



## AZ 16-12ZVK-M20

- 3 cable entries M 20 x 1.5
- Large wiring compartment
- Thermoplastic enclosure
- Double-insulated
- 52 mm x 90 mm x 30 mm
- Universal coding
- Long life
- High level of contact reliability with low voltages and currents
- Insensitive to soiling
- Slotted holes for adjustment, circular holes for location

## Data

### General data

Standards	EN ISO 13849-1 EN ISO 14119 EN IEC 60947-5-1
Coding level according to EN ISO 14119	Low
Working principle	electromechanical
Enclosure material	Plastic, glass-fibre reinforced thermoplastic, self-extinguishing
Gross weight	120 g

### General data - Features

Ejection force	Yes
Number of auxiliary contacts	1
Number of cable glands	3
Number of safety contacts	2

## Safety classification

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

## Safety classification - Safety outputs

B <sub>10D</sub> Normally-closed contact (NC)	2,000,000 Operations
B <sub>10D</sub> Normally open contact (NO)	1,000,000 Operations
Note (B <sub>10D</sub> Normally open contact (NO))	at 10% I <sub>e</sub> and ohmic load

## Mechanical data

Mechanical life, minimum	1,000,000 Operations
Positive break travel	8 mm
Positive break force per NC contact, minimum	10 N
Positive break force, minimum	20 N
Actuating speed, maximum	2 m/s
Mounting	Screws
Type of the fixing screws	2x M6

## Mechanical data - Connection technique

Termination	Screw terminals
Cable entry	3 x M20 x 1,5
Cable section, minimum	0.25 mm <sup>2</sup>
Cable section, maximum	2.5 mm <sup>2</sup>
Note (Cable section)	All indications including the conductor ferrules.
Allowed type of cable	solid single-wire solid multi-wire flexible

## Mechanical data - Dimensions

Length of sensor	30 mm
------------------	-------

Width of sensor	52 mm
Height of sensor	90 mm

### Ambient conditions

Degree of protection	IP67
Ambient temperature	-30 ... +80 °C
Storage and transport temperature, minimum	-40 °C
Storage and transport temperature, maximum	+85 °C
Permissible installation altitude above sea level, maximum	2,000 m

### Ambient conditions - Insulation values

Rated insulation voltage $U_i$	500 V
Rated impulse withstand voltage $U_{imp}$	6 kV
Overvoltage category	III
Degree of pollution	3

### Electrical data

Thermal test current	10 A
Required rated short-circuit current	1,000 A
Switching element	NO contact, NC contact
Switching principle	slow action, positive break NC contact
Switching frequency	4,000 /h
Material of the contacts, electrical	Silver

### Electrical data - Safety contacts

Voltage, Utilisation category AC-15	230 VAC
Current, Utilisation category AC-15	4 A
Voltage, Utilisation category DC-13	24 VDC
Current, Utilisation category DC-13	4 A

## Electrical data - Auxiliary contacts

Voltage, Utilisation category AC-15	230 VAC
Current, Utilisation category AC-15	4 A
Voltage, Utilisation category DC-13	24 VDC
Current, Utilisation category DC-13	4 A

## Documents

### Operating instructions (supplementary sheet/quick guide)

Mounting set MS-AZ 15/16 (138.2 kB, 10/05/2019, Revision C)

### Operating instructions and Declaration of conformity

AZ 15/16 (411.7 kB, 08/07/2021, W)

### Operating Instructions and Declaration of Conformity (Short)

Operating instructions in short form (For further information and languages, see the "Operation and assembly" tab) (410.7 kB, 26/10/2022)

### CCC certification

AZ 15 / AZ 16 / AZ 17 / AZ 335 / AZ 355 (1.6 MB, 26/08/2022)

### UL Certificate

AZ 10 / AZ 15 / AZ 16 / AZ 20 (413.2 kB, 01/08/2019)

### SISTEMA-VDMA library

(659.5 kB, 23/03/2023)

Schmersal India Pvt. Ltd., Plot No - G-7/1, Ranjangaon MIDC, Tal. - Shirur, Dist.- Pune 412 220

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: 27/04/2023, 8:45 am