



# Teleflo Dial Indicator



Turning Ideas Into Engineered Solutions

**KAYDON**  
FILTRATION GROUP

*Simple Operation • "Flow - No Flow" Switch  
Use for both oil flow and water flow indication*



# Teleflo Dial Indicator

## Description

The TELEFLO Model 816BC is a rugged flow switch designed for a wide range of oil and water flow applications. For over 50 years, the TELEFLO flow indicator and switch has provided equipment protection against the loss of flow, protecting thousands of installations against costly equipment damage due to inadequate liquid flow.

## Applications:

- Bearing Lube Oil
- Gear Box Lube Oil
- Machine Tool Coolants
- Cooling Water Lines
- Seal Water

## Features

- Spring loaded vane actuated by liquid flow is connected to a red dial pointer that indicates a liquid flow reading on a graduated scale.
- Switch is set by the factory, causing switch operation when the red dial pointer advances  $1\frac{1}{2} \pm \frac{1}{2}$  graduations from the rest or no-flow condition.
- The TELEFLO is a low flow switch. No adjustments are needed if the application requires a low flow switch.
- After the TELEFLO is in operation, the switch cam may be accessed and adjusted for a different switch setting (most applications do not require any adjustments).
- Complete liquid flow control is obtained by installing two TELEFLO flow switches in a series. The first in the series is set as a low flow switch, and the second in the series is set as a high flow switch.

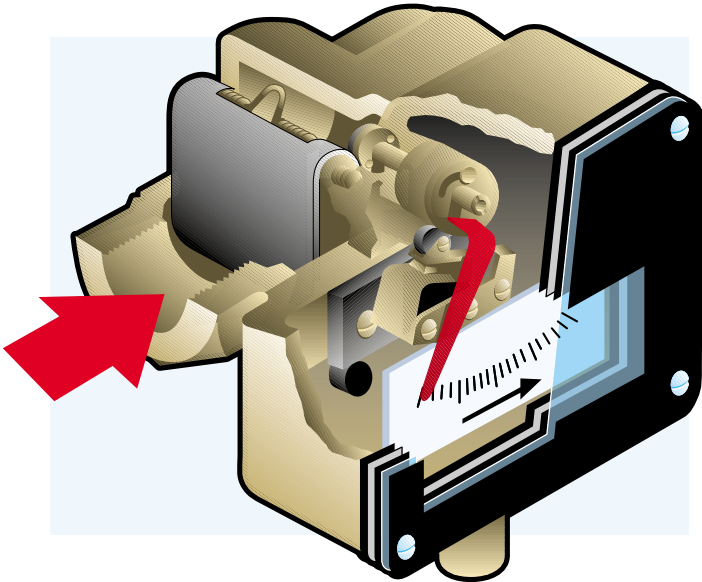


KAYDON Custom Filtration



## Operation

The red dial pointer and switch are located in the head casting. The spring loaded vane is set in motion by liquid flow in the body casting. The vane rotates the red dial pointer and switch cam as liquid flow moves against the vane. The vane shaft connected between the head casting and body casting are sealed with a Viton "O" ring. The removal of the four cover screws permits easy access for connecting to switch terminals or cam adjustments. The factory sets the switch causing switch operation when the red dial pointer advances  $1\frac{1}{2} \pm \frac{1}{2}$  graduations from the rest or no-flow condition.



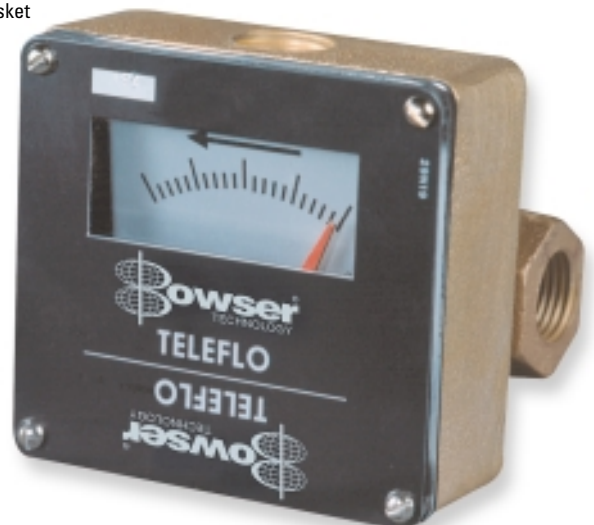
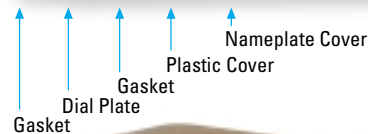
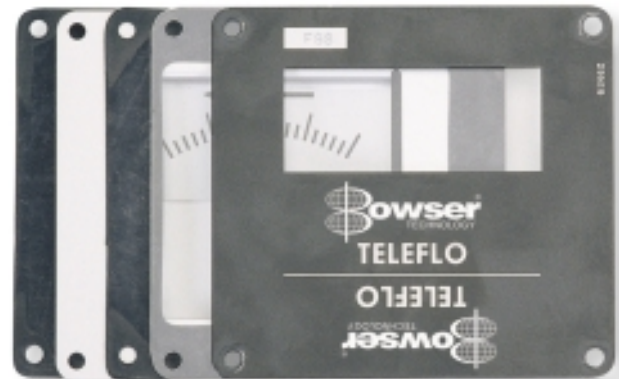
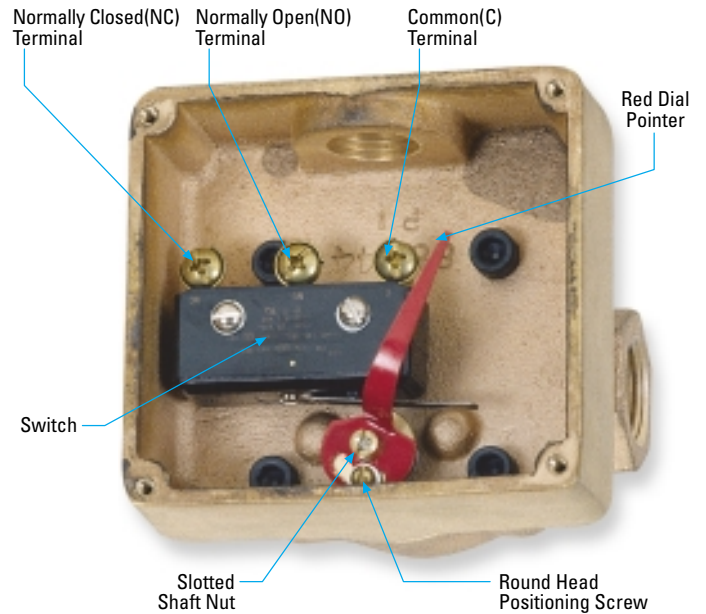
The fluid enters in at the inlet and moves against the spring-loaded vane. The vane shaft connected to the red dial pointer rotates according to the amount of fluid advancing against the vane. The movement of the red dial pointer indicates fluid flow. The vane shaft also operates a cam that activates a SPDT switch.

## Specifications

- Body and head casting: Bronze – 85-5-5-5
- Finish: Bronze acid dip
- Dial: Aluminum background with black graduations
- Pointer: Brass painted red
- Window: Clear acrylic plastic
- Switch: S.P.D.T. – 15A-125V, 7A-250V
- Head Gasket: Garlock 7022
- Seal: Viton A "O" Ring Seal
- Pressure: 125psi @ 200°F
- Weatherproof head

## Installation

Teleflo Indicators may be installed in any position.



### Flow Rate Information

- The High Flow Point is the flow rate that will give a full flow reading on the scale. This is not the maximum flow that can be pumped through the flow switch.
- The Low Flow Point is the lowest flow that will move the flow indicator needle to indicate flow. A flow below this point is too low for the flow switch to indicate.
- The Switch Setting is the flow at which the switch will activate (change the NC contact from "closed" to "open"). The switch is a SPDT (single pole double throw).

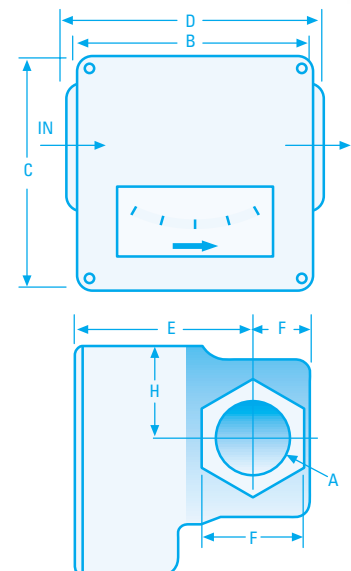


### 150 SSU Turbine Oil

Size	Low Flow Point	High Flow Point	Switch Setting
1/2"	2gpm	28gpm	2.5gpm
3/4"	4gpm	32gpm	4.5gpm
1"	6gpm	60gpm	7gpm
1 1/2"	8gpm	65gpm	9gpm
2"	10gpm	75gpm	11gpm

### Dimensions

General Assembly Number	816BC-1/2"	816BC-3/4"	816BC-1	816BC-1 1/2"	816BC-2
NPT Opening	1/2"	3/4"	1"	1 1/2"	2"
A Pipe Tap Size	1/2"	3/4"	1"	1 1/2"	2"
B Width of Dial	3 5/8"	3 5/8"	3 5/8"	3 5/8"	4 1/2"
C Height	3 3/8"	3 3/8"	3 3/8"	3 3/8"	4 1/2"
D Length Overall	3 5/8"	3 3/4"	3 1/4"	4 3/4"	6 1/2"
E Center to Front	2 1/4"	2 5/8"	2 5/8"	2 7/8"	3 3/8"
F Center to Front	1 1/16"	1 5/16"	1 5/16"	1 3/8"	1 3/4"
G Hex., Across Flats	1 3/16"	1 9/16"	1 9/16"	2 1/4"	3 1/4"
H Height from c of Pipe	1 5/16"	1 5/16"	1 5/16"	1 11/16"	2 5/32"



## Installation

TELEFLO flow switches may be installed in any position in a liquid line. Pipe connections are NPT. The size ranges are 1/2", 3/4", 1", 1 1/2", and 2".

## Adjustment

The TELEFLO flow switch is factory set as a low flow switch. Most applications using the TELEFLO will not require adjustments. If the switch must be adjusted, follow these procedures:

## Procedure

The TELEFLO must be operating when the switch is adjusted. Both the high flow and low flow switch examples will use graduation mark 15 on the scale as the desired flow rate reading.

### To set the switch above desired flow rate (high flow switch)

Remove the screws holding the cover, glass, and dial plate. Temporarily replace the dial plate with the same four screws. Hold the red pointer firmly with fingers and loosen the slotted shaft nut. Rotate the red pointer in a direction against the liquid flow until switch click or continuity tester indicates switch closure. Retighten nut. Holding the red pointer, loosen the round head positioning screw and rotate the red pointer past the desired flow graduation position (from mark 15 to mark 17 or 18). Retighten red pointer positioning screw. Test for switch closure by increasing liquid flow from desired flow rate reading (mark 15). The switch should activate on a flow indication of mark 17 or 18.

### To set the switch below desired flow rate (low flow switch)

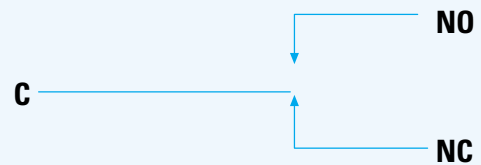
Note: The TELEFLO is set from the factory as a low flow switch. Remove the screws holding the cover, glass, and dial plate. Temporarily replace the dial plate with the same four screws. Hold the red pointer firmly with fingers and loosen the slotted shaft nut. Rotate the red pointer in a direction against the liquid flow until switch click or continuity tester indicates switch opening, then rotate back to obtain switch closure and retighten nut. Proceed as in adjustment for increased liquid flow and test for switch opening by reducing liquid flow.

Connect necessary switch leads and replace cover, glass & dial.

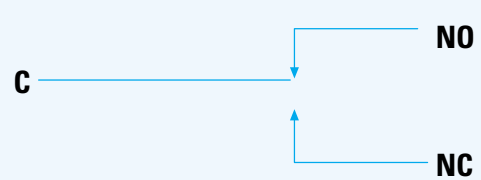
## S.P.D.T. Switch



Liquid Flow below Switch Setting Point  
Normally Closed (NC) contact is closed.



Liquid Flow above Switch Setting Point  
Normally Closed (NC) contact is open.



### Contact Rating

15A/125V, 250V, 460VAC

1/8HP 125VAC, 1/4HP 250VAC

1/2A 125VDC, 1/4A 250VAC