RSS16 RFID Electronic Safety Sensor

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.
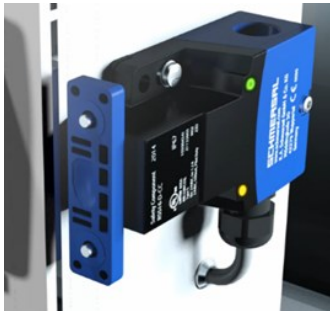
The RSS16 also features all of the diagnostic advantages of our electronic safety sensors. With continuous internal function tests and monitoring of the safety outputs, RSS16 sensors can be wired in series without detriment to the safety level. The RSS16 comes standard with diagnostic LED's on the front 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.

Features

Mounting options

Mounting actuator to Plexiglas door

Sliding guard, approach from side

Magnetic latching option

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

RSS16 Brochure
4 pages

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
A-K8P-M12-S-G-2.5M-BK-1-X-A-2
    IP67 cable, 2.5 meter length
A-K8P-M12-S-G-5M-BK-1-X-A-2
    IP67 cable, 5 meter length
A-K8P-M12-S-G-10M-BK-1-X-A-2
    IP67 cable, 10 meter length

Compatible Safety Controllers
SRB-301MA	**SRB-301MC**
SRB-301ST-24	**SRB-301LCB**
SRB-504ST	SRB-211ST
SRB-324ST	SRB-031MC

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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