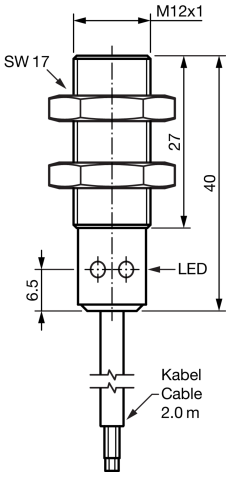
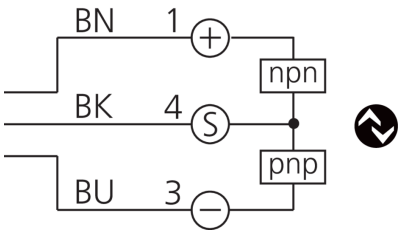
# 212680
# KNS M12KM 4B G3-2R
# Capacitive proximity sensor

- Large operating distance
- Detection of liquids, powdery and solid materials
- Detecting metal and non-metal parts
- Detection possible even through containers and packaging
- Sensitivity adjustable via IO-Link
- NO/NC, switchable via IO-Link
- Push-pull output pnp + npn
- Robust nickel-plated brass housing
- Short design




BK: black BN: brown BU: blue

**Function**

IO-Link

| Technical data (typ.) | +20°C, 24 V DC |
|---|---|
| **Electrical features** | |
| Service voltage | 18 … 30 V DC |
| No-load current (max.) | 15 mA (24 V DC) |
| Insulation voltage endurance | 500 V |
| **Mechanical features** | |
| Installation type | Flush |
| Thread | M12 x 1 |
| Housing length | 40 mm |
| Housing material | Brass (nickel-plated) |
| Material of cable | Polyurethane |
| Material | Polyurethane (Sensor probe) |
| Weight | 40 g |
| **Certifications, approvals** | |
| Protection class | III, operation on protective low voltage |
| **General features** | |
| Operating principle | Capacitive |
| Design | Thread |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| Technical data (typ.) | +20°C, 24 V DC |
|---|---|
| **Functional scope** | |
| Operation modes | STANDARD, HIGH RESOLUTION, SPEED |
| Scope of delivery | Sensor, 2 x M12 nuts |
| **Output, input, interface** | |
| Switching output | Push-pull, 100 mA, NO/NC, switchable via IO-Link |
| Voltage drop (max.) | 2 V |
| Interface | IO-Link |
| **Detection range, measuring range, tolerance limits** | |
| Switching distance (SN) | 4 mm (0.3 to 8 mm adjustable via IO-Link) |
| Standardized measuring plate | 12 x 12 mm |
| Switching hysteresis (max.) | < 15 % |
| **Display, operation** | |
| Sensitivity adjustment | IO-Link |
| Display | LED yellow - Output signal |
| **Time behavior** | |
| Switching frequency (factory setting) | 100 Hz (STANDARD) |
| Switching frequency (STANDARD) | 100 Hz |
| Switching frequency (HIGH RESOLUTION) | 10 Hz |
| Switching frequency (SPEED) | 200 Hz |
| Readiness delay (max.) | 300 ms |
| **Ambient conditions** | |
| Shock/vibration load | 30 g, 10 … 55 Hz / 0.5 mm |
| Ambient temperature during operation | -20 … +70 °C |
| Protection type | IP 65 |
| **Electrical connection** | |
| Connection | Cable, 2.0 m, 3-pin, 3 x 0.14 $mm^2$ |

| More information / accessories | https://www.di-soric.com/212680 |
|---|---|


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