

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

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 on either the inlet or outlet capable of 360 degree orientation. Available with 2°F sub-cool bellows.

How It Works

This trap contains a welded 316L stainless steel thermal element that expands when heated and contracts when cooled. When air and sub-cooled 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.



Sanitary Clamp for Trap Body

Size/Connection Inlet x Outlet	Model Code	Port Configuration Inlet	Port Configuration Outlet	Weight lbs
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)

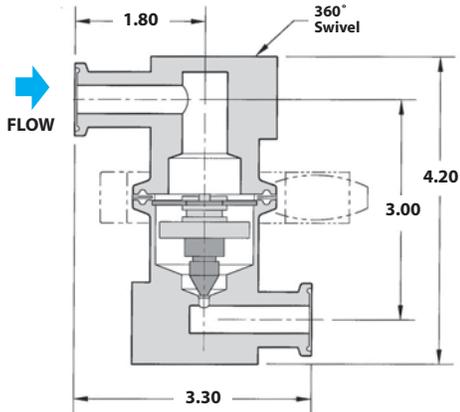
Model	Orifice (inches)	Differential Pressure (PSI)					
		5	10	20	50	75	90
FDA400	9/64	140	240	400	690	850	950
FDA410	5/16	850	1200	1695	2690	3165	3400

Note: Capacities at 10°F below saturation.

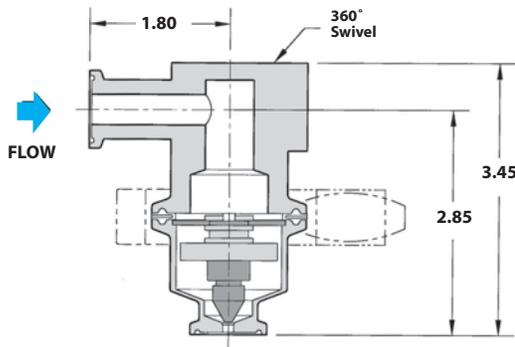
FDA400 Series Connections: 1/2" & 3/4"

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

