

SMC Gap Checker Sensor for High Precision Workpiece Detection

The recently launched ISA3 series from SMC offers several significant benefits to customers including; lowered air consumption, increased precision and reduced cabling work. Today, the range of applications for the new gap checker sensors is expanding to cover faster, more precise processes in quality control and in-process quality assurance.

Two-line, digital display with three colours

For improved visibility, the gap checker sensor has a two-line, three colour digital display. Brian Abbott, SMC Product Manager explains that thanks to this feature, readings are possible from some distance or at a brief glance. "The ISA3 sensor is designed for quick and simple installation as well as easy operation. It's extremely robust and maintenance-friendly".

The switching points can be adjusted in just three easy steps. "A button lock function also prevents settings from being unintentionally changed. Customers utilising the SMC Gap Checker have realised an increase in their process productivity and safety" says Brian.

The sensors of the ISA3 series also scores points with its compact dimensions and reduced weight. They are particularly suitable in confined assembly conditions.

Query distance up to 0.01 mm

The ISA3 series covers three types of catch sensors: A new addition to the existing type G, with a query distance of 0.02 to 0.15 mm, and type H, with a query distance of 0.05 to 0.3 mm; SMC now offers type F with a nominal range of 0.01 to 0.03 mm. "This expansion creates the opportunity to introduce the ISA3 gap checker sensors in processes with very short measuring distances, or those where higher precision is required".

An added feature to the new ISA3 sensors is the connection cable, allowing several sensors to be linked to a centralized lead wire. In addition, the air connection can be on either the right or left side of the control unit. Both serve to reduce the wiring work and features more flexibility in the design.

Less weight – hardly any noise

In their development work, SMC engineers continue to consistently pursue the goal of increasing cost-effectiveness and lower energy use. This can also be seen on the ISA3 series gap checker sensors, where air consumption was reduced by about 60% compared to the previous ISA2 series. "This doesn't just save operating costs, it also helps the environment." concludes Brian.