Model DM25 Steam Traps

For steam main dripleg and critical tracing

The DM25 is a high performance, energy efficient steam trap that incorporates a Y-type strainer and integral check valve. For use on steam main dripleg and critical tracing service with differential pressures to 320 psig.

- **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 —** highly resistant to fatigue and corrosion and completely renewable.
- **Built-in strainer & check valve —** Y-type strainer protects trap from dirt while integral check valve prevents backflow during shutdown.
- **Modulating discharge —** automatically adjusts to operating pressure and load, overcoming problems associated with cyclic discharge.
- **Continuous air and CO_2 venting —** maximizes heat transfer while minimizing corrosion.
- **Fast start-up capabilities —** due to high cold discharge capacities.

BESTOBELL STEAM
Steam Traps and Steam Specialties

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Bestobell Model DM25 Steam Traps

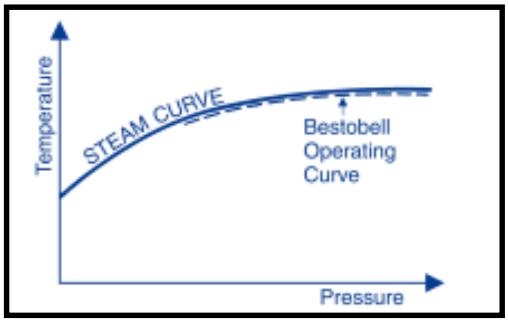
Bestobell's Delta Element ... no live steam loss

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 bimetal strip of austenitic and ferritic stainless steels. The materials are rolled together, shaped into 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 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.

Combining thermostatic & thermodynamic forces for optimal performance.



Following the steam curve is the key to efficient steam trap performance. Utilizing dual thermostatic/thermodynamic forces allows Bestobell delta traps to match the steam curve, meaning that the energy in the steam is efficiently used by the process and not wasted in operating the trap.

Bestobell traps are unique in that they employ a hybrid design that utilizes both thermostatic and thermodynamic principles to achieve a continuous *modulating* discharge of condensate *as it forms,* and *eliminate live steam loss.*

The combination of a temperature-sensitive closing force (thermostatic element) and a pressure-sensitive opening force (thermodynamic valve) overcomes the sluggishness and susceptibility to service failure that can be encountered with traditional bimetallic designs. The valve design utilizes the thermodynamic pressure forces of the flashing steam within a unique multi-staged variable orifice to provide quick response and a wide operating range closely approximating the steam curve.

Specifications

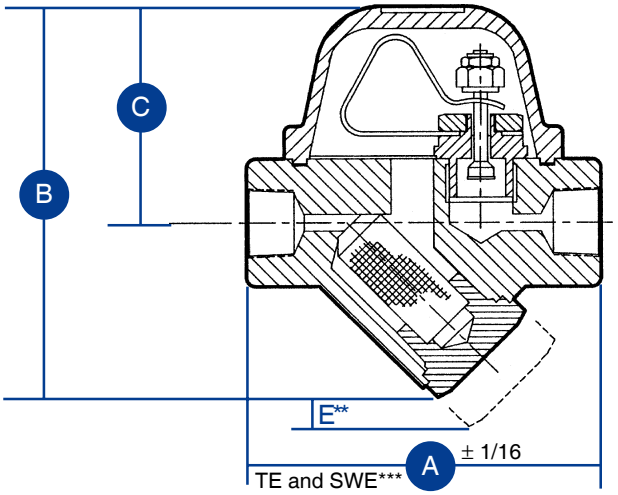
Maximum Differential Pressure: 320 psig (22 bar)
Maximum Body Pressure: 750 psig (52 bar)
Maximum Body Temperature: 650°F (343°C)
Line Sizes: 1/2" & 3/4"
End Connections: threaded (NPT), BSPT, BSPP, socket weld, raised face flanges (ANSI 150, 300, 600; or DIN)
Materials:

- Body & Cover: forged Carbon Steel
- Valve Seat & Cone: Stainless Steel
- Bimetal: Stainless Steel
- Strainer: Stainless Steel
- Nuts & Bolts: Steel
- Gasket: flexible Graphite

Options: double threaded strainer cap (DTC) for blowdown valve attachment; selection of blowdown valves

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

Dimensions



1/2 & 3/4	A	B	C	D	E	WT.
Inches	4	5	3-1/4	3-1/8	2-1/4	5.5 lbs
mm	102	127	83	79	57	2,5 kg

Notes: dimension D is overall width; **dimension E is withdrawal distance for strainer; *** for flanged, contact factory.

Capacity Charts: Condensate Capacity at Differential Pressure

		Consider Model DM12 in this range.							
Size	Differential Pressure, psi (bar)	50 (3,5)	100 (6,9)	120 (8,3)	150 (10,3)	200 (13,8)	250 (17,2)	300 (20,7)	320 (22,1)
1/2", 3/4"	Cold Start-Up, lbs/hr	1500	1950	2050	2200	2400	2600	2700	2800
	Hot Running, lbs/hr	70	80	85	90	100	105	110	110
	Cold Start-Up, Kg/hr	680	885	930	998	1090	1180	1220	1270
	Hot Running Load, Kg/hr	32	36	39	41	45	48	50	50

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