



## TS 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	B
Enclosure material	Plastic, glass-fibre-reinforced
Gross weight	72 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 <sub>10D</sub> Normally-closed contact (NC)	20,000,000 Operations
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## Mechanical data

Actuating element	Plunger
Mechanical life, minimum	20,000,000 Operations
Actuating force, minimum	9 N
Positive break force, minimum	19 N
Actuating speed, minimum	60 mm/min
Actuating speed, maximum	1 m/s
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 <sup>2</sup>
Cable section, maximum	2.5 mm <sup>2</sup>
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	73.5 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

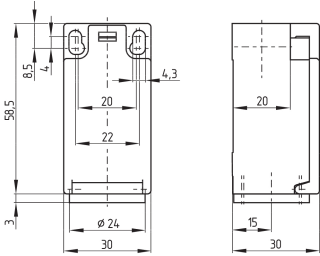
## Pictures

### Product picture (catalogue individual photo)



ID: k236sf01  
 | 776.0 kB | .jpg | 352.778 x 692.856 mm - 1000 x 1964 px - 72 dpi  
 | 85.8 kB | .png | 74.083 x 145.344 mm - 210 x 412 px - 72 dpi

### Dimensional drawing basic component

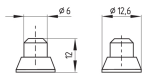


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| 4.0 kB | .png | 74.083 x 73.378 mm - 210 x 208 px - 72 dpi

| 115.0 kB | .jpg | 352.778 x 349.956 mm - 1000 x 992 px - 72 dpi

## Dimensional drawing actuator



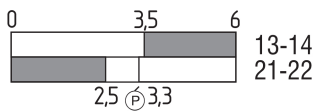
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| 36.9 kB | .cdr |

| 1.7 kB | .png | 74.083 x 52.211 mm - 210 x 148 px - 72 dpi

| 29.8 kB | .jpg | 352.778 x 248.003 mm - 1000 x 703 px - 72 dpi

## Switch travel diagram



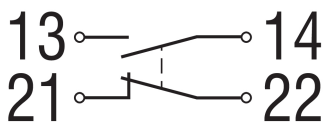
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| 25.0 kB | .cdr |

| 1.7 kB | .png | 74.083 x 23.283 mm - 210 x 66 px - 72 dpi

| 45.0 kB | .jpg | 352.778 x 111.478 mm - 1000 x 316 px - 72 dpi

## Diagram



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| 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

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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.

Generated on: 26/05/2023, 14:01