



3A.522-E
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BM 35

Bimetallic Steam Traps and Air Eliminators

Description

Thermostatic bimetallic steam traps.
 Carbon steel body and cover Electro Less Nickel Plated.
 Stainless steel internal trim.
 Stainless steel inbuilt strainer.

Standards

The product fully complies with the requirements of the European Pressure Equipment Directive 2014/68/EU.

Certification

The product is available with certification to EN 10204 3.1.

Note: All certification/inspection requirements must be stated at the time of order placement.

Pipe connections

Standard:

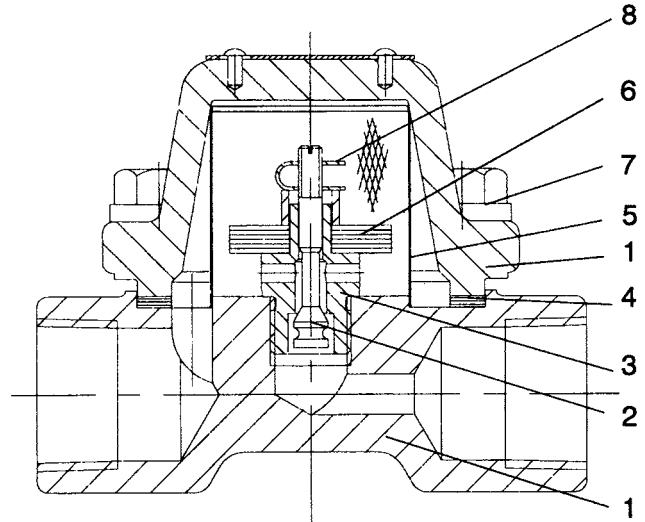
- Female screwed UNI ISO 7/1 Rp (gas)
- Female screwed ANSI B 1.20.1 (NPT)
- Socket welding ANSI B 16.11 (SW)

On request:

- Flanged UNI 2284/2229 PN 25/40
- Flanged ANSI 150-300-600 RF

Size

DN ½" e ¾"



Limiting conditions (ISO 6552)

Body design conditions 40 bar g
 Maximum design temperature 425°C
 Maximum hydraulic test pressure 60 bar g

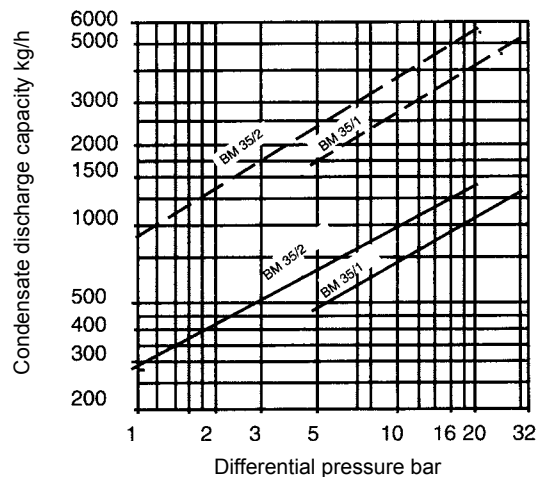
Operating range (ISO 6552)

PMO-TMO
 BM 35/1 32 bar - 350°C
 BM 35/2 22 bar - 350°C
 The maximum working conditions may be limited by flange rating.
 Maximum differential pressure
 BM 35/1 32 bar
 BM 35/2 22 bar

Materials

N.	Part	Material	Designation
1	Body/cover	Carbon steel	ASTM A105
2	Valve	Stainless steel	AISI s. 400
3	Seat	Stainless steel	AISI s. 400
4	Body gasket	Asbestos free	
5	Strainer	Stainless steel	AISI 304
6	Bimet. element	Special stainless steel	
7	Bolts	Steel	ASTM A 193 B7
8	Setting nut	Stainless steel	AISI s. 400

Capacities



Discharge capacity: in operation _____

Discharge capacity: cold water - - - - -

Installation

The trap can be fitted into any position, but the horizontal one with cover in upper position is the most advisable. Only with freezing conditions the vertical position with outlet downward and no raiser downstream the steam trap is preferable. The condensate flow through the steam trap must be in accordance with the arrow on the body. To avoid the unit to be flooded, fit the trap at 2+3 meters downstream the utilizer and do not insulate the pipe.

Low pressure

The trap is correctly operating even with low pressure, provide that the condensate rate is not below 20÷30Kg/h; should be condensate rate be very low and the pressure below 2 bar, it is advisable to lower the discharge temperature by turning the self-locking nut anticlockwise of half a turn (see "Setting and Adjustment").

How to fit as air eliminator

For use as air eliminator the trap must be installed in the point of the piping or unit where the air tends to collect. It is advisable to connect it to a 2" pipe 500 mm long without insulation to operate as a collector and cooling device.

Setting and adjustment

The normal factory is such that the trap begins to discharge condensate about 15-20°C below the saturated steam temperature in order to recover part of sensible heat.

It is not advisable to amend the factory setting, however should it be necessary, proceed as follows:

- shut off the upstream steam valve and the downstream condensate valve if any.
- remove cover from the trap. Preventing the adjustment locking spring (part 2) from rotating, turn with a screwdriver anticlockwise the screw on the top of it.
- with a complete turn of the adjustment screw the discharge temperature will be lowered of 35°C:
It is possible to rotate the screw for a maximum of 1¼ turn, thus obtaining to lower the temperature of 44°C about.

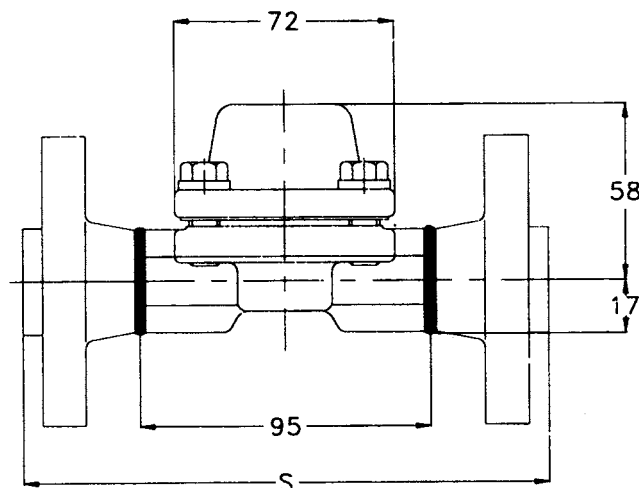
Service

To clean the built-in strainer remove the cover, slightly shake the screen and then blow the dirt.

Replace trap cover making sure that gasket and strainer screen are correctly located and that joint faces and the gasket are clean; replace the gasket if defective. The element set can be completely replaced. Using a spanner 17 mm across flats on the valve seat hexagon unscrew the element set and replace with a new one; tighten with a 20 Nm torque. Lightly coat the element seat gasket with a suitable jointing compound for high temperature.

Dimensions (approximate) in millimetres and weight

DN Connections	Fil. o SW		PN25/40		ANSI150		ANSI300		ANSI600	
	S	kg	S	kg	S	kg	S	kg	S	kg
1/2"	-	1,6	150	4,0	150	3,6	150	4,2	170	4,5
3/4"	-	1,6	150	4,4	150	4	150	5	170	5,3



Available spare parts

Spare parts are available as per following table.

Available spares

Trim set BM 35/1	2-3-5-6-8
Trim set BM35/2	2-3-5-6-8
Gasket set (5 pezzi)	4

How to order spares

Always order spares by using the description give above and quoting the type of steam trap

Example: Trim set for BM35/1.