



3-piece Ball valve
Soft seal
BW / BSP / FLG
PN16-100
DN10-150

Range of application:

In industrial facilities, oil and chemical industry and related manufacturing industries

Temperature range:

Max. working temperature :

-60°C to +280°C

-196°C acc. to requirement

Material [according DIN EN (DIN)]

Body: —1.0619N,1.0619QT
 —1.4408,1.4409,1.4470,1.4539
 Ball: —1.4301,1.4401,1.4404,1.4539
 Body Seal: PTFE /Graphite
 Seat: PTFE / RPTFE /TFM1600 / VX1
 / PEEK /PCTFE

Perform standard:

Design:split body with full bore round port , floating ball.
 acc. DIN 3357 .

Design minimum wall thickness calculation acc. : EN12516-1 .

Face to face: DIN 558-1; BW / BSP / FLG

Operating:with a two flat stem acc to the NAMUR-recommends.
 90° -rotary switch

Actuator mounting: mounting flange acc. to DIN ISO 5211
 for gear box , air- , electric-or hydraulic pattern actuator .

Fire test : API 607 & BS 6755 .

TA-Luft 2002 10000 cycles RT.

TA-Luft acc. to ISO 15848-1 CO3 t (-60°C 200°C).

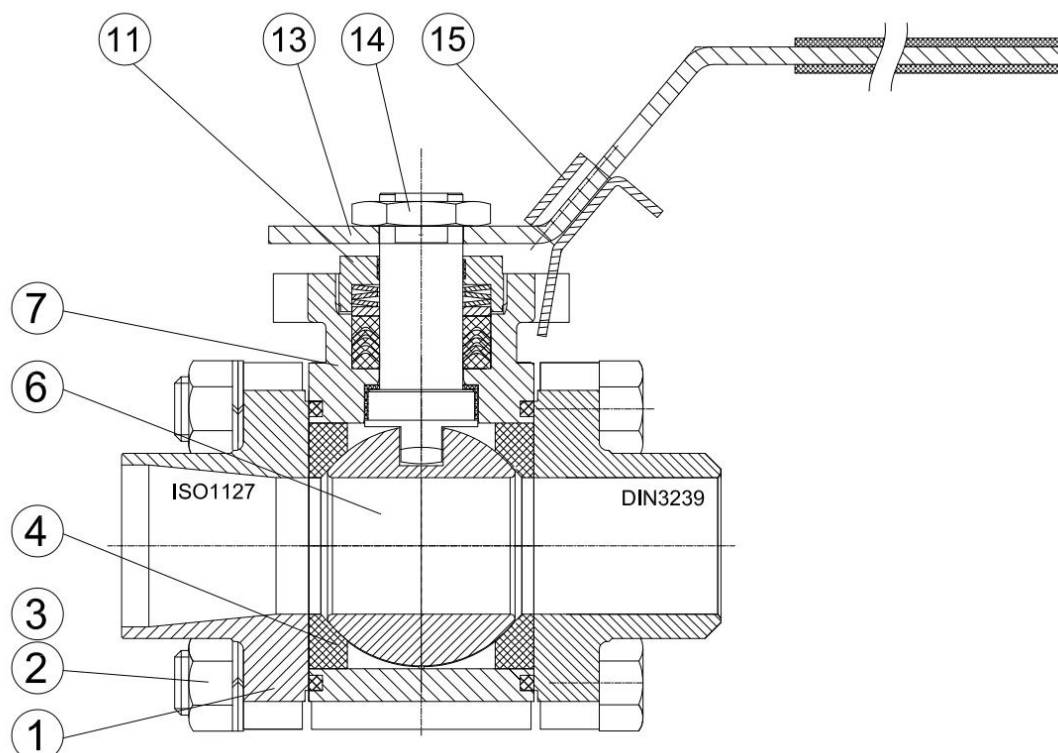
ISO 15848-1 FE BH CO3 t (-60°C 200°C).

Antistatic device acc.: BS 5351 .

Preloaded belleville spring design for stem sealing system,
 offers the possibility of adjustment of the sealing.

Optional: Ball with relief bore on pressure side (requires unidirectional installation)

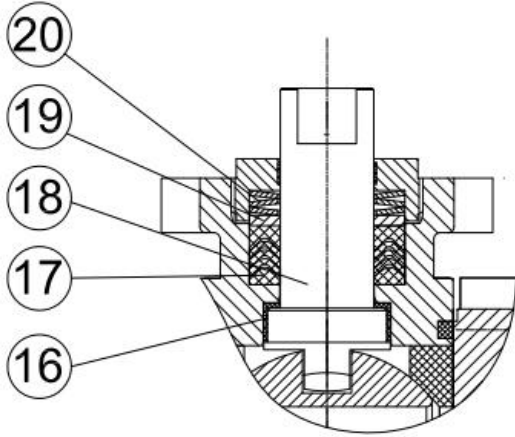
FIG.	Pressure	Material	RANGE
133.752	PN16	1.0619N	DN10-DN150
135.752	PN40	1.0619N	DN10-DN150
136.752	PN64	1.0619N	DN10-DN150
137.752	PN100	1.0619N	DN10-DN150
153 / 503.752	PN16	1.4408 / 1.4539	DN10-DN150
155 / 505.752	PN40	1.4408 / 1.4539	DN10-DN150
156 / 506.752	PN64	1.4408 / 1.4539	DN10-DN150
157 / 507.752	PN100	1.4408 / 1.4539	DN10-DN150



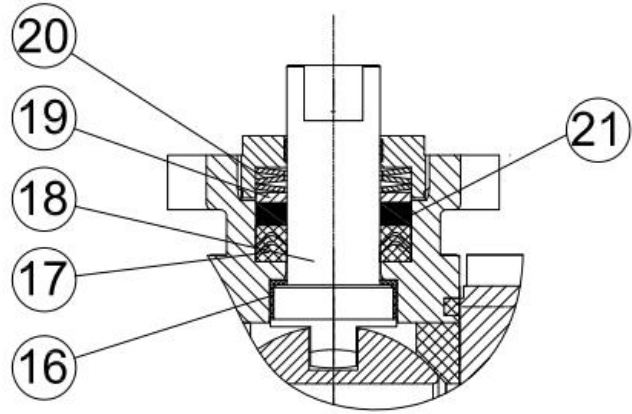
Material list

NO.	Part	Material	
		FIG. 153/ 155/ 156/ 157/ 503/ 505/ 506/ 507.752	FIG. 133/135/ 136/ 137.752
1	Adapter	1.4408 / 1.4539	1.0619N
2	Bolt	A4-70	1.7225
3	Nut	A4	1.1181
4	Seat	PTFE/RPTFE/TFM 1600/VX1/ PEEK /PCTFE	PTFE/RPTFE/TFM 1600/VX1/ PEEK /PCTFE
6	Ball	1.4401 / 1.4404 / 1.4539	1.4301
7	Body	1.4408 / 1.4539	1.0619N
11	Gland nut	1.4401	C22.8
13	Lever	1.4301	1.4301
14	Lock nut	A2	A2
15	Locking piece	1.4301	1.4301

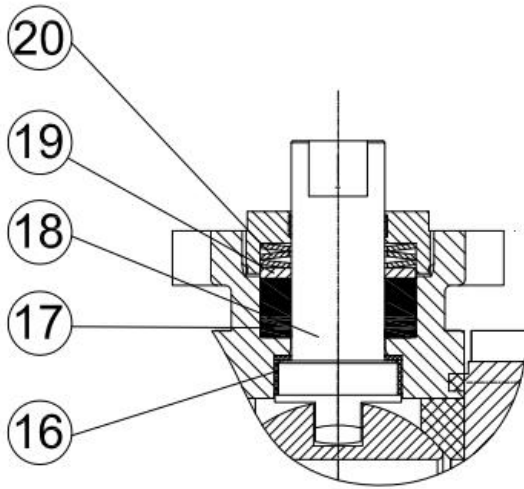
STUFFING BOX TYPE :



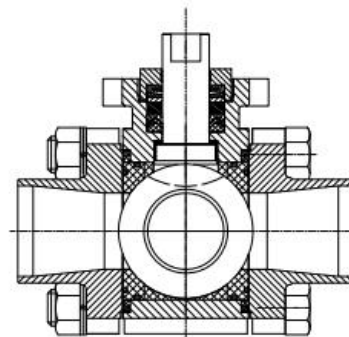
NP(Nut,PTFE)



NPG(Nut,PTFE+Graphite)

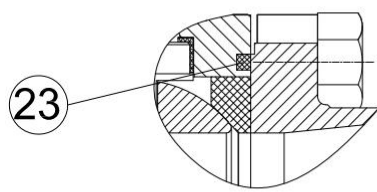


NG(Nut,Graphite)

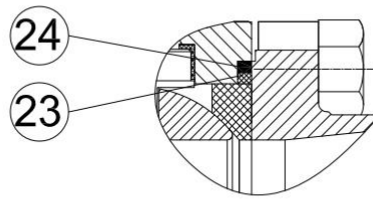


Enclosed ball, without dead space

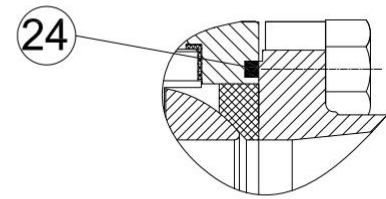
BODY SEALING TYPE :



For NP



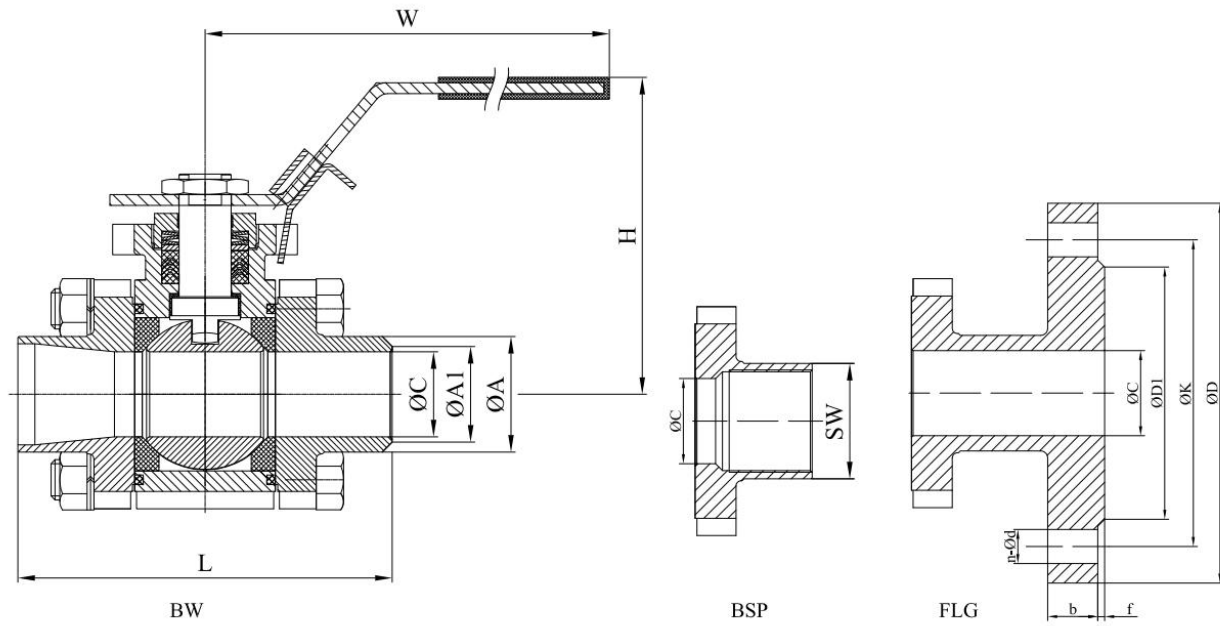
For NPG



For NG

Material list

NO.	Part	Material		
		Fig.752 NP	Fig.752 NPG	Fig.752 NG
16	Thrust bearing	PTFE / PTFE + Carbon Fiber Antistatic		
17	Packing	PTFE / PTFE + Carbon Fiber Antistatic		
18	Stem	17-4PH/1.4462/1.4571/1.4401		
19	Metal ring	1.4401 / 1.4301		
20	Belleville spring	17-7PH		
21	Packing	PTFE / PTFE + Carbon Fiber Antistatic		
22	Metal ring	1.4401 / 1.4301		
23	Body seal	PTFE	PTFE	Graphite
24	Body seal		Graphite	



Dimension List

PN	DN	BW				BSP			FLG						ISO 5211	
		L	ΦC	ΦA	ΦA1(DIN/ISO)	L	ΦC	SW	L	ΦD	ΦK	ΦD1	b	f		n-Φd
16	10	65	10	17.2	14.9/15.2	65	10	27	130							F03
	15	72.5	15	21.3	18.7/19.3	72.5	15	33	130	95	65	45	16	2	4-14	F03
	20	85.4	20	26.9	23.5/24.9	85.4	20	41	150	105	75	58	18	2	4-14	F04
	25	99.3	25	33.7	29.8/31.7	99.3	25	50	160	115	85	68	18	2	4-14	F04
	32	110.4	32	42.4	37.2/40.4	110.4	32	55	180	140	100	78	18	2	4-18	F05
	40	126.3	40	48.3	44.1/46.3	126.3	40	68	200	150	110	88	18	3	4-18	F05
	50	142.6	50	60.3	55.1/58.3	160	50		230	165	125	102	18	3	4-18	F07
	65	169.5	65	76.1	70.6/73.8	180	65		290							F07
	80	214	80	88.9	84.5/86.6	214	80		310	200	160	138	20	3	8-18	F10
	100	277	100	114.3	107.2/111.7		100		350	220	180	158	20	3	8-18	F10
	125		125				125			250	210	188	22	3	8-18	
150	409	150	168.3	159.2/165.7		150		480	285	240	212	22	3	8-22	F12	
40	65	169.5	65	76.1	70.6/73.8	180	65		290							F07
	80	214	80	88.9	84.5/86.6	214	80		310	200	160	138	24	3	8-18	F10
	100	277	100	114.3	107.2/111.7		100		350	235	190	162	24	3	8-22	F10
	125		125				125			270	220	188	26	3	8-26	
	150	409	150	168.3	159.2/165.7		150		480	300	250	218	28	3	8-26	F12

PN64-PN100 BW BSP are the same as PN16-PN40.

Connecting format

Flanged		
Pressure rating	Connection type	Reference standard
PN16	Flanged	DIN EN 1092-1 Form B 1
PN40	BSP screw	DIN259 / DIN2999
PN64	BW	ISO 1127 / DIN3239 Form2 Welding end
PN100		Welding joint DIN2559,Form22

Installation instructions

Installation site is not prescribed.
Regardless of the flow direction.

Technical parameters

Flow characteristics - Kv (m³/h)

DN	10	15	20	25	32	40	50	65	80	100	150
Kv	7	12	23	60	72	175	360	620	930	1900	3500

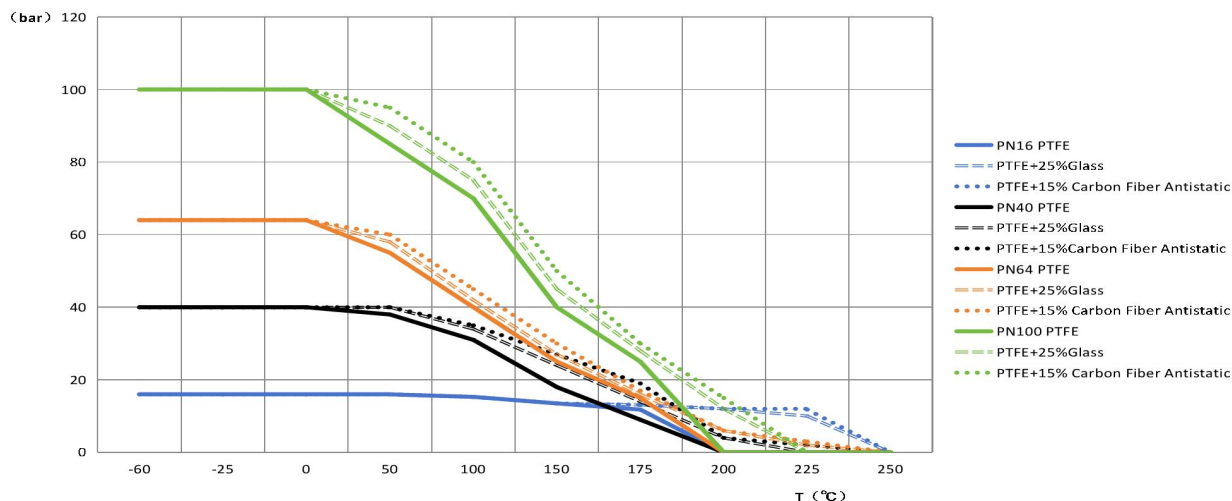
Open torque - Nm

ΔP (bar)	DN										
	10	15	20	25	32	40	50	65	80	100	150
0	3	3	3.5	6	9	14	17	39	59	75	130
10	4	4	6	10	15	24	27	55	80	105	220
16	5	5	8	16	21	31	36	70	100	132	306
25	7	7	11	20	30	39	55	95	130	180	500
40	8	9	15	26	41	50	72	130	190	265	670
64	8.8	9.9	16.5	28.6	45.1	55	79.2	143	209	291.5	737
100	9.6	10.8	18	31.2	49.2	60	86.4	156	228	318	804

Maximum - Nm

DN	15	15	20	25	32	40	50	65	80	100	150
M _{d max}	45	50	50	336	336	600	600	600	1000	1000	3500

Allowable pressure in dependence of the temperature



The shown values refer to austenitic stainless steel 1.4408. More details please consult.