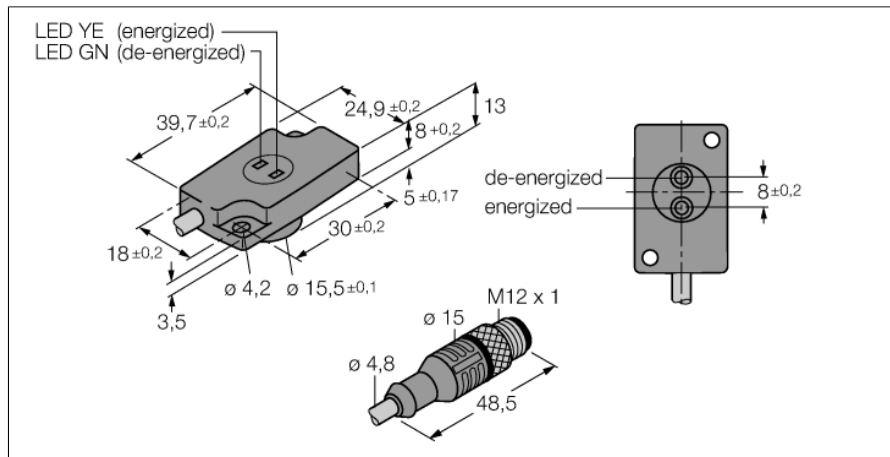


Inductive Sensor (Axial) Monitoring Kit for Power Clamps NI1.5-KSR13A-2AD4X2-0.2-RS4.4T/S34



- Compact power clamp monitoring KSR13A with two sensors and LEDs
- Active face, axial
- Plastic, PBT-GF20-V0, yellow
- Mounting holes with stainless steel sleeves
- Cable: Irradiation crosslinked PUR
- Resistant to magnetic fields (weld-resistant), for DC and AC fields
- Acc. to standard EN 60947-5-2
- Acc. to standard EN 61000-4-3
- Acc. to standard E03.75.020.N (7.2.6.1 CEM)
- DC 4-wire, 10...65 VDC
- 2 x NO
- M12 x 1 male connector

| | |
|------|------------------------------------|
| Type | NI1.5-KSR13A-2AD4X2-0.2-RS4.4T/S34 |
| ID | 4430122 |

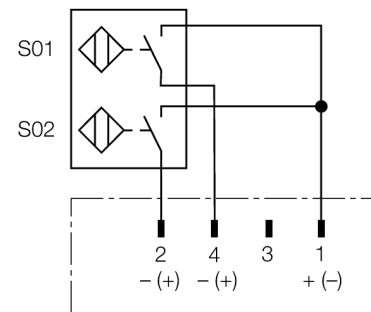
| | |
|-----------------|--|
| Special version | S34 Corresponds to: Resistant to magnetic fields |
|-----------------|--|

| General data | |
|--------------------------------|---|
| Rated switching distance S_n | 1.5 mm |
| Mounting conditions | Non-flush |
| Secured operating distance | $\leq (0.81 \times S_n)$ mm |
| Correction factors | St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4 |
| Repeat accuracy | $\leq 2\%$ of full scale |
| Temperature drift | $\leq \pm 10\%$ |
| Hysteresis | 1...15 % |

| Electrical data | |
|--|----------------------------|
| Operating voltage U_s | 10...65 VDC |
| Ripple $U_{s,r}$ | $\leq 10\% U_{s,max}$ |
| DC rated operating current I_s | ≤ 100 mA |
| Residual current | ≤ 0.6 mA |
| Isolation test voltage | 0.5 kV |
| Short-circuit protection | yes/Cyclic |
| Voltage drop at I_s | ≤ 5 V |
| Output function | 3-wire, NO contact, 2-wire |
| Smallest operating current $I_{s,min}$ | ≥ 3 mA |
| | for each sensor |
| Switching frequency | 0.25 kHz |

| Mechanical data | |
|-----------------------|--|
| Design | Monitoring Kit for Spanners, KSR13 |
| Dimensions | 40 x 25 x 13 mm |
| Housing material | Plastic, PBT-GF20-V0 |
| Active area material | Plastic, PBT |
| Electrical connection | Connector, M12 x 1 |
| Cable quality | $\varnothing 4.8$ mm, Orange, D12YSL11X-OB, PUR, 0.2 m |
| Core cross-section | 4 x 0.34 mm ² |

Wiring Diagram



Functional principle

Inductive sensors detect metal objects contactless and wear-free. For this, they use a high-frequency electromagnetic AC field that interacts with the target. Inductive sensors generate this field via an RLC circuit with a ferrite coil.

| | |
|--------------------------|--|
| Environmental conditions | |
| Ambient temperature | -25...+70 °C |
| Vibration resistance | 55 Hz (1 mm) |
| Shock resistance | 30 g (11 ms) |
| Protection class | IP67 |
| MTTF | 2283 years acc. to SN 29500 (Ed. 99) 40 °C |
| Switching state | |
| | 2 × LEDs, Green/yellow |