

GEMÜ 620

Pneumatically operated diaphragm valve



Features

- Suitable for particulate and abrasive media
- Various lining materials are available, such as PFA, PP or hard rubber
- Standard optical position indicator
- Wide range of adaptation options for add-on components and accessories

Description

The GEMÜ 620 2/2-way diaphragm valve has a low maintenance membrane actuator made of metal or plastic and is pneumatically operated. The valve has a metal distance piece. Normally Closed (NC), Normally Open (NO) and Double Acting (DA) control functions are available.

Technical specifications

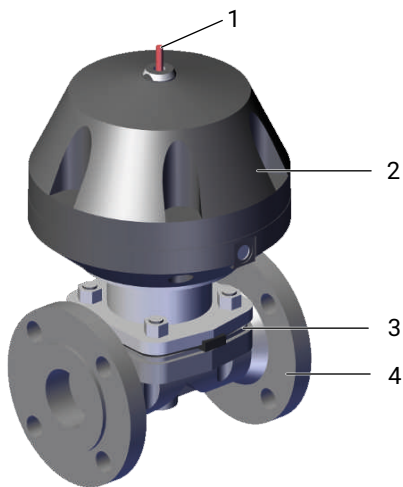
- **Media temperature:** 0 to 100 °C
- **Ambient temperature:** 0 to 60 °C
- **Operating pressure:** 0 to 10 bar
- **Nominal sizes:** DN 15 to 150
- **Body configurations:** 2/2-way body
- **Connection types:** Flange | Threaded connection
- **Connection standards:** ANSI | BS | EN | ISO
- **Body materials:** EN-GJL-250, cast iron material | EN-GJS-400-18-LT (GGG 40.3), PFA lined | EN-GJS-400-18-LT (GGG 40.3), PP lined | EN-GJS-400-18-LT, hard rubber lined | EN-GJS-400-18-LT, SG iron material | EN-GJS-400-18-LT, SG iron material with butyl lining | EN-GJS-400-18-LT, SG iron material with soft rubber lining | EN-GJS-500-7, ductile iron material, PFA lined | EN-GJS-500-7, ductile iron material, PP lined
- **Body lining:** Hard rubber | PFA | PP
- **Diaphragm materials:** CR | EPDM | FKM | NBR | PTFE/EPDM | PTFE/FKM | PTFE/PVDF/EPDM
- **Conformities:** CRN | EAC | FDA | TA Luft (German Clean Air Act)

Technical data depends on the respective configuration



Product description

Construction



Item	Name	Materials
1	Optical position indicator	PP red
2	Actuator	Cast iron, PP reinforced
3	Diaphragm	NBR FKM CR EPDM PTFE / EPDM (one-piece) PTFE / EPDM (two-piece) PTFE / FKM (two-piece) PTFE / PVDF / EPDM (three-piece)
4	Valve body	EN-GJL-250 (GG 25) EN-GJS-400-18-LT (GGG 40.3) EN-GJS-400-18-LT (GGG 40.3), butyl lined EN-GJS-400-18-LT (GGG 40.3), PFA lined EN-GJS-400-18-LT (GGG 40.3), PP lined EN-GJS-400-18-LT (GGG 40.3), hard rubber lined EN-GJS-400-18-LT (GGG 40.3), soft rubber lined EN-GJS-500-7 (GGG 50), PFA lined EN-GJS-500-7 (GGG 50), PP lined

Availability

Availability of valve bodies

Threaded connection

MG	DN	Connection types code 1, 31 ¹⁾
		Material code 90 ²⁾
25	15	X
	20	X
	25	X
40	32	X
	40	X
50	50	X

MG = diaphragm size, X = standard

1) **Connection type**

Code 1: Threaded socket DIN ISO 228

Code 31: NPT female thread

2) **Valve body material**

Code 90: EN-GJS-400-18-LT (GGG 40.3)

Flange

MG	DN	Connection type code ¹⁾															
		8			38			39			51			53		56	
		Material code ²⁾															
		17, 82, 83, 88	18	90	17, 82, 83, 88	18 ³⁾	17, 82, 83, 88	18	90	17	81	91 ³⁾	8	17	17	81	91 ³⁾
25	15	X	X	X	-	-	X	X	X	-	-	-	-	-	-	-	-
	20	X	X	X	X	X	X	X	X	-	-	-	X	-	-	-	-
	25	X	X	X	X	X	X	X	X	-	X	X	-	-	-	X	X
40	32	X	X	X	-	-	X	X	X	-	-	-	-	-	-	-	-
	40	X	X	X	X	X	X	X	X	-	X	X	X	-	-	X	X
50	50	X	X	X	X	X	X	X	X	-	X	X	X	-	-	X	X
	65	X	X	X	X	X	X	X	X	-	X	X	-	-	-	X	X
65	65	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-
80	80	X	X	X	X	X	X	X	X	-	X	X	X	-	-	X	X
100	100	X	X	X	X	X	X	X	X	-	X	X	-	-	-	X	X
	125	-	-	X	-	-	-	-	X	-	-	-	-	-	-	-	-
125	125	X	-	-	-	-	X	-	-	-	-	-	X	-	-	-	-
150	150	X	-	X	X	-	X	-	X	X	-	-	X	X	X	-	-

MG = diaphragm size, X = standard

1) Connection type

Code 8: Flange EN 1092, PN 16, form B, face-to-face dimension FTF EN 558 series 1, ISO 5752, basic series 1, length only for body configuration D

Code 38: Flange ANSI Class 150 RF, face-to-face dimension FTF MSS SP-88, length only for body configuration D

Code 39: Flange ANSI Class 125/150 RF, face-to-face dimension FTF EN 558 series 1, ISO 5752, basic series 1, length only for body configuration D

Code 51: Flange BS 10 table E, face-to-face dimension FTF EN 558 series 7, ISO 5752, basic series 7, length only for body configuration D

Code 53: Flange EN 1092, PN 16, form A, face-to-face dimension FTF EN 558 series 7, ISO 5752, basic series 7, length only for body configuration D

Code 56: Flange ANSI Class 125/150 RF, face-to-face dimension FTF EN 558 series 7, ISO 5752, basic series 7, length only for body configuration D

2) Valve body material

Code 8: EN-GJL-250 (GG 25)

Code 17: EN-GJS-400-18-LT (GGG 40.3), PFA lined

Code 18: EN-GJS-400-18-LT (GGG 40.3), PP lined

Code 81: EN-GJS-500-7 (GGG 50), PFA lined

Code 82: EN-GJS-400-18-LT (GGG 40.3), soft rubber lined

Code 83: EN-GJS-400-18-LT (GGG 40.3), hard rubber lined

Code 88: EN-GJS-400-18-LT (GGG 40.3), butyl lined

Code 90: EN-GJS-400-18-LT (GGG 40.3)

Code 91: EN-GJS-500-7 (GGG 50), PP lined

3) On request

Availability of actuator version

MG	DN	Actuator version
25	15 - 25	0KN
40	32 - 40	1KN
50	50 - 65	2KN
65	65	3/1, 3/2, 3/3, 3/D, 3/F, 3A1, 3A2, 3A3, 3AD, 3AF
80	80	3/2, 3/3, 3/D, 3/F, 3A2, 3A3, 3AD, 3AF, 4A2
100	100 - 125	3/3, 3/D, 3/F, 3A3, 3AD, 3AF, 4A3, 4AD, 4AF
125	125	4A2, 4A3, 4AD, 4AF
150	150	4A3, 4AD, 4AF

Order data

The order data provide an overview of standard configurations.

Please check the availability before ordering. Other configurations available on request.

Order codes

1 Type	Code
Diaphragm valve, pneumatically operated, membrane actuator, cast iron distance piece	620

2 DN	Code
DN 15	15
DN 20	20
DN 25	25
DN 32	32
DN 40	40
DN 50	50
DN 65	65
DN 80	80
DN 100	100
DN 125	125
DN 150	150

3 Body configuration	Code
2/2-way body	D

4 Connection type	Code
Threaded connection	
Threaded socket DIN ISO 228	1
NPT female thread	31
Flange	
Flange EN 1092, PN 16, form B, face-to-face dimension FTF EN 558 series 1, ISO 5752, basic series 1, length only for body configuration D	8
Flange ANSI Class 150 RF, face-to-face dimension FTF MSS SP-88, length only for body configuration D	38
Flange ANSI Class 125/150 RF, face-to-face dimension FTF EN 558 series 1, ISO 5752, basic series 1, length only for body configuration D	39
Flange BS 10 table E, face-to-face dimension FTF EN 558 series 7, ISO 5752, basic series 7, length only for body configuration D	51
Flange EN 1092, PN 16, form A, face-to-face dimension FTF EN 558 series 7, ISO 5752, basic series 7, length only for body configuration D	53
Flange ANSI Class 125/150 RF, face-to-face dimension FTF EN 558 series 7, ISO 5752, basic series 7, length only for body configuration D	56

5 Valve body material	Code
Cast iron material	
EN-GJL-250 (GG 25)	8
SG iron material	
EN-GJS-400-18-LT (GGG 40.3), PFA lined	17
EN-GJS-400-18-LT (GGG 40.3), PP lined	18
EN-GJS-500-7 (GGG 50), PFA lined	81
EN-GJS-400-18-LT (GGG 40.3), soft rubber lined	82
EN-GJS-400-18-LT (GGG 40.3), hard rubber lined	83
EN-GJS-400-18-LT (GGG 40.3), butyl lined	88
EN-GJS-400-18-LT (GGG 40.3)	90
EN-GJS-500-7 (GGG 50), PP lined	91

6 Diaphragm material	Code
Elastomer	
NBR	2
FKM	4
CR	8
EPDM	29
PTFE	
PTFE/EPDM one-piece	54
PTFE/EPDM two-piece	5M
PTFE/FKM two-piece	5T
PTFE/PVDF/EPDM three-piece	71
Note: The PTFE/PVDF/EPDM diaphragm (code 71) can only be combined with PFA lined valve bodies.	

7 Control function	Code
Normally closed (NC)	1
Normally open (NO)	2
Double acting (DA)	3

8 Actuator version	Code
DN 15 - 25, diaphragm size 25	
Plastic actuator material	
Membrane actuator, plastic, diameter of 130 mm	0KN
DN 32 - 40, diaphragm size 40	
Plastic actuator material	
Membrane actuator, plastic, diameter of 171 mm	1KN
DN 50 - 65, diaphragm size 50	
Plastic actuator material	
Membrane actuator, plastic, diameter of 211 mm	2KN

8 Actuator version	Code
DN 65, diaphragm size 65	
Plastic actuator material	
Actuator size 3/1	3/1
Actuator size 3/2	3/2
Actuator size 3/3	3/3
Actuator size 3/D	3/D
Actuator size 3/F	3/F
Metal actuator material	
Actuator size 3A1	3A1
Actuator size 3A2	3A2
Actuator size 3A3	3A3
Actuator size 3AD	3AD
Actuator size 3AF	3AF
DN 80, diaphragm size 80	
Plastic actuator material	
Actuator size 3/2	3/2
Actuator size 3/3	3/3
Actuator size 3/D	3/D
Actuator size 3/F	3/F
Metal actuator material	
Actuator size 3A2	3A2
Actuator size 3A3	3A3
Actuator size 3AD	3AD
Actuator size 3AF	3AF
Actuator size 4A2	4A2
DN 100 - 125, diaphragm size 100	
Plastic actuator material	
Actuator size 3/3	3/3

8 Actuator version	Code
Actuator size 3/D	3/D
Actuator size 3/F	3/F
Metal actuator material	
Actuator size 3A3	3A3
Actuator size 3AD	3AD
Actuator size 3AF	3AF
Actuator size 4A3	4A3
Actuator size 4AD	4AD
Actuator size 4AF	4AF
DN 125, diaphragm size 125	
Metal actuator material	
Actuator size 4A2	4A2
Actuator size 4A3	4A3
Actuator size 4AD	4AD
Actuator size 4AF	4AF
DN 150, diaphragm size 150	
Metal actuator material	
Actuator size 4A3	4A3
Actuator size 4AD	4AD
Actuator size 4AF	4AF
Note: On all actuators, the control air connector is 90° offset to flow direction.	

9 Mounting type	Code
With NAMUR mounting bracket	N0
With NAMUR mounting bracket and handwheel	NH

Order example

Ordering option	Code	Description
1 Type	620	Diaphragm valve, pneumatically operated, membrane actuator, cast iron distance piece
2 DN	80	DN 80
3 Body configuration	D	2/2-way body
4 Connection type	8	Flange EN 1092, PN 16, form B, face-to-face dimension FTF EN 558 series 1, ISO 5752, basic series 1, length only for body configuration D
5 Valve body material	90	EN-GJS-400-18-LT (GGG 40.3)
6 Diaphragm material	29	EPDM
7 Control function	1	Normally closed (NC)
8 Actuator version	3/3	Actuator size 3/3
9 Mounting type		Without