



TR 335-11Z-M20

- 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	TR 335-11Z-M20
Article number (order number)	151167924
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
--------------	--------------

General data

Housing construction form	Norm construction design
Actuator type to EN 50041	C
Enclosure material	Light alloy die-casting

Enclosure coating material	Painted
Gross weight	217 g

General data - Features

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

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
-----------------------------------------------	-----------------------

Mechanical data

Actuating element	Roller plunger
Mechanical life, minimum	30,000,000 Operations
Actuating force, minimum	17 N
Actuating speed, maximum	0.5 m/s
Note (Actuating speed)	Actuating speed with actuating angle 30° to switch axis
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 - connector side B

Connector typ	Female connector
---------------	------------------

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

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	4 A
Switching element	NO contact, NC contact
Switching principle	Slow action
Bounce duration, maximum	2 ms
Switching frequency	5,000 /h
Material of the contacts, electrical	Silver

Ordering code

Product type description:

(1)(2) 3(3)5-(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)

3	slim design
215	large design

(4)

11	1 NO contacts/1 NC contact
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
(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
(9)	
1637	Gold-plated contacts

Pictures

Product picture (catalogue individual photo)

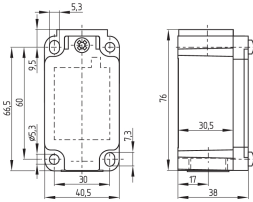


ID: k335rf01

| 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



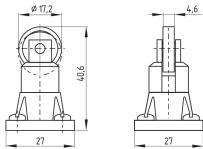
ID: 1-335g01

| 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



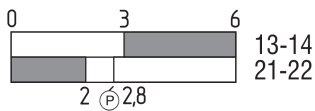
ID: 1r336g01

| 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



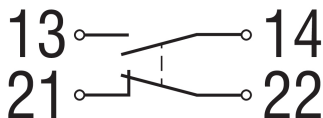
ID: kr335s08

| 24.6 kB | .cdr |

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

| 42.1 kB | .jpg | 352.778 x 111.478 mm - 1000 x 316 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

Operating principle



ID: 235rz01

| 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

Schmersal Ltd., Sparrowhawk Close, WR14 1GL Malvern

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: 10/04/2023, 07:44