

## IQE17

MEDIUM-SIZED ECONOMIC STANDARD FOR SIMPLE APPLICATIONS



**Inductive proximity sensors** 

# MEDIUM-SIZED ECONOMIC STANDARD FOR SIMPLE APPLICATIONS



#### **Product description**

The IQE17 is a compact inductive proximity sensor with a rectangular design, which offers excellent value for money. SICK has developed this sensor specifically for the consumer goods industry and other mass market applications.

The IQE17 offers precise detection, high counting speeds, high repeat accuracy, and reliable performance.

Furthermore, the sensor is easy to adapt to different production requirements.

#### At a glance

- Dimensions (W x H x D):
   17 mm x 17 mm x 29.5 mm
- · Sensing range: 5 mm
- Electrical configuration:
   DC 3-wire, DC: 10 V ... 30 V
- Enclosure rating: IP 67

- Ambient operating temperature:
   -25 °C ... +75 °C
- Switching output: NPN or PNP
- Switching function: Normally open, normally closed
- Switching frequency: 1,000 Hz

#### Your benefits

- Easy to integrate and replace in existing machines and systems thanks to its standardized mounting surface
- · Minimal machine downtime
- Clearly visible LED display for easy commissioning and monitoring
- Precise detection and high counting speeds enable fast handling processes

## $\epsilon$

#### Additional information

Detailed technical data
Ordering information
Dimensional drawing 4
Connection diagram4
Installation note
Recommended accessories 5

→ www.mysick.com/en/IQE17

For more information, just enter the link or scan the QR code and get direct access to technical data, CAD design models, operating instructions, software, application examples and much more



## Detailed technical data

#### **Features**

Housing	Rectangular
Sensing range S <sub>n</sub>	5 mm
Assured sensing range S <sub>a</sub>	4.05 mm
Installation type	Non-flush
Switching frequency	1,000 Hz
Output type	PNP / NPN (depending on type)
Output function	NO / NC (depending on type)
Electrical wiring	DC 3-wire
Enclosure rating 1)	IP 67

<sup>1)</sup> According to EN 60529.

## Mechanics/electronics

Supply voltage	10 V DC 30 V DC
Ripple	≤ 10 %
Voltage drop	≤ 2 V
Current consumption	≤ 10 mA
Time delay before availability	≤ 100 ms
Hysteresis	5 % 15 %
Repeatability	≤ 2 %
Temperature drift (of S <sub>r</sub> )	± 10 %
EMC	According to EN 60947-5-2
Continuous current I <sub>a</sub>	≤ 200 mA
Connection type	Cable, 2 m, PVC
Short-circuit protection	V
Reverse polarity protection	V
Power-up pulse protection	<b>√</b>
Ambient operating temperature	-25 °C +75 °C
Housing material	Plastic
Tightening torque, max.	0.9 Nm

## **Reduction factors**

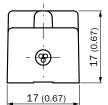
Note	The values are reference values which may vary
St37 steel (Fe)	1
Stainless steel (V2A, 304)	Typ. 0.7
Aluminum (Al)	Typ. 0.43
Copper (Cu)	Typ. 0.3
Brass (Br)	Typ. 0.4

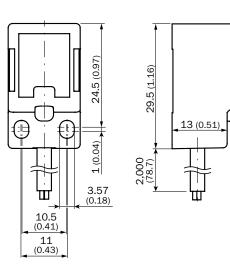
## Ordering information

Other models → www.mysick.com/en/IQE17

Output function	Output type	Connection diagram	Model name	Part no.
NO	PNP	Cd-001	IQE17-05NPSKW2S	1069411
	NPN	Cd-001	IQE17-05NNSKW2S	1072414
NC	PNP	Cd-003	IQE17-05NPOKW2S	1072413
	NPN	Cd-003	IQE17-05NNOKW2S	1072415

## Dimensional drawing (Dimensions in mm (inch))

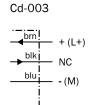




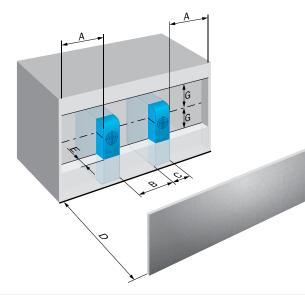
## Connection diagram

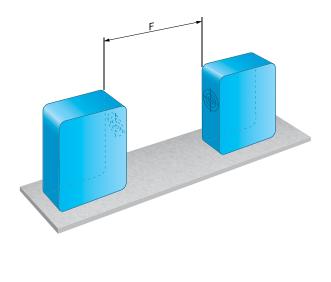
Cd-001





#### Installation note





	Installation	Sensing range Sn	Α	В	С	D	E	F	G
IQE17	Non-flush	5 mm	17 mm	34 mm	17 mm	15 mm	10 mm	40 mm	25.5 mm

#### Recommended accessories

#### Plug connectors and cables

Female connectors (ready to assemble)

- Connection type head B: -
- Enclosure rating: IP 67

Figure	Connection type head A	Locking nut material	Connector material	Model name	Part no.
	Female connector, M12, 4-pin, straight	CuZn	PA	DOS-1204-G	6007302
	Female connector, M12, 4-pin, angled	CuZn	РВТ	DOS-1204-W	6007303

Male connectors (ready to assemble)

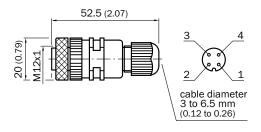
- Connection type head B: -
- Enclosure rating: IP 67

Figure	Connection type head A	Locking nut material	Connector material	Model name	Part no.
	Male connector, M12, 4-pin, straight	CuZn	PA	STE-1204-G	6009932
	Male connector, M12, 4-pin, angled	CuZn	PBT	STE-1204-W	6022084

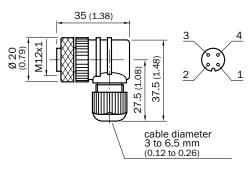
## Dimensional drawings for accessories

## Female connectors (ready to assemble)

#### DOS-1204-G

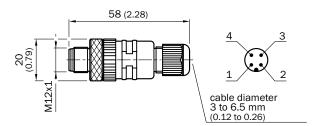


#### DOS-1204-W

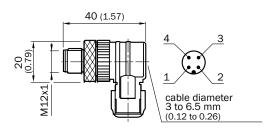


## Male connectors (ready to assemble)

#### STE-1204-G



#### STE-1204-W



# REGISTER AT WWW.SICK.COM TODAY AND ENJOY ALL THE BENEFITS

- Select products, accessories, documentation and software quickly and easily.
- Create, save and share personalized wish lists.
- View the net price and date of delivery for every product.
- Requests for quotation, ordering and delivery tracking made easy.
- Overview of all quotations and orders.
- Direct ordering: submit even very complex orders in moments.
- View the status of quotations and orders at any time.

  Receive e-mail notifications of status changes.
- Easily repeat previous orders.
- Conveniently export quotations and orders to work with your systems.



## SERVICES FOR MACHINES AND SYSTEMS: SICK LifeTime Services

Our comprehensive and versatile LifeTime Services are the perfect addition to the comprehensive range of products from SICK. The services range from product-independent consulting to traditional product services.





Consulting and design Safe and professional



Product and system support Reliable, fast and on-site



Verification and optimization Safe and regularly inspected



Upgrade and retrofits
Easy, safe and economical



Training and education

Practical, focused and professional

## SICK AT A GLANCE

SICK is a leading manufacturer of intelligent sensors and sensor solutions for industrial applications. With almost 7,000 employees and over 50 subsidiaries and equity investments as well as numerous representative offices worldwide, we are always close to our customers. 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 various 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 round out 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:

Australia, Austria, Belgium, Brazil, Canada, Chile, China, Czech Republic, Denmark, Finland, France, Germany, Great Britain, Hungary, India, Israel, Italy, Japan, Malaysia, Mexico, Netherlands, New Zealand, Norway, Poland, Romania, Russia, Singapore, Slovakia, Slovenia, South Africa, South Korea, Spain, Sweden, Switzerland, Taiwan, Thailand, Turkey, United Arab Emirates, USA, Vietnam.

Detailed addresses and additional representatives → www.sick.com

