



NEW New features 2009

IP69K

Protection degree IP69K for SR series

- Protection degree IP69K according to standard DIN 40050 part 9
- Suitable for use in machineries subjected to intense washings, such as in the food or pharmaceutical industry

NEW New features 2009



Approval UL for SR series

Sensor with actuator code structure

SR BD40AN2-B01F

Sensor housing

SR polymer housing

Contacts (with closed protection)

40 2NC
41 1NO+2NC
42 1NO+1NC

Actuator

B01F complete with SM B01F actuator, actuation distance 5 mm
B02F complete with SM B02F actuator, actuation distance 8 mm

Type of cable or connector

N1 integrated PVC cable, length 1 m
N2 integrated PVC cable, length 2 m
 ...
N10 Integrated PVC cable, length 10 m
M0,1 M12 connector with cable length 0.1 m
LK M8 connector (available with 40 and 42 contacts only)

Single sensor code structure

SR BD40AN2

Sensor housing

SR polymer housing

Contacts (with closed protection)

40 2NC
41 1NO+2NC
42 1NO+1NC

Type of cable or connector

N1 integrated PVC cable, length 1 m
N2 integrated PVC cable, length 2 m
 ...
N10 Integrated PVC cable, length 10 m
M0,1 M12 connector with cable length 0.1 m
LK M8 connector (available with 40 and 42 contacts only)

Actuator code structure

SM B01F

Actuator

B01F actuation distance 5 mm
B02F actuation distance 8 mm

- 1
- 1A
- 1B
- 2
- 2A
- 2B
- 2C
- 2D
- 2E
- 3
- 3A
- 3B
- 3C
- 4
- 4A
- 4B**
- 4C
- 4D
- 4E
- 4F
- 4G
- 4H
- 5
- 6

4B Safety coded magnetic sensor SR B series



Main data

- Long life, no mechanical wear
- Stainless steel fixing plates
- Output contacts: 2NC, 1NO+2NC or 1NO+1NC
- Insensitive to dirt
- Protection degree IP67 and IP69K
- Coded actuator
- Polymer housing
- Versions with M8 or M12 connector

Markings and quality marks:



Approval UL:



E131787

In conformity with requirements requested by:

Low Voltage Directive 2006/95/EC
Machinery Directive 2006/42/EC
Electromagnetic Compatibility 2004/108/EC.

Technical data

Housing

Made of glass-reinforced polymer, self-extinguishing, shock-proof thermoplastic resin. Version with integrated cable with 4 or 6 x 0.25 mm² wires length 2 m, other lengths on request.

Versions with M8 or M12 connector

Protection degree: IP67 according to EN 60529
IP69K according to DIN 40050

Dimensions L x P x H: 88 x 25 x 13 mm

General data

Safety parameters: see page 6/32
Ambient temperature: -20°C ... +80°C
Vibrations holding: 10 gn (10...500 Hz) according to IEC 60069-2-6
Shock holding: 30 gn (11 ms) according to IEC 60068-2-27
Pollution degree: 3
Max screw driving torque: 0,8 ... 2 Nm

In conformity with standards:

IEC 60947-1, EN 60947-1, IEC 60947-5-1, EN 60947-5-1, EN 60947-5-2, EN 60947-5-3 (in connection with safety module), EN 1088, EN ISO 14119, EN ISO 12100-1, EN ISO 12100-2, EN ISO 13849-1, EN ISO 13849-2, IEC 60204-1, EN 60204-1, IEC 60529, EN 60529.

Approvals:

UL 508

Actuating data

Assured operating distance S_{ao} : 5 mm with actuator SM B01F
Assured release distance S_{ar} : 15 mm with actuator SM B01F
Assured operating distance S_{ao} : 8 mm with actuator SM B02F
Assured release distance S_{ar} : 20 mm with actuator SM B02F
Repeat accuracy: $\leq 10\%$
Frequency of operating cycles: 150 Hz
Distance between two sensors: Min. 50 mm

Electrical data

Rated insulation voltage U_i : 120 Vac (with cable)
60 Vac / 75 Vdc (with M8 connector)
120 Vac (with 4 poles M12 connector)
30 Vac / 36 Vdc (with 6 poles M12 connector)
Thermal current I_{th} : 0.5 A
Max switching load: 6 W (resistive load)
Rated operational voltage (U_o): 24 Vac/DC
Rated operational current (I_o): 0.5 A (resistive load)
Protection fuse: 0.5 A, type F
Electrical endurance: 1 million operations cycles

Connection with safety modules with personnel protection function:

Connection with safety modules CS AR-08; CS AR-05; CS AR-06; CS AT-0; CS AT-1; CS AT-2

The sensor connected with the safety module can be classified as device for control circuit up to PDF-M (EN 60947-5-3). The system can be used in safety circuits up to category 4 according to EN 954-1.

Data type approved by UL

Utilization categories: 24 Vdc, 0.25 A (resistive load)

Data of the housing type 1, 4X "indoor use only", 12

Accessory of series CS.

In conformity with standard: UL 508

Please contact our technical service for the list of approved products.