

## 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

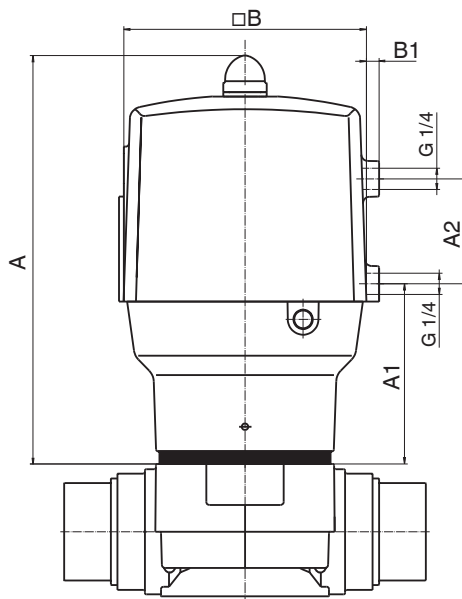
- Suitable for inert and corrosive\* liquid and gaseous high purity media
- All medium wetted parts and the housing are made of high quality plastic materials
  - Valve body: PFA-Inliner/PVDF-Outliner (carbon-filled)
  - Diaphragm material: PTFE/EPDM
  - Actuator: PP glass fibre reinforced
- Control 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

\* see information on working medium on page 2

### 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



## 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

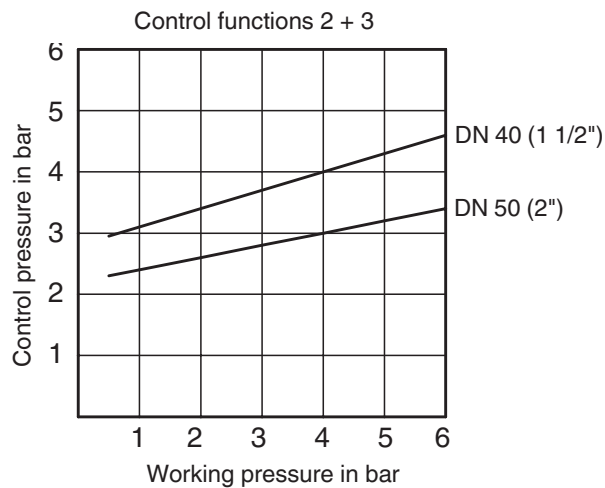
60°C (140°F)

Nominal size	Control function 1		Control functions 2+3		Kv value	Cv value	Weight
	Operating pressure	Control pressure	Working pressure	Control pressure	[m³/h]	[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					46.0	53.8	7.4

All pressures are given as gauge pressures.. \*see diagram below

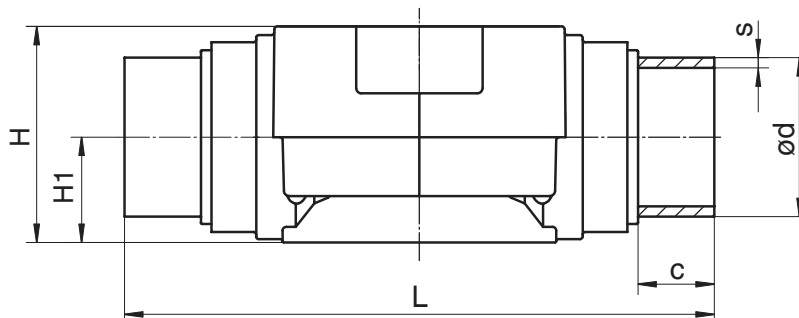
The Kv value curve (Kv value dependent on valve stroke) can vary depending on the diaphragm material and duration of use.

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



## Body dimensions [mm / inch]

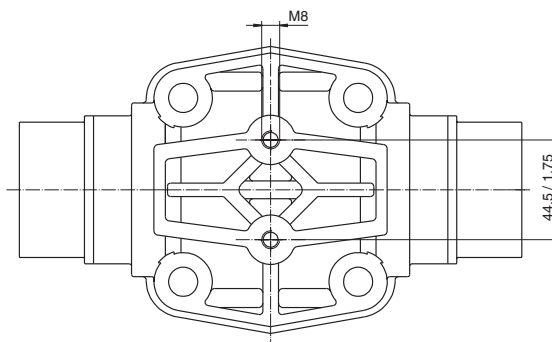
### Imperial butt weld spigots , connection code 30



DN	NPS	L	H	H1	Ød	s	c
40	1 1/2"	195 / 7.68	74 / 2.91	40 / 1.6	48,3 / 1.90	3,7 / 0.15	33 / 1.32
50	2"	224 / 8.82	82 / 3.23	40 / 1.6	60,3 / 2.37	3,9 / 0.15	29 / 1.14

## 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

Diaphragm material	Code
PTFE / EPDM, one-piece	54
PTFE / EPDM, two-piece	5M
PTFE/EPDM (available until 01.06.2020)	5E

Body configuration	Code
Straight through	D

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

Connection	Code
Imperial butt weld spigots (DIN length)	30

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

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

High Purity design	Code
High Purity	HP

Order example	600	50	D	30	23	5M	1	4/N	HP
Type	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

## 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.

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