



# ThermoDyne® STEAM TRAP

## MODEL A3N

### THERMODYNAMIC DISC TRAP WITH THERMOSTATIC AIR VENTING

#### Features

**Steam jacketed disc trap for long life on mains, tracers, and coils.**

1. Inline replaceable valve module.
2. Steam jacketing reduces no-load cycling.
3. Quick thermostatic air venting with bimetal ring for fast start-up.
4. Lapped disc provides steam-tight seal without air binding.
5. Built-in screen for trouble-free service.
6. High grade reusable gaskets.
7. Hardened working surfaces for long life.



#### Specifications

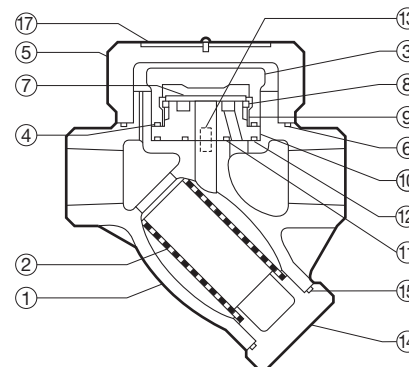
Model	A3N	AF3N
Connection	Screwed	Flanged
Size (mm)	15, 20, 25, 32, 40, 50	
Maximum Operating Pressure (MPaG) PMO	1.6	
Minimum Operating Pressure (MPaG)	0.03	
Maximum Operating Temperature (°C) TMO	220	
Maximum Back Pressure	80% of Inlet Pressure	

PRESSURE SHELL DESIGN CONDITIONS (**NOT** OPERATING CONDITIONS): Maximum Allowable Pressure (MPaG) PMA: 1.6    1 MPa = 10.197 kg/cm<sup>2</sup>  
Maximum Allowable Temperature (°C) TMA: 220



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 mm	Ductile Cast Iron	FCD450	A536
		A3N 32-50 mm, AF3N	Cast Iron	FC250	A126 Cl.B
② <sup>R</sup>	Screen	Stainless Steel	SUS430	AISI430	
③ <sup>R</sup>	Inner Cover	15-25 mm	Stainless Steel	SUS410F2	AISI410
		32-50 mm	Stainless Steel	SUS416	AISI416
④ <sup>R</sup>	Inner Cover Gasket	Fluorine Resin	PTFE	PTFE	
⑤	Outer Cover	15-25 mm	Ductile Cast Iron	FCD450	A536
		32-50 mm	Cast Iron	FC250	A126 Cl.B
⑥ <sup>MR</sup>	Outer Cover Gasket	Fluorine Resin	PTFE	PTFE	
⑦ <sup>R</sup>	Disc	15-25 mm	Stainless Steel	SUS420J2	AISI420
		32-50 mm	Stainless Steel	SUS420F	AISI420F
⑧ <sup>R</sup>	Disc Holder Ring	Stainless Steel	SUS420J2	AISI420	
⑨ <sup>R</sup>	Air Vent Ring	Bimetal	—	—	
⑩ <sup>R</sup>	Module Valve Seat	Stainless Steel	SUS420F	AISI420F	
⑪ <sup>R</sup>	Inner Module Gasket	Fluorine Resin	PTFE	PTFE	
⑫ <sup>R</sup>	Outer Module Gasket	Fluorine Resin	PTFE	PTFE	
⑬ <sup>R</sup>	Guide Pin	High-Cr Steel	SUJ2	A485	
⑭	Screen Holder	15-25 mm	Ductile Cast Iron	FCD450	A536
		32-50 mm	Cast Iron	FC250	A126 Cl.B
⑮ <sup>MR</sup>	Screen Holder Gasket	15-25 mm	Fluorine Resin	PTFE	PTFE
		32-50 mm	Copper	CuP	B152
⑯	Cover Bolt (32-50 mm)**	Carbon Steel	SS400	A307 Gr.B	
⑰	Nameplate	Stainless Steel	SUS304	AISI304	

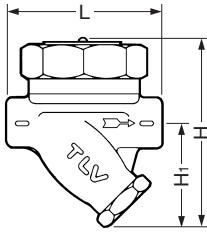


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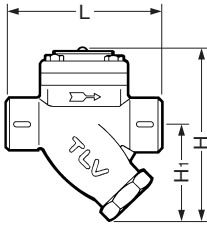
\* Equivalent \*\* Shown on reverse  
Replacement kits available: (M) maintenance parts, (R) repair parts

**Dimensions**

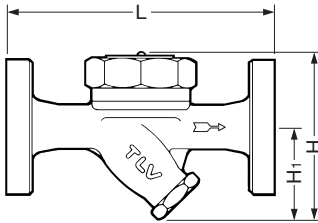
● **A3N Screwed**  
Size 15-25 mm



Size 32-50 mm



● **AF3N Flanged**



Configuration of sizes 32 - 50 mm flanged is same as sizes 32 - 50 mm screwed.

**A3N Screwed\*** (mm)

Size	L	H**	H1**	Weight (kg)
15	98	125	70	1.5
20	104	125	70	1.6
25	112	135	75	1.8
32	175	194	104	7.2
40	180	193	105	7.4
50	195	208	109	8.8

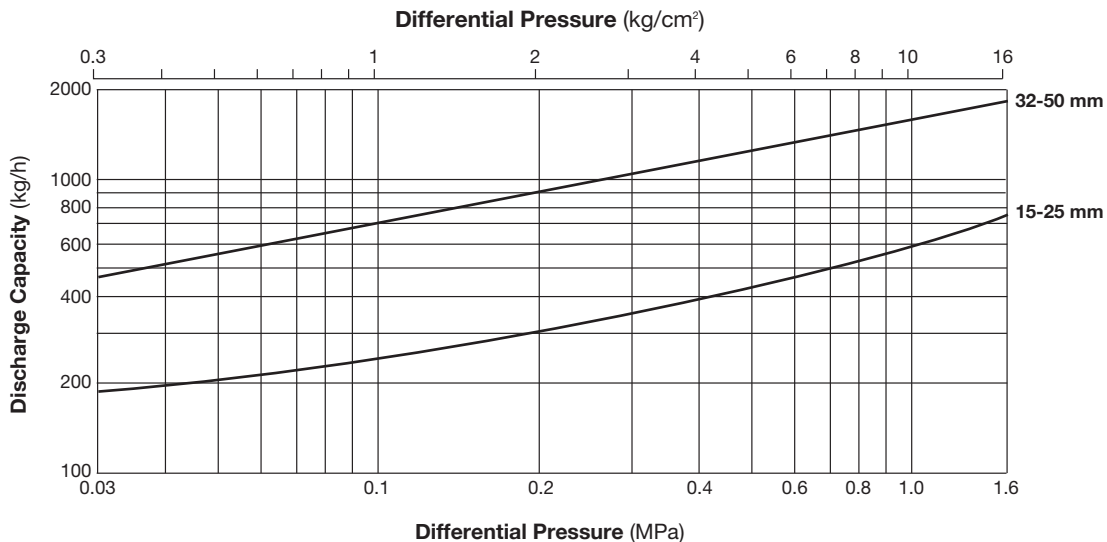
\* Rc (PT), other standards available \*\* Approx.

**AF3N Flanged** (mm)

Size	L				H*	H1*	Weight** (kg)
	ASME Class						
	125FF	(150RF)	250RF	(300RF)			
(15)	—	175	—	175	120	70	[3.4]
(20)	—	195	—	195	125	70	[5.0]
25	203	215	215	219	130	75	6.2
32	231	245	243	245	194	104	11
40	250	260	262	264	198	106	13
50	257	265	269	269	208	109	14

( ) No ASME standard exists for cast iron; machined to fit steel flanges  
Class 125FF can connect to 150RF, 250RF can connect to 300RF  
Other standards available, but length and weight may vary  
\* Approx. \*\* Weight is for Class 250RF [300RF]

**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

