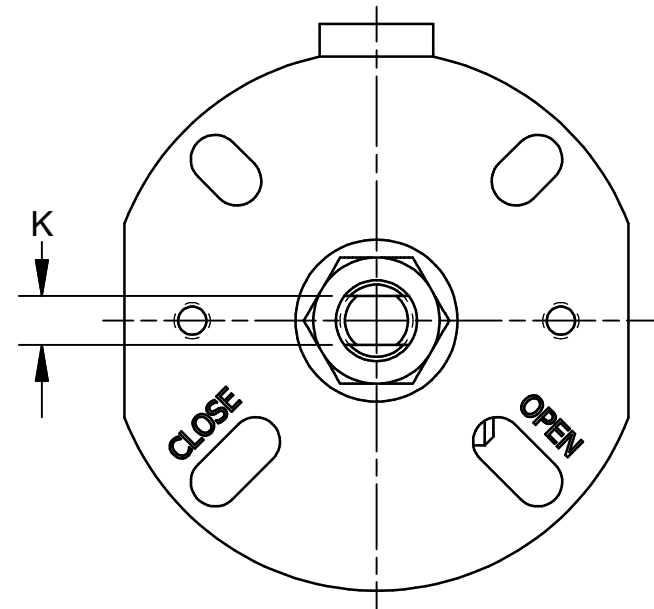
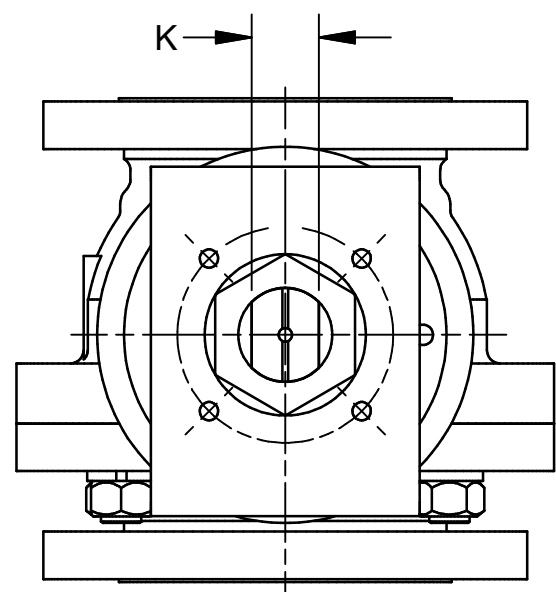


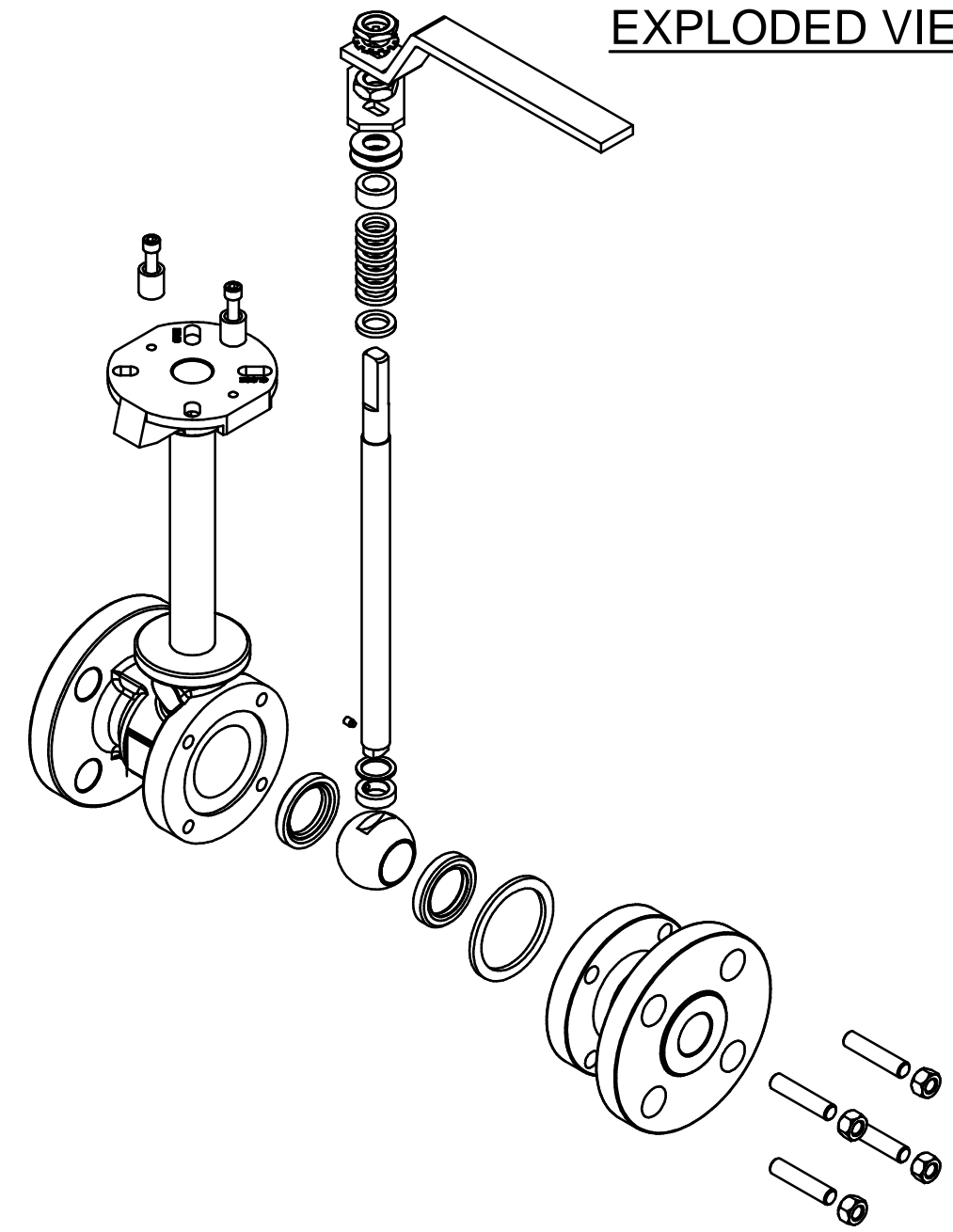
1/2" - 2" MOUNTING CONFIGURATION



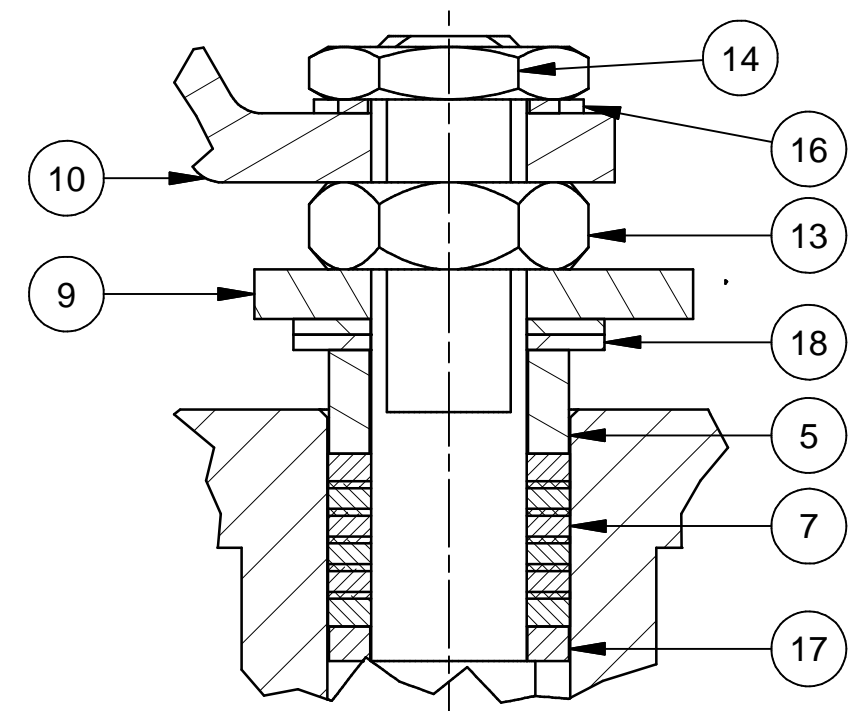
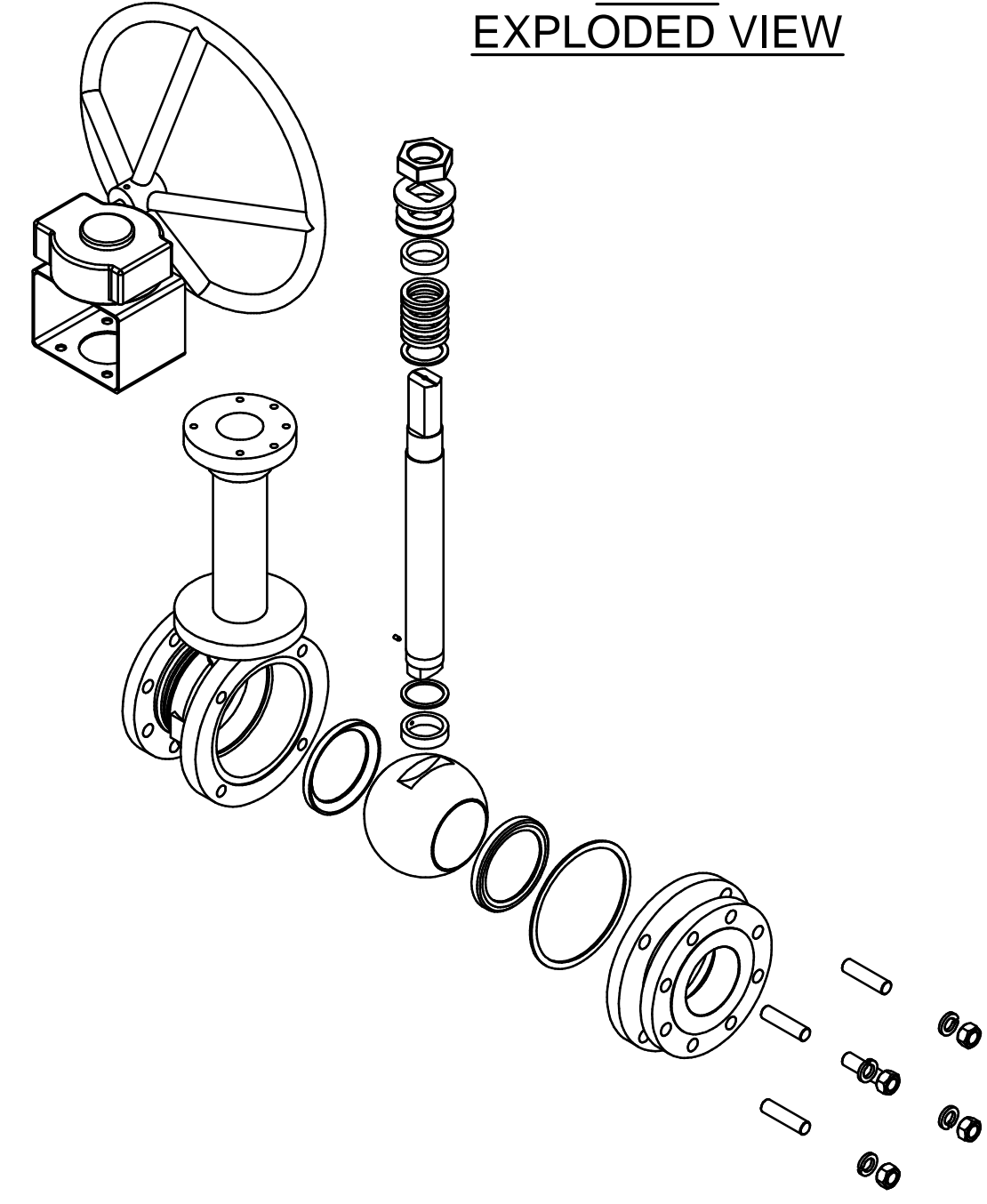
3" - 8" MOUNTING CONFIGURATION



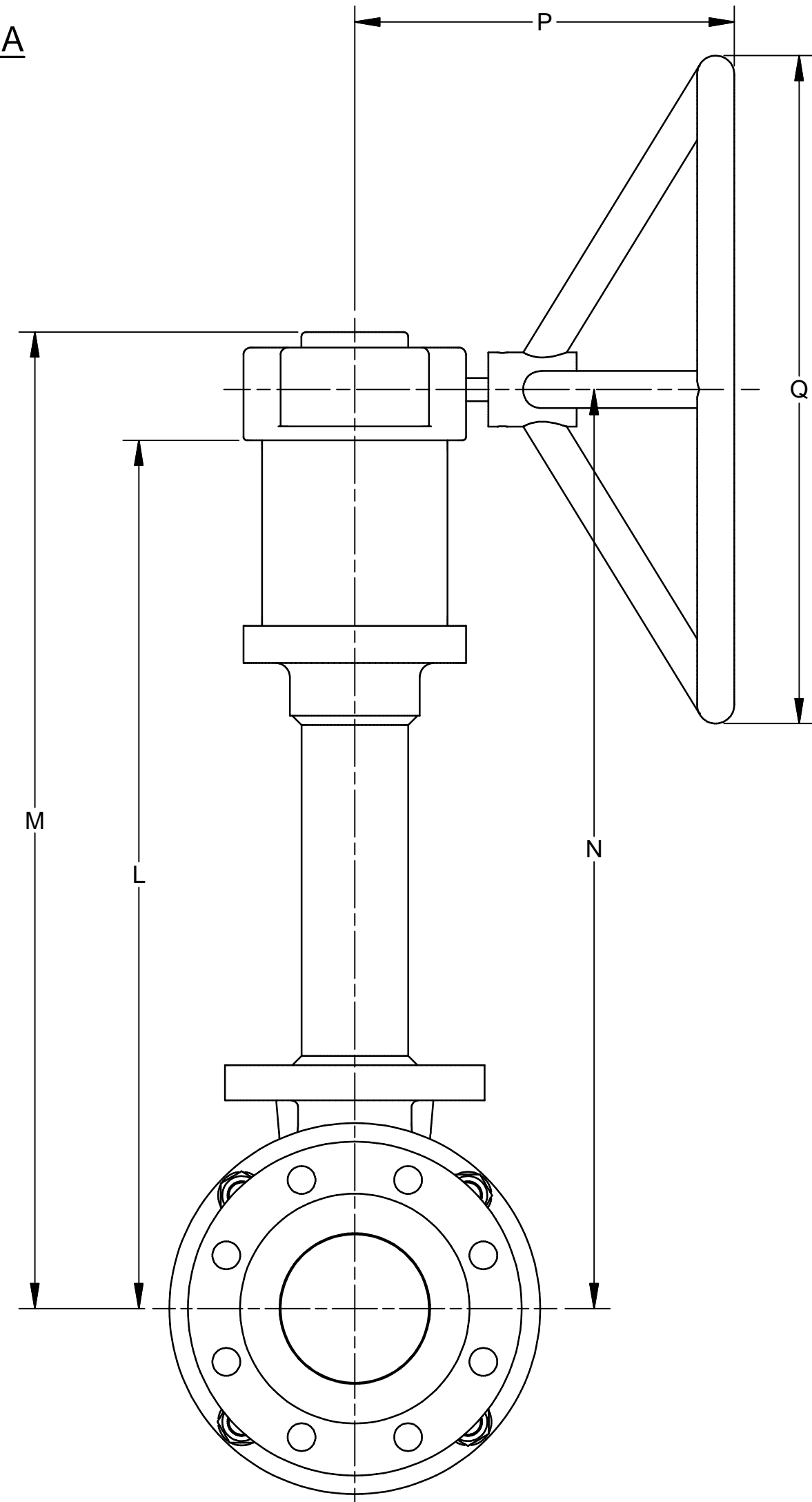
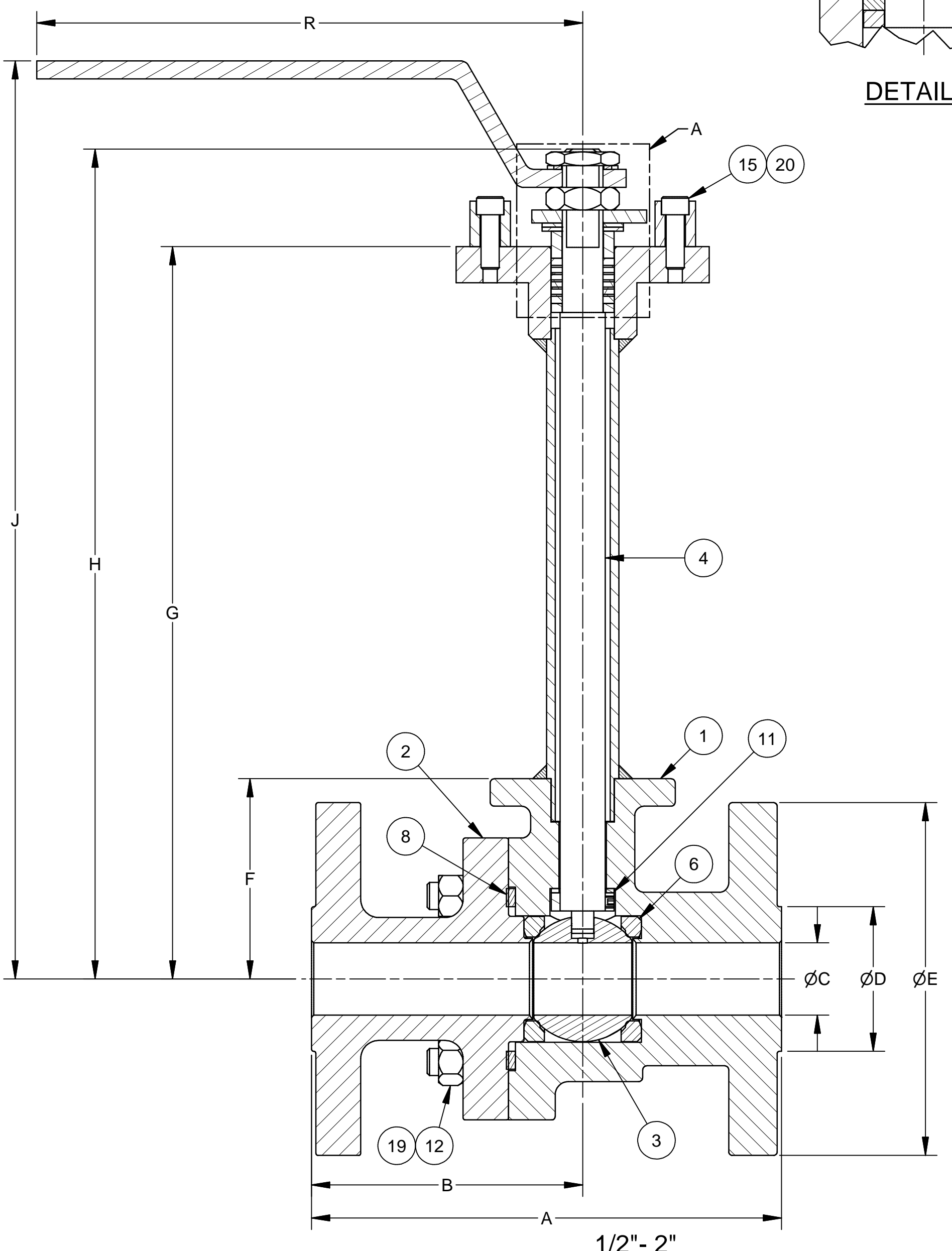
1/2" - 2" EXPLODED VIEW



3" - 8" EXPLODED VIEW



DETAIL A



3" - 8"

NOTE:

1. VALVE WEIGHT IS WITHOUT GEAR BOX.
2. REFER TO TBV™ CRYOGENIC BALL VALVE BROCHURE FOR MATERIAL SPECIFICATIONS AND ADDITIONAL INFORMATION.
3. CONTACT TBV ENGINEERING FOR DIMENSIONAL INFORMATION NOT LISTED ABOVE.

FULL PORT SERIES 21/28 ASME / ANSI CLASS 150																	
VALVE SIZE in	A	B	ØC	ØD	ØE	F	G	H	J	K	L	M	N	P	ØQ	R	WEIGHT lbs [Kg]
1/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3/4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1 1/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	7.01 [178.1]	3.70 [94.0]	2.00 [50.8]	3.88 [98.6]	6.00 [152.4]	3.93 [99.8]	9.61 [244.1]	11.65 [295.9]	-	0.75 [19.1]	-	-	-	-	-	-	21 [10]
3	8.00 [203.2]	4.17 [105.9]	3.00 [76.2]	5.00 [127.0]	7.50 [190.5]	5.00 [127.0]	15.87 [403.2]	18.32 [465.2]	-	1.00 [25.4]	19.87 [504.7]	23.05 [585.5]	21.37 [542.8]	16.51 [419.4]	30.00 [762.0]	17.85 [453.4]	76 [35]
4	9.00 [228.6]	4.60 [116.8]	4.00 [101.6]	6.19 [157.2]	9.00 [228.6]	6.56 [166.6]	18.40 [467.3]	21.65 [549.8]	-	1.25 [31.8]	23.40 [594.3]	26.32 [668.5]	24.77 [629.2]	10.23 [259.8]	18.00 [457.2]	-	141 [64]
6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	18.00 [457.2]	9.71 [246.6]	8.00 [203.2]	10.62 [269.7]	13.50 [342.9]	11.81 [300.0]	26.50 [673.1]	31.94 [811.3]	-	1.75 [44.5]	32.50 [825.5]	37.30 [948.2]	34.75 [882.7]	19.67 [499.6]	30.00 [762.0]	-	591 [268]
FULL PORT SERIES 21/28 ASME/ANSI CLASS 300																	
VALVE SIZE in	A	B	ØC	ØD	ØE	F	G	H	J	K	L	M	N	P	ØQ	R	WEIGHT lbs [Kg]
1/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3/4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1	6.50 [165.1]	3.75 [95.3]	1.00 [25.4]	2.00 [50.8]	4.88 [123.9]	2.77 [70.4]	10.13 [257.3]	11.48 [291.6]	12.70 [322.6]	0.34 [8.6]	-	-	-	-	-	7.55 [191.8]	18 [8]
1 1/2	7.50 [190.5]	4.12 [104.6]	1.44 [36.6]	2.88 [73.2]	6.12 [155.4]	2.86 [72.6]	10.47 [265.9]	11.79 [299.5]	-	0.34 [8.6]	-	-	-	-	-	-	27 [12]
2	8.50 [215.9]	5.00 [127.0]	2.00 [50.8]	3.62 [91.9]	6.50 [165.1]	3.88 [98.6]	9.56 [242.8]	11.65 [295.9]	11.71 [297.4]	0.75 [19.1]	-	-	-	-	-	18.5 [469.9]	32 [15]
3	11.12 [282.4]	6.52 [165.6]	3.00 [76.2]	5.00 [127.0]	8.25 [209.6]	5.00 [127.0]	15.87 [403.1]	18.32 [465.3]	-	1.00 [25.4]	19.87 [504.7]	23.05 [585.5]	21.37 [542.8]	16.51 [419.4]	30.00 [762.0]	-	108 [49]
4	12.00 [304.8]	6.87 [174.5]	4.00 [101.6]	6.19 [157.2]	10.00 [254.0]	6.56 [166.6]	18.40 [467.4]	21.65 [549.9]	-	1.25 [31.8]	23.40 [594.4]	26.64 [676.6]	25.03 [635.7]	14.89 [378.2]	24.00 [609.6]	-	181 [82]
6	15.88 [403.4]	9.00 [228.6]	6.00 [152.4]	8.50 [215.9]	12.50 [317.5]	8.00 [203.2]	19.91 [505.7]	23.59 [599.2]	-	1.37 [34.8]	25.91 [658.1]	30.74 [780.8]	28.08 [713.1]	19.78 [502.4]	18.00 [457.2]	-	375 [170]
8	19.75 [501.7]	10.78 [273.8]	8.00 [203.2]	10.62 [269.7]	15.00 [381.0]	11.81 [300.0]	26.50 [673.1]	32.06 [814.3]	-	1.75 [44.5]	34.50 [876.3]	40.73 [1034.5]	37.27 [946.5]	25.57 [649.5]	24.00 [609.6]	-	723 [328]
FULL PORT SERIES 21/28 ASME/ANSI CLASS 600																	
VALVE SIZE in	A	B	ØC	ØD	ØE	F	G	H	J	K	L	M	N	P	ØQ	R	WEIGHT lbs [Kg]
1/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3/4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1 1/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	14.00 [355.6]	8.79 [223.3]	3.00 [76.2]	5.00 [127.0]	8.25 [209.6]	5.00 [127.0]	15.87 [403.1]	18.32 [465.2]	-	1.00 [25.4]	19.87 [504.7]	-	-	-	-	-	145 [66]
4	17.00 [431.8]	10.68 [271.3]	4.00 [101.6]	6.19 [157.2]	10.75 [273.1]	6.56 [166.6]	18.40 [467.4]	21.65 [549.9]	-	1.25 [31.8]	23.40 [594.4]	26.58 [673.1]	24.90 [632.5]	16.51 [419.4]	30.00 [762.0]	-	287 [130]
6	22.00 [558.8]	13.53 [343.7]	6.00 [152.4]	8.50 [215.9]	14.00 [355.6]	8.00 [203.2]	19.91 [505.7]	23.59 [599.2]	-	1.37 [34.8]	25.91 [658.1]	31.33 [795.8]	31.03 [788.2]	19.91 [502.4]	18.00 [457.2]	-	801 [363]
8	26.00 [660.4]	15.48 [393.2]	8.00 [203.2]	10.62 [269.7]	16.50 [419.1]	11.81 [300.0]	26.50 [673.1]	31.94 [811.3]	-	1.75 [44.5]	34.50 [876.3]	40.73 [1034.5]	37.27 [946.6]	25.19 [639.8]	24.00 [609.6]	-	1059 [480]

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

SURFACE TREATMENT		DO NOT SCALE			VALVES & MEASUREMENT
DRAWN BY: VJAY		DATE: 11 Sep 14			DIMENSIONAL DRAWING 1/2" - 8" FP CLASS 150,300 & 600 21/28 TBV™ CRYO BALL VALVE
MATERIAL & HEAT TREAT		CHECKED BY: M.RAVI		DATE: 11 Sep 14	
APPROVED BY: M.GLAVIN		DATE: 11 Sep 14		DATE: 11 Sep 14	
ESTIMATED WEIGHT:	LBS [KG]	INITIAL USE BM:		SHEET 1 of 1	REV: 01