

SPS-50 Sash Position Sensor Data Sheet



SPS-50

The SPS-50 Sash Position Sensor is an added safety feature used to detect a fume hood's sash position.

As the sash is moved by the user, the SPS-50 communicates with Triatek's HMS fume hood controller and the hood's Venturi valve to increase or decrease airflow as necessary to maintain the desired face velocity setpoint.

The SPS-50 provides the fastest and safest approach to instantaneously achieve calibrated airflow requirements.

The HMS controller can also utilize a closed loop sidewall sensor in conjunction with the SPS-50 to further fine tune the fume hood's airflow.

The SPS-50 utilizes a spring-loaded spool, precision potentiometer, and nylon-coated stainless steel cables to measure the position of the fume hood's sash.

Made of rugged polycarbonate, the SPS-50 also features a stainless steel mounting bracket to allow the user to easily orient the sensor in the preferred direction.

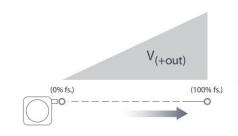
FEATURES INCLUDE

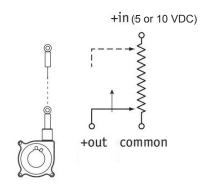
- Linear position to 50 inches
- Rugged polycarbonate enclosure
- Spring-loaded spool
- Precision potentiometer
- Nylon-coated stainless steel cable
- Stainless steel mounting bracket for added flexibility

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SPS-50 Specifications	
Full Stroke Range	50 in (1,270 mm)
Output Signal	0 VDC - +in VDC
Accuracy	0.25%
Repeatability	±0.05% full stroke
Resolution	Essentially infinite
Measuring Cable	0.019 in. diameter nylon-coated stainless steel
Measuring Cable Tension	7 oz. (1,9 N)
Cycle Life	250K
Maximum Cable Acceleration	15 g
Enclosure Material	Polycarbonate
Sensor	Plastic-hybrid precision potentiometer
Weight, max. (including bracket)	0.4 lbs.
Input Resistance	5K ohms, ±10%
Power Rating, Watts	2.0 at 70° derated to 0 at 250°
Recommended Maximum Input Voltage	30 V (AC/DC)
Output Signal Change Over Full Stroke Range	94% ±4% of input voltage
Electrical Connection	22 AWG 3 conductor 10 foot cable
Operating Temperature	0-160° F
Vibration	Up to 10 g to 2000 Hz maximum

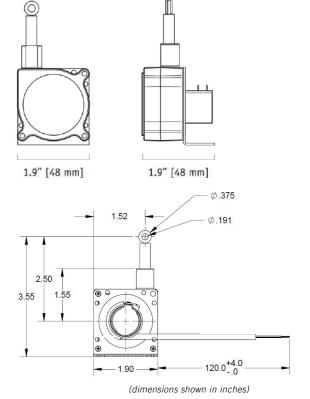
Output Signal:

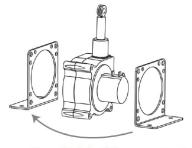




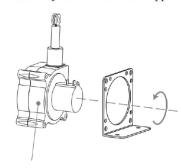
 $Product\ specifications\ are\ subject\ to\ change\ without\ notice.\ TRIATEK\ is\ a\ registered\ trademark\ of\ Triatek\ LLC..$

Part Number Guide: SPS-50





For added flexibilty, mounting bracket can easily be switched to the opposite side.



To change measuring cable direction simply remove the 3 bracket attaching screws and rotate sensor body to desired direction.

Cable Termination	
Red	+ In
Green	+ Out
Black	Common

