

SOFT31 (DN 40, 50)

Single Orifice Float Trap with SLR / TV

Description

The Forbes Marshall Single Orifice Float Trap, SOFT31, is a single orifice condensate drain trap of cast iron body and stainless steel internals.

Sizes and Pipe Connections

DN40 and 50 Screwed BSP/BSPT/NPT

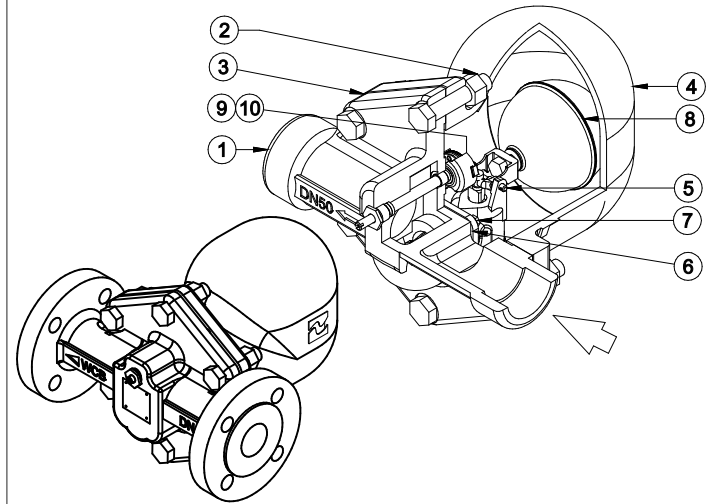
Flange connection: #125, PN16

Note: Available Non-IBR only

Available Types

SOFT31 with Thermostatic air Vent (TV)

SOFT31 with Steam Lock Release (SLR)

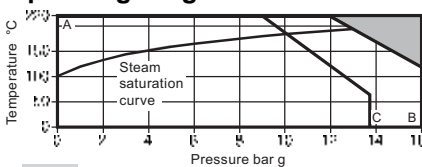


Limiting Conditions

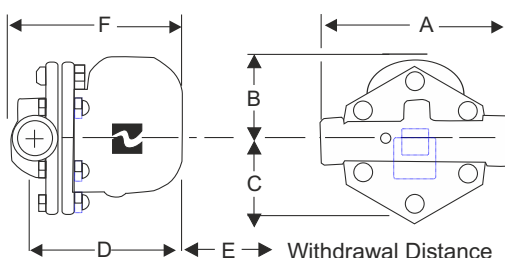
	Screwed Version # 125 Flange	PN16 Flange
PMA Maximum Allowable pressure	13 bar g at 220°C	13 bar g at 180°C
TMA Maximum Allowable temperature	220°C at 13 bar g	180°C at 10.1 bar g
PMO Maximum Operating pressure	13 bar g	10.2 bar g
TMO Maximum Operating temperature	220°C at 13 bar g	180°C at 10.1 bar g
Minimum Operating Temperature	0°C	0°C
Δ PMX Maximum differential pressure		
SOFT31-4.5	4.5 bar g	
SOFT31-10	10 bar g	
SOFT31-13	13 bar g	

Cold hydraulic test pressure : 1.5 times Operating Pressure

Operating range



A - B Flanged EN 1092 PN16.
A - C Flanged ASME 125.



(Screwed Version)

Material

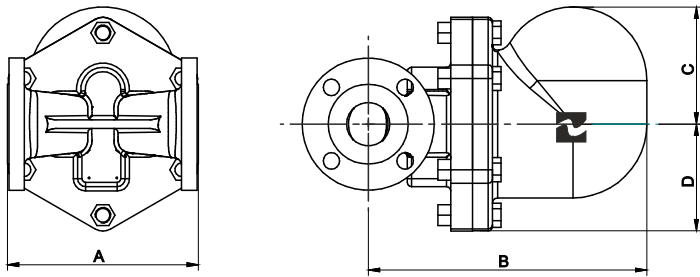
Sr.No.	Part	Material	Standard
1.	Body	Cast Iron	IS 210 FG 260
2a.	Cover bolts	Carbon Steel	ASTMA A193 B7
2b.	Cover nuts	Carbon Steel	ASTMA A194 2H
3.	Cover gasket	Reinforced exfoliated graphite	
4.	Cover	Cast Iron	IS 210 FG 260
5.	Main valve assly. with erosion deflector	Stainless Steel	BS 3148 Part 2 ANC - 2
6.	Main valve assly. gasket	Reinforced exfoliated graphite	
7.	Main valve assly. studs & nuts	Stainless Steel Type 431	ASTM A276
8.	Ball float	Stainless Steel Type 304	ASTM A240
9.	Air vent assly.	Stainless Steel Type 316	ASTM A240
10.	Air vent seat gasket	Stainless Steel Type 410	ASTM A240
*11.	SLR unit	Stainless Steel Type 316	ASTM A276
*12.	SLR Seal	Graphite	
*13.	SLR seat	Stainless Steel Type CA40	ASTM A743
*14.	SLR seat gasket	Stainless Steel Type 410	ASTM A240
15.	Deflector plate	Stainless Steel Type 304	ASTM A240

* Not shown in the drawing

Dimensions (approx.) in mm (Screwed Version)

Size	A	B	C	D	E	F	Weight
DN40	270	127	110	244	200	274	17.5 kg
DN50	300	140	125	250	205	286	22 kg

General Tol : ± 3



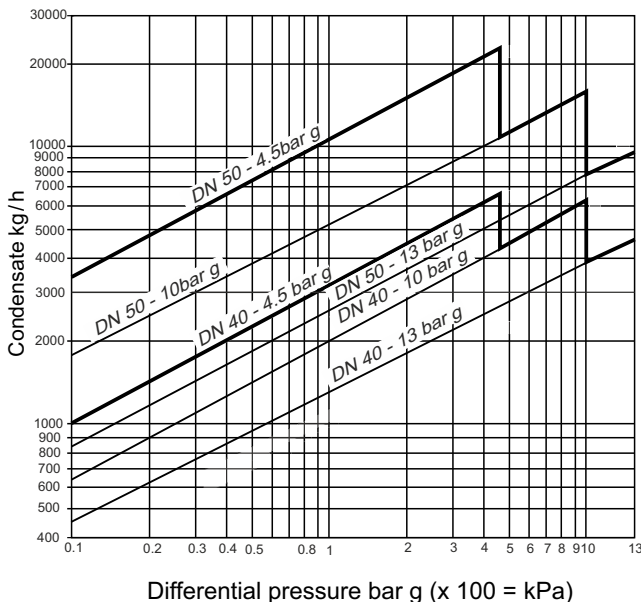
(Flanged Version)

Dimensions (approx.) in mm (Flanged Version)

Size(DN)	A	B	C	D	Weight
DN40 ASME 125	221	323	135	123	25 kg
DN40 PN10/16	230	323	135	123	25 kg
DN50 ASME 125	220	319	122	108	27 kg
DN50 PN10/16	230	319	122	108	27 kg

General Tol : ±3

Capacity Chart



How to Order

Example: DN40 Single Orifice Float Trap, SOFT31, 13 bar g, TV, screwed BSPT

Installation

The arrow on the name plate must point downwards. The arrow on the casting indicates the flow direction. Refer detailed installation and maintenance manual for more information.

Servicing

With suitable isolation repairs can be carried out with trap on the line. Undo cover bolts and lift off the cover. When re-assembling, make sure that all joint faces are clean. Always use a new gasket and apply a thin coating of jointing paste. Tighten cover bolts uniformly. Open up the isolating valve.

Recommended Tightening Torques

Part	Torque (Nm)
1. TV seat	45 – 55
2. SLR Seat	45 - 55
3. SLR Body	60 - 70
4. Valve Housing (Studs)	15 - 20
5. Cover Bolts	65 - 75

Spare Parts

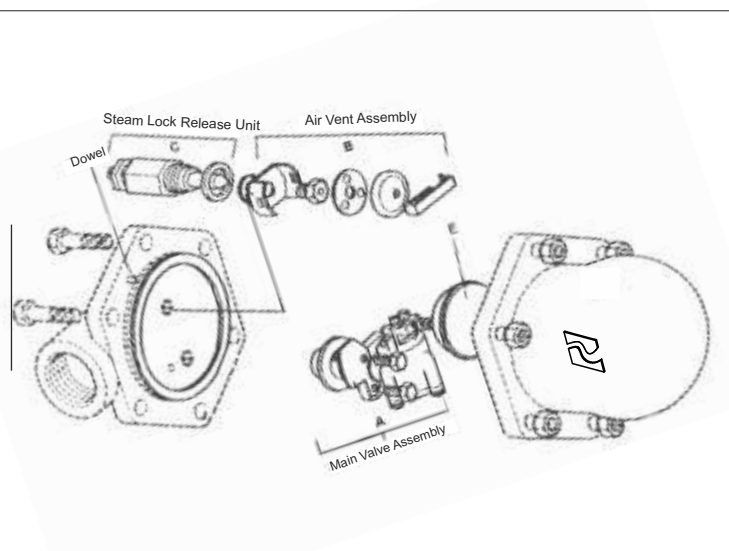
The spare parts available are shown in the figure in a heavy outline. Parts drawn in a broken line are not supplied as spares.

Available Spares

Main valve assembly with erosion deflector	A
Air vent assembly	B
Steam lock release unit	C
Sets of gasket (pack of 5 sets)	D
Float	E

How to Order Spares

Always order spares using the description given in the column above, headed "Available Spares", and stating the size and type and differential pressure of the trap. For codes refer the user manual.



www.forbesmarshall.com

Forbes Marshall Arca

Codel International

Krohne Marshall

Forbes Vyncke

Forbes Marshall Steam Systems

A: Forbes Marshall Pvt. Ltd.
Opp. 106th Milestone, CTS 2220,
Mumbai-Pune Road, Kasarwadi,
Pune MH 411034 INDIA
P: +91(0)20-68138555
F: +91(0)20-68138402

E: 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.

Forbes Marshall International Pte. Ltd.
16A, Tuas Avenue 1,
#05-21, JTC Space @Tuas
Singapore - 639533
P: +65 6219 3890

CIN No: U28996PN1985PTC037806

DOC# FMSS/0824/TIS-SOFT31(DN40,50)/R3