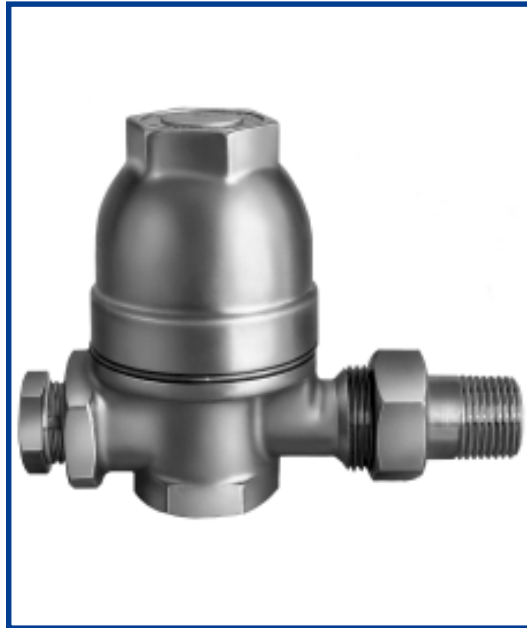


Model DMR6 Steam Traps

For process and space heating services



The DMR6 is a steam trap designed to provide sufficient capacity for wall radiators and space heaters up to 150,000 Btu/hour.

- **Versatile Design** — for right-angled or straight-through installations. Mount vertically or horizontally.
- **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 check valve** — prevents backflow during shutdown.
- **Modulating discharge** — automatically adjusts to operating pressure and load, overcoming problems associated with cyclic discharge.
- **Continuous air and CO₂ venting** — maximizes heat transfer while minimizing corrosion.
- **Fast start-up capabilities** — due to high cold discharge capacities.

Bestobell Model DMR6 Steam Traps

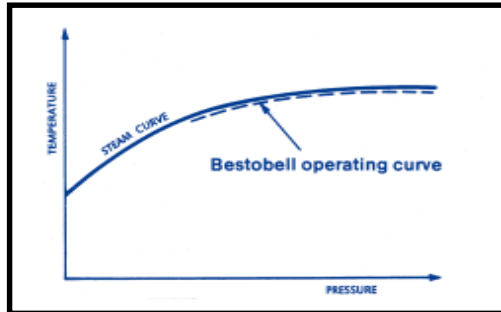
Bestobell's Delta Element ... no live steam loss

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: 70 psig

Maximum Body Pressure: 120 psig

Maximum Body Temperature: 400°F

Line Sizes: 1/2" & 3/4" (3/4" size uses adaptor)

End Connections: threaded (NPT)

Materials:

- Body & Cover: forged Brass
- Valve Seat & Cone: Stainless Steel
- Bimetal: Stainless Steel
- Tail Pipe: Brass
- Union Nut: Brass
- Gasket: flexible Graphite

Mounting: from horizontal to vertical (*see Installation & Maintenance Instructions*). Self-draining and freeze-resistant when mounted in vertical position. Outlet plug location determines whether discharge is right-angled or straight-through.

Dimensions

- Dimensions in Inches

A	B	C	D	E	F	G	H
3-3/4	3/4	1-3/4	4-1/8	2-3/16	1-3/4	2-7/8	1/2

- Dimensions in mm

A	B	C	D	E	F	G	H

Notes: 1) 1/2" or 3/4" MNPT plug provided on all traps; location of plug determines whether trap is right-angle or straight-through.

2) 1/2" FNPT x 3/4" MNPT bushing provided on 3/4" DMR6.

Weight: 1/2": 1.75 lbs. (kg); 3/4": 1.88 lbs. (kg)

Capacity Charts: Condensate Capacity at Differential Pressure

Size	Differential Pressure, psi (bar)	2 ()	5 ()	10 ()	20 ()	30 ()	40 ()	50 ()	60 ()	70 ()
1/2", 3/4"	Cold start-up, lbs/hr	400	700	1000	1400	1800	2200	2500	2700	2800
	Hot running load, lbs/hr	40	110	150	160	170	175	180	185	190
	Cold start-up, Kg/hr									
	Hot running load, Kg/hr									

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.