

## Sight Flow Indicators



See-Flo® sight flow indicators show you at a glance, the color, clarity and flow of liquids in process lines. The large tempered glass window permits easy observation of fluid conditions and vane indicator position.

The wedge shape of the meter housing makes See-Flo® practically self-cleaning. Where periodic maintenance might be necessary, the window is easily removed and replaced. *As this is a sight flow indicator, it does not include a calibrated scale.*

### Features

- Observe fluid conditions for color, clarity and flow.
- Repeatable vane indication-same position at same flow rate.
- This enables the user to mark a normal condition on the ledge below the pointer.
- Use in horizontal or vertical piping systems.
- Low pressure loss.
- Simple design with few parts for long service life.

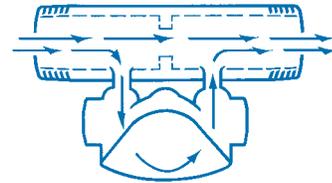
### Principle of Operation

See-Flo® sight flow indicators utilize variable area body housings. The internal volume of the housing enlarges from the inlet to the outlet.

The primary element is a tempered alloy vane with one end affixed to the apex of the meter housing. As the flow rate changes, the vane is flexed in direct proportion.



$\frac{1}{2}$ " ,  $\frac{3}{4}$ " , and 1" connections typically have female threaded ends. Sizes from  $\frac{1}{4}$ " through 6" utilize an integral bypass



housing permitting larger connection sizes in the format of a spool with a constant 12" end to end dimension. In addition, it permits a wide variety of connection types which include threaded, flanged, grooved ends and tri-clamp.

### Applications

- Water
- Transparent liquids

### Specifications

#### Materials of Construction: (wetted parts)

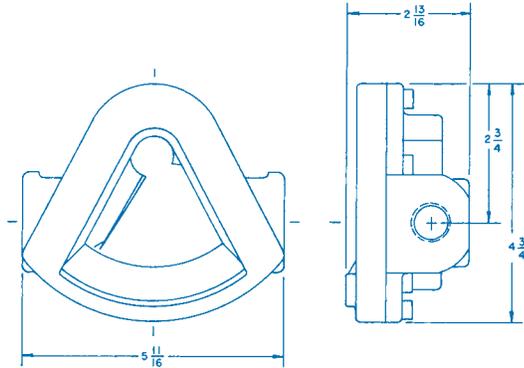
Housing:	aluminum, brass or 316 stainless steel
Shunt:	housing material or carbon steel
Window:	tempered glass
Vane:	17-7 ph stainless steel
"O" Rings:	buna-n, ethylene propylene, Viton® or perfluoroelastomer

#### Piping Connections:

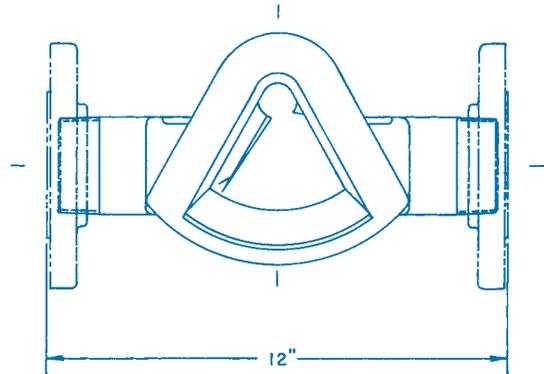
$\frac{1}{2}$ " to 1" NPT Female
$\frac{1}{4}$ " to 4" NPT Male
$\frac{1}{2}$ " to 3" Tri-clamp
$\frac{1}{4}$ " to 6" Grooved
$\frac{1}{4}$ " to 6" Beveled
$\frac{1}{2}$ " to 6" 150#/300# RF/FF ANSI Flanges (carbon stl)
$\frac{1}{2}$ " to 6" 150# RF ANSI Flanges (stainless steel)
$\frac{1}{2}$ " to 6" 150#/300# RF ANSI Flanges (aluminum)
$\frac{1}{2}$ " to 6" 150# FF ANSI Flanges (brass)
15 to 25 mm DIN 2999/BS21/ISO R7 Female threaded
15 to 150 mm DIN PN 10 Flanges (316 stainless stl & carbon stl)

## Sight Flow Indicators

### 1/2", 3/4", & 1" connections



### 1 1/4" to 6" connections



**Pressure Limits:** 200 psig (13.8 bar) with glass window  
 100 psig (6.8 bar) with polycarbonate window

#### Temperature Limits:

- 23 to 85°C (-10 to 185°F)  
with polycarbonate window.
- 23 to 121°C (-10 to 250°F)  
with buna-n o-ring.
- 23 to 204°C (-10 to 400°F)  
with Viton®, ethylene propylene or perfluoroelastomer o-ring.

Not intended for use with opaque liquids or steam. ERDCO reserves the right to alter design and/or specifications without notice. Viton® is a registered trademark of E.I. duPont de Nemours and Co.

#### Model Number System

The example 3121-12F5-11 describes a 3100 Series See-Flo® meter with a brass body/carbon steel shunt for left to right flow, glass window and EPM O-Ring. Connections are 3" 150# raised face carbon steel flanges.

31 Series	2 Housing Material	1 - Flow Direction	12 Size	F Type	5 - Shunt Material	1 Window	1 O-Ring
31-3100	1-Aluminum 2-Brass 6-Stainless Stl	1-L to R 2-R to L 3-Up 4-Down	02-1/2" (15mm) 03-3/4" (20mm) 04-1" (25mm) 05-1 1/4" (32mm) 06-1 1/2" (40mm) 08-2" (50mm) 10-2 1/2" (65mm) 12-3" (80mm) 16-4" (100mm) 20-5" (125mm) 24-6" (150mm)	T-NPT End R-NPT Back S-Tri-clamp G-Grooved X-Beveled W-Socket (1/2"-1") F-Flange 150#RF H-Flange 150#FF J-Flange 300#RF K-Flange 300#FF L-Flange DIN PN16 M-BSPT End N-BSPT Back	0-None 1-Aluminum 2-Brass 5-Carbon Stl 6-Stainless Stl	1 Glass 2 Polycarbonate	1 EPM 2 Viton® 3 Buna-N 4 Perfluoroelastomer