

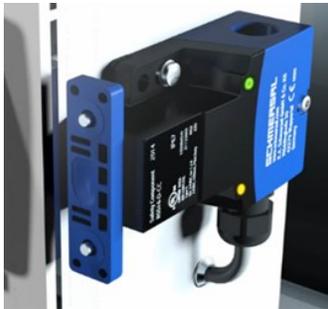
SCHMERSAL Tech Briefs:

RSS16 RFID Electronic Safety Sensor



Features

Mounting options



Mounting actuator to Plexiglas door



Sliding guard, approach from side



Magnetic latching option

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 mis-alignment, and door open/closed signaling. 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 ISO13849-1 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

RSS16①-②-③-④

- 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

Regularly stocked:

RSS16-D-ST8H	RSS16-D-R-ST8H
RSS16-D-SK	RSS16-D-R-SK
RSS16-I2-D-ST8H	RSS16-I2-D-R-ST8H
RSS16-SD-ST8H	RSS16-SD-R-ST8H

Accessories

Actuator

RST16-1	Standard Actuator
RST16-1-R	Actuator with latching

Connector cables

M12, 8 pole connectors	
101210560	5 m length (IP69K)
103001389	10 m length (IP69K)

103011411	2.5 m length (IP67)
103011412	5 m length (IP67)
103011413	10 m length (IP67)

Compatible Safety Controllers

SRB-E-201LC	SRB-E-322ST
SRB-E-201ST	SRB-E-402ST
SRB-E-301ST	SRB-301MC
SRB-E-212ST	

SD Interface Gateways

SD-I-DP-V0-2	PROFIBUS Gateway
SD-I-U	Universal gateway
CSS-Y-8P	Series wiring Y adapter
CSS-Y-A-8P	Series ender

Bold part numbers are regularly stocked

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