



IQ40-15BUP-KK0

IQ Standard

INDUCTIVE PROXIMITY SENSORS

SICK
Sensor Intelligence.



Ordering information

| Type | Part no. |
|----------------|----------|
| IQ40-15BUP-KK0 | 7902136 |

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



Detailed technical data

Features

| | |
|--|--|
| Housing | Rectangular |
| Housing | Standard design |
| Dimensions (W x H x D) | 40 mm x 40 mm x 121 mm |
| Sensing range S_n | 15 mm |
| Safe sensing range S_a | 12.15 mm |
| Installation type | Flush |
| Switching frequency | 20 Hz ¹⁾ 55 Hz ²⁾ |
| Connection type | Terminal connection with M20 gland |
| Output function | NC or NO |
| Output characteristic | Wire configurable |
| Electrical wiring | AC/DC 2-wire |
| Enclosure rating | IP65 ³⁾ |

¹⁾ AC.

²⁾ DC.

³⁾ According to EN 60529.

Mechanics/electronics

| | |
|---|--|
| Supply voltage | 20 V AC/DC ... 250 V AC/DC |
| Voltage drop | ≤ 6.5 V (AC) ≤ 6 V (DC) |
| Hysteresis | 1 % ... 15 % |
| Reproducibility | ≤ 10 % ^{1) 2) 3)} |
| Temperature drift (of S_r) | ± 10 % |
| EMC | As per EN 55011, class B According to EN 60947-5-2 |
| Continuous current I_a | ≤ 350 mA ⁴⁾ ≤ 250 mA ⁵⁾ ≤ 100 mA ⁶⁾ |
| Off-state current | ≤ 2.5 mA (AC 250 V) ≤ 1.3 mA (AC 110 V) ≤ 0.8 mA (DC 24 V) |
| Minimum load current | > 5 mA |
| Short-time withstand current | 2.2 A ⁷⁾ |
| Cable gland clamping area | M20 1.5 |
| Wire size | ≤ 2.5 mm ² |
| Short-circuit protection | ⁸⁾ |
| Shock and vibration resistance | 30 g, 11 ms / 10 ... 55 Hz, 1 mm |
| Ambient operating temperature | -25 °C ... +80 °C |
| Housing material | Plastic |
| Sensing face material | Plastic, PPE |
| Protection class | II |
| Rated insulation voltage U_i | 250 V AC |
| Usage category | AC-140 ⁹⁾ DC-13 ¹⁰⁾ |
| Contamination rating | 3 |
| Rated impulse withstand voltage | 4 kV |

¹⁾ Supply voltage U_B and constant ambient temperature T_a.

²⁾ Of S_r.

³⁾ Repeatability (T_a not constant).

⁴⁾ AC (+50 °C).

⁵⁾ AC (+80 °C).

⁶⁾ DC.

⁷⁾ 20 ms / 0.5 Hz.

⁸⁾ Miniature fuse to IEC 60217-2 Sheet 1, ≤ 2 A (quick-blow).

⁹⁾ Control of small electromagnetic loads with holding currents < 200 mA.

¹⁰⁾ Control of solenoids.

Safety-related parameters

| | |
|-------------------------------------|-----------|
| MTTF_D | 964 years |
| DC_{avg} | 0 % |
| T_M (mission time) | 20 years |

Reduction factors

| | |
|-----------------------------------|--|
| Note | The values are reference values which may vary |
| Stainless steel (V2A, 304) | Approx. 0.7 |
| Aluminum (Al) | Approx. 0.3 |
| Copper (Cu) | Approx. 0.2 |
| Brass (Br) | Approx. 0.4 |

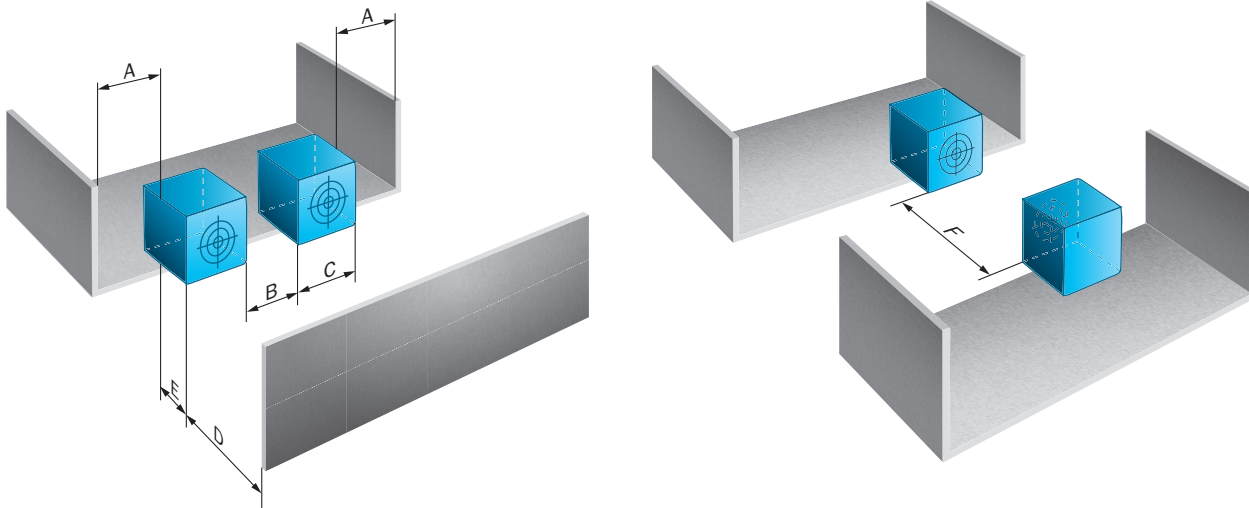
Installation note

| | |
|---------------|---------------------------------------|
| Remark | Associated graphic see "Installation" |
| A | 0 mm |
| B | 40 mm |
| C | 40 mm |
| D | 45 mm |
| E | 0 mm |
| F | 120 mm |

Classifications

| | |
|-----------------------|----------|
| ECLASS 5.0 | 27270101 |
| ECLASS 5.1.4 | 27270101 |
| ECLASS 6.0 | 27270101 |
| ECLASS 6.2 | 27270101 |
| ECLASS 7.0 | 27270101 |
| ECLASS 8.0 | 27270101 |
| ECLASS 8.1 | 27270101 |
| ECLASS 9.0 | 27270101 |
| ECLASS 10.0 | 27270101 |
| ECLASS 11.0 | 27270101 |
| ECLASS 12.0 | 27274001 |
| ETIM 5.0 | EC002714 |
| ETIM 6.0 | EC002714 |
| ETIM 7.0 | EC002714 |
| ETIM 8.0 | EC002714 |
| UNSPSC 16.0901 | 39122230 |

Installation note

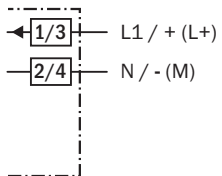


Connection type



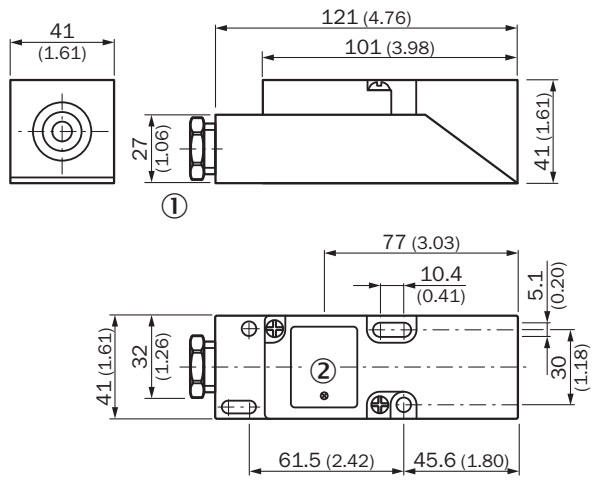
Connection diagram

Cd-018



Miniature fuse to IEC60127-2
sheet 1, ≤ 2 A (fast acting)

Dimensional drawing (Dimensions in mm (inch))



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