

BIMETALLIC STEAM TRAPS AND AIR VENTS BM89

DESCRIPTION

The BM89 is a series of robust and efficient bimetallic steam traps and air vents. These steam traps are recommended for steam process applications where sensible heat can be recovered, such as steam tracing lines, drip points, storage tank coils and steam air venting. Specially designed for draining high pressure superheated steam lines and processes.

MAIN FEATURES

- Modulating discharge.
- Discharges condensate below steam temperature.
- Excellent air discharge.
- Operates on superheated steam.
- Unaffected by water hammer and vibrations.
- Built-in strainer.

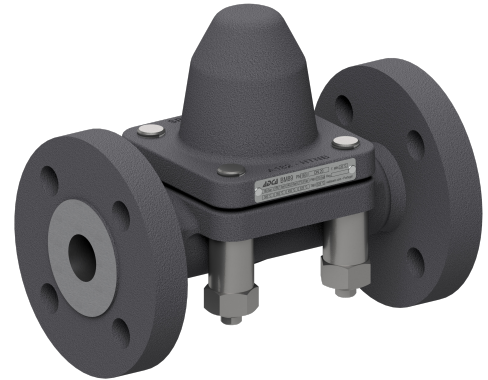
USE: Saturated and superheated steam.

AVAILABLE MODELS: BM89 – carbon steel.

SIZES: 1/2" to 1"; DN 15 to DN 25.

CONNECTIONS: Female threaded ISO 7 Rp or NPT.
Flanged EN 1092-1 PN 160.
Flanged ASME B16.5 Class 900.
Socket weld (SW) ASME B16.11.
Butt weld (BW) ASME B16.25.

INSTALLATION: Inline horizontal installation is recommended.
See IMI – Installation and maintenance instructions.



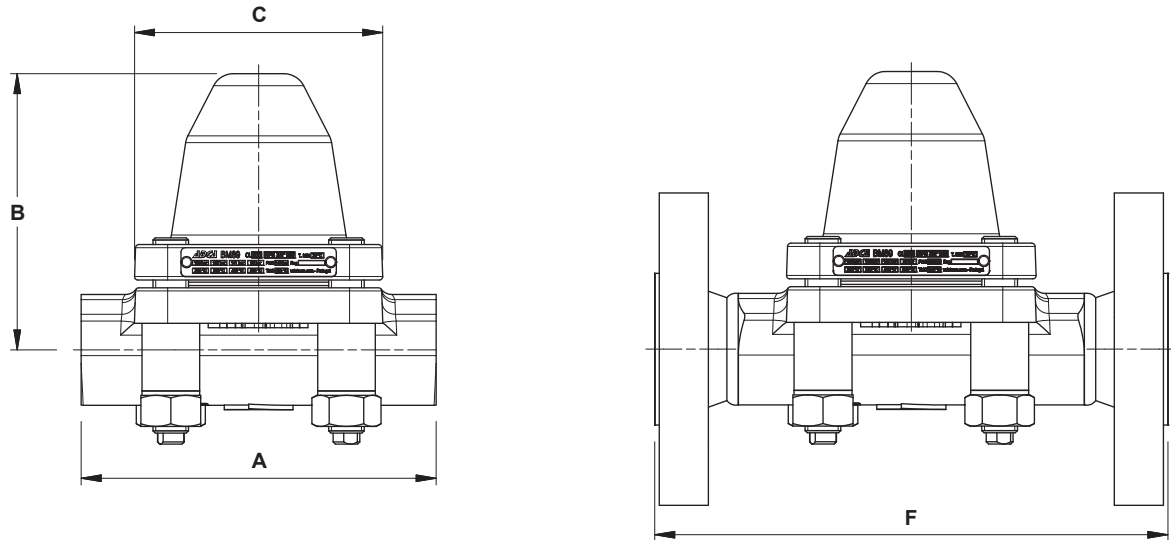
| CE MARKING – GROUP 2 (PED – European Directive) | |
|---|----------|
| PN 160 | Category |
| 1/2" to 1" – DN 15 to 25 | SEP |

| BODY LIMITING CONDITIONS | | |
|--------------------------|----------------------|---------------|
| FLANGED PN 160 * | FLANGED CLASS 900 ** | RELATED TEMP. |
| ALLOWABLE PRESSURE | ALLOWABLE PRESSURE | |
| 160 bar | 128,6 bar | 300 °C |
| 156,1 bar | 120,7 bar | 350 °C |
| 140,9 bar | 101,4 bar | 450 °C |
| 102,8 bar | 83,4 bar | 500 °C |
| 73,4 bar | 64,9 bar | 525 °C |

PMO – Maximum operating pressure: 110 bar.
TMO – Maximum operating temperature: 525 °C.
* Acc. to EN 1092-1:2018. ** Acc. to EN 1759-1:2004.
Body limiting conditions PN 160 or below, depending on the type of connection adopted. Rating PN 160 for threaded, SW and BW versions.

| FLOW RATE CAPACITY (kg/h) | | | | | | | | | | | | | | | | |
|---------------------------|-------------------------------|-----------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MODEL | SIZE | DIFFERENTIAL PRESSURE (bar) | | | | | | | | | | | | | | |
| | | 4 | 6 | 8 | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 70 | 90 | 100 | 110 |
| BM89 | 1/2" to 1" A DN 15 to 25 A | 360 | 420 | 490 | 510 | 600 | 650 | 700 | 710 | 790 | 810 | 850 | 900 | 930 | 970 | 990 |
| BM89 | 1/2" to 1" B DN 15 to 25 B | 1500 | 1750 | 2000 | 2200 | 2700 | 3000 | 3300 | 3600 | 4000 | 4500 | 4900 | 5300 | 6000 | 6200 | 6500 |

A: Condensate discharge at 10 °C below saturation temperature; B: Cold water capacity around 20 °C.



| DIMENSIONS (mm) | | | | | | | | |
|-----------------|----------------------|-----|-----|-------------|--------|-------------|-----------|-------------|
| SIZE | THREADED / SW / BW * | | | | PN 160 | | CLASS 900 | |
| | A | B | C | WEIGHT (kg) | F ** | WEIGHT (kg) | F ** | WEIGHT (kg) |
| 1/2" – DN 15 | 160 | 125 | 112 | 6,2 | 210 | 7,4 | 230 | 8,2 |
| 3/4" – DN 20 | 160 | 125 | 112 | 6,2 | – | – | 230 | 8,8 |
| 1" – DN 25 | 160 | 125 | 112 | 6,1 | 230 | 9,1 | 254 | 10,3 |

* In case of BW connections please indicate pipe dimensions when ordering. Body limiting conditions may be restricted by the BW end wall thickness. Consult the manufacturer.

** Different face to face dimensions on request.

| MATERIALS | | |
|-----------|------------------------|--|
| POS. N° | DESIGNATION | MATERIAL |
| 1 | Body | A182F22 / 1.7380 (Equiv. 10CrMo910) |
| 2 | Cover | A182F22 / 1.7380 (Equiv. 10CrMo910) |
| 3 | * Gasket | Stainless steel / Graphite |
| 4 | * Bimetallic regulator | Corrosion resistant bimetal; Stainless steel |
| 5 | * Strainer screen | AISI 304 / 1.4301 |
| 6 | Studs | A193 Gr. B16 |
| 7 | Nuts | A194 Gr. 4 |
| 8 | Extension sleeves | A193 Gr. B16 |

* Available spare parts.

