



TS 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	TS 235-11Z-M20
Article number (order number)	151165678
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
--------------	---------------------

General data

Standards	BG-GS-ET-15 EN ISO 13849-1 EN IEC 60947-5-1
Housing construction form	Norm construction design

Actuator type to DIN EN 50047	B
Enclosure material	Metal, zinc die-cast
Material of the contacts, electrical	Silver
Gross weight	156 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
---	-----------------------

Mechanical data

Actuating element	Plunger
Mechanical life, minimum	20,000,000 Operations
Actuating force, minimum	9 N
Positive break force, minimum	19 N
Actuating speed, minimum	60 mm/min
Actuating speed, maximum	1 m/s
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	75.5 mm

Ambient conditions

Degree of protection	IP65 IP67
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	230 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

K.A. Schmersal GmbH & Co. KG, Möddinghofe 30, 42279 Wuppertal

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.

