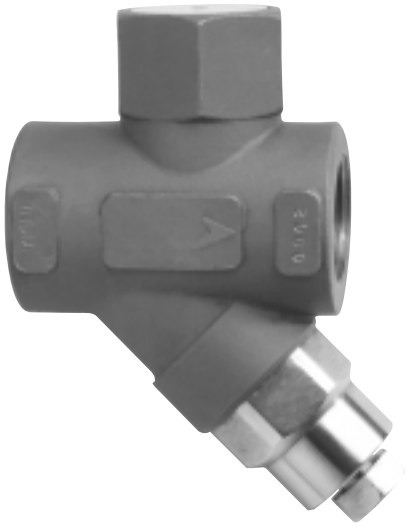


NTD600 SERIES
THERMODYNAMIC STEAM TRAPS

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

Compact Design — Hardened stainless steel disc is the only moving part.

Inexpensive — Low initial cost is less expensive than repairable technologies.

Simplifies Installation — Works in any position.

Rugged — Handles water hammer and superheat.

Reliable, Efficient Operation — Blast discharge helps to eliminate dirt buildup and provides tight shutoff

Freeze resistant — Self draining design prevents freezing.

All Stainless Steel Construction — Resists both internal and external corrosion.

Easy to Monitor — Audible discharge cycle makes checking operation simple.

MODELS

- **NTD600**–Thermodynamic Disc Trap
- **NTD600S**–NTD600 with integral strainer
- **NTD600B**–NTD600S with blowdown valve

APPLICATIONS

- Steam Tracing
- Drips
- Heating

NTD600 Model Only:
Canadian Registration # OE0591.9C

Installation Tip: Always install STV Test & Block Valve as part of trap station
SEE PAGE 118

Installation Tip: Add Uniflex Pipe Coupling for ease of maintenance
SEE PAGE 102

OPERATION

Incoming air and condensate flow through the trap body and into the control chamber. 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 flashed vapor in the control chamber keeps the disc seated. Pressure inside the cap is not lowered until the trapped flash vapor condenses due to body radiation. Condensing steam lowers the pressure above the disc. Disc is then lifted and the cycle repeated.

NTD600 SERIES
THERMODYNAMIC STEAM TRAPS

SPECIFICATION

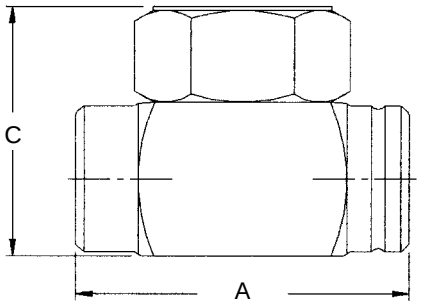
Steam trap shall be of thermodynamic design. Body shall be of all stainless construction and hardened throughout. Seat shall be integral to body. Cover shall seal to body without gaskets or seals. Trap shall be suitable for pressures through 600 psi and available in 3/8" through 1".

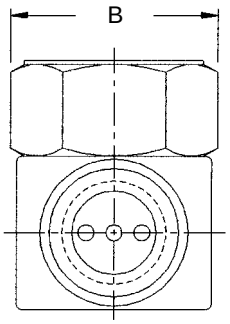
MAXIMUM OPERATING CONDITIONS

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: ⅜" – 1" NPT

Dimensions in inches (mm)				Weight in Lbs. (kg)
Size	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.