



FREE FLOAT STEAM TRAP

MODEL FS3 QuickTrap® STAINLESS STEEL

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 provides steam-tight seal even under no-load conditions.
5. Trap incorporates thermostatic air vent for fast start-up.
6. Two built-in screens with large surface area ensure extended trouble-free operation.



Specifications

Model	FS3		
Connection	Screwed	Socket Welded	Flanged
Size	1/2", 3/4", 1"		DN 15, 20, 25
Orifice No.	5, 10, 21		
Maximum Operating Pressure (barg) PMO	5, 10, 21		
Maximum Differential Pressure (bar) ΔPMX	5, 10, 21		
Maximum Operating Temperature (°C) TMO	350		

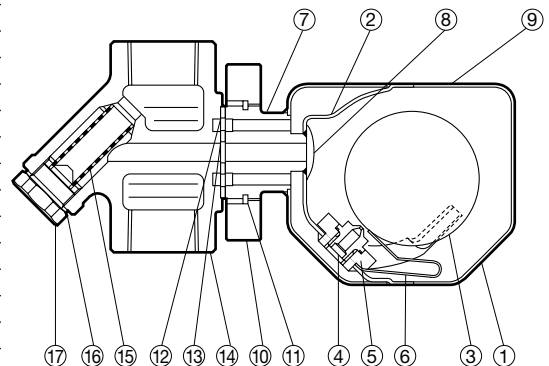
PRESSURE SHELL DESIGN CONDITIONS (**NOT** OPERATING CONDITIONS): Maximum Allowable Pressure (barg) PMA: 21 1 bar = 0.1 MPa
Maximum Allowable Temperature (°C) TMA: 350



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.

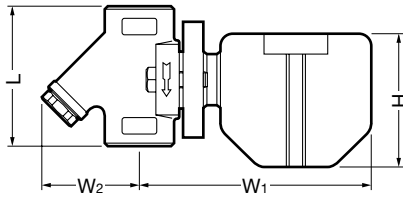
No.	Description	Material*	DIN	ASTM/AISI
①	Trap Body	Stainless Steel SUS316L	1.4404	AISI316L
②	Inner Cover	Stainless Steel SUS316L	1.4404	AISI316L
③	Float	Stainless Steel SUS316L	1.4404	AISI316L
④	Orifice	Stainless Steel SUS420F	1.4028	AISI420F
⑤	Float Guide	Cast Stainl. Stl. SCS16	1.4435	A351 Gr. CF3M
⑥	Air Vent Strip	Bimetal	—	—
⑦	Connector Joint	Stainless Steel SUS304	1.4301	AISI304
⑧	Trap Screen	Stainless Steel SUS304	1.4301	AISI304
⑨	Name Plate	Stainless Steel SUS304	1.4301	AISI304
⑩	Connector Flange	Carbon Steel A105	1.0460	A105
⑪	Snap Ring	Carbon Steel SWRH57	1.0535	AISI1055
⑫ ^M	Outer Connector Gasket	Stainl. Steel/Graphite SUS304	1.4301	AISI304
⑬ ^M	Inner Connector Gasket	Stainl. Steel/Graphite SUS304	1.4301	AISI304
⑭	Connector Body	Cast Stainl. Stl. SCS13A	1.4312	A351 Gr. CF8
⑮	Screen outside/inside	Stainless Steel SUS430/304	1.4016/4301	AISI430/304
⑯ ^M	Holder Gasket	Stainless Steel SUS316L	1.4404	AISI316L
⑰	Screen Holder	Stainless Steel SUS303	1.4305	AISI303
⑱	Connector Bolt**	Alloy Steel SNB7	1.7225	A193 Gr. B7
⑲	Flange***	Cast Stainl. Steel/Stainl. Steel SCS13A/SUS304	1.4312/4301	A351 Gr. CF8/AISI304

* Equivalent materials ** Shown overleaf *** Shown overleaf, shape and material depend on flange specifications
Replacement kits available: (M) maintenance parts, (T) trap unit S3



Dimensions

● **FS3**
Screwed

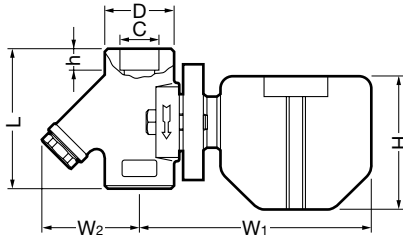


FS3 Screwed* (mm)

Size	L	φH	W ₁	W ₂	Weight (kg)
1/2"	80	76	140	56	1.7
3/4"					
1"	96		144	75	2.0

* BSP DIN 2999, other standards available

● **FS3**
Socket Welded

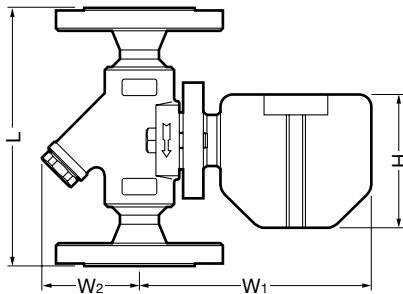


FS3 Socket Welded* (mm)

DN	L	φH	W ₁	W ₂	φD	φC	h	Weight (kg)
15	80	76	140	56	39	21.70	12	1.7
20						27.05		
25	96		144	75	46	33.80	14	2.0

* ASME B16.11, other standards available

● **FS3**
Flanged

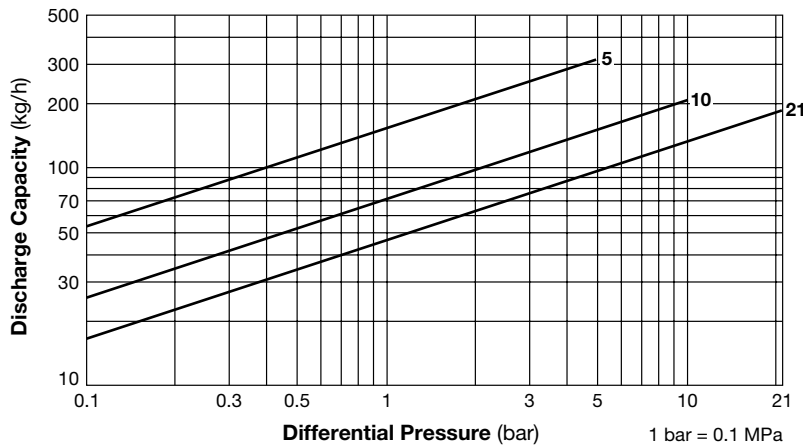


FS3 Flanged (mm)

DN	L			φH	W ₁	W ₂	Weight* (kg)
	DIN 2501	ASME Class					
	PN25/40	150RF	300RF				
15	150	150	150	76	140	56	3.3
20							4.2
25							4.7

Other standards available, but length and weight may vary
* Weight is for PN 25/40

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.

CAUTION 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

