



DOUGLAS ITALIA S.P.A.

**BIMETALLIC THERMOSTATIC
STEAM TRAPS
BC 20 S1**

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.



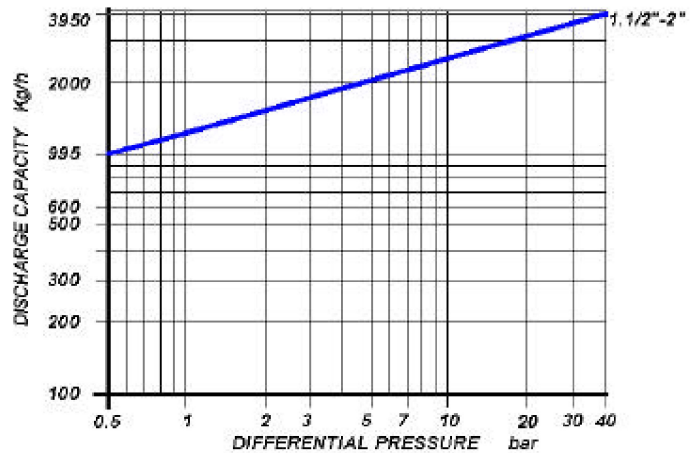
MAIN FEATURES

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 1/2" – 2"

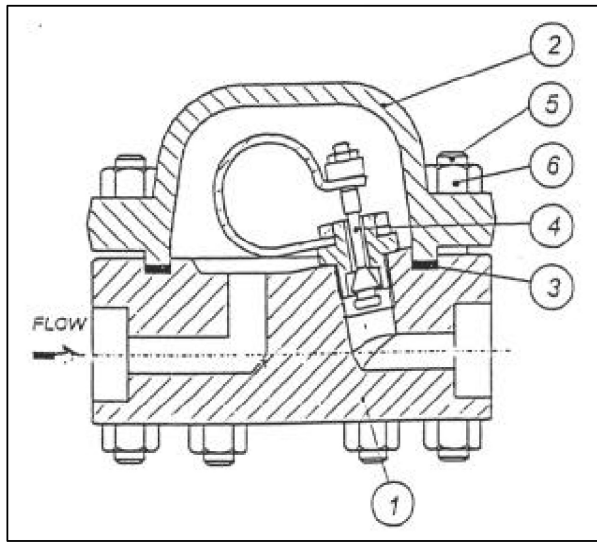
CONNECTIONS

SCREWED	ANSI B1.20.1 (NPT) / BS21 (BSP)
SOCKET WELD	ANSI B16.11
FLANGED	ANSI B16.5

LIMITING CONDITIONS (according to ISO 6552)

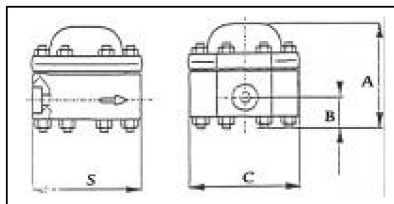
Steam Trap rating	ANSI 800
PMA: Max allowable pressure	137 bar
TMA: max allowable temperature	570°C
PMO: max working pressure	20 bar
TMO: max working temperature	275°C

BIMETALLIC THERMOSTATIC STEAM TRAPS BC 20 S1



POS.	DESCRIPTION	MATERIALS	SPARES
1	Body	SA F2205	
2	Cover	SA F2205	
3	Gasket	316 / GRAPHITE	X
4	Valve assembly	STAINLESS STEEL	X
5	Studs	ASTM A193 B8	
6	Nuts	ASTM A194 Gr.8	

Size (inches)	S	A	B	C
1½"	160	190	60	180
2"	160	190	60	180



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 20 S1 steam trap to the "as new from factory" condition. Unscrew the bolts (5) 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 (5). 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 S1 2" NPT

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OFFICIAL WEB SITE: www.douglas-italia.com