PowerDyne® STEAM TRAP

MODEL HR80A ALLOY STEEL

THERMODYNAMIC DISC TRAP WITH THERMOSTATIC AIR VENTING

Features

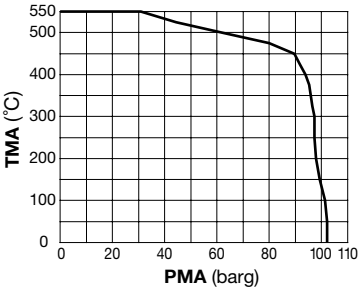
Air-jacketed disc trap for drainage of high pressure and temperature steam mains and turbines.

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 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	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 Allowable Pressure (barg)	PMA*	102 @ 40 °C	
Maximum Allowable Temperature (°C)	TMA*	550 @ 31 barg	
Maximum Back Pressure		50% of Inlet Pressure	

Pressure-Temperature Rating**

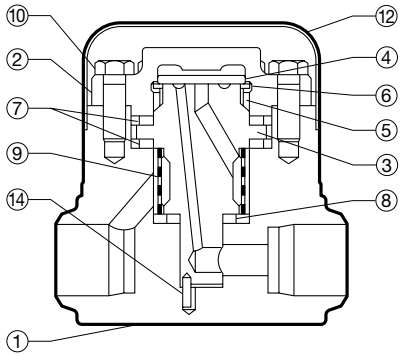


* PRESSURE SHELL DESIGN CONDITIONS (**NOT** OPERATING CONDITIONS) 1 bar = 0.1 MPa

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

⚠ 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	DIN*	ASTM/AISI*
①	Body	Alloy Steel A182F22 Cl.3	1.7380	—
②R	Cover	Stainless Steel SUS403	1.4000	AISI403
③R	Module Valve Seat	Stainless Steel SUS440C	1.4125	AISI440C
④R	Disc	Stainless Steel SUS440C	1.4125	AISI440C
⑤R	Air Vent Ring	Bimetal	—	—
⑥R	Disc Holder Ring	Stainless Steel SUS630	1.4542	AISI630
⑦MR	Module Gasket	Graphite/Stainl. Stl. - /SUS309S+Cb	- /1.4833	- /AISI309S+Cb
⑧MR	Module Gasket	Graphite/Stainl. Stl. - /SUS309S+Cb	- /1.4833	- /AISI309S+Cb
⑨R	Screen inside/outside	Stainless Steel SUS430/304	1.4016/1.4301	AISI430/304
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
⑭R	Guide Pin	Stainless Steel SUS304	1.4301	AISI304

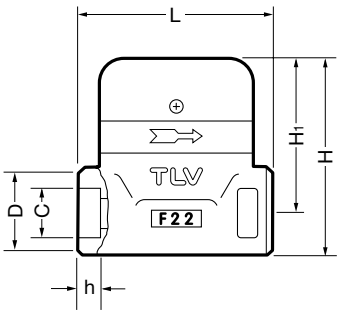


* Equivalent materials ** Not shown *** Shown overleaf

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

Dimensions

● **HR80A**
Socket Welded

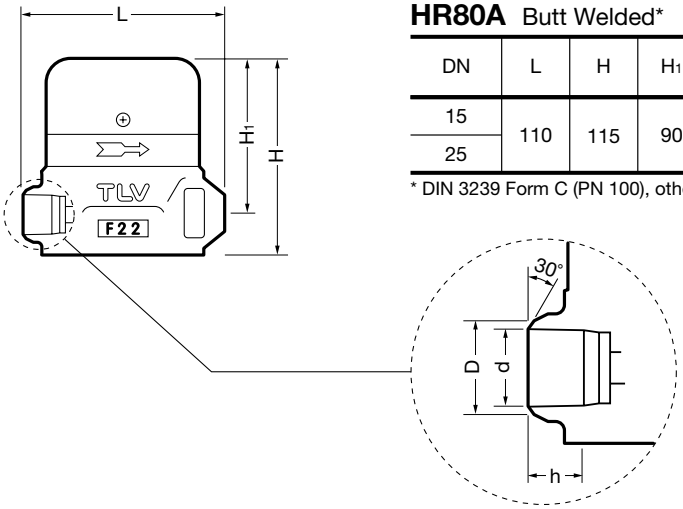


HR80A Socket Welded* (mm)

DN	L	H	H1	ϕD	ϕC	h	Weight (kg)
15	110	115	90	48	21.8	14	3.9
20					27.2		3.8
25					33.9		3.7

* ASME B16.11-2005, other standards available

● **HR80A**
Butt Welded

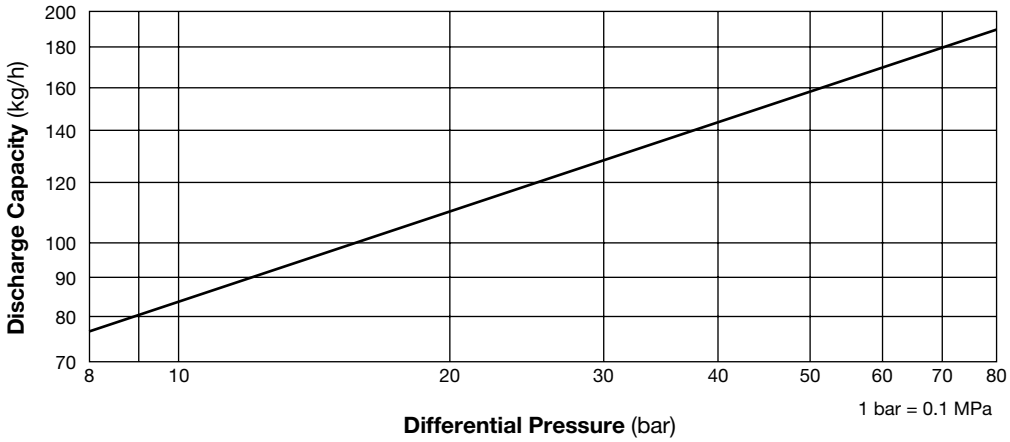


HR80A Butt Welded* (mm)

DN	L	H	H1	ϕD	ϕd	h	Weight (kg)
15	110	115	90	22	17	20	3.8
25				34	28		

* 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