Kingdom
FLOW CONTROL CO., LTD.

KV-L4A, KV-L4C (Direct Mount Type)
KV-L6A, KV-L6C (Direct Mount Type / Fire Safe Type)
JIS 10K / 20K, 2-PC Body, Flanged Ends, Full Port

231102

DESIGN FEATURES

- Built-in ISO 5211 Direct Mounting Pad Easy Automation
- Fire Safe Design Approved
- Ⓔx 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
- Options : 1.Actuator 2.Limit Switch 3.Positioner

APPLICABLE STANDARDS

- Design : ASME B16.34
- Frie Safe : API 607 5th 2005, ISO10497
- Wall Thickness : ASME B16.34
- Face To Face : JIS 2002 (ASME B 16.10)
- Flanged Ends : JIS 2220 10K / 20K
- Inspection & Testing : JIS 2003, API 598

CV VALUES

Size	CV
15A	30
20A	55
25A	96
32A	170
40A	270
50A	470
65A	780
80A	1150
100A	2100
125A	3500
150A	5000
200A	9500

WEIGHT

Size	Weight (kg)	
	KV-L4A, KV-L6A	KV-L4C, KV-L6C
15A	2.1	—
20A	2.6	—
25A	3.8	—
32A	5.2	—
40A	6.5	—
50A	8.4	—
65A	13.3	—
80A	16.5	—
100A	25.5	—
125A	50.5	59.4
150A	74.6	85.2
200A	131	150

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TORQUE VALUES

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

unit : in·lb / N·m

Size/△P	5 bar		10 bar		20 bar		50bar	
	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
125A	190	1681	210	1858	245	2168	285	2522
150A	280	2478	306	2708	340	3009	530	4690
200A	370	3274	430	3805	487	4310	760	6726

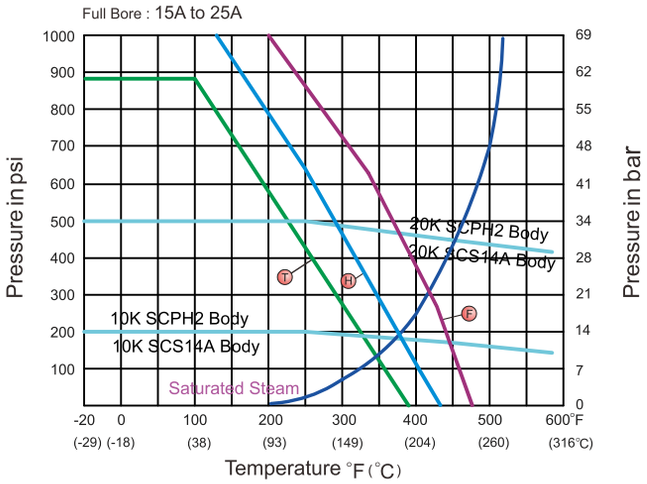
Remark : 1.Torques will increase about 30% if seat materials are Reinforced Fiber-Glass PTFE, Carbon-filled. PTFE or EK+PTFE or TFM4215.
2.The torque figures at 5 bar pressure are maximum values to be tested after the valves are placed for 24 hours.
3.For actuator sizing, a safety factor of minimum 30%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

TECHNICAL INFORMATION

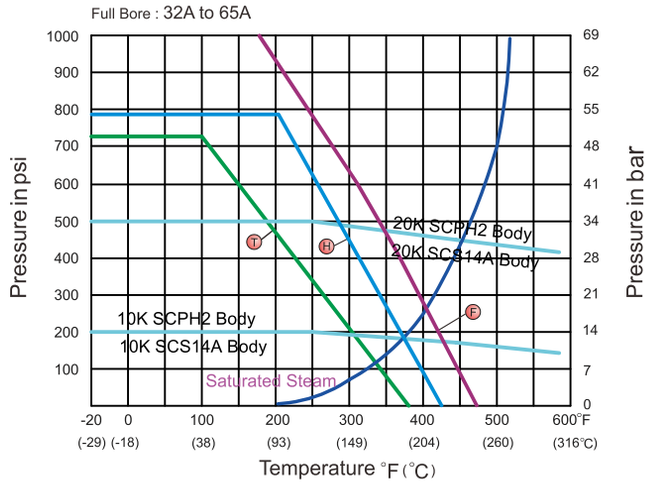
PRESSURE - TEMPERATURE DATA

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

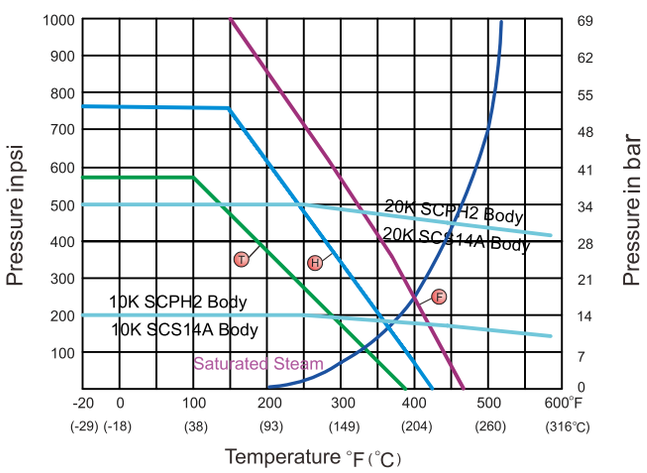
Full Bore : 15A to 25A



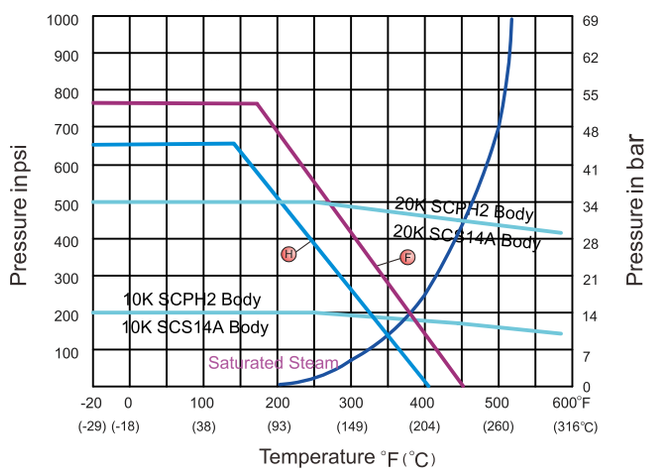
Full Bore : 32A to 65A



Full Bore : 80A & 100A



Full Bore : 125A & 150A & 200A



Seat Materials : Ⓣ PTFE Ⓗ TFM1600 Ⓕ TFM4215

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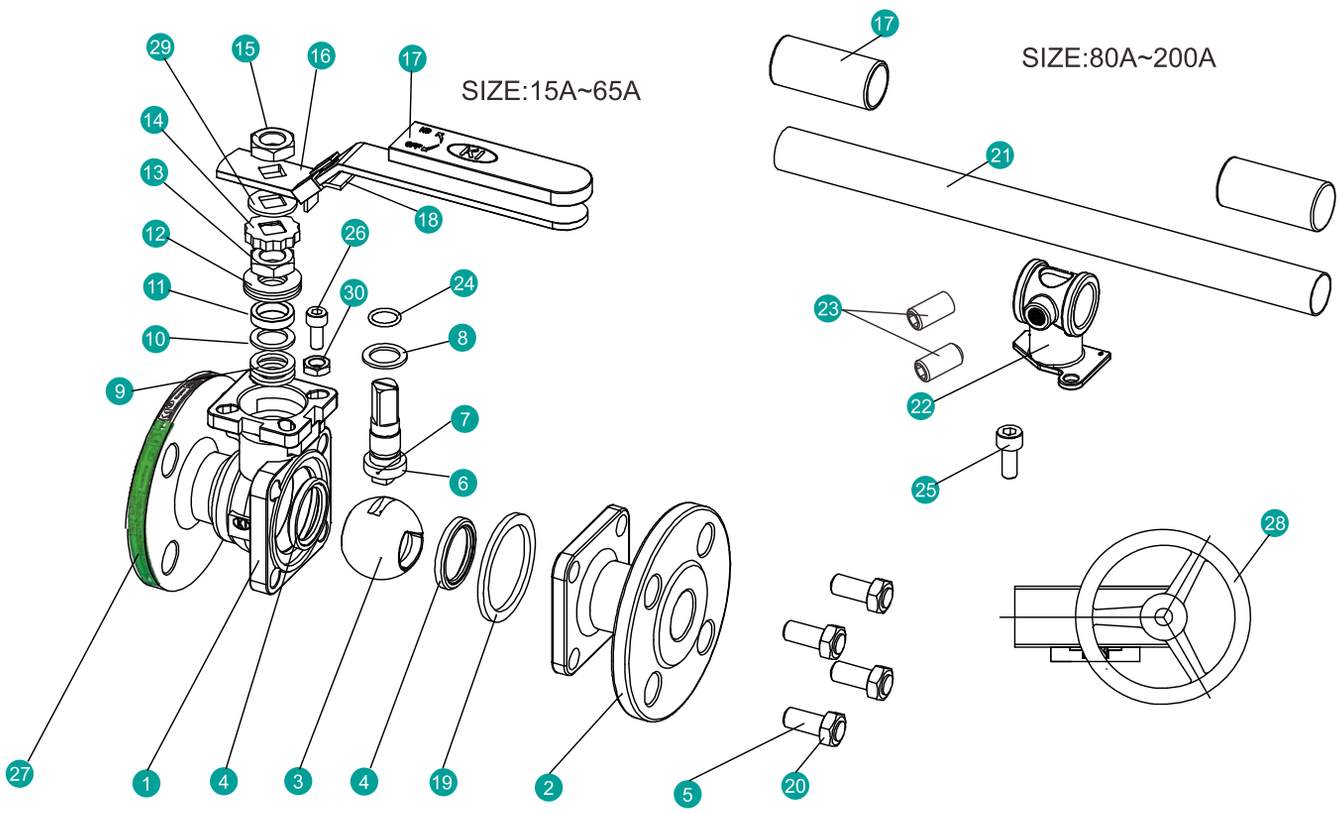

MATERIAL OF CONSTRUCTION

NO.	PART NAME	MATERIALS		
1	End Cap	SCS14A	SCS13A	SCPH2
2	Body	SCS14A	SCS13A	SCPH2
3	Ball	316	304	
4	Ball Seat	TFM1600 / PTFE / TFM4215		
5	Bolting	A2-70		8.8
6	Stem(15A-125A, 200A)	316	304	
	Stem(150A)	S32205	S32205	
7	Anti-Static	316	304	
8	Thrust Washer	PTFE/TFM1600		
9	Stem Packing	PTFE / GRAPHITE*		
10	Bushing	50%SS+50%PTFE / 304*		
11	Gland	316		
12	Belleville Washer	301		
13	Stem Nut	A194-8		
14	Stop-lock-Cap	304		
15	Handle Nut (15A~65A)	A194-8		
16	Handle Lever (15A~65A)	304		
17	Handle Sleeve	PVC		
18	Lock Device (15A~65A)	304		
19	Body Gasket	PTFE / 316 Spiral Wound+GRAPHITE*		
20	Bolt Nut	A2-70		8
21	Pipe Handle (80A~200A)	A53+Zn PLATED Zn		
22	Handle Adapter (80A~200A)	A351-CF8		
23	Set Screwed (80A~200A)	A2-70		
24	O-Ring	FKM (VITON)		
25	Bolting (80A~200A)	A2-70		
26	Stop Bolt	A2-70		
27	Nameplate	304		
28	Worm Gear (Optional)	Package		
29	Support Washer	304		
30	Stop Nut	A2-70		

*Materials for KV-L6A, L6C (Fire Safe Type)

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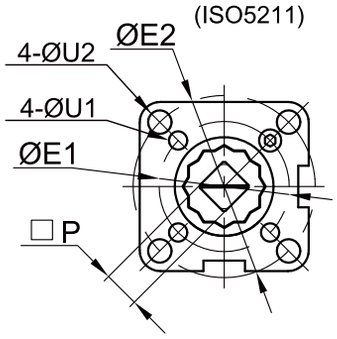
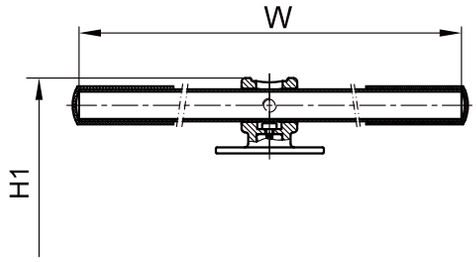
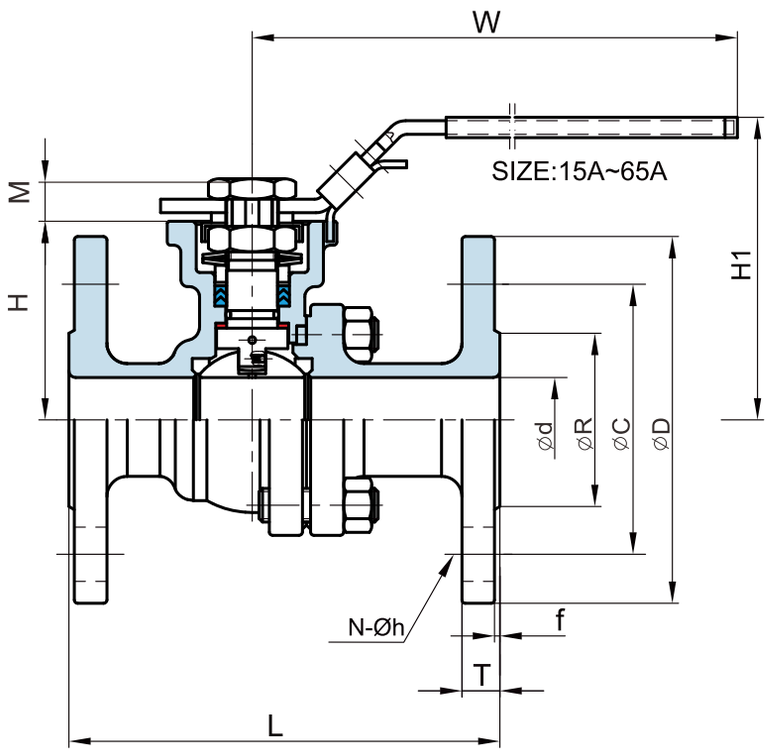
Direct mount pad
(ISO5211)



Pipe Handle Operation

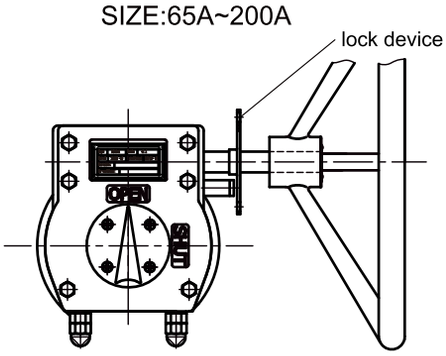
SIZE:80A~200A





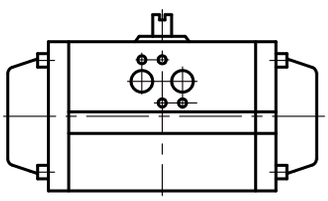
Gear Operation (Optional)

SIZE:65A~200A



Automation (Optional)

SIZE:15A~200A



DIMENSION TABLE

■ **JIS 10K** — **KV-L4A, KV-L6A** — Unit: mm

SIZE	d	L	R	D	C	T	f	N	h	H	H1	W	M	P	U1	U2	E1	E2	ISO 5211
15A	15	108	51	95	70	12	1	4	15	48	78	147	8	9	6	6	36	42	F03-F04
20A	20	117	56	100	75	14	1	4	15	53	84	147	9	9	6	7	36	50	F03-F05
25A	25	127	67	125	90	14	1	4	19	64	96	177	11	11	6	7	42	50	F04-F05
32A	32	140	76	135	100	16	2	4	19	70	101	177	11	11	6	9	42	70	F04-F07
40A	38	165	81	140	105	16	2	4	19	71	105	197	14	14	7	9	50	70	F05-F07
50A	50	178	96	155	120	16	2	4	19	80	113	197	14	14	7	9	50	70	F05-F07
65A	63.5	190	116	175	140	18	2	4	19	102	150	267	17	17	9	11	70	102	F07-F10
80A	76	203	126	185	150	18	2	8	19	112	176	300	17	17	9	11	70	102	F07-F10
100A	100	229	151	210	175	18	2	8	19	140	211	400	22	22	N/A	11	N/A	102	F10
125A	125	356	182	250	210	20	2	8	23	183	263	600	27	27	14	N/A	125	N/A	F12
150A	150	394	212	280	240	22	2	8	23	204	284	800	27	27	14	N/A	125	N/A	F12
200A	200	457	262	330	290	22	2	12	23	253	352	800	36	36	—	18	—	140	F14

■ **JIS 20K** — **KV-L4C, KV-L6C** — Unit: mm

SIZE	d	L	R	D	C	T	f	N	h	H	H1	W	M	P	U1	U2	E1	E2	ISO 5211
125A	125	381	195	270	225	26	2	8	25	183	263	600	27	27	14	N/A	125	N/A	F12
150A	150	403	230	305	260	28	2	12	25	204	284	800	27	27	14	N/A	125	N/A	F12
200A	200	502	275	350	305	30	2	12	25	253	352	800	36	36	—	18	—	140	F14