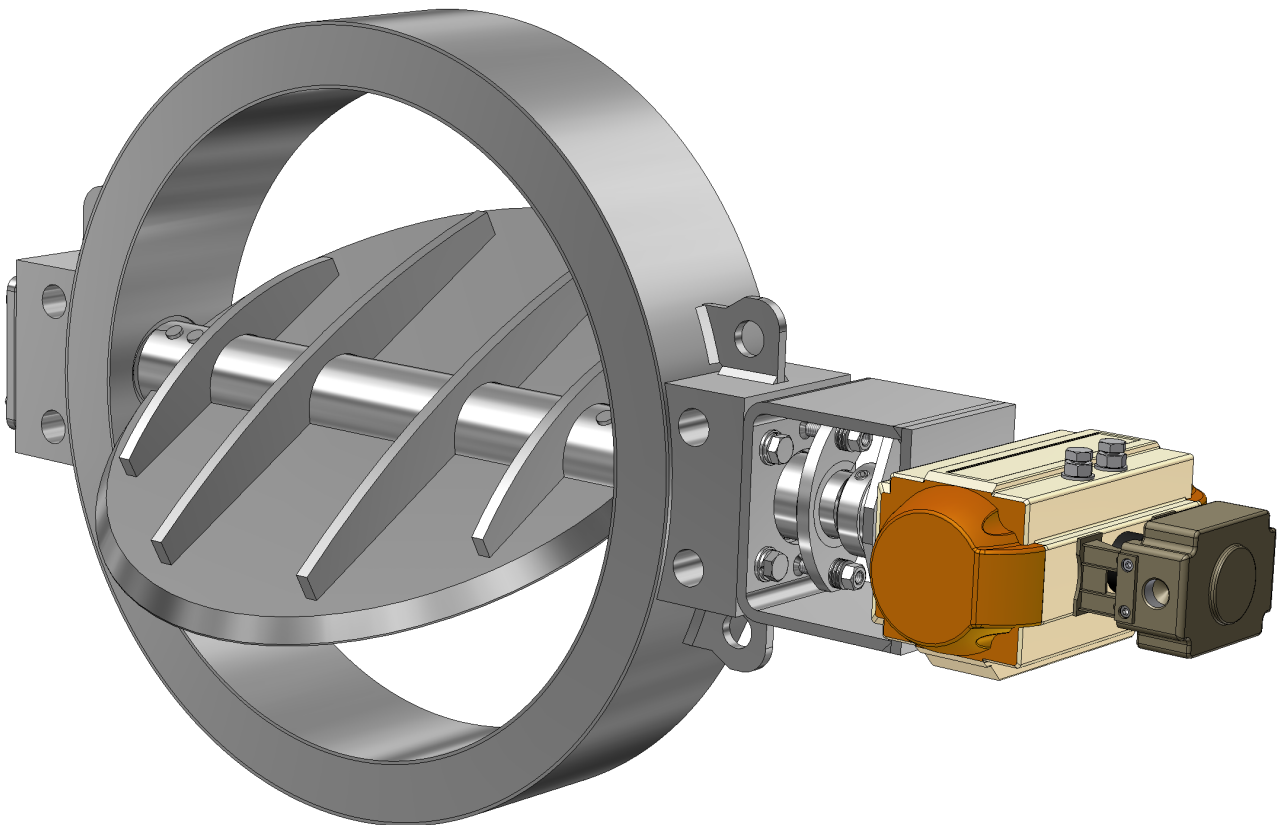


AFT-DVH DN50 - DN1000



Regulating damper valve

Technical description

Damper valves type AFT-DVH serve for the shut-off and/or flow regulation of media such as air and process gas.

Such valves find application in flue gas extraction installations, flue gas desulphurisation, gas utilisation SO₂, SO₃, NO_x, dedusting of furnaces, glass factories, metallurgical plants for copper, zinc, plumb as well as cement factories, etc.

The valves are of monolithic construction; bodies can be forged or cut out of steel sheets. Discs can be joined with the shafts permanently by welding or by dismountable pins (exchangeable discs). For better tightness discs and sealing bars in the body are machined.

Product properties

Diameter range

DN50 – DN1000
(larger sizes on request)

Mounting connection

- between flanges PN2,5, PN6, PN10, PN16 (acc. to EN1092-1)
- custom-made acc. to customer requirements

Face-to-face length

- acc. to AFT standard
- acc. to EN558-1 (on request)

Design pressure

< 0,5 bar
(higher pressure on request)

Temperature range

-20°C up to +750°C or acc. to customer request
(max. working temperature 1100°C)

Mounting of actuator

acc. to ISO 5211

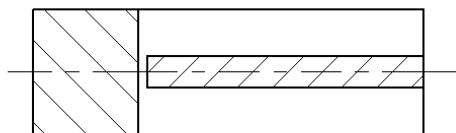
Gland packing

graphite
(other depending on medium and temperature)

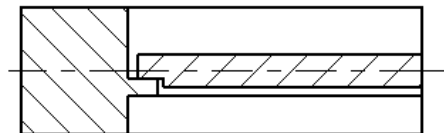
Working positions of damper valve

- horizontal shaft
- vertical shaft
- shaft at required angle

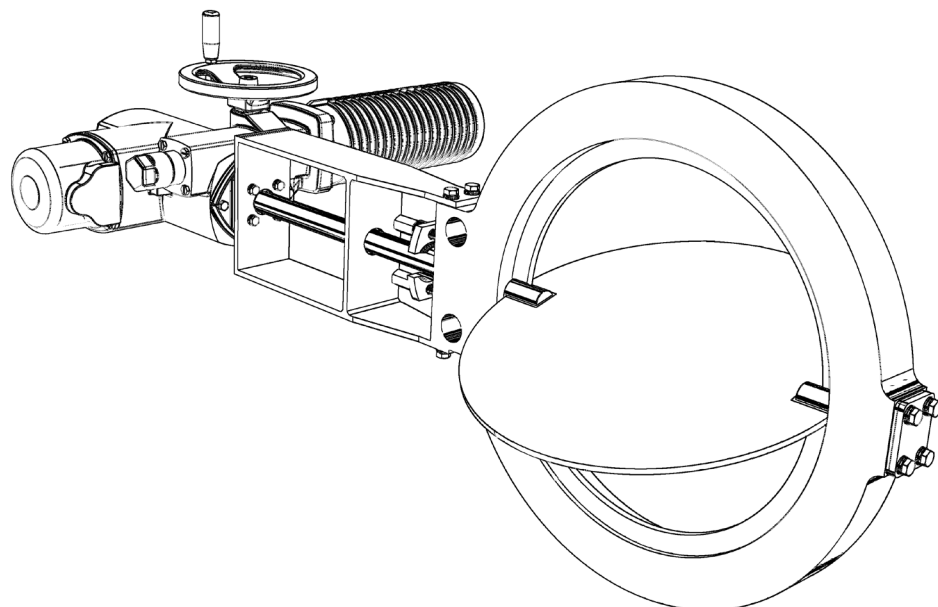
Geometric tightness according to constructional solution applied

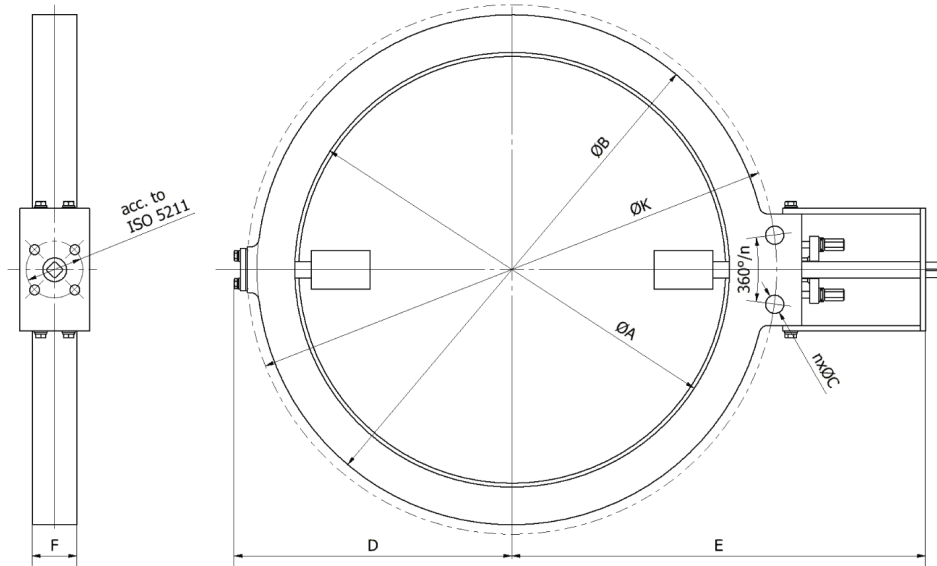


Geometric tightness >98%



Geometric tightness >99%





| DN | EN 1092-1 PN 2,5 / PN 6 | | | | | | | |
|------|-------------------------|------|------|----|------|------|------|------|
| | ØA | ØB | ØK | n | ØC | D | E(*) | F |
| | [mm] | [mm] | [mm] | - | [mm] | [mm] | [mm] | [mm] |
| 50 | 50 | 95 | 110 | 4 | 14 | 80 | 180 | 30 |
| 65 | 65 | 115 | 130 | 4 | 14 | 90 | 200 | 30 |
| 80 | 80 | 131 | 150 | 4 | 18 | 105 | 215 | 30 |
| 100 | 100 | 151 | 170 | 4 | 18 | 115 | 240 | 30 |
| 125 | 125 | 181 | 200 | 8 | 18 | 130 | 260 | 30 |
| 150 | 150 | 205 | 225 | 8 | 18 | 145 | 280 | 30 |
| 200 | 200 | 260 | 280 | 8 | 18 | 170 | 350 | 40 |
| 250 | 250 | 315 | 335 | 12 | 18 | 195 | 380 | 40 |
| 300 | 300 | 371 | 395 | 12 | 22 | 220 | 420 | 40 |
| 350 | 330 | 421 | 445 | 12 | 22 | 250 | 460 | 50 |
| 400 | 380 | 471 | 495 | 16 | 22 | 290 | 495 | 50 |
| 450 | 430 | 526 | 550 | 16 | 22 | 330 | 570 | 50 |
| 500 | 480 | 576 | 600 | 20 | 22 | 350 | 595 | 50 |
| 600 | 580 | 677 | 705 | 20 | 26 | 400 | 645 | 50 |
| 700 | 680 | 782 | 810 | 24 | 26 | 450 | 690 | 60 |
| 800 | 780 | 888 | 920 | 24 | 29,5 | 500 | 750 | 60 |
| 900 | 880 | 988 | 1020 | 24 | 29,5 | 560 | 810 | 60 |
| 1000 | 980 | 1088 | 1120 | 28 | 29,5 | 630 | 950 | 80 |

| DN | EN 1092-1 PN 10 | | | | | | | |
|------|-----------------|------|------|----|------|------|------|------|
| | ØA | ØB | ØK | n | ØC | D | E(*) | F |
| | [mm] | [mm] | [mm] | - | [mm] | [mm] | [mm] | [mm] |
| 50 | 50 | 105 | 125 | 4 | 18 | 80 | 180 | 30 |
| 65 | 65 | 125 | 145 | 8 | 18 | 90 | 200 | 30 |
| 80 | 80 | 140 | 160 | 8 | 18 | 105 | 215 | 30 |
| 100 | 100 | 160 | 180 | 8 | 18 | 115 | 240 | 30 |
| 125 | 125 | 190 | 210 | 8 | 18 | 130 | 260 | 30 |
| 150 | 150 | 216 | 240 | 8 | 22 | 145 | 280 | 30 |
| 200 | 200 | 271 | 295 | 8 | 22 | 170 | 350 | 40 |
| 250 | 250 | 326 | 350 | 12 | 22 | 195 | 380 | 40 |
| 300 | 300 | 376 | 400 | 16 | 22 | 220 | 420 | 40 |
| 350 | 330 | 436 | 460 | 16 | 22 | 255 | 460 | 50 |
| 400 | 380 | 487 | 515 | 16 | 26 | 290 | 495 | 50 |
| 450 | 430 | 557 | 585 | 20 | 26 | 330 | 570 | 50 |
| 500 | 480 | 592 | 620 | 20 | 26 | 350 | 595 | 50 |
| 600 | 580 | 693 | 725 | 20 | 30 | 400 | 645 | 50 |
| 700 | 680 | 808 | 840 | 24 | 30 | 450 | 690 | 60 |
| 800 | 780 | 915 | 950 | 20 | 33 | 500 | 750 | 60 |
| 900 | 880 | 1015 | 1050 | 28 | 33 | 560 | 810 | 60 |
| 1000 | 980 | 1125 | 1160 | 28 | 33 | 630 | 950 | 80 |

| DN | EN 1092-1 PN 16 | | | | | | | |
|------|-----------------|------|------|----|------|------|------|------|
| | ØA | ØB | ØK | n | ØC | D | E(*) | F |
| | [mm] | [mm] | [mm] | - | [mm] | [mm] | [mm] | [mm] |
| 50 | 50 | 105 | 125 | 4 | 18 | 80 | 180 | 30 |
| 65 | 65 | 125 | 145 | 8 | 18 | 90 | 200 | 30 |
| 80 | 80 | 140 | 160 | 8 | 18 | 105 | 215 | 30 |
| 100 | 100 | 160 | 180 | 8 | 18 | 115 | 240 | 30 |
| 125 | 125 | 190 | 210 | 8 | 18 | 130 | 260 | 30 |
| 150 | 150 | 216 | 240 | 8 | 22 | 145 | 280 | 30 |
| 200 | 200 | 271 | 295 | 12 | 22 | 170 | 350 | 40 |
| 250 | 250 | 327 | 355 | 12 | 26 | 195 | 380 | 40 |
| 300 | 300 | 382 | 410 | 12 | 26 | 220 | 420 | 40 |
| 350 | 330 | 442 | 470 | 16 | 26 | 255 | 460 | 50 |
| 400 | 380 | 493 | 525 | 16 | 30 | 290 | 495 | 50 |
| 450 | 430 | 553 | 585 | 20 | 30 | 330 | 570 | 50 |
| 500 | 480 | 615 | 650 | 20 | 33 | 350 | 595 | 50 |
| 600 | 580 | 732 | 770 | 20 | 36 | 400 | 645 | 50 |
| 700 | 680 | 802 | 840 | 24 | 36 | 450 | 690 | 60 |
| 800 | 780 | 909 | 950 | 24 | 39 | 500 | 740 | 60 |
| 900 | 880 | 1009 | 1050 | 28 | 39 | 560 | 810 | 60 |
| 1000 | 980 | 1126 | 1170 | 28 | 42 | 630 | 950 | 80 |

Valves type AFT-DVH of other sizes (face-to-face lengths, drilling patterns, nominal diameters, temperatures, pressures) are available on request.

(*) Depending on the temperature of the medium measures can vary - due to applying of thermal isolation of the actuator or dismountable shaft/actuator coupling.

Materials*

| | Temperature | | | |
|----------------|---|--------------------------------|----------------------------------|--|
| | up to 370°C | from 370°C up to 450°C | from 450°C up to 550°C | from 550°C up to 750°C |
| Body | S235JR lub S355JR X5CrNi18-10 (1.4301) | P265GH X5CrNi18-10 (1.4301) | 16Mo3 X15CrNiSi20-12 (1.4828) | X15CrNiSi20-12 (1.4828) 253 MA (1.4835) |
| Disc | S235JR lub S355JR X5CrNi18-10 (1.4301) | P265GH X5CrNi18-10 (1.4301) | 16Mo3 X15CrNiSi20-12 (1.4828) | X15CrNiSi20-12 (1.4828) 253 MA (1.4835) |
| Shaft | X20Cr13 (1.4021) | X20Cr13 (1.4021) | X15CrNiSi20-12 (1.4828) | X15CrNiSi20-12 (1.4828) |
| Sealing | graphite | graphite | graphite | graphite |

* - standard executions

Final material execution depends on specific medium, working conditions and customer requirements.

Actuators and Accessories

Manual gear box

Equipment:
electromechanical limit switches or proximity or AS-i

Single or double acting pneumatic actuators (quarter turn, linear)

Equipment:
- solenoid valve
- electromechanical limit switches or proximity
- electropneumatic positioner 4-20 mA
- pneumatic accessories AS-i, PROFIBUS, HART

Emergency functions (options)

In case of control air failure the valve:

- closes
- opens
- stays in last position

In case of voltage supply failure the valve:

- closes
- opens
- stays in last position

Open/close or regulating electric actuators

Equipment:
- stroke and torque limit switches
- position transmitter 4-20mA
- positioner
- local control unit
- equipment for PROFIBUS, HART systems etc.

Special executions

- drive transmission systems – shaft angle extensions for non typical applications
- hand lever with position adjustment