TRAP STATION

MODEL V1P/V2P

FORGED TRAP STATION EQUIPPED WITH BUILT-IN PISTON VALVE

Features

Compact valve and steam trap station for use with condensate manifolds or applications with limited installation space.

1. Rugged, compact and versatile design minimizes installation area and easily adapts to plant requirements.
2. 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.
3. The synergy between the wide stainless steel piston sealing surface and soft valve seat of the piston valve ensures reliable long term sealing.
4. **QuickTrap** 2-bolt universal connection permits trap unit replacement in minutes without disturbing piping.
5. Built-in screen with large surface area ensures trouble-free operation.
6. Includes built-in BD2 blowdown and/or test valves on some models for station blowdown and trap testing.

Photo shows with S3 trap unit

Specifications

Model	V1P-RL	V1P-RB	V1P-LB	V1P-RW	V1P-LW	V1P-RV	V1P-LV	V2P-RL	V2P-RB	V2P-LB
Connection	Screwed, Socket Welded									
Size (mm)	15, 20									
Built-in Valve Location	1 valve at trap inlet							1 valve at trap inlet, 1 valve at trap outlet		
Max. Operating Pressure (MPaG) PMO	5.0*									
Max. Operating Temperature (°C) TMO	425*									

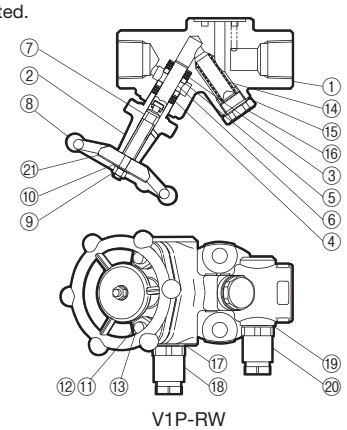
PRESSURE SHELL DESIGN CONDITIONS (NOT OPERATING CONDITIONS): Maximum Allowable Pressure (MPaG) PMA: 5.0* Maximum Allowable Temperature (°C) TMA: 425*

1 MPa = 10.197 kg/cm²

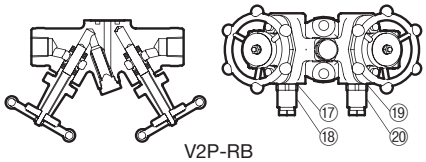
* For trap station only; further restricted by mounted trap unit.

⚠ CAUTION 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
			Stainless Steel	—	A182 F304
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	—	—
⑫	Washer		Carbon Steel	—	—
⑬	Bonnet Bolt		Alloy Steel	—	A193 Gr.B7
⑭	Screen [3] inside/outside		Stainless Steel	SUS304/430	AISI304/430 [1]
⑮	Screen Holder Gasket [3]	Carbon Steel Body	Soft Iron	SUYP	AISI1010 [1]
		Stain. Steel Body	Stainless Steel	SUS316L	AISI316L [1]
⑯	Screen Holder	Carbon Steel Body	Carbon Steel	—	A105
		Stain. Steel Body	Stainless Steel	SUS303	AISI303 [1]
⑰	Blowdown Valve Gasket [2],[3]	Carbon Steel Body	Soft Iron	SUYP	AISI1010 [1]
		Stain. Steel Body	Stainless Steel	SUS316L	AISI316L [1]
⑱	Blowdown Valve (BD2) [2]		Cast Stainless Steel	—	A351 Gr.CF8
⑲	Test Valve Gasket [2],[3]	Carbon Steel Body	Soft Iron	SUYP	AISI1010 [1]
		Stain. Steel Body	Stainless Steel	SUS316L	AISI316L [1]
⑳	Test Valve (BD2) [2]		Cast Stainless Steel	—	A351 Gr.CF8
㉑	Nameplate		Aluminum	—	—



V1P-RW



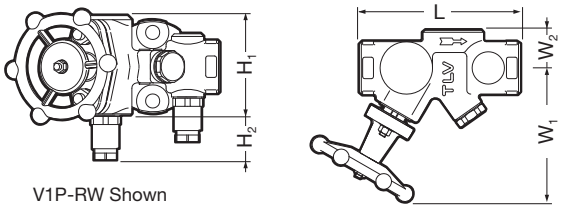
V2P-RB

[1] Equivalent [2] See next page for available models.

[3] Aside from these indicated, replacement parts are not normally supplied. Consult TLV if other parts are needed. Furthermore, the material for the gasket varies depending on the body material of the product. Include the body material of your product when ordering a replacement gasket.

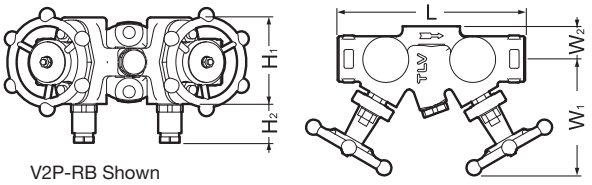
Dimensions

● **V1P** Series Screwed & Socket Welded



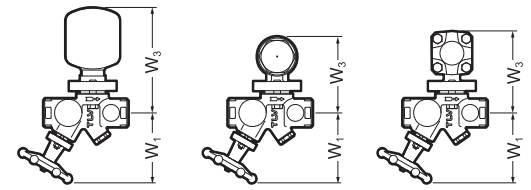
V1P-RW Shown

● **V2P** Series Screwed & Socket Welded



V2P-RB Shown

● **Mounted Steam Trap Units (QuickTrap)**



With: S3/S5/S5H P46UC L21/L32

V1P Series Screwed & Socket Welded (mm)

Size	L	H1	H2	W1*	W2	Weight** (kg)
15	120	74	33	120	28	2.4
20						

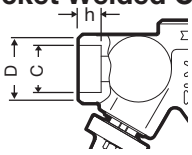
Screwed connections are Rc(PT) or NPT; other standards available
* At full-open position ** With blowdown and test valves

V2P Series Screwed & Socket Welded (mm)

Size	L	H1	H2	W1*	W2	Weight** (kg)
15	160	74	33	120	28	3.8
20						

Screwed connections are Rc(PT) or NPT; other standards available
* At full-open position ** With blowdown and test valves

Socket Welded Connections (mm)



Size	ϕD	ϕC JIS	ϕC ASME	h
15	36	22.2	21.8	13
20		27.7	27.2	

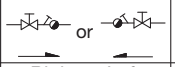
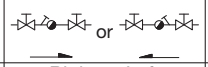
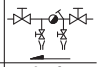
* JIS or ASME B16.11-2005, other standards available

(mm)

Model	W1*	W3	Weight (kg) With V1P**	Weight (kg) With V2P**
S3	120	143	3.4	4.8
S5		175	3.8	5.2
S5H		178	3.9	5.3
P46UC		110	3.4	4.8
L21/L32			3.5	4.9

*At full-open position
** Combined weight of trap station with mounted trap unit

Valve Series

Model		V1P-RL*	V1P-RB	V1P-LB	V1P-RW	V1P-LW	V1P-RV	V1P-LV	V2P-RL*	V2P-RB	V2P-LB
Station Picture											
Flow Diagram											
Flow Direction		Right or Left	Right	Left	Right	Left	Right	Left	Right or Left	Right	Left
Inlet Valve		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Outlet Valve		—	—	—	—	—	—	—	✓	✓	✓
Blowdown Valve		—	✓	✓	✓	✓	—	—	—	✓	✓
Test Valve		—	—	—	✓	✓	✓	✓	—	✓	✓
Available Trap Units**	Free Float	S3 / S5 / S5H									
	Thermodynamic	P46UC									
	Thermostatic	L21 / L32									

● **Steam Trap Units Specifications****

Free Float Steam Trap S3 / S5 / S5H		Thermodynamic Steam Trap P46UC		Thermostatic Steam Trap L21 / L32	
PMO: 2.1 / 3.2 / 4.6 MPaG		PMO: 4.6 MPaG		PMO: 2.1 / 3.2 MPaG	
TMO: 400 / 400 / 425 °C		TMO: 425 °C		TMO: 235 / 240 °C	
Max. Discharge Capacity*** 215 / 670 / 245 kg/h	S3/S5/S5H	Max. Discharge Capacity*** 740 kg/h	P46UC	Max. Discharge Capacity*** 760 / 530 kg/h	L21/L32

* Can be used for flow in either direction
** 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; S5H - FS5; P46UC - FP46UC; L21 - FL21/FL32; L32 - FL21/FL32;
*** Capacities shown here will vary depending on orifice numbers, type of X-element and/or pressure differential.

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

ISO 9001/ISO 14001