



ZR 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

Note (Delivery capacity)	Not available!
Product type description	ZR 235-11Z-M20
Article number (order number)	101152265
EAN (European Article Number)	4030661165301
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	c
Housing material	Metal, zinc die-cast
Gross weight	150 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	Roller plunger
Mechanical life, minimum	20,000,000 Operations
Actuating force, minimum	9 N
Positive break force, minimum	19 N
Actuating speed, minimum	20 mm/min
Actuating speed, maximum	1 m/s

Note (Actuating speed)

Actuating speed with actuating angle 30° to switch axis

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	86 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)



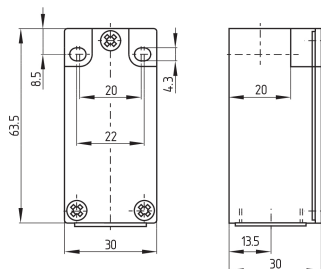
ID: k235rf01

| 676.8 kB | .jpg | 352.778 x 729.192 mm - 1000 x 2067 px - 72 dpi

| 89.8 kB | .png | 74.083 x 153.106 mm - 210 x 434 px - 72 dpi

| 68.4 kB | .png | 59.619 x 123.472 mm - 169 x 350 px - 72 dpi

Dimensional drawing basic component

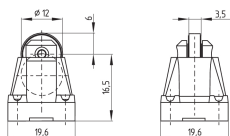


ID: 1-235g01

| 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

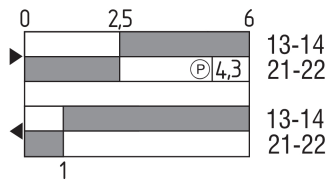


ID: 1r236g01

| 7.4 kB | .png | 74.083 x 51.858 mm - 210 x 147 px - 72 dpi

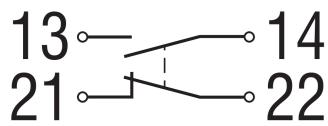
| 76.5 kB | .jpg | 352.778 x 247.297 mm - 1000 x 701 px - 72 dpi

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

Schmersal, Inc., 115 E Stevens Ave, Suite 208, Valhalla, NY 10595
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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