

Introducing the 'Guardian System'...

The newly developed 'Guardian System' is the ultimate pneumatic pump & system protection, designed and manufactured in the UK, this unique & ground breaking product can monitor & protect many pumps, pipe work, tank or vessel for applications such as Barrier Monitoring, Dead-head & Stop, Dry-run prevention & Over/Under Pressure Monitoring. All are **ATex** certified

Applications

Dry-run Prevention - stops the pump automatically if the discharge pressure falls below the set pressure of the system. Under normal running conditions the pump will run at a discharge pressure proportional to the application, if the suction line becomes exposed the fluid pressure in the discharge line will collapse and the system will issue a signal that can stop the pump. This will in turn increase diaphragm life, reduce air usage and costs, reduce noise levels, prevent product & plant damage.

Dead-head & Stop System - The Guardian system automatically turns the pump on/off dependant on the discharge pressure of the pump. Under normal running conditions the pump will run at a discharge pressure proportional to the application, if dead-headed (i.e. the discharge valve is closed) the fluid pressure will rise. The system recognises this and stops the pump until the discharge pressure reduces due to the valve being re-opened, automatically restarting the pump. Some of the advantages are; minimises potential damage to the machinery if low or high pressures are experienced, the system warns of filter blockage or failure, indication of pipe bursts or pump failure and minimizes wear and tear on applications.

Barrier Monitoring System - The Guardian system monitors the pressure in the void cavities of a barrier pump, pipe work, tank or vessel. If the pressure in the void increases above the set point due to either a media breach or mechanical failure, the system will issue a signal that can be utilised to sound an alarm, stop the pump, etc'.

The diaphragm is PTFE faced as per the fluid diaphragms of the pump, therefore is completely tolerant of most media and is therefore much safer than conventional systems. Some of the advantages are that it prevents & contains spills associated with diaphragm failure in air

pumps and seal failure in electrical pumps, continually monitors barrier pumps, tanks, vessels & pipe work for leaks inherently safer than other barrier systems on the market.

Ideal for pressure monitoring on filter systems with auto changeover and pressure monitoring in twin wall pipe systems and vessels.

Over/Under Pressure Monitoring - The Guardian system can be used to monitor the pressure of media in a line, issuing a signal if it deviates above or below the set point.

TECHNICAL DATA	
Wetted Parts	Stainless Steel, Aluminium, Conductive PTFE
Product Connections	¼" BSP
Air Connections	4mm P/F (M5)
Air Pressure	10 bar max
Maximum Media Temp	110°C

The Guardian system is a breakthrough in the effective monitoring of pumps and other equipment offering full **ATEX compliance** and simple pneumatic operation that can also be integrated with electrical signals.

"We wanted to design a hand sized system with few wearing parts that would make it as maintenance free as possible and work with any manufacturers pump, this has been achieved with the Guardian System" *Colin Wreyford - Head of Development*

Currently we are looking for distributors and Agents throughout the World to promote and market the Guardian system. If it is of interest to you or your business please call us on the details below.

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