

THERMODYNAMIC STEAM TRAPS DT46

DESCRIPTION

The thermodynamic DT46 disc steam traps are compact and lightweight-easy to install traps, excellent for high pressure systems, including 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 have only one moving part and offer a wide operating range, without adjustment.

MAIN FEATURES

- Intermittent discharge.
- Integral air vent.
- Standard insulation cover.
- Operates on superheated steam.
- The seat and disc can be easily replaced in field without removing the trap from the line.
- 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 PN 40 / CLASS 300 *	FLANGED PN 63 *	FLANGED PN 100 *	FLANGED CLASS 150 **	FLANGED CLASS 600 **	RELATED TEMPERATURE
ALLOW. PRESS.	ALLOW. PRESS.	ALLOW. PRESS.	ALLOW. PRESS.	ALLOW. PRESS.	
40 bar	63 bar	100 bar	19,3 bar	90,5 bar	50 °C
37,1 bar	58,5 bar	92,8 bar	17,7 bar	80,2 bar	100 °C
33,3 bar	52,5 bar	83,3 bar	14 bar	72 bar	200 °C
27,6 bar	43,5 bar	69 bar	10,2 bar	59,7 bar	300 °C
23,8 bar	37,5 bar	59,5 bar	6,5 bar	51,4 bar	400 °C

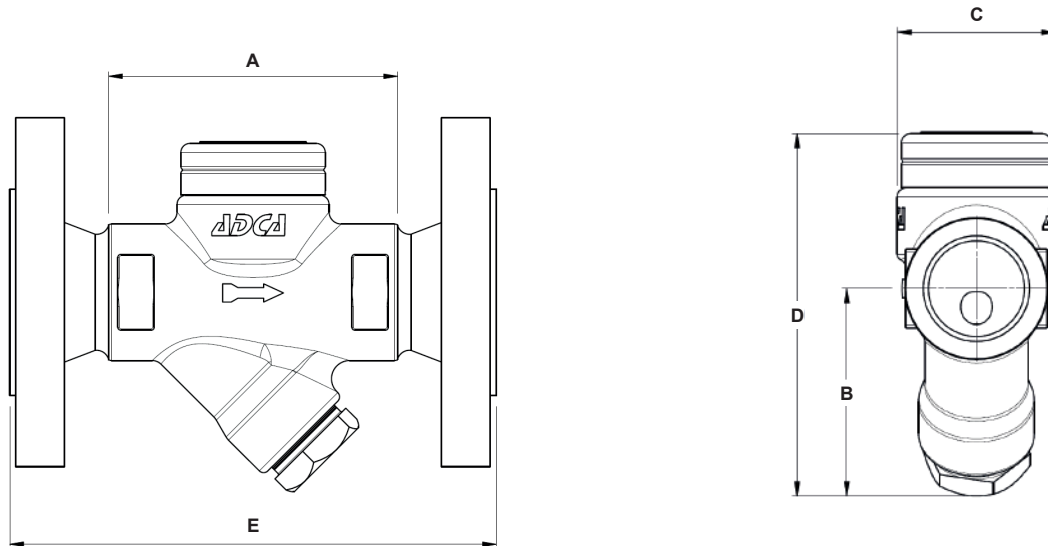
PMO – Maximum operating pressure: 46 bar ; TMO – Maximum operating temperature: 400 °C.

* 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 (Hot)	1/2" to 1" DN 15 to 25	70	100	130	175	190	200	225	240	250	270	290	300	310	320
DT46 (Cold)	1/2" to 1" DN 15 to 25	170	230	300	335	390	435	485	520	575	600	645	695	740	800

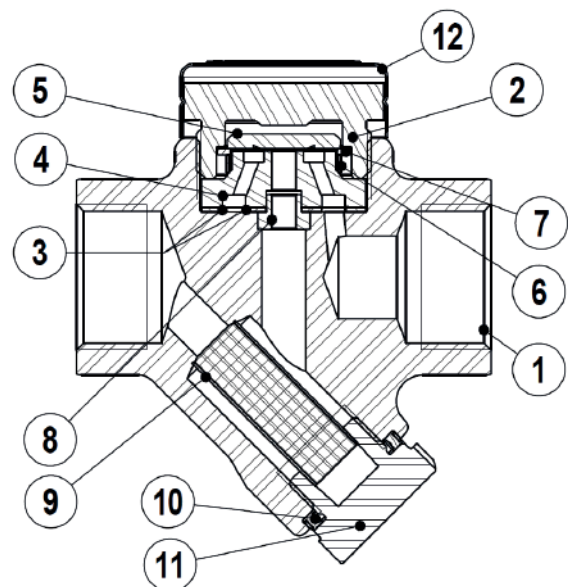
Minimum operating pressure: 1,5 bar; Maximum operating back pressure: 80% of upstream pressure.



DIMENSIONS (mm)																
THREADED / SW						PN 40		PN 63 / PN 100		CLASS 150		CLASS 300		CLASS 600		
SIZE	A	B	C	D	WGT. (kg)	E	WGT. (kg)	E	WGT. (kg)	E	WGT. (kg)	E	WGT. (kg)	E	WGT. (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 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	Plug	A105 / 1.0432
12	Insulation cover	AISI 304 / 1.4301

* Available spare parts.



Insulation cover

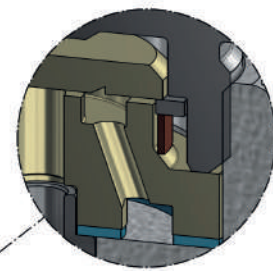
Reduces heat losses, mainly where weather conditions, such as rain and wind, may affect the normal operation

Automatic air vent

Faster response during start-up, avoiding air blockage

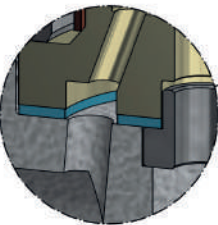
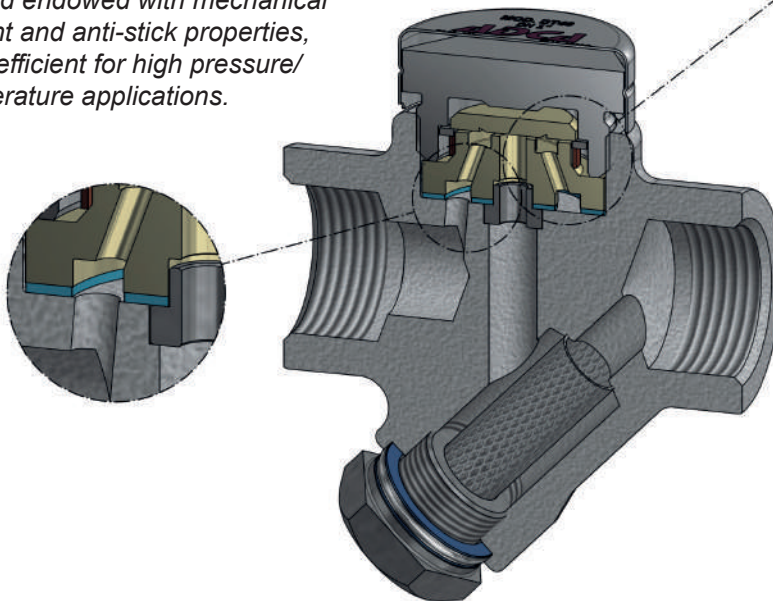
Blow-out resistance seat gaskets

Graphite based endowed with mechanical reinforcement and anti-stick properties, particularly efficient for high pressure/temperature applications.



Hardened valve and disc

Duly lapped (mirror finished), guarantee longer service life



Easy maintenance

Seat and disc are replaceable

Strong design

Solid and compact forged steel design, ensures increased life

Strainer

Integral stainless steel strainer

Strainer gasket

Spiral wound stainless steel/graphite strainer gasket