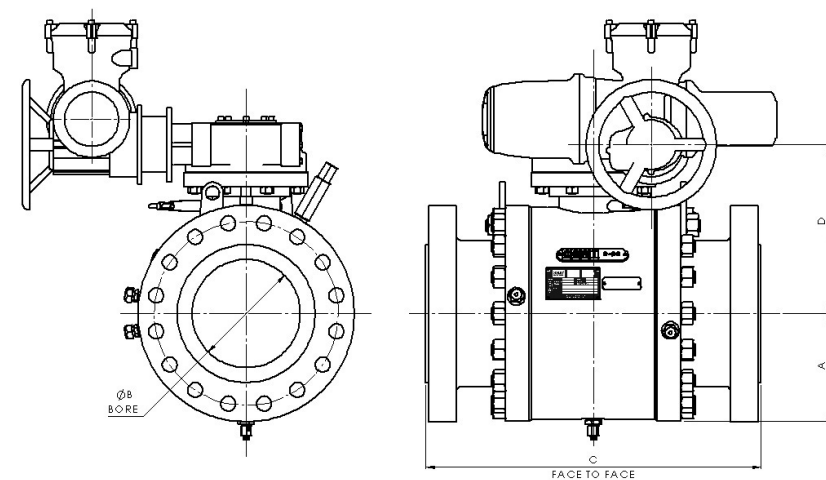


# C-B5 Trunnion Mounted API-6D Ball Valve

**DN150 - DN1400 / 6" - 56"**

**Class 150 - 2500**

## DATASHEET



### DESIGN STANDARDS

- API 6D Monogram License Number: 6D-1709
- API Q1
- BS EN ISO 9001
- Pressure Equipment Directive 2014/68/EU

### BORE

- Full Port (Through conduit, full round opening)

### END CONNECTION

- Flanged or Welded

### STANDARD FEATURES

- Trunnion Mounted (Low operating torque)
- Bubble-tight sealing from zero to full rated pressure
- Metal-to-metal primary seal – protected 'O' ring secondary seal
- Self-cleaning ball
- Piggable
- 3 – piece Bolted construction allows for disassembly maintenance on site
- Double stem seals – upper seal can be replaced (replacement of the lower seal requires the gland plate to be removed)
- Integral mechanical stops (for setting operator)
- Both upstream and downstream seat seals capable of sealing upstream pressure
- Full block and bleed capability
- Seal integrity can be checked by pressurising the body cavity only
- Double block and bleed as defined by API 6D

### OPTIONAL FEATURES INCLUDE

- Hardness controlled materials (to suit NACE MR-01-75)
- Spring Energized Polymer Seals
- Emergency sealant injection (seat and stem seals)
- Stem extensions for operating underground
- Transition pups for weld end valves
- Full or reduced bore
- Self-relieving seats

### VALVE SIZES & CLASS

INCHES	mm	150	300	400	600	900	1500	2500
6	150	x	x	x	x	x	x	
8	200	x	x	x	x	x	x	x
10	250	x	x	x	x	x	x	x
12	300	x	x	x	x	x	x	x
14	350	x	x	x	x	x	x	
16	400	x	x	x	x	x	x	
18	450	x	x	x	x	x	x	
20	500	x	x	x	x	x	x	x
22	550	x	x	x	x			
24	600	x	x	x	x	x	x	
26	650	x	x	x	x	x		
28	700	x			x	x		
30	750	x	x	x	x	x	x	
32	800	x	x					
34	850			x	x			
36	900	x	x	x	x	x		
38	965		x					
40	1000	x	x	x	x	x		
42	1050	x	x	x	x			
48	1200	x	x		x			
56	1400			x				

Other sizes available upon request

NOTE: Weights and dimensions are approximate for all valve classes.

## WEIGHTS AND DIMENSIONS CLASS 150

Valve Size (inches)	A	B	C (R.F)	C (W.E)	D	Weight (Kg) (W.E)	Weight (Kg) (R.F)
6	162	152	394	457	295	193	202
8 x 6 x 8	162	152	457	521	295	216	227
8	203	203	457	521	375	330	352
10 x 8 x 10	203	203	533	559	375	352	375
10	248	254	533	559	419	477	500
12 x 10 x 12	248	254	610	635	419	500	534
12	289	305	610	635	460	659	705
16 x 12 x 16	289	305	762	838	460	727	773
14	308	337	686	762	470	818	864
16	346	387	762	838	508	977	1023
20 x 16 x 20	346	387	914	991	508	1057	1125
18	394	438	864	914	591	1364	1443
20	429	489	914	991	632	1841	1920
24 x 20 x 24	429	489	1067	1143	632	1977	2057
22	470	540	991	1092	670	2284	2352
24	514	591	1067	1143	708	2727	2807
30 x 24 x 30	514	591	1295	1397	708	2841	2920
26	546	635	1143	1245	762	3443	3523
28	594	686	1245	1346	810	3943	4045
30	629	737	1295	1397	848	4727	4818
36 x 30 x 36	629	737	1524	1727	848	4909	5000
32	664	781	1372	1524	879	5375	5489
34	699	832	1473	1626	956	6580	6705
36	730	876	1524	1727	991	7568	7614
40	806	978	1753	1956	1064	9773	10273
42	841	1022	1854	2083	1105	11514	12114
48	972	1181	2134	2388	1283	17932	18364

56" Diameter available on request

## WEIGHTS AND DIMENSIONS CLASS 300

Valve Size (inches)	A	B	C (R.F)	C (W.E)	D	Weight (Kg) (W.E)	Weight (Kg) (R.F)
6	162	152	403	457	295	193	220
8 x 6 x 8	162	152	502	521	295	216	250
8	203	203	502	521	375	330	375
10 x 8 x 10	203	203	568	559	375	364	409
10	248	254	568	559	419	466	534
12 x 10 x 12	248	254	648	635	419	511	580
12	289	305	648	635	460	659	761
16 x 12 x 16	289	305	838	838	460	739	841
14	308	337	762	762	470	818	898
16	346	387	838	838	540	1068	1295
20 x 16 x 20	346	387	991	991	540	1261	1466
18	394	438	914	914	591	1500	1705
20	429	489	991	991	632	1841	2080
24 x 20 x 24	429	489	1143	1143	632	1977	2216
22	470	540	1092	1092	670	2330	2611
24	514	591	1143	1143	708	2727	3080
30 x 24 x 30	514	591	1397	1397	708	2841	3193
26	546	635	1245	1245	762	3443	3875
28	594	686	1346	1346	832	3955	4773
30	629	737	1397	1397	870	4966	5580
36 x 30 x 36	629	737	1727	1727	870	5489	6091
32	664	781	1524	1524	902	5614	6239
34	699	832	1626	1626	956	6580	7364
36	730	876	1727	1727	991	7568	8420
40	806	978	1956	1956	1064	9773	11000
42	845	1022	2083	2083	1105	11514	12955
48	975	1181	2388	2388	1283	17932	19045

Up to 56" Diameter available on request

## WEIGHTS AND DIMENSIONS CLASS 600

Valve Size (inches)	A	B	C (R.F)	C (W.E)	D	Weight (Kg) (W.E)	Weight (Kg) (R.F)
6	168	152	559	559	295	205	250
8 x 6 x 8	168	152	660	660	295	261	307
8	210	203	660	660	375	382	443
10 x 8 x 10	210	203	787	787	375	455	534
10	254	254	787	787	400	568	705
12 x 10 x 12	254	254	838	838	400	750	886
12	295	305	838	838	441	773	920
16 x 12 x 16	295	305	991	991	441	1193	1364
14	314	337	889	889	502	1068	1227
16	352	387	991	991	540	1284	1534
20 x 16 x 20	352	387	1194	1194	540	1716	1966
18	403	438	1092	1092	591	1864	2135
20	438	489	1194	1194	632	2318	2636
24 x 20 x 24	438	489	1397	1397	632	3114	3432
22	476	540	1295	1295	670	3057	3364
24	514	591	1397	1397	733	3648	3955
30 x 24 x 30	514	591	1651	1651	733	4420	4727
26	556	635	1448	1448	784	4466	5148
28	568	686	1549	1549	832	5568	6057
30	629	737	1651	1651	870	6114	6685
36 x 30 x 36	629	737	2083	2083	870	6795	7375
32	664	781	1778	1778	902	7318	7818
34	708	832	1930	1930	956	7568	8500
36	743	876	2083	2083	991	9482	10636
40	838	978	2337	2337	1153	12727	14636
42	870	1022	2438	2438	1187	14227	16318
48	1019	1181	2845	2845	1327	22000	24136

Up to 56" Diameter available on request

## WEIGHTS AND DIMENSIONS CLASS 900

Valve Size (inches)	A	B	C (R.F)	C (W.E)	C (R.T.J)	D	Weight (Kg) (W.E)	Weight (Kg) (R.F)
6	175	152	610	610	613	343	295	386
8 x 6 x 8	175	152	737	737	740	343	341	477
8	210	203	737	737	740	352	432	557
10 x 8 x 10	210	203	838	838	841	352	568	693
10	254	254	838	838	841	400	636	818
12 x 10 x 12	254	254	965	965	968	400	772	954
12	295	305	965	965	968	473	1000	1227
16 x 12 x 16	295	305	1130	1130	1140	473	1680	1907
14	318	324	1029	1029	1038	508	1264	1609
16	362	375	1130	1130	1140	546	1591	2009
20 x 16 x 20	362	375	1321	1321	1334	546	1852	2573
18	413	425	1219	1219	1232	610	2214	2805
20	454	473	1321	1321	1334	686	2736	3459
24 x 20 x 24	454	473	1549	1549	1568	686	3155	4500
24	530	572	1549	1549	1568	762	4155	5500
30 x 24 x 30	530	572	1880	1880	1902	762	4782	6591
26	587	619	1651	1651	1673	835	5841	7159
30	683	714	1880	1880	1902	997	7500	9545
36 x 30 x 36	683	714	2286	2286	2315	997	8045	10727
36	813	857	2286	2286	2315	-	9727	12182

Other sizes available on request

## WEIGHTS AND DIMENSIONS CLASS 1500

Valve Size (inches)	A	B	C (R.F)	C (W.E)	C (R.T.J)	D	Weight (Kg) (W.E)	Weight (Kg) (R.F)
6	213	146	705	705	711	375	441	577
8	256	194	832	832	841	414	541	750
10	319	241	991	991	1000	510	836	1191
12	352	289	1130	1130	1146	541	1209	1655
14	413	318	1257	1257	1276	1276	2045	2773
16	467	362	1384	1384	1407	664	3068	4000
18	508	410	1537	1537	1559	793	-	-
20	564	457	1664	1664	1686	869	-	-
24	-	546	-	-	-	-	-	-
30	-	686	-	-	-	-	-	-

NOTE: Class 400/2500 weights and dimensions available on request

## MATERIALS OF CONSTRUCTION

	STANDARD	OPTIONS INCLUDE
<b>BODY</b>	Carbon Steel ASTM A350-LF2 (class 1) Modified (50000psi min yield)	Weld Overlayed Epoxy/Phenolic Linig
<b>CLOSURES</b>	Carbon Steel ASTM A350-LF2 (class 1) Modified (50000psi min yield)	Weld Overlayed Epoxy/Phenolic Linig
<b>BODY BOLTING</b>	ASTM A193 Grade B7 Studs ASTM A194 Class 2H Nuts	Low Temperature Alloy Steel
<b>GLAND PLATE</b>	Carbon Steel BS EN10025 S355 ASTM A350-LF2	Stainless Steels Weld Overlayed Epoxy/Phenolic Linig
<b>BEARING RETAINERS</b>	Carbon Steel BS EN10025 S355	Weld Overlayed
<b>BEARINGS</b>	Steel backed PTFE Type DU	Fibreglide Resin
<b>THRUST WASHERS</b>	Electroless Nickel Coated Carbon Steel	
<b>BALL</b>	Electroless Nickel Coated Carbon Steel ASTM A350-LF2	Stainless Steels Weld Overlayed Hard Faced (Tungsten Carbide or Stellite)
<b>SEAT RINGS</b>	Electroless Nickel Coated Carbon Steel BS 970 070M20 BS 970 080M40	Stainless Steels Duplex Stainless Steel Weld Overlayed Hard Faced (Tungsten Carbide or Stellite)
<b>SEAT SPRINGS</b>	18/8 Austenitic Stainless Steel	Inconel X750
<b>'O' RING SEALS</b>	Specially compounded Nitrile synthetic rubber	Viton HNBR Nylon PA12G (Face Seal)
<b>STEM</b>	Electroless Nickel Coated Alloy Steel BS 970 709M40	Stainless Steels Duplex Stainless Steel
<b>DRIVE PINS</b>	Alloy Steel BS 970 709M40	Stainless Steels Duplex Stainless Steel

Other options available: Including hardness controlled materials (to suit NACE MR-01-75) and spring energised polymer seals



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