

Product No: 101057175

SCHMERSAL ENCLOSED MAGNETIC REEDSWITCH BN 31-RZ

Note: Instead of nuts, a mounting clamp can be provided.



General Information

Brand	SCHMERSAL
Cable Note	All indications including the conductor ferrules.
Coding Level According to EN ISO 14119	Low
EAN	4030660000000
eCl@ss Number, Version 11.0	27-27-06-01
eCl@ss Number, Version 9.0	27-27-06-01
ETIM 6.0	EC000127
ETIM 7.0	EC000030
Housing Construction Form	Rectangular
No. of Beams	136
Product Type	Magnetic Reed Switch
Protection Class of Operating Resource	3
Recommended Actuator	BPS 36-2
Recommended Safety Switchgear	SRB-E-301ST SRB-E-201LC
Version	Round Mushroom button
Working Principle	Magnetic drive

Technical Attributes

No. of Auxiliary Contacts	1
Switchover Time (ms)	35
Actuating Torque (Nm)	0.15
Actuator Type to EN 50047	B
Assured "OFF" Switching Distance (mm)	18
Assured "ON" Switching Distance (mm)	8
Bounce Duration	Bounce duration in accordance with actuating speed

Coding Type	Universal coding
Connector Type	Connector plug M12, 4-pole
Contact Material	Silver
Design of Control Element	p-type
Detection Ability for Test Bodies @ V = 1.6 m/s	35 mm
Height of The Protection Field (mm)	1930
Integral System Diagnostics Status	Yes
Latching Force (N)	20
Maximum Actuating Speed (m/s)	1
Maximum Bounce Duration (ms)	3
Maximum Cable Cross Section (mm ²)	2.5
Maximum Electrical Power Consumption (W)	10
Maximum Fuse Rating	6 A gG D-fuse
Maximum Holding Force (N)	2600
Maximum Leakage Current (mA)	1.5
Maximum No-load Supply Current (mA)	600
Maximum Output Current (A)	0.25
Maximum Permissible Installation Altitude Above Sea Level (m)	2000
Maximum Protection Field (mm)	10000
Maximum Reaction Time (ms)	10
Maximum Switching Capacity (W)	10
Maximum Switching Frequency (Hz)	5
Maximum Switching Voltage DC (V)	100
Minimum Actuating Force (N)	3
Minimum Actuating Speed (mm/min)	1
Minimum Cable Cross Section (mm ²)	0.75
Minimum Mechanical Life	10000000 Operations
Minimum Positive Break Force (N)	50
Minimum Protection Field (mm)	3000
No. of Actuating Directions	1
No. of Cable Wires	4

No. of Normally-open Contacts	1
No. of Safety Contacts	2
Overvoltage Category	3
Positive Break Travel (mm)	2
Rated Control Voltage AC/DC (V)	24
Rated Control Voltage DC (V)	24
Rated Impulse Withstand Voltage (kV)	6
Rated Insulation Voltage (V)	500
Rated Operating Current (mA)	600
Rated Short-circuit Current (A)	1000
Resistance to Shock (g/ms)	30 / 11
Switching Element	Opener (NC)
Switching Principle	Slow action
Switchover Time	Switchover time in accordance with actuating speed
Terminal Type	Screw terminals M20 x 1.5
Tolerance	10%
Utilisation Category	AC-15
Utilisation Category AC-15	230 VAC
Utilisation Category DC-13	2.5 A, 24 VDC
Wavelength of The Sensor (nm)	850

Physical Attributes

Active Area	Plastic
Actuator Type	Offset roller lever
Cable Entry	Without cable gland
Colour of The Front Ring	Silver
Design	Angled
Direction of Motion	Head-on to the active surface
Enclosure Coating Material	Painted
Enclosure Material	Glass-fibre, reinforced thermoplastic

Front Ring Material	Aluminium
Gross Weight (g)	335
Installation Conditions	Quasi-flush
Lever Material	Metal film
Material of The Cable Mantle	LiYY
Maximum Ambient Temperature (°C)	75
Maximum Relative Humidity	93%
Minimum Ambient Temperature (°C)	-30
Mounting Type	Mounting flange ELM
Net Weight (g)	35
Recipient Terminal Connector Type	Connector plug M12, 8-pole
Roller Material	Plastic
Sealing Type	Form seals / Lip gaskets / Membrane
Storage Temperature (°C)	-25 to 70
Wire Cross-Section	23 AWG

Dimensions

Cable Length (m)	5
Depth (mm)	60
Height (mm)	29
Sensor Height (mm)	1251
Sensor Length (mm)	30
Spacing (mm)	80 x 80
Width (mm)	170

Protection & Standards

Degree of Protection	IP67
Pollution Degree	3
Standards	EN IEC 60947-5-1 / EN IEC 60947-1

Resources

Product catalogue (Flipbook)	Download from here
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