## Datasheet - BN 80-10Z

Magnetic reed switch / BN 80
区 Preferred typ

|  | - Non-contact principle |
| :---: | :---: |
| QEEHMERSAL | - 1 Reed contakts |
| ${ }_{30}$ | - Long life |
|  | - Flat design |
| (Minor differences between the printed image and the original product may exist!) | - Actuating distance up to 60 mm depending on actuating magnet and version |
|  | - $44 \mathrm{~mm} \times 13 \mathrm{~mm} \times 9 \mathrm{~mm}$ |
|  | - Thermoplastic enclosure |
|  | - Actuating surface marked by protrusion |

## Ordering details

| Product type description | BN 80-10Z |
| :--- | :--- |
| Article number | 101055844 |
| EAN Code | 4030661010021 |
| eCl@ss | $27-27-01-04$ |

Approval

Approval

## Global Properties

Permanent light
BN 80
Standards
Compliance with the Directives (Y/N) $\mathcal{C}$
suitable for elevators (Y/N)
Active principle
Materials

- Material of the housings
- Material of the cable mantle
- Material of the active surface

Housing construction form
Weight
Recommended actuator
-
Yes
No
Magnetic drive

Plastic, glass-fibre reinforced thermoplastic
PVC
Plastic
Block
25
BP 8, BP 10, $2 \times$ BP 10, BP 15, $2 \times$ BP 15, $2 \times$ BP 34, BP 20, BP 31, BP 11, BP 12

## Mechanical data

| Design of electrical connection | Cable |
| :--- | :--- |
| Cable length | 1 |
| Conductors | $2 \times 0,25$ |
| AWG-Number | 23 |
| Mechanical life | 1.000 .000 .000 operations |
| Electrical lifetime | 5.000 .000 operations |

Actuating planes

## Active area

Switch distance

Actuation from side
lateral
0... 32

BP $8=3 \ldots 8 \mathrm{~mm}$
BP $10=6 \ldots 12 \mathrm{~mm}$
$2 \times \mathrm{BP} 10=12 \ldots 20 \mathrm{~mm}$
BP $15=8 \ldots 14 \mathrm{~mm}$
$2 \times \mathrm{BP} 15=12 \ldots 22 \mathrm{~mm}$
$2 \times \mathrm{BP} 34=12 \ldots 26 \mathrm{~mm}$
BP $20=12 \ldots 24 \mathrm{~mm}$
BP $31=12 \ldots 24 \mathrm{~mm}$
BP $11=22 \ldots 28 \mathrm{~mm}$
BP $12=24 \ldots 32 \mathrm{~mm}$

- notice

Type of actuation
restistance to shock
resistant to vibration
Bounce duration
Latching (Y/N)

Actuating distance up to 32 mm depending on actuating magnet and version
Magnet
15 g , on sine wave oscillation
15 g , on sine wave oscillation
0,5
No

## Ambient conditions

| Ambient temperature | -25 |
| :--- | :---: |
| - Min. environmental temperature | +75 |
| - Max. environmental temperature | IP67 |

## Electrical data

| Design of control element | Opener (NC) |
| :--- | :--- |
| Number of shutters | 1 |
| Number of openers | 0 |
| Switching time - Close | 2 |
| Switching time - Open | - |
| Voltage type | $>450(50)$ |
| Dielectric strength | 250 |
| Switching voltage | $0,5 \mathrm{~A}$ |
| Switching current | 10,8 |

## Outputs

## LED switching conditions display

LED switching conditions display (Y/N)

## ATEX

| Explosion protection categories for gases | None |
| :--- | :--- |
| Explosion protected category for dusts | None |

## Dimensions

Dimensions of the sensor

- Width of sensor44
- Height of sensor ..... 13
- Length of sensor ..... 9
notice

The opening and closing functions depend on the direction of actuation, the actuating magnets and the polarity of the actuating magnets.

Included in delivery

Actuators must be ordered separately.

## Diagram



Note Diagram
$\Theta_{\text {positive break NC contact }}$
(1) active
(1) no active
--_-- Normally-open contact

- ---- Normally-closed contact


## Documents

Declaration of conformity (en) 186 kB, 12.07.2018
Code: __bn_p01_en

Declaration of conformity (de) 102 kB, 08.06.2016
Code: $\qquad$ bn_p01
notice - Switch distance (de) $36 \mathrm{kB}, 07.08 .2009$
Code: s_bnsp01
notice - Switch distance (nl) $39 \mathrm{kB}, 07.08 .2009$
Code: s_bnsp04
notice - Switch distance (en) $42 \mathrm{kB}, 07.08 .2009$
Code: s_bnsp02
notice - Switch distance (fr) $41 \mathrm{kB}, 07.08 .2009$
Code: s_bnsp03
notice - Switch distance (pt) $39 \mathrm{kB}, 07.08 .2009$
Code: s_bnsp10
notice - Switch distance (it) $40 \mathrm{kB}, 07.08 .2009$
Code: s_bnsp05
notice - Switch distance (es) $38 \mathrm{kB}, 07.08 .2009$
Code: s_bnsp09

Images


Dimensional drawing (basic component)


## System components

## Actuator

101059916 - BP 12


- -metal housing
- S-pole marked red
- N-pole marked green
- Suitable for mounting on ferrous material



## 101057533 - BP 11 S

- -metal housing
- S-pole marked red
- Suitable for mounting on ferrous material

101059922 - BP 11

- -metal housing
- S-pole marked red
- N -pole marked green
- Suitable for mounting on ferrous material



## 101057521 - BP 31 S

- thermoplastic enclosure
- S-pole marked red
- Suitable for mounting on ferrous material with a distance of 20 mm



## 101057530 - BP 31

- thermoplastic enclosure
- S-pole marked red
- N-pole marked green
- Suitable for mounting on ferrous material with a distance of 20 mm


101057541 - BP 20 S

- -metal housing
- S-pole marked red
- Suitable for mounting on ferrous material with a distance of 20 mm


101057549 - BP 20

- -metal housing
- S-pole marked red
- N-pole marked green
- Suitable for mounting on ferrous material with a distance of 20 mm

|  | $101057553-$ BP 34 |
| :--- | :--- |
|  | • thermoplastic enclosure |
|  | - S-pole marked red |
|  | • N-pole marked green |
|  | • Suitable for mounting on ferrous material with a distance of 25 mm |

## 101060163 - BP 15

- thermoplastic enclosure
- N-pole marked green
- S-pole marked red
- Suitable for mounting on ferrous material with a distance of 18 mm


## 101057531 - BP 10

- Unenclosed
- Colour coding of poles by lables

101054816 - BP 8

- Unenclosed
- S-pole marked red

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The data and values have been checked throroughly. Technical modifications and errors excepted.
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