



## IMG

Inductive standard sensors for economical use in outdoor applications

**SICK**  
Sensor Intelligence.

Advantages



**High precision in a harsh work environment**

The IMG has been reduced to the essentials and, thanks to the high-quality components and the SICK ASIC technology, delivers precise detection results at an optimized price/performance ratio. In combination with a rugged design, it also operates reliably under harsh conditions. This results in practice in reduced downtimes and stable processes, which makes it a suitable solution for use in mobile machines and machine construction.



The high leak tightness with enclosure ratings IP68 and IP69K and the especially good shock resistance extend the service life and ensure reliable operation.



Large sensing ranges from 4 to 20 mm allow a wide variety of fields of application – from workpiece detection right through to speed measurement tasks in vehicles.



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

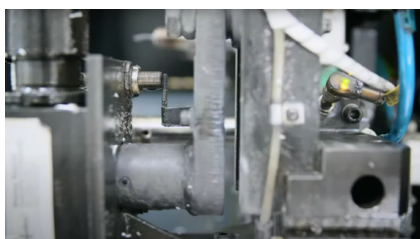


**Reliability that pays off: The IMG is the rugged solution for price-sensitive applications.**



## Durability for many fields of application

**Whether Alaska or Sahara:** The IMG proximity sensor withstands extreme temperatures and harsh outdoor conditions. This enables it to detect reliably over a temperature range of  $-40$  to  $+85$  °C. The IMG is also resistant to oils, coolants and other contamination that can arise when used in mobile applications and diverse production facilities. Thanks to its EMC performance and high shock resistance, it is suitable for numerous applications – both in production halls and also installed in mobile machines.



High chemical resistance to coolants and lubricants thanks to LCP cap and PUR encapsulation and cable sheath.



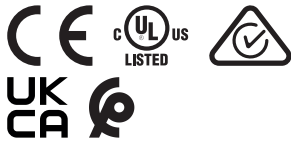
The IMG is available in various types and can, if required, be manufactured to specific customer requirements.



The EMC performance prevents switching errors due to disruptive interference from other electronic components.



**Versatility:** Thanks to its ruggedness, the IMG can be used in a variety of environments and applications.



### Technical data overview

<b>Housing</b>	Metric
<b>Thread size</b>	M12 x 1 M18 x 1 M30 x 1.5
<b>Diameter</b>	Ø 12 mm ... Ø 30 mm (depending on type)
<b>Sensing range S<sub>n</sub></b>	4 mm ... 20 mm (depending on type)
<b>Housing material</b>	Nickel-plated brass
<b>Enclosure rating</b>	IP67, IP68, IP69K

### Product description

The IMG inductive proximity sensor precisely detects metallic objects even in harsh usage environments. In price-sensitive mobile applications and automation solutions, it is suitable as a switch for end position determination of speed measurement. Using the IMG, fault-free processes can be ensured even with high temperature fluctuations. The fully-encapsulated sensor is impervious to mechanical shocks as well as vibrations and with its IP69K rating is protected against water as well as oils, coolants and all kinds of contamination. This makes the IMG an economical solution for challenging outdoor uses and machine construction. Thanks to plug and play, the sensor can also be commissioned quickly.

### At a glance

- Types: M12, M18, M30
- Extended sensing ranges: 4 to 20 mm
- Electrical configuration: DC, 3-wire
- Enclosure rating: IP67, IP68, IP69K
- Temperature range: -40 to +85 °C
- Nickel-plated brass housing, plastic sensing face (LCP)
- Resistant to oil and cooling lubricants; suitable for use outdoors

### Your benefits

- High availability and long service life thanks to rugged design according to enclosure ratings IP68 and IP69K
- For harsh environments and demanding weather conditions with high humidity, extreme temperatures or constant vibrations
- Reliable detection thanks to SICK ASIC technology
- Optimized price/performance ratio due to incorporating only the essentials but with high-quality components and features
- Fast commissioning without prior parameterization
- Fault-free signal transmission thanks to high electromagnetic compatibility

### Fields of application

- Speed detection for vehicles, fans and conveyor systems
- Detection of flap position
- Position detection for tool turrets
- Tool detection on a turret
- Detection of the locked and unlocked position of the turret

## Ordering information

Other models and accessories → [www.sick.com/IMG](http://www.sick.com/IMG)

- **Sub product family:** IMG12
- **Cylindrical thread design:** M12
- **Installation type:** flush
- **Electrical wiring:** DC 3-wire
- **Sensing range  $S_n$ :** 4 mm
- **Special features:** Resistant against coolant lubricants, Temperature resistance

Housing	Switching output	Output function	Connection type	Type	Part no.
Standard design	NPN	NC	Cable, 3-wire, 2 m	IMG12-04BNOZU2S	1135547
			Male connector M12, 4-pin	IMG12-04BNOZC0S	1135546
		NO	Cable, 3-wire, 2 m	IMG12-04BNSZU2S	1135523
			Male connector M12, 4-pin	IMG12-04BNSZC0S	1135522
	PNP	NC	Cable, 3-wire, 2 m	IMG12-04BPOZU2S	1135535
			Male connector M12, 4-pin	IMG12-04BPOZC0S	1135534
		NO	Cable, 3-wire, 2 m	IMG12-04BPSZU2S	1108130
			Male connector M12, 4-pin	IMG12-04BPSZC0S	1094334
Short-body	NPN	NC	Cable, 3-wire, 2 m	IMG12-04BNOZU2K	1135544
			Male connector M12, 4-pin	IMG12-04BNOZC0K	1135543
		NO	Cable, 3-wire, 2 m	IMG12-04BNSZU2K	1135520
			Male connector M12, 4-pin	IMG12-04BNSZC0K	1135519
	PNP	NC	Cable, 3-wire, 2 m	IMG12-04BPOZU2K	1135532
			Male connector M12, 4-pin	IMG12-04BPOZC0K	1135531
		NO	Cable, 3-wire, 2 m	IMG12-04BPSZU2K	1135510
			Male connector M12, 4-pin	IMG12-04BPSZC0K	1094333

- **Sub product family:** IMG12
- **Cylindrical thread design:** M12
- **Installation type:** non-flush
- **Electrical wiring:** DC 3-wire
- **Sensing range  $S_n$ :** 8 mm
- **Special features:** Resistant against coolant lubricants, Temperature resistance

Housing	Switching output	Output function	Connection type	Type	Part no.
Standard design	NPN	NC	Cable, 3-wire, 2 m	IMG12-08NNOZU2S	1135553
			Male connector M12, 4-pin	IMG12-08NNOZC0S	1135552
		NO	Cable, 3-wire, 2 m	IMG12-08NNSZU2S	1135529
			Male connector M12, 4-pin	IMG12-08NNSZC0S	1135528
	PNP	NC	Cable, 3-wire, 2 m	IMG12-08NPOZU2S	1135541
			Male connector M12, 4-pin	IMG12-08NPOZC0S	1135540
		NO	Cable, 3-wire, 2 m	IMG12-08NPSZU2S	1135517
			Male connector M12, 4-pin	IMG12-08NPSZC0S	1135516
Short-body	NPN	NC	Cable, 3-wire, 2 m	IMG12-08NNOZU2K	1135550
			Male connector M12, 4-pin	IMG12-08NNOZC0K	1135549
		NO	Cable, 3-wire, 2 m	IMG12-08NNSZU2K	1135526
			Male connector M12, 4-pin	IMG12-08NNSZC0K	1135525
	PNP	NC	Cable, 3-wire, 2 m	IMG12-08NPOZU2K	1135538
			Male connector M12, 4-pin	IMG12-08NPOZC0K	1135537
		NO	Cable, 3-wire, 2 m	IMG12-08NPSZU2K	1135514
			Male connector M12, 4-pin	IMG12-08NPSZC0K	1135513

- **Sub product family:** IMG18
- **Cylindrical thread design:** M18
- **Installation type:** flush
- **Electrical wiring:** DC 3-wire
- **Sensing range  $S_n$ :** 8 mm
- **Special features:** Resistant against coolant lubricants, Temperature resistance

Housing	Switching output	Output function	Connection type	Type	Part no.
Standard design	NPN	NC	Cable, 3-wire, 2 m	IMG18-08BNOZU2S	1135603
			Male connector M12, 4-pin	IMG18-08BNOZC0S	1135602
		NO	Cable, 3-wire, 2 m	IMG18-08BNSZU2S	1135579
			Male connector M12, 4-pin	IMG18-08BNSZC0S	1135578
	PNP	NC	Cable, 3-wire, 2 m	IMG18-08BPOZU2S	1135591
			Male connector M12, 4-pin	IMG18-08BPOZC0S	1135590
		NO	Cable, 3-wire, 2 m	IMG18-08BPSZU2S	1135567
			Male connector M12, 4-pin	IMG18-08BPSZC0S	1135566
Short-body	NPN	NC	Cable, 3-wire, 2 m	IMG18-08BNOZU2K	1135600
			Male connector M12, 4-pin	IMG18-08BNOZC0K	1135599
		NO	Cable, 3-wire, 2 m	IMG18-08BNSZU2K	1135576
			Male connector M12, 4-pin	IMG18-08BNSZC0K	1135575
	PNP	NC	Cable, 3-wire, 2 m	IMG18-08BPOZU2K	1135588
			Male connector M12, 4-pin	IMG18-08BPOZC0K	1135587
		NO	Cable, 3-wire, 2 m	IMG18-08BPSZU2K	1135564
			Male connector M12, 4-pin	IMG18-08BPSZC0K	1135563

- **Sub product family:** IMG18
- **Cylindrical thread design:** M18
- **Installation type:** non-flush
- **Electrical wiring:** DC 3-wire
- **Sensing range  $S_n$ :** 12 mm
- **Special features:** Resistant against coolant lubricants, Temperature resistance

Housing	Switching output	Output function	Connection type	Type	Part no.
Standard design	NPN	NC	Cable, 3-wire, 2 m	IMG18-12NNOZU2S	1135609
			Male connector M12, 4-pin	IMG18-12NNOZC0S	1135608
		NO	Cable, 3-wire, 2 m	IMG18-12NNSZU2S	1135585
			Male connector M12, 4-pin	IMG18-12NNSZC0S	1135584
	PNP	NC	Cable, 3-wire, 2 m	IMG18-12NPOZU2S	1135597
			Male connector M12, 4-pin	IMG18-12NPOZC0S	1135596
		NO	Cable, 3-wire, 2 m	IMG18-12NPSZU2S	1135573
			Male connector M12, 4-pin	IMG18-12NPSZC0S	1135572
Short-body	NPN	NC	Cable, 3-wire, 2 m	IMG18-12NNOZU2K	1135606
			Male connector M12, 4-pin	IMG18-12NNOZC0K	1135605
		NO	Cable, 3-wire, 2 m	IMG18-12NNSZU2K	1135582
			Male connector M12, 4-pin	IMG18-12NNSZC0K	1135581
	PNP	NC	Cable, 3-wire, 2 m	IMG18-12NPOZU2K	1135594
			Male connector M12, 4-pin	IMG18-12NPOZC0K	1135593
		NO	Cable, 3-wire, 2 m	IMG18-12NPSZU2K	1135570
			Male connector M12, 4-pin	IMG18-12NPSZC0K	1135569



- **Sub product family:** IMG30
- **Cylindrical thread design:** M30
- **Installation type:** flush
- **Electrical wiring:** DC 3-wire
- **Sensing range  $S_n$ :** 15 mm
- **Special features:** Resistant against coolant lubricants, Temperature resistance

Housing	Switching output	Output function	Connection type	Type	Part no.
Standard design	NPN	NC	Cable, 3-wire, 2 m	IMG30-15BNOZU2S	1135654
			Male connector M12, 4-pin	IMG30-15BNOZC0S	1135653
		NO	Cable, 3-wire, 2 m	IMG30-15BNSZU2S	1135630
			Male connector M12, 4-pin	IMG30-15BNSZC0S	1135629
	PNP	NC	Cable, 3-wire, 2 m	IMG30-15BPOZU2S	1135642
			Male connector M12, 4-pin	IMG30-15BPOZC0S	1135641
		NO	Cable, 3-wire, 2 m	IMG30-15BPSZU2S	1135616
			Male connector M12, 4-pin	IMG30-15BPSZC0S	1135615
Short-body	NPN	NC	Cable, 3-wire, 2 m	IMG30-15BNOZU2K	1135651
			Male connector M12, 4-pin	IMG30-15BNOZC0K	1135650
		NO	Cable, 3-wire, 2 m	IMG30-15BNSZU2K	1135625
			Male connector M12, 4-pin	IMG30-15BNSZC0K	1135624
	PNP	NC	Cable, 3-wire, 2 m	IMG30-15BPOZU2K	1135639
			Male connector M12, 4-pin	IMG30-15BPOZC0K	1135638
		NO	Cable, 3-wire, 2 m	IMG30-15BPSZU2K	1135612
			Male connector M12, 4-pin	IMG30-15BPSZC0K	1135611

- **Sub product family:** IMG30
- **Cylindrical thread design:** M30
- **Installation type:** non-flush
- **Electrical wiring:** DC 3-wire
- **Sensing range  $S_n$ :** 20 mm
- **Special features:** Resistant against coolant lubricants, Temperature resistance

Housing	Switching output	Output function	Connection type	Type	Part no.
Standard design	NPN	NC	Cable, 3-wire, 2 m	IMG30-20NNOZU2S	1135660
			Male connector M12, 4-pin	IMG30-20NNOZC0S	1135659
		NO	Cable, 3-wire, 2 m	IMG30-20NNSZU2S	1135636
			Male connector M12, 4-pin	IMG30-20NNSZC0S	1135635
	PNP	NC	Cable, 3-wire, 2 m	IMG30-20NPOZU2S	1135648
			Male connector M12, 4-pin	IMG30-20NPOZC0S	1135647
		NO	Cable, 3-wire, 2 m	IMG30-20NPSZU2S	1135622
			Male connector M12, 4-pin	IMG30-20NPSZC0S	1135621
Short-body	NPN	NC	Cable, 3-wire, 2 m	IMG30-20NNOZU2K	1135657
			Male connector M12, 4-pin	IMG30-20NNOZC0K	1135656
		NO	Cable, 3-wire, 2 m	IMG30-20NNSZU2K	1135633
			Male connector M12, 4-pin	IMG30-20NNSZC0K	1135632
	PNP	NC	Cable, 3-wire, 2 m	IMG30-20NPOZU2K	1135645
			Male connector M12, 4-pin	IMG30-20NPOZC0K	1135644
		NO	Cable, 3-wire, 2 m	IMG30-20NPSZU2K	1135619
			Male connector M12, 4-pin	IMG30-20NPSZC0K	1135618

## 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](http://www.sick.com)