GKR/GKL Series
Dual Entry Solenoid Key Operated Safety Interlock Switch

FEATURES

- Solenoid power to lock or power to unlock
- Side or top key entry
- Separate switches for key position and solenoid status
- Available with two 1 NC/1 NO snap action, two 3 NC/ 1 NO 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)
- Two solenoid voltages available
- Dual LEDs
- UL listed / CSA certified / CE compliant
- 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

CSA

UL

CE

BG
(Pending)

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.

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.

GKR/GKL

> ⚠ **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

GKR/GKL

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
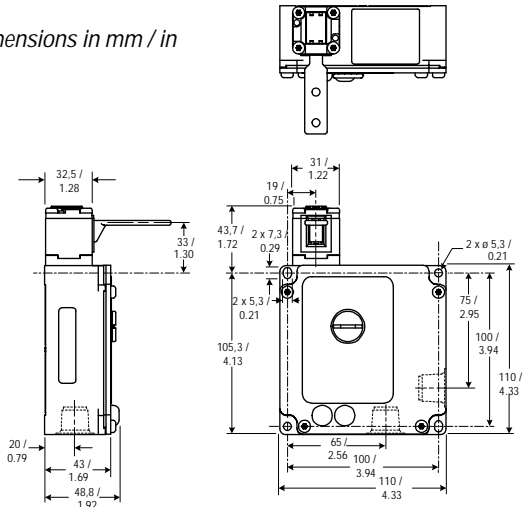ac15 A300/A600
dc13 Q300
UL Listed
CSA Certified

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
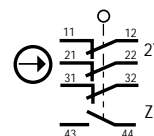
Switch Type

Slow Acting, 1 Normally Closed/1 Normally Open
Gate and Solenoid Monitor

13 14
Zb
21 22
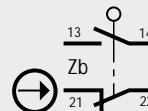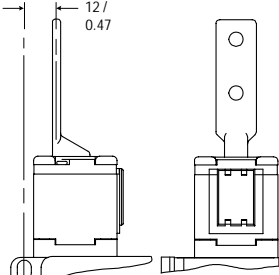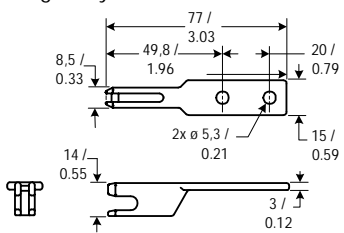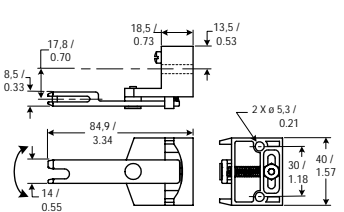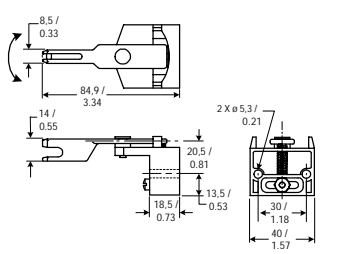
3

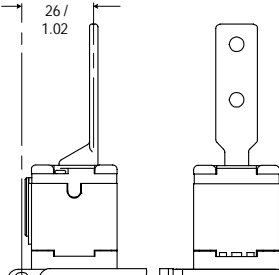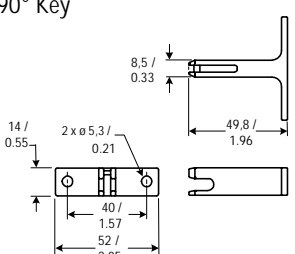**Slow Acting 3 Normally Closed/1 Normally Open**
Gate and Solenoid Monitor

11 12
21 22 2Y
31 32
Zb
43 44

36

Head Left or Right

Head on Left = **L**

Head on Right = **R**

Conduit Thread

E = 1/2" NPT

G = 20 mm

Switch Ordering:

GK **X** **X**   **X** OR **XX**

Example: GKLE36PXA2 + GKZ56

Head Orientation	Latching Mechanism	Solenoid and LED Indicator Voltage	Key Type (sold separately)

12 / 0.47

M

Only for right oriented head

26 / 1.02

P

Only for left oriented head

Mechanical Latch **A**

(Energise solenoid to release key)

24 Vdc **2**

Solenoid Latch **S**

(De-energise solenoid to release key)

120 Vac **4**

GKR/GKL

Straight Key

77 / 3.03
49,8 / 1.96
20 / 0.79
8,5 / 0.33
2x ø 5,3 / 0.21
15 / 0.59
14 / 0.55
3 / 0.12

6

Door swing radius down to 250 mm / 9.84 in

90° Key

8,5 / 0.33
14 / 0.55
2 x ø 5,3 / 0.21
49,8 / 1.96
40 / 1.57
52 / 2.05

7

Door swing radius down to 250 mm / 9.84 in

Spring-loaded Key: Up/Down

18,5 / 0.73
13,5 / 0.53
17,8 / 0.70
8,5 / 0.33
84,9 / 3.34
2 X ø 5,3 / 0.21
30 / 1.18
40 / 1.57
14 / 0.55

8

Door swing radius down to 150 mm / 5.9 in

Spring-loaded Key: Left/Right

8,5 / 0.33
84,9 / 3.34
14 / 0.55
20,5 / 0.81
2 X ø 5,3 / 0.21
18,5 / 0.73
13,5 / 0.53
30 / 1.18
40 / 1.57

9

Door swing radius down to 150 mm / 5.9 in

Key Ordering:

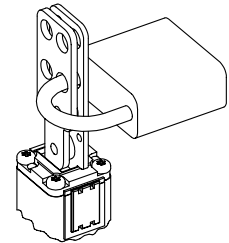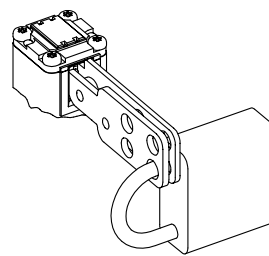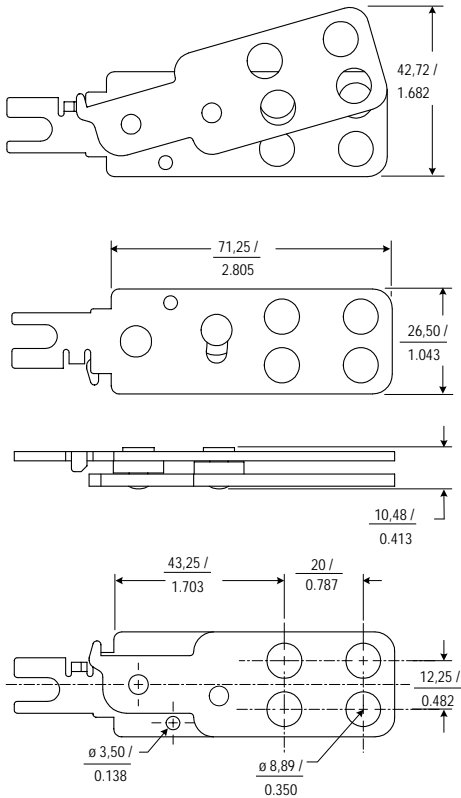**X**   **X**   **X** + **GKZ5**   **X**

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 accomodates up to four padlocks to prevent unauthorised removal of the device

GKR/L

Mounting dimensional diagram (mm/in):

42,72 / 1.682

71,25 / 2.805

26,50 / 1.043

10,48 / 0.413

43,25 / 1.703

20 / 0.787

12,25 / 0.482

ø 3,50 / 0.138

ø 8,89 / 0.350

Ordering:

GKZL2