



THERMODYNE STEAM TRAP

MODEL HR80A ALLOY STEEL

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 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		Socket Welded	Butt Welded
Size		DN 15, 20, 25	DN 15, 25
Maximum Operating Pressure (barg)	PMO	80	
Minimum Operating Pressure (barg)		8	
Maximum Operating Temperature (°C)		TMO 475	
Maximum Back Pressure		50% of Inlet Pressure	

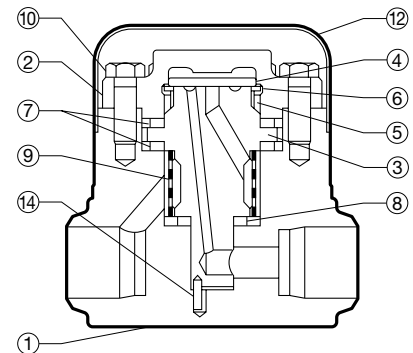
PRESSURE SHELL DESIGN CONDITIONS (**NOT** OPERATING CONDITIONS): Maximum Allowable Pressure (barg) PMA: 80 1 bar = 0.1 MPa
Maximum Allowable Temperature (°C) TMA: 475



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.

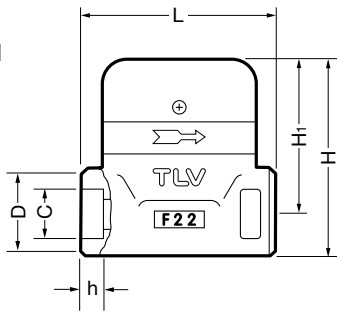
No.	Description	Material	DIN*	ASTM/AISI*
①	Body	Alloy Steel A182F22 Cl. 3	1.7380	—
② ^R	Cover	Stainless Steel SUS403	1.4000	AISI403
③ ^R	Module Valve Seat	Stainless Steel SUS440C	1.4125	AISI440C
④ ^R	Disc	Stainless Steel SUS440C	1.4125	AISI440C
⑤ ^R	Air Vent Ring	Bimetal	—	—
⑥ ^R	Disc Holder Ring	Stainless Steel SUS630	1.4542	AISI630
⑦ ^{MR}	Module Gasket	Stainl. Stl. SUS309S+Cb/Graphite	1.4833	AISI309S+Cb
⑧ ^{MR}	Module Gasket	Stainl. Stl. SUS309S+Cb/Graphite	1.4833	AISI309S+Cb
⑨ ^R	Screen outside/inside	Stainless Steel SUS304/430	1.4301/4016	AISI304/430
⑩	Cover Bolt	Alloy Steel SNB16	1.7711	A193 Gr. B16
⑪	Nameplate***	Stainless Steel SUS304	1.4301	AISI304
⑫	Cap	Stainless Steel SUS304	1.4301	AISI304
⑬	Set Screw**	Stainless Steel SUS304	1.4301	AISI304
⑭ ^R	Guide Pin	Stainless Steel SUS304	1.4301	AISI304

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



Dimensions

● **HR80A**
Socket Welded

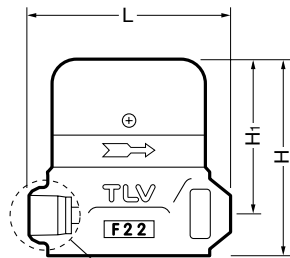


HR80A Socket Welded* (mm)

DN	L	H	H ₁	φD	φC	h	Weight (kg)
15	110	115	90	48	21.70	14	3.9
20					27.05		3.8
25					33.80		3.7

* ASME B16.11, other standards available

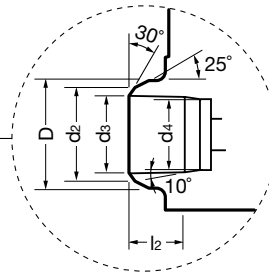
● **HR80A**
Butt Welded



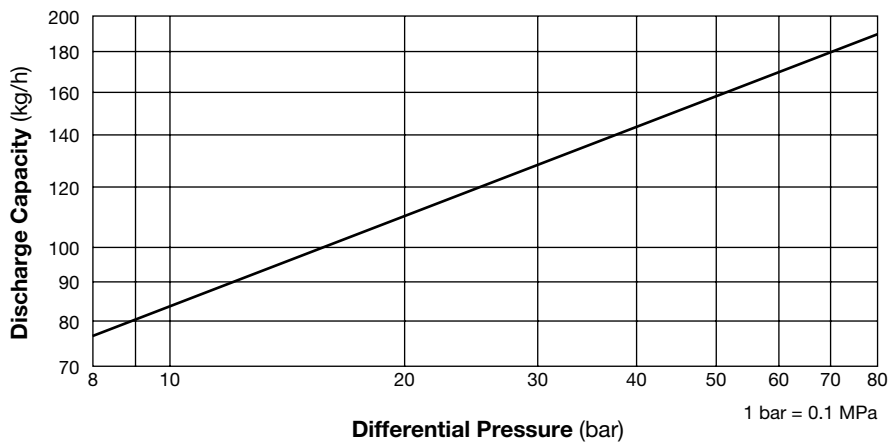
HR80A Butt Welded* (mm)

DN	L	H	H ₁	φD	φd ₂	φd ₃	φd ₄	l ₂	(kg)
15	110	115	90	24	22	17	15	20	3.8
25				37	34	28	25		

* DIN 3239 Form C (PN 100), 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
TLV® CO., LTD.
Kakogawa, Japan
is approved by LRQA Ltd. to ISO 9001/14001

ISO 9001 / ISO 14001

