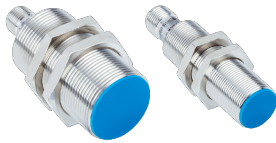# SAM

The simple and intelligent way of speed monitoring

SICK
Sensor Intelligence.

SAM

Technical data overview

Housing	Cylindrical thread design
Thread size	M18 x 1 M30 x 1.5
Housing diameter	Ø 18 mm / Ø 30 mm (depending on type)
Sensing range S_n	7 mm / 10 mm (depending on type)
Electrical wiring	DC 4-wire
Housing material	Brass
Enclosure rating	IP67
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Product description

The SAM sensor is the simple and intelligent way of speed monitoring with an additional IO-Link interface. SAM can be used as a classic speed monitor or innovative acceleration monitor with a revolutionary speed-independent monitoring function. It checks if an adjustable speed or acceleration threshold is crossed and provides a switching signal. SAM is setting new standards and revolutionizing commissioning tasks and fields of application thanks to its fast response time, monitored range of up to 12,000 pulses per minute and intelligent start-up delay.

At a glance

- Types: M18 and M30
- Sensing ranges: up to 10 mm flush
- Speed and acceleration monitoring
- Monitoring range: 6 to 12,000 pulses/min. and 0.1 to 2 pulses/sec.[2]
- Switching and pulse output
- Intelligent start-up delay
- Speed monitoring can be flexibly configured via two thresholds
- Flexible sensor settings, monitoring, extended diagnostics, and visualization thanks to IO-Link

Your benefits

- Speed-independent detection of speed changes
- Faster detection of speed changes than conventional speed monitors
- No readjustment after speed changes necessary
- Precise and convenient configuration via software
- IO-Link provides easy data access from the PLC
- No time-consuming, individual configuration of start-up delay feature necessary
- Reliable output signal thanks to adjustable speed thresholds (hysteresis)
- No expensive counter cards necessary in PLC

Fields of application

- Monitoring of slack, belt breakage, overload, and component breakage on:
- Machine tools
- Ventilators
- Stranding machines
- Conveyor belts
- Elevator conveyors and crushers
- Drainage centrifuges and mixing facilities
- Wind power plants

Ordering information

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

- **Sub product family:** SAM M18
- **Cylindrical thread design:** M18
- **Installation type:** flush
- **Electrical wiring:** DC 4-wire
- **Sensing range S_n:** 7 mm
- **Switching output:** PNP
- **Output function:** NO
- **Special features:** Speed monitor
- **Connection type:** male connector M12, 4-pin

Type	Part no.
IMC18-07BPDZC0SA05	1061987
IMC18-07BPSZC0SS01	1058622

- **Sub product family:** SAM M30
- **Cylindrical thread design:** M30
- **Installation type:** flush
- **Electrical wiring:** DC 4-wire
- **Sensing range S_n:** 10 mm

Switching output	Output function	Special features	Connection type	Type	Part no.
PNP	NO	Speed monitor	Male connector M12, 4-pin	IMC30-10BPDZC0SA05	1061704

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**

SICK AG | Waldkirch | Germany | www.sick.com

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