P-KUBE Super safety handles for NG series switches

Description



Together with the NG series RFID safety switches with guard locking, the **P-KUBE Super** safety handles form an integrated locking system for guards that enables access control to dangerous areas, offering an effective solution to designers and installers for problems related to the mechanical precision of the movements of the guard.

Designed as an evolution of the P-KUBE 2 handles, the P-KUBE Super handles with double centring pin are specifically designed for guards installed in heavy-duty work environments (e.g. rolling mills, iron and steel plants, etc.) where very heavy doors or doors with such dimensions as to generate high misalignments between the movable and fixed parts of the guard may be present.

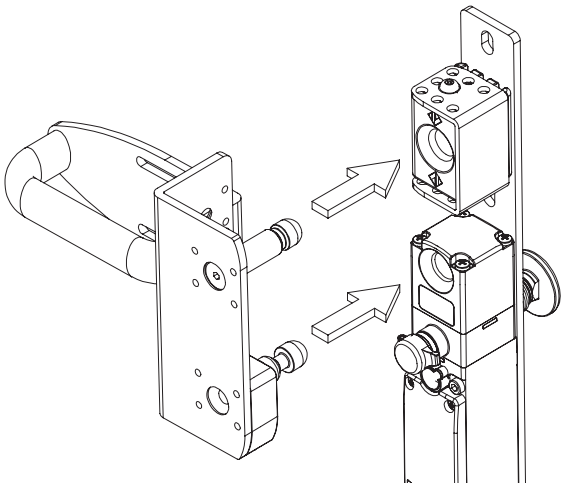
The integrated lock-out device is used to block the door in the open position and prevent an unexpected system restart when maintenance personnel access the system.

Thanks to their adjustable design these handles can be installed on different types of doors or barriers: hinged or sliding, right or left closing, as well as on various types of profiles.

Maximum safety with a single device

PL e + SIL 3 The P-KUBE Super safety handles can be combined with the NG series switches. As a result, the maximum PL e and SIL 3 safety levels can be achieved through the use of a single device on a guard. This avoids expensive wiring in the field and allows faster installation. Inside the control cabinet, the two electronic safety outputs must be connected to a module suitable for managing devices with semiconductor outputs, or to a safety PLC.

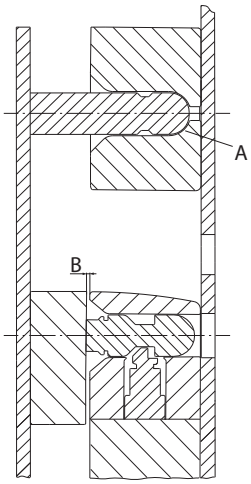
Dual centring pin



When closing the guard, the upper metal pin attached to the handle plate hits the bottom of the centring block (A) before the actuator hits the switch housing, leaving a safe distance (B) to avoid collisions between the devices.

The upper metal centring pin can also only hit surfaces that transmit the impact to the support structure of the guard but not to the switch itself, which is thus relieved of all mechanical loads when the door is opened and closed.

The coupling with the actuators of the NG series with hinge pin allows further adaptation to the centring hole even with doors with inaccurate opening, thus avoiding continuous maintenance operations to realign the actuator and switch.



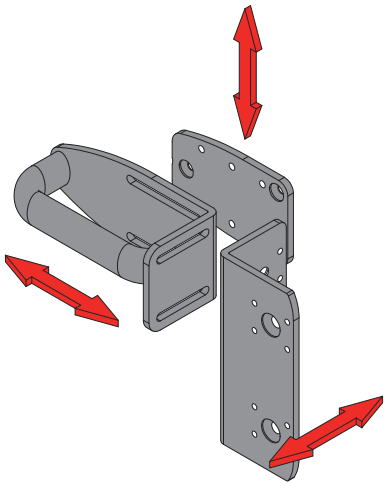
Sturdiness and easy installation

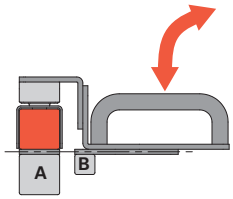
The handle is provided with 5 mm thick sturdy brackets in painted steel. The slots in the brackets allow independent adjustments to be performed. This ensures easy installation, eliminating the need to make changes to structure of the existing guard.

The adjustments make it possible to attach the handle to aluminium profiles or steel frames of various dimensions, from 40 x 40 mm to 80 x 80 mm for the frame jamb **(A)** and from 20 x 20 mm to 40 x 40 mm for the door **(B).**

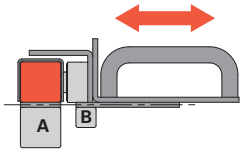
It can be installed both on hinged doors and sliding doors, either with right or left closing.

The handle is supplied with all of the components necessary for fastening at the appropriate distances with tamper-proof screws. The installer only has to assemble the components according to the application, fix the selected NG series switch (supplied separately) and make centring adjustments.

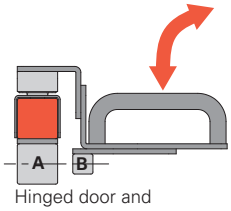




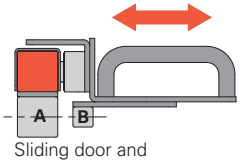
Hinged door and jamb frontally aligned



Hinged door and jamb frontally aligned

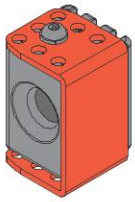


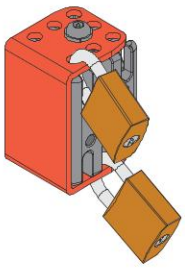
Hinged door and jamb axially aligned



Sliding door and jamb axially aligned

Lock-out device



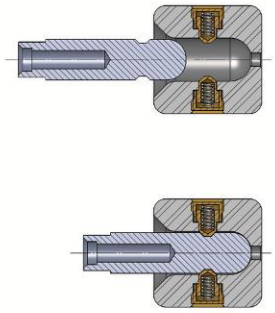


With a single operation, the lock-out device can close the centring hole, making it impossible to mechanically close the door.

Simply turn the red cover so that the centring hole is completely covered and the holes on the top of the cover match the holes in the metal block underneath.

With the lock-out device activated, it is possible to insert up to 12 padlocks with a shackle diameter of 5 mm; this feature makes the P-KUBE Super handle particularly suitable for large and complex systems, in which the maintenance phases require the simultaneous entry of several operators into the hazardous areas.

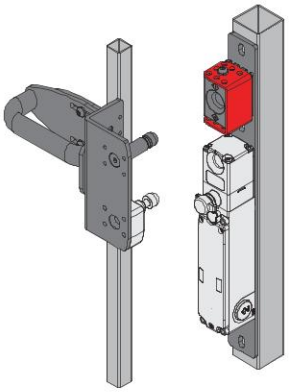
Holding force of the unlocked actuator



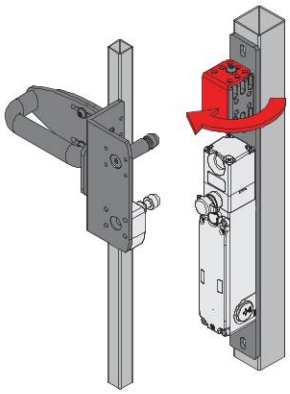
A version of the lock-out device with 100 N holding force is available on request. With this new optional feature, the handle is kept in its limit-stop closed position; a moderately energetic pull is required to open the door. This device is ideal for all applications where multiple doors are unlocked simultaneously but only one is actually opened; all unlocked doors are held in position, thereby preventing vibrations or gusts of wind from opening them.

Padlocking option for protecting against errors

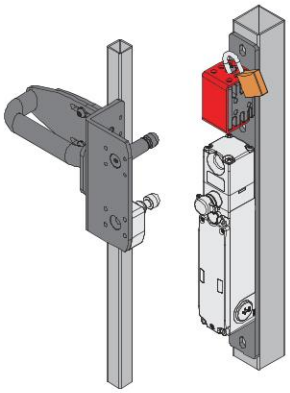
The lock-out device is operated by a simple rotation of the slider to expose the holes for mounting padlocks. As a result, padlocks can no longer be mounted incorrectly, since the holes are not exposed until the switch is fully locked. Up to 12 padlocks can be applied.



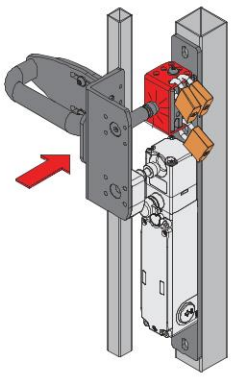
Lock-out device open.
Safety switch is accessible.



Closing of the
lock-out device.



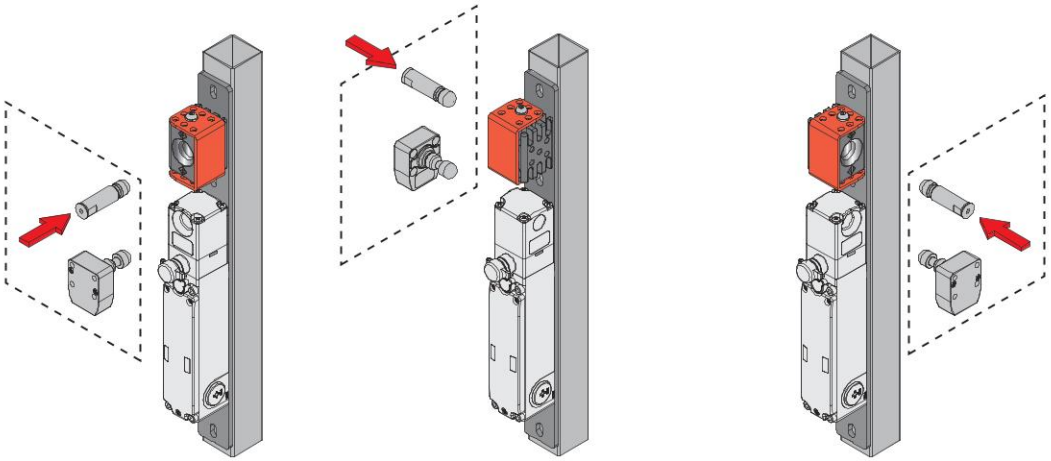
Lock-out device closed.
Padlock insertion.



Lock-out device locked.
Padlock locked.
Safety switch is not accessible.

Turnable centring block

The special configuration allows the use of the lock-out device on hinged and sliding doors, both right and left, changing only the mounting position.



P-KUBE Super safety handles for NG series switches

Code structure

Attention! The feasibility of a code number does not mean the effective availability of a product. Please contact our sales office.

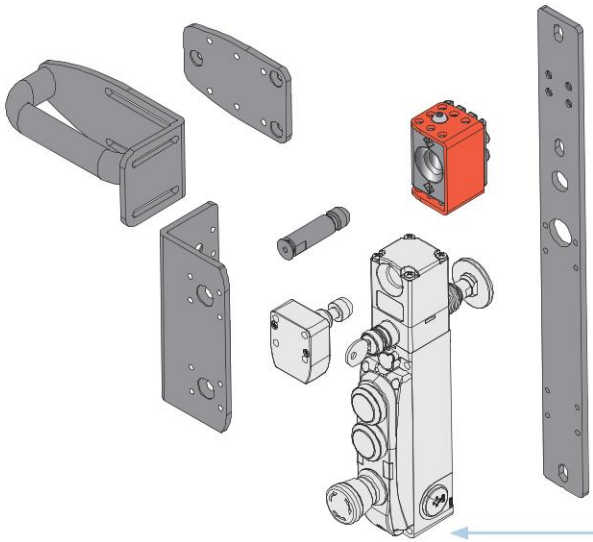
AP G2C-800P

LOCK-OUT device	
0	Centring block only
1	LOCK-OUT device
2	LOCK-OUT device with 100 N holding force

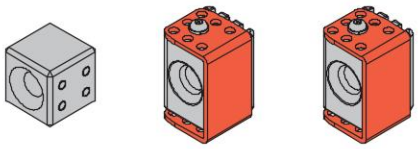
Grip	
P	plastic grip
M	metal grip

Note: the handle is supplied with fastening screws for the grip, for the switch, and for bolting the plates together.

AP G2C-800•



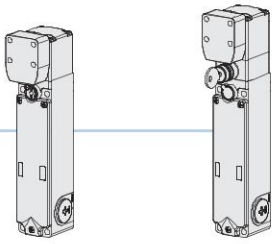
Lock-out device options:



0
Centring block only

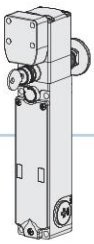
1
With LOCK-OUT device

2
With LOCK-OUT device with 100 N holding force

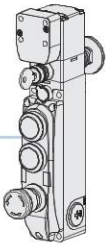


NG 2D1D••A-F3•
Safety locking switch, with separate actuator.

NG 2D5D••A-F3•
Safety locking switch, with separate actuator. With key release.

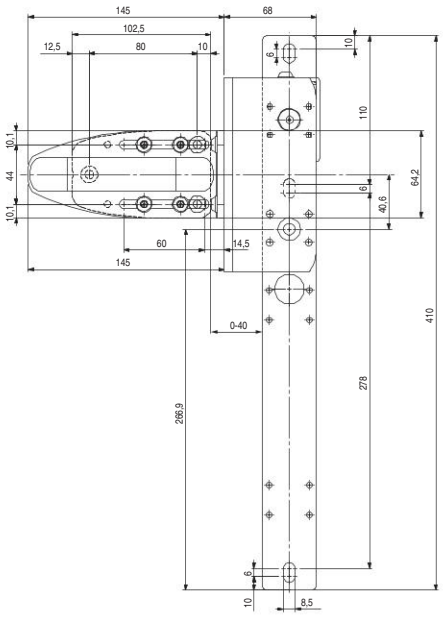


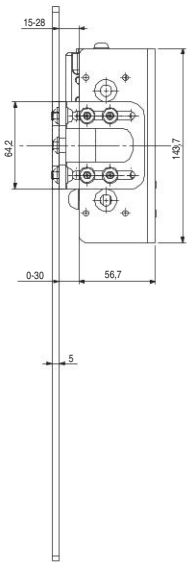
NG 2D6D••A-F3•
Safety locking switch, with separate actuator. With key release and escape release button.



NG 2D7D••••D-F3•
Safety locking switch, with separate actuator. With escape release button, lock and integrated control devices.

Dimensional drawings



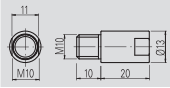
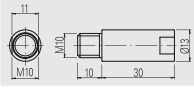
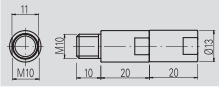
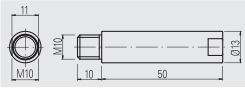
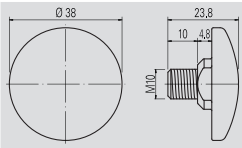
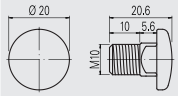
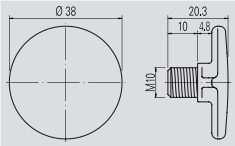
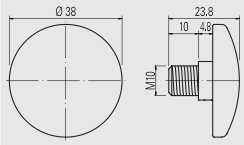


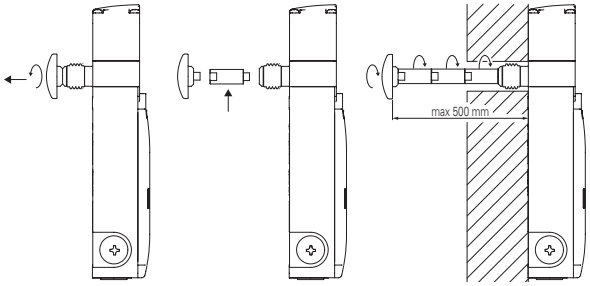
Sold separately as accessory

The NG series safety switch is also available in other versions. For further information see page 169.

Accessories

Extensions for release button

Article	Description	Drawing
VN NG-LP30	Metal extension for release button. For max. wall thickness of 30 mm	
VN NG-LP40	Metal extension for release button. For max. wall thickness of 40 mm	
VN NG-LP50	Metal extension for release button. For max. wall thickness of 50 mm	
VN NG-LP60	Metal extension for release button. For max. wall thickness of 60 mm	
VN NG-ERB	Red metal release button	
VN NG-ERC	Compact red metal release button	
VN NG-ERP	Red plastic release button	
VN NG-ERX	AISI 316 stainless steel release button, unpainted. Guarantees a high resistance against corrosion and aggressive cleaning	



- Metal extensions can be combined with one another to achieve the desired length.
- Do not exceed an overall length of 500 mm between the release button and the switch.
- Use medium-strength thread locker to secure the extensions.

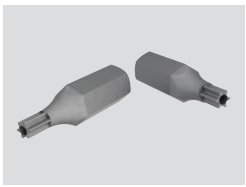
Adhesive labels for escape release button



Polycarbonate yellow adhesive, rectangular, 300 x 32 mm, red inscription. It has to be fixed on the internal part of the jamb and helps finding the escape release button.

Article	Description and language	
VF AP-A1AGR01	PREMERE PER USCIRE	ita
VF AP-A1AGR02	PUSH TO EXIT	eng
VF AP-A1AGR04	ZUM ÖFFNEN DRÜCKEN	deu
VF AP-A1AGR05	POUSSER POUR SORTIR	fra
VF AP-A1AGR06	PULSAR PARA SALIR	spa
VF AP-A1AGR07	НАЖАТЬ ДЛЯ ВЫХОДА	rus
VF AP-A1AGR08	NACISNĄĆ ABY WYJŚĆ	pol
VF AP-A1AGR09	PRESSIONAR PARA SAIR	por

Bits for safety screws



Bits for safety screws with pin, with ¼" hexagonal connection.

Article	Description
VF VAIT1T25	Bits for M5 screws with Torx T25 fitting
VF VAIT1T30	Bits for M6 screws with Torx T30 fitting

All values in the drawings are in mm

Accessories See page 357

➔ The 2D and 3D files are available at **www.pizzato.com**