# LO-flo - Models F, FR, P, & R

#### **INSPECTION & HANDLING**

- The LO-flo station should be carefully inspected for damage prior to installation. Report damage to your Freight Department, or contact delivery carrier.
- Almost any means of handling can be utilized depending on the size and weight of the station, however, it is important not to drop or mishandle such that damage is done to the air straightener, sensing arms, signal connection fittings, or flanges.

### **LOCATION OF LO-flo STATION**

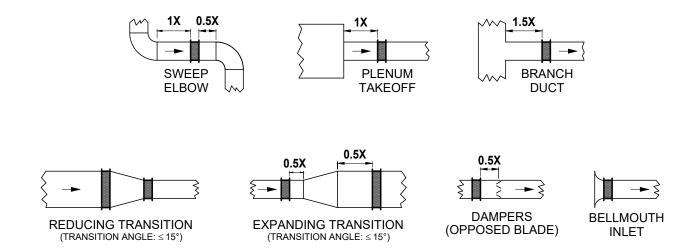
- When installing the LO-flo station, select a location that meets or exceeds the Minimum Installation Requirements. See Figure 1.
- The LO-flo station should not be used to strengthen or support connecting piping or ductwork.

#### **MINIMUM INSTALLATION REQUIREMENTS**

- Considerations when installing the LO-flo station are as follows:
- Turbulent Airflow. The unique use of honeycomb airflow straightener permits accurate flow measurement in the presence of moderate air turbulence. The distances from air turbulence producing fittings, transitions, etc., shown in Figure 1 are the minimum requirements for installation to assure accurate airflow measurement. Wherever possible, the LO-flo should be installed with longer runs of straight duct (or clearances) than shown.
- Airborne Contaminants. Applications containing airborne contaminants may require periodic manual or automatic cleaning using compressed air applied via the signal fittings, and/or physical cleaning.
- Direction of Airflow. The LO-flo will function only with the airflow passing through the air straightener section prior to entering the total and static pressure sensing section. To prevent improper installation, each LO-flo is marked with an arrow indicating the required direction of airflow.



## MINIMUM INSTALLATION REQUIREMENTS, cont'd.

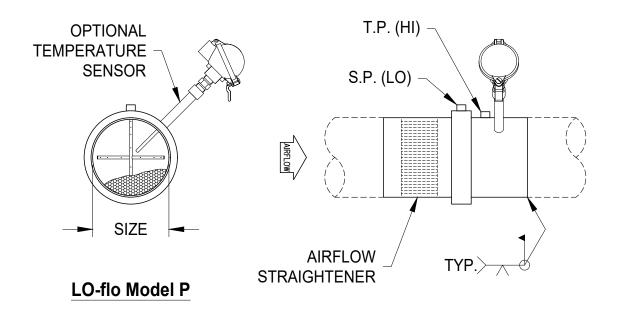


NOTE: X = pipe or duct diameter.

Figure 1

#### GENERAL INSTALLATION

- Each LO-flo station has an airflow arrow on the exterior to assist in correct orientation relative to the direction of airflow entering the LO-flo station.
- LO-flo stations are furnished in a variety of designs and sizes, enabling welded or bolted installation in piping or ducts. Model P (plain ends), Model R (reducing), Model F (flanged), and Model FR (flanged/reducing) are described below and in Figures 2 & 3.
- Type P and R stations (Figure 2) may be butt welded to the adjoining piping using stainless steel welding rod and seal welds consistent with the pipe schedule in use. See Figure 4.
- Type F and FR stations (Figure 3) are furnished with 150 lb. raised-face, slip-on stainless steel flanges for bolting into piping systems. Flange bolt torque specifications per ANSI B16.5 are shown in Figure 5. Torque values listed are for SAE Grade 8 bolts. Applied torque should be per the customer's plant standard. Standard ring gaskets for 150 lb. flanges should be used. Gasket material selection should be per the customer's plant standard.



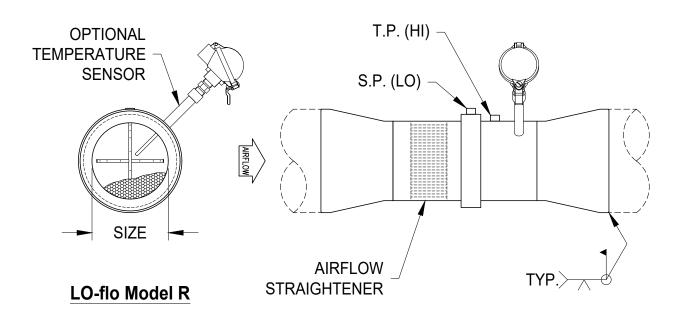
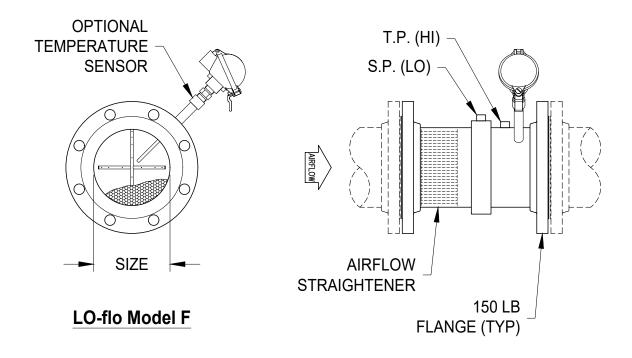


Figure 2



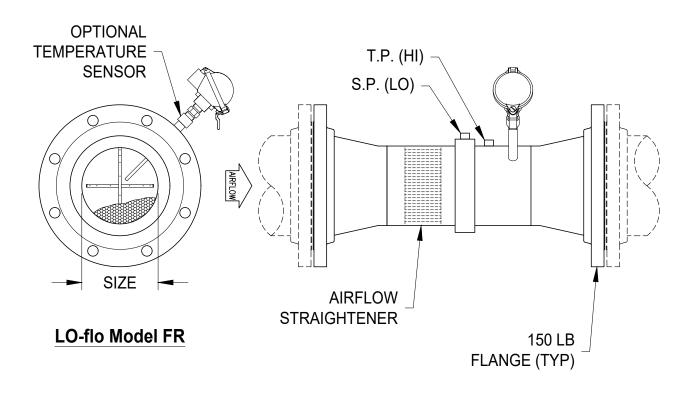


Figure 3

PIPE SIZE	PIPE SCHEDULE	WALL THICKNESS
3/4"	5	.065"
1"	10	.109"
1 1/4"	10	.109"
1 1/2"	10	.109"
2"	10	.109"

PIPE SIZE	PIPE SCHEDULE	WALL THICKNESS	
3"	10	.120"	
4"	10	.120"	
5"	10	.134"	
6"	10	.134"	
8"	10	.148"	

Figure 4 - LO-flo Station Pipe Schedules

FLANGE SIZE	BOLT DIA./LENGTH	BOLT QTY.	MIN. TORQUE (FT/LB)
3/4"	1/2" x 2.25"	4	119
1"	1/2" x 2.25"	4	119
1 1/4"	1/2" x 2.50"	4	119
1 1/2"	1/2" x 2.50"	4	119
2"	5/8" x 2.75"	4	230
3"	5/8" x 3.25"	4	230
4"	5/8" x 3.25"	8	230
5"	3/4" x 3.25"	8	380
6"	3/4" x 3.50"	8	380
8"	3/4" x 3.75"	8	380

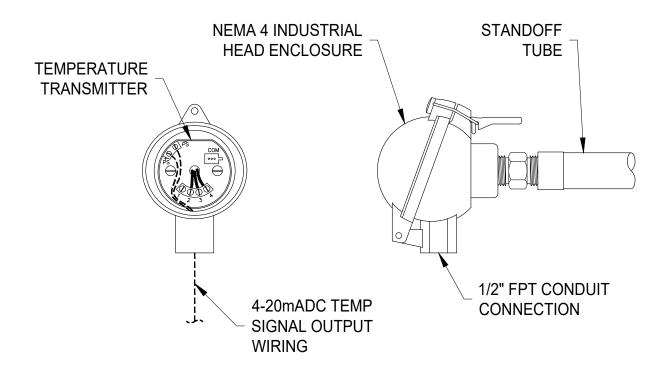
Figure 5 - Bolt Torque

## SIGNAL TUBING

- Each LO-flo station is equipped with 1/4" FPT total pressure (high) and static pressure (low) signal connections. Optional tube compression adapters are available.
- Tubing size for the signal connections is dependent upon distance between the LO-flo station and the measuring device. For distances up to 50 feet, use 1/4" tubing. For distances from 50 feet to 200 feet, use 3/8" tubing. For longer distances, use 1/2" tubing.
- External fittings installed to the LO-flo signal connections should not be rotated or twisted during installation.
- After tubing is completed, signal lines should be leak tested prior to operation.

## **OPTIONAL TEMPERATURE SENSOR**

 Available to the LO-flo station is a 1/4" OD, single point 100 ohm platinum RTD for temperature measurement. This option includes a 4-20mADC, 2-wire temperature transmitter, located in a NEMA 4 industrial head, attached to the LO-flo station. If so equipped, use the wiring detail shown in Figure 6.



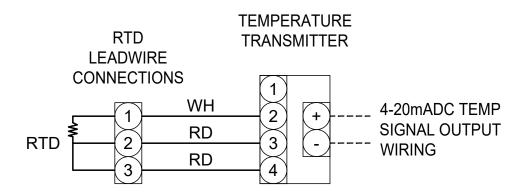


Figure 6

**CUSTOMER SERVICE** Air Monitor Corporation provides in-house technical support for all our products:

Monday through Friday, 7 am to 5 pm (PST)

Phone: 707-544-2706 or 1-800-AIRFLOW / Fax: 707-526-2825 service@airmonitor.com www.airmonitor.com

If after contacting the Customer Service Department it is determined that equipment will require return to Air Monitor Corporation for further repair, a Return Authorization number will be issued. A Confirmation of Return Authorization with shipping instructions will be sent via facsimile or email. Equipment to be returned to Air Monitor should be returned in its original shipping container if possible. If this is not possible, ensure equipment is packaged sufficiently to protect it during shipment.

Caution: All damage occurring during transit is the Customer's responsibility.

List the Return Authorization (RA) number on the packing list and clearly mark this number on the outside of each shipping container. Costs associated with the return of equipment to Air Monitor Corporation are the customer's responsibility regardless whether the repair/return is under warranty. Once the Customer Service Department determines that the equipment repair is under warranty, the item will be repaired and returned to the customer at no charge. If the equipment is not under warranty, customer will need to approve a repair quote which will be invoiced along with return shipping charges.

Thank you for choosing Air Monitor Corporation!



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