## : ©hipsmall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation, and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!


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## For innovation that's well apart, there's only Honeywell

With more than 50,000 products ranging from snap-action, limit, toggle, and pressure switches to position, speed, pressure, and airflow sensors, Honeywell has one of the broadest sensing and switching portfolios.

Honeywell sensor, switch, and control components are tailored to exact specifications for stronger performance, longer productivity, and increased safety. Enhanced accuracy and durability are built into every part, improving output and endurance. For our customers, this can reduce expenditures and operational costs. Our global footprint and channels help to competitively price such components for your chosen application and provide immediate technical support.

While Honeywell's switch and sensor solutions are suitable for a wide array of basic and complex applications, our customengineered solutions offer enhanced precision, repeatability, and ruggedness. We offer domain knowledge and technology resources, along with a close working relationship, to develop and deliver cost-effective, individually tailored solutions.
Whether clean-slate development or simple modifications to an existing design are needed, our expertly engineered solutions help to meet the most stringent requirements with world-class product designs, technology integration, and customer-specific manufacturing

Global service, sourcing, and manufacturing. Industry-leading engineers. Value-added assemblies and solutions. A one-stop, full-service, globally competitive supplier.


## MICRO SWITCH Limit Switches | Heavy-Duty Limit Switches

| Offer a rugged, die-cast body with multiple mounting and actuator options. Low- and high-temp construction and factory-sealed, pre-wired versions available. Potential applications include food and beverage, construction and agriculture equipment, material handling, rail, industrial valves, chemical and food processing, shipboard, caustic waste handling, and power generation. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | HDLS <br> Series | Standard | 316L Stainless Steel | Fully Potted, Epoxy Sealed |
|  | Housing type | HDLS plug-in and non-plug-in | 316L stainless steel non plug-in | sealed HDLS body |
|  | Sealing | IP65/66/67; <br> NEMA $1,3,4,4 \mathrm{X}, 6,6 \mathrm{P}, 12,13$ | $\begin{aligned} & \text { IP65/66/67; NEMA 1, 3, 3R, 4, } \\ & 4 \mathrm{X}, 6,6 \mathrm{P}, 12,13 \end{aligned}$ | IP65/66/67; <br> NEMA $1,3,4,6,6 P, 12,13$ |
|  | Temperature range (standard) | $\begin{aligned} & -12^{\circ} \mathrm{C} \text { to } 121^{\circ} \mathrm{C} \\ & {\left[10^{\circ} \mathrm{F} \text { o } 250^{\circ} \mathrm{F}\right.} \end{aligned}$ | $\begin{aligned} & -12{ }^{\circ} \mathrm{C} \text { to } 121^{\circ} \mathrm{C} \\ & {\left[10^{\circ} \mathrm{F} \text { o } 250^{\circ} \mathrm{F}\right.} \end{aligned}$ | $\begin{aligned} & -12{ }^{\circ} \mathrm{C} \text { to } 121^{\circ} \mathrm{C} \\ & {\left[10^{\circ} \mathrm{F} \text { to } 250^{\circ} \mathrm{F}\right]} \end{aligned}$ |
|  | Low temperature range (optional) | $\begin{aligned} & -40^{\circ} \mathrm{C} \text { to } 121^{\circ} \mathrm{C} \\ & {\left[-40^{\circ} \mathrm{F} \text { to } 250^{\circ} \mathrm{F}\right]} \end{aligned}$ | $\begin{aligned} & -40^{\circ} \mathrm{C} \text { to } 121^{\circ} \mathrm{C} \\ & {\left[-40^{\circ} \mathrm{F} \text { to } 250^{\circ} \mathrm{F}\right]} \end{aligned}$ | $\begin{aligned} & -40^{\circ} \mathrm{C} \text { to } 121^{\circ} \mathrm{C} \\ & {\left[-40^{\circ} \mathrm{F} \text { to } 250^{\circ} \mathrm{F}\right]} \end{aligned}$ |
|  | Housing material | zinc die-cast w/ epoxy coating | stainless steel | zinc die-cast w/ epoxy coating |
|  | Actuators/levers | - top pin plunger <br> - top pin plunger, adjustable <br> - top roller plunger <br> - top rotary <br> - side rotary <br> - side rotary (maintained) <br> - side pin plunger <br> - side pin plunger, adjustable <br> - side pin plunger, maintained <br> - side roller plunger <br> - wobble | - top pin plunger <br> - top roller plunger <br> - side rotary <br> - side rotary (maintained) <br> - side pin plunger <br> - side roller plunger | - top pin plunger <br> - top pin plunger, adjustable <br> - top roller plunger <br> - top rotary <br> - side rotary <br> - side rotary (maintained) <br> - side pin plunger <br> - side pin plunger, adjustable <br> - side pin plunger, maintained <br> - side roller plunger <br> - wobble |
|  | Termination | - $0.5 \mathrm{in} / 0.75 \mathrm{in}-14 \mathrm{NPT}$ conduit <br> - 20 mm conduit <br> - PG13.5 <br> - 6 - ft and 12 - ft cable <br> - manifold <br> - 4, 5, and 9-pin mini-connector <br> - 4-pin micro-connector | - $0.5 \mathrm{in} / 0.75 \mathrm{in}-14 \mathrm{NPT}$ conduit <br> - 12-ft cable | - cable (various lengths) <br> - 4, 5, and 9-pin mini-connector |
|  | Approvals | UL, CE, CSA, CCC, EN60947-1, EN60947-5-1 | UL, CE, CSA, CCC, EN60947-1, EN60947-5-1 | UL, CE, CSA, CCC, EN60947-1, EN60947-5-1 |
|  | Circuitry (double break contacts) | - 1NC 1NO SPDT, snap action <br> - 1NC direct acting, <br> - 2NC 2NO DPDT, snap action <br> - 2NC 2NO DPDT sequential, snap action <br> - 2NC 2NO DPDT center neutral, snap action | - 1NC 1NO SPDT, snap action <br> - 1 NC direct acting, <br> - 2NC 2NO DPDT, snap action <br> - 2NC 2NO DPDT sequential, snap action <br> - 2NC 2NO DPDT center neutral, snap action | - 1NC 1NO SPDT, snap action <br> - 1NC direct acting, <br> - 2NC 2NO DPDT, snap action <br> - 2NC 2NO DPDT sequential, snap action <br> - 2NC 2NO DPDT center neutral, snap action |
|  | Contacts | silver, gold | silver, gold | silver, gold |
|  | Electrical rating | $\begin{aligned} & 10 \mathrm{~A} \text { (thermal) } \\ & \text { AC15, A600; DC13, R300 } \end{aligned}$ | $\begin{aligned} & 10 \mathrm{~A} \text { (thermal) } \\ & \text { AC15, A600; DC13, R300 } \end{aligned}$ | $\begin{aligned} & 10 \mathrm{~A} \text { (thermal) } \\ & \text { AC15, A600; DC13, R300 } \end{aligned}$ |
|  | Measurements $(H \times W \times D)$ | $\begin{aligned} & 106,7 \mathrm{~mm} \times 41,1 \mathrm{~mm} \times 44,4 \\ & \mathrm{~mm}[4.20 \mathrm{in} \times 1.62 \mathrm{in} \times 1.75 \mathrm{in}] \end{aligned}$ | $\begin{aligned} & 122,9 \mathrm{~mm} \times 47,63 \mathrm{~mm} \times 45,2 \\ & \mathrm{~mm}[4.84 \mathrm{in} \times 1.875 \mathrm{in} \times 1.78 \\ & \mathrm{in}] \end{aligned}$ | $\begin{aligned} & 106,7 \mathrm{~mm} \times 41,1 \mathrm{~mm} \times 44,4 \\ & \mathrm{~mm}[4.20 \mathrm{in} \times 1.62 \mathrm{in} \times 1.75 \mathrm{in}] \end{aligned}$ |
|  | Features | wide variety of actuators, circuitry options, and connectivity; rugged and dependable, models in service for over 40 years | series 316L 300 stainless steel housing suitable for corrosive environment and wash down food and beverage applications | construction guards aganst fluid penetration into switch body; suitable for harsh-duty applications |

## MICRO SWITCH Limit Switches | General-Purpose Limit Switches

Meet IEC standards for world-wide acceptance - often used in injection molding, PLC interface, machine tooling, escalators, packaging, food and beverage, industrial, lifts and elevators, electronic assembly, construction and agriculture equipment, material handling, and rail.


|  |  |  |
| :---: | :---: | :---: |
| Series | GLA | GLC |
| Housing type | EN 50041 | EN 50047 |
| Sealing | IP67; NEMA 1, 3, 4, 12, 13 | IP66/IP67; NEMA 1, 4, 12, 13 |
| Temperature range | $\begin{aligned} & -25^{\circ} \mathrm{C} \text { to } 85^{\circ} \mathrm{C}\left[-13{ }^{\circ} \mathrm{F} \text { to } 185^{\circ} \mathrm{F}\right] \\ & \text { side rotary: }-40^{\circ} \mathrm{C} \text { to } 85^{\circ} \mathrm{C}\left[-40^{\circ} \mathrm{F} \text { to } 185^{\circ} \mathrm{F}\right] \end{aligned}$ | $-40^{\circ} \mathrm{C}$ to $85{ }^{\circ} \mathrm{C}$ [-40 ${ }^{\circ} \mathrm{F}$ to $\left.185{ }^{\circ} \mathrm{F}\right]$ |
| Housing material | zinc die-cast, epoxy coated | zinc die-cast, epoxy coated |
| Actuators/levers | side rotary, top pin plunger, top roller lever, top roller plunger, wobble | side rotary, top pin plunger, top roller lever, top roller plunger, wobble |
| Termination | conduit: 0.5 in - 14NPT, 20 mm , PG13.5 | conduit: 0.5 in - 14NPT, 20 mm, PG13.5, Deutsch-style connector (4-pin) |
| Approvals | $\begin{aligned} & \text { UL, CE, CSA, CCC, IEC 947-5-1, } \\ & \text { EN60947-5-1, UL508 } \end{aligned}$ | $\begin{aligned} & \text { UL, CE, CSA, CCC, IEC 947-5-1, } \\ & \text { EN60947-5-1, UL508 } \end{aligned}$ |
| Circuitry <br> (double break contacts) | - SPDT snap action <br> - SPDT slow action, BBM/MBB <br> - DPDT snap action <br> - DPDT sequential <br> - DPDT center neutral <br> - 2 NO or 2 NC | - SPDT snap action <br> - SPDT slow action, BBM/MBB <br> - 2NC slow action <br> - 2NO slow action |
| Contacts | silver, gold | silver, gold |
| Electrical rating | 10 A (thermal) AC15, A600; DC13, Q300 | $\begin{aligned} & 10 \mathrm{~A} \text { (thermal) } \\ & \text { AC15, A300; DC13, Q300 } \end{aligned}$ |
| Measurements (Hx W x D) | $\begin{aligned} & 103 \mathrm{~mm} \times 42,0 \mathrm{~mm} \times 42,0 \mathrm{~mm} \\ & {[4.06 \mathrm{in} \times 1.65 \mathrm{in} \times 1.65 \mathrm{in}]} \end{aligned}$ | $\begin{aligned} & 85,6 \mathrm{~mm} \times 30,5 \mathrm{~mm} \times 31,1 \mathrm{~mm} \\ & {[3.37 \mathrm{in} \times 1.20 \mathrm{in} \times 1.23 \mathrm{in}]} \end{aligned}$ |
| Features | positive-opening NC contacts $\oplus$ | positive-opening NC contacts $๑$ |


| EN |
| :--- |
| GLD |

## MICRO SWITCH Limit Switches | Miniature Limit Switches

Miniature switches

- each with unique
housing and operational characteristics. Designed for modern industrial OEMs, the miniature and compact package sizes fit in applications where space is limited. The mounting pattern meets most globally accepted mounting standards.

|  |  |
| :---: | :---: |
| Series | NGC |
| Housing type | minature, metal and plastic options |
| Sealing | NEMA 1, 4, 12, 13; IP67 per IEC 60529 suitable for outdoor applications |
| Temperature range | $-25^{\circ} \mathrm{C}$ to $75^{\circ} \mathrm{C}\left[-13^{\circ} \mathrm{F}\right.$ to $\left.167^{\circ} \mathrm{F}\right]$ |
| Housing material | metal and plastic housing options |
| Actuators/levers | side rotary (standard \& short), side rotary with adjustable length roller lever, reversed side rotary (standard \& short), pin plunger (standard \& long), roller plunger (standard \& long), cross roller plunger (standard \& long), pin plunger with boot seal, panel-mount pin plunger, panel-mount roller plunger, panel-mount cross roller plunger, panel-mount pin plunger with boot seal, top roller lever arm |
| Termination | - cable $0,75 \mathrm{~mm}^{2}$ (18 AWG), <br> - PUR cable $0,75 \mathrm{~mm}^{2}(18$ AWG), <br> - special application cable, $4 \& 5 \times 0,75 \mathrm{~mm}^{2}$ (18 AWG) non-halogen, <br> - connector, 4-pin male, M12 thread, <br> - connector, 5 -pin male, M12 thread, <br> - cable $0,50 \mathrm{~mm}^{2}$ (20 AWG) <br> - PUR cable, $0,50 \mathrm{~mm}^{2}$ (20 AWG) <br> - special application cable, 8 \& $9 \times 0,50 \mathrm{~mm}^{2}$ (20 AWG) non-halogen |
| Approvals | UL (UL508), cUL, CE (IEC 60947-5-1), CCC (GB14048.5-2008) |
| Circuitry | SPDT, DPDT; snap action contacts (1NC/1NO, 2NC/2NO) |
| Contacts | snap action, positive break standard: silver alloy; gold: gold-plated |
| Electrical rating | various (refer to datsheet) |
| Measurements $(H \times W \times D)$ | $\begin{aligned} & 55,8 \mathrm{~mm} \times 30 \mathrm{~mm} \times 16,7 \mathrm{~mm} \\ & {[2.2 \mathrm{in} \times 1.19 \mathrm{in} \times 0.66 \mathrm{in}]} \end{aligned}$ |
| Features | can be configured more than 380,000 ways, carries global approvals, and are sealed to IP67 for potential use in indoor and outdoor applications |


|  |  |  |
| :---: | :---: | :---: |
| 14CE/914CE | SZL-VL-S | SL1 |
| minature | miniature | side mount |
| $\begin{aligned} & \text { IP65, IP66, IP67; IP68 } \\ & \text { NEMA 1, 3, 3R, 4, 6, 6P, } 12 \text { (boot seal), } 13 \end{aligned}$ | IP67 | IP67; NEMA 3, 4, 13 |
| $0^{\circ} \mathrm{C}$ to $70^{\circ} \mathrm{C}$ [ $35^{\circ} \mathrm{F}$ to $158^{\circ} \mathrm{F}$ ] <br> $-40^{\circ} \mathrm{C}\left[-40^{\circ} \mathrm{F}\right]$ low temp (optional) | $-20^{\circ} \mathrm{C}$ to $70^{\circ} \mathrm{C}\left[-4^{\circ} \mathrm{F}\right.$ to $\left.158^{\circ} \mathrm{F}\right]$ (with no icing) | $-10^{\circ} \mathrm{C}$ to $70^{\circ} \mathrm{C}\left[14^{\circ} \mathrm{F}\right.$ to $\left.158{ }^{\circ} \mathrm{F}\right]$ |
| zinc die-cast, epoxy coated | die-cast metal housing with glass-filled, flame-retardant thermoplastic cover; UL 94 flame spread testing: V-0 rated | zinc die-cast |

side rotary, top pin plunger, top roller plunger, pushbutton, wobble, panel mount
side rotary (positive-opening contacts), top pin plunger, top roller plunger, wobble, wobble cat whisker
top pin plunger, top roller plunger, top cross roller plunger, top roller lever

## cable gland

(cable diameter 5,8 mm to 9,6 mm)

14CE: CE, IEC947-5-1, EN60947-5-1 914CE: UL, CE, CSA, IEC947-5-1, EN60947-5-1

| SPDT | 1NC 1NO SPDT | SPDT |
| :--- | :--- | :--- |
| silver, gold | silver alloy | silver, gold |
| 5 A (thermal) | AC-15 A300 (380 Vac/0.5 A) | 5 A |
| AC14, D300; DC13, R300 | DC- $-13 \mathrm{Q} 300(220 \mathrm{Vdc} / 0.05 \mathrm{~A})$ | $59,8 \mathrm{~mm} \times 44,2 \mathrm{~mm} \times 18 \mathrm{~mm}$ |
| $49 \mathrm{~mm} \times 40 \mathrm{~mm} \times 16 \mathrm{~mm}$ | $64 \mathrm{~mm} \times 28,5 \mathrm{~mm} \times 25,7 \mathrm{~mm}$ | $[2.35 \mathrm{in} \times 1.74 \mathrm{in} \times 0.71 \mathrm{in}]$ |
| $[1.93 \mathrm{in} \times 1.58 \mathrm{in} \times 0.63 \mathrm{in}]$ | $2.52 \mathrm{in} \times 1.12 \mathrm{in} \times 1.01 \mathrm{in}$ |  |

## MICRO SWITCH Limit Switches | Compact Precision Limit Switches

Featuring a small-tomedium metal and plastic package sizes. Potential applications include material handling, printing, machine tools, agricultural equipment, cranes, packaging, earth moving, conveyors, surtran, textile, and printing.


| Series | E6 | V6 |
| :--- | :--- | :--- |
| Housing type | side mount | flange mount |
| Sealing | E6/V6-RQ: IP40; NEMA 1 | E6/V6-RQ: IP40; NEMA 1 |
|  | E6/V6-RN: IP66; NEMA $1,3,4$ | E6/V6-RN: IP66; NEMA 1, 3, 4 |

E7
side mount,
E7/V7-RQ:IP50

E7/V7-RN or RQN: IP65
$-30^{\circ} \mathrm{C}$ to $70^{\circ} \mathrm{C}\left[22^{\circ} \mathrm{F}\right.$ to $\left.158^{\circ} \mathrm{F}\right]$
aluminum die-cast, epoxy coated
top pin plunger, top roller plunger, top roller lever, one-way roller lever, wobble, cross-roller plunger
20 mm, PG13.5
single or double conduit
CE

| SPDT, DPDT | SPD |
| :--- | :---: |
| silver | silve |

SPDT:AC15, A300; DC13, Q300 SPDT:AC15, A300; DC13, Q300

DPDT: AC15, B300; DC13, R300
single conduit: $45,3 \mathrm{~mm} \times 76,4 \mathrm{~mm} \times 25,4 \mathrm{~mm}$ [1.79 in $\times 3.01 \mathrm{in} \times 1.00 \mathrm{in}]$ double conduit: $45,2 \mathrm{~mm} \times 84,6 \mathrm{~mm} \times 25,4 \mathrm{~mm}$ [1.78 in $\times 3.33 \mathrm{in} \times 1.00 \mathrm{in}$ ]
compact, general-purpose limit switch for medium-duty indoor or outdoor applications
E7/V7-RN or RQN: IP65
$-30^{\circ} \mathrm{C}$ to $70^{\circ} \mathrm{C}\left[22^{\circ} \mathrm{F}\right.$ to $\left.158^{\circ} \mathrm{F}\right]$
aluminum die-cast, epoxy coated plunger

20 mm, PG13.5
single or double conduit
CE

SPDT, DPDT

SPDT: AC15, A300; DC13, Q300
DPDT:AC15, B300; DC13, R300

V7

flange mount
E7/V7-RQ: IP50
top pin plunger, top roller plunger, top roller lever, one-way roller lever, wobble, cross-roller
single conduit: $45,3 \mathrm{~mm} \times 76,4 \mathrm{~mm} \times 25,4 \mathrm{~mm}$ [1.79 in $\times 3.01 \mathrm{in} \times 1.00 \mathrm{in}]$
double conduit: $45,2 \mathrm{~mm} \times 84,6 \mathrm{~mm} \times 25,4 \mathrm{~mm}$ [1.78 in $\times 3.33 \mathrm{in} \times 1.00 \mathrm{in}$ ]
compact, general-purpose limit switch for medium-duty indoor or outdoor applications

## MICRO SWITCH Hazardous Area Switches | Hazardous Area Switches

Designed to extinguish the
flame path in a potentially
explosive environment,
MICRO SWITCH
hazardous area switches
are weatherproof, water-
tight, and dust-tight.
These highly reliable,
rugged switches are often
used in control valves,
petrochemical, conveyors,
grain elevators, and
material handling.



## Series BX

BX (1/2 NPT or 3/4 NPT): UL, CSA, ATEX, IEC Ex, NEPSI (China)
BX (20 mm): ATEX, IEC Ex, NEPSI (China), EAC (Russia), IN METRO (Brasil)
NEMA 7, Div. 1 \& 2, Class I, Groups B, C, \& D
NEMA 9, Div. 1 \& 2, Class II, Groups E, F, \& G
II 2 G Exd IIC T6 Gb
II 2 D Extb IIIC $785^{\circ} \mathrm{CDb}$
BX2
BX2 (1/2 NPT, $3 / 4$ NPT, 20 mm ): UL, cUL, ATEX, IEC Ex, NEPSI (China), EAC (Russia), IN METRO (Brasil)

| Designations | NEMA 7, Div. 1 \& 2, Class I, Groups B, C, \& D NEMA 9, Div. 1 \& 2, Class II, Groups E, F, \& G II 2 G ExdIICT6 Gb II 2 D Extb IIIC $785^{\circ} \mathrm{CDb}$ | NEMA 7, Div. 1 \& 2, Class I, Groups B, C, \& D NEMA 9, Div. 1 \& 2, Class II, Groups E, F, \& G \\| 2 G Exd IIC T6 Gb II 2 D Extb IIIC $785^{\circ} \mathrm{C} \mathrm{Db}$ |
| :---: | :---: | :---: |
| Sealing | P67; NEMA 1, 3, 4, 6, 13 | IP67; NEMA 1, 3, 4, 6, 13 |
| Housing material | aluminum, epoxy coated | stainless steel |
| Actuators/levers | side rotary, side rotary (maintained), side pin plunger, side pin plunger - adjustable, side roller plunger, top rotary, top pin plunger, top pin plunger - adjustable, top roller plunger, wobble | side rotary, side rotary (maintained), side pin plunger, side roller plunger, top pin plunger, top roller plunger |
| Termination | 0.5 in - 14NPT conduit, 0.75 in - 14NPT conduit, 20 mm conduit | conduit: 0.5 in - 14NPT, 0.75 in - 14NPT, 20 mm |

Circuitry
(double break
contacts)

- 1NC 1NO SPDT snap action
- 2NC 2NO DPDT snap action
- 2NC 2NO DPDT snap action, center neutral
- 2NC 2NO DPDT snap action, sequential
- 1NC 1NO SPDT snap action
- 2NC 2NO DPDT snap action
- 2NC 2NO DPDT snap action, center neutral
- 2NC 2NO DPDT snap action, sequential

| Operating temperature | $\begin{aligned} & -40^{\circ} \mathrm{C} \text { to } 70^{\circ} \mathrm{C} \\ & {\left[-40^{\circ} \mathrm{F} \text { to } 158^{\circ} \mathrm{F}\right]} \end{aligned}$ | $\begin{aligned} & -40^{\circ} \mathrm{C} \text { to } 70^{\circ} \mathrm{C} \\ & {\left[-40^{\circ} \mathrm{F} \text { to } 158^{\circ} \mathrm{F}\right]} \end{aligned}$ |
| :---: | :---: | :---: |
| Electrical rating | 10 A (thermal) <br> AC15,A600; DC13, R300 | 10 A (thermal) <br> AC15, A600; DC13, R300 |
| Measurements $(H \times W \times D)$ | $\begin{aligned} & 146,1 \mathrm{~mm} \times 76,2 \mathrm{~mm} \times 72,9 \mathrm{~mm}] \\ & {[5.75 \mathrm{in} \times 3.00 \mathrm{in} \times 2.87 \mathrm{in}]} \end{aligned}$ | $\begin{aligned} & 146,1 \mathrm{~mm} \times 76,2 \mathrm{~mm} \times 72,9 \mathrm{~mm}] \\ & {[5.75 \mathrm{in} \times 3.00 \mathrm{in} \times 2.87 \mathrm{in}]} \end{aligned}$ |
| Features | diverse conduit selection; compatible with LSX; tracking interchangeability with MICRO SWITCH HDLS; variety of heads and non-sparking actuators; 10 A thermal electrical rating; silver or gold contacts; ATEX-required external ground screw; global agency approvals | corrosion-resistant stainless steel housing; diverse conduit selection; tracking interchangeability with MICRO SWITCH LSX and BX series products; variety of heads and non-sparking actuators; 10 A thermal electrical rating; silver or gold contacts; ATEX-required external ground screw; global agency approvals |



LSX


## GSX



UL, CSA
cULus, ATEX, IEC Ex, IN METRO (Brasil)
NEMA 7, Div. 1 \& 2, Class I, Groups B, C, \& D
NEMA 9, Div. 1 \& 2, Class II, Groups E, F, \& G
$\| 2$ G; Exd IIC T6


| $\| 2$ D; Exd tD A21 $85^{\circ} \mathrm{C}$ |
| :-- |

IP67; NEMA 1, 4, 12, 13
aluminum, epoxy coated
N

## NEMA 1, 3, 4, 13

aluminum, epoxy coated
side rotary, side rotary (maintained), side pin plunger, side pin plunger - adjustable, side roller plunger, top rotary, top pin plunger, top pin plunger - adjustable, top roller plunger, side rotary, top pin plunger, top roller plunger, top roller lever cable/rope pull, maintained wobble

## conduit: 0.5 in - 14NPT, $20 \mathrm{~mm}, \mathrm{PG} 13,5$

conduit: 0.5 in - 14NPT, 0.75 in - 14NPT

- 1NC 1NO snap action
- 2NC 2NO snap action
- 2NC slow action
- 2NO slow action
- 1NC
- 1NC 1NO BBM slow action
- 1NC 1NO
- 1NC 1NO MBB slow action
- 2NC
- 2NC 1NO BBM slow action
- 2NC 2NO BBM slow action
- 3NC 1NO BBM slow action
- 4NC slow action
$\because 0^{\circ}$ -

| $-40^{\circ} \mathrm{C}$ to $70^{\circ} \mathrm{C}$ | $-1^{\circ} \mathrm{C}$ to $70^{\circ} \mathrm{C}$ |
| :--- | :--- |
| $\left[-40^{\circ} \mathrm{F}\right.$ to $\left.158{ }^{\circ} \mathrm{F}\right]$ | $\left[-30^{\circ} \mathrm{F}\right.$ to $\left.158{ }^{\circ} \mathrm{F}\right]$ |
| 10 A (thermal) | 10 A (thermal) |
| AC15, A300/A600; DC13, Q300 | AC15, A300/A600; DC13, Q300 |
| $154,2 \mathrm{~mm} \times 76,2 \mathrm{~mm} \times 72 \mathrm{~mm}$ | $158,24 \mathrm{~mm} \times 76,2 \mathrm{~mm} \times 73,2 \mathrm{~mm}$ |
| $[6.07 \mathrm{in} \times 3.00 \mathrm{in} \times 2.84 \mathrm{in}]$ | $[6.23 \mathrm{in} \times 3.00 \mathrm{in} \times 2.88 \mathrm{in}]$ |

10 A thermal electrical rating; variety of actuators and circuitry options; silver or gold contacts; field adjustable to meet various application needs
snap-action or slow-action contacts with positive break of NC contacts; simple installation; positive action push plunger; global agency approvals; silver or gold contacts
positive-opening operating of NC contacts; cable length may be 200 ft in straight line; internal grounding screw


## MICRO SWITCH Hazardous Area Switches | Hazardous Area Switches

Designed to extinguish the
flame path in a potentially explosive environment, MICRO SWITCH
hazardous area switches are weatherproof, watertight, and dust-tight. These highly reliable,
rugged switches are often used in control valves, petrochemical, conveyors, grain elevators, and material handling.


NEMA 7, Div. 1 \& 2, Class I, Groups B, C, \& D (select catalog listings)
NEMA 9, Div. 1 \& 2, Class II, Groups E, F, \& G
\| 2 G; EExdIIB + H2 T6


## CX

UL, CSA, ATEX (CE), IN METRO, IEC Ex (consult factory for applicable listings)

NEMA 7, Div. 1 \& 2, Class I, Groups B, C, \& D (select catalog listings)
NEMA 9, Div. 1 \& 2, Class II, Groups E, F, \& G II 2 G: Exd IIC T6
II $2 \mathrm{D} ;$ ExdtD A21 $\mathrm{T} 85^{\circ} \mathrm{C}$

IP66;
NEMA 1, 3, 4, 4X, 6, 6P, 13
aluminum (epoxy coated), bronze
Housing
material
aluminum, epoxy coated

| Actuators/levers | side rotary, top pin plunger, top roller plunger, manual | side rotary, pin plunger |
| :---: | :---: | :---: |
| Termination | 0.5 in - 14NPT conduit, lead wires | 0.75 in - 14 NPT conduit, 25 mm conduit |
| Circuitry | 1NC 1NO SPDT snap action; 1NC 1NO SPDT maintained; 2NC 2NO DPDT snap action | max. of 6NC/6NO <br> 4 mA to 20 mA ; analog output |
| Operating temperature (standard) | $-40^{\circ} \mathrm{C}$ to $71^{\circ} \mathrm{C}$ [-40 ${ }^{\circ} \mathrm{F}$ to $\left.160^{\circ} \mathrm{F}\right]$ $-40^{\circ} \mathrm{C}$ to $204^{\circ} \mathrm{C}\left[-40^{\circ} \mathrm{F}\right.$ to $\left.400^{\circ} \mathrm{F}\right]$ optional EXHT catalog listing | $-25^{\circ} \mathrm{C}$ to $85^{\circ} \mathrm{C}\left[-13{ }^{\circ} \mathrm{F}\right.$ to $\left.185^{\circ} \mathrm{F}\right]$ <br> $-40^{\circ} \mathrm{C}$ to $85^{\circ} \mathrm{C}\left[-40^{\circ} \mathrm{F}\right.$ to $\left.185^{\circ} \mathrm{F}\right]$ (optional) |

## Electrical rating $\quad 1 \mathrm{~A}, 10 \mathrm{~A}, 15 \mathrm{~A}, 20 \mathrm{~A}$

|  |  |
| :--- | :--- |
| Measurements $65,0 \mathrm{~mm} \times 93,0 \mathrm{~mm} \times 51,3 \mathrm{~mm}$ <br> $(\mathrm{H} \times \mathrm{W} \times \mathrm{D})$  | $[2.56 \mathrm{in} \times 3.66 \mathrm{in} \times 2.02 \mathrm{in}]$ |

Features
smallest metal housing intended for indoor applications; ample wiring space; mounts from any of four sides; used in temperature range of $-40^{\circ} \mathrm{C}$ to $71^{\circ} \mathrm{C}\left[-40^{\circ} \mathrm{F}\right.$ to $160{ }^{\circ} \mathrm{FJ}$; global agency approvals
$1 \mathrm{~A}, 10 \mathrm{~A}, 15 \mathrm{~A}, 20 \mathrm{~A}$
short cover: 101,6 mm x 101,6 mm x 104 mm [4.00 in $x 4.00$ in $x 4.09 \mathrm{in}$ ]
standard cover: $101,6 \mathrm{~mm} \times 101,6 \mathrm{~mm} \times 145,0 \mathrm{~mm}$ [ 4.00 in $x 4.00$ in $\times 5.71 \mathrm{in}$ ]
operate point field adjustable; low temp seals; available models for on/off position switching or continuous analog output sensing; single or double pole, double-throw available; global agency approvals

## snap-action switches:

$\| 2$ G, II 2 D (ATEX Rating) Exdb IICT6 Gb (Gas) Ex tb IIIC T85 ${ }^{\circ} \mathrm{CDb}$ (Dust) Ta $-40^{\circ} \mathrm{C}$ to $+50^{\circ} \mathrm{C}$ (Switch Code 4A or 4B)
Ta $-40^{\circ} \mathrm{C}$ to $+60^{\circ} \mathrm{C}$ (Switch Code 2A or 2B)

## proximity switches:

|| 1 G, || 1 D (ATEX Rating)
Exia IICT4 Ga(Gas) II 2 G; EExd IIC T6
|l 2 D ; ExtD A21 $\mathrm{T} 85^{\circ} \mathrm{C}$
Exia IIIC T135 ${ }^{\circ} \mathrm{C}$ Da (Dust)
$\mathrm{Ta}-40^{\circ} \mathrm{C}$ to $80^{\circ} \mathrm{C}$


GXA
ATEX (CE)

GXE
ATEX (CE), IEC Ex EN 50041 mounting compatible


## 14CE100

ATEX (CE)

| IP66 per IEC 60079-0; <br> IP67 per IEC 60529 (self-certified by Honeywell) <br> NEMA 4, 4X, 6, and 13 per UL 50E | IP66 | IP66 | IP65 |
| :--- | :--- | :--- | :--- |
| aluminum with protective paint finish | zinc, epoxy coated | zinc, epoxy coated | zinc, epoxy coated |

snap-action switches:

## UL: 15 A 150 Vac

 10 A 250 Vac 0.5 A 250 VdcCE: 16 A 250 Vac
0.5 A 250 Vdc

## proximity switches:

switch element function: NAMUR, NC
Nominal voltage: 8.2 V
Current cons. (On) $\leq 1 \mathrm{~mA}$
Current cons. (Off) $\geq 3 \mathrm{~mA}$

AC15, 4 A, 250 V ;
DC13, 0.15A, 250 V

AC15, 4 A, 250 V :
DC13, $0.15 \mathrm{~A}, 250 \mathrm{~V}$
AC14, D300; DC13, R300
$152,3 \mathrm{~mm}$ H $\times 140 \mathrm{~mm}$ W $\times 140 \mathrm{~mm}$ D [6.0 in $\mathrm{H} \times 5.5$ in W $\times 5.5$ in D] ref.
$103 \mathrm{~mm} \times 42,0 \mathrm{~mm} \times$
$42,0 \mathrm{~mm}$ [4.06 in $\times 1.65$ in $\times 1.65 \mathrm{in}$ ]
$85,9 \mathrm{~mm} \times 65 \mathrm{~mm} \times 30,0 \mathrm{~mm}$
[ $3.38 \mathrm{in} \times 2.56 \mathrm{in} \times 1,18 \mathrm{in}$ ]

EN 50047 mounting compatible; double-insulated switch element; snap-action basic switch; A-P and European approvals
$49,0 \mathrm{~mm} \times 40,0 \mathrm{~mm} \times 16,0 \mathrm{~mm}$ [1.93 in $\times 1.57$ in $\times 0.63 \mathrm{in}$ ]
valve position indicator; certified flame-proof, explosion-proof and intrinsically safe (optional);VPX with proximity switches carry an Intrinsically Safe (IS) rating; well suited for up to 500,000 actuation cycles; available in multiple indicator colors that is visible from all directions

EN 50041 mounting compatible; double-insulated switch element; snap-action basic switch; A-P and European approvals
pre-wired versions; gang-mounting capability; cable length variations; simple two screw mounting; A-P and European approvals

## Limitless ${ }^{\text {TM }}$ Solutions | Wireless Limit Switches

New alternative enables designers to work without limitations of traditional tethered devices. Enables presence, absence, or position in applications where wired products are not feasible due to functionality and/or cost. Applications include door position, construction/ ag machines, conveyors, cranes, grain diverters, lifts, material handling, presses, and valves.



| Series | WLS | WGLA |
| :--- | :--- | :--- |
| Housing type | EN 50041 and back-mounting | EN 50041 |
| Housing <br> material | powder-coated phosphate epoxy finish, zinc die-cast | powder-coated, zinc die-cast |
| Radio | WPAN 802.15.4; 2.4 GHz | WPAN 802.15.4; 2.4 GHz |
| Signal range | 1000 ft [305 m] in US/Canada | 1000 ft [305 m] in US/Canada |
| Sealing | IP67/IP68; NEMA 1, 3, 4, 6, 6P, 12, 13 | IP67; NEMA 1, 4, 12, 13 |
| Actuators/ <br> operating heads | over 15 side rotary actuators; pin/roller plunger, <br> side/top rotary (with more than 15 levers), cat whis- <br> ker, wobble stick, side shaft eyelet pull, maintained/ <br> momentary side plunger, and cable pull operating <br> heads | side rotary, top pin plunger, top roller plunger, <br> top roller lever |
| Antenna types | direct or remote mounts, <br> omni-directional | direct or remote mounts, <br> omni-directional |
| Sensing target | - |  |

Electrical
connection
Electromechanical
switch

Operating
characteristics

## Measurements

( $\mathrm{H} \times \mathrm{W} \times \mathrm{D}$ ) (without antenna)
$106,68 \mathrm{~mm} \times 41,15 \mathrm{~mm} \times 44,45 \mathrm{~mm}$ [ $4.20 \mathrm{in} \times 1.62 \mathrm{in} \times 1.75 \mathrm{in}$ ]
operating head rotary tested in excess of 50 million

## Features

cycles; diaphragm seal between head and body components from corrosion and debris; reliable, flexible, and secure wireless transmission; FCC 15, IC, ACMA, \& ETSI
$102,85 \mathrm{~mm} \times 42 \mathrm{~mm} \times 42 \mathrm{~mm}$ [ $4.05 \mathrm{in} \times 1.65 \mathrm{in} \times 1.65 \mathrm{in}$ ]
reliable, flexible, and secure wireless transmission; EN 50041 die-cast metal enclosure; FCC 15, IC, ACMA, \& ETSI; EMI immunity; full complement of operating heads and levers; direct or remote mount antenna options

|  |  |  |  |
| :---: | :---: | :---: | :---: |
| WBX Hazardous Location Switch | WLS Non-Contact Switch | WLS Single-Switch Adapter | WOI |
| II 1 GD, Ex ia IIC T4 Ga, Ex ia IIIC T135² ${ }^{\circ} \mathrm{Da}$ | EN 50041 and back-mounting | EN 50041 mounting comp. \& back-mtg | screw mount |
| powder-coated phosphate epoxy finish, zinc die-cast | zinc head and body are phosphate treated and epoxy finished; 30\% glass-filled PBT plastic head | zinc body is phosphate treated and epoxy filled; 30 \% glass-filled PBT plastic head | powder-coated aluminum |
| WPAN 802.15.4; 2.4 GHz | WPAN 802.15.4; 2.4 GHz | WPAN 802.15.4; 2.4 GHz | WPAN 802.15.4; 2.4 GHz |
| 1000 ft [305 m] in US/Canada | 1000 ft [305 m] in US/Canada | 1000 ft [305 m] in US/Canada | 1000 ft [305 m] in US/Canada |
| NEMA 1, 3, 4, 13; IP67 (self-certified) | IP67; NEMA 1, 4, 12, 13 | IP67; NEMA 1, 4, 12, 13 | IP65 |
| side rotary, top plunger, wobble stick; many side rotary lever options | - | - | pushbutton operators: 22 mm round flush momentary, 29 mm mushroom head momentary, 40 mm mushroom head maintained (push-pull); no operator option available for use with user supplied 22 mm operator and contact blocks |
| direct or remote mounts, omni-directional | direct or remote mounts, omni-directional | direct or remote mounts, omni-directional | direct or remote mounts, omni-directional |
| - | top and side of head |  | - |
| - | - | 4-pin M12 micro-connector with threepole, single keyway female receptacle cable grip with internal screw connector (maximum cable length $3 \mathrm{~m}[9.84 \mathrm{ft}]$ ) | - |
| - | - | SPDT (Form C) switch with low-energy contacts (i.e., gold) capable of reliably controlling a 3.6 Vdc <br> @ 30 mA electrical load to ensure proper operation | - |
| - | operating point: $3,81 \mathrm{~mm}$ [0.15 in] min.; release point: $15,24 \mathrm{~mm}$ [ 0.60 in ] max. with use of WMG1 magnet | - | - |
| $267,45 \mathrm{~mm} \times 52,1 \mathrm{~mm} \times 73,18 \mathrm{~mm}$ [10.54 in $\times 2.05$ in $\times 2.88 \mathrm{in}$ ] | $122,43 \mathrm{~mm} \times 41,15 \mathrm{~mm} \times 44,45 \mathrm{~mm}$ [ 4.82 in $\times 1.62$ in $\times 1.75 \mathrm{in}$ ] | $137,16 \mathrm{~mm} \times 41,15 \mathrm{~mm} \times 44,45 \mathrm{~mm}$ [ 5.40 in $\times 1.62$ in $\times 1.75 \mathrm{in}$ ] | $130 \mathrm{~mm} \times 85 \mathrm{~mm} \times 66 \mathrm{~mm}$ ] [5.1 in $\times 3.4$ in $\times 2.6$ in] |
| Provides an independent layer of protection for equipment, by giving an immediate indication that a remote mechanical device is not positioned or moving correctly | non-contact presence/absence detection of a variety of different magnet styles and magnetic actuators; reliable, flexible, and secure wireless transmission; EN 50041 die-cast metal enclosure; FCC 15, IC, ACMA, \& ETSI; EMI immunity | converts almost any electromechanical switch with low-energy contacts (i.e., gold) into a wireless switch; reliable, flexible, and secure wireless transmission; EN 50041 die-cast metal enclosure; FCC 15, IC, ACMA, \& ETSI; EMI immunity | enables operator indication (i.e. push button) from remote locations where wiring is too costly or not possible; flexibility for users to choose and install their desired operator type; i.e. 22 mm rotary switch, 22 mm key switch, etc.; ability to reconfigure and network multiple WOI inputs |

## Limitless ${ }^{\text {TM }}$ Solutions I Wireless Monitors and Receivers

Provide a visual, audio, and output based on a signal received from a Limitless ${ }^{\text {™ }}$ input. Wireless technology eliminates the need for communications cabling or power line installation, saving both ime and money. Applications include positioners, manual process valves, eye bath stations, emergency showers, tank level, steam traps, louvers, mining conveyor, and grain diverters.



## Specialty Limit Switches | Relialign ${ }^{\text {™ }}$ Door Interlock Switches

Designed specifically for residential and commercial swing-door applications, including swing-door elevators, platform lifts, dumbwaiters, and lifts
for the mobility impaired. Holds the door in place and prevents it from being opened when not desired. Design contributes to increase safety, reduce nuisance stoppages and call-backs, and simplified wiring and installation.


## Machine Safety I MICRO SWITCH Safety Switches



| Potential applications | conveyor applications, perimeter guard | gates, doors, access panels, cages |
| :--- | :--- | :--- |
| Housing | zinc, epoxy coated | aluminum, epoxy coated |
| Approvals | UL, CSA, CE, SIL 3 capable | cULus, ATEX, IEC Ex, IN METRO (Brasil) <br> SIL 3 capable |

Sealing IP67; NEMA 1, 4, 12,13 IP67; NEMA 1, 4, 6, 12, 13

| Contacts | silver, gold | silver, gold |
| :---: | :---: | :---: |
| Circuitry <br> (double break contacts, except FF and FFS) | - 1NC 1NO <br> - 2NC 2NO <br> - 3NC 1NO <br> - 4NC | - 1NC 1NO snap action <br> - 1NC 1NO slow action BBM <br> - 1NC 1NO slow action MBB <br> - 2NC slow action <br> - 2NC 2NO snap action <br> - 4NC slow action <br> - 2NC 1NO slow action BBM <br> - 2NC 2NO slow action BBM <br> - 3NC 1NO slow action BBM |
| Differentiator | rugged, sealed, large wiring cavity; indicators; wide temperature tolerance; longest span available (up to 500 feet/ 152 m on dual head 2CPS) | hazardous location and positive-break safety switch with cULus, ATEX, IEC Ex, IN METRO approvals |
| Measurements (less levers) H x W x D | $\begin{aligned} & 1 \text { CPS: } 178,2 \mathrm{~mm} \times 99,1 \mathrm{~mm} \times 65,3 \mathrm{~mm} \\ & \text { [6.8 } \mathrm{in} \times 3.9 \mathrm{in} \times 2.57 \mathrm{in}] \\ & 2 \mathrm{CPS}: 152,4 \mathrm{~mm} \times 165,1 \mathrm{~mm} \times 84,1 \mathrm{~mm} \\ & {[6.0 \mathrm{in} \times 6.5 \mathrm{in} \times 3.31 \mathrm{in}]} \end{aligned}$ | $\begin{aligned} & 154,2 \mathrm{~mm} \times 76,2 \mathrm{~mm} \times 72 \mathrm{~mm} \\ & {[6.07 \mathrm{in} \times 3.00 \mathrm{in} \times 2.84 \mathrm{in}]} \end{aligned}$ |
| Temperature | $-40^{\circ} \mathrm{C}$ to $85^{\circ} \mathrm{C}\left[-40^{\circ} \mathrm{F}\right.$ to $\left.185{ }^{\circ} \mathrm{F}\right]$ | $-40^{\circ} \mathrm{C}$ to $70^{\circ} \mathrm{C}\left[-40^{\circ} \mathrm{F}\right.$ to $\left.158{ }^{\circ} \mathrm{F}\right]$ |

Electrical rating $\quad 10 \mathrm{~A}$ (thermal); AC15, A300; DC13, Q300

|  |  |  |
| :--- | :--- | :--- |
| optional hardware packs; heavy-duty terminals: | extensive switching and actuating options; designed so |  |
| Features | gold contacts; positive opening of NC contacts |  |
| (up to 4 contacts); LED status lights; positive | in emergency with positive opening NC contacts (direct <br> in |  |
|  |  |  |



GSS

EN50047 (metal or plastic), EN50041 (metal), designed to global standards

| medium/large doors and apertures |  |
| :---: | :---: |
| glass-filled polyester, zinc epoxy coated |  |
| UL, CSA, CE, SIL 3 capable |  |
| metal: IP66; NEMA 1, 4, 12, 13 <br> plastic: IP66/IP67; NEMA 1, 4 (indoor), 12, 13 |  |
| silver, gold |  |
| EN50041 <br> - 1NC 1NO snap action <br> - 1NC 1NO slow action BBM <br> - 1NC 1NO slow action MBB <br> - 2NC slow action <br> - 2NC 2NO snap action <br> - 4NC slow action <br> - 2NC 1NO slow action BBM <br> - 2NC 2NO slow action BBM <br> - 3NC 1NO slow action BBM | EN50047 <br> - 1NC 1NO snap action <br> - 1NC 1NO slow action BBM <br> - 1NC 1NO slow action MBB <br> - 2NC slow action |
| highly visible red housing; snap action and slow action basic switches |  |

GSS Hinge
EN50047 mounting compatible, metal or plastic housing for access door safety hinge applications

## 24CE/924CE

miniature, compact die-cast zinc housing construction with a wide variety of actuators, IEC945-5-1, EN60947-5-1

## FF and FFS

non-contact safety switches either magnetically operated or by electronically coded magnets providing high degree of tamper-resistant, reliable operation
small doors and apertures
ABS resin-filled, stainless steel
UL, CE
24CE: CE; 924CE: UL, CE, SIL 3
capable

IP66
IP67, NEMA 4
silver
silver, gold silver

- 1NC 1NO snap action
- 2NC slow action • 1NC slow action,
- 4 NC slow action
- 2NC 2 NO slow action BBM
- 3NC 1NO slow action BBM
highly visible red housing; actuator head may be rotated in $90^{\circ}$ increments
smallest safety switch offering from Honeywell; tough and rugged switch, designed to operate in harsh operating environments
large actuation window from almost any angle (ranges $\sim 6 \mathrm{~mm}$ to 20 mm ); sealed, compact and rugged design
$49,0 \mathrm{~mm} \times 40,0 \mathrm{~mm} \times 16,0 \mathrm{~mm}$ [1.93 in $\times 1.57$ in $\times 0.63 \mathrm{in}$ ]
$87 \mathrm{~mm} \times 24 \mathrm{~mm} \times 19 \mathrm{~mm}$ [3.43 in $\times 0.95$ in $\times 0.75 \mathrm{in}$ ]
$-25^{\circ} \mathrm{C}$ to $85^{\circ} \mathrm{C}\left[-13^{\circ} \mathrm{F}\right.$ to $\left.185^{\circ} \mathrm{F}\right]$
$-40^{\circ} \mathrm{C}$ to $85^{\circ} \mathrm{C}\left[-40^{\circ} \mathrm{F}\right.$ to $\left.185^{\circ} \mathrm{F}\right]$ (side rotary
operating heads) $-40^{\circ} \mathrm{C}$ to $70^{\circ} \mathrm{C}\left[-40^{\circ} \mathrm{F}\right.$ to $\left.158^{\circ} \mathrm{F}\right] \quad-10^{\circ} \mathrm{C}$ to $55^{\circ} \mathrm{C}\left[14^{\circ} \mathrm{F}\right.$ to $\left.131^{\circ} \mathrm{F}\right]$ (optional)

1 or 2 safety contacts. Select catalog listings offer an auxiliary contact
$83,0 \mathrm{~mm} \times 30,5 \mathrm{~mm} \times 30,0 \mathrm{~mm}$
[3.27 in $\times 1.20$ in $\times 1.18 \mathrm{in}$ ]
$83,0 \mathrm{~mm} \times 30,5 \mathrm{~mm} \times 30,0 \mathrm{~mm}$ [3.27 in $\times 1.20$ in $\times 1.18 \mathrm{in}$ ]
$0^{\circ} \mathrm{C}$ to $70^{\circ} \mathrm{C}\left[32^{\circ} \mathrm{F}\right.$ to $\left.158^{\circ} \mathrm{F}\right]$
$-40^{\circ} \mathrm{C}$ to $70^{\circ} \mathrm{C}\left[-40^{\circ} \mathrm{F}\right.$ to $\left.158^{\circ} \mathrm{F}\right] \quad-10^{\circ} \mathrm{C}$ to $55^{\circ} \mathrm{C}\left[14^{\circ} \mathrm{F}\right.$ to $\left.131^{\circ} \mathrm{F}\right]$
(optional)

AC15, B300; DC13, R300
multiple contact options (up to 4 NC ); full range of actuator heads and levers; reliable low energy switching; tested to 15 million operations; positive opening NC contacts

Low profile design; available with 3 actuator styles (left, center, right); multiple contact options; reliable low energy switching; positive opening NC contacts
simple two screw mounting; available pre-wired with choice of cable lengths or connector fitted; side and bottom cable entry; positive opening NC contacts
guard status indication; small, easy to mount; either pre-wired or connector fitted; allows for door misalignment with door closed sensing

## Machine Safety I MICRO SWITCH Safety Switches

Designed to help pass any test with the most impressive safety switch portfolio and solutions for application-specific needs. Widest range of sizing, sealing alternatives, enclosure materials, actuator styles, and contact options available.



| Series | GKR/L | GK |
| :---: | :---: | :---: |
| Attributes | heavy-duty metal body solenoid trapped key interlock switch designed not to release until hazard has been removed; for large doors/cages | heavy duty metal body keyed interlock switch designed for large doors and cages |
| Potential applications | large, heavy door, cage and gate machine apps | large, heavy door cage and gate applications |
| Housing | zinc, epoxy coated | zinc, epoxy coated |
| Approvals | UL, CSA, CE, SIL 3 capable | UL, CSA, CE, SIL 3 capable |
| Sealing | IP68; NEMA 1, 4, 6P, 12, 13 | IP67; NEMA 1, 4, 12, 13 |
| Contacts | silver, gold | silver, gold |
| Circuitry <br> (double break contacts) | - 1NC 1NO slow action BBM <br> - 2NC 1NO slow action BBM <br> - 2NC 2NO slow action BBM <br> - 3NC 1NO slow action BBM <br> - 2NC slow action <br> - 4NC slow action <br> - 2NC 2NO snap action | - 1NC 1NO snap action <br> - 2NC 2NO snap action <br> - 1NC 1NO slow action BBM <br> - 1NC 1NO slow action MBB <br> - 2NC 1NO slow action BBM <br> - 2NC 2NO slow action BBM <br> - 3NC 1NO slow action BBM <br> - 2NC slow action <br> - 4NC slow action |
| Differentiator | rugged design withstands vibration, harsh environments; provides long-term durability | unique friction feature for key retention; rugged design withstands vibration, harsh environments, and provides long-term durability (tested 15 million cycles) |
| Measurements (less levers) HxW xD | $160,0 \mathrm{~mm} \times 110,0 \mathrm{~mm} \times 48,8 \mathrm{~mm}$ [ $6.3 \mathrm{in} \times 4.33 \mathrm{in} \times 1.92 \mathrm{in}$ ] | $121,6 \mathrm{~mm} \times 42 \mathrm{~mm} \times 42,6 \mathrm{~mm}$ <br> [1.79 in $\times 1.652$ in $\times 1.68 \mathrm{in}$ ] |
| Temperature | $-25^{\circ} \mathrm{C}$ to $40^{\circ} \mathrm{C}$ [-13 ${ }^{\circ} \mathrm{F}$ to $\left.104^{\circ} \mathrm{F}\right]$ | $-25^{\circ} \mathrm{C}$ to $85{ }^{\circ} \mathrm{C}\left[-13{ }^{\circ} \mathrm{F}\right.$ to $\left.185{ }^{\circ} \mathrm{F}\right]$ |
| Electrical rating | AC15, A300; DC13, Q300 | AC15, A300/A600; DC13, Q300 |
| Features | solenoid power-to-lock or power-to unlock; key retain force 1000 N max; multiple key and lockout devices; dual LED indicator; available with key entry (4 face orientations); up to 4 contacts; manual override; positive opening NC contacts | top or side entry lockout device options available; LED indicator; up to four contacts; positive opening NC contacts |


|  |  |  |
| :--- | :--- | :--- |
| Compact housing size, standard IEC 20 mm mounting | most compact key-operated safety product available; fully | common footprint safety switch for multiple applicability; |
| sealed construction | small/medium doors and apertures |  |
| small doors and apertures | small doors and apertures | glass-filled polyester |
| glass-filled polyester | glass-filled polyester | cULus, CE, CCC, S-mark, SIL 3 capable |
| cULus, CE, S-mark, SIL 3 capable | UL, CSA, CE, SIL 3 capable | IP67; NEMA 1, 4X (indoor use only), 12, 13 |
| IP66/IP67; NEMA 1, 4X (indoor), 12, 13 | IP67; NEMA 1,12, 13 | silver |
| silver | silver, gold |  |

- 1NC 1NO snap action
- 1NC 1NO BBM
- 2NC 1NO slow action BBM
- 1NC 1NO slow action BBM
- 2NC
- 3NC slow action
- 2NC slow action
can be used for doors as small as 160 mm [ 6.3 in ] with small closed radius; available cabled or with integrated M12 connectors for plug-and-play install
$69,4 \mathrm{~mm} \times 34,0 \mathrm{~mm} \times 16,0 \mathrm{~mm} \quad 90,0 \mathrm{~mm} \times 64,0 \mathrm{~mm} \times 30,0 \mathrm{~mm}$
[2.73 in $\times 1.34 \mathrm{in} \times 0.63 \mathrm{in}] \quad$ [3.55 in $\times 2.52 \mathrm{in} \times 1.18 \mathrm{in}]$
$-25^{\circ} \mathrm{C}$ to $85^{\circ} \mathrm{C}\left[-13^{\circ} \mathrm{F}\right.$ to $\left.185^{\circ} \mathrm{F}\right] \quad-25^{\circ} \mathrm{C}$ to $70^{\circ} \mathrm{C}\left[-13^{\circ} \mathrm{F}\right.$ to $\left.158^{\circ} \mathrm{F}\right]$

AC15, A300; DC13, Q300 AC15, A600; DC13, Q300
double insulated, no ground wiring required; wiring en-
medium duty switch covers most common $1 \mathrm{NC} / 1 \mathrm{NO}$ and 2NC applications key entry from top and front
trance options from bottom, side, or both (dual entry GKME for daisy chain capability); variety of keys available for top or front entry options; positive opening NC contact
multi-use, multi-option; up to 3 contacts for additional monitoring; 4 key head entries; knock-out points for wiring entry; double insulated body; rigid and flexible key options available

## 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 that Honeywell, in its sole discretion, 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 Honeywell may provide application assistance personally, through our literature and the Honeywell web site, it is customer's sole responsibility 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 writing. However, Honeywell assumes no responsibility for its use.

## Find out more

To learn more about Honeywell's
sensing and switch products, call
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