

GENERAL NOTE – FLOW INDICATOR PRODUCTION

Sight glass indicators are pieces of equipment used to observe the flow of a fluid in a pipe.
 Comprising a flanged tube pierced at the center, with two pieces of glass held in place by two welded flanges, the sight glass indicator may contain a floating or static flow indicator, which allows for instant, safe monitoring of flow inside the pipe.
 On request, special versions for pressures and temperatures specified by the customer can be produced for use in a wide variety of industrial applications.
 All of Blu Zac products have been designed to satisfy the requests and specific requirements of the customer, including high pressure applications.



APPLICATION

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

CONNECTIONS

Buttweld	BW	ANSI B16.25
Flanged	FLG	ANSI B16.5

SIZES

from 2" to 24"

GLASS LIMITING CONDITIONS (according to Glass DIN 7080)

Size	2"	3" and 6"	from 8" to 24"
Max Working Pressure	51bar	51bar	25bar
Max Working Temperature	280°C	280°C	280°C

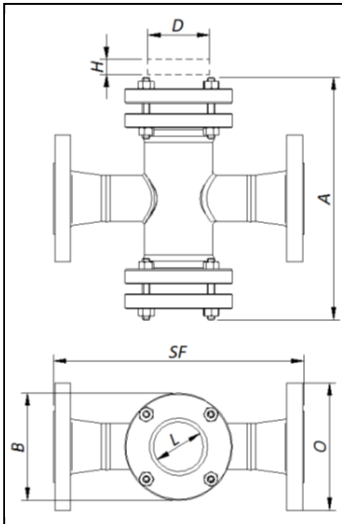
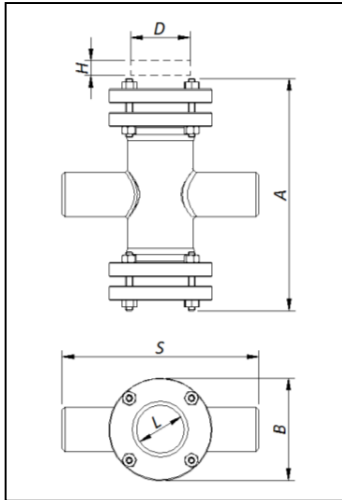
BODY LIMITING CONDITIONS (according to ASME B16.34)

Body Material	A106 Gr.B A333 Gr.6	A312 TP316 A312 TP304	A312 TP316L A312 TP304L	A335 P11 A335 P22	A312 UNS S31254	A312 UNS S31803 A312 UNS S32750
PMA: Max allowable pressure	51bar at 385°C	51bar at 500°C	41bar at 350°C	51bar at 450°C	51bar at 500°C	51bar at 500°C
TMA: max allowable temperature	400°C at 30bar	530°C at 35bar	400°C at 35bar	530°C at 35bar	530°C at 35bar	530°C at 35bar
PMO: max working pressure	51bar at 385°C	51bar at 500°C	41bar at 350°C	51bar at 450°C	51bar at 500°C	51bar at 500°C
TMO: max working temperature	400°C at 30bar	530°C at 35bar	400°C at 35bar	530°C at 35bar	530°C at 35bar	530°C at 35bar

Note 1: The Flow indicator max limiting condition are the same of Glass pressure and temperature value.

GENERAL NOTE – FLOW INDICATOR CONSTRUCTION

CONNECTION	 BW	 Flanged				
GLASS	 1 Glass for each side	 2 Glass for each side				
INDICATOR	 Without – Type X	 LUG – Type Y	 BOAL – Type Z	 ROTOR – Type W	 PIPE – Type K	 Check valve Type V

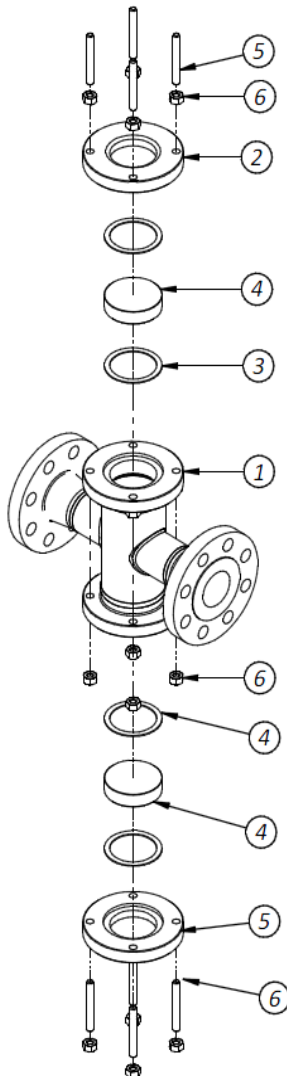


Size	S (mm)	SF (mm)		A (mm)	B (mm)	D (mm)	H (mm)	L (mm)	O (mm)		Wt (Kg)		
		150RF	300RF						150RF	300RF	BW	150RF	300RF
2"	180	310	325	315	140	80	20	65	152	165	7,2	11,5	13,6
2.1/2"				330	140	80	20	65	178	190			
3"				350	140	80	20	65	190	210			
4"				375	210	100	25	85	229	254			
6"				430	210	100	25	85	279	318			
8"				480	210	100	25	85	343	381			
10"				535	270	175	30	100	406	444			
12"				570	270	175	30	100	483	521			
14"				620	270	175	30	100	533	584			
16"				670	270	175	30	100	597	648			
18"				720	270	175	30	100	635	711			
20"				775	270	175	30	100	698	775			
24"				880	270	175	30	100	813	914			

DIMENSION TOLLERANCE		
SIZE	DIMENSION	
	S & SF	A & B & O
2" to 10"	± 1	± 3
12" to 24"	± 1	± 5

POS	DESCRIPTION	MATERIALS	MATERIALS	MATERIALS	MATERIALS	MATERIALS	SPARES
1	Body	ASTM A106 Gr.B	ASTM A333 Gr.6	ASTM A312 TP304	ASTM A312 TP316	ASTM A335 P22	
2	Cover	ASTM A105	ASTM A350 LF2	ASTM A182 F304	ASTM A182 F316	ASTM A182 F22 Cl.3	
3	Gasket Seat	Graphite	Graphite	Graphite	Graphite	Graphite	X
4	Glass	Borosilicate Temperate	Borosilicate Temperate	Borosilicate Temperate	Borosilicate Temperate	Borosilicate Temperate	X
5	Stud	ASTM A193 B7	ASTM A320 L7	ASTM A193 B8	ASTM A193 B8	ASTM A193 B16	
6	Nuts	ASTM A194 Gr.2H	ASTM A194 Gr.4	ASTM A194 Gr.8	ASTM A194 Gr.8	ASTM A194 Gr.7	

Note 1: Other Materials and Dimensions on Request



HOW TO INSTALL:

Sight glass indicator 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 studs(5) and nuts(6), then remove the flanges(2), gaskets(3) and glass(4).
4. Thoroughly clean the inside of the body and the glass. Inspect thoroughly to check for any damage; if the glass is damaged it must be replaced with a new one.
7. Replace: gaskets(3)
8. Reposition the flanges(2), then screw the studs(5) and nuts(6).
9. Slowly start the plant and check if there are any line losses.
10. Apply a label to the trap with the maintenance date.

ORDER CODE

i.e. GW 2" 150RF A106 Gr.B – Type X
GW 3" BW-XS A312 TP316 – Type W