

Ui 600V ac

Ui 300V dc

UL 50041

EN60947-5-1

EN45545-2 HL 3 (GLA & GLF Series switches only)



**Installation Instructions for the MICRO SWITCH Global Limit Switches (GLS-DIN Series)**  
**Instrucciones de instalación para los MICRO SWITCH interruptores limite global (serie GLS-DIN)**  
**Einbauanweisungen für den MICRO SWITCH Global Endschalter (Serie GLS-DIN)**  
**Instructions d'installation du MICRO SWITCH fin de course mondiales (série GLS-DIN)**  
**Istruzioni per l'installazione del MICRO SWITCH finecorsa globali (Serie GLS-DIN)**  
**Instruções de Instalação para o MICRO SWITCH de limite global (Série GLS-DIN)**

**⚠ WARNING**

**IMPROPER INSTALLATION**

- Consult with local safety agencies and their requirements when designing a machine-control link, interface, and all control elements that affect safety.
- Strictly adhere to all installation instructions.

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

**MOUNT, WIRE, AND SEAL THE SWITCH**

**⚠ WARNING**

**IMPROPER OPERATION**

- Ensure switch actuator achieves sufficient travel for positive opening of normally closed (NC) contacts to occur.

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

1. Refer to:
  - Page 3 for adjustments.
  - Pages 8 to 17 for specific travel distances for each switch code, and specifications.
  - Page 4 proper application of limit switches, and switch mounting dimensions.
2. Perform adjustments (if desired):
  - Head orientation, page 4.
  - Actuation direction (Figure 2, page 4).
  - Side rotary switches with 90° positive drive levers (catalog listings ending in A1A, A1B, A5A, A5B) (Figure 3):
    - Ensure flats of switch shaft engage groove in actuator lever.
    - Tighten locking screw (A) until tab (B) no longer moves.
3. Mount switch using four M5 or #10 screws. Torque screws to 4,9 Nm to 5,9 Nm [43 in-lb to 52 in-lb].
4. Remove screws on cover plate.
5. Connect stranded wire (0,75 mm<sup>2</sup> to 2,5 mm<sup>2</sup>, 18-14 AWG) or solid wire (0,75 mm<sup>2</sup> to 1,5 mm<sup>2</sup>, 18-16 AWG) to connector terminals (use 90 °C wire when ambient temperature is over 75 °C). Torque switch terminal screws to 0,8 Nm to 1,0 Nm [7 in-lb to 9 in-lb]. Wire strip length should be 7,3 mm [0.29 in] max.
6. Seal conduit opening according to instructions in PK 80112.
7. Reassemble cover plate, and torque cover screws to 0,5 Nm [4.4 in-lb].

**⚠ ADVERTENCIA**

**INSTALACIÓN INCORRECTA**

- Consulte las normas de seguridad y sus requisitos al realizar el diseño del enlace de control de una máquina, la interfaz, y los elementos de control que afecten a la seguridad.
- Siga estrictamente todas las instrucciones para la instalación.

**El incumplimiento de estas recomendaciones puede ocasionar lesiones graves o peligro de muerte.**

**MONTAJE, CABLEADO Y SELLADO DEL INTERRUPTOR**

**⚠ ADVERTENCIA**

**FUNCIONAMIENTO INCORRECTO**

- Asegúrese que el actuador del interruptor tenga la suficiente carrera para que se produzca la apertura positiva de los contactos normalmente cerrados (NC)..

**El incumplimiento de estas recomendaciones puede ocasionar lesiones graves o peligro de muerte.**

1. Consulte:
  - la página 3 para los ajustes
  - las páginas 8 y 17 para las distancias de carrera específicas de cada código de interruptor y las especificaciones.
  - la página 4 para la correcta aplicación de los interruptores final de carrera y las dimensiones de montaje del interruptor.
2. Realice ajustes (si lo desea):
  - Orientación del cabezal (la página 4).
  - Dirección del accionamiento (véase la figura 2, la página 4).
  - Interruptores de rotación lateral con palancas de impulsión positiva de 90° (las referencias del catálogo que terminen en A1A, A1B, A5A, A5B) (véase la figura 3):
    - Asegúrese de que las caras del eje del interruptor enganchen la ranura de la palanca del actuador.
    - Ajuste el tornillo de apriete (A) hasta que la lengüeta (B) deje de moverse.
3. Para montar el interruptor, utilice cuatro tornillos M5 o del número 10. Ajuste los tornillos hasta 4,9 Nm a 5,9 Nm (43 a 52 pulg. lb).
4. Quite los tornillos de la tapa.
5. Conecte cable trenzado (0,75 mm<sup>2</sup> a 2,5 mm<sup>2</sup>, 18-14 AWG) o cable sólido (0,75 mm<sup>2</sup> a 1,5 mm<sup>2</sup>, 18-16 AWG) a los terminales del conector (utilice cable de 90 °C cuando la

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temperatura ambiente supere los 75 °C). Ajuste los tornillos de los terminales hasta 0,8-1,0 N m (7-9 pulg. lb). La longitud del cable pelado debe ser de 7,3 mm [0,29 in] como máximo.

6. Selle el conducto de entrada según las instrucciones en PK 80112.
7. Vuelva a montar la tapa, y con una llave de torsión, ajuste los tornillos a 0,5 Nm ( 4.4 in lbf ).

## **⚠️ WARNUNG UNSACHGEMÄSSER EINBAU**

- Beraten Sie sich mit den zuständigen Sicherheitsbehörden beim Entwurf von Verbindungen zu Maschinensteuerungen, Schnittstellen und sämtlichen Steuerelementen, welche die Sicherheit betreffen.
- Halten Sie sich genau an die Einbau-Anweisungen.

**Das Nichtbeachten dieser Anweisungen könnte zum Tod oder zu schweren Verletzungen führen.**

## **SCHALTER MONTIEREN, ANSCHLIESSEN UND ABDICHTEN**

### **⚠️ WARNUNG UNSACHGEMÄSSER BETRIEB**

- Sicherstellen, daß der Betätiger genügend Laufweg hat, um die Öffnerkontakte (NC) zwangszuöffnen.

**Das Nichtbeachten dieser Anweisungen könnte zum Tod oder zu schweren Verletzungen führen.**

1. Weitere Informationen:
  - Einstellungen auf Seite 3.
  - Spezifische Laufwege für jeden Schaltercode und technische Daten auf Seite 8 und 17.
  - Ordnungsgemäße Anwendung von Positionsschaltern und Abmessungen für die Schaltermontage auf Seite 4.
2. Einstellungen vornehmen (falls gewünscht):
  - Ausrichtung des Kopfes (auf Seite 4).
  - Betätigungsrichtung (Abbildung 2, auf Seite 4).
  - Schalter mit seitlichem Schwenkhebel mit 90°-Zwangssteuerhebeln (Bestellnummern enden mit A1A, A1B, A5A, A5B) (Abbildung 3):
    - Sicherstellen, daß die gegenüberliegenden Flächen des Schalterschafts in die Rille im Betätigerhebel eingreifen.
    - Die Sicherungsschraube (A) anziehen, bis die Nase (B) nicht mehr zu bewegen ist.
3. Den Schalter mit Hilfe von vier M5-Schrauben oder Schrauben Nr. 10 montieren. Schrauben mit 4,9 ...1,80 Nm anziehen.
4. Die Schrauben auf der Deckplatte entfernen.
5. Den Litzendraht (0,75 mm<sup>2</sup> ... 2,5 mm<sup>2</sup>, 18 ... 14 AWG) oder Draht (0,75 mm<sup>2</sup> ... 1,5 mm<sup>2</sup>, 18 ...16 AWG) an die Klemmleisten anschließen (90 °C-Draht verwenden, wenn die Umgebungstemperatur über 75 °C liegt). Die Klemmleistschrauben des Schalters mit 0,8 ...1,0 Nm anziehen. Der Draht sollte auf einer Länge von max. 7,3 mm [0,29 in] abisoliert werden.
6. Die Kabeleinführung entsprechend den Anweisungen in PK 80112 abdichten.

7. Abdeckung wiederanbringen und Abdeckschrauben mit einem Drehmoment von 0.5Nm anziehen.

### **⚠️ AVERTISSEMENT INSTALLATION INCORRECTE**

- Faites appel à des emperatu locaux de sécurité et prenez en compte leurs exigences lorsque vous concevez une liaison de commande ou interface de machine, ou tout autre dispositif de commande mettant en jeu la sécurité.
- Respectez scrupuleusement l'ensemble des instructions d'installation.

**L'inobservation de ces instructions peut entraîner la mort ou de graves blessures.**

## **MONTEZ, CABLEZ ET ETANCHEIFIEZ L'INTERRUPTEUR**

### **⚠️ AVERTISSEMENT MAUVAIS FONCTIONNEMENT**

- Veillez à ce que l'actionneur de l'interrupteur parcourt une course suffisante afin de permettre une ouverture positive des contacts normalement fermés (NF).

**L'inobservation de ces instructions peut entraîner la mort ou de graves blessures.**

1. Consultez:
  - La page 3 pour les réglages.
  - Les pages 8 et 17 pour connaître les longueurs de courses pour chaque code d'interrupteur et les caractéristiques techniques.
  - La page 4 pour savoir comment réaliser une application correcte des interrupteurs de fin de course et connaître les cotes de montage de l'interrupteur.
2. Effectuez les réglages (le cas échéant):
  - Orientation de la tête (la page 4).
  - Sens d'actionnement (figure 2, la page 4).
  - Interrupteurs à rotation latérale avec leviers à 90° à action positive (numéros de emperatu se terminant par A1A, A1B, A5A, A5B) (figure 3) :
    - Veillez à ce que les méplats de l'axe de l'interrupteur s'engagent dans l'encoche du levier de l'actionneur.
    - Serrez la vis de blocage (A) jusqu'à ce que la languette (B) ne bouge plus.
3. Montez l'interrupteur à l'aide de vis M5 ou n°10. Serrez les vis avec un couple de 4,9 à 5,9 N.m (43 à 52 in.lb).
4. Retirez les vis du couvercle.
5. Connectez du fil souple (0,75 mm<sup>2</sup> à 2,5 mm<sup>2</sup>, 18 à 14 AWG) ou rigide (0,75 mm<sup>2</sup> à 1,5 mm<sup>2</sup>, 18 à 16 AWG) aux bornes du connecteur (utilisez du fil 90 °C lorsque la emperatura ambiente est supérieure à 75 °C). Serrez les vis des bornes de l'interrupteur avec un couple de 0,8 à 1,0 N.m (7 à 9 in.lb). La longueur maximale de dénudage des fils est de 7,3 mm (0,29 pouce).
6. Réalisez l'étanchéité de l'ouverture du conduit conformément aux instructions données en PK 80112.
7. Remonter le couvercle, et serrez les vis du couvercle avec un couple de 0,5 N.m (4.4 in.lb).

## **⚠ ATTENZIONE** **INSTALLAZIONE SCORRETTA**

- Consultare gli enti locali in materia di antinfortunistica e le rispettive normative nel momento in cui ci si avvia alla progettazione di un qualsiasi collegamento controllo macchina, o di un'interfaccia, o di tutti gli elementi di controllo che possano influire sulla sicurezza.
- Attenersi rigorosamente a tutte le istruzioni relative all'installazione.

**L'inosservanza di tali istruzioni può essere causa di gravi lesioni, con conseguenze addirittura fatali.**

## **MONTARE, CABLARE E SIGILLARE L'INTERRUTTORE**

### **⚠ ATTENZIONE** **FUNZIONAMENTO SCORRETTO**

- Accertarsi che la corsa dell'attuatore dell'interruttore sia sufficiente a consentire l'apertura forzata dei contatti normalmente chiusi (NC).

**L'inosservanza di tali istruzioni può essere causa di gravi lesioni, con conseguenze addirittura fatali.**

1. Fare riferimento a:
  - Pagina 3, per le regolazioni.
  - Pagina 8 e pagina 17, per gli specifici valori relativi a ciascun codice di interruttore e per i dati tecnici.
  - Pagina 4, per il corretto impiego degli interruttori fine-corsa e per le dimensioni di montaggio.
2. Eventualmente eseguire le regolazioni (in base alle esigenze):
  - Orientamento testa (Pagina 4).
  - Direzione di attuazione (Figura 2, pagina 4).
  - Interruttori a rotazione laterale con leva ad azionamento meccanico a 90° (voci di catalogo che finiscono con A1A, A1B, A5A, A5B) (Figura 3);
    - Accertarsi che le alette dell'alberino dell'interruttore siano inserite nell'apposita scanalatura della leva dell'attuatore.
    - Serrare la vite di fermo (A) finché il movimento della linguetta (B) non risulta impedito.
3. Montare l'interruttore mediante quattro viti M5 o #10. Serrare le viti ad una coppia pari a 4,9-5,9 N m [43-52 poll. lb.].
4. Rimuovere le viti dalla piastra di copertura.
5. Collegare cavi flessibili (0,75 mm<sup>2</sup> - 2,5 mm<sup>2</sup>, 18-14 AWG) o cavi rigidi (0,75 mm<sup>2</sup>-1,5 mm<sup>2</sup>, 18-16 AWG) ai morsetti dei connettori (se la temperatura ambiente supera i 75 °C, utilizzare cavi che hanno una temperatura di esercizio pari a 90 °C). Serrare le viti ad una coppia pari a 0,8-1,0 N m [7-9 poll. lb.]. La lunghezza massima della piastrina deve essere 7,3 mm [0,29 in].
6. Sigillare l'apertura del tubo isolante in base alle istruzioni della PK 80112.
7. Rimontare il coperchio, e stringere le viti fino al massimo di 0,5 Nm. [4.4 in-lb].

## **⚠ ADVERTÊNCIA** **INSTALAÇÃO INCORRETA**

- Consulte as agências de segurança local e seus requisitos ao projetar unidades de conexão ou interface para controle de máquinas, bem como todos os elementos de controle que possam afetar a segurança
- Obedeça rigorosamente todas as instruções de segurança.

**Desobediência a essas instruções pode resultar em morte ou ferimentos graves.**

## **MONTAGEM, FIAÇÃO E VEDAÇÃO DO SWITCH**

### **⚠ ADVERTÊNCIA** **INSTALAÇÃO INCORRETA**

- Certifique-se de que o atuador do switch atinja um percurso suficiente para que ocorra a abertura positiva de contatos normalmente fechados (NC, normally closed).

**Desobediência a essas instruções pode resultar em morte ou ferimentos graves.**

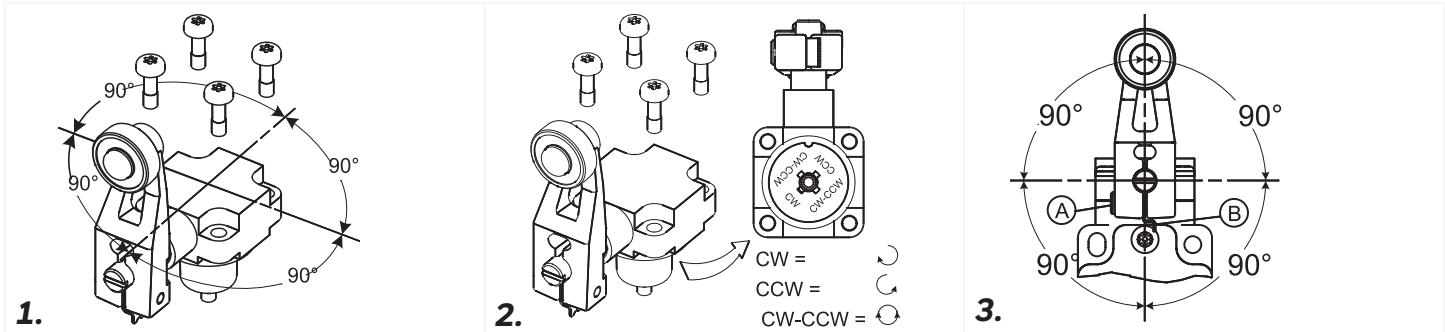
1. Consulte:
  - A página 3 para ajustes.
  - As páginas 8 e 17 para saber as distâncias de percurso específicas para cada código de switch e especificações.
  - A página 4 para ver a aplicação adequada de switches de fim de curso e dimensões de montagem dos switches.
2. Faça os ajustes necessários (se desejado):
  - Orientação da cabeça (A página 4).
  - Direção de atuação (Figura 2, a página 4).
  - Switches com acionamento lateral com alavancas de direção de 90° positivos (listas do catálogo com terminação A1A, A1B, A5A, A5B) (Figura 3):
    - Certifique-se de que os planos do eixo do switch encaixem-se nos sulcos da alavanca do atuador.
    - Aperte o parafuso de trava (A) até que a lingueta (B) não se desloque mais.
3. Monte o switch usando quatro parafusos M5 ou nº10. Aperte os parafusos com um torque de 4,9-5,9 N-m (109,22-132,08cm lb).
4. Remova os parafusos da tampa de cobertura.
5. Conecte cabos trançados (0,75 mm<sup>2</sup> - 2,5 mm<sup>2</sup>, 18-14 AWG) ou sólidos (0,75 mm<sup>2</sup> to 1,5 mm<sup>2</sup>, 18-16 AWG) aos terminais do conector (utilize cabos para 90 °C quando a temperatura ambiente passar dos 75 °C). Aperte os parafusos do terminal do switch com um torque de 0,8-1,0 N-m (17,78-22,86cm-lb). O comprimento máximo do fio desencapado deve ser 7,3 mm [0,29 pol.].
6. Sele a abertura do conduíte de acordo com as instruções descritas em PK 80112.
7. Remontar prato de cobertura, e parafusos de cobertura de torque para 0,5 Nm (4.4 pol/lb).

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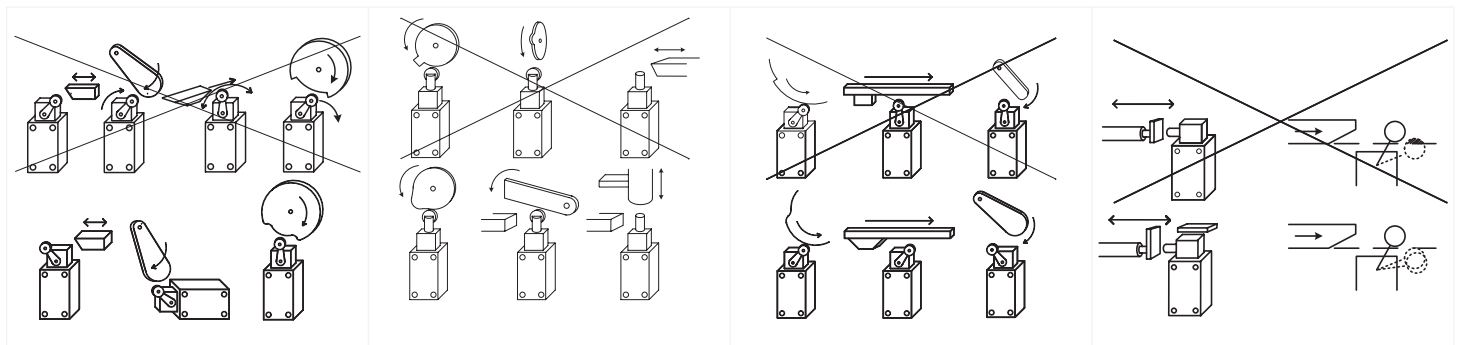
**FIELD ADJUSTABLE HEAD  
FIELD VERSTELLBAREM KOPF  
CAMPO TESTA REGOLABILE**

**CAMPO DE CABEZA AJUSTABLE  
TÊTE DE CHAMP RÉGLABLE  
CABEÇA CAMPO AJUSTÁVE**



**OPERATION REQUIREMENTS  
ANFORDERUNGEN AN DEN BETRIEB  
REQUISITI PER L'ESERCIZIO**

**REQUISITOS DE FUNCIONAMIENTO  
EXIGENCES DE FONCTIONNEMENT  
REQUISITOS DE OPERAÇÃO**



**TERMS  
BEDINGUNGEN  
TARIFFE**


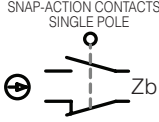
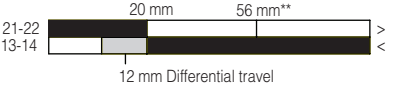
**CONDICIONES  
TERMES  
CONDIÇÕES**

Contact Closed	Contacto cerrado	Kontakt geschlossen	Contact fermé	Contatto chiuso	Contacto Fechado
Contact Open	Contacto abierto	Kontakt offen	Contact ouvert	Contatto aperto	Contacto Aberto
Differential Travel	Carrera diferencial	Differenzwinkel	Course différentielle	Corsa differenziale	Percurso Diferencial
Free Position	Posición libre	Freistellung	Position libre	Posizione libera	Posição Livre
Operating Position 1	Posición de funcionamiento 1	Schaltpunkt 1	Position de commutation 1	Posizione di funzionamento 1	Posição de Operação 1
Positive Opening 1 to IEC 947-5-1	Apertura positiva 1 según IEC 947-5-1	Zwangsöffnung 1 gemäß IEC 947-5-1	Ouverture positive 1 selon CEI 947-5-1	Apertura forzata 1 Conforme alla norma IEC 947-5-1	Abertura Positiva 1 para IEC 947-5-1
Differential Travel 1	Carrera diferencial 1	Differenzweg 1	Course différentielle 1	Corsa differenziale 1	Percurso Diferencial 1
Over Travel	Sobrecarrera	Nachlaufweg	Surcourse	Oltre corsa	Sobrepercurso
Maximum Operating Force	Fuerza de funcionamiento máxima	Maximale Betätigungskraft	Force de commutation maximum	Forza massima di intervento	Força Máxima de Operação
Maximum Disconnect Force	Fuerza de desconexión máxima	Maximale Öffnungskraft	Force de déconnexion maximum	Forza massima di scollimento	Força Máxima de Desconexão

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**Figure 1. Reading Operating Specifications**

Catalog listing	Contact block diagram	Nominal travels and related terminals 	Operating force max.	Disconnect force, max.	Operating de-grees, max.	Operating de-grees, min.	Max. operate frequency ops/min
GL**01A GL**07A			9,7 N [2.2 lb]	11,4 N [2.6 lb]	0,85 M/S [33.5 in/S]	8,5 mm/S [0.33 in/S]	250
<b>↑</b> Catalog Listing Code	<b>↑</b> Contact Block Diagram Shows the circuit configuration of the internal contact block.	<b>↑</b> Operating Bar Charts Show the state of the contacts relative to the position of the actuator.	<b>↑</b>	<b>↑</b>	<b>↑</b>	<b>↑</b>	<b>↑</b>

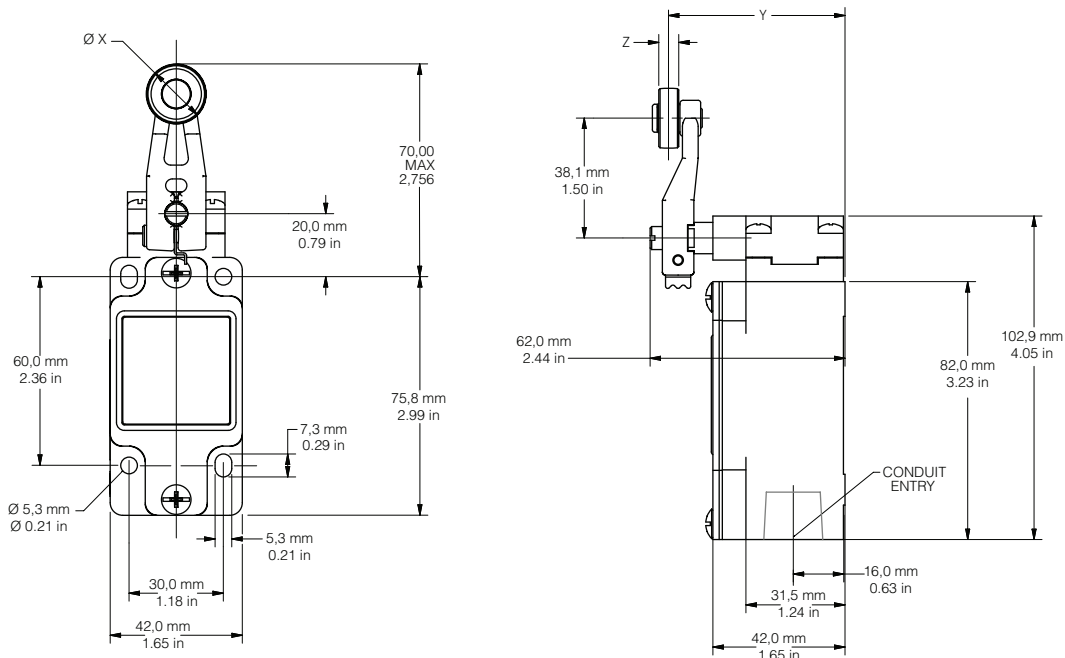
## PRODUCT NOMENCLATURE

GL Switch Type	A Body Style Code	A Conduit Entry Threading Code	01 Basic Switch		A1A Head/Actuator			
GL Series Global Limit Switch	<b>A</b> EN50041, non-plug-in	<b>A</b> 1/2-14 NPT	<b>01</b> SPDT, snap action	<b>26</b> DPDT, snap action, center neutral	<b>A1</b> Side rotary, fixed, no roller	<b>A3A</b> Side rotary, yoke, 19 x 6 nylon roller	<b>E7A</b> Wobble, plastic stick	<b>1</b> CW rotation only
	<b>B</b> EN50041, plug-in	<b>B</b> PG 13.5	<b>03</b> SPDT, BBM slow acting	<b>27</b> DPDT, snap action, center neutral, Body E	<b>A2</b> Side rotary, adjustable, no roller	<b>A3B</b> Side rotary, yoke, 19 x 6 steel roller	<b>E7B</b> Wobble, coil	<b>2</b> CCW rotation only
	<b>F</b> EN50041, non-plug-in, LED light box	<b>C</b> 20 mm	<b>04</b> SPDT, MBB slow acting	<b>28</b> DPDT, snap action, gold, sequential	<b>A1A</b> Side rotary, fixed, 19 x 6 nylon roller	<b>A4J</b> Side rotary, adjust., 200 mm aluminum rod	<b>E7D</b> Wobble, cat whisker	<b>3</b> Lever to right
	<b>G</b> EN50041, plug-in, LED light box	<b>D</b> PF 1/2	<b>05</b> SPDT, 2NO slow acting	<b>29</b> DPDT, snap action, center neutral, gold	<b>A1B</b> Side rotary, fixed, 19 x 6 steel roller	<b>A4K</b> Side rotary, adjust., 140 mm aluminum rod	<b>F</b> Adj. top roller lever, Ø27.3 x 5 POM roller	<b>4</b> Lever to left
	<b>H</b> EN50041, plug-in, LED light box		<b>06</b> SPDT, 2NC slow acting	<b>30</b> DPDT, snap act, center neutral, gold, Body E	<b>A1Y</b> Side rotary, fixed, 50 x 10 rubber roller	<b>A4N</b> Side rotary, adjust., 318 mm aluminum rod	<b>K8A</b> Cat whisker, 140 mm	<b>5</b> Lever to mounting surf.
			<b>07</b> SPDT, snap action, gold	<b>31</b> DPDT, snap action, gold, sequen., Body E	<b>A2Y</b> Side rotary, adj., 50 x 10 rubber roller	<b>A5A</b> Side rotary, offset, 19 x 6 nylon roller	<b>K8B</b> Cat whisker, 190 mm	<b>6</b> Roller perpendicular to mtg. surf.
			<b>20</b> DPDT, snap action	<b>32</b> DPDT, snap action, gold cont. Body E	<b>A2A</b> Side rotary, adjust., 19 x 6 nylon roller	<b>A5B</b> Side rotary, offset, 19 x 6 steel roller	<b>K8C</b> Wobble, cat whisker	
			<b>21</b> DPDT, snap action, sequential	<b>33</b> SPDT, BBM, slow acting, gold contacts	<b>A2B</b> Side rotary, adjust., 19 x 6 steel roller	<b>A9A</b> Side rotary, conveyor lever		
			<b>22</b> DPDT, snap action, gold contacts	<b>34</b> SPDT, MBB slow acting, gold contacts	<b>A2D</b> Side rotary, adjust., 38 x 6 nylon roller	<b>B</b> Top pin plunger		
			<b>24</b> DPDT, snap action, Body E	<b>35</b> SPDT, 2NO slow acting, gold contacts	<b>A2W</b> Side rotary, adjust., 38 x 12 rubber roller	<b>C</b> Top roller plunger		
			<b>25</b> DPDT, snap action, gold cont. Body E	<b>36</b> SPDT, 2NC slow acting, gold contacts		<b>D</b> Top roller lever		

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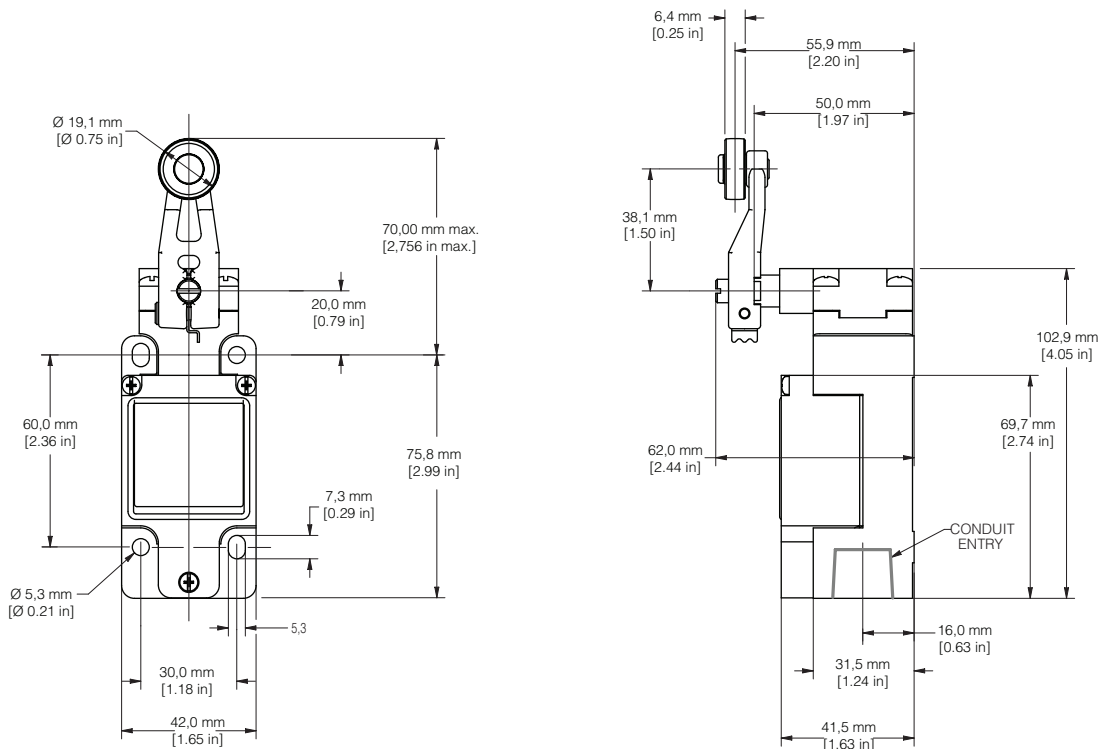
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**Figure 2. Fixed Lever, Side Rotary Switch - Non-plug-in Body Style, GLZ51 lever, and GLA body**



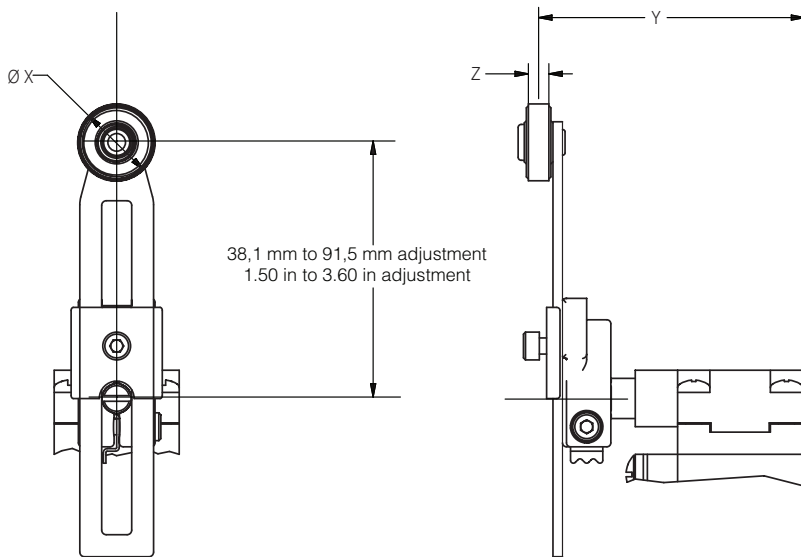
LEVER (catalog listing)	ROLLER MATL	X DIM	Y DIM	Z DIM
GLZ51A	NYLON	19,1 .75	55,9 2.20	6,4 .25
GLZ51B	STEEL	19,1 .75	55,9 2.20	6,4 .25
GLZ51C	NYLON	24,5 1.00	59,1 2.33	12,7 .50
GLZ51Y	RUBBER	50,0 1.97	66,1 2.60	10,0 .39
GLZ51T	STAINLESS STEEL	19,1 .75	56,8 2.24	8,8 .345

**Figure 3. Fixed Lever, Side Rotary Switch - Plug-in Body Style, GLZ51 lever, and GLB body**



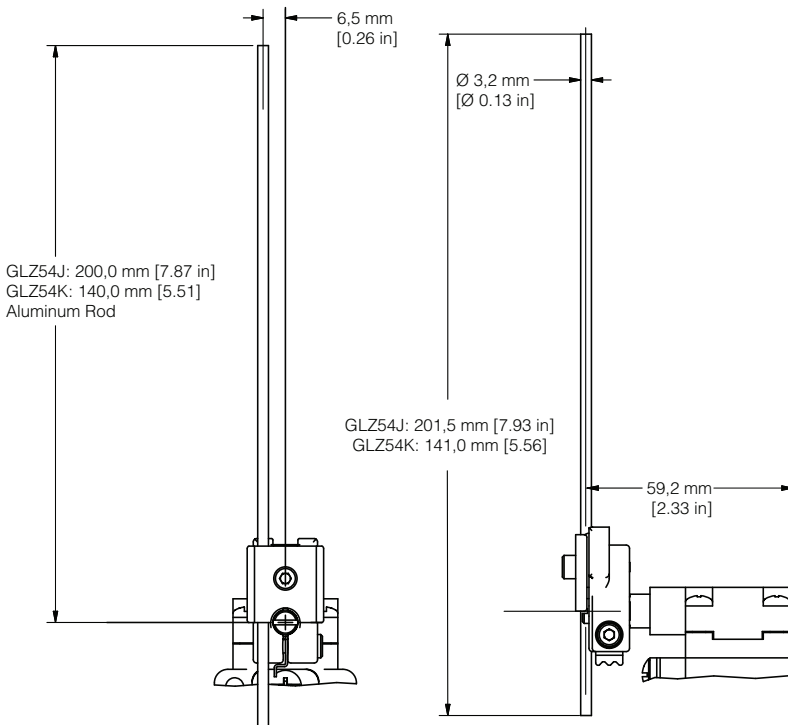
# Installation Instructions for MICRO SWITCH GLS Limit Switches

**Figure 4. Adjustable Lever Dimensions, GLZ52**



LEVER	ROLLER MATL	X DIM	Y DIM	Z DIM
GLZ52A	NYLON	19,1 .75	65,9 2.59	6,4 .25
GLZ52B	STEEL	19,1 .75	65,9 2.59	6,4 .25
GLZ52D	NYLON	38,1 1.5	65,9 2.59	6,4 .25
GLZ52E	NYLON	19,1 .75	79,37 3.125	33,07 1.300
GLZ52W	RUBBER	40,0 1.6	71,5 2.81	12,7 .5
GLZ52Y	RUBBER	50,0 1.97	68,8 2.71	10,0 .39

**Figure 5. Aluminum Rod Lever Dimensions, GLZ54**





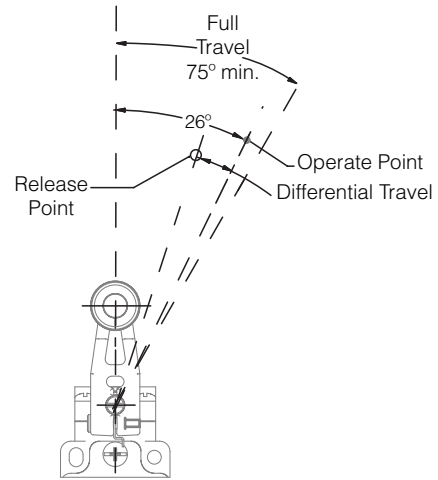
# Installation Instructions for MICRO SWITCH GLS Limit Switches

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**Figure 6. Head Code: A**  
**Side Rotary Angular Operating Characteristics**

**Notes:**

- Free position, operate point, over travel and pre-travel all to EN 50041
- Operating characteristics apply to counter clockwise (CCW) and clock wise (CW) actuation
- Refer to page 5 for instructions on how to read operating characteristics and specifications



Catalog listing	Contact block diagram	Nominal travels and related terminals			Operating torque max.	Disconnect torque, max.	Operating degrees, max.	Operating degrees, min.	Max. operate frequency ops/min
		■ Contact Closed	□ Contact Open	▨ Diff. Travel					
GL**01A GL**07A	SNAP-ACTION CONTACTS SINGLE POLE 	21-22 13-14	26° 55°** 75° min. 12° Differential travel	0.330 Nm [2.9 in-lb]	0.385 Nm [3.4 in-lb]	1290°	13°	250	
GL**03A GL**33A	SLOW ACTING BREAK BEFORE MAKE 	21-22 13-14	26° ** 75° min. 38°	0.330 Nm [2.9 in-lb]	0.385 Nm [3.4 in-lb]	1290°	13°	250	
GL**04A GL**34A	SLOW ACTING MAKE BEFORE BREAK 	21-22 13-14	38° ** 75° min. 26°	0.330 Nm [2.9 in-lb]	0.400 Nm [3.5 in-lb]	1290°	13°	250	
GL**05A GL**35A	SLOW ACTING 	13-14 23-24	38° ** 75° min.	0.330 Nm [2.9 in-lb]	0.385 Nm [3.4 in-lb]	1290°	13°	250	
GL**06A GL**36A	SLOW ACTING 	11-12 21-22	26° ** 75° min.	0.330 Nm [2.9 in-lb]	0.385 Nm [3.4 in-lb]	1290°	13°	250	
GL**20A GL**22A GL**24A GL**32A	SNAP ACTION CONTACTS DOUBLE POLE 	11-12, 21-22 13-14, 23-24	26° 55°** 75° min. 12° Differential travel	0.330 Nm [2.9 in-lb]	0.385 Nm [3.4 in-lb]	1290°	13°	250	
GL**21A GL**25A GL**28A GL**31A	STEP 1 SNAP ACTION CONTACTS DOUBLE POLE SEQUENTIAL STEP 2 	11-12 13-14 21-22 23-24	27° 42° 75° min. 8° Differential travel 8° Differential travel	0.330 Nm [2.9 in-lb]	n/a	1290°	13°	250	



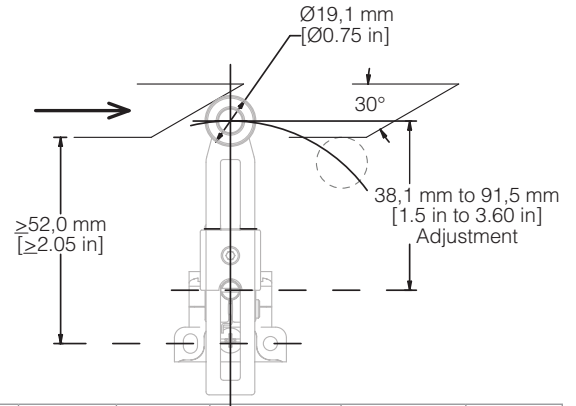
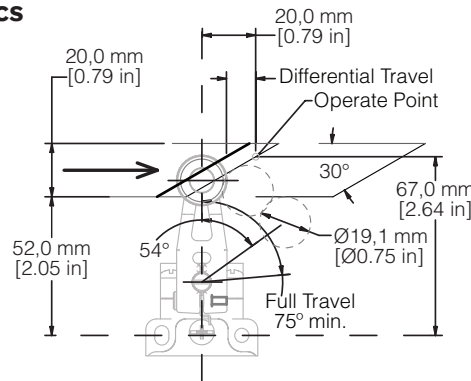
# Installation Instructions for MICRO SWITCH GLS Limit Switches

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**Figure 7. Head Code: A • Side Rotary Cam Actuation Per EN50041  
Operating Characteristics**

Notes:

- Cam travel for adjustable lever applies when lever is adjusted to 38,1 mm [1.5 in]
- Refer to page 5 for instructions on how to read operating characteristics and specifications

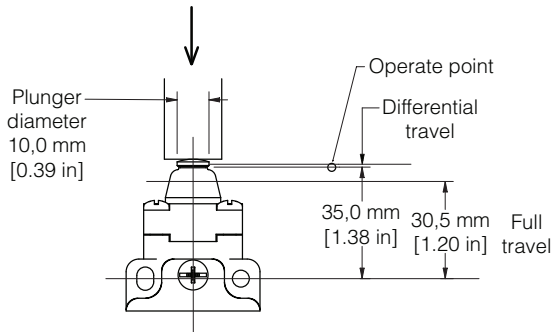


Catalog listing	Contact block diagram	Nominal travels and related terminals			Operating force max.	Disconnect force, max.	Operating de-grees, max.	Operating de-grees, min.	Max. operate frequency ops/min
		Contact Closed	Contact Open	Diff. Travel					
GL**01A GL**07A	SNAP-ACTION CONTACTS SINGLE POLE 	21-22 13-14	20 mm 56 mm**	12 mm Differential travel	9,7 N [2.2 lb]	11,4 N [2.6 lb]	0,85 M/S [33.5 in/S]	8,5 mm/S [0.33 in/S]	250
GL**03A GL**33A	SLOW ACTING BREAK BEFORE MAKE 	21-22 13-14	20 mm **	32 mm	9,7 N [2.2 lb]	11,4 N [2.6 lb]	0,85 M/S [33.5 in/S]	8,5 mm/S [0.33 in/S]	250
GL**04A GL**34A	SLOW ACTING MAKE BEFORE BREAK 	21-22 13-14	0 mm 32 mm	20 mm	9,7 N [2.2 lb]	11,4 N [2.6 lb]	0,85 M/S [33.5 in/S]	8,5 mm/S [0.33 in/S]	250
GL**05A GL**35A	SLOW ACTING 	13-14 23-24	32 mm		9,7 N [2.2 lb]	11,4 N [2.6 lb]	0,85 M/S [33.5 in/S]	8,5 mm/S [0.33 in/S]	250
GL**06A GL**36A	SLOW ACTING 	11-12 21-22	0 mm 20 mm **		9,7 N [2.2 lb]	11,4 N [2.6 lb]	0,85 M/S [33.5 in/S]	8,5 mm/S [0.33 in/S]	250
GL**20A GL**22A GL**24A GL**32A	SNAP ACTION CONTACTS DOUBLE POLE 	11-12, 21-22 13-14, 23-24	20 mm 56 mm**	12 mm Differential travel	9,7 N [2.2 lb]	11,8 N [2.7 lb]	0,85 M/S [33.5 in/S]	8,5 mm/S [0.33 in/S]	250
GL**21A GL**25A GL**28A GL**31A	STEP 1  STEP 2 	11-12 13-14 21-22 23-24	0 mm 20 mm 38.5 mm	8.5 mm Differential travel 7 mm Differential travel	9,7 N [2.2 lb]	n/a	0,85 M/S [33.5 in/S]	8,5 mm/S [0.33 in/S]	250
GL**26J GL**27J GL**29J GL**30J	CCW  CW SNAP ACTION CONTACTS DOUBLE POLE CENTER NEUTRAL	11-12 13-14 21-22 23-24	0 mm 16 mm	8 mm Differential travel 8 mm Differential travel	9,7 N [2.2 lb]	n/a	0,85 M/S [33.5 in/S]	8,5 mm/S [0.33 in/S]	250

# Installation Instructions for MICRO SWITCH GLS Limit Switches

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**Figure 8. Head Code: B**  
**Pin Plunger Operating Characteristics**



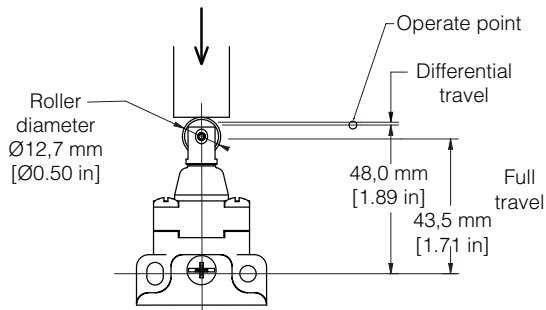
**Notes:**

- Free position, operate point, overtravel, and pretravel all to EN50041
- Refer to page 5 for instructions on how to read operating characteristics and specifications

Catalog listing	Contact block diagram	Nominal travels and related terminals			Operating force max.	Disconnect force, max.	Operating velocity, max.	Operating velocity, min.	Max. operate frequency ops/min
		■ Contact Closed	□ Contact Open	▨ Diff. Travel					
GL**01B GL**07B	SNAP-ACTION CONTACTS SINGLE POLE 	21-22 13-14	37.5 35 33** 30.5	0.9 Differential travel	16 N [3.6 lb]	27 N [6.0 lb]	0,1 M/S [3.9 in/S]	1,0 mm/S [0.04 in/S]	250
GL**03B GL**33B	SLOW ACTING BREAK BEFORE MAKE 	21-22 13-14	37.5 35** 30.5	34	16 N [3.6 lb]	27 N [6.0 lb]	0,1 M/S [3.9 in/S]	1,0 mm/S [0.04 in/S]	250
GL**04B GL**34B	SLOW ACTING MAKE BEFORE BREAK 	21-22 13-14	37.5 34** 30.5	35	16 N [3.6 lb]	27 N [6.0 lb]	0,1 M/S [3.9 in/S]	1,0 mm/S [0.04 in/S]	250
GL**05B GL**35B	SLOW ACTING 	13-14 23-24	37.5 34 30.5		16 N [3.6 lb]	27 N [6.0 lb]	0,1 M/S [3.9 in/S]	1,0 mm/S [0.04 in/S]	250
GL**06B GL**36B	SLOW ACTING 	11-12 21-22	37.5 35** 30.5	34	16 N [3.6 lb]	27 N [6.0 lb]	0,1 M/S [3.9 in/S]	1,0 mm/S [0.04 in/S]	250
GL**20B GL**22B GL**24B GL**32B	SNAP ACTION CONTACTS DOUBLE POLE 	11-12, 21-22 13-14, 23-24	37.5 35 33** 30.5	0.9 Differential travel	16 N [3.6 lb]	37 N [8.2 lb]	0,1 M/S [3.9 in/S]	1,0 mm/S [0.04 in/S]	250
GL**21B GL**25B GL**28B GL**31B	STEP 1 STEP 2 SNAP ACTION CONTACTS DOUBLE POLE SEQUENTIAL 	11-12 13-14 21-22 23-24	37.5 35 33.8 30.5	0.8 Differential travel	16 N [3.6 lb]	n/a	0,1 M/S [3.9 in/S]	1,0 mm/S [0.04 in/S]	250

# Installation Instructions for MICRO SWITCH GLS Limit Switches

**Figure 9. Head Code: C**  
**Top Roller Plunger Pin Actuation Operating Characteristics**



**Notes:**

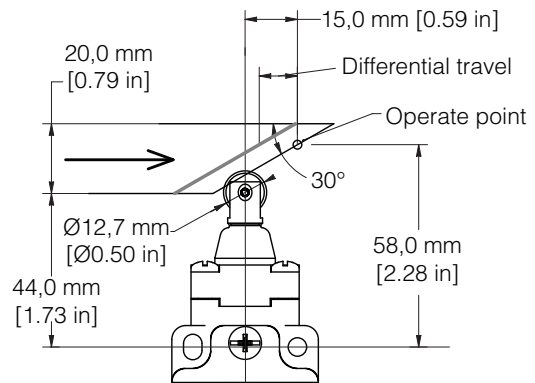
- Free position, operate point, overtravel, and pretravel all to EN50041
- Refer to page 5 for instructions on how to read operating characteristics and specifications

Catalog listing	Contact block diagram	Nominal travels and related terminals			Operating force max.	Disconnect force, max.	Operating velocity, max.	Operating velocity, min.	Max. operate frequency ops/min
		■ Contact Closed	□ Contact Open	▨ Diff. Travel					
GL**01C GL**07C	SNAP-ACTION CONTACTS SINGLE POLE 				16 N [3.6 lb]	27 N [6.0 lb]	0,1 M/S [3.9 in/S]	1,0 mm/S [0.04 in/S]	250
GL**03C GL**33C	SLOW ACTING BREAK BEFORE MAKE 				16 N [3.6 lb]	27 N [6.0 lb]	0,1 M/S [3.9 in/S]	1,0 mm/S [0.04 in/S]	250
GL**04C GL**34C	SLOW ACTING MAKE BEFORE BREAK 				16 N [3.6 lb]	27 N [6.0 lb]	0,1 M/S [3.9 in/S]	1,0 mm/S [0.04 in/S]	250
GL**05C GL**35C	SLOW ACTING 				16 N [3.6 lb]	27 N [6.0 lb]	0,1 M/S [3.9 in/S]	1,0 mm/S [0.04 in/S]	250
GL**06C GL**36C	SLOW ACTING 				16 N [3.6 lb]	27 N [6.0 lb]	0,1 M/S [3.9 in/S]	1,0 mm/S [0.04 in/S]	250
GL**20C GL**22C GL**24C GL**32C	SNAP ACTION CONTACTS DOUBLE POLE 				16 N [3.6 lb]	37 N [8.2 lb]	0,1 M/S [3.9 in/S]	1,0 mm/S [0.04 in/S]	250
GL**21C GL**25C GL**28C GL**31C	STEP 1 STEP 2 SNAP ACTION CONTACTS DOUBLE POLE SEQUENTIAL 				16 N [3.6 lb]	n/a	0,1 M/S [3.9 in/S]	1,0 mm/S [0.04 in/S]	250

# Installation Instructions for MICRO SWITCH GLS Limit Switches

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**Figure 10. Head Code: C  
Roller Plunger Cam Actuation  
Per EN50041 Operating Characteristics**



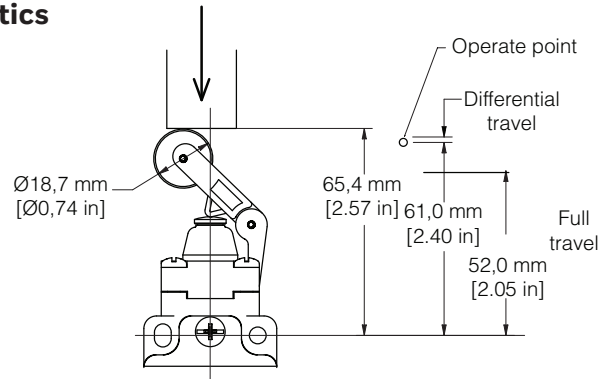
**Notes:**

- Free position, operate point, overtravel, and pretravel all to EN50041
- Refer to page 5 for instructions on how to read operating characteristics and specifications

Catalog listing	Contact block diagram	Nominal travels and related terminals			Operating force max.	Disconnect force, max.	Operating velocity, max.	Operating velocity, min.	Max. operate frequency ops/min
		■ Contact Closed	□ Contact Open	▨ Diff. Travel					
GL**01C GL**07C	SNAP-ACTION CONTACTS SINGLE POLE 	21-22 13-14	0 15 18.3** 1.8 Differential travel	> <	9,3 N [2.1 lb]	15,6 N [3.5 lb]	0,17 M/S [6.7 in/S]	1,7 mm/S [0.067 in/S]	250
GL**03C GL**33C	SLOW ACTING BREAK BEFORE MAKE 	21-22 13-14	0 15** 16.8	> <	9,3 N [2.1 lb]	15,6 N [3.5 lb]	0,17 M/S [6.7 in/S]	1,7 mm/S [0.067 in/S]	250
GL**04C GL**34C	SLOW ACTING MAKE BEFORE BREAK 	21-22 13-14	0 16.8** 15	> <	9,3 N [2.1 lb]	15,6 N [3.5 lb]	0,17 M/S [6.7 in/S]	1,7 mm/S [0.067 in/S]	250
GL**05C GL**35C	SLOW ACTING 	13-14 23-24	0 16.8	> <	9,3 N [2.1 lb]	15,6 N [3.5 lb]	0,17 M/S [6.7 in/S]	1,7 mm/S [0.067 in/S]	250
GL**06C GL**36C	SLOW ACTING 	21-22 13-14	0 15**	> <	9,3 N [2.1 lb]	15,6 N [3.5 lb]	0,17 M/S [6.7 in/S]	1,7 mm/S [0.067 in/S]	250
GL**20C GL**22C GL**24C GL**32C	SNAP ACTION CONTACTS DOUBLE POLE 	11-12, 21-22 13-14, 23-24	0 15 18.3** 1.8 Differential travel	> <	9,3 N [2.1 lb]	21,4 N [4.8 lb]	0,17 M/S [6.7 in/S]	1,7 mm/S [0.067 in/S]	250
GL**21C GL**25C GL**28C GL**31C	STEP 1 STEP 2 SNAP ACTION CONTACTS DOUBLE POLE SEQUENTIAL 	11-12 13-14 21-22 23-24	0 15 16.9 1.4 Differential travel	> <	9,3 N [2.1 lb]	n/a	0,17 M/S [6.7 in/S]	1,7 mm/S [0.067 in/S]	250

# Installation Instructions for MICRO SWITCH GLS Limit Switches

**Figure 11. Head Code: D  
Top Roller Lever Pin Actuation Operating Characteristics**



**Notes:**

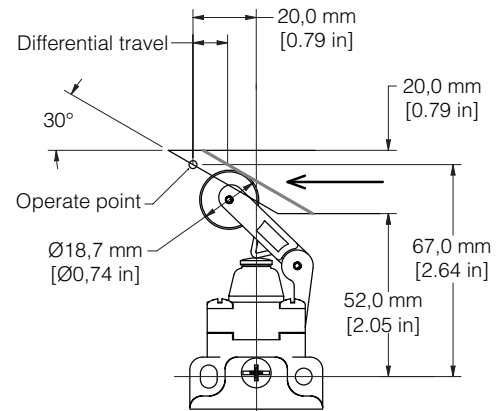
- Free position, operate point, overtravel, and pretravel all to EN50041
- Refer to page 5 for instructions on how to read operating characteristics and specifications

Catalog listing	Contact block diagram	Nominal travels and related terminals			Operating force max.	Disconnect force, max.	Operating velocity, max.	Operating velocity, min.	Max. operate frequency ops/min
		■ Contact Closed	□ Contact Open	▨ Diff. Travel					
GL**01D GL**07D	SNAP-ACTION CONTACTS SINGLE POLE 		9,5 N [2.1 lb]	12 N [2.7 lb]	0,17 M/S [6.7 in/S]	1,7 mm/S [0.067 in/S]	250		
GL**03D GL**33D	SLOW ACTING BREAK BEFORE MAKE 		9,5 N [2.1 lb]	12 N [2.7 lb]	0,17 M/S [6.7 in/S]	1,7 mm/S [0.067 in/S]	250		
GL**04D GL**34D	SLOW ACTING MAKE BEFORE BREAK 		9,5 N [2.1 lb]	12 N [2.7 lb]	0,17 M/S [6.7 in/S]	1,7 mm/S [0.067 in/S]	250		
GL**05D GL**35D	SLOW ACTING 		9,5 N [2.1 lb]	12 N [2.7 lb]	0,17 M/S [6.7 in/S]	1,7 mm/S [0.067 in/S]	250		
GL**06D GL**36D	SLOW ACTING 		9,5 N [2.1 lb]	12 N [2.7 lb]	0,17 M/S [6.7 in/S]	1,7 mm/S [0.067 in/S]	250		
GL**20D GL**22D GL**24D GL**32D	SNAP ACTION CONTACTS DOUBLE POLE 		9,5 N [2.1 lb]	16,4 N [3.7 lb]	0,17 M/S [6.7 in/S]	1,7 mm/S [0.067 in/S]	250		
GL**21D GL**25D GL**28D GL**31D	STEP 1 STEP 2 SNAP ACTION CONTACTS DOUBLE POLE SEQUENTIAL 		9,5 N [2.1 lb]	n/a	0,17 M/S [6.7 in/S]	1,7 mm/S [0.067 in/S]	250		

# Installation Instructions for MICRO SWITCH GLS Limit Switches

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**Figure 12. Head Code: D  
Top Roller Lever Cam Actuation  
per EN50041 Operating Characteristics**



**Notes:**

- Free position, operate point, overtravel, and pretravel all to EN50041
- Refer to page 5 for instructions on how to read operating characteristics and specifications

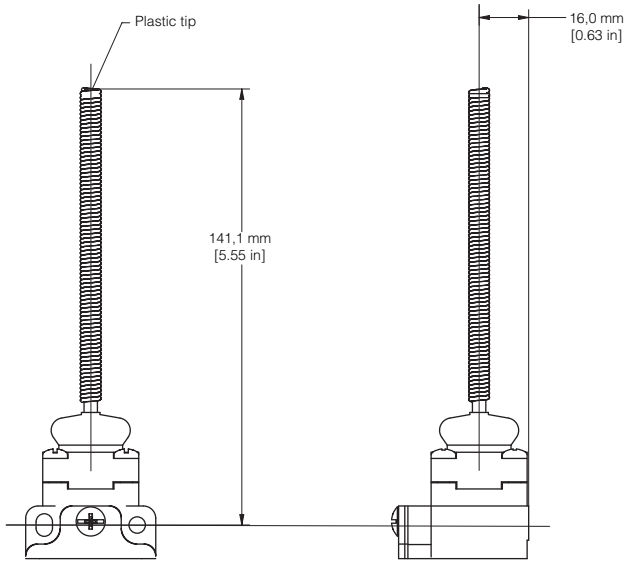
Catalog listing	Contact block diagram	Nominal travels and related terminals			Operating force max.	Disconnect force max.	Operating velocity, max.	Operating velocity, min.	Max. operate frequency ops/min
		 Contact Closed    Contact Open    Diff. Travel **Positive Opening to IEC 947-5-1							
GL**01D GL**07D	SNAP-ACTION CONTACTS SINGLE POLE 	 0 20 29.1** 21-22 13-14 4.1 Differential travel	5,5 N [1.2 lb]	7,0 N [1.6 lb]	0,29 M/S [11.4 in/S]	2.9 mm/S [0.11 in/S]	250		
GL**03D GL**33D	SLOW ACTING BREAK BEFORE MAKE 	 0 20** 21-22 13-14 24.1	5,5 N [1.2 lb]	7,0 N [1.6 lb]	0,29 M/S [11.4 in/S]	2.9 mm/S [0.11 in/S]	250		
GL**04D GL**34D	SLOW ACTING MAKE BEFORE BREAK 	 0 24.1** 21-22 13-14 20	5,5 N [1.2 lb]	9,6 N [2.2 lb]	0,29 M/S [11.4 in/S]	2.9 mm/S [0.11 in/S]	250		
GL**05D GL**35D	SLOW ACTING 	 0 24.1 13-14 23-24	5,5 N [1.2 lb]	7,0 N [1.6 lb]	0,29 M/S [11.4 in/S]	2.9 mm/S [0.11 in/S]	250		
GL**06D GL**36D	SLOW ACTING 	 0 20** 11-12 21-22	5,5 N [1.2 lb]	7,0 N [1.6 lb]	0,29 M/S [11.4 in/S]	2.9 mm/S [0.11 in/S]	250		
GL**20D GL**22D GL**24D GL**32D	SNAP ACTION CONTACTS DOUBLE POLE 	 0 20 29.1** 11-12, 21-22 13-14, 23-24 4.1 Differential travel	5,5 N [1.2 lb]	7,0 N [1.6 lb]	0,29 M/S [11.4 in/S]	2.9 mm/S [0.11 in/S]	250		
GL**21D GL**25D GL**28D GL**31D	STEP 1 STEP 2 SNAP ACTION CONTACTS DOUBLE POLE SEQUENTIAL 	 0 20 25.5 11-12 13-14 21-22 23-24 3.7 Differential travel 3.7 Differential travel	5,5 N [1.2 lb]	n/a	0,29 M/S [11.4 in/S]	2.9 mm/S [0.11 in/S]	250		

# Installation Instructions for MICRO SWITCH GLS Limit Switches

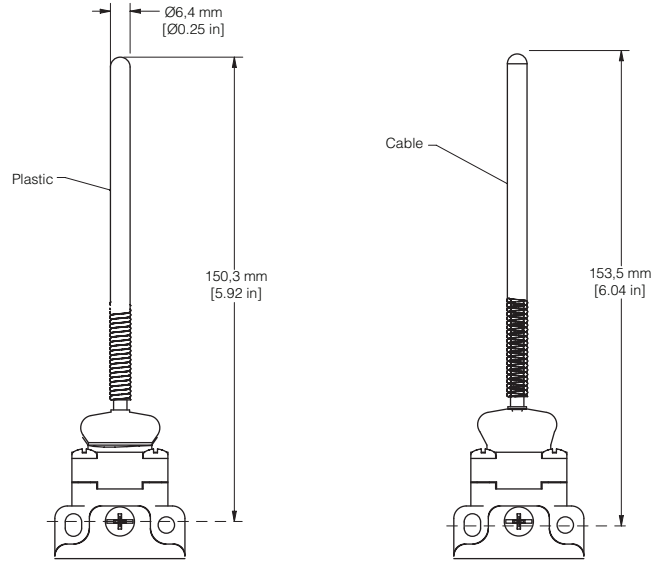
ISSUE 5 **81501**

## Head Code: E • WOBBLE AND CAT WHISKER ACTUATOR DIMENSIONS

**Figure 13. Coil Actuator**



**Figure 14. Plastic Rod and Flexible Cable**

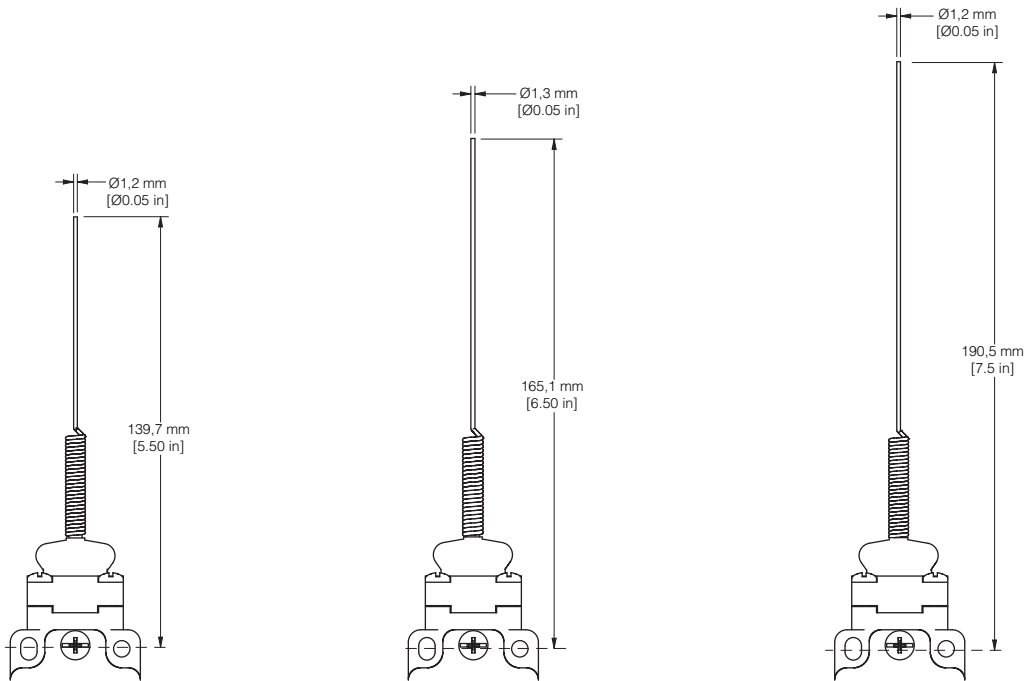


**Figure 15. Cat Whisker Wobbles**

**5.5 inches (stainless steel)**

**6.5 inches (stainless steel)**

**7.5 inches (stainless steel)**

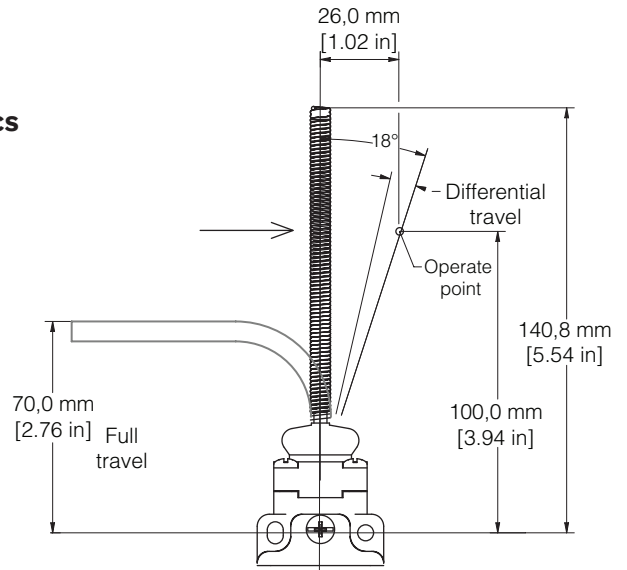




# Installation Instructions for MICRO SWITCH GLS Limit Switches

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**Figure 16. Head Code: E**  
**Wobble Stick Angular Actuation Operating Characteristics**



**Notes:**

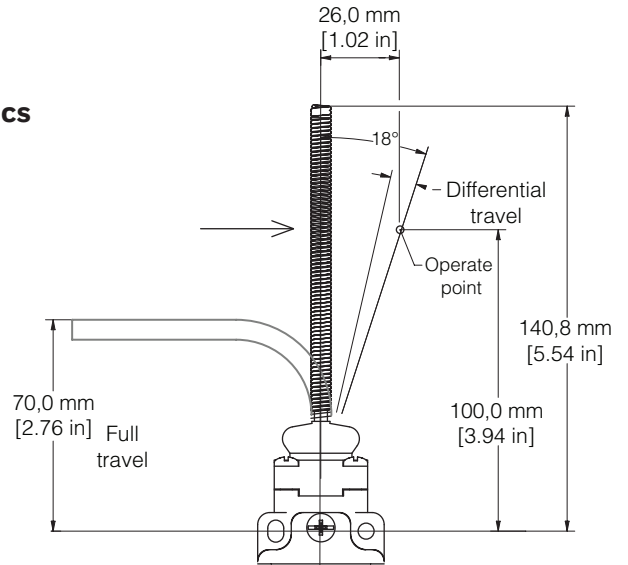
- Free position, operate point, overtravel, and pretravel all to EN50041
- Refer to page 5 for instructions on how to read operating characteristics and specifications

Catalog listing	Contact block diagram	Nominal travels and related terminals ■ Contact Closed    □ Contact Open    ▨ Diff. Travel **Positive Opening to IEC 947-5-1	Operating force max.	Disconnect force, max.	Operating degrees, max.	Operating velocity, min.	Max. operate rate cycles/min
GL**01K GL**07K	SNAP-ACTION CONTACTS SINGLE POLE 	21-22 18° 13-14 8° Differential travel	0,1 N [0.9 lb]	n/a	360°	8°	100
GL**03K GL**33K	SLOW ACTING BREAK BEFORE MAKE 	21-22 18° 13-14 25°	0,1 N [0.9 lb]	n/a	360°	8°	100
GL**04K GL**34K	SLOW ACTING MAKE BEFORE BREAK 	21-22 25° 13-14 18°	0,1 N [0.9 lb]	n/a	360°	8°	100
GL**05K GL**35K	SLOW ACTING 	13-14 25° 23-24	0,1 N [0.9 lb]	n/a	360°	8°	100
GL**06K GL**36K	SLOW ACTING 	11-12 18° 21-22	0,1 N [0.9 lb]	n/a	360°	8°	100
GL**20K GL**22K GL**24K GL**32K	SNAP ACTION CONTACTS DOUBLE POLE 	11-12, 21-22 18° 13-14, 23-24 8° Differential travel	0,1 N [0.9 lb]	n/a	360°	8°	100

# Installation Instructions for MICRO SWITCH GLS Limit Switches

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**Figure 17. Head Code: K  
Wobble Stick Angular Actuation Operating Characteristics**



**Notes:**

- Free position, operate point, overtravel, and pretravel all to EN50041
- Refer to page 5 for instructions on how to read operating characteristics and specifications

Catalog listing	Contact block diagram	Nominal travels and related terminals			Operating force max.	Disconnect force, max.	Operating velocity, max.	Operating velocity, min.	Max. operate rate cycles/min
		■ Contact Closed	□ Contact Open	▨ Diff. Travel					
GL**01K GL**07K	SNAP-ACTION CONTACTS SINGLE POLE 	21-22 13-14	26° 12° Differential travel	> <	1,3 N [0.3 lb]	n/a	0,5 M/S [19.7 in/S]	11 mm/S [0.43 in/S]	100
GL**03K GL**33K	SLOW ACTING BREAK BEFORE MAKE 	21-22 13-14	26.5° 38.1°	> <	1,3 N [0.3 lb]	n/a	0,5 M/S [19.7 in/S]	11 mm/S [0.43 in/S]	100
GL**04K GL**34K	SLOW ACTING MAKE BEFORE BREAK 	21-22 13-14	38.1° 26.5°	> <	1,3 N [0.3 lb]	n/a	0,5 M/S [19.7 in/S]	11 mm/S [0.43 in/S]	100
GL**05K GL**35K	SLOW ACTING 	21-22 13-14	38.1°	> <	1,3 N [0.3 lb]	n/a	0,5 M/S [19.7 in/S]	11 mm/S [0.43 in/S]	100
GL**06K GL**36K	SLOW ACTING 	11-12 21-22	26.5°	> <	1,3 N [0.3 lb]	n/a	0,5 M/S [19.7 in/S]	11 mm/S [0.43 in/S]	100
GL**20K GL**22K GL**24K GL**32K	SNAP ACTION CONTACTS DOUBLE POLE 	11-12, 21-22 13-14, 23-24	26° 12° Differential travel	> <	1,3 N [0.3 lb]	n/a	0,5 M/S [19.7 in/S]	11 mm/S [0.43 in/S]	100

# Installation Instructions for MICRO SWITCH GLS Limit Switches

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## WARRANTY/REMEDY

Honeywell warrants goods of its manufacture as being free of defective materials and faulty workmanship. Honeywell's standard product warranty applies unless agreed to otherwise by Honeywell in writing; please refer to your order acknowledgement or consult your local sales office for specific warranty details. If warranted goods are returned to Honeywell during the period of coverage, Honeywell will repair or replace, at its option, 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. In no event shall Honeywell be liable for consequential, special, or indirect damages.**

While Honeywell may 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.

Specifications may change without notice. The information we supply is believed to be accurate and reliable as of this printing. However, we assume no responsibility for its use.

## GARANZIA/RISARCIMENTO

Honeywell garantisce che i propri prodotti sono esenti da difetti nei materiali e nella manodopera. Rimane valida la garanzia di prodotto standard Honeywell, se non diversamente concordato dalla stessa per iscritto. Fare riferimento alla ricevuta dell'ordine o rivolgersi all'ufficio vendite della propria zona, per ulteriori dettagli sulla garanzia. Durante il periodo di validità della garanzia, Honeywell provvederà alla riparazione o alla sostituzione, a sua discrezione e senza alcun addebito degli articoli restituiti e riscontrati difettosi. **Tale azione costituisce l'unico risarcimento per l'acquirente e sostituisce tutte le altre garanzie, esplicite o implicite, incluse quelle della commerciabilità e dell'idoneità ad uno scopo particolare. In nessun caso Honeywell è da ritenersi responsabile per danni conseguenti, speciali o indiretti.**

Honeywell fornisce assistenza in merito alle applicazioni tramite il proprio personale, il proprio materiale informativo ed il proprio sito Web; tuttavia è responsabilità del cliente verificare l'idoneità del prodotto all'applicazione.

I dati tecnici sono soggetti a modifica senza alcun preavviso. Le informazioni fornite nel presente documento sono da ritenere accurate ed affidabili. Tuttavia, Honeywell non si assume alcuna responsabilità in merito al loro impiego.

## GARANTIE UND HAFTUNGSANSPRÜCHE

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Honeywell garantit que les articles de sa fabrication sont exempts de défauts de pièces et main d'œuvre. La garantie standard sur les produits Honeywell est d'application sauf indication contraire écrite et approuvée par Honeywell. Veuillez vous reporter au récépissé de votre commande ou consulter votre bureau de vente local pour obtenir des détails spécifiques sur la garantie. Si les articles garantis sont retournés à Honeywell pendant la période de couverture, Honeywell réparera ou remplacera, à sa discrétion, gratuitement ceux qui auront été trouvés défectueux. **Ce qui précède constitue le seul recours de l'acheteur et se substitue à toutes autres garanties, explicites ou implicites, y compris celles relatives à la commercialisation ou la compatibilité avec une application particulière. Honeywell ne peut être en aucun cas tenu responsable de tout dommage indirect, spécial ou accessoire.**

Bien que nous fournissions une assistance aux applications par le biais de notre bibliographie et le site Web Honeywell, il appartient au client de déterminer l'aptitude du produit pour son application.

Les caractéristiques techniques peuvent changer sans préavis. Les informations que nous diffusons sont réputées précises et fiables au moment de leur impression. Nous n'assumons cependant aucune responsabilité pour leur usage.

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Honeywell garantiza que todos los productos que fabrica están libres de defectos de mano de obra o materiales. La garantía del producto estándar de Honeywell se aplica a menos que Honeywell haya acordado lo contrario por escrito; consulte a su confirmación de orden o a su oficina de ventas local para detalles específicos de garantía. Si se devuelven productos con garantía a Honeywell durante el período de cobertura, Honeywell los reparará o reemplazará, de manera opcional, si determina que están defectuosos. **Esta cláusula de garantía sustituye a cualquier otra garantía, ya sea explícita o implícita. En ningún caso Honeywell será responsable por daños consecuentes, especiales o indirectos.**

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Las especificaciones pueden cambiar sin previo aviso. La información suministrada es considerada correcta y fiable en el momento de esta impresión. No obstante, no asumimos la responsabilidad por su uso.

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Especificações podem ser alteradas sem aviso prévio. Acreditamos que as informações aqui contidas eram as mais precisas e confiáveis no momento da impressão desta publicação. No entanto, não assumimos qualquer responsabilidade pelo uso destas.

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## SALES AND SERVICE

Honeywell serves its customers through a worldwide network of sales offices, representatives and distributors. For application assistance, current specifications, pricing or name of the nearest Authorized Distributor, contact your local sales office or:

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Internet: [sensing.honeywell.com](http://sensing.honeywell.com)

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