

Two Orifice Float Trap

Description

The Forbes Marshall Two Orifice Float Trap TOFT, has SG iron cover and base with stainless steel internals and optional automatic air venting and steam lock release facility.

The TOFT comes with two orifices operated by single float. For normal running condensate load single orifice opens and with increase in condensate load opens the second orifice. This modulating mechanism makes the trap to efficiently cope with the condensate load at start-up, normal running and peak load conditions. TOFT is provided with automatic air venting, steam lock release and strainer.

TOFT comes with horizontal screwed connections and can be maintained without disturbing the pipework.

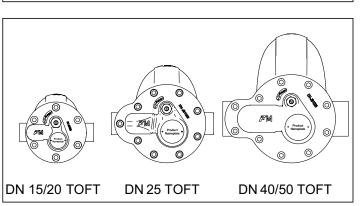
Sizes and Pipe Connection

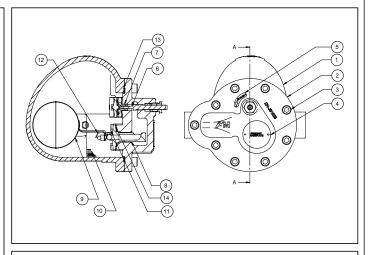
DN 15/20/25/40/50 Screwed BSPT/BSP/NPT

Limiting Conditions

PMA - Maximum allowable pressure			17 bar g @232°C
TMA - Maximum allowable temperature		232°C	
Minimum allowable temperature		-20°C	
PMO - Maximum operating pressure		17 bar g	
TMO - Maximum operating temperature		232°C	
Minimum	operating tem	perature	0°C
	Maximum	TOFT-4.5	4.5 bar g
ΔPMX	differential	TOFT-10	10 bar g
	Pressure	TOFT-17	17 bar g
Maximum cold hydraulic test pressure 26 bar g			

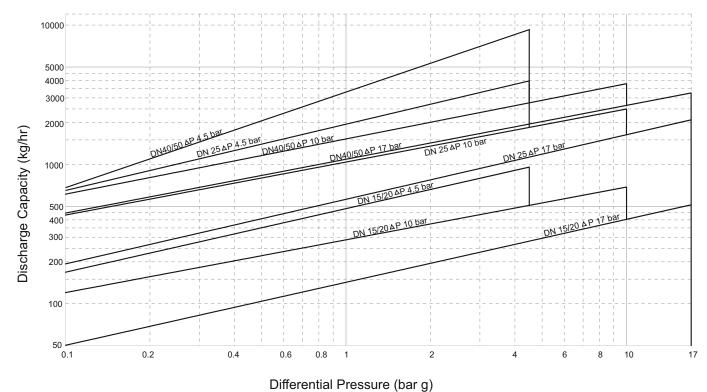
Note: For lower operating temperature consult Forbes Marshall





Material			
Sr. No.	Part	Material	Standard
1	Cover	SG iron	ENJS 1025
2	Base	SG iron	ENJS 1025
3	Cover Bolts	Stainless steel	A 193 B8
4	Product Nameplate	Stainless steel	ASTM A24 SS 304
5	SLR Nameplate	Stainless steel	ASTM A24 SS 304
6	SLR assembly (optional)	Stainless steel	-
7	Air vent assembly (optional)	Stainless steel	
8	Seat	Stainless steel	ASTM A74 CA 40
9	Float and lever assembly	Stainless steel	ASTM A24
10	Strainer Screen Assembly	Stainless steel	-
11	Seat screws	Stainless steel	-
12	Secondary lever assembly	Stainless steel	ASTM A24
13	Cover gasket	Reinforced exfoliated graphite	-
14	Seat gasket	Reinforced exfoliated graphite	-

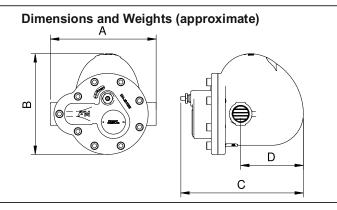




DN 15 to 50 TOFT

Capacities shown are based on condensate at saturation temperature. When discharging sub-cooled condensate the air vent provides extra capacities. Under start-up conditions when the condensate is cold the internal thermostatic air vent will be open and provides additional capacity to the main valve. On 4.5 bar g units this will provide a minimum of 25% increased capacity above the hot condensate figures shown. On 10 and 17 bar g units this will be minimum increase of 40% on the published capacity

Discharge capacities as measured as per: ISO 7842



SIZE	DIMENSIONS (mm)				WEIGHT	
DN	Α	В	С	D	Withdrawal Distance (mm)	(kg)
15/20	158.5	148	186	87.5	180	6
25	219	209	255	130	250	12
40/50	270	278	327	164	320	20

Operating Range Operating Range Steam Saturation Curve Pressure bar g

Safety Information and Maintenance:

For full details see the user manual supplied with the product.

Installation:

The TOFT must be installed with the direction of flow as indicated on the body, and arrow on the nameplate must point downwards.

Disposal:

The product is recyclable. No ecological hazard is anticipated with the disposal of the product provided due care is taken.

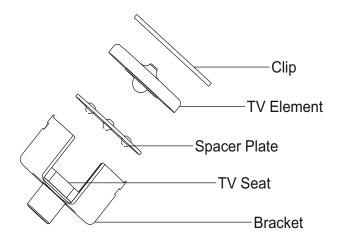
Recommended Tightening Torques

Item No.	Part	Bolt	Torque Range
3	Cover Bolt	M10	47-50 Nm
11	Seat Screws	M4 / M5 / M6	6-7 Nm
7	Air Vent Assembly	M12	50 - 55 Nm

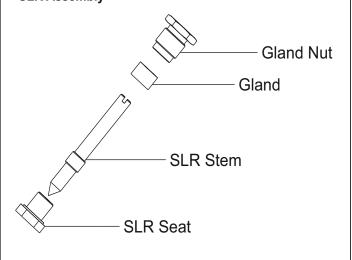
Available Spares

Mechanism Assembly	8, 9, 12
Air vent assembly	7
Cover and seat gasket(5 in a packet)	13, 14
SLR Assembly	6
Strainer screen (5 in a packet)	10

Air Vent Assembly



SLR Assembly



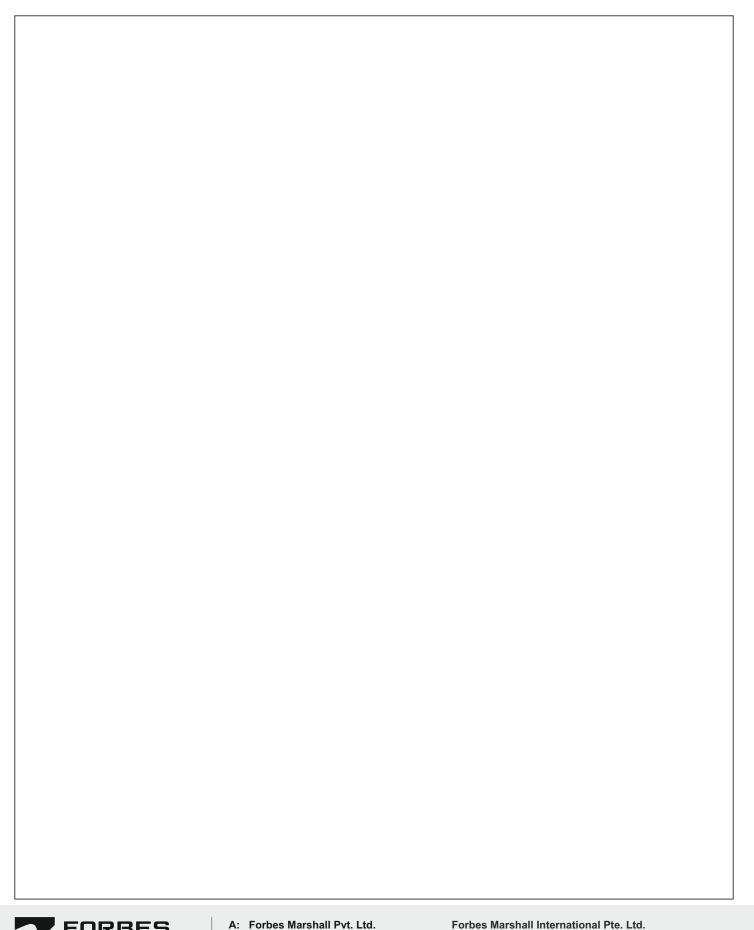
How to Order:

Example: DN15 Two Orifice Float Trap, BSPT TOFT 4.5 bar g differential pressure with the steam lock release.

How to Order Spares:

Always order spares by using description given in the column headed 'available spares' and state the size, type of trap and pressure range.

Example: 1 no. Mechanism assembly for DN 15 Two Orifice Float Trap-4.5.





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