

# Delta Element Steam Traps

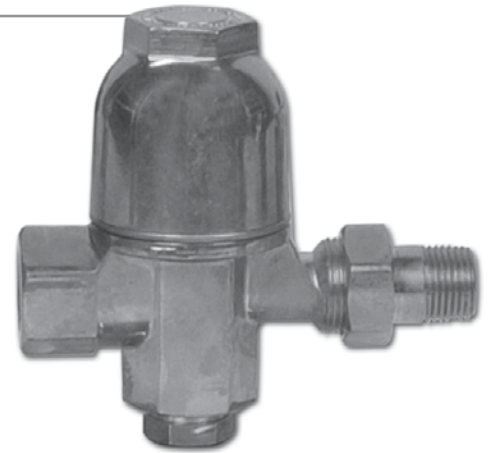
**Model  
DMR6**

CRN: Canadian Registration Number Available

## 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

- **Maximum Operating Pressure** – 70 psi / 4,8 bar
- **Versatile design** – for right angled or straight through installations, mount vertically or horizontally
- **Easy maintenance** – traps are in-line repairable when isolated from live steam system and can be up and running again in minutes
- **Fast start-up capabilities** – due to high cold discharge capabilities
- **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				6	7	8
D	M	R	0	6	6	1 0

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

7	CONNECTIONS
1	NPT
8	BSPT
9	BSPP

8	SPECIALITIES
0	None



A Division of  
Richards Industries  
3170 Wasson Road  
Cincinnati, OH 45209

toll free. 800.543.7311  
local. 513.533.5600  
fax. 513.871.0105

steam@richardsind.com  
www.bestobellsteamtraps.com

**FOR PROCESS AND SPACE HEATING SERVICES**
**SPECIFICATIONS**

Maximum Differential Pressure: 70 PSI (4,8 bar)

Maximum Operating Pressure: 120 PSI (8,3 bar)

Maximum Body Temperature: 400°F (204°C)

**MATERIALS**

Body & Cover: Forged Brass B283

Valve Seat: 303 SST

Cone: 17-4 SST

Bi-Metal: Stainless Steel NiCr

Tail Pipe: Brass B16

Union Nut: Brass B16

Gasket: Leaded Copper Clad, non-asbestos-filled

**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

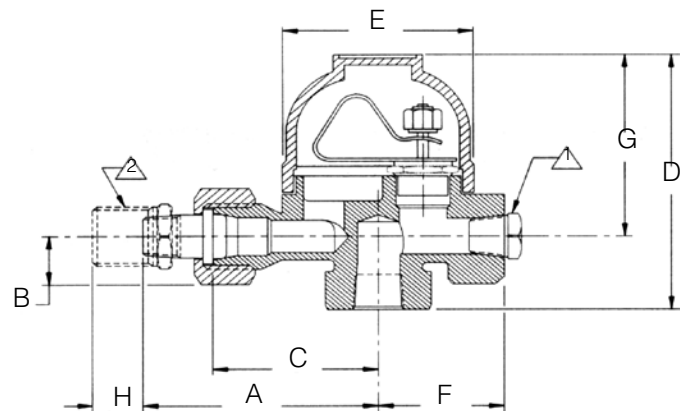
**Line Sizes:** 1/2", 3/4"

**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 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 (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.

**MODEL DMR6 DIMENSIONS**


		DMR6								
1/2", 3/4"	A	B	C	D	E	F	G	H	Wt	
inches	3.75	0.75	1.75	4.125	2.19	1.75	1.88	0.50	1.9 lbs	
mm	95	19	45	105	56	45	73	13	1,0 kgs	

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

**CAPACITY CHARTS: CONDENSATE CAPACITY AT OPERATING PRESSURE**

Model DMR6		For larger heating applications consider models 3A or GM3								
Size	Operating Pressure, psi (bar)	2 (0,14)	5 (0,34)	10 (0,70)	20 (1,4)	30 (2,1)	40 (2,8)	50 (3,5)	60 (4,1)	70 (4,8)
1/2"	Cold start-up, lbs/hr	400	700	1000	1400	1800	2200	2500	2700	2800
	Hot (dripleg), lbs/hr	40	110	150	160	170	175	180	185	190
3/4"	Cold start-up, kgs/hr	181	318	454	635	817	998	1134	1225	1270
	Hot (dripleg), kgs/hr	18	50	68	72	77	79	82	84	86

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.