

**BIMETALLIC STEAM TRAPS AND AIR ELIMINATORS**  
**BM 45**  
 (DN1/2" – DN 1"; DN15 – DN25)

**DESCRIPTION**

BM45 series bimetallic steam traps and air eliminators are simple and robust traps, recommended for steam where condensate sensible heat can be recovered, steam tracing lines, drip points, storage tank coils, steam air venting, etc. The use of condensate sensible heat reduces the steam consumption.

Connections are female screwed, socket weld, butt weld or flanged.

**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:**

BM45

**SIZES:**

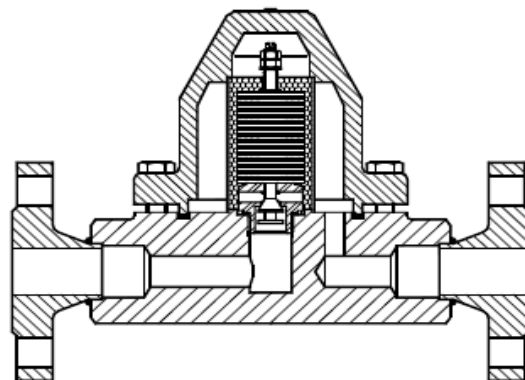
DN 1/2" to 1" ; DN15 to DN25.

**CONNECTIONS:**

- Female screwed BSP or NPT
- Flanged EN 1092-1 or ANSI
- SW - Socket weld to ANSI B 16.11
- BW - Butt weld to ANSI B16.25

**INSTALLATION:**

Horizontal installation recommended, can be installed in any position. See IMI installation and maintenance instructions.



| BODY LIMITING CONDITIONS |                                   |                  |
|--------------------------|-----------------------------------|------------------|
| FLANGED<br>ANSI 300 **   | FLANGED<br>PN63/100/ANSI 400/600* | RELATED<br>TEMP. |
| ALLOW. PRES.             | ALLOW. PRES.                      |                  |
| 50 bar                   | 63 bar                            | 50 °C            |
| 41,8 bar                 | 48 bar                            | 250 °C           |
| 38,9 bar                 | 43,5 bar                          | 300 °C           |
| 28,7 bar                 | 29,1 bar                          | 425 °C           |

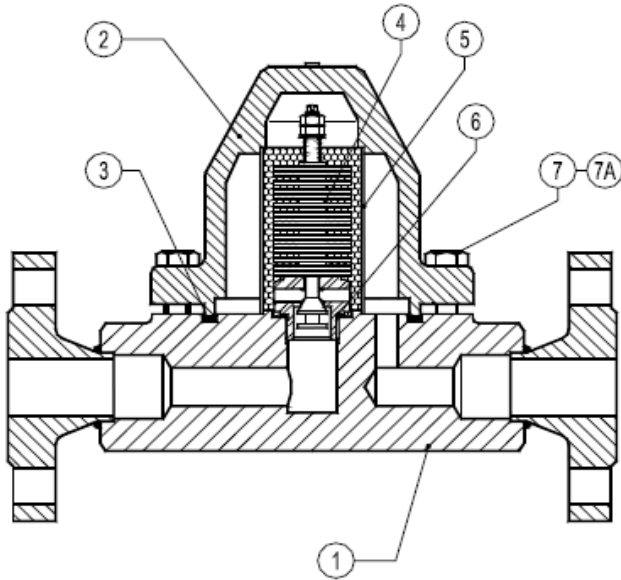
\* According to EN1092-1:2007 ; \*\* Acc. to EN1759-1:2004

Operating pressure : 15 to 45 bar

Body limiting conditions PN63 or below, depending on the type of connection adopted. Rating PN63 for thread, SW and BW.

| FLOW RATE CAPACITY IN Kgs/h |            |                             |      |      |      |      |      |      |      |      |      |
|-----------------------------|------------|-----------------------------|------|------|------|------|------|------|------|------|------|
| MODEL                       | SIZE<br>DN | DIFFERENTIAL PRESSURE (bar) |      |      |      |      |      |      |      |      |      |
|                             |            | 15                          | 17   | 20   | 22   | 25   | 28   | 30   | 40   | 42   | 45   |
| BM 45                       | 15 - 25 A  | 400                         | 430  | 460  | 480  | 500  | 530  | 550  | 580  | 585  | 590  |
| BM 45                       | 15 - 25 B  | 2400                        | 2600 | 2760 | 2800 | 3000 | 3100 | 3200 | 4000 | 4100 | 4200 |

A = Condensate discharge at 10°C below saturation temperature. B = Cold water capacity at about 20°C.



| MATERIALS |                   |                                  |
|-----------|-------------------|----------------------------------|
| POS. Nr.  | DESIGNATION       | MATERIAL                         |
| 1         | Body              | ASTMA105 / 1.0432 (Equiv.P250GH) |
| 2         | Cover             | ASTMA105 / 1.0432 (Equiv.P250GH) |
| 3         | * Gasket          | St.St./Graphite                  |
| 4         | * Valve assembly  | Hardened St.Steel                |
| 5         | * Strainer screen | AISI304 / 1.4301                 |
| 6         | * Seat gasket     | AISI304 / 1.4301                 |
| 7         | Studs             | ASTM A193 Gr.B7                  |
| 7A        | Nuts              | ASTMA194 Gr.2H                   |

\* Available spare parts

| DIMENSIONS ( mm ) |                     |     |     |          |                        |     |          |          |     |          |                |     |          |
|-------------------|---------------------|-----|-----|----------|------------------------|-----|----------|----------|-----|----------|----------------|-----|----------|
| SIZE DN           | BSP - NPT - SW - BW |     |     |          | EN 1092-1 PN63 / PN100 |     |          | ANSI 300 |     |          | ANSI 400 / 600 |     |          |
|                   | A                   | C   | D   | WGT. Kgs | B                      | F*  | WGT. Kgs | B        | F*  | WGT. Kgs | B              | F*  | WGT. Kgs |
| 15-1/2"           | 160                 | 120 | 115 | 6,3      | 52,5                   | 230 | 8,8      | 47,5     | 230 | 9,1      | 47,5           | 230 | 8,2      |
| 20-3/4"           | 160                 | 120 | 115 | 6,3      | 65                     | 230 | 11,1     | 58,5     | 230 | 11,9     | 59             | 230 | 9,4      |
| 25-1"             | 160                 | 120 | 115 | 6,3      | 70                     | 230 | 11,8     | 62       | 230 | 13       | 62             | 230 | 10,2     |

\* Note: different face to face dimensions on request.

