

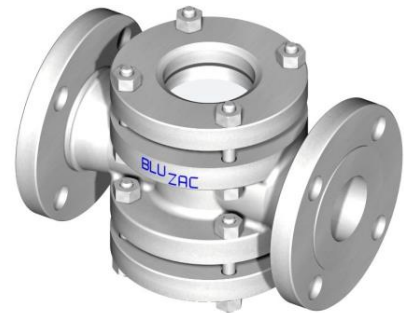
### GENERAL NOTE – FLOW INDICATOR PRODUCTION

Sight glass indicators are pieces of equipment used to observe the flow of a fluid in a pipe.

Comprising a single cast flanged body, with two pieces of glass held in place by two 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

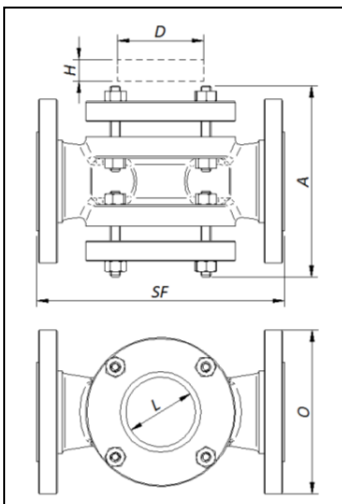
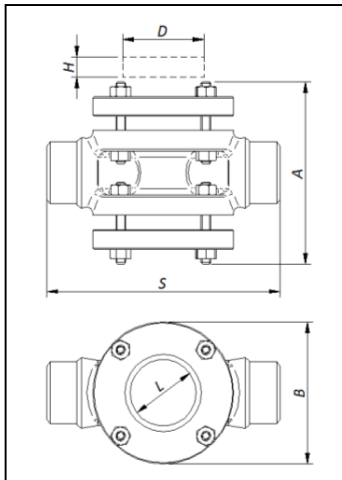
### BODY LIMITING CONDITIONS ( according to ASME B16.34 )

Body Material	A352 LCC A216 WCB	A351 CF8 A351 CF8M	A351 CF3 A351 CF3M	A217 WC6 A217 WC9	A351 CK3MCuN	A890 CD3MN
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

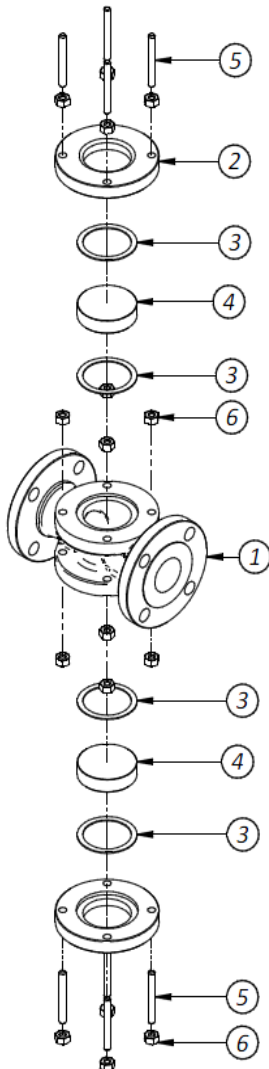


Size	S (mm)	SF (mm)	A (mm)	B (mm)	D (mm)	H (mm)	L (mm)	O (mm)		Wt (Kg)		
								150RF	300RF	BW	150RF	300RF
2"	230	230	180	140	80	20	65	152	165	9,45	13,6	14
2.1/2"	310	310	200	210	100	25	85	178	190	9,6	14	15
3"	310	310	200	210	100	25	85	190	210	12	18	20
4"	350	350	230	210	100	25	85	229	254	15	25	27
6"	480	480	300	210	100	25	85	279	318	40	62	68
8"	600	600	365	210	100	25	85	343	381	80	105	125
10"	730	730	450	270	175	30	100	406	444	97	120	155
12"	850	850	470	270	175	30	100	483	521	115	165	205
14"					175	30	100	533	584			
16"					175	30	100	597	648			
18"					175	30	100	635	711			
20"					175	30	100	698	775			
24"					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 A216 WCB	ASTM A352 LCB	ASTM A351 CF8	ASTM A351 CF8M	ASTM A216 WC9	
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. GC 2" 150RF A216 WCB – Type X  
GC 3" BW-XS A351 CF8M – Type W