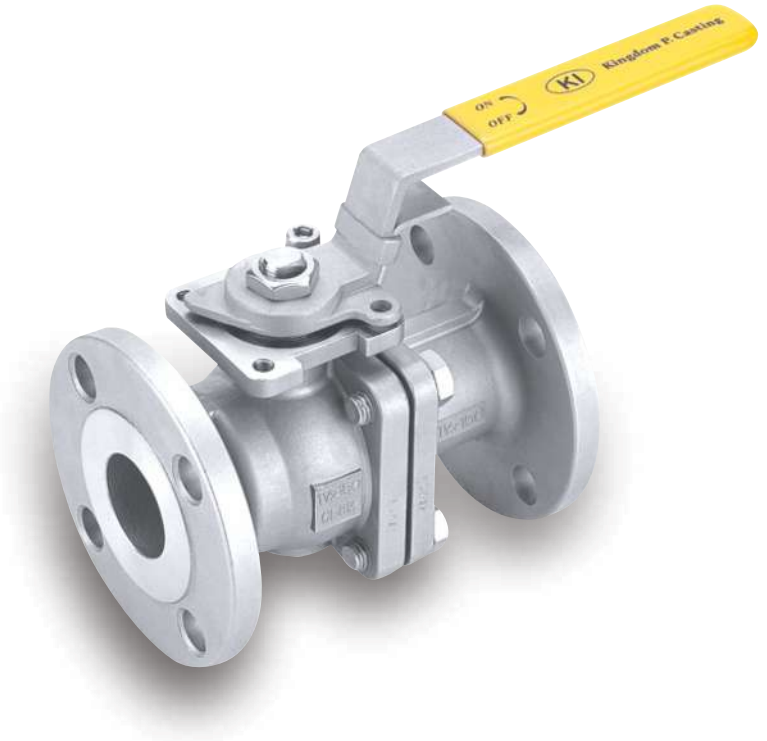


## DESIGN FEATURES

- Built-in ISO 5211 Mounting Pad for Easy Automation
- **Fire Safe** Design Approved
- $\text{Ex}$  Anti-static Devices for Ball-Stem-Body
- Blow-out Proof Stem
- Pressure Balance Hole in Ball Slot
- **TA-LUFT** **ISO15848-1** Design Approved
- NACE standard MR0175 & MR0103 (Optional)
- Casting Approved by TÜV AD 2000-Merkblatt W0

## APPLICABLE STANDARDS

- Design : ASME B16.34
- Fire Safe : API 607 5<sup>th</sup> 2005, ISO10497
- Face To Face : JIS 2002 (ASME B16.10)
- Wall Thickness :ASME B16.34
- Flanged End : JIS 2220 10K / 20K
- Inspection & Testing : JIS B2003, API 598



## CV VALUES

Size	CV
15A	30
20A	55
25A	96
32A	170
40A	270
50A	470
65A	690
80A	1150
100A	2100

## WEIGHT

Size	Weight (kg)	
	KV-04A, KV-06A	KV-04C, KV-06C
15A	2.1	2.5
20A	2.6	3.0
25A	3.8	4.5
32A	4.8	5.6
40A	6.6	7.2
50A	8.4	9.2
65A	13.6	16.1
80A	19.1	20.6
100A	25.4	31.4

**TORQUE VALUES**

Close to Open Torque at Various Differential Pressure ( $\Delta P$ ), Standard Seats (TFM1600&PTFE)

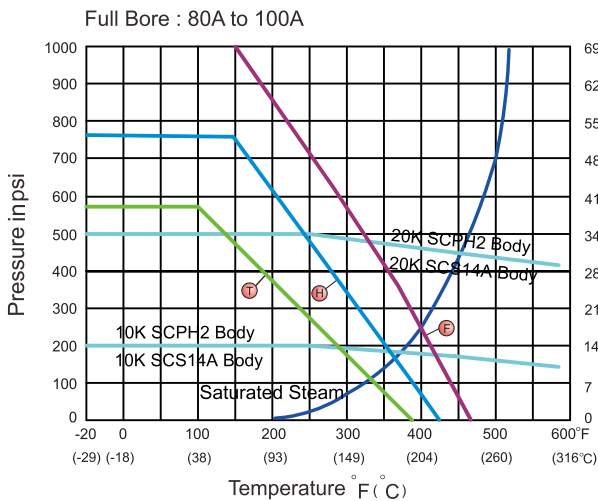
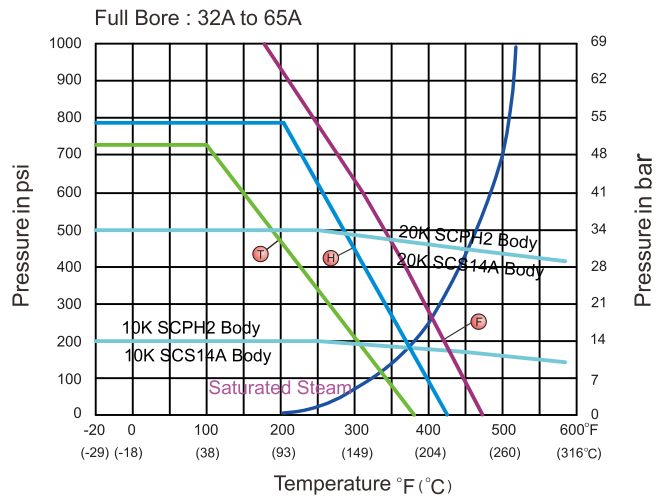
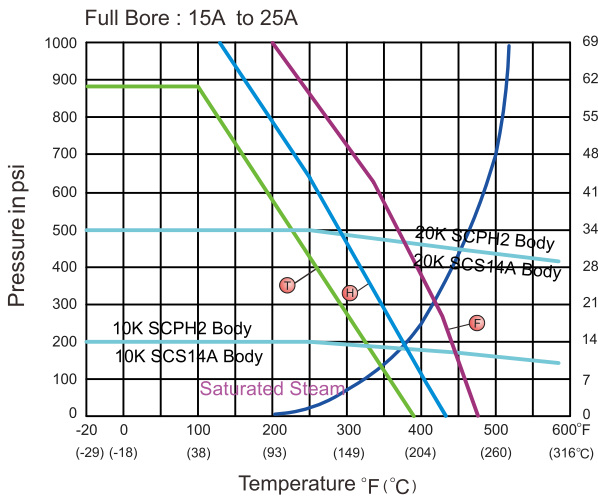
unit : in-lb / N-m

Size/ $\Delta P$	5 bar		10 bar		20 bar		50 bar	
	N-m	In-lb	N-m	In-lb	N-m	In-lb	N-m	In-lb
15A	5	44	5	44	5	44	5	44
20A	6	53	6	53	6	53	6	53
25A	10	88	10	88	11	97	11	97
32A	13	115	13	115	15	133	17	150
40A	19	168	19	168	22	195	24	212
50A	25	221	29	257	32	283	35	310
65A	40	354	45	398	49	434	54	478
80A	65	575	72	637	81	717	90	796
100A	100	885	110	973	122	1080	135	1195

- 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.

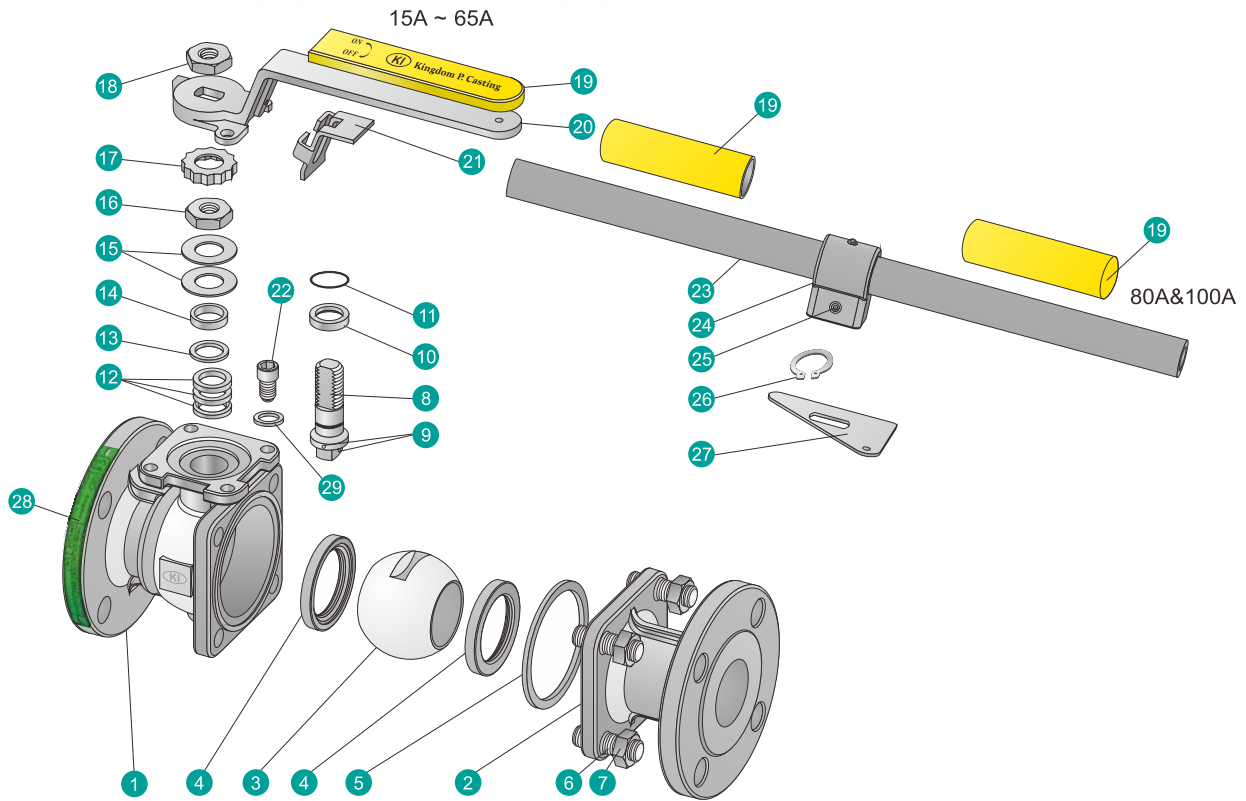
**TECHNICAL INFORMATION**

**PRESSURE - TEMPERATURE DATA**



Seat Materials : T PTFE B TFM1600 E TFM4215

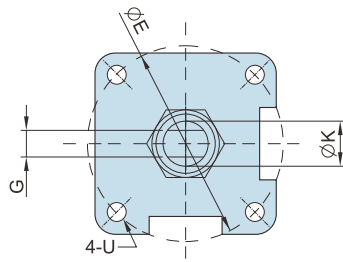
The pressure-temperature data of ball valves are determined, not only by valve shell materials, but also by sealing materials used for ball seats, gland packings and flange gaskets.



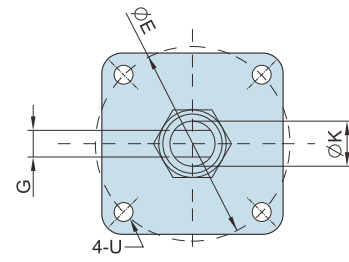
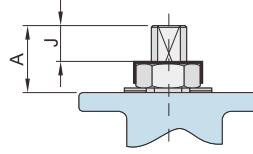
**MATERIAL OF CONSTRUCTION**

NO.	PART NAME	MATERIALS		
		ANSI	ANSI	ANSI
1	Body	SCS14A	SCS13A	SCSH2
2	End Cap	SCS14A	SCS13A	SCSH2
3	Ball	316	304	
4	Ball Seat	TFM1600 / PTFE /TFM4215		
5	Body Gasket	PTFE / 316 Spiral Wound+GRAPHITE*		
6	Bolting	A2-70		8.8
7	Bolt Nut	A2-70		8
8	Stem	316	304	
9	Anti-Static	316	304	
10	Thrust Washer	PTFE/TFM1600		
11	O-Ring	FKM		
12	Packing	PTFE/GRAPHITE*		
13	Bushing	50%SS+50%PTFE / 304*		
14	Gland	316		
15	Belleville Washer	301		
16	Stem Nut	A194-8		
17	Stop-lock-Cap	304		
18	Handle Nut (15A~65A)	A194-8		
19	Handle Sleeve	PVC		
20	Handle (15A~65A)	CF8		
21	Lock Device (15A~65A)	304		
22	Stop Bolt	A2-70		
23	Pipe Handle (80A~100A)	A53+PLATED Zn		
24	Handle Adapter (80A~100A)	A351-CF8		
25	Set Screwed (80A~100A)	A2-70		
26	Snap Screw (80A~100A)	304		
27	Triangle Stopper (80A~100A)	304		
28	Nameplate	304		
29	Stop Washer	304		

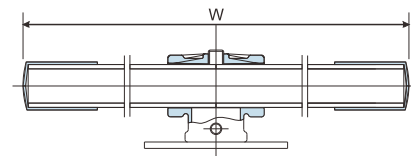
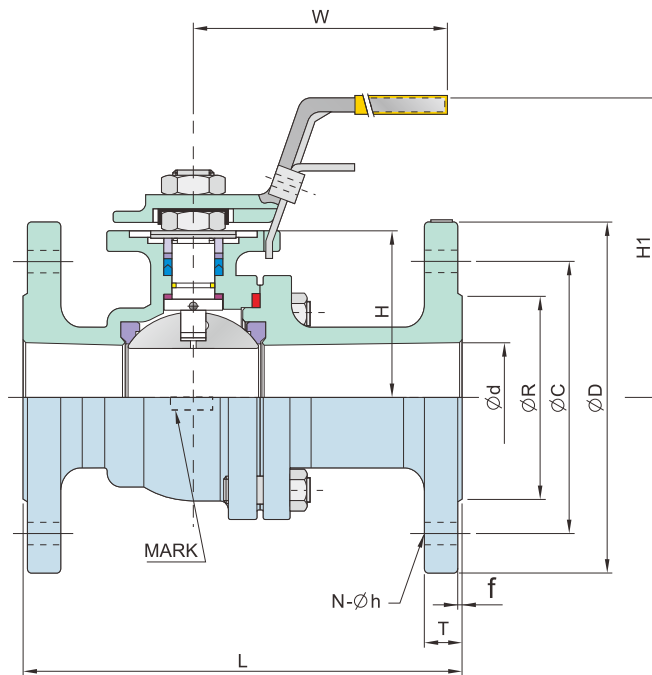
\*Materials for KV-06A, KV-06C Series (Fire Safe Models)



15A ~ 80A



100A



80A ~ 100A

**DIMENSION TABLE**

■ JIS 10K

**KV-04A, KV-06A**

Unit: mm

SIZE	d	L	R	D	C	f	T	H	H1	N	h	W	G	A	J	K	U	E	ISO 5211	
15A	1/2	15.0	108	51	95	70	1	12	37.0	87	4	15	137	6.3	20.0	10	12	M5	42	F04
20A	3/4	20.0	117	56	100	75	1	14	40.5	91	4	15	137	6.3	20.0	10	12	M5	42	F04
25A	1	25.0	127	67	125	90	1	14	46.0	98	4	19	172	9.0	24.0	11	15	M6	50	F05
32A	1 1/4	32.0	140	76	135	100	2	16	50.0	102	4	19	172	9.0	24.0	11	15	M6	50	F05
40A	1 1/2	38.0	165	81	140	105	2	16	62.0	114	4	19	202	9.6	27.0	16	16	M8	70	F07
50A	2	50.0	178	96	155	120	2	16	70.5	127	4	19	202	9.6	27.0	16	16	M8	70	F07
65A	2 1/2	63.5	190	116	175	140	2	18	89.0	154	4	19	252	16.0	42.5	21	24	M10	102	F10
80A	3	76.0	203	126	185	150	2	18	99.5	185	8	19	304	16.0	42.5	21	24	M10	102	F10
100A	4	100.0	229	151	210	175	2	18	120.5	216	8	19	404	18.0	47.5	25	29	M10	102	F10

■ JIS 20K

**KV-04C, KV-06C**

Unit: mm

SIZE	d	L	R	D	C	f	T	H	H1	N	h	W	G	A	J	K	U	E	ISO 5211	
15A	1/2	15.0	140	51	95	70	1	14	37.0	87	4	15	137	6.3	20.0	10	12	M5	42	F04
20A	3/4	20.0	152	56	100	75	1	16	40.0	91	4	15	137	6.3	20.0	10	12	M5	42	F04
25A	1	25.0	165	67	125	90	1	16	45.5	98	4	19	172	9.0	24.0	11	15	M6	50	F05
32A	1 1/4	32.0	178	76	135	100	2	18	50.0	102	4	19	172	9.0	24.0	11	15	M6	50	F05
40A	1 1/2	38.0	190	81	140	105	2	18	61.5	114	4	19	202	9.6	27.0	16	16	M8	70	F07
50A	2	50.0	216	96	155	120	2	18	70.5	127	8	19	202	9.6	27.0	16	16	M8	70	F07
65A	2 1/2	63.5	241	116	175	140	2	20	89.0	154	8	19	252	16.0	42.5	21	24	M10	102	F10
80A	3	76.0	283	132	200	160	2	22	100.0	185	8	23	304	16.0	42.5	21	24	M10	102	F10
100A	4	100.0	305	160	225	185	2	24	120.0	216	8	23	404	18.0	47.5	25	29	M10	102	F10