DATASHEET



EX-TR 335-20Z-3G/D

Data

Ordering data

Product type description	EX-TR 335-20Z-3G/D
Article number (order number)	103004158
EAN (European Article Number)	4030661632292
eCl@ss number, version 12.0	27-27-06-01
eCl@ss number, version 11.0	27-27-06-01
eCl@ss number, version 9.0	27-27-06-01
ETIM number, version 7.0	EC000030
ETIM number, version 6.0	EC000030

Approvals - Standards

Certificates	cULus

Explosion protection

Explosion protection: regulations	EN IEC 60079-0 EN IEC 60079-15 EN 60079-31
Explosion protection zones	2 22

Explosion protection category	3G 3D
Explosion protection designation	II 3G Ex nC IIC T5 Gc X II 3D Ex tc IIIC T90°C Dc X
Manufacturer declaration	Additional simple electrical apparatus (Zone 0 and 20)

General data

Housing construction form	Norm construction design
Actuator type to EN 50041	C
Housing material	Aluminium
Housing coating material	painted
Gross weight	240 g

General data - Features

Number of auxiliary contacts	2
Number of safety contacts	0

Safety classification

Standards	EN ISO 13849-1
Mission time	20 Year(s)

Mechanical data

Actuating element	Roller plunger
Mechanical life, minimum	30,000,000 Operations
Impact energy, maximum	4 J
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 cross-section of the cable glands, minimum	7 mm
Cable cross-section of the cable glands, maximum	12 mm
Cable section, minimum	0.75 mm²
Cable section, maximum	2.5 mm²
Note (Cable section)	All indications including the conductor ferrules.
Wire cross-section	13 AWG

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	IP67
Ambient temperature	-20 ... +60 °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
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	Normally open contact (NO)

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:
EX-(1)(2) 335-(3)Z(4)-(5)-(6)-(7)-3G/D

(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
7H-2138	Roller lever 7H for position switches with safety function
1K	Offset roller lever 1K
3K	Angle roller lever 3K

(3)

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

(4)

H	Slow action with staggered contacts

UE	Slow action with overlapping contacts

(5)

1297	Enclosure with transverse slotted holes

(6)

2138	Roller lever 7H for position switches with safety function

(7)

1637	Gold-plated contacts

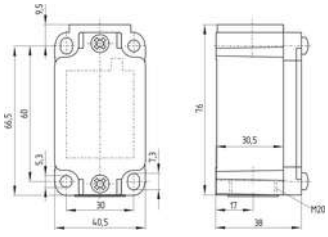
Pictures

Product picture (catalogue individual photo)



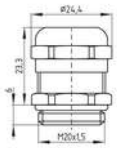
ID: k335rf01
| 727.6 kB | .jpg | 352.778 x 767.292 mm - 1000 x 2175 px - 72 dpi
| 71.3 kB | .png | 74.083 x 160.867 mm - 210 x 456 px - 72 dpi
| 27.7 kB | .jpg | 56.797 x 123.472 mm - 161 x 350 px - 72 dpi

Dimensional drawing basic component



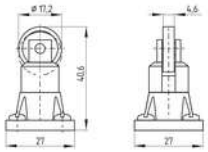
ID: k-335g01
| 27.9 kB | .cdr |
| 4.1 kB | .png | 74.083 x 52.211 mm - 210 x 148 px - 72 dpi
| 126.8 kB | .jpg | 352.778 x 248.708 mm - 1000 x 705 px - 72 dpi

Dimensional drawing basic component



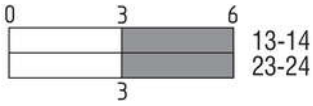
ID: 1xzm1g07
| 2.5 kB | .png | 74.083 x 51.153 mm - 210 x 145 px - 72 dpi
| 46.3 kB | .jpg | 352.778 x 243.769 mm - 1000 x 691 px - 72 dpi

Dimensional drawing actuator



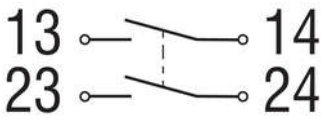
ID: 1r336g01
| 51.1 kB | .cdr |
| 6.6 kB | .png | 74.083 x 52.211 mm - 210 x 148 px - 72 dpi
| 66.1 kB | .jpg | 352.778 x 248.003 mm - 1000 x 703 px - 72 dpi

Switch travel diagram



ID: kr335s10
| 23.4 kB | .cdr |
| 1.4 kB | .png | 74.083 x 22.225 mm - 210 x 63 px - 72 dpi
| 33.9 kB | .jpg | 352.778 x 105.128 mm - 1000 x 298 px - 72 dpi

Diagram



ID: k--2sk01
| 51.9 kB | .jpg | 352.778 x 135.819 mm - 1000 x 385 px - 72 dpi
| 2.6 kB | .png | 74.083 x 28.575 mm - 210 x 81 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