



# THERMODYNE STEAM TRAP

## MODEL HR80A

### THERMODYNAMIC DISC TRAP WITH THERMOSTATIC AIR VENTING

#### Features

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

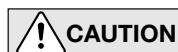
1. Inline replaceable valve module to facilitate maintenance and lower repair costs.
2. Lapped disc provides steam-tight seal.
3. Air jacket reduces radiant heat loss to reduce no-load cycling and so extend life.
4. Quick thermostatic air venting with bimetal ring allows fast start-up and elimination of air binding.
5. Built-in screen with large surface area for extended trouble-free operation.
6. Hardened working surfaces guarantee long service life.



#### Specifications

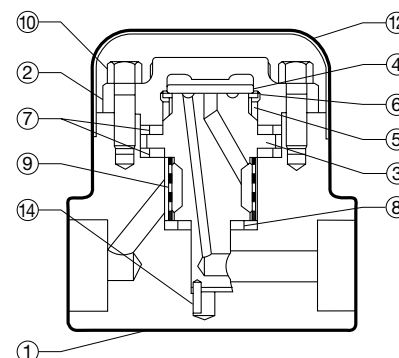
Model	HR80A		
Connection	Screwed	Socket Welded	Flanged
Size (mm)	15, 20, 25		
Maximum Operating Pressure (MPaG) PMO	8		
Minimum Operating Pressure (MPaG)	0.8		
Maximum Operating Temperature (°C) TMO	475		
Maximum Back Pressure	50% of Inlet Pressure		

PRESSURE SHELL DESIGN CONDITIONS (**NOT** OPERATING CONDITIONS): Maximum Allowable Pressure (MPaG) PMA: 8 1 MPa = 10.197 kg/cm<sup>2</sup>  
Maximum Allowable Temperature (°C) TMA: 475



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.

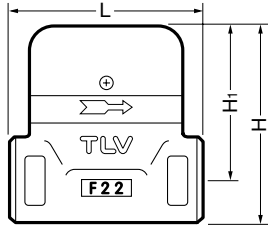
No.	Description	Material	JIS	ASTM/AISI*
①	Body	Alloy Steel	—	A182 F22 Cl. 3
② <sup>R</sup>	Cover	Stainless Steel	SUS403	AISI403
③ <sup>R</sup>	Module Valve Seat	Stainless Steel	SUS440C	AISI440C
④ <sup>R</sup>	Disc	Stainless Steel	SUS440C	AISI440C
⑤ <sup>R</sup>	Air Vent Ring	Bimetal	—	—
⑥ <sup>R</sup>	Disc Holder Ring	Stainless Steel	SUS630	AISI630
⑦ <sup>MR</sup>	Module Gasket	Stainl. Stl. /Graphite	SUS309S+Cb	AISI309S+Cb
⑧ <sup>MR</sup>	Module Gasket	Stainl. Stl. /Graphite	SUS309S+Cb	AISI309S+Cb
⑨ <sup>R</sup>	Screen outside/inside	Stainless Steel	SUS304/430	AISI304/430
⑩	Cover Bolt	Alloy Steel	SNB16	A193 Gr. B16
⑪	Nameplate***	Stainless Steel	SUS304	AISI304
⑫	Cap	Stainless Steel	SUS304	AISI304
⑬	Set Screw**	Stainless Steel	SUS304	AISI304
⑭ <sup>R</sup>	Guide Pin	Stainless Steel	SUS304	AISI304
⑮	Flange**	Alloy Steel	—	A182F22 Cl. 3



\* Equivalent \*\* Shown overleaf \*\*\* Not shown  
Replacement kits available: (M) maintenance parts, (R) repair parts

**Dimensions**

●HR80A  
Screwed

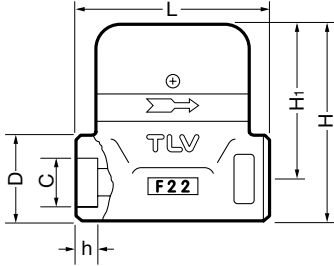


**HR80A Screwed\*** (mm)

Size	L	H	H <sub>1</sub>	Weight (kg)
15	110	115	90	3.9
20				3.8
25				3.7

\* PT, other standards available

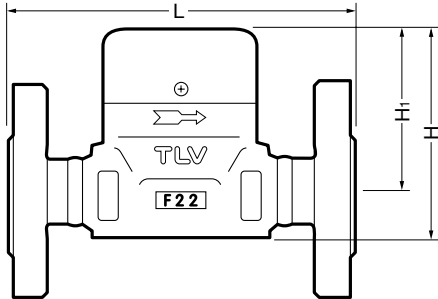
●HR80A  
Socket Welded



**HR80A Socket Welded** (mm)

Size	φD	φC	h	L	H	H <sub>1</sub>	Weight (kg)
15	50	22.2	14	110	115	90	3.9
20		27.7					3.8
25		34.5					3.7

●HR80A  
Flanged

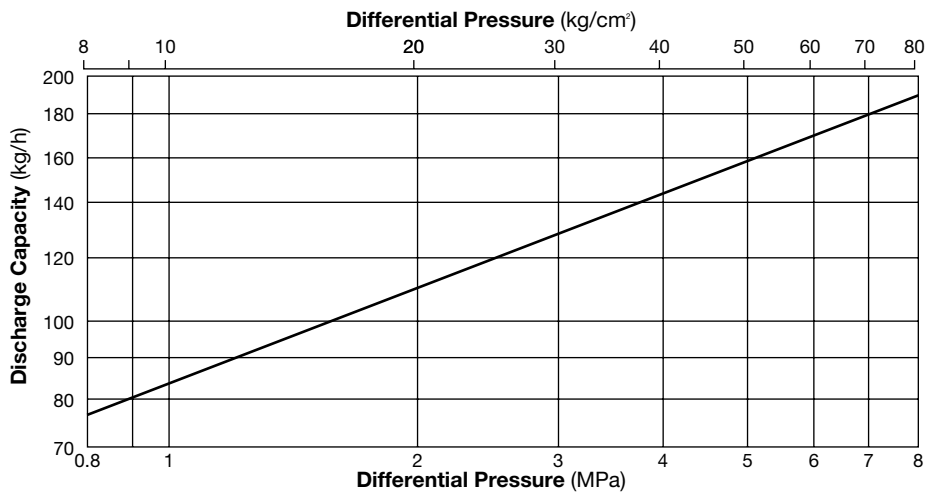


**HR80A Flanged\*** (mm)

Size	L	H	H <sub>1</sub>	Weight (kg)
15	210	115	90	8.8
20	220			10
25	230			11

\* JIS 63K, 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.

Manufacturer

ISO 9001/ISO 14001

**TLV**® CO.,LTD.

Kakogawa, Japan

is approved by LRQA Ltd. to ISO 9001/14001

