



Series  
FLST

# Duct Mounted Airflow Measurement Station

## Rectangular, Oval or Circular Configurations

AIR QUALITY

Flow Sensors

**Circular Style**

TOTAL PRESSURE TAKEOFF  
1/4" COMPRESSION FITTING

STATIC PRESSURE TAKEOFF  
1/4" COMPRESSION FITTING

**Oval Style**

TOTAL PRESSURE TAKEOFF  
1/4" COMPRESSION FITTING

.25" RADIUS BEADING EDGE [TYP]

STATIC PRESSURE TAKEOFF  
1/4"

**Rectangular Style**

TOTAL PRESSURE (T.P.) TAKEOFF  
1/4" COMPRESSION FITTING

STATIC PRESSURE (S.P.) TAKEOFF  
1/4" COMPRESSION FITTING

**Dimensions**

Circular Flange			
Station Size "D"	Flange Thickness	Flange Size "F"	Casing Length "L"
8" - 15"	.064"	1"	6"
16" - 44"	.064"	1-1/2"	6"
45" - 72"	.188"	1-1/2"	10"
73" & Over	.188"	2"	12"

Oval Flange			
Station Width "W"	Flange Thickness	Flange Size "F"	Casing Length "L"
Up to 48"	.064"	1-1/2"	6"
Over 48"	.188"	1-1/2"	8"

Rectangular Flange	
Station Size "H" or "W"	Flange Size "F"
8" - 72"	1-1/2"
73" & Over	2"

The Series FLST Airflow Measurement Station is easy to install - simply connect the tubing to the station fittings, then to a differential pressure manometer, gage, transmitter or switch. Single or multiple airflow elements are factory mounted and pre-piped in a casing designed for flanged connection to the ductwork. Standard materials consist of a G90 galvanized casing and 6063-T5 anodized aluminum flow sensors, suitable for most HVAC applications. The Series FLST utilizes an airflow averaging element in a head-type device, generating a differential (velocity) pressure signal similar to the orifice, venturi, and other head producing primary elements. Strategically located sensing ports continually sample the total and static pressures when inserted normal to flow. Total pressures sensed by the upstream ports are continually averaged within the airflow element in an isolated chamber. The static sensing ports are averaged in a second isolation chamber. Multiple elements are joined together for connection to a differential measurement device (gage, transmitter, etc.) for flow measurement and indication purposes.

### FEATURES

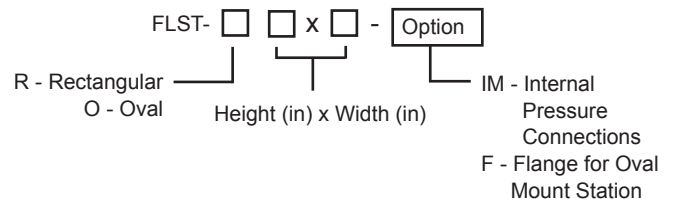
- Low signal-to-noise ratio
- Multiple total and static pressure sensing ports along the length of the element
- Factory mounted and pre-piped in a flanged duct section (casing)
- ±2% accuracy throughout velocity ranges of 100 FPM and over
- Standard construction includes galvanized casing and 6063-T5 anodized aluminum flow sensors
- Standard airflow stations can be operated (in air) continuously in temperatures up to 350°F or intermittently in temperatures up to 400°F
- All airflow stations can be operated in humidity ranges of 0 to 100%
- Standard airflow stations have good salt air resistance and are suitable for most HVAC applications

### SPECIFICATIONS

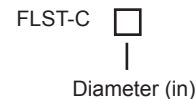
- Accuracy:** Within 2% of actual flow when installed in accordance with published recommendations.
- K-Factor:** 0.97.
- Velocity Range:** 100 to 10,000 FPM (0.51-51 m/s).
- Wetted Material:** Elements: 6063-T5 anodized aluminum; Casings: 16 ga G90 galvanized steel.
- Temperature Limits:** Galvanized casings and aluminum elements 350°F (177°C) continuous operation (in air) 400°F (204°C) intermittent operation (in air).
- Humidity:** All airflow stations 0 to 100% non condensing.
- Process Connections:** 1/4" compression fittings.

### How To Order:

#### Rectangular or Oval Models



#### Circular Models



**Note:** When ordering rectangular or oval flow stations, pressure taps will always be located on the longer of the two dimensions.

**Series FLST Rectangular or Oval**

Size (in)	8"	10"	12"	14"	16"	18"	20"	22"	24"	26"	28"	30"	32"	34"	36"
8"	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
10"		X	X	X	X	X	X	X	X	X	X	X	X	X	X
12"			X	X	X	X	X	X	X	X	X	X	X	X	X
14"				X	X	X	X	X	X	X	X	X	X	X	X
16"					X	X	X	X	X	X	X	X	X	X	X
18"						X	X	X	X	X	X	X	X	X	X
20"							X	X	X	X	X	X	X	X	X
22"								X	X	X	X	X	X	X	X
24"									X	X	X	X	X	X	X
26"										X	X	X	X	X	X
28"											X	X	X	X	X
30"												X	X	X	X
32"													X	X	X
34"														X	X
36"															X

Size (in)	40"	44"	48"	52"	56"	60"	66"	72"	78"	84"	90"	96"	102"	108"	114"	120"
8"	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
10"	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
12"	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
14"	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
16"	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
18"	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
20"	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
22"	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
24"	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
26"	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
28"	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
30"	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
32"	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
34"	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
36"	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
40"	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
44"		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
48"			X	X	X	X	X	X	X	X	X	X	X	X	X	X
52"				X	X	X	X	X	X	X	X	X	X	X	X	X
56"					X	X	X	X	X	X	X	X	X	X	X	X
60"						X	X	X	X	X	X	X	X	X	X	X
66"							X	X	X	X	X	X	X	X	X	X
72"								X	X	X	X	X	X	X	X	X
78"									X	X	X	X	X	X	X	X
84"										X	X	X	X	X	X	X
90"											X	X	X	X	X	X
96"												X	X	X	X	X
102"													X	X	X	X
108"														X	X	X
114"															X	X
120"																X

**OPTIONS**

IM – Internal Pressure Connections (Rectangular Stations Only)

F – (Oval Stations Only)

SS1 – 316 SS Elements with 16 GA galvanized casing

SS2 – 316 SS Elements with 16 GA 304 SS casing

SS3 – 316 SS Elements with 16 GA 316 SS casing

**Series FLST Circular\***

Size (in)	8"	10"	12"	14"	16"	18"	20"	22"	24"	26"	28"	32"	36"	40"
		X	X	X	X	X	X	X	X	X	X	X	X	X
Size (in)	44"	48"	54"	60"	66"	72"	78"	84"	90"	96"	102"	108"	114"	120"
	X	X	X	X	X	X	X	X	X	X	X	X	X	X

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