

Globe Valve, Metal

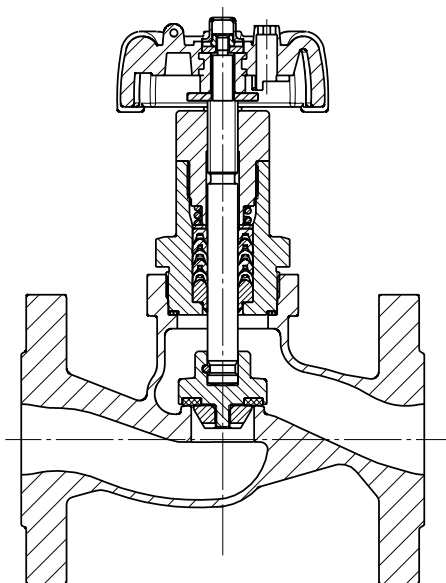
Construction

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 0.59 inHg (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 14 to 356 °F

Max. permissible viscosity 600 mm²/s (cSt)

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

Ambient conditions

Max. ambient temperature 140 °F

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	Cv value
DN	[psi]	[gpm]
15	580	5.4
20	580	9.4
25	580	15.2
32	580	25.7
40	580	40.9
50	232	58.5

Cv values determined in accordance with DIN EN 60534. The Cv value specifications refer to the largest actuator for the respective nominal size. The Cv 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 psi at temperature °F*					
		RT	212	302	392	482	572
8	37	232	232	210	194	184	171
10	37	363	363	329	305	287	268
11	37	580	580	526	489	461	431
39	37	276	232	215	197	174	148
8	90	232	232	225	213	202	162
39	90	247	232	215	202	175	148

* The valves can be used down to 14 °F 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	Kv value [m³/h]	Operating pressure [bar]	Actuator size	Regulating cone no.	
DN				linear	equal-percentage
15	4.7	580	1	RS271	RS281
20	7.4	580	1	RS272	RS282
25	11.7	580	1	RS273	RS283
32	18.7	580	1	RS274	RS284
40	29.3	580	1	RS275	RS285
50	46.8	232	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

Nominal size	Code
DN 15 NPS 1/2"	15
DN 20 NPS 3/4"	20
DN 25 NPS 1"	25
DN 32 NPS 1 1/4"	32
DN 40 NPS 1 1/2"	40
DN 50 NPS 2"	50

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

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

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

Control function	Code
Manually operated with handwheel lock nut	0

Bonnet size	Code
Handwheel diameter 3.54 inch	1
Handwheel diameter 3.54 inch Handwheel extension	1E

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

Version	Code
Gland packing PTFE / PTFE suitable for contact with food according to EU Regulation 1935/2004	2013
Media temperature 14 to 410 °F (only with seat seal Code 5G and 10)	2023

Special version	Code
Rigid plug fixing	C

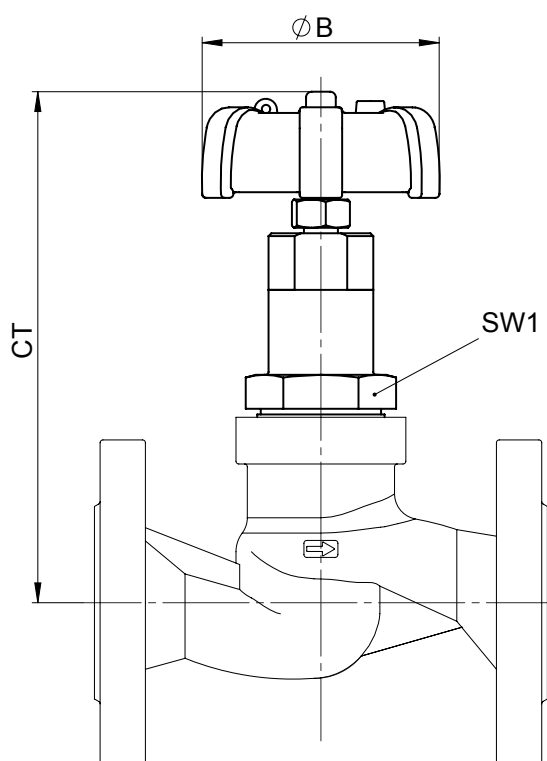
Order example	537	25	D	10	37	5	0	1	-	C
Type	537									
Nominal size		25								
Body configuration (code)			D							
Connection (code)				10						
Valve body material (code)					37					
Seat seal (code)						5				
Control function (code)							0			
Bonnet size (code)								1		
Regulating cone (R-No.)										
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	3.54	6.61	7.72
20	46	3.54	7.01	8.07
25	46	3.54	7.64	8.70
32	41	3.54	7,87	8.98
40	41	3.54	8.58	9.65
50	41	3.54	9.06	10.12

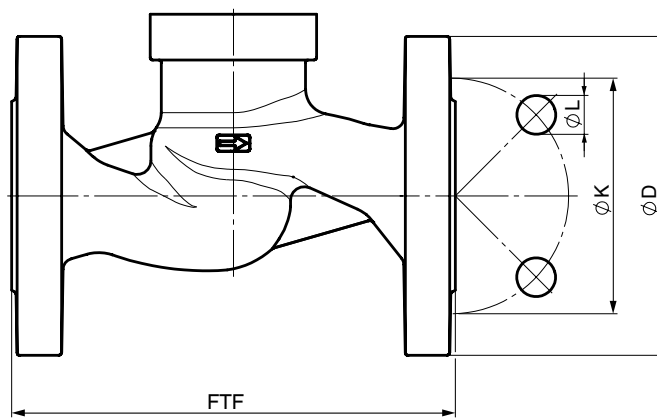


Body dimensions [inch]

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 [lbs]
		FTF	ø D	ø K	ø L	FTF	ø D	ø K	ø L	FTF	ø D	ø K	ø L	
15	4	5.12	3.74	2.56	0.55	5.12	3.54	2.37	0.63	4.25	3.74	2.76	0.59	4.8
20	4	5.91	4.13	2.95	0.55	5.91	3.94	2.75	0.63	4.61	3.94	2.95	0.59	6.6
25	4	6.30	4.53	3.35	0.55	6.30	4.33	3.13	0.63	5.00	4.92	3.54	0.75	8.2
32	4	7.09	5.51	3.94	0.71	7.09	4.53	3.50	0.63	-	-	-	-	11.7
40	4	7.87	5.91	4.33	0.71	7.87	4.92	3.87	0.63	6.50	5.51	4.13	0.75	13.9
50	4	9.06	6.50	4.92	0.71	9.06	5.91	4.75	0.75	7.99	6.10	4.72	0.75	18.5

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

