DATA SHEET

Type 5282

bürkert
FLUID CONTROL SYSTEMS

Servo-assisted 2/2-way diaphragm valve

- Servo-assisted diaphragm valve up to DN65 orifice
- Separating diaphragm for aggressive and contaminated media
- Closing and opening times can be adjusted individually
- Explosion-proof versions (Cat.2)
- Service-friendly manual override

Product variants described in the data sheet may differ from the product presentation and description.

Can be combined with

Type 2518 ▸
Cable Plug
DIN EN 175301-803 - Form A

Type 1087 ▸
Timer

Type description

The 5282 valve is a servo-assisted diaphragm valve. A minimum differential pressure is required for the valve to function. Various diaphragm material combinations and circuit functions are available depending on the application. The standard brass body satisfies all European drinking water requirements. The body offering is completed with stainless steel versions. The 3/2-way pilot valve can be easily converted from NC to NO circuit function by rotating it on the armature. The solenoid coils are moulded with a chemically resistant epoxy. The 5282 is equipped with manual override for start-up and testing. In combination with a plug acc. to DIN EN 175301-803 Form A and stainless steel body, the valves satisfy the requirements of NEMA 4X.

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Visit product website ▸

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1. General technical data

Product characteristics	
Dimensions	Detailed information can be found in chapter "5. Dimensions" on page 5.
Materials	
Threaded body	Brass according to DIN EN 50930 – 6 DN13 stainless steel CF3M DN 20…DN 50 stainless steel 1.4581
Flange body	Stainless steel 1.4581
Internal valve parts	Stainless steel, brass
Coil	Epoxide
Seal	NBR, EPDM, FKM
Nominal diameter	DN13…DN65
Thermal insulation class of solenoid	H
Performance data	
Switching times[1.)]	Opening: 0.1…0.8 sec. Closing: 1.0…4.0 sec.
Electrical data	
Operating voltage	024/DC, 024/56, 230/56, 024/UC, 230/UC
Voltage tolerance	±10 %
Electrical connection	
Standard	Plug tabs according to DIN EN 175301-803 Form A for cable plug Type 2518
Ex	With moulded cable 3 m long, 3 × 0.5 mm^2 With terminal box
Nominal operating mode	Continuous operation 100 % duty cycle
Electrical power consumption	
Standard	Inrush AC 24 VA Operation AC 14/8 VA W DC cold/hot 11/8 W
Ex	Inrush AC 40 VA Operation AC 3 VA W DC cold/hot 40 W inrush / 3 W operation
Medium data	
Operating medium	
NBR	Neutral media, e.g. compressed air, water, hydraulic oil
EPDM	Oil and grease-free media, alkalis, hot water
FKM	Hot air, per solutions, hot oils
Medium temperature	
NBR	0 °C…+80 °C
EPDM	-25 °C…+90 °C
FKM	0 °C…+90 °C
Approvals and certificates	
Guidelines	CE, EAC
Environment and installation	
Ambient temperature	Max. +55 °C
Degree of protection	IP65 with cable plug according to DIN EN 175301-803 Form A IP65 with cable connection or terminal box
Installation position	Any, preferably actuator face up

1.) Measurement at the valve outlet 6 bar and 20 °C. Opening: Pressure build-up 0…90 %, closing: Pressure reduction 100…10 %

The switching times can be changed by turning the throttle screws (in the housing lid).

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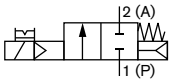
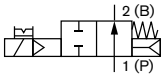
2. Circuit functions

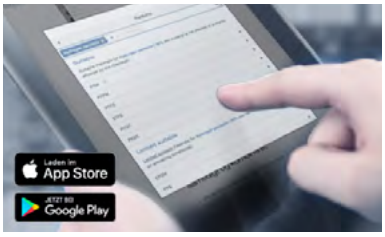
Circuit function	Description
	**Type: A, solenoid valve** 2/2 way servo-controlled, with manual override normally closed
	**Type: B, solenoid valve** 2/2 way servo-controlled, with manual override normally open

3. Approvals

Explosion-proof approvals	
Type of protection (ATEX and IECEx)	
with cable	II 2G Ex mb IIC T4 Gb II 2D Ex mb IIIC T130 °C Db
with terminal box	II 2G Ex eb mb IIC T4 Gb II 2D Ex mb tb IIIC T130 °C Db

4. Materials

4.1. Chemical Resistance Chart – Bürkert resistApp

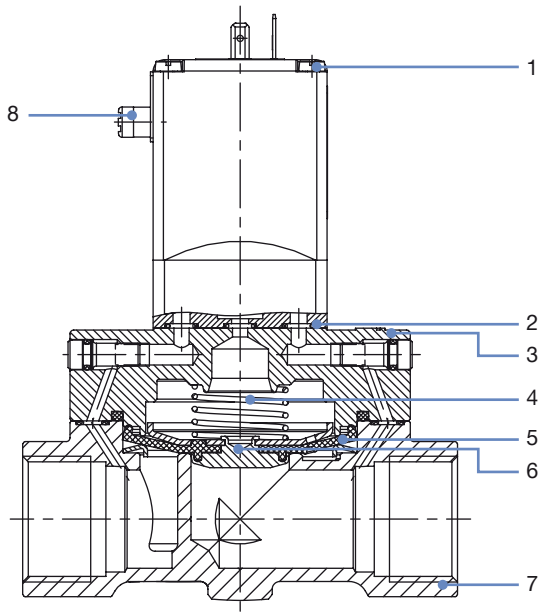


Bürkert resistApp – Chemical Resistance Chart

You want to ensure the reliability and durability of the materials in your individual application case? Verify your combination of media and materials on our website or in our resistApp.

Start Chemical Resistance Check

4.2. Standard version



No.	Element	Material
1	Coil	Epoxy
2	O-rings	NBR, EPDM, FKM
3	Cover	Brass DN 13 stainless steel 1.4408 DN 20…DN 50 stainless steel 1.4581
4	Springs	Stainless steel 1.4310
5	Diaphragm	NBR, EPDM, FKM
6	Diaphragm holder	Brass, 1.4401 stainless steel
7	Valve body	Brass DN 13 stainless steel CF3M DN 20…DN 50 stainless steel 1.4581
8	Manual override	PA

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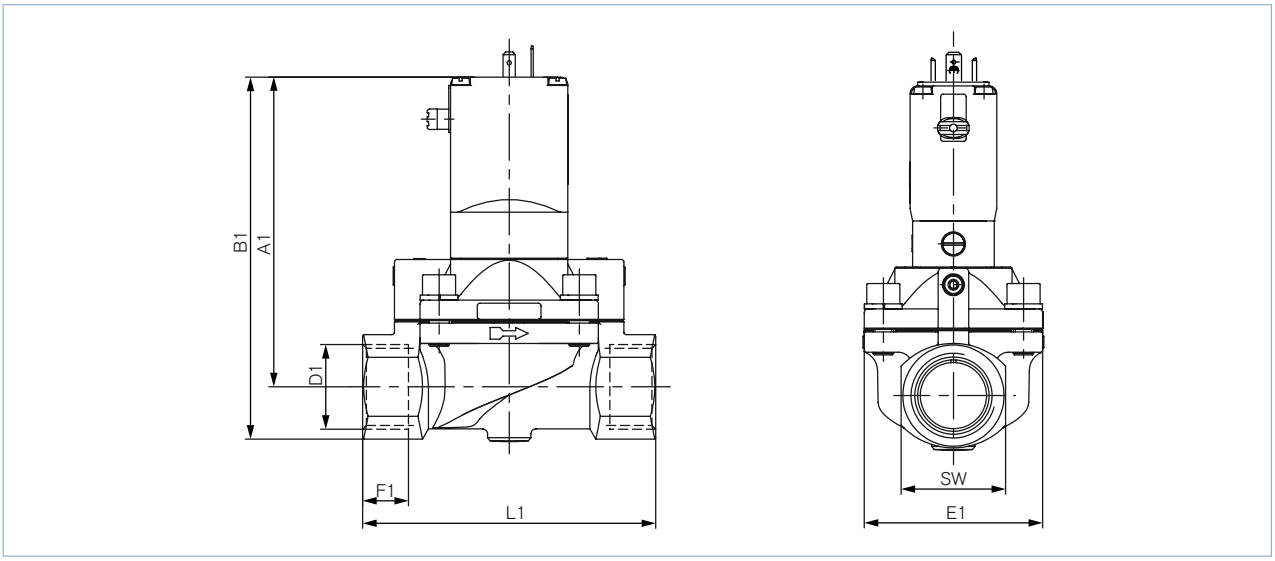
5. Dimensions

5.1. Standard versions

Threaded connection

Note:

- Dimensions in mm
- Dimensions D1 and F1 apply to G thread
- Dimensions D2 and F2 apply to NPT thread
- Dimensions D3 and F3 apply to Rc thread



DN	A1	B1	D1	F1	D2	F2	D3	F3	E1	L1	AF
13[1.)]	109.0	123.0	G ½	14	NPT ½	13.7	Rc ½	13.2	40	65	27
13[2.)]	108.0	124.0	G ½	14	NPT ½	13.7	Rc ½	13.2	40	65	32
13[2.)]	108.0	124.0	G ¾	16	NPT ¾	14.0	Rc ¾	14.5	40	65	32
20[2.)]	115.0	131.0	G ½	14	NPT ½	13.7	Rc ½	13.2	60	100	32
20	115.0	131.0	G ¾	16	NPT ¾	14.0	Rc ¾	14.5	60	100	32
25	121.5	142.0	G 1	18	NPT 1	16.8	Rc 1	16.8	70	115	41
32	122.0	147.0	G 1¼	20	NPT 1¼	17.3	Rc 1¼	19.1	85	126	50
40	126.0	156.0	G 1½	22	NPT 1½	17.3	Rc 1½	19.1	85	126	60
50	142.5	177.5	G 2	24	NPT 2	17.6	Rc 2	23.4	115	164	70
65	142.5	185.0	G 2½	27	NPT 2½	23.6	–	–	115	180	85

1.) Only in threaded brass connection

2.) Only in threaded stainless steel connection

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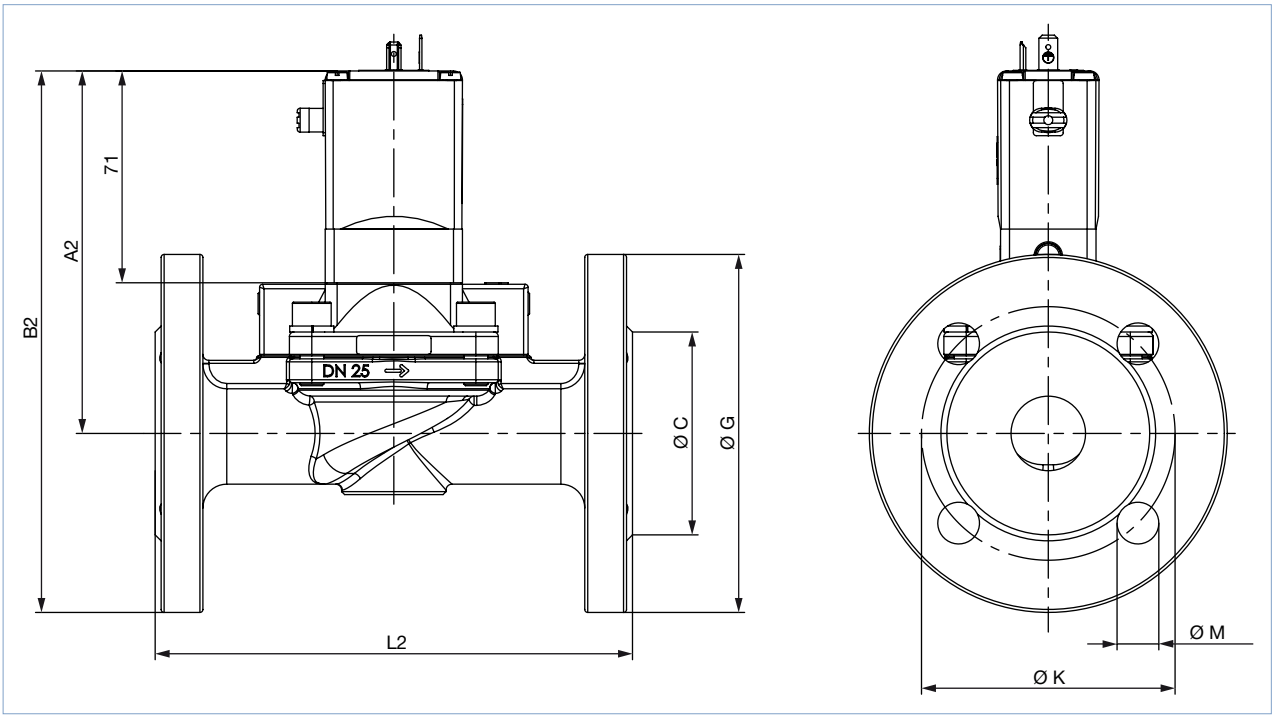
Flange connection according to DIN EN 1092-1

Note:
Dimensions in mm



Version	DN	A2	B2	Ø C	Ø G	L2	Ø M	Ø K
Brass with cast stainless steel body	25	121,5	181,5	68	120	160	14	85
	32	122,0	192,0	78	140	180	18	100
	40	128,0	203,0	88	150	200	18	110
	50	142,8	225,3	102	165	230	18	125
Stainless steel with cast stainless steel body	25	120,5	180,5	68	120	160	14	85
	32	122,0	192,0	78	140	180	18	100
	40	128,0	203,0	88	150	200	18	110
	50	142,8	225,3	102	165	230	18	125

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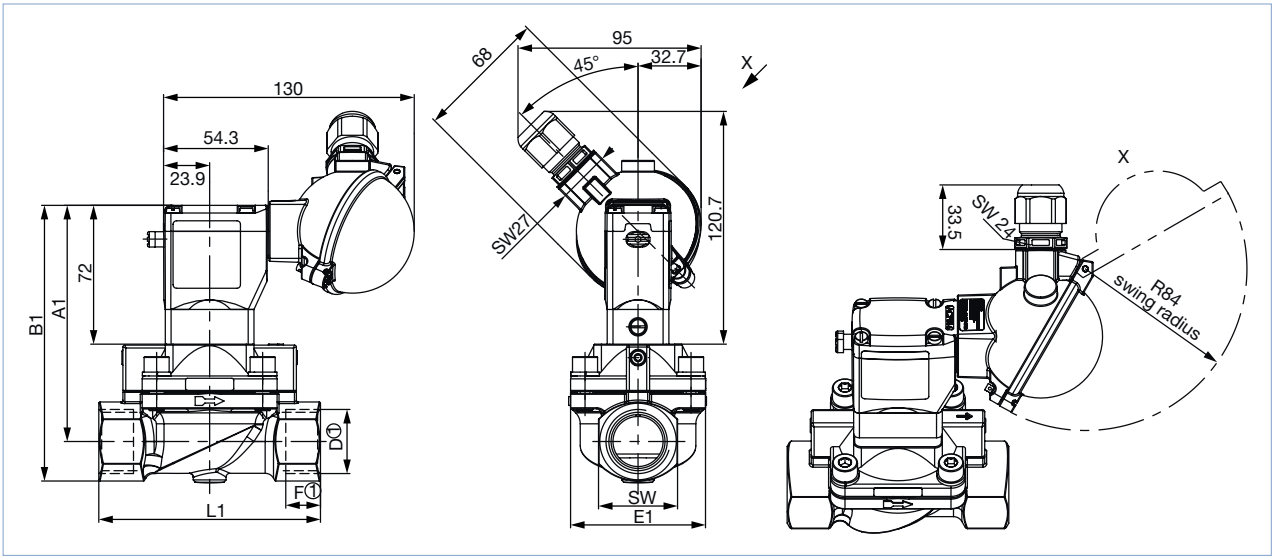
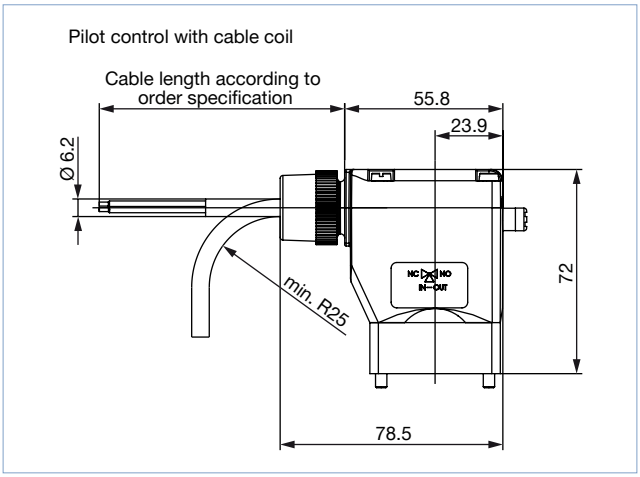
5.2. Explosion-proof version

Threaded connection

Note:

- Dimensions in mm
- Dimensions D1 and F1 apply to G thread
- Dimensions D2 and F2 apply to NPT thread
- Dimensions D3 and F3 apply to Rc thread





DN	A1	B1	D1	F1	D2	F2	D3	F3	E1	L1	AF
13[1.)]	110.0	124.0	G ½	14	NPT ½	13.7	Rc ½	13.2	40	65	27
13[2.)]	109.0	125.0	G ½	14	NPT ½	13.7	Rc ½	13.2	40	65	32
13[2.)]	109.0	125.0	G ¾	16	NPT ¾	14.0	Rc ¾	14.5	40	65	32
20[2.)]	116.0	132.0	G ½	14	NPT ½	13.7	Rc ½	13.2	60	100	32
20	116.0	132.0	G ¾	16	NPT ¾	14.0	Rc ¾	14.5	60	100	32
25	122.5	143.0	G 1	18	NPT 1	16.8	Rc 1	16.8	70	115	41
32	123.0	148.0	G 1¼	20	NPT 1¼	17.3	Rc 1¼	19.1	85	126	50
40	127.0	157.0	G 1½	22	NPT 1½	17.3	Rc 1½	19.1	85	126	60
50	143.8	178.8	G 2	24	NPT 2	17.6	Rc 2	23.4	115	164	70
65	143.5	186.0	G 2½	27	NPT 2½	23.6	–	–	115	180	85

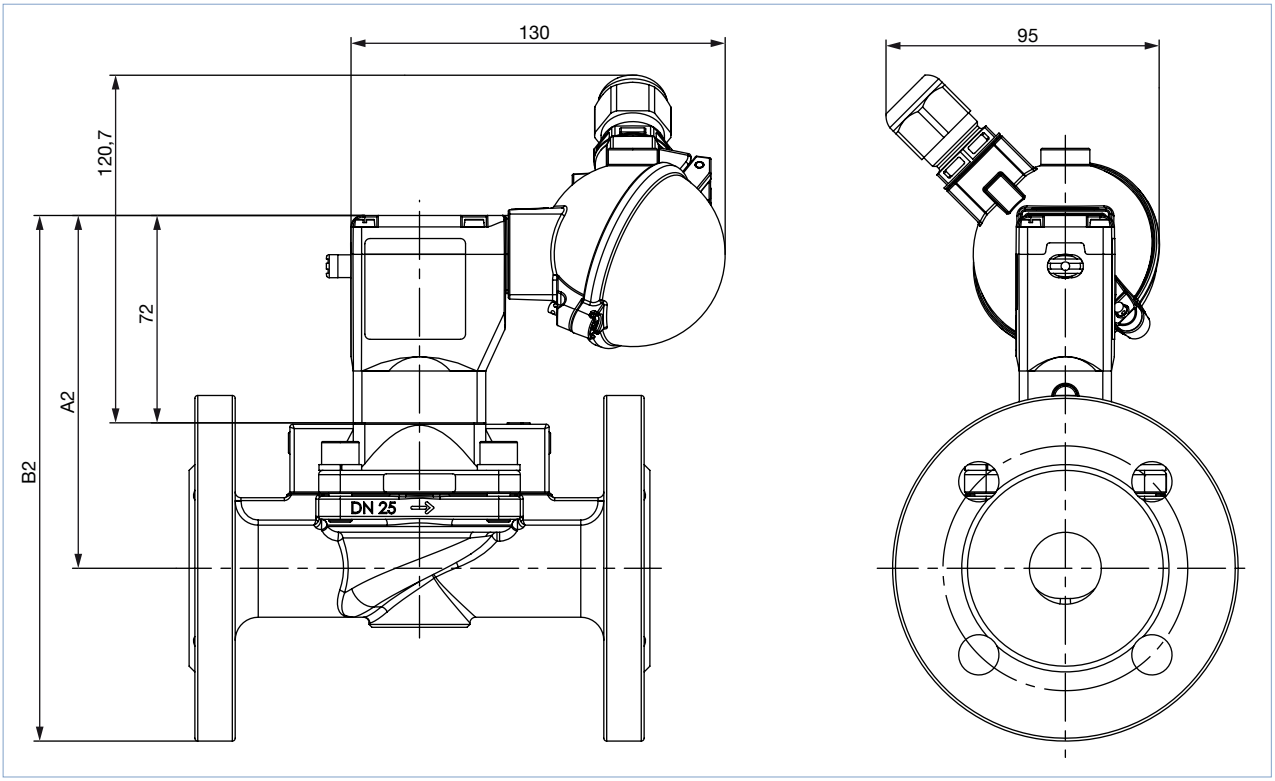
1.) Only in threaded brass connection

2.) Only in threaded stainless steel connection

Flange connection according to DIN EN 1092-1

Note:

- Dimensions in mm
- Dimensions of coil and terminal connection box see “Threaded connection” on page 7.



Version	DN	A2	B2	Ø C	Ø G	L2	Ø M	Ø K
Brass with cast stainless steel body	25	122,5	182,5	68	120	160	14	85
	32	123,0	193,0	78	140	180	18	100
	40	129,0	204,0	88	150	200	18	110
	50	143,8	226,3	102	165	230	18	125
Stainless steel with cast stainless steel body	25	121,5	181,5	68	120	160	14	85
	32	123,0	193,0	78	140	180	18	100
	40	129,0	204,0	88	150	200	18	110
	50	143,8	226,3	102	165	230	18	125

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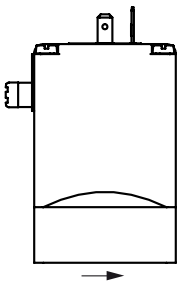
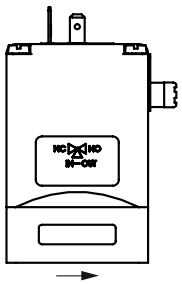
6. Product installation

6.1. Mounting options

Note:

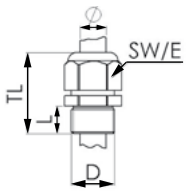
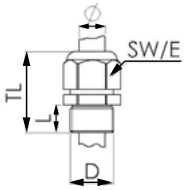
- Delivery status corresponds to the order code. Turning the pilot valve through 180° changes the circuit function of the valve.
- The circuit function can only be changed for versions up to 10 bar.

Circuit function A	Circuit function B
 Flow direction	 Flow direction

7. Product accessories

7.1. Cable glands for ATEX/IECEx terminal box

Note:
A cable gland in polyamide version is included in the delivery. A nickel-plated brass version can be ordered at a surcharge, see "8.4. Ordering chart accessories" on page 15.

Description	Ex approvals		Dimensions	
	Certification	Identification		
Ex cable gland, Brass, nickelplated, 6…13 mm 	PTB 04 ATEX 1112 X, IECEx PTB 13.0027X	II 2 G Ex e IIC Gb, II 2 D Ex tb IIIC Db IP68		TL 29…37 mm L 6 mm D 20 mm SW 24 mm E 27 mm
Ex cable gland, Polyamide, 7…13 mm 	PTB 13 ATEX 1015 X, IECEx PTB 13.0034X	II 2 G Ex e IIC Gb, II 2 D Ex tb IIIC Db IP68		TL 36…45 mm L 10 mm D 20 mm SW 24 mm E 28 mm

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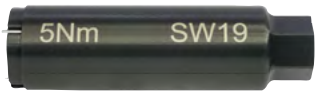
7.2. Special tool to turn the junction box

Note:
This special tool is not supplied with the valve, see "8.4. Ordering chart accessories" on page 15.

Set SC02-AC10	
	**Set includes:** • Special wrench • Service manual

8. Ordering information

8.1. Bürkert eShop – Easy ordering and quick delivery

Bürkert eShop – Easy ordering and fast delivery

You want to find your desired Bürkert product or spare part quickly and order directly? Our online shop is available for you 24/7. Sign up and enjoy all the benefits.

Order online now

8.2. Bürkert product filter

Bürkert product filter – Get quickly to the right product

You want to select products comfortably based on your technical requirements? Use the Bürkert product filter and find suitable articles for your application quickly and easily.

Try out our product filter

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