



# ThermoDyne® STEAM TRAP

## MODEL A3N CAST IRON

### 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.



#### Pressure Equipment Directive (PED)

Classification according to PED 2014/68/EU, fluid group 2

Size	Category	CE marking
DN 15 to DN 25	—*	Art. 4, Sec. 3 (sound engineering practice), CE marking not allowed

\* Manufactured in accordance with sound engineering practice

#### Specifications

Model	A3N	AF3N
Connection	Screwed	Flanged
Size	1/2", 3/4", 1"	DN 15, 20, 25
Maximum Operating Pressure (barg) PMO	13	
Minimum Operating Pressure (barg)	0.3	
Maximum Operating Temperature (°C) TMO	200	
Maximum Back Pressure	80% of Inlet Pressure	

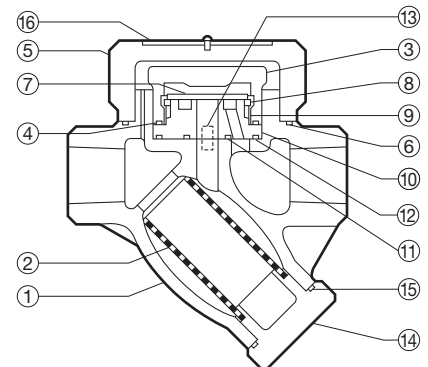
PRESSURE SHELL DESIGN CONDITIONS (**NOT** OPERATING CONDITIONS): Maximum Allowable Pressure (barg) PMA: 13      1 bar = 0.1 MPa  
Maximum Allowable Temperature (°C) TMA: 200



#### 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	A3N	Ductile Cast Iron FCD450	0.7040	A536
		AF3N	Cast Iron FC250	0.6025	A126 Cl.B
② <sup>R</sup>	Screen	Stainless Steel SUS430	1.4016	AISI430	
③ <sup>R</sup>	Inner Cover	Stainless Steel SUS410F2	—	AISI410F2	
④ <sup>R</sup>	Inner Cover Gasket	Fluorine Resin PTFE	PTFE	PTFE	
⑤	Outer Cover	Ductile Cast Iron FCD450	0.7040	A536	
⑥ <sup>MR</sup>	Outer Cover Gasket	Fluorine Resin PTFE	PTFE	PTFE	
⑦ <sup>R</sup>	Disc	Stainless Steel SUS420J2	1.4031	AISI420	
⑧ <sup>R</sup>	Disc Holder Ring	Stainless Steel SUS420J2	1.4031	AISI420	
⑨ <sup>R</sup>	Air Vent Ring	Bimetal	—	—	
⑩ <sup>R</sup>	Module Valve Seat	Stainless Steel SUS420F	1.4028	AISI420F	
⑪ <sup>R</sup>	Inner Module Gasket	Fluorine Resin PTFE	PTFE	PTFE	
⑫ <sup>R</sup>	Outer Module Gasket	Fluorine Resin PTFE	PTFE	PTFE	
⑬ <sup>R</sup>	Guide Pin	High-Cr Steel SUJ2	1.2067	A485	
⑭	Screen Holder	Ductile Cast Iron FCD450	0.7040	A536	
⑮ <sup>MR</sup>	Screen Holder Gasket	Fluorine Resin PTFE	PTFE	PTFE	
⑯	Nameplate	Stainless Steel SUS304	1.4301	AISI304	

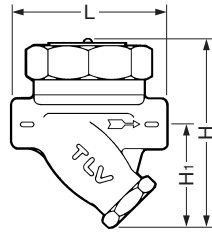


\* Equivalent materials

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

**Dimensions**

● **A3N** Screwed

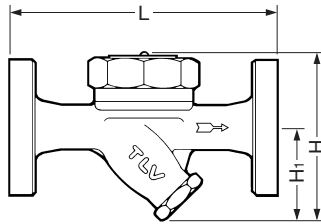


**A3N** Screwed\* (mm)

Size	L	H	H <sub>1</sub>	Weight (kg)
1/2"	98	122	68	1.5
3/4"	104	125	69	1.6
1"	112	133	73	1.8

\* BSP DIN 2999, other standards available

● **AF3N** Flanged

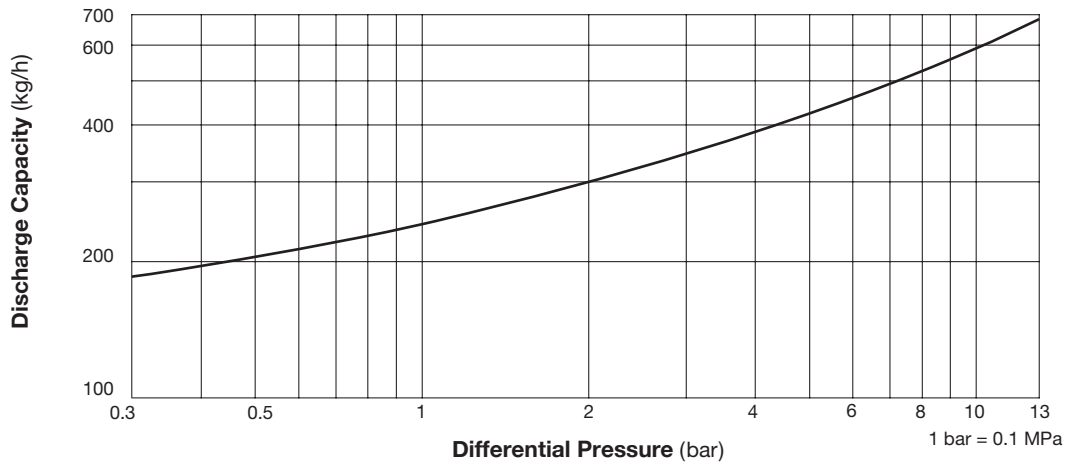


**AF3N** Flanged (mm)

DN	L		H	H <sub>1</sub>	Weight (kg)
	DIN 2501	PN16			
15	175		120	67	3.4
20	191		125	71	5.0
25	211		131	73	6.2

Other standards available, but length and weight may vary

**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

