Forbes Marshall Thermodynamic Trap FMTD64

**Description**
The Forbes Marshall Thermodynamic Trap FMTD64, with inbuilt Strainer and full stainless steel construction, is best suited for header and mainline drains. Also available with Flanged ends with Model FMTD64FL & with DN25 Socket Weld Ends Model FMTD64SW25 & is ready to install for better Performance.

**Sizes**
DN 15, DN 20 and DN25
Screwed BSPT/BSP/NPT & Socket Weld Ends

**Notes**
1. Available with Class #150 and #300, PN40 Flange Ends.
2. Available with IBR certificate

**Limiting Conditions of FMTD64**
- Body design conditions: PN 63
- PMA Maximum allowable pressure: 63 bar g @ 100°C
- TMA Maximum allowable temperature: 400°C @ 42 bar g
- Minimum allowable temperature: 0°C
- PMO Maximum operating pressure: 42 bar g recommended
- Minimum operating temperature: 0°C
- Minimum operating differential pressure: 0.25 bar g for satisfactory operations
- Designed for maximum cold hydraulic test pressure of 95 bar g

**Note:** For lower operating temperatures consult Forbes Marshall PMOB: Maximum back pressure should not exceed 80% of the inlet pressure under any conditions of operation otherwise the trap may not shut-off.

**Material**

<table>
<thead>
<tr>
<th>No</th>
<th>Part</th>
<th>Material</th>
<th>Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Body</td>
<td>Stainless Steel</td>
<td>ASTM A 743 Gr-CA40</td>
</tr>
<tr>
<td>2</td>
<td>Cap</td>
<td>Stainless Steel</td>
<td>BS 3146 ANC2</td>
</tr>
<tr>
<td>3</td>
<td>Disc</td>
<td>Stainless Steel</td>
<td>ASTM A 240 SS 420</td>
</tr>
<tr>
<td>4</td>
<td>Strainer Screen</td>
<td>Stainless Steel</td>
<td>ASTM A 240 Type 304</td>
</tr>
<tr>
<td>5</td>
<td>Strainer Cap</td>
<td>Stainless Steel</td>
<td>BS 3146 ANC2</td>
</tr>
</tbody>
</table>

**Operating Range**
The Product must not be used in this region. The product should not be used in this region or beyond its operating range as damage may occur to the internal.

**Dimensions of Model FMTD64FL (Flanged Version)**

<table>
<thead>
<tr>
<th>Size</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>DN 15</td>
<td>42</td>
<td>78</td>
<td>50</td>
<td>44</td>
<td>57</td>
<td>150</td>
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<tr>
<td>DN 20</td>
<td>42</td>
<td>78</td>
<td>50</td>
<td>44</td>
<td>57</td>
<td>150</td>
</tr>
<tr>
<td>DN 25</td>
<td>49</td>
<td>92</td>
<td>50</td>
<td>44</td>
<td>62</td>
<td>160</td>
</tr>
</tbody>
</table>

**Note:** Weight of bare FMTD64 is 0.8 kg.

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**Limiting Conditions of FMTD64FL**
Flange to Flange Dimensions as per international Standard ISO 6554.

For ANSI #150
- PMO Maximum operating pressure: 14.0 bar g @ 197 Deg. C
- TMO Maximum operating temperature: 400 Deg C @ 5.5 bar g
- Cold hydraulic test pressure: 21.0 bar g

For ANSI #300
- PMO Maximum operating pressure: 41.5 bar g @ 253 Deg. C
- TMO Maximum operating temperature: 400 Deg C @ 28.0 bar g
- Cold hydraulic test pressure: 62.0 bar g

For PN40 Flanges
- PMO Maximum operating pressure: 38.0 bar g @ 250 Deg. C
- TMO Maximum operating temperature: 400 Deg C @ 39.5 bar g
- Cold hydraulic test pressure: 57.0 bar g
Installation
Preferably on horizontal pipe with cover on top. The trap can be fitted in other positions if unavoidable.

Maintenance
Remove the isotub if fitted and unscrew cap using spanner. Do not use pipe wrench which may cause distortion of the cap. If the disc and body seating faces are only slightly worn they can be refaced by lapping individually on a flat surface such as a surface plate. A figure of eight motion and a diluted 1:6 lapping compound such as 6 micron Aluminium Oxide gives the best results.

If the wear is too great to be rectified by simple lapping, the seating faces on the body must be ground flat and then lapped and the disc replaced by a new one. The total amount of metal removed in this way should not exceed 0.25 mm or 0.010”. When re-assembling, the disc is normally placed in position with the grooved side in contact with the body seating face. Screw on the cap; no gasket is required but suitable high temperature anti-seize grease should be applied to the threads.

To clean or replace the strainer, unscrew the strainer cap using a spanner, withdraw the screen and clean or replace with a new one if damaged. To re-assemble, insert the screen in cap, then screw cap into place. No gasket is required but a fine smear of Molybdenum Disulphide grease should be applied to the threads.

Optional extras
ISOTUB- An insulating cover which prevents the trap from being unduly influenced by excessive heat loss such as when subjected to low outside temperature, wind, rain etc.

Salient Features
1. Complete stainless steel construction ensures better mechanical and corrosion resistant properties.
2. The disc and seat, hardened by induction hardening process to about 45RC can withstand continuous water hammering conditions.
3. Seat integral part of the body, eliminates leakage-prone joints and gaskets.
4. Condensate entry below the disc concentric to disc/seat ensures clean and parallel lift to disc with reference to seat, eliminating any localized wear and tear.
5. An inbuilt strainer screen of adequately large area ensures long and trouble free operation.

Available Spares: [Refer below figure]
The parts available as spares are shown with Alphabets.

Spares
- Disc and screen kit for DN 15 (Pack of 3) A+B
- Disc and screen kit for DN 20 (Pack of 3) A+B
- Disc and screen kit for DN 25 (Pack of 3) A+B
- Isotub C

How to Order
Example:
1) 1No. DN15 Forbes Marshall Thermodynamic Trap FMTD64 Screwed BSPT, IBR.
2) 1No. DN15 Forbes Marshall Thermodynamic Trap FMTD64FL Flanged to ASA 150, IBR.
3) 1No. DN15 Forbes Marshall Thermodynamic Trap FMTD64SW25 Socket Weld Ends to DN25, IBR.

How to Order Spares
Always order spares by using the description given in the column headed “Available Spare” and stating the size and type of trap. Example: 1No. Disc & Screen kit for DN15 Forbes Marshall Thermodynamic Trap FMTD64