

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

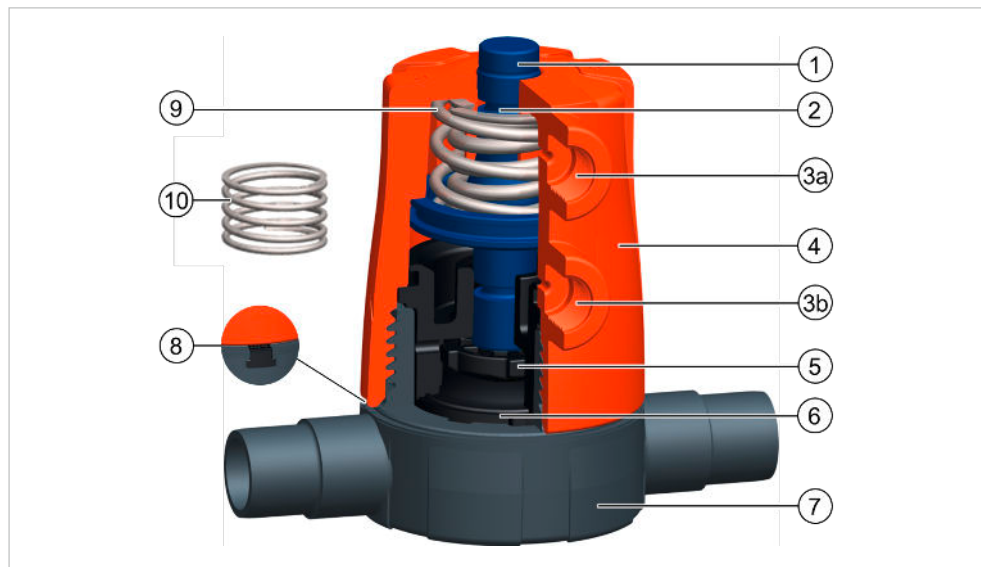
Benefits/features

- 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

Possible 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 FC
- ③b Connection for control air DA
- 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

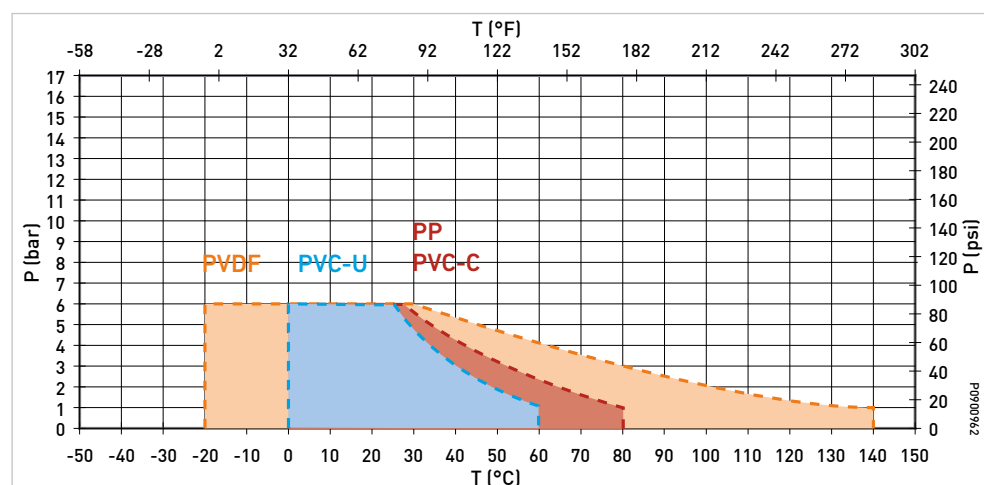
Specification

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 (m³/h)	Kv 100 (Gpm)
15	½	20	125	7.5	0.55

Pressure-temperature diagrams



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

Pressure ratings

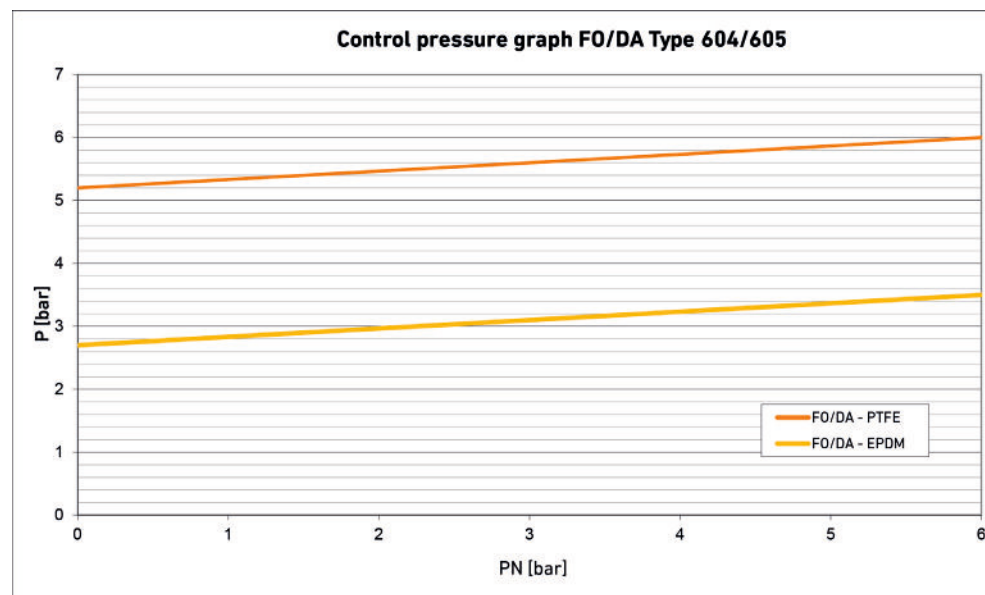
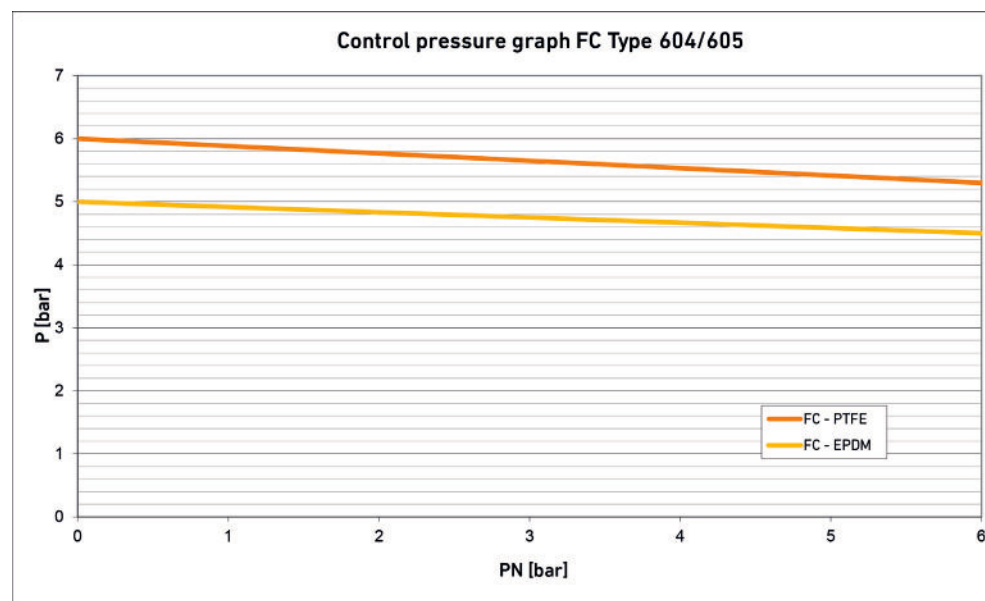
DN	Pressure rating [bar]	Max. control pressure [bar]			
		FC	FC	FO/DA	FO/DA
		EPDM ¹⁾	PTFE ¹⁾	EPDM ²⁾	PTFE ²⁾
20DN15	6	5.0	6.0	3.5	6.0

Medium pressure → One sided applied

¹⁾ At 0 bar medium pressure

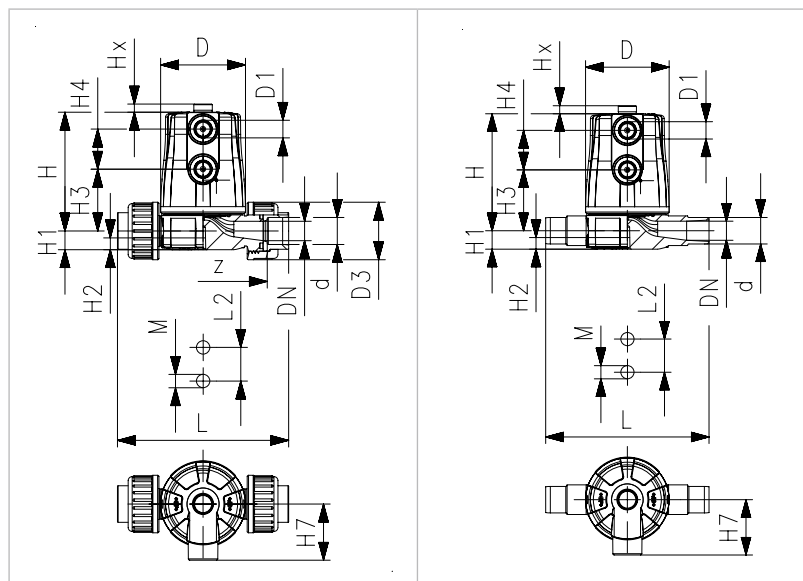
²⁾ At 6 bar medium pressure

Control pressure diagrams



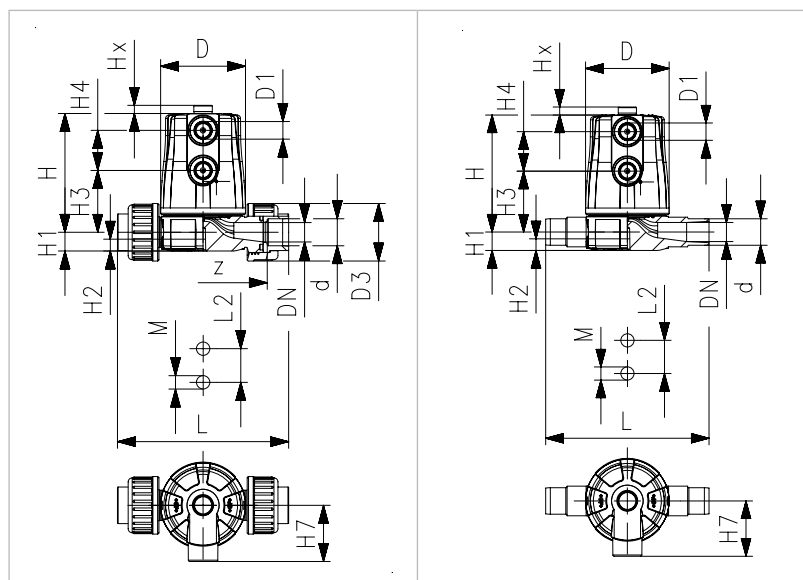
Dimensions

PVC-U



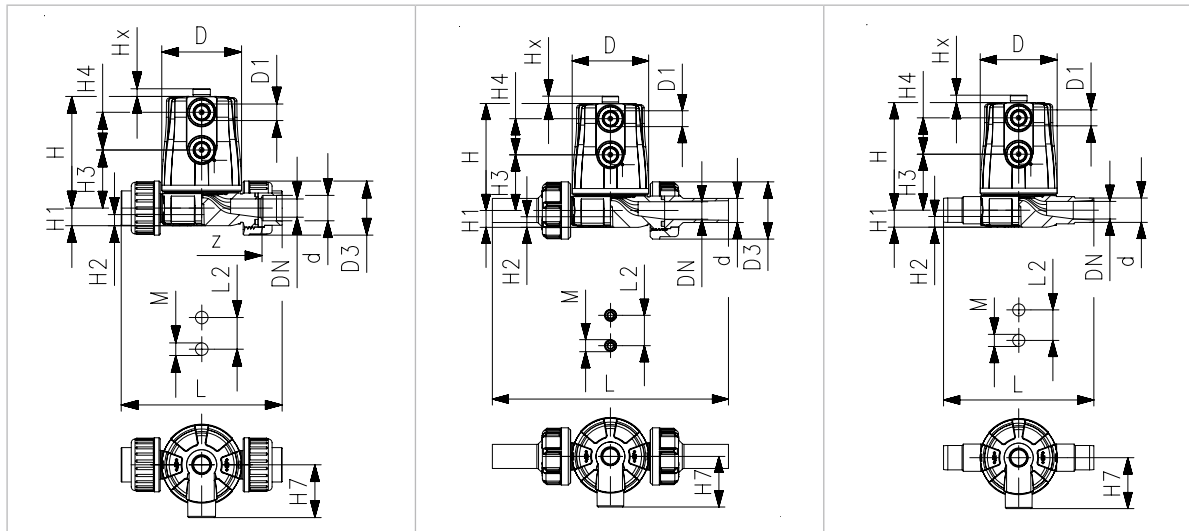
Jointing d	DN	Size	D	D1_G	D3	H	H1	H2	H3	H4	H7	L	L2	M	Z	Lift	
(mm)	(mm)	(inch)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(Hx)	
ASTM Socket	20	15	½	65	¼	43	89	14	12	46	30	42	140.6	25	M6	96	6
Metric Socket	20	15	½	65	¼	43	89	14	12	46	30	42	128	25	M6	96	6
Rp Socket	20	15	½	65	¼	43	89	14	12	46	30	42	128	25	M6	102	6
Metric Spigot	20	15	½	65	¼		89	14	12	46	30	42	124	25	M6		6

PVC-C



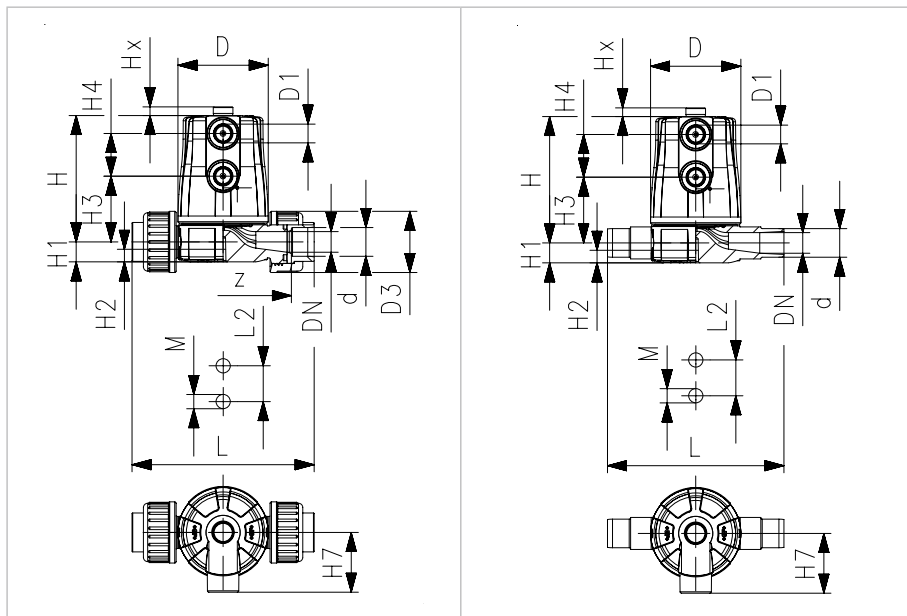
Jointing d	DN	Size	D	D1_G	D3	H	H1	H2	H3	H4	H7	L	L2	M	Z	Lift	
(mm)	(mm)	(inch)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(Hx)	
Metric Socket	20	15	½	65	¼	43	89	14	12	46	30	42	131	25	M6	99	6
Metric Spigot	20	15	½	65	¼		89	14	12	46	30	42	124	25	M6		6

PP-H



Joining	d	DN	Size	D	D1_G	D3	H	H1	H2	H3	H4	H7	L	L2	M	Z	Lift
	(mm)	(mm)	(inch)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(Hx)
Metric Socket	20	15	½	65	¼	48	89	14	12	46	30	42	128	25	M6	96	6
Metric Unions Spigot	20	15	½	65	¼	48	89	14	12	46	30	42	196	25	M6	100	6
Metric Spigot	20	15	½	65	¼		89	14	12	46	30	42	124	25	M6	100	6

PVDF



Joining	d	DN	Size	D	D1_G	D3	H	H1	H2	H3	H4	H7	L	L2	M	Z	Lift
(mm)	(mm)	(mm)	(inch)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(Hx)
Metric Socket	20	15	½	65	¼	43	89	14	12	46	30	42	128	25	M6	96	6
Metric Unions Spigot	20	15	½	65	¼	43	89	14	12	46	30	42	196	25	M6	100	6
Metric Spigot	20	15	½	65	¼	43	89	14	12	46	30	42	124	25	M6		6

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