Steam Traps

MSDT-420

Thermodynamic Steam Trap

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MSDT-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. Its hardened stainless steel disc ensures intermittent discharge with perfect shutoff. It is supplied with an integral strainer, which reduces the installation space and ensure long and trouble free operation. It can be supplied with screwed connections BSPT (BS 21) or NPT (ANSI-B1.20.1) and SW or BW Flanges according to ANSI-B16.5 class. Contact factory for other connection options.

N: Strainer Cap, D: Blowndown Valve.

FEATURES

| Product Family | MSDT |
|----------------------------|---------------------------|
| 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 |

HOW TO ORDER

Specify:

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

Example: 1 SF International Thermodynamic Steam Trap model MSDT-421N with $\frac{1}{2}$ " body and BSPT connections.

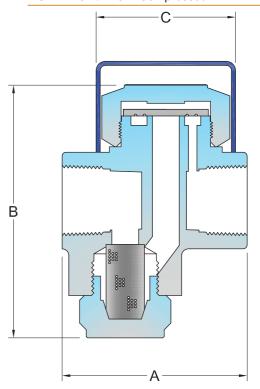
DIMENSIONS & WEIGHT (INCHES & POUNDS)

| DN | A | В | С | Weight |
|------|------|------|------|--------|
| 1/2" | 2.48 | 3.07 | 1.50 | 2.9 |
| 3/4" | 3.07 | 3.62 | 1.65 | 3.7 |
| 1" | 2.95 | 4.41 | 2.09 | 5.5 |

MSDT-D MSDT-D

AVAILABLE MODELS

MSDT-421N / 421D: Saturated Steam
MSDT-422N / 422D: Superheated Steam
MSDT-423N / 423D: Compressed Air



CAPACITY

| on non- | | | | | | | | | | | | | |
|-------------|-------|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Model Sizes | Sizes | DIFFERENTIAL PRESSURE - ∆P (psig) x Q (lb/h) | | | | | | | | | | | |
| Wodel | Sizes | 11 | 50 | 100 | 149 | 199 | 249 | 299 | 348 | 398 | 498 | 548 | 597 |
| MSDT-420 | 1/2" | 375 | 617 | 860 | 1,080 | 1,279 | 1,389 | 1,543 | 1,587 | 1,720 | 1,764 | 1,786 | 1,808 |
| MSDT-420 | 3/4" | 441 | 772 | 1,102 | 1,323 | 1,565 | 1,764 | 1,984 | 2,205 | 2,381 | 2,535 | 2,756 | 2,866 |
| MSDT-420 | 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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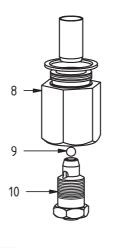
Steam Traps

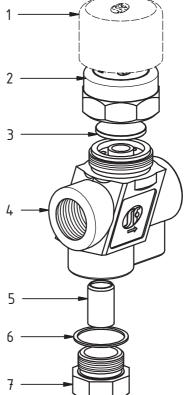


Thermodynamic Steam Trap

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 |
| 5 | Screen | AISI 304 SS (20 Mesh) |
| 6 | Gasket | Copper |
| 7 | Strainer Cap | ASTM A743 CA40F |
| 8 | Support (MSDT-D) | AISI 420 SS |
| 9 | Ball (MSDT-D) | AISI 420 SS |
| 10 | Stem (MSDT-D) | AISI 420 SS |

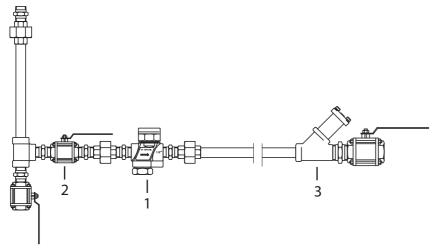




HOW TO ORDER SPARE PARTS

| Model | Description | Pos. | 1/2" | 3/4" | 1" |
|-------|---------------------|------|--------|--------|--------|
| | Insulated Cover | 1 | 16,991 | 16,992 | 16,994 |
| 421 | Disc | 3 | 17,068 | 17,071 | 17,074 |
| | Screen & Gasket Set | 5, 6 | 17,028 | 17,033 | 17,035 |
| | Insulated Cover | 1 | 16,991 | 16,992 | 16,994 |
| 422 | Disc | 3 | 17,069 | 17,072 | 17,075 |
| | Screen & Gasket Set | 5, 6 | 17,028 | 17,033 | 17,035 |
| | Insulated Cover | 1 | 16,991 | 16,992 | 16,994 |
| 423 | Disc | 3 | 17,070 | 17,073 | 17,076 |
| | Screen & Gasket Set | 5, 6 | 17,028 | 17,033 | 17,035 |





| Title: | |
|--------|-------------|
| 1 | Steam Trap |
| 2 | Stop Valve |
| 3 | Sight Glass |

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).