

Steam Traps Steel Manifolds

FM/FSM Series Manifolds

Fabricated Carbon Steel • Forged Steel

Model	FM	FSM
Sizes	1/2", 3/4"	1/2", 3/4"
Connections	NPT, SW	NPT, SW
Body Material	Fabricated Carbon Steel	Forged Steel
PMO Max. Operating Pressure	720 PSIG	600 PSIG
Pressure/Temperature Rating	720 PSIG @ 508°F	600 PSIG @ 500°F

Typical Applications

FM / FSM manifolds are used for steam distribution TO the tracing system and for condensate collection FROM the tracing system. Commonly used in chemical and petrochemical facilities as well as in other industrial plants that have multiple tracing applications. Manifolding the steam distribution and condensate collection system not only cuts down on installation and maintenance costs, but also provides freeze protection. FSM Series manifolds have integral isolation valves.

Description FM

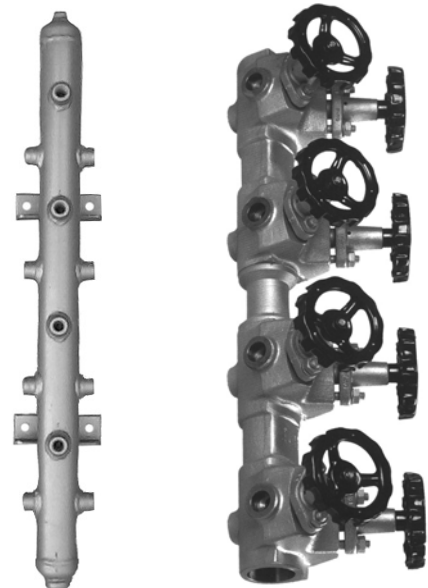
The FM manifold is fabricated from carbon steel and available with either NPT or Socket-weld connections. Condensate collection type are provided with a built-in siphon tube to minimize bi-phase flow, which reduces water hammer and allows flash steam space to prevent freeze damage.

Description FSM

The FSM manifold is manufactured from forged steel and is equipped with integral piston style valves. The unique sealing system of the valves utilize an austenitic stainless steel piston that slides into two rings composed of reinforced graphite ring stainless steel plates.

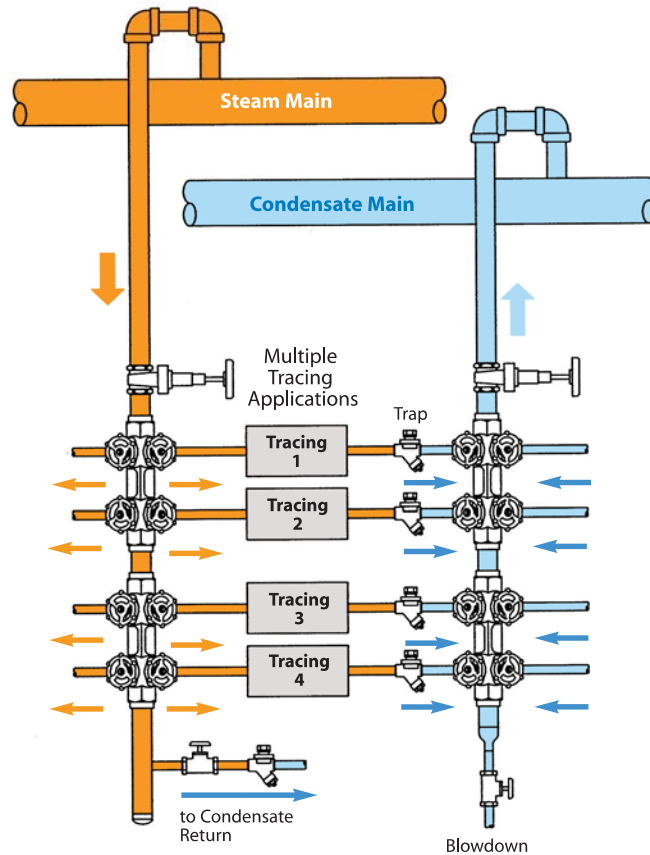
Features

- Compact design saves valuable plant space
- Available in 4, 6, 8 & 12 branch designs
- Available with pre-assembled steam trap stations
- Standard designs or custom built manifolds available
- Provides freeze protection
- Reduces installation and maintenance time
- On FSM Model valve bonnets are long neck type to allow for installation of insulation, keeping surface temperatures low for protection of personnel



FM Manifold
(Carbon Steel)

FSM Manifold
(Forged Steel)



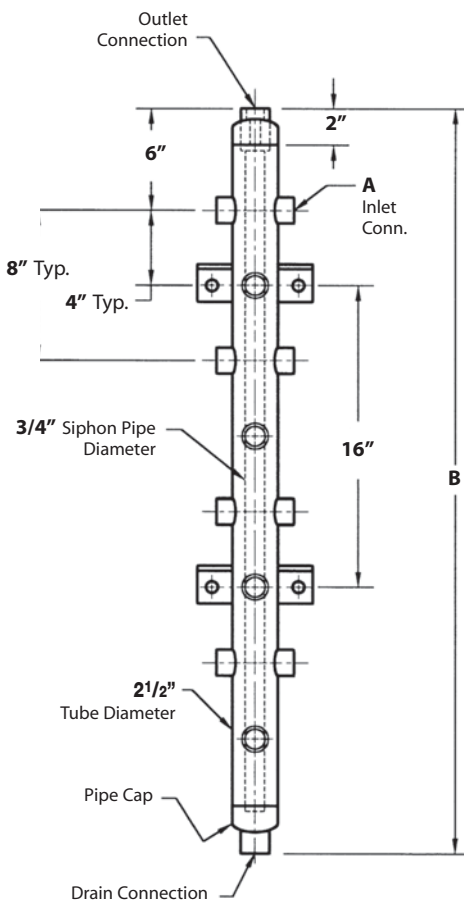
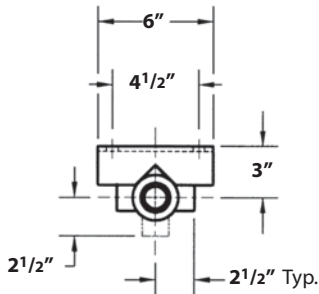
FSM Steam Distribution Manifold
Distributes Steam TO Tracing Applications

FSM Condensate Collection Manifold
Collects Condensate FROM Tracing Applications

Steam Traps Steel Manifolds

FM Series Manifolds

Fabricated Carbon Steel



Description Vertical Mount	Model Code	Inlet (A)		# Front Conn.	# Side Conn.	Conn. Total	B Length (in)	Wt.. (lbs)
		Size	Type					
Condensate Collection (C) Manifolds								
4 side conn.	FM4-12-N-C	1/2"	NPT	4	0	4	24	25
4 side conn.	FM4-13-N-C	3/4"	NPT	4	0	4	24	27
4 side/2 front conn.	FM6-12-N-C	1/2"	NPT	4	2	6	24	27
4 side/2 front conn.	FM6-13-N-C	3/4"	NPT	4	2	6	24	29
8 side conn.	FM8-12-N-C	1/2"	NPT	8	0	8	40	40
8 side conn.	FM8-13-N-C	3/4"	NPT	8	0	8	40	42
8 side/4 front conn.	FM12-12-N-C	1/2"	NPT	8	4	12	40	46
8 side/4 front conn.	FM12-13-N-C	3/4"	NPT	8	4	12	40	48
12 side conn.	FM12A-12-N-C	1/2"	NPT	12	0	12	56	56
12 side conn.	FM12A-13-N-C	3/4"	NPT	12	0	12	56	58
Steam Distribution (D) Manifolds								
4 side conn.	FM4-12-N-D	1/2"	NPT	4	0	4	24	25
4 side conn.	FM4-13-N-D	3/4"	NPT	4	0	4	24	27
4 side/2 front conn.	FM6-12-N-D	1/2"	NPT	4	2	6	24	27
4 side/2 front conn.	FM6-13-N-D	3/4"	NPT	4	2	6	24	29
8 side conn.	FM8-12-N-D	1/2"	NPT	8	0	8	40	40
8 side conn.	FM8-13-N-D	3/4"	NPT	8	0	8	40	42
8 side/4 front conn.	FM12-12-N-D	1/2"	NPT	8	4	12	40	46
8 side/4 front conn.	FM12-13-N-D	3/4"	NPT	8	4	12	40	48
12 side conn.	FM12A-12-N-D	1/2"	NPT	12	0	12	56	56
12 side conn.	FM12A-13-N-D	3/4"	NPT	12	0	12	56	58

Connection Codes: **N** = NPT, **SW** = Socket Weld

For Socket Weld Connections: change **N** in Model code to **SW**. Example: **FM4-12-SW-C**

MATERIALS – FM

Body	Fabricated Carbon Steel
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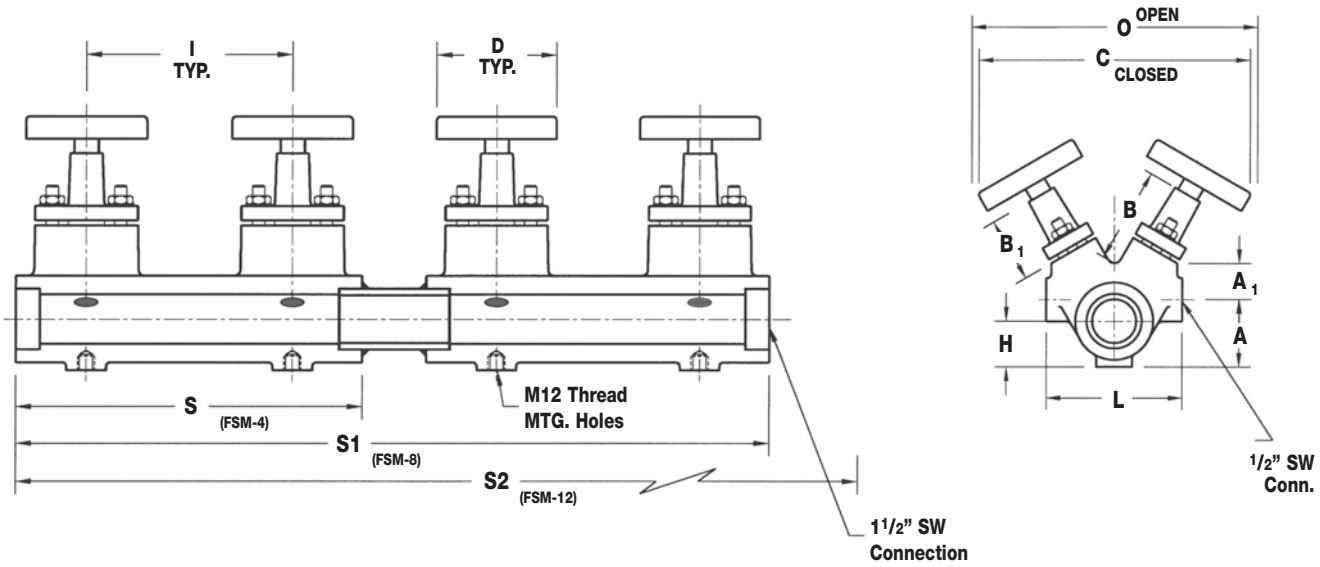
Steam Traps Steel Manifolds

FSM Series Manifolds

Forged Steel

DIMENSIONS & WEIGHTS – inches

Model	L	H	D	C	O	I	S	S1	S2	A	A1	B	B1	No. of Valves	No. of Holes	Weight (lbs)
FSM-4	4.33"	1.61"	3.94"	8.97"	10.63"	6.30"	13.03"	-	-	2.79"	1.22"	3.23"	2.79"	4	2 (M12)	23
FSM-8	4.33"	1.61"	3.94"	8.97"	10.63"	6.30"	-	28.1"	-	2.79"	1.22"	3.23"	2.79"	8	4 (M12)	49
FSM-12	4.33"	1.61"	3.94"	8.97"	10.63"	6.30"	-	-	36.22"	2.79"	1.22"	3.23"	2.79"	12	6 (M12)	72



Description	Model Code	Connection		# of Branches
		Size	Type	
Condensate Collection (C) Manifolds				
4 Branches/4 Valves	FSM4-12-N-C	1/2"	NPT	4
4 Branches/4 Valves	FSM4-13-N-C	3/4"	NPT	4
8 Branches/8 Valves	FSM8-12-N-C	1/2"	NPT	8
8 Branches/8 Valves	FSM8-13-N-C	3/4"	NPT	8
12 Branches/12 Valves	FSM12-12-N-C	1/2"	NPT	12
12 Branches/12 Valves	FSM12-13-N-C	3/4"	NPT	12
Steam Distribution (D) Manifolds				
4 Branches/4 Valves	FSM4-12-N-D	1/2"	NPT	4
4 Branches/4 Valves	FSM4-13-N-D	3/4"	NPT	4
8 Branches/8 Valves	FSM8-12-N-D	1/2"	NPT	8
8 Branches/8 Valves	FSM8-13-N-D	3/4"	NPT	8
12 Branches/12 Valves	FSM12-12-N-D	1/2"	NPT	12
12 Branches/12 Valves	FSM12-13-N-D	3/4"	NPT	12

Connection Codes: **N** = NPT, **SW** = Socket Weld

For Socket Weld Connections: change **N** in Model code to **SW**.

Example: **FSM4-12-SW-C**

CAPACITIES

Pressure (PSIG)	Condensate (lbs/hr) ¹	Steam (lbs/hr) ²
25	1850	160
50	1000	310
75	840	460
100	610	730
125	660	760
150	620	900
200	570	1200
250	535	1500
300	510	1800
400	470	2350
500	460	3000
600	440	3550

¹Saturated condensate discharging into 20 PSI back pressure

²Saturated Steam flow @ 5000 ft/min velocity

MATERIALS – FSM

Body	Forged Steel, A105
Hand Wheel	Sheet Metal
Bonnet	Forged Steel, A105
Valve ring above	Graphite
Valve ring below	Graphite/Stainless Steel
Piston	Stainless Steel, A304