

TLV®

FREE FLOAT® STEAM TRAP

MODEL FS5H QuickTrap®

HIGH-PRESSURE UNIVERSAL FREE FLOAT STEAM TRAP WITH 3-POINT SEATING & THERMOSTATIC AIR VENTING

Benefits

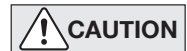
Inline replaceable 2-bolt universal flange steam trap for high-pressure steam mains, turbines and light processes.

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. Self-modulating free float provides continuous condensate discharge and three-point seating design ensures a steam tight seal.
4. Only one moving part, the free float, prevents concentrated valve wear and provides long maintenance-free service life.
5. Rugged float construction with up to 2300 psig hydraulic shock rating ensures excellent resistance to water hammer.
6. Thermostatic air venting with bimetal strip allows for fast start-up.
7. One screen located in connector and one in trap ensure trouble-free operation.



Specifications

Model	FS5H		
Connection	Screwed*	Socket Weld	Flanged
Size (in)	1/2, 3/4, 1		1/2, 3/4, 1
Orifice No.	46		
Maximum Operating Pressure (psig) PMO	650		
Maximum Differential Pressure (psi) ΔPMX	650		
Minimum Operating Pressure (psig)	1.5		
Maximum Operating Temperature (°F) TMO	800		
Maximum Allowable Pressure (psig) PMA	650		
Maximum Allowable Temperature (°F) TMA	800		
Connector Unit	F46		
Trap Unit	S5H**		

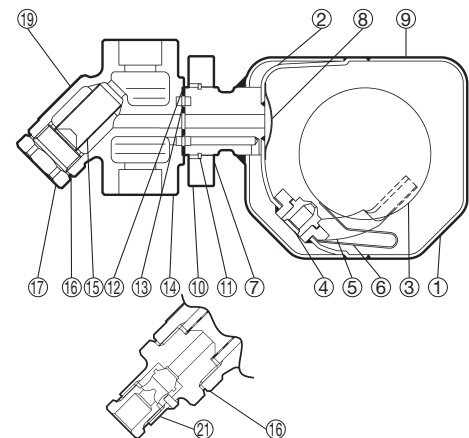


To avoid abnormal operation, accidents or serious injury, DO NOT use this product outside of the specification range. Local regulations may restrict the use of this product to below the conditions quoted.

* Requires special installation procedure for horizontal piping. Consult TLV for details. **Connections and sizes in bold are standard**

** Designed for use with F46, F32 Connector Units and V1/V2/V1P/V2P Trap Stations. Trap and Connector Units sent as separate units for flexible installation.

No.	Description	Material	ASTM/AISI*	JIS
① ^T	Trap Body	Stainless Steel	A240 Type 316L	—
② ^T	Inner Cover	Stainless Steel	A240 Type 316L	—
③ ^T	Float	Stainless Steel	AISI316L	SUS316L
④ ^T	Orifice	—	—	—
⑤ ^T	Float Guide	Cast Stainless Steel	A351 Gr.CF3M	—
⑥ ^T	Air Vent Strip	Bimetal	—	—
⑦ ^T	Connector Joint	Stainless Steel	AISI304	SUS304
⑧ ^T	Trap Screen	Stainless Steel	AISI304	SUS304
⑨ ^T	Nameplate	Stainless Steel	AISI304	SUS304
⑩ ^T	Connector Flange	Carbon Steel	A105	—
⑪ ^T	Snap Ring	Carbon Steel	AISI1055	SWRH57
⑫ ^M	Outer Connector Gasket	Graphite/Stainless Steel	—/AISI304	—/SUS304
⑬ ^M	Inner Connector Gasket	Graphite/Stainless Steel	—/AISI304	—/SUS304
⑭	Connector Body	Cast Stainless Steel	A351 Gr.CF8	—
⑮	Screen	Stainless Steel	AISI430	SUS430
⑯ ^M	Screen Holder Gasket	Stainless Steel	AISI316L	SUS316L
⑰	Screen Holder	Cast Stainless Steel	A351 Gr.CF8	—
⑱ ^T	Connector Bolt**	Alloy Steel	A193 Gr.B7	SNB7
⑲	Connector Nameplate	Stainless Steel	AISI304	SUS304
⑳	Flange**	Stainless Steel	AISI304	SUS304
㉑	BD2 Blowdown Valve***	Cast Stainless Steel	A351 Gr.CF8	—



*Equivalent ** Shown on reverse *** Option

Replacement kits available:

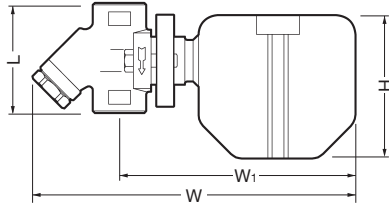
(M) maintenance parts, (T) trap unit S5H

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

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Dimensions

● **FS5H Screwed**



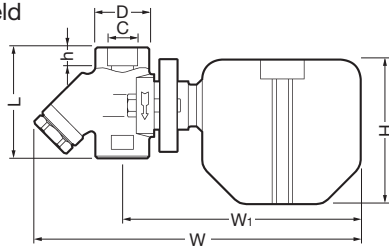
FS5H Screwed* (in)

Size	L	φH	W	W ₁	Weight (lb)
1/2	3 1/8	4 1/4	9 3/8	6 7/8	4.8
3/4			9 7/16	7	
1**	3 3/4				5.7

* NPT, other standards available

** Configuration of 1" differs slightly from 1/2" and 3/4"

● **FS5H Socket Weld**



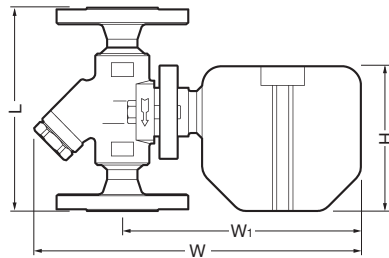
FS5H Socket Weld* (in)

Size	L	φH	W	W ₁	φD	φC	h	Weight (lb)
1/2	3 1/8	4 1/4	9 3/8	6 7/8	1 7/16	0.855	1/2	4.8
3/4			9 7/16	7	1 3/4	1.065	9/16	
1**	3 3/4					1.330		5.7

* ASME B16.11-2005, other standards available

** Configuration of 1" differs slightly from 1/2" and 3/4"

● **FS5H Flanged**

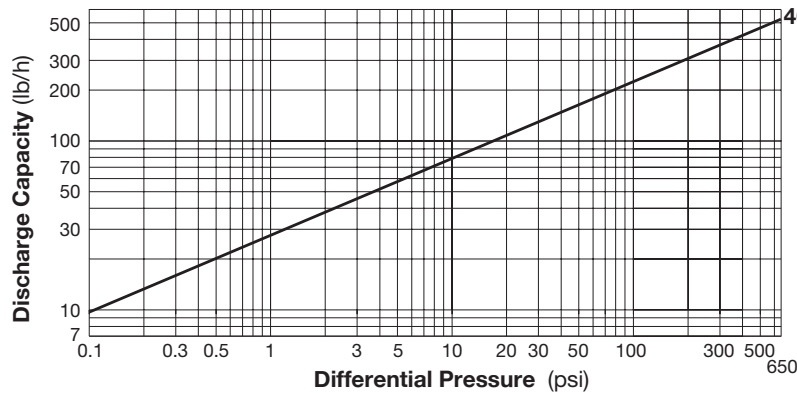


FS5H Flanged (in)

Size	L		φH	W	W ₁	Weight (lb)
	Connects to ASME Class					
1/2	600RF		4 1/4	9 7/16	6 7/8	9.9
3/4	7 1/16					13
1	7 1/2					14

Other standards available, but length and weight may vary

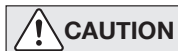
Discharge Capacity



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 11 °F below saturated steam temperature.
4. Recommended safety factor: at least 1.5.



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



DO NOT DISASSEMBLE OR REMOVE THIS PRODUCT WHILE IT IS UNDER PRESSURE.

Allow internal pressure of this product to equal atmospheric pressure and its surface to cool to room temperature before disassembling or removing. Failure to do so could cause burns or other injury. READ INSTRUCTION MANUAL CAREFULLY.

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For Technical Service 1-800 "TLV TRAP"



Manufacturer

TLV CO., LTD.

Kakogawa, Japan

is approved by LRQA Ltd. to ISO 9001/14001

ISO 9001
ISO 14001

