

BIMETALLIC STEAM TRAPS AND AIR ELIMINATORS BM20R (With external adjustable temperature control)

DESCRIPTION

BM20R series bimetallic steam traps and air eliminators 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.

Connections are female screwed or flanged.

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.
SIZES:	1/2" to 1" ; DN 15 to DN 25.
CONNECTIONS:	Female screwed ISO 7/1 Rp (BS21). Flanged EN 1092-1 PN40 or ANSI.
INSTALLATION:	Horizontal installation recommended, can be installed in any position. See IMI – Installation and maintenance instructions.

BODY LIMITING CONDITIONS		
FLANGED PN40 / ANSI 300 lb *	FLANGED ANSI 150 lb **	RELATED TEMP.
ALLOW. PRESS.	ALLOW. PRESS.	
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;

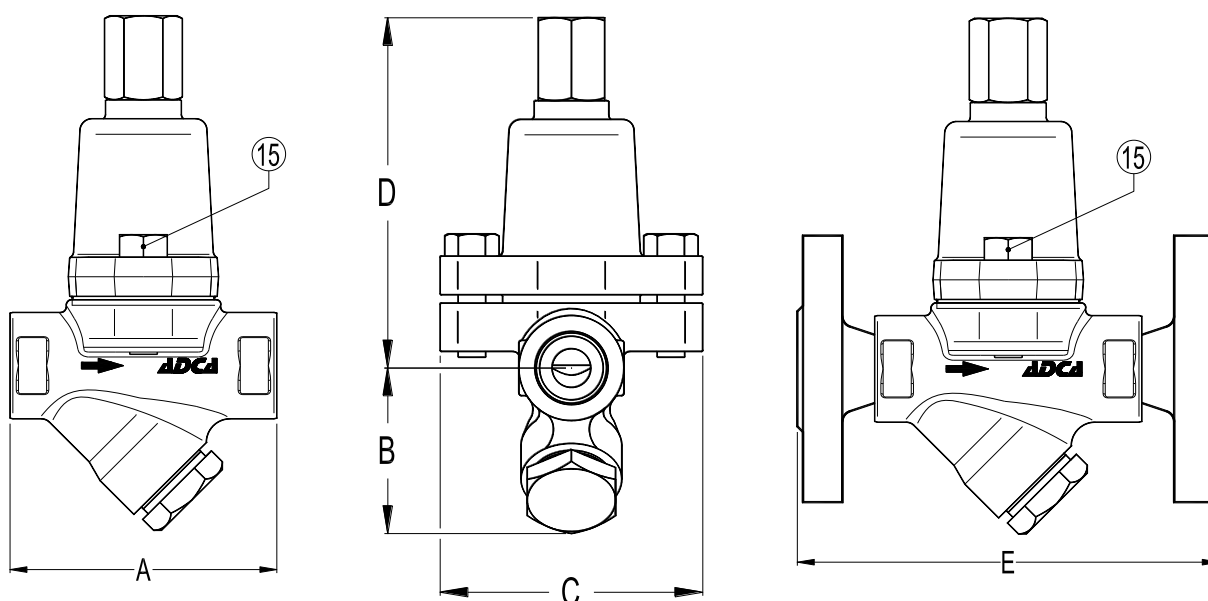
* According to EN1092-1:2018; ** Acc. to EN1759-1:2004;
Body limiting conditions PN40 or below, depending on the type of connection adopted;
Rating PN40 for thread, SW and BW.

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

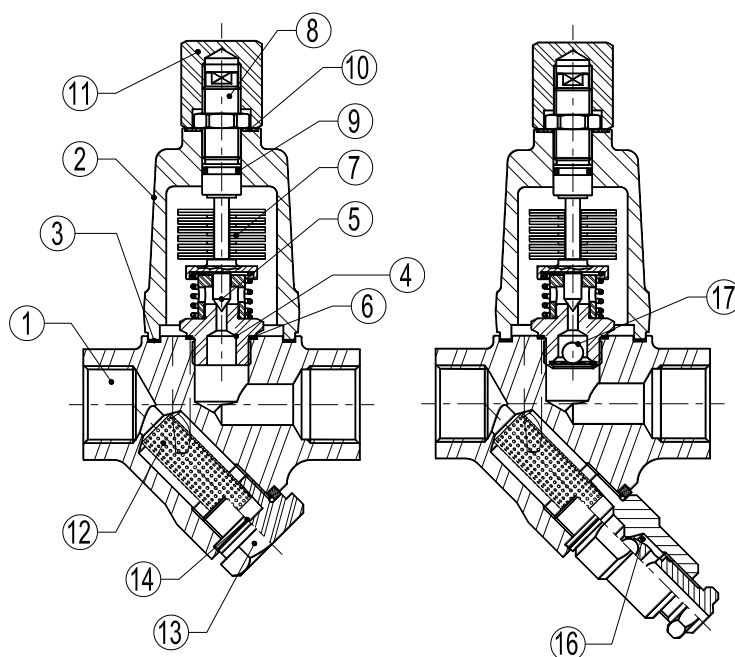
* Condensate discharge temperature below saturation temperature; ** Standard factory setting.

DIMENSIONS (mm)											
Screwed and SW *						PN16/40		ANSI 150 lb		ANSI 300 lb	
Size	A	B	C	D	WGT. (kg)	E	WGT. (kg)	E	WGT. (kg)	E	WGT. (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

* BW (butt weld) on request.



MATERIALS		
POS. Nº	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	A2-70
16	* Blowdown valve	AISI 304 (see IS 1.150)
17	Ball check valve	AISI 440C / 1.4125



* Available spare parts.