

# 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 to Class 6000

## Notes

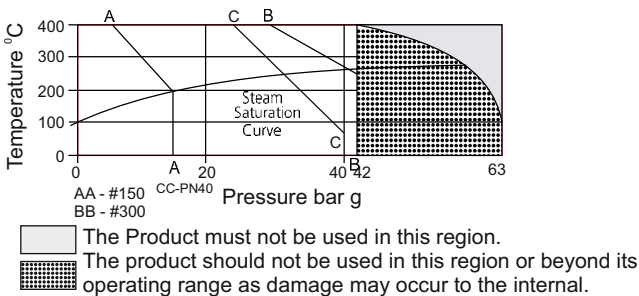
1. Available with Class #150 and #300, PN40 Flange Ends.
2. Available with IBR certificate

## 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 for satisfactory operations	0.25 bar g
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.

## Operating Range



## Limiting Conditions of FMTD64FL

Flange to Flange Dimensions as per international Standard ISO 6554.

### For ANSI #150

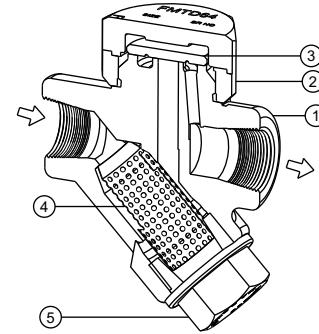
PMO Maximum operating pressure = 14.0 bar g @ 197 Deg.C  
TMO Maximum operating temperature = 400 Deg C @ 5.5 bar g  
Cold hydraulic test pressure = 21.0 bar g

### 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

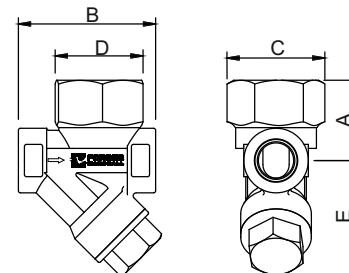
### For PN40 Flanges

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

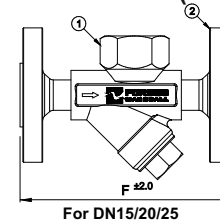


## Material

No	Part	Material	Standard
1.	Body	Stainless Steel	ASTM A 743 Gr-CA40
2.	Cap	Stainless Steel	BS 3146 ANC2
3.	Disc	Stainless Steel	ASTM A 240 SS 420
4.	Strainer Screen	Stainless Steel	ASTM A 240 Type 304
5.	Strainer Cap	Stainless Steel	BS 3146 ANC2



## Dimensions of Model FMTD64FL ( Flanged Version )



## Dimensions (approx. in mm)

Size	A	B	C	D	E	F
DN 15	42	78	50	44	57	150
DN 20	42	78	50	44	57	150
DN 25	49	92	50	44	62	160

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

Sr.	Description	Material	Standard
1	Thermodynamic Trap FMTD64, SWE	Stainless Steel	ASTMA 743 Gr. CA 40
2	Flanges SWE type ANSI #150, ASME B16.5	Carbon Steel	ASTM A 105
2	Flanges SWE type ANSI #300, ASME B16.5	Carbon Steel	ASTM A 105
2	Flanges RF, PN40, EN 1092-1	Carbon Steel	ASTM A105

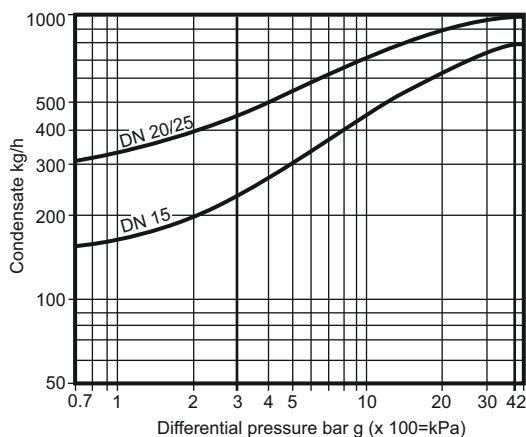
### Optional extras

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.

### Capacity



### 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.

### 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.

### Available Spares: [Refer below figure]

The parts available as spares are shown with Alphabets.

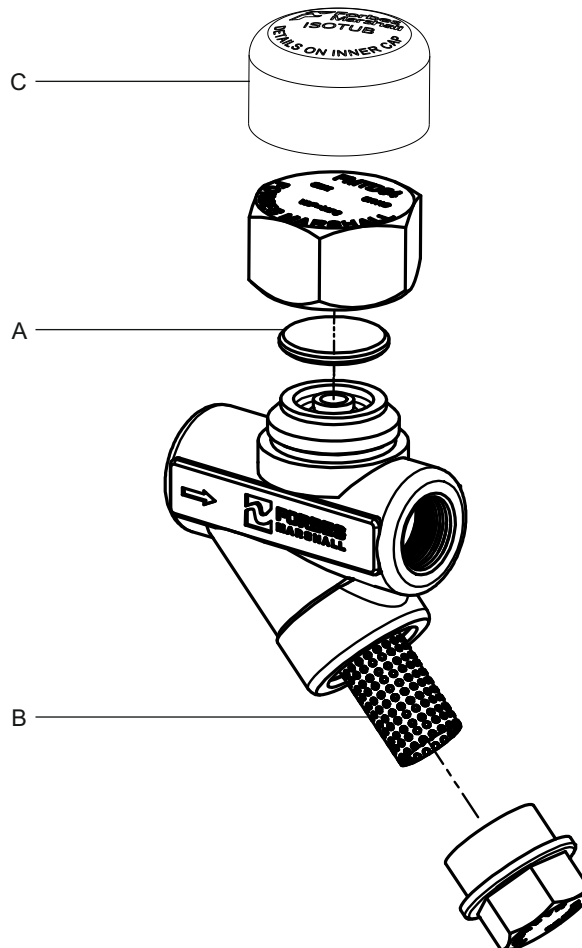
### Spares

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 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



www.forbesmarshall.com

Forbes Marshall Arca

Codel International

Krohne Marshall

Forbes Vyncke

Forbes Marshall Steam Systems

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