# Delta Element Traps for Process Services

# Models M40-M64-M100 Steam Traps For high pressure process services



A series of heavy-duty steam traps in 1-1/2" & 2" sizes designed specifically for high pressure, high flow process applications. Featuring built-in Y-type strainers and check valves, this series can be used for services with differential pressures up to 900 psi (62 bar).

- No loss of live steam for greater energy efficiency and extended seat life.
- Single blade element a superior element design combining thermostatic and thermodynamic forces for long-term, trouble-free service. The single blade element is not prone to dirt build-up as encountered with many other bimetallic trap designs.
- Stainless Steel internals highly resistant to fatigue and corrosion and completely renewable.
- **Built-in strainer and check valve** y-type strainer is included to protect trap from dirt; 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<sub>2</sub> venting maximizes heat transfer while minimizing corrosion.
- Fast start-up capabilities due to high cold discharge capacities.



## Bestobell Models M40 - M64 - M100

### **Specifications**

#### **Maximum Differential Pressure:**

Model M40: 450 psi (31 bar)
Model M64: 600 psi (41 bar)
Model M100: 900 psi (62 bar)

Maximum Body Pressure: 1500 psig (103 bar)

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

Line Sizes: 1-1/2" & 2" (40 & 50 mm)

End Connections: threaded (NPT), BSPT, BSPP, socket weld — all models; raised face flanges — M40: ANSI 600; M64: ANSI 600 or 900; M100: ANSI 600, 900, 1500

#### **Materials:**

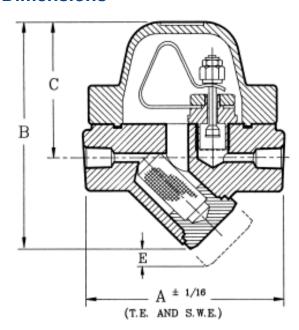
Body & Cover: forged Carbon Steel (A105)
 Valve Seat & Cone: Stainless Steel/Stellite

Bimetal: Stainless Steel
Strainer: Stainless Steel
Nuts & Bolts: forged Steel
Gasket: flexible Graphite

**Options:** Double Threaded Strainer Cap (DTSC) for blowdown valve attachment; selection of blowdown valves

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

#### **Dimensions**



Models M40 - M64 - M100									
1-1/2" & 2"	Α	В	С	D	Е	WT.			
Inches	8	9-3/4	6	8	4-3/8	50#			
mm	203,2	247,7	152,4	203,2	111,1	23 kg			

Notes: dimension D is overall width; dimension E is withdrawal distance for strainer. Dimensions shown are for traps with NPT or SW ends; for flanged ends, consult factory.

## **Capacity Charts: Condensate Capacity at Differential Pressure**

Model M40		Consider 25 Series in this range				
Size	Differential Pressure, psi (bar)	250 (17,23)	300 (20.,68)	350 (24,13)	400 (27,58)	450 (31,03)
1-1/2" & 2"	Cold Start-Up, lbs/hr	11000	15500	18000	20000	21000
	Hot Running, lbs/hr	1500	1800	1900	1950	1950
	Cold Start-Up, Kg/hr	4989	7030	8164	9071	9525
	Hot Running Load, Kg/hr	680	816	861	884	884
Model M64		Consider M40 Series in this range				
Size	Differential Pressure, psi (bar)	400 (27,58)	450 (31,03)	500 (34,47)	550 (37,92)	600 (41,37)
1-1/2" & 2"	Cold Start-Up, lbs/hr	11000	13250	15500	16500	17500
	Hot Running, lbs/hr	1900	1950	2000	2050	2100
	Cold Start-Up, Kg/hr	4989	6010	7030	7484	7937
	Hot Running Load, Kg/hr	861	884	907	929	952
Model M100		Consider M64 Series in this range				
Size	Differential Pressure, psi (bar)	550 (37,92)	600 (41,37)	700 (48,26)	800 (55,16)	900 (62,05)
1-1/2" & 2"	Cold Start-Up, lbs/hr	16500	17500	19000	20000	21000
	Hot Running, lbs/hr	2050	2100	2200	2300	2400
	Cold Start-Up, Kg/hr	7484	7937	8618	9071	9525
	Hot Running Load, Kg/hr	929	952	997	1043	1088

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.