Honeywell

THE POWER OF **CONNECTED**

MICRO SWITCH Flame-Proof Limit Switches

GXS Series

Datasheet

GXA Series

GXE Series

DESCRIPTION

The GXS Series flame-proof limit switches are designed specifically for use in hazardous applications. The GXS enclosure is epoxy sealed and has an environmental protection of IP66 as per IEC/EN 60529. The entire GXS Series 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.

VALUE TO CUSTOMERS
- Flameproof protection
- Meets product design and quality systems requirements of ATEX 94/9/EC
- Standard European mounting of 30 mm x 60 mm (GXA Series) or 20 mm to 22 mm (GXE Series)
- Suitable for difficult operating environments
- Fast and easy to install
- Epoxy-sealed cable and basic switch in a limit switch body
- External earth connection not required
- Change over (SPDT), 3 wire device, 1NC/1NO

POTENTIAL APPLICATIONS
- Hazardous areas Category 2 (Zones 1 & 21) or Category 3 (Zones 2 & 22)
- Petrochemical
- Material handling
- Valves

FEATURES
- II 2 G Ex d IIC T6, II 2 D Ex tD A21 IP66 T85°C
- KEMA 00 ATEX 2103 X, IEC Ex KEM 10.0039X
- Conforms to EN60079-0, EN60079-1, EN61241-0, EN61241-1
- CE marked
- EN50041 mounting compatible (GXA Series)
- EN50047 mounting compatible (GXE Series)
- Rugged zinc die-cast housing with epoxy coating
- Pre-wired, 5 m of cable
- Bottom exit cable ONLY
- Double insulated switch element with snap–action basic switch

Category	Flammable atmospheres	Protection required	Requirements for equipment
2	Medium risk of an explosive atmosphere occurring Gas = Zone 1 Dust = Zone 21	High	Equipment is capable of operating safely under a single fault condition (ib) or alternatively, one or more types of protection is used. For example, 'd', 'e', 'p', etc.
3	Low risk of an explosive atmosphere occurring Gas = Zone 2 Dust = Zone 22	Normal	Equipment for safe use in normal operation, typically (Ex n) equipment

PORTFOLIO

The GXS Series is part of the MICRO SWITCH™ family of hazardous location limit switches.

Note 1: The product is certified flame-proof only with the pre-wired 5 m cable. The cable on its own does not carry any hazardous area certifications.
Note 2: The GXS Series is part of the MICRO SWITCH family of hazardous location limit switches and has design and form factor similar to the GLA/GLE Series limit switches. To view these series, please click: GLA Series, GLE Series

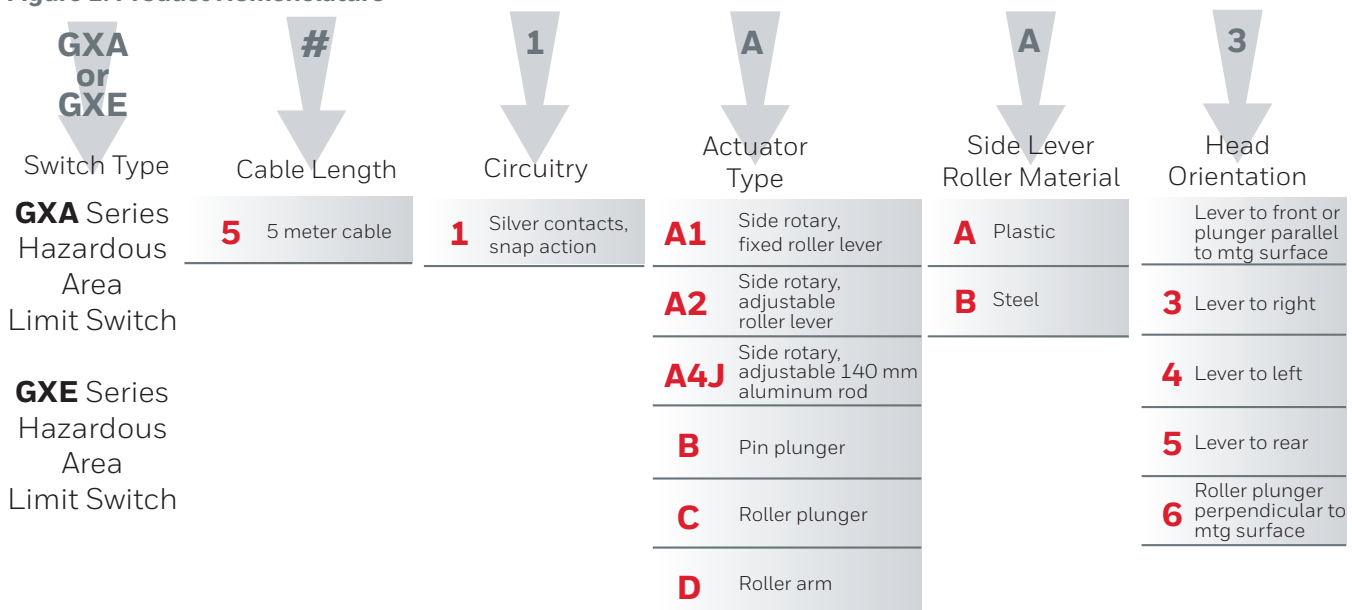# MICRO SWITCH Flame-Proof Limit Switches, GXS Series

Table 1. Specifications

Characteristic	Parameter
Mechanical life	up to 2 million operations
Degree of protection	IP66, EN 60529
Operating temperature @ 3 A	-20 °C to 75 °C [-4 °F to 167 °F]
Operating temperature @ 4 A	-20 °C to 60 °C [-4 °F to 140 °F]
Standards/approvals	EN60079-0, EN60079-1, EN61241-0, EN61241-1 ⟨Ex⟩ II 2 G Ex d IIC T6, II 2 D Ex tD A21 IP66 T85°C KEMA 00 ATEX 2103 X; IEC Ex KEM10.0039X, NEPSI Ex (X indicates special conditions for safe use, see certificates for details)
Electrical rating	AC15, DC13 1NC/1NO change over contacts Double insulated switch element No internal or external earth connection
Contact material	silver
Cable/body	Harmonised Cenelec cable, HO5VV-F, 3-core x 0,75 mm^2 Black (BK) - common Grey (GY) - NC Brown (BN) - NO Epoxy-sealed cable and body
Shock	50 g, IEC 60068-2-27
Vibration	10 g, IEC 60068-2-6

Table 2. UL and CSA Electrical Ratings

Rating Code	Electrical Rating
ac15 (Ue)	250 V, 4 A
dc15 (Ue)	250 V, 0.15 A

Figure 1. Product Nomenclature

Table 3. GXA/GXE Series Order Guide

Catalog Listing	Description	Actuator Type	Operate Force or Torque [max.]	Bar Chart	Free Position	Operate Point	Pretravel	Total Travel	Differential Travel
GXA51A1B	Limit switch, EN50041, 30 mm x 60 mm mounting	Side rotary with fixed 38,1 mm [1.50 in] lever & Ø19 mm x 6,4 mm [Ø0.75 in x 0.25 in] steel roller	0,33 Nm [2.9 in lb]		0° ref.	29°	29°	85°	7°
GXA51A2B		Side rotary with adjustable 38,1 mm to 91,5 mm [1.5 in to 3.6 in] lever & Ø19 mm x 6,4 mm [Ø0.75 in x 0.25 in] steel roller	0,33 Nm [2.9 in lb]		0° ref.	26°	26°	85°	7°
GXA51B		Top pin plunger Ø10,0 mm [Ø0.39 in]	16 N [3.6 lb]		37,5 mm [1.48 in]	35,0 mm [1.38 in]	2,5 mm [0.10 in]	7,0 mm [0.28 in]	0,5 mm [0.020 in]
GXA51C		Top roller plunger Ø12,4 mm x 4,7 mm [Ø0.49 in x 0.19 in] steel roller	16 N [3.6 lb]		50,5 mm [1.99 in]	48,0 mm [1.89 in]	2,5 mm [0.10 in]	7,0 mm [0.28 in]	0,5 mm [0.020 in]

Table 3. GXA/GXE Series Order Guide, continued

Catalog Listing	Description	Actuator Type	Operate Force or Torque [max.]	Bar Chart	Free Position	Operate Point	Pretravel	Total Travel	Differential Travel
GXE51A1A	Limit switch, EN50047 20 mm to 22 mm mounting	Side rotary with fixed 46,5 mm [1.83 in] lever & Ø19 mm x 6,0 mm [Ø0.75 in x 0.24 in] nylon roller	0,25 Nm [2.21 in-lb]	Black-Gray (NC) Black-Brown (NO) 0° FP 26° OP 75° TT 8° DT	0° ref.	26°	26°	75°	8°
GXE51A1B		Side rotary with fixed 46,5 mm [1.83 in] lever & Ø19 mm x 6,0 mm [Ø0.75 in x 0.24 in] steel roller	0,25 Nm [2.21 in-lb]	Black-Gray (NC) Black-Brown (NO) 0° FP 26° OP 75° TT 8° DT	0° ref.	26°	26°	75°	8°
GXE51A2A		Side rotary with adjustable 34 mm to 79 mm [1.3 in to 3.1 in] lever & Ø19 mm x 6,0 mm [Ø0.75 in x 0.24 in] nylon roller	0,25 Nm [2.21 in-lb]	Black-Gray (NC) Black-Brown (NO) 0° FP 26° OP 75° TT 8° DT	0° ref.	26°	26°	75°	8°
GXE51A2B		Side rotary with adjustable 3 mm to 79 mm [1.3 in to 3.1 in] lever & Ø19 mm x 6,0 mm [Ø0.75 in x 0.24 in] steel roller	0,25 Nm [2.21 in-lb]	Black-Gray (NC) Black-Brown (NO) 0° FP 26° OP 75° TT 8° DT	0° ref.	26°	26°	75°	8°
GXE51A4J		Side rotary with adjustable aluminum rod 20 mm to 150 mm [0.8 in to 5.9 in] x Ø3,2 mm [0.13 in]	0,25 Nm [2.21 in-lb]	Black-Gray (NC) Black-Brown (NO) 0° FP 26° OP 75° TT 8° DT	0° ref.	26°	26°	75°	8°
GXE51B		Top pin plunger Ø9,9 mm [0.39 in]	16 N [3.6 lb]	Black-Gray (NC) Black-Brown (NO) 21 mm FP 19 mm OP 15 mm TT 0,5 mm DT	21,0 mm [0.83 in]	19,0 mm [0.75 in]	2,0 mm [0.080 in]	6,0 mm [0.24 in]	0,5 mm [0.020 in]
GXE51C		Top roller plunger Ø12,4 mm x 4,7 mm [Ø0.49 in x 0.19 in] steel roller	16 N [3.6 lb]	Black-Gray (NC) Black-Brown (NO) 31 mm FP 29 mm OP 25 mm TT 0,5 mm DT	31,0 mm [1.22 in]	29,0 mm [1.14 in]	2,0 mm [0.080 in]	6,0 mm [0.24 in]	0,5 mm [0.020 in]
GXE51D		Top roller lever Ø12,4 mm x 4,7 mm [Ø0.49 x 0.19 in] steel roller	16 N [3.6 lb]	Black-Gray (NC) Black-Brown (NO) 39,3 mm FP 37,3 mm OP 31 mm TT 0,7 mm DT	39,3 mm [1.55 in]	37,3 mm [1.47 in]	2,0 mm [0.080 in]	8,3 mm [0.33 in]	0,7 mm [0.030 in]

GXS SERIES DIMENSIONS

Note: GXA Side Rotary and GXE Plunger versions shown.

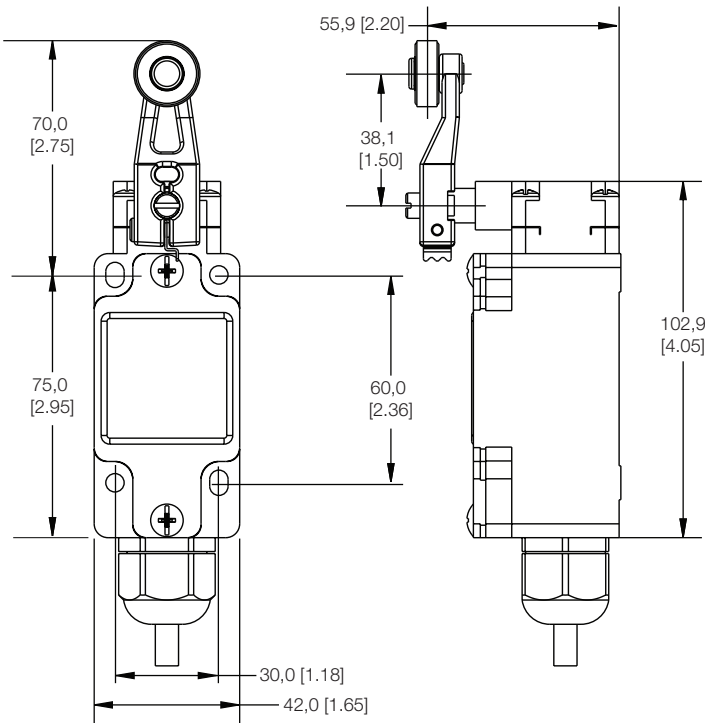**Figure 2. GXA Series Dimensions mm [in]**

Figure 3. GXA Series Side Rotary Adjustable Dimensions
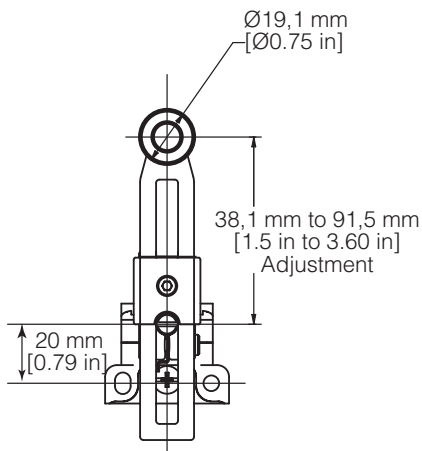*(refer to Figure 2 for additional measurements)*

Figure 4. GXA Series Pin Plunger Dimensions
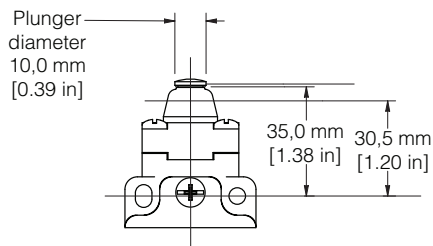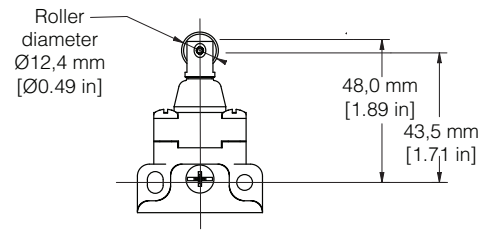*(refer to Figure 2 for additional measurements)*

Figure 5. GXA Series Roller Plunger Dimensions
(refer to Figure 2 for additional measurements)

GXS SERIES DIMENSIONS

Note: GXA Side Rotary and GXE Plunger versions shown.

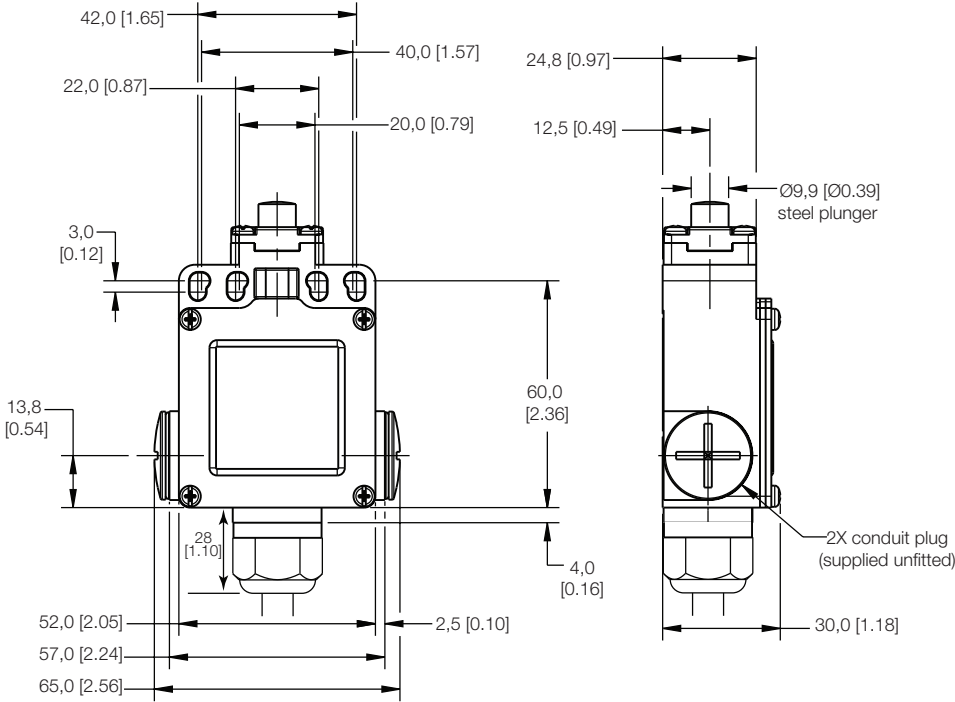**Figure 6. GXE Series Dimensions mm [in]**

Figure 7. GXE Series Side Rotary Dimensions mm [in]
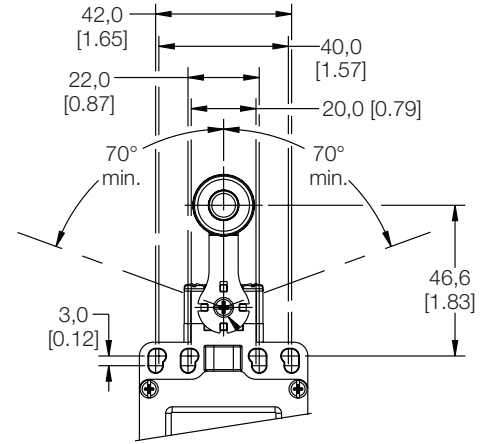*(refer to Figure 6 for additional measurements)*

Figure 8. GXE Series Side Rotary Adjustable Dimensions mm [in]
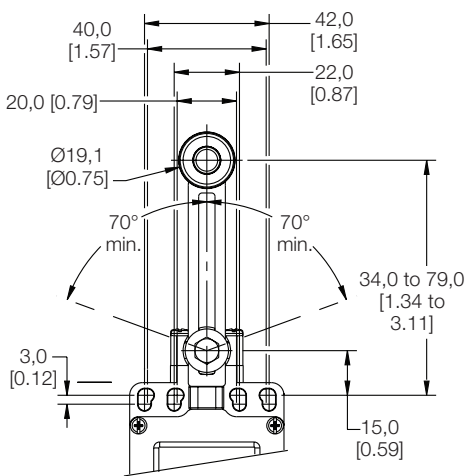*(refer to Figure 6 for additional measurements)*

Figure 9. GXE Series Roller Plunger Dimensions mm [in]
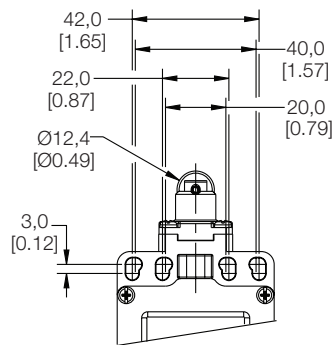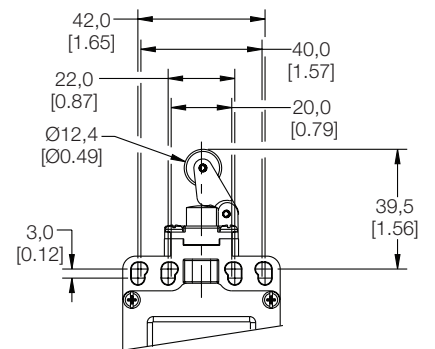*(refer to Figure 6 for additional measurements)*

Figure 10. GXE Series Roller Lever Dimensions mm [in]
(refer to Figure 6 for additional measurements)

ADDITIONAL MATERIALS

The following associated literature is available at sensing.honeywell.com:

- Product range guide
- Product application-specific information
  - Guide to Hazardous Location Approvals: MICRO SWITCH Hazardous Area Limit Switches
  - MICRO SWITCH Hazardous Area Limit Switches brochure

⚠ WARNING
PERSONAL INJURY

DO NOT USE these products as safety or emergency stop devices or in any other application where failure of the product could result in personal injury.

Failure to comply with these instructions could result in death or serious injury.

⚠ WARNING
MISUSE OF DOCUMENTATION

- The information presented in this product sheet is for reference only. Do not use this document as a product installation guide.
- Complete installation, operation, and maintenance information is provided in the instructions supplied with each product.

Failure to comply with these instructions could result in death or serious injury.

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