



VISIC50SF-0100

VISIC50SF

SMOKE DETECTORS

SICK
Sensor Intelligence.



Ordering information

| Type | Part no. |
|----------------|----------|
| VISIC50SF-0100 | 1068733 |

Our regional sales organization will help you to select the optimum device configuration.

Other models and accessories → www.sick.com/VISIC50SF



Detailed technical data

Technical specifications

| | | | | | |
|---------------------------------------|---|----------------------|----------------------------|----------------------------------|----------------|
| Description | Smoke detector for early fire detection in tunnels | | | | |
| Measured values | Visibility (K-value) | | | | |
| Measurement principles | Scattered light forward | | | | |
| Measuring ranges | <table border="0"> <tr> <td style="padding-right: 20px;">Visibility (K-value)</td> <td>0 ... 150 km⁻¹</td> </tr> <tr> <td>Temperature measurement (option)</td> <td>-30 ... +70 °C</td> </tr> </table> | Visibility (K-value) | 0 ... 150 km ⁻¹ | Temperature measurement (option) | -30 ... +70 °C |
| Visibility (K-value) | 0 ... 150 km ⁻¹ | | | | |
| Temperature measurement (option) | -30 ... +70 °C | | | | |
| Response time (t₉₀) | ≤ 5 s | | | | |
| Resolution | <table border="0"> <tr> <td style="padding-right: 20px;">Visibility (K-value)</td> <td>1 km⁻¹</td> </tr> </table> | Visibility (K-value) | 1 km ⁻¹ | | |
| Visibility (K-value) | 1 km ⁻¹ | | | | |
| Repeatability | <table border="0"> <tr> <td style="padding-right: 20px;">Visibility (K-value)</td> <td>≤ 1 %</td> </tr> </table> | Visibility (K-value) | ≤ 1 % | | |
| Visibility (K-value) | ≤ 1 % | | | | |
| Ambient temperature | -20 °C ... +55 °C | | | | |
| Storage temperature | -30 °C ... +85 °C | | | | |
| Ambient pressure | 860 hPa ... 1,080 hPa | | | | |
| Ambient humidity | 10 % ... 100 % Relative humidity; non-condensing | | | | |
| Conformities | ASTRA "Guideline - Ventilation of Road Tunnels" (2008) RABT 2006 | | | | |
| Electrical safety | CE | | | | |
| Enclosure rating | IP6K9K | | | | |
| Analog outputs | 2 outputs: 4 ... 20 mA, 500 Ω Electrically isolated; short-circuit proof. Outputs are preset for smoke detection and temperature. | | | | |
| Digital outputs | 3 relay contacts: 48 V, 0.5 mA, 24 W Preset for failure, limit value and maintenance | | | | |

| | |
|-------------------------------|---|
| Modbus | ✓ |
| Remark | Not available when a TAD is used |
| Type of fieldbus integration | RTU RS-485 |
| PROFIBUS DP | ✓ |
| Type of fieldbus integration | RS-485 |
| Indication | LC display, inside Status LEDs: "Operational", "Maintenance required", and "Fault" |
| Input | Functional keys |
| Operation | Via LC-display and function keys |
| Dimensions (W x H x D) | 266 mm x 159 mm x 117 mm (for details see dimensional drawings) |
| Weight | ≤ 2.8 kg |
| Material | Stainless steel 1.4571 |
| Mounting | Wall mount, vertical, wall inclination up to 45° or ceiling mount using an adapter |
| Energy supply | Voltage 18 V DC ... 28 V DC, ± 10 % Other voltages with optional connecting unit or TAD control unit |
| Current consumption | ≤ 1 A |
| Power consumption | Without heating: ≤ 5 W With heating: ≤ 20 W |
| Test functions | Contamination monitoring of glass pane Drift and plausibility check Automatic self-test |
| Options | Temperature sensor TAD control unit Connection unit |

Classifications

| | |
|---------------------|----------|
| ECLASS 5.0 | 27150305 |
| ECLASS 5.1.4 | 27150305 |
| ECLASS 6.0 | 27150305 |
| ECLASS 6.2 | 27150305 |
| ECLASS 7.0 | 27150305 |
| ECLASS 8.0 | 27150305 |
| ECLASS 8.1 | 27150305 |
| ECLASS 9.0 | 27150305 |
| ECLASS 10.0 | 27150305 |
| ECLASS 11.0 | 27150305 |
| ECLASS 12.0 | 27150305 |
| ETIM 5.0 | EC001190 |
| ETIM 6.0 | EC001190 |
| ETIM 7.0 | EC001190 |
| ETIM 8.0 | EC001190 |

VISIC50SF-0100 | VISIC50SF

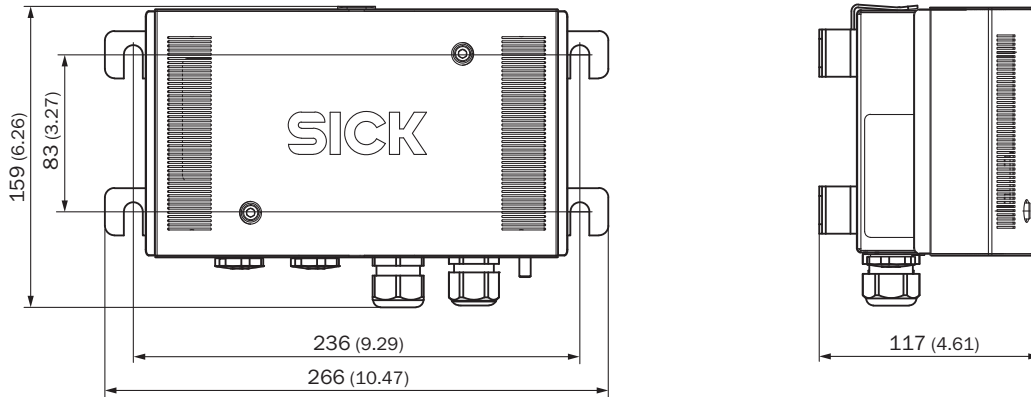
SMOKE DETECTORS

UNSPSC 16.0901

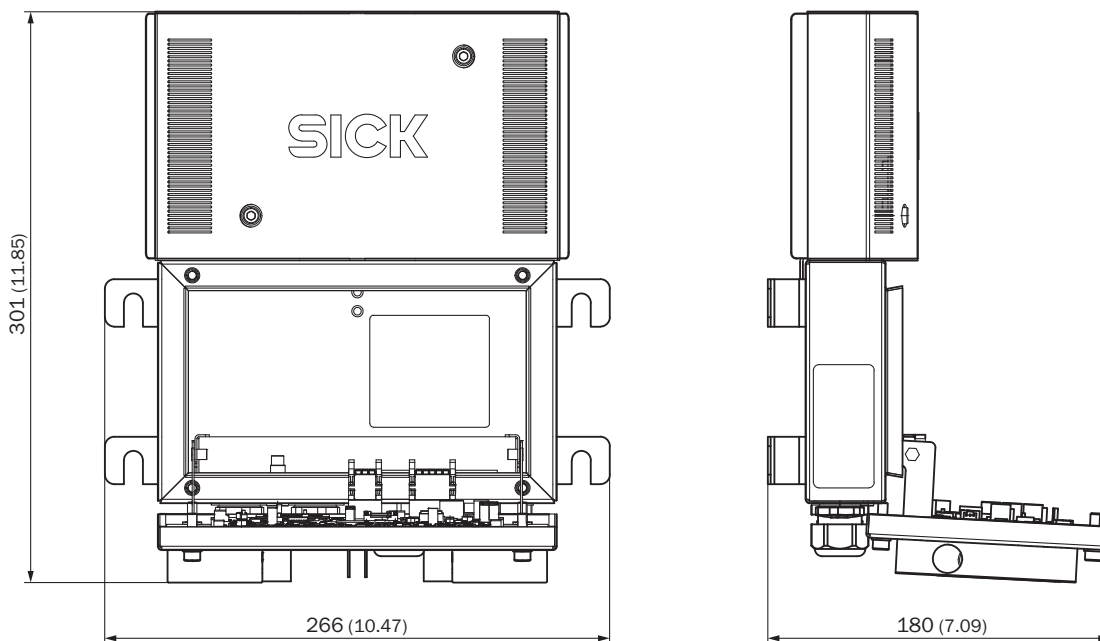
41115406

Dimensional drawing (Dimensions in mm (inch))

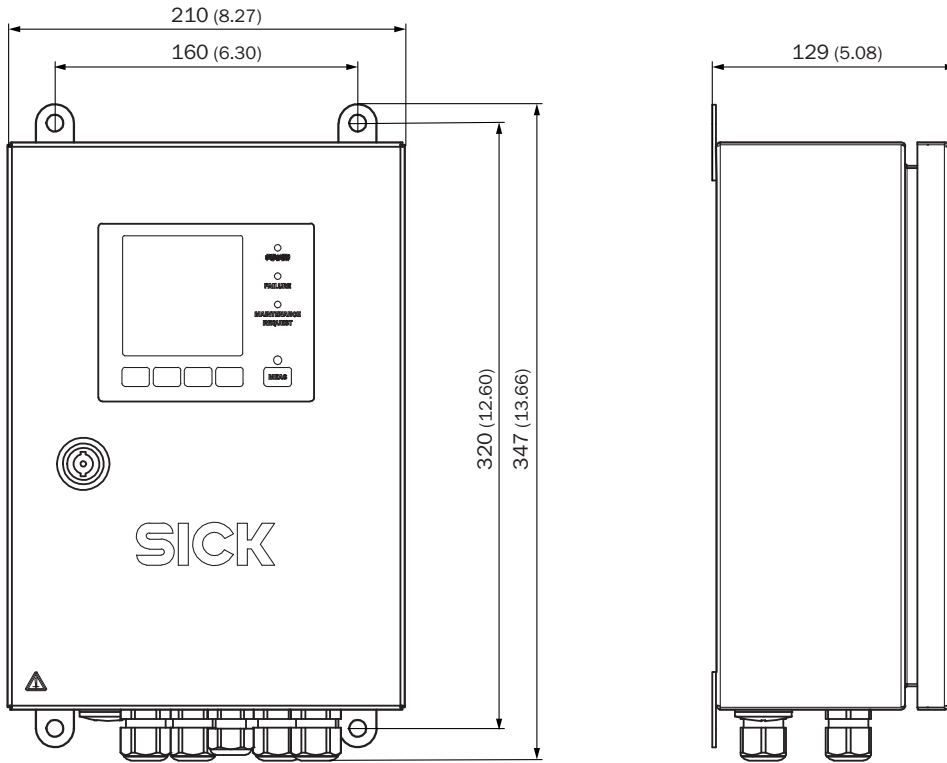
VISIC50SF sensor unit closed



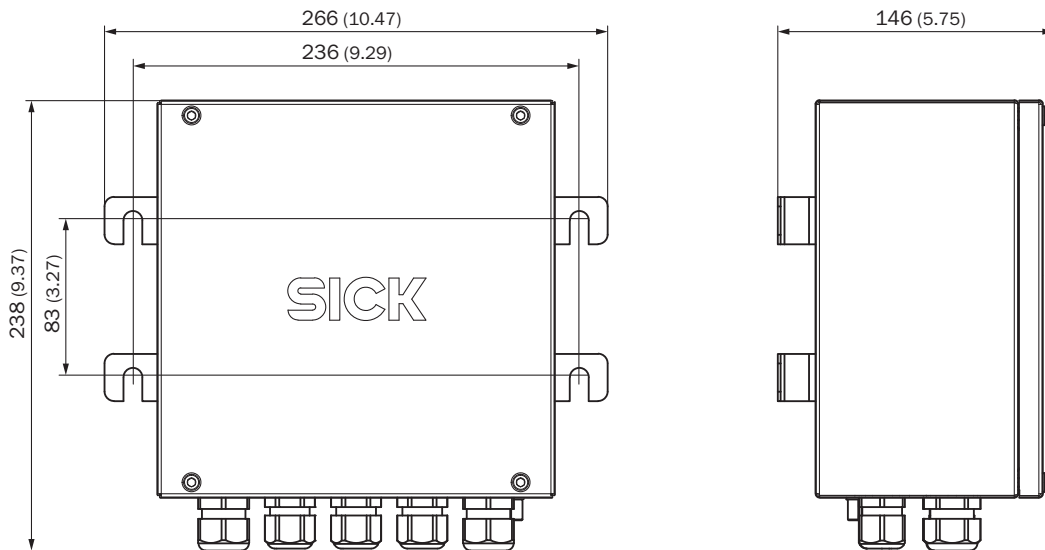
VISIC50SF sensor unit open with clipped-on front cover



TAD control unit

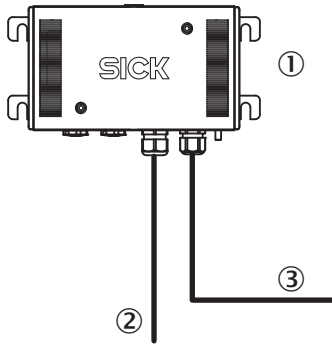


VISIC50SF connecting unit



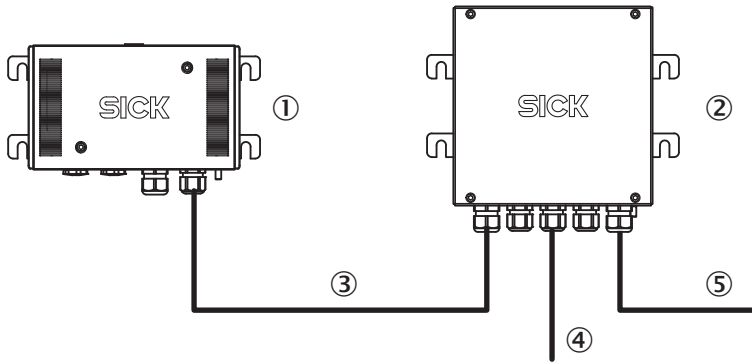
Connection types

Standard version



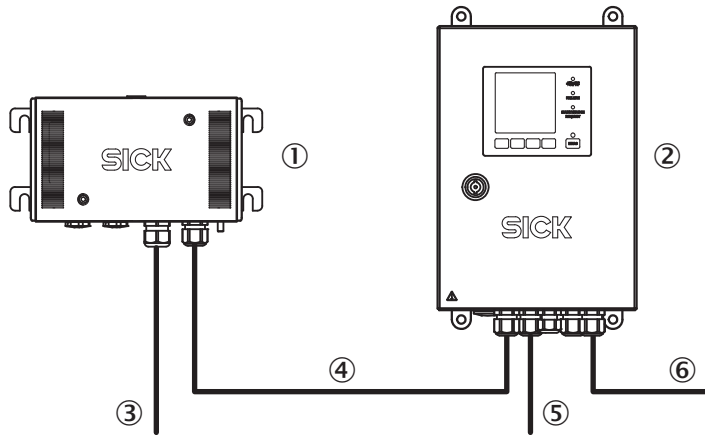
- ① VISIC50SF sensor unit
- ② Power supply (24 V)
- ③ Analog and digital signals or data bus

Version with terminal box



- ① VISIC50SF sensor unit
- ② VISIC50SF connecting unit
- ③ Analog and digital signals or data bus, incl. power supply (24 V)
- ④ Power supply (230 V)
- ⑤ Analog and digital signals or data bus

Version with TAD control unit



- ① VISIC50SF sensor unit
- ② TAD control unit
- ③ Power supply (24 V)
- ④ Analog and digital signals or data bus (max. length = 1,200 m)
- ⑤ Power supply (230 V)
- ⑥ Analog and digital signals or data bus

SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is “Sensor Intelligence.”

WORLDWIDE PRESENCE:

Contacts and other locations –www.sick.com