

SAFETY PRODUCTS

GKey Safety Lock

Product Datasheet



GKey is a robust safety lock with a die cast housing for hinged and sliding doors. It offers an interlocking function reaching PL e/SIL 3 with high level coding. Power is needed to unlock GKey which makes GKey a safety lock.

GKey is fitted with a rear escape release button and manual unlocking (auxiliary release). It offers four positions for 22 mm pilot devices.



Safety and protection

Escape release

The door can always be opened from inside the danger zone using the escape release button.

High level coding

A standard mechanical interlock combined with RFID coding offers high level coding.

Lockout function

GKey can be padlocked off for safe working.



Easy to install

Integrated buttons

There are four positions in the key housing that can be used for integrating push buttons, switches or pilot lights.



Reliable in extreme conditions

Robust design

Made of die cast aluminum alloy with a robust construction, GKey is ideal for use in mechanically demanding environments.

Ordering details

GKey



GKey4 RU



FHS GKey4



RHS GKey MKey



SCS GKey MKey



CE3P-10R-02



CP1-11C-10



C2SS1-10B-20



MA1-8130



KA1-8120

Ordering Details

For a complete safety lock, a switch and a mounting plate with front handle must be ordered separately. Rear handle, spring catch, pilot devices and blanking plugs for the unused positions are available and also ordered separately.

Switches

All models are fitted with an escape release button and delivered with a high level coded RFID actuator.

Material (body)	Positions for pilot devices	Manual unlock	Type	Order code
Die cast	4	Yes	GKey4 RU	2TLA050304R0002

Mounting plate with front handle

The handle can be mounted on hinged doors and sliding doors, on the left or on the right. Note that door and frame must be aligned when the door is closed. Each order code includes a mounting plate for the switch and a front handle.

Type of handle	Material (mounting plates and sliding bolt)	Type	Order code
Sliding	Die cast	FHS GKey4	2TLA050310R0032

Accessories - Rear handle and spring loaded catch

The spring loaded catch prevents from closing the door by mistake. When the sliding handle is in open position, the catch must be pulled in order to be able to push back the handle to closed position.

Type of handle	Material	Description	Type	Order code
Sliding	Die cast	Rear handle	RHS GKey MKey	2TLA050040R0510
		Spring catch	SCS GKey MKey	2TLA050040R0511

Accessories - Pilot devices

Pilot devices and blanking plugs must be ordered separately. Make sure that the total amount is 4, so that all holes in GKey4 are covered.

Description	Contacts	Illuminated	Voltage	Type	Order code
Emergency stop button	2NC	No	24 V AC/DC	CE3P	CE3P-10R-02
Selector switch	2NO	No	24 V AC/DC	C2SS1	C2SS1-10B-20
Push button Green	1NO	Yes	24 V AC/DC	CP1	CP1-11G-10
Push button Yellow	1NO	Yes	24 V AC/DC	CP1	CP1-11Y-10
Push button Blue	1NO	Yes	24 V AC/DC	CP1	CP1-11L-10
Push button White/Clear	1NO	Yes	24 V AC/DC	CP1	CP1-11C-10
Push button Black	1NO	No	24 V AC/DC	CP2	CP2-10B-10
Blanking plug Black				MA1	MA1-8130
Legend plate holder (without insert)				KA1	KA1-8120

More information

For more optional pilot devices, pre-printed legend plate inserts and other accessories, please see the Compact range of ABB pilot devices:
<http://new.abb.com/low-voltage/products/pilot-devices>

Technical data

GKey

Technical data

Approvals



Conformity



2006/42/EC
EN 60947-5-3
EN ISO 14119
EN ISO 13849-1
EN 62061
UL 508

Functional safety data

EN 62061:2005+A1:2013

SIL3
PFH = 4.77×10^{-10} (corresponds to 4.8% of SIL3),
PFD = 4.18×10^{-5} (corresponds to 4.2% of SIL3)
Proof test interval $T_1 = 20$ a

EN ISO 13849-1:2008

PL e (if both channels are used in conjunction with a SIL3/PL e control device),
Category 4, $MTTF_d = 1100$ a, DC high

Assumptions

$d_{op} = 365d$, $h_{op} = 24h$

If the product usage differs from these assumptions (different load, operating frequency, etc.) the values must be adjusted accordingly.

Electrical data

Operating voltage

+24 VDC $\pm 10\%$

Holding force

3000 N

Mechanical data

Connection

M20 (x3)

Operating temperature

-25 °C ... +40 °C

Protection class

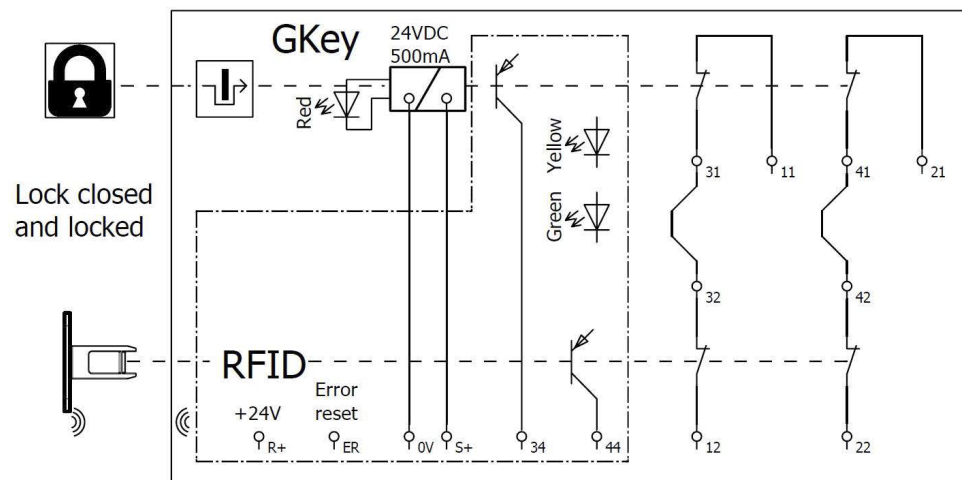
IP65. (If pilot devices have better protection class a higher rating can be achieved.)

More information

For more information, e.g. the complete technical information, see product manual:

GKey [2TLC010048M0201](#)

Electrical connection

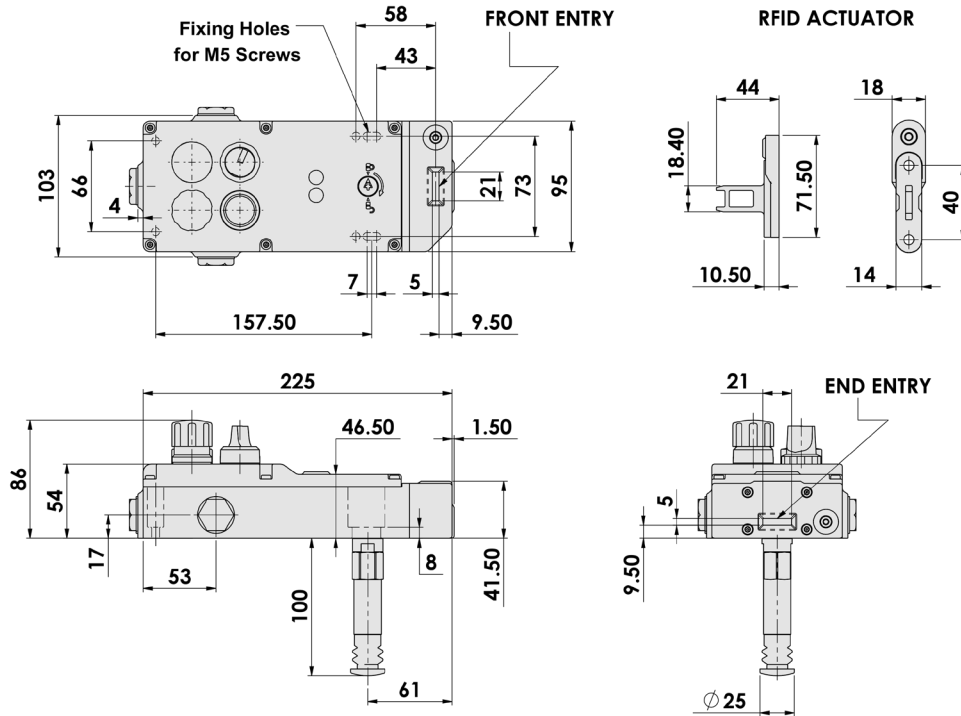


Actuator must be in place and RFID coding verified for the safety contacts to close.

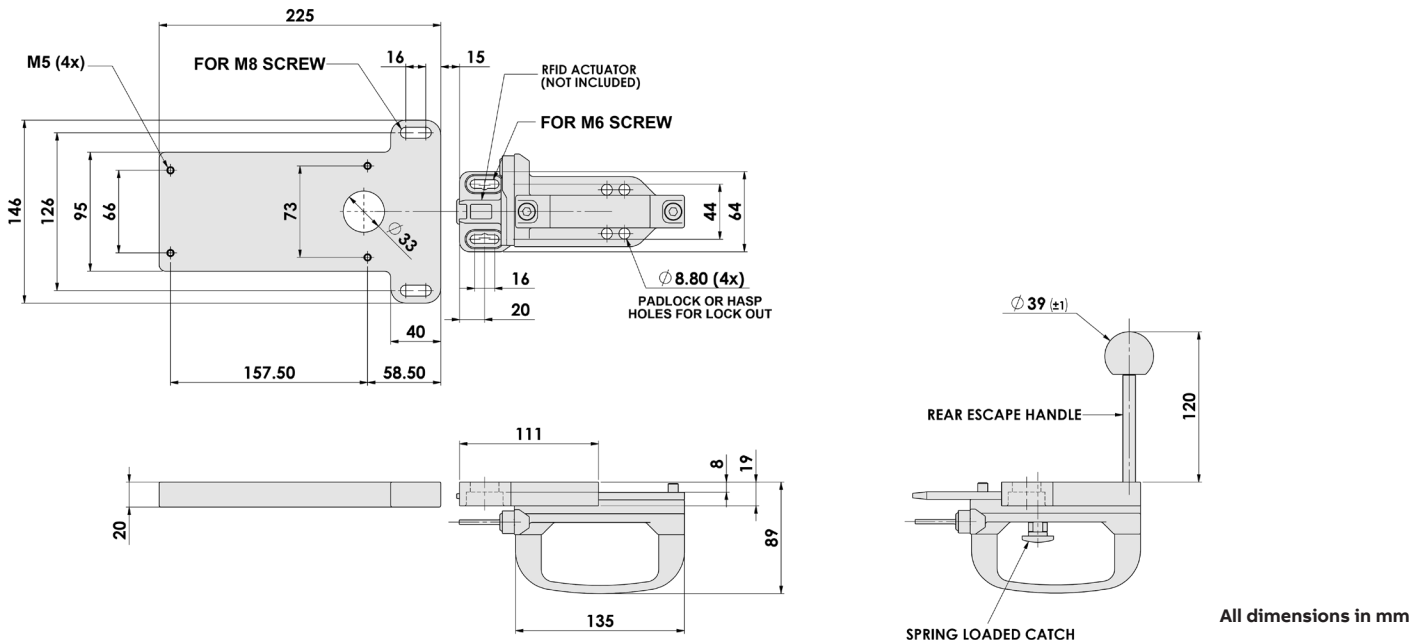
Dimension drawings

GKey

Dimensions - GKey4 switch and actuator



Dimensions - FHS GKey4 with rear handle and spring loaded catch



All dimensions in mm

ABB Campus Montréal
800 Hymus Blvd
St-Laurent, Qc Canada
H4S 0B5

abb.com/lowvoltage

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