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# GEMÜ®

## Diaphragm Valve, Metal

### Construction

The GEMÜ 695 pneumatically operated 2/2-way diaphragm valve has a low maintenance membrane actuator which can be controlled by inert gaseous media. Normally Closed, Normally Open and Double Acting control functions are available.

### Features

- Suitable for inert and corrosive\* liquid and gaseous media
- Insensitive to particulate media
- Valve body and diaphragm available in various materials and designs
- Surface finishes down to 0.25 µm, electropolished
- Versions according to ATEX on request
- Optical position indicator is standard for control function 1

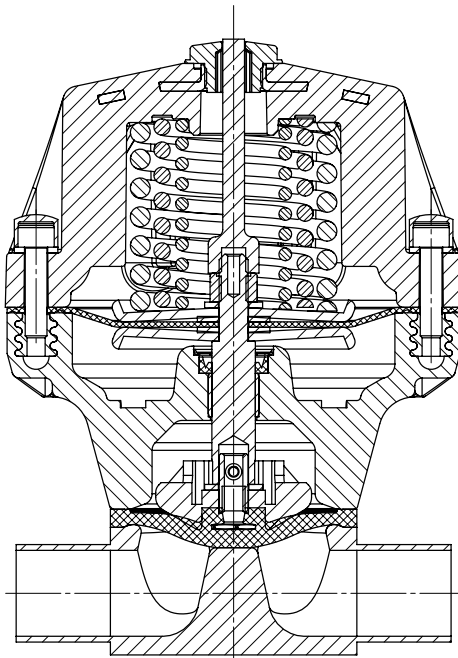
### Advantages

- Optional flow direction
- Installation for an optimized draining is possible
- Weight-saving design
- Optional accessories:
  - Stroke limiter
  - Optical position indicator control function 2 + 3
  - Manual override (GEMÜ 1002, GEMÜ 1004)
  - Pilot valve with manual override (GEMÜ 0322 - 0326)
  - Electrical position indicator

\*see information on working medium on page 2



Sectional drawing



**GEMÜ® 695**

## 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.

The valve will seal in both flow directions up to full operating pressure. (All pressures are gauge pressures.)

### Temperatures

**Medium temperature** -10 ... 80 °C

**Ambient temperature** 0 ... 60 °C

### Control medium

**Max. perm. temperature of control medium** 40 °C

#### Filling volume

| Actuator size | Control function 1   | Control function 2   |
|---------------|----------------------|----------------------|
| 1/N           | 0,17 dm <sup>3</sup> | 0,11 dm <sup>3</sup> |
| 2/N           | 0,38 dm <sup>3</sup> | 0,23 dm <sup>3</sup> |
| 3/N           | 1,10 dm <sup>3</sup> | 0,54 dm <sup>3</sup> |

C.f. 3 = for filling volume in open position see c.f. 1, for filling volume in closed position see c.f. 2

|                |            | Operating pressure [bar] |       | Control pressure [bar] |                    |                    |
|----------------|------------|--------------------------|-------|------------------------|--------------------|--------------------|
| Diaphragm size | DN         | EPDM / FPM               | PTFE  | Control function 1     | Control function 2 | Control function 3 |
| 25             | 15, 20, 25 | 0 - 10                   | 0 - 6 | 5.5 - 7.0              | max. 5.5           | max. 5.5           |
| 40             | 32, 40     | 0 - 10                   | 0 - 6 | 5.5 - 7.0              | max. 5.5           | max. 5.5           |
| 50             | 50, 65     | 0 - 10                   | 0 - 6 | 5.5 - 7.0              | max. 5.0           | max. 5.0           |

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]

| MG | DN | DIN    | EN 10357 Series B | EN 10357 Series A | DIN 11850 Series 3 | SMS 3008 | ASME BPE | ISO 1127 / EN 10357 Series C Code 60 |
|----|----|--------|-------------------|-------------------|--------------------|----------|----------|--------------------------------------|
|    |    | Code 0 | Code 16           | Code 17           | Code 18            | Code 37  | Code 59  |                                      |
| 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 | -      | -                 | -                 | -                  | 62,2     | 61,8     | -                                    |

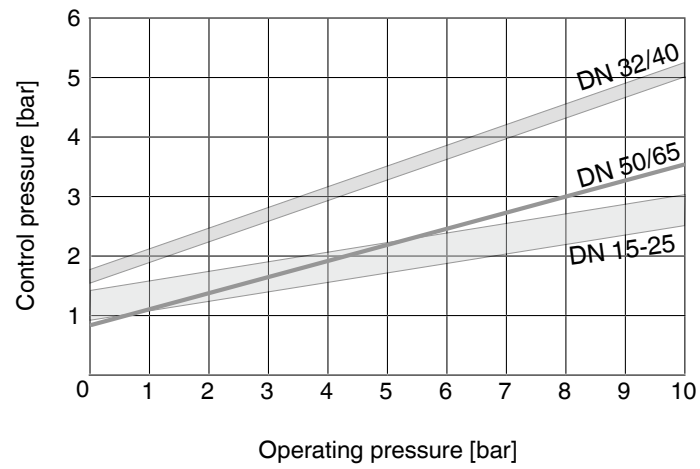
Kv values determined acc. to DIN EN 60534, inlet pressure 5 bar,  $\Delta p$  1 bar, stainless steel valve body and soft elastomer diaphragm.

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.

MG = diaphragm size

## Technical data

### Control functions 2 + 3



The values shown relate to control function 2 (with opening spring).  
For control function 3 (without opening spring) control pressure is approx. 1 bar lower.

The control pressure depending on the prevailing operating pressure, as shown in the diagram, is intended as a guide for operating the system with low wear on the diaphragm.

## Order data

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

| Connection   | Code |
|--|------|
| <b>Butt weld spigots</b>   |      |
| Spigots DIN  | 0    |
| Spigots EN 10357 series B  | 16   |
| Spigots EN 10357 series A  | 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 ISO 1127 / EN 10357 series C   | 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 sockets NPT   | 31   |
| Threaded spigots DIN 11851   | 6    |
| One side threaded spigot, other side cone spigot and union nut, DIN 11851          | 62   |
| Aseptic unions on request  |      |
| <b>Flanges</b>   |      |
| Flanges EN 1092 / PN16 / form B, length EN 558, series 1, ISO 5752, basic series 1 | 8    |
| Flanges ANSI Class 150 RF, length MSS SP-88  | 38   |
| Flanges ANSI Class 125/150 RF, length EN 558, series 1, ISO 5752, basic series 1   | 39   |
| <b>Clamp connections</b>   |      |
| Clamps ASME BPE for pipe ASME BPE, length ASME BPE                                 | 80   |
| Clamps 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   |
| Aseptic clamps on request  |      |

For overview of available valve bodies for GEMÜ 695 see page 11

| Valve body material   | Code |
|---|------|
| EN-GJL-250, (GG25) (Cast iron)                                | 8    |
| EN-GJS-400-18-LT (S.G. Iron 40.3), PFA lined                  | 17   |
| EN-GJS-400-18-LT (S.G. 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   |
| EN-GJS-400-18-LT (S.G. Iron 40.3), hard rubber lined          | 83   |
| 1.4539, forged body   | F4   |

| Diaphragm material  | Code |
|---|------|
| NBR   | 2    |
| FPM   | 4    |
| EPDM  | 13   |
| EPDM  | 14   |
| EPDM  | 17   |
| PTFE/EPDM convex, PTFE loose  | 5E   |
| PTFE/EPDM, PTFE lamin.  | 52   |
| Material complies with FDA requirements, except codes 2, 4 and 14   |      |
| The combination of PFA lining with 5E diaphragms is only conditionally suitable for gaseous media. If low seat leakage rates are required for gaseous media, other combinations are preferable. |      |

| Control function     | Code |
|----------------------|------|
| Normally closed (NC) | 1    |
| Normally open (NO)   | 2    |
| Double acting (DA)   | 3    |

| Actuator size     | Code |
|-------------------|------|
| Diaphragm size 25 | 1/N  |
| Diaphragm size 40 | 2/N  |
| Diaphragm size 50 | 3/N  |

| Order example                    | 695 | 25 | D | 60 | 34 | 17 | 1 | 1/N | 1500 |
|----------------------------------|-----|----|---|----|----|----|---|-----|------|
| Type                             | 695 |    |   |    |    |    |   |     |      |
| Nominal size                     |     | 25 |   |    |    |    |   |     |      |
| Body configuration (code)        |     |    | D |    |    |    |   |     |      |
| Connection (code)                |     |    |   | 60 |    |    |   |     |      |
| Valve body material (code)       |     |    |   |    | 34 |    |   |     |      |
| Diaphragm material (code)        |     |    |   |    |    | 17 |   |     |      |
| Control function (code)          |     |    |   |    |    |    | 1 |     |      |
| Actuator size (code)             |     |    |   |    |    |    |   | 1/N |      |
| Surface finish (code see page 5) |     |    |   |    |    |    |   |     | 1500 |

## Order data

### Valve body surface finish, internal contour

|  | Hygienic class<br>DIN 11866 | Designation<br>ASME BPE<br>(2014) | Forged body<br>Code 40, 42, F4 | Investment<br>casting<br>Code 32, 34 | Code |
|--|-----------------------------|-----------------------------------|--------------------------------|--------------------------------------|------|
| Ra ≤ 6,3 µm (250 µinch)<br>for media wetted surfaces,<br>blasted internal/external         | -                           | -                                 | -                              | X                                    | 1500 |
| Ra ≤ 0,8 µm (30 µinch)<br>for media wetted surfaces,<br>mechanically polished internal     | H3                          | SF3                               | X                              | X                                    | 1502 |
| Ra ≤ 0,8 µm (30 µinch)<br>for media wetted surfaces,<br>electropolished internal/external  | HE3                         | -                                 | X                              | -                                    | 1503 |
| Ra ≤ 0,6 µm (25 µinch)<br>for media wetted surfaces,<br>mechanically polished internal     | -                           | SF2                               | X*                             | X*                                   | 1507 |
| Ra ≤ 0,6 µm (25 µinch)<br>for media wetted surfaces,<br>electropolished internal/external  | -                           | SF6                               | X*                             | -                                    | 1508 |
| Ra ≤ 0,5 µm (20 µinch)<br>for media wetted surfaces,<br>mechanically polished internal     | -                           | SF1                               | X*                             | -                                    | 1927 |
| Ra ≤ 0,5 µm (20 µinch)<br>for media wetted surfaces,<br>electropolished internal/external  | -                           | SF5                               | X*                             | -                                    | 1928 |
| Ra ≤ 0,4 µm (15 µinch)<br>for media wetted surfaces,<br>mechanically polished internal     | H4                          | -                                 | X*                             | -                                    | 1536 |
| Ra ≤ 0,4 µm (15 µinch)<br>for media wetted surfaces,<br>electropolished internal/external  | HE4                         | -                                 | X*                             | -                                    | 1537 |
| Ra ≤ 0,4 µm (15 µinch)<br>for media wetted surfaces,<br>electropolished internal/external  | -                           | SF4                               | X*                             | -                                    | 1929 |
| Ra ≤ 0,25 µm (10 µinch)<br>for media wetted surfaces,<br>electropolished internal/external | HE5                         | -                                 | X*                             | -                                    | 1516 |
| Ra ≤ 0,25 µm (10 µinch)<br>for media wetted surfaces,<br>mechanically polished internal    | H5                          | -                                 | X*                             | -                                    | 1527 |

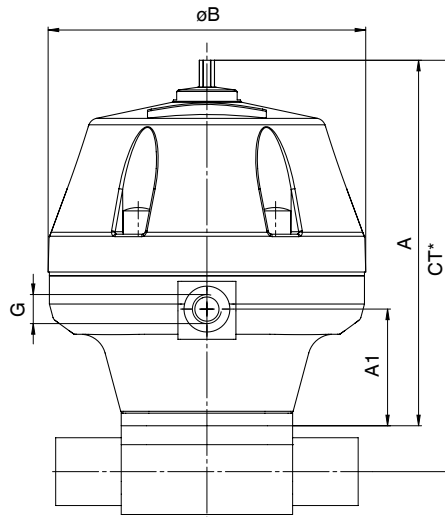
Ra acc. to DIN 4768; at defined reference points.

\* For pipe inside diameter < 6 mm, the surface inside the spigot is Ra ≤ 0.8 µm.

## Actuator dimensions [mm]

### Control function 1

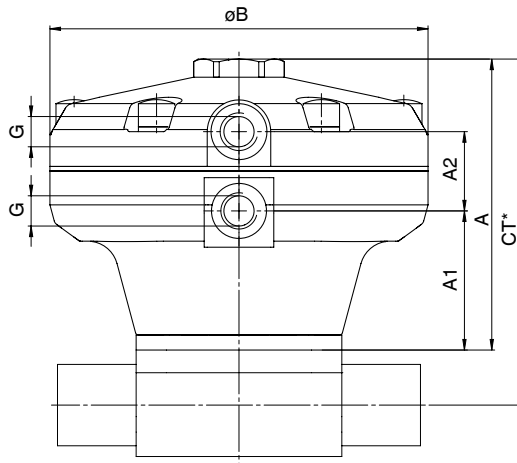
| MG | DN      | ø B | A   | A1 | G     | Weight [kg] |
|----|---------|-----|-----|----|-------|-------------|
| 25 | 15 - 25 | 125 | 145 | 47 | G 1/4 | 1,5         |
| 40 | 32 - 40 | 155 | 194 | 75 | G 1/4 | 3,0         |
| 50 | 50 - 65 | 210 | 240 | 90 | G 1/4 | 5,5         |



\* CT = A + H1 (see body dimensions)

### Control function 2 + 3

| MG | DN      | ø B | A   | A1 | A2 | G     | Weight [kg] |
|----|---------|-----|-----|----|----|-------|-------------|
| 25 | 15 - 25 | 125 | 98  | 47 | 27 | G 1/4 | 1,0         |
| 40 | 32 - 40 | 155 | 135 | 75 | 27 | G 1/4 | 2,1         |
| 50 | 50 - 65 | 210 | 164 | 90 | 29 | G 1/4 | 3,6         |



\* CT = A + H1 (see body dimensions)

## Body dimensions [mm]

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

| 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 |             |
| 25 | 15 | G 1/2   | 85  | 35              | 19 | 12 | 32  | 6               | 29               | 16 | 15 | 27  | 6               | 0.32        |
|    | 20 | G 3/4   | 85  | 40              | 19 | 13 | 41  | 6               | 32               | 16 | 16 | 32  | 6               | 0.34        |
|    | 25 | G 1     | 110 | 42              | 19 | 16 | 46  | 6               | 37               | 16 | 13 | 41  | 6               | 0.39        |
| 40 | 32 | G 1 1/4 | 120 | 56              | 28 | 16 | 55  | 6               | 49               | 24 | 20 | 50  | 8               | 0.88        |
|    | 40 | G 1 1/2 | 140 | 61              | 28 | 18 | 65  | 6               | 52               | 24 | 18 | 55  | 8               | 0.93        |
| 50 | 50 | G 2     | 165 | 73              | 35 | 18 | 75  | 6               | 68               | 33 | 26 | 70  | 8               | 1.56        |

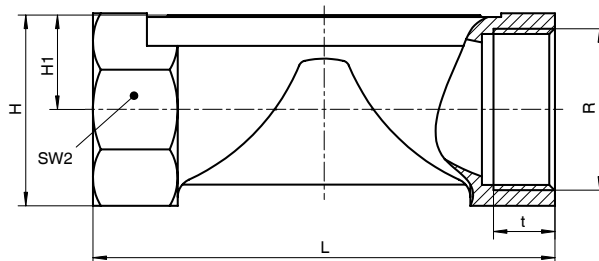
MG = diaphragm size

For materials see overview on page 12

### Threaded sockets, connection code 31 Valve body material: investment casting (code 37)

| MG | DN | R         | L   | H  | H1 | t  | SW2 | Number of flats | Weight [kg] |
|----|----|-----------|-----|----|----|----|-----|-----------------|-------------|
| 25 | 15 | NPT 1/2   | 85  | 29 | 16 | 14 | 27  | 6               | 0.32        |
|    | 20 | NPT 3/4   | 85  | 32 | 16 | 14 | 32  | 6               | 0.34        |
|    | 25 | NPT 1     | 110 | 42 | 21 | 17 | 41  | 6               | 0.39        |
| 40 | 32 | NPT 1 1/4 | 120 | 49 | 24 | 17 | 50  | 8               | 0.88        |
|    | 40 | NPT 1 1/2 | 140 | 52 | 24 | 17 | 55  | 8               | 0.93        |
| 50 | 50 | NPT 2     | 165 | 68 | 33 | 18 | 70  | 8               | 1.56        |

MG = diaphragm size



## Body dimensions [mm]

### Butt weld spigots, connection code 0, 16, 17, 18 Valve body material: Investment casting (code 34), forged body (code 40, F4)

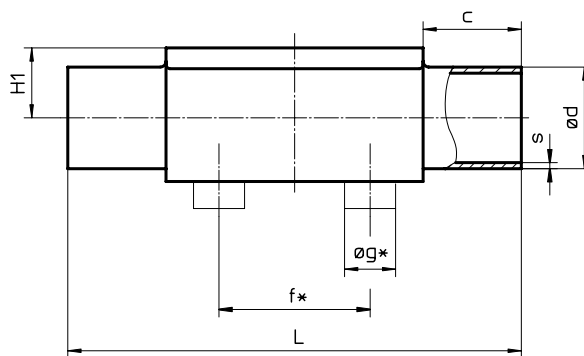
| MG | DN | NPS    | f* | øg*  | L   | c  | H1*  | H1** | DIN Series 0 Code 0 |     | EN 10357 Series B Code 16 |     | EN 10357 Series A Code 17 |     | DIN 11850 Series 3 Code 18 |     | Weight [kg] |
|----|----|--------|----|------|-----|----|------|------|---------------------|-----|---------------------------|-----|---------------------------|-----|----------------------------|-----|-------------|
|    |    |        |    |      |     |    |      |      | ød                  | s   | ød                        | s   | ød                        | s   | ød                         | s   |             |
| 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        |

\* only for investment cast design      \*\* only for forged design      MG = diaphragm size  
For materials see overview on page 12

### Butt weld spigots, connection code 1A, 1B, 60 Valve body material: Investment casting (code 34), forged body (code 40, F4)

| MG | DN | NPS    | f* | øg*  | L   | c  | H1*  | H1** | DIN 11866 Series A Code 1A |     | DIN 11866 Series B Code 1B |     | ISO 1127 / EN 10357 Series C Code 60 |     | Weight [kg] |
|----|----|--------|----|------|-----|----|------|------|----------------------------|-----|----------------------------|-----|--------------------------------------|-----|-------------|
|    |    |        |    |      |     |    |      |      | ød                         | s   | ød                         | s   | ød                                   | s   |             |
| 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        |

\* only for investment cast design      \*\* only for forged design      MG = diaphragm size  
For materials see overview on page 12





## Body dimensions [mm]

### Butt weld spigots, connection code 35, 36, 37 Valve body material: Investment casting (code 34), forged body (code 40, F4)

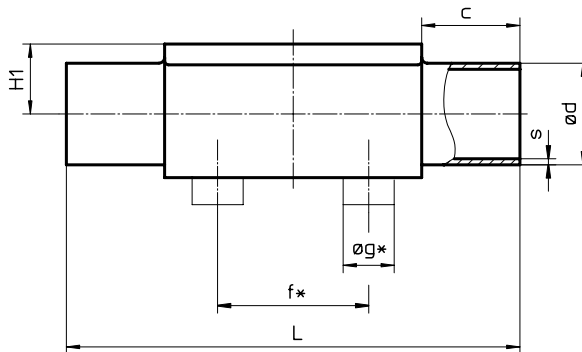
| MG | DN | NPS    | f* | øg*  | L   | c  | H1*  | H1** | JIS-G 3447 Code 35 |     | JIS-G 3459 Code 36 |     | SMS 3008 Code 37 |     | Weight [kg] |
|----|----|--------|----|------|-----|----|------|------|--------------------|-----|--------------------|-----|------------------|-----|-------------|
|    |    |        |    |      |     |    |      |      | ød                 | s   | ød                 | s   | ød               | s   |             |
| 25 | 15 | 1/2"   | 40 | 13.5 | 120 | 25 | 13.0 | 19.0 | -                  | -   | 21.7               | 2.1 | -                | -   | 0.62        |
|    | 20 | 3/4"   | 40 | 13.5 | 120 | 25 | 16.0 | 19.0 | -                  | -   | 27.2               | 2.1 | -                | -   | 0.58        |
|    | 25 | 1"     | 40 | 13.5 | 120 | 25 | 19.0 | 19.0 | 25.4               | 1.2 | 34.0               | 2.8 | 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               | 2.8 | 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               | 2.8 | 38.0             | 1.2 | 1.32        |
| 50 | 50 | 2"     | 90 | 13.5 | 173 | 30 | 32.0 | 32.0 | 50.8               | 1.5 | 60.5               | 2.8 | 51.0             | 1.2 | 2.25        |
|    | 65 | 2 1/2" | -  | -    | 173 | 30 | -    | 34.0 | 63.5               | 2.0 | -                  | -   | 63.5             | 1.6 | 2.20        |

\* only for investment cast design      \*\* only for forged design      MG = diaphragm size  
For materials see overview on page 12

### Butt weld spigots, connection code 55, 59, 63, 65 Valve body material: Investment casting (code 34), forged body (code 40, F4)

| MG | DN | NPS    | f* | øg*  | L   | c  | H1*  | H1** | BS 4825 Code 55 |     | ASME BPE Code 59 |      | ANSI/ASME B36.19M 10s Code 63 |      | ANSI/ASME B36.19M 40s Code 65 |      | Weight [kg] |
|----|----|--------|----|------|-----|----|------|------|-----------------|-----|------------------|------|-------------------------------|------|-------------------------------|------|-------------|
|    |    |        |    |      |     |    |      |      | ød              | s   | ød               | s    | ød                            | s    | ød                            | s    |             |
| 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" | -  | -    | 173 | 30 | -    | 34.0 | -               | -   | 63.50            | 1.65 | -                             | -    | -                             | -    | 2.10        |

\* only for investment cast design      \*\* only for forged design      MG = diaphragm size  
For materials see overview on page 12



## Body dimensions [mm]

**Flanges - DIN EN 1092, connection code 8**  
**Valve body material: GG25 (code 8), S.G. Iron 40.3 (code 17, 18, 83),**  
**1.4435 (code 34, 40), 1.4408 (code 39)**

| MG | DN | øD  | øk  | øL | Number of bolt | H1              |                              |                  |                  | FTF  | Weight [kg] |
|----|----|-----|-----|----|----------------|-----------------|------------------------------|------------------|------------------|------|-------------|
|    |    |     |     |    |                | Material code 8 | Material code 17, 18, 39, 83 | Material code 34 | Material code 40 |      |             |
| 25 | 15 | 95  | 65  | 14 | 4              | 19.0            | 18.0                         | 13.0             | 19.0             | 130* | 1.85        |
|    | 20 | 105 | 75  | 14 | 4              | 19.0            | 20.5                         | 16.0             | 19.0             | 150  | 2.35        |
|    | 25 | 115 | 85  | 14 | 4              | 19.0            | 23.0                         | 19.0             | 19.0             | 160  | 2.85        |
| 40 | 32 | 140 | 100 | 19 | 4              | 28.0            | 28.7                         | 24.0             | 26.0             | 180  | 4.90        |
|    | 40 | 150 | 110 | 19 | 4              | 28.0            | 33.0                         | 26.0             | 26.0             | 200  | 5.65        |
| 50 | 50 | 165 | 125 | 19 | 4              | 35.0            | 39.0                         | 32.0             | 32.0             | 230  | 7.45        |

\*Material code 34, 40 FTF = 150 (no DIN length)

MG = diaphragm size

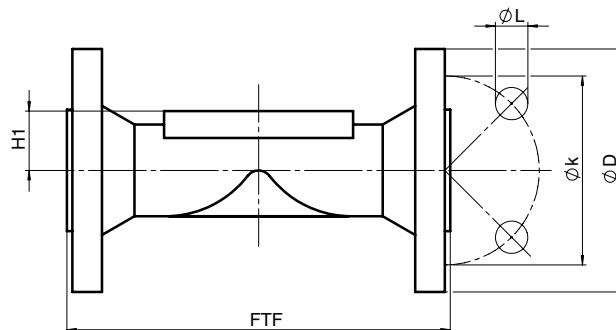
For materials see overview on page 12

**Flanges - ANSI Class 125/150 RF, connection code 38, 39**  
**Valve body material: GG25 (code 8), S.G. Iron 40.3 (code 17, 18, 83),**  
**1.4435 (code 34, 40), 1.4408 (code 39)**

| MG | DN | øD  | øk    | øL   | Number of bolt | H1                     |      |      |      | FTF                          |                              | Weight [kg] |                                    |
|----|----|-----|-------|------|----------------|------------------------|------|------|------|------------------------------|------------------------------|-------------|------------------------------------|
|    |    |     |       |      |                | Connection code 38, 39 |      |      |      | MSS Sp-88 Connection-code 38 |                              |             | EN 558 Series 1 Connection-code 39 |
|    |    |     |       |      |                |                        |      |      |      | Material code 8              | Material code 17, 18, 39, 83 |             | Material code 34                   |
| 25 | 15 | 90  | 60.3  | 15.9 | 4              | 19.0                   | 18.0 | 13.0 | 19.0 | -                            | -                            | 130         | 1.85                               |
|    | 20 | 100 | 69.9  | 15.9 | 4              | 19.0                   | 20.5 | 16.0 | 19.0 | 146                          | 146.4                        | 150         | 2.35                               |
|    | 25 | 110 | 79.4  | 15.9 | 4              | 19.0                   | 23.0 | 19.0 | 19.0 | 146                          | 146.4                        | 160         | 2.85                               |
| 40 | 32 | 115 | 88.9  | 15.9 | 4              | 28.0                   | 28.7 | 24.0 | 26.0 | -                            | -                            | 180         | 4.90                               |
|    | 40 | 125 | 98.4  | 15.9 | 4              | 28.0                   | 33.0 | 26.0 | 26.0 | 175                          | 171.4                        | 200         | 5.65                               |
| 50 | 50 | 150 | 120.7 | 19.0 | 4              | 35.0                   | 39.0 | 32.0 | 32.0 | 200                          | 197.4                        | 230         | 7.45                               |

MG = diaphragm size

For materials see overview on page 12



## Body dimensions [mm]

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

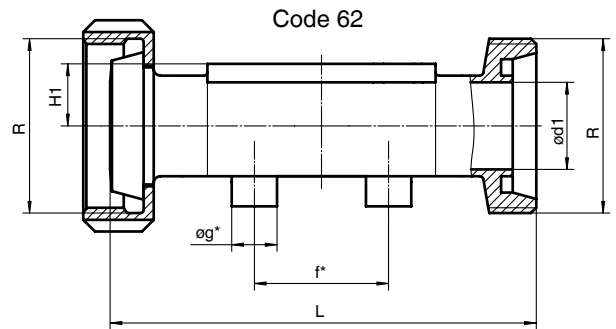
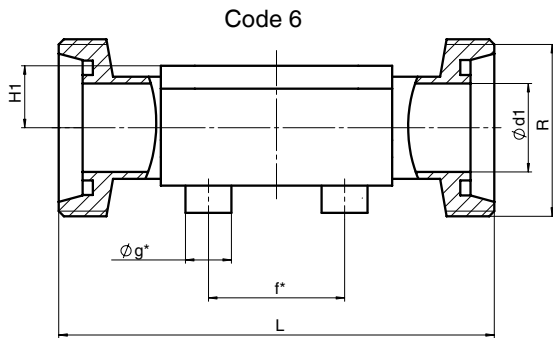
| MG | DN | H1*  | H1** | f*   | øg*  | ød1  | Thread to DIN 405 R | Code 6 L | Code 62 L | Weight [kg] |
|----|----|------|------|------|------|------|---------------------|----------|-----------|-------------|
| 25 | 15 | 13.0 | 19   | 40.0 | 13.5 | 16.0 | RD 34 x 1/8         | 118      | 116       | 0.71        |
|    | 20 | 16.0 | 19   | 40.0 | 13.5 | 20.0 | RD 44 x 1/6         | 118      | 114       | 0.78        |
|    | 25 | 19.0 | 19   | 40.0 | 13.5 | 26.0 | RD 52 x 1/6         | 128      | 127       | 0.79        |
| 40 | 32 | 24.0 | 26   | 68.0 | 13.5 | 32.0 | RD 58 x 1/6         | 147      | 147       | 1.66        |
|    | 40 | 26.0 | 26   | 75.0 | 13.5 | 38.0 | RD 65 x 1/6         | 160      | 160       | 1.62        |
| 50 | 50 | 32.0 | 32   | 90.0 | 13.5 | 50.0 | RD 78 x 1/6         | 191      | 191       | 2.70        |

\* only for investment cast design

\*\* only for forged design

MG = diaphragm size

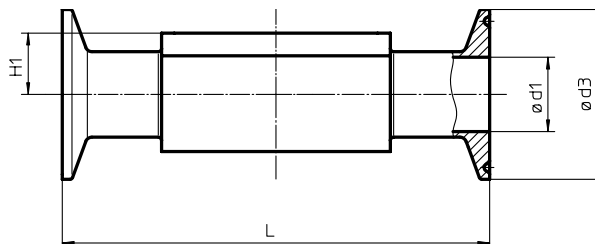
For materials see overview on page 12



### Clamp connections, connection code 80, 82, 88, 8A, 8E Valve body material: forged body (code 40, F4)

| MG | DN | NPS    | H1   | for pipe ASME BPE Code 80 |      |       | for pipe EN ISO 1127 Code 82 |      |     | for pipe ASME BPE Code 88 |      |     | for pipe DIN 11850 Code 8A |      |     | for pipe SMS 3008 Code 8E |      |     | Weight [kg] |
|----|----|--------|------|---------------------------|------|-------|------------------------------|------|-----|---------------------------|------|-----|----------------------------|------|-----|---------------------------|------|-----|-------------|
|    |    |        |      | ød1                       | ød3  | L     | ød1                          | ød3  | L   | ød1                       | ød3  | L   | ød1                        | ød3  | L   | ød1                       | ød3  | L   |             |
| 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        |
|    | 65 | 2 1/2" | 34.0 | 60,20                     | 77,5 | 193,8 | -                            | -    | -   | 60,20                     | 77,5 | 216 | -                          | -    | -   | 60,3                      | 77,5 | 216 | 2,30        |

MG = diaphragm size



## Overview of valve bodies for GEMÜ 695

|                 |    | Spigots |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|-----------------|----|---------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Connection code |    | 0       |    | 16 |    | 17 |    | 18 |    | 1A | 1B | 35 |    | 36 | 37 |    | 55 |    | 59 |    | 60 |    | 63 | 65 |    |
| Material code   |    | 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 |         |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 25              | 15 | X       | X  | X  | X  | X  | X  | -  | X  | X  | X  | -  | -  | X  | -  | -  | -  | -  | -  | -  | X  | X  | X  | X  |    |
|                 | 20 | X       | X  | X  | X  | X  | X  | -  | X  | X  | X  | -  | -  | X  | -  | -  | X  | X  | X  | X  | X  | X  | X  | X  |    |
|                 | 25 | 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  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | -  | -  | -  | -  | X  | X  | X  | X  |    |
|                 | 40 | 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  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | -  | -  | X  | X  | X  | X  | X  | X  |    |
|                 | 65 | -       | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | X  | -  | -  | X  | -  | -  | -  | X  | -  | -  | -  | -  |    |

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

X = Standard

MG = diaphragm size

Availability of material code 32: same as code 34, availability of material code 42, F4: same as code 40

|                 |    | Threaded connections |    |    |    |    |    |    |    | Clamps |    |    |    |    | Flanges |    |    |    |    |    |    |     |    |    |    |   |    |    |    |    |    |    |  |  |  |
|-----------------|----|----------------------|----|----|----|----|----|----|----|--------|----|----|----|----|---------|----|----|----|----|----|----|-----|----|----|----|---|----|----|----|----|----|----|--|--|--|
| Connection code |    | 1                    | 31 | 6  | 62 | 80 | 82 | 88 | 8A | 8E     | 8  |    |    |    |         |    |    | 38 |    |    |    | 39  |    |    |    |   |    |    |    |    |    |    |  |  |  |
| Material code   |    | 8                    | 37 | 37 | 34 | 40 | 34 | 40 | 40 | 40     | 40 | 40 | 40 | 40 | 8       | 17 | 18 | 34 | 39 | 40 | 83 | 17  | 18 | 39 | 83 | 8 | 17 | 18 | 34 | 39 | 40 | 83 |  |  |  |
| MG              | DN |                      |    |    |    |    |    |    |    |        |    |    |    |    |         |    |    |    |    |    |    |     |    |    |    |   |    |    |    |    |    |    |  |  |  |
| 25              | 15 | X                    | X  | X  | W  | W  | W  | W  | -  | W      | -  | K  | -  | X* | X       | X  | W  | X  | W  | X  | -  | -   | -  | -  | X* | X | X  | W  | X  | W  | X* |    |  |  |  |
|                 | 20 | X                    | X  | X  | W  | W  | W  | W  | K  | K      | K  | K  | -  | X* | X       | X  | W  | X  | W  | X  | X  | X** | X  | X* | X* | X | X  | W  | X  | W  | X* |    |  |  |  |
|                 | 25 | X                    | X  | X  | W  | W  | W  | W  | K  | K      | K  | K  | K  | X* | X       | X  | W  | X  | W  | X  | X  | X** | X  | X* | X* | X | X  | W  | X  | W  | X* |    |  |  |  |
| 40              | 32 | X                    | X  | X  | W  | W  | W  | W  | -  | W      | -  | K  | K  | X* | X       | X  | W  | X  | W  | X  | -  | -   | -  | -  | X* | X | X  | W  | X  | W  | X* |    |  |  |  |
|                 | 40 | X                    | X  | X  | W  | W  | W  | W  | K  | W      | K  | K  | K  | X* | X       | X  | W  | X  | W  | X  | X  | X** | X  | X* | X* | X | X  | W  | X  | W  | X* |    |  |  |  |
| 50              | 50 | X                    | X  | X  | W  | W  | W  | W  | K  | W      | K  | K  | K  | X* | X       | X  | W  | X  | W  | X  | X  | X** | X  | X* | X* | X | X  | W  | X  | W  | X* |    |  |  |  |
|                 | 65 | -                    | -  | -  | -  | -  | -  | -  | W  | -      | W  | -  | W  | -  | -       | -  | -  | -  | -  | -  | -  | -   | -  | -  | -  | - | -  | -  | -  | -  | -  |    |  |  |  |

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

\*\* Connection code 38 / material code 18 on request

X = Standard

K = Connections completely machined (not welded)

W = Welded construction

MG = diaphragm size

Availability of material code 32: same as code 34, availability of material code 42, F4: same as code 40

For further metal diaphragm valves, accessories and other products, please see our Product Range catalogue and Price List.  
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