

# Steam Traps

## MDT-420

### Thermodynamic Steam Trap

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MDT-420 is a thermodynamic steam trap designed to remove condensate from steam mains and for those applications where the release of air is a concern. It is manufactured in stainless steel and all external surfaces have nickel plating treatment, which allows better thermal efficiency and superior lifecycle performance, even under severe corrosion and erosion conditions. It is unaffected by water hammer and vibration. Its hardened stainless steel disc ensures intermittent discharge with perfect shutoff. It can be supplied with screwed connections BSPT (BS 21) or NPT (ANSI-B1.20.1). Flanges according to ANSI-B16.5 class. Contact factory for other connection options.



#### FEATURES

Product Family	MDT
Sizes	1/2", 3/4" and 1"
Connections	Screwed, Flanged
Body Material	ASTM A743 CA40F SS
Options	Insulated Cover
PMO Max. Oper. Pressure	598 psig
TMO Max. Oper. Temperature	842 °F
Min. Inlet Pressure	3.56 psig
Maximum Backpressure	80% of Operating Pressure

#### AVAILABLE MODELS

MDT-421: Saturated Steam

MDT-422: Superheated Steam

MDT-423: Compressed Air

#### HOW TO ORDER

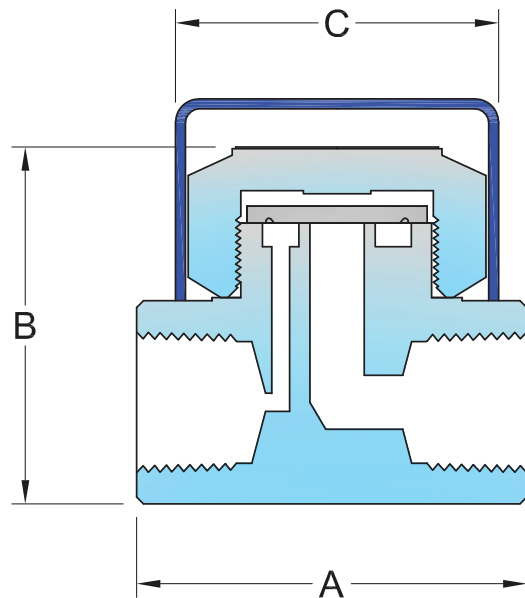
Specify:

- Model
- Sizes and type of connection
- Optional, if necessary

**Example:** 1 SF International Thermodynamic Steam Trap model MDT-421 with 1/2" body and BSPT connections.

#### DIMENSIONS & WEIGHT (INCHES & POUNDS)

DN	A	B	C	Weight
1/2"	1.97	2.13	1.50	0.88
3/4"	2.28	2.36	1.65	1.32
1"	2.76	2.99	2.09	2.43



#### CAPACITY

Model	Sizes	DIFFERENTIAL PRESSURE - ΔP (psig) x Q (lb/h)											
		11	50	100	149	199	249	299	348	398	498	548	597
MDT-420	1/2"	375	617	860	1,080	1,279	1,389	1,543	1,587	1,720	1,764	1,786	1,808
	3/4"	441	772	1,102	1,323	1,565	1,764	1,984	2,205	2,381	2,535	2,756	2,866
	1"	661	1,301	1,764	2,205	2,590	2,866	3,153	3,461	3,704	3,968	4,233	4,519



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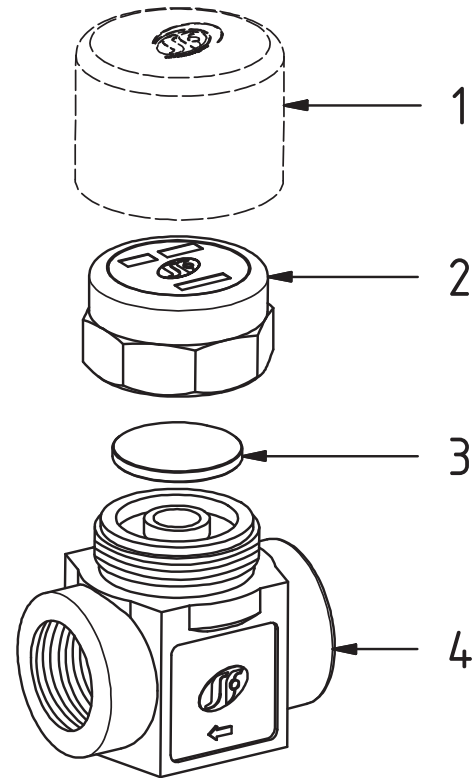
### Thermodynamic Steam Trap

#### COMPONENTS AND MATERIALS

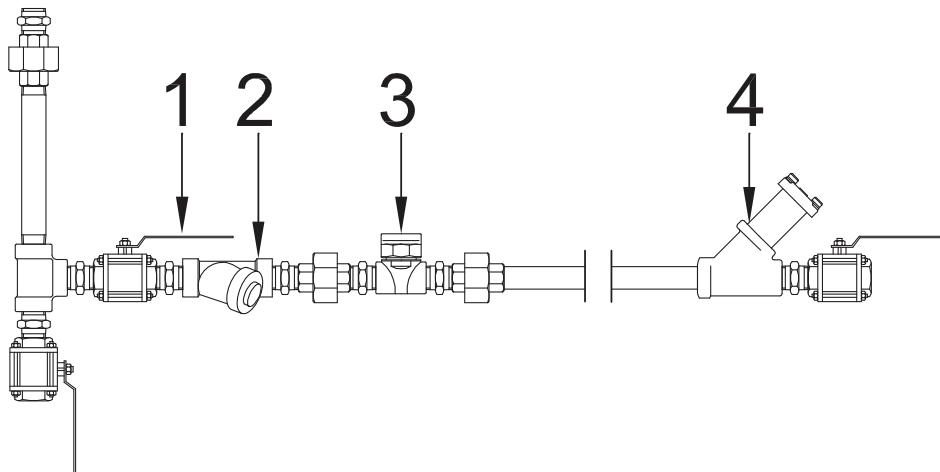
Pos.	Description	Material
1	Insulated Cover	Aluminium
2	Cover	ASTM A743 CA40F
3	Disc	AISI 420 SS
4	Body	ASTM A743 CA40F

#### HOW TO ORDER SPARE PARTS

Model	Description	Pos.	1/2"	3/4"	1"
MDT421	Disc	3	16,991	16,992	16,994
	Insulated Cover	1	17,068	17,071	17,074
MDT422	Disc	3	16,991	16,992	16,994
	Insulated Cover	1	17,069	17,072	17,075
MDT423	Disc	3	16,991	16,992	16,994
	Insulated Cover	1	17,070	17,073	17,076



#### TYPICAL INSTALLATION



Title:	
1	Stop Valve
2	Y Strainer
3	Steam Trap
4	Sight Glass

#### INSTALLATION INSTRUCTIONS

This Steam Trap should be installed in a horizontal pipeline with the direction of flow as indicated by the arrow on the trap body.

#### PRODUCT DISPOSAL

This product is totally recyclable. No ecological hazard is anticipated with the disposal of this product.

#### SAFETY, INSTALLATION AND MAINTENANCE

For safety, installation and maintenance information see instructions supplied with the product (MI-0101-37).