

INNOVA M

Shut-off Single Seat Valve



APPLICATION

The INNOVA M-type valve is a pneumatic shut-off seat valve for hygienic applications. The valve is designed for the direction of product flow from the upper to the lower body. To avoid the effect of water hammer, the valve closes against the flow.

DESIGN AND FEATURES

Gasket with specific profile guarantees reliability under adverse working conditions.
Hygienic design of the gasket ensures optimal cleaning.
Single-acting pneumatic actuator.
Normally closed valve (NC).
The valve can be changed to normally open (NO) by simply reversing the position of the pneumatic actuator.
Easy assembly/disassembly of internal parts by loosening a clamp fastener.
Open lantern allows visual inspection of shaft sealing.
360° adjustable body.

TECHNICAL SPECIFICATIONS

Materials

| | |
|-------------------------------------|--------------------|
| Parts in contact with the product | 1.4404 (AISI 316L) |
| Other stainless steel parts | 1.4301 (AISI 304) |
| Gaskets in contact with the product | EPDM |

Surface finish

| | |
|----------|-----------------------------------|
| Internal | Bright polish $Ra \leq 0,8 \mu m$ |
| External | Matt |

Available sizes

| | |
|--|----------------|
| DIN EN 10357 series A (previously DIN 11850 series 2) | DN 25 - DN 100 |
| ASTM A269/270 (corresponds to OD pipe) | OD 1" - OD 4" |

Connections

Weld

Operating limits

| | | |
|--------------------------|----------------------------|---------------|
| Temperature range | -10°C to 121°C | 14°F to 250°F |
| Temperature SIP | 140°C (maximum 30 minutes) | 284°F |
| Maximum working pressure | 1000 kPa (10 bar) | 145 PSI |
| Minimum working pressure | Vacuum | Vacuum |
| Compressed air pressure | 6 - 8 bar | 87 - 116 PSI |
| Air connections | G 1/8 (BSP) | G 1/8 (BSP) |

OPTIONS

Double-acting pneumatic actuator.

Gaskets: FPM, HNBR.

Other connection types.

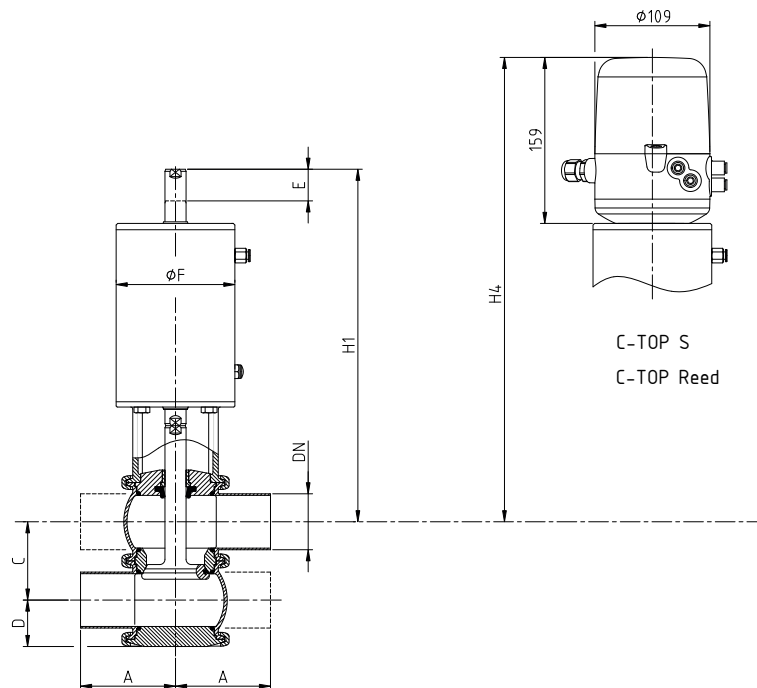
Control unit.

External position sensors.

Surface finish: Ra < 0,5 µm.

Steam barrier.

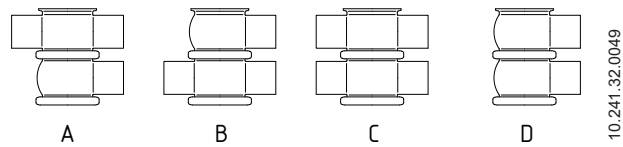
Bodies with heating jacket.

DIMENSIONS

| | DN | Pipe | A | C | D | E | ØF | H1 | H4 | kg ¹ |
|-----|-----|--------------|-----|-----|----|----|-----|-----|-----|-----------------|
| DIN | 25 | 29,0 x 1,50 | 50 | 50 | 32 | 10 | 87 | 238 | 376 | 5,3 |
| | 40 | 41,0 x 1,50 | 85 | 62 | 38 | 21 | 87 | 259 | 386 | 6,7 |
| | 50 | 53,0 x 1,50 | 90 | 74 | 44 | 28 | 112 | 328 | 442 | 10 |
| | 65 | 70,0 x 2,00 | 110 | 92 | 53 | 31 | 143 | 376 | 494 | 18 |
| | 80 | 85,0 x 2,00 | 125 | 107 | 60 | 29 | 143 | 382 | 501 | 20 |
| OD | 100 | 104 x 2,00 | 150 | 127 | 70 | 31 | 216 | 411 | 525 | 36 |
| | 1" | 25,4 x 1,65 | 50 | 46 | 30 | 14 | 87 | 240 | 378 | 5,3 |
| | 1½" | 38,1 x 1,65 | 85 | 59 | 36 | 24 | 87 | 260 | 388 | 6,7 |
| | 2" | 50,8 x 1,65 | 90 | 72 | 43 | 31 | 112 | 329 | 443 | 10 |
| | 2½" | 63,5 x 1,65 | 110 | 86 | 50 | 37 | 143 | 379 | 497 | 18 |
| | 3" | 76,2 x 1,65 | 125 | 99 | 56 | 37 | 143 | 386 | 505 | 20 |
| | 4" | 101,6 x 2,11 | 150 | 124 | 69 | 33 | 216 | 412 | 526 | 36 |

1) The weights correspond to the "D" housing combination

HOUSING COMBINATIONS



MAXIMUM PRESSURES

Maximum pressure in bar / PSI without leakage at the valve seat

| Actuator / valve body combination and direction of pressure | Air pressure [bar] / [PSI] | Plug position | DN 25 | DN 40 | DN 50 | DN 65 | DN 80 | DN 100 |
|---|-------------------------------|---------------|---------------|-----------|----------|----------|----------|----------|
| | | | OD 1" | OD 1½" | OD 2" | OD 2½" | OD 3" | OD 4" |
| | | | [bar] / [PSI] | | | | | |
| | 6 / 87 | NO | 10 / 145 | 7,4 / 107 | 4,5 / 65 | 5,6 / 81 | 4,7 / 68 | 10 / 145 |
| | - | NC | 10 / 145 | 6 / 87 | 6,1 / 89 | 6,3 / 91 | 5,3 / 77 | 5,6 / 81 |
| | 6 / 87 | A/A | 10 / 145 | 10 / 145 | 10 / 145 | 10 / 145 | 10 / 145 | 10 / 145 |

Maximum pressure in bar / PSI against which the valve can open

| Actuator / valve body combination and direction of pressure | Air pressure [bar] / [PSI] | Plug position | DN 25 | DN 40 | DN 50 | DN 65 | DN 80 | DN 100 |
|---|-------------------------------|---------------|---------------|-----------|-----------|-----------|-----------|-----------|
| | | | OD 1" | OD 1½" | OD 2" | OD 2½" | OD 3" | OD 4" |
| | | | [bar] / [PSI] | | | | | |
| | - | NO | 10 / 145 | 7,9 / 115 | 10 / 145 | 9 / 131 | 7,6 / 110 | 7,7 / 111 |
| | 6 / 87 | NC | 10 / 145 | 9,1 / 132 | 9,7 / 141 | 8,4 / 121 | 7 / 102 | 10 / 145 |

A ≡ air

P ≡ product pressure

NC ≡ normally closed

NO ≡ normally open

A/A ≡ double acting

Values for standard actuators

For other pressures, bigger actuators can be assembled