RS Components introduces range of contactless connectors delivering major benefits for industrial machinery

TE Connectivity ARISO connectors deliver affordable and flexible contactless data and power connectivity for industrial automation and control applications

18 March 2016, Johannesburg, South Africa - RS Components (RS), the trading brand of Electrocomponents plc (LSE:ECM), the global distributor for engineers, has introduced a new range of ARISO contactless connectors from TE Connectivity. The ARISO connectivity platform is a hybrid interconnection system that is based on contactless power and data technology and enables easy connectivity over a short distance without physical connection. The connectivity system brings many advantages such as design flexibility and reduced maintenance costs in industrial and control applications such as robotics, centrifuges, in-line inspection, milling machines, high-end printers, rotating tables and moulding machines.

Unlike traditional mechanical cable connectors, ARISO connectors use an inductive magnetic coupling system between transmitter and receiver (M30 x 80mm sized) and thereby do not require physical contact. The connectors are able to transfer data and power not only through air, but also across many different materials as well as fluids such as oil and water. They will also automatically switch off in the event of a foreign metal object coming between the transmitter and receiver.

Designed to replace complex and expensive harness constructions and slip rings to enable connectivity where connections have previously not been possible, the ARISO series comprises five contactless male and female connectors that come with enhanced design specifications. There is also interchangeable dynamic pairing between the ARISO couplers and they are capable of connecting with traditional systems via standard M12 cables.

The system's use of dynamic tuning means that the connectors are able to maintain a connection and avoid misalignment problems caused by shifts in movement. This freedom of movement includes 360° rotation, angular motion or a variable degree of distance between connectors. This results in a connection that is highly resistant to vibration, as well as making the devices ideal for on-the-fly connections, such as when connecting remote I/O or sensors on

moving machine parts.

The connectors are also designed to provide safe and reliable connectivity even in harsh environments via high vibration resistance and fully sealed couplers, which also means significantly reduced maintenance costs. This makes them highly suitable for conditions that are wet, dusty or contain debris and pollutants. The connectors also provide a range of protection features including reverse polarity protection for power and data transmission, protection against over heating, and IP67 ingress protection.

Overall, with none of the wear and tear due to friction caused by traditional contacts, these contactless connectors have a very high service life. This offers a whole new range of deployment opportunities providing increased design flexibility and cost savings.

The TE Connectivity ARISO contactless connector range is now in stock at RS Components for immediate shipping. RS is the number one high service distributor for TE Connectivity products in EMEA and across major markets in the Asia Pacific region.