

# FMTD65

## Forbes Marshall Thermodynamic Trap

### Description

The Forbes Marshall Thermodynamic Trap, FMTD65, is a mainline thermodynamic trap with in-built strainer screen and unique three port design. The three port design ensures parallel lifting of the disc and no wear and tear due to uneven seating of the disc enhancing the life of the trap. Typical applications include main distribution headers, tube line inlets etc.

### Size and Pipe Connections

DN 15 and DN 20

Screwed BSPT/NPT/BSP and socket weld ends

Available with Class 150,300 and 600 weld on flanges on request.

Available with IBR certificate.

### Limiting Conditions

PMO: Max. operating pressure in bar g

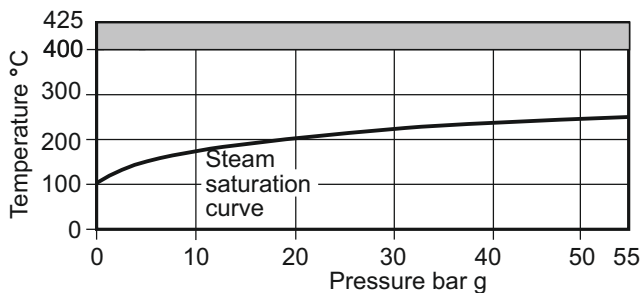
TMO: Max operating temperature in °C


Parameter	Screwed end	Socket Weld end
PMA	31.5	55.0
TMA	400	400
Hydraulic test	63.0	110.0

PMOB-Max. Operating back pressure on outlet should not exceed 80% of inlet pressure.

Min. Operating pressure for satisfactory operation: 0.25 bar g

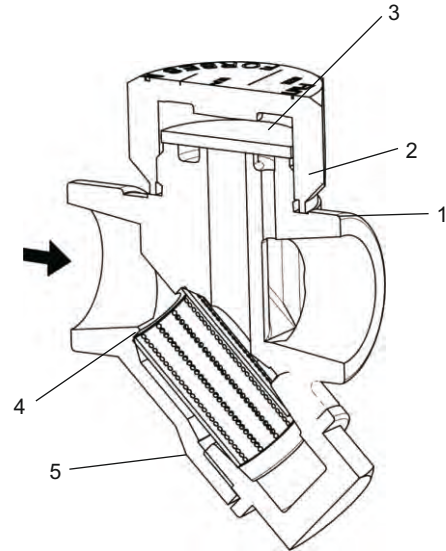
### Operating range



 The product not to be used in this range.

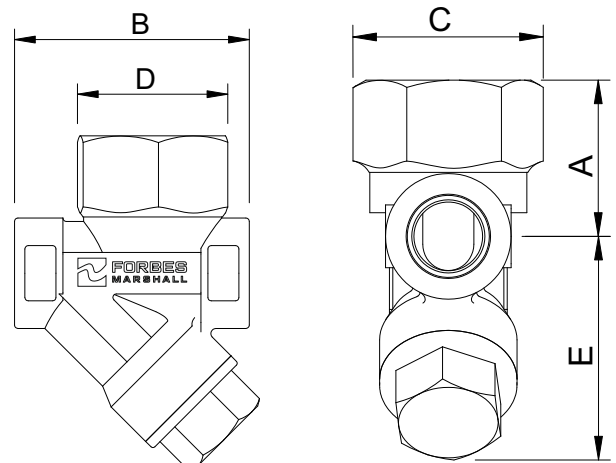
### Dimensions (approx.in mm)

Size	A	B	C	D	E	Weight
DN 15						
DN 20	42	68	50	44	57	0.8 kg



### Material

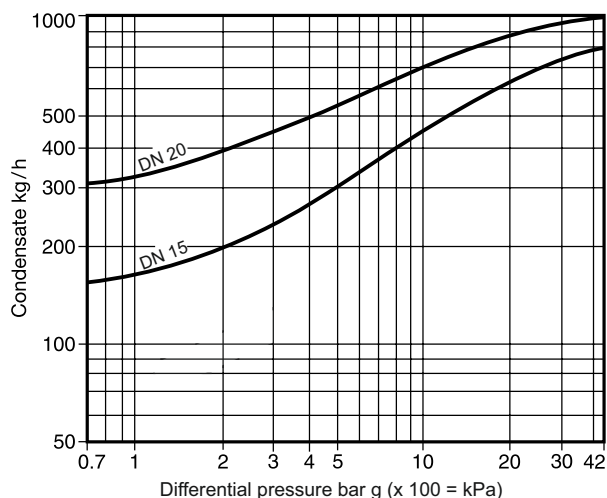
Sr No	Part	Material	Standard
1	Body	Stainless Steel	ASTM A 743 Gr. CA 40
2	Cap	Stainless Steel	BS3146 ANC 2
3	Disc	Stainless Steel	ASTM A 240 SS 420
4	Screen	Stainless Steel	ASTM A 240 Type 304
5	Strainer Cap	Stainless Steel	BS3146 ANC 2



### Salient Features

1. Complete stainless steel construction ensures better mechanical and corrosion resistant properties.
2. The seat is hardened by induction hardening process to about 50 Rc to enable withstand continuous water hammering.
3. The seat is an integral part of the body, and eliminates leakage prone joints and gaskets.
4. Condensate entry below the disc concentric to disc and seat, ensures clean and parallel lift of disc with reference to seat, eliminating any localized uneven wear and tear.
5. An inbuilt strainer screen of adequate large area ensures long and trouble free operation.
6. Three port design ensures proper lifting and seating of the disc and results in uniform wear, enhancing life of the steam trap.

### Capacity Chart



### Installation

Preferably on horizontal pipe line, can be fitted on the position if unavoidable.

### How To Order

Example: 1 No. DN 15 Forbes Marshall Thermodynamic Trap FMTD65 with screwed BSPT connections.

Disc and screen kit	A+B
Isotub	C

### Optional extras

ISOTUB: An insulating cover on the cap prevents the trap being unduly influenced by excessive heat loss, such as when subjected to low outside temperature, wind, rain etc.

### Available Spares

The parts shown in heavy outline are available as spares. Parts drawn in broken line are not supplied as spares.

### Recommended Tightning Torques

Item	Part	Or mm	Or mm	Nm
2	Spool	42	M35	180-200
5	Stud	32	M28	170-190

### How to Order Spares

Always order spares by using the description given under 'Available Spares' and state the size and type of trap.

**Example:** Disc and strainer screen kit for DN 15 Forbes Marshall Thermodynamic Trap FMTD65.

### How to Service

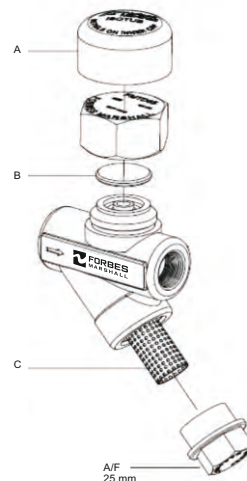
Remove isotub if fitted and unscrew cap using spanner. Do not use Stillsons or any similar type of wrench which may cause distortion of the cap. If the disc and the body seating faces are only slightly worn they can be refaced by lapping individually on a flat surface plate. A figure of eight motion and fine aluminum oxide lapping slurry gives the best results.

If the wear is beyond rectification 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 micron. Alternatively, customers may prefer to take advantage of our reconditioned trap scheme which allows this work to be done to original production standards.

When re-assembling, place the disc with the grooved side in contact with body seating face and screw on cap. No gasket is required but a suitable high temperature anti-seize grease should be applied to the threads.

### How to clean or replace strainer

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 reassemble, insert the screen in cap, then screw cap in place. No gasket is required but a fine smear of Molybdenum Disulphide grease should be applied to the threads.



Forbes Marshall  
Krohne Marshall  
Forbes Marshall Arca  
Codel International  
Forbes Solar  
Forbes Vyncke  
Forbes Marshall Steam Systems

Opp 106th Milestone  
Bombay Poona Road  
Kasarwadi, Pune - 411 034. INDIA  
Tel : 91(0)20-27145595, 39858555  
Fax : 91(0)20-27147413

Email : seg@forbesmarshall.com, ccmidc@forbesmarshall.com

© All rights reserved. Any reproduction or distribution in part or as a whole without written permission of Forbes Marshall Pvt Ltd, its associate companies or its subsidiaries ("FM Group") is prohibited.

Information, designs or specifications in this document are subject to change without notice. Responsibility for suitability, selection, installation, use, operation or maintenance of the product(s) rests solely with the purchaser and/or user. The contents of this document are presented for informational purposes only. FM Group disclaims liabilities or losses that may be incurred as a consequence of the use of this information.

B-85, Phase II, Chakan Indl Area  
Sawardari, Chakan, Tal. Khed  
Dist. Pune - 410 501. INDIA  
Tel : 91(0)2135-393400

A-34/35, MIDC H Block  
Pimpri, Pune - 411 018. INDIA.  
Tel : 91(0)20-27442020, 39851199  
Fax : 91(0)20-27442040

CIN No.: U28996PN1985PTC037806  
www.forbesmarshall.com