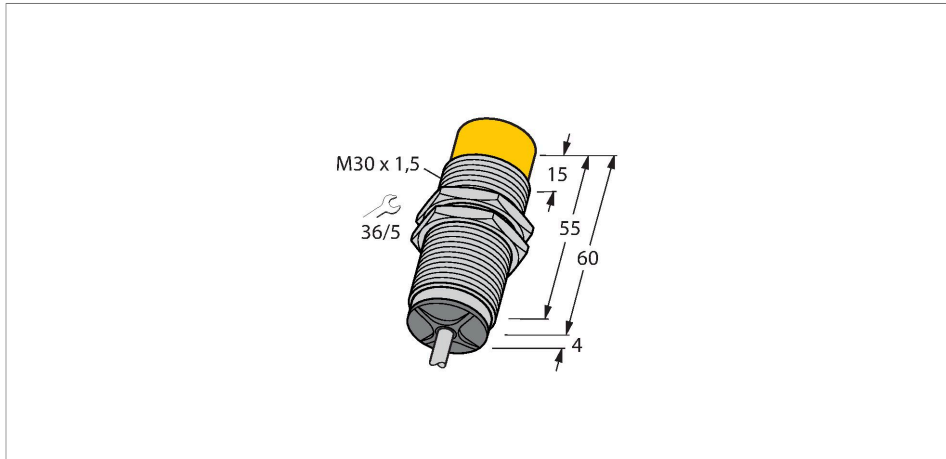


# NI15-EM30-LIU 7M

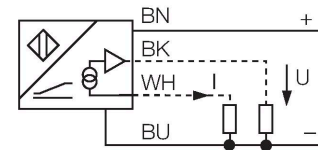
## Inductive Sensor – With Analog Output



### Features

- M30 × 1.5 threaded tube
- Stainless steel, 1.4301
- 4-wire, 15...30 VDC
- Analog output
- 0...10 V and 0...20 mA
- Cable connection

### Wiring diagram

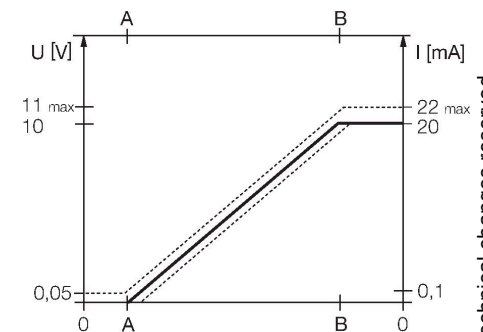


### Technical data

Type	NI15-EM30-LIU 7M
ID	1535608
<b>General data</b>	
Measuring range	2...12 mm
Rated switching distance	15 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	$\leq 100\ \mu\text{m}$ $\leq 50\ \mu\text{m}$ , after a warm-up time of 0.5 h
Linearity deviation	$\leq 3\%$
Temperature drift	$\leq \pm 0.06\ \%/K$
<b>Electrical data</b>	
Operating voltage	15...30 VDC
Residual ripple	$\leq 10\% U_{ss}$
No-load current	8 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

### 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.



NI15-EM30-LIU 7M | 11/07/2023 15-23 | technical changes reserved

## Technical data

Current output	0...20 mA
Load resistance voltage output	$\geq 4.7 \text{ k}\Omega$
Load resistance current output	$\leq 0.4 \text{ k}\Omega$
<b>Mechanical data</b>	
Design	Threaded barrel, M30 x 1.5
Dimensions	64 mm
Housing material	Stainless steel, 1.4301 (AISI 304)
Active area material	Plastic, PA12-GF30
End cap	Plastic, EPTR
Max. tightening torque of housing nut	75 Nm
Electrical connection	Cable
Cable quality	$\varnothing 5.2 \text{ mm}$ , Gray, LifYY, PVC, 7 m
Core cross-section	$4 \times 0.34 \text{ mm}^2$
<b>Environmental conditions</b>	
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

## Mounting instructions

### Mounting instructions/Description



Distance D      3 x B

Distance W      3 x Sn

Distance T      3 x B

Distance S      1.5 x B

Distance G      6 x Sn

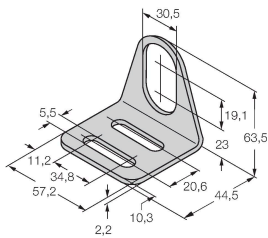
Distance N      2 x Sn

Diameter active  
area B      Ø 30 mm

## Accessories

MW-30

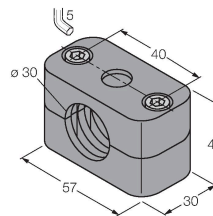
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Mounting bracket for threaded barrel sensors; material: Stainless steel A2 1.4301 (AISI 304)

BSS-30

6901319



Mounting clamp for smooth and threaded barrel sensors; material: Polypropylene