



# FREE FLOAT STEAM TRAP

## MODEL FS5 QuickTrap®

### UNIVERSAL FREE FLOAT TRAP WITH THERMOSTATIC AIR VENTING

#### Features

**Inline replaceable 2-bolt universal flange steam trap for steam mains, tracers and light process.**

1. Two-bolt flange connector permits trap replacement in minutes without disturbing piping.
2. Universal flange allows trap to be positioned in the correct attitude, regardless of pipeline configuration.
3. Unique free-float design eliminates concentrated wear ensuring long reliable life.
4. Three-point seating ensures steam-tight seal even under no-load conditions.
5. Trap incorporates thermostatic air vent for rapid start-up.
6. Two built-in screens with large surface area ensure extended trouble-free operation.



#### Specifications

Model	FS5		
Connection	Screwed*	Socket Welded	Flanged
Size (mm)	15, 20, 25		
Orifice No.	10, 21, 32		
Maximum Operating Pressure (MPaG) PMO	1.0, 2.1, 3.2		
Maximum Differential Pressure (MPa) ΔPMX	1.0, 2.1, 3.2		
Minimum Operating Pressure (MPaG)	0.01		
Maximum Operating Temperature (°C) TMO	350		

\* Screwed connections are optional and require special installation procedures.

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

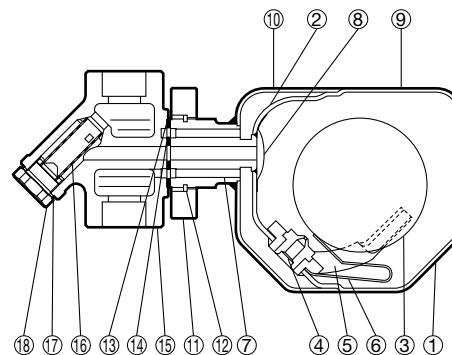
PRESSURE SHELL DESIGN CONDITIONS (**NOT** OPERATING CONDITIONS): Maximum Allowable Pressure (MPaG) PMA: 3.2

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.

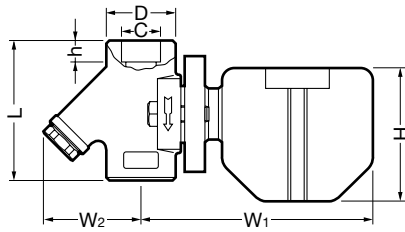
No.	Description	Material	JIS	ASTM/AISI*
①	Trap Body	Stainless Steel	SUS316L	AISI316L
②	Inner Cover	Stainless Steel	SUS316L	AISI316L
③	Float	Stainless Steel	SUS316L	AISI316L
④	Orifice	Stainless Steel	SUS440C	AISI440C
⑤	Float Guide	Cast Stainless Steel	SCS16A	A743 Gr. CF-8M
⑥	Air Vent Strip	Bimetal	—	—
⑦	Connector Joint	Stainless Steel	SUS304	AISI304
⑧	Screen	Stainless Steel	SUS304	AISI304
⑨	Name Plate	Stainless Steel	SUS304	AISI304
⑩	Up-Seal	Aluminum	Al	B209
⑪	Connector Flange	Carbon Steel***	—	A105
⑫	Snap Ring	Carbon Steel***	SWRH57	AISI1055
⑬	Outer Connector Gasket	Stainless Steel/Graphite	SUS304	AISI304
⑭	Inner Connector Gasket	Stainless Steel/Graphite	SUS304	AISI304
⑮	Connector Body	Cast Stainless Steel	SCS13A	A351 Gr. CF8
⑯	Screen outside/inside	Stainless Steel	SUS430/304	AISI430/304
⑰	Holder Gasket	Soft Iron	SUYP	AISI1010
⑱	Screen Holder	Carbon Steel	—	A105
⑲	Connector Bolt**	Alloy Steel	SNB7	A193 Gr. B7
⑳	Flange** (JIS20K)	Cast Stainless Steel	SCS13A	A351 Gr. CF8
㉑	Flange** (JIS40K)	Stainless Steel	SUS304	AISI304



\* Equivalent \*\* Shown on reverse \*\*\* Option: Stainless steel

**Dimensions**

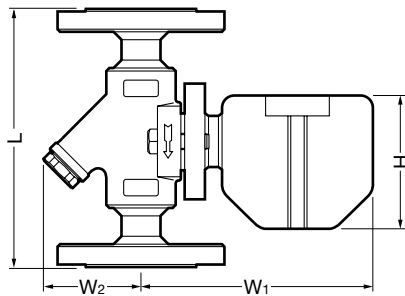
● **FS5**  
Socket Welded



**FS5** Socket Welded (mm)

Size	C	h	L	D	φ H	W <sub>1</sub>	W <sub>2</sub>	Weight (kg)
15	22.2	12	80	39	104	172	56	2.1
20	27.7	14						
25	34.5		96	46		176	75	2.5

● **FS5**  
Flanged

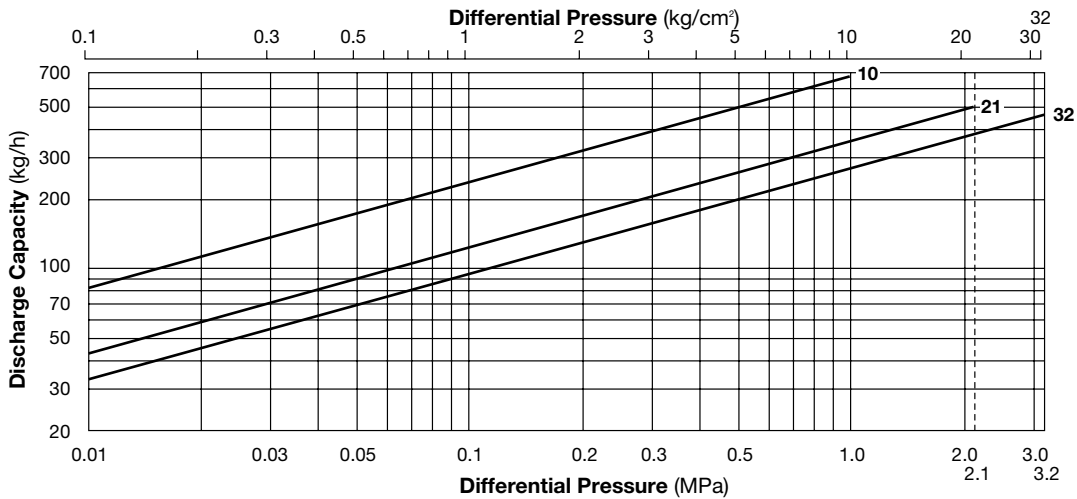


**FS5** Flanged\* (mm)

Size	L	φ H	W <sub>1</sub>	W <sub>2</sub>	Weight (kg)
15	150 (180)	104	172	56	3.7 (5)
20					4.6 (5.9)
25	160 (190)				5.1 (6.5)

\* JIS 20K (40K), other standards available

**Discharge Capacity**



1. Line numbers within the graph refer to orifice numbers.
2. Differential pressure is the difference between the inlet and outlet pressure of the trap.
3. Capacities are based on continuous discharge of condensate 6°C below saturated steam temperature.
4. Recommended safety factor: at least 1.5.



DO NOT use traps under conditions that exceed maximum differential pressure as condensate backup will occur!

Manufacturer  
**TLV**® CO., LTD.  
Kakogawa, Japan  
is approved by LRQA Ltd. to ISO 9001/14001

ISO 9001/ISO 14001

