



PowerDyne® STEAM TRAP MODEL HR80A

HIGH-PRESSURE THERMODYNAMIC DISC TRAP WITH THERMOSTATIC AIR VENTING

Benefits

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. 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 reduces wear.
5. Quick thermostatic air-venting with bimetal ring for fast start-up and elimination of air binding.
6. Built-in screen with large surface area for extended trouble-free operation.
7. Hardened working surfaces for long life.

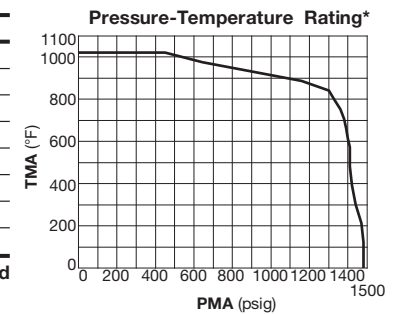


Specifications

Model	HR80A	
Connection	Screwed	Socket Weld
Size (in)	1/2, 3/4, 1	
Maximum Operating Pressure (psig) PMO	1150	
Minimum Operating Pressure (psig)	115	
Maximum Operating Temperature (°F) TMO	887	
Maximum Allowable Pressure (psig) PMA	1480 @ 100 °F	
Maximum Allowable Temperature (°F) TMA	1022 @ 449 psig	
Maximum Back Pressure	50% of Inlet Pressure	

* This Rating Graph is based on Allowable Stress Values of ASTM-Materials at each temperature.

Connections and sizes in bold are standard



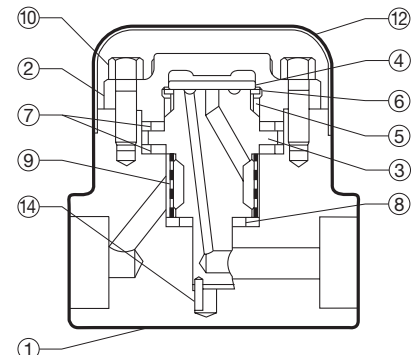
CAUTION

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 ^R	Cover	Stainless Steel	AISI403	SUS403
③ ^R	Module Valve Seat	Hardened Stainless Steel	AISI440C	SUS440C
④ ^R	Disc	Hardened Stainless Steel	AISI440C	SUS440C
⑤ ^R	Air Vent Ring	Bimetal	—	—
⑥ ^R	Disc Holder Ring	Stainless Steel	AISI630	SUS630
⑦ ^{MR}	Module Gasket	Graphite/Stainless Steel	—/AISI309S+Cb	—/SUS309S+Cb
⑧ ^{MR}	Module Gasket	Graphite/Stainless Steel	—/AISI309S+Cb	—/SUS309S+Cb
⑨ ^R	Screen inside/outside	Stainless Steel	AISI430/304	SUS430/304
⑩	Cover Bolt	Alloy 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 ^R	Guide Pin	Stainless Steel	AISI304	SUS304

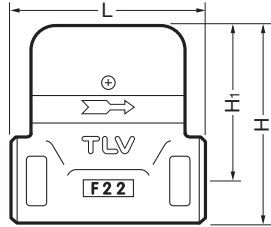
* Equivalent ** Shown on reverse *** Not shown

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



Dimensions

● **HR80A Screwed**

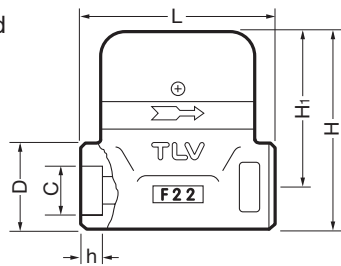


HR80A Screwed* (in)

Size	L	H	H ₁	Weight (lb)
1/2	4 ⁵ / ₁₆	4 1/2	3 ⁹ / ₁₆	8.6
3/4				8.4
1				8.2

* NPT, other standards available

● **HR80A Socket Weld**

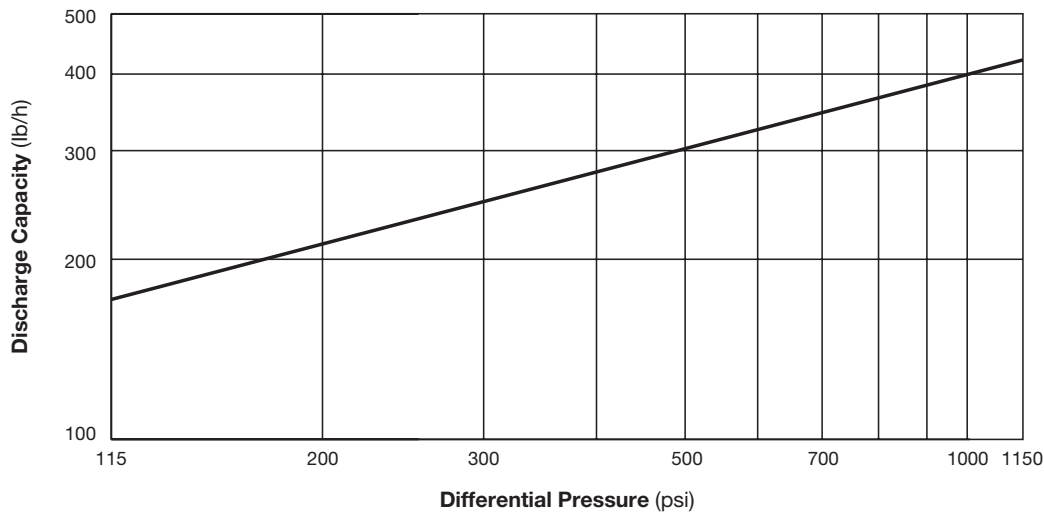


HR80A Socket Weld* (in)

Size	L	H	H ₁	φD	φC	h	Weight (lb)
1/2	4 ⁵ / ₁₆	4 1/2	3 ⁹ / ₁₆	1 7/8	0.855	9/16	8.6
3/4					1.065		8.4
1					1.330		8.2

* ASME B16.11-2005, 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.



CAUTION DO NOT DISASSEMBLE OR REMOVE THIS PRODUCT WHILE IT IS UNDER PRESSURE. Allow internal pressure of this product to equal atmospheric pressure and its surface to cool to room temperature before disassembling or removing. Failure to do so could cause burns or other injury. READ INSTRUCTION MANUAL CAREFULLY.

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Manufacturer

TLV® CO., LTD.

Kakogawa, Japan

is approved by LRQA Ltd. to ISO 9001/14001

ISO 9001/ISO 14001

