



**DOUGLAS ITALIA S.P.A.**

**BIMETALLIC THERMOSTATIC  
STEAM TRAPS  
BD 120 F22**

**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.



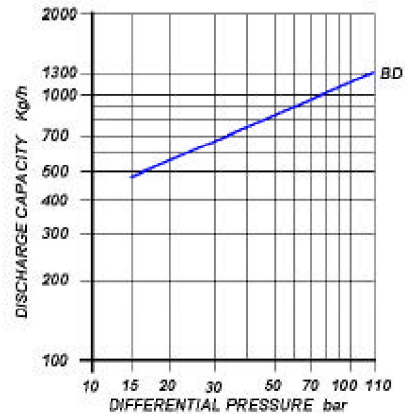
**MAIN FEATURES**

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"

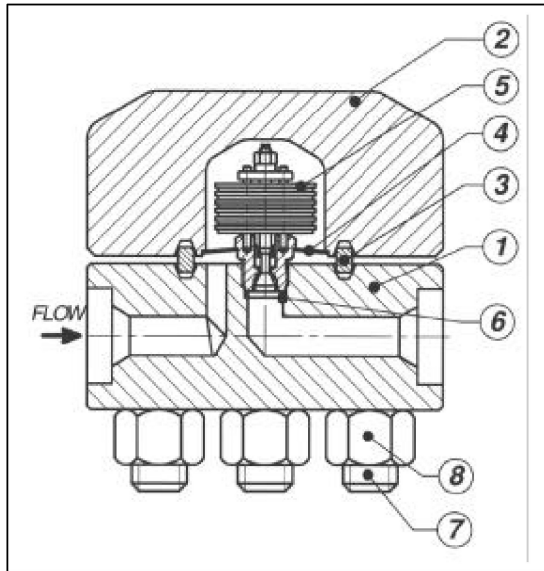
**CONNECTIONS**

SOCKET WELD	ANSI B16.11
FLANGED	ANSI B16.5 RF-RJ ( 1500 – 2500 )

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

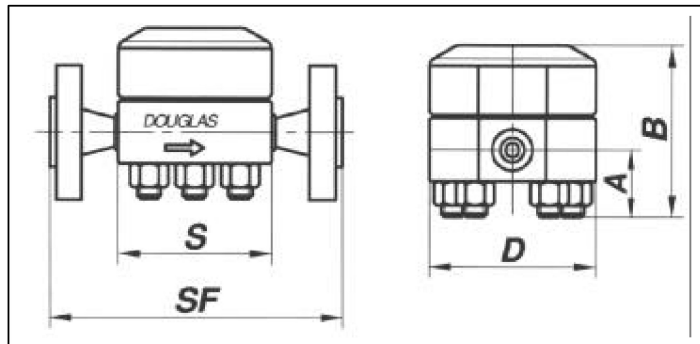
Steam Trap rating	ANSI 2500
PMA: Max allowable pressure	430 bar
TMA: max allowable temperature	580°C
PMO: max working pressure	110 bar
TMO: max working temperature	550°C

## BIMETALLIC THERMOSTATIC STEAM TRAPS BD 120 F22



POS.	DESCRIPTION	MATERIALS	SPARES
1	Body	ASTM A182 F22	
2	Cover	ASTM A182 F22	
3	Cover gasket RJ	ASTM A182 F304	X
4	Screen	AISI 304	X
5	Seat	NITRONIC 50 + STELLITE	X
5	Valve	NITRONIC 60	X
5	Bimetallic element	STAINLESS STEEL	X
6	Gasket seat	ASTM A182 F316	X
7	Studs	ASTM A320 L7	
8	Nuts	ASTM A194 Gr.4	

Size (inches)	S	A	B	D	Weight (Kg)	Flanged					
						1500 RF -RJ		2500 RF		2500 RJ	
						SF	Kg	SF	Kg	SF	Kg
½"	185	70	200	200	35	305	36	331	42	331	42
¾"	185	70	200	200	35	322	40	341	44	341	44
1"	185	70	200	200	35	328	43	360	48	360	49
1½"	185	70	200	200	35	345	47	402	54	405	55



### INSTALLATION

The steam trap is designed for installation on horizontal line with the cover at the top. The steam trap may be used on superheated steam. Condensate is discharged below steam temperature (30°). Subcooling temperature may be adjusted on field without removing the trap from the line. For information for this operation, to be performed only by qualified personnel, please ask our technical department.

### HOW TO SERVICE

By installing a new valve assembly you can bring the BD 120 F22 steam trap to the "as new from factory" condition. Unscrew the 8 nuts (8). Remove cover (2) and RJ gasket (3). Unscrew and remove valve assembly (5) with screen (4). Clean the inside of the trap and clean or replace the screen (4). Screw in the new valve assembly (5) with screen (4) and reinstall cover (2) tightening the nuts (8).

**How to order:** i.e. BD 120 F22 1" 1500 RF

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