

Two-Way Ball Valves Series 90



90-S

DN: 1" to 6"
PN: ANSI Class 150
Temp.: -40°C to +250°C



90-M

DN: 1" to 6"
PN: ANSI Class 150
Temp.: -40°C to +450°C



90-C

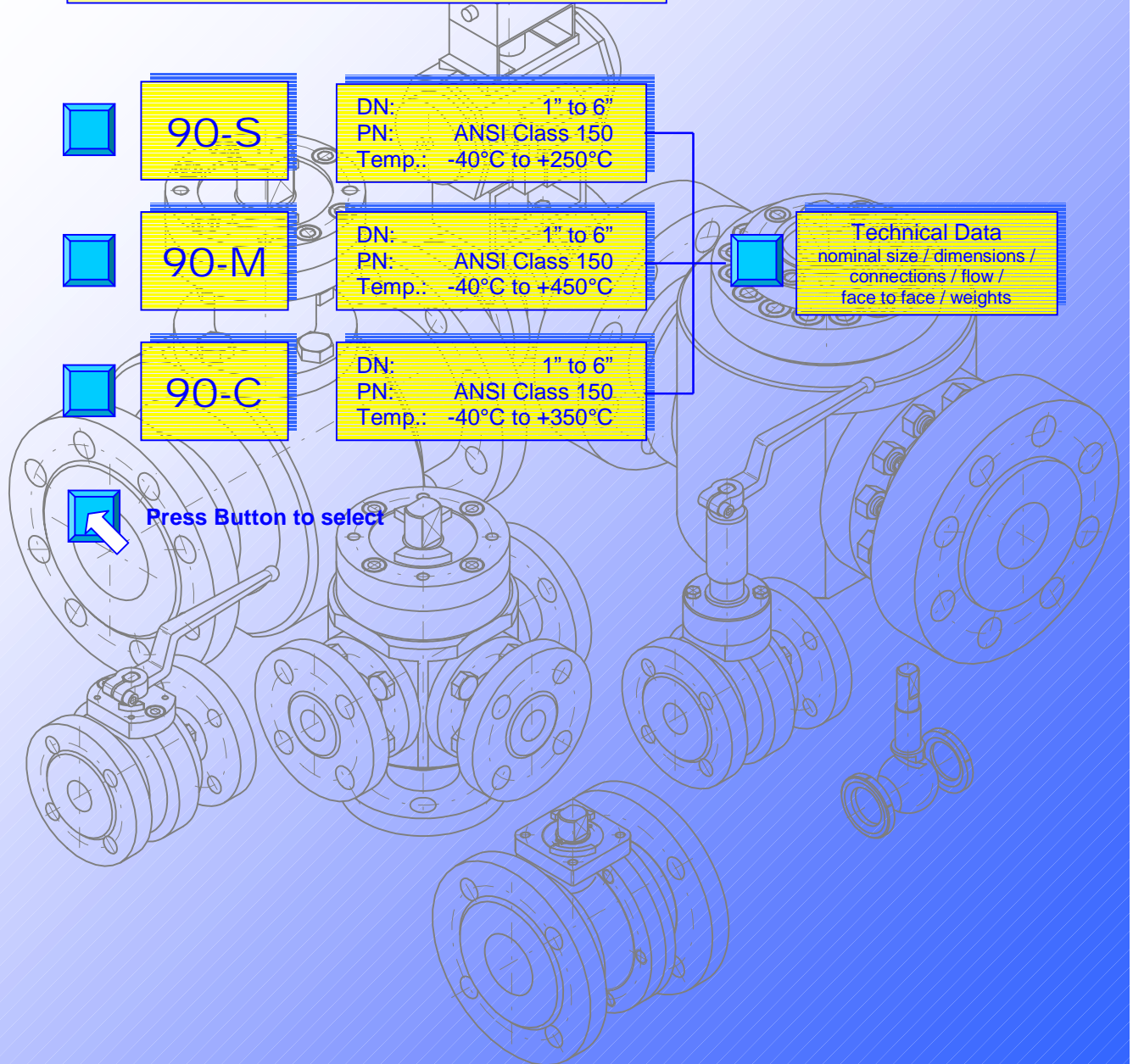
DN: 1" to 6"
PN: ANSI Class 150
Temp.: -40°C to +350°C



Technical Data
nominal size / dimensions /
connections / flow /
face to face / weights

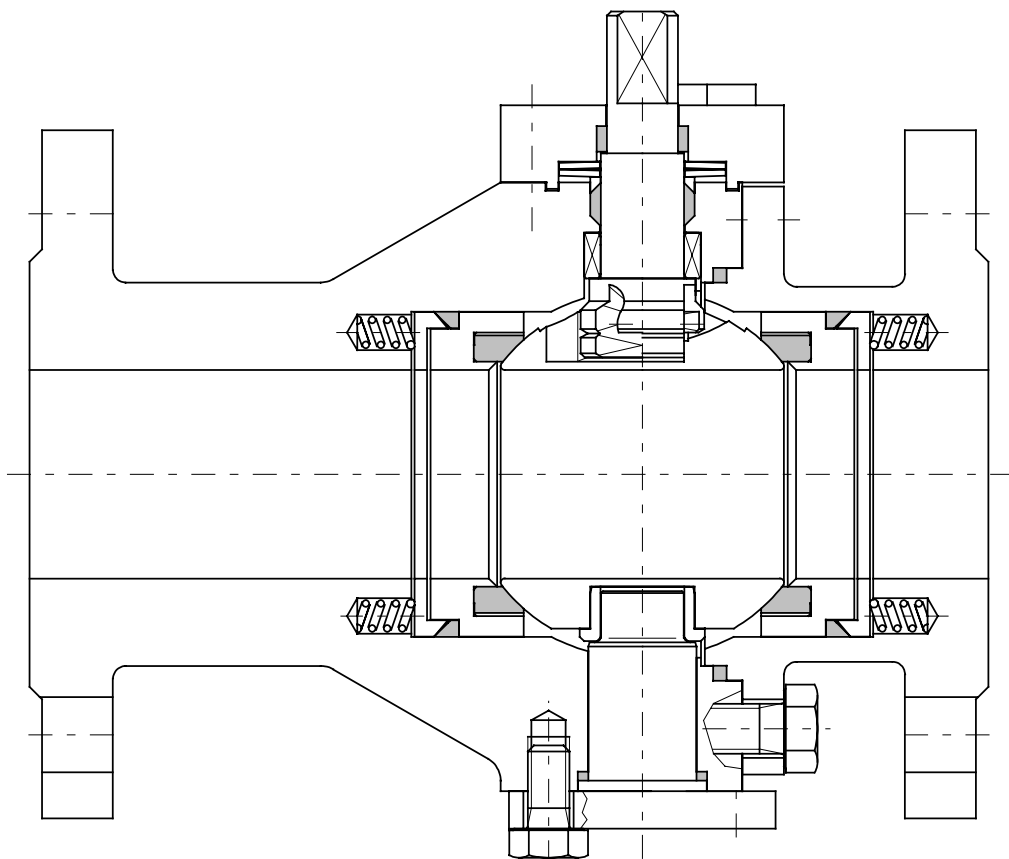


Press Button to select



Two-Way Ball Valve Series 90-S

DN 1" to 6"



Description:

This PERRIN ball valve design features a two piece, bolted body and a trunnion mounted ball. The seat system and the stem packing are spring loaded, resulting in very good sealing properties and a constant torque not influenced by temperature fluctuations.

The actuator mounting flange corresponds to the NAMUR recommendations with dimensions to DIN/ISO 5211.

Stem extensions, locking devices and actuators with accessoires can be field mounted at any time.

The ball valve is extruded in antistatic-design, with anti blowout proof stem and, as desired, in "fire-safe design". The stem packing has examined TA-Luft.

Range of application:

DN 1" to 6"	PN ANSI Class 150	Temperature -40°C to 250°C
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1.0 Main parts

item	designation
1	body
2	body end connection
3	retainer ring
4	retainer ring
5	ball
6	stem
7	lower trunnion
8	gland washer
9	bearing bush
10	bearing cover
16	plate spring
17	coil spring
18	body gasket
20	sealing ring
21	seat ring
23	body gasket
24	stem packing
25	bearing ring
26	bearing
28	screw
29	screw
31	screw

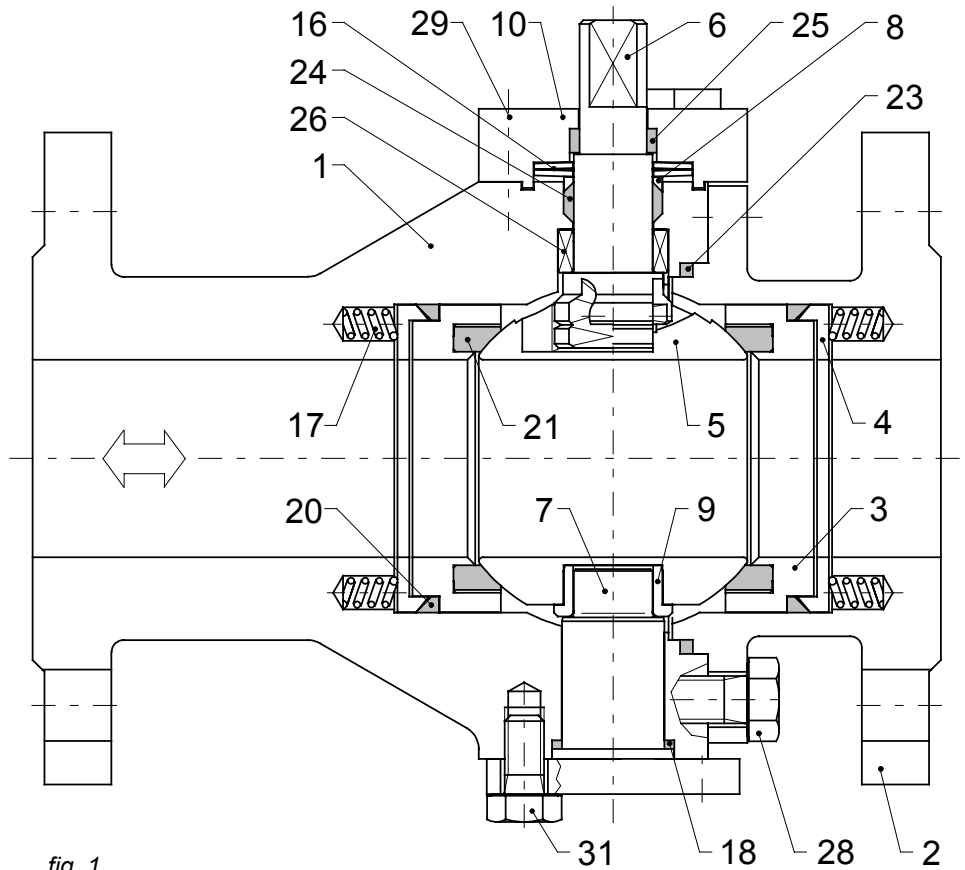


fig. 1
ball valve, series 90-S

Technical modifications are reserved.

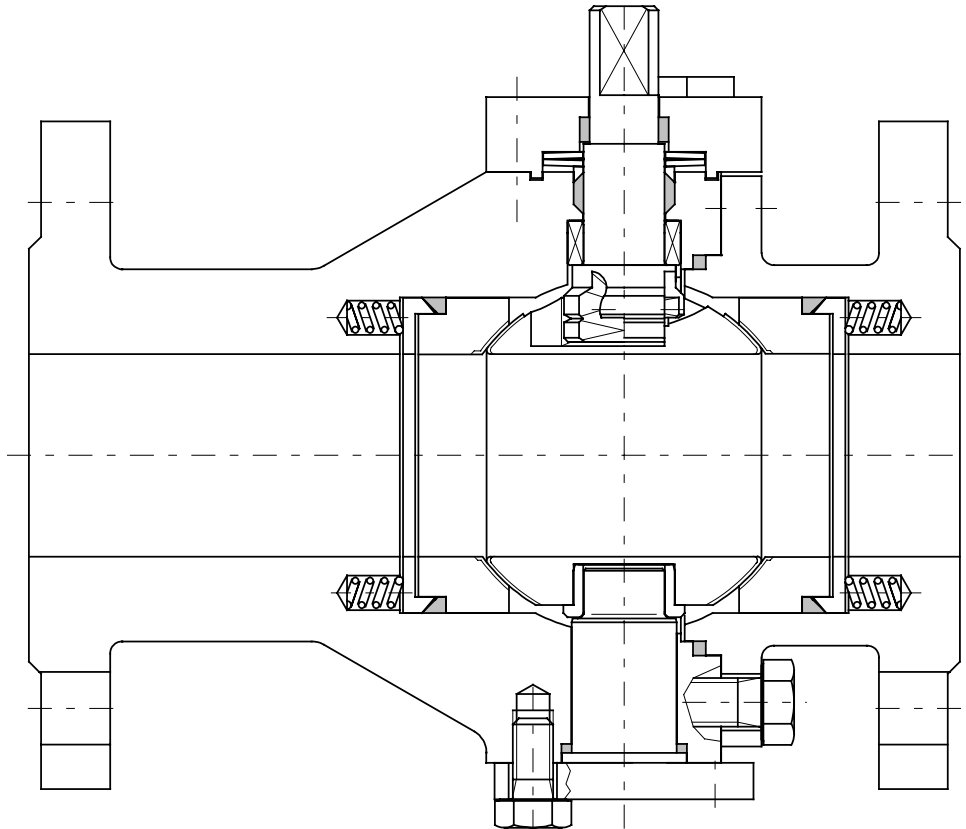
2.0 Materials

item	designation	temperatures:	
		-40°C to 250°C ¹⁾	-10°C to 250°C ¹⁾
1	body	1.4571 / 1.4408	1.0460 / 1.0619
2	body end connection		
3-4	retainer ring	1.4571	1.4571
5	ball	1.4571 / 1.4404 / 1.4408	1.4571 / 1.4404 / 1.4408
6	stem	1.4571	1.4571
7	lower trunnion		
8	gland washer		
9	bearing bush	PEEK	PEEK
10	bearing cover	1.4571	1.0460
16	plate spring	1.4568	1.8159
17	coil spring	1.4571	1.4571
18	body gasket	PTFE - TFM	PTFE - TFM
20	sealing ring		
21	seat ring		
23	body gasket	PTFE - Graphite	PTFE - Graphite
24	stem packing		
25	bearing ring	PTFE - 25% Glass	PTFE - 25% Glass
26	bearing	PEEK	PEEK
28-29	screw	A 2-70	A 2-70
31	screw		

1) Materials for lower/higher temperatures on request..

Two-Way Ball Valve Series 90-M

DN 1" to 6"



Description:

This PERRIN ball valve design features a two piece, bolted body and a trunnion mounted ball. The metallic seat system and the stem packing are spring loaded, resulting in very good sealing properties and a constant torque not influenced by temperature fluctuations.

The actuator mounting flange corresponds to the NAMUR recommendations with dimensions to DIN/ISO 5211.

Stem extensions, locking devices and actuators with accessoires can be field mounted at any time.

The ball valve is extradited in antistatic-design, with anti blowout proof stem and in "fire-safe design". The stem packing has examined TA-Luft.

Range of application:

DN 1" to 6"	PN ANSI Class 150	Temperature -40°C to 450°C
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1.0 Main parts

item	designation
1	body
2	body end connection
4	retainer ring
5	ball
6	stem
7	lower trunnion
8	gland washer
9	bearing bush
10	bearing cover
16	plate spring
17	coil spring
18	body gasket
20	sealing ring
21	seat ring
23	body gasket
24	stem packing
25	bearing ring
26	bearing
28	screw
29	screw
31	screw

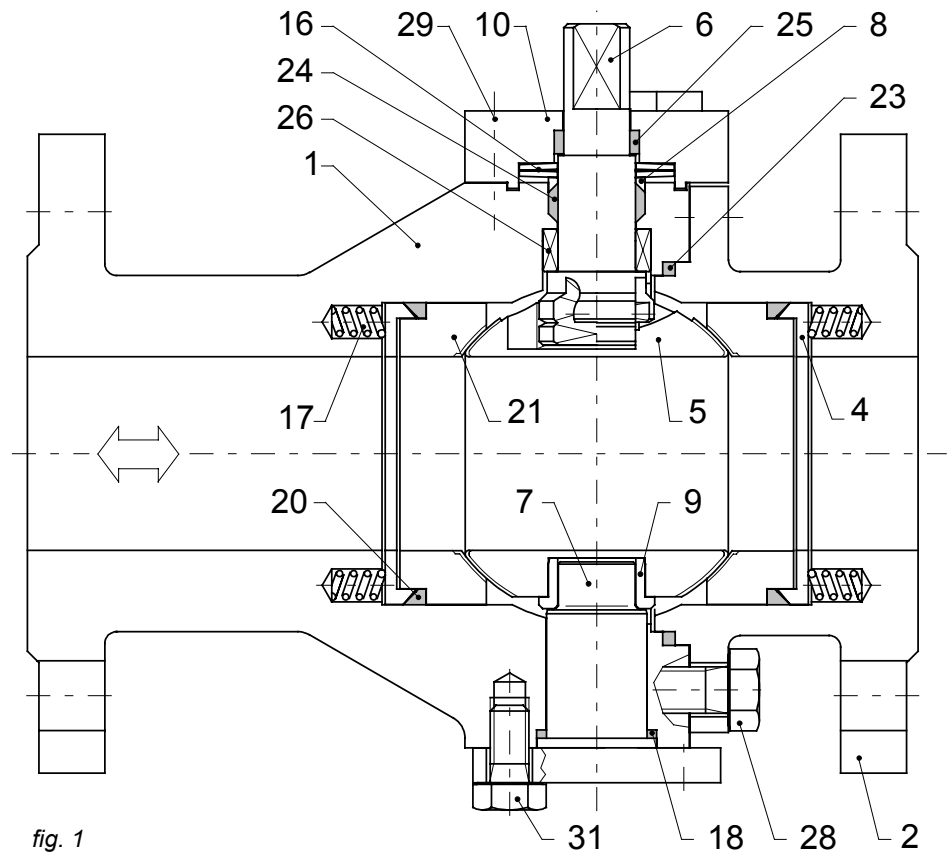


fig. 1
ball valve, series 90-M

Technical modifications are reserved.

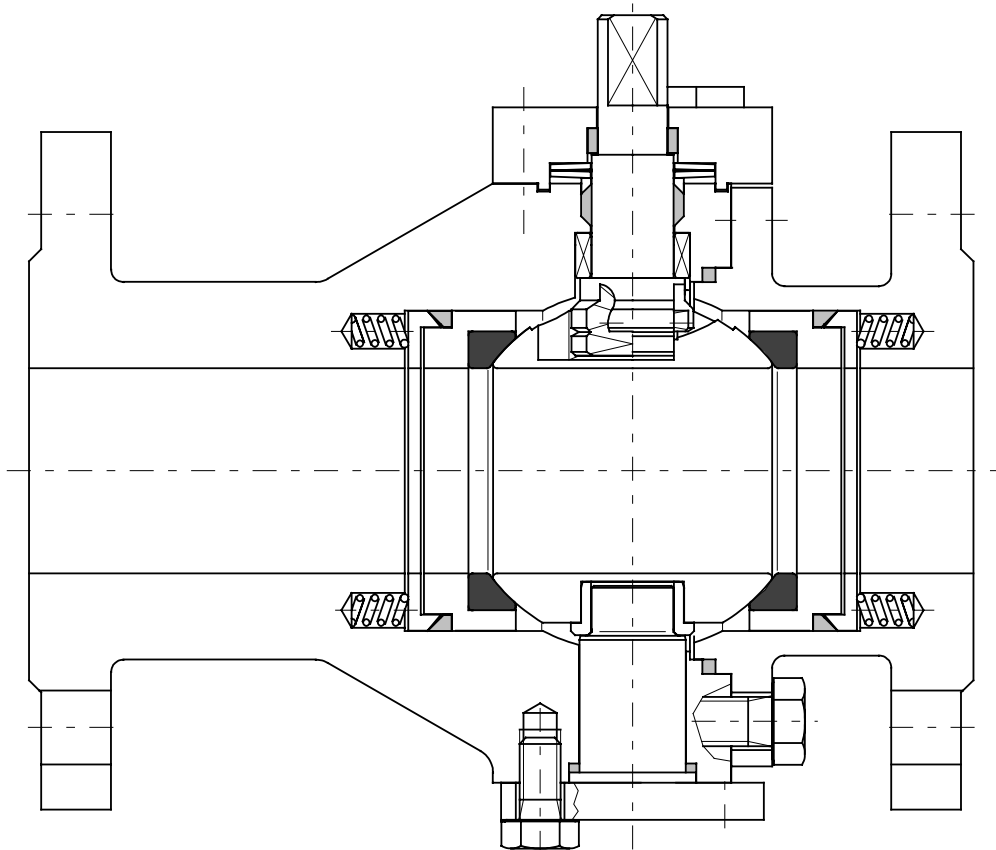
2.0 Materials

item	designation	temperatures:	
		-40°C to 450°C ¹⁾	-10°C to 450°C ¹⁾
1	body	1.4571 / 1.4408	1.0460 / 1.0619
2	body end connection		
4	retainer ring	1.4571	1.4571
5	ball	1.4571 / 1.4408 coated	1.4571 / 1.4408 coated
6	stem	1.4571	1.4571
7	lower trunnion	1.4571 coated	1.4571 coated
8	gland washer	1.4571	1.4571
9	bearing bush	1.4571 coated	1.4571 coated
10	bearing cover	1.4571	1.0460
16	plate spring	1.4568	1.8159
17	coil spring	1.4571	1.4571
18	body gasket	Graphite	Graphite
20	sealing ring		
21	seat ring	1.4571 coated	1.4571 coated
23	body gasket	Graphite	Graphite
24	stem packing		
25	bearing ring	PEEK	PEEK
26	bearing	Carbon-Antimon	Carbon-Antimon
28-29	screw	A 2-70	A 2-70
31	screw		

1) Materials for lower/higher temperatures on request..

Two-Way Ball Valve Series 90-C

DN 1" to 6"



Description:

This PERRIN ball valve design features a two piece, bolted body and a trunnion mounted ball. The carbon seat system and the stem packing are spring loaded, resulting in very good sealing properties and a constant torque not influenced by temperature fluctuations.

The actuator mounting flange corresponds to the NAMUR recommendations with dimensions to DIN/ISO 5211.

Stem extensions, locking devices and actuators with accessoires can be field mounted at any time.

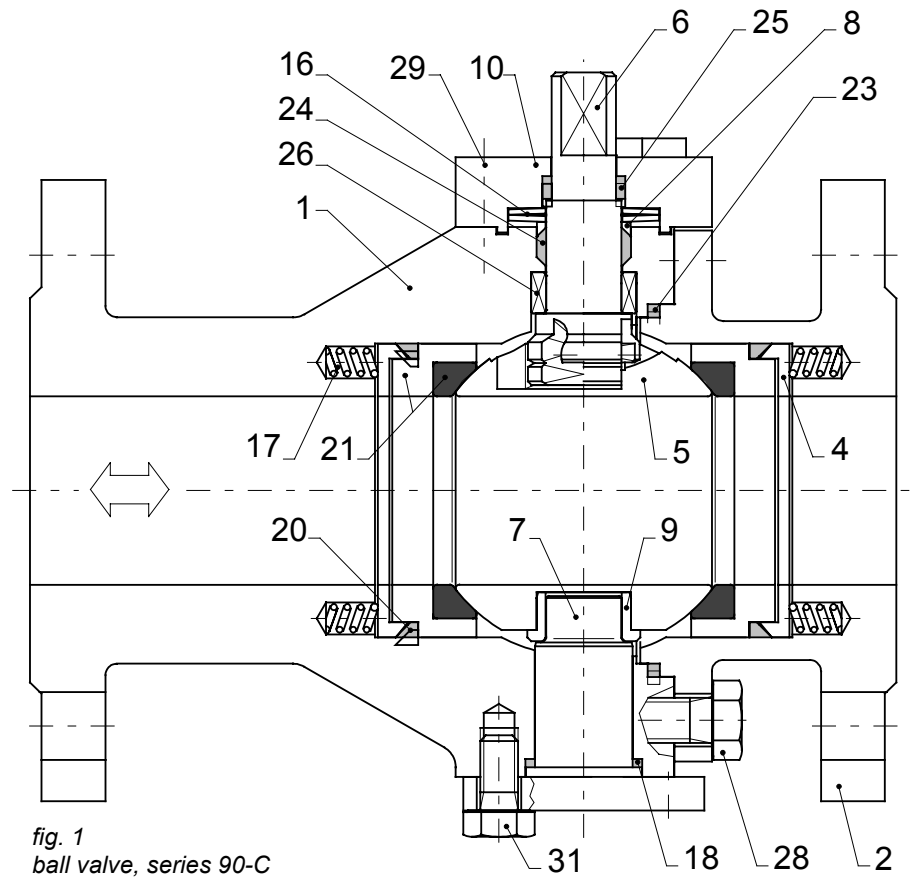
The ball valve is extruded in antistatic-design, with anti blowout proof stem and in "fire-safe design". The stem packing has examined TA-Luft.

Range of application:

DN 1" to 6"	PN ANSI Class 150	Temperature -40°C to 350°C
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1.0 Main parts

item	designation
1	body
2	body end connection
4	retainer ring
5	ball
6	stem
7	lower trunnion
8	gland washer
9	bearing bush
10	bearing cover
16	plate spring
17	coil spring
18	body gasket
20	sealing ring
21	seat-unit
23	body gasket
24	stem packing
25	bearing ring
26	bearing
28	screw
29	screw
31	screw



Technical modifications are reserved.

2.0 Materials

item	designation	temperatures:	
		-40°C to 350°C ¹⁾	-10°C to 350°C ¹⁾
1	body	1.4571 / 1.4408	1.0460 / 1.0619
2	body end connection		
4	retainer ring	1.4571	1.4571
5	ball	1.4571 / 1.4404 / 1.4408	1.4571 / 1.4404 / 1.4408
6	stem	1.4571	1.4571
7	lower trunnion	1.4571 coated	1.4571 coated
8	gland washer	1.4571	1.4571
9	bearing bush	1.4571 coated	1.4571 coated
10	bearing cover	1.4571	1.0460
16	plate spring	1.4568	1.8159
17	coil spring	1.4571	1.4571
18	body gasket	Graphite	Graphite
20	sealing ring		
21	seat-unit	1.4571 / Carbon-Antimon	1.4571 / Carbon-Antimon
23	body gasket	Graphite	Graphite
24	stem packing		
25	bearing ring	PEEK	PEEK
26	bearing	Carbon-Antimon	Carbon-Antimon
28-29	screw	A 2-70	A 2-70
31	screw		

1) Materials for lower/higher temperatures on request..

Technical data, Series 90-S; 90-M; 90-C

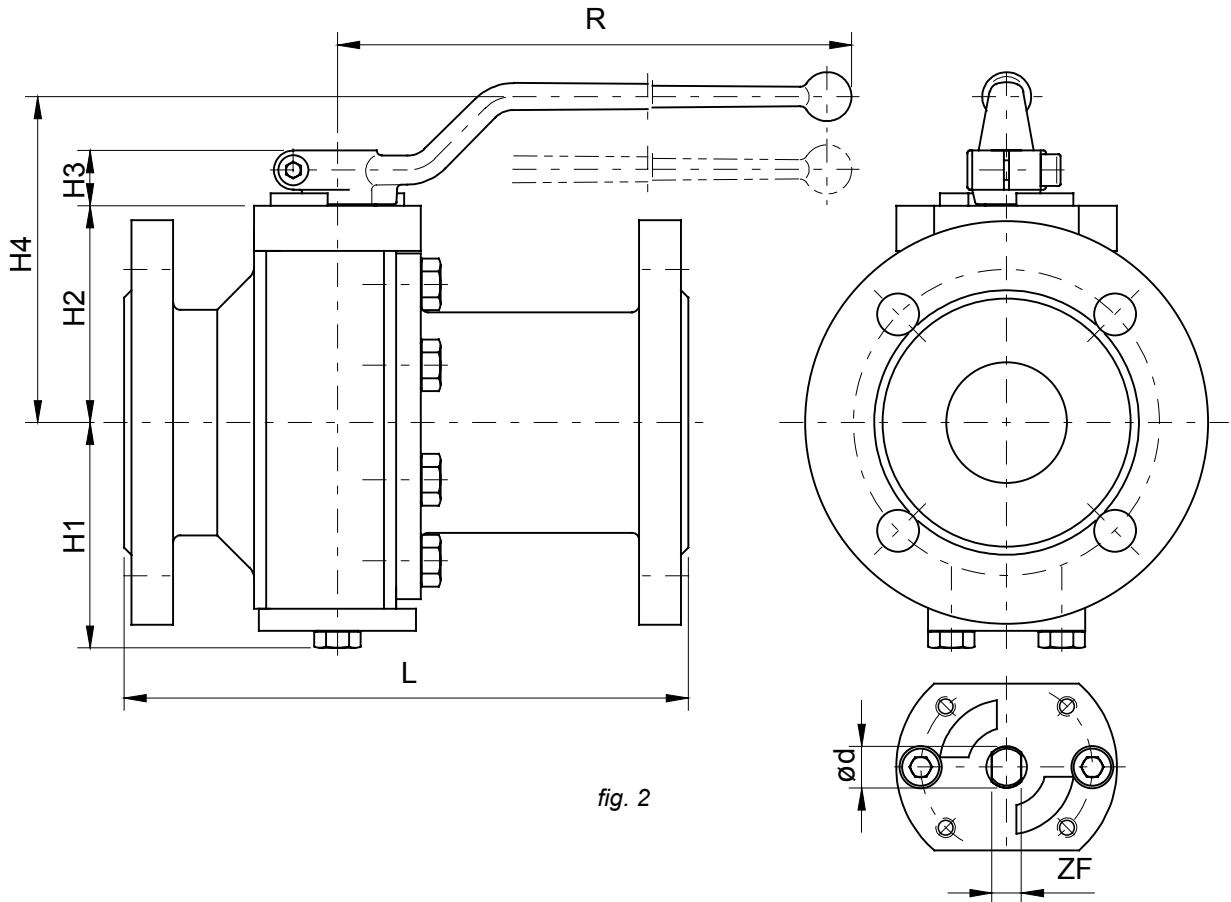
3.0 Technical data

3.1 Nominal size / Dimensions / Connections / Flow / Weights

Nominal size (DN)		dimensions							flow k_{v100} [m ³ /h] $\Delta p=1\text{bar}$	face to face			connections	weight [kg]			actuator-connection DIN/ISO 5211	
										ANSI		DIN 558-1		ANSI Cl.150	DIN 558-1			
		H1	H2	H3	H4	R	ϕd	ZF		Cl.150 RF/FF	FTF1	FTF45			FTF1	FTF45		
1/2"	15																	
3/4"	20																	
1"	25	68	62	19	107	180	13	10	65		165	160		6,5	6	F 05		
1 1/4"	32																	
1 1/2"	40																	
2"	50	92	88	23	133	300	17	12	325		216	230		12,5	13	F 07		
2 1/2"	65																	
3"	80	108	125	28	153	450	27	18	960		283	310	280		27	30	27	F 10
4"	100	126	140	28	168	450	27	18	1650		305	350	300		31	34	31	F 10
5"	125																	
6"	150	169	173	37	224	800	40	32	4200		403	480			89	95		F 12

dimensions in mm

Technical modifications are reserved.



3.2 Special features

profit:

- ready to take actuator
- minimal abrasion
- standard connections
- constant torque
- minimal maintenance

design:

- splitted body
- trunnion mounted ball
- no welds
- anti blowout proof stem
- spring loaded seat system
- live loaded stem packing