

New gear shift sensor for demanding motorsports applications from Variohm EuroSensor

Variohm EuroSensor has launched a new tension/compression gear shift sensor for clutch-free, flat shift, ignition cut and other gearshift applications in professional motorsports. The VGS-T-1000-M8 (1UAB04) combines strain gauge and integrated digital amplifier technologies to provide an analogue voltage output corresponding to typical motorsports ECU threshold values set between 2.5V DC for zero force and 0...5V DC for +/- 1000N force. Facilitating high speed gear engagement during maximum acceleration with no lost traction, the gear shift sensor also offers advantages over other shifting systems by removing the need for a torque converter and reducing fuel consumption.

Aimed at professional motorsports series such as WRC, S2000, Moto GP, etc., the IP65 rated sensor's robust and durable design includes a stainless-steel housing with two M8 mounting threads and a 15 mm diameter anodised aluminium sleeve protecting the sensor electronics. With excellent resistance to shock and vibration, the unit has an accuracy to within +/- 5 N over a temperature range of -20 to +85 °C. Overload protection is rated at +/- 5000 N whilst zero force offset at 2.5 V output is specified to within +/- 0.025 V, and gain drift with temperature is 0.2%. The sensor's supply voltage and current rating is 6 to 16V DC at 18 mA and electrical connection is via a 1-metre-long braided cable assembly.

The new VGS-T-1000-M8 (1UAB04) is part of a wide range of motorsports sensors available from Variohm EuroSensor, including linear and rotary position sensors, pressure sensors, temperature, acceleration & gyro sensors, plus displays and other instrumentation. Full details are available on Variohm's website, email sales@variohm.com or call +44 (0)1327 351 004.