

## BIMETALLIC STEAM TRAPS AND AIR VENTS BM24 (1/2" – 1"; DN 15 – 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.

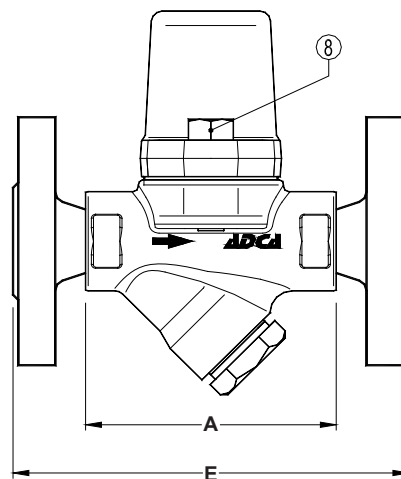
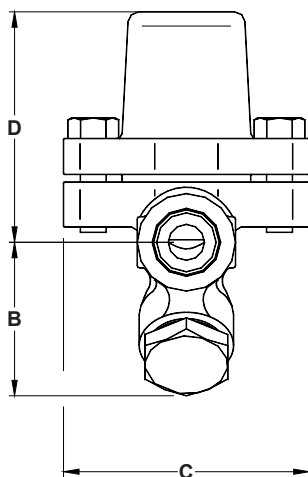
### CE MARKING – GROUP 2 (PED – European Directive)

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.



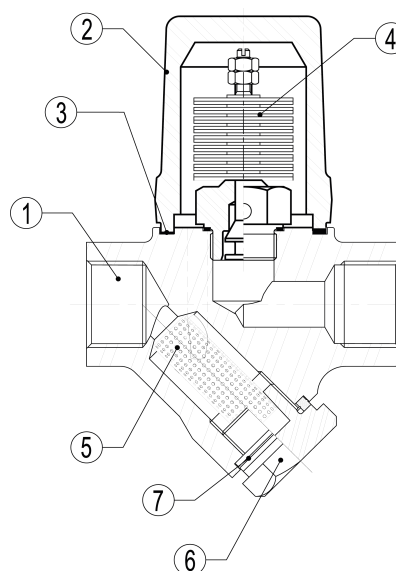
**DIMENSIONS (mm)**

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
1	Body	P250GH / 1.0460
2	Cover	P250GH / 1.0460
3	* Gasket	Stainless steel / Graphite
4	* Valve assembly	Bimetal
5	* Strainer screen	AISI 304 / 1.4301
6	* Strainer cover	A 105 / 1.0432
7	* Gasket	Stainless steel / Graphite
8	Bolts	Stainless steel A2-70

\* Available spare parts.



## BIMETALLIC STEAM TRAPS AND AIR VENTS BM24 (1 1/2" – 2"; DN 40 – 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" to 2"; DN 40 to 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" to 2" DN 40 to 50	1 (CE Marked)
1 1/2" to 2"	–	SEP

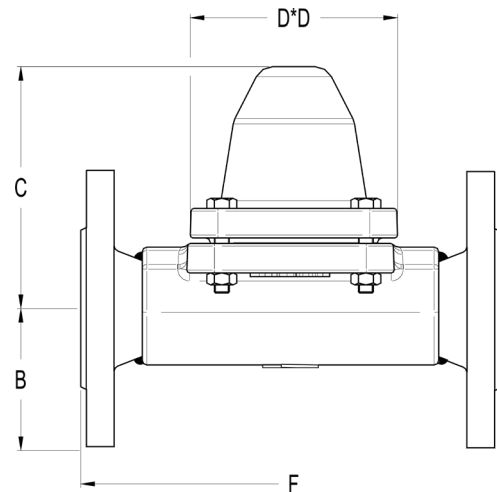
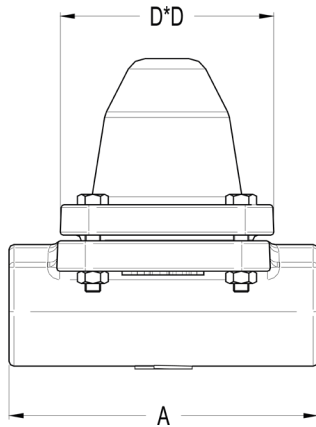
BODY LIMITING CONDITIONS		
FLANGED PN 40 / CLASS 300 *	FLANGED CLASS 150 **	RELATED TEMP.
ALLOWABLE PRESSURE	ALLOWABLE PRESSURE	
40 bar	19,3 bar	50 °C
35 bar	15,8 bar	150 °C
30,4 bar	12,1 bar	250 °C
27,6 bar	10,2 bar	300 °C

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" to 2" A DN 40 to 50 A	700	900	1200	1450	1600	1700	1780	1880	1900	1950	2020	2100
BM24	1 1/2" to 2" B DN 40 to 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	C	D	WEIGHT (kg)	B	F *	WEIGHT (kg)	B	F *	WEIGHT (kg)	B	F *	WEIGHT (kg)
1 1/2" – DN 40	160	160	132	115	7,2	75	230	11,9	64	230	10,6	78	230	12,9
2" – DN 50	160	230	132	115	9,3	83	230	14,9	76	230	14,5	83	230	16,1

\* 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	* Valve assembly	Hardened st. steel / Bimetal
5	* Strainer screen	AISI 304 / 1.4301
6	* Seat gasket	Copper
7	Studs	A193 Gr. B7
7A	Nuts	A194 Gr. 2H

\* Available spare parts.

