

Globe Valve, Metal

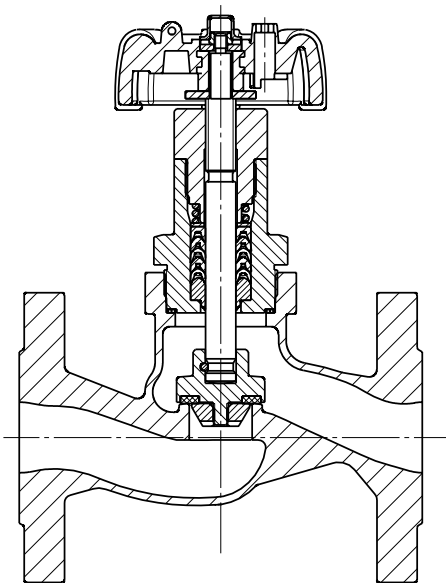
Construction

The GEMÜ 537 manually operated 2/2-way globe valve has an ergonomically designed plastic handwheel. The valve spindle is sealed by a self-adjusting gland packing providing low maintenance and reliable valve spindle sealing even after a long service life. The wiper ring fitted in front of the gland packing protects it against contamination and damage. A handwheel extension available as an option enables installation of the valve in insulated pipelines.

Features

- Valve bodies available in SG iron and stainless steel
- Good flow capability and compact design
- Modular system, the valve can also later be retrofitted with pneumatic actuators
- Optionally suitable for contact with food according to Regulation (EC) No. 1935/2004 (K-No. 2013)
- Standard gland packing suitable for vacuum up to 20 mbar (abs.)
- Handwheel locknut as standard
- Optionally available as control valve with regulating cone

Sectional drawing



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 seal material.

Max. perm. pressure of working medium see table

Media temperature -10° to 180 °C

Max. permissible viscosity 600 mm²/s (cSt)

Other versions for lower/higher temperatures and higher viscosities on request.

Ambient conditions

Max. ambient temperature 60 °C

Maximum permissible seat leakage rate

Seat seal	Standard	Test procedure	Leakage rate	Test medium
PTFE	DIN EN 12266-1	P12	A	air

Maximum permissible seat leakage class

Seat seal	Standard	Test procedure	Leakage rate	Test medium
PTFE	DIN EN 60534-4	1	VI	air
Metal	DIN EN 60534-4	1	IV	air

Nominal size	Max. operating pressure	Kv value
DN	[bar]	[m ³ /h]
15	40	4.6
20	40	8.0
25	40	13.0
32	40	22.0
40	40	35.0
50	16	50.0

Kv values determined in accordance with DIN EN 60534. The Kv value specifications refer to the largest actuator for the respective nominal size. The Kv values for other product configurations (e.g. other connection types or body materials) may differ.

Pressure / temperature correlation for globe valve bodies

Connection code	Material code	Max. allowable operating pressures in bar at temperature °C*					
		RT	100	150	200	250	300
8	37	16.0	16.0	14.5	13.4	12.7	11.8
10	37	25.0	25.0	22.7	21.0	19.8	18.5
11	37	40.0	40.0	36.3	33.7	31.8	29.7
39	37	19.0	16.0	14.8	13.6	12.0	10.2
8	90	16.0	16.0	15.5	14.7	13.9	11.2
39	90	17.0	16.0	14.8	13.9	12.1	10.2

* The valves can be used down to -10°C RT = Room Temperature All pressures are gauge pressures.
Pressure-temperature correlation for connection code 48: DN 15 - 40 see connection code 10, DN 50 see connection code 8.

Technical data

Correlation* Kv value, operating pressure, regulating cone number

Nominal size DN	Kv value [m ³ /h]	Operating pressure [bar]	Actuator size	Regulating cone no.	
				linear	equal-percentage
15	4.0	40	1	RS271	RS281
20	6.3	40	1	RS272	RS282
25	10.0	40	1	RS273	RS283
32	16.0	40	1	RS274	RS284
40	25.0	40	1	RS275	RS285
50	40.0	16	1	RS276	RS286

Please always order standard regulating cone with special function "C" – rigid valve plug.

Order data

Body configuration	Code
2/2-way body	D

Seat seal	Code
PTFE	5
PTFE, glass fibre reinforced	5G
Other seat seals on request	

Connection	Code
Flanges Flanges EN 1092 / PN16 / form B, length EN 558, series 1, ISO 5752, basic series 1	8
Flanges EN 1092 / PN25 / form B, length EN 558, series 1 ISO 5752, basic series 1	10
Flanges EN 1092 / PN40 / form B, length EN 558, series 1 ISO 5752, basic series 1	11
Flanges ANSI Class 150 RF, face-to-face dimension FTF EN 558 series 1, ISO 5752, basic series 1	39
Flanges drilled according to JIS 20K (DN 15 - 40), Flanges drilled according to JIS 10K (DN 50), length EN 558, series 10, ASME/ANSI B 16.10 table 1, column 16	48

Control function	Code
Manually operated with handwheel lock nut	0

Bonnet size	Code
Handwheel diameter 90 mm	1
Handwheel diameter 90 mm Handwheel extension	1E

Regulating cone	R-No.
For the regulating cone no. (R-No.) - linear or equal-percentage (mod.)- please refer to the table	

Valve body material	Code
1.4408, Investment casting	37
EN-GJS-400-18-LT (GGG 40.3), SG iron	90

Version	Code
Gland packing PTFE / PTFE suitable for contact with food according to EU Regulation 1935/2004	2013
Media temperature -10 to 210 °C (only with seat seal Code 5G and 10)	2023

Special version	Code
Rigid plug fixing	C

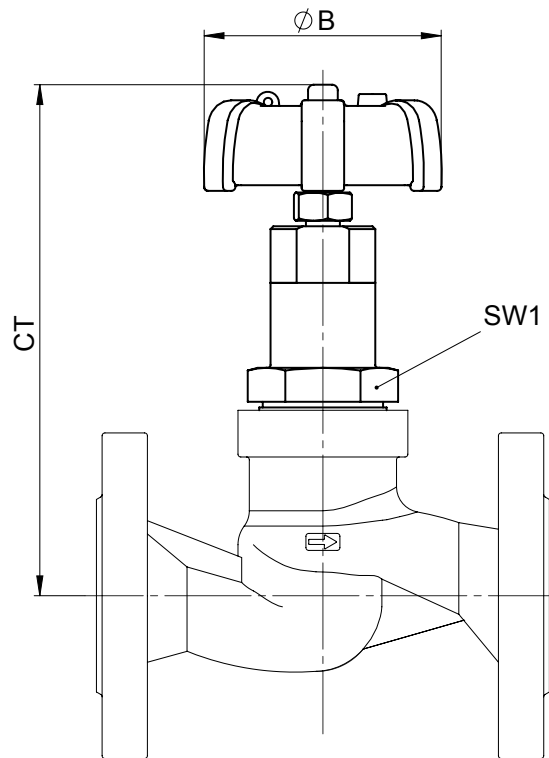
Order example	537	25	D	10	37	5	0	1	-	C
Type	537									
Nominal size		25								
Body configuration (code)			D							
Connection (code)				10						
Valve body material (code)					37					
Seat seal (code)						5				
Control function (code)							0			
Bonnet size (code)								1		
Regulating cone (R-No.)										
Version (code)										-
Special version (code)										C

Version for food contact
For food contact, the product must be ordered with the following ordering options:
Version code 2013
Seat seal code 5, 5G
Valve body material code 37

Dimensions [mm]

Installation dimensions

DN	SW1	ø B	CT (max. height)	
			Control function code 0	Bonnet code 1E
15	41	90	168	196
20	46	90	178	205
25	46	90	194	221
32	41	90	200	228
40	41	90	218	245
50	41	90	230	257

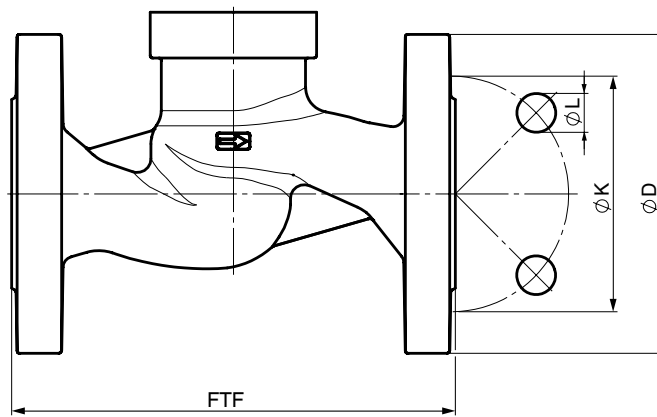


Body dimensions [mm]

Flanges. connection code 8, 10, 11, 39, 48
Valve body material: 1.4408 (code 37), EN-GJS-400-18-LT (code 90)

DN	Number of bolts	Connection code 8, 10, 11				Connection code 39				Connection code 48				Weight [kg]
		FTF	ø D	ø K	ø L	FTF	ø D	ø K	ø L	FTF	ø D	ø K	ø L	
15	4	130	95	65	14	130	90	60.3	15.9	108	95	70	15	2.2
20	4	150	105	75	14	150	100	69.9	15.9	117	100	75	15	3.0
25	4	160	115	85	14	160	110	79.4	15.9	127	125	90	19	3.7
32	4	180	140	100	18	180	115	88.9	15.9	-	-	-	-	5.3
40	4	200	150	110	18	200	125	98.4	15.9	165	140	105	19	6.3
50	4	230	165	125	18	230	150	120.7	19.0	203	155	120	19	8.4

For materials see overview on page 6



Overview of metal bodies for GEMÜ 537

Connection code	8		10	11	39		48
Material code	37	90	37	37	37	90	37
DN 15	-	X	-	X	X	X	X
DN 20	-	X	-	X	X	X	X
DN 25	-	X	-	X	X	X	X
DN 32	-	X	X	X	X	X	-
DN 40	-	X	X	X	X	X	X
DN 50	X	X	-	-	X	X	X

For further globe valves, accessories and other products, please see our Product Range catalogue and Price List.
 Contact GEMÜ.

GEMÜ VALVES, MEASUREMENT
 AND CONTROL SYSTEMS

