

GEMÜ 554

Pneumatically operated angle seat globe valve



Features

- Low actuator weight due to plastic body
- ATEX optionally available
- Optional for food contact according to Regulation (EC) No. 1935/2004
- Quick drive change and free drive positioning
- Suitable for vacuum up to 20 mbar (a)
- Available as shut-off or control valve

Description

The GEMÜ 554 2/2-way angle seat globe valve has a plastic piston actuator and is pneumatically operated. The valve spindle is sealed by a self-adjusting gland packing or a compact seal cartridge, depending on the size and version. A wiper ring or the wiper contour of the seal cartridge additionally protects the valve spindle against contamination and damage. This provides low-maintenance and reliable spindle sealing even after a long service life.

Technical specifications

- **Media temperature:** -10 to 180 °C
- **Ambient temperature:** 0 to 60 °C
- **Operating pressure:** 0 to 25 bar
- **Nominal sizes:** DN 6 to 80
- **Body configurations:** Angle valve body | Straight through body
- **Connection types:** Clamp | Flange | Spigot | thread
- **Connection standards:** ANSI | ASME | BS | DIN | EN | ISO | JIS | NPT | SMS
- **Body materials:** 1.4408, investment casting material | 1.4435, investment casting material
- **Seat seal materials:** 1.4404 | PTFE | PTFE, reinforced
- **Conformities:** ATEX | CRN | EAC | FDA | FMEDA | Oxygen | Reg. (EU) No. 10/2011 | Regulation (EC) No. 1935/2004 | RoHS | TA Luft (German Clean Air Act) | USP

Technical data depends on the respective configuration



further information
webcode: GW-554



Product description

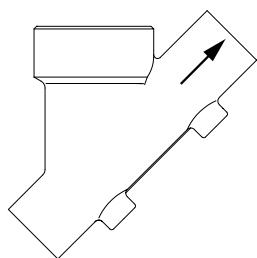
Construction



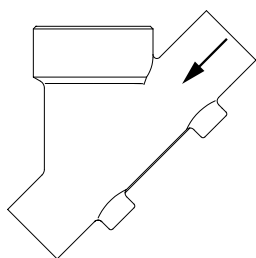
Item	Name	Materials
1	Optical position indicator	
2	Piston actuator	Plastic
3	Valve body	1.4408, investment casting 1.4435 (ASTM A 351 CF3M 316L), investment casting 1.4435 (316 L), forged body 1.4435, investment casting (equivalent to 316L) CC499K, cast bronze

Flow direction

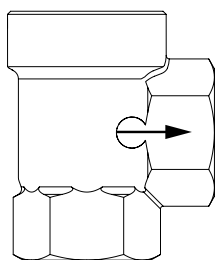
The flow direction is indicated by an arrow on the valve body.



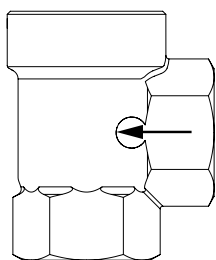
2/2-way body
under the seat



2/2-way body
over the seat

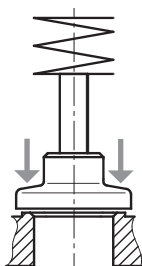


Angle valve body
under the seat

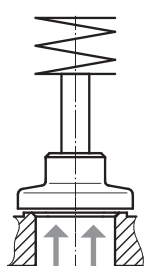


Angle valve body
over the seat

Over the seat
(actuator 3, 4)



Under the seat
(actuator B, 0, 1, 2)



Under the seat is the preferred flow direction with incompressible liquid media to avoid water hammer
Over the seat only with control function - Normally closed (NC)

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.

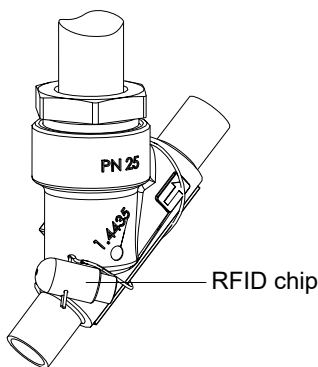
For further information on GEMÜ CONEXO please visit:

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 (1) for electronic identification purposes. The position of the RFID chip can be seen below. The CONEXO pen helps read out information stored in the RFID chips. The CONEXO app or CONEXO portal is required to display this information.



Availability

Actuator assignment

DN	Actuator size (code)					
	B	0	1	2	3	4
	Piston Ø [mm]					
	30.0	50.0	70.0	120.0	50.0	70.0
6	X	-	-	-	-	-
8	X	-	-	-	-	-
10	X	X	X	-	X	X
15	X	X	X	-	X	X
20	-	X	X	X	X	X
25	-	X	X	X	X	X
32	-	-	X	X	X	X
40	-	-	X	X	X	X
50	-	-	X	X	X	X
65	-	-	-	X	-	-
80	-	-	-	X	-	-

Actuator size (code)	Control function	Seat seal
B	Normally closed (NC)	NBR, PFA
0, 1, 2, 3, 4	Normally closed (NC) Normally open (NO) Double acting (DA)	PTFE, PTFE (glass fibre reinforced), PTFE (USP Class VI)

Availability of valve bodies**Spigot, actuator size B**

DN	Connection type code ¹⁾				
	0	16	17	59	60
Material code 40 ²⁾					
6	X	-	-	-	-
8	X	-	X	-	X
10	-	X	X	X	-
15	-	-	-	X	-

X = Standard

1) Connection type

Code 0: Spigot DIN

Code 16: Spigot DIN EN 10357 series B (2014 issue; formerly DIN 11850 series 1)

Code 17: Spigot EN 10357 series A/DIN 11866 series A, formerly DIN 11850 series 2

Code 59: Spigot ASME BPE/DIN EN 10357 series C (from 2022 issue)/DIN 11866 series C

Code 60: Spigot ISO 1127/DIN EN 10357 series C (2014 issue)/DIN 11866 series B

2) Valve body material

Code 40: 1.4435 (F316L), forged body

Spigot, actuator size 0, 1, 2, 3, 4

DN	Connection type code ¹⁾													
	0	16	17			37			59			60		
	Material code ²⁾													
	34	34	34	37	C2	34	37	34	37	C2	34	37	C2	
8	-	-	-	-	-	-	-	-	-	-	-	-	X	
10	-	X	X	-	X	-	-	-	-	-	X	-	X	
15	X	X	X	X	X	-	-	X	-	X	X	X	X	
20	X	X	X	X	X	-	-	X	-	X	X	X	X	
25	X	X	X	X	X	X	-	X	-	X	X	X	X	
32	-	X	X	X	X	-	-	-	-	-	X	X	X	
40	X	X	X	X	X	X	-	X	-	X	X	X	X	
50	X	X	X	X	X	X	-	X	-	X	X	X	X	
65	-	-	-	X	X	-	X	-	X	X	-	X	X	
80	-	-	-	X	X	-	X	-	X	X	-	X	X	

X = Standard

1) Connection type

Code 0: Spigot DIN

Code 16: Spigot DIN EN 10357 series B (2014 edition; formerly DIN 11850 series 1)

Code 17: Spigot EN 10357 series A/DIN 11866 series A formerly DIN 11850 series 2

Code 37: Spigot SMS 3008

Code 59: Spigot ASME BPE/DIN EN 10357 series C (from 2022 edition)/DIN 11866 series C

Code 60: Spigot ISO 1127/DIN EN 10357 series C (2014 edition)/DIN 11866 series B

2) Valve body material

Code 34: 1.4435, investment casting

Code 37: 1.4408, investment casting

Code C2: 1.4435, investment casting

Threaded connection, actuator size B

DN	Connection type code ¹⁾				
	1	3C	3D	9	
	Material code ²⁾				
	37	37	37	37	40
6	-	-	-	-	X
8	X	-	X	X	-
10	X	X	X	X	-
15	X	-	X	X	-

X = Standard

1) Connection type

Code 1: Threaded socket DIN ISO 228

Code 3C: Threaded socket Rc ISO 7-1, EN 10226-2, JIS B 0203, BS 21, end-to-end dimension ETE DIN 3202-4 series M8

Code 3D: Threaded socket NPT, end-to-end dimension ETE DIN 3202-4 series M8

Code 9: Threaded spigot DIN ISO 228

2) Valve body material

Code 37: 1.4408, investment casting

Code 40: 1.4435 (F316L), forged body

Threaded connection, actuator size 0, 1, 2, 3, 4

DN	Connection type code ¹⁾						
	1		3C	3D		9	
	Material code ²⁾						
	9	37	37	9	37	9	37
Body configuration code D ³⁾							
10	-	X	-	-	-	-	-
15	X	X	X	X	X	X	X
20	X	X	X	X	X	X	X
25	X	X	X	X	X	X	X
32	X	X	X	X	X	-	X
40	X	X	X	X	X	X	X
50	X	X	X	X	X	X	X
65	X	X	X	-	X	X	X
80	X	X	X	-	X	X	X

DN	Connection type code ¹⁾	
	1	3D
	Material code 37 ²⁾	
	Body configuration code E ³⁾	
15	X	X
20	X	X
25	X	X
32	X	X
40	X	X
50	X	X

X = Standard

1) Connection type

Code 1: Threaded socket DIN ISO 228

Code 3C: Threaded socket Rc ISO 7-1, EN 10226-2, JIS B 0203, BS 21, end-to-end dimension ETE DIN 3202-4 series M8

Code 3D: Threaded socket NPT, end-to-end dimension ETE DIN 3202-4 series M8

Code 9: Threaded spigot DIN ISO 228

2) Valve body material

Code 9: CC499K, cast bronze

Code 37: 1.4408, investment casting

3) Body configuration

Code D: 2/2-way body

Code E: Angle valve body

Flange, actuator size 0, 1, 2, 3, 4

DN	Connection type code ¹⁾	
	13	47
	Material code 34 ²⁾	
15	X	X
20	X	X
25	X	X
32	X	X
40	X	X
50	X	X

X = Standard

1) **Connection type**

Code 13: Flange EN 1092, PN 25, form B

Code 47: Flange ANSI Class 150 RF

2) **Valve body material**

Code 34: 1.4435, investment casting

Clamp, actuator size 0, 1, 2, 3, 4

DN	Connection type code ¹⁾		
	82	86	88
	Material code 34 ²⁾		
15	X	X	X
20	X	X	X
25	X	X	X
32	X	X	-
40	X	X	X
50	X	X	X

X = Standard

1) **Connection type**

Code 82: Clamp DIN 32676 series B, face-to-face dimension FTF EN 558 series 1

Code 86: Clamp DIN 32676 series A, face-to-face dimension FTF EN 558 series 1

Code 88: Clamp ASME BPE, for pipe ASME BPE, face-to-face dimension FTF EN 558 series 1

2) **Valve body material**

Code 34: 1.4435, investment casting

Type of design

Type of design	
For surface finish (code 1903, 1904, 1909) see order data	Valve body material (code C2)
For contact with food, the product must be ordered with the following order options (code 2013)	Seat seal (code 5, 5G) valve body material (code 34, 37, 40, C2)

Order data

Order codes

The order data provide an overview of standard configurations.

Please check the availability before ordering. Other configurations available on request.

1 Type	Code
Angle seat globe valve, pneumatically operated, plastic piston actuator	554

2 DN	Code
DN 6	6
DN 8	8
DN 10	10
DN 15	15
DN 20	20
DN 25	25
DN 32	32
DN 40	40
DN 50	50
DN 65	65
DN 80	80

3 Body configuration	Code
2/2-way body	D
Angle valve body	E

4 Connection type	Code
Spigot	
Spigot DIN	0
Spigot DIN EN 10357 series B (2014 edition; formerly DIN 11850 series 1)	16
Spigot EN 10357 series A/DIN 11866 series A formerly DIN 11850 series 2	17
Spigot SMS 3008	37
Spigot ASME BPE/DIN EN 10357 series C (from 2022 edition)/DIN 11866 series C	59
Spigot ISO 1127/DIN EN 10357 series C (2014 edition)/DIN 11866 series B	60
Threaded connection	
Threaded socket DIN ISO 228	1
Threaded socket Rc ISO 7-1, EN 10226-2, JIS B 0203, BS 21, end-to-end dimension ETE DIN 3202-4 series M8	3C
Threaded socket NPT, end-to-end dimension ETE DIN 3202-4 series M8	3D
Threaded spigot DIN ISO 228	9
Flange	
Flange EN 1092, PN 25, form B	13
Flange ANSI Class 150 RF	47
Clamp	
Clamp DIN 32676 series B, face-to-face dimension FTF EN 558 series 1	82
Clamp DIN 32676 series A, face-to-face dimension FTF EN 558 series 1	86

4 Connection type	Code
Clamp ASME BPE, for pipe ASME BPE, face-to-face dimension FTF EN 558 series 1	88

5 Valve body material	Code
Investment casting material	
1.4435, investment casting	34
1.4408, investment casting	37
1.4435, investment casting	C2
Forged material	
1.4435 (F316L), forged body	40
Cast bronze	
CC499K, cast bronze	9
Note: A surface finish from the order code table "Type of design" must be specified for valve body material C2.	

6 Seat seal	Code
NBR	2
PTFE	5
PTFE, glass fibre reinforced	5G
PTFE	5P
FDA compliant, USP class VI	
PFA	30

7 Control function	Code
Normally closed (NC)	1
Normally open (NO)	2
Double acting (DA)	3

8 Actuator version	Code
Actuator size B	B
Actuator size 0	0
Actuator size 1	1
Actuator size 2	2
Actuator size 3	3
Actuator size 4	4

10 Type of design	Code
Without	
Ra ≤ 0.6 µm (25 µinch) for media wetted surfaces, in accordance with ASME BPE SF2 + SF3 mechanically polished internal	1903
Ra ≤ 0.8 µm (30 µinch) for media wetted surfaces, in accordance with DIN 11866 H3, mechanically polished internal	1904
Ra ≤ 0.4 µm (15 µinch) for media wetted surfaces, in accordance with DIN 11866 H4, ASME BPE SF1 mechanically polished internal	1909
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	554	Angle seat globe valve, pneumatically operated, plastic piston actuator
2 DN	15	DN 15
3 Body configuration	D	2/2-way body
4 Connection type	1	Threaded socket DIN ISO 228
5 Valve body material	9	CC499K, cast bronze
6 Seat seal	5	PTFE
7 Control function	1	Normally closed (NC)
8 Actuator version	1	Actuator size 1
9		
10 Type of design		Without
11 Special version		Standard
12 CONEXO		Without

Technical data

Medium

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.

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
-10–60 °C only with special function ordering option (code S)
Actuator size B
seat seal NBR code 2: -10 – 80 °C
seat seal PFA code 30: -10 – 160 °C

Ambient temperature: 0 – 60 °C

Control medium temperature: 0 – 60 °C

Storage temperature: 0 – 40 °C

Pressure

Operating pressure:

DN	Normally closed (NC)						Normally open (NO) / Double acting (DA)		
	Actuator size (code)								
	B	0	1	2	3	4	0	1	2
6	10.0	-	-	-	-	-	-	-	-
8	10.0	-	-	-	-	-	-	-	-
10	10.0	12.0	25.0	-	10.0	10.0	25.0	25.0	-
15	10.0	12.0	25.0	-	10.0	10.0	25.0	25.0	-
20	-	6.0	20.0	25.0	10.0	10.0	20.0	25.0	25.0
25	-	2.5	10.0	25.0	10.0	10.0	12.0	25.0	25.0
32	-	-	7.0	20.0	8.0	10.0	-	20.0	25.0
40	-	-	4.5	12.0	6.0	10.0	-	12.0	25.0
50	-	-	3.0	10.0	4.0	10.0	-	8.0	25.0
65	-	-	-	7.0	-	-	-	-	18.0
80	-	-	-	5.0	-	-	-	-	10.0

All pressures are gauge pressures.
For max. operating pressures the pressure / temperature correlation must be observed.

Pressure rating: PN 16
PN 25
PN 40

Control pressure:

Normally closed (NC)					Normally open (NO) / Double acting (DA)
Actuator size (code)					
B	0	1	2	3, 4	0, 1, 2
4.0 - 8.0	4.8 - 7.0	5.5 - 7.0	4.0 - 7.0 (DN 20 - 40) 5.0 - 7.0 (DN 50 - 80)	For min. control pressure see diagram / max. control pressure 7.0 bar	

All pressures are gauge pressures.

Observe control pressure / operating pressure diagram

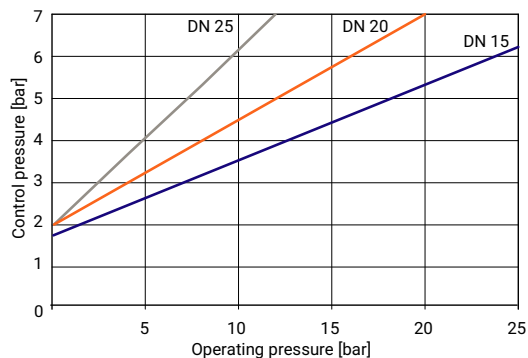
Control pressure/operating pressure diagram:

Control function

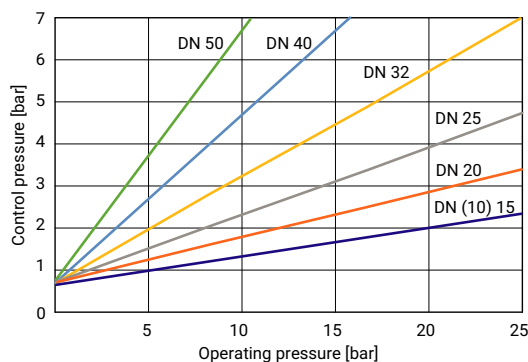
**Normally open (NO) (code 2),
Double acting (DA) (code 3)**

Flow direction: under the seat

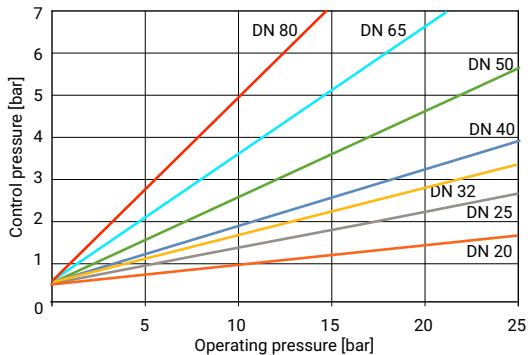
Actuator size 0



Actuator size 1



Actuator size 2



Min. control pressure dependent on operating pressure

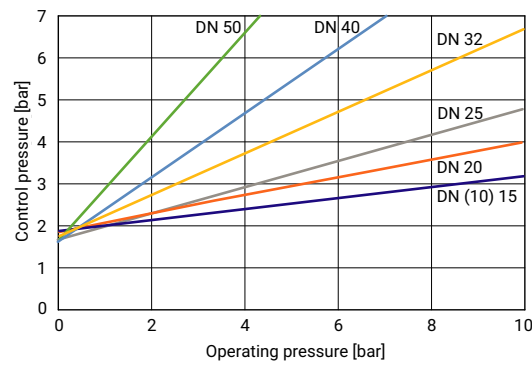
Control pressure/operating pressure diagram:

Control function

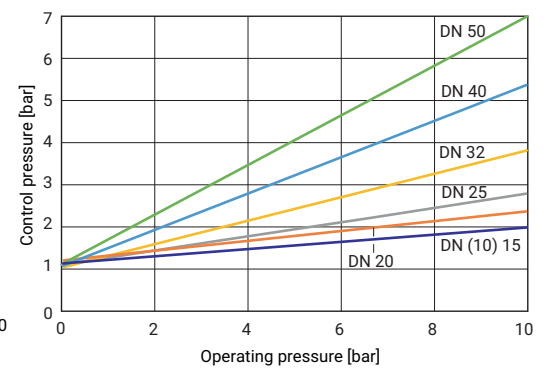
Normally closed (NC) (code 1)

Flow direction: over the seat

Actuator size 3



Actuator size 4



Min. control pressure dependent on operating pressure

Filling volume:

Actuator B: 0.01 dm³

Actuator 0, 3: 0.05 dm³

Actuator 1, 4: 0.125 dm³

Actuator 2: 0.625 dm³

Leakage rate:

Seat seal	Standard	Test procedure	Leakage rate	Test medium
PTFE, PFA, NBR	DIN EN 12266-1	P12	A	Air

Pressure/temperature correlation:

Connection type (code)	Material (code)	Max. allowable operating pressures in bar at temperature in °C					
		RT	100	150	200	250	300
1, 3C, 3D, 9 (bis DN 50)	9	16.0	16.0	16.0	13.5	-	-
1, 9 (ab DN 65)	9	10.0	10.0	10.0	8.5	-	-
1, 9, 17, 37, 60, 3C, 3D	37	25.0	23.8	21.4	18.9	17.5	16.1
0, 16, 17, 37, 59, 60	34	25.0	24.5	22.4	20.3	18.2	16.1
13 (DN 15 - 50)	34	25.0	23.6	21.5	19.8	18.6	17.2
88 (DN 15 - DN 40)	34	25.0	21.2	19.3	-	-	-
88 (DN 50 - DN 80)	34	16.0	16.0	16.0	-	-	-
82 (DN 15 - 32)	34	25.0	21.2	19.3	-	-	-
82 (DN 40 - 65)	34	16.0	16.0	16.0	-	-	-
86 (DN 15 - 40)	34	25.0	21.2	19.3	-	-	-
86 (DN 50 - 65)	34	16.0	16.0	16.0	-	-	-
47 (DN 15 - 50)	34	15.9	13.3	12.0	11.1	10.2	9.7
0, 16, 17, 59, 60	40	25.0	20.6	18.7	17.1	15.8	14.8
17, 59, 60	C2	25.0	21.2	19.3	17.9	16.8	15.9

* max. temperature 140 °C

The valves are suitable for temperatures as low as -10 °C

RT = room temperature

All pressures are gauge pressures.

Kv values:

DN	Butt weld spigot DIN 11850	Butt weld spigot DIN 11866	Threaded socket DIN ISO 228
6	1.6	-	-
8	1.8	2.2	-
10	2.4	4.5	4.5
15	2.4	5.5	5.4
20	-	11.7	10.0
25	-	20.5	15.2
32	-	33.0	23.0
40	-	51.0	41.0
50	-	61.0	68.0
65	-	110.0	95.0
80	-	117.0	130.0

Kv values in m³/h

Kv values determined in accordance with DIN EN 60534. The Kv value specifications refer to control function 1 (NC) and the largest actuator for the respective nominal size.

The Kv values for other product configurations (e.g. other connections or body materials) may differ.

Kv values AG0 on request.

Product conformity

Food:	Regulation (EC) No. 1935/2004* Regulation (EC) No. 10/2011*	
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)	
Approvals:	FDA* * 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	
FMEDA:	Product description:	GEMÜ 554 angle seat globe valve
	Device type:	A
	Fail safe function:	Due to the fail safe function, the straight seat or angle seat globe valve is placed in the closed position (with control function 1) or open position (with control function 2), or it seals tightly (with control function 1).
	HFT (Hardware Fault Tolerance):	0
	There is no proof of systematic suitability in accordance with IEC 61508.	

Mechanical data

Weight:

Total weight

DN	Actuator size (code)			
	B	0, 3	1, 4	2
6	0.3	-	-	-
8	0.3	-	-	-
10	0.3	0.9	1.4	-
15	0.3	0.9	1.4	-
20	-	1.1	1.6	-
25	-	1.3	1.8	-
32	-	-	2.4	5.1
40	-	-	2.7	6.0
50	-	-	3.4	6.9
65	-	-	-	8.5
80	-	-	-	10.1

Weights in kg

Body

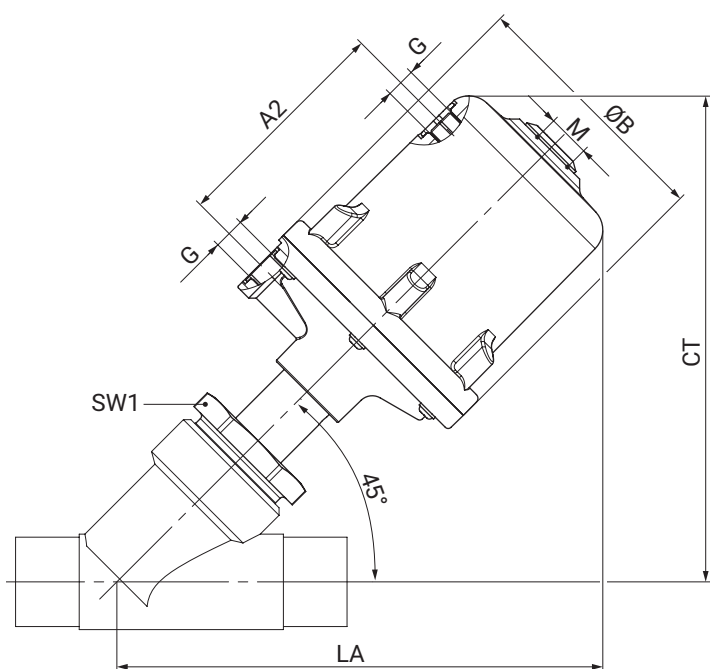
DN	Spigot K514	Threaded socket	Threaded spigot	Flange K514	Clamp
	Connection type code				
	0, 16, 17, 37, 59, 60	1, 3C, 3D	9	13, 47	82, 86, 88
6	0.12	-	0.14	-	-
8	0.12	0.25	0.12	-	-
10	0.12	0.25	0.14	-	-
15	0.16	0.25	0.14	-	-
10	0.25	0.25	-	-	-
15	0.24	0.35	0.31	1.80	0.37
20	0.50	0.35	0.50	2.50	0.63
25	0.50	0.35	0.65	3.10	0.63
32	0.90	0.75	1.00	4.60	1.08
40	1.10	0.98	1.30	5.10	1.28
50	1.80	1.70	1.80	7.20	2.07
65	3.40	3.20	3.40	-	3.69
80	4.20	4.10	4.40	-	4.60

Weights in kg

Dimensions

Actuator installation dimensions

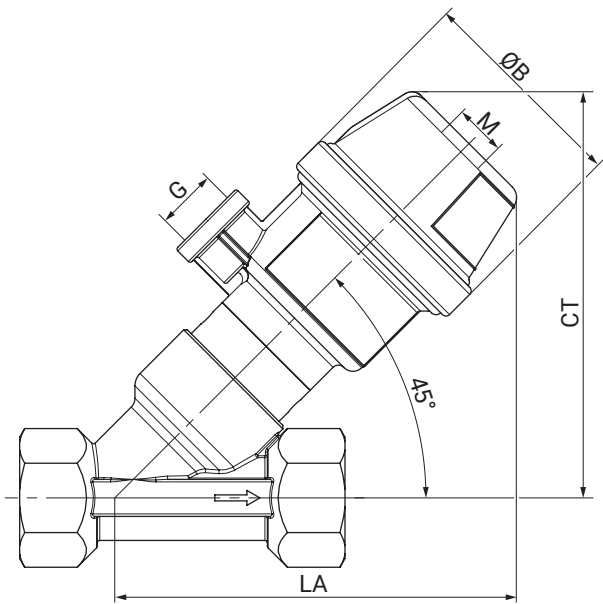
Valve with 2/2-way body (code D)



DN	SW1 metric	G	Actuator size											
			0, 3				1, 4				2			
			A2	ØB	CT/LA	M	A2	ØB	CT/LA	M	A2	ØB	CT/LA	M
10	36.0	G 1/4	70.0	72.0	154.0	M16x1	86.0	96.0	181.0	M16x1	-	-	-	-
15	36.0	G 1/4	70.0	72.0	157.0	M16x1	86.0	96.0	184.0	M16x1	-	-	-	-
20	41.0	G 1/4	70.0	72.0	167.0	M16x1	86.0	96.0	194.0	M16x1	149.0	168.0	281.0	M22x1.5
25	46.0	G 1/4	70.0	72.0	167.0	M16x1	86.0	96.0	194.0	M16x1	149.0	168.0	281.0	M22x1.5
32	55.0	G 1/4	-	-	-	-	86.0	96.0	202.0	M16x1	149.0	168.0	289.0	M22x1.5
40	60.0	G 1/4	-	-	-	-	86.0	96.0	207.0	M16x1	149.0	168.0	294.0	M22x1.5
50	75.0	G 1/4	-	-	-	-	86.0	96.0	215.0	M16x1	149.0	168.0	302.0	M22x1.5
65	75.0	G 1/4	-	-	-	-	-	-	-	-	149.0	168.0	315.0	M22x1.5
80	75.0	G 1/4	-	-	-	-	-	-	-	-	149.0	168.0	332.0	M22x1.5

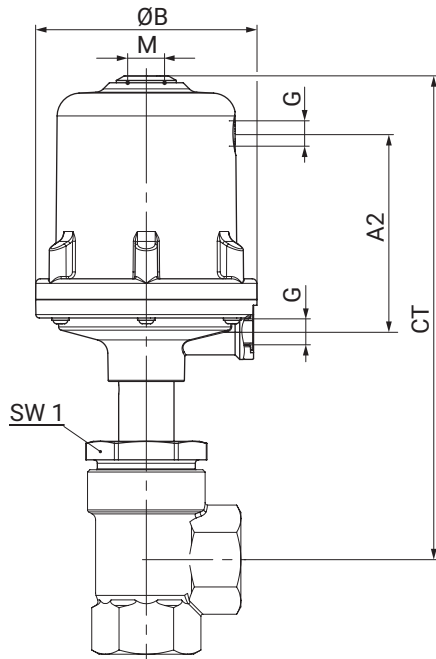
Dimensions in mm

Dimensions



DN	Actuator size B			
	G	ØB	CT/LA	M
6 - 15	G 1/8	43.0	83.0	M12x1

Dimensions in mm

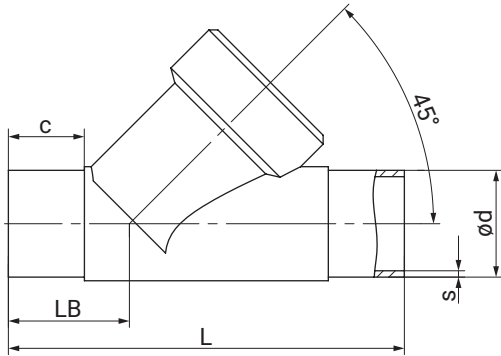
Valve with angle valve body (code E)

DN	SW1 metric	G	Actuator size											
			0, 3				1, 4				2			
			A2	ØB	CT	M	A2	ØB	CT	M	A2	ØB	CT	M
15	36.0	G 1/4	70.0	72.0	178.0	M16x1	86.0	96.0	206.0	M16x1	-	-	-	-
20	41.0	G 1/4	70.0	72.0	181.0	M16x1	86.0	96.0	209.0	M16x1	149.0	168.0	306.0	M22x1.5
25	46.0	G 1/4	70.0	72.0	185.0	M16x1	86.0	96.0	213.0	M16x1	149.0	168.0	310.0	M22x1.5
32	55.0	G 1/4	-	-	-	-	86.0	96.0	216.0	M16x1	149.0	168.0	313.0	M22x1.5
40	60.0	G 1/4	-	-	-	-	86.0	96.0	221.0	M16x1	149.0	168.0	316.0	M22x1.5
50	75.0	G 1/4	-	-	-	-	86.0	96.0	228.0	M16x1	149.0	168.0	325.0	M22x1.5

Dimensions in mm

Body dimensions

Spigot DIN/EN/ISO/ASME (code 0, 16, 17, 59, 60), actuator size B



Connection type spigot DIN/EN/ISO/ASME (code 0, 16, 17, 59, 60)¹⁾, forged material (code 40)²⁾

DN	NPS	c (min)					ød					L	LB	s				
		Connection type												Connection type				
		0	16	17	59	60	0	16	17	59	60			0	16	17	59	60
6	1/8"	20	-	-	-	20	8.0	-	-	-	-	80.0	26.5	1.0	-	-	-	-
8	1/4"	20	-	20	10	-	10.0	-	-	-	13.5	80.0	26.5	1.0	-	-	-	1.6
10	3/8"	-	20	20	20	-	-	12.0	13.0	9.53	-	80.0	26.5	-	1.0	1.5	0.89	-
15	1/2"	-	-	-	20	-	-	-	-	12.70	-	80.0	26.5	-	-	-	1.65	-

Dimensions in mm

1) **Connection type**

Code 0: Spigot DIN

Code 16: Spigot DIN EN 10357 series B (2014 edition; formerly DIN 11850 series 1)

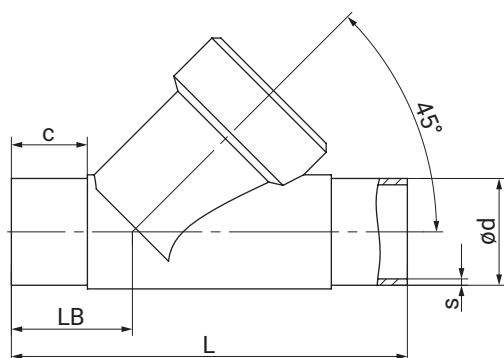
Code 17: Spigot EN 10357 series A/DIN 11866 series A formerly DIN 11850 series 2

Code 59: Spigot ASME BPE/DIN EN 10357 series C (from 2022 edition)/DIN 11866 series C

Code 60: Spigot ISO 1127/DIN EN 10357 series C (2014 edition)/DIN 11866 series B

2) **Valve body material**

Code 40: 1.4435 (F316L), forged body

Spigot DIN/EN/ISO/ANSI/ASME/SMS (code 0, 16, 17, 37, 59, 60), actuator size 0, 1, 2, 3, 4**Connection type spigot DIN/EN/ISO (code 0, 16, 17, 60)¹⁾, investment casting material (code 34)²⁾**

DN	NPS	c (min)				ød				L	LB	s			
		Connection type										Connection type			
		0	16	17	60	0	16	17	60			0	16	17	60
10	3/8"	-	20	20	20	-	12.0	13.0	17.2	105.0	35.5	-	1.0	1.5	1.6
15	1/2"	20	20	20	20	18.0	18.0	19.0	21.3	105.0	35.5	1.5	1.0	1.5	1.6
20	3/4"	25	25	25	25	22.0	22.0	23.0	26.9	120.0	39.0	1.5	1.0	1.5	1.6
25	1"	24.5	24.5	24.5	24.5	28.0	28.0	29.0	33.7	125.0	38.5	1.5	1.0	1.5	2.0
32	1 1/4"	-	26	27	29	-	34.0	35.0	42.4	155.0	48.0	-	1.0	1.5	2.0
40	1 1/2"	24	24	24	43.7	40.0	40.0	41.0	48.3	160.0	47.0	1.5	1.0	1.5	2.0
50	2"	29	29	29	29	52.0	52.0	53.0	60.3	180.0	48.0	1.5	1.0	1.5	2.0

Connection type spigot ANSI/ASME/SMS (code 37, 59)¹⁾, investment casting material (code 34)²⁾

DN	NPS	c (min)		ød		L	LB	s	
		Connection type						Connection type	
		37	59	37	59			37	59
15	1/2"	-	20	-	12.70	105.0	35.5	-	1.65
20	3/4"	-	25	-	19.05	120.0	39.0	-	1.65
25	1"	24.5	24.5	25.0	25.40	125.0	38.5	1.2	1.65
32	1 1/4"	-	-	-	-	155.0	48.0	-	-
40	1 1/2"	24	24	38.0	38.10	160.0	47.0	1.2	1.65
50	2"	29	29	51.0	50.80	180.0	48.0	1.2	1.65

Dimensions in mm

1) Connection type

Code 0: Spigot DIN

Code 16: Spigot DIN EN 10357 series B (2014 edition; formerly DIN 11850 series 1)

Code 17: Spigot EN 10357 series A/DIN 11866 series A formerly DIN 11850 series 2

Code 37: Spigot SMS 3008

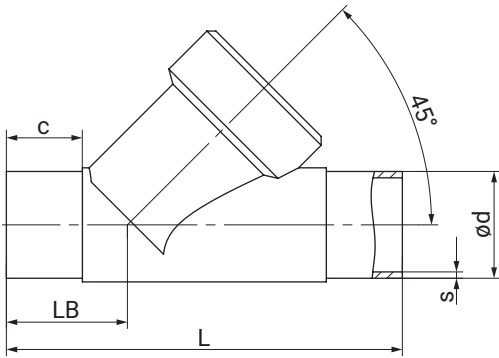
Code 59: Spigot ASME BPE/DIN EN 10357 series C (from 2022 edition)/DIN 11866 series C

Code 60: Spigot ISO 1127/DIN EN 10357 series C (2014 edition)/DIN 11866 series B

2) Valve body material

Code 34: 1.4435, investment casting

Spigot EN/ISO/ANSI/ASME/SMS (code 17, 37, 59, 60), actuator size 0, 1, 2, 3, 4



Connection type spigot EN/ISO/ASME (code 17, 60)¹⁾, investment casting material (code 37)²⁾

DN	NPS	c (min)		ød		L	LB	s	
		Connection type						Connection type	
		17	60	17	60			17	60
15	1/2"	18	18	19.0	21.3	100.0	33.0	1.5	1.6
20	3/4"	18	18	23.0	26.9	108.0	33.0	1.5	1.6
25	1"	18	18	29.0	33.7	112.0	32.0	1.5	2.0
32	1¼"	18	18	35.0	42.4	137.0	39.0	1.5	2.0
40	1½"	19	18	41.0	48.3	146.0	40.0	1.5	2.0
50	2"	20	20	53.0	60.3	160.0	38.0	1.5	2.0
65	2½"	52.5	47	70.0	76.1	290.0	96.0	2.0	2.0
80	3"	50	46.5	85.0	88.9	310.0	95.0	2.0	2.3

Connection type spigot ASME/SMS (code 37, 59), investment casting material (code 37)²⁾

DN	NPS	c (min)		ød		L	LB	s	
		Connection type						Connection type	
		37	59	37	59			37	59
65	2½"	58	58	63.5	63.5	290.0	96.0	1.6	1.65
80	3"	58	58	76.1	76.0	310.0	95.0	1.6	1.65

Dimensions in mm

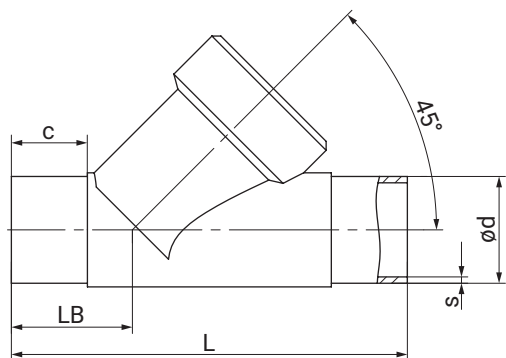
1) Connection type

- Code 17: Spigot EN 10357 series A/DIN 11866 series A formerly DIN 11850 series 2
- Code 37: Spigot SMS 3008
- Code 59: Spigot ASME BPE/DIN EN 10357 series C (from 2022 edition)/DIN 11866 series C
- Code 60: Spigot ISO 1127/DIN EN 10357 series C (2014 edition)/DIN 11866 series B

2) Valve body material

- Code 37: 1.4408, investment casting

Spigot EN/ISO/ASME (code 17, 59, 60), actuator size 0, 1, 2, 3, 4



Connection type spigot EN/ISO/ASME (code 17, 59, 60)¹⁾, investment casting material (code C2)²⁾

DN	NPS	c (min)			ød			L	LB	s		
		Connection type								Connection type		
		17	59	60	17	59	60			17	59	60
8	1/4"	-	-	20.0	-	-	13.5	80.0	35.5	-	-	1.6
10	3/8"	20.0	-	20.0	13.0	-	17.2	100.0	35.5	1.5	-	1.6
15	1/2"	20.0	15.0	20.0	19.0	12.70	21.3	105.0	35.5	1.5	1.65	1.6
20	3/4"	25.0	25.0	25.0	23.0	19.05	26.9	120.0	39.0	1.5	1.65	1.6
25	1"	24.0	24.0	24.0	29.0	25.40	33.7	125.0	39.5	1.5	1.65	2.0
32	1¼"	27.0	-	26.1	35.0	-	42.4	155.0	48.0	1.5	-	2.0
40	1½"	24.0	23.0	28.9	41.0	38.10	48.3	160.0	47.0	1.5	1.65	2.0
50	2"	28.23	28.23	29.0	53.0	50.80	60.3	180.0	48.0	1.5	1.65	2.0
65	2½"	52.5	58.0	52.5	70.0	63.50	76.1	290.0	96.0	2.0	1.65	2.0
80	3"	50.2	58.0	46.82	85.0	76.20	88.9	310.0	95.0	2.0	1.65	2.3

Dimensions in mm

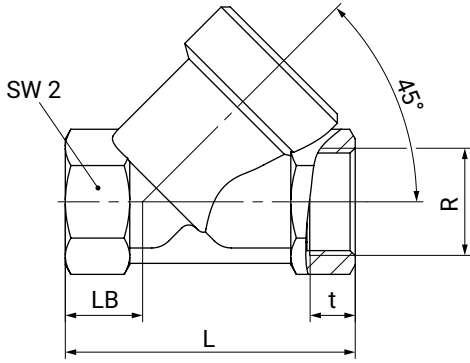
1) Connection type

- Code 17: Spigot EN 10357 series A/DIN 11866 series A, formerly DIN 11850 series 2
- Code 59: Spigot ASME BPE/DIN EN 10357 series C (from 2022 issue)/DIN 11866 series C
- Code 60: Spigot ISO 1127/DIN EN 10357 series C (2014 issue)/DIN 11866 series B

2) Valve body material

- Code C2: 1.4435, investment casting

Threaded socket DIN/NPT, body configuration D (code 1, 3C, 3D), actuator size B



Connection type threaded socket DIN/NPT (code 1, 3C, 3D)¹⁾, investment casting material (code 37)²⁾

DN	NPS	L	LB			R			SW2	t		
			Connection type			Connection type				Connection type		
			1	3C	3D	1	3C	3D		1	3C	3D
8	1/4"	65.0	19.0	-	19.0	G 1/4	-	1/4" NPT	17	12.0	-	10.1
10	3/8"	65.0	19.0	27.0	27.0	G 3/8	G 3/8	3/8" NPT	24	12.0	11.4	10.4
15	1/2"	65.0	19.0	-	27.0	G 1/2	-	1/2" NPT	24	11.4	-	13.6

Dimensions in mm

1) **Connection type**

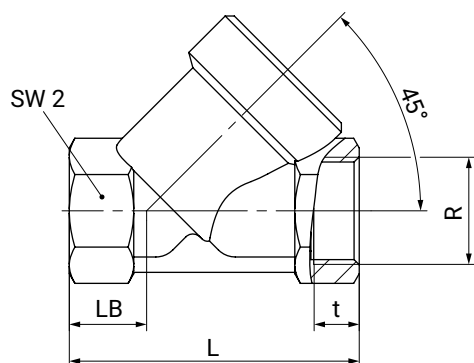
Code 1: Threaded socket DIN ISO 228

Code 3C: Threaded socket Rc ISO 7-1, EN 10226-2, JIS B 0203, BS 21, end-to-end dimension ETE DIN 3202-4 series M8

Code 3D: Threaded socket NPT, end-to-end dimension ETE DIN 3202-4 series M8

2) **Valve body material**

Code 37: 1.4408, investment casting

Threaded socket DIN/Rc/NPT, body configuration D (code 1, 3C, 3D), actuator size 0, 1, 2, 3, 4**Connection type threaded socket DIN (code 1)¹⁾, investment casting material (code 37)²⁾**

DN	NPS	L	LB	R	SW2	t
10	3/8"	65.0	16.5	G 3/8	27	11.4
15	1/2"	65.0	16.5	G 1/2	27	15.0
20	3/4"	75.0	17.5	G 3/4	32	16.3
25	1"	90.0	24.0	G 1	41	19.1
32	1 1/4"	110.0	33.0	G 1 1/4	50	21.4
40	1 1/2"	120.0	30.0	G 1 1/2	55	21.4
50	2"	150.0	40.0	G 2	70	25.7
65	2 1/2"	190.0	46.0	G 2 1/2	85	30.2
80	3"	220.0	50.0	G 3	100	33.3

Connection type threaded socket Rc/NPT (code 3C, 3D)¹⁾, investment casting material (code 37)²⁾

DN	NPS	L	LB	R		SW2	t	
				Connection type			Connection type	
				3C	3D		3C	3D
15	1/2"	65.0	16.5	Rc 1/2	1/2" NPT	27	15.0	13.6
20	3/4"	75.0	17.5	Rc 3/4	3/4" NPT	32	16.3	14.1
25	1"	90.0	24.0	Rc 1	1" NPT	41	19.1	17.0
32	1 1/4"	110.0	33.0	Rc 1 1/4	1 1/4" NPT	50	21.4	17.5
40	1 1/2"	120.0	30.0	Rc 1 1/2	1 1/2" NPT	55	21.4	17.3
50	2"	150.0	40.0	Rc 2	2" NPT	70	25.7	17.8
65	2 1/2"	190.0	46.0	Rc 2 1/2	2 1/2" NPT	85	30.2	23.7
80	3"	220.0	50.0	Rc 3	3" NPT	100	33.3	25.8

Dimensions in mm

1) Connection type

Code 1: Threaded socket DIN ISO 228

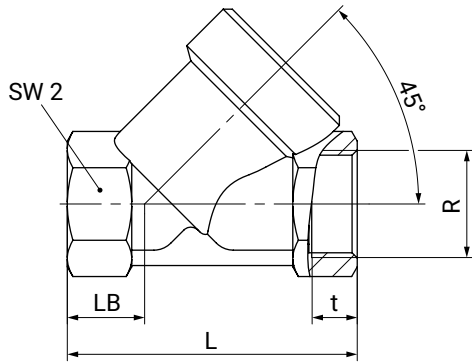
Code 3C: Threaded socket Rc ISO 7-1, EN 10226-2, JIS B 0203, BS 21, end-to-end dimension ETE DIN 3202-4 series M8

Code 3D: Threaded socket NPT, end-to-end dimension ETE DIN 3202-4 series M8

2) Valve body material

Code 37: 1.4408, investment casting

Dimensions



Connection type threaded socket DIN/NPT (code 1)¹⁾, block material (code 9)²⁾

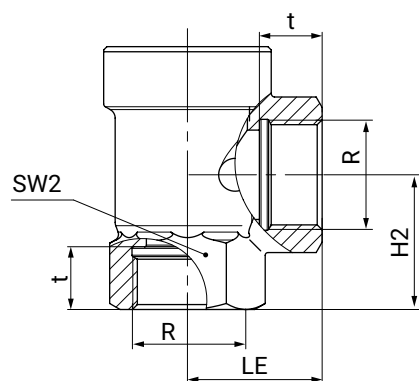
DN	NPS	L	LB	R	SW2	t
15	1/2"	65.0	16.5	G 1/2	27	15.0
20	3/4"	75.0	17.5	G 3/4	32	16.3
25	1"	90.0	24.0	G 1	41	19.1
32	1¼"	110.0	33.0	G 1¼	50	21.4
40	1½"	120.0	30.0	G 1½	55	21.4
50	2"	150.0	40.0	G 2	70	25.7
65	2½"	190.0	46.0	G 2½	85	30.2
80	3"	220.0	50.0	G 3	100	33.3

1) **Connection type**

Code 1: Threaded socket DIN ISO 228

2) **Valve body material**

Code 9: CC499K, cast bronze

Threaded socket DIN/NPT, body configuration E (code 1, 3D), actuator size 0, 1, 2, 3, 4**Connection type threaded socket DIN/NPT (code 1, 3D)¹⁾, investment casting material (code 37)²⁾**

DN	NPS	H2	LE	SW2	R		t	
					Connection type		Connection type	
					1	3D	1	3D
15	1/2"	30.0	30.0	27	G 1/2	1/2" NPT	15.0	13.6
20	3/4"	37.5	35.0	32	G 3/4	3/4" NPT	16.3	14.1
25	1"	41.0	41.0	41	G 1	1" NPT	19.1	17.0
32	1 1/4"	48.0	50.0	50	G 1 1/4	1 1/4" NPT	21.4	17.5
40	1 1/2"	55.0	50.0	55	G 1 1/2	1 1/2" NPT	21.4	17.3
50	2"	62.0	60.0	70	G 2	2" NPT	25.7	17.8

Dimensions in mm

1) Connection type

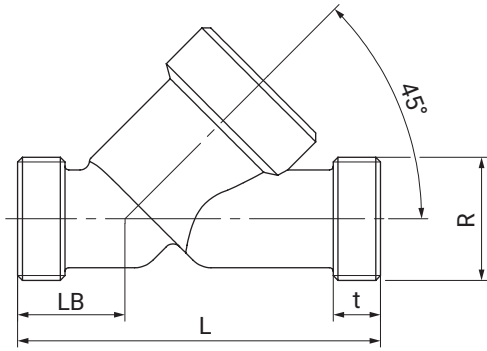
Code 1: Threaded socket DIN ISO 228

Code 3D: Threaded socket NPT, end-to-end dimension ETE DIN 3202-4 series M8

2) Valve body material

Code 37: 1.4408, investment casting

Threaded spigot DIN (code 9), actuator size B



Connection type threaded spigot DIN (code 9)¹⁾, forged material (code 40)²⁾

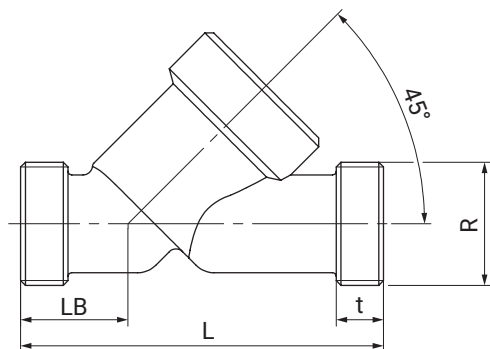
DN	L	LB	R	t
6	65.0	19.0	G 1/4	12.0

Connection type threaded spigot DIN (code 9)¹⁾, investment casting material (code 37)²⁾

DN	L	LB	R	t
8	65.0	19.0	G 3/8	12.0
10	65.0	19.0	G 1/2	12.0
15	65.0	19.0	G 3/4	12.0

Dimensions in mm

- 1) **Connection type**
Code 9: Threaded spigot DIN ISO 228
- 2) **Valve body material**
Code 37: 1.4408, investment casting
Code 40: 1.4435 (F316L), forged body

Threaded spigot DIN (code 9), actuator size 0, 1, 2, 3, 4**Connection type threaded spigot DIN (code 9)¹⁾, investment casting material (code 37)²⁾**

DN	L	LB	R	t
15	90.0	25.0	G 3/4	12.0
20	110.0	30.0	G 1	15.0
25	118.0	30.0	G 1¼	15.0
32	130.0	38.0	G 1½	13.0
40	140.0	35.0	G 1¾	13.0
50	175.0	50.0	G 2¾	15.0
65	216.0	52.0	G 3	15.0
80	254.0	64.0	G 3½	18.0

Dimensions in mm

- 1) **Connection type**
Code 9: Threaded spigot DIN ISO 228
- 2) **Valve body material**
Code 37: 1.4408, investment casting

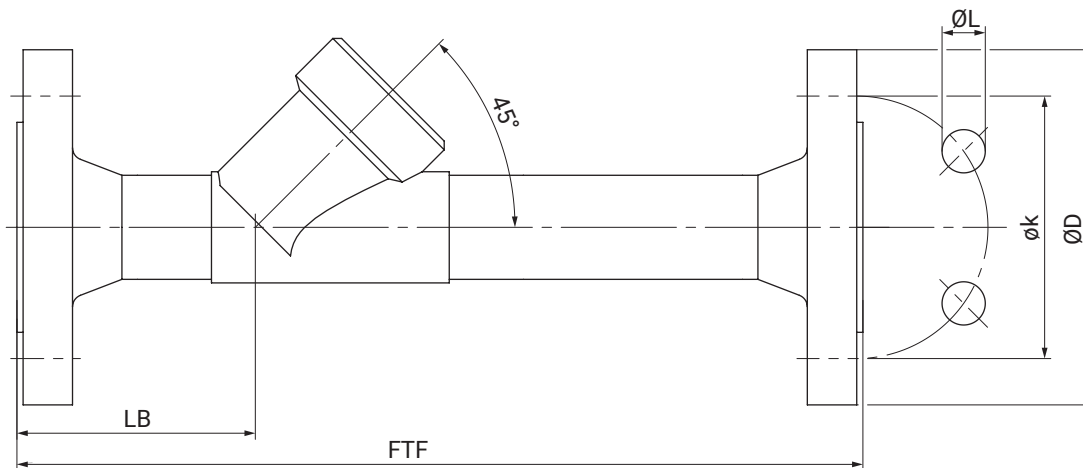
Connection type threaded spigot DIN (code 9)¹⁾, block material (code 9)²⁾

DN	L	LB	R	t
15	90.0	25.0	G 3/4	12.0
20	110.0	30.0	G 1	15.0
25	118.0	30.0	G 1¼	15.0
40	140.0	35.0	G 1¾	13.0
50	175.0	50.0	G 2¾	15.0
65	216.0	52.0	G 3	15.0
80	254.0	64.0	G 3½	18.0

Dimensions in mm

- 1) **Connection type**
Code 9: Threaded spigot DIN ISO 228
- 2) **Valve body material**
Code 9: CC499K, cast bronze

Flange, special length EN/ANSI (code 13, 47), actuator size 0, 1, 2, 3, 4



Connection type flange, special length EN/ANSI (code 13, 47)¹⁾, investment casting material (code 34)²⁾

DN	NPS	ØD		FTF	øk		ØL		LB	n
		Connection type			Connection type		Connection type			
		13	47		13	47	13	47		
15	1/2"	95.0	89.0	210.0	65.0	60.5	14.0	15.7	72.0	4
20	3/4"	105.0	98.6	280.0	75.0	69.8	14.0	15.7	78.0	4
25	1"	115.0	108.0	280.0	85.0	79.2	14.0	15.7	77.0	4
32	1 1/4"	140.0	117.3	310.0	100.0	88.9	18.0	15.7	89.0	4
40	1 1/2"	150.0	127.0	320.0	110.0	98.6	18.0	15.7	91.0	4
50	2"	165.0	152.4	330.0	125.0	120.7	18.0	19.1	95.0	4

Dimensions in mm

n = number of bolts

1) **Connection type**

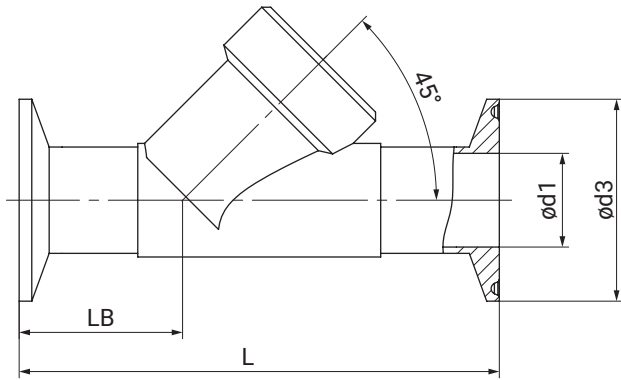
Code 13: Flange EN 1092, PN 25, form B

Code 47: Flange ANSI Class 150 RF

2) **Valve body material**

Code 34: 1.4435, investment casting

Clamp DIN/ASME (code 82, 86, 88), actuator size 0, 1, 2, 3, 4



Connection type clamp DIN/ASME (code 82, 86, 88)¹⁾, investment casting material (code 34)²⁾

DN	NPS	ød1			ød3			L			LB		
		Connection type			Connection type			Connection type			Connection type		
		82	86	88	82	86	88	82	86	88	82	86	88
15	1/2"	18.1	16.0	9.40	50.5	34.0	25.0	130.0	130.0	130.0	47.5	47.5	47.5
20	3/4"	23.7	20.0	15.75	50.5	34.0	25.0	150.0	150.0	150.0	54.0	54.0	54.0
25	1"	29.7	26.0	22.10	50.5	50.5	50.5	160.0	160.0	160.0	56.0	56.0	56.0
32	1 1/4"	38.4	32.0	-	64.0	50.5	-	180.0	180.0	-	62.0	62.0	-
40	1 1/2"	44.3	38.0	34.80	64.0	50.5	50.5	200.0	200.0	200.0	67.0	67.0	67.0
50	2"	56.3	50.0	47.50	77.5	64.0	64.0	230.0	230.0	230.0	73.0	73.0	73.0

Dimensions in mm

1) **Connection type**

Code 82: Clamp DIN 32676 series B, face-to-face dimension FTF EN 558 series 1

Code 86: Clamp DIN 32676 series A, face-to-face dimension FTF EN 558 series 1

Code 88: Clamp ASME BPE, for pipe ASME BPE, face-to-face dimension FTF EN 558 series 1

2) **Valve body material**

Code 34: 1.4435, investment casting



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