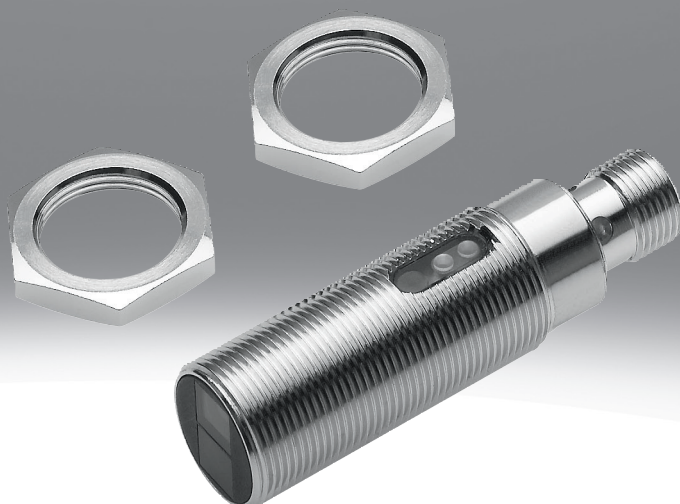


Optoelectronic sensor SOEG-E/S

FESTO



Type code

001	Series	
SOEG	Standard sensor, optoelectronic	
002	Sensor function	
E	Through-beam sensor, receiver	
S	Through-beam sensor, transmitter	
003	Design type	
M18	Round, M18, beam exit straight	

004	Switching output	
	None	
NA	NPN, antivalent	
PA	PNP, antivalent	
005	Electrical connection	
S	Plug	
K	Cable	
006	Display	
L	1 light emitting diode	
2L	2 light emitting diodes	

Datasheet

General technical data

Size	M18x1
Design	Round
Type of mounting	Via lock nut
Tightening torque	20 Nm
Measured variable	Position
Measuring principle	Optoelectronic
Measurement method	Through-beam sensor, Receiver, Transmitter
Operating distance	20,000 mm
Type of light	Red

Electrical data

Electrical connection	3-wire, Cable	4-pin, M12x1, Plugs	4-wire, Cable	3-pin, M12x1, Plugs
Operational voltage range DC	10 ... 36 V			
Voltage drop	–	≤2	–	–
Max. output current	–	200 mA	–	–
No-load supply current	15 mA	10 mA	–	15 mA
Max. switching frequency	–	1,000 Hz	–	–
Residual ripple	20%			
Switching status indication	–	Yellow LED	–	–
Function reserve indication	–	Green LED	–	–
Short circuit current rating	Pulsed			
Reverse polarity protection	For all electrical connections			
Degree of protection	IP65, IP67			
Switching output	–	NPN, PNP	–	–
Switching element function	–	Antivalent	–	–

Operating and environmental conditions

Ambient temperature	-25 ... 55°C
Ambient temperature with moving cable	-5 ... 55°C
CE mark (see declaration of conformity)	To EU EMC Directive, In accordance with EU RoHS Directive
UKCA marking (see declaration of conformity)	To UK instructions for EMC, To UK RoHS instructions
Conforms to standard	EN 60947-5-2
Approval	RCM trademark, c UL us listed (OL)
Corrosion resistance class CRC ¹⁾	1 - Low corrosion stress
LABS (PWIS) conformity	VDMA24364-B2-L

1) More information www.festo.com/x/topic/crc

Materials

Material housing	Brass, Chrome-plated
Material cable sheath	TPE-U(PUR)

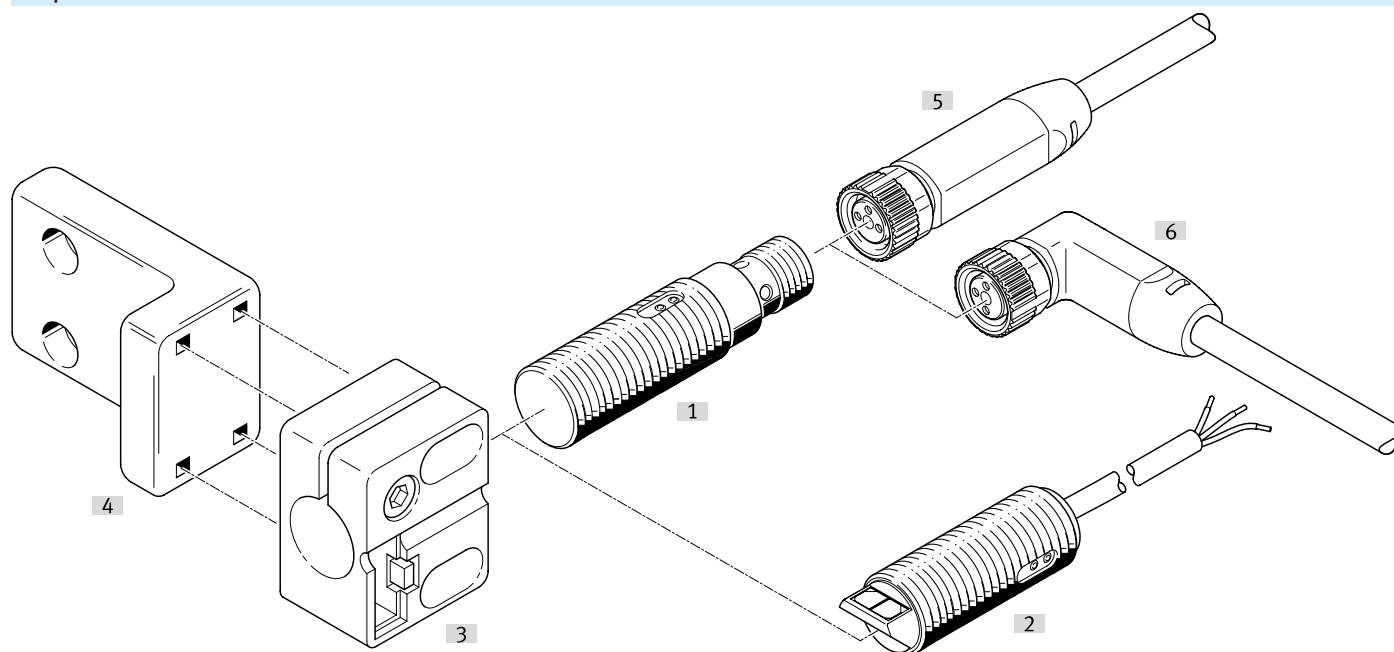
Ordering data

Transmitter				
Operating distance	Measurement method	Electrical connection	Part no.	Type
20,000 mm	Through-beam sensor, Transmitter	3-wire, Cable	537691	SOEG-S-M18-K-L
		3-pin, M12x1, Plugs	537703	SOEG-S-M18-S-L

Receiver				
Operating distance	Measurement method	Electrical connection	Part no.	Type
20,000 mm	Through-beam sensor, Receiver	4-wire, Cable	537709	SOEG-E-M18-NA-K-2L
			537692	SOEG-E-M18-PA-K-2L
		4-pin, M12x1, Plugs	537704	SOEG-E-M18-PA-S-2L
			537711	SOEG-E-M18-NA-S-2L

Peripherals

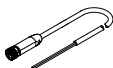
Peripherals overview



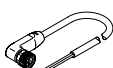
Accessories		→ Link
Type/order code	Description	
[1] SOEG-...	Round design, M12, M18..., with plug	soeg
[2] SOEG-...	Round design, M12, M18..., with cable	soeg
[3] Sensor bracket SIEZ-NB	–	6
[4] Sensor bracket SIEZ-UH	–	6
[5] Connecting cables NEBA	Straight socket	6
[6] Connecting cables NEBA	Angled socket	6

Accessories

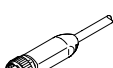
Connecting cable NEBA, socket M8x1, 3-pin, straight

	Connection technology left, field device side	Electrical connection 1, cable outlet	Connection technology right, controller side	Cable length	Part no.	Type
	Socket M8x1 A-coded, EN 61076-2-104	Straight	Open end	2.5 m	8078223	NEBA-M8G3-U-2.5-N-LE3
					8078227	NEBA-M8G4-U-2.5-N-LE4
				5 m	8078224	NEBA-M8G3-U-5-N-LE3
					8078228	NEBA-M8G4-U-5-N-LE4

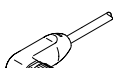
Connecting cable NEBU, socket M8x1, 3-pin, angled

	Connection technology left, field device side	Electrical connection 1, cable outlet	Connection technology right, controller side	Cable length	Part no.	Type
	Socket M8x1 A-coded, EN 61076-2-104	Angled	Open end	2.5 m	8078230	NEBA-M8W3-U-2.5-N-LE3
					8078233	NEBA-M8W4-U-2.5-N-LE4
				5 m	8078231	NEBA-M8W3-U-5-N-LE3
					8078234	NEBA-M8W4-U-5-N-LE4

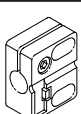
Connecting cable NEBA, socket M12x1, 5-pin, straight

	Connection technology left, field device side	Electrical connection 1, cable outlet	Connection technology right, controller side	Cable length	Part no.	Type
	Socket M12x1 A-coded, EN 61076-2-101	Straight	Open end	2.5 m	8078236	NEBA-M12G5-U-2.5-N-LE3
				5 m	8078240	NEBA-M12G5-U-5-N-LE4
					8078237	NEBA-M12G5-U-5-N-LE3

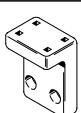
Connecting cable NEBA, socket M12x1, 5-pin, angled

	Connection technology left, field device side	Electrical connection 1, cable outlet	Connection technology right, controller side	Cable length	Part no.	Type
	Socket M12x1 A-coded, EN 61076-2-101	Angled	Open end	2.5 m	8078245	NEBA-M12W5-U-2.5-N-LE3
				5 m	8078249	NEBA-M12W5-U-5-N-LE4
					8078246	NEBA-M12W5-U-5-N-LE3

Sensor bracket SIEZ-NB

	Size	Type of mounting	Product weight	Part no.	Type
	M12	With through-hole	20 g	538347	SIEZ-NB-12
	M18		21 g	538349	SIEZ-NB-18

Sensor bracket SIEZ-UH

	Type of mounting	Product weight	Part no.	Type
	With through-hole	25 g	538354	SIEZ-UH