



Easy Integration with SICK's Tamper-proof STR1 Safety Transponder

SICK has launched the STR1, a Transponder Safety Switch that uses non-contact RFID technology to provide highly-reliable and tamper-proof personnel protection on removable guards to PLe/SIL3, with easy installation and safety system integration.

The SICK STR1 can be installed individually or in series with up to 30 units, using T-junctions or the SICK Flexi Loop safety sensor cascade whilst still achieving PLe (EN ISO 13849) and SIL3 (IEC62061).

“Two big challenges with non-contact safety switches on removable guards are the mounting requirements and their susceptibility to tampering,” explains SICK’s UK Safety Specialist and FS Engineer (TUV Rheinland #13017/16) Dr Martin Kidman. “Large door offset tolerances and high levels of shock and vibration cause reliability issues. Additionally, the temptation for operators to defeat the guard because of piece-working or a lack of special modes of operation, for example, makes manipulation a huge problem.”

To allow for exceptional flexibility during mounting, the STR1 has three different actuators, each of which can be actuated from four different mounting directions. With its compact VISTAL™ housing, The STR1 offers outstanding mechanical stability, high EMC immunity and an IP67 enclosure, to ensure excellent reliability in harsh environments.

“The SICK STR1 is highly resistant to tampering whether through accidental damage or deliberate attempts to manipulate or ‘defeat’ a switch for operational convenience, by offering a choice of universal, unique or permanent coding options and unidirectional mounting screws. So high levels of machine availability are ensured,” adds Dr Kidman

“The STR1 continually self-monitors its semiconductor Output Safety Switching Devices (OSSDs) to detect failures and has LED status indicators for fast diagnostics. Three coding types are available: universally-, unique-, and individually -coded. For applications that are susceptible to manipulation,

uniquely- and permanently-coded variants can be used dependant on the risk. With high levels of resistance to manipulation, the requirements of EN ISO 14119 can be fulfilled.

The versatility of the SICK STR1 Transponder Safety Switch makes it exceptionally easy to integrate. As it can be applied almost universally, it can reduce stocks of safety switches to a minimum.

For more information on the SICK STR1 Transponder Safety Switch and other SICK safety equipment, please contact Andrea Hornby on 01727 831121 or email andrea.hornby@sick.co.uk.

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