Products improve diaphragm efficiency

Wilden has introduced two products for use with its Advanced Series of air-operated double-diaphragm pumps.

The PX Simulator is a free online tool that allows operators to determine the optimal balance of flow rate and efficiency for any application. Using inlet, head and flow parameters of the application plus the pump model, the simulator computes the air inlet pressure and Efficiency Management System (EMS) setting that will yield the greatest efficiency. The EMS features an integrated control dial to select the efficiency point and flow rate that best suits the application.

Wilden has also developed a new range of full-stroke polytetrafluoroethylene (PTFE/Teflon) diaphragms which allow increased product displacement per stroke. This helps produce greater flow rates and higher efficiency than reduced stroke diaphragms.

The new full-stroke PTFE diaphragms are available for Wilden 1, 1.5, 2 and 3 in pumps and can be retrofitted. They are suitable for applications including chemical processing, oil and gas, construction, energy, mining, paint and coating, plating and finishing, pulp and paper, food and pharmaceutical, semiconductor, water and wastewater.

www.pumpsg.com

Wilden's PX Simulator.

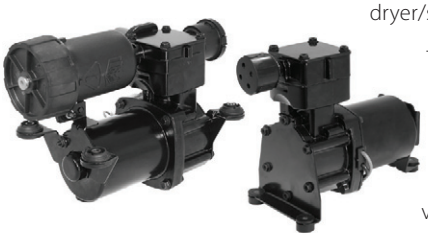
Oil-less piston pumps

Thomas, a Gardner Denver company, has developed the 319 Series of oil-less, WOB Piston DC pumps and compressors.

The pumps are small and manufactured with die-cast aluminium components for strength and durability. They weigh 5.1 lbs/2.3 kg.

The series is suitable for mobile applications including air suspension, air doors, air horns, air brakes and clutches and fuel systems. The 319 Series includes EMI suppression and is RoHS compliant.

The 319 Series of piston pumps has a corrosion resistant e-coated exterior finish, stainless steel inlet valve, thermally protected motor and inlet filter/exhaust muffler. It is a available with 12 and 24 V DC motor and dryer/solenoid.



Thomas's 319 series.

The 319 Series provides up to 150 psi (10 bar) of maximum intermittent pressure and 93% local barometer of maximum vacuum.

www.gd-thomas.com

Pressure gauges improve performance

Texas-based Precision Instruments, a new valve specialist, has launched a range of differential pressure gauges featuring a new line of piston and diaphragm-style Dp gauges.

The Model LX Series is available in Dp ranges from 0-2 in H_2O to 0-1,000 psid and working pressures to 6,000 psig/400 bar. It can work at temperatures up to 200°F/93°C and NEMA 4X/IP65 dial housings.

The gauge options include: dial sizes, dial scales, lens, private branding, wetted parts, body materials, seals, port connections, mountings, switching, follower pointer, liquid filling and hazardous duty housings.

Typical applications include filter, pressure, pump performance, heating/cooling or flow monitoring and level measurement.

www.differentialpressure.us

Improved online condition monitoring

The Schaeffler Group has launched an improved version of its FAG DTECT X1 online condition monitoring system.

The new system is more compact than its predecessor and offers increased functionality and flexibility.

Individual modules – the monitoring unit and the multiplexer – are now integrated in a single, compact unit which measures 260 × 150 × 90 mm. The integrated multiplexer enables the recording of signals from up to eight different sensors.

The FAG DTECT X1 can save up to 16 separate monitoring tasks and execute these automatically. The system is protected to IP67 and can therefore be installed in harsh environments, in ambient temperatures from –20°C to + 70°C. All commonly used acceleration, speed and displacement sensors can be connected to the system, enabling process parameters such as speed, temperature, torque and pressure to be monitored.

The system monitors vibration conditions, which if left undetected, can cause costly unplanned shutdowns of plant and machinery, Schaeffler says. These conditions include damage to bearings and gears, as well as shaft misalignments. If a specified threshold value or limit is exceeded, the system triggers an alarm. The vibration monitoring data can be analysed directly on site at the central control station or this data can be retrieved via a TCP/IP communications link.

The new FAG DTECT X1 is suitable for a wide range of industrial vibration monitoring applications, including the monitoring of rotating components and machines such as bearings, gearboxes, compressors, fans, pumps, rolling stands, paper mills and drives.

www.schaeffler.co.uk

The new FAG DTECT X1 from Schaeffler.