DATASHEET

SCHMERSAL
THE DNA OF SAFETY



EX-T1K 335-12Z-3G/D

Data

Ordering data

Product type description	EX-T1K 335-12Z-3G/D
Article number (order number)	101187080
EAN (European Article Number)	4030661334561
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

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	Ex D II 3G Ex nC IIC T5 Gc X Ex D II 3D Ex tc IIIC T90°C Dc X

Manufacturer declaration	Additional simple electrical apparatus (Zone 0 and 20)

General data

Standards	EN IEC 60947-5-1
Housing construction form	Norm construction design
Housing material	Aluminium
Housing coating material	painted
Gross weight	245 g

General data - Features

Safety functions	Yes
Number of auxiliary contacts	1
Number of safety contacts	2

Safety classification

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

Safety classification - Safety outputs

B_{10D} Normally-closed contact (NC)	20,000,000 Operations

Mechanical data

Actuating element	Offset roller lever
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	118.5 mm

Ambient conditions

Degree of protection	IP67
Ambient temperature	-20 ... +60 °C

Ambient conditions - Insulation values

Rated insulation voltage U_i	250 VAC
Rated impulse withstand voltage U_{imp}	4 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	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:
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

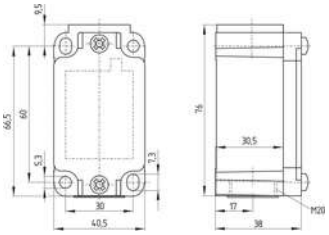
Pictures

Product picture (catalogue individual photo)



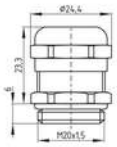
ID: k335kf01
| 1.1 MB | .jpg | 352.778 x 784.225 mm - 1000 x 2223 px - 72 dpi
| 89.8 kB | .png | 74.083 x 164.747 mm - 210 x 467 px - 72 dpi
| 31.6 kB | .jpg | 55.386 x 123.472 mm - 157 x 350 px - 72 dpi

Dimensional drawing basic component



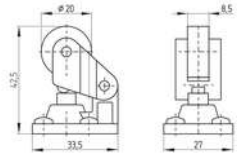
ID: k-335g01
| 27.9 kB | .cdr |
| 4.1 kB | .png | 74.083 x 52.211 mm - 210 x 148 px - 72 dpi
| 126.8 kB | .jpg | 352.778 x 248.708 mm - 1000 x 705 px - 72 dpi

Dimensional drawing basic component



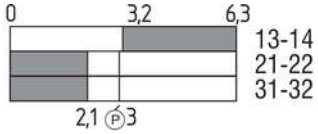
ID: 1xzm1g07
| 2.5 kB | .png | 74.083 x 51.153 mm - 210 x 145 px - 72 dpi
| 46.3 kB | .jpg | 352.778 x 243.769 mm - 1000 x 691 px - 72 dpi

Dimensional drawing actuator



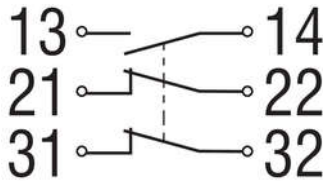
ID: 1k336g01
| 57.2 kB | .cdr |
| 7.0 kB | .png | 74.083 x 51.506 mm - 210 x 146 px - 72 dpi
| 71.4 kB | .jpg | 352.778 x 245.886 mm - 1000 x 697 px - 72 dpi

Switch travel diagram



ID: kk335s23
| 25.9 kB | .cdr |
| 2.0 kB | .png | 74.083 x 29.281 mm - 210 x 83 px - 72 dpi
| 56.1 kB | .jpg | 352.778 x 139.7 mm - 1000 x 396 px - 72 dpi

Diagram



ID: k2o1sk02
| 82.3 kB | .jpg | 352.778 x 193.322 mm - 1000 x 548 px - 72 dpi
| 3.2 kB | .png | 74.083 x 40.569 mm - 210 x 115 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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