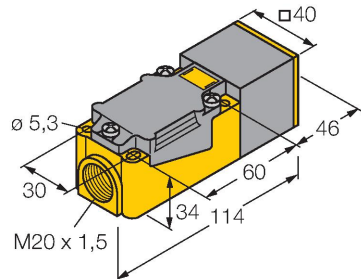


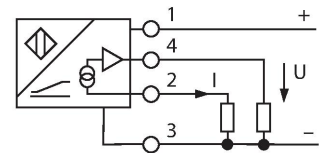
NI25-CP40-LIU Inductive Sensor – With Analog Output



Features

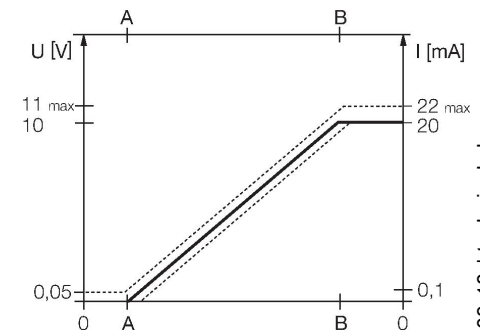
- Rectangular, height 40 mm
- Variable orientation of active face in 9 directions
- Plastic, PBT-GF30-VO
- High-luminance corner LEDs
- Optimum view of operating voltage and switching state from any position
- 4-wire, 15...30 VDC
- Analog output
- 0...10 V and 0...20 mA
- Terminal chamber

Wiring diagram



Functional principle

Inductive TURCK sensors with analog output accomplish simple control tasks. They provide a current, voltage or frequency signal proportional to the target's distance. The output signal is linear to the distance of the target over the entire sensing range.



Technical data

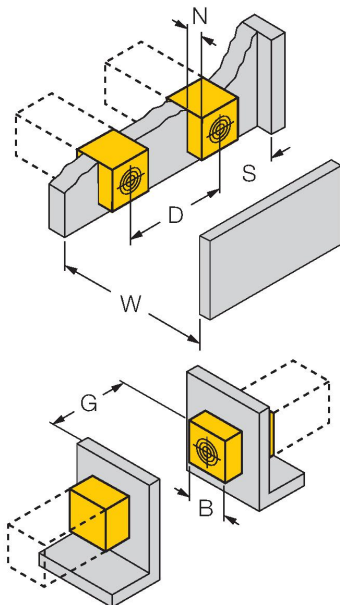
Type	NI25-CP40-LIU
Ident. no.	1535544
Measuring range	5...25 mm
Rated switching distance	25 mm
Mounting conditions	Non-flush
Secured operating distance	$\leq (0.81 \times S_n)$ mm
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeatability	$\leq 1 \%$ of measuring range A - B
	0.5 %, after warm-up 0.5 h
Reproducibility	$\leq 200 \mu\text{m}$
	$\leq 100 \mu\text{m}$, after a warm-up time of 0.5 h
Linearity deviation	$\leq 5 \%$
Temperature drift	$\leq \pm 10 \%$
Temperature drift	$\leq \pm 0.06 \%$ / K
Ambient temperature	-25...+70 °C
Operating voltage	15...30 VDC
Residual ripple	$\leq 10 \%$ U_{ss}
No-load current	$\leq 8 \text{ mA}$
Isolation test voltage	$\leq 0.5 \text{ kV}$
Short-circuit protection	yes
Wire breakage/Reverse polarity protection	no / Complete
Output function	4-wire, Analog output
Voltage output	0...10 V

Technical data

Current output	0...20 mA
Load resistance voltage output	$\geq 4.7 \text{ k}\Omega$
Load resistance, current output	$\leq 0.4 \text{ k}\Omega$
Measuring sequence frequency	30 Hz
Design	Rectangular, CP40
Dimensions	114 x 40 x 40 mm
Housing material	Plastic, PBT-GF30-V0, Black
Active area material	Plastic, PBT-GF30-V0, yellow
Electrical connection	Terminal chamber
Clamping ability	$\leq 2.5 \text{ mm}^2$
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP67
MTTF	751 years acc. to SN 29500 (Ed. 99) 40 °C

Mounting instructions

Mounting instructions/Description



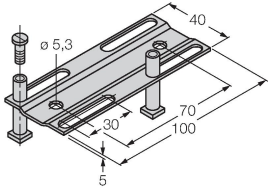
Distance D	120 mm
Distance W	75 mm
Distance S	120 mm
Distance G	150 mm
Distance N	40 mm
Width active area B	40 mm

Accessories

Adjusting bar JS 025/037

69429

Adjusting bar for rectangular housings
CK/CP40; material: VA 1.4301



BSS-CP40

6901318

Mounting clamp for rectangular
housings 40 x 40 mm; material:
Polypropylene

