

TC-01TK VALVE

1PC REDUCED PORT 1000 WOG BALL VALVE, THREADED

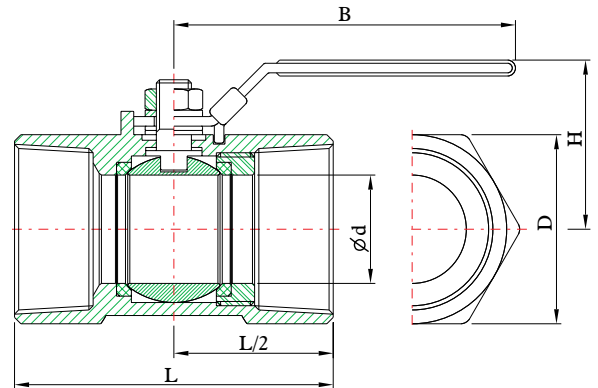
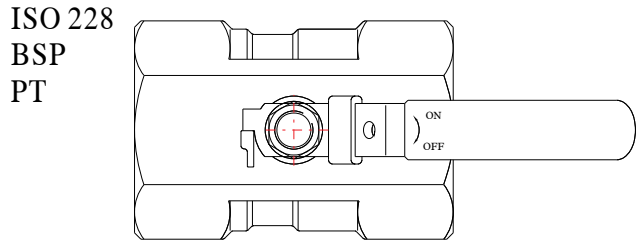


DESIGN FEATURES:

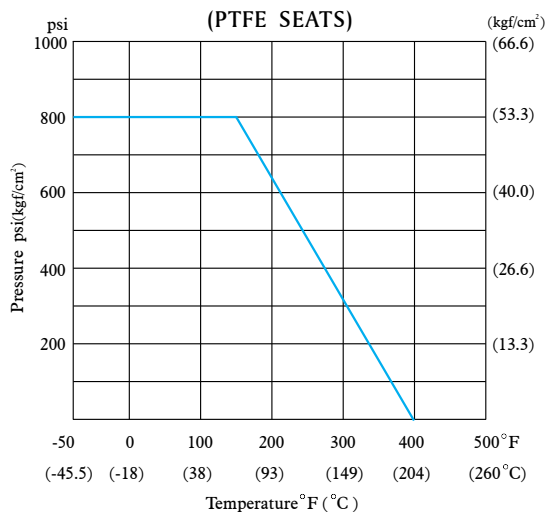
- Steam rating: 125 psi WSP
- Blow-out-proof stem design
- Padlocking device
- Body: ASTM A351 Gr.CF8M
- Stem: SS316
- Seat: PTFE
- End Connections: Threaded End
- Working Pressure: 1000 psi
- Temperature Range: -50° to 400° F
- TEST STANDARD: API 598
- Vacuum Service to 29" Hg
- Threaded Type:
ANSI B1.20.1 (NPT)
DIN 259/DIN 2999
ISO 228

MATERIALS LIST

NO.	PART NAME	MATERIAL	QTY
1	BODY	ASTM A351 Gr.CF8M	1
2	CAP	ASTM A351 Gr.CF8M	1
3	BALL	ASTM A351 Gr.CF8M	1
4	STEM	ASTM A276 Gr.316	1
5	SEAT	PTFE	2
6	THRUST WASHER	PTFE	1
7	PACKING	PTFE	1
8	WASHER	SS304	2
9	SPRING WASHER	SS304	1
10	HANDLE NUT	SS304	1
11	HANDLE	SS304	1
12	HANDLE SLEEVE	VINYL GRIP	1
13	LOCKING PLATE	SS304	1



PRESSURE TEMPERATURE RATINGS



DIMENSIONS

SIZE		d		B		D		L		H		Cv Factor	Weight	
inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm		Kg	Lb
1/4"	8	0.20	5.0	2.36	60	0.67	17.0	1.54	39.0	1.22	31	1	0.08	0.18
3/8"	10	0.28	7.0	2.76	70	0.83	21.0	1.73	44.0	1.38	35	2	0.11	0.24
1/2"	15	0.36	9.2	3.39	86	0.98	25.0	2.22	56.0	1.69	43	4	0.17	0.38
3/4"	20	0.49	12.5	3.39	86	1.26	32.0	2.32	59.0	1.81	46	7	0.25	0.55
1"	25	0.63	16.0	4.09	104	1.50	38.0	2.80	71.0	1.97	50	10	0.45	0.99
1 1/4"	32	0.79	20.0	4.09	104	1.93	49.0	3.11	79.0	2.13	54	17	0.74	1.63
1 1/2"	40	0.96	24.5	4.96	126	2.09	53.0	3.27	83.0	2.56	65	26	0.83	1.83
2"	50	1.26	32.0	4.96	126	2.56	65.0	3.94	100.0	2.83	72	45	1.25	2.75

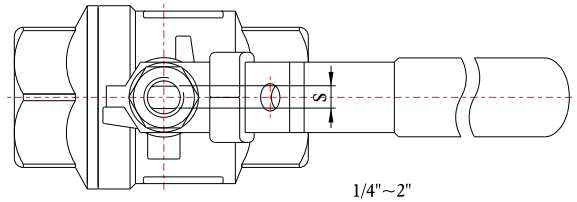
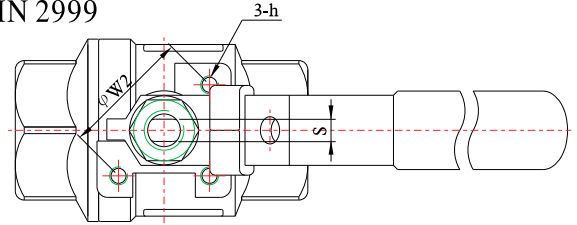
TC-02X VALVE

2PC FULL PORT 1000 WOG BALL VALVE, THREADED



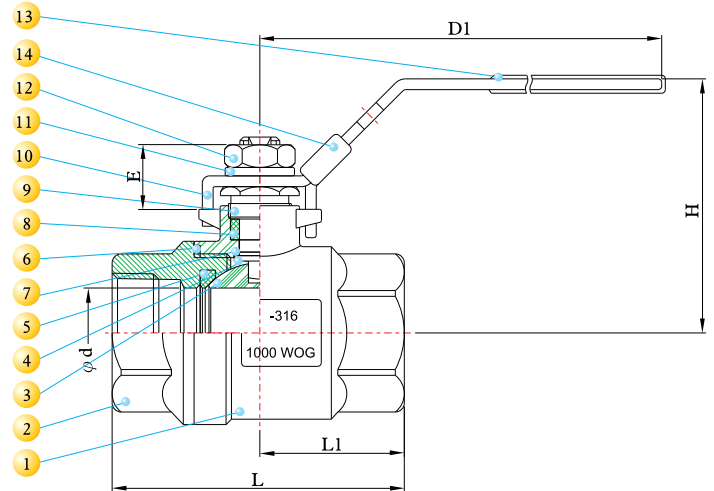
DESIGN FEATURES:

- Steam rating: 150 psi WSP
- Blow-out-proof stem design
- Temperature Range: -50 °F to 450 °F
- Options: locking device
- TEST STANDARD: API 598
- Vacuum Service to 29" Hg
- Threaded Type:
ANSI B1.20.1 (NPT)
DIN 259/DIN 2999
ISO 228
BSP
PT

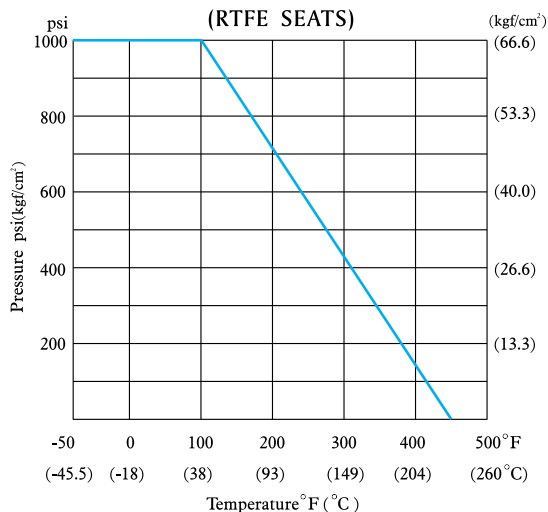


MATERIALS LIST

NO.	PART NAME	MATERIAL	QTY
1	BODY	ASTM A351 Gr.CF8M	1
2	CAP	ASTM A351 Gr.CF8M	1
3	BALL	ASTM A351 Gr.CF8M	1
4	STEM	ASTM A276 Gr.316	1
5	SEAT	PTFE+15% G/F	2
6	GASKET	PTFE	1
7	THRUST WASHER	PTFE	1
8	PACKING	PTFE	1
9	GLAND	SS304	1
10	HANDLE	SS304	1
11	SPRING WASHER	SS304	1
12	HANDLE NUT	SS304	1
13	HANDLE SLEEVE	VINYL GRIP	1
14	LOCKING PLATE	SS304	1



PRESSURE TEMPERATURE RATINGS



DIMENSIONS

SIZE		d		E		L		L1		H		S		D1		W2		h	Cv	Weight	
inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	Factor		Kg	Lb
1/4"	8	0.43	11.0	0.61	15.5	2.28	57.8	1.13	28.8	2.25	57.2	0.21	5.45	4.06	103				16	0.26	0.57
3/8"	10	0.49	12.5	0.61	15.5	2.28	57.8	1.13	28.8	2.25	57.2	0.21	5.45	4.06	103				16	0.24	0.53
1/2"	15	0.59	15.0	0.57	14.5	2.43	61.7	1.21	30.7	2.33	59.1	0.21	5.45	4.06	103				26	0.30	0.66
3/4"	20	0.79	20.0	0.83	21.0	2.76	70.1	1.38	35.0	2.46	62.6	0.21	5.45	4.06	103				55	0.42	0.93
1"	25	0.98	25.0	0.77	19.5	3.20	81.3	1.58	40.2	2.78	70.7	0.24	6.20	5.00	127				110	0.70	1.54
1 1/4"	32	1.26	32.0	1.09	27.9	3.78	96.0	1.86	47.2	3.00	76.2	0.24	6.20	5.00	127				180	1.10	2.42
1 1/2"	40	1.50	38.0	1.50	27.5	4.43	112.5	2.19	55.6	3.51	89.1	0.37	9.40	6.02	153				270	1.86	4.10
2"	50	2.00	50.8	1.08	26.7	4.96	126.0	2.46	62.4	3.87	98.2	0.37	9.40	7.60	193				500	2.85	6.28
2 1/2"	65	2.56	65.0	1.02	26.0	6.63	168.5	3.35	85.0	4.35	110.6	0.37	9.40	7.60	193	2.76	70	M8*P1.25	800	6.25	13.77
3"	80	3.15	80.0	1.50	38.0	7.54	191.4	3.78	95.9	4.88	124.0	0.47	12.00	10.98	279	4.02	102	M10*P1.5	1150	10.42	22.95
4"	100	3.94	100.0	1.89	48.0	8.52	216.5	4.26	108.3	6.63	168.5	0.47	16.00	13.19	335	4.02	102	M10*P1.5	2120	17.20	37.89

TC-2000 VALVE

2PC FULL PORT 2000/1500 WOG BALL VALVE, THREADED



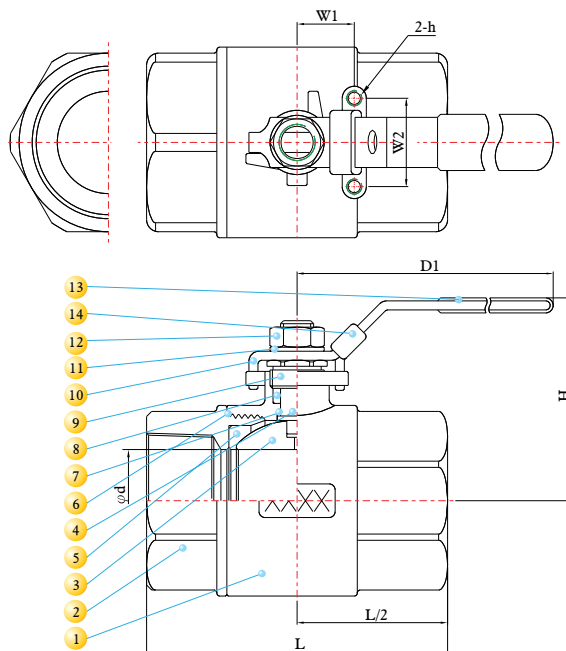
DESIGN FEATURES:

- Steam rating: 150 psi WSP
- WORKING PRESSURE : 1/4"~1" 2000 PSI
1 1/4"~2" 1500 PSI
- INVESTMENT CASTING BODY & CAP
- ME-PTFE SEAL KITS : REPLACES PTFE ,RPTFE AND FPA
LOW DEFORMATION UNDER LOAD
LOW PERMEATION
- TEMPERATURE RATING : -45.5°C (-50°F) to 246°C (475°F)
- LONG CYCLE LIFE
- ADJUSTABLE STEM PACKING
- BLOW-OUT PROOF STEM
- LOCKING DEVICE
- DESIGN SPECIFICATION : ANSI B16.34 CLASS 900
- TEST STANDARD: API 598
- Vacuum Service to 29" Hg

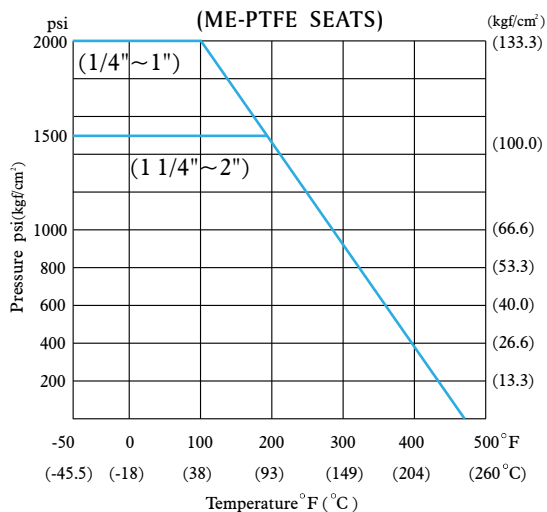
MATERIALS LIST

NO.	PART NAME	MATERIAL	QTY
1	BODY	ASTM A351 Gr.CF8M	1
2	CAP	ASTM A351 Gr.CF8M	1
3	BALL	ASTM A351 Gr.CF8M	1
4	STEM	ASTM A276 Gr.316	1
5	SEAT	ME-PTFE *	2
6	GASKET	ME-PTFE *	1
7	THRUST WASHER	ME-PTFE *	1
8	PACKING	ME-PTFE *	1
9	GLAND	SS304	1
10	HANDLE	SS304	1
11	SPRING WASHER	SS304	1
12	HANDLE NUT	SS304	1
13	HANDLE SLEEVE	VINYL GRIP	1
14	LOCKING PLATE	SS304	1

* ME-PTFE IS Molecularly Enhanced PTFE



PRESSURE TEMPERATURE RATINGS



DIMENSIONS

SIZE		d		L		H		D1		W1		W2		h	Cv	Weight	
inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	(Option)	Factor	Kg	Lb
1/4"	8	0.43	11.0	2.34	59.5	2.24	57.0	4.06	103	0.50	12.7	1.12	28.5	M5*p0.8	16	0.37	0.81
3/8"	10	0.49	12.5	2.34	59.5	2.24	57.0	4.06	103	0.50	12.7	1.12	28.5	M5*p0.8	16	0.36	0.79
1/2"	15	0.59	15.0	2.52	64.5	2.27	57.6	4.06	103	0.50	12.7	1.12	28.5	M5*p0.8	26	0.42	0.93
3/4"	20	0.79	20.0	3.03	77.0	2.70	68.5	5.00	127	0.88	22.4	1.38	35.0	M6*p1.0	55	0.80	1.76
1"	25	0.98	25.0	3.56	90.5	2.86	72.7	5.00	127	0.88	22.4	1.38	35.0	M6*p1.0	110	1.24	2.73
1 1/4"	32	1.26	32.0	3.92	99.5	3.45	87.7	6.14	156	1.00	25.4	1.50	38.1	M6*p1.0	180	2.05	4.52
1 1/2"	40	1.50	38.0	4.65	118.0	3.66	93.0	7.60	193	1.00	25.4	1.50	38.1	M6*p1.0	270	2.58	5.68
2"	50	2.00	50.8	5.37	136.5	4.11	104.3	7.60	193	1.00	25.4	1.50	38.1	M6*p1.0	500	4.43	9.76

TC-03T/B/S VALVE

3PC FULL PORT 1000 WOG BALL VALVE

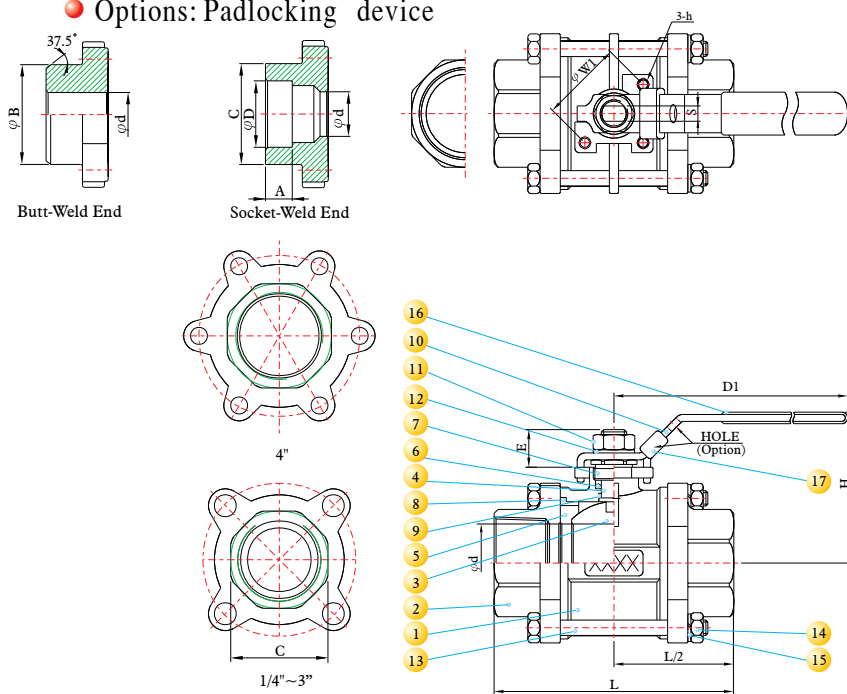


DESIGN FEATURES:

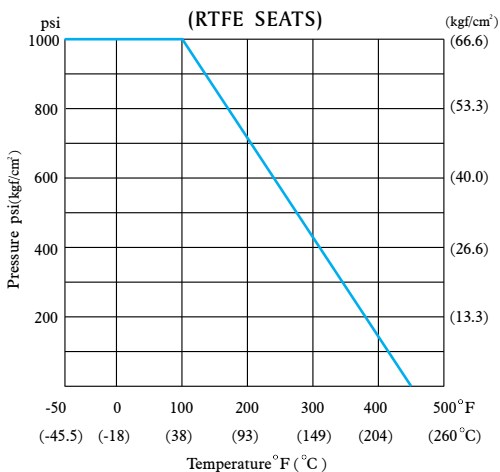
- Steam rating: 150 psi WSP
- Blow-out-proof stem design
- ISO 5211 Mounting pad
- Body: ASTM A351 Gr.CF8M
- Ball: SS316
- Stem: SS 316
- Seat: Reinforced Teflon
- End Connections: Threaded End
Socket Weld End
Butt Weld End
- Working Pressure: 1000 psi
- Temperature Range: -50° to 450°F
- TEST STANDARD: API 598
- Vacuum Service to 29" Hg
- Options: Padlocking device

MATERIALS LIST

NO.	PART NAME	MATERIAL	QTY
1	BODY	ASTM A351 Gr.CF8M	1
2	CAP	ASTM A351 Gr.CF8M	2
3	BALL	ASTM A351 Gr.CF8M	1
4	STEM	ASTM A276 Gr.316	1
5	SEAT	PTFE+15% G/F	2
6	PACKING	PTFE	1
7	GLAND	SS304	1
8	END SEALS	PTFE	2
9	THRUST WASHER	PTFE	1
10	HANDLE	SS304	1
11	HANDLE NUT	SS304	1
12	SPRING WASHER	SS304	1
13	BOLTS	ASTM A193 Gr.B8	4~6
14	BOLT NUTS	ASTM A194 Gr.8	4~6
15	BOLT WASHERS	SS304	4~6
16	HANDLE SLEEVE	VINYL GRIP	1
17	LOCKING PLATE	SS304	1



PRESSURE TEMPERATURE RATINGS



DIMENSIONS

SIZE	A		B		C		D		E		d	L		D1		H		S		W1	h	Cv	Weight				
	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	Factor	Kg	Lb		
1/4"	8	0.39	10	0.71	18.1	0.90	22.8	0.56	14.1	0.61	15.5	0.43	11.0	2.56	65	4.06	103	2.13	54	0.21	5.45	1.42	36	M5*P0.8	16	0.48	1.06
3/8"	10	0.39	10	0.71	18.1	0.90	22.8	0.69	17.6	0.61	15.5	0.49	12.5	2.56	65	4.06	103	2.13	54	0.21	5.45	1.42	36	M5*P0.8	16	0.46	1.01
1/2"	15	0.39	10	0.89	22.5	1.06	26.8	0.85	21.7	0.61	15.5	0.59	15.0	2.80	71	4.06	103	2.24	57	0.21	5.45	1.42	36	M5*P0.8	26	0.58	1.28
3/4"	20	0.51	13	1.11	28.3	1.36	34.6	1.07	27.1	0.77	19.5	0.79	20.0	3.35	85	5.00	127	2.64	67.1	0.24	6.2	1.42	36	M5*P0.8	55	0.92	2.02
1"	25	0.51	13	1.38	35.0	1.56	39.5	1.33	33.8	0.77	19.5	1.00	25.4	3.74	95	5.00	127	2.76	70.0	0.24	6.2	1.42	36	M5*P0.8	110	1.19	2.62
1 1/4"	32	0.51	13	1.74	44.1	1.93	49.0	1.68	42.6	1.00	25.5	1.26	32.0	4.37	111	6.02	153	3.59	91.1	0.37	9.4	1.97	50	M6*P1.0	180	2.07	4.56
1 1/2"	40	0.51	13	1.97	50.0	2.20	55.8	1.92	48.7	1.04	26.5	1.57	40.0	4.76	121	6.02	153	3.74	95.1	0.37	9.4	1.97	50	M6*P1.0	270	2.75	6.06
2"	50	0.63	16	2.38	60.5	2.68	68.0	2.41	61.1	1.00	25.5	2.00	50.8	5.51	140	7.60	193	4.02	102.0	0.37	9.4	1.97	50	M6*P1.0	500	4.07	8.96
2 1/2"	65	0.63	16	3.06	77.8	3.46	88.0	2.91	73.8	1.56	39.5	2.56	65.0	6.81	173	10.98	279	4.76	120.8	0.47	12.0	2.76	70	M8*P1.25	800	8.12	17.89
3"	80	0.63	16	3.51	89.1	4.13	105.0	3.54	89.8	1.48	37.5	3.15	80.0	7.56	192	10.98	279	5.08	129.0	0.47	12.0	4.02	102	M10*P1.5	1150	12.71	28.03
4"	100	0.75	19	4.50	114.3	5.10	129.5	4.35	115.5	1.95	49.5	3.94	100.0	8.86	225	13.19	335	6.84	173.7	0.63	16.0	4.02	102	M10*P1.5	2120	21.12	46.52

TC-YS VALVE

800 WOG Y STRAINER, THREADED, SOCKET-WELD

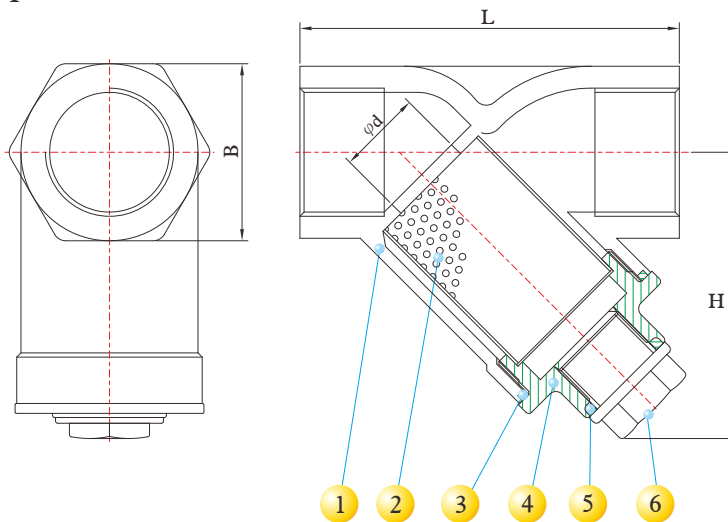


DESIGN FEATURES:

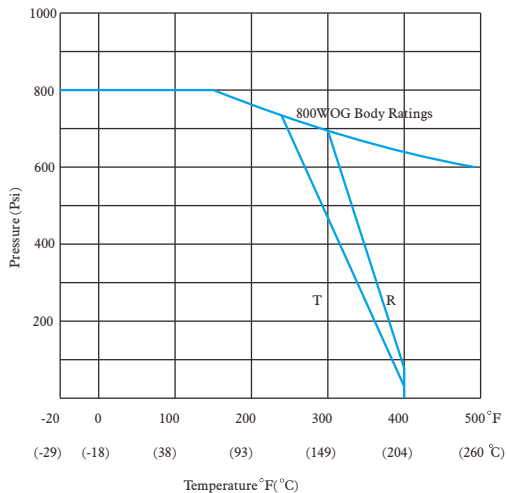
- Body: ASTM A351 Gr.CF8M
- Screen: SS316
- Packing: PTFE
- Working Pressure: 800 psi
- TEST STANDARD: API 598
- End Connections: Threaded End
Socket-Weld End
- Threaded Type:
ANSI B1.20.1 (NPT)
DIN 259 / DIN 2999
ISO 228
BSP
PT

MATERIALS LIST

NO	PARTS NAME	SPECIFICATION	Q, TY
1	BODY	ASTMA-351 Gr. CF8M	1
2	SCREEN	12MESH (SS316)	1
3	GASKET	PTFE	1
4	BONNET	ASTM A-351 Gr. CF8M	1
5	PLUG GASKET	PTFE	1
6	PLUG	ASTM A-351 Gr. CF8M	1



PRESSURE TEMPERATURE RATINGS



DIMENSIONS

SIZE		d		B		H		L		Weight	
inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	Kg	Lb
1/4"	8	0.43	11	0.91	23	1.81	46	2.56	65	0.24	0.53
3/8"	10	0.51	13	0.91	23	1.81	46	2.56	65	0.23	0.5
1/2"	15	0.59	15	1.02	26	1.81	46	2.56	65	0.23	0.5
3/4"	20	0.79	20	1.26	32	2.17	55	3.15	80	0.36	0.79
1"	25	0.98	25	1.61	41	2.76	70	3.54	90	0.70	1.54
1-1/4"	32	1.26	32	2.01	51	2.87	73	4.13	105	0.90	1.98
1-1/2"	40	1.57	40	2.24	57	3.19	81	4.72	120	1.20	2.64
2"	50	1.97	50	2.72	69	3.70	94	5.51	140	1.90	4.19
2-1/2"	65	2.56	65	3.43	87	4.72	120	6.69	170	4.30	9.47
3"	80	3.15	80	4.02	102	5.51	140	7.87	200	6.30	13.88

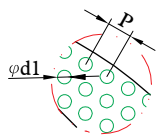
TC-YSF VALVE

150# R.F. FLANGED Y STRAINERS STAINLESS STEEL



DESIGN FEATURES:

- Body: ASTM A351 Gr.CF8M
- Screen: SS304
- Gasket: PTFE
- Flange Dimensions: ANSI B16.5 150 #
- TEST STANDARD: API 598



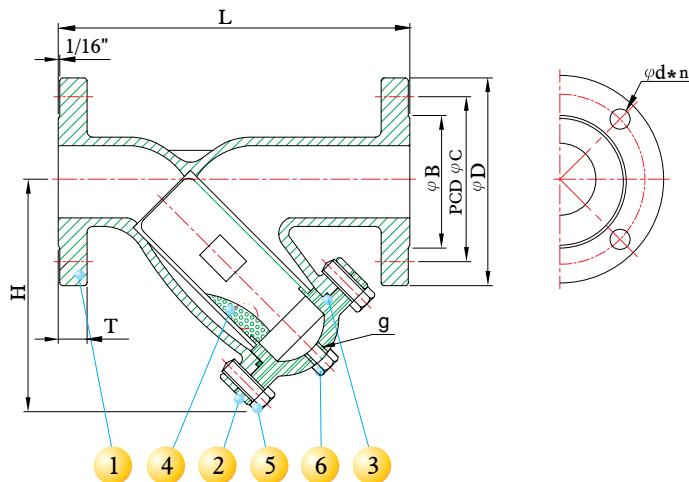
Screen Detail

SIZE		d1		P	
inch	mm	inch	mm	inch	mm
2"	50	0.04	1	0.08	2
3"	80	0.04	1	0.08	2
4"	100	0.04	1	0.08	2
6"	150	0.12	3	0.20	5

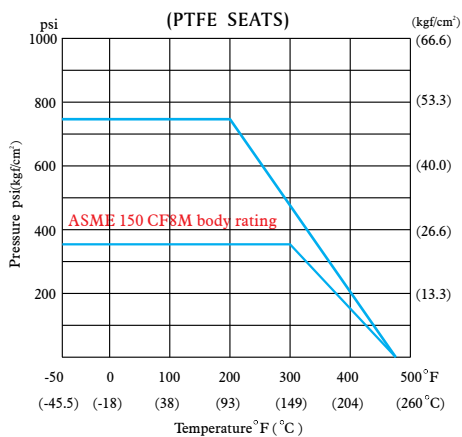
MATERIALS LIST

NO.	PART NAME	MATERIAL	QTY
1	BODY	ASTM A351 Gr.CF8M	1
2	CAP	ASTM A351 Gr.CF8M	1
3	GASKET	PTFE	1
4	SCREEN	* SS304	1
5	BOLT	ASTM A193 B8	4~8
6	PLUG	SS316	1

* 316 SCREENS AVAILABLE UPON REQUEST



PRESSURE TEMPERATURE RATINGS



DIMENSIONS

SIZE		B		C		D		d		H		L		n	T		g	Cv Factor	Weight	
inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm		inch	mm			Kg	Lb
2"	50	3.62	92	4.74	120.5	5.98	152	0.75	19	5.75	146	8.58	218	4	0.63	15.9	1/2"	500	13	28.6
2 1/2"	80	4.13	105	5.49	139.5	7.00	178	0.75	19	7.09	180	10.28	261	4	0.69	17.5	3/4"	850	23	50.6
3"	80	5.00	127	6.00	152.5	7.48	190	0.75	19	7.87	200	11.61	295	4	0.75	19.1	1"	1150	25	55.1
4"	100	6.18	157	7.50	190.5	9.02	229	0.75	19	9.45	240	14.21	361	8	0.94	23.9	1 1/2"	2120	33	72.7
6"	150	8.50	216	9.51	241.5	10.98	279	0.87	22	13.39	340	18.46	469	8	1.00	25.4	2"	5100	76	167.4

200 WOG GATE VALVE, THREADED

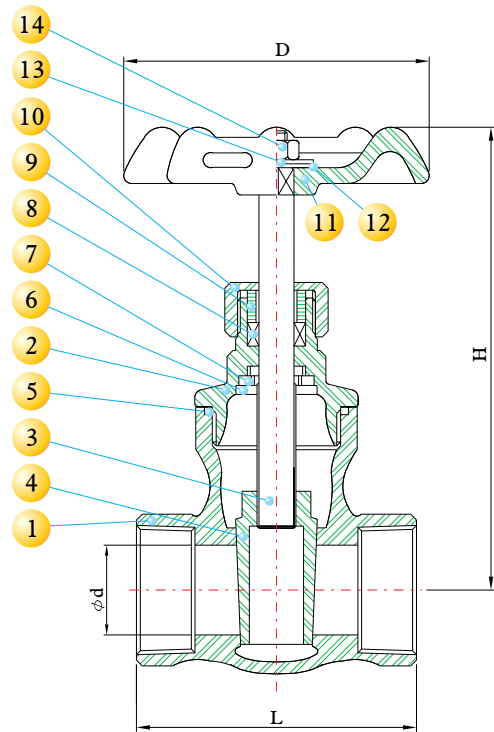


DESIGN FEATURES:

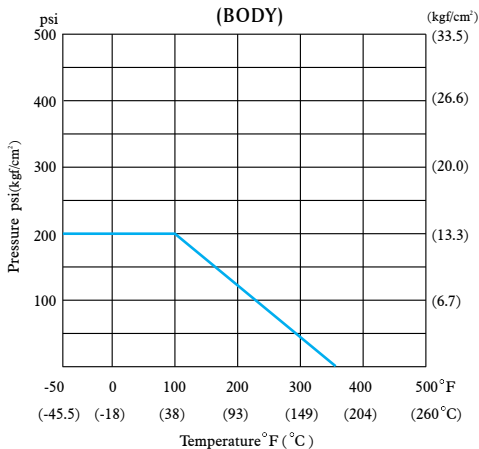
- Non-Rising Stem
- Solid Wedge Disc
- Body: ASTM A351 Gr.CF8M
- DISC: ASTM A351 Gr.CF8M
- Seat: SS316
- Packing: PTFE
- Working Pressure: 200 psi
- TEST STANDARD: API 598
- End Connections: Threaded End
- Threaded Type:
ANSI B1.20.1 (NPT)
DIN 259/DIN 2999
ISO 228
BSP
PT

MATERIALS LIST

NO.	PART NAME	MATERIAL	QTY
1	BODY	ASTM A351 Gr.CF8M	1
2	BONNET	ASTM A351 Gr.CF8M	1
3	STEM	ASTM A276 Gr.316	1
4	DISC	ASTM A351 Gr.CF8M	1
5	GASKET	PTFE	1
6	STOP RING	SS304	1
7	STEM HOLDER	SS316	1
8	STEM PACKING	PTFE	1
9	GLAND	SS304	1
10	GLAND NUT	SS316	1
11	HANDLE WHEEL	SS400	1
12	NAME PLATE	ALUMINUM	1
13	HANDLEWHEEL WASHER	SS304	1
14	HANDLEWHEEL NUT	SS304	1



PRESSURE TEMPERATURE RATINGS



DIMENSIONS

SIZE		d		D		H		L		Cv Factor	Weight	
inch	mm	inch	mm	inch	mm	inch	mm	inch	mm		Kg	Lb
1/2"	15	0.63	16.1	2.76	70.0	3.88	98.6	2.24	57.0	15	0.52	1.15
3/4"	20	0.80	20.3	2.76	70.0	4.06	103.0	2.38	60.5	37	0.63	1.39
1"	25	1.02	26.0	3.01	76.5	4.53	115.0	2.64	67.0	72	0.81	1.78
1 1/4"	32	1.25	31.8	3.01	76.5	5.04	128.0	2.99	76.0	110	1.18	2.60
1 1/2"	40	1.57	31.8	4.07	103.5	6.81	173.0	3.43	87.0	165	2.00	4.41
2"	50	1.98	50.3	4.76	121.0	7.44	189.0	3.74	95.0	320	2.82	6.21

TC-GB VALVE

200 WOG GLOBE VALVE, THREADED

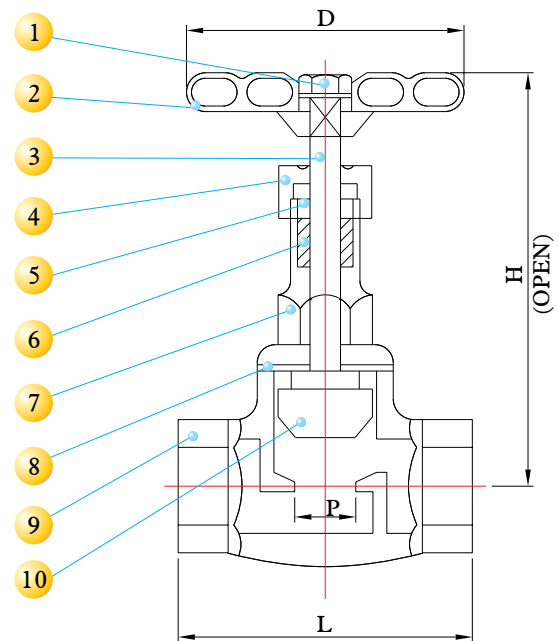


DESIGN FEATURES:

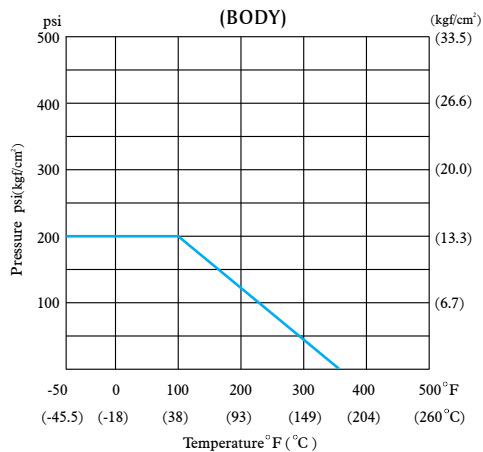
- Rising Stem And Wheel
- Body: ASTM A351 Gr.CF8M
- Disc: ASTM A351 Gr.CF8M
- Seat: SS 316
- Packing: PTFE
- Working Pressure: 200 psi
- TEST STANDARD: API 598
- End Connections: Threaded End
- Threaded Type:
ANSI B1.20.1 (NPT)
DIN 259/DIN 2999
ISO 228
BSP
PT

MATERIALS LIST

NO.	PART NAME	MATERIAL	Q'TY
1	NUT	SS304	1
2	HANDWHEEL	SS400	1
3	STEM	ASTM A276 Gr.316	1
4	GLAND NUT	ASTM A351 Gr.CF8M	1
5	GLAND	ASTM A351 Gr.CF8M	1
6	GLAND PACKING	PTFE	1
7	BONNET	ASTM A351 Gr.CF8M	1
8	GASKET	PTFE	1
9	BODY	ASTM A351 Gr.CF8M	1
10	DISC	ASTM A351 Gr.CF8M	1



PRESSURE TEMPERATURE RATINGS



DIMENSIONS

SIZE		D		L		H		P		Cv Factor	Weight	
inch	mm	inch	mm	inch	mm	inch	mm	inch	mm		Kg	Lb
1/4"	8	2.36	60.0	2.05	52.0	4.02	102	0.39	10	1.0	0.33	0.73
3/8"	10	2.36	60.0	2.05	52.0	4.02	102	0.47	12	1.5	0.31	0.68
1/2"	15	2.76	70.0	2.60	66.0	3.74	95	0.47	12	2.5	0.42	0.93
3/4"	20	2.76	70.0	2.70	68.5	3.90	99	0.59	15	5.6	0.46	1.01
1"	25	3.01	76.5	3.08	78.3	4.02	102	0.79	20	10.5	0.62	1.37
1 1/4"	32	4.07	103.5	3.39	86.0	4.96	126	0.98	25	17.0	1.05	2.31
1 1/2"	40	4.07	103.5	3.86	98.0	5.35	136	1.30	33	25.0	1.40	3.08
2"	50	4.76	121.0	4.35	110.5	6.14	156	1.57	40	46.0	2.10	4.63

TC-CK, TC-CKS VALVE

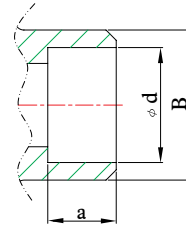
200 WOG SWING CHECK VALVE, THREADED



DESIGN FEATURES:

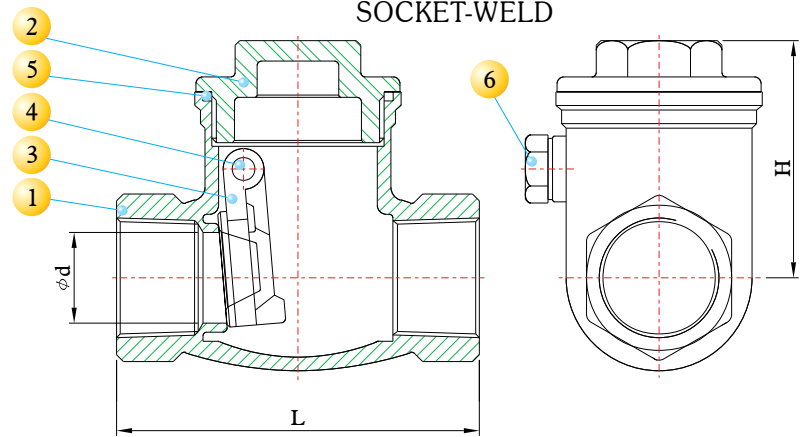
- Swing Type
- Body: ASTM A351 Gr.CF8M
- Disc: ASTM A351 Gr.CF8M
- Packing: PTFE.
- Working Pressure: 200 psi
- End Connections: Threaded End
- TEST STANDARD: API 598

Threaded Type:
ANSI B1.20.1 (NPT)
DIN 259/DIN 2999
ISO 228
BSP
PT

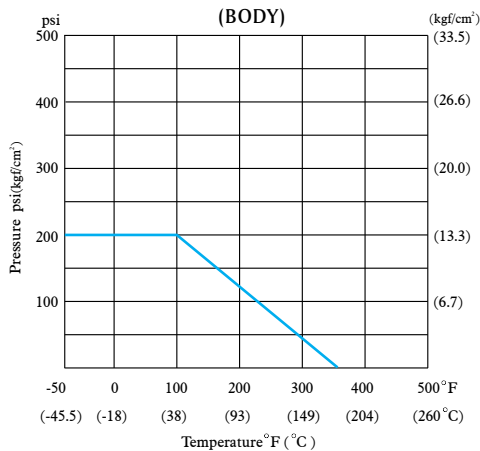


MATERIALS LIST

NO.	PART NAME	MATERIAL	QTY
1	BODY	ASTM A351 Gr.CF8M	1
2	CAP	ASTM A351 Gr.CF8M	1
3	DISC	ASTM A351 Gr.CF8M	1
4	HINGE PIN	SS316	1
5	GASKET	PTFE	1
6	PLUG	SS316	1



PRESSURE TEMPERATURE RATINGS



DIMENSIONS

SIZE	d		L		H		a		d		B		Cv Factor	Weight	
	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm		Kg	Lb
1/4"	0.39	10	2.56	65.0	1.77	45	0.39	10	0.55	14.1	0.9	22.8	3.0	0.33	0.73
3/8"	0.47	12	2.56	65.0	1.77	45	0.39	10	0.69	17.6	0.9	22.8	4.0	0.35	0.77
1/2"	0.59	15	2.60	66.0	1.81	46	0.39	10	0.85	21.7	1.06	26.8	6.5	0.30	0.66
3/4"	0.79	20	3.19	81.0	2.13	54	0.51	13	1.07	27.1	1.36	34.6	15.0	0.48	1.06
1"	0.98	25	3.58	91.0	2.36	60	0.51	13	1.33	33.8	1.56	39.5	28.0	0.75	1.65
1 1/4"	1.26	32	4.19	106.5	2.83	72	0.51	13	1.68	42.6	1.93	49.0	45.0	1.15	2.53
1 1/2"	1.57	40	4.76	121.0	2.95	75	0.51	13	1.92	48.7	2.20	55.8	65.0	1.54	3.39
2"	1.97	50	5.59	142.0	3.23	82	0.63	16	2.41	61.1	2.68	68.0	120.0	2.54	5.59
2 1/2"	2.56	65	6.26	159.0	3.54	90	0.63	16	2.91	73.8	3.46	88.0	190.0	3.80	8.37
3"	3.15	80	7.48	190.0	4.09	104	0.63	16	3.54	89.8	4.13	105.0	280.0	5.90	13.00