

Differential pressure sensor for portable applications



- ▶ Piezometric differential pressure sensors
- ▶ Measurement of the pressure in the two environments using the included silicon tubes. The sensor directly provides the difference of the two values
- ▶ Typical sector in which differential pressure sensor is applied is HVAC: verification of filters in the pipes, measurement of air flow in ventilation systems, testing of over-pressure environments
- ▶ Suitable for measuring the air speed when connected to Pitot tubes. When used with LSI LASTEM's data loggers, air speed values are directly calculated in m/s.
- ▶ ISO17025 accredited internal laboratory for air speed measurements with Pitot tubes

Portable differential pressure probe for air and non-ionic and non corrosive gas. This sensor can be used together with Pitot tubes to measure air speed, LSI LASTEM data logger can calculate directly air speed from the differential pressure measurement.




Technical Specifications

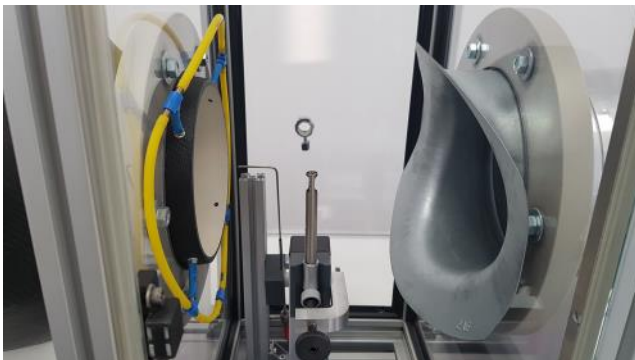
| PN | ESP024 | DQE524 |
|----------------------------------|-----------------------------|--|
| Output | 60...300 mV | 4...20 mA |
| Cable + connector | L= 2 m + Mini DIN connector | L= 0.5 m + IP65 7 pin connector for DWA5nnA cables |
| Data logger compatibility | M-Log (ELO009) | E-Log, A-Log |

Common Technical Specifications

| | | |
|-----------------------------|---------------------------------------|---|
| Atmospheric pressure | Principle | Piezoelectric |
| | Range | 0...16 hPa |
| | Resolution | 0.01 hPa |
| | Accuracy | 2% FS (20°C) |
| | Thermal drift | 0.1 hPa/°C |
| General Information | Power supply | 11...33 Vdc |
| | Power consumption | 20 mA |
| | Zero calibration | Using external trimmer |
| | Overload | Max 1 Bar |
| | Weight | 0.1 kg |
| | Protection | IP65 |
| | Operative limits | -10...50°C, non ionic and non corrosive gas |
| | Silicon tubes | N.2 tubes L= 2 m included |
| | Input type on E/M/R-Log | N.1 analog |
| | E/M/R-Log derived quantities obtained | Air speed, using Pitot tubes |

Accessories

| | | |
|--|------------------|---|
| | SVICA5103 | Calibration certificate. ISO9001 type (Differential Pressure) |
| | SVACA2105 | Calibration certificate. ISO17025 ACCREDIA type (Pitot tubes) |
| | BSE006 | Pitot Tube, stainless steel. L=0.5 m, D=7mm |
| | BSE007 | Pitot Tube, stainless steel. L=0,5 m, D=7mm |
|  | DWA505A | Cable L=5 m for DQE524 sensor |
| | DWA510A | Cable L=10 m for DQE524 sensor |
| | DWA525A | Cable L=25 m for DQE524 sensor |
| | DWA526A | Cable L=50 m for DQE524 sensor |
| | DWA527A | Cable L=100 m for DQE524 sensor |
|  | MG2251.R | 7 pin free female connector |
|  | MAGFA2003 | Fixing kit for Pitot tube to pipe |



▶ *LSI LASTEM is an ISO17025 accredited laboratory for air speed measurements. All sensors manufactured are tested inside this laboratory. LSI LASTEM provides Test report for any sensor supplied and on request, ISO17025 or ISO9001 calibration certificates (see Accessories list).*