

UNIVERSAL STYLE STEAM TRAPS

WB450

Bi-Metallic Steam Trap Module (mounts to Universal Connectors)

Model	WB450
Connections	Fits WU450 Series Universal Connectors
Body Material	Stainless Steel
PMO Max. Operating Pressure	450 PSIG
TMO Max. Operating Temperature	662°F
PMA Max. Allowable Pressure	720 PSIG @ 100°F
TMA Max. Allowable Temperature	800°F @ 400 PSIG

Steam trap modules can be used with other manufacturers' Universal Connectors.



**WB450
Bi-Metallic
Steam Trap
Module**

TYPICAL APPLICATIONS

The **WB450** Series Bi-Metallic Module is used in steam tracing applications (process lines, instrumentation and winterization, general steam jacketing) and small process applications where accurate control of condensate discharge temperature is required to provide maximum usage of energy.

HOW IT WORKS

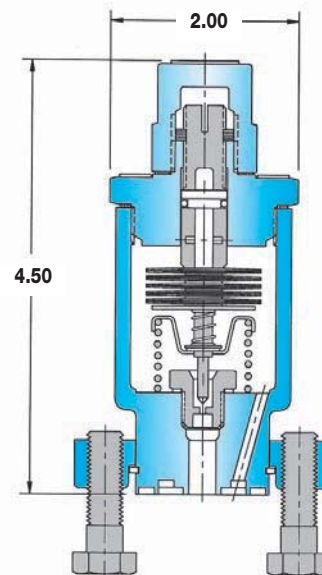
Bi-Metallic plates of dissimilar metals respond to steam temperature variations, whereby the metals are relaxed at relatively cool conditions, such as start-up, and the trap is open for the discharge of condensate. As temperature nears the preset subcool temperature below saturation, the metals react and expand, closing the trap and preventing the loss of live steam. Field adjustability of the bimetal element allows precise control of the condensate discharge temperature.

FEATURES

- Excellent for various steam tracing and small process applications where maximum energy usage is desired
- Field-adjustable bimetal element allows precise control of condensate discharge temperature, providing maximum use of additional energy in the condensate
- Internal screen and seat/plug design help prevent pipe scale and debris from accumulating on seating surfaces to provide trouble-free operation

MATERIALS

Body and Cover	Stainless Steel, A-351, Gr. CF8
Bimetal Element	GB14
Valve Seat	420 Stainless Steel
Gaskets (2)	Spiral Wound 304 Stainless Steel with Grafoil Filler
Valve Stem	Stainless Steel with Grafoil Filler



Units: Inches

Maximum Trap Capacities at Various Inlet Pressures and Set Temperatures – Condensate (lbs/hr)

Set Temperature	Steam Inlet Pressure (PSIG)											
	15	30	50	100	125	150	200	250	300	350	400	450
220°F	56	70	102	144	161	177	204	228	250	270	289	306
240°F	116	164	212	300	336	368	425	475	520	562	600	637
260°F	134	190	245	346	387	424	490	548	600	648	693	735
280°F	143	202	261	370	413	453	523	584	640	691	739	784

- Notes:**
- 1) Capacities in chart are based on discharging condensate to atmosphere with a condensate temperature of 200° F.
 - 2) Maximum discharge capacity up to 970 lbs/hr, depending on operating condition requirements.
 - 3) Contact factory for additional information including other condensate set and discharge temperatures.
 - 4) To ensure proper operation and eliminate possible steam loss, the Set Temperature should be lower than 27 °F subcool (degrees below inlet steam saturation temperature).