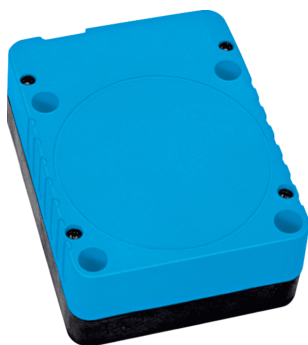


IQ80-60NPP-KK0

IQL

INDUCTIVE PROXIMITY SENSORS

SICK
Sensor Intelligence.



Ordering information

| Type | Part no. |
|----------------|----------|
| IQ80-60NPP-KK0 | 7900227 |

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



Detailed technical data

Features

| | |
|--|------------------------------------|
| Housing | Rectangular |
| Housing | Standard design |
| Dimensions (W x H x D) | 80 mm x 105 mm x 40 mm |
| Sensing range S_n | 60 mm |
| Safe sensing range S_a | 48.6 mm |
| Installation type | Non-flush |
| Switching frequency | 100 Hz |
| Connection type | Terminal connection with M20 gland |
| Switching output | PNP |
| Output function | NC or NO |
| Output characteristic | Wire configurable |
| Electrical wiring | DC 3-wire |
| Enclosure rating | IP65 ¹⁾ |

¹⁾ According to EN 60529.

Mechanics/electronics

| | |
|--|---------------------------|
| Supply voltage | 10 V DC ... 36 V DC |
| Voltage drop | ≤ 2.5 V ¹⁾ |
| Hysteresis | 1 % ... 15 % |
| Temperature drift (of S_n) | ± 10 % |
| EMC | According to EN 60947-5-2 |
| Continuous current I_a | ≤ 250 mA |
| Off-state current | ≤ 0.5 mA |
| Cable gland clamping area | M20 1.5 |
| Wire size | ≤ 2.5 mm ² |

¹⁾ With I_a max and U_b 24 V.

| | |
|---------------------------------------|----------------------------------|
| Short-circuit protection | ✓ |
| Power-up pulse protection | ✓ |
| Shock and vibration resistance | 30 g, 11 ms / 10 ... 55 Hz, 1 mm |
| Ambient operating temperature | -25 °C ... +80 °C |
| Housing material | Plastic, PPE |
| Sensing face material | Plastic, PPE |

¹⁾ With I_{a max} and U_b 24 V.

Safety-related parameters

| | |
|-------------------------------------|-------------|
| MTTF_D | 2,043 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

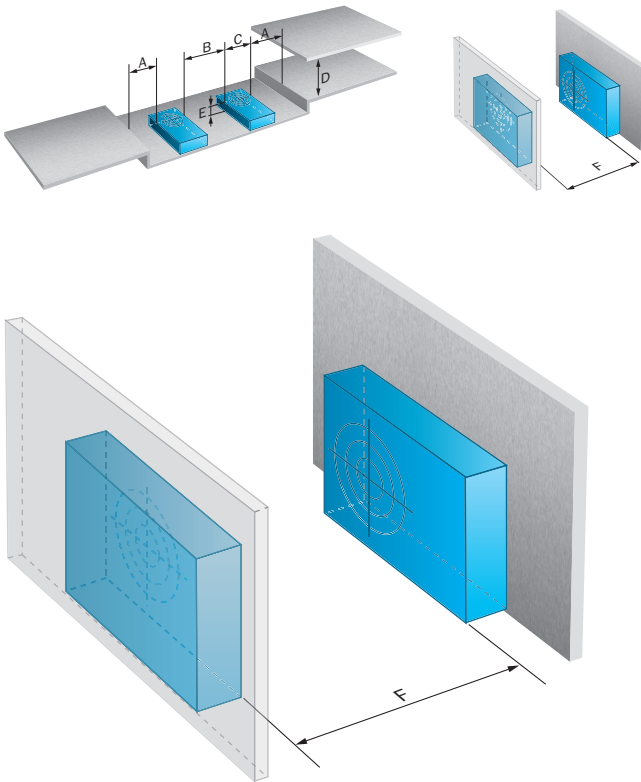
| | |
|---------------|---------------------------------------|
| Remark | Associated graphic see "Installation" |
| A | 160 mm |
| B | 160 mm |
| C | 80 mm |
| D | 150 mm |
| E | 40 mm |
| F | 480 mm |

Classifications

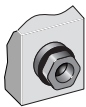
| | |
|---------------------|----------|
| ECLASS 5.0 | 27270101 |
| ECLASS 5.1.4 | 27270101 |
| ECLASS 6.0 | 27270101 |
| ECLASS 6.2 | 27270101 |
| ECLASS 7.0 | 27270101 |
| ECLASS 8.0 | 27270101 |
| ECLASS 8.1 | 27270101 |
| ECLASS 9.0 | 27270101 |
| ECLASS 10.0 | 27270101 |
| ECLASS 11.0 | 27270101 |
| 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

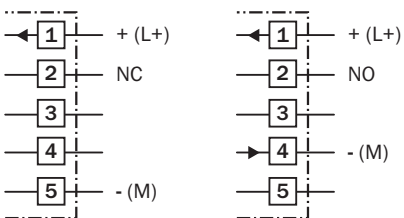


Connection type



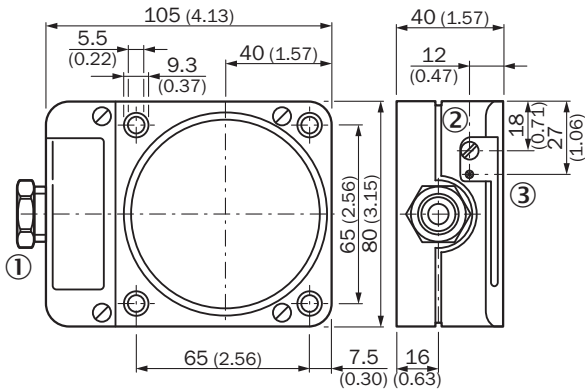
Connection diagram

Cd-024



Dimensional drawing (Dimensions in mm (inch))

IQ80, DC 3-wire



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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Contacts and other locations –www.sick.com