



High Purity Diaphragm Valve, Plastic

Construction

The GEMÜ 600 HP 2/2 way valve has a low maintenance piston actuator which can be controlled by inert gases. It has a stroke limiter, a manual override and an integral optical position indicator as standard. Normally Closed, Normally Open and Double Acting control functions are available.

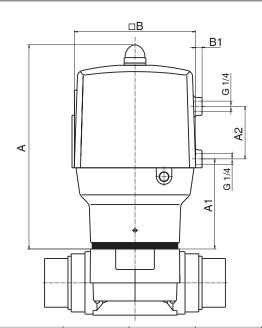
Features

- Suitable for inert and corrosive* liquid and gaseous 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
 - Actuator: PP glass fibre reinforced
- Control connection in flow direction as standard, therefore installation in restricted spaces possible
- · Manufactured under cleanroom conditions

Advantages

- Good K_V value
- · Minimal deadleg
- Optional flow direction, will seal in either flow direction up to full working pressure
- Due to its design particularly suitable for polishing agents and slurries
- · Optional mounting position
- · Optional accessories
- Electrical position indicator with microswitches or proximity switches -Pneumatic or electro-pneumatic positioners
 - Control air adapter for pilot valves according to Namur

Actuator dimensions [mm / inch]



| DN A | | A1 | A2 | □ B | B1 |
|------|------------|------------|-----------|------------|----------|
| 40 | 192 / 7.56 | 93 / 3.66 | 65 / 2.56 | 125 / 4.92 | 9 / 0.35 |
| 50 | 230 / 9.06 | 110 / 4.33 | 65 / 2.56 | 150 / 5.91 | 8 / 0.31 |



^{*} see information on working medium on page 2



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

Control medium

Inert gases

Required control pressure see table below

Max. perm. temperature of control medium

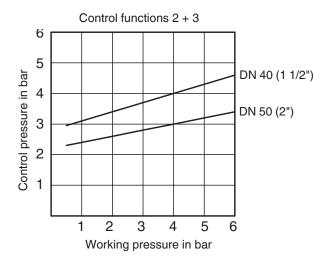
40°C

Ambient temperature

60°C (140°F)

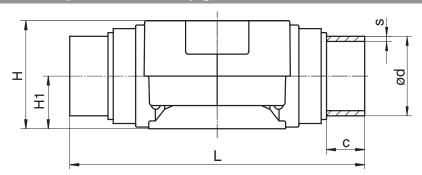
| Nominal | Control f | unction 1 | Control fur | nctions 2+3 | Kv value | Cv value | Weight | |
|---|--------------------|---------------------|------------------|---------------------------|------------|--------------|--------|-----|
| size | Operating pressure | Control pressure | Working pressure | Control [m³/h] [US gal/mi | | [US gal/min] | [kg] | |
| 1 1/2" pipe DN 40 | 0 - 6 bar | 5 - 6 bar | 0 - 6 bar | max. 5 bar* | 25.0 | 29.3 | 4.3 | |
| 2" pipe DN 50 | 0 - 6 Dai | 5 - 6 Dar 0 - 6 Dar | 0 - 6 Dar | max. 5 bar | max. 5 bar | 46.0 | 53.8 | 7.4 |
| All pressures are given as gauge pressures *see diagram below | | | | | | | | |

Control pressure characteristic DN 40 (1 1/2") and DN 50 (2")



Body dimensions [mm / inch]

Imperial butt weld spigots, connection code 30



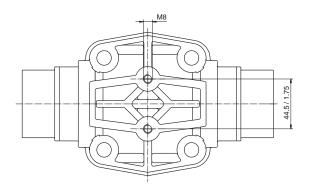
| DN | NPS | H1 | L | Н | ød | С | Weight [kg] |
|----|--------|------|-----|------|------|----|-------------|
| 40 | 1 1/2" | 23.2 | 194 | 63.2 | 48.3 | 35 | 0.50 |
| 50 | 2" | 23.2 | 224 | 63.2 | 60.3 | 40 | 0.57 |





Dimensions [mm / inch]

Mounting holes DN 40 (1 1/2") und DN 50 (2")



Order data

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

| Code |
|------|
| 54 |
| 5M |
| 5E |
| |

| Body configuration | Code |
|--------------------|------|
| Straight through | D |

| Connection | Code |
|---|------|
| Imperial butt weld spigots (DIN length) | 30 |

| Control function | Code |
|------------------------------|------|
| Normally closed | 1 |
| Normally open | 2 |
| Double acting (upon request) | 3 |

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

| Operator version | Code |
|---------------------------|------|
| Actuator size 3/N (DN 40) | 3/N |
| Actuator size 4/N (DN 50) | 4/N |

| High Purity design | Code |
|--------------------|------|
| High Purity | HP |

| Order example | 600 | 50 | D | 30 | 23 | 5M | 1 | 4/N | HP |
|----------------------------|-----|----|---|----|----|----|---|-----|----|
| Туре | 600 | | | | | | | | |
| Nominal size (code) | | 50 | | | | | | | |
| Body configuration (code) | | | D | | | | | | |
| Connection (code) | | | | 30 | | | | | |
| Valve body material (code) | | | | | 23 | | | | |
| Diaphragm material (code) | | | | | | 5M | | | |
| Control function (code) | | | | | | | 1 | | |
| Antriebsausführung (Code) | | | | | | | | 4/N | |
| High Purity design (code) | | | | | | | | | HP |



AVF

Other HP valves



GEMÜ 677 HPW



CleanStar® C60



CleanStar® C60/C67



CleanStar® C67

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



