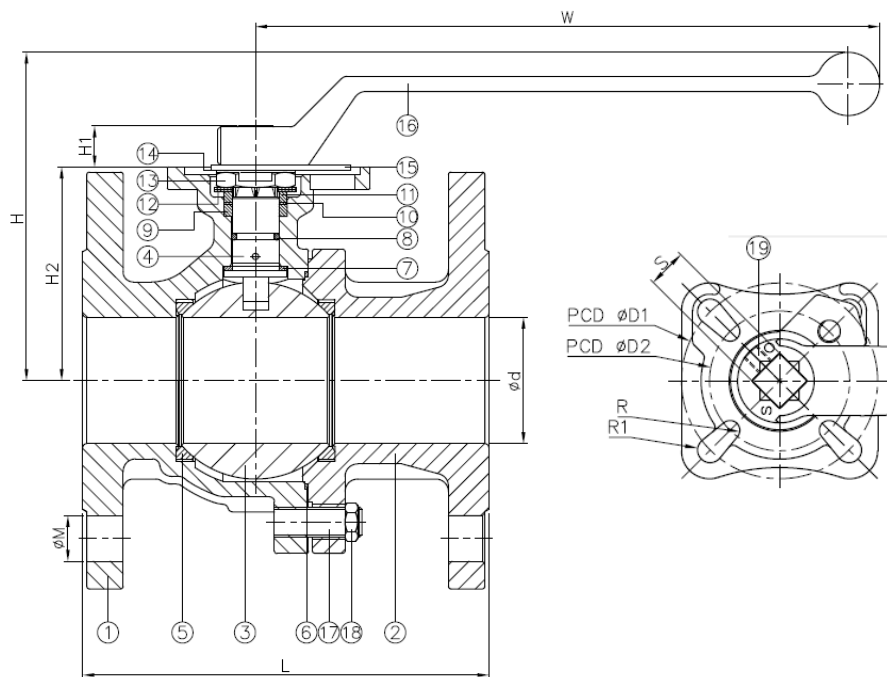


STAINLESS STEEL 2 PIECE BALL VALVE DIRECT ISO MOUNTING PAD - FIRE SAFE MODEL - SS2020D 15-100MM



FEATURES AND BENEFITS

- For Industrial, Chemical & General Applications
- 2 Piece 316 S/S Construction
- Flanged ANSI B16.5 Class 150 Raised Face
- Full Bore
- ISO 5211 Direct Mounting Pad
- Blowout Proof Stem
- Anti Static Device
- API 607 Fire Safe
- Investment Cast Body
- Pressure Rating: Class 150
- Working Temperature: -20°C~200°C
- Replacement Seal Kits available



NO.	PART NAME	MATERIAL
1	Body	ASTM A351-CF8M
2	Cap	ASTM A351-CF8M
3	Ball	ASTM A351-CF8M
4	Stem	ASTM A276-316
5	Seat	RTFE
6	Body Seal	Graphite
7	Thrust Washer	CTFE
8	O-Ring	Viton
9	Packing A	Graphite
10	Packing B	CTFE
11	Gland Ring	AISI 304
12	Belleville Washer	AISI 301
13	Nut	AISI 304
14	Lock Washer	AISI 304
15	Stopper	AISI 304
16	Handle	AISI 304
17	Stud	AISI 304
18	Nut	AISI 304
19	Socket Set Screw	AISI 304

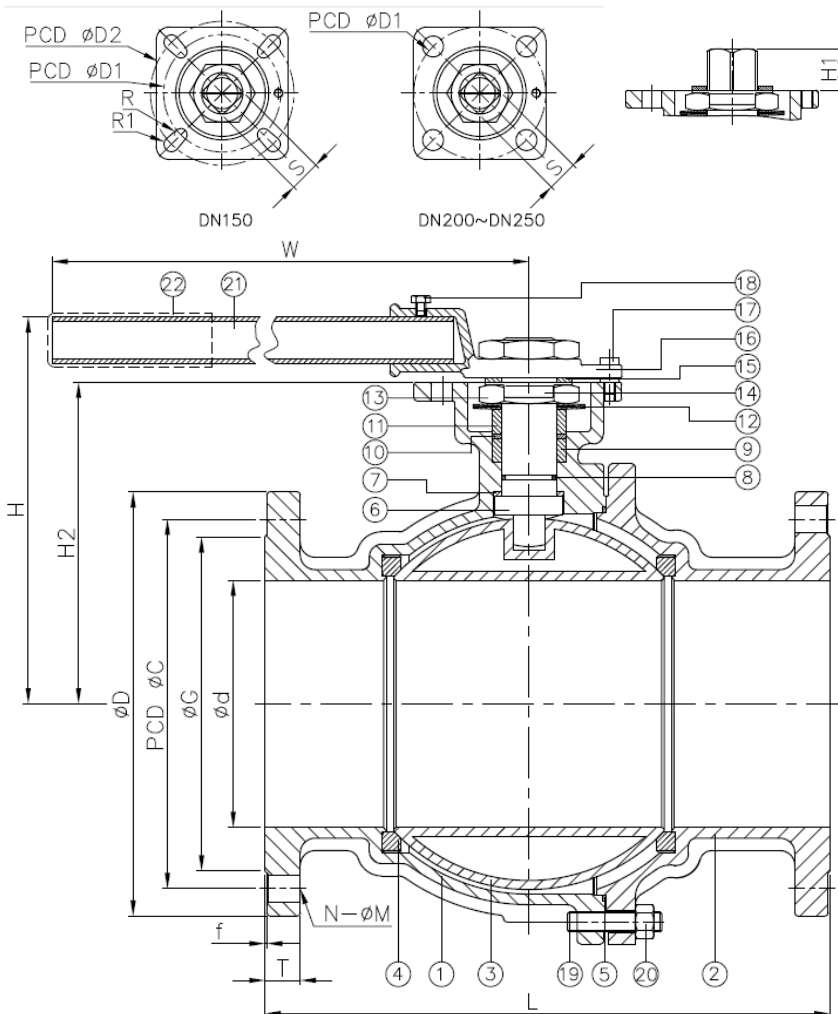
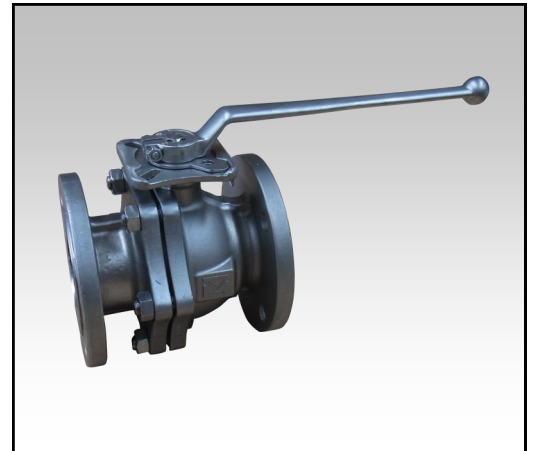
DIMENSIONS																
DN	D1	D2	M	d	L	H	H1	H2	W	R	R1	S	Breakaway (Nm)	Action (Nm)	(Kg)	(Cv)
15	42	36	16	15	108	85	8.5	50.5	190	2.75	2.75	9	5.2	3	1.7	37
20	42	36	16	20	117	89.5	8.5	55	190	2.75	2.75	9	8	4.7	2.1	68
25	50	42	16	24	127.5	94.2	10.5	59	190	2.75	3.5	11	12.5	9	3.2	101
32	50	42	16	30	140.5	97.9	10.5	62	190	2.75	3.5	11	12	8.5	3.7	162
40	70	50	16	38	165	120.9	14	76	235	3.5	4.5	14	24.5	18	6	268
50	70	50	19	50	178	129.9	14	84.5	235	3.5	4.5	14	32	23	8	486
65	102	70	19	64	190.5	156.3	17	104.5	325	4.5	5.5	17	38	27	14.5	817
80	102	70	19	76	203	163.3	17	111.5	325	4.5	5.5	17	45	30	18.2	1150
100	125	102	19	98	229	190.9	23	135.5	325	5.5	6.5	22	55	37	29	1973

STAINLESS STEEL 2 PIECE BALL VALVE DIRECT ISO MOUNTING PAD - FIRE SAFE MODEL - SS2020D 125-250MM



FEATURES AND BENEFITS

- For Industrial, Chemical & General Applications
- 2 Piece 316 S/S Construction
- Flanged ANSI B16.5 Class 150 Raised Face
- Full Bore
- ISO 5211 Direct Mounting Pad
- Blowout Proof Stem
- API 607 Fire Safe up to DN150
- Investment Cast Body
- Pressure Rating: Class 150
- Working Temperature: -20°C~200°C



NO.	PART NAME	MATERIAL
1	Body	ASTM A351-CF8M
2	Cap	ASTM A351-CF8M
3	Ball	ASTM A240-316
4	Ball Seat	RTFE
5	Body Seal	Graphite
6	Stem	ASTM A276-316
7	Thrust Washer	CTFE
8	O-Ring	VITON
9	Packing A	Graphite
10	Packing B	CTFE
11	Gland Ring	AISI 304
12	Belleville Washer	AISI 301
13	Stem Nut	AISI 304
14	Lock washer	AISI 304
15	Flat Washer	AISI 304
16	Handle Head	AISI 304
17	Stop Pin	AISI 304
18	Bolt	AISI 304
19	Stud	AISI 304
20	Nut	AISI 304
21	Steel Tube	AISI 304
22	Handle Sleeve	PVC

DIMENSIONS

DN	d	D	C	G	M	N	f	T	D1	D2	R	R1	H	H1	H2	L	S	W	Break-Away (Nm)	Action (Nm)	(Kg)	(Cv)
125	125	254	216	186	22	8	1.6	23.9	102	125	5.5	6.5	232	28	180	356	27	743	160	96	40.3	3304
150	150	279	241.5	216	22.4	8	1.6	25.4	102	125	5.5	6.5	230	27.5	201	394	27	743	250	170	52	4923
200	200	343	298.5	270	22.4	8	1.6	28.6	140	-	8.5	-	312	36	259	457	36	840	470	280	88	9036
250	250	406	362	324	25.4	12	1.6	30.2	140	-	8.5	-	350	36	295	533	36	1040	750	532	143	14126

STAINLESS STEEL 2 PIECE BALL VALVE DIRECT ISO MOUNTING PAD - FIRE SAFE MODEL - SS2020D 15-250MM



FIRE SAFE APPLICATION

In general the application of the valve shall comply with the pressure & temperature rating range below. If the risk of fire is present the client is recommended to select fire safe products according to API-607 approval. This means that the ball when in closed position will seal against the metal seat rim after the soft seats have been burned or melted in a fire.

TROUBLE SHOOTING

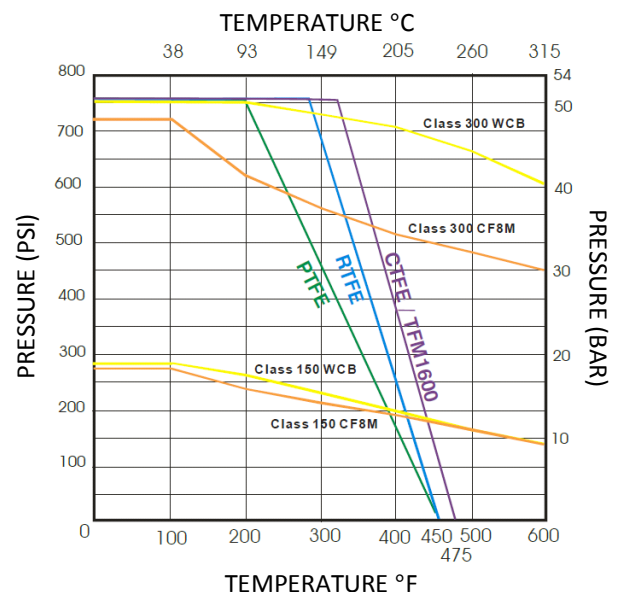
The following chart will cover the various problems which can happen to the ball valves. This information will aid in isolating and correcting these problems.

PROBLEM	PROBABLE CAUSE	SOLUTION
Leakage through the stem and packing.	A) Gland nut is loose B) Packing worn out or failed C) Inadequate amount of packing rings D) Packing is hard and dry E) Thrust washer is damaged F) Stem is damaged	Tighten Gland Nut Replacing Packing Install additional packing rings Replace with new packing Replace with new thrust washer Repair or replace as required
Valve wont open or close.	G) Gland nut over wear H) Packing is exerting excessive force on stem I) Stem is damaged J) Internal components may be damaged	Replace gland nut Check torque on gland nuts Repair or replace as required Disassembly the valve. Inspect ball, seat stem and repair as required.
Leakage between body and cap.	K) Body bolt nuts are loose L) Gasket is damaged M) Body or cap faces are damaged	Tighten gland nuts Disassemble and install new gasket Repair and install new gasket
Seat leakage.	N) Valve not seated properly O) Internal components are damaged or worn P) Leakage by foreign material.	Check to see if valve is fully closed Disassembly the valve. Inspect ball, seat stem and clean or repair as required.

SS2020D BALL VALVE SIZING CHART

Size	Double Acting Pneumatic Actuator	Spring Return Pneumatic Actuator	Electric Actuator
15mm	HP-DA035	HP-SR050	HQ004
20mm	HP-DA035	HP-SR050	HQ004
25mm	HP-DA050	HP-SR063	HQ004
32mm	HP-DA050	HP-SR063	HQ004
40mm	HP-DA063	HP-SR075	HQ006
50mm	HP-DA063	HP-SR088	HQ006
65mm	HP-DA075	HP-SR088	HQ015
80mm	HP-DA075	HP-SR100	HQ015
100mm	HP-DA115	HP-SR115	HQ015
125mm	HP-DA145	HP-SR145	HQ030
150mm	HP-DA145	HP-SR160	HQ030
200mm	HP-DA200	HP-SR200	HQ080
250mm	HP-DA200	HP-SR212	HQ080

PRESSURE-TEMPERATURE RATING



Note: HQ004 is only available in 24VDC or 240VAC, if 24VAC is required use the HQ006.
HQ080 is only available in 240VAC or 415VAC, consult factory for 24VDC.
415VAC consult Challenger.