

Steam Traps

Clean Steam Thermostatic Steam Trap

(Repairable)

FDA500

Thermostatic Clean Steam

Model	FDA500, FDA510
Sizes	1/2", 3/4", 1", 1 1/2"
Connections	Tri-clamp, NPT, Tube Weld
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 FDA500 Series Steam Traps.

Typical Applications

DRIP, PROCESS: FDA500 Series thermostatic clean steam traps are used in clean steam applications as drip traps on piping runs as well as for drainage for CIP/SIP systems and various process vessels.

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

- All wetted parts are 316L stainless steel
- Electro-polish finish of 20-25 microinches RA on **internal** surfaces of body. Consult factory for 15RA max surface finish option.
- 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

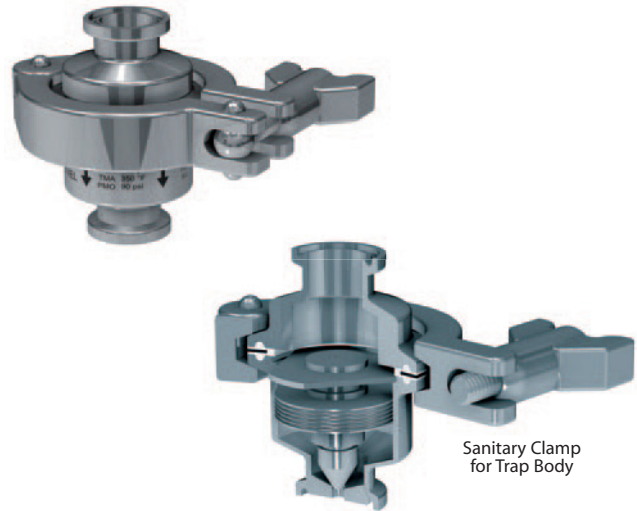
The steam Trap shall be all 316L stainless steel thermostatic type with a balanced pressure bellows that operates close to saturated steam temperatures. Internal body parts shall have an electro-polish finish of 20-25 microinches RA internally and a 25-32 finish externally. The unit shall have a split-body sanitary clamp design for easy maintenance. Trap shall be completely self-draining when mounted vertically.

Installation and Maintenance

This trap is designed for installation in a vertical, downward flow orientation to ensure that the self-draining clean steam requirement is satisfied. If purchased with tube weld connections with the intention of welding in-line, the thermal element and gasket must be removed during the welding process or heat damage may occur.

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	Orifice Size	Weight lbs
1/2" TC x TC	FDA500-12-TCTC	9/64"	2.00
3/4" TC x TC	FDA500-13-TCTC	9/64"	2.00
1" TC x TC	FDA500-14-TCTC	9/64"	2.25
1 1/2" TC x TC	FDA500-16-TCTC	9/64"	2.25
1/2" TC x TC	FDA510-12-TCTC	5/16"	2.00
3/4" TC x TC	FDA510-13-TCTC	5/16"	2.00
1" TC x TC	FDA510-14-TCTC	5/16"	2.25
1 1/2" TC x TC	FDA510-16-TCTC	5/16"	2.25
1/2" TC x NPT	FDA500-12-TCNP	9/64"	2.00
3/4" TC x NPT	FDA500-13-TCNP	9/64"	2.00
1" TC x NPT	FDA500-14-TCNP	9/64"	3.00
1 1/2" TC x NPT	FDA500-16-TCNP	9/64"	2.25
1/2" TC x NPT	FDA510-12-TCNP	5/16"	2.25
3/4" TC x NPT	FDA510-13-TCNP	5/16"	2.25
1" TC x NPT	FDA510-14-TCNP	5/16"	2.25
1 1/2" TC x NPT	FDA510-16-TCNP	5/16"	2.25
1/2" TW x TW	FDA500-12-TWTW	9/64"	2.25
1/2" TW x TW	FDA510-12-TWTW	5/16"	2.25

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

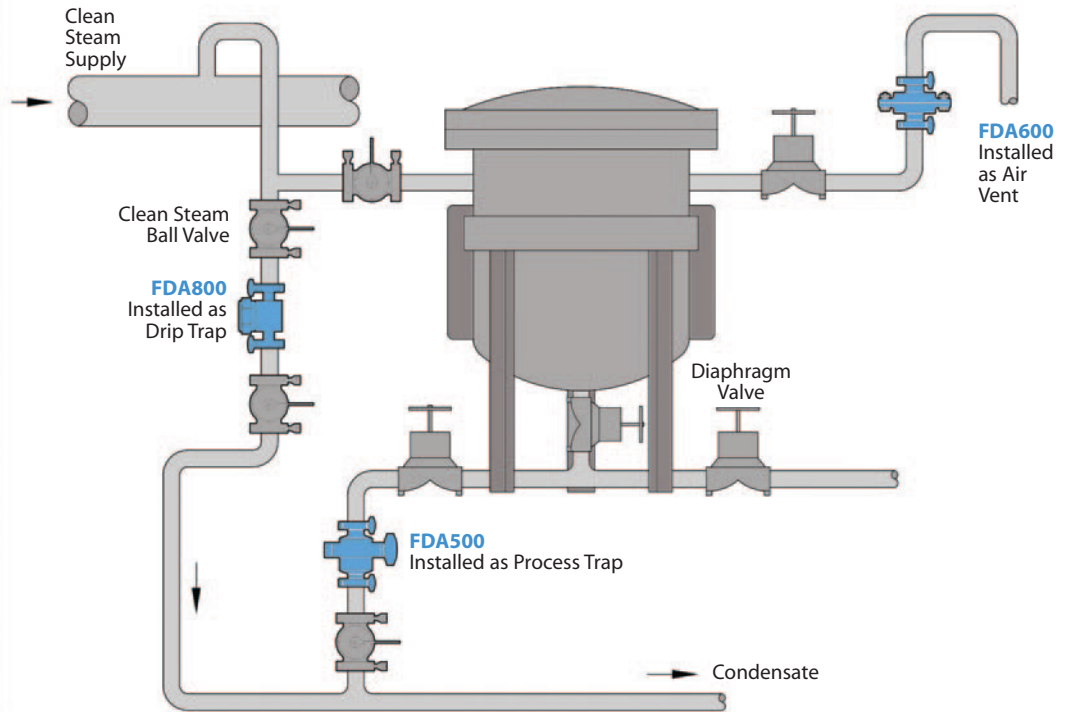
CAPACITIES — Condensate (lbs/hr)

Model	Orifice (Inches)	Differential Pressure (PSI)					
		5	10	20	50	75	90
FDA500	9/64	140	240	400	690	850	950
FDA510	5/16	850	1200	1695	2690	3165	3400

Note: Capacities at 10°F below saturation.



Typical Clean Steam Application



FDA500 Series Connections: 1/2", 3/4" & 1"

Units: inches

Tri-Clamp Connection: TC x TC

Connection: NP x NP or TC x NP

Tube-weld Connection: TW x TW

