DPV421
Air Velocity

sperosens
safety through innovation

The DPV (differential pressure velocity) sensor measures air velocity by comparing input/ output pressures. It has no moving parts and is intended to be used in very dirty areas with high air velocities.

The DPV421 is designed to interface with 4-20mA controllers. Various velocity options are available.

KEY FEATURES

- Low power
- Up to 30m/s range
- Well suited to harsh environments
- Ruggedized Design

APPLICATIONS

- Air speed monitoring
- Mine ventilation monitoring

PRODUCT INFO

DPV421 range options

Type	5 m/s	10 m/s	15 m/s	20 m/s	30 m/s
Part No.	SP001053	SP001054	SP001055	SP00909	SP001065

DPV421 AIR VELOCITY SENSOR

FUNCTIONALITY

- The DPV421 Air Velocity sensor measures air velocities (wind speed).
- The sensor measures the differential pressure created by the movement of air across an obstruction. The differential pressure changes proportionately to the change in air speed.
- The sensor has no moving parts and the pressure sampling does not require air to pass through narrow ports. The sensor performs reliably for extended periods of time in very harsh environments.
- The electronic enclosure of the DPV421 is ingress protected to IP 65 against dust and water.

SPECIFICATIONS

Measuring Range:	Up to 30 m/s
Output Type:	Current loop (mA)
Accuracy:	Within 5% of measured velocity
Supply Voltage:	18 - 30VDC
Power consumption:	1.5W average
Analog Output Signal:	4-20mA
Electrical Protection:	Fuse protection on power input
Warm Up Time:	< 30 sec
Life Expectancy:	More than 10 years

CERTIFICATION

Ex Protection:
Ex ia I – to be used behind a suitable safety barrier

MECHANICAL SPECIFICATIONS

Physical Dimensions:	220mm x 220mm x 120mm
Weight:	± 2.9 kg

ENVIRONMENTAL SPECIFICATIONS

Water and Dust:	IP 65
Temperature:	-10 °C to +55 °C