



# THERMODYNE STEAM TRAP

## MODEL P46SRN

### THERMODYNAMIC DISC TRAP WITH THERMOSTATIC AIR VENTING

#### Features

Steam trap of weldable carbon steel for steam mains, tracers and coils.

1. Inline replaceable valve seat module.
2. Air jacketing reduces no-load cycling.
3. Lapped disc provides steam-tight seal without air binding.
4. Built-in screen for trouble-free service.
5. Bimetal ring provides quick thermostatic air venting.
6. Hardened stainless steel working surfaces.



#### Specifications

Model		P46SRN		
Connection		Screwed	Socket Welded	Flanged
Size (mm)		15, 20, 25		
Maximum Operating Pressure (MPaG)	PMO	4.6		
Minimum Operating Pressure (MPaG)		0.03		
Maximum Operating Temperature (°C)	TMO	425		
Maximum Back Pressure		80% of Inlet Pressure		

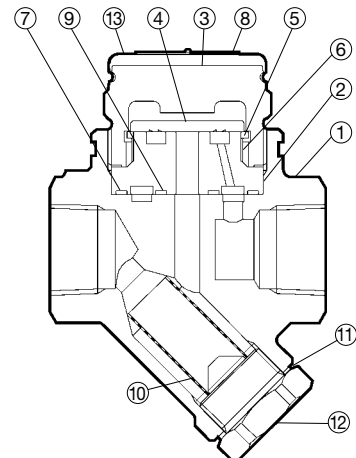
PRESSURE SHELL DESIGN CONDITIONS (**NOT** OPERATING CONDITIONS): Maximum Allowable Pressure (MPaG) PMA: 5.0 1 MPa = 10.197 kg/cm<sup>2</sup>  
Maximum Allowable Temperature (°C) TMA: 425



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.

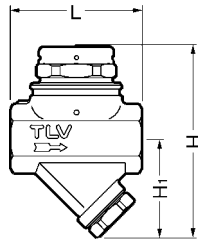
No.	Description	Material	JIS	ASTM/AISI*
①	Body	Carbon Steel	—	A105
② <sup>R</sup>	Module Valve Seat	Stainless Steel	SUS420F	AISI420F
③ <sup>R</sup>	Cover	Stainless Steel	SUS420F2	AISI420F2
④ <sup>R</sup>	Disc	Stainless Steel	SUS420J2	AISI420
⑤ <sup>R</sup>	Disc Holder Ring	Stainless Steel	SUS420J2	AISI420
⑥ <sup>R</sup>	Air Vent Ring	Bimetal	—	—
⑦ <sup>MR</sup>	Outer Module Gasket	Graphite/Stainless Steel	- /SUS316L	- /AISI316L
⑧	Nameplate	Stainless Steel	SUS304	AISI304
⑨ <sup>MR</sup>	Inner Module Gasket	Graphite/Stainless Steel	- /SUS316L	- /AISI316L
⑩ <sup>R</sup>	Screen inside/outside	Stainless Steel	SUS304/430	AISI304/430
⑪ <sup>MR</sup>	Screen Holder Gasket	Soft Iron	SUYP	AISI1010
⑫ <sup>R</sup>	Screen Holder	Cast Stainless Steel	—	A351 Gr.CF8
⑬ <sup>R</sup>	Cap	Stainless Steel	SUS304	AISI304
⑭	Flange**	Carbon Steel	—	A105

\* Equivalent material \*\* Shown overleaf  
Replacement kits available: (M) maintenance parts, (R) repair parts



**Dimensions**

● **P46SRN**  
Screwed

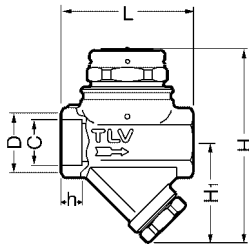


**P46SRN** Screwed\* (mm)

Size	L	H	H <sub>1</sub>	Weight (kg)
1/2"	80	120	62	1.2
3/4"				1.4
1"	88	125		

\* Rc (PT), other standards available

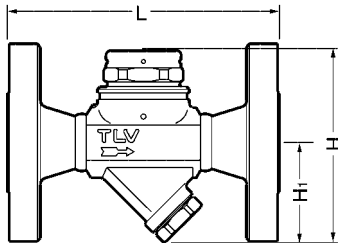
● **P46SRN**  
Socket Welded



**P46SRN** Socket Welded (mm)

DN	L	H	H <sub>1</sub>	φD	φC	h	Weight (kg)
15	80	120	62	30	22.2	13	1.2
20				36	27.7		1.4
25	88	125		44	34.5		

● **P46SRN**  
Flanged

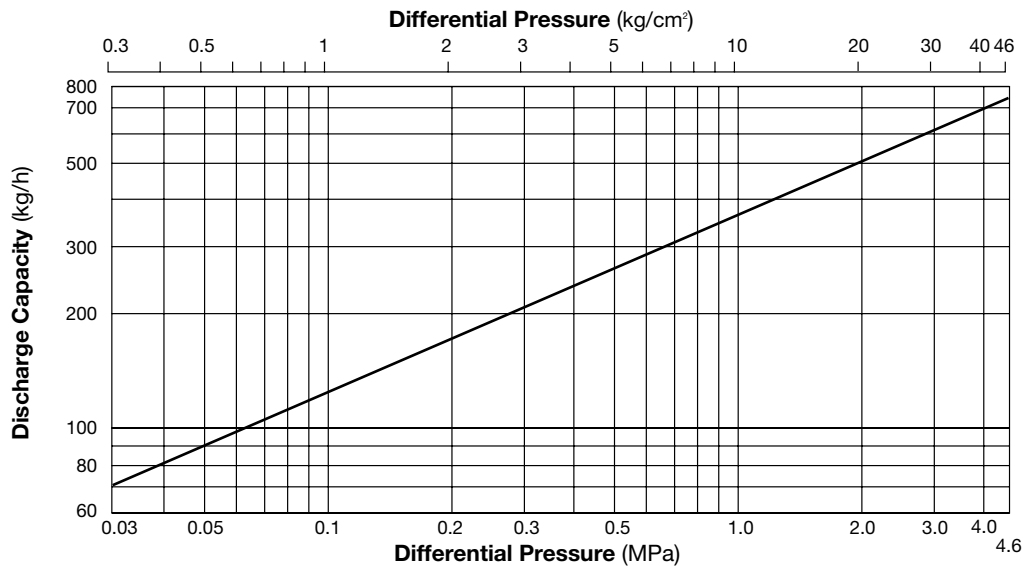


**P46SRN** Flanged (mm)

DN	L			H	H <sub>1</sub>	Weight* (kg)
	ASME Class					
	150RF	300RF	600RF			
15	140	140	140	120	62	3.3
20	165	165	165			4.7
25	210	210	210			6.1

Other standards available, but length and weight may vary  
\* Weight is for ASME Class 600

**Discharge Capacity**



1. Differential pressure is the difference between the inlet and outlet pressure of the trap.
2. Recommended safety factor: at least 2.

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

ISO 9001/ISO 14001

