

Product No: 101055844

SCHMERSAL ENCLOSED MAGNETIC REEDSWITCH BN 80-10Z

Note: Actuation from the side of the plunger should be avoided, since this reduces the mechanical life of the position switch.



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	27-27-01-01
eCl@ss Number, Version 9.0	27-27-01-01
ETIM 6.0	EC000030
ETIM 7.0	EC000030
Housing Construction Form	Cylinder thread
No. of Beams	176
Product Type	Magnetic Reed Switch
Protection Class of Operating Resource	3
Recommended Actuator	BPS 33S
Recommended Safety Switchgear	SRB-E 301
Version	Embeddable button - Front plate mounting
Working Principle	Magnetic drive

Technical Attributes

No. of Auxiliary Contacts	1
Switchover Time (ms)	5.5
Actuating Torque (Nm)	0.26
Actuator Type to EN 50047	C
Assured "OFF" Switching Distance (mm)	17
Assured "ON" Switching Distance (mm)	7
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	14 mm
Height of The Protection Field (mm)	650
Integral System Diagnostics Status	Yes
Latching Force (N)	20
Maximum Actuating Speed (m/s)	1
Maximum Bounce Duration (ms)	0.15
Maximum Cable Cross Section (mm ²)	2.5
Maximum Electrical Power Consumption (W)	8.5
Maximum Fuse Rating	10 A gG D-fuse
Maximum Holding Force (N)	2600
Maximum Leakage Current (mA)	0.5
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)	7000
Maximum Reaction Time (ms)	10
Maximum Switching Capacity (W)	10
Maximum Switching Current (A)	0.01
Maximum Switching Frequency (Hz)	5
Maximum Switching Voltage AC (V)	250
Minimum Actuating Force (N)	3
Minimum Actuating Speed (mm/min)	60
Minimum Cable Cross Section (mm ²)	0.5
Minimum Mechanical Life	10000000 Operations
Minimum Positive Break Force (N)	50
Minimum Protection Field (mm)	300
No. of Actuating Directions	1

No. of Cable Wires	4
No. of Normally-open Contacts	1
No. of Safety Contacts	1
Overvoltage Category	3
Positive Break Travel (mm)	3.5
Rated Control Voltage DC (V)	24
Rated Impulse Withstand Voltage (kV)	6
Rated Insulation Voltage (V)	400
Rated Operating Current (mA)	12000
Rated Short-circuit Current (A)	1000
Resistance to Shock (g/ms)	30 / 11
Switching Element	Normally open contact (NO)
Switching Principle	Slow action
Switchover Time	Switchover time in accordance with actuating speed
Terminal Type	Cable
Tolerance	10%
Utilisation Category	DC-13 AC-15
Utilisation Category AC-15	25 A, 230 VAC
Utilisation Category DC-13	2.5 A, 24 VDC
Voltage Type	DC
Wavelength of The Sensor (nm)	880

Physical Attributes

Active Area	Plastic
Actuator Type	Angle roller lever
Cable Entry	3 x M20 x 1.5
Colour of The Front Ring	Black
Design	Straight
Direction of Motion	Head-on to the active surface
Enclosure Coating Material	Nickel-plated
Enclosure Material	Glass-fibre, reinforced thermoplastic

Front Ring Material	Aluminium
Gross Weight (g)	30
Installation Conditions	Flush
Lever Material	Metal film
Material of The Cable Mantle	LiYY
Material of The Operators	Plastic
Maximum Ambient Temperature (°C)	80
Maximum Relative Humidity	93%
Minimum Ambient Temperature (°C)	-25
Mounting Type	Can be clipped into standard rail
Net Weight (g)	15.165
Recipient Terminal Connector Type	Connector plug M12, 5-pole
Roller Material	Plastic
Sealing Type	Lip gaskets / Membrane
Storage Temperature (°C)	-25 to 70
Wire Cross-Section	13 AWG

Dimensions

Cable Length (m)	1
Castor Diameter (mm)	9.5
Depth (mm)	60
Height (mm)	72
Sensor Height (mm)	90
Sensor Length (mm)	30
Spacing (mm)	80 x 80
Width (mm)	40

Protection & Standards

Degree of Protection	IP67
Explosion Protection Category	3D 3G
Explosion Protection Zones	22 2
Pollution Degree	3

Standards

EN IEC 60947-5-1 / EN IEC 60947-1

Resources

Product catalogue (Flipbook)

[Download from here](#)
