PRODUCT INFORMATION

deTec Core Ex II 3GD / deTem Core Ex II 3GD

SAFETY IN EXPLOSIVE ATMOSPHERES

Safety light curtain, Multiple light beam safety devices

SICK
Sensor Intelligence.

RUGGED AND RELIABLE – EVEN IN EXTREME CONDITIONS

In industries with explosion-hazardous areas, a single spark can be disastrous. The components used in these environments must therefore be particularly rugged and reliable in order to meet the strict explosion protection requirements.

Explosion-hazardous areas are governed by particularly stringent safety regulations and standards. People and systems must never be placed at risk. Planners and operating entities must therefore get to grips with explosion protection before establishing new systems or converting them. They must provide evidence that explosion protection measures have been taken and the relevant standards have been observed. For this reason, the ruggedness and reliability of the components play an important role in terms of safety and productivity.

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The deTec Ex II 3GD safety light curtains and the deTem Ex II 3GD multiple light beam safety devices from SICK meet the requirements of the ATEX guidelines for gas: II 3GD Ex nA op is IIB T4 GC X, and ATEX for dust: II 3GD Ex tc IIIB T135°C Dc. Both products provide maximum reliability and a very high level of safety for employees – even in explosive environments.

Certification with the highest protection classes

Measurement, detection, identification, protection: In addition to a wide range of solutions which are perfectly suited to use in explosion-hazardous areas, SICK also offers advice and expertise from certified experts.

Ensure safety on all levels

Compliance with the ATEX guidelines for use in explosion-hazardous areas ensures maximum reliability and a very high level of safety for your employees.

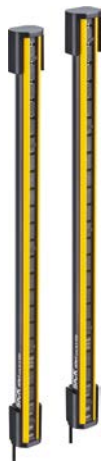
Save time and money

Easy mounting, installation and commissioning in your systems thanks to the alignment quality display using LEDs, plus standardized connectivity and accessories.

New opportunities for more productivity

Reduce downtimes and increase machine availability thanks to the exceptional ruggedness and reliability of the product components – even in explosion-hazardous areas.

SAFETY IN EXPLOSIVE ATMOSPHERES



Product description

Rugged and reliable safety technology is very important in industries with explosion-hazardous areas. A single spark can be disastrous. With the special version of the deTec4 Core Ex II 3GD safety light curtain, SICK is ensuring compliance with the high safety requirements in explosive areas. It fulfills the requirements of the ATEX guidelines for use in explosion-hazardous areas (ATEX for gas: II 3G EX and ATEX for dust: II 3D Ex). Thanks to the high resistance and reliability, the safety light curtain is particularly well-suited for use in tough industrial settings. The deTec4 Core Ex II 3GD offers maximum reliability and very high safety for employees, even in explosive atmospheres.

At a glance

- ATEX for gas:
  II 3G EX nA op is IIB T4 GC X
- ATEX for dust:
  II 3D Ex tc IIIB T135 °C Dc
- Innovative bracket
- No blind zones
- Automated calibration of the protective field width
- LED alignment and output display
- Standardized connectivity: M12 male connector, 5-pin connection, compatible with Flexi Loop
- Enclosure ratings: IP65 and IP67

Your benefits

- Uniform housing and accessory concept for standard and special industrial environments saves time and money when planning systems
- Innovative bracket concept for easy mounting saves installation time and costs
- No blind zones for very high flexibility and space-saving machine design
- Quick installation thanks to integrated LED display and automated calibration of the protective field width save time and money
- Standardized connectivity for Flexi Loop integration saves time and money when it comes to installation
- Enclosure ratings IP65, IP67 and temperature resistance offer long sensor life times and therefore even more efficiency

Additional information

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→ www.sick.com/deTec

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.

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Detailed technical data

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

Features

Application	Explosive areas
Ex-approvals	ATEX for gas: II 3G Ex nA op is IIB T4 Gc X ATEX for dust: II 3D Ex tc IIIB T135°C Dc
Resolution	14 mm / 30 mm (depending on type)
Protective field height	300 mm ... 2,100 mm (depending on type)
Scanning range	10 m / 15 m (depending on type)
No blind zones	Yes
Synchronization	Optical synchronisation

Safety-related parameters

Type	Type 4 (IEC 61496-1) [1]
Safety integrity level	SIL3 (IEC 61508) SILCL3 (IEC 62061)
Category	Category 4 (ISO 13849-1)
Performance level	PL e (ISO 13849-1)
PFH_D (mean probability of a dangerous failure per hour)	3.7×10^{-9}
T_M (mission time)	20 years (ISO 13849-1)
Safe state in the event of a fault	At least one OSSD is in the OFF state.

[1] Type 2 devices available on request.

Functions

Protective operation	✔
Automatic calibration of the protective field width	✔

Interfaces

Connection type	Male connector M12, 5-pin
Display elements	LEDs
Fieldbus, industrial network	
Integration via Flexi Soft safety controller	CANopen, DeviceNet™, EtherCAT®, EtherNet/IP™, Modbus TCP, PROFIBUS DP, PROFINET [1]

[1] For additional information on Flexi Soft ➜ www.sick.com/Flexi_Soft.

Electrical data

Protection class	III (IEC 61140)
Supply voltage V_S	24 V DC (19.2 V ... 28.8 V)
Ripple	≤ 10 %
Output signal switching devices (OSSDs)	
Type of output	2 PNP semiconductors, short-circuit protected, cross-circuit monitored [1]
ON state, switching voltage HIGH	24 V DC (V_S – 2.25 V DC ... V_S)
OFF state, switching voltage LOW	≤ 2 V DC
Current-carrying capacity per OSSD	≤ 300 mA

[1] Applies to the voltage range between –30 V and +30 V.

Mechanical data

Dimensions	See dimensional drawing
Housing material	Aluminum extruded profile

Ambient data

Enclosure rating	IP65 (IEC 60529) IP67 (IEC 60529)
Ambient operating temperature	0 °C ... +55 °C
Storage temperature	–30 °C ... +70 °C
Air humidity	15 % ... 95 %, Non-condensing
Vibration resistance	5 g, 10 Hz ... 55 Hz (IEC 60068-2-6)
Shock resistance	10 g, 16 ms (IEC 60068-2-27)

Other information

Wave length	850 nm
Type of light	Near-infrared (NIR), invisible

Ordering information

- **Resolution:** 14 mm
- **Scanning range:** 10 m

Protective field height	Sender		Receiver	
	Type [1]	Part no.	Type [1]	Part no.
300 mm	C4C-SX03010A10000	1220313	C4C-EX03010A10000	1220326
450 mm	C4C-SX04510A10000	1220314	C4C-EX04510A10000	1220327
600 mm	C4C-SX06010A10000	1220315	C4C-EX06010A10000	1220328
750 mm	C4C-SX07510A10000	1220316	C4C-EX07510A10000	1220329
900 mm	C4C-SX09010A10000	1220317	C4C-EX09010A10000	1220330
1,050 mm	C4C-SX10510A10000	1220318	C4C-EX10510A10000	1220331
1,200 mm	C4C-SX12010A10000	1220319	C4C-EX12010A10000	1220332
1,350 mm	C4C-SX13510A10000	1220320	C4C-EX13510A10000	1220333
1,500 mm	C4C-SX15010A10000	1220321	C4C-EX15010A10000	1220334
1,650 mm	C4C-SX16510A10000	1220322	C4C-EX16510A10000	1220335
1,800 mm	C4C-SX18010A10000	1220323	C4C-EX18010A10000	1220336
1,950 mm	C4C-SX19510A10000	1220324	C4C-EX19510A10000	1220337
2,100 mm	C4C-SX21010A10000	1220325	C4C-EX21010A10000	1220338

[1] Type 2 devices available on request.

- **Resolution:** 30 mm
- **Scanning range:** 15 m

Protective field height	Sender		Receiver	
	Type [1]	Part no.	Type [1]	Part no.
300 mm	C4C-SX03030A10000	1220339	C4C-EX03030A10000	1220352
450 mm	C4C-SX04530A10000	1220340	C4C-EX04530A10000	1220353
600 mm	C4C-SX06030A10000	1220341	C4C-EX06030A10000	1220354
750 mm	C4C-SX07530A10000	1220342	C4C-EX07530A10000	1220355
900 mm	C4C-SX09030A10000	1220343	C4C-EX09030A10000	1220356
1,050 mm	C4C-SX10530A10000	1220344	C4C-EX10530A10000	1220357
1,200 mm	C4C-SX12030A10000	1220345	C4C-EX12030A10000	1220358
1,350 mm	C4C-SX13530A10000	1220346	C4C-EX13530A10000	1220359
1,500 mm	C4C-SX15030A10000	1220347	C4C-EX15030A10000	1220360
1,650 mm	C4C-SX16530A10000	1220348	C4C-EX16530A10000	1220363
1,800 mm	C4C-SX18030A10000	1220349	C4C-EX18030A10000	1220362
1,950 mm	C4C-SX19530A10000	1220350	C4C-EX19530A10000	1220361
2,100 mm	C4C-SX21030A10000	1220351	C4C-EX21030A10000	1220364

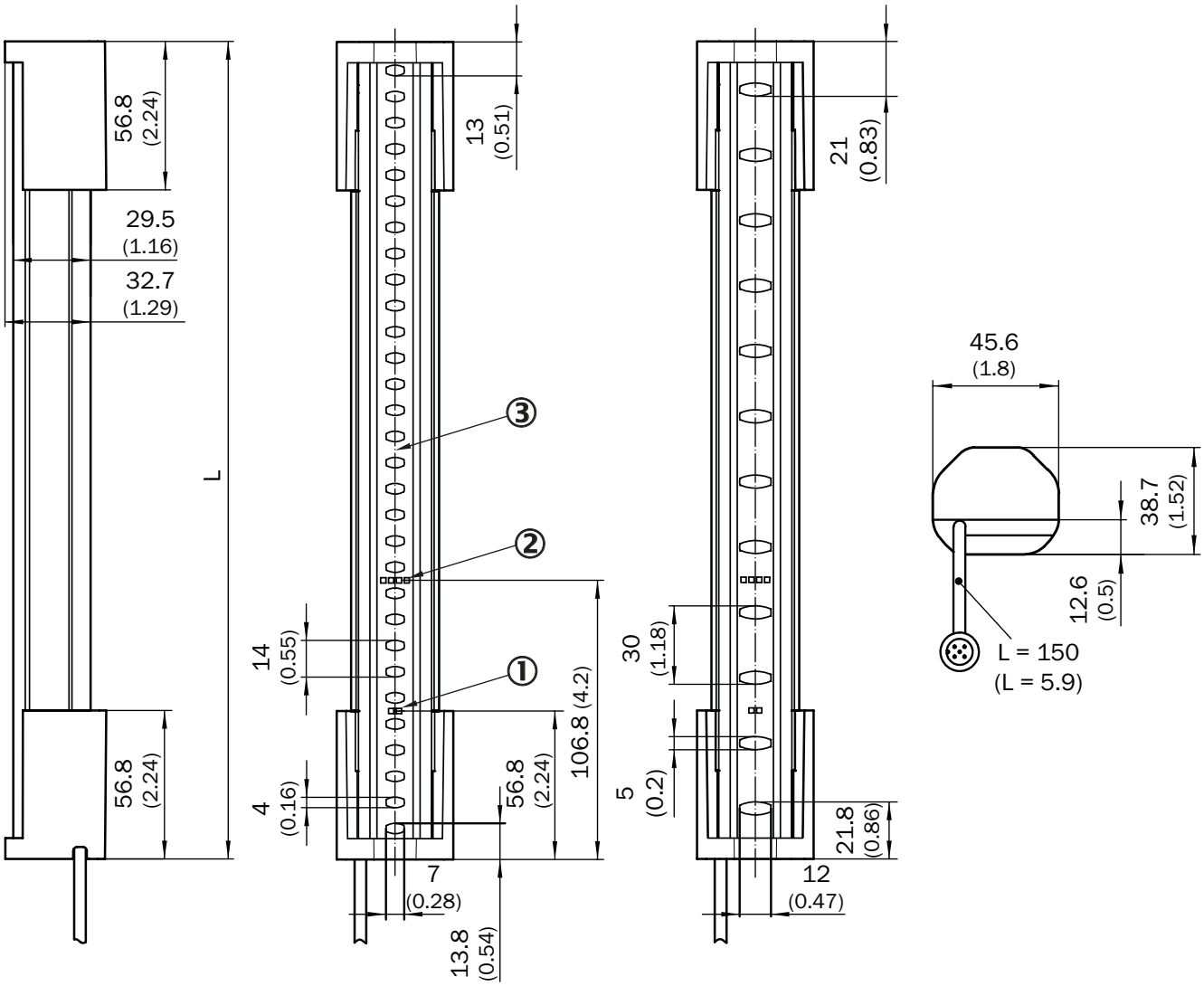
[1] Type 2 devices available on request.

Accessories required for commissioning

Description	Number	Items supplied	Further information
→ Terminal and alignment brackets	2	–	→ Mounting systems

Suitable accessories → page 15

Dimensional drawing (Dimensions in mm (inch))



① Operating indicator
② Alignment indicator
③ Optical axis

Protective field height	L
300 (11.81)	313 (12.32)
450 (17.72)	463 (18.23)
600 (23.62)	613 (24.13)
750 (29.53)	763 (30.04)
900 (35.43)	913 (35.94)
1,050 (41.34)	1,063 (41.85)
1,200 (47.24)	1,213 (47.76)
1,350 (53.15)	1,362 (53.62)
1,500 (59.06)	1,512 (59.53)
1,650 (64.96)	1,662 (65.43)
1,800 (70.87)	1,812 (71.34)
1,950 (76.77)	1,962 (77.24)
2,100 (82.68)	2,112 (83.15)

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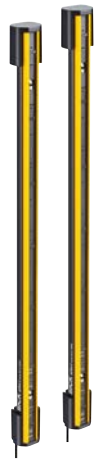

Product description

Rugged and reliable safety technology is very important in industries with explosion-hazardous areas. A single spark can be disastrous. With the special version of the deTem4 Core Ex II 3GD multiple light beam safety device, SICK is ensuring compliance with the high safety requirements in explosive areas. It fulfills the requirements of the ATEX guidelines for use in explosion-hazardous areas (ATEX for gas: II 3G EX and ATEX for dust: II 3D Ex). Thanks to the high resistance and reliability, the multiple light beam safety device is particularly well-suited for use in tough industrial settings. The deTem4 Core Ex II 3GD offers maximum reliability and very high safety for employees, even in explosive atmospheres.

At a glance

- ATEX for gas:
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  II 3D Ex tc IIIB T135 °C Dc
- Innovative bracket
- Automated calibration of the protective field width
- LED alignment and output display
- Standardized connectivity: M12 male connector, 5-pin connection, compatible with Flexi Loop
- Enclosure ratings: IP65 and IP67

Your benefits

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Additional information

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→ www.sick.com/deTem4_Core_Ex_II_3GD
→ www.sick.com/deTem2_Core_Ex_II_3GD

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.

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Detailed technical data

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

Features

Application	Explosive areas
Ex-approvals	ATEX for gas: II 3G Ex nA op is IIB T4 Gc X ATEX for dust: II 3D Ex tc IIIB T135°C Dc
Dimension of the light path	0.5 m ... 17 m / 10 m ... 90 m (depending on type)
Number of beams	2 / 3 / 4 (depending on type)
Beam separation	500 mm / 400 mm / 300 mm (depending on type)
Response time	20 ms
Synchronization	Optical synchronisation

Safety-related parameters

	deTem4 Core Ex II 3GD	deTem2 Core Ex II 3GD
Type	Type 4 (IEC 61496-1)	Type 2 (IEC 61496-1)
Safety integrity level	SIL3 (IEC 61508) SILCL3 (IEC 62061)	SIL1 (IEC 61508) SILCL1 (IEC 62061)
Category	Category 4 (ISO 13849-1)	Category 2 (ISO 13849-1)
Performance level	PL e (ISO 13849-1)	PL c (ISO 13849-1)
PFH_D (mean probability of a dangerous failure per hour)	$3 * 10^{-9}$	
T_M (mission time)	20 years (ISO 13849-1)	
Safe state in the event of a fault	At least one OSSD is in the OFF state.	

Functions

Protective operation	✔

Interfaces

System connection	
Connection type	Male connector M12, 5-pin
Permitted cable length	≤ 50 m [1]
Status display	LEDs
Fieldbus, industrial network	
Integration via Flexi Soft safety controller	CANopen, DeviceNet™, EtherCAT®, EtherNet/IP™, Modbus TCP, PROFIBUS DP, PROFINET [2]

[1] Maximum allowed cable resistances must be observed.

[2] For additional information on Flexi Soft ➜ www.sick.com/Flexi_Soft.

Electrical data

Protection class	III (IEC 61140)
Supply voltage V_S	24 V DC (19.2 V DC ... 28.8 V DC) [1]
Residual ripple	≤ 10 % [2]
Power consumption	150 mA / 50 mA (depending on type)
Power consumption	4.32 W (DC) / 1.44 W (DC) (depending on type)
Output signal switching devices (OSSDs)	
Type of output	2 PNP semiconductors, short-circuit protected, cross-circuit monitored [3]
ON state, switching voltage HIGH	24 V DC (V_S – 2.25 V DC ... V_S)
OFF state, switching voltage LOW	≤ 2 V DC
Current-carrying capacity per OSSD	≤ 300 mA

[1] The external voltage supply must be capable of buffering brief mains voltage failures of 20 ms as specified in EN 60204-1. Suitable power supplies are available as accessories from SICK.

[2] Within the limits of V_S.

[3] Applies to the voltage range between –30 V and +30 V.

Mechanical data

Housing cross-section	38.7 mm x 45.6 mm
Housing material	Aluminum alloy ALMGSI 0.5

Ambient data

Enclosure rating	IP65 (IEC 60529) IP67 (IEC 60529)
Ambient operating temperature	0 °C ... +55 °C
Storage temperature	–30 °C ... +70 °C
Air humidity	15 % ... 95 %, Non-condensing
Vibration resistance	IEC 60068-2-6
Shock resistance	10 g, 16 ms (IEC 60068-2-27)

Other information

Wave length	Near-infrared (NIR), invisible

Ordering information

deTem4 Core Ex II 3GD

Dimension of the light path	Number of beams	Beam separation	Sender		Receiver	
			Type	Part no.	Type	Part no.
0.5 m ... 17 m	2	500 mm	M4C-SX0250LA10	1092039	M4C-EX02500A10	1092041
	3	400 mm	M4C-SX0340LA10	1092042	M4C-EX03400A10	1092044
	4	300 mm	M4C-SX0430LA10	1092045	M4C-EX04300A10	1092047
10 m ... 90 m	2	500 mm	M4C-SX0250HA10	1092040	M4C-EX02500A10	1092041
	3	400 mm	M4C-SX0340HA10	1092043	M4C-EX03400A10	1092044
	4	300 mm	M4C-SX0430HA10	1092046	M4C-EX04300A10	1092047

deTem2 Core Ex II 3GD

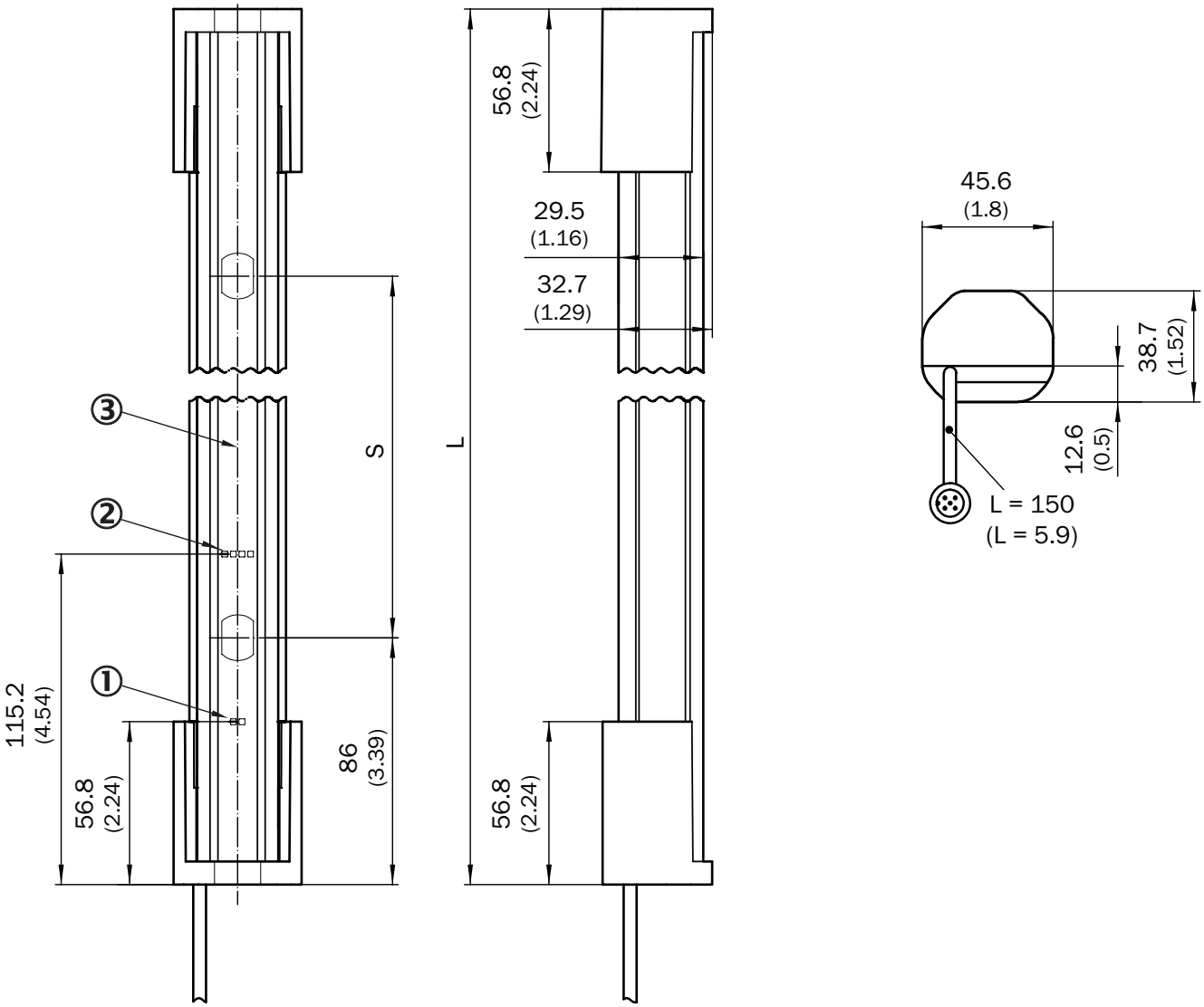
Dimension of the light path	Number of beams	Beam separation	Sender		Receiver	
			Type	Part no.	Type	Part no.
0.5 m ... 17 m	2	500 mm	M2C-SX0250LA10	1093813	M2C-EX02500A10	1093899
	3	400 mm	M2C-SX0340LA10	1093900	M2C-EX03400A10	1093903
	4	300 mm	M2C-SX0430LA10	1093904	M2C-EX04300A10	1093909
10 m ... 90 m	2	500 mm	M2C-SX0250HA10	1093898	M2C-EX02500A10	1093899
	3	400 mm	M2C-SX0340HA10	1093902	M2C-EX03400A10	1093903
	4	300 mm	M2C-SX0430HA10	1093906	M2C-EX04300A10	1093909

Accessories required for commissioning

Description	Number	Items supplied	Further information
→ Terminal and alignment brackets	2	–	→ Mounting systems

Suitable accessories → page 15

Dimensional drawing (Dimensions in mm (inch))



① Operating indicator
② Alignment indicator
③ Optical axis

Number of beams	S (Beam separation)	L (Length)
2	500 (19.69)	672 (26.46)
3	400 (15.75)	972 (38.27)
4	300 (11.81)	1,072 (42.2)

Accessories

Mounting systems

Terminal and alignment brackets

Figure	Description	Packing unit	Type	Part no.	deTec Core Ex II 3GD	deTem Core Ex II 3GD
	FlexFix mounting kit for 1 device, e.g. sender or receiver (FlexFix bracket, alignment tool and assembly materials for installation in PU3H device columns), plastic	2 pieces	BEF-1SHABBKU2	2073543	●	●
	FlexFix replacement bracket (mounting kit for replacement of swivel mount brackets 2030510 or side bracket 2019506 with the FlexFix bracket when using the wells provided), Aluminum (anodised), plastic	4 pieces	BEF-1SHABU004	2099282	●	–
	FlexFix replacement bracket (mounting kit for replacement of swivel mount brackets 2019649 and 2019659 or side bracket 2019506 with the FlexFix bracket when using the wells provided), Aluminum (anodised), plastic	4 pieces	BEF-1SHABS004	2100345	●	–
	FlexFix bracket for 1 device (e.g. sender or receiver), can be aligned ± 15°, including M5 screw, Plastic	2 pieces	BEF-1SHABPKU2	2098709	●	●
	FlexFix bracket for 2 devices (e.g. sender and receiver), can be aligned ± 15°, including M5 screw, Plastic	4 pieces	BEF-1SHABPKU4	2066614	●	●
	QuickFix bracket for 1 device (e.g. sender or receiver), Plastic	2 pieces	BEF-3SHABPKU2	2066048	●	●
	QuickFix bracket for 2 devices (e.g. sender and receiver), Plastic	4 pieces	BEF-3SHABPKU4	2098710	●	●

Dimensional drawings ➜ page 19

Other mounting accessories

Mounting tools

Figure	Description	Packing unit	Type	Part no.		
	Alignment tool for aligning sensors in areas with limited accessibility, e.g. device columns	1 piece	Alignment tool	4084133	●	●

Connection systems

Plug connectors and cables

Connecting cables

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

Figure	Connection type		Conductor cross-section	Length of cable	Type	Part no.	deTec Core Ex II 3GD	deTem Core Ex II 3GD
	Female connector, M12, 5-pin, angled	Flying leads	0.34 mm²	2 m	YG2A15-020UB5XLEAX	2095772	●	●
				5 m	YG2A15-050UB5XLEAX	2095773	●	●
				10 m	YG2A15-100UB5XLEAX	2095774	●	●
	Female connector, M12, 5-pin, straight	Flying leads	0.34 mm²	2 m	YF2A15-020UB5XLEAX	2095617	●	●
				5 m	YF2A15-050UB5XLEAX	2095618	●	●
				10 m	YF2A15-100UB5XLEAX	2095619	●	●
				15 m	YF2A15-150UB5XLEAX	2095620	●	●
				20 m	YF2A15-200UB5XLEAX	2095614	●	●
				30 m	YF2A15-300UB5XLEAX	2095621	●	●

Connection cables

- **Model:** PVC, unshielded
- **Length of cable:** 0.25 m
- **Description:** Replacement cables (replacement of C4000 with deTec4)

Figure	Connection type		Conductor cross-section	Items supplied	Type	Part no.		
	Female connector, M12, 5-pin, straight	Male connector, M12, 8-pin, straight	0.34 mm²	Packaging unit: 2 pcs.	DSL-1285GM25034KM1	2070987	●	–
		Male connector, M26, 12-pin, straight	0.34 mm²	Packaging unit: 2 pcs.	DSL-6182GM25034KM1	2070989	●	–
		Male connector, M26, 7-pin, straight	0.34 mm²	Packaging unit: 2 pcs.	DSL-6187GM25034KM1	2070988	●	–

Adapters and distributors

T-junctions

Figure	Description	Type	Part no.		
	T-piece for simultaneous connection to sender and receiver, splits the cable from the control cabinet to the sender and receiver, 5-pin	DSC-1205T000025KM0	6030664	●	●

Power supply units and power supply cables

Figure	Input voltage	Output voltage	Output current	Type	Part no.		
Illustration may differ	100 V AC ... 240 V AC	24 V DC	≤ 2.1 A	PS50WE24V	7028789	●	●
			≤ 3.9 A	PS95WE24V	7028790	●	●

Reflectors and optics

Alignment aids

Figure	Description	Type	Part no.	deTec Core Ex II 3GD	deTem Core Ex II 3GD
	Laser alignment aid for various sensors, laser class 2 (IEC 60825). Do not look into the beam!	AR60	1015741	●	●
	Adapter AR60 for deTec4, deTec2 and MLG-2	AR60 adapter, deTec, deTem, MLG-2	4070854	●	●

Deflector mirrors

- **Mirror material:** Glass

Figure	Description	Items supplied	Suitable for protective field height	Type	Part no.		
	Horizontal deflection	Incl. mounting kit swivel mount	150 mm ... 300 mm	PNS125-034	1019425	●	●
			150 mm ... 450 mm	PNS125-049	1019426	●	●
			150 mm ... 600 mm	PNS125-064	1019427	●	●
			150 mm ... 750 mm	PNS125-079	1019428	●	●
			150 mm ... 900 mm	PNS125-094	1019429	●	●
			150 mm ... 1,050 mm	PNS125-109	1019430	●	●
			150 mm ... 1,200 mm	PNS125-124	1019431	●	●
			150 mm ... 1,350 mm	PNS125-139	1019432	●	●
			150 mm ... 1,500 mm	PNS125-154	1019433	●	●
			150 mm ... 1,650 mm	PNS125-169	1019434	●	●
			150 mm ... 1,800 mm	PNS125-184	1019435	●	●
			150 mm ... 1,950 mm	PNS125-199	1092964	●	●
			150 mm ... 2,100 mm	PNS125-214	1092965	●	●
			150 mm ... 300 mm	PNS75-034	1019414	●	●
			150 mm ... 450 mm	PNS75-049	1019415	●	●
			150 mm ... 600 mm	PNS75-064	1019416	●	●
			150 mm ... 750 mm	PNS75-079	1019417	●	●
			150 mm ... 900 mm	PNS75-094	1019418	●	●
			150 mm ... 1,050 mm	PNS75-109	1019419	●	●
			150 mm ... 1,200 mm	PNS75-124	1019420	●	●
			150 mm ... 1,350 mm	PNS75-139	1019421	●	●
			150 mm ... 1,500 mm	PNS75-154	1019422	●	●
			150 mm ... 1,650 mm	PNS75-169	1019423	●	●
			150 mm ... 1,800 mm	PNS75-184	1019424	●	●
			150 mm ... 1,950 mm	PNS75-199	1092962	●	●
			150 mm ... 2,100 mm	PNS75-214	1092963	●	●

Dimensional drawings ➜ page 20

Optics cloths

Figure	Description	Type	Part no.	deTec Core Ex II 3GD	deTem Core Ex II 3GD
	Cloth for cleaning the front screen	Lens cloth	4003353	●	●

Further accessories

Test and monitoring tools

Figure	Description	Type	Part no.		
	14 mm diameter	Test rod 14 mm	2022599	●	●
	30 mm diameter	Test rod 30 mm	2022602	●	●
	Test rod holder	BEF-3WNAAAAL1	2052249	●	●

Cleaning agent

Figure	Description	Type	Part no.		
	Plastic cleaner and care product, anti-static, 0.5 liter	Plastic cleaner	5600006	●	●

Mirror columns and device columns

Mirror columns with protective field height mirror

Figure	Suitable for protective field height	Mirror length	Column height	Type	Part no.		
	≤ 1,050 mm	1,082 mm	1,281.5 mm	PM3C13-00030000	1043453	●	●
	≤ 1,350 mm	1,382 mm	1,569 mm	PM3C15-00030000	1077525	●	●
	≤ 1,500 mm	1,532 mm	1,716.5 mm	PM3C17-00030000	1043454	●	●
	≤ 1,650 mm	1,682 mm	2,016.5 mm	PM3C19-00030000	1043455	●	●
	≤ 1,800 mm	1,832 mm	2,216.5 mm	PM3C20-00030000	1043456	●	●
	≤ 1,950 mm	1,982 mm	2,269 mm	PM3C22-00030000	1093216	●	●
	≤ 2,100 mm	2,132 mm	2,419 mm	PM3C24-00030000	1093217	●	●

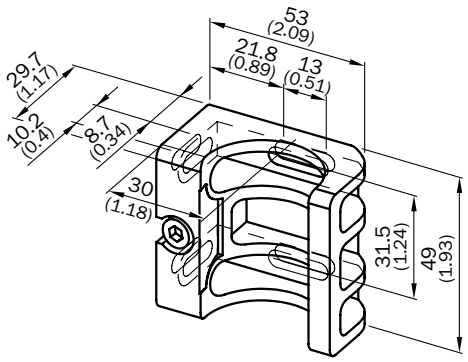
Device columns with two external mounting grooves

Figure	Suitable for protective field height: C2000, C4000, M4000 Curtain	Suitable for protective field height: deTec	Max. installation length	Column height	Type	Part no.	deTec Core Ex II 3GD	deTem Core Ex II 3GD
	≤ 900 mm	≤ 1,050 mm	1,165 mm	1,185 mm	PU3H11-00000000	2045641	●	●
	≤ 1,050 mm	≤ 1,200 mm	1,265 mm	1,285 mm	PU3H13-00000000	2045642	●	●
	≤ 1,350 mm	≤ 1,500 mm	1,550 mm	1,570 mm	PU3H15-00000000	2068813	●	●
		≤ 1,650 mm	1,720 mm	1,740 mm	PU3H17-00000000	2045643	●	●
	≤ 1,650 mm	≤ 1,950 mm	2,020 mm	2,040 mm	PU3H21-00000000	2045644	●	●
	≤ 1,800 mm	≤ 2,100 mm	2,250 mm	2,270 mm	PU3H22-00000000	2045645	●	●
			2,400 mm	2,420 mm	PU3H24-00000000	2045646	●	●
	≤ 600 mm	≤ 900 mm	965 mm	985 mm	PU3H96-00000000	2045490	●	●

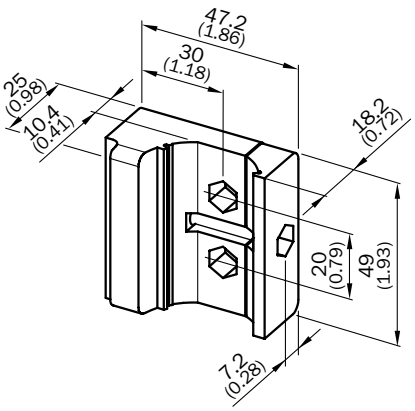
Dimensional drawings for accessories (Dimensions in mm (inch))

Terminal and alignment brackets

BEF-1SHABPKU2
BEF-1SHABPKU4
BEF-1SHABBKU2

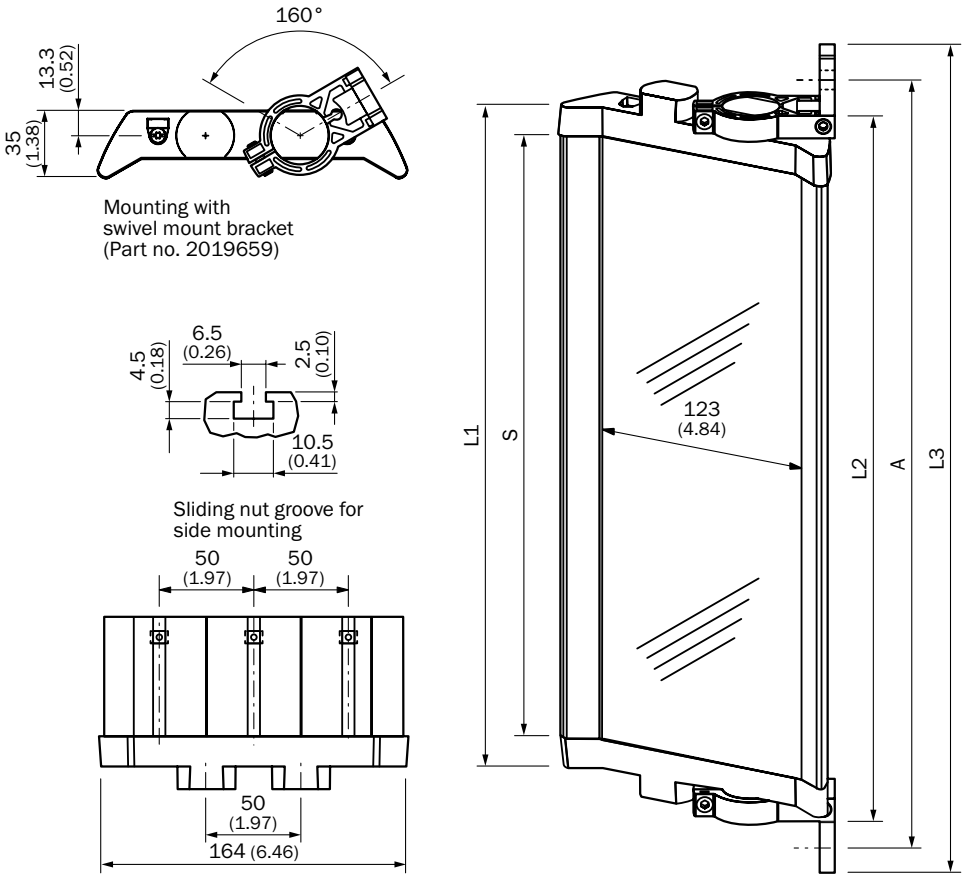


BEF-3SHABPKU2
BEF-3SHABPKU4



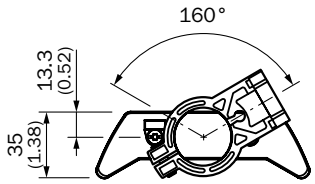
Deflector mirrors

PNS125

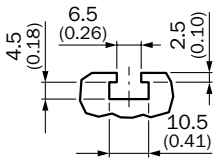


Mirror height S	L1	L2	L3	A
340 (13.39)	372 (14.65)	396 (15.59)	460 (18.11)	440 (17.32)
490 (19.29)	522 (20.55)	546 (21.50)	610 (24.02)	590 (23.23)
640 (25.20)	672 (26.46)	696 (27.40)	760 (29.92)	740 (29.13)
790 (31.10)	822 (32.36)	846 (33.31)	910 (35.83)	890 (35.04)
940 (37.01)	972 (38.27)	996 (39.21)	1,060 (41.73)	1,040 (40.94)
1,090 (42.91)	1,122 (44.17)	1,146 (45.12)	1,210 (47.64)	1,190 (46.85)
1,240 (48.82)	1,272 (50.08)	1,296 (51.02)	1,360 (53.54)	1,340 (52.76)
1,390 (54.72)	1,422 (55.98)	1,446 (56.93)	1,510 (59.45)	1,490 (58.66)
1,540 (60.63)	1,572 (61.89)	1,596 (62.83)	1,660 (65.35)	1,640 (64.57)
1,690 (66.54)	1,722 (67.80)	1,746 (68.74)	1,810 (71.26)	1,790 (70.47)
1,840 (72.44)	1,872 (73.70)	1,896 (74.65)	1,960 (77.71)	1,940 (76.38)
1,990 (78.35)	2,022 (79.61)	2,046 (80.55)	2,110 (83.07)	2,090 (82.28)
2,140 (84.25)	2,172 (85.51)	2,196 (86.46)	2,260 (88.98)	2,240 (88.19)

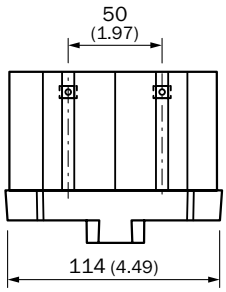
PNS75

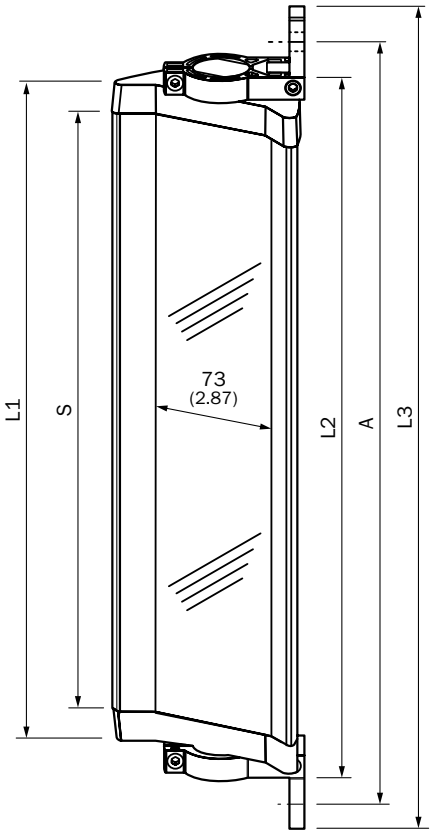


Mounting with
swivel mount bracket
(Part no. 2019659)



Sliding nut groove for
side mounting





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