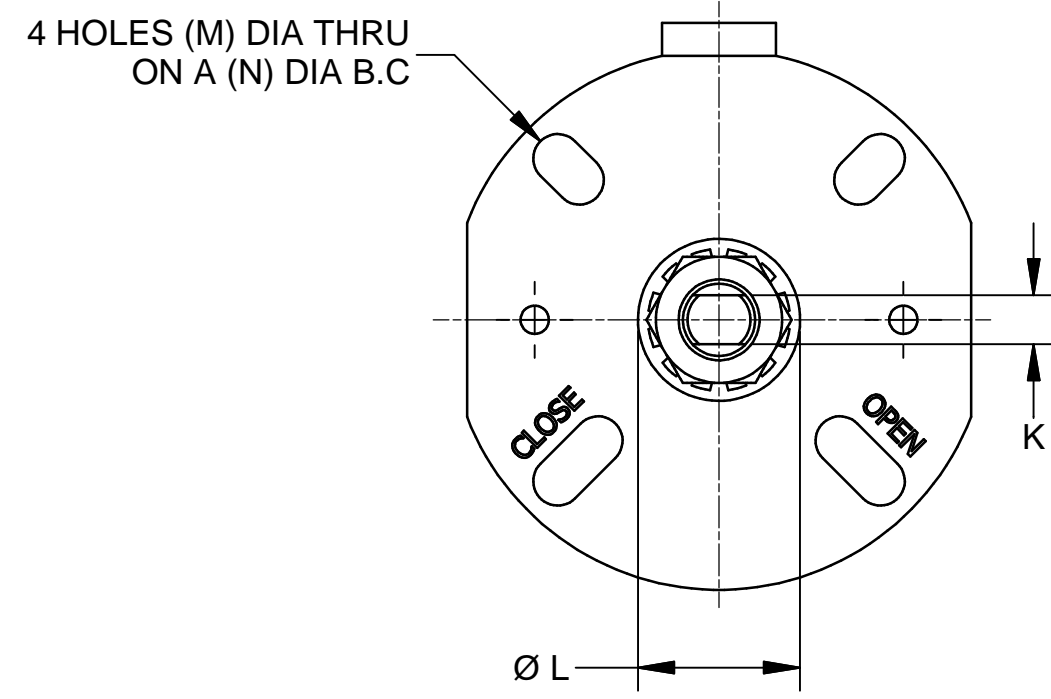
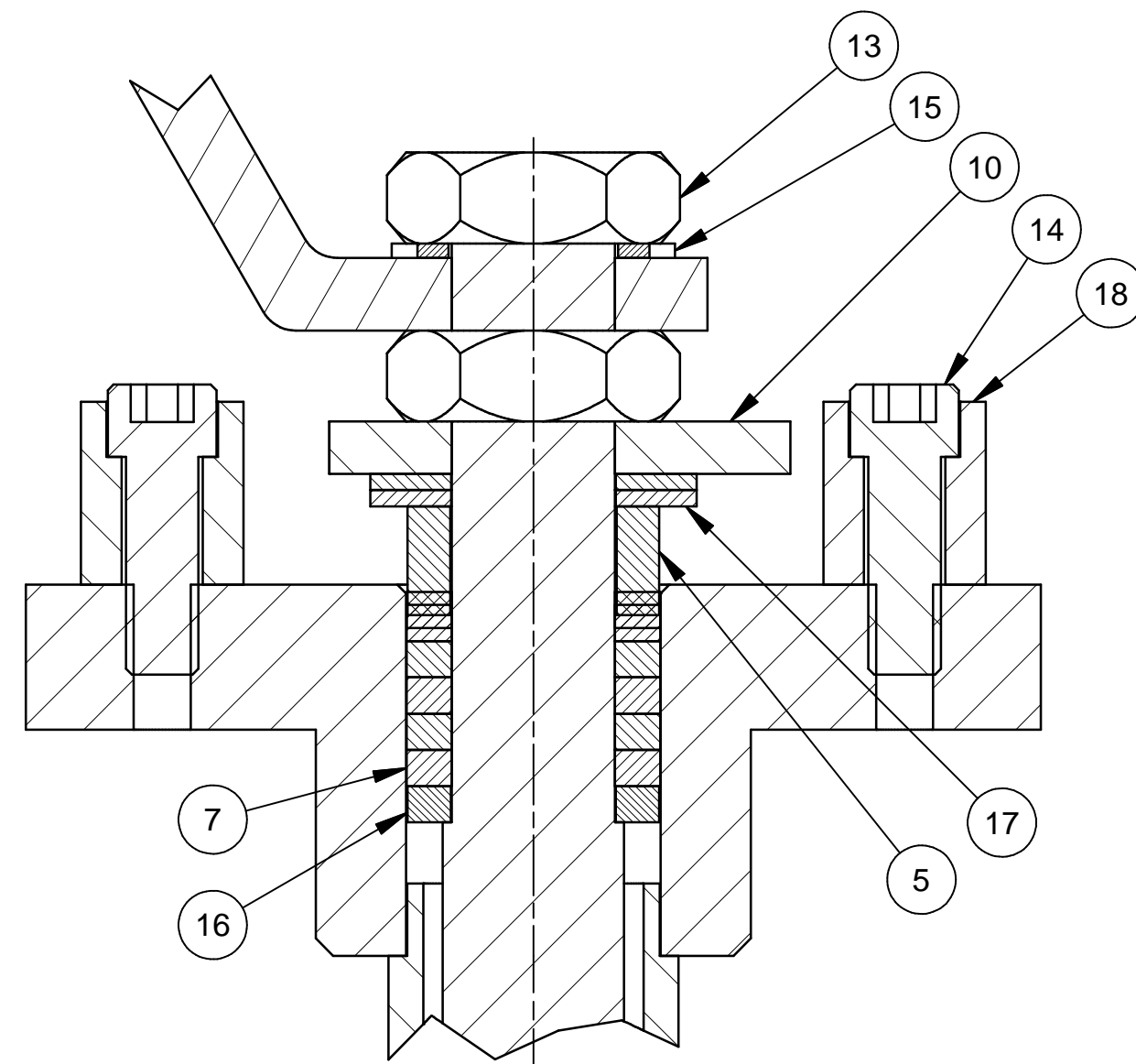
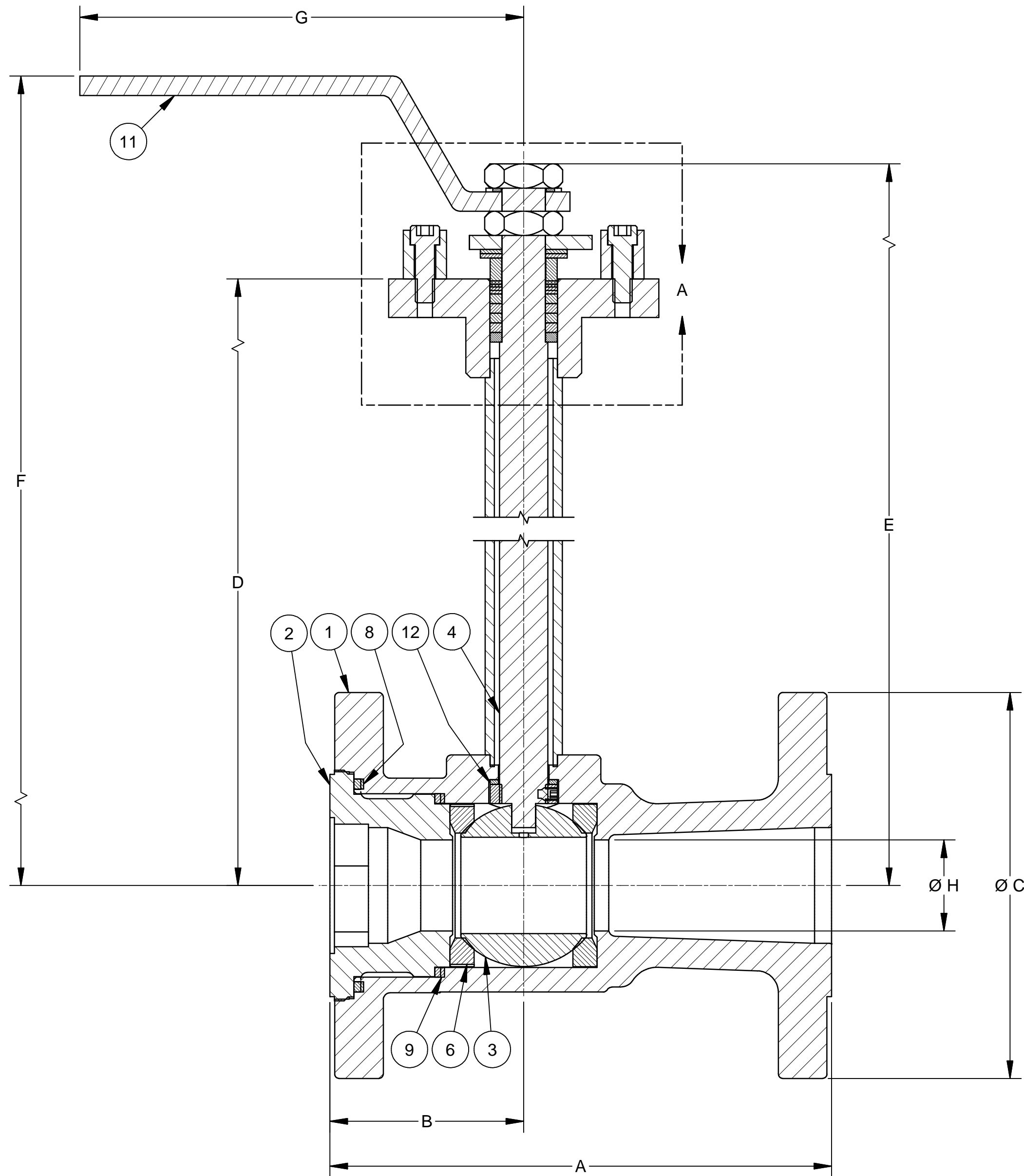
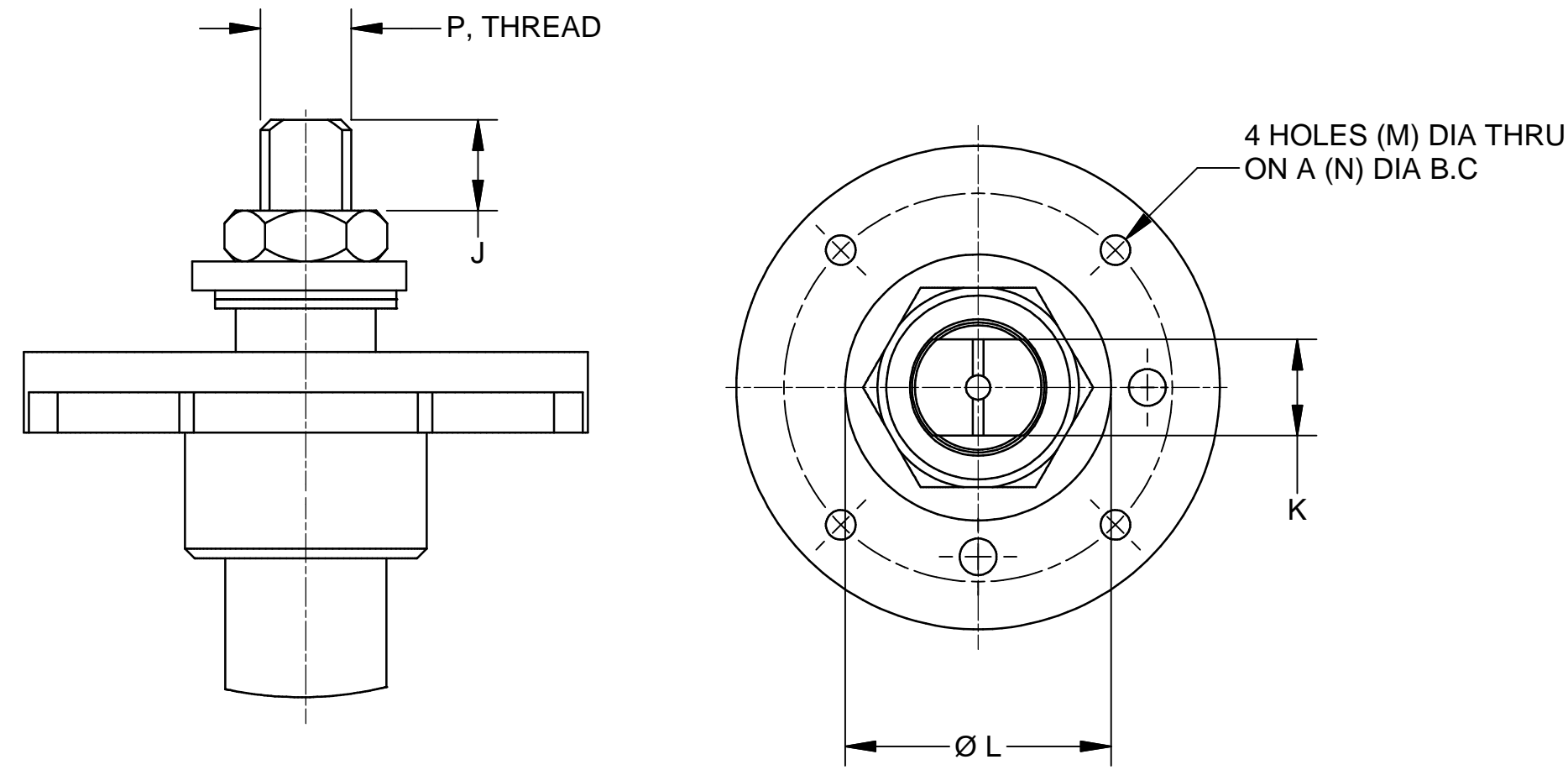


ITEM	DESCRIPTION	QTY	SPARE
1	BODY WELDMENT	1	
2	ENDPLUG	1	
3	BALL	1	
4	STEM ASSY	1	
5	FOLLOWER	1	
6	SEAT	2	*
7	STEM SEAL	6	*
8	BODY SEAL	1	*
9	BODY SEAL	1	
10	LOCK STOP	1	
11	HANDLE	1	
12	THRUST BEARING	1	*
13	STEM NUT	2	
14	CAP SCREW	2	
15	LOCK WASHER	1	
16	SEAL WASHER	1	
17	BELLEVILLE WASHER	2	
18	STOP CAM	2	

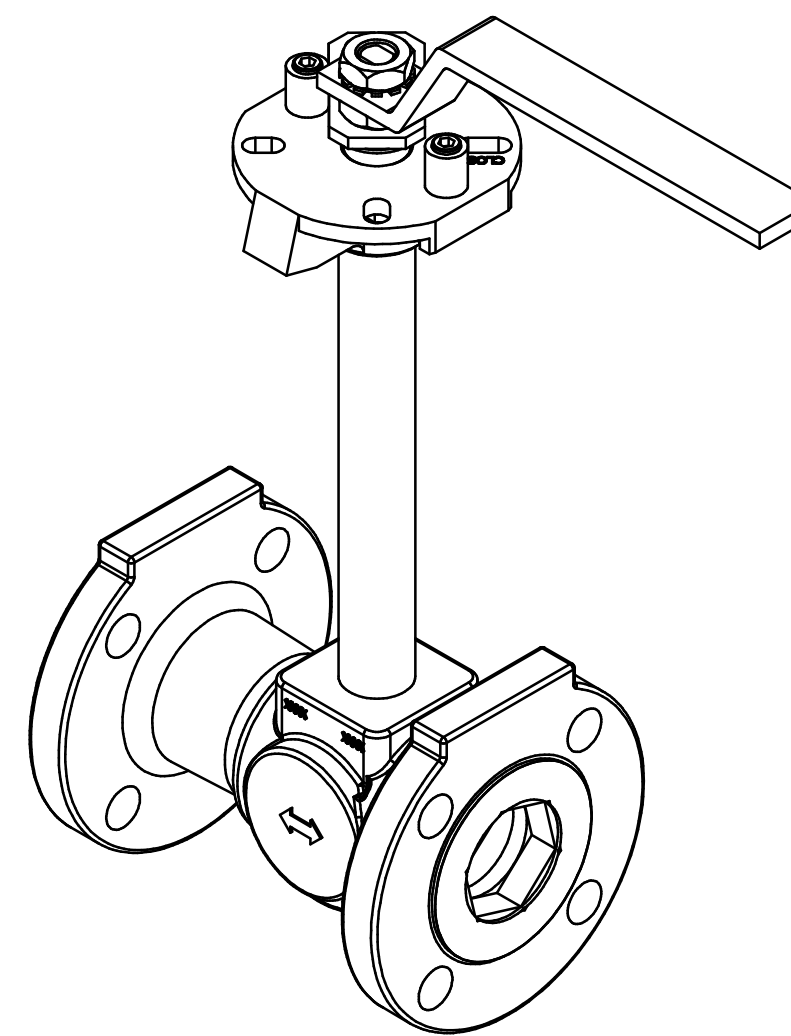
**1/2" - 2" MOUNTING CONFIGURATION**



**3" - 8" MOUNTING CONFIGURATION**



**DETAIL A**



**NOTES:**

- REFER TO TBV™ CRYOGENIC BALL VALVE BROCHURE FOR MATERIAL SPECIFICATION AND ADDITIONAL INFORMATION.
- CONTACT TBV ENGINEERING FOR DIMENSIONAL INFORMATION NOT LISTED ABOVE.

**ANSI 150 CLASS**

Valve	A	B	C	D	E	F	G	H	J	K	L	M	N	P
1/2"	4.25 [107.95]	2.13 [54.1]	3.50 [88.9]	7.88 [200.2]	8.83 [224.3]	8.64 [219.5]	5.50 [139.7]	0.38 [9.7]	0.38 [9.7]	0.230 [5.84]	0.75 [19.1]	0.34 [8.6]	3.18 [80.7]	3/8 - 24
3/4"	4.62 [117.4]	2.31 [58.7]	3.88 [98.6]	7.97 [202.4]	8.93 [226.8]	10.00 [254.0]	5.57 [141.5]	0.41 [10.4]	0.38 [9.7]	0.230 [5.84]	0.75 [19.1]	0.34 [8.6]	3.18 [80.7]	3/8 - 24
1"	5.00 [127.0]	2.25 [57.2]	4.25 [108.0]	8.19 [208.0]	9.35 [237.5]	12.95 [329.0]	5.50 [139.7]	0.75 [19.1]	0.50 [12.7]	0.296 [7.52]	0.88 [22.4]	0.34 [8.6]	3.18 [80.7]	7/16 - 20
1 1/2"	6.50 [165.1]	2.51 [63.8]	5.00 [127.0]	10.16 [258.1]	11.65 [296.0]	12.79 [324.8]	7.55 [191.8]	1.18 [30.0]	0.63 [16.0]	0.340 [8.64]	1.13 [28.7]	0.34 [8.6]	3.18 [80.7]	9/16 - 18
2"	7.00 [177.8]	2.92 [74.2]	6.00 [152.4]	10.37 [263.4]	11.82 [300.1]	12.95 [329.0]	7.55 [191.8]	1.44 [36.6]	0.63 [16.0]	0.340 [8.64]	1.13 [28.7]	0.34 [8.6]	3.18 [80.7]	9/16 - 18
3"	8.00 [203.2]	4.07 [103.3]	7.50 [190.5]	15.50 [393.7]	17.91 [454.9]	17.41 [442.2]	7.55 [191.8]	2.50 [63.5]	0.66 [16.8]	0.995 [25.27]	2.75 [69.9]	3/8-16	4.02 [102.11]	1 3/8 - 12
4"	9.00 [228.6]	4.51 [114.6]	9.00 [228.6]	16.10 [408.9]	18.51 [470.2]	18.01 [457.5]	7.55 [191.8]	3.25 [82.6]	0.75 [19.1]	0.995 [25.27]	2.75 [69.9]	3/8-16	4.02 [102.11]	1 3/8 - 12
6"	10.50 [266.7]	5.25 [133.4]	11.00 [279.4]	18.70 [475.0]	21.95 [557.5]	21.45 [544.8]	21.50 [546.1]	4.38 [111.3]	1.40 [35.6]	1.246 [31.65]	3.25 [82.6]	7/16 - 14	4.92 [125.0]	1 3/4 - 12
8"	11.50 [292.1]	6.00 [152.4]	13.50 [342.9]	19.91 [505.7]	-	-	-	6.00 [152.4]	-	1.246 [31.65]	3.00 [76.2]	7/16 - 14	4.92 [125.0]	1 3/4 - 12

**ANSI 300 CLASS**

Valve	A	B	C	D	E	F	G	H	J	K	L	M	N	P
1/2"	5.50 [139.7]	2.12 [53.8]	3.75 [95.3]	7.88 [200.2]	8.83 [224.3]	8.64 [219.5]	5.57 [141.5]	0.38 [9.7]	0.38 [9.7]	0.230 [5.84]	0.75 [19.1]	0.34 [8.6]	3.18 [80.7]	3/8 - 24
3/4"	6.00 [152.4]	2.31 [58.7]	4.62 [117.4]	7.97 [202.4]	8.92 [226.6]	10.00 [254.0]	5.57 [141.5]	0.41 [10.4]	0.38 [9.7]	0.230 [5.84]	0.75 [19.1]	0.34 [8.6]	3.18 [80.7]	3/8 - 24
1"	6.50 [165.1]	2.25 [57.2]	4.88 [124.0]	8.19 [208.0]	9.35 [237.5]	12.95 [329.0]	5.57 [141.5]	0.75 [19.1]	0.50 [12.7]	0.296 [7.52]	0.88 [22.4]	0.34 [8.6]	3.18 [80.7]	7/16 - 20
1 1/2"	7.50 [190.5]	2.50 [63.5]	6.12 [155.5]	10.28 [261.1]	11.60 [294.6]	11.22 [285.0]	7.55 [191.8]	1.18 [30.0]	0.63 [16.0]	0.340 [8.64]	1.13 [28.7]	0.34 [8.6]	3.18 [80.7]	9/16 - 18
2"	8.50 [215.9]	2.92 [74.2]	6.50 [165.1]	10.37 [263.4]	11.82 [300.1]	12.95 [329.0]	7.55 [191.8]	1.44 [36.6]	0.63 [16.0]	0.340 [8.64]	1.13 [28.7]	0.34 [8.6]	3.18 [80.7]	9/16 - 18
3"	11.12 [282.4]	4.07 [103.3]	8.25 [210.0]	15.50 [393.7]	18.70 [475.0]	17.77 [451.4]	7.55 [191.8]	2.50 [63.5]	0.63 [16.0]	0.995 [25.27]	2.75 [69.9]	3/8-16	4.02 [102.11]	1 3/8 - 12
4"	12.00 [304.8]	4.51 [115.0]	10.00 [254.0]	16.10 [408.9]	18.51 [470.2]	18.01 [457.5]	7.55 [191.8]	3.25 [82.6]	0.75 [19.1]	0.995 [25.27]	2.75 [69.9]	3/8-16	4.02 [102.11]	1 3/8 - 12
6"	15.88 [403.4]	5.25 [133.4]	12.50 [317.5]	18.70 [475.0]	21.95 [557.5]	21.45 [544.8]	21.50 [546.1]	4.38 [111.3]	1.40 [35.6]	1.246 [31.65]	3.25 [82.6]	7/16 - 14	4.92 [125.0]	1 3/4 - 12
8"	16.50 [419.1]	6.50 [165.1]	15.00 [381.0]	19.91 [505.7]	23.15 [588.0]	-	-	6.00 [152.4]	-	1.246 [31.65]	3.00 [76.2]	7/16 - 14	4.92 [125.0]	1 3/4 - 12

**ANSI 600 CLASS**

Valve	A	B	C	D	E	F	G	H	J	K	L	M	N	P
1/2"	6.50 [165.1]	2.32 [58.8]	3.75 [95.3]	7.88 [200.2]	8.83 [224.3]	8.64 [219.5]	5.50 [139.7]	0.38 [9.7]	0.38 [9.7]	0.230 [5.84]	0.75 [19.1]	0.34 [8.6]	3.18 [80.7]	3/8 - 24
3/4"	7.50 [190.5]	2.31 [58.7]	4.62 [117.4]	7.97 [202.4]	8.92 [226.6]	10.00 [254.0]	5.50 [139.7]	0.41 [10.4]	0.38 [9.7]	0.230 [5.84]	0.75 [19.1]	0.34 [8.6]	3.18 [80.7]	3/8 - 24
1"	8.00 [203.2]	2.25 [57.2]	4.88 [124.0]	8.19 [208.0]	9.35 [237.5]	12.95 [329.0]	5.50 [139.7]	0.75 [19.1]	0.50 [12.7]	0.296 [7.52]	0.88 [22.4]	0.34 [8.6]	3.18 [80.7]	7/16 - 20
1 1/2"	9.50 [241.3]	2.70 [68.6]	6.12 [155.5]	10.28 [261.1]	11.60 [294.6]	11.22 [285.0]	7.55 [191.8]	1.18 [30.0]	0.63 [16.0]	0.340 [8.64]	1.13 [28.7]	0.34 [8.6]	3.18 [80.7]	9/16 - 18
2"	11.50 [292.1]	3.11 [79.0]	6.50 [165.1]	10.37 [263.4]	11.82 [300.1]	12.95 [329.0]	7.55 [191.8]	1.44 [36.6]	0.63 [16.0]	0.340 [8.64]	1.13 [28.7]	0.34 [8.6]	3.18 [80.7]	9/16 - 18
3"	14.00 [355.6]	4.26 [108.3]	8.25 [209.5]	15.50 [393.7]	18.70 [475.0]	17.77 [451.4]	7.55 [191.8]	2.50 [63.5]	0.63 [16.0]	0.995 [25.27]	2.75 [69.9]	3/8-16	4.02 [102.11]	1 3/8 - 12
4"	17.00 [431.8]	4.70 [119.4]	10.75 [273.1]	16.10 [408.9]	18.51 [470.2]	18.01 [457.5]	7.55 [191.8]	3.25 [82.6]	0.75 [19.1]	0.995 [25.27]	2.75 [69.9]	3/8-16	4.02 [102.11]	1 3/8 - 12
6"	22.00 [558.8]	6.50 [165.1]	14.00 [355.6]	18.67 [474.2]	-	-	-	4.38 [111.3]	1.30 [35.6]	1.246 [31.65]	3.25 [82.6]	7/16 - 14	4.92 [125.0]	1 3/4 - 12
8"	26.00 [660.4]	7.69 [195.3]	16.50 [419.1]	19.91 [505.7]	-	-	-	6.00 [152.4]	-	1.246 [31.65]	3.00 [76.2]	7/16 - 14	4.92 [125.0]	1 3/4 - 12

SURFACE TREATMENT	DO NOT SCALE			VALVES & MEASUREMENT
	DRAWN BY: SAMUEL	DATE: 5 Nov 14		
MATERIAL & HEAT TREAT	CHECKED BY: RAVI M	DATE: 5 Nov 14	OUTLINE DIMENSIONAL DRAWING 1/2"-8" CLASS 150, 300 & 600 SP SERIES 21/20 TBV™ CRYO BALL VALVE	
	APPROVED BY: M. GLAVIN	DATE: 5 Nov 14		
ESTIMATED WEIGHT:	15.9 LBS 7.2 KG	INITIAL USE BM:	SHEET 1 of 1	INVENTOR: 8M-701-2699 01