

CMTD62M-S, CMTD62M-F

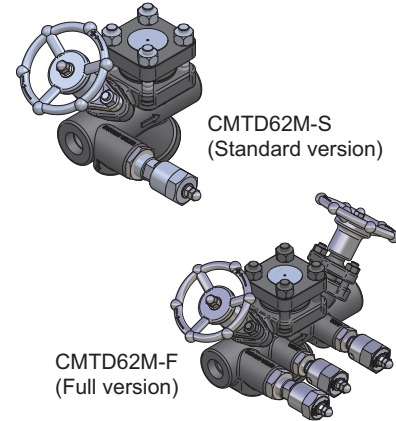
Compact Module - Thermodynamic Trap

Description

The Forbes Marshall Compact Module - Thermodynamic Trap CMTD62M-S / CMTD62M-F is designed with an inbuilt bypass valve for high pressure steam applications up to 900 Psig.

Replaceable trap internals and inbuilt strainer eases inline maintenance. The CMTD62M-S / CMTD62M-F has an integral up steam piston valve which isolates the upstream piping of the steam trap.

Its full version (CMTD62M-F) has added features such as a downstream piston valve that helps isolate the module from downstream piping and to check the trap condition a trap test valve is also provided.



Sizes and Pipe Connections

1/2", 3/4", Socket weldable end connection

Limiting Conditions

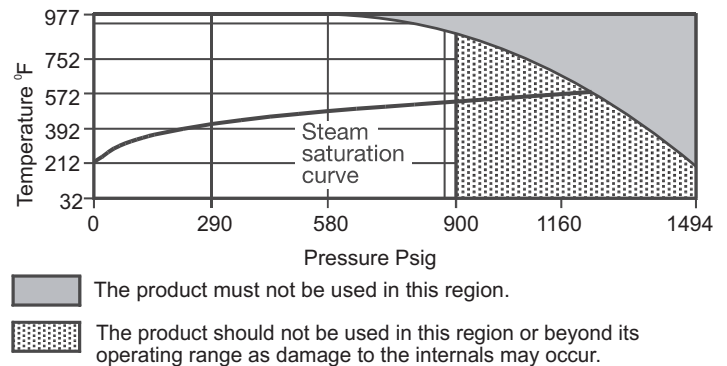
Body design conditions	ANSI 600
PMA Max. allowable pressure	1494 Psig @ 199°F
TMA Max. allowable temperature	977°F. @ 616 Psig
PMO Max. operating pressure	9062 Psig @ 899°F
TMO Max. operating temperature	977 °F.@ 619 Psig
Minimum allowable temperature	32°F
Max. operating back pressure	80% of upstream pressure
Cold hydraulic test pressure	2248 Psig

Installation

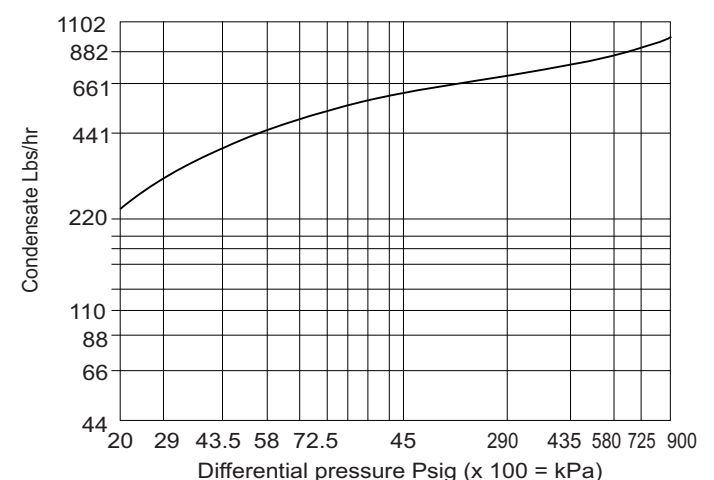
1. The CMTD62M-S / CMTD62M-F is installed with flow in the direction of the arrow. Flow to be horizontal.
2. Ensure that there is sufficient access to the hand-wheel to allow proper operation of both upstream and downstream isolation valves.
3. Ensure that there is sufficient access to the strainer to allow strainer to be cleaned periodically.
4. Allow sufficient access for the bypass valve and trap test valve to operate.
5. Ensure all the valves are either fully opened or tightly shut and never kept partially open / crack open.

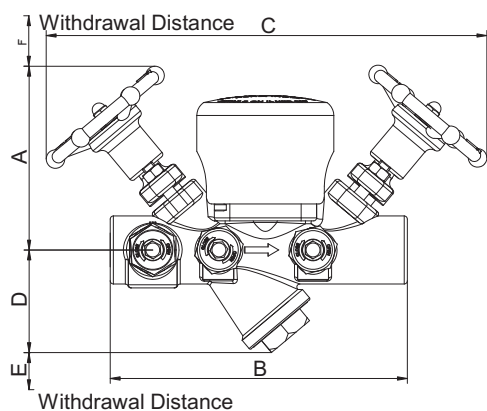
After 24 hours in service the cover nuts should be checked for tightness. Refer installation and maintenance manual for full details.

Operating Range



Capacity Chart

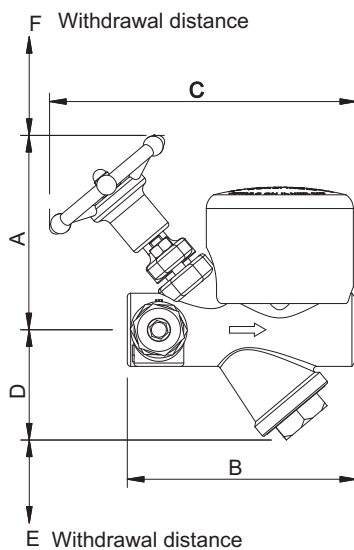




**Dimensions/ Weight (approx.) in inches
(Valves in closed conditions)**

CMTD62M-S Standard Version

Size	A	B	C	D	E	F	G	H	Wt (Lbs)
1/2"	4.7	5.5	7.5	2.6	0.8	2.0	4.6	1.7	10
3/4"	4.7	5.5	7.5	2.6	0.8	2.0	4.6	1.7	10



CMTD62M-S Standard Version

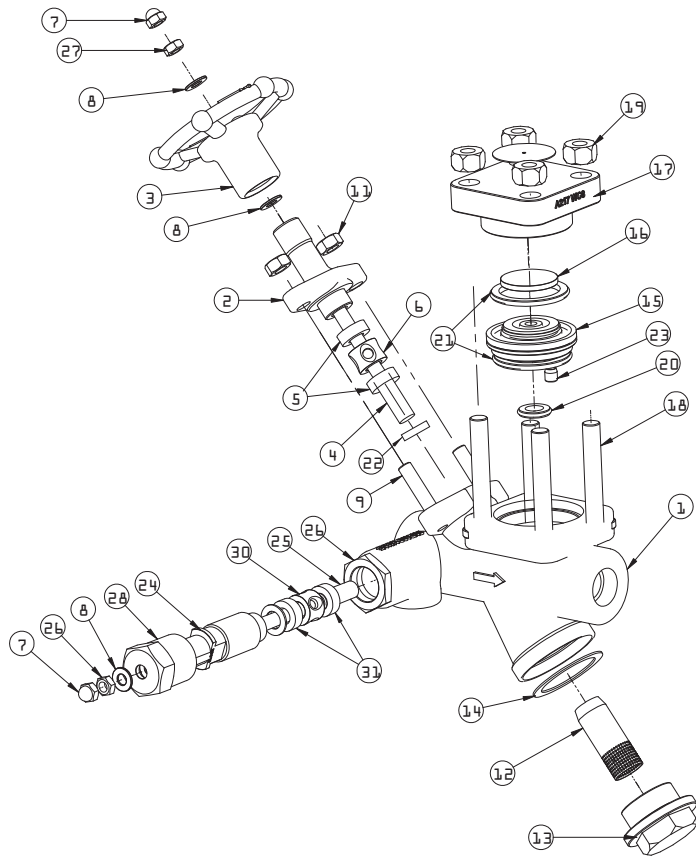
Size	A	B	C	D	E	F	G	H	Wt (Lbs)
1/2"	4.7	5.5	7.5	2.6	0.8	2.0	4.6	1.7	14.3
3/4"	4.7	5.5	7.5	2.6	0.8	2.0	4.6	1.7	14.3

Note: Material specification mentioned in bracket are for reference only.

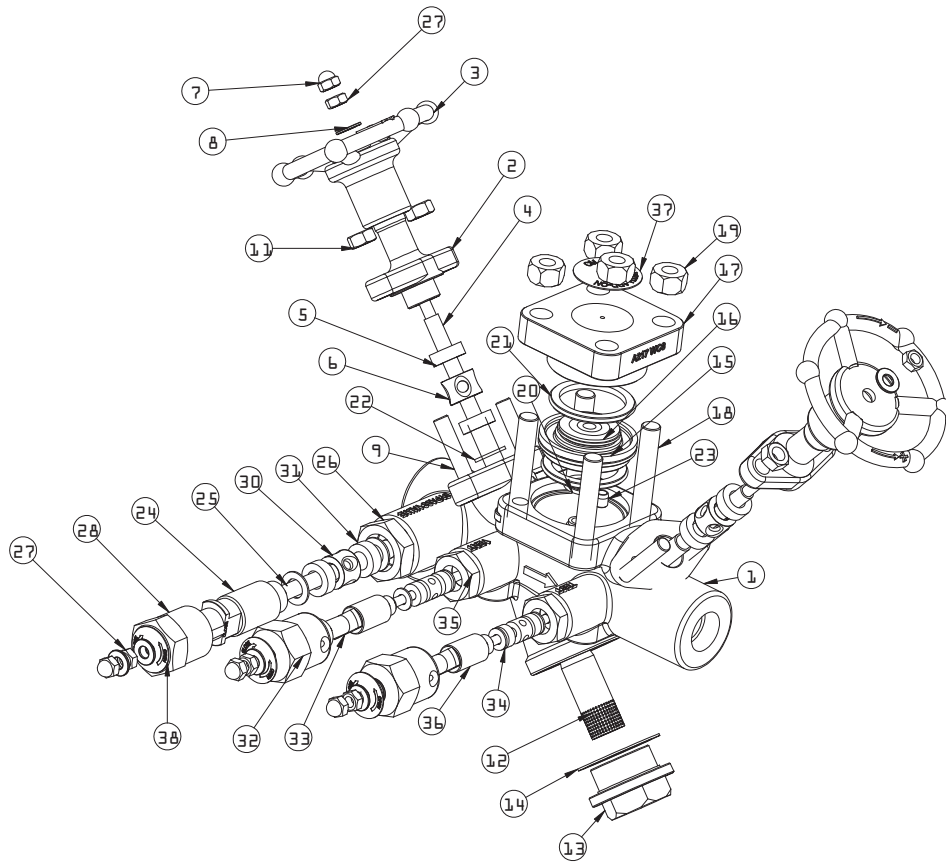
Materials

No.	Part	Material	No.	Part	Material
1	Body	ASTM A 217 Gr. Wc6	21	Spiral wound gasket	Spiral wound (SS/ Graphite)
2	Bonnet	ASTM A 217 Gr. Wc6	22	Plain washer	SS304
3	Hand wheel	SG IRON 400/15A (ASTM A536)	23	Ferrule	SS304
4	Stem	ASTM A 276 Type 316	24	DV bonnet	ASTM A 276 Gr. SS410
5	Sealing ring stacks	Graphite +SS304	25	Steam piston - DV1	ASTM A 276 Gr. SS316
6	Lantern bush	ASTM A 276 Type 410	26	Lock nut 7/8" x1/16"	ASTM A276 Gr. SS410
7	M6 LH dome nut	SS304	27	1/4" LH hex nut	SS304
8	1/4" plain washer	SS304	28	Hex knob-DV1	SG iron 400/15 A (ASTM A 536)
9	5/16" studs	ASTM A 193, B16	29	Isotub	SS304
10	Belleville washer M8+	Spring steel	30	Lantern bush	ASTM A 276 Type 410
11	5/16" hex nuts	ASTM A 194 Gr. 8M	31	Sealing ring stack	Graphite + SS304
12	Screen	SS 316 screen with 100 mesh	32	DV2 hex knob	SG iron 400/15 A (ASTM A 536)
13	Strainer cap	ASTM A 217 Gr. WC6	33	Stem piston	ASTM A 276 Gr. SS316
14	Strainer cap gasket	SS exfoliated graphite	34	Plain washer	SS304
15	Seat	BS 4659 Gr. BD2 (ASTM A681)	35	19/32" x 1/24" lock nut	ASTM A 276 Gr. SS410
16	Disc	BS 4659 Gr. BD2 (ASTM A681)	36	Bonnet machining	ASTM A 217 Gr. Wc6
17	Top cover	ASTM A 217 Gr. WC6	37	Name plate for CMTD62M-F	SS304
18	Stud 3/8" x 1/16" x 2-2	ASTM A 193 Gr. B16	38	Direction plate	SS304
19	3/8" nuts	ASTM A194 Gr. 8M	39	Rivet	-
20	Spiral wound gasket	Spiral wound (SS / Graphite)			

* Items Not Shown



CMTD62M-S (Standard Version)



CMTD62M-F (Full Version)

Maintenance

To Clean or Replace Strainer Screen

Access to the strainer screen can be obtained by removing strainer cap. Remove strainer screen fit new or cleaned strainer screen into recess of the cap. A new gasket should be fitted and the cap screwed into the body. The use of a thread lubricant is recommended.

To Replace the Cover Studs:

After removing old cover studs, fit new cover studs until the studs bottom out. The use of a thread lock (high temperature grade) is recommended.

Recommended Tightening Torques:

Description	Torques (Ft-Lbsf)
5/16" Nuts (11)	7
1/4" LH (7)	0.07
1/4" A/F (13)	105-117
3/8"x1/16" Studs (18)	15-18
11/16" A/F Nuts (19)	33-37

Bypass Valve and Trap Test Valve

Maintenance

Lubricate the valve frequently with Molykote M30 oil or equivalent. Lubricate the stem piston and bonnet threading of drain valves DV1. Operate the valves after lubrication.

How to Order

Example. 1/2" CMTD62M-S Compact Module Thermodynamic Trap - Standard Version (with 1 valve) with action body socket weldable end connections.



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

Forbes Marshall USA (FM USA Inc.)
480 South California Avenue, Unit 102
Palo Alto, CA 94306
P: 650-327-4227
F: 650-327-4127

Email : fm.northamerica@forbesmarshall.com

All contents herein are the property of Forbes Marshall Private Limited ("FMPL") or Forbes Marshall Steam Systems Private Limited ("FMSSPL"), as the case may be, and having protection under the intellectual property rights. Any reproduction, distribution or disclosure without prior written permission is prohibited. Information in this document is subject to change without notice.

Forbes Marshall Canada Inc.
2425 Matheson Blvd East, 8th Floor
Mississauga, ON L4W 5K4
P: 905-361-2880
F: 905-361-6401

Forbes Marshall Pvt. Ltd.
B-85, Phase II, Chakan Indl.
Area, Sawardari,
Chakan, Tal. Khed.
Dist. Pune - 410 501, India
Tel. 91(0)2135-393400
www.forbesmarshall.com