

Delta Element Steam Traps

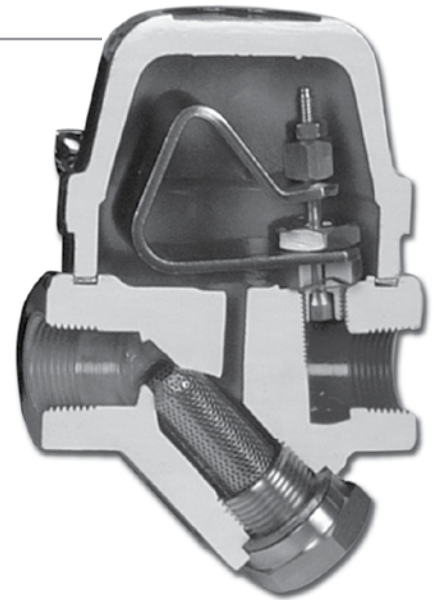
Models
M22
TM22

CRN: Canadian Registration Number Available

STEAM TRAPS FOR SUBCOOLING TRACING APPLICATIONS

Specifically developed to make use of the latent heat of steam and the sensible heat of condensate prior to discharge. For tracing services with differential pressures to 300 psi (20,7 bar), these traps are completely maintainable.

- **No live steam loss:** for greater energy efficiency and extended seat life, up to 320 psig (22,1 bar)
- **Single blade element** – offers long-term, trouble-free service because it's not prone to dirt build-up as encountered with many other bimetal designs
- **Easy maintenance** – traps are in-line repairable when isolated from live steam system and can be up and running again in minutes
- **Stainless Steel internals** – leads to longer service life since materials are highly resistant to fatigue and corrosion
- **Modulating discharge** – automatically adjusts to operating pressure and load
- **Built-in check valve** – prevents backflow during shutdown
- **Continuous air and CO2 venting** – maximizes heat transfer while minimizing corrosion



ORDERING SCHEMATIC

| MODEL | | | | 6 | 7 | 8 | |
|-------|---|---|---|---|---|---|---|
| M | 0 | 0 | 2 | 2 | 1 | 3 | 1 |

| MODEL | | | | 6 | 7 | 8 | |
|-------|---|---|---|---|---|---|---|
| T | M | 0 | 2 | 2 | 1 | 1 | 0 |

| 6 | SIZE |
|---|------|
| 1 | 3/8" |
| 2 | 1/2" |
| 3 | 3/4" |

| 7 | CONNECTIONS |
|---|-------------------|
| 1 | NPT (All) |
| 2 | FSW (All) |
| 3 | 150# Flange (M22) |
| 4 | 300# Flange (M22) |
| 5 | 600# Flange (M22) |
| 8 | BSPT (All) |
| 9 | BSPP (All) |

| 8 | SPECIALITIES |
|---|-------------------------|
| 0 | None (All) |
| 1 | DTC (M22) |
| 3 | Integral Blowdown (M22) |



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STEAM TRAPS FOR SUBCOOLING TRACING APPLICATIONS

SPECIFICATIONS

Maximum Operating Pressure: 300 PSIG (20,1 bar)

Maximum Body Pressure: 750 PSIG (52 bar)

Maximum Body Temperature: 750°F (399°C)

MATERIALS

Body & Cover: Forged Carbon Steel A105

Valve Seat: 303 SST

Cone: 17-4 SST

Bi-Metal: Stainless Steel NiCr

Strainer: Stainless Steel 304

Bolts: ASTM-A193, B7

Gasket: Flexible Graphite

Options: Double Threaded Strainer Cap (DTC) for blowdown valve attachment; selection of integral blowdown valves (M22 only)

Mounting: From horizontal to vertical (see Installation & Maintenance Instructions). Self-Draining and freeze-resistant when mounted in vertical position.

Line Sizes:

Model M22: 3/8", 1/2", 3/4"

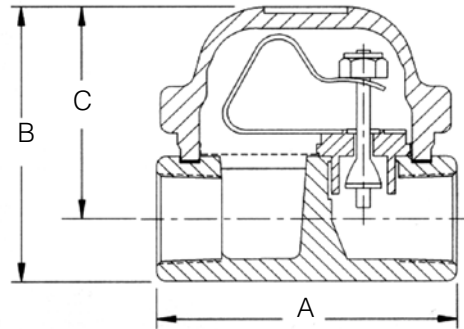
Model TM22: 3/8", 1/2", 3/4"

End Connections:

All models: NPT, BSPT, BSPP, SW

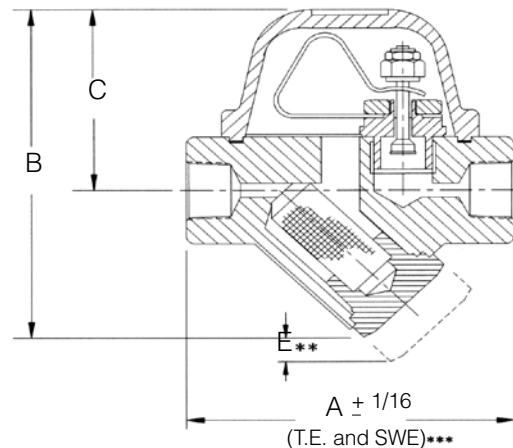
M22: Raised faced flanges (150, 300, 600)

MODEL TM22 DIMENSIONS



| Model TM22 | | | | | | |
|------------|-------|-------|------|-------|---------|--|
| 3/8", 1/2" | A | B | C | D | Wt | |
| inches | 2.438 | 2 | 2.25 | 2.438 | 2.2 lbs | |
| mm | 62 | 51 | 57 | 62 | 1.0 kgs | |
| 3/4" | A | B | C | D | Wt | |
| inches | 4.563 | 3.125 | 2.25 | 2.438 | 3.0 lbs | |
| mm | 116 | 79 | 57 | 62 | 1.4 kgs | |

MODEL M22 DIMENSIONS



| Model M22 | | | | | | |
|------------------|-----|-----|------|-------|------|---------|
| 3/8", 1/2", 3/4" | A | B | C | D | E | Wt |
| inches | 4 | 5 | 3.75 | 3.125 | 2.25 | 5.5 lbs |
| mm | 102 | 127 | 83 | 79 | 57 | 2.5 kgs |

Notes: dimension D is overall width; ** dimension E is withdrawal distance for strainer, ***dimensions shown are for threaded or socket weld ends, contact factory for other dimensions

CAPACITY CHARTS: CONDENSATE CAPACITY AT OPERATING PRESSURE

| Model M22 & TM22 | | Note: Actual flow rate from tracer line determines the amount of subcooling of condensate | | | | | |
|------------------|-------------------------------|---|-----------|------------|------------|------------|------------|
| Size | Operating Pressure, psi (bar) | 50 (3,5) | 100 (6,9) | 150 (10,3) | 200 (13,8) | 250 (17,2) | 300 (20,7) |
| 3/8" | Hot @ 50°F subcooling lbs/hr | 50 | 50 | 50 | 50 | 50 | 50 |
| | Hot @ 90°F subcooling lbs/hr | 250 | 250 | 250 | 250 | 250 | 250 |
| 1/2" | Hot @ 10°C subcooling kgs/hr | 22,7 | 22,7 | 22,7 | 22,7 | 22,7 | 22,7 |
| | Hot @ 32°C subcooling kgs/hr | 113 | 113 | 113 | 113 | 113 | 113 |

Note: Flow rates are based on discharge to atmospheric pressure, valid for back pressure up to 20% of inlet pressure. Higher back pressure requires reset of control element to obtain these capacities. Consult factory for details.