Honeywell

MICRO SWITCH ™ Safety Switches Line Guide

Full-Scale Offering. Solid, Robust Industry Knowledge. Equal parts common sense and creativity. Each part in Honeywell Sensing and Control's (S&C) robust offering of safety switches comes complete with amenities you'd expect from the industry leader: superior assembly techniques for enhanced performance, extended productivity, full-line flexibility – for supreme safety.

• Key-operated interlock switches
• Cable-pull switches
• Hinge-mount switches
• Trapped key and solenoid key switches
• Positive-opening contacts

End users, OEMs, everyone faces the same challenge: ensuring equipment productivity while meeting global workplace safety standards. Honeywell S&C offers solutions designed to help pass any test with the most impressive safety switch portfolio and solutions – for any important, application-specific need. It's the widest range of sizes, sealing alternatives, enclosure materials, actuator styles, and contact options available. All backed by superior Honeywell service and global support.

• Non-contact products for door detection
• Miniature switches for smaller openings
• Reduced installation time and cost
• Tamper resistant

FEATURES

GKM Series Global Miniature.
Features: Red body color • Integrated cable or connector(s) • Bottom or side-entry • Bottom, side-entry, or dual connector versions (for daisy chaining a number of switches together) • 90° or straight key • Extremely compact enclosure • Positive opening operation of normally closed contacts (conforming to IEC/EN 60947-5-1-3) • IP67 rating • Stackable design allows side-by-side mounting • Robust keys • UL listed, CSA certified, CE compliant, SIL 3 capable • High current switching capabilities • Small door swing radius down to 160 mm [6.3 in]

Benefits: Reduced installation time and costs. Flexibility of mounting and actuation options. Ability to function as a final switching device for small, low-risk equipment. Operates with safety control modules for more complex applications. Fits extremely compact spaces, and is often suitable for wet applications. Simple mechanical and electrical redundancy for some options. Easy application in multiple door modular machinery (no difficulty in

wiring small switch enclosures).Durable, tough design. Global acceptance.

FF and FFS Series Non-contact.
Features: Red body color (except FFS and stainless steel offerings) • Tamper-proof electronic switching • 7 mm to 10 mm [0.28 in to 0.4 in] operating distance • Guard status indication • CE, UL approvals • Options of one or two safety contacts • Tested to over 1,000,000 operations • Simple mounting (M18/30 thread mounting or frame-mountable versions • Guard status indication available • ac and dc versions

Benefits: Tolerates misalignment over lifetime of machine. Gap between sensor and actuator large, enabling non-contact switching. FFS offers superior tamper resistance. Integrates easily with control modules. Easy daisy chain configurations.

GSS Series Safety Limits.
Features: Red body color • EN50041 and EN50047 mounting and characteristics • IEC electrical standard for global ap-
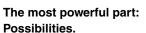
plications • Positive opening operation of normally closed contacts (conforming to IEC/EN60947-5-1-3) • Rugged housing (zinc die-cast) • Full range of actuator heads and levers • Sealing up to IP67; NEMA 1, 4, 12, and 13 • Snap-action and slow-action basic switches • International conduit sizes • Galvanically isolated contacts • UL listed, CSA and CE certified, SIL 3 capable

Benefits: Standard mounting and characteristics are globally available and accepted. Welded NC contacts will separate (vital security in safety applications). Range of actuation methods for detecting conditions in guarding and machine status applications. Wiring and body flexibility. Often suitable for inductive switching and safety relay interfaces.

GSX Series.
Features: Snap action contacts with positive break in an explosion-proof housing • Positive action push plunger breaks current upon opening of door or aperature • Explosion-proof housing

MICRO SWITCH™ Safety Switches Line Guide

The most powerful part: Possibilities.

Honeywell S&C offers one-stop convenience for engineering excellence – meaning top-notch products or completely customized creations, as well as all the possibilities that lie between. You may have 'impossible' needs and dead-lines. But the experts at Honeywell are ready with powerful safety solutions.

From the factory floor to the assembly line, from packaging machinery to robot cells – from the smallest spaces to any worldwide application or mount, Honeywell delivers ultimate reliability and safety in compact, cost-effective packages.

Safety Switches

	GKM Series Global Miniature	FF and FFS Series Non-contact
Attributes	key switch – very small, cable/connector fitted	contactless door detection; very small, cable/connector fitted
Potential applications	small doors and apertures	small doors and apertures
Housing	glass-filled polyester	ABS resin-filled, stainless steel
Approvals	UL, CE, SIL 3 capable	UL, CE
IEC/NEMA rating	IP66/67; NEMA 1, 12, 13; EN60529	IP67; NEMA 4
Differentiator	small footprint; connectorized; side-exit cable connector	large actuation window to reduce mis-alignment issues
Body dimensions (less levers) H x W x D mm[in]	69,4 mm x 34,0 mm x 16,0 mm [2.73 in x 1.34 in x 0.63 in]	82,5 mm x 19 mm x 17 mm [3.25 in x 0.75 in x 0.67 in]
Temperature	-25 °C to 85 °C [-13 °F to 185 °F]	-10 °C to 55 °C [14 °F to 131 °F]

Safety Switches

	GSS Hinge Mount Safety Limits	GSS Series Safety Limits	GSX Series Explosion-Proof Safety Switch	GK Series Key-Operated Safety Interlock
Attributes	mounted to the door hinge – detects door angle	global safety switch	explosion-proof, safety switch	heavy-duty key switch
Potential applications	medium/large doors and apertures	medium/large doors	gates, doors, access panels, cages	large, heavy door applications
Housing	glass-filled polyester; die-cast	die-cast	die-cast	die-cast
Approvals	UL, CE, SIL 3 capable	UL, CE, SIL 3 capable	UL, ATEX, IECEx	UL, CE, SIL 3 capable
IEC/NEMA rating	IP67; NEMA 1, 4, 12, 13	IP67; NEMA 1, 4, 12, 13	IP67; NEMA 1, 3, 4, 12, 13	IP67; NEMA 1, 4, 12, 13
Differentiator	highly visible	highly visible	IECEx approvals. More than 10000 actuator/switching combos	extremely heavy-duty, rugged
Body dimensions (less levers) H x W x D	83,0 mm x 30,5 mm x 30,0 mm [3.27 in x 1.2 in x 1.18 in]	83,0 mm x 30,5 mm x 30,0 mm [3.27 in x 1.2 in x 1.18 in]	154,2 mm x 44,5 mm x 72 mm [6.07 in x 1.75 in x 2.84 in]	121,6 mm x 42 mm x 42,6 mm [1.79 in x 1.652 in x 1.68 in]
Temperature	-25 °C to 85 °C [-13 °F to 185 °F]	-25 °C to 85 °C [-13 °F to 185 °F]	-40 °C to 70 °C [-40 °F to 158 °F]	-25 °C to 85 °C [-13 °F to 185 °F]

Safety Switches

	24CE and 924CE Series	GKE Series Dual Entry Safety	GKN Series Safety Interlock
Attributes	very small, cable/connector fitted	key switch – small, standardized housing	standard offering, three conduit, minimal variances
Potential applications	small doors and apertures	small doors and apertures	small/medium doors and apertures
Housing	Die-cast	glass-filled polyester	glass-filled polyester
Approvals	UL, CE, SIL 3 capable	UL, CE, CCC, SIL 3 capable	UL, CE, CCC, SIL 3 capable
IEC/NEMA rating	IP67	IP66; NEMA 1, 12, 13	IP67; NEMA 1, 4X (indoor use only), 12, 13
Differentiator	toughest safety switch available	small footprint key switch	molded 0.5 in NPT conduit
Body dimensions (less levers) H x W x D mm[in]	49,0 mm x 40,0 mm x 16,0 mm [1.93 in x 1.57 in x 0.63 in]	92,2 mm x 24,2 mm x 29,4 mm [3.63 in x 0.95 in x 1.16 in]	90,0 mm x 40,0 mm x 33,0 mm [3.55 in x 1.57 in x 1.30 in]
Temperature	0 °C to 70 °C [32 °F to 160 °F]	-25 °C to 85 °C [-13 °F to 185 °F]	-25 °C to 70 °C [-13 °F to 158 °F]

Safety Switches

	GKS Series Multi-Entry Trapped Safety Interlock	GKR/L Dual-Entry Solenoid Safety Interlock	CPS Series Cable Pull Safety Switch
Attributes	trap and hold the key until hazard has been removed	heavy-duty key switch/solenoid lock	single/dual head rope pull
Potential applications	large, heavy door applications	large, heavy door and machine apps	conveyor applications
Housing	glass-filled polyester	die-cast	die-cast
Approvals	UL, CE, CCC, SIL 3 capable	UL, CE, SIL 3 capable	UL, CE, SIL 3 capable
IEC/NEMA rating	IP67; NEMA 1, 4X (indoor use only), 12, 13	IP68; NEMA 1, 4, 6P, 12, 13	IP67; NEMA 1, 4, 12, 13
Differentiator	compact, trapped key design	extremely rugged trapped key switch	rugged housing, ease of installation
Body dimensions (less levers) H x W x D mm[in]	196,8 mm x 40 mm x 41 mm [7.75 in x 1.57 in x 1.61 in]	149,0 mm x 110,0 mm x 48,8 mm [5.85 in x 4.33 in x 1.92 in]	165,1 mm x 79,8 mm x 325,9 mm [6.5 in x 3.14 in x 12.75 in]
Temperature	-25 °C to 50 °C [-13 °F to 122 °F]	-25 °C to 85 °C [-13 °F to 185 °F]	-40 °C to 85 °C [-40 °F to 185 °F]

for hazardous locations • Sealed for protection against corrosion, water, dust, and oil as defined in NEMA 1, 3, 4, 12, and 13 and IP67 • Complies with ATEX, IECEx, and UL/CSA regulations • Simple installation • Extensive switch options and actuator styles

Benefits: To comply with explosion-proof requirements, the GSX has flame paths within the housing, which cool exploding gases below the ignition temperature before they reach explosive gases surrounding the housing. Flame paths are (1) an extended plunger between the switch cavity and head and (2) the cover-housing threads on the front of the switch. Potential applications include gates, doors, access panels, and/or cages on machinery in hydrocarbon refining, chemical processing, agricultural equipment, food processing, and grain elevators.

GKN Series Safety Interlock.

Features: Red body color • Positive opening operation of normally closed contacts (conforming to IEC/EN 60947-5-1-3) • Choice of actuators • Double insulated per IEC 60947-5-1 • Global approvals (cULus, CE, CCC, SIL 3 capable) • Three cable entries • Large wiring cavity • Large M20 cable entry • Oblique native 0.5 in NPT conduit • Common footprint • Four-entry head

Benefits: Flexibility in positioning on door/machine. Ease of wiring/installation. No conduit or cable adapters. Meets global safety standards. Drop-in compatibility with most brands. No need to reconfigure head orientation.

GK Series Key-Operated Safety Interlock.

Features: Red body color •Positive opening operation of normally closed contacts • Standard mounting per EN50041 •Available with 2NC/2NO, 3NC/1NO or 4NC positive opening contacts • Side or top key entry • Unique friction feature for key retention • Choice of four heavy duty keys (Key sold separately) • Die-cast zinc housing • Lockout device available • UL, CSA, CE, SIL 3 capable

Benefits: Designed for use on machinery where key removal brings the machine to an immediate safe condition. Potential applications include Hinged or sliding guard doors, screens, protective covers and enclosures on: machine tools machinery, metalworking machines, special purpose machinery, robotics assembly cells, and plastic molding machines.

GKE Series Dual Entry Safety Interlock.

Features: Red body color • Positive opening safety contacts • Head orientation configured to order • Rotating head • Head may be ordered in four possible orientations • Double insulation per IEC 60947-5-1 • Choice of two standard actuators • Small size •cULus, CE, CCC, SIL 3 capable

Benefits: Small footprint. Applicable to various safety schemes, including low and high voltage/energy. May be used as final switching device for small, low-risk applications. Environmentally sealed for challenging applications.

GKN Series Safety Interlock.

Features: Red body color • Positive opening operation of normally closed contacts (conforming to IEC/EN 60947-5-1-3) • Choice of actuators • Double insulated per IEC 60947-5-1 • cULus, CE, CCC, SIL 3 capable • Three cable entries • Large wiring cavity • Large M20 cable entry • Oblique native 0.5 in NPT conduit • Common footprint • Four-entry head

Benefits: Flexibility in positioning on door/machine. Ease of wiring/installation. No conduit or cable adapters. Meets global safety standards. Drop-in compatibility with most brands. No need to reconfigure head orientation.

GKS Series Multi-Entry Trapped Key Safety Interlock.

Features: Red body color • Global approvals (CE, cULus, CCC, SIL 3 capable) • Glass-filled polyester body • Power-to-lock and power-to-unlock schemes for key trap • Flexible switching arrangement • 24 Vdc, 110 Vac, and 230 Vac coil voltages • Override mechanism in cover • Four head positions available • Three conduit open-

ings (knock-out style) • Switch position provides status

Benefits: Ease of safety module integration. Tough, cost-effective, double-insulated enclosure. Choice of key trapping methodology. Four contacts can be arranged in any configuration and multiple voltages for every geography. Ability to open door (in case of power loss, etc.). Flexible wiring options. Can diagnose status of gate/door open, closed, locked.

GKR/GKL Dual-Entry Solenoid Trapped Key Safety Interlock.

Features: Metal housing • Red body color • Solenoid power to lock or power to unlock • Side or top key entry • Separate switch detection for key position and solenoid status • Available with several switch configurations • 100 mm [3.94 in] x 100 mm [3.94 in] mounting • Choice of four heavy-duty keys • Key retain force 1000 N max. • IP68 (NEMA 6P) • Two solenoid voltages available • Dual LEDs • UL listed/CSA certified/CE compliant, SIL 3 capable • Fluorocarbon-sealed enclosure available

Benefits: Robust body design for harsh environments. High force resistance. Flurocarbon version often suitable for metalworking fluid-splash environment. Allows up to eight key entry positions. Standard mounting, key mounting flexibility and security. Often suitable for harsh-duty environments. Operates at standard control voltage. Global acceptance.

CPS Series Cable Pull Safety.

Features: 2CPS dual head for dual span • 1CPS single head for single span • Red body color • Direct opening action of normally closed contacts if emergency occurs • Typical cable span of 76 m [250 ft], longer spans available • UL listed, CE compliant, SIL 3 capable • Highly visible status indicator • Gold-plated contacts available • Rugged, die-cast zinc housing • Optional hardware packs

Benefits: Easy to identify tripped switch in emergency. Extremely rugged design for harsh environments or applications. Minimizes false triggers in varying temperature environments (i.e., semi-enclosed conveyor spaces). Easy wiring and installation. Simple set-up.

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.

For more information about Sensing and Control products, visit www.honeywell.com/sensing or call +1-815-235-6847 Email inquiries to info.sc@honeywell.com

---

⚠ **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 catalogue 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.

Honeywell

Notes

MOSCHIP.RU
ВМЕСТЕ МЫ СОЗДАЕМ БУДУЩЕЕ

ПОСТАВКА
ЭЛЕКТРОННЫХ КОМПОНЕНТОВ

многоканальный
+7 495 668 12 70
info@moschip.ru

Общество с ограниченной ответственностью «МосЧип»   ИНН 7719860671 / КПП 771901001
Адрес: 105318, г.Москва, ул.Щербаковская д.3, офис 1107

Данный компонент на территории Российской Федерации

Вы можете приобрести в компании MosChip.

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

http://moschip.ru/get-element

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное   производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

Офис по работе с юридическими лицами:

105318, г.Москва, ул.Щербаковская д.3, офис 1107, 1118, ДЦ «Щербаковский»

Телефон: +7 495 668-12-70 (многоканальный)

Факс: +7 495 668-12-70 (доб.304)

E-mail: info@moschip.ru

Skype отдела продаж:
moschip.ru   moschip.ru_6
moschip.ru_4   moschip.ru_9