

GKR/GKL Series

Dual Entry Solenoid Key Operated Safety Interlock Switch

FEATURES

- Side or top key entry
- Solenoid power to lock or power to unlock
- Separate switches for key position and lock status
- Many other options available
- Available with two NC/NO, two 3 NC/1 NO or two 4 NC contact blocks
- 100 mm / 3.94 in x 100 mm / 3.94 in mounting
- Choice of four heavy duty keys
- Key retain force 1000 N max.
- IP 68 (NEMA 6P)
- Wide range of solenoid voltages available
- Dual LEDs
- UL listed / CSA certified / CE marked
- Red body colour
- Connectorised versions available upon request
- Fluorocarbon sealed enclosure available

BENEFITS

- Allows up to eight different key entry positions
- Flexibility of design
- Switch configuration exactly matches need
- Standard mounting centres
- Key mounting flexibility and security
- Suitable for harsh duty environments
- Operates at standard control voltage
- Use this product anywhere in the world
- Immediately recognisable in the application as a safety component

TYPICAL APPLICATIONS

- Automotive factory floor
- Machine tools sliding doors
- Metalworking machines sliding or hinged doors
- Special purpose machinery cage guarded sliding or hinged doors
- Robotics assembly cells cage guarded sliding or hinged doors
- Plastic moulding machines sliding doors



(Pending)



GKR/GKL

The GKR (head to the right) and GKL (head to the left) products offer the user an unrivalled range of standard options.

The GKR/GKL product is a key actuated device incorporating a key trapping mechanism. The switch is used on machinery where instant stop and access to the machinery is either impossible (due to the momentum of the machine) or impractical (due to tool or machine damage or scrapped product if the current machine cycle is interrupted).

The switch incorporates a manual override feature which allows removal of the key for emergency access.

Over 1000 options are available in a simple to understand part number tree.

A safety lockout device is also available for use with the GKR/GKL Series. The lockout device (GKZL2) is specifically designed to prevent a key from being inserted either manually, or by the access door being closed while maintenance personnel are working on the machine. When inserted, the lockout device can accommodate up to four padlocks to prevent unauthorised removal of the device.

WARNING

MISUSE OF DOCUMENTATION

- The information presented in this product sheet (or catalogue) is for reference only. DO NOT USE this document as system installation information.
- 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.

GKR/GKL - Dual Entry Solenoid Key Operated Safety Interlock

Technical data

Mechanical life Up to 1 million operations

Degree of protection IP 68
NEMA/UL Type 1,4, 6P, 12, 13

Temperature range Operating: -25 °C to 40 °C / -13 °F to 104 °F

Approvals* IEC 60947-5-1 EN 60947-5-1
Ac15 A300/A600
Dc13 Q300
UL Listed
CSA Certified

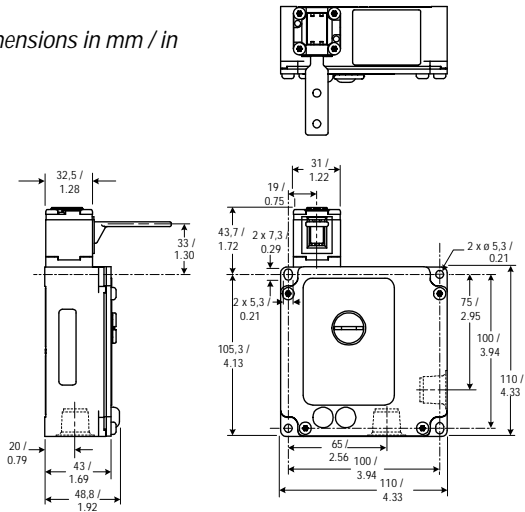
Operating forces: Insertion force: 35 N / 8 lb
Extraction force: 28 N / 6 lb
Max. solenoid locking force: 1000 N / 224 lb

Directives The forced disconnect mechanism on normally closed contacts conforms to IEC 60947-5-1-3.

Compliance This product complies with the Machinery Directive 98/37/EC and complies with EN 60947-5-1.

* See Standards (page 179)

Dimensions in mm / in



Head Left or Right

Conduit Thread

E = 1/2" NPT

Head on Left = **L**

F = PG 13,5

Head on Right = **R**

G = 20 mm

H = PF 1/2

Ordering:

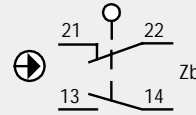
GK **X** **X**

Example: GKLE3L6S2

Switch Type

Slow Acting, break before make (BBM),
1 Normally Closed/1 Normally Open

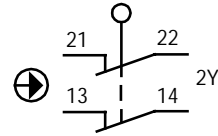
Gate and Solenoid Monitor



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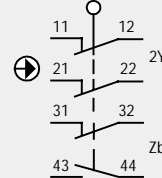
Slow Acting
2 Normally Closed

Gate and Solenoid Monitor

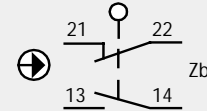


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Slow Acting
3 Normally Closed/1 Normally Open
Gate



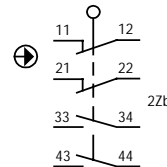
Slow Acting, break before make (BBM)
1 Normally Closed/1 Normally Open
Solenoid Monitor



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Slow Acting
2 Normally Closed/2 Normally Open

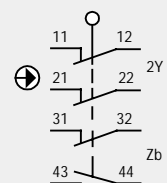
Gate and Solenoid Monitor



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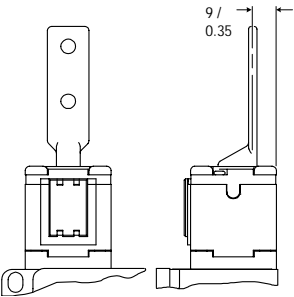
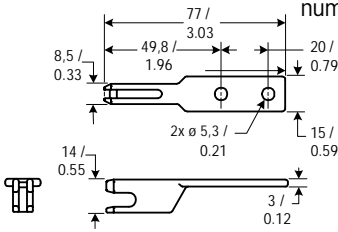
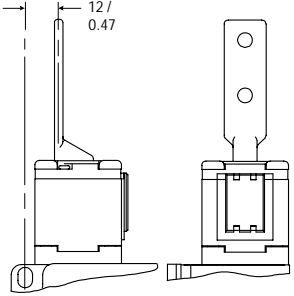
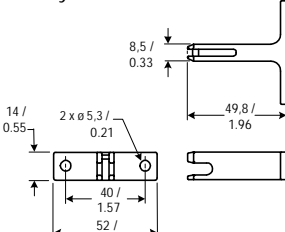
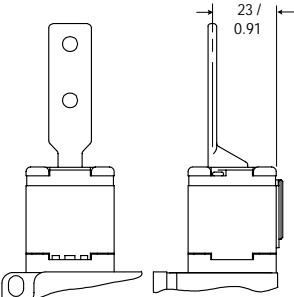
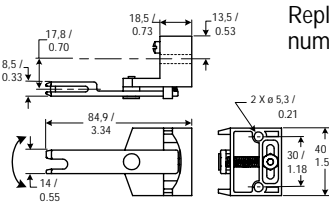
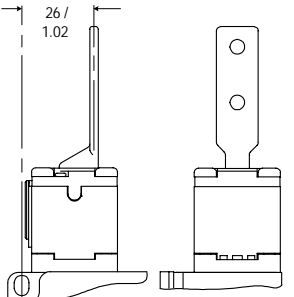
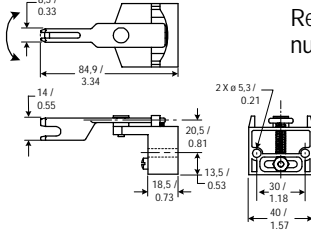
Slow Acting
3 Normally Closed/1 Normally Open

Gate and Solenoid Monitor



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X OR **XX**

Head Orientation	Key Type	Latching Mechanism	Solenoid and LED Indicator Voltage
 <p>9 / 0.35</p>	<p>L</p> <p>Straight Key Replacement part number GKZ56</p>  <p>77 / 3.03 49.8 / 1.96 20 / 0.79 8.5 / 0.33 15 / 0.59 2x ø 5.3 / 0.21 14 / 0.55 3 / 0.12</p> <p>Door swing radius down to 250 mm / 9.84 in</p>	<p>6</p> <p>Mechanical Latch A</p>	<p>12 Vdc 1</p>
 <p>12 / 0.47</p>	<p>M</p> <p>90° Key Replacement part number GKZ57</p>  <p>8.5 / 0.33 49.8 / 1.96 14 / 0.55 2x ø 5.3 / 0.21 40 / 1.57 52 / 2.05</p> <p>Door swing radius down to 250 mm / 9.84 in</p>	<p>7</p> <p>(Energise solenoid to release key)</p>	<p>24 Vdc 2</p> <p>48 Vdc 3</p>
 <p>23 / 0.91</p>	<p>N</p> <p>Spring-loaded Key: Up/Down Replacement part number GKZ58</p>  <p>17.8 / 0.70 18.5 / 0.73 13.5 / 0.53 8.5 / 0.33 84.9 / 3.34 2x ø 5.3 / 0.21 14 / 0.55 30 / 1.18 40 / 1.57</p> <p>Door swing radius down to 150 mm / 5.9 in</p>	<p>8</p> <p>Solenoid Latch S</p> <p>(De-energise solenoid to release key)</p>	<p>120 Vac 4</p>
 <p>26 / 1.02</p>	<p>P</p> <p>Spring-loaded Key: Left/Right Replacement part number GKZ59</p>  <p>8.5 / 0.33 84.9 / 3.34 14 / 0.55 20.5 / 0.81 18.5 / 0.73 13.5 / 0.53 2x ø 5.3 / 0.21 30 / 1.18 40 / 1.57</p> <p>Door swing radius down to 150 mm / 5.9 in</p>	<p>9</p>	<p>240 Vac 6</p>
X	X	X	X

GKR/GKL

Accessories

The GKZL2 lockout device is for use with both the GK and GKR/GKL Series Dual Entry Head products. The lockout device does not activate the switch. It is designed to prevent a key from being inserted either manually, or by the access door being closed while maintenance personnel are working on the machine. When inserted, the lockout device accommodates up to four padlocks to prevent unauthorised removal of the device

GKR/L

Mounting dimensional diagram (mm/in):

