



DOUGLAS ITALIA S.P.A.

**BIMETALLIC THERMOSTATIC  
STEAM TRAPS  
BC 20**

**BIMETALLIC THERMOSTATIC**

The operating principle is based on a balance between the steam force ( pressure related ) trying to open the discharge valve and the bimetal force ( temperature related ) which acts to close it. At saturated steam temperature the bimetal force keeps the valve closed, while with subcooled condensate the pressure opens the valve.



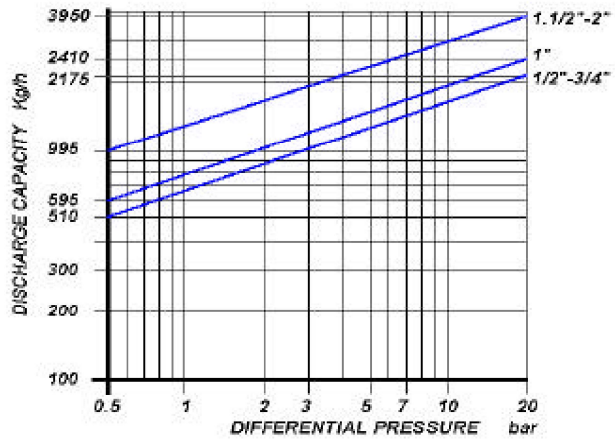
**MAIN FEATURES**

Free air discharge. Suitable on superheated steam. It withstands frost and waterhammer. Modulating discharge only with condensate.

**APPLICATIONS**

- Tracing lines
- Marine applications
- Turbines
- Steam mains
- Tanks

**DISCHARGE CAPACITY**



Cold water capacities are 2 to 4 times greater than the above .  
Safety factor = 1.2 – 1.5

**SIZES**

1/2" - 3/4" - 1" - 1. 1/2" - 2"

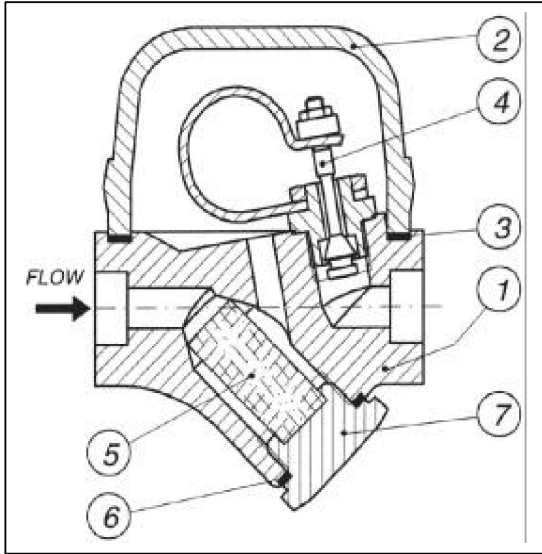
**CONNECTIONS**

SCREWED	ANSI B1.20.1 (NPT) / BS21 (BSP)
SOCKET WELD	ANSI B16.11
FLANGED	ANSI 150#/300#/600#/UNI/DIN

**LIMITING CONDITIONS ( according to ISO 6552 )**

Steam Trap rating	ANSI 300
PMA: Max allowable pressure	50 bar
TMA: max allowable temperature	390°C
PMO: max working pressure	20 bar
TMO: max working temperature	275°C

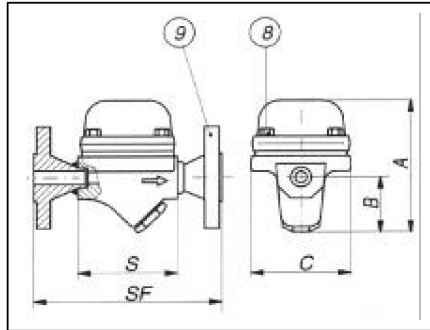
## BIMETALLIC THERMOSTATIC STEAM TRAPS BC 20



POS.	DESCRIPTION	MATERIALS	SPARES
1	Body	ASTM A105	
2	Cover	ASTM A105	
3	Gasket	316 / GRAPHITE	X
4	Valve assembly	STAINLESS STEEL	X
5	Screen	AISI 304	X
6	Gasket	316 / GRAPHITE	X
7	Strainer cap	ASTM A105	
7	Blow-off valve *	AISI 416	
8	Bolts	ASTM A193 B7	
9	Flange	ASTM A105	

\* Optional

Size (inches)	S	A	B	C	Weight (Kg)	Flanged							
						UNI-DIN PN16-25-40		150#		300#		600#	
						SF	Kg	SF	Kg	SF	Kg	SF	Kg
½"	100	150	55	100	3.8	166	5.4	160	5.2	180	5.4	190	5.6
¾"	100	150	55	100	3.8	170	6.1	170	5.4	190	6.6	200	7
1"	120	160	65	100	4.5	190	7.3	200	6.7	210	7.9	230	8.3
1½"	160	205	80	170	13	240	17	250	16	260	19.4	280	20.2
2"	160	205	80	170	13	246	19	250	18.5	260	20.2	280	22.4



### INSTALLATION

The steam trap can be installed on horizontal or vertical lines. Do not fit the trap upside down since this position will not allow the cleaning of the strainer. For the same reason the direction of flow on vertical lines must be downwards. For installation with superheated steam, please contact our Technical Department

### HOW TO SERVICE

By installing a new element assembly you can bring the BC steam trap to the "as new from factory" condition. Unscrew the bolts (8) and remove cover (2) and gasket (3). Unscrew and remove the element (4). Clean the inside of the trap and screw in the element-gasket assembly. Fit a new gasket (3) and reinstall cover (2) tightening the bolts (8). To service the strainer, unscrew cap (7), withdraw screen (5) and clean or replace it. Screwing the cap back in place, always fit a new gasket (6). The discharge temperature may be adjusted without removing the trap from the line. For information about this operation, to be performed only by qualified personnel, please ask our Technical Department.

**How to order:** i.e. BC 20 1" 150 RF

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OFFICIAL WEB SITE: [www.douglas-italia.com](http://www.douglas-italia.com)