



STEAM & CONDENSATE MANIFOLD

MODEL M4P/M8P/M12P

RUGGED MANIFOLD WITH BUILT-IN PISTON VALVES

Features

Forged steel manifolds for steam distribution and condensate recovery on tracing and other applications.

1. Rugged and versatile design minimizes installation area and easily adapts to plant requirements.
2. Each line has a built-in piston valve, minimizing installation space.
3. Employs a piston valve with upper and lower valve rings made of alternating layers of stainless steel and graphite that provide a tight-sealing soft seat.
4. The synergy between the wide stainless steel piston sealing surface and soft seating of valves ensures reliable long term sealing.
5. Complete condensate manifold packages are available, incorporating shutoff valves and steam traps.



Specifications

Model	M4P		M8P		M12P		
Steam Outlet* / Condensate Inlet**	No. of Connections	4		8		12	
	Connection***	Screwed	Socket Welded	Screwed	Socket Welded	Screwed	Socket Welded
	Size (mm)	15, 20					
Steam Inlet* / Condensate Outlet**	Connection***	Socket Welded					
	Size (mm)	40					
Drain* / Blowdown**	Connection***	Socket Welded					
	Size (mm)	40					
Maximum Operating Pressure (MPaG) PMO	7.67						
Maximum Operating Temperature (°C) TMO	425						

* When used as a steam manifold ** When used as a condensate manifold *** Flanged connections available as an option 1 MPa = 10.197 kg/cm²
Compact M4P/M8P/M12P with short pitch available as option. Contact TLV for details.

PRESSURE SHELL DESIGN CONDITIONS (**NOT** OPERATING CONDITIONS): Maximum Allowable Pressure (MPaG) PMA: 7.67
Maximum Allowable Temperature (°C) TMA: 425

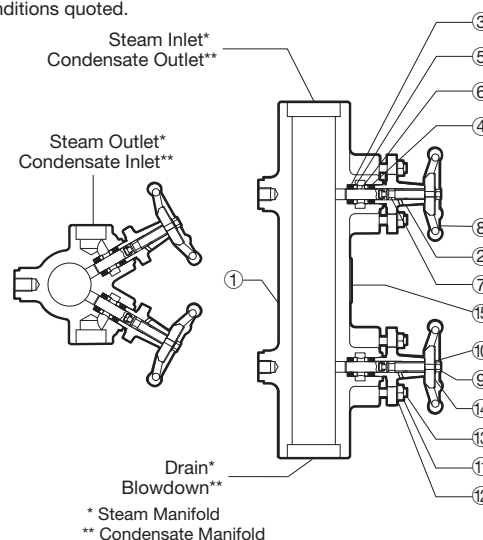


To avoid abnormal operation, accidents or serious injury, DO NOT use this product outside of the specification range.
Local regulations may restrict the use of this product to below the conditions quoted.

No.	Description	Material	JIS	ASTM/AISI
①	Body	Carbon Steel	—	A105
②	Valve Bonnet	Carbon Steel	—	A105
③	Lower Valve Ring	Graphite/Stainless Steel	—	—
④	Upper Valve Ring	Graphite/Stainless Steel	—	—
⑤	Lantern Bushing	Stainless Steel	—	A182 F316
⑥	Piston	Stainless Steel	—	A182 F316
⑦	Spindle	Stainless Steel	—	A479 410
⑧	Handwheel	Carbon Steel	—	A105
⑨	Handwheel Nut	Carbon Steel	—	—
⑩	Washer	Carbon Steel	—	—
⑪	Bonnet Nut	Carbon Steel	—	A194 2H
⑫	Washer	Carbon Steel	—	—
⑬	Bonnet Bolt	Alloy Steel	—	A193 B7
⑭	Design Plate	Aluminum	—	—
⑮	Nameplate	Stainless Steel	SUS304	AISI304*

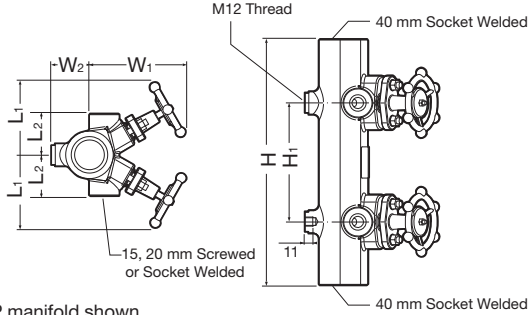
* Equivalent

Repair parts are not provided. If repairs are required for any reason, consult TLV.



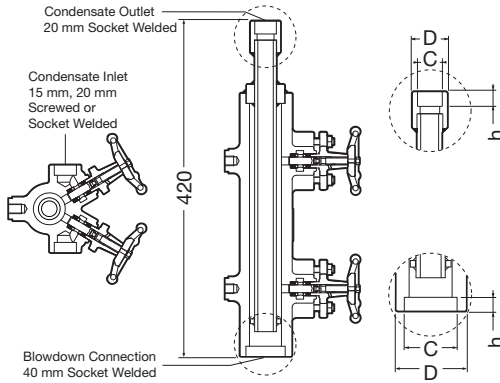
Dimensions

● M4P / M8P / M12P



M4P manifold shown

Optional Siphon Tube for Condensate Manifolds



M4P shown; optional siphon tubes are also available for M8P and M12P

M4P / M8P / M12P

Model	L ₁	L ₂	H	H ₁	W ₁ *	W ₂	Weight** (kg)
M4P			330 (240)	160 (120)	130	51	9.4 (8.4)
M8P	97	55	720 (520)				19 (17)
M12P			1111 (800)				29 (26)

* At full open position ** Approximate
() Optional compact model

Socket Welded Connections*

Size	φD	φC		h
		JIS	ASME	
15	38	22.2	21.8	13
20	64	27.7	27.2	
40	64	49.1	48.8	

* JIS or ASME B16.11-2005

Siphon Tube Socket Welded*

Connection	Size	φD	φC		h
			JIS	ASME	
Condensate Outlet	20	37	27.7	27.2	16
Blowdown	40	64	49.1	48.8	13

* JIS or ASME B16.11-2005

Note: Condensate inlet connections for manifolds with siphon tubes have the same dimensions as for standard M4P/M8P/M12P.

Optional Condensate Manifold Packages

Packages are available for the M4P, M8P and M12P manifolds (pictures show M8P manifold packages.)

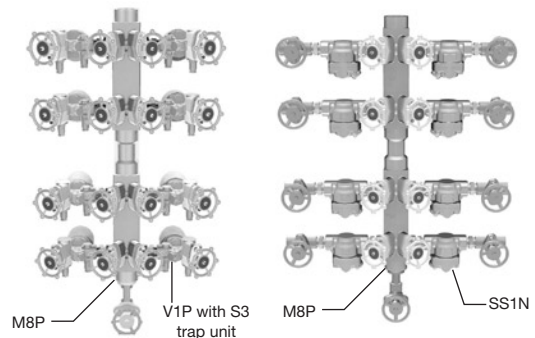
Package	Components
① With V1P Trap Stations Trap station model: Shutoff valve type: Steam trap unit: (QuickTrap*)	V1P Series Piston valve (built-in) Free Float: S3/S5/S5H Thermodyne: P46UC Thermostatic: L21/L32
② With Steam Traps & Valves Shutoff valve type (Trap Inlet): Shutoff valve type (Trap Outlet): Steam trap:	Various valve types** Piston valve (built-in) Free Float: SS1** Temperature Control: LEX3N-TZ** (with built-in scale removal feature)

* For more information, see the **QuickTrap** specifications data sheet for the steam trap employing the desired trap unit (trap unit - **QuickTrap** data sheet): S3 - FS3; S5 - FS5/FS5H; S5H - FS5/FS5H; P46UC - FP46UC; L21 - FL21/FL32; L32 - FL21/FL32

** Other steam trap types are available. Consult TLV for available valve types.

Note: The operating and allowable pressure and temperature ranges of the manifold package are limited to the lowest PMO/TMO and PMA/TMA of the steam trap or valves used.
See the specifications data sheet for the steam trap or valve, or contact TLV for details.

① With V1P Trap Stations ② With Steam Traps & Valves



Manufacturer
TLV CO., LTD.
Kakogawa, Japan
is approved by LRQA Ltd. to ISO 9001/14001

