



# SIGHT FLOW INDICATORS

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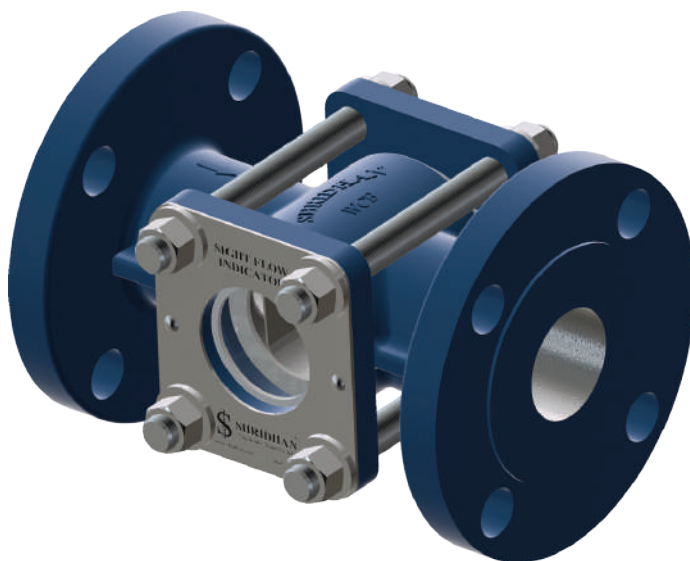
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**SIGHT FLOW INDICATOR**

## 1. SIGHT FLOW INDICATOR

- Reliable and robust instruments designed for clear, real-time visual observation of flow inside pipelines.
- Allow operators to monitor the presence, clarity, color, and condition of process fluids without interrupting the flow or opening the system.
- Manufactured with high-quality materials and precision engineering for durability and dependable performance.
- Widely used across various applications involving liquids, gases, or steam.
- Enable operators to easily observe media flow, flow direction and process condition during operation.

## 1.2 INDUSTRIES

- Petrochemical
- Oil & Gas
- Chemical
- Pharmaceutical
- Bulk products processing

## 1.3 FEATURES

- Visual Flow Confirmation
- Robust Construction
- High-Temperature & Pressure Capability
- Flow Direction Indication
- Low Maintenance

**Note :** Forged Sight Flow Indicators are also available on request.

## 1.4 MATERIAL OF CONSTRUCTION

- |  |
|--|
| • Typically manufactured by casting in the following materials : |
| • Carbon Steel (ASTM A105)                                       |
| • SS 304 (ASTM A351 Gr. CF8)                                     |
| • SS 316 (ASTM A351 Gr. CF8M)                                    |
| • SS 316L (ASTM A351 Gr. CF3M)                                   |
| • Nickel-based & Super Alloys :                                  |
| • Inconel 625  |
| • Inconel 825  |
| • Monel  |
| • Hastelloy  |
| • Size Range : ½ inch to 16 inch                                 |
| • Pressure Class : 150 Class & 300 Class                         |
| • End Connections : Flanged end connections                      |

**Note :** For other ratings and end connections – Consult Factory.

## 2 TECHNICAL SPECIFICATIONS

Size Range	½" NB to 16" NB (IN 150#) & ½" NB to 8" NB (IN 300#)
End Connections	Flanged (ASME B16.5/DIN) Screwed (BSP/NPT) Socket Weld
Body Material	CS (A105), SS304, SS316, SS316L, Duplex SS, Alloy Steel, Special Alloys (Hastelloy, Monel, Inconel)
View Glass Materials	Borosilicate, Toughened Soda Lime, Quartz or Mica - protected
Sealing	PTFE, Graphite, Spiral Wound Style R
Pressure Ratings	ANSI Class 150/300/PN10/PN16/PN40

## 3 STYLES OF SIGHT FLOW INDICATORS

- FULL VIEW (BI-DIRECTIONAL):**

This indicator has two opposing viewing windows so that an operator can see intervening flow of fluid from behind, either by ambient light or with an attached luminaire and suited to ANSI pressure classes for High temperature & harsh fluid applications.



- FLAPPER TYPE :**

This type of Flow indicator is fitted with a hinged flapper mounted inside visible through the sight glass. The flapper is deflected towards the flow direction. This relative change in position of the flapper gives operators with an approximate gauge of flow. This can be installed on horizontal Pipe lines & also on vertical Pipe lines but with an upward flow.



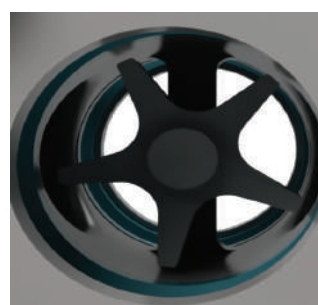
- **DRIP TUBE TYPE :**

These indicators are designed for Drips & low volume intermittent flow such as in distillation. Because gravity is utilized, drip indicators are normally used in Vertical Pipe lines with a downward flow direction.



- **ROTOR TYPE :**

These Flow Indicator are fitted with rotors or impellers made from Teflon or Stainless steel that are rotated by the flow of liquid or gas. The rotors are mounted inside the body visible through the sight glass. The Operators can observe the fluid flow & gauge approximate flow rate. This suits in any position or flow direction.



## 4.1 ASME-PRESSURE/TEMPERATURE RATINGS

### 150 Class SFI

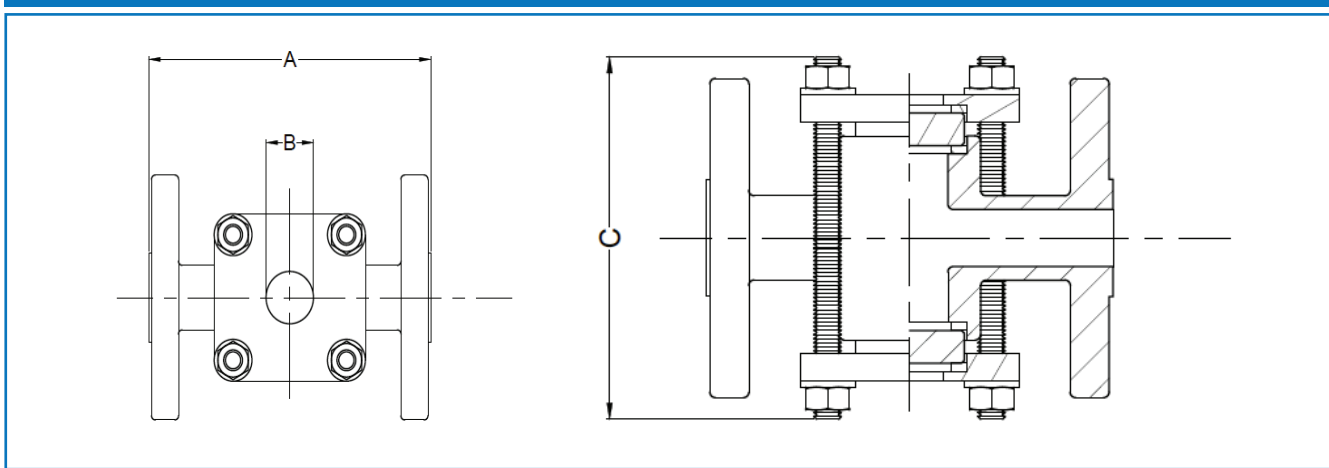
TEMP	PRESSURE Bar	
°C	CARBON STEEL	316 SS
-29 to 37	19.65	18.96
66	18.61	17.58
93	17.92	16.20
121	16.89	15.51
149	15.86	14.82
177	14.82	14.13
204	13.79	13.44
232	12.76	12.41
260	11.72	11.72

### 300 Class SFI

TEMP	PRESSURE Bar	
°C	CARBON STEEL	316 SS
-29 to 37	51.02	49.64
66	48.60	46.19
93	46.53	42.74
121	45.85	40.87
149	45.16	38.61
177	44.47	36.88
204	43.78	35.50
232	42.40	34.12
260	41.36	33.09

**Note :** For Higher ratings - Consult Factory.

## 4.2 DRAWING OF A SIGHT FLOW INDICATOR



A - Flange to Flange Dimension

B - View Size

C - Bolt Length

## 4.3 SIZE AND DIMENSION OF 150 CLASS SFI

SFI 150 CLASS				
FLANGED SIZE	A	B	C	APPROX. WEIGHT
NB	mm	mm	mm	KGS
15	118	28	102	2.70
20	118	28	102	2.70
25	143	32	114	3.60
40	165	50	146	6.80
50	200	50	152	10.00
65	238	80	203	20.00
80	238	80	203	20.00
100	279	100	260	30.40
150	362	150	343	70.30
200	410	200	419	104.30
250	630	279	613	183.70
300	654	279	613	208.70
350	679	279	695	229.00
400	679	279	695	257.10

## 4.4 SIZE AND DIMENSION OF 300 CLASS SFI

SFI 300 CLASS				
PIPE SIZE	A	B	C	APPROX. WGT.
	mm	mm	mm	KGS
1/2 & 3/4	149	25	133	4.3
1	175	32	133	7.7
1-1/2	191	50	187	10.9
2	219	50	194	15.9
2-1/2 & 3	289	80	270	29.0
4	337	100	330	61.3
6	543	140	435	113.4
8	584	140	483	152.0

**Note :** Dimension shared is for casting only.

Forged and Welded SFI's will be customised, dimensions may vary.

## 5 ORDERING INFORMATION OF SIGHT FLOW INDICATOR

### SPECIFY PART NO.

SFI

1

2

3

4

5

6

7

8









**Example:** 2"-150# Flapper type Flanged end SFI MOC: ASTM A 216 Gr. WCB with Forged cover plate in Carbon steel with toughened borosilicate glass & with spiral wound with graphite without IR/OR – MODEL NO: F-EI-FL-C1-FI-1-C-X

1	STYLE
P	Plain / Full View
F	Flapper
R	Rotor
D	Drip Tube
O	Others

2	SIZE AND RATING
A	15 NB (1/2")
B	20 NB (3/4")
C	25 NB (1")
D	40 NB (1 1/2")
E	50 NB (2")
F	80 NB (3")
G	100 NB (4")
H	150 NB (6")
I	200 NB (8")
J	250 NB (10")
K	300 NB (12")
L	350 NB (14")
M	400 NB (16")

3	PROCESS / LINE CONNECTION
FL	Flanged
NT	NPT Threaded
BT	BSP Threaded
SW	Socket Welded
OO	Others

4	BODY
C	Casted
F	Forged

5	COVER PLATE
C	Casted
F	Forged

6	VIEW GLASS
1	Toughened Borosilicate glass
2	Toughened Soda lime glass
3	Others

7	SEALING
A	PTFE/Teflon
B	GRAPHITE
C	Spiral wound with Graphite Filler STYLE-R
D	Silicone
E	Others

8	TESTING
A	3.1 Material certificate
B	Hydro - Test
C	Dye-Penetrant Test
D	Radiography Test
E	Positive Material Identification (PMI)
F	NACE Compliance
X	Multiple Options (As per technical datasheet)
O	Others



### HQ and Manufacturing - 1

SHRIDHAN Automation Pvt. Ltd.  
#B-54, KSSIDC Industrial Estate,  
Kumbalgodu, Mysore Road,  
Bangalore-560074. India.  
Ph no - +91-80-2843 7847 / 7848  
Email - info@shridhan.com

### Manufacturing - 2

SHRIDHAN Automation Pvt. Ltd.  
#D-13, KIADB Industrial Area,  
Kumbalgodu, Mysore Road,  
Bangalore-560074. India.

### Manufacturing - 3

SHRIDHAN Automation Pvt. Ltd.  
#D-18, KIADB Industrial Area,  
Kumbalgodu, Mysore Road,  
Bangalore-560074. India.

### Middle East

ORBIT Automation FZE  
#Z3-38, II Floor, PO Box - 122828,  
SAIF Zone, Sharjah, UAE.  
A 100% Subsidiary of  
SHRIDHAN Automation Pvt. Ltd., India.  
Ph No : +971 6 5792662  
Email - me@shridhan.com

### Europe

SHRIDHAN Sensortek B.V.  
James Wattstraat 6,  
5051 DT, Goirle,  
The Netherlands.  
Ph No: +31 13 304 00 01  
Email - europe@shridhan.com

