



THERMODYNE STEAM TRAP

MODEL A3N CAST IRON

THERMODYNAMIC DISC TRAP WITH THERMOSTATIC AIR VENTING

Features

Steam jacketed 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

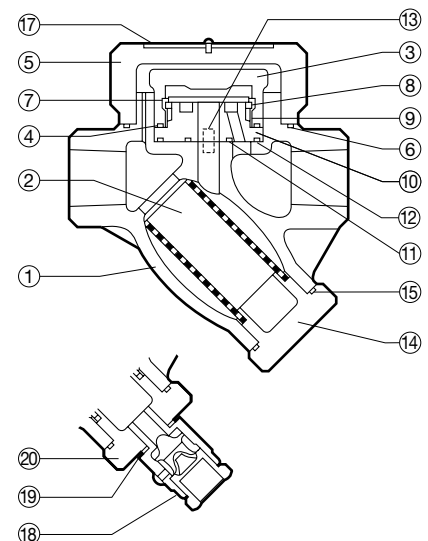
Model	A3N	AF3N
Connection	Screwed	Flanged
Size	1/2", 3/4", 1", 1 1/4", 1 1/2", 2"	DN 25, 32, 40, 50
Maximum Operating Pressure (barg) PMO		13
Minimum Operating Pressure (barg)		0.3
Maximum Operating Temperature (°C) TMO		200
Maximum Back Pressure	80% of Inlet Pressure	

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



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 1/2" - 1")	Malleable Cast Iron FCMB270	0.8135	A47 Gr. 32510
	Body (A3N 1 1/4" - 2", AF3N)	Cast Iron FC250	0.6025	A126 Cl. B
② ^R	Screen	Stainless Steel SUS430	1.4016	AISI430
③ ^R	Inner Cover (1/2" - 1", DN 15 - 25)	Stainless Steel SUS410F2	—	AISI410
	Inner Cover (1 1/4" - 2", DN 32 - 50)	Stainless Steel SUS416	1.4005	AISI416
④ ^R	Inner Cover Gasket	Fluorine Resin PTFE	PTFE	PTFE
⑤	Outer Cover (1/2" - 1", DN 15 - 25)	Malleable Cast Iron FCMB270	0.8135	A47 Gr. 32510
	Outer Cover (1 1/4" - 2", DN 32 - 50)	Cast Iron FC250	0.6025	A126 Cl. B
⑥ ^{MR}	Outer Cover Gasket	Fluorine Resin PTFE	PTFE	PTFE
⑦ ^R	Disc (1/2" - 1", DN 15 - 25)	Stainless Steel SUS420J2	1.4031	AISI420
	Disc (1 1/4" - 2", DN 32 - 50)	Stainless Steel SUS420F2	1.4028	AISI420F2
⑧ ^R	Disc Holder Ring (1/2" - 1", DN 15 - 25)	Stainless Steel SUS416	1.4005	AISI416
	Disc Holder Ring (1 1/4" - 2", DN 32 - 50)	Stainless Steel SUS420F	1.4028	AISI420F2
⑨ ^R	Air Vent Ring	Bimetal	—	—
⑩ ^R	Module Valve Seat	Stainless Steel SUS420F	1.4028	AISI420F
⑪ ^R	Inner Module Gasket	Fluorine Resin PTFE	PTFE	PTFE
⑫ ^R	Outer Module Gasket	Fluorine Resin PTFE	PTFE	PTFE
⑬ ^R	Module Pin	High-Cr Steel SUJ2	1.2067	A485
⑭	Screen Holder (1/2" - 1", DN 15 - 25)	Malleable Cast Iron FCMB270	0.8135	A47 Gr. 32510
	Screen Holder (1 1/4" - 2", DN 32 - 50)	Cast Iron FC250	0.6025	A126 Cl. B
⑮ ^{MR}	Holder Gasket (1/2" - 1", DN 15 - 25)	Fluorine Resin PTFE	PTFE	PTFE
	Holder Gasket (1 1/4" - 2", DN 32 - 50)	Copper Alloy C1100P	—	B152
⑯	Cover Bolt (1 1/4" - 2", DN 32 - 50)	Alloy Steel SS400	1.0037	A283 Gr. C
⑰	Nameplate	Stainless Steel SUS304	1.4301	AISI304
⑱ ^{**}	Blow-off Valve BO2**	Stainless Steel SUS420F	1.4028	AISI420F
⑲ ^{**}	Blow-off Valve Gasket**	Soft Iron SUYP	1.1121	AISI11010
⑳ ^{**}	Screen Holder for BO2**	Carbon Steel C22.8	1.0406	A105

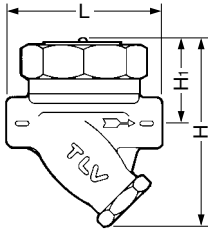


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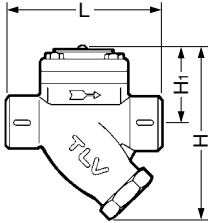
* Equivalent materials ** Option *** Shown on reverse
Replacement Kits available: (M) maintenance parts, (R) repair parts

Dimensions

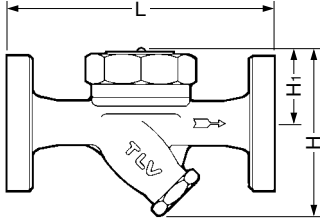
● **A3N**
Screwed
(1/2" - 1")



● **A3N**
Screwed
(1 1/4" - 2")



● **AF3N**
Flanged



A3N Screwed* (mm)

	L	H**	H ₁	Weight (kg)
1/2"	98	122	68	1.5
3/4"	104	125	69	1.6
1"	112	133	73	1.8
1 1/4"	175	194	104	7.2
1 1/2"	180	193	105	7.4
2"	195	208	109	8.4

* BSP DIN 2999, other standards available

** With optional BO2, add 22 mm to H

AF3N Flanged* (mm)

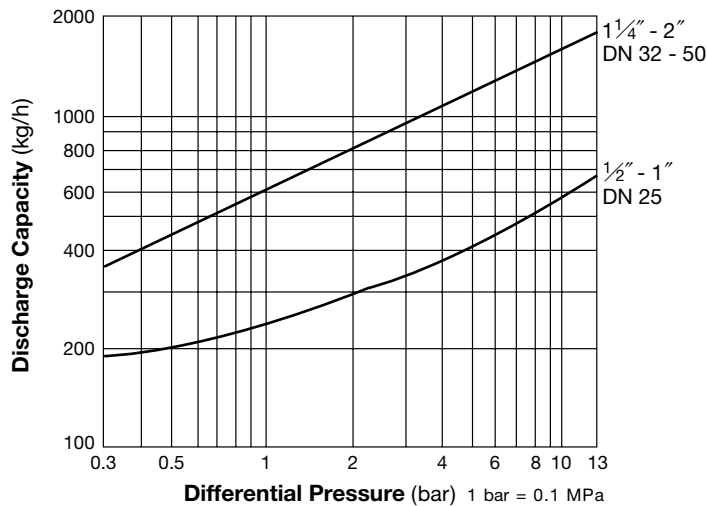
DN	L	H**	H ₁ **	Weight (kg)
25	211	131	73	6.2
32	241	194	104	11
40	256	198	106	13
50	265	208	109	14

* DIN 2501 PN 16, but no DIN-Length, other standards available

** With optional BO2, add 22 mm to H

Configuration of sizes 32 ~ 50 same as 1 1/4 - 2 screwed

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

