

Technical data sheet Fork photoelectric sensor

Part no.: 50154016

GS06B/4X-100-M12

Contents

- Technical data
- Dimensioned drawings
- Electrical connection
- Operation and display
- Part number code
- Notes
- Further information



For illustration purposes only



Technical data

Basic data

Series	06B
Principle of physics	Optical
Application	Detection of small parts

Characteristic parameters

MTTF	388 years
------	-----------

Optical data

Light source	LED, Infrared
Wavelength	940 nm
Transmitted-signal shape	Pulsed

Measurement data

Minimum object diameter	1.5 mm
-------------------------	--------

Electrical data

Protective circuit	Polarity reversal protection
	Short circuit protected

Performance data

Supply voltage U_B	12 ... 24 V, DC
Residual ripple	0 ... 10 %, From U_B
Open-circuit current	0 ... 15 mA

Inputs

Number of digital switching inputs	1 Piece(s)
------------------------------------	------------

Switching inputs

Type	Digital switching input
------	-------------------------

Digital switching input 1

Function	Light/dark switching light switching (input = open) dark switching (input = 0 V)
----------	--

Outputs

Number of digital switching outputs	1 Piece(s)
-------------------------------------	------------

Switching outputs

Type	Digital switching output
Voltage type	DC
Switching current, max.	100 mA
Switching voltage	high: $\geq(U_B - 2V)$
	low: $\leq 2 V$

Switching output 1

Assignment	Connection 1, pin 4
Switching element	Transistor, PNP
Switching principle	Light/dark switchable

Time behavior

Switching frequency	1,000 Hz
Response time	0.5 ms

Connection

Number of connections	1 Piece(s)
-----------------------	------------

Connection 1

Function	Signal IN
	Signal OUT
	Voltage supply
Type of connection	Connector
Cable length	100 mm
Sheathing material	PVC
Cable color	Black
Number of conductors	4 -wire
Wire cross section	0.16 mm ²
Thread size	M12
Type	Male
Material	Plastic
No. of pins	4 -pin
Encoding	A-coded

Mechanical data

Design	Fork
Mouth width	25 mm
Mouth depth	35 mm
Dimension (W x H x L)	40 mm x 11 mm x 50 mm
Housing material	Plastic
Net weight	40 g
Housing color	Black
Type of fastening	Through-hole mounting

Operation and display

Type of display	LED
Number of LEDs	1 Piece(s)

Environmental data

Ambient temperature, operation	-25 ... 55 °C
--------------------------------	---------------

Certifications

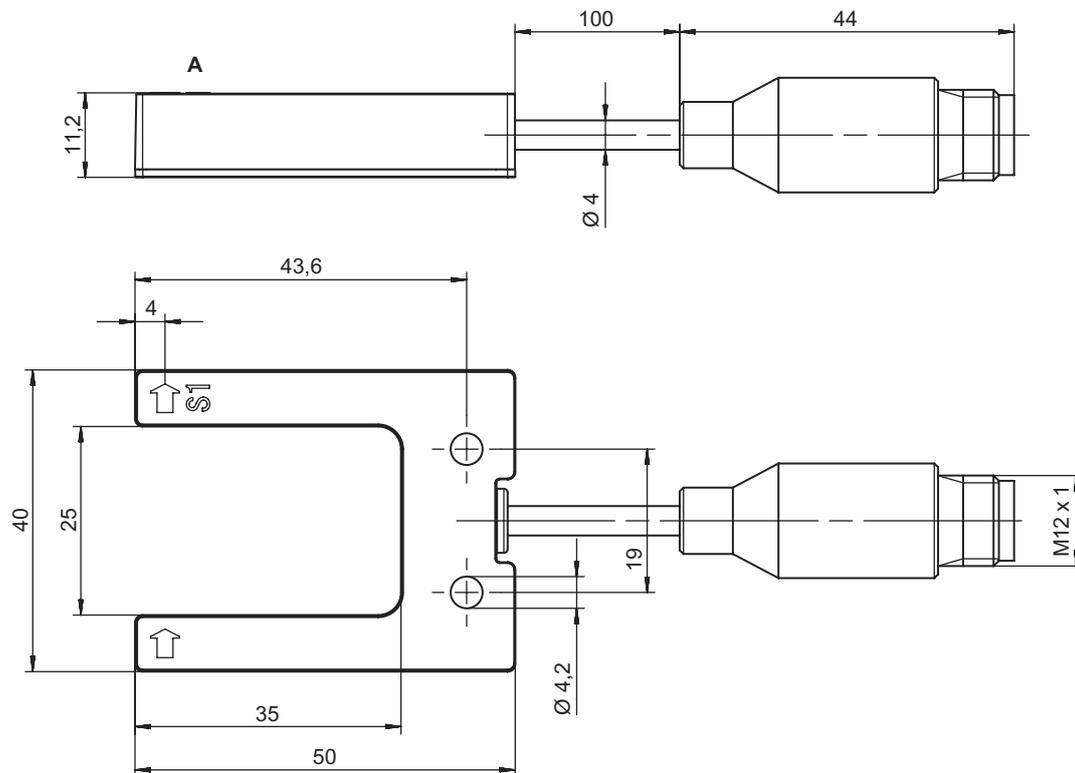
Degree of protection	IP 65
Protection class	III
Standards applied	IEC 60947-5-2

Classification

Customs tariff number	85365019
ECLASS 5.1.4	27270909
ECLASS 8.0	27270909
ECLASS 9.0	27270909
ECLASS 10.0	27270909
ECLASS 11.0	27270909
ECLASS 12.0	27270909
ECLASS 13.0	27270909
ECLASS 14.0	27270909
ECLASS 15.0	27270909
ECLASS 16.0	27270909
ETIM 5.0	EC002720
ETIM 6.0	EC002720
ETIM 7.0	EC002720
ETIM 8.0	EC002720
ETIM 9.0	EC002720
ETIM 10.0	EC002720

Dimensioned drawings

All dimensions in millimeters



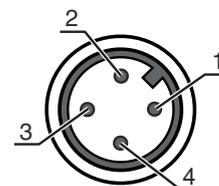
Electrical connection

Connection 1

Function	Signal IN Signal OUT Voltage supply
Type of connection	Connector
Cable length	100 mm
Sheathing material	PVC
Cable color	Black
Number of conductors	4 -wire
Wire cross section	0.16 mm ²
Thread size	M12
Type	Male
Material	Plastic
No. of pins	4 -pin
Encoding	A-coded

Pin Pin assignment

1	V+
2	IN 1
3	GND
4	OUT 1



Operation and display

LED	Display	Meaning
1	Blue, continuous light	Light beam not interrupted (light switching)
	Off	Light beam interrupted (light switching)
	Off	Light beam not interrupted (dark switching)
	Blue, continuous light	Light beam interrupted (dark switching)

Part number code

Part designation: AAAAB/CD-EEE

AAAAB	Operating principle / construction GS06B: Plastic fork through-beam photoelectric sensor, mouth width 25 mm, mouth depth 35 mm, light source: LED, infrared
C	Switching output / function / OUT1/IN1 (OUT1 = pin 4, IN1 = pin 2) 2: NPN transistor output, light switching (input = open) 4: PNP transistor output, light switching (input = open)
D	Switching input / Function X: Light/dark switching
EEE	Electrical connection n/a: cable, standard length 2000 mm, 4-wire 100-M8: cable, length 100 mm with M8 connector, 4-pin, axial (plug) 100-M12: cable, length 100 mm with M12 connector, 4-pin, axial (plug)

Notes

 Observe intended use!	
	<ul style="list-style-type: none"> ⌘ This product is not a safety sensor and is not intended as personnel protection. ⌘ The product may only be put into operation by competent persons. ⌘ Only use the product in accordance with its intended use.

Further information

- Max. tightening torque for nuts 0.5 Nm.