

GKM Series

MICRO SWITCH™ Safety Key Interlock Switch



DESCRIPTION

Honeywell Sensing and Control (S&C) offers safety switches to meet your needs. Designed with OEMs in mind, we offer safety switches in every size. The MICRO SWITCH™ GKM Series is our miniature product line offering one of the smallest key-op switches available. GKM has daisy-chain capability to reduce installation and down time. Pre-leaded versions allow for rapid fit, easy cable routing and function testing, potentially

cutting costs dramatically in OEM applications. Per safety code EN 954-1, components used alone comply as a Category 1. By using components in conjunction with other safety switches and modules, it is possible to construct a comprehensive protection schemes with Category 2, 3, or 4 compliance. Simple upgrade guarding solutions are available for end-user applications. Order switch and key separately.

FEATURES

- Red body color
- Integrated cable or connector(s)
- Bottom, side, and dual entry cable
- 90° or straight key
- Extremely compact enclosure
- Positive opening operation of Normally Closed contacts conforming to IEC/EN 609447-5-1-3
- IP67 enclosure rating
- Design allows side-by-side mounting and daisy-chaining from switch to switch
- Dust cap for unused key entry
- Robust stainless steel keys
- UL listed, CSA certified, CE compliant
- High current switching capabilities
- Small door swing radius allows use down to 160 mm [6.3 in]

POTENTIAL APPLICATIONS

- Small enclosures and compact spaces
- Multiple door modular machinery

BENEFITS

- Immediately identifiable as safety component
- Reduced installation time and costs
- Flexibility in mounting/actuation options
- Switch equipment directly and through safety control modules
- Fits into extremely compact spaces
- Often suitable for wet applications
- Simple mechanical and electrical redundancy
- Easy application to multiple door modular machinery – reduced difficulty in wiring small switch enclosures
- Durable and tough design
- Complies with global requirements

GKM Series

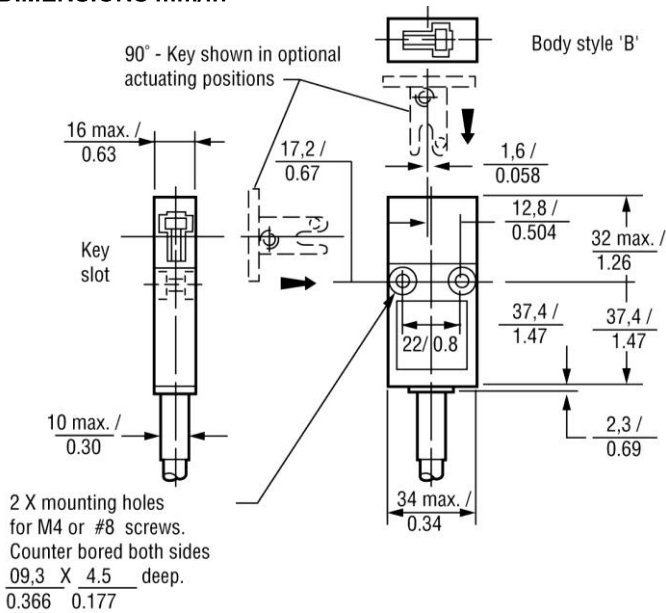
SPECIFICATIONS

| Characteristic | Parameter |
|--------------------------|--|
| Expected mechanical life | > 1 million operations |
| Degree of protection | IP66/67; EN 60529; NEMA 1, 12, 13 |
| Temperature range | -25 °C to 85 °C [-13 °F to 185 °F] |
| Approvals* | IEC 60947-5-1, EN 60947-5-1, EN 1088, EN 60504, UL508, CSA22-2-14, UL748C utilization category |
| Ratings | 15 ac, B300; 13 dc, Q300 For low energy (gold versions): operating voltage Ue: 1 Vac to 50 Vac or 1 Vdc to 50 Vdc Operating current Ie: 1 A to 100 mA GKME: 30 Vdc and 2 A max. |
| Cable spec. | SJTP rated P.V.C. type |
| Vibration | IEC 68-2-6 (BS 2011, Part 2.1 Fc) 10 g |
| Shock | IEC 68-2-27 (BS 2011, Part 2.1 Ea) 50 g |
| Door radius | 160 mm [6.3 in] |

NOTES:

* See standards (<http://content.honeywell.com/sensing/prodinfo/safety/catalog/en/v6si179e.pdf>)

DIMENSIONS mm/in

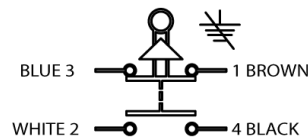
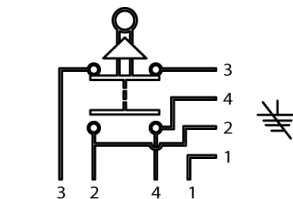


PINOUT

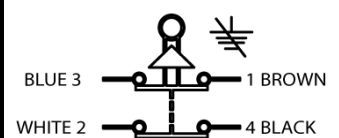
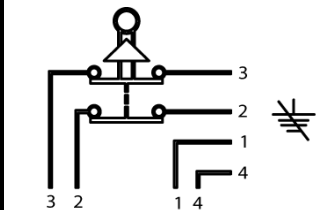


WIRING DIAGRAMS

Switch type 3 (Slow BBM 1NO/1NC) and Switch type 9 (Slow BBM 1NO/1NC gold contacts)

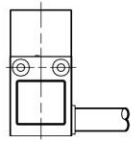
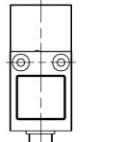
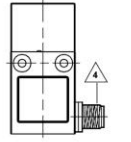
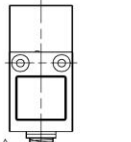
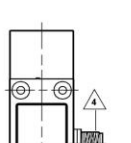
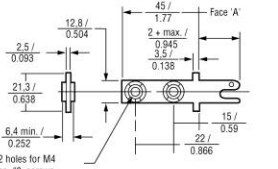
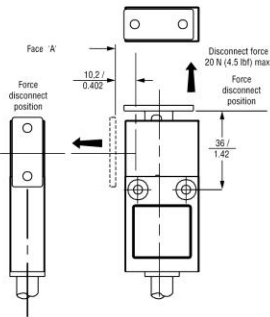
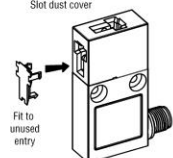
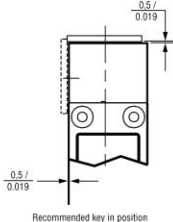
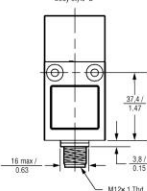
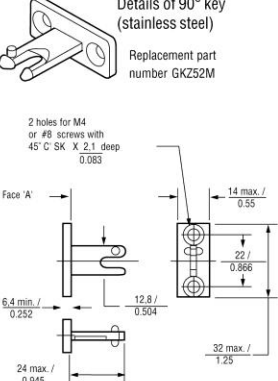


Switch type 6 (Slow 2NC) and Switch type 7 (Switch 2NC gold contacts)



Global Miniature Safety Key Interlock Switch

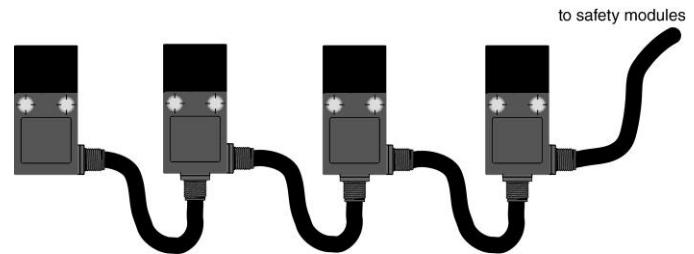
PART NUMBER TREE

| Body style | Cable/connector | Switch type (Slow-action contacts) | Key style (sold separately) | Optional key positions |
|---|---|---|---|---|
|      | <p>1 METRE CABLE LENGTH 1</p> <p>2 METRE CABLE LENGTH 2</p> <p>3 METRE CABLE LENGTH 3</p> | <p>1 NORMALLY CLOSED/ 1 NORMALLY OPEN 3</p> <p>BREAK BEFORE MAKE</p> <p>Blue 3 — 1 Brown</p> <p>White 2 — 4 Black</p> | <p>Details of straight key (stainless steel)</p> <p>Replacement part number GKZ51M</p>  |    |
| | <p>ZERO INDICATES NO CABLE BUT CONNECTOR</p> <p>Body style 'D'</p>  | <p>2 NORMALLY CLOSED 6</p> <p>Blue 3 — 1 Brown</p> <p>White 2 — 4 Black</p> | <p>Details of 90° key (stainless steel)</p> <p>Replacement part number GKZ52M</p>  | |
| | | <p>LOW ENERGY (GOLD) CONTACTS 9[^]</p> | <p>LOW ENERGY (GOLD) CONTACTS 7[^]</p> <p>▲ GOLD PLATE OVER SILVER</p> | |

Ordering: **GKM** **X** **X** **X** + **GKZ5** **X** **M**
 Example: GKMD03 + GKZ52M

DAISY-CHAINING CAPABILITY

The GKME modules may be daisy-chained and terminated into either a GKMC or GKMD (as shown) for multi-door modular machinery.



⚠ WARNING

RISK TO LIFE OR PROPERTY

Never use this product for an application involving serious risk to life or property without ensuring that the system as a whole has been designed to address the risks, and that this product is properly rated and installed for the intended use within the overall system.

Failure to comply with these instructions could result in death or serious injury.

⚠ WARNING

MISUSE OF DOCUMENTATION

- The information presented in this product sheet is for reference only. Do not use this document as a product installation guide.
- Complete installation, operation, and maintenance information is provided in the instructions supplied with each product.

Failure to comply with these instructions could result in death or serious injury.

WARRANTY/REMEDY

Honeywell warrants goods of its manufacture as being free of defective materials and faulty workmanship. Honeywell's standard product warranty applies unless agreed to otherwise by Honeywell in writing; please refer to your order acknowledgement or consult your local sales office for specific warranty details. If warranted goods are returned to Honeywell during the period of coverage, Honeywell will repair or replace, at its option, without charge those items it finds defective. **The foregoing is buyer's sole remedy and is in lieu of all other warranties, expressed or implied, including those of merchantability and fitness for a particular purpose. In no event shall Honeywell be liable for consequential, special, or indirect damages.**

While we provide application assistance personally, through our literature and the Honeywell web site, it is up to the customer to determine the suitability of the product in the application.

Specifications may change without notice. The information we supply is believed to be accurate and reliable as of this printing. However, we assume no responsibility for its use.

SALES AND SERVICE

Honeywell serves its customers through a worldwide network of sales offices, representatives and distributors. For application assistance, current specifications, pricing or name of the nearest Authorized Distributor, contact your local sales office or:

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