



## Accessories for pneumatic stroke and rotary actuators – CLASSIC and ELEMENT process valves

- Complete modular designed accessory program
- More for less - optimal configuration costs
- Easy maintenance and commissioning
- Increase system and operational safety

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

### Can be combined with

	<b>Type 2000</b> ▶ Pneumatically operated 2/2 way angle seat valve (Type CLASSIC)
	<b>Type 2006</b> ▶ Pneumatically operated 3/2 way seat valve CLASSIC
	<b>Type 2030</b> ▶ Pneumatically operated 2/2 way diaphragm valve with plastic body (Type CLASSIC)
	<b>Type 2031</b> ▶ 2/2 way diaphragm valve with pneumatic plastic actuator (Type CLASSIC)
	<b>Type 2012</b> ▶ Pneumatically operated 2/2 way globe valve (Type CLASSIC)
	<b>Type 210X</b> ▶ ELEMENT process valves

### Type description

The modular designed accessory option package is the comprehensive addition to the Bürkert process valves with pneumatic actuators. The flexible, easily accessible concept of modular accessories has been designed to cover individual application requirements in a cost-effective way.

The design has been optimized for easy installation (retro-fitting), commissioning and operation.

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## 1. General technical data

### Product properties

<b>Type 8697</b>  Electrical position feedback (Actuator Ø 20...225)	Detailed information can be found in chapter <a href="#">“2.1. Type 8697 - Electrical position feedback for CLASSIC valves” on page 4</a>  Mechanical limit switches (0...48 V or 50...250 V AC/DC) Inductive limit switches (24 V DC, PNP shutter 3-wire with LEDs) Inductive limit switches (24 V DC, shutter 2-wire with LEDs) NAMUR inductive limit switches (8.2 V DC, 2-wire with LEDs).
<b>Type 1060</b>  Position feedback (Actuator Ø 50...225)	Detailed information can be found in chapter <a href="#">“2.3. Type 1060 - Electrical position feedback for CLASSIC valves” on page 7</a>  Change-over contact
<b>Adapter for proximity switch</b>	Detailed information can be found in chapter <a href="#">“2.4. Proximity switch adapters for CLASSIC valves” on page 8</a>  Adapter for proximity switches M12 x 1 (fastening angle) Adapter for proximity switches (Nipple with thread M12x1)
<b>Stroke limitation</b> (Actuator Ø 50...225)	Detailed information can be found in chapter <a href="#">“2.5. Stroke limiter for stroke actuators for CLASSIC valves” on page 9</a> and <a href="#">“2.6. Stroke limiter for stroke actuators for ELEMENT valves” on page 11</a> .  Max. upper stroke limitation, without optical position indicator Max. and min. stroke limitation, with optical position indicator
<b>Manual override</b> (Actuator Ø 50...125)	Detailed information can be found in chapter <a href="#">“2.7. Manual override for stroke actuator for CLASSIC valves” on page 12</a> .  With visual position indication for valve operation when pressure drops
<b>NAMUR-Adapter</b> (Actuator Ø 50...125)	Detailed information can be found in chapter <a href="#">“2.8. NAMUR-Adapter for pilot valve for CLASSIC valves” on page 13</a> .  Adapter plate with screw connection for pilot valve

## 2. Product accessories

### 2.1. Type 8697 - Electrical position feedback for CLASSIC valves

The electrical position feedback Type 8697 is optimised for integrated mounting on the CLASSIC 20XX series. Mechanical or inductive limit switches register the position of the valve and give an electrical feedback signal to the control system.

Besides the electrical position feedback signal the position of the valve is visually shown via LEDs. The housing is easy to clean and features proven electrical IP protection and chemically resistant materials for use in hygienic processing, in food, beverage and pharmaceutical industries.

#### General technical data



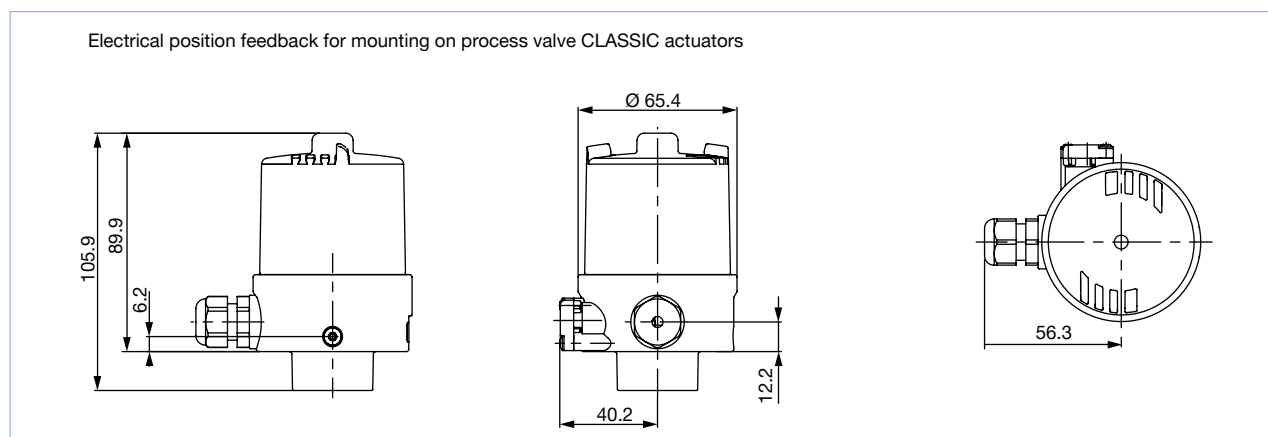
Product properties	
<b>Material</b>	
Housing	PPS
Cover	PC
Seal	EPDM
Stroke range valve spindle	2...36 mm
Electrical data	
<b>Operating voltage<sup>1)</sup></b>	
Micro switch	24 V Version: 0...48 V AC/DC, max. 2 A 230 V Version: 50...250 V AC/DC, max. 2 A
Initiator	10...30 V DC - max. 100 mA per initiator
Position feedback	2x micro switch (0...48 V AC/DC, max. 2 A) 2x micro switch (50...250 V AC/DC, max. 2 A) 2x initiator (24 V DC), PNP shutter 3-wire with LEDs 2x initiator NAMUR (8.2 V DC) (2-wire) with LEDs 2x initiator (24 V DC), shutter (2-wire) with LEDs
Protection class	3 acc. to DIN EN 61140
Electrical connection	
Multipole	M12, 8 pin
Cable gland	M16x1.5 SW22 (cable diameter 4...8 mm), terminal screws 0.14...1.5 mm <sup>2</sup>
Approvals and certificates	
Conformity	EMC directive 2014/30/EU
Ignition protection	II 3D Ex tc IIIC T135 °C Dc II 3G Ex nA IIC T4 Gc II 2D Ex ia IIIC T135 °C Db IP64 II 2G Ex ia IIC T4 Gb
Approval	cULus certificate no. E238179
Environment and installation	
Ambient temperature	-20...+60 °C (without ATEX or for II 2G Ex ia IIC T4 Gb) 0...+55 °C (II 3D Ex tc IIIC T135°C Dc, II 3G Ex nA IIC T4 Gc) 0...+55 °C (II 2D Ex ia IIIC T135 °C Db IP64, II 2G Ex ia IIC T4 Gb)
Installation	As required, preferably with actuator in upright position
Degree of protection	IP65 and IP67 according to EN 60529, Type 4X

1.) Supply voltage according to UL NEC Class 2 for versions with cULus approval.

**Dimensions**

**Note:**

Dimensions in mm



**Ordering chart**

**Note:**

cULus only valid for versions without ATEX approval

End position feedback						Electrical connection	ATEX/IECEx Cat. 3D/G Zone 22/2 <sup>1.)</sup>	ATEX/IECEx Cat. 2D/G Zone 21/1 <sup>2.)</sup>	ATEX/IECEx Cat. 2G Zone 1 <sup>3.)</sup>	cULus	Article no. Actuator series CLASSIC Types 20XX
Inductive switch 3-wire PNP	Inductive switch 2-wire NAMUR	Inductive switch 2-wire 24 V DC	Micro switch 24 V DC	Micro switch 50...250 V AC/DC	Feedback status LEDs						
<b>Feedback, without pilot valve (Actuator size 40 to 225)</b>											
2	-	-	-	-	Yes	Cable	-	-	-	Yes	248827
2	-	-	-	-	Yes	gland	Yes	-	-	-	255851
2	-	-	-	-	Yes	M12 connector	Yes	-	-	-	255858
2	-	-	-	-	Yes		-	-	-	Yes	250472
-	2	-	-	-	Yes	Cable	-	Yes	-	-	248831
-	2	-	-	-	Yes	gland	-	-	Yes	-	255863
-	-	2	-	-	Yes		-	-	-	Yes	248826
-	-	2	-	-	Yes		Yes	-	-	-	255850
-	-	-	2	-	-		-	-	-	Yes	248833
-	-	-	-	2	-		-	-	-	Yes	248825

1.) II 3D Ex tc IIIC T135II 3G Ex nA IIC T4 Gc

2.) II 2D Ex ia IIIC T135 °C IP64/II 2G Ex ia IIC T4 Gb

3.) II 2G Ex ia IIC T4 Gb

**Adapter kits**

Adapter kits for third-party actuators can be found in the data sheet **Adaptation for third-party actuators, KK01** or contact the appropriate Bürkert sales office.

**Note:**

Has to be ordered separately

Description	Actuator size Ø	Article no.
Adapter kit CLASSIC Type 20xx	40 mm	698573
	50/63/80 mm	682264
	100/125 mm	682265
	175/225 mm	684944

## 2.2. Type SY02ST - Electrical position feedback for valves Type 2060, Type 2063 and Type 2080 with actuator size 32 mm

The electrical position feedback Type SY02ST is optimised for integrated mounting on process valves of the 2060, 2063 and 2080 series. Inductive limit switches register the position of the valve and give an electrical feedback signal to the control system.

Besides the electrical position feedback signal the position of the valve is visually shown via LEDs. The housing is easy to clean and features proven electrical IP protection and chemically resistant materials for use in hygienic processing, in food, beverage and pharmaceutical industries.

### General technical data



#### Product properties

##### Material

Housing	PPS
Cover	PC
Adaption	VA
Seal	EPDM/FKM
Stroke range valve spindle	2...6 mm

#### Electrical data

##### Operating voltage

Micro switch	24 V DC +/-10%, max. 100 mA short-circuit proof
Position feedback	2x reed switch, closing contact (2-wire) with LEDs
Protection class	3 acc. to DIN EN 61140

##### Electrical connection

Multipole	M12, 4 pin
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#### Approvals and certificates

Conformity	EMC directive 2014/30/EU
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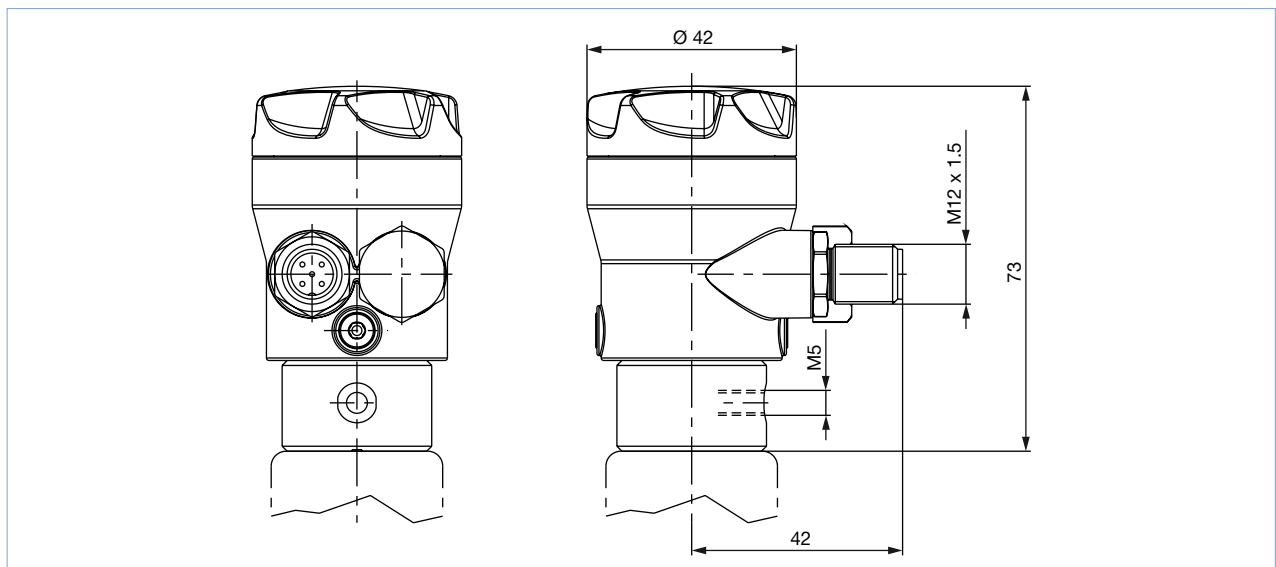
#### Environment and installation

Ambient temperature	-20 °C...+60 °C
Installation	As required, preferably with actuator in upright position
Degree of protection	IP65 and IP67 according to EN 60529, Type 4X

### Dimensions

#### Note:

Dimensions in mm



Ordering chart

Description	Actuator size Ø	Article no.	
		Circuit function A	Circuit function B
Electrical position feedback with adaptation for Type 2060	32 mm	<b>Note:</b> must be ordered as system type 8803 - please contact the appropriate Bürkert sales office.	
Electrical position feedback with adaptation for Type 2063			
Electrical position feedback with adaptation for Type 2080			

2.3. Type 1060 - Electrical position feedback for CLASSIC valves

The electrical position feedback is screwed in, instead of the visual position indicator. While the valve is opening, the piston of the actuator lifts a palm-button. This button actuates a micro switch with change-over contact, which gives the electrical feedback of the valve position. The palm-button also acts as an optical position indicator.

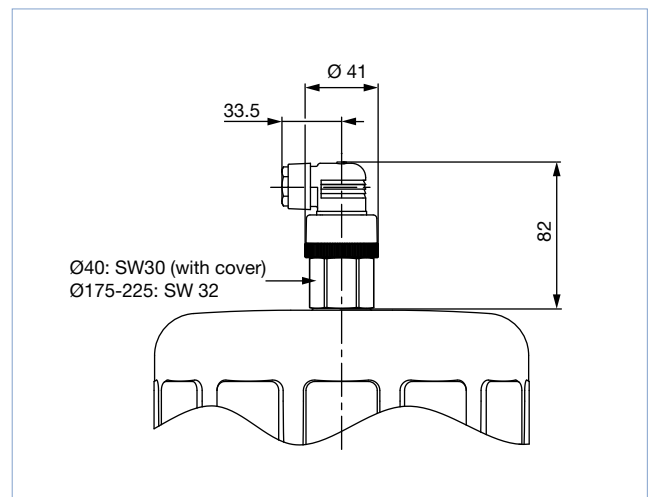
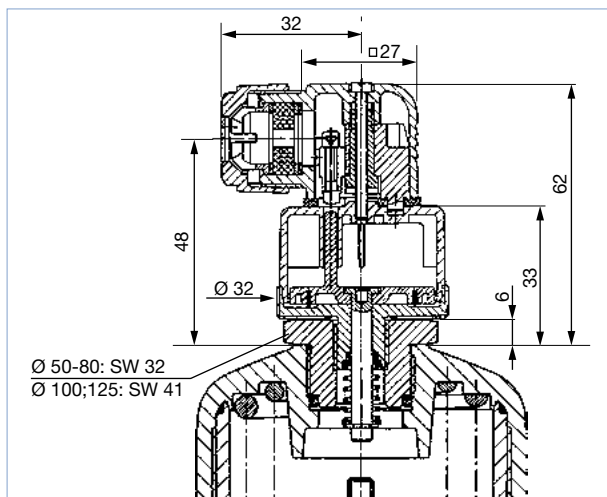
General technical data



Product properties	
Material	Plastic
Electrical data	
Micro switch	Change-over contact
Electrical connection	Solder connections, cable entry sealed by gland with cable grip to suit cable Ø 5...9 mm
Contact rating	
Max. 250 V AC	Max. 5 A resistance or inductive load current
Max. 250 V DC	0.25 A resistance or 0.02 A inductive load current
Environment and installation	
Max. continuous temperature	+ 125 °C
Installation	Screwed in instead of the visual position indicator
Degree of protection	IP65

Dimensions

**Note:**  
Dimensions in mm



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Ordering chart

Actuator size Ø [mm]	Article no.
40	293113 <sup>1.)</sup>
40 (Seat valve)	158244
40 (Diaphragm valve)	158220
50...80	701515
100, 125	701516
175, 225	655696

1.) For valves built as of 2016

2.4. Proximity switch adapters for CLASSIC valves

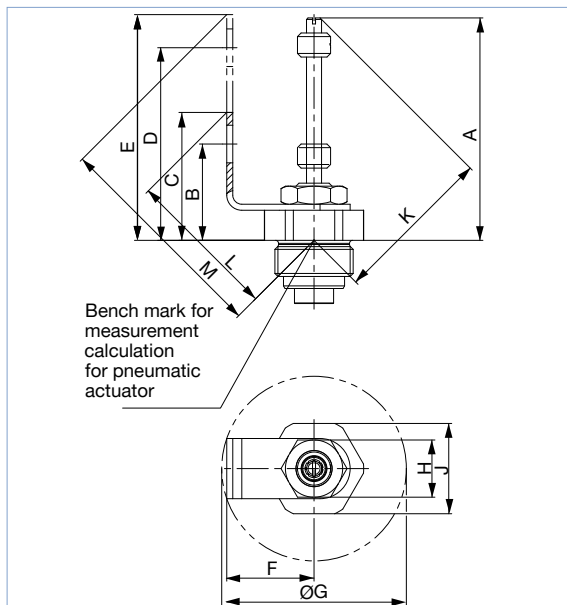


Dimensions

Note:

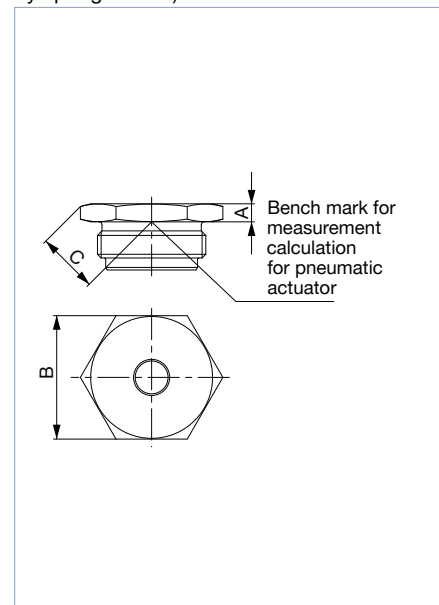
Dimensions in mm

Adapter for proximity switches M12 x 1  
(fastening angle)



Adapter for proximity switch

(Nipple with M12 x 1 thread; single version, only for valve with circuit function A, normally closed by spring action.)



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Actuator size (Ø)	A	B	C	D	E	F	Ø G	H	J	K	L	M	Actuator size (Ø)	A	B	C
50, 63, 80	65.5	32	42.5	-	-	29	61.5	A/F19	A/F30	48	51	-	40	25	A/F30	29.5
100, 125	80.5	35	45.5	-	-	29	61.5	A/F19	A/F30	49	53	-	50, 63, 80	6	A/F32	17
50, 63, 80	80.5	28	-	74	85	24	52	A/F19	A/F30	59	-	78	100, 125	6	A/F41	21
100, 125	95.5	31	-	77	88	24	52	A/F19	A/F30	69	-	80	175, 225	28.5	A/F32	33
175, 225	145	68	-	136	147	24	52	A/F19	A/F30	104	-	121				

### Ordering chart

**Adapter for proximity switches M12 x 1**  
(fastening angle)

Sensor	Actuator size (Ø) [mm]	Article no.
Single	50, 63, 80	649381 ☒
Single	100, 125	649382 ☒
Double	50, 63, 80	667988 ☒
Double	100, 125	667989 ☒
Double	175, 225	669810 ☒

**Adapter for proximity switch**

(Nipple with M12 x 1 thread; single version, only for valve with circuit function A, normally closed by spring action.)

Actuator size (Ø) [mm]	Article no.
40	On request
50, 63, 80	648152 ☒
100, 125	649257 ☒
175, 225	669773 ☒

## 2.5. Stroke limiter for stroke actuators for CLASSIC valves

### General technical data

**Max. stroke limitation without visual position indicator**

Ø 40...125 mm    Ø 175...225 mm



#### Product properties

##### Max. stroke limitation

Special feature

Without visual position indicator (upper stroke limitation only) (Single version, only for valve with circuit function A, normally closed by spring action.)

Mounting

Screw in stroke limiter (instead of the transparent cover for the visual position indicator)

For Ø 100 and Ø 125, actuator cover must be removed for mounting, to do this a special key is required (see [“Ordering chart for mounting key \(for actuator cover\)” on page 12](#))

**Min./Max. stroke limitation with visual position indicator**

Ø 50...125 mm    Ø 175 mm



#### Product properties

##### Max./min. stroke limitation

Special feature

Max. & min. flow setting (upper and lower stroke limitation) with visual position indicator

Mounting

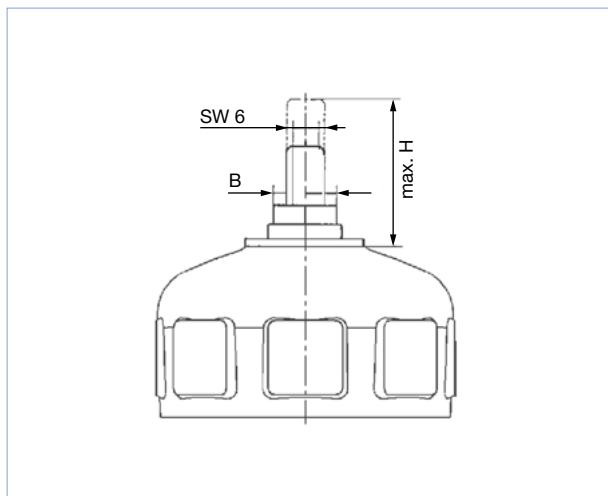
Actuator cover must be removed for mounting, to do this a special key is required (see [“Ordering chart for mounting key \(for actuator cover\)” on page 12](#))

**Dimensions**

**Note:**

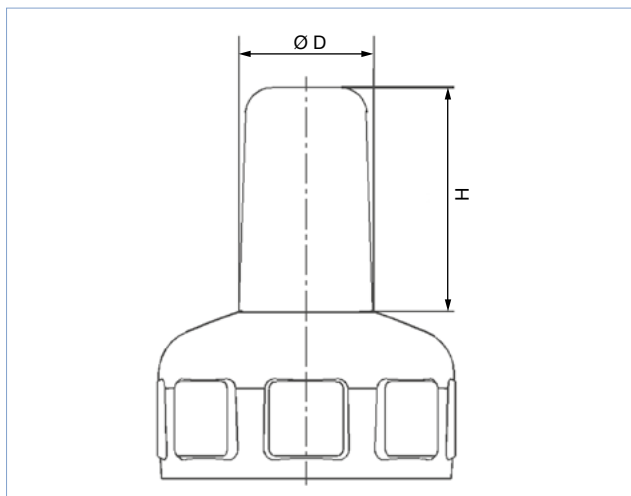
Dimensions in mm

**Actuator size 40...225 mm**



Actuator size Ø	B	H
40, 50, 63, 80	SW 17	40
100, 125	SW 19	55
175, 225	SW24	97

**Actuator size 50...175 mm**



Actuator size Ø	Ø D	H
50, 63, 80	39	50
100, 125	53	73
175	86	172

**Ordering chart**

**Max. stroke limitation without visual position indicator**

(single version, only for valves with circuit function A, normally closed)

Actuator size Ø [mm]	Article no.
40...80	637866
100	637867
125	637868
175...225	655600

**Min./Max. stroke limitation with visual position indicator**

Rc

Actuator size Ø [mm]	Article no.
50...80	636820
100	636821
125	640703
175 (diaphragm valve)	655631
175 (globe valve )	659038

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## 2.6. Stroke limiter for stroke actuators for ELEMENT valves

### General technical data

#### Max. stroke limitation without visual position indicator

Ø 50 mm

Ø 70...130 mm



#### Product properties

##### Max. stroke limitation

Special feature

Without visual position indicator (upper stroke limitation only)

Mounting

Screw in stroke limiter (instead of the transparent cover for the visual position indicator)

#### Min./Max. stroke limitation with visual position indicator

Ø 50 mm

Ø 70...130 mm



#### Product properties

##### Max./min. stroke limitation

Special feature

Max. and min. flow setting (upper and lower stroke limitation) with visual position indicator

Mounting

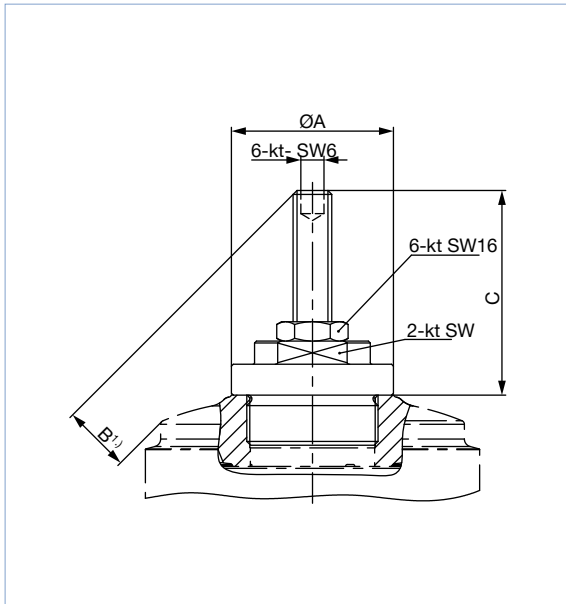
Screw in stroke limiter (instead of the transparent cover for the visual position indicator)

### Dimensions

#### Note:

Dimensions in mm

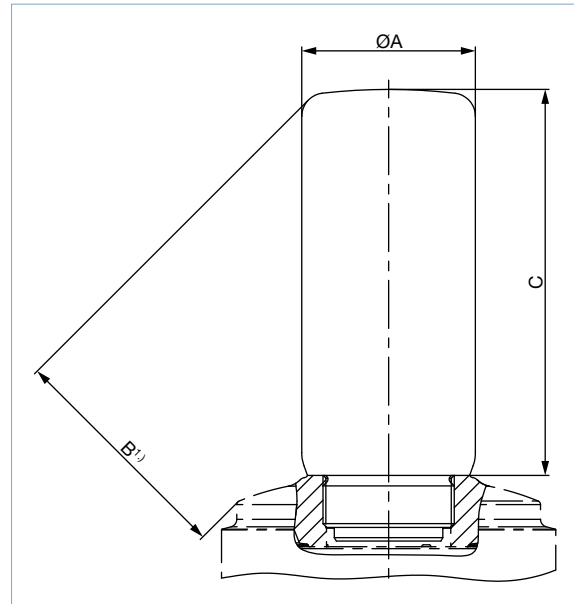
#### Actuator size 50 mm



Actuator	ØA	B	C	2-kt SW
D	20	15	40	17
M	42	18	53	24
N		16		
P		2		

1.) Measurement B for Angle-seat valve

#### Actuator size 70...130 mm



Actuator	ØA	B	C
D	27	38	66
M	45	61	100
N		59	
P		45	

**Ordering chart**

**Max. stroke limitation without visual position indicator**  
 (single version, only for valve with circuit function A, normally closed by spring action.)

**Min./Max. stroke limitation with visual position indicator**

Actuator size Ø [mm]	Article no.
50	677535
70-130	673962

Actuator size Ø [mm]	Article no.
50	673950
70-130	673951

**2.7. Manual override for stroke actuator for CLASSIC valves**

Manual override with visual position indicator for manual valves when pressure drops

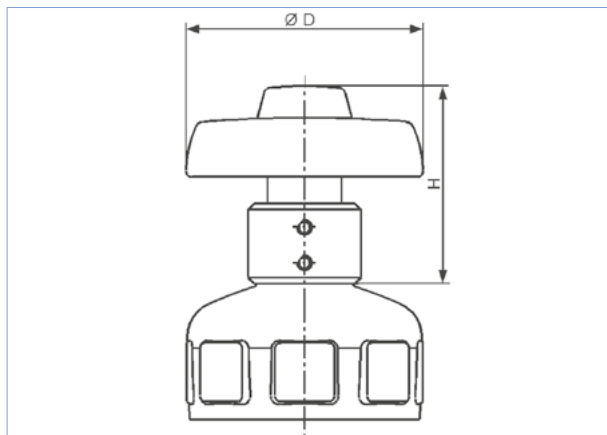
**General technical data**



Product properties	
Version	Manual opening (only for control function A, i.e. unpressurised closed)

**Dimensions**

**Note:**  
 Dimensions in mm

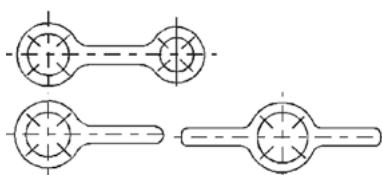


Actuator size Ø	Ø D	H
50, 63, 80	80	68
100, 125	150	85

**Ordering chart**

Actuator size Ø [mm]	Article no.
50...80	636822
100, 125	636823

**Ordering chart for mounting key (for actuator cover)**



Actuator size Ø [mm]	Article no.
40 and 50	639175
63	639170
80	639171
100	639172
125	639173

## 2.8. NAMUR-Adapter for pilot valve for CLASSIC valves

### General technical data



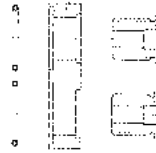
#### Product properties

##### Material

Plate and hollow screw	Steel 1.4021 or CuZn39 Pb3 F44
Seal: O-rings	NBR 75

#### Mounting for NAMUR-Adapter

No.	Description
1	Plate
2	Hollow screw
3	O-rings

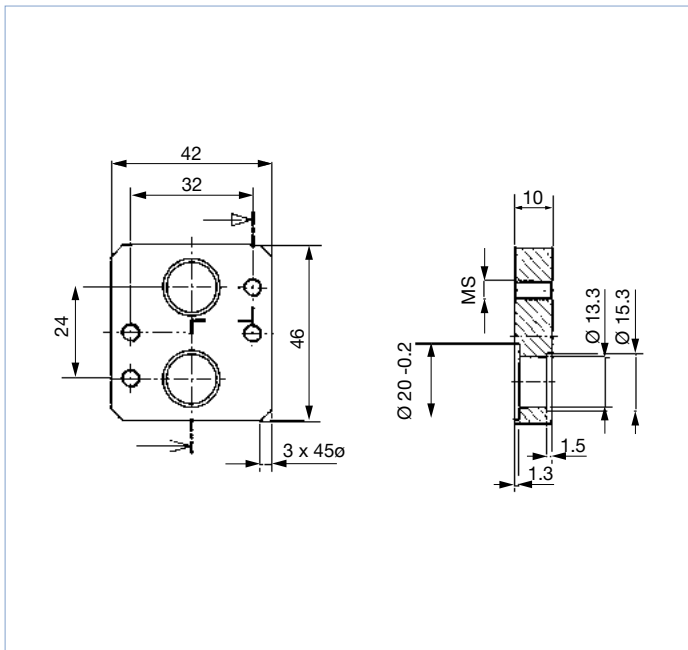


### Dimensions

#### Note:

Dimensions in mm

#### Version 1



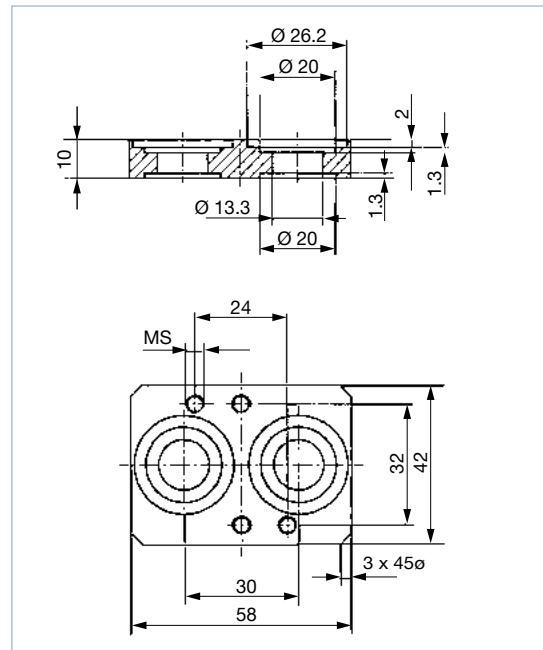
Namur-Adapter for **stroke actuator**

- Ø 50...80 for angle seat and globe valve
- Ø 63...100 for diaphragm valve

NAMUR adapter for **rotary actuator**

- Ø 63 on request

#### Version 2



Namur-Adapter for **stroke actuator**

- Ø 100 and 125 for angle seat and globe valve
- Ø 125 for diaphragm valve

NAMUR adapter for **rotary actuator**

- Ø 100

### Ordering chart

Actuator size Ø	Material	Article no.
Version 1	Stainless steel	632974
Version 2	Stainless steel	634275
Version 1	Brass	637113
Version 2	Brass	637114

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