



EX-ZV14H 235-11Z-3D

- Snap action with constant contact pressure up to switching point
- 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
- 1 Cable entry M 20 x 1.5
- Lever angle adjustable in 10° steps

Data

Ordering data

| | |
|-------------------------------|---------------------|
| Product type description | EX-ZV14H 235-11Z-3D |
| Article number (order number) | 101194377 |
| EAN (European Article Number) | 4030661358642 |
| 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 | INMETRO |
|--------------|---------|

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 | ⊕ II 3G Ex nC IIC T5 Gc X ⊕ II 3D Ex tc IIIC T90°C Dc X |
| Manufacturer declaration | ATEX Zone 2 and 22 |

General data

| | |
|---------------------------|---------------------------------|
| Standards | BG-GS-ET-15 EN IEC 60947-5-1 |
| Housing construction form | Norm construction design |
| Housing material | Metal, zinc die-cast |
| Housing coating material | painted |
| Lever material | Metal film |
| Gross weight | 250 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 | Roller lever |
| Roller material | Plastic |
| Mechanical life, minimum | 20,000,000 Operations |
| Actuating speed, minimum | 687 mm/min |
| Actuating speed, maximum | 1 m/s |
| Note (Actuating speed) | Actuating speed with actuating angle 30° to switch axis |
| Actuating torque, minimum | 0.2 Nm |
| Positive break torque | 0.2 Nm |

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 mm ² |
| Cable section, maximum | 2.5 mm ² |
| Note (Cable section) | All indications including the conductor ferrules. |
| Wire cross-section | 13 AWG |

Mechanical data - Dimensions

| | |
|------------------|--------|
| Length of sensor | 46 mm |
| Width of sensor | 30 mm |
| Height of sensor | 114 mm |

Ambient conditions

| | |
|----------------------|----------------|
| Degree of protection | IP67 |
| Ambient temperature | -20 ... +60 °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 |
| 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 | Snap action |
| Bounce duration, maximum | 3 ms |
| Switching frequency | 5,000 /h |
| Switchover time, maximum | 5.5 ms |
| Material of the contacts, electrical | Silver |

Scope of delivery

| | |
|-------------------|----------------------------------|
| Scope of delivery | Ex-certified screwed cable gland |
|-------------------|----------------------------------|

Ordering code

Product type description:
EX-(1)(2) 235-(3)Z-(4)-(5)-(6)-(7)-3D

(1)

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

(2)

| | |
|-----------|-------------------|
| S | Plunger S |
| R | Roller plunger R |
| 4S | Plunger 4S |
| 4R | Roller plunger 4R |

| | |
|-------------|---|
| 1R | Offset roller lever 1R |
| K | Offset roller lever K |
| 3K | Angle roller lever 3K |
| 4K | Angle roller lever 4K |
| K4 | Angle roller lever K4 |
| 1H | Roller lever 1H |
| 7H | Roller lever 7H |
| 10H | Rod lever 10H |
| 12H | Roller lever 12H |
| 14H | Roller lever 14H |
| (3) | |
| 02 | 2 NC contact |
| 11 | 1 NO contacts/1 NC contact |
| 20 | 2 NO contacts, (switches with 2 NO contacts are not suitable for safety applications) |
| (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)



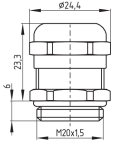
ID: k235hf05

| 1.0 MB | .jpg | 352.778 x 959.908 mm - 1000 x 2721 px - 72 dpi

| 109.2 kB | .png | 74.083 x 201.436 mm - 210 x 571 px - 72 dpi

| 27.9 kB | .jpg | 45.508 x 123.472 mm - 129 x 350 px - 72 dpi

Dimensional drawing basic component

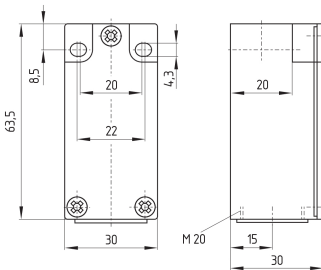


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| 2.5 kB | .png | 74.083 x 51.153 mm - 210 x 145 px - 72 dpi

| 46.3 kB | .jpg | 352.778 x 243.769 mm - 1000 x 691 px - 72 dpi

Dimensional drawing basic component



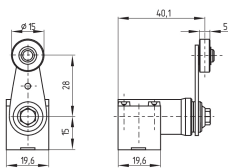
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| 24.5 kB | .cdr |

| 3.6 kB | .png | 74.083 x 61.736 mm - 210 x 175 px - 72 dpi

| 111.2 kB | .jpg | 352.778 x 293.511 mm - 1000 x 832 px - 72 dpi

Dimensional drawing actuator



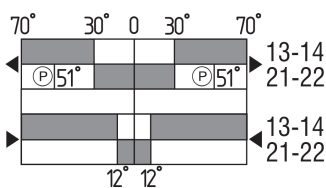
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| 25.9 kB | .cdr |

| 7.6 kB | .png | 74.083 x 51.506 mm - 210 x 146 px - 72 dpi

| 82.4 kB | .jpg | 352.778 x 245.181 mm - 1000 x 695 px - 72 dpi

Switch travel diagram



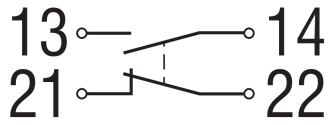
ID: kh235s06

| 27.0 kB | .cdr |

| 2.9 kB | .png | 74.083 x 40.217 mm - 210 x 114 px - 72 dpi

| 94.9 kB | .jpg | 352.778 x 191.911 mm - 1000 x 544 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.

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