



# CHECK VALVE

## MODEL CK3M/CK3T/CK3R

### DISC TYPE CHECK VALVE WITH SCREW CONNECTION

#### Features

**Compact check valve for steam, air and water.**

1. Fine-machined metal, fluorine resin or nitrile rubber valve seat provides tight closure.
2. Corrosion resistant body material and stainless steel internal parts ensure long service life.
3. Performance assured with installation in either horizontal or vertical pipelines.
4. Also functions as a vacuum breaker (CK3M, CK3T only). See overleaf for details.



#### Specifications

Model	CK3M			CK3T			CK3R			
	Screwed									
Connection										
Size	15-25	32-50	15-50	15-25	32-50	15-50	15-25	32-50	15-50	
Body Material	Brass	Bronze	Stainless Steel	Brass	Bronze	Stainless Steel	Brass	Bronze	Stainless Steel	
Sealing Surface*	Brass	Bronze	Stainless Steel	Fluorine Resin			Nitrile Rubber			
Maximum Operating Pressure (MPaG) PMO	1.0		2.1		1.0		1.6		1.0	
Minimum Operating Differential Pressure** (MPa)	0.002									
Minimum Required Differential Pressure for Tight Sealing (MPa)	-						0.05			
Maximum Operating Temperature (°C) TMO	220			185			90			
Applicable Fluids***	Steam			Steam, Hot Water			Air, Water			

\* Perfect sealing cannot be guaranteed for metal sealing surfaces.

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

1 MPa = 10.197 kg/cm<sup>2</sup>

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

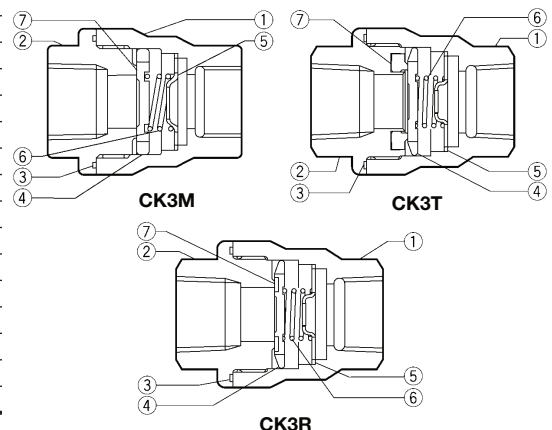
\*\*\* Do not use for toxic, flammable or otherwise hazardous fluids.

PRESSURE SHELL DESIGN CONDITIONS (**NOT** OPERATING CONDITIONS): Maximum Allowable Pressure (MPaG) PMA: 1.0 (Brass, Bronze), 2.1 (Stainless Steel)  
Maximum Allowable Temperature (°C) TMA: 220



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	Valve Body	15-25 mm	Brass	C3604 B16 C36000	
		32-50 mm	Bronze	CAC407 B584 C92200	
		15-50 mm	Cast Stainless Steel	- A351 Gr.CF8	
②	Inlet Union	15-25 mm	Brass	C3604 B16 C36000	
		32-50 mm	Bronze	CAC407 B584 C92200	
		15-50 mm	Cast Stainless Steel	- A351 Gr.CF8	
③ <sup>MR</sup>	Union Gasket	Fluorine Resin	PTFE	PTFE	
④ <sup>R</sup>	Valve Body	15-25 mm	Stainless Steel	SUS304 AISI304	
		32-50 mm	Cast Stainless Steel	- A351 Gr.CF8	
⑤	Spring Holder	Stainless Steel	SUS304	AISI304	
⑥ <sup>R</sup>	Coil Spring	Stainless Steel	SUS304	AISI304	
⑦	Valve Seat	CK3T	Fluorine Resin	PTFE	
		CK3R	Nitrile Rubber	NBR	
	CK3M	15-25 mm	Brass	C3604	B16 C36000
		32-50 mm	Bronze	CAC407	B584 C92200
	15-50 mm	Cast Stainless Steel	-	A351 Gr.CF8	

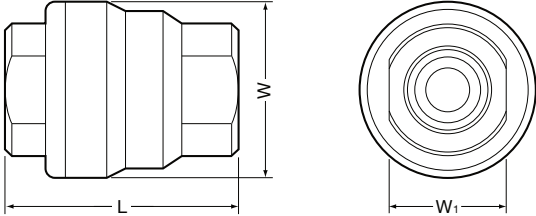


\* Equivalent Replacement kits available: (M) maintenance parts, (R) repair parts  
When requesting replacement kits, please specify the Minimum Opening Differential Pressure.

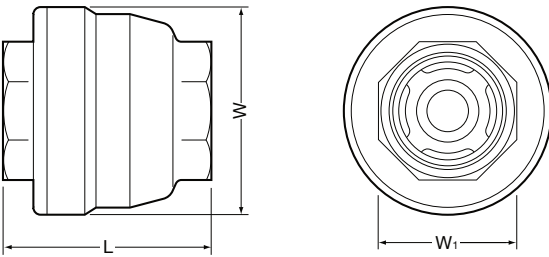
**Dimensions**

● **CK3M/CK3T/CK3R** Screwed

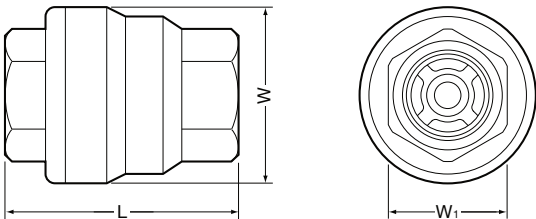
Brass, Size ½" - 1"



Bronze, Size 1¼" - 2"



Stainless Steel, Size ½" - 2"



**CK3M/CK3T/CK3R** Screwed\* (mm)

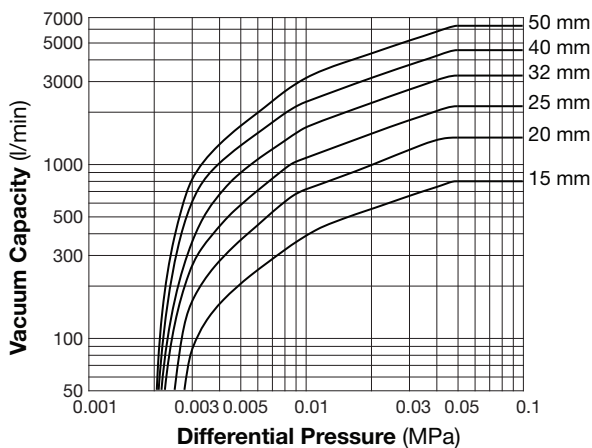
Size	L	φ W	W1	Weight (kg)
15	55	40	27	0.3
20	60	50	32	0.5
25	70	60	41	0.8
32	80	75	50	1.3
40	85	85	55	1.6
50	100	95	70	2.2

\* Rc(PT), other standards available

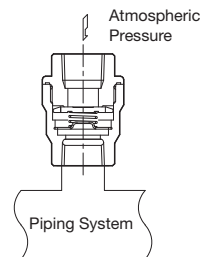
**Cv Values**

Size (mm)	15	20	25	32	40	50
Cv (US)	3.7	6.6	10	15	21	29
Cv (UK)	3.1	5.5	8.3	13	17	24
Kvs (DIN)	3.2	5.7	8.6	13	18	25

**Vacuum Breaker Function**



1. Differential pressure is the difference between the inlet pressure of the check valve and the internal pressure of the piping system.
2. Capacities are equivalent capacities of air at 20 °C and atmospheric pressure.
3. Configure the outlet piping to prevent dust penetration during suction.



Manufacturer

**TLV** CO., LTD.

Kakogawa, Japan

is approved by LRQA Ltd. to ISO 9001/14001

ISO 9001  
ISO 14001

