



AS-Interface safety switch

VAA-2E-IM1-J-S-V1

- Applications up to PL_d
- Rotating metal head
- 40 mm narrow construction, fixture dimensions compatible with all safety switches
- M12 plug connection

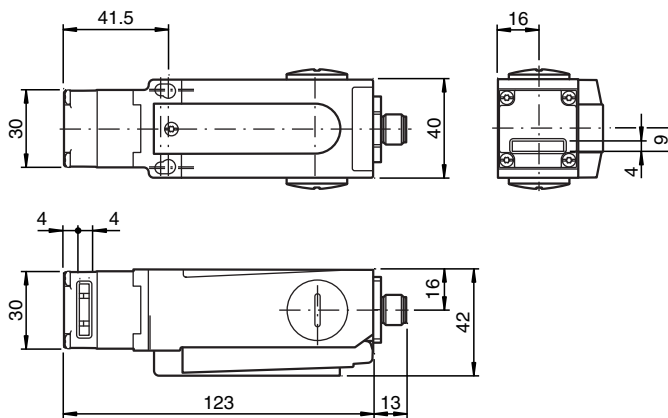
AS-Interface safety switch



Function

The VAA-2E-LIM1-S-V1 safety switch with a separate actuator is a mechanical safety switch with 2 inputs. NC contacts 1 and 2 are monitored via the inputs. Evaluation takes place via a safety monitor. Connection is via an M12 plug. The safety switch is supplied via the AS-Interface. Depending on the application, 4 different models of mechanical actuators can be ordered separately.

Dimensions



Technical Data

General specifications

| Node type | Safety node |
|--------------------------------|-------------|
| AS-Interface specification | V3.0 |
| Required gateway specification | ≥ V2.0 |
| Profile | S-7.B |
| IO code | 7 |
| ID code | B |
| ID1 code | F |
| ID2 code | E |
| UL File Number | E179102 |

Electrical specifications

| | | |
|-------------------------|----------------|-----------------------------------|
| Rated operating voltage | U _e | 26.5 ... 31.6 V from AS-Interface |
|-------------------------|----------------|-----------------------------------|

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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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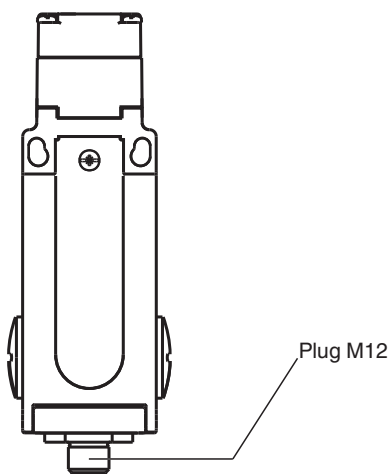
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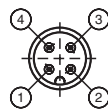
Technical Data

| | | |
|----------------------------------|-------|--|
| Rated operating current | I_e | ≤ 45 mA |
| Rated insulation voltage | | 50 V |
| Input | | |
| Number/Type | | 2 safety-related inputs: normally-closed contact 1 normally-closed contact 2 |
| Supply | | from AS-Interface |
| Directive conformity | | |
| Electromagnetic compatibility | | |
| Directive 2014/30/EU | | EN 62026-2:2013+A1:2019 IEC 60947-5-3:1999 |
| Standard conformity | | |
| Degree of protection | | EN 60529:2000 |
| AS-Interface | | EN 62026-2:2013+A1:2019 |
| Functional safety | | DIN EN 954-1, EN ISO 13849-1 (up to PL _d) |
| Ambient conditions | | |
| Ambient temperature | | -20 ... 55 °C (-4 ... 131 °F) |
| Mechanical specifications | | |
| approach speed | | max. 20 m/min |
| Operating force | | 25 N |
| Extraction force | | 25 N |
| retention force | | 10 N |
| insertion depth | | |
| approach direction lateral | | detected min. distance: 24.5 mm permissible caster: 5 mm |
| approach direction from above | | detected min. distance: 24.5 mm permissible caster: 5 mm |
| Degree of protection | | IP67 |
| Connection | | connector M12 x 1 |
| Material | | |
| Housing | | Fiberglass-reinforced thermoplastic |
| actuating head | | metal |
| cam | | stainless steel |
| Mass | | approx. 0.16 kg |
| Life span | | 2 x 10 ⁶ switching cycles |

Assembly



View of safety switch
plug connector










- 1 AS-Interface +
- 2 not used
- 3 AS-Interface -
- 4 not used

Programming

Data bit safety node
(function via AS-Interface)

| Data bit | Input |
|----------|---------------------------|
| D0 | normally-closed contact 1 |
| D1 | normally-closed contact 1 |
| D2 | normally-closed contact 2 |
| D3 | normally-closed contact 2 |

Accessories

| | | |
|---|---------------------------------|--|
|  | VAZ-IM1-90°-BOLT-S | Right-angled actuator for AS-Interface safety switches |
|  | VAZ-IM1-BOLT-S | Straight actuator for AS-Interface safety switches |
|  | VAZ-IM1-LR-RADIUS-BOLT-S | Hinged actuator for right/left mounted doors, for AS-Interface safety switches |
|  | VAZ-IM1-TD-RADIUS-BOLT-S | Hinged actuator for top/bottom mounted doors, for AS-Interface safety switches |
|  | VAZ-IM1-BASE-BOLT-S | Latches for mechanical safety switches (LIM1 and IM1) |
|  | VAZ-IM1-BASE-S | Switch mount for mechanical safety switches (LIM1 and IM1) |
|  | VAZ-T1-FK-1M-PUR-V1-G | Splitter box AS-Interface to 1x M12 round connector |