

# Diaphragm Valve, Metal

## Construction

The GEMÜ 611 and 671 manually operated 2/2-way metal diaphragm valves have a low maintenance plastic bonnet and an integral optical position indicator as standard.

## Features

- Suitable for inert and corrosive\* liquid and gaseous media
- Chemical resistance of bonnet
- Insensitive to particulate media
- Valve body and diaphragm available in various materials and designs
- Compact design (ideal when space is at a premium)
- Versions according to ATEX on request

## Advantages

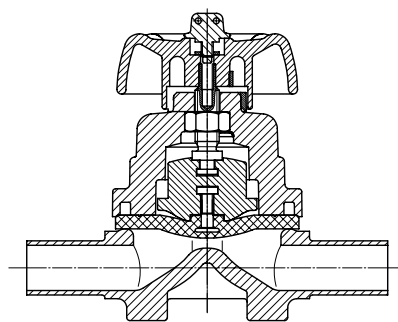
- Hermetic separation between medium and bonnet
- Optional flow direction, will seal in either flow direction up to full operating pressure
- Optional mounting position
- Optional accessories for 671:
  - Electrical remote indication that the valve is in the open position
  - Lockable handwheel clamp

\*see information on working medium on page 2

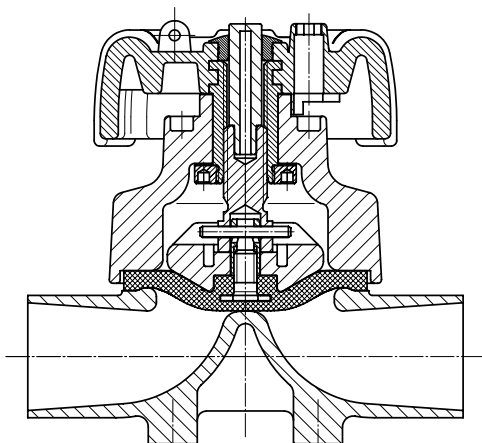


GEMÜ 611

## Sectional drawing



GEMÜ 611



GEMÜ 671



GEMÜ 671

## Technical data

### 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.

Operating temperature max. 80 °C  
(dependent on medium wetted materials)

### Ambient conditions

Max. ambient temperature 60 °C

### Operating pressure

#### Diaphragm material

EPDM 0 - 10 bar  
PTFE 0 - 6 bar

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.

### Kv values [m<sup>3</sup>/h]

| Type     | MG | DN  | DIN Code 0 | DIN 11850 Series 1 Code 16 | DIN 11850 Series 2 Code 17 | DIN 11850 Series 3 Code 18 | SMS 3008 Code 37 | ASME BPE Code 59 | EN ISO 1127 Code 60 |
|----------|----|-----|------------|----------------------------|----------------------------|----------------------------|------------------|------------------|---------------------|
| GEMÜ 611 | 10 | 10  | -          | 2.4                        | 2.4                        | 2.4                        | -                | 2.2              | 3.3                 |
|          |    | 15  | 3.3        | 3.8                        | 3.8                        | 3.8                        | -                | 2.2              | 4.0                 |
|          |    | 20  | -          | -                          | -                          | -                          | -                | 3.8              | -                   |
| GEMÜ 671 | 25 | 15  | 4.1        | 4.7                        | 4.7                        | 4.7                        | -                | -                | 7.4                 |
|          |    | 20  | 6.3        | 7.0                        | 7.0                        | 7.0                        | -                | 4.4              | 13.2                |
|          |    | 25  | 13.9       | 15.0                       | 15.0                       | 15.0                       | 12.6             | 12.2             | 16.2                |
|          | 40 | 32  | 25.3       | 27.0                       | 27.0                       | 27.0                       | 26.2             | -                | 30.0                |
|          |    | 40  | 29.3       | 30.9                       | 30.9                       | 30.9                       | 30.2             | 29.5             | 32.8                |
|          | 50 | 50  | 46.5       | 48.4                       | 48.4                       | 48.4                       | 51.7             | 50.6             | 55.2                |
|          |    | 65  | -          | -                          | 77.0                       | -                          | 68.5             | 68.5             | 96.0                |
|          | 80 | 80  | -          | -                          | 111.0                      | -                          | 80.0             | 87.0             | 111.0               |
|          |    | 100 | -          | -                          | 194.0                      | -                          | 173.0            | 188.0            | 214.0               |

Kv values determined acc. to IEC 534 standard, inlet pressure 6 bar,  $\Delta p$  1 bar, stainless steel valve body and soft elastomer diaphragm.  
MG = diaphragm size

### Diaphragm temperature range [°C]

| Diaphragm | Liquid Media |      | Code |
|-----------|--------------|------|------|
|           | Min.         | Max. |      |
| EPDM      | -10          | 80   | 13   |
| EPDM      | -10          | 80   | 14   |
| EPDM      | -10          | 80   | 16   |
| EPDM      | -10          | 80   | 17   |
| PTFE      | -10          | 80   | 52   |
| PTFE      | -10          | 80   | 5E   |
| FPM       | -10          | 80   | 4    |
| PTFE      | -10          | 80   | 5F   |

## Order data

| Valve type                       | Code |
|----------------------------------|------|
| GEMÜ 611 diaphragm size 10       | 611  |
| GEMÜ 671 diaphragm size 25 - 100 | 671  |

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

| Connection   | Code |
|--|------|
| <b>Butt weld spigots</b>   |      |
| Spigots DIN  | 0    |
| Spigots DIN 11850, series 1  | 16   |
| Spigots DIN 11850, series 2  | 17   |
| Spigots DIN 11850, series 3  | 18   |
| Spigots DIN 11866, series A  | 1A   |
| Spigots DIN 11866, series B  | 1B   |
| Spigots JIS-G 3447   | 35   |
| Spigots JIS-G 3459   | 36   |
| Spigots SMS 3008   | 37   |
| Spigots BS 4825, Part 1  | 55   |
| Spigots ASME BPE   | 59   |
| Spigots EN ISO 1127  | 60   |
| Spigots ANSI/ASME B36.19M, Schedule 10s  | 63   |
| Spigots ANSI/ASME B36.19M, Schedule 40s  | 65   |
| <b>Threaded connections</b>  |      |
| Threaded sockets DIN ISO 228   | 1    |
| Threaded spigots DIN 11851   | 6    |
| One side threaded spigot, other side cone spigot and union nut, DIN 11851          | 62   |
| Aseptic unions on request  |      |
| <b>Clamp connections</b>   |      |
| Clamps ASME BPE for pipe ASME BPE, length ASME BPE                                 | 80   |
| Clamp DIN 32676 series B for pipe EN ISO 1127, length EN 558, series 7             | 82   |
| Clamps ASME BPE for pipe ASME BPE, length EN 558, series 7                         | 88   |
| Clamps DIN 32676 series A for pipe DIN 11850, length EN 558, series 7              | 8A   |
| Clamps SMS 3017 for pipe SMS 3008, length EN 558, series 7                         | 8E   |
| <b>Flanges (GEMÜ 671)</b>  |      |
| Flanges EN 1092 / PN16 / form B, length EN 558, series 1, ISO 5752, basic series 1 | 8    |
| Flanges ANSI CLASS 125/150 RF, length MSS SP-88                                    | 38   |
| Flanges ANSI CLASS 125/150 RF, length EN 558, series 1, ISO 5752, basic series 1   | 39   |
| Overview of available valve bodies see page 12                                     |      |

| Valve body material   | Code |
|---|------|
| EN-GJL-250 (GG 25)  | 8    |
| CW617N (brass)  | 12   |
| EN-GJS-400-18-LT (SG iron 40.3) PFA lined                     | 17   |
| EN-GJS-400-18-LT (SG iron 40.3) PP lined                      | 18   |
| 1.4435 - BN2 (CF3M), investment casting Fe<0.5%               | 32   |
| 1.4435 (ASTM A 351 CF3M $\triangle$ 316L), investment casting | 34   |
| 1.4408, investment casting                                    | 37   |
| 1.4408, PFA lined   | 39   |
| 1.4435 (316L), forged body                                    | 40   |
| 1.4435 (BN2), forged body Fe<0.5%                             | 42   |

| Diaphragm material  | Code |
|---|------|
| FPM   | 4    |
| EPDM  | 13   |
| EPDM  | 14   |
| EPDM  | 16   |
| EPDM  | 17   |
| PTFE/EPDM convex, PTFE loose MG 25 - MG 100                   | 5E*  |
| PTFE/FPM convex, PTFE loose MG 25 - MG 50                     | 5F   |
| PTFE/EPDM, PTFE lamin. MG 10                                  | 52   |
| Material complies with FDA requirements, except code 4 and 14 |      |
| *For use with valve bodies see page 12                        |      |

| Control function                                     | Code |
|--|------|
| Manually operated GEMÜ 611, 671                      | 0    |
| Manually operated (lockable handwheel) only GEMÜ 671 | L    |

| Accessory   | Code |
|---|------|
| Threaded connection for position indicator, only GEMÜ 671 | Z    |

For further order data see page 5

## Order data

### Valve body surface finish, internal contour

|              |  | Forged body<br>Code 40, 42 | Investment casting<br>Code 32, 34 | Code |
|--------------|--|----------------------------|-----------------------------------|------|
| Ra ≤ 6.3 µm  | blasted internal/external                        | -                          | X                                 | 1500 |
| --           | electropolished                                  | -                          | X                                 | 1509 |
| Ra ≤ 0.8 µm  | mechanically polished internal, blasted external | X                          | X                                 | 1502 |
| Ra ≤ 0.8 µm  | electropolished internal/external                | X                          | -                                 | 1503 |
| Ra ≤ 0.6 µm  | mechanically polished internal, blasted external | X                          | X                                 | 1507 |
| Ra ≤ 0.6 µm  | electropolished internal/external                | X                          | -                                 | 1508 |
| Ra ≤ 0.4 µm  | mechanically polished internal, blasted external | X                          | -                                 | 1536 |
| Ra ≤ 0.4 µm  | electropolished internal/external                | X                          | -                                 | 1537 |
| Ra ≤ 0.25 µm | mechanically polished internal, blasted external | X                          | -                                 | 1527 |
| Ra ≤ 0.25 µm | electropolished internal/external                | X                          | -                                 | 1516 |

Ra acc. to DIN 4768; at defined reference points  
Surface finish data refer to medium wetted surfaces

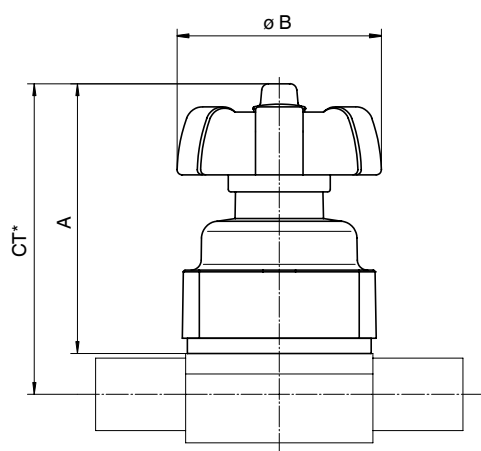
| Order example              | 671 | 25 | D | 60 | 34 | 17 | 0 | Z | 1500 |
|----------------------------|-----|----|---|----|----|----|---|---|------|
| Type                       | 671 |    |   |    |    |    |   |   |      |
| Nominal size               |     | 25 |   |    |    |    |   |   |      |
| Body configuration (code)  |     |    | D |    |    |    |   |   |      |
| Connection (code)          |     |    |   | 60 |    |    |   |   |      |
| Valve body material (code) |     |    |   |    | 34 |    |   |   |      |
| Diaphragm material (code)  |     |    |   |    |    | 17 |   |   |      |
| Control function (code)    |     |    |   |    |    |    | 0 |   |      |
| Accessory (code)           |     |    |   |    |    |    |   | Z |      |
| Surface finish (code)      |     |    |   |    |    |    |   |   | 1500 |

## Dimensions [mm]

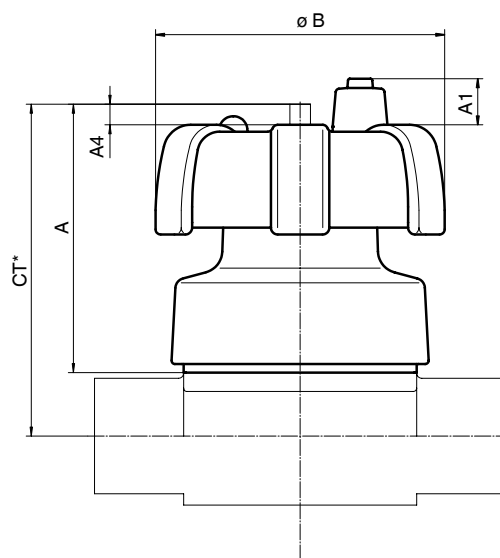
### Bonnet dimensions

| Type     | Diaphragm size | Ø B | A   | A1 | A4 | Weight [kg] |
|----------|----------------|-----|-----|----|----|-------------|
| GEMÜ 611 | 10             | 60  | 80  | -  | -  | 0.15        |
| GEMÜ 671 | 25             | 90  | 85  | 14 | 8  | 0.8         |
|          | 40             | 114 | 102 | 14 | 13 | 1.6         |
|          | 50             | 140 | 120 | 8  | 13 | 3.0         |
|          | 80             | 214 | 166 | 17 | 25 | 10.0        |
|          | 100            | 214 | 222 | 25 | 37 | 15.0        |

### GEMÜ 611



### GEMÜ 671



\*  $\text{CT} = A + H1$  (see body dimensions)

## Body dimensions [mm]

**Butt weld spigots, connection code 0, 16, 17, 18,  
Valve body material: investment casting (code 34), forged body (code 40)**

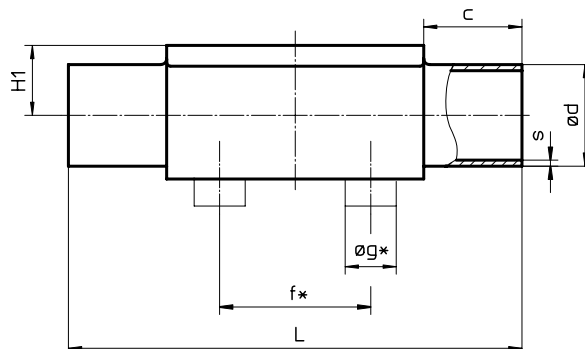
| Typ      | MG  | DN  | NPS    | f* | øg*  | L   | c  | H1*  | H1** | DIN Series 0 Code 0 |     | DIN 11850 Series 1 Code 16 |     | DIN 11850 Series 2 Code 17 |     | DIN 11850 Series 3 Code 18 |      | Weight [kg] |
|----------|-----|-----|--------|----|------|-----|----|------|------|---------------------|-----|----------------------------|-----|----------------------------|-----|----------------------------|------|-------------|
|          |     |     |        |    |      |     |    |      |      | ød                  | s   | ød                         | s   | ød                         | s   | ød                         | s    |             |
| GEMÜ 611 | 10  | 10  | 3/8"   | 30 | 13.5 | 108 | 25 | 12.5 | -    | -                   | 12  | 1.0                        | 13  | 1.5                        | 14  | 2.0                        | 0.30 |             |
|          |     | 15  | 1/2"   | 30 | 13.5 | 108 | 25 | 12.5 | 18   | 1.5                 | 18  | 1.0                        | 19  | 1.5                        | 20  | 2.0                        | 0.30 |             |
|          |     | 20  | 3/4"   | 30 | 13.5 | 108 | 25 | 12.5 | -    | -                   | -   | -                          | -   | -                          | -   | -                          | 0.30 |             |
| GEMÜ 671 | 25  | 15  | 1/2"   | 40 | 13.5 | 120 | 25 | 13.0 | 19.0 | 18                  | 1.5 | 18                         | 1.0 | 19                         | 1.5 | 20                         | 2.0  | 0.62        |
|          |     | 20  | 3/4"   | 40 | 13.5 | 120 | 25 | 16.0 | 19.0 | 22                  | 1.5 | 22                         | 1.0 | 23                         | 1.5 | 24                         | 2.0  | 0.58        |
|          |     | 25  | 1"     | 40 | 13.5 | 120 | 25 | 19.0 | 19.0 | 28                  | 1.5 | 28                         | 1.0 | 29                         | 1.5 | 30                         | 2.0  | 0.55        |
|          | 40  | 32  | 1 1/4" | 68 | 13.5 | 153 | 25 | 24.0 | 26.0 | 34                  | 1.5 | 34                         | 1.0 | 35                         | 1.5 | 36                         | 2.0  | 1.45        |
|          |     | 40  | 1 1/2" | 75 | 13.5 | 153 | 25 | 26.0 | 26.0 | 40                  | 1.5 | 40                         | 1.0 | 41                         | 1.5 | 42                         | 2.0  | 1.32        |
|          | 50  | 50  | 2"     | 90 | 13.5 | 173 | 30 | 32.0 | 32.0 | 52                  | 1.5 | 52                         | 1.0 | 53                         | 1.5 | 54                         | 2.0  | 2.25        |
|          | 80  | 65  | 2 1/2" | -  | -    | 216 | 30 | -    | 62.0 | -                   | -   | -                          | -   | 70                         | 2.0 | -                          | -    | 8.60        |
|          |     | 80  | 3"     | -  | -    | 254 | 30 | -    | 62.0 | -                   | -   | -                          | -   | 85                         | 2.0 | -                          | -    | 8.00        |
|          | 100 | 100 | 4"     | -  | -    | 305 | 30 | -    | 76.0 | -                   | -   | -                          | -   | 104                        | 2.0 | -                          | -    | 24.10       |

\* only for investment cast design      \*\* only for forged design      MG = diaphragm size  
For materials see overview on last page

**Butt weld spigots, connection code 1A, 1B, 60  
Valve body material: investment casting (code 34), forged body (code 40)**

| Typ      | MG  | DN  | NPS    | f* | øg*  | L   | c  | H1*  | H1** | DIN 11866 Series A Code 1A |      | DIN 11866 Series B Code 1B |      | EN ISO 1127 Code 60 |      | Weight [kg] |
|----------|-----|-----|--------|----|------|-----|----|------|------|----------------------------|------|----------------------------|------|---------------------|------|-------------|
|          |     |     |        |    |      |     |    |      |      | ød                         | s    | ød                         | s    | ød                  | s    |             |
| GEMÜ 611 | 10  | 10  | 3/8"   | 30 | 13.5 | 108 | 25 | 12.5 | 13   | 1.5                        | 17.2 | 1.6                        | 17.2 | 1.6                 | 0.30 |             |
|          |     | 15  | 1/2"   | 30 | 13.5 | 108 | 25 | 12.5 | 19   | 1.5                        | 21.3 | 1.6                        | 21.3 | 1.6                 | 0.30 |             |
|          |     | 20  | 3/4"   | 30 | 13.5 | 108 | 25 | 12.5 | -    | -                          | -    | -                          | -    | -                   | 0.30 |             |
| GEMÜ 671 | 25  | 15  | 1/2"   | 40 | 13.5 | 120 | 25 | 13.0 | 19.0 | 19                         | 1.5  | 21.3                       | 1.6  | 21.3                | 1.6  | 0.62        |
|          |     | 20  | 3/4"   | 40 | 13.5 | 120 | 25 | 16.0 | 19.0 | 23                         | 1.5  | 26.9                       | 1.6  | 26.9                | 1.6  | 0.58        |
|          |     | 25  | 1"     | 40 | 13.5 | 120 | 25 | 19.0 | 19.0 | 29                         | 1.5  | 33.7                       | 2.0  | 33.7                | 2.0  | 0.55        |
|          | 40  | 32  | 1 1/4" | 68 | 13.5 | 153 | 25 | 24.0 | 26.0 | 35                         | 1.5  | 42.4                       | 2.0  | 42.4                | 2.0  | 1.45        |
|          |     | 40  | 1 1/2" | 75 | 13.5 | 153 | 25 | 26.0 | 26.0 | 41                         | 1.5  | 48.3                       | 2.0  | 48.3                | 2.0  | 1.32        |
|          | 50  | 50  | 2"     | 90 | 13.5 | 173 | 30 | 32.0 | 32.0 | 53                         | 1.5  | 60.3                       | 2.0  | 60.3                | 2.0  | 2.25        |
|          | 80  | 65  | 2 1/2" | -  | -    | 216 | 30 | -    | 62.0 | 70                         | 2.0  | 76.1                       | 2.0  | 76.1                | 2.0  | 8.60        |
|          |     | 80  | 3"     | -  | -    | 254 | 30 | -    | 62.0 | 85                         | 2.0  | 88.9                       | 2.3  | 88.9                | 2.3  | 8.00        |
|          | 100 | 100 | 4"     | -  | -    | 305 | 30 | -    | 76.0 | 104                        | 2.0  | 114.3                      | 2.3  | 114.3               | 2.3  | 24.10       |

\* only for investment cast design      \*\* only for forged design      MG = diaphragm size  
For materials see overview on last page



## Body dimensions [mm]

### Butt weld spigots, connection code 35, 36, 37 Valve body material: investment casting (code 34), forged body (code 40)

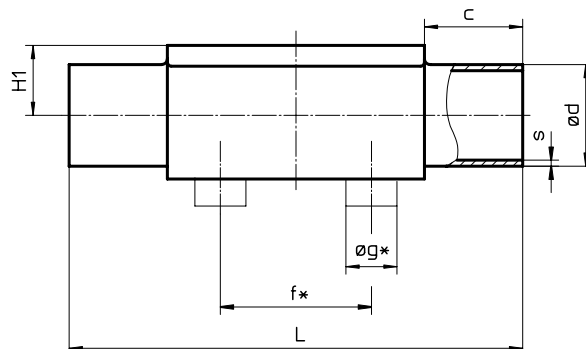
|          |    |     |        |    |      |     |    |      |      | JIS-G<br>3447<br>Code 35 |     | JIS-G<br>3459<br>Code 36 |      | SMS<br>3008<br>Code 37 |     | Weight<br>[kg] |
|----------|----|-----|--------|----|------|-----|----|------|------|--------------------------|-----|--------------------------|------|------------------------|-----|----------------|
| Typ      | MG | DN  | NPS    | f* | øg*  | L   | c  | H1*  | H1** | ød                       | s   | ød                       | s    | ød                     | s   |                |
| GEMÜ 611 | 10 | 10  | 3/8"   | 30 | 13.5 | 108 | 25 | 12.5 |      | -                        | -   | 17.3                     | 1.65 | -                      | -   | 0.30           |
|          |    | 15  | 1/2"   | 30 | 13.5 | 108 | 25 | 12.5 |      | -                        | -   | 21.7                     | 2.10 | -                      | -   | 0.30           |
|          |    | 20  | 3/4"   | 30 | 13.5 | 108 | 25 | 12.5 |      | -                        | -   | -                        | -    | -                      | -   | 0.30           |
| GEMÜ 671 | 25 | 15  | 1/2"   | 40 | 13.5 | 120 | 25 | 13.0 | 19.0 | -                        | -   | 21.7                     | 2.10 | -                      | -   | 0.62           |
|          |    | 20  | 3/4"   | 40 | 13.5 | 120 | 25 | 16.0 | 19.0 | -                        | -   | 27.2                     | 2.10 | -                      | -   | 0.58           |
|          |    | 25  | 1"     | 40 | 13.5 | 120 | 25 | 19.0 | 19.0 | 25.4                     | 1.2 | 34.0                     | 2.80 | 25.0                   | 1.2 | 0.55           |
|          | 40 | 32  | 1 1/4" | 68 | 13.5 | 153 | 25 | 24.0 | 26.0 | 31.8                     | 1.2 | 42.7                     | 2.80 | 33.7                   | 1.2 | 1.45           |
|          |    | 40  | 1 1/2" | 75 | 13.5 | 153 | 25 | 26.0 | 26.0 | 38.1                     | 1.2 | 48.6                     | 2.80 | 38.0                   | 1.2 | 1.32           |
|          | 50 | 50  | 2"     | 90 | 13.5 | 173 | 30 | 32.0 | 32.0 | 50.8                     | 1.5 | 60.5                     | 2.80 | 51.0                   | 1.2 | 2.25           |
|          |    | 65  | 2 1/2" | -  | -    | 216 | 30 | -    | 62.0 | 63.5                     | 2.0 | 76.3                     | 3.00 | 63.5                   | 1.6 | 8.60           |
|          | 80 | 80  | 3"     | -  | -    | 254 | 30 | -    | 62.0 | 76.3                     | 2.0 | 89.1                     | 3.00 | 76.1                   | 1.6 | 8.00           |
|          |    | 100 | 4"     | -  | -    | 305 | 30 | -    | 76.0 | 101.6                    | 2.0 | 114.3                    | 3.00 | 101.6                  | 2.0 | 24.10          |

\* only for investment cast design      \*\* only for forged design      MG = diaphragm size  
For materials see overview on last page

### Butt weld spigots, connection code 55, 59, 63, 65 Valve body material: investment casting (code 34), forged body (code 40)

|          |    |     |        |    |      |     |    |      |      | BS 4825<br>Code 55 |     | ASME BPE<br>Code 59 |      | ANSI/ASME<br>B36.19M 10s<br>Code 63 |      | ANSI/ASME<br>B36.19M 40s<br>Code 65 |      | Weight<br>[kg] |
|----------|----|-----|--------|----|------|-----|----|------|------|--------------------|-----|---------------------|------|-------------------------------------|------|-------------------------------------|------|----------------|
| Typ      | MG | DN  | NPS    | f* | øg*  | L   | c  | H1*  | H1** | ød                 | s   | ød                  | s    | ød                                  | s    | ød                                  | s    |                |
| GEMÜ 611 | 10 | 10  | 3/8"   | 30 | 13.5 | 108 | 25 | 12.5 |      | 9.53               | 1.2 | 9.53                | 0.89 | 17.1                                | 1.65 | 17.1                                | 2.31 | 0.30           |
|          |    | 15  | 1/2"   | 30 | 13.5 | 108 | 25 | 12.5 |      | 12.70              | 1.2 | 12.70               | 1.65 | 21.3                                | 2.11 | 21.3                                | 2.77 | 0.30           |
|          |    | 20  | 3/4"   | 30 | 13.5 | 108 | 25 | 12.5 |      | 19.05              | 1.2 | 19.05               | 1.65 | -                                   | -    | -                                   | -    | 0.30           |
| GEMÜ 671 | 25 | 15  | 1/2"   | 40 | 13.5 | 120 | 25 | 13.0 | 19.0 | -                  | -   | -                   | -    | 21.3                                | 2.11 | 21.3                                | 2.77 | 0.62           |
|          |    | 20  | 3/4"   | 40 | 13.5 | 120 | 25 | 16.0 | 19.0 | 19.05              | 1.2 | 19.05               | 1.65 | 26.7                                | 2.11 | 26.7                                | 2.87 | 0.58           |
|          |    | 25  | 1"     | 40 | 13.5 | 120 | 25 | 19.0 | 19.0 | -                  | -   | 25.40               | 1.65 | 33.4                                | 2.77 | 33.4                                | 3.38 | 0.55           |
|          | 40 | 32  | 1 1/4" | 68 | 13.5 | 153 | 25 | 24.0 | 26.0 | -                  | -   | -                   | -    | 42.2                                | 2.77 | 42.2                                | 3.56 | 1.45           |
|          |    | 40  | 1 1/2" | 75 | 13.5 | 153 | 25 | 26.0 | 26.0 | -                  | -   | 38.10               | 1.65 | 48.3                                | 2.77 | 48.3                                | 3.68 | 1.32           |
|          | 50 | 50  | 2"     | 90 | 13.5 | 173 | 30 | 32.0 | 32.0 | -                  | -   | 50.80               | 1.65 | 60.3                                | 2.77 | 60.3                                | 3.91 | 2.25           |
|          |    | 65  | 2 1/2" | -  | -    | 216 | 30 | -    | 62.0 | -                  | -   | 63.50               | 1.65 | 73.0                                | 3.05 | 73.0                                | 5.16 | 8.60           |
|          | 80 | 80  | 3"     | -  | -    | 254 | 30 | -    | 62.0 | -                  | -   | 76.20               | 1.65 | 88.9                                | 3.05 | 88.9                                | 5.49 | 8.00           |
|          |    | 100 | 4"     | -  | -    | 305 | 30 | -    | 76.0 | -                  | -   | 101.60              | 2.11 | 114.3                               | 3.05 | 114.3                               | 6.02 | 24.10          |

\* only for investment cast design      \*\* only for forged design      MG = diaphragm size  
For materials see overview on last page



## Body dimensions [mm]

### Threaded sockets, connection code 1 Valve body material: brass (code 12), investment casting (code 34)

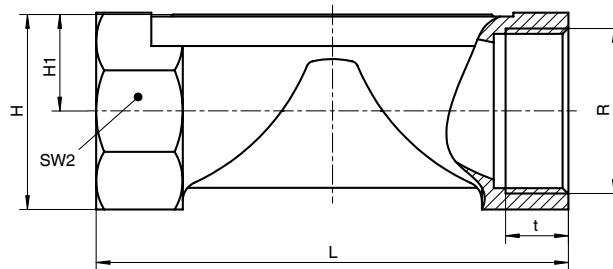
| Typ      | MG | DN | R     | H  | H1   | t    | Material code 12 |     | Material code 34 |     | Number of flats | Weight [kg] |
|----------|----|----|-------|----|------|------|------------------|-----|------------------|-----|-----------------|-------------|
|          |    |    |       |    |      |      | L                | SW2 | L                | SW2 |                 |             |
| GEMÜ 611 | 10 | 12 | G 3/8 | 23 | 10.5 | 13.0 | 55               | 22  | 55               | 22  | 2               | 0.17        |
|          |    | 15 | G 1/2 | 29 | 13.5 | 15.0 | 75               | 25  | 68               | 24  | 2               | 0.26        |

MG = diaphragm size      For materials see overview on last page

### Threaded sockets, connection code 1 Valve body material: GG25 (code 8), investment casting (code 37)

| Typ      | MG | DN | R       | L   | Material code 8 |    |    |     |                 | Material code 37 |    |    |     |                 | Weight [kg] |
|----------|----|----|---------|-----|-----------------|----|----|-----|-----------------|------------------|----|----|-----|-----------------|-------------|
|          |    |    |         |     | H               | H1 | t  | SW2 | Number of flats | H                | H1 | t  | SW2 | Number of flats |             |
| GEMÜ 671 | 25 | 15 | G 1/2   | 85  | 35              | 19 | 12 | 32  | 6               | 30               | 16 | 9  | 27  | 6               | 0.32        |
|          |    | 20 | G 3/4   | 85  | 40              | 19 | 13 | 41  | 6               | 33               | 17 | 10 | 32  | 6               | 0.34        |
|          |    | 25 | G 1     | 110 | 42              | 19 | 16 | 46  | 6               | 37               | 17 | 13 | 41  | 6               | 0.39        |
|          | 40 | 32 | G 1 1/4 | 120 | 56              | 28 | 16 | 55  | 6               | 50               | 25 | 16 | 50  | 8               | 0.88        |
|          |    | 40 | G 1 1/2 | 140 | 61              | 28 | 18 | 65  | 6               | 52               | 25 | 18 | 55  | 8               | 0.93        |
|          |    | 50 | G 2     | 165 | 73              | 35 | 18 | 75  | 6               | 69               | 34 | 18 | 70  | 8               | 1.56        |

MG = diaphragm size      For materials see overview on last page





## Body dimensions [mm]

**Threaded connections, connection code 6, 62**  
**Valve body material: investment casting (code 34), forged body (code 40)**

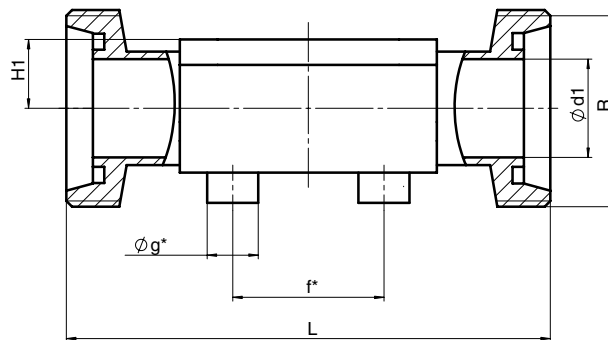
| Type     | MG | DN | H1*  | H1** | f*   | øg*  | ød1  | Thread to DIN 405 R | Code 6 L | Code 62 L | Weight [kg] |
|----------|----|----|------|------|------|------|------|---------------------|----------|-----------|-------------|
| GEMÜ 611 | 10 | 10 | 12.5 | -    | 30.0 | 13.5 | 10.0 | RD 28 x 1/8         | 118      | 116       | 0.33        |
|          |    | 15 | 12.5 | -    | 30.0 | 13.5 | 16.0 | RD 34 x 1/8         | 118      | 116       | 0.35        |
| GEMÜ 671 | 25 | 15 | 13.0 | 19.0 | 40.0 | 13.5 | 16.0 | RD 34 x 1/8         | 118      | 116       | 0.71        |
|          |    | 20 | 16.0 | 19.0 | 40.0 | 13.5 | 20.0 | RD 44 x 1/6         | 118      | 114       | 0.78        |
|          |    | 25 | 19.0 | 19.0 | 40.0 | 13.5 | 26.0 | RD 52 x 1/6         | 128      | 127       | 0.79        |
|          | 40 | 32 | 24.0 | 26.0 | 68.0 | 13.5 | 32.0 | RD 58 x 1/6         | 147      | 147       | 1.66        |
|          |    | 40 | 26.0 | 26.0 | 75.0 | 13.5 | 38.0 | RD 65 x 1/6         | 160      | 160       | 1.62        |
|          | 50 | 50 | 32.0 | 32.0 | 90.0 | 13.5 | 50.0 | RD 78 x 1/6         | 191      | 191       | 2.70        |
|          | 80 | 65 | -    | 62.0 | -    | -    | -    | RD 95 x 1/6         | 246      | 246       | 9.22        |
|          |    | 80 | -    | 62.0 | -    | -    | -    | RD 110 x 1/4        | 256      | 256       | 9.20        |

\* only for investment cast design  
 For materials see overview on last page

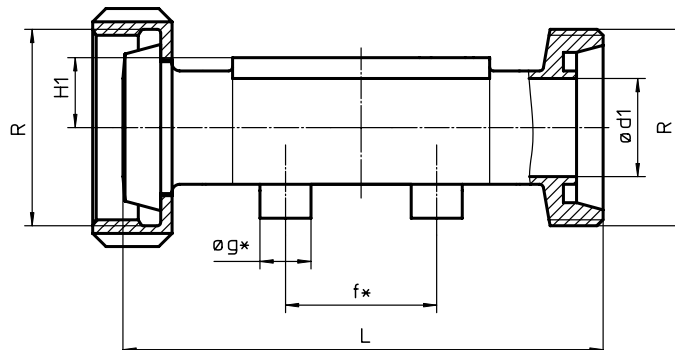
\*\* only for forged design

MG = diaphragm size

Code 6



Code 62



## Body dimensions [mm]

### Flanges - DIN EN 1092, connection code 8 Valve body material: GGG 40.3 (code 17, 18), 1.4435 (code 34, 40), 1.4408 (code 39)

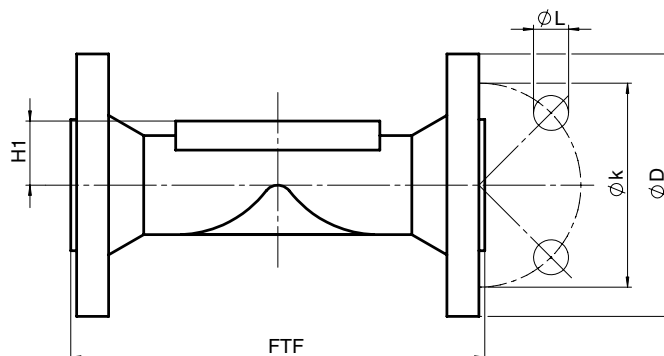
| Type     | MG  | DN  | øD  | øk  | øL | Number of bolts | H1                       |                  |                  | FTF  | Weight [kg] |
|----------|-----|-----|-----|-----|----|-----------------|--------------------------|------------------|------------------|------|-------------|
|          |     |     |     |     |    |                 | Material code 17, 18, 39 | Material code 34 | Material code 40 |      |             |
| GEMÜ 671 | 25  | 15  | 95  | 65  | 14 | 4               | 18.0                     | 13.0             | 19.0             | 130* | 1.85        |
|          |     | 20  | 105 | 75  | 14 | 4               | 20.5                     | 16.0             | 19.0             | 150  | 2.35        |
|          |     | 25  | 115 | 85  | 14 | 4               | 23.0                     | 19.0             | 19.0             | 160  | 2.85        |
|          | 40  | 32  | 140 | 100 | 18 | 4               | 28.7                     | 24.0             | 26.0             | 180  | 4.90        |
|          |     | 40  | 150 | 110 | 18 | 4               | 33.0                     | 26.0             | 26.0             | 200  | 5.65        |
|          | 50  | 50  | 165 | 125 | 18 | 4               | 39.0                     | 32.0             | 32.0             | 230  | 7.45        |
|          | 80  | 65  | 185 | 145 | 18 | 4               | 51.0                     | -                | 62.0             | 290  | 10.20       |
|          |     | 80  | 200 | 160 | 18 | 8               | 59.5                     | -                | 62.0             | 310  | 14.20       |
|          | 100 | 100 | 220 | 180 | 18 | 8               | 73.0                     | -                | 76.0             | 350  | 21.00       |

\*Material code 34, 40 FTF = 150 (no DIN length)      MG = diaphragm size  
For materials see overview on last page

### Flanges - ANSI class 150 RF, connection code 38, 39 Valve body material: GGG 40.3 (code 17, 18), 1.4435 (code 34, 40), 1.4408 (code 39)

| Type     | MG  | DN  | øD  | øk    | øL   | Number of bolts | H1                       |                  |                  | FTF                |                    | Weight [kg] |
|----------|-----|-----|-----|-------|------|-----------------|--------------------------|------------------|------------------|--------------------|--------------------|-------------|
|          |     |     |     |       |      |                 | Material code 17, 18, 39 | Material code 34 | Material code 40 | Connection code 38 | Connection code 39 |             |
| GEMÜ 671 | 25  | 15  | 90  | 60.3  | 15.9 | 4               | 18.0                     | 13.0             | 19.0             | -                  | 130                | 1.85        |
|          |     | 20  | 100 | 69.9  | 15.9 | 4               | 20.5                     | 16.0             | 19.0             | 146                | 150                | 2.35        |
|          |     | 25  | 110 | 79.4  | 15.9 | 4               | 23.0                     | 19.0             | 19.0             | 146                | 160                | 2.85        |
|          | 40  | 32  | 115 | 88.9  | 15.9 | 4               | 28.7                     | 24.0             | 26.0             | -                  | 180                | 4.90        |
|          |     | 40  | 125 | 98.4  | 15.9 | 4               | 33.0                     | 26.0             | 26.0             | 175                | 200                | 5.65        |
|          | 50  | 50  | 150 | 120.7 | 19.0 | 4               | 39.0                     | 32.0             | 32.0             | 200                | 230                | 7.45        |
|          | 80  | 65  | 180 | 139.7 | 19.0 | 4               | 51.0                     | -                | 62.0             | 226                | 290                | 10.20       |
|          |     | 80  | 190 | 152.4 | 19.0 | 4               | 59.5                     | -                | 62.0             | 260                | 310                | 14.20       |
|          | 100 | 100 | 230 | 190.5 | 19.0 | 8               | 73.0                     | -                | 76.0             | 327                | 350                | 21.00       |

MG = diaphragm size      For materials see overview on last page

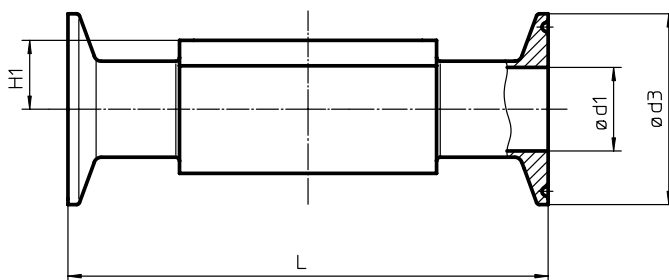


## Body dimensions [mm]

### Clamp connections, connection code 80, 82, 88, 8A, 8E Valve body material: forged body (code 40)

| Type        | MG  | DN | NPS    | H1     | for pipe<br>ASME BPE<br>Code 80 |       |       | for pipe<br>EN ISO 1127<br>Code 82 |      |       | for pipe<br>ASME BPE<br>Code 88 |       |      | for pipe<br>DIN 11850<br>Code 8A |      |       | for pipe<br>SMS 3008<br>Code 8E |      |       | Weight<br>[kg] |      |
|-------------|-----|----|--------|--------|---------------------------------|-------|-------|------------------------------------|------|-------|---------------------------------|-------|------|----------------------------------|------|-------|---------------------------------|------|-------|----------------|------|
|             |     |    |        |        | ød1                             | ød3   | L     | ød1                                | ød3  | L     | ød1                             | ød3   | L    | ød1                              | ød3  | L     | ød1                             | ød3  | L     |                |      |
| GEMÜ<br>611 | 10  | 10 | 3/8"   | 12.5   | -                               | -     | -     | 14.0                               | 25.0 | 108   | -                               | -     | -    | 10                               | 34.0 | 108   | -                               | -    | -     | 0.30           |      |
|             |     | 15 | 1/2"   | 12.5   | 9.40                            | 25.0  | 88.9  | 18.1                               | 50.5 | 108   | 9.40                            | 25.0  | 108  | 16                               | 34.0 | 108   | -                               | -    | -     | 0.43           |      |
|             |     | 20 | 3/4"   | 12.5   | 15.75                           | 25.0  | 101.6 | -                                  | -    | -     | 15.75                           | 25.0  | 117  | -                                | -    | -     | -                               | -    | -     | 0.43           |      |
| GEMÜ<br>671 | 25  | 15 | 1/2"   | 19.0   | -                               | -     | -     | 18.1                               | 50.5 | 108   | -                               | -     | -    | 16                               | 34.0 | 108   | -                               | -    | -     | 0.75           |      |
|             |     | 20 | 3/4"   | 19.0   | 15.75                           | 25.0  | 101.6 | 23.7                               | 50.5 | 117   | 15.75                           | 25.0  | 117  | 20                               | 34.0 | 117   | -                               | -    | -     | 0.71           |      |
|             |     | 25 | 1"     | 19.0   | 22.10                           | 50.5  | 114.3 | 29.7                               | 50.5 | 127   | 22.10                           | 50.5  | 127  | 26                               | 50.5 | 127   | 22.6                            | 50.5 | 127   | 0.63           |      |
|             | 40  | 32 | 1 1/4" | 26.0   | -                               | -     | -     | 38.4                               | 64.0 | 146   | -                               | -     | -    | 32                               | 50.5 | 146   | 31.3                            | 50.5 | 146   | 1.62           |      |
|             |     | 40 | 1 1/2" | 26.0   | 34.80                           | 50.5  | 139.7 | 44.3                               | 64.0 | 159   | 34.80                           | 50.5  | 159  | 38                               | 50.5 | 159   | 35.6                            | 50.5 | 159   | 1.50           |      |
|             | 50  | 50 | 2"     | 32.0   | 47.50                           | 64.0  | 158.8 | 56.3                               | 77.5 | 190   | 47.50                           | 64.0  | 190  | 50                               | 64.0 | 190   | 48.6                            | 64.0 | 190   | 2.50           |      |
|             |     | 80 | 65     | 2 1/2" | 62.0                            | 60.20 | 77.5  | 193.8                              | 72.1 | 91.0  | 216                             | 60.20 | 77.5 | 216                              | 66   | 91.0  | 216                             | 60.3 | 77.5  | 216            | 8.90 |
|             |     |    | 80     | 3"     | 62.0                            | 72.90 | 91.0  | 222.3                              | 84.3 | 106.0 | 254                             | 72.90 | 91.0 | 254                              | 81   | 106.0 | 254                             | 72.9 | 91.0  | 254            | 8.50 |
| 100         | 100 | 4" | 76.0   | 97.38  | 119.0                           | 292.1 | 109.7 | 130.0                              | 305  | 97.38 | 119.0                           | 305   | 100  | 119.0                            | 305  | 97.6  | 119.0                           | 305  | 24.80 |                |      |

MG = diaphragm size



## Overview of valve bodies for GEMÜ 611, 671

|                 |               | Threaded connections |    |    |    |    |    |    |    |    |    |    |    | Spigots |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|-----------------|---------------|----------------------|----|----|----|----|----|----|----|----|----|----|----|---------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
|                 |               | 1                    |    |    |    | 6  |    | 62 |    | 0  |    | 16 |    | 17      |    | 18 |    | 1A | 1B | 35 |    | 36 |    | 37 |    | 55 |    | 59 |    | 60 |    | 63 |    |
| Connection code | Material code | 8                    | 12 | 34 | 37 | 34 | 40 | 34 | 40 | 34 | 40 | 34 | 40 | 34      | 40 | 34 | 40 | 40 | 40 | 34 | 40 | 40 | 40 | 34 | 40 | 34 | 40 | 34 | 40 | 34 | 40 | 40 | 40 |
|                 |               | MG                   | DN |    |    |    |    |    |    |    |    |    |    |         |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| GEMÜ 611        | 10            | 10                   | -  | -  | -  | W  | W  | W  | W  | -  | -  | X  | X  | X       | X  | X  | X  | X  | -  | -  | X  | -  | -  | -  | X  | -  | X  | X  | X  | X  | X  | X  |    |
|                 |               | 12                   | -  | X  | X  | -  | -  | -  | -  | -  | -  | -  | -  | -       | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |    |
|                 |               | 15                   | -  | X  | X  | -  | W  | W  | W  | W  | X  | X  | X  | X       | X  | X  | X  | X  | X  | -  | -  | X  | -  | -  | X  | X  | -  | X  | X  | X  | X  | X  |    |
|                 |               | 20                   | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -       | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | X  | X  | X  | X  | -  | -  | -  | -  |    |
| GEMÜ 671        | 25            | 15                   | X* | -  | -  | X  | W  | W  | W  | W  | X  | X  | X  | X       | X  | X  | X  | X  | -  | -  | X  | -  | -  | -  | -  | -  | -  | -  | X  | X  | X  | X  |    |
|                 |               | 20                   | X* | -  | -  | X  | W  | W  | W  | W  | X  | X  | X  | X       | X  | X  | X  | X  | X  | -  | -  | X  | -  | -  | X  | X  | X  | X  | X  | X  | X  | X  |    |
|                 |               | 25                   | X* | -  | -  | X  | W  | W  | W  | W  | X  | X  | X  | X       | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  |    |
|                 | 40            | 32                   | X* | -  | -  | X  | W  | W  | W  | W  | X  | X  | X  | X       | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  |    |
|                 |               | 40                   | X* | -  | -  | X  | W  | W  | W  | W  | X  | X  | X  | X       | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  |    |
|                 | 50            | 50                   | X* | -  | -  | X  | W  | W  | W  | W  | X  | X  | X  | X       | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  |    |
|                 |               | 65                   | -  | -  | -  | -  | W  | -  | W  | -  | -  | -  | -  | -       | X  | -  | -  | X  | X  | -  | X  | X  | -  | X  | -  | -  | -  | X  | -  | X  | X  | X  |    |
|                 | 80            | 65                   | -  | -  | -  | -  | W  | -  | W  | -  | -  | -  | -  | -       | X  | -  | -  | X  | X  | -  | X  | X  | -  | X  | -  | -  | -  | X  | -  | X  | X  | X  |    |
|                 |               | 80                   | -  | -  | -  | -  | W  | -  | W  | -  | -  | -  | -  | -       | X  | -  | -  | X  | X  | -  | X  | X  | -  | X  | -  | -  | -  | X  | -  | X  | X  | X  |    |
|                 | 100           | 100                  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -       | X* | -  | -  | X* | X* | -  | X* | X* | -  | X* | -  | -  | -  | X* | -  | X* | X* | X* |    |

X = Standard

W = Welded construction

MG = diaphragm size

\*Valve bodies are not suitable for use with diaphragm code 5E

## Overview of valve bodies for GEMÜ 611, 671

|                 |               | Clamps |    |    |    |    | Flanges |    |    |    |    |    |    |    |    |    |    |    |    |   |
|-----------------|---------------|--------|----|----|----|----|---------|----|----|----|----|----|----|----|----|----|----|----|----|---|
|                 |               | 80     | 82 | 88 | 8A | 8E | 8       |    |    |    |    | 38 |    |    |    | 39 |    |    |    |   |
| Connection code | Material code | 40     | 40 | 40 | 40 | 40 | 17      | 18 | 34 | 39 | 40 | 17 | 18 | 39 | 17 | 18 | 34 | 39 | 40 |   |
|                 |               | MG     | DN |    |    |    |         |    |    |    |    |    |    |    |    |    |    |    |    |   |
| GEMÜ 611        | 10            | 10     | -  | K  | -  | K  | -       | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |   |
|                 |               | 12     | -  | -  | -  | -  | -       | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |   |
|                 |               | 15     | K  | W  | K  | K  | -       | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |   |
|                 |               | 20     | K  | -  | K  | -  | -       | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |   |
| GEMÜ 671        | 25            | 15     | -  | W  | -  | K  | -       | X  | X  | W  | X  | W  | -  | -  | -  | X  | X  | W  | X  | W |
|                 |               | 20     | K  | K  | K  | K  | -       | X  | X  | W  | X  | W  | X  | X  | X  | X  | X  | W  | X  | W |
|                 | 25            | K      | K  | K  | K  | K  | X       | X  | W  | X  | W  | X  | X  | X  | X  | X  | W  | X  | W  |   |
|                 | 40            | 32     | -  | W  | -  | K  | K       | X  | X  | W  | X  | W  | -  | -  | -  | X  | X  | W  | X  | W |
|                 |               | 40     | K  | W  | K  | K  | K       | X  | X  | W  | X  | W  | X  | X  | X  | X  | X  | W  | X  | W |
|                 | 50            | 50     | K  | W  | K  | K  | K       | X  | X  | W  | X  | W  | X  | X  | X  | X  | X  | W  | X  | W |
|                 |               | 65     | K  | K  | K  | K  | K       | -  | -  | -  | -  | W  | -  | -  | -  | -  | -  | -  | -  | W |
|                 | 80            | 65     | K  | K  | K  | K  | K       | -  | -  | -  | -  | W  | -  | -  | -  | -  | -  | -  | -  | W |
| 80              |               | K      | W  | K  | W  | W  | X       | X  | -  | X  | W  | X  | X  | X  | X  | X  | -  | X  | W  |   |
| 100             | 100           | W*     | W* | W* | W* | W* | X       | X  | -  | X  | W* | X  | X  | X  | X  | X  | -  | X  | W* |   |

X = Standard

K = Connections completely machined (not welded) in material code 40

W = Welded construction

MG = diaphragm size

\*Valve bodies are not suitable for use with diaphragm code 5E

Connection code 38 / Material code 18 on request

Availability of material code 32 same as code 34, code 42 same as code 40

For further metal diaphragm valves, accessories and other products,  
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