefficient $\mu = 0.1$ and safety factor $\nu = 2$, opening angle 0°
distance from top edge of gripper jaw $\blacklozenge = 60$ mm

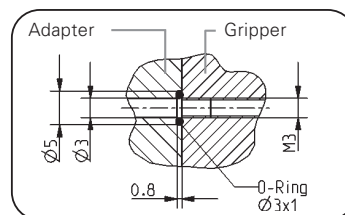
** High-temperature-resistant model (up to 150°C) add T to part number

GG2060N



- ① Gripper mounting
- ② Power supply
- ③ Jaw fastening
- ⑤ Stroke adjustment screw
- ⑦ Mounting for mounting block
- A Air connection (closing)
- B Air connection (opening)
- A' Alternate air connection (closing)
- B' Alternate air connection (opening)

* equivalent to DIN EN ISO 4762

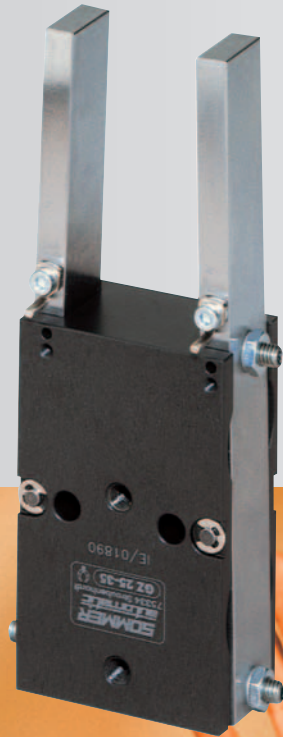


Hoseless power supply



Finger **Grippers**

pneumatic



GZ Series

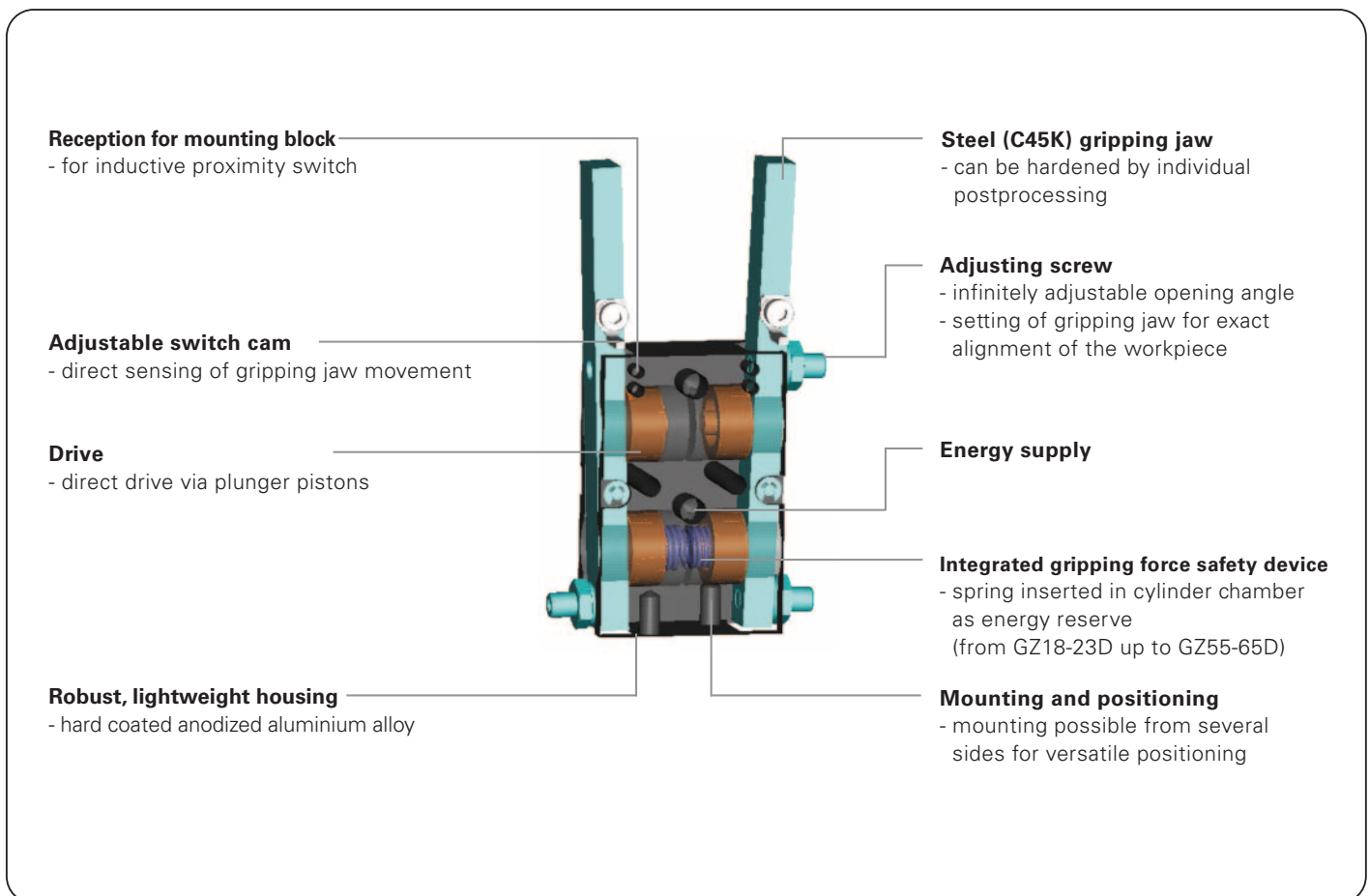
SOMMER
automatic

Finger Gripper

Features

- with dominant gripper jaw for exact workpiece alignment
- infinitely adjustable opening angle
- designs available with mechanical gripping force safety device

Functional diagram





Terms

- Gripping force:** arithmetic sum of the individual forces occurring at the jaws
- Closing/opening time:** time required by the gripping jaws to turn through the entire angle
- Repeatability:** at end stops after 50/100 consecutive cycles
- Cycle:** one complete movement of the piston forward and back
- Maintenance:** recommended at 10 mil. cycles
(please see the owner's manual for conditions,
download from www.sommer-automatic.com)
- long maintenance intervals keep costs down
 - long lifespan

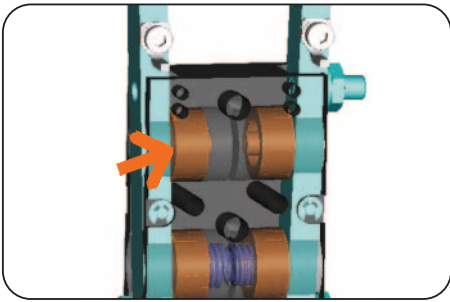
Model guide

- E:** single acting cylinder with spring return
- D:** double acting cylinder with spring to maintain gripping force from a size of GZ18-23D
- G:** devided design

Order no.	Stroke per jaw	Gripping torque in opening	Gripping torque in closing	Self-locking via
GZ8-16E	5°	-	0,12 Nm	DSV*
GZ8-16D	5°	0,15 Nm	0,15 Nm	DSV*
GZ11-18E	4,5°	-	0,48 Nm	DSV*
GZ18-23D	3,5°	0,56 Nm	1,10 Nm	Spring
GZ25-35E	4°	-	4 Nm	Spring
GZ25-35G	4°	3,4 Nm	5,4 Nm	Spring
GZ25-35D	4°	3,4 Nm	5,4 Nm	Spring
GZ55-65D	4°	3,4 Nm	5,4 Nm	Spring

*DSV= Pressure safety valves (Order no. DSV1/8)

Finger Gripper



Drive

E Models:

single acting pneumatic cylinder
return with spring

- low control effort

D and G Models:

double acting pneumatic cylinder

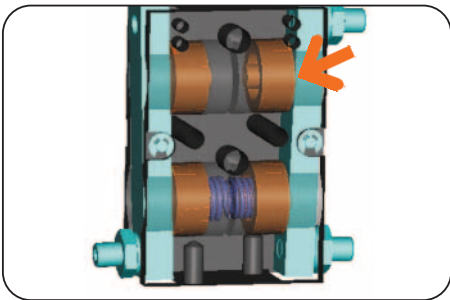
- for quick cycle times



Stroke adjustment

Alignment or fixing of a jaw

- application-specific
- infinitely adjustable opening stroke



Power transfer

Via plunger pistons

- direct
- maximum force transmission

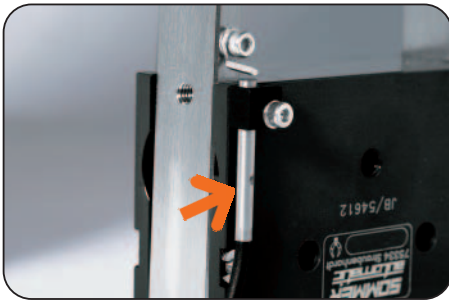


Connections

Energy supply, attachment and positioning possibilities

Adaptable to multiple mounting configuration

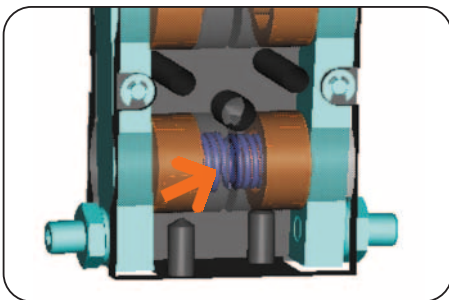
- optimal integration into the workroom through individual mounting situation
- tubeless direct connection possibility (no additional hose needed)



Position sensing

switch cam fixed directly to the gripper jaw

- process safe
- adjustable
- for inductive proximity switch with 3 mm diameter



Gripping force safety device

Design D and G

spring integrated into cylinder as energy reserve

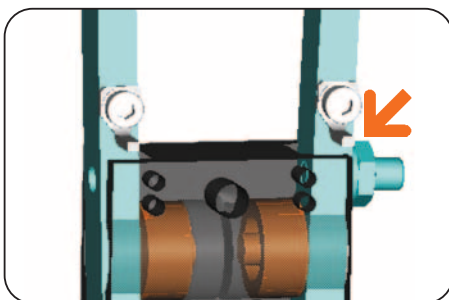
- permanent maintenance of gripping force
- optimum coordination of gripping force and force secured by spring
- compact design



Gripper jaws

in C45K steel

- individual postprocessing



Dominant gripper jaw

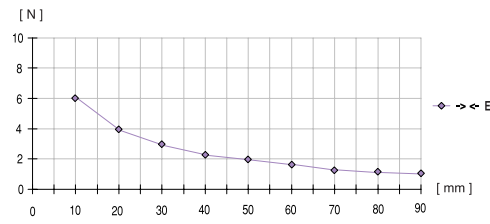
- adjustable gripping centre
- through one-side larger piston (D) or variable size springs (E)

Finger Gripper



Gripping force diagram

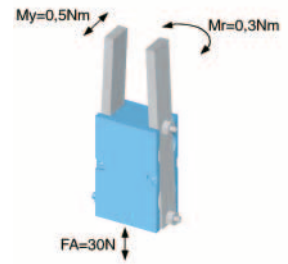
Gripping force as a function of jaw length.



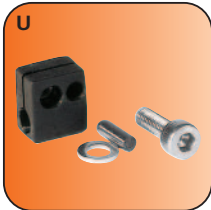
measured from top edge of housing ♦

Forces and Moments

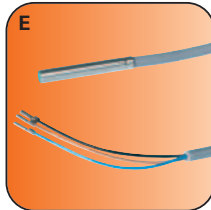
Max allowable forces and moments on jaws.



Accessory list



Mounting block
Order no. KB3M



Proximity switch
Order no. NJ3-E2-03



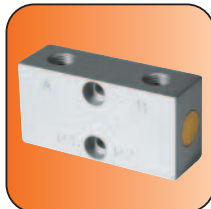
Pneumatic fittings
Order no. WVM5



Pneumatic fittings
Order no. GVM5

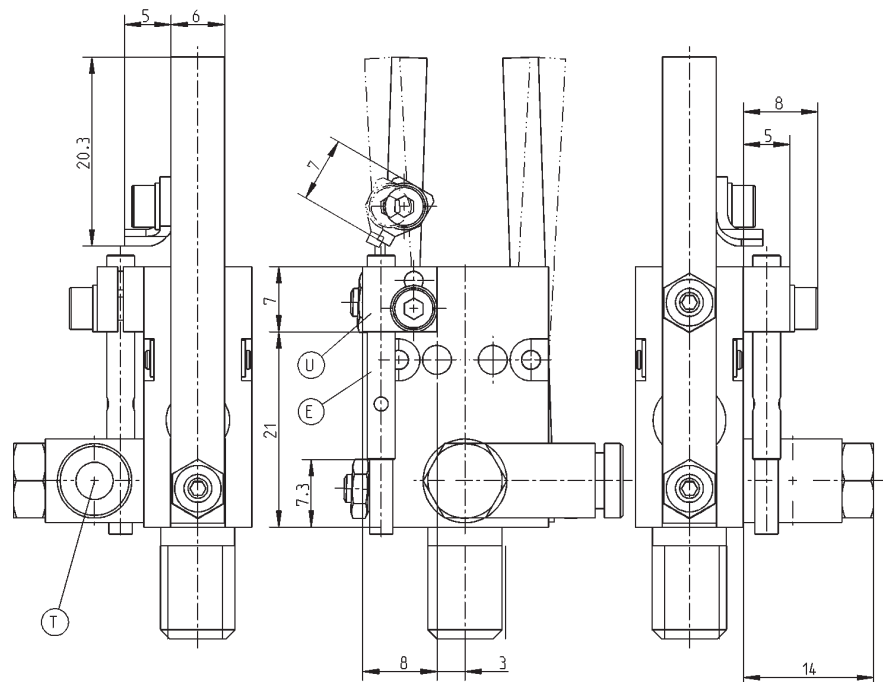


Plug 3-pole
Order no. S12-G-3



Pressure safety valve
Order no. DSV1/8

Accessory



Subject to change without prior notice



Order no.:	GZ8-16E
Stroke per jaw [°]:	5
Gripping torque in closing [Nm]:	0,12
Gripping torque in opening [Nm]:	-
Gripping force in closing [N]**:	6
Gripping force in opening [N]**:	-
Recommended workpiece weight [g]*:	20
Min. gripping force secured by spring [N]**:	-
Closing time/opening time [s]:	0,02
Repeatability [mm]:	0,1
Min./max. operating pressure [bar]:	3/8
Min./max. operating temperature [°C]**:	5/80
Air volume per cycle [cm ³]:	0,23
Weight [g]:	30

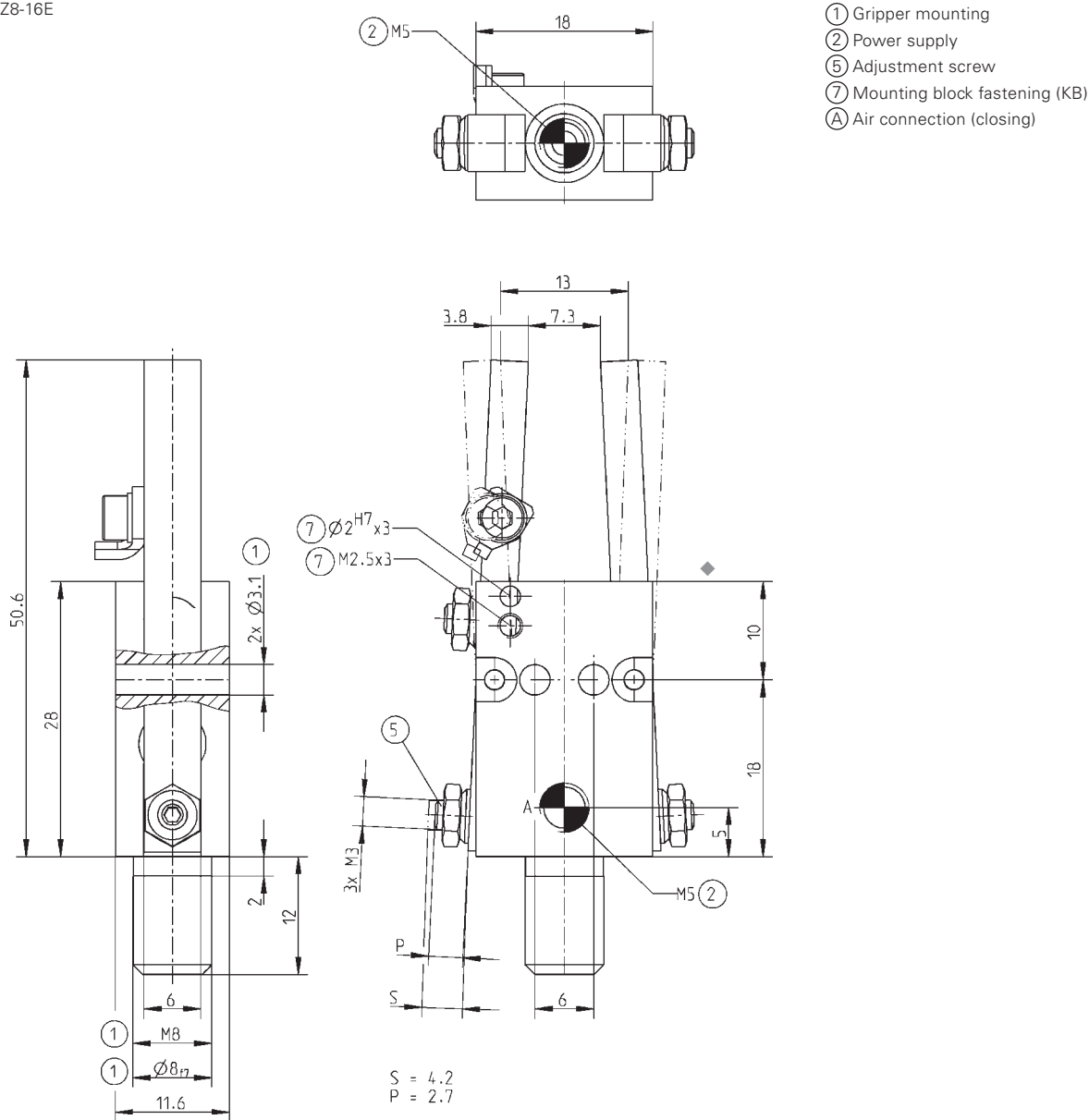
All data measured at 6 bar

* Value determined with friction coefficient $\mu = 0.1$ and safety factor $v = 2$, distance from top edge of housing $\blacklozenge = 20$ mm

** High-temperature-resistant model (up to 150°C) add T to part number

*** measured at 10 mm from top edge of housing \blacklozenge

GZ8-16E

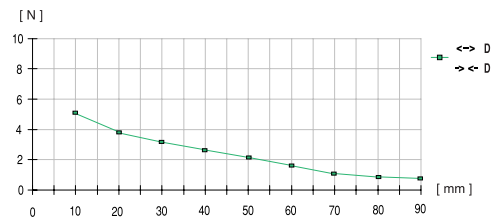


Finger Gripper



Gripping force diagram

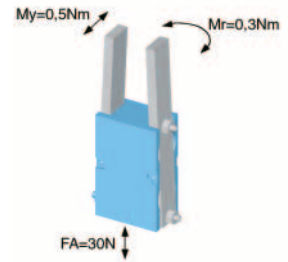
Gripping force as a function of jaw length.



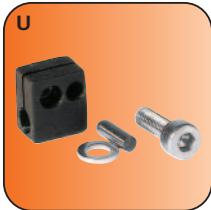
measured from top edge of housing ♦

Forces and Moments

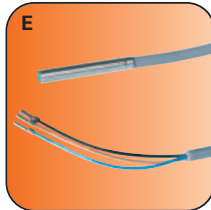
Max allowable forces and moments on jaws.



Accessory list



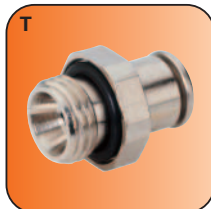
Mounting block
Order no. KB3M



Proximity switch
Order no. NJ3-E2-03



Pneumatic fittings
Order no. WVM5



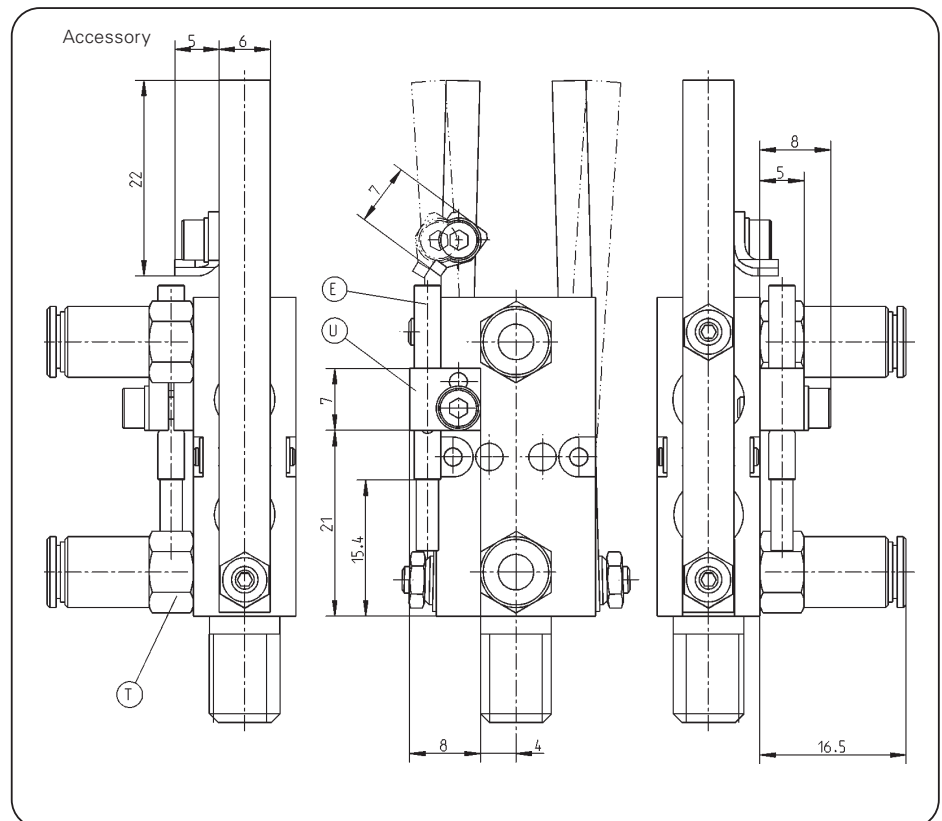
Pneumatic fittings
Order no. GVM5



Plug 3-pole
Order no. S12-G-3



Pressure safety valve
Order no. DSV1/8



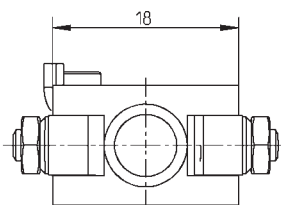
Subject to change without prior notice

All data measured at 6 bar

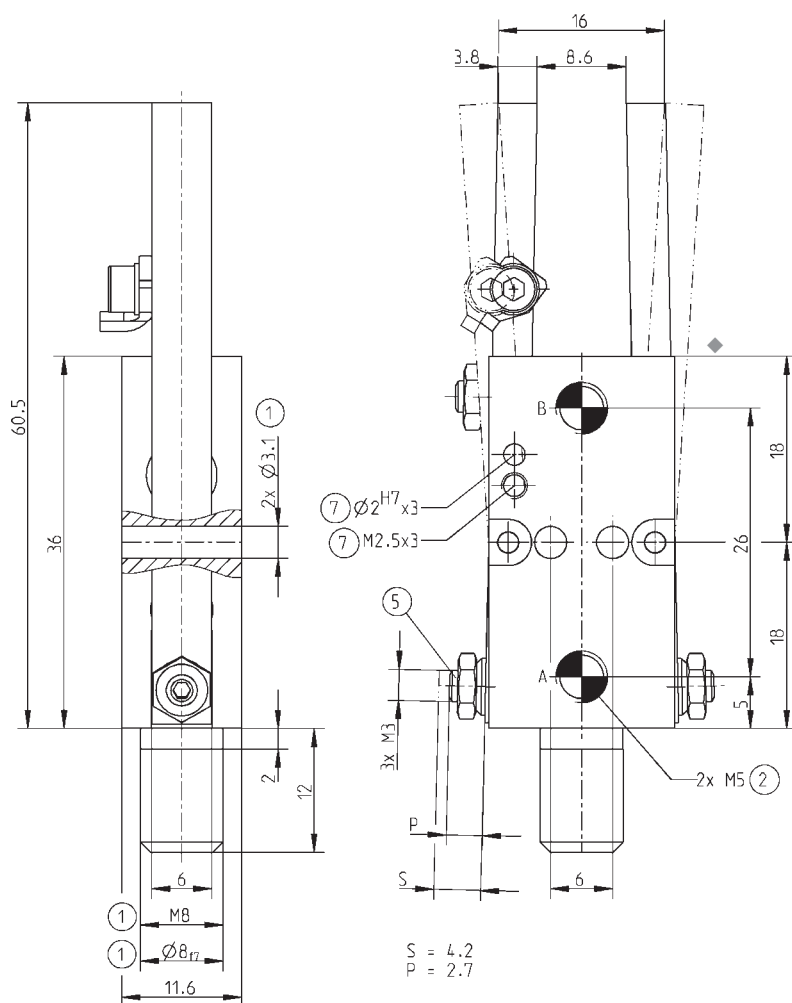
** High-temperature-resistant model (up to 150 °C) add T to part number

*** measured at 10 mm from top edge of housing ◆

measured at 16 mm from top edge of housing

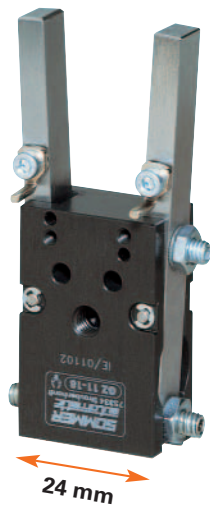


- ① Gripper mounting
- ② Power supply
- ⑤ Adjustment screw
- ⑦ Mounting block fastening (KB)
- Ⓐ Air connection (closing)
- Ⓑ Air connection (opening)



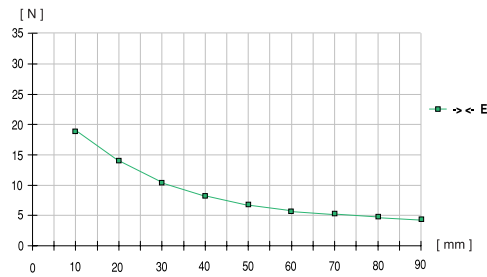
SOMMER
automatic

Finger Gripper



Gripping force diagram

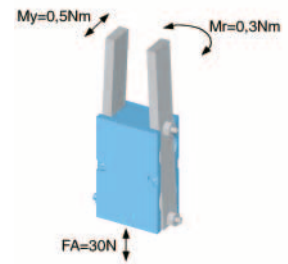
Gripping force as a function of jaw length.



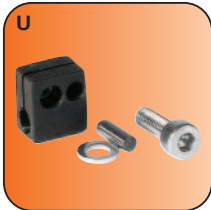
measured from top edge of housing ◆

Forces and Moments

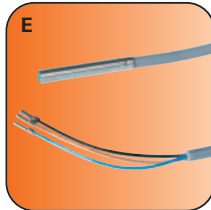
Max allowable forces and moments on jaws.



Accessory list



Mounting block
Order no. KB3M



Proximity switch
Order no. NJ3-E2-03



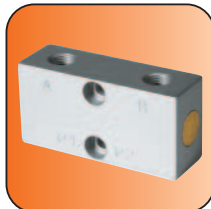
Pneumatic fittings
Order no. WVM5



Pneumatic fittings
Order no. GVM5

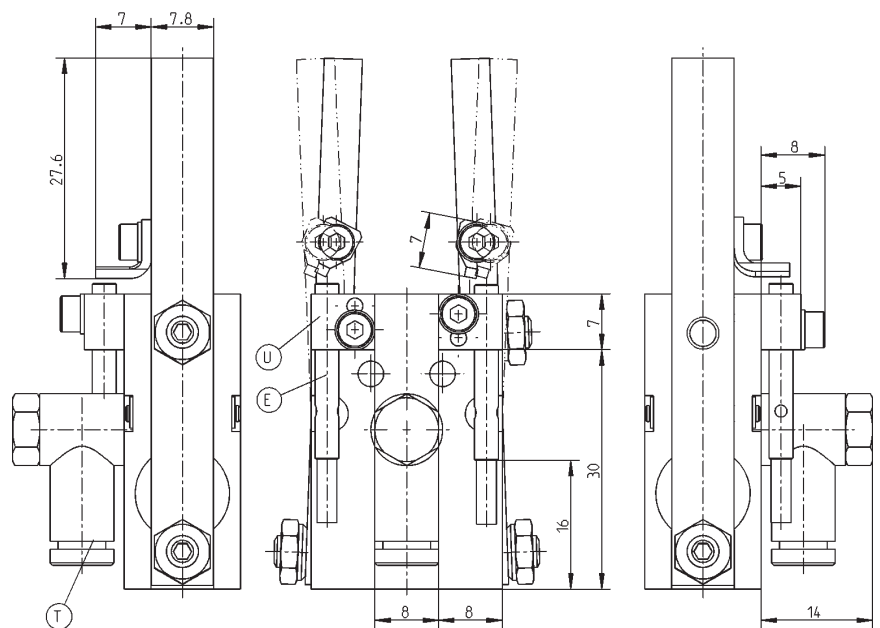


Plug 3-pole
Order no. S12-G-3



Pressure safety valve
Order no. DSV1/8

Accessory



Subject to change without prior notice



Order no.:	GZ11-18E
Stroke per jaw [°]:	4,5
Gripping torque in closing [Nm]:	0,48
Gripping torque in opening [Nm]:	-
Gripping force in closing [N]**:	19,2
Gripping force in opening [N]**:	-
Recommended workpiece weight [g]*:	58
Min. gripping force secured by spring [N]**:	-
Closing time/opening time [s]:	0,2
Repeatability [mm]:	0,1
Min./max. operating pressure [bar]:	4/8
Min./max. operating temperature [°C]**:	5/80
Air volume per cycle [cm³]:	1
Weight [g]:	63

All data measured at 6 bar

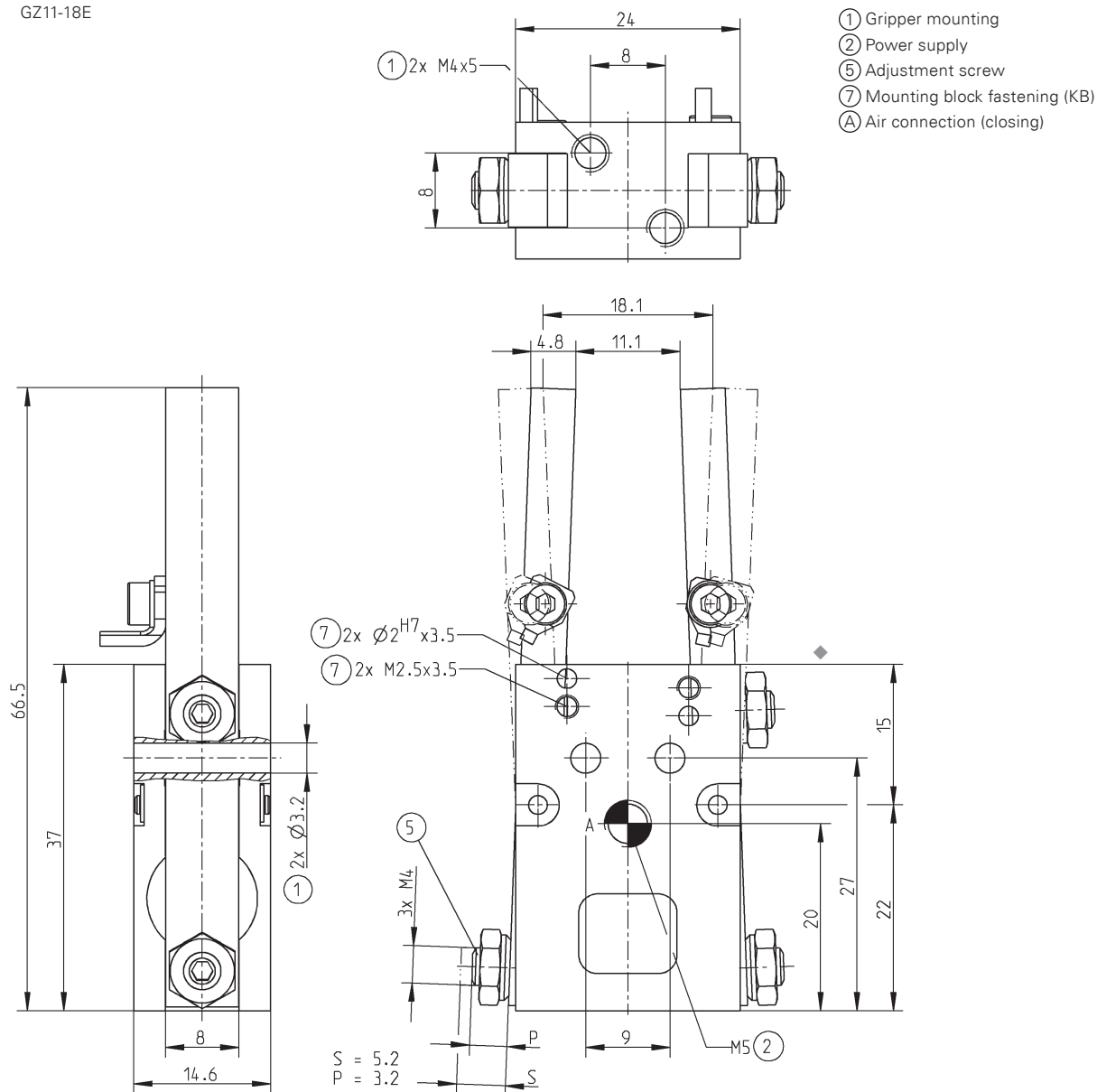
* Value determined with friction coefficient $\mu = 0.1$ and safety factor $v = 2$,

distance from top edge of housing $\blacklozenge = 20$ mm

** High-temperature-resistant model (up to 150 °C) add T to part number

*** measured at 10 mm from top edge of housing \blacklozenge

GZ11-18E



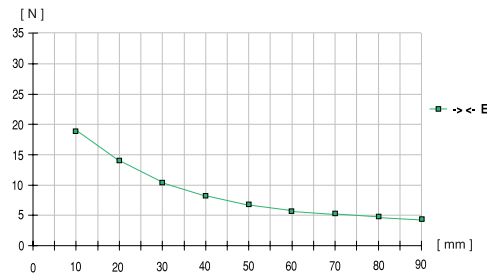
Subject to change without prior notice

Finger Gripper



Gripping force diagram

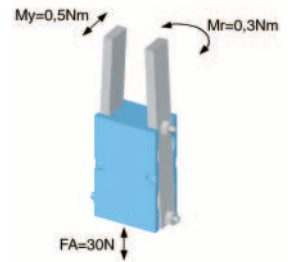
Gripping force as a function of jaw length.



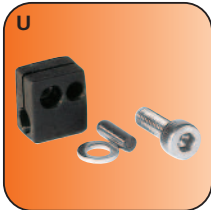
measured from top edge of housing ◆

Forces and Moments

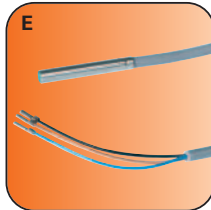
Max allowable forces and moments on jaws.



Accessory list



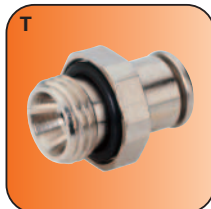
Mounting block
Order no. KB3M



Proximity switch
Order no. NJ3-E2-03



Pneumatic fittings
Order no. VWM5



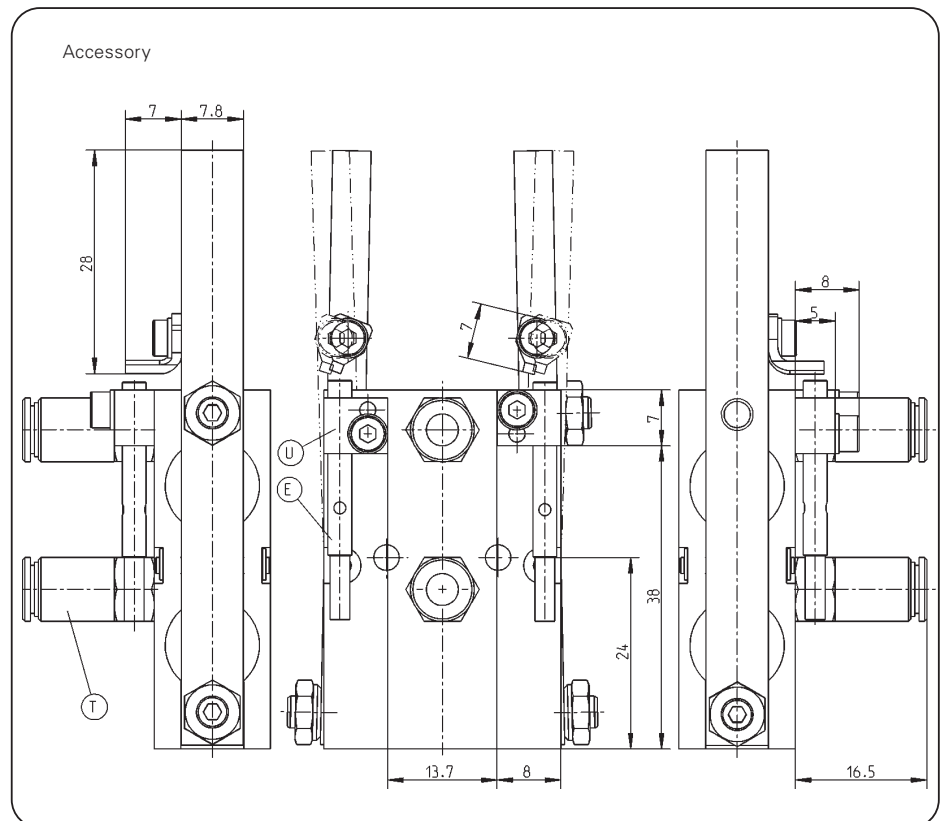
Pneumatic fittings
Order no. GVM5



Plug 3-pole
Order no. S12-G-3



Pressure safety valve
Order no. DSV1/8



Subject to change without prior notice



Order no.:	GZ18-23D
Stroke per jaw [°]:	4
Gripping torque in closing [Nm]:	1,1
Gripping torque in opening [Nm]:	0,56
Gripping force in closing [N]**:	34,4
Gripping force in opening [N]**:	17,5
Recommended workpiece weight [g]*:	57
Min. gripping force secured by spring [N]**:	17
Closing time/opening time [s]:	0,02
Repeatability [mm]:	0,2/0,03
Min./max. operating pressure [bar]:	5/8
Min./max. operating temperature [°C]**:	5/80
Air volume per cycle [cm³]:	0,5
Weight [g]:	79

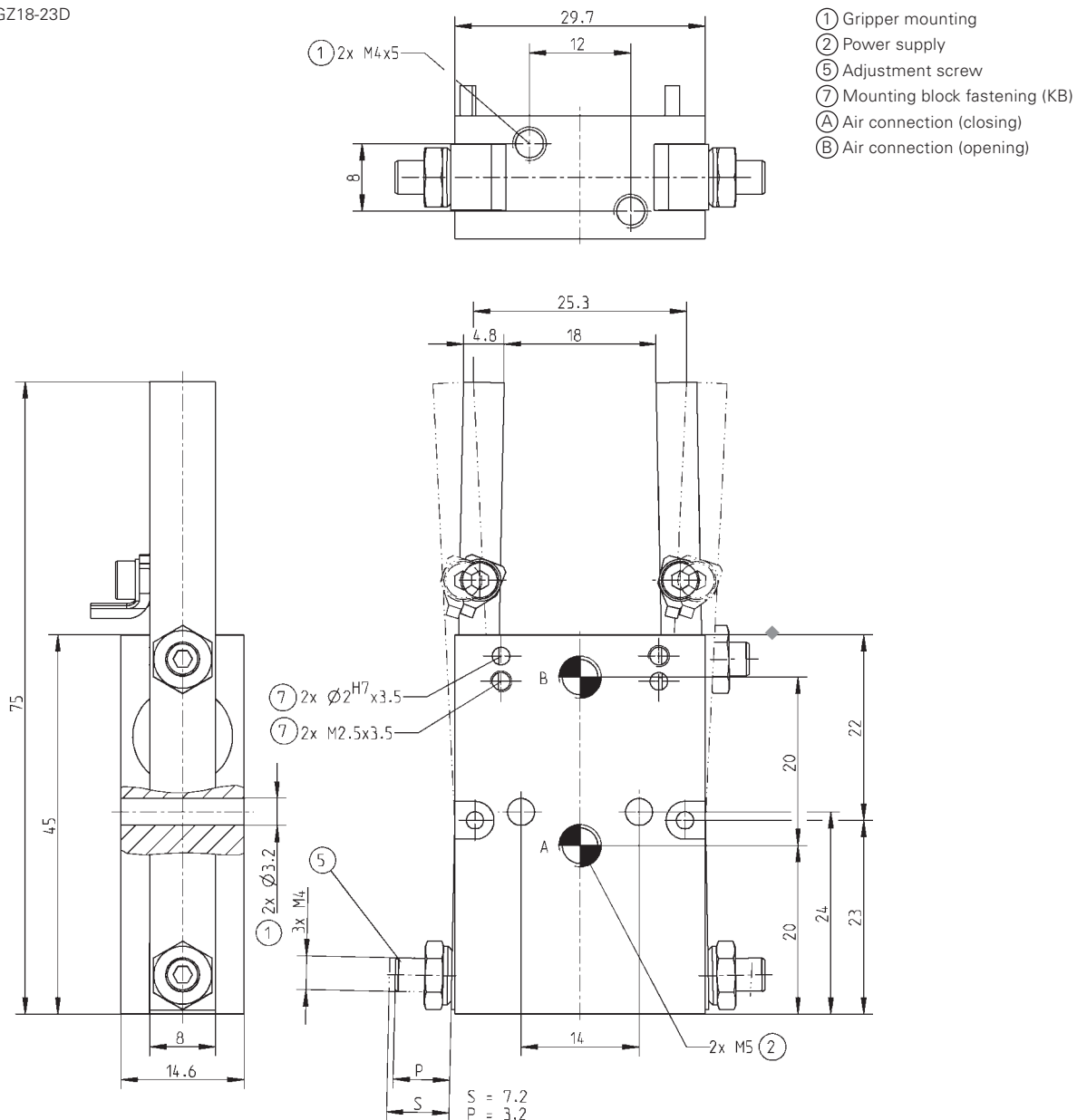
All data measured at 6 bar

* Value determined with friction coefficient $\mu = 0.1$ and safety factor $v = 2$, distance from top edge of housing $\blacklozenge = 20$ mm

** High-temperature-resistant model (up to 150°C) add T to part number

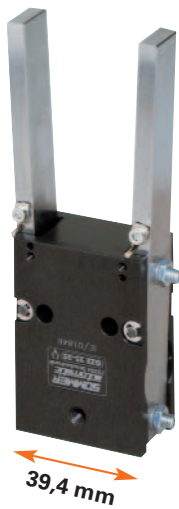
*** measured at 10 mm from top edge of housing \blacklozenge

GZ18-23D



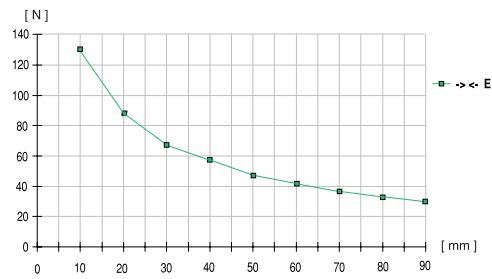
Subject to change without prior notice

Finger Gripper



Gripping force diagram

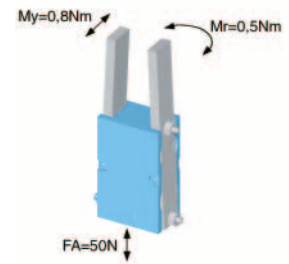
Gripping force as a function of jaw length.



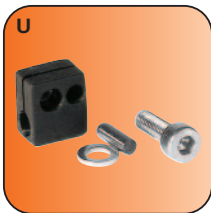
measured from top edge of housing ♦

Forces and Moments

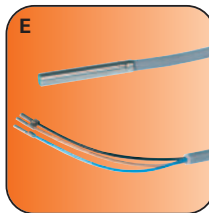
Max allowable forces and moments on jaws.



Accessory list



Mounting block
Order no. KB3M



Proximity switch
Order no. NJ3-E2-03



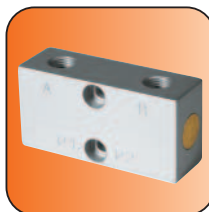
Pneumatic fittings
Order no. WVM5



Pneumatic fittings
Order no. GVM5

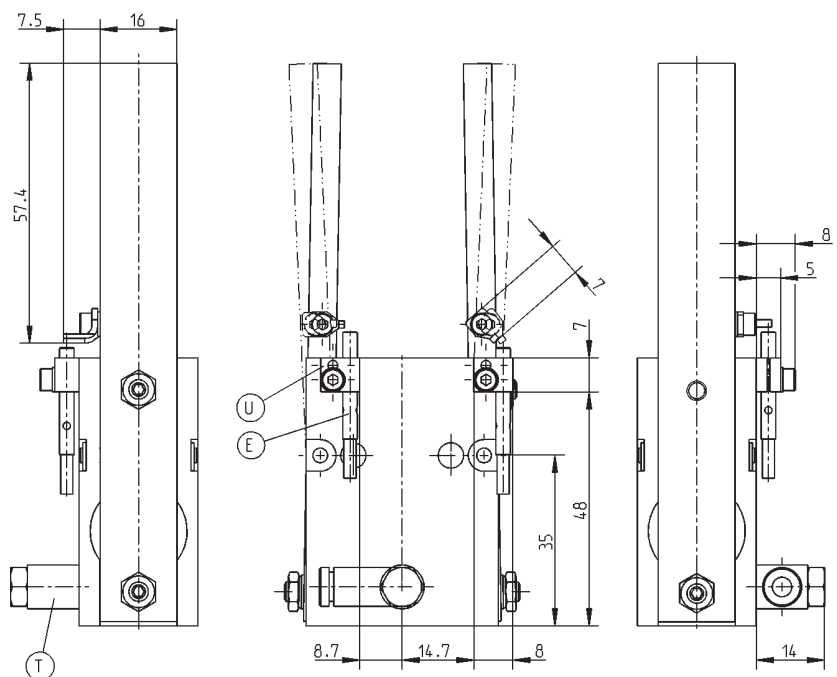


Plug 3-pole
Order no. S12-G-3



Pressure safety valve
Order no. DSV1/8

Accessory



Subject to change without prior notice

GZ25-35E

Stroke per jaw [°]:	5
Gripping torque in closing [Nm]:	4
Gripping torque in opening [Nm]:	-
Gripping force in closing [N]**:	135
Gripping force in opening [N]**:	-
Recommended workpiece weight [g]*:	265
Min. gripping force secured by spring [N]**:	-
Closing time/opening time [s]:	0,03
Repeatability [mm]:	0,1
Min./max. operating pressure [bar]:	3/8
Min./max. operating temperature [°C]**:	5/80
Air volume per cycle [cm³]:	6
Weight [g]:	254

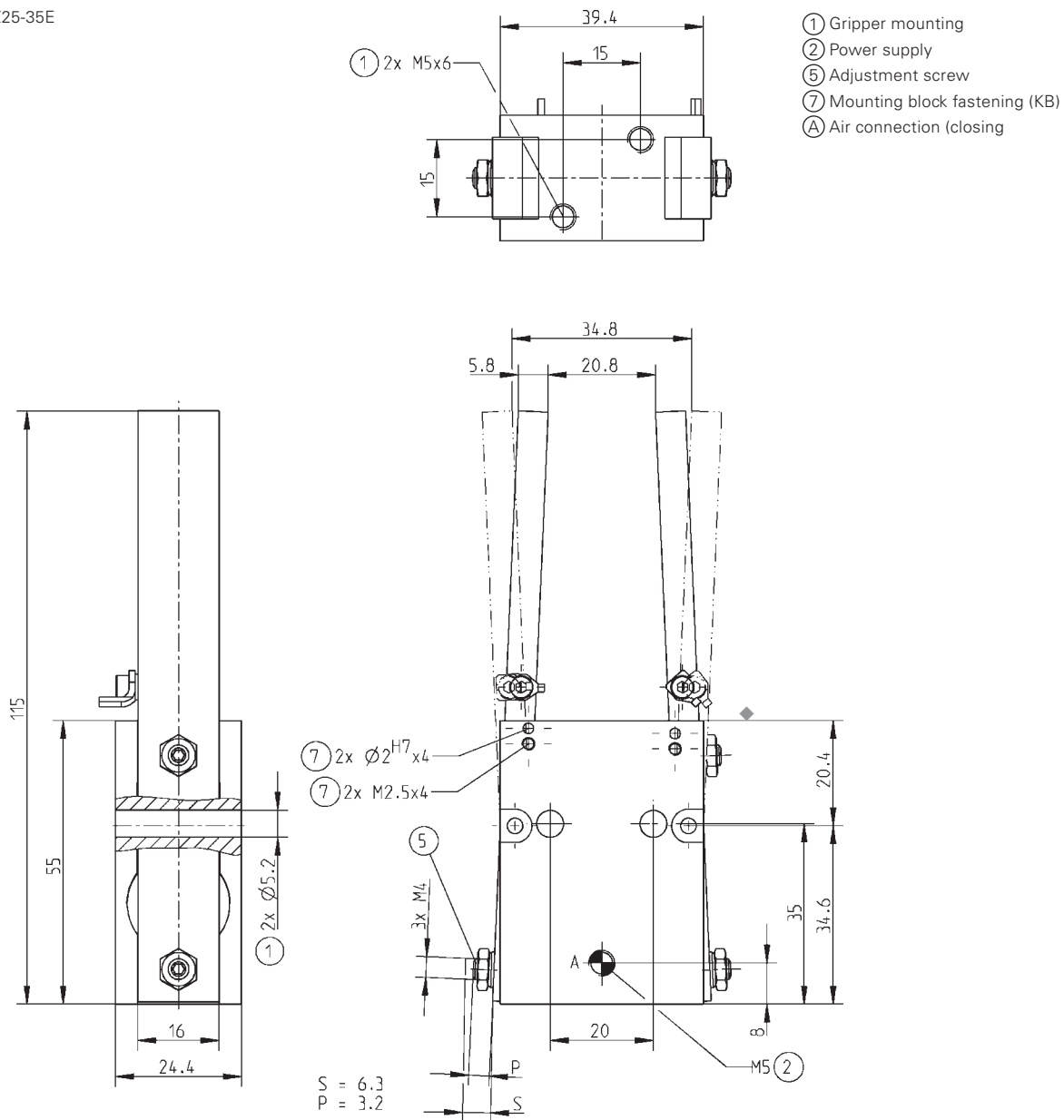
All data measured at 6 bar

* Value determined with friction coefficient $\mu = 0.1$ and safety factor $\nu = 2$, distance from top edge of housing $\blacklozenge = 20 \text{ mm}$

** High-temperature-resistant model (up to 150 °C) add T to part number

*** measured at 10 mm from top edge of housing ◆

GZ25-35E



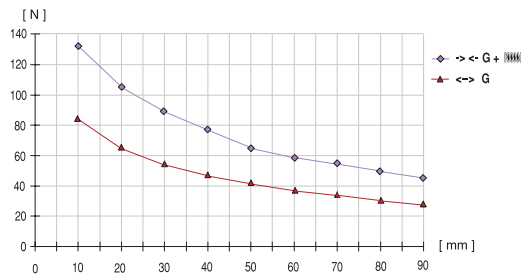
Subject to change without prior notice

Finger Gripper



Gripping force diagram

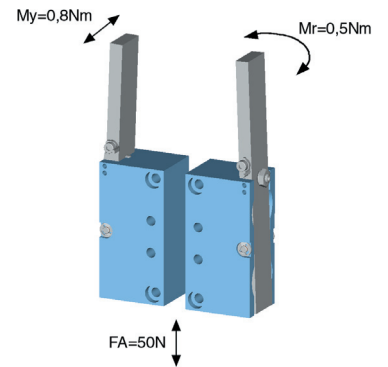
Gripping force as a function of jaw length.



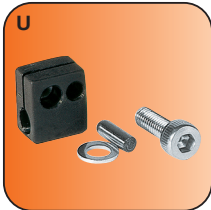
measured from top edge of housing ◆

Forces and Moments

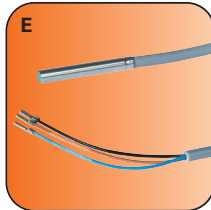
Max allowable forces and moments on jaws.



Accessory list



Mounting block
Order no. KB3M



Proximity switch
Order no. NJ3-E2-03



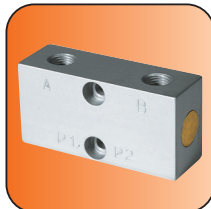
Pneumatic fittings
Order no. WVM5



Pneumatic fittings
Order no. GVM5

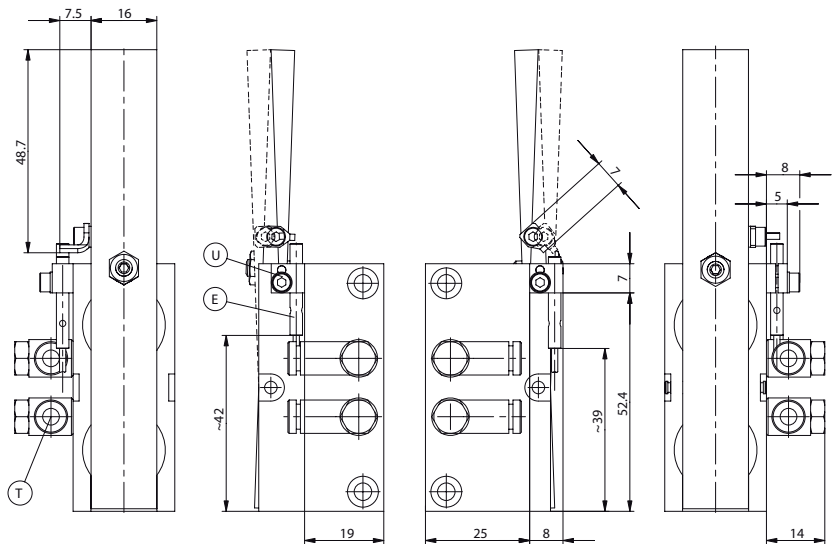


Plug 3-pole
Order no. S12-G-3



Pressure safety valve
Order no. DSV1/8

Accessory



Subject to change without prior notice



Order no.:	GZ25-35G
Stroke per jaw [°]:	4
Gripping torque in closing [Nm]:	5,4
Gripping torque in opening [Nm]:	3,4
Gripping force in closing [N]**:	135
Gripping force in opening [N]**:	85
Recommended workpiece weight [g]*:	223
Min. gripping force secured by spring [N]**:	12
Closing time/opening time [s]:	0,03
Repeatability [mm]:	0,1
Min./max. operating pressure [bar]:	3/8
Min./max. operating temperature [°C]**:	5/80
Air volume per cycle [cm³]:	2 x 6
Weight [g]:	315

All data measured at 6 bar

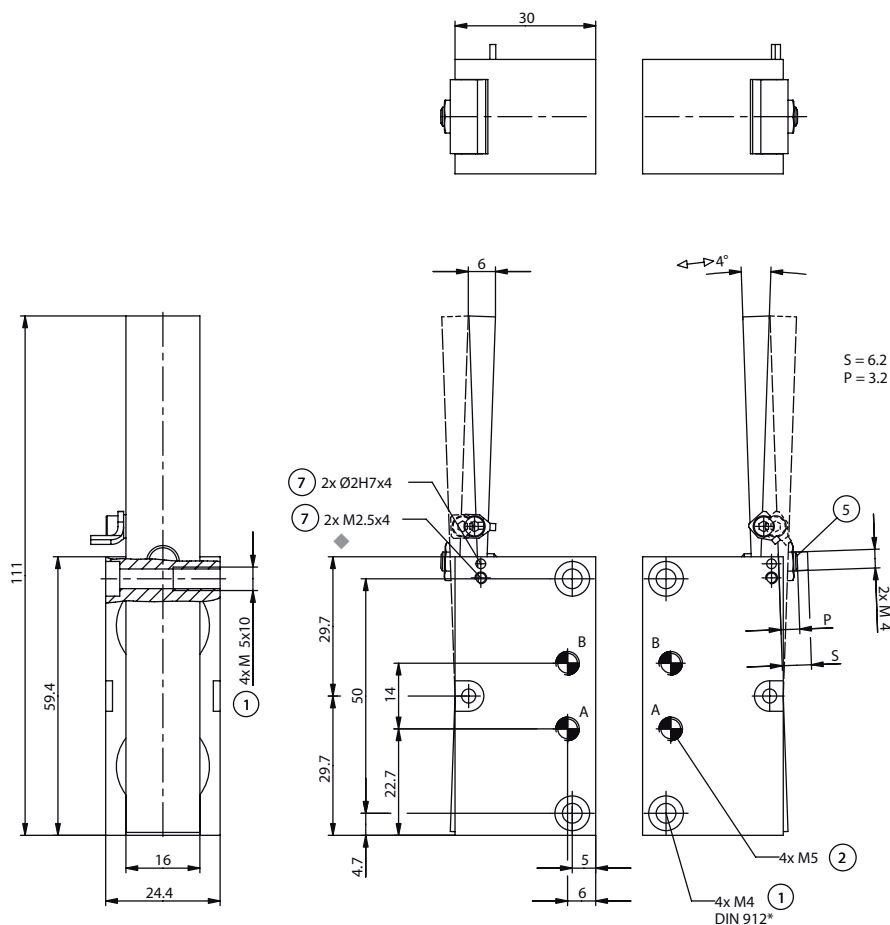
* Value determined with friction coefficient $\mu = 0.1$ and safety factor $v = 2$, distance from top edge of housing $\blacklozenge = 20$ mm

** High-temperature-resistant model (up to 150°C) add T to part number

*** measured at 10 mm from top edge of housing \blacklozenge

GZ25-35G

- ① Gripper mounting
- ② Power supply
- ⑤ Adjustment screw
- ⑦ Mounting block fastening (KB)
- Ⓐ Air connection (closing)
- Ⓑ Air connection (opening)



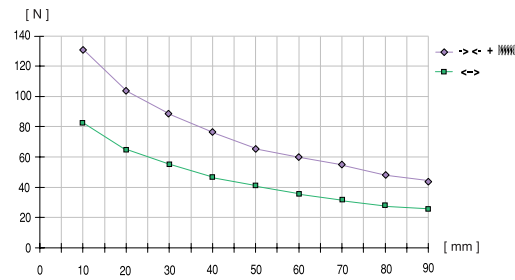
Subject to change without prior notice

Finger Gripper



Gripping force diagram

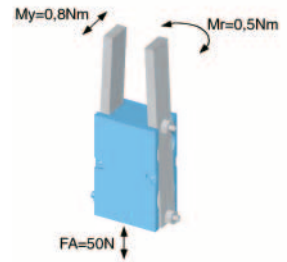
Gripping force as a function of jaw length.



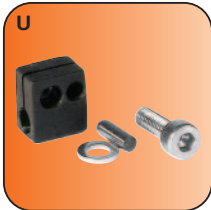
measured from top edge of housing ♦

Forces and Moments

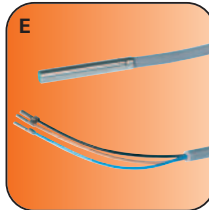
Max allowable forces and moments on jaws.



Accessory list



Mounting block
Order no. KB3M



Proximity switch
Order no. NJ3-E2-03



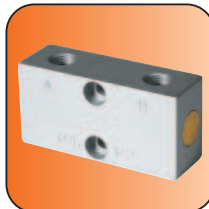
Pneumatic fittings
Order no. WVM5



Pneumatic fittings
Order no. GVM5

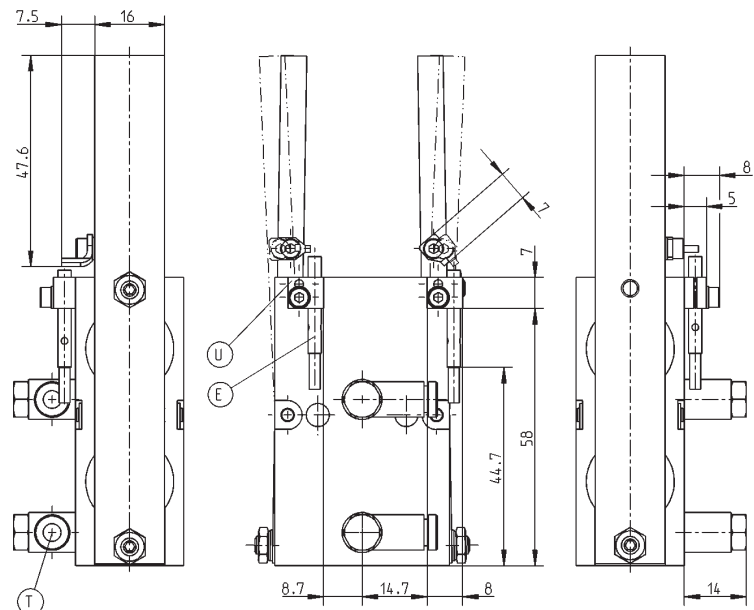


Plug 3-pole
Order no. S12-G-3



Pressure safety valve
Order no. DSV1/8

Accessory



Subject to change without prior notice



Order no.:	GZ25-35D
Stroke per jaw [°]:	4
Gripping torque in closing [Nm]:	5,4
Gripping torque in opening [Nm]:	3,4
Gripping force in closing [N]***:	135
Gripping force in opening [N]***:	85
Recommended workpiece weight [g]*:	348
Min. gripping force secured by spring [N]***:	12
Closing time/opening time [s]:	0,03
Repeatability [mm]:	0,1
Min./max. operating pressure [bar]:	5/8
Min./max. operating temperature [°C]**:	5/80
Air volume per cycle [cm³]:	12
Weight [g]:	263

All data measured at 6 bar

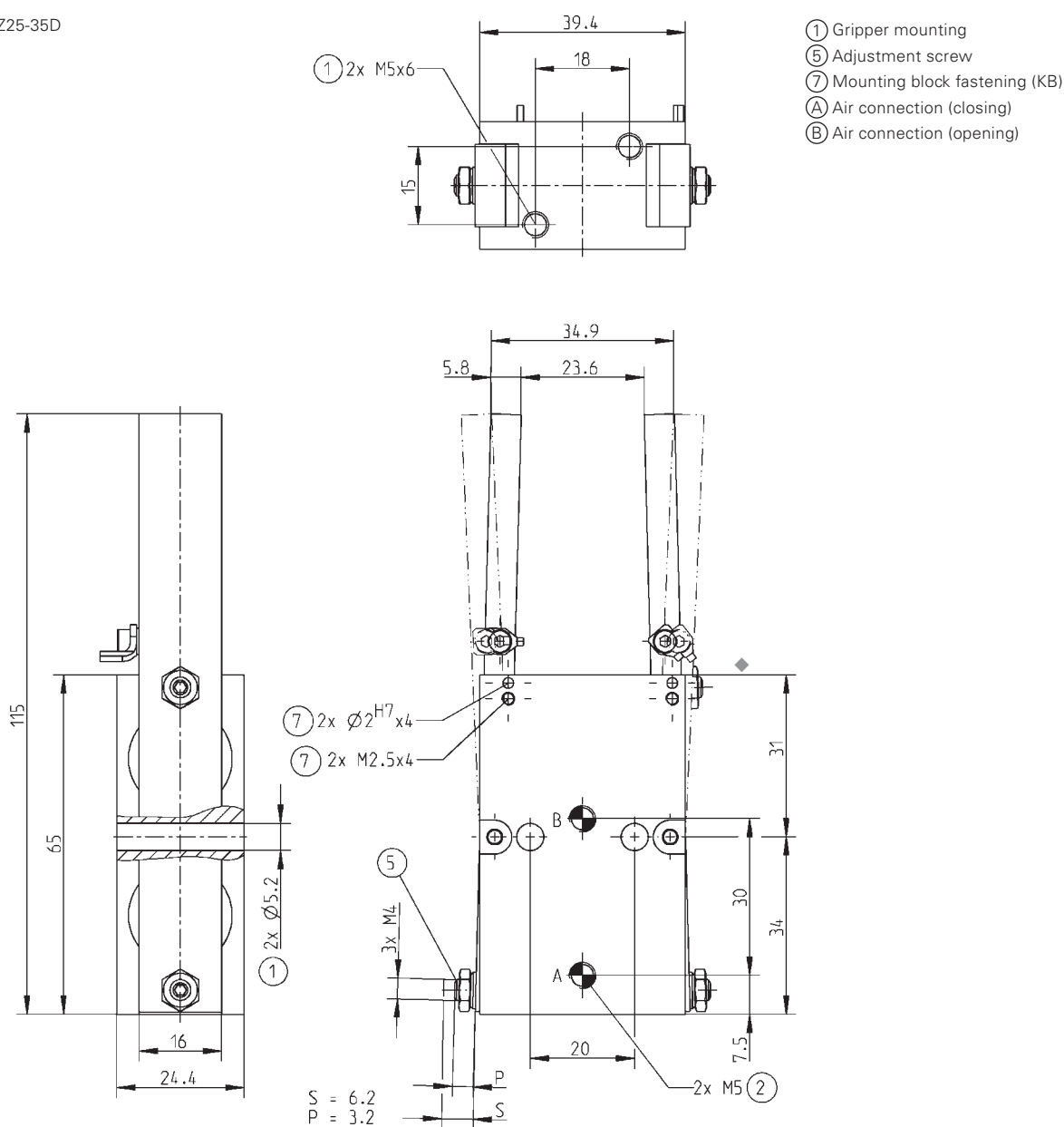
* Value determined with friction coefficient $\mu = 0.1$ and safety factor $v = 2$,

distance from top edge of housing $\blacklozenge = 20$ mm

** High-temperature-resistant model (up to 150 °C) add T to part number

*** measured at 10 mm from top edge of housing \blacklozenge

GZ25-35D



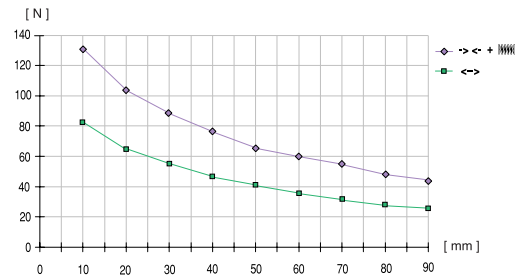
Subject to change without prior notice

Finger Gripper



Gripping force diagram

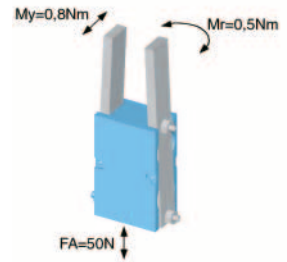
Gripping force as a function of jaw length.



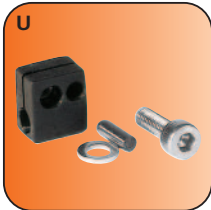
measured from top edge of housing ♦

Forces and Moments

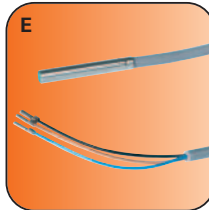
Max allowable forces and moments on jaws.



Accessory list



Mounting block
Order no. KB3M



Proximity switch
Order no. NJ3-E2-03



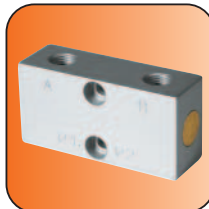
Pneumatic fittings
Order no. WVM5



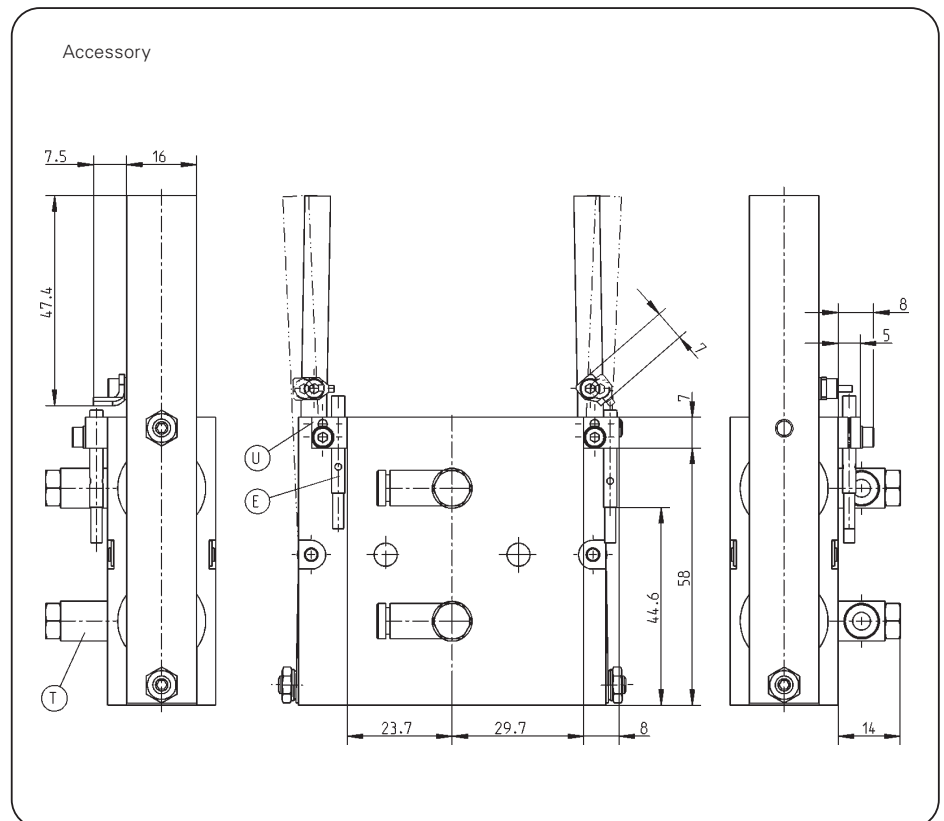
Pneumatic fittings
Order no. GVM5



Plug 3-pole
Order no. S12-G-3



Pressure safety valve
Order no. DSV1/8



Subject to change without prior notice



Order no.:	GZ55-65D
Stroke per jaw [°]:	4
Gripping torque in closing [Nm]:	5,4
Gripping torque in opening [Nm]:	3,4
Gripping force in closing [N]**:	135
Gripping force in opening [N]**:	85
Recommended workpiece weight [g]*:	219
Min. gripping force secured by spring [N]**:	12
Closing time/opening time [s]:	0,03
Repeatability [mm]:	0,1
Min./max. operating pressure [bar]:	5/8
Min./max. operating temperature [°C]**:	5/80
Air volume per cycle [cm³]:	13
Weight [g]:	378

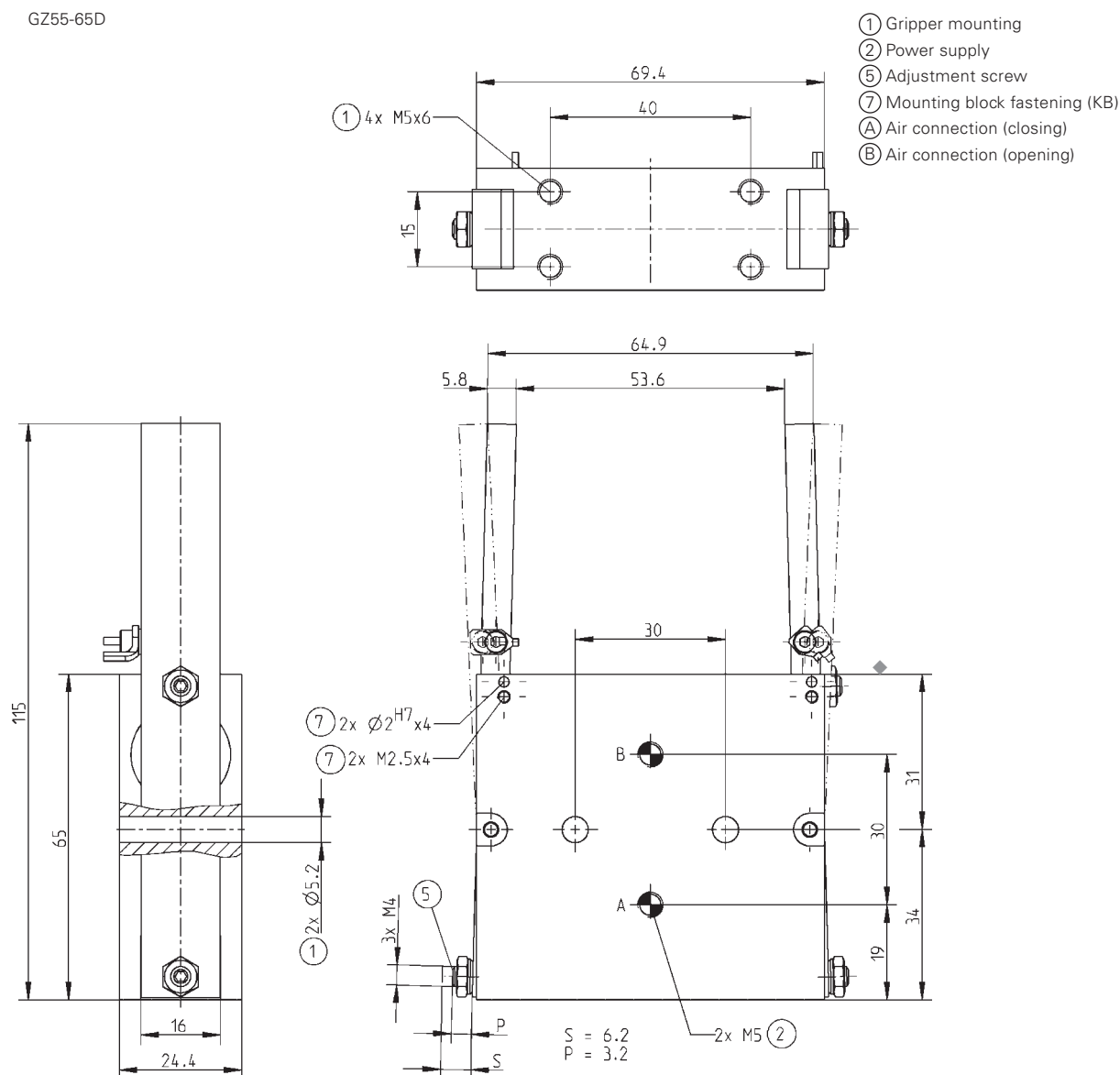
All data measured at 6 bar

* Value determined with friction coefficient $\mu = 0.1$ and safety factor $v = 2$, distance from top edge of housing $\blacklozenge = 20$ mm

** High-temperature-resistant model (up to 150 °C) add T to part number

*** measured at 10 mm from top edge of housing \blacklozenge

GZ55-65D

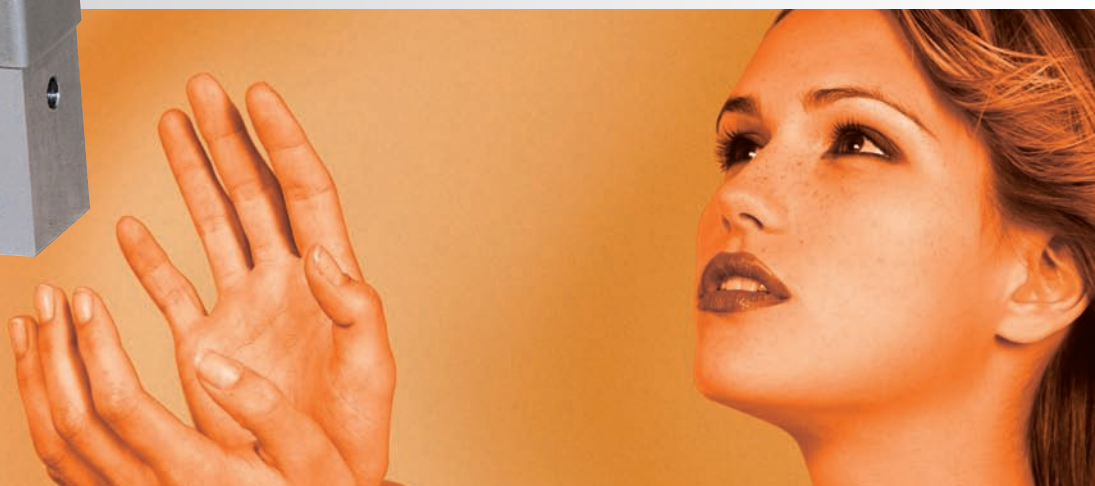


Subject to change without prior notice



Mini-Finger Grippers

pneumatic



GM Series

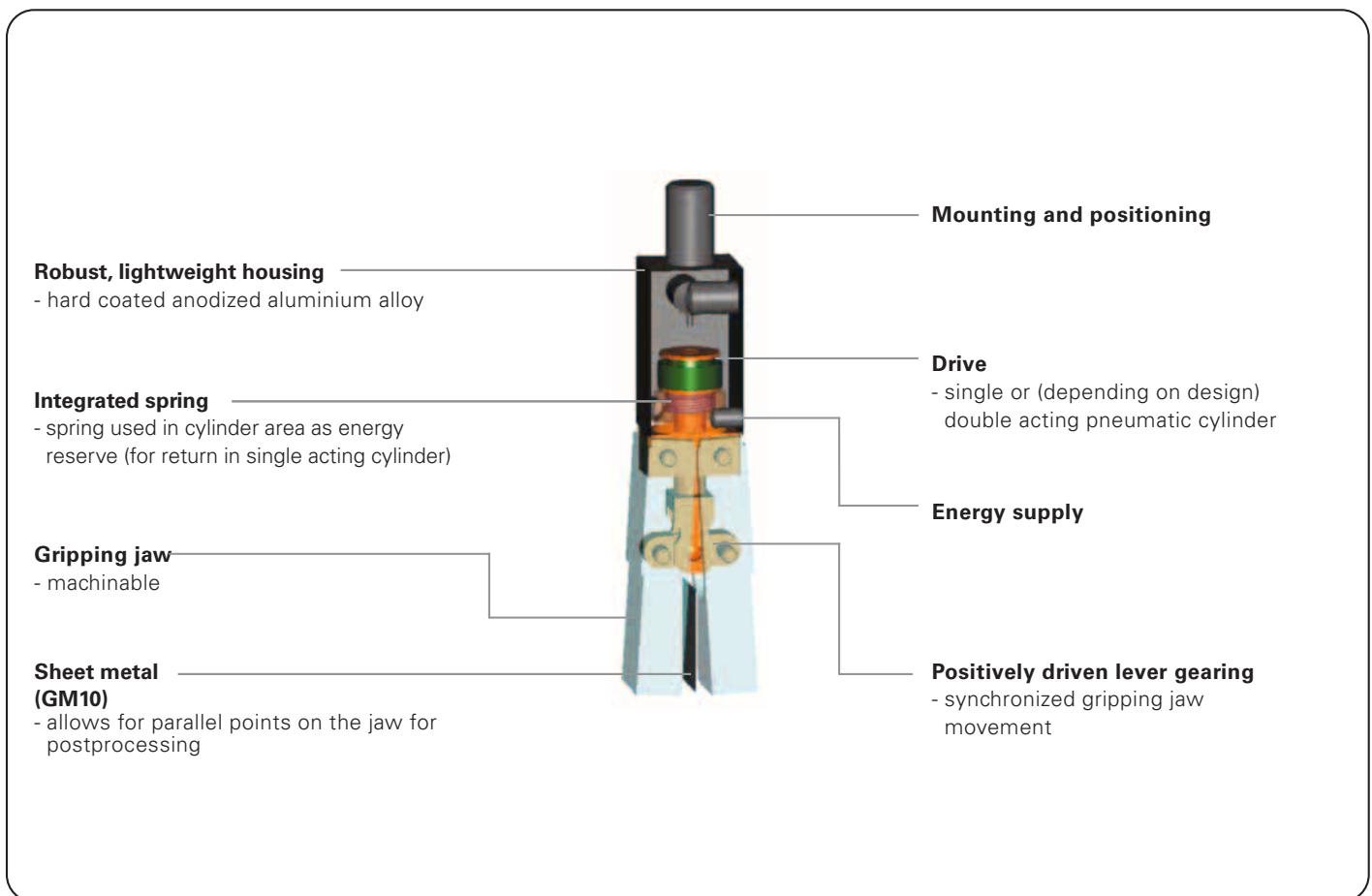
SOMMER
automatic

Mini-Finger Gripper

Features

- high gripping torque with small design, four design with up to 0.55 Nm gripping torques
- gripping jaws made from C45 K steel can be machined to suit individual applications
- manually convertible joints for high forces when closing or opening

Functional diagram



Terms

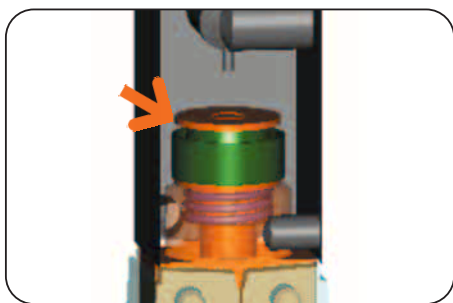
- Gripping force:** arithmetic sum of the individual forces occurring at the jaws
- Closing/opening time:** time required by the gripping jaws to turn through the entire angle
- Repeatability:** at end stops after 50/100 consecutive cycles
- Cycle:** one complete movement of the piston jaw
- Maintenance:** recommended at 5 mil. cycles
(please see the owner's manual for conditions,
download from www.sommer-automatic.com)
- long maintenance intervals keep costs down
 - long lifespan

Model guide

D: double acting cylinder

Order no.	Stroke per jaw	Gripping torque in opening	Gripping torque in closing	Self-locking via
GM10	3,5°	0,06 Nm	0,12 Nm	-
GM16	3,5°	0,08 Nm	0,2 Nm	-
GM16D	3,5°	0,2 Nm	0,4 Nm	Spring
GM22D	3,5°	0,3 Nm	0,55 Nm	Spring

Mini-Finger **Gripper**



Drive

GM10/GM16

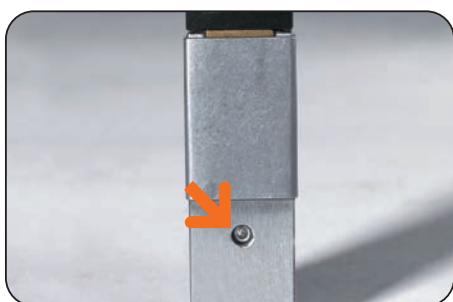
single acting pneumatic cylinder

- control effort low
- only one pneumatic line required
- return with spring

GM16D/GM22D

Double acting pneumatic cylinder with integrated mechanical gripping force safety device

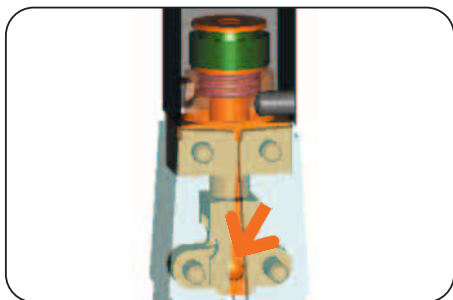
- optimum coordination of drive force and gripping moment secured by spring



Gripper jaw

Individual gripper jaw machining

- hexagon socket screw for parallel alignment of the jaws during operation
- gripper jaw in C45K included in delivery
- cost-effective and direct machining in assembled state



Power transfer

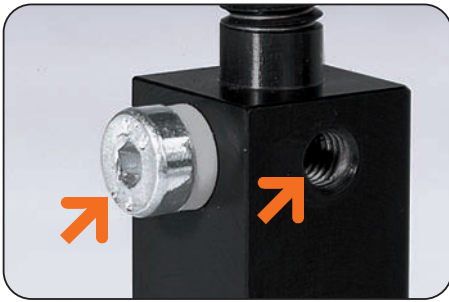
Positively driven lever gearing

- optimum transmission of drive force in gripping force
- self-centering
- synchronization
- high repeatability



User changeable linkage action

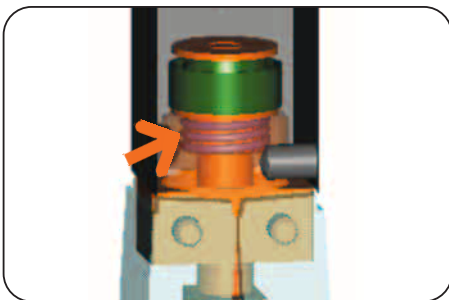
- high gripping torque when closing and opening
- flexible application for internal or external gripping
- easy handling due to pins and safety sheet



Energy supply

flexibility possible on two sides

- easy integration into the application via free selection of connection options
- minimisation of interference contours by alternate air connection



Gripping force safety device

GM16D/GM22D

spring integrated into cylinder as energy reserve

- permanent maintenance of gripping force
- compact design



Fixing thread

with H7 fit

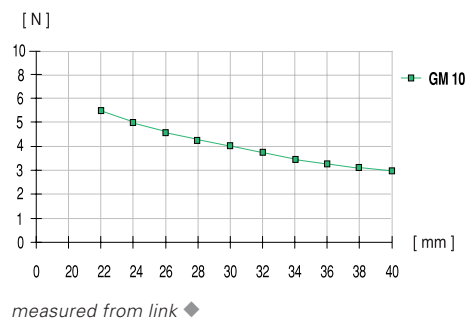
- precise gripper positioning in the machine
- high repeat accuracy when changing
- simple and cost-effective integration

Mini-Finger-Gripper



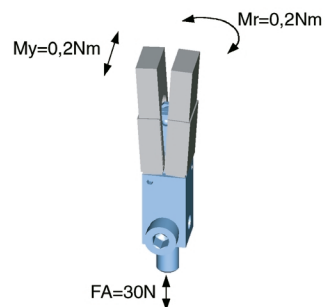
Gripping force diagram

Gripping force as a function of jaw length.

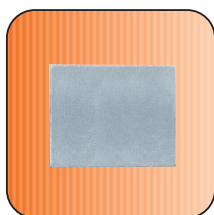


Forces and Moments

Max allowable forces and moments on jaws.



Included with purchase



Sheet: to keep jaws parallel

Order no. BBLE01010

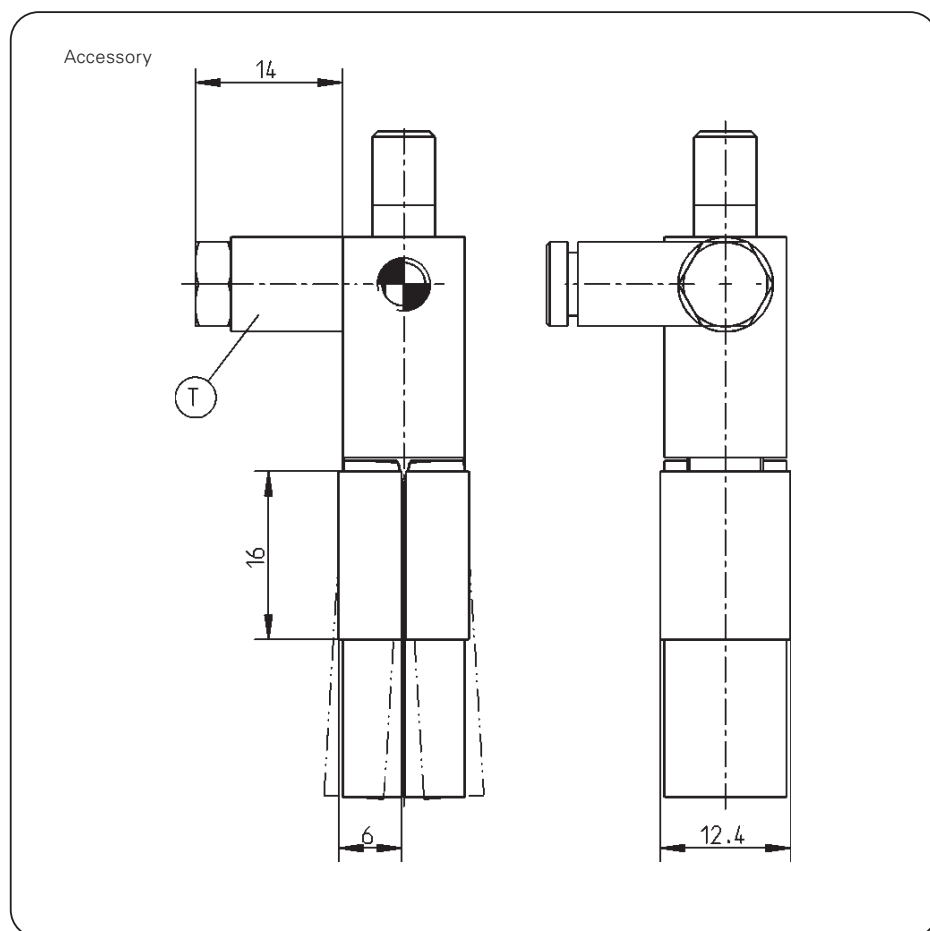
Accessory list



Pneumatic fittings
Order no. WVM5



Pneumatic fittings
Order no. GVM5



Subject to change without prior notice

Order no.:	GM10
Stroke per jaw [°]:	3,5
Gripping torque in closing [Nm]:	0,12
Gripping torque in opening [Nm]:	0,06
Recommended workpiece weight [g]*:	25
Closing time/opening time [s]:	0,02
Repeatability [mm]:	0,1
Min./max. operating pressure [bar]:	3/8
Min./max. operating temperature [°C]**:	5/80
Air volume per cycle [cm³]:	2
Weight [g]:	40

All data measured at 6 bar

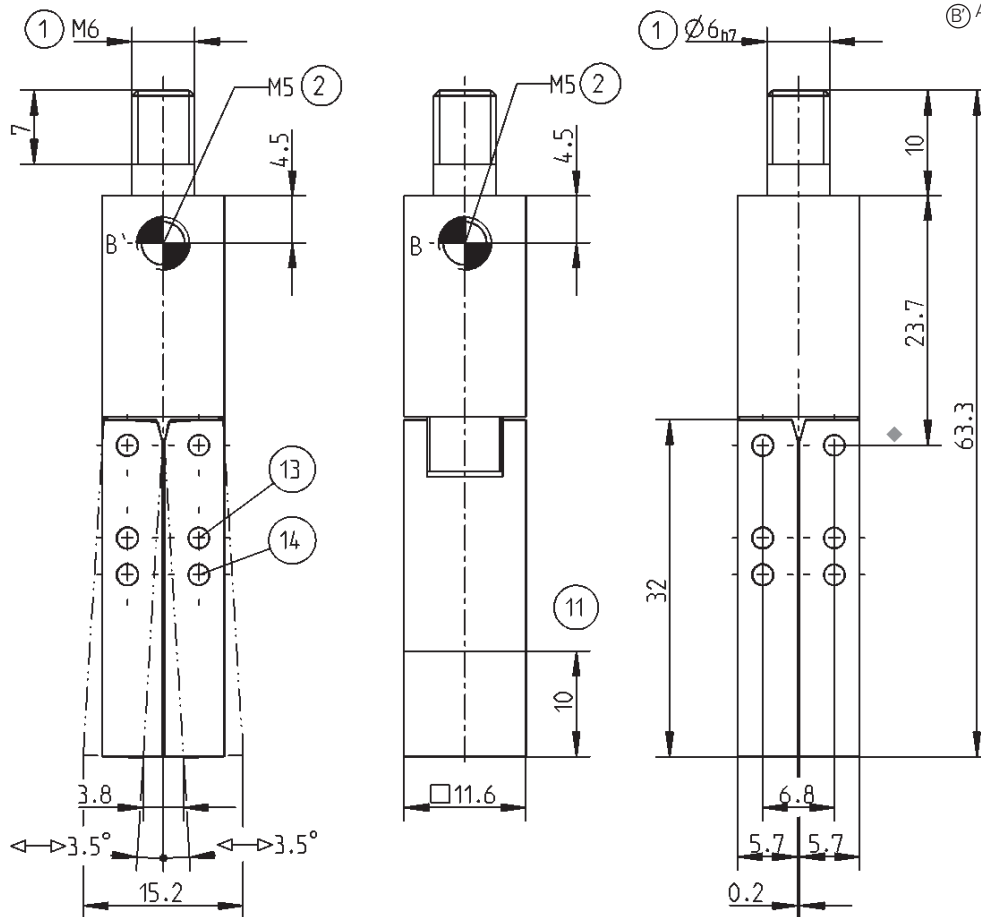
* Value determined with friction coefficient $\mu = 0.1$ and safety factor $v = 2$,

Distance from link $\blacklozenge = 24.5$ mm

** High-temperature-resistant model (up to 150 °C) add T to part number

GM10

- ① Gripper mounting
- ② Power supply
- ⑪ Machining possibility
- ⑬ Linkage point, unpressurised open
- ⑭ Linkage point, unpressurised closed
- Ⓑ Air connection (opening)
- Ⓑ' Alternate air connection (opening)



Subject to change without prior notice

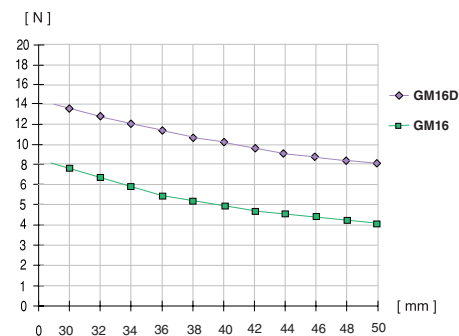
Mini-Finger-Gripper



20,6 mm

Gripping force diagram

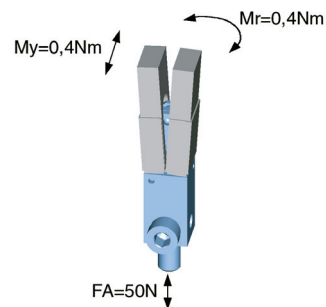
Gripping force as a function of jaw length.



measured from link ◆

Forces and Moments

Max allowable forces and moments on jaws.



Accessory list

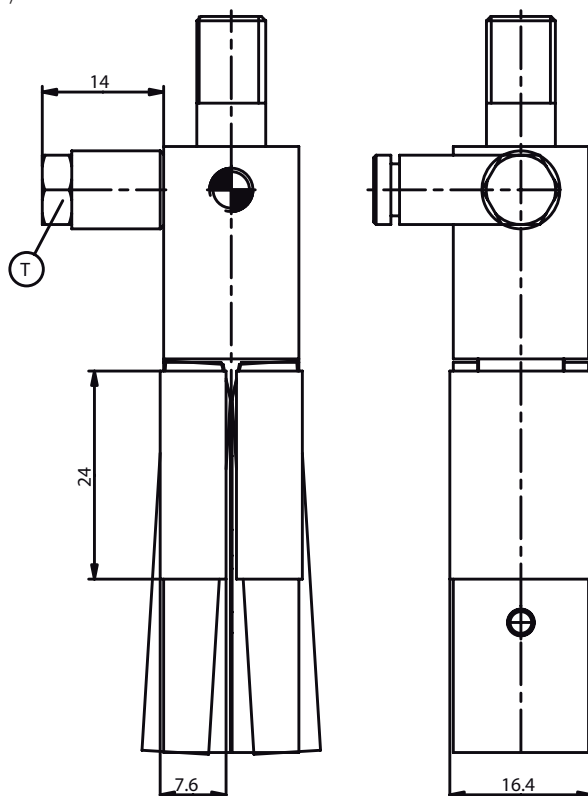


Pneumatic fittings
Order no. WVM5



Pneumatic fittings
Order no. GVM5

Accessory



Subject to change without prior notice

Order no.:	GM16	GM16D
Stroke per jaw [°]:	3,5	3,5
Gripping torque in closing [Nm]:	0,2	0,4
Gripping torque in opening [Nm]:	0,08	0,2
Recommended workpiece weight [g]*:	29	58
Closing time/opening time [s]:	0,02	0,02
Repeatability [mm]:	0,1	0,1
Min./max. operating pressure [bar]:	3/8	3/8
Min./max. operating temperature [°C]**:	5/80	5/80
Air volume per cycle [cm³]:	5	5
Weight [g]:	95	95

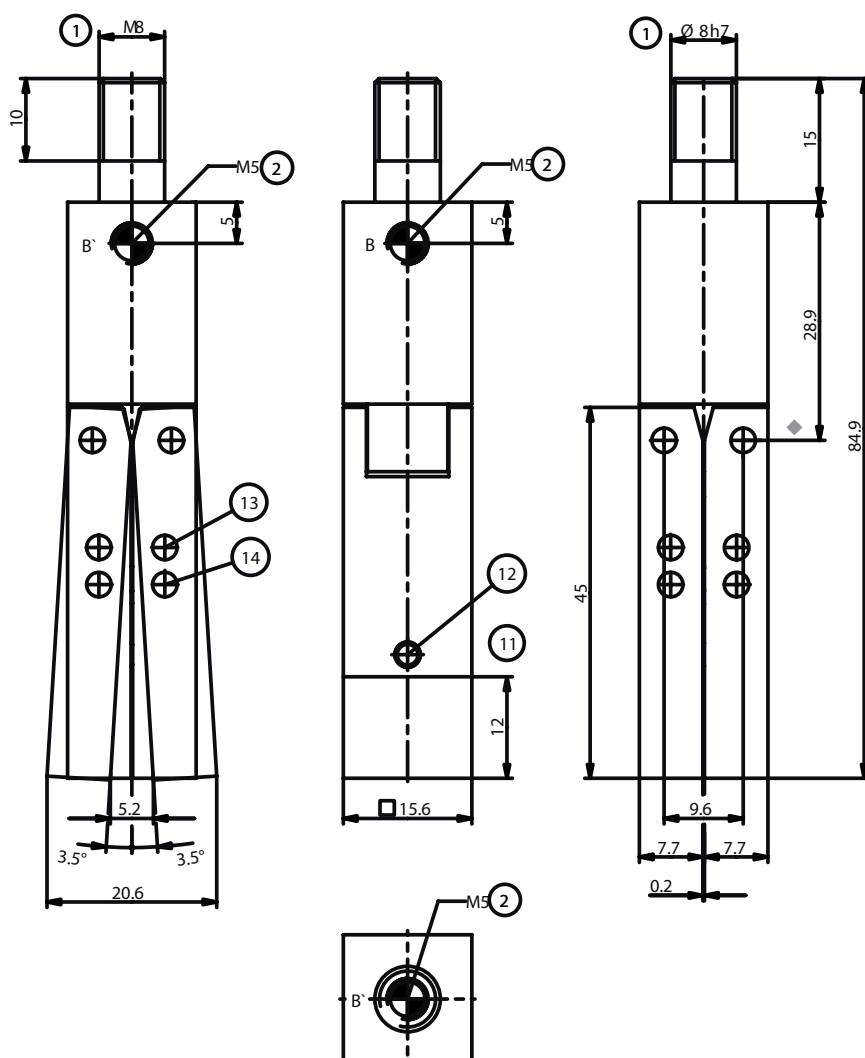
All data measured at 6 bar

* Value determined with friction coefficient $\mu = 0.1$ and safety factor $v = 2$,

Distance from link $\blacklozenge = 24.5$ mm

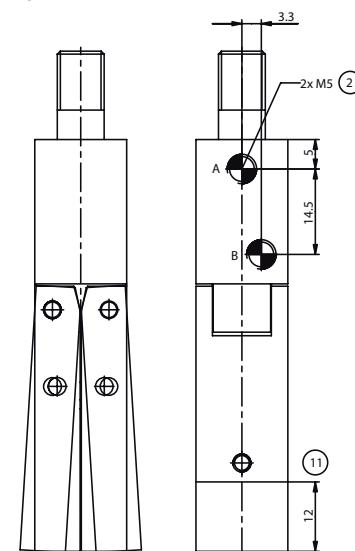
** High-temperature-resistant model (up to 150 °C) add T to part number

GM16



- ① Gripper mounting
- ② Power supply
- ⑪ Machining possibility
- ⑫ Parallel adjustment
- ⑬ Linkage point, unpressurised open
- ⑭ Linkage point, unpressurised closed
- Ⓐ Air connection (closing)
- Ⓑ Air connection (opening)
- Ⓑ' Alternate air connection (opening)

GM16D



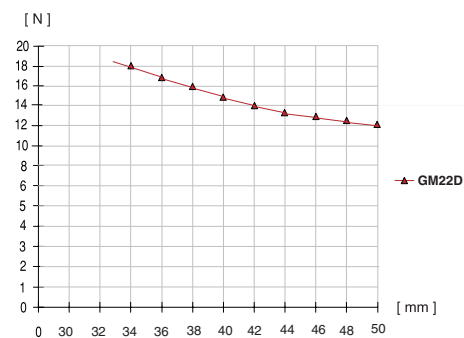
Subject to change without prior notice

Mini-Finger-Gripper



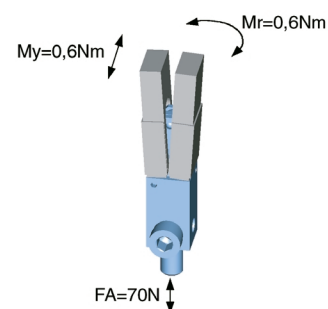
Gripping force diagram

Gripping force as a function of jaw length.



Forces and Moments

Max allowable forces and moments on jaws.



Accessory list

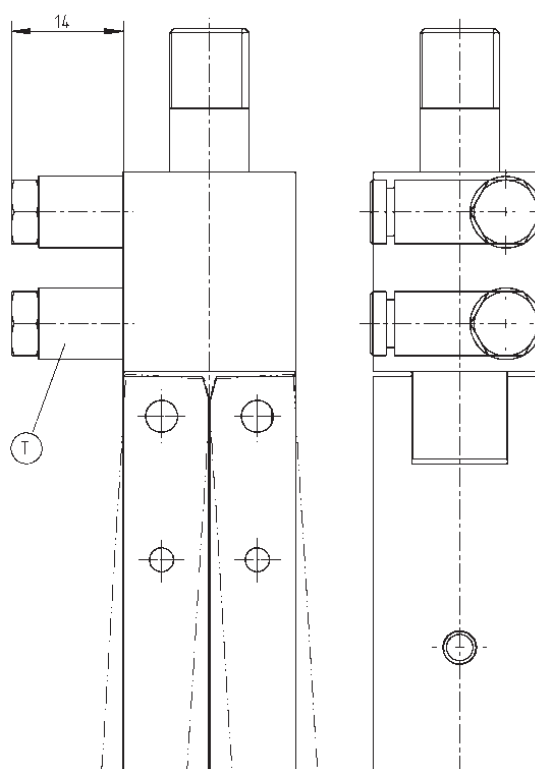


Pneumatic fittings
Order no. WVM5



Pneumatic fittings
Order no. GVM5

Accessory



Subject to change without prior notice

Order no.:	GM22D
Stroke per jaw [°]:	3,5
Gripping torque in closing [Nm]:	0,55
Gripping torque in opening [Nm]:	0,3
Recommended workpiece weight [g]*:	72
Closing time/opening time [s]:	0,02
Repeatability [mm]:	0,1
Min./max. operating pressure [bar]:	3/8
Min./max. operating temperature [°C]**:	5/80
Air volume per cycle [cm³]:	8
Weight [g]:	198

All data measured at 6 bar

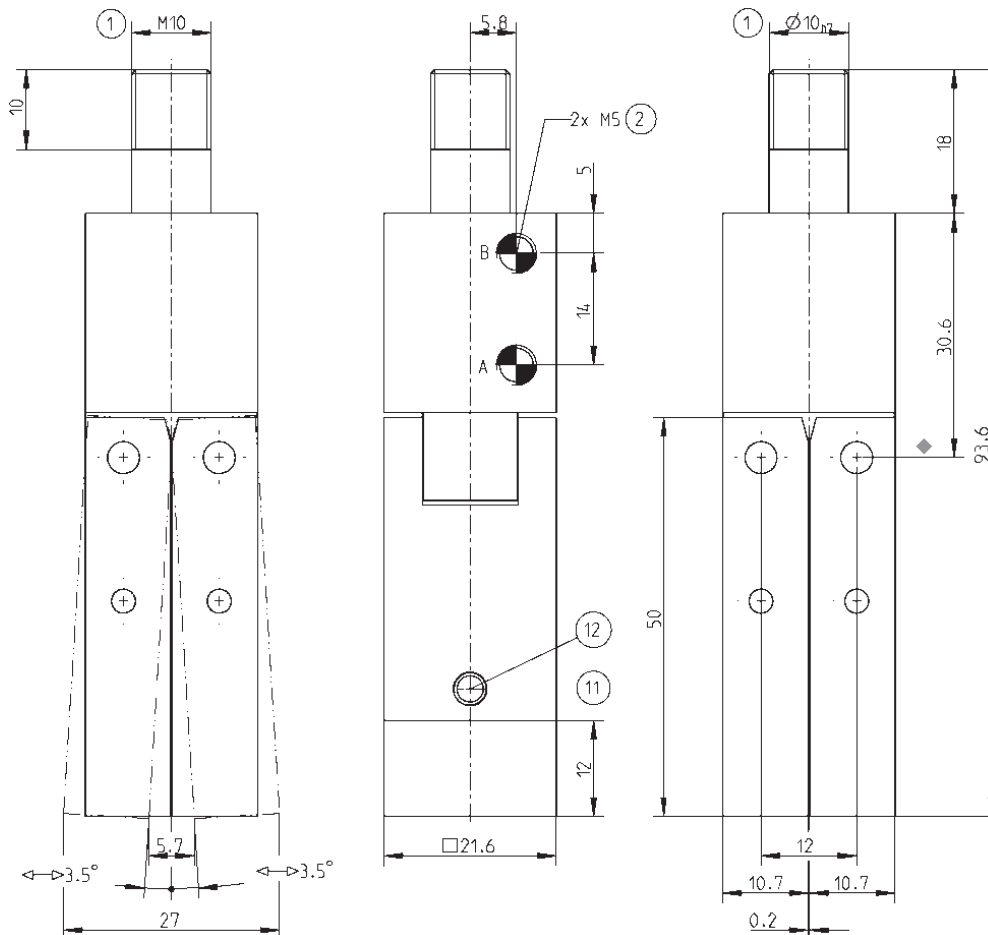
* Value determined with friction coefficient $\mu = 0.1$ and safety factor $v = 2$,

Distance from link $\blacklozenge = 24.5$ mm

** High-temperature-resistant model (up to 150 °C) add T to part number

GM22D

- ① Gripper mounting
- ② Power supply
- ⑪ Machining possibility
- ⑫ Parallel adjustment
- A Air connection (closing)
- B Air connection (opening)



Subject to change without prior notice



➤ Grippers <i>pneumatic</i>	01
➤ Grippers <i>electrical</i>	02
➤ Grippers <i>hydraulic</i>	03
➤ Grippers <i>Special</i>	04
➤ Grip & Rotate Modules <i>pneumatic</i>	05
➤ Separators	06
➤ Swivel Units <i>pneumatic</i>	07
➤ Swivel Units <i>electrical</i>	08
➤ Swivel Units <i>hydraulic</i>	09
➤ Rotation Jaws <i>pneumatic</i>	10
➤ Axial Compensation Modules	11
➤ Tool Changers	12
➤ Robotics Accessories	13
➤ Linear Cylinders	14
➤ Shock Absorber	15
➤ Air Vane Motors	16
➤ Rotary Cylinders	17
➤ Vacuum Components	18
➤ Accessorios	19