

# Delta Element Steam Traps

Models: M40, M100, M64

FOR HIGH PRESSURE PROCESS SERVICES

A series of heavy duty steam traps in 1-1/2" and 2" sizes designed specifically for high pressure, high flow process applications, featuring built-in "Y" type strainers and check valves.

- Maximum differential pressure: 450 psi (31,0 bar) to 900 psi (62,1 bar)
- **Easy maintenance** traps are in-line repairable when isolated from live steam system and can be up and running again in minutes
- **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



**CRN: Canadian Registration Number Available** 

### ORDERING SCHEMATIC

MODEL				6	7	8
0	0	4	0			
MODEL				6	7	8
0	0	6	4			
MODEL				6	7	8
0	1	0	0			
	0 1 0	0 0 MODEL 0 0 MODEL	0 0 4 MODEL 0 0 6 MODEL	0     0     4     0       WODEL     4     4     4       0     0     6     4       MODEL     4     4     4	0 0 4 0   ₩ODEL 6   0 0 6   MODEL 6	0 0 4 0    ₩ODEL 6 7   MODEL 6 7

6	SIZE
6	1-1/2"
7	2"

7	CONNECTIONS
1	NPT (All)
2	FSW (AII)
5	600# Flange (All)
6	900# Flange (M64, M100)
7	1500# Flange (M100)
8	BSPT (AII)
9	BSPP (AII)
8	SPECIAL ITIES

8	SPECIALITIES
0	None
1	DTC
3	Integral Blowdown



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



# M40 M64 M100 SERIES

## **DELTA ELEMENT STEAM TRAPS**

## FOR HIGH PRESSURE PROCESS SERVICES

#### **SPECIFICATIONS**

Maximum Differential Pressure: Model M40: 450 psi (31,0 bar)

Model M64: 600 psi (41,4 bar)

Model M100: 900 psi (62,1 bar)

Maximum Allowable Pressure: 1500 psig (103,4 bar)

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

#### MATERIALS

Body & Cover: Forged Carbon Steel A105

Valve Seat 17-4 SST (coated) & Stem: 17-4 SST (coated)

Bi-Metal: Stainless Steel NiCr

Strainer: Stainless Steel 304

Bolts: ASTM-A193, B7

Gasket: Flexible Graphite

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

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

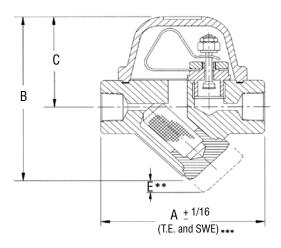
Line Sizes: All models: 1-1/2", 2"

#### End Connections:

All Models: NPT, BSPT, BSPP, SW, Raised Face Flanged ANSI 600# M64, M100: Raised Face Flanged ANSI 900# M100: Raised Face Flanges ANSI 1500#

#### CAPACITY CHARTS: CONDENSATE CAPACITY AT OPERATING PRESSURE

#### DIMENSIONS



Model M40, M64, M100							
1-1/2", 2"	А	В	С	D	E	Wt	
inches	8.00	9.75	6.00	8.00	4.375	50 lbs	
mm	203	248	152	203	111	23 kgs	

Notes: dimension D is overall width; \*\* dimension E is withdrawal distance for strainer, \*\*\*dimensions shown are for threaded or socket weld ends, contact factory for other dimensions

	Model M40	Cons	ider M25 in this			
Size	Operating Pressure, psi (bar)	250 (17,2)	300 (20,7)	350 (24,1)	400 (27,6)	450 (31,0)
	Cold start-up. lbs/hr	1100	15500	18000	20000	21000
1-1/2"	Hot (Dripleg), lbs/hr	1500	1800	1900	1950	1950
& 2"	Cold start-up, Kg/hr	4989	7030	8164	9071	9525
~ <u>~</u>	Hot (Dripleg), Kg/hr	680	816	861	884	884
	Model M64		ider M40 in this			
Size	Operating Pressure, psi (bar) Cold start-up, lbs/hr	400 (27,6)	450 (31,0)	500 (34,5)	550 (37,9)	600 (41,4)
	Cold start-up, lbs/hr	11000	13250	15500	16500	17500
1-1/2"	Hot (Driplea), lbs/hr	1900	1950	2000	2050	2100
& 2"	Cold start-up Kg/hr	4989	6010	7030	7484	7937
~ -	Hot (Dripleg), Kg/hr	861	884	907	929	952
	Model M100		Consider M64 in this range			
Size	Operating Pressure, psi (bar)	550 (37,9)	600 (41,4)	700 (48,3)	800 (55,2)	900 (62,0)
	Cold start-up. lbs/hr	16500	17500	19000	20000	21000
1-1/2"	Hot (Dripleg), lbs/hr	2050	2100	2200	2300	2400
& 2"	Cold start-up, Kg/hr	7484	7937	8618	9071	9525
	Hot (Dripleg), Kg/hr	929	952	997	1043	1088

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.

1 year parts & labor warranty available - consult factory for details