

Delta Element Steam Traps

Models: M10, GM10

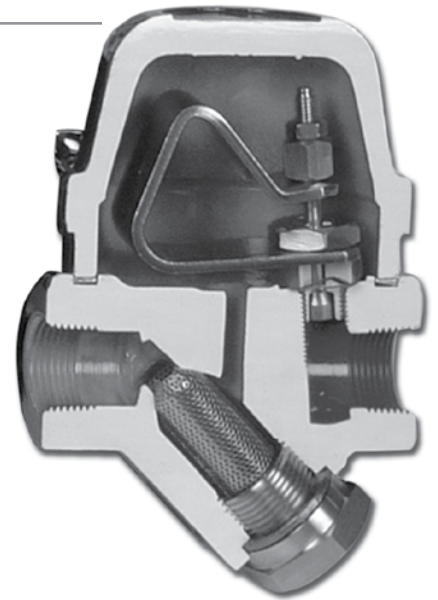
CRN: Canadian Registration Number Available

FOR PROCESS AND HEATING SYSTEMS

3 Year No Live Steam Loss Guarantee

Designed to handle varying loads of process applications and provide fast start-up and modulating discharge with no live steam loss.

- **Maximum differential pressure:** 120 psi (8,3 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
- **Integral strainer and check valve** – strainer protects trap from dirt while 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 | 1 | 0 | | | |

| MODEL | | | | | 6 | 7 | 8 |
|-------|---|---|---|---|---|---|---|
| G | M | 0 | 1 | 0 | | | |

| 6 | SIZE |
|---|---------------|
| 1 | 3/8" (M10) |
| 2 | 1/2" (All) |
| 3 | 3/4" (All) |
| 4 | 1" (GM10) |
| 6 | 1-1/2" (GM10) |
| 7 | 2" (GM10) |

| 7 | CONNECTIONS |
|---|-------------|
| 1 | NPT |
| 2 | FSW |
| 3 | 150# Flange |
| 4 | 300# Flange |
| 8 | BSPT |
| 9 | BSPP |

| 8 | SPECIALITIES |
|---|-------------------|
| 0 | None |
| 1 | DTC |
| 3 | Integral Blowdown |



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FOR PROCESS AND HEATING SYSTEMS

SPECIFICATIONS

Maximum Differential Pressure: 120 psi (8,3 bar)
 Maximum Allowable Pressure: 750 psig (51,7 bar)
 Maximum Allowable Temperature: 750°F (399°C)

MATERIALS

Body & Cover: Forged Carbon Steel A105
 Valve Seat: 303 SST & Stem: 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

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

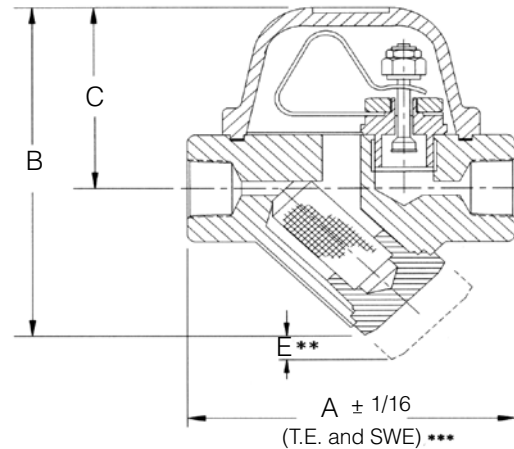
Line Sizes:

Model GM10: 1/2", 3/4", 1", 1-1/2", 2"

Model M10: 3/8", 1/2", 3/4"

End Connections:

All models: Threaded NPT, BSPT, BSPP, SW, Raised Face Flanges (ANSI 150, 300, DIN)



| Model GM10 | | | | | | |
|------------|-------|------|-------|-------|-------|---------|
| 1/2", 3/4" | A | B | C | D | E | Wt |
| inches | 4.00 | 5.00 | 3.75 | 3.125 | 2.25 | 5.5 lbs |
| mm | 102 | 127 | 83 | 79 | 57 | 2,5 kgs |
| 1" | A | B | C | D | E | Wt |
| inches | 5.00 | 6.75 | 3.625 | 4.00 | 2.25 | 9.9 lbs |
| mm | 127 | 171 | 92 | 102 | 83 | 4,5 kgs |
| 1-1/2", 2" | A | B | C | D | E | Wt |
| inches | 7.125 | 9.5 | 5.875 | 6.00 | 4.375 | 33 lbs |
| mm | 181 | 241 | 149 | 152 | 111 | 15 kgs |
| Model M10 | | | | | | |
| 1/2", 3/4" | A | B | C | D | E | Wt |
| inches | 4.00 | 5.00 | 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 M10 | | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 |
|-----------|-------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Size | Operating Pressure, psi (bar) | (0,7) | (1,3) | (4,1) | (2,8) | (3,5) | (4,1) | (4,8) | (5,5) | (6,2) | (6,9) | (7,6) | (8,3) |
| 3/8" | Cold start-up, lbs/hr | 1000 | 1700 | 2100 | 2700 | 3000 | 3200 | 3500 | 3800 | 4000 | 4100 | 4200 | 4300 |
| 1/2" | Hot (dripleg), lbs/hr | 300 | 350 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| | Cold start-up, kgs/hr | 453 | 771 | 952 | 1224 | 1361 | 1451 | 1587 | 1723 | 1814 | 1859 | 1905 | 1950 |
| 3/4" | Hot (dripleg), lbs/hr | 136 | 158 | 181 | 181 | 181 | 181 | 181 | 181 | 181 | 181 | 181 | 181 |
| | Cold start-up, kgs/hr | 136 | 158 | 181 | 181 | 181 | 181 | 181 | 181 | 181 | 181 | 181 | 181 |

| Model GM10 | | Consider Model 3A | | Consider Model 6A | | | |
|------------|-------------------------------|-------------------|----------|-------------------|----------|-----------|-----------|
| Size | Operating Pressure, psi (bar) | 20 (1,4) | 40 (2,8) | 60 (4,1) | 80 (5,5) | 100 (6,9) | 120 (8,3) |
| 1/2" | Cold start-up, lbs/hr | 2800 | 3800 | 4600 | 5400 | 6000 | 6600 |
| | Hot (dripleg), lbs/hr | 460 | 550 | 630 | 700 | 750 | 780 |
| 3/4" | Cold start-up, kgs/hr | 1270 | 1723 | 2086 | 2449 | 2721 | 2993 |
| | Hot (dripleg), kgs/hr | 208 | 249 | 285 | 317 | 340 | 353 |
| 1" | Cold start-up, lbs/hr | 5600 | 7600 | 9300 | 10600 | 11700 | 12500 |
| | Hot (dripleg), lbs/hr | 810 | 1070 | 1280 | 1470 | 1630 | 1750 |
| | Cold start-up, kgs/hr | 2540 | 3447 | 4218 | 4808 | 5307 | 5670 |
| 1-1/2" | Hot (dripleg), kgs/hr | 367 | 485 | 580 | 666 | 739 | 793 |
| | Cold start-up, lbs/hr | 13000 | 18000 | 22500 | 26000 | 29000 | 32000 |
| | Hot (dripleg), lbs/hr | 1350 | 1750 | 2100 | 2400 | 2600 | 2800 |
| & 2" | Cold start-up, kgs/hr | 5896 | 8164 | 10206 | 11793 | 13154 | 14515 |
| | Hot (dripleg), kgs/hr | 612 | 793 | 952 | 1088 | 1179 | 1270 |

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.