

# FMSEP31, FMSEP34

## Forbes Marshall Moisture Separator - Cast Iron

### Description

The Forbes Marshall Moisture Separator FMSEP31 (screwed) / FMSEP34 (flanged) is a cast iron baffle type separator used for the removal of entrained liquids in steam, so that they can be drained away as condensate.

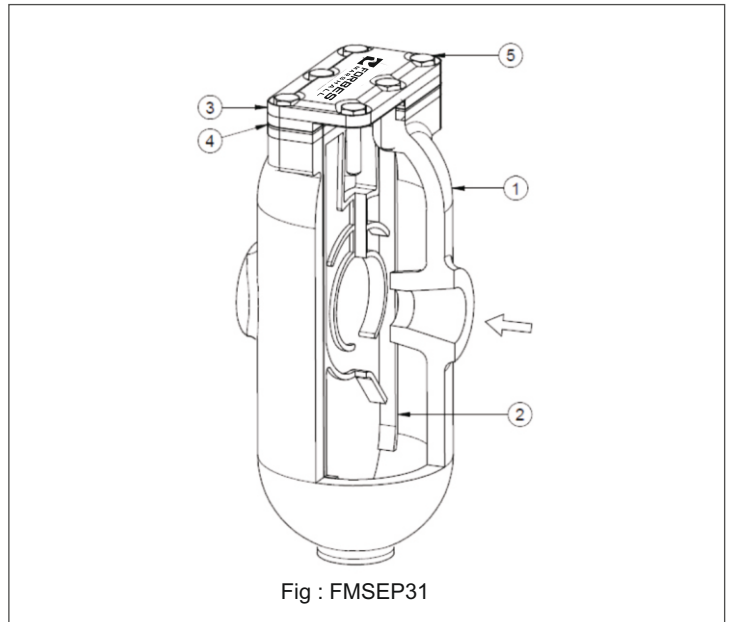
### Size and End Connections

DN 15 and DN 20-Screwed BSPT/NPT/BSP  
 DN 25 to DN 250 Flanged (for details, see overleaf)  
 Note: Available with IBR test certificates, on request.

Optional insulation jackets are available that will increase the performance of the separator.

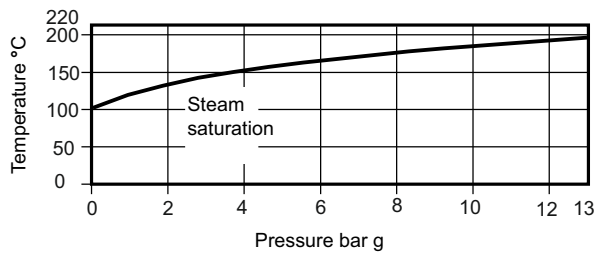
### Limiting Conditions (DN 15,20) (FMSEP31)

Max. Operating pressure	13 bar g at 220°C
Max. Operating temperature	220 °C at 13 bar g
Cold hydraulic test pressure	26 bar g
Min. Operating Temperature	0°C

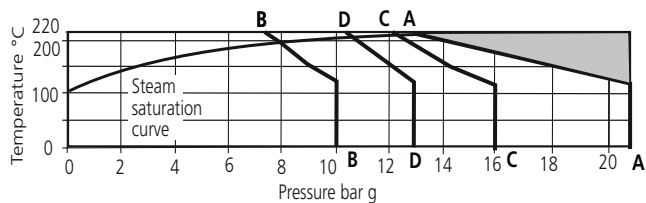


### Operating Range

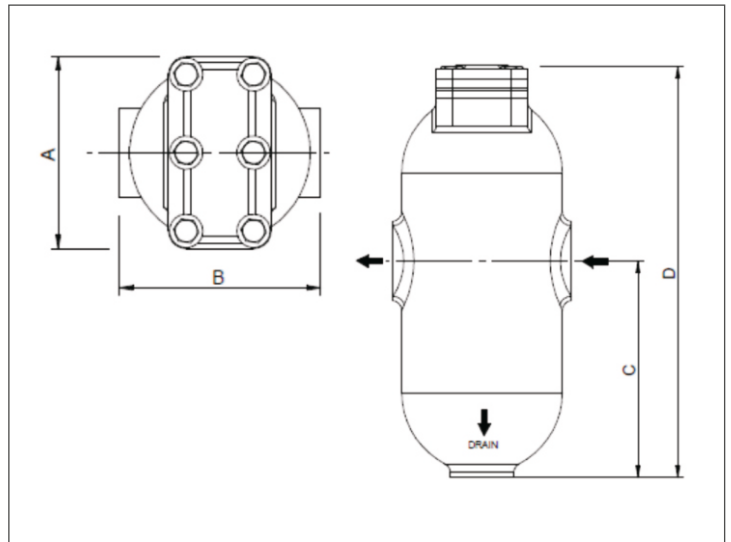
#### For FMSEP31



#### For FMSEP34



This product must not be used in this region. A-A BS10 Table F C-C PN 16  
 B-B PN 10 D-D Flanged ANSI 150



### Dimensions: (approx.) in mm for FMSEP31 DN15/20

Size	Dimensions				Weight Kg
	A	B	C	D	
DN 15	86	90	110	215	4
DN 20	83	115	143	248	6.3

General Tolerance  $\pm 3$

### Material (FMSEP31)

No	Part	Material	Standard
1	Body	Cast Iron	IS 210 Gr FG 260
2	Baffle Plate	Cast Iron	IS 210 Gr FG 260
3	Cover	Cast Iron	IS 210 Gr FG 260
4	Gasket	Asbestos free	IS 2712
5	Hex HT Bolt	Carbon Steel	IS1367 Gr. 8.8

### How to Order

**Example :** DN20 BSPT Forbes Marshall Moisture Separator FMSEP31, IBR

## Sizes and End Connections

Flanged DN 25, 40, 50, 65, 80, 100, 125, 150, 200 and 250  
Available with IBR test certificates, on request.

## Material (FMSEP34)

No	Part	Material	Standard
1	Body	Cast Iron	IS 210 Gr. FG 260 (ASTM A 48, Cl. 35)

## Limiting Conditions (DN 25 - 250)

Flange Types	Max. Working Pressure	Max. Working Temp.
TAB 'F'	20.6 bar g at 120 °C	220 °C at 13 bar g
PN 10	10 bar g at 120 °C	220 °C at 7.6 bar g
PN 16	16 bar g at 120 °C	220 °C at 12.1 bar g
ASA 125/150	13 bar g at 120 °C	220 °C at 10.1 bar g

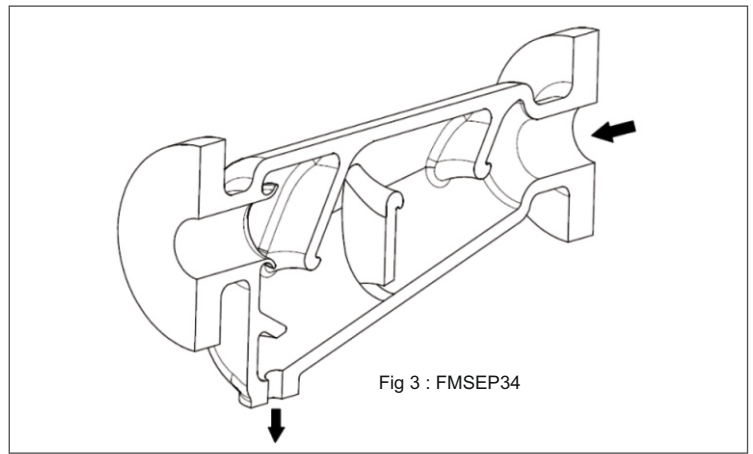


Fig 3 : FMSEP34

## Dimensions (approx. in mm) for FMSEP34 DN 25-250

Size DN	Dimensions				TAB F	Flange Connections				Weight Kg
	A	B	C	D		CLASS 125/150	PN 10	PN16		
25	280	70	98	3/4"	A	A	A	NA	11.5	
40	368	89	111	3/4"	A	A	A	NA	14.5	
50	457	121	146	1"	A	A	A	A	26	
65	405	146	170	3/4"	A	A	A	A	37	
80	483	152	175	1"	A	A	A	NA	46	
100	692	197	238	1"	A	A	A	NA	77	
125	705	354	233	1"	A	A	A	A	161	
150	706	375	232	1"	A	A	A	A	185	
200	762	416	305	1 1/2"	A	A	A	NA	255	
250	822	472	382	1 1/2"	A	A	A	NA	350	

A-Available

NA-Not Available

## FMSEP34 Flange Thickness "T" (mm)

SIZE	BS10 TAB 'F'	CLASS 125/150	PN6	PN10	PN16
25	25.5	25.5	25.5	25.5	NA
40	15.9	14.3/15.9	16	18	NA
50	19	15.9/17.5	16	19	19
65	24	24	24	24	24
80	19.1	19.1	20	20	NA
100	22.2	24	22	22	NA
125	25.5	25.5	25.5	25.5	25.5
150	27	27	27	27	27
200	29	29	29	29	NA
250	30	30	30	30	NA

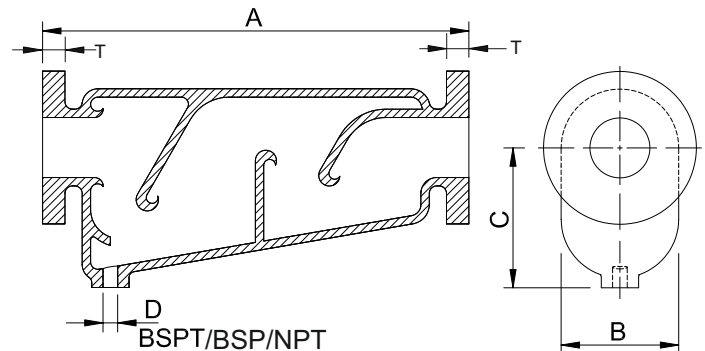
## Installation

The FMSEP31 / FMSEP34 is installed in a horizontal pipeline with the drain directly below.

**Note:** To ensure that any separated liquid is drained away quickly, a suitable steam trap must be connected to the drain connection. Consult Forbes Marshall for further details.

## How to Order

**Example** DN 40 Forbes Marshall SEP34 Moisture Separator, Flanged ANSI Class 150



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