

Universal attachment for hygienic process valves

- 3 switching points
- Color status display
- Manual override to be used with closed housing
- Fieldbus AS-Interface, IO-Link or bÜS (CANopen)



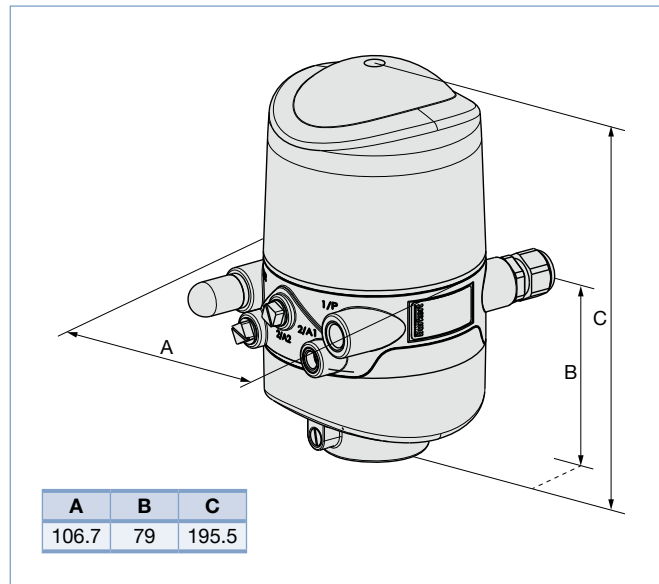
Type 8681 control head is optimized for decentralised automation of hygienic process valves. Thanks to its universal adapter it can be combined with all normal commercial butterfly valves, ball valves, single and double seated valves. With a decentralised automation concept, the control head takes over all pneumatic actuation, feedback and diagnostic functions up to and including field bus communication. 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.

Technical Data

| | |
|---|--|
| Material | |
| Body | PA, PPO, VA |
| Cover | PC |
| Seal | CR, EPDM |
| Control medium | neutral gases, air DIN ISO 8573-1 (filter 5 µm recommended) |
| Dust concentration | class 5 (<40 µm particle size) |
| Particle density | class 5 (<10 mg/m ³) |
| Pressure condensation point | class 3 (<-4 °F (-20°C)) |
| Oil concentration | class 5 (<25 mg/m ³) |
| Supply pressure | 36.25 to 116 PSI |
| Air capacity solenoid valve¹⁾ (supply and exhaust air per solenoid valve adjustable) | 110 l _N /min - for pressurization and exhaust, lifting device 110 l _N /min - delivery condition 200 l _N /min - max. typical flow rate (throttle) |
| Pilot air ports | |
| Air inlet and outlet | G 1/4" |
| Service ports | G 1/8" |
| Position sensor | Non-contact Position Sensor, 3 self-regulated switching points PNP (Teach-In-function) closer (normally open), PNP-output short-circuit proof, with clamping short-circuit protection Max. 100 mA per feedback signal |
| Outlet current | 0 to 80 mm |
| Stroke range | ≤ 0.1 mm |
| Resolution | ± 0.5 mm - when using a target for the dimensional drawing, material 1.4021 and a piston rod (Ø 22 mm, material 1.4301) (error refers to the reproducibility of a teach-position) |
| Total error | |
| Ambient temperature | 14 °F to 131 °F 41 °F to 131 °F (ATEX II 3G Ex nA IIC T4; ATEX II 3G Ex tD A22 T135°C) |
| Installation | As required, preferably with actuator in upright position |

¹⁾ QNn-value acc. to the definition with decrease in pressure from 7 to 6 bar absolute with 68°C.

Envelope Dimensions [mm] (see datasheet for details)



Technical Data (continued)

| | |
|-------------------------------|--|
| Type of protection | IP 65/67 acc. to EN 60529 |
| Protection class | 3 acc. to VDE 0580 |
| Fieldbus communication | AS-Interface |
| EG-Conformity | EMV2004/108/EG; ATEX 94/9/EG |
| Ignition protection | ATEX II 3G Ex nA IIC T4 ATEX II 3G Ex tD A22 T135°C |

Options

- Class 1 Div. 2



Ordering Chart

| Communication | Supply voltage | Connection | FM CL1D2 NI | Quantity of solenoid valves | Feedback | Item no. |
|---|-------------------|--|-------------|-----------------------------|-----------------|------------|
| without | 12 to 28 V DC | cable gland | no | 0 | 3 int. + 1 ext. | 196410 |
| | | | no | 1 | 3 int. + 1 ext. | 196411 |
| | | | no | 3 | 3 int. + 1 ext. | 196413 |
| | | without | yes | 0 | 3 int. + 1 ext. | 267358 |
| | | | yes | 1 | 3 int. + 1 ext. | 261483 |
| | | | yes | 3 | 3 int. + 1 ext. | 261484 |
| without | 12 to 28 V DC | M12, 12-pin, cable 80 cm | no | 0 | 3 int. + 1 ext. | 196420 |
| | | | no | 1 | 3 int. + 1 ext. | 196421 |
| | | | no | 3 | 3 int. + 1 ext. | 196423 |
| without | 120 VAC | cable gland | no | 0 | 3 int. + 1 ext. | 196470 |
| | | | no | 1 | 3 int. + 1 ext. | 196471 |
| | | | no | 3 | 3 int. + 1 ext. | 196473 |
| AS-Interface v3.0 (62 slaves) | 29.5 to 31.6 V DC | Version with ASI flat cable clip | no | 0 | 3 int. + 1 ext. | 196430 |
| | | | no | 1 | 3 int. + 1 ext. | 196431 |
| | | | no | 3 | 3 int. + 1 ext. | 196433 |
| | | without | yes | 0 | 3 int. + 1 ext. | 20013509 |
| | | | yes | 1 | 3 int. + 1 ext. | 261485 |
| | | | yes | 3 | 3 int. + 1 ext. | 261486 |
| büS/CANopen | via Bus | M12, 5-pin, cable 80 cm | no | 0 | 3 int. + 1 ext. | on request |
| | | | no | 1 | 3 int. + 1 ext. | 363140 |
| | | | no | 3 | 3 int. + 1 ext. | 363163 |
| IO-Link | via Bus | Multipole 4-pin, cable 10 cm (port class A) | no | 0 | 3 int. + 1 ext. | 359167 |
| | | | no | 1 | 3 int. + 1 ext. | 358578 |
| | | | no | 3 | 3 int. + 1 ext. | 358579 |
| | | | yes | 0 | 3 int. + 1 ext. | 20013513 |
| | | | yes | 1 | 3 int. + 1 ext. | 20002932 |
| | | | yes | 3 | 3 int. + 1 ext. | 20003427 |
| PMO Versions (for Alfa Laval mixproof valves - includes fittings for 1/4" poly tubing) | | | | | | |
| without | 12 to 28 V DC | M12, 12-pin, cable 80 cm | no | 3 | 3 int. + 1 ext. | 98134546 |
| AS-Interface (62 slaves) | 29.5 to 31.6 V DC | Version with ASI flat cable clip and cable 80 cm | no | 3 | 3 int. + 1 ext. | 98134547 |
| büS/CANopen | via Bus | M12, 5-pin, cable 80 cm | no | 3 | 3 int. + 1 ext. | 98138074 |
| IO-Link | via Bus | Multipole 4-pin, cable 10 cm (Port class A) | no | 3 | 3 int. + 1 ext. | 98137651 |

Notes:

- UL and ATEX zone 2/22 cat. 3 versions available upon request
- 2 solenoid versions available upon request
- FM versions always come without an electrical connection!
- FM versions of feedback units are always with pneumatic housing (ports are plugged)
- IO-Link Port class B available upon request

6 optimized LED colors: green, yellow, red, orange, white, and blue to indicate valve positions, error messages and warnings. In addition, the user has 6 different LED display modes to choose from.

