



THERMODYNE STEAM TRAPS

MODEL A3N

THERMODYNAMIC DISC TRAPS WITH THERMOSTATIC AIR VENTING

Features

Steam jacketed traps for long life on mains, tracers, and coils.

1. Inline replaceable valve module to lower repair cost.
2. Steam jacketing reduces no-load cycling and extends life.
3. Quick thermostatic air venting with bimetal ring for fast start-up.
4. Lapped disc provides steam-tight seal without air binding for long life.
5. Built-in, easy-to-clean screen for extended trouble-free service.
6. High grade reusable gaskets for cleaning ease.
7. Hardened stainless steel working surfaces for long life.



Specifications

Model	A3N	AF3N
Connection	Screwed	Flanged
Size(mm)	15, 20, 25, 32, 40, 50	
Maximum Operating Pressure (MPaG) PMO	1.57	
Minimum Operating Pressure (MPaG)	0.03	
Maximum Operating Temperature (°C) TMO	220	
Maximum Back Pressure	80% of Inlet Pressure	

PRESSURE SHELL DESIGN CONDITIONS (**NOT** OPERATING CONDITIONS):

Maximum Allowable Pressure (MPaG) PMA: 1.57

Maximum Allowable Temperature (°C) TMA: 220

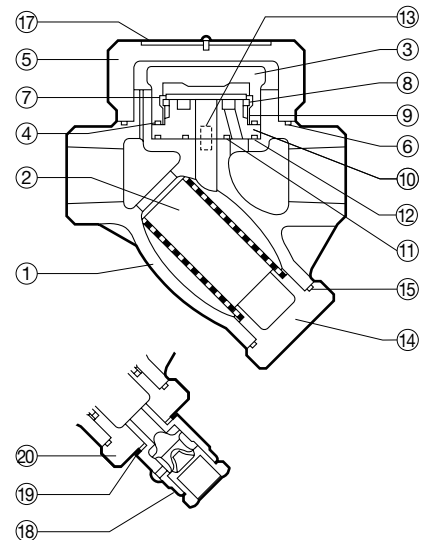
1 MPa = 10.197 kg/cm²



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.

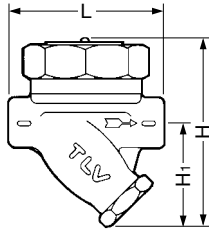
No.	Description	Material	JIS	ASTM/AISI*
①	Body (A3N 15-25)	Malleable Cast Iron	FCMB270	A47 Gr. 32510
	Body (A3N 32-50, AF3N)	Cast Iron	FC250	A126 Cl. B
② ^R	Screen	Stainless Steel	SUS430	AISI430
③ ^R	Inner Cover (15-25)	Stainless Steel	SUS410F2	AISI410
	Inner Cover (32-50)	Stainless Steel	SUS416	AISI416
④ ^R	Inner Cover Gasket	Fluorine Resin	PTFE	PTFE
⑤	Outer Cover (15-25)	Malleable Cast Iron	FCMB270	A47 Gr. 32510
	Outer Cover (32-50)	Cast Iron	FC250	A126 Cl. B
⑥ ^{MR}	Outer Cover Gasket	Fluorine Resin	PTFE	PTFE
⑦ ^R	Disc (15-25)	Stainless Steel	SUS420J2	AISI420
	Disc (32-50)	Stainless Steel	SUS420F	AISI420F
⑧ ^R	Disc Holder Ring (15-25)	Stainless Steel	SUS416	AISI416
	Disc Holder Ring (32-50)	Stainless Steel	SUS420F	AISI420F
⑨ ^R	Air Vent Ring	Bimetal	—	—
⑩ ^R	Module Valve Seat	Stainless Steel	SUS420F	AISI420F
⑪ ^R	Inner Module Gasket	Fluorine Resin	PTFE	PTFE
⑫ ^R	Outer Module Gasket	Fluorine Resin	PTFE	PTFE
⑬ ^R	Module Pin	Steel	SUJ2	A485
⑭	Screen Holder (15-25)	Malleable Cast Iron	FCMB270	A47 Gr. 32510
	Screen Holder (32-50)	Cast Iron	FC250	A126 Cl. B
⑮ ^{MR}	Screen Holder Gasket (15-25)	Fluorine Resin	PTFE	PTFE
	Screen Holder Gasket (32-50)	Copper Alloy	C1100P	B152
⑯	Cover Bolt (32-50)***	Carbon Steel	SS400	A6
⑰	Nameplate	Stainless Steel	SUS304	AISI304
⑱	Blow-off Valve BO2**	Stainless Steel	SUS420F	AISI420F
	Blow-off Valve Gasket**	Soft Iron	SUYF	AISI1010
⑳	Screen Holder for BO2**	Carbon Steel	—	A105



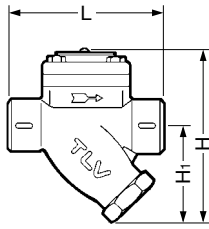
* Equivalent ** Option *** Shown overleaf
Replacement kits available: (M) maintenance parts, (R) repair parts

Dimensions

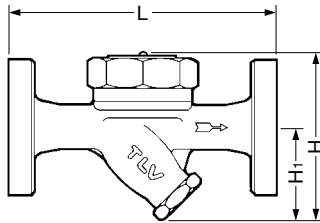
•A3N
Screwed
(15-25)



•A3N
Screwed
(32-50)



•AF3N
Flanged



Configuration of sizes 32-50 same as 32-50 screwed.

A3N Screwed* (mm)

Size	L	H**	H ₁ **	Weight (kg)
15	98	122	68	1.5
20	104	125	69	1.6
25	112	133	73	1.8
32	175	194	104	7.2
40	180	193	105	7.4
50	195	208	109	8.8

* Rc (PT), other standards available

** With optional BO2, add 22 mm to H and H₁

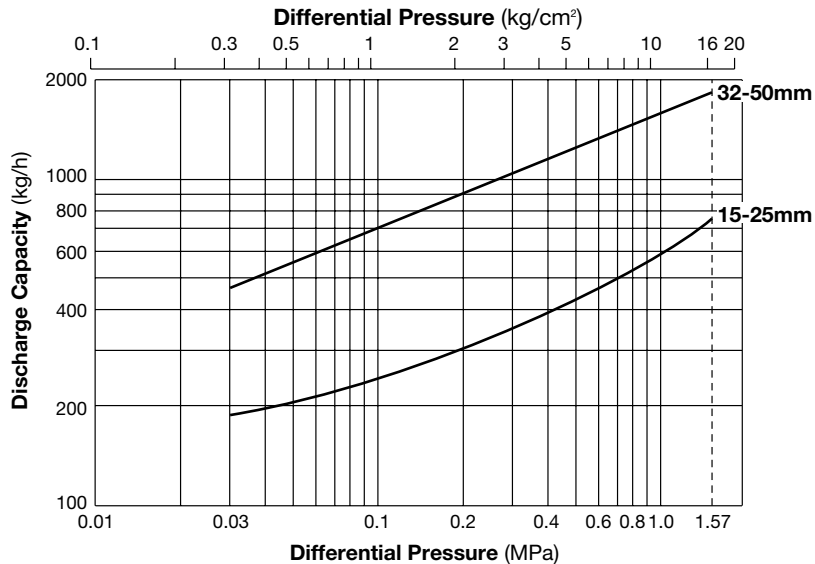
AF3N Flanged* (mm)

Size	L(ASME Class)		H**	H ₁ **	Weight (approx. kg)
	150RF	300RF			
15	175	175	120	67	3.4
20	195	195	125	71	5.0
25	215	219	131	73	6.2
32	245	245	194	104	11
40	260	264	198	106	13
50	265	269	208	109	14

* Fits to ASME Class 150RF or 300RF, other standards available but length and weight may vary

** With optional BO2, add 22 mm to H and H₁

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

