

## INSTALLATION & OPERATION INSTRUCTIONS FOR FLOW INDICATORS (SERIES FIG AND FIL)

### GENERAL CHARACTERISTICS

Mechanical flow indicators for liquids or gases are manufactured of quality materials and if properly installed and maintained, will provide long-term trouble-free operation. They offer 360° rotor viewing and may be installed in any orientation. These flow indicators are also ideal for overhead installations. The internal colored rotor spins proportional to flow rates and indicates intermittent or loss of liquid or gas flow.

### UNPACKING

Precautions have been taken to prevent any damage from occurring during shipment. However, if the indicator is received damaged, *report it to the carrier immediately*. Before installing, verify that you have the model and flow range required.

### INSTALLATION POSITION

The flow indicator must be installed with the flow in the direction marked on the side of the indicator. This flow direction arrow is permanently stamped into the indicators metal housing.

Note: specific mounting positions may influence the starting flow rate of the rotor.

### INSTALLATION

These indicators are supplied in various internal NPT thread sizes, which are properly sized for the rated flows. They can be installed in systems via piping, tubing, hoses, etc which must be properly mounted to support the indicator. To ease installation and provide a better seal use pipe thread sealant or Teflon® tape.

**Place the proper size wrench on the hex ends of the indicator when making the NPT connections. Avoid any torsion stress on the ends of the indicator as this may cause internal damage.**

Test system for leaks.

### CLEANING

The indicators feature an internal wiper system for cleaning the inside of the clear sight tube. This can be done by rotating the sight tube by hand (in either direction) while the indicator is mounted. Removal and disassembly of the flow indicator is not required.

Do not use solvents to clean clear sight tube as they may attack the material and destroy the indicator.

### MAINTENANCE

The flow indicator operates maintenance free and does not require periodic service. Therefore, no spare parts are available. As required, clean the sight tube as described above.

### APPLICATION

Make sure the fluids are compatible with the flow indicators. Avoid fluid surges or cessations, and sudden acceleration of flows as they may damage the flow indicator. Use the maximum flow recommendations listed in the specifications to size the flow indicator. Do not allow liquids to freeze inside the flow indicators.

If you have any questions regarding the installation, maintenance or use of this indicator, please call the Customer Service Department at 1-800-356-7483.

	THREAD SIZE (FNPT)	PART NUMBER	MAX FLOW (LPM)	MIN FLOW (LPM) START OF ROTOR
<b>BRASS</b>	¼-18	FIG001	60	18
	3/8-18	FIG003	150	20
	½-14	FIG005	250	25
	¾-14	FIG007	250	25
	1-11 ½	FIG009	350	35
	1 ¼-11 ½	FIG011	600	60
	1 ½-11 ½	FIG013	700	70
	¼-18	FIL001	4	0.7
	3/8-18	FIL003	8	0.8
	½-14	FIL005	12	1.4
	¾-14	FIL007	25	1.4
	1-11 ½	FIL009	40	1.7
	1 ¼-11 ½	FIL011	80	8.0
1 ½-11 ½	FIL013	100	8.0	
<b>STAINLESS STEEL</b>	¼-18	FIG002	60	18
	3/8-18	FIG004	150	20
	½-14	FIG006	250	25
	¾-14	FIG008	250	25
	1-11 ½	FIG010	350	35
	1 ¼-11 ½	FIG012	600	60
	1 ½-11 ½	FIG014	700	70
	¼-18	FIL002	4	0.7
	3/8-18	FIL004	8	0.8
	½-14	FIL006	12	1.4
	¾-14	FIL008	25	1.4
	1-11 ½	FIL010	40	1.7
	1 ¼-11 ½	FIL012	80	8.0
	1 ½-11 ½	FIL014	100	8.0

(CONTINUED PRODUCT IMPROVEMENT MAY RESULT IN SPECIFICATION REVISIONS)

### CAUTION

THIS FLOW INDICATOR IS DESIGNED FOR USE WITH NON-HAZARDOUS FLUIDS AT THE PRESSURES AND TEMPERATURES LISTED. DO NOT USE HAZARDOUS FLUIDS AND DO NOT EXCEED TEMPERATURE OR PRESSURE LIMITS. USE WITH HAZARDOUS FLUIDS OR EXCEEDING THE PRESSURE AND TEMPERATURE LIMITS MAY CAUSE FAILURE, WHICH COULD RESULT IN INJURY.