

THERMODYNAMIC STEAM TRAPS DT46R

DESCRIPTION

The ADCA DT46R thermodynamic 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 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 disk 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: DT46R – 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. PRESSURE	ALLOW. PRESSURE	ALLOW. PRESSURE	ALLOW. PRESSURE	ALLOW. PRESSURE	
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.

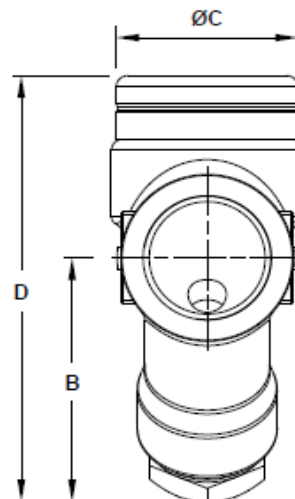
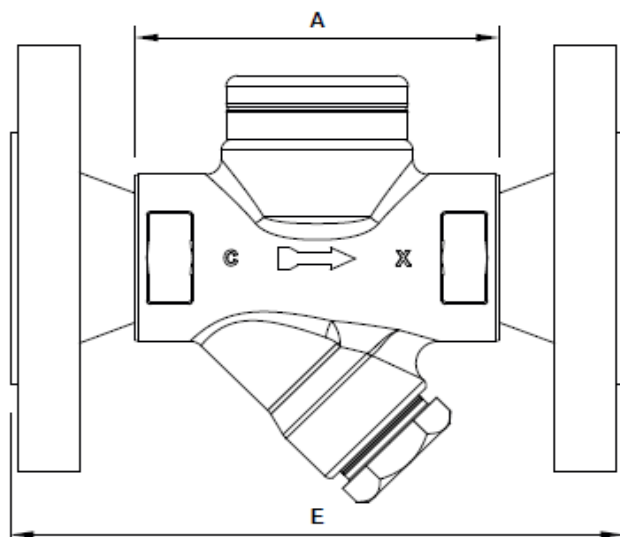
* According to EN 1092-1:2018; ** According to EN 1759-1:2004.

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)

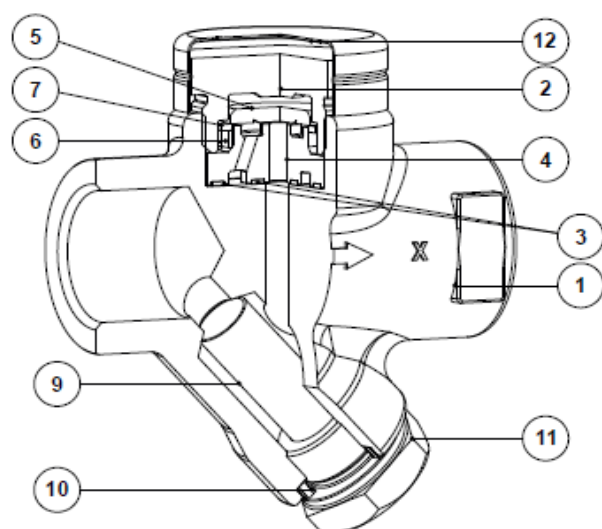
MODEL	SIZE	DIFFERENTIAL PRESSURE (bar)													
		1,5	3	5	7	9	12	15	18	21	24	30	35	42	46
DT46R (Hot)	1/2" to 1" DN 15 to 25	70	100	130	175	190	200	225	240	250	270	290	300	310	320
DT46R (Cold)	1/2" to 1" DN 15 to 25	170	230	300	335	390	435	485	520	575	600	645	695	740	800

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



DIMENSIONS (mm)

SIZE	THREADED / SW					PN 40		PN 63 / PN 100		CLASS 150		CLASS 300		CLASS 600	
	A	B	ØC	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
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.