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# TSF-10,10F,11,11F TRAP STAR



Bucket	Float	Disc	Bellows	
Bimetal	Wafer	By-pass	Stainless steel	
Connector	Side to side	Down to Up	Up to Down	

## ■Features

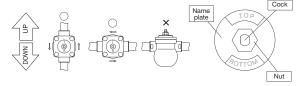
- 1. The TSF-10 · 10F · 11 · 11F can discharge condensate effectively without retention, and realize energy saving steam system without steam loss.
- 2. Incorporated thermostatic air vent discharges air inside the piping and shortens warming-up time.
- 3. By turning the cock, it is possible to meet various flow direction such as horizontal or vertical installation
  - Flow direction can be switched easily without disassembly such as detaching the cover.
- Since the main parts are installed on the cover. it is possible to disassemble the cover with the body installed on the piping so the inspection and parts replacement can be conducted easily.



## ■Specifications

	Model	TSF-10	TSF-10F	TSF-11	TSF-11F		
Nominal size		15A-25A		25A-50A			
P	Application	Steam condensate					
TSF-1□□-5: 0.01-0.5 MPa TSF-1□□-10: 0.01-1.0 MPa TSF-1□□-21: 0.01-2.1 MPa							
Maxim	um temperature	220°C			0°C		
	Body	Ductile cast iron					
Material	Float	Stainless steel					
	Valve, valve seat	Stainless steel					
Connection		JIS Rc screwed NPT screwed	JIS 10K FF flanged JIS 20K FF flanged ASME150/300, ENPN25	JIS Rc screwed NPT screwed	JIS 10K FF flanged JIS 20K FF flanged ASME150/300, ENPN25		

#### ■Caution for Installation



Adjust direction of the name plate in no pressure condition after installation.

Fix the cock with spanner and loosen the nut. Turn the cock and adjust direction of the name plate to position "TOP" and "BOTTOM" signs on upside and downside respectively. Fix the cock with spanner and fasten the nut after adjustment.

In case of Bottom to Top, Please apply that shorten the vertical piping before the trap to open and discharge easily of trap in the condition of using upward flow direction.

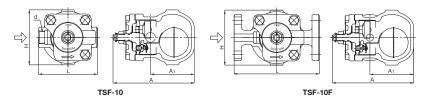
# ■Dimensions (mm) and Weights (kg)

### · TSF-10

Nominal size	d	L	Α	A1	Н	Weight
15A	Rc 1/2	121	167	90	113	3.6
20A	Rc 3/4	121	167	90	113	3.6
25A	Rc 1	145	167	90	113	4.0

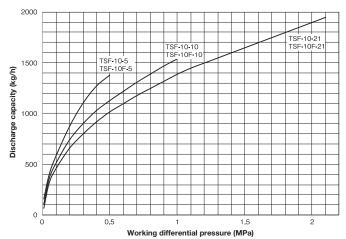
#### · TSF-10F

Nominal size	d	L	Α	A <sub>1</sub>	Н	Weight
15A	15	175	167	90	113	5.0
20A	20	195	167	90	113	5.8
25A	25	215	167	90	113	7.1



# ■Maximum Continuous Discharge Capacity Chart

## · TSF10,10F



The discharge capacity shown in the charts on the above is the maximum value. In designing a system, select a steam trap with a sufficient safety factor (more than two times the regular level).