



ZR 335-02Z-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
- 40,5 mm x 76 mm x 38 mm
- Actuator heads can be repositioned by 4 x 90°
- Design to EN 50041

Data

Ordering data

Product type description	ZR 335-02Z-M20
Article number (order number)	101168109
EAN (European Article Number)	4030661220697
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

Housing construction form	Norm construction design
Actuator type to EN 50041	C
Housing material	Light alloy die-casting
Housing coating material	painted
Gross weight	190 g

General data - Features

Safety functions	Yes
Number of safety contacts	2

Safety classification

Standards	BG-GS-ET-15 EN ISO 13849-1 EN IEC 60947-5-1
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	30,000,000 Operations
Actuating force, minimum	12 N
Actuating speed, maximum	0.5 m/s
Note (Actuating speed)	Actuating speed with actuating angle 30° to switch axis
Note Bounce duration	Bounce duration 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	38 mm
Width of sensor	40.5 mm
Height of sensor	116.6 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}	4 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	4 A
Switching element	Opener (NC)
Switching principle	Snap action
Switching frequency	5,000 /h
Switchover time, maximum	2 ms
Material of the contacts, electrical	Silver

Ordering code

Product type description:

(1)(2) 3(3)-(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
H	Roller lever H
10H	Rod lever 10H
7H	Roller lever 7H
1K	Offset roller lever 1K
3K	Angle roller lever 3K
RMS	Brass roller

(3)

35	slim design
56	large design

(4)

11	1 NO contacts/1 NC contact
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02	2 NC contact
20	2 NO contacts (not suitable for safety applications)
01/01	1 NC contact left / 1 NC contact right
12	1 NO contact/2 NC contacts
03	3 NC contact

(5)

H	Slow action with staggered contacts
UE	Slow action with overlapping contacts
2272	2272 Special roller bolt with collar
1183	with aluminium rod
1699-1	Exterior stainless steel bolts and clamp

(6)

G24	with LED
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(7)

without	Cable entry M20
NPT	Cable entry NPT 1/2"
ST	M12 connector with A-coding (Caution! According to EN 60204-1, the versions with connector must only be used in PELV circuits.)
ST-2310	M12 connector with B-coding (Caution! According to EN 60204-1, the versions with connector must only be used in PELV circuits.)

(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)

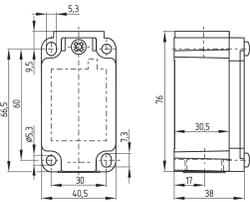


ID: k335rf01

| 727.6 kB | .jpg | 352.778 x 767.292 mm - 1000 x 2175 px - 72 dpi

| 71.3 kB | .png | 74.083 x 160.867 mm - 210 x 456 px - 72 dpi

Dimensional drawing basic component



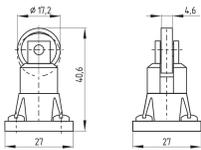
ID: 1-335g01

| 96.7 kB | .cdr |

| 4.5 kB | .png | 74.083 x 51.506 mm - 210 x 146 px - 72 dpi

| 105.8 kB | .jpg | 352.778 x 245.886 mm - 1000 x 697 px - 72 dpi

Dimensional drawing actuator



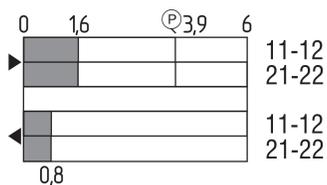
ID: 1r336g01

| 51.1 kB | .cdr |

| 6.6 kB | .png | 74.083 x 52.211 mm - 210 x 148 px - 72 dpi

| 66.1 kB | .jpg | 352.778 x 248.003 mm - 1000 x 703 px - 72 dpi

Switch travel diagram



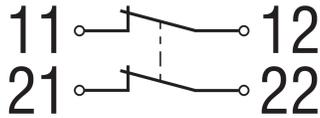
ID: kr335s11

| 25.6 kB | .cdr |

| 2.2 kB | .png | 74.083 x 40.922 mm - 210 x 116 px - 72 dpi

| 70.3 kB | .jpg | 352.778 x 195.086 mm - 1000 x 553 px - 72 dpi

Diagram

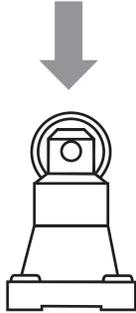


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| 48.8 kB | .jpg | 352.778 x 125.236 mm - 1000 x 355 px - 72 dpi

| 2.3 kB | .png | 74.083 x 26.458 mm - 210 x 75 px - 72 dpi

Operating principle



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| 15.2 kB | .cdr |

| 149.7 kB | .jpg | 352.778 x 799.394 mm - 1000 x 2266 px - 72 dpi

| 2.9 kB | .png | 74.083 x 167.922 mm - 210 x 476 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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