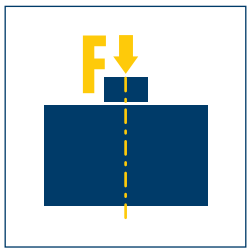
Sizes
20 .. 63

Weight
1.2 kg .. 26.5 kg

Torque
1.1 Nm .. 115.0 Nm



Axial force
800 N .. 11000 N

Bending moment
10.5 Nm .. 950 Nm

Application example

Unit for the swiveling of roughly positioned small components

1. SRU 40.1-180-3 rotary unit
2. AGE-XY-50 compensation unit
3. DKG 44 2-finger parallel gripper

Universal Rotary Actuator

Universal unit for swiveling movements up to 180°, especially suitable with large and heavy attachments.

Area of application

For use in both clean and dirty environments, wherever pneumatic swiveling is suitable.

Your advantages and benefits

Clearly graded series with uniform torque growth
so that for many applications, the correct size is available as a standard product

Choice of 90° or 180° angle of traverse
Ultimate flexibility in the choice of the angle of traverse. Special angles available on request

Adjustability of end positions
Choice of +3°/-3° (small) or +3°/-90° (large)

Choice of pneumatic or locked center position
The locked center position can be released under load. Swiveling can always continue in any direction from both types of center position.

Fluid feed-through can be used for gases, fluids and vacuum
dispensing with troublesome hoses

electric rotary transmission leadthrough
for the steady reliable realization of sensor-, actuator- and bus-signals

Choice of electronic solenoid switches or inductive proximity switches
for absolute variability in position monitoring

Replaceable, screw-in guide sleeves (bushes)
for simple maintenance and rapid replacement after many millions of cycles.

Downwards continuation of the series
with the MRU series, ensuring suitability for a broad range of applications

design award winner 2004

Information about the series

Working principle
Double pinion rack and pinion system

Housing material
Aluminum press-drawn section

Piston and pinion material
Hardened steel (16 MnCr 5)

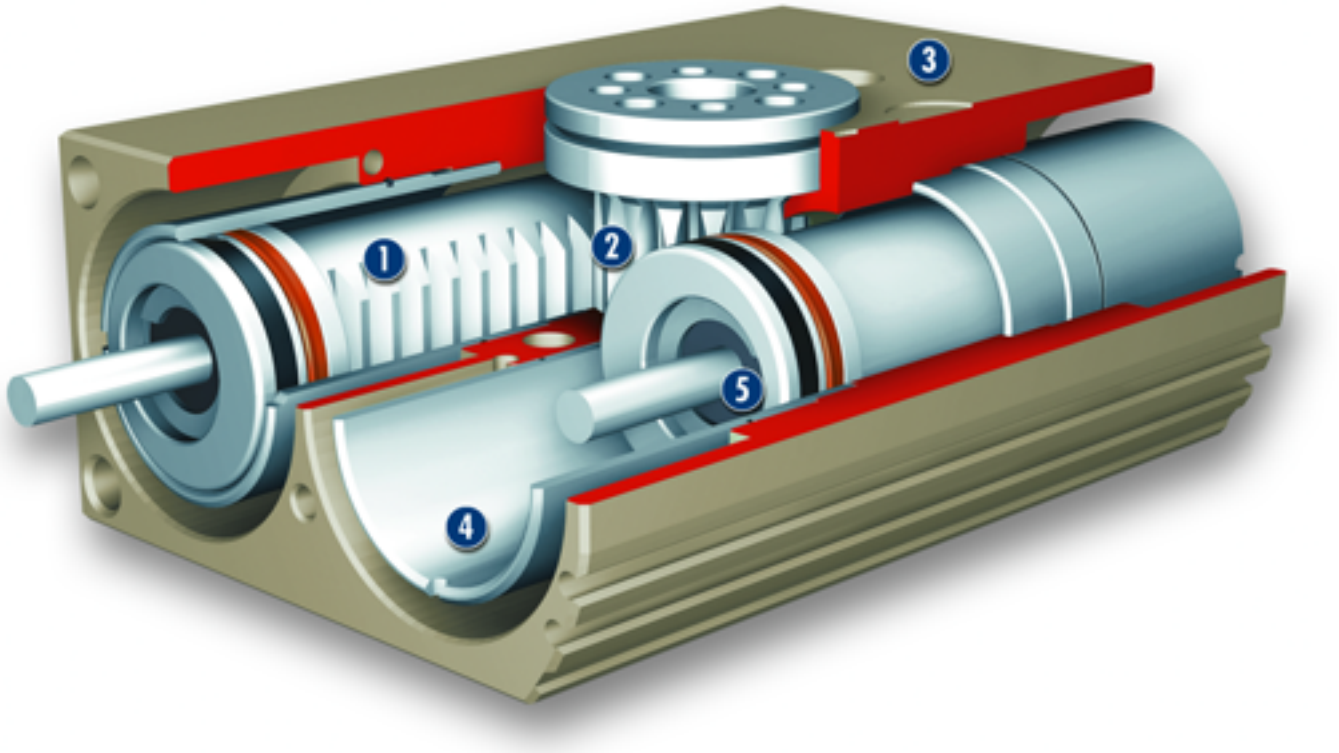
Actuation
Pneumatic, with filtered compressed air (10 µm): Dry, lubricated or non-lubricated
Pressure medium: Requirements on quality of the compressed air according to DIN ISO 8573-1: 6 4 4.

Condition standard
The mentioned information alludes to a periphery of 20°C and 1013 mbar

Warranty
24 months

Scope of delivery
Flow control coupling, guide sleeves, O-rings for direct connection, dowel screws (SRU 63 only), Assembly and Operating Manual with manufacturer's declaration

Sectional diagram



1 Drive
Pneumatic, powerful double piston drive

2 Pinion
Stable pinion, optionally with fluid feed-through, for transforming the piston movement into a rotary movement

3 Housing
Weight-reduced through the use of a hard-anodized, high-strength aluminum alloy

4 Sleeve technology
For radial adjustment of the end positions without a settling effect and ensuring rapid replacement for maintenance

5 Damping
Hydraulic shock absorbers for high moments of inertia

Function description

When subjected to pressure, the two pneumatic pistons move their end faces in a straight line in their bores, turning the pinion by means of the serrations on their sides.

Torque at the endpositions

Please consider that the last angular degrees (appr. 2°) prior to the end position are driven with the force of just one actuation piston.
Thus the double actuated modules just dispose of appr. half of the nominal torque in this range.

Options and special information

On request, the SRU series can also be obtained **with tightness class IP67** (to DIN 40050). For swiveling movements requiring particularly intensive damping, additional external shock absorbers can also be fitted. Please ask for details.
Special angles of traverse and swivel ranges are available on request.
Please note that for pneumatic units, appropriate **emergency stop** (e.g. controlled lowering) and **restart strategies** (e.g. pressure build-up valves, suitable valve switching sequences) are required.
Cutting off the pressure in an uncontrolled manner could lead to undefined states and behavior.

Accessories

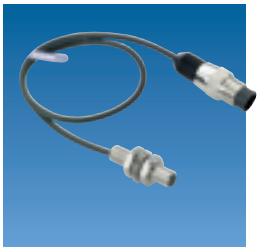
Accessories from SCHUNK – the suitable supplement for maximum functionality, reliability and performance of all automation modules.

Centering Sleeves

Fittings

MMS magnetic switches

IN inductive proximity switches



KV/KA sensor cables

SDV-P pressure maintenance valves

V sensor distributors

ⓘ For the exact size of the required accessories, availability of this size and the designation and ID, please refer to the additional views at the end of the size in question. You will find more detailed information on our accessory range in the „Accessories“ catalog section.

General information on the series

Repeat accuracy

Repeat accuracy is defined as the spread of the limit position after 100 consecutive swiveling cycles.

Pinion position

The position of the pinion is always shown in the drawing in the left-hand end position. From here, the pinion rotates clockwise. The direction of rotation is indicated by the arrow.

Pinion screw connection diagram

Please note that if you wish to set the angle of traverse to less than 90°, the left-hand end stop must generally be screwed in completely. In this way, the screw connection diagram of the left-hand end stop is rotated clockwise by 90° in relation to the drawing, which shows the situation with an angle of traverse of 180°.

Travel to pneumatic center position

In units with double compressed air action, travel to pneumatic center position takes place at only half the nominal torque.

Mean attached load

The mean attached load should constitute a typical load. It is defined as the half of the max. possible moment of inertia that can be swiveled without restriction, bouncing or hitting, with a centric load and a vertical rotating axis.

Cycle time

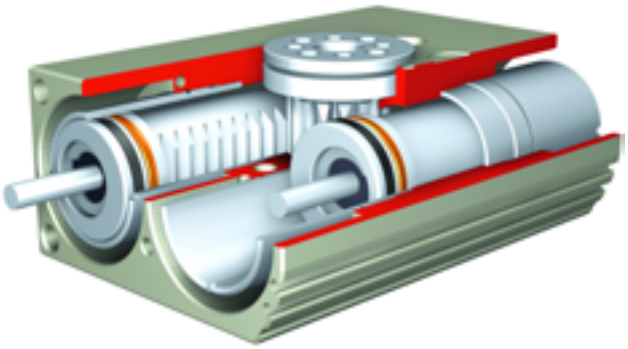
Cycle times are purely the times taken by the pinion/flange to turn round the nominal angle of rotation. Valve switching times, hose filling times or SPC reaction times are not included in the above times and must be taken into consideration when determining cycle times.

Layout or checking calculation

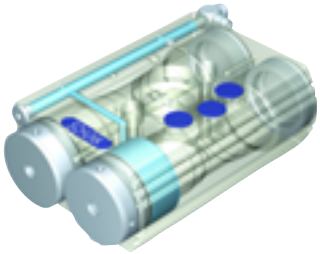
For deciding the layout or for checking calculations of rotary modules, we recommend that you use our SSE software, available on CD or from www.schunk.com. A checking calculation of the unit you have chosen is absolutely essential, as otherwise overloading may occur.

Basic module

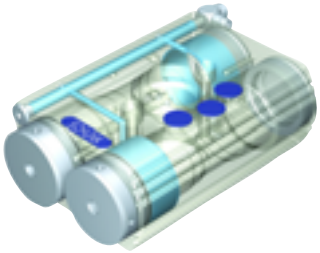
- ➜ Tailored for every application
  thanks to the modular system with options
- ➜ Integrated hydraulic shock absorbers for short swivel times
- ➜ Pistons guided in centering sleeves with simple replaceability in the event of maintenance



Pneumatic drive



Single actuation



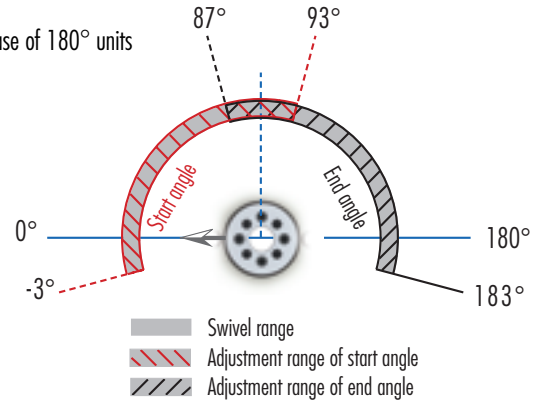
Double actuation

- ➜ High torques despite a small installation space

End stop adjustability of the two-position units

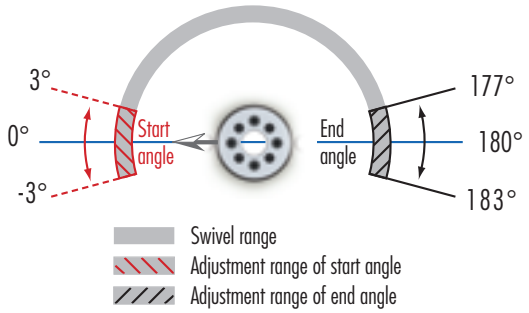
Large end position adjustability (90°) for variable adjustment of the swivel angle

- In the case of 180° units

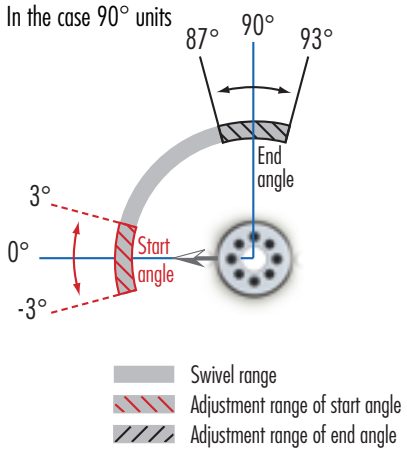


Small end position adjustability (± 3°) for fine adjustment

- In the case 180°-units



- In the case 90° units

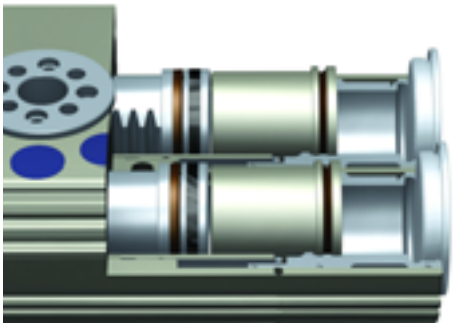


- ➜ Small end position adjustability for fast and exact fine adjustment
- ➜ Large end position adjustability for flexible adjustability of the swivel angle

Middle position

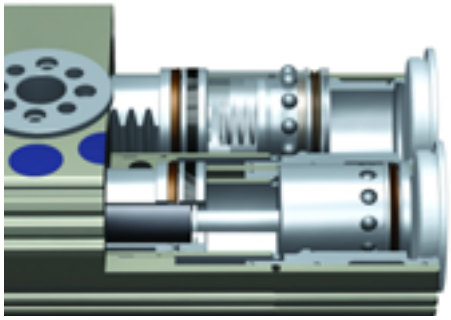
Pneumatic (M)

- Pneumatic middle position for pneumatically dampened intermediate position
- Middle position adjustable by ± 3° for fast fine adjustment



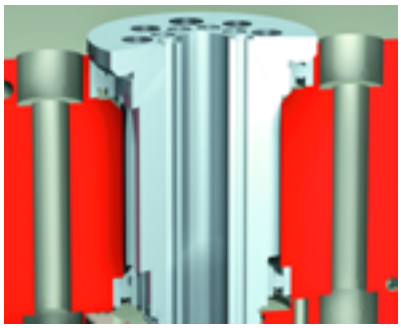
Locked (VM)

- Mechanically locked and hydraulically dampened middle position for short cycle times especially in the case of heavy loads
- Middle position adjustable by ± 3° for fast fine adjustment



Air feed-through

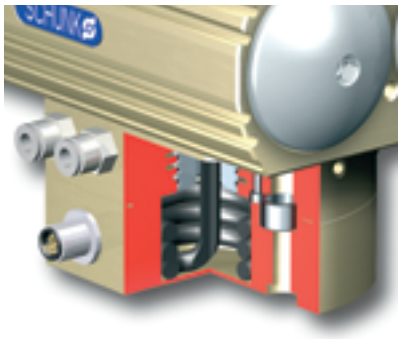
- Tubeless air feed-through and a big center bore
- No hoses or cables swiveling, thus increasing process reliability



Section through the pinion

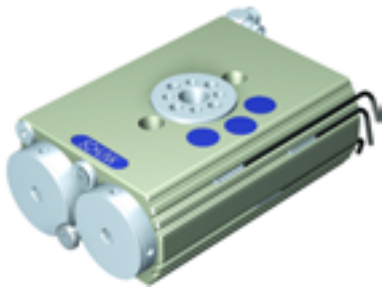
Electric feed-through

- Completely integrated feed-through for sensor, actuator and bus signals
- Connection via plugs and bushes



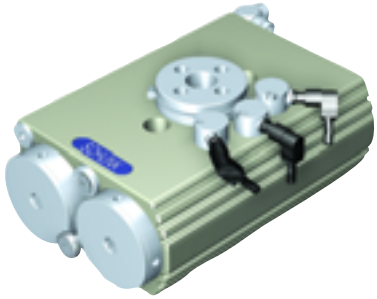
End position monitoring possibilities

- Electronic magnetic switches can be completely recessed in the groove to minimize the interfering contour
- Up to eight positions can be monitored



Electronic magnetic switches MMS 22

- One mounting kit for fast assembly of inductive proximity switches M8
- Reliable monitoring of up to three positions



Inductive proximity switches IN 80

Obtain calculation support from our calculation program „SSE“ Available on CD-ROM, or on the Internet at www.schunk.com

Application specific parameters

- ➜ Torque
- ➜ Mass moment of inertia
- ➜ Swivel time

Size (piston diameter): 20 | 25 | 35 | 40 | 50 | 60

Actuation: Single | Double

Swivel angle: 0° – 90° | 0° – 180° | 0° – 90° – 180°

End position adjustability: 3° | 3° | 90° | 3° | 90° | 3°

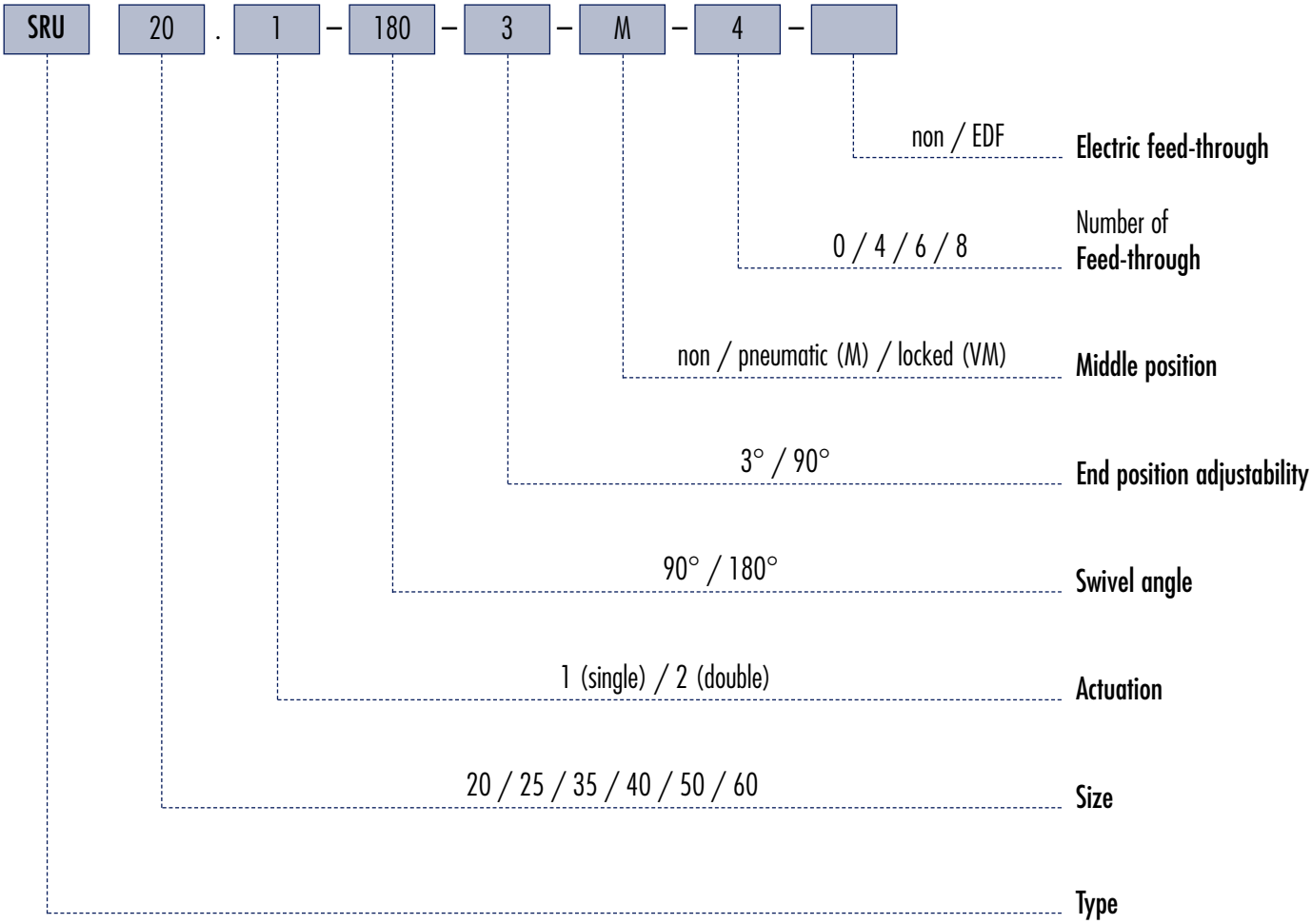
Middle position: None | Pneumatic (M) | Locked (VM)

Feed-through: Without | With feed-through | With fluid and electric feed-through EDF | Without | With feed-through | With fluid and electric feed-through EDF

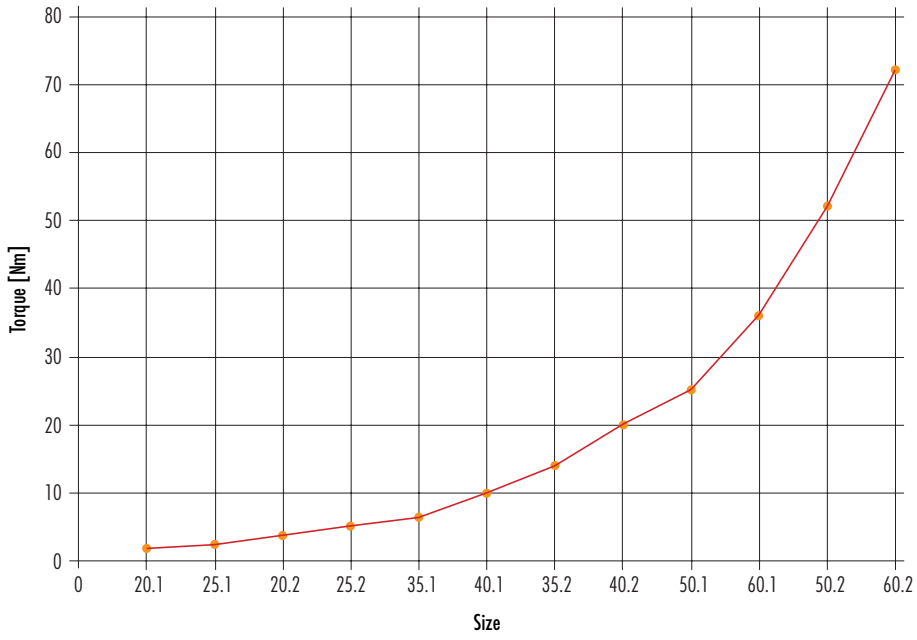
Accessories (see “Accessories” catalog section)

- ➜ Magnetic proximity switches MMS 22
- ➜ Inductive proximity switches IN 80 and mounting kits

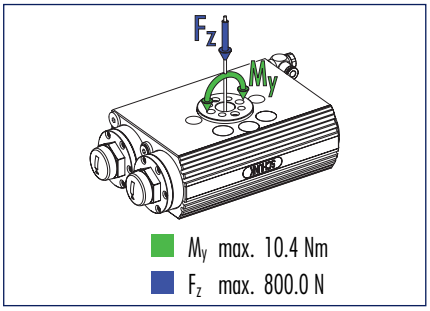
How to order



Stagged torque values



Pinion load



ⓘ Moments and forces may occur simultaneously. When using heavy attachments or ones with high mass moments of inertia, the speed must be restricted to ensure that the rotary movement occurs without any hitting or bouncing.

Technical data

Angle of traverse 90° and small end position adjustability of 3°

Description		SRU 20.1-90-3	SRU 20.1-90-3-4	SRU 20.2-90-3	SRU 20.2-90-3-4
	ID	0357300	0357302	0357400	0357402
Torque	[Nm]	1.5	1.1	3.4	3.0
Rotating angle	[°]	90.0	90.0	90.0	90.0
Adjustability of end positions	[°]	3.0	3.0	3.0	3.0
No. of fluid feed-throughs			4		4
IP class		65	65	65	65
Weight	[kg]	1.2	1.4	1.2	1.4
Fluid consumption per cycle (2 x nominal angle)	[cm³]	18.0	18.0	36.0	36.0
Swiveling time with middle attached load	[s]	0.9	1.1	0.6	0.7
Nominal pressure	[bar]	6.0	6.0	6.0	6.0
Minimum pressure	[bar]	3.0	3.0	3.0	3.0
Maximum pressure	[bar]	8.0	8.0	8.0	8.0
Diameter of connecting hose	[mm]	6.0	6.0	6.0	6.0
Max. pressure in fluid feed-through	[bar]		8.0		8.0
Min. ambient temperature	[°C]	5.0	5.0	5.0	5.0
Max. ambient temperature	[°C]	60.0	60.0	60.0	60.0
Repeat accuracy	[°]	0.05	0.05	0.05	0.05

Angle of traverse 180°, small end position adjustability of 3° and electric feed-through EDF

Description		SRU 20.1-90-3-4-EDF M5	SRU 20.1-90-3-4-EDF M8	SRU 20.2-90-3-4-EDF M5	SRU 20.2-90-3-4-EDF M8
	ID	0357303	0357304	0357403	0357404
Torque	[Nm]	1.1	1.1	3.0	3.0
Rotating angle	[°]	90.0	90.0	90.0	90.0
Adjustability of end positions	[°]	3.0	3.0	3.0	3.0
No. of fluid feed-throughs		4	4	4	4
IP class		65	65	65	65
Weight	[kg]	1.4 + 0.65	1.4 + 0.65	1.4 + 0.65	1.4 + 0.65
Fluid consumption per cycle (2 x nominal angle)	[cm³]	18.0	18.0	36.0	36.0
Swiveling time with middle attached load	[s]	1.1	1.1	0.7	0.7
Nominal pressure	[bar]	8.0	8.0	8.0	8.0
Minimum pressure	[bar]	3.0	3.0	3.0	3.0
Maximum pressure	[bar]	6.0	6.0	6.0	6.0
Diameter of connecting hose	[mm]	6.0	6.0	6.0	6.0
Max. pressure in fluid feed-through	[bar]	8.0	8.0	8.0	8.0
Min. ambient temperature	[°C]	5.0	5.0	5.0	5.0
Température ambiante max.	[°C]	60.0	60.0	60.0	60.0
Repeat accuracy	[°]	0.05	0.05	0.05	0.05
Number of E-fittings on the output end		4	4	4	4
Size of the E-connections on the output end.		M5	M8	M5	M8
Number of cores by EDF		6	6	6	6
maximum voltage by EDF	[V]	24.0	24.0	24.0	24.0
Max. current per wire	[A]	1.0	1.0	1.0	1.0
Max. overall current	[A]	1.0	1.0	1.0	1.0

Technical data

Angle of traverse 180° and small end position adjustability of 3°

Description		SRU 20.1-180-3	SRU 20.1-180-3-4	SRU 20.2-180-3	SRU 20.2-180-3-4
	ID	0357320	0357322	0357420	0357422
Torque	[Nm]	1.5	1.1	3.4	3.0
Rotating angle	[°]	180.0	180.0	180.0	180.0
Adjustability of end positions	[°]	3.0	3.0	3.0	3.0
No. of fluid feed-throughs			4		4
IP class		65	65	65	65
Weight	[kg]	1.2	1.4	1.2	1.4
Fluid consumption per cycle (2 x nominal angle)	[cm³]	30.0	30.0	60.0	60.0
Swiveling time with middle attached load	[s]	1.0	1.2	0.7	0.8
Nominal pressure	[bar]	6.0	6.0	6.0	6.0
Minimum pressure	[bar]	3.0	3.0	3.0	3.0
Maximum pressure	[bar]	8.0	8.0	8.0	8.0
Diameter of connecting hose	[mm]	6.0	6.0	6.0	6.0
Max. pressure in fluid feed-through	[bar]		8.0		8.0
Min. ambient temperature	[°C]	5.0	5.0	5.0	5.0
Max. ambient temperature	[°C]	60.0	60.0	60.0	60.0
Repeat accuracy	[°]	0.05	0.05	0.05	0.05

Angle of traverse 180°, small end position adjustability of 3° and electrica feed-through EDF

Description		SRU 20.1-180-3-4-EDF M5	SRU 20.1-180-3-4-EDF M8	SRU 20.2-180-3-4-EDF M5	SRU 20.2-180-3-4-EDF M8
	ID	0357323	0357324	0357423	0357424
Torque	[Nm]	1.1	1.1	3.0	3.0
Rotating angle	[°]	180.0	180.0	180.0	180.0
Adjustability of end positions	[°]	3.0	3.0	3.0	3.0
No. of fluid feed-throughs		4	4	4	4
IP class		65	65	65	65
Weight	[kg]	1.4 + 0.65	1.4 + 0.65	1.4 + 0.65	1.4 + 0.65
Fluid consumption per cycle (2 x nominal angle)	[cm³]	30.0	30.0	60.0	60.0
Swiveling time with middle attached load	[s]	1.2	1.2	0.8	0.8
Nominal pressure	[bar]	8.0	8.0	8.0	8.0
Minimum pressure	[bar]	3.0	3.0	3.0	3.0
Maximum pressure	[bar]	6.0	6.0	6.0	6.0
Diameter of connecting hose	[mm]	6.0	6.0	6.0	6.0
Max. pressure in fluid feed-through	[bar]	8.0	8.0	8.0	8.0
Min. ambient temperature	[°C]	5.0	5.0	5.0	5.0
Température ambiante max.	[°C]	60.0	60.0	60.0	60.0
Repeat accuracy	[°]	0.05	0.05	0.05	0.05
Number of E-fittings on the output end		4	4	4	4
Size of the E-connections on the output end.		M5	M8	M5	M8
Number of cores by EDF		6	6	6	6
maximum voltage by EDF	[V]	24.0	24.0	24.0	24.0
Max. current per wire	[A]	1.0	1.0	1.0	1.0
Max. overall current	[A]	1.0	1.0	1.0	1.0

Technical data

Angle of traverse 180°, small end position adjustability of 3° and pneumatic center position

Description		SRU 20.1-180-3-M	SRU 20.1-180-3-M-4	SRU 20.2-180-3-M	SRU 20.2-180-3-M-4
	ID	0357330	0357332	0357430	0357432
Torque	[Nm]	1.5	1.1	3.4	3.0
Rotating angle	[°]	180.0	180.0	180.0	180.0
Adjustability of end positions	[°]	3.0	3.0	3.0	3.0
Center position		M (pneumatic middle position)	M (pneumatic middle position)	M (pneumatic middle position)	M (pneumatic middle position)
Adjustability of center position	[°]	3.0	3.0	3.0	3.0
No. of fluid feed-throughs			4		4
IP class		65	65	65	65
Weight	[kg]	1.55	1.75	1.55	1.75
Fluid consumption per cycle (2 x nominal angle)	[cm^3]	18.0	18.0	36.0	36.0
Swiveling time with middle attached load	[s]	1.0	1.2	0.7	0.8
Nominal pressure	[bar]	6.0	6.0	6.0	6.0
Minimum pressure	[bar]	3.0	3.0	3.0	3.0
Maximum pressure	[bar]	8.0	8.0	8.0	8.0
Diameter of connecting hose	[mm]	6.0	6.0	6.0	6.0
Max. pressure in fluid feed-through	[bar]		8.0		8.0
Min. ambient temperature	[°C]	5.0	5.0	5.0	5.0
Max. ambient temperature	[°C]	60.0	60.0	60.0	60.0
Repeat accuracy	[°]	0.05	0.05	0.05	0.05

Angle of traverse 180°, small end position adjustability of 3°, pneumatic center position and electric feed-through

Description		SRU 20.1-180-3-M-4-EDF M5	SRU 20.1-180-3-M-4-EDF M8	SRU 20.2-180-3-M-4-EDF M5	SRU 20.2-180-3-M-4-EDF M8
	ID	0357333	0357334	0357433	0357434
Torque	[Nm]	1.1	1.1	3.0	3.0
Rotating angle	[°]	180.0	180.0	180.0	180.0
Adjustability of end positions	[°]	3.0	3.0	3.0	3.0
Center position		M (pneumatic middle position)	M (pneumatic middle position)	M (pneumatic middle position)	M (pneumatic middle position)
Central Position Andjustability	[°]	3.0	3.0	3.0	3.0
No. of fluid feed-throughs		4	4	4	4
IP class		65	65	65	65
Weight	[kg]	1.75 + 0.65	1.75 + 0.65	1.75 + 0.65	1.75 + 0.65
Fluid consumption per cycle (2 x nominal angle)	[cm^3]	18.0	18.0	36.0	36.0
Swiveling time with middle attached load	[s]	1.2	1.2	0.8	0.8
Nominal pressure	[bar]	8.0	8.0	8.0	8.0
Minimum pressure	[bar]	3.0	3.0	3.0	3.0
Maximum pressure	[bar]	6.0	6.0	6.0	6.0
Diameter of connecting hose	[mm]	6.0	6.0	6.0	6.0
Max. pressure in fluid feed-through	[bar]	8.0	8.0	8.0	8.0
Min. ambient temperature	[°C]	5.0	5.0	5.0	5.0
Température ambiante max.	[°C]	60.0	60.0	60.0	60.0
Repeat accuracy	[°]	0.05	0.05	0.05	0.05
Number of E-fittings on the output end		4	4	4	4
Size of the E-connections on the output end.		M5	M8	M5	M8
Number of cores by EDF		6	6	6	6
maximum voltage by EDF	[V]	24.0	24.0	24.0	24.0
Max. current per wire	[A]	1.0	1.0	1.0	1.0
Max. overall current	[A]	1.0	1.0	1.0	1.0

Technical data

Angle of traverse 180°, small end position adjustability of 3° and locked center position

Description		SRU 20.2-180-3-VM	SRU 20.2-180-3-VM-4
	ID	0357440	0357442
Torque	[Nm]	3.4	3.0
Rotating angle	[°]	180.0	180.0
Adjustability of end positions	[°]	3.0	3.0
Center position		VM (locked middle position)	VM (locked middle position)
Adjustability of center position	[°]	3.0	3.0
No. of fluid feed-throughs			4
IP class		65	65
Weight	[kg]	1.76	1.96
Fluid consumption per cycle (2 x nominal angle)	[cm³]	60.0	60.0
Swiveling time with middle attached load	[s]	0.7	0.8
Nominal pressure	[bar]	6.0	6.0
Minimum pressure	[bar]	4.0	4.0
Maximum pressure	[bar]	6.5	6.5
Diameter of connecting hose	[mm]	6.0	6.0
Max. pressure in fluid feed-through	[bar]		8.0
Min. ambient temperature	[°C]	5.0	5.0
Max. ambient temperature	[°C]	60.0	60.0
Repeat accuracy	[°]	0.05	0.05

Angle of traverse 180°, small end position adjustability of 3°, blocked center position and electric feed-through

Description		SRU 20.2-180-3-VM-4-EDF M5	SRU 20.2-180-3-VM-4-EDF M8
	ID	0357443	0357444
Torque	[Nm]	3.0	3.0
Rotating angle	[°]	180.0	180.0
Adjustability of end positions	[°]	3.0	3.0
Center position		VM (locked middle position)	VM (locked middle position)
Central Position Andjustability	[°]	3.0	3.0
No. of fluid feed-throughs		4	4
IP class		65	65
Weight	[kg]	1.96 + 0.65	1.96 + 0.65
Fluid consumption per cycle (2 x nominal angle)	[cm³]	60.0	60.0
Swiveling time with middle attached load	[s]	0.8	0.8
Nominal pressure	[bar]	6.5	6.5
Minimum pressure	[bar]	4.0	4.0
Maximum pressure	[bar]	6.0	6.0
Diameter of connecting hose	[mm]	6.0	6.0
Max. pressure in fluid feed-through	[bar]	8.0	8.0
Min. ambient temperature	[°C]	5.0	5.0
Température ambiante max.	[°C]	60.0	60.0
Repeat accuracy	[°]	0.05	0.05
Number of E-fittings on the output end		4	4
Size of the E-connections on the output end.		M5	M8
Number of cores by EDF		6	6
maximum voltage by EDF	[V]	24.0	24.0
Max. current per wire	[A]	1.0	1.0
Max. overall current	[A]	1.0	1.0

Technical data

Angle of traverse 180° and large end position adjustability of 90°

Description		SRU 20.1-180-90	SRU 20.1-180-90-4	SRU 20.2-180-90	SRU 20.2-180-90-4
	ID	0357350	0357352	0357450	0357452
Torque	[Nm]	1.5	1.1	3.4	3.0
Rotating angle	[°]	180.0	180.0	180.0	180.0
Adjustability of end positions	[°]	90.0	90.0	90.0	90.0
No. of fluid feed-throughs			4		4
IP class		65	65	65	65
Weight	[kg]	1.24	1.44	1.24	1.44
Fluid consumption per cycle (2 x nominal angle)	[cm^3]	30.0	30.0	60.0	60.0
Swiveling time with middle attached load	[s]	1.0	1.2	0.7	0.8
Nominal pressure	[bar]	6.0	6.0	6.0	6.0
Minimum pressure	[bar]	3.0	3.0	3.0	3.0
Maximum pressure	[bar]	8.0	8.0	8.0	8.0
Diameter of connecting hose	[mm]	6.0	6.0	6.0	6.0
Max. pressure in fluid feed-through	[bar]		8.0		8.0
Min. ambient temperature	[°C]	5.0	5.0	5.0	5.0
Max. ambient temperature	[°C]	60.0	60.0	60.0	60.0
Repeat accuracy	[°]	0.05	0.05	0.05	0.05

Angle of traverse 180°, large end position adjustability of 90° and electric feed-through EDF

Description		SRU 20.1-180-90-4-EDF M5	SRU 20.1-180-90-4-EDF M8	SRU 20.2-180-90-4-EDF M5	SRU 20.2-180-90-4-EDF M8
	ID	0357353	0357354	0357453	0357454
Torque	[Nm]	1.1	1.1	3.0	3.0
Rotating angle	[°]	180.0	180.0	180.0	180.0
Adjustability of end positions	[°]	90.0	90.0	90.0	90.0
No. of fluid feed-throughs		4	4	4	4
IP class		65	65	65	65
Weight	[kg]	1.44 + 0.65	1.44 + 0.65	1.44 + 0.65	1.44 + 0.65
Fluid consumption per cycle (2 x nominal angle)	[cm^3]	30.0	30.0	60.0	60.0
Swiveling time with middle attached load	[s]	1.2	1.2	0.8	0.8
Nominal pressure	[bar]	8.0	8.0	8.0	8.0
Minimum pressure	[bar]	3.0	3.0	3.0	3.0
Maximum pressure	[bar]	6.0	6.0	6.0	6.0
Diameter of connecting hose	[mm]	6.0	6.0	6.0	6.0
Max. pressure in fluid feed-through	[bar]	8.0	8.0	8.0	8.0
Min. ambient temperature	[°C]	5.0	5.0	5.0	5.0
Température ambiante max.	[°C]	60.0	60.0	60.0	60.0
Repeat accuracy	[°]	0.05	0.05	0.05	0.05
Number of E-fittings on the output end		4	4	4	4
Size of the E-connections on the output end.		M5	M8	M5	M8
Number of cores by EDF		6	6	6	6
maximum voltage by EDF	[V]	24.0	24.0	24.0	24.0
Max. current per wire	[A]	1.0	1.0	1.0	1.0
Max. overall current	[A]	1.0	1.0	1.0	1.0

Technical data

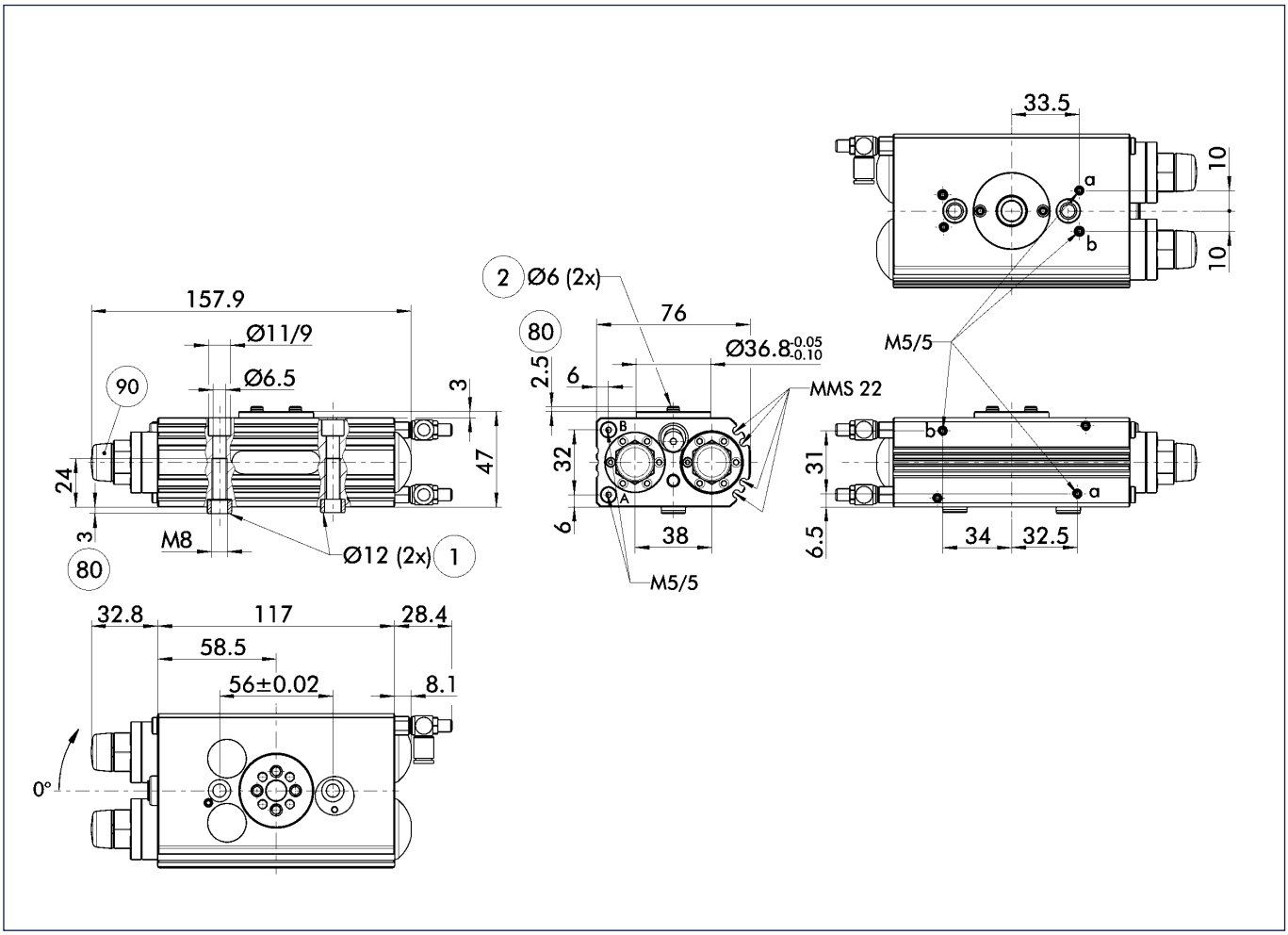
Angle of traverse 180°, large end position adjustability of 90° and pneumatic center position

Description		SRU 20.1-180-90-M	SRU 20.1-180-90-M-4	SRU 20.2-180-90-M	SRU 20.2-180-90-M-4
	ID	0357360	0357362	0357460	0357462
Torque	[Nm]	1.5	1.1	3.4	3.0
Rotating angle	[°]	180.0	180.0	180.0	180.0
Adjustability of end positions	[°]	90.0	90.0	90.0	90.0
Center position		M (pneumatic middle position)	M (pneumatic middle position)	M (pneumatic middle position)	M (pneumatic middle position)
Adjustability of center position	[°]	3.0	3.0	3.0	3.0
No. of fluid feed-throughs			4		4
IP class		65	65	65	65
Weight	[kg]	1.6	1.8	1.6	1.8
Fluid consumption per cycle (2 x nominal angle)	[cm^3]	30.0	30.0	60.0	60.0
Swiveling time with middle attached load	[s]	1.0	1.2	0.7	0.8
Nominal pressure	[bar]	6.0	6.0	6.0	6.0
Minimum pressure	[bar]	3.0	3.0	3.0	3.0
Maximum pressure	[bar]	8.0	8.0	8.0	8.0
Diameter of connecting hose	[mm]	6.0	6.0	6.0	6.0
Max. pressure in fluid feed-through	[bar]		8.0		8.0
Min. ambient temperature	[°C]	5.0	5.0	5.0	5.0
Max. ambient temperature	[°C]	60.0	60.0	60.0	60.0
Repeat accuracy	[°]	0.05	0.05	0.05	0.05

Angle of traverse 180°, large end position adjustability of 90°, pneumatic center position and electric feed-through EDF

Description		SRU 20.1-180-90-M-4-EDF M5	SRU 20.1-180-90-M-4-EDF M8	SRU 20.2-180-90-M-4-EDF M5	SRU 20.2-180-90-M-4-EDF M8
	ID	0357363	0357364	0357463	0357464
Torque	[Nm]	1.1	1.1	3.0	3.0
Rotating angle	[°]	180.0	180.0	180.0	180.0
Adjustability of end positions	[°]	90.0	90.0	90.0	90.0
Center position		M (pneumatic middle position)	M (pneumatic middle position)	M (pneumatic middle position)	M (pneumatic middle position)
Central Position Andjustability	[°]	3.0	3.0	3.0	3.0
No. of fluid feed-throughs		4	4	4	4
IP class		65	65	65	65
Weight	[kg]	1.8 + 0.65	1.8 + 0.65	1.8 + 0.65	1.8 + 0.65
Fluid consumption per cycle (2 x nominal angle)	[cm^3]	30.0	30.0	60.0	60.0
Swiveling time with middle attached load	[s]	1.2	1.2	0.8	0.8
Nominal pressure	[bar]	8.0	8.0	8.0	8.0
Minimum pressure	[bar]	3.0	3.0	3.0	3.0
Maximum pressure	[bar]	6.0	6.0	6.0	6.0
Diameter of connecting hose	[mm]	6.0	6.0	6.0	6.0
Max. pressure in fluid feed-through	[bar]	8.0	8.0	8.0	8.0
Min. ambient temperature	[°C]	5.0	5.0	5.0	5.0
Température ambiante max.	[°C]	60.0	60.0	60.0	60.0
Repeat accuracy	[°]	0.05	0.05	0.05	0.05
Number of E-fittings on the output end		4	4	4	4
Size of the E-connections on the output end.		M5	M8	M5	M8
Number of cores by EDF		6	6	6	6
maximum voltage by EDF	[V]	24.0	24.0	24.0	24.0
Max. current per wire	[A]	1.0	1.0	1.0	1.0
Max. overall current	[A]	1.0	1.0	1.0	1.0

Main views for SRU without EDF

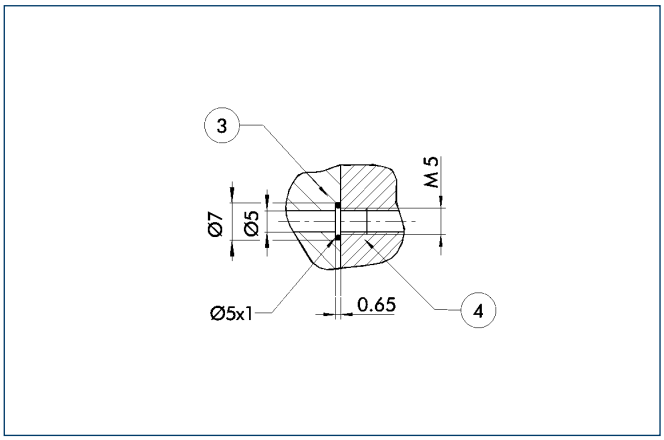


The main view shows the SRU in the most basic version, that is with an angle of traverse of 180°/90°, small end position adjustability of 3°, without center position and without fluid feed-through. Modifications to the drawings as a result of various options can be seen in the relevant additional views.

ⓘ The SDV-P pressure maintenance valve can be used to hold the position upon a loss of pressure (see „Accessories“ catalog section).

A,a Main/direct connection, clockwise rotary unit
B,b Main/direct connection, anti-clockwise rotary unit
① Linear unit connection
② Attachment connection
80 depth of the centering sleeve hole in the matching part
90 setting shock absorber-hub

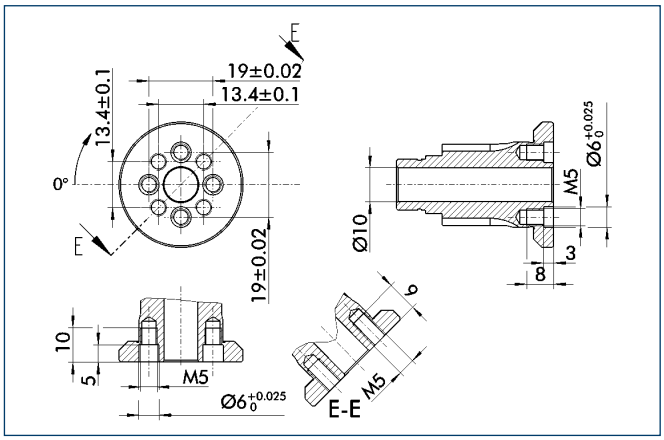
Hose-free direct connection



③ Adapter
④ Rotary unit

The direction connection is used for supplying compressed air without hoses, which are liable to faults. Instead, the pressure medium is conveyed through the bore-holes of the mounting plate.

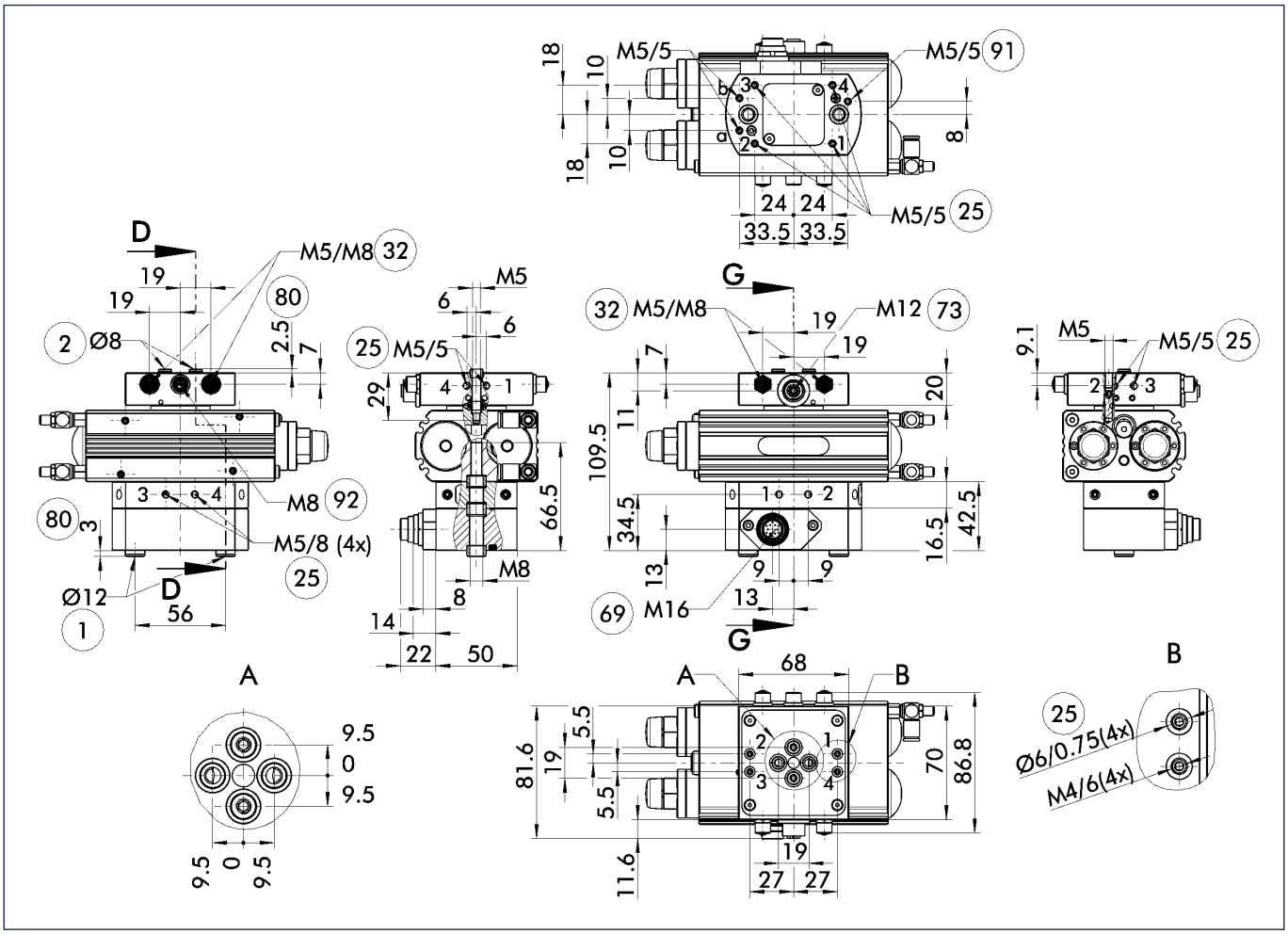
Pinion with fluid feed-through



Pinion screw connection diagram for mounting the swiveling attachment. The „4x large thread for 4x screw and 2x flat fit for guide sleeve“ screw connection diagram is preferable to the „4x small thread for 2x screw and 2x dowel screw“ (in deep fit) screw connection diagram.

ⓘ **View adaptable at versions without EDF**

Main views for SRU with EDF

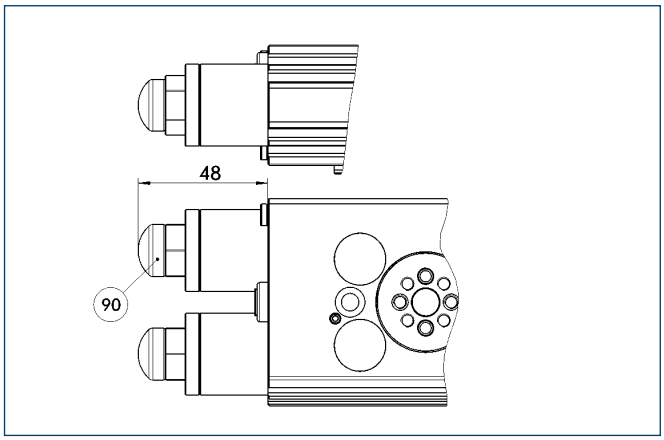


The main view shows the SRU in the most basic version, that is with an angle of traverse of 180°/90°, small end position adjustability of 3°, without center position and without fluid feed-through. Modifications to the drawings as a result of various options can be seen in the relevant additional views.

ⓘ The SDV-P pressure maintenance valve can be used to hold the position upon a loss of pressure (see „Accessories“ catalog section).

A,a Main/direct connection, clockwise rotary unit
B,b Main/direct connection, anti-clockwise rotary unit
① Rotary unit connection
② Attachment connection
㉕ Fluid feed-through
㉜ flange socket for sensor feed-through
㊾ Connection for electric feed-through
㉝ Connection BUS-throughs
㊿ depth of the centering sleeve hole in the matching part
㉛ ventilation-drill for simple admitted SRU with middle position
㉜ change Bus-/Sensor feed-through

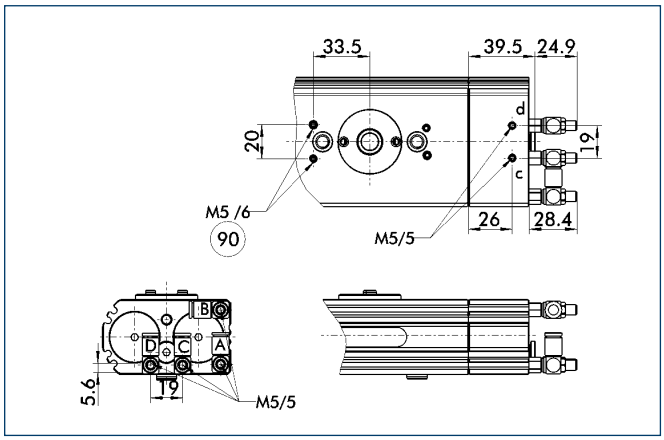
Large end position adjustability 90°



㊿ setting shock absorber-hub

Different dimensions with the option „Large end position adjustability (90°)“ This permits the end positions to be adjusted by up to 93°. More information can be found in the introduction to the series.

Pneumatic center position (M)

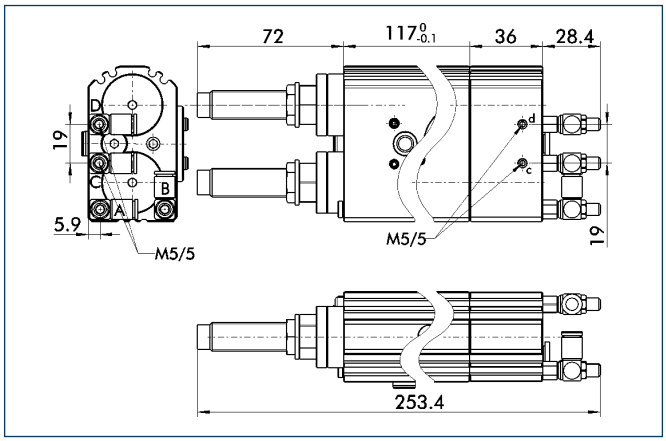


C,c Main/direct connection, center position
Dd, Main/direct connection, center position
㊿ Bleeder hole for unit with single compressed air action (.1)

Different dimensions with the „Pneumatic Center Position (M)“ option. Heavy attachments may have to level out until they reach the correct position. The locked center position (VM) offers a remedy. Units with single compressed air action (.1) and pneumatic center position need an essential bleeder hose.

ⓘ **View applicable for version with or without EDF!**

Locked center position (VM)

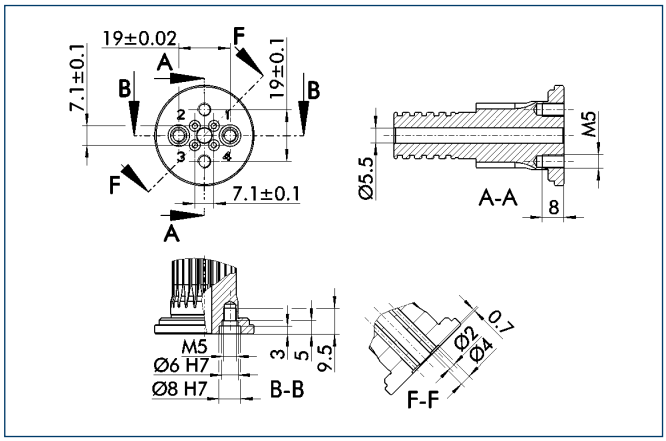


C,c Main/direct connection, center position
Dd, Main/direct connection, center position

Different dimensions with the „Locked center position (VM)“ option. The center position is locked. The unit travels to center position using the force of the main drive piston. Shock absorbers brake the travel to center position as fast as possible to prevent overshooting.

ⓘ View applicable for version with or without EDF!

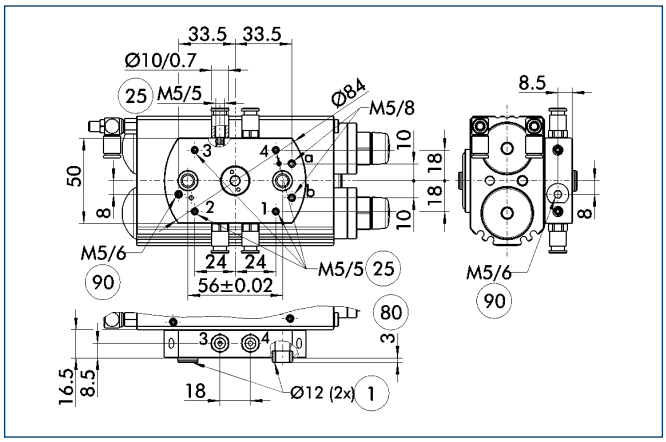
Pinion



Pinion screw connection diagram for the „Fluid feed-through“ option. The preferred drilling pattern is 2 x screws and 2 x screws with guide sleeve (in ø 8 H7).

ⓘ View adaptable at versions without EDF

Connections for Medium-throughs

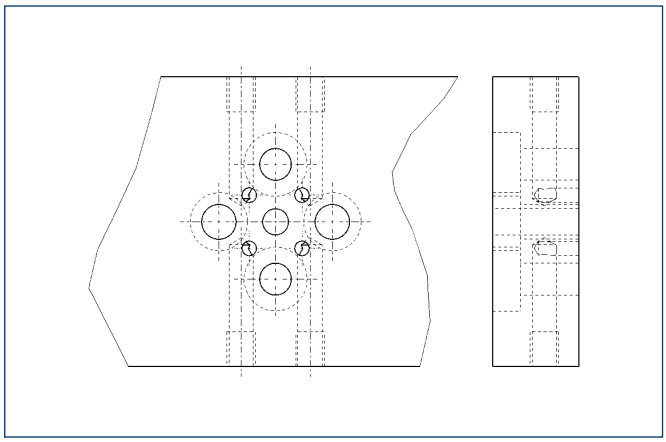


① Linear unit connection
㉕ Fluid feed-through
㉚ depth of the centering sleeve hole in the matching part
㉚ Bleeder hole for unit with single compressed air action provided with pneumatic center position (.1-M)

Lower mounting plate for the „Fluid feed-through“ option. Vacuum, gases or fluids can be conveyed. The connection may be a screw type or a direct connection.

ⓘ View adaptable at versions without EDF

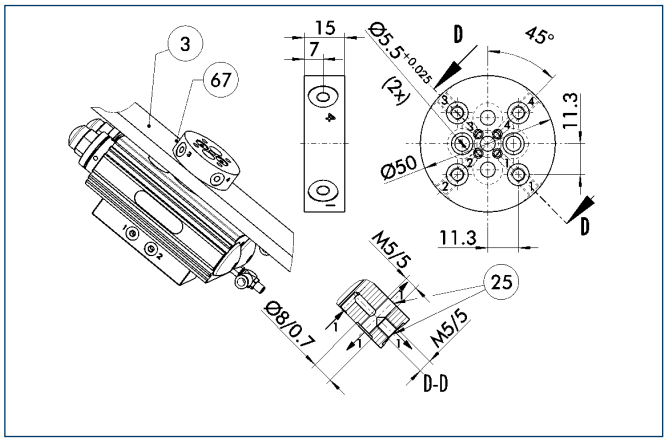
Adapter plate arrangement



Suggested here is an arrangement of the adapter plate which enables all fluid feed-throughs to be reached as easily as possible.

ⓘ View adaptable at versions without EDF

Distributor for SRU

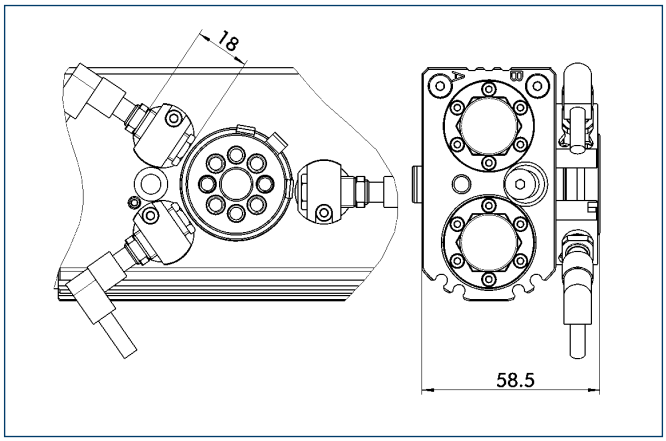


(3) Adapter
(25) Fluid feed-through
(67) Distributor for media feed-through

The distributor (ID: 0357392) for SRU 20 and SRU 25 facilitates the use of the fluid feed-throughs, both at the direct attachment to the distributor and in the lines conveying the fluid inside the adapter plate. Thanks to the distributor, only a simple drilling pattern has to be drilled in the adapter plate situated between the pinion and the distributor.

ⓘ View adaptable at versions without EDF

Mounting kit for proximity switch at SRU without EDF



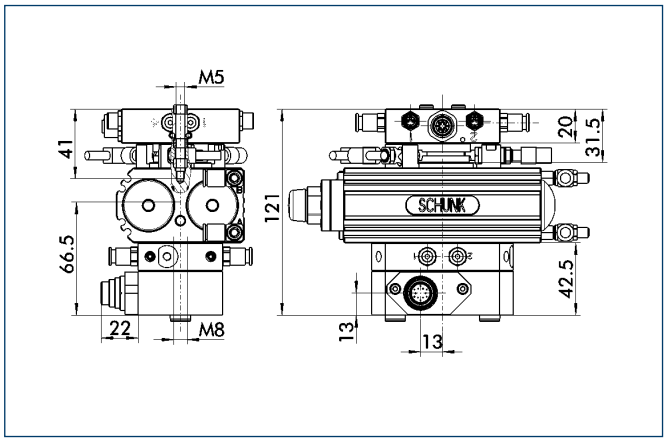
The size-specific mounting kit is required for installing the inductive proximity switches. Up to three proximity switches (2x end position, 1x center position) can be attached using the mounting kit. A mounting kit for IN 80 inductive proximity switches consists of:

3x sensor brackets complete
1x operating cam retaining disk
3x operating cams

Description	ID
AS-SRU 20	0357390
AS-SRU 20/25-4	0357391

ⓘ View adaptable at versions without EDF

Mounting kit for proximity switch at SRU with EDF

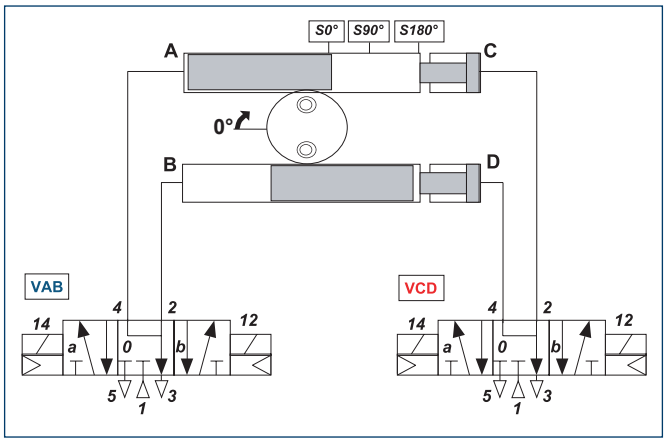


The size-specific mounting kit is required for installing the inductive proximity switches. Up to three proximity switches (2x end position, 1x center position) can be attached using the mounting kit. A mounting kit for IN 80 inductive proximity switches consists of:

3x sensor brackets complete
1x operating cam retaining disk
3x operating cams

ⓘ View adaptable at versions with EDF
The adaptor kit cannot be ordered individually. The SRU with EDF and adaptor kit is being delivered by SCHUNK completely mounted.

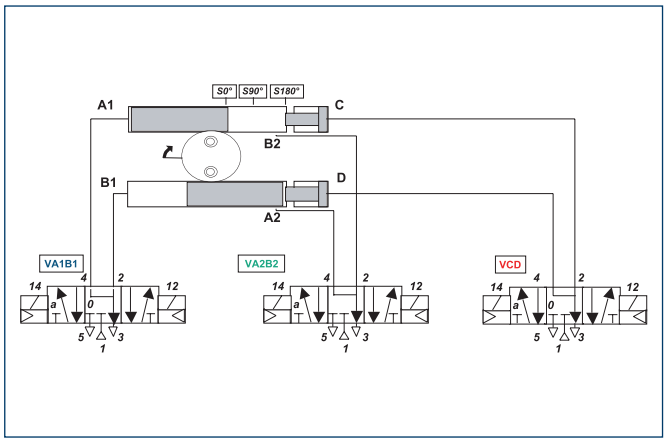
Pneumatic diagram of SRU-VM – Vertical axis



VM units with vertical swivel axis are generally actuated by two 5/3 directional control valves with bled center position. To prevent damage, it is essential that you pay attention to the actuation sequence in the Operating Manual.

ⓘ View applicable for version with or without EDF!

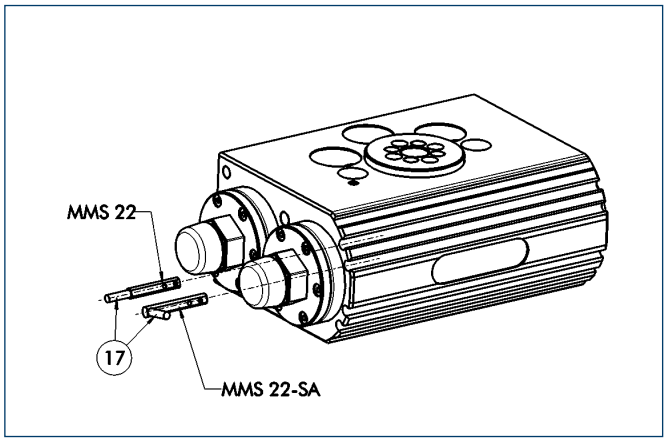
Pneumatic diagram of SRU-VM – horizontal axis



VM units with horizontal or non-vertical swivel axis must generally be actuated by three 5/3 directional control valves with bled center position. To prevent damage, it is essential that you pay attention to the actuation sequence in the Operating Manual.

ⓘ View applicable for version with or without EDF!

Sensor System



⑰ Cable outlet

End position monitoring: Electronic magnetic switches, for mounting in C-slot

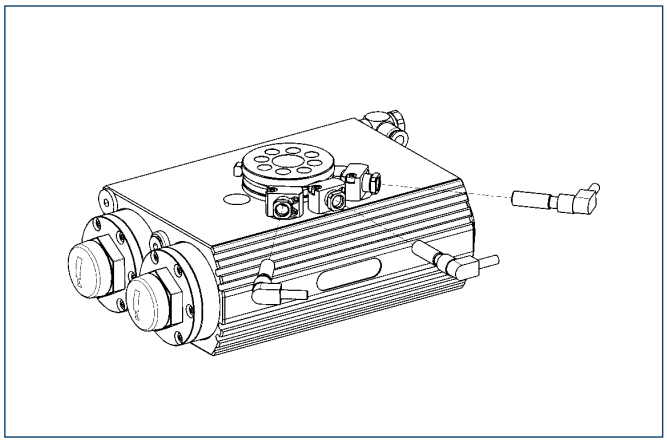
Description	ID	Recommended product
MMS 22-S-M5-NPN	0301439	
MMS 22-S-M5-NPN-SA	0301449	
MMS 22-S-M5-PNP	0301438	
MMS 22-S-M5-PNP-SA	0301448	
MMS 22-S-M8-NPN	0301433	
MMS 22-S-M8-NPN-SA	0301443	
MMS 22-S-M8-PNP	0301432	•
MMS 22-S-M8-PNP-SA	0301442	
MMSK 22-S-NPN	0301435	
MMSK 22-S-NPN-SA	0301445	
MMSK 22-S-PNP	0301434	
MMSK 22-S-PNP-SA	0301444	

Extension cables for proximity switches/magnetic switches

Description	ID
KA BG05-L 3P-0300	0301652
KA BG08-L 3P-0300-PNP	0301622
KA BW05-L 3P-0300	0301650
KA BW08-L 3P-0300-NPN	0301602
KA BW08-L 3P-0300-PNP	0301594
KA BW08-L 3P-0500-NPN	9641116
KA BW08-L 3P-0500-PNP	0301502
KA BW12-L 3P-0300-PNP	0301503
KA BW12-L 3P-0500-PNP	0301507
KV BW08-SG08 3P-0030-PNP	0301495
KV BW08-SG08 3P-0100-PNP	0301496
KV BW08-SG08 3P-0200-PNP	0301497
KV BW12-SG12 3P-0030-PNP	0301595
KV BW12-SG12 3P-0100-PNP	0301596
KV BW12-SG12 3P-0200-PNP	0301597

ⓘ Please note the minimum permitted bending radii for the sensor cables, which are generally 35 mm.

Assembly IN on SRU without EDF

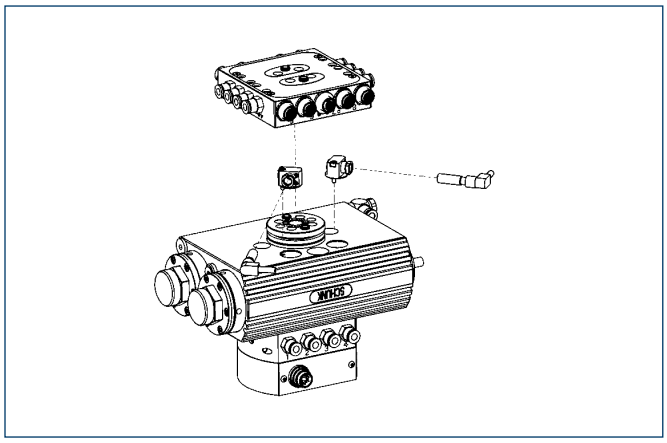


End position monitoring:
Inductive proximity switches, mounted with mounting kit

Description	ID	Recommended product
AS-SRU 20	0357390	
AS-SRU 20/25-4	0357391	
IN 80-S-M12	0301578	
IN 80-S-M8	0301478	•
IN-C 80-S-M8	0301475	
INK 80-S	0301550	
INK 80-SL	0301579	

ⓘ In general there are two sensors needed per swivel unit, with additional request of the middle position , three sensors plus optional an extension cable.
View adaptable at versions without EDF!

Assembly IN on SRU with EDF and add-on kit

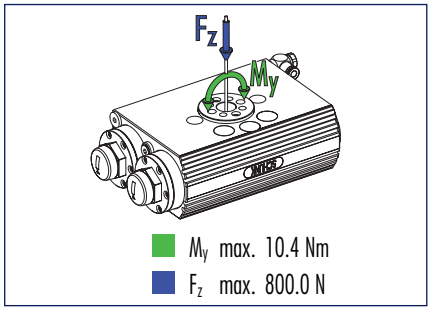


End position monitoring:
Inductive proximity switches, mounted with mounting kit

Description	ID	Recommended product
IN 80-S-M12	0301578	
IN 80-S-M8	0301478	•
IN-C 80-S-M8	0301475	
INK 80-S	0301550	
INK 80-SL	0301579	

ⓘ In general there are two sensors needed per swivel unit, with additional request of the middle position, three sensors plus optional an extension cable.
View adaptable at versions without EDF!

Pinion load



ⓘ Moments and forces may occur simultaneously. When using heavy attachments or ones with high mass moments of inertia, the speed must be restricted to ensure that the rotary movement occurs without any hitting or bouncing.

Technical data

Angle of traverse 90° and small end position adjustability of 3°

Description		SRU 25.1-90-3	SRU 25.1-90-3-4	SRU 25.2-90-3	SRU 25.2-90-3-4
	ID	0357500	0357502	0357600	0357602
Torque	[Nm]	2.4	2.0	5.0	4.6
Rotating angle	[°]	90.0	90.0	90.0	90.0
Adjustability of end positions	[°]	3.0	3.0	3.0	3.0
No. of fluid feed-throughs			4		4
IP class		65	65	65	65
Weight	[kg]	1.6	1.8	1.6	1.8
Fluid consumption per cycle (2 x nominal angle)	[cm³]	30.0	30.0	60.0	60.0
Swiveling time with middle attached load	[s]	1.0	1.4	0.8	1.0
Nominal pressure	[bar]	6.0	6.0	6.0	6.0
Minimum pressure	[bar]	3.0	3.0	3.0	3.0
Maximum pressure	[bar]	8.0	8.0	8.0	8.0
Diameter of connecting hose	[mm]	6.0	6.0	6.0	6.0
Max. pressure in fluid feed-through	[bar]		8.0		8.0
Min. ambient temperature	[°C]	5.0	5.0	5.0	5.0
Max. ambient temperature	[°C]	60.0	60.0	60.0	60.0
Repeat accuracy	[°]	0.05	0.05	0.05	0.05

Angle of traverse 180°, small end position adjustability of 3° and electric feed-through EDF

Description		SRU 25.1-90-3-4-EDF M5	SRU 25.1-90-3-4-EDF M8	SRU 25.2-90-3-4-EDF M5	SRU 25.2-90-3-4-EDF M8
ID	ID	0357503	0357504	0357603	0357604
Torque	[Nm]	2.0	2.0	4.6	4.6
Rotating angle	[°]	90.0	90.0	90.0	90.0
Adjustability of end positions	[°]	3.0	3.0	3.0	3.0
No. of fluid feed-throughs		4	4	4	4
IP class		65	65	65	65
Weight	[kg]	1.8 + 0.65	1.8 + 0.65	1.8 + 0.65	1.8 + 0.65
Fluid consumption per cycle (2 x nominal angle)	[cm³]	30.0	30.0	60.0	60.0
Swiveling time with middle attached load	[s]	1.4	1.4	1.0	1.0
Nominal pressure	[bar]	8.0	8.0	8.0	8.0
Minimum pressure	[bar]	3.0	3.0	3.0	3.0
Maximum pressure	[bar]	6.0	6.0	6.0	6.0
Diameter of connecting hose	[mm]	6.0	6.0	6.0	6.0
Max. pressure in fluid feed-through	[bar]	8.0	8.0	8.0	8.0
Min. ambient temperature	[°C]	5.0	5.0	5.0	5.0
Température ambiante max.	[°C]	60.0	60.0	60.0	60.0
Repeat accuracy	[°]	0.05	0.05	0.05	0.05
Number of E-fittings on the output end		4	4	4	4
Size of the E-connections on the output end.		M5	M8	M5	M8
Number of cores by EDF		6	6	6	6
maximum voltage by EDF	[V]	24.0	24.0	24.0	24.0
Max. current per wire	[A]	1.0	1.0	1.0	1.0
Max. overall current	[A]	1.0	1.0	1.0	1.0

Technical data

Angle of traverse 180° and small end position adjustability of 3°

Description		SRU 25.1-180-3	SRU 25.1-180-3-4	SRU 25.2-180-3	SRU 25.2-180-3-4
	ID	0357520	0357522	0357620	0357622
Torque	[Nm]	2.4	2.0	5.0	4.6
Rotating angle	[°]	180.0	180.0	180.0	180.0
Adjustability of end positions	[°]	3.0	3.0	3.0	3.0
No. of fluid feed-throughs			4		4
IP class		65	65	65	65
Weight	[kg]	1.6	1.8	1.6	1.8
Fluid consumption per cycle (2 x nominal angle)	[cm³]	44.0	44.0	88.0	88.0
Swiveling time with middle attached load	[s]	1.1	1.5	0.9	1.1
Nominal pressure	[bar]	6.0	6.0	6.0	6.0
Minimum pressure	[bar]	3.0	3.0	3.0	3.0
Maximum pressure	[bar]	8.0	8.0	8.0	8.0
Diameter of connecting hose	[mm]	6.0	6.0	6.0	6.0
Max. pressure in fluid feed-through	[bar]		8.0		8.0
Min. ambient temperature	[°C]	5.0	5.0	5.0	5.0
Max. ambient temperature	[°C]	60.0	60.0	60.0	60.0
Repeat accuracy	[°]	0.05	0.05	0.05	0.05

Angle of traverse 180°, small end position adjustability of 3° and electrica feed-through EDF

Description		SRU 25.1-180-3-4-EDF M5	SRU 25.1-180-3-4-EDF M8	SRU 25.2-180-3-4-EDF M5	SRU 25.2-180-3-4-EDF M8
ID	ID	0357523	0357524	0357623	0357624
Torque	[Nm]	2.0	2.0	4.6	4.6
Rotating angle	[°]	180.0	180.0	180.0	180.0
Adjustability of end positions	[°]	3.0	3.0	3.0	3.0
No. of fluid feed-throughs		4	4	4	4
IP class		65	65	65	65
Weight	[kg]	1.8 + 0.65	1.8 + 0.65	1.8 + 0.65	1.8 + 0.65
Fluid consumption per cycle (2 x nominal angle)	[cm³]	44.0	44.0	88.0	88.0
Swiveling time with middle attached load	[s]	1.5	1.5	1.1	1.1
Nominal pressure	[bar]	8.0	8.0	8.0	8.0
Minimum pressure	[bar]	3.0	3.0	3.0	3.0
Maximum pressure	[bar]	6.0	6.0	6.0	6.0
Diameter of connecting hose	[mm]	6.0	6.0	6.0	6.0
Max. pressure in fluid feed-through	[bar]	8.0	8.0	8.0	8.0
Min. ambient temperature	[°C]	5.0	5.0	5.0	5.0
Température ambiante max.	[°C]	60.0	60.0	60.0	60.0
Repeat accuracy	[°]	0.05	0.05	0.05	0.05
Number of E-fittings on the output end		4	4	4	4
Size of the E-connections on the output end.		M5	M8	M5	M8
Number of cores by EDF		6	6	6	6
maximum voltage by EDF	[V]	24.0	24.0	24.0	24.0
Max. current per wire	[A]	1.0	1.0	1.0	1.0
Max. overall current	[A]	1.0	1.0	1.0	1.0

Technical data

Angle of traverse 180°, small end position adjustability of 3° and pneumatic center position

Description		SRU 25.1-180-3-M	SRU 25.1-180-3-M-4	SRU 25.2-180-3-M	SRU 25.2-180-3-M-4
	ID	0357530	0357532	0357630	0357632
Torque	[Nm]	2.4	2.0	5.0	4.6
Rotating angle	[°]	180.0	180.0	180.0	180.0
Adjustability of end positions	[°]	3.0	3.0	3.0	3.0
Center position		M (pneumatic middle position)	M (pneumatic middle position)	M (pneumatic middle position)	M (pneumatic middle position)
Adjustability of center position	[°]	3.0	3.0	3.0	3.0
No. of fluid feed-throughs			4		4
IP class		65	65	65	65
Weight	[kg]	2.2	2.35	2.2	2.35
Fluid consumption per cycle (2 x nominal angle)	[cm^3]	44.0	44.0	88.0	88.0
Swiveling time with middle attached load	[s]	1.1	1.5	0.9	1.1
Nominal pressure	[bar]	6.0	6.0	6.0	6.0
Minimum pressure	[bar]	3.0	3.0	3.0	3.0
Maximum pressure	[bar]	8.0	8.0	8.0	8.0
Diameter of connecting hose	[mm]	6.0	6.0	6.0	6.0
Max. pressure in fluid feed-through	[bar]		8.0		8.0
Min. ambient temperature	[°C]	5.0	5.0	5.0	5.0
Max. ambient temperature	[°C]	60.0	60.0	60.0	60.0
Repeat accuracy	[°]	0.05	0.05	0.05	0.05

Angle of traverse 180°, small end position adjustability of 3°, pneumatic center position and electric feed-through

Description		SRU 25.1-180-3-M-4-EDF M5	SRU 25.1-180-3-M-4-EDF M8	SRU 25.2-180-3-M-4-EDF M5	SRU 25.2-180-3-M-4-EDF M8
ID	ID	0357533	0357534	0357633	0357634
Torque	[Nm]	2.0	2.0	4.6	4.6
Rotating angle	[°]	180.0	180.0	180.0	180.0
Adjustability of end positions	[°]	3.0	3.0	3.0	3.0
Center position		M (pneumatic middle position)	M (pneumatic middle position)	M (pneumatic middle position)	M (pneumatic middle position)
Central Position Andjustability	[°]	3.0	3.0	3.0	3.0
No. of fluid feed-throughs		4	4	4	4
IP class		65	65	65	65
Weight	[kg]	2.35 + 0.65	2.35 + 0.65	2.35 + 0.65	2.35 + 0.65
Fluid consumption per cycle (2 x nominal angle)	[cm^3]	44.0	44.0	88.0	88.0
Swiveling time with middle attached load	[s]	1.5	1.5	1.1	1.1
Nominal pressure	[bar]	8.0	8.0	8.0	8.0
Minimum pressure	[bar]	3.0	3.0	3.0	3.0
Maximum pressure	[bar]	6.0	6.0	6.0	6.0
Diameter of connecting hose	[mm]	6.0	6.0	6.0	6.0
Max. pressure in fluid feed-through	[bar]	8.0	8.0	8.0	8.0
Min. ambient temperature	[°C]	5.0	5.0	5.0	5.0
Température ambiante max.	[°C]	60.0	60.0	60.0	60.0
Repeat accuracy	[°]	0.05	0.05	0.05	0.05
Number of E-fittings on the output end		4	4	4	4
Size of the E-connections on the output end.		M5	M8	M5	M8
Number of cores by EDF		6	6	6	6
maximum voltage by EDF	[V]	24.0	24.0	24.0	24.0
Max. current per wire	[A]	1.0	1.0	1.0	1.0
Max. overall current	[A]	1.0	1.0	1.0	1.0

Technical data

Angle of traverse 180°, small end position adjustability of 3° and locked center position

Description		SRU 25.2-180-3-VM	SRU 25.2-180-3-VM-4
	ID	0357640	0357642
Torque	[Nm]	5.0	4.6
Rotating angle	[°]	180.0	180.0
Adjustability of end positions	[°]	3.0	3.0
Center position		VM (locked middle position)	VM (locked middle position)
Adjustability of center position	[°]	3.0	3.0
No. of fluid feed-throughs			4
IP class		65	65
Weight	[kg]	2.57	2.74
Fluid consumption per cycle (2 x nominal angle)	[cm³]	88.0	88.0
Swiveling time with middle attached load	[s]	0.9	1.1
Nominal pressure	[bar]	6.0	6.0
Minimum pressure	[bar]	4.0	4.0
Maximum pressure	[bar]	6.5	6.5
Diameter of connecting hose	[mm]	6.0	6.0
Max. pressure in fluid feed-through	[bar]		8.0
Min. ambient temperature	[°C]	5.0	5.0
Max. ambient temperature	[°C]	60.0	60.0
Repeat accuracy	[°]	0.05	0.05

Angle of traverse 180°, small end position adjustability of 3°, blocked center position and electric feed-through

Description		SRU 25.2-180-3-VM-4-EDF M5	SRU 25.2-180-3-VM-4-EDF M8
ID	ID	0357643	0357644
Torque	[Nm]	4.6	4.6
Rotating angle	[°]	180.0	180.0
Adjustability of end positions	[°]	3.0	3.0
Center position		VM (locked middle position)	VM (locked middle position)
Central Position Andjustability	[°]	3.0	3.0
No. of fluid feed-throughs		4	4
IP class		65	65
Weight	[kg]	2.74 + 0.65	2.74 + 0.65
Fluid consumption per cycle (2 x nominal angle)	[cm³]	88.0	88.0
Swiveling time with middle attached load	[s]	1.1	1.1
Nominal pressure	[bar]	6.5	6.5
Minimum pressure	[bar]	4.0	4.0
Maximum pressure	[bar]	6.0	6.0
Diameter of connecting hose	[mm]	6.0	6.0
Max. pressure in fluid feed-through	[bar]	8.0	8.0
Min. ambient temperature	[°C]	5.0	5.0
Température ambiante max.	[°C]	60.0	60.0
Repeat accuracy	[°]	0.05	0.05
Number of E-fittings on the output end		4	4
Size of the E-connections on the output end.		M5	M8
Number of cores by EDF		6	6
maximum voltage by EDF	[V]	24.0	24.0
Max. current per wire	[A]	1.0	1.0
Max. overall current	[A]	1.0	1.0

Technical data

Angle of traverse 180° and large end position adjustability of 90°

Description		SRU 25.1-180-90	SRU 25.1-180-90-4	SRU 25.2-180-90	SRU 25.2-180-90-4
	ID	0357550	0357552	0357650	0357652
Torque	[Nm]	2.4	2.0	5.0	4.6
Rotating angle	[°]	180.0	180.0	180.0	180.0
Adjustability of end positions	[°]	90.0	90.0	90.0	90.0
No. of fluid feed-throughs			4		4
IP class		65	65	65	65
Weight	[kg]	1.65	1.8	1.65	1.8
Fluid consumption per cycle (2 x nominal angle)	[cm^3]	44.0	44.0	88.0	88.0
Swiveling time with middle attached load	[s]	1.1	1.5	0.9	1.1
Nominal pressure	[bar]	6.0	6.0	6.0	6.0
Minimum pressure	[bar]	3.0	3.0	3.0	3.0
Maximum pressure	[bar]	8.0	8.0	8.0	8.0
Diameter of connecting hose	[mm]	6.0	6.0	6.0	6.0
Max. pressure in fluid feed-through	[bar]		8.0		8.0
Min. ambient temperature	[°C]	5.0	5.0	5.0	5.0
Max. ambient temperature	[°C]	60.0	60.0	60.0	60.0
Repeat accuracy	[°]	0.05	0.05	0.05	0.05

Angle of traverse 180°, large end position adjustability of 90° and electric feed-through EDF

Description		SRU 25.1-180-90-4-EDF M5	SRU 25.1-180-90-4-EDF M8	SRU 25.2-180-90-4-EDF M5	SRU 25.2-180-90-4-EDF M8
ID	ID	0357553	0357554	0357653	0357654
Torque	[Nm]	2.0	2.0	4.6	4.6
Rotating angle	[°]	180.0	180.0	180.0	180.0
Adjustability of end positions	[°]	90.0	90.0	90.0	90.0
No. of fluid feed-throughs		4	4	4	4
IP class		65	65	65	65
Weight	[kg]	1.8 + 0.65	1.8 + 0.65	1.8 + 0.65	1.8 + 0.65
Fluid consumption per cycle (2 x nominal angle)	[cm^3]	44.0	44.0	88.0	88.0
Swiveling time with middle attached load	[s]	1.5	1.5	1.1	1.1
Nominal pressure	[bar]	8.0	8.0	8.0	8.0
Minimum pressure	[bar]	3.0	3.0	3.0	3.0
Maximum pressure	[bar]	6.0	6.0	6.0	6.0
Diameter of connecting hose	[mm]	6.0	6.0	6.0	6.0
Max. pressure in fluid feed-through	[bar]	8.0	8.0	8.0	8.0
Min. ambient temperature	[°C]	5.0	5.0	5.0	5.0
Température ambiante max.	[°C]	60.0	60.0	60.0	60.0
Repeat accuracy	[°]	0.05	0.05	0.05	0.05
Number of E-fittings on the output end		4	4	4	4
Size of the E-connections on the output end.		M5	M8	M5	M8
Number of cores by EDF		6	6	6	6
maximum voltage by EDF	[V]	24.0	24.0	24.0	24.0
Max. current per wire	[A]	1.0	1.0	1.0	1.0
Max. overall current	[A]	1.0	1.0	1.0	1.0

Technical data

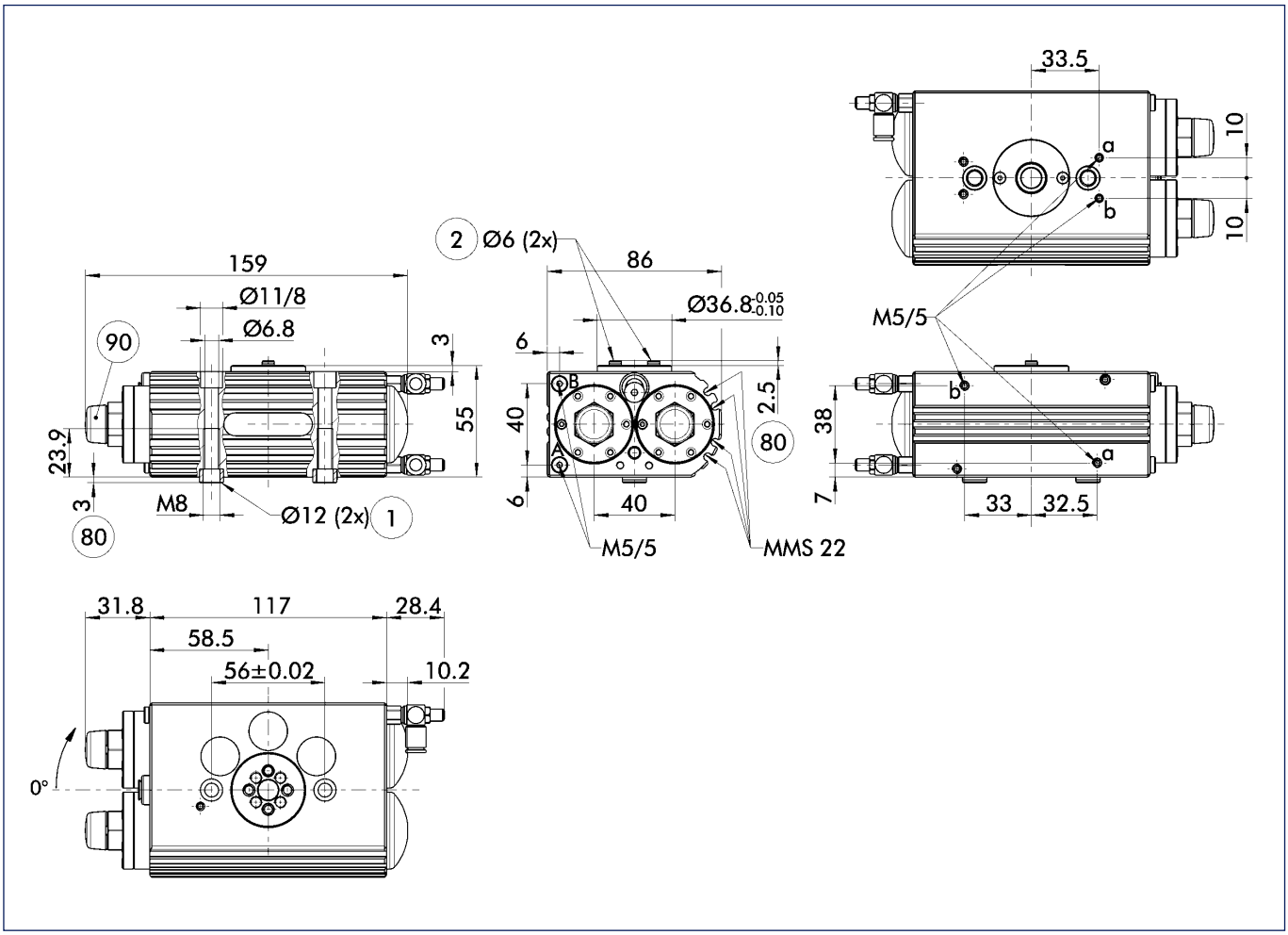
Angle of traverse 180°, large end position adjustability of 90° and pneumatic center position

Description		SRU 25.1-180-90-M	SRU 25.1-180-90-M-4	SRU 25.2-180-90-M	SRU 25.2-180-90-M-4
	ID	0357560	0357562	0357660	0357662
Torque	[Nm]	2.4	2.0	5.0	4.6
Rotating angle	[°]	180.0	180.0	180.0	180.0
Adjustability of end positions	[°]	90.0	90.0	90.0	90.0
Center position		M (pneumatic middle position)	M (pneumatic middle position)	M (pneumatic middle position)	M (pneumatic middle position)
Adjustability of center position	[°]	3.0	3.0	3.0	3.0
No. of fluid feed-throughs			4		4
IP class		65	65	65	65
Weight	[kg]	2.23	2.4	2.23	2.4
Fluid consumption per cycle (2 x nominal angle)	[cm^3]	44.0	44.0	88.0	88.0
Swiveling time with middle attached load	[s]	1.1	1.5	0.9	1.1
Nominal pressure	[bar]	6.0	6.0	6.0	6.0
Minimum pressure	[bar]	3.0	3.0	3.0	3.0
Maximum pressure	[bar]	8.0	8.0	8.0	8.0
Diameter of connecting hose	[mm]	6.0	6.0	6.0	6.0
Max. pressure in fluid feed-through	[bar]		8.0		8.0
Min. ambient temperature	[°C]	5.0	5.0	5.0	5.0
Max. ambient temperature	[°C]	60.0	60.0	60.0	60.0
Repeat accuracy	[°]	0.05	0.05	0.05	0.05

Angle of traverse 180°, large end position adjustability of 90°, pneumatic center position and electric feed-through EDF

Description		SRU 25.1-180-90-M-4-EDF M5	SRU 25.1-180-90-M-4-EDF M8	SRU 25.2-180-90-M-4-EDF M5	SRU 25.2-180-90-M-4-EDF M8
ID	ID	0357563	0357564	0357663	0357664
Torque	[Nm]	2.0	2.0	4.6	4.6
Rotating angle	[°]	180.0	180.0	180.0	180.0
Adjustability of end positions	[°]	90.0	90.0	90.0	90.0
Center position		M (pneumatic middle position)	M (pneumatic middle position)	M (pneumatic middle position)	M (pneumatic middle position)
Central Position Andjustability	[°]	3.0	3.0	3.0	3.0
No. of fluid feed-throughs		4	4	4	4
IP class		65	65	65	65
Weight	[kg]	2.4 + 0.65	2.4 + 0.65	2.4 + 0.65	2.4 + 0.65
Fluid consumption per cycle (2 x nominal angle)	[cm^3]	44.0	44.0	88.0	88.0
Swiveling time with middle attached load	[s]	1.5	1.5	1.1	1.1
Nominal pressure	[bar]	8.0	8.0	8.0	8.0
Minimum pressure	[bar]	3.0	3.0	3.0	3.0
Maximum pressure	[bar]	6.0	6.0	6.0	6.0
Diameter of connecting hose	[mm]	6.0	6.0	6.0	6.0
Max. pressure in fluid feed-through	[bar]	8.0	8.0	8.0	8.0
Min. ambient temperature	[°C]	5.0	5.0	5.0	5.0
Température ambiante max.	[°C]	60.0	60.0	60.0	60.0
Repeat accuracy	[°]	0.05	0.05	0.05	0.05
Number of E-fittings on the output end		4	4	4	4
Size of the E-connections on the output end.		M5	M8	M5	M8
Number of cores by EDF		6	6	6	6
maximum voltage by EDF	[V]	24.0	24.0	24.0	24.0
Max. current per wire	[A]	1.0	1.0	1.0	1.0
Max. overall current	[A]	1.0	1.0	1.0	1.0

Main views for SRU without EDF

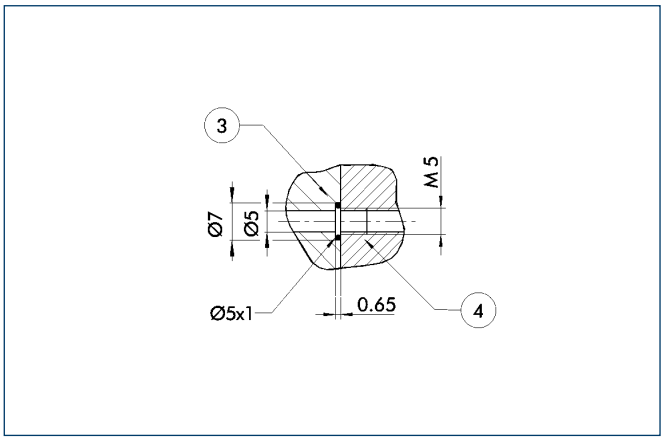


The main view shows the SRU in the most basic version, that is with an angle of traverse of 180°/90°, small end position adjustability of 3°, without center position and without fluid feed-through. Modifications to the drawings as a result of various options can be seen in the relevant additional views.

ⓘ The SDV-P pressure maintenance valve can be used to hold the position upon a loss of pressure (see „Accessories“ catalog section).

A,a Main/direct connection, clockwise rotary unit
B,b Main/direct connection, anti-clockwise rotary unit
① Linear unit connection
② Attachment connection
80 depth of the centering sleeve hole in the matching part
90 setting shock absorber-hub

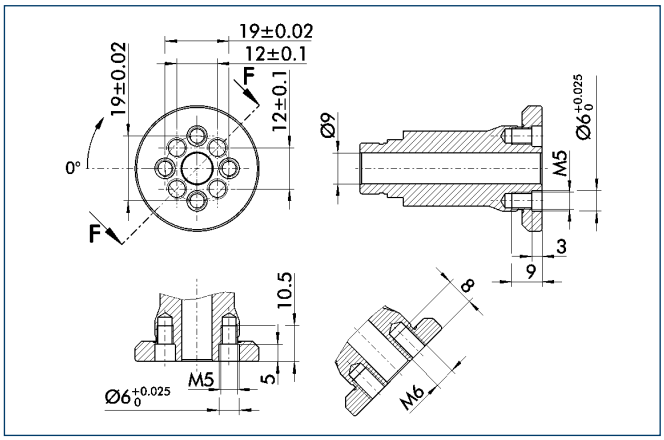
Hose-free direct connection



③ Adapter
④ Rotary unit

The direction connection is used for supplying compressed air without hoses, which are liable to faults. Instead, the pressure medium is conveyed through the bore-holes of the mounting plate.

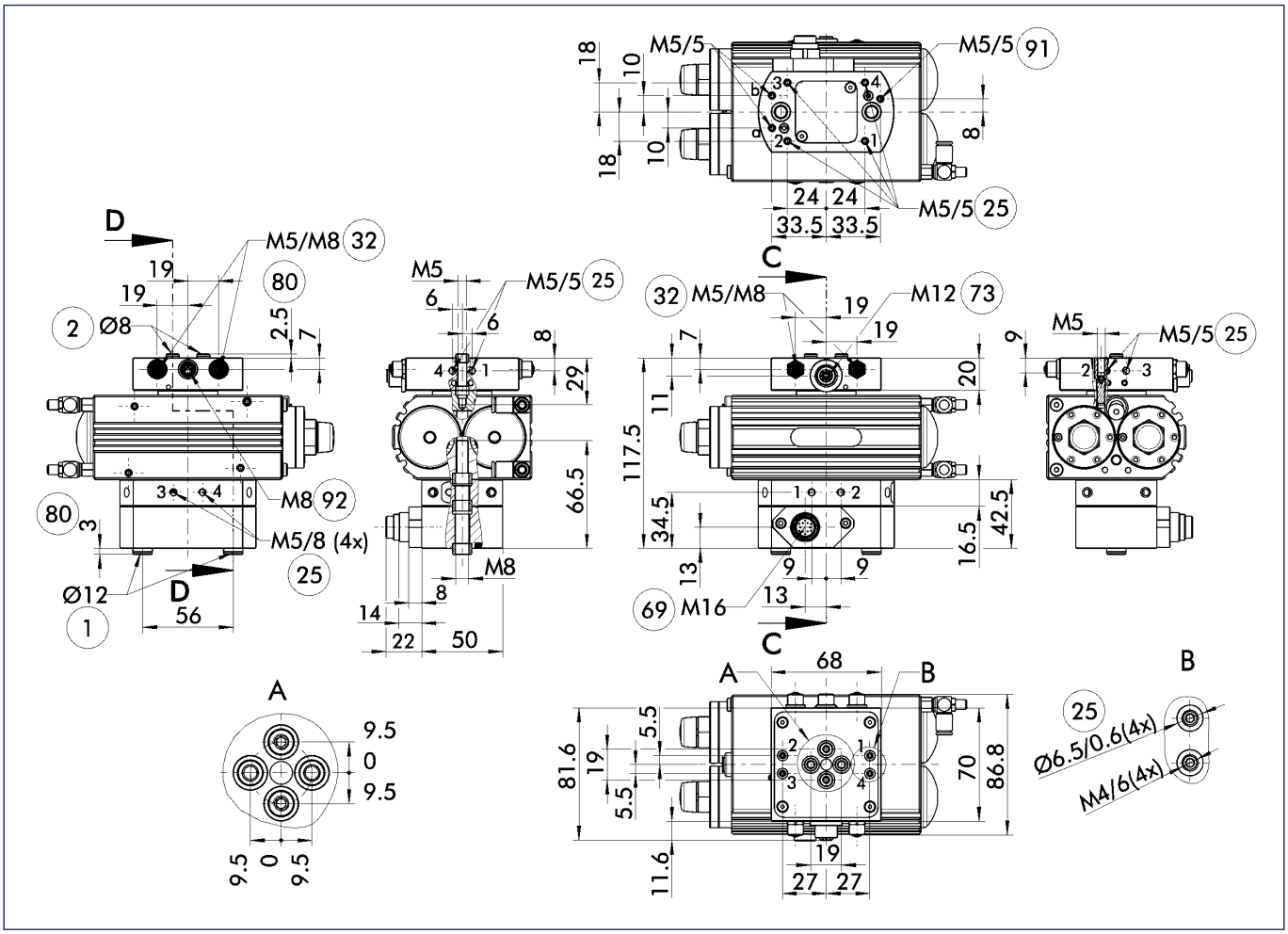
Pinion with fluid feed-through



Pinion screw connection diagram for mounting the swiveling attachment. The „4x large thread for 4x screw and 2x flat fit for guide sleeve“ screw connection diagram is preferable to the „4x small thread for 2x screw and 2x dowel screw“ (in deep fit) screw connection diagram.

ⓘ View adaptable at versions without EDF

Main views for SRU with EDF

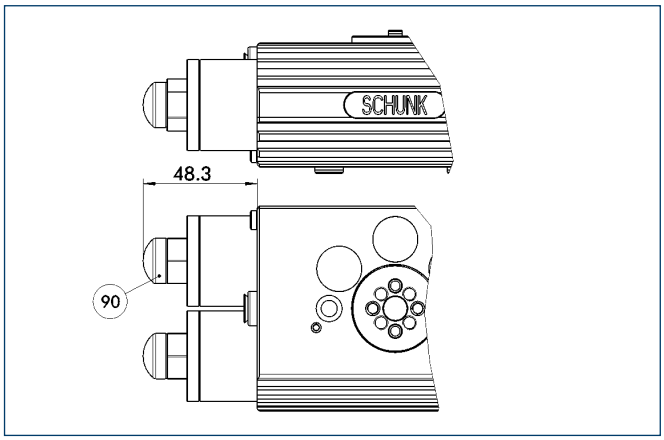


The main view shows the SRU in the most basic version, that is with an angle of traverse of 180°/90°, small end position adjustability of 3°, without center position and without fluid feed-through. Modifications to the drawings as a result of various options can be seen in the relevant additional views.

ⓘ The SDV-P pressure maintenance valve can be used to hold the position upon a loss of pressure (see „Accessories“ catalog section).

A,a Main/direct connection, clockwise rotary unit
B,b Main/direct connection, anti-clockwise rotary unit
① Rotary unit connection
② Attachment connection
㉕ Fluid feed-through
㉜ flange socket for sensor feed-through
㊾ Connection for electric feed-through
㉝ Connection BUS-throughs
㉚ depth of the centering sleeve hole in the matching part
㉛ ventilation-drill for simple admitted SRU with middle position
㉜ change Bus-/Sensor feed-through

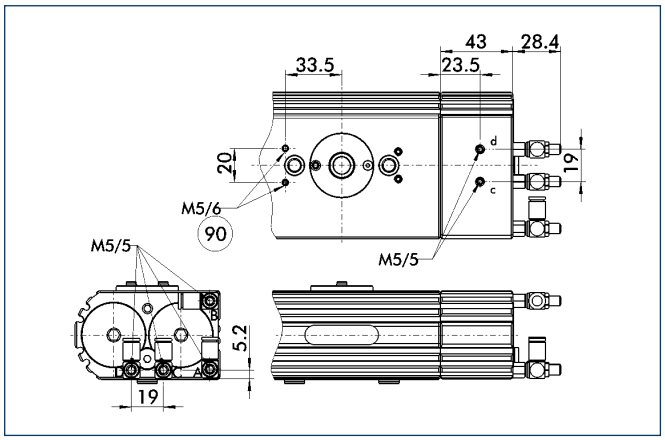
Large end position adjustability 90°



㉚ setting shock absorber-hub

Different dimensions with the option „Large end position adjustability (90°)“ This permits the end positions to be adjusted by up to 93°. More information can be found in the introduction to the series.

Pneumatic center position (M)

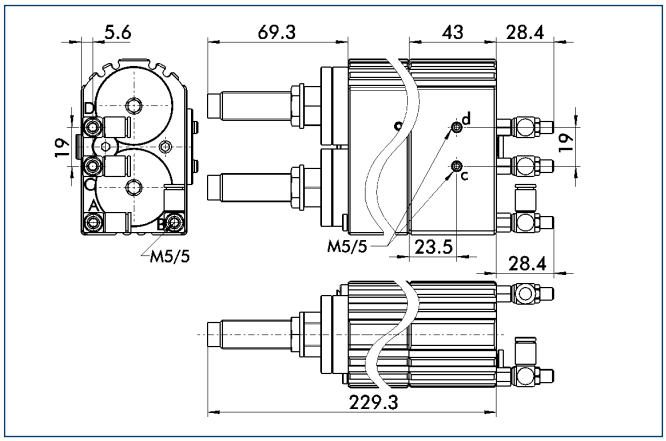


C,c Main/direct connection, center position
Dd, Main/direct connection, center position
㊾ Bleeder hole for unit with single compressed air action (.1)

Different dimensions with the „Pneumatic Center Position (M)“ option. Heavy attachments may have to level out until they reach the correct position. The locked center position (VM) offers a remedy. Units with single compressed air action (.1) and pneumatic center position need an essential bleeder hose.

ⓘ **View applicable for version with or without EDF!**

Locked center position (VM)

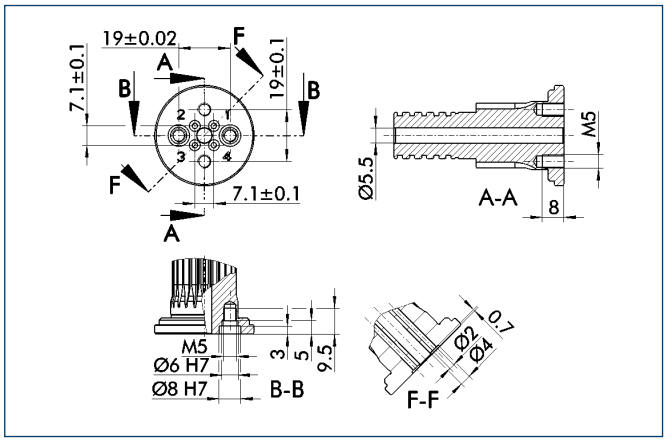


C,c Main/direct connection, center position
Dd, Main/direct connection, center position

Different dimensions with the „Locked center position (VM)“ option. The center position is locked. The unit travels to center position using the force of the main drive piston. Shock absorbers brake the travel to center position as fast as possible to prevent overshooting.

ⓘ View applicable for version with or without EDF!

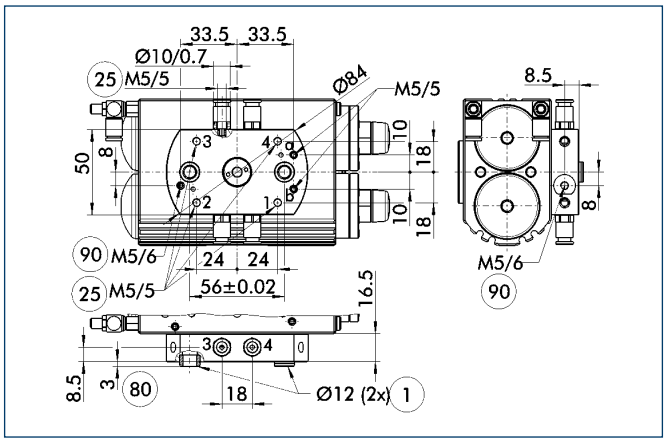
Pinion



Pinion screw connection diagram for the „Fluid feed-through“ option. The preferred drilling pattern is 2 x screws and 2 x screws with guide sleeve (in ø 8 H7).

ⓘ View adaptable at versions without EDF

Connections for Medium-throughs

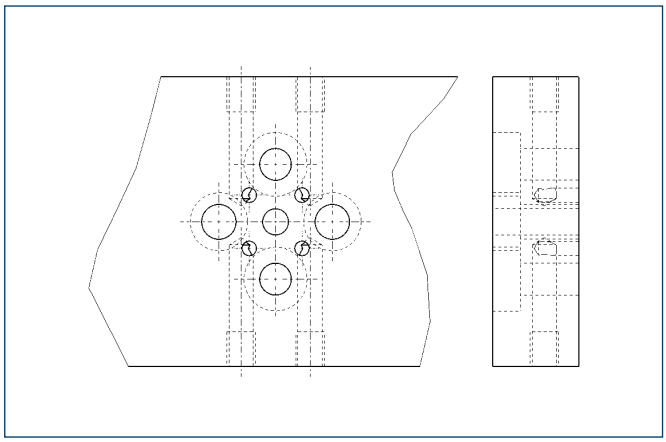


① Linear unit connection
㉕ Fluid feed-through
㉚ depth of the centering sleeve hole in the matching part
㊿ Bleeder hole for unit with single compressed air action provided with pneumatic center position (.1-M)

Lower mounting plate for the „Fluid feed-through“ option. Vacuum, gases or fluids can be conveyed. The connection may be a screw type or a direct connection.

ⓘ View adaptable at versions without EDF

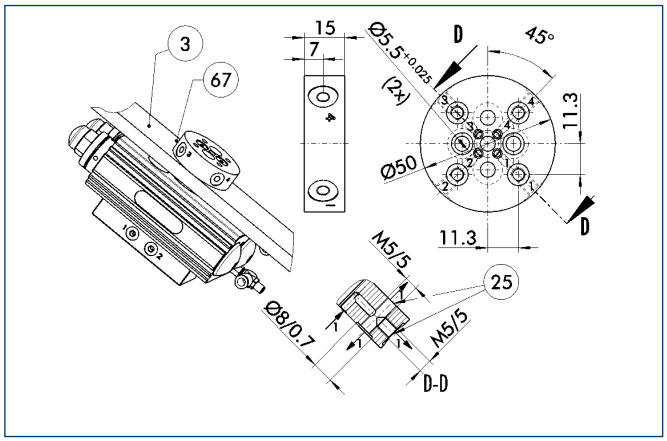
Adapter plate arrangement



Suggested here is an arrangement of the adapter plate which enables all fluid feed-throughs to be reached as easily as possible.

ⓘ View adaptable at versions without EDF

Distributor for SRU

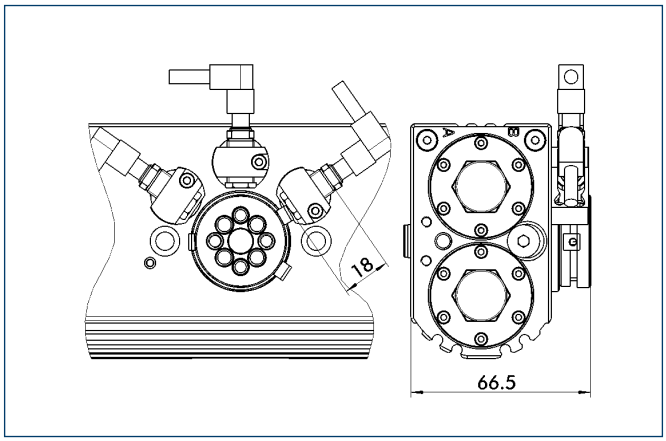


(3) Adapter
(25) Fluid feed-through
(67) Distributor for media feed-through

The distributor (ID: 0357392) for SRU 20 and SRU 25 facilitates the use of the fluid feed-throughs, both at the direct attachment to the distributor and in the lines conveying the fluid inside the adapter plate. Thanks to the distributor, only a simple drilling pattern has to be drilled in the adapter plate situated between the pinion and the distributor.

ⓘ View adaptable at versions without EDF

Mounting kit for proximity switch at SRU without EDF



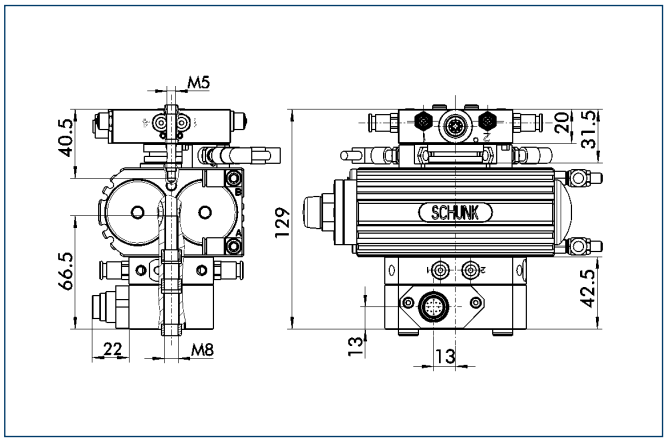
The size-specific mounting kit is required for installing the inductive proximity switches. Up to three proximity switches (2x end position, 1x center position) can be attached using the mounting kit. A mounting kit for IN 80 inductive proximity switches consists of:

3x sensor brackets complete
1x operating cam retaining disk
3x operating cams

Description	ID
AS-SRU 20/25-4	0357391
AS-SRU 25	0357590

ⓘ View adaptable at versions without EDF

Mounting kit for proximity switch at SRU with EDF

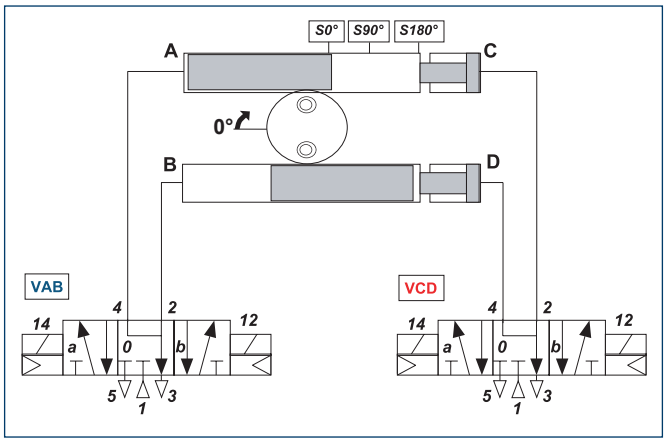


The size-specific mounting kit is required for installing the inductive proximity switches. Up to three proximity switches (2x end position, 1x center position) can be attached using the mounting kit. A mounting kit for IN 80 inductive proximity switches consists of:

3x sensor brackets complete
1x operating cam retaining disk
3x operating cams

ⓘ View adaptable at versions with EDF
The adaptor kit cannot be ordered individually. The SRU with EDF and adaptor kit is being delivered by SCHUNK completely mounted.

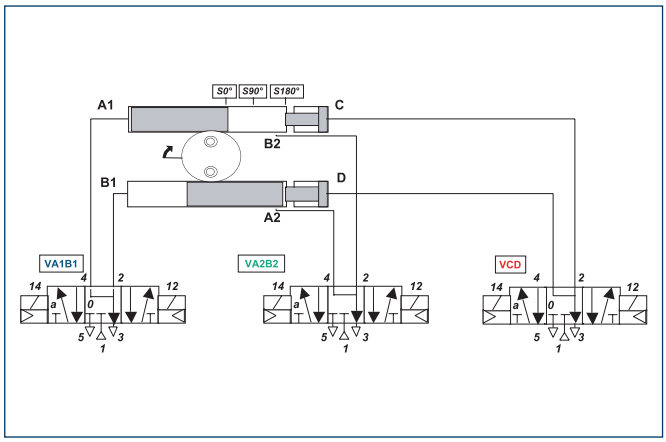
Pneumatic diagram of SRU-VM – Vertical axis



VM units with vertical swivel axis are generally actuated by two 5/3 directional control valves with bled center position. To prevent damage, it is essential that you pay attention to the actuation sequence in the Operating Manual.

ⓘ View applicable for version with or without EDF!

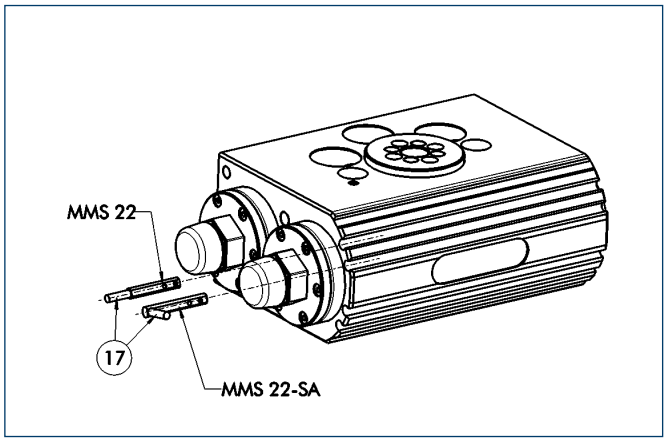
Pneumatic diagram of SRU-VM – horizontal axis



VM units with horizontal or non-vertical swivel axis must generally be actuated by three 5/3 directional control valves with bled center position. To prevent damage, it is essential that you pay attention to the actuation sequence in the Operating Manual.

ⓘ View applicable for version with or without EDF!

Sensor System



⑰ Cable outlet

End position monitoring: Electronic magnetic switches, for mounting in C-slot

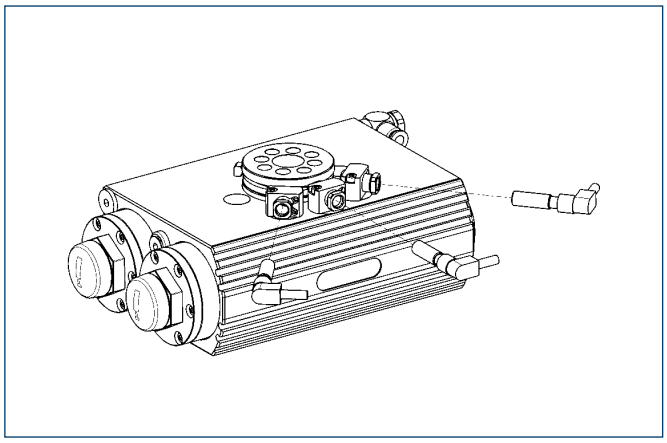
Description	ID	Recommended product
MMS 22-S-M5-NPN	0301439	
MMS 22-S-M5-NPN-SA	0301449	
MMS 22-S-M5-PNP	0301438	
MMS 22-S-M5-PNP-SA	0301448	
MMS 22-S-M8-NPN	0301433	
MMS 22-S-M8-NPN-SA	0301443	
MMS 22-S-M8-PNP	0301432	•
MMS 22-S-M8-PNP-SA	0301442	
MMSK 22-S-NPN	0301435	
MMSK 22-S-NPN-SA	0301445	
MMSK 22-S-PNP	0301434	
MMSK 22-S-PNP-SA	0301444	

Extension cables for proximity switches/magnetic switches

Description	ID
KA BG05-L 3P-0300	0301652
KA BG08-L 3P-0300-PNP	0301622
KA BW05-L 3P-0300	0301650
KA BW08-L 3P-0300-NPN	0301602
KA BW08-L 3P-0300-PNP	0301594
KA BW08-L 3P-0500-NPN	9641116
KA BW08-L 3P-0500-PNP	0301502
KA BW12-L 3P-0300-PNP	0301503
KA BW12-L 3P-0500-PNP	0301507
KV BW08-SG08 3P-0030-PNP	0301495
KV BW08-SG08 3P-0100-PNP	0301496
KV BW08-SG08 3P-0200-PNP	0301497
KV BW12-SG12 3P-0030-PNP	0301595
KV BW12-SG12 3P-0100-PNP	0301596
KV BW12-SG12 3P-0200-PNP	0301597

ⓘ Please note the minimum permitted bending radii for the sensor cables, which are generally 35 mm.

Assembly IN on SRU without EDF

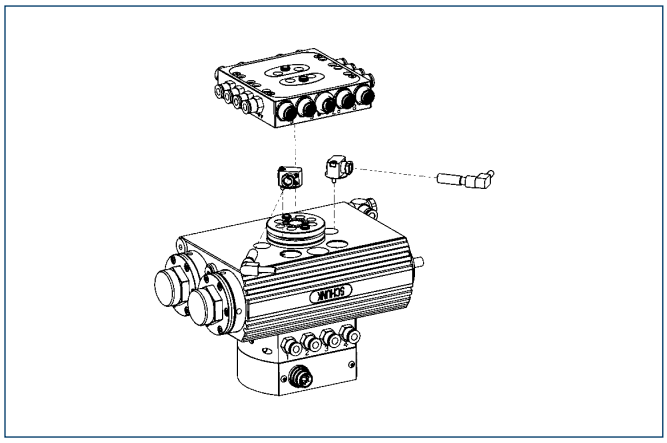


End position monitoring:
Inductive proximity switches, mounted with mounting kit

Description	ID	Recommended product
AS-SRU 20/25-4	0357391	
AS-SRU 25	0357590	
IN 80-S-M12	0301578	
IN 80-S-M8	0301478	•
IN-C 80-S-M8	0301475	
INK 80-S	0301550	
INK 80-SL	0301579	

ⓘ In general there are two sensors needed per swivel unit, with additional request of the middle position , three sensors plus optional an extension cable.
View adaptable at versions without EDF!

Assembly IN on SRU with EDF and add-on kit

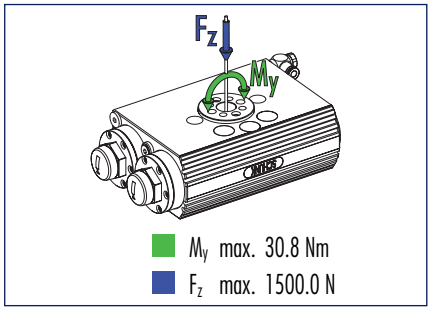


End position monitoring:
Inductive proximity switches, mounted with mounting kit

Description	ID	Recommended product
IN 80-S-M12	0301578	
IN 80-S-M8	0301478	•
IN-C 80-S-M8	0301475	
INK 80-S	0301550	
INK 80-SL	0301579	

ⓘ In general there are two sensors needed per swivel unit, with additional request of the middle position, three sensors plus optional an extension cable.
View adaptable at versions without EDF!

Pinion load



ⓘ Moments and forces may occur simultaneously. When using heavy attachments or ones with high mass moments of inertia, the speed must be restricted to ensure that the rotary movement occurs without any hitting or bouncing.

Technical data

Angle of traverse 90° and small end position adjustability of 3°

Description		SRU 35.1-90-3	SRU 35.1-90-3-4	SRU 35.2-90-3	SRU 35.2-90-3-4
	ID	0357700	0357702	0357800	0357802
Torque	[Nm]	6.6	6.0	14.0	13.4
Rotating angle	[°]	90.0	90.0	90.0	90.0
Adjustability of end positions	[°]	3.0	3.0	3.0	3.0
No. of fluid feed-throughs			4		4
IP class		65	65	65	65
Weight	[kg]	2.65	2.97	2.65	2.97
Fluid consumption per cycle (2 x nominal angle)	[cm³]	66.0	66.0	132.0	132.0
Swiveling time with middle attached load	[s]	1.3	1.6	1.0	1.1
Nominal pressure	[bar]	6.0	6.0	6.0	6.0
Minimum pressure	[bar]	3.0	3.0	3.0	3.0
Maximum pressure	[bar]	8.0	8.0	8.0	8.0
Diameter of connecting hose	[mm]	6.0	6.0	6.0	6.0
Max. pressure in fluid feed-through	[bar]		8.0		8.0
Min. ambient temperature	[°C]	5.0	5.0	5.0	5.0
Max. ambient temperature	[°C]	60.0	60.0	60.0	60.0
Repeat accuracy	[°]	0.05	0.05	0.05	0.05

Angle of traverse 180°, small end position adjustability of 3° and electric feed-through EDF

Description		SRU 35.1-90-3-4-EDF M5	SRU 35.1-90-3-4-EDF M8	SRU 35.2-90-3-4-EDF M5	SRU 35.2-90-3-4-EDF M8
ID	ID	0357703	0357704	0357803	0357804
Torque	[Nm]	6.0	6.0	13.4	13.4
Rotating angle	[°]	90.0	90.0	90.0	90.0
Adjustability of end positions	[°]	3.0	3.0	3.0	3.0
No. of fluid feed-throughs		4	4	4	4
IP class		65	65	65	65
Weight	[kg]	2.97 + 0.75	2.97 + 0.75	2.97 + 0.75	2.97 + 0.75
Fluid consumption per cycle (2 x nominal angle)	[cm³]	66.0	66.0	132.0	132.0
Swiveling time with middle attached load	[s]	1.6	1.6	1.1	1.1
Nominal pressure	[bar]	8.0	8.0	8.0	8.0
Minimum pressure	[bar]	3.0	3.0	3.0	3.0
Maximum pressure	[bar]	6.0	6.0	6.0	6.0
Diameter of connecting hose	[mm]	6.0	6.0	6.0	6.0
Max. pressure in fluid feed-through	[bar]	8.0	8.0	8.0	8.0
Min. ambient temperature	[°C]	5.0	5.0	5.0	5.0
Température ambiante max.	[°C]	60.0	60.0	60.0	60.0
Repeat accuracy	[°]	0.05	0.05	0.05	0.05
Number of E-fittings on the output end		4	4	4	4
Size of the E-connections on the output end.		M5	M8	M5	M8
Number of cores by EDF		6	6	6	6
maximum voltage by EDF	[V]	24.0	24.0	24.0	24.0
Max. current per wire	[A]	1.0	1.0	1.0	1.0
Max. overall current	[A]	1.0	1.0	1.0	1.0

Technical data

Angle of traverse 180° and small end position adjustability of 3°

Description		SRU 35.1-180-3	SRU 35.1-180-3-4	SRU 35.2-180-3	SRU 35.2-180-3-4
	ID	0357720	0357722	0357820	0357822
Torque	[Nm]	6.6	6.0	14.0	13.4
Rotating angle	[°]	180.0	180.0	180.0	180.0
Adjustability of end positions	[°]	3.0	3.0	3.0	3.0
No. of fluid feed-throughs			4		4
IP class		65	65	65	65
Weight	[kg]	2.63	2.95	2.63	2.95
Fluid consumption per cycle (2 x nominal angle)	[cm³]	108.0	108.0	216.0	216.0
Swiveling time with middle attached load	[s]	1.5	1.8	1.1	1.3
Nominal pressure	[bar]	6.0	6.0	6.0	6.0
Minimum pressure	[bar]	3.0	3.0	3.0	3.0
Maximum pressure	[bar]	8.0	8.0	8.0	8.0
Diameter of connecting hose	[mm]	6.0	6.0	6.0	6.0
Max. pressure in fluid feed-through	[bar]		8.0		8.0
Min. ambient temperature	[°C]	5.0	5.0	5.0	5.0
Max. ambient temperature	[°C]	60.0	60.0	60.0	60.0
Repeat accuracy	[°]	0.05	0.05	0.05	0.05

Angle of traverse 180°, small end position adjustability of 3° and electrica feed-through EDF

Description		SRU 35.1-180-3-4-EDF M5	SRU 35.1-180-3-4-EDF M8	SRU 35.2-180-3-4-EDF M5	SRU 35.2-180-3-4-EDF M8
ID	ID	0357723	0357724	0357823	0357824
Torque	[Nm]	6.0	6.0	13.4	13.4
Rotating angle	[°]	180.0	180.0	180.0	180.0
Adjustability of end positions	[°]	3.0	3.0	3.0	3.0
No. of fluid feed-throughs		4	4	4	4
IP class		65	65	65	65
Weight	[kg]	2.95 + 0.75	2.95 + 0.75	2.95 + 0.75	2.95 + 0.75
Fluid consumption per cycle (2 x nominal angle)	[cm³]	108.0	108.0	216.0	216.0
Swiveling time with middle attached load	[s]	1.8	1.8	1.3	1.3
Nominal pressure	[bar]	8.0	8.0	8.0	8.0
Minimum pressure	[bar]	3.0	3.0	3.0	3.0
Maximum pressure	[bar]	6.0	6.0	6.0	6.0
Diameter of connecting hose	[mm]	6.0	6.0	6.0	6.0
Max. pressure in fluid feed-through	[bar]	8.0	8.0	8.0	8.0
Min. ambient temperature	[°C]	5.0	5.0	5.0	5.0
Température ambiante max.	[°C]	60.0	60.0	60.0	60.0
Repeat accuracy	[°]	0.05	0.05	0.05	0.05
Number of E-fittings on the output end		4	4	4	4
Size of the E-connections on the output end.		M5	M8	M5	M8
Number of cores by EDF		6	6	6	6
maximum voltage by EDF	[V]	24.0	24.0	24.0	24.0
Max. current per wire	[A]	1.0	1.0	1.0	1.0
Max. overall current	[A]	1.0	1.0	1.0	1.0

Technical data

Angle of traverse 180°, small end position adjustability of 3° and pneumatic center position

Description		SRU 35.1-180-3-M	SRU 35.1-180-3-M-4	SRU 35.2-180-3-M	SRU 35.2-180-3-M-4
	ID	0357730	0357732	0357830	0357832
Torque	[Nm]	6.6	6.0	14.0	13.4
Rotating angle	[°]	180.0	180.0	180.0	180.0
Adjustability of end positions	[°]	3.0	3.0	3.0	3.0
Center position		M (pneumatic middle position)	M (pneumatic middle position)	M (pneumatic middle position)	M (pneumatic middle position)
Adjustability of center position	[°]	3.0	3.0	3.0	3.0
No. of fluid feed-throughs			4		4
IP class		65	65	65	65
Weight	[kg]	3.63	3.95	3.63	3.95
Fluid consumption per cycle (2 x nominal angle)	[cm^3]	108.0	108.0	216.0	216.0
Swiveling time with middle attached load	[s]	1.5	1.8	1.1	1.3
Nominal pressure	[bar]	6.0	6.0	6.0	6.0
Minimum pressure	[bar]	3.0	3.0	3.0	3.0
Maximum pressure	[bar]	8.0	8.0	8.0	8.0
Diameter of connecting hose	[mm]	6.0	6.0	6.0	6.0
Max. pressure in fluid feed-through	[bar]		8.0		8.0
Min. ambient temperature	[°C]	5.0	5.0	5.0	5.0
Max. ambient temperature	[°C]	60.0	60.0	60.0	60.0
Repeat accuracy	[°]	0.05	0.05	0.05	0.05

Angle of traverse 180°, small end position adjustability of 3°, pneumatic center position and electric feed-through

Description		SRU 35.1-180-3-M-4-EDF M5	SRU 35.1-180-3-M-4-EDF M8	SRU 35.2-180-3-M-4-EDF M5	SRU 35.2-180-3-M-4-EDF M8
ID	ID	0357733	0357734	0357833	0357834
Torque	[Nm]	6.0	6.0	13.4	13.4
Rotating angle	[°]	180.0	180.0	180.0	180.0
Adjustability of end positions	[°]	3.0	3.0	3.0	3.0
Center position		M (pneumatic middle position)	M (pneumatic middle position)	M (pneumatic middle position)	M (pneumatic middle position)
Central Position Andjustability	[°]	3.0	3.0	3.0	3.0
No. of fluid feed-throughs		4	4	4	4
IP class		65	65	65	65
Weight	[kg]	3.95 + 0.75	3.95 + 0.75	3.95 + 0.75	3.95 + 0.75
Fluid consumption per cycle (2 x nominal angle)	[cm^3]	108.0	108.0	216.0	216.0
Swiveling time with middle attached load	[s]	1.8	1.8	1.3	1.3
Nominal pressure	[bar]	8.0	8.0	8.0	8.0
Minimum pressure	[bar]	3.0	3.0	3.0	3.0
Maximum pressure	[bar]	6.0	6.0	6.0	6.0
Diameter of connecting hose	[mm]	6.0	6.0	6.0	6.0
Max. pressure in fluid feed-through	[bar]	8.0	8.0	8.0	8.0
Min. ambient temperature	[°C]	5.0	5.0	5.0	5.0
Température ambiante max.	[°C]	60.0	60.0	60.0	60.0
Repeat accuracy	[°]	0.05	0.05	0.05	0.05
Number of E-fittings on the output end		4	4	4	4
Size of the E-connections on the output end.		M5	M8	M5	M8
Number of cores by EDF		6	6	6	6
maximum voltage by EDF	[V]	24.0	24.0	24.0	24.0
Max. current per wire	[A]	1.0	1.0	1.0	1.0
Max. overall current	[A]	1.0	1.0	1.0	1.0

Technical data

Angle of traverse 180°, small end position adjustability of 3° and locked center position

Description		SRU 35.2-180-3-VM	SRU 35.2-180-3-VM-4
	ID	0357840	0357842
Torque	[Nm]	14.0	13.4
Rotating angle	[°]	180.0	180.0
Adjustability of end positions	[°]	3.0	3.0
Center position		VM (locked middle position)	VM (locked middle position)
Adjustability of center position	[°]	3.0	3.0
No. of fluid feed-throughs			4
IP class		65	65
Weight	[kg]	4.15	4.47
Fluid consumption per cycle (2 x nominal angle)	[cm³]	216.0	216.0
Swiveling time with middle attached load	[s]	1.1	1.3
Nominal pressure	[bar]	6.0	6.0
Minimum pressure	[bar]	4.0	4.0
Maximum pressure	[bar]	6.5	6.5
Diameter of connecting hose	[mm]	6.0	6.0
Max. pressure in fluid feed-through	[bar]		8.0
Min. ambient temperature	[°C]	5.0	5.0
Max. ambient temperature	[°C]	60.0	60.0
Repeat accuracy	[°]	0.05	0.05

Angle of traverse 180°, small end position adjustability of 3°, blocked center position and electric feed-through

Description		SRU 35.2-180-3-VM-4-EDF M5	SRU 35.2-180-3-VM-4-EDF M8
ID	ID	0357843	0357844
Torque	[Nm]	13.4	13.4
Rotating angle	[°]	180.0	180.0
Adjustability of end positions	[°]	3.0	3.0
Center position		VM (locked middle position)	VM (locked middle position)
Central Position Andjustability	[°]	3.0	3.0
No. of fluid feed-throughs		4	4
IP class		65	65
Weight	[kg]	4.47 + 0.75	4.47 + 0.75
Fluid consumption per cycle (2 x nominal angle)	[cm³]	216.0	216.0
Swiveling time with middle attached load	[s]	1.3	1.3
Nominal pressure	[bar]	6.5	6.5
Minimum pressure	[bar]	4.0	4.0
Maximum pressure	[bar]	6.0	6.0
Diameter of connecting hose	[mm]	6.0	6.0
Max. pressure in fluid feed-through	[bar]	8.0	8.0
Min. ambient temperature	[°C]	5.0	5.0
Température ambiante max.	[°C]	60.0	60.0
Repeat accuracy	[°]	0.05	0.05
Number of E-fittings on the output end		4	4
Size of the E-connections on the output end.		M5	M8
Number of cores by EDF		6	6
maximum voltage by EDF	[V]	24.0	24.0
Max. current per wire	[A]	1.0	1.0
Max. overall current	[A]	1.0	1.0

Technical data

Angle of traverse 180° and large end position adjustability of 90°

Description		SRU 35.1-180-90	SRU 35.1-180-90-4	SRU 35.2-180-90	SRU 35.2-180-90-4
	ID	0357750	0357752	0357850	0357852
Torque	[Nm]	6.6	6.0	14.0	13.4
Rotating angle	[°]	180.0	180.0	180.0	180.0
Adjustability of end positions	[°]	90.0	90.0	90.0	90.0
No. of fluid feed-throughs			4		4
IP class		65	65	65	65
Weight	[kg]	2.75	3.07	2.75	3.07
Fluid consumption per cycle (2 x nominal angle)	[cm^3]	108.0	108.0	216.0	216.0
Swiveling time with middle attached load	[s]	1.5	1.8	1.1	1.3
Nominal pressure	[bar]	6.0	6.0	6.0	6.0
Minimum pressure	[bar]	3.0	3.0	3.0	3.0
Maximum pressure	[bar]	8.0	8.0	8.0	8.0
Diameter of connecting hose	[mm]	6.0	6.0	6.0	6.0
Max. pressure in fluid feed-through	[bar]		8.0		8.0
Min. ambient temperature	[°C]	5.0	5.0	5.0	5.0
Max. ambient temperature	[°C]	60.0	60.0	60.0	60.0
Repeat accuracy	[°]	0.05	0.05	0.05	0.05

Angle of traverse 180°, large end position adjustability of 90° and electric feed-through EDF

Description		SRU 35.1-180-90-4-EDF M5	SRU 35.1-180-90-4-EDF M8	SRU 35.2-180-90-4-EDF M5	SRU 35.2-180-90-4-EDF M8
ID	ID	0357753	0357754	0357853	0357854
Torque	[Nm]	6.0	6.0	13.4	13.4
Rotating angle	[°]	180.0	180.0	180.0	180.0
Adjustability of end positions	[°]	90.0	90.0	90.0	90.0
No. of fluid feed-throughs		4	4	4	4
IP class		65	65	65	65
Weight	[kg]	3.07	3.07	3.07	3.07
Fluid consumption per cycle (2 x nominal angle)	[cm^3]	108.0	108.0	216.0	216.0
Swiveling time with middle attached load	[s]	1.8	1.8	1.3	1.3
Nominal pressure	[bar]	8.0	8.0	8.0	8.0
Minimum pressure	[bar]	3.0	3.0	3.0	3.0
Maximum pressure	[bar]	6.0	6.0	6.0	6.0
Diameter of connecting hose	[mm]	6.0	6.0	6.0	6.0
Max. pressure in fluid feed-through	[bar]	8.0	8.0	8.0	8.0
Min. ambient temperature	[°C]	5.0	5.0	5.0	5.0
Max. ambient temperature	[°C]	60.0	60.0	60.0	60.0
Repeat accuracy	[°]	0.05	0.05	0.05	0.05
Number of E-fittings on the output end		4	4	4	4
Size of the E-connections on the output end.		M5	M8	M5	M8
Number of cores by EDF		6	6	6	6
maximum voltage by EDF	[V]	24.0	24.0	24.0	24.0
Max. current per wire	[A]	1.0	1.0	1.0	1.0
Max. overall current	[A]	1.0	1.0	1.0	1.0

Technical data

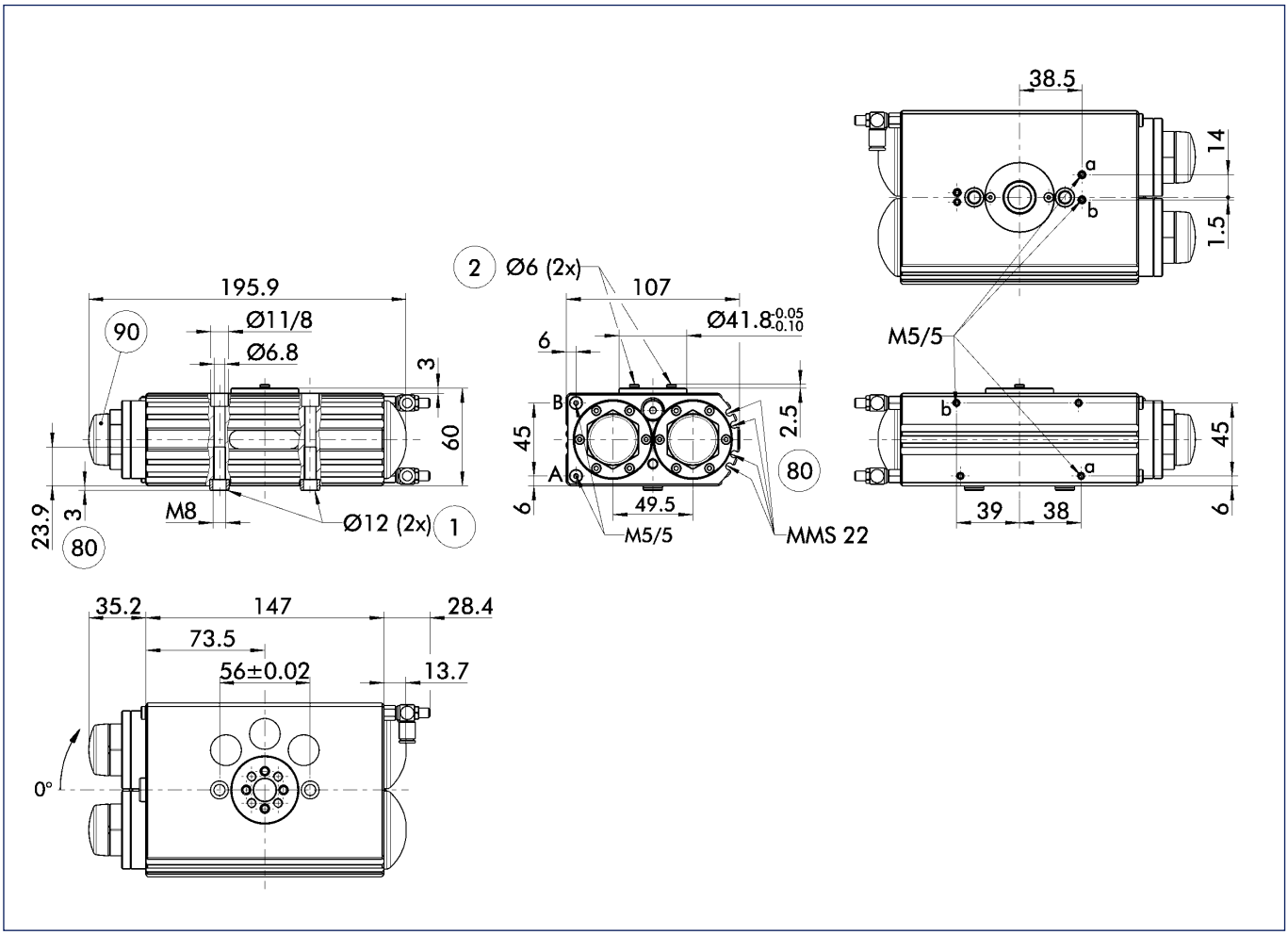
Angle of traverse 180°, large end position adjustability of 90° and pneumatic center position

Description		SRU 35.1-180-90-M	SRU 35.1-180-90-M-4	SRU 35.2-180-90-M	SRU 35.2-180-90-M-4
	ID	0357760	0357762	0357860	0357862
Torque	[Nm]	6.6	6.0	14.0	13.4
Rotating angle	[°]	180.0	180.0	180.0	180.0
Adjustability of end positions	[°]	90.0	90.0	90.0	90.0
Center position		M (pneumatic middle position)	M (pneumatic middle position)	M (pneumatic middle position)	M (pneumatic middle position)
Adjustability of center position	[°]	3.0	3.0	3.0	3.0
No. of fluid feed-throughs			4		4
IP class		65	65	65	65
Weight	[kg]	3.75	4.07	3.75	4.07
Fluid consumption per cycle (2 x nominal angle)	[cm^3]	108.0	108.0	216.0	216.0
Swiveling time with middle attached load	[s]	1.5	1.8	1.1	1.3
Nominal pressure	[bar]	6.0	6.0	6.0	6.0
Minimum pressure	[bar]	3.0	3.0	3.0	3.0
Maximum pressure	[bar]	8.0	8.0	8.0	8.0
Diameter of connecting hose	[mm]	6.0	6.0	6.0	6.0
Max. pressure in fluid feed-through	[bar]		8.0		8.0
Min. ambient temperature	[°C]	5.0	5.0	5.0	5.0
Max. ambient temperature	[°C]	60.0	60.0	60.0	60.0
Repeat accuracy	[°]	0.05	0.05	0.05	0.05

Angle of traverse 180°, large end position adjustability of 90°, pneumatic center position and electric feed-through EDF

Description		SRU 35.1-180-90-M-4-EDF M5	SRU 35.1-180-90-M-4-EDF M8	SRU 35.2-180-90-M-4-EDF M5	SRU 35.2-180-90-M-4-EDF M8
ID	ID	0357763	0357764	0357863	0357864
Torque	[Nm]	6.0	6.0	13.4	13.4
Rotating angle	[°]	180.0	180.0	180.0	180.0
Adjustability of end positions	[°]	90.0	90.0	90.0	90.0
Center position		M (pneumatic middle position)	M (pneumatic middle position)	M (pneumatic middle position)	M (pneumatic middle position)
Central Position Andjustability	[°]	3.0	3.0	3.0	3.0
No. of fluid feed-throughs		4	4	4	4
IP class		65	65	65	65
Weight	[kg]	4.07 + 0.75	4.07 + 0.75	4.07 + 0.75	4.07 + 0.75
Fluid consumption per cycle (2 x nominal angle)	[cm^3]	108.0	108.0	216.0	216.0
Swiveling time with middle attached load	[s]	1.8	1.8	1.3	1.3
Nominal pressure	[bar]	8.0	8.0	8.0	8.0
Minimum pressure	[bar]	3.0	3.0	3.0	3.0
Maximum pressure	[bar]	6.0	6.0	6.0	6.0
Diameter of connecting hose	[mm]	6.0	6.0	6.0	6.0
Max. pressure in fluid feed-through	[bar]	8.0	8.0	8.0	8.0
Min. ambient temperature	[°C]	5.0	5.0	5.0	5.0
Température ambiante max.	[°C]	60.0	60.0	60.0	60.0
Repeat accuracy	[°]	0.05	0.05	0.05	0.05
Number of E-fittings on the output end		4	4	4	4
Size of the E-connections on the output end.		M5	M8	M5	M8
Number of cores by EDF		6	6	6	6
maximum voltage by EDF	[V]	24.0	24.0	24.0	24.0
Max. current per wire	[A]	1.0	1.0	1.0	1.0
Max. overall current	[A]	1.0	1.0	1.0	1.0

Main views for SRU without EDF

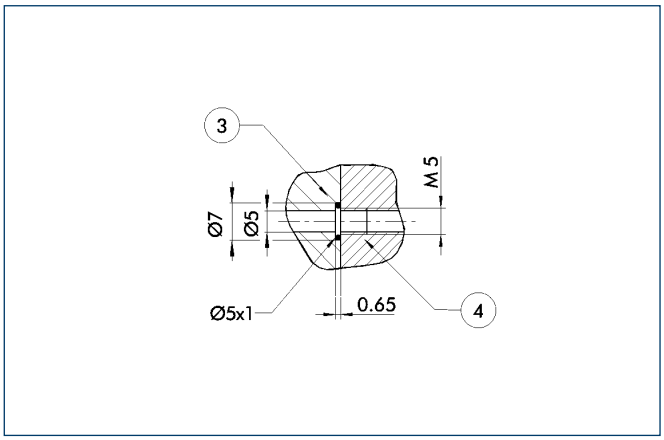


The main view shows the SRU in the most basic version, that is with an angle of traverse of 180°/90°, small end position adjustability of 3°, without center position and without fluid feed-through. Modifications to the drawings as a result of various options can be seen in the relevant additional views.

ⓘ The SDV-P pressure maintenance valve can be used to hold the position upon a loss of pressure (see „Accessories“ catalog section).

A,a Main/direct connection, clockwise rotary unit
B,b Main/direct connection, anti-clockwise rotary unit
① Linear unit connection
② Attachment connection
80 depth of the centering sleeve hole in the matching part
90 setting shock absorber-hub

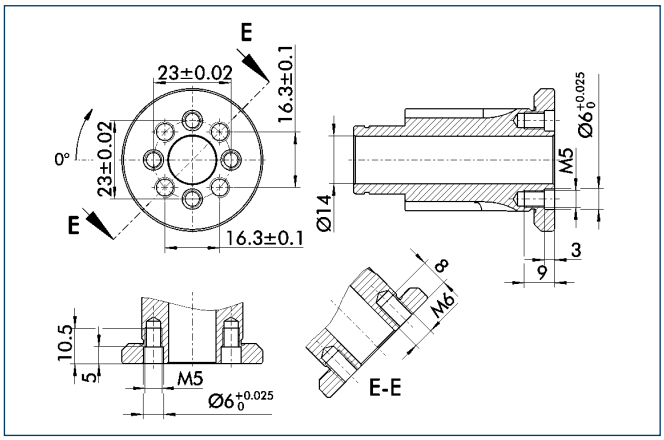
Hose-free direct connection



③ Adapter
④ Rotary unit

The direction connection is used for supplying compressed air without hoses, which are liable to faults. Instead, the pressure medium is conveyed through the bore-holes of the mounting plate.

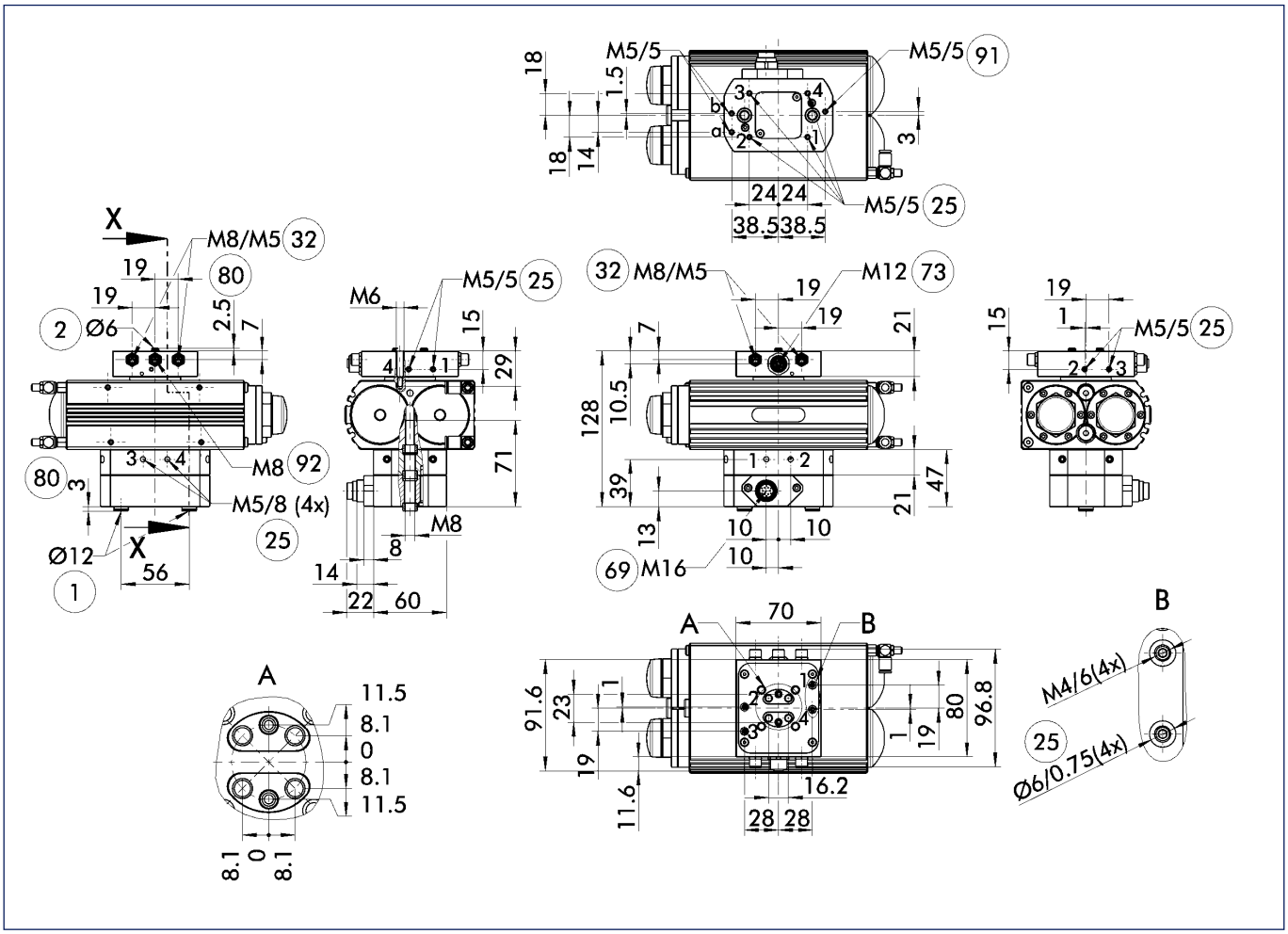
Pinion with fluid feed-through



Pinion screw connection diagram for mounting the swiveling attachment. The „4x large thread for 4x screw and 2x flat fit for guide sleeve“ screw connection diagram is preferable to the „4x small thread for 2x screw and 2x dowel screw“ (in deep fit) screw connection diagram.

ⓘ **View adaptable at versions without EDF**

Main views for SRU with EDF

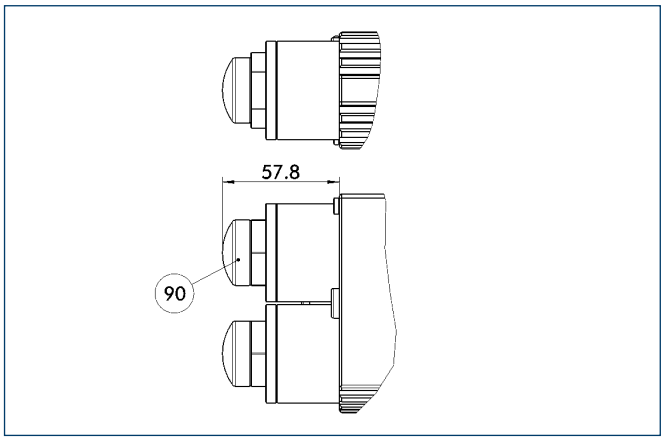


The main view shows the SRU in the most basic version, that is with an angle of traverse of 180°/90°, small end position adjustability of 3°, without center position and without fluid feed-through. Modifications to the drawings as a result of various options can be seen in the relevant additional views.

ⓘ The SDV-P pressure maintenance valve can be used to hold the position upon a loss of pressure (see „Accessories“ catalog section).

A,a Main/direct connection, clockwise rotary unit
B,b Main/direct connection, anti-clockwise rotary unit
① Rotary unit connection
② Attachment connection
㉕ Fluid feed-through
㉜ flange socket for sensor feed-through
㊾ Connection for electric feed-through
㉝ Connection BUS-throughs
㊿ depth of the centering sleeve hole in the matching part
㉛ ventilation-drill for simple admitted SRU with middle position
㉜ change Bus-/Sensor feed-through

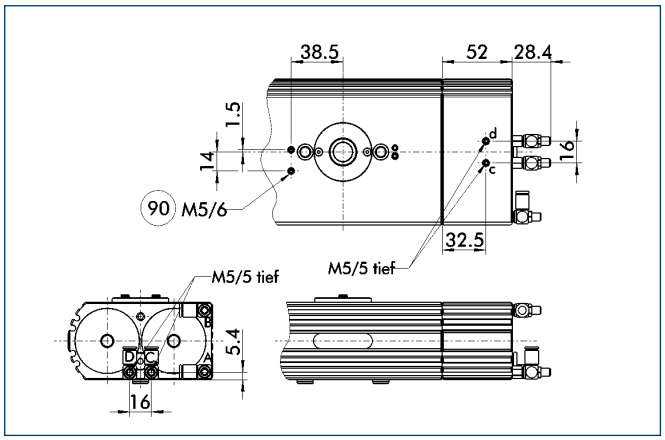
Large end position adjustability 90°



㉚ setting shock absorber-hub

Different dimensions with the option „Large end position adjustability (90°)“ This permits the end positions to be adjusted by up to 93°. More information can be found in the introduction to the series.

Pneumatic center position (M)

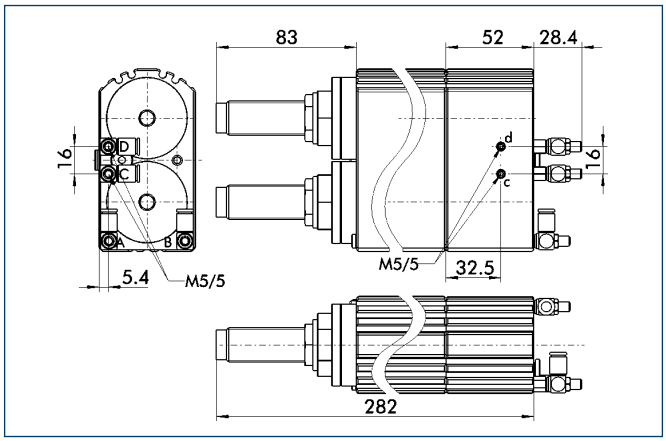


C,c Main/direct connection, center position
Dd, Main/direct connection, center position
㊿ Bleeder hole for unit with single compressed air action (.1)

Different dimensions with the „Pneumatic Center Position (M)“ option. Heavy attachments may have to level out until they reach the correct position. The locked center position (VM) offers a remedy. Units with single compressed air action (.1) and pneumatic center position need an essential bleeder hose.

ⓘ **View applicable for version with or without EDF!**

Locked center position (VM)

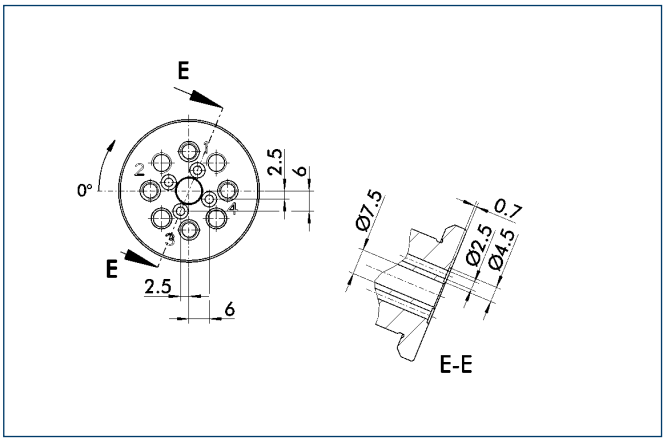


C,c Main/direct connection, center position
Dd, Main/direct connection, center position

Different dimensions with the „Locked center position (VM)“ option. The center position is locked. The unit travels to center position using the force of the main drive piston. Shock absorbers brake the travel to center position as fast as possible to prevent overshooting.

ⓘ View applicable for version with or without EDF!

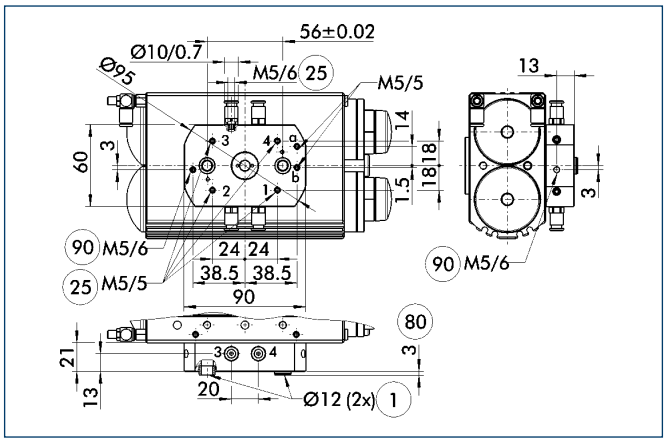
Pinion



Pinion screw connection diagram for mounting the swiveling attachment. The „4x large thread for 4x screw and 2x flat fit for guide sleeve“ screw connection diagram is preferable to the „4x small thread for 2x screw and 2x dowel screw“ (in deep fit) screw connection diagram.

ⓘ View adaptable at versions without EDF

Connections for Medium-throughs

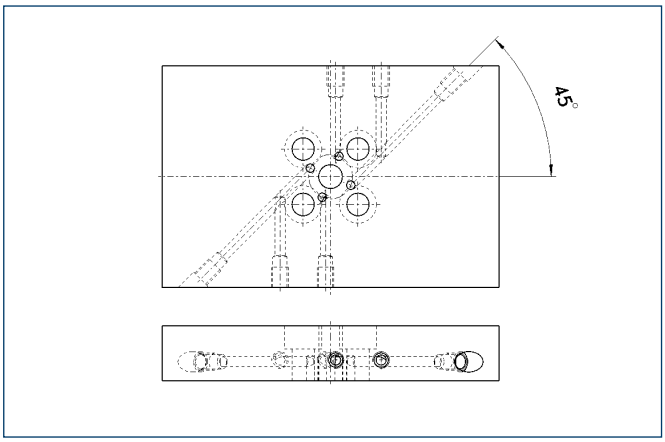


① Linear unit connection
㉕ Fluid feed-through
㊽ depth of the centering sleeve hole in the matching part
㊿ Bleeder hole for unit with single compressed air action provided with pneumatic center position (.1-M)

Lower mounting plate for the „Fluid feed-through“ option. Vacuum, gases or fluids can be conveyed. The connection may be a screw type or a direct connection.

ⓘ View adaptable at versions without EDF

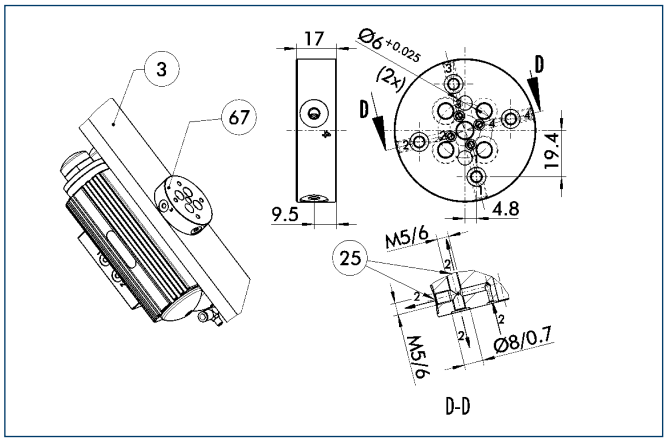
Adapter plate arrangement



Suggested here is an arrangement of the adapter plate which enables all fluid feed-throughs to be reached as easily as possible.

ⓘ View adaptable at versions without EDF

Distributor for SRU

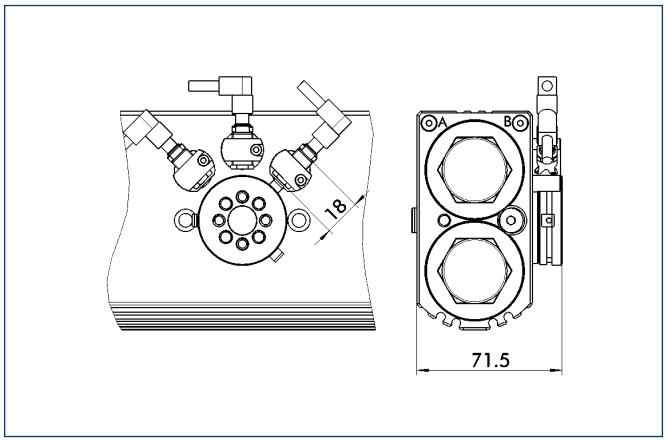


(3) Adapter
(25) Fluid feed-through
(67) Distributor for media feed-through

The distributor (ID: 0357792) for SRU 35 facilitates the use of the fluid feed-throughs, both at the direct attachment to the distributor and in the lines conveying the fluid inside the adapter plate. Thanks to the distributor, only a simple drilling pattern has to be drilled in the adapter plate situated between the pinion and the distributor.

ⓘ **View adaptable at versions without EDF**

Mounting kit for proximity switch at SRU without EDF



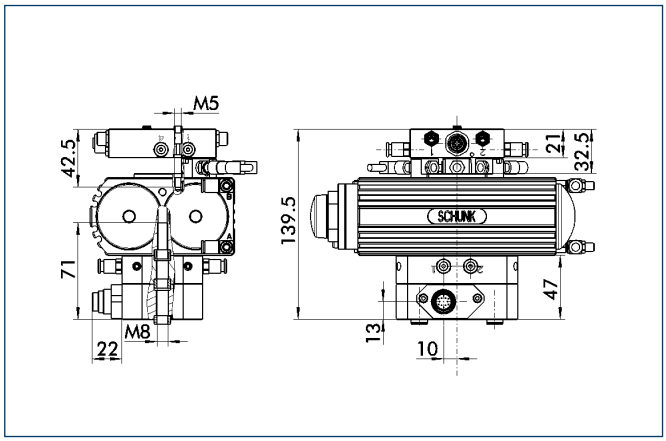
The size-specific mounting kit is required for installing the inductive proximity switches. Up to three proximity switches (2x end position, 1x center position) can be attached using the mounting kit. A mounting kit for IN 80 inductive proximity switches consists of:

3x sensor brackets complete
1x operating cam retaining disk
3x operating cams

Description	ID
AS-SRU 35	0357790
AS-SRU 35-4	0357791

ⓘ View adaptable at versions without EDF

Mounting kit for proximity switch at SRU with EDF

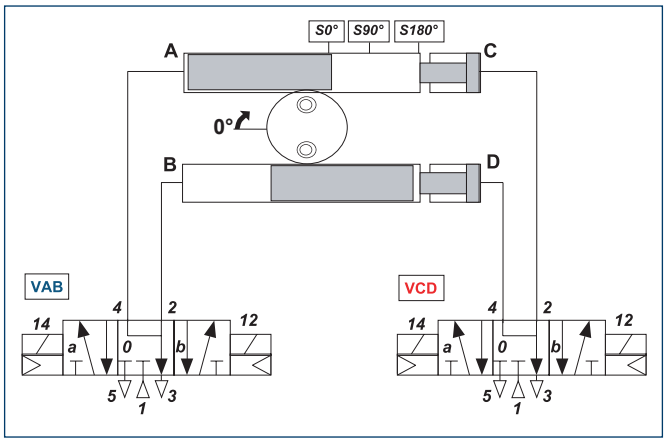


The size-specific mounting kit is required for installing the inductive proximity switches. Up to three proximity switches (2x end position, 1x center position) can be attached using the mounting kit. A mounting kit for IN 80 inductive proximity switches consists of:

3x sensor brackets complete
1x operating cam retaining disk
3x operating cams

ⓘ View adaptable at versions with EDF
The adaptor kit cannot be ordered individually. The SRU with EDF and adaptor kit is being delivered by SCHUNK completely mounted.

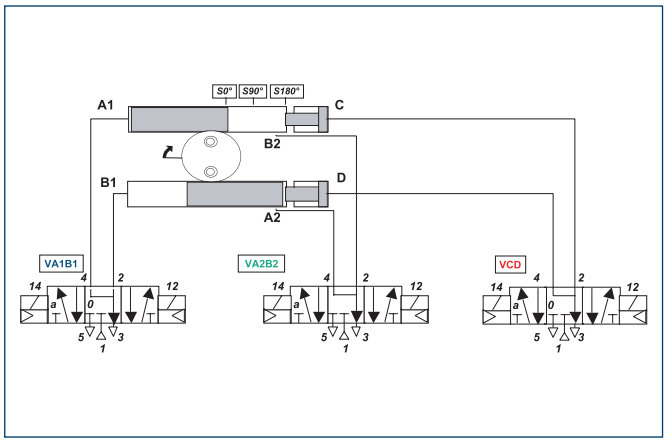
Pneumatic diagram of SRU-VM – Vertical axis



VM units with vertical swivel axis are generally actuated by two 5/3 directional control valves with bled center position. To prevent damage, it is essential that you pay attention to the actuation sequence in the Operating Manual.

ⓘ View applicable for version with or without EDF!

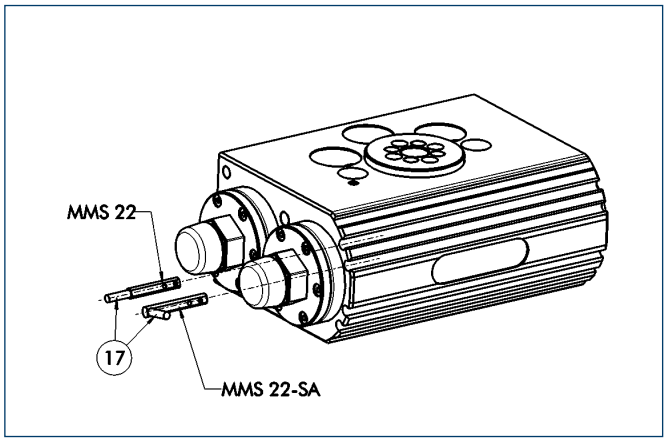
Pneumatic diagram of SRU-VM – horizontal axis



VM units with horizontal or non-vertical swivel axis must generally be actuated by three 5/3 directional control valves with bled center position. To prevent damage, it is essential that you pay attention to the actuation sequence in the Operating Manual.

ⓘ View applicable for version with or without EDF!

Sensor System



⑰ Cable outlet

End position monitoring: Electronic magnetic switches, for mounting in C-slot

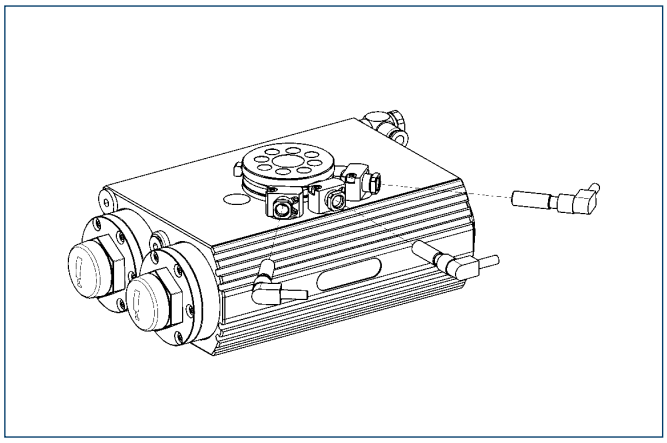
Description	ID	Recommended product
MMS 22-S-M5-NPN	0301439	
MMS 22-S-M5-NPN-SA	0301449	
MMS 22-S-M5-PNP	0301438	
MMS 22-S-M5-PNP-SA	0301448	
MMS 22-S-M8-NPN	0301433	
MMS 22-S-M8-NPN-SA	0301443	
MMS 22-S-M8-PNP	0301432	•
MMS 22-S-M8-PNP-SA	0301442	
MMSK 22-S-NPN	0301435	
MMSK 22-S-NPN-SA	0301445	
MMSK 22-S-PNP	0301434	
MMSK 22-S-PNP-SA	0301444	

Extension cables for proximity switches/magnetic switches

Description	ID
KA BG05-L 3P-0300	0301652
KA BG08-L 3P-0300-PNP	0301622
KA BW05-L 3P-0300	0301650
KA BW08-L 3P-0300-NPN	0301602
KA BW08-L 3P-0300-PNP	0301594
KA BW08-L 3P-0500-NPN	9641116
KA BW08-L 3P-0500-PNP	0301502
KA BW12-L 3P-0300-PNP	0301503
KA BW12-L 3P-0500-PNP	0301507
KV BW08-SG08 3P-0030-PNP	0301495
KV BW08-SG08 3P-0100-PNP	0301496
KV BW08-SG08 3P-0200-PNP	0301497
KV BW12-SG12 3P-0030-PNP	0301595
KV BW12-SG12 3P-0100-PNP	0301596
KV BW12-SG12 3P-0200-PNP	0301597

ⓘ Please note the minimum permitted bending radii for the sensor cables, which are generally 35 mm.

Assembly IN on SRU without EDF

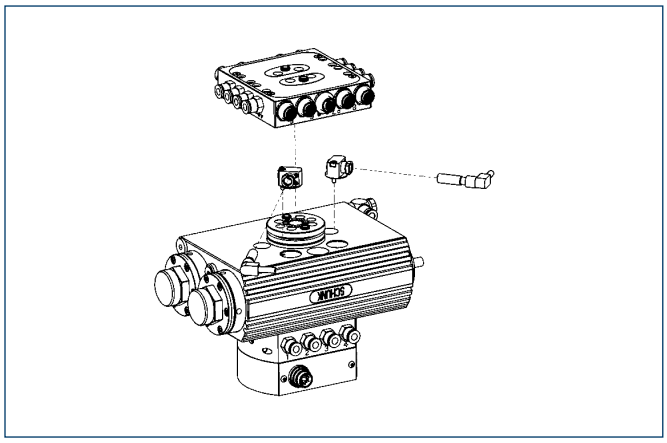


End position monitoring:
Inductive proximity switches, mounted with mounting kit

Description	ID	Recommended product
AS-SRU 35	0357790	
AS-SRU 35-4	0357791	
IN 80-S-M12	0301578	
IN 80-S-M8	0301478	•
IN-C 80-S-M8	0301475	
INK 80-S	0301550	
INK 80-SL	0301579	

ⓘ In general there are two sensors needed per swivel unit, with additional request of the middle position , three sensors plus optional an extension cable.
View adaptable at versions without EDF!

Assembly IN on SRU with EDF and add-on kit

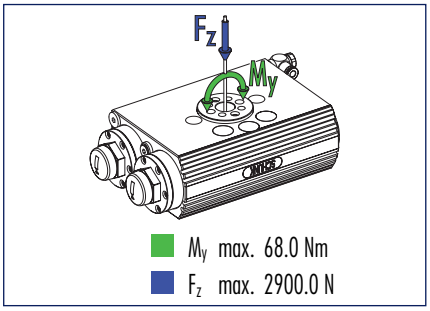


End position monitoring:
Inductive proximity switches, mounted with mounting kit

Description	ID	Recommended product
IN 80-S-M12	0301578	
IN 80-S-M8	0301478	•
IN-C 80-S-M8	0301475	
INK 80-S	0301550	
INK 80-SL	0301579	

ⓘ In general there are two sensors needed per swivel unit, with additional request of the middle position, three sensors plus optional an extension cable.
View adaptable at versions without EDF!

Pinion load



ⓘ Moments and forces may occur simultaneously. When using heavy attachments or ones with high mass moments of inertia, the speed must be restricted to ensure that the rotary movement occurs without any hitting or bouncing.

Technical data

Angle of traverse 90° and small end position adjustability of 3°

Description		SRU 40.1-90-3	SRU 40.1-90-3-8	SRU 40.2-90-3	SRU 40.2-90-3-8
	ID	0357900	0357902	0358000	0358002
Torque	[Nm]	10.0	9.2	20.0	19.2
Rotating angle	[°]	90.0	90.0	90.0	90.0
Adjustability of end positions	[°]	3.0	3.0	3.0	3.0
No. of fluid feed-throughs			8		8
IP class		65	65	65	65
Weight	[kg]	4.2	4.9	4.2	4.9
Fluid consumption per cycle (2 x nominal angle)	[cm³]	104.0	104.0	208.0	208.0
Swiveling time with middle attached load	[s]	1.8	2.0	1.4	1.6
Nominal pressure	[bar]	6.0	6.0	6.0	6.0
Minimum pressure	[bar]	3.0	3.0	3.0	3.0
Maximum pressure	[bar]	8.0	8.0	8.0	8.0
Diameter of connecting hose	[mm]	6.0	6.0	6.0	6.0
Max. pressure in fluid feed-through	[bar]		8.0		8.0
Min. ambient temperature	[°C]	5.0	5.0	5.0	5.0
Max. ambient temperature	[°C]	60.0	60.0	60.0	60.0
Repeat accuracy	[°]	0.05	0.05	0.05	0.05

Angle of traverse 180°, small end position adjustability of 3° and electric feed-through EDF

Description		SRU 40.1-90-3-8-EDF M5	SRU 40.1-90-3-8-EDF M8	SRU 40.1-90-3-8-EDF M12	SRU 40.2-90-3-8-EDF M5	SRU 40.2-90-3-8-EDF M8	SRU 40.2-90-3-8-EDF M12
ID	ID	0357903	0357904	0357905	0358003	0358004	0358005
Torque	[Nm]	9.2	9.2	9.2	19.2	19.2	19.2
Rotating angle	[°]	90.0	90.0	90.0	90.0	90.0	90.0
Adjustability of end positions	[°]	3.0	3.0	3.0	3.0	3.0	3.0
No. of fluid feed-throughs		8	8	8	8	8	8
IP class		65	65	65	65	65	65
Weight	[kg]	4.9 + 1.35	4.9 + 1.35	4.9 + 1.35	4.9 + 1.35	4.9 + 1.35	4.9 + 1.35
Fluid consumption per cycle (2 x nominal angle)	[cm³]	104.0	104.0	104.0	208.0	208.0	208.0
Swiveling time with middle attached load	[s]	2.0	2.0	2.0	1.6	1.6	1.6
Nominal pressure	[bar]	8.0	8.0	8.0	8.0	8.0	8.0
Minimum pressure	[bar]	3.0	3.0	3.0	3.0	3.0	3.0
Maximum pressure	[bar]	6.0	6.0	6.0	6.0	6.0	6.0
Diameter of connecting hose	[mm]	6.0	6.0	6.0	6.0	6.0	6.0
Max. pressure in fluid feed-through	[bar]	8.0	8.0	8.0	8.0	8.0	8.0
Min. ambient temperature	[°C]	5.0	5.0	5.0	5.0	5.0	5.0
Température ambiante max.	[°C]	60.0	60.0	60.0	60.0	60.0	60.0
Repeat accuracy	[°]	0.05	0.05	0.05	0.05	0.05	0.05
Number of E-fittings on the output end		8	8	8	8	8	8
Size of the E-connections on the output end.		M5	M8	M12	M5	M8	M12
Number of cores by EDF		10	10	10	10	10	10
maximum voltage by EDF	[V]	24.0	24.0	24.0	24.0	24.0	24.0
Max. current per wire	[A]	1.0	1.0	1.0	1.0	1.0	1.0
Max. overall current	[A]	1.0	1.0	1.0	1.0	1.0	1.0

Technical data

Angle of traverse 180° and small end position adjustability of 3°

Description		SRU 40.1-180-3	SRU 40.1-180-3-8	SRU 40.2-180-3	SRU 40.2-180-3-8
	ID	0357920	0357922	0358020	0358022
Torque	[Nm]	10.0	9.2	20.0	19.2
Rotating angle	[°]	180.0	180.0	180.0	180.0
Adjustability of end positions	[°]	3.0	3.0	3.0	3.0
No. of fluid feed-throughs			8		8
IP class		65	65	65	65
Weight	[kg]	4.1	4.8	4.1	4.8
Fluid consumption per cycle (2 x nominal angle)	[cm³]	168.0	168.0	336.0	336.0
Swiveling time with middle attached load	[s]	2.0	2.2	1.6	1.8
Nominal pressure	[bar]	6.0	6.0	6.0	6.0
Minimum pressure	[bar]	3.0	3.0	3.0	3.0
Maximum pressure	[bar]	8.0	8.0	8.0	8.0
Diameter of connecting hose	[mm]	6.0	6.0	6.0	6.0
Max. pressure in fluid feed-through	[bar]		8.0		8.0
Min. ambient temperature	[°C]	5.0	5.0	5.0	5.0
Max. ambient temperature	[°C]	60.0	60.0	60.0	60.0
Repeat accuracy	[°]	0.05	0.05	0.05	0.05

Angle of traverse 180°, small end position adjustability of 3° and electrica feed-through EDF

Description		SRU 40.1-180-3-8-EDF M5	SRU 40.1-180-3-8-EDF M8	SRU 40.1-180-3-8-EDF M12	SRU 40.2-180-3-8-EDF M5	SRU 40.2-180-3-8-EDF M8	SRU 40.2-180-3-8-EDF M12
ID	ID	0357923	0357924	0357925	0358023	0358024	0358025
Torque	[Nm]	9.2	9.2	9.2	19.2	19.2	19.2
Rotating angle	[°]	180.0	180.0	180.0	180.0	180.0	180.0
Adjustability of end positions	[°]	3.0	3.0	3.0	3.0	3.0	3.0
No. of fluid feed-throughs		8	8	8	8	8	8
IP class		65	65	65	65	65	65
Weight	[kg]	4.8 + 1.35	4.8 + 1.35	4.8 + 1.35	4.8 + 1.35	4.8 + 1.35	4.8 + 1.35
Fluid consumption per cycle (2 x nominal angle)	[cm³]	168.0	168.0	168.0	336.0	336.0	336.0
Swiveling time with middle attached load	[s]	2.2	2.2	2.2	1.8	1.8	1.8
Nominal pressure	[bar]	8.0	8.0	8.0	8.0	8.0	8.0
Minimum pressure	[bar]	3.0	3.0	3.0	3.0	3.0	3.0
Maximum pressure	[bar]	6.0	6.0	6.0	6.0	6.0	6.0
Diameter of connecting hose	[mm]	6.0	6.0	6.0	6.0	6.0	6.0
Max. pressure in fluid feed-through	[bar]	8.0	8.0	8.0	8.0	8.0	8.0
Min. ambient temperature	[°C]	5.0	5.0	5.0	5.0	5.0	5.0
Température ambiante max.	[°C]	60.0	60.0	60.0	60.0	60.0	60.0
Repeat accuracy	[°]	0.05	0.05	0.05	0.05	0.05	0.05
Number of E-fittings on the output end		8	8	8	8	8	8
Size of the E-connections on the output end.		M5	M8	M12	M5	M8	M12
Number of cores by EDF		10	10	10	10	10	10
maximum voltage by EDF	[V]	24.0	24.0	24.0	24.0	24.0	24.0
Max. current per wire	[A]	1.0	1.0	1.0	1.0	1.0	1.0
Max. overall current	[A]	1.0	1.0	1.0	1.0	1.0	1.0

Technical data

Angle of traverse 180°, small end position adjustability of 3° and pneumatic center position

Description		SRU 40.1-180-3-M	SRU 40.1-180-3-M-8	SRU 40.2-180-3-M	SRU 40.2-180-3-M-8
	ID	0357930	0357932	0358030	0358032
Torque	[Nm]	10.0	9.2	20.0	19.2
Rotating angle	[°]	180.0	180.0	180.0	180.0
Adjustability of end positions	[°]	3.0	3.0	3.0	3.0
Center position		M (pneumatic middle position)	M (pneumatic middle position)	M (pneumatic middle position)	M (pneumatic middle position)
Adjustability of center position	[°]	3.0	3.0	3.0	3.0
No. of fluid feed-throughs			8		8
IP class		65	65	65	65
Weight	[kg]	5.5	6.2	5.5	6.2
Fluid consumption per cycle (2 x nominal angle)	[cm^3]	168.0	168.0	336.0	336.0
Swiveling time with middle attached load	[s]	2.0	2.2	1.6	1.8
Nominal pressure	[bar]	6.0	6.0	6.0	6.0
Minimum pressure	[bar]	3.0	3.0	3.0	3.0
Maximum pressure	[bar]	8.0	8.0	8.0	8.0
Diameter of connecting hose	[mm]	6.0	6.0	6.0	6.0
Max. pressure in fluid feed-through	[bar]		8.0		8.0
Min. ambient temperature	[°C]	5.0	5.0	5.0	5.0
Max. ambient temperature	[°C]	60.0	60.0	60.0	60.0
Repeat accuracy	[°]	0.05	0.05	0.05	0.05

Angle of traverse 180°, small end position adjustability of 3°, pneumatic center position and electric feed-through

Description		SRU 40.1-180-3-M-8-EDF M5	SRU 40.1-180-3-M-8-EDF M8	SRU 40.1-180-3-M-8-EDF M12	SRU 40.2-180-3-M-8-EDF M5	SRU 40.2-180-3-M-8-EDF M8	SRU 40.2-180-3-M-8-EDF M12
ID	ID	0357933	0357934	0357935	0358033	0358034	0358035
Torque	[Nm]	9.2	9.2	9.2	19.2	19.2	19.2
Rotating angle	[°]	180.0	180.0	180.0	180.0	180.0	180.0
Adjustability of end positions	[°]	3.0	3.0	3.0	3.0	3.0	3.0
Center position		M (pneumatic middle position)	M (pneumatic middle position)	M (pneumatic middle position)	M (pneumatic middle position)	M (pneumatic middle position)	M (pneumatic middle position)
Central Position Andjustability	[°]	3.0	3.0	3.0	3.0	3.0	3.0
No. of fluid feed-throughs		8	8	8	8	8	8
IP class		65	65	65	65	65	65
Weight	[kg]	6.2 + 1.35	6.2 + 1.35	6.2 + 1.35	6.2 + 1.35	6.2 + 1.35	6.2 + 1.35
Fluid consumption per cycle (2 x nominal angle)	[cm^3]	168.0	168.0	168.0	336.0	336.0	336.0
Swiveling time with middle attached load	[s]	2.2	2.2	2.2	1.8	1.8	1.8
Nominal pressure	[bar]	8.0	8.0	8.0	8.0	8.0	8.0
Minimum pressure	[bar]	3.0	3.0	3.0	3.0	3.0	3.0
Maximum pressure	[bar]	6.0	6.0	6.0	6.0	6.0	6.0
Diameter of connecting hose	[mm]	6.0	6.0	6.0	6.0	6.0	6.0
Max. pressure in fluid feed-through	[bar]	8.0	8.0	8.0	8.0	8.0	8.0
Min. ambient temperature	[°C]	5.0	5.0	5.0	5.0	5.0	5.0
Température ambiante max.	[°C]	60.0	60.0	60.0	60.0	60.0	60.0
Repeat accuracy	[°]	0.05	0.05	0.05	0.05	0.05	0.05
Number of E-fittings on the output end		8	8	8	8	8	8
Size of the E-connections on the output end.		M5	M8	M12	M5	M8	M12
Number of cores by EDF		10	10	10	10	10	10
maximum voltage by EDF	[V]	24.0	24.0	24.0	24.0	24.0	24.0
Max. current per wire	[A]	1.0	1.0	1.0	1.0	1.0	1.0
Max. overall current	[A]	1.0	1.0	1.0	1.0	1.0	1.0

Technical data

Angle of traverse 180°, small end position adjustability of 3° and locked center position

Description		SRU 40.2-180-3-VM	SRU 40.2-180-3-VM-8
	ID	0358040	0358042
Torque	[Nm]	20.0	19.2
Rotating angle	[°]	180.0	180.0
Adjustability of end positions	[°]	3.0	3.0
Center position		VM (locked middle position)	VM (locked middle position)
Adjustability of center position	[°]	3.0	3.0
No. of fluid feed-throughs			8
IP class		65	65
Weight	[kg]	6.5	7.3
Fluid consumption per cycle (2 x nominal angle)	[cm^3]	336.0	336.0
Swiveling time with middle attached load	[s]	1.6	1.8
Nominal pressure	[bar]	6.0	6.0
Minimum pressure	[bar]	4.0	4.0
Maximum pressure	[bar]	6.5	6.5
Diameter of connecting hose	[mm]	6.0	6.0
Max. pressure in fluid feed-through	[bar]		8.0
Min. ambient temperature	[°C]	5.0	5.0
Max. ambient temperature	[°C]	60.0	60.0
Repeat accuracy	[°]	0.05	0.05

Angle of traverse 180°, small end position adjustability of 3°, blocked center position and electric feed-through

Description		SRU 40.2-180-3-VM-8-EDF M5	SRU 40.2-180-3-VM-8-EDF M8	SRU 40.2-180-3-VM-8-EDF M12
ID	ID	0358043	0358044	0358045
Torque	[Nm]	19.2	19.2	19.2
Rotating angle	[°]	180.0	180.0	180.0
Adjustability of end positions	[°]	3.0	3.0	3.0
Center position		VM (locked middle position)	VM (locked middle position)	VM (locked middle position)
Central Position Andjustability	[°]	3.0	3.0	3.0
No. of fluid feed-throughs		8	8	8
IP class		65	65	65
Weight	[kg]	7.3 + 1.35	7.3 + 1.35	7.3 + 1.35
Fluid consumption per cycle (2 x nominal angle)	[cm^3]	336.0	336.0	336.0
Swiveling time with middle attached load	[s]	1.8	1.8	1.8
Nominal pressure	[bar]	6.5	6.5	6.5
Minimum pressure	[bar]	4.0	4.0	4.0
Maximum pressure	[bar]	6.0	6.0	6.0
Diameter of connecting hose	[mm]	6.0	6.0	6.0
Max. pressure in fluid feed-through	[bar]	8.0	8.0	8.0
Min. ambient temperature	[°C]	5.0	5.0	5.0
Température ambiante max.	[°C]	60.0	60.0	60.0
Repeat accuracy	[°]	0.05	0.05	0.05
Number of E-fittings on the output end		8	8	8
Size of the E-connections on the output end.		M5	M8	M12
Number of cores by EDF		10	10	10
maximum voltage by EDF	[V]	24.0	24.0	24.0
Max. current per wire	[A]	1.0	1.0	1.0
Max. overall current	[A]	1.0	1.0	1.0

Technical data

Angle of traverse 180° and large end position adjustability of 90°

Description		SRU 40.1-180-90	SRU 40.1-180-90-8	SRU 40.2-180-90	SRU 40.2-180-90-8
	ID	0357950	0357952	0358050	0358052
Torque	[Nm]	10.0	9.2	20.0	19.2
Rotating angle	[°]	180.0	180.0	180.0	180.0
Adjustability of end positions	[°]	90.0	90.0	90.0	90.0
No. of fluid feed-throughs			8		8
IP class		65	65	65	65
Weight	[kg]	4.3	5.0	4.3	5.0
Fluid consumption per cycle (2 x nominal angle)	[cm³]	168.0	168.0	336.0	336.0
Swiveling time with middle attached load	[s]	2.0	2.2	1.6	1.8
Nominal pressure	[bar]	6.0	6.0	6.0	6.0
Minimum pressure	[bar]	3.0	3.0	3.0	3.0
Maximum pressure	[bar]	8.0	8.0	8.0	8.0
Diameter of connecting hose	[mm]	6.0	6.0	6.0	6.0
Max. pressure in fluid feed-through	[bar]		8.0		8.0
Min. ambient temperature	[°C]	5.0	5.0	5.0	5.0
Max. ambient temperature	[°C]	60.0	60.0	60.0	60.0
Repeat accuracy	[°]	0.05	0.05	0.05	0.05

Angle of traverse 180°, large end position adjustability of 90° and electric feed-through EDF

Description		SRU 40.1-180-90-8-EDF M5	SRU 40.1-180-90-8-EDF M8	SRU 40.1-180-90-8-EDF M12	SRU 40.2-180-90-8-EDF M5	SRU 40.2-180-90-8-EDF M8	SRU 40.2-180-90-8-EDF M12
ID	ID	0357953	0357954	0357955	0358053	0358054	0358055
Torque	[Nm]	9.2	9.2	9.2	19.2	19.2	19.2
Rotating angle	[°]	180.0	180.0	180.0	180.0	180.0	180.0
Adjustability of end positions	[°]	90.0	90.0	90.0	90.0	90.0	90.0
No. of fluid feed-throughs		8	8	8	8	8	8
IP class		65	65	65	65	65	65
Weight	[kg]	5.0 + 1.35	5.0 + 1.35	5.0 + 1.35	5.0 + 1.35	5.0 + 1.35	5.0 + 1.35
Fluid consumption per cycle (2 x nominal angle)	[cm³]	168.0	168.0	168.0	336.0	336.0	336.0
Swiveling time with middle attached load	[s]	2.2	2.2	2.2	1.8	1.8	1.8
Nominal pressure	[bar]	8.0	8.0	8.0	8.0	8.0	8.0
Minimum pressure	[bar]	3.0	3.0	3.0	3.0	3.0	3.0
Maximum pressure	[bar]	6.0	6.0	6.0	6.0	6.0	6.0
Diameter of connecting hose	[mm]	6.0	6.0	6.0	6.0	6.0	6.0
Max. pressure in fluid feed-through	[bar]	8.0	8.0	8.0	8.0	8.0	8.0
Min. ambient temperature	[°C]	5.0	5.0	5.0	5.0	5.0	5.0
Température ambiante max.	[°C]	60.0	60.0	60.0	60.0	60.0	60.0
Repeat accuracy	[°]	0.05	0.05	0.05	0.05	0.05	0.05
Number of E-fittings on the output end		8	8	8	8	8	8
Size of the E-connections on the output end.		M5	M8	M12	M5	M8	M12
Number of cores by EDF		10	10	10	10	10	10
maximum voltage by EDF	[V]	24.0	24.0	24.0	24.0	24.0	24.0
Max. current per wire	[A]	1.0	1.0	1.0	1.0	1.0	1.0
Max. overall current	[A]	1.0	1.0	1.0	1.0	1.0	1.0

Technical data

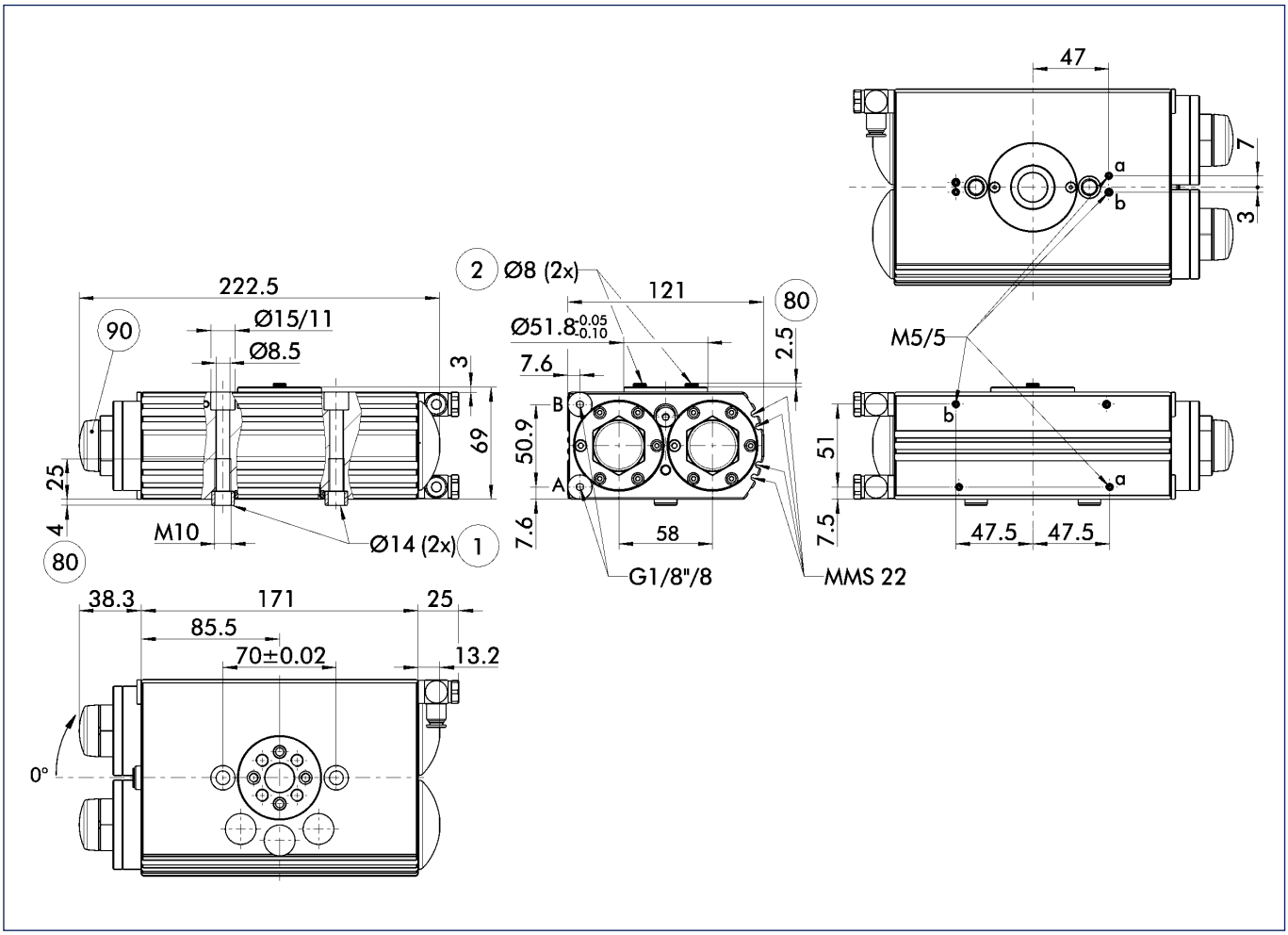
Angle of traverse 180°, large end position adjustability of 90° and pneumatic center position

Description		SRU 40.1-180-90-M	SRU 40.1-180-90-M-8	SRU 40.2-180-90-M	SRU 40.2-180-90-M-8
	ID	0357960	0357962	0358060	0358062
Torque	[Nm]	10.0	9.2	20.0	19.2
Rotating angle	[°]	180.0	180.0	180.0	180.0
Adjustability of end positions	[°]	90.0	90.0	90.0	90.0
Center position		M (pneumatic middle position)	M (pneumatic middle position)	M (pneumatic middle position)	M (pneumatic middle position)
Adjustability of center position	[°]	3.0	3.0	3.0	3.0
No. of fluid feed-throughs			8		8
IP class		65	65	65	65
Weight	[kg]	5.7	6.4	5.7	6.4
Fluid consumption per cycle (2 x nominal angle)	[cm^3]	168.0	168.0	336.0	336.0
Swiveling time with middle attached load	[s]	2.0	2.2	1.6	1.8
Nominal pressure	[bar]	6.0	6.0	6.0	6.0
Minimum pressure	[bar]	3.0	3.0	3.0	3.0
Maximum pressure	[bar]	8.0	8.0	8.0	8.0
Diameter of connecting hose	[mm]	6.0	6.0	6.0	6.0
Max. pressure in fluid feed-through	[bar]		8.0		8.0
Min. ambient temperature	[°C]	5.0	5.0	5.0	5.0
Max. ambient temperature	[°C]	60.0	60.0	60.0	60.0
Repeat accuracy	[°]	0.05	0.05	0.05	0.05

Angle of traverse 180°, large end position adjustability of 90°, pneumatic center position and electric feed-through EDF

Description		SRU 40.1-180-90-M-8-EDF M5	SRU 40.1-180-90-M-8-EDF M8	SRU 40.1-180-90-M-8-EDF M12	SRU 40.2-180-90-M-8-EDF M5	SRU 40.2-180-90-M-8-EDF M8	SRU 40.2-180-90-M-8-EDF M12
ID	ID	0357963	0357964	0357965	0358063	0358064	0358065
Torque	[Nm]	9.2	9.2	9.2	19.2	19.2	19.2
Rotating angle	[°]	180.0	180.0	180.0	180.0	180.0	180.0
Adjustability of end positions	[°]	90.0	90.0	90.0	90.0	90.0	90.0
Center position		M (pneumatic middle position)	M (pneumatic middle position)	M (pneumatic middle position)	M (pneumatic middle position)	M (pneumatic middle position)	M (pneumatic middle position)
Central Position Andjustability	[°]	3.0	3.0	3.0	3.0	3.0	3.0
No. of fluid feed-throughs		8	8	8	8	8	8
IP class		65	65	65	65	65	65
Weight	[kg]	6.4 + 1.35	6.4 + 1.35	6.4 + 1.35	6.4 + 1.35	6.4 + 1.35	6.4 + 1.35
Fluid consumption per cycle (2 x nominal angle)	[cm^3]	168.0	168.0	168.0	336.0	336.0	336.0
Swiveling time with middle attached load	[s]	2.2	2.2	2.2	1.8	1.8	1.8
Nominal pressure	[bar]	8.0	8.0	8.0	8.0	8.0	8.0
Minimum pressure	[bar]	3.0	3.0	3.0	3.0	3.0	3.0
Maximum pressure	[bar]	6.0	6.0	6.0	6.0	6.0	6.0
Diameter of connecting hose	[mm]	6.0	6.0	6.0	6.0	6.0	6.0
Max. pressure in fluid feed-through	[bar]	8.0	8.0	8.0	8.0	8.0	8.0
Min. ambient temperature	[°C]	5.0	5.0	5.0	5.0	5.0	5.0
Température ambiante max.	[°C]	60.0	60.0	60.0	60.0	60.0	60.0
Repeat accuracy	[°]	0.05	0.05	0.05	0.05	0.05	0.05
Number of E-fittings on the output end		8	8	8	8	8	8
Size of the E-connections on the output end.		M5	M8	M12	M5	M8	M12
Number of cores by EDF		10	10	10	10	10	10
maximum voltage by EDF	[V]	24.0	24.0	24.0	24.0	24.0	24.0
Max. current per wire	[A]	1.0	1.0	1.0	1.0	1.0	1.0
Max. overall current	[A]	1.0	1.0	1.0	1.0	1.0	1.0

Main views for SRU without EDF

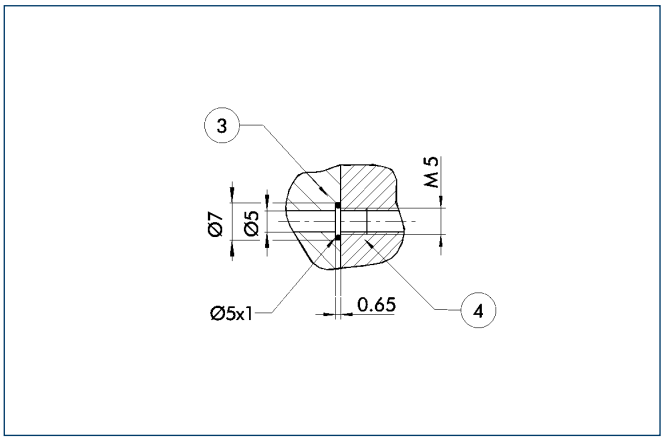


The main view shows the SRU in the most basic version, that is with an angle of traverse of 180°/90°, small end position adjustability of 3°, without center position and without fluid feed-through. Modifications to the drawings as a result of various options can be seen in the relevant additional views.

ⓘ The SDV-P pressure maintenance valve can be used to hold the position upon a loss of pressure (see „Accessories“ catalog section).

A,a Main/direct connection, clockwise rotary unit
B,b Main/direct connection, anti-clockwise rotary unit
① Linear unit connection
② Attachment connection
80 depth of the centering sleeve hole in the matching part
90 setting shock absorber-hub

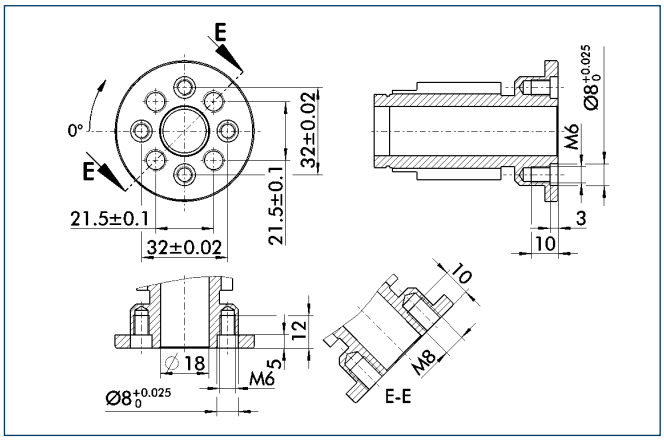
Hose-free direct connection



③ Adapter
④ Rotary unit

The direction connection is used for supplying compressed air without hoses, which are liable to faults. Instead, the pressure medium is conveyed through the bore-holes of the mounting plate.

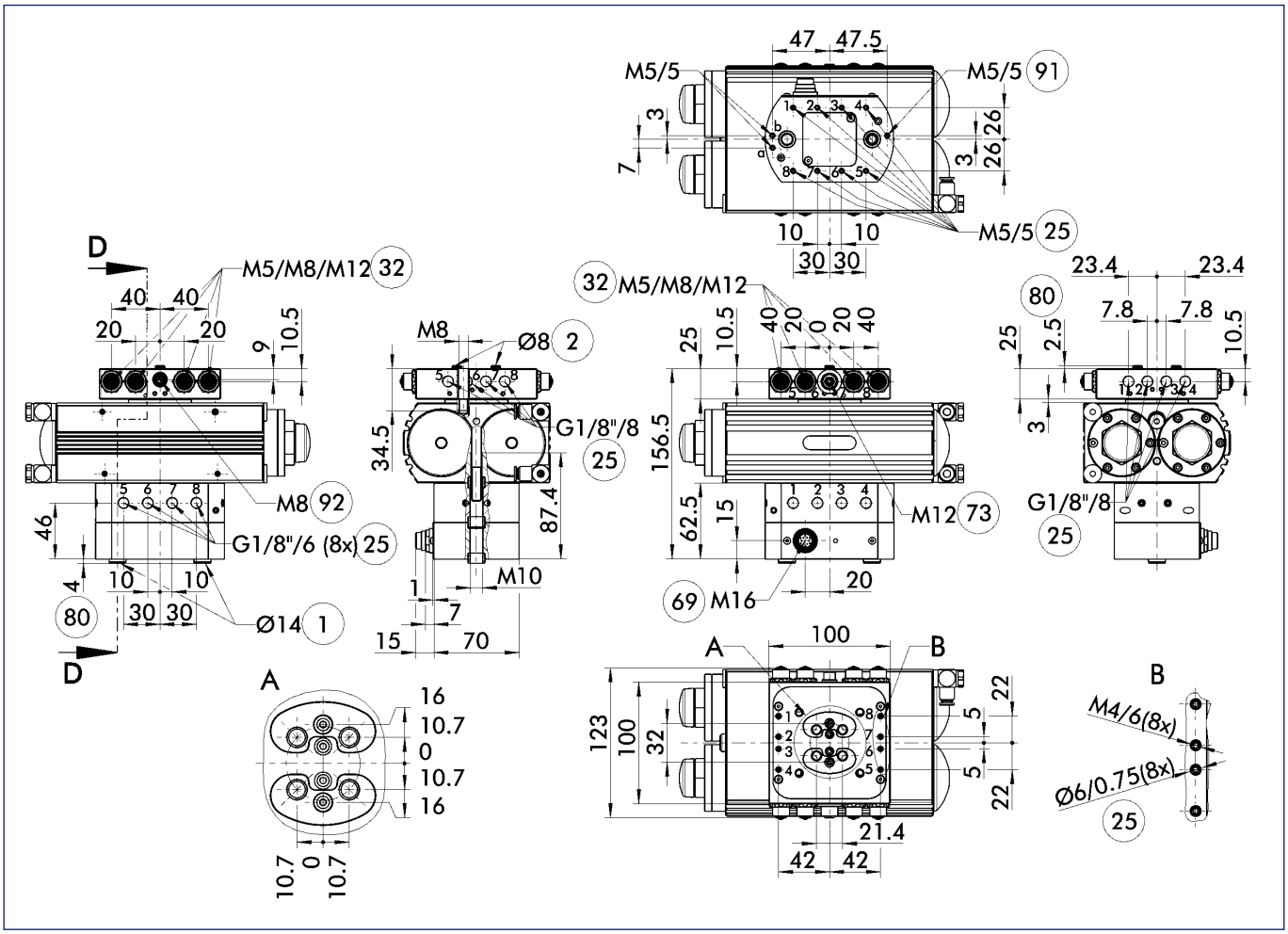
Pinion with fluid feed-through



Pinion screw connection diagram for mounting the swiveling attachment. The „4x large thread for 4x screw and 2x flat fit for guide sleeve“ screw connection diagram is preferable to the „4x small thread for 2x screw and 2x dowel screw“ (in deep fit) screw connection diagram.

ⓘ **View adaptable at versions without EDF**

Main views for SRU with EDF

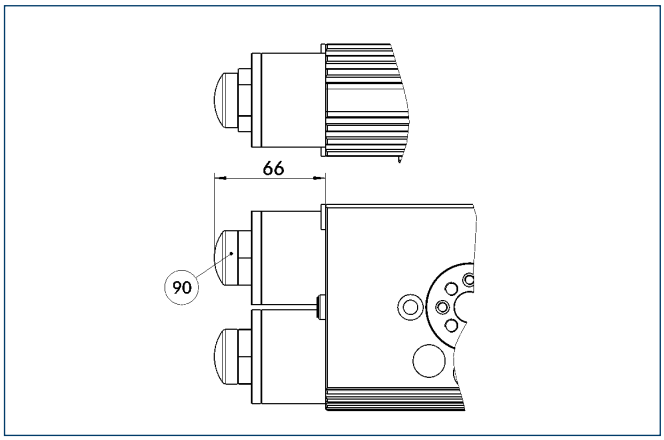


The main view shows the SRU in the most basic version, that is with an angle of traverse of 180°/90°, small end position adjustability of 3°, without center position and without fluid feed-through. Modifications to the drawings as a result of various options can be seen in the relevant additional views.

ⓘ The SDV-P pressure maintenance valve can be used to hold the position upon a loss of pressure (see „Accessories“ catalog section).

A,a Main/direct connection, clockwise rotary unit
B,b Main/direct connection, anti-clockwise rotary unit
① Rotary unit connection
② Attachment connection
㉕ Fluid feed-through
㉜ flange socket for sensor feed-through
㊾ Connection for electric feed-through
㉝ Connection BUS-throughs
㊵ depth of the centering sleeve hole in the matching part
㊶ ventilation-drill for simple admitted SRU with middle position
㊷ change Bus-/Sensor feed-through

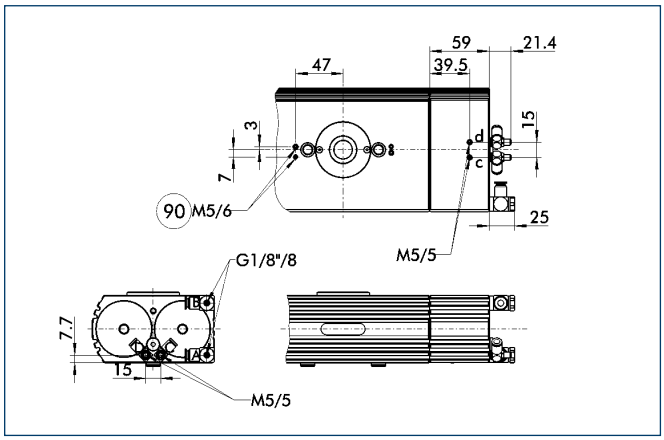
Large end position adjustability 90°



㊿ setting shock absorber-hub

Different dimensions with the option „Large end position adjustability (90°)“ This permits the end positions to be adjusted by up to 93°. More information can be found in the introduction to the series.

Pneumatic center position (M)

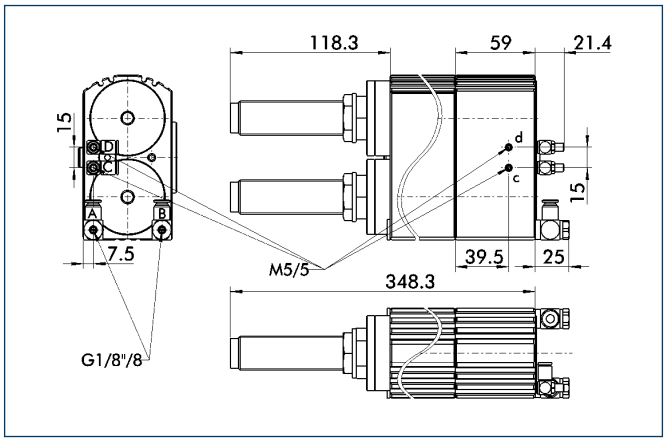


C,c Main/direct connection, center position
Dd, Main/direct connection, center position
㊿ Bleeder hole for unit with single compressed air action (.1)

Different dimensions with the „Pneumatic Center Position (M)“ option. Heavy attachments may have to level out until they reach the correct position. The locked center position (VM) offers a remedy. Units with single compressed air action (.1) and pneumatic center position need an essential bleeder hose.

ⓘ **View applicable for version with or without EDF!**

Locked center position (VM)

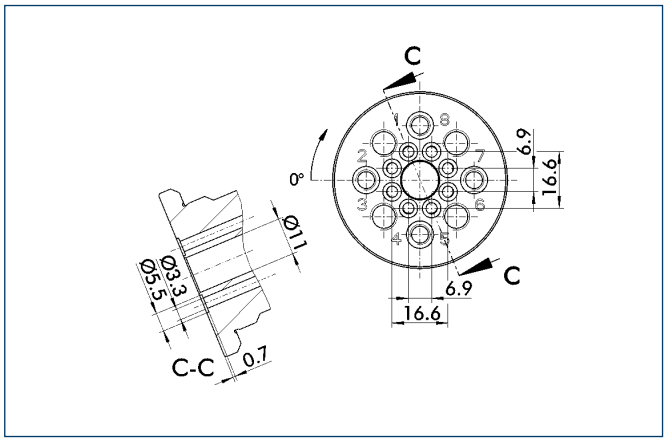


C,c Main/direct connection, center position
Dd, Main/direct connection, center position

Different dimensions with the „Locked center position (VM)“ option. The center position is locked. The unit travels to center position using the force of the main drive piston. Shock absorbers brake the travel to center position as fast as possible to prevent overshooting.

ⓘ View applicable for version with or without EDF!

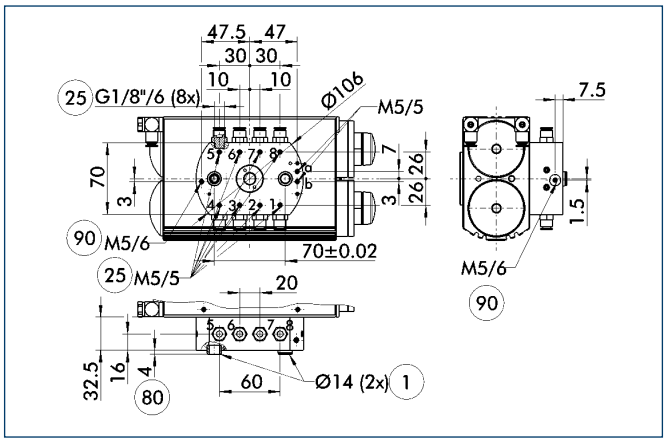
Pinion



Pinion screw connection diagram for mounting the swiveling attachment. The „4x large thread for 4x screw and 2x flat fit for guide sleeve“ screw connection diagram is preferable to the „4x small thread for 2x screw and 2x dowel screw“ (in deep fit) screw connection diagram.

ⓘ View adaptable at versions without EDF

Connections for Medium-throughs

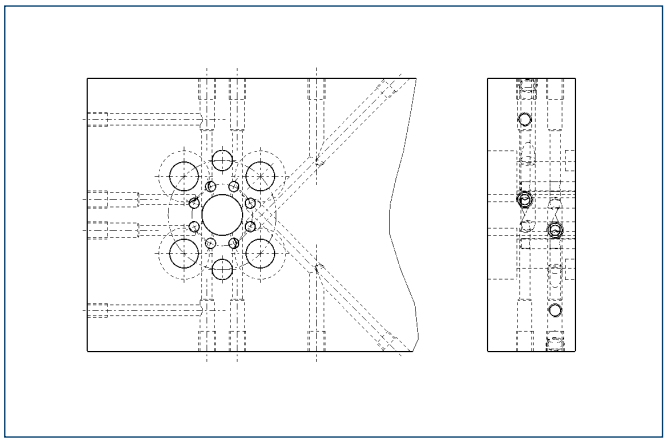


① Rotary unit connection
㉕ Fluid feed-through
㉚ depth of the centering sleeve hole in the matching part
㉚ Bleeder hole for unit with single compressed air action provided with pneumatic center position (.1-M)

Lower mounting plate for the „Fluid feed-through“ option. Vacuum, gases or fluids can be conveyed. The connection may be a screw type or a direct connection.

ⓘ View adaptable at versions without EDF

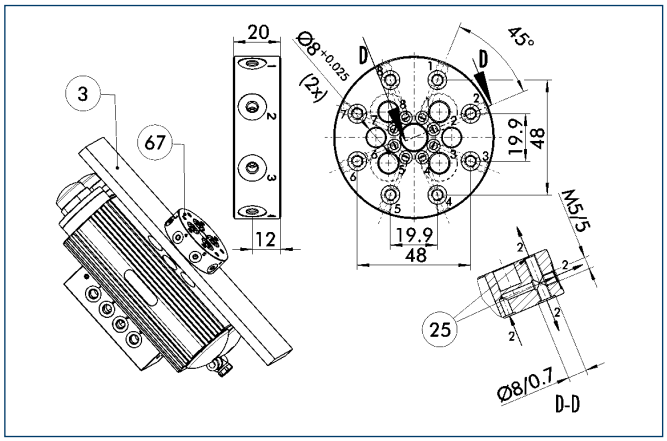
Adapter plate arrangement



Suggested here is an arrangement of the adapter plate which enables all fluid feed-throughs to be reached as easily as possible.

ⓘ View adaptable at versions without EDF

Distributor for SRU

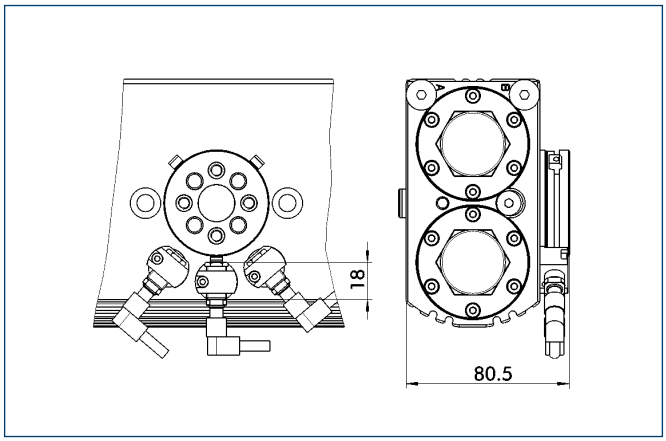


(3) Adapter
(25) Fluid feed-through
(67) Distributor for media feed-through

The distributor (ID: 0357992) for SRU 40 facilitates the use of the fluid feed-throughs, both at the direct attachment to the distributor and in the lines conveying the fluid inside the adapter plate. Thanks to the distributor, only a simple drilling pattern has to be drilled in the adapter plate situated between the pinion and the distributor.

ⓘ View adaptable at versions without EDF

Mounting kit for proximity switch at SRU without EDF



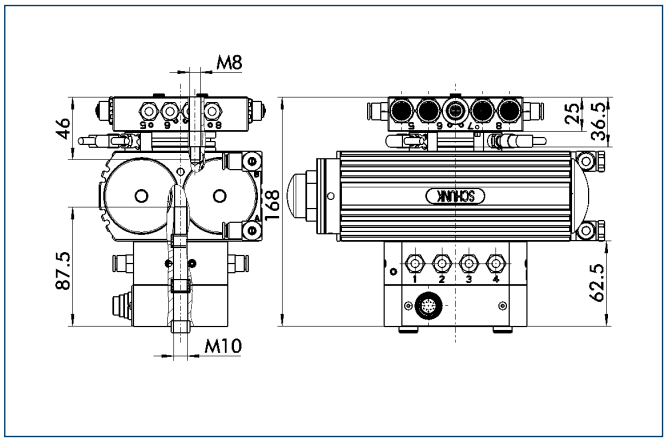
The size-specific mounting kit is required for installing the inductive proximity switches. Up to three proximity switches (2x end position, 1x center position) can be attached using the mounting kit. A mounting kit for IN 80 inductive proximity switches consists of:

3x sensor brackets complete
1x operating cam retaining disk
3x operating cams

Description	ID
AS-SRU 40	0357990
AS-SRU 40-8	0357991

ⓘ View adaptable at versions without EDF

Mounting kit for proximity switch at SRU with EDF

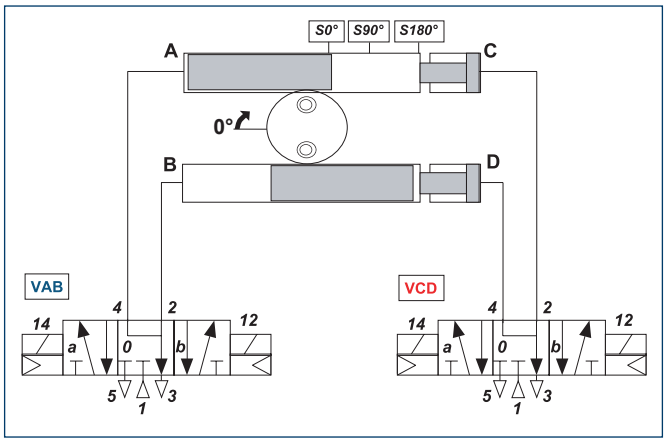


The size-specific mounting kit is required for installing the inductive proximity switches. Up to three proximity switches (2x end position, 1x center position) can be attached using the mounting kit. A mounting kit for IN 80 inductive proximity switches consists of:

3x sensor brackets complete
1x operating cam retaining disk
3x operating cams

ⓘ View adaptable at versions with EDF
The adaptor kit cannot be ordered individually. The SRU with EDF and adaptor kit is being delivered by SCHUNK completely mounted.

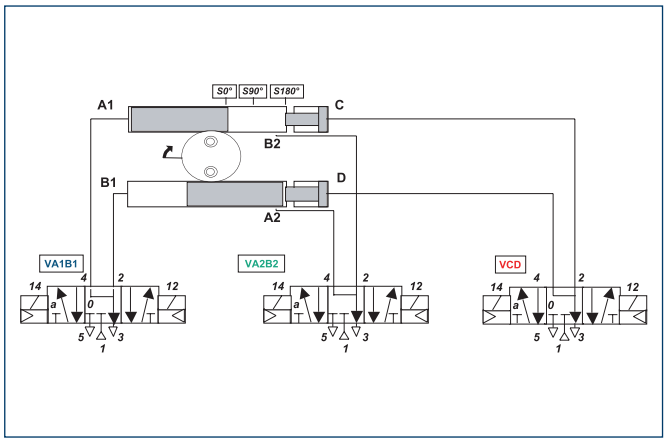
Pneumatic diagram of SRU-VM – Vertical axis



VM units with vertical swivel axis are generally actuated by two 5/3 directional control valves with bled center position. To prevent damage, it is essential that you pay attention to the actuation sequence in the Operating Manual.

ⓘ View applicable for version with or without EDF!

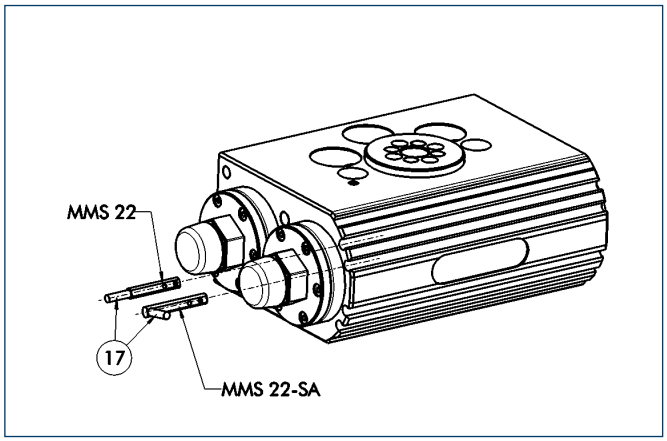
Pneumatic diagram of SRU-VM – horizontal axis



VM units with horizontal or non-vertical swivel axis must generally be actuated by three 5/3 directional control valves with bled center position. To prevent damage, it is essential that you pay attention to the actuation sequence in the Operating Manual.

ⓘ View applicable for version with or without EDF!

Sensor System



⑰ Cable outlet

End position monitoring: Electronic magnetic switches, for mounting in C-slot

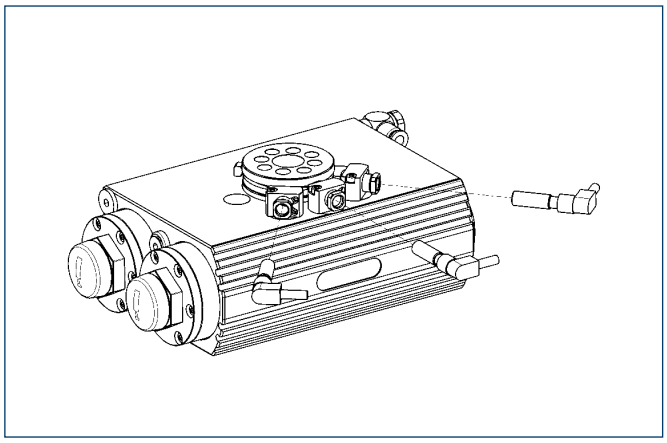
Description	ID	Recommended product
MMS 22-S-M5-NPN	0301439	
MMS 22-S-M5-NPN-SA	0301449	
MMS 22-S-M5-PNP	0301438	
MMS 22-S-M5-PNP-SA	0301448	
MMS 22-S-M8-NPN	0301433	
MMS 22-S-M8-NPN-SA	0301443	
MMS 22-S-M8-PNP	0301432	•
MMS 22-S-M8-PNP-SA	0301442	
MMSK 22-S-NPN	0301435	
MMSK 22-S-NPN-SA	0301445	
MMSK 22-S-PNP	0301434	
MMSK 22-S-PNP-SA	0301444	

Extension cables for proximity switches/magnetic switches

Description	ID
KA BG05-L 3P-0300	0301652
KA BG08-L 3P-0300-PNP	0301622
KA BW05-L 3P-0300	0301650
KA BW08-L 3P-0300-NPN	0301602
KA BW08-L 3P-0300-PNP	0301594
KA BW08-L 3P-0500-NPN	9641116
KA BW08-L 3P-0500-PNP	0301502
KA BW12-L 3P-0300-PNP	0301503
KA BW12-L 3P-0500-PNP	0301507
KV BW08-SG08 3P-0030-PNP	0301495
KV BW08-SG08 3P-0100-PNP	0301496
KV BW08-SG08 3P-0200-PNP	0301497
KV BW12-SG12 3P-0030-PNP	0301595
KV BW12-SG12 3P-0100-PNP	0301596
KV BW12-SG12 3P-0200-PNP	0301597

ⓘ Please note the minimum permitted bending radii for the sensor cables, which are generally 35 mm.

Assembly IN on SRU without EDF

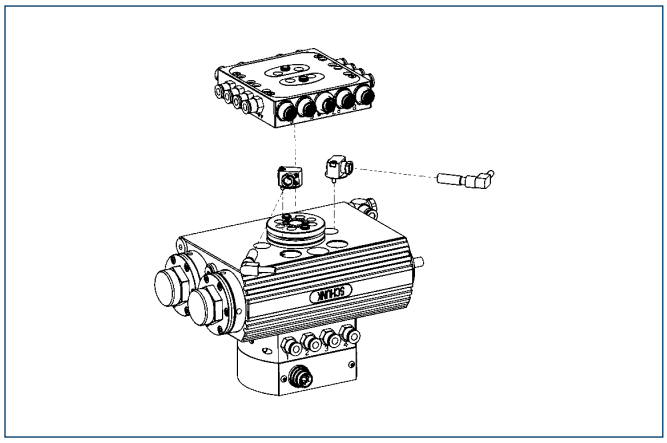


End position monitoring:
Inductive proximity switches, mounted with mounting kit

Description	ID	Recommended product
AS-SRU 40	0357990	
AS-SRU 40-8	0357991	
IN 80-S-M12	0301578	
IN 80-S-M8	0301478	•
IN-C 80-S-M8	0301475	
INK 80-S	0301550	
INK 80-SL	0301579	

ⓘ In general there are two sensors needed per swivel unit, with additional request of the middle position , three sensors plus optional an extension cable.
View adaptable at versions without EDF!

Assembly IN on SRU with EDF and add-on kit

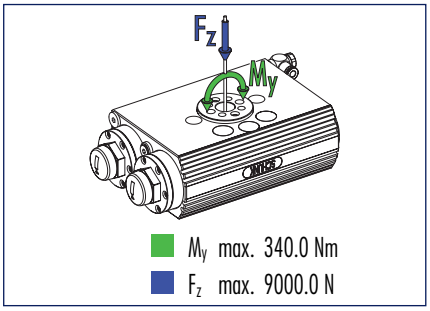


End position monitoring:
Inductive proximity switches, mounted with mounting kit

Description	ID	Recommended product
IN 80-S-M12	0301578	
IN 80-S-M8	0301478	•
IN-C 80-S-M8	0301475	
INK 80-S	0301550	
INK 80-SL	0301579	

ⓘ In general there are two sensors needed per swivel unit, with additional request of the middle position, three sensors plus optional an extension cable.
View adaptable at versions without EDF!

Pinion load



ⓘ Moments and forces may occur simultaneously. When using heavy attachments or ones with high mass moments of inertia, the speed must be restricted to ensure that the rotary movement occurs without any hitting or bouncing.

Technical data

Angle of traverse 90° and small end position adjustability of 3°

Description		SRU 50.1-90-3	SRU 50.1-90-3-8	SRU 50.2-90-3	SRU 50.2-90-3-8
	ID	0358100	0358102	0358200	0358202
Torque	[Nm]	25.0	23.3	52.0	50.3
Rotating angle	[°]	90.0	90.0	90.0	90.0
Adjustability of end positions	[°]	3.0	3.0	3.0	3.0
No. of fluid feed-throughs			8		8
IP class		65	65	65	65
Weight	[kg]	9.4	9.6	9.4	9.6
Fluid consumption per cycle (2 x nominal angle)	[cm³]	224.0	224.0	448.0	448.0
Swiveling time with middle attached load	[s]	1.9	2.2	1.6	1.9
Nominal pressure	[bar]	6.0	6.0	6.0	6.0
Minimum pressure	[bar]	3.0	3.0	3.0	3.0
Maximum pressure	[bar]	8.0	8.0	8.0	8.0
Diameter of connecting hose	[mm]	6.0	6.0	6.0	6.0
Max. pressure in fluid feed-through	[bar]		8.0		8.0
Min. ambient temperature	[°C]	5.0	5.0	5.0	5.0
Max. ambient temperature	[°C]	60.0	60.0	60.0	60.0
Repeat accuracy	[°]	0.05	0.05	0.05	0.05

Angle of traverse 180°, small end position adjustability of 3° and electric feed-through EDF

Description		SRU 50.1-90-3-8-EDF M5	SRU 50.1-90-3-8-EDF M8	SRU 50.1-90-3-8-EDF M12	SRU 50.2-90-3-8-EDF M5	SRU 50.2-90-3-8-EDF M8	SRU 50.2-90-3-8-EDF M12
ID	ID	0358103	0358104	0358105	0358203	0358204	0358205
Torque	[Nm]	23.3	23.3	23.3	50.3	50.3	50.3
Rotating angle	[°]	90.0	90.0	90.0	90.0	90.0	90.0
Adjustability of end positions	[°]	3.0	3.0	3.0	3.0	3.0	3.0
No. of fluid feed-throughs		8	8	8	8	8	8
IP class		65	65	65	65	65	65
Weight	[kg]	9.6 + 1.85	9.6 + 1.85	9.6 + 1.85	9.6 + 1.85	9.6 + 1.85	9.6 + 1.85
Fluid consumption per cycle (2 x nominal angle)	[cm³]	224.0	224.0	224.0	448.0	448.0	448.0
Swiveling time with middle attached load	[s]	2.2	2.2	2.2	1.9	1.9	1.9
Nominal pressure	[bar]	8.0	8.0	8.0	8.0	8.0	8.0
Minimum pressure	[bar]	3.0	3.0	3.0	3.0	3.0	3.0
Maximum pressure	[bar]	6.0	6.0	6.0	6.0	6.0	6.0
Diameter of connecting hose	[mm]	6.0	6.0	6.0	6.0	6.0	6.0
Max. pressure in fluid feed-through	[bar]	8.0	8.0	8.0	8.0	8.0	8.0
Min. ambient temperature	[°C]	5.0	5.0	5.0	5.0	5.0	5.0
Température ambiante max.	[°C]	60.0	60.0	60.0	60.0	60.0	60.0
Repeat accuracy	[°]	0.05	0.05	0.05	0.05	0.05	0.05
Number of E-fittings on the output end		8	8	8	8	8	8
Size of the E-connections on the output end.		M5	M8	M12	M5	M8	M12
Number of cores by EDF		10	10	10	10	10	10
maximum voltage by EDF	[V]	24.0	24.0	24.0	24.0	24.0	24.0
Max. current per wire	[A]	1.0	1.0	1.0	1.0	1.0	1.0
Max. overall current	[A]	1.0	1.0	1.0	1.0	1.0	1.0

Technical data

Angle of traverse 180° and small end position adjustability of 3°

Description		SRU 50.1-180-3	SRU 50.1-180-3-8	SRU 50.2-180-3	SRU 50.2-180-3-8
	ID	0358120	0358122	0358220	0358222
Torque	[Nm]	25.0	23.3	52.0	50.3
Rotating angle	[°]	180.0	180.0	180.0	180.0
Adjustability of end positions	[°]	3.0	3.0	3.0	3.0
No. of fluid feed-throughs			8		8
IP class		65	65	65	65
Weight	[kg]	9.3	9.5	9.3	9.5
Fluid consumption per cycle (2 x nominal angle)	[cm³]	388.0	388.0	776.0	776.0
Swiveling time with middle attached load	[s]	2.2	2.4	1.9	2.1
Nominal pressure	[bar]	6.0	6.0	6.0	6.0
Minimum pressure	[bar]	3.0	3.0	3.0	3.0
Maximum pressure	[bar]	8.0	8.0	8.0	8.0
Diameter of connecting hose	[mm]	6.0	6.0	6.0	6.0
Max. pressure in fluid feed-through	[bar]		8.0		8.0
Min. ambient temperature	[°C]	5.0	5.0	5.0	5.0
Max. ambient temperature	[°C]	60.0	60.0	60.0	60.0
Repeat accuracy	[°]	0.05	0.05	0.05	0.05

Angle of traverse 180°, small end position adjustability of 3° and electrica feed-through EDF

Description		SRU 50.1-180-3-8-EDF M5	SRU 50.1-180-3-8-EDF M8	SRU 50.1-180-3-8-EDF M12	SRU 50.2-180-3-8-EDF M5	SRU 50.2-180-3-8-EDF M8	SRU 50.2-180-3-8-EDF M12
ID	ID	0358123	0358124	0358125	0358223	0358224	0358225
Torque	[Nm]	23.3	23.3	23.3	50.3	50.3	50.3
Rotating angle	[°]	180.0	180.0	180.0	180.0	180.0	180.0
Adjustability of end positions	[°]	3.0	3.0	3.0	3.0	3.0	3.0
No. of fluid feed-throughs		8	8	8	8	8	8
IP class		65	65	65	65	65	65
Weight	[kg]	9.5 + 1.85	9.5 + 1.85	9.5 + 1.85	9.5 + 1.85	9.5 + 1.85	9.5 + 1.85
Fluid consumption per cycle (2 x nominal angle)	[cm³]	388.0	388.0	388.0	776.0	776.0	776.0
Swiveling time with middle attached load	[s]	2.4	2.4	2.4	2.1	2.1	2.1
Nominal pressure	[bar]	8.0	8.0	8.0	8.0	8.0	8.0
Minimum pressure	[bar]	3.0	3.0	3.0	3.0	3.0	3.0
Maximum pressure	[bar]	6.0	6.0	6.0	6.0	6.0	6.0
Diameter of connecting hose	[mm]	6.0	6.0	6.0	6.0	6.0	6.0
Max. pressure in fluid feed-through	[bar]	8.0	8.0	8.0	8.0	8.0	8.0
Min. ambient temperature	[°C]	5.0	5.0	5.0	5.0	5.0	5.0
Température ambiante max.	[°C]	60.0	60.0	60.0	60.0	60.0	60.0
Repeat accuracy	[°]	0.05	0.05	0.05	0.05	0.05	0.05
Number of E-fittings on the output end		8	8	8	8	8	8
Size of the E-connections on the output end.		M5	M8	M12	M5	M8	M12
Number of cores by EDF		10	10	10	10	10	10
maximum voltage by EDF	[V]	24.0	24.0	24.0	24.0	24.0	24.0
Max. current per wire	[A]	1.0	1.0	1.0	1.0	1.0	1.0
Max. overall current	[A]	1.0	1.0	1.0	1.0	1.0	1.0

Technical data

Angle of traverse 180°, small end position adjustability of 3° and pneumatic center position

Description		SRU 50.1-180-3-M	SRU 50.1-180-3-M-8	SRU 50.2-180-3-M	SRU 50.2-180-3-M-8
	ID	0358130	0358132	0358230	0358232
Torque	[Nm]	25.0	23.3	52.0	50.3
Rotating angle	[°]	180.0	180.0	180.0	180.0
Adjustability of end positions	[°]	3.0	3.0	3.0	3.0
Center position		M (pneumatic middle position)	M (pneumatic middle position)	M (pneumatic middle position)	M (pneumatic middle position)
Adjustability of center position	[°]	3.0	3.0	3.0	3.0
No. of fluid feed-throughs			8		8
IP class		65	65	65	65
Weight	[kg]	12.2	12.4	12.2	12.4
Fluid consumption per cycle (2 x nominal angle)	[cm^3]	388.0	388.0	776.0	776.0
Swiveling time with middle attached load	[s]	2.2	2.4	1.9	2.1
Nominal pressure	[bar]	6.0	6.0	6.0	6.0
Minimum pressure	[bar]	3.0	3.0	3.0	3.0
Maximum pressure	[bar]	8.0	8.0	8.0	8.0
Diameter of connecting hose	[mm]	6.0	6.0	6.0	6.0
Max. pressure in fluid feed-through	[bar]		8.0		8.0
Min. ambient temperature	[°C]	5.0	5.0	5.0	5.0
Max. ambient temperature	[°C]	60.0	60.0	60.0	60.0
Repeat accuracy	[°]	0.05	0.05	0.05	0.05

Angle of traverse 180°, small end position adjustability of 3°, pneumatic center position and electric feed-through

Description		SRU 50.1-180-3-M-8-EDF M5	SRU 50.1-180-3-M-8-EDF M8	SRU 50.1-180-3-M-8-EDF M12	SRU 50.2-180-3-M-8-EDF M5	SRU 50.2-180-3-M-8-EDF M8	SRU 50.2-180-3-M-8-EDF M12
ID	ID	0358133	0358134	0358135	0358233	0358234	0358235
Torque	[Nm]	23.3	23.3	23.3	50.3	50.3	50.3
Rotating angle	[°]	180.0	180.0	180.0	180.0	180.0	180.0
Adjustability of end positions	[°]	3.0	3.0	3.0	3.0	3.0	3.0
Center position		M (pneumatic middle position)	M (pneumatic middle position)	M (pneumatic middle position)	M (pneumatic middle position)	M (pneumatic middle position)	M (pneumatic middle position)
Central Position Andjustability	[°]	3.0	3.0	3.0	3.0	3.0	3.0
No. of fluid feed-throughs		8	8	8	8	8	8
IP class		65	65	65	65	65	65
Weight	[kg]	12.4 + 1.85	12.4 + 1.85	12.4 + 1.85	12.4 + 1.85	12.4 + 1.85	12.4 + 1.85
Fluid consumption per cycle (2 x nominal angle)	[cm^3]	388.0	388.0	388.0	776.0	776.0	776.0
Swiveling time with middle attached load	[s]	2.4	2.4	2.4	2.1	2.1	2.1
Nominal pressure	[bar]	8.0	8.0	8.0	8.0	8.0	8.0
Minimum pressure	[bar]	3.0	3.0	3.0	3.0	3.0	3.0
Maximum pressure	[bar]	6.0	6.0	6.0	6.0	6.0	6.0
Diameter of connecting hose	[mm]	6.0	6.0	6.0	6.0	6.0	6.0
Max. pressure in fluid feed-through	[bar]	8.0	8.0	8.0	8.0	8.0	8.0
Min. ambient temperature	[°C]	5.0	5.0	5.0	5.0	5.0	5.0
Température ambiante max.	[°C]	60.0	60.0	60.0	60.0	60.0	60.0
Repeat accuracy	[°]	0.05	0.05	0.05	0.05	0.05	0.05
Number of E-fittings on the output end		8	8	8	8	8	8
Size of the E-connections on the output end.		M5	M8	M12	M5	M8	M12
Number of cores by EDF		10	10	10	10	10	10
maximum voltage by EDF	[V]	24.0	24.0	24.0	24.0	24.0	24.0
Max. current per wire	[A]	1.0	1.0	1.0	1.0	1.0	1.0
Max. overall current	[A]	1.0	1.0	1.0	1.0	1.0	1.0

Technical data

Angle of traverse 180°, small end position adjustability of 3° and locked center position

Description		SRU 50.2-180-3-VM	SRU 50.2-180-3-VM-8
	ID	0358240	0358242
Torque	[Nm]	52.0	50.3
Rotating angle	[°]	180.0	180.0
Adjustability of end positions	[°]	3.0	3.0
Center position		VM (locked middle position)	VM (locked middle position)
Adjustability of center position	[°]	3.0	3.0
No. of fluid feed-throughs			8
IP class		65	65
Weight	[kg]	12.8	13.0
Fluid consumption per cycle (2 x nominal angle)	[cm³]	776.0	776.0
Swiveling time with middle attached load	[s]	1.9	2.1
Nominal pressure	[bar]	6.0	6.0
Minimum pressure	[bar]	4.0	4.0
Maximum pressure	[bar]	6.5	6.5
Diameter of connecting hose	[mm]	6.0	6.0
Max. pressure in fluid feed-through	[bar]		8.0
Min. ambient temperature	[°C]	5.0	5.0
Max. ambient temperature	[°C]	60.0	60.0
Repeat accuracy	[°]	0.05	0.05

Angle of traverse 180°, small end position adjustability of 3°, blocked center position and electric feed-through

Description		SRU 50.2-180-3-VM-8-EDF M5	SRU 50.2-180-3-VM-8-EDF M8	SRU 50.2-180-3-VM-8-EDF M12
ID	ID	0358243	0358244	0358245
Torque	[Nm]	50.3	50.3	50.3
Rotating angle	[°]	180.0	180.0	180.0
Adjustability of end positions	[°]	3.0	3.0	3.0
Center position		VM (locked middle position)	VM (locked middle position)	VM (locked middle position)
Central Position Andjustability	[°]	3.0	3.0	3.0
No. of fluid feed-throughs		8	8	8
IP class		65	65	65
Weight	[kg]	13.0 + 1.85	13.0 + 1.85	13.0 + 1.85
Fluid consumption per cycle (2 x nominal angle)	[cm³]	776.0	776.0	776.0
Swiveling time with middle attached load	[s]	2.1	2.1	2.1
Nominal pressure	[bar]	6.5	6.5	6.5
Minimum pressure	[bar]	4.0	4.0	4.0
Maximum pressure	[bar]	6.0	6.0	6.0
Diameter of connecting hose	[mm]	6.0	6.0	6.0
Max. pressure in fluid feed-through	[bar]	8.0	8.0	8.0
Min. ambient temperature	[°C]	5.0	5.0	5.0
Température ambiante max.	[°C]	60.0	60.0	60.0
Repeat accuracy	[°]	0.05	0.05	0.05
Number of E-fittings on the output end		8	8	8
Size of the E-connections on the output end.		M5	M8	M12
Number of cores by EDF		10	10	10
maximum voltage by EDF	[V]	24.0	24.0	24.0
Max. current per wire	[A]	1.0	1.0	1.0
Max. overall current	[A]	1.0	1.0	1.0

Technical data

Angle of traverse 180° and large end position adjustability of 90°

Description		SRU 50.1-180-90	SRU 50.1-180-90-8	SRU 50.2-180-90	SRU 50.2-180-90-8
	ID	0358150	0358152	0358250	0358252
Torque	[Nm]	25.0	23.3	52.0	50.3
Rotating angle	[°]	180.0	180.0	180.0	180.0
Adjustability of end positions	[°]	90.0	90.0	90.0	90.0
No. of fluid feed-throughs			8		8
IP class		65	65	65	65
Weight	[kg]	9.7	9.9	9.7	9.9
Fluid consumption per cycle (2 x nominal angle)	[cm^3]	388.0	388.0	776.0	776.0
Swiveling time with middle attached load	[s]	2.2	2.4	1.9	2.1
Nominal pressure	[bar]	6.0	6.0	6.0	6.0
Minimum pressure	[bar]	3.0	3.0	3.0	3.0
Maximum pressure	[bar]	8.0	8.0	8.0	8.0
Diameter of connecting hose	[mm]	6.0	6.0	6.0	6.0
Max. pressure in fluid feed-through	[bar]		8.0		8.0
Min. ambient temperature	[°C]	5.0	5.0	5.0	5.0
Max. ambient temperature	[°C]	60.0	60.0	60.0	60.0
Repeat accuracy	[°]	0.05	0.05	0.05	0.05

Angle of traverse 180°, large end position adjustability of 90° and electric feed-through EDF

Description		SRU 50.1-180-90-8-EDF M5	SRU 50.1-180-90-8-EDF M8	SRU 50.1-180-90-8-EDF M12	SRU 50.2-180-90-8-EDF M5	SRU 50.2-180-90-8-EDF M8	SRU 50.2-180-90-8-EDF M12
ID	ID	0358153	0358154	0358155	0358253	0358254	0358255
Torque	[Nm]	23.3	23.3	23.3	50.3	50.3	50.3
Rotating angle	[°]	180.0	180.0	180.0	180.0	180.0	180.0
Adjustability of end positions	[°]	90.0	90.0	90.0	90.0	90.0	90.0
No. of fluid feed-throughs		8	8	8	8	8	8
IP class		65	65	65	65	65	65
Weight	[kg]	9.9 + 1.85	9.9 + 1.85	9.9 + 1.85	9.9 + 1.85	9.9 + 1.85	9.9 + 1.85
Fluid consumption per cycle (2 x nominal angle)	[cm^3]	388.0	388.0	388.0	776.0	776.0	776.0
Swiveling time with middle attached load	[s]	2.4	2.4	2.4	2.1	2.1	2.1
Nominal pressure	[bar]	8.0	8.0	8.0	8.0	8.0	8.0
Minimum pressure	[bar]	3.0	3.0	3.0	3.0	3.0	3.0
Maximum pressure	[bar]	6.0	6.0	6.0	6.0	6.0	6.0
Diameter of connecting hose	[mm]	6.0	6.0	6.0	6.0	6.0	6.0
Max. pressure in fluid feed-through	[bar]	8.0	8.0	8.0	8.0	8.0	8.0
Min. ambient temperature	[°C]	5.0	5.0	5.0	5.0	5.0	5.0
Température ambiante max.	[°C]	60.0	60.0	60.0	60.0	60.0	60.0
Repeat accuracy	[°]	0.05	0.05	0.05	0.05	0.05	0.05
Number of E-fittings on the output end		8	8	8	8	8	8
Size of the E-connections on the output end.		M5	M8	M12	M5	M8	M12
Number of cores by EDF		10	10	10	10	10	10
maximum voltage by EDF	[V]	24.0	24.0	24.0	24.0	24.0	24.0
Max. current per wire	[A]	1.0	1.0	1.0	1.0	1.0	1.0
Max. overall current	[A]	1.0	1.0	1.0	1.0	1.0	1.0

Technical data

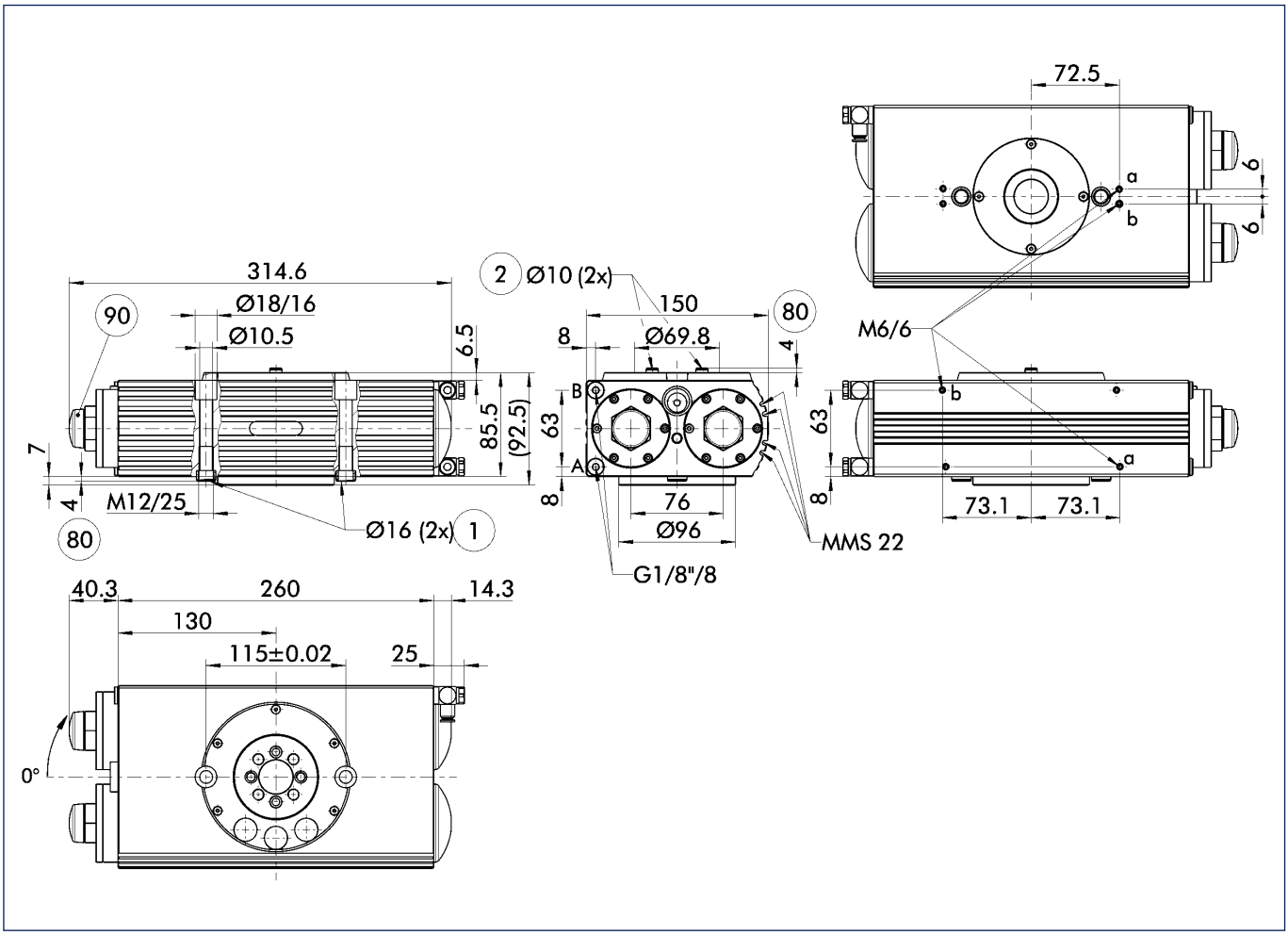
Angle of traverse 180°, large end position adjustability of 90° and pneumatic center position

Description		SRU 50.1-180-90-M	SRU 50.1-180-90-M-8	SRU 50.2-180-90-M	SRU 50.2-180-90-M-8
	ID	0358160	0358162	0358260	0358262
Torque	[Nm]	25.0	23.3	52.0	50.3
Rotating angle	[°]	180.0	180.0	180.0	180.0
Adjustability of end positions	[°]	90.0	90.0	90.0	90.0
Center position		M (pneumatic middle position)	M (pneumatic middle position)	M (pneumatic middle position)	M (pneumatic middle position)
Adjustability of center position	[°]	3.0	3.0	3.0	3.0
No. of fluid feed-throughs			8		8
IP class		65	65	65	65
Weight	[kg]	12.6	12.8	12.6	12.8
Fluid consumption per cycle (2 x nominal angle)	[cm^3]	388.0	388.0	776.0	776.0
Swiveling time with middle attached load	[s]	2.2	2.4	1.9	2.1
Nominal pressure	[bar]	6.0	6.0	6.0	6.0
Minimum pressure	[bar]	3.0	3.0	3.0	3.0
Maximum pressure	[bar]	8.0	8.0	8.0	8.0
Diameter of connecting hose	[mm]	6.0	6.0	6.0	6.0
Max. pressure in fluid feed-through	[bar]		8.0		8.0
Min. ambient temperature	[°C]	5.0	5.0	5.0	5.0
Max. ambient temperature	[°C]	60.0	60.0	60.0	60.0
Repeat accuracy	[°]	0.05	0.05	0.05	0.05

Angle of traverse 180°, large end position adjustability of 90°, pneumatic center position and electric feed-through EDF

Description		SRU 50.1-180-90-M-8-EDF M5	SRU 50.1-180-90-M-8-EDF M8	SRU 50.1-180-90-M-8-EDF M12	SRU 50.2-180-90-M-8-EDF M5	SRU 50.2-180-90-M-8-EDF M8	SRU 50.2-180-90-M-8-EDF M12
ID	ID	0358163	0358164	0358165	0358263	0358264	0358265
Torque	[Nm]	23.3	23.3	23.3	50.3	50.3	50.3
Rotating angle	[°]	180.0	180.0	180.0	180.0	180.0	180.0
Adjustability of end positions	[°]	90.0	90.0	90.0	90.0	90.0	90.0
Center position		M (pneumatic middle position)	M (pneumatic middle position)	M (pneumatic middle position)	M (pneumatic middle position)	M (pneumatic middle position)	M (pneumatic middle position)
Central Position Andjustability	[°]	3.0	3.0	3.0	3.0	3.0	3.0
No. of fluid feed-throughs		8	8	8	8	8	8
IP class		65	65	65	65	65	65
Weight	[kg]	12.8 + 1.85	12.8 + 1.85	12.8 + 1.85	12.8 + 1.85	12.8 + 1.85	12.8 + 1.85
Fluid consumption per cycle (2 x nominal angle)	[cm^3]	388.0	388.0	388.0	776.0	776.0	776.0
Swiveling time with middle attached load	[s]	2.4	2.4	2.4	2.1	2.1	2.1
Nominal pressure	[bar]	8.0	8.0	8.0	8.0	8.0	8.0
Minimum pressure	[bar]	3.0	3.0	3.0	3.0	3.0	3.0
Maximum pressure	[bar]	6.0	6.0	6.0	6.0	6.0	6.0
Diameter of connecting hose	[mm]	6.0	6.0	6.0	6.0	6.0	6.0
Max. pressure in fluid feed-through	[bar]	8.0	8.0	8.0	8.0	8.0	8.0
Min. ambient temperature	[°C]	5.0	5.0	5.0	5.0	5.0	5.0
Température ambiante max.	[°C]	60.0	60.0	60.0	60.0	60.0	60.0
Repeat accuracy	[°]	0.05	0.05	0.05	0.05	0.05	0.05
Number of E-fittings on the output end		8	8	8	8	8	8
Size of the E-connections on the output end.		M5	M8	M12	M5	M8	M12
Number of cores by EDF		10	10	10	10	10	10
maximum voltage by EDF	[V]	24.0	24.0	24.0	24.0	24.0	24.0
Max. current per wire	[A]	1.0	1.0	1.0	1.0	1.0	1.0
Max. overall current	[A]	1.0	1.0	1.0	1.0	1.0	1.0

Main views for SRU without EDF

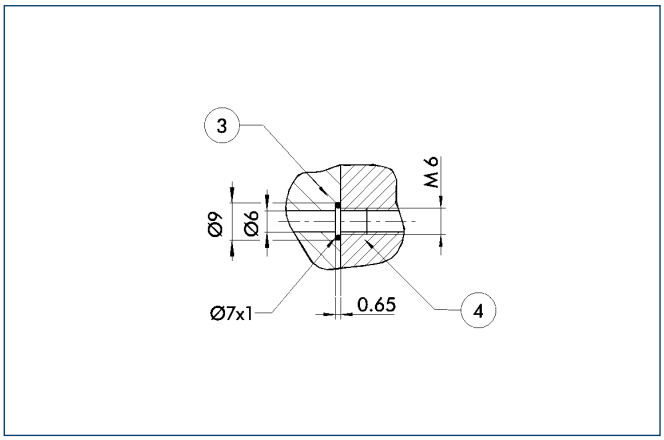


The main view shows the SRU in the most basic version, that is with an angle of traverse of 180°/90°, small end position adjustability of 3°, without center position and without fluid feed-through. Modifications to the drawings as a result of various options can be seen in the relevant additional views.

ⓘ The SDV-P pressure maintenance valve can be used to hold the position upon a loss of pressure (see „Accessories“ catalog section).

A,a Main/direct connection, clockwise rotary unit
B,b Main/direct connection, anti-clockwise rotary unit
① Linear unit connection
② Attachment connection
80 depth of the centering sleeve hole in the matching part
90 setting shock absorber-hub

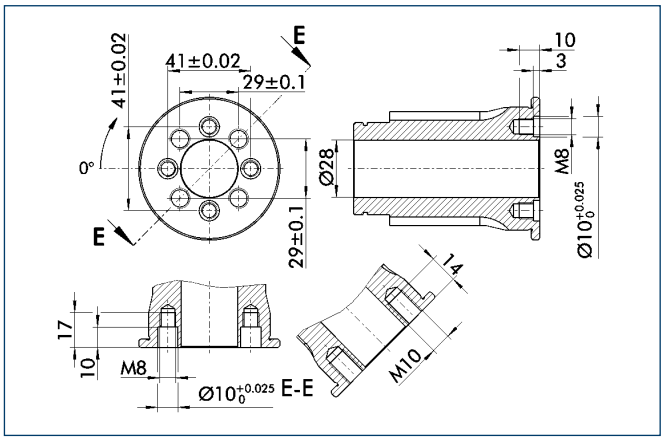
Hose-free direct connection



③ Adapter
④ Rotary unit

The direction connection is used for supplying compressed air without hoses, which are liable to faults. Instead, the pressure medium is conveyed through the bore-holes of the mounting plate.

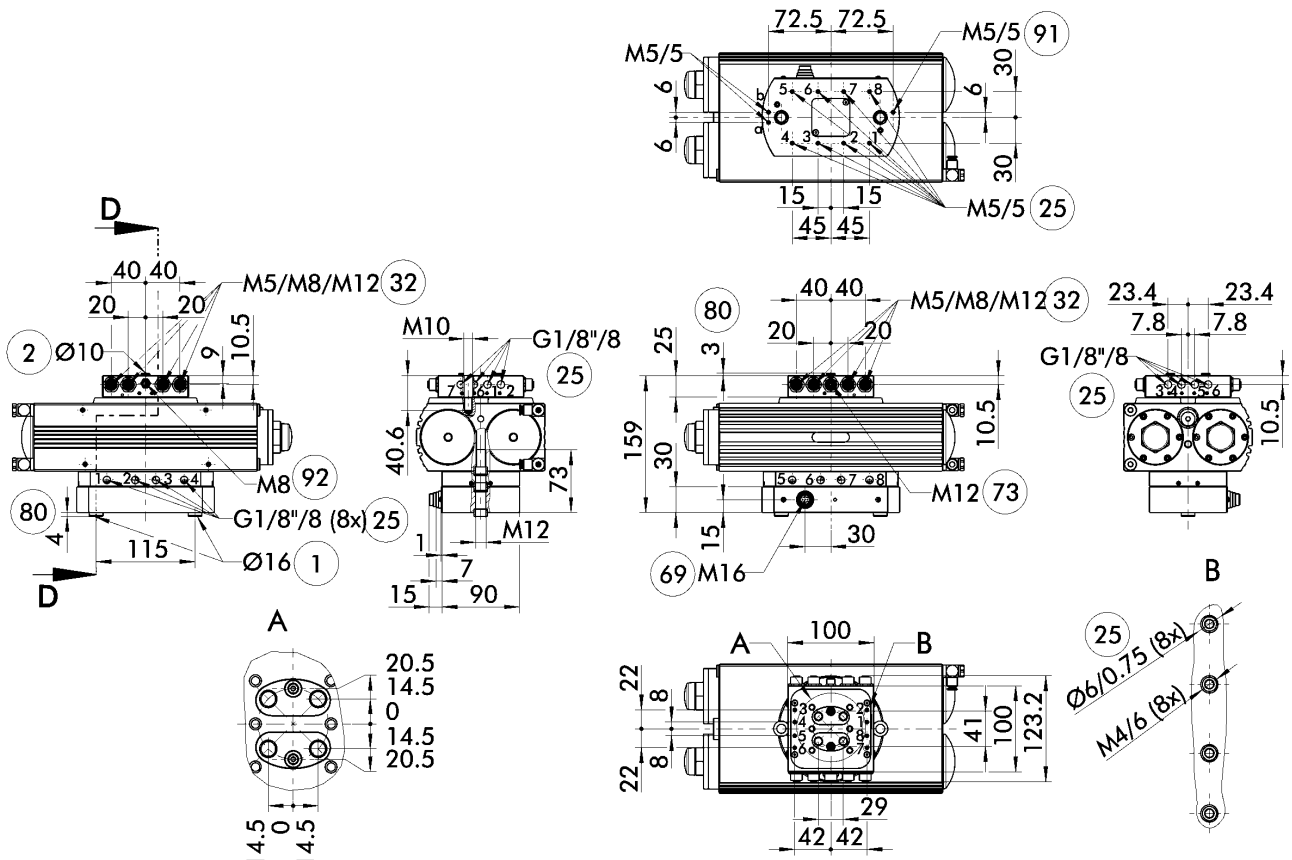
Pinion with fluid feed-through



Pinion screw connection diagram for mounting the swiveling attachment. The „4x large thread for 4x screw and 2x flat fit for guide sleeve“ screw connection diagram is preferable to the „4x small thread for 2x screw and 2x dowel screw“ (in deep fit) screw connection diagram.

ⓘ **View adaptable at versions without EDF**

Main views for SRU with EDF

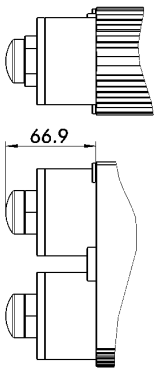


The main view shows the SRU in the most basic version, that is with an angle of traverse of 180°/90°, small end position adjustability of 3°, without center position and without fluid feed-through. Modifications to the drawings as a result of various options can be seen in the relevant additional views.

ⓘ The SDV-P pressure maintenance valve can be used to hold the position upon a loss of pressure (see „Accessories“ catalog section).

A,a Main/direct connection, clockwise rotary unit
B,b Main/direct connection, anti-clockwise rotary unit
① Rotary unit connection
② Attachment connection
㉕ Fluid feed-through
㉜ flange socket for sensor feed-through
㊾ Connection for electric feed-through
㉝ Connection BUS-throughs
㊿ depth of the centering sleeve hole in the matching part
㉛ ventilation-drill for simple admitted SRU with middle position
㉜ change Bus-/Sensor feed-through

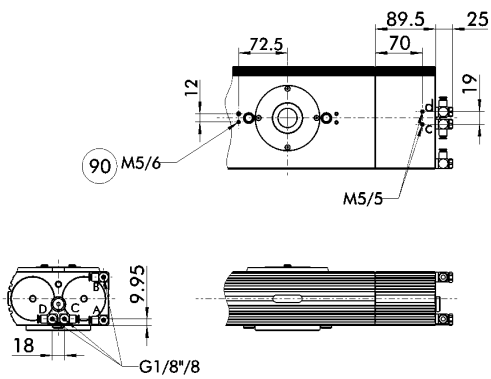
Large end position adjustability 90°



㊿ setting shock absorber-hub

Different dimensions with the option „Large end position adjustability (90°)“ This permits the end positions to be adjusted by up to 93°. More information can be found in the introduction to the series.

Pneumatic center position (M)

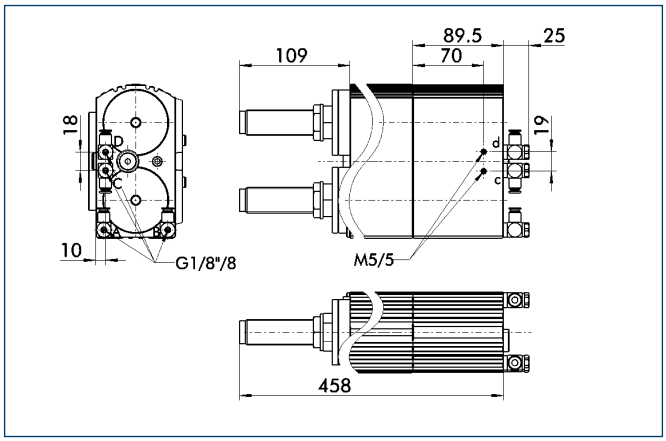


C,c Main/direct connection, center position
Dd, Main/direct connection, center position
㊿ Bleeder hole for unit with single compressed air action (.1)

Different dimensions with the „Pneumatic Center Position (M)“ option. Heavy attachments may have to level out until they reach the correct position. The locked center position (VM) offers a remedy. Units with single compressed air action (.1) and pneumatic center position need an essential bleeder hose.

ⓘ **View applicable for version with or without EDF!**

Locked center position (VM)

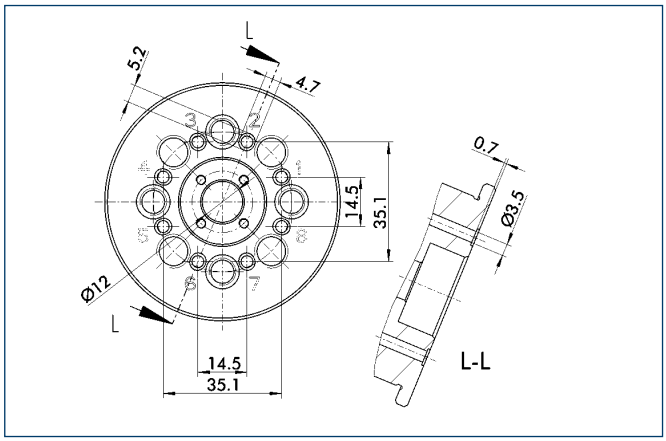


C,c Main/direct connection, center position
Dd, Main/direct connection, center position

Different dimensions with the „Locked center position (VM)“ option. The center position is locked. The unit travels to center position using the force of the main drive piston. Shock absorbers brake the travel to center position as fast as possible to prevent overshooting.

ⓘ View applicable for version with or without EDF!

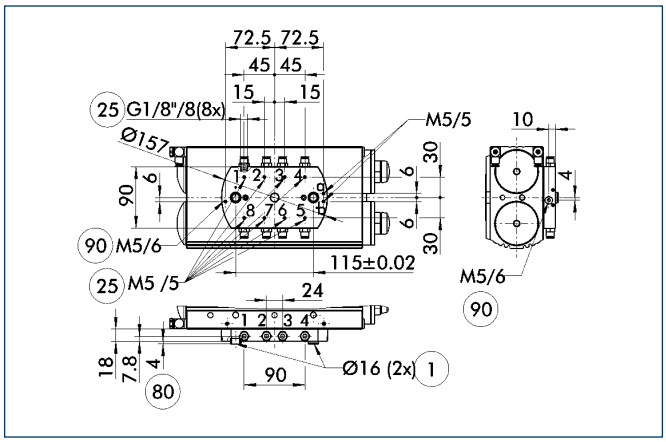
Pinion



Pinion screw connection diagram for mounting the swiveling attachment. The „4x large thread for 4x screw and 2x flat fit for guide sleeve“ screw connection diagram is preferable to the „4x small thread for 2x screw and 2x dowel screw“ (in deep fit) screw connection diagram.

ⓘ View adaptable at versions without EDF

Connections for Medium-throughs

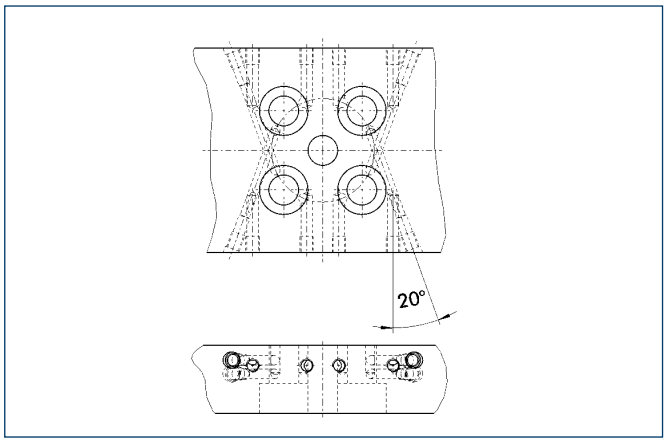


① Linear unit connection
㉕ Fluid feed-through
㉚ depth of the centering sleeve hole in the matching part
㉚ Bleeder hole for unit with single compressed air action provided with pneumatic center position (.1-M)

Lower mounting plate for the „Fluid feed-through“ option. Vacuum, gases or fluids can be conveyed. The connection may be a screw type or a direct connection.

ⓘ View adaptable at versions without EDF

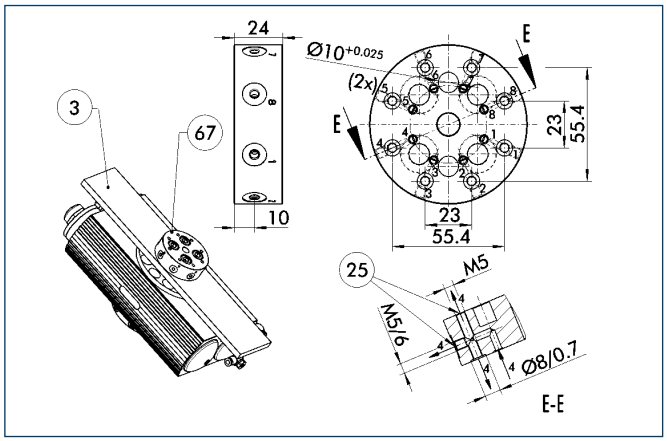
Adapter plate arrangement



Suggested here is an arrangement of the adapter plate which enables all fluid feed-throughs to be reached as easily as possible.

ⓘ View adaptable at versions without EDF

Distributor for SRU

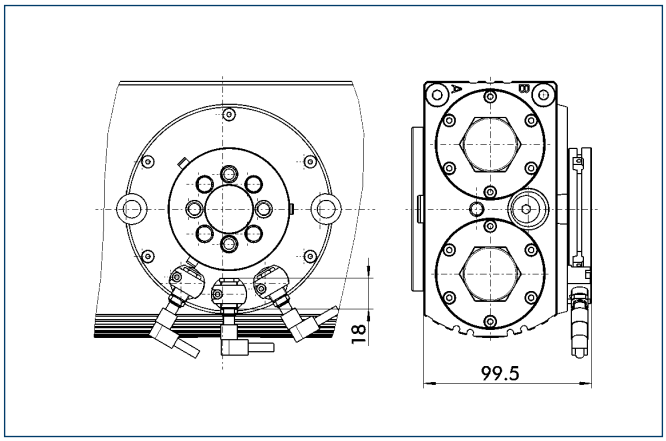


(3) Adapter
(25) Fluid feed-through
(67) Distributor for media feed-through

The distributor (ID: 0358192) for SRU 50 and SRU 60 facilitates the use of the fluid feed-throughs, both at the direct attachment to the distributor and in the lines conveying the fluid inside the adapter plate. Thanks to the distributor, only a simple drilling pattern has to be drilled in the adapter plate situated between the pinion and the distributor.

ⓘ View adaptable at versions without EDF

Mounting kit for proximity switch at SRU without EDF



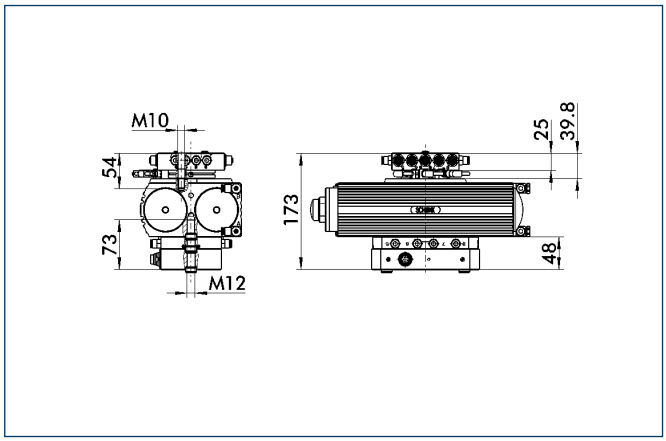
The size-specific mounting kit is required for installing the inductive proximity switches. Up to three proximity switches (2x end position, 1x center position) can be attached using the mounting kit. A mounting kit for IN 80 inductive proximity switches consists of:

3x sensor brackets complete
1x operating cam retaining disk
3x operating cams

Description	ID
AS-SRU 50/60	0358190
AS-SRU 50/60-8	0358191

ⓘ View adaptable at versions without EDF

Mounting kit for proximity switch at SRU with EDF

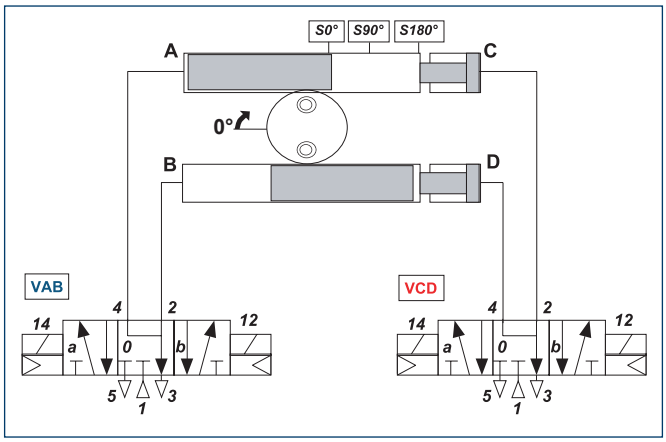


The size-specific mounting kit is required for installing the inductive proximity switches. Up to three proximity switches (2x end position, 1x center position) can be attached using the mounting kit. A mounting kit for IN 80 inductive proximity switches consists of:

3x sensor brackets complete
1x operating cam retaining disk
3x operating cams

ⓘ View adaptable at versions with EDF
The adaptor kit cannot be ordered individually. The SRU with EDF and adaptor kit is being delivered by SCHUNK completely mounted.

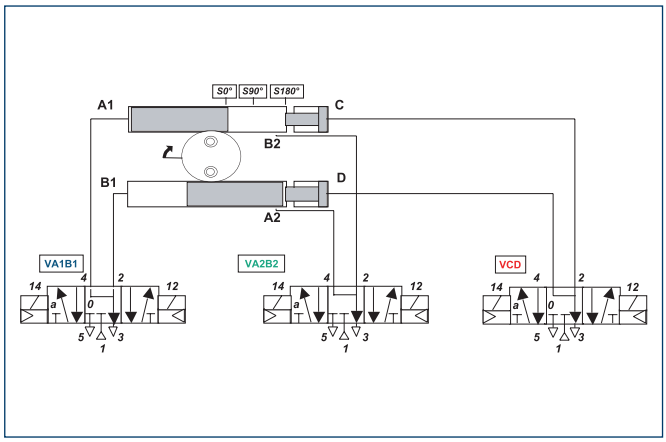
Pneumatic diagram of SRU-VM – Vertical axis



VM units with vertical swivel axis are generally actuated by two 5/3 directional control valves with bled center position. To prevent damage, it is essential that you pay attention to the actuation sequence in the Operating Manual.

ⓘ View applicable for version with or without EDF!

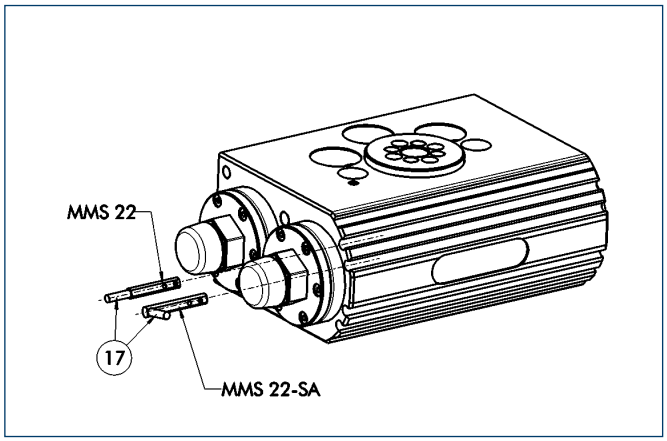
Pneumatic diagram of SRU-VM – horizontal axis



VM units with horizontal or non-vertical swivel axis must generally be actuated by three 5/3 directional control valves with bled center position. To prevent damage, it is essential that you pay attention to the actuation sequence in the Operating Manual.

ⓘ View applicable for version with or without EDF!

Sensor System



⑰ Cable outlet

End position monitoring: Electronic magnetic switches, for mounting in C-slot

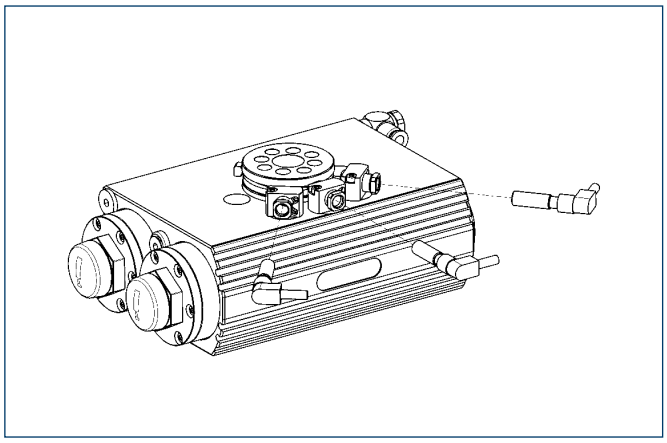
Description	ID	Recommended product
MMS 22-S-M5-NPN	0301439	
MMS 22-S-M5-NPN-SA	0301449	
MMS 22-S-M5-PNP	0301438	
MMS 22-S-M5-PNP-SA	0301448	
MMS 22-S-M8-NPN	0301433	
MMS 22-S-M8-NPN-SA	0301443	
MMS 22-S-M8-PNP	0301432	•
MMS 22-S-M8-PNP-SA	0301442	
MMSK 22-S-NPN	0301435	
MMSK 22-S-NPN-SA	0301445	
MMSK 22-S-PNP	0301434	
MMSK 22-S-PNP-SA	0301444	

Extension cables for proximity switches/magnetic switches

Description	ID
KA BG05-L 3P-0300	0301652
KA BG08-L 3P-0300-PNP	0301622
KA BW05-L 3P-0300	0301650
KA BW08-L 3P-0300-NPN	0301602
KA BW08-L 3P-0300-PNP	0301594
KA BW08-L 3P-0500-NPN	9641116
KA BW08-L 3P-0500-PNP	0301502
KA BW12-L 3P-0300-PNP	0301503
KA BW12-L 3P-0500-PNP	0301507
KV BW08-SG08 3P-0030-PNP	0301495
KV BW08-SG08 3P-0100-PNP	0301496
KV BW08-SG08 3P-0200-PNP	0301497
KV BW12-SG12 3P-0030-PNP	0301595
KV BW12-SG12 3P-0100-PNP	0301596
KV BW12-SG12 3P-0200-PNP	0301597

ⓘ Please note the minimum permitted bending radii for the sensor cables, which are generally 35 mm.

Assembly IN on SRU without EDF

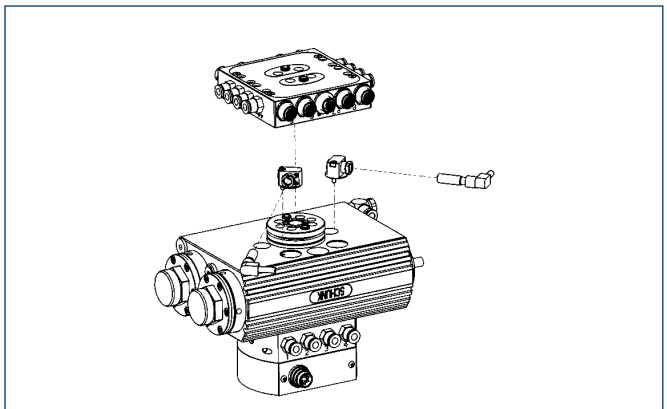


End position monitoring:
Inductive proximity switches, mounted with mounting kit

Description	ID	Recommended product
AS-SRU 50/60	0358190	
AS-SRU 50/60-8	0358191	
IN 80-S-M12	0301578	
IN 80-S-M8	0301478	•
IN-C 80-S-M8	0301475	
INK 80-S	0301550	
INK 80-SL	0301579	

ⓘ In general there are two sensors needed per swivel unit, with additional request of the middle position , three sensors plus optional an extension cable.
View adaptable at versions without EDF!

Assembly IN on SRU with EDF and add-on kit

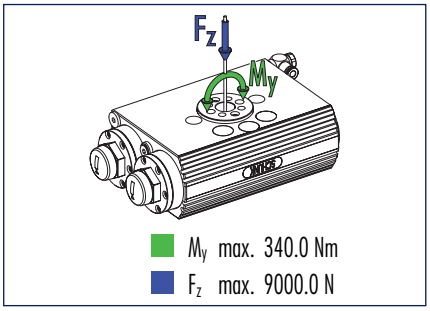


End position monitoring:
Inductive proximity switches, mounted with mounting kit

Description	ID	Recommended product
IN 80-S-M12	0301578	
IN 80-S-M8	0301478	•
IN-C 80-S-M8	0301475	
INK 80-S	0301550	
INK 80-SL	0301579	

ⓘ In general there are two sensors needed per swivel unit, with additional request of the middle position, three sensors plus optional an extension cable.
View adaptable at versions without EDF!

Pinion load



ⓘ Moments and forces may occur simultaneously. When using heavy attachments or ones with high mass moments of inertia, the speed must be restricted to ensure that the rotary movement occurs without any hitting or bouncing.

Technical data

Angle of traverse 90° and small end position adjustability of 3°

Description		SRU 60.1-90-3	SRU 60.1-90-3-8	SRU 60.2-90-3	SRU 60.2-90-3-8
	ID	0358300	0358302	0358400	0358402
Torque	[Nm]	36.0	34.0	72.0	70.0
Rotating angle	[°]	90.0	90.0	90.0	90.0
Adjustability of end positions	[°]	3.0	3.0	3.0	3.0
No. of fluid feed-throughs			8		8
IP class		65	65	65	65
Weight	[kg]	13.0	13.2	13.0	13.2
Fluid consumption per cycle (2 x nominal angle)	[cm³]	328.0	328.0	656.0	656.0
Swiveling time with middle attached load	[s]	1.9	2.3	1.7	2.0
Nominal pressure	[bar]	6.0	6.0	6.0	6.0
Minimum pressure	[bar]	3.0	3.0	3.0	3.0
Maximum pressure	[bar]	8.0	8.0	8.0	8.0
Diameter of connecting hose	[mm]	6.0	6.0	6.0	6.0
Max. pressure in fluid feed-through	[bar]		8.0		8.0
Min. ambient temperature	[°C]	5.0	5.0	5.0	5.0
Max. ambient temperature	[°C]	60.0	60.0	60.0	60.0
Repeat accuracy	[°]	0.05	0.05	0.05	0.05

Angle of traverse 180°, small end position adjustability of 3° and electric feed-through EDF

Description		SRU 60.1-90-3-8-EDF M5	SRU 60.1-90-3-8-EDF M8	SRU 60.1-90-3-8-EDF M12	SRU 60.2-90-3-8-EDF M5	SRU 60.2-90-3-8-EDF M8	SRU 60.2-90-3-8-EDF M12
ID	ID	0358303	0358304	0358305	0358403	0358404	0358405
Torque	[Nm]	34.0	34.0	34.0	70.0	70.0	70.0
Rotating angle	[°]	90.0	90.0	90.0	90.0	90.0	90.0
Adjustability of end positions	[°]	3.0	3.0	3.0	3.0	3.0	3.0
No. of fluid feed-throughs		8	8	8	8	8	8
IP class		65	65	65	65	65	65
Weight	[kg]	13.2 + 1.85	13.2 + 1.85	13.2 + 1.85	13.2 + 1.85	13.2 + 1.85	13.2 + 1.85
Fluid consumption per cycle (2 x nominal angle)	[cm³]	328.0	328.0	328.0	656.0	656.0	656.0
Swiveling time with middle attached load	[s]	2.3	2.3	2.3	2.0	2.0	2.0
Nominal pressure	[bar]	8.0	8.0	8.0	8.0	8.0	8.0
Minimum pressure	[bar]	3.0	3.0	3.0	3.0	3.0	3.0
Maximum pressure	[bar]	6.0	6.0	6.0	6.0	6.0	6.0
Diameter of connecting hose	[mm]	6.0	6.0	6.0	6.0	6.0	6.0
Max. pressure in fluid feed-through	[bar]	8.0	8.0	8.0	8.0	8.0	8.0
Min. ambient temperature	[°C]	5.0	5.0	5.0	5.0	5.0	5.0
Température ambiante max.	[°C]	60.0	60.0	60.0	60.0	60.0	60.0
Repeat accuracy	[°]	0.05	0.05	0.05	0.05	0.05	0.05
Number of E-fittings on the output end		8	8	8	8	8	8
Size of the E-connections on the output end.		M5	M8	M12	M5	M8	M12
Number of cores by EDF		10	10	10	10	10	10
maximum voltage by EDF	[V]	24.0	24.0	24.0	24.0	24.0	24.0
Max. current per wire	[A]	1.0	1.0	1.0	1.0	1.0	1.0
Max. overall current	[A]	1.0	1.0	1.0	1.0	1.0	1.0

Technical data

Angle of traverse 180° and small end position adjustability of 3°

Description		SRU 60.1-180-3	SRU 60.1-180-3-8	SRU 60.2-180-3	SRU 60.2-180-3-8
	ID	0358320	0358322	0358420	0358422
Torque	[Nm]	36.0	34.0	72.0	70.0
Rotating angle	[°]	180.0	180.0	180.0	180.0
Adjustability of end positions	[°]	3.0	3.0	3.0	3.0
No. of fluid feed-throughs			8		8
IP class		65	65	65	65
Weight	[kg]	12.8	13.0	12.8	13.0
Fluid consumption per cycle (2 x nominal angle)	[cm³]	560.0	560.0	1120.0	1120.0
Swiveling time with middle attached load	[s]	2.2	2.5	1.9	2.2
Nominal pressure	[bar]	6.0	6.0	6.0	6.0
Minimum pressure	[bar]	3.0	3.0	3.0	3.0
Maximum pressure	[bar]	8.0	8.0	8.0	8.0
Diameter of connecting hose	[mm]	6.0	6.0	6.0	6.0
Max. pressure in fluid feed-through	[bar]		8.0		8.0
Min. ambient temperature	[°C]	5.0	5.0	5.0	5.0
Max. ambient temperature	[°C]	60.0	60.0	60.0	60.0
Repeat accuracy	[°]	0.05	0.05	0.05	0.05

Angle of traverse 180°, small end position adjustability of 3° and electrica feed-through EDF

Description		SRU 60.1-180-3-8-EDF M5	SRU 60.1-180-3-8-EDF M8	SRU 60.1-180-3-8-EDF M12	SRU 60.2-180-3-8-EDF M5	SRU 60.2-180-3-8-EDF M8	SRU 60.2-180-3-8-EDF M12
ID	ID	0358323	0358324	0358325	0358423	0358424	0358425
Torque	[Nm]	34.0	34.0	34.0	70.0	70.0	70.0
Rotating angle	[°]	180.0	180.0	180.0	180.0	180.0	180.0
Adjustability of end positions	[°]	3.0	3.0	3.0	3.0	3.0	3.0
No. of fluid feed-throughs		8	8	8	8	8	8
IP class		65	65	65	65	65	65
Weight	[kg]	13.0 + 1.85	13.0 + 1.85	13.0 + 1.85	13.0 + 1.85	13.0 + 1.85	13.0 + 1.85
Fluid consumption per cycle (2 x nominal angle)	[cm³]	560.0	560.0	560.0	1120.0	1120.0	1120.0
Swiveling time with middle attached load	[s]	2.5	2.5	2.5	2.2	2.2	2.2
Nominal pressure	[bar]	8.0	8.0	8.0	8.0	8.0	8.0
Minimum pressure	[bar]	3.0	3.0	3.0	3.0	3.0	3.0
Maximum pressure	[bar]	6.0	6.0	6.0	6.0	6.0	6.0
Diameter of connecting hose	[mm]	6.0	6.0	6.0	6.0	6.0	6.0
Max. pressure in fluid feed-through	[bar]	8.0	8.0	8.0	8.0	8.0	8.0
Min. ambient temperature	[°C]	5.0	5.0	5.0	5.0	5.0	5.0
Température ambiante max.	[°C]	60.0	60.0	60.0	60.0	60.0	60.0
Repeat accuracy	[°]	0.05	0.05	0.05	0.05	0.05	0.05
Number of E-fittings on the output end		8	8	8	8	8	8
Size of the E-connections on the output end.		M5	M8	M12	M5	M8	M12
Number of cores by EDF		10	10	10	10	10	10
maximum voltage by EDF	[V]	24.0	24.0	24.0	24.0	24.0	24.0
Max. current per wire	[A]	1.0	1.0	1.0	1.0	1.0	1.0
Max. overall current	[A]	1.0	1.0	1.0	1.0	1.0	1.0

Technical data

Angle of traverse 180°, small end position adjustability of 3° and pneumatic center position

Description		SRU 60.1-180-3-M	SRU 60.1-180-3-M-8	SRU 60.2-180-3-M	SRU 60.2-180-3-M-8
	ID	0358330	0358332	0358430	0358432
Torque	[Nm]	36.0	34.0	72.0	70.0
Rotating angle	[°]	180.0	180.0	180.0	180.0
Adjustability of end positions	[°]	3.0	3.0	3.0	3.0
Center position		M (pneumatic middle position)	M (pneumatic middle position)	M (pneumatic middle position)	M (pneumatic middle position)
Adjustability of center position	[°]	3.0	3.0	3.0	3.0
No. of fluid feed-throughs			8		8
IP class		65	65	65	65
Weight	[kg]	16.8	17.0	16.8	17.0
Fluid consumption per cycle (2 x nominal angle)	[cm^3]	560.0	560.0	1120.0	1120.0
Swiveling time with middle attached load	[s]	2.2	2.5	1.9	2.2
Nominal pressure	[bar]	6.0	6.0	6.0	6.0
Minimum pressure	[bar]	3.0	3.0	3.0	3.0
Maximum pressure	[bar]	8.0	8.0	8.0	8.0
Diameter of connecting hose	[mm]	6.0	6.0	6.0	6.0
Max. pressure in fluid feed-through	[bar]		8.0		8.0
Min. ambient temperature	[°C]	5.0	5.0	5.0	5.0
Max. ambient temperature	[°C]	60.0	60.0	60.0	60.0
Repeat accuracy	[°]	0.05	0.05	0.05	0.05

Angle of traverse 180°, small end position adjustability of 3°, pneumatic center position and electric feed-through

Description		SRU 60.1-180-3-M-8-EDF M5	SRU 60.1-180-3-M-8-EDF M8	SRU 60.1-180-3-M-8-EDF M12	SRU 60.2-180-3-M-8-EDF M5	SRU 60.2-180-3-M-8-EDF M8	SRU 60.2-180-3-M-8-EDF M12
ID	ID	0358333	0358334	0358335	0358433	0358434	0358435
Torque	[Nm]	34.0	34.0	34.0	70.0	70.0	70.0
Rotating angle	[°]	180.0	180.0	180.0	180.0	180.0	180.0
Adjustability of end positions	[°]	3.0	3.0	3.0	3.0	3.0	3.0
Center position		M (pneumatic middle position)	M (pneumatic middle position)	M (pneumatic middle position)	M (pneumatic middle position)	M (pneumatic middle position)	M (pneumatic middle position)
Central Position Andjustability	[°]	3.0	3.0	3.0	3.0	3.0	3.0
No. of fluid feed-throughs		8	8	8	8	8	8
IP class		65	65	65	65	65	65
Weight	[kg]	17.0 + 1.85	17.0 + 1.85	17.0 + 1.85	17.0 + 1.85	17.0 + 1.85	17.0 + 1.85
Fluid consumption per cycle (2 x nominal angle)	[cm^3]	560.0	560.0	560.0	1120.0	1120.0	1120.0
Swiveling time with middle attached load	[s]	2.5	2.5	2.5	2.2	2.2	2.2
Nominal pressure	[bar]	8.0	8.0	8.0	8.0	8.0	8.0
Minimum pressure	[bar]	3.0	3.0	3.0	3.0	3.0	3.0
Maximum pressure	[bar]	6.0	6.0	6.0	6.0	6.0	6.0
Diameter of connecting hose	[mm]	6.0	6.0	6.0	6.0	6.0	6.0
Max. pressure in fluid feed-through	[bar]	8.0	8.0	8.0	8.0	8.0	8.0
Min. ambient temperature	[°C]	5.0	5.0	5.0	5.0	5.0	5.0
Température ambiante max.	[°C]	60.0	60.0	60.0	60.0	60.0	60.0
Repeat accuracy	[°]	0.05	0.05	0.05	0.05	0.05	0.05
Number of E-fittings on the output end		8	8	8	8	8	8
Size of the E-connections on the output end.		M5	M8	M12	M5	M8	M12
Number of cores by EDF		10	10	10	10	10	10
maximum voltage by EDF	[V]	24.0	24.0	24.0	24.0	24.0	24.0
Max. current per wire	[A]	1.0	1.0	1.0	1.0	1.0	1.0
Max. overall current	[A]	1.0	1.0	1.0	1.0	1.0	1.0

Technical data

Angle of traverse 180°, small end position adjustability of 3° and locked center position

Description		SRU 60.2-180-3-VM	SRU 60.2-180-3-VM-8
	ID	0358440	0358442
Torque	[Nm]	72.0	70.0
Rotating angle	[°]	180.0	180.0
Adjustability of end positions	[°]	3.0	3.0
Center position		VM (locked middle position)	VM (locked middle position)
Adjustability of center position	[°]	3.0	3.0
No. of fluid feed-throughs			8
IP class		65	65
Weight	[kg]	17.8	18.0
Fluid consumption per cycle (2 x nominal angle)	[cm³]	1120.0	1120.0
Swiveling time with middle attached load	[s]	1.9	2.2
Nominal pressure	[bar]	6.0	6.0
Minimum pressure	[bar]	4.0	4.0
Maximum pressure	[bar]	6.5	6.5
Diameter of connecting hose	[mm]	6.0	6.0
Max. pressure in fluid feed-through	[bar]		8.0
Min. ambient temperature	[°C]	5.0	5.0
Max. ambient temperature	[°C]	60.0	60.0
Repeat accuracy	[°]	0.05	0.05

Angle of traverse 180°, small end position adjustability of 3°, blocked center position and electric feed-through

Description		SRU 60.2-180-3-VM-8-EDF M5	SRU 60.2-180-3-VM-8-EDF M8	SRU 60.2-180-3-VM-8-EDF M12
ID	ID	0358443	0358444	0358445
Torque	[Nm]	70.0	70.0	70.0
Rotating angle	[°]	180.0	180.0	180.0
Adjustability of end positions	[°]	3.0	3.0	3.0
Center position		VM (locked middle position)	VM (locked middle position)	VM (locked middle position)
Central Position Andjustability	[°]	3.0	3.0	3.0
No. of fluid feed-throughs		8	8	8
IP class		65	65	65
Weight	[kg]	18.0 + 1.85	18.0 + 1.85	18.0 + 1.85
Fluid consumption per cycle (2 x nominal angle)	[cm³]	1120.0	1120.0	1120.0
Swiveling time with middle attached load	[s]	2.2	2.2	2.2
Nominal pressure	[bar]	6.5	6.5	6.5
Minimum pressure	[bar]	4.0	4.0	4.0
Maximum pressure	[bar]	6.0	6.0	6.0
Diameter of connecting hose	[mm]	6.0	6.0	6.0
Max. pressure in fluid feed-through	[bar]	8.0	8.0	8.0
Min. ambient temperature	[°C]	5.0	5.0	5.0
Température ambiante max.	[°C]	60.0	60.0	60.0
Repeat accuracy	[°]	0.05	0.05	0.05
Number of E-fittings on the output end		8	8	8
Size of the E-connections on the output end.		M5	M8	M12
Number of cores by EDF		10	10	10
maximum voltage by EDF	[V]	24.0	24.0	24.0
Max. current per wire	[A]	1.0	1.0	1.0
Max. overall current	[A]	1.0	1.0	1.0

Technical data

Angle of traverse 180° and large end position adjustability of 90°

Description		SRU 60.1-180-90	SRU 60.1-180-90-8	SRU 60.2-180-90	SRU 60.2-180-90-8
	ID	0358350	0358352	0358450	0358452
Torque	[Nm]	36.0	34.0	72.0	70.0
Rotating angle	[°]	180.0	180.0	180.0	180.0
Adjustability of end positions	[°]	90.0	90.0	90.0	90.0
No. of fluid feed-throughs			8		8
IP class		65	65	65	65
Weight	[kg]	13.5	13.7	13.5	13.7
Fluid consumption per cycle (2 x nominal angle)	[cm^3]	560.0	560.0	1120.0	1120.0
Swiveling time with middle attached load	[s]	2.2	2.5	1.9	2.2
Nominal pressure	[bar]	6.0	6.0	6.0	6.0
Minimum pressure	[bar]	3.0	3.0	3.0	3.0
Maximum pressure	[bar]	8.0	8.0	8.0	8.0
Diameter of connecting hose	[mm]	6.0	6.0	6.0	6.0
Max. pressure in fluid feed-through	[bar]		8.0		8.0
Min. ambient temperature	[°C]	5.0	5.0	5.0	5.0
Max. ambient temperature	[°C]	60.0	60.0	60.0	60.0
Repeat accuracy	[°]	0.05	0.05	0.05	0.05

Angle of traverse 180°, large end position adjustability of 90° and electric feed-through EDF

Description		SRU 60.1-180-90-8-EDF M5	SRU 60.1-180-90-8-EDF M8	SRU 60.1-180-90-8-EDF M12	SRU 60.2-180-90-8-EDF M5	SRU 60.2-180-90-8-EDF M8	SRU 60.2-180-90-8-EDF M12
ID	ID	0358353	0358354	0358355	0358453	0358454	0358455
Torque	[Nm]	34.0	34.0	34.0	70.0	70.0	70.0
Rotating angle	[°]	180.0	180.0	180.0	180.0	180.0	180.0
Adjustability of end positions	[°]	90.0	90.0	90.0	90.0	90.0	90.0
No. of fluid feed-throughs		8	8	8	8	8	8
IP class		65	65	65	65	65	65
Weight	[kg]	13.7 + 1.85	13.7 + 1.85	13.7 + 1.85	13.7 + 1.85	13.7 + 1.85	13.7 + 1.85
Fluid consumption per cycle (2 x nominal angle)	[cm^3]	560.0	560.0	560.0	1120.0	1120.0	1120.0
Swiveling time with middle attached load	[s]	2.5	2.5	2.5	2.2	2.2	2.2
Nominal pressure	[bar]	8.0	8.0	8.0	8.0	8.0	8.0
Minimum pressure	[bar]	3.0	3.0	3.0	3.0	3.0	3.0
Maximum pressure	[bar]	6.0	6.0	6.0	6.0	6.0	6.0
Diameter of connecting hose	[mm]	6.0	6.0	6.0	6.0	6.0	6.0
Max. pressure in fluid feed-through	[bar]	8.0	8.0	8.0	8.0	8.0	8.0
Min. ambient temperature	[°C]	5.0	5.0	5.0	5.0	5.0	5.0
Température ambiante max.	[°C]	60.0	60.0	60.0	60.0	60.0	60.0
Repeat accuracy	[°]	0.05	0.05	0.05	0.05	0.05	0.05
Number of E-fittings on the output end		8	8	8	8	8	8
Size of the E-connections on the output end.		M5	M8	M12	M5	M8	M12
Number of cores by EDF		10	10	10	10	10	10
maximum voltage by EDF	[V]	24.0	24.0	24.0	24.0	24.0	24.0
Max. current per wire	[A]	1.0	1.0	1.0	1.0	1.0	1.0
Max. overall current	[A]	1.0	1.0	1.0	1.0	1.0	1.0

Technical data

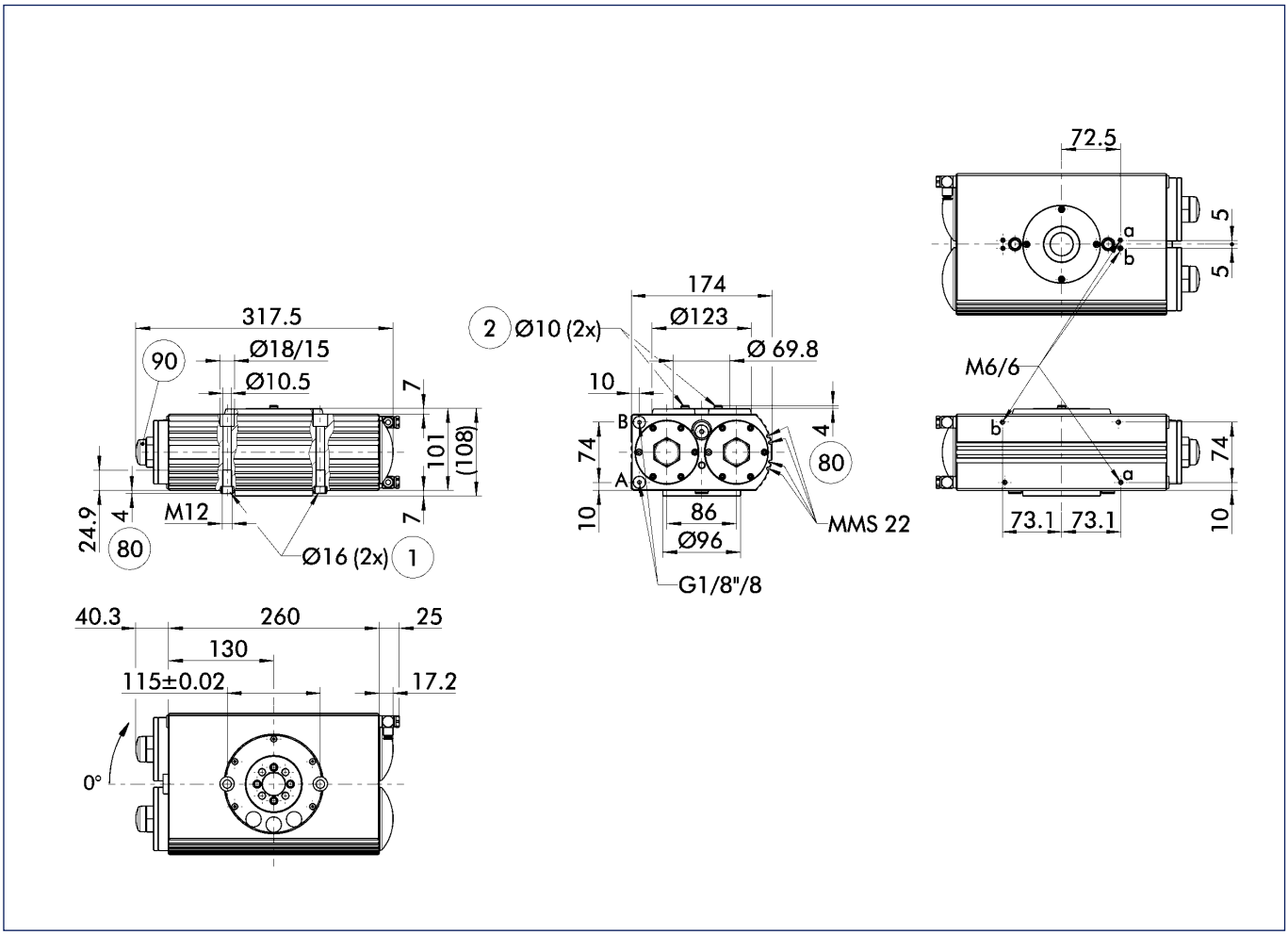
Angle of traverse 180°, large end position adjustability of 90° and pneumatic center position

Description		SRU 60.1-180-90-M	SRU 60.1-180-90-M-8	SRU 60.2-180-90-M	SRU 60.2-180-90-M-8
	ID	0358360	0358362	0358460	0358462
Torque	[Nm]	36.0	34.0	72.0	70.0
Rotating angle	[°]	180.0	180.0	180.0	180.0
Adjustability of end positions	[°]	90.0	90.0	90.0	90.0
Center position		M (pneumatic middle position)	M (pneumatic middle position)	M (pneumatic middle position)	M (pneumatic middle position)
Adjustability of center position	[°]	3.0	3.0	3.0	3.0
No. of fluid feed-throughs			8		8
IP class		65	65	65	65
Weight	[kg]	17.5	17.7	17.5	17.7
Fluid consumption per cycle (2 x nominal angle)	[cm³]	560.0	560.0	1120.0	1120.0
Swiveling time with middle attached load	[s]	2.2	2.5	1.9	2.2
Nominal pressure	[bar]	6.0	6.0	6.0	6.0
Minimum pressure	[bar]	3.0	3.0	3.0	3.0
Maximum pressure	[bar]	8.0	8.0	8.0	8.0
Diameter of connecting hose	[mm]	6.0	6.0	6.0	6.0
Max. pressure in fluid feed-through	[bar]		8.0		8.0
Min. ambient temperature	[°C]	5.0	5.0	5.0	5.0
Max. ambient temperature	[°C]	60.0	60.0	60.0	60.0
Repeat accuracy	[°]	0.05	0.05	0.05	0.05

Angle of traverse 180°, large end position adjustability of 90°, pneumatic center position and electric feed-through EDF

Description		SRU 60.1-180-90-M-8-EDF M5	SRU 60.1-180-90-M-8-EDF M8	SRU 60.1-180-90-M-8-EDF M12	SRU 60.2-180-90-M-8-EDF M5	SRU 60.2-180-90-M-8-EDF M8	SRU 60.2-180-90-M-8-EDF M12
ID	ID	0358363	0358364	0358365	0358463	0358464	0358465
Torque	[Nm]	34.0	34.0	34.0	70.0	70.0	70.0
Rotating angle	[°]	180.0	180.0	180.0	180.0	180.0	180.0
Adjustability of end positions	[°]	90.0	90.0	90.0	90.0	90.0	90.0
Center position		M (pneumatic middle position)	M (pneumatic middle position)	M (pneumatic middle position)	M (pneumatic middle position)	M (pneumatic middle position)	M (pneumatic middle position)
Central Position Andjustability	[°]	3.0	3.0	3.0	3.0	3.0	3.0
No. of fluid feed-throughs		8	8	8	8	8	8
IP class		65	65	65	65	65	65
Weight	[kg]	17.7 + 1.85	17.7 + 1.85	17.7 + 1.85	17.7 + 1.85	17.7 + 1.85	17.7 + 1.85
Fluid consumption per cycle (2 x nominal angle)	[cm³]	560.0	560.0	560.0	1120.0	1120.0	1120.0
Swiveling time with middle attached load	[s]	2.5	2.5	2.5	2.2	2.2	2.2
Nominal pressure	[bar]	8.0	8.0	8.0	8.0	8.0	8.0
Minimum pressure	[bar]	3.0	3.0	3.0	3.0	3.0	3.0
Maximum pressure	[bar]	6.0	6.0	6.0	6.0	6.0	6.0
Diameter of connecting hose	[mm]	6.0	6.0	6.0	6.0	6.0	6.0
Max. pressure in fluid feed-through	[bar]	8.0	8.0	8.0	8.0	8.0	8.0
Min. ambient temperature	[°C]	5.0	5.0	5.0	5.0	5.0	5.0
Température ambiante max.	[°C]	60.0	60.0	60.0	60.0	60.0	60.0
Repeat accuracy	[°]	0.05	0.05	0.05	0.05	0.05	0.05
Number of E-fittings on the output end		8	8	8	8	8	8
Size of the E-connections on the output end.		M5	M8	M12	M5	M8	M12
Number of cores by EDF		10	10	10	10	10	10
maximum voltage by EDF	[V]	24.0	24.0	24.0	24.0	24.0	24.0
Max. current per wire	[A]	1.0	1.0	1.0	1.0	1.0	1.0
Max. overall current	[A]	1.0	1.0	1.0	1.0	1.0	1.0

Main views for SRU without EDF

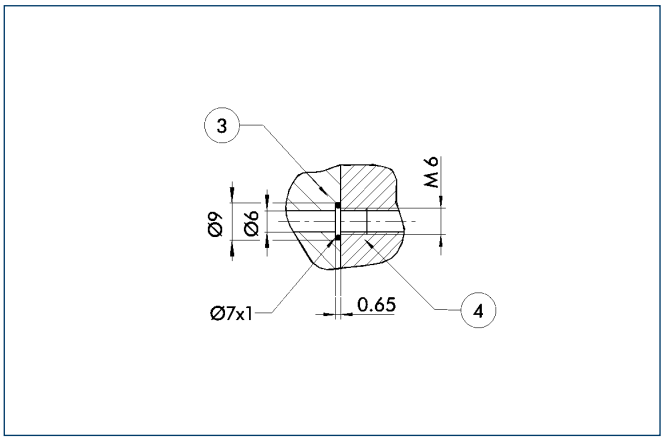


The main view shows the SRU in the most basic version, that is with an angle of traverse of 180°/90°, small end position adjustability of 3°, without center position and without fluid feed-through. Modifications to the drawings as a result of various options can be seen in the relevant additional views.

ⓘ The SDV-P pressure maintenance valve can be used to hold the position upon a loss of pressure (see „Accessories“ catalog section).

A,a Main/direct connection, clockwise rotary unit
B,b Main/direct connection, anti-clockwise rotary unit
① Linear unit connection
② Attachment connection
(80) depth of the centering sleeve hole in the matching part
(90) setting shock absorber-hub

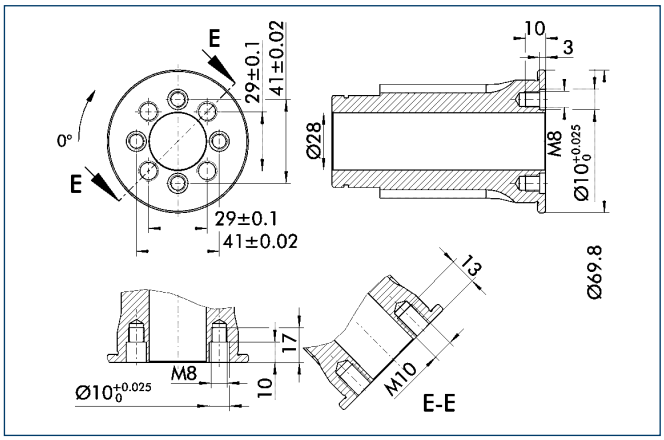
Hose-free direct connection



③ Adapter
④ Rotary unit

The direction connection is used for supplying compressed air without hoses, which are liable to faults. Instead, the pressure medium is conveyed through the bore-holes of the mounting plate.

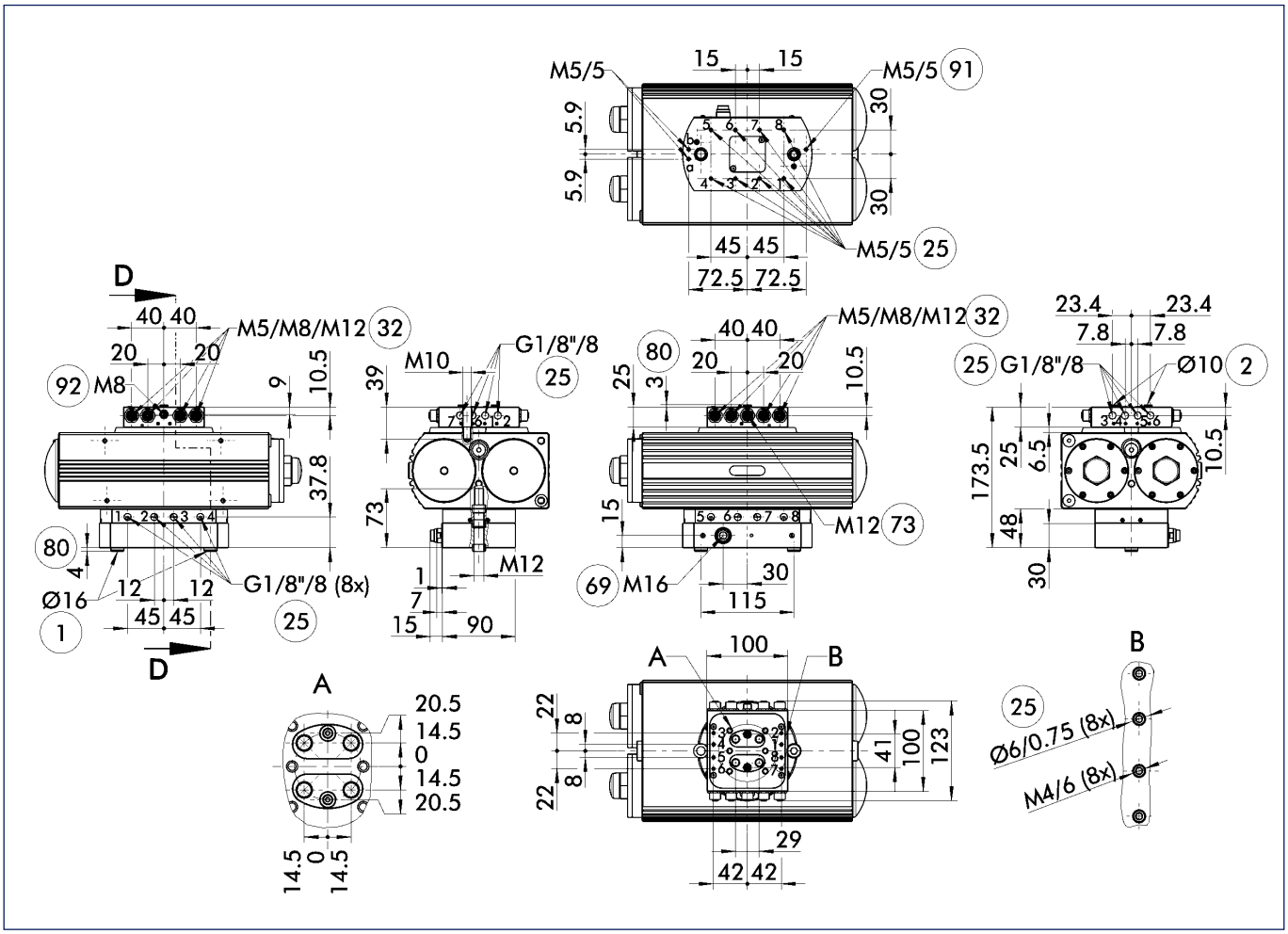
Pinion with fluid feed-through



Pinion screw connection diagram for mounting the swiveling attachment. The „4x large thread for 4x screw and 2x flat fit for guide sleeve“ screw connection diagram is preferable to the „4x small thread for 2x screw and 2x dowel screw“ (in deep fit) screw connection diagram.

ⓘ **View adaptable at versions without EDF**

Main views for SRU with EDF

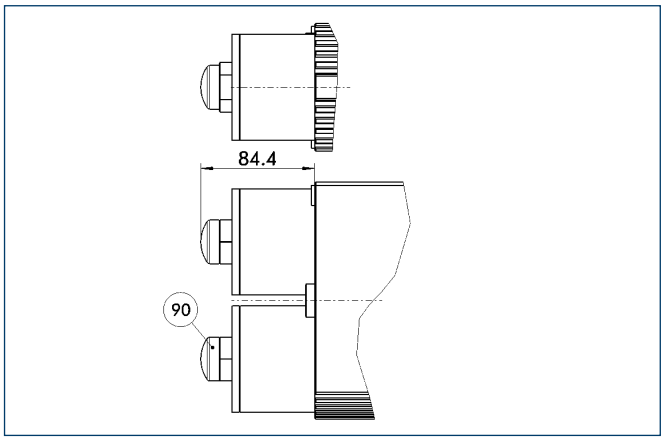


The main view shows the SRU in the most basic version, that is with an angle of traverse of 180°/90°, small end position adjustability of 3°, without center position and without fluid feed-through. Modifications to the drawings as a result of various options can be seen in the relevant additional views.

ⓘ The SDV-P pressure maintenance valve can be used to hold the position upon a loss of pressure (see „Accessories“ catalog section).

A,a Main/direct connection, clockwise rotary unit
B,b Main/direct connection, anti-clockwise rotary unit
① Rotary unit connection
② Attachment connection
㉕ Fluid feed-through
㉜ flange socket for sensor feed-through
㊾ Connection for electric feed-through
㉝ Connection BUS-throughs
㉚ depth of the centering sleeve hole in the matching part
㉛ ventilation-drill for simple admitted SRU with middle position
㉜ change Bus-/Sensor feed-through

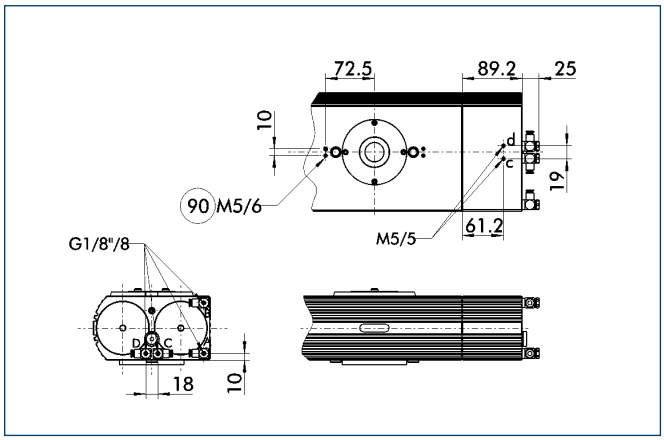
Large end position adjustability 90°



㉚ setting shock absorber-hub

Different dimensions with the option „Large end position adjustability (90°)“ This permits the end positions to be adjusted by up to 93°. More information can be found in the introduction to the series.

Pneumatic center position (M)

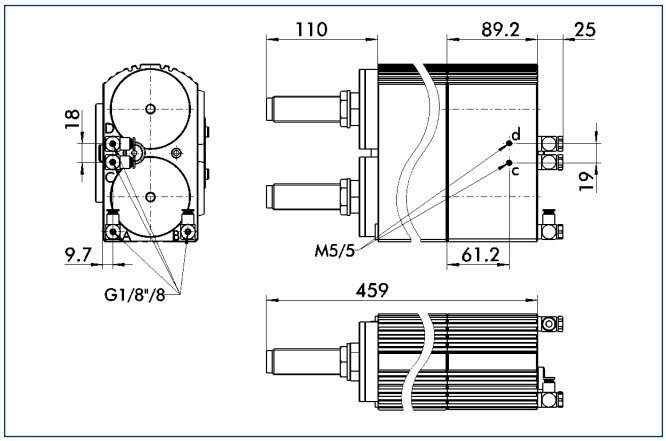


C,c Main/direct connection, center position
Dd, Main/direct connection, center position
㉚ Bleeder hole for unit with single compressed air action (.1)

Different dimensions with the „Pneumatic Center Position (M)“ option. Heavy attachments may have to level out until they reach the correct position. The locked center position (VM) offers a remedy. Units with single compressed air action (.1) and pneumatic center position need an essential bleeder hose.

ⓘ View applicable for version with or without EDF!

Locked center position (VM)

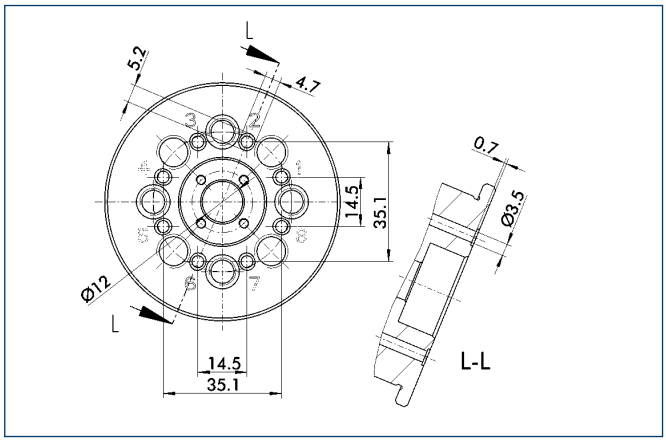


C,c Main/direct connection, center position
Dd, Main/direct connection, center position

Different dimensions with the „Locked center position (VM)“ option. The center position is locked. The unit travels to center position using the force of the main drive piston. Shock absorbers brake the travel to center position as fast as possible to prevent overshooting.

ⓘ View applicable for version with or without EDF!

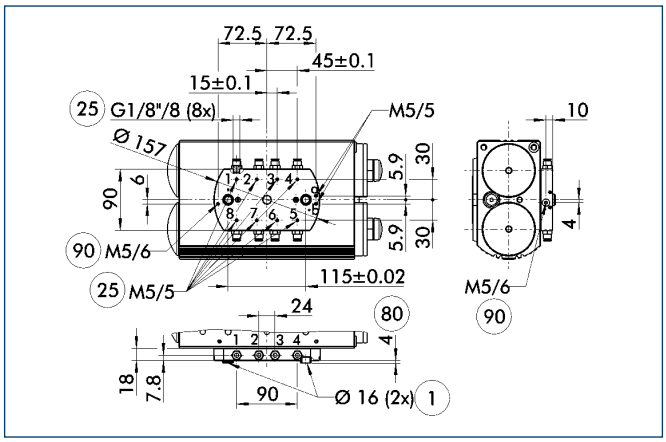
Pinion



Pinion screw connection diagram for mounting the swiveling attachment. The „4x large thread for 4x screw and 2x flat fit for guide sleeve“ screw connection diagram is preferable to the „4x small thread for 2x screw and 2x dowel screw“ (in deep fit) screw connection diagram.

ⓘ View adaptable at versions without EDF

Connections for Medium-throughs

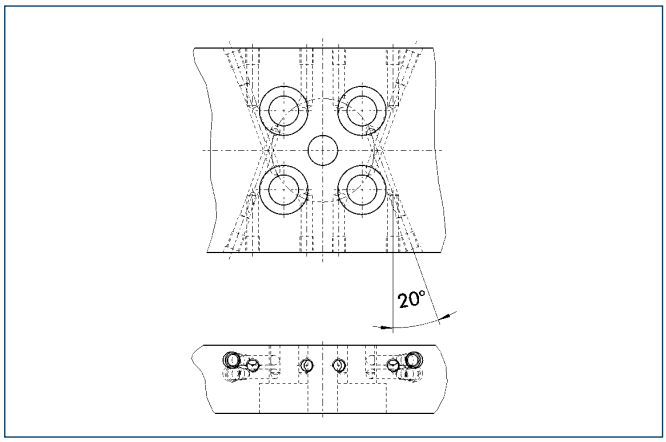


① Linear unit connection
㉕ Fluid feed-through
㉚ depth of the centering sleeve hole in the matching part
㉚ Bleeder hole for unit with single compressed air action provided with pneumatic center position (.1-M)

Lower mounting plate for the „Fluid feed-through“ option. Vacuum, gases or fluids can be conveyed. The connection may be a screw type or a direct connection.

ⓘ View adaptable at versions without EDF

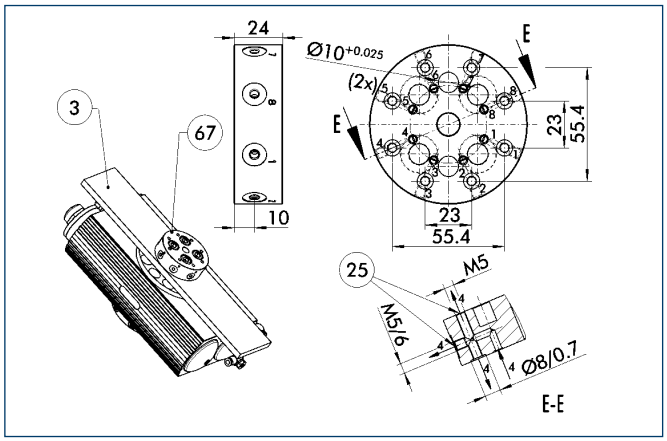
Adapter plate arrangement



Suggested here is an arrangement of the adapter plate which enables all fluid feed-throughs to be reached as easily as possible.

ⓘ View adaptable at versions without EDF

Distributor for SRU

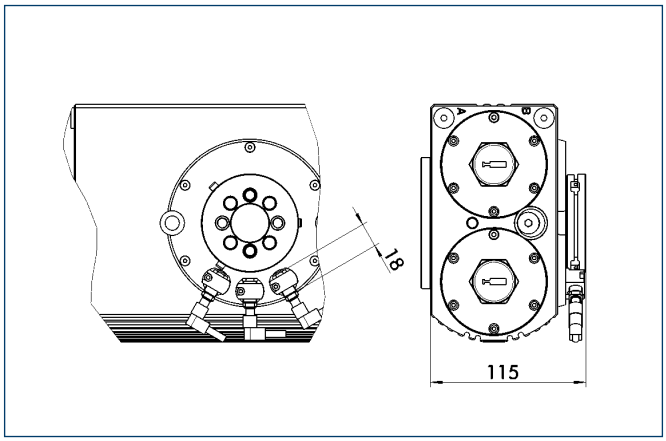


(3) Adapter
(25) Fluid feed-through
(67) Distributor for media feed-through

The distributor (ID: 0358192) for SRU 50 and SRU 60 facilitates the use of the fluid feed-throughs, both at the direct attachment to the distributor and in the lines conveying the fluid inside the adapter plate. Thanks to the distributor, only a simple drilling pattern has to be drilled in the adapter plate situated between the pinion and the distributor.

ⓘ View adaptable at versions without EDF

Mounting kit for proximity switch at SRU without EDF



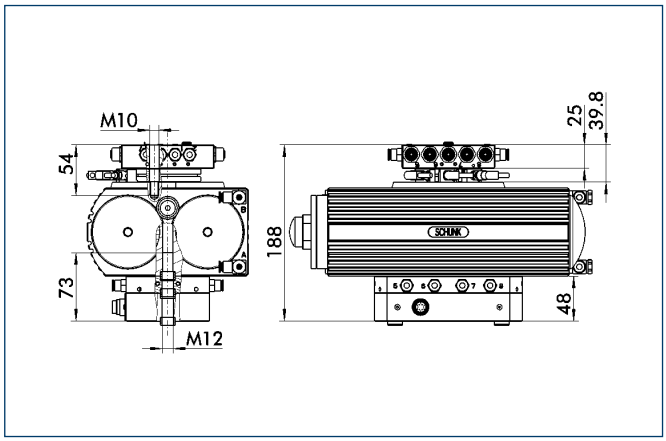
The size-specific mounting kit is required for installing the inductive proximity switches. Up to three proximity switches (2x end position, 1x center position) can be attached using the mounting kit. A mounting kit for IN 80 inductive proximity switches consists of:

3x sensor brackets complete
1x operating cam retaining disk
3x operating cams

Description	ID
AS-SRU 50/60	0358190
AS-SRU 50/60-8	0358191

ⓘ View adaptable at versions without EDF

Mounting kit for proximity switch at SRU with EDF

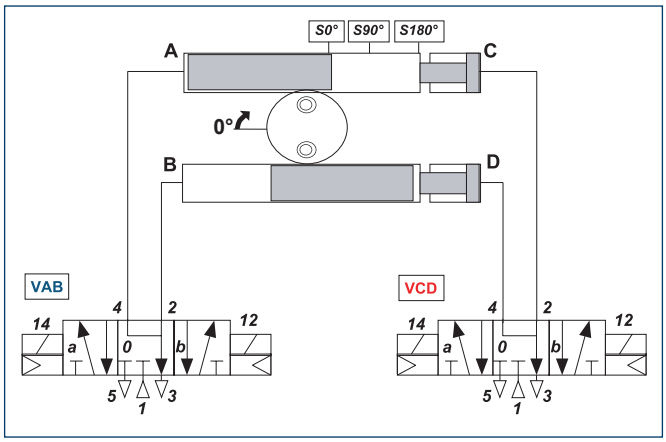


The size-specific mounting kit is required for installing the inductive proximity switches. Up to three proximity switches (2x end position, 1x center position) can be attached using the mounting kit. A mounting kit for IN 80 inductive proximity switches consists of:

3x sensor brackets complete
1x operating cam retaining disk
3x operating cams

ⓘ View adaptable at versions with EDF
The adaptor kit cannot be ordered individually. The SRU with EDF and adaptor kit is being delivered by SCHUNK completely mounted.

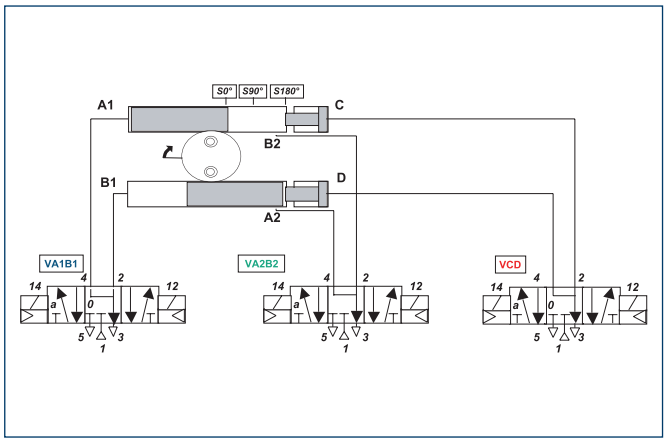
Pneumatic diagram of SRU-VM – Vertical axis



VM units with vertical swivel axis are generally actuated by two 5/3 directional control valves with bled center position. To prevent damage, it is essential that you pay attention to the actuation sequence in the Operating Manual.

ⓘ View applicable for version with or without EDF!

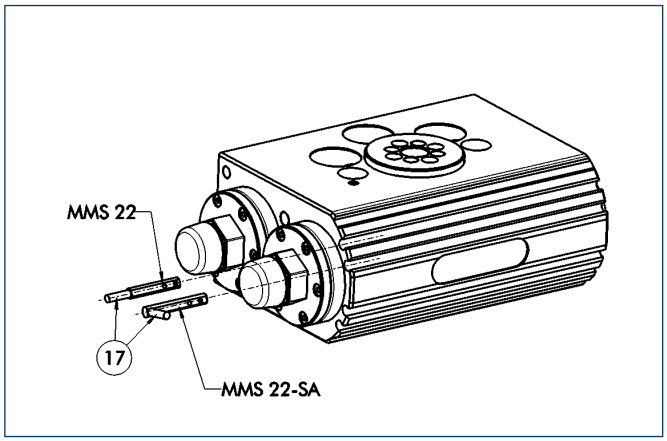
Pneumatic diagram of SRU-VM – horizontal axis



VM units with horizontal or non-vertical swivel axis must generally be actuated by three 5/3 directional control valves with bled center position. To prevent damage, it is essential that you pay attention to the actuation sequence in the Operating Manual.

ⓘ View applicable for version with or without EDF!

Sensor System



⑰ Cable outlet

End position monitoring: Electronic magnetic switches, for mounting in C-slot

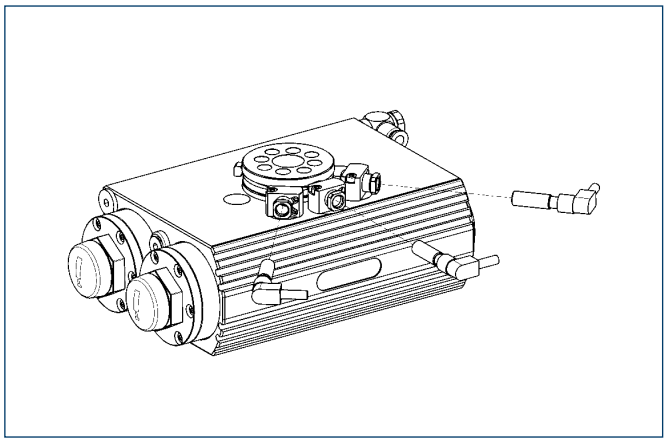
Description	ID	Recommended product
MMS 22-S-M5-NPN	0301439	
MMS 22-S-M5-NPN-SA	0301449	
MMS 22-S-M5-PNP	0301438	
MMS 22-S-M5-PNP-SA	0301448	
MMS 22-S-M8-NPN	0301433	
MMS 22-S-M8-NPN-SA	0301443	
MMS 22-S-M8-PNP	0301432	•
MMS 22-S-M8-PNP-SA	0301442	
MMSK 22-S-NPN	0301435	
MMSK 22-S-NPN-SA	0301445	
MMSK 22-S-PNP	0301434	
MMSK 22-S-PNP-SA	0301444	

Extension cables for proximity switches/magnetic switches

Description	ID
KA BG05-L 3P-0300	0301652
KA BG08-L 3P-0300-PNP	0301622
KA BW05-L 3P-0300	0301650
KA BW08-L 3P-0300-NPN	0301602
KA BW08-L 3P-0300-PNP	0301594
KA BW08-L 3P-0500-NPN	9641116
KA BW08-L 3P-0500-PNP	0301502
KA BW12-L 3P-0300-PNP	0301503
KA BW12-L 3P-0500-PNP	0301507
KV BW08-SG08 3P-0030-PNP	0301495
KV BW08-SG08 3P-0100-PNP	0301496
KV BW08-SG08 3P-0200-PNP	0301497
KV BW12-SG12 3P-0030-PNP	0301595
KV BW12-SG12 3P-0100-PNP	0301596
KV BW12-SG12 3P-0200-PNP	0301597

ⓘ Please note the minimum permitted bending radii for the sensor cables, which are generally 35 mm.

Assembly IN on SRU without EDF

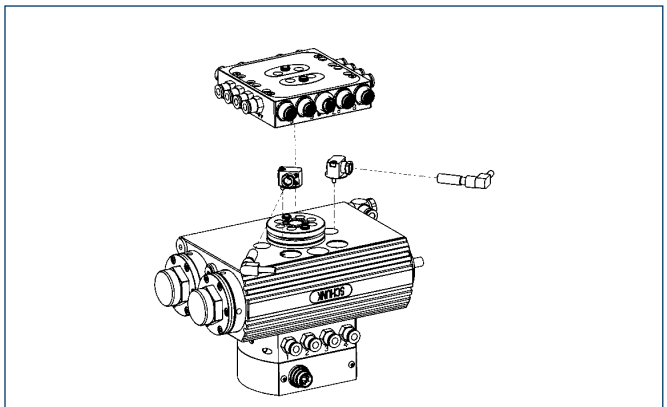


End position monitoring:
Inductive proximity switches, mounted with mounting kit

Description	ID	Recommended product
AS-SRU 50/60	0358190	
AS-SRU 50/60-8	0358191	
IN 80-S-M12	0301578	
IN 80-S-M8	0301478	•
IN-C 80-S-M8	0301475	
INK 80-S	0301550	
INK 80-SL	0301579	

ⓘ In general there are two sensors needed per swivel unit, with additional request of the middle position , three sensors plus optional an extension cable.
View adaptable at versions without EDF!

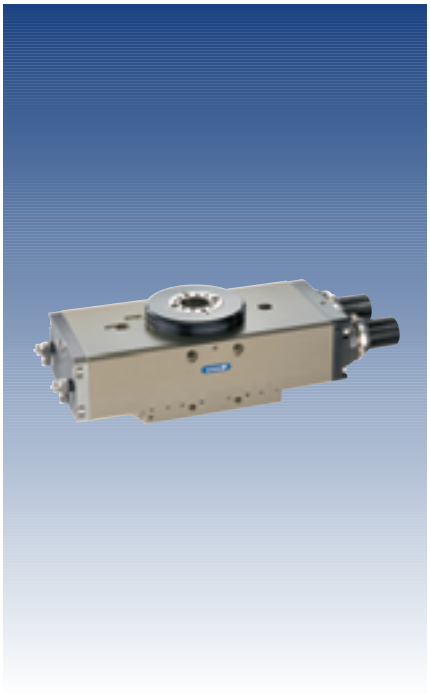
Assembly IN on SRU with EDF and add-on kit



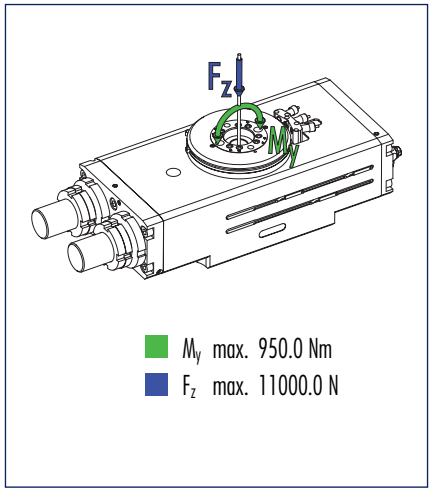
End position monitoring:
Inductive proximity switches, mounted with mounting kit

Description	ID	Recommended product
IN 80-S-M12	0301578	
IN 80-S-M8	0301478	•
IN-C 80-S-M8	0301475	
INK 80-S	0301550	
INK 80-SL	0301579	

ⓘ In general there are two sensors needed per swivel unit, with additional request of the middle position, three sensors plus optional an extension cable.
View adaptable at versions without EDF!



Pinion load

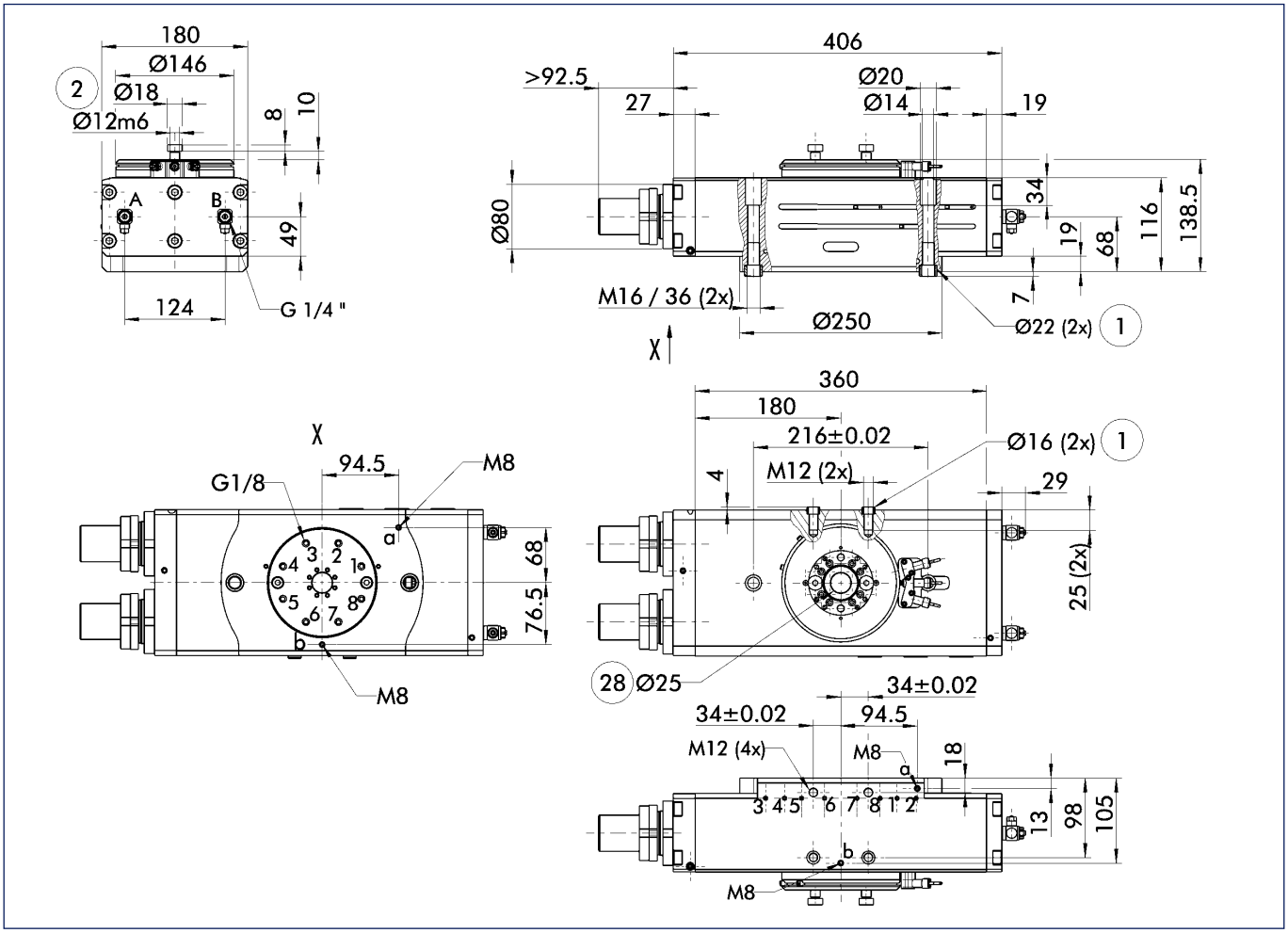


ⓘ Moments and forces may occur simultaneously. When using heavy attachments or ones with high mass moments of inertia, the speed must be restricted to ensure that the rotary movement occurs without any hitting or bouncing.

Technical data

Description		SRU 63.2-180-3-8	SRU 63.2-90-3-8-R	SRU 63.2-90-3-8-L
	ID	0354800	0354850	0354840
Torque	[Nm]	115.0	115.0	115.0
Rotating angle	[°]	180.0	90.0	90.0
Direction of rotation			right	left
Adjustability of end positions	[°]	2.0	2.0	2.0
No. of fluid feed-throughs		8	8	8
IP class		54	54	54
Weight	[kg]	26.5	26.5	26.5
Fluid consumption per cycle (2 x nominal angle)	[cm^3]	950.0	475.0	475.0
Swiveling time with middle attached load	[s]	2.1	1.9	1.9
Nominal pressure	[bar]	6.0	6.0	6.0
Minimum pressure	[bar]	4.5	4.5	4.5
Maximum pressure	[bar]	8.0	8.0	8.0
Diameter of connecting hose	[mm]	8.0	8.0	8.0
Max. pressure in fluid feed-through	[bar]	8.0	8.0	8.0
Min. ambient temperature	[°C]	5.0	5.0	5.0
Max. ambient temperature	[°C]	60.0	60.0	60.0
Repeat accuracy	[°]	0.07	0.07	0.07

Main views

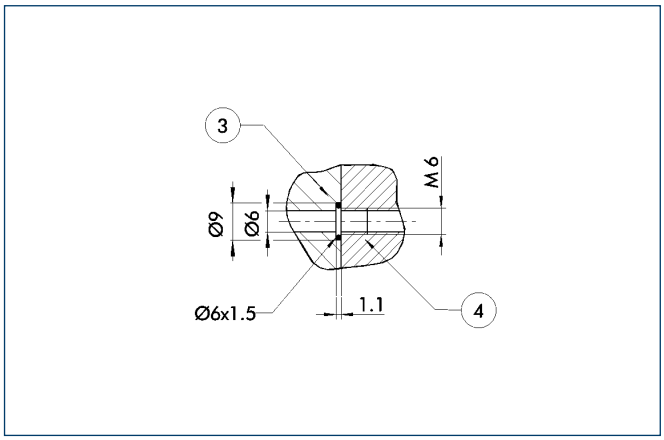


The main view shows the SRU in the most basic version, that is with an angle of traverse of 180°/90°, small end position adjustability of 3°, without center position and without fluid feed-through. Modifications to the drawings as a result of various options can be seen in the relevant additional views.

ⓘ The SDV-P pressure maintenance valve can be used to hold the position upon a loss of pressure (see „Accessories“ catalog section).

A,a Main/direct connection, clockwise rotary unit
B,b Main/direct connection, anti-clockwise rotary unit
① Linear unit connection
② Attachment connection
㉘ Through-bore

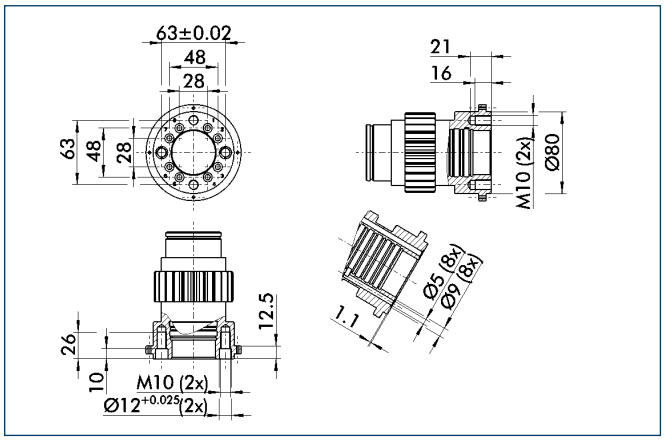
Hose-free direct connection



③ Adapter
④ Rotary unit

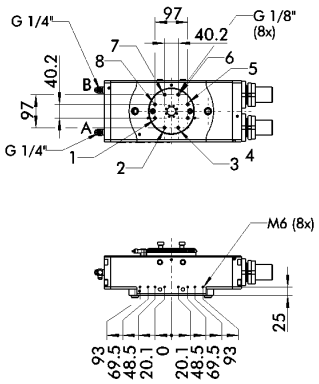
The direction connection is used for supplying compressed air without hoses, which are liable to faults. Instead, the pressure medium is conveyed through the bore-holes of the mounting plate.

Pinion with fluid feed-through



Pinion screw connection diagram for the „Fluid feed-through“ option

Connections for fluid feed-through

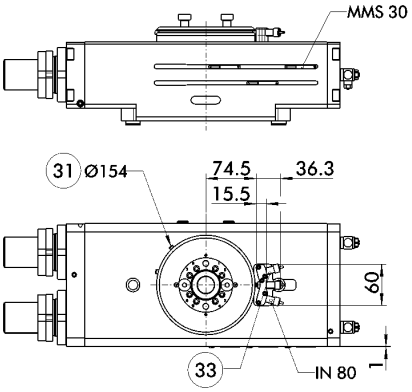


A,a Main/direct connection, clockwise rotary unit

B,b Main/direct connection, anti-clockwise rotary unit

The connections for the fluid feed-through are integrated in the housing.

Mounting kit for proximity switches



(31) Interfering contour of operating cam

(33) Mounting kit

The size-specific mounting kit is required for installing the inductive proximity switches. Up to three proximity switches (2x end position, 1x center position) can be attached using the mounting kit. A mounting kit for IN 80 inductive proximity switches consists of:

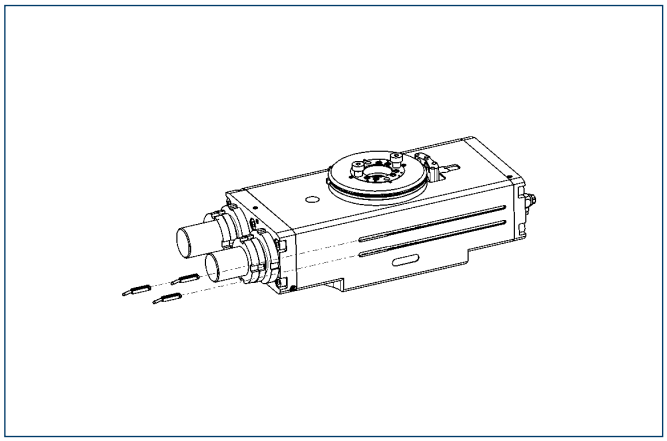
3x sensor brackets complete

1x operating cam retaining disk

3x operating cams

Description	ID
AS-SRU 63-8	0300762

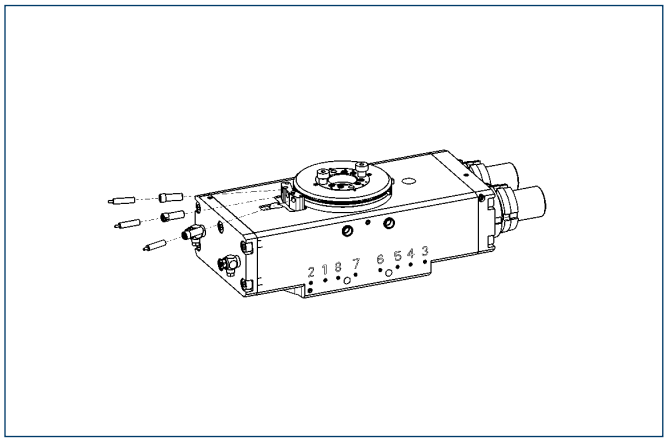
Sensor System



End position monitoring: Electronic magnetic switches, for mounting in C-slot

Description	ID	Recommended product
MMS 30-S-M12-PNP	0301571	
MMS 30-S-M8-PNP	0301471	
MMSK 30-S-PNP	0301563	

ⓘ Each rotary unit requires the same number of sensors as the positions that are to be monitored, i.e. mostly two or three, plus extension cables as an option.



End position monitoring:
Inductive proximity switches, mounted with mounting kit

Description	ID	Recommended product
AS-SRU 63-8	0300762	
IN 80-S-M12	0301578	
IN 80-S-M8	0301478	•
INK 80-S	0301550	

ⓘ Two sensors are generally required for each rotary unit, plus extension cables as an option.

Extension cables for proximity switches/magnetic switches

Description	ID
KA BG08-L 3P-0300-PNP	0301622
KA BW08-L 3P-0300-PNP	0301594
KA BW08-L 3P-0500-PNP	0301502
KV BW08-SG08 3P-0030-PNP	0301495
KV BW08-SG08 3P-0100-PNP	0301496
KV BW08-SG08 3P-0200-PNP	0301497
KV BW12-SG12 3P-0030-PNP	0301595
KV BW12-SG12 3P-0100-PNP	0301596
KV BW12-SG12 3P-0200-PNP	0301597

ⓘ Please note the minimum permitted bending radii for the sensor cables, which are generally 35 mm.

You can find more detailed information and individual parts of the above-mentioned accessories in the „Accessories“ catalog section.