Press enquiries to: Sharon Lindsay. **Tel:** 07928 809035

Email: sharon@sharonlindsaypr.co.uk

SICK'S FTMG 4-IN1 FLOW METER PROMISES BIG ENERGY SAVINGS

SICK's innovative new FTMg thermal flow meter simultaneously measures gas flow, pressure and temperature then computes the combined values to detect leaks in pneumatic systems and monitor compressed air energy consumption in real time.

The SICK FTMg Thermal Flow Meter's on-board algorithm uses the flow, pressure and temperature values to calculate the energy of gas passing through the flow channel in kWh. By comparing to the electrical power demand of the compressor, the SICK FTMg can accurately detect changes in the efficiency of a pneumatic system. As a result, the compact and easy-to-use device promises major benefits for improved process efficiency of machines, as well as to achieve plant-wide savings as part of ISO EN 50001-compliant energy management systems.

"Compressed air loss is a major source of wasted energy in most production plants, quite easily amounting for more air lost through leakages than is used for the process itself," says Darren Pratt, SICK's UK Product Manager for Industrial Instrumentation. "Undetected leaks in pneumatic systems can lead to unexpected machine failures, or to gradual degradation in product quality.

"SICK's first gas flow meter for factory automation has entered the market with an exciting innovation that breaks new ground, especially for minimising the operating costs associated with producing, supplying and distributing compressed air.

"This neat little sensor has a real-time graphic display for trending of measured values on the device itself. At the same time, it opens up transparency for production and maintenance teams to monitor, trend and record the operating efficiency and energy consumption of their pneumatic systems through industrial control, IT or cloud-based systems. Using the FTMg, targeted

interventions can be planned to identify and eliminate leaks in machine cell compressed air systems, for example."

Universal Connectivity

Whether working on a computer, mobile device or through a controller, using the SICK FTMg keeps production, maintenance teams and energy managers immediately informed of the system performance.

The FTMg industry variant supports integration into a PLC control system e.g. via 4-20mA or switch outputs, as well as via IO-Link, through which it can also be connected with higher-level fieldbus gateways such as the SICK SIG200 Profinet Sensor Integration Gateway or with the cloud via devices like the SICK Telematic Data Collector (TDC) Alerts and dashboards can be sent directly from these devices to smart phones or tablets.

The Power over Ethernet (PoE) version is designed for connection into plant-based condition monitoring systems, higher automation levels such as ERP systems and cloud-based applications via OPC UA and MQTT interfaces. Its integrated web server enables simple operation by computer and standard browser.

Reliable and Accurate

The SICK FTMg, which stands for Flow Thermal Meter for gases, is suitable for use with inert gases such as argon, helium, carbon dioxide and nitrogen, as well as compressed air. It uses the dynamic calorimetric principle for precision measurement to reliably detect even the smallest changes. Its straight measurement channel design ensures highly accurate measurement with almost zero pressure loss as gases flow through the sensor during measurement.

The SICK FTMg comes in three pipe diameters and process connections. On each, the easy-to-read crystal-clear OLED colour display shows measured values, together with a simple trend graphic, enabling quick and accurate interpretation of measured data.

The multifunctional FTMg flow sensor is able to output up to eight process parameters in total: flow speed, flow volume, cumulative volume, mass flow, cumulative mass, energy consumption, current pressure and temperature.

For more information please contact Andrea Hornby on 01727 831121 or email andrea.hornby@sick.co.uk.

www.sick.co.uk

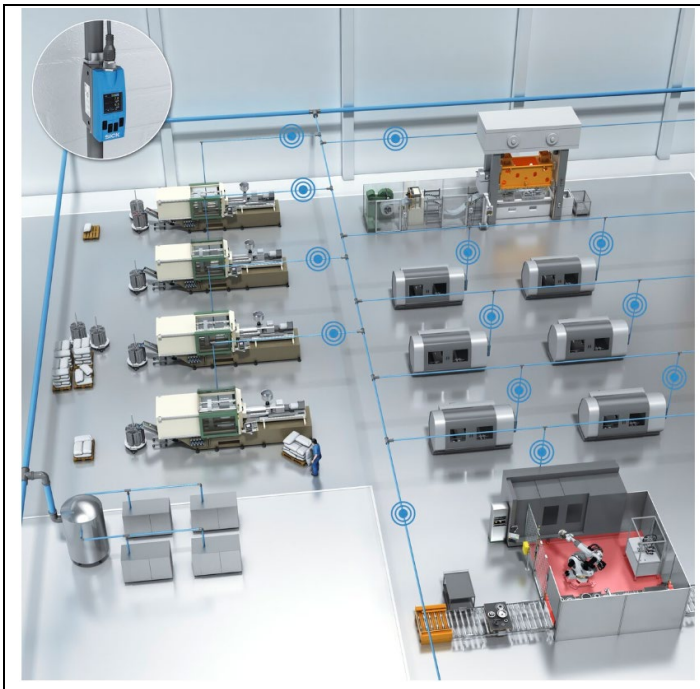
Images

The SICK FTMg flow sensor measures flow, pressure and temperature simultaneously

Leakage		Leakage rate per year	Cost per year
Surface Area	Hole diameter	at 6 bar (rel.)	
·	0.5 mm	8,410 Nm^3	£124.41
•	1 mm	33,112 Nm^3	£489.81
•	1.5 mm	74,635 Nm^3	£1104.03
•	2 mm	132,976 Nm^3	£1967.07
●	3 mm	299,066 Nm^3	£4423.08

Assumptions: 8,760 operating hours (24 h/365 days)
Compressed air costs of 1.48p/Nm^3

Chart demonstrating the potential for savings based on costs of undetected compressed air leaks.



The SICK FTMg flow sensor can be positioned to identify leaks based on pressure losses, thereby minimising the operating costs for producing, supplying and distributing compressed air.

-ends -

Press Enquiries to:

Sharon Lindsay, Sharon Lindsay Communications. Email sharon@sharonlindsaypr.co.uk

Tel: 07928 809035;

Issued on behalf of: SICK (UK) LTD, Waldkirch House, 39 Hedley Road, St Albans, Hertfordshire, AL1 5BN.