

MICRO SWITCH™ GKM Series

Global Miniature Key Interlock Safety 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 60954-1, 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 60947-5-1
- IP66/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
- cULus listed, CE compliant
- SIL rating: 3 per IEC 61508-2:2000
- 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

*GKME style is rated for IP66 only.

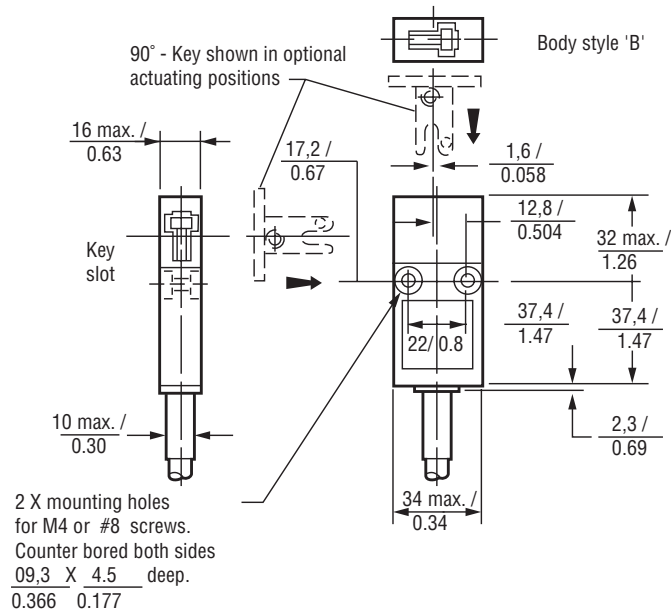
MICRO SWITCH™ GKM Series

SPECIFICATIONS

Characteristic	Parameter
Expected mechanical life	> 1 million operations
Degree of protection	IP66/IP67 (GKME style IP66 only) per 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, UL508, CSA22-2-14
Ratings	AC15 B300, DC13 Q300 For low energy (gold versions): operating voltage Ue: 1 Vac to 50 Vac or 1 Vdc to 50 Vdc Operating current Ie: 10 µA to 100 mA GKME: 30 Vdc and 2 A max.
Cable spec.	SJTP rated P.V.C. type
Vibration	IEC 60086-2-6 (BS 2011, Part 2.1 Fc) 10 g
Shock	IEC 60068-2-27 (BS 2011, Part 2.1 Ea) 50 g
Door radius	160 mm [6.3 in] min.

DIMENSIONS

Dimensions in mm / in

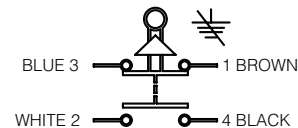
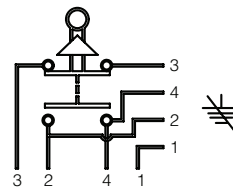


PINOUT

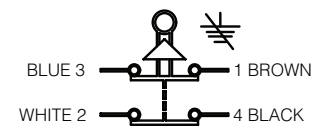
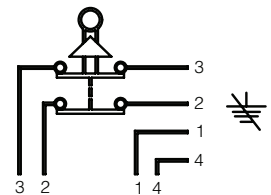


WIRING DIAGRAMS

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

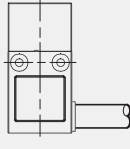
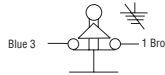
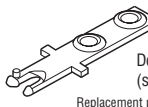
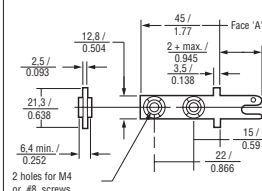
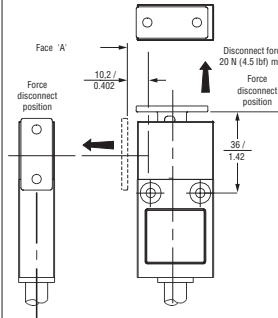
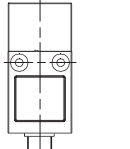
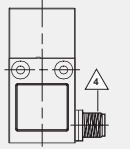
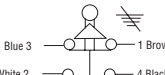
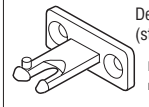
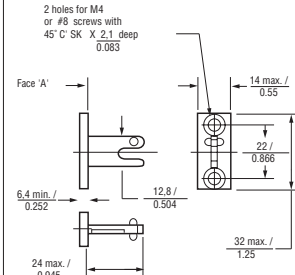
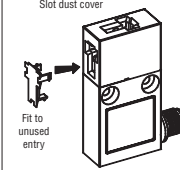
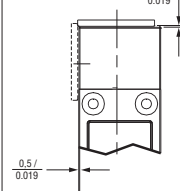
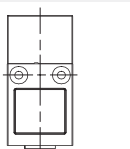
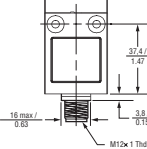
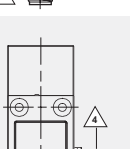


Switch type 6 (Slow 2NC) and Switch type 7 (Switch 2NC gold contacts)



Global Miniature Key Interlock Safety Switch

PART NUMBER TREE

Body style	Cable/connector	Switch type (Slow-action contacts)	Key style (sold separately)	Optional key positions
 <p>A</p>	1 METER CABLE LENGTH 1	1 NORMALLY CLOSED/ 1 NORMALLY OPEN BREAK BEFORE MAKE  Blue 3 — 1 Brown White 2 — 4 Black Contacts: Silver Nickel Rating: I, for GKME III LOW ENERGY CONTACTS: GOLD PLATE OVER SILVER NICKEL RATING: II, FOR GKME IV	 Details of straight key (stainless steel) Replacement part number GKZ51M  2.5 / 0.093, 12.8 / 0.504, 45 / 1.77, 2 + max / 0.945, 3.5 / 0.138, 15 / 0.59, 22 / 0.866, 6.4 min. / 0.252, 21.3 / 0.638, 2 holes for M4 or #8 screws	 Face 'A', Force disconnect position, 10.2 / 0.402, Disconnect force 20 N (4.5 lbf) max., Force disconnect position, 38 / 1.42
 <p>B</p>	3 METER CABLE LENGTH 3			
 <p>C</p>	ZERO INDICATES NO CABLE BUT CONNECTOR 0	2 NORMALLY CLOSED  Blue 3 — 1 Brown White 2 — 4 Black Contacts: Silver Nickel Rating: I, for GKME III LOW ENERGY CONTACTS: GOLD PLATE OVER SILVER NICKEL RATING: II, FOR GKME IV	 Details of 90° key (stainless steel) Replacement part number GKZ52M  2 holes for M4 or #8 screws with 45° C° SK X 2.1 deep 0.083, Face 'A', 14 max. / 0.55, 22 / 0.866, 32 max. / 1.25, 6.4 min. / 0.252, 12.8 / 0.504, 24 max. / 0.945	 Slot dust cover Fit to unused entry  Recommended key in position, 0.5 / 0.019
 <p>D</p>	Body style 'D'  37.4 / 1.47, 18 max. / 0.69, 3.8 / 0.15, M12x1 Thd.			
 <p>E</p>		ELECTRICAL RATINGS I: AC15 B300, DC13 Q300 II: 10 µA to 100 mA, 1 Vac/Vdc to 50 Vac/Vdc III: 30 Vdc, 2 A max. IV: 10 µA to 100 mA, 1 Vdc to 30 Vdc		

△ Micro-change dc Style M12, 4-pin with external threads/male

Ordering:

GKM

X

X

X +

Key ordering

GKZ5

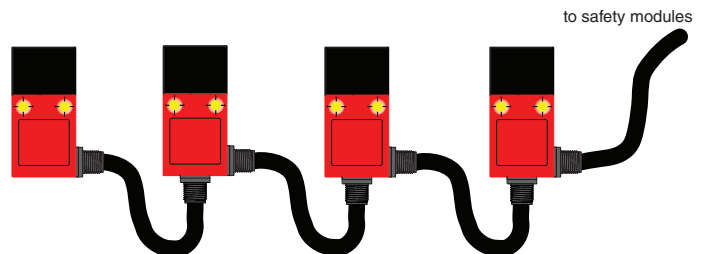
X

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.



MICRO SWITCH™ GKM Series Global Miniature Key Interlock Safety Switch

Warranty. 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 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.

Find out more

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. To learn more about Honeywell's sensing and control products, call **+1-815-235-6847/1-800-537-6945**, visit **sensing.honeywell.com**, or e-mail inquiries to **info.sc@honeywell.com**

Sensing and Control
Honeywell
1985 Douglas Drive North
Golden Valley, MN 55422 USA
sensing.honeywell.com

WARNING

MISUSE OF DOCUMENTATION

- The information presented in this datasheet is for reference only. DO NOT USE this document as product installation information.
- 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.

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.

Honeywell