

Type 2060

2/2-way angle seat valve
2/2-Wege-Schrägsitzventil
Vanne à siège incliné 2/2 voies

Replacement Instructions
Austauschanleitung
Instructions de remplacement



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Replacement Instructions 1907/00_EU-ml_00815316 /

Original DE

1 SYMBOLS

- Highlights instructions to avoid a danger.
- Designates a procedure which you must carry out.

! DANGER!
There is an imminent danger of serious or fatal injuries.

! WARNING!
There is a potential danger of serious or fatal injuries.

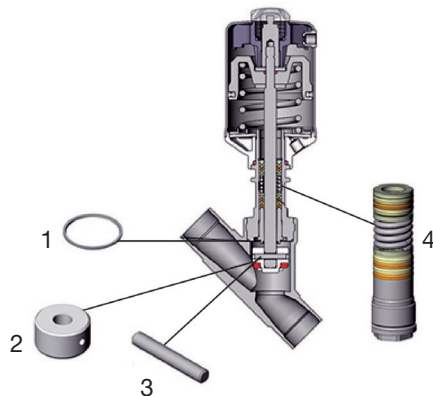
! CAUTION!
There is a danger of minor or moderate injuries.

2 REPLACEMENT PART SET

The following replacement part sets are available for the angle seat valve Type 2060:

- **Swivel plate set**
consisting of swivel plate, pin and seal
- **Seal set for packing gland**
(only actuator sizes 70, 90 and 130)
consisting of the individual parts of the packing gland, seal and lubricant
(the modified socket wrench is not included in the seal set)

3 OVERVIEW OF REPLACEMENT PART SETS



Pos.	Description	
1	Swivel plate set	Seal (packaged)
2		Swivel plate
3		Pin
4	Seal set for packing gland (only actuator sizes 70, 90 and 130)	

4 CHANGE SWIVEL PLATE SET



DANGER!

Risk of injury from discharge of pressure and escaping medium. Working on a device, which is under pressure, is hazardous due to a sudden discharge of pressure or escaping medium.

- Before working on the device or system, switch off the pressure. Vent or empty the lines.



WARNING!

Risk of injury due to using wrong tool.

Performing installation work, using unsuitable tools, is hazardous due to possible damage to the device.

- To remove the actuator from the valve body, use an open-end wrench, never a pipe wrench.



Before replacing the replacement parts, remove the actuator from the valve body.

4.1 Removing actuator from the valve body

→ Clamp valve body in a holding device (only for valves which have not yet been installed).

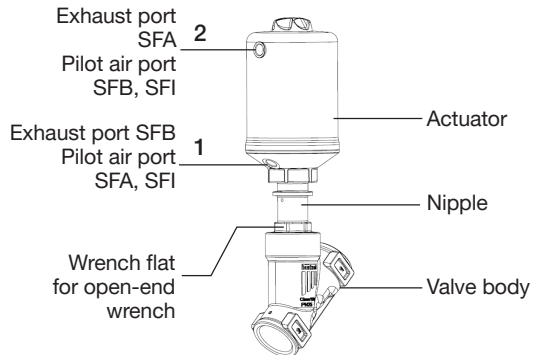
NOTE!

Damage to the valve seat seal or seat contour.

When removing the actuator, the valve must be in the open position.

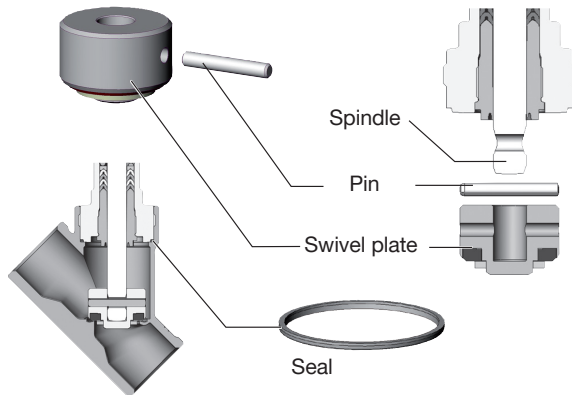
- For control functions A (SFA) and I (SFI) pressurise the pilot air port 1 with compressed air (5 bar): Valve opens.

→ Place a suitable open-end wrench on the wrench flat of the nipple and unscrew the actuator from the valve body.



4.2 Replace swivel plate set

- Support swivel plate on the cylindrical part using a prism or something similar.
- Knock out pin using a suitable pin punch (see “Tab. 1”).
- Remove swivel plate.
- Connect new swivel plate to the spindle.
- Align boreholes in the swivel plate and spindle.



- Support swivel plate on the cylindrical part using a prism or something similar.
- Insert pin into the borehole.
- Caulk pin boreholes on both sides of the swivel plate using a chisel or centre punch.

Spindle [ø in mm]	Orifice DN	Actuator size [ø in mm]	Suitable pin punch [ø in mm]
8	15...25	50	3
10	15...50	70	
14	32...65	90	5
		130	

Tab. 1: Suitable pin punch in relation to the spindle diameter

4.3 Installing actuator on valve body



WARNING!

Danger from using wrong lubricant.

Unsuitable lubricant may contaminate the medium. There is a risk of explosion in oxygen applications!

- For specific applications, e.g. oxygen or analysis applications, use approved lubricants only.

→ Check seal and replace if required.

→ Before re-installation, grease nipple thread of the actuator (e.g. using Klüberpaste UH1 96-402 from Klüber).

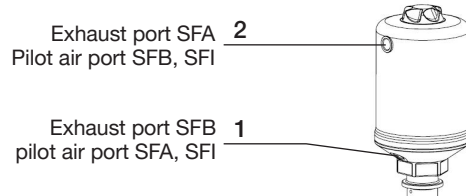
NOTE!

Damage to the valve seat seal or seat contour.

When removing the actuator, the valve must be in the open position.

- For control functions A (SFA) and I (SFI) pressurise the pilot air port **1** with compressed air (5 bar): Valve opens.

→ Screw actuator onto valve body. Observe tightening torque (see ["Tab. 2"](#)).



Tightening torques valve body / nipple

Orifice DN	Tightening torques [Nm]
15	45 ± 3
20	50 ± 3
25	60 ± 3
32	65 ± 3
40	
50	70 ± 3
65	100 ± 3

5 REPLACING PACKING GLAND



DANGER!

Risk of injury from discharge of pressure and escaping medium.
Working on a device, which is under pressure, is hazardous due to a sudden discharge of pressure or escaping medium.

- ▶ Before working on the device or system, switch off the pressure. Vent or empty the lines.



WARNING!

Risk of injury due to using wrong tool.

Performing installation work, using unsuitable tools, is hazardous due to possible damage to the device.

- ▶ To remove the actuator from the valve body, use an open-end wrench, never a pipe wrench.

The seal set for the packing gland includes:

- 1 support ring
- 1 spindle guide
- 7 chevron seals
- 1 seal
- 2 thrust collars
- Lubricant
- 1 compression spring



Before replacing the replacement parts, remove the actuator from the valve body and remove the swivel plate.

5.1 Removing actuator from the valve body

→ Clamp valve body in a holding device (only for valves which have not yet been installed).

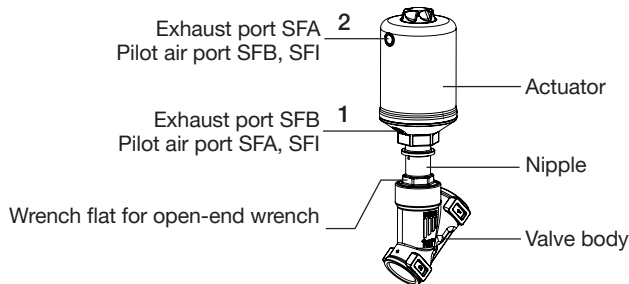
NOTE!

Damage to the valve seat seal or seat contour.

When removing the actuator, the valve must be in the open position.

- ▶ For control functions A (SFA) and I (SFI) pressurise the pilot air port 1 with compressed air (5 bar): Valve opens.

→ Place a suitable open-end wrench on the wrench flat of the nipple and unscrew the actuator from the valve body.

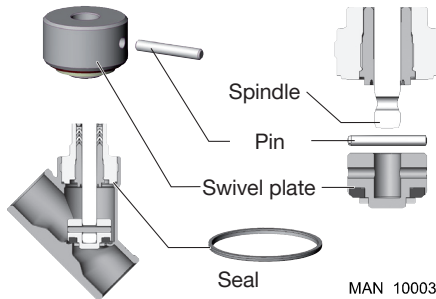


5.2 Removing swivel plate

- Support swivel plate on the cylindrical part using a prism or something similar.
- Knock out pin using a suitable pin punch (see "Tab. 3").
- Remove swivel plate.

Spindle [ø in mm]	Orifice DN	Actuator size [ø in mm]	Suitable pin punch [ø in mm]
10	15...50	70	3
14	32...65	90	5
		130	

Tab. 3: Suitable pin punch in relation to the spindle diameter

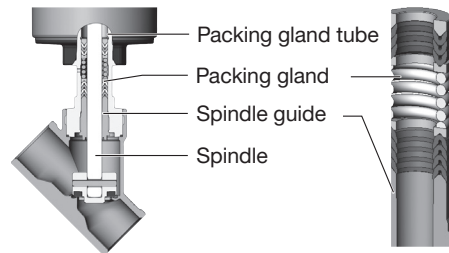


5.3 Replacing packing gland

- Unscrew spindle guide using a modified socket wrench²⁾.



²⁾ The modified socket wrench is available from your Bürkert sales department (see [Page 10](#)).



WARNING!

Risk of injury due to parts being ejected.

When the spindle opening is exposed, the individual parts of the packing gland will be pressed out at an undefined speed when the pilot air port is pressurised.

- Before pressurising with pilot air, safeguard the area around the outlet, (e.g. place spindle on a firm surface).

→ Using compressed air, press packing gland out of the packing gland tube.

For **control function A and I**:

Pressurise pilot air port 1 with compressed air (6...8 bar)

For **control function B**:

Pressurise pilot air port 2 with compressed air (6...8 bar)

→ Grease the individual parts of the new packing gland with the supplied lubricant.

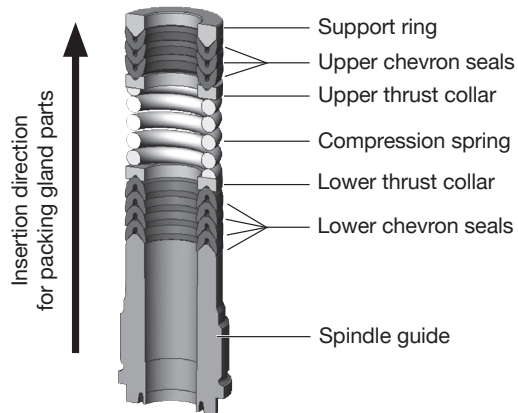
→ Place individual parts on the spindle in the specified direction and sequence.

→ Push the packing gland into the packing gland tube.

→ Screw in the spindle guide using the socket wrench. Observe tightening torque (see "[Tab. 4](#)")!

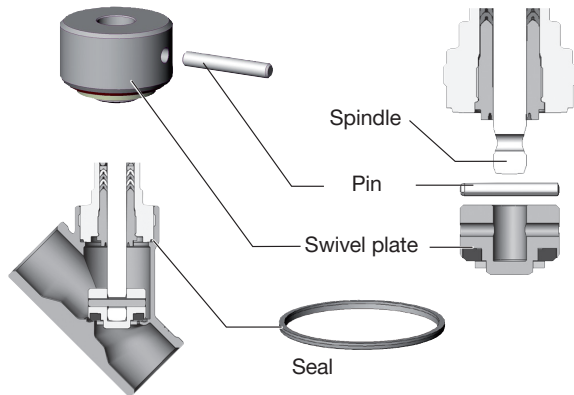
Spindle [ø in mm]	Tightening torque [Nm]
10	6
14	15

Tab. 4: Tightening torques spindle guide



5.4 Installing swivel plate

- Connect swivel plate to the spindle.
- Align boreholes in the swivel plate and spindle.



- Support swivel plate on the cylindrical part using a prism or something similar.
- Insert pin into the borehole.
- Caulk pin boreholes on both sides of the swivel plate using a chisel or centre punch.

5.5 Installing actuator on valve body



WARNING!

Danger from using wrong lubricant.

Unsuitable lubricant may contaminate the medium. There is a risk of explosion in oxygen applications!

- For specific applications, e.g. oxygen or analysis applications, use approved lubricants only.

- Check seal and replace if required.
- Before re-installation, grease nipple thread of the actuator (e.g. using Klüberpaste UH1 96-402 from Klüber).

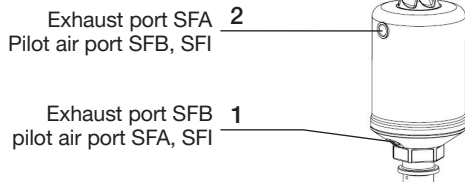
NOTE!

Damage to the valve seat seal or seat contour.

When removing the actuator, the valve must be in the open position.

- For control functions A (SFA) and I (SFI) pressurise the pilot air port 1 with compressed air (5 bar): Valve opens.

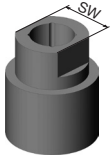
- Screw actuator onto valve body. Observe tightening torque (see ["Tab. 5"](#)).



Orifice DN	Tightening torques [Nm]
15	45 ± 3
20	50 ± 3
25	60 ± 3
32	65 ± 3
40	
50	70 ± 3
65	100 ± 3

Tab. 5: Tightening torques valve body / nipple

6 INSTALLATION TOOLS

	Modified socket wrench for packing gland			
	Socket wrench	Orifice DN	AF	Order No.
	Spindle ø10 mm	15...50	19	683221
	Spindle ø14 mm	32...65	21	683223

Tab. 6: Modified socket wrench

Special wrench for turning the actuator	
Order number	665702

Tab. 7: Special wrench



If you have any questions, please contact your Bürkert sales department.

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