



FLANGELESS CHECK VALVE

MODEL CKF3M/CKF3R

UNIQUE DISC TYPE CHECK VALVE BETWEEN FLANGES

Features

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

1. Fine-machined metal or fluorine rubber valve seat provides tight closure.
2. Stainless steel body and internal parts ensure long service life.
3. Performance assured with installation in either horizontal or vertical pipelines.
4. Can be simply installed between all major flange types without measuring instruments, concentric due to its unique body shape.
5. Easy repair and maintenance possible.



Specifications

Model	CKF3M	CKF3R
Connection	Between Flanges	Between Flanges
Size	15, 20, 25, 32, 40	15, 20, 25, 32, 40
Connectable Flange Standards	Shown on reverse	Shown on reverse
Sealing Surface*	Stainless Steel	Fluorine Rubber
Maximum Operating Pressure (MPaG) PMO	3.0	1.6
Minimum Opening Differential Pressure** (MPa)	0.002	0.002
Minimum Required Differential Pressure for Tight Sealing (MPa)	—	0.05
Maximum Operating Temperature (°C) TMO	350	150
Applicable Fluids***	Steam, Water	Air, Water

* Perfect sealing cannot be guaranteed for metal sealing surfaces.

1 MPa = 10.197 kg/cm²

Degradation of, or debris on, rubber sealing surfaces may also prevent perfect sealing.

** When the valve has remained closed for a long period of time, the valve and the valve seat may stick, increasing the necessary minimum opening differential pressure.

*** Do not use for toxic, flammable or otherwise hazardous fluids.

PRESSURE SHELL DESIGN CONDITIONS (**NOT** OPERATING CONDITIONS): Maximum Allowable Pressure (MPaG) PMA: 3.0
Maximum Allowable Temperature (°C) TMA: 350

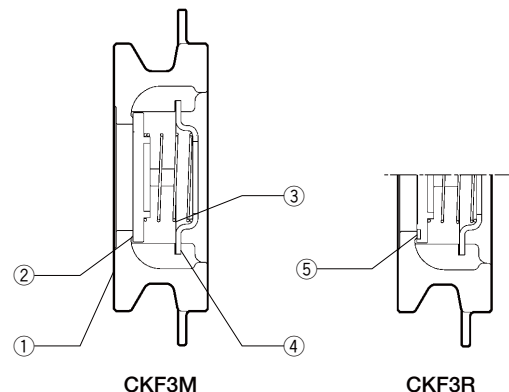


To avoid abnormal operation, accidents or serious injury, DO NOT use this product outside of the specification range. Local regulations may restrict the use of this product to below the conditions quoted.

No.	Description	Material	JIS	ASTM/AISI*
①	Body	Cast Stainless Steel	—	A351 Gr.CF8
②	Valve Disc	Stainless Steel	SUS303	AISI303
③	Coil Spring	Stainless Steel	SUS304	AISI304
④	Spring Holder	Stainless Steel	SUS304	AISI304
⑤	Valve Disc Inlay (CKF3R)	Fluorine Rubber	FPM	D2000HK

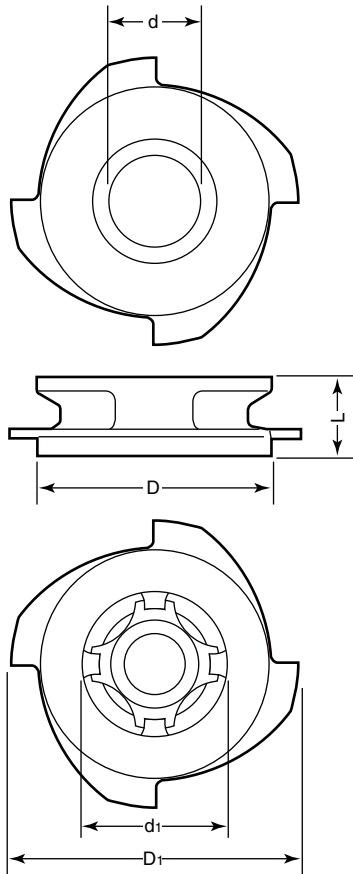
* Equivalent

Replacement Parts are not available for this product as special equipment is required for assembly / disassembly



Dimensions

• **CKF3M / CKF3R** Flangeless



CKF3M / CKF3R Flangeless (mm)

Size	L	φ D	D ₁	φ d	φ 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

Connectable Flange Standards

Size (mm)	ASME, JPI	JIS	DIN	BS Table
15, 20	Class 150, 300	5, 10, 16, 20, 30 K	PN 6, 10, 16, 25, 40	A, D, E, F, H, J
25 – 40	Class 125, 150, 250, 300			

Cv Values

Size (mm)	15	20	25	32	40
Cv (US)	4.6	8.8	16	20	29
Cv (UK)	3.8	7.3	13	17	24
Kvs (DIN)	3.9	7.5	14	17	25

Manufacturer

ISO 9001/ISO 14001

TLV CO., LTD.
Kakogawa, Japan

is approved by LRQA Ltd. to ISO 9001/14001

