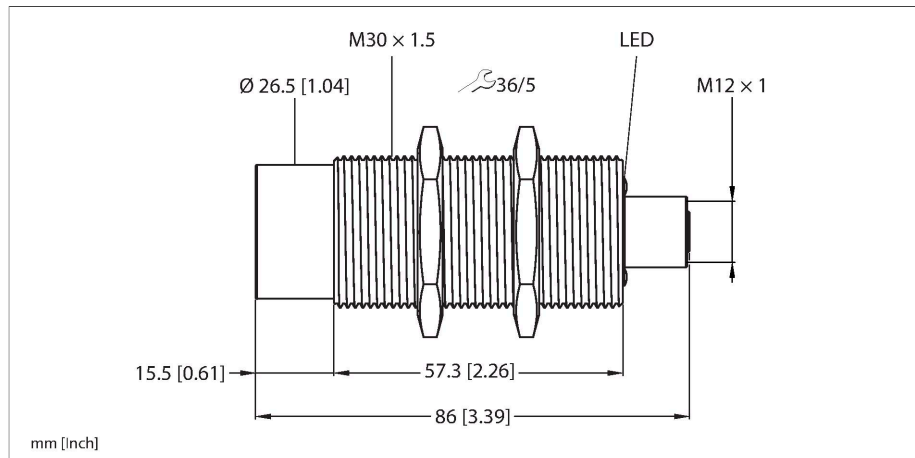


NICS-EM30-IOL-HK1141

Inductive coupler – Secondary Side



Technical data

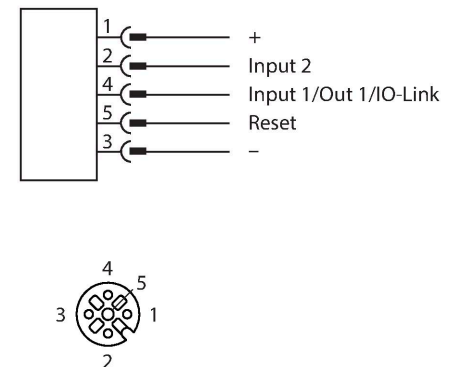
Type	NICS-EM30-IOL-HK1141
ID	100018259
max. transmission distance	7 mm
max. offset	5 mm
Maximum Angular Misalignment	15 °
General data	
Mounting conditions	Non-flush
Electrical data	
Operating voltage U_B	24 VDC
DC rated operating current I_o	≤ 750 mA
Short-circuit protection	yes
Wire break/reverse polarity protection	yes
Communication protocol	IO-Link
Output function	4-wire, PNP/NPN
Nominal transmission capacity	18 W
Input function	4-wire, PNP/NPN
IO-Link specification	V 1.1.1
Minimum cycle time	10 ms
Maximum cable length	20 m
Mechanical data	
Design	Threaded barrel, M30 x 1.5
Dimensions	86 mm
Housing material	Stainless steel, 1.4404 (AISI 316L)
Active area material	Plastic, LCP
Max. tightening torque of housing nut	40 Nm
Electrical connection	Connector, M12 x 1



Features

- Threaded barrel, M30 x 1.5
- Stainless steel, 1.4404
- IO-Link COM2 (38.4 kbps)
- IO-Link COM3 (230.4 kbps)
- DC 4-wire, 24 VDC
- 2 x PNP/NPN inputs or 1 x PNP/NPN output
- M12 x 1 female connector

Wiring diagram



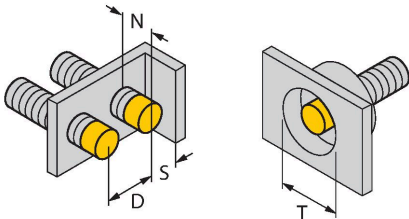
Functional principle

Inductive couplers are used for the noncontact transmission of power and data. With a high-frequency alternating field, power is transmitted at a frequency of 100...148.5 kHz and data at 2.4 GHz. The powered primary side NICP feeds the secondary side NICS via the air interface, and the secondary side transmits the data from sensors etc. back to the primary side.

Technical data

Environmental conditions	
Ambient temperature	-25...+55 °C
	Derating above 45 °C, see manual
Vibration resistance	55 Hz (1 mm)
Shock resistance	100 g (11 ms)
Protection class	IP67 IP68
MTTF	361 years acc. to SN 29500 (Ed. 99) 20 °C
Switching state	LED, Yellow

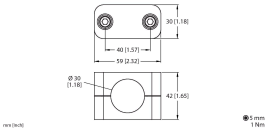
Mounting instructions

Mounting instructions/Description	
	Distance D
	60 mm
	Distance T
	60 mm
	Distance S
	30 mm
	Distance N
	26,5 mm
	Diameter active area B
	Ø 30 mm

Accessories

BSM-30

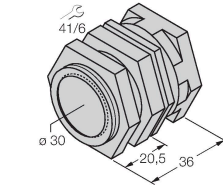
100047196



Mounting clip for inductive couplers, smooth and threaded barrel sensors; material: aluminum

QM-30

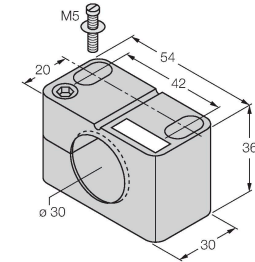
6945103



Quick-mount bracket with dead-stop; material: Chrome-plated brass. Male thread M36 × 1.5. Note: The switching distance of the proximity switches may change when using quick-mount brackets.

BST-30B

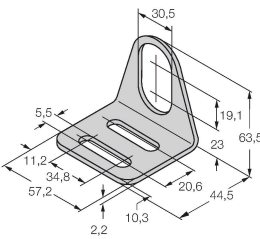
6947216



Mounting clamp for threaded barrel sensors, with dead-stop; material: PA6

MW30

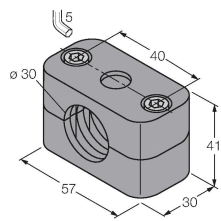
6945005



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

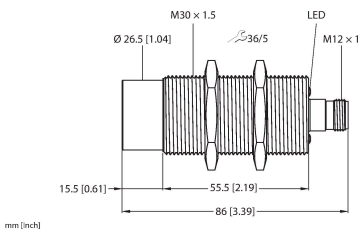
BSS-306901319

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



Accessories

Dimension drawing	Type	ID	
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NICP-EM30-IOL-H1141	100018258	Inductive coupler, primary side
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