

Magnetic Switch

JSNY7



Approvals:



Application:

Gates
Hatches
Position control

Features

Small size
IP 67

Switch operation description

The magnetic switch is designed to operate in dirty industrial environments and is certified to the highest level of safety regulation when working together with a suitable ABB Jokab Safety safety relay or Safety-PLC Pluto. The magnetic switch is small and resistant to both dirt and water, and has no dust collecting cavities making it useful in environments where hygiene is paramount. The small size of the switch makes it easy to position and hide on gates and hatches.

The magnetic switch has a long working life since no mechanical contact is made during operation.

Contacts

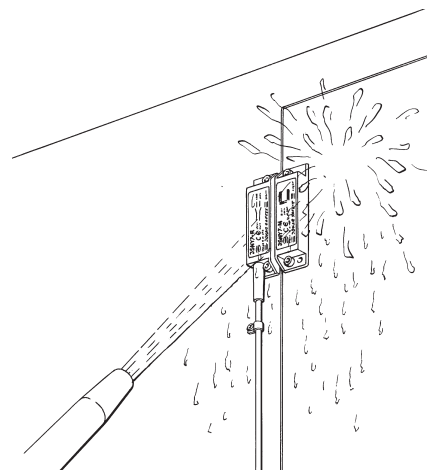
The magnetic switch has one closing and one opening contact. Both contacts have to be monitored. The contacts may be monitored by either the RT9 safety relay or other suitable relays in the new RT-series, i.e. RT6, RT9 or Safety PLC Pluto.

Protection from unauthorised or incidental access

To avoid unauthorised operation of the JSNY7 switch it is only possible to actuate the JSNY7R with the coded magnet, JSNY7M. Other magnets, screwdrivers and tools have no effect on the switch contacts.

Safety level

The JSNY7 is approved to the highest level of safety regulations, PL e according to EN ISO 13849-1 together with safety relay in the RT-series or Pluto PLC.



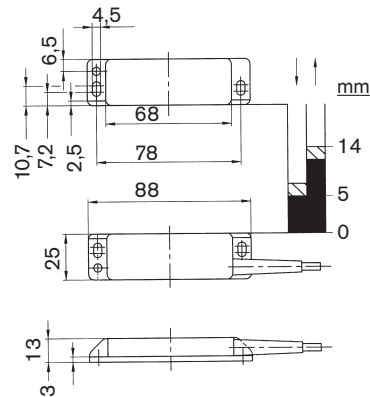
JSNY7 is resistant to both dirt and water.

Regulations and Standards

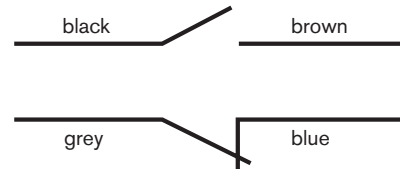
The JSNY7 is designed and approved in accordance with appropriate directives and standards. See technical data.

Technical data – JSNY7	
Manufacturer	ABB AB/Jokab Safety, Sweden
Article number/ordering data	JSNY7R-3 Magnetic switch 3 m cable 2TLJ020023R0000 JSNY7R-6 Magnetic switch 6 m cable 2TLJ020023R0100 JSNY7R-10 Magnetic switch 10 m cable 2TLJ020023R0200 JSNY7M Magnetic switch 2TLJ020024R0000
Colour	Black
Enclosure/Cover	PA 6 (UL94-VO)
Supply voltage max	30 VDC
Switch current max	100 mA
Max switching frequency	1 Hz
Mechanical life	3 x 10 ⁸ switch operations, depending on load
Operating temperature range	-5°C to +70°C (moveable) -20°C to +70°C (fixed)
Connection	Cable ø4.5, 4x0.25 mm ² , 3 meter ; PVC (other lengths upon request)
Switching point	Min. switch-on point 5 mm Max. switch-off point 14 mm
Weight	Coded magnet: 32 g Sensor with 3m cable: 133 g
Protection class	IP67

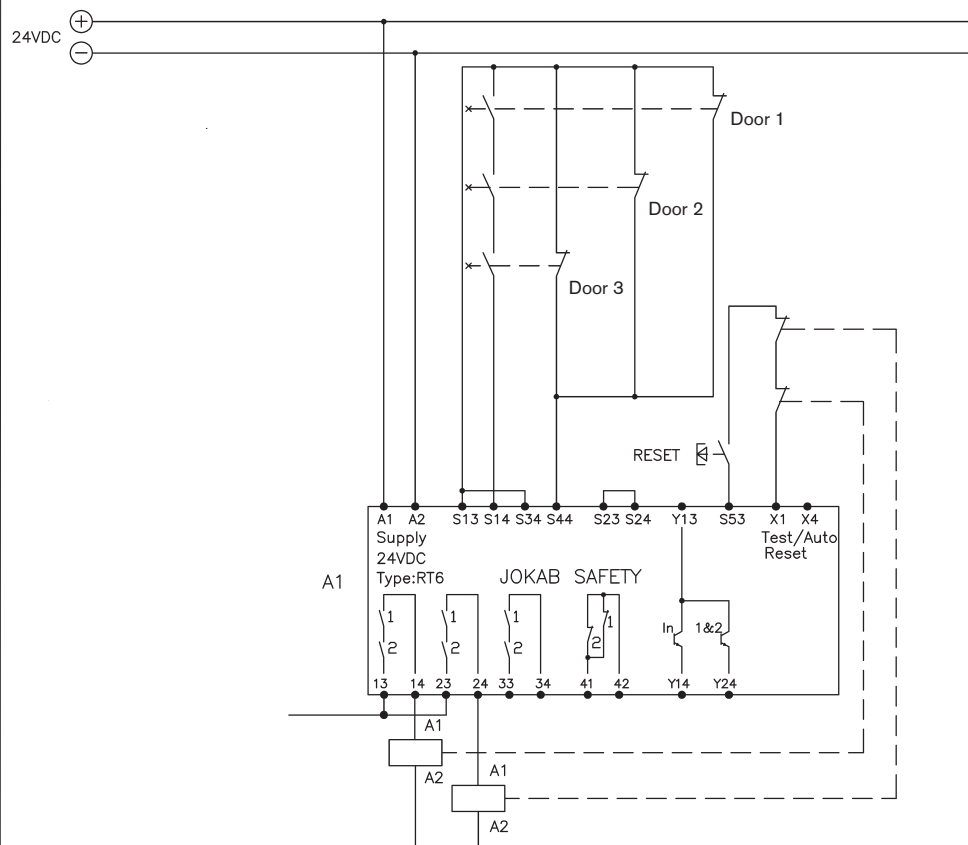
B_{10d}	JSNY 7R-3: 3,00×10 ⁷ JSNY 7R-6: 3,00×10 ⁷ JSNY 7R-10: 3,00×10 ⁷
Conformity	2006/42/EG EN ISO 12100 1/2, EN 954-1, EN 60204-1, EN ISO 13849-1, EN 1088, GS-ET 15



Electrical connection
Two-channel switching, high safety level.



Electrical connection description - JSNY7



Electrical Connection example

Three JSNY7 connected to RT6 safety relay.

NOTE!

Safety components drawn in released position.

NOTE!

This solution with 3 magnetic switches only complies with category 3 as per EN 954-1/EN ISO 13849-1.

To reach highest level of safety only one magnetic switch should be connected to the safety relay.