

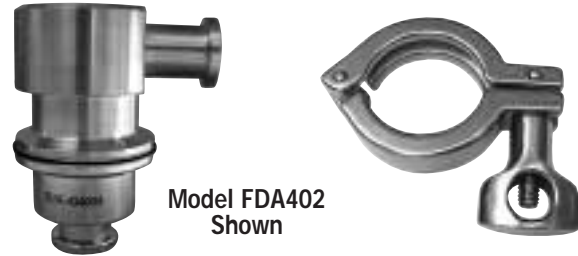
STEAM TRAPS

FDA400 Series

Thermostatic Clean Steam Trap (Repairable)

Watson McDaniel reserves the right to change the designs and/or materials of its products without notice.
©2006 Watson McDaniel Company

Model	FDA401, FDA402, FDA403
Sizes	1/2", 3/4"
Connections	Clamped
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



Model FDA402 Shown

TYPICAL APPLICATIONS

DRIP, PROCESS: The FDA400 Series thermostatic steam traps are used on clean steam applications as drip traps on piping runs as well as drainage for CIP/SIP systems and various process vessels. The FDA 400 Series allows for a 90° connection on either the inlet or outlet capable of 360° orientation.

HOW IT WORKS

The thermostatic trap contains a welded 316L stainless steel thermal element that expands when heated and contracts when cooled. When air and condensate are present the trap is in the 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 body
- Electro-polish finish of 25-32 microinches RA on external body
- Operates close to saturation curve to minimize condensate back-up
- Completely self-draining in the vertical downward flow orientation

MATERIALS

Body	Stainless Steel, AISI 316L
Gasket	Teflon Coated Elastomer
Element Plate	Stainless Steel, AISI 316L
Thermal Element	Stainless Steel, AISI 316L
Clamp	Stainless Steel, AISI 316L

CAPACITIES – Condensate (lbs/hr)

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

Capacities at 10° F below saturation.

SAMPLE SPECIFICATION

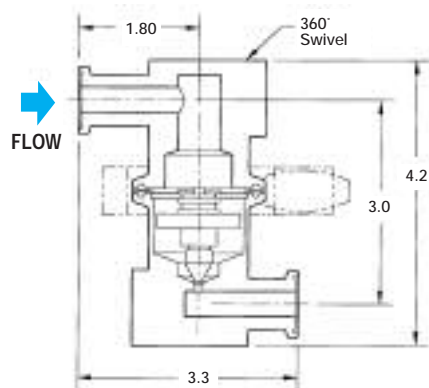
The Steam Trap shall be all 316L stainless steel thermostatic type with a balanced pressure bellows that operates close to saturated steam temperatures. Inlet, outlet or both connections must contain a 90° swivel arrangement capable of 360° orientation. Internal body parts shall have an electro-polish 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 & MAINTENANCE

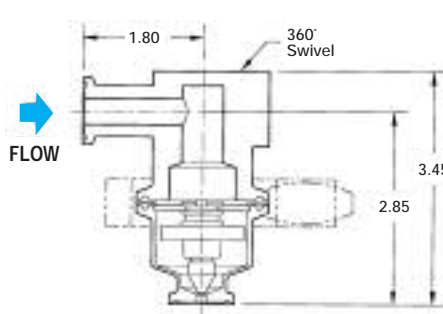
Trap is designed for installation in a vertical, downward flow orientation to ensure that the self-draining clean steam requirement is satisfied. For full maintenance details see Installation and Maintenance Manual.

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

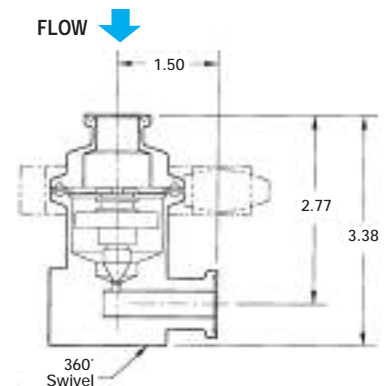
Unit: inches



FDA 401 Inlet: 90° Angle
Outlet: 90° Angle



FDA 402 Inlet: 90° Angle
Outlet: Straight



FDA 403 Inlet: Straight
Outlet: 90° Angle