

Steam Traps

Clean Steam Thermostatic Steam Trap

(Repairable)

FDA400
Thermostatic Clean Steam

Model	FDA401, FDA402, FDA403
Sizes	1/2", 3/4"
Connections	Tri-clamp
Body Material	Stainless Steel
PMO Max. Operating Pressure	90 PSIG
TMO Max. Operating Temperature	Saturated Steam Temperature
PMA Max. Allowable Pressure	145 PSIG up to 338°F
TMA Max. Allowable Temperature	350°F @ 132 PSIG

Material Traceability Reports (MTR) provided with all FDA400 Series Steam Traps.

Typical Applications

DRIP, PROCESS: FDA400 Series thermostatic clean steam traps are used in clean steam applications such as drainage for CIP/SIP systems and various process vessels. The universal horizontal connection allows the trap body to swivel to any angle. The FDA400 Series allows for a 90 degree connection either the inlet or outlet capable of 360 degree orientation.

How It Works

This trap contains a welded 316L stainless steel thermal element that expands when heated and contracts when cooled. When air and subcooled condensate are present, the trap is in an open discharge position. When steam reaches the trap, the element expands, closing the trap tightly.

Features

- Universal horizontal connection swivels to any angle
- All wetted parts are 316L stainless steel
- Electro-polish finish of 20-25 microinches RA on internal surfaces of body
- Electro-polish finish of 25-32 microinches RA on external surfaces of body
- Operates close to saturation curve to minimize condensate back-up
- Completely self-draining in the vertical downward flow orientation

Sample Specification

The Steam Trap shall be all 316L stainless steel thermostatic type with a balanced pressure bellows that operates close to saturated steam temperatures. Inlet, outlet or both connections must contain a 90° swivel arrangement capable of 360° orientation. Internal body parts shall have an electro-polish finish of 20-25 microinches RA internally and a 25-32 finish externally. The unit shall have a split-body sanitary clamp design for easy maintenance. Trap shall be completely self-draining when mounted vertically.

Installation and Maintenance

Trap is designed for installation in a vertical, downward flow orientation to ensure that the self-draining clean steam requirement is satisfied.



Options

Electropolish to 15 Ra internal or lower is available; Consult factory.

Special Bellows available that sub-cools 2°F

Size/Connection Inlet x Outlet	Model Code	Port Configuration		Weight lbs
		Inlet	Outlet	
9/64" Orifice (0.141)				
1/2" TC x TC	FDA401-12-TCTC	90°	90°	3
1/2" TC x TC	FDA402-12-TCTC	90°	Straight	3
1/2" TC x TC	FDA403-12-TCTC	Straight	90°	3
5/16" Orifice (0.312)				
3/4" TC x TC	FDA411-13-TCTC	90°	90°	3
3/4" TC x TC	FDA412-13-TCTC	90°	Straight	3
3/4" TC x TC	FDA413-13-TCTC	Straight	90°	3

MATERIALS

Body	Stainless Steel, AISI 316L
Gasket	Teflon/Encapsulated Viton
Element Plate	Stainless Steel, AISI 316L
Thermal Element	Stainless Steel, AISI 316L
Clamp	Stainless Steel, AISI 304

CAPACITIES — Condensate (lbs/hr)

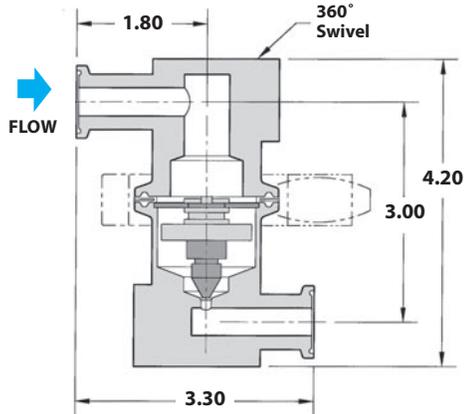
Model	Orifice (Inches)	Differential Pressure (PSI)					
		5	10	20	50	75	90
FDA400	9/64	140	240	400	690	850	950
FDA410	5/16	850	1200	1695	2690	3165	3400

Note: Capacities at 10°F below saturation.

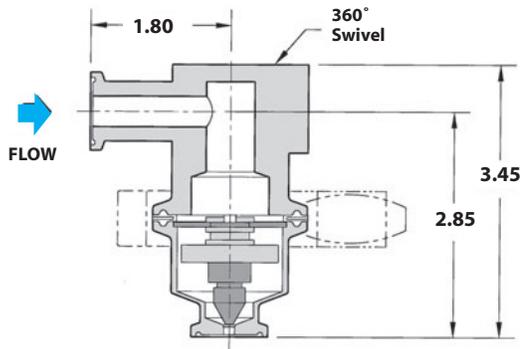
FDA400 Series Connections: 1/2" & 3/4"

Units: inches

FDA401 9/64" Orifice (0.141) Inlet: 90° Angle
FDA411 5/16" Orifice (0.312) Outlet: 90° Angle



FDA402 9/64" Orifice (0.141) Inlet: 90° Angle
FDA412 5/16" Orifice (0.312) Outlet: Straight



FDA403 9/64" Orifice (0.141) Inlet: Straight
FDA413 5/16" Orifice (0.312) Outlet: 90° Angle

