



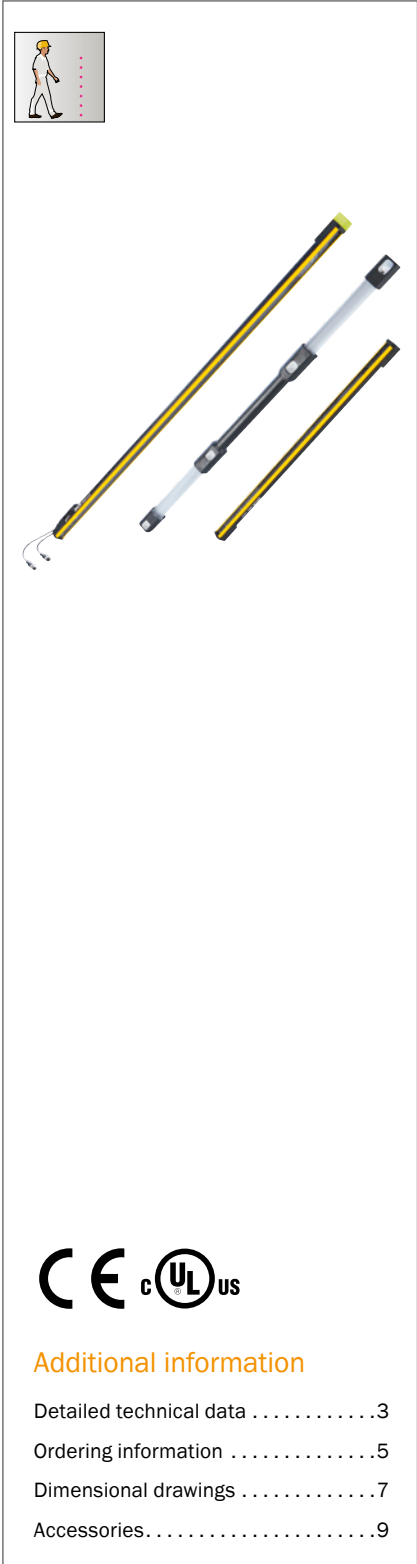
## deTem A/P

IMPRESSIVE FLEXIBILITY

Multiple light beam safety devices

**SICK**  
Sensor Intelligence.

# IMPRESSIVE FLEXIBILITY



### Product description

The multiple light beam safety devices deTem A/P are active/passive systems in a compact housing and offer high flexibility for access protection and entry/exit monitoring (muting). Depending on needs and in order to meet individual requirements, the scanning range, number of beams and various muting sensors can be selected. In addition,

### At a glance

- NFC, IO-Link and SICK Safety Assistant app with real-time diagnostic data
- Various scanning ranges up to 8 m, 2 or 4 beams, 2-signal muting
- Sender and receiver in a compact housing

### Your benefits

- Increase your productivity in access protection and entry/exit monitoring (muting) thanks to process optimization options with real-time diagnostic data
- Stay flexible when selecting the appropriate scanning range, number of beams and muting sensors
- Minimize your wiring and installation efforts

deTem A/P impresses with valuable diagnostic data that allow immediate process optimization in real time and thus contribute to higher productivity. Sophisticated product details allow easy integration into the existing machine design and optimum use of space in production halls.

- Beam coding, external device monitoring (EDM) and restart interlock
- Configuration of all functions without software
- Optionally integrated: Top LED

- Benefit from the possibility of a compact plant layout and simple integration
- Save time and money due to easy commissioning and configuration
- Respond quickly to machine downtime thanks to the all-round visibility of the status display

→ [www.sick.com/deTem](http://www.sick.com/deTem)

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/deTem](http://www.sick.com/deTem)

## Features

|                                    | deTem4 A/P                          | deTem4 Core A/P | deTem2 Core A/P |
|------------------------------------|-------------------------------------|-----------------|-----------------|
| <b>Application</b>                 | Normal industrial environment       |                 |                 |
| <b>Scanning range</b>              |                                     |                 |                 |
| Fibre-optic deflection             | 3.2 m                               |                 |                 |
| Prism deflection                   | 7 m / 8 m (depending on type)       |                 |                 |
| <b>Number of beams</b>             | 2 / 4 (depending on type)           |                 |                 |
| <b>Beam separation</b>             | 300 mm / 500 mm (depending on type) |                 |                 |
| <b>Response time</b>               | 20 ms                               |                 |                 |
| <b>End cap with integrated LED</b> | ✓ (depending on type)               | -               |                 |

## Safety-related parameters

|   | deTem4 A/P                             | deTem4 Core A/P        | deTem2 Core A/P                        |
|---|--|------------------------|--|
| <b>Type</b>   | Type 4 (IEC 61496-1)                   |                        | Type 2 (IEC 61496-1)                   |
| <b>Safety integrity level</b>   | SIL3 (IEC 61508)<br>SILCL3 (IEC 62061) |                        | SIL1 (IEC 61508)<br>SILCL1 (IEC 62061) |
| <b>Category</b>   | Category 4 (ISO 13849-1)               |                        | Category 2 (ISO 13849-1)               |
| <b>Performance level</b>  | PL e (ISO 13849-1)                     |                        | PL c (ISO 13849-1)                     |
| <b>PFH<sub>D</sub> (mean probability of a dangerous failure per hour)</b> | 6.6 x 10 <sup>-9</sup>                 | 5.3 x 10 <sup>-9</sup> |  |
| <b>T<sub>M</sub> (mission time)</b>                                       | 20 years (ISO 13849-1)                 |                        |  |
| <b>Safe state in the event of a fault</b>                                 | At least one OSSD is in the OFF state. |                        |  |

## Functions

|  | deTem4 A/P |     | deTem4 Core A/P | deTem2 Core A/P |
|--|------------|-----|-----------------|-----------------|
|  | SP1        | SP2 |                 |                 |
| <b>Protective operation</b>                              | ✓          |     |                 |                 |
| <b>Beam coding</b>                                       | ✓          |     | -               |                 |
| <b>Restart interlock</b>                                 | ✓          |     | -               |                 |
| <b>External device monitoring (EDM)</b>                  | ✓          |     | -               |                 |
| <b>Differentiation between man and material (muting)</b> | -          | ✓   | -               |                 |
| Concurrence monitoring                                   | -          | ✓   | -               |                 |
| Monitoring of total muting time                          | -          | ✓   | -               |                 |
| Sensor gap monitoring                                    | -          | ✓   | -               |                 |
| Muting with override                                     | -          | ✓   | -               |                 |
| Exit monitoring  | -          | ✓   | -               |                 |
| End of muting by ESPE                                    | -          | ✓   | -               |                 |

## Interfaces

|                             | deTem4 A/P   | deTem4 Core A/P           | deTem2 Core A/P |
|-----------------------------|--|---------------------------|-----------------|
| <b>System connection</b>    | Male connector M12, 5-pin / male connector M12, 8-pin (depending on system plug) <sup>1)</sup> | Male connector M12, 5-pin |                 |
| <b>Extension connection</b> | Female connector M12, 5-pin (depending on system plug) <sup>1)</sup>                           | -                         |                 |

<sup>1)</sup> A system plug has to be ordered separately.

<sup>2)</sup> For additional information on Flexi Soft → [www.sick.com/Flexi\\_Soft](http://www.sick.com/Flexi_Soft).

|  | deTem4 A/P  | deTem4 Core A/P | deTem2 Core A/P |
|--|---|-----------------|-----------------|
| <b>Configuration method</b>                | DIP switch on system plug   |                 |                 |
| <b>Display elements</b>                    | LEDs  |                 |                 |
| <b>Alignment aid</b>                       | Alignment quality via diagnostic LEDs   |                 |                 |
| <b>End cap with integrated LED</b>         | ✓   | –               | –               |
| <b>Application diagnostic output (ADO)</b> | ✓   | –               | –               |
| <b>IO-Link</b>                             | ✓   | –               | –               |
| <b>Near Field Communication (NFC)</b>      | ✓   | –               | –               |
| <b>Fieldbus, industrial network</b>        | Integration via Flexi Soft safety controller  |                 |                 |
|  | CANopen, DeviceNet™, EtherCAT®, EtherNet/IP™, Modbus TCP, PROFIBUS DP, PROFINET <sup>1)</sup> |                 |                 |

<sup>1)</sup> A system plug has to be ordered separately.

<sup>2)</sup> For additional information on Flexi Soft → [www.sick.com/Flexi\\_Soft](http://www.sick.com/Flexi_Soft).

## Electrical data

|  | deTem4 A/P   | deTem4 Core A/P | deTem2 Core A/P |
|--|--|-----------------|-----------------|
| <b>Protection class</b>                        | III (IEC 61140) <sup>1)</sup>  |                 |                 |
| <b>Supply voltage <math>V_s</math></b>         | 24 V DC (19.2 V DC ... 28.8 V DC) <sup>2)</sup>                                      |                 |                 |
| <b>Residual ripple</b>                         | ≤ 10 % <sup>3)</sup>   |                 |                 |
| <b>Output signal switching devices (OSSDs)</b> | 2 PNP semiconductors, short-circuit protected, cross-circuit monitored <sup>4)</sup> |                 |                 |
| 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             | ≤ 500 mA   |                 |                 |
| <b>Application diagnostic output (ADO)</b>     | PNP semiconductor, short-circuit protected <sup>4)</sup>                             |                 |                 |
| Output voltage HIGH (active)                   | ≥ $V_s - 3$ V  | –               | –               |
| Output voltage LOW (deactivated)               | High resistance  | –               | –               |
| Current loading                                | ≤ 100 mA   | –               | –               |

<sup>1)</sup> SELV/PELV safety/protective extra-low voltage.

<sup>2)</sup> 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.

<sup>3)</sup> Within the limits of  $V_s$ .

<sup>4)</sup> Applies to the voltage range between –30 V and +30 V.

## Mechanical data

|                   |  |  |  |
|-------------------|--|--|--|
| <b>Dimensions</b> | See dimensional drawing                              |  |  |
| <b>Material</b>   |  |  |  |
| Housing           | Aluminum extruded profile / PMMA (depending on type) |  |  |
| Front screen      | Polycarbonate, scratch-resistant coating             |  |  |

## Ambient data

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

## Other information

|                      |                                |  |  |
|----------------------|--------------------------------|--|--|
| <b>Type of light</b> | Near-infrared (NIR), invisible |  |  |
|----------------------|--------------------------------|--|--|

## Ordering information

### deTem4 A/P

A deTem4 A/P multiple light beam safety device consists of:

- 1 active unit
- 1 passive unit
- 1 system plug active unit

### Selection aid deTem4 A/P system plug for active unit

- Functions: SP1 (without muting) or SP2 (with muting)

Options:

- System connection 5-pin or 8-pin (e.g. for RES, EDM, ADO, muting)
- Without or with extension connection (e.g. for RES, EDM, ADO, IO-Link, muting)

### deTem4 A/P system plugs

| Functions | System connection                                    | Extension connection  | Type | Part no. |
|-----------|--|---|------|----------|
| SP1       | Male connector M12, 5-pin                            | –   | 1000 | 2076832  |
|           |  | Female connector M12, 5-pin<br>(RES, EDM, ADO, IO-Link)         | 1100 | 2076833  |
|           | Male connector M12, 8-pin<br>(RES, EDM, ADO)         | –   | 1200 | 2076834  |
|           |  | Female connector M12, 5-pin<br>(RES, EDM, ADO, IO-Link)         | 1300 | 2076835  |
| SP2       | Male connector M12, 5-pin                            | Female connector M12, 5-pin<br>(RES, EDM, ADO, IO-Link, muting) | 2100 | 2093098  |
|           | Male connector M12, 8-pin<br>(RES, EDM, ADO, muting) | Female connector M12, 5-pin<br>(RES, EDM, ADO, IO-Link, muting) | 2300 | 2093100  |

### deTem4 A/P for low scanning range (fibre-optic deflection)

| Number of beams | Beam separation | Scanning range | End cap with integrated LED | Active unit    |          | Passive unit |          |
|-----------------|-----------------|----------------|-----------------------------|----------------|----------|--------------|----------|
|                 |                 |                |                             | Type           | Part no. | Type         | Part no. |
| 2               | 500 mm          | 3.2 m          | –                           | M4P-ZA02500C00 | 1102633  | PSN01-2501   | 1101921  |
|                 |                 |                | ✓                           | M4P-ZA02500D00 | 1102635  | PSN01-2501   | 1101921  |
| 4               | 300 mm          | 3.2 m          | –                           | M4P-ZA04300C00 | 1102634  | PSN02-2301   | 1102144  |
|                 |                 |                | ✓                           | M4P-ZA04300D00 | 1102636  | PSN02-2301   | 1102144  |

### deTem4 A/P for great scanning range (prism deflection)

| Number of beams | Beam separation | Scanning range | End cap with integrated LED | Active unit    |          | Passive unit |          |
|-----------------|-----------------|----------------|-----------------------------|----------------|----------|--------------|----------|
|                 |                 |                |                             | Type           | Part no. | Type         | Part no. |
| 2               | 500 mm          | 8 m            | –                           | M4P-ZA02500C00 | 1102633  | PSN01-3501   | 1103066  |
|                 |                 |                | ✓                           | M4P-ZA02500D00 | 1102635  | PSN01-3501   | 1103066  |
| 4               | 300 mm          | 7 m            | –                           | M4P-ZA04300C00 | 1102634  | PSN02-3301   | 1103067  |
|                 |                 |                | ✓                           | M4P-ZA04300D00 | 1102636  | PSN02-3301   | 1103067  |

deTem4 Core A/P

A deTem4 Core A/P multiple light beam safety device consists of:

- 1 active unit
- 1 passive unit

deTem4 Core A/P for low scanning range (fibre-optic deflection)

| Number of beams | Beam separation | Scanning range | Active unit    |          | Passive unit |          |
|-----------------|-----------------|----------------|----------------|----------|--------------|----------|
|                 |                 |                | Type           | Part no. | Type         | Part no. |
| 2               | 500 mm          | 3.2 m          | M4C-ZA02500C10 | 1102644  | PSN01-2501   | 1101921  |
| 4               | 300 mm          | 3.2 m          | M4C-ZA04300C10 | 1102645  | PSN02-2301   | 1102144  |

deTem4 Core A/P for great scanning range (prism deflection)

| Number of beams | Beam separation | Scanning range | Active unit    |          | Passive unit |          |
|-----------------|-----------------|----------------|----------------|----------|--------------|----------|
|                 |                 |                | Type           | Part no. | Type         | Part no. |
| 2               | 500 mm          | 8 m            | M4C-ZA02500C10 | 1102644  | PSN01-3501   | 1103066  |
| 4               | 300 mm          | 7 m            | M4C-ZA04300C10 | 1102645  | PSN02-3301   | 1103067  |

deTem2 Core A/P

A deTem2 Core A/P multiple light beam safety device consists of:

- 1 active unit
- 1 passive unit

deTem2 Core A/P for low scanning range (fibre-optic deflection)

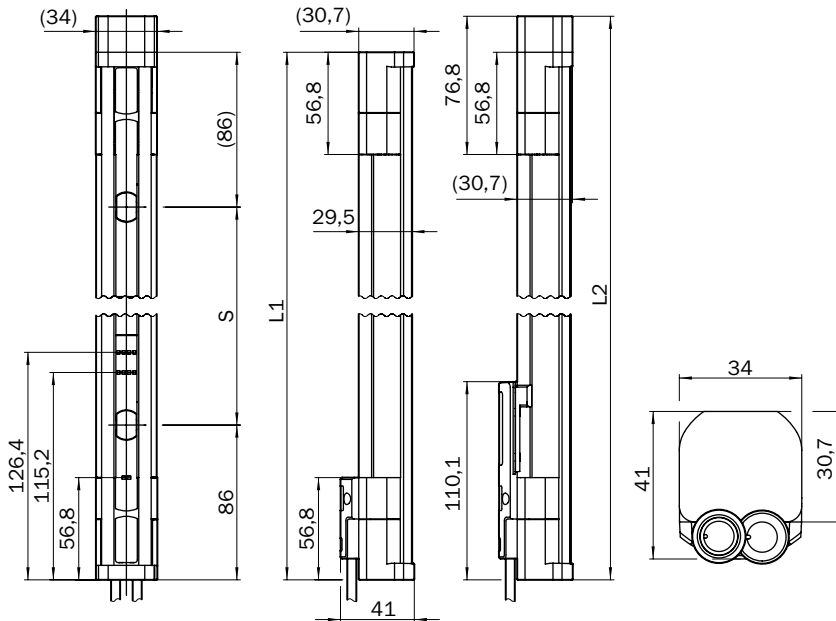
| Number of beams | Beam separation | Scanning range | Active unit    |          | Passive unit |          |
|-----------------|-----------------|----------------|----------------|----------|--------------|----------|
|                 |                 |                | Type           | Part no. | Type         | Part no. |
| 2               | 500 mm          | 3.2 m          | M2C-ZA02500C10 | 1102646  | PSN01-2501   | 1101921  |
| 4               | 300 mm          | 3.2 m          | M2C-ZA04300C10 | 1102647  | PSN02-2301   | 1102144  |

deTem2 Core A/P for great scanning range (prism deflection)

| Number of beams | Beam separation | Scanning range | Active unit    |          | Passive unit |          |
|-----------------|-----------------|----------------|----------------|----------|--------------|----------|
|                 |                 |                | Type           | Part no. | Type         | Part no. |
| 2               | 500 mm          | 8 m            | M2C-ZA02500C10 | 1102646  | PSN01-3501   | 1103066  |
| 4               | 300 mm          | 7 m            | M2C-ZA04300C10 | 1102647  | PSN02-3301   | 1103067  |

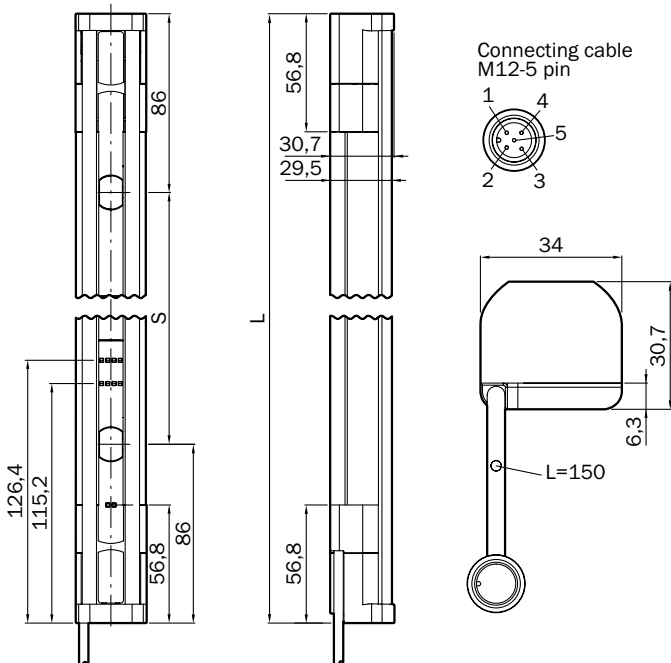
**Dimensional drawings** (Dimensions in mm)

Active unit deTem4 A/P



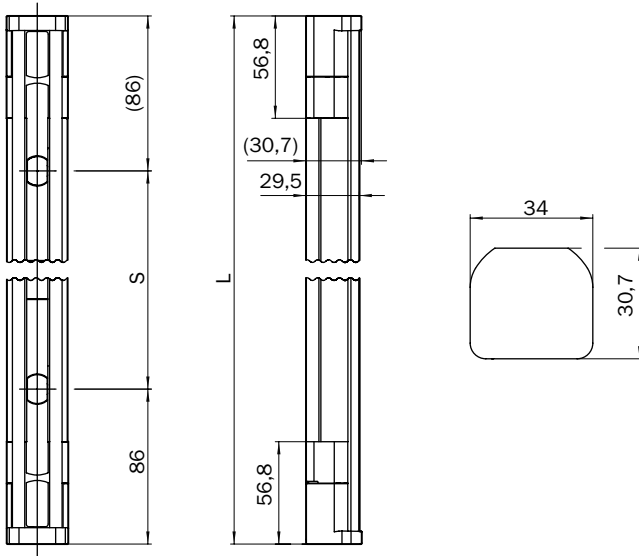
| Number of beams | Beam separation S | L1   | L2   |
|-----------------|-------------------|------|------|
| 2               | 500               | 672  | 692  |
| 4               | 300               | 1072 | 1092 |

Active unit deTem4 Core A/P, deTem2 Core A/P



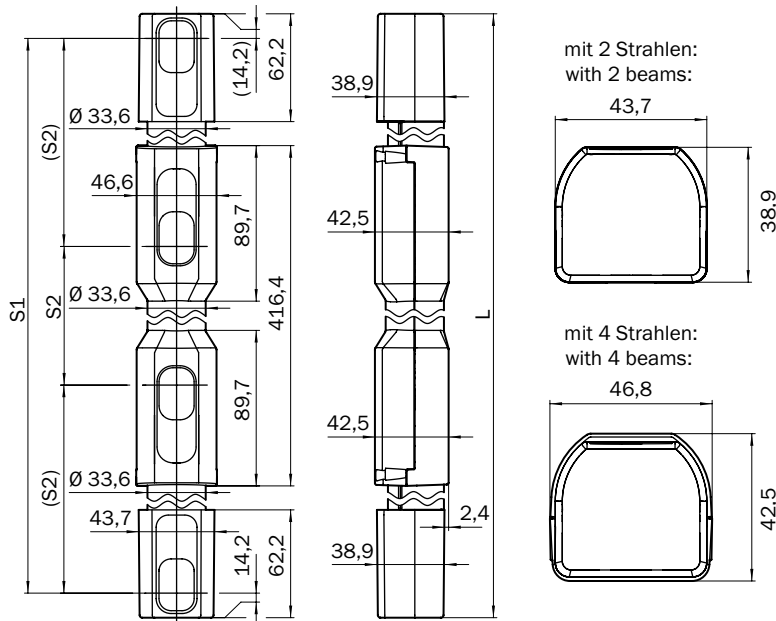
| Number of beams | Beam separation S | L    |
|-----------------|-------------------|------|
| 2               | 500               | 672  |
| 4               | 300               | 1072 |

Passive unit for short scanning ranges (fibre-optic deflection)



| Number of beams | Beam separation S | L    |
|-----------------|-------------------|------|
| 2               | 500               | 672  |
| 4               | 300               | 1072 |

Passive unit for great range (prism deflection)



| Number of beams | Beam separation S1 | Beam separation S2 | L     |
|-----------------|--------------------|--------------------|-------|
| 2               | 500                | -                  | 528,4 |
| 4               | -                  | 300                | 928,4 |







Accessories

Mounting systems

Terminal and alignment brackets


Alignment brackets

| Figure   | Description  | Packing unit | Type          | Part no. | deTem4 A/P | deTem4 Core A/P | deTem2 Core A/P |
|--|--|--------------|---------------|----------|------------|-----------------|-----------------|
|   | 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  | ●          | ●               | ●               |
|   | 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  | ●          | ●               | ●               |
|   | 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  | ●          | ●               | ●               |

Dimensional drawings → [page 14](#)


Device protection (mechanical)

Front screen protection

| Figure  | Description  | Packing unit | Type                          | Part no. |   |   |   |
|---|--|--------------|-------------------------------|----------|---|---|---|
|  | Self-adhesive protective film for the front screen (protects sensors from damage by flying sparks and welding beads) | 1 piece      | Self-adhesive protective film | 2069268  | ● | ● | ● |

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. |            |                 |                 |
|---|-----------------|--------------|-------------------------|-----------------|--------------------|----------|------------|-----------------|-----------------|
|   |                 |              |                         |                 |                    |          | deTem4 A/P | deTem4 Core A/P | deTem2 Core A/P |
|    |                 | Flying leads | 0.34 mm <sup>2</sup>    | 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  | ●          | ●               | ●               |
|    |                 | Flying leads | 0.34 mm <sup>2</sup>    | 2 m             | YG2A15-020UB5XLEAX | 2095772  | ●          | ●               | ●               |
|   |                 |              |                         | 5 m             | YG2A15-050UB5XLEAX | 2095773  | ●          | ●               | ●               |
|   |                 |              |                         | 10 m            | YG2A15-100UB5XLEAX | 2095774  | ●          | ●               | ●               |
|   |                 | Flying leads | 0.25 mm <sup>2</sup>    | 2.5 m           | YF2A18-025UA5XLEAX | 2099229  | ●          | -               | -               |
|   |                 |              |                         | 5 m             | YF2A18-050UA5XLEAX | 2095653  | ●          | -               | -               |
|   |                 |              |                         | 7.5 m           | YF2A18-075UA5XLEAX | 2099230  | ●          | -               | -               |
|   |                 |              |                         | 10 m            | YF2A18-100UA5XLEAX | 2095654  | ●          | -               | -               |
|   |                 |              |                         | 15 m            | YF2A18-150UA5XLEAX | 2095679  | ●          | -               | -               |
|   |                 |              |                         | 20 m            | YF2A18-200UA5XLEAX | 2095680  | ●          | -               | -               |
|  |                 | Flying leads | 0.25 mm <sup>2</sup>    | 2 m             | YG2A18-020UA5XLEAX | 2095779  | ●          | -               | -               |
|   |                 |              |                         | 5 m             | YG2A18-050UA5XLEAX | 2095780  | ●          | -               | -               |
|   |                 |              |                         | 10 m            | YG2A18-100UA5XLEAX | 2095781  | ●          | -               | -               |

## Connection cables


| Figure  | Connection type                        |                                      | Model                         | Conductor cross-section | Length of cable | Type               | Part no. |            |                 |                 |
|---|--|--------------------------------------|-------------------------------|-------------------------|-----------------|--------------------|----------|------------|-----------------|-----------------|
|   |  |                                      |                               |                         |                 |                    |          | deTem4 A/P | deTem4 Core A/P | deTem2 Core A/P |
|  | Female connector, M12, 5-pin, straight | Male connector, M12, 5-pin, straight | PUR, halogen-free, unshielded | 0.34 mm <sup>2</sup>    | 0.6 m           | YF2A15-C60UB5M2A15 | 2096006  | ●          | -               | -               |
|   |  |                                      |                               |                         | 1 m             | YF2A15-010UB5M2A15 | 2096007  | ●          | -               | -               |
|   |  |                                      |                               |                         | 2 m             | YF2A15-020UB5M2A15 | 2096009  | ●          | -               | -               |
|   |  |                                      |                               |                         | 5 m             | YF2A15-050UB5M2A15 | 2096010  | ●          | -               | -               |
|   |  |                                      |                               |                         | 10 m            | YF2A15-100UB5M2A15 | 2096011  | ●          | -               | -               |
|   |  |                                      |                               |                         | 15 m            | YF2A15-150UB5M2A15 | 2096171  | ●          | -               | -               |

## Adapters and distributors

Other adapters and distributors



| Figure  | Description       | Type              | Part no. | deTem4 A/P | deTem4 Core A/P | deTem2 Core A/P |
|---|-------------------|-------------------|----------|------------|-----------------|-----------------|
|  | IO-Link connector | IO-Link connector | 2092757  | ●          | -               | -               |
|  | Muting connector  | Muting connector  | 2092758  | ●          | -               | -               |

## Power supply units and power supply cables

| Figure   | Input voltage         | Output voltage | Output current | Type      | Part no. | deTem4 A/P | deTem4 Core A/P | deTem2 Core A/P |
|--|-----------------------|----------------|----------------|-----------|----------|------------|-----------------|-----------------|
| <br>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. |   |   |   |
|--|--|-----------------------------------|----------|---|---|---|
|   | 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  | ● | ● | ● |

## Optics cloths

| Figure  | Description                         | Type       | Part no. |   |   |   |
|---|-------------------------------------|------------|----------|---|---|---|
|  | Cloth for cleaning optical surfaces | Lens cloth | 4003353  | ● | ● | ● |

## Further accessories

## Test and monitoring tools


| Figure  | Description     | Type           | Part no. |   |   |   |
|---|-----------------|----------------|----------|---|---|---|
|  | 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  | ● | ● | ● |


### Safety command devices

#### Reset pushbuttons and multiple pushbuttons

| Figure  | Description      | Items supplied   | Type       | Part no. | deTem4 A/P | deTem4 Core A/P | deTem2 Core A/P |
|---|------------------|--|------------|----------|------------|-----------------|-----------------|
|   |                  |  |            |          |            |                 |                 |
|  | Reset pushbutton | Including retaining clip, "RESET" cover and "RESET/OVERRIDE" cover | ER12-SB3C5 | 6045316  | ●          | -               | -               |





### Mirror columns and device columns

#### Device columns with two external mounting grooves

| Figure   | Max. installation length | Column height | Type            | Part no. |   |   |   |
|--|--------------------------|---------------|-----------------|----------|---|---|---|
|  | 965 mm                   | 985 mm        | PU3H96-00000000 | 2045490  | ● | ● | ● |
|  | 1,165 mm                 | 1,185 mm      | PU3H11-00000000 | 2045641  | ● | ● | ● |
|  | 1,265 mm                 | 1,285 mm      | PU3H13-00000000 | 2045642  | ● | ● | ● |
|  | 1,550 mm                 | 1,570 mm      | PU3H15-00000000 | 2068813  | ● | ● | ● |
|  | 1,720 mm                 | 1,740 mm      | PU3H17-00000000 | 2045643  | ● | ● | ● |
|  | 2,020 mm                 | 2,040 mm      | PU3H21-00000000 | 2045644  | ● | ● | ● |
|  | 2,250 mm                 | 2,270 mm      | PU3H22-00000000 | 2045645  | ● | ● | ● |
|  | 2,400 mm                 | 2,420 mm      | PU3H24-00000000 | 2045646  | ● | ● | ● |

### Photoelectric sensors

- **Design:** rectangular
- **Housing material:** plastic

| Figure  | Sensor principle                      | Detection principle    | Sensing range max.   | Light source | Type           | Part no. |   |   |   |
|---|---------------------------------------|------------------------|--|--------------|----------------|----------|---|---|---|
|  | Photoelectric retro-reflective sensor | Dual lens              | 0.15 m ... 12 m <sup>1)</sup><br>0.15 m ... 10 m <sup>2)</sup> | PinPoint LED | GL10-P4151     | 1069860  | ● | - | - |
|  |                                       |                        | ≤ 6 m <sup>1)</sup>  | PinPoint LED | GL6-P0211S49   | 1070568  | ● | - | - |
|  | Photoelectric proximity sensor        | Background suppression | 20 mm ... 950 mm <sup>3)</sup>                                 | PinPoint LED | GTB10-P4411S01 | 1066852  | ● | - | - |
|  |                                       |                        | 5 mm ... 500 mm <sup>3)</sup>                                  | LED          | GTB6-P7441S56  | 1077541  | ● | - | - |

<sup>1)</sup> Reflector PL80A.






<sup>2)</sup> Reflector P250.

<sup>3)</sup> Object with 90 % reflectance (referred to standard white, DIN 5033).

Reflectors


| Figure  | Description                   | Type | Part no. | deTem4 A/P | deTem4 Core A/P | deTem2 Core A/P |
|---|-------------------------------|------|----------|------------|-----------------|-----------------|
|  | Rectangular, screw connection | P250 | 5304812  | ●          |                 |                 |

Muting accessories

| Figure   | Description                | Length | Diameter | Usage  | Type               | Part no. |   |  |  |
|--|----------------------------|--------|----------|--|--------------------|----------|---|--|--|
|   | Muting arm bracket         | -      | -        | For mounting muting arm 2111923 or 2111924 on the deTec or deTem                 | Muting arm bracket | 2106455  | ● |  |  |
|   | Muting arm, short          | 200 mm | 18 mm    | For cross muting (X-muting)  | Muting arm, short  | 2111924  | ● |  |  |
|   | Muting arm, long           | 400 mm | 18 mm    | For parallel muting (L-muting or T-muting)                                       | Muting arm, long   | 2111923  | ● |  |  |
|   | Sensor bracket G6 and P250 | -      | -        | For mounting muting sensor G6 or reflector P250 on muting arm 2111923 or 2111924 | BEF-2KHAAAKU1      | 2113145  | ● |  |  |
|  | Universal bracket          |        |          | For mounting sensors or reflectors on muting arm 2111923 or 2111924              | Universal bracket  | 2044953  | ● |  |  |

Dimensional drawings → [page 14](#)

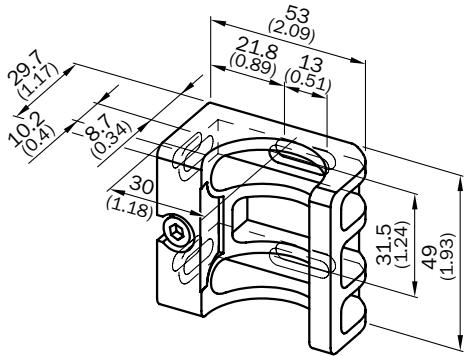
Muting indicator lamp

| Figure  | Description           | Items supplied   | Length of cable | Type                  | Part no. |   |   |   |
|---|-----------------------|--|-----------------|-----------------------|----------|---|---|---|
|  | Muting indicator lamp | Inclusive male connector M12 and connection cable, mounting bracket and mounting kit | 2 m             | Muting indicator lamp | 2033118  | ● | - | - |
|   |                       |  | 10 m            | Muting indicator lamp | 2033119  | ● | - | - |

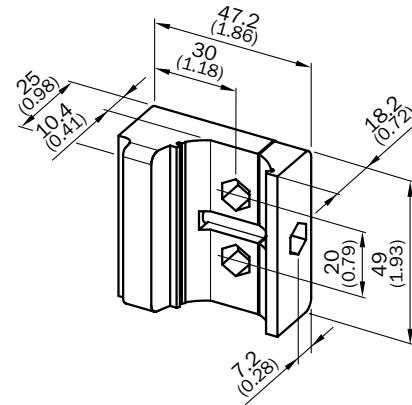
Dimensional drawings for accessories (Dimensions in mm (inch))

Terminal and alignment brackets

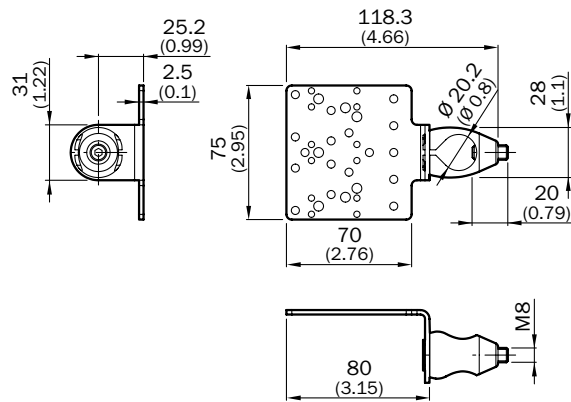
BEF-1SHABPKU2  
 BEF-1SHABPKU4  
 BEF-1SHABBKU2



BEF-3SHABPKU2  
 BEF-3SHABPKU4



Universal bracket



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