



Separators

pneumatic

SOMMER
automatic





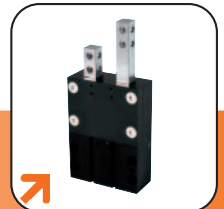
VEG-B

Order no.	Stroke [mm]	Force in retract [N]	Force in extend [N]	Page
Product Information				6
VEG10-B	10	30	40	10
VEG14-B	20	65	80	12
VEG15-B	40	65	80	14
VEG22-B	30	170	220	16
VEG23-B	60	170	220	18



VE-B

Order no.	Stroke [mm]	Force in retract [N]	Force in extend [N]	Page
Product Information				22
VE10-B	10	30	40	26
VE14-B	20	65	80	28
VE15-B	40	65	80	30
VE22-B	30	170	220	32
VE23-B	60	170	220	34





Separators

pneumatic



VE-B-Series

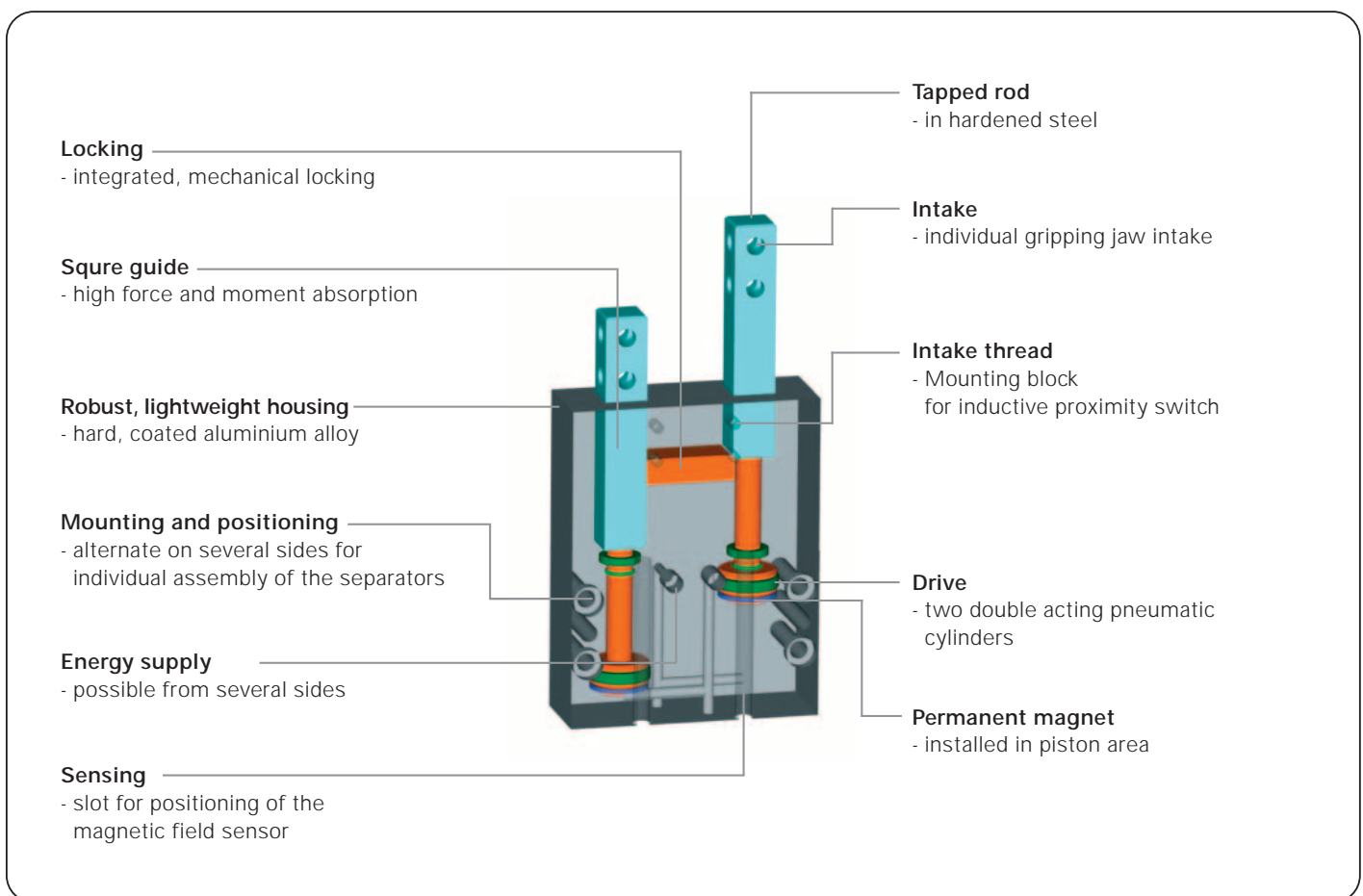
SOMMER
automatic

Separators

Features

- Universal talent: counting, separating, reject, with integrated mechanical locking for wholly process reliability
- To control the both pneumatic cylinders, it is only 5/2 way valve needed (more details see function)
- Five different sizes, with a stroke up to 60 mm
- Positioning possibility via magnetic field sensor, alternate via inductive proximity switch

Functional diagram



Terms

Retract time/extend time: time required by the tapped rod to travel the entire stroke distance

Repeatability: dispersion of stop positions at 50/100 consecutive cycles/strokes

Cycle: distance covered by the piston in one open and close movement

Maintenance: maintenance free bis 10 Mio. cycles
(please see the owner's manual for conditions,
download from www.sommer-automatic.com)

- long maintenance intervals keep costs down
- long durability

Model

Order no.	Stroke per tapped rod	Force in retract	Force in extend
VE10-B	10 mm	30 N	40 N
VE14-B	20 mm	65 N	80 N
VE15-B	40 mm	65 N	80 N
VE22-B	30 mm	170 N	220 N
VE23-B	60 mm	170 N	220 N

Function

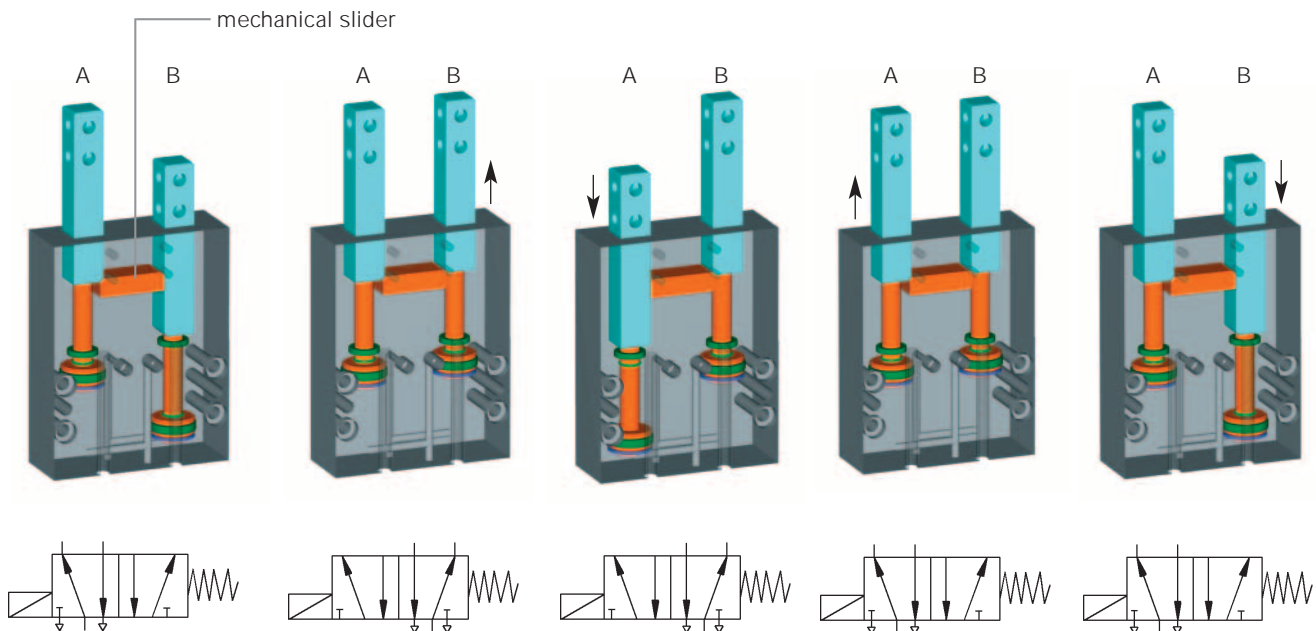
Tapped rod B is retract.
A mechanical slider
momentarily locks rod A

Tapped rod B extends

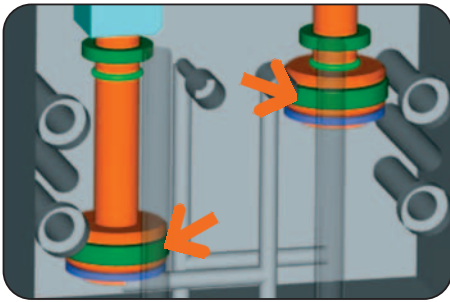
Tapped rod A can
retract when rod B is
completely extended
(due to the mechanical
slider)

Tapped rod A extends

Tapped rod A can
retract when rod B
is completely extended
(due to the mechanical
slider)



Separators



Drive

two double acting pneumatic cylinders

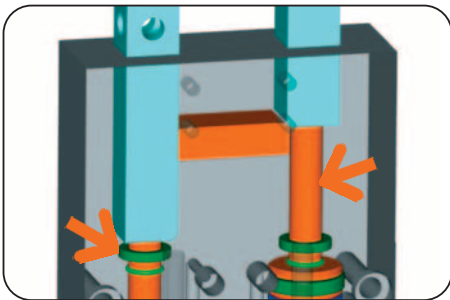
- maximum drive force in retract and extend
- extend force up to 220 N



Guide

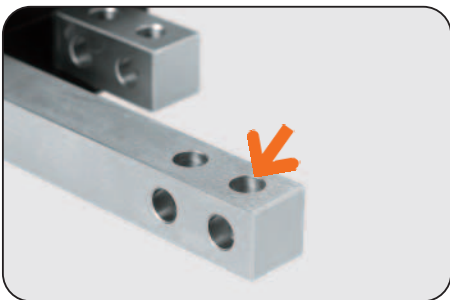
flat guide in hardened steel

- flat guide for high force and moment intake
- high precision due to low play guide, polished flat guide
- long durability due to generous lubrication pockets in the housing



Force transfer

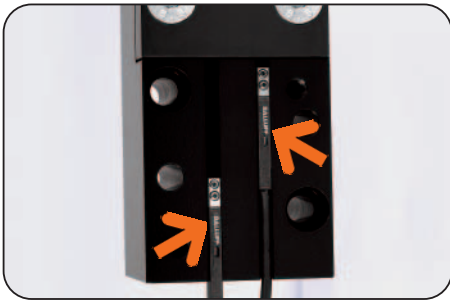
- direct force transfer of drive force in extend force
- low loss of the piston to the tapped rod
- high repeatability



Intake

Individual separating jaws intake

- flexible fixing of individual jaw on multiple bores possible
- simple adaptable to the workpiece size due to four-sided bores
- simple and cost effective design of the jaws

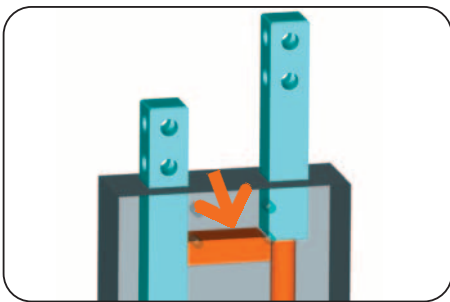


Position sensing

indirect piston setting position sensing via magnetic field sensors

- Process safe
- Compact
- For magnetic field sensors with C groove mounting holder

alternate thread holes for intake of the mounting holder to mount an inductive proximity switch are provided



Positive drive

integrated mechanical locking

- Makes sure that both tapped rod momentarily extended
- The workpiece is momentarily enclosed by the tapped rods
- Only one tapped rod retracts, the workpiece will be separated
- Effective and absolute reliable system without additional effort



Machine connection

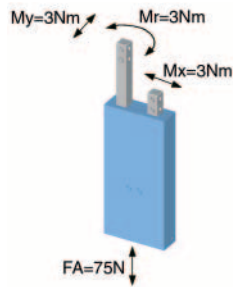
Energy supply, attachment and positioning possibilities on several sides

- Optimum integration in the workspace due to individual installation position
- Hoseless direct connection possible, no additional interference contours (from VE14-B)

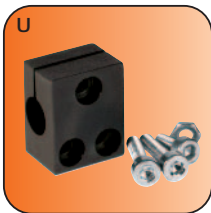
Separators

Forces and Moments

Max allowable static forces and moments on tapped rod



Accessory list



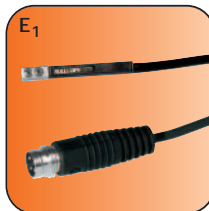
Mounting block
Order no. KB8-20



Pneumatic fittings
Order no. GVM5



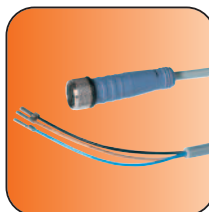
Proximity switch
Order no. NJ8-E2S



Magnetic field sensor
Order no. MFS303SKHC30

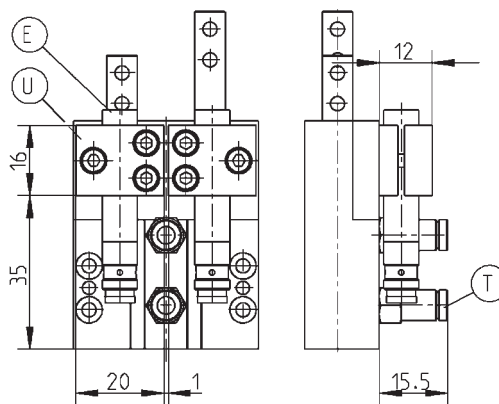


Magnetic field sensor
Order no. MFS103SKHC42

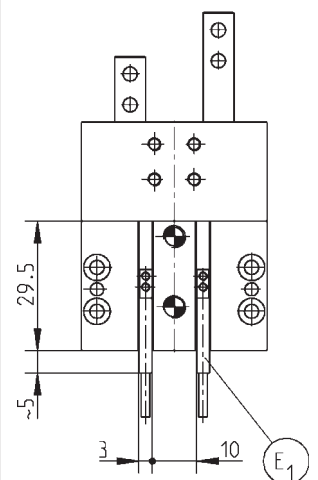


Cable straight plug
Order no. KAG500

Accessories



Accessories



Subject to change without prior notice

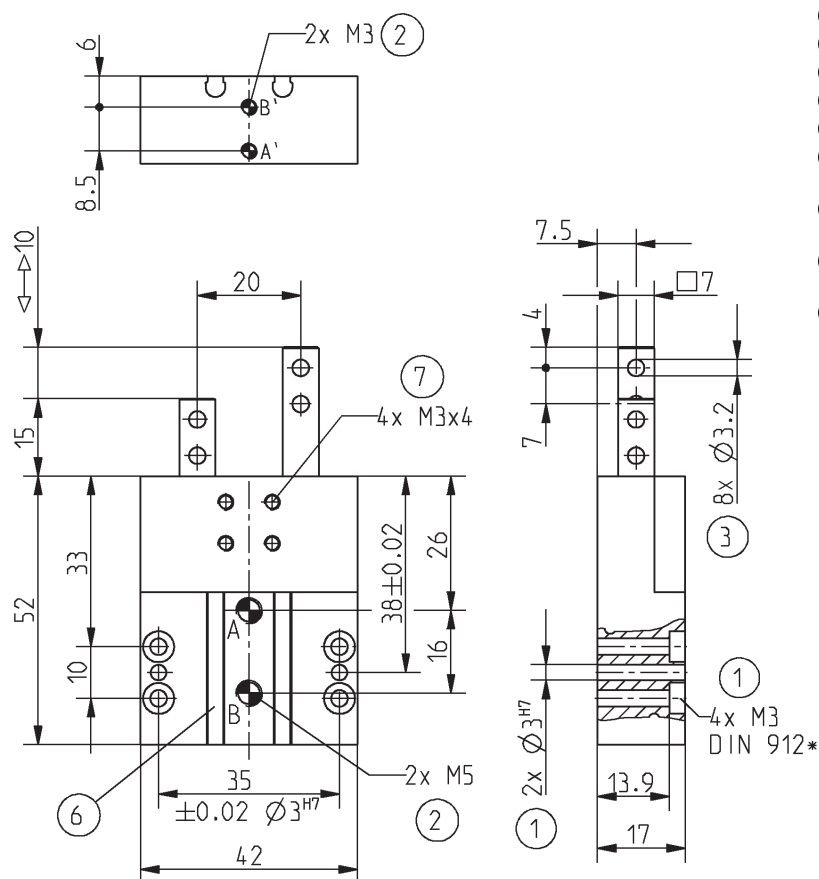


Order no.:	VE10-B
Stroke per tapped rod [mm]:	10
Force in retract [N]:	30
Force in extend [N]:	40
Self limitation:	
Cycle time [s]:	0,02
Repeatability +/- [mm]:	0,05
Min./max. operating pressure [bar]:	3/8
Air volume per cycle [cm ³]:	3
Min./max. operating temperature [°C]*:	5/80
Weight [g]:	120

All data measured at 6 bar

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

VE10-B

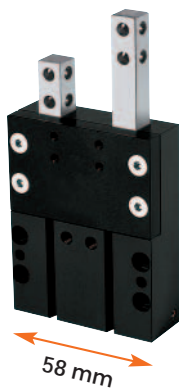


- ① Fixing Separators
- ② Energy supply
- ③ Fixing jaws
- ⑥ Inquiry groove magnetic field sensor
- ⑦ Fixing for mounting block (KB)
- Ⓐ Air connection (left retract/right extend)
- Ⓑ Air connection (left retract/right extend)
- Ⓐ Air connection alternativ (left retract/right extend)
- Ⓑ Air connection alternativ (left retract/right extend)

* replaced by DIN EN ISO 4762

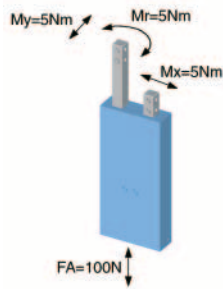
Subject to change without prior notice

Separators

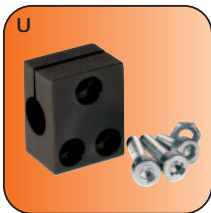


Forces and Moments

Max allowable static forces and moments on tapped rod



Accessory list



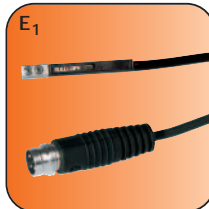
Mounting block
Order no. KB8-20



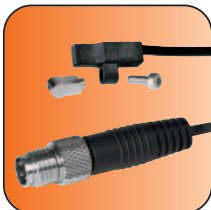
Pneumatic fittings
Order no. GVM5



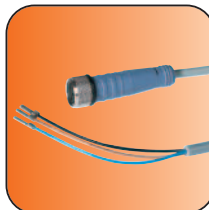
Proximity switch
Order no. NJ8-E2S



Magnetic field sensor
Order no. MFS303SKHC30

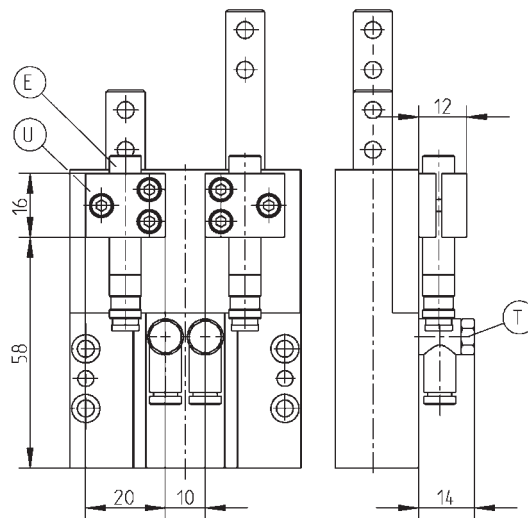


Magnetic field sensor
Order no. MFS103SKHC42

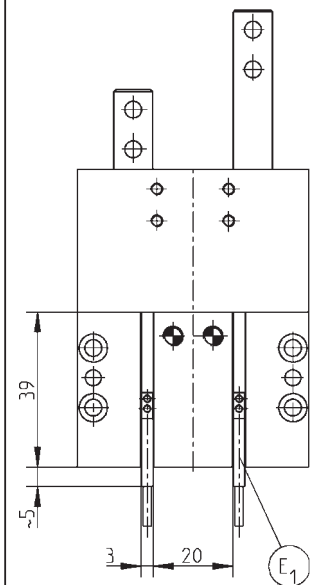


Cable straight plug
Order no. KAG500

Accessories



Accessories



Subject to change without prior notice

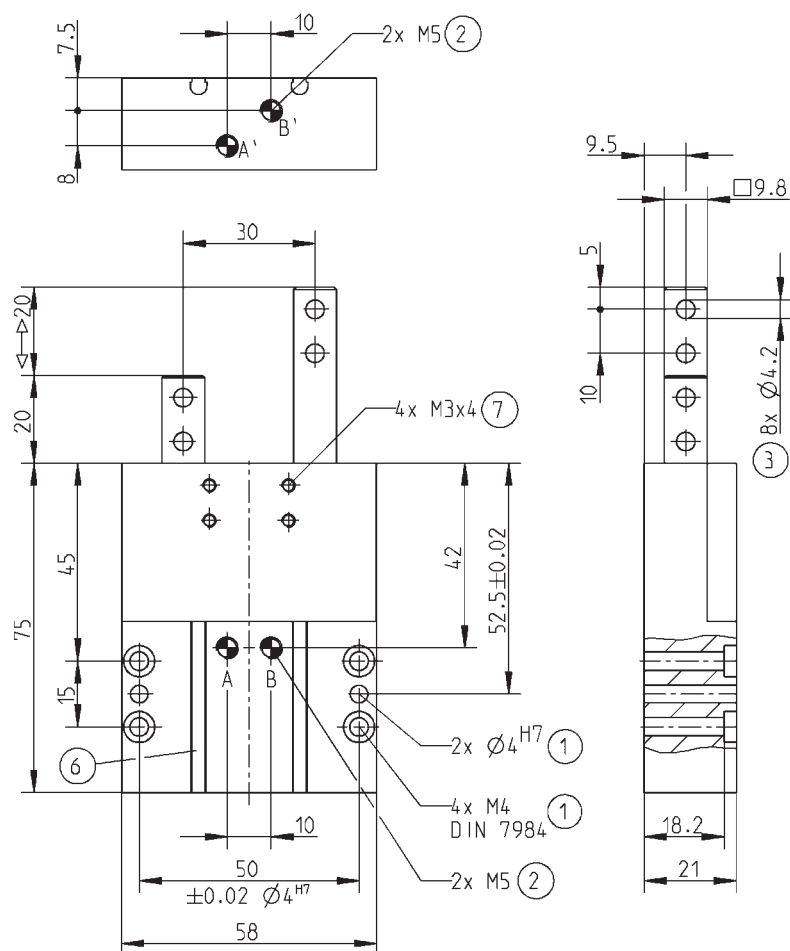


Order no.:	VE14-B
Stroke per tapped rod [mm]:	20
Force in retract [N]:	65
Force in extend [N]:	80
Self limitation:	
Cycle time [s]:	0,02
Repeatability +/- [mm]:	0,1
Min./max. operating pressure [bar]:	3/8
Air volume per cycle [cm ³]:	11
Min./max. operating temperature [°C]*:	5/80
Weight [g]:	300

All data measured at 6 bar

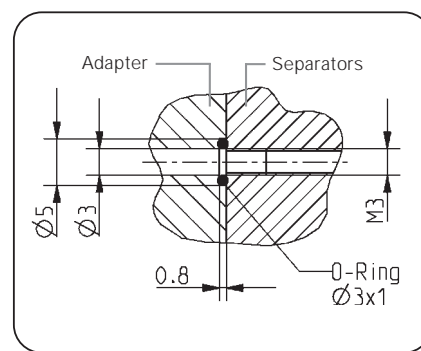
*High temperature resistant model (up to 150 °C) add „T“ to part number

VE14-B



- ① Fixing Separators
- ② Energy supply
- ③ Fixing jaw
- ⑥ Inquiry groove magnetic field sensor
- ⑦ Fixing for mounting block (KB)
- Ⓐ Air connection (left retract/right extend)
- Ⓑ Air connection (left retract/right extend)
- Ⓐ Air connection alternate (left retract/right extend)
- Ⓑ Air connection alternate (left retract/right extend)

* replaced by DIN EN ISO 4762



Hoseless air connection

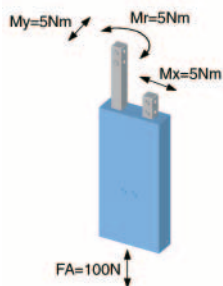
Subject to change without prior notice

Separators



Forces and Moments

Max allowable static forces and moments on tapped rod



Accessory list



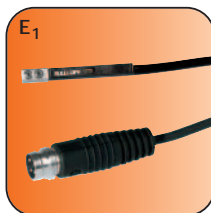
U
Mounting block
Order no. KB8-20



T
Pneumatic fittings
Order no. GVM5



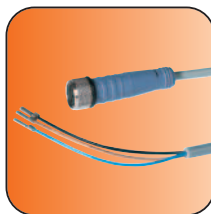
E
Proximity switch
Order no. NJ8-E2S



E₁
Magnetic field sensor
Order no. MFS303SKHC30

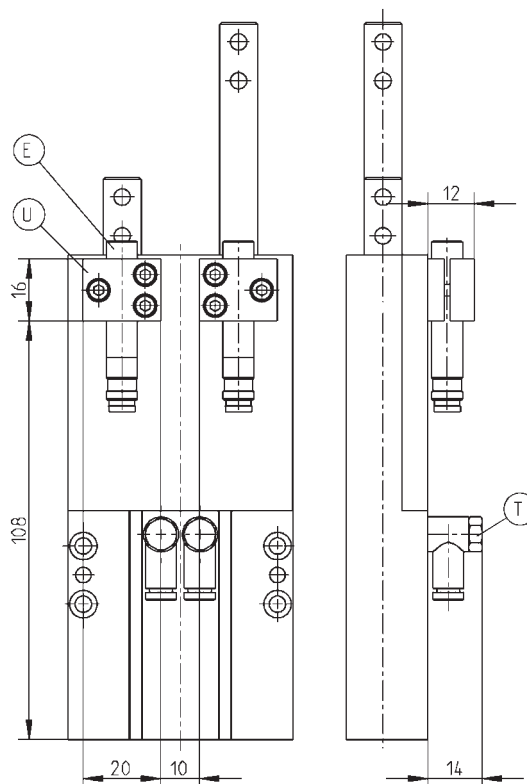


Magnetic field sensor
Order no. MFS103SKHC42

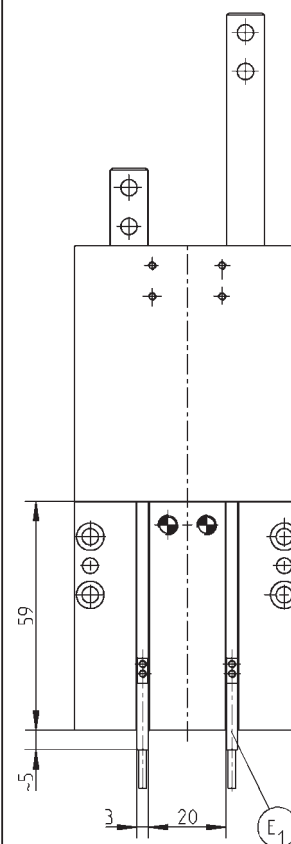


Cable straight plug
Order no. KAG500

Accessories



Accessories



Subject to change without prior notice

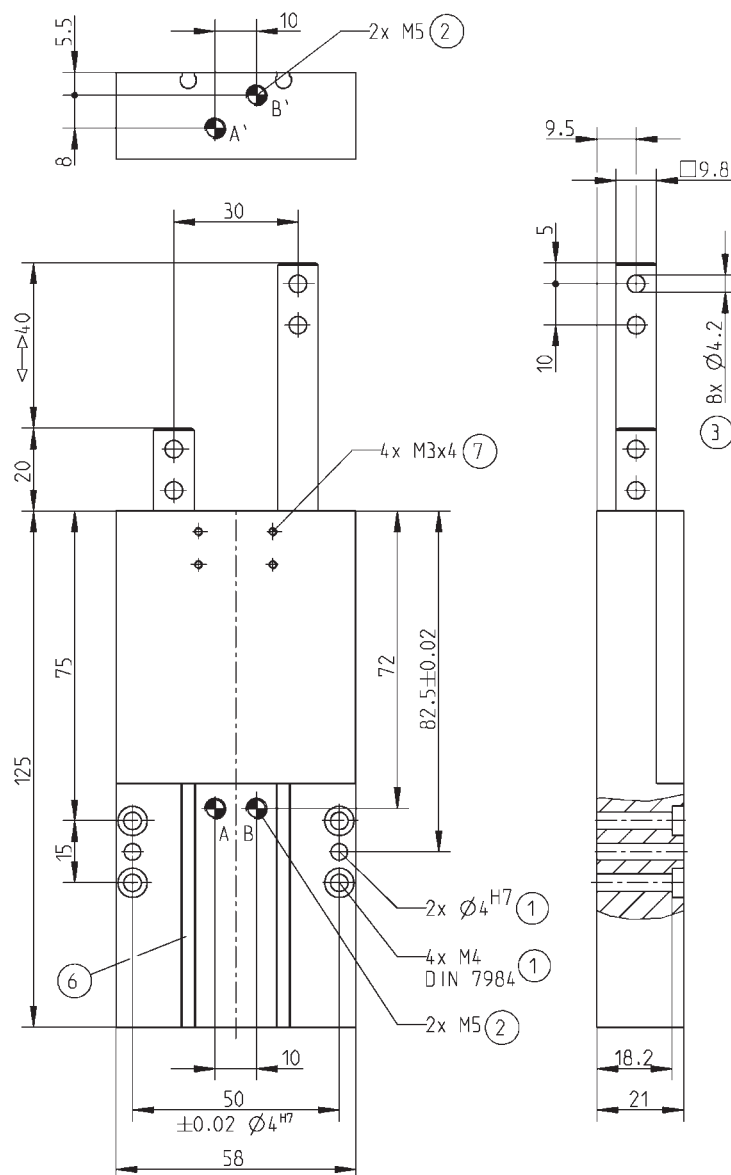


Order no.:	VE15-B
Stroke per tapped rod [mm]:	40
Force in retract [N]:	65
Force in extend [N]:	80
Self limitation:	
Cycle time [s]:	0,05
Repeatability +/- [mm]:	0,1
Min./max. operating pressure [bar]:	3/8
Air volume per cycle [cm ³]:	23
Min./max. operating temperature [°C]*:	5/80
Weight [g]:	480

All data measured at 6 bar

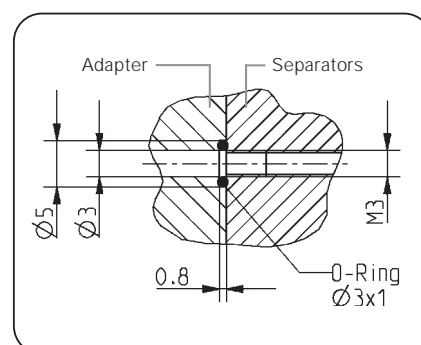
*High temperature resistant model (up to 150 °C) add „T“ to part number

VE15-B



- ① Fixing Separators
- ② Energy supply
- ③ Fixing jaw
- ④ Inquiry groove magnetic field sensor
- ⑤ Fixing for mounting block (KB)
- ⑥ Air connection (left retract/right extend)
- ⑦ Air connection (left retract/right extend)
- ⑧ Air connection alternate (left retract/right extend)
- ⑨ Air connection alternate (left retract/right extend)

* replaced by DIN EN ISO 4762



Hoseless air connection

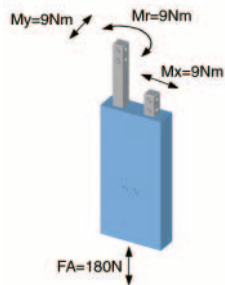
Subject to change without prior notice

Separators

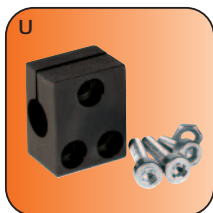


Forces and Moments

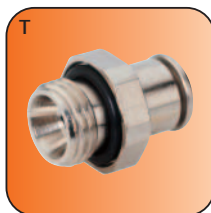
Max allowable static forces and moments on tapped rod



Accessory list



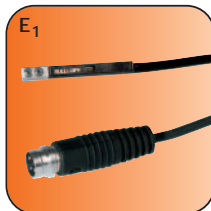
Mounting block
Order no. KB8-20



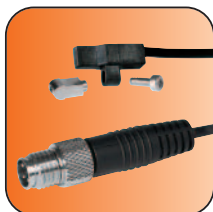
Pneumatic fittings
Order no. GVM5



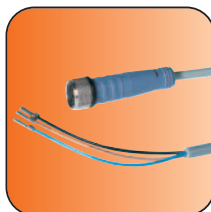
Proximity switch
Order no. NJ8-E2S



Magnetic field sensor
Order no. MFS303SKHC30

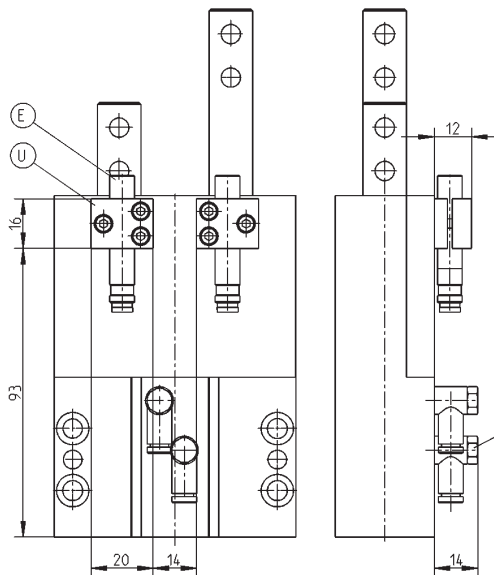


Magnetic field sensor
Order no. MFS103SKHC42

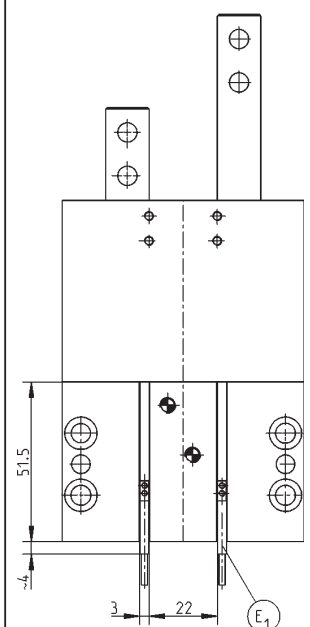


Cable straight plug
Order no. KAG500

Accessories



Accessories



Subject to change without prior notice

*High temperature resistant model (up to 150 °C) add „T“ to part nummber

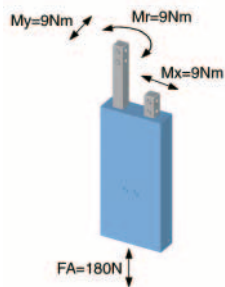


Separators

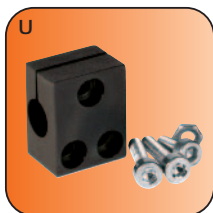


Forces and Moments

Max allowable static forces and moments on tapped rod



Accessory list



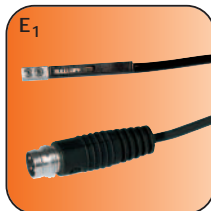
Mounting block
Order no. KB8-20



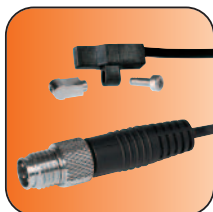
Pneumatic fittings
Order no. GVM5



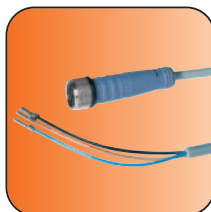
Proximity switch
Order no. NJ8-E2S



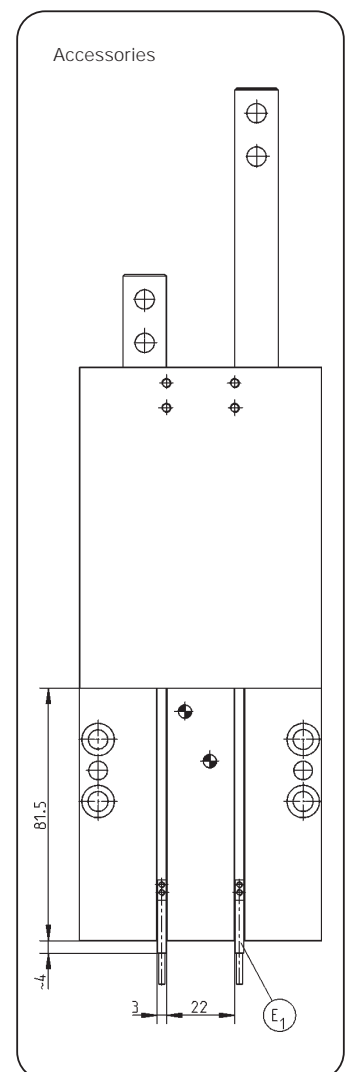
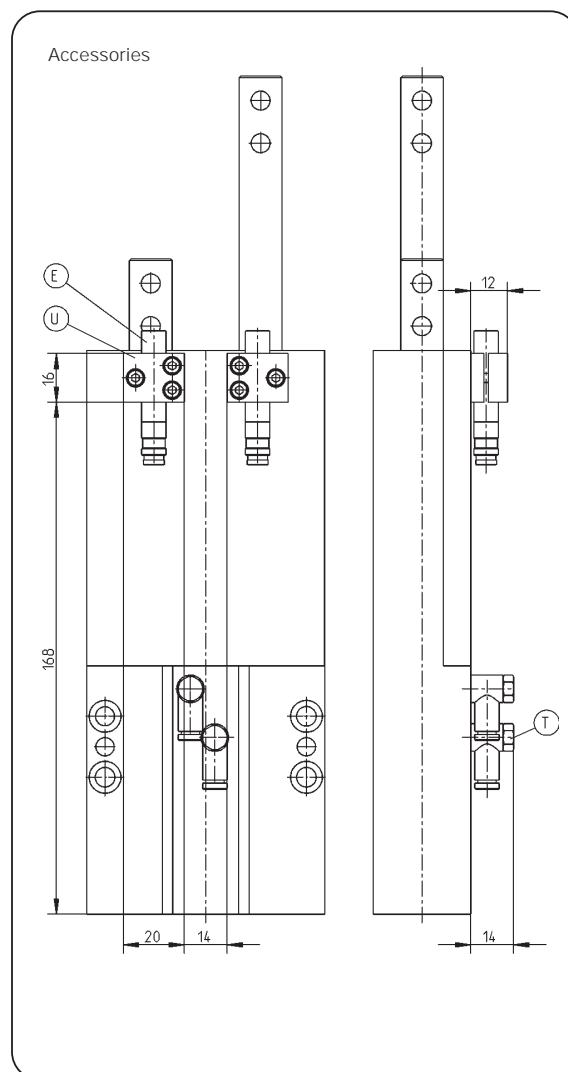
Magnetic field sensor
Order no. MFS303SKHC30



Magnetic field sensor
Order no. MFS103SKHC42



Cable straight plug
Order no. KAG500



Subject to change without prior notice

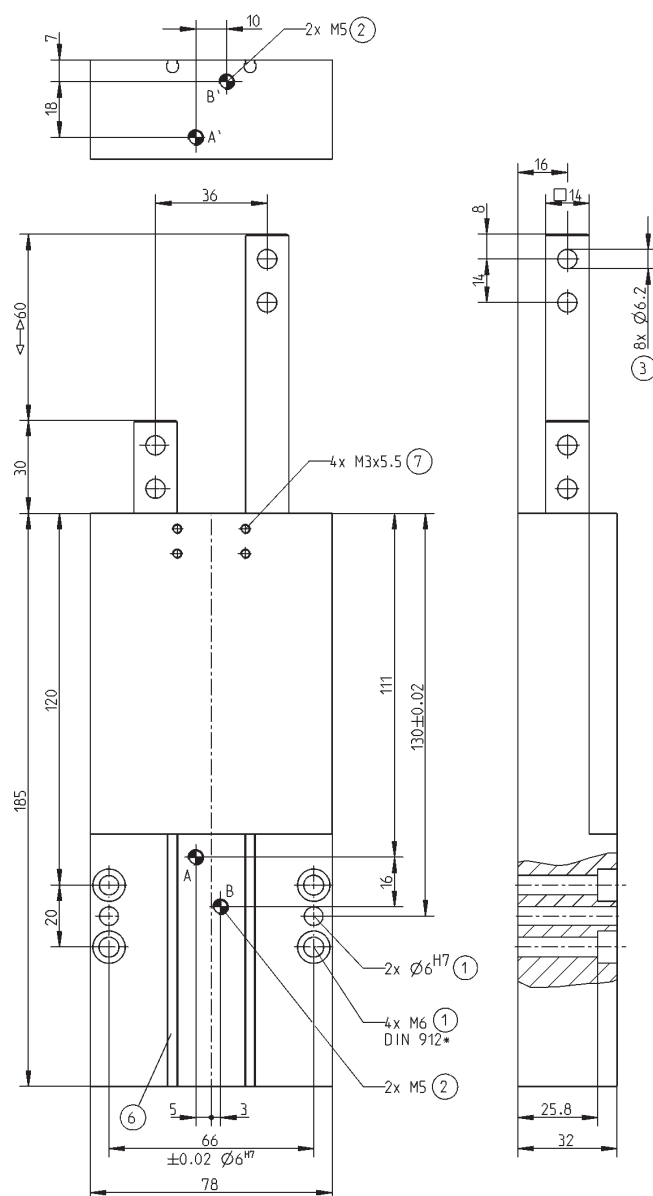


Order no.:	VE23-B
Stroke per tapped rod [mm]:	60
Force in retract [N]:	170
Force in extend [N]:	220
Self limitation:	
Cycle time [s]:	0,2
Repeatability +/- [mm]:	0,05
Min./max. operating pressure [bar]:	3/8
Air volume per cycle [cm ³]:	83
Min./max. operating temperature [°C]*:	5/80
Weight [kg]:	1,5

All data measured at 6 bar

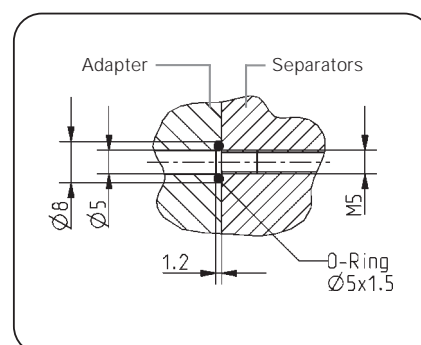
*High temperature resistant model (up to 150 °C) add „T“ to part number

VE23-B



- ① Fixing Separators
- ② Energy supply
- ③ Fixing jaw
- ⑥ Inquiry groove magnetic field sensor
- ⑦ Fixing for mounting block (KB)
- Ⓐ Air connection (left retract/right extend)
- Ⓑ Air connection (left retract/right extend)
- Ⓐ Air connection Alternate (left retract/right extend)
- Ⓑ Air connection alternate (left retract/right extend)

* replaced by DIN EN ISO 4762



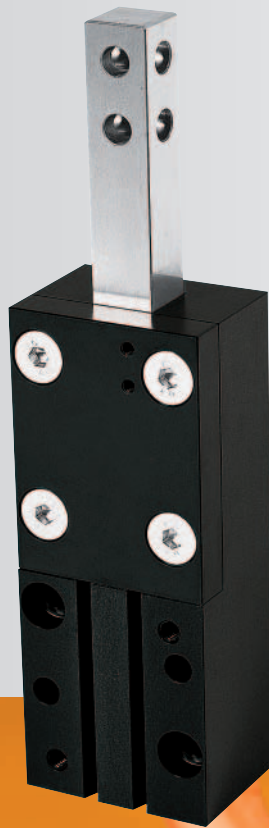
Hoseless air connection

Subject to change without prior notice



Separators

pneumatic



VEG-B-Series

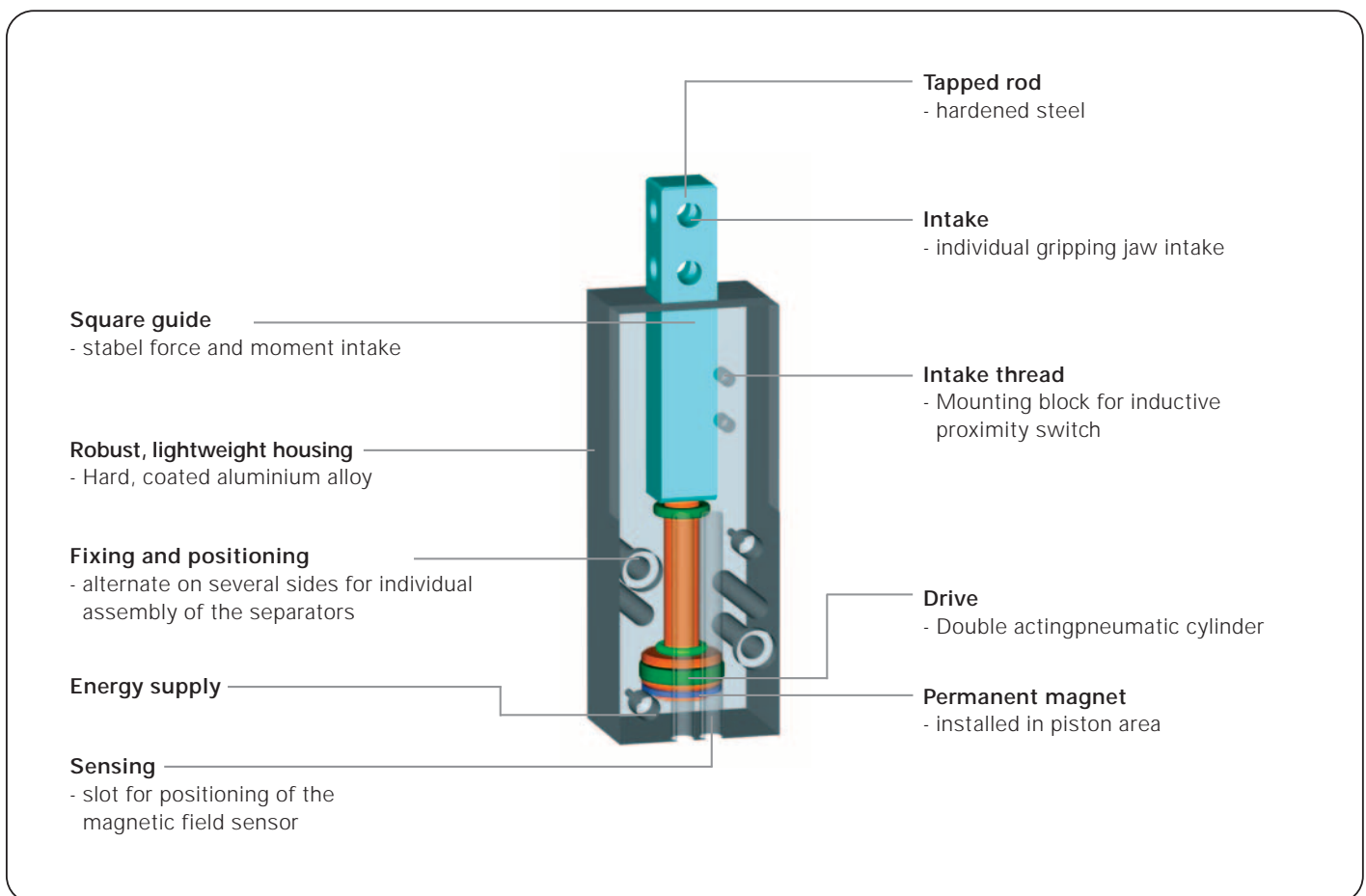
SOMMER
automatic

Separators

Features

- Universal talent: counting, separating, reject
- Five different sizes, with a stroke up to 60 mm
- Positioning possibility via magnetic field sensor, alternate via inductive proximity switch

Functional diagram



Terms

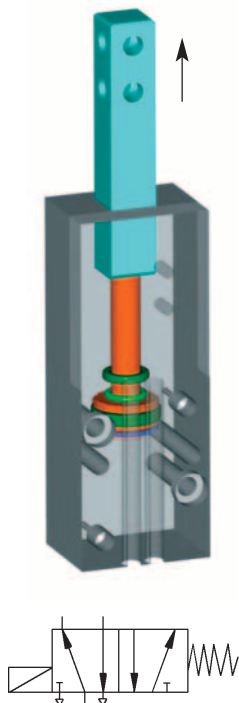
Retract/extend time:	time required by the tapped rod to travel the entire stroke distance
Repeatability:	dispersion of stop positions at 50/100 consecutive cycles/strokes
Cycles:	distance covered by the piston in one open and close movement
Maintenance:	<p>maintenance free bis 10 Mio. cycles (please see the owner's manual for conditions, download from www.sommer-automatic.com)</p> <ul style="list-style-type: none"> • long maintenance intervals keep costs down • long durability

Model

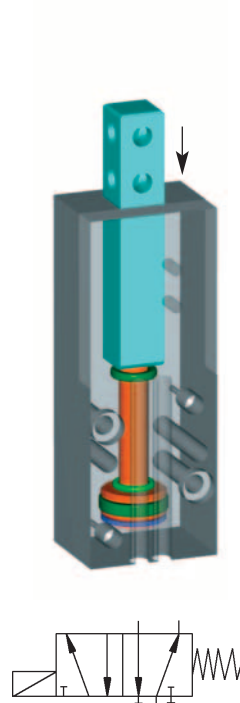
Order no.	Stroke	Force in retract	Force in extend
VEG10-B	10 mm	30N	40N
VEG14-B	20 mm	65N	80N
VEG15-B	40 mm	65N	80N
VEG22-B	30 mm	170N	220N
VEG23-B	60 mm	170N	220N

Function

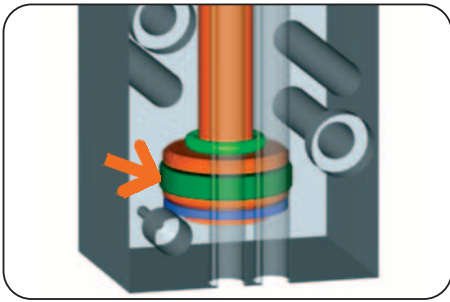
tapped rod extend



tapped rod retract



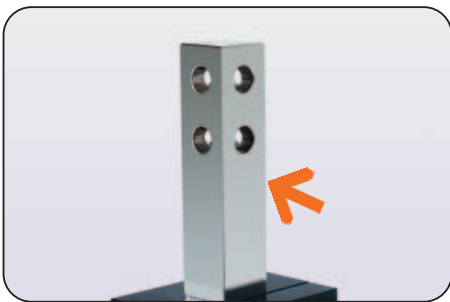
Separators



Drive

Double acting pneumatic cylinder

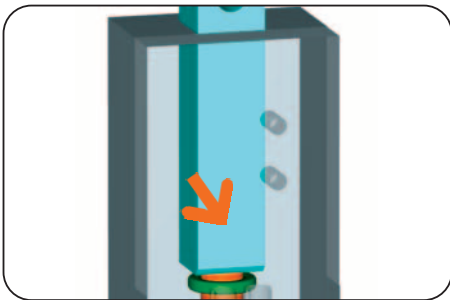
- maximum drive force when opening and closing
- extend force up to 220N



Guide

flat guide in hardened steel

- flat guide for high force and moment intake
- high precision due to low play guide, polished flat guide
- long durability due to generous lubrication pockets in the housing



Force transfer

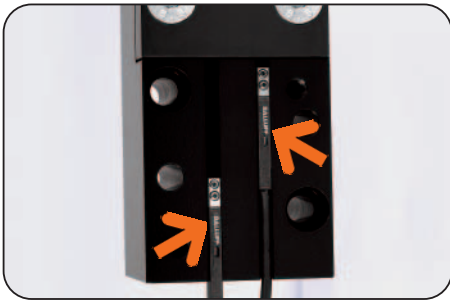
- direct force transfer of drive force in extend force
- low loss of the piston to the tapped rod
- high repeatability



Intake

Individual separating jaws intake

- flexible fixing of individual jaw on multiple bores possible
- simple adaptable to the workpiece size due to four-sided bores
- simple and cost effective design of the jaws

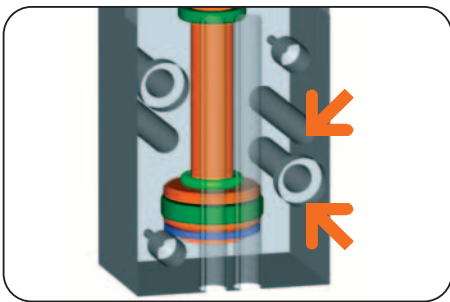


Position sensing

indirect piston setting position sensing via magnetic field sensors

- Process safe
- Compact
- For magnetic field sensors with C groove mounting holder

alternate thread holes for intake of the mounting holder to mount an inductive proximity switch are provided



Machine connection

Energy supply, attachment and positioning possibilities on several sides

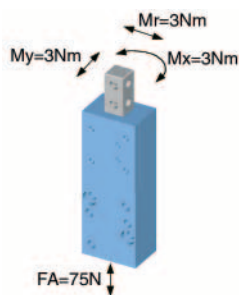
- Optimum integration in the workspace due to individual installation position

Separators

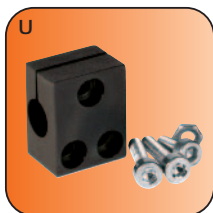


Forces and Moments

Max allowable static forces and moments on tapped rod



Accessory list



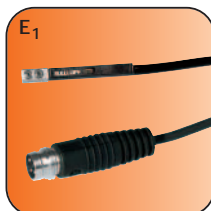
Mounting block
Order no. KB8-20



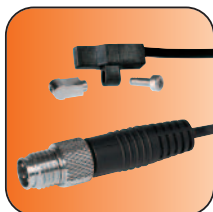
Pneumatic fittings
Order no. WVM5



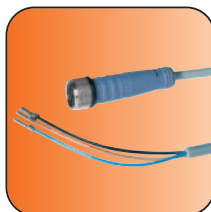
Proximity switch
Order no. NJ8-E2S



Magnetic field sensor
Order no. MFS303SKHC30

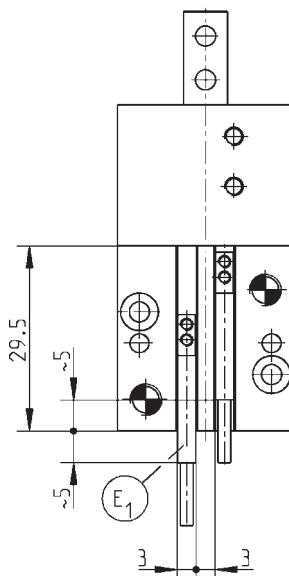


Magnetic field sensor
Order no. MFS103SKHC42

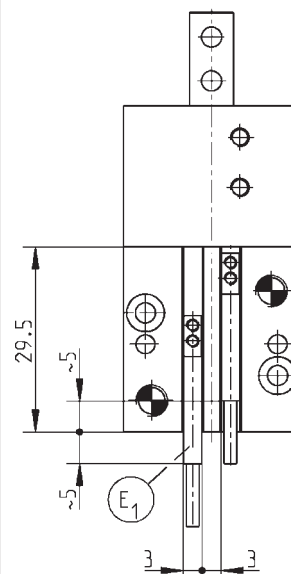


Cable straight plug
Order no. KAG500

Accessories



Accessories



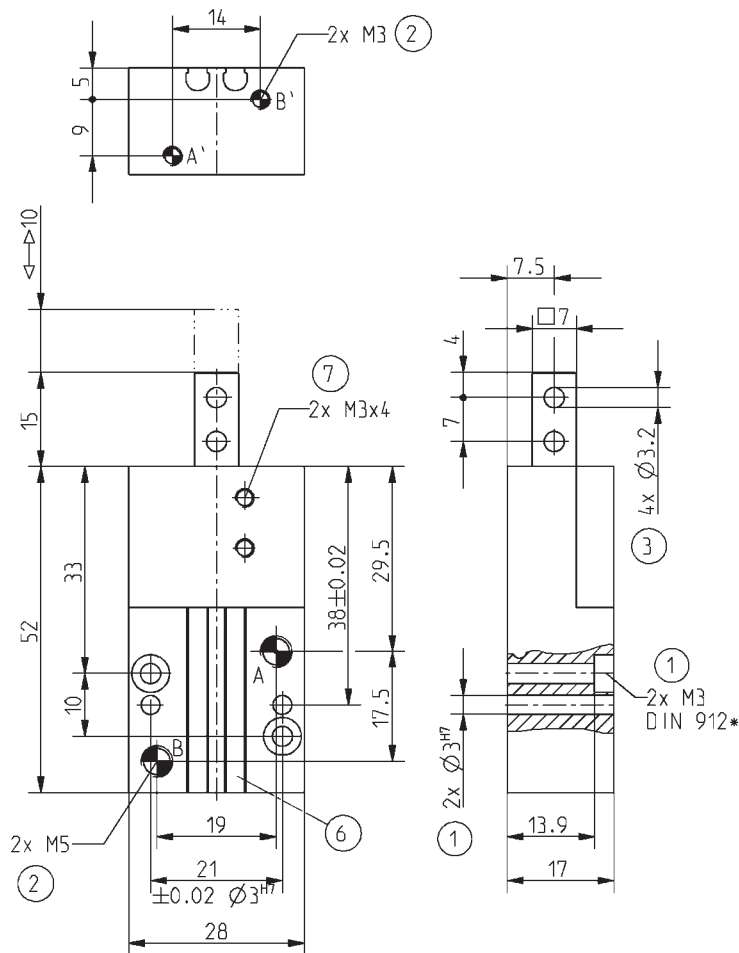
Subject to change without prior notice

Order no.:	VEG10-B
Stroke [mm]:	10
Force in retract [N]:	30
Force in extend [N]:	40
Cycle time [s]:	0,02
Repeatability +/- [mm]:	0,05
Min./max. operating pressure [bar]:	3/8
Air volume per cycle [cm ³]:	1,5
Min./max. operating temperature [°C]*:	5/80
Weight [g]:	74

All data measured at 6 bar

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

VEG10-B



- ① Fixing Separators
- ② Energy supply
- ③ Fixing jaw
- ⑥ Inquiry groove magnetic field sensor
- ⑦ Fixing for mounting block (KB)
- A Air connection (retract)
- B Air connection (extend)
- A Air connection alternate (left retract/right extend)
- B Air connection alternate (left retract/right extend)

* replaced by DIN EN ISO 4762

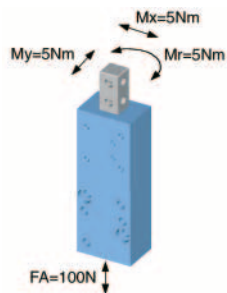
Subject to change without prior notice

Separators

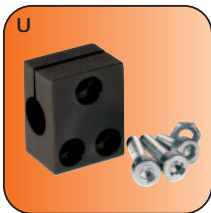


Forces and Moments

Max allowable static forces and moments on tapped rod



Accessory list



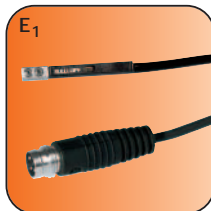
Mounting block
Order no. KB8-20



Pneumatic fittings
Order no. WVM5



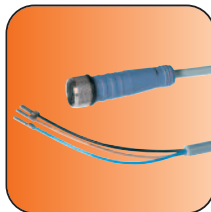
Proximity switch
Order no. NJ8-E2S



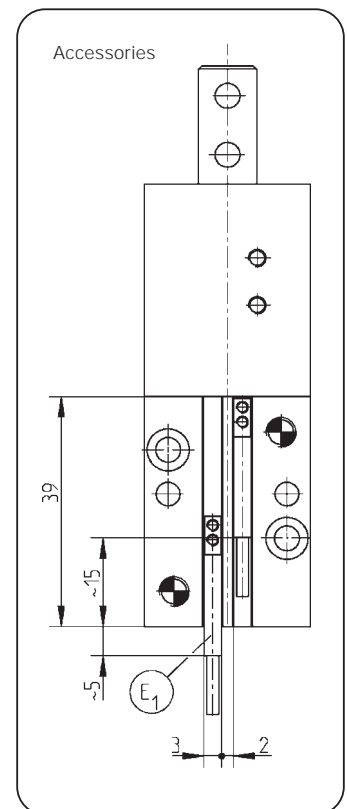
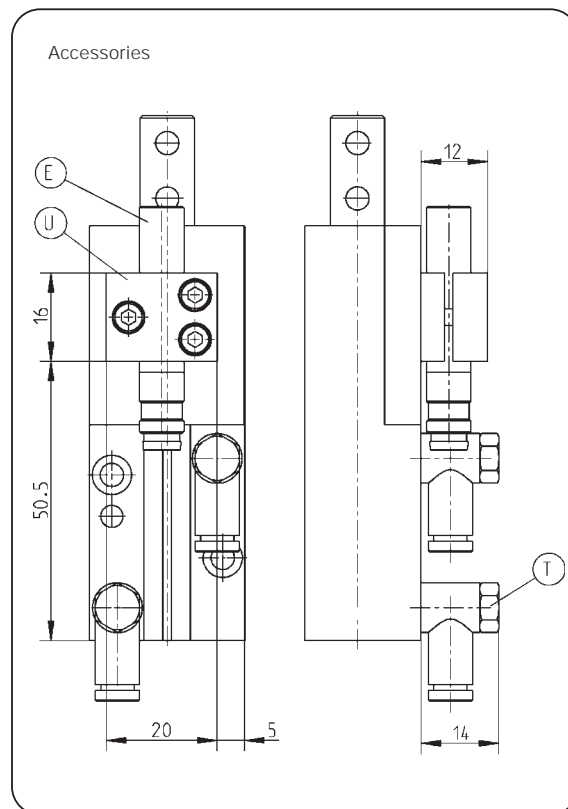
Magnetic field sensor
Order no. MFS303SKHC30



Magnetic field sensor
Order no. MFS103SKHC42



Cable straight plug
Order no. KAG500



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

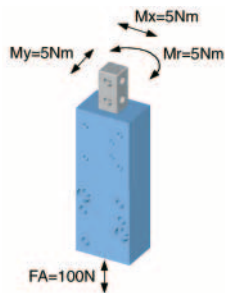


Separators

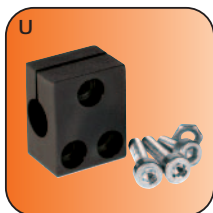


Forces and Moments

Max allowable static forces and moments on tapped rod



Accessory list



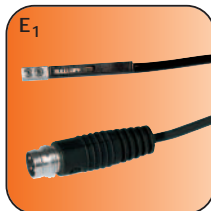
Mounting block
Order no. KB8-20



Pneumatic fittings
Order no. WVM5



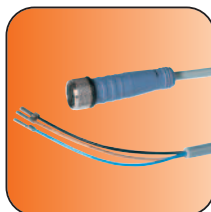
Proximity switch
Order no. NJ8-E2S



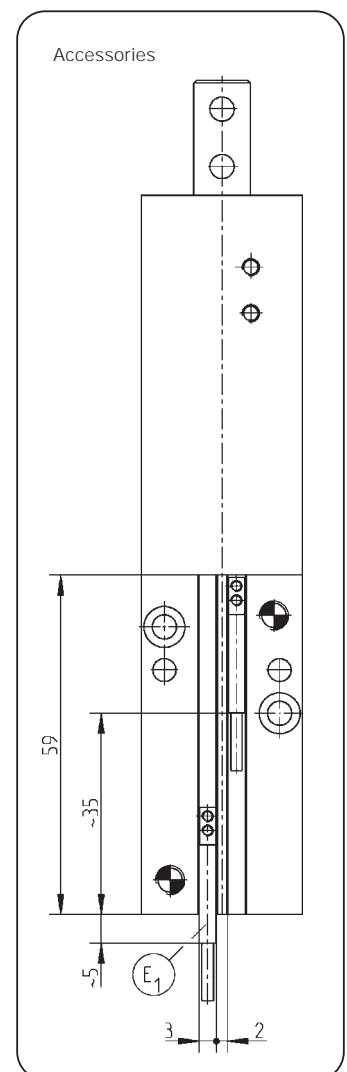
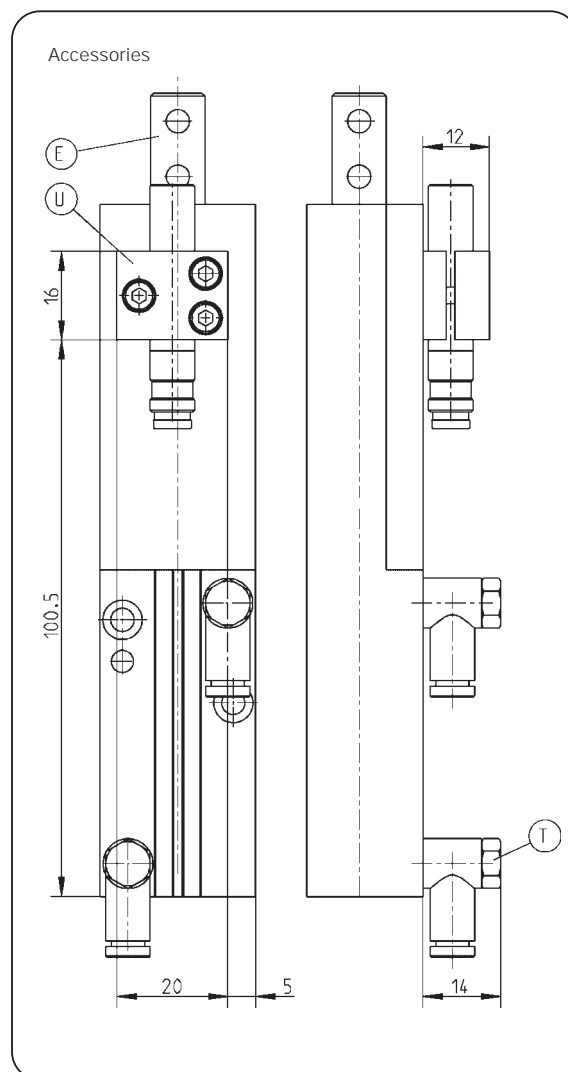
Magnetic field sensor
Order no. MFS303SKHC30



Magnetic field sensor
Order no. MFS103SKHC42



Cable straight plug
Order no. KAG500

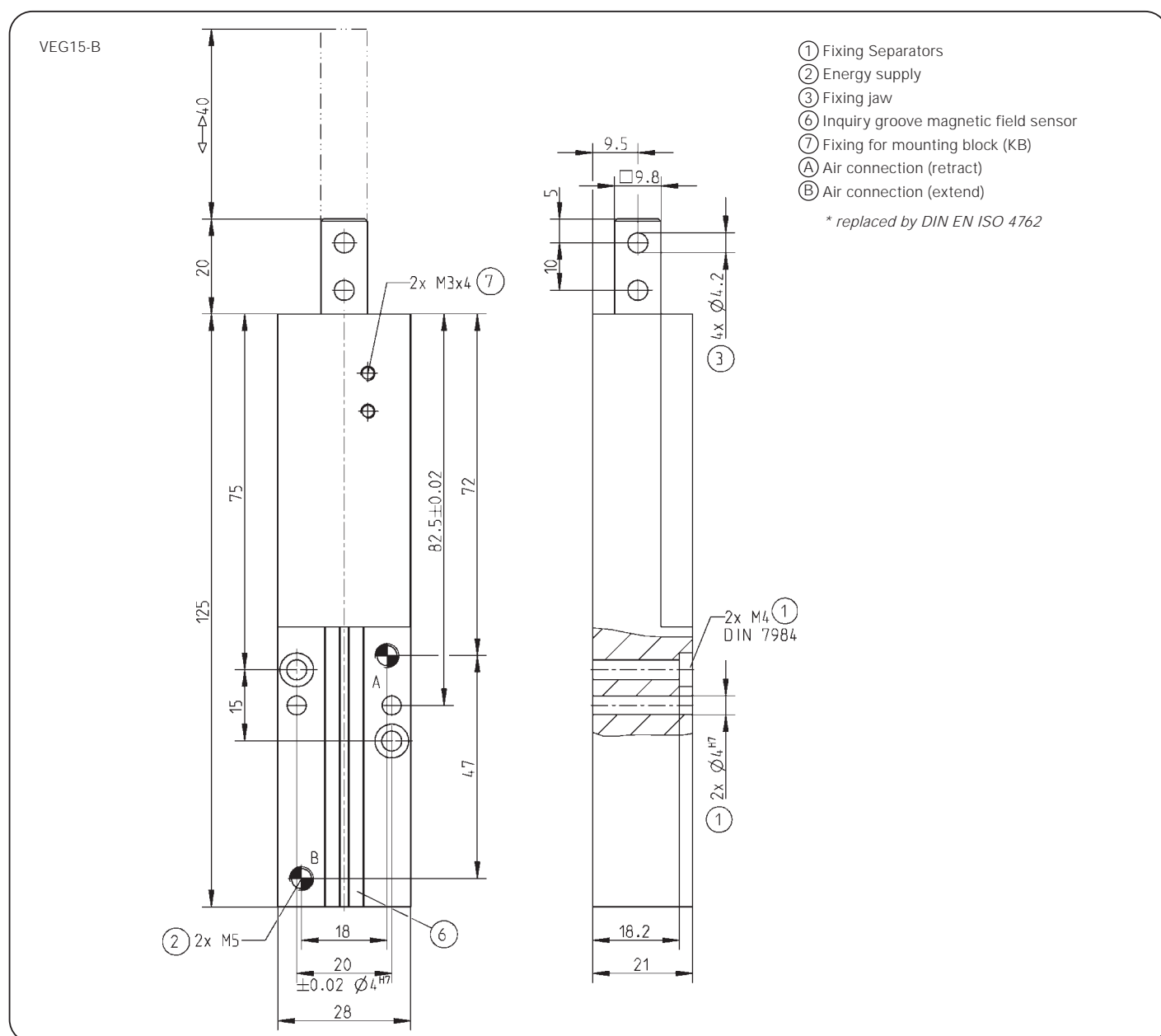


Subject to change without prior notice

Order no.:	VEG15-B
Stroke [mm]:	40
Force in retract [N]:	65
Force in extend [N]:	80
Cycle time [s]:	0,05
Repeatability +/- [mm]:	0,05
Min./max. operating pressure [bar]:	3/8
Air volume per cycle [cm³]:	11
Min./max. operating temperature [°C]*:	5/80
Weight [g]:	200

All data measured at 6 bar

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



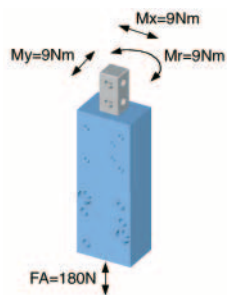
Subject to change without prior notice

Separators

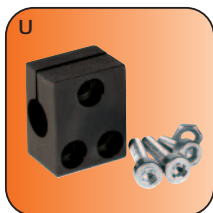


Forces and Moments

Max allowable static forces and moments on tapped rod



Accessory list



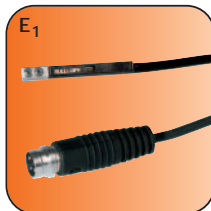
Mounting block
Order no. KB8-20



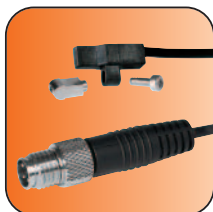
Pneumatic fittings
Order no. WVM5



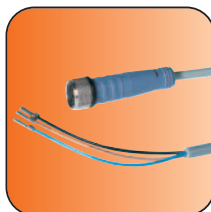
Proximity switch
Order no. NJ8-E2S



Magnetic field sensor
Order no. MFS303SKHC30

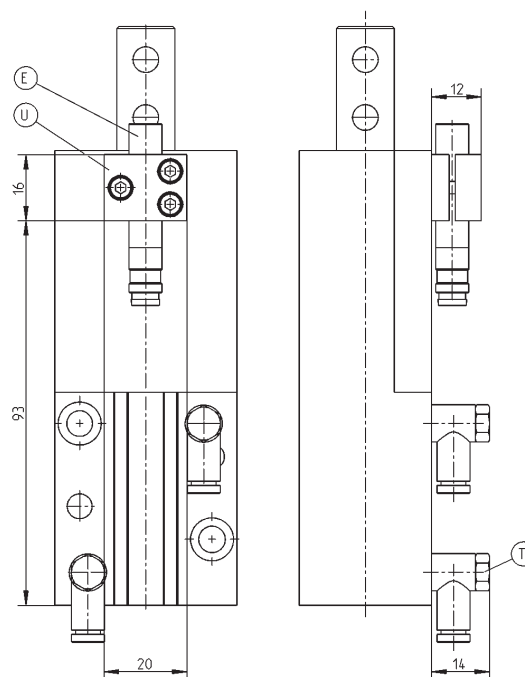


Magnetic field sensor
Order no. MFS103SKHC42

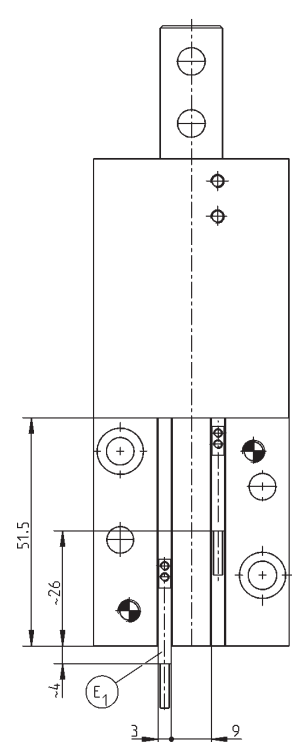


Cable straight plug
Order no. KAG500

Accessories



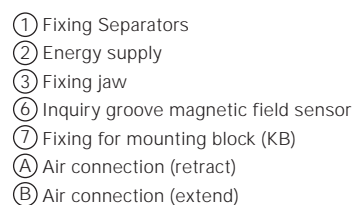
Accessories



Subject to change without prior notice

VEG22-B

** High temperature resistant model (up to 150 °C) add „T“ to part nummber



* replaced by DIN EN ISO 4762

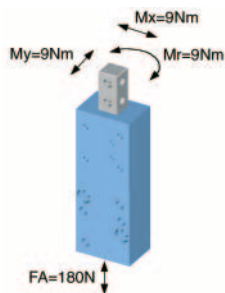
SOMMER
automatic

Separators

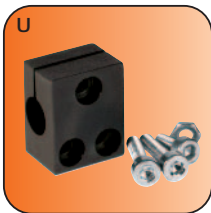


Forces and Moments

Max allowable static forces and moments on tapped rod



Accessory list



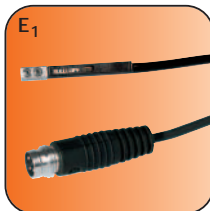
Mounting block
Order no. KB8-20



Pneumatic fittings
Order no. WVM5



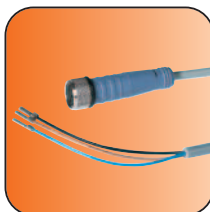
Proximity switch
Order no. NJ8-E2S



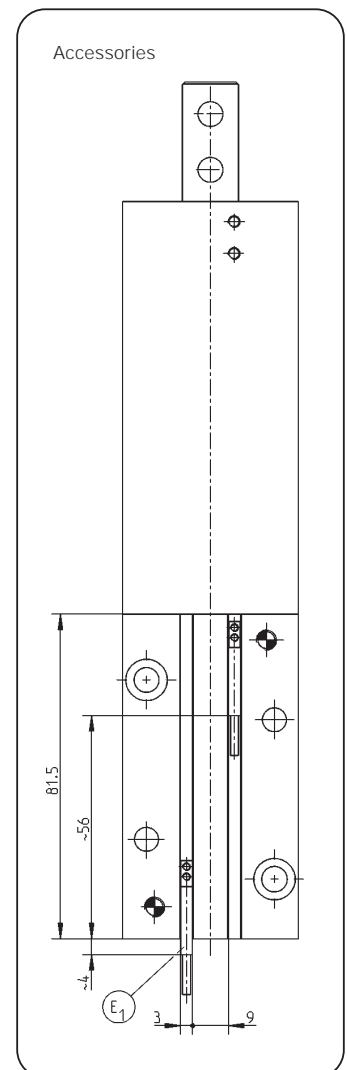
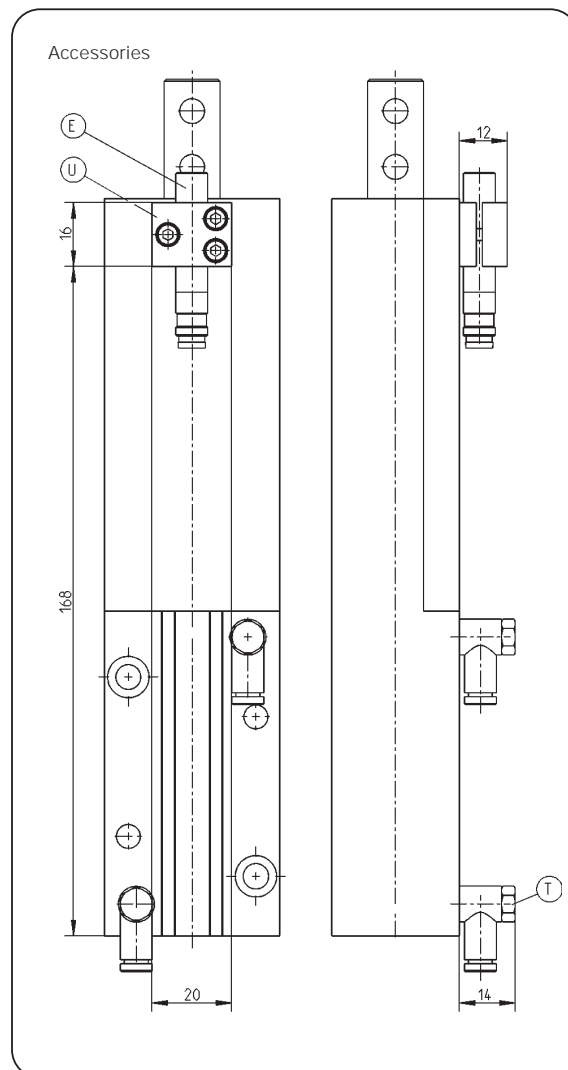
Magnetic field sensor
Order no. MFS303SKHC30



Magnetic field sensor
Order no. MFS103SKHC42



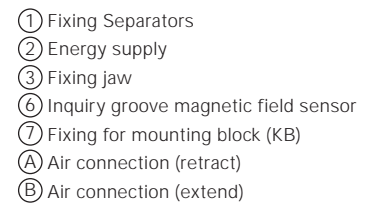
Cable straight plug
Order no. KAG500



Subject to change without prior notice

VEG23-B

**** High temperature resistant model (up to 150 °C) add „T“ to part nummber**



—2x M6 ①
DIN 912*

SOMMER
automatic



➤ 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