



BESTOBELLSTEAM

Steam Traps and Steam Specialties



Delta Element Trap

A sophisticated, yet simple, design that will provide years of trouble-free service with no live steam loss.

Bestobell Steam's Delta Element is a triangular shaped bimetal strip of austenitic and ferritic stainless steels. The materials are joined together using a patented state of the art process of Controlled Atmospheric Bonding. This process assures strong, consistent, and repeatable operation over the life of the trap. This bonded steel is then further processed for additional strength and shaped into the delta pattern and heat-treated to eliminate stresses. This entire process allows the Bestobell Delta Element traps long life with consistent operations.

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.

Thermostatic and Thermodynamic Forces

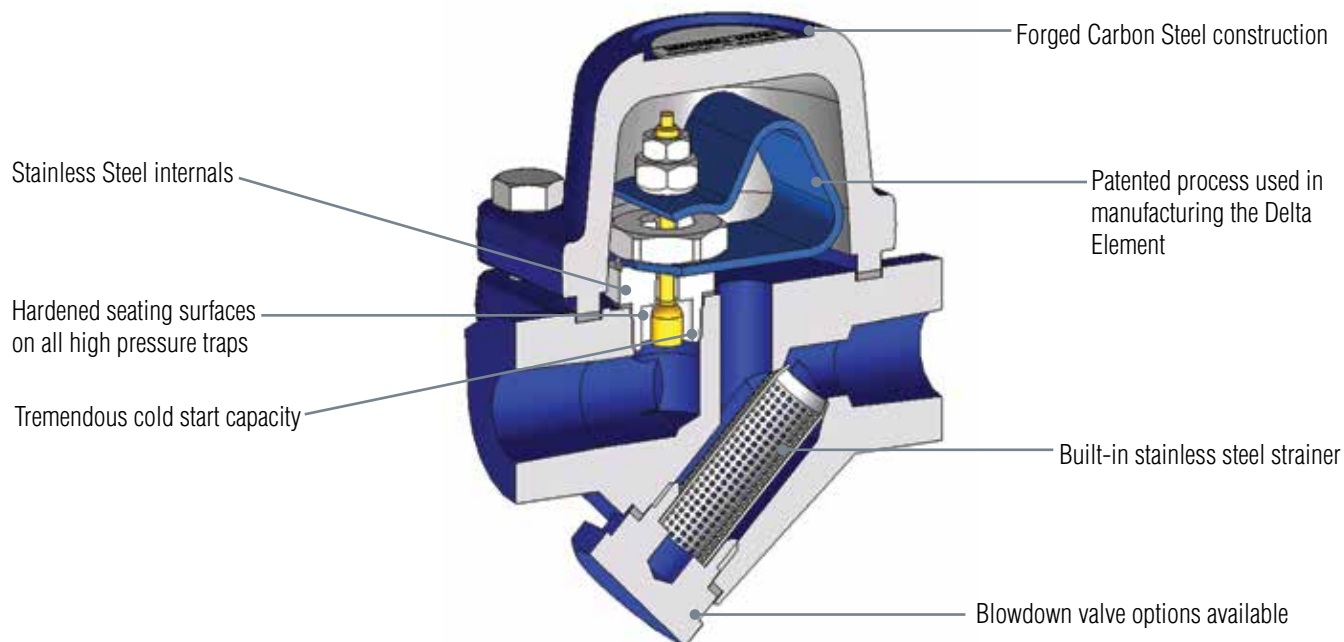
Bestobell Delta Element traps are unique in that they employ a hybrid design that utilizes both thermostatic and thermodynamic principles to achieve a continuous modulating discharge of condensate as it forms, and eliminates live steam loss.

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 to provide quick response and a wide operating range closely approximating the steam curve.

Integral Strainers and Check Valves

Bestobell Steam saves you the added expense of buying and installing separate strainers and check valves to complete your steam trap station. Most models include a built-in strainer to protect the trap internals from dirt or foreign matter in your steam system.

The valve stem acts as an integral check valve to prevent backward flow of condensate. The Delta Element trap can operate in applications with constant back pressures of up to 70% of inlet pressures due to the adjustable design on the element.



Energy Efficient Operation – Delta Element traps allow the process to use more heat energy from both the steam and condensate

3 Year Warranty against Live Steam Loss – For greater energy efficiency and long seat life, the Bestobell Delta Element is warranted up to three years against the loss of live steam in operation (up to 320 psi/22 bar)

Mount Horizontally or Vertically – The Delta Element steam trap is effective mounted either horizontally or vertically

Universal Trap Configuration Available

In-Line Repairability

Bestobell Steam Technology

Delta Element

- Long-term, trouble-free service due to single blade element, stainless internals, built-in strainer and check valve
- Only 30 - 40% of total pressure drop occurs over seating surface resulting in long valve life
- Problems due to cyclic discharge are eliminated with modulating discharge
- High cold discharge capacities provide fast start-up capabilities
- Excellent heat transfer and minimum corrosion by continuous air and CO₂ venting

Thermodynamic Disc

- Single moving part for minimal maintenance and long operating life
- High capacities
- Rugged design can withstand effects of water hammer and vibration

Inverted Bucket

- Unique linkage system provides for maximum flow capacities
- Increased trap life and minimal impact from corrosion is achieved by hardened stainless steel valve and seat
- Reliable and industry accepted design for applications where cyclic design is desirable

Float & Thermostatic

- Enhanced sensitivity to pressure and temperature conditions
- Continuous condensate discharge
- Maximum heat transfer is provided by separate internal air and CO₂ venting
- Easy in-line inspection and repair. Removable flush plug permits easy cleaning

Capsule

- Small and lightweight thermostatic design provides good discharge of condensate and non-condensable gases and is easily maintainable

Drain and Tracer Steam Traps

Drain and Tracer traps are used to discharge condensate from steam line drain and tracing applications.

Drain and Tracer Steam Traps

Model Number	Technology	Sizes	Body Materials	Max. Operating Pressure psi (bar)
DM6	Delta Element	3/8", 1/2", 3/4"	Carbon Steel	70 (4,8)
DM12	Delta Element	3/8", 1/2", 3/4"	Carbon Steel	150 (10,3)
DS12	Delta Element	1/2", 3/4"	Stainless Steel	150 (10,3)
DM25	Delta Element	1/2", 3/4"	Carbon Steel	320 (22,0)
IB18H	Inverted Bucket	1/2", 3/4", 1"	Cast Iron	250 (17,2)
IB18S	Inverted Bucket	1/2", 3/4", 1"	Cast Iron	250 (17,2)
IB18V	Inverted Bucket	1/2", 3/4", 1"	Cast Iron	250 (17,2)
IB21V	Inverted Bucket	1/2", 3/4"	Carbon Steel	300 (20,7)
IB41V	Inverted Bucket	1/2", 3/4", 1"	Carbon Steel	600 (41,4)
GSM17	Capsule	3/8", 1/2", 3/4"	Stainless Steel	250 (17,2)
GCM17	Capsule	1/2", 3/4", 1"	Carbon Steel	250 (17,2)
DT711	Thermodynamic Trap	3/8", 1/2", 3/4", 1"	Stainless Steel	711 (49,0)

Tracer (sub-cooled)

Model Number	Technology	Sizes	Body Materials	Max. Operating Pressure psi (bar)
M22	Delta Element	3/8", 1/2", 3/4"	Carbon Steel	300 (20,7)
TS22	Delta Element	1/2", 3/4"	Carbon Steel	300 (20,7)
TM22	Delta Element	3/8", 1/2", 3/4"	Stainless Steel	300 (20,7)

Freeze Protection & Drainage

Model Number	Technology	Sizes	Body Materials	Max. Operating Pressure psi (bar)
DM10E	Delta Element	3/8", 1/2", 3/4"	Carbon Steel	120 (8,3)

High Pressure Steam Traps

Use for removal of condensate from steam main drip lines, turbine drains, heaters and soot blowers.

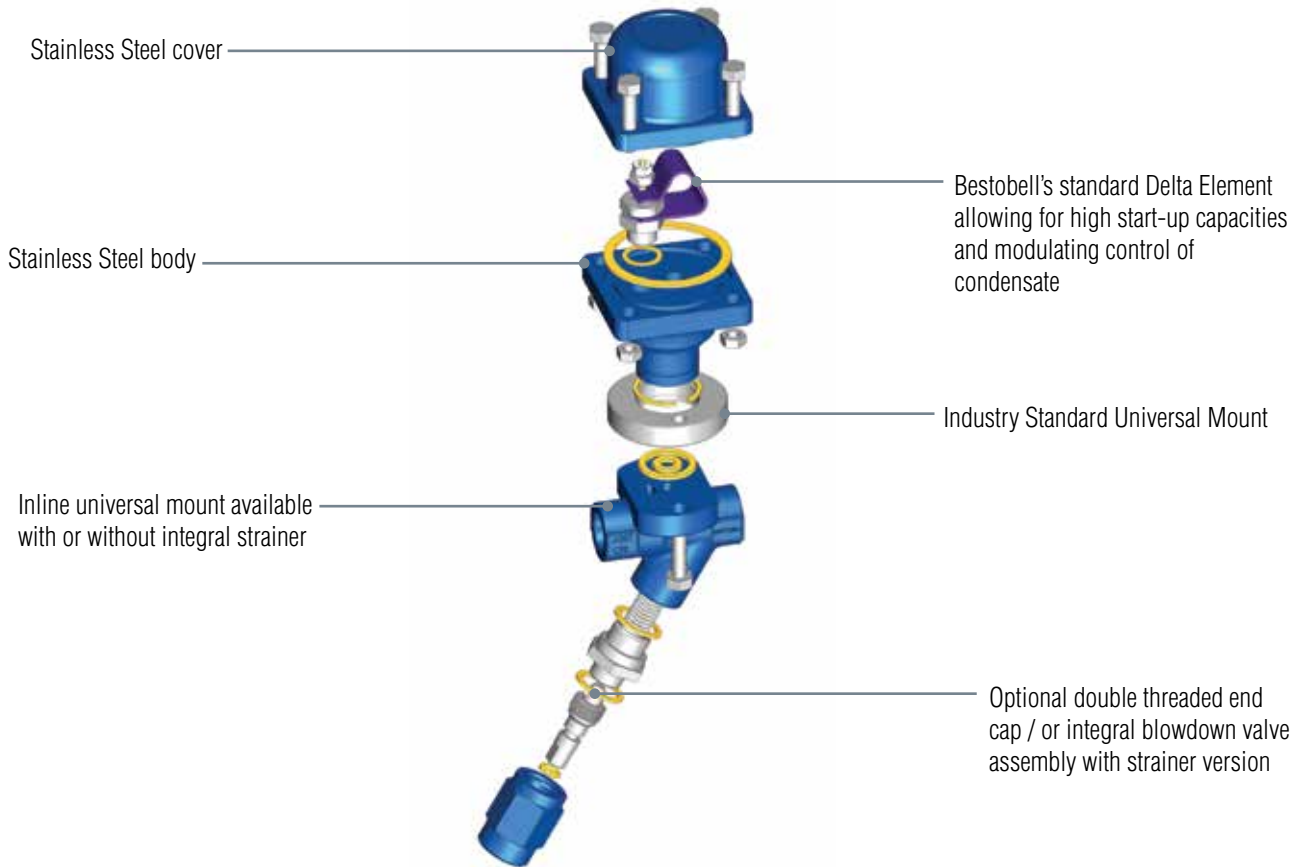
Model Number	Technology	Sizes	Body Materials	Max. Operating Pressure psi (bar)
DM40	Delta Element	1/2", 3/4", 1"	Carbon Steel	450 (31,0)
M40	Delta Element	1-1/2", 2"	Carbon Steel	450 (31,0)
DM64	Delta Element	1/2", 3/4", 1"	Carbon Steel	600 (41,4)
M64	Delta Element	1-1/2", 2"	Carbon Steel	600 (41,4)
DM100	Delta Element	1/2", 3/4", 1"	Carbon Steel & CrMo	900 (62,1)
M100	Delta Element	1-1/2", 2"	Carbon Steel	900 (62,1)
DM160	Delta Element	1/2", 3/4", 1"	CrMo	1500 (103,5)
DM320	Delta Element	1/2", 3/4", 1"	CrMo	2000 (137,9)
IB21V	Inverted Bucket	1/2", 3/4"	Carbon Steel	300 (20,7)
IB41V	Inverted Bucket	1/2", 3/4", 1", 1-1/2", 2"	Carbon Steel	600 (41,4)
DT711	Thermodynamic Disc	3/8", 1/2", 3/4", 1"	Stainless Steel	711 (49,0)

Process and Space Heating Steam Traps

These traps are used to discharge condensate from all manner of heat exchangers, tank preheat coils, platen presses, air heaters, paper machines, autoclaves, etc., that are used for process applications and air heating.

Number	Technology	Sizes	Body Materials	Max. Operating Pressure psi (bar)
3A	Delta Element	3/8", 1/2", 3/4"	Carbon Steel	30 (2,1)
GM3	Delta Element	1/2", 3/4", 1-1/4", 1-1/2", 2"	Carbon Steel	30 (2,1)
6A	Delta Element	3/8", 1/2", 3/4"	Carbon Steel	70 (4,8)
GM6	Delta Element	1/2", 3/4", 1-1/4", 1-1/2", 2"	Carbon Steel	70 (4,8)
M10	Delta Element	3/8", 1/2", 3/4"	Carbon Steel	120 (8,3)
GM10	Delta Element	1/2", 3/4", 1-1/4", 1-1/2", 2"	Carbon Steel	120 (8,3)
M16	Delta Element	1/2", 3/4", 1-1/4", 1-1/2", 2"	Carbon Steel	200 (13,8)
GM16	Delta Element	1/2", 3/4"	Carbon Steel	200 (13,8)
M25	Delta Element	1/2", 3/4", 1", 1-1/2", 2"	Carbon Steel	320 (22,0)
GM25	Delta Element	1/2", 3/4"	Carbon Steel	320 (22,00)
IB18H	Inverted Bucket	1/2" to 2"	Cast Iron	250 (17,2)
IB18S	Inverted Bucket	1/2", 3/4", 1", 1-1/4"	Cast Iron	250 (17,2)
IB18V	Inverted Bucket	1/2" to 2"	Cast Iron	250 (17,2)
IB21V	Inverted Bucket	1/2", 3/4"	Carbon Steel	300 (20,7)
IB41V	Inverted Bucket	1/2", 3/4", 1", 1-1/2", 2"	Carbon Steel	600 (41,4)
FT015	Float & Thermostatic	3/4", 1", 1-1/4" 1-1/2", 2"	Cast Iron	15 (1,1)
FT030	Float & Thermostatic	3/4", 1", 1-1/4" 1-1/2", 2"	Cast Iron	30 (2,2)
FT075	Float & Thermostatic	3/4", 1", 1-1/4" 1-1/2", 2"	Cast Iron	75 (5,1)
FT125	Float & Thermostatic	3/4", 1", 1-1/4" 1-1/2", 2"	Cast Iron	125 (8,6)
FTH10	Float & Thermostatic	3/8", 1/2", 3/4", 1"	Ductile Iron	711 (49,0)
GSM17	Capsule	3/8", 1/2", 3/4", 1"	Stainless Steel	250 (17,2)
GCM17	Capsule	1/2", 3/4", 1"	Carbon Steel	250 (7,2)
DT711	Thermodynamic Disc	3/8", 1/2", 3/4", 1"	Stainless Steel	711 (49,0)
Magnum	Delta Element High Capacity	Sized per application	Carbon Steel	320 (22,0)

Universal Delta Element Trap



Model Number	Technology	Body Type	Body Materials	Max. Operating Pressure psi (bar)
UDM25035	Delta Element	Universal	Stainless Steel	320 (22,0)
UGM03036	Delta Element	Universal	Stainless Steel	30 (2,1)
UGM06039	Delta Element	Universal	Stainless Steel	70 (4,8)
UGM10045	Delta Element	Universal	Stainless Steel	120 (8,3)
UM010004	Delta Element	Universal	Stainless Steel	120 (8,3)
UM022008	Delta Element	Universal	Stainless Steel	300 (20,7)
UM03A001	Delta Element	Universal	Stainless Steel	30 (2,1)
UM06A002	Delta Element	Universal	Stainless Steel	70 (4,8)

Model Number	Technology	Body Size	Body Materials	Max. Operating Pressure psi (bar)
UC0P0210	Universal Connection without integral strainer	1/2"	Stainless Steel	Trap installed sets Max. differential pressure
UC0P0310		3/4"	Stainless Steel	
UC0P0410		1"	Stainless Steel	
UC0S0210	Universal Connection with integral strainer	1/2"	Stainless Steel	Trap installed sets Max. differential pressure
UC0S0310		3/4"	Stainless Steel	
UC0S0410		1"	Stainless Steel	

To learn more about Bestobell Steam products and to find the name of a local representative visit:
www.bestobellsteamtraps.com

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Key markets include: chemical, petrochemical, water resources, oil & gas, refining and power. Other sectors include: paper products, tire and rubber, machinery and electrical equipment, transportation equipment and power generation.