



TR 235-11Z-M20

- 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

Product type description	TR 235-11Z-M20
Article number (order number)	101164168
EAN (European Article Number)	4030661204871
eCl@ss number, version 9.0	27-27-26-01
eCl@ss number, version 11.0	27-27-26-01
eCl@ss number, version 12.0	27-27-26-01
ETIM number, version 7.0	EC000030
ETIM number, version 6.0	EC000030

Approvals - Standards

Certificates	cULus CCC EAC
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General data

Standards	EN IEC 60947-5-1 EN ISO 13849-1 BG-GS-ET-15
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Housing construction form	Norm construction design
Actuator type to DIN EN 50047	c
Enclosure material	Metal, zinc die-cast
Material of the contacts, electrical	Silver
Gross weight	115 g

General data - Features

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

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
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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	120 mm/min
Actuating speed, maximum	1 m/s
Note (Actuating speed)	Actuating speed with actuating angle 30° to switch axis
Note Bounce duration	Bounce duration in accordance with actuating speed
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 - Dimensions

Length of sensor	30 mm
Width of sensor	30 mm
Height of sensor	86 mm

Ambient conditions

Degree of protection	IP67 IP65
Ambient temperature, minimum	-30 °C
Ambient temperature, maximum	+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 to EN 60947-5-1	1,000 A
Utilisation category AC-15	240 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	Slow action

Switching frequency

5,000 /h

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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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