

# FREE FLOATS STEAM TRAP

# MODEL FS3 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 replace- ment 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

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

<sup>\*</sup> Manufactured in accordance with sound engineering practice

# **Specifications**

Model	FS3			
Connection	Screwed	Screwed Socket Welded		
Size	<sup>1</sup> / <sub>2</sub> ", <sup>3</sup> / <sub>4</sub> ", 1" DN 15, 20, 25			
Orifice No.	5, 10, 21			
Max. Operating Pressure (barg) PMO	5, 10, 21			
Max. Differential Pressure (bar) ΔPMX	5, 10, 21			
Max. Operating Temperature (°C) TMO	400			
Connector Unit	F46			
Trap Unit	S3*			

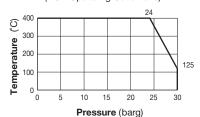
Designed for use with F46, F32 Connector Units and V1/V2 Trap Stations. Trap and Connector Units sent as separate units for flexible installation.



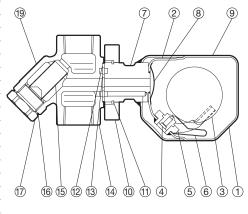
To avoid abnormal operation, accidents or serious injury, DO NOT use this product outside of the specification range. Local regulations may restrict the use of this product to below the conditions quoted.

No.	Description	Material	DIN*	ASTM/AISI*	
① <sup>T</sup>	Trap Body	Stainless Steel A240 Type 316L	1.4404	_	
② <sup>T</sup>	Inner Cover	Stainless Steel A240 Type 316L	1.4404	_	
3) <sup>T</sup>	Float	Stainless Steel SUS316L	1.4404	AISI316L	
(4) <sup>T</sup>	Orifice	_	_	_	
(5) <sup>T</sup>	Float Guide	Cast Stainl. Steel A351 Gr.CF3M	1.4435	_	
<u>6</u> т	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 <sup>T</sup>	Nameplate	Stainless Steel SUS304	1.4301	AISI304	
10 <sup>T</sup>	Connector Flange	Carbon Steel A105	1.0460	_	
<b>11</b> ) <sup>™</sup>	Snap Ring	Carbon Steel SWRH57	1.0535	AISI1055	
(12) MT	Outer Connector Gasket	Graphite/Stainl. Steel SUS304	-/1.4301	-/AISI304	
(13) MT	Inner Connector Gasket	Graphite/Stainl. Steel SUS304	-/1.4301	-/AISI304	
14)	Connector Body	Cast Stainl. Steel A351 Gr.CF8	1.4312	_	
15	Screen inside/outside	Stainless Steel SUS304/430	1.4301/1.4016	AISI304/430	
16 <sup>M</sup>	Screen Holder Gasket	Stainless Steel SUS316L	1.4404	AISI316L	
17	Screen Holder	Cast Stainl. Steel A351 Gr.CF8	1.4312	_	
18 <sup>™</sup>	Connector Bolt**	Alloy Steel SNB7	1.7225	A193 Gr.B7	
19	Connector Nameplate	Stainless Steel SUS304	1.4301	AISI304	
20	Flange***	Cast Stainl. Steel A351 Gr.CF8/ Stainless Steel SUS304	1.4312/ 1.4301	-/AISI304	

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



1 bar = 0.1 MPa



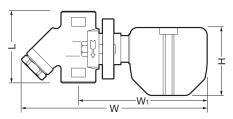
<sup>\*</sup> Equivalent materials \*\* Shown on reverse \*\*\* Shown on reverse, shape and material depend on flange specifications Replacement kits available: (M) maintenance parts, (T) trap unit S3 Replacement parts for former connector body F32 differ from those for F46.



# **Consulting · Engineering · Services**

## **Dimensions**

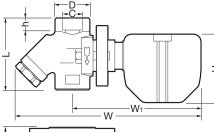




FS3 Screwed* (mm								
Size	L	φН	W	W <sub>1</sub>	Weight (kg)			
1/2 "	80	77	204	140	1.7			
3/4 "	60							
1″	96		206	144	2.0			

\* BSP DIN 2999, other standards available

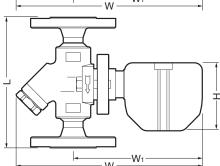
## FS3 Socket Welded



F53	Sock		(mm)					
DN	L	φН	W	W <sub>1</sub>	φD	φС	h	Weight (kg)
15	90	77	204 140	140	36	21.8	12	1.7
20	80			30	27.2	14	1.7	
25	96		206	144	44	33.9	14	2.0

\* ASME B16.11-2005, other standards available

#### FS3 Flanged

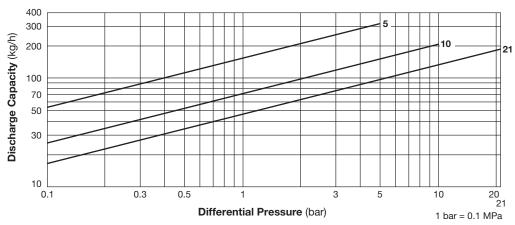


#### FS3 Flanged

roo rianged (mm)								
DN								
	DIN 2501	ASME Class		φН	W	W <sub>1</sub>	Weight * (kg)	
	PN25/40	150RF	300RF					
15	150	150	150	77	205	140	3.3	
20							4.2	
25	160	160	160				4.7	

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.



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

Kakogawa, Japan

Manufacturer

ISO 9001 ISO 14001