



# THERMODYNE STEAM TRAP

## MODEL HR80A

### THERMODYNAMIC DISC TRAP WITH THERMOSTATIC AIR VENTING

#### Benefits

**Air-jacketed trap for drainage of high pressure and temperature steam mains and turbines.**

1. Inline replaceable valve module to lower repair costs.
2. Six body bolts fasten the cover and hold the module valve seat in the trap body to promote good sealing.
3. Lapped disc provides steam-tight seal.
4. Air-jacketing reduces no-load cycling and extends life.
5. Quick thermostatic air-venting with bimetal ring for fast start-up and elimination of air binding.
6. Built-in screen for extended trouble-free service.
7. Hardened working surfaces for long life.



#### Specifications

Model		HR80A	
Connection		Screwed	Socket Weld
Size (in)		1/2, 3/4, 1	
Maximum Operating Pressure (psig)	PMO	1,150	
Minimum Operating Pressure (psig)		115	
Maximum Operating Temperature (°F)	TMO	887	
Maximum Allowable Pressure (psig)	PMA	1,150	
Maximum Allowable Temperature (°F)	TMA	887	
Maximum Back Pressure		50% of Inlet Pressure	



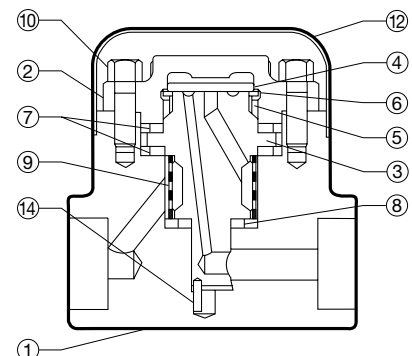
#### CAUTION

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	ASTM/AISI*	JIS
①	Body	Alloy Steel	A182 F22 Cl. 3	—
② <sup>R</sup>	Cover	Stainless Steel	AISI420	SUS420I2
③ <sup>R</sup>	Module Valve Seat	Hardened Stainless Steel	AISI440C	SUS440C
④ <sup>R</sup>	Disc	Hardened Stainless Steel	AISI440C	SUS440C
⑤ <sup>R</sup>	Air Vent Ring	Bimetal	—	—
⑥ <sup>R</sup>	Disc Holder Ring	Stainless Steel	AISI630	SUS630
⑦ <sup>MR</sup>	Module Gasket	Stainless Steel/Graphite	AISI309S+Cb	SUS309S+Cb
⑧ <sup>MR</sup>	Module Gasket	Stainless Steel/Graphite	AISI309S+Cb	SUS309S+Cb
⑨ <sup>R</sup>	Screen outside/inside	Stainless Steel	AISI304/430	SUS304/430
⑩	Body Bolt	Carbon Steel	A193 Gr. B16	SNB16
⑪	Nameplate***	Stainless Steel	AISI304	SUS304
⑫	Cap	Stainless Steel	AISI304	SUS304
⑬	Set Screw**	Stainless Steel	AISI304	SUS304
⑭ <sup>R</sup>	Guide Pin	Stainless Steel	AISI304	SUS304

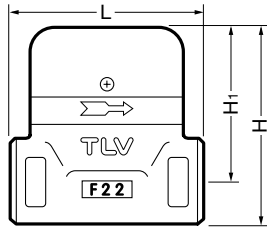
\* Equivalent \*\* Shown on reverse \*\*\* Not shown

Replacement kits available: (M) maintenance parts, (R) repair parts



**Dimensions**

● **HR80A**  
Screwed

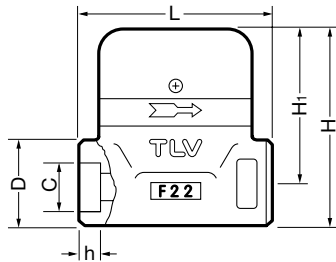


**HR80A** Screwed\* (mm)

Size	L	H	H <sub>1</sub>	Weight (kg)
1/2	4 5/16	4 9/16	3 9/16	8.6
3/4				8.4
1				8.2

\* NPT, other standards available

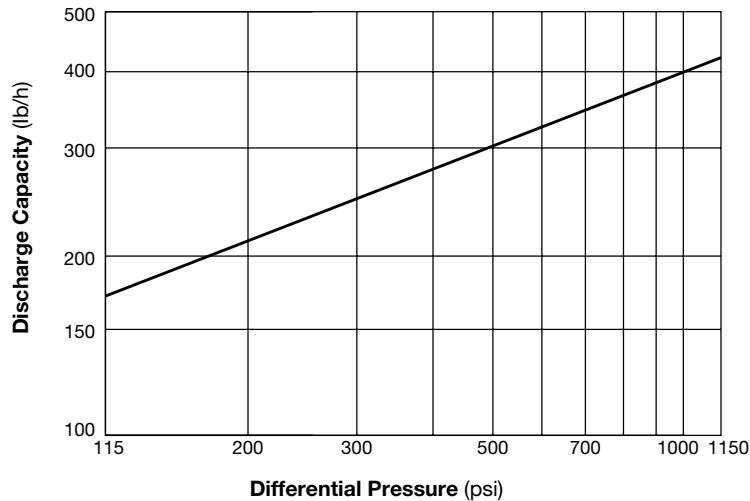
● **HR80A**  
Socket Weld



**HR80A** Socket Weld (in)

Size	φD	φC	h	L	H	H <sub>1</sub>	Weight (lb)
1/2	2	7/8	9/16	4 5/16	4 9/16	3 9/16	8.6
3/4		1 1/16					8.4
1		1 3/8					8.2

**Discharge Capacity**



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

**TLV CORPORATION**

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Manufacturer

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

ISO 9001/ISO 14001

