

## Liquid level sensor

**MTS Sensors** has expanded its magnetostrictive sensor application offerings with the CPSR sensor for liquid level applications. The IP 65 or 67 rated devices provide additional intelligence to products that may have only used level switches in the past. The sensor can be linked to a machine's control system to monitor and maintain a desired liquid level. Available in various lengths, the sensors provide accurate and repeatable level measurement up to 250 mm (10 in), empty to full. Each sensor provides 5 V dc analog and pulse-width-modulated outputs; custom designs are also offered.

For more information, circle 1



## Tracking products

The Liberty tracking product line from **Polhemus** offers high sensor speed (240 Hz), a graphical user interface (GUI), scalability, and improved signal-to-noise ratios that increase stability and resolution. The line's sensors simultaneously track objects at 240 updates/s through advanced digital signal processors that feature cleaner signals and improved range. The series comes standard with four sensors, a serial I/O RS-232 and high-speed USB interface, Windows 2000/XP GUI, and a software developer kit. Resolution for each sensor is greater than 0.001 in (0.025 mm) and 0.01°; absolute accuracy is better than 0.03 in (0.76 mm) rms for the x, y, and z position and 0.15° rms for rotation.

For more information, circle 4



## 16-bit DAC converter

The AD5570 is an accurate, single-channel, 16-bit digital-to-analog (DAC) converter from **Analog Devices, Inc.** housed in a 16-lead shrink-small outline package. Its integral and differential non-linearities do not exceed one least significant bit over its full temperature range of -40 to +125°C (-40 to +257°F). The AD5570 also features a small footprint and on-chip reference buffers that are said to simplify designs and reduce system size and cost. Output is  $\pm 13.6$  V with  $\pm 15$  V supplies. Input data is available on its serial data output for daisy-chaining and data read-back. Other features include automatic 0 V clamping on power-up and power-down, a low-power sleep mode, and asynchronous update of outputs.

For more information, circle 2

## Digital monitor

The Series 400 digital monitor from **Novx Corp.** replaces the Series 350 and is capable of communicating with industry-standard particle counters and particle detectors, having the ability to report data using RS-485 and ModBus protocols. Series 400 is a microprocessor-based monitoring instrument capable of body voltage or current detection, dual-channel ground monitoring, and particle counter data collection and reporting configured to a PC interface. Single-wire technology offers customers the flexibility to eliminate the applied voltage and optional in-line resistance required to protect the operator, bringing the control limits between operator and product to lower levels.

For more information, circle 3



## Filter assembly

**Parker Hannifin Corp.**'s Racor Div. produces an FBO filter assembly available for fuel dispensing applications at diesel fueling installations. The filter is available in two sizes using a 10-in or 14-in filter element. The FBO-10 assembly offers flow rates from 18 to 20 gal/min (68 to 75 L/min) for diesel fuel, while the FBO-14 can flow 25 to 30 gal/min (95 to 113 L/min) for diesel, depending on filter element installed. The unit can be supplied with a pre-filter element, a filter/separator element, or water-absorbing element. A locking ring collar design eliminates the need for tools when changing elements; V-band clamps are not used, and installations are said to be leak-free. An electronic water sensor option is also available.

For more information, circle 5

## Seal catalogs

A Disogrin Loaded Symmetrical U-cup seal catalog, a Radial Shaft Seal manual, and a Simriz Perfluoroelastomer brochure from **Simrit**, the industrial sealing products division of **Freudenberg-NOK**, provide detailed product information on the company's hydraulic seal series. The 60-page Disogrin catalog features 29 LSU seal cross sections with diagrams and data for both rod and piston applications. Cross-reference materials and a general technical data section about the seals' physical properties and chemical compatibility are also offered. More than 40,000 styles and sizes are chronicled by part number and shaft dimension.

For more information, circle 6



## Oxygen monitor

The microPac Plus Oxygen Monitor from **Draeger Safety, Inc.** is a compact gas measuring and warning device for oxygen in the 0-25% volume range. The two-year maintenance-free instrument features an LCD concentration display with audible, visual, and vibrating alarms. The low-profile design allows the device to be worn on the lapel, shirt pocket, or belt of anyone requiring a warning of the presence of hazardous gas concentrations. Rugged housing guards against the environment, and alarms notify users of a potential gas hazard, making the device suitable for monitoring worker exposure in the construction and agricultural industries.

*For more information, circle 7*



## Two-speed fan drive

**Horton Inc.**'s DriveMaster two-speed fan drive is offered for off-highway applications without RAM air and is said to offer improved cooling because it can turn a larger fan at faster speeds. The drive alternates between an eddy current, or low-speed operation, and spring-actuated high-speed operation for efficient temperature



control. Under most operating conditions, the eddy current mode provides sufficient cooling for the engine, which preserves horsepower for auxiliary systems, reduces fan noise levels, and minimizes radiator abrasion from dust and debris. When additional cooling is required, the system spring actuates to drive the fan at full input speed.

*For more information, circle 8*

## Triaxial accelerometer

Model 63C12/C13 compact triaxial piezoelectric accelerometers from **Endevco** offer unit-to-unit phase deviation at low frequencies, making them suitable for low-*g* modal analysis applications. Built-in digital memory chips store such information as sensitivity, location, and calibration coefficients in a transducer electronic data sheet. Other features include automatic identification of all sensors, configuration of output data, simplified system set-up, dynamic range and frequency response, and good phase characteristic maintenance over the entire operating temperature.

*For more information, circle 9*



## Torque transducer

Series 5310 Torkdisc rotary torque transducers from **PCB Piezotronics, Inc.** offer the same advantages as other Torkdisc models, including rugged, strain-gauge sensing technology and wireless, digital, signal telemetry to transmit measurement signals to an adjacent receiver. Additional features of the new line include compact design, high stiffness, low weight, low rotating inertia, RF interface immunity, and low sensitivity to extraneous loads. Voltage or current outputs are available, and the sensors are offered in a choice of capacities from 12,500 to 18,750 lb•ft (16,950 to 25,420 N•m) and a speed rating up to 6000 rpm. All units are calibrated with NIST traceability.

*For more information, circle 10*



## System safeguard

The Mesabi System Protector tube and shell cooler from **L&M Radiator, Inc.** provides a safeguard for systems under constant operation and protects equipment from downtime caused by cross-contaminated fluids. In addition, the system is field repairable and protects the environment, according to the company. Site gauge or optional electronic sensors alert operators to leaking fluids. The coolers have individual copper tubes held in header plates with flexible rubber seals. Two seals at each tube end absorb thermal and mechanical stresses, while a collection chamber between the seals connects to an external fluid detection port where fluids are isolated. Various length and diameter configurations for liquid and heat air exchange are available.

*For more information, circle 11*

