

# IME2S

Cylindrical inductive safety switch for position monitoring



#### Advantages



### The highest standard of position and presence detection

Many machines require safety switches for safe position and presence detection. Thanks to the many variants of the IME2S, it satisfies individual customer requirements with ease. One of its greatest strengths is the precise, non-contact detection of metallic machine parts without a special actuator. Depending on the switch size, it can achieve a sensing range of up to 15 mm.

### Many variants with optimal response range



From M12 to M30: The IME2S has the right switch for any drill hole and any required sensing range.



The smallest variant of the IME2S with M12 thread features a unique sensing range of 8 mm and is therefore ideal for detecting moving machine parts in small machines.



The right switch size for any requirement: The IME2S non-contact safety switch



### It can be optimally adjusted in just a few steps

The IME2S can be integrated into the machine with or without a bracket and is easy to adjust. It is also characterized by its high degree of flexibility when it comes to connections. It reliably detects the position of a machine part up to performance level d. Thanks to the two OSSD outputs with test pulses, it reliably detects short- and cross-circuits, therefore ensuring a high level of safety.

### Fast adjustment, high tolerance



Thanks to the thread and range of sizes, the IME2S can be quickly integrated into any machine and is easy to adjust. There is no blind spot — and therefore no minimum distance.



The IME2S exhibits high tolerance to deviation. And, just like the IQB2S inductive safety switch, it features non-contact operation and has a very low wear rate.



The IME2S inductive safety switch enables precise adjustment for optimal productivity.





#### Technical data overview

Toolilloar data ovolviow				
Sensor principle	Inductive			
Safety level	PL d, SIL 2			
Actuator coding level	Uncoded (EN ISO 14119)			
Type of output	Self-monitoring semiconductor outputs (OSSDs)			
Number of safe outputs	2			
Connection type	Male connector M12, 4-pin Cable with M12 male connector, 4-pin Cable, 4-wire (depending on type)			

#### **Product description**

The inductive safety switches of the IME2S product family are used for safe position and area monitoring. Thanks to the very compact design and wide range of connection variants, they offer optimum integration into the machine design. The IME2S switches work without making contact and are low-wear. The inductive safety switches do not require a separate actuator to do their monitoring tasks. On the contrary, they are generally activated by metals, for example on machines. Due to the large response range, the safety switches allow for assembly tolerances, simplifying mounting and adjustment. The IME2S can be connected to a safe control solution via its self-monitoring switching outputs (OSSDs), allowing for high safety with PL d (EN ISO 13849).

#### At a glance

- Types: M12 to M30
- Increased response ranges: 4 mm to 15 mm
- Two OSSD safety outputs
- Enclosure rating: IP67
- Temperature range: -25 °C to +70 °C
- Nickel-plated brass housing, plastic sensing face
- Up to performance level PL d (EN ISO 13849)
- Connection variants: M12 male connector, cable or cable with M12 male connector

#### Your benefits

- · High machine availability thanks to low susceptibility to dirt and moisture
- · Long product service life due to low-wear and low-maintenance workings
- · Easy integration: Sensors can be mounted to save space thanks to their compact design and do not need a separate actuator
- Fast diagnostics via LED status indicator
- · High reliability and precise switching behavior due to proven ASIC technology
- · Safe, direct connection to a safe control solution by means of OSSDs
- · Easy and flexible connection options thanks to variants with male connector, cable or cable with male connector

#### Fields of application

- · Safe position monitoring
- Safe area monitoring
- · Safe presence monitoring

### Ordering information

Other models and accessories → www.sick.com/IME2S

• Design: cylindrical

Dimensions	Thread length	Sensing range S <sub>n</sub>	Installation type	Connection type Detail	Туре	Part no.
M12 x 63 mm	36.9 mm	4 mm	Non-flush	Cable with M12 male con- nector, 4-pin	IME2S12-04N4DQ9	1091943
				Cable, 4-wire	IME2S12-04N4DW2	1091947
	40.9 mm 4 mm	4 mm	Flush	Cable with M12 male con- nector, 4-pin	IME2S12-04B4DQ9	1091142
				Cable, 4-wire	IME2S12-04B4DW2	1091945
M12 x 65 mm	36.9 mm	4 mm	Non-flush	Male connector M12, 4-pin	IME2S12-04N4DC0	1091946
		8 mm	Non-flush	Male connector M12, 4-pin	IME2S12-08N4DC0	1091948
	40.9 mm	4 mm	Flush	Male connector M12, 4-pin	IME2S12-04B4DC0	1091944
	43 mm	4 mm	Non-flush	Male connector M12, 4-pin	IME2S12-04N4DC0S02	1117664
	48 mm	4 mm	Flush	Male connector M12, 4-pin	IME2S12-04B4DC0S02	1117670
M18 x 69 mm	35.2 mm	8 mm	Non-flush	Male connector M12, 4-pin	IME2S18-08N4DC0	1091950
	44.2 mm	5 mm	Flush	Male connector M12, 4-pin	IME2S18-05B4DC0	1091949
		8 mm	Flush	Male connector M12, 4-pin	IME2S18-08B4DC0	1091951
M30 x 71 mm	34.6 mm	15 mm	Non-flush	Male connector M12, 4-pin	IME2S30-15N4DC0	1091953
	45.9 mm	12 mm	Flush	Male connector M12, 4-pin	IME2S30-12B4DC0	1091952

### 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

