

NTD600 SERIES THERMODYNAMIC STEAM TRAPS

SPECIFICATION

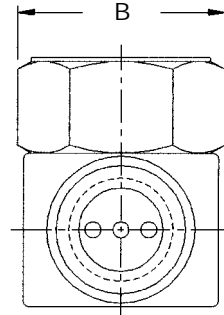
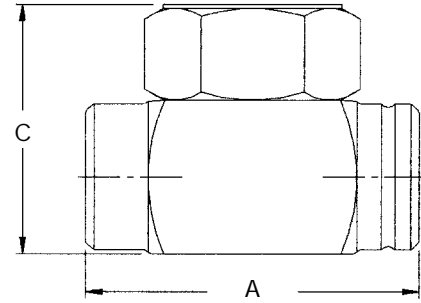
Steam trap shall be of thermodynamic design. Body shall be of all stainless construction and hardened throughout. Seat shall be integral to body. Cover shall seal to body without gaskets or seals. Trap shall be suitable for pressures through 600 psi and available in 3/8" through 1".

MAXIMUM OPERATING CONDITIONS

PMO: Max. Operating Pressure	600 psig	(41.3 barg)
TMO: Max. Operating Temperature	800°F	(426°C)
PMA: Max. Allowable Pressure	600 psig	(41.3 barg)
TMA: Max. Allowable Temperature	800°F	(426°F)

MATERIALS OF CONSTRUCTION

Body	420F SS ASTM A743 CA40F
Cap & Disc	416 SS ASTM A582
Blow Down Valve	304/316SS
Screen	Stainless Steel



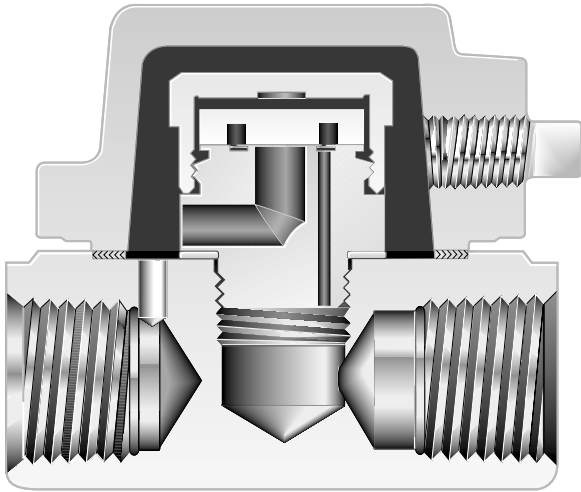
Connections: 3/8" - 1" NPT

Size	Dimensions in inches (mm)			Weight in Lbs. (kg)
	A	B	C	
3/8"	2 (51)	1 3/4 (44)	1 3/4 (44)	.8 (.36)
1/2"	2 11/16 (68)	1 3/4 (44)	2 (51)	1.2 (.55)
3/4"	2 13/16 (71)	2 5/16 (59)	2 7/16 (62)	1.85 (.86)
1"	3 5/16 (84)	2 1/2 (64)	2 7/8 (73)	3.1 (1.8)

Maximum Capacity—lbs/hr 10°F Below Saturation														
NPT Connection	Differential PSIG (barg)													
	3.5 (0.24)	5 (0.34)	10 (0.7)	20 (1.4)	30 (2.1)	50 (3.4)	75 (5.2)	100 (6.9)	150 (10.3)	200 (13.8)	300 (20.7)	400 (27.6)	500 (34.5)	600 (41.3)
3/8"	180	185	190	200	215	245	305	370	500	610	790	960	1100	1250
1/2"	300	310	345	410	465	575	700	810	1000	1140	1410	1630	1830	2000
3/4"	405	420	470	560	640	810	1000	1160	1450	1670	2100	2430	2750	3050
1"	640	670	725	865	980	1200	1470	1750	2200	2600	3250	3780	4250	4700

For Kg/Hr Multiply by .454

NOTE: The NTD600 Series works efficiently at all line pressures between 5+600 psi and back pressures up to 80% of line pressures.



Shown with optional
tapped blowdown connection.

APPLICATIONS

- Steam Tracing
- Drips
- Heating

OPTIONS

- SW - Socketweld Connections
- TB - Tapped Blowdown Connection
- B - Blowdown Valve

Canadian Registration # 0E0591.9

S610 SERIES THERMODYNAMIC STEAM TRAP

Pressures To 600 PSIG (41.3 barg)
Temperatures to 800°F (426°C)

Improved Energy Savings — Lowers steam waste due to steam jacketing. Trap cycle is unaffected by ambient temperatures or precipitation.

Extended Trap Life — Integral strainer keeps disc and seat clean. Non-violent discharge reduces wear. Heavy disc prevents warpage and improves performance.

Easily Maintained — Completely renewable without disturbing piping connections by removing cover, unscrewing and replacing Celtron® cartridge. Celtron® replacement cartridges are packaged individually with cover and gaskets in a protective bag.

Freeze Proof — When mounted vertically or on its side horizontally.

Multi-functional — Integral check valve eliminates need for additional fittings.

Economical — First cost and maintenance cost are low.

Spiral-wound Cover Gasket — assures positive closure.

Integral Strainer — prevents dirt problems.

MODELS

- S610—3/8" & 1/2" standard capacity
- S610L—Low capacity on S610

Celtron®

plastic-packed
replaceable cartridge
for fast and simple
replacement



OPERATION

Incoming air and condensate flow through the trap body and into the Celtron® cartridge. Line pressure raises the disc off the seat allowing complete discharge. When flashing condensate enters the cartridge, flow velocity increases, creating low pressure underneath the disc. Flashing condensate at high velocity strikes the inside wall of the disc chamber and is deflected

to the top of the disc causing a pressure buildup. The disc is forced down onto the seat by this pressure imbalance. The trap remains closed as steam in the jacket prevents exposure of the Celtron® cartridge to ambient temperatures. Pressure inside the cap is not lowered until the trapped flash vapor condenses. Condensing steam lowers the pressure above the disc. Disc is then lifted and the cycle repeated.