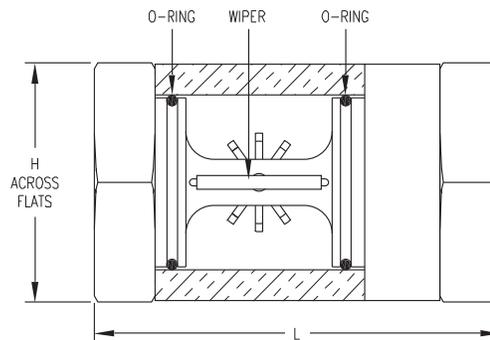




Series 700 Sight Flow Indicators

Specifications - Installation and Operating Instructions



Sizes Inches	Dim "L" Inches (mm)	Dim "H" Inches (mm)
1/4 & 3/8	2-3/4 (70)	1-1/2 (38)
1/2 & 3/4	3-11/16 (94)	2-1/4 (57)
1, 1-1/4 & 1-1/2	4-7/8 (124)	2-3/4 (70)

NOTE: Read safety precautions on back before installing or operating!

INSTALLATION

1. Use proper sealing compound on the fitting threads.
2. Check the flow direction arrow on hex to make sure the sight flow indicator is aligned properly.
3. Attach sight flow indicator to the correct size fittings.
4. Hold the sight flow indicator in place with the correct size wrench by the hex adjacent to the fitting.
5. Avoid over tightening the fittings or placing stress on the sight flow indicator.
6. Attach the other side of the sight flow indicator repeating steps 1-5 above making sure a torque load is NOT applied across the unit.

OPERATION

1. Gradually introduce the medium into the sight flow indicator. Avoid any pressure surges.
2. The rotation of the impeller indicates flow. See table right for minimum flow surges.
2. The rotation of the impeller indicated flow. See table right for minimum flow values.
3. By rotating the glass axially, the wipers will clean the inner surface of the glass. Care should be taken while medium is flowing.

SPECIFICATIONS

Wetted Materials:

Body: Model 700; nickel plated brass.
Model 700 SS; 316 Stainless.

Window: Tempered borosilicate glass.

O-ring: Florelastomer.

Wiper: Florelastomer.

Spindle: 416 Stainless Steel.

Impeller: Acetal plastic.

Temperature Limit: 212°F (100°C).

Pressure Limit: 230 psig (1585.8 kPa).

Weight: 1 to 5 lb. (.45 to 2.3 kg) Depending on model.

Options: BSPP or BSPT metric thread forms, less impeller, bidirectional flow models.

Minimum Flows for Impeller

Rotation (nominal)

Size Inches	Water GPM (LPM)	Air SCFM (LPM)
1/4	0.10 (0.38)	1.1 (31.2)
3/8	0.10 (0.38)	1.1 (31.2)
1/2	0.25 (0.95)	2.0 (56.6)
3/4	0.30 (1.14)	2.0 (56.6)
1	0.50 (1.89)	4.0 (113.3)
1-1/4	0.80 (3.03)	5.0 (141.6)
1-1/2	1.0 (3.79)	5.0 (141.6)

You have purchased a quality Sight Flow Indicator. Please protect your safety and that of others by observing the following safety instructions when installing and operating your new Sight Flow Indicator.

Your Safety and Others Depend on Proper Installation and Operation

Always inspect sight flow indicator units for fractures, cracks or other defects before installation. If unit is found with any defect, do **NOT** install. Consult factory. The defective products performance and safety cannot be guaranteed.

In no instance are the temperature and pressure limits specified on the instrument to be exceeded. This includes the following circumstances:

- **“Water Hammer”**
The sudden surge that occurs when a downstream flow is suddenly stopped (i.e. shutting a valve). This causes the water in the line upstream to slam into the wall stopping flow (i.e. valve) sometimes causing severe damage to the sight flow indicator. Damage is due to the water mass momentum causing a large pressure increase.
- **“Fluid Surges”**
Empty fluid lines pressurized suddenly (i.e. by a pump or the rapid opening of a supply valve) can cause a large fluid surge with no back pressure. These conditions are similar to “water hammer”.
- **“Thermal Liquid Expansion/Contraction”**
This may be due to water freezing in the unit or a liquid thermally expanding in an isolated unit. Both cases can be avoided by draining units when not in use.

Never install a sight flow indicator unit in an unsupported position.

- Make sure that the lines connected to both sides of the unit do **NOT** put undue stress on the unit at any time.
- Check alignment of lines on both sides of the unit to prevent torque from being applied to the unit when installed.
- Always consider the weight of the unit, fluid lines, and the medium when calculating stresses.

Use care when installing the sight flow unit to fittings.

- Always hold unit with wrench at hex adjacent to connection when installing.
- Do **NOT** apply torque loads across the unit.
- Do **NOT** overtighten fittings.
- Use proper sealing techniques (i.e. pipe thread sealant tape, joint compound) to ease tightening of fittings and ensure proper seal.
- Do **NOT** hold unit by housing or glass when installing. Always, use the hex fitting provided.
- Avoid causing any damage to the glass surface when installing the unit. Even slight damaging the surface of the glass may greatly reduce the glass' strength.

These units are designed to use specific mediums (i.e. water, air, and oil). For use with other mediums, consult Dwyer Instruments, Inc.'s Sales Department.

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