



... the level & gas people

ISO-9001 : 2008 CERTIFIED COMPANY

Description

Sight flow indicators are commonly used for monitoring of liquid flow in pipeline. They provide visual observation and monitoring of the process flow stream. To Determine flow, colour and consistency of fluid flowing through a pipe line. It enables maintaining flow of the liquid by viewing instantaneously and guides for any subsequent change in flow desired. Having double/single window construction, sight flow indicators are available in various shapes & materials of construction. Bodies are made of CS/SS & others with toughened borosilicate glass windows. Standard units are available in flanged /threaded connections even for higher temperature & Pressures .



Specifying

The specification of a sight flow indicator includes selecting the body material, gasket material, type of glass, window design and mounting type. The first step is to define the process to be observed, including temperature, pressure, the physical characteristics of the process media, the direction flow (Horizontal left to right, vertical up to down) and whether the process has sanitary requirement. These factors will lead to the second step, selecting the appropriate type of sight flow indicator. The final step is to define the type of material needed in the body, gasket and glass

Types of Sight Flow Indicators

360°View flow indicator

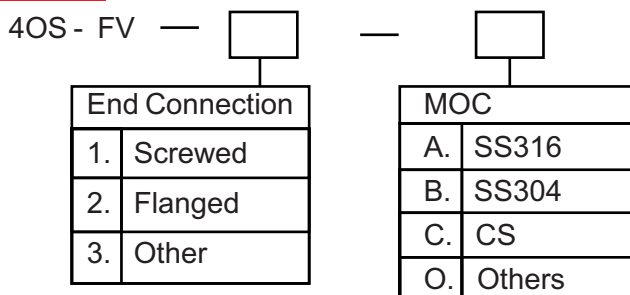
Also called full view, cylindrical or tube style flow indicator this type of flow indicator passes fluid through a glass cylinder that is visible from all angles. This allows simple ambient light to illuminate the flow. It is ideal for observation of process fluid for clarity, Color, Foam and other condition, and for the Presence of moisture. This style of flow indicator is suited for lower pressure systems with moderate flow rates. These indicator must be installed on pipes where there is minimal mechanical strain.



Specification

- * Type - Full view
- * Glass - Borosilicate with flare end.
- * Packing - PTFE, compressed Asbetors, etc.
- * F/F Distance - 150mm, others on demand.
- * End connection - Screwed / flanged
- * Tie rod & Flanges - SS316, SS304 , CS

Model Decodification



View through flow indicator

This type of flow indicator has two opposing windows so that an operator can see the intervening flow of fluid lighted from behind, either by ambient light or with an attached luminaire.

Unlike 306° full view flow indicators, this design is suited for ANSI pressure classes, high temperature and harsh fluid applications. This type may be ordered with teflon lining of the metal body for corrosive service.

Mount types include flange, threaded, butt-weld, socket weld etc. sizes depends on the manufacturer but generally ranged from 1/4" diameters to 16" diameter, with larger unit available as special order.

This style covers the widest range of applications and may be fitted with indication devices such as flappers, rotors etc.

Note:- For either full view or view through sight flow indicators, occasionally a standard model will not match the exact needs of the application. For unusual sizes and unusually demanding applications, suppliers offers custom sight flow indicators or modifications of standard units.

Flapper type indicator

Flow indicators may be fitted with a hinged flapper or flag visible through the sight glass. The flapper is deflected toward the flow direction. Because the position of the flapper changes in relationship to the force of flow, it provides operators with an approximate gauge of flow. This style is best applied on horizontal pipelines but it may also be employed in vertical pipe lines with upward flow. It is ideal for use with transparent solutions and gases which can not be observed directly and for dark, nearly opaque fluid in which flow is difficult to observe.



Rotary flow indicator

Flow indicators may be fitted with rotors or impellers that are turned by the flow of liquid or gas. The rotors are mounted in the window view so operator can observe the direction and approximate speed of flow. This is particularly useful for clear gases and fluids but the rotor is visible with dark fluid as well. This indicator operates in any position and with any direction of flow. Rotor style flow indicators should not be used if the flow rate is very low because the rotor device or propeller may not turn



Plain type

Sight flow indicators are plain without any internal indicator and service as observing window and are suitable for vertical as well as horizontal lines and are adapted to liquids and gases.



Specifications for Double Window Sight Flow Indicators

Main Body	: MS, CS, SS304, SS316, PP, PVC, PTFE, Lining, Rubber Lining.
Glass	: Toughened borosilicate, Sodalime, Acrylic.
Gasket	: Compressed asbestos, Teflon, CAF, PTFE etc.
Connection	: Screwed BSP, NPT, Socket weld and flanged as per std.
Size	: 1/4" to 16" others on demand.
Flapper / Wheel matl.	: Aluminium, SS, PVC, PP, etc.
Pressure	: 0- 15kg/cm ² -100kg/cm ²
Temp	: 0- 100°C - 250°C
Stud & Nut	: A193 GR.B7/2H/SS304/316

Ordering Information

40S-SFI

	I	II	III	IV	V
Indicator Type					
Flapper.....	F				
Rotory wheel.....	R				
Plain.....	P				
Other.....	O				
Body Material					
Carbon Steel.....		A			
SS304.....		B			
SS316.....		C			
PP.....		D			
PVC.....		E			
others.....		O			
Glass					
Sodalime.....			0		
Borosilicate.....			1		
Acrylic.....			2		
Process Connection					
Flange -150#.....				F1	
Flange -300#.....				F2	
Flange-600#.....				F3	
BSP.....				B	
NPT.....				N	
Socket Weld.....				S	
others.....				O	
Line Size					
15 NB.....					0
20 NB.....					1
25 NB.....					2
32 NB.....					3
40 NB.....					4
50 NB.....					5
65 NB.....					6
80 NB.....					7
100 NB.....					8
150 NB.....					9
200 NB.....					10
250 NB.....					11
300 NB.....					12
Others.....					S

Sight glasses

Sight glasses are designed to be welded on pipelines or side of the vessels for visual observation and monitoring of liquid/flow inside a tank or pipe. These are custom manufactured as per application with single form windows in various sizes. Sight glasses are universal in application. Their lower flange can be provided with a nozzle to be weld mounted on vessels.

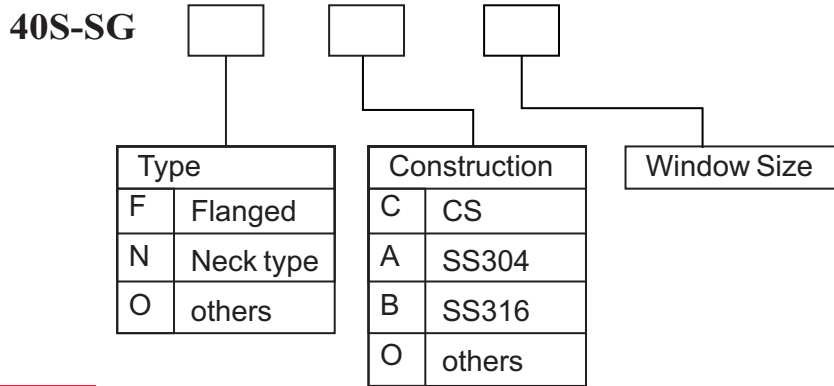


Technical Specification

- * Type: Sight Glass
- * Sizes : Customised
- * Visibility : Front window
- * Connection : Neck/ Flange

- * Mounting : Welded on Tanks
- * Process Temperature : 0-200°C or more
- * Operating Pressure : 0-25kg/cm² or more
- * Glasses : Toughened borosilicate

Model Decodification



Applications

- * Sight flow indicators may be applied to almost every phase of process media movement, whether media is liquid, gas or Powder. Operators can see the approximate rate of flow, direction of flow and condition of the process media, without interrupting process flow.
- * In the processing of bulk solids such as plastic resins, inorganic powders and food product sight flow indicator enable operators to view blending and confirm the free flow of materials.
- * Sight flow indicators enable personnel to inspect pipelines for residue, scale and foreign matter especially during cleaning routines.
- * for pipe carrying steam sight flow indicators enable personnel to be alerted to the presence of condensate and take steps to eliminate it.
- * A chemical processing system of the involves a number of pipelines used to move liquid product through cooling lines filters and transfer/ pumping lines. Sight flow indicators enable operators to observe line conditions for signs of clogging or blinding filters.
- * In discrete manufacturing machines depends on adequate lubrication for their smooth operation. Sight flow indicators are used on equipment so that maintenance personnel can detect the absence of oil and to inspect the color of the oil which may indicate it needs to be changed.
- * Use in water, condensate, coolant, diesel, solvent, chemicals, alcohol, lube oil, slurries, juices etc.

Applications

- * Low maintenance
- * Reliable performance
- * clear indications
- * long service life
- * Different construction & sizes, highly economical, Versatile used
- * Used for major liquid

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