

Forbes Marshall Bucket Trap

Description

The Forbes Marshall Bucket Trap FMBT50, is designed so that it may be fitted into horizontal pipelines. It is maintainable in line and is complete with integral strainer screen.

Sizes and End Connections

DN 15, DN20, and DN25

Screwed BSPT/NPT

Socket weldable ends

Limiting Conditions

Maximum body design condition	42 bar g
PMA-max. allowable pressure	32 bar g
TMA-max. allowable temperature	300 °C
Cold hydraulic test pressure	84 bar g

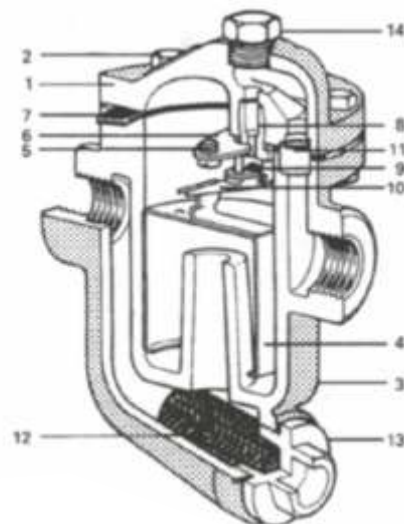
Maximum operating conditions depend upon orifice size.

ΔPMX - maximum differential pressure

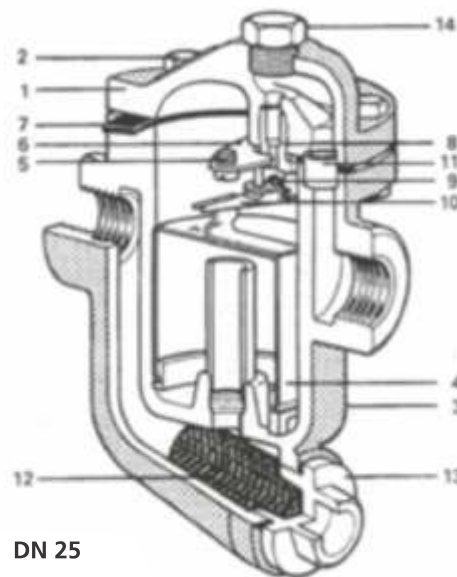
DN 15	DN 20	DN 25	ΔPMX (bar) g
FMBT 50/4	FMBT 50/5	FMBT 50/5	32.0
FMBT 50/5	FMBT 50/6	FMBT 50/6	20.0
FMBT 50/6	FMBT 50/7	FMBT 50/8	12.0
FMBT 50/7	FMBT 50/8	FMBT 50/10	8.5
FMBT 50/8	FMBT 50/10	FMBT 50/12	4.0

Material

No.	Part	Material	Standard
1	Cover	Cast Steel	ASTMA 216WCB
2	Cover Studs and Nuts Dn15 and 20 For DN25	Steel M 8 X 30mm M 12 x 50mm	IS 1367
3	Body	Cast Steel	ASTM216WCB
4	Bucket	Stainless Steel type 304	
5	Valve Guid Plate Screw	Stainless Steel Type 304	IS 1364
6	Valve Guide Plate	Stainless Steel Type 304	ASTM A 240
7	Cover Gasket	Reinforced exfoliated graphite	-----



DN 15 and 20



DN 25

No.	Part	Material	Standard
8	Valve Seat	Stainless Steel Type 304	ASTM A 276
9	Valve	Stainless Steel	-----
10	Valve Lever	Stainless Steel Type 304	ASTM A 240
11	Ferrule	Stainless Steel Type 304	ASTM A 213
12	Strainer Screen	Stainless Steel Type 304	ASTM A 240
13	Strainer Cap	Stainless Steel	-----
14	Plug	Stainless Steel	-----

Dimensions(approx.)in mm

Size(DN)	A	B	C	F	G	H	WT.(Kg)
15	130	120	110	75	100	65	5.50
20	130	120	150	93	117	65	6.25
25	180	165	170	132	127	85	2.25

GENTOL $\pm$ 3.0

How to Order

Example: 1No. DN15 FMBT50 Forbes Marshall Bucket trap with screwed BSPT connections, IBR

Installation

The Trap must be installed with the body upright so that the bucket is rising and falling vertically. The inlet and outlet connections should be in a horizontal plane, with the trap installed below the drain point so that a water seal can be maintained around the open end of the bucket.

Recommended Tightening Torques

Size (DN)	Seat (B)	Stud and Nuts (J)	Strainer Cap
15, 20	23-27 Nm	25-28 Nm	90-100 Nm
25	80-88 Nm	85-95 Nm	125-145 Nm

Spare Parts

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

Available Spares

Valve And Seat Assembly	A, B, C, D (2 Nos.)
Strainer Screen & Gasket	(pkt.of 2) E & F

How to Order Spares

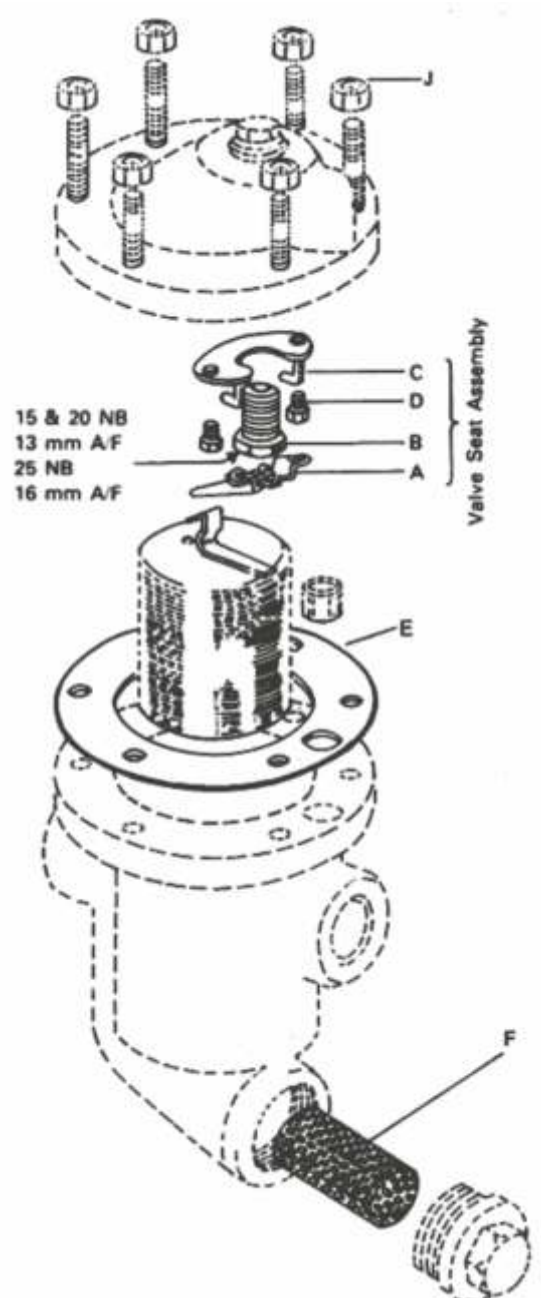
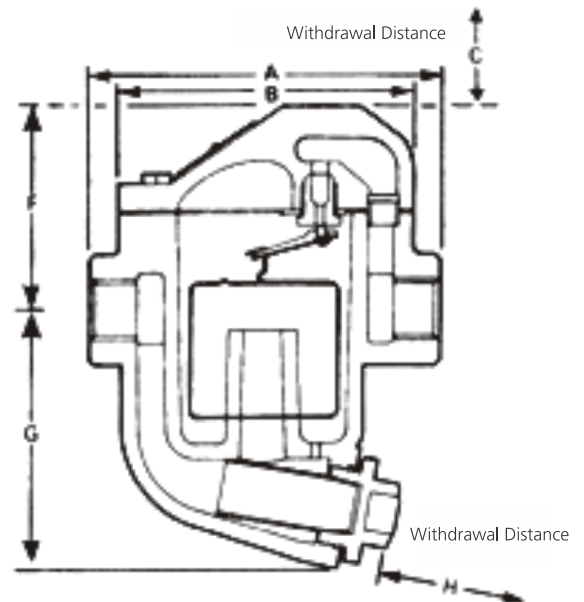
Always order spares by using the description given in the column headed "Available Spares" and stating the size and series of the trap.

For codes refer user manual.

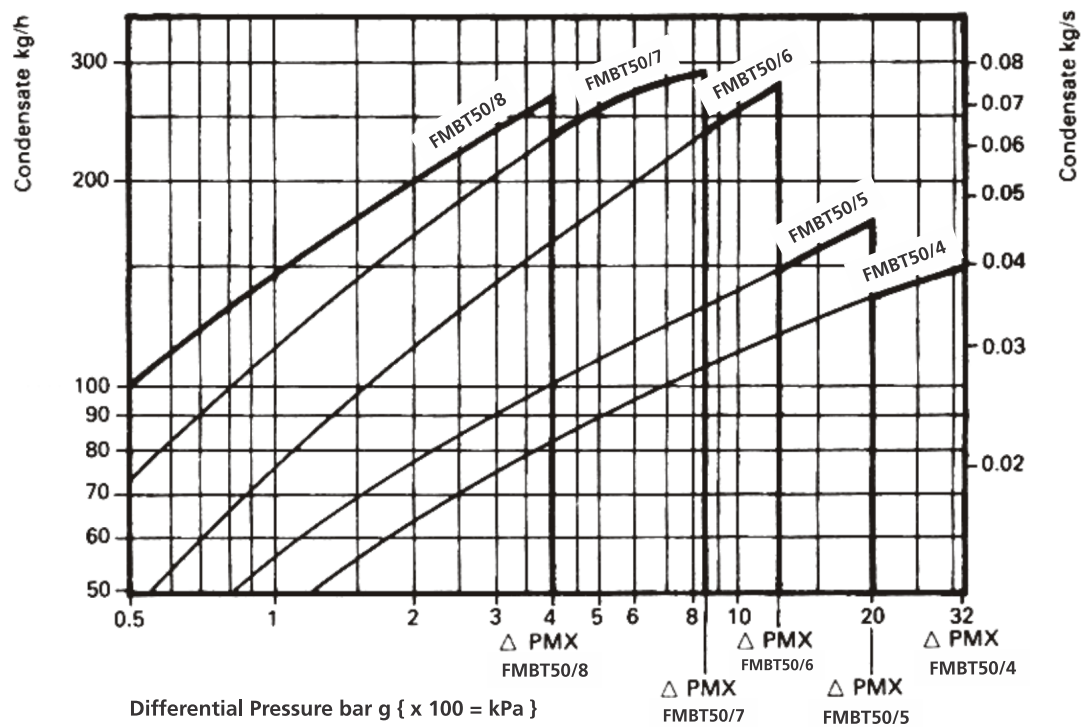
Example :1 No. valve and seat assembly for DN15 Forbes Marshall Bucket Trap FMBT50

How to Fit Valve and Seat Assembly

Isolate trap, remove cover by undoing cover nuts. Unhook the bucket from the valve lever **A**. Remove the valve seat **B**. Remove the valve guide plate **C** by undoing the two screws **D**. Screw in new valve seat, using a little jointing paste on the threads and making sure the joint faces are clean. Fix new valve guide plate in position with new screws supplied, hook new valve lever over pins on valve guide plate and centralise valve to the orifice and tighten screws.

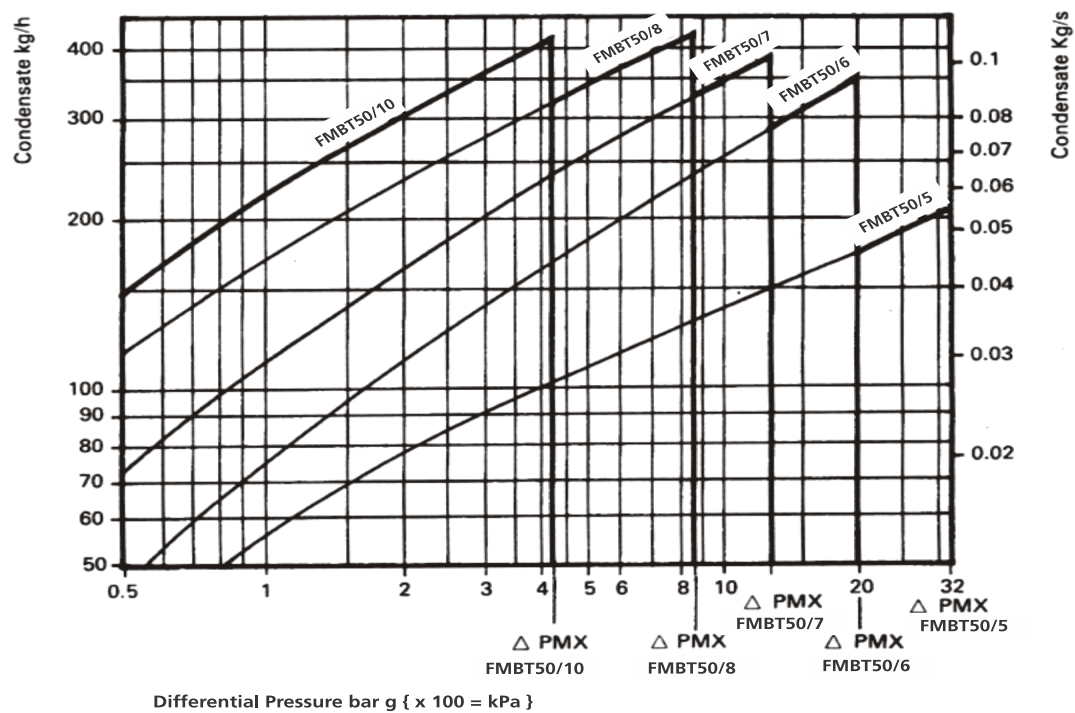


Capacity Chart (DN15)



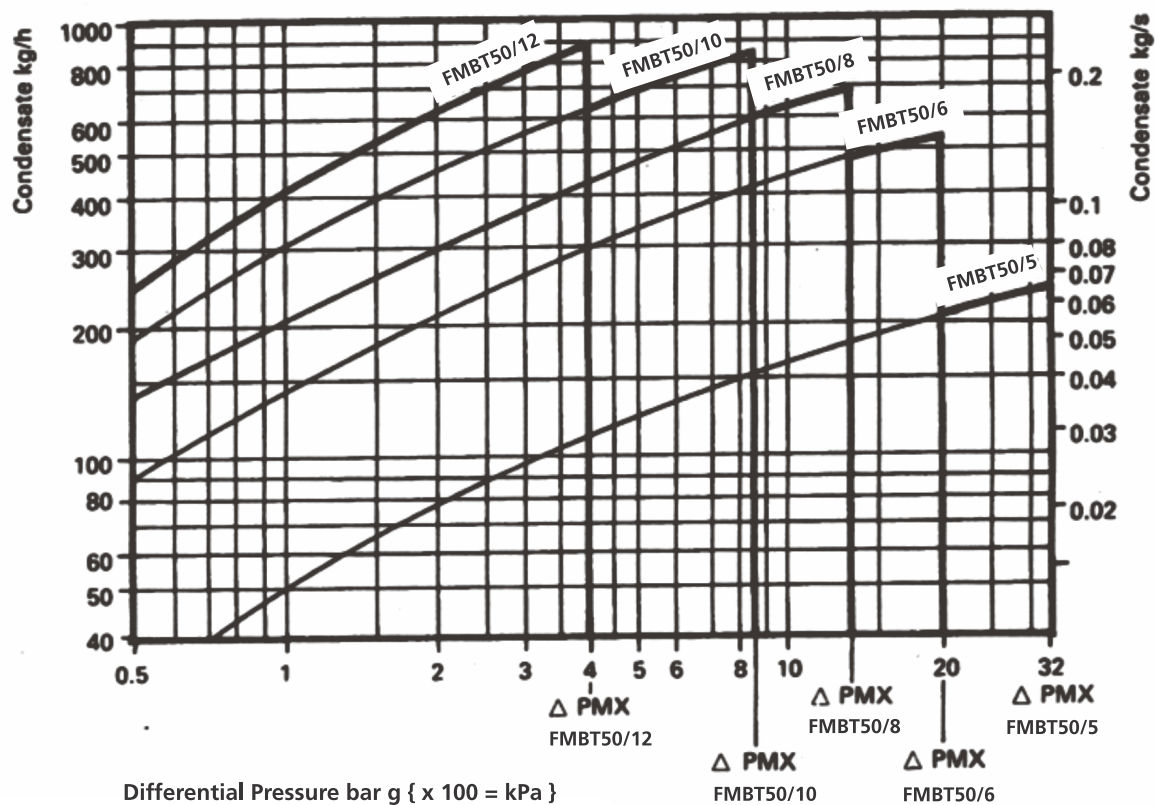
For Sizing see Note Overleaf

Capacity Chart (DN20)



For Sizing see Note Overleaf

Capacity Chart (DN25)



Note :

Trap should be selected for the most appropriate working differential pressure and not on the basis of load e.g. DN25 FMBT50, 80 Kg/h at 7 bar differential should be handled by FMBT50/10 and not FMBT50/5.