

DS200 SERIES THERMOSTATIC STEAM TRAPS

Pressures To 100 PSIG (6.9 barg)
Temperatures to 338°F (170°C)



APPLICATIONS

- Platen Presses
- Plating Tanks
- Sterilizers
- Tire Presses
- Cooking Equipment
- Laundry Equipment
- Other Process Equipment

OPTION

- -B Bellows for low subcool

Canadian Registration # OE0591.9C

OPERATION

Thermal actuator is filled at its free length with a liquid having a lower boiling point than water. As assembled, valve is normally open. On startup, air passes through vent. As air is eliminated, hot steam reaches vent and the thermal actuator fill vaporizes to a pressure higher than line pressure. This forces

Stainless Steel Body—Body materials are Type 316L Stainless Steel.

Self Centering Valve—Leak tight shut off. Assembly of actuator and valve to impingement plate allows valve to self-align with center of valve seat orifice. Provides long lasting valve and seat.

Temperature Sensitive Actuator—One moving part. Inconel welded actuator for maximum corrosion, thermal and hydraulic shock resistance.

Thermal and Hydraulic Shock Resistant—Impingement plate plus welded construction prevents damage to actuator.

Valve and Seat—Long life, stainless steel valve and seat lapped and matched together for water tight seal.

Maintenance—All models are sealed and maintenance free.

Three Year Guarantee—Trap guaranteed for three years against defects in material or workmanship.

Additional Features—Best air handling capability for fast start up and operation. Fastest response to condensate load or temperature changes. Broad application range. Selection of orifice and pipe sizes meet majority of condensate removal demands in deionized steam systems.

Unique SLR Orifice Option—Specify when immediate elimination of condensate and improved sensitivity is desired. An orifice on the valve allows for continuous discharge of condensate. Trap will nominally pass 50 lb/hr (22.7 kg/hr) of condensate at 50 psi (3.4 barg) within 0.5°C (1°F) of saturated temperature.

MODELS

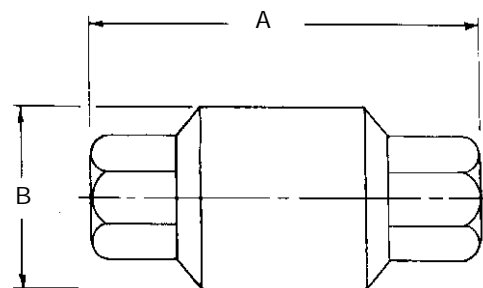
- DS202—Low capacity
- DS203—Medium capacity
- DS204—High capacity

valve into seat orifice to prevent any further flow. Should more air collect, it takes heat from the actuator, lowering internal pressure. Line pressure will then compress thermal actuator to open valve and discharge air. Valve lift automatically adjusts to variations.

DS200 SERIES THERMOSTATIC STEAM TRAPS

SPECIFICATION

Steam trap shall be of balanced pressure design with 316L welded bellows capable of releasing condensate within 5°C (10°F) of saturated pressure. Where drainage at saturated temperatures is required, trap shall have SLR orifice. All other components shall be of 316 or 316L stainless steel. Trap shall be self draining and normally open.



3/8" - 3/4" BODY

Connections:
3/8" - 3/4" NPT or socketweld

MAXIMUM OPERATING CONDITIONS

PMO: Max. Operating Pressure	100 psig	(6.9 barg)
TMO: Max. Operating Temperature	338°F	(170°C)
PMA: Max. Allowable Pressure	150 psig	(10.3 barg)
TMA: Max. Allowable Temperature	366°F	(186°C)

MATERIALS OF CONSTRUCTION

Body	ASTM A351 Grade CF3M (316L)
Welded Actuator	316L Fittings & Plates
Valve & Seat	316L Stainless Steel

SLR ORIFICE OPTION

Specify when immediate elimination of condensate and improved sensitivity is desired. An orifice on the valve allows for continuous discharge of condensate. Trap will nominally pass 50 lb/hr (22.7 kg/hr) of condensate at 50 psi (3.4 barg) within 0.5°C (1°F) of saturated temperature.

-B BELLOWS

1°C (2-3°F) subcool for sensitive applications under 40 psi (2.7 barg)

DIMENSIONS inches (mm) and WEIGHTS pounds (kg)

NPT or Socket Weld	A	B	Weight
3/8 and 1/2	3 3/4 (95)	1 3/4 (44)	1.1 (0.5)
3/4	3 1/4 (100)	1 3/4 (44)	1.2 (0.54)

Maximum Capacity—lbs/hr 10°F Below Saturation (Kg/hr 5°C Below Saturation)

Trap	Orifice Inch (mm)	Differential PSIG (bar)													
		5 (0.34)	10 (0.7)	20 (1.4)	50 (3.5)	100 (6.9)	125 (8.6)	150 (10.3)	200 (13.8)	250 (17.2)	300 (20.7)	350 (24.1)	400 (27.6)	450 (31.0)	500 (34.5)
DS202	1/8 (3)	216 (98)	265 (120)	375 (170)	592 (269)	778 (354)	838 (381)	890 (405)	980 (445)	1055 (480)	1121 (510)	1180 (536)	1235 (561)	1284 (584)	1323 (601)
DS203	1/4 (6)	550 (249)	825 (374)	1210 (549)	1975 (896)	2825 (1281)	3140 (1424)	3425 (1554)	3650 (1656)	3960 (1796)	4100 (1860)	4230 (1919)	4420 (2005)	4600 (2086)	4760 (2161)
DS204	5/16 (8)	860 (390)	1220 (554)	1725 (783)	2725 (1237)	3575 (1623)	3850 (1748)	4090 (1857)	4505 (2045)	4850 (2202)	5155 (2340)	5425 (2463)	5675 (2576)	5900 (2679)	6110 (2774)