



Ex position switch with safety function Ex ES 99 R-11 -60°C X Material no.: 1349302

Product features

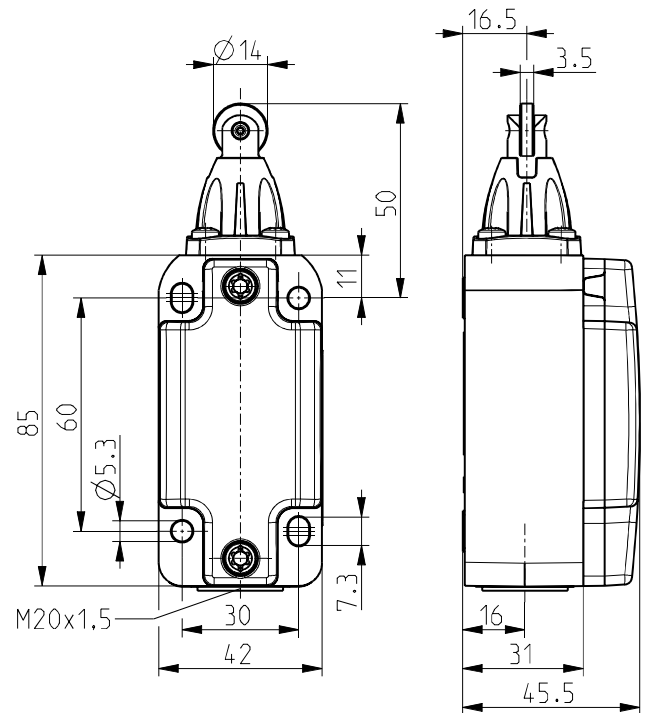


- Ex zone 1 and 21
- Thermoplastic enclosure
- Cold-resistant down to -60 °C
- High degree of protection IP66 / IP67 / IP69
- Design to EN 50041
- Wiring compartment
- Double insulated
- Actuator: Roller plunger R

Notes

- 1 Ex"e" cable gland M20x1.5 included in delivery

Dimensions



Technical data

Applied standards

EN 60947-5-1, EN IEC 60079-0, EN 60079-1, EN IEC 60079-7, EN 60079-31, EN ISO 13849-1, EN ISO 14119

Enclosure

thermoplastic, glass-fibre reinforced, shockproof, self-extinguishing UL 94 V-0

Cover

thermoset, glass-fibre reinforced, shockproof, self-extinguishing UL 94 V-0

Sealing

silicone

Switch type

type 1

Coding level

no coding

Tightening torque

cover screws: 1.5 ... 2 Nm

Degree of protection

IP66 (EN 60079-0 + IEC/EN 60529)

IP67, IP69 (IEC/EN 60529)

IP69K (ISO 20653)

B_{10d} (10 % load)

2 million

T_M

max. 20 years

Contact material

Silver, nickel-plated

Switching system

slow action, positive break NC contacts \ominus

Switching elements

1 NC/1 NO contact, type Zb

Connection

screw connection terminals

Cable cross-section

min. 0.75 mm² (AWG 18), max. 1.5 mm² (AWG 16), incl. conductor ferrules

Cable entry

M20 x 1.5; screwing depth max. 9 mm; use only Ex approved and certified cable glands with min. degree of protection IP66 and suitable for the specified ambient temperature range

Clamping range

7 ... 12 mm

Errors and omissions excepted.



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Technical data (contd.)

Utilisation category
AC-15

Rated operating current I_e
max. 2 A or 4 A

Rated operating voltage U_e
max. 500 VAC, max. 250 VAC for unequal potential

Degree of pollution
3

Mechanical life
> 1 million operations

Temperature class
T6

Ambient temperature
-60 °C ... +55 °C max. 4 A, +60 °C max. 2 A

Impact energy
max. 7 J down to -40 °C, max. 4 J down to -60 °C

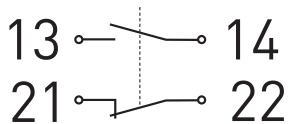
Short-circuit protection
2 A / 4 A gG/gN fuse

Ex marking
Ⓜ II 2G Ex db eb IIC T6 Gb,
Ⓜ II 2D Ex tb IIIC T80 °C Db
IECEX Ex db eb IIC T6 Gb,
Ex tb IIIC T80 °C Db

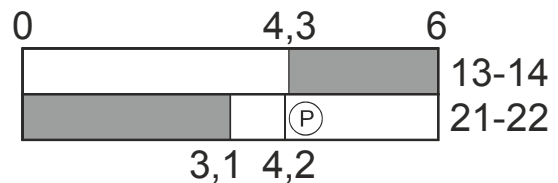
Approvals
BVS 16 ATEX E113 X
IECEX BVS 16.0076X

Weight
168 g

Contact diagram



Switching diagram



Ⓟ Positive break travel/angle