



FLANGELESS CHECK VALVE

MODEL CKF3 STAINLESS STEEL

UNIQUE DISC TYPE CHECK VALVE WITH LOW PRESSURE DROP

Features

All stainless steel, compact check valve for steam, water, liquids, air and gases.

1. Lapped or FPM-inlaid valve disc provides tight closure.
2. Hardened valve seat guarantees long service life.
3. Easy repair and maintenance possible.
4. Installation in either vertical or horizontal pipelines possible.
5. Can be simply installed between all major flange types without measuring instruments, concentric due to its unique body shape.
6. Low pressure drop due to large flow area.



Specifications

Model	CKF3M	CKF3R
Connection	Between Flanges	
Size	DN 15, 20, 25, 32, 40, 50, 65, 80, 100	DN 15, 20, 25, 32, 40, 50
Compatible Flange Standards	Shown on reverse	
Maximum Operating Pressure (barg) PMO	30	16
Maximum Operating Temperature (°C) TMO	350	150
Minimum Opening Differential Pressure (bar)	0.02	
Minimum Required Differential Pressure for Tight Sealing (bar)	—	0.5
Application	Steam, Hot Water	Gas*, Air, Hot & Cold Water

* Consult with TLV for hazardous and flammable gases

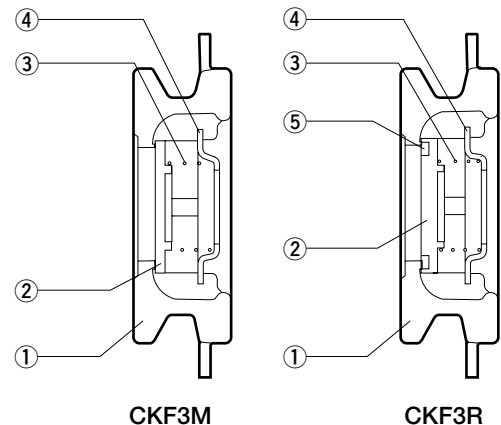
PRESSURE SHELL DESIGN CONDITIONS (**NOT** OPERATING CONDITIONS): Maximum Allowable Pressure (barg) PMA: 30
Maximum Allowable Temperature (°C) TMA: 350



To avoid abnormal operation, accidents or serious injury, DO NOT use this product outside of the specification range. Local regulations may restrict the use of this product to below the conditions quoted.

No.	Description	Material*	DIN	ASTM/AISI*
①	Body	Cast Stainless Steel SCS13A	1.4312	A351 Gr. CF8
②	Valve Disc	Stainless Steel SUS303	1.4305	AISI303
	Valve Disc (65 – 100)	Stainless Steel SUS304	1.4301	AISI304
③	Coil Spring	Stainless Steel SUS304	1.4301	AISI304
④	Spring Holder	Stainless Steel SUS304	1.4301	AISI304
⑤	Valve Disc Inlay (CKF3R)	Fluorine Rubber FPM	FPM	FPM

* Equivalent materials

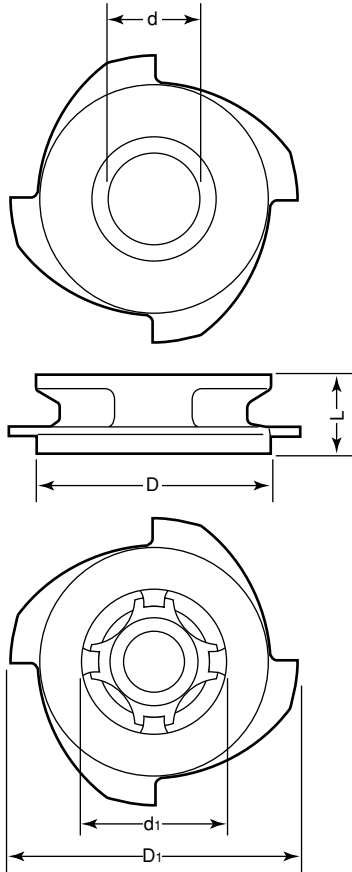


CKF3M

CKF3R

Dimensions

● **CKF3M•CKF3R** Flangeless



Configuration of CKF3M, 65 mm – 100 mm differs slightly

CKF3M•CKF3R Flangeless (mm)

DN	L	D	D ₁	d	d ₁	Weight (kg)
15	16	43	64	15	25	0.14
20	19	53	69	20	33	0.22
25	22	63	79	25	40	0.33
32	28	72.5	89	32	48	0.51
40	31.5	81	100	40	57	0.62
50	40	91	114	50	70	0.87

CKF3M Flangeless (mm)

DN	L	D	D ₁	d	d ₁	Weight (kg)
65	46	116	142	65	87	1.7
80	50	132	152	80	105	2.1
100	60	157	185	100	122	3.1

Cv & Kvs Values

Size	Kvs (DIN)	Cv (UK)	Cv (US)
15	3.9	3.8	4.6
20	7.5	7.3	8.8
25	14	13	16
32	17	17	20
40	25	24	29
50	46	45	54
65	85	83	100
80	120	117	140
100	206	200	240

Compatible Flange Standards

Model	Size	ASME, JPI	JIS	DIN	BS Table
CKF3M	15–50	Class	5, 10, 16, 20, 30, 40K	PN 6, 10, 16, 25, 40	D, E, F, H, J
			5, 10, 16, 20, 30K		F, H, J
	65	125	10, 16, 20, 30K	PN 10, 16, 25, 40	A, D, E, F, H, J
			250		
100	300	5, 10, 16, 20K	PN 6, 10, 16	D, E, F, H, J	

Manufacturer

ISO 9001/ISO 14001

TLV® CO., LTD.
Kakogawa, Japan

is approved by LRQA Ltd. to ISO 9001/14001

