

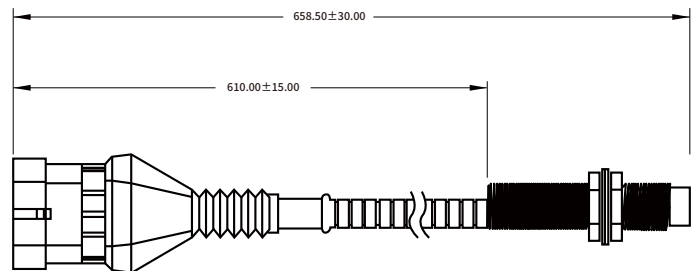
General Specification

Inductive Proximity Sensor

NO: IS-1003



Dimensions (mm)



Product characteristics

- **Positive metal lock verification**
Confirms that metal components, clamps, guards, or fixtures are fully seated and securely engaged before machine start-up.
- **Non-contact electromagnetic sensing**
Eliminates mechanical wear and reduces risk of failure associated with physical switches.
- **Fast response for safety interlock circuits**
Immediate signal output for real-time safety logic and machine protection.
- **High repeatability and switching accuracy**
Ensures consistent detection performance in precision assembly and locking mechanisms.
- **High immunity to EMI/EMC and electrical noise**
Stable operation in heavy industrial environments with motors, drives, and welding equipment.
- **Long operational lifetime**
Solid-state design minimizes maintenance and unplanned downtime.
- **Compatible with safety control systems**
Suitable for integration into PLCs, safety relays, and interlock architectures.

Applications

- **Machine Guard & Safety Interlock Verification**
Confirmation that protective guards, doors, and safety covers are fully closed and properly locked before machine operation.
- **Clamp & Fixture Lock Detection**
Verification that workpieces are securely clamped or fixtures are fully engaged prior to machining or automated processing.
- **Tooling & Die Position Confirmation**
Ensures dies, molds, and tooling components are correctly seated in stamping, injection molding, and forming systems.
- **Automated Assembly Lines**
Metal component presence and final-position verification to prevent incomplete assembly or misalignment.
- **Robotic & Transfer Systems**
End-of-stroke detection and secure locking confirmation in robotic arms and mechanical actuators.
- **Heavy Industrial Equipment**
Safety monitoring in presses, conveyors, welding stations, and material handling systems operating under high vibration and harsh conditions.

Product performance characteristics

Characteristics	Parameter	Rating
Electrical Characteristics	Power Requirement	DC Input: 5V-36V
	Switching frequency	< 1 kHz
	Current consumption max (no load)	<100mA
	Output circuit	NPN Switch-on function (NO)
	Output current	<200mA
	Short circuit protection	Yes
	Reverse polarity protection	Yes
	Sensing distance	4-6mm

Please contact sales@xintec.hk for latest product details