

GEMÜ 620

Pneumatically operated diaphragm valve



Features

- Suitable for particulate and abrasive media
- Various lining materials are available, such as PFA, PP or hard rubber
- Standard optical position indicator
- Wide range of adaptation options for add-on components and accessories

Description

The GEMÜ 620 2/2-way diaphragm valve has a low maintenance membrane actuator made of metal or plastic and is pneumatically operated. The valve has a metal distance piece. Normally Closed (NC), Normally Open (NO) and Double Acting (DA) control functions are available.

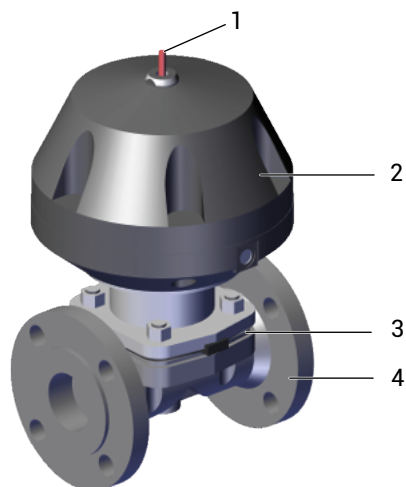
Technical specifications

- Media temperature: 0 to 100 °C
 - Ambient temperature*: 0 to 60 °C
 - Operating pressure*: 0 to 10 bar
 - Nominal sizes*: DN 15 to 150
 - Body configurations: 2/2-way body
 - Connection types: Flange | Threaded connection
 - Connection standards: ANSI | BS | EN | ISO
 - Body materials: EN-GJL-250, cast iron material | EN-GJS-400-18-LT, SG iron material | EN-GJS-500-7, ductile iron material
 - Body lining: Hard rubber | PFA | PP
 - Diaphragm materials: CR | EPDM | FKM | NBR | PTFE/EPDM
 - Conformities*: EAC | FDA | TA Luft (German Clean Air Act)
- * depending on version and/or operating parameters



Product description

Construction



| Item | Name | Materials |
|------|----------------------------|--|
| 1 | Optical position indicator | 5.1301 (GG 25) |
| 2 | Actuator | Cast iron, PP reinforced |
| 3 | Diaphragm | CR EPDM FKM NBR PTFE / EPDM (one-piece) PTFE / EPDM (two-piece) |
| 4 | Valve body | EN-GJL-250 (GG 25) EN-GJS-400-18-LT (GGG 40.3), PFA lined EN-GJS-400-18-LT (GGG 40.3), PP lined EN-GJS-400-18-LT (GGG 40.3), hard rubber lined EN-GJS-500-7 (GGG 50), PFA lined EN-GJS-500-7 (GGG 50), PP lined |

Availability

Availability of valve bodies

Threaded connection, flange

| MG | DN | Threaded connection | Flange | | | | | | | | | | | | | | | | | | |
|-----|-----|---------------------|-------------------------------------|----|----|----|----|-----------------|---|----|----|----|----|----|----|-----------------|----|----|----|----|-----------------|
| | | | Connection types code ¹⁾ | | | | | | | | | | | | | | | | | | |
| | | | 1 | 8 | | | 38 | | | 39 | | | 51 | | 53 | | 56 | | | | |
| | | | Material code ²⁾ | | | | | | | | | | | | | | | | | | |
| | 8 | 8 | 17 | 18 | 83 | 17 | 18 | 83 | 8 | 17 | 18 | 83 | 17 | 81 | 91 | 8 | 17 | 17 | 81 | 91 | |
| 25 | 15 | X | X | X | X | X | - | - | - | X | X | X | X | - | - | - | X | - | - | - | - |
| | 20 | X | X | X | X | X | X | X ³⁾ | X | X | X | X | X | - | - | - | X | - | - | - | - |
| | 25 | X | X | X | X | X | X | X ³⁾ | X | X | X | X | X | - | X | X ⁴⁾ | X | - | - | X | X ⁵⁾ |
| 40 | 32 | X | X | X | X | X | - | - | - | X | X | X | X | - | - | - | - | - | - | - | - |
| | 40 | X | X | X | X | X | X | X ³⁾ | X | X | X | X | X | - | X | X ⁴⁾ | X | - | - | X | X ⁵⁾ |
| 50 | 50 | X | X | X | X | X | X | X ³⁾ | X | X | X | X | X | - | X | X ⁴⁾ | X | - | - | X | X ⁵⁾ |
| 65 | 65 | - | X | X | X | X | X | X ³⁾ | X | X | X | X | X | - | - | - | X | - | - | - | - |
| 80 | 80 | - | X | X | X | X | X | X ³⁾ | X | X | X | X | X | - | X | X ⁴⁾ | X | - | - | X | X ⁵⁾ |
| 100 | 100 | - | X | X | X | X | X | X ³⁾ | X | - | X | X | X | - | X | X ⁴⁾ | X | - | - | X | X ⁵⁾ |
| 125 | 125 | - | X | X | - | X | - | - | - | X | X | - | X | - | - | - | X | - | - | - | - |
| 150 | 150 | - | X | X | - | X | X | - | X | X | X | - | X | X | - | - | X | X | X | - | - |

MG = diaphragm size

X = Standard

1) Connection type

Code 1: Threaded socket DIN ISO 228

Code 8: Flange EN 1092, PN 16, form B, face-to-face dimension FTF EN 558 series 1, ISO 5752, basic series 1, length only for body configuration D

Code 38: Flange ANSI Class 150 RF, face-to-face dimension FTF MSS SP-88, length only for body configuration D

Code 39: Flange ANSI Class 125/150 RF, face-to-face dimension FTF EN 558 series 1, ISO 5752, basic series 1, length only for body configuration D

Code 51: Flange BS 10 Table "E", face-to-face dimension FTF EN 558 series 7, ISO 5752, basic series 7, length only for body configuration D

Code 53: Flange EN 1092, PN 16, form A, face-to-face dimension FTF EN 558 series 7, ISO 5752, basic series 7, length only for body configuration D

Code 56: Flange ANSI Class 125/150 RF, face-to-face dimension FTF EN 558 series 7, ISO 5752, basic series 7, length only for body configuration D

2) Valve body material

Code 8: EN-GJL-250 (GG 25)

Code 17: EN-GJS-400-18-LT (GGG 40.3), PFA lined

Code 18: EN-GJS-400-18-LT (GGG 40.3), PP lined

Code 81: EN-GJS-500-7 (GGG 50), PFA lined

Code 83: EN-GJS-400-18-LT (GGG 40.3), hard rubber lined

Code 91: EN-GJS-500-7 (GGG 50), PP lined

3) Connection code 38 / material code 18 on request

4) Connection code 51 / material code 91 on request

5) Connection code 56 / material code 91 on request

Actuator version

| MG | DN | Actuator version |
|-----|---------|--|
| 25 | 15 - 25 | 0/D, 0/F, 0/N, 0KN |
| 40 | 32 - 40 | 1/D, 1/F, 1/N, 1KN |
| 50 | 50 | 2/D, 2/F, 2/N, 2KN |
| 65 | 65 | 3/1, 3/2, 3/3, 3/D, 3/F, 3A1, 3A2, 3A3, 3AD, 3AF |
| 80 | 80 | 3/2, 3/3, 3/D, 3/F, 3A2, 3A3, 3AD, 3AF, 4A2 |
| 100 | 100 | 3/3, 3/D, 3/F, 3A3, 3AD, 3AF, 4A3, 4AD, 4AF |
| 125 | 125 | 4A2, 4A3, 4AD, 4AF |
| 150 | 150 | 4A3, 4AD, 4AF |

Code 0/D, 1/D, 2/D, 0/N, 1/N, 2/N, 0/F, 1/F, 2/F available until April 2021

Availability of product compliance

| | Diaphragm material code ¹⁾ | Body material code ²⁾ |
|---------------------------------------|---------------------------------------|----------------------------------|
| Food | | |
| FDA | 54, 5M | 17, 81 |
| TA Luft (German Clean Air Act) | | |
| TA Luft (German Clean Air Act) | | 17, 18, 81, 91 |

1) **Diaphragm material**

Code 54: PTFE/EPDM one-piece
Code 5M: PTFE/EPDM two-piece

2) **Valve body material**

Code 17: EN-GJS-400-18-LT (GGG 40.3), PFA lined
Code 18: EN-GJS-400-18-LT (GGG 40.3), PP lined
Code 81: EN-GJS-500-7 (GGG 50), PFA lined
Code 91: EN-GJS-500-7 (GGG 50), PP lined

Order data

The order data provide an overview of standard configurations.

Please check the availability before ordering. Other configurations available on request.

Order codes

| 1 Type | Code |
|--|------|
| Diaphragm valve, pneumatically operated, membrane actuator, cast iron distance piece | 620 |

| 2 DN | Code |
|--------|------|
| DN 15 | 15 |
| DN 20 | 20 |
| DN 25 | 25 |
| DN 32 | 32 |
| DN 40 | 40 |
| DN 50 | 50 |
| DN 65 | 65 |
| DN 80 | 80 |
| DN 100 | 100 |
| DN 125 | 125 |
| DN 150 | 150 |

| 3 Body configuration | Code |
|----------------------|------|
| 2/2-way body | D |

| 4 Connection type | Code |
|---|------|
| Threaded connection | |
| Threaded socket DIN ISO 228 | 1 |
| Flange | |
| Flange EN 1092, PN 16, form B, face-to-face dimension FTF EN 558 series 1, ISO 5752, basic series 1, length only for body configuration D | 8 |
| Flange ANSI Class 150 RF, face-to-face dimension FTF MSS SP-88, length only for body configuration D | 38 |
| Flange ANSI Class 125/150 RF, face-to-face dimension FTF EN 558 series 1, ISO 5752, basic series 1, length only for body configuration D | 39 |
| Flange BS 10 Table "E", face-to-face dimension FTF EN 558 series 7, ISO 5752, basic series 7, length only for body configuration D | 51 |
| Flange EN 1092, PN 16, form A, face-to-face dimension FTF EN 558 series 7, ISO 5752, basic series 7, length only for body configuration D | 53 |
| Flange ANSI Class 125/150 RF, face-to-face dimension FTF EN 558 series 7, ISO 5752, basic series 7, length only for body configuration D | 56 |

| 5 Valve body material | Code |
|--|------|
| EN-GJL-250 (GG 25) | 8 |
| EN-GJS-400-18-LT (GGG 40.3), PFA lined | 17 |
| EN-GJS-400-18-LT (GGG 40.3), PP lined | 18 |
| EN-GJS-500-7 (GGG 50), PFA lined | 81 |
| EN-GJS-400-18-LT (GGG 40.3), hard rubber lined | 83 |
| EN-GJS-500-7 (GGG 50), PP lined | 91 |

| 6 Diaphragm material | Code |
|----------------------|------|
| NBR | 2 |
| FPM | 4 |
| CR | 8 |
| EPDM | 14 |
| PTFE/EPDM one-piece | 54 |
| PTFE/EPDM two-piece | 5M |

| 7 Control function | Code |
|----------------------|------|
| Normally Closed (NC) | 1 |
| Normally Open (NO) | 2 |
| Double Acting (DA) | 3 |

| 8 Actuator version | Code |
|---|------|
| DN 15 - 25, diaphragm size 25 | |
| Plastic actuator material | |
| Actuator size 0/D | 0/D |
| Actuator size 0/F | 0/F |
| Actuator size 0/N | 0/N |
| Membrane actuator, plastic, diameter 130 mm | 0KN |
| DN 32 - 40, diaphragm size 40 | |
| Plastic actuator material | |
| Actuator size 1/D | 1/D |
| Actuator size 1/F | 1/F |
| Actuator size 1/N | 1/N |
| Membrane actuator, plastic, diameter 170 mm | 1KN |
| DN 50, diaphragm size 50 | |
| Plastic actuator material | |
| Actuator size 2/D | 2/D |
| Actuator size 2/F | 2/F |
| Actuator size 2/N | 2/N |
| Membrane actuator, plastic, diameter 210 mm | 2KN |
| DN 65, diaphragm size 65 | |
| Plastic actuator material | |
| Actuator size 3/1 | 3/1 |
| Actuator size 3/2 | 3/2 |

Order data

| 8 Continuation of Actuator version | Code |
|------------------------------------|------|
| Actuator size 3/3 | 3/3 |
| Actuator size 3/D | 3/D |
| Actuator size 3/F | 3/F |
| Metal actuator material | |
| Actuator size 3A1 | 3A1 |
| Actuator size 3A2 | 3A2 |
| Actuator size 3A3 | 3A3 |
| Actuator size 3AD | 3AD |
| Actuator size 3AF | 3AF |
| DN 80, diaphragm size 80 | |
| Plastic actuator material | |
| Actuator size 3/2 | 3/2 |
| Actuator size 3/3 | 3/3 |
| Actuator size 3/D | 3/D |
| Actuator size 3/F | 3/F |
| Metal actuator material | |
| Actuator size 3A2 | 3A2 |
| Actuator size 3A3 | 3A3 |
| Actuator size 3AD | 3AD |
| Actuator size 3AF | 3AF |
| Actuator size 4A2 | 4A2 |

| 8 Continuation of Actuator version | Code |
|------------------------------------|------|
| DN 100, diaphragm size 100 | |
| Plastic actuator material | |
| Actuator size 3/3 | 3/3 |
| Actuator size 3/D | 3/D |
| Actuator size 3/F | 3/F |
| Metal actuator material | |
| Actuator size 3A3 | 3A3 |
| Actuator size 3AD | 3AD |
| Actuator size 3AF | 3AF |
| Actuator size 4A3 | 4A3 |
| Actuator size 4AD | 4AD |
| Actuator size 4AF | 4AF |
| DN 125, diaphragm size 125 | |
| Metal actuator material | |
| Actuator size 4A2 | 4A2 |
| Actuator size 4A3 | 4A3 |
| Actuator size 4AD | 4AD |
| Actuator size 4AF | 4AF |
| DN 150, diaphragm size 150 | |
| Metal actuator material | |
| Actuator size 4A3 | 4A3 |
| Actuator size 4AD | 4AD |
| Actuator size 4AF | 4AF |

Order example

| Order option | Code | Description |
|-----------------------|------|---|
| 1 Type | 620 | Diaphragm valve, pneumatically operated, membrane actuator, cast iron distance piece |
| 2 DN | 80 | DN 80 |
| 3 Body configuration | D | 2/2-way body |
| 4 Connection type | 8 | Flange EN 1092, PN 16, form B, face-to-face dimension FTF EN 558 series 1, ISO 5752, basic series 1, length only for body configuration D |
| 5 Valve body material | 8 | EN-GJL-250 (GG 25) |
| 6 Diaphragm material | 14 | EPDM |
| 7 Control function | 1 | Normally Closed (NC) |
| 8 Actuator version | 3/3 | Actuator size 3/3 |

Technical data

Medium

Working medium: Corrosive, inert, gaseous and liquid media which have no negative impact on the physical and chemical properties of the body and diaphragm material.

Control medium: Inert gases

Temperature

| | | |
|---------------------------|-----------------------|---------------|
| Media temperature: | NBR (code 2) | -10 to 100 °C |
| | FPM (code 4) | -10 to 90 °C |
| | CR (code 8) | -10 to 100 °C |
| | EPDM (code 14) | -10 to 90 °C |
| | PTFE / EPDM (code 54) | -10 to 100 °C |
| | PTFE / EPDM (code 5M) | -10 to 100 °C |

Control medium temperature: 0 to 40 °C

Ambient temperature: 0 to 60 °C

Storage temperature: 0 to 40 °C

Pressure

Operating pressure:

| MG | DN | Control function | Actuator size | EPDM | PTFE |
|-----|---------|------------------|---------------|--------|--------|
| 25 | 15 - 25 | 1 | 0/N | 0 - 10 | 0 - 6 |
| | | 2 | 0/F | 0 - 10 | 0 - 6 |
| | | 3 | 0/D | 0 - 10 | 0 - 6 |
| | | 1, 2, 3 | 0KN | 0 - 10 | 0 - 10 |
| 40 | 32 - 40 | 1 | 1/N | 0 - 10 | 0 - 6 |
| | | 2 | 1/F | 0 - 10 | 0 - 6 |
| | | 3 | 1/D | 0 - 10 | 0 - 6 |
| | | 1, 2, 3 | 1KN | 0 - 10 | 0 - 10 |
| 50 | 50 | 1 | 2/N | 0 - 10 | 0 - 6 |
| | | 2 | 2/F | 0 - 10 | 0 - 6 |
| | | 3 | 2/D | 0 - 10 | 0 - 6 |
| | | 1, 2, 3 | 2KN | 0 - 10 | 0 - 10 |
| 65 | 65 | 1 | 3/1 | 0 - 3 | 0 - 2 |
| | | | 3A1 | 0 - 3 | 0 - 2 |
| | | | 3/2 | 0 - 6 | 0 - 4 |
| | | | 3A2 | 0 - 6 | 0 - 4 |
| | | | 3/3 | 0 - 10 | 0 - 6 |
| | | 3A3 | 0 - 10 | 0 - 6 | |
| | | 2 | 3/F, 3AF | 0 - 10 | 0 - 6 |
| | | 3 | 3/D, 3AD | 0 - 10 | 0 - 6 |
| 80 | 80 | 1 | 3/2 | 0 - 3 | 0 - 2 |
| | | | 3A2 | 0 - 3 | 0 - 2 |
| | | | 3/3 | 0 - 7 | 0 - 5 |
| | | | 3A3 | 0 - 7 | 0 - 5 |
| | | | 4A2 | 0 - 10 | 0 - 6 |
| | | 2 | 3/F, 3AF | 0 - 10 | 0 - 6 |
| | | 3 | 3/D, 3AD | 0 - 10 | 0 - 6 |
| 100 | 100 | 1 | 3/3 | 0 - 6 | 0 - 4 |
| | | | 3A3 | 0 - 6 | 0 - 4 |
| | | | 4A3 | 0 - 10 | 0 - 6 |
| | | 2 | 3/F | 0 - 6 | 0 - 4 |
| | | | 3AF | 0 - 6 | 0 - 4 |
| | | | 4AF | 0 - 10 | 0 - 6 |
| | | 3 | 3/D | 0 - 6 | 0 - 4 |
| | | | 3AD | 0 - 6 | 0 - 4 |
| 4AD | 0 - 10 | | 0 - 6 | | |
| 125 | 125 | 1 | 4A2 | 0 - 5 | 0 - 3 |
| | | | 4A3 | 0 - 8 | 0 - 5 |
| | | 2 | 4AF | 0 - 10 | 0 - 6 |
| | | 3 | 4AD | 0 - 10 | 0 - 6 |
| 150 | 150 | 1 | 4A3 | 0 - 6 | 0 - 4 |
| | | 2 | 4AF | 0 - 8 | 0 - 5 |
| | | 3 | 4AD | 0 - 8 | 0 - 5 |

MG = diaphragm size

All pressures are gauge pressures. Operating pressure values were determined with static operating pressure applied on one side of a closed valve. Sealing at the valve seat and atmospheric sealing is ensured for the given values.

Information on operating pressures applied on both sides and for high purity media on request.

Pressure rating: PN 16

Leakage rate: Leakage rate A (acc. to EN 12266-1)

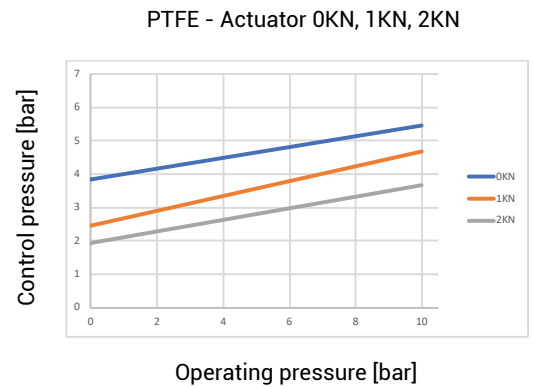
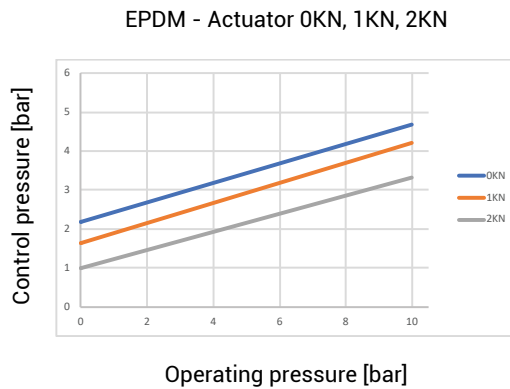
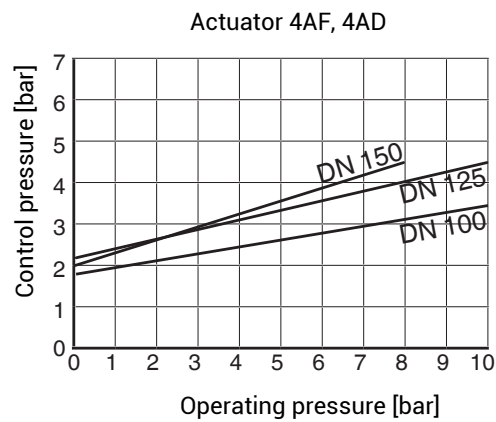
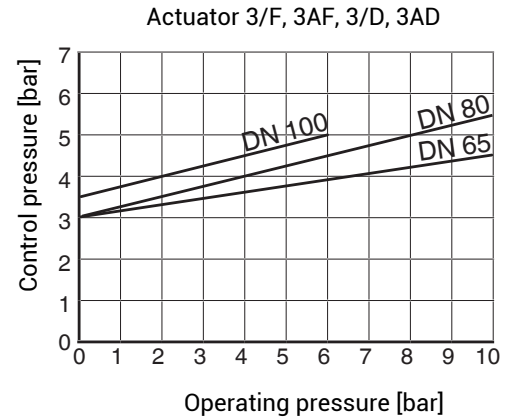
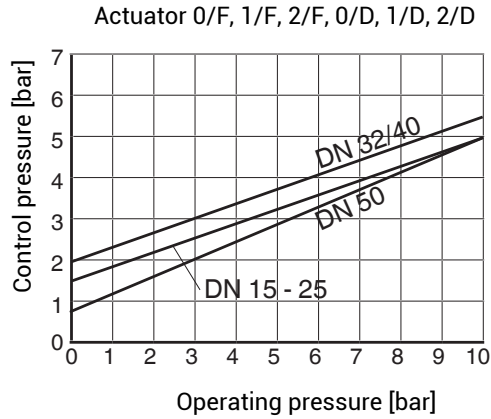
Control pressure:

| MG | DN | Control function | Actuator size | Control pressure |
|------------|----------------|------------------|---------------|------------------|
| 25 | 15 - 25 | 1 | 0/N, 0KN | 5.5 - 7.0 |
| | | 2 | 0/F, 0KN | max. 5.5 |
| | | 3 | 0/D, 0KN | max. 5.5 |
| 40 | 32 - 40 | 1 | 1/N, 1KN | 5.5 - 7.0 |
| | | 2 | 1/F, 1KN | max. 5.5 |
| | | 3 | 1/D, 1KN | max. 5.5 |
| 50 | 50 | 1 | 2/N, 2KN | 5.5 - 7.0 |
| | | 2 | 2/F, 2KN | max. 5.0 |
| | | 3 | 2/D, 2KN | max. 5.0 |
| 65 | 65 | 1 | 3/1 | 2.6 - 7.0 |
| | | | 3A1 | 3.0 - 7.0 |
| | | | 3/2 | 4.5 - 7.0 |
| | | | 3A2 | 4.5 - 7.0 |
| | | | 3/3 | 5.5 - 7.0 |
| | | 3A3 | 6.0 - 7.0 | |
| | | 2 | 3/F, 3AF | max. 4.5 |
| 3 | 3/D, 3AD | max. 4.0 | | |
| 80 | 80 | 1 | 3/2 | 4.5 - 7.0 |
| | | | 3A2 | 5.0 - 7.0 |
| | | | 3/3 | 5.6 - 7.0 |
| | | | 3A3 | 6.5 - 7.0 |
| | | | 4A2 | 3.5 - 7.0 |
| | | 2 | 3/F, 3AF | max. 5.5 |
| 3 | 3/D, 3AD | max. 5.0 | | |
| 100 | 100 | 1 | 3/3 | 6.2 - 7.0 |
| | | | 3A3 | 6.5 - 7.0 |
| | | | 4A3 | 4.5 - 7.0 |
| | | 2 | 3/F | max. 5.0 |
| | | | 3AF | max. 5.0 |
| | | | 4AF | max. 3.5 |
| | | 3 | 3/D | max. 4.5 |
| 3AD | max. 4.5 | | | |
| 4AD | max. 3.0 | | | |
| 125 | 125 | 1 | 4A2 | 4.0 - 7.0 |
| | | | 4A3 | 5.5 - 7.0 |
| | | 2 | 4AF | max. 4.5 |
| 3 | 4AD | max. 4.0 | | |
| 150 | 150 | 1 | 4A3 | 5.5 - 7.0 |
| | | 2 | 4AF | max. 4.5 |
| | | 3 | 4AD | max. 4.0 |

MG = diaphragm size

Control pressure:

Control pressure - operating pressure - diagram



Note: The above diagrams give the minimum control pressure for "normally open" actuators (control function 2) for different operating pressures.

Filling volume:

| | |
|-------------------|----------------------|
| Actuator size 0 | 0.15 dm ³ |
| Actuator size 1 | 0.35 dm ³ |
| Actuator size 2 | 1.10 dm ³ |
| Actuator size 3 | 2.5 dm ³ |
| Actuator size 4 | 6.8 dm ³ |
| Actuator size 0KN | 0.16 dm ³ |
| Actuator size 1KN | 0.4 dm ³ |
| Actuator size 2KN | 0.69 dm ³ |

Kv values:

| MG | DN | GG 25 | PFA / PP | Hard rubber |
|------------|------------|-------|----------|-------------|
| 25 | 15 | 7.0 | 5.0 | 6.0 |
| | 20 | 14.0 | 9.0 | 11.0 |
| | 25 | 20.0 | 13.0 | 15.0 |
| 40 | 32 | 36.0 | 23.0 | 29.0 |
| | 40 | 40.0 | 26.0 | 32.0 |
| 50 | 50 | 80.0 | 47.0 | 64.0 |
| 65 | 65 | 100.0 | 72.0 | 80.0 |
| 80 | 80 | 160.0 | 110.0 | 128.0 |
| 100 | 100 | 238.0 | 177.0 | 190.0 |
| 125 | 125 | 270.0 | 214.0 | 230.0 |
| 150 | 150 | 480.0 | 365.0 | 397.0 |

MG = diaphragm size, Kv values in m³/h

Kv values determined in accordance with EN 60534, inlet pressure 5 bar, Δp 1 bar, with connection flange EN 1092 length EN 558 series 1 and soft elastomer diaphragm. The Kv values for other product configurations (e.g. other diaphragm or body materials) may differ. In general, all diaphragms are subject to the influences of pressure, temperature, the process and their tightening torques. Therefore the Kv values may exceed the tolerance limits of the standard.

The Kv value curve (Kv value dependent on valve stroke) can vary depending on the diaphragm material and duration of use.

Product compliance

Pressure Equipment Directive: 2014/68/EU

Machinery Directive: 2006/42/EU

Food: FDA*
Regulation (EC) No. 1935/2004*
Regulation (EC) No. 10/2011*

EAC: TR CU 010/2011

TA Luft (German Clean Air Act): The product complies with the equivalence requirements of section 5.2.6.4 of the German Clean Air Act (TA Luft / VDI 2440 according to section 3.3.1.3)*

The product complies with the requirements according to VDI 2440 (November 2000), VDI 3479, DIN EN ISO 158481, certificate no. 18 11 090235 002*

* see availability

Mechanical data

Weight:

Actuator

| MG | Actuator size | Control function | Weight |
|------------|---------------|------------------|--------|
| 25 | 0/N | 1 | 2.1 |
| | 0/F - 0/D | 2 + 3 | 1.6 |
| | 0KN | 1 | 2.2 |
| | 0KN | 2 + 3 | 1.7 |
| 40 | 1/N | 1 | 4.2 |
| | 1/F - 1/D | 2 + 3 | 3.2 |
| | 1KN | 1 | 4.7 |
| | 1KN | 2 + 3 | 3.1 |
| 50 | 2/N | 1 | 7.0 |
| | 2/F - 2/D | 2 + 3 | 5.1 |
| | 2KN | 1 | 6.9 |
| | 2KN | 2 + 3 | 5.2 |
| 65 | 3/1 | 1 | 14.4 |
| | 3/2 | | 15.1 |
| | 3/3 | | 15.8 |
| | 3A1 | | 23.8 |
| | 3A2 | | 24.6 |
| | 3A3 | | 25.8 |
| | 3/F - 3/D | 2 + 3 | 14.0 |
| | 3AF - 3AD | | 18.2 |
| 80 | 3/2 | 1 | 16.5 |
| | 3/3 | | 17.2 |
| | 3A2 | | 26.4 |
| | 3A3 | | 27.4 |
| | 4A2 | | 54.7 |
| | 3/F - 3/D | 2 + 3 | 15.2 |
| | 3AF - 3AD | | 20.0 |
| | | | |
| 100 | 3/3 | 1 | 17.8 |
| | 3A3 | | 28.1 |
| | 4A3 | | 63.3 |
| | 3/F - 3/D | 2 + 3 | 16.0 |
| | 3AF - 3AD | | 21.0 |
| | 4AF - 4AD | | 35.0 |
| 125 | 4A2 | 1 | 58.0 |
| | 4A3 | | 66.0 |
| | 4AF - 4AD | 2 + 3 | 35.0 |
| | | | |
| 150 | 4A3 | 1 | 67.0 |
| | 4AF - 4AD | 2 + 3 | 45.0 |

MG = diaphragm size, weight in kg

Weight:

Body

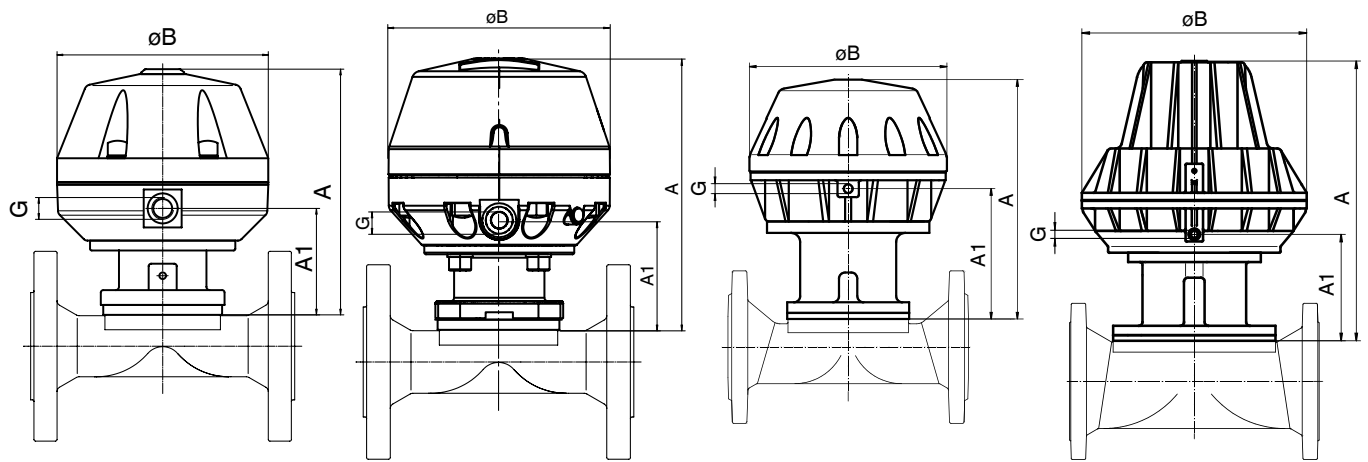
| MG | DN | Threaded socket | Flange |
|-----|-----|-----------------------|-----------------------|
| | | Connection types code | |
| | | 1 | 8, 38, 39, 51, 53, 56 |
| 25 | 15 | 0.5 | 1.9 |
| | 20 | 0.6 | 2.4 |
| | 25 | 0.9 | 2.9 |
| 40 | 32 | 1.2 | 4.9 |
| | 40 | 1.8 | 5.7 |
| 50 | 50 | 2.6 | 7.5 |
| 65 | 65 | - | 10.2 |
| 80 | 80 | - | 14.2 |
| 100 | 100 | - | 21.0 |
| 125 | 125 | - | 30.0 |
| 150 | 150 | - | 35.0 |

MG = diaphragm size, weight in kg

Dimensions

Actuator dimensions

Control function 1



Actuator size 0 - 2

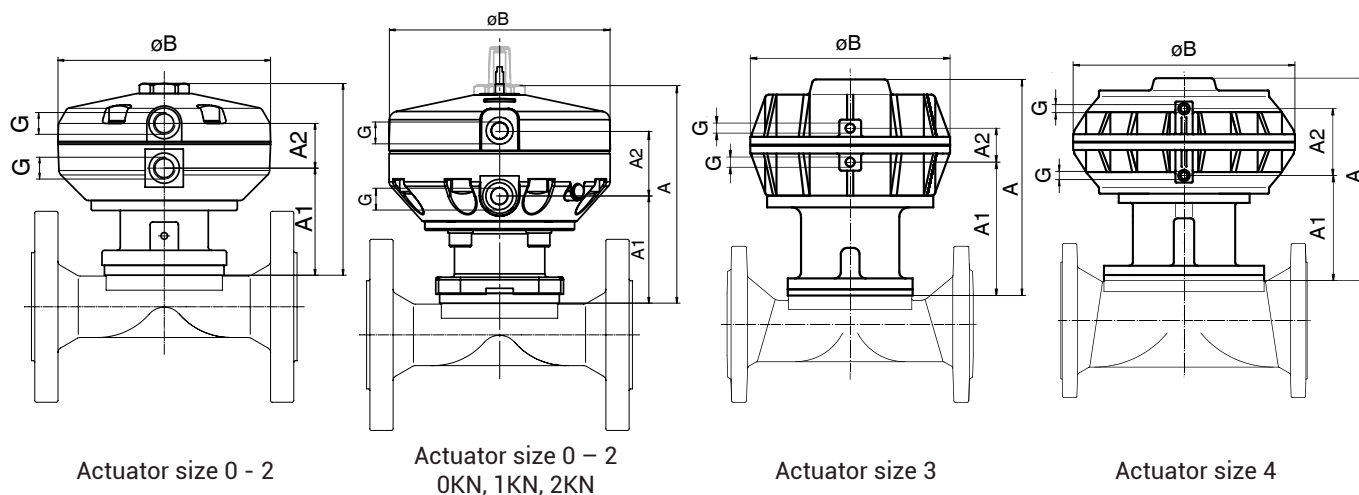
Actuator size 0 - 2
0KN, 1KN, 2KN

Actuator size 3

Actuator size 4

| MG | DN | Actuator version | ø B | A | A1 | G |
|-----|---------|------------------|-----|-----|-----|-------|
| 25 | 15 - 25 | 0/N | 128 | 152 | 65 | G 1/4 |
| 25 | 15 - 25 | 0KN | 130 | 170 | 59 | G 1/4 |
| 40 | 32 + 40 | 1/N | 158 | 187 | 86 | G 1/4 |
| 40 | 32 + 40 | 1KN | 171 | 208 | 75 | G 1/4 |
| 50 | 50 | 2/N | 213 | 221 | 97 | G 1/4 |
| 50 | 50 | 2KN | 211 | 244 | 90 | G 1/4 |
| 65 | 65 | 3/1 | 259 | 333 | 173 | G 1/4 |
| | | 3/2 | 259 | 333 | 173 | |
| | | 3/3 | 259 | 333 | 173 | |
| | | 3A1 | 256 | 307 | 172 | |
| | | 3A2 | 256 | 307 | 172 | |
| | | 3A3 | 256 | 307 | 172 | |
| 80 | 80 | 3/2 | 259 | 333 | 173 | G 1/4 |
| | | 3/3 | 259 | 333 | 173 | |
| | | 3A2 | 256 | 307 | 172 | |
| | | 3A3 | 256 | 307 | 172 | |
| | | 4A2 | 360 | 439 | 159 | |
| 100 | 100 | 3/3 | 259 | 333 | 173 | G 1/4 |
| | | 3A3 | 256 | 307 | 172 | |
| | | 4A3 | 360 | 439 | 159 | |
| 125 | 125 | 4A2 | 360 | 451 | 171 | G 1/4 |
| | | 4A3 | 360 | 451 | 171 | |
| 150 | 150 | 4A3 | 360 | 440 | 160 | G 1/4 |

Dimensions in mm, MG = diaphragm size

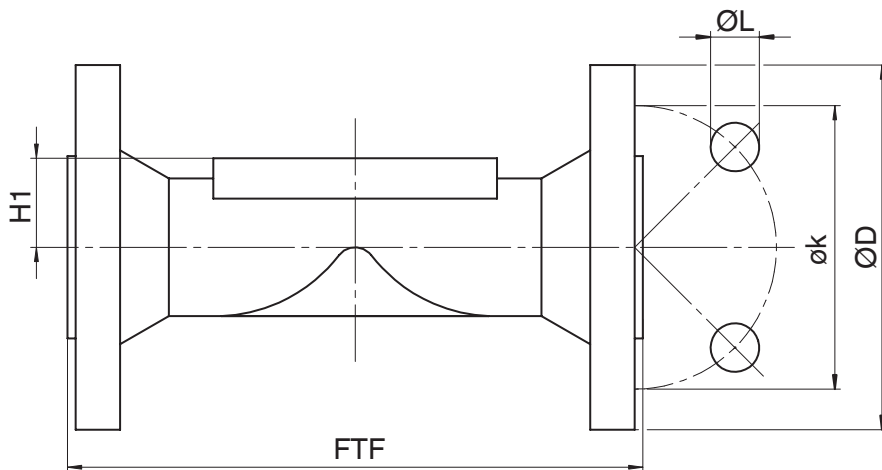
Control functions 2 + 3

| MG | DN | Actuator size | ø B | A | A1 | A2 | G |
|-----|---------|---------------|-----|-----|-----|-----|-------|
| 25 | 15 - 25 | 0/F - 0/D | 128 | 117 | 66 | 28 | G 1/4 |
| 25 | 15 - 25 | 0KN | 130 | 147 | 59 | 39 | G 1/4 |
| 40 | 32 + 40 | 1/F - 1/D | 158 | 143 | 84 | 27 | G 1/4 |
| 40 | 32 + 40 | 1KN | 171 | 173 | 75 | 42 | G 1/4 |
| 50 | 50 | 2/F - 2/D | 213 | 167 | 96 | 28 | G 1/4 |
| 50 | 50 | 2KN | 211 | 206 | 90 | 47 | G 1/4 |
| 65 | 65 | 3/F - 3/D | 258 | 284 | 170 | 45 | G 1/4 |
| 65 | 65 | 3AF - 3AD | 258 | 284 | 170 | 45 | G 1/4 |
| 80 | 80 | 3/F - 3/D | 256 | 282 | 169 | 45 | G 1/4 |
| 80 | 80 | 3AF - 3AD | 256 | 282 | 169 | 45 | G 1/4 |
| 100 | 100 | 3/F - 3/D | 256 | 282 | 169 | 45 | G 1/4 |
| 100 | 100 | 3AF - 3AD | 256 | 282 | 169 | 45 | G 1/4 |
| 100 | 100 | 4AF - 4AD | 360 | 322 | 156 | 109 | G 1/4 |
| 125 | 125 | 4AF - 4AD | 360 | 334 | 168 | 109 | G 1/4 |
| 150 | 150 | 4AF - 4AD | 360 | 323 | 156 | 109 | G 1/4 |

Dimensions in mm, MG = diaphragm size

Body dimensions

Flange EN (code 8)



| MG | DN | Connection type code 8 ¹⁾ | | | | | | |
|-----|-----|--------------------------------------|-------|------|---|------|------------|-------|
| | | Material code ²⁾ | | | | | | |
| | | | | | | 8 | 17, 18, 83 | |
| | | øD | øk | øL | n | H1 | H1 | FTF |
| 25 | 15 | 95.0 | 65.0 | 14.0 | 4 | 19.0 | 18.0 | 130.0 |
| | 20 | 105.0 | 75.0 | 14.0 | 4 | 19.0 | 20.5 | 150.0 |
| | 25 | 115.0 | 85.0 | 14.0 | 4 | 19.0 | 23.0 | 160.0 |
| 40 | 32 | 140.0 | 100.0 | 19.0 | 4 | 28.0 | 28.7 | 180.0 |
| | 40 | 150.0 | 110.0 | 19.0 | 4 | 28.0 | 33.0 | 200.0 |
| 50 | 50 | 165.0 | 125.0 | 19.0 | 4 | 35.0 | 39.0 | 230.0 |
| 65 | 65 | 185.0 | 145.0 | 19.0 | 4 | 27.5 | 51.0 | 290.0 |
| 80 | 80 | 200.0 | 160.0 | 19.0 | 8 | 33.0 | 59.5 | 310.0 |
| 100 | 100 | 220.0 | 180.0 | 19.0 | 8 | 43.0 | 73.0 | 350.0 |
| 125 | 125 | 250.0 | 210.0 | 19.0 | 8 | 65.0 | 87.0 | 400.0 |
| 150 | 150 | 285.0 | 240.0 | 23.0 | 8 | 58.0 | 109.0 | 480.0 |

Dimensions in mm, MG = diaphragm size
n = number of bolt holes

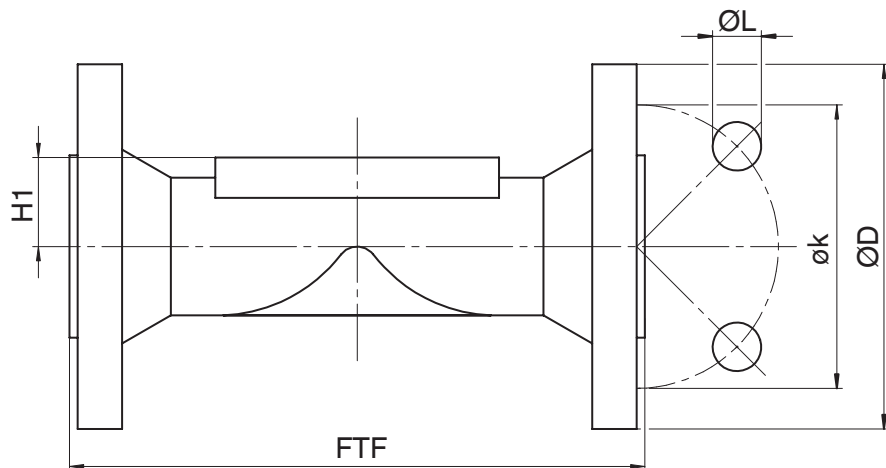
1) **Connection type**

Code 8: Flange EN 1092, PN 16, form B, face-to-face dimension FTF EN 558 series 1, ISO 5752, basic series 1, length only for body configuration D

2) **Valve body material**

Code 8: EN-GJL-250 (GG 25)
Code 17: EN-GJS-400-18-LT (GGG 40.3), PFA lined
Code 18: EN-GJS-400-18-LT (GGG 40.3), PP lined
Code 83: EN-GJS-400-18-LT (GGG 40.3), hard rubber lined

Flange EN (code 53)

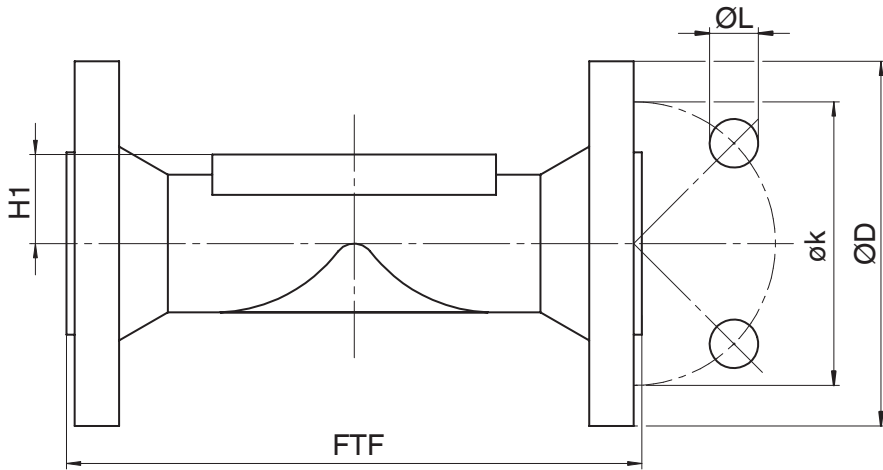


| MG | DN | Connection type code 53 ¹⁾ | | | | | | | | |
|-----|-----|---------------------------------------|---------------------|-------|------|---|------|-------|-------|-------|
| | | Material code ²⁾ | | | | | | | | |
| | | 8 | 17 | | | | 8 | 17 | 8 | 17 |
| | | øD | øD | øk | øL | n | H1 | H1 | FTF | FTF |
| 25 | 15 | 95.0 | - | 65.0 | 14.0 | 4 | 19.0 | - | 117.0 | - |
| | 20 | 105.0 | - | 75.0 | 14.0 | 4 | 19.0 | - | 117.0 | - |
| | 25 | 115.0 | - | 85.0 | 14.0 | 4 | 19.0 | - | 127.0 | - |
| 40 | 32 | 140.0 | - | 100.0 | 19.0 | 4 | 28.0 | - | - | - |
| | 40 | 150.0 | - | 110.0 | 19.0 | 4 | 28.0 | - | 159.0 | - |
| 50 | 50 | 165.0 | - | 125.0 | 19.0 | 4 | 35.0 | - | 191.0 | - |
| 65 | 65 | 185.0 | - | 145.0 | 19.0 | 4 | 27.5 | - | 216.0 | - |
| 80 | 80 | 200.0 | - | 160.0 | 19.0 | 8 | 33.0 | - | 254.0 | - |
| 100 | 100 | 220.0 | - | 180.0 | 19.0 | 8 | 43.0 | - | 305.0 | - |
| 125 | 125 | 250.0 | - | 210.0 | 19.0 | 8 | 65.0 | - | 356.0 | - |
| 150 | 150 | 285.0 | 280.0 ³⁾ | 240.0 | 23.0 | 8 | 58.0 | 109.0 | 406.0 | 416.0 |

Dimensions in mm, MG = diaphragm size
n = number of bolt holes

- 1) **Connection type**
Code 53: Flange EN 1092, PN 16, form A, face-to-face dimension FTF EN 558 series 7, ISO 5752, basic series 7, length only for body configuration D
- 2) **Valve body material**
Code 8: EN-GJL-250 (GG 25)
Code 17: EN-GJS-400-18-LT (GGG 40.3), PFA lined
- 3) Diameter deviates from standard

Flange ANSI Class (code 38, 39)



| MG | DN | Connection types code ¹⁾ | | | | | | | | |
|-----|-----|-------------------------------------|-------|------|----|------|-------|-------|------------|--------|
| | | | | | 38 | 38 | 39 | | | |
| | | Material code ²⁾ | | | | | | 8 | 17, 18, 83 | 17, 18 |
| | | øD | øk | øL | n | H1 | H1 | FTF | FTF | FTF |
| 25 | 15 | 90.0 | 60.3 | 15.9 | 4 | 19.0 | 18.0 | - | - | 130.0 |
| | 20 | 100.0 | 69.9 | 15.9 | 4 | 19.0 | 20.5 | 146.0 | 146.4 | 150.0 |
| | 25 | 110.0 | 79.4 | 15.9 | 4 | 19.0 | 23.0 | 146.0 | 146.4 | 160.0 |
| 40 | 32 | 115.0 | 88.9 | 15.9 | 4 | 28.0 | 28.7 | - | - | 180.0 |
| | 40 | 125.0 | 98.4 | 15.9 | 4 | 28.0 | 33.0 | 175.0 | 171.4 | 200.0 |
| 50 | 50 | 150.0 | 120.7 | 19.0 | 4 | 35.0 | 39.0 | 200.0 | 197.4 | 230.0 |
| 65 | 65 | 180.0 | 139.7 | 19.0 | 4 | 27.5 | 51.0 | 226.0 | 222.4 | 290.0 |
| 80 | 80 | 190.0 | 152.4 | 19.0 | 4 | 33.0 | 59.5 | 260.0 | 260.4 | 310.0 |
| 100 | 100 | 230.0 | 190.5 | 19.0 | 8 | 43.0 | 73.0 | 327.0 | 324.4 | 350.0 |
| 125 | 125 | 255.0 | 215.9 | 22.2 | 8 | 65.0 | 87.0 | - | - | 400.0 |
| 150 | 150 | 280.0 | 241.3 | 22.2 | 8 | 58.0 | 109.0 | 416.0 | 416.0 | 480.0 |

Dimensions in mm, MG = diaphragm size
n = number of bolt holes

1) **Connection type**

Code 38: Flange ANSI Class 150 RF, face-to-face dimension FTF MSS SP-88, length only for body configuration D

Code 39: Flange ANSI Class 125/150 RF, face-to-face dimension FTF EN 558 series 1, ISO 5752, basic series 1, length only for body configuration D

2) **Valve body material**

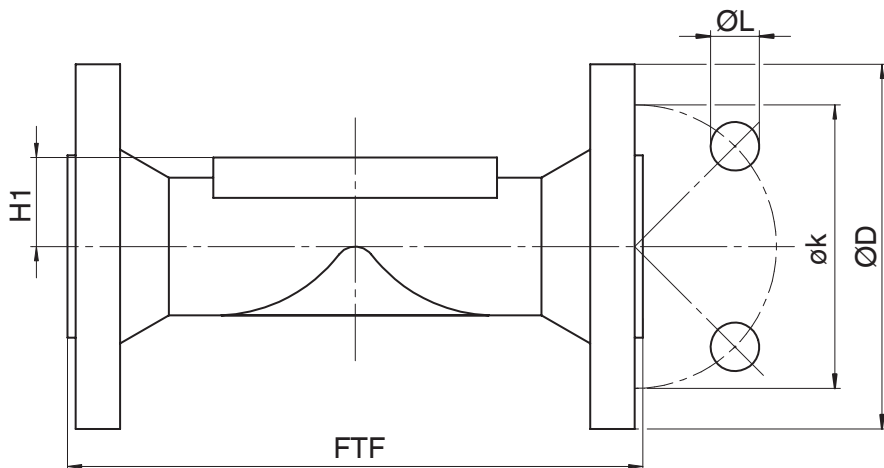
Code 8: EN-GJL-250 (GG 25)

Code 17: EN-GJS-400-18-LT (GGG 40.3), PFA lined

Code 18: EN-GJS-400-18-LT (GGG 40.3), PP lined

Code 83: EN-GJS-400-18-LT (GGG 40.3), hard rubber lined

Flange ANSI Class (code 56)



| MG | DN | Connection type code 56 ¹⁾ | | | | | | | |
|-----|-----|---------------------------------------|-------|------|---|-------|--------|-------|--------|
| | | Material code ²⁾ | | | | | | | |
| | | øD | øk | øL | n | 17 | 81, 91 | 17 | 81, 91 |
| H1 | H1 | | | | | FTF | FTF | | |
| 25 | 25 | 110.0 | 79.4 | 15.9 | 4 | - | 23.0 | - | 127.0 |
| 40 | 40 | 125.0 | 98.4 | 15.9 | 4 | - | 32.0 | - | 165.0 |
| 50 | 50 | 150.0 | 120.7 | 19.0 | 4 | - | 40.0 | - | 191.0 |
| 80 | 80 | 190.0 | 152.4 | 19.0 | 4 | - | 58.0 | - | 254.0 |
| 100 | 100 | 230.0 | 190.5 | 19.0 | 8 | - | 70.0 | - | 311.0 |
| 150 | 150 | 280.0 | 241.3 | 22.2 | 8 | 109.0 | - | 416.0 | - |

Dimensions in mm, MG = diaphragm size

n = number of bolt holes

1) **Connection type**

Code 56: Flange ANSI Class 125/150 RF, face-to-face dimension FTF EN 558 series 7, ISO 5752, basic series 7, length only for body configuration D

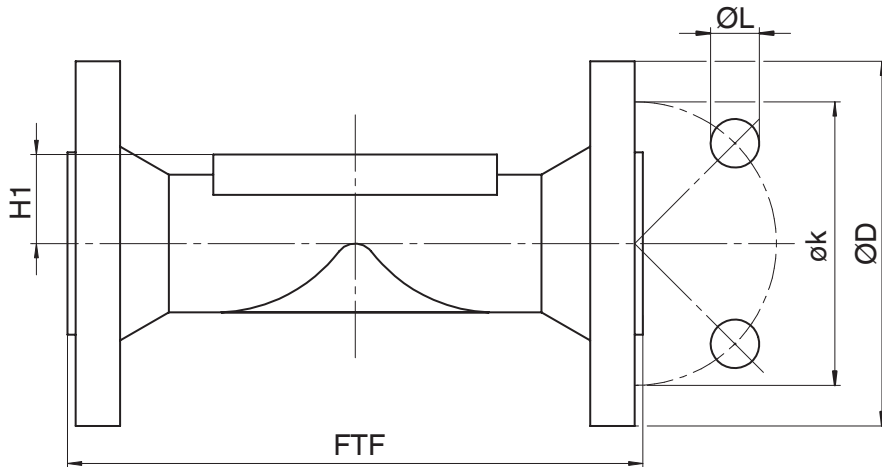
2) **Valve body material**

Code 17: EN-GJS-400-18-LT (GGG 40.3), PFA lined

Code 81: EN-GJS-500-7 (GGG 50), PFA lined

Code 91: EN-GJS-500-7 (GGG 50), PP lined

Flange BS (code 51)



| MG | DN | Connection type code 51 ¹⁾ | | | | | | | | | |
|-----|-----|---------------------------------------|-------|------|---|-------|------|-------|--------|----|--------|
| | | Material code ²⁾ | | | | | | 17 | 81, 91 | 17 | 81, 91 |
| | | øD | øk | øL | n | H1 | H1 | FTF | FTF | | |
| 25 | 25 | 114.0 | 83.0 | 14.0 | 4 | - | 23.0 | - | 127.0 | | |
| 40 | 40 | 125.0 ³⁾ | 98.0 | 14.0 | 4 | - | 32.0 | - | 165.0 | | |
| 50 | 50 | 152.0 | 114.0 | 17.0 | 4 | - | 40.0 | - | 191.0 | | |
| 80 | 80 | 184.0 | 146.0 | 17.0 | 4 | - | 58.0 | - | 254.0 | | |
| 100 | 100 | 216.0 | 178.0 | 17.0 | 8 | - | 70.0 | - | 311.0 | | |
| 150 | 150 | 279.0 | 235.0 | 22.0 | 8 | 109.0 | - | 416.0 | - | | |

Dimensions in mm, MG = diaphragm size

n = number of bolt holes

1) **Connection type**

Code 51: Flange BS 10 Table "E", face-to-face dimension FTF EN 558 series 7, ISO 5752, basic series 7, length only for body configuration D

2) **Valve body material**

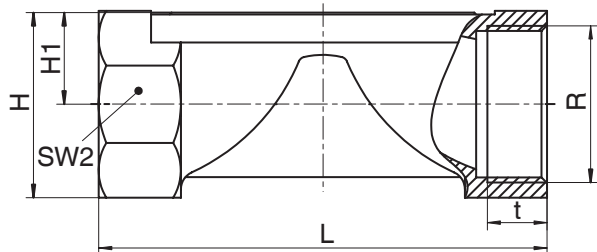
Code 17: EN-GJS-400-18-LT (GGG 40.3), PFA lined

Code 81: EN-GJS-500-7 (GGG 50), PFA lined

Code 91: EN-GJS-500-7 (GGG 50), PP lined

3) Diameter deviates from standard BS 10

Threaded socket DIN (code 1)



| MG | DN | Connection type code 1 ¹⁾ | | | | | | |
|----|----|--------------------------------------|------|------|------|-------|------|---|
| | | Material code 8 ²⁾ | | | | | | |
| | | R | H | H1 | t | L | SW 2 | n |
| 25 | 15 | G 1/2 | 35.0 | 19.0 | 12.0 | 85.0 | 32 | 6 |
| | 20 | G 3/4 | 40.0 | 19.0 | 13.0 | 85.0 | 41 | 6 |
| | 25 | G 1 | 42.0 | 19.0 | 16.0 | 110.0 | 46 | 6 |
| 40 | 32 | G 1¼ | 56.0 | 28.0 | 16.0 | 120.0 | 55 | 6 |
| | 40 | G 1½ | 61.0 | 28.0 | 18.0 | 140.0 | 65 | 6 |
| 50 | 50 | G 2 | 73.0 | 35.0 | 18.0 | 165.0 | 75 | 6 |

Dimensions in mm, MG = diaphragm size
n = number of flats

- 1) **Connection type**
Code 1: Threaded socket DIN ISO 228
- 2) **Valve body material**
Code 8: EN-GJL-250 (GG 25)



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