



Ex position switch Ex ES 97 TTK-11 -60°C Material no.: 1451424

Product features

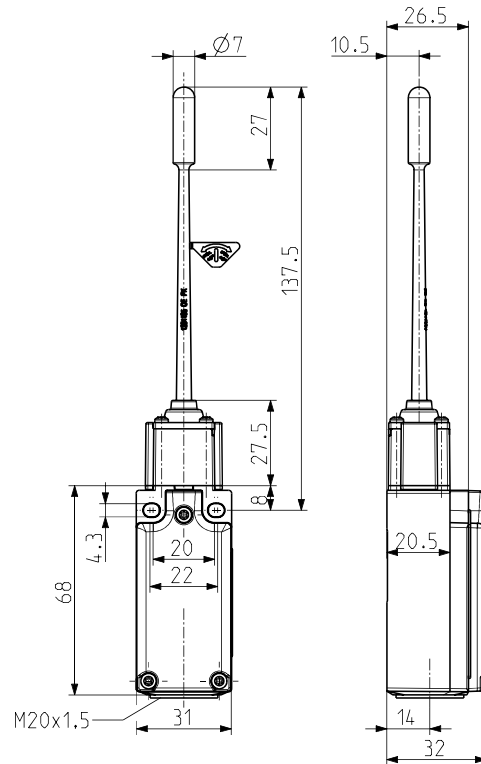


- Ex zone 1 and 21
- Thermoplastic enclosure
- Cold-resistant down to -60 °C, return of TTK spring rod actuator is restricted at temperatures < -20 °C
- High degree of protection IP66 / IP67 / IP69
- Design to EN 50047
- Wiring compartment
- Double insulated
- Actuator: Plastic spring rod TTK (insensitive to soiling)

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

Enclosure

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

Sealing

silicone

Cover

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

Tightening torque

cover screws: 0.4 ... 0.45 Nm

Degree of protection

IP66 to EN 60079-0 + IEC/EN 60529 (... -60 °C)
IP67 to EN 60079-0 + IEC/EN 60529 (... -20 °C)
IP67 / IP69 to IEC/EN 60529
IP69K to ISO 20653

Contact material

Silver, nickel-plated

Switching system

slow action

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

Utilisation category

AC-15

Rated operating current I_e

max. 2 A or 4 A

Errors and omissions excepted.



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Technical data (contd.)

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

Degree of pollution
3

Mechanical life
> 1 million operations

Impact energy
max. 7 J

Temperature class
T6

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

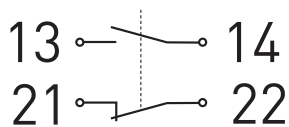
Short-circuit protection
2 A / 4 A gG/gN fuse

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

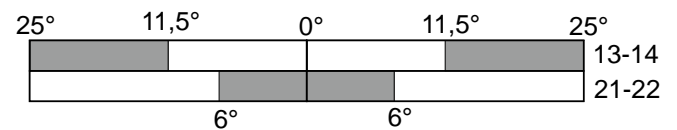
Approvals
 BVS 16 ATEX E 052
 IECEx BVS 16.0052

Weight
111 g

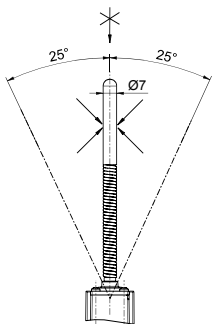
Contact diagram



Switching diagram



Switching angle



Errors and omissions excepted.