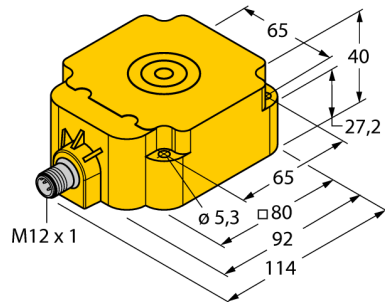


Inductive sensor with analog output NI50-Q80-LIU-H1141

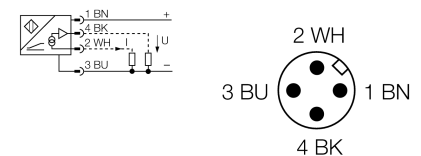
TURCK

Industrial
Automation



- Rectangular, height 40 mm
- Active face on top
- Plastic, PBT-GF30-V0
- Analog+
- Extended operating range
- 4-wire, 15...30 VDC
- Analog output
- 0...10 V and 0...20 mA
- M12 x 1 connector

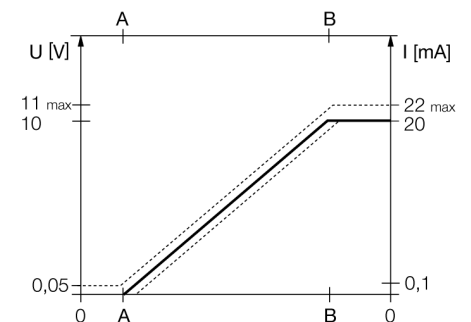
Wiring diagram



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.

Measuring range



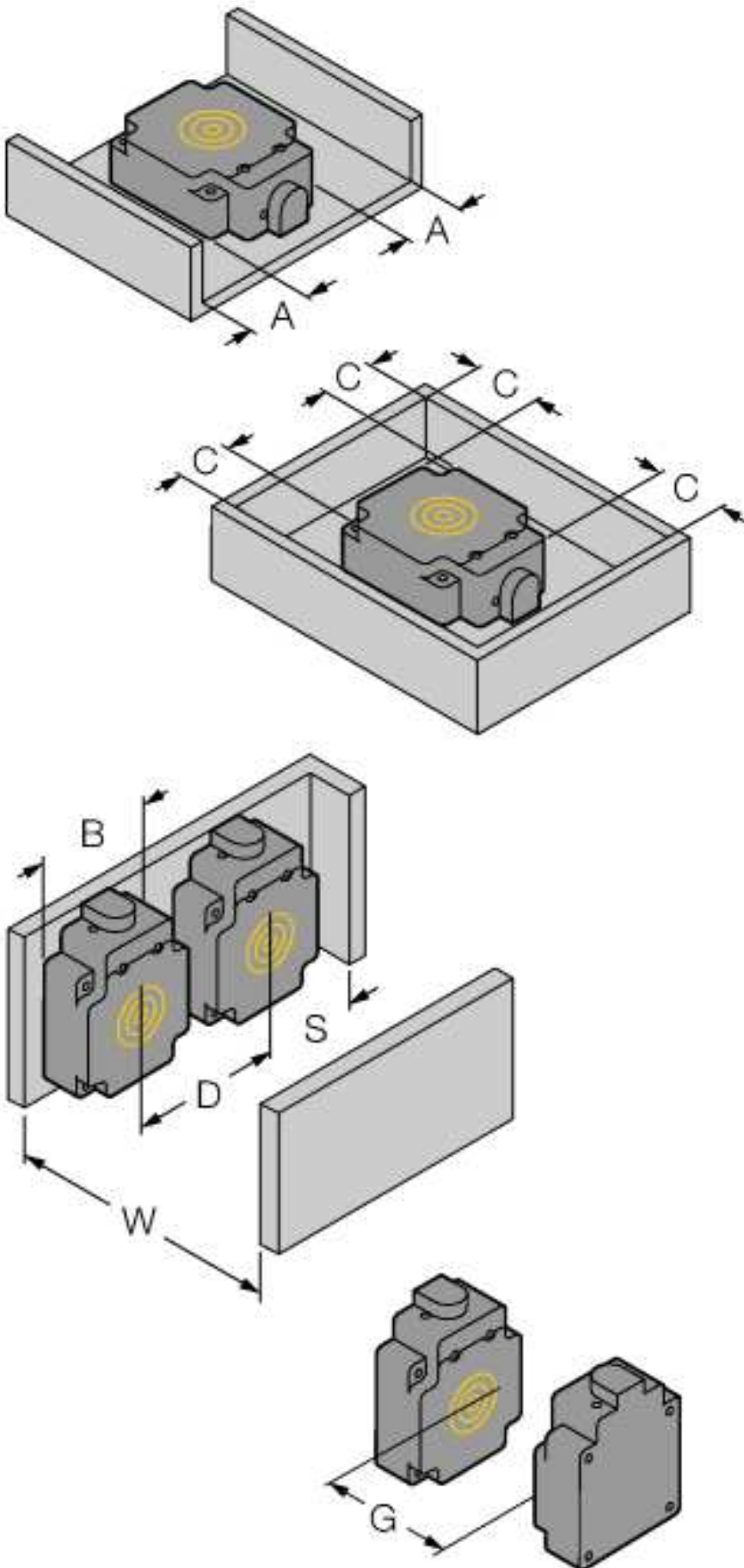
Type code	NI50-Q80-LIU-H1141
Ident no.	1535545
Measuring range [A...B]	10...50mm
Mounting condition	non-flush
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeatability	≤ 1 % of measuring range A - B
	≤ 0.5 %, after warm-up 0.5 h
Reproducibility	≤ 400 μm
	≤ 200 μm, after a warm-up time of 0.5 h
Linearity deviation	≤ 5 % of full scale
Temperature drift	≤ ± 0.06 % / K
Ambient temperature	-25...+70 °C
Operating voltage	15...30VDC
Residual ripple	≤ 10 % U _{ss}
No-load current I ₀	≤ 8 mA
Rated insulation voltage	≤ 0.5 kV
Short-circuit protection	yes
Wire breakage / Reverse polarity protection	yes/ complete
Output function	4-wire, Analog output
Voltage output	0...10V
Current output	0...20mA
Load resistance voltage output	≥ 4.7 kΩ
Load resistance current output	≤ 0.4 kΩ
Measuring sequence frequency	30 Hz
Design	rectangular, Q80
Dimensions	92x 80x 40 mm
Housing material	Plastic, PBT
Connection	male, M12 x 1
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

**Inductive sensor
with analog output
NI50-Q80-LIU-H1141**

Distance D	3 x B
Distance W	3 x Sn
Distance S	1.5 x B
Distance G	6 x Sn
Distance A	1 x B
Distance C	1 x B

Width of the active face B	80 mm
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Inductive sensor
with analog output
NI50-Q80-LIU-H1141



**Inductive sensor
with analog output
NI50-Q80-LIU-H1141**

Accessories

Type code	Ident no.	Description	Dimension drawing
IM43-13-SR	7540041	Limit value monitor; 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 monitors are described in our "Interface Technology" catalog.	