CAN Newsletter Online

LVDT transducer for subsea valves

Measurement Specialties (Meas) has launched the LVDT (linear variable differential transformer) featuring a CANopen interface compliant with CiA 443. The device measures the position of valves for subsea oil fields.

THE US-COMPANY WITH SEVERAL BRANDS established in 1982 has recently introduced the LVDT transducer suitable for subsea applications. In order to correct for valve tolerances, the zero and gain are digitally adjustable in the field. The product

The subsea sensor for measuring the position of valves complies with theCiA 443 profile (Photo: Meas)

features digital calibration, digital linearity correction, and temperature compensation suing the company's signal conditioning technology. It is available in different mechanical housings. The transducer is designed to function in oil at pressures up to 7500 PSI. It is qualified in compliance with ISO 13628-6 at the supplier's test laboratories in Hampton, Virginia.

The subsea sensor for measuring the position of valves complies with theCiA 443 profile (Photo: Meas)

Meas also supplies rotary transducers with comparable performance and features. This includes a CANopen CiA 443 interface. The angular range is specified up to 359 degrees. The company offers also application-specific position transducer and signal conditioners.

The sensor specialist has acquired several companies or departments from other sensor makers, e.g. piezo-film sensors from AMP, ICsensors from P+E, Schaevitz Sensors from TRW, and Celesco. Celesco develops the PT9 and PT9000 sensor series for stroke position and velocity feedback applications. They can be used for hydraulic cylinder synchronizing, telescoping mechanism, and water gate positioning. They come optionally with CAN, J1939, and Devicenet connectivity.

Another CANopen compatible sensor is the D series of inclinometers. Based on SMD technology the product comes in an IP67/68-rated housing. The CANopen interface is available at the M12 plug connector. The sensor provides 32-bit inclination values. The embedded micro-controller performs the linearization and the temperature compensation of the measured values.