Ultra Pure PVDF Diaphragm Valves

Construction

The ***CleanStar***® C60 / C67 pneumatically or manually operated ultra pure 2/2-way diaphragm valves have a PVDF body. All medium wetted parts are made of PVDF or PTFE (diaphragm). The external actuator parts are also made of PVDF.

A stroke limiter and an optical position indicator are standard. Both valves have integral solid mounting lugs and a leakage sensor connection.

Features

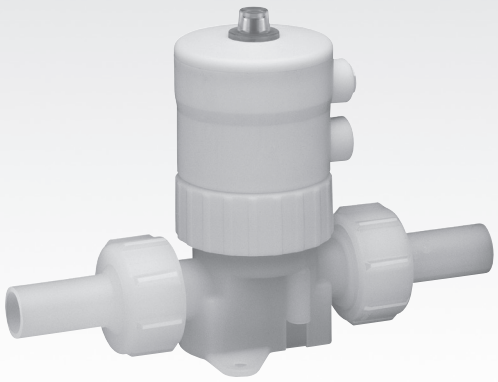
- Specifically designed for high purity media
- Metal-free (for C67)
- High flow capability
- Union ends for simple radial installation and removal
- Manufactured under cleanroom conditions

Advantages

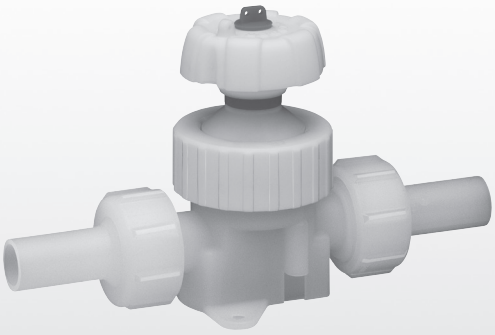
- Minimal contamination
- Minimal deadleg
- Improved mounting system
- Optional flow direction

Thus you achieve:

- Reduced equipment flush times
- High reliability (MTBF)
- Maximum yield

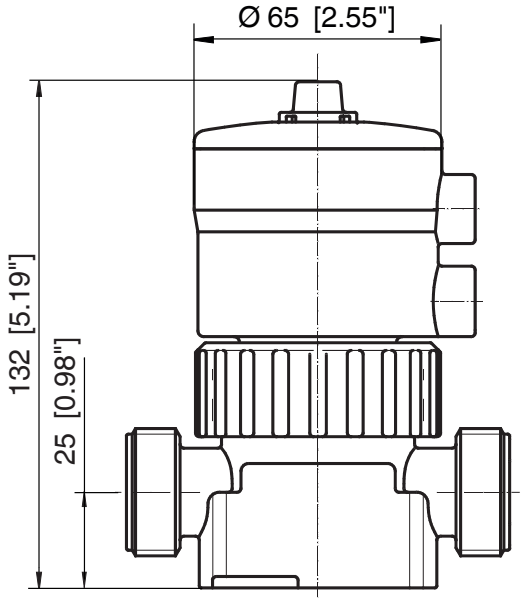


GEMÜ C60 PVDF



GEMÜ C67 PVDF

Dimensions GEMÜ C60 PVDF 1/2“ [mm / inch]



For further dimensions see pages 3 and 4

C60, C67 PVDF

Technical data

Working medium

Suitable for any inert or corrosive gases or liquids,
- particularly high purity media - which do not corrode the body and diaphragm materials.

Operating pressure

Max. 6 bar when applied upstream only

Vacuum	400 mbar/abs*

* The life expectancy of the valve may be affected if exposed to a greater vacuum.

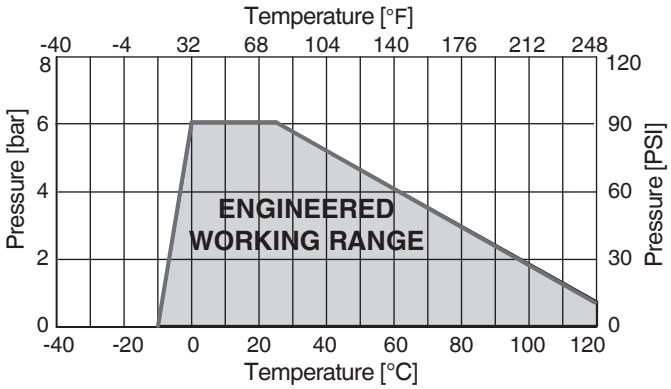
Flow direction

Optional

Operating temperature

See temperature/pressure diagram

Temperature / pressure diagram



Information on the use of the diagram

The temperature / pressure diagram is only an orientation aid. The data refer to water as a working medium.
A change of operating conditions or other media may result in deviations. In case of doubt it is advisable to test the behavior of the material under the definitive operating conditions by means of a test installation.

Temperatures below 0 °C can affect the operating speed negatively.

Ambient temperature

Max. 60°C (130°F)

Materials

Media wetted parts (body)	PVDF
Diaphragm	PTFE
External actuator parts	PVDF

GEMÜ C60

Control pressure

"Normally closed" (actuator size 2)	4 - 7 bar
"Normally open" and „Double acting“	max. 4 bar

Control air connection

Size G 1/8

Actuator volume

Actuator size	Control function	Code	Actuator volume [cm³]
2	Normally closed	1	24.0
	Normally open	2	39.0
	Double acting (closed)	3	39.0
	Double acting (open)	3	24.0

Kv / Cv values - 2/2-way valves

Connection				Size		Kv value*	Cv value
Size		Connection	Code	DN	Actuator	l/min	US gal/min
1/2”	Pipe	Union ends	7.78	15	2	68.0	4.7

* The measurement was carried out with water at 5 bar inlet pressure and a temperature of 20 °C.

Order data

Type	Code
Valve with pneumatic actuator	C60
Valve with manual operator	C67

Nominal size		Code
Pipe (1/2”)	DN 15	15

Valve body configuration	Code
2/2-way body	D

Valve body connection	Code
Union ends with DIN insert (socket)	7
Union ends with DIN insert (for IR butt welding)	78

Valve body material	Code
PVDF	20

Diaphragm material	Code
PTFE / EPDM, one-piece	54
PTFE/EPDM	5A

Control function	Code
Manually operated (C67)	0
Normally closed (C60)	1
Normally open (C60)	2
Double acting (C60)	3

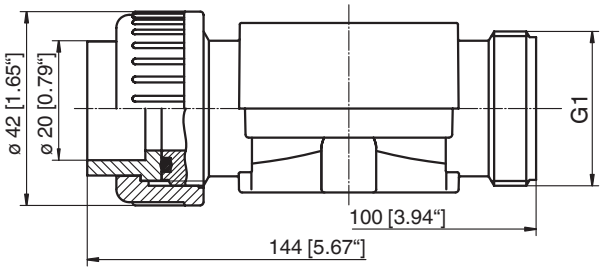
Actuator version	Code
Actuator size 2	2

High Purity version	Code
High Purity, white	HPW

Order example	C60	15	D	78	20	5A	1	2	HPW
Type	C60								
Nominal size (code)		15							
Body configuration (code)			D						
Valve body connection (code)				78					
Valve body material (code)					20				
Diaphragm material (code)						5A			
Control function (code)							1		
Actuator version (code)								2	
High Purity version (code)									HPW

Connection dimensions [mm / inch]

Code 7



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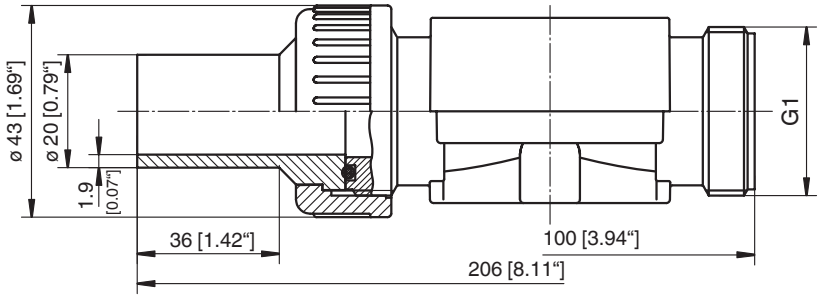
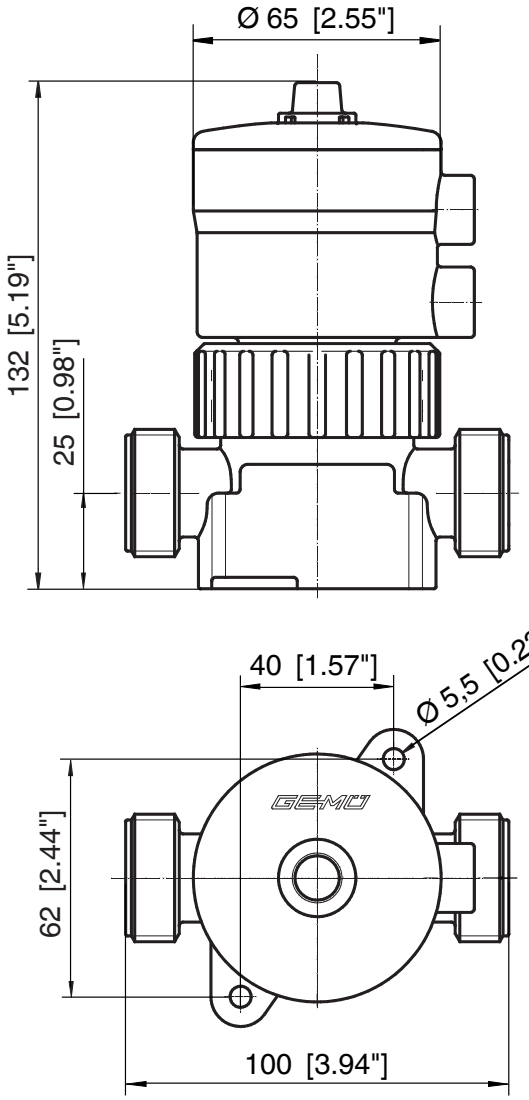
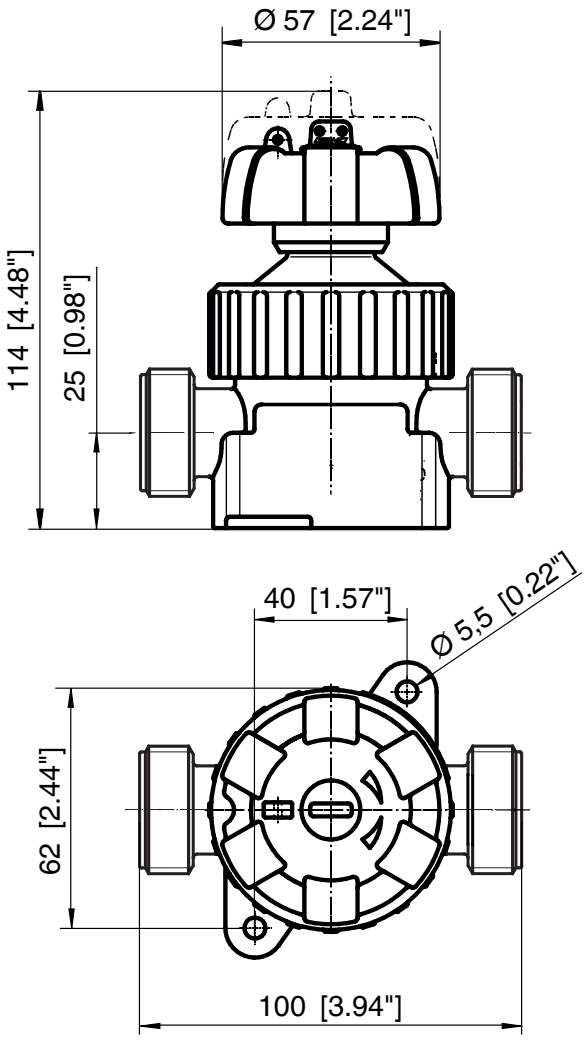


Dimensions [mm / inch]

GEMÜ C60



GEMÜ C67



Accessories

GEMÜ C67 STA
Service tool for actuators

GEMÜ 1098
Flaring mandrel

GEMÜ CF STF
Service tool for
flare union nuts

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

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