



THERMODYNE STEAM TRAP

MODEL A46S

THERMODYNAMIC DISC TRAP WITH THERMOSTATIC AIR VENTING

Features

Inline repairable trap of weldable carbon steel for steam mains 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. Air vent ring provides quick thermostatic air venting.
6. Inline replaceable valve seat module.



Specifications

Model	A46S			A46SW		
	Screwed	Socket Welded	Flanged	Screwed	Socket Welded	Flanged
Size (mm)	15, 20, 25			25	25, 32, 40, 50	
Maximum Operating Pressure (MPaG) PMO	4.6			4.6		
Minimum Operating Pressure (MPaG)	0.03			0.03		
Maximum Operating Temperature (°C) TMO	425			425		
Maximum Back Pressure	80% of Inlet Pressure			80% of Inlet Pressure		

PRESSURE SHELL DESIGN CONDITIONS (**NOT** OPERATING CONDITIONS):
 Maximum Allowable Pressure (MPaG) PMA: 4.6 (A46SW), 6.5 (A46S)
 Maximum Allowable Temperature (°C) TMA: 425

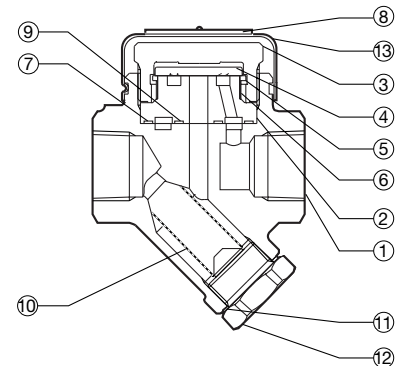
1 MPa = 10.197 kg/cm²



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.

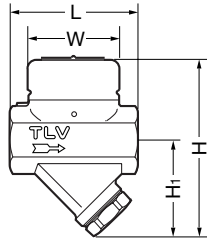
No.	Description	Material	JIS	ASTM/AISI*
①	Body	Carbon Steel	—	A105
	Body (A46SW)	Cast Steel	—	A216 Gr. WCB
② ^R	Module Valve Seat	Stainless Steel	SUS420F	AISI420F
③ ^R	Inner Cover	Stainless Steel	SUS420F2	AISI420F2
④ ^R	Disc	Stainless Steel	SUS420J2	AISI420
⑤ ^R	Disc Holder Ring	Stainless Steel	SUS420J2	AISI420J2
⑥ ^R	Air Vent Ring	Bimetal	—	—
⑦ ^{MR}	Outer Module Gasket	Graphite/Stainless Steel	- /SUS316L	- /AISI316L
⑧	Nameplate	Stainless Steel	SUS304	AISI304
⑨ ^{MR}	Inner Module Gasket	Graphite/Stainless Steel	- /SUS316L	- /AISI316L
⑩ ^R	Screen inner/outer	Stainless Steel	SUS304/430	AISI304/430
⑪ ^{MR}	Screen Holder Gasket	Soft Iron	SUYP	AISI1010
⑫	Screen Holder	Carbon Steel	—	A105
⑬	Cap	Stainless Steel	SUS304	AISI304
	Flange**	Carbon/Cast Steel***	—	A105/A216 Gr. WCB
⑭	Flange** (A46SW)	Carbon Steel	—	A105



*Equivalent **Shown on reverse ***Material depends on flange specifications
 Replacement kits available: (M) maintenance parts, (R) repair parts

Dimensions

● **A46S/A46SW**
Screwed

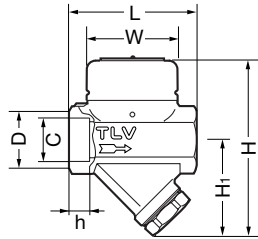


A46S/A46SW Screwed* (mm)

Size	L	H	H ₁	φW	Weight (kg)
15	80	112	62 (62)	57.5 (66.5)	1.2
20					
25 (25)	88 (88)	117 (124)			1.4 (1.6)

() Model A46SW * Rc(PT), other standards available

● **A46S/A46SW**
Socket Welded

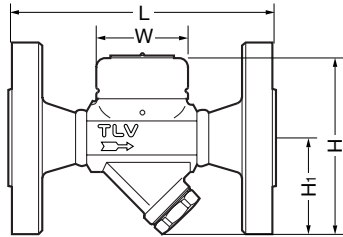


A46S/A46SW Socket Welded (mm)

Size	L	H	H ₁	φW	φD	φC	h	Weight (kg)
15	80	112	62 (62)	57.5 (66.5)	30	22.2	13 (14)	1.2
20					36	27.7		
25 (25)	88 (88)	117 (124)			44 (44)	34.5 (34.5)		1.4 (1.6)

() Model A46SW

● **A46S/A46SW**
Flanged



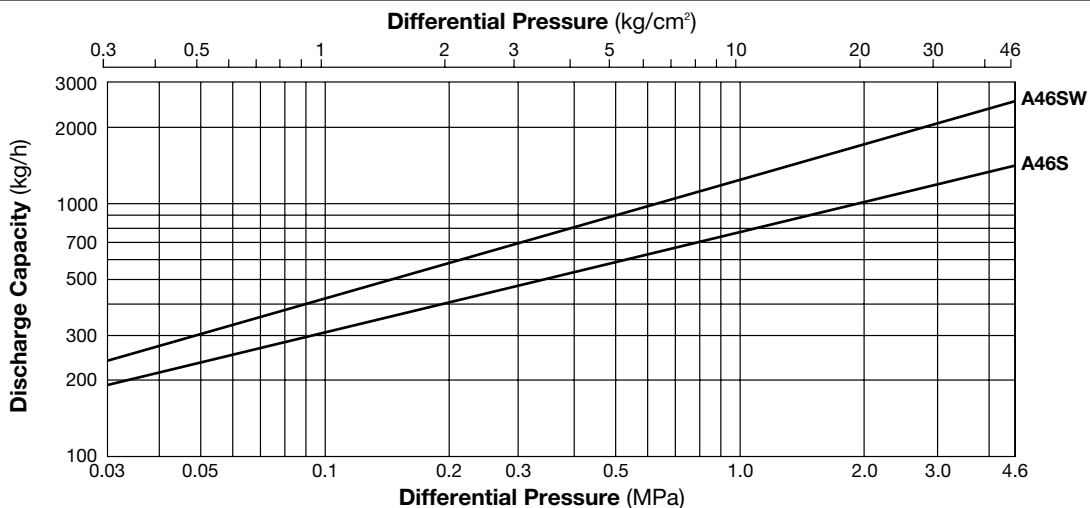
A46S/A46SW Flanged (mm)

Size	L			H	H ₁	φW	Weight* (kg)
	ASME Class						
	150RF	300RF	600RF				
15	140	140	140	112 (124)	62 (62)	57.5 (66.5)	3.3
20	165	165	165				4.7
25(25)	210 (210)	210 (210)	210 (210)	112 (124)	62 (62)	57.5 (66.5)	6.1(5.7)
(32)							(7.4)
(40)							(9.8)
(50)							(12)

Other standards available, but length and weight may vary

() Model A46SW * Weight is for Class 600 RF

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

ISO 9001/ISO 14001

TLV® CO., LTD.
Kakogawa, Japan

is approved by LRQA Ltd. to ISO 9001/14001

