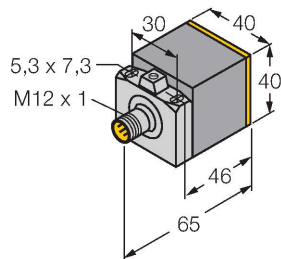


# NI25-CK40-LIU-H1141

## Inductive Sensor – With Analog Output



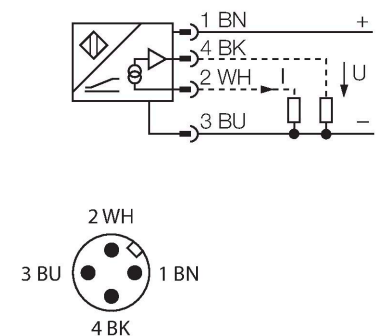
### Technical data

Type	NI25-CK40-LIU-H1141
ID	1537802
<b>General data</b>	
Measuring range	5...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	$\leq \pm 0.06\ \%/K$
<b>Electrical data</b>	
Operating voltage $U_b$	15...30 VDC
Ripple $U_{ss}$	$\leq 10\% U_{Bmax}$
No-load current	$\leq 8\ \text{mA}$
Isolation test voltage	0.5 kV
Short-circuit protection	yes
Wire break/reverse polarity protection	no/Complete
Output function	4-wire, Analog output
Voltage output	0...10 V
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

### Features

- Rectangular, height 40 mm
- Variable orientation of active face in 5 directions
- Plastic, PBT-GF30-V0
- 4-wire, 15...30 VDC
- Analog output
- 0...10 V and 0...20 mA
- M12 x 1 male connector

### Wiring diagram

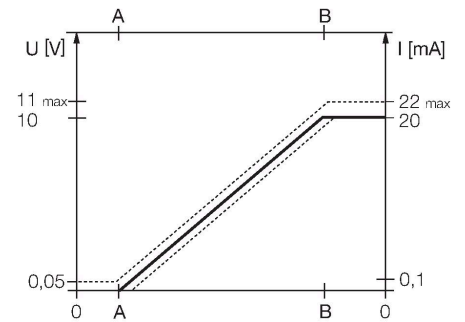


### Functional principle

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.

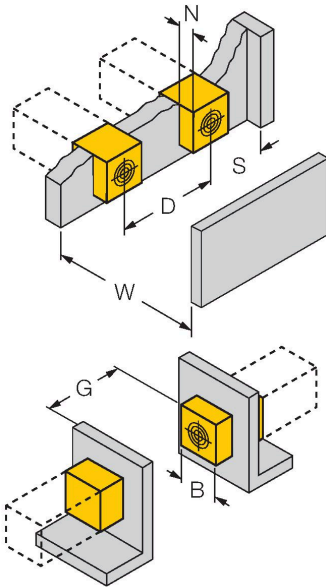
## Technical data

Mechanical data	
Design	Rectangular, CK40
Dimensions	65 x 40 x 40 mm
	variable orientation of active face in 5 directions
Housing material	Plastic, PBT-GF20-V0, Black
Active area material	Plastic, PA12-GF30, yellow
Electrical connection	Connector, M12 × 1
Environmental conditions	
Ambient temperature	-25...+70 °C
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
Included in delivery	BS1-CK40



## Mounting instructions

### Mounting instructions/Description

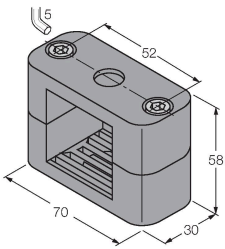


Distance D	120 mm
Distance W	75 mm
Distance S	120 mm
Distance G	150 mm
Distance N	1 × B
Width active area B	40 mm

Accessories

BSS-CP40 6901318

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



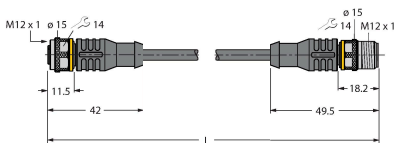
Accessories

Dimension drawing	Type	ID	
	RKC4.4T-2/TEL	6625013	Connection cable, M12 female connector, straight, 4-pin, cable length: 2 m, jacket material: PVC, black; cULus approval



RKC4.301T-0.15-RSC4.334T/TXL 6631382

Extension cable, M12 female/male, straight, 4-pin, cable length: 0.15m, jacket material: PUR, black; cULus approval; Adapter cable for sensors with analog output on pin 2, for connection to analog inputs of fieldbus modules with 4-wire technology



Accessories

Dimension drawing	Type	ID	
	IM43-13-SR	7540041	Trip amplifier; 1-channel; input 0/4... 20 mA or 0/2...10 V; supply of 2- or 3-wire transmitters/sensors; limit value adjustment via teach button; three relay outputs with one NO contact each; removable terminal blocks; 27 mm wide; universal voltage supply 20...250 VUC; further Limit value indicators are described in our "Interface Technology" catalog.

