# FREE FLOAT STEAM TRAP MODEL FS3 QuickTrap®

### UNIVERSAL FREE FLOAT STEAM TRAP WITH THERMOSTATIC AIR VENTING

### Features

Inline replaceable two-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. 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.



## **Specifications**

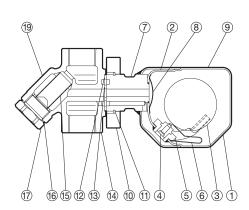
Model		FS3				
Connection		Screwed Socket Welded Flanged				
Size (mm)		15, 20, 25				
Orifice No.		10, 21				
Maximum Operating Pressure (MPaG)	PMO	1.0, 2.1				
Maximum Differential Pressure (MPa)	ΔΡΜΧ	1.0, 2.1				
Minimum Operating Pressure (MPaG)		0.01				
Maximum Operating Temperature (°C)	TMO	400				
Connector Unit			F46			
Trap Unit		S3*				

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. PRESSURE SHELL DESIGN CONDITIONS (**NOT** OPERATING CONDITIONS): Maximum Allowable Pressure (MPaG) PMA: 2.4

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

Maximum Allowable Temperature (°C) TMA: 400 To avoid abnormal operation, accidents or serious injury, DO NOT use this product outside of the specification CAUTION To avoid abnormal operation, accidents or serious injury, borror use and preserve and pr

No.	Description		Material	JIS	ASTM/AISI*
(1) <sup>T</sup>	Trap Body		Stainless Steel	_	A240 Type 316L
(2) <sup>T</sup>	Inner Cover		Stainless Steel		A240 Type 316L
<u>З</u> т	Float		Stainless Steel	SUS316L	AISI316L
(4) <sup>T</sup>	Orifice		—	—	_
(5) <sup>T</sup>	Float Guide		Stainless Steel		A351 Gr.CF3M
<u>б</u> т	Air Vent Strip		Bimetal		
(7) <sup>T</sup>	Connector Jo	vint	Stainless Steel	SUS304	AISI304
(8) <sup>T</sup>	Trap Screen		Stainless Steel	SUS304	AISI304
<u>(</u> 9)т	Nameplate		Stainless Steel	SUS304	AISI304
10 <sup>×</sup>	Connector Flange		Carbon Steel	—	A105
¶¶ <sup>™</sup>	Snap Ring		Carbon Steel	SWRH57	AISI1055
(12 <sup>MT</sup>	Outer Connector Gasket		Graphite/Stainless Steel	-/SUS304	-/AISI304
(13 <sup>MT</sup>			Graphite/Stainless Steel	-/SUS304	-/AISI304
14	Connector Body		Cast Stainless Steel	—	A351 Gr.CF8
15	Screen inside/outside		Stainless Steel	SUS304/430	AISI304/430
16™	Screen Holder Gasket		Stainless Steel	SUS316L	AISI316L
$\overline{0}$	Screen Holder		Cast Stainless Steel	—	A351 Gr.CF8
(18)™	Connector Bolt**		Alloy Steel	SNB7	A193 Gr.B7
19	Connector Nameplate		Stainless Steel	SUS304	AISI304
00	Flange**	15, 20 mm	Cast Stainless Steel	—	A351 Gr.CF8
20	Fiange	25 mm	Stainless Steel	SUS304	AISI304

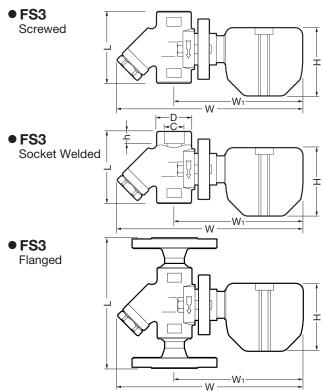


\* Equivalent \*\* Shown on reverse Replacement kits available: (M) maintenance parts, (T) trap unit S3 Replacement parts for former connector body F32 differ from those for F46.

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## **Consulting · Engineering · Services**

## **Dimensions**



FS3 Screwed* (mm									
	Size	L	φH	W	W1	Weight (kg)			
	15	80		004	140	17			
	20	80	77	204	140	1.7			
	25	96		206	144	2.0			

\* (Rc)PT, other standards available

FS3 Socket Welded (m								
Size	L	φH	W	W1	φC	φD	h	Weight (kg)
15	- 80		204	140	22.2	36	12	1.7
20	00	77	204	140	27.7	30	- 4	1.7
25	96		206	144	34.5	44	14	2.0

FS3 Flanged									
	Size	ASME 150RF	Class 300RF	φH	W	W1	Weight* (kg)		
	15	150	150				3.2		
	20	150	150	77 205	205	140	4.6		
	25	160	160						
	Other standards sucilable, but length and weight move your								

Other standards available, but length and weight may vary \* Weight is for Class 300 RF

## **Discharge Capacity**

Differential Pressure (kg/cm<sup>2</sup>) 0.1 0.3 0.5 10 500 Standard 5 300 Available on Discharge Capacity (kg/h) request 16 200 21 100 CAUTION 70 DO NOT use this 50 product under conditions that 30 exceed maximum differential pressure, as condensate back up will occur! 10 0.01 0.03 0.05 0.3 0.1 0.5 1.0 1.6 2.0 Differential Pressure (MPa)

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.

Manufacturer CO., LTD.



Kakogawa, Japan approved by LRQA Ltd. to ISO 9001/14001



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(M)

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