

Delta Element Steam Traps

Model
DS12

CRN: Canadian Registration Number Available

FOR STEAM MAIN DRIPLEG AND CRITICAL TRACING

A lightweight steam trap for plant applications requiring sealed Stainless Steel construction for tracing services with operating pressures up to 150 psig.

- **Easy maintenance** – traps are in-line repairable when isolated from live steam system and can be up and running again in minutes
- **No live steam loss** – for greater energy efficiency and extended seat life, up to the minimum operating pressure
- **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
- **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
- **Continuous air and CO2 venting** – maximizes heat transfer while minimizing corrosion



ORDERING SCHEMATIC

| MODEL | | | | | | | |
|-------|---|---|---|---|---|---|---|
| D | S | 0 | 1 | 2 | 2 | 1 | 2 |

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

| 7 | CONNECTIONS |
|---|-------------|
| 1 | NPT |
| 2 | FSW |
| 8 | BSPT |
| 9 | BSPP |

| 8 | SPECIALITIES |
|---|--------------|
| 2 | Sealed |



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FOR STEAM MAIN DRIPLEG AND CRITICAL TRACING
SPECIFICATIONS

Maximum Operating Pressure: 150 psig (10,3 bar)

Maximum BODy Pressure: 500 psig (34,5 bar)

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

MATERIALS

Shell: Investment cast Stainless Steel CF3

Valve Seat: 303 SST

Cone: 17-4 SST

Bi-Metal: Stainless Steel NiCr

End Connections: NPT, BSPT, BSPP, SW

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

Line Sizes: 1/2", 3/4"

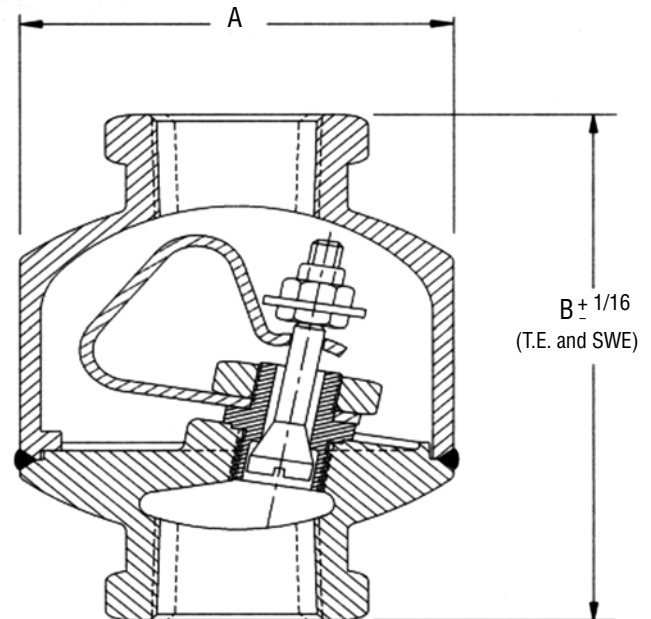
BESTOBELL'S DELTA ELEMENT . . . NO LIVE STEAM LOSS

A sophisticated, yet simple, design that will give you years of trouble-free service with absolutely no live steam loss. Bestobell's Delta Element is a triangular shaped bi-metal strip of austenitic and ferritic stainless steels. The materials are rolled together, shaped in the Delta pattern and then heat treated to eliminate stresses. The single blade design provides faster response than found with typical stacked arrangements due to the large surface to mass ratio. The stem is situated at a point that allows the expansion of the bimetal to exert a linear pull on the stem to prevent uneven wear on the sealing surfaces.

CAPACITY CHARTS: CONDENSATE CAPACITY AT OPERATING PRESSURE

| Model DS12 | | | | | | |
|------------|-------------------------------|----------|----------|----------|-----------|------------|
| Size | Operating Pressure, psi (bar) | 30 (2,1) | 60 (4,1) | 90 (6,2) | 120 (8,3) | 150 (10,3) |
| 1/2" | Cold start-up, lbs/hr | 2000 | 3100 | 4000 | 4400 | 4500 |
| | Hot (dripleg), lbs/hr | 80 | 95 | 105 | 110 | 115 |
| 3/4" | Cold start-up, kgs/hr | 907 | 1406 | 1814 | 1996 | 2041 |
| | Hot (dripleg), kgs/hr | 36 | 43 | 47 | 49 | 52 |

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.

MODEL DS12 SERIES DIMENSIONS


| Model DS12 | | | |
|------------------|-------|------|----------|
| 3/8", 1/2", 3/4" | A | B | Wt |
| inches | 2.625 | 3.75 | 1.8 lbs |
| mm | 67 | 95 | 0,82 kgs |

**dimensions shown are for threaded or socket weld ends, contact factory for other dimensions