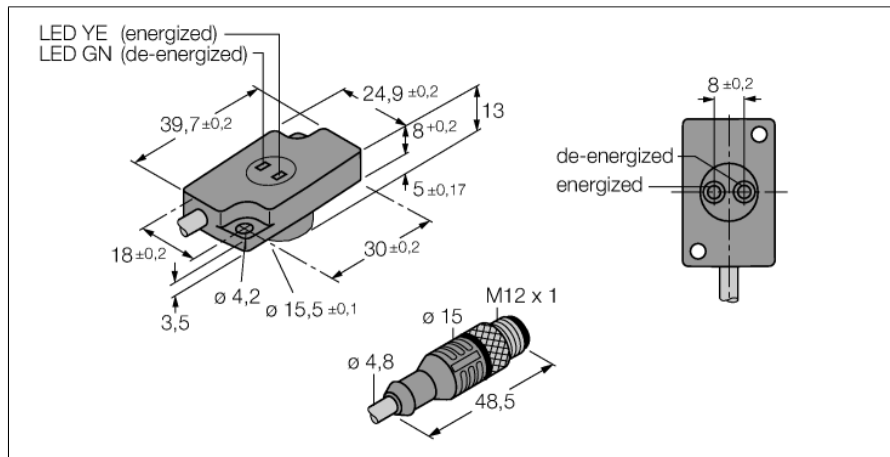


# Inductive Sensor (Radial) Monitoring Kit for Power Clamps NI1.5-KSR13R-2AD4X2-0.2-RS4.4T/S34



- Compact power clamp monitoring KSR13R with two sensors and LEDs
- Active face, radial
- Plastic, PBT-GF20-V0, black
- Mounting holes with metal 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-KSR13R-2AD4X2-0.2-RS4.4T/S34
ID	4430121

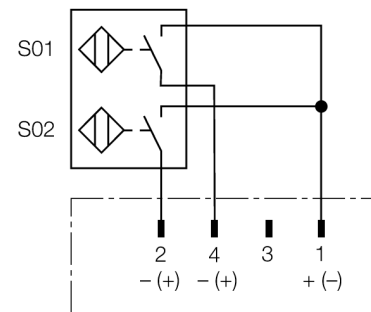
Special version	S34 corresponds to: Resistant to magnetic fields
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General data	
Rated switching distance $S_n$	1.5 mm
Mounting conditions	Non-flush
Secured operating distance	$\leq (0.81 \times S_n)$ mm
Correction factors	St37 = 1; Al = 0.3; stainless 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	10...65 VDC
Residual ripple	$\leq 10\% U_{in}$
DC rated operational current	$\leq 100$ mA
Residual current	$\leq 0.6$ mA
Isolation test voltage	$\leq 0.5$ kV
Short-circuit protection	yes/ Cyclic
Voltage drop at $I_n$	$\leq 5$ V
Output function	3-wire, NO contact, 2-wire
Smallest operating current $I_m$	$\geq 3$ 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	Metal, 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 <sup>2</sup>

## 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