



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 mm² to 2,5 mm², 18-14 AWG) or solid wire (0,75 mm² to 1,5 mm², 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 mm² a 2,5 mm², 18-14 AWG) o cable sólido (0,75 mm² a 1,5 mm², 18-16 AWG) a los terminales del conector (utilice cable de 90 °C cuando la

Installation Instructions for MICRO SWITCH GLS Limit Switches

ISSUE 5 **81501**

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 mm² ... 2,5 mm², 18 ... 14 AWG) oder Draht (0,75 mm² ... 1,5 mm², 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 mm² à 2,5 mm², 18 à 14 AWG) ou rigide (0,75 mm² à 1,5 mm², 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 mm² - 2,5 mm², 18-14 AWG) o cavi rigidi (0,75 mm²-1,5 mm², 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.

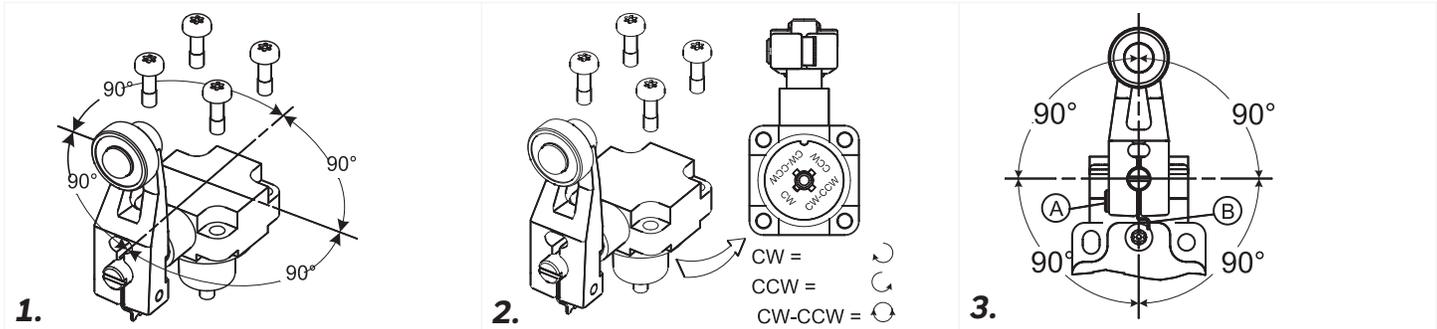
1. Consulte:
 - A página 3 para ajustes.
 - As páginas 8 e 17 para saber as distâncias de percurso específicas para cada código de switch e especificações.
 - A página 4 para ver a aplicação adequada de switches de fim de curso e dimensões de montagem dos switches.
2. Faça os ajustes necessários (se 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 mm² - 2,5 mm², 18-14 AWG) ou sólidos (0,75 mm² to 1,5 mm², 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).

Installation Instructions for MICRO SWITCH GLS Limit Switches

ISSUE 5 **81501**

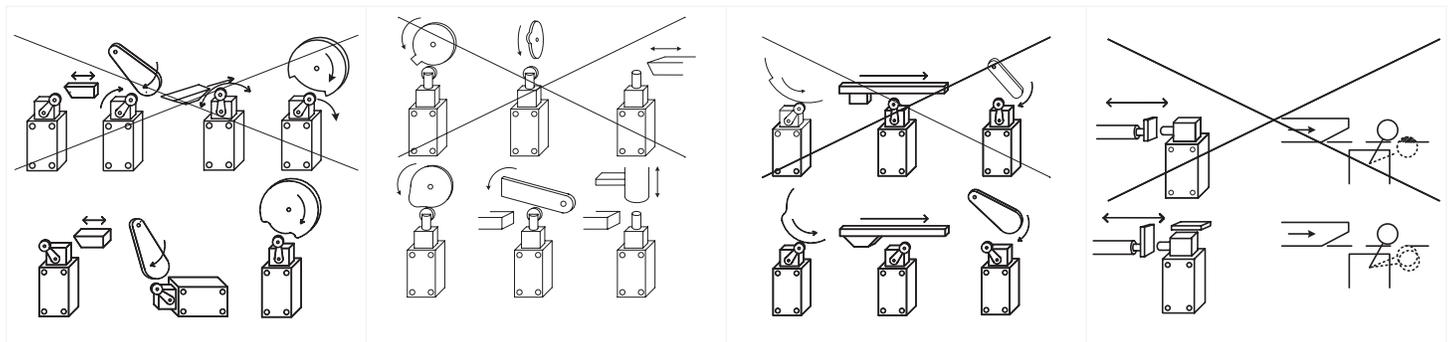
**FIELD ADJUSTABLE HEAD
FIELD VERSTELLBAREM KOPF
CAMPO TESTA REGOLABILE**

**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**

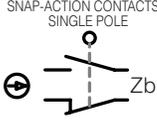
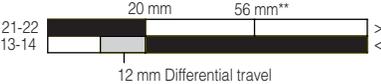
**CONDICIONES
TERMES
CONDIÇÕES**

| | | | | | |
|-----------------------------------|---------------------------------------|-----------------------------------|--|--|--------------------------------------|
| Contact Closed | Contacto cerrado | Kontakt geschlossen | Contact fermé | Contatto chiuso | Contato Fechado |
| Contact Open | Contacto abierto | Kontakt offen | Contact ouvert | Contatto aperto | Contato 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 |

Installation Instructions for MICRO SWITCH GLS Limit Switches

ISSUE 5 **81501**

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 |
| ↑ Catalog Listing Code | ↑ Contact Block Diagram Shows the circuit configuration of the internal contact block. | ↑ Operating Bar Charts Show the state of the contacts relative to the position of the actuator. | ↑ ↑ ↑ ↑ ↑ Operating Specifications | | | | |

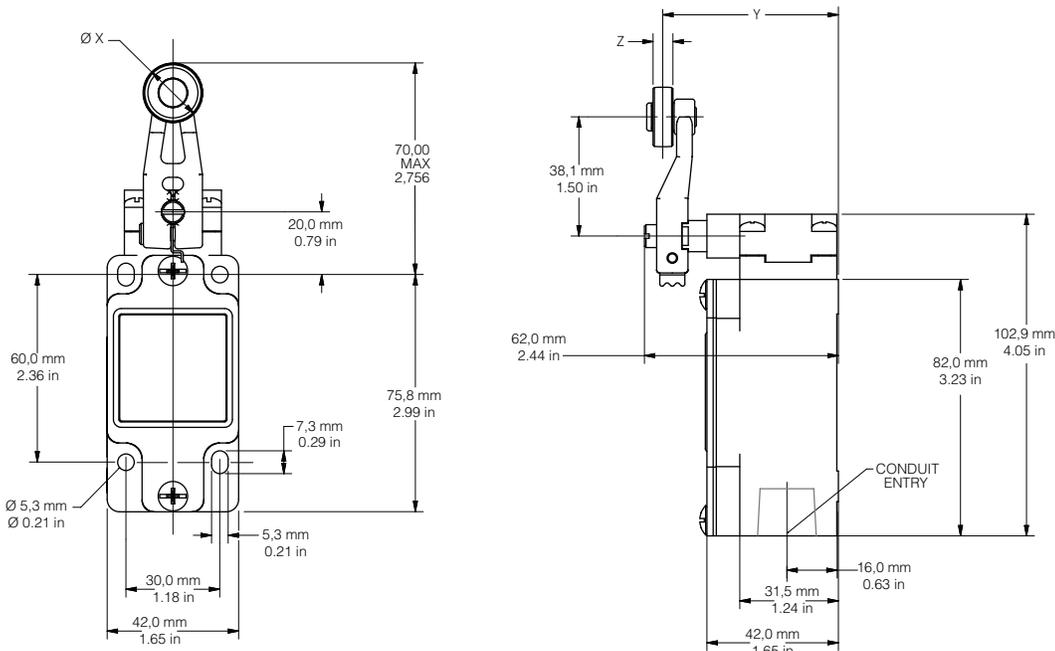
PRODUCT NOMENCLATURE

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

Installation Instructions for MICRO SWITCH GLS Limit Switches

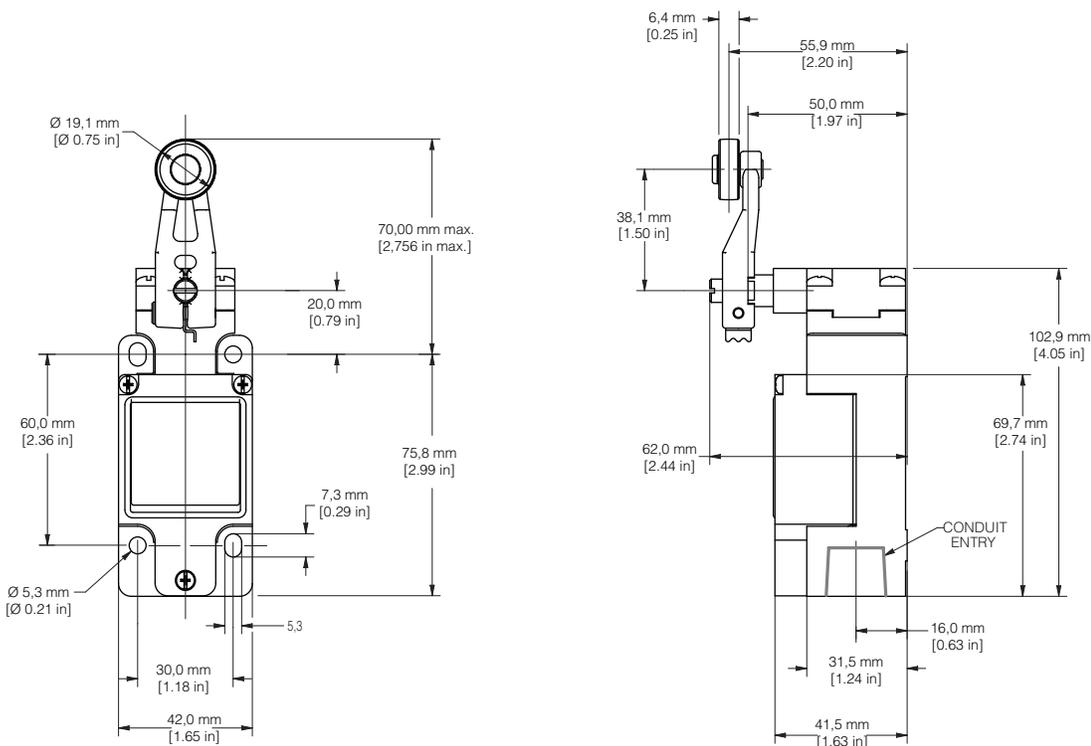
ISSUE 5 **81501**

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



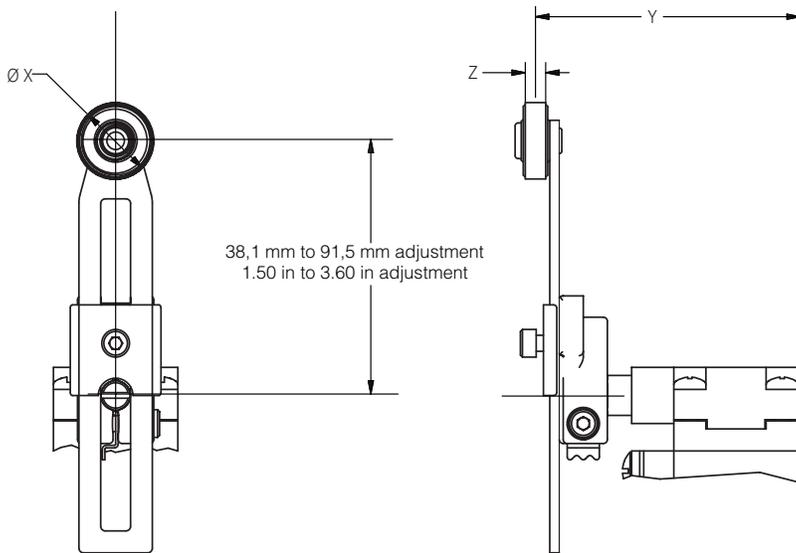
| LEVER (catalog listing) | ROLLER MATL | X DIM | Y DIM | Z DIM |
|----------------------------|--------------------|--------------|--------------|-------------|
| GLZ51A | NYLON | 19,1 .75 | 55,9 2.20 | 6,4 .25 |
| GLZ51B | STEEL | 19,1 .75 | 55,9 2.20 | 6,4 .25 |
| GLZ51C | NYLON | 24,5 1.00 | 59,1 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



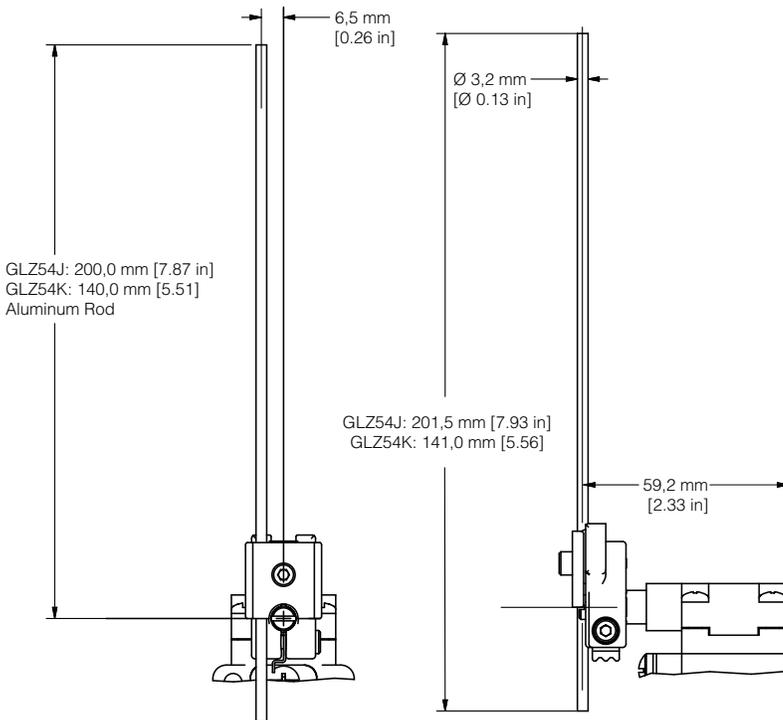
Installation Instructions for MICRO SWITCH GLS Limit Switches

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



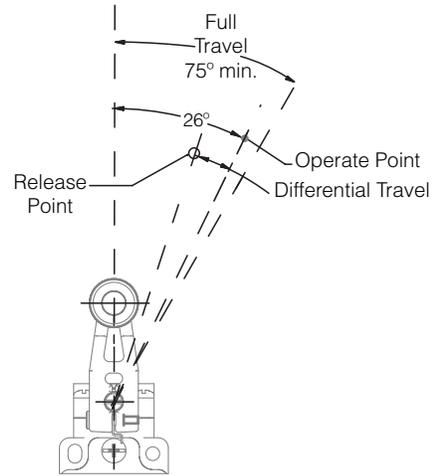
Installation Instructions for MICRO SWITCH GLS Limit Switches

ISSUE 5 **81501**

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 STEP 2 SNAP ACTION CONTACTS DOUBLE POLE SEQUENTIAL | 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 |

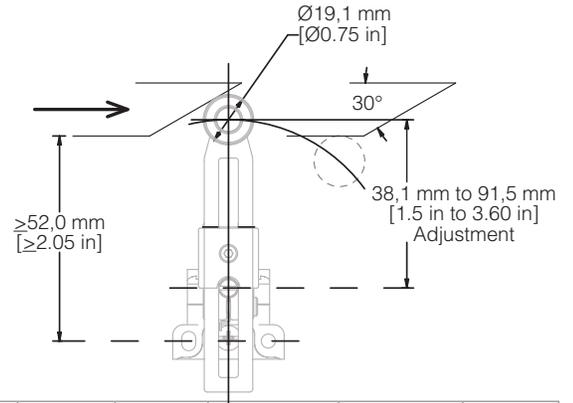
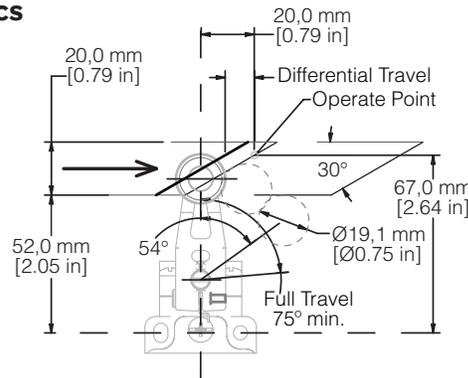
Installation Instructions for MICRO SWITCH GLS Limit Switches

ISSUE 5 **81501**

**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

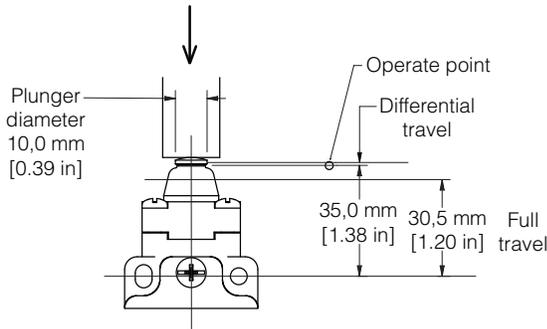


| Catalog listing | Contact block diagram | Nominal travels and related terminals | | | Operating force max. | Disconnect force, max. | Operating de-grees, max. | Operating de-grees, min. | Max. operate frequency ops/min |
|--|---|---|----------------|-----------------|----------------------|------------------------|--------------------------|--------------------------|--------------------------------|
| | | Contact Closed | Contact Open | Diff. Travel | | | | | |
| GL**01A GL**07A | SNAP-ACTION CONTACTS SINGLE POLE | 21-22: 20 mm 13-14: 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: 20 mm** 13-14: 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: 0 mm 13-14: 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: 32 mm 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: 0 mm 21-22: 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: 20 mm 13-14, 23-24: 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 SNAP ACTION CONTACTS DOUBLE POLE SEQUENTIAL | 11-12: 0 mm 13-14: 20 mm 21-22: 38.5 mm 23-24: 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: 0 mm 13-14: 16 mm 21-22: 16 mm 23-24: 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

ISSUE 5 **81501**

Figure 8. Head Code: B
Pin Plunger Operating Characteristics



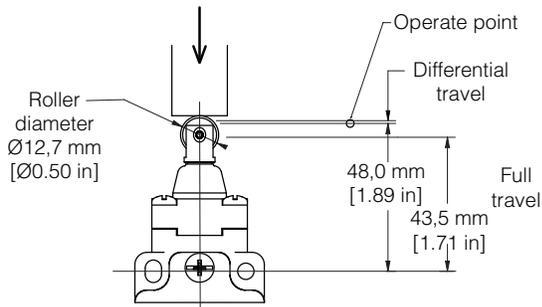
Notes:

- 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:

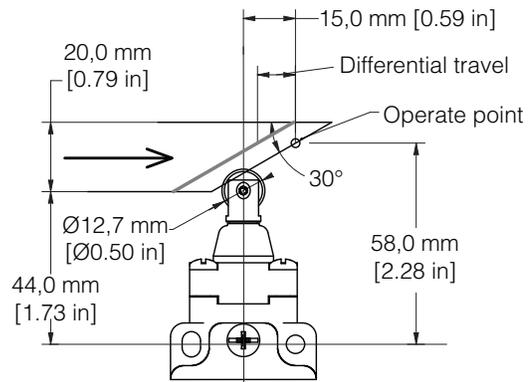
- Free position, operate point, overtravel, and pretravel all to EN50041
- Refer to page 5 for instructions on how to read operating characteristics and specifications

| 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

ISSUE 5 **81501**

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



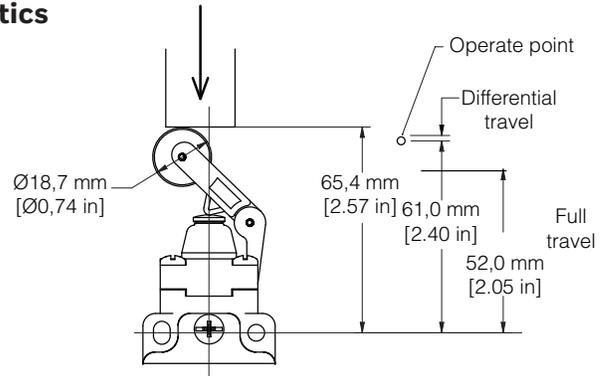
Notes:

- 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 |
|--|---|---|----------------------|------------------------|--------------------------|--------------------------|--------------------------------|
| GL**01C GL**07C | SNAP-ACTION CONTACTS SINGLE POLE | 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 | 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 | 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 | 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 | 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 | 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 | 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:

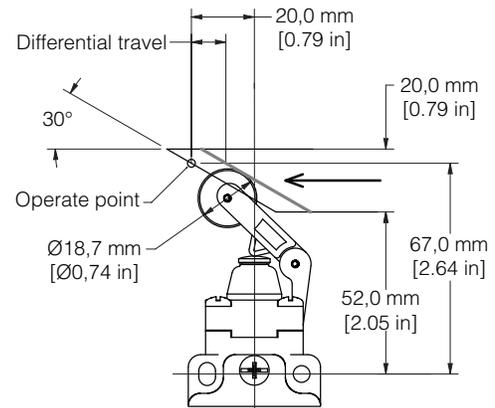
- Free position, operate point, overtravel, and pretravel all to EN50041
- Refer to page 5 for instructions on how to read operating characteristics and specifications

| 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

ISSUE 5 **81501**

**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 | | | | | |
| GL**01D GL**07D | SNAP-ACTION CONTACTS SINGLE POLE | 21-22 13-14 | 0 20 29.1** | 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 | 21-22 13-14 | 0 20** | 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 | 21-22 13-14 | 0 24.1** | 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 | 13-14 23-24 | 0 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**06D GL**36D | SLOW ACTING | 11-12 21-22 | 0 20** | | 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 | 11-12, 21-22 13-14, 23-24 | 0 20 29.1** | 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 | 11-12 13-14 21-22 23-24 | 0 20 25.5 | 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

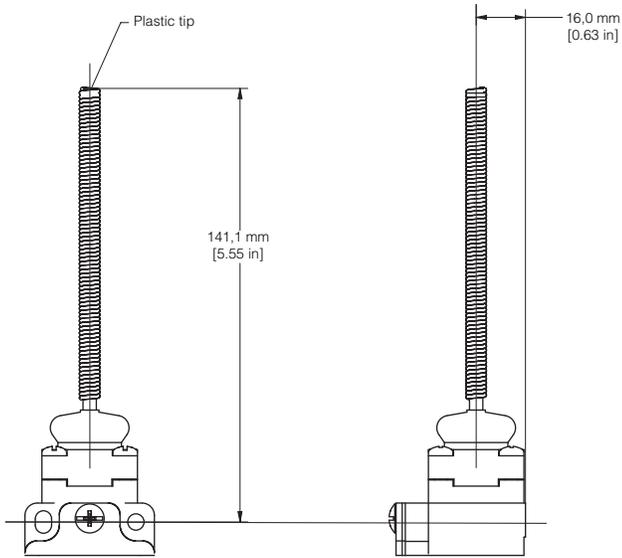


Figure 14. Plastic Rod and Flexible Cable

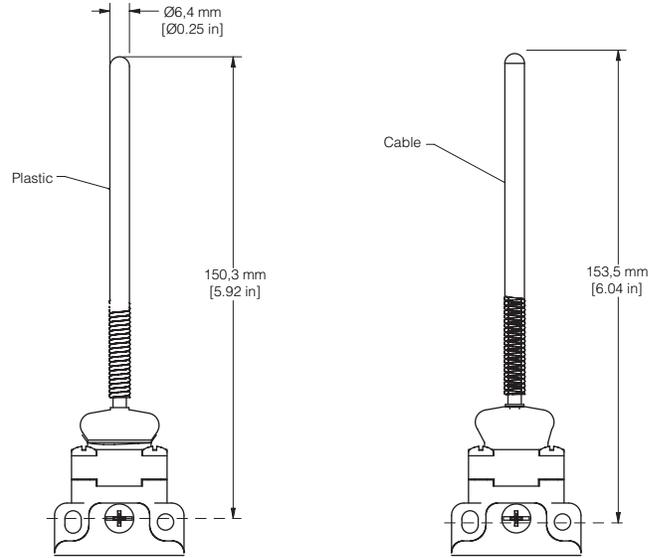
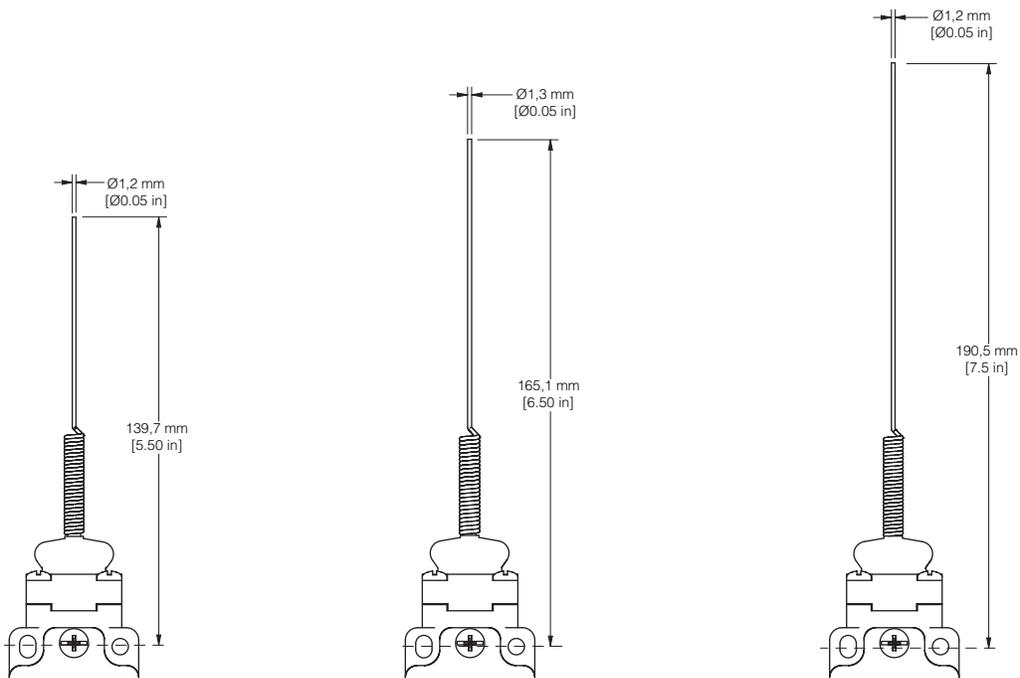


Figure 15. Cat Whisker Wobbles

5.5 inches (stainless steel)

6.5 inches (stainless steel)

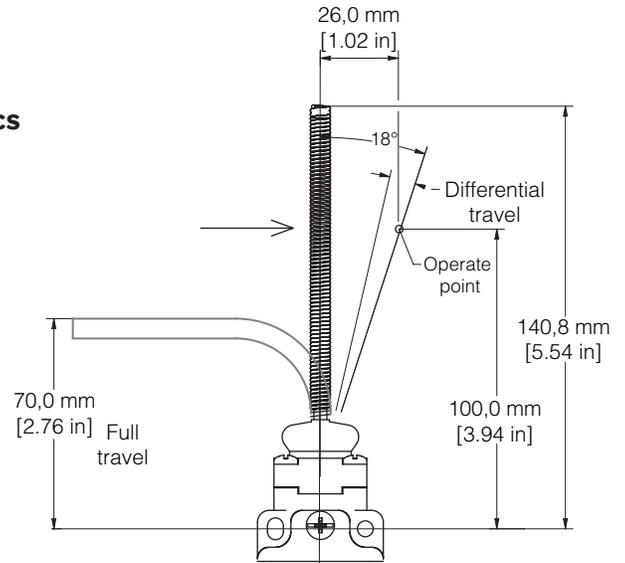
7.5 inches (stainless steel)



Installation Instructions for MICRO SWITCH GLS Limit Switches

ISSUE 5 **81501**

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



Notes:

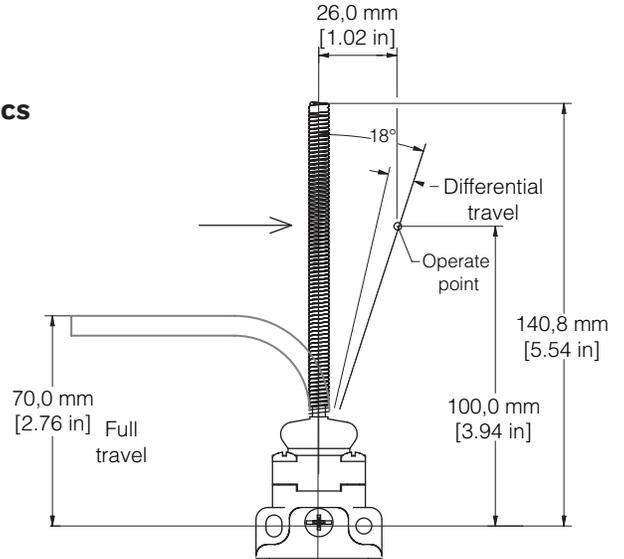
- Free position, operate point, overtravel, and pretravel all to EN50041
- Refer to page 5 for instructions on how to read operating characteristics and specifications

| Catalog listing | Contact block diagram | Nominal travels and related terminals | 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

ISSUE 5 **81501**

**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

ISSUE 5 **81501**

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

Honeywell garantiert für seine hergestellten Produkte fehlerfreies Material und Qualitätsarbeit. Es gilt die durch Honeywell schriftlich mitgeteilte Standard-Produktgarantie von Honeywell. Informationen zu Garantiedetails finden Sie auf Ihrer Auftragsbestätigung bzw. erhalten Sie von Ihrer örtlichen Niederlassung. Wenn Produkte mit Garantie innerhalb der Garantiefrist an Honeywell zurückgesendet werden, ersetzt oder repariert Honeywell die als fehlerhaft angesehenen Teile nach eigenem Ermessen kostenlos. **Das Vorgegangene gilt als einzige Entschädigung des Käufers und ersetzt alle anderen ausdrücklichen oder stillschweigenden Garantien, einschließlich Qualitäts- und Sachmängelhaftung. In keinem Fall haftet Honeywell für mittelbare, indirekte oder Sonderschäden.**

Obwohl Honeywell persönliche und schriftliche Anwendungshilfe sowie Informationen über die Honeywell Website bietet, ist es die Entscheidung des Kunden, ob das Produkt sich für die entsprechende Anwendung eignet.

Änderungen der technischen Daten ohne Vorankündigung sind vorbehalten. Die hier gegebenen Informationen sind nach unserem Wissen zum Zeitpunkt der Drucklegung korrekt. Wir übernehmen dennoch keinerlei Verantwortung für deren Verwendung.

GARANTIE/RECOURS

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.

CLAUSULA DE GARANTÍA

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.**

Aunque Honeywell ofrece asistencia personal para las aplicaciones por medio de sus publicaciones y páginas web, es el cliente quien debe determinar la idoneidad del producto en la aplicación.

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.

GARANTIA/SOLUÇÕES

A Honeywell garante seus produtos contra defeitos de material e de fabricação. A garantia padrão de produto da Honeywell se aplica a menos que haja um acordo diferente por escrito com a Honeywell; consulte a sua confirmação de encomenda ou consulte o escritório de vendas local para obter detalhes específicos da garantia. Quando produtos dentro do período de cobertura da garantia forem devolvidos à Honeywell, esta se compromete a reparar ou substituir, de acordo com a opção da empresa, por um novo aqueles produtos que consideramos defeituosos. **O acima estipulado é a única solução oferecida ao comprador e substitui quaisquer outras garantias, expressas ou implícitas, inclusive garantias de comerciabilidade e adequação a um fim específico. Em hipótese alguma a Honeywell deve ser responsabilizada por danos consequenciais, especiais ou indiretos.**

Embora a Honeywell proporcione assistência pessoal, através de literatura e de seu site na web, cabe ao cliente determinar qual produto é mais adequado à sua aplicação.

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.

Installation Instructions for MICRO SWITCH GLS Limit Switches

ISSUE 5 **81501**

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:

E-mail: info.sc@honeywell.com
Internet: sensing.honeywell.com

Phone and Fax:

| | |
|---------------|---|
| Asia Pacific | +65 6355-2828 +65 6445-3033 Fax |
| Europe | +44 (0) 1698 481481 +44 (0) 1698 481676 Fax |
| Latin America | +1-305-805-8188 +1-305-883-8257 Fax |
| USA/Canada | +1-800-537-6945 +1-815-235-6847 +1-815-235-6545 Fax |

Honeywell Sensing and Internet of Things

9680 Old Bailes Road
Fort Mill, SC 29707
honeywell.com

The Honeywell logo is displayed in a bold, red, sans-serif font.

81501-5-EN IL50 GLO Printed in USA.
June 2017
© 2017 Honeywell International Inc. All rights reserved.