TERMOSTATIC – STEAM TRAPS
TSB25 - BIMETALLIC

GENERAL NOTE – STEAM TRAPS PRODUCTION

The thermostatic bimetallic pack type of steam trap is created for standard applications, designed for standards customer's requirements, it's obtained from a machined forged billet.

***how it works**:*

1- The bimetallic pack inside the capsule attached to the housing is raised.

2- Start-up: when the condensate begins to circulate, the bimetal is prevented from reacting to the low temperature, keeping the shutter in the open position.

3- As the system heats up, the condensate reduces and steam begins to arrive, heating the bimetal, which reacts by bending. The combined force generated by the pack of bimetallic discs creates a movement on the shutter, lifting it until it comes into contact with the housing.

4- As the condensate accumulates, the bimetal cools, contracting and releasing the shutter, which in turn frees the flow.

All of Blu Zac products have been designed to satisfy the requests and specific requirements of the customer, including high pressure applications.

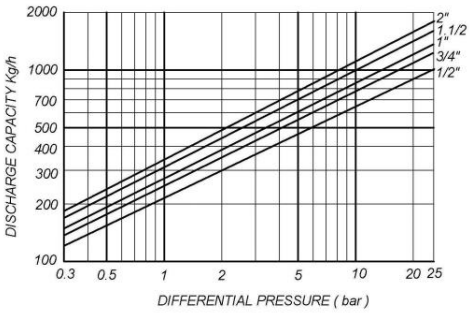
MAIN FEATURES

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

APPLICATION

- *Steam mains*
- *Tracing lines*
- *Turbines*
- *Marine applications*
- *Presses*

DISCARGE CAPACITY

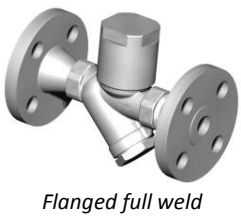


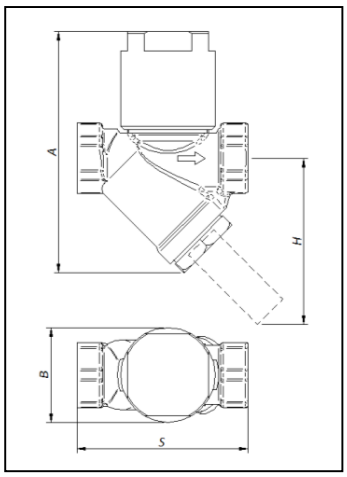
CONNECTIONS		
Buttweld	*BW*	*ANSI B16.25*
Flanged	*FLG*	*ANSI B16.5*
Socket Welding	*SW*	*ANSI B16.11*
Screwed	*NPT BSP*	*ANSI B1.20.1 ANSI BS21*

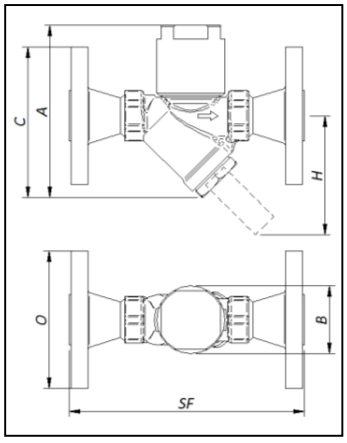
SIZES
To ¼" from to 2.1/2"

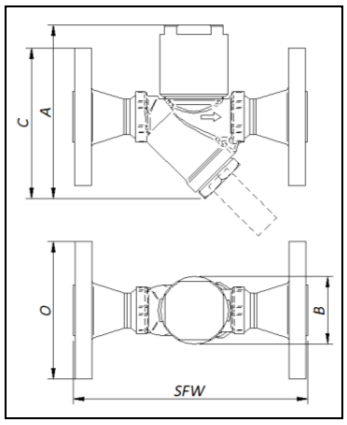
LIMITING CONDITIONS (according to ISO 6552)						
Steam Trap rating	*600*					
Max Working Differential Pressure	*25 bar*					
Min Working Differential Pressure	*0,3 bar*					
PMOB: max working back pressure	*80%*					
Body and Cover Material	***A105 A350 LF2***	***A182 F304 A182 F316***	***A182 F304L A182 F316L***	***A182 F11 Cl.2 A182 F22 Cl.3 A182 F91***	***A182 F321 A182 F347***	***A182 F44 A182 F51 A182 F53***
PMA: Max allowable pressure	*102bar at 315°C*	*99bar at 425°C*	*83bar at 260°C*	*103bar at 480°C*	*99bar at 425°C*	*103bar at 480°C*
TMA: max allowable temperature	*400°C at 100bar*	*530°C at 95bar*	*425°C at 70bar*	*530°C at 100bar*	*530°C at 95bar*	*530°C at 100bar*
PMO: max working pressure	*102bar at 315°C*	*99bar at 425°C*	*83bar at 260°C*	*103bar at 480°C*	*99bar at 425°C*	*103bar at 480°C*
TMO: max working temperature	*400°C at 100bar*	*530°C at 95bar*	*425°C at 70bar*	*530°C at 100bar*	*530°C at 95bar*	*530°C at 100bar*

GENERAL NOTE – STEAM TRAPS STANDARD PRODUCTION

CONNECTION				
	 *SW or NPT or BSP or BW*	 *Flanged fillet weld*	 *Flanged full weld*	







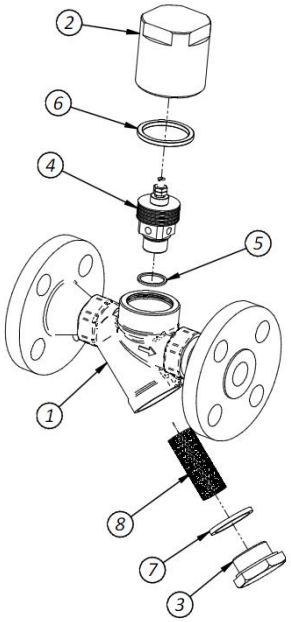
Size		1/2"	3/4"	1"	1.1/4"	1.1/2"	2"	2.1/2"
S (mm)		105	105	120	155	155	155	155
S for BW (mm)		105	105	105	120	120	155	155
A (mm)		150	150	170	200	200	200	200
B (mm)		60	60	75	95	95	95	95
H (mm)		102	102	111	161	161	161	161
SF (mm)	150RF	185	190	210	250	255	255	-
	300RF	195	200	220	265	270	270	-
	600RF	205	210	235	280	285	285	-
O (mm)	150RF	89	99	108	117	127	152	178
	300RF	95	117	124	133	156	165	190
	600RF	95	117	124	133	156	165	190
C (mm)	150RF	120	121	138	174	179	192	205
	300RF	120	130	146	182	194	198	211
	600RF	120	130	146	182	194	198	211
SFW (mm)	150RF	205	215	220	240	245	285	300
	300RF	215	225	230	255	260	300	310
	600RF	225	235	245	265	275	310	325
Wt (kg)	150RF	2,6	3	5,1	9,3	9,9	11,9	15,3
	300RF	3,4	4,1	6,7	11,5	12,9	13,7	17,3
	600RF	3,4	4,6	6,7	11,5	12,9	15,9	19,5

Note 1: The Steam Traps with size 2.1/2" have the possible connection only BW or FLANGED Full weld, isn't possible connection SW, NPT, BSP or FLANGED fillet weld.

DIMENSION TOLLERANCE		
SIZE	DIMENSION	
	S	SF & SFW & A & C &H
1/2" to 1"	± 1	± 1,5
1" to 3"	± 1	± 2

POS	DESCRIPTION	MATERIALS	MATERIALS	MATERIALS	MATERIALS	MATERIALS	SPARES
1	Body	ASTM A105	ASTM A350 LF2	ASTM A182 F304	ASTM A182 F316	ASTM A182 F22 Cl.3	
2	Cover	ASTM A350 LF2	ASTM A350 LF2	ASTM A182 F316L	ASTM A182 F316L	ASTM A182 F22 Cl.3	
3	Plug	ASTM A350 LF2 or ASTM A182 F316L	ASTM A350 LF2 or ASTM A182 F316L	ASTM A182 F316L	ASTM A182 F316L	ASTM A182 F22 Cl.3	
4	Seat	AISI-420	AISI-420	AISI-420	AISI-420	AISI-420	X
5	Gasket Seat	AISI-304	AISI-304	AISI-304	AISI-304	AISI-304	X
6	Gasket Cover	F-Graphite W-316	F-Graphite W-316	F-Graphite W-316	F-Graphite W-316	F-Graphite W-316	X
7	Gasket Plug	SPW: F-Graphite W-316	SPW: F-Graphite W-316	SPW: F-Graphite W-316	SPW: F-Graphite W-316	SPW: F-Graphite W-316	X
8	Screen	AISI-316	AISI-316	AISI-316	AISI-316	AISI-316	X

Note 1: Other Materials and Dimensions on Request
Nota 4: Material A182 F316L is dual grade A182 F316/316L



HOW TO INSTALL:
This steam trap can work in any position, however it should be preferably installed in horizontal line.

HOW TO DO MAINTENANCE:
1. Before starting, wear the required safety equipment and follow all plant safety procedures.
2. Stop the main line to make sure that no residues of dangerous waste fluid could be emitted.
3. Unscrew the cover(2).
4. Remove: gasket cover(6), seat(4) and gasket seat(5).
5. Clean inside the body.
6. Replace: seat(4), gasket seat(5) and gasket cover(6)
7. Screw the cover (2).
8. Slowly start the plant and check if there are any line losses.
9. Apply a label to the trap with the maintenance date.

HOW TO SERVICE THE STRAINER:
1. Remove the plug(3)
2. Clean or change the screen(8).
3. Change the gasket(7) and re-screw the plug(3).

ORDER CODE
i.e. *TSB25 3/4" 150RF A105*
TSB25 1" BW-XS A350 LF2