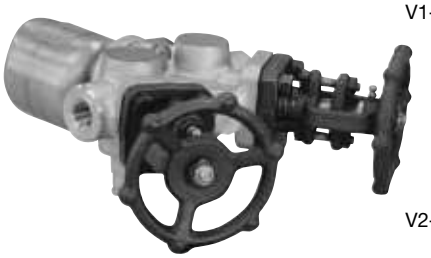
V1/V2
Forged Stainless Steel Trap Station
/w Bellows Sealed Valve

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.

V1-LB



V2-LB

Photo shows with S3 trap unit

Specifications

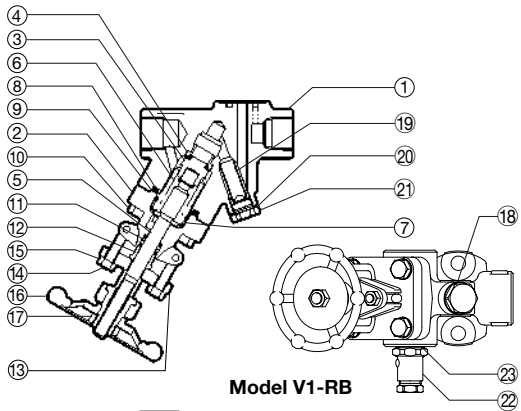
Model	V1-RB, V1-LB		V2-RB, V2-LB	
Connection	Screwed	Socket Welded	Screwed	Socket Welded
Size	½″, ¾″	DN 15, 20	½″, ¾″	DN 15, 20
Built-in Valve Location	1 valve at trap inlet		1 valve at trap inlet, 1 valve at trap outlet	
Maximum Operating Pressure (barg) PMO	46*			
Maximum Operating Temperature (˚C) TMO	425*			

PRESSURE SHELL DESIGN CONDITIONS (**NOT** OPERATING CONDITIONS): Maximum Allowable Pressure (barg) PMA: 46* 1 bar = 0.1 MPa
Maximum Allowable Temperature (˚C) TMA: 425*

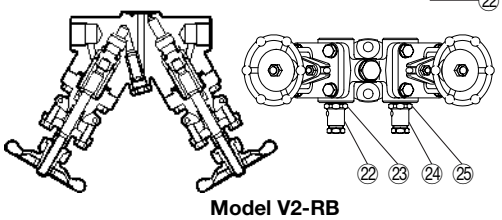
* For trap station only; further restricted by mounted trap unit.

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	DIN [1]	ASTM/AISI [1]
①	Body		Stainless Steel SUS304	1.4301	AISI304
②	Valve Bonnet		Carbon Steel A105	1.0460	—
③	Valve Plug		Stainless Steel A276-304 + Stellite	—	—
④	Valve Seat		Stainless Steel A276-410 + Stellite	—	—
⑤	Valve Stem		Stainless Steel A276-410	—	—
⑥	Bellows		Stainless Steel SUS316L	1.4404	AISI316L
⑦	Bellows Flange		Stainless Steel A276-316L	1.4404	—
⑧	Bellows Gasket	Lower [3]	Graphite/Stainless Steel SUS316	- /1.4401	- /AISI316
⑨		Upper	Graphite/Stainless Steel SUS304	- /1.4301	- /AISI304
⑩	Bonnet Bolt		Alloy Steel A193 Gr.B7	1.7225	—
⑪	Gland Packing		Graphite	—	—
⑫	Gland Bushing		Stainless Steel A276-410	—	—
⑬	Gland Flange		Carbon Steel A105	1.0460	—
⑭	Gland Eye Bolt		Alloy Steel A193 Gr.B7	1.7225	—
⑮	Gland Nut		Carbon Steel A194 Gr.2H	—	—
⑯	Handwheel		Ductile Cast Iron FCD450	0.7040	A536
⑰	Handwheel Nut		Carbon Steel S25C	1.1158	AISI1025
⑱	Nameplate		Stainless Steel SUS304	1.4301	AISI304
⑲	Screen [3] inside/outside		Stainless Steel SUS304/430	1.4301/1.4106	AISI304/430
⑳	Screen Holder Gasket [3]		Stainless Steel SUS316L	1.4404	AISI316L
㉑	Screen Holder Plug		Stainless Steel SUS303	1.4305	AISI303
㉒	Blowdown Valve (BD2) [2]		Stainless Steel A351 Gr.CF8	1.4312	—
㉓	Blowdown Valve Gasket [2,3]		Stainless Steel SUS316L	1.4404	AISI316L
㉔	Test Valve (BD2) [2]		Cast Stainless Steel A351 Gr.CF8	1.4312	—
㉕	Test Valve Gasket [2,3]		Stainless Steel SUS316L	1.4404	AISI316L



Model V1-RB

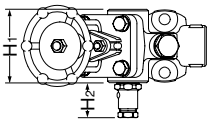


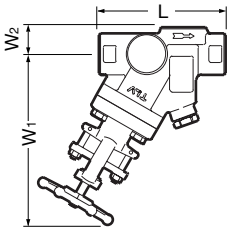
Model V2-RB

[1] Equivalent materials [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

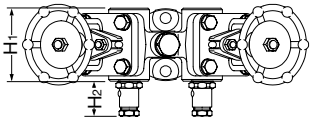
● V1-RB · V1-LB Screwed & Socket Welded

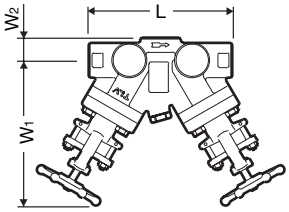




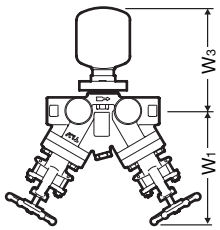
V1-RB shown; V1-LB is inverted (opposite flow direction)

● V2-RB · V2-LB Screwed & Socket Welded

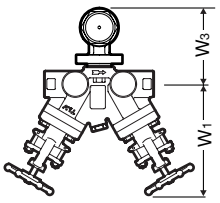




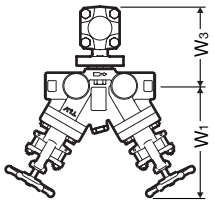
V2-RB shown; V2-LB is inverted (opposite flow direction)



With: S3/S5/S5H



P46UC



L21/L32

V1-RB · V1-LB Screwed* & Socket Welded (mm)

Size	DN	L	H1	H2	W1**	W2	Weight (kg)
½″	15	120	70	33	180	26	3.4
¾″	20						

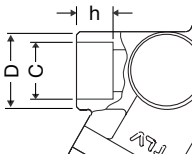
* Screwed connections are BSP or NPT; other standards available
** At full-open position

V2-RB · V2-LB Screwed* & Socket Welded (mm)

Size	DN	L	H1	H2	W1**	W2	Weight (kg)
½″	15	160	70	33	180	26	5.8
¾″	20						

* Screwed connections are BSP or NPT; other standards available
** At full-open position

● Socket Weld Connections (mm)



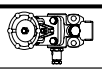
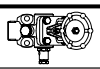
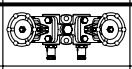
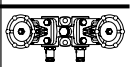
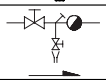
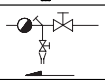
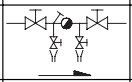
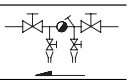
DN	ϕD	ϕC	h
15	36	21.8	13
20		27.2	

ASME B16.11-2005, other standards available

Model	W1* (mm)	W3 (mm)	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-RB	V1-LB	V2-RB	V2-LB
Station Picture					
Flow Diagram					
Flow Direction		Right	Left	Right	Left
Inlet Valve		✓	✓	✓	✓
Outlet Valve		—	—	✓	✓
Blowdown Valve		✓	✓	✓	✓
Test Valve		—	—	✓	✓
Available Trap Units*	Free Float	S3 / S5 / S5H			
	Thermodynamic	P46UC			
	Thermostatic	L21 / L32			

* 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.

● Steam Trap Unit Specifications*

Free Float Steam Trap S3 / S5 / S5H	
PMO: 21 / 32 / 46 barg	
TMO: 400 / 400 / 425 °C	
Max. Discharge Capacity** 215 / 670 / 245 kg/h	
Thermodynamic Steam Trap P46UC	
PMO: 46 barg	
TMO: 425 °C	
Max. Discharge Capacity** 740 kg/h	
Thermostatic Steam Trap L21 / L32	
PMO: 21 / 32 barg	
TMO: 235 / 240 °C	
Max. Discharge Capacity** 760 / 530 kg/h	