



## TS 336-11Z-M20

- 1 Cable entry M 20 x 1.5
- Design to EN 50041
- Thermoplastic enclosure
- Double-insulated
- Good resistance to oil and petroleum spirit
- Wide range of alternative actuators
- Actuator heads can be repositioned by 4 x 90°

## Data

### Ordering data

|                               |                |
|-------------------------------|----------------|
| Product type description      | TS 336-11Z-M20 |
| Article number (order number) | 151155769      |
| 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<br>CCC |
|--------------|--------------|

### General data

|                           |                                 |
|---------------------------|---------------------------------|
| Housing construction form | Norm construction design        |
| Actuator type to EN 50041 | B                               |
| Housing material          | Plastic, glass-fibre-reinforced |

Gross weight 128 g

### General data - Features

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

### Safety classification

Standards BG-GS-ET-15  
EN ISO 13849-1  
EN IEC 60947-5-1  
Mission time 20 Year(s)

### Safety classification - Safety outputs

B<sub>10D</sub> Normally-closed contact (NC) 20,000,000 Operations

### Mechanical data

Actuating element Plunger  
Mechanical life, minimum 30,000,000 Operations  
Actuating force, minimum 17 N  
Actuating speed, maximum 0.5 m/s  
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<sup>2</sup>  
Cable section, maximum 2.5 mm<sup>2</sup>  
Note All indications including the conductor ferrules.

## Mechanical data - Dimensions

|                  |          |
|------------------|----------|
| Length of sensor | 38 mm    |
| Width of sensor  | 40.5 mm  |
| Height of sensor | 103.5 mm |

## Ambient conditions

|                      |                |
|----------------------|----------------|
| Degree of protection | IP65<br>IP67   |
| Ambient temperature  | -30 ... +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 | 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           | 4 A                    |
| Switching element                    | NO contact, NC contact |
| Switching principle                  | Slow action            |
| Bounce duration, maximum             | 2 ms                   |
| Maximum switching frequency          | 5,000 /h               |
| Material of the contacts, electrical | Silver                 |

## Ordering code

Product type description:  
(1)(2) 336-(3)(4)-(5)-(6)-(7)-(8)-(9)

(1)

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|          |                            |
|----------|----------------------------|
| <b>Z</b> | Snap action                |
| <b>T</b> | Slow action (not for AF/S) |

(2)

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|            |                        |
|------------|------------------------|
| <b>S</b>   | Plunger S              |
| <b>R</b>   | Roller plunger R       |
| <b>H</b>   | Roller lever H         |
| <b>10H</b> | Rod lever 10H          |
| <b>7H</b>  | Roller lever 7H        |
| <b>1K</b>  | Offset roller lever 1K |
| <b>3K</b>  | Angle roller lever 3K  |
| <b>RMS</b> | Brass roller           |

(3)

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|              |   |
|--------------|---|
| <b>11</b>    | 1 NO contacts/1 NC contact  |
| <b>02</b>    | 2 NC contact  |
| <b>20</b>    | 2 NO contacts, (switches with 2 NO contacts are not suitable for safety applications) |
| <b>01/01</b> | 1 NC contact left / 1 NC contact right  |

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|          |       |
|----------|-------|
| <b>Y</b> | IP 65 |
| <b>Z</b> | IP 67 |

(5)

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|          |                  |
|----------|------------------|
|          | without latching |
| <b>R</b> | with latching    |

(6)

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|           |                                       |
|-----------|---------------------------------------|
| <b>H</b>  | Slow action with staggered contacts   |
| <b>UE</b> | Slow action with overlapping contacts |

(7)

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**without**

Cable entry M20

**NPT**

Cable entry NPT 1/2"

**ST**

M12 connector with A-coding

**ST-2310**

M12 connector with B-coding

(8)

**2138**

Roller lever 7H for position switches with safety function

(9)

**1637**

Gold-plated contacts

## Pictures

### Product picture (catalogue individual photo)



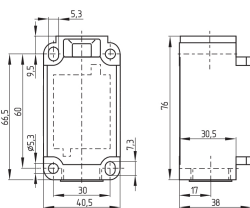
ID: k336sf01

| 632.4 kB | .jpg | 352.778 x 701.322 mm - 1000 x 1988 px - 72 dpi

| 78.9 kB | .png | 74.083 x 147.108 mm - 210 x 417 px - 72 dpi

| 30.5 kB | .jpg | 62.089 x 123.472 mm - 176 x 350 px - 72 dpi

### Dimensional drawing basic component



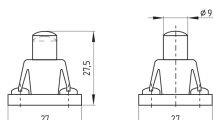
ID: 1-336g01

| 51.4 kB | .cdr |

| 4.1 kB | .png | 74.083 x 51.506 mm - 210 x 146 px - 72 dpi

| 107.0 kB | .jpg | 352.778 x 245.181 mm - 1000 x 695 px - 72 dpi

### Dimensional drawing actuator



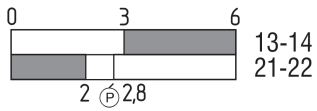
ID: 1s336g01

| 48.9 kB | .cdr |

| 2.7 kB | .png | 74.083 x 52.211 mm - 210 x 148 px - 72 dpi

| 52.6 kB | .jpg | 352.778 x 248.003 mm - 1000 x 703 px - 72 dpi

## Switch travel diagram



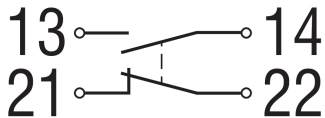
ID: kr335s08

| 24.6 kB | .cdr |

| 1.7 kB | .png | 74.083 x 23.283 mm - 210 x 66 px - 72 dpi

| 42.1 kB | .jpg | 352.778 x 111.478 mm - 1000 x 316 px - 72 dpi

## Diagram



ID: k1o1sk01

| 52.2 kB | .jpg | 352.778 x 143.581 mm - 1000 x 407 px - 72 dpi

| 2.6 kB | .png | 74.083 x 29.986 mm - 210 x 85 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.

Generated on: 30/05/2024, 12:34