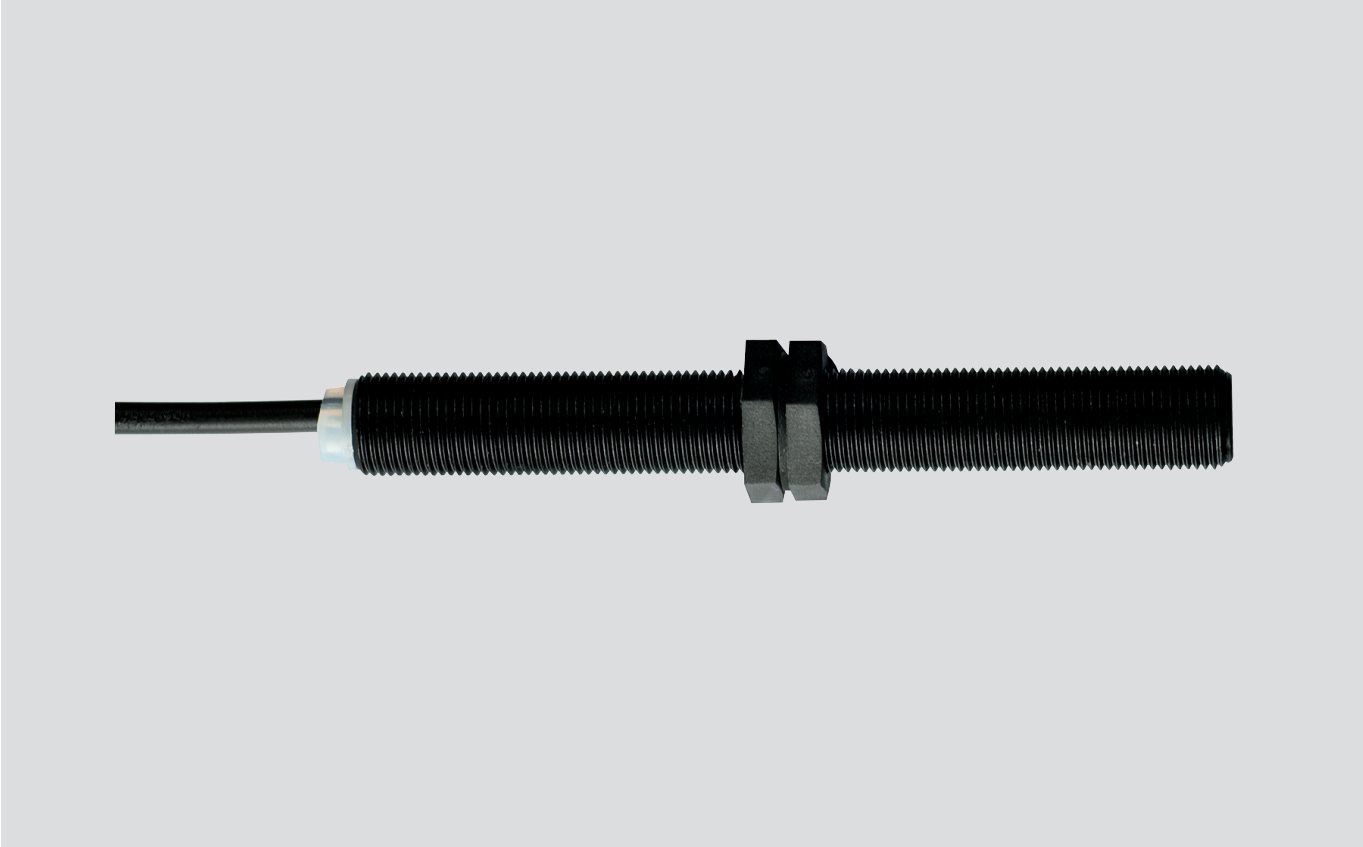
Magnetic reed switch
BN120L or BN120L/V



Possible applications

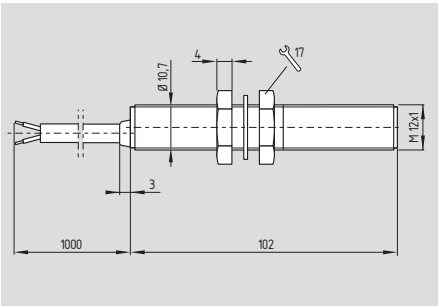
Applications in elevators for:
- Positioning of the car
- Positioning of car doors

Further applications:
- All kinds of non-contact position sensing

BN 120 magnetic reed switches are used in elevator applications to create levelling signals, door zone signals, or switching points for slowing down the car, as well as determining other positions. They are preferably used where noiseless operation is required, or where mechanically actuated limit switches no longer function satisfactorily due to unfavourable operating conditions such as: high or low operating speed, high switching frequency, heavy dust or dirt condition, high humidity or large tolerances in operating distance and where a safety switch is not required. The contacts of the switch are hermetically sealed within in a glass tube. Magnetic reed switches thus are completely protected from dust, humidity and corrosion and offer an extraordinarily high contact reliability. BN 120L is the 100 mm long version of the well-tried BN 120 (71 mm). The longer housing offers more flexibility in mounting arrangements.
Permanent magnets are used to operate magnetic switches. They must be ordered separately. A varied choice of magnets is available to suit different applications and operating distances.

Magnetic reed switch

BN120L or BN120L/V

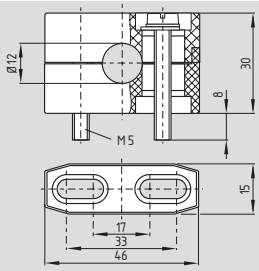


- Non-contact switch
- Contact variants available: NO, NC or latching
- Lateral or frontal actuation
- Lifetime of 10 Mio. operations
- Cylindrical plastic housing with a length of 100 mm
- External thread M 12 x 1,0 and two nuts for fastening
- Prewired with 2m-cable (other lengths available upon request)
- Usable up to +70°C
- Protection class IP 67
- Various actuating magnets available

Technical data

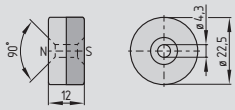
Standards:	IEC/EN 60947-5-2
Design:	cylindrical
Enclosure:	glass-fibre reinforced thermoplastic
Protection class:	IP 67 to EN 60529
Termination:	LiYY 2 x 0,25 mm^2
Cable length:	on request
Operating principle:	magnetic
Switching voltage:	max. 200 VAC/DC
Switching current:	max. 1 A
Switching capacity:	max. 30 VA/W
Dielectric strength:	580 V
Ambient temperature:	– 25 °C ... + 70 °C
Storage temperature:	– 25 °C ... + 70 °C
Mechanical life:	10 million operations
Electrical life:	1 million - 10 million operations, depending on load
Resistance to shocks:	30 g / 11 ms
Resistance to vibrations:	10 ... 55 Hz, amplitude 1 mm
Repeatability:	± 0.25 mm, T = constant
Fixing screwed flange:	M12 x 1
Tightening torque for screw nuts:	SW 17 max. 90 Ncm
Actuator:	see catalogue

System components



Terminal mounting H 12

Actuator



BP 15 plastic encapsulated

More actuating magnets are available off-the- shelf.

Approvals

cULus under preparation CE

Ordering data

BN 120L-①Z (lateral actuation)

N°	Insert	Description
①	01	1 NC contact
	10	1 NO contact
	R	1 latching contact

BN 120L/V-①Z (frontal actuation)

N°	Insert	Description
①	01	1 NC contact
	10	1 NO contact
	R	1 latching contact

Note

Further technical information can be found in the Schmersal catalogues or in the online catalogue on the Internet: **www.schmersal.net.**

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