

## High Purity Diaphragm Valve, Plastic

### Construction

The GEMÜ 677 HPW 2/2 way diaphragm valve has a low maintenance bonnet with an ergonomically designed handwheel and an integral optical position indicator. All medium wetted parts are made of PFA (body) and PTFE (diaphragm).

### Features

- Suitable for inert and corrosive\* liquid and gaseous media, particularly high purity media
- All medium wetted parts and the housing are made of high quality plastic materials
  - Valve body: PFA-Inliner/PVDF-Outliner (carbon-filled)
  - Diaphragm material: PTFE/EPDM
- Bonnet: PP glass fiber reinforced
- Assembled, tested and packaged under class 100 cleanroom conditions

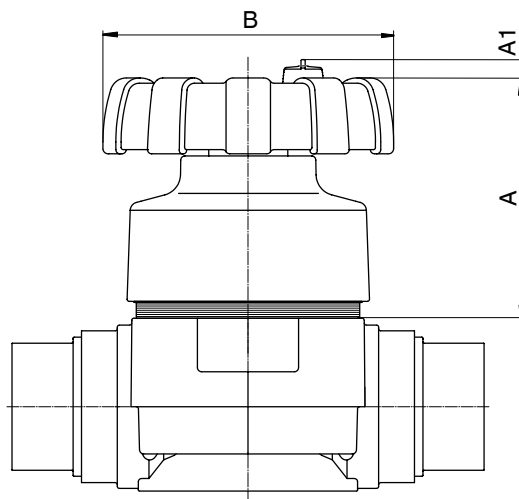
### Advantages

- Good  $K_v / C_v$  value
- Minimal deadleg
- Optional flow direction, will seal in either flow direction up to full working pressure
- Due to its design (diaphragm valve, i.e. soft flow deviation) also particularly suitable for polishing agents and slurries
- Optional mounting position
- Optional accessories
  - Electrical position indicator
  - Locking device

\* see information on working medium on page 2



### Main dimensions [mm / inch]



Nominal size	ø B	A	A1
40	114 / 4.49	89 / 3.50	8 / 0.31
50	140 / 5.51	107 / 4.21	9 / 0.35

## 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.

### Working temperature

Max. 90°C (194°F), higher temperatures upon request depending on working pressure

### Ambient temperature

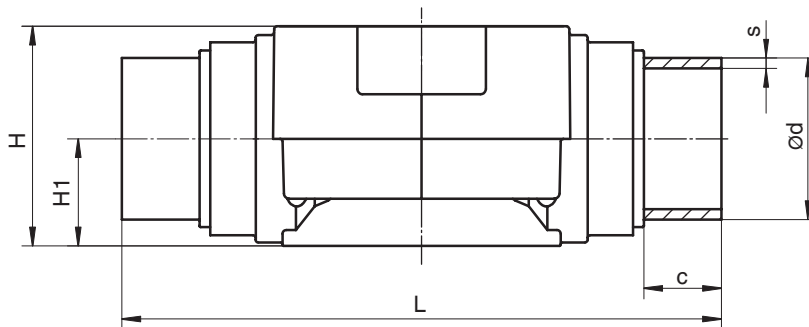
60°C (140°F)

Nominal size	Working pressure	Kv value	Cv value	Weight
	[bar]	[m <sup>3</sup> /h]	[US gal/min]	[kg]
1 1/2" pipe DN 40	0 - 6	25.0	29.3	1.7
2" pipe DN 50	0 - 6	46.0	53.8	2.8

All pressures are given as gauge pressures.

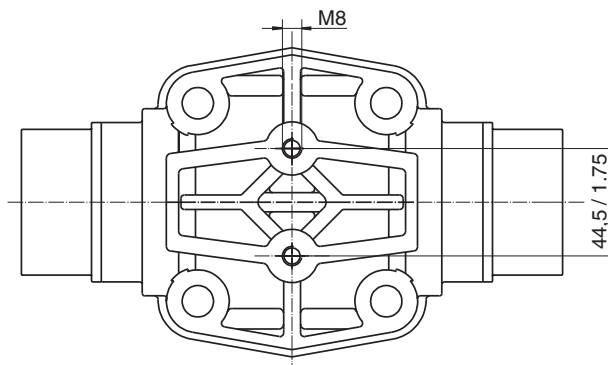
## Body dimensions [mm / inch]

### Imperial butt weld spigots , connection code 30



Nominal size	L	H	H1	Ød	s	c
40	192 / 7.56	74 / 2.91	40 / 1.6	50.5 / 1.99	3,7 / 0.15	33 / 1.32
50	224 / 8.82	82 / 3.23	40 / 1.6	60.3 / 2.37	3,9 / 0.15	29 / 1.14

## Mounting holes [mm / inch]



## Order data

Nominal size	Code
1 1/2" pipe DN 40	40
2" pipe DN 50	50

Diaphragm material	Code
PTFE/EPDM	5E

Body configuration	Code
2/2 way body	D

Control function	Code
Manually operated	
Manually operated, with lockable handwheel	L

Connection	Code
Imperial butt weld spigots	30

Option	Code
Mounting thread for position indicator GEMÜ 1215	Z

Valve body material	Code
PFA-Inliner/PVDF-Outliner (carbon filled)	23

High Purity version	Code
High Purity white	HPW

Order example	677	50	D	30	23	5E	0	Z	HPW
Type	677								
Nominal size		50							
Body configuration (code)			D						
Connection (code)				30					
Valve body material (code)					23				
Diaphragm material (code)						5E			
Control function (code)							0		
Option (code)								Z	
High Purity design (code)									HPW

## Futher HP valves



**GEMÜ 600 HP**



**CleanStar® C60**



**CleanStar® C60/C67**



**CleanStar® C67**

## Further High Purity products



**HydraLine®**  
Pressure Measurement  
Systems



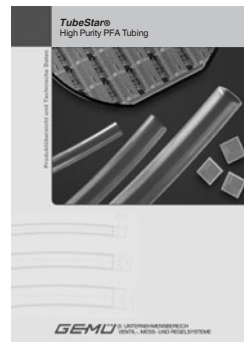
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High Purity PVDF/PP  
Valves and Flowmeters



**SonicLine®**  
Ultra-Sonic Flowmeters



**FlareStar®**  
Ultra Pure PFA  
Tube and Weld Fittings



**TubeStar®**  
High Purity PFA Tubing

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

**GEMÜ®** VALVES, MEASUREMENT  
AND CONTROL SYSTEMS

