



Ex magnetic sensors

Ex RC 2580 1W-B-Niro-5m

Material number: 1190153 (Material number old: 22533502)

Features/Options:

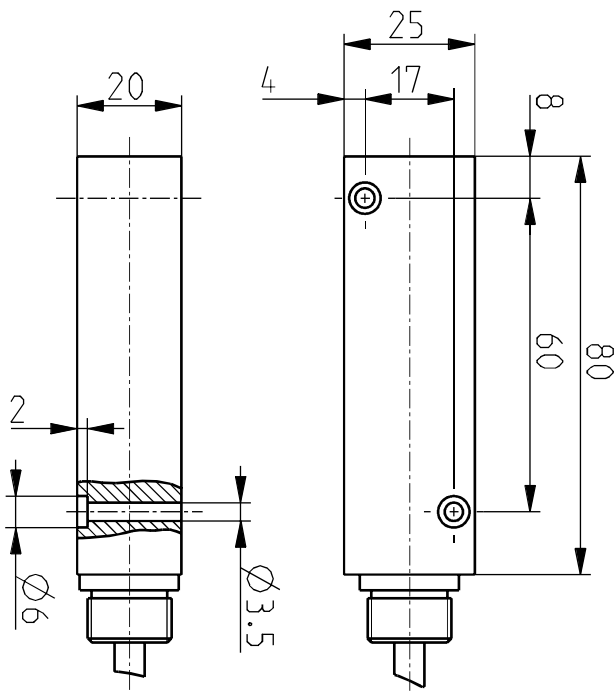
- Ex zone 1 and 21
- Stainless steel enclosure
- 1 Reed contact
- Cold-resistant down to -40 °C

Notes

- The Ex RC 2580 B (with mounting thread) has "double reinforced insulation". These devices do not require earthing.
- The actuator is not included in the delivery of the switches

- All side actuation
- With pre-wired cable
- With mounting thread M16 x 1.5 for cable protection system
- N.B.: Please state required international approvals with your order!

Dimensions



Technical data

Standards	EN 60947-5-1; EN 60079-0; EN 60079-18
Enclosure	Stainless steel 1.4571
Degree of protection	IP 67 (EN 60079-0 + IEC/EN 60529) or IP 69 (IEC/EN 60529) / IP 69K (ISO 20653)
Contact material	Rhodium
Switching system	reed contacts
Switching elements	change-over contact
Connection	pre-wired cable H05VV-F
Cable cross-section	3 x 0.75 mm ²
Cable length	5 m
Switching voltage	250 VAC
Switching current	1 A
Short-circuit current I _k	max. 2 A
Switching capacity	max. 50 W
Utilisation category	AC-12; DC-12
Bounce duration	0,3 ... 0,6 ms
Ambient temperature	-40 °C ... +70 °C
Mechanical life	> 1 million operations
Electrical life	10 ⁶ ... 10 ⁹ operations
Vibration resistance	10 ... 50 g
Impact energy	max. 7 J



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Ex marking

⊕ II 2G Ex mb IIC T6 Gb,
⊕ II 2D Ex mb IIIC T80 °C Db
IECEEx Ex mb IIC T6 Gb
Ex mb IIIC T80 °C Db

Approvals

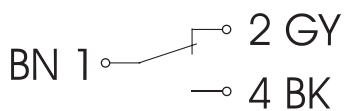
DMT 01 ATEX E 058 X
IECEEx BVS 07.0007 X



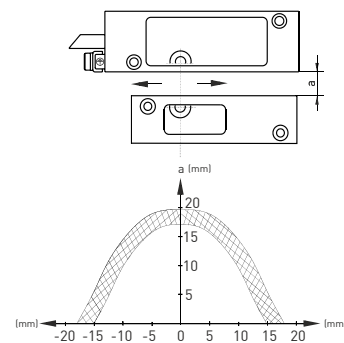
Weight

640 g

Contact diagram



Axial misalignment



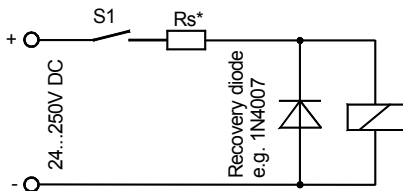
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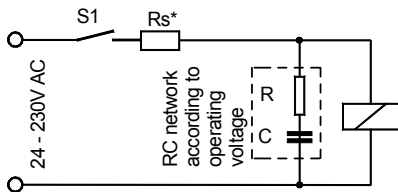
Directive for the protection of reed contacts

1.) Protective circuit for inductive load to DC voltage



coil voltage U_e	serial resistor R_s
24 VDC	27 Ohm / 0.6 W
48 VDC	51 Ohm / 0.6 W

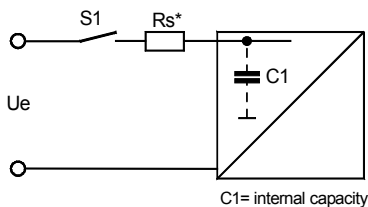
2.) Protective circuit for inductive load to AC voltage



Permitted values for RC elements

coil voltage U_e	capacity C	resistor R	resistor R_s
24 VAC	0,1 μ F	100 Ohm	27 Ohm/0,6 W
48 VAC	0,1 μ F	220 Ohm	75 Ohm/0,6 W
115 VAC	0,1 μ F	330 Ohm	180 Ohm/0,6 W
230 VAC	0,1 μ F	470 Ohm	330 Ohm/0,6 W

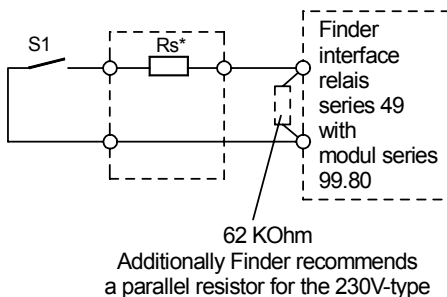
3.) Protective circuit for capacitive load on DC / AC voltage



C1 = internal capacity

coil voltage U_e	serial resistor R_s
24 VDC	27 Ohm / 0.6 W
24 VAC	39 Ohm / 0.6 W
230 VAC	330 Ohm / 0.6 W

*Due to the cable capacitances it is necessary to place the series resistors R_s as near as possible to the reed contact, in general the next terminal point (junction box). For cable length > 5m. $R_s \ll R_L$ or R



With unknown input currents, input capacitances we recommend the interposing of an interface relays. When using Finder relays series 49, in the following you will find some proposals to protect the reed contact against overload.

coil voltage U_e	serial resistor R_s
24 VDC	27 Ohm / 0.6 W
24 VAC	39 Ohm / 0.6 W
230 VAC	330 Ohm / 0.6 W