GEMÜ 534

Pneumatically operated globe valve

Features

- Simple and fast commissioning
- Valve and positioner are optimally adapted to each other
- Suitable for vacuum up to 20 mbar (a)

Description

The GEMÜ 534 2/2-way straight seat control valve has a plastic piston actuator and is pneumatically operated. The valve is designed for demanding flow control applications. It can be paired with positioners or process controllers dependent on the control requirements. 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. A wiper ring fitted in front of the gland packing protects the seal against contamination and damage.

Technical specifications

- **Media temperature :** -10 to 180 °C
- **Ambient temperature:** 0 to 60 °C
- **Operating pressure :** 0 to 40 bar
- **Nominal sizes:** DN 15 to 100
- **Body configurations:** 2/2-way body
- **Connection types:** Flange
- **Connection standards:** ANSI I ASME I EN I ISO I JIS
- **Body materials:** 1.4408, cast stainless steel material I EN-GJS-400-18-LT, SG iron material
- **Seat seal materials:** 1.4404 I PTFE I PTFE, reinforced
- **Conformities:** ATEX I CRN I EAC I FDA I FMEDA I Oxygen I Reg. (EU) No. 10/2011 I Regulation (EC) No. 1935/2004 I TA Luft (German Clean Air Act)

Technical data depends on the respective configuration

further information
webcode: GW-534_Rule

Comparison of functions/positioner properties

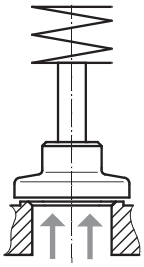
			
	GEMÜ 1434 µPos	**GEMÜ 1435 ePos**	**GEMÜ 1436 cPos**
Controller type			
Positioner	●	●	-
Positioners and process controllers	-	-	●
Ambient temperature	0 to 60 °C	-20 to 60 °C	0 to 60 °C
Supply voltage			
24 V DC	●	●	●
Flow rate	15 Nl/min	50 Nl/min 90 Nl/min	100 Nl/min 172 Nl/min 84 Nl/min
Measuring range			
Max. 30 mm, linear	●	●	●
Max. 50 mm, linear	-	●	●
Max. 75 mm, linear	-	●	●
Max. 90°, radial	-	●	●
Electrical connection type			
M12 cable gland	-	●	-
M12 connector	●	●	●
Programmable outputs			
No	●	-	-
Yes	-	●	●
Input option			
No	●	-	-
Yes	-	●	●
Conformity			
EAC	●	●	●

Product description

Construction

Item	Name	Materials
1	GEMÜ 1436 positioner	
2	Piston actuator	Plastic
3	Valve body	1.4408, investment casting EN-GJS-400-18-LT (GGG 40.3), SG iron

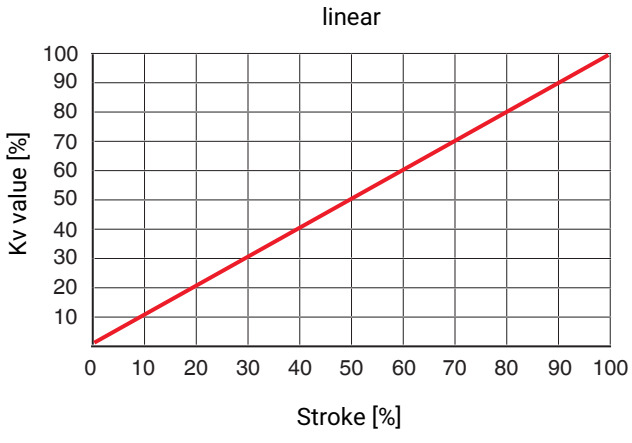
Flow direction

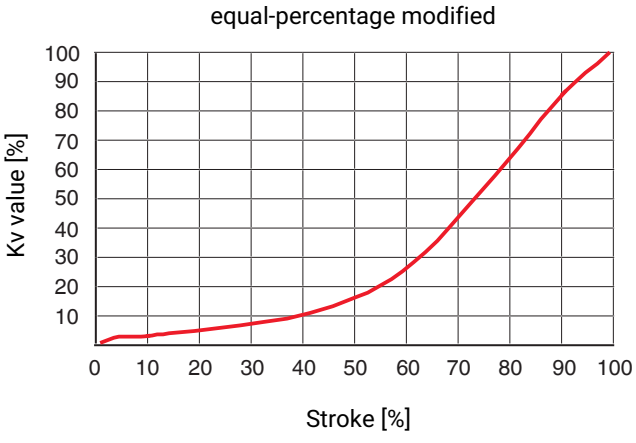


Flow under the seat

The flow direction is indicated by an arrow on the valve body.

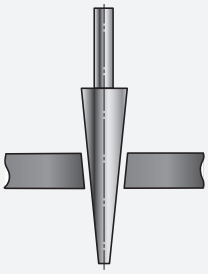
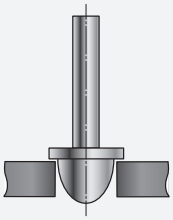
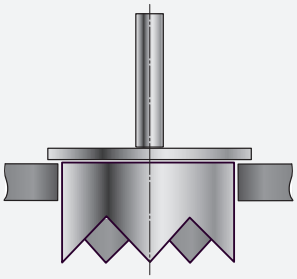
Kv value diagram





The diagram shows the approximative curve of the Kv value characteristic. The characteristic may deviate depending on valve body, nominal size, regulating cone and valve stroke.

Regulating needle/regulating cone/regulating cage

Regulating needle	Regulating cone	Regulating cage
		
Regulating needle: RAxxx – RCxxx (reduced valve seat)	Regulating cone: DN 15 - 50	Regulating cage: DN 65 – 100

GEMÜ CONEXO

The interaction of valve components that are equipped with RFID chips and an associated IT infrastructure actively increase process reliability.

Thanks to serialization, every valve and every relevant valve component such as the body, actuator or diaphragm, and even automation components, can be clearly traced and read using the CONEXO pen RFID reader. The CONEXO app, which can be installed on mobile devices, not only facilitates and improves the "installation qualification" process, but also makes the maintenance process much more transparent and easier to document. The app actively guides the maintenance technician through the maintenance schedule and directly provides him with all the information assigned to the valve, such as test reports, testing documentation and maintenance histories. The CONEXO portal acts as a central element, helping to collect, manage and process all data.

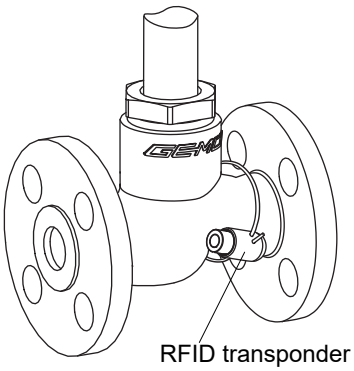
For further information on GEMÜ CONEXO please visit:
www.gemu-group.com/conexo

Ordering

GEMÜ Conexo must be ordered separately with the ordering option "CONEXO".

In the corresponding design with CONEXO, this product has an RFID chip for electronic identification purposes. The position of the RFID chip can be seen below.

Installing the RFID chip



Availability

Actuator assignment

DN	Normally closed			Normally open/double acting		
	Piston dia. [mm]					
	50	70	120	50	70	120
	Actuator size					
	0	1	2	0	1	2
15	X	X	-	X	X	-
20	X	X	X	X	X	X
25	X	X	X	X	X	X
32	-	X	X	-	X	X
40	-	X	X	-	X	X
50	-	X	X	-	X	X
65	-	-	X	-	-	X
80	-	-	X	-	-	X
100	-	-	X	-	-	X

Flange

DN	Connection type code [1]						
	8		10	11	39		48
	Material code [2]						
	37	90	37	37	37	90	37
15	-	X	-	X	X	X	X
20	-	X	-	X	X	X	X
25	-	X	-	X	X	X	X
32	-	X	X	X	X	X	-
40	-	X	X	X	X	X	X
50	X	X	-	X	X	X	X
65	X	X	-	X	X	X	-
80	X	X	-	X	X	X	-
100	X	X	-	X	X	X	-

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
Code 10: Flange EN 1092, PN 25, form B, face-to-face dimension FTF EN 558 series 1, ISO 5752, basic series 1
Code 11: Flange EN 1092, PN 40, form B, face-to-face dimension FTF EN 558 series 1, ISO 5752, basic series 1
Code 39: Flange ANSI Class 125/150 RF, face-to-face dimension FTF EN 558 series 1, ISO 5752, basic series 1,
Code 48: Flange JIS 20K, face-to-face dimension FTF EN 558 series 10, ASME/ANSI B16.10 table 1, column 16, DN 50 drilled to JIS 10K

2) **Valve body material**
Code 37: 1.4408, investment casting
Code 90: EN-GJS-400-18-LT (GGG 40.3)

Type of design

Type of design	
For contact with foodstuffs, the product must be ordered with the following ordering options (code 2013)	Seat seal (code 5, 5G) Valve body material (code 37)

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
Globe valve, pneumatically operated, plastic piston actuator	534

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

3 Body configuration	Code
2/2-way body	D

4 Connection type	Code
Flange EN 1092, PN 16, form B, face-to-face dimension FTF EN 558 series 1, ISO 5752, basic series 1	8
Flange EN 1092, PN 25, form B, face-to-face dimension FTF EN 558 series 1, ISO 5752, basic series 1	10
Flange EN 1092, PN 40, form B, face-to-face dimension FTF EN 558 series 1, ISO 5752, basic series 1	11
Flange ANSI Class 125/150 RF, face-to-face dimension FTF EN 558 series 1, ISO 5752, basic series 1,	39
Flange JIS 20K, face-to-face dimension FTF EN 558 series 10, ASME/ANSI B16.10 table 1, column 16, DN 50 drilled to JIS 10K	48

5 Valve body material	Code
1.4408, investment casting	37
EN-GJS-400-18-LT (GGG 40.3)	90

6 Seat seal	Code
PTFE	5
PTFE, glass fibre reinforced	5G
1.4404	10
Note: Code 10, steel (standard up to Kv value 1.00 m³/h) R-No. on request	

7 Control function	Code
Normally closed (NC)	1
Double acting (DA)	3
Double acting and normally open	8
Note: Code 3 and 8, R-No. on request	

8 Actuator version	Code
Actuator size 0	0
Actuator size 1	1
Actuator size 2	2

9 Regulating cone	Code
Please find the number of the optional regulating cone (R-No.) for the linear or equal-percentage modified regulating cone in the Kv value table.	R....

10 Type of design	Code
Standard	
Spindle seal PTFE-PTFE	2013

11 Special version	Code
Standard	
Special version for oxygen, (max. temperature 60 °C; max. operating pressure 10 bar), flow direction only possible under the seat! Media-wetted seal materials and auxiliary materials with BAM testing	S

12 CONEXO	Code
Without	
Integrated RFID chip for electronic identification and traceability	C

Order example

Ordering option	Code	Description
1 Type	534	Globe valve, pneumatically operated, plastic piston actuator
2 DN	25	DN 25
3 Body configuration	D	2/2-way body
4 Connection type	10	Flange EN 1092, PN 25, form B, face-to-face dimension FTF EN 558 series 1, ISO 5752, basic series 1
5 Valve body material	37	1.4408, investment casting

Order data

Ordering option	Code	Description
6 Seat seal	5	PTFE
7 Control function	1	Normally closed (NC)
8 Actuator version	1	Actuator size 1
9 Regulating cone	RS034	10 m³/h – mod.EQ
10 Type of design		Standard
11 Special version		Standard
12 CONEXO		Without

Technical data

Medium

Working medium: Corrosive, inert, gaseous and liquid media and steam which have no negative impact on the physical and chemical properties of the body and seal material.

Control medium: Inert gases

Max. permissible viscosity: 600 mm²/s (cSt)
Other versions for lower/higher temperatures and higher viscosities on request.

Temperature

Media temperature: -10 — 180 °C

Ambient temperature: 0 — 60 °C

Control medium temperature: 0 — 60 °C

Storage temperature: -20 — 60 °C

Pressure

Control valve: Valve body material 1.4408 (code 37), EN-GJS-400-18-LT (code 90)

DN	Kv value [m³/h]	Operating pressure [bar]	Actuator size	Regulating cone number	
				Linear	Equal-percentage (mod.)
15	4.0	12.0	**0**	**RS021**	**RS031**
		40.0	**1**	**RS020**	**RS030**
20	6.3	6.0	**0**	**RS022**	**RS032**
		20.0	**1**	**RS023**	**RS033**
25	10.0	10.0	**1**	**RS024**	**RS034**
32	16.0	7.0	**1**	**RS028**	**RS038**
		20.0	**2**	**RS025**	**RS035**
40	25.0	4.5	**1**	**RS029**	**RS039**
		12.0	**2**	**RS026**	**RS036**
50	40.0	3.0	**1**	**RS363**	**RS353**
		10.0	**2**	**RS027**	**RS037**
65	63.0	7.0	**2**	**-**	**RS350**
80	90.0	5.0	**2**	**-**	**RS351**
100	140.0	2.5	**2**	**-**	**RS352**

Control valve:

Valve body material 1.4408 (code 37)

DN	Kv value [m³/h]	Operating pressure [bar]	Actuator size	Regulating cone number	
				Linear	Equal-percentage (mod.)
15	0.1*	40.0	**1**	**RA101**	**RA301**
	0.16*	40.0	**1**	**RB101**	**RA302**
	0.25*	40.0	**1**	**RB102**	**RB302**
	0.4*	40.0	**1**	**RB103**	**RB301**
	0.63*	40.0	**1**	**RC101**	**RC301**
	1.0*	40.0	**1**	**RC102**	**RC302**
	1.6	40.0	**1**	**RD101**	**RD301**
	2.5	40.0	**1**	**RE101**	**RE301**
20	1.6	40.0	**1**	**RD102**	**RD302**
	2.5	40.0	**1**	**RE102**	**RE302**
	4.0	40.0	**1**	**RF101**	**RF301**
25	2.5	40.0	**1**	**RE103**	**RE303**
	4.0	40.0	**1**	**RF102**	**RF303**
	6.3	18.0	**1**	**RG101**	**RG301**
32	4.0	40.0	**1**	**RF103**	**RF302**
	6.3	18.0	**1**	**RG102**	**RG302**
	10.0	10.0	**1**	**RH102**	**RH301**
40	6.3	40.0	**1**	**RG103**	**RG303**
	10.0	24.0	**1**	**RH101**	**RH302**
	16.0	15.0	**1**	**RJ101**	**RJ302**
50**	10.0	16.0	**1**	**RH103**	**RH303**
	16.0	12.0	**1**	**RJ102**	**RJ301**
	25.0	16.0	**2**	**RK101**	**RK301**

*metal seated

**only for connection code 8, 39, 48

Please observe the pressure/temperature correlation table.

Pressure/temperature correlation:

Connection type code	Material code	Permissible operating pressures in bar at temperature in °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

All pressures are gauge pressures.
The valves are suitable for temperatures as low as -10 °C
RT = room temperature
Pressure/temperature correlation for connection code 48: DN 15–40 see connection code 10, DN 50 see connection code 8.

Pressure rating:

PN 16

PN 25

PN 40

Leakage rate:

Control valve

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

Filling volume:

Actuator 0: 0.050 dm³
Actuator 1: 0.125 dm³
Actuator 2: 0.625 dm³

Control pressure:

max. 7.0 bar

Product conformity

Food:

Regulation (EC) No. 1935/2004*
Regulation (EC) No. 10/2011*
FDA*

TA Luft (German Clean Air Act):

The product complies with the equivalence requirements of section 5.2.6.4 of the German Clean Air Act (TA Luft / VDI 2440 according to section 3.3.1.3)

* depending on version and/or operating parameters

Pressure Equipment Directive:

2014/68/EU

Machinery Directive:

2006/42/EC

Explosion protection:

ATEX (2014/34/EU) on request

Mechanical data

Weight:

Total weight without positioner

DN	Actuator size		
	0	1	2
15	3.1	3.6	7.8
20	4.1	4.6	8.6
25	5.0	5.5	9.3
32	-	7.7	10.9
40	-	9.0	11.9
50	-	11.8	14.0
65	-	-	21.5
80	-	-	25.1
100	-	-	33.4

Weights in kg

Weight:

Valve body

DN	Weight
15	2.2
20	3.0
25	3.7
32	5.3
40	6.3
50	11.5
65	12.7
80	15.4
100	23.0

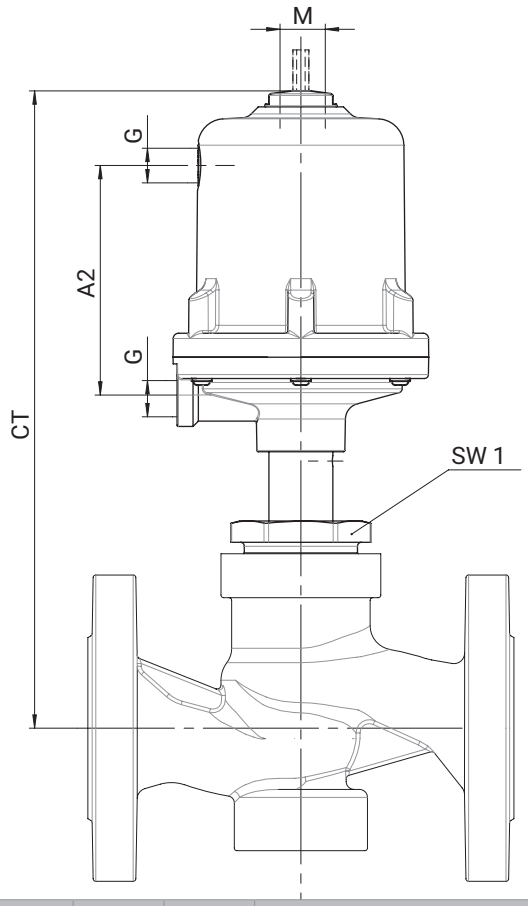
Weights in kg

Technical data for positioner

For the technical data and order data of the positioners, please refer to the GEMÜ 1434, 1435 and 1436 datasheets.
Please also note the table on page 2.

Dimensions without positioner

Installation dimensions



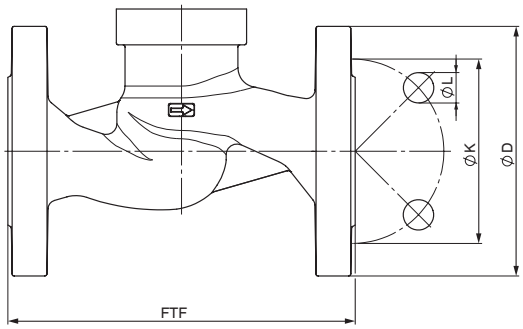
DN	WAF1 metric	G	Actuator size											
			0				1				2			
			A2	ØB	CT	M	A2	ØB	CT	M	A2	ØB	CT	M
15	36.0	G 1/4	70.0	72.0	196.0	M16x1	86.0	96.0	224.0	M16x1	-	-	-	-
20	41.0	G 1/4	70.0	72.0	203.0	M16x1	86.0	96.0	231.0	M16x1	149.0	168.0	328.0	M22x1.5
25	46.0	G 1/4	70.0	72.0	214.0	M16x1	86.0	96.0	242.0	M16x1	149.0	168.0	339.0	M22x1.5
32	55.0	G 1/4	-	-	-	-	86.0	96.0	247.0	M16x1	149.0	168.0	344.0	M22x1.5
40	60.0	G 1/4	-	-	-	-	86.0	96.0	258.0	M16x1	149.0	168.0	355.0	M22x1.5
50	75.0	G 1/4	-	-	-	-	86.0	96.0	266.0	M16x1	149.0	168.0	363.0	M22x1.5
65	75.0	G 1/4	-	-	-	-	-	-	-	-	149.0	168.0	391.0	M22x1.5
80	75.0	G 1/4	-	-	-	-	-	-	-	-	149.0	168.0	406.0	M22x1.5
100	75.0	G 1/4	-	-	-	-	-	-	-	-	149.0	168.0	427.0	M22x1.5

Dimensions in mm

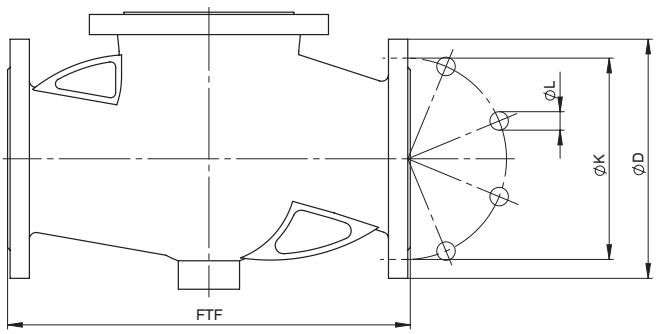
Body dimensions

Flange EN (code 8)

DN 15 - 50



DN 65 - 100



Connection type flange, length EN 558 (code 8) [1], SG iron material (code 90) [2]

DN	NPS	ø D	FTF	ø k	ø L	n
15	**1/2"**	95.0	130.0	65.0	14.0	4
20	**3/4"**	105.0	150.0	75.0	14.0	4
25	**1"**	115.0	160.0	85.0	14.0	4
32	**1¼"**	140.0	180.0	100.0	18.0	4
40	**1½"**	150.0	200.0	110.0	18.0	4
50	**2"**	165.0	230.0	125.0	18.0	4
65	**2½"**	185.0	290.0	145.0	18.0	4
80	**3"**	200.0	310.0	160.0	18.0	8
100	**4"**	220.0	350.0	180.0	18.0	8

Connection type flange, length EN 558 (code 8) [1], investment casting material (code 37) [2]

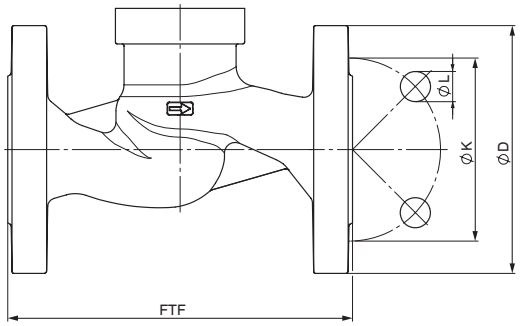
DN	NPS	ø D	FTF	ø k	ø L	n
50	**2"**	165.0	230.0	125.0	18.0	4
65	**2½"**	185.0	290.0	145.0	18.0	4
80	**3"**	200.0	310.0	160.0	18.0	8
100	**4"**	220.0	350.0	180.0	18.0	8

Dimensions in mm
n = number of bolts

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

2) **Valve body material**
Code 37: 1.4408, investment casting
Code 90: EN-GJS-400-18-LT (GGG 40.3)

Flange EN (code 10, 11, 48)



Connection type flange, length EN 558 (code 10) [1], investment casting material (code 37) [2]

DN	NPS	ø D	FTF	ø k	ø L	n
32	**1¼"**	140.0	180.0	100.0	18.0	4
40	**1½"**	150.0	200.0	110.0	18.0	4

Connection type flange, length EN 558 (code 11) [1], investment casting material (code 37) [2]

DN	NPS	ø D	FTF	ø k	ø L	n
15	**1/2"**	95.0	130.0	65.0	14.0	4
20	**3/4"**	105.0	150.0	75.0	14.0	4
25	**1"**	115.0	160.0	85.0	14.0	4
32	**1¼"**	140.0	180.0	100.0	18.0	4
40	**1½"**	150.0	200.0	110.0	18.0	4
50	**2"**	165.0	230.0	125.0	18.0	4
65	**2½"**	185.0	290.0	145.0	18.0	8
80	**3"**	200.0	310.0	160.0	18.0	8
100	**4"**	235.0	350.0	190.0	22.0	8

Connection type flange, length EN 558 (code 48), investment casting material (code 37) [2]

DN	NPS	ø D	FTF	ø k	ø L	n
15	**1/2"**	95.0	108.0	70.0	15.0	4
20	**3/4"**	100.0	117.0	75.0	15.0	4
25	**1"**	125.0	127.0	90.0	19.0	4
40	**1½"**	140.0	16.0	105.0	19.0	4
50	**2"**	155.0	203.0	120.0	19.0	4

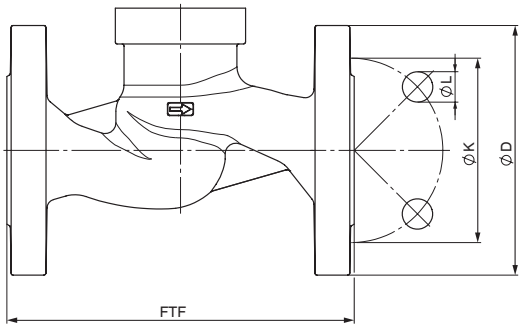
Dimensions in mm
n = number of bolts

1) **Connection type**
Code 10: Flange EN 1092, PN 25, form B, face-to-face dimension FTF EN 558 series 1, ISO 5752, basic series 1
Code 11: Flange EN 1092, PN 40, form B, face-to-face dimension FTF EN 558 series 1, ISO 5752, basic series 1
Code 48: Flange JIS 20K, face-to-face dimension FTF EN 558 series 10, ASME/ANSI B16.10 table 1, column 16, DN 50 drilled to JIS 10K

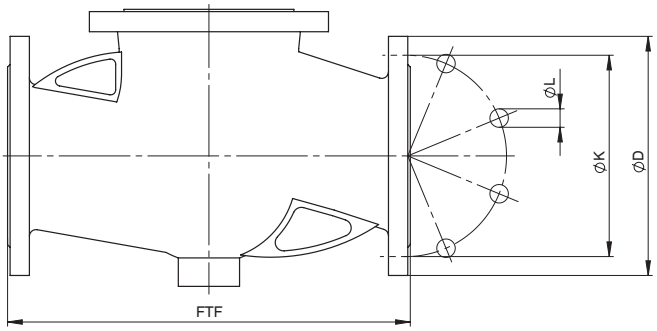
2) **Valve body material**
Code 37: 1.4408, investment casting

Flange ANSI Class (code 39)

DN 15 - 50



DN 65 - 100



Connection type flange, length EN 558 (code 39) [1], investment casting material (code 37), SG iron material (code 90) [2]

DN	NPS	ø D	FTF	ø k	ø L	n
15	**1/2"**	90.0	130.0	60.3	15.9	4
20	**3/4"**	100.0	150.0	69.9	15.9	4
25	**1"**	110.0	160.0	79.4	15.9	4
32	**1¼"**	115.0	180.0	88.9	15.9	4
40	**1½"**	125.0	200.0	98.4	15.9	4
50	**2"**	150.0	230.0	120.7	19.0	4
65	**2½"**	180.0	290.0	139.7	19.0	4
80	**3"**	190.0	310.0	152.4	19.0	4
100	**4"**	230.0	350.0	190.5	19.0	8

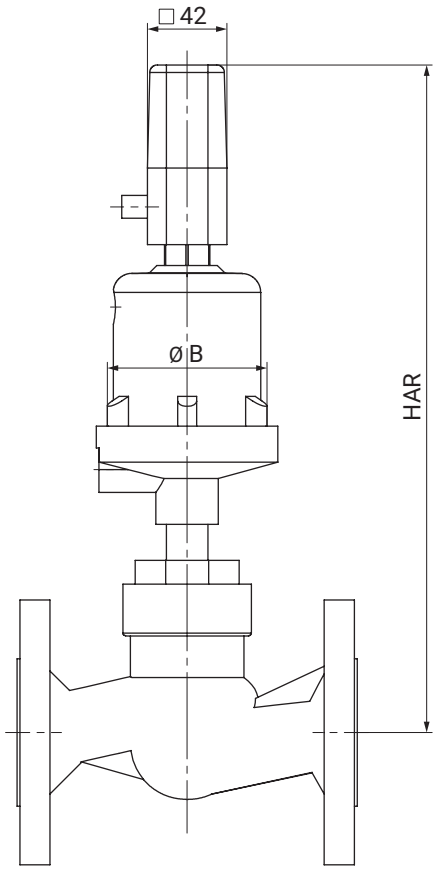
Dimensions in mm
n = number of bolts

1) **Connection type**
Code 39: Flange ANSI Class 125/150 RF, face-to-face dimension FTF EN 558 series 1, ISO 5752, basic series 1,

2) **Valve body material**
Code 37: 1.4408, investment casting
Code 90: EN-GJS-400-18-LT (GGG 40.3)

Dimensions with positioner

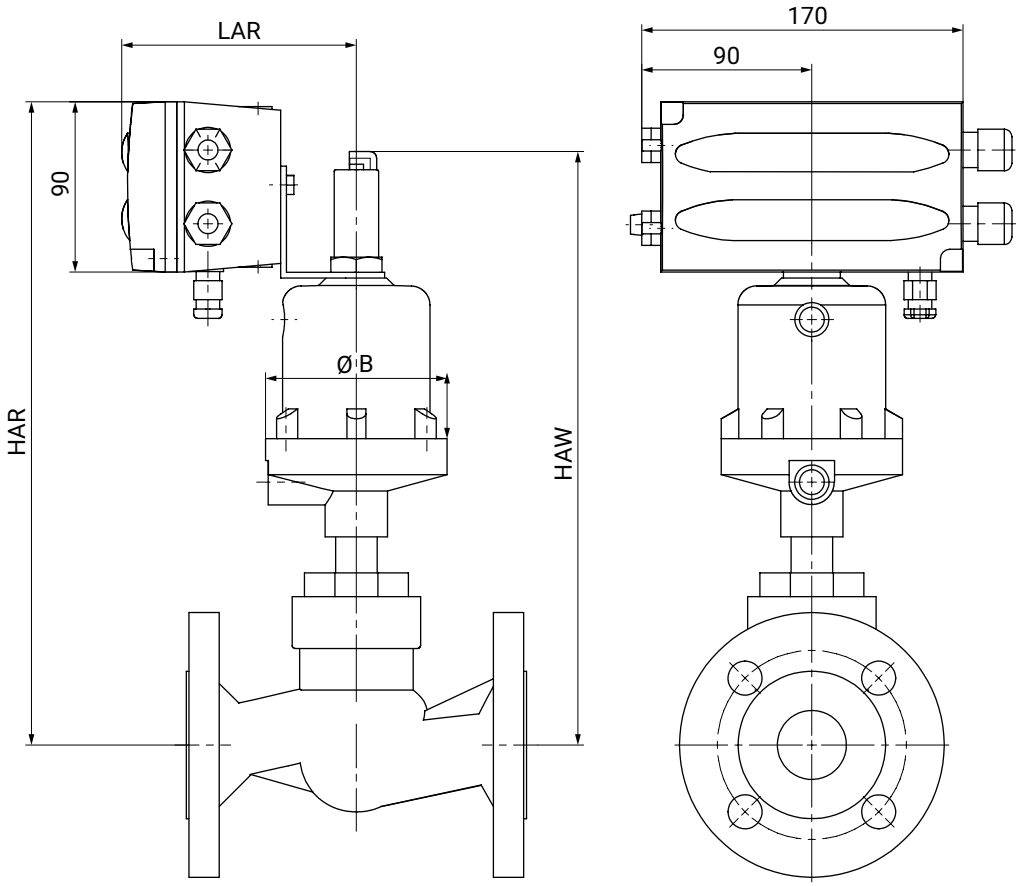
GEMÜ 534 with 1434 µPos



DN	Actuator size	Control function	ØB	HAR
15	**0**	**1**	72.0	294.0
	1	**1**	96.0	322.0
20	**0**	**1**	72.0	301.0
	1	**1**	96.0	329.0
25	**0**	**1**	72.0	312.0
	1	**1**	96.0	340.0
32	**1**	**1**	96.0	345.0
40	**1**	**1**	96.0	356.0
50	**1**	**1**	96.0	364.0

Dimensions in mm

GEMÜ 534 with 1435 ePos

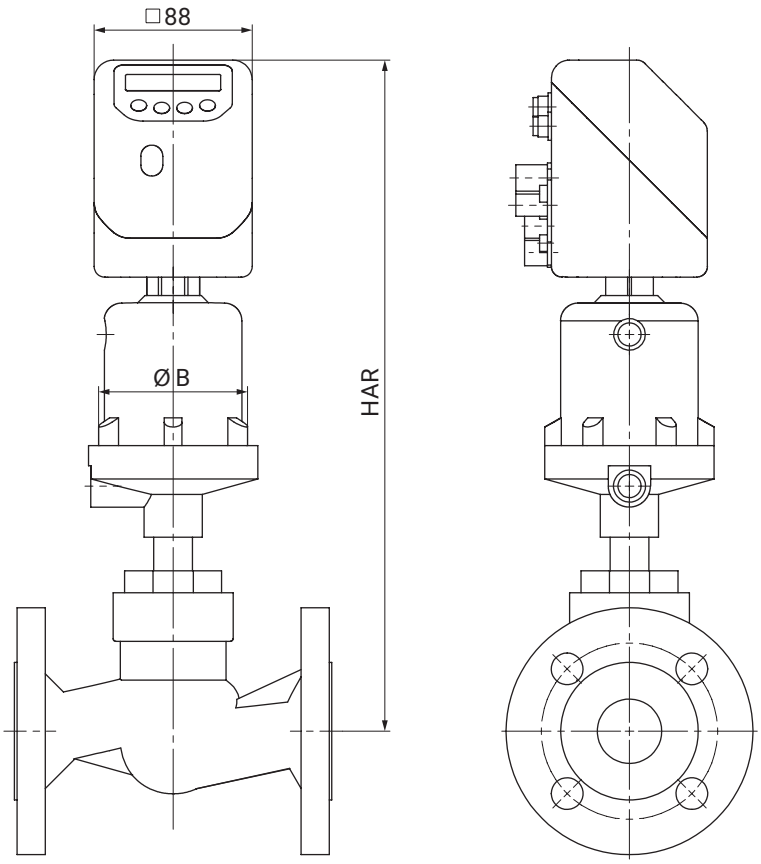


DN	Actuator size	Control function	ØB	HAR	HAW	LAR
15	**0**	**1**	72.0	278.0	251.0	118.0
	1	**1**	96.0	306.0	279.0	118.0
		3, 8	96.0	330.0	303.0	118.0
20	**0**	**1**	72.0	285.0	258.0	118.0
	1	**1**	96.0	313.0	286.0	118.0
		3, 8	96.0	337.0	310.0	118.0
	2	**1**	168.0	413.0	408.0	138.0
		3, 8	168.0	432.0	427.0	138.0
25	**0**	**1**	72.0	296.0	269.0	118.0
	1	**1**	96.0	324.0	297.0	118.0
		3, 8	96.0	348.0	321.0	118.0
	2	**1**	168.0	424.0	419.0	138.0
		3, 8	168.0	443.0	438.0	138.0
32	**1**	**1**	96.0	329.0	302.0	118.0
		3, 8	96.0	353.0	326.0	118.0
	2	**1**	168.0	429.0	424.0	138.0
		3, 8	168.0	448.0	443.0	138.0
40	**1**	**1**	96.0	340.0	313.0	118.0
		3, 8	96.0	364.0	337.0	118.0
	2	**1**	168.0	440.0	435.0	138.0
		3, 8	168.0	459.0	454.0	138.0
50	**1**	**1**	96.0	348.0	321.0	118.0

DN	Actuator size	Control function	ØB	HAR	HAW	LAR
		3, 8	96.0	372.0	345.0	118.0
	2	**1**	168.0	448.0	443.0	138.0
		3, 8	168.0	467.0	462.0	138.0
65	**2**	**1**	168.0	374.0	369.0	138.0
		3, 8	168.0	393.0	388.0	138.0
80	**2**	**1**	168.0	374.0	369.0	138.0
		3, 8	168.0	393.0	388.0	138.0
100	**2**	**1**	168.0	374.0	369.0	138.0
		3, 8	168.0	393.0	388.0	138.0

Dimensions in mm

GEMÜ 534 with 1436 cPos



DN	Actuator size	Control function	ØB	HAR
15	**0**	**1, 3**	72.0	347.0
	1	**1**	96.0	351.0
		3	96.0	375.0
20	**0**	**1, 3**	72.0	354.0
	1	**1**	96.0	358.0
		3	96.0	382.0
	2	**1**	168.0	480.0
		3	168.0	499.0
25	**0**	**1, 3**	72.0	365.0
	1	**1**	96.0	369.0
		3	96.0	393.0
	2	**1**	168.0	492.0
		3	168.0	510.0
32	**1**	**1**	96.0	374.0
		3	96.0	398.0
	2	**1**	168.0	496.0
		3	168.0	515.0
40	**1**	**1**	96.0	385.0
		3	96.0	409.0
	2	**1**	168.0	508.0
		3	168.0	526.0
50	**1**	**1**	96.0	393.0

DN	Actuator size	Control function	ØB	HAR
		3	96.0	417.0
	2	**1**	168.0	516.0
		3	168.0	534.0
65	**2**	**1**	168.0	442.0
		3	168.0	460.0
80	**2**	**1**	168.0	442.0
		3	168.0	460.0
100	**2**	**1**	168.0	442.0
		3	168.0	460.0

Dimensions in mm

send an E-Mail

Reference no.

Specification | GEMÜ regulating cones for globe valves

Customer/Project _____ Contact person _____

Date _____ Phone _____

Contact person (GEMÜ) _____ E-mail _____

Technical requirements

Medium [1]

Requirement characteristic	1st operating point maximum flow	2nd operating point medium flow	3rd operating point minimum flow
Media temperature [4]	°C	°C	°C
Inlet pressure	bar(g)	bar(g)	bar(g)
Outlet pressure	bar(g)	bar(g)	bar(g)
Flow rate [2, 3]			
in [m³/h] for liquids	m³/h	m³/h	m³/h
for gases [6]	Nm³/h	Nm³/h	Nm³/h
in [kg/h] for steam	kg/h	kg/h	kg/h

Operation	Manual ○					
	Pneumatic ○	Control function	○ NC (normally closed)	○ NO (normally open)	○ DA (double acting)	○ Double acting (normally open)
	Motorized ○	Voltage	○ 24 V DC	○ Other		
		Set value information	○ 0-10 V	○ 0/4–20 mA		
Control fitting	Feature		○ linear	○ modified equal-percentage		

Valve body	Type		
	Required valve DN		
	Max. operating pressure (bar)		
	Ambient temperature [4]		
	Max. media temperature		
	Connection type		
	Body material		
	Seat seal [7]	○ PTFE	○ Other
	Control pressure	min	max

1) Liquid or gas?
For media other than water or air, it is useful to give data for the density and viscosity of the medium (with unit of measurement). Otherwise we will assume data for standard conditions.

2) For steam especially, the minimum or maximum flow rate should be assigned to the appropriate inlet or outlet pressure. The temperature of the medium should also be taken into account.

3) GEMÜ recommends a positioning ratio of 1 : 10 (e.g. minimal flow rate is 10 m³/h and the maximum flow rate is 100 m³/h). Please note that the valve only controls reliably from a flow of about 10% of the max. Kv value on account of the valve opening behaviour. Other positioning ratios are possible on request or in the selection of standard regulating cones.

4) The media temperature range must be specified for steam applications. T = 20 °C is assumed unless specified otherwise.

5) This data is not absolutely necessary. A room temperature of 20 °C is assumed unless specified otherwise.

6) Basis: standard conditions 0 °C, 1013.25 mbar.
If conditions differ, please specify them.

7) The seat seal is made of PTFE as standard.
For regulating needles with a Kv value between 0.1 and 1.0 m³/h, only a metal seal is possible.
Other materials possible on request.

The technical details of each enquiry must be checked by GEMÜ.

Comment:

GEMÜ Gebr. Müller Apparatebau GmbH & Co. KG · Fritz-Müller-Str. 6-8 · D-74653 Ingelfingen-Criesbach · Phone +49(0)7940/123-0 · Fax +49(0)7940/123-224
info@gemue.de · www.gemu-group.com

Subject to alteration | 10.2024 | 88342375

GEMÜ Gebr. Müller Apparatebau GmbH & Co. KG
Fritz-Müller-Straße 6-8, 74653 Ingelfingen-Criesbach, Germany
Phone +49 (0) 7940 1230 · info@gemue.de
www.gemu-group.com