



microScan3

THE NEW GENERATION OF SAFETY LASER SCANNERS

Safety laser scanners

SICK
Sensor Intelligence.

microScan3: A NEW ERA COULDN'T GET OFF TO A SAFER START

SICK has combined its extensive knowledge, considerable experience, and power of innovation into this safety laser scanner. The microScan3 complies with stringent international safety standards. Every detail has been reexamined in order to meet your requirements as fully as possible. The result is a new benchmark for safety laser scanners, personal safety, and productivity.



microScan3: MEETS YOUR REQUIREMENTS HEAD-ON

The microScan3 reliably monitors the hazardous area of machines and facilities. In doing so, it ensures the safety of your employees and promotes ergonomic work practices. The microScan3 masters the applications of today exceptionally well, while also paving the way for the innovative safety solutions of tomorrow.

Safe in a number of applications



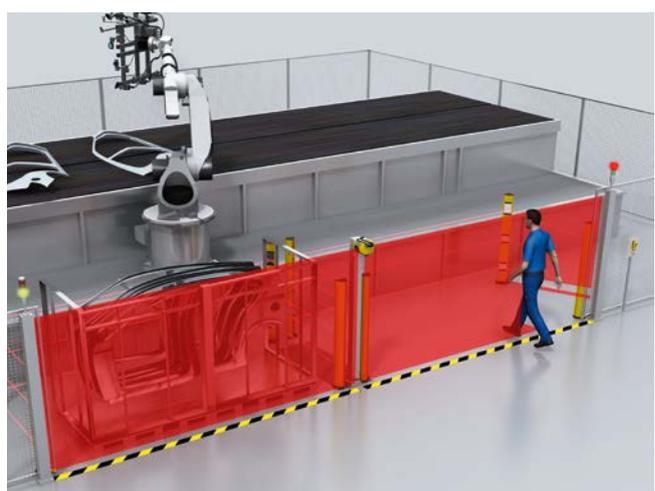
Mobile hazardous area protection: If a vehicle approaches a person in the hazardous area, the microScan3 recognizes this person by detecting their leg.



Stationary hazardous area protection: The microScan3 can tell if a person is approaching or standing in the hazardous area by detecting their leg.



Hazardous point protection: If a person reaches into the hazardous area, the microScan3 will recognize this by detecting their arm.



Access protection: If a person enters the hazardous area, the microScan3 will recognize this by detecting their body. With additional measures people and material can be differentiated.

microScan3: SICK CUSTOMERS DEMAND THE BEST

You are one of the best in your field because you ensure the highest standards in terms of safe and smooth processes – day in, day out. The microScan3 from SICK is not just any typical safety laser scanner. SICK understands what you need. And the microScan3 makes it possible.



Stable manufacturing processes



Safety and navigation



Efficient machine design



Intelligent cooperation





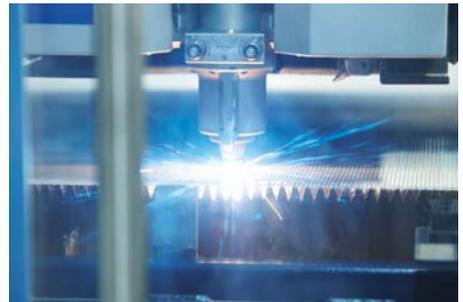
Uninterrupted production



Standardized network integration



Ease of integration and scalability



Complete portfolio and know-how on functional safety at
→ www.sick.com/safetyIQ



microScan3: ONE IMPRESSIVE PRODUCT, LEAVES A LASTING IMPRESSION

1



The innovative safeHDDM® scanning technology is setting new standards for safety laser scanners. By allowing a compact design in combination with a wide scanning range, it enables the microScan3 to retain its field of view even in challenging ambient conditions.

2



20 years of experience with safety laser scanners in harsh industrial day-to-day work has been incorporated into the development of the microScan3. It is extremely rugged.

+ Reliable operation

+ Durable for high productivity



3



SMART
CONNECTIVITY

Reliable integration of the microScan3 via a network or I/Os – quickly and easily. Secure communication, convenient configuration, and diagnosis either remotely via laptop or centrally within the network. The microScan3 uses standardized plug connectors and is easy to replace, thereby saving time and keeping costs low.



Reliable integration and standardized connectivity

4



INTUITIVE
OPERATION

Intuitive configuration and convenient commissioning using the Safety Designer software. The multi-colored display clearly indicates the operational status of the laser scanner. These details and additional information, e.g. on the checksum or an interruption in the protective field, can be easily accessed at the touch of a button and are displayed in cleartext.



Quick, safe configuration and commissioning



INNOVATIVE safeHDDM® SCANNING TECHNOLOGY



The microScan3 is compact and has a wide scanning range, as well as an impressive performance. This is achieved thanks to the safeHDDM® scanning technology, which enables the microScan3 to retain its field of view even in challenging ambient conditions – high tech at its best!

safeHDDM® is	a patented SICK process based on SICK's proven HDDM (HDDM = High Definition Distance Measurement) technology.
safeHDDM® delivers	an outstanding measurement result for a safety laser scanner by filtering and evaluating 88,000 individual pulses per revolution.
safeHDDM® enables	the microScan3 to reliably detect an object with a remission of just 1.8 %, e.g. a pair of black trousers.

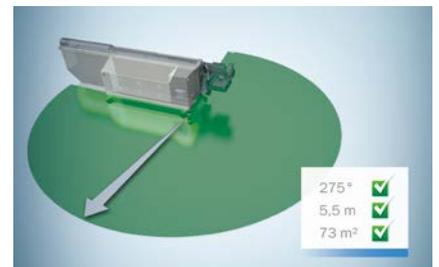
Exceptionally reliable



The microScan3 has incredible resistance to dirt, dust and ambient light.



The microScan3 is highly practical as it is not affected by additional laser scanners or other infrared sources.



First safety laser scanner with a scanning angle of 275°: no gaps in detection – even with an imprecise corner installation.



→ www.sick.com/8020076 (Whitepaper "safeHDDM® – the new scanning technology for safety laser scanners")



RUGGED DESIGN

High mechanical stability in a small, compact housing. The microScan3 impresses with its rugged and compact light metal die-cast housing. Furthermore, the safety laser scanner sets new benchmarks in terms of electromagnetic compatibility (EMC).

65 years ago	SICK developed the first opto-electronic protective device.
For 20 years	SICK has been employing safety laser scanners in harsh industrial day-to-day work, and understands the stringent requirements placed on components in this field.
Today and in years to come	the quickly and easily installed microScan3 will be carrying out its work long lasting, safely and reliably.

Excellent durability and productivity



The compact light metal die-cast housing of the microScan3 impresses in harsh industrial day-to-day work too.



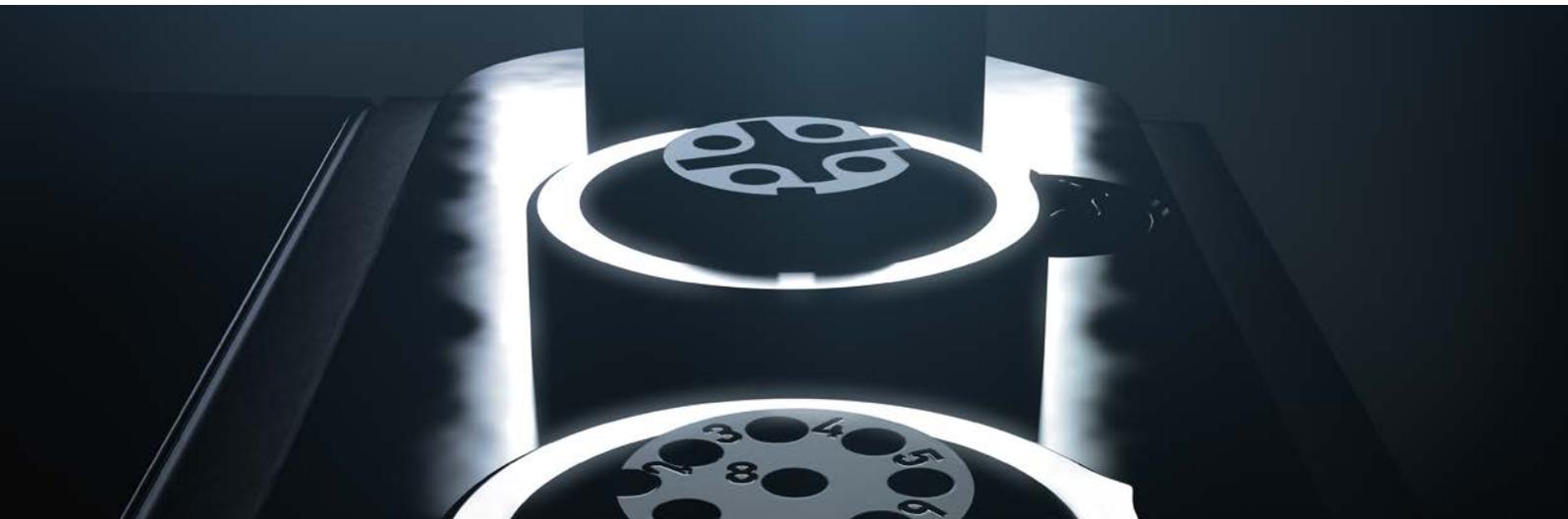
The vibration-resistant mounting systems of the microScan3 laser scanner make installation easy.



Electromagnetic compatibility as standard: electronic components of the microScan3.



→ www.sick.com/microScan3_robustness_video (Video on robustness of microScan3)



SMART CONNECTIVITY

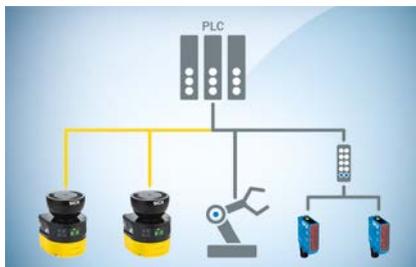
You are already well aware that when it comes to the installation and commissioning of devices, time is a factor that should not be underestimated. The smart connectivity of the microScan3 allows it to be easily and reliably integrated via network interfaces or I/Os, making wasted time a thing of the past.

Cost-effective cabling	thanks to the standardized connectivity of the safety laser scanner.
Time-saving and reliable integration	into industrial networks like CIP Safety™ via EtherNet/IP™ or PROFI-safe via PROFINET. Configuration via any desired access point in the network.
Quick changeover	thanks to microScan3, which takes the settings from the configuration memory integrated into the system plug and restores operation immediately.

Simple and centralized integration, configuration and diagnosis as well as fast changeover



Flexible and fast installation thanks to the removable system plug with integrated configuration memory on the rear or bottom of the device.

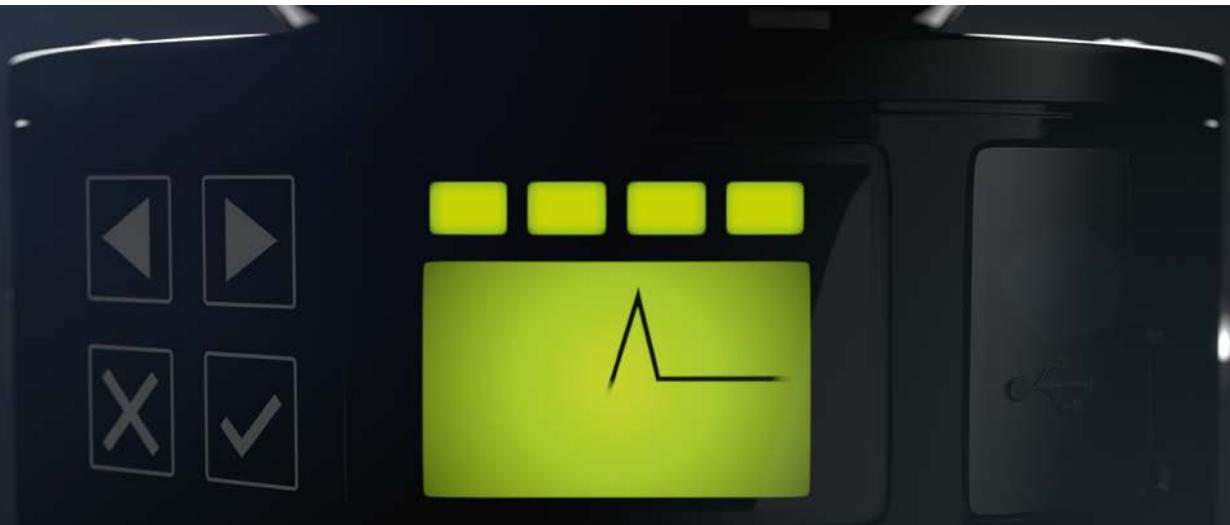


Safe communication as well as centralized configuration and diagnosis across the network.



The right information at the right time in the right place – the microScan3 provides access to a multitude of data.





INTUITIVE OPERATION

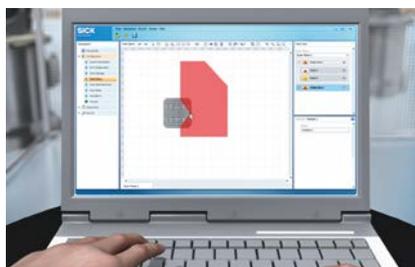
Many people assume that a high-performance safety laser scanner would be complex to handle and operate. This, however, could not be further from the truth – the microScan3 sets new usability standards.

Intuitive configuration	thanks to the Safety Designer software, which allows warning and protective fields to be quickly and easily designed.
Simple device diagnosis	can be performed at any time via user-friendly pushbuttons on the device.
Informative diagnostic data	that can be retrieved and analyzed over the network. This data can be used, for example, to investigate the operating status, contamination status and the times and frequency of protective field interruptions.

Straightforward commissioning and intuitive operation



The LEDs and the multi-colored display of the microScan3 are clearly visible. Important diagnostic data can be viewed via the pushbuttons and display.



The configuration and diagnosis software Safety Designer is easy to use.



The step-by-step navigation of the Safety Designer enables the desired configuration to be set quickly and easily.

microScan3: SPEAKS YOUR LANGUAGE

You too can benefit from the reliable network integration – perfect for future-oriented applications such as networked production facilities and human-robot interaction. Take advantage of this technology to reduce your costs and increase your productivity.



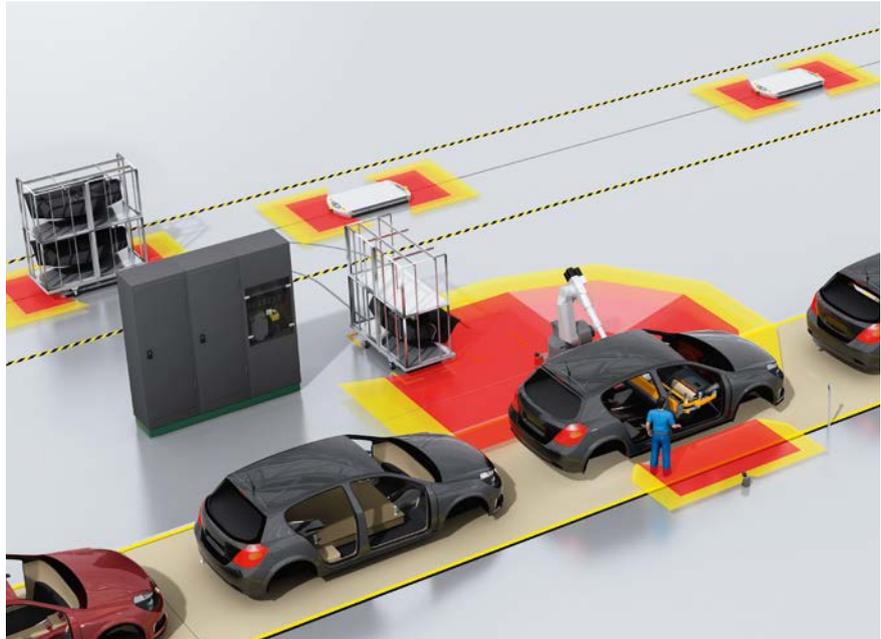
EtherNet/IP™



Networked production facilities:

microScan3 integrates itself into your network.

- Low cabling costs thanks to the integrated switch for star, line and ring topologies
- Central configuration and diagnostics
- Optimized maintenance intervals thanks to informative status data, e.g. on contamination



Human-robot interaction:

With microScan3 you can achieve optimal cooperation between humans and machines.

- Flexible setup via 8 freely-configurable fields
- Cost savings thanks to Sim-4-Safety: replace 4 conventional I/O scanners with a single microScan3 thanks to its 4 simultaneous protective fields



THE NEW GENERATION OF SAFETY LASER SCANNERS



Product description

With microScan3 Core, SICK is starting a new generation of safety laser scanners for the protection of hazardous areas, entrances, and hazardous points. The innovative safeHDDM® scanning technology increases the reliability of the microScan3. It is outstanding in dust and ambient light. It increases the productivity and availability of machines. The housing is rugged. Smart connect-

tivity facilitates safe integration into fieldbus technologies and cuts cabling costs. Using Safety Designer software, the microScan3 can be intuitively configured and is convenient to commission. The operational status can be called up and read clearly on the multicolored display or via the network. What can first impress, and repeatedly generate enthusiasm? The microScan3 from SICK.

At a glance

- Innovative safeHDDM® scanning technology
- Protective field range 5.5 m; scanning angle 275°
- Up to 8 freely configurable fields
- Up to 4 simultaneous protective fields
- System plug with configuration memory and M12 plug connectors
- Safe integration via I/Os or via network with EtherNet/IP™ CIP Safety™ or PROFINET PROFI-safe

Your benefits

- safeHDDM®: innovative scanning technology for an outstanding ratio between wide scanning range and compact design for simple integration in your machine
- Rugged design: developed for harsh industrial day-to-day work, the microScan3 is resilient and reliable, and increases productivity
- Smart connectivity: low cabling costs due to standardized interfaces, fast device change due to configuration memory, and safe integration via networks or I/Os possible
- Intuitive operation: easy commissioning with the Safety Designer software and diagnostic options via the display, pushbuttons, or network



Additional information

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→ www.sick.com/microScan3_Core

For more information, simply 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

More detailed data can be found in the operating instructions. Download → www.sick.com/microScan3_Core

Features

	microScan3 Core I/O	microScan3 Core I/O AIDA	microScan3 Core – EtherNet/IP™	microScan3 Core – PROFINET
Protective field range	4 m / 5.5 m (depending on type)			
Warning field range	40 m	–	40 m	
Number of simultaneously monitored protective fields	≤ 4 ¹⁾		≤ 4	
Number of fields	8 ²⁾	4 ²⁾	8	
Number of monitoring cases	2	1	8	
Scanning angle	275°			
Resolution (can be configured)	30 mm, 40 mm, 50 mm, 70 mm, 150 mm, 200 mm			
Response time	≥ 70 ms		≥ 95 ms	
Protective field supplement	65 mm			

¹⁾ Please note the number of available OSSD pairs.

²⁾ Please note the number of available inputs and OSSD pairs.

Safety-related parameters

	microScan3 Core I/O	microScan3 Core I/O AIDA	microScan3 Core – EtherNet/IP™	microScan3 Core – PROFINET
Type	Type 3 (IEC 61496)			
Safety integrity level	SIL2 (IEC 61508) SILCL2 (EN 62061)			
Category	Category 3 (EN ISO 13849)			
Performance level	PL d (EN ISO 13849)			
PFH_d (mean probability of a dangerous failure per hour)	8.0 x 10 ⁻⁸ (EN ISO 13849)			
T_M (mission time)	20 years (EN ISO 13849)			
Safe state in the event of a fault	In each OSSD pair, at least one OSSD is in the OFF state.		The safety outputs via the network are logic 0.	

Functions

	microScan3 Core I/O	microScan3 Core I/O AIDA	microScan3 Core – EtherNet/IP™	microScan3 Core – PROFINET
Restart interlock	✓	–	✓	
External device monitoring (EDM)	✓	–		
Multiple sampling	✓			
Monitoring case switching	✓	–	✓	
Simultaneous monitoring	✓			
Static protective field switching	✓	–	✓	
Safe contour detection	✓			
Contour as a reference	✓			
Integrated configuration memory	✓			

Interfaces

microScan3 Core I/O

Connection type	Male connector, M12, 8 pin, A-coded (common male connector for power supply and inputs and outputs)
Universal I/Os	3
Outputs	
OSSD pairs	1
Configuration method	PC with Safety Designer (Configuration and Diagnostic Software)
Configuration and diagnostics interface	USB 2.0, Mini-USB
Display elements	Graphic color display, LEDs

microScan3 Core I/O AIDA

Connection type	Male connector, M12, 5 pin, A-coded (common male connector for power supply and outputs)
Outputs	
OSSD pairs	1
Configuration method	PC with Safety Designer (Configuration and Diagnostic Software)
Configuration and diagnostics interface	USB 2.0, Mini-USB
Display elements	Graphic color display, LEDs

microScan3 Core – EtherNet/IP™

Connection type	
Voltage supply	1 x male connector, M12, 4-pin, A-coded
Fieldbus, industrial network	2 x M12 female connectors, 4-pin, D-coded
Outputs	
OSSD pairs	0
Safety outputs via network	4
Configuration method	PC with Safety Designer (Configuration and Diagnostic Software)
Configuration and diagnostics interface	USB 2.0, Mini-USB, Ethernet
Fieldbus, industrial network	EtherNet/IP™
Protocol	CIP Safety™
Device properties	Common Industrial Protocol: The CIP Networks Library Volume 1, Edition 3.20 EtherNet/IP™: The CIP Networks Library Volume 2, Edition 1.21 CIP Safety™: The CIP Networks Library Volume 5, Edition 2.13 Integration via generic profile or EDS file 10 Mb/s and 100 Mb/s in accordance with The CIP Networks Library Volume 2, Edition 1.21
Topology support	DLR (Device Level Ring)
Display elements	Graphic color display, LEDs

microScan3 Core – PROFINET

Connection type	
Voltage supply	1 x male connector, M12, 5-pin, L-coded
Fieldbus, industrial network	2 x female connector, RJ45 for push-pull male connector (copper)
Outputs	
OSSD pairs	0
Safety outputs via network	4
Configuration method	PC with Safety Designer (Configuration and Diagnostic Software)
Configuration and diagnostics interface	USB 2.0, Mini-USB, Ethernet
Fieldbus, industrial network	PROFINET
Protocol	PROFIsafe
Supported protocol versions	PROFINET specification V2.3 PROFIsafe profile in accordance with specification V2.6.1 PROFIsafe profile in accordance with specification V2.4
GSDML	According to GSDML specification V2.33
Cycle time	1 ms, 2 ms, 4 ms, 8 ms, 16 ms ...
Conformance	Conformance Class C
Network management	SNMP MIB-2 LLDP in accordance with IEEE 802.1AB MRP client support
Net load	Net load class III in accordance with security level 1 test
Switch properties	2 port real-time switch compliant with IEEE 802
Port properties	100Base-TX Auto-negotiation Auto-crossover (MDIX) Auto-polarity
Diagnostics	I&M data sets 0 ... 5 PROFINET alarms
Additional services	PROFenergy F_iPar_CRC Acyclic read-/write services for communication via TCI
Additional interfaces	TCP/IP communication via port 9000
Display elements	Graphic color display, LEDs

Electrical data

	microScan3 Core I/O	microScan3 Core I/O AIDA	microScan3 Core – EtherNet/IP™	microScan3 Core – PROFINET
Protection class	III (EN 61140)			
Supply voltage V _s	24 V DC (16.8 V DC ... 30 V DC)			
Power consumption	7 W (without output load)			

Mechanical data

	microScan3 Core I/O	microScan3 Core I/O AIDA	microScan3 Core – EtherNet/IP™	microScan3 Core – PROFINET
Dimensions (W x H x D)	112 mm x 135 mm x 111 mm		112 mm x 151 mm x 111 mm (without system plug)	112 mm x 163.1 mm x 111 mm (without system plug)
Weight	1.15 kg		1.45 kg	1.65 kg
Housing material	Aluminum			
Housing color	RAL 1021 (yellow), RAL 9005 (black)			
Optics cover material	Polycarbonat			
Optics cover surface finish	Outside with scratch-resistant coating			

Ambient data

	microScan3 Core I/O	microScan3 Core I/O AIDA	microScan3 Core – EtherNet/IP™	microScan3 Core – PROFINET
Enclosure rating	IP65 (IEC 60529)			
Ambient light immunity	3,000 lx (IEC 61496-3)			
Ambient operating temperature	-10 °C ... +50 °C			
Storage temperature	-25 °C ... +70 °C			
Vibration resistance	0.35 mm, 10 Hz ... 60 Hz (IEC 60068-2-6, IEC 61496-1, CLC/TS 61496-3) 5 g, 60 Hz ... 150 Hz (IEC 60068-2-6, IEC 61496-1, CLC/TS 61496-3)			
Shock resistance	10 g, 16 ms (IEC 60068-2-27, IEC 61496-3)			
EMC	IEC 61496-1, IEC 61000-6-2, IEC 61000-6-4			

Other information

	microScan3 Core I/O	microScan3 Core I/O AIDA	microScan3 Core – EtherNet/IP™	microScan3 Core – PROFINET
Type of light	Pulsed laser diode			
Wave length	845 nm			
Detectable remission	1.8% to several 1000%			
Laser class	1M (21 CFR 1040.10 and 1040.11, IEC 60825-1)			

Ordering information

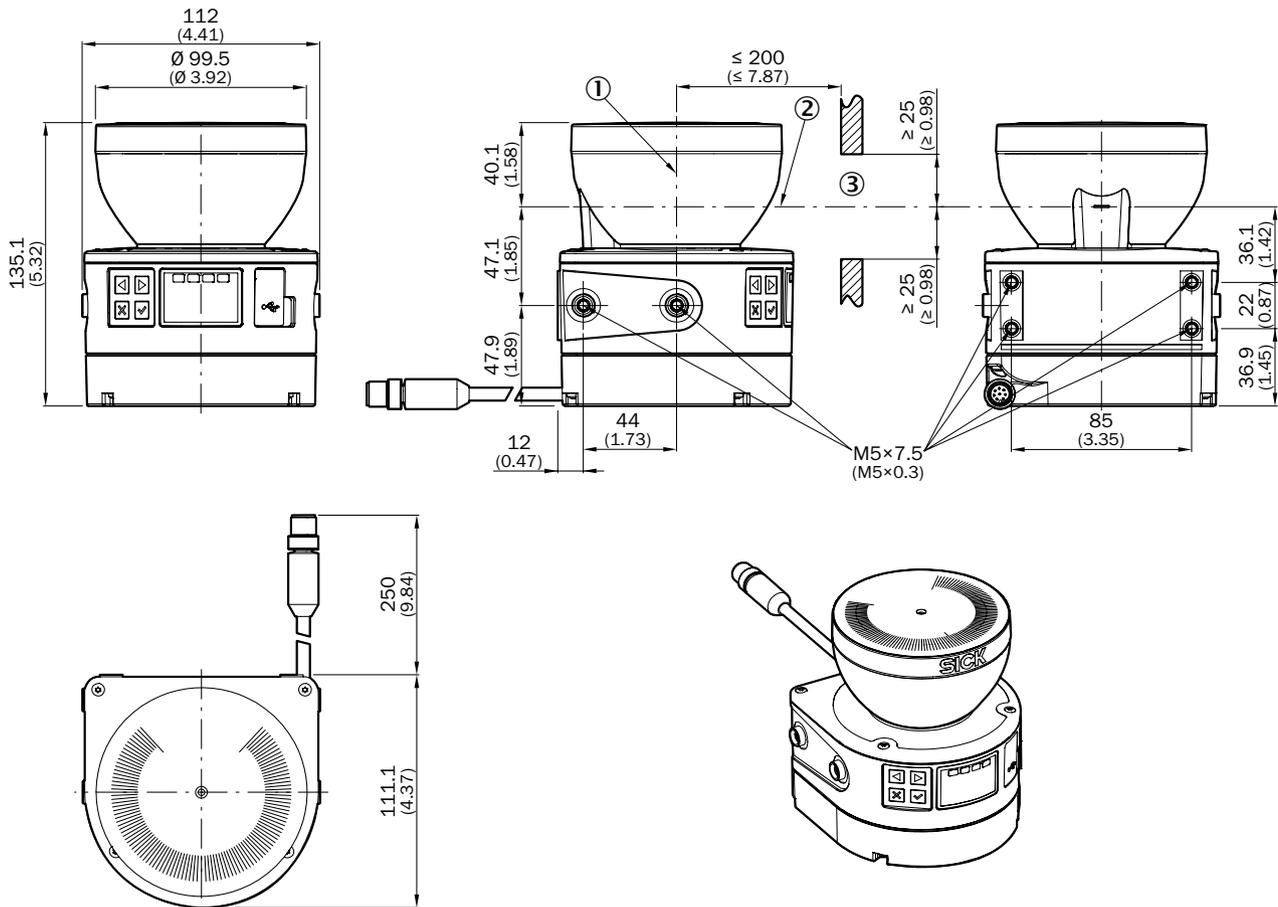
Items supplied microScan3 Core:

- Safety laser scanner with system plug
- Cover plate (for microScan3 Core – EtherNet/IP™ and microScan3 Core – PROFINET)
- Safety instruction
- Mounting instructions
- Operating instructions for download → www.sick.com/microScan3_Core
- Safety Designer (configuration and diagnostic software) for download → www.sick.com/safety_designer

Variant	Integration in the control system	Protective field range	Type	Part no.
microScan3 Core I/O	Local inputs and outputs (I/O)	4 m	MICS3-AAAZ40AZ1P01	1075842
		5.5 m	MICS3-AAAZ55AZ1P01	1075843
microScan3 Core I/O AIDA	Local inputs and outputs (I/O)	4 m	MICS3-AAAZ40BZ1P01	1083078
		5.5 m	MICS3-AAAZ55BZ1P01	1083079
microScan3 Core – EtherNet/IP™	CIP Safety™ over EtherNet/IP™	4 m	MICS3-ABAZ40IZ1P01	1082015
		5.5 m	MICS3-ABAZ55IZ1P01	1082016
microScan3 Core – PROFINET	PROFINET PROFI-safe	4 m	MICS3-ACAZ40PZ1P01	1083012
		5.5 m	MICS3-ACAZ55PZ1P01	1083010

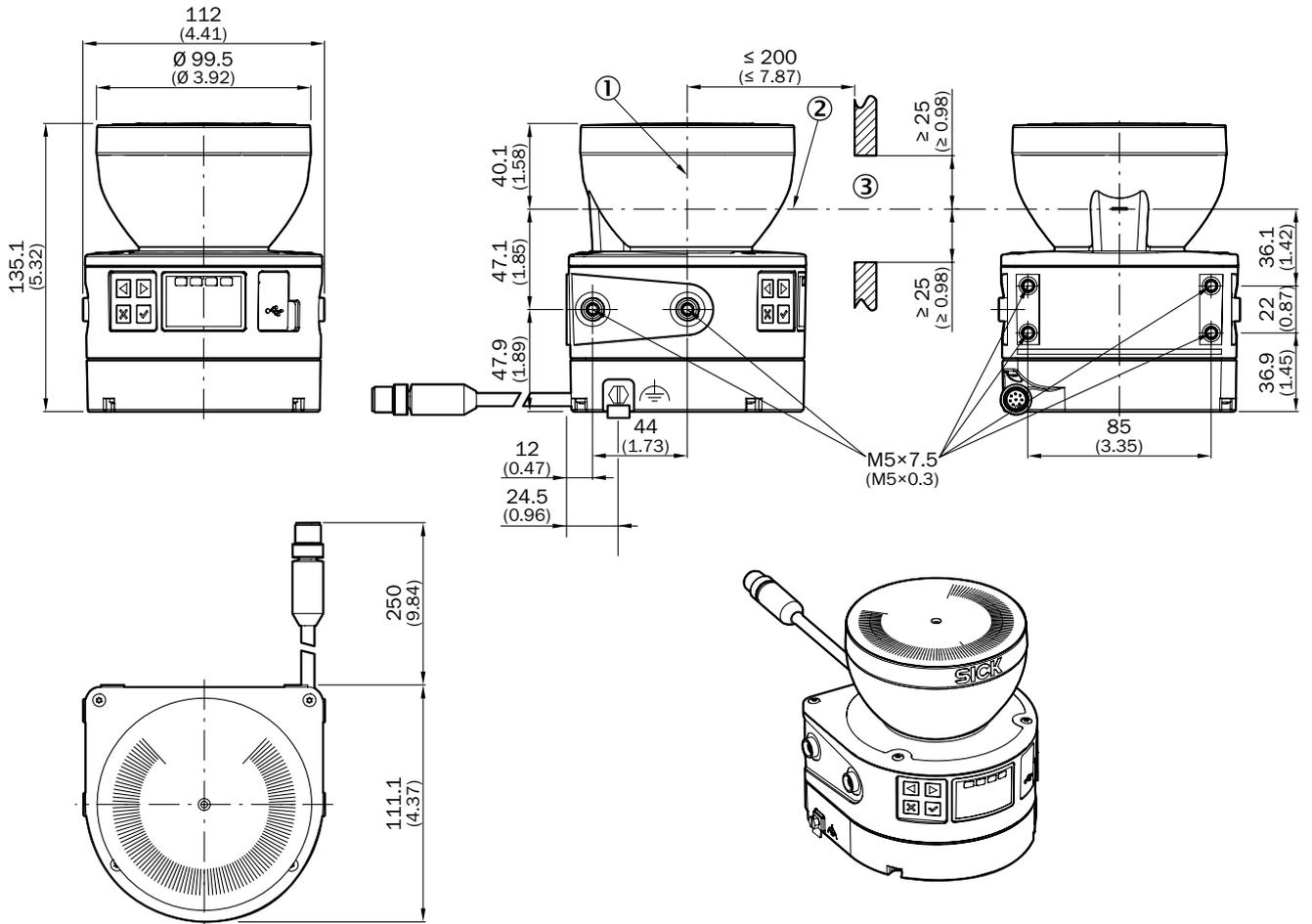
Dimensional drawing

microScan3 Core I/O



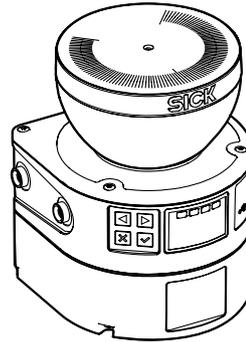
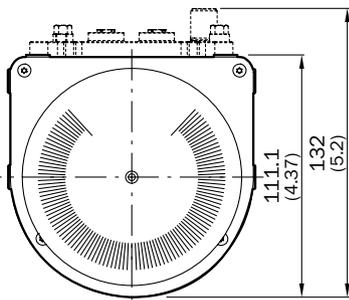
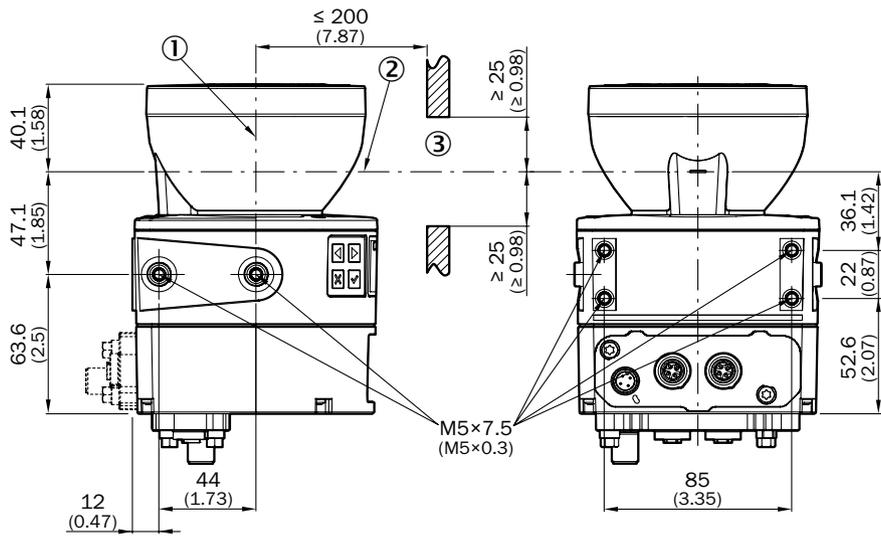
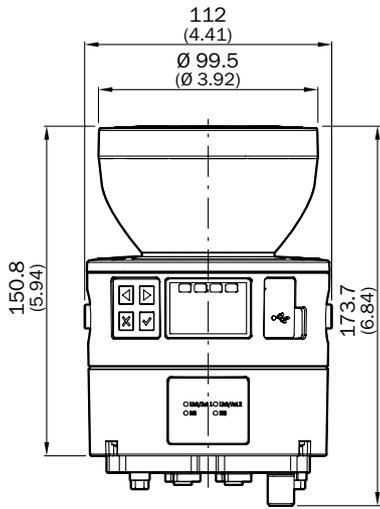
- ① Mirror axis of rotation
- ② Scan plane
- ③ Required viewing slit

microScan3 Core I/O AIDA



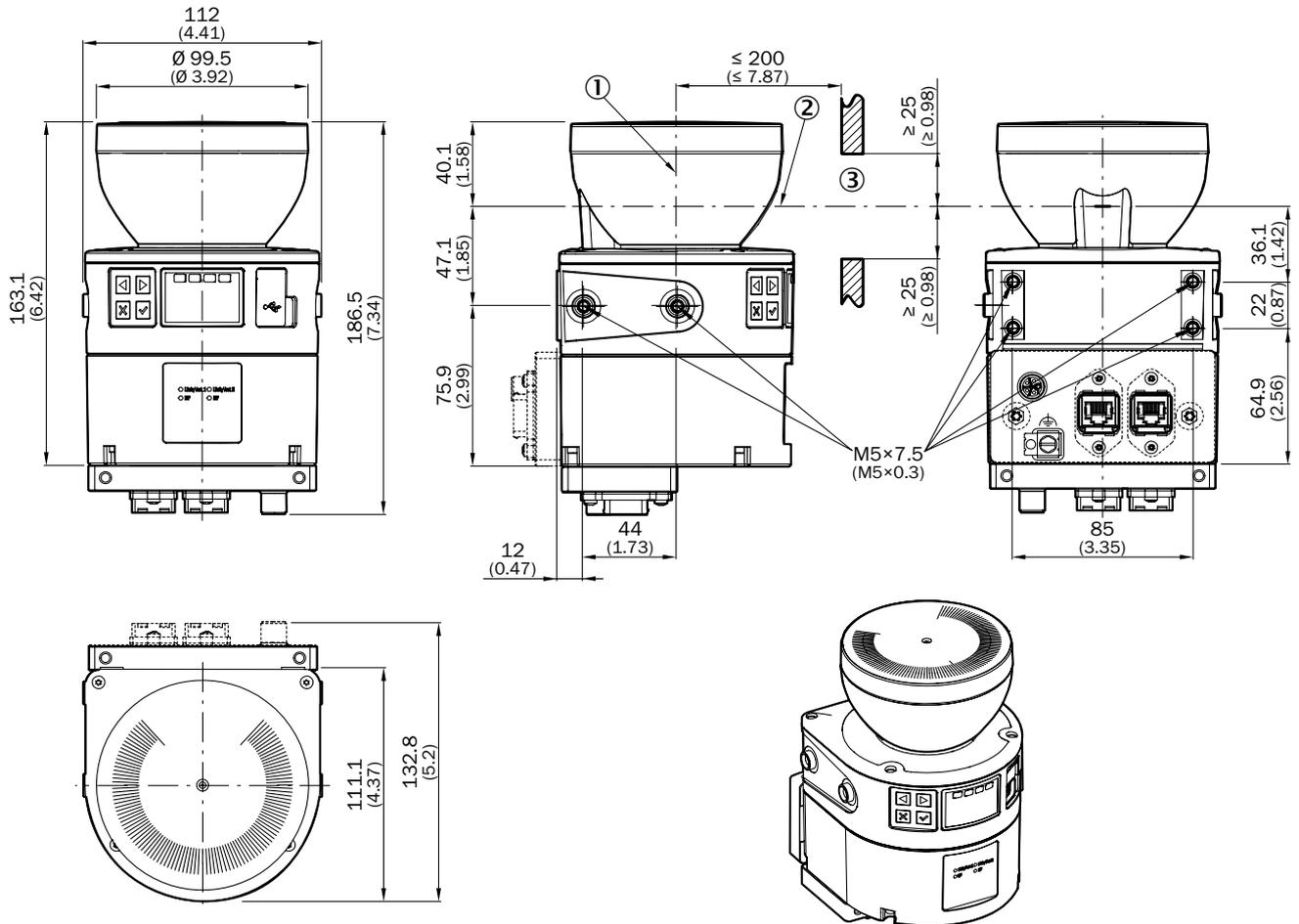
- ① Mirror axis of rotation
- ② Scan plane
- ③ Required viewing slit

microScan3 Core - EtherNet/IP™



- ① Mirror axis of rotation
- ② Scan plane
- ③ Required viewing slit

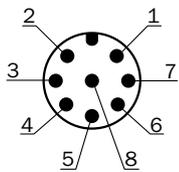
microScan3 Core - PROFINET



- ① Mirror axis of rotation
- ② Scan plane
- ③ Required viewing slit

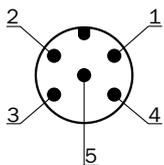
Pin assignment

microScan3 Core I/O



Pin	Designation	Function
1	+24 V DC	Supply voltage +24 V DC
2	OSSD 1.A	OSSD pair 1, OSSD A
3	0 V DC	Supply voltage 0 V DC
4	OSSD 1.B	OSSD pair 1, OSSD B
5	Uni-I/O 1	Universal I/O 1, configurable
6	Uni-I/O 2	Universal I/O 2, configurable
7	Uni-I/O 3	Universal I/O 3, configurable
8	FE	Functional earth/shielding

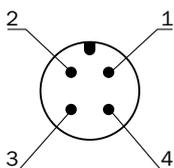
microScan3 Core I/O AIDA



Pin	Designation	Function
1	+24 V DC	Supply voltage +24 V DC
2	OSSD 1.B	OSSD pair 1, OSSD B
3	0 V DC	Supply voltage 0 V DC
4	OSSD 1.A	OSSD pair 1, OSSD A
5	FE	Functional earth/shielding
Thread	FE	Functional earth/shielding

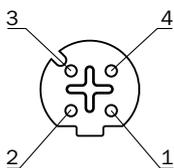
microScan3 Core – EtherNet/IP™

Voltage supply



Pin	Designation	Function
1	+24 V DC	Supply voltage +24 V DC
2	NC	Not connected
3	0 V DC	Supply voltage 0 V DC
4	FE	Functional earth/shielding

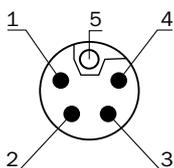
EtherNet/IP™ (2 x)



Pin	Designation	Function
1	TXD+	Send data +
2	RXD+	Receive data +
3	TXD-	Send data -
4	RXD-	Receive data -
Housing	SH	Shielding

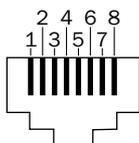
microScan3 Core – PROFINET

Voltage supply



Pin	Designation	Function
1	+24 V DC	Supply voltage +24 V DC
2	NC	Not connected
3	0 V DC	Supply voltage 0 V DC
4	NC	Not connected
5	FE	Functional earth/shielding

Ethernet (2 x)



Pin	Designation	Function
1	TX+	Send data +
2	TX-	Send data -
3	RX+	Receive data +
4	-	Reserved
5	-	Reserved
6	RX-	Receive data -
7	-	Reserved
8	-	Reserved
Housing	SH	Shielding

Accessories required for commissioning

Description	Number	Items supplied	Further information	microScan3 Core			
				I/O	I/O AIDA	EtherNet/IP™	PROFINET
Mounting bracket	1	-	→ Mounting brackets and plates	●	●	●	●
Connecting cable I/O	1	-	→ Plug connectors and cables	●	-	-	-
Connecting cable I/O AIDA	1	-	Not available from SICK	-	●	-	-
Connecting cable for EtherNet/IP™	1	-	→ Plug connectors and cables	-	-	●	-
Connecting cable for PROFINET	1	-	Not available from SICK	-	-	-	●
Connection cable M12-RJ45 for EtherNet/IP™	1	-	→ Plug connectors and cables	-	-	●	-
Connection cable RJ45-Push-Pull for PROFINET	1	-	Not available from SICK	-	-	-	●
Connection cable for configuration and diagnosis	1	-	→ Plug connectors and cables	●	●	-	-
Safety Designer (configuration and diagnostic software)	1	-	→ www.sick.com/safety_designer	●	●	●	●
Operating instructions	1	-	→ www.sick.com/microScan3_Core	●	●	●	●

Recommended accessories

Mounting systems

Mounting brackets and plates

Figure	Description	Packing unit	Type	Part no.	microScan3 Core			
					I/O	I/O AIDA	EtherNet/IP™	PROFINET
	Mounting bracket	1 piece	Mounting kit 1a	2073851	●	●	●	●
	Mounting bracket with protection of optics hood	1 piece	Mounting kit 1b	2074242	●	●	●	●
	Alignment bracket, alignment with cross-wise axis and depth axis possible, distance between mounting surface and device: 22.3 mm, only in conjunction with mounting kit 1a (2073851) or 1b (2074242)	1 piece	Mounting kit 2a	2073852	●	●	●	●
	Alignment bracket, alignment with cross-wise axis and depth axis possible, distance between mounting surface and device: 52.3 mm, only in conjunction with mounting kit 1a (2073851) or 1b (2074242)	1 piece	Mounting kit 2b	2074184	●	●	●	●

Connection systems

Plug connectors and cables

Connecting cables with female connector

- **Model:** PUR, halogen-free, unshielded

Figure	Connection type		Conductor cross-section	Cable length	Type	Part no.	microScan3 Core			
							I/O	I/O AIDA	EtherNet/IP™	PROFINET
	Female connector, M12, 8-pin, straight	Open cable ends	0.25 mm ²	2 m	DOL-1208G02MD25KM1	2079314	●	-	-	-
				5 m	DOL-1208G05MD25KM1	2079315	●	-	-	-
				10 m	DOL-1208G10MD25KM1	2079316	●	-	-	-
				20 m	DOL-1208G20MD25KM1	2092105	●	-	-	-
				30 m	DOL-1208G30MD25KM1	2092106	●	-	-	-
	Female connector, M12, 4-pin, straight	Open cable ends	0.75 mm ²	2 m	DOL-1204G02MC75KM0	2079290	-	-	●	-
				5 m	DOL-1204G05MC75KM0	2079291	-	-	●	-
				10 m	DOL-1204G10MC75KM0	2079292	-	-	●	-
				20 m	DOL-1204G20MC75KM0	2089703	-	-	●	-
	Female connector, M12, 4-pin, angled	Open cable ends	0.75 mm ²	2 m	DOL-1204W02MC75KM0	2079293	-	-	●	-
				5 m	DOL-1204W05MC75KM0	2079294	-	-	●	-
				10 m	DOL-1204W10MC75KM0	2079295	-	-	●	-
				20 m	DOL-1204W20MC75KM0	2089704	-	-	●	-

Connection cables with male and male connector

- **Model:** PUR, halogen-free, shielded

Figure	Connection type		Conductor cross-section	Cable length	Type	Part no.	microScan3 Core			
							I/O	I/O AIDA	EtherNet/IP™	PROFINET
	Male connector, M12, 4-pin, straight	Male connector, RJ45, 8-pin, straight	2 x 2 x 0.14 mm ²	2 m	SSL-2J04-G02ME60	6047916	-	-	●	-
				5 m	SSL-2J04-G05ME60	6047917	-	-	●	-
				10 m	SSL-2J04-G10ME60	6047918	-	-	●	-
				20 m	SSL-2J04-G20ME60	6063700	-	-	●	-
	Male connector, M12, 4-pin, angled	Male connector, RJ45, 8-pin, straight	2 x 2 x 0.14 mm ²	2 m	SSL-2J04-H02ME	6047911	-	-	●	-
				5 m	SSL-2J04-H05ME	6045287	-	-	●	-
				10 m	SSL-2J04-H10ME	6045288	-	-	●	-
				20 m	SSL-2J04-H20ME	6063701	-	-	●	-

Connection cables with male and male connector

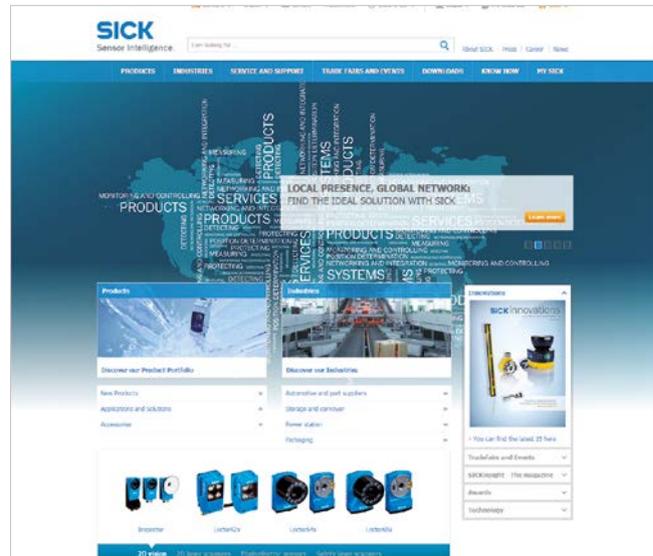
- **Description:** For connecting the configuration connection to the USB interface on the PC

Figure	Connection type		Model	Cable length	Type	Part no.	microScan3 Core			
							I/O	I/O AIDA	EtherNet/IP™	PROFINET
	Male connector, USB-A, straight	Male connector, Mini-USB, straight	Shielded	3 m	Connection cable (male connector-male connector)	6042517	●	●	●	●
				5 m	Connection cable (male connector-male connector)	6053566	●	●	●	●

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