



KT5G-2P1122

KT5

CONTRAST SENSORS

SICK
Sensor Intelligence.



Illustration may differ

Ordering information

| Type | part no. |
|-------------|----------|
| KT5G-2P1122 | 1017976 |

Other models and accessories → www.sick.com/KT5

Detailed technical data

Features

| | |
|-------------------------------|--|
| Housing design | Middle |
| Dimensions (W x H x D) | 30.4 mm x 53 mm x 80 mm |
| Light source | LED, visible green light ¹⁾ |
| Light emission | Long and short side of housing, exchangeable |
| Light spot size | 1.2 mm x 4.2 mm |
| Light spot direction | Vertical ²⁾ |
| Wave length | 520 nm |
| Sensing distance | ≤ 10 mm ³⁾ |
| Adjustment | Teach-in button |
| Teach-in mode | 1-point teach-in |
| Function | Off delay 20 ms |
| Special features | Off Delay |

¹⁾ Average service life: 100,000 h at T_U = +25 °C.

²⁾ In relation to long side of housing.

³⁾ From leading edge of lens.

Electronics

| | |
|----------------------------|-----------------------------------|
| Supply voltage | 10 V DC ... 30 V DC ¹⁾ |
| Ripple | ≤ 5 V _{pp} ²⁾ |
| Current consumption | < 80 mA ³⁾ |
| Switching frequency | 10 kHz ⁴⁾ |
| Response time | |

¹⁾ Limit values when operated in short-circuit protected network: max. 8 A.

²⁾ May not fall below or exceed U_y tolerances.

³⁾ Without load.

⁴⁾ With light/dark ratio 1:1.

⁵⁾ Short-circuit-proof.

⁶⁾ Reference voltage DC 50 V.

| | |
|--|--|
| Switching output | 50 µs |
| Switching output (voltage) | PNP |
| Output current I_{max.} | PNP: HIGH = U _V ≤ 2 V / LOW approx. 0 V |
| Output current I_{max.} | 100 mA ⁵⁾ |
| Input, teach-in (ET) | PNP Teach: U = 10 V ... < U _V Run: U < 2 V |
| Input, fine/coarse (F/C) | PNP: fine: U = 0 V Coarse: U > 10 V ... < U _V |
| Retention time (ET) | 25 ms, non-volatile memory |
| Time delay | None |
| Protection class | II ⁶⁾ |
| Circuit protection | U _V connections, reverse polarity protected Output Q short-circuit protected Interference pulse suppression |
| Connection type | Plug, M12, 5-pin |

¹⁾ Limit values when operated in short-circuit protected network: max. 8 A.

²⁾ May not fall below or exceed U_V tolerances.

³⁾ Without load.

⁴⁾ With light/dark ratio 1:1.

⁵⁾ Short-circuit-proof.

⁶⁾ Reference voltage DC 50 V.

Mechanics

| | |
|-------------------------|--------------|
| Housing material | Zinc diecast |
| Weight | 400 g |

Ambient data

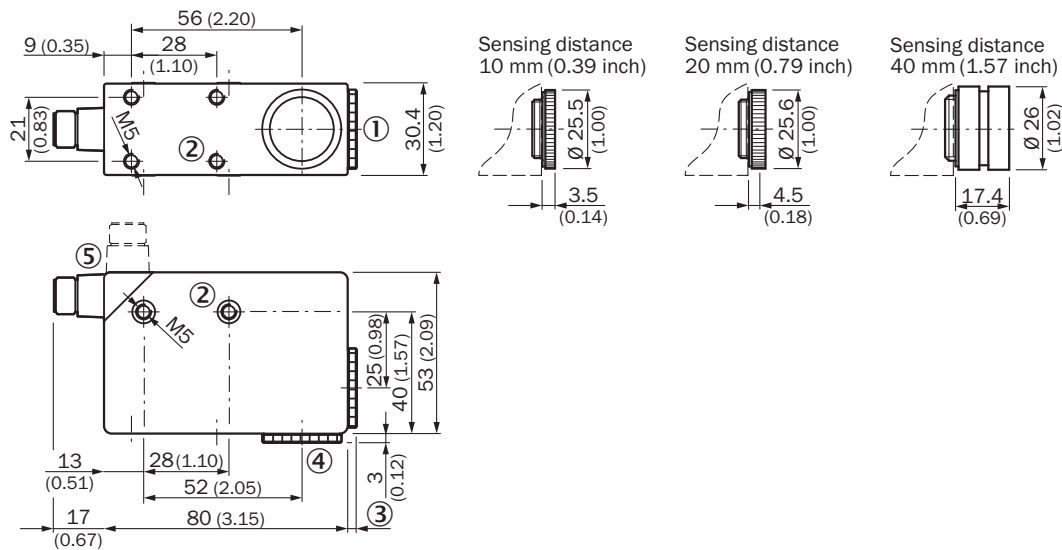
| | |
|--------------------------------------|------------------------------|
| Ambient operating temperature | -10 °C ... +55 °C |
| Ambient temperature, storage | -25 °C ... +75 °C |
| Shock load | According to IEC 60068 |
| UL File No. | NRKH.E181493 & NRKH7.E181493 |

Classifications

| | |
|---------------------|----------|
| ECLASS 5.0 | 27270906 |
| ECLASS 5.1.4 | 27270906 |
| ECLASS 6.0 | 27270906 |
| ECLASS 6.2 | 27270906 |
| ECLASS 7.0 | 27270906 |
| ECLASS 8.0 | 27270906 |
| ECLASS 8.1 | 27270906 |
| ECLASS 9.0 | 27270906 |
| ECLASS 10.0 | 27270906 |
| ECLASS 11.0 | 27270906 |
| ECLASS 12.0 | 27270906 |
| ETIM 5.0 | EC001820 |

| | |
|-----------------------|----------|
| ETIM 6.0 | EC001820 |
| ETIM 7.0 | EC001820 |
| ETIM 8.0 | EC001820 |
| UNSPSC 16.0901 | 39121528 |

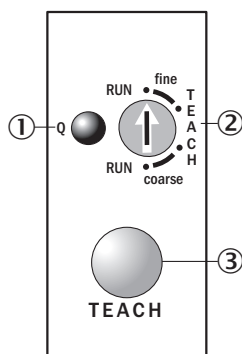
Dimensional drawing KT5-2 Teach-in, KT5-2 Display



Dimensions in mm (inch)

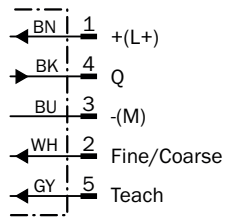
- ① Lens (light transmission), can be exchanged for pos. 4
- ② M5 threaded mounting hole, 5.5 mm deep
- ③ see dimensional drawings of lenses
- ④ Blind screw can be replaced by pos. 1
- ⑤ Connector M12 (rotatable up to 90°)

Adjustments KT5-2 Teach-in, KT5G-xx2

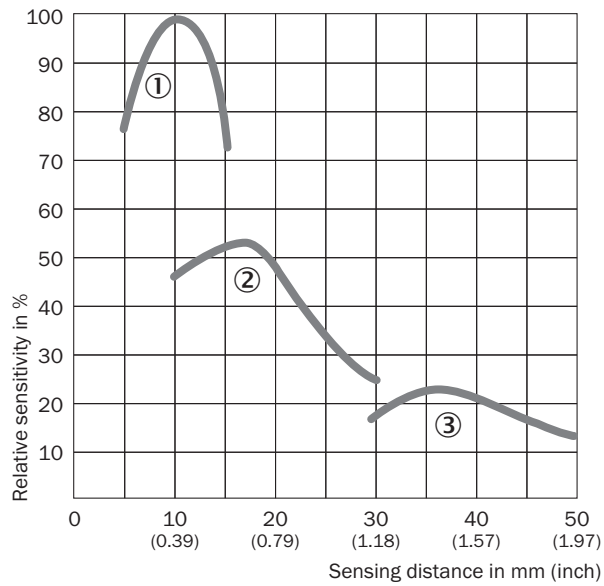


- ① Function signal indicator (yellow)
- ② Pre-selection switch for minimum contrast
- ③ Teach-in button

Connection diagram Cd-326








Sensing distance





- ① Sensing distance 10 mm
- ② Sensing distance 20 mm
- ③ Sensing distance 40 mm

Recommended accessories

Other models and accessories → www.sick.com/KT5

| | Brief description | Type | part no. |
|---|---|-------------|----------|
| Mounting systems | | | |
|  | <ul style="list-style-type: none"> Description: Plate G for universal clamp bracket Material: Steel Details: Steel, zinc coated Items supplied: Universal clamp (2022726), mounting hardware Usable for: W34, LUT3, KT5-2, KT10, CS8, W24-2, KT8, KT8 | BEF-KHS-G01 | 2022464 |
|  | <ul style="list-style-type: none"> Description: Plate K for universal clamp bracket Material: Steel Details: Steel, zinc coated Items supplied: Universal clamp (2022726), mounting hardware Usable for: W11-2, W12-3, W14-2, W18-3, W23-2, W24-2, W27-3, W30, W32, W34, W36, PL50A, PL80A, P250, UC12, LUT3, KT2, KT5-2, KT8, CS8, DT2, DS30, DS40, W12-2 Laser, W16, W26, KT5 | BEF-KHS-K01 | 2022718 |
| reflectors and optics | | | |
|  | <ul style="list-style-type: none"> Description: Lens, 40 mm sensing distance | OBJ-210 | 2010945 |
|  | <ul style="list-style-type: none"> Description: Lens, 10 mm sensing distance | OBJ-211 | 1004936 |
|  | <ul style="list-style-type: none"> Description: Lens, 20 mm sensing distance | OBJ-212 | 1011506 |

| | Brief description | Type | part no. |
|---|--|--------------------|----------|
| connectors and cables | | | |
|  | <ul style="list-style-type: none"> Description: Unshielded Connection type head A: Female connector, M12, 5-pin, straight, A-coded Connection systems: Screw-type terminals Permitted cross-section: ≤ 0.75 mm² | DOS-1205-G | 6009719 |
|  | <ul style="list-style-type: none"> Description: Unshielded Connection type head A: Female connector, M12, 5-pin, angled, A-coded Connection systems: Screw-type terminals Permitted cross-section: ≤ 0.75 mm² | DOS-1205-W | 6009720 |
|  | <ul style="list-style-type: none"> Description: Sensor/actuator cable, unshielded Connection type head A: Female connector, M12, 5-pin, angled, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 2 m, 5-wire, PVC Application: Uncontaminated zones, Zones with chemicals | YG2A15-020VB5XLEAX | 2096215 |
|  | <ul style="list-style-type: none"> Description: Sensor/actuator cable, unshielded Connection type head A: Female connector, M12, 5-pin, angled, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 5 m, 5-wire, PVC Application: Uncontaminated zones, Zones with chemicals | YG2A15-050VB5XLEAX | 2096216 |
|  | <ul style="list-style-type: none"> Description: Sensor/actuator cable, unshielded Connection type head A: Female connector, M12, 5-pin, angled, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 10 m, 5-wire, PVC Application: Uncontaminated zones, Zones with chemicals | YG2A15-100VB5XLEAX | 2096217 |
|  | <ul style="list-style-type: none"> Description: Sensor/actuator cable, unshielded Connection type head A: Female connector, M12, 5-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 2 m, 5-wire, PVC Application: Uncontaminated zones, Zones with chemicals | YF2A15-020VB5XLEAX | 2096239 |
|  | <ul style="list-style-type: none"> Description: Sensor/actuator cable, unshielded Connection type head A: Female connector, M12, 5-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 5 m, 5-wire, PVC Application: Uncontaminated zones, Zones with chemicals | YF2A15-050VB5XLEAX | 2096240 |
|  | <ul style="list-style-type: none"> Description: Sensor/actuator cable, unshielded Connection type head A: Female connector, M12, 5-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 10 m, 5-wire, PVC Application: Uncontaminated zones, Zones with chemicals | YF2A15-100VB5XLEAX | 2096241 |
|  | <ul style="list-style-type: none"> Description: Sensor/actuator cable, unshielded Connection type head A: Female connector, M12, 5-pin, angled, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 0.6 m, 5-wire, PVC Application: Uncontaminated zones, Zones with chemicals | YG2A15-C60VB5XLEAX | 2145573 |
|  | <ul style="list-style-type: none"> Description: Sensor/actuator cable, unshielded Connection type head A: Female connector, M12, 5-pin, angled, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 1 m, 5-wire, PVC Application: Uncontaminated zones, Zones with chemicals | YG2A15-010VB5XLEAX | 2145574 |
|  | <ul style="list-style-type: none"> Description: Sensor/actuator cable, unshielded Connection type head A: Female connector, M12, 5-pin, angled, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 3 m, 5-wire, PVC | YG2A15-030VB5XLEAX | 2145575 |

| | Brief description | Type | part no. |
|---|---|---------------------------|----------------|
|  | <ul style="list-style-type: none"> • Application: Untaminated zones, Zones with chemicals • Description: Sensor/actuator cable, unshielded • Connection type head A: Female connector, M12, 5-pin, straight, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 0.6 m, 5-wire, PVC • Application: Untaminated zones, Zones with chemicals | <p>YF2A15-C60VB5XLEAX</p> | <p>2145570</p> |
|  | <ul style="list-style-type: none"> • Description: Sensor/actuator cable, unshielded • Connection type head A: Female connector, M12, 5-pin, straight, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 3 m, 5-wire, PVC • Application: Untaminated zones, Zones with chemicals | <p>YF2A15-030VB5XLEAX</p> | <p>2145572</p> |

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.”

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