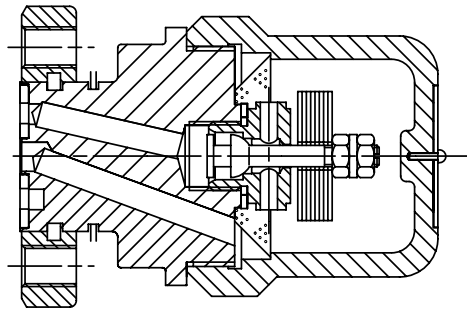


# AB-3000 Bimetallic Steam Trap

Stainless Steel

For Pressures to 22 bar...Capacities to 2 100 kg/h



Steam Traps

## Description

Armstrong's AB-3000 Bimetallic Steam Trap operates by the effect that rising temperature has on bimetallic elements. It adjusts itself to changing conditions, as the increasing pressure on the valve is compensated by the curving of the bimetallic elements caused by the increasing temperature. The valve of the AB-3000 is specially treated (boronization) in order to be more resistant to wiredrawing due to erosive condensate flashing.

Armstrong's AB-3000 has a sealed, stainless steel body that is lightweight, compact and highly resistant to corrosion. The AB-3000 is repairable (body and cap can be unscrewed). It is piped through the Armstrong 360° Universal Connector or Trap Valve Station (TVS). This makes it easy to install and replace, as the trap can be removed while the connector remains in-line. The result is savings in labor cost and increasing in flexibility, as other trap types (Inverted Bucket, Thermostatic and Thermodynamic) can be installed on the same connector.

## Valve Boronized

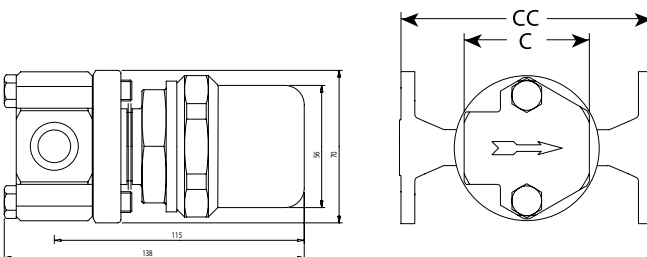
The problem of wiredrawing of valve and seat materials is well known to users of steam traps and other types of valves. Wiredrawing is a particular problem to valves and seats of bimetallic traps, which rely on bimetallic elements to operate.

To solve the problem of wiredrawing, a new thermochemical surface treatment has been developed. The basic valve material is machinable hardened chrome steel. Atoms of highly resistant material are thermochemically diffused into the valve, giving a layer of protection and a hardness of 1700 HV to the basic material. Because of this new thermochemical treatment, the surface of the valve is highly resistant to the erosive action of flashing condensate. The failure rate of Armstrong bimetallic traps due to wearing out of valve and seat material is greatly reduced.

Pipe Connections	15 - 20 - 25
"C" Face-to-Face (screwed & SW)	60 - 60 - N/A
"CC" Face-to-Face (flanged PN40*)	150 - 150 - 160
Weight in kg (screwed & SW)	1,9
Weight in kg (flanged PN40*)	4,3 - 4,5 - 4,7

\* Standard flanges are in carbon steel, stainless steel flanges are optional. Other flange sizes, ratings and face-to-face dimensions are available on request.

All sizes comply with the article 3.3 of the PED (97/23/EC).



## Maximum operating conditions

Maximum allowable pressure (vessel design):	28 bar @ 343°C
Maximum operating pressure:	22 bar
Maximum back pressure:	99% of inlet pressure

## Connections

Screwed BSPT and NPT  
Socketweld  
Flanged DIN or ANSI (welded)

## Materials

Body:	ASTM - A240 304L
Standard connector:	Stainless steel - 304
Valve:	Chrome steel - 440F, Boronized
Seat:	303 Stainless steel
Elements:	Nickel plated
Strainer:	304 Stainless steel

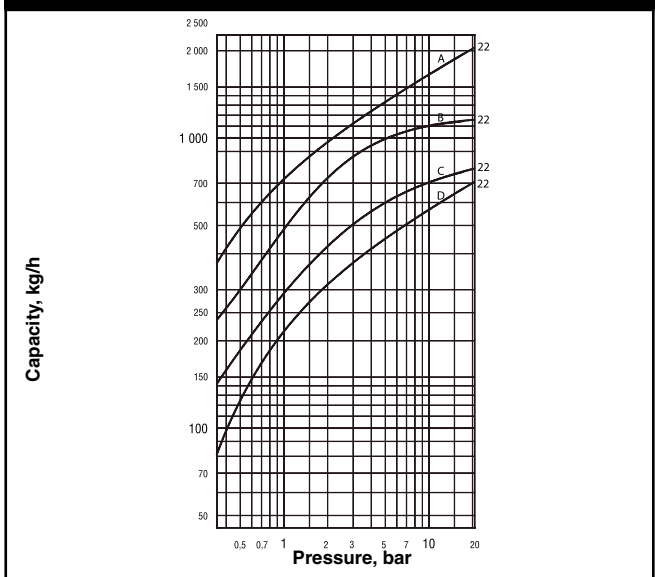
## Specification

Bimetallic repairable steam trap with valve boronized, type AB-3000 in stainless steel, with integral strainer. Piped through 360° Universal Connector or Trap Valve Station (TVS). Maximum allowable back pressure 99% of inlet pressure.

## How to order

- Specify:
- Size and type of pipe connection.
  - Maximum working pressure that will be encountered
  - Maximum condensate load

Table ST-147-2. Model AB-3000 Capacity



A = Cold Water  
B = 40°C Below Saturation  
C = 20°C Below Saturation  
D = 10°C Below Saturation

All dimensions and weights are approximate. Use certified print for exact dimensions. Design and materials are subject to change without notice.