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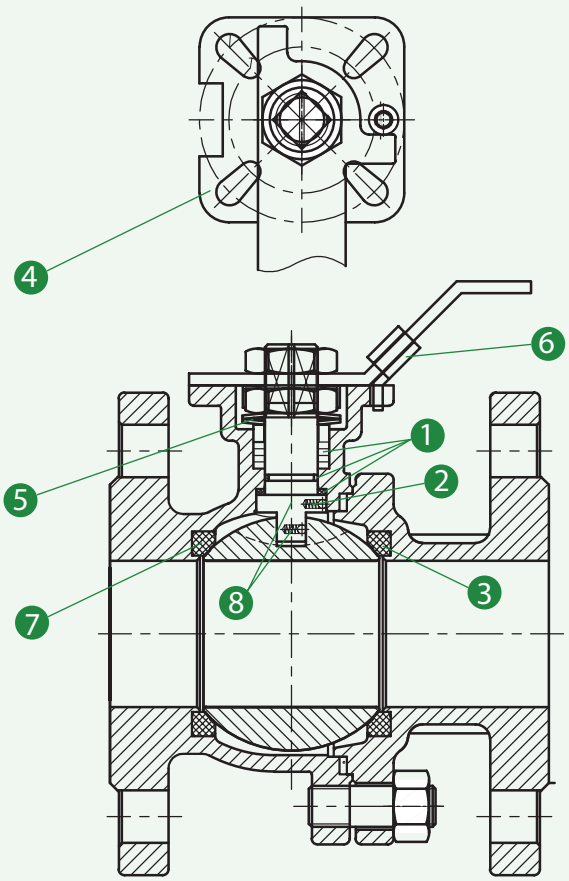
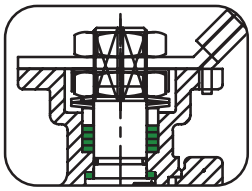


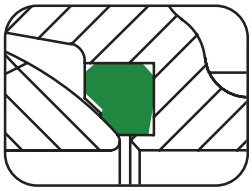


1 Stem multiple seal design

The bottom gasket, intermediate O-ring and packing multiple seal, effectively ensures the upper sealing par of the stem does not leak.

2 Stem blowout design

The lower part of the stem is provided with a shaft shoulder. Even if the nut is removed, the stem will not blow out of the body, ensuring the safety of the body.

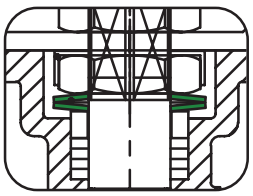


3 Seat resilient seal design

The seat sealing part is designed with elastic structure, which can effectively reduce the valve stem operation torque, which makes the opening and closing easier, and the low pressure and high pressure seal more reliable.

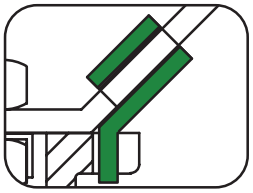
4 Comply with ISO5211 flange design

ISO 5211 standard installation platform, integrated with the body, the actuator can be installed directly, easy to install, economical and reliable.



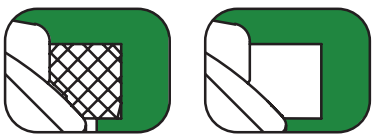
5 Design of double butterfly shrapnel device

The two pieces of utterfly shears pressed in advance will compensate for the leakage of the valve stem, release is pretensioned deformation, and press the packing again to ensure the sealing of the packing.



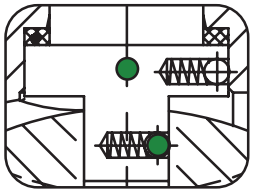
6 Design with locking device

After the padlock of the lock hole, the lock plate cannot move upward and the handle cannot be rotated.This ensures that the valve is locked at the desired position preventing misoperation.



7 Fire protection structure design

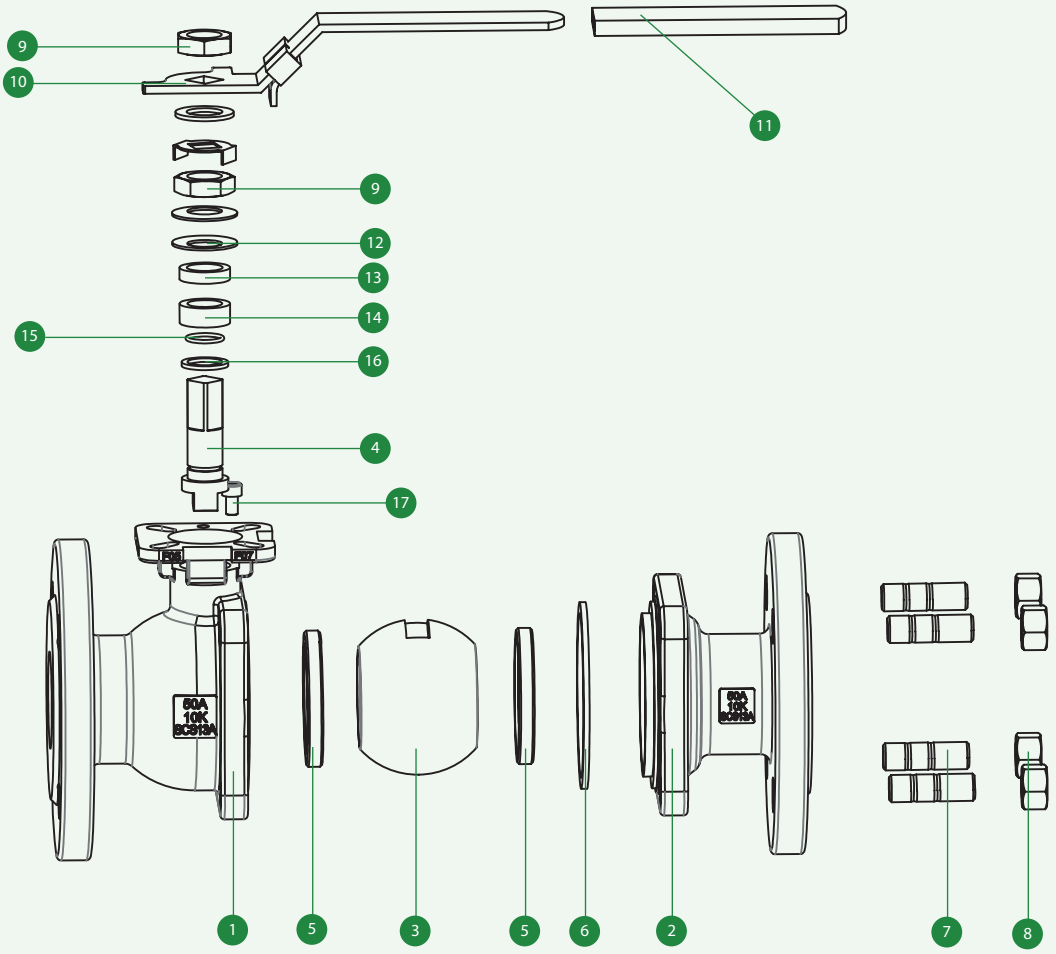
When a fire breaks out in the surrounding area, the valve seat is burned, and the ball moves backward under the force of the medium, contacting with the body's fire-proof lip to assist in sealing and reducing medium leakage.



8 Design of double butterfly shrapnel device

The two pieces of utterfly shears pressed in advance will compensate for the leakage of the valve stem, release is pretensioned deformation, and press the packing again to ensure the sealing of the packing.

FLANGED BALL VALVES | SPARE PARTS
CAST STEEL BALL VALVES



N°	Parts Name	Material		
		DIN/JIS/ANSI	DIN/JIS/ANSI	DIN/JIS/ANSI
1	Body	14308 / SCS13A / A351 CF8	14308 / SCS14A / A351 CF8M	10619 / SCPH2 / A216 WCB
2	Cap	14308 / SCS13A / A351 CF8	14308 / SCS14A / A351 CF8M	10619 / SCPH2 / A216 WCB
3	Ball	A182-F304	A182-F316	A182-F304
4	Stem	A276-304	A276-316	A276-410
5	Seat	PTFE / PTFE+15%GF / PTFE+15%CF / TFM1600		
6	Gasket	PTFE / 304 + Graphite	PTFE/316+Graphite	PTFE/304+Graphite
7	Stud	A193-B8	A193-B8	A193-B7
8	Nut	A194-8	A194-8	A194-2H
9	Thin nut	304	304	304
10	Handle	304	304	304
11	Handle cover	PVC	PVC	PVC
12	Disc spring	SS301	SS301	SS301
13	Gland	304	316	304
14	Packing	PTFE / Graphite		
15	O-ring	Viton (FKM)		
16	Thrust washer	PTFE/RPTFE	PTFE/RPTFE	PTFE/RPTFE
17	Screw	304	304	304

FLANGED BALL VALVES | DIN STANDARD
CAST STEEL BALL VALVES

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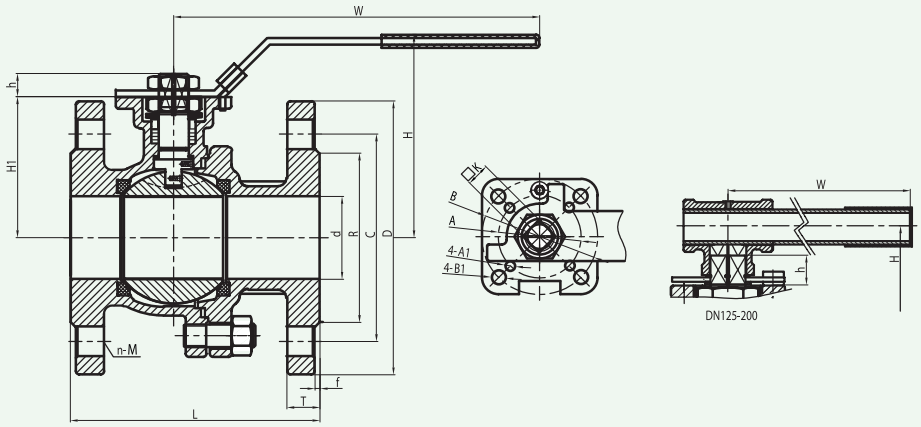


STANDARD SPECIFICATION
1. Design: DIN3357-2 EN12516-1
2. Fire Design: API 607
3. Face to Face: EN 558 Series 27/1 (L* Extended body)
4. Flanged End: EN 1092-1
5. Inspection: EN 12266-1

DESIGN FEATURES
1. Stem O-ring + packing multiple seal
2. Dynamic load pressure stem packing
3. Blow-out proof stem
4. Fire-proof and Anti-static structure
5. Seat resilient seal design
6. ISO 5211 standard actuator mounting pad

PN16/25/40

DN	DIMENSION					FLANGE DIMENSION						TOP CONNECTION SIZE							
	d	L	L*	H	W	D	C	R	T	f	n-m	ISO 5211	A	B	A1	B1	K	h	H1
15	15	115	130	80	141	95	65	45	16	2	4-14	F03/F04	36	42	6	6	9	9	48
20	20	120	150	86	141	105	75	58	18	2	4-14	F03/F04	36	42	6	6	9	9	54
25	25	125	160	98	162	115	85	68	18	2	4-14	F04/F05	42	50	6	7	11	11	61
32	32	130	180	107	162	140	100	78	18	2	4-18	F04/F05	42	50	6	7	11	11	70
40	38	140	200	114	220	150	110	88	18	3	4-18	F05/F07	50	70	7	9	14	14	76
50	50	150	230	123	220	165	125	102	20	3	4-18	F05/F07	50	70	7	9	14	14	85

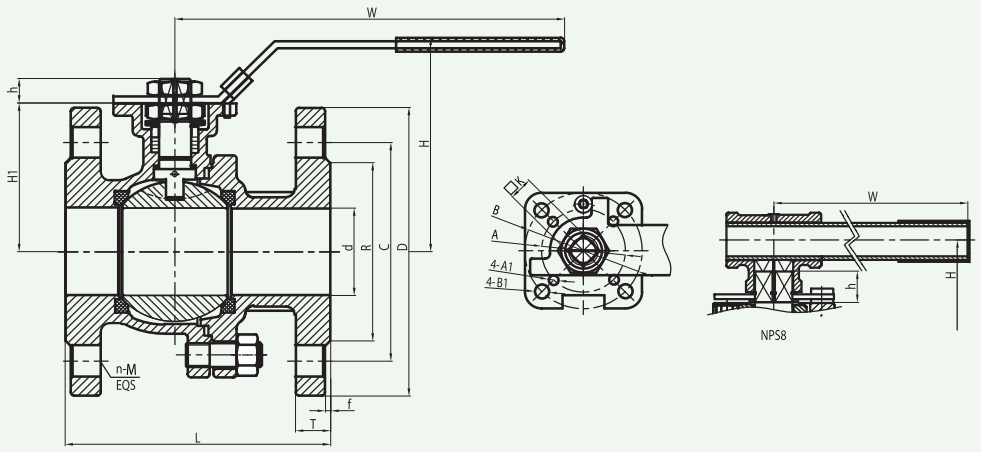
PN16

DN	DIMENSION					FLANGE DIMENSION						TOP CONNECTION SIZE							
	d	L	L*	H	W	D	C	R	T	f	n-m	ISO 5211	A	B	A1	B1	K	h	H1
65	64	170	290	154	285	185	145	122	18	3	4-18	F07/F10	70	102	9	11	17	17	108
80	76	180	310	166	285	200	160	138	20	3	8-18	F07/F10	70	102	9	11	17	17	122
100	100	190	350	196	380	220	180	158	20	3	8-18	F10	-	102	-	11	22	22	148
125	123	325	400	260	705	250	210	188	22	3	8-18	F12	-	125	-	14	27	30	180
150	150	350	480	285	705	285	240	212	22	3	8-22	F12	-	125	-	14	27	30	202
200	200	400	600	345	1200	340	295	268	24	3	12-22	F12/F14	125	140	13	18	30	32	258

PN25/40

DN	DIMENSION				FLANGE DIMENSION						TOP CONNECTION SIZE							
	d	L	H	W	D	C	R	T	f	n-m	ISO 5211	A	B	A1	B1	K	h	H1
65	64	170	163	285	185	145	122	22	3	8-18	F07/F10	70	102	10	11	17	17	108
80	76	180	172	285	200	160	138	24	3	8-18	F10	-	102	-	11	22	22	130
100	100	190	201	380	235	190	162	24	3	8-22	F10	-	102	-	11	22	22	148
125	123	325	260	705	270	220	188	26	3	8-26	F12	-	125	-	14	27	30	180
150	150	350	310	1200	300	250	218	28	3	8-26	F12/F14	125	140	13	18	30	32	222
200	200	400	275	1500	375	320	285	34	3	12-30	F14/F16	140	465	18	22	36	38	275

FLANGED BALL VALVES | JIS STANDARD
CAST STEEL BALL VALVES



STANDARD SPECIFICATION
1. Design: ASME B16.34
2. Face to Face: JIS B2002
3. Flange End: JIS B2220
4. Inspection: JIS B2003

DESIGN FEATURES
1. Stem O-ring + packing multiple seal
2. Dynamic load pressure stem packing
3. Blow-out proof stem
4. Anti-static structure
5. Seat resilient seal design
6. ISO 5211 standard actuator mounting pad

10K																	
DN	DIMENSION				FLANGE DIMENSION						TOP CONNECTION SIZE							
	d	L	H	W	D	C	R	T	f	n-m	ISO 5211	A	B	A1	B1	K	h	H1
15A	15	108	80	140	95	70	51	12	1	4-15	F03/F04	36	42	6	6	9	9	48
20A	20	117	85	140	100	75	56	14	1	4-15	F03/F04	36	42	6	6	9	9	53
25A	25	127	100	160	125	90	67	14	2	4-19	F04/F05	42	50	6	7	11	11	64
32A	32	140	108	160	135	100	76	16	2	4-19	F04/F05	42	50	6	7	11	11	71
40A	38	165	114	185	140	105	81	16	2	4-19	F05/F07	50	70	7	9	14	14	76
50A	50	178	124	185	155	120	96	16	2	4-19	F05/F07	50	70	7	9	14	14	85
65A	65	190	148	230	175	140	116	18	2	4-19	F07/F10	70	102	9	11	17	17	102
80A	76	203	158	230	185	150	126	18	2	8-19	F07/F10	70	102	9	11	17	17	112
100A	100	229	189	320	210	175	151	18	2	8-19	F07/F10	-	102	-	11	22	22	141
125A	125	300	258	456	250	210	182	20	2	8-23	F12	-	125	-	14	27	27	197
150A	150	394	273	656	280	240	212	22	2	8-23	F10/F12	102	125	11	13	27	30	213

FLANGED BALL VALVES | ASME STANDARD
CAST STEEL BALL VALVES

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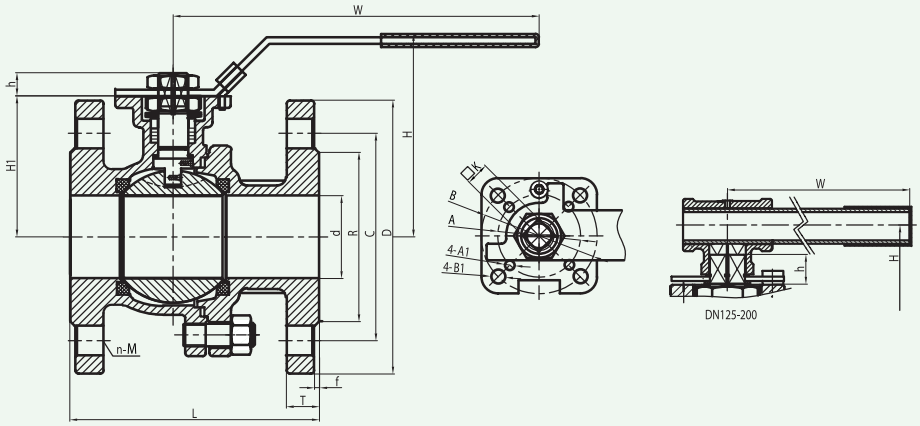


STANDARD SPECIFICATION
1. Design: ASME B16.34/API 608
2. Fire Design: API 607
3. Face to Face: ASME B16.10
4. Flanged End: ASME B16.5
5. Inspection: 598

DESIGN FEATURES
1. Stem O-ring + packing multiple seal
2. Dynamic load pressure stem packing
3. Blow-out proof stem
4. Fire-proof and Anti-static structure
5. Seat resilient seal design
6. ISO 5211 standard actuator mounting pad

CL150

NPS	DIMENSION				FLANGE DIMENSION						TOP CONNECTION SIZE							
	d	L	H	W	D	C	R	T	f	n-m	ISO 5211	A	B	A1	B1	K	h	H1
1/2"	15	108	80	141	90	60.3	34.9	8.5	2	4-16	F03/F04	36	42	6	6	9	9	48
3/4"	20	117	86	141	100	69.9	42.9	9.5	2	4-16	F03/F04	36	42	6	6	9	9	54
1"	25	127	98	162	110	79.4	50.8	10	2	4-16	F04/F05	42	50	6	7	11	11	61
1 1/4"	32	140	106.5	162	115	88.9	63.5	11.5	2	4-16	F04/F05	42	50	6	7	11	11	70
1 1/2"	38	165	1114	220	125	98.4	73	12.7	2	4-16	F05/F07	50	70	7	9	14	14	76
2"	50	178	123	220	150	120.7	92.1	14.3	2	4-19	F05/F07	50	70	7	9	14	14	85
2 1/2"	64	190	154	285	180	139.7	104.8	15.9	2	4-19	F07/F10	70	102	9	11	17	17	108
3"	76	203	175	380	190	152.4	127	17.5	2	4-19	F10	-	102	-	11	22	22	130
4"	100	229	196	380	230	190.5	157.2	22.5	2	8-19	F10	-	102	-	11	22	22	148
5"	123	356	240	705	255	215.9	185.7	22.5	2	8-22	F12	-	125	-	14	27	30	180
6"	150	394	285	705	280	241.3	215.9	24	2	8-22	F12	-	125	-	14	27	30	202
8"	200	457	345	1200	345	298.5	269.9	27	2	8-22	F12/F14	125	140	14	18	30	32	258

CL300

NPS	DIMENSION				FLANGE DIMENSION						TOP CONNECTION SIZE							
	d	L	H	W	D	C	R	T	f	n-m	ISO 5211	A	B	A1	B1	K	h	H1
1/2"	15	140	80	141	95	66.7	34.9	12.7	2	4-16	F03/F04	36	42	6	6	9	9	48
3/4"	20	152	86	141	115	82.6	42.9	14.3	2	4-19	F03/F04	36	42	6	6	9	9	58.5
1"	25	165	98	162	125	88.9	50.8	15.9	2	4-19	F04/F05	42	50	6	7	11	11	63
1 1/4"	32	178	106.5	162	135	98.4	63.5	17.5	2	4-19	F04/F05	42	50	6	7	11	11	70
1 1/2"	38	190	114	220	155	114.3	73	19.1	2	4-22	F05/F07	50	70	7	9	14	15	78
2"	50	216	123	220	165	127	92.1	20.7	2	8-19	F05/F07	50	70	7	9	14	15	85
2 1/2"	64	241	154	285	190	149.2	104.8	23.9	2	8-22	F07/F10	70	102	9	11	17	17	120
3"	76	282	178	380	210	168.3	127	27	2	8-22	F10	-	102	-	11	22	22	130
4"	100	305	196	380	255	200	157.2	30.2	2	8-22	F10	-	102	-	11	22	22	148
5"	123	381	240	705	280	235	185.7	33.4	2	8-22	F12	-	125	-	14	27	30	180
6"	150	403	308	1200	320	269.9	215.9	35	2	12-22	F12/F14	125	140	14	18	30	32	222

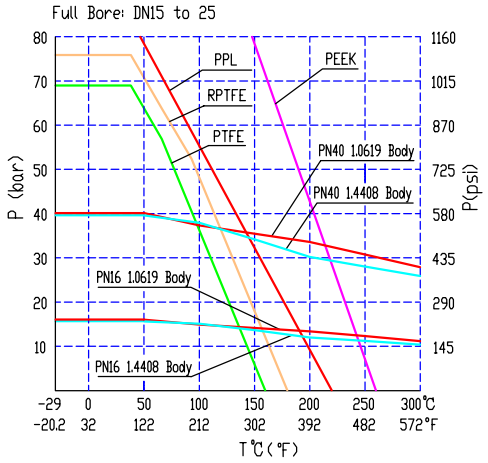
FLOATING FLOW COEFICIENT TABLE											
PN16-25-40/CLASS 150-300/10K											
DN	15	20	25	40	50	65	80	100	125	150	200
NPS	1/2	3/4	1	1 1/2	2	2 1/2	3	4	5	6	8
Cv (Gal/min)	25	56	98	235	366	620	938	1466	2290	3298	5863
Kv (M^3/h)	21	48	84	201	314	530	804	1256	1962	2826	5024
Note: Kv=Cv/1.167											

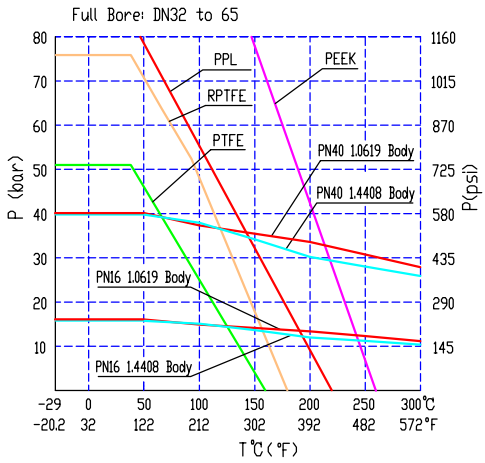
FLOATING BALL VALVE DESIGN TORQUE METER						
DN	NPS	All kinds of pressure differential valveopen torque (N.m)				
		0.6MPa	1.0 Mpa	1.6Mpa/CL.150/10K	2.5Mpa	4.0MPa/CL300
15	1/2	6	6	6	6	6
20	3/4	8	8	8	8	8
25	1	10	12	12	13	13
32	1 1/4	12	15	16	16	20
40	1 1/2	16	18	20	22	23
50	2	30	33	35	38	40
65	2 1/2	38	42	50	55	60
80	3	60	80	90	100	115
100	4	90	118	135	160	185
125	5	240	260	300	320	350
150	6	300	350	400	460	480
200	8	500	560	620	635	760

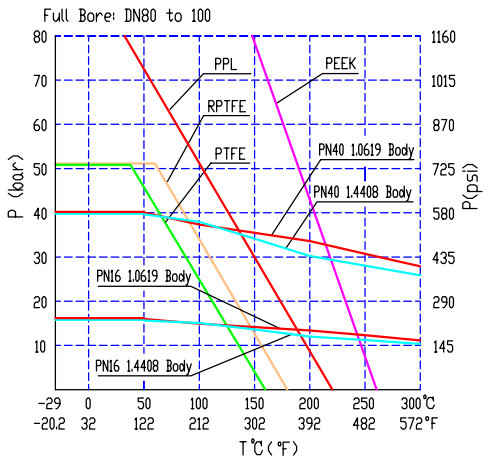
Note:
1. The torque of this table is the maximum open torque of the valve with two disc floating ball valves with different pressure difference. When the seat material is enhanced PTFE, the torque will increase by 20~30%;
2. For pneumatic and electric actuator drive, the safety factor of minimum driving torque is 30%.

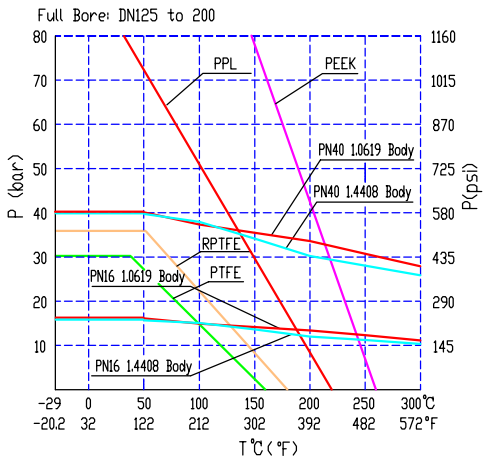
GD SEAT MATERIAL			
SEAT MATERIAL		PECULIARITY	Tmax
PTFE		High corrosion resistance, good self - lubrication and wear resistance, easy to cold flow.	160°C
RPTFE	PTFE+15%GF	Resistance to creep, low coefficient of friction, resistance to chemical corrosion, good insulation.	180°C
	PTFE+15%CF	High strength, high temperature resistance, wear resistance, small coefficient of thermal expansion.	180°C
	TFM1600	Under high temperature and high pressure, shape denaturation is smaller, permeability is smaller, pressure recovery is better under high temperature, corrosion resistance is high.	180°C
	TFM4215	Smaller deformation and permeability under high temperature and high pressure, better stress recovery under high temperature, excellent heat resistance and chemical resistance, low friction coefficient.	180°C
PPL		High temperature resistance, high strength, radiation resistance, chemical corrosion resistance, good self-lubrication performance.	220°C
PEEK		High temperature, high pressure, high strength, chemical resistance to PTFE.	260°C

FLOATING BALL VALVE DIN PN16/25/40



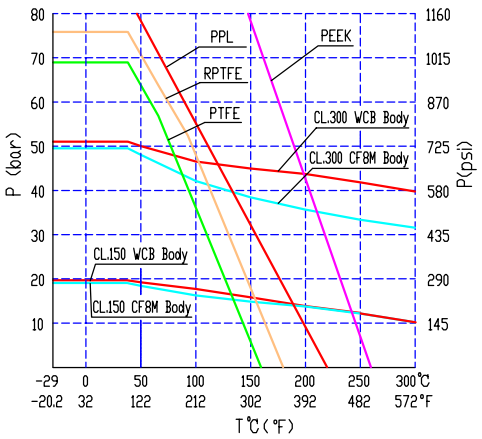




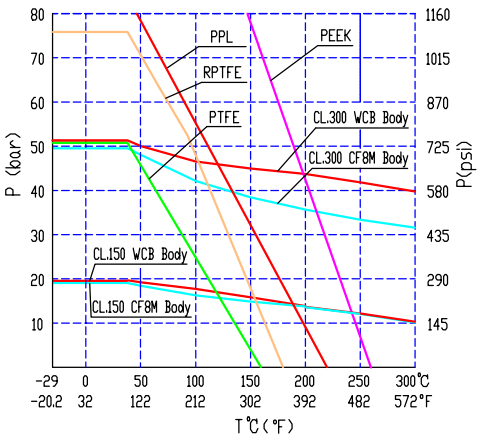


FLOATING BALL VALVE CLASS 150/300

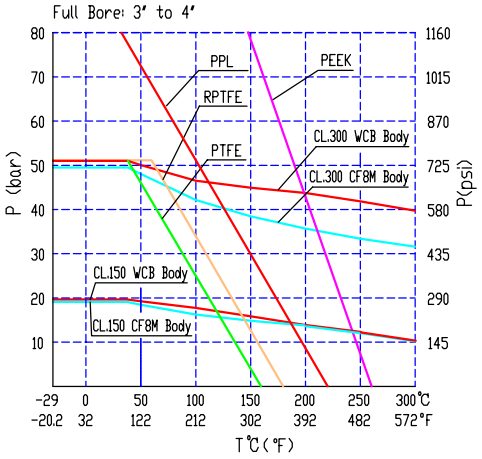
Full Bore: 1/2" to 1"



Full Bore: 1-1/4" to 2-1/2"



Full Bore: 3" to 4"



Full Bore: 5" to 8"