



ZS 235-11Z-M20

- Snap action with constant contact pressure up to switching point
- 1 Cable entry M 20 x 1.5
- Metal enclosure
- Wide range of alternative actuators
- Good resistance to oil and petroleum spirit
- 30 mm x 63,5 mm x 30 mm
- Actuator heads can be repositioned by 4 x 90°
- Mounting details to EN 50047

Data

Ordering data

Product type description	ZS 235-11Z-M20
Article number (order number)	101164340
EAN (European Article Number)	4030661205564
eCl@ss number, version 12.0	27-27-26-01
eCl@ss number, version 11.0	27-27-26-01
eCl@ss number, version 9.0	27-27-26-01
ETIM number, version 7.0	EC000030
ETIM number, version 6.0	EC000030

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
Housing material	Metal, zinc die-cast
Gross weight	149 g

General data - Features

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

Safety classification

Vorschriften	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	Plunger
Mechanical life, minimum	20,000,000 Operations
Actuating force, minimum	9 N
Positive break force, minimum	19 N
Actuating speed, minimum	10 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 ²
Cable section, maximum	2.5 mm ²
Note	All indications including the conductor ferrules.

Mechanical data - Dimensions

Length of sensor	30 mm
Width of sensor	30 mm
Height of sensor	75.5 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	230 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	Snap action
Bounce duration, maximum	3 ms
Maximale Schalthäufigkeit	5,000 /h
Switchover time, minimum	5.5 ms
Material of the contacts, electrical	Silver

Pictures

Product picture (catalogue individual photo)



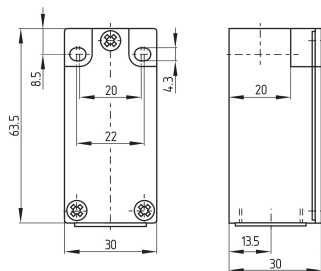
ID: k235sf01

| 620.3 kB | .jpg | 352.778 x 668.867 mm - 1000 x 1896 px - 72 dpi

| 79.6 kB | .png | 74.083 x 140.406 mm - 210 x 398 px - 72 dpi

| 71.8 kB | .png | 65.264 x 123.472 mm - 185 x 350 px - 72 dpi

Dimensional drawing basic component

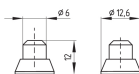


ID: 1-235g01

| 4.0 kB | .png | 74.083 x 61.383 mm - 210 x 174 px - 72 dpi

| 114.7 kB | .jpg | 352.778 x 293.158 mm - 1000 x 831 px - 72 dpi

Dimensional drawing actuator



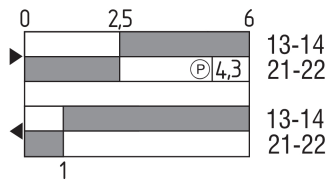
ID: 1s236g01

| 36.9 kB | .cdr |

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

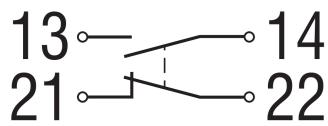
| 29.8 kB | .jpg | 352.778 x 248.003 mm - 1000 x 703 px - 72 dpi

Switch travel diagram



ID: kr235s12
| 25.8 kB | .cdr |
| 2.4 kB | .png | 74.083 x 39.158 mm - 210 x 111 px - 72 dpi
| 69.2 kB | .jpg | 352.778 x 187.325 mm - 1000 x 531 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

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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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