

Explosion-Proof Limit Switches

BX Series

FEATURES

- UL, CSA and European approvals
- Sealing - applicable portions of IP67 and NEMA 1, 3, 4, 6, 7, 9, and 13
- Diverse conduit selection for wide range of applications
- Compatible with LSX
- Tracking interchangeability with MICRO SWITCH ML-E1 and HDLS
- Variety of heads and non-sparking actuators
- 10 A continuous carry electrical rating
- Choice of silver or gold contacts
- Internal grounding screw
- Fluorocarbon and low-temperature sealing

TYPICAL APPLICATIONS

- Control valves and actuators
- Offshore drilling
- Grain elevators
- Petrochemical plants
- Chemical plants
- Waste treatment
- Paint booths
- Mining conveyors
- Pulp and paper coating
- Hazardous waste handling



DESCRIPTION

The BX is ideal for outdoor use or in adverse environments where a combination of explosion proof plus sealing requirements are needed. To comply with explosion-proof requirements the BX has flame paths within the housing, which cool exploding gases below the ignition temperature before they reach explosive gases surrounding the housing. Flame paths on the BX are (1) an extended plunger between the switch cavity and head and (2) the cover-housing threads on the front of the switch.

These products are weather sealed for outdoor use and designed for explosive gas/dust environments. They may be interchanged with HDLS products by using an adapter plate. All heads are field adjustable at 90° increments. Side rotary BX products can be adjusted for clockwise and counter-clockwise actuation.

Honeywell explosion-proof switches are designed specifically for use in hazardous location applications. The BX enclosure is sealed for protection against corrosion, water, dust, and oil as defined in NEMA 1, 3, 4, 6, 7, 9 and 13 and IP67 as defined in IEC 529.

These enclosures also meet the European Hazardous Locations Designation: EExd IIC T6 category II 2 GD, SIRA 00ATEX 1037X. The entire series BX complies with the European Directive on Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres (94/9/EC) commonly referred to as the ATEX Directive.

Compliance with the Essential Health and Safety Requirements has been assured by compliance with EN50014 1997 and EN50018 1994. BX products with conduit types 1/2-14NPT, 3/4-14NPT also meet the North American Hazardous Locations Designation: Class I, Groups B, C, and D; Class II, Groups E, F, and G and comply with UL Standard: UL 894, CSA Standard: C22.2 No. 25-1966, C22.2 No. 30-M1986.

General Purpose

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SELECTION GUIDE




			
Features	BX4A3K	BX4A3K-1A	BX4C3K
Actuator	Lever Not Included - Reference Lever Required Accessory	1.5" Fixed Length Lever with front mounted Nylon Roller (.75" dia. x .25" wide)	N/A
Termination Type	20 mm conduit	20 mm conduit	20 mm conduit
Circuitry	1NC 1NO Single-Pole Double-Throw, Snap-Action, Double-Break	1NC 1NO Single-Pole Double-Throw, Snap-Action, Double-Break	1NC 1NO Single-Pole Double-Throw, Snap-Action, Double-Break
Approvals	CE Certified	CE Certified	CE Certified
Actuator	Side Rotary	Side Rotary	Top Plunger
Pretravel (P.T.)	15°	15°	1,78 mm [0.070 in]
Overtravel (O.T.)	60°	60°	4,83 mm [0.190 in]
Differential Travel (D.T.)	7°	7°	0,51 mm [0.020 in]
UL File #	-	-	-
CSA File #	-	-	-
Operating Position (O.P.)	-	-	58.5 mm ± 0.76 mm [2.305 in ± 0.030 in]
Sealing	IP67, NEMA 1,3, 4, 6, 13	IP67, NEMA 1,3, 4, 6, 14	IP67, NEMA 1,3, 4, 6, 15
Product Type	Weather-Sealed, Explosion-Proof Limit Switches/European Approvals		
Ampere Rating	10 A (Thermal)		
Supply Voltage	600 Vac and 250 Vdc Maximum		
Operating Temperature Range	-40 °C to 70 °C [-40 °F to 158 °F]		
Housing Material	Zinc Die-Cast		
Housing Type	BX Non Plug-in		
Sealed	Explosion-proof		
Operating Force (O.F.)	0,45 N max. [4 in lb max.]		
Availability	Global		
Agency Approvals and Standards	EExd IIC T6 category II 2 GD, SIRA 00ATEX 1037X		
Series Name	BX Series		

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Features	BX4D3K	BXA3K	BXA4L
Actuator	N/A	Lever Not Included - Reference Lever Required Accessory	Lever Not Included - Reference Lever Required Accessory
Termination Type	20mm conduit	1/2 in - 14NPT conduit	3/4 in - 14NPT conduit
Circuitry	1NC 1NO Single-Pole Double-Throw, Snap-Action, Double-Break	1NC 1NO Single-Pole Double-Throw, Snap-Action, Double-Break	2NC 2NO Single-Pole Double-Throw, Snap-Action, Double-Break
Approvals	CE Certified	UL recognized, CSA Certified, CE Certified	UL recognized, CSA Certified, CE Certified
Actuator	Top Roller Plunger	Side Rotary	Side Rotary
Pretravel (P.T.)	1,78 mm [0.070 in]	15°	15°
Overtravel (O.T.)	4,83 mm [0.190 in]	60°	60°
Differential Travel (D.T.)	0,51 mm [0.020 in]	7°	7°
UL File#	-	E61730	E61730
CSA File #	-	LR57327	LR57327
Operating Position (O.P.)	68.6 mm ± 1 mm [2.700 in ± 0.040 in]	-	-
Sealing	IP67, NEMA 1,3, 4, 6, 16	IP67, NEMA 1,3, 4, 6, 7, 9, 13	IP67, NEMA 1,3, 4, 6, 7, 9, 13
Product Type	Weather-Sealed, Explosion-Proof Limit Switches/European Approvals		
Ampere Rating	10 A (Thermal)		
Supply Voltage	600 Vac and 250 Vdc Maximum		
Operating Temperature Range	-40 °C to 70 °C [-40 °F to 158 °F]		
Housing Material	Zinc Die-Cast		
Housing Type	BX Non Plug-in		
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Operating Force (O.F.)	0,45 N max. [4 in lb max.]		
Availability	Global		
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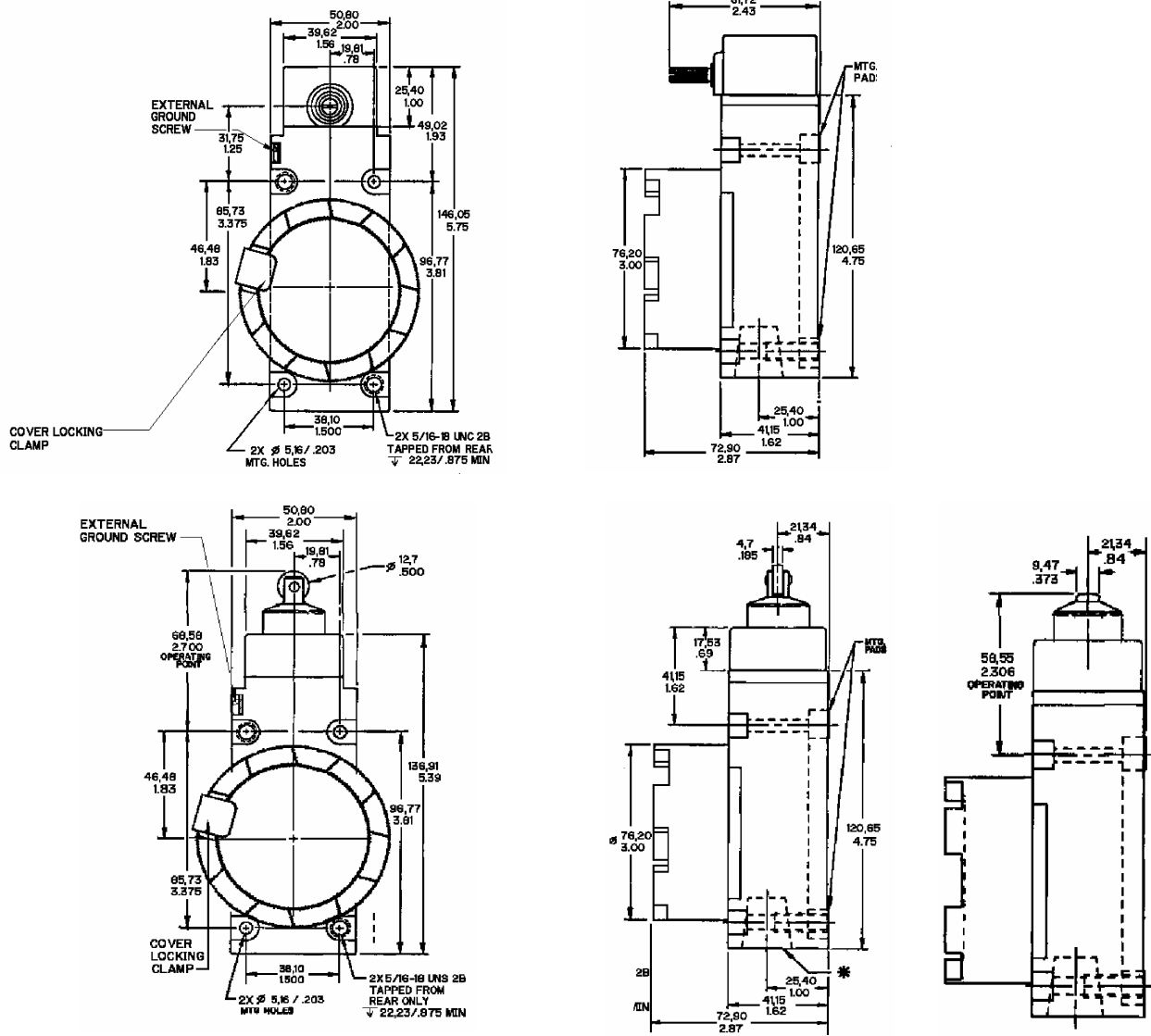
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MOUNTING DIMENSIONS (For reference only) mm/in

Fig. 1








Conduit sizes 1/2-14NPT, 3/4-14NPT, M20, PG13.5, PF1/2 are available for each switch type. Verify that the mating threaded fitting is identical with the conduit thread shown on the product nameplate






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LEVERS – REQUIRED ACCESSORIES

					
	LSZ51A	LSZ51C	LSZ52C	LSZ52J	LSZ52K
Lever Style	Roller – Standard	Roller – Standard	Roller – Adjustable	Roller – Adjustable	Roller – Adjustable
Comment	Roller - Standard; Material: Nylon; Roller Mounted On Front Of Lever	Roller - Standard; Material: Nylon; Roller Mounted On Back Of Lever	Roller - Adjustable; Material: Nylon; Roller Mounted On Front Of Lever	Roller - Adjustable; Material: Nylon; Roller Mounted On Front Of Lever	Roller - Adjustable; Material: Nylon; Roller Mounted On Front Of Lever
Radius	38,1 mm [1.5 in]	38,1 mm [1.5 in]	38,1 mm to 88,9 mm [1.5 in to 3.5 in]	38,1 mm to 88,9 mm [1.5 in to 3.5 in]	38,1 mm to 88,9 mm [1.5 in to 3.5 in]
Diameter	19,05 mm [0.75 in]	19,05 mm [0.75 in]	19,05 mm [0.75 in]	25,4 mm [1.0 in]	38,1 mm [1.5 in]
Width	6,35 mm [0.25 in]	6,35 mm [0.25 in]	6,35 mm [0.25 in]	12,7 mm [0.5 in]	6,35 mm [0.25 in]
Product Type	Lever				
Availability	Global				

					
	LSZ53E	LSZ53S	LSZ54M	LSZ55A	LSZ55C
Lever Style	Roller – Yoke	Roller – Yoke	Rod – Standard	Roller with offset	Roller with offset
Comment	Roller - Yoke; Material: Nylon; Roller Mounted On Back-Front Of Lever	Roller - Yoke; Material: Nylon; Roller Mounted On Back-Back Of Lever	Rod - Standard; Material: Aluminum; Material: Aluminum	Roller - With Offset; Material: Nylon; Roller Mounted On Back Of Lever	Roller - With Offset; Material: Nylon; Roller Mounted On Front Of Lever
Radius	38,1 mm [1.5 in]	38,1 mm [1.5 in]	139,7 mm [5.5 in]	38,1 mm [1.5 in]	38,1 mm [1.5 in]
Diameter	19,05 mm [0.75 in]	19,05 mm [0.75 in]	-	19,05 mm [0.75 in]	19,05 mm [0.75 in]
Width	6,35 mm [0.25 in]	6,35 mm [0.25 in]	-	6,35 mm [0.25 in]	6,35 mm [0.25 in]
Product Type	Lever				
Availability	Global				

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WARRANTY/REMEDY

Honeywell warrants goods of its manufacture as being free of defective materials and faulty workmanship. Contact your local sales office for warranty information. If warranted goods are returned to Honeywell during the period of coverage, Honeywell will repair or replace without charge those items it finds defective. The foregoing is Buyer's sole remedy and is **in lieu of all other warranties, expressed or implied, including those of merchantability and fitness for a particular purpose.**

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While we provide application assistance personally, through our literature and the Honeywell web site, it is up to the customer to determine the suitability of the product in the application.

For application assistance, current specifications, or name of the nearest Authorized Distributor, check the Honeywell web site or call:

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