

HAZARDOUS AREA SWITCHES

Product Range Guide



Honeywell

RUGGED. RELIABLE. READY FOR USE.

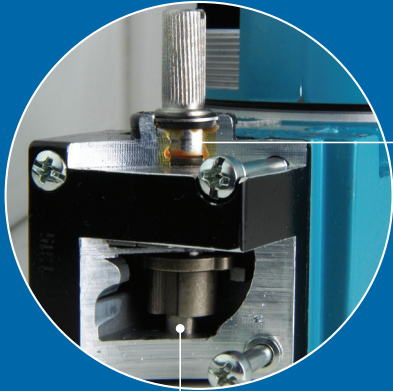
Honeywell has a complete family of hazardous area limit switches tailored to exact specifications for superior performance, extended productivity and increased safety.

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

Dual bearings deliver enhanced mechanical life

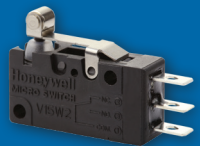
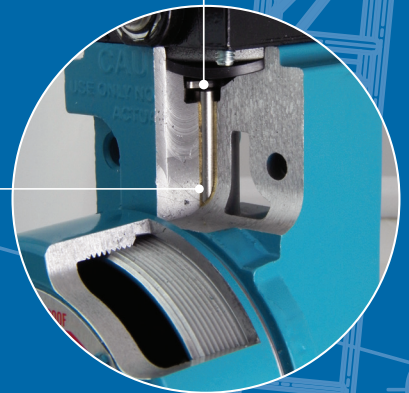
Twin shaft seals for improved environmental protection. Optional fluorosilicone seals extend operating temperature down to -40 °C [-40°F]

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

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



V15W2:
explosion-proof basic switch



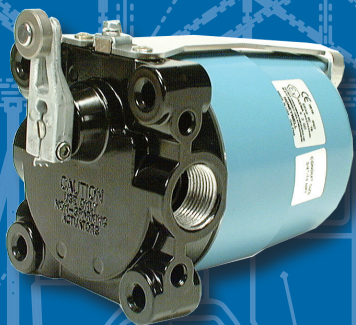
GXE:
compact footprint with SPDT capabilities and pre-leaded cable



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



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


<p>BX (20 mm): ATEX, IEC Ex, NEPSI Ex BX (NPT): ATEX, cULus, IEC Ex, KOSHA/KTL, NEPSI Ex BX2 (20 mm/NPT): ATEX, cULus, IEC Ex, NEPSI EX, IN METRO</p>	<p>UL, CSA</p>	<p>Agency Approvals</p>	<p>cULus, ATEX, IEC Ex, KOSHA/KTL, IN METRO</p>	<p>UL, CSA</p>
<p>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 IICT6 Gb II 2 D Ex tb IIIC T85°C Db</p>	<p>NEMA 7 (Div. 1 & 2, Class I, Groups B, C, & D) NEMA 9 (Div. 1 & 2, Class II, Groups E, F, & G)</p>	<p>Hazardous Area Designations</p>	<p>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</p>	<p>NEMA 7 (Gas) Div. 1 & 2, Class I, Groups B, C, & D NEMA 9 (Dust) Div. 1 & 2, Class II, Groups E, F, & G</p>
<p>IP67; NEMA 1, 3, 4, 6, 13</p>	<p>IP67; NEMA 1, 3, 4, 6, 13</p>	<p>Sealing</p>	<p>IP67; NEMA 1, 4, 6, 12, 13</p>	<p>NEMA 1, 3, 4, 13</p>
<p>aluminum, epoxy coated stainless steel</p>	<p>aluminum, epoxy coated</p>	<p>Housing Material</p>	<p>aluminum, epoxy coated</p>	<p>aluminum, epoxy coated</p>
<p>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</p>	<p>side rotary, side rotary (maint.) side plunger, side plunger adj. side roller, side roller adj. top rotary, top plunger, top roller plunger, wobble</p>	<p>Actuators/Levers</p>	<p>side rotary, top pin plunger, top roller plunger, top roller lever</p>	<p>cable/rope, maintained</p>
<p>0.5 in - 14NPT conduit, 0.75 in - 14NPT conduit, 20 mm conduit</p>	<p>0.5 in - 14NPT conduit, 0.75 in - 14NPT conduit, 20 mm conduit</p>	<p>Termination</p>	<p>0.5 in - 14NPT conduit, 20 mm conduit</p>	<p>0.5 in - 14NPT conduit, 20 mm conduit</p>
<p>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</p>	<p>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</p>	<p>Circuitry</p>	<p>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</p>	<p>1NC direct acting, 1NO 1NO direct acting, 2NC direct acting</p>
<p>-40°C to 70°C [-40°F to 158°F]</p>	<p>-12°C to 121°C [10°F to 250°F] optional (-40°C [-40°F])</p>	<p>Operating Temp. (std)</p>	<p>-40°C to 70°C [-40°F to 158°F]</p>	<p>-1°C to 70°C [30°F to 158°F]</p>
<p>10 A (thermal)</p>	<p>10 A (thermal)</p>	<p>Amp Rating</p>	<p>10 A (thermal)</p>	<p>10 A (thermal)</p>
<p>AC15 A600; DC13 R300</p>	<p>AC15 A600; DC13 R300</p>	<p>Voltage</p>	<p>AC15 A300, AC15 A500 AC15 A600, DC13 Q300</p>	<p>24 Vdc, 250 Vdc 120 Vac, 240 Vac, 600 Vac</p>
<p>External and internal</p>	<p>Internal</p>	<p>Grounding screw</p>	<p>External and internal</p>	<p>Internal</p>



MICRO SWITCH HAZARDOUS AREA SWITCHES | BX, BX2, & LSX

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

Δ Not available with conduit code 4.
* BX2 stainless steel "head styles" and "actuators" available



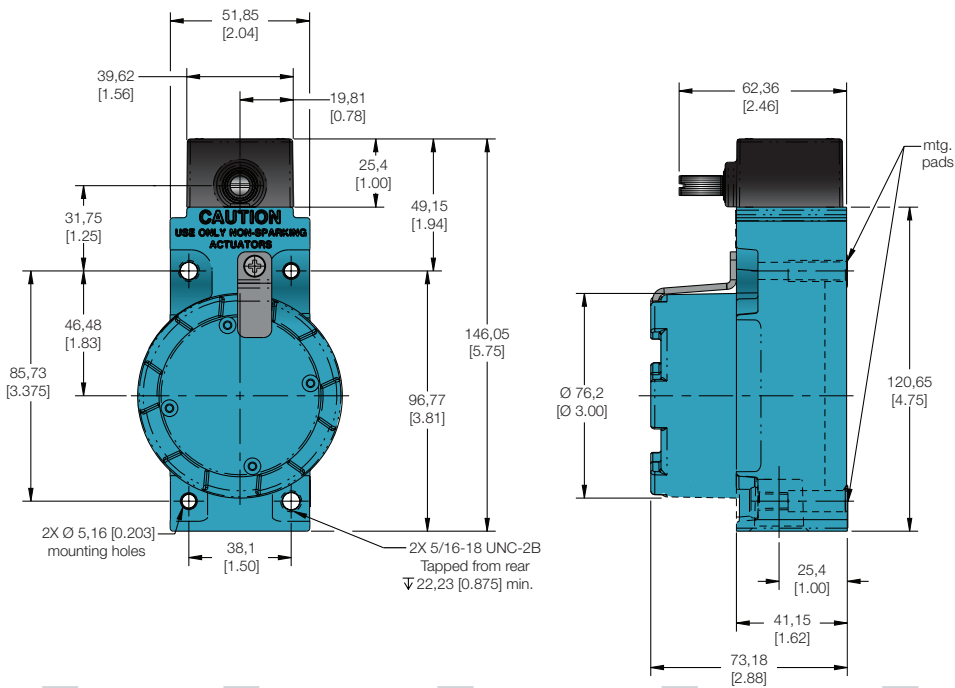
To order high temperature versions, insert the additional letters **Y** and **C** in the appropriate places in the standard catalog listing, as shown below:

BXA3K	standard, side-rotary plug-in switch
BXYA3K	completely FC-sealed version of BXA3K

LEVERS FOR SIDE ROTARY ACTUATED SWITCHES

Code	Catalog Listing	Material	Roller Dia. (in)	Roller Width (in)	Roller Mounting
Fixed 1.5 inch radius					
1		Rollerless	n/a	n/a	n/a
1A	LSZ51A	Nylon	0.75	0.25	Front
1C	LSZ51C	Nylon	0.75	0.25	Back
Adjustable 1.5 in to 3.5 in radius					
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
Yoke - 1.5 in radius					
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
Rod					
4		Hub only	n/a	n/a	n/a
4M	LSZ54M	Alum, 5.5 in	n/a	n/a	n/a
Offset - 1.5 in radius					
5		Rollerless	n/a	n/a	n/a
5A	LSZ55A	Nylon	0.75	0.25	Back
5C	LSZ55C	Nylon	0.75	0.25	Front
Wobble stick					
7A	LSZ1JGA	Delrin™ rod, 5.5	n/a	n/a	n/a
Short fixed - 1.3 in radius					
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**
LSX Series Hazardous Area Switch	A Side rotary, momentary	3E 1NO/1NC, gold contacts, 1/2-14NPT	1 CW rotation	1 Fixed roller, 1.5 in radius
	B Top rotary, momentary	3K 1NO/1NC, 1/2-14NPT	2 CCW rotation	1A Fixed 0.75 in x 0.25 in nylon roller, 1.5 in radius
	C Top plunger, plain	3N SPNC direct acting, 1/2-14NPT	3 Head assembled with actuator to right side	1C Fixed 0.75 in x 0.25 in nylon roller, 1.5 in radius
	D Top plunger, roller	4K 1NO/1NC, 3/4-14NPT	4 Head assembled with actuator to left side	2 Adjustable, rollerless
	E Side plunger plain, momentary	4L 2NO/2NC, 3/4-14NPT	5 Head assembled with actuator toward mounting surface	2A Adjustable, 0.75 in x 0.25 in nylon roller
	F Side plunger roller, momentary	4M 2NO/2NC, 3/4-14NPT, sequential operation	6 Roller perpendicular to mounting surface	2C Adjustable, 0.75 in x 0.25 in nylon roller
	H Side rotary, momentary, low PT, low torque	4N 2NO/2NC, 3/4-14NPT, center neutral	8 Roller on side plunger in vertical position	2J Adjustable, 1.0 in x 0.5 in nylon roller
	J Wobble stick	4S 2NO/2NC, gold contacts, 3/4-14NPT		2K Adjustable, 0.5 in x 0.25 in nylon roller
	K Whisker	4T 2NO/2NC, gold contacts, 3/4-14NPT, sequential operation		3E Yoke, 0.75 in x 0.25 in nylon roller
	L Side rotary, sequential	4U 2NO/2NC, gold contacts, 3/4-14NPT, center neutral		3M Yoke, 0.75 in x 0.25 in nylon roller
	M Side rotary, central neutral	7L 2NO/2NC, 1/2-14NPT		3S Yoke, 0.75 in x 0.25 in nylon roller, same side
	N Side rotary, maintained	7M 2NO/2NC, 1/2-14NPT, sequential operation		4 Hub only
	P Side rotary, momentary, low PT and DT	7N 2NO/2NC, 1/2-14NPT, center neutral		4M Hub rod, aluminum
	R Side rotary, momentary, low torque	7S 2NO/2NC, gold contacts, 1/2-14NPT		5 Offset, rollerless
	U Side rotary, low pre-travel	7T 2NO/2NC, gold contacts, 1/2-14NPT, sequential operation		5A Offset, 0.75 in x 0.25 in nylon roller
	V Top plunger, adjustable	7U 2NO/2NC, gold contacts, 1/2-14NPT, center neutral		5C Offset, 0.75 in x 0.25 in nylon roller
	W Side plunger, adjustable			7A Plastic wobble stick
				8A Whisker, 5.5 in
				9A Fixed, 0.75 in x 0.25 in nylon roller, open, 1.33 in radius
				9C 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.

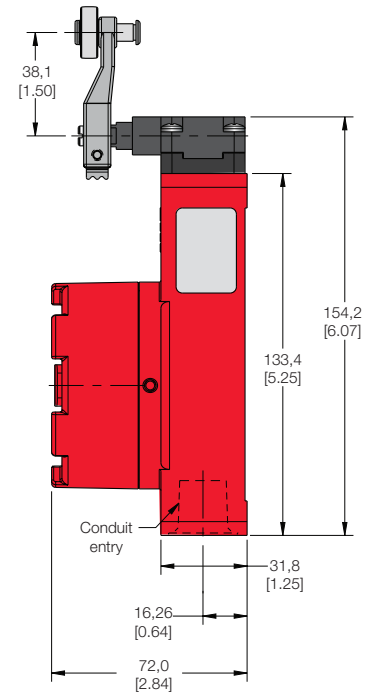
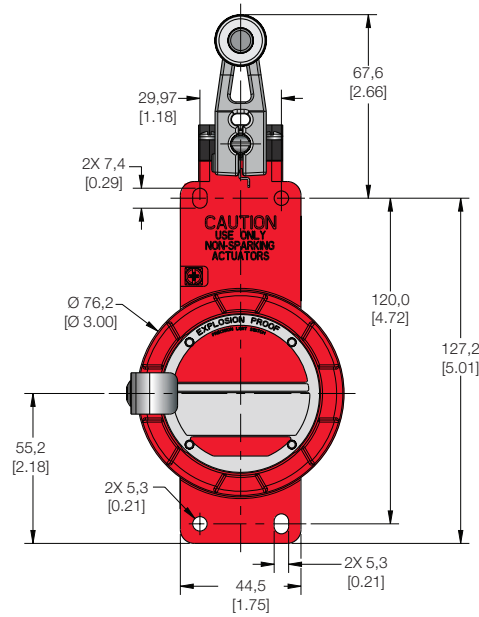
To order high temperature versions, insert the additional letters **Y** and **C** in the appropriate places in the standard catalog listing, as shown below:

LSXA3K	standard, side-rotary plug-in switch
LSXYAC3K	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:

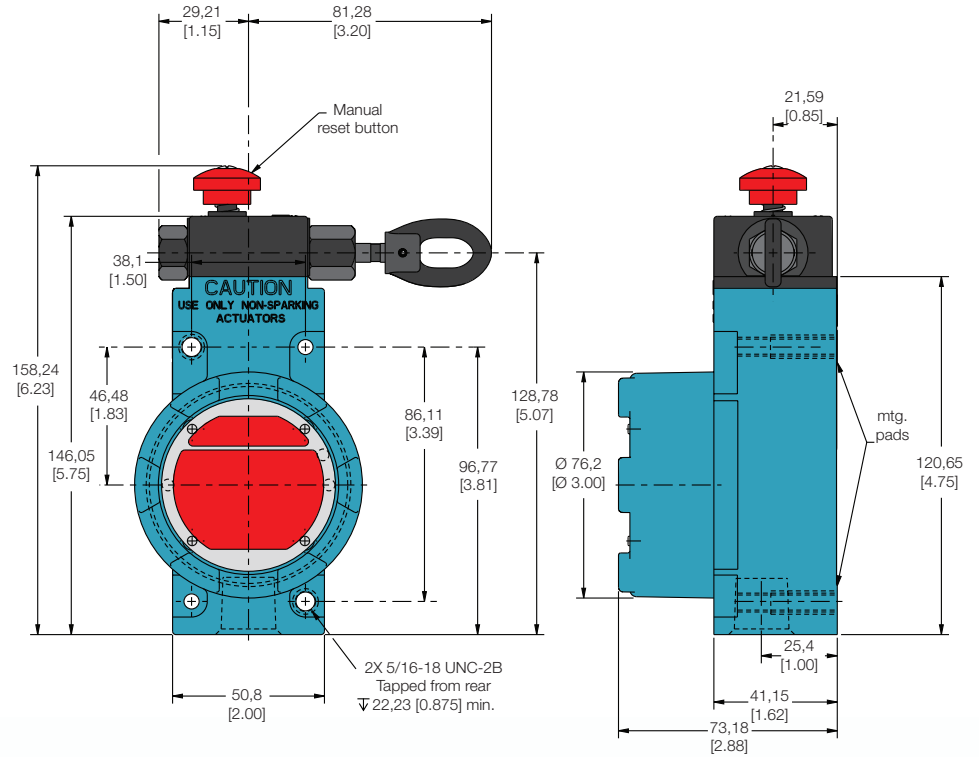
LSXA3K	standard, side-rotary plug-in switch
LSXYAB3K	low-temperature version of LSXA3K

MICRO SWITCH HAZARDOUS AREA SWITCHES | GSX SERIES



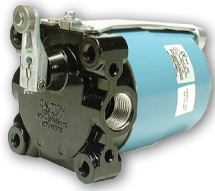
GSX	A	01	B			-
Switch Type	Conduit Connection	Circuitry	Head Style	Actuator Style	Lever Roller	Modifications/ Specials
GSX Series Hazardous Area Safety Switch	A 1/2 in NPT	01 Snap action, 1NC/1NO	A Side rotary, momentary	1 Fixed length roller	A 19,0 mm x 6,35 mm [0.75 in x 0.25 in] nylon roller	1 Clockwise rotation
	B PG 13.5	03 Slow action, 1NC/1 NO, BBM	B Top pin plunger	3 Yoke roller	C 24,4 mm x 12,7 mm [1.0 in x 0.5 in] nylon roller	2 Counter-clockwise rotation
	C 20 mm	04 Slow action, 1NC/1 NO, MBB	C Top roller plunger	5 Offset roller	D 38,1 mm x 6,35 mm [1.5 in x 0.25 in] nylon roller	3 Head assembled with actuator to right side
		05 Slow action, 2NO	D Top roller lever		E 19,0 mm x 6,35 mm [0.75 in x 0.25 in] bronze roller	4 Head assembled with actuator to left side
		06 Slow action, 2NC			W 40 mm x 12,7 mm [1.5 in x 0.5 in] bronze roller	5 Head assembled with actuator to mounting surface
		07 Snap action, 1NC/1NO, gold contacts			Y 50,9 mm x 12,7 mm [2.0 in x 0.5 in] rubber roller	6 Roller perpendicular to mounting surface
		20 Snap action, 2NC/2NO				
		22 Snap action, 2NC/2NO, gold contacts				
		33 Slow action, 1NC/1NO, BBM				
		34 Slow action, 1NC/1NO, MBB, gold contacts				
		35 Slow action, 2NO, gold contacts				
		36 Slow action, 2NC, gold contacts				
		40 Slow action, 4NC				
		41 Slow action, 4NC, gold contacts				
		42 Slow action, 2NC/1NO, BBM				
		43 Slow action, 2NC/1NO, BBM, gold contacts				
		44 Slow action, 2NC/2NO, BBM				
		45 Slow action, 2NC/2NO, BBM, gold contacts				
		46 Slow action, 3NC/1NO, BBM				
		47 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
CLSX Series Hazardous Area Safety Switch	B 0.5 in NPT conduit opening	1 1NC direct acting	A Maintained, red body	B 1NO/3NC, slow acting
	E 0.75 in NPT conduit opening	2 1NO/1NC snap action	B Momentary, blue body	E 2NO/2NC, slow acting
		4 1NO/1NC direct acting	N Maintained w/o broken cable detection, red body	F 1NO/3NC, slow acting gold plated
		8 2NC direct acting		1 Head oriented, left
		9 Special basic - see lettered modifications		2 Head oriented, front
				3 Head oriented, rear

HAZARDOUS AREA SWITCHES | CX, EX, 14CE100, GXE SERIES



CX SERIES

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

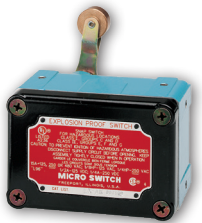


- Ability to monitor quarter-turn and linear valve position
- Automates existing, non-automated valves
- Pin plunger and side-rotary versions
- Hermetically sealed elements available
- Housing available in short and standard lengths
- Optional gold contacts for switching low-power load
- Up to six NC 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

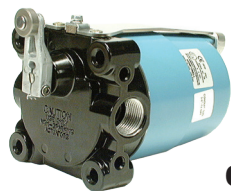


GXE SERIES

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, IN METRO	Agency Approvals	ATEX (CE)	ATEX (CE), IEC Ex, NEPSI 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 db IIB + H2 T6	Hazardous Designations	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	Sealing	IP65, (IP66/IP67 boot sealed plungers)	IP66/67
aluminum epoxy coated, bronze	aluminum, epoxy coated	Housing Material	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	Actuators/Levers	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	Termination	cable (various lengths)	5 m cable
1NC 1NO SPDT, 2NC 2NO DPDT, 6NC 6NO, 4NC 4NO	1NC 1NO SPDT snap action, 1NC 1NO SPDT maintained, 2NC 2NO DPDT snap action	Circuitry	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]	Operating Temp.	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	Amp Rating	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	Voltage	AC14 D300 DC13 R300	AC15, 4 A 250 V DC13, 0.15 A 250 V
external and internal	external and internal	Grounding screw	external and internal (ground wire provided)	none, double insulated



MICRO SWITCH HAZARDOUS AREA SWITCHES | EX SERIES

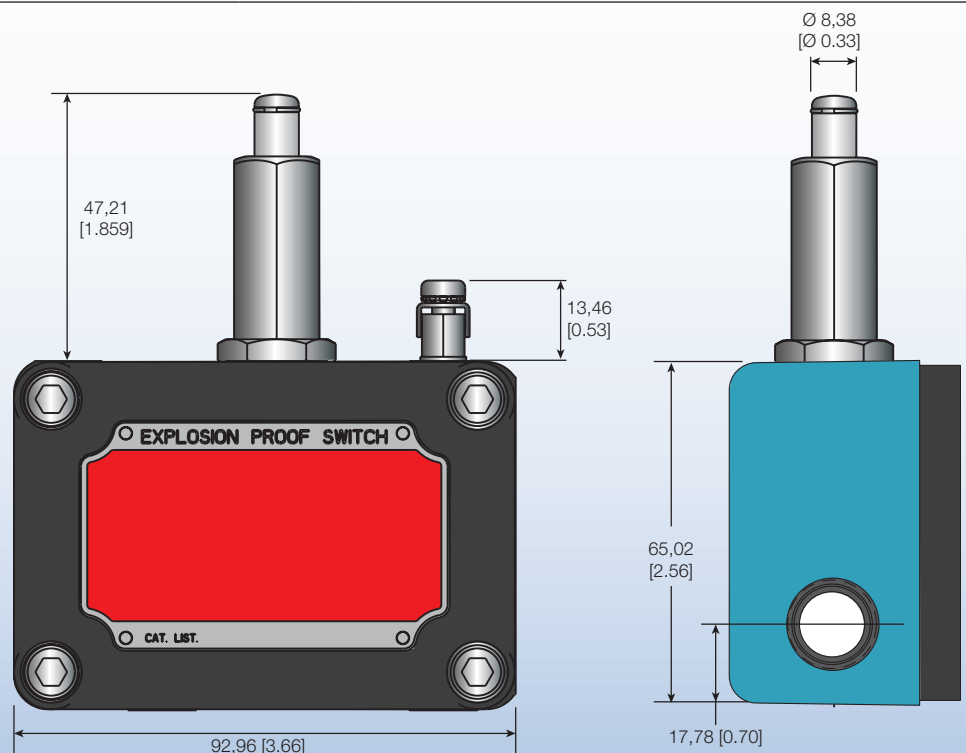
MICRO SWITCH EX Series Listings

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]

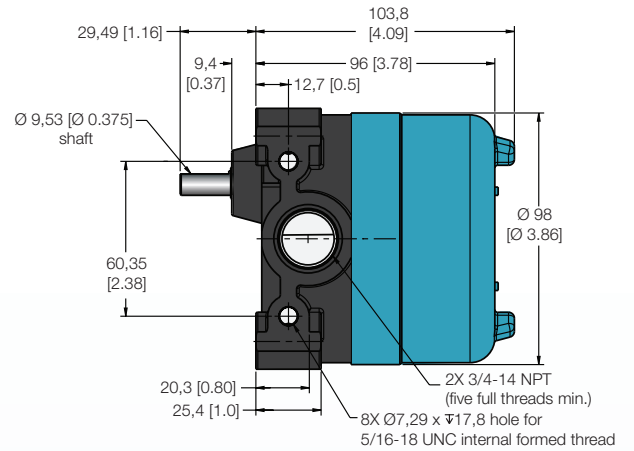
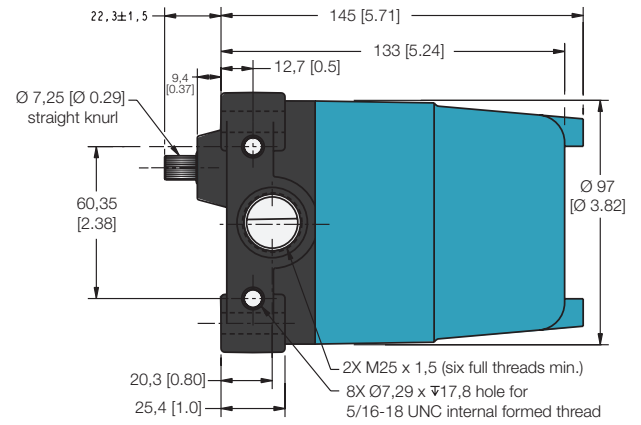
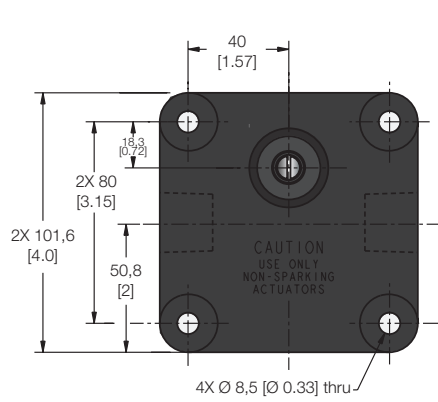
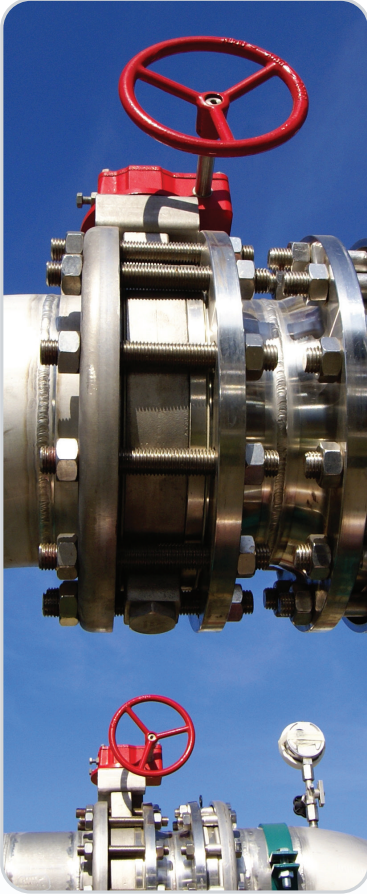
*Electrical Ratings

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.



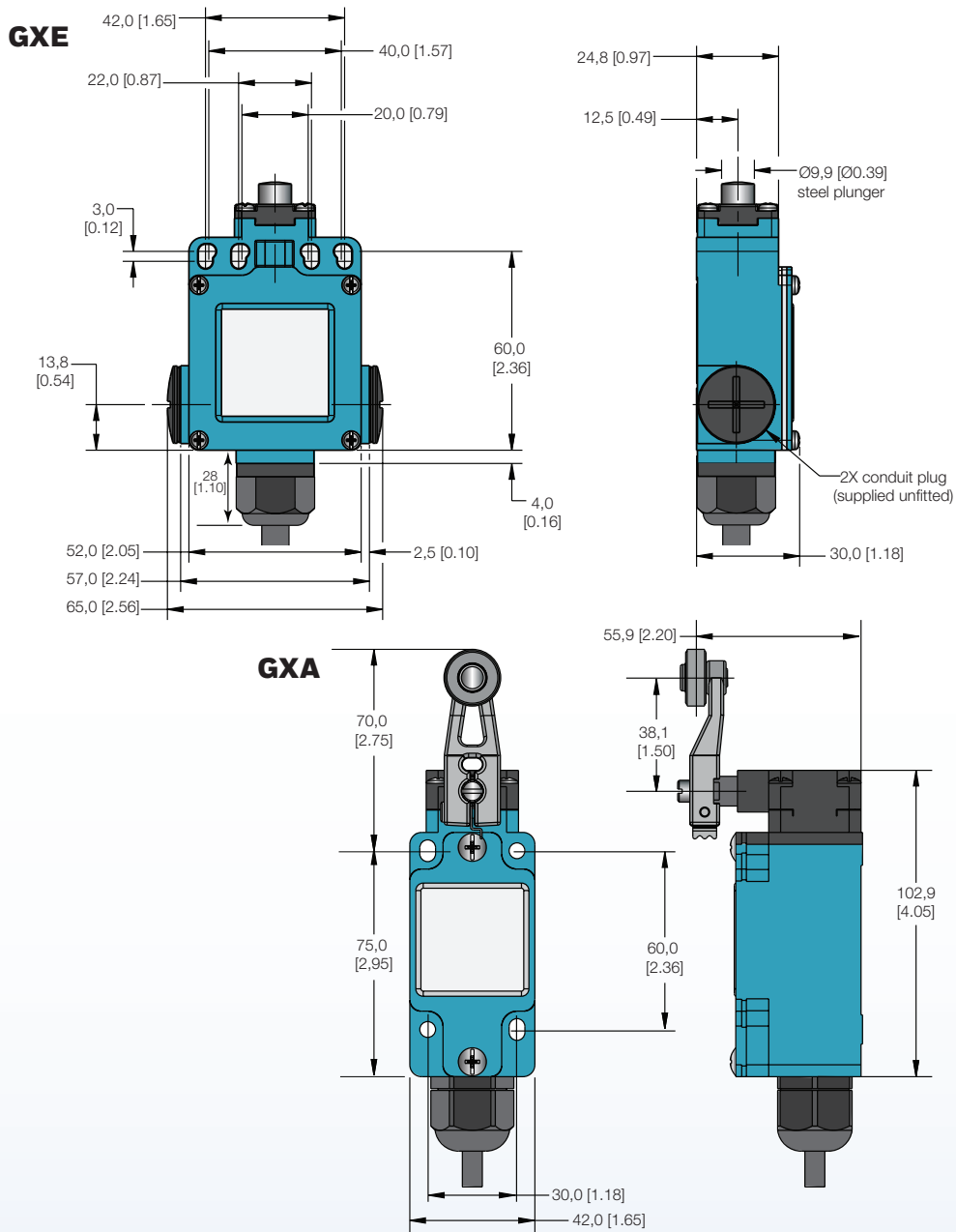
MICRO SWITCH HAZARDOUS AREA SWITCHES | CX SERIES



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

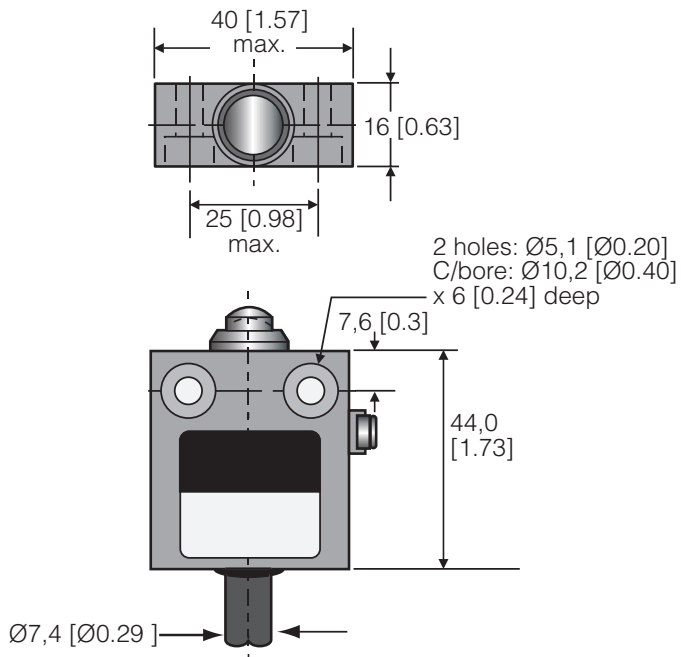
Other special configurations may be available. For more information, contact your Honeywell representative.

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
GXA Series Hazardous Area Limit Switch	5 5 meter cable	1 Silver contacts, snap action	A Side rotary	A Plastic	Lever to front or plunger parallel to mtg surface
GXE Series Hazardous Area Limit Switch		2 Gold contacts, snap action	B Pin plunger	B Steel	3 Lever to right
			C Roller plunger		4 Lever to left
			D Roller arm		5 Lever to rear
					6 Roller plunger perpendicular to mtg surface

MICRO SWITCH HAZARDOUS AREA SWITCHES | 14CE100 SERIES



Switch Type
14CE Series
Hazardous
Area
Limit Switch

101

Actuator

1

Cable length

101 Top plunger

1 1 meter

102 Top roller plunger

2 2 meters

103 Cross roller plunger

3 3 meters

118 Booted top plunger

4 4 meters

5 5 meters

6 6 meters

8 8 meters

10 10 meters

12 12 meters

15 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
- 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



APPLICATIONS

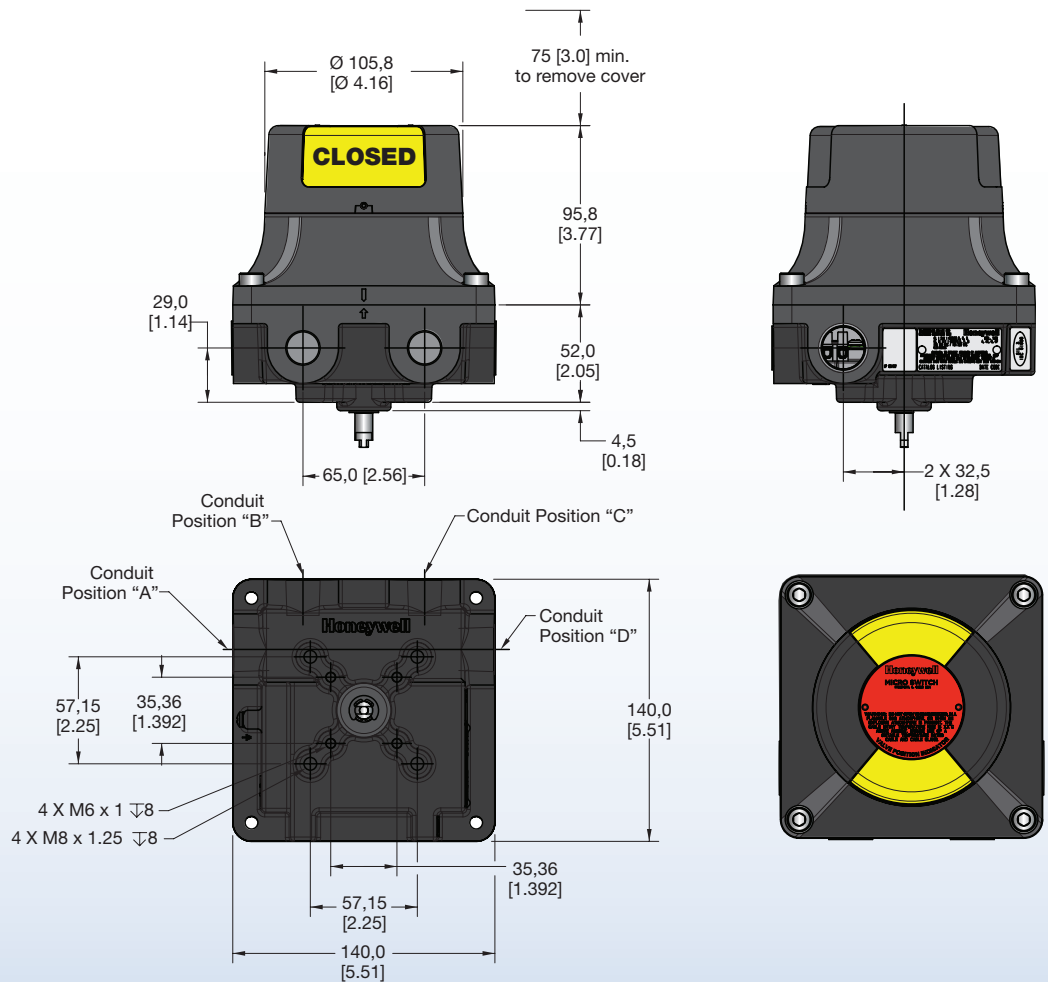
- Seaside grain and fuel loading docks
- Oil and gas wells
- Refineries
- Fuel storage facilities
- Mining
- Petrochemical and chemical plants
- Waste water treatment facilities
- Oil and gas production pipeline networks
- Paint batching/blending plants
- Pharmaceuticals and drug processing plants
-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



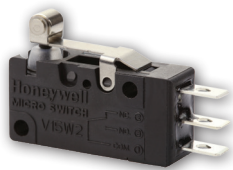
VPX

Agency Approvals	cULus, ATEX, IEC EX, CE, NEPSI, KOSHA/KTL
Explosion Proof Hazardous Area Designations	North America: Division 1, Class I, Groups B, C, and D (Gas Rating) Division 1, Class II, Groups E, F, and G (Dust Rating) 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)
Intrinsically Safe Hazardous Area Designations	VPX with proximity switches carry an intrinsically safe rating: North America: Not Available ATEX/IEC Ex: II 1 G, II 1 D (ATEX Rating) Ex ia IIC T4 Ga (Gas Rating) Ex ia IIIC T1.35°C Da (Dust Rating) Ta -40°C to 80°C
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.	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]
Electrical Rating	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 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

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
VPX Series Valve Position Indicator	1 Aluminum	A China (standard) IEC Ex, ATEX, CE, NEPSI	2A 2X snap action SPDT	A 45°	GR Green (open) Red (closed)	1 Namur	A 360° continuous	2A (2) 1/2-14 NPT (A & D)	Leave blank for no plugs	Up to two letters or numbers to indicate a special feature.
		C China (premium) IEC Ex, ATEX, cULus, CE, SIL3, NEPSI, KOSHA	4A 4X snap action SPDT	B 90°	BY Black (open) Yellow (closed)	2 1/4 in flats	B ±90°	2B (2) 3/4-14 NPT (A & D)	1 1 plug	
		E USA (premium) IEC Ex, ATEX, cULus, CE, SIL3, NEPSI, KOSHA	2B 2X snap action SPDT, gold contacts	YB Yellow (open) Black (closed)	3 Ø7.25 knurl for ex. lever	2C (2) M20 x 1.5 (A & D)	2D (2) M25 x 1.5 (A & D)	2 2 plugs		
		4B 4X snap action SPDT, gold contacts	RY Red (open) Yellow (closed)	3B (3) 3/4-14 NPT (A, B, & D)	3 3 plugs					
			2C 2X I.S. inductive proximity switch (Namur)	GY Green (open) Yellow (closed)	RG Red (open) Green (closed)	4C (4) M20 x 1.5	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).			
				YR Yellow (open) Red (closed)	YB Yellow (open) Green (closed)	4D (4) M25 x 1.5				
						4F (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



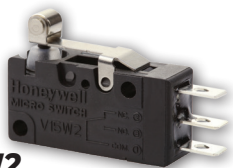
- ATEX and IEC Ex approved for use in Zone 2 hazardous locations
- IP67 equivalent
- UL, cUL, ENEC, CQC approvals for ordinary (non-hazardous) locations
- 5 A electrical rating
- Longer service life: over one million mechanical operations
- Quick-connect terminals
- SPDT, SPNO¹, SPNC¹
- 100 gf, 200 gf¹ operating forces
- Available with a variety of actuators
- Global package size acceptance
- Gold contacts are also available for controlling logic-level/low-energy circuits

¹ 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

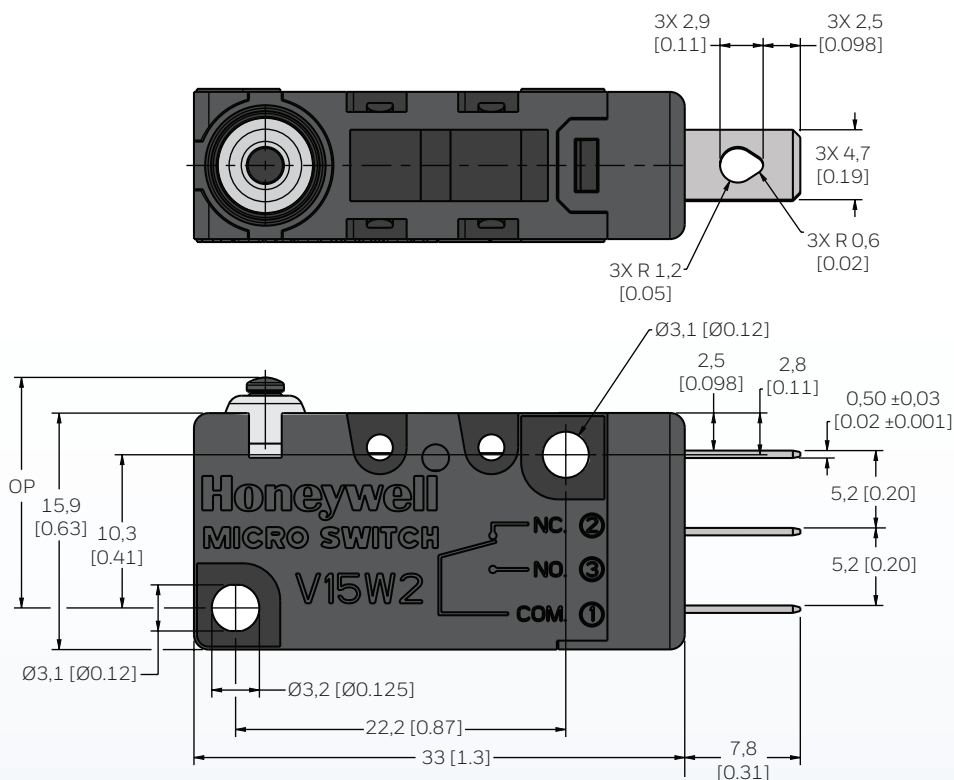
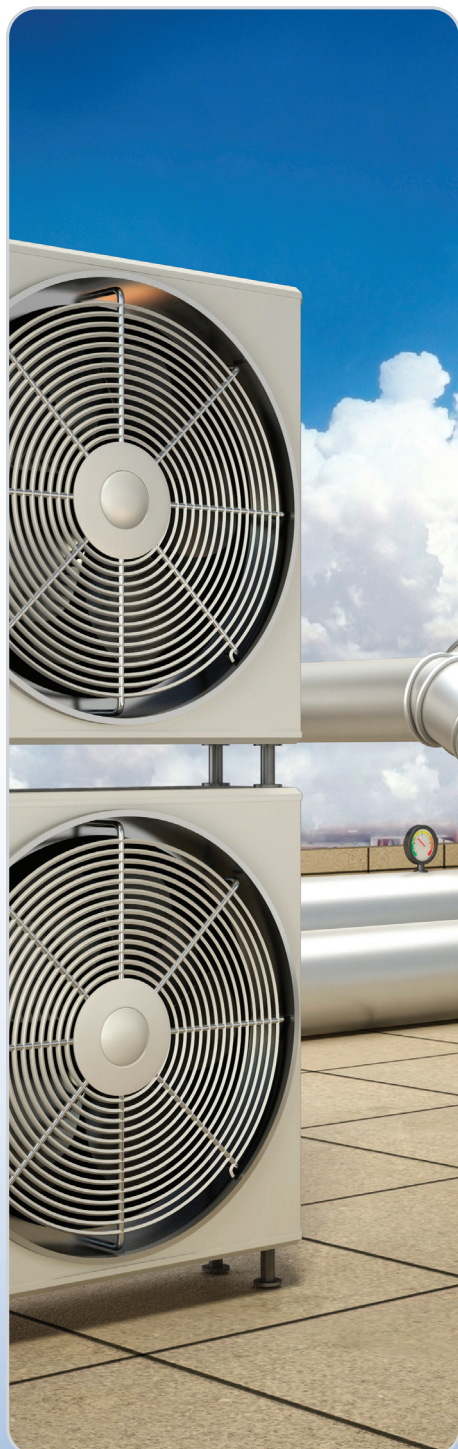
Agency Approvals	UL, cUL, ENEC, CQC ordinary (non-hazardous) locations per UL/EN 61058-1
Explosion Proof Hazardous Area Designations	IEC Ex per IEC 60079-0 and 60079-15 Ex nC IIA T5 Gc -25°C < Tamb < +85°C
Sealing	IP67 equivalent
Housing Material	PBT thermoplastic polyester
Sealing Material	silicone
Operating Temp.	-25 °C to 85 °C [-13 °F to 185 °F]
Electrical Rating	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
Mechanical Life	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 V15W2 Basic Switch	E Quick connect 4.8 mm x 0.5 mm	Z SPDT P SPNO ¹ C SPNC ¹	100 100 g max. 200 200 g max. ²	No lever A Lever pivot far from plunger B Lever pivot near plunger	Pin plunger 01 Short straight lever ¹ 02 Standard straight lever ¹ 03 Long straight lever ¹ 04 Simulated roller lever ¹ 05 Roller lever 06 Long roller lever ¹	Metric (Ø 3.1 mm) K USA (Ø 2.9 mm)	Standard silver alloy A Gold-plated silver alloy	W2 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, wire length, connector, 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.	

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

¹These options have a three-month lead time for set up.



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

At Honeywell, 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 MICRO SWITCH switches are the leading electromechanical switch brand on the market.

And you can rest assured, Honeywell 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 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

For more information

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Warranty/Remedy

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