



Accessories

SOMMER
automatic

Accessory



Sensors

Inductive Proximity Switches
Magnetic Field Sensors

from Page 4



Cable Connectors

from Page 9



Sensor Cables

from Page 10



Sensor Mounts

Proximity Switch Brackets
Stop Stroke adjustment screws with sensor mounts

from Page 12



End Stop Dampers

from Page 13



Pneumatic Controls

Flow Control Valves - with swivel joint
Flow Control Valves - in-line
Pressure Safety Valve

from Page 14

Silencers

from Page 14



Pneumatic Connections

Straight Fittings - Quick Connect Style
Angled Fittings - Quick Connect Style
Straight Fittings - Barb Style Connection
Angled Fittings - Barb Style Connection

from Page 15



Jaw Accessories

Jaw Pads
Hard Jaw Inserts
Hard Jaw Inserts, floating
Rubber Jaw Liners
Epoxy Jaw Compound
Rubber Molding Compound

from Page 16



Ball Joints

from Page 21



Gripper Jaw Extensions

from Page 22



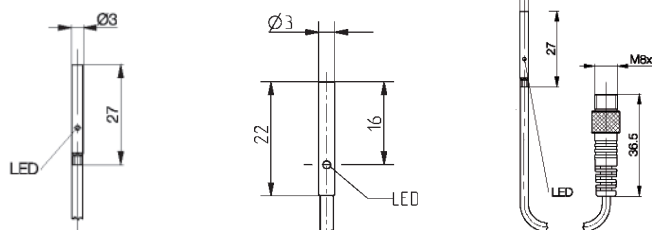
Pneumatic Rotary Manifolds

from Page 24



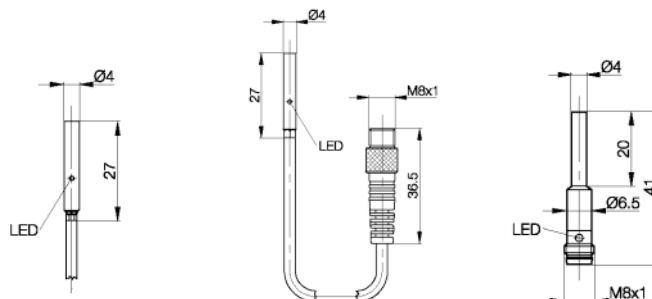
Accessory

Inductive Proximity Switches (PNP-Closed)



Housing size Ø 3 mm

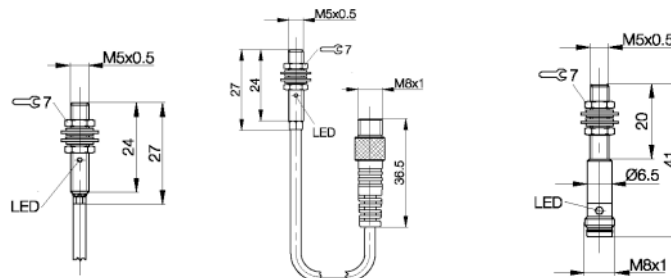
Order no.:	NJ3-E2	NJ3-E2-03	NJ3-E2SK
Type of Installation:	flush	flush	flush
Rated Switching Distance S_N [mm]:	1	0,6	1
Secured Switching Distance S_a [mm]:	0...0,8	0...0,5	0...0,8
Supply Voltage [V DC]:	10...30	10...30	10...30
Load Current Capacity [mA]:	100	100	100
Current consumption max. [mA]:	≤ 12	≤ 10	≤ 12
Protection against polarity reversal:	yes	yes	yes
Short circuit protection:	no	yes	no
Repeat accuracy [%]:	≤ 5	≤ 5	≤ 5
Ambient Temperature Range [°C]:	0...+70	-25...+70	0...+70
Operating Frequency [Hz]:	5000	5000	5000
Function Indicator::	yes	yes	yes
Degree of protection per IEC 60529:	IP 67	IP67	IP67
Housing Material:	Stainless steel	Stainless steel	Stainless steel
Material of sensing face:	POM	PBT	POM
Connection:	Cable	Cable	Cable with connector M8x1
Cable length [m]:	5	2	0,3
Nr. of wires x diameter [mm ²]:	3x0,09	3x0,055	-
Certification:	cULus	-	cULus



Housing size Ø 4 mm

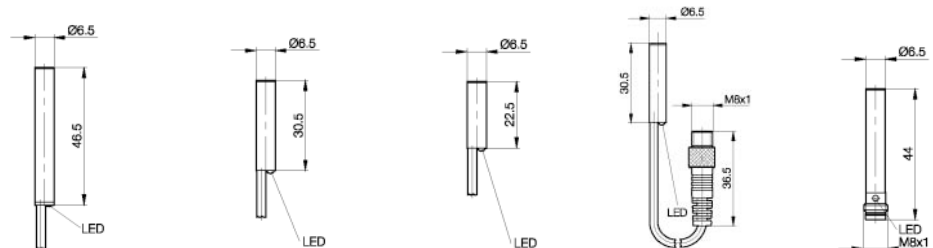
Order no.:	NJ4-E2	NJ4-E2SK	NJ4-E2S
Type of Installation:	flush	flush	flush
Rated Switching Distance S_N [mm]:	0,8	0,8	0,8
Secured Switching Distance S_a [mm]:	0...0,6	0...0,8	0...0,6
Supply Voltage [V DC]:	10...30	10...30	10...30
Load Current Capacity [mA]:	100	100	100
Current consumption max. [mA]:	≤ 12	≤ 12	≤ 12
Protection against polarity reversal:	yes	yes	yes
Short circuit protection:	yes	yes	yes
Repeat accuracy [%]:	≤ 5	≤ 5	≤ 5
Ambient Temperature Range [°C]:	-25...+70	-25...+70	-25...+70
Operating Frequency [Hz]:	3000	3000	3000
Function Indicator::	yes	yes	yes
Degree of protection per IEC 60529:	IP 67	IP 67	IP 67
Housing Material:	Stainless steel	Stainless steel	Stainless steel
Material of sensing face::	POM	POM	POM
Connection:	Cable	Cable w/connector M8x1	Connector M8x1
Cable length [m]:	5	0,3	-
Nr. of wires x diameter [mm ²]:	3x0,14	-	-
Certification:	cULus	-	cULus

Inductive Proximity Switches (PNP-Closed)



Housing Size ø 5 mm

Order no.:	NJ5-E2	NJ5-E2SK	NJ5-E2S
Type of installation:	flush	flush	flush
Rated Switching Distance S_N [mm]:	0,8	0,8	0,8
Secured Switching Distance S_a [mm]:	0...0,6	0...0,6	0...0,6
Supply Voltage [V DC]:	10...30	10...30	10...30
Load Current Capacity [mA]:	100	100	100
Current consumption max. [mA]:	≤ 12	≤ 12	≤ 12
Protection against polarity reversal:	yes	yes	yes
Short circuit protection:	yes	yes	yes
Repeat accuracy [%]:	≤ 5	≤ 5	≤ 5
Ambient Temperature Range [°C]:	-25...+70	-25...+70	-25...+70
Operating Frequency [Hz]:	3000	3000	3000
Function indicator:	yes	yes	yes
Degree of protection per IEC 60529:	IP 67	IP 67	IP 67
Housing Material:	Stainless steel	Stainless steel	Stainless steel
Material of Sensing Face:	POM	POM	POM
Connection:	Cable	Cable w/connector M8x1	Connector M8x1
Cable length [m]:	5	0,3	-
Nr. of wires x diameter [mm ²]:	3x0,14	-	-
Certification:	cULus	cULus	cULus

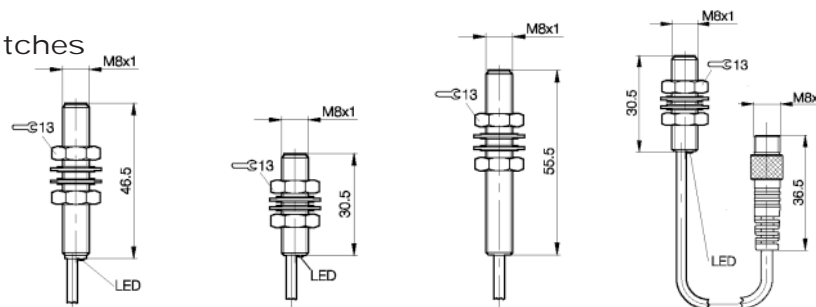


Housing size ø 6.5 mm

Order no.:	NJ6.5-E2	NJ6.5-E2-01	NJ6.5-E2-02	NJ6.5-E2SK	NJ6.5-E2S
Type of installation:	flush	flush	flush	flush	flush
Rated Switching Distance S_N [mm]:	1,5	1,5	1,5	1,5	1,5
Secured Switching Distance S_a [mm]:	0...1,2	0...1,2	0...1,2	0...1,2	0...1,2
Supply Voltage [V DC]:	10...30	10...30	10...30	10...30	10...30
Load Current Capacity [mA]:	200	200	200	200	200
Current consumption max. [mA]:	≤ 8	≤ 25	≤ 25	≤ 25	≤ 25
Protection against polarity reversal:	yes	yes	yes	yes	yes
Short Circuit protection:	yes	yes	yes	yes	yes
Repeat accuracy [%]:	≤ 5	≤ 5	≤ 5	≤ 5	≤ 5
Ambient Temperature range [°C]:	-40...+70	-25...+70	-25...+70	-25...+70	-25...+70
Operating Frequency [Hz]:	3000	1500	1500	1500	1500
Function indicator:	yes	yes	yes	yes	yes
Degree of protection per IEC 60529:	IP 67	IP 67	IP 67	IP 67	IP 67
Housing material:	Stainless steel	Stainless steel	CuZn nickel plated	Stainless steel	Stainless steel
Material of Sensing Face:	PA12	PBT	PBT	PBT	PBT
Connection:	Cable	Cable	Cable	Cable w/connector M8x1	Connector M8x1
Cable length [m]:	3	3	3	0,3	-
Nr. of wires x diameter [mm ²]:	3x0,14	3x0,14	3x0,14	-	-
Certification:	cULus	cULus	cULus	cULus	cULus

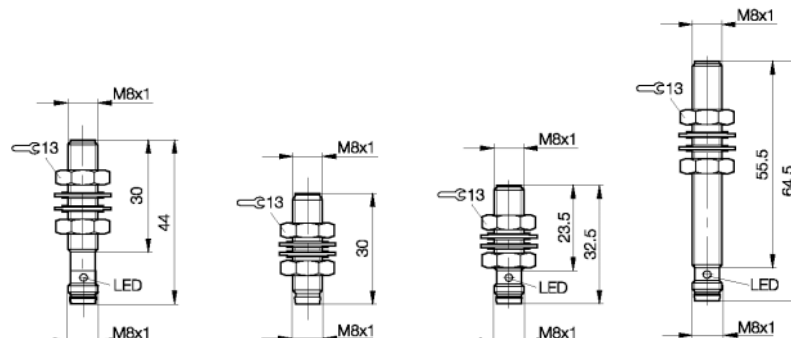
Accessory

Inductive Proximity Switches (PNP-Closed)



Housing size \varnothing 8 mm

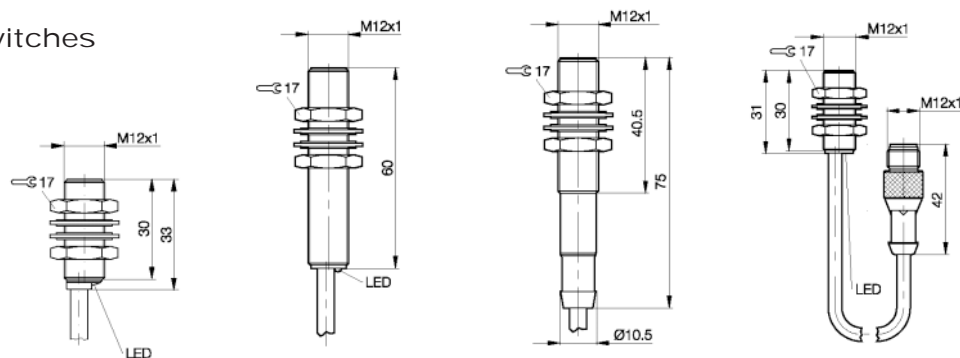
Order no.:	NJ8-E2	NJ8-E2-01	NJ8-E2T	NJ8-E2SK
Type of installation:	flush	flush	flush	flush
Rated Switching Distance S_N [mm]:	1,5	2	2	1,5
Secured Switching Distance S_a [mm]:	0...1,2	0...0,16	0...1,6	0...1,2
Supply Voltage [V DC]:	10...30	10...30	10...30	10...30
Load Current Capacity [mA]:	200	200	≤ 200	200
Current consumption max. [mA]:	≤ 8	≤ 25	≤ 20	≤ 25
Protection against polarity reversal:	yes	yes	yes	yes
Short circuit protection:	yes	yes	no	yes
Repeat accuracy [%]:	≤ 5	≤ 5	≤ 5	≤ 5
Ambient Temperature range [°C]:	-25...+70	-25...+70	-25...+120	-25...+70
Operating Frequency [Hz]:	3000	1000	1500	1500
Function indicator:	yes	yes	no	yes
Degree of protection per IEC 60529:	IP 67	IP 67	IP 60	IP 67
Housing Material:	Stainless steel	Stainless steel	Stainless steel	Stainless steel
Material of Sensing Face:	PBT	PBT	PBT	PBTP
Connection:	Cable	Cable	Teflon-Cable	Cable with connector M8x1
Cable length [m]:	3	3	3	0,3
Nr. of wires x diameter [mm ²]:	3x0,14	3x0,14	3x0,14	-
Certification:	cULus	cULus	-	cULus



Housing size \varnothing 8 mm

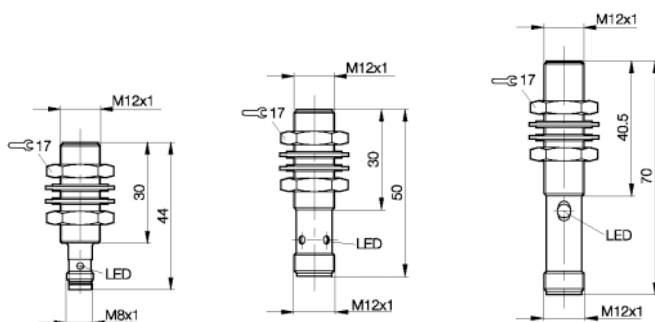
Order no.:	NJ8-E2S	NJ8E2S-04	NJ8-E2S-05	NJ8-E2S-14
Type of installation:	flush	flush	flush	flush
Rated Switching Distance S_N [mm]:	2	1,5	1,5	1,5
Secured Switching Distance S_a [mm]:	0...1,6	0...1,2	0...1,2	0...1,2
Supply Voltage [V DC]:	10...30	10...30	10...30	10...30
Load Current Capacity [mA]:	200	200	200	200
Current consumption max. [mA]:	≤ 25	≤ 20	≤ 8	≤ 8
Protection against polarity reversal:	yes	yes	yes	yes
Short circuit protection:	yes	yes	yes	yes
Repeat accuracy [%]:	≤ 5	≤ 5	≤ 5	≤ 5
Ambient Temperature range [°C]:	-25...+70	-25...+70	-25...+70	-25...+70
Operating Frequency [Hz]:	1000	1500	3000	3000
Function indicator:	yes	no	yes	yes
Degree of protection per IEC 60529:	IP 67	IP 65	IP 67	IP 67
Housing Material:	Stainless steel	Stainless steel	Stainless steel	Stainless steel
Material of Sensing Face:	PBT	PBT	PBT	PBT
Connection:	Connector M8x1	Connector M8x1	Connector M8x1	Connector M8x1
Cable Length [m]:	-	-	-	-
Nr. of wires x diameter [mm ²]:	-	-	-	-
Certification:	cULus	cULus	cULus	-

Inductive Proximity Switches (PNP-Closed)



Housing size \varnothing 12 mm

Order no.:	NJ12-E2	NJ12-E2-01	NJ12-E2T	NJ12-E2SK
Type of installation:	flush	flush	flush	flush
Rated Switching Distance S_N [mm]:	2	2	2	2
Secured Switching Distance S_a [mm]:	0...1,6	0...1,6	0...1,6	0...1,6
Supply Voltage [V DC]:	10...30	10...30	10...30	10...30
Load Current Capacity [mA]:	200	200	\leq 200	200
Current consumption max. [mA]:	\leq 12	\leq 25	\leq 25	\leq 12
Protection against polarity reversal:	yes	yes	yes	yes
Short circuit protection:	yes	yes	no	yes
Repeat accuracy[%]:	\leq 5	\leq 5	\leq 5	\leq 5
Ambient Temperature range [°C]:	-25...+70	-25...+70	-25...+120	-25...+70
Operating Frequency [Hz]:	5000	800	1000	5000
Function indicator:	yes	yes	no	yes
Degree of protection per IEC 60529:	IP 68	IP 67	IP 60	IP 68
Housing material:	CuZn nickel plated	Stainless steel	CuZn nickel plated	CuZn nickel plated
Material of Sensing Face:	PBT	PA12	PEEK	PBT
Connection:	Cable	Cable	Silicon-Cable	Cable w/connector M12x1
Cable length [m]:	3	3	3	0,5
Nr. of wires x diameter [mm ²]:	3x0,34	3x0,34	3x0,5	-
Certification:	cULus	-	-	cULus

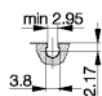


Housing size \varnothing 12 mm

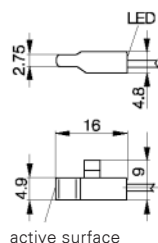
Order no.:	NJ12-E2S	NJ12-E2S-01	NJ12-E2S-02
Type of installation:	flush	flush	flush
Rated Switching Distance S_N [mm]:	2	4	2
Secured Switching Distance S_a [mm]:	0...1,6	0...3,2	0...1,6
Supply Voltage [V DC]:	10...30	10...30	10...30
Load Current Capacity [mA]:	130	130	200
Current consumption max. [mA]:	\leq 25	\leq 25	\leq 8
Protection against polarity reversal:	yes	yes	yes
Short circuit protection:	yes	yes	no
Repeat accuracy[%]:	\leq 5	\leq 5	\leq 5
Ambient Temperature range [°C]:	-25...+70	-25...+70	-40...+85
Operating Frequency [Hz]:	1000	600	3000
Function indicator:	yes	yes	no
Degree of protection per IEC 60529:	IP 67	IP 67	IP 68
Housing material:	CuZn nickel plated	Stainless steel	CuZn nickel plated
Material of Sensing Face:	PA12	PA12	PA12
Connection:	Cable	Cable	Silicon-Cable
Cable length [m]:	-	-	-
Nr. of wires x diameter [mm ²]:	-	-	-
Certification:	cULus	cULus	cULus

Accessory

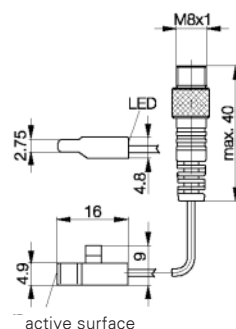
Magnetic Field Sensors (PNP-Closed)



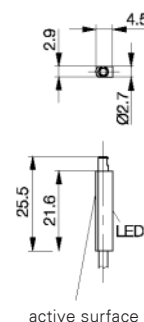
for use in C-Nut*
(ex. DGP12N, VE10-B)



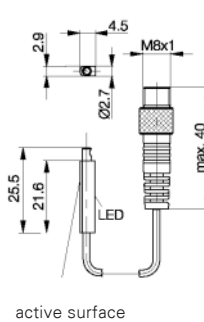
active surface



active surface

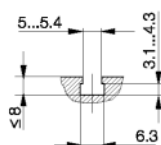


active surface

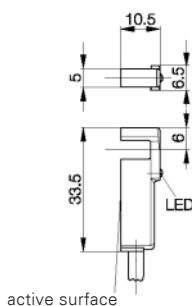


active surface

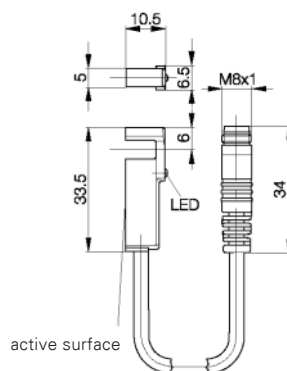
Order no.:	MFS103KHC42	MFS103SKHC42	MFS303KHC30	MFS303SKHC30
Assured Operating Field Strength [mm]:	≤ 2	≤ 2	≤ 2	≤ 2
Hysteresis of [%]:	≤ 45	≤ 45	≤ 45	≤ 45
Temperature Drift of turn on point of [%/°C]:	≤ 0,3	≤ 0,3	≤ 0,3	≤ 0,3
Supply Voltage [V DC]:	10...30	10...30	10...30	10...30
Voltage Drop [V]:	≤ 2	≤ 2	≤ 2	≤ 2
Rated operating current [mA]:	100	100	100	100
No load supply current max. [mA]:	≤ 12	≤ 12	≤ 12	≤ 12
Protection against polarity reversal:	yes	yes	yes	yes
Short circuit protection:	yes	yes	yes	yes
Ambient temperature range [°C]:	-25...+70	-25...+70	-25...+70	-25...+70
Degree of protection per IEC 60529:	IP 67	IP 67	IP 67	IP 67
Housing Material:	LCP	LCP	LCP	LCP
Connection:	Cable	Cable w/connector M8x1	Cable	Cable w/connector M8x1
Cable length [m]:	3	0,3	3	0,3
Nr. of wires x diameter [mm²]:	3x0,06	-	3x0,06	-
Certification:	cULus	cULus	cULus	cULus



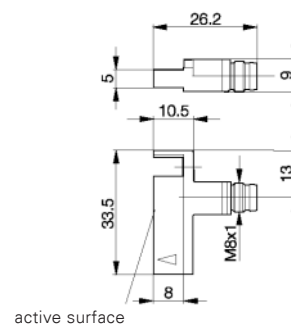
for use in T-Nut*
(ex. SGP25N, SGW14NC)



active surface



active surface



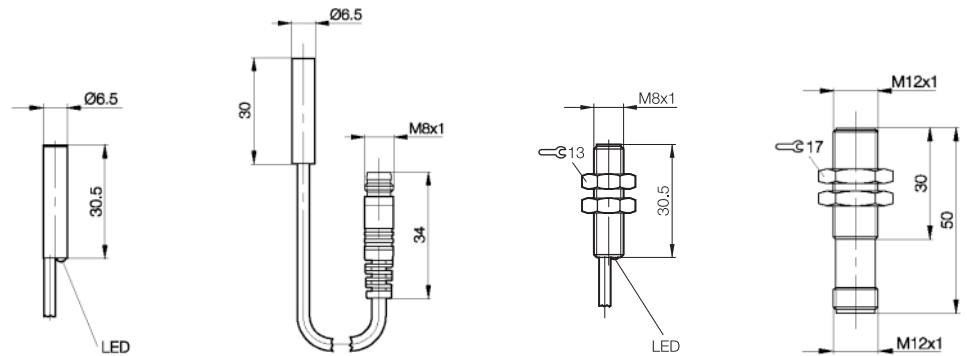
active surface

Order no.:	MFS305KHT20	MFS305SKHT20	MFS305WSKHT20
Assured Operating Field Strength [mm]:	≤ 2	≤ 2	≤ 2
Hysteresis of [%]:	≤ 45	≤ 45	≤ 45
Temperature Drift of turn on point of [%/°C]:	≤ 0,3	≤ 0,3	≤ 0,3
Supply Voltage [V DC]:	10...30	10...30	10...30
Voltage Drop [V]:	≤ 3,1	≤ 3,1	≤ 3,1
Rated Operating Current [mA]:	200	200	200
No load supply current max. [mA]:	≤ 30	≤ 30	≤ 30
Protection against polarity reversal:	yes	yes	yes
Short circuit protection:	yes	yes	yes
Ambient temperature range [°C]:	-25...+70	-25...+70	-25...+70
Degree of protection per IEC 60529:	IP 67	IP 67	IP 67
Housing Material:	LCP	LCP	AL
Connection:	Cable	Cable w/connector M8x1	Cable M8x1
Cable length [m]:	5	0,3	-
Nr. of wires x diameter [mm²]:	3x0,14	-	-
Certification:	cULus	cULus	cULus

* Mounting block included with delivery

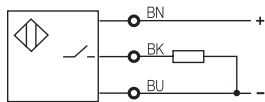
Magnetic Field Sensors (PNP-Closed)

for use in piston position sensing
(ex. WWR125F, WE250A)

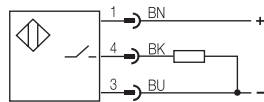


Order no.:	MFS07M	MFS07MSK	MFS08M	MFS12MS
Assured operating field strength m/m]:	≤ 2	≤ 2	≤ 2	≤ 2
Hysteresis of [%]:	≤ 45	≤ 45	≤ 45	≤ 45
Temperature drift of turn-on point of [%/°C]:	≤ 0,3	≤ 0,3	≤ 0,3	≤ 0,3
Supply Voltage [V DC]:	10...30	10...30	10...30	10...30
Voltage drop [V]:	≤ 3,1	≤ 3,1	≤ 3,1	≤ 3,1
Rated operating current [mA]:	200	200	200	200
No load supply current max. [mA]:	≤ 30	≤ 30	≤ 30	≤ 30
Protection against polarity reversal:	yes	yes	yes	yes
Short circuit protection:	yes	yes	yes	yes
Ambient temperature range [°C]:	-25...+70	-25...+70	-25...+70	-25...+70
Degree of protection per IEC 60529:	IP 67	IP 67	IP 67	IP 67
Housing material:	CuZn nickel plated	CuZn nickel plated	CuZn nickel plated	CuZn nickel plated
Connection:	Cable	Cable w/connector M8x1	Cable	Connector M12x1
Cable length [m]:	3	0,3	3	-
Nr. of wires x diameter [mm²]:	3x0,14	-	-	-
Certification:	cULus	cULus	cULus	cULus

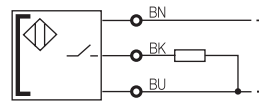
Connection diagram for Sensors



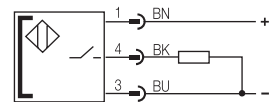
NJ-Cable



NJ-Connector



MFS-Cable



MFS-Connector

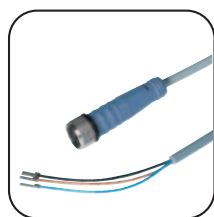
Connectors



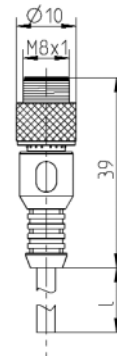
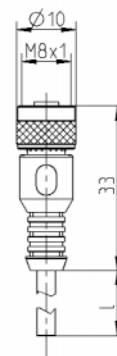
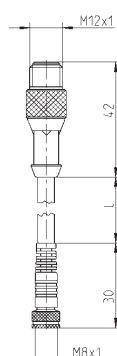
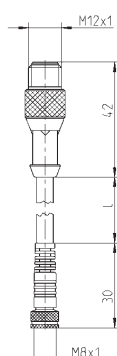
Order no.:	S12-G-3	S8-G-4	B8-G-4	S8-W-4	B8-W-4
Number of contacts:	3	4	4	4	4
Type of connector:	straight	straight	straight	angled	angled
Size of thread:	M12x1	M8x1	M8x1	M8x1	M8x1
Pin assignment:					
	Pin	Pin	Socket	Pin	Socket

Accessory

Cable connectors for inductive proximity switches with straight connectors



KAG500



Order no.:	KAG30	KAG60	KAG300B4	KAG300S4
Nr. of contacts:	3	3	4	4
Cable length L [m]:	0,3	0,6	3	3
Cable diameter Ø [mm]:	5	5	5	5
Straight Plug:	x	x	x	x
Angled Plug:	-	-	-	-
Version with diode:	-	-	-	-
Version with stranded wire:	-	-	x	x

Pin assignment:



Pin



Socket



Pin



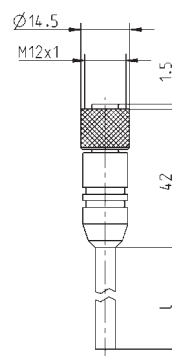
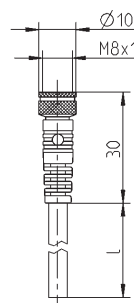
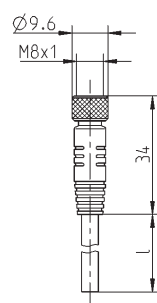
Socket



Pin



Pin



Order no.:	KAG500	KAG500-01	KAG500-02
Nr. of contacts:	3	3	3
Cable length L [m]:	5	5	5
Cable diameter Ø [mm]:	3	5	5
Straight plug:	x	x	x
Angled plug:	-	-	-
Version with diode:	-	-	-
Version with stranded wire:	x	x	x

Pin assignment:



Socket



Socket



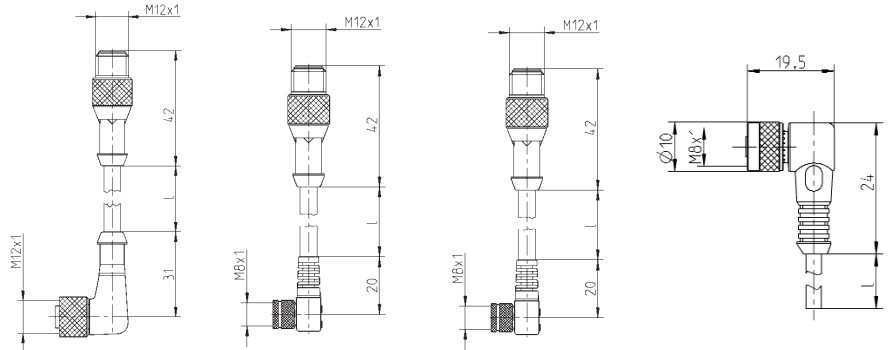
Socket

Subject to change

Cable connectors for inductive proximity switches with angled connectors

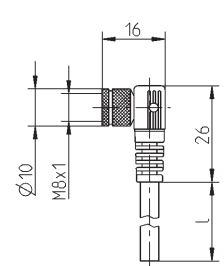
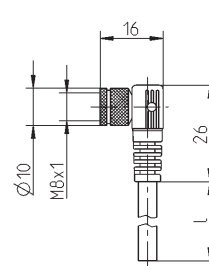
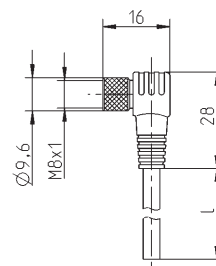
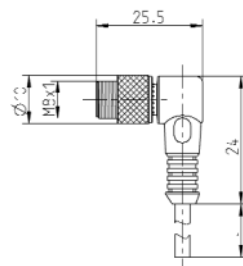


KAW500



Order no.:	KAW30	KAW100	KAW200	KAW300B4
Nr. of contacts:	3	3	3	4
Cable length L [m]:	0,3	1	2	3
Cable diameter Ø [mm]:	5	5	5	5
Straight plug:	x	x	x	-
Angled plug:	x	x	x	x
Version with diode:	x	x	x	-
Version with stranded wire:	-	-	-	x

Pin assignment:



Order no.:	KAW300S4	KAW500	KAW500-01	KAW500-02
Nr. of contacts:	4	3	3	3
Cable length L [m]:	3	5	5	5
Cable diameter Ø [mm]:	5	3	5	5
Straight plug:	-	-	-	-
Angled plug:	x	x	x	x
Version with diode:	-	-	-	x
Version with stranded wire:	x	x	x	x

Pin assignment:



Subject to change

Accessory

Bracket for inductive proximity switches
manufactured from a hard coated aluminium alloy



Order no.: **KB3**
suitable for:
GK15N
GP19-B
GP206N
GP210N

Order no.: **KB3M**
suitable for:
GP12-B
GZ8-16D
GZ8-16E
GZ11-18E
GZ18-23D
GZ25-35D
GZ25-35E
GZ25-35G
GZ55-65D

Order no.: **KB4**
suitable for:
ZK22

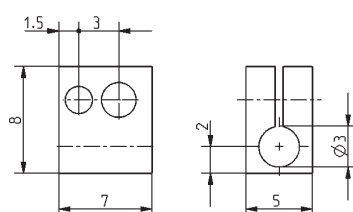
Order no.: **KB5**
suitable for:
GK20N
GP30-B

Order no.: **KB6.5**
suitable for:
GD46N
GD70
GD110N
GH90
GH100
GH150
GH200
GP45...
GS65

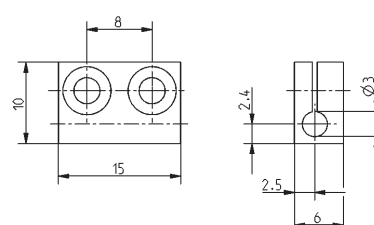
Order no.: **KB8**
suitable for:
GD160N
GD540...
GD560...
GG50...
GG70...
GG100...
GK25N
GK35N
GP75
GP78
GP80
GP100
GP224...
GP406...
GP408...
GP410...
GP412...
GP416...
GP420...
GP430...
GP500...
SB50...
SB74...
SB100...
SB150...
SB190...
ZK33

Order no.: **KB12**
suitable for:
GK40N
GK50N
GP88
GP100...
GP240...
GP260...
GP325...

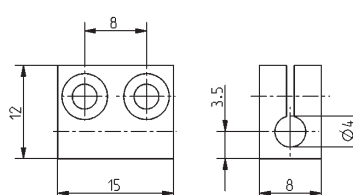
KB3M



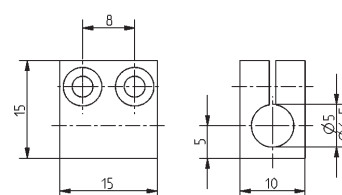
KB3



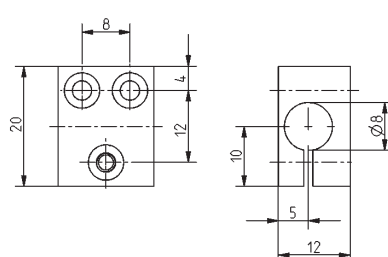
KB4



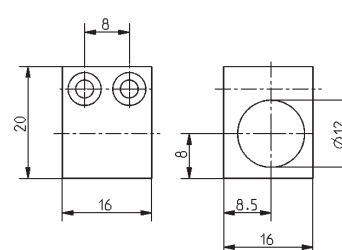
KB5/KB6.5



KB8



KB12



Subject to change

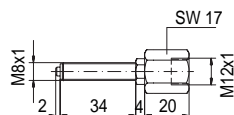
Stop Stroke Adjustment Screw with or without sensor mount



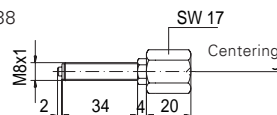
Part Number:	AI-M8x1-38	AI-M8x1-53	AI-M10x1-70
Thread size:	M8x1	M8x1	M10x1
suitable for switch sizes:	M12x1	M12x1	M12x1

Part Number:	AO-M8x1-38	AO-M8x1-53	AO-M10x1-70
Thread size:	M8x1	M8x1	M10x1
suitable for switch sizes:	-	-	-

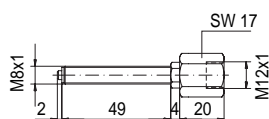
AI-M8x1-38



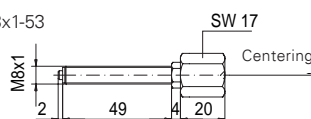
AO-M8x1-38



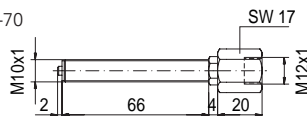
AI-M8x1-53



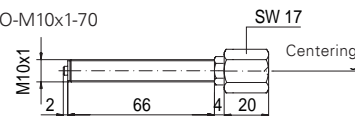
AO-M8x1-53



AI-M10x1-70



AO-M10x1-70

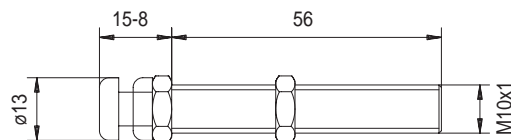


End Stop Damper

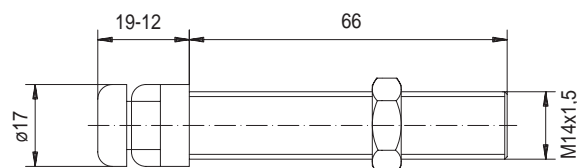


Order no.:	AD-M10x1	AD-M14x1,5
Stroke [mm]:	7	7
Max. cycles per min. [1/min]:	50	50
Impact speed [m/s]:	1,5	1,5
Resetting force [m/s]:	65	150

AD-M10x1

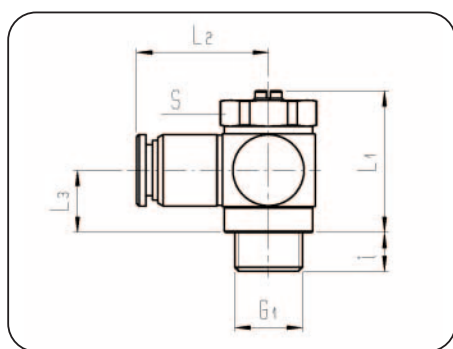


AD-M14x1,5



Accessory

Flow Control Valves

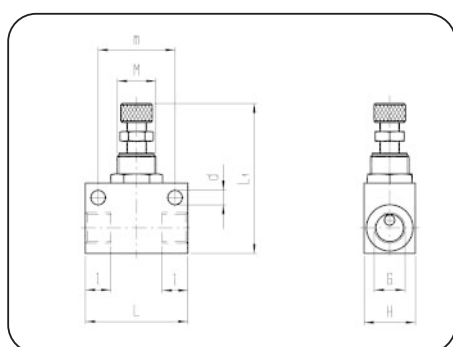


Flow control valves - with swivel joint

Exhaust air restrictor
for direct installation on the components



Order no.:	DRVM5x4	DRV1/8x6	DRV1/8x8	DRV1/4x8
Connection thread size G1:	M5	1/8"	1/8"	1/4"
Outside diam. Ø for hose [mm]:	4	6	8	8
Dim. S [mm]:	8	14	14	17
Dim. L1 [mm]:	21,5	29	29	31
Dim. L2 [mm]:	17	21,5	23,5	25,5
Dim. L3 [mm]:	7,5	11	11	12
Dim. i [mm]:	4	6	6	7,5
Operating pressure min./max. [bar]:	0,2/10	0,2/10	0,2/10	0,2/10
Operating temp min./max. [°C]:	5/80	5/80	5/80	5/80

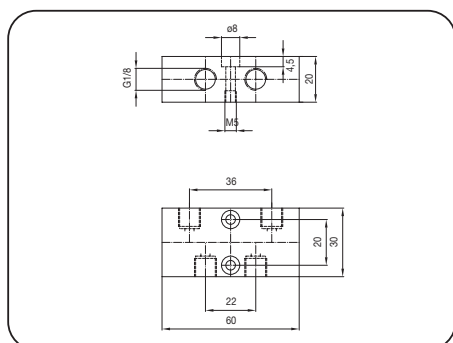


Flow control valves - inline

Exhaust air restrictor
for close-by installation into the hose system of the components

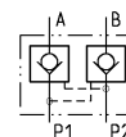


Order no.:	DRV1/8I	DRV1/4I
Thread Size:	1/8"	1/4"
Dim. i [mm]:	8	12
Dim. L [mm]:	32	52
Dim. L1 [mm]:	48	58
Dim. M [mm]:	M12x1	M20x1,5
Dim. H [mm]:	16	20
Dim. m [mm]:	24	34
Dim. d [mm]:	4,3	6,3
Operating pressure min./max. [bar]:	0,2/10	0,2/10
Operating Temp. min./max. [°C]:	5/80	5/80



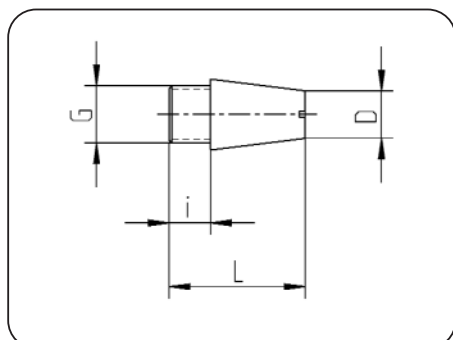
Pressure safety valve

Pressure safety at drop in pressure
for close-by installation into the hose system of the components



Order no.:	DSV1/8
Nominal Size [mm]:	4
Operating pressure min./max. [bar]:	0,5/10
Operating Temp. min./max. [°C]:	0/80

Silencer

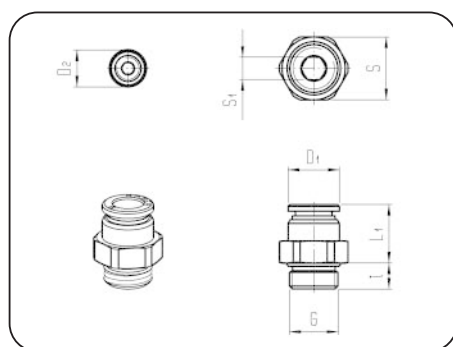


Silencer

Order no.:	SDM5	SD18	SD14	SD38	SD12	SD34
Dim. G:	M5	1/8"	1/4"	3/8"	1/2"	3/4"
Dim. i [mm]:	4	7	7	9,5	9,5	14,5
Dim. L [mm]:	21	23	28	41	44	56
Dim. D [mm]:	8,5	8,0	9,5	13,0	19,5	20,0

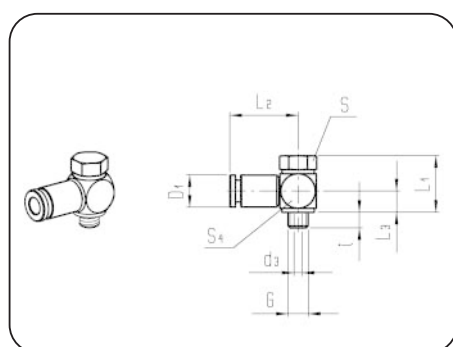
Subject to change

Pneumatic Connectors



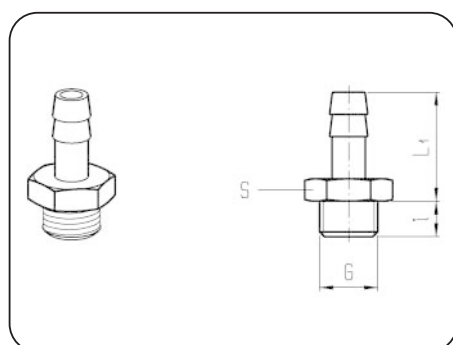
Straight Connector

Order no.:	GVM5	GV1/8x4	GV1/8x6	GV1/8x8	GV1/4x6	GV1/4x8
Thread Size G:	M5	1/8"	1/8"	1/8"	1/4"	1/4"
Hose Outside Diameter [mm]:	4	4	6	8	6	8
Dim. i [mm]:	3,5	5	5	5	7	7
Dim. L1 [mm]:	16,5	14	15	20	14,5	16
Dim. D1 [mm]:	8	10	12	14	12	14
Dim. S1 [mm]:	2,5	3	4	5	4	6
Dim. S [mm]:	8	13	13	14	17	17



Angle Connector, rotatable

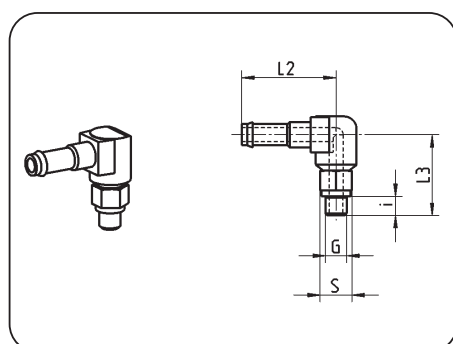
Order no.:	WVM5	WV1/8x4	WV1/8x6	WV1/8x8	WV1/4x6	WV1/4x8
Thread Size G:	M5	1/8"	1/8"	1/8"	1/4"	1/4"
Hose Outside Diameter [mm]:	4	4	6	8	6	8
Dim. i [mm]:	4	6,5	6,5	6,5	8	8
Dim. L1 [mm]:	14	20	20	20	21	21
Dim. L2 [mm]:	17	20,5	21,5	23,5	23,5	25,5
Dim. L3 [mm]:	5,3	8	8	8	8	8
Dim. d3 [mm]:	2	5	5	5	7	7
Dim. D1 [mm]:	8	10	12	14	12	14
Dim. S4 [mm]:	9	14	14	14	18	18
Dim. S [mm]:	8	14	14	14	17	17



Barbed Fitting

Order no.:	GVM3	GV1/8x5ID	GV1/8x6ID	GV1/8x8ID	GV1/4x8ID
Thread size:	M3	1/8"	1/8"	1/8"	1/4"
Hose Inner Diameter [mm]:	3	5	6	8	8
Dim. i [mm]:	2,7	6	6	6	8
Dim. L1 [mm]:	7,2	24	24	24	24,5
Dim. S [mm]:	4,5	13	13	13	17

Order no.:	GV1/4x10ID	GV3/8x13ID	GV1/2x13ID	GV1/2x16ID
Thread Size:	1/4"	3/8"	1/2"	1/2"
Hose Inner Diameter [mm]:	10	13	13	16
Dim. i [mm]:	8	9	10	10
Dim. L1 [mm]:	24,5	24,5	25	29,5
Dim. S [mm]:	17	19	24	24



Barbed Angle Fitting

Order no.:	WVM3
Thread Size G:	M3
Hose Inner Diameter [mm]:	3
Dim. i [mm]:	2,7
Dim. L2 [mm]:	13,3
Dim. L3 [mm]:	11,4
Dim. S [mm]:	4,5

Subject to change

Accessory

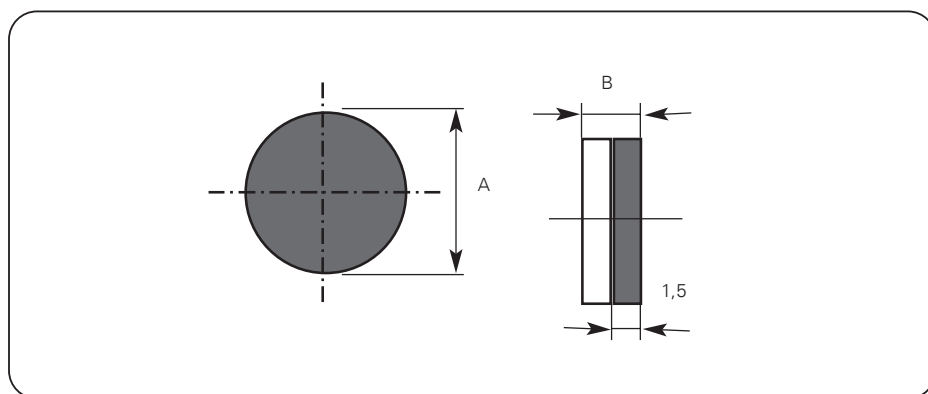
Rubber Jaw Pads



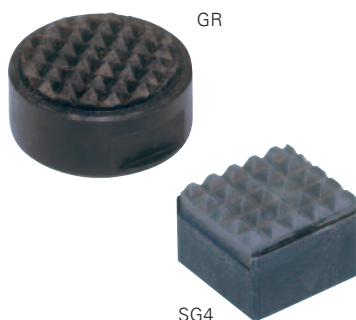
Order no. *:	DG6	DG10	DG16	DG20
Dim. A [mm]:	6	10	16	20
Dim. B [mm]:	5	5	5	5

* sold in packets of 6 pcs

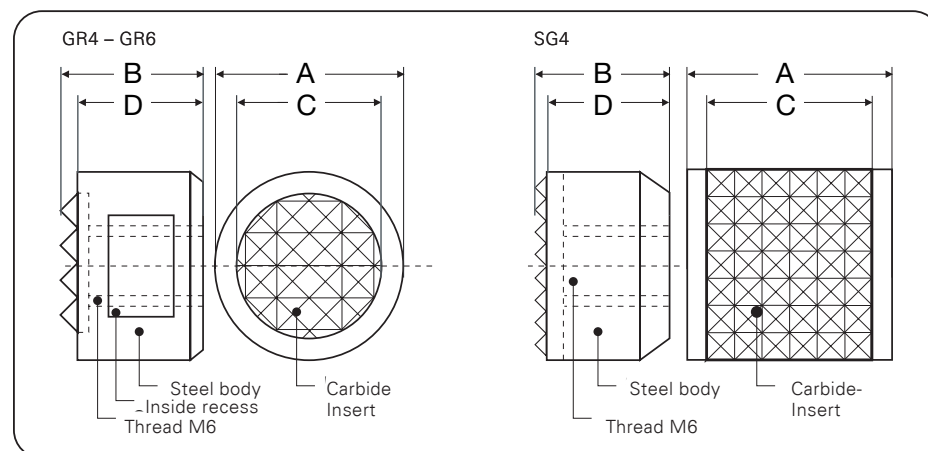
Version	Material	Color	Heat resistant	to Durometer	Extra charge	Add to part nr.
Standard	Neoprene	black	-30°-120°C oil tolerant	65 ±3	no	-
Heat Resistant	Silicone	blue	200° C	60 ±5	no	SI



Hard Jaw Inserts



Order no.:	GR4	GR4A	GR4C	GR5	GR6	SG4
Dim. A [mm]:	12,7	12,7	12,7	15,8	19	12,7
Dim. B [mm]:	9,5	12,7	16,5	9,5	9,5	9,5
Dim. C [mm]:	9,5	9,5	9,5	12,7	15,8	10,3 x 12,7
Dim. D [mm]:	8,7	11,9	15,8	8,7	8,7	8,7

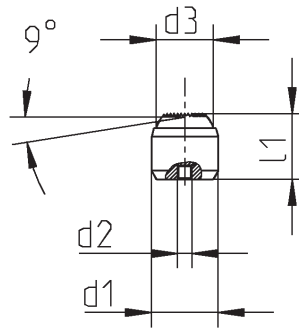


Subject to change

Hard Jaw Inserts, floating

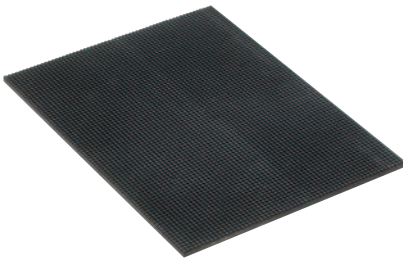


Order no.:	J712	J718	J728
Dim. d1 [mm]:	12n6	18n6	28n6
Dim. d2 [mm]:	M3	M4	M5
Dim. d3 [mm]:	7	10	20
Dim. L1 [mm]:	10	16	25

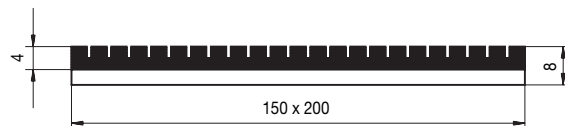


Subject to change

Rubber Jaw Liners



Order no.:	GU2G
Firmness DIN53 504 min. [N/mm²]:	10



Subject to change

Accessory

Rubber Jaw Liners



GU1

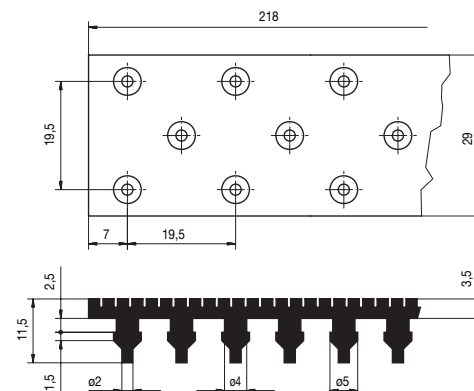


GU2Si

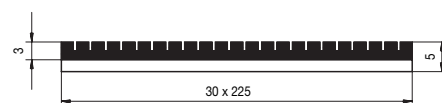
Order no.:	GU1	GU2
Firmness DIN53 504 min. [N/mm ²]:	10	10

Version	Material	Color	Heat Resistant	Durometer	Extra charge	Add to part nr.
Standard	Neoprene	black	-30°-120° C oil tolerant	65 ±3	no	-
Heat Resistant	Silicone	blue	200° C	60 ±5	no	SI

GU1 Rubber jaw liner retaining buttons



GU2 Rubber jaw liner with aluminum back plate



Subject to change

Rubber Coated Tape



Order no.:	KF50G	KF50N
	smooth	knobbed

Even out tolerances quickly...

Be it a smooth surface or a knobbed one, applying this adhesive tape gives you ideal coefficients of friction and compensates for variation in tolerances. Be it rectangular, round or bulky, no matter what the gripper jaw is shaped like, the Rubber Coated Tape adapts itself like a sticker.

And it's this simple:

- Cut the tape to the required shape.
- Peel backing and stick it on.
- Done!

Rubber Coated Tape for Gripper Jaws

Size:

Material:

Thickness:

Temperature Range:

Tensile Strength:

Adhesion:

Characteristics:

500 x 100 mm

rubber laminated over a cotton weave,
smooth or knobbed

0,48 mm

60 °C long term, 100 °C short term

~ 0,9 kg/mm

22 g/mm

high coefficient of friction

Epoxy Jaw Compound



BGM-W



BGM-H

Order no.:	BGM-W	BGM-H
	(soft, Silicone) for approx. 10 medium size jaw cups	(hard) for approx. 10 medium size jaw cups

1-2-3 and your jaws are ready!

Whether bulky parts, balls, or dice... in 2 to a maximum of 4 hours, you can produce customized jaws with our Epoxy Jaw Compound and the matching jaw cups. Hard as metal or soft as silicone. Shaping jaws by chipping, diagrams, complicated (or even impossible) milling processes become a thing of the past.

And it's this simple:

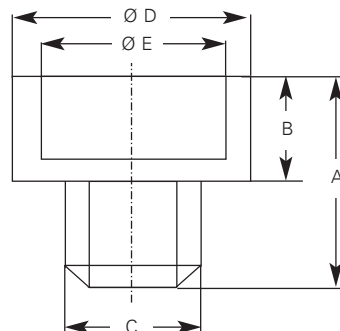
- Knead the blue and yellow compounds together in a 1:1 ratio until it turns green.
- Put the mixed compound into the jaw cup.
- Hold the part to be gripped between the jaw cups.
- Put the jaw cups into the holding device/gripper.
- Allow to harden for 2 hours (Silicone compound: allow 4 hours).
- Done!

Jaw Cups for epoxy jaw compound



Order no.:	BN8	BN12	BN16	BN20
Dim. A [mm]:	8	12	16	20
Dim. B [mm]:	4	6	8	10
Dim. C [mm]:	M3	M4	M5	M6
Dim. Ø D [mm]:	6	10	16	20
Dim. Ø E [mm]:	5	9	15	19

Material: Brass



Subject to change

Accessory

Rubber Moulding Compound



Order no.:

GU800

The ideal way to mold or form custom gripper jaws and more!

To increase the coefficient of friction and the corresponding gripping forces, gripper jaws can be coated with a rubber compound which also protects the part being gripped. This is ideal for the more complex gripper jaws. For example, on grippers with holes or inserts, the Rubber Moulding Compound penetrates throughout. Our Rubber Moulding Compound is also suitable for making seals, coating rollers, or making repairs to conveyor belts, solid tires or conveyor rollers and for coating tanks, pumps valves and piping. It can also be used as protection against vibrations and as an electrical insulator.

Easy to use:

- Roughen metal surface.
- For optimal adhesion drill holes approximately. \varnothing 2 mm, 3 mm deep at 10mm intervals into surface.
- Mix 3 parts rubber compound to one part hardener.
- Apply with brush or spatula.
- Allow approximately 14 hours to harden.

Rubber Moulding Compound

Durometer when cured (ISO 868):	70 Shore
Relative Density:	1,1
Tensile Strength (DIN 53455):	10–12 N/mm ²
Elongation at break (DIN 53455):	500–600 %
Tear Resistance (DIN 53356):	20–30 N/m
Unit Size:	1 Liter

Subject to change

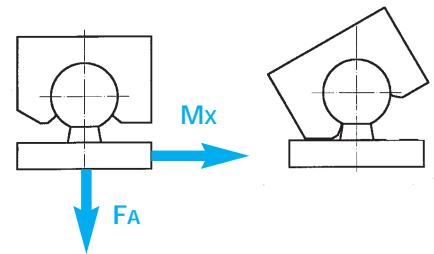
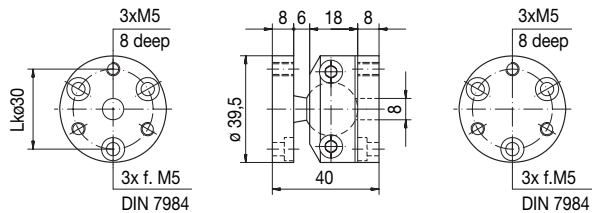
Ball Joints



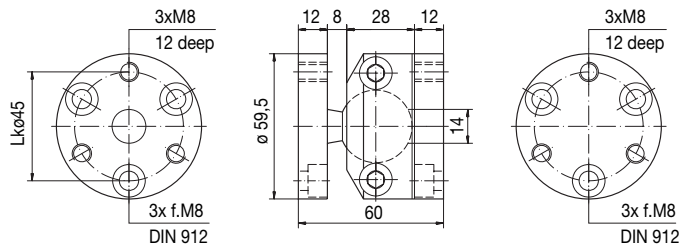
Order no.:	KG40	KG60	KG80
Pivot angle max. adjustable \pm [°]:	30	30	30
FA [N]:	7500	15000	28000
Mx [Nm]:	18	55	124
Weight [kg]:	0,1	0,3	0,8

Order no.:	KG40ST	KG60ST	KG80ST
Pivot angle max. adjustable \pm [°]:	30	30	30
FA [N]:	18000	45000	70000
Mx [Nm]:	18	55	124
Weight [kg]:	0,3	0,9	2,3

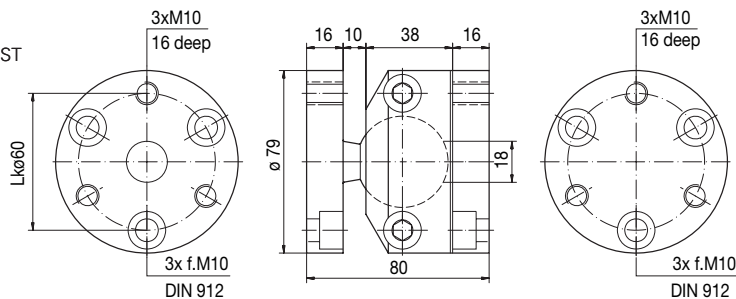
KG40
KG40ST



KG60
KG60ST



KG80
KG80ST



* equivalent to
DIN EN ISO 4 762

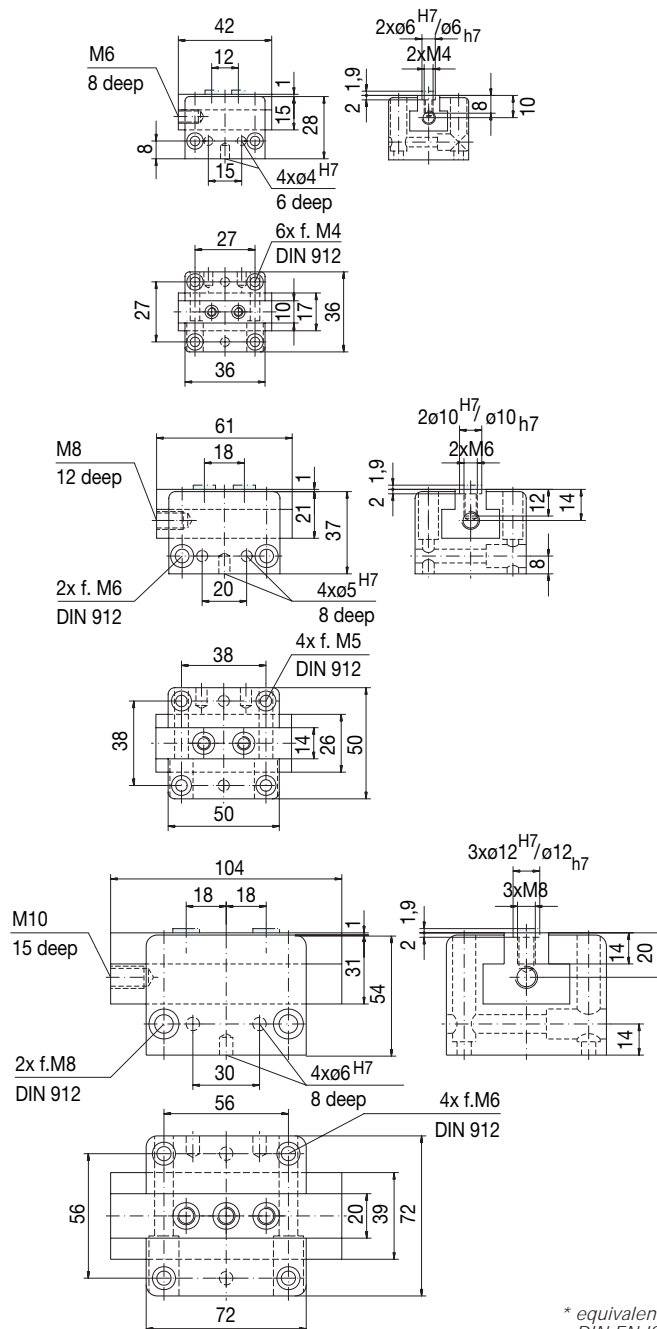
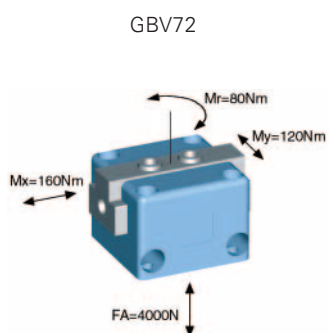
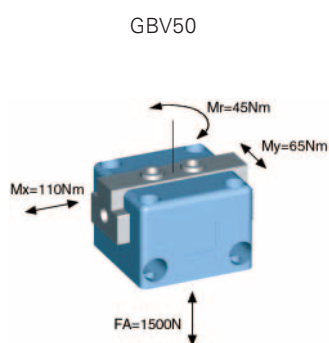
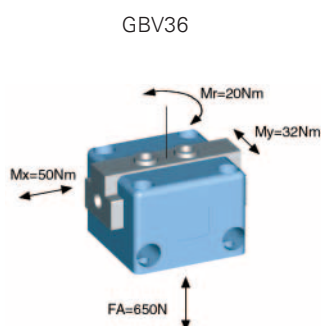
Subject to change

Accessory

Gripper Jaw Extensions



Order no.:	GBV36	GBV50	GBV72
Weight [kg]:	0,14	0,4	1,3



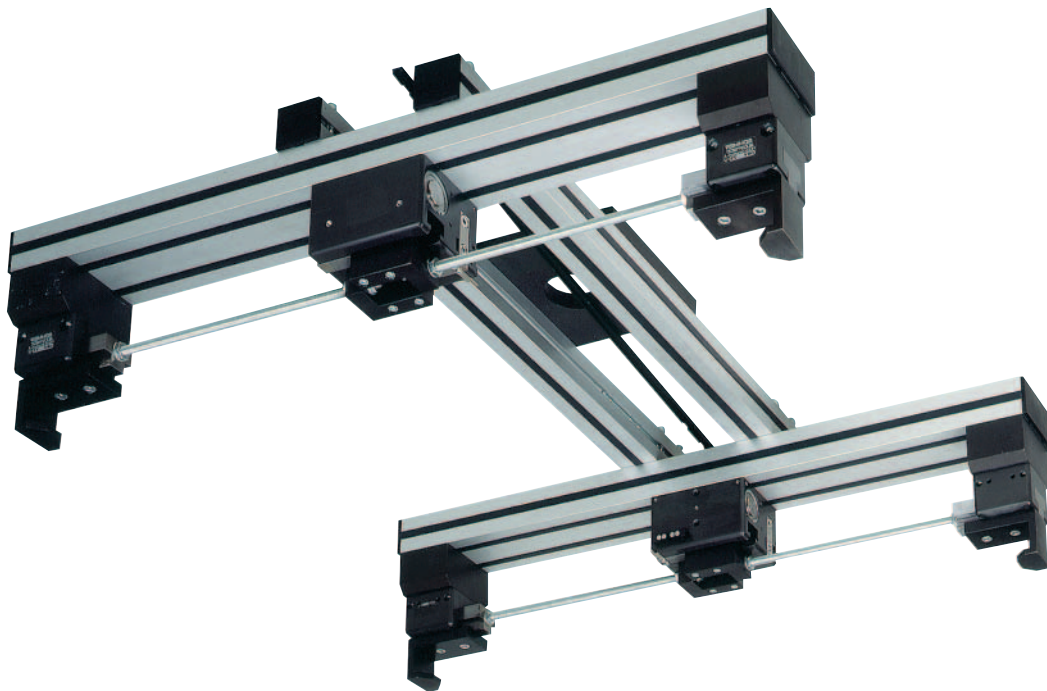
* equivalent to
DIN EN ISO 4 762

Subject to change

Simple mounting:

- GBV-Jaw extensions allow the placement of the gripper jaws out away from the gripper
(Also ideal if you must grasp centrally, but there is no space in the center)
- GBV- Jaw extensions attach to the gripper with threaded rod (available in standard lengths of 500 mm, or cut to length, stainless steel).
- Easy!

Example



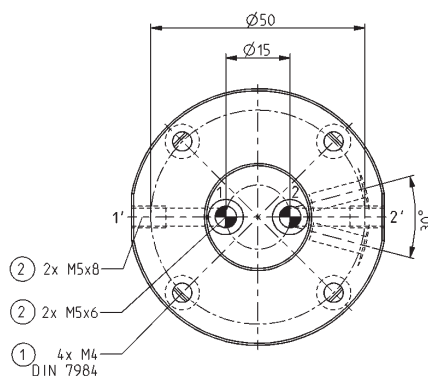
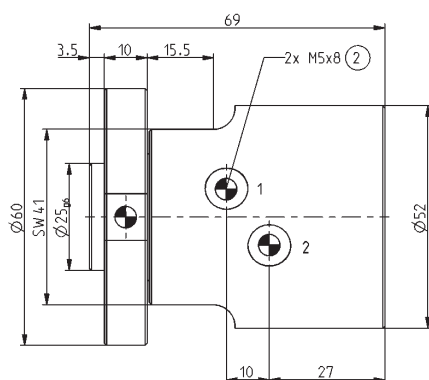
Accessory

Pneumatic Rotary Manifolds

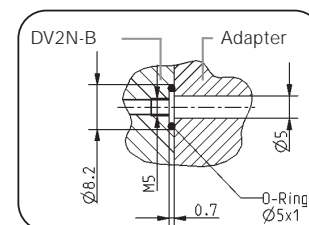


Order no.:	DV2N-B	DV4N-B
Number of air connections:	2	4
Max. Acceleration [m/s ²]:	22	22
Max. RPM [U/min]/[°/s]:	120/720	120/720
Axial bearing load [N]:	1300	1300
Radial bearing load [Nm]:	104	156
Pressure max. [bar]:	10	10
Temperature min./max. [°C]:	5/80	5/80
Weight [kg]:	0,45	0,55

DV2N-B

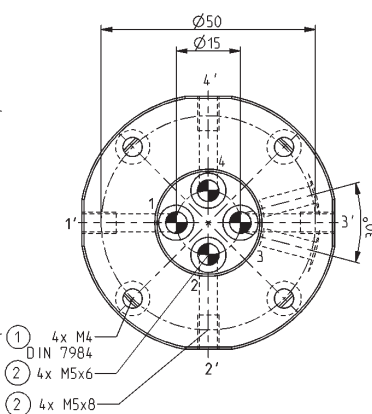
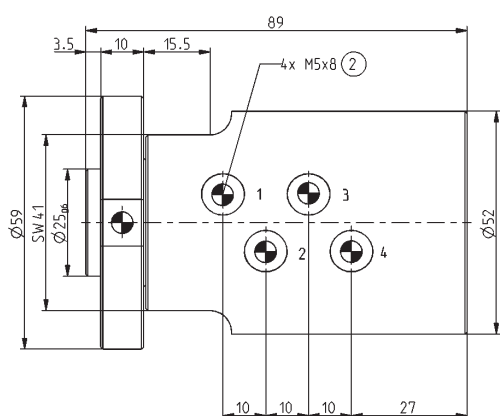


- ① Mounting for DV2N-B
- ② Air connections

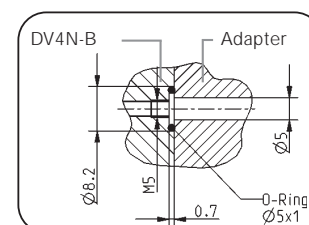


O-Rings included with delivery

DV4N-B



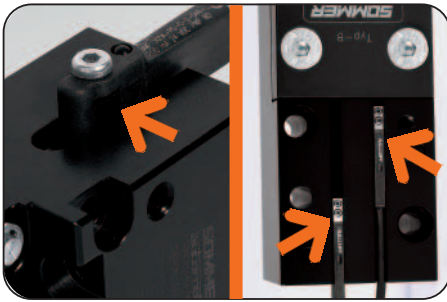
- ① Mounting for DV4N-B
- ② Air connections



O-Rings included with delivery

Subject to change

Examples:



Position sensing

indirect position sensing of the piston position

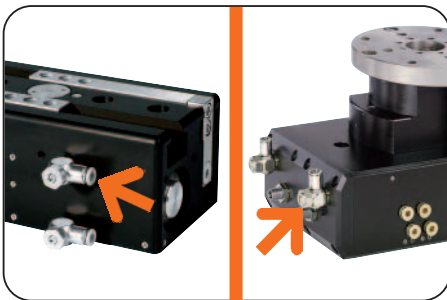
- by means of magnetic field-sensors (from page 8)
- Brackets for T-Nut or C-groove included with purchase of the magnetic field-sensors.



Position sensing

direct position sensing via trip flag

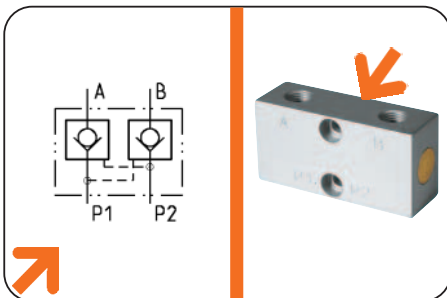
- by means of bracket (page 12) to attach inductive proximity switch (from page 4)
- Signal transmission takes place via connection cable (from page 10)



Drive

Speed control via exhaust airflow regulation

- via Flow Control Valves with swivel joint (see picture) or inline flow control valves (from page 14)
- the piston speed of a double acting cylinder can be adjusted in both directions of travel separately by using 2 flow control valves.



Gripper Force Maintenance (Safety)

Prevention of a loss of gripping-force in the event of a drop in pressure

- by means of the pressure safety valve DSV1/8 (page 14)
- the operation of the pressure safety valve takes place thru two parallel connected one-way valves that automatically open the exhaust and close the supply in the event of a loss in pressure.



➤ 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