



PowerDyne[®] 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 for ease of maintenance and low cost of repair.
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 for 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.

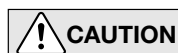
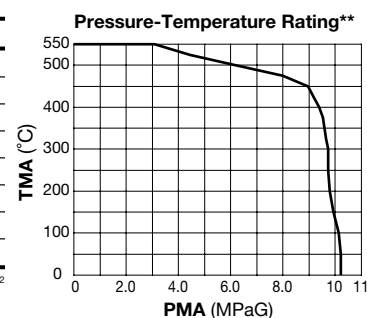


Specifications

Model		HR80A	
Connection		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 Allowable Pressure (MPaG)	PMA*	10.2 @ 40 °C	
Maximum Allowable Temperature (°C)	TMA*	550 @ 3.1 MPaG	
Maximum Back Pressure		50% of Inlet Pressure	

* PRESSURE SHELL DESIGN CONDITIONS (NOT OPERATING CONDITIONS) 1 MPa = 10.197 kg/cm²

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

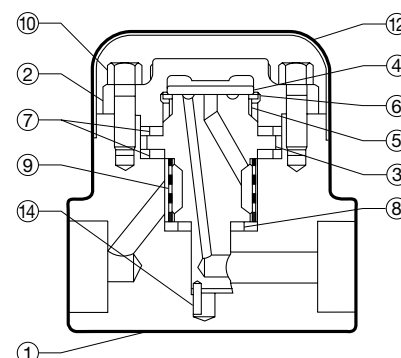


To avoid abnormal operation, accidents or serious injury, DO NOT use this product outside of the specification range. Local regulations may restrict the use of this product to below the conditions quoted.

No.	Description	Material	JIS	ASTM/AISI*
①	Body	Alloy Steel	—	A182 F22 Cl.3
② ^R	Cover	Stainless Steel	SUS403	AISI403
③ ^R	Module Valve Seat	Stainless Steel	SUS440C	AISI440C
④ ^R	Disc	Stainless Steel	SUS440C	AISI440C
⑤ ^R	Air Vent Ring	Bimetal	—	—
⑥ ^R	Disc Holder Ring	Stainless Steel	SUS630	AISI630
⑦ ^{MR}	Module Gasket	Graphite/Stainless Steel	- /SUS309S+Cb	- /AISI309S+Cb
⑧ ^{MR}	Module Gasket	Graphite/Stainless Steel	- /SUS309S+Cb	- /AISI309S+Cb
⑨ ^R	Screen inside/outside	Stainless Steel	SUS430/304	AISI430/304
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 ^R	Guide Pin	Stainless Steel	SUS304	AISI304
⑮	Flange***	Alloy Steel	—	A182 F22 Cl.3

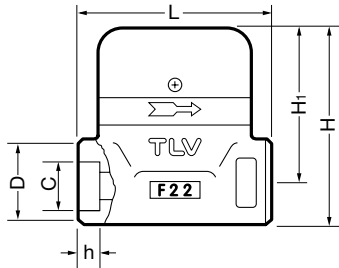
* Equivalent ** Not shown *** Shown on reverse

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



Dimensions

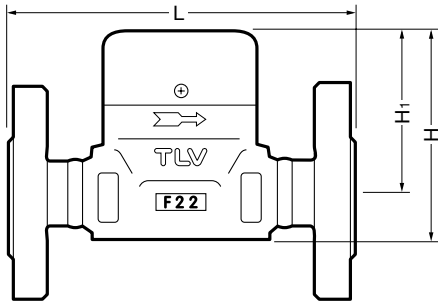
●HR80A Socket Welded



HR80A Socket Welded (mm)

Size	L	H	H ₁	φD	φC	h	Weight (kg)
15	110	115	90	48	22.2	14	3.9
20					27.7		3.8
25					34.5		3.7

●HR80A Flanged

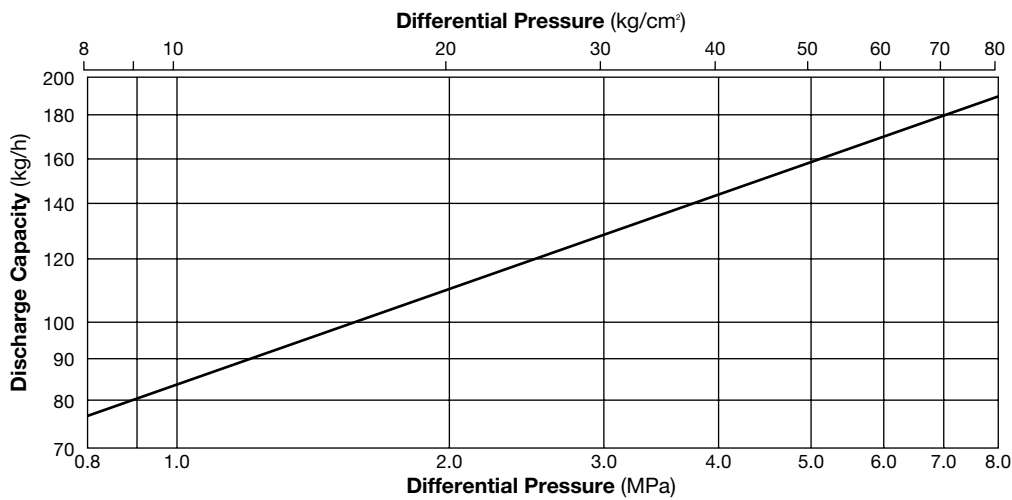


HR80A Flanged (mm)

Size	L				H	H ₁	Weight* (kg)
	ASME Class						
	150RF	300RF	600RF	900RF			
15	180	180	180	210	115	90	9.6
20	190	190	190	220			11
25	220	220	220	230			14

Other standards available, but weight and length may vary
* Weight is for Class 900 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

