

Diaphragm Valve, Metal

Construction

The GEMÜ 625 2/2 way diaphragm valve has a low maintenance piston actuator which can be controlled by inert gases. Normally Closed, Normally Open and Double Acting control functions are available. An optical position indicator is integrated as standard.

Features

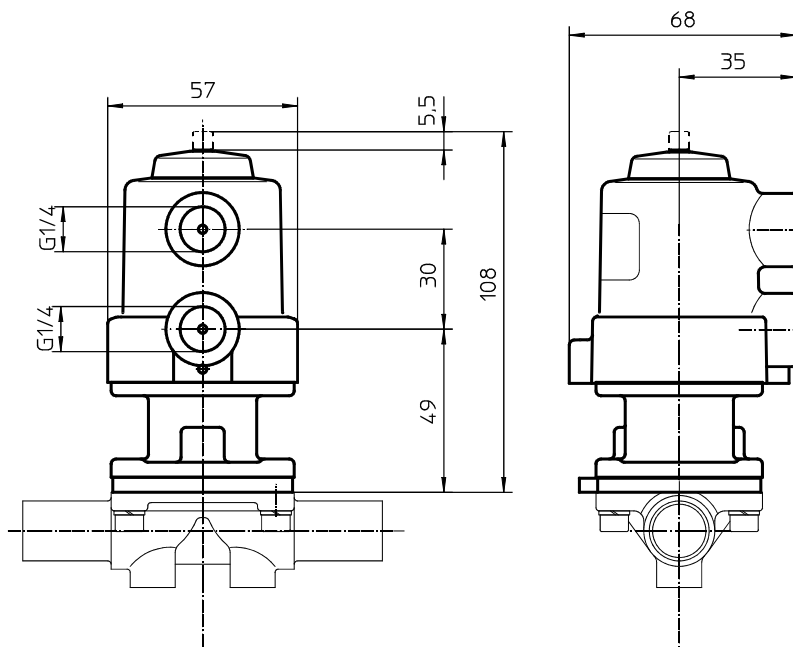
- Suitable for inert and corrosive* liquid and gaseous media
- CIP/SIP cleaning and sterilizing capabilities
- Valve body and diaphragm available in various materials and designs
- Various connections available
- Compact construction for restricted spaces
- Insensitive to particulate media

Advantages

- For sterile applications
- Optional flow direction, will seal in either flow direction up to full working pressure
- Optional mounting position
- Optional accessories:
 - Stroke limiter
 - Electrical position indicators with microswitches or proximity switches

* see information on working medium on page 2

Actuator dimensions - GEMÜ 625 (mm)



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. 150°C
(dependent on medium wetted materials)

Control medium

Inert gases

Max. perm. temperature of control medium 40°C
Filling volume 0.02 NI

Diaphragm size	DN	Working pressure	K _v value*	Control pressure		Weight
		(bar)	(m³/h)	C. f. 1	C. f. 2 + 3	(g)
10	10	0 - 6 bar	3.9	5 - 7 bar	4.5 - 5.5 bar	450
	12		4.0			500
	15		5.3			680
	20		5.5			690

All pressures are given as gauge pressures, when applied upstream only.
* K_v values with valve body
DN 10 and 15 with connection code 60,
DN 12 with connection code 1,
DN 20 with connection code 59,
diaphragm material EPDM, K_v values determined with p₁ = 6 bar.

Order data

Body configuration

Code

Straight through	D
Tank bottom valve body	B*
T body	T*

* see special brochures

Valve body material

Code

1.4539	Investment casting	33
1.4435 (316 L)	Investment casting	34
1.4435 (316 L)	Forged body	40
1.4435 (316 L)	Block material	41

Connections

Code

Butt weld spigots

Spigots to DIN	0
Spigots to DIN 11850, series 1	16
Spigots to DIN 11850, series 2	17
Spigots to DIN 11850, series 3	18
Spigots to JIS-G 3459	36
Spigots to BS 4825, part 1	55
Spigots to ASME BPE	59
Spigots to EN ISO 1127	60

Threaded connections

Threaded sockets to DIN ISO 228	1
Threaded spigots to DIN 11851	6
One side threaded spigot, other side cone spigot with union nut, to DIN 11851	62
Aseptic unions upon request	

Clamp connections

Clamp ASME BPE for pipe ASME BPE, short design	80
Clamp following ASME BPE for pipe EN ISO 1127 length EN 558-1 series 7	82
Clamp ASME BPE for pipe ASME BPE length EN 558-1, series 7	88
Clamp DIN 32676 for pipe DIN 11850 length EN 558-1, series 7	8A

For overview of available valve bodies for GEMÜ 625 see page 6

Diaphragm material

Code

FPM		4
EPDM	max. 130°C*	12
EPDM	max. 150°C*	13
EPDM	max. 150°C*	16
PTFE/EPDM	PTFE laminated max. 150°C*	52

* Steam sterilisation temperature / 20 min

Control function

Code

Normally closed	1
Normally open	2
Double acting	3

Valve body surface finish, internal contour		Code
*Ra ≤ 6.3 µm	blasted internal/external	1500
*Ra ≤ 6.3 µm	electropolished internal/external	1509
*Ra ≤ 0.8 µm	mechanically polished internal, blasted external	1502
*Ra ≤ 0.8 µm	electropolished internal/external	1503
*Ra ≤ 0.6 µm	mechanically polished internal, blasted external	1507
*Ra ≤ 0.6 µm	electropolished internal/external	1508
*Ra ≤ 0.4 µm	mechanically polished internal, blasted external	1536
*Ra ≤ 0.4 µm	electropolished internal/external	1537
*Ra ≤ 0.25 µm	mechanically polished internal, blasted external	1527
*Ra ≤ 0.25 µm	electropolished internal/external	1516

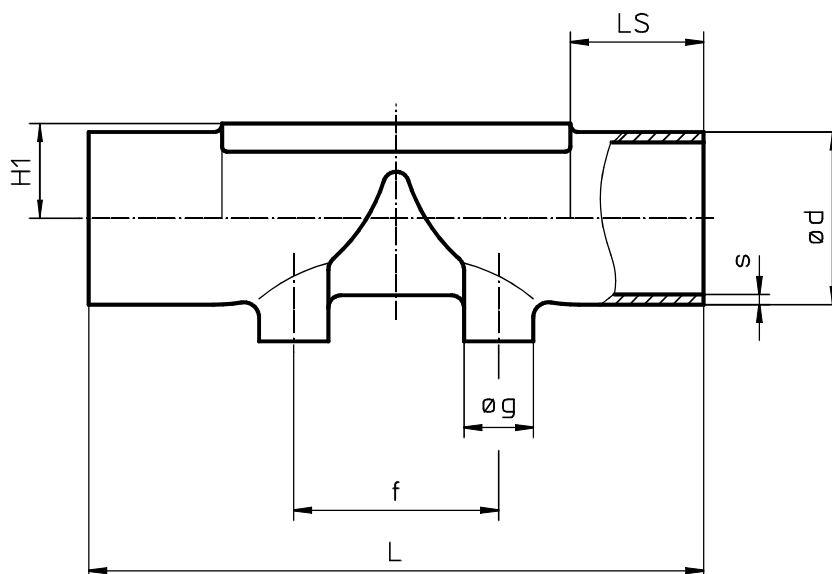
* Ra acc. to DIN 4768; at defined reference points

Order example	625	15	D	60	34	12	1	1500
Type	625							
Nominal size (mm)		15						
Body configuration (D)			D					
Connection (Code)				60				
Valve body material (Code)					34			
Diaphragm material (Code)						12		
Control function (Code)							1	
Surface finish (Code)								1500

Body dimensions - Butt weld spigots

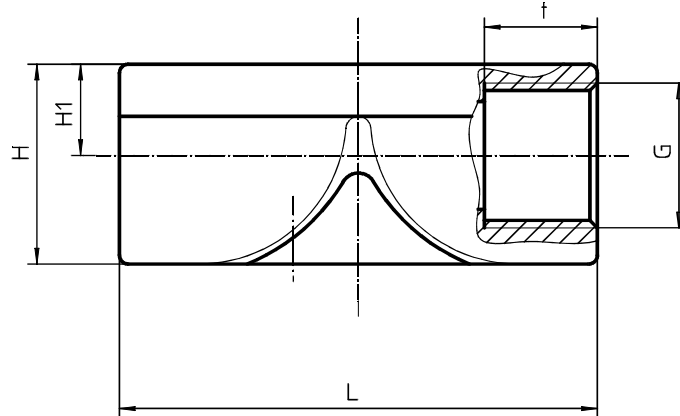
Dimensions in mm								ISO Code 60	DIN Selection series Code 0	DIN 11850			BS O.D. 4825 Code 55	ASME/ BPE Code 59	JIS-G 3459 Code 36
DN	NPS	MG	*f	*g	L	LS (min.)	H1	ø d x s	ø d x s	Series 1 Code 16 ø d x s	Series 2 Code 17 ø d x s	Series 3 Code 18 ø d x s	ø d x s	ø d x s	ø d x s
10	3/8"	10	30	13.5	108	25	12	17.2 x 1.6	-	12 x 1.0	13 x 1.5	14 x 2.0	9.53 x 1.2	9.53 x 0.89	17.3 x 1.65
15	1/2"	10	30	13.5	108	25	12	21.3 x 1.6	18 x 1.5	18 x 1.0	19 x 1.5	20 x 2.0	12.70 x 1.2	12.70 x 1.65	21.7 x 2.10
20	3/4"	10	30	13.5	108	25	12	-	-	-	-	-	19.05 x 1.2	19.05 x 1.65	-

* valid for investment cast design MG = diaphragm size



Body dimensions - Threaded sockets (mm)
Connection code 1 DIN ISO, material code 34

MG	DN	G	H	H1	t	L
10	12	G 3/8	23	10.5	13	55
10	15	G 1/2	29	13.5	15	68



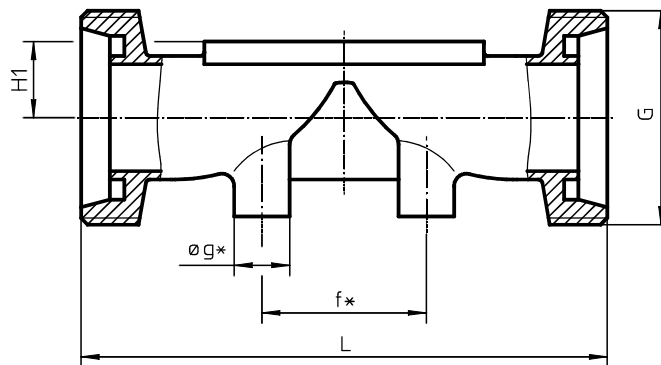
Body dimensions - Dairy connections to DIN 11851

MG	DN	H1	f*	øg*	G	L (Code 6)	L (Code 62)
10	10	12	30.0	13.5	Rd 28 x 1/8	118	116
10	15	12	30.0	13.5	Rd 34 x 1/8	118	116

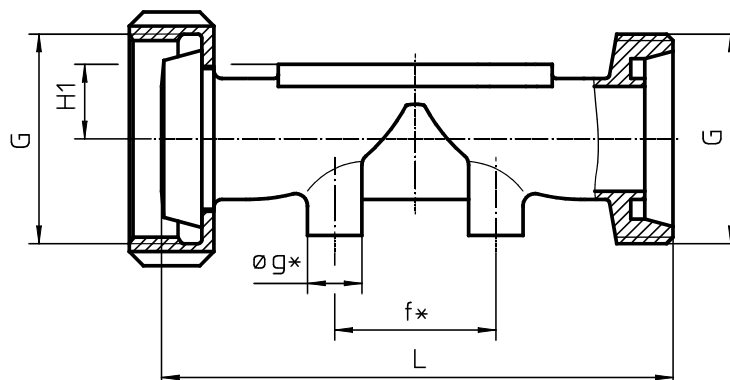
* valid for investment cast design

MG = diaphragm size

Code 6



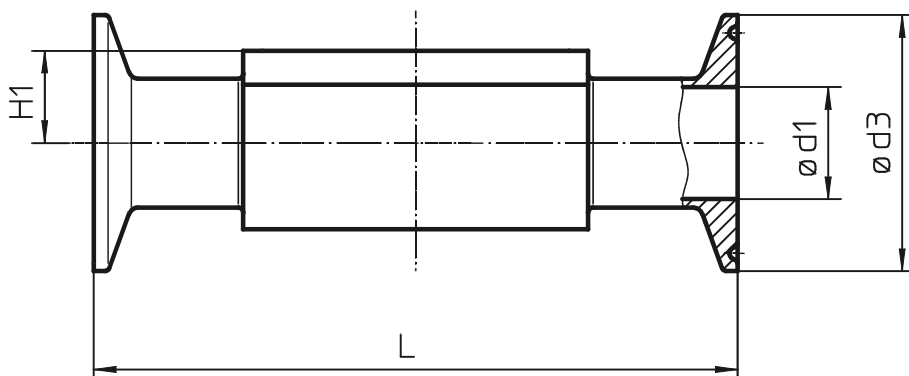
Code 62



Body dimensions - Clamp connections

Dimensions in mm				Code 80 for pipe ASME BPE			Code 82 for pipe EN ISO 1127			Code 88 for pipe ASME BPE			Code 8A for pipe DIN 11850		
DN	NPS	MG	H1	ø d1	ø d3	L	ø d1	ø d3	L	ø d1	ø d3	L	ø d1	ø d3	L
10	3/8"	10	12	-	-	-	14.00	25.40	108.00	-	-	-	10.00	34.00	108.00
15	1/2"	10	12	9.40	25.00	88.90	18.10	50.50	108.00	9.40	25.00	108.00	16.00	34.00	108.00
20	3/4"	10	12	15.75	25.00	101.60	-	-	-	15.75	25.00	117.00	-	-	-

MG = diaphragm size



Overview of valve bodies for GEMÜ 625

Material code		Code 34	Code 33 / Code 34 / Code 40													
Connection code		1	0	16	17	18	36	55	59	60	6	62	80	82	88	8A
MG	DN															
10	10	-	-	X	X	X	Y	Y	Y	X	B	B	-	K	-	K
10	12	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	15	X	X	X	X	X	Y	X	Y	X	B	B	K	W	K	K
10	20	-	-	-	-	-	-	X	X	-	-	-	K	-	K	-

B Welded construction in material codes 34 and 40
 K Connections completely machined (not welded) in material code 40
 W Connections welded on in material code 40
 X Spigot body in material codes 34 and 40
 Y Spigot body in material code 40

Accessories



GEMÜ® 1230 Electrical position indicator with microswitches

GEMÜ® 1231 Electrical position indicator with proximity switches acc. to NAMUR EN 60529

GEMÜ® 1232 Electrical position indicator with proximity switches



GEMÜ® 1235 Electrical position indicator with LED indication; intelligent programming - for linear actuators



GEMÜ® ePos 1435
Electro-pneumatic positioner, single or double acting



GEMÜ® 4232
Travel sensor for GEMÜ 1435

Further metal diaphragm valves, accessories and other products see our Product Range catalogue and Price List.
Contact GEMÜ.



GEMÜ® VALVES, ACTUATORS
AND CONTROL SYSTEMS