



# THERMODYNE STEAM TRAP

## MODEL P46SR FORGED STEEL

### THERMODYNAMIC DISC TRAP WITH THERMOSTATIC AIR VENTING

#### Features

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

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



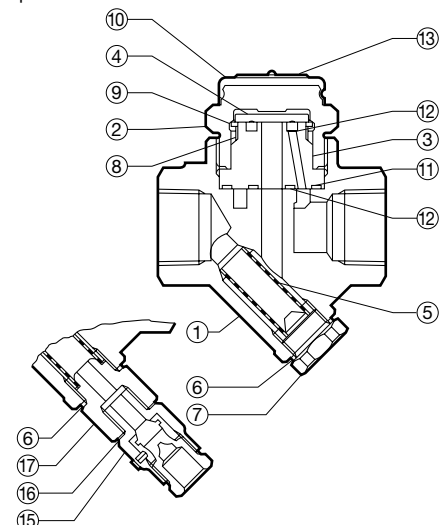
#### Specifications

Model		P46SR		
Connection		Screwed	Socket Welded	Flanged
Size		1/2", 3/4", 1"		
Maximum Operating Pressure (barg) PMO		46		
Minimum Operating Pressure (barg)		Horizontally installed: 0.25		Vertically installed: 0.4
Maximum Operating Temperature (°C) TMO		400		
Maximum Back Pressure		80% of Inlet Pressure		

PRESSURE SHELL DESIGN CONDITIONS (**NOT** OPERATING CONDITIONS): Maximum Allowable Pressure (barg) PMA: 50      1 bar = 0.1MPa  
Maximum Allowable Temperature (°C) TMA: 400

**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.

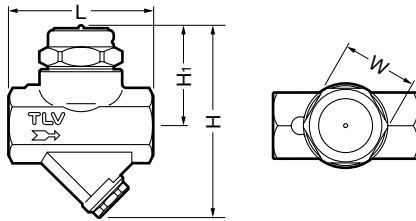
No.	Description	Material*	DIN	ASTM/AISI
①	Body	Carbon Steel A105	1.0406	A105
② <sup>R</sup>	Cover	Stainless Steel SUS420F2	1.4028	AISI420F2
③ <sup>R</sup>	Module Valve Seat	Stainless Steel SUS420F	1.4028	AISI420F
④ <sup>R</sup>	Disc	Stainless Steel SUS420J2	1.4031	AISI420
⑤ <sup>R</sup>	Screen outside/inside	Stainless Steel SUS430/304	1.4016/4301	AISI430/304
⑥ <sup>MR</sup>	Screen Holder Gasket	Soft Iron SUYP	1.1121	AISI1010
⑦ <sup>R</sup>	Screen Holder	Carbon Steel A105	1.0406	A105
⑧ <sup>R</sup>	Air Vent Ring	Bimetal	—	—
⑨ <sup>R</sup>	Disc Holder Ring	Stainless Steel SUS420F2	1.4028	AISI420F2
⑩ <sup>R</sup>	Cap	Stainless Steel SUS304	1.4301	AISI304
⑪ <sup>MR</sup>	Outer Module Gasket	Stainl. Stl./Graphite SUS316L	1.4404	AISI316L
⑫ <sup>MR</sup>	Inner Module Gasket	Stainl. Stl./Graphite SUS316L	1.4404	AISI316L
⑬	Nameplate	Stainless Steel SUS304	1.4301	AISI304
⑭	Flange (shown overleaf)	Forged/Cast Steel*** A105/216 Gr. WCB	1.0406/1811	A105/216 Gr. WCB
⑮	Blow-off Valve BO2**	Stainless Steel SUS430	1.4016	AISI430
⑯	Blow-off Valve Gasket**	Soft Iron SUYP	1.1121	AISI1010
⑰	Screen Holder for BO2**	Carbon Steel A105	1.0406	A105



\* Equivalent materials \*\* Option \*\*\* Either A105 or A216 WCB, depending upon flange specifications  
Replacement kits available : (M) maintenance parts, (R) repair parts

**Dimensions**

**•P46SR**  
Screwed

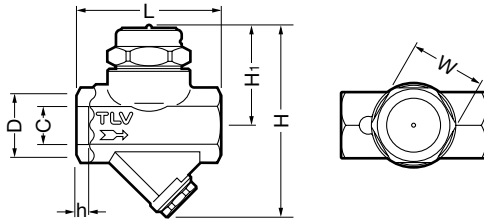


**P46SR** Screwed\* (mm)

Size	L	H	H <sub>1</sub>	W	Weight (kg)
1/2"	80	107	55	37	1.1
3/4"					
1"	88	113	60	45	1.3

\* BSP DIN 2999, other standards available

**•P46SR**  
Socket Welded

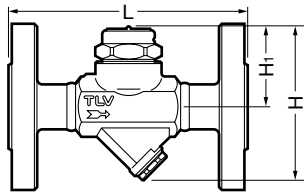


**P46SR** Socket Welded\* (mm)

DN	φD	φC	h	L	H	H <sub>1</sub>	W	Weight (kg)
15	30	21.70	13	80	107	55	37	1.1
20	36	27.05						
25	44	33.80		88	113	60	45	1.3

\* Suitable for DIN 3239, other standards available

**•P46SR**  
Flanged

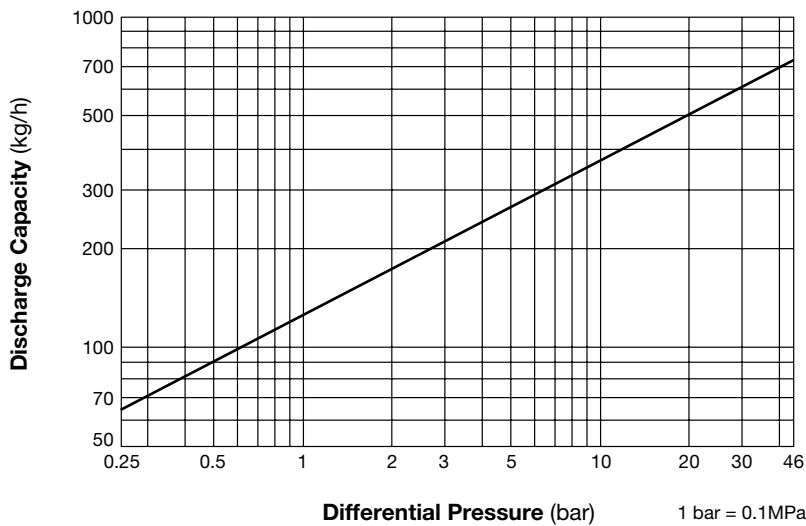


**P46SR** Flanged\* (mm)

DN	L	H	H <sub>1</sub>	H	Weight (kg)
15	150	107	55	37	2.4
20					3.0
25	160	113			4.2

\* DIN 2501 PN40, other standards available

**Discharge Capacity**



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