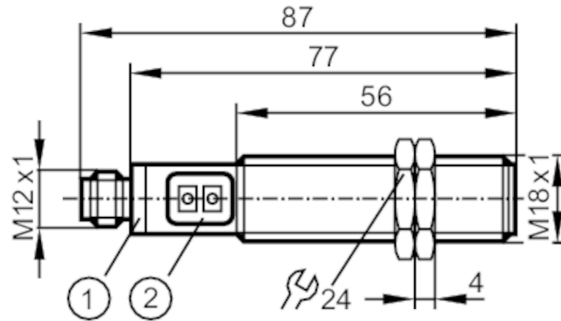


KG5065



Capacitive sensor

KG-3120NFAKGP2T/US



- 1 LED ring
- 2 programming buttons



Product characteristics

| | |
|-------------------------|--|
| Electrical design | PNP/NPN; (automatic load detection PNP/NPN; when using a resistive load < 20 kΩ) |
| Output function | normally open / normally closed; (selectable) |
| Sensing range [mm] | 12 |
| Communication interface | IO-Link |
| Housing | threaded type |
| Dimensions [mm] | M18 x 1 / L = 87 |

Electrical data

| | |
|-----------------------------|------------|
| Operating voltage [V] | 10...36 DC |
| Current consumption [mA] | < 20 |
| Protection class | II |
| Reverse polarity protection | yes |
| Measuring principle | capacitive |

Outputs

| | |
|--|--|
| Electrical design | PNP/NPN; (automatic load detection PNP/NPN; when using a resistive load < 20 kΩ) |
| Output function | normally open / normally closed; (selectable) |
| Max. voltage drop switching output DC [V] | 2.5 |
| Permanent current rating of switching output DC [mA] | 200 |
| Switching frequency DC [Hz] | 10 |
| Short-circuit proof | yes |
| Overload protection | yes |

Detection zone

| | |
|--------------------|----|
| Sensing range [mm] | 12 |
|--------------------|----|

Accuracy / deviations

| | |
|------------------------------|----------|
| Hysteresis [% of Sr] | 1...15 |
| Switch point drift [% of Sr] | -20...20 |

KG5065



Capacitive sensor

KG-3120NFAKGP2T/US

| Interfaces | | |
|-------------------------------|--|--|
| Communication interface | IO-Link | |
| Transmission type | COM1 (4,8 kBaud) | |
| IO-Link revision | 1.1 | |
| SDCI standard | IEC 61131-9 CDV | |
| Profiles | Smart Sensor | |
| SIO mode | yes | |
| Min. process cycle time [ms] | 101 | |
| Supported DeviceIDs | Type of operation | DeviceID |
| | default | 387 |
| Operating conditions | | |
| Ambient temperature [°C] | -25...80 | |
| Note on ambient temperature | temperature of the sensing face: -25...110 °C | |
| Protection | IP 65; IP 67 | |
| Tests / approvals | | |
| EMC | EN 61000-4-2 ESD | 8 kV AD |
| | EN 61000-4-3 HF radiated | 10 V/m |
| | EN 61000-4-4 Burst | 2 kV |
| | EN 61000-4-6 HF conducted | 3 V |
| | EN 55011 | class B |
| Vibration resistance | EN 60068-2-6 Fc | (10...55 Hz) / 1 mm amplitude, oscillation period 5 min., 30 min. per axis at resonance or 55 Hz |
| Shock resistance | EN 60068-2-27 Ea | 30 g 6 shocks / 11 ms half-sine (x, y, z) |
| MTTF [years] | 566 | |
| Mechanical data | | |
| Weight [g] | 31.5 | |
| Housing | threaded type | |
| Mounting | non-flush mountable | |
| Dimensions [mm] | M18 x 1 / L = 87 | |
| Thread designation | M18 x 1 | |
| Materials | housing: PBT; pushbuttons: TPE-U; LED window: PC | |
| Displays / operating elements | | |
| Display | switching status | 1 x LED, yellow |
| Teach function | yes | |
| Electronic lock | yes | |
| Accessories | | |
| Items supplied | lock nuts: 2 | |
| Remarks | | |
| Pack quantity | 1 pcs. | |

KG5065

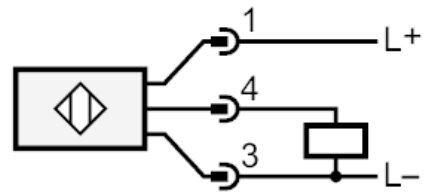
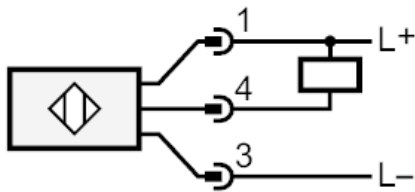


Capacitive sensor

KG-3120NFAKGP2T/US

Electrical connection - plug

Connector: 1 x M12; coding: A



- 4: OUT / IO-Link
automatic load detection PNP/NPN
when using a resistive load < 20 k Ω