



IMX

Inductive sensors with a quadruple sensing range for large distances in industrial environments

SICK
Sensor Intelligence.

Advantages



4-fold sensing range for larger distances

With their 4-fold sensing ranges, IMX sensors detect objects from a greater distance than other inductive proximity sensors and thereby open up new application possibilities. The sensors can be used in many applications where space is limited or additional distance is required. With sensing ranges of up to 50 mm, they ensure stable processes as objects can be detected from a safe distance without the risk of collision. IMX sensors allow the use of smaller designs without compromising the sensing range. In addition, the degree of standardization can be increased by using the same sensors in different applications.

For applications that need larger distances.



4-fold sensing ranges: up to 300% greater detection distance compared to standard sensors.



Detection from a safe distance reduces the risk of collisions and mechanical damage.



Less installation space required: To achieve comparable sensing ranges, IMX sensors can be selected one size smaller than standard sensors.



Stable and safe processes thanks to larger sensing range.



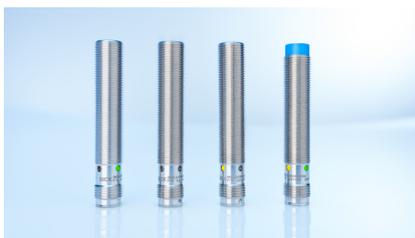
Simple and safe installation

IMX sensors save valuable installation time and ensure the detection of objects. The sensors can be mounted close to each other as the mutual magnetic interference is minimal. The visual adjustment indicator facilitates correct installation by signaling the safe switching on and off of the sensor. This ensures the object is detected over the entire temperature range during operation. Thanks to plug and play, the sensors are quickly ready for operation and do not need to be parameterized by specialist personnel.

Time-saving installation thanks to features that make installation easier.



Mutual interference between IMX sensors is minimal so they can be installed close to each other.



The visual adjustment indicator ensures the sensor functions reliably.



Thanks to plug and play, the sensor can be commissioned without additional configuration.



IMX sensors are designed for quick, easy and safe commissioning.



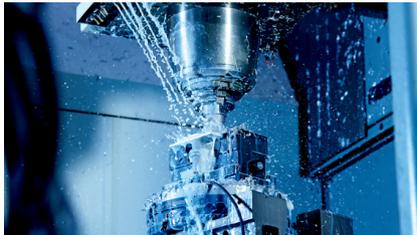
Reliable in many fields of application

Thanks to its rugged design, the IMX works reliably even under harsh conditions. The sensor is resistant to oils, coolants and other contamination that can arise in production facilities and machines. Thanks to its high leak tightness, shock resistance, and good EMC properties, the IMX is suitable for numerous applications and environments. These properties increase the service life of the sensor and ensure stable processes. This reduces downtimes due to maintenance work, thereby resulting in higher plant productivity.

Rugged, durable design.



High chemical resistance to coolants and lubricating oils thanks to LCP cap, PUR encapsulation, and cable sheathing.



Leak tightness in accordance with enclosure rating IP68 and good shock resistance benefit the service life and reliability of the product.



The EMC properties of the product prevent faulty switching caused by interfering electrical components.



Versatile use: Thanks to its robustness, the IMX is recommended for a variety of environments and applications.



Technical data overview

Housing	Metric
Thread size	M8 x 1 M12 x 1 M18 x 1 M30 x 1.5
Diameter	Ø 8 mm ... Ø 30 mm (depending on type)
Sensing range S_n	4 mm ... 50 mm (depending on type)
Housing material	Nickel-plated brass
Enclosure rating	IP68

Product description

Significantly greater distances: IMX offers four times the sensing range of conventional sensors, setting a new standard for inductive proximity sensors. Sensing ranges of up to 50 mm ensure a higher process performance - making IMX ideal for applications that were previously inconceivable with inductive sensors. In space-critical applications, IMX sensors save installation space by using smaller designs. At the same time, the greater distance reduces mechanical damage. The rugged, durable design ensures less downtimes, stable processes and high plant availability.

At a glance

- Types: M8 to M30
- Large sensing ranges: 4 mm to 50 mm
- Enclosure rating: IP68
- Temperature range: -25 °C to +75 °C
- Nickel-plated brass housing, plastic sensing face
- Visual adjustment indicator
- Resistant against oils and cooling lubricant
- 4-fold sensing ranges

Your benefits

- Less installation space required than for larger standard sensors with comparable sensing ranges
- Reduced risk of mechanical damage due to larger mounting distance from the target object
- Avoidance of incorrect switching and more stable processes thanks to high operating reserves
- Low mutual interference, several sensors can be installed close to each other
- Higher degree of standardization by using the same sensors for different applications
- Quick and easy commissioning thanks to visual adjustment indicator and no need for prior parameterization
- Long sensor service life thanks to rugged and durable design

Fields of application

- Presence detection on conveying lines
- Positioning of electrical overhead conveyors
- End position detection for lifting devices
- Positioning of skid conveyors
- Detection of trays in vertical storage systems
- Positioning of rail-bound transport trolleys
- Positioning of the car body in the automotive industry

Ordering information

Other models and accessories → www.sick.com/IMX

- **Cylindrical thread design:** M8
- **Installation type:** quasi-flush
- **Electrical wiring:** DC 3-wire
- **Sensing range S_n :** 4 mm
- **Housing:** Standard design
- **Special features:** quadruple sensing range, Resistant against coolant lubricants, Visual adjustment indicator
- **Connection type:** male connector M12, 4-pin

Switching output	Output function	Type	Part no.
NPN	NC	IMX08-04BNOZC0S	1134191
	NO	IMX08-04BNSZC0S	1134177
PNP	NC	IMX08-04BPOZC0S	1119658
	NO	IMX08-04BPSZC0S	1107435

- **Cylindrical thread design:** M8
- **Installation type:** non-flush
- **Electrical wiring:** DC 3-wire
- **Sensing range S_n :** 8 mm
- **Housing:** Standard design
- **Special features:** quadruple sensing range, Resistant against coolant lubricants, Visual adjustment indicator
- **Connection type:** male connector M12, 4-pin

Switching output	Output function	Type	Part no.
NPN	NC	IMX08-08NNOZC0S	1134192
	NO	IMX08-08NNSZC0S	1134178
PNP	NC	IMX08-08NPOZC0S	1119659
	NO	IMX08-08NPSZC0S	1107436

- **Cylindrical thread design:** M12
- **Installation type:** quasi-flush
- **Electrical wiring:** DC 3-wire
- **Sensing range S_n :** 9 mm
- **Housing:** Standard design
- **Special features:** quadruple sensing range, Resistant against coolant lubricants, Visual adjustment indicator

Switching output	Output function	Connection type	Type	Part no.
NPN	NC	Cable, 3-wire, 2 m	IMX12-09BNOZU2S	1134199
		Male connector M12, 4-pin	IMX12-09BNOZC0S	1134193
	NO	Cable, 3-wire, 2 m	IMX12-09BNSZU2S	1134185
		Male connector M12, 4-pin	IMX12-09BNSZC0S	1134179
PNP	NC	Cable, 3-wire, 2 m	IMX12-09BPOZU2S	1119666
		Male connector M12, 4-pin	IMX12-09BPOZC0S	1119660
	NO	Cable, 3-wire, 2 m	IMX12-09BPSZU2S	1107445
		Male connector M12, 4-pin	IMX12-09BPSZC0S	1107437

- **Cylindrical thread design:** M12
- **Installation type:** non-flush
- **Electrical wiring:** DC 3-wire
- **Sensing range S_n :** 16 mm
- **Housing:** Standard design
- **Special features:** quadruple sensing range, Resistant against coolant lubricants, Visual adjustment indicator

Switching output	Output function	Connection type	Type	Part no.
NPN	NC	Cable, 3-wire, 2 m	IMX12-16NNOZU2S	1134200
		Male connector M12, 4-pin	IMX12-16NNOZCOS	1134194
	NO	Cable, 3-wire, 2 m	IMX12-16NNSZU2S	1134186
		Male connector M12, 4-pin	IMX12-16NNSZCOS	1134180
PNP	NC	Cable, 3-wire, 2 m	IMX12-16NPOZU2S	1119667
		Male connector M12, 4-pin	IMX12-16NPOZCOS	1119661
	NO	Cable, 3-wire, 2 m	IMX12-16NPSZU2S	1107446
		Male connector M12, 4-pin	IMX12-16NPSZCOS	1107438

- **Cylindrical thread design:** M18
- **Installation type:** quasi-flush
- **Electrical wiring:** DC 3-wire
- **Sensing range S_n :** 14 mm
- **Housing:** Standard design
- **Special features:** quadruple sensing range, Resistant against coolant lubricants, Visual adjustment indicator

Switching output	Output function	Connection type	Type	Part no.
NPN	NC	Cable, 3-wire, 2 m	IMX18-14BNOZU2S	1134201
		Male connector M12, 4-pin	IMX18-14BNOZCOS	1134195
	NO	Cable, 3-wire, 2 m	IMX18-14BNSZU2S	1134187
		Male connector M12, 4-pin	IMX18-14BNSZCOS	1134181
PNP	NC	Cable, 3-wire, 2 m	IMX18-14BPOZU2S	1119668
		Male connector M12, 4-pin	IMX18-14BPOZCOS	1119662
	NO	Cable, 3-wire, 2 m	IMX18-14BPSZU2S	1107447
		Male connector M12, 4-pin	IMX18-14BPSZCOS	1107439

- **Cylindrical thread design:** M18
- **Installation type:** non-flush
- **Electrical wiring:** DC 3-wire
- **Sensing range S_n :** 30 mm
- **Housing:** Standard design
- **Special features:** quadruple sensing range, Resistant against coolant lubricants, Visual adjustment indicator

Switching output	Output function	Connection type	Type	Part no.
NPN	NC	Cable, 3-wire, 2 m	IMX18-30NNOZU2S	1134202
		Male connector M12, 4-pin	IMX18-30NNOZCOS	1134196
	NO	Cable, 3-wire, 2 m	IMX18-30NNSZU2S	1134188
		Male connector M12, 4-pin	IMX18-30NNSZCOS	1134182

Switching output	Output function	Connection type	Type	Part no.
PNP	NC	Cable, 3-wire, 2 m	IMX18-30NPOZU2S	1119669
		Male connector M12, 4-pin	IMX18-30NPOZC0S	1119663
	NO	Cable, 3-wire, 2 m	IMX18-30NPSZU2S	1107448
		Male connector M12, 4-pin	IMX18-30NPSZC0S	1107441

- **Cylindrical thread design:** M30
- **Installation type:** quasi-flush
- **Electrical wiring:** DC 3-wire
- **Sensing range S_n :** 25 mm
- **Housing:** Standard design
- **Special features:** quadruple sensing range, Resistant against coolant lubricants, Visual adjustment indicator

Switching output	Output function	Connection type	Type	Part no.
NPN	NC	Cable, 3-wire, 2 m	IMX30-25BNOZU2S	1134203
		Male connector M12, 4-pin	IMX30-25BNOZC0S	1134197
	NO	Cable, 3-wire, 2 m	IMX30-25BNSZU2S	1134189
		Male connector M12, 4-pin	IMX30-25BNSZC0S	1134183
PNP	NC	Cable, 3-wire, 2 m	IMX30-25BPOZU2S	1119670
		Male connector M12, 4-pin	IMX30-25BPOZC0S	1119664
	NO	Cable, 3-wire, 2 m	IMX30-25BPSZU2S	1107449
		Male connector M12, 4-pin	IMX30-25BPSZC0S	1107442

- **Cylindrical thread design:** M30
- **Installation type:** non-flush
- **Electrical wiring:** DC 3-wire
- **Sensing range S_n :** 50 mm
- **Housing:** Standard design
- **Special features:** quadruple sensing range, Resistant against coolant lubricants, Visual adjustment indicator

Switching output	Output function	Connection type	Type	Part no.
NPN	NC	Cable, 3-wire, 2 m	IMX30-50NNOZU2S	1134204
		Male connector M12, 4-pin	IMX30-50NNOZC0S	1134198
	NO	Cable, 3-wire, 2 m	IMX30-50NNSZU2S	1134190
		Male connector M12, 4-pin	IMX30-50NNSZC0S	1134184
PNP	NC	Cable, 3-wire, 2 m	IMX30-50NPOZU2S	1119671
		Male connector M12, 4-pin	IMX30-50NPOZC0S	1119665
	NO	Cable, 3-wire, 2 m	IMX30-50NPSZU2S	1107450
		Male connector M12, 4-pin	IMX30-50NPSZC0S	1107443

SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is “Sensor Intelligence.”

WORLDWIDE PRESENCE:

Contacts and other locations –www.sick.com