



V2D632R-MXSXB0 Flex

Lector63x

IMAGE-BASED CODE READERS

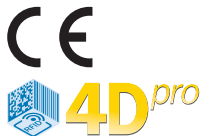
SICK
Sensor Intelligence.



Ordering information

| Type | Part no. |
|---------------------|----------|
| V2D632R-MXSXB0 Flex | 1067380 |

Other models and accessories → www.sick.com/Lector63x



Detailed technical data

Features

| | |
|---------------------------|---|
| Focus | Adjustable focus (manually) |
| Sensor | CMOS matrix sensor, grayscale values |
| Sensor resolution | 1,600 px x 1,200 px |
| Light source | To be ordered separately as accessory Aiming laser: visible red light ($\lambda = 630 \text{ nm} \dots 680 \text{ nm}$) |
| Laser class | 1, complies with 21 CFR 1040.10 except for the tolerance according to "Laser Notice No. 50" from June 24, 2007 (IEC 60825-1 (2007-3)) |
| Scanning frequency | $\leq 50 \text{ Hz}$, at 1.9 megapixels resolution |
| Code resolution | $\geq 0.1 \text{ mm}^{1)}$ |
| Reading distance | 50 mm ... 2,200 mm ¹⁾ |

¹⁾ Depends on lens used, for details see field of view diagram.

Performance

| | |
|---------------------------------|---|
| Readable code structures | 1D, 2D, Stacked |
| Bar code types | GS1-128 / EAN 128, UPC / GTIN / EAN, Interleaved 2 of 5, Pharmacode, GS1 DataBar, Code 39, Code 128, Codabar, Code 32, Code 93, USPS (Postnet, Planet, USPS4SCB), Australian Post, Dutch KIX Post, Royal Mail, Swedish Post |
| 2D code types | Data Matrix ECC200, GS1 Data-Matrix, MaxiCode, QR code |
| Stacked code types | PDF417 |
| Code qualification | On the basis of ISO/IEC 16022, ISO/IEC 15415, ISO/IEC 18004 |

Interfaces

| | |
|------------------------|---|
| Ethernet TCP/IP | ✓, TCP/IP |
| Function | Host, AUX, FTP (image transmission) |
| Data transmission rate | 10/100/1,000 Mbit/s |
| PROFINET | ✓ |
| Function | PROFINET Dual Port (optional via external connection module CDF600-2) |

| | | |
|--------------------------------------|------------------------------|---|
| EtherNet/IP™ | | ✓ |
| | Data transmission rate | 10/100/1,000 Mbit/s |
| Serial | | ✓, RS-232, RS-422 |
| | Function | Host, AUX |
| | Data transmission rate | 0.3 kBaud ... 115.2 kBaud, AUX: 57.6 kBaud (RS-232) |
| CAN | | ✓ |
| | Function | SICK CAN sensor network (Master/Slave, Multiplexer/Server) |
| | Data transmission rate | 250 kbit/s ... 500 kbit/s |
| PROFIBUS DP | | ✓ |
| | Type of fieldbus integration | Optional over external fieldbus module CDF600-2 |
| USB | | ✓ |
| | Remark | USB 2.0 |
| Switching inputs | | 4 ("Sensor 1", "Sensor 2", 2 inputs via optional CMC600 parameter memory in CDB650/CDM420) |
| Configurable inputs | | Encoder input, external trigger |
| Switching outputs | | 6 (CDB650: "Result 1", "Result 2", "Result 3", "Result 4", 2 external outputs via CMC600 or CDM420: "Result 1", "Result 2", 2 external outputs via CMC600 or cable with open end: "Result 1", "Result 2", "Result 3", "Result 4") |
| Configurable outputs | | Good read, External illumination control, free configurable output condition, "device ready" |
| Reading pulse | | Switching inputs, non-powered, serial interface, Ethernet, CAN, auto pulse, presentation mode |
| Optical indicators | | 11 LEDs (5 x status display, 5 x LED bar graph, 1 green/red feedback spot) |
| Acoustic indicators | | Beeper (configurable) |
| Operating elements | | 2 buttons (choose and start/stop functions) |
| Configuration software | | SOPAS ET |
| Memory card | | Micro SD memory card (flash card) max. 32 GB, optional |
| Data storage and retrieval | | Image and data storage via microSD memory card, internal storage and external FTP |
| Maximum encoder frequency | | 1 kHz |
| External illumination control | | Via digital output (max. 24 V trigger) or via external illumination connector |

Mechanics/electronics

| | |
|-------------------------------|---|
| Electrical connection | 1 x M12, 17-pin plug (serial, CAN, I/Os, power supply) 1 x M12, 8-pin socket (Ethernet, 1 GBit/s) 1 x M8, 4-pin socket (USB) 1 x M12, 4-pin socket (external illumination control) |
| Operating voltage | 24 V DC, ± 20 % |
| Power consumption | Typ. 10 W, ± 20 % |
| Output current | ≤ 100 mA |
| Housing | Aluminum die cast |
| Enclosure rating | IP67 (EN 60529 (1991-10), EN 60529/A2 (2002-02)) |
| Electrical safety | EN 60950-1 (2011-01) |
| Weight | 430 g, without lens and connection cables |
| Dimensions (L x W x H) | 108 mm x 63.1 mm x 45.8 mm ¹⁾ |
| Lens | Exchangeable (S-mount), to be ordered separately as accessory |

¹⁾ Only housing without lens and protective hood.

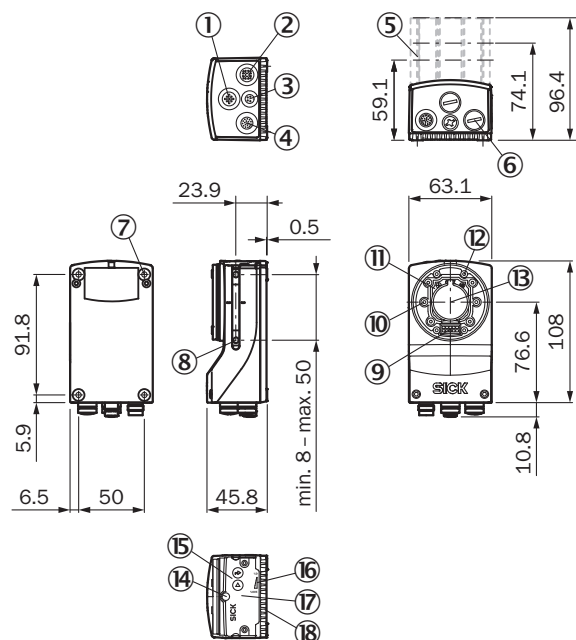
Ambient data

| | |
|--|---|
| Electromagnetic compatibility (EMC) | EN 61000-6-2 (2005-08) / EN 61000-6-4 (2007-01) + A1 (2011) |
| Vibration resistance | EN 60068-2-6 (2008-02) |
| Shock resistance | EN 60068-2-27 (2009-05) |
| Ambient operating temperature | 0 °C ... +50 °C |
| Storage temperature | -20 °C ... +70 °C |
| Permissible relative humidity | 90 %, Non-condensing |

Classifications

| | |
|-----------------------|----------|
| ECl@ss 5.0 | 27280103 |
| ECl@ss 5.1.4 | 27280103 |
| ECl@ss 6.0 | 27280103 |
| ECl@ss 6.2 | 27280103 |
| ECl@ss 7.0 | 27280103 |
| ECl@ss 8.0 | 27280103 |
| ECl@ss 8.1 | 27280103 |
| ECl@ss 9.0 | 27280103 |
| ETIM 5.0 | EC002550 |
| ETIM 6.0 | EC002550 |
| UNSPSC 16.0901 | 43211701 |

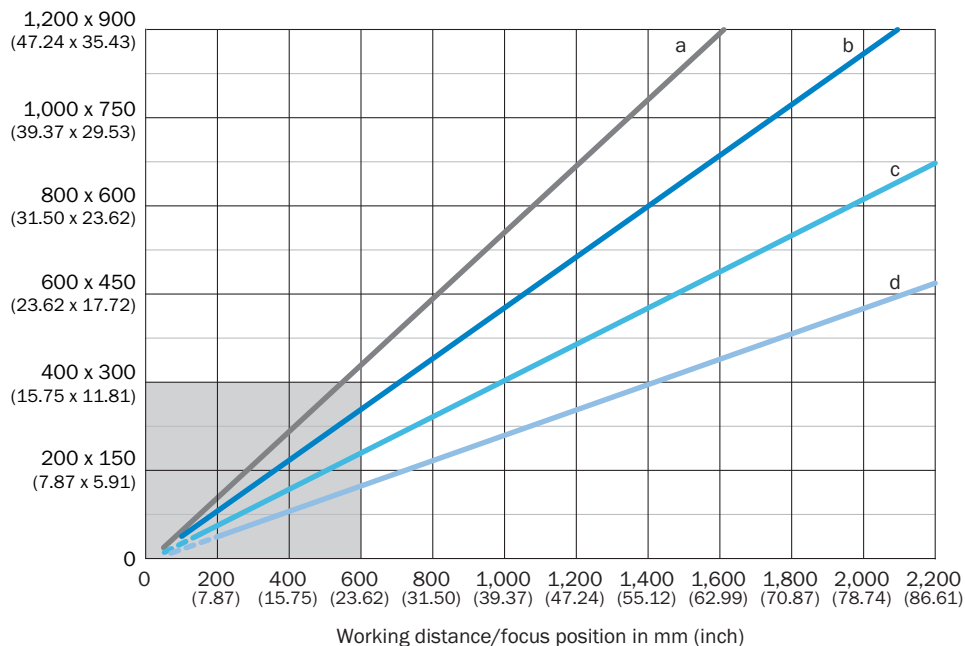
Dimensional drawing (Dimensions in mm (inch))



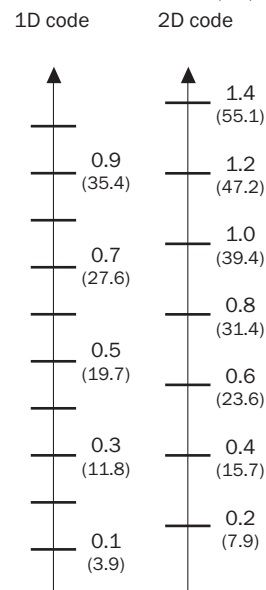
- ① External illumination connection
- ② Gigabit Ethernet port
- ③ USB port
- ④ Power, serial, CAN, and I/O connection
- ⑤ 22.7 mm, 37.7 mm, or 60 mm protective cover for optics
- ⑥ Protective caps/plugs to seal any electrical connections that are not in use
- ⑦ M5 blind tapped holes, 5 mm deep (4 x), for mounting the sensor
- ⑧ M5 sliding nut, 5.5 mm deep (4 x), pivoting, for an alternative method of mounting the sensor
- ⑨ Integrated illumination connection
- ⑩ Aiming laser (2 x)
- ⑪ S-mount or C-mount optics module
- ⑫ 2.5 mm blind tapped holes (4 x) for mounting the spacers for the integrable illumination
- ⑬ Optical axis and center of the image sensor
- ⑭ Manual focus screw, underneath cover/label (S-mount Flex)
- ⑮ Function button (2 x)
- ⑯ Bar graph display
- ⑰ Removable cover for microSD memory card slot and manual focus screw (S-mount)
- ⑱ LEDs for status display (2 levels), 5 x

Field of view

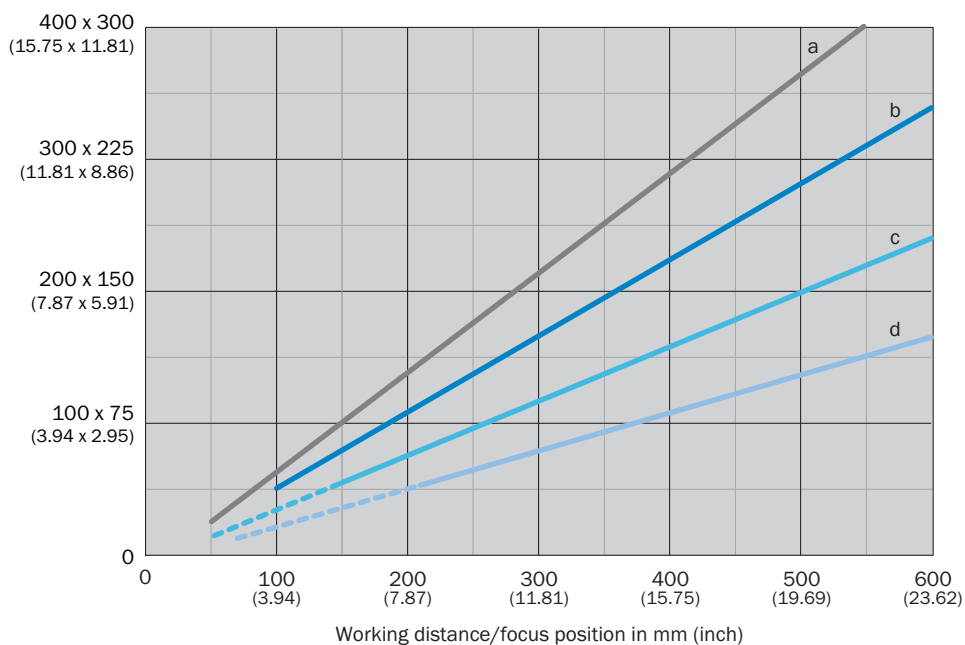
Field of view in mm² (sq inch)



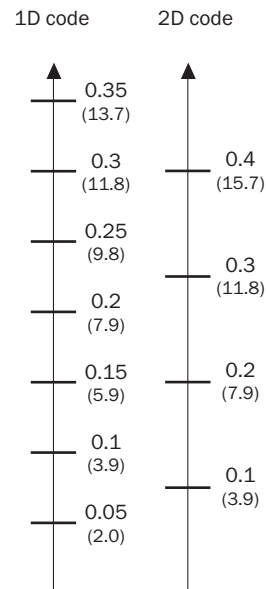
Min. resolution in mm (mil)



Field of view in mm² (sq inch)



Min. resolution in mm (mil)

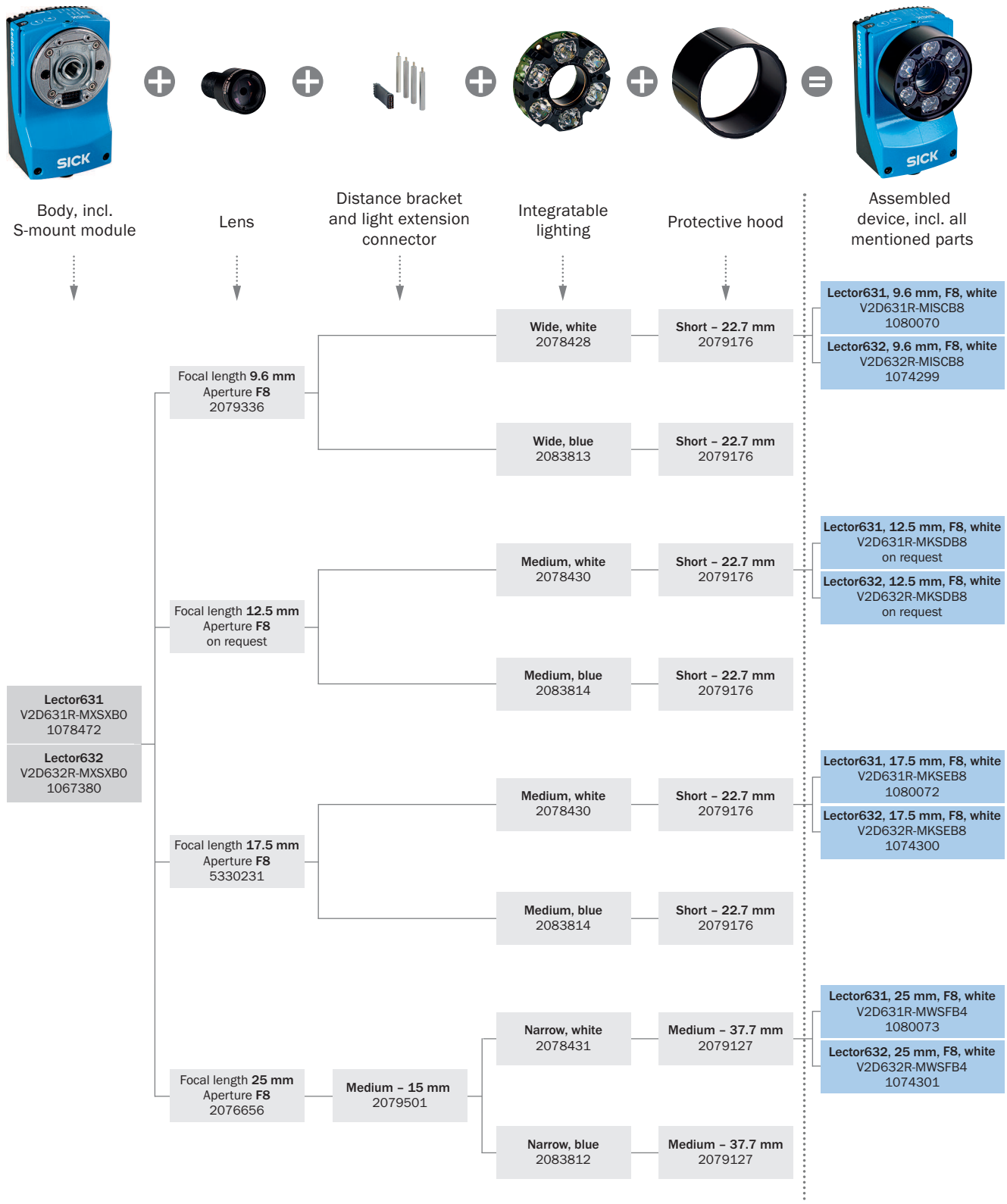


- a: f = 9.6 mm — c: f = 17.5 mm
- b: f = 12.5 mm — d: f = 25.0 mm
- - - Optional spacer rings required

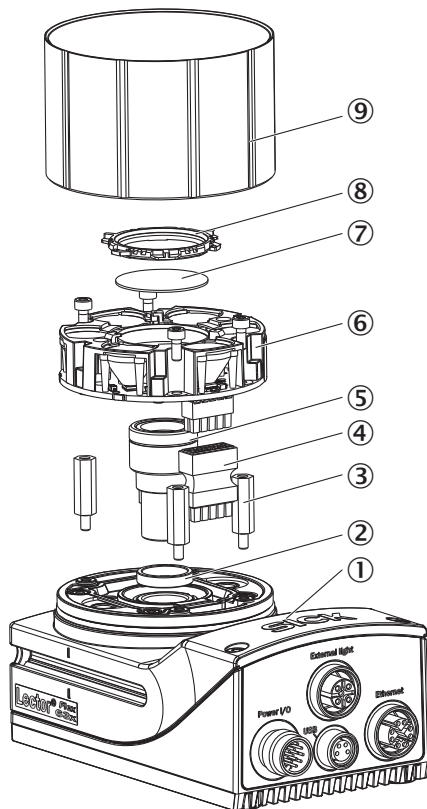
For S-mount and standard C-mount lenses, spacer rings are needed for working distances shorter than approximately 10 times the focal length. For compact C-mount lenses, spacer rings are not needed, but the built-in illumination cannot be used for distances shorter than 300 mm.

Selection Guide

Lector63x S-mount



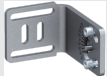

Exploded view








- ① Camera housing
- ② Spacer for built-in illumination
- ③ Spacer ring (optional)
- ④ Plug connector for illumination
- ⑤ S-mount lens
- ⑥ Built-in illumination
- ⑦ Optical filter (optional)
- ⑧ Filter holder
- ⑨ Protective cover for optics

Recommended accessories

Other models and accessories → www.sick.com/Lector63x

| | Brief description | Type | Part no. |
|---|--|------------------|----------|
| Mounting brackets and plates | | | |
|  | Mounting bracket with screws, L-shaped for mounting with sliding nuts, includes angle indicator for adjusting the tilt angle | Mounting bracket | 2078970 |
| Terminal and alignment brackets | | | |
|  | Distance bracket and light extension connector (medium) for mounting integratable lighting, length 15 mm, used with compact C-mount lenses with focal length of 12 mm or 25 mm and S-mount lens with focal length 25mm | Distance bracket | 2079501 |

| | Brief description | Type | Part no. |
|---|--|--|----------|
| Modules | | | |
|  | Connection device basic for connecting one sensor with 2 A fuse, 5 cable glands and RS-232 interface to sensor via M12, 17-pin female connector, all outputs available on screw/spring-loaded terminals. | CDB650-204 | 1064114 |
| Plug connectors and cables | | | |
|  | Head A: female connector, M12, 17-pin, straight, A-coded Head B: male connector, M12, 17-pin, straight, A-coded Cable: Power, serial, CAN, digital I/Os, drag chain use, suitable for 2 A, suitable for refrigeration, shielded, 2 m | Connection cable (male connector - female connector) | 6053230 |
|  | Head A: male connector, M12, 8-pin, straight, X-coded Head B: male connector, RJ45, 8-pin, straight Cable: Gigabit Ethernet, shielded, 2 m | Connection cable (male connector-male connector) | 6049728 |
| Lenses and accessories | | | |
|  | Lens protective hood medium, enclosure rating IP 67, length 37.7 mm, PMMA, used with compact C-mount lenses with focal length of 12 mm or 25 mm and S-mount lens with focal length 25mm | Optics protection cover | 2079127 |
| Illuminations | | | |
|  | Integratable lighting, lighting color white, narrow, suitable for S-mount and compact C-mount lenses with a focal length of 25 mm and 35 mm | VI55I-WH2023M0 | 2078431 |

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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.”

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