

Diaphragm Valve, Metal

Construction

The GEMÜ 628 motorized 2/2-way weir-type diaphragm valve is fitted with motor/control units made by AUMA.

Features

- Suitable for inert, corrosive*, liquid and gaseous media
- Valve body and diaphragm available in various materials and designs
- Motorized actuators are available for Open/Close duty and for regulating duties, including various control units
- Various actuator designs available from the AUMA product range

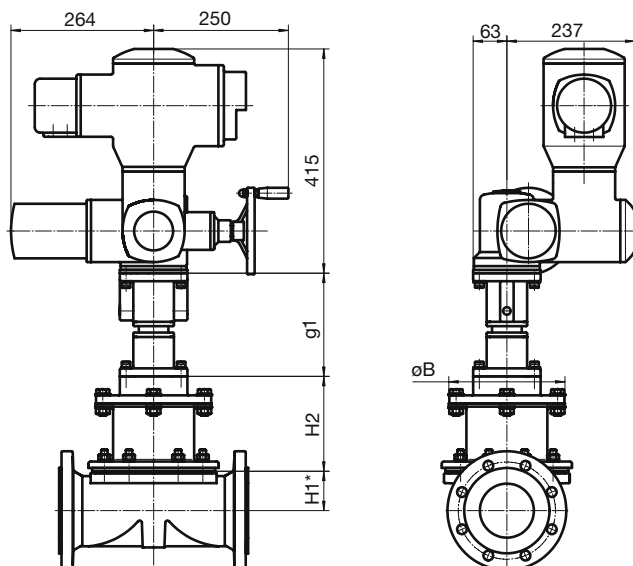
Advantages

- No auxiliary air pressure supply required
- Diaphragm valve body combinations for practically all media available
- Optional flow direction, will seal in either flow direction up to full operating pressure
- Valve can be cleaned without disassembly of actuator
- Proven electric actuators and control units in modular design

* see information on working medium on page 2

Actuator dimensions [mm]

Diaphragm size	DN	H2	g1	B
40	40	118	191	175
50	50	119	191	200
65	65	141	191	213
80	80	144	191	213
100	100	176	191	215
125	125	192	241	213
150	150	180	241	216



* For information on H1 see pages 4 and 5



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.

Max. perm. temperature of working medium 150°C*

* depending on body and diaphragm material

Ambient conditions

Max. ambient temperature 50° C

For the technical data of the AUMA actuator, the control or regulating unit and the linear thrust unit please refer to AUMA's own technical data sheet.

MG	DN	Operating pressure**		Weight (ca.)	Kv value*
		EPDM/FPM [bar]	PTFE [bar]	[kg]	[m³/h]
40	32	0 - 10	0 - 6	40.0	36.0
	40				40.0
50	50	0 - 10	0 - 6	60.0	80.0
65	65	0 - 10	0 - 6	62.0	100.0
80	80	0 - 8	0 - 5	78.0	160.0
100	100	0 - 6	0 - 4	88.0	238.0
125	125	0 - 6	0 - 4	130.0	376.0
150	150	0 - 6	0 - 4	140.0	496.0

All pressures are given as gauge pressures when applied upstream only.

K_v values were measured with cast iron body and EPDM diaphragm.

K_v values shown are valid for unlined valve bodies. K_v values for lined valve bodies are lower depending on the lining.

** Higher operating pressures on request

MG = Diaphragm size

Actuator types, control and regulating units

Diaphragm size	DN	628 Open/close actuator	628 Regulating actuator
40	40	LE12.1 (50) + SA07.1	LE12.1 (50) + SAR07.1
50	50	LE12.1 (50) + SA07.1	LE12.1 (50) + SAR07.1
65	65	LE12.1 (50) + SA07.1	LE12.1 (50) + SAR07.1
80	80	LE25.1 (100) + SA07.5	LE25.1 (100) + SAR07.5
100	100	LE25.1 (100) + SA07.5	LE25.1 (100) + SAR07.5
125	125	LE25.1 (100) + SA07.5	LE25.1 (100) + SAR07.5
150	150	LE25.1 (100) + SA07.5	LE25.1 (100) + SAR07.5

LE 12.1 (50) = AUMA linear thrust unit with 50 mm stroke

LE 25.1 (100) = AUMA linear thrust unit with 100 mm stroke

**The standard AUMA control unit used is the AM01.1.
Other control units upon request!**

Order data

Body configuration	Code
2/2 way	D

Connection	Code
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Threaded connections	
Threaded sockets DIN ISO 228	1

Flanges	
Flanges EN 1092 - PN10/16 - form B, (ex DIN 2501 / PN16 / form C) length EN 558-1, series 1 ISO 5752, basic series 1 (ex DIN 3202-1, series F1)	8

Flanges ANSI class 125/150 RF length MSS SP-88	38
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Flanges ANSI class 125/150 RF length EN 558-2, series 1 ISO 5752, basic series 1 (ex DIN 3202-1, series F1)	39
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Flanges EN 1092 - PN10 - form A (ex DIN 2501 / PN10 / form A) length EN 558-1, series 7 ISO 5752, basic series 7 (ex BS 5156)	52
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Flanges EN 1092 - PN10/16 - form A (ex DIN 2501 / PN16 / form A) length EN 558-1, series 7 ISO 5752, basic series 7 (ex BS 5156)	53
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Flanges ANSI class 125/150 FF length EN 558-2, series 7 ISO 5752, basic series 7 (ex BS 5156)	58
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For overview of available valve bodies for GEMÜ 628 see page 6.

Valve body material		Code
EN-GJL-250	GG 25 (cast iron)	8
EN-GJL-250	GG 25 (cast iron) Hard rubber lined	13
EN-GJS-400-18-LT	GGG 40.3 (S.G. iron) PFA lined	17
EN-GJS-400-18-LT	GGG 40.3 (S.G. iron) PP lined	18
EN-GJL-250	GG 25 (cast iron) Halar coated	55
EN-GJS-400-18-LT	GGG 40.3 (S.G. iron) Hard rubber lined	83

Diaphragm material		Code
CSM	Hypalon	1
NBR	Perbunan	2
FPM		4
CR	Neoprene	8
EPDM	KTW approval	14
PTFE/EPDM	fully laminated	52
PTFE/EPDM convex	PTFE loose	5E

"The combination of PFA or PTFE lining with 5E diaphragms is only conditionally suitable for gaseous media. If low seat leakage rates are required for gaseous media, other combinations are preferable."

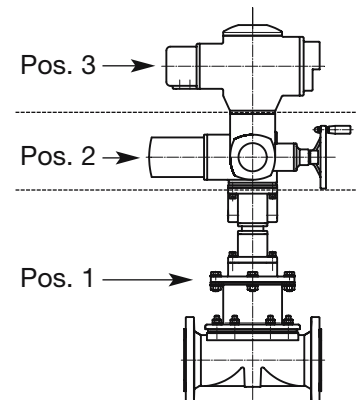
Order data: The order must include 3 items!

Item 1 Valve with adapter and suitable AUMA length unit
e.g. 628 80 D 52 13 14
For details of AUMA length unit see AUMA's own technical documentation.

Item 2 AUMA rotary actuator*
e.g. SA 07.1F1022D380/506822KN
For details see AUMA's own technical documentation.

Item 3 AUMA control unit*
Standard type AM01.1TP110/001 1110KC3F18E1
For details see AUMA's own technical documentation.

*Other types on request



Order example for item 1	628	50	D	53	17	14		
Type	628							
Nominal size		50						
Body configuration (code)			D					
Connection (code)				53				
Valve body material (code)					17			
Diaphragm material (code)						14		

Body dimensions

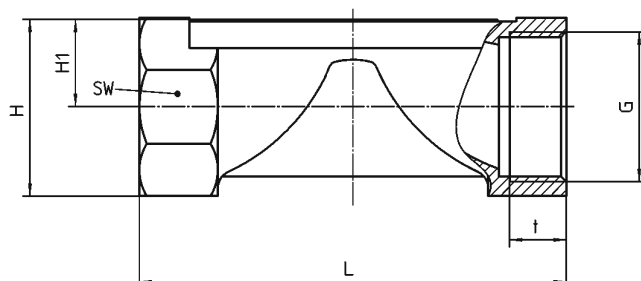
Threaded sockets - DIN ISO 228, connection code 1 [mm]

Valve body material GG 25 (Code 8)

MG	DN	G	L	H	H1	t	SW	Number of flats
40	40	G 1 1/2	140	61	28	18	65	6
50	50	G 2	165	73	35	18	75	6

For materials see overview on last page.

MG = diaphragm size



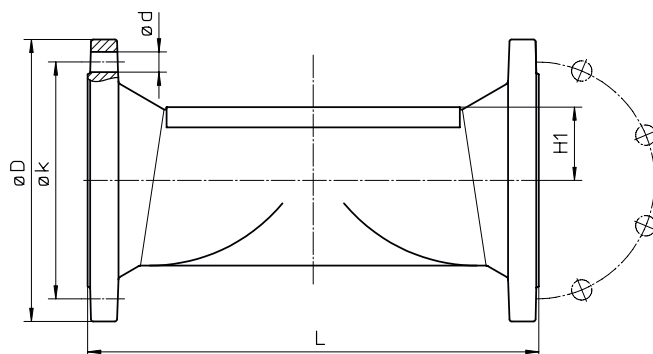
Flanges - DIN EN 1092-2, connection code 8, 52, 53 [mm]

Valve body material GG 25 (Code 8, 13, 55), GGG 40.3 (Code 17, 18, 83)

						H1				EN 558-1 series 1	EN 558-1 series 7 (ex BS 5156)
						Connection code 8			Connection code 52, 53	Connection code 8	Connect. code 52, 53
MG	DN	øD	øk	ød	No. of bolt holes	Material code 8, 55	Material code 13	Material code 17, 18, 83	Material code 8, 13	L Material code 8, 13, 17, 18, 55, 83	L Material code 8, 13
40	40	150	110	18	4	28.0	21.0	33.0	28.0	200	159
50	50	165	125	18	4	35.0	25.0	39.0	35.0	230	191
65	65	175	145	18	4	27.5	30.5	51.0	27.5	290	216
80	80	200	160	18	8	33.0	34.0	59.5	33.0	310	254
100	100	220	180	18	8	43.0	50.0	73.0	43.0	350	305
125	125	250	210	18	8	65.0	69.0	87.0	65.0	400	356
150	150	285	240	23	8	58.0	62.0	109.0	58.0	480	406

For materials see overview on last page.

MG = diaphragm size

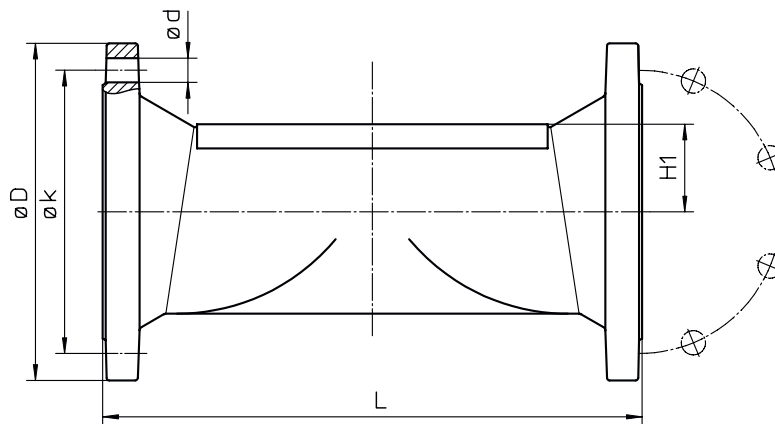


Flanges - ANSI B 16.5, connection code 38, 39, 58 [mm]
 Valve body material GG 25 (Code 8, 13), GGG 40.3 (Code 17, 18, 83)

						H1		MSS Sp-88		EN 558-2	EN 558-2
						Connection code 38, 39, 58		Connection code 38		series 1	series 7
MG	DN	øD	øk	ød	No. of bolt holes	Material code 8	Material code 17, 18, 83	L		Material code 8, 17, 18, 83	Material code 8
								Material code 17, 18,	83		
40	40	127.0	98.6	15.7	4	28.0	33.0	175	171.4	200	159
50	50	152.4	120.7	19.1	4	35.0	39.0	200	197.4	230	191
65	65	177.8	139.7	19.1	4	27.5	51.0	226	222.4	290	216
80	80	190.5	152.4	19.1	4	33.0	59.5	260	260.4	310	254
100	100	228.6	190.5	19.1	8	43.0	73.0	327	324.4	350	305
125	125	254.0	215.9	22.4	8	65.0	87.0	-	-	400	356
150	150	279.4	241.3	22.4	8	58.0	109.0	-	-	480	406

For materials see overview on last page.

MG = diaphragm size



Mounting position: vertical, standing

The complete weight of the actuator must be supported by a suitable bracket

Overview of valve bodies for GEMÜ 628

Connection code		1	8						38			39					52		53		58	
Material code		8	8	13	17	18	55	83	17	18	83	8	13	17	18	83	8	13	8	13	8	13
MG	DN																					
40	40	X	X	X	X*	X*	X	X*	X*	X*	X*	X	X	X*	X*	X*	X ¹	X ¹	X	X	X	X
50	50	X	X	X	X*	X*	X	X*	X*	X*	X*	X	X	X*	X*	X*	X ¹	X ¹	X	X	X	X
65	65	-	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X ¹	X ¹	X	X	X	X
80	80	-	X*	X	X*	X*	X	X*	X*	X*	X*	X	X	X*	X*	X*	X ¹	X ¹	X	X	X	X
100	100	-	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X ¹	X ¹	X	X	X	X
125	125	-	X	X	X	-	X	X	-	-	-	X	X	X	-	X	X ¹	X ¹	X	X	X	X
150	150	-	X	X	X	-	X	X	X	-	X	X	X	X	-	X	X ¹	X ¹	X	X	X	X

* Valve bodies are suitable for use with diaphragm code 5E.

X¹ = available in UK only

MG = Diaphragm size

Technical data sheet

Should there be any doubts or misunderstandings, the German version of this data sheet is the authoritative document!

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GEMÜ® VALVES, MEASUREMENT AND CONTROL SYSTEMS