

Installation Instructions for the GLL Series Limit Switch




⚠ WARNING

PERSONAL INJURY

- Where possible, install these switches with the conduit opening pointed down to drain moisture away from switch.
- Do not install switch at the low point of a conduit run.
- Install a fitting into the conduit opening that provides strain relief to the wires/cable, as well as sealing against contaminants found in the application.
- In applications where fluids or moisture may be present, seal the fitting threads with a product such as Teflon tape or pipe dope.

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

GENERAL INFORMATION

1. Refer to page 2 for specifications.
2. Rotate switch head to desired position (90° increments). Review adjusting instructions below.
3. Mount switch using two M4 or #8 screws (not included). Torque screws to mounting surface 4,9 N m to 5,9 N m [43.4 in lb to 52.2 in lb].
4. All Normally Closed (NC) contacts are Direct Opening. 

ADJUSTMENT INSTRUCTIONS

To give flexibility in application, the user can perform the adjustments described below in any order before wiring the unit.

ACTUATOR HEAD POSITIONING

The actuator head may be positioned in any of four directions.

1. Remove the four head retaining screws while holding actuator head in place.
2. To prevent actuator spring loss, remove head slowly to relieve spring tension prior to removal.
3. Rotate actuator head to desired position.
4. Position the large diameter end of the actuator spring over the actuator. Place retaining screws through gasket material and position head over screw holes in desired position.
5. Securely tighten the screws to 0,2 N m [1.7 in lb] of torque.

POSITIONING LEVER

The lever on rotary actuated units is adjustable to any of the segmented positions 360° around the shaft; however, the degree of rotation is dependant on head position and direction of roller.

1. Loosen the lever retaining screw with a Phillips head screwdriver.
2. Remove lever.
3. Reposition lever to desired location.
4. Securely tighten screw.

REVERSING THE ROLLER LEVER

The roller arm may be reversed to face the roller to the inside or outside of the arm.

ADJUSTABLE LENGTH LEVERS

1. Loosen the lever's adjustment screw using a Phillips head screwdriver.
2. Adjust to desired length.
3. Securely tighten adjustment screw to 1.0 N m [8.85 in lb] of torque.

TOP ROLLER PLUNGER

Switches with top roller plunger must be mounted with plunger in desired position. Actuating device must not exceed over travel distance.

WIRING


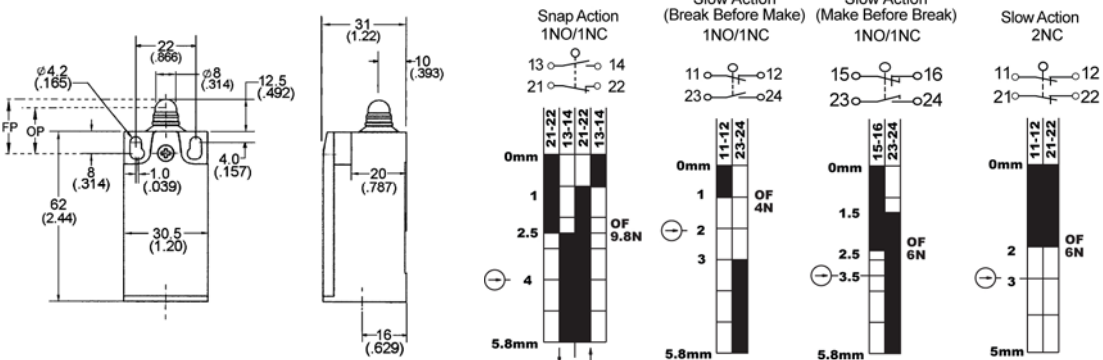

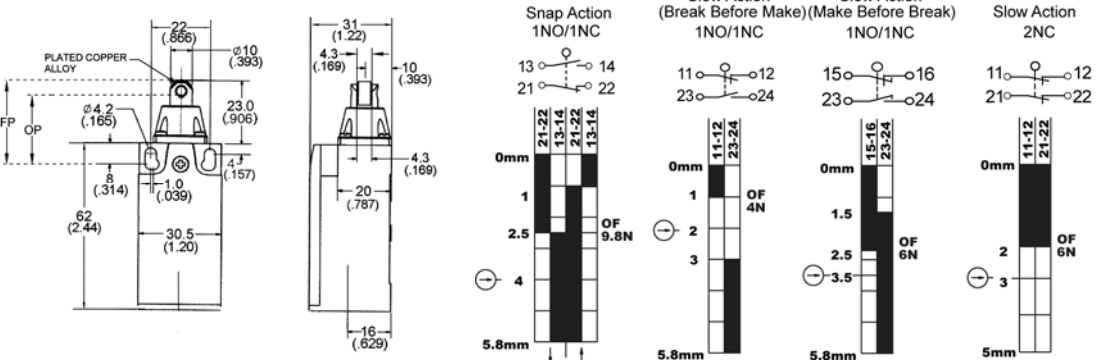
1. Remove front cover plate screw.
2. Contact block area by terminal screw is labeled for NO (Normally Open) and NC (Normally Closed) contacts.
3. Connect stranded wire (0,75 mm² - 2,5 mm², 18 AWG-14 AWG) or solid wire (0,75 mm² - 1,5 mm², 18 AWG-16 AWG) to desired connector terminals. Use 90 °C [194 °F] rated wire when ambient temperature is to exceed 75 °C [158 °F]:
 - Torque switch terminal screws to 0,8 N m to 1,0 N m [7.1 in lb to 8.9 in lb]
4. Securely tighten cover screw to 0,5 N m [4.4 in lb] of torque.

GLL Series Limit Switch

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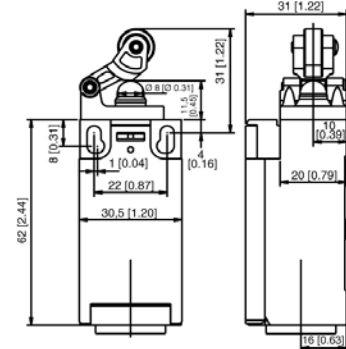
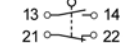
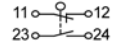


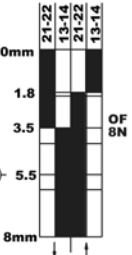
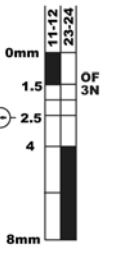
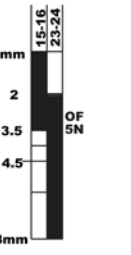
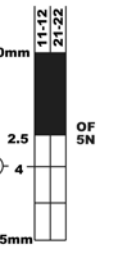
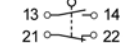
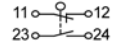


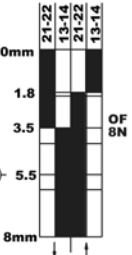
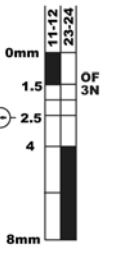
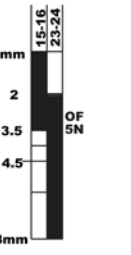
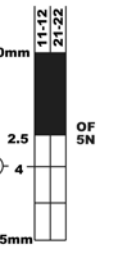
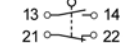
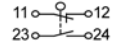


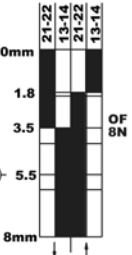
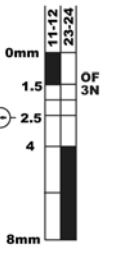
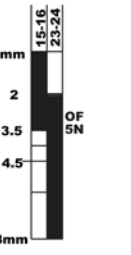
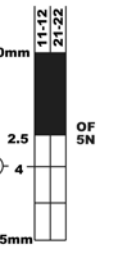

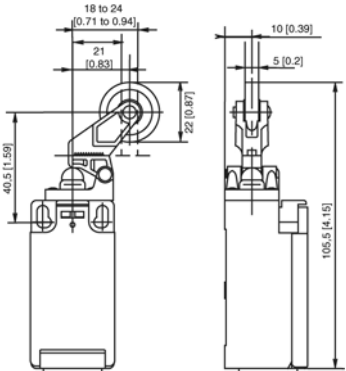
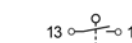
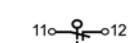
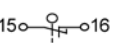
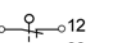
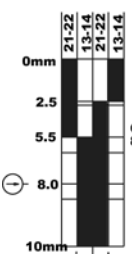
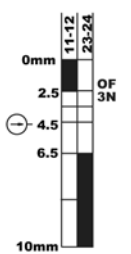
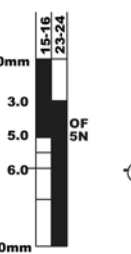
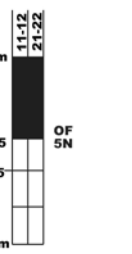
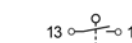
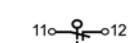
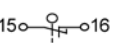
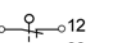
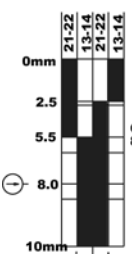
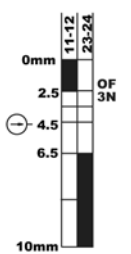
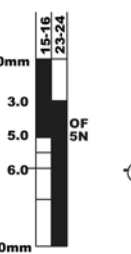
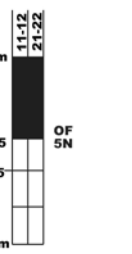
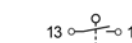
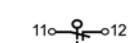
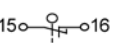
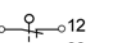
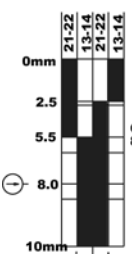
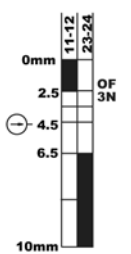
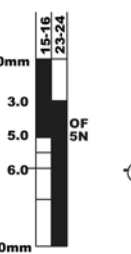
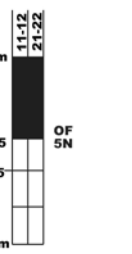

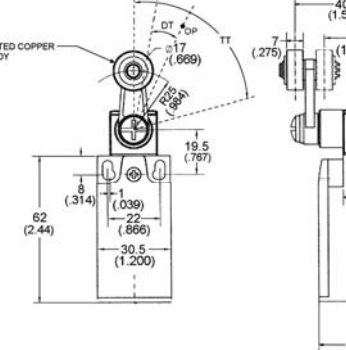
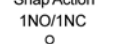
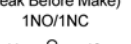
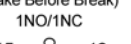
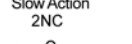

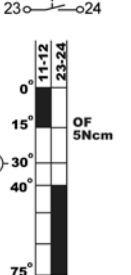
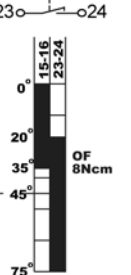
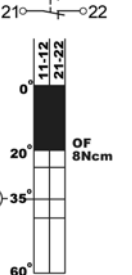
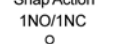
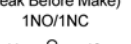
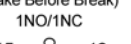
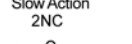

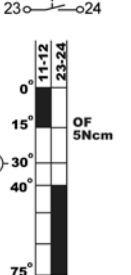
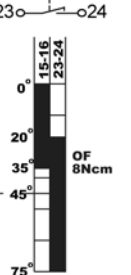
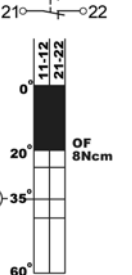
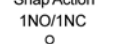
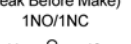
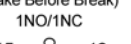
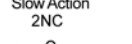

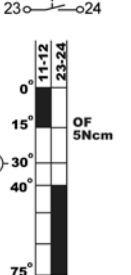
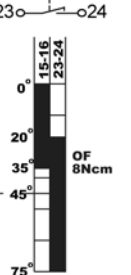
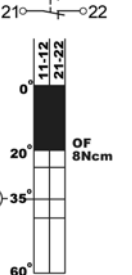

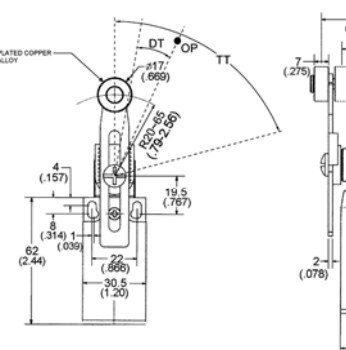
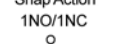
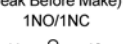
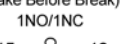
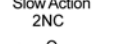
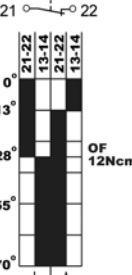
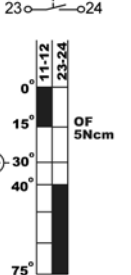
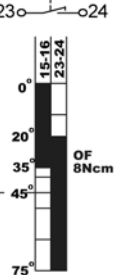
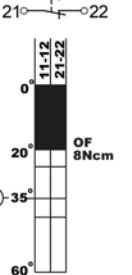
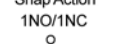
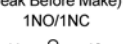
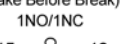
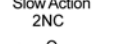
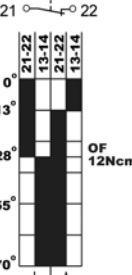
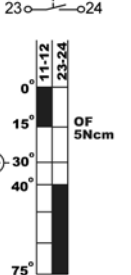
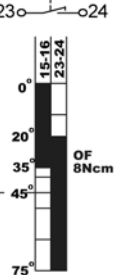
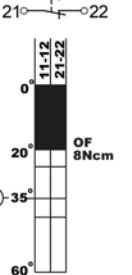
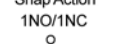
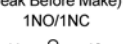
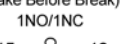
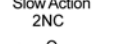
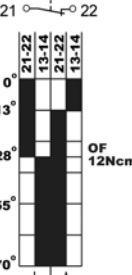
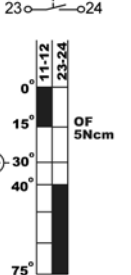
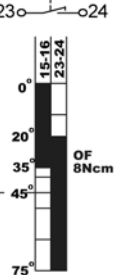
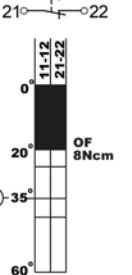
SPECIFICATION DATA

Circuitry	1 NO 1 NC direct opening snap action, slow action (BBM), slow action (MBB); 2NC slow action
Ampere rating	10 A (Thermal)
Supply voltage	300 Vac and 250 Vdc max.
Housing material	Plastic
Termination type	12,7 mm [0.5 in] conduit; 20 mm [0.79 in] conduit
Housing type	EN 50047
Shock	50 g per PEC 68-2-27c (w/o actuator)
Vibration	10 g per IEC 68-2-6 (w/o actuator)
Sealing	IP65, NEMA 1, 12, 13
Approvals	c-UL-US, CE, CCC
Mechanical life	5 million operations
Operating temperature range	-10 °C to 80 °C [14 °F to 176 °F]

<p>GLLA**B, GLLC**B</p> 	 <p>Technical drawings showing dimensions for GLLA**B, GLLC**B:</p> <ul style="list-style-type: none"> Top view: $\phi 4.2$ (.165), 22 (.866), $\phi 8$ (.314), 12.5 (.492), 8 (.314), 1.0 (.039), 4.0 (.157), 62 (2.44), 30.5 (1.20) Side view: 31 (1.22), 10 (.393), 20 (.787), 16 (.629) <p>Terminal diagrams for GLLA**B, GLLC**B:</p> <ul style="list-style-type: none"> Snap Action 1NO/1NC: 13-14, 21-22, 21-22, 13-14, 13-14, OF 9.8N, 5.8mm Slow Action (Break Before Make) 1NO/1NC: 11-12, 23-24, 11-12, 23-24, OF 4N, 5.8mm Slow Action (Make Before Break) 1NO/1NC: 15-16, 23-24, 15-16, 23-24, OF 6N, 5.8mm Slow Action 2NC: 11-12, 21-22, 11-12, 21-22, OF 6N, 5mm
<p>GLLA**C, GLLC**C</p> 	 <p>Technical drawings showing dimensions for GLLA**C, GLLC**C:</p> <ul style="list-style-type: none"> Top view: $\phi 4.2$ (.165), 22 (.866), $\phi 10$ (.393), 23.0 (.906), 8 (.314), 1.0 (.039), 4.3 (.157), 62 (2.44), 30.5 (1.20) Side view: 31 (1.22), 4.3 (.169), 10 (.393), 20 (.787), 4.3 (.169), 16 (.629) <p>Terminal diagrams for GLLA**C, GLLC**C:</p> <ul style="list-style-type: none"> Snap Action 1NO/1NC: 13-14, 21-22, 21-22, 13-14, 13-14, OF 9.8N, 5.8mm Slow Action (Break Before Make) 1NO/1NC: 11-12, 23-24, 11-12, 23-24, OF 4N, 5.8mm Slow Action (Make Before Break) 1NO/1NC: 15-16, 23-24, 15-16, 23-24, OF 6N, 5.8mm Slow Action 2NC: 11-12, 21-22, 11-12, 21-22, OF 6N, 5mm


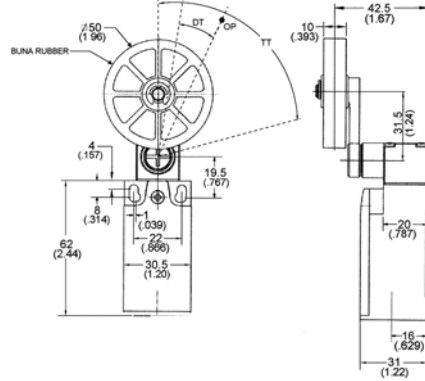
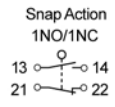
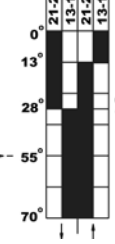
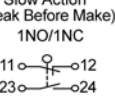
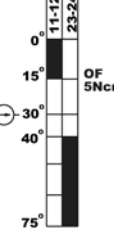
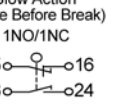
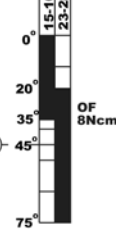
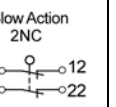
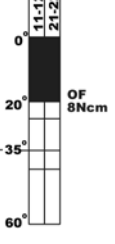

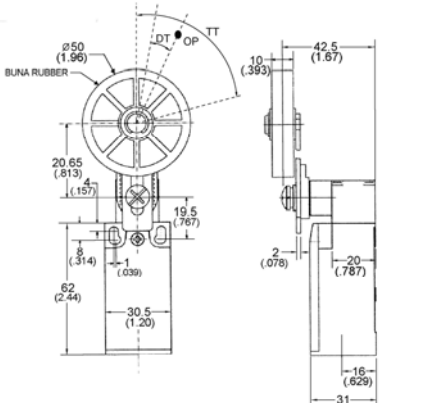
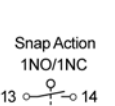
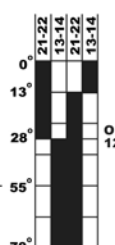
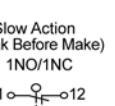
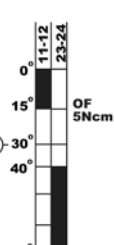
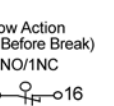
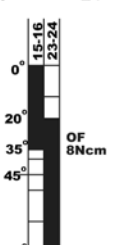
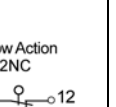
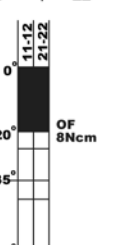

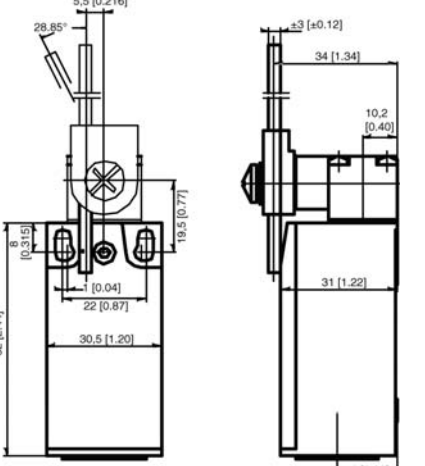

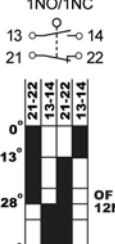

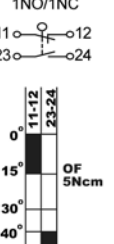

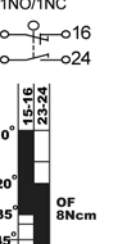
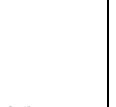
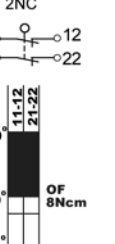
GLL Series Limit Switch

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<p>GLLA**D, GLLC**D</p> 		<table border="0"> <tr> <td style="text-align: center;"> <p>Snap Action 1NO/1NC</p>  </td> <td style="text-align: center;"> <p>Slow Action (Break Before Make)(Make Before Break) 1NO/1NC</p>  </td> <td style="text-align: center;"> <p>Slow Action (Make Before Break) 1NO/1NC</p>  </td> <td style="text-align: center;"> <p>Slow Action 2NC</p>  </td> </tr> <tr> <td style="text-align: center;">  </td> <td style="text-align: center;">  </td> <td style="text-align: center;">  </td> <td style="text-align: center;">  </td> </tr> </table>	<p>Snap Action 1NO/1NC</p> 	<p>Slow Action (Break Before Make)(Make Before Break) 1NO/1NC</p> 	<p>Slow Action (Make Before Break) 1NO/1NC</p> 	<p>Slow Action 2NC</p> 				
<p>Snap Action 1NO/1NC</p> 	<p>Slow Action (Break Before Make)(Make Before Break) 1NO/1NC</p> 	<p>Slow Action (Make Before Break) 1NO/1NC</p> 	<p>Slow Action 2NC</p> 							
										
<p>GLLA**F, GLLC**F</p> 		<table border="0"> <tr> <td style="text-align: center;"> <p>Snap Action 1NO/1NC</p>  </td> <td style="text-align: center;"> <p>Slow Action (Break Before Make)(Make Before Break) 1NO/1NC</p>  </td> <td style="text-align: center;"> <p>Slow Action (Make Before Break) 1NO/1NC</p>  </td> <td style="text-align: center;"> <p>Slow Action 2NC</p>  </td> </tr> <tr> <td style="text-align: center;">  </td> <td style="text-align: center;">  </td> <td style="text-align: center;">  </td> <td style="text-align: center;">  </td> </tr> </table>	<p>Snap Action 1NO/1NC</p> 	<p>Slow Action (Break Before Make)(Make Before Break) 1NO/1NC</p> 	<p>Slow Action (Make Before Break) 1NO/1NC</p> 	<p>Slow Action 2NC</p> 				
<p>Snap Action 1NO/1NC</p> 	<p>Slow Action (Break Before Make)(Make Before Break) 1NO/1NC</p> 	<p>Slow Action (Make Before Break) 1NO/1NC</p> 	<p>Slow Action 2NC</p> 							
										
<p>GLLA**A1B, GLLC**A1B</p> 		<table border="0"> <tr> <td style="text-align: center;"> <p>Snap Action 1NO/1NC</p>  </td> <td style="text-align: center;"> <p>Slow Action (Break Before Make) 1NO/1NC</p>  </td> <td style="text-align: center;"> <p>Slow Action (Make Before Break) 1NO/1NC</p>  </td> <td style="text-align: center;"> <p>Slow Action 2NC</p>  </td> </tr> <tr> <td style="text-align: center;">  </td> <td style="text-align: center;">  </td> <td style="text-align: center;">  </td> <td style="text-align: center;">  </td> </tr> </table>	<p>Snap Action 1NO/1NC</p> 	<p>Slow Action (Break Before Make) 1NO/1NC</p> 	<p>Slow Action (Make Before Break) 1NO/1NC</p> 	<p>Slow Action 2NC</p> 				
<p>Snap Action 1NO/1NC</p> 	<p>Slow Action (Break Before Make) 1NO/1NC</p> 	<p>Slow Action (Make Before Break) 1NO/1NC</p> 	<p>Slow Action 2NC</p> 							
										
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<p>Snap Action 1NO/1NC</p> 	<p>Slow Action (Break Before Make) 1NO/1NC</p> 	<p>Slow Action (Make Before Break) 1NO/1NC</p> 	<p>Slow Action 2NC</p> 							
										


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<p>GLLA**A1Y, GLLC**A1Y</p> 		<p>Snap Action 1NO/1NC</p>  	<p>Slow Action (Break Before Make) 1NO/1NC</p>  	<p>Slow Action (Make Before Break) 1NO/1NC</p>  	<p>Slow Action 2NC</p>  
<p>GLLA**A2Y, GLLC**A2Y</p> 		<p>Snap Action 1NO/1NC</p>  	<p>Slow Action (Break Before Make) 1NO/1NC</p>  	<p>Slow Action (Make Before Break) 1NO/1NC</p>  	<p>Slow Action 2NC</p>  
<p>GLLA**A4J, GLLC**A4J</p> 		<p>Snap Action 1NO/1NC</p>  	<p>Slow Action (Break Before Make) 1NO/1NC</p>  	<p>Slow Action (Make Before Break) 1NO/1NC</p>  	<p>Slow Action 2NC</p>  

WARNING

IF USED IN APPLICATIONS CONCERNING HUMAN SAFETY

- Only use NC direct opening (“positive opening”/“positive break”) contacts, identified by the symbol .
- Do NOT use flexible/adjustable actuators. Only use actuators designed for safety applications.
- Do NOT defeat, tamper, remove, or bypass this switch.
- Hazardous voltage, disconnect power before servicing.
- Strictly adhere to all installation and maintenance instructions.
- Consult with local safety agencies and their requirements when designing a machine-control link, interface and all control elements that affect safety.

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

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

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.

WARNING

MISUSE OF DOCUMENTATION

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

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

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: www.honeywell.com/sensing

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