

Digitron

HLX575 Series

HVAC Miniature Air Velocity Transmitter

The HLX575 is a compact air velocity transmitter designed for high volume applications. Due to the small design, the module can be fitted to nearly every application.

The use of a high-quality thin film sensor element based on the hot film anemometer principle ensures optimal precision and maximum sensitivity.

The innovative design makes velocity sensor elements less sensitive to dust and other pollution than conventional hot wire anemometers. This is reflected in the excellent reproducibility and proven long-term stability of the measuring results.

The HLX575 can be mounted fast and easily.

The alignment strip along the probe's tube and the matching mounting flange determine the orientation of the sensor probe. The mounting flange allows for an infinitely variation of the depth of the sensor probe.

The electronics integrated in the probe tube provide a linear analogue signal of 0-5V or 0-10V for the velocity range 0...5m/s (0...1000ft/min) / 0...10m/s (0...2000ft/min) or 0...20m/s (0...4000ft/min).



Typical Applications

heating and ventilation systems
fan control
intake air measurement in furnaces

Features

excellent price/performance ratio
compact housing
easy and fast mounting
customization possible

Technical Data

Measuring values

Working range ¹⁾	0... 5m/s (0...1000ft/min) 0...10m/s (0...2000ft/min) 0...20m/s (0...4000ft/min)
Output signal ¹⁾	0-5V (max. 1mA) 0-10V (max. 1mA)
0...5m/s / 0...10m/s / 0...20m/s	
Accuracy ²⁾	0.5... 5m/s (100...1000ft/min): ±(0.2m/s / 40ft/min +3% of measuring value)
at 20°C / 68°F / 45%RH and 1013hPa	1... 10m/s (200...2000ft/min): ±(0.3m/s / 60ft/min +4% of measuring value)
	1... 20m/s (200...4000ft/min): ±(0.4m/s / 80ft/min +6% of measuring value)
Response time at 10m/s (2000ft/min) t_{90}	typ. 4 sec.

General

Supply voltage ¹⁾	10 - 19V DC or 19 - 29V DC
Current consumption	max. 70mA at 20m/s (4000ft/min)
Working range	humidity: 10...95% RH (non-condensing) working temperature: 0...60°C (-4...140°F) storage temperature: -30...60°C (-22...140°F)
Connection	0.5m cable, PVC 3x0.25mm ² with cable end sleeves
Electromagnetic compatibility	EN61326-1 EN61326-2-3
Housing / Protection class	polycarbonate / IP20 (sensor); IP40 (housing)

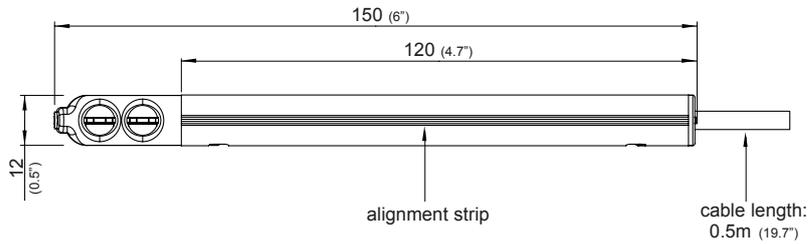


¹⁾ refer to ordering guide

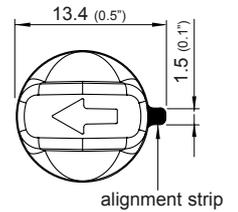
²⁾ The accuracy statement includes the uncertainty of the factory calibration with an enhancement factor k=2 (2-times standard deviation).
The accuracy was calculated in accordance with EA-4/02 and with regard to GUM (Guide to the Expression of Uncertainty in Measurement).

Dimensions (mm)

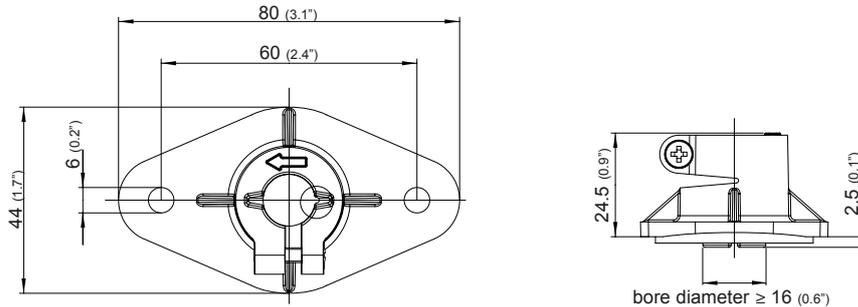
Probe:



Front view sensor head:



Flange (included in the scope of supply):



Cable Assignment

white	V+
brown	GND
green	output signal

Ordering Guide

MODEL	OUTPUT	WORKING RANGE	SUPPLY	CABLE LENGTH
HLX575-	(V) 0 - 5V	(2) 0...5m/s (0...1000ft/min)	(A) 10 - 19V DC	(1) 0.5m (1.6") (no code)
	0 - 10V ¹⁾	(3) 0...10m/s (0...2000ft/min)	(B) 19 - 29V DC	(2) 2m (6.5") (K200)
			(C) 0...20m/s (0...4000ft/min)	

1) with supply 19-29V DC only

Order Example

HLX575-V2B1

Model:	air velocity
Output:	0 - 5V
Working range:	0...10m/s
Supply:	10 - 19V DC
Cable length:	0.5m