



LMS111-10190

Bulkscan

FLOW SENSORS





Ordering information

Туре	part no.
LMS111-10190	1093274

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

Illustration may differ







Detailed technical data

Features

Measurement principle	Laser run time technology
Medium	Bulk solids
Communication interface	Serial, RS-232 USB, RS-422
Light source	Infrared (905 nm)
Laser class	1, eye-safe (IEC 60825-1:2014)
Aperture angle	190°
Scanning frequency	25 Hz 50 Hz
Bandwidth	No limit
Heating	Yes
Working range	0.5 m 10 m
Amount of evaluated echoes	2

Performance

Measurement accuracy	
	\pm 6 $\%$ under reference conditions and with "high" contour smoothing
Response time	20 ms, 40 ms
Average filter	0 s 3,600 s
Max. conveyor speed	≤ 20 m/s

Interfaces

	Serial host interface, Ethernet, Auxiliary interface
Number	1, 1, 1
Protocol	RS-232/RS-422 TCP/IP RS-232
Data transmission rate	115.2 kBaud 100 Mbit/s

	115.2 kBaud
Switching inputs	2 + Encoder
Switching outputs	3
Analog signals	Available with separate accessory BAM100
Optical indicators	5 LEDs Additional 7-segment display

Electronics

Supply voltage	10.8 V 30 V
Power consumption	8 W + 35 W heating (typical)
Residual ripple	± 5 %
Protection class	✓
Connection type	M12 round connector
Output signal	Ethernet Digital inputs and digital outputs USB auxiliary interface RS-232/RS-422
Enclosure rating	IP67 (IEC 60529)
MTTF	> 100 years
Switch-on peak current	2 A
Operating current scanner	≤ 0.4 A
Switch-on time	≤ 60 s

Mechanics

Weight	1.1 kg
Housing color	Gray (RAL 7032)
Dimensions	161 mm x 102 mm x 105 mm
Distance of the sensor to the bulk solid	≥ 0.5 m

Ambient data

Ambient operating temperature	-30 °C +50 °C
Electromagnetic compatibility (EMC)	IEC 61000-6-2:2016-08 / IEC 61000-6-3:2006-07 / EN 61000-6-2:2005 / EN 61000-6-3 / A1 2011
Ambient temperature, storage	-40 °C +70 °C
Ambient light immunity	40,000 lx

Certificates

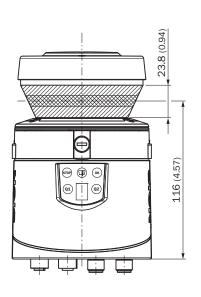
EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓
China RoHS	✓
cTUVus certificate	✓
Information according to Art. 3 of Data Act (Regulation EU 2023/2854)	✓

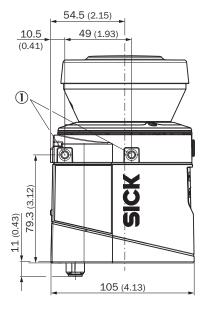
Classifications

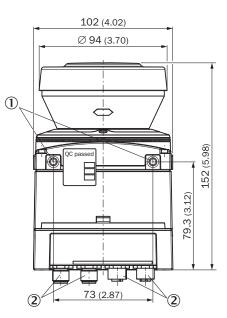
ECLASS 5.0	27200413
ECLASS 5.1.4	27200413

ECLASS 6.0	27200413
ECLASS 6.2	27200413
ECLASS 7.0	27200413
ECLASS 8.0	27200413
ECLASS 8.1	27200413
ECLASS 9.0	27200413
ECLASS 10.0	27200413
ECLASS 11.0	27200413
ECLASS 12.0	27200413
ETIM 5.0	EC002580
ETIM 6.0	EC002580
ETIM 7.0	EC002580
ETIM 8.0	EC002580
UNSPSC 16.0901	41112501

Dimensional drawing Bulkscan LMS111



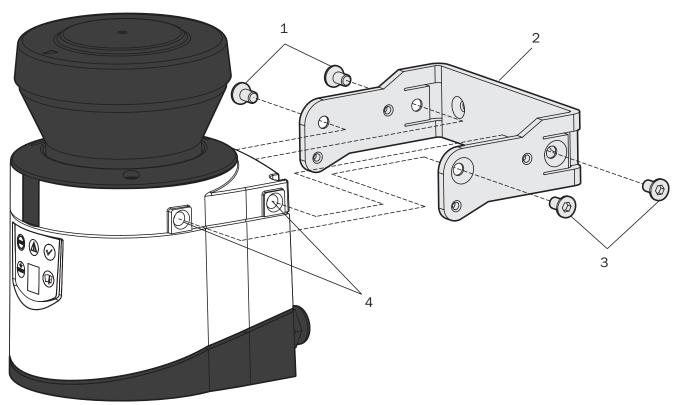




Dimensions in mm (inch)

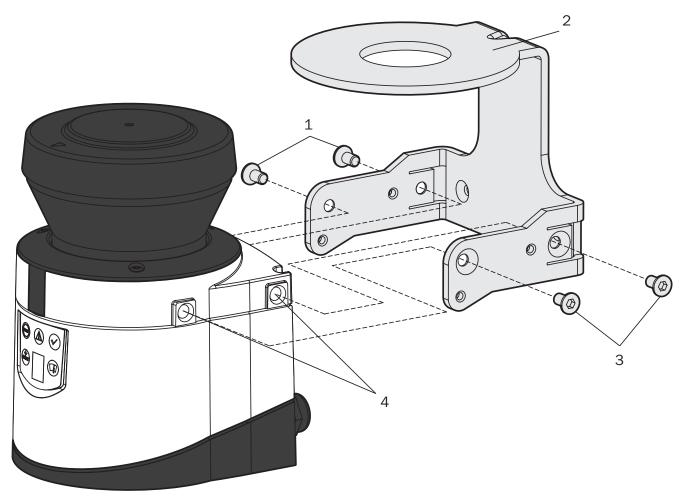
- ① Mounting hole M5 x 7.5
- ② Connector M12

Instruction for installation Mounting kit 1a (2034324)



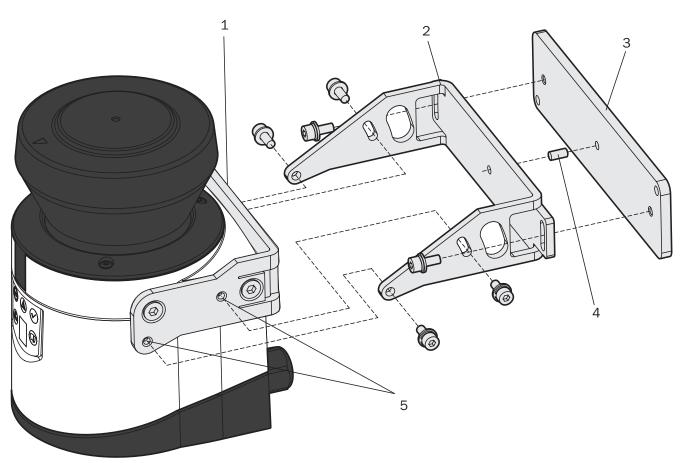
- ① Mounting screws
- Mounting screws
 Mounting kit 1a (2034324)
 Mounting screws
 threaded holes M5x8

Instruction for installation Mounting kit 1b



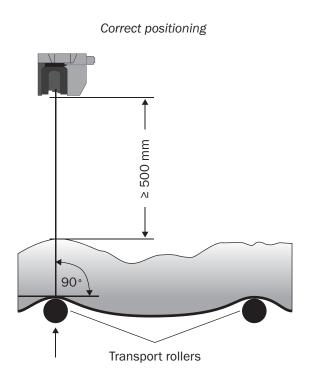
- ① Mounting screws
- 2 mounting kit 1b
- ③ Mounting screws
- 4 threaded holes M5x8

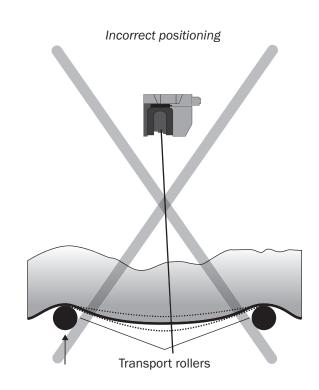
Instruction for installation Mounting kit 2



- ① Mounting kit 1a (2034324)
- ② Mounting kit 2
- 3 Mounting kit 3
- 4 centring pin
- ⑤ threaded holes M4

Instruction for installation Bulkscan LMS511 / Bulkscan LMS111





Recommended accessories

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

	Brief description	Туре	part no.
Mounting sys	stems		
	Description: Pole bracket requires additionally adapter bracket (2059271) or mounting set (2018303)	Mast mount- ing bracket	2018304
	Description: Strap for mast bracket (sold by meter)	Tension strap	5306222
	Description: Strap lock	Adjustable strap lock	5306221
	Description: Spring arm / mounting arm for DFV60	DFV60 spring arm	2056155
	 Description: Mounting bracket for rear mounting on wall or machine Packing unit: 1 piece 	Mounting kit 1a	2034324
R	 Description: Mounting bracket for rear mounting on wall or machine with protection of optics hood Packing unit: 1 piece 	Mounting kit 1b	2034325
	 Description: Mounting bracket, adjustable lateral axis, only in conjunction with mounting kit 1a (2034324) or 1b (2034325) Packing unit: 1 piece 	Mounting kit 2	2039302
	 Description: Mounting plate, adjustable longitudinal axis, only in conjunction with mounting kit 2 (2039302) Packing unit: 1 piece 	Mounting kit 3	2039303
	 Description: Standard mounting set for weather hood Material: Stainless steel 1.4301 (V2A) Details: Stainless steel 1.4301 (V2A) Items supplied: Mounting bracket, incl. 7 x screws with M6 x 12 washers Suitable for: 2085937, 2085938, 2085939, 2046459, 2046458, 2082563, 2082560 	Mounting bracket	2046025
	 Description: Quick-action lock system for weather hood Suitable for: 2085937, 2085938, 2085939, 2046459, 2046458, 2082563, 2082560 	Quick release	2046989
ower supply	units and power supply cables		
PAS TO THE PASS TO	 Output voltage: 24 V DC Output current: 10 A Description: Power supply DC 24 V / 10 A 	Power supply	6020875

LMS111-10190 | Bulkscan

FLOW SENSORS

	Brief description	Туре	part no.
device protection and care			
sick	 Product family: Cleaning agents Description: Cloth for cleaning optical surfaces 	Lens cloth	4003353
	 Description: Weather hood, 190° Suitable for: LMS10x, LMS11x, LMS12x, LMS13x, LMS14x, LMS15x, S100 	Weather protection cover 190°	2046459

	Brief description	Туре	part no.
connectors and cables			
The state of the s	 Connection type head A: Male connector, M12, 4-pin, straight, D-coded Connection type head B: Male connector, RJ45, 8-pin, straight Signal type: Ethernet Cable: 20 m, 4-wire, AWG26, PUR, halogen-free Description: Ethernet, twisted pair, shielded 	YM2D24-200EA1M- RJA4	6036158
	 Connection type head A: Female connector, M12, 5-pin, straight, A-coded Connection type head B: Flying leads Signal type: Power Cable: 5 m, 4-wire, PUR, halogen-free Description: Power, shielded Connection systems: Flying leads 	YF2A64-050XXXXLEAX	6036159
	 Connection type head A: Female connector, M12, 5-pin, straight, A-coded Connection type head B: Flying leads Signal type: Power Cable: 20 m, 4-wire, PUR, halogen-free Description: Power, shielded Connection systems: Flying leads Application: Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation 	YF2Z15-200UE1XLEAX	6042564
	Connection type head A: Female connector, M12, 5-pin, straight, A-coded Connection type head B: Flying leads Signal type: Power Cable: 10 m, 4-wire, PUR, halogen-free Description: Power, shielded Connection systems: Flying leads Application: Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation	YF2Z15-100UE1XLEAX	6042565
8 8	 Connection type head A: Male connector, M12, 4-pin, straight, D-coded Connection type head B: Male connector, RJ45, 4-pin, straight Signal type: Ethernet, PROFINET Cable: 5 m, 4-wire, PUR, halogen-free Description: Ethernet, shielded, PROFINET Application: Drag chain operation, Zones with oils and lubricants 	YM2D24-050P- N1MRJA4	2106184
8 8	 Connection type head A: Male connector, M12, 4-pin, straight, D-coded Connection type head B: Male connector, RJ45, 4-pin, straight Signal type: Ethernet, PROFINET Cable: 10 m, 4-wire, PUR, halogen-free Description: Ethernet, shielded, PROFINET Application: Drag chain operation, Zones with oils and lubricants 	YM2D24-100P- N1MRJA4	2106185
The state of the s	Connection type head A: Male connector, M12, 8-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 5 m, 8-wire, PUR, halogen-free Description: Sensor/actuator cable, shielded Connection systems: Flying leads Application: Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation	YM2A28-050UA6XLEAX	6036155
1	Connection type head A: Male connector, M12, 8-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 10 m, 8-wire, PUR, halogen-free Description: Sensor/actuator cable, shielded Connection systems: Flying leads Application: Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation	YM2A28-100UA6XLEAX	6036156
	 Connection type head A: Female connector, M12, 8-pin, straight, A-coded Connection type head B: Flying leads Signal type: RS-232, RS-422 Cable: 10 m, 8-wire Description: RS-232, shielded, RS-422 Connection systems: Flying leads 	Connecting ca- ble (female con- nector - open)	6028420
	 Connection type head A: Female connector, M12, 8-pin, straight, A-coded Connection type head B: Flying leads Signal type: RS-232, RS-422 Cable: 20 m, 8-wire Description: RS-232, shielded, RS-422 Connection systems: Flying leads 	YF2A28-200UA6XLEAX	6036154

- Application: Uncontaminated armis, Zomes with oils and flubricants, Robot, Drag chain operation - Consection type head & Finniq lesses - Cables & Dr., Savie, P.IVI, Rubigen-free - Connection type head & Finniq consort (M.2. Spin, straight, A-coded - Connection type head & Finniq consort (M.2. Spin, straight, A-coded - Connection type head & Finniq consort (M.2. Spin, straight, A-coded - Connection type head & Finniq consort (M.2. Spin, straight, A-coded - Connection type head & Finnique connection, M.2. Spin, straight, A-coded - Connection type head & Finnique connection, M.2. Spin, straight, A-coded - Connection type head & Finnique connection, M.2. Spin, straight, A-coded - Connection type head & Finnique connection, M.2. Spin, straight, A-coded - Connection type head & Finnique connection, M.2. Spin, straight, A-coded - Connection type head & Finnique connection, M.2. Spin, straight, A-coded - Connection type head & Finnique connection, M.2. Spin, straight, A-coded - Connection type head & Finnique connection, M.2. Spin, straight, A-coded - Connection type head & Finnique connection, M.2. Spin, straight, A-coded - Connection type head & Finnique connection, M.2. Spin, straight, A-coded - Connection type head & Finnique connection, M.2. Spin, straight, A-coded - Connection type head & Finnique connection, M.2. Spin, straight, A-coded - Connection type head & Finnique connection, M.2. Spin, straight, A-coded - Connection type head & Finnique connection, M.2. Spin, straight, A-coded - Connection type head & Finnique connection, M.2. Spin, straight, A-coded - Connection type head & Finnique connection, M.2. Spin, straight, A-coded - Connection type head & Finnique connection, M.2. Spin, straight, A-coded - Connection type head & Finnique connection, M.2. Spin, straight, A-coded - Connection type head & Finnique connection, M.2. Spin, straight, A-coded - Connection type head & Finniqu		Brief description	Туре	part no.
Connection type head & Fining leads Signal types Service / Authorition 2016		Application: Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation		
Connection type head E-Pingle goods Cable: Con. Report Pingle goods Connection type head E-Pingle goods Connection type the good E-Pingle goods Connection type the good E-Pingle goods Connection type the good E-Pingle good E-Pingle goods Connection type the good E-Pingle good	No.	 Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 5 m, 8-wire, PUR, halogen-free Description: Sensor/actuator cable, shielded 	YF2A28-050UA6XLEAX	2095835
• Connection type head B: Flying leads • Signal type: Sensory/actuator cable • Cables: 1 m. Swire, PUR, halogen-free • Description: Sensory/actuator cable • Cables: 1 m. Swire, PUR, halogen-free • Description: Sensory/actuator cable • Connection type head A: Femela connector, M12, 8-pin, straight, A-coded • Connection type head B: Flying leads • Signal type: Sensory/actuator cable • Cables: 2 m. Swire, PUR, halogen-free • Description: Sensory/actuator cable • Cables: 2 m. Swire, PUR, halogen-free • Description: Sensory/actuator cable • Cables: 2 m. Swire, PUR, halogen-free • Description: Sensory/actuator cable • Cables: 3 m. Swire, PUR, halogen-free • Description: Sensory/actuator cable • Cables: 3 m. Swire, PUR, halogen-free • Description: Sensory/actuator cable • Cables: 3 m. Swire, PUR, halogen-free • Description: Sensory/actuator cable • Cables: 3 m. Swire, PUR, halogen-free • Description: Sensory/actuator cable • Cables: 3 m. Swire, PUR, halogen-free • Description: Sensory/actuator cable • Cables: 3 m. Swire, PUR, halogen-free • Description: Sensory/actuator cable • Cables: 3 m. Swire, PUR, halogen-free • Description: Sensory/actuator cable • Cables: 3 m. Swire, PUR, halogen-free • Description: Sensory/actuator cable • Cables: 3 m. Swire, PUR, halogen-free • Description: Sensory/actuator cable • Cables: 3 m. Swire, PUR, halogen-free • Description: Sensory/actuator cable • Cables: 3 m. Swire, PUR, halogen-free • Description: Sensory/actuator cable • Cables: 3 m. Swire, PUR, halogen-free • Description: BMIJ 00 analog module for Bullscan, by Beachtoff, 24 V DC supply voltage (15%) • 20%, and involved graphs and cables and cables and adapters • Description: BMIJ 00 analog module for Bullscan, by Beachtoff, 24 V DC supply voltage (15%) • 20%, and involved graphs and cables	No.	 Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 0.6 m, 8-wire, PUR, halogen-free Description: Sensor/actuator cable, shielded 		2145470
Connection type head 8: Flying leads Signal type: Sensor/Actuator cable Cable: 2 m, 8-wire, PUR, halogen-free Description: Sensor/Actuator cable, shielded Application: Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation Connection type head 8: Flying leads Signal type: Sensor/Actuator cable, shielded Application: Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation Connection type head 8: Flying leads Signal type: Sensor/Actuator cable, shielded Application: Description: Sensor/Actuator cable, shielded Application: Description: Sensor/Actuator cable, shielded Application: Description: Sensor/Actuator cable, shielded Application: Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation Integration modules and adapters Description: BAM100 analog module for Bulkscan, by Beckhoff, 24 V DC supply voltage (-15%/ + 20%), and immuniting on 35 mm Or rail, according to EN 50022 with interlocking, Ethernet TCP/ IP interface (R)45), CoLa communication, 3 x IN: 4 mA 20 mA, 4 x 0UT: 4 mA 20 mA Measuring wheel encoders Measuring wheel encoders Measuring wheel circumference: 300 mm Measuring wheel surface: Oring NBR70 Communication interface: 10 V 32 V, Incremental, HTL, Push pull Supply voltage: 10 V 32 V, Incremental, HTL, Push pull Measuring wheel elicumference: 300 mm Measuring wheel surface: Oring NBR70 Communication interface: 10 V 32 V, Incremental, HTL, Push pull Supply voltage: 10 V 32 V, Incremental, HTL, Push pull Connection type: Cable, 8 wire, universal, 1.5 m Resolution in pulses/mm: 3.41 Mechanical design: Solid shaft face mount flange 10 mm x 19 mm (With flat) Communication interface: 10 V 32 V, HTL, Push pull Communication interface: 10 V 32 V, HTL, Push pull Communication interface: 10 V 32 V, HTL, Push pull Communication interface: 10 V 32 V, HTL, Push pull Communication interface: 10 V 32 V, HTL, Push pull Communication interface: 10 V 32 V, HTL, Push pull Communication i	No.	 Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 1 m, 8-wire, PUR, halogen-free Description: Sensor/actuator cable, shielded 	YF2A28-010UA6XLEAX	2145471
Connection type head Br. Flying leads Signal type: Sensor/actuator cable Cable: 3 m, 8-wire, PUR, halogen-free Description: Sensor/actuator cable, shielded Application: Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation integration modules and adapters Description: SAM J00 analog module for Bulkscan, by Beckhoff, 24 V DC supply voltage (-15% / + 20%), rail mounting on 35 mm C rail, according to EN 50022 with interlocking, Ethernet TCP / P interface (R/45), CoLa communication, 3 x IN: 4 mA 20 mA, 4 x OUT: 4 mA 20 mA Measuring wheel encoders	No.	 Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 2 m, 8-wire, PUR, halogen-free Description: Sensor/actuator cable, shielded 	YF2A28-020UA6XLEAX	2145472
Description: BAM100 analog module for Bulkscan, by Beckhoff, 24 V DC supply voltage (-15%/ + 20%), rail mounting on 35 mm C rail, according to EN 50022 with interlocking, Ethernet TCP/ IP interface (R145), CoLa communication, 3 x IN: 4 mA 20 mA, 4 x OUT: 4 mA 20 mA Measuring wheel encoders Measuring wheel circumference: 300 mm	No.	 Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 3 m, 8-wire, PUR, halogen-free Description: Sensor/actuator cable, shielded 	YF2A28-030UA6XLEAX	2145473
+ 20%), rail mounting on 35 mm C rail, according to EN 50022 with interlocking, Ethernet TCP/ IP interface (RJ45), CoLa communication, 3 x IN: 4 mA 20 mA, 4 x OUT: 4 mA 20 mA Measuring wheel encoders Measuring wheel circumference: 300 mm Measuring wheel surface: 0-ring NBR70 Communication interface: 10 V 32 V, Incremental, HTL, Push pull Supply voltage: 10 V 32 V, Incremental, HTL, Push pull Measuring wheel surface: 0-ring NBR70 Measuring wheel circumference: 300 mm Measuring wheel surface: 10 V 32 V, Incremental, HTL, Push pull Measuring wheel surface: 0-ring NBR70 Communication interface: 10 V 32 V, Incremental, HTL, Push pull Supply voltage: 10 V 32 V Pulses per revolution: 1,024 Connection type: Cable, 8-wire, universal, 1.5 m Resolution in pulses/mm: 3.41 Incremental encoders Mechanical design: Solid shaft face mount flange 10 mm x 19 mm (With flat) Communication interface: 10 V 32 V, HTL, Push pull Mechanical design: Blind hollow shaft 15 mm (Front clamp) Pulses per revolution: 1,024 Mechanical design: Blind hollow shaft 15 mm (Front clamp) Communication interface: 10 V 32 V, HTL, Push pull Mechanical design: Blind hollow shaft 15 mm (Front clamp) Communication interface: 10 V 32 V, HTL, Push pull Communication interface: 10 V 32 V, HTL, Push pull	integration mo	dules and adapters		
Measuring wheel circumference: 300 mm Measuring wheel surface: 0-ring NBR70 Communication interface: 10 V 32 V, Incremental, HTL, Push pull Supply voltage: 10 V 32 V, Incremental, HTL, Push pull Pulses per revolution: 1,024 Connection type: Male connector, M12, 8-pin, radial Resolution in pulses/mm: 3.41 Measuring wheel circumference: 300 mm Measuring wheel circumference: 300 mm Measuring wheel surface: 0-ring NBR70 Communication interface: 10 V 32 V, Incremental, HTL, Push pull Supply voltage: 10 V 32 V, Incremental, HTL, Push pull Supply voltage: 10 V 32 V, Incremental, HTL, Push pull Connection type: Cable, 8-wire, universal, 1.5 m Resolution in pulses/mm: 3.41 Incremental encoders Mechanical design: Solid shaft face mount flange 10 mm x 19 mm (With flat) Communication interface: 10 V 32 V, HTL, Push pull Connection type: Cable, 8-wire, universal, 1.5 m Pulses per revolution: 1,024 Mechanical design: Blind hollow shaft 15 mm (Front clamp) Communication interface: 10 V 32 V, HTL, Push pull Communication interface: 10 V 32 V, HTL, Push pull Communication interface: 10 V 32 V, HTL, Push pull Communication interface: 10 V 32 V, HTL, Push pull Communication interface: 10 V 32 V, HTL, Push pull Communication interface: 10 V 32 V, HTL, Push pull Communication interface: 10 V 32 V, HTL, Push pull Communication interface: 10 V 32 V, HTL, Push pull Communication interface: 10 V 32 V, HTL, Push pull Communication interface: 10 V 32 V, HTL, Push pull Communication interface: 10 V 32 V, HTL, Push pull Communication interface: 10 V 32 V, HTL, Push pull Communication interface: 10 V 32 V, HTL, Push pull Communication interface: 10 V 32 V, HTL, Push pull		+ 20%), rail mounting on 35 mm C rail, according to EN 50022 with interlocking, Ethernet TCP/	BAM100-HE44K	2073296
Measuring wheel surface: 0-ring NBR70 Communication interface: 10 V 32 V, Incremental, HTL, Push pull Supply voltage: 10 V 32 V Pulses per revolution: 1,024 Connection type: Male connector, M12, 8-pin, radial Resolution in pulses/mm: 3.41 Measuring wheel surface: 0-ring NBR70 Communication interface: 10 V 32 V, Incremental, HTL, Push pull Supply voltage: 10 V 32 V Pulses per revolution: 1,024 Connection type: Cable, 8-wire, universal, 1.5 m Resolution in pulses/mm: 3.41 Incremental encoders Mechanical design: Solid shaft face mount flange 10 mm x 19 mm (With flat) Communication interface: 10 V 32 V, HTL, Push pull Connection type: Cable, 8-wire, universal, 1.5 m Pulses per revolution: 1,024 Mechanical design: Blind hollow shaft 15 mm (Front clamp) Communication interface: 10 V 32 V, HTL, Push pull Communication interface: 10 V 32 V, HTL, Push pull Communication interface: 10 V 32 V, HTL, Push pull Communication interface: 10 V 32 V, HTL, Push pull Communication interface: 10 V 32 V, HTL, Push pull Communication interface: 10 V 32 V, HTL, Push pull Communication interface: 10 V 32 V, HTL, Push pull Communication interface: 10 V 32 V, HTL, Push pull Communication interface: 10 V 32 V, HTL, Push pull Communication interface: 10 V 32 V, HTL, Push pull Communication interface: 10 V 32 V, HTL, Push pull Communication interface: 10 V 32 V, HTL, Push pull Communication interface: 10 V 32 V, HTL, Push pull Communication interface: 10 V 32 V, HTL, Push pull Communication interface: 10 V 32 V, HTL, Push pull Communication interface: 10 V 32 V, HTL, Push pull	Measuring wh	eel encoders		
Measuring wheel surface: 0-ring NBR70 Communication interface: 10 V 32 V, Incremental, HTL, Push pull Supply voltage: 10 V 32 V Pulses per revolution: 1,024 Connection type: Cable, 8-wire, universal, 1.5 m Resolution in pulses/mm: 3.41 Incremental encoders Mechanical design: Solid shaft face mount flange 10 mm x 19 mm (With flat) Communication interface: 10 V 32 V, HTL, Push pull Connection type: Cable, 8-wire, universal, 1.5 m Pulses per revolution: 1,024 Mechanical design: Blind hollow shaft 15 mm (Front clamp) Communication interface: 10 V 32 V, HTL, Push pull Communication interface: 10 V 32 V, HTL, Push pull Connection type: Male connector, M12, 8-pin, radial		 Measuring wheel surface: 0-ring NBR70 Communication interface: 10 V 32 V, Incremental, HTL, Push pull Supply voltage: 10 V 32 V Pulses per revolution: 1,024 Connection type: Male connector, M12, 8-pin, radial 	DFV60E-22EC01024	1060308
Mechanical design: Solid shaft face mount flange 10 mm x 19 mm (With flat) Communication interface: 10 V 32 V, HTL, Push pull Connection type: Cable, 8-wire, universal, 1.5 m Pulses per revolution: 1,024 Mechanical design: Blind hollow shaft 15 mm (Front clamp) Communication interface: 10 V 32 V, HTL, Push pull Connection type: Male connector, M12, 8-pin, radial		 Measuring wheel surface: 0-ring NBR70 Communication interface: 10 V 32 V, Incremental, HTL, Push pull Supply voltage: 10 V 32 V Pulses per revolution: 1,024 Connection type: Cable, 8-wire, universal, 1.5 m 	DFV60E-22EK01024	1060309
Communication interface: 10 V 32 V, HTL, Push pull Connection type: Cable, 8-wire, universal, 1.5 m Pulses per revolution: 1,024 Mechanical design: Blind hollow shaft 15 mm (Front clamp) Communication interface: 10 V 32 V, HTL, Push pull Connection type: Male connector, M12, 8-pin, radial	Incremental er	ncoders		
Communication interface: 10 V 32 V, HTL, Push pull Connection type: Male connector, M12, 8-pin, radial	(e	Communication Interface: 10 V 32 V, HTL, Push pull Connection type: Cable, 8-wire, universal, 1.5 m	DFS60E-S4EK01024	1037534
	-1	 Communication Interface: 10 V 32 V, HTL, Push pull Connection type: Male connector, M12, 8-pin, radial 	DFS60E-BHEC01024	1036541

	Brief description	Туре	part no.	
Commissionin	Commissioning aids and test equipment			
	 Product: Alignment aids Description: Alignment aid for detecting the infrared light (wavelength 780 nm to 1050 nm) of SICK sensors 	Alignment aid	2101720	

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

