



# SERIES 70T

## 3 PC HIGH PURITY CLEAN BALL VALVE

FULL & TURE PORT MANUAL OR AUTOMATED 1/2" TO 12" (DN15-DN300)



### FEATURES:

- Patented "Sealmaster" stem arrangement
- Double stem sealing complies with TA-LUFT requirements
- Blow-out proof stem
- ISO 5211 top mounting plate
- Three-piece swing out design
- Valve pressure rating: 1/2" to 1-1/2" - PN 63  
2" to 4" - PN 40  
5" to 12" - PN 16
- End connections butt weld, tubing and tri-clamp
- All wetted parts are polished to 180 Grit (0.51 to 0.64 micron)
- All extend weld ends in CF3M/DIN1.4409 material allows orbital welding in place
- High purity cleaning (oil free) and packing
- Bosses for purge connections are built into the end caps
- Size range DN15 (1/2") to DN300 (12")
- Helium leak detection calibrated to  $1 \times 10^{-5}$  std cc/sec.
- Polish standard:

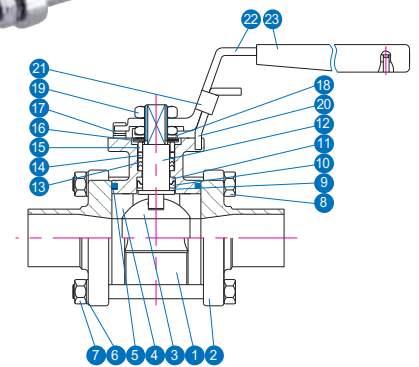
Standard Grit	RMS		Ra	
	$\mu$ in	$\mu$ m	$\mu$ in	$\mu$ m
150g	30-50	.76-.89	27-32	.68-.80
*180g	20-25	.51-.64	18-23	.46-.58
240g	15-20	.38-.51	14-18	.34-.46
320g	9-11	.23-.28	8-10	.21-.25

\* TV's standard.

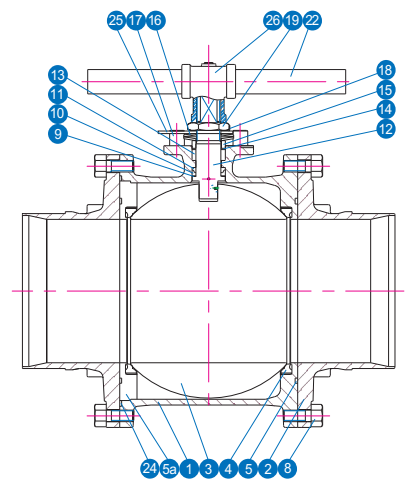
### MATERIAL OF CONSTRUCTION

NO	Parts Name	Material	Q'TY
1	Body	CF8M / 1.4408	1
2	Cap	CF3M / 1.4409	2
3	Ball	ASTM A351 Gr. CF8M	1
4	Ball Seat	PTFE	2
5	Body Seal	PTFE	2
5a	Seat Ring	ASTM A351 Gr. CF8M (5" to 12")	1
6	Bolt Washer	304SS	4-6
7	Bolt Nut	A2-70	4-6
8	Bolt	A2-70	*
9	Lower Thrust Washer	50% S.S Powder / 50% PTFE	1
10	Compress Ring	316SS	1
11	Upper Thrust Washer	TFM1600	1
12	Anti-Static Stem	A276 Type 316	1
13	V-Ring Stem Packing	PTFE	1 Set
14	Thrust Washer	50% S.S Powder / 50% PTFE	1
15	Gland	304SS	1
16	Belleville Washer	301SS	2
17	Stop Bolt	A2-70	1
18	Lock Saddle	304SS	1
19	Stem Nut	304SS	1-2
20	Locking Trigger	304SS	1
21	Fix Plate	304SS	1
22	Handle	CF8 / SGP Zn Plating	1
23	Handle Sleeve	Vinyl	1
24	Cap Seal	PTFE	1
25	Triangle Stopper	304SS(2-1/2" to 12")	1
26	Handle Adapter	CF8(2-1/2" to 5") / A536 (6" to 12")	1

\* 1/2" to 2-1/2" x 4pcs, 3" to 4" x 6pcs, 5" to 6" x 10pcs, 8" x 12pcs, 10" to 12" x 20pcs

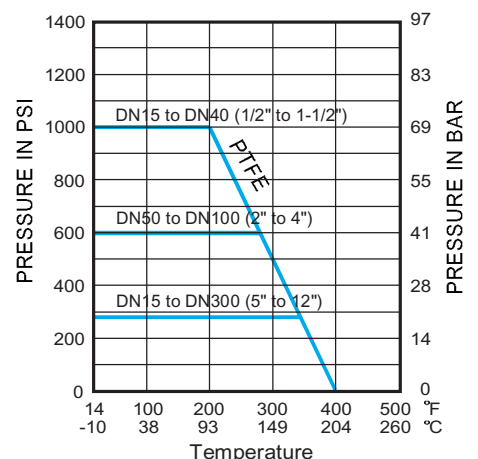


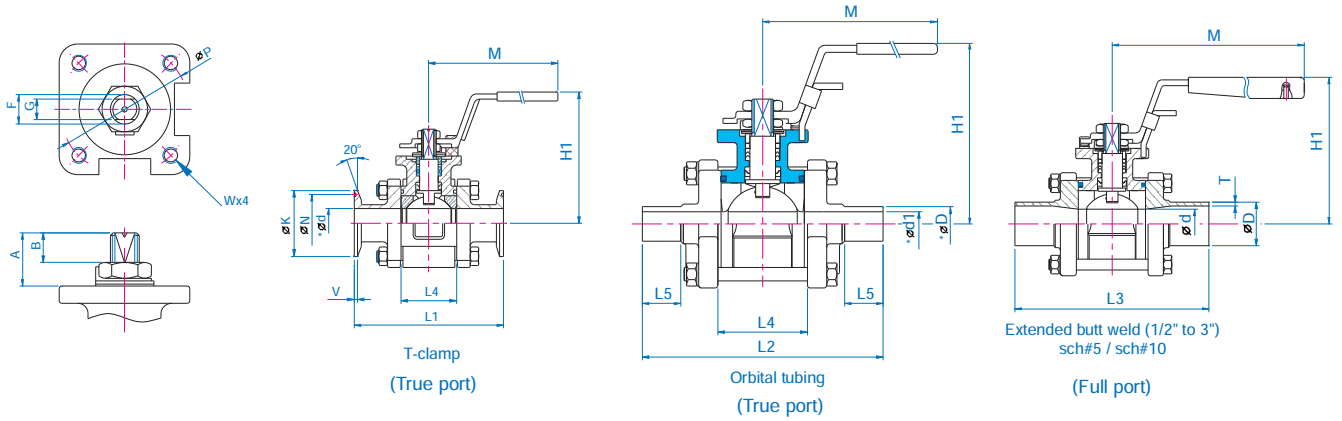
Sizes DN15 to DN80(1/2" to 3")



Sizes DN100 to DN300(4" to 12")

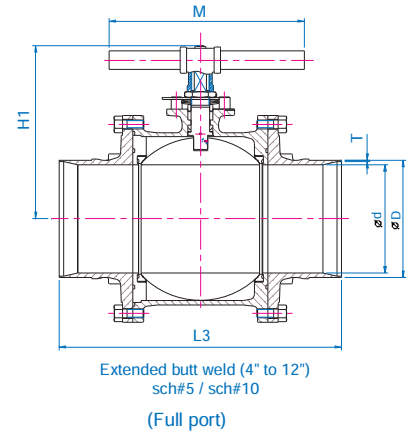
### Pressure/Temperature Chart





**DIMENSIONS(mm)**

SIZE	DN	V	L1	L2	L4	L5	∅K	∅N	*∅d	*∅d1	*∅D	Wt(kg) T-Clamp
1/2"	15	3.63	93.0	139.7	26.5	35.0	25.0	20.2	9.40	10.22	12.70	0.86
3/4"	20	3.63	105.2	139.7	33.2	36.0	25.0	20.3	15.75	15.75	19.05	1.02
1"	25	2.85	113.9	160.7	37.7	38.0	50.4	43.6	22.10	22.10	25.40	1.54
1-1/2"	40	2.85	125.0	190.4	58.0	46.0	50.4	43.6	34.80	34.80	38.10	3.08
2"	50	2.85	146.0	203.2	69.6	46.0	63.9	56.3	47.50	47.50	50.80	4.54
2-1/2"	65	2.85	174.0	254.0	86.5	56.0	77.4	70.6	60.20	60.20	63.50	9.32
3"	80	2.85	193.0	279.0	102.6	60.0	90.9	83.3	72.90	72.90	76.20	14.50
4"	100	2.85	219.4	307.0	125.4	60.0	118.9	110.3	97.38	97.38	101.60	23.00



SIZE	DN	A	B	G	∅P	W	F	∅d	T		∅D	M	H1	L3	Wt(kg) Ext. BW
									5S	10S					
1/2"	15	19.8	12.5	6.3	42	M5	9.7	15.0	1.65	2.1	21.7	135	82	139.7	0.98
3/4"	20	20.0	12.5	6.3	42	M5	9.7	20.0	1.65	2.1	27.2	135	86	139.7	1.18
1"	25	21.0	13.7	8.0	50	M6	11.2	25.0	1.65	2.8	34.0	165	98	152.4	1.80
1-1/4"	32	21.4	13.2	8.0	50	M6	11.2	32.0	1.65	2.8	42.7	165	100	165.1	2.64
1-1/2"	40	24.6	13.9	9.5	70	M8	16.0	38.0	1.65	2.8	48.6	200	116	190.5	3.90
2"	50	25.1	13.9	9.5	70	M8	16.0	50.8	1.65	2.8	60.5	200	125	203.2	5.42
2-1/2"	65	41.6	26.1	15.0	102	M10	19.1	65.0	2.10	3.0	76.3	250	160	254.0	10.42
3"	80	42.0	25.4	15.0	102	M10	19.1	76.0	2.10	3.0	89.1	250	171	279.4	15.74
4"	100	47.8	29.2	17.0	102	M10	28.6	97.4	2.10	3.0	114.3	595	204	317.5	23.06
5"	125	53.6	33.0	17.0	102	M10	28.6	125.0	2.80	3.4	139.8	595	226	381.0	49.00
6"	150	65.0	39.0	23.0	125	M12	34.0	150.0	2.80	3.4	165.2	800	281	403.0	76.00
8"	200	65.0	39.0	23.0	125	M12	34.0	200.0	2.80	4.0	216.3	1100	317	521.0	136.00
10"	250	83.5	52.0	30.0	140	M16	50.0	250.0	3.40	4.0	267.4	1100	378	559.0	153.00
12"	300	83.5	52.0	30.0	140	M16	50.0	300.0	4.00	4.5	318.5	1100	420	635.0	409.00

**ORDERING INFORMATION**

<b>70T</b>	-	<b>T</b>		<b>2</b>	<b>1</b>		<b>R</b>		<b>G</b>		<b>D</b>		<b>2</b>			
		TRI-CLAMP		TRUE PORT	SS316		RPTFE		1-1/2"		1000cwp		T-HANDLE			
70 T HIGH PURITY	A	Schedule 5S Extend Butt-weld	1	FULL PORT	*1	316CF8M 1.4408SCS14	R	RPTFE	C	1/2"	K	3"	C	PN50/720cwp	1	STANDARD HANDLE W/LOCK
	C	Schedule 10S Extend Butt-weld	2	TRUE PORT		*CF3M END CAP TO SUPPLY FOR WELD END	T	PTFE	D	3/4"	L	4"	D	PN63/1000cwp	2	T - HANDLE
	G	Extend Butt-weld for O.D. tubing					O	OTHER	E	1"	M	5"			3	BARE SHAFT
	T	Tri-Clamp							F	1 1/4"	N	6"			4	OTHER
									G	1 1/2"	P	8"				
									H	2"	Q	10"				
									J	2 1/2"	R	12"				