

Diaphragm Valve Type 604/605



Product description

Diaphragm Valve Type 604/605 with integrated pneumatic actuator has a broad range of application, particularly when high actuating cycles, different control functions and chemical-resistant diaphragms are required.

Function

Pneumatic diaphragm valves from GF Piping Systems are used for regulating, as well as closing, controlling and monitoring volume flows. Especially when transporting solid or aggressive media, this Valve Type has decisive advantages due to its simple function, compact construction and optimized flow geometry. Only the valve body and diaphragm come into contact with the medium.

Unlike other Valve Types, no pressure surges can be caused by closing the diaphragm valve.

Applications

- Chemical process industry
- Dosing applications
- Water distribution

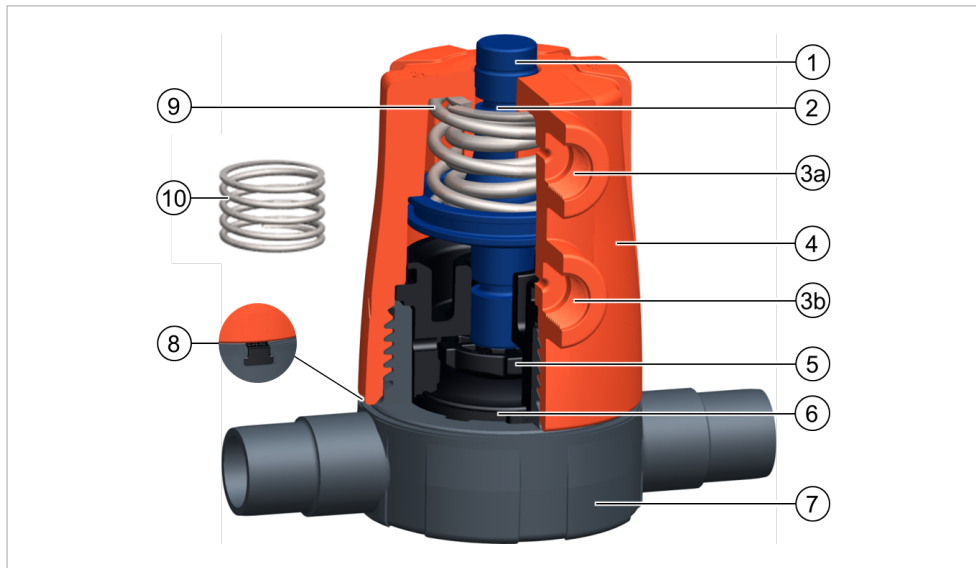
Benefits/features

- High actuating cycles
- Compact construction
- Fully plastic design without metal screws
- No corrosion caused by aggressive media
- Constant leak-tightness in the event of changes in temperature without tightening screws
- Long service life through optimized diaphragm geometry and Longlife variants
- Maintenance-free
- For easy installation and removal
- Maximum flow and linear characteristic curves for easier control

Flow media

The valve is suitable for use with gases, as well as solids and aggressive media.

Technical data



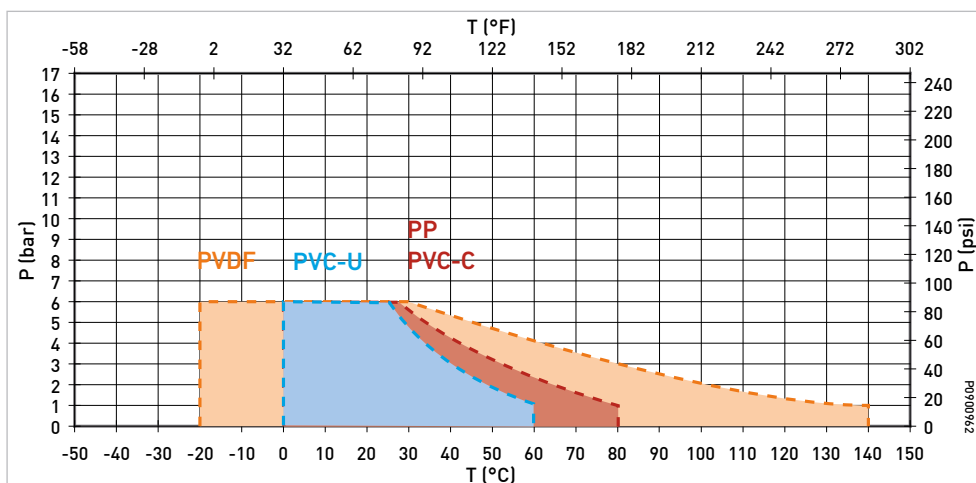
- ① Optical position indicator
- ② Piston
- ③a Connection for control air FO
- ③b Connection for control air FC
- ③a + ③b Connection for control air DA
- ④ Upper part with plastic thread
- ⑤ Pressure piece
- ⑥ Diaphragm
- ⑦ Valve body
- ⑧ Indicator for diaphragm material
- ⑨ Spring for control function FC
- ⑩ Spring for control function FO

| Specification | |
|-------------------------|--|
| Dimensions | d20/DN15 |
| Materials | Valve body PVC-U, PVC-C, PP-H, PVDF, others upon request Diaphragms EPDM, FKM, PTFE/EPDM, PTFE/FKM Spring Spring steel EN 10270-1 SH (C) Deltatone |
| Gasket materials | NBR |
| Connections | Screw connection with solvent cement sockets, threaded sockets, fusion sockets, butt fusion spigots Solvent cement spigots, butt fusion spigots |
| Pressure level | PN6 |
| Approvals | ACS, FDA, DIBt |

Kv 100 values

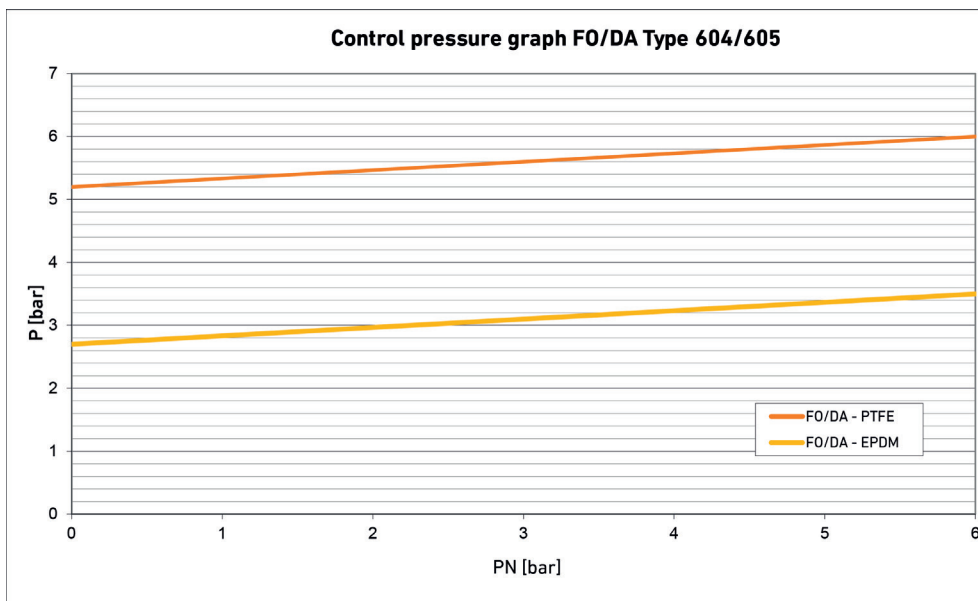
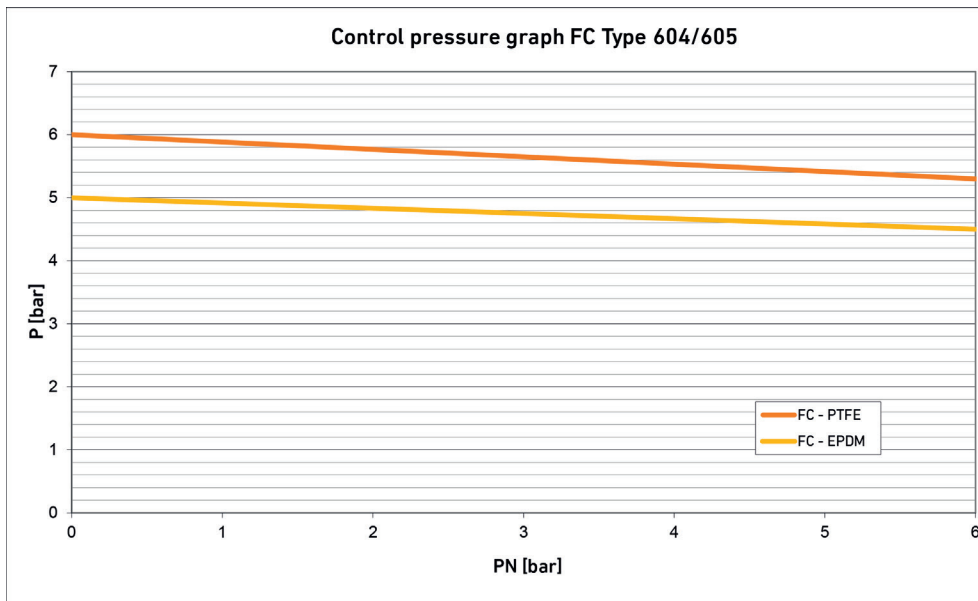
| DN (mm) | Inch (inch) | d (mm) | Kv 100 (L/min) | Kv 100 (m ³ /h) | Kv 100 (Gpm) |
|---------|-------------|--------|----------------|----------------------------|--------------|
| 15 | ½ | 20 | 125 | 7.5 | 0.55 |

Pressure-temperature diagrams



T Temperature (°C, °F)
P Permissible pressure (bar, psi)

Control pressure diagrams

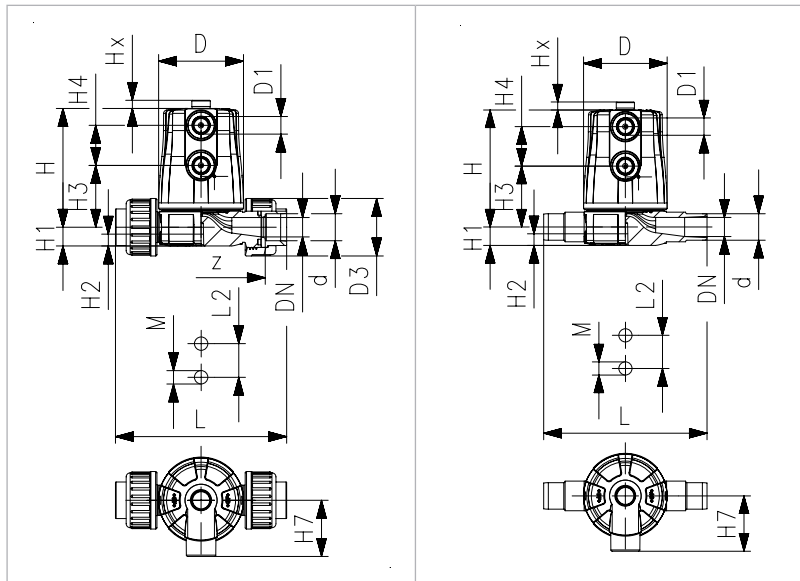


Dimensions

PVC-U

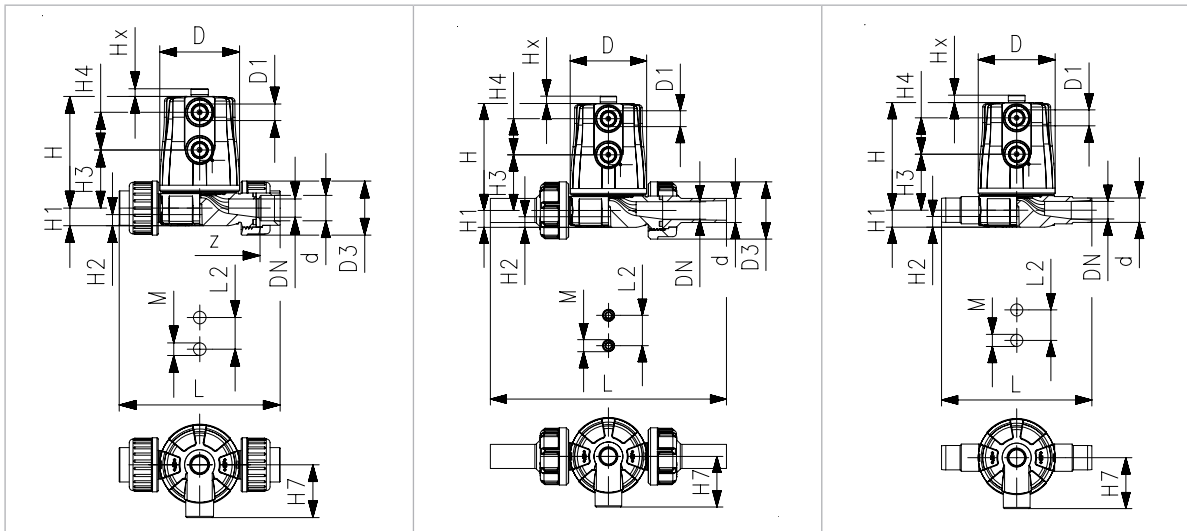
| D (mm) | D1_G (mm) | D3 (mm) | H (mm) | H1 (mm) | H2 (mm) | H3 (mm) | H4 (mm) | H7 (mm) | L (mm) | L2 (mm) | M (mm) | Z (mm) | Z (mm) |
|-----------|--------------|------------|-----------|------------|------------|------------|------------|------------|-----------|------------|-----------|-----------|-----------|
| 65 | ¼ | 43 | 89 | 14 | 12 | 46 | 30 | 42 | 128 | 25 | M6 | 96 | 6 |
| 65 | ¼ | 43 | 89 | 14 | 12 | 46 | 30 | 42 | 128 | 25 | M6 | 96 | 6 |
| 65 | ¼ | 43 | 89 | 14 | 12 | 46 | 30 | 42 | 128 | 25 | M6 | 96 | 6 |
| 65 | ¼ | 43 | 89 | 14 | 12 | 46 | 30 | 42 | 128 | 25 | M6 | 96 | 6 |
| 65 | ¼ | 43 | 89 | 14 | 12 | 46 | 30 | 42 | 128 | 25 | M6 | 96 | 6 |
| 65 | ¼ | - | 89 | 14 | 12 | 46 | 30 | 42 | 124 | 25 | M6 | 96 | 6 |

PVC-C



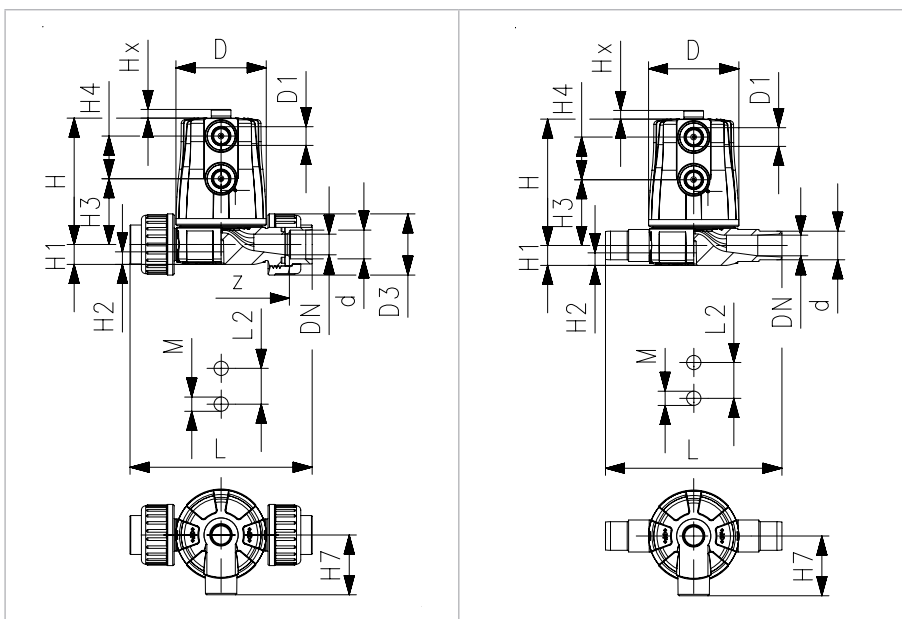
| d (mm) | D (mm) | D1_G (mm) | D3 (mm) | H (mm) | H1 (mm) | H2 (mm) | H3 (mm) | H4 (mm) | H7 (mm) | L (mm) | L2 (mm) | M (mm) | Z (mm) | Lift (Hx) |
|-----------|-----------|--------------|------------|-----------|------------|------------|------------|------------|------------|-----------|------------|-----------|-----------|--------------|
| 20 | 65 | ¼ | 43 | 89 | 14 | 12 | 46 | 30 | 42 | 128 | 25 | M6 | 96 | 6 |
| 20 | 65 | ¼ | 43 | 89 | 14 | 12 | 46 | 30 | 42 | 128 | 25 | M6 | 96 | 6 |
| 20 | 65 | ¼ | - | 89 | 14 | 12 | 46 | 30 | 42 | 124 | 25 | M6 | 96 | 6 |

PP-H



| d (mm) | D (mm) | D1_G (mm) | D3 (mm) | H (mm) | H1 (mm) | H2 (mm) | H3 (mm) | H4 (mm) | H7 (mm) | L (mm) | L2 (mm) | M (mm) | Z (mm) | Hub (Hx) |
|--------|--------|-----------|---------|--------|---------|---------|---------|---------|---------|--------|---------|--------|--------|----------|
| 20 | 65 | ¼ | 48 | 89 | 14 | 12 | 46 | 30 | 42 | 128 | 25 | M6 | 100 | 6 |
| 20 | 65 | ¼ | 48 | 89 | 14 | 12 | 46 | 30 | 42 | 196 | 25 | M6 | 100 | 6 |
| 20 | 65 | ¼ | - | 89 | 14 | 12 | 46 | 30 | 42 | 124 | 25 | M6 | 100 | 6 |

PVDF



| d (mm) | D (mm) | D1_G (mm) | D3 (mm) | H (mm) | H1 (mm) | H2 (mm) | H3 (mm) | H4 (mm) | H7 (mm) | L (mm) | L2 (mm) | M (mm) | Z (mm) | Lift (Hx) |
|--------|--------|-----------|---------|--------|---------|---------|---------|---------|---------|--------|---------|--------|--------|-----------|
| 20 | 65 | ¼ | 43 | 89 | 14 | 12 | 46 | 30 | 42 | 128 | 25 | M6 | 100 | 6 |
| 20 | 65 | ¼ | 43 | 89 | 14 | 12 | 46 | 30 | 42 | 196 | 25 | M6 | 100 | 6 |
| 20 | 65 | ¼ | - | 89 | 14 | 12 | 46 | 30 | 42 | 124 | 25 | M6 | 100 | 6 |

The information and technical data (altogether "Data") herein are not binding, unless explicitly confirmed in writing. The Data neither constitutes any expressed, implied or warranted characteristics, nor guaranteed properties or a guaranteed durability. All Data is subject to modification. The General Terms and Conditions of Sale of Georg Fischer Piping Systems apply.

09/2020-A

© Georg Fischer Piping Systems Ltd, 8201 Schaffhausen/Switzerland
 Tel. +41 52 631 11 11 • www.gfps.com • E-Mail: info.ps@georgfischer.com