



TRAP STATION

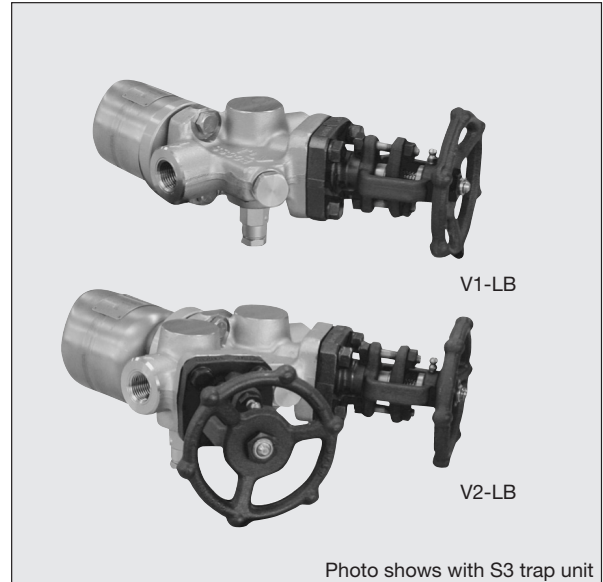
MODEL V1/V2

FORGED TRAP STATION EQUIPPED WITH BUILT-IN BELLOWS SEALED VALVE

Features

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

1. All wetted components are stainless steel.
2. Rugged, compact and versatile design minimizes installation area and easily adapts to plant requirements.
3. Built-in bellows-sealed valves have durable stainless steel bellows to eliminate gland leakage.
4. Good seal with stellite hardened surfaces on valve plug and valve seat.
5. **QuickTrap** 2-bolt universal connection permits trap unit replacement in minutes without disturbing piping.
6. Built-in screen with large surface area ensures trouble-free operation.
7. Includes built-in BD2 blowdown and/or test valves on some models for station blowdown and trap testing.



Specifications

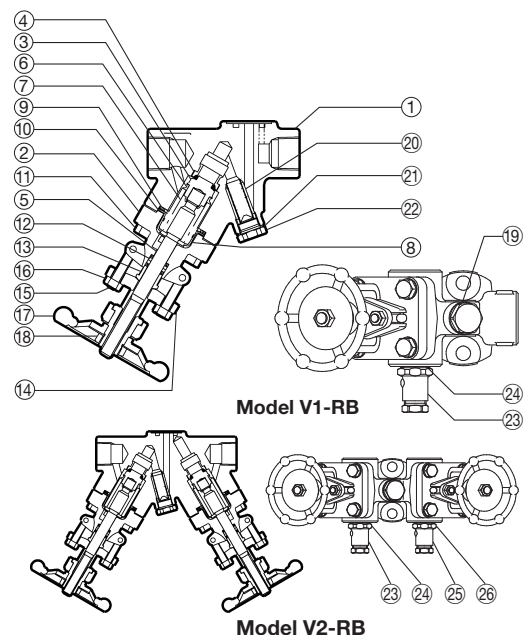
Model	V1-RL, V1-LB, V1-RB		V2-RL, V2-LB, V2-RB	
Connection	Screwed	Socket Welded	Screwed	Socket Welded
Size (mm)	15, 20		15, 20	
Built-in Valve Location	1 valve at trap inlet		1 valve at trap inlet, 1 valve at trap outlet	
Maximum Operating Pressure (MPaG) PMO			4.6*	
Maximum Operating Temperature (°C) TMO			425*	

PRESSURE SHELL DESIGN CONDITIONS (**NOT** OPERATING CONDITIONS): Maximum Allowable Pressure (MPaG) PMA: 4.6* 1 MPa = 10.197 kg/cm²
 * For trap station only; further restricted by mounted trap unit 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⁾
①	Body	Stainless Steel	SUS304	AISI304
②	Valve Bonnet	Carbon Steel	—	A105
③	Valve Plug	Stainless Steel + Stellite	—	A276-304
④	Valve Seat	Stainless Steel + Stellite	—	A276-410
⑤	Valve Stem	Stainless Steel	—	A276-410
⑥	Bellows Ring	Stainless Steel	—	A276-304
⑦	Bellows	Stainless Steel	SUS316L	AISI316L
⑧	Bellows Flange	Stainless Steel	—	A276-316L
⑨	Bellows Gasket	Lower ²⁾	Graphite/Stainless Steel	- /SUS316 - /AISI316
⑩		Upper	Graphite/Stainless Steel	- /SUS304 - /AISI304
⑪	Bonnet Bolt	Alloy Steel	—	A193 Gr.B7
⑫	Gland Packing	Graphite	—	—
⑬	Gland Bushing	Stainless Steel	—	A276-410
⑭	Gland Flange	Carbon Steel	—	A105
⑮	Gland Eye Bolt	Alloy Steel	—	A193 Gr.B7
⑯	Gland Nut	Carbon Steel	—	A194 Gr.2H
⑰	Handwheel	Ductile Cast Iron	FCD450	A536
⑱	Handwheel Nut	Carbon Steel	S25C	AISI1025
⑲	Nameplate	Stainless Steel	SUS304	AISI304
⑳	Screen ³⁾ inside/outside	Stainless Steel	SUS304/430	AISI304/430
㉑	Screen Holder Gasket ³⁾	Stainless Steel	SUS316L	AISI316L
㉒	Screen Holder Plug	Stainless Steel	SUS303	AISI303
㉓	Blowdown Valve (BD2) ²⁾	Cast Stainless Steel	—	A351 Gr.CF8
㉔	Blowdown Valve Gasket ^{2,3)}	Stainless Steel	SUS316L	AISI316L
㉕	Test Valve (BD2) ²⁾	Cast Stainless Steel	—	A351 Gr.CF8
㉖	Test Valve Gasket ^{2,3)}	Stainless Steel	SUS316L	AISI316L

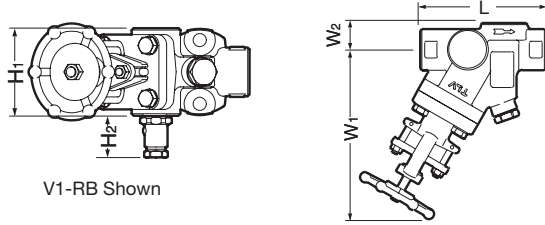


¹⁾ Equivalent ²⁾ See next page for available models

³⁾ Aside from these indicated, replacement parts are not normally supplied. Consult TLV if other parts are needed.

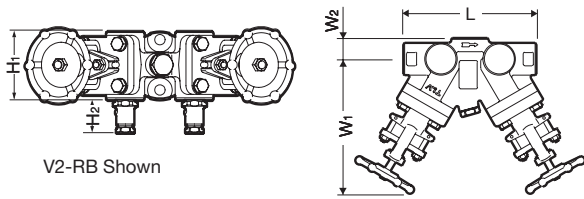
Dimensions

● **V1 Series** Screwed & Socket Welded



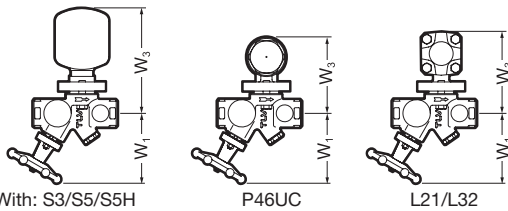
V1-RB Shown

● **V2 Series** Screwed & Socket Welded



V2-RB Shown

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



With: S3/S5/S5H

P46UC

L21/L32

V1 Series Screwed & Socket Welded (mm)

Size	L	H ₁	H ₂	W ₁ *	W ₂	Weight** (kg)
15	120	70	33	180	26	3.4
20						

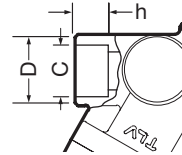
Screwed connections are Rc(PT) or NPT; other standards available
 * At full-open position ** With blowdown and test valves

V2 Series Screwed & Socket Welded (mm)

Size	L	H ₁	H ₂	W ₁ *	W ₂	Weight** (kg)
15	160	70	33	180	26	5.8
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	φ D	φ C		h
		JIS	ASME	
15	36	22.2	21.8	13
20		27.7	27.2	

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

Model	W ₁ *	W ₃	Weight (kg)		
			With V1**	With V2**	
S3	180	143	4.4	6.8	
S5		175	4.8	7.2	
S5H		178	4.9	7.3	
P46UC		110		4.4	6.8
L21/L32				4.5	6.9

*At full-open position

** Combined weight of trap station with mounted trap unit

Valve Series

Model	V1-RL*	V1-RB	V1-LB	V2-RL*	V2-RB	V2-LB
Station Picture						
Flow Diagram						
Flow Direction	Right or Left	Right	Left	Right or Left	Right	Left
Inlet Valve	✓	✓	✓	✓	✓	✓
Outlet Valve	—	—	—	✓	✓	✓
Blowdown Valve	—	✓	✓	—	✓	✓
Test Valve	—	—	—	—	✓	✓
Available	Free Float	S3 / S5 / S5H				
Trap	Thermodynamic	P46UC				
Units**	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		Max. Discharge Capacity*** 740 kg/h		Max. Discharge Capacity*** 760 / 530 kg/h	

* 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

