



**NG**



**Series connection**  
 Multiple sensors can be connected in series. With up to 32 sensors connected in series, PL e safety level laid down in EN ISO 13849-1 and SIL 3 acc. to EN 62061 is ensured. The fact that the PL e and SIL 3 can be maintained even with 32 sensors connected in series demonstrates the extremely secure structure of each sensor.

**PL e + SIL 3**  
 Safety level up to PL e and SIL 3 with a single device. Simple wiring, fast installation times. Safety module connection with digital inputs or safety PLC.

**ST**



**Insensitivity to dirt**  
 The sensors are completely sealed and retain their safety characteristics even in the presence of dirt or deposits (not ferromagnetic material). This characteristic, combined with the design without recesses, makes them particularly suitable for use in the agricultural and food industries.

**LEDs for immediate diagnosis**

As the LEDs have been designed for fast and immediate diagnostics, the status of each input and output is indicated by one specific LED. This allows for operational device parameters to be rapidly identified on an individual basis, without needing to decode complex flashing sequences.

**NS**



**Laser engraving**

All devices are marked using a dedicated indelible laser system. These engravings are therefore suitable for extreme environments too. Thanks to this system that does not use labels, the loss of plate data is prevented and a greater resistance of the marking is achieved over time.

**HX**



## NS series safety switches with solenoid and RFID technology

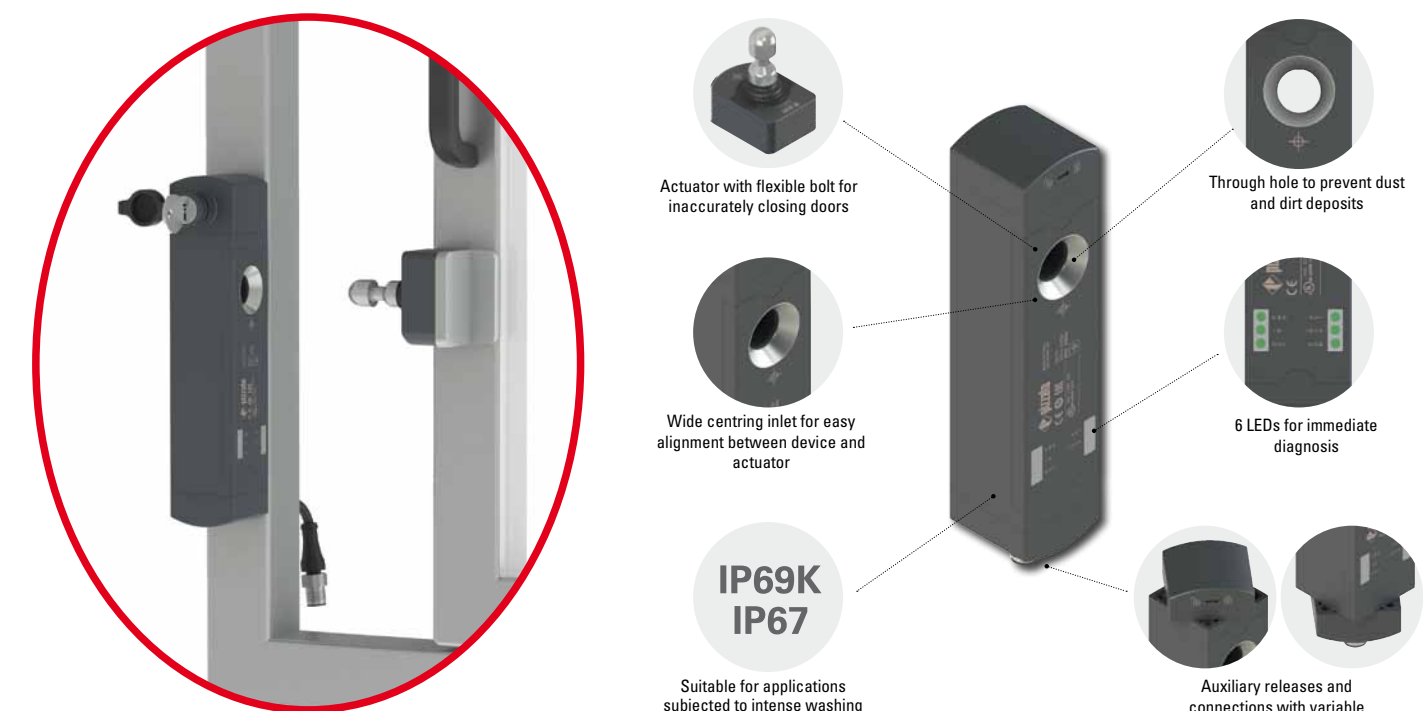


- SIL 3 and PL e with a single device
- High protection degree up to IP67 and IP69K
- Actuation without contact, using RFID technology for a long endurance over time
- Holding force of the actuator up to 2,100 N
- Interlock, no contact, coded, with guard interlock, type 4 acc. to EN ISO 14119
- Reinforced technopolymer housing, self-extinguishing, fully sealed
- Actuators with two available coding levels (low and high) acc. to EN ISO 14119
- 3 actuation modes
- 6 state signalling LEDs
- Automated actuator centring
- Upper auxiliary release and lower connector with variable orientation
- Dust resistance
- Emergency release button (escape release)
- Output with M12 connector or integrated cable



### Description

NS series switches are suitable for the management of guards on machines where the hazardous conditions persist even after the machine has been switched off, due to inertia of moving hazardous parts, or specific material or machinery temperature or pressure conditions within the protected area. The 3 different hardware activation modes allow the guard lock function to be used for machines with inertia (mode 1), for machines with no inertia (mode 2), and for machines with inertia and safety outputs used either for the door closed and locked state, or door closed only state (mode 3). Their light and versatile design means they are particularly suited to light aluminium, polycarbonate or light metal grating guards, typically used in woodworking and packaging machines, or assembly islands.



## NG series safety switches with solenoid and RFID technology

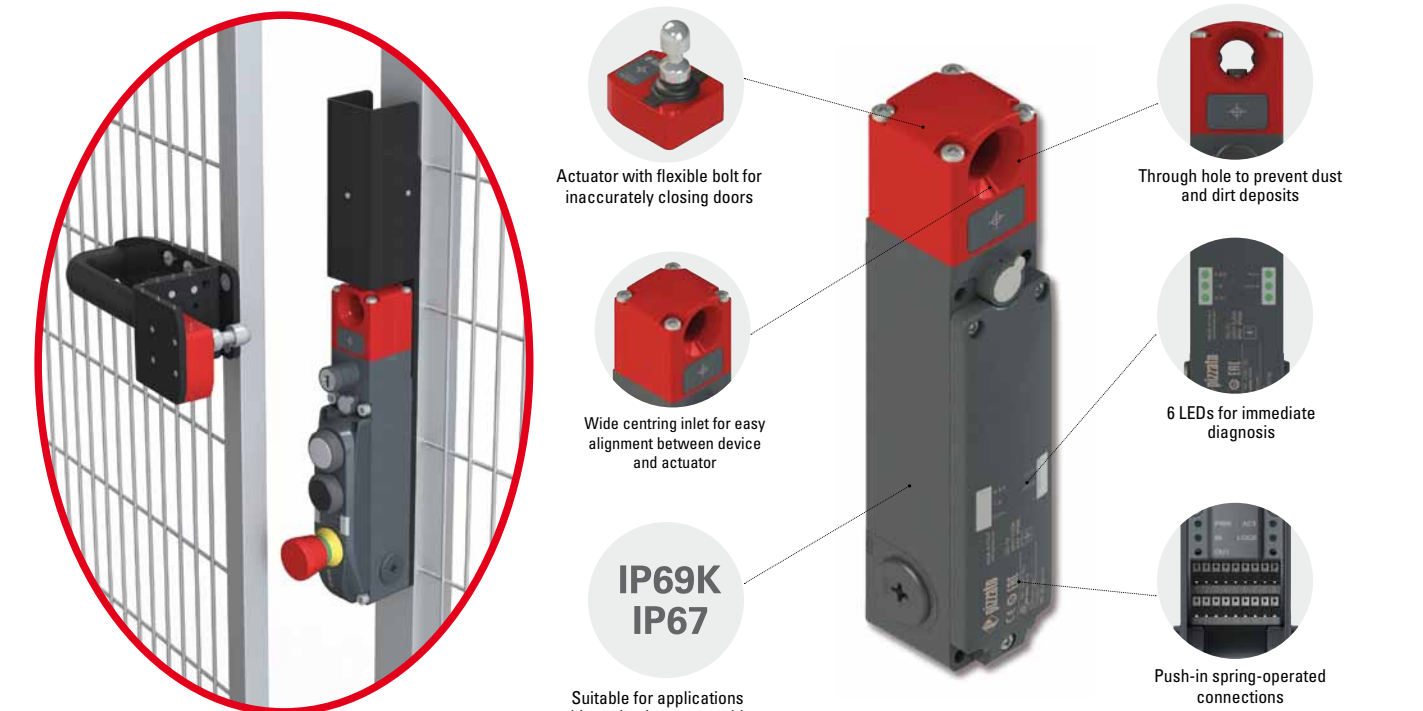


- SIL 3 and PL e with a single device
- High protection degree up to IP67 and IP69K
- Actuation without contact, using RFID technology for a long endurance over time
- Increased actuator holding force of up to 9,750 N
- Interlock, no contact, coded, with guard interlock, type 4 acc. to EN ISO 14119
- Metal housing, three M20 conduit entries
- Actuators with two available coding levels (low and high) acc. to EN ISO 14119
- Automated actuator centring
- Heads and release devices with variable orientation, non-detachable
- Dust resistance
- 2 actuation modes
- 6 state signalling LEDs
- Command buttons integration in device housing
- Emergency release button (escape release)
- Lockout/tagout: compatible with Pizzato AP series safety handles



### Description

NG series switches, like those of the NS series, are suitable for the management of guards on machines where the hazardous conditions persist even after the machine has been switched off; or, thanks to the 2 different hardware operating modes, they can also be used in situations where control of the locking of machine guards with or without inertia is required. The robust, powder-coated, metal housing, combined with a high actuator holding force (up to 9,750 N), make the NG series switches suitable for applications on heavy and large metal guards, typically found in heavy industry (robotic metalworking presses and islands). With the option to integrate illuminable pushbuttons, selectors, and an emergency stop button within the same housing, these switches offer a complete and integrated solution for automated plants, including those of large scopes where, in addition to the main control panel, local control stations are also required.



## ST series safety sensors with RFID technology

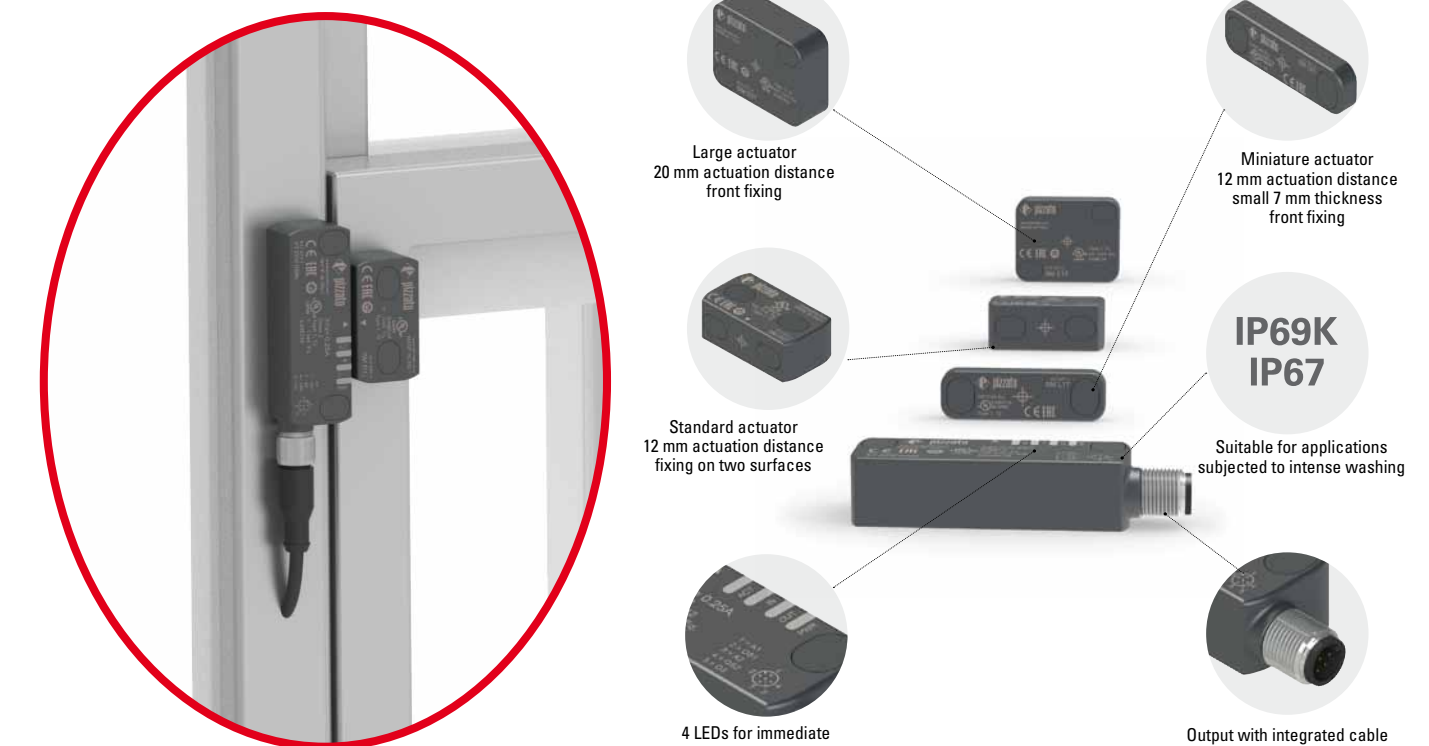


- SIL 3 and PL e with a single device
- High protection degree up to IP67 and IP69K
- Actuation without contact, using RFID technology for a long endurance over time
- Interlock, no contact, coded, type 4 acc. to EN ISO 14119
- Housing made of glass fibre reinforced technopolymer, self-extinguishing
- Reduced dimensions for easy installation to all guard types
- Actuation possible from many directions
- Choice of 3 different actuators
- Two coding levels options (low and high) acc. to EN ISO 14119
- Sensor can be programmed during installation phase
- Wide actuation range, ideal for less precise guards
- Protection caps for screw holes for maximum degree of cleanliness and anti-tamper protection
- Output with M12 connector or integrated cable



### Description

The ST series sensors, with their extremely compact dimensions and contactless RFID technology, guarantee a long-lasting solution in frequently opened and closed guards, including in hostile environmental conditions. The option to choose between 3 different actuator types, with different fixing and actuating directions, makes these sensors extremely versatile; this means that they can be installed to all types of machines and guards, both large and small. Once installation is complete, the plugs supplied make the casing completely smooth and sealed, preventing accumulation of dirt and dust; the IP67 and IP69K protection degree allows washing with pressurized water, making the ST sensors suitable for and valued in the food and pharmaceutical sector.



## HX BEE1 series safety hinge switches with electronic contact block



- SIL 3 and PL e with a single device
- High protection degree up to IP67 and IP69K
- Polished stainless steel AISI 316L housing: safety and style in one product
- Three different cable output directions
- Output with invisible rear cable for most pleasing guard aesthetics
- Clean design: hidden fixing screws
- Designed for heavy guards
- 4 state signalling LEDs for immediate diagnosis
- Fast and safe switching point adjustment
- Availability of fixing plates and additional hinges without contact block
- Output with M12 connector or integrated cable



### Description

HX series hinge switches incorporate a robust metal hinge for heavy guards with a safety switch that is fully inserted into the body of the product: the safety device becomes practically invisible to the inexperienced eye. This, besides from being an aesthetic advantage, guarantees greater safety as a switch which is difficult to identify is consequently even more difficult to tamper with. As the HX series safety hinge switches are in AISI 316L stainless steel, these devices can be used in environments where particular attention must be paid to cleanliness and hygiene, and also corrosion resistance; typically in the food and pharmaceutical sector, but also in the chemical or marine sectors.

