MECHANICAL STEAM TRAPS
NOVA NFT250 SERIES
VARIABLE ORIFICE STEAM TRAPS
Pressures To 250 PSIG
Temperatures to 450°F

Applications
- Steam Lines
- Unit Heaters
- Process Equipment
- Oil Preheaters
- Steam Cookers
- Converters
- Steam Heated Vats
- Coils
- Pressing Machinery
- Rotating Drum

Proven Caged Stainless Steel Balanced Pressure Thermostatic Air Vent
automatically discharges air and non-condensables

Stainless Steel Strainer
with large screen area prevents dirt problems

Connections
Sizes 1/2” – 2” screwed NPT (BSPT optional)
Sizes 1 1/2” & 2” flanged optional ANSI 250

Weighted Stainless Steel Ball
multi-contact surface area modulates orifice discharge to provide smooth, continuous discharge and immediate response to load variations

Stainless Steel Sleeve
eliminates body erosion

Stainless Steel Seat
full bore prevents choking and permits ample capacities

Liquid Level
maintains seal over orifice to prevent live steam loss

Bottom & Side
Blowdown Connections for preventative maintenance

Guarantee
Traps are guaranteed against defects in materials or workmanship for 3 years.
NOVA NFT250 SERIES
VARIABLE ORIFICE
STEAM TRAPS

Pressures To 250 PSIG (17.2 barg)
Temperatures to 450°F (232°C)

All Stainless Steel Internal Components - Hardened valves and seats. Extra long life and dependable service. Resists water hammer. Protects against erosion and corrosion.
Erosion Proof - Discharge passage is protected with a stainless steel liner.
Integral Strainer - Stainless Steel screen prevents dirt problems. Blow-down connection provided.
Thermostatic Air Vent - Full balanced pressure element for immediate and complete air venting.
Variable Orifice - Condensate is discharged continuously through the seat ring which is modulated by the float. This provides a smooth, even flow without high velocity or steam entrainment.
SLR Orifice - Optional continuous bleed prevents flash steam lockup when it is impossible to install trap at low point in system.

Guarantee - Traps are guaranteed against defects in materials or workmanship for 3 years.

MODELS*
- NFT250 - Low capacity
- NFT251 - Medium capacity
- NFT252 - High capacity
- NFT253 - Super high capacity

Applications
- Steam Lines
- Process Equipment
- Steam Cookers
- Steam Heated Vats
- Pressing Machinery
- Unit Heaters
- Oil Preheaters
- Converters
- Coils
- Rotating Drum

Options
- SLR - SLR Orifice
- B - Blowdown Valve (contact factory)
- Orifice Continuous Bleed Air Vent
- 250# Flanged Connection*

* Available on NFT 253 only.

Canadian Registration # OE0591.9C

Operation
On startup, the thermostatic air vent (caged stainless welded bellows) is open, allowing air to flow freely through the vent valve orifice. When condensate flows into the trap, the float rises, allowing condensate to be discharged. Once air and non-condensibles have been evacuated, hot condensate will cause the thermostatic vent to close. Condensate will continue to be discharged as long as condensation occurs. During normal operation, an increase in the load causes the liquid level in the trap to rise. The float then rises and rolls off the seat ring, allowing more condensate to flow out. The float sinks as the condensate load decreases, moving nearer to the seat ring, decreasing the effective size of the orifice and allowing less condensate to discharge. This provides smooth, continuous operation that reacts instantly to load variation while maintaining a water seal over the seat ring to prevent live steam loss.
NOVA NFT250 SERIES
VARIABLE ORIFICE
STEAM TRAPS

SPECIFICATION

Steam trap shall be of float and thermostatic design. Float shall be free of levers, linkages, or other mechanical connections. Float shall be weighted to maintain orientation and shall act as the valve being free to modulate condensate through the seat ring. Air vent shall be of balanced pressure design with stainless steel welded encapsulated bellows capable of discharging air and noncondensable gases continuously within 15°F of saturated temperature. Trap shall contain integral strainer and stainless steel exhaust port sleeve. Trap shall be cast iron bodied suitable for pressures to 250 psi and available in 1/2" through 2" NPT or flanged.

<table>
<thead>
<tr>
<th>Model</th>
<th>Size</th>
<th>Connection</th>
<th>Inch (mm)</th>
<th>Weight Lb (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NFT250</td>
<td>1/2 &amp; 3/4</td>
<td>NPT</td>
<td>4 1/4 (108)</td>
<td>2 1/4 (69)</td>
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<tr>
<td>NFT251</td>
<td>3/4 &amp; 1</td>
<td>NPT</td>
<td>5 1/2 (140)</td>
<td>2 3/4 (74)</td>
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<tr>
<td>NFT252†</td>
<td>1 &amp; 1 1/2</td>
<td>NPT</td>
<td>11 (279)</td>
<td>2 1/2 (74)</td>
</tr>
<tr>
<td>NFT253</td>
<td>1 1/2 &amp; 2</td>
<td>NPT</td>
<td>15 1/2 (400)</td>
<td>2 1/2 (74)</td>
</tr>
</tbody>
</table>

**Dimensions**

**Materials of construction**

- Body and Cover ............Cast Iron ASTM A126B
- All Internal Parts ..........Stainless Steel
- Air Vent .......................Balanced Pressure, Stainless Steel
- Cover Gasket .................Graphite Fiber

**Maximum operating conditions**

- PMO: Max. Operating Pressure
- ORIFICE
  - 20 psig (1.4 barg)
  - 50 psig (3.5 barg)
  - 100 psig (6.9 barg)
  - 150 psig (10.3 barg)
  - 250 psig (17.2 barg)

- PMA: Max. Allowable Pressure: 250 psig (17.2 barg)

- TMA: Max. Allowable Temperature: 450°F (232°C)

**Maximum Capacity–lbs/hr (10°F Below Saturation)**

For Kg/hr Multiply by .454
**NOVA NFT650 SERIES**  
**VARIABLE ORIFICE**  
**STEAM TRAPS**

**Pressures To 650 PSIG (44.8 barg)**  
**Temperatures to 750°F (400°C)**

- **All Stainless Steel Internal Components** - Hardened valves and seats. Extra long life and dependable service. Resists water hammer. Protects against erosion and corrosion.
- **Erosion Proof** - Discharge passage is protected with a stainless steel liner.
- **Integral Strainer** - Stainless Steel screen prevents dirt problems. Blow-down connection provided.
- **Thermostatic Air Vent** - Provided with balanced pressure element for immediate and complete air venting.
- **Variable Orifice** - Condensate is discharged continuously through the seat ring which is modulated by the float. This provides a smooth, even flow without high velocity or steam entrainment.
- **SLR Orifice** - Optional continuous bleed prevents flash steam lockup when it is impossible to install trap at low point in system.
- **Guarantee** - Traps are guaranteed against defects in materials or workmanship for 3 years.

### MODELS

- **NFT651** - Low capacity
- **NFT652** - Medium capacity
- **NFT653** - High capacity

### Applications

- Steam Lines
- Process Equipment
- Steam Cookers
- Steam Heated Vats
- Pressing Machinery
- Unit Heaters
- Oil Preheaters
- Converters
- Coils
- Rotating Drum

### Options

- SLR - SLR Orifice
- B - Blowdown Valve (contact factory)
- Continuous Bleed Air Vent
- 300# or 600# Flanged Connection* (Raised Face)

*Available on NFT652 and NFT653 only.

Canadian Registration # OE0591.9C

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**Operation**

On startup, the thermostatic air vent (caged stainless welded bellows) is open, allowing air to flow freely through the vent valve orifice. When condensate flows into the trap, the float rises, allowing condensate to be discharged. Once air and non-condensibles have been evacuated, hot condensate will cause the thermostatic vent to close. Condensate will continue to be discharged as long as condensation occurs. During normal operation, an increase in the load causes the liquid level in the trap to rise. The float then rises and rolls off the seat ring, allowing more condensate to flow out. The float sinks as the condensate load decreases, moving nearer to the seat ring, decreasing the effective size of the orifice and allowing less condensate to discharge. This provides smooth, continuous operation that reacts instantly to load variation while maintaining a water seal over the seat ring to prevent live steam loss.
NOVA NFT650 SERIES
VARIABLE ORIFICE
STEAM TRAPS

SPECIFICATION

Steam trap shall be of float and thermostatic design. Float shall be free of levers, linkages, or other mechanical connections. Float shall be weighted to maintain orientation and shall act as the valve being free to modulate condensate through the seat ring. Air vent shall be of balanced pressure design with stainless steel welded encapsulated bellows capable of discharging air and noncondensable gases continuously within 15°F of saturated temperature. Trap shall contain integral strainer and stainless steel exhaust port sleeve. Trap shall be cast steel bodied suitable for pressures to 650 psi and available in 1/2" through 2" NPT, Socket Weld, or flanged.

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Model</th>
<th>Size</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>Weight lb (kg)</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>NFT651</td>
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<td>3/8&quot;</td>
<td>3/8&quot;</td>
<td>5/8&quot;</td>
<td>7/8&quot;</td>
<td>21 (9.5)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>11&quot;</td>
<td>13&quot;</td>
<td>13&quot;</td>
<td>2 1/4&quot;</td>
<td>8&quot;</td>
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</tr>
<tr>
<td></td>
<td>NFT652</td>
<td>1 1/2 &amp; 2</td>
<td>15&quot;</td>
<td>15&quot;</td>
<td>15&quot;</td>
<td>15&quot;</td>
<td>87 (39.5)</td>
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<tr>
<td></td>
<td></td>
<td>13&quot;</td>
<td>17&quot;</td>
<td>17&quot;</td>
<td>3/4&quot;</td>
<td>11/2&quot;</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>NFT653</td>
<td>2</td>
<td>16&quot;</td>
<td>17&quot;</td>
<td>3/4&quot;</td>
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<table>
<thead>
<tr>
<th>Materials of construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body &amp; Cover ..............ASTM A216 Grade WCB</td>
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</tbody>
</table>
| Cover Gasket ................Spiral Wound 304 Stainless Steel
...................................w/graphite filler |
| All Internal................Stainless Steel |

Maximum operating conditions

PMO: Max. Operating Pressure

<table>
<thead>
<tr>
<th>ORIFICE</th>
<th>PMO</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>20 psig (1.4 barg)</td>
</tr>
<tr>
<td>50</td>
<td>50 psig (3.5 barg)</td>
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<tr>
<td>100</td>
<td>100 psig (6.9 barg)</td>
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<tr>
<td>175</td>
<td>175 psig (12.1 barg)</td>
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<tr>
<td>300</td>
<td>300 psig (20.7 barg)</td>
</tr>
<tr>
<td>400</td>
<td>400 psig (27.6 barg)</td>
</tr>
<tr>
<td>600</td>
<td>600 psig (41.4 barg)</td>
</tr>
</tbody>
</table>

TMA: Max. Allowable Temperature: 750°F (400°C)

Maximum Capacity - lbs/hr (10 degrees Below Saturation)

| Trap | Orifice inch (mm) | Max. \( \Delta P \) \( \text{barg} \) | 1 | 5 | 10 | 20 | 50 | 75 | 100 | 150 | 175 | 200 | 250 | 300 | 400 | 500 | 600 |
|------|-------------------|----------------------------------|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
|      |                   | 0.277                           | 20 | 590 | 1600 | 1240 | 2460 |
|      |                   | 0.209                           | 50 | 760 | 1800 | 1540 | 3100 |
|      |                   | 0.157                           | 100 | 850 | 2400 | 2100 | 4200 |
|      |                   | 0.141                           | 150 | 950 | 2900 | 2600 | 5200 |
|      |                   | 0.130                           | 200 | 1050 | 3400 | 3100 | 6200 |
|      |                   | 0.120                           | 250 | 1150 | 3900 | 3600 | 7400 |
|      |                   | 0.106                           | 300 | 1250 | 4400 | 4100 | 8800 |
|      |                   | 0.096                           | 350 | 1350 | 4900 | 4600 | 10000 |
|      |                   | 0.081                           | 400 | 1450 | 5400 | 5100 | 11000 |
|      |                   | 0.071                           | 450 | 1550 | 5900 | 5600 | 12000 |
|      |                   | 0.063                           | 500 | 1650 | 6400 | 6100 | 13000 |
|      |                   | 0.056                           | 550 | 1750 | 6900 | 6600 | 14000 |
|      |                   | 0.049                           | 600 | 1850 | 7400 | 7100 | 15000 |

For Kg/Hr Multiply by .454
FTN SERIES
FLOAT & THERMOSTATIC
STEAM TRAPS

Pressures To 125 PSIG (8.6 barg)
Temperatures to 450°F (232°C)

Universal Four-port Design - Four possible hookup combinations of the “H” pattern body and piping dimensions similar to other major manufacturers allow maximum installation flexibility for easy replacement of other traps. Inlet and outlet taps on larger sized traps located in the cover to permit larger capacities.

All Stainless Steel Internal Components - Hardened valves and seats. Extra long life and dependable service. Resists water hammer. Protects against erosion and corrosion.

Balanced Pressure Thermostatic Element - allows venting of non-condensibles while operating at design pressure.

Rugged Welded Stainless Steel Element - Increases service life.

Wide Selection of Differential Pressures - Sizes 3/4” to 2” available with 15, 30, 75 and 125 psig differential pressures.

Air Line Water Removal - Special configuration FTNA optimized for compressed air service.

Repairable In-line - Can be serviced without disturbing system piping.

**MODELS**
- FTN-15–Steam pressures to 15 PSIG
- FTN-30–Steam pressures to 30 PSIG
- FTN-75–Steam pressures to 75 PSIG
- FTN-125–Steam pressures to 125 PSIG
- FTNA-75–Air pressures to 75 PSIG
- FTNA-125–Air pressures to 125 PSIG

**Applications**
- Unit Heaters & other Space Heating
- Equipment
- Heat Exchangers/Reboilers
- Steam Heating Coils
- Steam Main Drips
- Air Compressor Receivers
- Air Line Drips
- Air Powered Process Equipment

**Options**
- Repair Kits

**Installation Tip:** Always install STV Test & Block Valve as part of trap station
SEE PAGE 118

**Installation Tip:** Add Uniflex Pipe Coupling for ease of maintenance
SEE PAGE 102

**Operation**
Air entering trap is immediately discharged through the high capacity integral air vent. The thermostatic vent will close just prior to saturation temperature. The balanced design will allow venting of non-condensibles that collect in the float chamber when operating at design pressure. When steam enters the trap, the thermostatic air vent closes to prevent steam loss. When steam gives up its latent heat, it becomes condensate. This “condensate” enters the trap and causes the stainless steel ball float to rise. Raising of the float opens the discharge valve, allowing condensate to be continuously discharged as it enters the trap. The condensate level in the trap body is maintained above the discharge seat, providing a positive seal against the loss of steam.
FTN SERIES
FLOAT & THERMOSTATIC STEAM TRAPS

SPECIFICATION
Steam trap shall be of float and thermostatic design. Float shall actuate the valve via a hinged lever and linkage. Air vent shall be of balanced pressure design with stainless steel welded encapsulated bellows capable of discharging air and noncondensable gases continuously within 15°F of saturated temperature. Traps through 1-1/4" shall employ "H" pattern connections to accommodate multiple piping configurations. Trap shall be cast iron bodied suitable for pressures to 125 psi and available in 3/4" through 2" NPT.

For Air Traps, 1/8" NPT tap at top boss for balancing line.

Materials of construction
Body & Cover ..............Cast Iron ASTM A126B
All Internal...............Stainless Steel
Air Vent (FTN only) ...Balanced Pressure,
Welded Stainless Steel

Maximum operating conditions
PMO: Max. Operating Pressure
ORIFICE PMO
15 15 psig (1.03 barg)
30 30 psig (2.07 barg)
75 75 psig (5.17 barg)
125 125 psig (8.62 barg)

PMA: Max. Allowable Pressure 250 psig (17.2 barg)
TMA: Max. Allowable Temperature 450°F (232°C)

| Trap | Size NPT | Orifice inch | 1/4 (0.17) | 1/2 (0.34) | 1 (0.69) | 2 (1.38) | 5 (1.345) | 10 (1.690) | 15 (1.03) | 20 (1.38) | 25 (1.72) | 30 (2.07) | 40 (2.76) | 50 (3.45) | 75 (5.17) | 100 (6.90) | 125 (8.62) |
|------|----------|--------------|------------|------------|----------|----------|-----------|-----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| FTN-15 | 3/4” | .218 | 279 | 369 | 489 | 650 | 785 | 1000 | 1075 | 1210 | 1300 | 1370 |
| FTN-15 | 1” | .218 | 279 | 369 | 489 | 650 | 785 | 1000 | 1075 | 1210 | 1300 | 1370 |
| FTN-15 | 1 1/2” | .312 | 600 | 770 | 980 | 1240 | 1640 | 2000 | 2340 |
| FTN-15 | 2” | .500 | 1100 | 1700 | 2400 | 3300 | 5000 | 6600 | 7600 | 9000 | 10900 |
| FTN-30 | 3/4” | .218 | 279 | 369 | 489 | 650 | 785 | 1000 | 1075 | 1210 | 1300 | 1370 |
| FTN-30 | 1” | .218 | 279 | 369 | 489 | 650 | 785 | 1000 | 1075 | 1210 | 1300 | 1370 |
| FTN-30 | 1 1/2” | .312 | 600 | 770 | 980 | 1240 | 1640 | 2000 | 2340 |
| FTN-30 | 2” | .500 | 1100 | 1700 | 2400 | 3300 | 5000 | 6600 | 7600 | 9000 | 10900 |
| FTN-75† | 3/4” | .166 | 160 | 213 | 280 | 365 | 520 | 700 | 795 | 875 | 930 | 970 |
| FTN-75† | 1” | .166 | 160 | 213 | 280 | 365 | 520 | 700 | 795 | 875 | 930 | 970 |
| FTN-75† | 1 1/4” | .312 | 550 | 725 | 960 | 1300 | 1900 | 2650 | 3050 | 3400 | 3700 | 4000 |
| FTN-75† | 1 1/2” | .312 | 550 | 725 | 960 | 1300 | 1900 | 2650 | 3050 | 3400 | 3700 | 4000 |
| FTN-75† | 2” | .421 | 850 | 1100 | 1500 | 2000 | 3100 | 4150 | 4750 | 5200 | 5500 | 5800 |
| FTN-125† | 3/4” | .125 | 100 | 135 | 175 | 230 | 330 | 415 | 500 | 585 | 620 | 685 |
| FTN-125† | 1” | .125 | 100 | 135 | 175 | 230 | 330 | 415 | 500 | 585 | 620 | 685 |
| FTN-125† | 1 1/4” | .246 | 420 | 520 | 680 | 890 | 1300 | 1700 | 2050 | 2300 | 2500 | 2700 |
| FTN-125† | 1 1/2” | .246 | 420 | 520 | 680 | 890 | 1300 | 1700 | 2050 | 2300 | 2500 | 2700 |
| FTN-125† | 2” | .332 | 550 | 675 | 880 | 1225 | 1950 | 2600 | 3000 | 3250 | 3500 | 3800 |

For Kg/hr Multiply by .454
†For FTNA capacities, multiply by 1.33.
MAX-FLO
SUPER HIGH CAPACITY FLOAT & THERMOSTATIC STEAM TRAPS

Pressures to 175 PSIG (12.1 barg)
Temperatures to 377°F (192°C)

- High Capacities
- Rugged cast iron body and cover
- Stainless steel thermostatic element eliminates air binding
- Stainless steel float and lever mechanism
- Below condensate level seat design prevents steam leakage
- Resistant to water hammer and corrosion
- In-Line repairable

MODELS

- **HC-15** - Steam pressures to 15 PSIG
- **HC-30** - Steam pressures to 30 PSIG
- **HC-75** - Steam pressures to 75 PSIG
- **HC-125** - Steam pressures to 125 PSIG
- **HC-175** - Steam pressures to 175 PSIG

Applications

- Very High Condensate Loads
- Continuous Drainage With High Air Venting
- Capacity Requirements
- Industrial And Commercial Applications
- Absorption Systems
- Air Handling Coils
- Heat Exchangers
- Dryers Evaporators
- Hot water Generators
- Rendering Machines
- Steam Process Equipment
- Air Make-up Coils
- Unit Heaters And Cooking Kettles

Installation Tip: Always install STV Test & Block Valve as part of trap station
SEE PAGE 118

Installation Tip: Add Uniflex Pipe Coupling for ease of maintenance
SEE PAGE 102

Operation

During startup, air and non-condensible gases enter the trap and are automatically vented through an accurate balanced pressure internal thermostatic air vent. As condensate enters the trap, the float and lever mechanism is raised, lifting the valve off the seat, discharging the condensate. Condensate will continue to be discharged at the same rate at which it is entering. Any air or non-condensible gas that may accumulate will be continually and efficiently passed by the thermostatic air vent.
MAX-FLO
SUPER HIGH CAPACITY FLOAT & THERMOSTATIC STEAM TRAPS

SPECIFICATION

Steam trap shall be of float and thermostatic design. Float shall actuate the valve via a hinged lever and linkage. Air vent shall be of balanced pressure design with stainless steel welded encapsulated bellows capable of discharging air and noncondensable gases continuously. Trap shall be cast iron bodied suitable for pressures to 175 PSI and shall be a ______ NPT connection.

Materials of construction

Body & Cover .................. Cast Iron 30,000 psi tensile
Valve Pin and Seat .......... Stainless Steel (Hardened)
Float ............................ Stainless Steel
Lever Assembly ............. Stainless Steel
Thermostatic Air Vent .... Stainless Steel Cage & Thermal Element
Cover Bolts ................... Grade 5
Baffle ........................... Stainless Steel

(2-1/2 (65mm) units only)

Maximum operating conditions

PMO: Max. Operating Pressure 175 PSIG (12.1 barg)
TMO: Max. Operating Temperature saturated at pressure
PMA: Max. Allowable Pressure 175 PSIG (12.1 barg)
PMA: Max. Allowable Pressure 377ºF (192ºC)

Dimensions

<table>
<thead>
<tr>
<th>Model</th>
<th>NPT Size in. (mm)</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>J</th>
<th>K</th>
<th>L</th>
<th>Weight lbs (kg)</th>
</tr>
</thead>
<tbody>
<tr>
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<td>1½ &amp; 1½ (32 &amp; 40)</td>
<td>4%</td>
<td>8%</td>
<td>8%</td>
<td>3%</td>
<td>2%</td>
<td>—</td>
<td>4½</td>
<td>1½</td>
<td>—</td>
<td>—</td>
<td>18</td>
<td>8</td>
</tr>
<tr>
<td>ALL</td>
<td>2 (50)</td>
<td>10</td>
<td>15</td>
<td>15</td>
<td>6%</td>
<td>4%</td>
<td>3%</td>
<td>3%</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>108</td>
<td>49</td>
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<tr>
<td>ALL</td>
<td>2½ (65)</td>
<td>14%</td>
<td>20%</td>
<td>17%</td>
<td>9%</td>
<td>14%</td>
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<td>5</td>
<td>12</td>
<td>1%</td>
<td>1%</td>
<td>175</td>
<td>79</td>
</tr>
</tbody>
</table>

Maximum Capacity-lbs/hr

| Trap    | Orifice Size | 1/4 (0.017) | 1/2 (0.035) | 5/8 (0.062) | 3/4 (0.094) | 1 (1.0) | 13/16 (1.03) | 1 1/16 (1.06) | 1 1/2 (1.37) | 2 (1.4) | 2 1/4 (1.55) | 2 1/2 (1.69) | 2 1/4 (1.55) | 3 (2.1) | 4 (2.8) | 5 (3.5) | 6 (4.2) | 7 (5.2) | 10 (6.9) | 125 (8.6) | 150 (10.4) | 175 (12.1) |
|---------|--------------|--------------|--------------|--------------|--------------|---------|---------------|---------------|---------------|---------|---------------|---------------|--------------|---------|-------|---------|--------|--------|---------|----------|---------|----------|----------|
| HC-15, 2" | .970 | 6500 | 8000 | 9500 | 10800 | 15500 | 20900 | 24000 | 28000 | 32000 | 36000 | 40000 | 44000 | 48000 | 52000 | 56000 | 60000 | 64000 | 68000 | 72000 | 76000 | 80000 |
| HC-15, 1½" | 1.875 | 17000 | 20000 | 27000 | 36000 | 46000 | 55000 | 60000 | 65000 | 70000 | 75000 | 80000 | 85000 | 90000 | 95000 | 100000 | 105000 | 110000 | 115000 | 120000 | 125000 | 130000 |
| HC-30, 2" | .876 | 3400 | 4600 | 6400 | 8400 | 12500 | 16900 | 21500 | 23500 | 26000 | 29000 | 32000 | 35000 | 38000 | 41000 | 44000 | 47000 | 50000 | 53000 | 56000 | 59000 |
| HC-30, 1½" | 1.624 | 14000 | 17000 | 20900 | 25300 | 33200 | 45500 | 52700 | 55600 | 60000 | 64000 | 68000 | 72000 | 76000 | 80000 | 84000 | 88000 | 92000 | 96000 | 100000 | 104000 |
| HC-75, 2" | .858 | 2550 | 3150 | 4300 | 5450 | 7600 | 11400 | 12500 | 13500 | 14250 | 15600 | 17150 | 18600 | 20500 | 22400 | 24300 | 26200 | 28100 | 30000 | 31900 | 33800 |
| HC-75, 1½" | 1.031 | 5900 | 7700 | 10000 | 13000 | 18600 | 24200 | 28300 | 31600 | 34400 | 36800 | 41100 | 44800 | 48040 | 52300 | 56600 | 60900 | 65200 | 69500 | 73800 | 78100 |
| HC-125, 2" | .448 | 2300 | 2800 | 3450 | 4200 | 5450 | 6600 | 7450 | 8050 | 8600 | 8950 | 10350 | 11950 | 13400 | 15600 | 18850 | 21800 | 24800 | 27800 | 30800 | 33800 |
| HC-125, 1½" | .797 | 4000 | 5300 | 6900 | 9100 | 13000 | 17100 | 20000 | 22400 | 24500 | 26300 | 29400 | 32100 | 34650 | 37600 | 42100 | 46000 | 50000 | 54000 | 58000 |
| HC-175, 1½" | .210 | 260 | 350 | 480 | 640 | 940 | 1190 | 1450 | 1560 | 1670 | 1750 | 1910 | 2040 | 2100 | 2300 | 2500 | 2900 | 3100 | 3240 | 3400 | 3600 |
| HC-175, 2" | .375 | 2100 | 2600 | 3000 | 3500 | 4400 | 4900 | 5350 | 5800 | 6250 | 6700 | 7600 | 8600 | 9500 | 11000 | 13000 | 14750 | 16500 | 18000 | 19500 | 21000 |
| HC-175, 2½" | .688 | 2460 | 3350 | 4600 | 6200 | 9400 | 12800 | 15400 | 17500 | 19300 | 21000 | 23800 | 26300 | 28060 | 31600 | 35900 | 39700 | 43100 | 46200 | 49400 |

For Kg/Hr Multiply by .454
FTE SERIES
FLOAT & THERMOSTATIC STEAM TRAPS

Pressures to 464 PSIG (32 barg)
Temperatures to 850°F (454°C)

- High Capacities
- Rugged cast iron, ductile iron or cast steel body and cover
- Stainless steel thermostatic element eliminates air binding
- Stainless steel float and lever mechanism
- Below condensate level seat design prevents steam leakage
- Resistant to water hammer and corrosion
- In-Line repairable

Applications
- Very High Condensate Loads
- Continuous Drainage With High Air Venting
- Capacity Requirements
- Industrial And Commercial Applications
- Absorption Systems
- Air Handling Coils
- Heat Exchangers
- Dryers Evaporators
- Hot water Generators
- Rendering Machines
- Steam Process Equipment
- Air Make-up Coils
- Unit Heaters And Cooking Kettles

MODELS *

CAST IRON BODY
- FTE-10 – To 200 PSIG Threaded Connections
- FTE-43 – To 200 PSIG Flanged Connections

DUCTILE IRON BODY
- FTE-14 – To 200 PSIG Threaded Connections

CAST STEEL BODY
- FTE-44 – To 465 PSIG Threaded/Socket Weld Connections
- FTE-44F – To 465 PSIG Flanged Connections

Note: * Add “S” to end of model for SLR

Options
- BSPT Threaded connection
- S-SLR Orifice
- Socket Weld connection on FTE-44
- Flanged connections
  - ANSI 125/150, 300, 600
  - DIN 10, 16, 25 or 40
  - BS10 - F, H, J, K or R

Installation Tip: Always install STV Test & Block Valve as part of trap station
SEE PAGE 118

Operation

During startup, air and non-condensible gases enter the trap and are automatically vented through an accurate balanced pressure internal thermostatic air vent. As condensate enters the trap, the float and lever mechanism is raised, lifting the valve off the seat, discharging the condensate. Condensate will continue to be discharged at the same rate at which it is entering. Any air or non-condensible gas that may accumulate will be continually and efficiently passed by the thermostatic air vent.
FTE SERIES
FLOAT & THERMOSTATIC STEAM TRAPS

SPECIFICATION
Steam trap shall be of float and thermostatic design. Float shall actuate the valve via a hinged lever and linkage. Air vent shall be of balanced pressure design with stainless steel welded encapsulated bellows capable of discharging air and noncondensable gases continuously. Trap shall be _______ bodied suitable for pressures to ________ PSI and shall be a ________ connection.

Maximum operating conditions
CAST IRON/DUCTILE IRON
PMO: Max. Operating Pressure see orifice selection
TMO: Max. Operating Temperature saturated at pressure
PMA: Max. Allowable Pressure 232 psig (16 barg)
TMA: Max. Allowable Pressure 850ºF (454ºC)

CAST STEEL
PMO: Max. Operating Pressure see orifice selection
TMO: Max. Operating Temperature saturated at pressure
PMA: Max. Allowable Pressure 465 psig (32 barg)
TMA: Max. Allowable Pressure 850ºF (454ºC)

Maximum Capacity—lbs/hr (10ºF Below Saturation)

<table>
<thead>
<tr>
<th>Trap Size</th>
<th>Size Code</th>
<th>Orifice (in.)</th>
<th>Max ∆P 5</th>
<th>Orifice (in.)</th>
<th>10</th>
<th>Differential Pressure-PSIG (barg)</th>
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<td>19800</td>
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<td>FTE-44 &amp; 44F</td>
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</table>

For Kg/Hr Multiply by .454

Materials of construction
Body & Cover ........ Cast Iron (ASTM A48 Cl. 30)
Ductile Iron (DIN 1693 GGG 40)
Cast Steel (ASTM A216 Gr. WCB)
Valve ................. Stainless Steel 304 (up to 1")
Stainless Steel 410 (1 1/2", 2")

Connections: ½”– 2” NPT, Flanged or Socket Weld
SERIES FTE DIMENSIONS

 DIMENSIONS inches (mm) AND WEIGHTS pounds (kg)  
SERIES FTE-10 & FTE 44

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<td>2%</td>
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<td>(54)</td>
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<td>2%</td>
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<td>(128)</td>
<td>(54)</td>
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<tr>
<td>1</td>
<td>5%</td>
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<td>1%</td>
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<td></td>
<td>(282)</td>
<td>(127)</td>
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 DIMENSIONS inches (mm) AND WEIGHTS pounds (kg)  
SERIES FTE-14

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<td>(108)</td>
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### SERIES FTE DIMENSIONS

#### DIMENSIONS inches (mm) AND WEIGHTS pounds (kg)

**SERIES FTE-43**

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<td>B:2 (54)</td>
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<td>A:6 (160)</td>
<td>B:4 (110)</td>
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<td>1</td>
<td>A:9 (230)</td>
<td>B:5 (127)</td>
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<tr>
<td>2</td>
<td>A:9 (230)</td>
<td>B:5 (140)</td>
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#### DIMENSIONS inches (mm) AND WEIGHTS pounds (kg)

**SERIES FTE-44F**

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<td>B:2 (54)</td>
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<td>3/4</td>
<td>A:8 (210)</td>
<td>B:2 (54)</td>
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<tr>
<td>1</td>
<td>A:8 (210)</td>
<td>B:4 (110)</td>
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<tr>
<td>1</td>
<td>A:12 (325)</td>
<td>B:5 (127)</td>
</tr>
<tr>
<td>2</td>
<td>A:12 (325)</td>
<td>B:5 (140)</td>
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</tbody>
</table>
DURA-FLO
INVERTED BUCKET STEAM TRAPS

Pressures To 250 PSIG (17.2 barg)
Temperatures to 450°F (232°C)

Hardened Stainless Steel Valve and Seat - Long life and maximum corrosion resistance.
Stainless Steel Bucket - Long lasting, rugged and naturally resistant to water hammer.
Inexpensive - Low maintenance and initial cost.
Repairable in-line - All working parts lift out of top of trap.
Cast Iron Body - Durable heavy wall construction provides years of reliable service.
Suitable for Wide Variety of Loads/Applications - Horizontal and vertical models in thirteen body sizes.
Resists Dirt and Scale - Valve and seats positioned at top of traps and internal stainless strainer available on most horizontal models ensure long service.

Applications
- Steam Lines
- Process Equipment
- Steam Cookers
- Steam Heated Vats
- Pressing Machinery
- Unit Heaters
- Oil Preheaters
- Converters
- Coils
- Rotating Drum

Options
- Repair Kits

Operation

Trap Closed
After trap is installed and primed, steam entering the trap collects in the top of the bucket, floating the bucket and forcing the valve into its seat.

Trap Begins to Open
As condensate begins to flow into the trap, steam and air are forced from the bucket. This causes the bucket to begin losing buoyancy, tending to pull the valve from its seat.

Trap Discharges
When enough condensate has entered the trap, displacing the steam and air, the bucket drops, pulling the valve from the seat and allowing condensate and air to discharge.

Trap Closes
As the flow of condensate stops, steam enters the trap and refloats the bucket, forcing the valve into its seat. The cycle then repeats as more condensate reaches the trap.

MODELS*
- **80S**—Low capacity horizontal w/integral strainer
- **81S**—Medium low capacity horizontal w/integral strainer
- **82S**—Medium capacity horizontal w/integral strainer
- **83S**—Medium high capacity horizontal w/integral strainer
- **84**—High capacity horizontal
- **85**—Super high capacity horizontal
- **86**—Ultra high capacity horizontal
- **21**—Medium low capacity vertical
- **22**—Medium capacity vertical
- **23**—Medium high capacity vertical
- **24**—High capacity vertical
- **25**—Super high capacity vertical
- **26**—Ultra high capacity vertical

Canadian Registration # OE 0591.1C

Installation Tip: Always install STV Test & Block Valve as part of trap station SEE PAGE 118

Installation Tip: Add Uniflex Pipe Coupling for ease of maintenance SEE PAGE 102
DURA-FLO
INVERTED BUCKET STEAM TRAP

Pressures To 250 PSIG
Temperatures to 450°F

Applications
- Steam Lines
- Unit Heaters
- Process Equipment
- Oil Preheaters
- Steam Cookers
- Converters
- Steam Heated Vats
- Coils
- Pressing Machinery
- Rotating Drum

Easy to Maintain
Working parts lift out with top for quick inspection and maintenance.

Resists Corrosion
Stainless steel bucket provides maximum service life with minimum deterioration.

Minimizes Effects of Water Hammer
Open bucket design avoids collapse typical of sealed floats.

Suitable for Wide Variety of Loads/Applications
Horizontal and vertical models in thirteen body sizes are one of the most comprehensive inverted bucket trap lines available.

Withstands Severe Conditions
Heavy wall cast iron cover and body provide many years of trouble free service.

Smooth Action and Tight Shutoff
Stainless steel linkage, valve and seats are precision manufactured to ensure optimal performance.

Ideal for “Dirty” Systems
Valve and seat located at top of trap and stainless steel strainers available on most horizontal models ensure long service

Maximum Compatibility with Existing Installations
Pressure change assemblies are interchangeable with Armstrong which guarantees maximum flexibility when stocking repair parts.
Furnish and install as shown on the plans, inverted bucket traps capable of discharging condensate, air and other noncondensible gases without loss of steam. These traps shall have a heavy cast iron body, hardened stainless steel valve and seat, all stainless steel linkage and bucket, and an asbestos free fiber cover gasket.

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>Weight Lbs (kg)</th>
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<td>71⁄4 (199)</td>
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<td>86 2, 2¼</td>
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<td>11 (279)</td>
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<td>51⁄4 (143)</td>
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<td>101⁄4 (260)</td>
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Connections: 1⁄2"– 2" NPT

Maximum operating conditions
- PMO: Max. Operating Pressure: see orifice selection
- TMO: Max. Operating Temperature: saturated at pressure
- PMA: Max. Allowable Pressure: 250 psig (17.2 barg)
- TMA: Max. Allowable Temperature: 450°F (232°C)

Materials of construction
- Bucket & Linkage: Stainless Steel
- Valve & Seat: Hardened Chrome Steel
- Standpipe: Steel Pipe
- Cover Gasket: Asbestos Free Fiber
## DURA-FLO
### CAPACITY TABLES

| Orifice & Trap | Orifice & Size | Trap | Max Size | 0.50 | 1 | 5 | 10 | 15 | 20 | 25 | 30 | 40 | 60 | 80 | 100 | 125 | 150 | 180 | 200 | 225 | 250 |
|---------------|---------------|------|----------|------|---|---|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|
| 805 | ¾/16 | 300 | 345 | 380 | 400 | 430 | 460 | 480 | 510 | 540 | 565 | 600 | 620 | 660 | 890 | 1050 | 1225 | 1500 | 1800 | 2050 |
| ⅝/16 | 250 | 280 | 300 | 320 | 350 | 360 | 380 | 400 | 440 | 480 | 500 | 540 | 560 | 600 | 870 | 1000 | 1225 | 1500 | 1800 | 2050 |
| 7/16 | 15 | 190 | 210 | 230 | 250 | 270 | 300 | 320 | 370 | 400 | 450 | 500 | 540 | 600 | 870 | 1000 | 1225 | 1500 | 1800 | 2050 |
| 7/8 | 30 | 300 | 345 | 380 | 400 | 430 | 460 | 480 | 510 | 540 | 565 | 600 | 620 | 660 | 890 | 1050 | 1225 | 1500 | 1800 | 2050 |
| 1 | ⅝/16 | 250 | 280 | 300 | 320 | 350 | 360 | 380 | 400 | 440 | 480 | 500 | 540 | 560 | 600 | 870 | 1000 | 1225 | 1500 | 1800 | 2050 |
| 7/16 | 15 | 190 | 210 | 230 | 250 | 270 | 300 | 320 | 370 | 400 | 450 | 500 | 540 | 600 | 870 | 1000 | 1225 | 1500 | 1800 | 2050 |

For Kg/Hr Multiply by .454
DURA-FLO
INVERTED BUCKET STEAM TRAPS PCA REPAIR KITS

Quick, easy and economical
Simplifies and standardizes inventory
All stainless steel corrosion resistant internal parts
Hardened stainless steel condensate valves and seats for extra long life

MODELS
- 80S–Orifice ratings 20, 80, 125, 150
- 81S & 21–Orifice ratings 15, 30, 70, 125, 200, 250
- 82S & 22–Orifice ratings 15, 30, 70, 125, 200, 250
- 83S & 23–Orifice ratings 15, 30, 60, 80, 125, 180, 250
- 84 & 24–Orifice ratings 15, 30, 60, 80, 125, 180, 250
- 85 & 25–Orifice ratings 15, 30, 60, 100, 130, 180, 225, 250

FTN SERIES
FLOAT & THERMOSTATIC STEAM TRAPS REPAIR KITS

High quality replacement kits
Rebuild existing F & T Traps far more economically than replacement
Quick, easy and economical
Simplifies and standardizes inventory
All stainless steel corrosion resistant internal parts
Hardened stainless steel condensate valves and seats for extra long life
Repairs other leading manufacturers’ F & T Traps

MODELS
- FTN-15 available in ¼", 1", 1¼", 1½" and 2"
- FTN-30 available in ¼", 1", 1¼", 1½" and 2"
- FTN-75 available in ¼", 1", 1¼", 1½" and 2"
- FTN-125 available in ¼", 1", 1¼", 1½" and 2"

All ¼" and 1" kits as well as 1¼" FTN-15 and FTN-30 kits supplied with cover assembly.
All 1¼" FTN-75 and FTN-125 kits as well as all 1½" and 2" kits supplied as mechanism complete.
See Capacity Charts on page 37
SEALED STAINLESS STEEL DURA-FLO
INVERTED BUCKET STEAM TRAPS

Pressures to 650 PSIG (45 barg)
Temperatures to 497°F (258°C)

Easy Trap Replacement - Universal two bolt swivel mounting option simplifies removal from system.
Simple Installation - Stainless mounting Block mounts permanently into system. Trap installs via two bolt universal mount connection.
Hardened Chrome Steel Valve and Seat - Long life and maximum corrosion resistance.
Stainless Steel Bucket - Long lasting, rugged and naturally resistant to water hammer.
Inexpensive - Low maintenance and initial cost.
Stainless Steel Body - Durable heavy wall construction provides years of reliable service and resists corrosion and freezing.
Suitable for Wide Variety of Loads/Applications - Horizontal models in three body sizes.
Resists Dirt and Scale - Valve and seats positioned at top of traps ensure long service.
Maintenance Free (TSBT- S and USBT- S) - Sealed design prevents unnecessary tampering. Trap can be replaced without breaking pipe.
Freeze Resistant - Extruded SS Body helps prevent problems associated with freezing conditions.

Applications
- Steam Lines
- Process Equipment
- Steam Cookers
- Steam Heated Vats
- Pressing Machinery
- Unit Heaters
- Oil Preheaters
- Converters
- Coils
- Rotating Drum

For information on Big Block UMTVS-BB Connector
SEE PAGE 116

MODELS

NPT CONNECTION
- TSBT-LS – Low Capacity, 200 PSIG
- TSBT-MS – Medium Capacity, 340 PSIG
- TSBT-HS – High Capacity, 650 PSIG

UMT CONNECTION
- USBT-LS – Low Capacity, 200 PSIG
- USBT-MS – Medium Capacity, 340 PSIG
- USBT-HS – High Capacity, 650 PSIG

UMT CONNECTOR BLOCKS
- UMTC – Standard connector (1/2" & 3/4" only)
- UMTCY-RH – Right Hand Connector with Y Strainer
- UMTCY-LH – Left Hand connector with Y Strainer
- UMTVS-BB – Connector with Isolation Valves, Strainer, Blowdown Valve and Test Port

Canadian Registration # OE10389.52

Operation

During startup, air and non-condensible gases enter the trap and are automatically vented through an accurate balanced pressure internal thermostatic air vent. As condensate enters the trap, the float and lever mechanism is raised, lifting the valve off the seat, discharging the condensate. Condensate will continue to be discharged at the same rate at which it is entering. Any air or non-condensible gas that may accumulate will be continually and efficiently passed by the thermostatic air vent.
SEAL STAINLESS STEEL DURA-FLO
INVERTED BUCKET STEAM TRAPS

SPECIFICATION

Furnish and install as shown on the plans, inverted bucket traps capable of discharging condensate, air and other non-condensable gases without loss of steam. These traps shall have a stainless steel sealed body, hardened chrome steel valve and seat and an all stainless steel linkage and bucket. It shall have a universal mount connector option.

Materials of construction

Body .......................AISI 304 SS
Bucket ....................AISI 304 SS
Bucket Clip ..............AISI 304 SS
Lever ......................AISI 304 SS
Inlet Tube .................AISI 304 SS
Valve ......................Hardened Chrome Steel AISI D3
Valve Seat ...............Hardened Chrome Steel AISI D3
Connector ...............AISI 304 SS

Maximum operating conditions

PMO: Max. Operating Pressure See Orifice Selection
TMO: Max. Operating Temperature Saturated at PMO
PMA: Max. Allowable Pressure -

LS 200 psig (13.8 barg) at 450°F (232°C)
MS 307 psig (21.2 barg) at 450°F (232°C)
HS 650 psig (44.8 barg) at 497°F (258°C)

TMA: Max. Allowable Temperature -

MS, LS & HS - 800°F (425°C)

Dimensions inches (mm) and Weight pounds (kg)

<table>
<thead>
<tr>
<th>Model</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>Weight lbs (kg)</th>
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<td>2% (70)</td>
<td>5% (142)</td>
<td>2% (110)</td>
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Connections: 3/8”– 1” NPT

Dimensions inches (mm) and Weight pounds (kg)

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<td>8% (222)</td>
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Connections: Universal Mount Two Bolt Swivel Connection

Dimensions inches (mm) and Weight pounds (kg)

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<th>Model</th>
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<th>C</th>
<th>D</th>
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<th>Weight lbs (kg)</th>
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<td>5% (148)</td>
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<td>4.75</td>
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<tr>
<td>USBT-HS</td>
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<td>8% (222)</td>
<td>2% (70)</td>
<td>7% (187)</td>
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<td>5</td>
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Maximum Capacity—(lbs/hr)

| Trap         | Orifice | 5 (0.34) | 10 (0.69) | 15 (1.03) | 20 (2.07) | 30 (2.76) | 40 (4.83) | 50 (5.52) | 60 (6.53) | 70 (8.62) | 80 (13.79) | 90 (17.24) | 100 (20.69) | 125 (27.59) | 200 (44.83) |
|--------------|---------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| SBT-LS & TSBT-LS | 3/32 | 200      | 85        | 120       | 145       | 200       | 230       | 300       | 325       | 400       | 500       |         |           |           |           |
| 1/4          | 15      | 800      | 920       | 1040      |           |           |           |           |           |           |           |           |           |           |           |
| 3/16         | 30      | 540      | 690       | 800       | 1000      |           |           |           |           |           |           |           |           |           |           |
| 5/32         | 70      | 390      | 490       | 560       | 700       | 790       | 940       |           |           |           |           |           |           |           |           |
| 1/8          | 125     | 260      | 325       | 400       | 530       | 600       | 750       | 800       | 970       |           |           |           |           |           |           |
| 7/64         | 200     | 200      | 265       | 315       | 410       | 470       | 580       | 610       | 720       | 900       |           |           |           |           |           |
| 3/32         | 250     | 155      | 200       | 240       | 315       | 360       | 440       | 480       | 560       | 690       | 750       |           |           |           |           |
| 5/64         | 400     | 100      | 130       | 155       | 210       | 235       | 280       | 310       | 360       | 440       | 460       | 510       | 580*      |           |           |
| USBT-MS & TSBT-MS | 1/4 | 1040     | 1350      | 1580      | 2000      | 2350      |           |           |           |           |           |           |           |           |           |
| 3/16         | 80      | 680      | 930       | 1120      | 1550      | 1775      | 2400      | 2300      |           |           |           |           |           |           |           |
| 5/32         | 125     | 480      | 630       | 780       | 1050      | 1200      | 1600      | 1700      | 2000      |           |           |           |           |           |           |
| 1/8          | 250     | 320      | 42        | 510       | 700       | 790       | 1020      | 1090      | 1300      | 1650      | 1800      |           |           |           |           |
| 7/64         | 300     | 220      | 280       | 325       | 430       | 500       | 630       | 685       | 800       | 1000      | 1100      | 1200      |           |           |           |
| 3/32         | 650     | 175      | 225       | 270       | 370       | 400       | 510       | 540       | 650       | 800       | 870       | 930       | 1050      | 1300      |           |

For Kg/Hr Multiply by .454

* CRN not available
Pressures to 650 PSIG (45 barg)
Temperatures to 497ºF (258ºC)

Easy Trap Replacement - Universal two bolt swivel mounting option simplifies removal from system.
Simple Installation - Stainless mounting Block mounts permanently into system. Trap installs via two bolt universal mount connection.
Hardened Chrome Steel Valve and Seat - Long life and maximum corrosion resistance.
Stainless Steel Bucket - Long lasting, rugged and naturally resistant to water hammer.
Inexpensive - Low maintenance and initial cost.
Stainless Steel Body - Durable heavy wall construction provides years of reliable service and resists corrosion and freezing.
Suitable for Wide Variety of Loads/Applications - Horizontal models in three body sizes.
Resists Dirt and Scale - Valve and seats positioned at top of traps ensure long service.
Repairable Model (TSBT_R & USBT_R) - Removable cover allows pressure change or repair with existing Dura-Flo PCA kits.

Applications
- Steam Lines
- Process Equipment
- Steam Cookers
- Steam Heated Vats
- Pressing Machinery
- Unit Heaters
- Oil Preheaters
- Converters
- Coils
- Rotating Drum

For information on Big Block UMTVS-BB Connector
SEE PAGE 116

Canadian Registration # OE10389.52

Operation

After trap is installed and primed, steam entering the trap collects in the top of the bucket, floating the bucket and forcing the valve into its seat. As condensate begins to flow into the trap, steam and air are forced from the bucket. This causes the bucket to begin losing buoyancy, tending to pull the valve from its seat. When enough condensate has entered the trap, displacing the steam and air, the bucket drops, pulling the valve from the seat and allowing condensate and air to discharge. As the flow of condensate stops, steam enters the trap and re-floats the bucket, forcing the valve into its seat. The cycle then repeats as more condensate reaches the trap.
REPAIRABLE STAINLESS STEEL DURA-FLO INVERTED BUCKET STEAM TRAPS

SPECIFICATION
Furnish and install as shown on the plans, inverted bucket traps capable of discharging condensate, air and other non-condensible gases without loss of steam. These traps shall have a stain- less steel sealed body, hardened chrome steel valve and seat and an all stainless steel linkage and bucket. It shall also have a universal mount connection option. The repairable traps shall have a removable cover to allow repair or orifice change.

Maximum Capacity—(lbs/hr)

<table>
<thead>
<tr>
<th>Model</th>
<th>Orifice</th>
<th>5 (0.34)</th>
<th>10 (0.69)</th>
<th>15 (1.03)</th>
<th>20 (2.07)</th>
<th>40 (4.83)</th>
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<td>210</td>
<td>235</td>
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</table>

For Kg/Hr Multiply by .454

Materials of construction

- Body: ASTM A351 CF8
- Cover: ASTM A351 CF8
- Bucket: AISI 304 SS
- Bucket Clip: AISI 304 SS
- Lever: AISI 304 SS
- Inlet Tube: AISI 304 SS
- Valve: Hardened Chrome Steel AISI D3
- Valve Seat: Hardened Chrome Steel AISI D3
- Swivel Connector: AISI 304 SS
- Cover Gasket: Spiral Wound 304 SS with Grafoil