



FREE FLOAT® STEAM TRAP

MODEL FS5/FS5H QuickTrap® STAINLESS STEEL

UNIVERSAL FREE FLOAT STEAM TRAP WITH THERMOSTATIC AIR VENTING

Features

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

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. Precision-ground float, constant water seal and three-point seating design ensure a steam tight seal, even under no-load conditions.
4. Thermostatic air venting with bimetal strip allows for fast start-up.
5. One screen located in connector and one in trap ensure trouble-free operation.



Pressure Equipment Directive (PED)

Classification according to PED 2014/68/EU, fluid group 2

Size	Category	CE marking
DN 15 to 25	—*	Art. 4, Sec. 3 (sound engineering practice), CE marking not allowed

* Manufactured in accordance with sound engineering practice

Specifications

Model	FS5	FS5H
Connection	Screwed*, Socket Welded, Flanged	
Size	1/2", 3/4", 1" / DN 15, 20, 25	
Orifice No.	5, 10, 21, 32	46
Max. Operating Pressure (barg) PMO	5, 10, 21, 32	46
Max. Differential Pressure (bar) ΔPMX	5, 10, 21, 32	46
Max. Operating Temperature (°C) TMO	400	400**/425
Connector Unit	F46	
Trap Unit	S5***	S5H***

* Screwed connection is optional and requires special installation procedure. Consult TLV for details. ** With PN flange.

*** Designed for use with F46, F32 Connector Units and V1/V2 Trap Stations. Trap and Connector Units sent as separate units for flexible installation.

CAUTION 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.

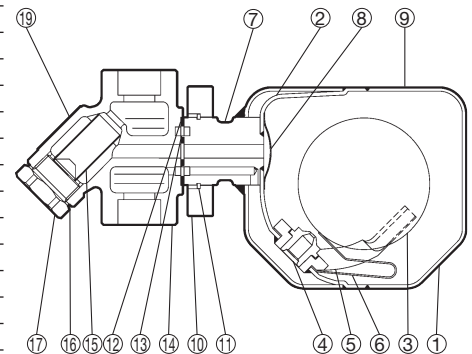
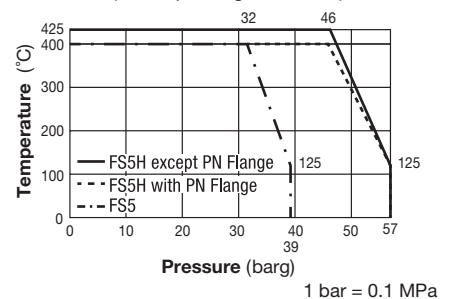
No.	Description	Material	DIN*	ASTM/AISI*
① ^T	Trap Body	Stainless Steel A240 Type 316L	1.4404	—
② ^T	Inner Cover	Stainless Steel A240 Type 316L	1.4404	—
③ ^T	Float	Stainless Steel SUS316L	1.4404	AISI316L
④ ^T	Orifice	—	—	—
⑤ ^T	Float Guide	Cast Stainless Steel A351 Gr.CF3M	1.4435	—
⑥ ^T	Air Vent Strip	Bimetal	—	—
⑦ ^T	Connector Joint	Stainless Steel SUS304	1.4301	AISI304
⑧ ^T	Trap Screen	Stainless Steel SUS304	1.4301	AISI304
⑨ ^T	Nameplate	Stainless Steel SUS304	1.4301	AISI304
⑩ ^T	Connector Flange	Carbon Steel A105	1.0460	—
⑪ ^T	Snap Ring	Carbon Steel SWRH57	1.0535	AISI1055
⑫ ^{MT}	Outer Connector Gasket	Graphite/Stainless Steel SUS304	- /1.4301	- /AISI304
⑬ ^{MT}	Inner Connector Gasket	Graphite/Stainless Steel SUS304	- /1.4301	- /AISI304
⑭	Connector Body	Cast Stainless Steel A351 Gr.CF8	1.4312	—
⑮	Screen inside/outside	Stainless Steel SUS304/430	1.4301/1.4016	AISI304/430
⑯ ^M	Screen Holder Gasket	Stainless Steel SUS316L	1.4404	AISI316L
⑰	Screen Holder	Cast Stainless Steel A351 Gr.CF8	1.4312	—
⑱ ^T	Connector Bolt**	Alloy Steel SNB7	1.7225	A193 Gr.B7
⑲	Connector Nameplate	Stainless Steel SUS304	1.4301	AISI304
⑳	Flange***	Cast Stainless Steel A351 Gr.CF8/ Stainless Steel SUS304	1.4312/ 1.4301	- /AISI304

* Equivalent materials ** Shown on reverse

*** Shown on reverse, shape and material depend on flange specifications
Replacement kits available: (M) maintenance parts, (T) trap unit S5/S5H

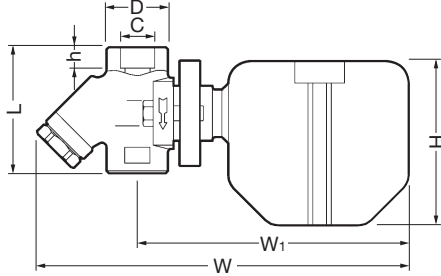
Replacement parts for former connector body F32 differ from those for F46.

Max. Allowable Press./ Temp. (PMA/TMA)
Pressure Shell Design Conditions
(NOT Operating Conditions)



Dimensions

● **FS5/FS5H**
Socket Welded

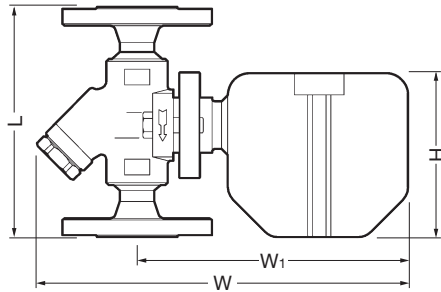


FS5/FS5H Socket Welded* (mm)

Model	DN	L	φH	W	W ₁	φD	φC	h	Weight (kg)
FS5	15	80	104	236	172	36	21.8	12	2.1
	20							14	
	25	96		238	176	44	33.9	2.5	
FS5H	15	80	108	238	174	36	21.8	12	2.2
	20							14	
	25	96		240	178	44	33.9	2.6	

* ASME B16.11-2005, other standards available

● **FS5/FS5H**
Flanged



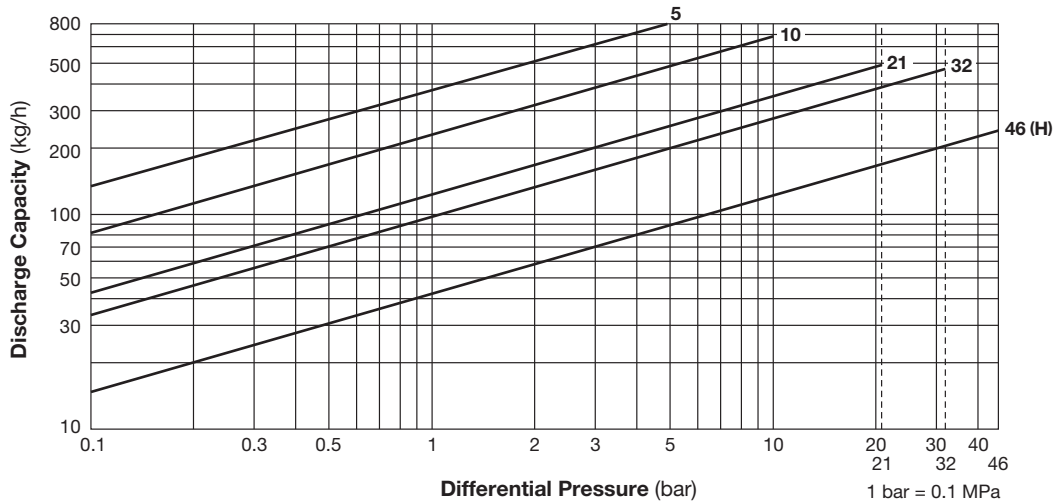
FS5/FS5H Flanged (mm)

Model	DN	L			φH	W	W ₁	Weight* (kg)	
		ASME Class							
		DIN 2501 PN25/40	150RF	300RF					600RF
FS5	15	150	150	150	180	104	235	175	3.9
	20								4.8
	25								5.3
FS5H	15	150	-	-	180	108	240	175	4.0
	20								4.9
	25								5.4

Other standards available, but length and weight may vary

* Weight is for DIN 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 this product under conditions that exceed maximum differential pressure as condensate back up will occur!

Manufacturer

TLV CO., LTD.

Kakogawa, Japan

is approved by LRQA Ltd. to ISO 9001/14001

ISO 9001
ISO 14001

