



TK 236-11Z-M20

- 1 Cable entry M 20 x 1.5
- Thermoplastic enclosure
- Good resistance to oil and petroleum spirit
- Wide range of alternative actuators
- 30 mm x 58,5 mm x 30 mm
- Double-insulated
- Mounting details to EN 50047
- Actuator heads can be repositioned by 4 x 90°

Data

Approvals - Standards

Certificates	cULus CCC
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General data

Standards	BG-GS-ET-15 EN ISO 13849-1 EN IEC 60947-5-1
Housing construction form	Norm construction design
Actuator type to EN 50047	e
Enclosure material	Plastic, glass-fibre-reinforced
Gross weight	60 g

General data - Features

Safety functions	Yes
Number of auxiliary contacts	1
Number of safety contacts	1

Safety classification

Standards	EN ISO 13849-1
Mission time	20 Year(s)

Safety classification - Safety outputs

B _{10D} Normally-closed contact (NC)	20,000,000 Operations
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Mechanical data

Actuating element	Offset roller lever
Mechanical life, minimum	20,000,000 Operations
Actuating force, minimum	9 N
Positive break force, minimum	19 N
Actuating speed, minimum	240 mm/min
Actuating speed, maximum	1 m/s
Note (Actuating speed)	Actuating speed with actuating angle 30° to switch axis
Note Bounce duration	Bounce duration in accordance with actuating speed
Note (Switchover time)	Switchover time in accordance with actuating speed

Mechanical data - Connection technique

Termination	Screw terminals M20 x 1.5
Cable section, minimum	0.75 mm ²
Cable section, maximum	2.5 mm ²
Note (Cable section)	All indications including the conductor ferrules.

Mechanical data - Dimensions

Length of sensor	30 mm
Width of sensor	30 mm
Height of sensor	93.1 mm

Ambient conditions

Degree of protection	IP65 IP67
Ambient temperature	-30 ... +80 °C

Ambient conditions - Insulation values

Rated insulation voltage U_i	500 V
Rated impulse withstand voltage U_{imp}	6 kV

Electrical data

Thermal test current	10 A
Required rated short-circuit current	1,000 A
Utilisation category AC-15	240 VAC
Utilisation category AC-15	4 A
Utilisation category DC-13	24 VDC
Utilisation category DC-13	1 A
Switching element	NO contact, NC contact
Switching principle	Slow action
Switching frequency	5,000 /h
Material of the contacts, electrical	Silver

Ordering code

Product type description:

(1)(2) 2(3)6-(4)Z(5)-(6)-(7)-(8)-(9)

(1)

Z

Snap action

T

Slow action (not for AF/S)

(2)

S	Plunger S
R	Roller plunger R
4S	Plunger 4S
4R	Roller plunger 4R
1R	Offset roller lever 1R
K	Offset roller lever K
3K	Angle roller lever 3K
4K	Angle roller lever 4K
K4	Angle roller lever K4
1H	Roller lever 1H
7H	Roller lever 7H
10H	Rod lever 10H
12H	Roller lever 12H
14H	Roller lever 14H
AF	Spring rod lever AF
RMS	Brass roller
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(3)	
3	slim design
215	large design
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(4)	
02	2 NC contact
11	1 NO contacts/1 NC contact
20	2 NO contacts, (switches with 2 NO contacts are not suitable for safety applications)
<hr/>	
(5)	
H	Slow action with staggered contacts
UE	Slow action with overlapping contacts
<hr/>	
(6)	
without	Cable entry M20
ID	Cut clamps

NPT	Cable entry NPT 1/2"
ST	M12 connector with A-coding
ST-2310	M12 connector with B-coding

(7)

1297	Enclosure with transverse slotted holes
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(8)

2138	Roller lever 7H for position switches with safety function
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(9)

1637	Gold-plated contacts
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Pictures

Product picture (catalogue individual photo)

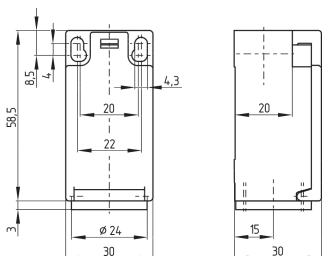


ID: k236kf01

| 919,7 kB | .jpg | 352.778 x 854.781 mm - 1000 x 2423 px - 72 dpi

| 103,0 kB | .png | 74.083 x 179.211 mm - 210 x 508 px - 72 dpi

Dimensional drawing basic component

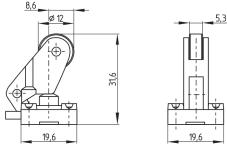


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| 4,0 kB | .png | 74.083 x 73.378 mm - 210 x 208 px - 72 dpi

| 115,0 kB | .jpg | 352.778 x 349.956 mm - 1000 x 992 px - 72 dpi

Dimensional drawing actuator



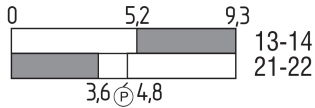
ID: 1k236g01

| 60,3 kB | .cdr |

| 3,6 kB | .png | 74.083 x 51.506 mm - 210 x 146 px - 72 dpi

| 67,4 kB | .jpg | 352.778 x 245.886 mm - 1000 x 697 px - 72 dpi

Switch travel diagram



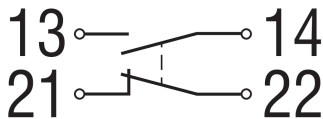
ID: kk235s14

| 25,1 kB | .cdr |

| 1,7 kB | .png | 74.083 x 22.931 mm - 210 x 65 px - 72 dpi

| 46,7 kB | .jpg | 352.778 x 109.714 mm - 1000 x 311 px - 72 dpi

Diagram



ID: k1o1sk01

| 52,2 kB | .jpg | 352.778 x 143.581 mm - 1000 x 407 px - 72 dpi

| 2,6 kB | .png | 74.083 x 29.986 mm - 210 x 85 px - 72 dpi

EPLAN Produktgrafik



ID: 101168165

| 2,1 kB | .edz |

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The details and data referred to have been carefully checked. Images may diverge from original. Further technical data can be found in the manual. Technical amendments and errors possible.

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