

data Series

ESP Sensors / Gauges

The RMSpumptools range of ESP Sensors have been specifically developed with the stresses associated with downhole ESP's in mind. Field proven Metal-to-Metal sealing provides a watertight casing for the electronics, ensuring you always receive reliable and accurate data. Advanced Motor Temperature Monitoring provides a more accurate picture by measuring Motor Winding and Motor Oil Temperature simultaneously. The Sensors are available in Standard and High Temperature models and include High Accuracy as standard across the range.

Technology

- Quick Start - Intake Pressure 15s from Power Up
- Rated for all ESP Motors up to 6.6kV
- Insulation Test to 5000V
- Continuous Rated Intake Temperature Range 0 - 177°C
- Over-Temperature Capability - rated for 1 hour
- 260°C Winding Temperature Probes
- Plug & Play Motor Winding Temperature (RTD or Thermocouple)

Additional Benefits

- 100% Waterproof for Extended Life Electronics
- 3-Axis Vibration Measurement for Greater Accuracy
- Withstand High Temperature spikes on ESP Shutdown
- RMSpumptools renowned Metal-to-Metal Sealing for Enhanced Durability
- High Accuracy for Optimal Monitoring
- Helps reduce Gas Locking
- Prevents Pump-off

Key Performance Features

- Increase the Runlife of your ESP
- Maximize Production from your Well
- Reduce Downtime and Costs
- Improve your Operating Efficiency
- Reduce premature Failure Rates of your ESP

Surface Display Units

The downhole Sensors are fully supported by the RMSpumptools high specification range of Surface Interface Units which transmit and display the necessary information to obtain an accurate understanding of your ESP and Well conditions.



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| | data 1 | data 1 ^{HT} | data 2 | data 2 ^{HT} |
|---|----------------|----------------------|----------------|----------------------|
| Intake Pressure | | | | |
| Range | 0 - 5,800psi | 0 - 5,800psi | 0 - 5,800psi | 0 - 5,800psi |
| Accuracy | 0.1%FS | 0.1%FS | 0.1%FS | 0.1%FS |
| Resolution | 0.1psi | 0.1psi | 0.1psi | 0.1psi |
| Intake Temperature | | | | |
| Range | 0 - 150°C | 0 - 177°C | 0 - 150°C | 0 - 177°C |
| Accuracy | 0.25°C | 0.25°C | 0.25°C | 0.25°C |
| Resolution | 0.1°C | 0.1°C | 0.1°C | 0.1°C |
| Discharge Pressure | | | | |
| Range | N/A | N/A | 0 - 5,800psi | 0 - 5,800psi |
| Accuracy | N/A | N/A | 0.1%FS | 0.1%FS |
| Resolution | N/A | N/A | 0.1psi | 0.1psi |
| Motor Winding Temperature (RTD / Thermocouple) | | | | |
| Range | 0 - 260°C | 0 - 260°C | 0 - 260°C | 0 - 260°C |
| Accuracy | 0.25°C / 1.0°C | 0.25°C / 1.0°C | 0.25°C / 1.0°C | 0.25°C / 1.0°C |
| Resolution | 0.1°C | 0.1°C | 0.1°C | 0.1°C |
| Motor Oil Temperature | | | | |
| Range | 0 - 185°C | 0 - 185°C | 0 - 185°C | 0 - 185°C |
| Accuracy | 0.25°C | 0.25°C | 0.25°C | 0.25°C |
| Resolution | 0.1°C | 0.1°C | 0.1°C | 0.1°C |
| Vibration (3 Axis - X, Y and Z) | | | | |
| Range | 0 - 18g | 0 - 18g | 0 - 18g | 0 - 18g |
| Accuracy | 0.5% | 0.5% | 0.5% | 0.5% |
| Resolution | 0.05g | 0.05g | 0.05g | 0.05g |
| Current Leakage | | | | |
| Range | 0 - 25mA | 0 - 25mA | 0 - 25mA | 0 - 25mA |
| Accuracy | 0.1mA | 0.1mA | 0.1mA | 0.1mA |
| Resolution | 0.01mA | 0.01mA | 0.01mA | 0.01mA |

Accessories

| | |
|--------------------------|--|
| Motor Base Crossover: | Available for all motors and in all metallurgies |
| Discharge Sub: | Available for all flanges, tubing sizes and metallurgies |
| Discharge Pressure Line: | Standard 160ft length with fittings |
| Installation Kits: | A full range of surface and downhole kits are available |

Variables

| | |
|------------------|--|
| Metallurgy: | 13Cr as standard and other materials on request |
| Elastomers: | Viton as standard, Aflas and other elastomers on request |
| Pressure Range: | 5,800psi (standard) - other ranges on request |
| Insulation Test: | 5kVDC |

Dimensions & Connections

| | |
|--------------------|---|
| Diameter: | 3.75" (9.525cm) - excluding Top Connection |
| Length: | 25.25" (64.135cm) |
| Top Connection: | 4.5" 6 Hole ESP Flange (industry standard) - others on request |
| Bottom Connection: | 2-3/8" EUE 8 RND box |

