

**MICRO SWITCH™ EXLS Switches**

**Honeywell**



**Hazardous Area Limit 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 Sensing and Control for global support, exceptional quality, and innovative design and technology.





# Designed to endure the toughest applications

**Dual bearing design** on side rotary construction increases resistance to side loading and allows for longer life

**Non-sparking materials** made for use in hazardous areas

**Twin shaft seals** for an extra measure of environmental protection

Optional **gold contacts** for controlling low-energy electrical loads

Unique, **all-metal drive train** for extended life and consistent operating characteristics even at high temperatures

**Domestic and international conduits** for global use

Optional **fluorosilicon seals** extend operating temperature down to -40 °C [-40 °F]

Sintered **bronze bearings** enable longer operating life and increased resistance in corrosive environments

Rugged, **corrosion-resistant head and body** are phosphate treated and epoxy finished (or stainless steel)



13

**CX:** designed for use with valves

12



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



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



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

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

22400

# MICRO SWITCH™ EXLS Series

Hazardous Area Limit 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 121 °C [-40 °F to 250 °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 and switching combinations are available
- Optional gold contacts for switching low-power load



## 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 and 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

***BUILT TOUGH***  
**FOR THE TOUGHEST APPLICATIONS**



**BX**



**LSX**



**GSX**



**CLSX**

1/2 NPT or 3/4 NPT: UL, CSA, ATEX, IEC Ex 20 mm: ATEX, IEC Ex	UL, CSA	<b>Agency Approvals</b>	cULus, ATEX, IEC Ex	UL, CSA
Div. 1 & 2, Class I, Groups B, C, & D 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	Div. 1 & 2, Class I, Groups B, C, & D Div. 1 & 2, Class II, Groups E, F, & G	<b>Hazardous Area Designations</b>	Div. 1 & 2, Class I, Groups B, C, & D 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	Div. 1 & 2, Class I, Groups B, C, & D Div. 1 & 2, Class II, Groups E, F, & G
IP67; NEMA 1, 3, 4, 6, 13 1/2-14 NPT, 3/4-NPT: IP67; NEMA 1, 3, 4, 6, 7, 9, 13	IP67; NEMA 1, 3, 4, 6, 13	<b>Sealing</b>	IP67; NEMA 1, 4, 6, 7, 9, 12, 13	NEMA 1, 3, 4, 7, 9, 13
aluminum stainless steel	aluminum	<b>Housing Material</b>	aluminum	aluminum
side rotary, side plunger, side roller, top rotary, top plunger, top roller plunger, wobble	side rotary, side plunger, side roller, top rotary, top plunger, top roller plunger, wobble	<b>Actuators/Levers</b>	side rotary, pin plunger, top roller plunger, top roller lever	cabie, maintained
1/2-14NPT conduit, 3/4-14NPT conduit, 20 mm conduit	1/2 in - 14NPT conduit, 3/4 in - 14NPT conduit, 20 mm conduit	<b>Termination</b>	1/2 in - 14NPT conduit, 20 mm conduit	1/2 in - 14NPT conduit, 20 mm conduit
1NC 1NO SPDT DB snap action, 2NC 2NO DPDT DB snap action	1NC 1NO SPDT DB snap action, 2NC 2NO DPDT DB snap action	<b>Circuitry</b>	SPDT, SPDT BBM, SPDT MBB, SPDT slow acting, DPDT, DPDT BBM, DPDT MBB, DPDT slow acting	1NC direct acting, 1NO 1NO direct acting
-40 °C to 70 °C [-40 °F to 158 °F]	-12 °C to 121 °C [10 °F to 250 °F]	<b>Operating Temp.</b>	-40 °C to 70 °C [-40 °F to 158 °F]	-1 °C to 70 °C [30 °F to 158 °F]
0.05 A, 10 A (thermal)	0.05 A, 10 A (thermal)	<b>Amp Rating</b>	10 A (thermal)	10 A (thermal)
120 Vac, 240 Vac, 250 Vac, 480 Vac, 600 Vac, 60 Vdc	120 Vac, 240 Vac, 250 Vac, 480 Vac, 600 Vac, 60 Vdc	<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™ EXLS Series

## BX/BX2/LSX Series

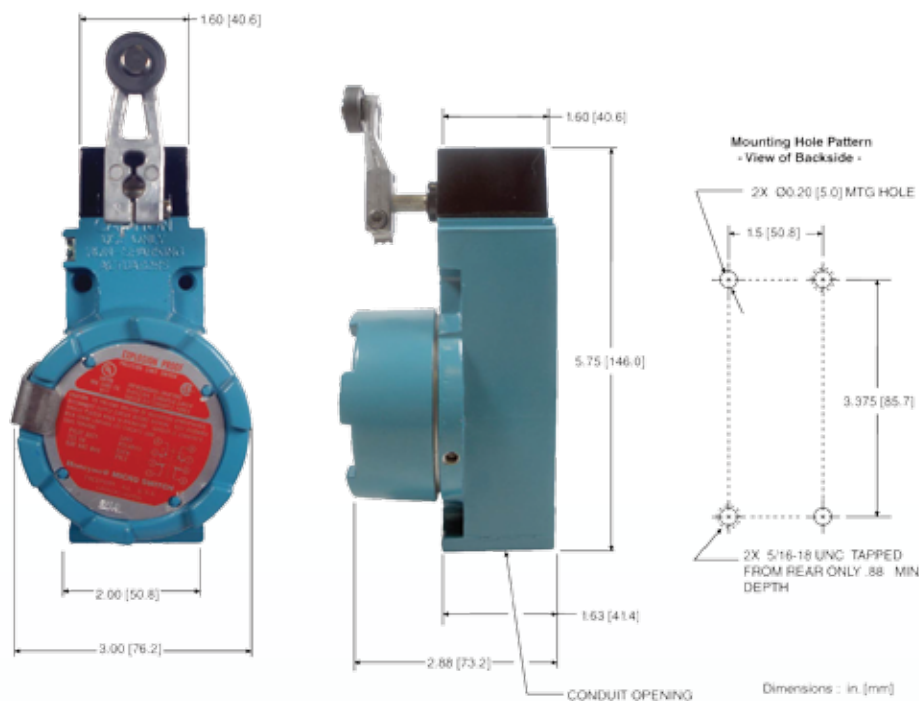
### Dimensions and Ordering Information

BX		A	4K		1A
Switch Type	Conduit Threads	Head Style	Circuitry and Conduit Connection*	Actuator Modification	Actuator Options
<b>BX Series</b> Hazardous Area Limit Switch	NPT	<b>A</b> Side rotary; momentary	<b>1A</b> Slow acting, 3NC/1NO; ¾-14NPT	<b>1</b> CW rotation	<b>1</b> Fixed roller, 1.5 in radius
	<b>3</b> PG 13.5 conduit thread	<b>B</b> Top rotary; momentary	<b>1E</b> Slow acting, 3NC/1 NO, gold-plated contacts, ¾-14NPT	<b>2</b> CCW rotation	<b>1A</b> Fixed 0.75 in x 0.25 in nylon roller, 1.5 in radius
<b>BX2 Series</b> Stainless Steel Hazardous Area Limit Switch	<b>4</b> 20 mm conduit thread	<b>C</b> Top plunger, plain	<b>3E</b> High fidelity, ½-14NPT	<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>3K</b> 1NC/1NO, ½-14NPT	<b>4</b> Head assembled with actuator to left side	<b>1E</b> Fixed, 0.75 in x 0.25 in bronze roller
		<b>E</b> Side plunger plain; momentary	<b>3N</b> 1NC direct acting, ½-14NPT	<b>5</b> Head assembled with actuator toward mounting surface	<b>1F</b> Fixed, 0.75 in x 0.25 in nylon roller
		<b>F</b> Side plunger roller; momentary	<b>4K</b> 1NO/1NC, ¾-14NPT	<b>6</b> Roller perpendicular to mounting surface	<b>2</b> Adjustable, rollerless
		<b>G</b> Top plunger w/o overtravel mechanism	<b>4L</b> 2NC/2NC, ¾-14NPT	<b>8</b> Roller on side plunger in vertical position	<b>2A</b> Adjustable, 0.75 in x 0.25 in nylon roller
		<b>H</b> Side rotary, momentary; low PT, low torque	<b>4M</b> 2NO/2NC, sequence, ¾-14NPT		<b>2C</b> Adjustable, 0.75 in x 0.25 in nylon roller
		<b>J</b> Wobble stick	<b>4N</b> 2NO/2NC, center neutral, ¾-14NPT		<b>2E</b> Adjustable, 0.75 in x 0.25 in bronze roller
		<b>K</b> Whisker	<b>4S</b> 2NO/2NC, high fidelity contacts, ¾-14NPT		<b>2F</b> Adjustable, 0.75 in x 0.25 in bronze roller
		<b>L</b> Side rotary; sequential	<b>4T</b> 2NO/2NC, sequence		<b>2J</b> Adjustable, 1.0 in x 0.5 in nylon roller
		<b>M</b> Side rotary; central neutral	<b>4U</b> 2NO/2NC, center neutral, high fidelity contacts, ¾-14NPT		<b>2K</b> Adjustable, 0.5 in x 0.25 in nylon roller
		<b>N</b> Side rotary; maintained	<b>7L</b> 2NO/2NC, center neutral, ½-14NPT		<b>3E</b> Yoke, 0.75 in x 0.25 in nylon roller
		<b>P</b> Side rotary, momentary; low PT and DT	<b>7N</b> 2NO/2NC, center neutral, ½-14NPT		<b>3M</b> Yoke, 0.75 in x 0.25 in nylon roller
		<b>R</b> Side rotary, momentary; low torque	<b>7S</b> 2NO/2NC, high fidelity contacts, ½-14NPT		<b>3S</b> Yoke, 0.75 in x 0.25 in nylon roller, same side
		<b>V</b> Top plunger, adjustable	<b>7T</b> 2NO/2NC, sequence, high fidelity contacts, ½-14NPT		<b>4</b> Hub only
		<b>W</b> Side plunger, adjustable	<b>7U</b> 2NO/2NC, center neutral, high fidelity contacts, ½-14NPT		<b>4M</b> Hub rod, aluminum
					<b>5</b> Offset, rollerless
					<b>5A</b> Offset, 0.75 in x 0.25 in nylon roller
					<b>5C</b> Offset, 0.75 in x 0.25 in nylon roller
					<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

**NOTE:** Not all permutations of model code are available. Please contact your local Honeywell provider for assistance.

\*Conduit connection code only applies if the standard NPT code is specified on the product.





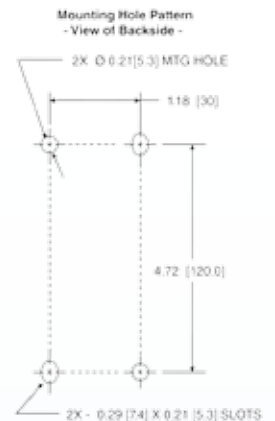
Honeywell MICRO SWITCH™ BX Series and LSX have consistent dimensions

LSX	A	4K		1A
Switch Type	Head Style	Circuitry and Conduit Connection	Modification Code	Actuator Options
<b>LSX Series Hazardous Area Limit Switch</b>	<b>A</b> Side rotary; momentary	<b>3E</b> High fidelity, ½-14NPT	<b>1</b> CW rotation	<b>1</b> Fixed roller, 1.5 in radius
	<b>B</b> Top rotary; momentary	<b>3K</b> 1NC/1NO, ½-14NPT	<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> 1NC direct acting, ½-14NPT	<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, ¾-14NPT	<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> 2NC/2NC, ¾-14NPT	<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, sequence, ¾-14NPT	<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, center neutral, ¾-14NPT	<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, high fidelity contacts, ¾-14NPT		<b>2K</b> Adjustable, 0.5 in x 0.25 in nylon roller
	<b>K</b> Whisker	<b>4T</b> 2NO/2NC, sequence		<b>3E</b> Yoke, 0.75 in x 0.25 in nylon roller
	<b>L</b> Side rotary; sequential	<b>4U</b> 2NO/2NC, center neutral, high fidelity contacts, ¾-14NPT		<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, center neutral, ½-14NPT		<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, sequence, ½-14NPT		<b>4</b> Hub only
	<b>P</b> Side rotary, momentary; low PT and DT	<b>7N</b> 2NO/2NC, center neutral, ½-14NPT		<b>4M</b> Hub rod, aluminum
	<b>R</b> Side rotary, momentary; low torque	<b>7S</b> 2NO/2NC, high fidelity contacts, ½-14NPT		<b>5</b> Offset, rollerless
	<b>U</b> Side rotary, low pre-travel	<b>7T</b> 2NO/2NC, sequence, high fidelity contacts, ½-14NPT		<b>5A</b> Offset, 0.75 in x 0.25 in nylon roller
	<b>V</b> Top plunger, adjustable	<b>7U</b> 2NO/2NC, center neutral, high fidelity contacts, ½-14NPT		<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

# MICRO SWITCH™ EXLS Series

## GSX Series

## Dimensions and Ordering Information



GSX	A	01	A	1	1	-	1
Switch Type	Conduit Connection	Circuitry	Head Style	Actuator Style	Lever Roller	Modifications/ Specials	
<b>GSX Series Hazardous Area Safety Switch</b>	<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					



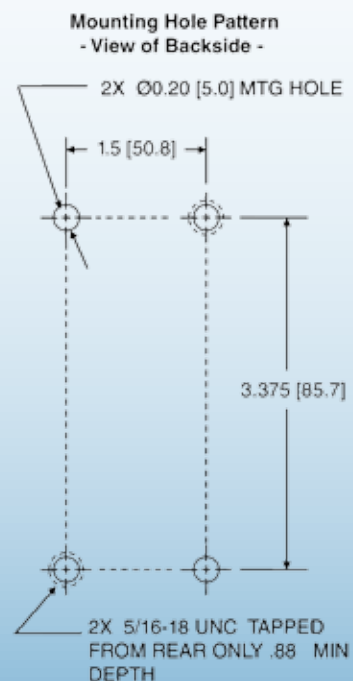
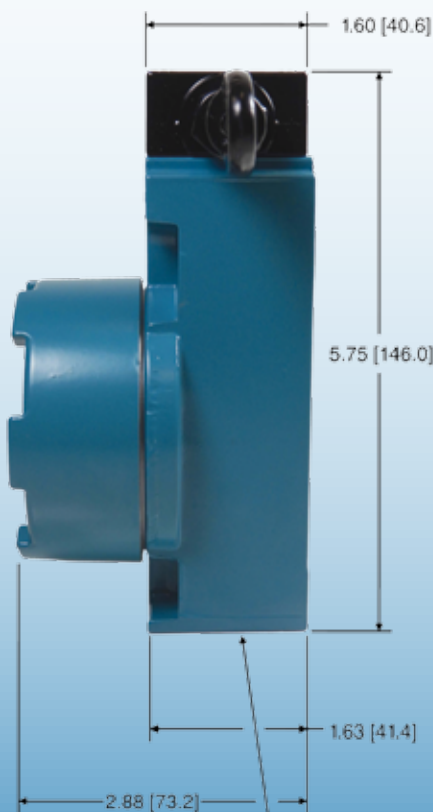
# MICRO SWITCH™ EXLS Series

## CLSX Series

### Dimensions and Ordering Information



CLSX	B	1	A	
Switch Type	Conduit Connection	Circuitry	Body and Operation	Modification Code
<b>CLSX Series</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>Hazardous Area</b>	<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>Safety Switch</b>		<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



Dimensions : in. [mm]

# MICRO SWITCH™ EXLS Series

Hazardous Area Limit Switches

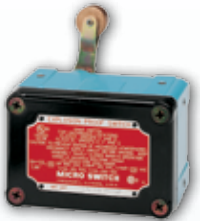
CX, EX, 14CE100, GXE Series



## 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



## 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
- Optional high temperature switches up to 400 °F
- Variety of levers and actuators
- Optional gold contacts for switching low-power load



## 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
- Increased mounting flexibility with capability for three conduit entry locations
- 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



## 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

***FLEXIBLE***  
**TO MEET YOUR NEEDS**





**CX**



**EX**



**14CE100**



**GXE**

UL, CSA, ATEX (CE), IEC Ex	UL, CSA, ATEX (CE), IEC Ex	<b>Agency Approvals</b>	ATEX (CE)	ATEX (CE), IEC Ex
Div. 1 & 2, Class I, Groups B, C, & D 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	Div. 1 & 2, Class I, Groups B, C, & D 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
IP66/IP67; NEMA 1, 3, 4, 4X, 6, 6P, 7, 9, 13	NEMA 1, 7, 9	<b>Sealing</b>	IP65/IP66/IP67	IP66/67
aluminum, bronze	aluminum	<b>Housing Material</b>	zinc	zinc
side rotary, plunger	side rotary, top plunger, top roller plunger, manual	<b>Actuators/Levers</b>	top plunger, roller plunger, cross-roller	side rotary, top plunger, top roller
3/4 in - 14 NPT conduit, 25 mm conduit	1/2 in - 14NPT conduit, lead wires	<b>Termination</b>	cable (various lengths)	5 m cable
1NC 1NO SPDT, 2NC 2NO DPDT, 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 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, 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, 125 Vdc, 250 Vdc	125 Vac, 250 Vac, 480 Vac, 125 Vdc, 250 Vdc	<b>Voltage</b>	AC14 D300 DC13 R300	AC15 DC13
external and internal	external and internal	<b>Grounding screw</b>	external and internal	internal



# MICRO SWITCH™ EXLS Series

## EX Series

## Dimensions and Ordering Information

### MICRO SWITCH™ EX Series Listings

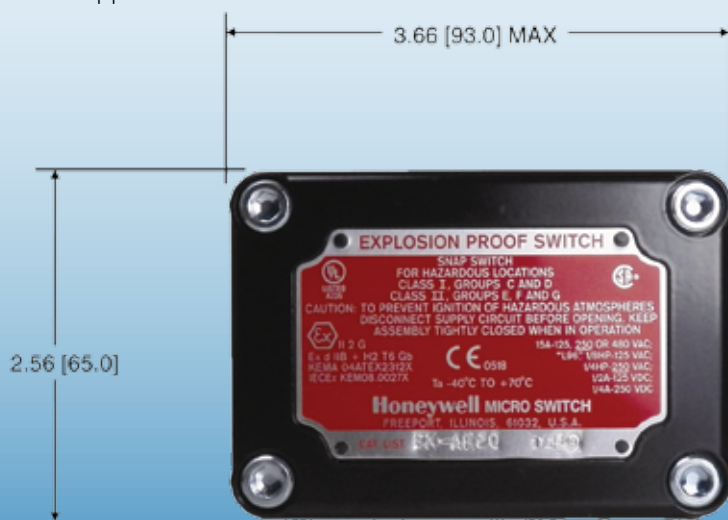
Catalog Listing	Actuation Type	Actuation	Contact	Electrical Rating*	Other
EX-AR20	Side Rotary	Clockwise	SPDT	A	
EX-AR230	Side Rotary	Counter Clockwise	SPDT	A	
EXA-AR20	Side Rotary	Clockwise	SPDT	B	
EX-AR	Roller Lever	Clockwise	SPDT	A	
EX-AR30	Roller Lever	Counter Clockwise	SPDT	A	
EX-AR800	Roller Lever	Clockwise	SPDT	A	Class 1 / Group B
EX-AR830	Roller Lever	Counter Clockwise	SPDT	A	Class 1 / Group B
EX-AR400*	Roller Lever	Clockwise	SPDT	A	High temperature
EXHT-AR	Roller Lever	Clockwise	SPDT	C	High Temperature
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 Plunger	NA	SPDT	A	
EX-Q62	Top Plunger	NA	SPDT	A	No mounting bracket
EX-Q400**	Top Plunger	NA	SPDT	A	High temperature
EXA-Q	Top Plunger	NA	SPDT	B	Low operating force
EXHT-Q	Top Plunger	NA	SPDT	C	High Temperature

\*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 your local Honeywell Sensing and Controls sales representative for more information.

\*\* No ATEX approval



Dimensions : in. [mm]

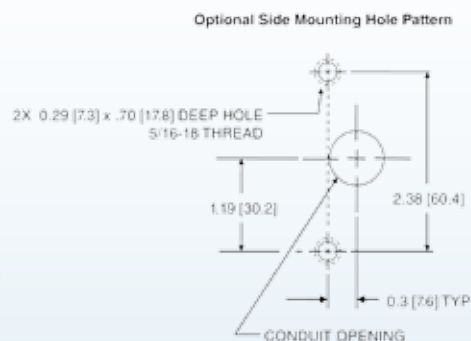
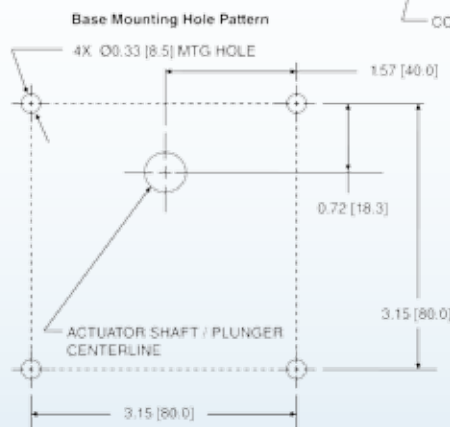
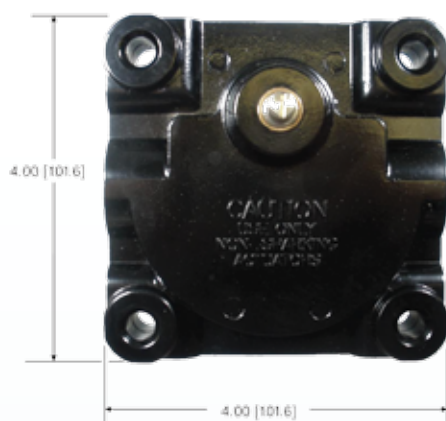
CONDUIT OPENING



# MICRO SWITCH™ EXLS Series

## CX Series

### Dimensions and Ordering Information

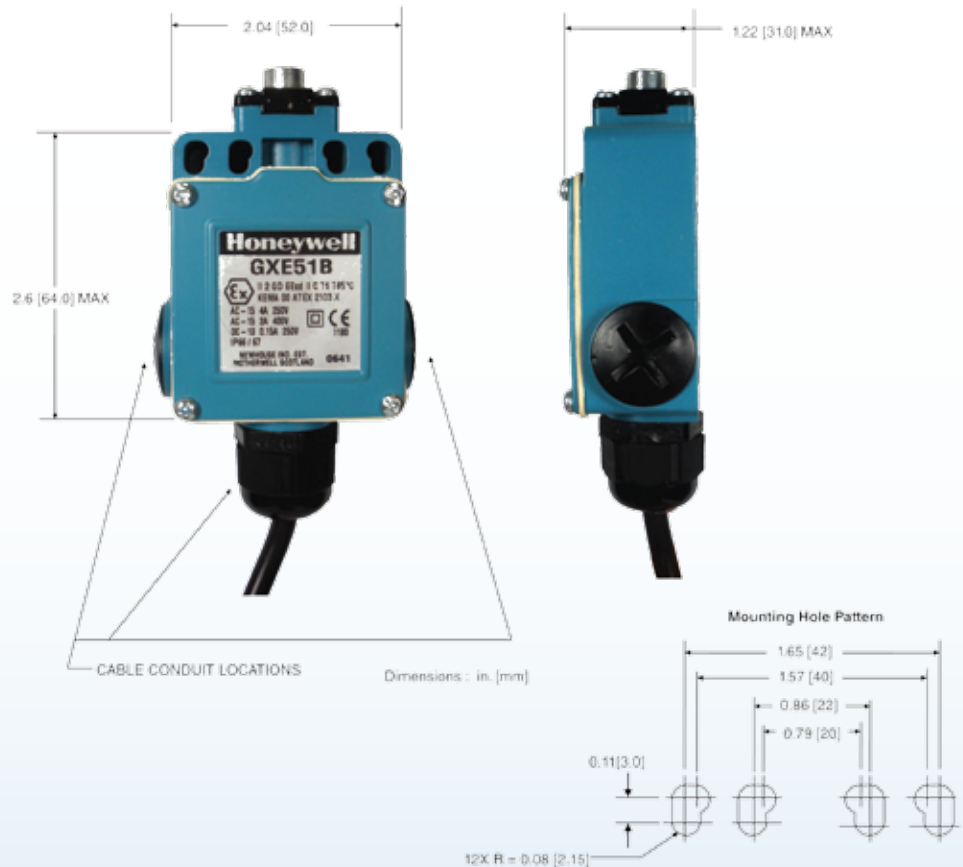


Switch Type	Housing Style & Actuator Type	Circuitry	Switch Type	Switches	Additional Options
<b>CX Series</b> Hazardous Area Limit Switch	<b>1</b> Short housing, side rotary	<b>1</b> 15 A, SPDT	<b>CX</b> Shaft restoring force to center (not avail. on code 8)	<b>0</b> None	<b>A</b> Side mounting, 5/16-18(8)
	<b>2</b> Standard housing, side rotary	<b>2</b> 20 A, SPDT	<b>CX1</b> W/o shaft restoring force to center (not avail. on code 9)	<b>1</b> One	<b>B</b> Thru mounting, 3/8-24(4)
	<b>3</b> Short housing, plunger actuator	<b>4</b> 10 A, DPDT		<b>2</b> Two	<b>C</b> Low temperature
	<b>4</b> Standard housing, plunger actuator	<b>6</b> 1 A, SPDT, hermetically sealed		<b>3</b> Three	<b>E</b> ATEX approval
	<b>8</b> Standard housing, bronze material	<b>8</b> 4 mA to 20 mA output for position sensing		<b>4</b> Four	Non-threaded thru holes
		<b>9</b> Analog position sensing, resistive output			
		<b>172</b> 1 A, SPDT with gold contacts (only available with 2 or 4 switches)			

# MICRO SWITCH™ EXLS Series

## GXE Series

### Dimensions and Ordering Information



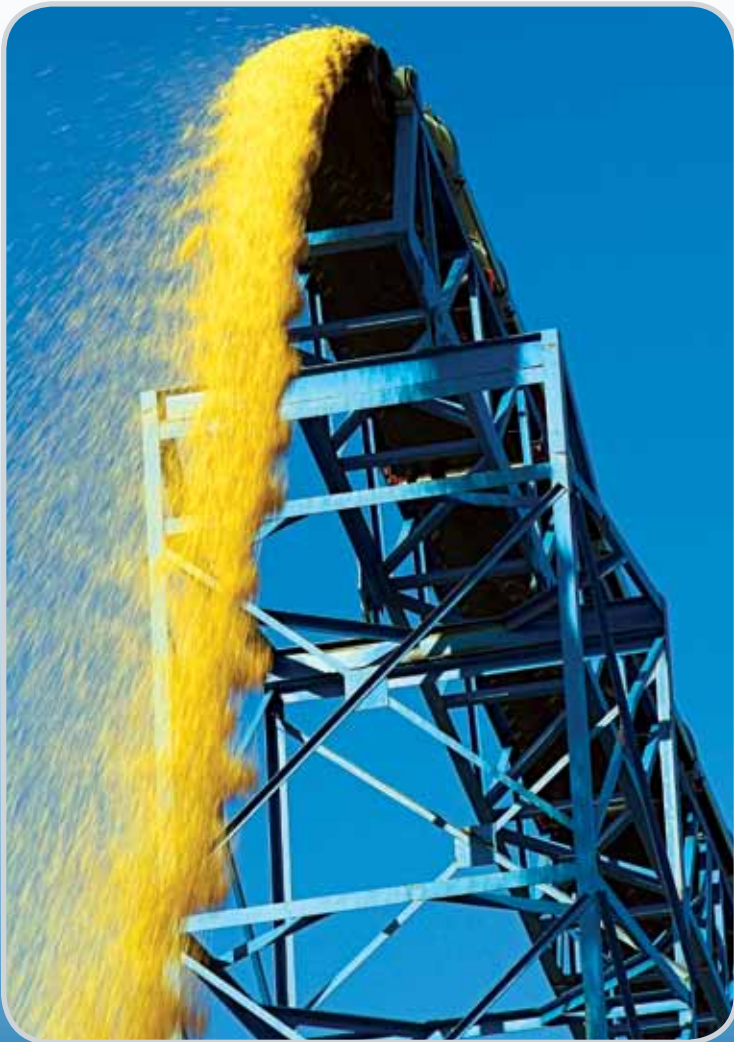
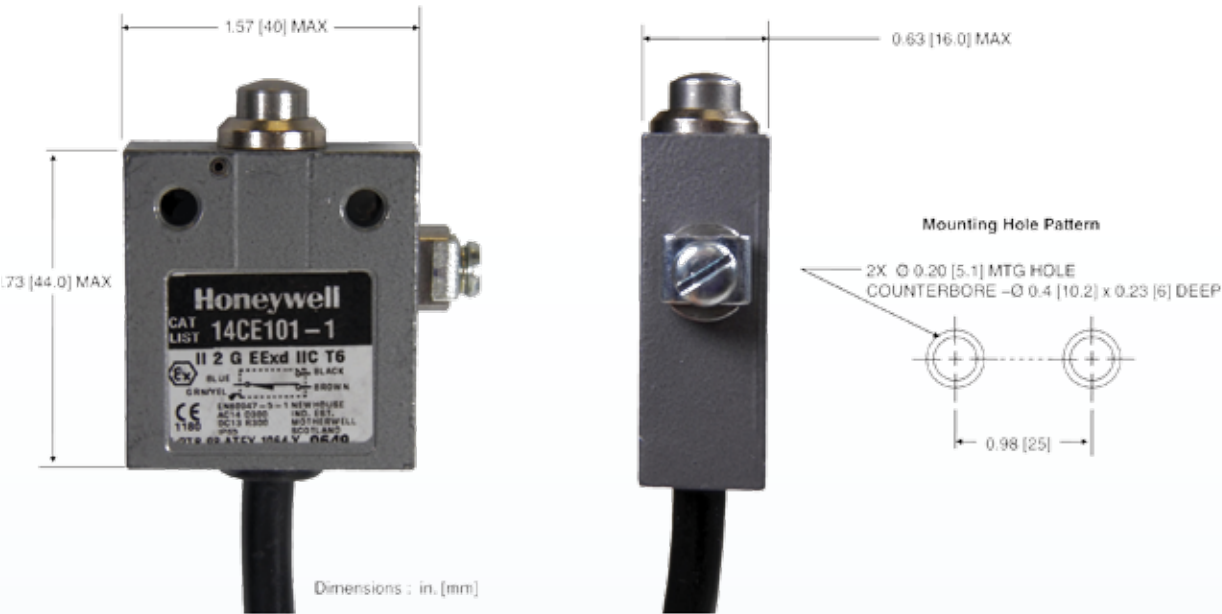
GXE	#	1	A	A	3
Switch Type	Cable Length	Circuitry	Actuator Type	Side Lever Roller Material	Head Orientation
<b>GXE</b> Series Hazardous Area Limit Switch	<b>5</b> 5 meter cable	<b>1</b> Silver contacts, snap action <b>2</b> Gold contacts, snap action <b>3</b> Silver contacts, slow action <b>4</b> Gold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



# MICRO SWITCH™ EXLS Series

14CE100 Series

Dimensions and Ordering Information



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

101

Actuator

- 101** Top plunger
- 102** Top roller plunger
- 103** Cross roller plunger
- 118** Booted top plunger

1

Cable length

- 1** 1 meter
- 2** 2 meters
- 3** 3 meters
- 4** 4 meters
- 5** 5 meters
- 6** 6 meters
- 8** 8 meters
- 10** 10 meters
- 12** 12 meters
- 15** 15 meters

# MICRO SWITCH™ EXLS Series

## Actuator Code Table



**LSZ51A  
LSZ51C**  
fixed rotary, nylon,  
front & back



**LSZ55A  
LSZ55C**  
offset lever, nylon,  
front & back



**LSZ51Y**  
fixed rotary,  
2-inch nylon roller



**LSZ55Y**  
offset lever,  
2-inch nylon roller



**LSZ53S, LSZ53E**  
yoke lever, nylon rollers,  
front and back placement



**LSZ52C**  
adj. lever, nylon  
roller, front placement



**LSZ52J**  
adjustable lever,  
1-inch nylon roller



**LSZ52K**  
adjustable lever,  
1.5-inch nylon roller



**LSZ52Y**  
adjustable lever,  
2-inch nylon roller



**LSZ61**  
6-inch  
loop



**LSZ54M**  
5.5-inch  
aluminum rod



**LSZ68**  
12-inch rod  
with spring





## A tough switch for tough conditions.

Whether it's on a valve or a drilling rig, Honeywell's MICRO SWITCH™ hazardous area switches keep you up and running.

Honeywell switches are made from the highest quality materials and are designed for years of use.

- Wide range of levers, acutators, and circuitry designs for installation flexibility
- Global hazardous approvals for world-wide use
- Weather-sealed, explosion-proof for outdoor use in rugged environments
- Designed for a wide variety of position detection applications

Call 800-537-6945 today for product information or to ask for a Honeywell representative nearest you, or visit us at [www.honeywell.com/sensing](http://www.honeywell.com/sensing)

# XYR6000 Series

## Wireless Hazardous Area Switch

The OneWireless™ XYR™ 6000 Position Sensor allows remote, reliable valve position monitoring in a variety of applications to avoid the time and safety risk of manually monitoring valves in hazardous areas and remote installations.

The XYR 6000 Position Sensor is based on the proven and reliable MICRO SWITCH™ CX series hazardous location limit switch that has been available for more than 40 years.

By combining the proven functionality of MICRO SWITCH™ technology with an enabler like the OneWireless™ network, position sensors can now be used for remote monitoring applications, including: positioners, manual process valves, safety shower notification, tank level indication, door position, louver/damper position, or any other presence, absence or position sensing application where installing wires is inefficient or cost-prohibitive.

The XYR 6000 Position Sensor delivers the following benefits:

**Reliable Operations** - Accurately monitor process parameters in real-time and enhance disaster recovery capability.

**Enhance Safety** - Reduce need for human site monitoring in areas that pose a safety risk.

**Reduce Environmental Risk** - Reduce the potential for environmental incidence through the explosion-proof packaging of the sensor mechanism and identify true valve position to minimize risk of unwanted fluid release.

**Achieve Higher Efficiency and Productivity** - Increase process efficiencies through accurate valve position monitoring, electronic tagging of all valves in system, improve efficiency of scheduled maintenance by targeting valves that have degraded and enhance scalability and flexibility with the ability to add/move valve position sensors.

**Lower System and Commissioning Costs** - Easily and quickly retrofit existing equipment, reduce system complexity and eliminate the need for conduit easements.



XYR™ 6000	
UL, CSA, ATEX (CE), IEC Ex	Agency Approvals
U.S. and Canadian (cCSAus) for Division 1, Class I- Groups A, B, C & D; Class II – Groups E, F & G; Class III	Hazardous Designations
NEMA 1, 3, 4, 6, 6P, 13 IP66/IP67	Sealing
A380 die cast aluminum alloy with epoxy paint finish	Housing Material
side rotary	Actuators/Levers
305 m [1000 ft]	Signal Range
-40 °C to 70 °C [-40 °F to 158 °F]	Operating Temp.
±5 % over 250° when centered between a slip clutch	Accuracy
yes	Grounding screw





# Limitless™ Series

## Wireless Switches and Receivers

It's time to retire the wire. To give your best ideas free rein. Honeywell's Limitless™ Series of wireless limit switches and receivers allows you to go farther, work smarter, and explore more possibilities than ever before. For complete specifications and details, go to [www.honeywell.com/limitless](http://www.honeywell.com/limitless).



WGLA Series		WLS Series
Limitless™ global switch	<b>Product</b>	Limitless™ heavy-duty switch
Global, license-free RF bands	<b>Availability</b>	Global, license-free RF bands
Side rotary, top plunger, top roller, top roller lever	<b>Actuator</b>	Side rotary, top plunger, top roller plunger, top adjustable plunger, wobble stick
Rotary lever included w/side rotary; other lever options available	<b>Lever type</b>	Many rotary lever options available
Zinc head and body are phosphate treated and epoxy finished	<b>Housing material</b>	Zinc head and body are phosphate treated and epoxy finished
EN 50041	<b>Housing</b>	WLS (EN 50041)
WPAN 802.15.4; 2.4 GHz point-to-point; specific country communication agency approval required	<b>Radio</b>	WPAN 802.15.4; 2.4 GHz point-to-point; specific country communication agency approval required
Direct or remote-mount antenna options; omni-directional	<b>Antenna type</b>	Direct or remote-mount antenna options; omni-directional
In excess of 305 m [1000 ft] line-of-sight communication between Limitless™ switches and monitor/receiver when using 2.2 dBi integral antenna	<b>Signal range</b>	In excess of 305 m [1000 ft] line-of-sight communication between Limitless™ switches and monitor/receiver when using 2.2 dBi integral antenna
3.6 Vdc Lithium Thionyl Chloride; 2/3 AA size by Uniwell, DEV-10-0009 or Green Energy p/n ER14335M	<b>Battery</b>	3.6 Vdc Lithium Thionyl Chloride; 2/3 AA size by Uniwell, DEV-10-0009 or Green Energy p/n ER14335M
IP67; NEMA 1, 4, 12, 13	<b>Sealing</b>	IP67, IP68; NEMA 1, 3, 4, 6, 6P, 12, 13
Latest applicable standards: EN 300 328, V1.7.1; EN 61326-1 (2006); EN 301 489-1, V1.8.1; EN 301 489-17, V2.1.1	<b>EMC</b>	Latest applicable standards: EN 300 328, V1.7.1; EN 61326-1 (2006); EN 301 489-1, V1.8.1; EN 301 489-17, V2.1.1
IEC 60068-2-27; half sine, 10 g, 6 mS, 3 axis	<b>Shock</b>	IEC 60068-2-27; half sine, 50 g, 6 mS, 3 axis
IEC 60068-2-6; 10 Hz to 500 Hz, w/ 0,35 mm peak-to-peak, 58 Hz to 500 Hz, 5 g	<b>Vibration</b>	IEC 60068-2-6; 10 Hz to 58 Hz w/ 0,35 mm peak-to-peak, 58 Hz to 500 Hz, 5 g
-40 °C to 85 °C [-40 °F to 185 °F] (side rotary) -25 °C to 85 °C [-13 °F to 185 °F] (all other actuators)	<b>Operating temperature</b>	-40 °C to 85 °C [-40 °F to 185 °F] -30 °C to 85 °C [-22 °F to 185 °F] (wobble sticks)
FCC 15.247 Industry Canada RSS 210 ETSI, CE mark ACMA, C-Tick mark COFETEL; IDA	<b>Agency approvals and standards</b>	FCC 15.247 Industry Canada RSS 210 ETSI, CE mark ACMA, C-Tick mark COFETEL; IDA

WPMM Series	WDRR Series	
Limitless™ wireless panel mount monitor	<b>Product type</b>	Limitless™ wireless din-rail receiver (PLC interface)
Global, license-free RF bands	<b>Availability</b>	Global, license-free RF bands
LCP, VECTRA E130i	<b>Housing</b>	Flame retardant ABS
Snap-in panel or screw-mount	<b>Housing type</b>	DIN-Rail or screw-mount
WPAN 802.15.4, 2.4 GHz point-to-point	<b>Radio type</b>	WPAN 802.15.4, 2.4 GHz point-to-point
RP-SMA jack for direct mount or remote antenna options; omni-directional standard	<b>Antenna type</b>	RP-SMA jack for direct mount or remote antenna options; omni-directional standard
10 Vdc to 30 Vdc	<b>Supply voltage</b>	10 Vdc to 28 Vdc
750 mA	<b>Supply current</b>	500 mA
NPN current sinking open collector; configurable normally open or normally closed	<b>Output type</b>	Selectable: NPN-type current sinking open collector or NPN-type "totem pole"; PNP-type current sourcing open collector or PNP-type "totem pole"
5 mA to 200 mA	<b>Load current</b>	10 mA max.
50 uA max.	<b>Leakage curr.</b>	100 uA max.
1.75 Vdc max. @ max. load @ 25 °C [77 °F]	<b>Voltage drop</b>	2.0 Vdc max. @ max. load @ 25 °C [77 °F]
3	<b>Terminal(s)</b>	18 usable
Quick connect, 0.25 in male blade	<b>Termination</b>	Cage-clamp screw terminal blocks
IP67	<b>Sealing</b>	IP20
Latest applicable standards: EN 300 328, V1.7.1; EN 61326-1 (2006); EN 301 489-1, V1.8.1; EN 301 489-17, V2.1.1	<b>EMC</b>	Latest applicable standards: EN 300 328, V1.7.1; EN 61326-1 (2006); EN 301 489-1, V1.8.1; EN 301 489-17, V2.1.1
IEC 60068-2-27; half sine, 10 g, 6 mS, 3 axis	<b>Shock</b>	IEC 60068-2-27; half sine, 10 g, 6 mS, 3 axis
IEC 60068-2-6; 10 Hz to 500 Hz w/ 0,35 mm peak-to-peak, 58 Hz to 500 Hz- 5 g	<b>Vibration</b>	IEC 60068-2-6; 10-500Hz w/ 0,35 mm peak-to-peak, 58-500 Hz- 5 g
-40 °C to 85 °C [-40 °F to 185 °F]	<b>Operating temp.</b>	-20 °C to 70 °C [-4 °F to 158 °F]
FCC 15.247; IC RSS 210, ETSI, CE mark; ACMA, C-TICK; COFETEL; IDA	<b>Agency approvals and standards</b>	FCC 15.247; IC RSS 210, ETSI, CE mark; ACMA, C-TICK; COFETEL; IDA



**There's an advantage for taking the bold step. For seeing the possibilities. And seizing the opportunity.**

At Honeywell Sensing and Control, we work hard to lead the way. To develop technologies that are ahead of the curve. To deliver solutions that anticipate your needs. And sometimes that innovative mindset allows you to be the market leader. That's why Limitless™ switches are the leading wireless switch brand on the market.

And you can rest assured, Limitless™ switches are the right product at the right time to help you maximize efficiency and minimize cost. Because it's a Honeywell product, backed by world-class service and support.

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

**MICRO SWITCH™ EXLS Solutions**

- BX/BX2
- LSX
- CX
- EX
- GXE
- 14CE100

**Potential Applications**

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

**Find Out More**

To learn more about Honeywell's hazardous location limit switches, contact a Honeywell representative today at **1-800-537-6945** or visit **[www.honeywell.com/sensing](http://www.honeywell.com/sensing)**

Sensing and Control

**Honeywell**

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Golden Valley, MN 55422

[www.honeywell.com](http://www.honeywell.com)

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