



PED 97/23/EC



TA LUFT



WRAS approved



ATEX certified

PKL.BV10.16.AAA

This pneumatically actuated butterfly valve, suitable for a wide variety of industrial and general applications, is mounted between flanges. Sizes between DN50 and DN1600 are available.

The unit can be delivered complete with pneumatic part-turn valve actuators, single- and double-acting, closing or opening function initiated by spring.

Different materials can be selected for housing, collar and the flap itself.



Specification

NOMINAL DIAMETER

DN50 to DN300 (up to DN1600 upon request)

STANDARDS

- Housing type acc. to EN593 fig.3a
- Appropriate for insertion between flanges acc. to EN1092-B1 PN6/10/16, formerly DIN 2632/2633, Form Cund ASME B16.5 150lbs RF
- Length in conformity with EN 558-1 table 1 series 20, formerly DIN 3202 K1 and API 609 category A
- Tightness acc. to EN 12266-1 A.5 Rate A, formerly DIN 3230
- Mounting flange acc. to EN ISO 5211

TESTS

Corresponding to EN12266-1 (P10-P12)/MSS SP-67 type 1
 Test pressure: Housing 24 bar/375 PSI, seat 17.6 bar/250 PSI

PRESSURE

Max. working pressure = 16 bar / 250 PSI

ADMISSIBLE SUBSTANCES

Acc. to material used (see table second page)

TEMPERATURE

Acc. to material used for seals (see table)

MATERIAL

- Housing: Gray cast iron casting 25, EP coated, color RAL 5015
- Seal: EPDM
- Disk: Special steel CF8M /1.4404
- Manual lever: Gray cast iron casting 25, EP coated

Standard Material (alternatives upon request)

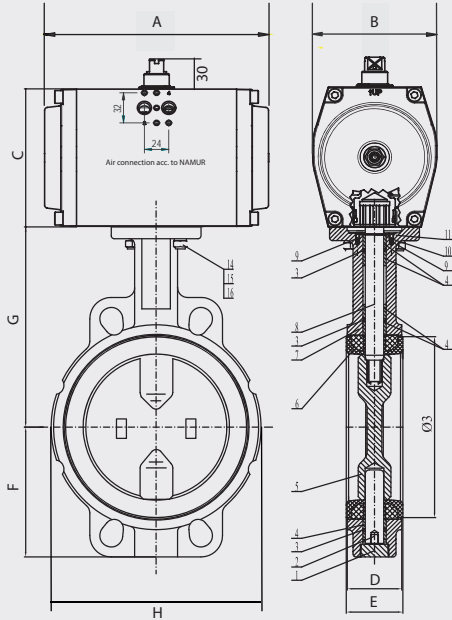
OPERATION

By hand lever (standard)

MATERIAL FOR SEALS

| Material | Suitable for... | Not recommended for... | Temperature |
|------------|---|--|----------------|
| EPDM | Water/vapor, sea- and saltwater, ester, ketone, alkali sodium hydroxide, caustic soda | Hydrocarbon, oil, fat | -15°C to 120°C |
| EPDM-HT | Water/vapor, sea- and saltwater, ester, ketone, alkali sodium hydroxide, caustic soda | Hydrocarbon, oil, fat | -15°C to 130°C |
| NBR | Hydrocarbon, oil, fat, gas | Solvents, benzene, xylene | -10°C to 80°C |
| PTFE* | Solvents, caustic media | Abrasive media, alkali metals, gaseous fluorides | -10°C to 120°C |
| VQM / MVQ* | Food and beverage industry | Vapor, oil, hydrocarbon | -60°C to 180°C |
| FKM | Mineral oil, fat, hydrocarbon, gasoline, fuel oil | Vapor, halogenated hydrocarbon, ketone, organic acid | -20°C to 160°C |

*Max. working pressure reduced to 10 bar (test pressure for seat = 11 bar)



SPECIFICATION - ACTUATOR

PRESSURE - ACTUATOR
5,5 to 10 bar, other values upon request

MEDIUM - ACTUATOR
Filtered air acc. to PNEURO/ISO class 4,
other substances upon request

PNEUMATIC CONTROL
Optionally corresponding to the order with
3/2- or 5/2- way valve or actuator

OPTIONS

- Manual gear
- Mechanical or inductive end-of-travel sensors in normally opened or closed (signal box) form.
- Pneumatically or electrically operated control valves (3/2- or 5/2-way)
- Positioner

KV values in m³/at Δp = 1 bar

| DN | close -----> open | | | | | | | | |
|-----|-------------------|-----|-----|-----|------|------|------|------|------|
| | 10° | 20° | 30° | 40° | 50° | 60° | 70° | 80° | 90° |
| 50 | 0.1 | 3 | 6 | 13 | 23 | 38 | 60 | 90 | 99 |
| 65 | 0.1 | 5 | 10 | 22 | 39 | 65 | 102 | 153 | 169 |
| 80 | 0.2 | 8 | 15 | 34 | 60 | 100 | 157 | 237 | 260 |
| 100 | 0.3 | 15 | 31 | 67 | 120 | 198 | 313 | 470 | 516 |
| 125 | 0.4 | 25 | 52 | 114 | 204 | 337 | 533 | 800 | 879 |
| 150 | 0.7 | 39 | 82 | 176 | 315 | 520 | 824 | 1236 | 1358 |
| 200 | 2.0 | 77 | 162 | 351 | 625 | 1034 | 1637 | 2454 | 2697 |
| 250 | 3.0 | 130 | 275 | 597 | 1064 | 1760 | 2786 | 4179 | 4592 |
| 300 | 3.0 | 201 | 426 | 922 | 1643 | 2719 | 4304 | 6456 | 7095 |

Cv = 1,16 * Kv

DN50 to DN300 appropriate for PN6/PN10/16/A150.

For diameters above DN 300, the intended connection (PN10, PN16, ANSI150) has to be specified when ordering. Switching frequency, selected seal material and transported substance may have an influence on the torque. In some cases, an actuator different from the standard delivery may be required. Therefore it is recommended to consult our factory service for choosing an optimum part-turn valve actuator.

Dimensions and weights- butterfly valve with double-acting actuator

| DN | Size | Dimensions [mm] and weights [kg] | | | | | | | | | | Order no. |
|-----|--------|----------------------------------|-------|-----|------|------|-------|-------|-------|-----|--------|-----------|
| | | A | B | C | D | E | F | G | Ø3 | H | Weight | |
| 40 | 1 1/2" | 133 | 68.5 | 74 | 34.0 | 38.0 | 68.0 | 108.0 | 72.0 | 94 | 2.9 | 350.4040B |
| 50 | 2" | 133 | 68.5 | 74 | 43.0 | 47.0 | 71.4 | 142.7 | 74.3 | 100 | 3.6 | 350.4050B |
| 65 | 2 1/2" | 133 | 68.5 | 74 | 45.0 | 49.1 | 77.8 | 155.4 | 86.0 | 115 | 4.3 | 350.4065B |
| 80 | 3" | 137 | 80.0 | 88 | 43.0 | 47.0 | 89.0 | 161.8 | 100.9 | 127 | 4.95 | 350.4080B |
| 100 | 4" | 161 | 92.5 | 100 | 52.5 | 55.5 | 102.0 | 178.0 | 132.0 | 163 | 6.9 | 350.4100B |
| 125 | 5" | 180 | 92.5 | 100 | 55.0 | 59.0 | 123.0 | 190.5 | 156.0 | 190 | 8.8 | 350.4125B |
| 150 | 6" | 209 | 110.5 | 117 | 55.0 | 59.0 | 138.0 | 205.2 | 185.4 | 216 | 9.8 | 350.4150B |

Ausgelegt auf Drehmomentwerte der Klappen in Nm für Wasser mit Temperatur 20°C delta p = 16 bar, Werkstoffe EPDM oder NBR, Drehmoment nach minimal einer Schaltung pro Monat

Materials

| Pos. | Item | Q'ty | Materials |
|------|-------------|------|-------------------------|
| | | | PKL.BV10.2366E |
| 1 | Drain Plug | 1 | Galvanized steel |
| 2 | Lower shaft | 1 | SS416 |
| 3 | O-Ring | 3 | EPDM |
| 4 | Liner | 6 | PTFE/Nylon |
| 5 | Disk | 1 | CF8M |
| 6 | Seat | 1 | EPDM |
| 7 | Housing | 1 | GG25 |
| 8 | Upper shaft | 1 | SS416 |
| 9 | Screw | 2 | Galvanized steel |
| 10 | Circlip | 1 | 65 Mn |
| 11 | Plate | 1 | Stahl |

For further material combinations, see data sheet BV10.

Dimensions and weights- butterfly valve with single-acting actuator

| DN | Size | Dimensions [mm] and weight [kg] | | | | | | | | | | Order no. |
|-----|--------|---------------------------------|-------|-----|------|------|-------|-------|-------|-----|--------|-----------|
| | | A | B | C | D | E | F | G | Ø3 | H | weight | |
| 40 | 1 1/2" | 161 | 92.5 | 100 | 34.0 | 38.0 | 68.0 | 108.0 | 72.0 | 94 | 3.0 | 350.5040B |
| 50 | 2" | 161 | 92.5 | 100 | 43.0 | 47.0 | 71.4 | 142.7 | 74.3 | 100 | 5.2 | 350.5050B |
| 65 | 2 1/2" | 161 | 92.5 | 100 | 45.0 | 49.1 | 77.8 | 155.4 | 86.0 | 115 | 5.9 | 350.5065B |
| 80 | 3" | 180 | 92.5 | 100 | 43.0 | 47.0 | 89.0 | 161.8 | 100.9 | 127 | 6.5 | 350.5080B |
| 100 | 4" | 221 | 120.0 | 140 | 52.5 | 55.5 | 102.0 | 178.0 | 132.0 | 163 | 11.0 | 350.5100B |
| 125 | 5" | 291 | 120.0 | 140 | 55.0 | 59.0 | 123.0 | 190.5 | 156.0 | 190 | 14.7 | 350.5125B |
| 150 | 6" | 298 | 137.0 | 116 | 55.0 | 59.0 | 138.0 | 205.2 | 185.4 | 216 | 17.2 | 350.5150B |

Torque values specified in Nm at 20°C, Δp = 16 bar, Material EPDM or NBR, torque when switching once per month at least XXX in the code = specify whether NC or NO version is desired