

DESIGN FEATURES

- Blow-out Proof Stem
- Pressure Balance Hole in Ball Slot
- Double Reduced Port
- Various Thread Standards Available
- Locking Device is Available Upon Request
- NACE MR-0175 (Optional)
- Casting Approved by TÜV AD 2000-Merkblatt W0



APPLICABLE STANDARDS

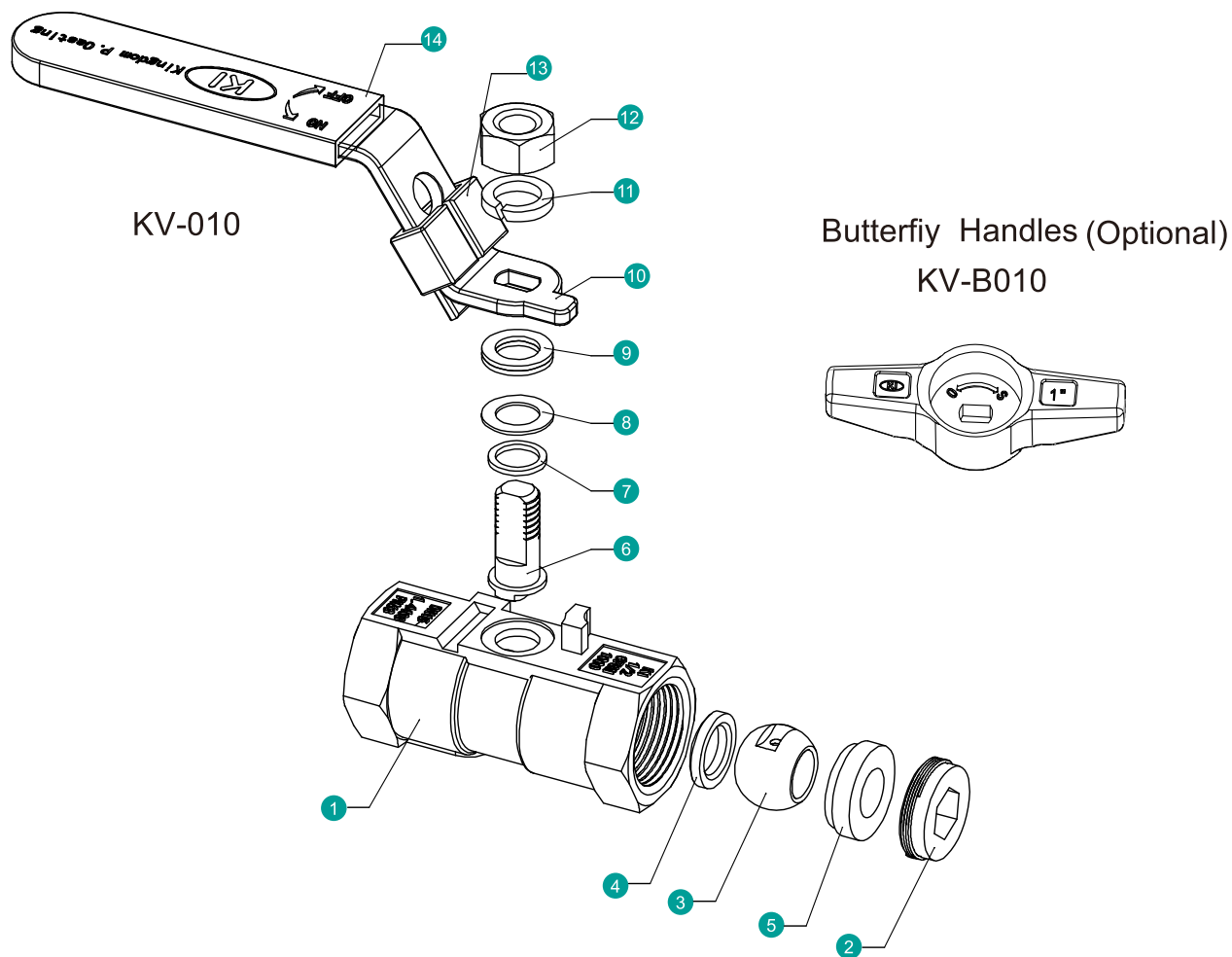
- Design Standard : MSS SP-110
- Wall Thickness : EN12516-3,
- Pipe Thread : ASME B1.20.1, BS21
DIN 2999/259, ISO 228/1
JIS B0203 ISO7/1
- Inspection & Testing : MSS SP-110

WEIGHT

DN	NPS	KV-010		KV-B010	
		(kg)	(lb)	(kg)	(lb)
8	1/4	0.07	0.15	0.07	0.15
10	3/8	0.11	0.24	0.11	0.24
15	1/2	0.20	0.44	0.20	0.44
20	3/4	0.30	0.66	0.30	0.66
25	1	0.42	0.93	0.48	1.06
32	1 1/4	0.65	1.43	0.65	1.43
40	1 1/2	0.86	1.90	1.02	2.25
50	2	1.48	3.26	1.60	3.53

CV VALUES

DN	NPS	CV
8	1/4	—
10	3/8	—
15	1/2	12
20	3/4	15
25	1	18
32	1 1/4	36
40	1 1/2	48
50	2	93



MATERIAL OF CONSTRUCTION

NO.	PART NAME	MATERIALS		
1	Body	CF8M(1.4408)	CF8(1.4308)	WCB(1.0619)
2	End Cap	CF8M(1.4408)	CF8(1.4308)	WCB(1.0619)
3	Ball	CF8M	CF8	
4	Ball Seat (1)		TFM1600/PTFE	
5	Ball Seat (2)		TFM1600/PTFE	
6	Stem	316	304	
7	Thrust Washer		PTFE	
8	Packing		PTFE	
9	Gland		304	
10	Handle		304	
11	Washer		304	
12	Stem Nut		A194-8	
13	Locking Device		304	
14	Handle Sleeve		VINYL PLASTIC	

TORQUE VALUES

Close to Open Torque at Various Differential Pressure (ΔP), Standard Seats (TFM1600 & PTFE)

unit : in-lb / N-m

Size \ ΔP		75psig		150psig		300psig		700psig		1000psig	
		5bar		10bar		20bar		50bar		63bar	
NPS	DN	N-m	In-lb	N-m	In-lb	N-m	In-lb	N-m	In-lb	N-m	In-lb
1/4	8	4.5	40	4.5	40	4.5	40	4.5	40	4.5	40
3/8	10	4.5	40	4.5	40	4.5	40	4.5	40	4.5	40
1/2	15	5	44	5	44	5	44	5	44	5	44
3/4	20	5	44	5	44	5	44	5	44	5	44
1	25	6	53	6	53	6	53	6	53	6	53
1 1/4	32	10	88	10	88	11	97	11	97	11	97
1 1/2	40	13	115	13	115	15	133	17	150	19	168
2	50	19	168	19	168	22	195	24	212	26	230

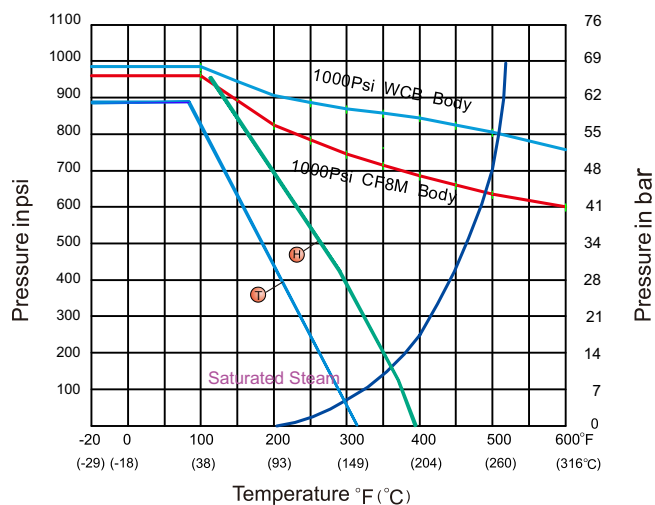
- Remark :
- 1.Torques will increase about 30% if seat materials are Reinforced Fiber-Glass PTFE, Carbon-filled PTFE or EK+PTFE or TFM4215.
 - 2.The torque figures at 5 bar pressure are maximum values to be tested after the valves are placed for 24 hours.
 - 3.For actuator sizing, a safety factor of minimum 30% is recommended.

TECHNICAL INFORMATION

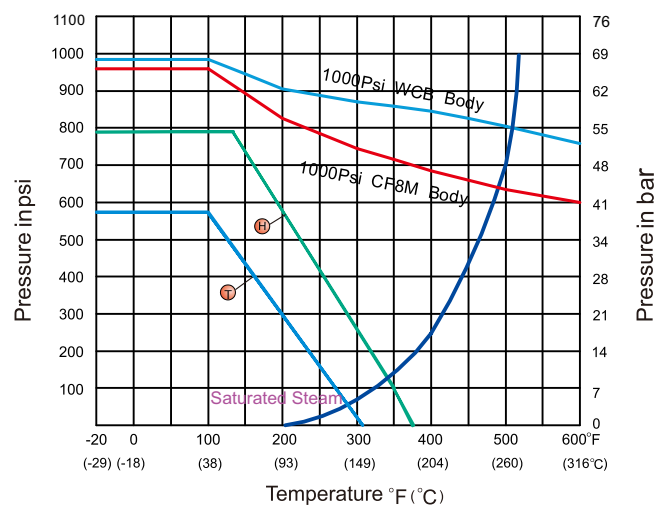
PRESSURE - TEMPERATURE DATA

The pressure-temperature data of ball valves is determined not only by valve shell materials but also by sealing materials used for ball seats, gland packings and flange gaskets.

Reduced Bore : NPS 1/4 ~ NPS 1 1/4
DN 8 to DN32

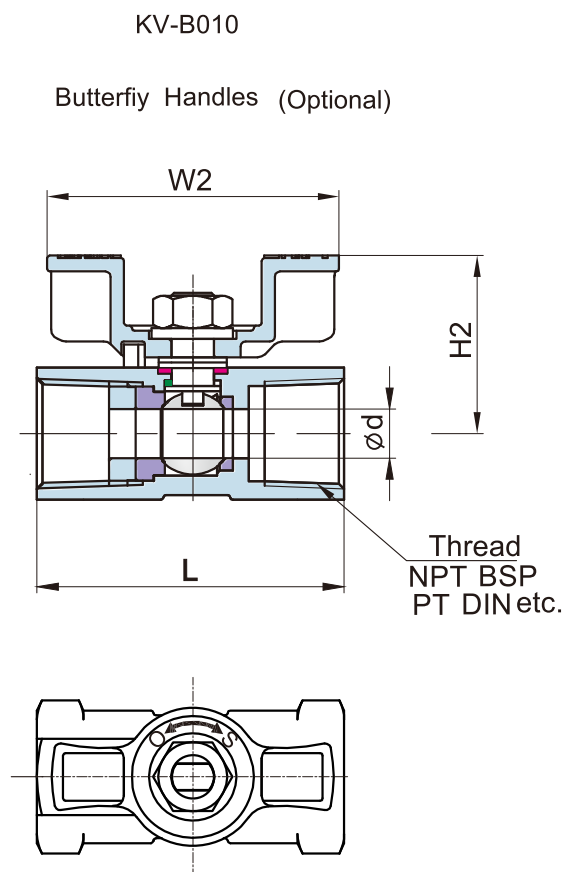
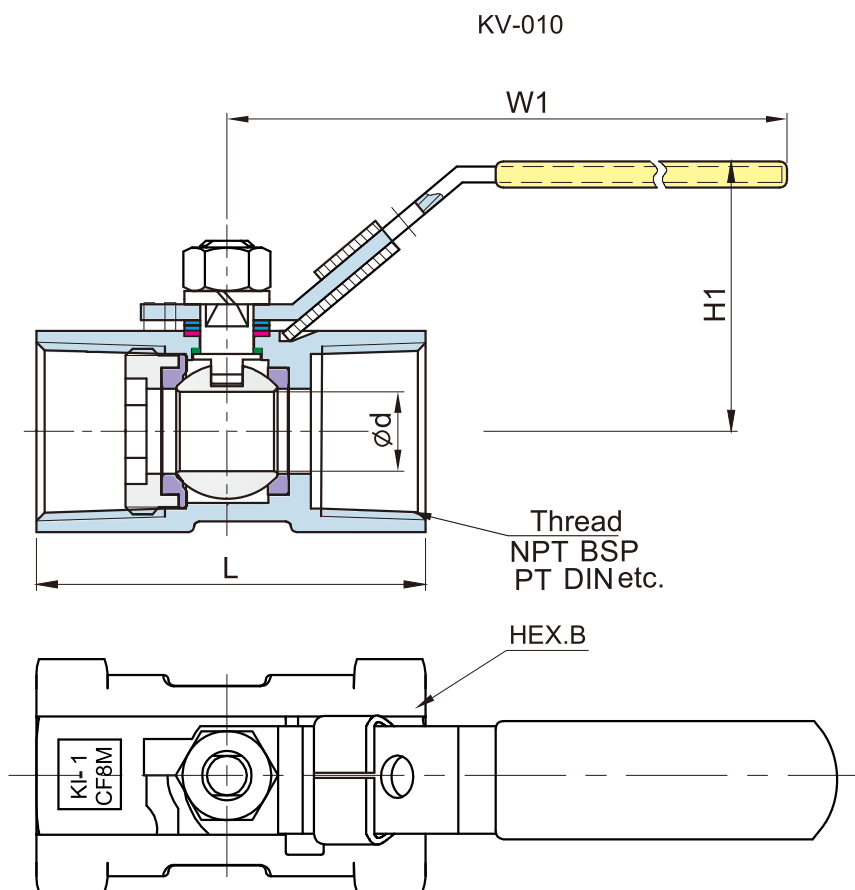


Reduced Bore : NPS 1 1/2 ~ NPS 2
DN40 to DN50



Seat Materials : T PTFE H TFM1600

Body Ratings: Shown above are for ASTM A351 Gr.CF8M and A216 Gr.WCB For ratings of other valve shell materials, please refer to the last edition of ASME B16.34.



DIMENSION TABLE

ANSI 1000 WOG DIMENSION TABLE

Unit : mm

DN	NPS	Ød	L	HEX.B	KV-010		KV-B010	
					H1	W1	H2	W2
8	1/4	5.0	41.5	17	35	70	27	41
10	3/8	7.0	47.0	21	37	80	30	44
15	1/2	9.1	58.0	25	44	92	35	53
20	3/4	12.5	61.0	32	47	92	38	58
25	1	15.0	73.5	38	52	115	45	90
32	1 1/4	20.0	78.0	48	59	115	49	90
40	1 1/2	25.0	85.0	53	67	127	64	105
50	2	32.0	102.0	66	75	127	71	105

ANSI 1000 WOG DIMENSION TABLE

Unit : inch

DN	NPS	Ød	L	HEX.B	KV-010		KV-B010	
					H1	W1	H2	W2
8	1/4	0.20	1.63	0.67	1.38	2.76	1.06	1.61
10	3/8	0.28	1.85	0.83	1.46	3.15	1.18	1.73
15	1/2	0.36	2.28	0.98	1.73	3.62	1.38	2.09
20	3/4	0.49	2.40	1.26	1.85	3.62	1.50	2.28
25	1	0.59	2.89	1.50	2.05	4.53	1.77	3.54
32	1 1/4	0.79	3.07	1.89	2.32	4.53	1.93	3.54
40	1 1/2	0.98	3.35	2.09	2.64	5.00	2.52	4.13
50	2	1.26	4.02	2.60	2.95	5.00	2.80	4.13