

**Honeywell**

Product Range Guide

# **MICRO SWITCH**

## **Hazardous Area**

### **Switches**





# Rugged. Reliable. Ready for use.

Honeywell has a complete family of hazardous area limit switches tailored to exact specifications for superior performance, extended productivity and increased safety.

Reduce operational and maintenance costs with Honeywell's hazardous area limit switches. Reliable and robust, these flexible switches are designed for a wide range of industrial applications, from mud pumps, valve positioning and pig position detectors to gate/door monitoring, conveyors and many more. Count on Honeywell for global support, exceptional quality, and innovative design and technology.





# Designed to endure the toughest applications

Features highlighted below relate to the  
MICRO SWITCH BX, LSX, GSX, and CLSX Series

Sintered, bronze bearings  
enable longer operating life  
and increase resistance in  
corrosive environments

Field adjustability  
of operating head matches  
switch to application

Boss-and-socket  
head design for more secure  
head-to-body retention

Twin shaft seals for improved  
environmental protection. Optional fluorosilicone seals  
extend operating temperature down to -40 °C [-40°F]

Diaphragm seal adds an extra measure  
of dynamic sealing between head and body

Dual bearings deliver  
enhanced mechanical life

Rugged zinc head  
and aluminum body  
are phosphate treated  
and epoxy coated

Two flame paths:  
one in the cover-housing  
threads; another between  
the switch cavity and head

Cover o-ring seal maintains  
NEMA and IP environmental  
sealing for the switch cavity

0.5 in or 0.75 in  
conduit options

**V15W2:**  
explosion-proof  
basic switch

**GXE:**  
compact footprint  
with SPDT capabilities  
and pre-leaded cable

**14CE100:**  
smallest available  
footprint with  
pre-leaded cable

**EX:**  
original  
hazardous area  
MICRO SWITCH  
with the largest  
installed base

**CX:**  
designed for  
use with valves

**VPX:**  
Valve position  
indicator designed  
for outdoor use  
in hazardous  
atmospheres

**Honeywell**

# Hazardous Area Switches | BX, BX2, LSX, GSX, CLSX Series



## BX Series

**A global history of rugged performance in explosive environments and a broad portfolio of options to meet your needs**



- Choice of aluminum or stainless steel housings for use in non-corrosive and corrosive environments
- Designed for use in the toughest climates (-40°C to 70°C [-40°F to 158°F])
- Silver contacts available for switching power loads and gold contacts for switching low-power loads
- Mounting pattern is interchangeable with the iconic HDLS MICRO SWITCH platform
- Multiple actuator & switching combinations are available



## LSX Series

**Weather-sealed product for operation in explosive environments in North America**



- Silver contacts available for switching power loads and gold contacts for switching low-power loads
- Mounting pattern is interchangeable with the iconic HDLS MICRO SWITCH platform
- Optional availability for use in low temperatures (-40°C [-40°F])
- Multiple actuator & switching combinations are available



## GSX Series

**Combines proven MICRO SWITCH global safety limit switch product with an explosion-proof design to create a hazardous area safety switch**



- Designed to ensure that even welded contacts will open and machine will stop in emergency situations
- SIL 3 rating for use in safety applications
- Switching contacts with positive break
- Optional gold contacts for switching low-power load
- For use on gates, cages, panels, and other applications requiring a machine to stop in an emergency



## CLSX Series

**Cable-pull switch designed for emergency stop protection in explosive environments**



- Cable lengths may be 200 ft in straight line
- Positive opening of normally closed (NC) contacts
- For use with conveyors, perimeter guarding and more



## APPLICATIONS

- Control valves and actuators
- Gate position detection
- Grain handling equipment
- Mining conveyors
- Mud pumps
- Offshore drilling
- Oil and gas drilling rigs
- Paint booths
- Pulp and paper coating
- Valve position monitoring
- Waste treatment





**BX**



**LSX**



**GSX**



**CLSX**

BX (20 mm): ATEX, IEC Ex, NEPSI Ex BX (NPT): ATEX, cULus, IEC Ex, KOSHA, NEPSI Ex BX2 (20 mm/NPT): ATEX, cULus, IEC Ex, NEPSI Ex, IN METRO, EAC	UL, CSA	<b>Agency Approvals</b>	cULus, ATEX, IEC Ex, IN METRO	UL, CSA
NEMA 7 (Gas) Div 1&2, Class I, Groups B, C, & D; NEMA 9 (Dust) Div 1&2, Class II, Groups E, F, & G II 2 G Ex d IIC T6 Gb II 2 D Ex tb IIIC T85°C Db	NEMA 7 (Div. 1 & 2, Class I, Groups B, C, & D) NEMA 9 (Div. 1 & 2, Class II, Groups E, F, & G)	<b>Hazardous Area Designations</b>	NEMA 7 (Gas) Div. 1 & 2, Class I, Groups B, C, & D NEMA 9 (Dust) Div. 1 & 2, Class II, Groups E, F, & G II 2 G; Ex d IIC T6 II 2 D; Ex d tD A21 T85°C	NEMA 7 (Gas) Div. 1 & 2, Class I, Groups B, C, & D NEMA 9 (Dust) Div. 1 & 2, Class II, Groups E, F, & G
IP67; NEMA 1, 3, 4, 6, 13	IP67; NEMA 1, 3, 4, 6, 13	<b>Sealing</b>	IP67; NEMA 1, 4, 6, 12, 13	NEMA 1, 3, 4, 13
aluminum, epoxy coated stainless steel	aluminum, epoxy coated	<b>Housing Material</b>	aluminum, epoxy coated	aluminum, epoxy coated
side rotary, side rotary (maint.) side pin plunger, side pin plunger adj. side roller, side roller adj. top rotary, top pin plunger, top pin plunger adj. top roller plunger, wobble	side rotary, side rotary (maint.) side plunger, side plunger adj. side roller, side roller adj. top rotary, top plunger, top roller plunger, wobble	<b>Actuators/Levers</b>	side rotary, top pin plunger, top roller plunger, top roller lever	cable/rope, maintained
0.5 in - 14NPT conduit, 0.75 in - 14NPT conduit, 20 mm conduit	0.5 in - 14NPT conduit, 0.75 in - 14NPT conduit, 20 mm conduit	<b>Termination</b>	0.5 in - 14NPT conduit, 20 mm conduit	0.5 in - 14NPT conduit, 20 mm conduit
1NC 1NO SPDT snap action, double break 2NC 2NO DPDT snap action, double break 2NC 2NO DPDT snap action, double break, sequential 2NC 2NO DPDT snap action, double break, center neutral 3NC 1NO slow action, double break	1NC 1NO SPDT snap action, double break 2NC 2NO DPDT snap action, double break 2NC 2NO DPDT snap action, double break, sequential 2NC 2NO DPDT snap action, double break, center neutral	<b>Circuitry</b>	1NC 1NO snap action, 2NC 2NO snap action, 2NC slow action, 2NO slow action, 1NC 1NO BBM slow action, 1NC 1NO MBB slow action, 2NC 1NO BBM slow action, 2NC 2NO BBM slow action, 3NC 1NO BBM slow action, 4NC slow action	1NC direct acting, 1NO 1NO direct acting, 2NC direct acting
-40°C to 70°C [-40°F to 158°F]	-12°C to 121°C [10°F to 250°F] optional (-40°C [-40°F])	<b>Operating Temp. (std)</b>	-40°C to 70°C [-40°F to 158°F]	-1°C to 70°C [30°F to 158°F]
10 A (thermal)	10 A (thermal)	<b>Amp Rating</b>	10 A (thermal)	10 A (thermal)
AC15 A600; DC13 R300	AC15 A600; DC13 R300	<b>Voltage</b>	AC15 A300, AC15 A500 AC15 A600, DC13 Q300	24 Vdc, 250 Vdc 120 Vac, 240 Vac, 600 Vac
External and internal	Internal	<b>Grounding screw</b>	External and internal	Internal



# MICRO SWITCH Hazardous Area Switches | BX, BX2, and LSX Series

Switch Type	Conduit Threads	Head Style*	Body/Basic Switch Code	Actuator Modification	Actuator Options
<b>BX</b> Series Aluminum Hazardous Area Limit Switch	1/2 or 3/4 NPT** <b>4</b> 20 mm	<b>A</b> * Side rotary; momentary <b>B</b> Top rotary; momentary <b>C</b> * Top pin plunger; momentary <b>D</b> * Top roller plunger; momentary <b>E</b> * Side pin plunger; momentary <b>F</b> * Side roller plunger; momentary <b>H</b> * Side rotary; momentary; low PT, low torque <b>J</b> Wobble stick <b>K</b> Cat whisker <b>L</b> * Side rotary; sequential; momentary <b>M</b> * Side rotary; central neutral; momentary <b>N</b> * Side rotary; maintained <b>P</b> * Side rotary; momentary; low PT and DT <b>R</b> * Side rotary; momentary; low torque <b>V</b> Top pin plunger; adjustable; momentary <b>W</b> Side pin plunger; adjustable; momentary	<b>1A</b> 3NC/1NO, slow acting, 3/4 - 14 NPT <b>1E</b> 3NC/1NO, slow acting, 3/4 - 14 NPT gold-plated contacts <b>3E</b> 1NC/1NO, snap action, 1/2 - 14 NPT gold-plated contacts <b>3K</b> 1NC/1NO, snap action, 1/2 - 14 NPT <b>Δ4K</b> 1NC/1NO, snap action, 3/4 - 14 NPT <b>4L</b> 2NC/2NO, snap action, 3/4 - 14 NPT <b>4M</b> 2NC/2NO, snap action, sequential, 3/4 - 14 NPT <b>4N</b> 2NC/2NO, snap action, center neutral, 3/4 - 14 NPT <b>4S</b> 2NC/2NO, snap action, 3/4 - 14 NPT gold-plated contacts <b>4T</b> 2NC/2NO, snap action, sequential, 3/4 - 14 NPT, gold-plated contacts <b>4U</b> 2NC/2NO, snap action, center neutral, 3/4 - 14 NPT, gold-plated contacts <b>Δ7L</b> 2NC/2NO, snap action, 1/2 - 14 NPT <b>Δ7N</b> 2NC/2NO, snap action, center neutral, 1/2 - 14 NPT <b>Δ7S</b> 2NC/2NO, snap action, 1/2 - 14 NPT gold-plated contacts <b>Δ7T</b> 2NC/2NO, snap action, sequential, 1/2 - 14 NPT, gold-plated contacts <b>Δ7U</b> 2NC/2NO, snap action, center neutral, 1/2 - 14 NPT, gold-plated contacts	<b>1</b> CW rotation <b>2</b> CCW rotation <b>3</b> Right-oriented actuator head assembly <b>4</b> Left-oriented actuator head assembly <b>5</b> Head assembled with actuator to mounting surface <b>6</b> Roller perpendicular to mounting surface <b>8</b> Roller parallel to mounting surface	<b>1A</b> * Fixed Ø 0.75 in x 0.25 in W nylon roller, 1.5 in radius, front mount <b>1C</b> * Fixed Ø 0.75 in x 0.25 in W nylon roller, 1.5 in radius, back mount <b>2A</b> * Adjustable, Ø 0.75 in x 0.25 in W nylon roller, front mount <b>2C</b> * Adjustable, Ø 0.75 in x 0.25 in W nylon roller, back mount <b>2J</b> Adjustable, Ø 1.0 in x 0.5 in W nylon roller, front mount <b>2K</b> Adjustable, Ø 1.0 in x 0.5 in W nylon roller, back mount <b>3S</b> Yoke, Ø 0.75 in x 0.25 in W nylon rollers, same side, back mount <b>4M</b> Hub rod, aluminum <b>5A</b> Offset, Ø 0.75 in x 0.25 in W nylon roller, back mount <b>5C</b> Offset, Ø 0.75 in x 0.25 in W nylon roller, front mount <b>7A</b> Plastic wobble stick <b>8A</b> Cat whisker, 5.5 in
<b>BX2</b> Series Stainless Steel Hazardous Area Limit Switch	NOTE: if 1/2 NPT or 3/4 NPT conduit is desired, no code is necessary. Leave blank.  <b>If conduit code "4" in this column is selected, conduit in Body/Basic Switch column does not apply.</b>				



To order high temperature versions, insert the additional letters **Y** and **C** in the appropriate places in the standard catalog listing, as shown below:

<b>BXA3K</b>	standard, side-rotary plug-in switch
<b>BXYAC3K</b>	completely FC-sealed version of BXA3K

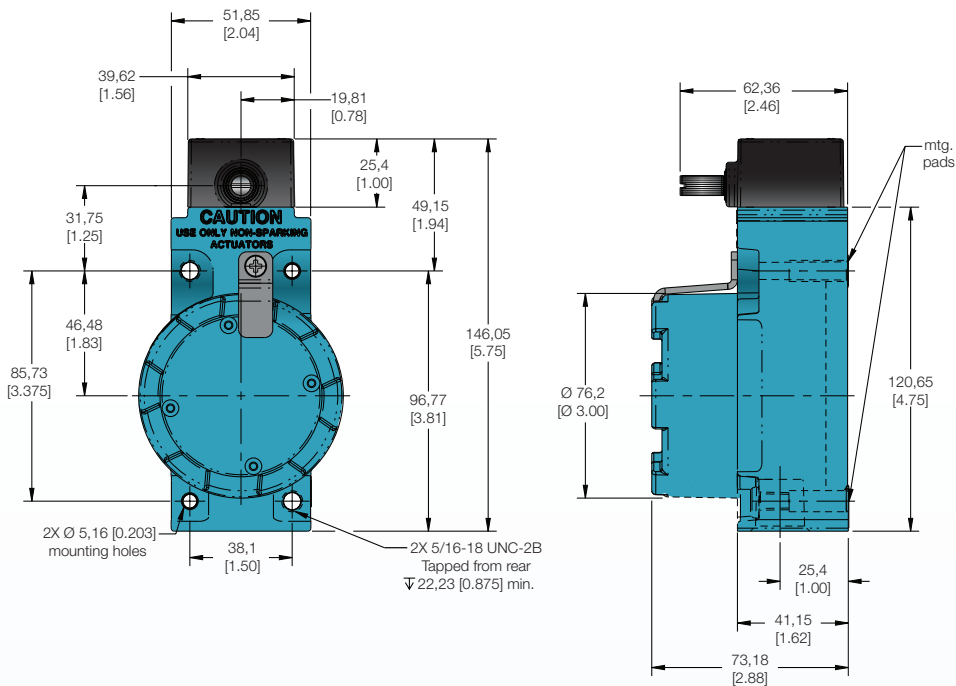
Δ Not available with conduit code 4.

\* BX2 stainless steel "head styles" and "actuators" available

## Levers for Side Rotary Actuated Switches

Code	Catalog Listing	Material	Roller Dia. (in)	Roller Width (in)	Roller Mounting
<b>Fixed 1.5 inch radius</b>					
1		Rollerless	n/a	n/a	n/a
1A	LSZ51A	Nylon	0.75	0.25	Front
1C	LSZ51C	Nylon	0.75	0.25	Back
<b>Adjustable 1.5 in to 3.5 in radius</b>					
2		Rollerless	n/a	n/a	n/a
2A	LSZ52A	Nylon	0.75	0.25	Back
2C	LSZ52C	Nylon	0.75	0.25	Front
2J	LSZ52J	Nylon	1.0	0.50	Front
2K	LSZ52K	Nylon	1.5	0.25	Front
<b>Yoke - 1.5 in radius</b>					
3E	LSZ53E	Nylon	0.75	0.25	Back/Front
3M	LSZ53M	Nylon	0.75	1.25	Back/Front

Code	Catalog Listing	Material	Roller Dia. (in)	Roller Width (in)	Roller Mounting
3S	LSZ53S	Nylon	0.75	0.25	Front/Front
<b>Rod</b>					
4		Hub only	n/a	n/a	n/a
4M	LSZ54M	Alum, 5.5 in	n/a	n/a	n/a
<b>Offset - 1.5 in radius</b>					
5		Rollerless	n/a	n/a	n/a
5A	LSZ55A	Nylon	0.75	0.25	Back
5C	LSZ55C	Nylon	0.75	0.25	Front
<b>Wobble stick</b>					
7A	LSZ1JGA	Delrin™ rod, 5.5	n/a	n/a	n/a
<b>Short fixed - 1.3 in radius</b>					
9A	LSZ59A	Nylon	0.75	0.25	Front
9C	LSZ59C	Nylon	0.75	0.25	Back



Honeywell MICRO SWITCH BX Series and LSX have consistent dimensions

LSX	J	3K		7A
Switch Type	Head Style	Circuitry and Conduit Connection	Modification Code	Actuator Options**
<b>LSX Series Hazardous Area Switch</b>	<b>A</b> Side rotary; momentary	<b>3E</b> 1NO/1NC, gold contacts, 1/2-14NPT	<b>1</b> CW rotation	<b>1</b> Fixed roller, 1.5 in radius
	<b>B</b> Top rotary; momentary	<b>3K</b> 1NO/1NC, 1/2-14NPT	<b>2</b> CCW rotation	<b>1A</b> Fixed 0.75 in x 0.25 in nylon roller, 1.5 in radius
	<b>C</b> Top plunger, plain	<b>3N</b> SPNC direct acting, 1/2-14NPT	<b>3</b> Head assembled with actuator to right side	<b>1C</b> Fixed 0.75 in x 0.25 in nylon roller, 1.5 in radius
	<b>D</b> Top plunger, roller	<b>4K</b> 1NO/1NC, 3/4-14NPT	<b>4</b> Head assembled with actuator to left side	<b>2</b> Adjustable, rollerless
	<b>E</b> Side plunger plain; momentary	<b>4L</b> 2NO/2NC, 3/4-14NPT	<b>5</b> Head assembled with actuator toward mounting surface	<b>2A</b> Adjustable, 0.75 in x 0.25 in nylon roller
	<b>F</b> Side plunger roller; momentary	<b>4M</b> 2NO/2NC, 3/4-14NPT, sequential operation	<b>6</b> Roller perpendicular to mounting surface	<b>2C</b> Adjustable, 0.75 in x 0.25 in nylon roller
	<b>H</b> Side rotary, momentary; low PT, low torque	<b>4N</b> 2NO/2NC, 3/4-14NPT, center neutral	<b>8</b> Roller on side plunger in vertical position	<b>2J</b> Adjustable, 1.0 in x 0.5 in nylon roller
	<b>J</b> Wobble stick	<b>4S</b> 2NO/2NC, gold contacts, 3/4-14NPT		<b>2K</b> Adjustable, 0.5 in x 0.25 in nylon roller
	<b>K</b> Whisker	<b>4T</b> 2NO/2NC, gold contacts, 3/4-14NPT, sequential operation		<b>3E</b> Yoke, 0.75 in x 0.25 in nylon roller
	<b>L</b> Side rotary; sequential	<b>4U</b> 2NO/2NC, gold contacts, 3/4-14NPT, center neutral		<b>3M</b> Yoke, 0.75 in x 0.25 in nylon roller
	<b>M</b> Side rotary; central neutral	<b>7L</b> 2NO/2NC, 1/2-14NPT		<b>3S</b> Yoke, 0.75 in x 0.25 in nylon roller, same side
	<b>N</b> Side rotary; maintained	<b>7M</b> 2NO/2NC, 1/2-14NPT, sequential operation		<b>4</b> Hub only
	<b>P</b> Side rotary, momentary; low PT and DT	<b>7N</b> 2NO/2NC, 1/2-14NPT, center neutral		<b>4M</b> Hub rod, aluminum
	<b>R</b> Side rotary, momentary; low torque	<b>7S</b> 2NO/2NC, gold contacts, 1/2-14NPT		<b>5</b> Offset, rollerless
	<b>U</b> Side rotary, low pre-travel	<b>7T</b> 2NO/2NC, gold contacts, 1/2-14NPT, sequential operation		<b>5A</b> Offset, 0.75 in x 0.25 in nylon roller
	<b>V</b> Top plunger, adjustable	<b>7U</b> 2NO/2NC, gold contacts, 1/2-14NPT, center neutral		<b>5C</b> Offset, 0.75 in x 0.25 in nylon roller
	<b>W</b> Side plunger, adjustable			<b>7A</b> Plastic wobble stick
				<b>8A</b> Whisker, 5.5 in
				<b>9A</b> Fixed, 0.75 in x 0.25 in nylon roller, open, 1.33 in radius
				<b>9C</b> Fixed, 0.75 in x 0.25 in nylon roller, closed, 1.33 in radius

\*\* Levers can be ordered separately. See Levers for Side Rotary Actuated Switches table

Not all combinations available. Please contact Honeywell for assistance.

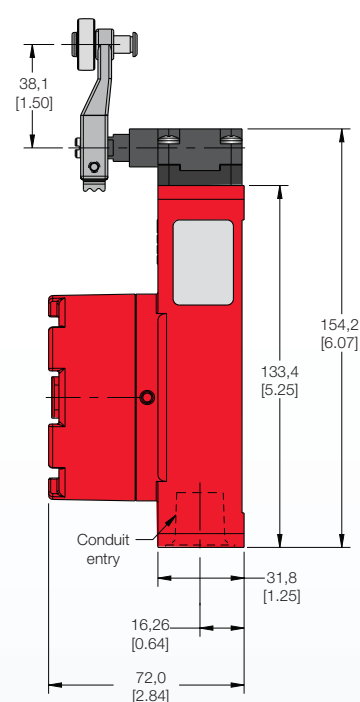
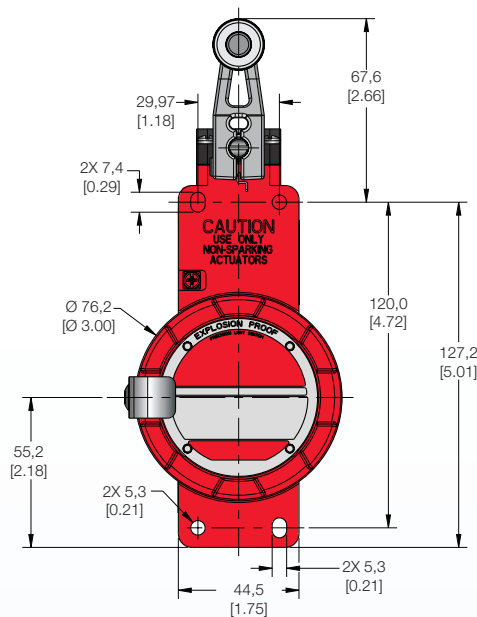
To order high temperature versions, insert the additional letters **Y** and **C** in the appropriate places in the standard catalog listing, as shown below:

<b>LSXA3K</b>	standard, side-rotary plug-in switch
<b>LSXYAC3K</b>	completely FC-sealed version of LSXA3K

To order low temperature versions, insert the additional letters **Y** and **B** in the appropriate places in the standard catalog listing, as shown below:

<b>LSXA3K</b>	standard, side-rotary plug-in switch
<b>LSXYAB3K</b>	low-temperature version of LSXA3K

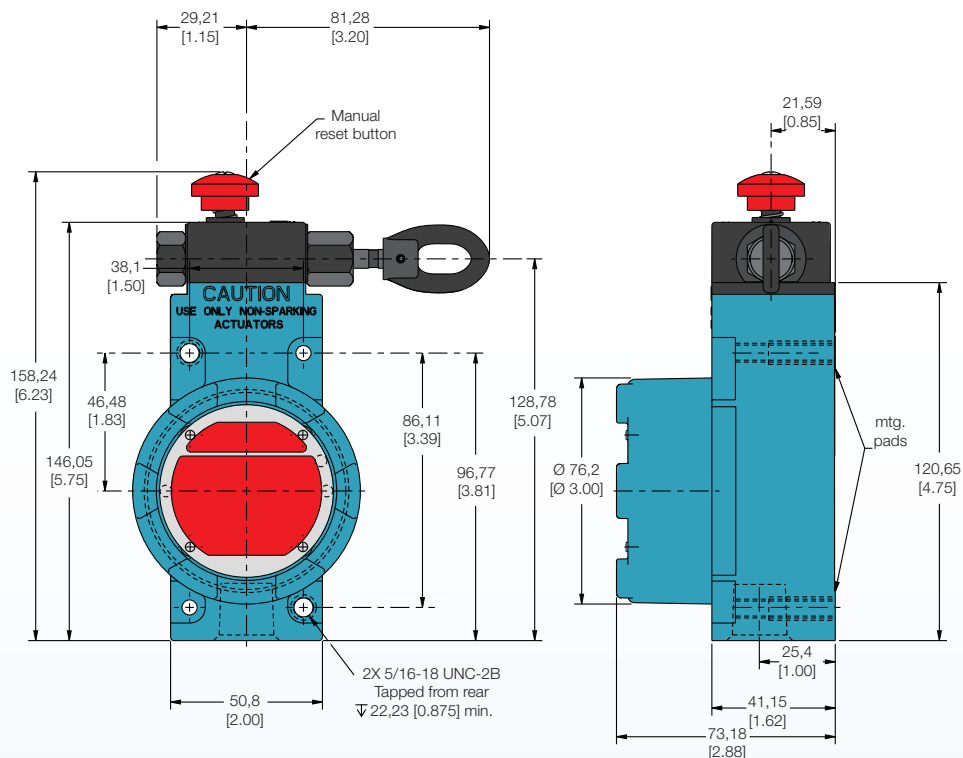
# MICRO SWITCH Hazardous Area Switches | GSX Series



GSX	A	01	B			
Switch Type	Conduit Connection	Circuitry	Head Style	Actuator Style	Lever Roller	Modifications/ Specials
GSX Series Hazardous Area Safety Switch	<b>A</b> 1/2 in NPT	<b>01</b> Snap action, 1NC/1NO	<b>A</b> Side rotary; momentary	<b>1</b> Fixed length roller	<b>A</b> 19.0 mm x 6.35 mm [0.75 in x 0.25 in] nylon roller	<b>1</b> Clockwise rotation
	<b>B</b> PG 13.5	<b>03</b> Slow action, 1NC/1 NO, BBM	<b>B</b> Top pin plunger	<b>3</b> Yoke roller	<b>C</b> 24.4 mm x 12.7 mm [1.0 in x 0.5 in] nylon roller	<b>2</b> Counter-clockwise rotation
	<b>C</b> 20 mm	<b>04</b> Slow action, 1NC/1 NO, MBB	<b>C</b> Top roller plunger	<b>5</b> Offset roller	<b>D</b> 38.1 mm x 6.35 mm [1.5 in x 0.25 in] nylon roller	<b>3</b> Head assembled with actuator to right side
		<b>05</b> Slow action, 2NO	<b>D</b> Top roller lever		<b>E</b> 19.0 mm x 6.35 mm [0.75 in x 0.25 in] bronze roller	<b>4</b> Head assembled with actuator to left side
		<b>06</b> Slow action, 2NC			<b>W</b> 40 mm x 12.7 mm [1.5 in x 0.5 in] bronze roller	<b>5</b> Head assembled with actuator to mounting surface
		<b>07</b> Snap action, 1NC/1NO, gold contacts			<b>Y</b> 50.9 mm x 12.7 mm [2.0 in x 0.5 in] rubber roller	<b>6</b> Roller perpendicular to mounting surface
		<b>20</b> Snap action, 2NC/2NO				
		<b>22</b> Snap action, 2NC/2NO, gold contacts				
		<b>33</b> Slow action, 1NC/1NO, BBM				
		<b>34</b> Slow action, 1NC/1NO, MBB, gold contacts				
		<b>35</b> Slow action, 2NO, gold contacts				
		<b>36</b> Slow action, 2NC, gold contacts				
		<b>40</b> Slow action, 4NC				
		<b>41</b> Slow action, 4NC, gold contacts				
		<b>42</b> Slow action, 2NC/1NO, BBM				
		<b>43</b> Slow action, 2NC/1NO, BBM, gold contacts				
		<b>44</b> Slow action, 2NC/2NO, BBM				
		<b>45</b> Slow action, 2NC/2NO, BBM, gold contacts				
		<b>46</b> Slow action, 3NC/1NO, BBM				
		<b>47</b> 2NO/2NC, center neutral, high fidelity contacts, 0.5 in tap				



# MICRO SWITCH Hazardous Area Switches | CLSX Series



CLSX	B	1	A	
Switch Type	Conduit Connection	Circuitry	Body and Operation	Modification Code
<b>CLSX Series Hazardous Area Safety Switch</b>	<b>B</b> 0.5 in NPT conduit opening	<b>1</b> 1NC direct acting	<b>A</b> Maintained, red body	<b>B</b> 1NO/3NC, slow acting
	<b>E</b> 0.75 in NPT conduit opening	<b>2</b> 1NO/1NC snap action	<b>B</b> Momentary, blue body	<b>E</b> 2NO/2NC, slow acting
		<b>4</b> 1NO/1NC direct acting	<b>N</b> Maintained w/o broken cable detection, red body	<b>F</b> 1NO/3NC, slow acting gold plated
		<b>8</b> 2NC direct acting		<b>1</b> Head oriented, left
		<b>9</b> Special basic - see lettered modifications		<b>2</b> Head oriented, front
				<b>3</b> Head oriented, rear



## CX Series

**Weather-sealed, explosion-proof switch designed for outdoor use in hazardous atmospheres**



- Ability to monitor quarter-turn and linear valve position
- Automates existing, non-automated valves
- Pin plunger and side-rotary versions
- Hermetically sealed elements available
- Housing available in short and standard lengths
- Available with analog 4 mA to 20 mA output and/or discrete switching capabilities
- Optional gold contacts for switching low-power load
- Up to six NC and six NO contacts



## APPLICATIONS

- Control valves and actuators
- Gate position detection
- Grain handling equipment
- Mining conveyors
- Mud pumps
- Offshore drilling
- Oil and gas drilling rigs
- Paint booths
- Pulp and paper coating
- Valve position monitoring
- Waste treatment



## EX Series

**The original hazardous area MICRO SWITCH with the largest installed base**



- Mounts from any of four sides
- Hermetically sealed elements available
- Option for two conduit openings
- Variety of levers and actuators
- Optional gold contacts for switching low-power load
- High temperature versions available (204°C [400°F])



## 14CE100 Series

**Gang-mounting capability adds to application design flexibility for smaller machines and instruments**



- Use where limited space is available
- Available with pin and roller plunger actuators
- Pre-leaded to minimize installation and procurement costs
- Optional gold contacts for switching low-power load



## GXE Series

**Compact, pre-leaded switch with DIN-sized body**



- EN 50047 mounting compatible (GXE Series)
- EN 50041 mounting compatible (GXA Series)
- Double insulated switch cavity provides a second layer of electrical circuit protection
- Pre-wired; variety of heads, levers, and actuators
- Compact footprint for use where space is limited





**CX**



**EX**



**14CE100**



**GXE GXA**

UL, CSA, [ATEX (CE), IEC Ex, IN METRO (select models)]	UL, CSA, ATEX (CE), IEC Ex	<b>Agency Approvals</b>	ATEX (CE)	ATEX (CE), IEC Ex
NEMA 7 (Gas): Class I, Div.1 & Div. 2, Groups B (14CX, 16CX, 24CX, 26CX, 36CX only), C, and D; NEMA 9 (Dust): Class II, Div.1 & Div. 2, Groups E, F, and G ATEX/IEC Ex, INMETRO (Gas) II 2 G; Exd IIC T6 ATEX/IEC Ex, INMETRO (Dust) II 2 D; Exd tD A21 T85°C	NEMA 7 (Gas): Div. 1 & 2, Class I, Groups B, C, & D (select models) NEMA 9 (Dust): Div. 1 & 2, Class II, Groups E, F, & G II 2 G; EEx d IIB + H2 T6	<b>Hazardous Designations</b>	II 2 G; Ex d IIC T6 II 2 D; Ex tD A21 T85°C	II 2 G; EEx d IIC T6 II 2 D; Ex tD A21 T85°C
NEMA 1, 3, 4, 4X, 6, 6P, and 13; IP66	NEMA 1	<b>Sealing</b>	IP65, (IP66/IP67 boot sealed plungers)	IP66/67
aluminum epoxy coated, bronze	aluminum, epoxy coated	<b>Housing Material</b>	zinc, epoxy coated	zinc, epoxy coated
side rotary (choice of levers), side rotary (with flat shaft), plunger actuator	side rotary, top pin plunger, top roller plunger, manual	<b>Actuators/Levers</b>	top pin plunger, top roller plunger, cross-roller plunger	side rotary, top pin plunger, top roller plunger
3/4 - 14 NPT, M25 x 1,5 mm conduit	1/2 in - 14NPT conduit, lead wires	<b>Termination</b>	cable (various lengths)	5 m cable
1NC 1NO SPDT, 2NC 2NO DPDT, 6NC 6NO, 4 mA to 20 mA analog output, 4NC 4NO	1NC 1NO SPDT snap action, 1NC 1NO SPDT maintained, 2NC 2NO DPDT snap action	<b>Circuitry</b>	1NC 1NO SPDT snap action	1NC 1NO SPDT snap action
-25°C to 85°C [-13°F to 185°F] -40°C [-40°F] optional	-40°C to 71°C [-40°F to 160°F]	<b>Operating Temp.</b>	0°C to 70°C [32°F to 158°F]	-20°C to 75°C [-4°F to 167°F]
1 A, 10 A, 15 A, 20 A	1 A, 3 A, 10 A, 15 A, 20 A	<b>Amp Rating</b>	1 A (thermal), 5 A (thermal)	5 A (thermal)
120 Vac, 240 Vac, 480 Vac, 28 Vdc, 125 Vdc, 250 Vdc	125 Vac, 250 Vac, 480 Vac, 125 Vdc, 250 Vdc	<b>Voltage</b>	AC14 D300 DC13 R300	AC15, 4 A 250 V DC13, 0.15 A 250 V
external and internal	external and internal	<b>Grounding screw</b>	external and internal (ground wire provided)	none, double insulated



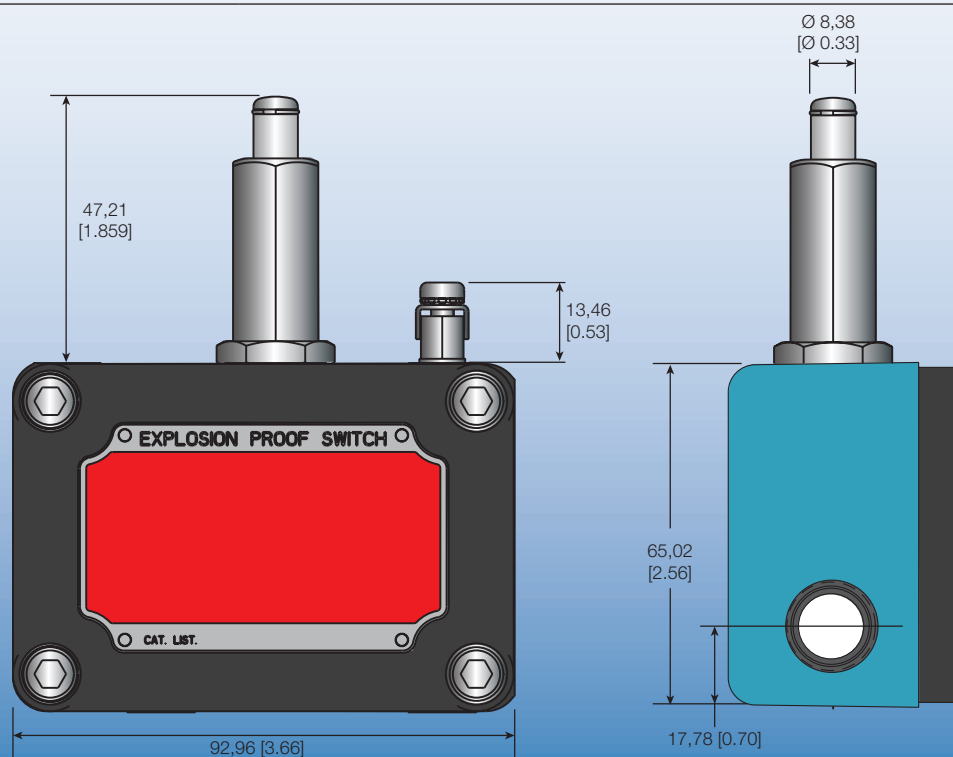
## MICRO SWITCH EX Series Listings

Catalog Listing	Actuation Type	Actuation	Contact	Electrical Rating*	Other
EX-AR	Roller Lever	Clockwise	SPDT	A	
EX-AR20	Side Rotary	Clockwise	SPDT	A	No lever furnished
EX-AR230	Side Rotary	Counter Clockwise	SPDT	A	
EXA-AR20	Side Rotary	Clockwise	SPDT	B	
EX-AR30	Roller Lever	Counter Clockwise	SPDT	A	
EX-AR800	Roller Lever	Clockwise	SPDT	A	Class 1 / Group B
EX-AR830	Roller Lever	Counter Clockwise	SPDT	A	Class 1 / Group B
EXHT-AR	Roller Lever	Clockwise	SPDT	C	High temperature 204°C [400°F]
EXA-AR	Roller Lever	Clockwise	SPDT	B	
EXA-AR62	Roller Lever	Clockwise	SPDT	B	No mounting bracket
EX-AR182	Roller Lever	Clockwise	SPDT	A	Nylon roller
EX-AR141	Roller Lever	Clockwise	SPDT	A	No mounting bracket
EX-Q	Top Pin Plunger	–	SPDT	A	
EX-Q62	Top Pin Plunger	–	SPDT	A	No mounting bracket
EXA-Q	Top Pin Plunger	–	SPDT	B	Low operating force
EXHT-Q	Top Pin Plunger	–	SPDT	C	High temperature 204°C [400°F]

### \*Electrical Ratings

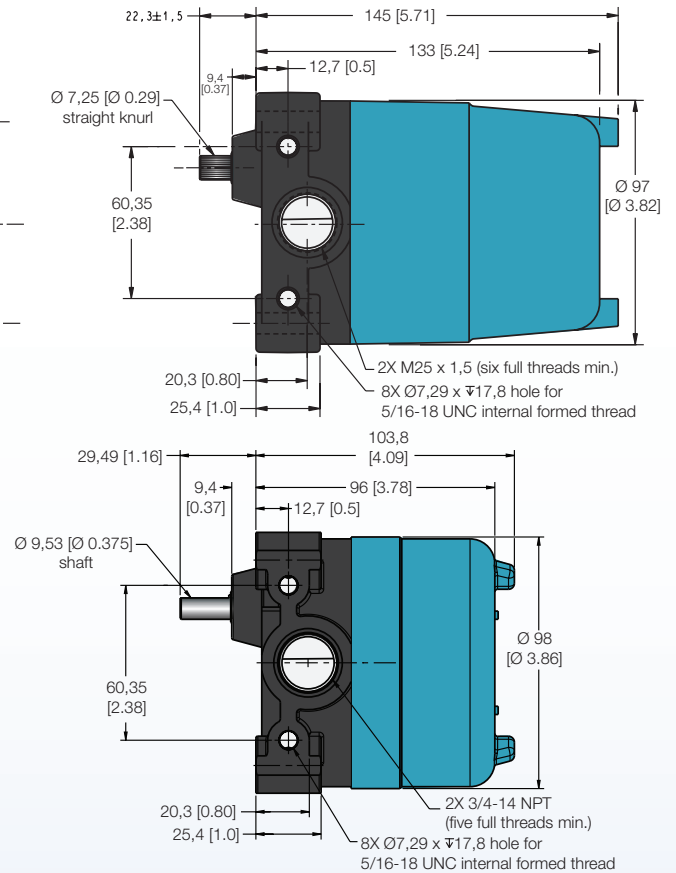
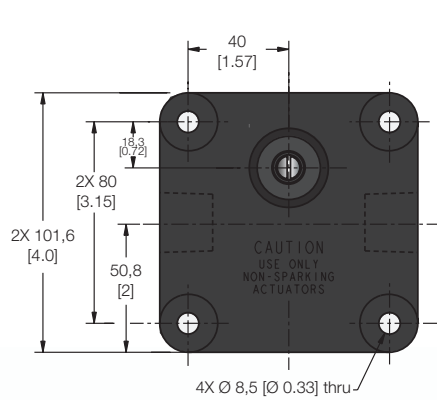
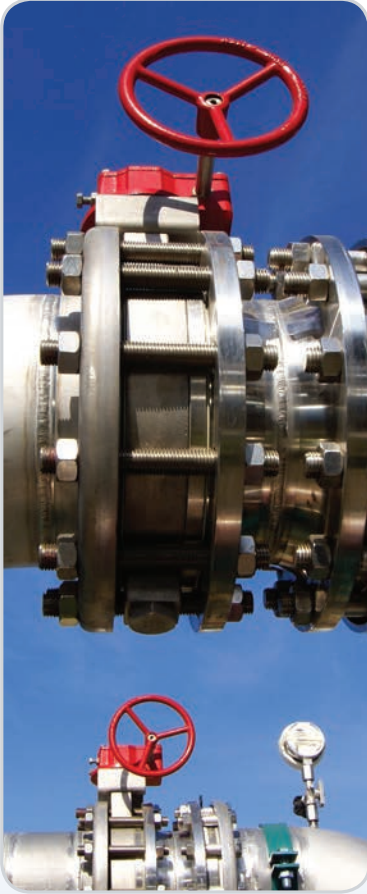
A	UL/CSA Rating: 15 A, 125 Vac, 250 Vac or 480 Vac; 1/8 HP, 125 Vac; 1/4 HP, 250 Vac; 1/2 amp, 125 Vdc; 1/4 amp, 250 Vdc
B	UL/CSA Rating: 20 A, 125 Vac, 250 Vac or 480 Vac; 10 A, 125 Vac "L"; 1 HP, 125 Vac; 2 HP, 250 Vac; 1/2 amp, 125 Vdc; 1/4 amp, 250 Vdc
C	UL/CSA Rating: 3 A, 125 Vac or 250 Vac; 1/10 HP, 125 Vac; 1/6 HP 250 Vac

Additional options and configurations of this product are available. Please contact Honeywell for more information.





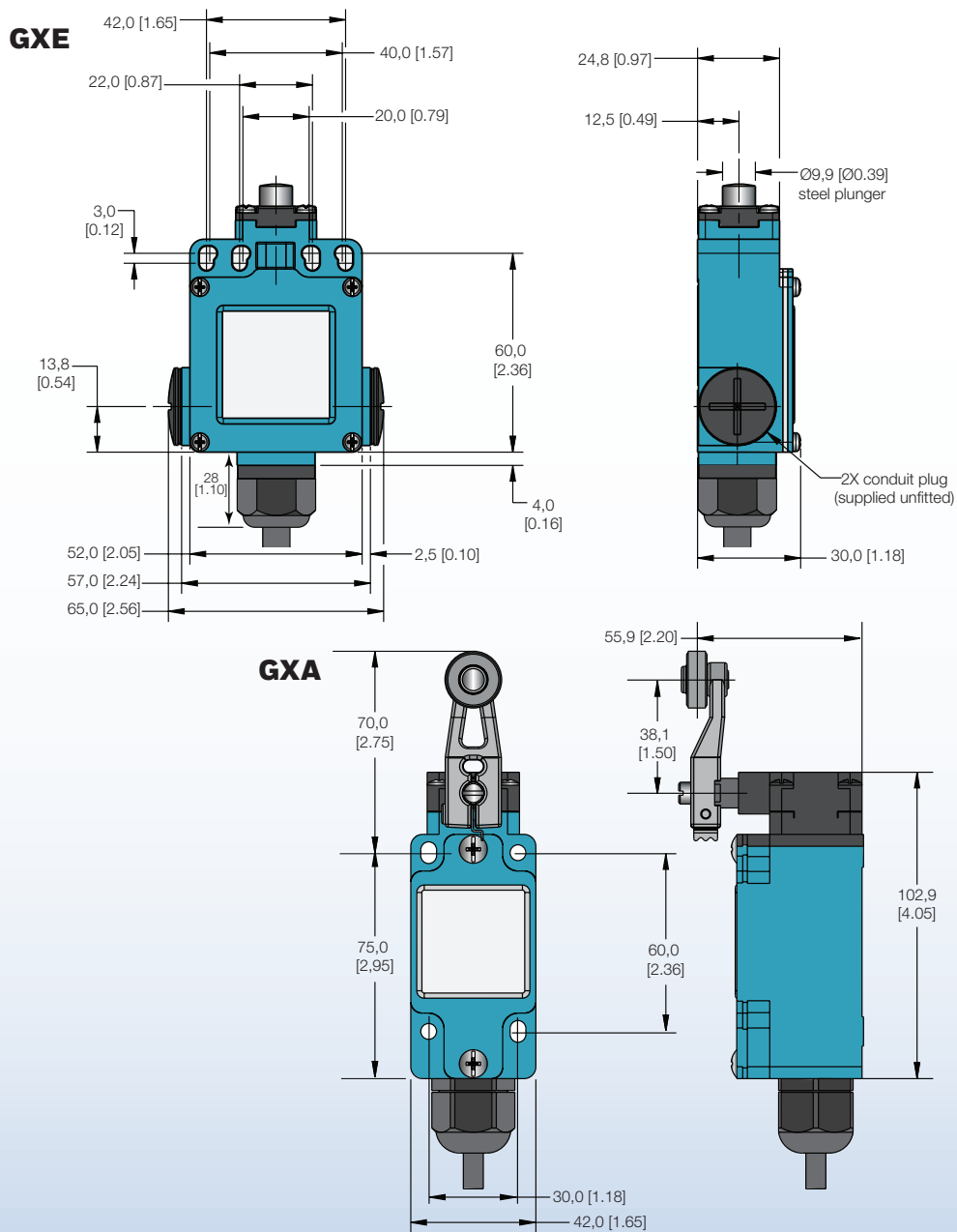
# MICRO SWITCH Hazardous Area Switches | CX Series



Switch Type	Housing Style & Actuator Type	Circuitry	Switch Type	Switches	Additional Options
<b>CX Series</b> Hazardous Area Limit Switch	<b>1</b> Short housing, side rotary	<b>1</b> 15 A, SPDT basic switch/es	<b>CX</b> Momentary	<b>0</b> 4 mA to 20 mA	Non-threaded thru holes
	<b>2</b> Standard housing, side rotary	<b>2</b> 20 A, SPDT basic switch/es	<b>CX1</b> Maintained	<b>1</b> One switch	<b>A</b> Side mounting, 5/16-18(8)
	<b>3</b> Short housing, plunger actuator	<b>4</b> 10 A, DPDT basic switch/es		<b>2</b> Two switches	<b>B</b> Thru mounting, 3/8-24(4)
	<b>4</b> Standard housing, plunger actuator	<b>6</b> 1 A, SPDT, hermetically sealed basic switch/es		<b>3</b> Three switches	<b>C</b> Low temperature
	<b>6</b> Short housing, black epoxy	<b>8</b> 4 mA to 20 mA output for position sensing		<b>4</b> Four switches	<b>E</b> ATEX/IEC Ex/ INMETRO certified with cover clamp
	<b>7</b> Stand. housing, bronze material, 5/16-18 UNC-2B mtg holes	<b>172</b> 1 A, SPDT, gold-plated contacts, basic switch/es		<b>5</b> Two switches, one CW oper., one CCW oper.	<b>M</b> Metric, M25 x 1.5 conduit
	<b>8</b> Standard housing, bronze material				<b>D01</b> Flat shaft
	<b>9</b> Switch assemblies (replacement)				<b>00</b> Or other numbers, various specials

Other special configurations may be available.  
For more information, contact your Honeywell representative.

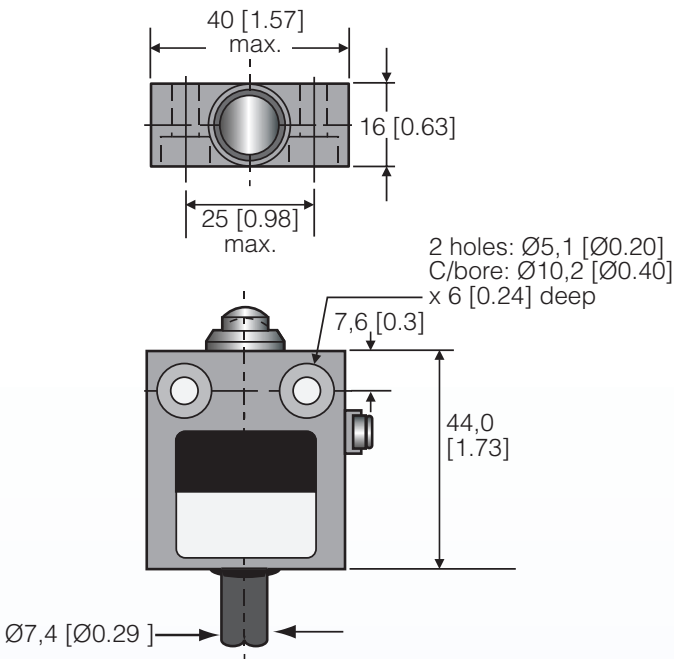
# MICRO SWITCH Hazardous Area Switches | GXA/GXE Series





GXE	#	1	A	A	3
Switch Type	Cable Length	Circuitry	Actuator Type	Side Lever Roller Material	Head Orientation
<b>GXA</b> Series Hazardous Area Limit Switch	<b>5</b> 5 meter cable	<b>1</b> Silver contacts, snap action	<b>A</b> Side rotary	<b>A</b> Plastic	Lever to front or plunger parallel to mtg surface
<b>GXE</b> Series Hazardous Area Limit Switch		<b>2</b> Gold contacts, snap action	<b>B</b> Pin plunger	<b>B</b> Steel	<b>3</b> Lever to right
			<b>C</b> Roller plunger		<b>4</b> Lever to left
			<b>D</b> Roller arm		<b>5</b> Lever to rear
					<b>6</b> Roller plunger perpendicular to mtg surface



# MICRO SWITCH Hazardous Area Switches | 14CE100 Series



Switch Type  
**14CE Series**  
Hazardous  
Area  
Limit Switch

 <b>101</b>	 <b>1</b>
Actuator	Cable length
<b>101</b> Top plunger	<b>1</b> 1 meter
<b>102</b> Top roller plunger	<b>2</b> 2 meters
<b>103</b> Cross roller plunger	<b>3</b> 3 meters
<b>118</b> Booted top plunger	<b>4</b> 4 meters
	<b>5</b> 5 meters
	<b>6</b> 6 meters
	<b>8</b> 8 meters
	<b>10</b> 10 meters
	<b>12</b> 12 meters
	<b>15</b> 15 meters



# Hazardous Area Switches | VPX Series



## VPX Series

Valve position indicator designed for outdoor use in hazardous atmospheres



- Certified for ATEX, IEC Ex, CE, and cULus specifications for global applications that requires protection from explosive gases, vapors & combustible dust  
**coming soon:** NEPSI and KOSHA certifications
- Die-cast aluminum housing and various sealing (NEMA 4, 4X, 6, and 13), certifies the VPX Series is rated for rain, wind, snow, ice and blowing dust environments
- Wide operating temperature range from -40°C to 80°C
- Versions of the 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



VPX

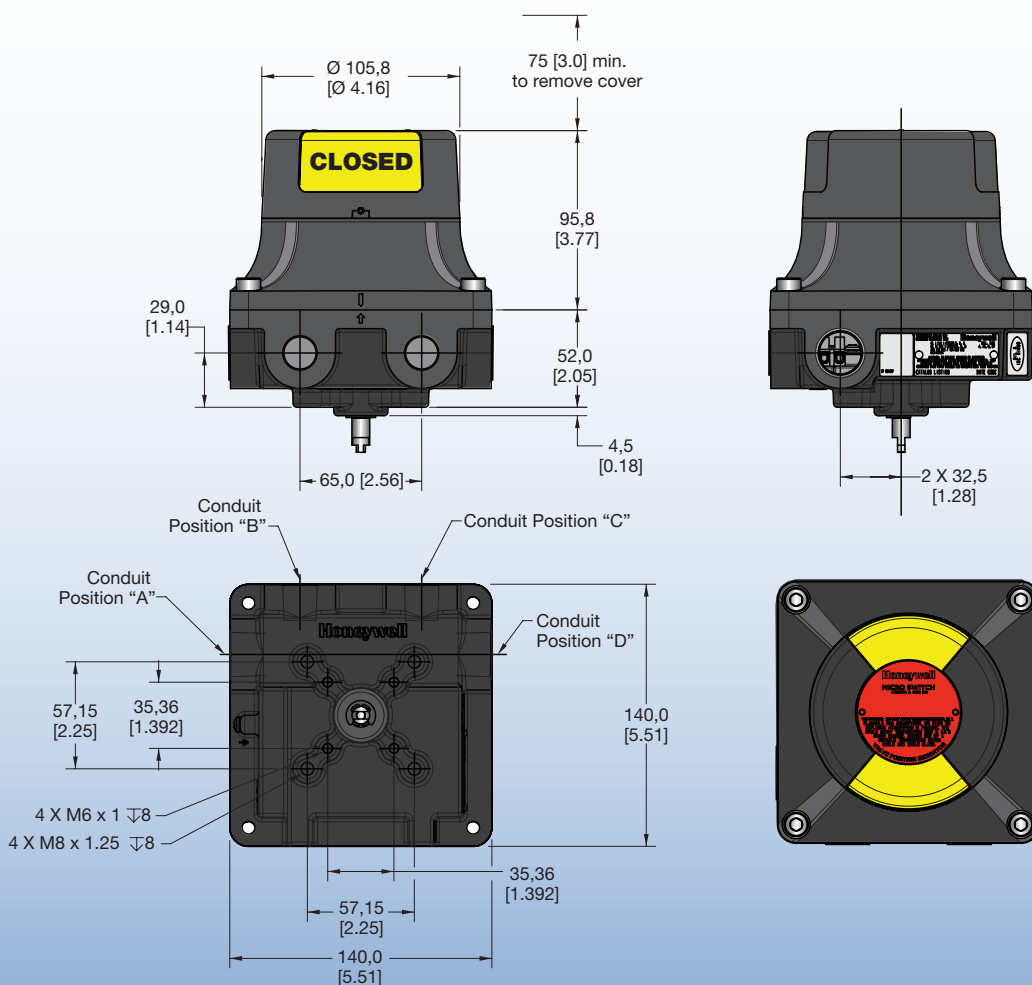
Agency Approvals	cULus, ATEX, IEC EX, CE
Explosion Proof Hazardous Area Designations	<p>North America: Division 1, Class I, Groups B, C, and D (Gas Rating) Division 1, Class II, Groups E, F, and G (Dust Rating)</p> <p>ATEX/IEC Ex: II 2 G, II 2 D (ATEX Rating) Ex db IIC T6 Gb (Gas Rating) Ex tb IIIC T85°C Db (Dust Rating) Ta -40°C to +50°C (Switch Code 4A or 4B) Ta -40°C to +60°C (Switch Code 2A or 2B)</p>
Intrinsically Safe Hazardous Area Designations	<p>VPX with proximity switches carry an intrinsically safe rating: North America: Not Available</p> <p>ATEX/IEC Ex: II 1 G, II 1 D (ATEX Rating) Ex ia IIC T4 Ga (Gas Rating) Ex ia IIIC T135°C Da (Dust Rating) Ta -40°C to 80°C</p>
Sealing	NEMA 4, 4X, 6, and 13 per UL 50E; IP66 per IEC 60079-0; IP67 per IEC 60529 (self-certified by Honeywell)
Housing Material	aluminum with protective paint finish
Visual Indicator	available in multiple colors and angles. Visible from all directions.
Operating Temp.	<p>versions with four electromechanical switches: -40°C to 50°C [-40°F to 122°F] versions with two electromechanical switches: -40°C to 60°C [-40°F to 140°F] versions with proximity switches: -40°C to 80°C [-40°F to 176°F]</p>
Electrical Rating	<p>versions with snap-action switches: UL Rating: 15 A 150 Vac CE Rating: 16 A 250 Vac 10 A 250 Vac 0.5 A 250 Vdc 0.5 A 250 Vdc</p> <p>versions with intrinsically safe proximity switches: switch element function: NAMUR, NC nominal voltage: 8.2 V current consumption (On) ≤ 1 mA current consumption (Off) ≥ 3 mA</p>



## APPLICATIONS

- Seaside grain and duel loading docks
- Oil and gas wells
- Refineries
- Fuel storage facilities
- Mining
- Petrochemical and chemical plants
- Waste water treatment facilities
- Oil and gas production pipeline networks
- Paint batching/blending plants
- Pharmaceuticals and drug processing plants
- Food and beverage industries
- Pesticides manufacturing plants
- Textile dyeing and finishing plants
- Lead acid battery manufacturing facilities

VPX Series	1 Enclosure Material	C Origin and Certifications	2A Switch Options	A Indicator Angle	GR Indicator Color	1 Shaft End	A Shaft Rotation	2A Conduit Entry	1 Number of Conduit Plugs	— — — Specials
<b>VPX Series</b> Valve Position Indicator	<b>1</b> Aluminum	<b>A</b> China (standard) IEC Ex, ATEX, CE, NEPSI	<b>2A</b> 2X snap action SPDT	<b>A</b> 45°	<b>GR</b> Green (open) Red (closed)	<b>1</b> Namur	<b>A</b> 360° continuous	<b>2A</b> (2) 1/2-14 NPT (A & D)	Leave blank for no plugs	Up to two letters or numbers to indicate a special feature.
		<b>C</b> China (premium) IEC Ex, ATEX, cULus, CE, SIL3, NEPSI, KOSHA	<b>4A</b> 4X snap action SPDT	<b>B</b> 90°	<b>BY</b> Black (open) Yellow (closed)	<b>2</b> 1/4 in flats	<b>B</b> ±90°	<b>2B</b> (2) 3/4-14 NPT (A & D)	<b>1</b> 1 plug	
		<b>E</b> USA (premium) IEC Ex, ATEX, cULus, CE, SIL3, NEPSI, KOSHA	<b>2B</b> 2X snap action SPDT, gold contacts		<b>YB</b> Yellow (open) Black (closed)	<b>3</b> Ø7.25 knurl for ex. lever		<b>2C</b> (2) M20 x 1.5 (A & D)	<b>2</b> 2 plugs	
			<b>4B</b> 4X snap action SPDT, gold contacts		<b>RY</b> Red (open) Yellow (closed)			<b>2D</b> (2) M25 x 1.5 (A & D)	<b>3</b> 3 plugs	
			<b>2C</b> 2X I.S. inductive proximity switch (Namur)		<b>GY</b> Green (open) Yellow (closed)			<b>3B</b> (3) 3/4-14 NPT (A, B, & D)	Indicate how many plugs should be included. Any unused conduit entries must be sealed with a blanking element certified to the hazardous location environment (or better). Plugs can also be purchased separately. (see page 7).	
					<b>RG</b> Red (open) Green (closed)			<b>4C</b> (4) M20 x 1.5		
					<b>YR</b> Yellow (open) Red (closed)			<b>4D</b> (4) M25 x 1.5		
					<b>YG</b> Yellow (open) Green (closed)			<b>4F</b> (2) 1/2-14 NPT (B & D) & (2) 3/4-14 NPT (A & D)		





# Hazardous Area Switches | V15W2 Series



## V15W2 Series

Basic switches approved for use in Zone 2 hazardous locations



- Approved for use in Zone 2 hazardous locations
- IP67 equivalent
- UL, cUL, ENEC, CQC, IEC Ex approvals
- 5 A electrical rating
- Longer service life: over one million mechanical operations
- Quick-connect terminals
- SPDT, SPNO<sup>1</sup>, SPNC<sup>1</sup>
- 100 gf, 200 gf<sup>1</sup> operating forces
- Available with a variety of actuators
- Global package size acceptance
- Gold contacts are also available for controlling logic-level/low-energy circuits

<sup>1</sup> These options have a three-month lead time for set up.



## APPLICATIONS

- Appliances (especially with new refrigerants)
- Valve actuators
- Commercial refrigeration
- Ice makers
- HVAC/R (furnace, refrigeration, ventilation)



## V15W2

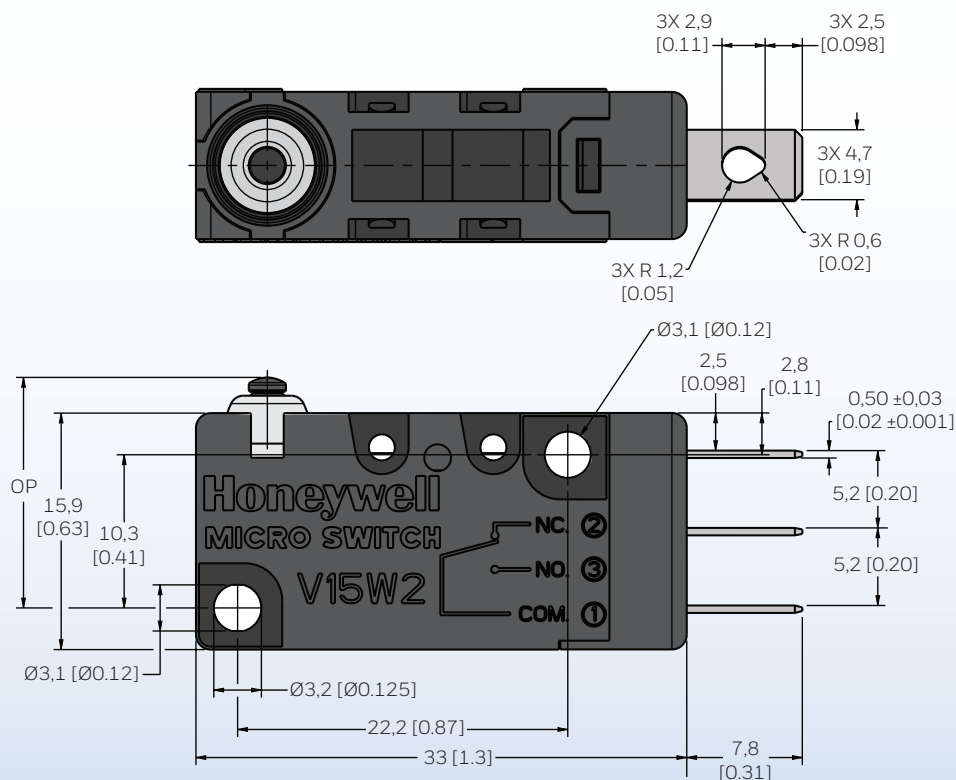
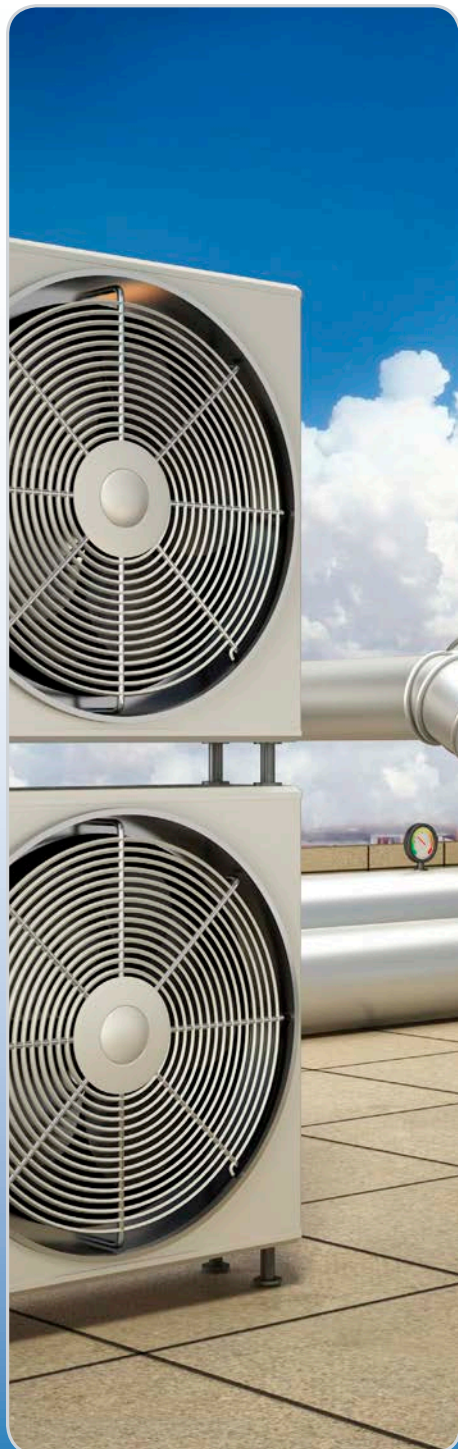
<b>Agency Approvals</b>	UL, cUL, ENEC, CQC, IEC Ex
<b>Explosion Proof Hazardous Area Designations</b>	IEC Ex per IEC 60079-0 and 60079-15 Ex nC IIA T5 Gc -25°C < Tamb < +85°C
<b>Sealing</b>	IP67 equivalent
<b>Housing Material</b>	PBT thermoplastic polyester
<b>Sealing Material</b>	silicone
<b>Operating Temp.</b>	-25 °C to 85 °C [-13 °F to 185 °F]
<b>Electrical Rating</b>	UL/cUL electrical rating per UL 61058-1: 5 A, 1/10 HP @ 125 Vac/250 Vac, 10,000 cycles ENEC/CQC electrical rating per IEC 61058-1 and GB15091.1: 5 A, 125 Vac/250 Vac, 50,000 cycles
<b>Mechanical Life</b>	1,000,000 cycles min. @ 180 cycles/minute max.



V15W2	—	E	Z	200	A	02	—	A	W2	
Switch Type	Terminals	Circuitry	Operating Force	Lever Location	Lever Type	Mounting Holes	Contact Material	Electrical Rating (must be included)	Special Designator	
MICRO SWITCH Hazardous Location-Rated <b>V15W2</b> Basic Switch	<b>E</b> Quick connect 4,8 mm x 0,5 mm	<b>Z</b> SPDT	<b>100</b> 100 g max.	No lever	Pin plunger	Metric (Ø 3,1 mm)	Standard silver alloy	<b>W2</b> 5 A, 1/10 HP 125 Vac/250 Vac	A special designator code is used to indicate some non-standard feature such as a special actuator, wire color, etc. Review product specification to determine the nature of the non-standard feature. This code will consist of up to three alphanumeric characters. A blank designates no difference from standard listing.	
		<b>P</b> SPNO <sup>1</sup>	<b>200</b> 200 g max. <sup>1</sup>	<b>A</b> Lever pivot far from plunger	<b>01</b> Short straight lever <sup>1</sup>	<b>K</b> USA (Ø 2,9 mm)	<b>A</b> Gold-plated silver alloy			
		<b>C</b> SPNC <sup>1</sup>		<b>B</b> Lever pivot near plunger	<b>02</b> Standard straight lever <sup>1</sup>					
					<b>03</b> Long straight lever <sup>1</sup>					
					<b>04</b> Simulated roller lever <sup>1</sup>					
					<b>05</b> Roller lever					
					<b>06</b> Long roller lever <sup>1</sup>					

Not all combinations of model code are available.  
Please contact your Honeywell provider/representative for assistance.

<sup>1</sup>These options have a three-month lead time for set up.



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**Part Innovation. Part Engineering. Total Solutions.**

**MICRO SWITCH Hazardous Area Switches**

- BX/BX2
- LSX
- CX
- EX
- VPX
- GXE | GXA
- 14CE100
- V15W2

**Potential Applications**

- Control valves
- Conveyors and grain elevators
- Maintenance equipment
- Material handling
- Off-shore drilling
- Paint booths
- Petrochemical and waste treatment plants
- Pipeline valves

**Find out more**

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