

BIMETALLIC STEAM TRAPS AND AIR VENTS BM20

DESCRIPTION

The BM20 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: BM20 – 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 – Max. operating pressure: 17 bar.
TMO – Max. 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.

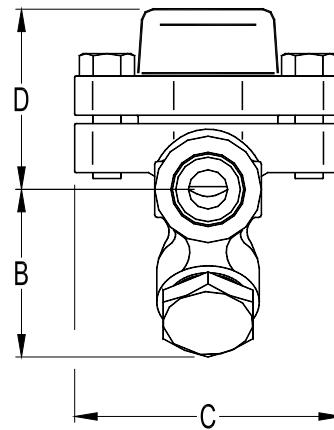
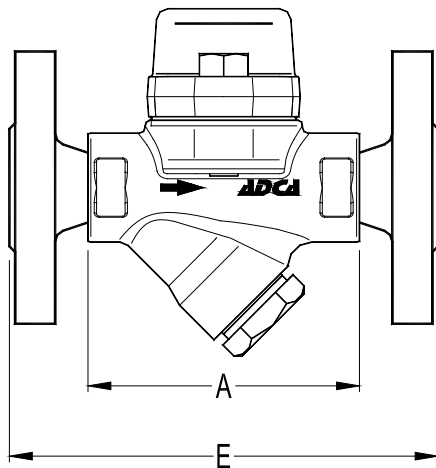
CE MARKING – GROUP 2 (PED – European Directive)

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	17
BM20	1/2" to 1" A DN 15 to 25 A	125	200	320	410	445	485	500	540	580	600
BM20	1/2" to 1" B DN 15 to 25 B	450	700	1000	1220	1340	1450	1560	1650	1780	1850

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



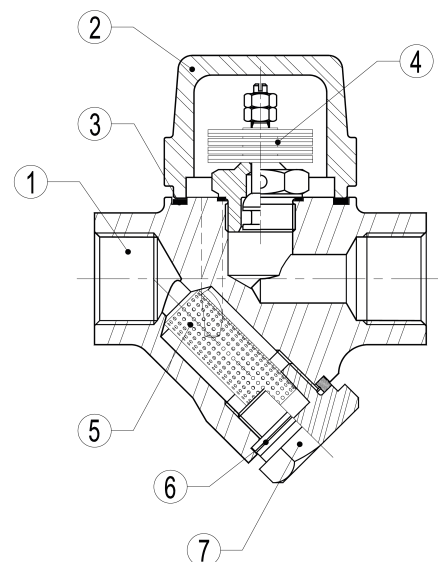
DIMENSIONS (mm)

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	65	1,6	150	3,2	150	2,7	150	3,5
3/4" – DN 20	95	59	95	65	1,6	150	3,9	150	3,1	150	4,7
1" – DN 25	95	65	95	65	1,8	160	4,7	160	4,3	160	5,9

MATERIALS

POS. N°	DESIGNATION	MATERIAL
1	Body	P250GH / 1.0460
2	Cover	P250GH / 1.0460
3	* Gasket	Stainless steel / Graphite
4	* Valve assembly	Bimetallic
5	* Strainer screen	AISI 304 / 1.4301
6	* Gasket	Stainless steel / Graphite
7	* Strainer cover	A105 / 1.0432
8	Bolts	Stainless steel A2-70

* Available spare parts.



BIMETALLIC STEAM TRAPS AND AIR VENTS BM20i

DESCRIPTION

The BM20i is a series of robust and efficient bimetallic steam traps and air vents. These steam traps are recommended for steam process applications where sensible heat can be recovered, such as steam tracing lines, drip points, storage tank coils and steam air venting.

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: BM20i – stainless 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: Inline horizontal installation is recommended.
See IMI – Installation and maintenance instructions.



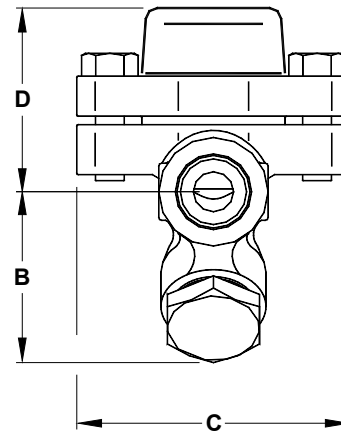
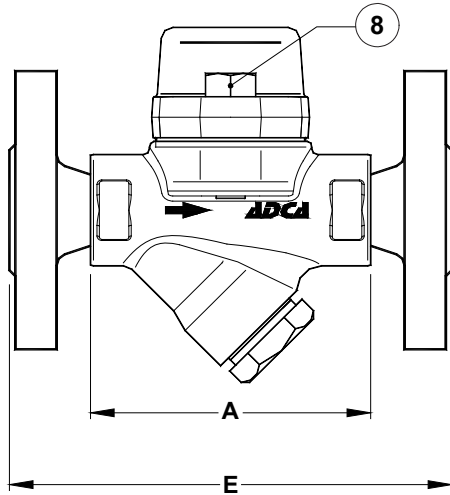
CE MARKING – GROUP 2 (PED – European Directive)	
PN 40	Category
1/2" to 1" – DN 15 to 25	SEP

BODY LIMITING CONDITIONS			
FLANGED PN 40 *	FLANGED CLASS 150 **	FLANGED CLASS 300 **	RELAT. TEMP.
ALLOW. PRESSURE	ALLOW. PRESSURE	ALLOW. PRESSURE	
40 bar	15,3 bar	39,9 bar	50 °C
34,4 bar	12 bar	31,3 bar	150 °C
29,9 bar	10,2 bar	26,6 bar	250 °C
27,6 bar	9,7 bar	25,2 bar	300 °C

PMO – Max. operating pressure: 17 bar.
TMO – Max. 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	14	17
BM20i	1/2" to 1" A DN 15 to 25 A	125	200	320	410	445	485	500	540	580	600
BM20i	1/2" to 1" B DN 15 to 25 B	450	700	1000	1220	1340	1450	1560	1650	1780	1850

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



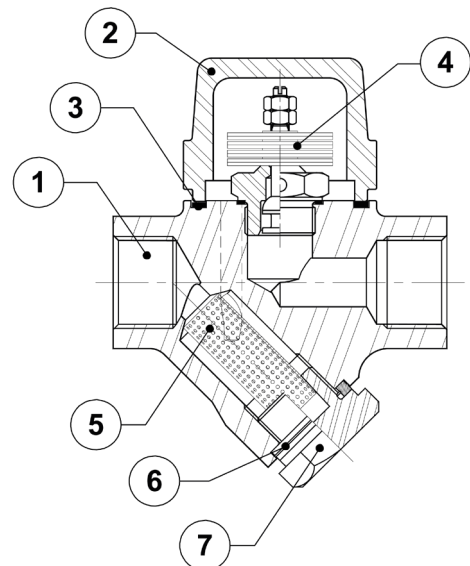
DIMENSIONS (mm)

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	65	1,6	150	3,2	150	2,7	150	3,5
3/4" – DN 20	95	59	95	65	1,6	150	3,9	150	3,1	150	4,7
1" – DN 25	95	65	95	65	1,8	160	4,7	160	4,3	160	5,9

MATERIALS

POS. N°	DESIGNATION	MATERIAL
1	Body	AISI 316L / 1.4404
2	Cover	AISI 316L / 1.4404
3	* Gasket	Stainless steel / Graphite
4	* Valve assembly	Bimetallic
5	* Strainer screen	AISI 304 / 1.4301
6	* Gasket	Stainless steel / Graphite
7	* Strainer cover	AISI 303 / 1.4305
8	Bolts	Stainless steel A2-70

* Available spare parts.



BIMETALLIC STEAM TRAPS AND AIR VENTS BM20SS

DESCRIPTION

The BM20SS 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.

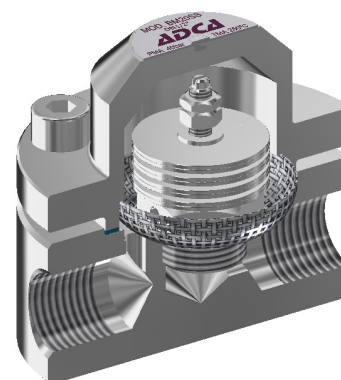
USE: Saturated and superheated steam.

AVAILABLE MODELS: BM20SS – stainless 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.



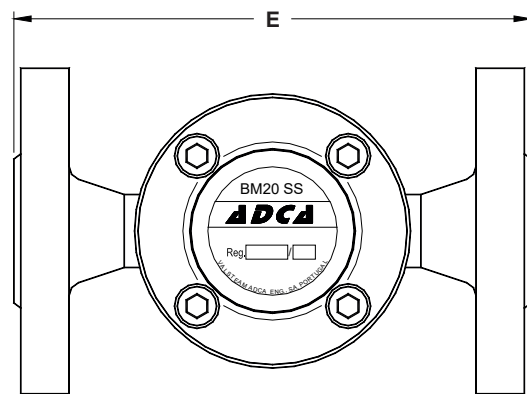
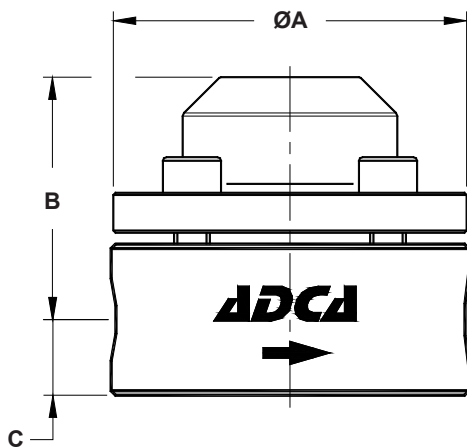
BODY LIMITING CONDITIONS			
FLANGED CLASS 150 **	FLANGED CLASS 300 **	FLANGED PN 40 *	RELATED TEMP.
ALLOWABLE PRESSURE	ALLOWABLE PRESSURE	ALLOWABLE PRESSURE	
15,3 bar	39,9 bar	40 bar	50 °C
12 bar	31,3 bar	34,4 bar	150 °C
11,1 bar	28,8 bar	31,8 bar	200 °C
10,2 bar	26,6 bar	29,9 bar	250 °C

PMO – Max. operating pressure: 17 bar.
TMO – Max. 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	17
BM20SS	1/2" to 1" A DN 15 to 25 A	125	200	320	410	445	485	500	540	580	600
BM20SS	1/2" to 1" B DN 15 to 25 B	450	700	1000	1220	1340	1450	1560	1650	1780	1850

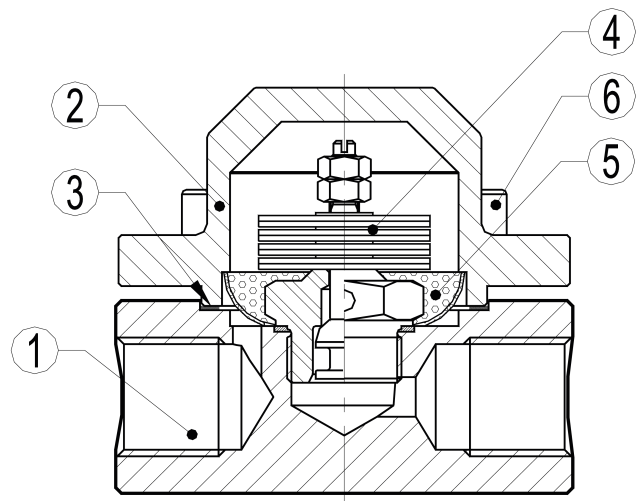
A: Condensate discharge at 10 °C below saturation temperature; B: Cold water capacity around 20 °C.



DIMENSIONS (mm)										
SIZE	THREADED / SW				PN 40		CLASS 150		CLASS 300	
	A	B	C	WEIGHT (kg)	E	WEIGHT (kg)	E	WEIGHT (kg)	E	WEIGHT (kg)
1/2" – DN 15	80	55	17	1,8	150	3,3	150	2,8	150	3,6
3/4" – DN 20	80	58	20	1,9	150	4,1	150	3,3	150	4,9
1" – DN 25	90	60	23	2,1	160	5,1	160	4,7	160	6,3

MATERIALS		
POS. N°	DESIGNATION	MATERIAL
1	Body	AISI 316 / 1.4401
2	Cover	AISI 316 / 1.4401
3	* Gasket	Stainless steel / Graphite
4	* Valve assembly	Bimetallic
5	* Strainer screen	AISI 304 / 1.4301
6	Bolts	Stainless steel A2-70

* Available spare parts.



BIMETALLIC STEAM TRAPS AND AIR VENTS BM20R

DESCRIPTION

The BM20R 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. Easy condensate temperature adjustment without disconnecting the trap from the piping.
- Independent valve and seat placed in the low velocity flow area reduces erosion and extends product life.
- Low maintenance costs consequence of the split regulator design.
- Excellent air discharge.
- Freeze protection of condensate lines.
- Operates on superheated steam.
- Unaffected by water hammer and vibrations.
- Built-in strainer.



OPTIONS: Blowdown valve.
Seat with check valve.

USE: Saturated and superheated steam.

AVAILABLE MODELS: BM20R – carbon steel, with external adjustable temperature control.

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.

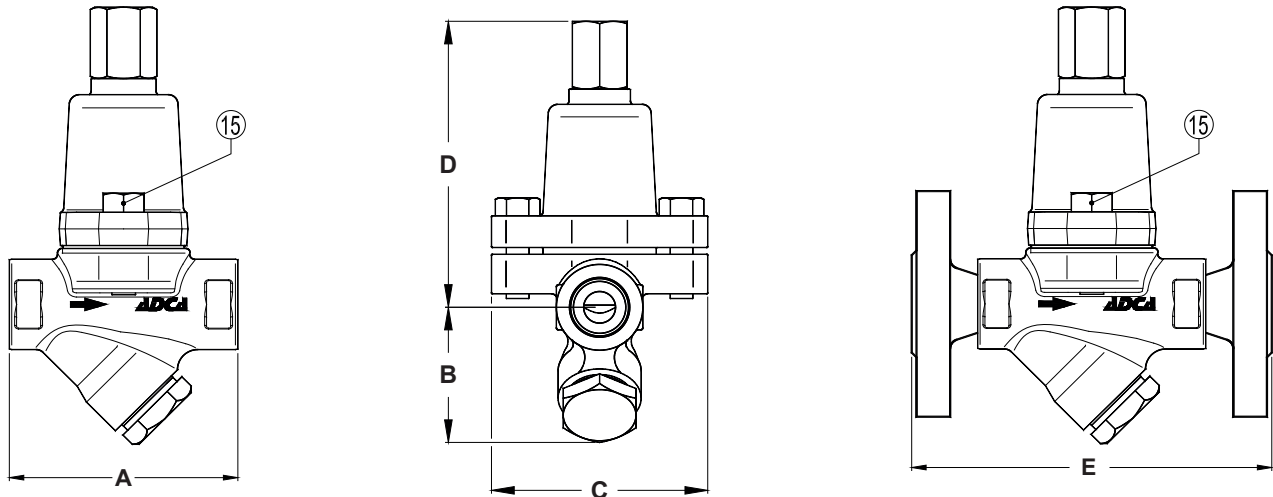
INSTALLATION: Horizontal installation recommended, can be installed in any position.
See IMI – Installation and maintenance instructions.

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 – Max. operating pressure: 17 bar.
TMO – Max. 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	TEMP. (°C) *	DIFFERENTIAL PRESSURE (bar)									
			0,5	1	2	4	6	8	10	12	14	17
BM20R	1/2" to 1" DN 15 to 25	10 **	125	200	320	410	445	485	500	540	580	600
BM20R	1/2" to 1" DN 15 to 25	20	200	300	440	550	580	600	620	670	700	720
BM20R	1/2" to 1" DN 15 to 25	40	380	500	700	970	990	1010	1050	1100	1130	1180
BM20R	1/2" to 1" DN 15 to 25	Cold	530	700	1210	1230	1320	1440	1650	1730	1780	1840

* Condensate discharge temperature below saturation temperature; ** Standard factory setting.



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	125	2,3	150	3,9	150	3,4	150	4,2
3/4" – DN 20	95	59	95	125	2,3	150	4,7	150	3,9	150	5,5
1" – DN 25	95	65	95	125	2,5	160	5,1	160	4,7	160	6,3

MATERIALS

POS. N°	DESIGNATION	MATERIAL
1	Body	P250GH / 1.0460
2	Cover	P250GH / 1.0460
3	* Gasket	Stainless steel / Graphite
4	* Seat	Hardened stainless steel
5	* Plug	Hardened stainless steel
6	* Seat gasket	Copper
7	* Regulator	Bimetal
8	Adjusting screw	AISI 304 / 1.4301
9	Seal ring	Viton
10	* Gasket	Copper
11	Cap nut	AISI 304 / 1.4301
12	* Strainer screen	AISI 304 / 1.4301
13	Strainer cover	A 105 / 1.0432
14	* Gasket	Stainless steel / Graphite
15	Bolts	Stainless steel A2-70
16	* Blowdown valve	AISI 304 (see IS 1.150)
17	Ball check valve	AISI 440C / 1.4125

* Available spare parts.

