



NOTES:
 1. REFER TO TBV™ CRYOGENIC BALL VALVE BROCHURE FOR MATERIAL SPECIFICATIONS AND ADDITIONAL INFORMATION.
 2. CONTACT TBV ENGINEERING FOR DIMENSIONAL INFORMATION NOT LISTED ABOVE.

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

21/51 SERIES FULL PORT

VALVE SIZE in	PORT	A1	A2	A3	B1	B2	B3	ØC	D	E	F	G	H1	H2	H3	X	Y	Z
1/2	.50 [12.7]	4.32 [109.7]	4.00 [101.6]	-	2.16 [54.9]	2.00 [50.8]	-	2.75 [69.9]	10.20 [259.1]	7.73 [196.3]	8.98 [228.1]	6.00 [152.4]	2.75 [69.9]	2.63 [66.8]	-	.53 [13.4]	3/8-24	.23 [5.8]
3/4	.75 [19.1]	4.70 [119.4]	5.25 [133.4]	3.67 [93.2]	2.35 [59.7]	2.63 [66.8]	1.84 [46.7]	4.00 [101.6]	10.66 [270.8]	8.27 [210.1]	9.55 [242.6]	7.55 [191.8]	3.13 [79.5]	2.82 [71.6]	-	.29 [7.4]	9/16-18	.34 [8.6]
1	1.00 [25.4]	4.76 [120.9]	4.76 [120.9]	4.32 [109.7]	2.38 [60.5]	2.38 [60.5]	2.16 [54.9]	4.12 [104.6]	12.96 [329.2]	10.28 [261.1]	11.60 [294.6]	7.55 [191.8]	3.88 [98.6]	3.18 [80.8]	3.67 [93.2]	.64 [16.3]	9/16-18	.34 [8.6]
1 1/2	1.50 [38.1]	5.05 [128.3]	5.00 [127.0]	4.94 [125.5]	2.53 [64.3]	2.5 [63.4]	2.47 [62.7]	4.36 [110.7]	12.90 [327.7]	10.47 [265.9]	11.79 [299.5]	7.56 [192.1]	4.19 [106.4]	4.10 [140.1]	3.25 [82.6]	.64 [16.3]	9/16-18	.34 [8.6]
2	2.00 [50.8]	6.80 [172.7]	6.56 [166.6]	6.00 [645.2]	3.40 [86.4]	3.28 [83.3]	3.00 [76.2]	6.88 [174.8]	15.98 [405.8]	12.37 [314.2]	14.79 [375.6]	7.55 [191.8]	5.38 [136.5]	6.44 [163.6]	5.75 [146.1]	.94 [24.0]	1-14	.75 [19.1]
3	3.00 [76.2]	10.75 [273.1]	-	-	5.38 [136.6]	-	-	9.00 [228.6]	18.26 [463.9]	16.12 [409.4]	19.16 [486.7]	18.00 [457.2]	7.75 [196.9]	-	-	.75 [19.1]	1 3/8-12	1.00 [25.4]

21/51 SERIES STD PORT

VALVE SIZE in	PORT	A1	A2	A3	B1	B2	B3	C	D	E	F	G	H1	H2	H3	X	Y	Z
1/2	.50 [12.7]	3.14 [79.8]	3.07 [77.9]	3.07 [77.9]	1.57 [39.9]	1.54 [39.1]	1.54 [39.1]	2.5 [63.5]	9.98 [253.5]	7.98 [202.7]	8.92 [226.6]	5.50 [139.7]	2.31 [58.7]	2.31 [58.7]	2.31 [58.7]	.38 [9.7]	3/8-24	.23 [5.8]
3/4	.50 [12.7]	3.13 [79.5]	3.05 [77.5]	3.05 [77.5]	1.57 [39.9]	1.53 [38.9]	1.53 [38.9]	2.5 [63.5]	9.98 [253.5]	7.98 [202.7]	8.92 [226.6]	5.50 [139.7]	2.31 [58.7]	2.31 [58.7]	2.31 [58.7]	.38 [9.7]	3/8-24	.23 [5.8]
1	.81 [20.6]	3.74 [94.9]	3.68 [93.5]	3.66 [92.9]	1.87 [47.5]	1.84 [46.7]	1.83 [46.5]	3.25 [82.6]	10.33 [262.4]	8.19 [208.0]	9.35 [237.5]	5.50 [139.7]	3.44 [87.4]	3.44 [87.4]	3.44 [87.4]	.50 [12.7]	9/16-18	.34 [8.6]
1 1/2	1.25 [31.8]	4.76 [120.9]	4.70 [119.4]	4.70 [119.4]	2.38 [60.5]	2.35 [59.7]	2.35 [59.7]	4.12 [104.6]	12.72 [323.1]	10.28 [261.1]	11.60 [294.6]	7.55 [191.8]	3.54 [89.9]	3.61 [91.4]	3.61 [91.4]	.63 [16.0]	9/16-18	.34 [8.6]
2	1.50 [38.1]	4.92 [124.9]	4.92 [124.9]	5.00 [127.0]	2.46 [62.5]	2.46 [62.5]	2.50 [63.5]	4.36 [110.7]	12.91 [327.9]	10.47 [265.9]	11.79 [299.5]	7.55 [191.8]	4.12 [104.6]	4.12 [104.6]	4.12 [104.6]	.63 [16.0]	9/16-18	.34 [8.6]
3	2.5 [63.5]	8.75 [222.3]	-	-	4.38 [111.3]	-	-	7.75 [196.9]	15.50 [393.7]	18.39 [467.1]	17.88 [454.2]	6.50 [165.1]	-	-	-	-	1-14	-

SURFACE TREATMENT		DO NOT SCALE			VALVES & MEASUREMENT	
DRAWN BY: VIJAY		DATE 1 Oct 14			DIMENSIONAL DRAWING 1/2"-3" SERIES 21/51 CLASS 600 TBV™ CRYO BALL VALVE	
MATERIAL & HEAT TREAT		DATE				
CHECKED BY: M.RAVI		DATE 1 Oct 14		SHEET 1 of 1		
APPROVED BY: M.GLAVIN		DATE 1 Oct 14		REV: 01		
ESTIMATED WEIGHT: LBS KG		INITIAL USE B/M:		8M-701-2691		