



Application field

This integrated closing device can be applied on guards or protections of perimetric safety barriers, where it is required control on access to dangerous areas of a machinery or plant.

Presentation

The new P-KUBE 2 safety handle, mounted in combination with the NG series RFID safety switch with block, creates an integrated protection closing system with relating control of access to dangerous areas; such new combination makes it possible to obtain, with one single device, an access control function complying with category 4, PLe according to EN 13849-1 or SIL3 according to EN 62061.

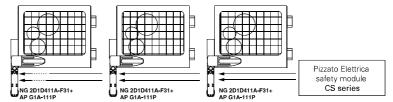
Maximum safety with a single device

Constructed with redundant electronic technology, the NG series switches combined with P-KUBE 2 handle, make it possible to create circuits having maximum PLe and SIL3 safety levels by fitting just one device on the protection. This avoids expensive wiring on the field and allows quicker installation. Inside the panel, the two electronic safety outputs must be connected to a Pizzato Elettrica safety module or to a safety PLC.

Connection of several switches in series

One of the most relevant features of the NG line combined with P-KUBE 2 handle is the optional connection in series of several switches, up to a maximum number of 32 devices, while maintaining the maximum PLe safety level prescribed by

the EN 13849-1 standard and the SIL3 safety level according to the EN 62061 standard. Such connection method is permitted in safety systems where a safety module, which evaluates the outputs of the last NG switch, is present at the end of the chain. The fact that the PLe safety level can be maintained, even with 32 switches connected in series, is indicative of the extremely safe structure found inside each individual device.



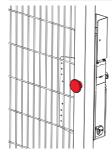
RFID actuators with high coding level

NG series features an electronic system based on RFID technology to detect the actuator. This system gives a different coding to each actua-



tor and makes it impossible to tamper with a device by using another actuator belonging to the same series. The actuators may have millions of different coding combinations, and are therefore classified as actuators with a high coding level, according to ISO 14119.

Anti-panic release button



The release button, facing the inside of the machine, allows an operator which may have been involuntarily trapped to get out, even in case of power cuts and in any operating condition. To reset the switch, just return the button to its initial position

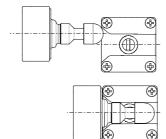
The anti-panic button can be freely lengthened by means of appropriate extensions, so that it can also be mounted on very thick uprights (see accessories).

High protection degree

The NG series switches by Pizzato Elettrica, besides having an IP67 protection degree, have passed the test proving their IP69K degree according prescriptions established by the ISO 20653 standard. Therefore they are suitable for use in

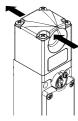
machineries subjected to intense washing with high pressure and high temperature water jets and for any condition or environment where a particular attention for cleanness and hygiene is required, such as in food or pharmaceutical industry.

Centring



The switch is provided with a wide centring inlet for the actuator pin. Such solution makes it easier to align the actuator with the hole found in the head during the fitting stage. Moreover, this solution drastically reduces any probable collisions between the actuator and the switch, also allowing it to be fitted on inaccurate doors.

Dustproof



The switch is provided with a through hole for inserting the actuator and, thanks to this peculiarity, any dust which may go inside the actuator hole can always come out of the opposite side instead of being left there. Moreover, the lock pin is provided with an external diaphragm gasket which makes it suitable for any environment where dust is present.

5 LEDs for immediate diagnosis



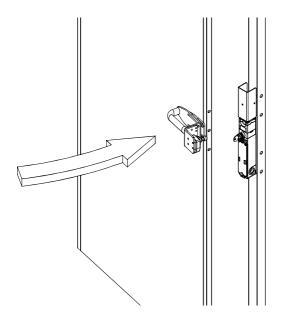
As the LEDs have been designed for quick immediate diagnosis, the status of each input and output is highlighted by one specific LED. This makes it possible to quickly identify the interruption points in the safe chain, which device is released, which door is opened and any errors inside the device. All that in a straightforward way without needing to decode complex blinking sequences.



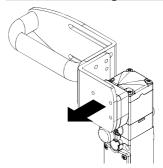
Simple operation

No specific action sequences are required to open or close the door, but just one opening/closing movement.

In the case of doors interlocked by means of handles provided with a release mushroom button, the door can thus be opened even if under stress (panic situations) with one single operation.

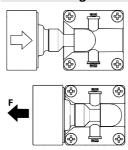


Actuator holding force



The interlocking system guarantees the $F_{\rm zh}$ actuator a maximum holding force equal to 7500 N. This is one of the highest values available on the market today, making this device suitable for severe heavy-duty applications.

30 N holding force



The inside of each switch features a device which holds the actuator in its closed position. Ideal for all those applications where several doors are unlocked simultaneously, but only one is actually opened. The device keeps all the unlocked doors in their position, stopping any vibrations or gusts of wind from opening them.

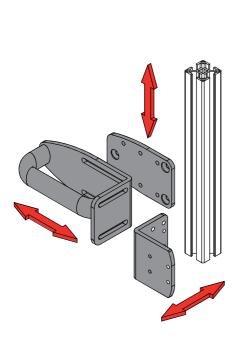
Sturdiness and easy installation

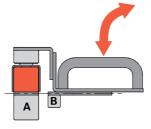
The handle has been manufactured with 5 mm thick brackets in painted steel. The slots found in the brackets enable independent adjustments, so as to guarantee extremely easy mounting, without needing to modify the existing protection structure.

The adjustments make it possible to apply the handle on aluminium profiles or steel frame having various dimensions, from 40x40 mm to 80x80 mm for the frame upright (A) and from 20x20 mm to 40x40 mm for the door (B).

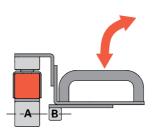
Mounting can be carried out indifferently on swing doors and sliding doors, either right-handed or left-handed.

The handle is supplied with all the components ready to be fixed at the correct distances by means of anti-tampering screws. The installer will just need to assemble the components according to the application, fix the switch selected (supplied separately) and carry out the centring adjustments.

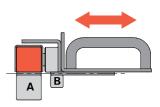




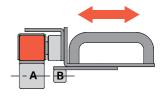
Swing door aligned frontally with the upright



Swing door aligned axially with the upright



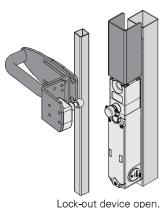
Sliding door aligned frontally with the upright

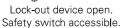


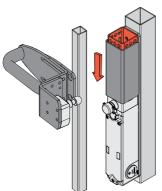
Sliding door axially aligned with the upright

Error-proof padlockable option

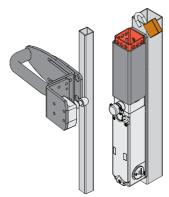
The lock-out device is activated by means of a simple vertical sliding action; such movement makes the padlock holes only accessible in a fully screened position, so as to exclude incorrect fitting of the padlocks. The padlock hole diameter is 7 mm and up to 9 padlocks can be fitted. Screening on 3 sides allows the lock-out device to be used, without any adaptation, on swing and sliding doors, either right or left-handed, also thanks to the fact that the switch head can be quickly rotated on all four sides by turning the fixing screws.



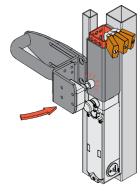




Closing of lock-out device.



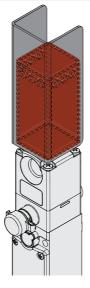
Lock-out device closed. Insertion of padlock.

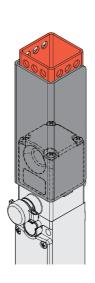


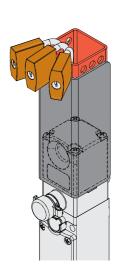
Lock-out device blocked. Padlock blocked. Safety switch not accessible.

LOCK OUT: maximum safety with just one movement

With one single operation, the lock-out device can close the centring hole found in the NG switch as well as screen the RFID recognition system, therefore locking both mechanical door closing and electrical switch commutation, and consequently preventing any accidental closing of the guard.

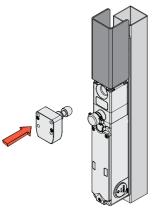




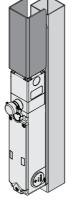


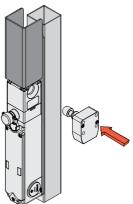
Head rotation

Screening on 3 sides allows the lock-out device to be used, without any adaptation, on swing and sliding doors, either right or lefthanded











Code structure

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

AP G1A-111P

LOCK OUT device

- 1 with LOCK OUT device
- without LOCK OUT device

Fixing on frame

A with long plate

B with short plate **Z** without plate

Handle

- P plastic handle
- M metal handle

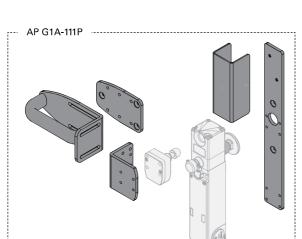
Configuration of plates on doors

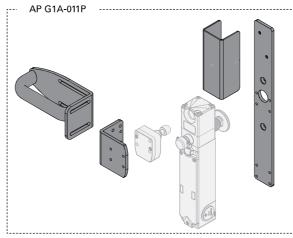
- 111 configuration with 3 adjustable plates
- **011** configuration with 2 adjustable plates

Attention! The actuator for the switch is supplied with the device

The NG series safety switch is also available in other versions. For any further information, contact our commercial

network.







NG 2D1D411A-F31

Safety switch with block and separate actuator.

NG 2D5D411A-F31

Safety switch with block and separate actuator. With lock release.



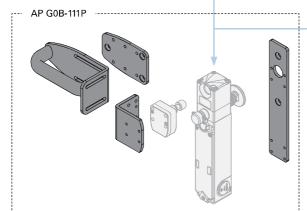
NG 2D6D411A-F31

Safety switch with block and separate actuator.
With lock release and anti-panic release button.

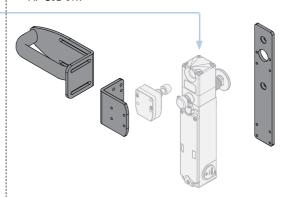


NG 2D7D411A-F31

Safety switch with block and separate actuator. With anti-panic release button.









accessory sold separately

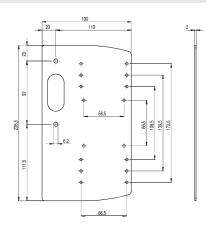
Shaped plate



Article AP A001

DescriptionLateral shaped plate for push-button panel

The shaped plate can be applied under the switch fixing plate. It can be fitted to the right or to the left, it is supplied with holes and used to fasten the boxes for Pizzato Elettrica EROUND push-button panels by means of commercial self-threading screws.



Safety screws bits



Bits for tamper-resistant safety screws, ¼" drive.

Article	Description
VF VAIT1T25	Bits for tamper-resistant Torx T25, M5 screw
VF VAIT1T30	Bits for tamper-resistant Torx T30, M6 screw

Stickers for anti-panic release button



Polycarbonate yellow adhesive, rectangular 300x32 mm, red writing. Applied on the jamb internal part it helps finding the emergency release push button.

Article	Description
VF AP-A1AGR01	PREMERE PER USCIRE
VF AP-A1AGR02	PUSH TO EXIT
VF AP-A1AGR04	ZUM OFFNEN DRUCKEN
VF AP-A1AGR05	POUSSER POUR SORTIR
VF AP-A1AGR06	PULSAR PARA SALIR
VF AP-A1AGR07	НАЖАТЬ ДЛЯ ВЫХОДА
VF AP-A1AGR08	NACISNĄĆ ABY WYJŚĆ
VF AP-A1AGR09	PRESSIONAR PARA SAIR

Extensions for release push-button

Article	Description	Drawing
VN NG-LP30	Metal extension for release push-button. For max wall thickness of 30 mm.	11 Mh0 20
VN NG-LP40	Metal extension for release push-button. For max wall thickness of 40 mm.	11 M10 30
VN NG-LP60	Metal extension for release push-button. For max wall thickness of 60 mm.	11 M10 50

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Metal extensions can be combined together until the required length is obtained. Do not exceed an overall length of 500 mm between the release button and the switch.

Safety modules CS series

Pizzato Elettrica offers its customers a wide range of safety modules make considering the typical problems about the control of the safety switches and their real use conditions. There are available safety modules with instantaneous or delayed contacts used for the type 0 emergency circuits (immediate stop) or type 1 (monitored stop).

There are also GEMNIS series safety modules which can be freely programmed by the user by means of the free GEMNIS STUDIO software.



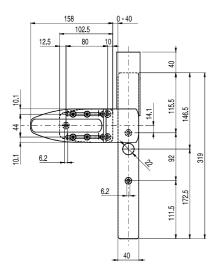
Items with code on the green background are available in stock

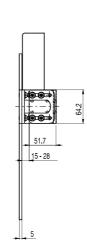
All measures in the drawings are in mm



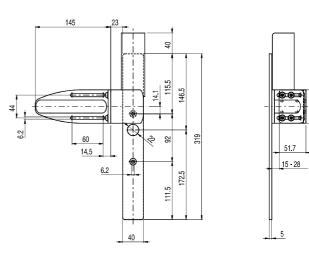
Dimensional drawings

Safety handle AP G1A-111•

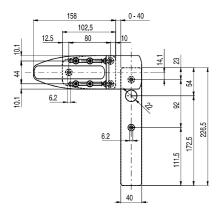


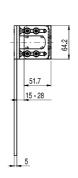


Safety handle AP G1A-011•

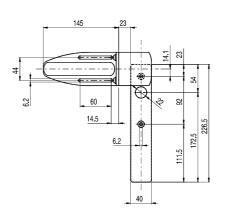


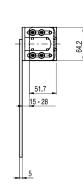
Safety handle AP G0B-111•





Safety handle AP G0B-011•







General Catalog



Production program



EROUND brochure



LIFT General Catalog



DVD



Web site www.pizzato.com



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