Overview

The RSS16 incorporates the RFID based safety sensor in a body type which matches our popular AZ16 electro-mechanical keyed interlock switch and BNS16 coded magnet sensor.

The RSS16 uses radio frequency identification (RFID) to detect the actuator and indicate a closed guard. This non-contact operating principle limits wear on components and tolerates misalignments.

Optional individual coding makes it difficult to bypass the RSS16: The basic version of the sensor responds to any RSS16 target actuator; The "I1" version only accepts the coded ID number of the specific target actuator which is taught in during the first start-up; The "I2" version allows the teach-in process to be repeated, allowing replacement of a lost or damaged actuator. The I1 and I2 options also fulfill the High level coding requirements of ISO 14119.

The RSS16 also features all of the diagnostic advantages of our electronic safety sensors. With continuous internal function tests and monitoring of the safety outputs, RSS16 sensors can be wired in series without detriment to the safety level. The RSS16 comes standard with diagnostic LED’s on the front of the sensor housing to indicate various errors, such as misalignment, and door open/closed signalling. For more advanced diagnostic indication the RSS 16-SD (serial diagnostic) version is available.

There are several wiring options for the RSS16. It is available with a prewired M12 quick connector from the bottom. The screw terminal or cage clamp versions have 4 conduit openings, to allow for mounting flexibility.

The RSS16 sensors meet stringent North American and European Standards, are cULus and CE approved, and can be used in the highest level of machine safety circuits, PLe to ISO13849 and SIL 3 to IEC61508.

Magnetic latching version

The RSS16 is available in a magnetic latching version with special actuator. The sensor has two magnets integrated into the sensor head.

The special actuator (RST-1-R) is an assembly of a mounting plate and stainless steel anchor plates with integrated elastomer damping elements. This allows the magnetic latching version of the RSS16 to be used as a door stop for small to medium sized guard doors.

When actuated from front (label side) or back, the latching force is approx. 9 lbs (40 N). Latching force for the top side is approx. 13 lbs (60 N).

Requires “R” versions of both switch and actuator.

Applications

- Material handling systems
- Packaging machinery
- Chemical processing equipment
- Robot cells
- Folding or brake presses
- Filter presses
- Punching machines
- Printing machines
- Injection molding
- Palletizers
- Packaging equipment

Available Literature

Electronic Safety Sensors and Solenoid Interlocks Catalog

Ordering Details

RSS16□□□□□

1 Actuator Coding
   Blank Standard version
   I1 Individual coding (single)
   I2 Individual coding (multiple)

2 Outputs
   D Diagnostic output
   SD Serial Diagnostic

3 Magnetic Latching
   Blank No latching
   R With magnetic latching

4 Wiring connections
   ST8H M12 connector, bottom
   CC Cage Clamp terminals
   SK Screw terminals

Available Literature

Contact

Schmersal USA
15 Skyline Drive
Hawthorne, NY 10532
Tel: 914-347-4775
Fax: 914-347-1567
E-mail: salesusa@schmersal.com

Schmersal Canada
29 Centennial Road, Unit 1
Orangeville ON L9W 1R1
Tel: 519-307-7540
Fax: 519-307-7543
E-mail: salescanada@schmersal.com