

## THERMODYNAMIC STEAM TRAPS DT46

### DESCRIPTION

The DT46 thermodynamic disc steam traps are compact and lightweight, easy to install traps, excellent for high pressure systems and steam tracing applications.

The insulation cover ensures a consistent operation and makes it particularly suitable for those applications where the weather conditions, such as rain and wind, may affect the normal operation. These traps offer a wide operating range, without adjustment and include a bimetal air vent ring which reduces start-up time by preventing air binding.

### MAIN FEATURES

Intermittent discharge.

Integral bimetallic air vent to avoid air blockage.

Complete with insulation cover to reduce heat and efficiency losses.

Operates with superheated steam.

The seat and disc can be easily replaced in field without removing the trap from the line.

Hardened seat and disc with duly lapped surface for longer service life.

Unaffected by water hammer and vibrations.

Built-in easy-to-clean strainer.

OPTIONS: Blowdown valve.

USE: Saturated and superheated steam.

### AVAILABLE

MODELS: DT46 – 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 40, PN 63 or PN 100.  
Flanged ASME B16.5 Class 150, 300 or 600.  
Socket weld (SW) ASME B16.11.  
Butt weld (BW) ASME B16.25 on request.

INSTALLATION: Horizontal or vertical installation.  
See IMI – Installation and maintenance instructions.



**CE MARKING – GROUP 2  
(PED – European Directive)**

| PN 100                   | Category |
|--------------------------|----------|
| 1/2" to 1" – DN 15 to 25 | SEP      |

### BODY LIMITING CONDITIONS

| FLANGED<br>PN 40 * | FLANGED<br>PN 63 * | FLANGED<br>PN 100 * | FLANGED<br>CLASS 150 ** | FLANGED<br>CLASS 300 ** | FLANGED<br>CLASS 600 ** | RELATED<br>TEMPERATURE |
|--------------------|--------------------|---------------------|-------------------------|-------------------------|-------------------------|------------------------|
| ALLOW. PRESS.      | ALLOW. PRESS.      | ALLOW. PRESS.       | ALLOW. PRESS.           | ALLOW. PRESS.           | ALLOW. PRESS.           |                        |
| 40 bar             | 63 bar             | 100 bar             | 19,3 bar                | 50 bar                  | 90,5 bar                | 50 °C                  |
| 37,1 bar           | 58,5 bar           | 92,8 bar            | 17,7 bar                | 46,4 bar                | 80,2 bar                | 100 °C                 |
| 33,3 bar           | 52,5 bar           | 83,3 bar            | 14 bar                  | 43,9 bar                | 72 bar                  | 200 °C                 |
| 27,6 bar           | 43,5 bar           | 69 bar              | 10,2 bar                | 38,9 bar                | 59,7 bar                | 300 °C                 |
| 23,8 bar           | 37,5 bar           | 59,5 bar            | 6,5 bar                 | 34,6 bar                | 51,4 bar                | 400 °C                 |

PMO – Maximum operating pressure: 46 bar; TMO – Maximum operating temperature: 400 °C.

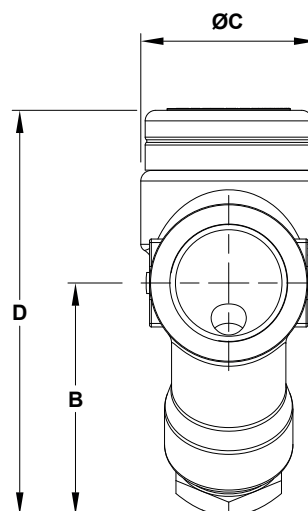
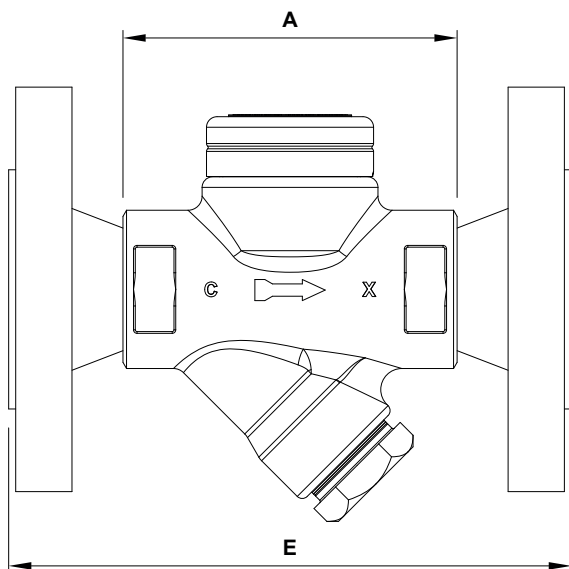
\* According to EN 1092-1:2018; \*\* According to EN 1759-1:2004.

Body limiting conditions PN 100 or below, depending on the type of connection adopted. Rating PN 100 for threaded, SW and BW versions.

**FLOW RATE CAPACITY (kg/h)**

| MODEL          | SIZE                      | DIFFERENTIAL PRESSURE (bar) |     |     |     |     |     |     |     |     |     |     |     |     |     |
|----------------|---------------------------|-----------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|                |                           | 1,5                         | 3   | 5   | 7   | 9   | 12  | 15  | 18  | 21  | 24  | 30  | 35  | 42  | 46  |
| DT46<br>(Hot)  | 1/2" to 1"<br>DN 15 to 25 | 70                          | 100 | 130 | 175 | 190 | 200 | 225 | 240 | 250 | 270 | 290 | 300 | 310 | 320 |
| DT46<br>(Cold) | 1/2" to 1"<br>DN 15 to 25 | 170                         | 230 | 300 | 335 | 390 | 435 | 485 | 520 | 575 | 600 | 645 | 695 | 740 | 800 |

Minimum operating pressure: 1,5 bar; Maximum operating back pressure: 80% of upstream pressure.



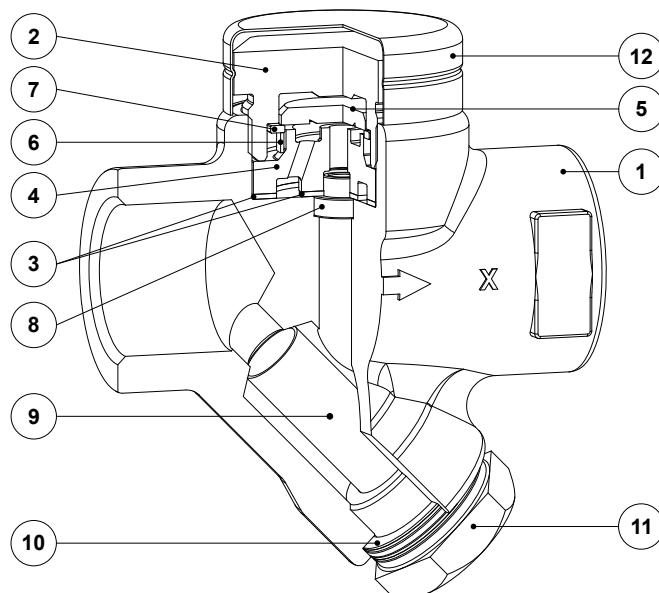
**DIMENSIONS (mm)**

| SIZE         | THREADED / SW |    |    |     |              | PN 40 |              | PN 63 / PN 100 |              | CLASS 150 |              | CLASS 300 |              | CLASS 600 |              |
|--------------|---------------|----|----|-----|--------------|-------|--------------|----------------|--------------|-----------|--------------|-----------|--------------|-----------|--------------|
|              | A             | B  | ØC | D   | WGT.<br>(kg) | E     | WGT.<br>(kg) | E              | WGT.<br>(kg) | E         | WGT.<br>(kg) | E         | WGT.<br>(kg) | E         | WGT.<br>(kg) |
| 1/2" – DN 15 | 95            | 60 | 50 | 109 | 1,3          | 150   | 2,8          | 150            | 3,7          | 150       | 2,4          | 150       | 2,8          | 210       | 3,2          |
| 3/4" – DN 20 | 95            | 60 | 50 | 109 | 1,2          | 150   | 3,3          | 150            | 5,2          | 150       | 2,8          | 150       | 3,6          | 210       | 4,2          |
| 1" – DN 25   | 95            | 66 | 50 | 115 | 1,5          | 160   | 4,1          | 160            | 6,5          | 160       | 3,6          | 160       | 4,5          | 210       | 5,2          |

**MATERIALS**

| POS. N° | DESIGNATION       | MATERIAL                               |
|---------|-------------------|----------------------------------------|
| 1       | Body              | P250GH / 1.0460                        |
| 2       | Cover             | AISI 304 / 1.4301<br>AISI 303 / 1.4305 |
| 3       | * Gasket          | Stainless steel / Graphite             |
| 4       | * Seat            | Hardened stainless steel               |
| 5       | * Valve disc      | Hardened stainless steel               |
| 6       | * Bimetal ring    | Bimetal                                |
| 7       | * Washer support  | AISI 304 / 1.4301                      |
| 8       | * Tube            | AISI 304 / 1.4301                      |
| 9       | * Strainer screen | AISI 304 / 1.4301                      |
| 10      | * Gasket          | Stainless steel / Graphite             |
| 11      | * Strainer cover  | A105 / 1.0432                          |
| 12      | Insulation cover  | AISI 304 / 1.4301                      |

\* Available spare parts.



We reserve the right to change the design and material of this product without notice.