2-PIECE FLANGED BALL VALVE

KV-L4J · L4K L4M · L4N

KV-L6J–L6N fire safe · EN PN10–40 · full port · DN15–200

2-piece body, full port, flanged ends ball valve to EN 1092-1 PN10–40 with direct mount ISO 5211 pad. KV-L4J / L4K / L4M / L4N direct mount standard type; KV-L6J / L6K / L6M / L6N direct mount fire safe type.

- Built-in ISO 5211 direct mounting pad for easy automation
- Fire safe design approved (API 607 5th 2005, ISO 10497)
- Anti-static devices · blow-out proof stem
- TA-Luft / ISO 15848-1 design approved
- Casting approved by TÜV AD 2000-Merkblatt W0
- NACE MR-0175 (optional)



PN10–40	DN15–200	F03–F14	4200
EN 1092-1	FULL PORT	ISO 5211 PAD	CV · DN200

Model by pressure rating.

STANDARD & FIRE SAFE TYPES

PN10	PN16	PN25	PN40
KV-L4J standard KV-L6J fire safe	KV-L4K standard KV-L6K fire safe	KV-L4M standard KV-L6M fire safe	KV-L4N standard KV-L6N fire safe

Applicable standards

Design	EN 12516-1
Fire safe	API 607 5th 2005, ISO 10497
Face to face	*L – DIN 3202 F17 (F1 DN15–100 / F7 DN125–200) L – DIN F18 (F4 DN15–100 / F5 DN125–200) L – EN 558 Series 27
Flanged ends	EN 1092-1 PN10–40
Inspection & testing	EN 12266-1

Options & operation

Options	1 Actuator · 2 Limit switch · 3 Positioner
Lever	DN15–65
Pipe handle	DN80–200
Gear	Worm gear operation DN65–200 (optional)
Automation	DN15–200 (optional)

MATERIALS

1.4408 · 1.4308 · 1.0619 · TFM1600 / PTFE / TFM4215 seats · Pressure balance hole in ball slot

CV & weight.

BY FACE TO FACE SERIES

DN	CV	Weight kg · F4 / F5				Weight kg · F1 / F7			
		PN10	PN16	PN25	PN40	PN10	PN16	PN25	PN40
15	18	2.37				2.42			
20	36	3.15				3.23			
25	48	4.09				4.37			
32	93	5.56				5.95			
40	165	6.98				7.81			
50	207	9.67				10.4			
65	450	13.9		14.6		15.5		17.5	
80	780	18.1		20.4		20.1		23.5	
100	1360	25.3		29.5		28.7		35.9	
125	1700	51.0		59.5		–		–	
150	2600	72.5		84.5		–		–	
200	4200	–	120	–	151	–	–	–	–

Merged weights apply to all pressure ratings shown. – = not published.

Torque values.

CLOSE TO OPEN

ΔP	75 psig 5 bar		150 psig 10 bar		240 / 300 psig 16 / 20 bar		600 psig 40 bar	
DN	N·m	in·lb	N·m	in·lb	N·m	in·lb	N·m	in·lb
15	5	44	5	44	5	44	5	44
20	6	53	6	53	6	53	6	53
25	10	88	10	88	11	97	11	97
32	13	115	13	115	15	133	17	150
40	19	168	19	168	22	195	24	212
50	25	221	29	257	32	283	34	301
65	40	354	45	398	49	434	52	460
80	65	575	72	637	81	717	88	779
100	100	885	110	973	122	1080	132	1168
125	190	1681	210	1858	245	2168	280	2478
150	280	2478	306	2708	340	3009	510	4514
200	370	3274	430	3805	487	4310	730	6461

Torque: standard seats (TFM1600 & PTFE). Torques increase about 30% with reinforced fibre-glass PTFE, carbon-filled PTFE, EK+PTFE or TFM4215 seats. Figures at 5 bar are maximum values tested after valves are placed for 24 hours. Actuator sizing: a safety factor of minimum 30% is recommended.

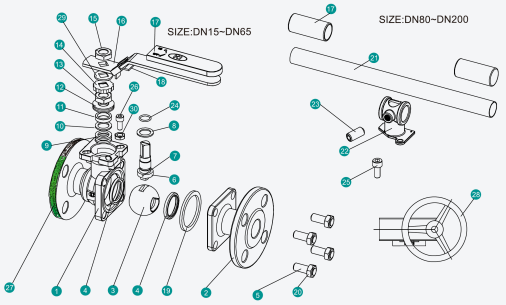
Material of construction.

* FIRE SAFE

No.	Part	1.4408	1.4308	1.0619
1	End cap	1.4408	1.4308	1.0619
2	Body	1.4408	1.4308	1.0619
3	Ball	1.4408	1.4308	
4	Ball seat	TFM1600 / PTFE / TFM4215		
5	Bolting	A2-70		8.8
6	Stem	316	304	
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 (DN15–65)	A194-8		
16	Lever (DN15–65)	304		
17	Handle sleeve	304		
18	Lock device (DN15–65)	304		
19	Body gasket	PTFE / 316 spiral wound + graphite*		
20	Bolt nut	A2-70		8
21	Pipe handle (DN80–200)	A53 + plated Zn		
22	Handle adapter (DN80–200)	A351-CF8		
23	Set screw (DN80–200)	A2-70		
24	O-ring	FKM (Viton)		
25	Bolting (DN80–200)	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-L6J, L6K, L6M, L6N series (fire safe models).

EXPLODED VIEW



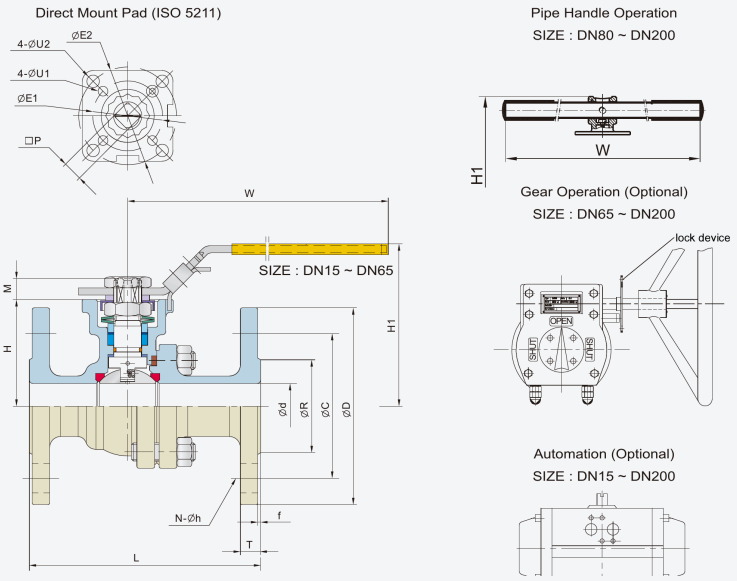
Fire safe models (KV-L6J–L6N)

Graphite stem packing, 304 bushing and 316 spiral wound + graphite body gasket replace the PTFE-based parts of the standard type.

Body ratings

Kingdom publishes pressure-temperature curves for EN 10213 1.4408 and 1.0619 bodies with PTFE, TFM1600 and TFM4215 seats – available on request.

DIRECT MOUNT PAD · LEVER DN15–65 · PIPE HANDLE DN80–200 · GEAR DN65–200 (OPTIONAL) · AUTOMATION (OPTIONAL)



EN PN10 / 16 / 25 / 40.

F1 / F7, F4 / F5 · MM

DN	PN	d	L	*L	R	D	C	f	T	N	h	H	H1	W	M	P	U1	U2	E1	E2	ISO 5211
15	10 / 16 25 / 40	15.0	115	130	45	95	65	2	16	4	14	48	78	147	9	9	6	6	36	42	F03-F04
20		20.0	120	150	58	105	75	2	18	4	14	53	84	147	9	9	6	6	36	42	F03-F04
25		25.0	125	160	68	115	85	2	18	4	14	59	90	177	11	11	6	7	42	50	F04-F05
32		32.0	130	180	78	140	100	2	18	4	18	71	102	177	11	11	6	7	42	50	F04-F05
40		38.0	140	200	88	150	110	3	18	4	18	76	110	197	14	14	7	9	50	70	F05-F07
50		50.0	150	230	102	165	125	3	20	4	18	85	118	197	14	14	7	9	50	70	F05-F07
65	10 / 16	63.5	170	–	122	185	145	3	18	4	18	102	150	267	17	17	9	11	70	102	F07-F10
			–	290								107	155								
	25 / 40		170	290					22	8		107	155								
80	10 / 16	76.0	180	310	138	200	160	3	20	8	18	112	176	300	17	17	9	11	70	102	F07-F10
	25 / 40								24			117	181								
100	10 / 16	100.0	190	350	158	220	180	3	20	8	18	140	210	400	22	22	–	11	–	102	F10
	25 / 40				162	235	190		24		22										
125	10 / 16	125.0	325	400	188	250	210	3	22	8	18	183	263	600	27	27	14	–	125	–	F12
	25 / 40					270	220		26		26										
150	10 / 16	150.0	350	450	212	285	240	3	22	8	22	204	284	800	27	27	14	–	125	–	F12
	25 / 40				218	300	250		28		26										
200	10	200.0	400	550	268	340	295	3	24	8	22	253	334	800	27	27	14	18[a]	125	140[a]	F12 or F14[a]
	16																				
	25				278	360	310		30	12	26										
	40				285	375	320		34		30										

L for series F4 / F5 · *L for series F1 / F7 · (a) optional · – = not applicable / not published. KV-L4J, L6J – PN10 · KV-L4K, L6K – PN16 · KV-L4M, L6M – PN25 · KV-L4N, L6N – PN40.

Data supplied by Kingdom Flow Control and provided for reference only. Specifications may change without notice – please confirm details with Actuation Valve & Control before ordering.

Need an EN flanged ball valve ready to automate?
Talk to our UK team about PN10–40 valves, fire safe options and actuated packages.
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