

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

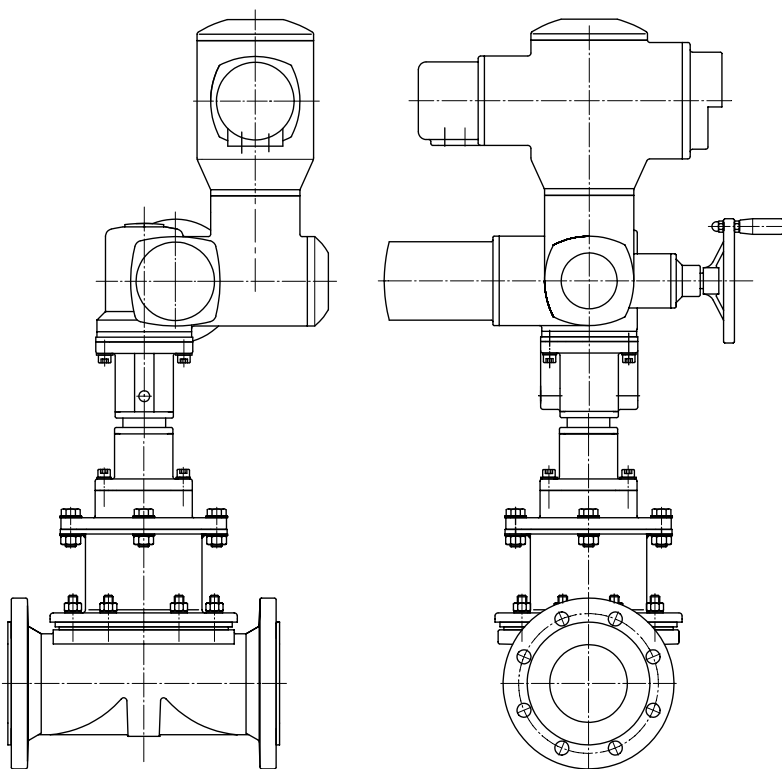
Advantages

- No auxiliary air pressure supply required
- Diaphragm valve body combinations for practically all media available
- Optional flow direction
- 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



GEMÜ 628



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 medium, body and diaphragm material)

Ambient conditions

Max. ambient temperature max. 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		Operating pressure	Kv value*
		EPDM/FPM [bar]	PTFE [bar]	[kg]	[m ³ /h]
40	32	0 - 10	0 - 6	40	36
	40				40
50	50	0 - 10	0 - 6	60	80
65	65	0 - 10	0 - 6	62	100
80	80	0 - 8	0 - 5	78	160
100	100	0 - 6	0 - 4	88	238
125	125	0 - 6	0 - 4	130	270
150	150	0 - 6	0 - 4	140	480

All pressures are gauge pressures. Operating pressure values were determined with static operating pressure applied on one side of a closed valve. Sealing at the valve seat and atmospheric sealing is ensured for the given values. Information on operating pressures applied on both sides and for high purity media on request.

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

MG = Diaphragm size

Kv values determined acc. to DIN EN 60534, inlet pressure 5 bar, Δp 1 bar, valve body material cast iron EN-GJL-250 and flanges EN 1092 length EN 558 series 1 and soft elastomer diaphragm.

The Kv values for other product configurations (e.g. other diaphragm or body materials) may differ. In general, all diaphragms are subject to the influences of pressure, temperature, the process and their tightening torques. Therefore the Kv values may exceed the tolerance limits of the standard.

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

Actuator types, control and regulating units

MG	DN	628 Open/close actuator	628 Regulating actuator
40	32 + 40	LE12.1 (50) + SA07.2 + AM01.1	LE12.1 (50) + SAR07.2 + AC01.2
50	50	LE12.1 (50) + SA07.2 + AM01.1	LE12.1 (50) + SAR07.2 + AC01.2
65	65	LE12.1 (50) + SA07.2 + AM01.1	LE12.1 (50) + SAR07.2 + AC01.2
80	80	LE25.1 (50) + SA07.6 + AM01.1	LE25.1 (50) + SAR07.6 + AC01.2
100	100	LE25.1 (50) + SA07.6 + AM01.1	LE25.1 (50) + SAR07.6 + AC01.2
125	125	LE25.1 (100) + SA07.6 + AM01.1	LE25.1 (100) + SAR07.6 + AC01.2
150	150	LE25.1 (100) + SA07.6 + AM01.1	LE25.1 (100) + SAR07.6 + AC01.2

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

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

MG = Diaphragm size

Our standard motorised actuators are for On/Off duty the Auma AM01.1 and for Regulation duty the Auma AC01.2. Other motorised actuators available on request.

Order data

Body configuration	Code
2/2 way	D

Connection	Code
Threaded connections	
Threaded sockets DIN ISO 228	1
Threaded sockets NPT	31
Flanges	
Flanges EN 1092 / PN16 / form B, length EN 558, series 1, ISO 5752, basic series 1	8
Flanges ANSI Class 150 RF, length MSS SP-88	38
Flanges ANSI Class 125/150 RF, length EN 558, series 1, ISO 5752, basic series 1	39
Flanges BS 10 Table "E", length EN 558, series 7, ISO 5752, basic series 7	51
Flanges EN 1092 / PN16 / form A, length EN 558, series 7, ISO 5752, basic series 7	53
Flanges ANSI Class 125/150 RF, length EN 558, series 7, ISO 5752, basic series 7	56
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-GJS-400-18-LT (GGG 40.3 cast iron) PFA lined	17
EN-GJS-400-18-LT (GGG 40.3 S.G. iron) PP lined	18
EN-GJS-500-7 (GGG 50 Ductile iron) PFA lined	81
EN-GJS-400-18-LT (GGG 40.3 S.G. iron) Hard rubber lined	83
EN-GJS-400-18-LT (GGG 40.3)	90
EN-GJS-500-7 (GGG 50 Ductile iron) PP lined	91

Diaphragm material	Code
NBR	2
FPM	4
CR	8
EPDM	14
EPDM	36
PTFE/EPDM, one-piece	54
PTFE/EPDM, two-piece	5M

Order data: The order must include 2 items!

Item 1 Valve with adapter and suitable AUMA linear thrust unit

e.g. 628 80 D 53 13 14

For details of the AUMA linear thrust unit see AUMA's own technical documentation.

Item 2 AUMA rotary actuator*

e.g. SA 07.2F1022D380/506822KN

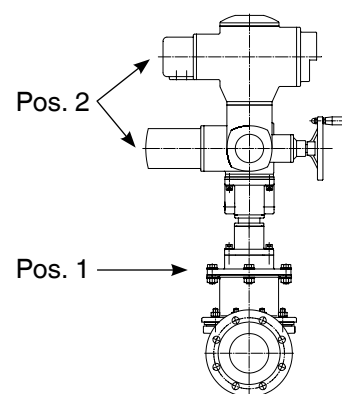
For details see AUMA's own technical documentation.

AUMA control unit*

Standard type AM01.1TP110/001 1110KC3F18E1

For details see AUMA's own technical documentation.

*Other types on request

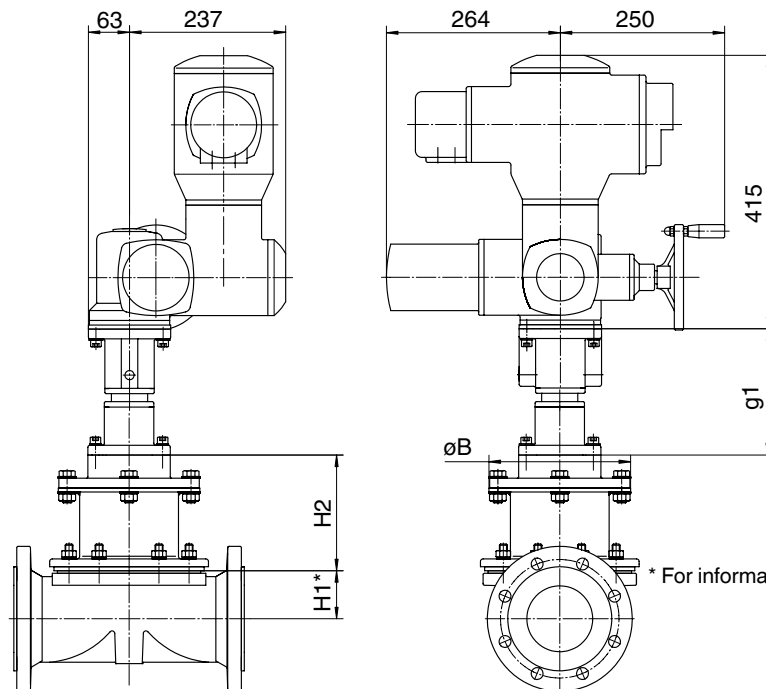


Order example for item 1	628	50	D	8	17	5M
Type	628					
Nominal size		50				
Body configuration (code)			D			
Connection (code)				8		
Valve body material (code)					17	
Diaphragm material (code)						5M

Dimensions [mm]

Actuator dimensions

Diaphragm size	DN	H2	g1	øB
40	32 + 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



Mounting position: vertical, standing
The complete weight of the actuator must be supported by a suitable bracket

Body dimensions [mm]

Flanges - DIN EN 1092 - series 1, connection code 8 Valve body material GG 25 (code 8), GGG 40.3 (code 17, 18, 83)

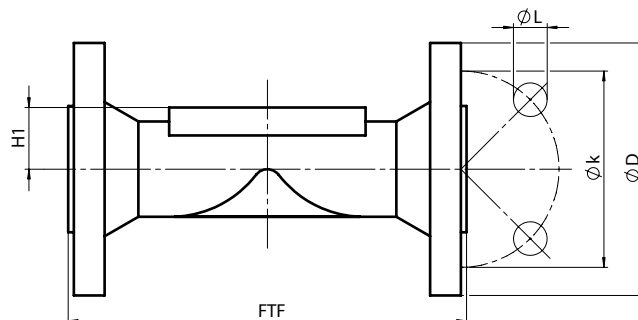
MG	DN	øD	øk	øL	Number of bolt	H1		FTF
						Material code 8	Material code 17, 18, 83	
40	32	140	100	19	4	28.0	28.7	180
	40	150	110	19	4	28.0	33.0	200
50	50	165	125	19	4	35.0	39.0	230
65	65	185	145	19	4	27.5	51.0	290
80	80	200	160	19	8	33.0	59.5	310
100	100	220	180	19	8	43.0	73.0	350
125	125	250	210	19	8	65.0	87.0	400
150	150	285	240	23	8	58.0	109.0	480

MG = diaphragm size For materials see overview on page 8

Flanges - DIN EN 1092 - series 7, connection code H3 Valve body material GG 25 (code 8), GGG 40.3 (code 17)

MG	DN	øD		øk	øL	Number of bolt	H1		FTF	
		Material code 8	Material code 17				Material code 8	Material code 17	Material code 8	Material code 17
40	32	140	-	100	19	4	28.0	-	-	-
	40	150	-	110	19	4	28.0	-	159.0	-
50	50	165	-	125	19	4	35.0	-	191.0	-
65	65	185	-	145	19	4	27.5	-	216.0	-
80	80	200	-	160	19	8	33.0	-	254.0	-
100	100	220	-	180	19	8	43.0	-	305.0	-
125	125	250	-	210	19	8	65.0	-	356.0	-
150	150	285	280*	240	23	8	58.0	109.0	406.0	416.0

* Diameter differs from standard MG = diaphragm size For materials see overview on page 8



Body dimensions [mm]

Flanges - ANSI Class 125/150 RF, connection code 38, 39 Valve body material GG 25 (code 8), GGG 40.3 (code 17, 18, 83)

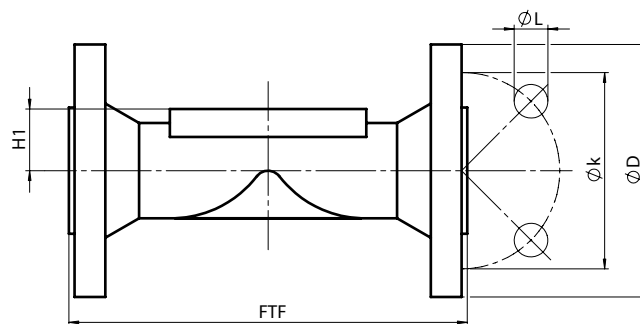
						H1		FTF		
						Connection code 38, 39		Connection code 38		Connection code 39
MG	DN	øD	øk	øL	Number of bolt	Material code 8	Material code 17, 18, 83	Material code 17, 18	Material code 83	Material code 8, 17, 18, 83
40	32	115	88.9	15.9	4	28.0	28.7	-	-	180.0
	40	125	98.4	15.9	4	28.0	33.0	175.0	171.4	200.0
50	50	150	120.7	19.0	4	35.0	39.0	200.0	197.4	230.0
65	65	180	139.7	19.0	4	27.5	51.0	226.0	222.4	290.0
80	80	190	152.4	19.0	4	33.0	59.5	260.0	260.4	310.0
100	100	230	190.5	19.0	8	43.0	73.0	327.0	324.4	350.0
125	125	255	215.9	22.2	8	65.0	87.0	-	-	400.0
150	150	280	241.3	22.2	8	58.0	109.0	416.0	-	480.0

MG = diaphragm size For materials see overview on page 8

Flanges - ANSI Class 125/150 RF, connection code 56 Valve body material GGG 40.3 (code 17), GGG 50 (code 81, 91)

MG	DN	øD	øk	øL	Number of bolt	H1	FTF
40	32	115	88.9	15.9	4	-	-
	40	125	98.4	15.9	4	32.0	165.0
50	50	150	120.7	19.0	4	40.0	191.0
65	65	180	139.7	19.0	4	-	-
80	80	190	152.4	19.0	4	58.0	254.0
100	100	230	190.5	19.0	8	70.0	311.0
125	125	255	215.9	22.2	8	-	-
150	150	280	241.3	22.2	8	109.0	416.0

MG = diaphragm size For materials see overview on page 8



Body dimensions [mm]

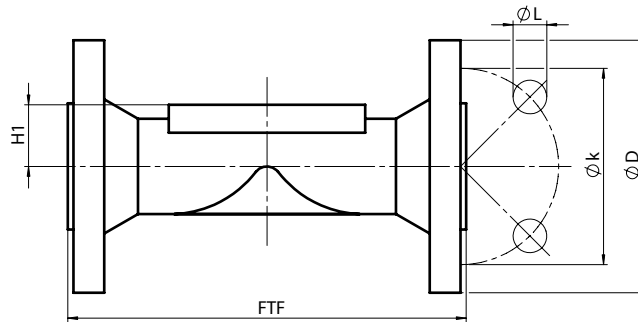
Flanges - BS 10 Table "E", connection code 51 Valve body material GGG 40.3 (code 17), GGG 50 (code 81, 91)

MG	DN	øD	øk	øL	Number of bolt	H1	FTF
40	40	125*	98	14	4	32	165
50	50	152	114	17	4	40	191
80	80	184	146	17	4	58	254
100	100	216	178	17	8	70	311
150	150	279	235	22	8	109	416

* Diameter differs from standard BS 10

MG = diaphragm size

For materials see overview on page 8



Threaded sockets, connection code 1 Valve body material GGG40.3 (code 90)

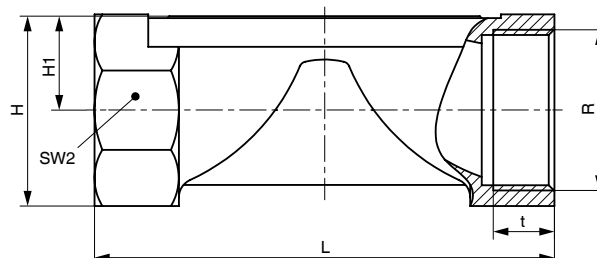
MG	DN	R	H	H1	t	L	SW2	Number of flats	Weight [kg]
40	32	G 11/4	56.0	28.5	21.4	120	55	6	0.88
	40	G 11/2	66.0	33.5	21.4	140	65	6	0.93
50	50	G 2	76.0	38.5	25.7	165	75	6	1.56

MG = diaphragm size

Threaded sockets, connection code 31 Valve body material GGG40.3 (code 90)

MG	DN	R	H	H1	t	L	SW2	Number of flats	Weight [kg]
40	32	NPT 11/4	56.0	28.5	17.3	120	55	6	0.88
	40	NPT 11/2	66.0	33.5	17.3	140	65	6	0.93
50	50	NPT 2	76.0	38.5	17.7	165	75	6	1.56

MG = diaphragm size



Overview of valve bodies for GEMÜ 628

Connection code		1	31	8			38			39				51			53		56			
Material code		90	90	8	17	18	83	17	18	83	8	17	18	83	17	81	91	8	17	17	81	91
MG	DN																					
40	32	X	X	X	X	X	X	-	-	-	X	X	X	X	-	-	-	-	-	-	-	-
	40	X	X	X	X	X	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	-	X	X*	X	-	-	X	X*
65**	65**	-	-	X	X	X	X	X	X*	X	X	X	X	X	-	-	-	X	-	-	-	-
80	80	-	-	X	X	X	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*	X	-	-	X	X*
125	125	-	-	X	X	-	X	-	-	-	X	X	-	X	-	-	-	X	-	-	-	-
150	150	-	-	X	X	-	X	X	-	X	X	X	-	X	X	-	-	X	X	X	-	-

* Connection code 38 / material code 18 on request

* Connection code 51 / material code 91 on request

* Connection code 56 / material code 91 on request

** When using PTFE diaphragms, only a diaphragm with code 54 is possible.

MG = diaphragm size

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

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