

BIMETALLIC STEAM TRAPS AND AIR VENTS BM24 (1 1/2" and 2" – DN 40 and DN 50)

DESCRIPTION

The BM24 series bimetallic steam traps and air vents are simple and robust traps, recommended for steam process applications 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 steam consumption.

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: BM24 – carbon steel.

SIZES: 1 1/2" and 2"; DN 40 and DN 50.

CONNECTIONS: Female threaded ISO 7 Rp or NPT.
Flanged EN 1092-1 PN 40.
Flanged ASME B16.5 Class 150 or 300.
Socket weld (SW) ASME B16.11.
Butt weld (BW) ASME B16.25.

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



CE MARKING – GROUP 2 (PED – European Directive)

CLASS 150	PN 40 / CLASS 300	Category
–	1 1/2" and 2" DN 40 and 50	1 (CE Marked)
1 1/2" and 2"	–	SEP

BODY LIMITING CONDITIONS

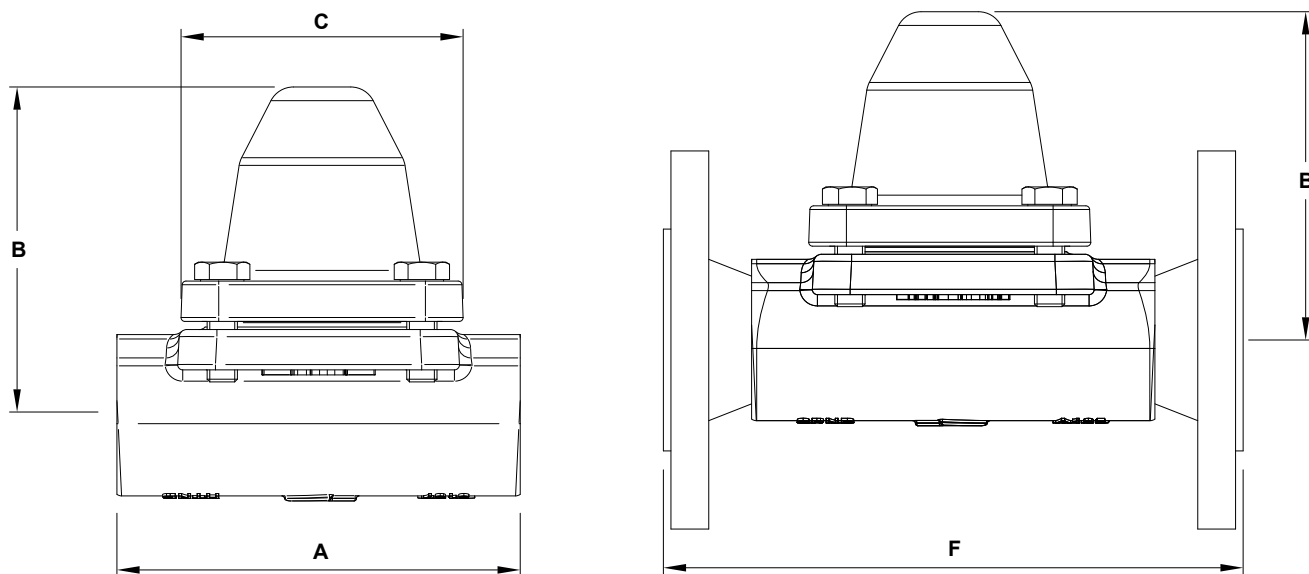
FLANGED PN 40 / CLASS 300 *	FLANGED CLASS 150 **	RELATED TEMP.
ALLOWABLE PRESSURE	ALLOWABLE PRESSURE	
40 bar	19,3 bar	50 °C
35 bar	15,8 bar	150 °C
30,4 bar	12,1 bar	250 °C
27,6 bar	10,2 bar	300 °C

PMO – Maximum operating pressure: 24 bar.
TMO – Maximum operating temperature: 250 °C.
* Acc. to EN 1092-1:2018. ** Acc. to EN 1759-1:2004.
Body limiting conditions PN 40 or below, depending on the type of connection adopted. Rating PN 40 for threaded, SW and BW versions.

FLOW RATE CAPACITY (kg/h)

MODEL	SIZE	DIFFERENTIAL PRESSURE (bar)											
		0,5	1	2	4	6	8	10	12	16	18	20	24
BM24	1 1/2" and 2" A DN 40 and 50 A	700	900	1200	1450	1600	1700	1780	1880	1900	1950	2020	2100
BM24	1 1/2" and 2" B DN 40 and 50 B	1900	2400	3500	4900	5500	6050	7000	7200	7800	8400	8800	9000

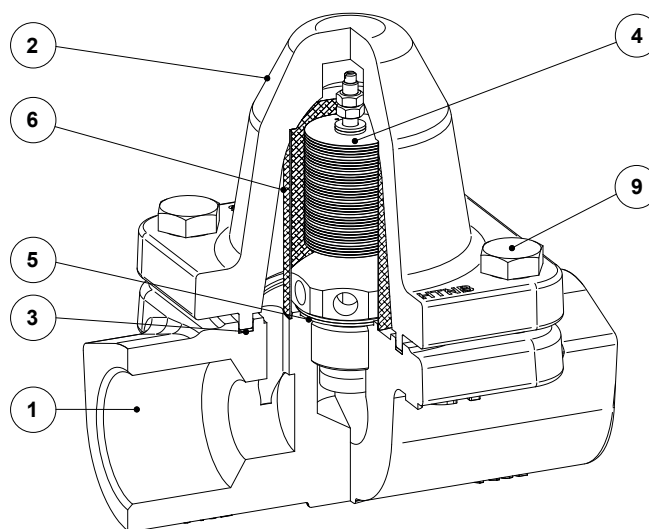
A: Condensate discharge at 10 °C below saturation temperature; B: Cold water capacity around 20 °C.



DIMENSIONS (mm)

SIZE	BW *	THREADED / SW				PN 40		CLASS 150		CLASS 300	
	A	A	B	C	WGT. (kg)	F **	WGT. (kg)	F **	WGT. (kg)	F **	WGT. (kg)
1 1/2" – DN 40	160	160	132	115	7,2	230	11,9	230	10,6	230	12,9
2" – DN 50	160	230	132	115	9,3	230	14,9	230	14,5	230	16,1

* In case of BW connections pipe dimensions should be indicated 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	A105 / 1.0432 (Equiv. P250GH)
2	Cover	A105 / 1.0432 (Equiv. P250GH)
3	* Gasket	Stainless steel / Graphite
4	* Bimetallic regulator	Corrosion resistant bimetal; Stainless steel
5	* Seat gasket	Copper
6	* Strainer screen	AISI 304 / 1.4301
9	Bolts	A193 Gr. B7

* Available spare parts.

BIMETALLIC STEAM TRAPS AND AIR VENTS

BM24

(1/2" to 1" – DN 15 to DN 25)

DESCRIPTION

The BM24 series bimetallic steam traps and air vents are simple and robust traps, recommended for steam process applications 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 steam consumption.

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.

OPTIONS: Blowdown valve.

USE: Saturated and superheated steam.

AVAILABLE MODELS: BM24 – 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.
Flanged ASME B16.5 Class 150 or 300.
Socket weld (SW) ASME 16.11.
Butt weld (BW) ASME B16.25 on request.

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



BODY LIMITING CONDITIONS

FLANGED PN 40 / CLASS 300 *	FLANGED CLASS 150 **	RELATED TEMP.
ALLOWABLE PRESSURE	ALLOWABLE PRESSURE	
40 bar	19,3 bar	50 °C
35 bar	15,8 bar	150 °C
30,4 bar	12,1 bar	250 °C
27,6 bar	10,2 bar	300 °C

PMO – Maximum operating pressure: 24 bar.

TMO – Maximum operating temperature: 250 °C.

* Acc. to EN 1092-1:2018. ** Acc. to EN 1759-1:2004.

Body limiting conditions PN 40 or below, depending on the type of connection adopted. Rating PN 40 for threaded, SW and BW versions.

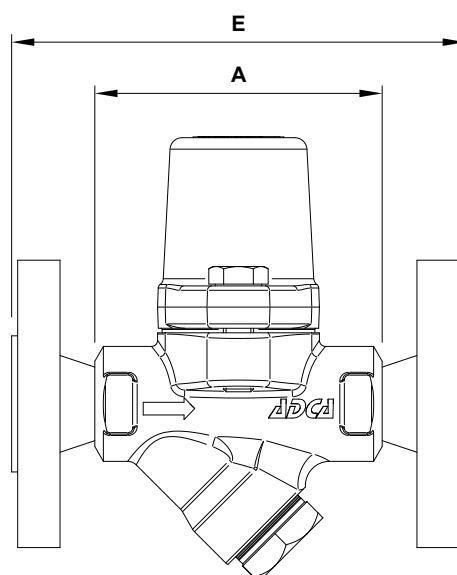
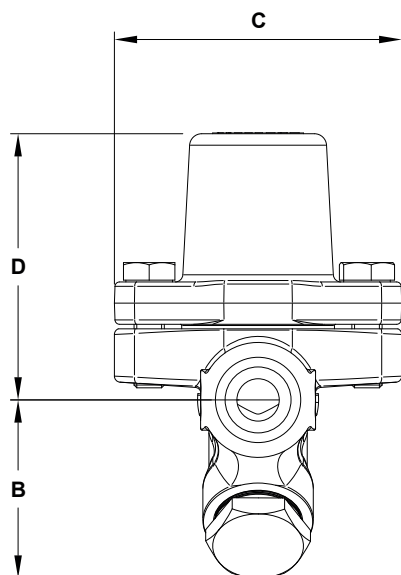
CE MARKING – GROUP 2 (PED – European Directive)

PN 40	Category
1/2" to 1" – DN 15 to 25	SEP

FLOW RATE CAPACITY (kg/h)

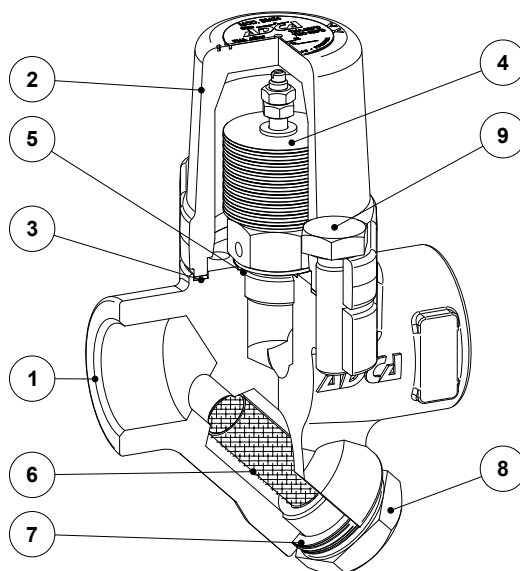
MODEL	SIZE	DIFFERENTIAL PRESSURE (bar)													
		0,5	1	2	4	6	8	10	12	14	16	18	20	22	24
BM24	1/2" to 1" A DN 15 to 25 A	225	350	490	650	720	795	820	850	880	900	905	910	915	925
BM24	1/2" to 1" B DN 15 to 25 B	550	800	1100	1500	1750	1825	2000	2100	2175	2235	2390	2490	2585	2680

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



DIMENSIONS (mm)

SIZE	THREADED / SW					PN 40		CLASS 150		CLASS 300	
	A	B	C	D	WEIGHT (kg)	E	WEIGHT (kg)	E	WEIGHT (kg)	E	WEIGHT (kg)
1/2" – DN 15	95	59	95	90	2,1	150	3,7	150	3,2	150	4
3/4" – DN 20	95	59	95	90	2,1	150	4,5	150	3,7	150	5,3
1" – DN 25	95	65	95	90	2,1	160	4,9	160	4,5	160	6,1



MATERIALS

POS. N°	DESIGNATION	MATERIAL	POS. N°	DESIGNATION	MATERIAL
1	Body	P250GH / 1.0460	6	* Strainer screen	AISI 304 / 1.4301
2	Cover	P250GH / 1.0460	7	* Strainer gasket	Stainless steel / Graphite
3	* Gasket	Stainless steel / Graphite	8	* Strainer cover	A105 / 1.0432
4	* Bimetallic regulator	Corrosion resistant bimetal; Stainless steel	9	Bolts	Stainless steel A2-70
5	* Seat gasket	Copper			

* Available spare parts.