

FMPC50, FMPC51, FMPC52

Forbes Marshall Pipeline Connector

Description

The Forbes Marshall Pipeline Connector, FMPC5_, is designed for use with swivel connector steam traps. The FMPC5_ is a module with integral piston type stop valve which isolates upstream of the steam trap. The FMPC5_ is available with connections for the draining of upstream pipework and trap venting upstream of the steam trap.

Sizes and Pipeline Connections

DN 15, DN20 screwed BSPT/NPT or socket weld ends to ANSI B 16.11 Class 3000
Available with IBR certificate on request.

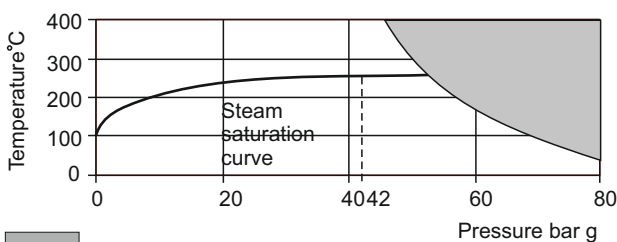
Standards

This product fully complies with the requirement of ASME B 16.34 class 600 standard.

Limiting Conditions

Body design conditions	ASME class 600
PMO Maximum operating pressure	42 bar g for saturated steam service
TMO Maximum operating temperature	425°C
Maximum cold hydraulic test pressure	63 bar g

Operating Range



The product must not be used in this region

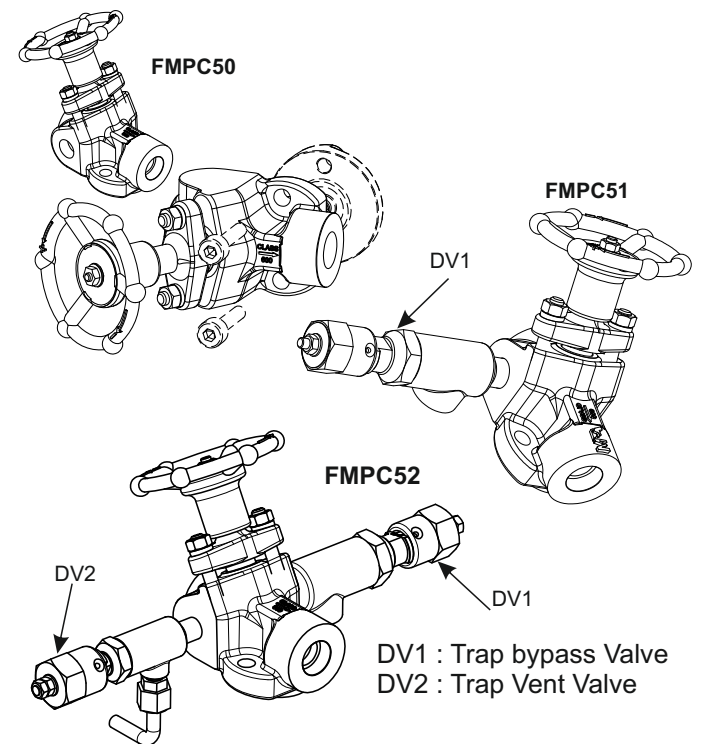
Available Types

Type	Description
FMPC50	Mainline compact module with upstream isolation valve
FMPC51	Main line compact module with upstream isolation valve and trap bypass valve (DV1)
FMPC52	Main line compact module with upstream isolation valve, trap bypass valve (DV1) and trap vent (DV2)

Kv Values

All Sizes Kv =1.8

For conversion $C_v (UK) = K_v \times 0.963$, $C_v (US) = K_v \times 1.156$
The Kv stated is for each valve rather than the complete connector module

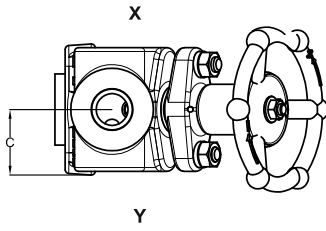
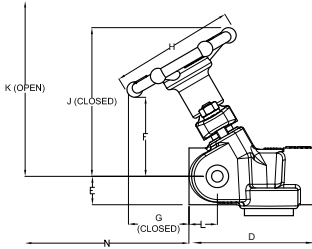


Material

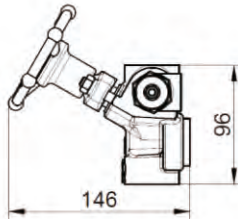
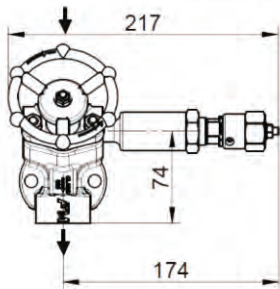
No.	Part	Material	Standard
1	Body	Carbon steel	ASTM A105 N
2	Sealing stack	Graphite and SS	
3	Bonnet	Carbon steel	ASTM A105 N
4	Spacer	Stainless steel	ASTM A276 Gr. 410
5	Stem-Piston	Stainless steel	ASTM A276 Gr. 316
6	Hand wheel	S G Iron	S G IRON 400/15
7	Nameplate	Stainless steel	SS 304
8	M8 Studs	Carbon steel	ASTM A196 Gr. B 7
9	M8 Nuts	Carbon steel	ASTM A194 Gr. 2 H
10	Disc spring washer	Spring steel	SS 304
11	Plain washer	Stainless steel	SS 304
12	M6 LH lock nut	Stainless steel	SS 304
13	M15 lock nut DV1	Stainless steel	SS 304
14	M22 lock nut DV2	Stainless steel	SS 304
15	Trap bypass valve Dv1	Carbon steel	ASTM A105 N
16	Trap vent valve DV2	Carbon steel	ASTM A105 N

X and Y denote position of bypass valve (Dv1) and depressurization valve (Dv2) connection

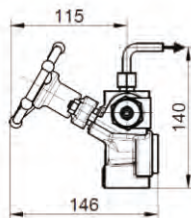
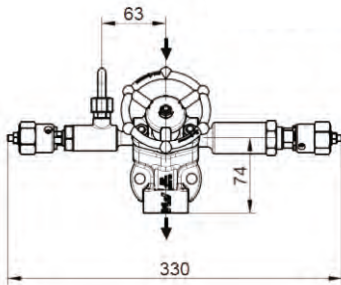
FMPC50



FMPC51



FMPC52



Installation

There are two criteria which must be satisfied to ensure that the swivel connector trap will operate correctly and ensure effective condensate removal

1. The pipeline connector shall be installed with flow in the direction of the arrow. Flow can be horizontal (left to right or vice versa), vertical or inclined.
2. The connection face for the swivel connector steam trap must be in the vertical plane.

The FMPC50 and trap are joined by a high integrity spirally wound gasket joint. It is important that no damages are caused, e.g. by weld, weld splatter, knocks, etc. to the trap gasket face. Hence, care must be taken when installing the FMPC50 into the pipe work. It is recommended that the trap be installed as soon as the FMPC50 is in the pipe work. The trap can be joined to the FMPC50 prior to installation.

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

How to Order

Example 1No. Forbes Marshall pipeline connector FMPC50 in forged carbon steel body with integral piston valve 1/2" socket weld to ANSI B16.11 Class 3000.

Note : All certification / inspection requirements must be stated at the time of order placement.

Recommended Tightening Torque

No	Item	Or Mm	Nm
7	Handwheel	10A/F M6	3.5
10	Nuts	14A/F M8	10
16*	M22Lock nut	30A/F M22	100
17*	M15 locknut	24A/F M15	70

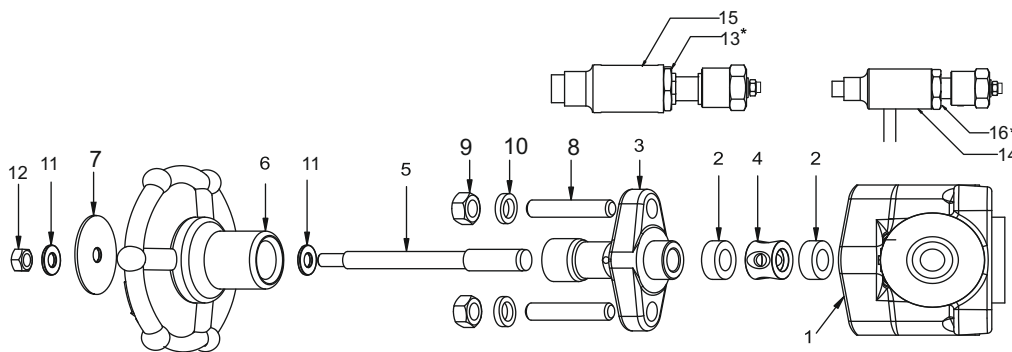
Spare Parts

For spare parts refer user manual

Dimensions (approximate) in mm

C	D	E	F	G	H	J	K	L	N
35	96	22	61	48	96	115	130	22	57

Model	Weight (kg)
FMPC50	2
FMPC51	2.4
FMPC52	2.8



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