




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

| | |
|---|---|
|  | Type 2000 ▶ Pneumatically operated 2/2 way angle seat valve (Type CLASSIC) |
|  | Type 2006 ▶ Pneumatically operated 3/2 way seat valve CLASSIC |
|  | Type 2030 ▶ Pneumatically operated 2/2 way diaphragm valve with plastic body (Type CLASSIC) |
|  | Type 2031 ▶ 2/2 way diaphragm valve with pneumatic plastic actuator (Type CLASSIC) |
|  | Type 2012 ▶ Pneumatically operated 2/2 way globe valve (Type CLASSIC) |
|  | Type 210X ▶ 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 | |
|---|---|
| Type 8697 Electrical position feedback (Actuator Ø 20...225) | Detailed information can be found in chapter “2.1. Type 8697 - Electrical position feedback for CLASSIC valves” on page 4 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). |
| Type 1060 Position feedback (Actuator Ø 50...225) | Detailed information can be found in chapter “2.2. Type 1060 - Electrical position feedback for CLASSIC valves” on page 6 Change-over contact |
| Adapters for proximity switches | Detailed information can be found in chapter “2.3. Proximity switch adapters for CLASSIC valves” on page 7 Adapter for proximity switches M12 x 1 (fastening angle) Adapter for proximity switches (Nipple with thread M12x1) |
| Stroke limitation (Actuator Ø 50...225) | Detailed information can be found in chapter “2.4. Stroke limiter for stroke actuators for CLASSIC valves” on page 8 and “2.5. Stroke limiter for stroke actuators for ELEMENT valves” on page 9 . Max. upper stroke limitation, without optical position indicator Max. and min. stroke limitation, with optical position indicator |
| Manual override (Actuator Ø 50...125) | Detailed information can be found in chapter “2.6. Manual override for stroke actuator for CLASSIC valves” on page 11 . With visual position indication for valve operation when pressure drops |
| NAMUR-Adapter (Actuator Ø 50...125) | Detailed information can be found in chapter “2.7. NAMUR-Adapter for pilot valve for CLASSIC valves” on page 12 . 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



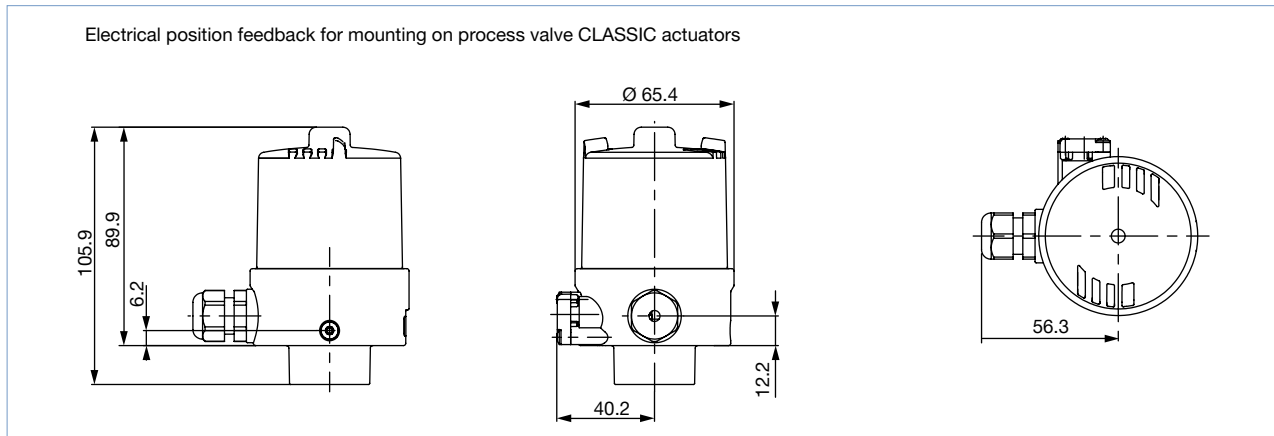
| Product features | |
|---------------------------------------|--|
| Material | |
| Housing | PPS |
| Cover | PC |
| Seal | EPDM |
| Stroke range valve spindle | 2...36 mm |
| Electrical data | |
| Operating voltage¹⁾ | |
| Micro switch | 24 V Version: 0...48 V AC/DC, max. 2 A 230 V Version: 50...250 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 ² |
| 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 ^{1.)} | ATEX/IECEx Cat. 2D/G Zone 21/1 ^{2.)} | ATEX/IECEx Cat. 2G Zone 1 ^{3.)} | 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 | | | | | | | |
| Feedback, without pilot valve (Actuator size 40 to 225) | | | | | | | | | | | | |
| 2 | - | - | - | - | Yes | Cable | - | - | - | Yes | 248827 | |
| 2 | - | - | - | - | Yes | gland | Yes | - | - | - | 255851 | |
| 2 | - | - | - | - | Yes | M12 connector | Yes | - | - | - | 255858 | |
| 2 | - | - | - | - | Yes | Cable gland | - | - | - | Yes | 250472 | |
| - | 2 | - | - | - | Yes | | - | Yes | - | - | - | 248831 |
| - | 2 | - | - | - | Yes | | - | - | 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 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

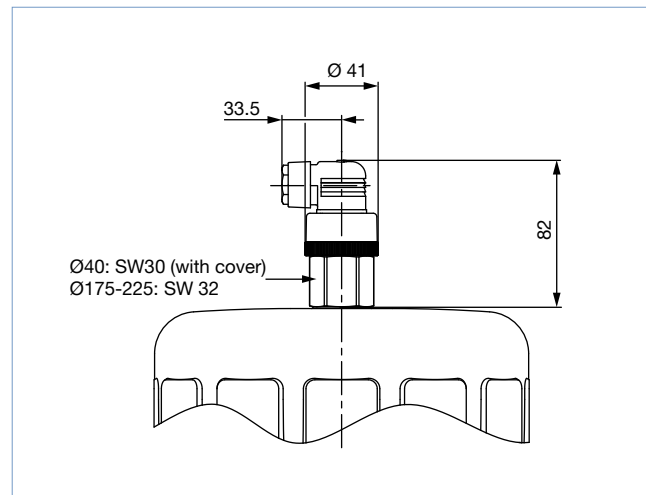
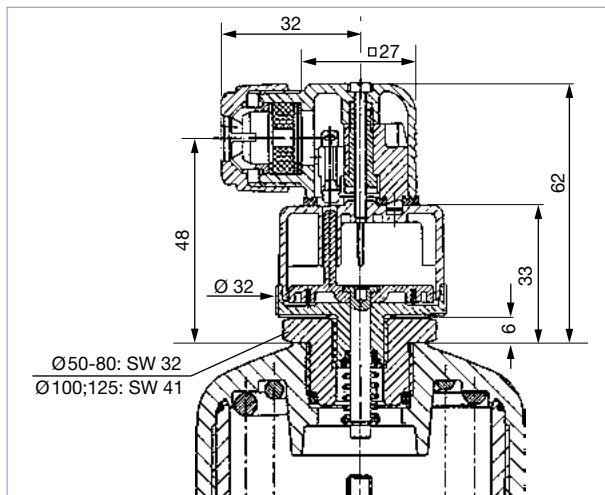


| Product features | |
|------------------------------|--|
| Material | Plastic |
| Electrical data | |
| Micro switch | Change-over contact |
| Electrical connection | Solder connections, cable entry sealed by gland with cable grip to suit cable Ø 5...9 mm |
| Contact rating | |
| Max. 250 V AC | Max. 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



Ordering chart

| Actuator size Ø [mm] | Article no. |
|----------------------|-----------------------|
| 40 | 293113 ^{1.)} |
| 40 (Seat valve) | 158244 |
| 40 (Diaphragm valve) | 158220 |
| 50...80 | 701515 |
| 100, 125 | 701516 |
| 175, 225 | 655696 |

1.) For valves built as of 2016

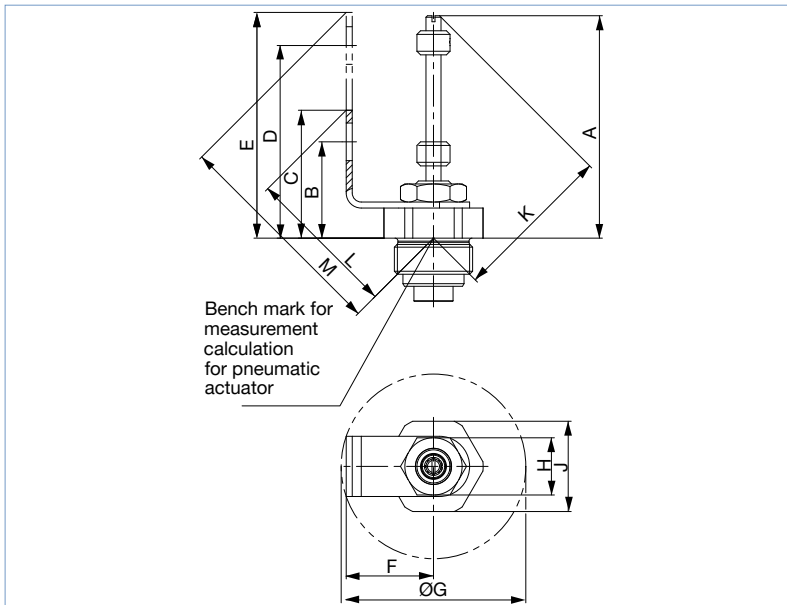
2.3. Proximity switch adapters for CLASSIC valves



Dimensions

Note:
Dimensions in mm

Adapter for proximity switches M12 x 1 (fastening angle)



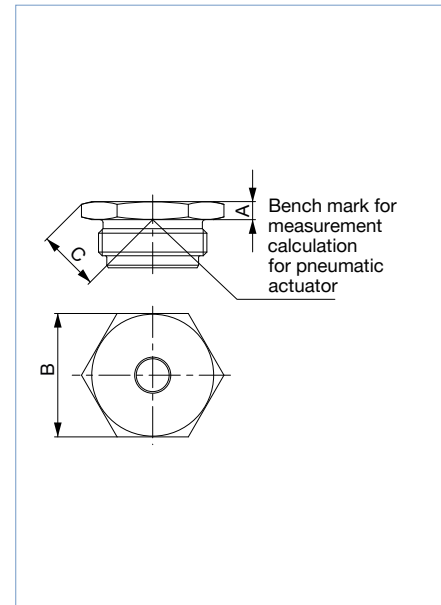
| Actuator size (Ø) | A | B | C | D | E | F | Ø G | H | J | K | L | M |
|-------------------|------|----|------|-----|-----|----|------|-------|-------|-----|----|-----|
| 50, 63, 80 | 65.5 | 32 | 42.5 | - | - | 29 | 61.5 | A/F19 | A/F30 | 48 | 51 | - |
| 100, 125 | 80.5 | 35 | 45.5 | - | - | 29 | 61.5 | A/F19 | A/F30 | 49 | 53 | - |
| 50, 63, 80 | 80.5 | 28 | - | 74 | 85 | 24 | 52 | A/F19 | A/F30 | 59 | - | 78 |
| 100, 125 | 95.5 | 31 | - | 77 | 88 | 24 | 52 | A/F19 | A/F30 | 69 | - | 80 |
| 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)



| Actuator size (Ø) | A | B | C |
|-------------------|------|-------|------|
| 40 | 25 | A/F30 | 29.5 |
| 50, 63, 80 | 6 | A/F32 | 17 |
| 100, 125 | 6 | A/F41 | 21 |
| 175, 225 | 28.5 | A/F32 | 33 |

Adapter for proximity switch (nipple with M12 x 1 thread)

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

2.4. 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 features

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)

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 11)

Min./Max. stroke limitation with visual position indicator

Ø 50...125 mm Ø 175...225 mm



Product features

Max./min. stroke limitation

Special feature

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

Mounting

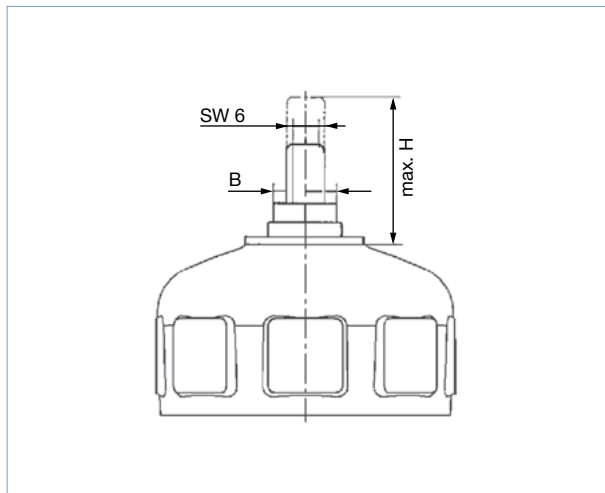
Actuator cover must be removed for mounting, to do this a special key is required (see [“Ordering chart for mounting key \(for actuator cover\)”](#) on page 11)

Dimensions

Note:

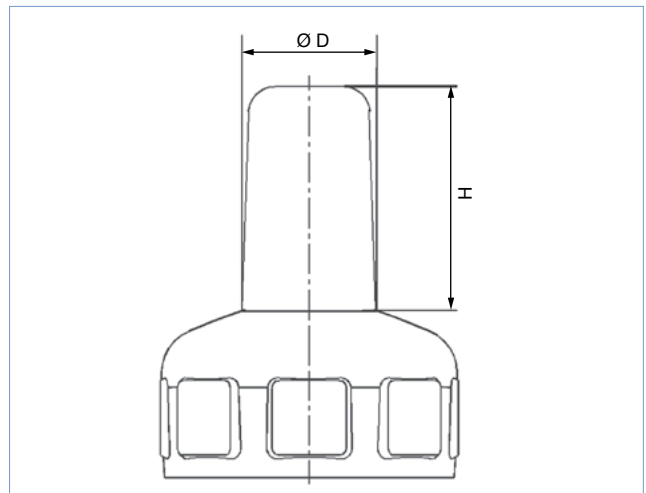
Dimensions in mm

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...225 mm



| Actuator size Ø | Ø D | H |
|-----------------|-----|-----|
| 50, 63, 80 | 39 | 50 |
| 100, 125 | 53 | 73 |
| 175, 225 | 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

| Actuator size Ø [mm] | Article no. |
|-----------------------------|-------------|
| 50...80 | 636820 |
| 100 | 636821 |
| 125 | 640703 |
| 175...225 (diaphragm valve) | 655631 |
| 175 (globe valve) | 659038 |
| 225 (globe valve) | 659423 |

2.5. 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 features

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 features

Max./min. stroke limitation

Special feature

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

Mounting

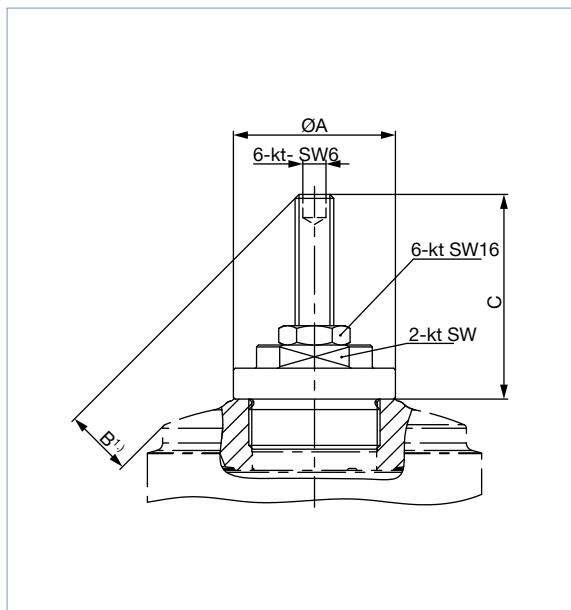
Screw in stroke limiter (instead of the transparent cover for the visual position indicator)

Dimensions

Note:

Dimensions in mm

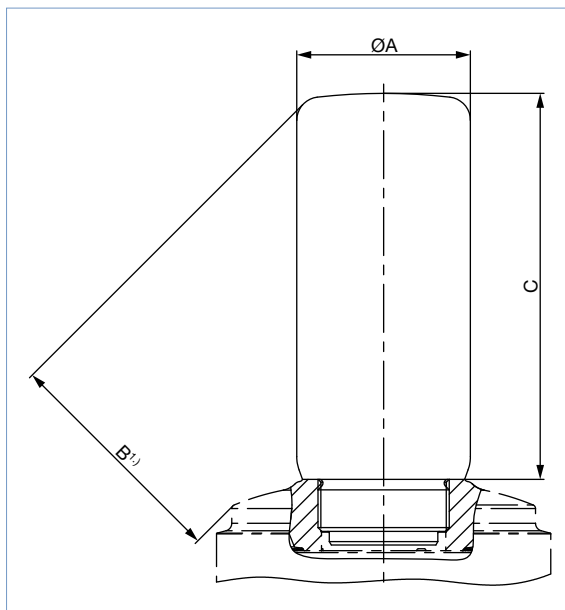
Actuator size 50 mm



| 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.)

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

Min./Max. stroke limitation with visual position indicator

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

2.6. Manual override for stroke actuator for CLASSIC valves

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

General technical data



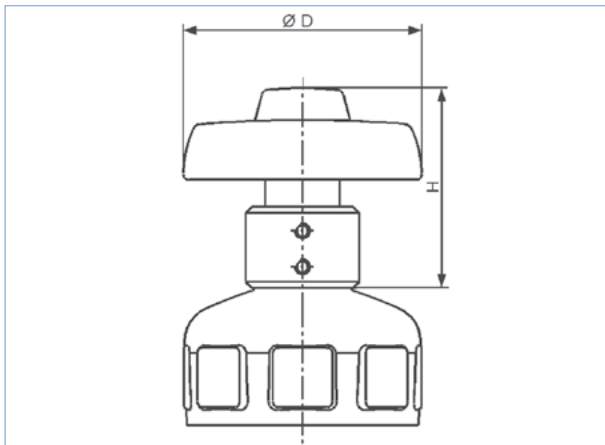
Product features

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

Dimensions

Note:

Dimensions in mm

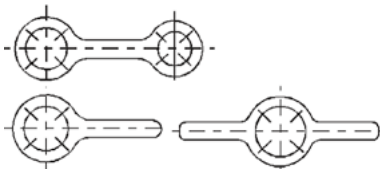


| Actuator size Ø | Ø D | H |
|-----------------|-----|----|
| 50, 63, 80 | 80 | 68 |
| 100, 125 | 150 | 85 |

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 |

2.7. NAMUR-Adapter for pilot valve for CLASSIC valves

General technical data



Product features

Material

Plate and hollow screw

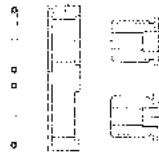
Steel 1.4021 or CuZn39 Pb3 F44

Seal: O-rings

NBR 75

Mounting for NAMUR-Adapter

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

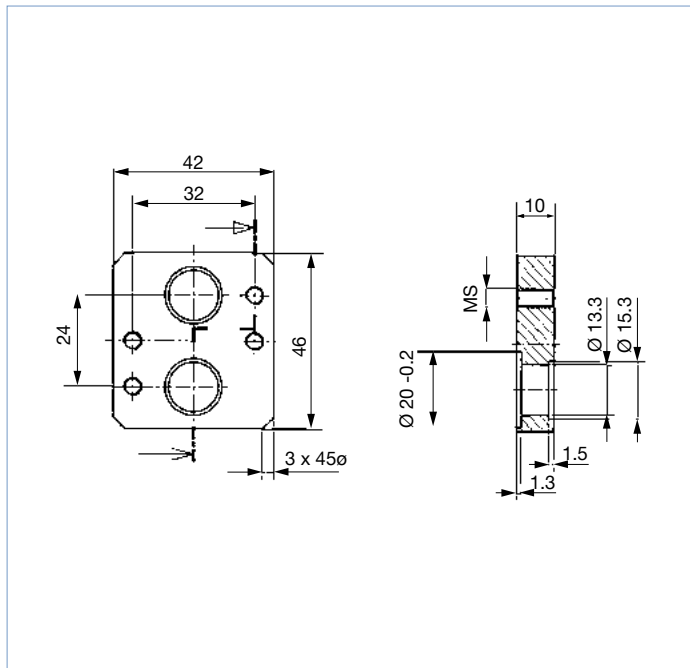


Dimensions

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

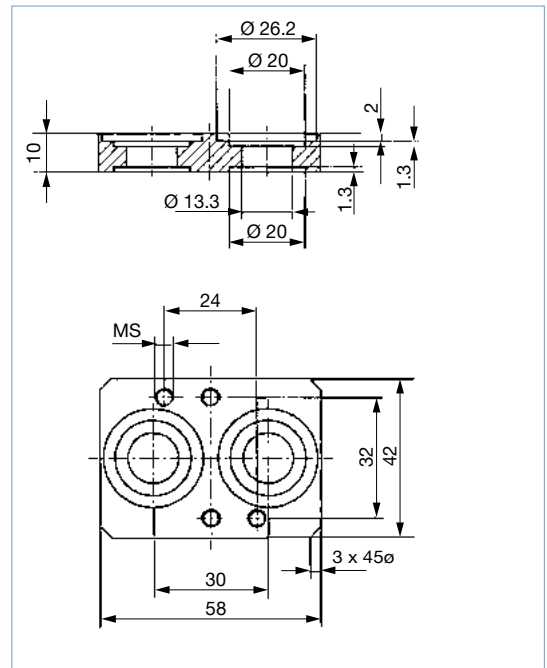
NAMUR adapter for **rotary actuator**

- Ø 63 on request

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 |

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

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DTS 1000102756 EN Version: Z Status: RL (released | freigegeben | validé) printed: 28.07.2021

