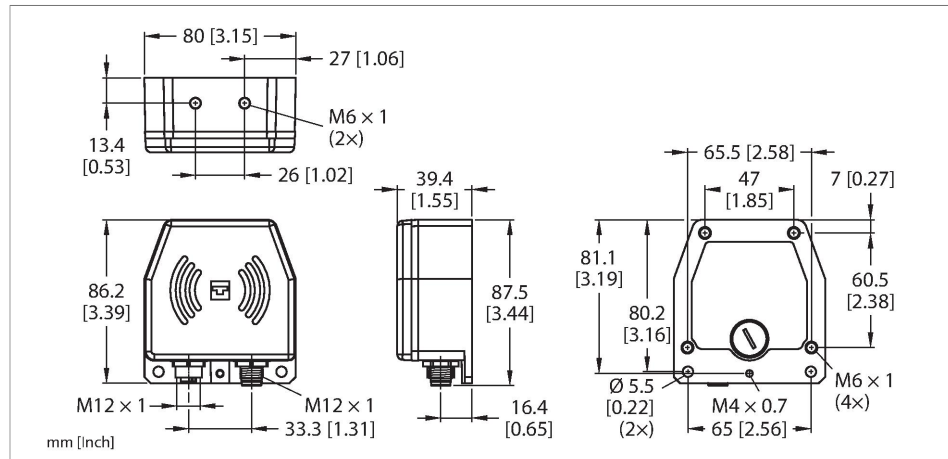


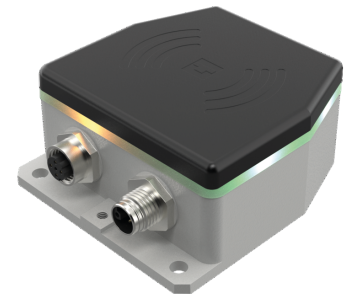
NICP-Q86-ETH-H1141

Inductive coupler – Primary Side



Technical data

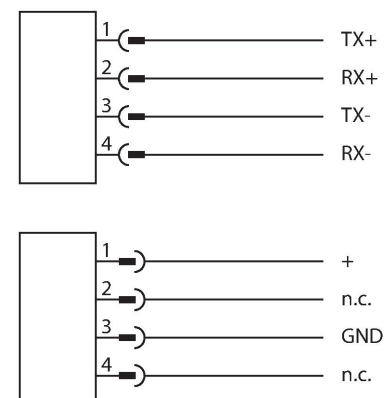
Type	NICP-Q86-ETH-H1141
ID	100050310
max. transmission distance	10 mm
max. offset	5 mm
Maximum Angular Misalignment	15 °
General data	
Mounting conditions	Non-flush
Electrical data	
Operating voltage U_b	19...30 VDC
DC rated operating current I_b	≤ 3700 mA
Short-circuit protection	yes
Nominal transmission capacity	50 W
Input function	Ethernet
Transmission rate Ethernet	10/100 Mbps
Protocol detection	automatic
Startup time (typ.)	2000 ms
Fast Startup/QuickConnect	450 ms
Mechanical data	
Design	Rectangular, Q86
Dimensions	86.2 x 80 x 39.4 mm
Housing material	Die-cast zinc
Active area material	Plastic, PBT
Electrical connection	M12 x 1, L-coded
Connection technology Ethernet	1 x M12, 4-pin, D-coded



Features

- Rectangular
- Metal housing, die-cast zinc
- Plastic cover, PBT
- Max. 10 mm transmission distance
- 100 Mbps, full duplex
- Latency < 1 µs
- Power IN: DC 2-wire, 24 VDC
- Power IN: male connector, M12 x 1 (L-coded)
- Data IN/OUT: Ethernet (protocol independent)
- Data IN/OUT: female connector, M12 x 1 (D-coded)

Wiring diagram



Functional principle

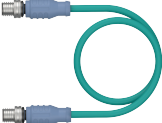
Inductive couplers are used for the noncontact transmission of power and data. With a high-frequency alternating field, power is transmitted

Technical data

at a frequency of 110...148.5 kHz and data at 60 GHz. The power-supplied primary part NICP supplies the secondary part NICS via the air interface, while full-duplex data communication can take place between the devices.

Environmental conditions	
Ambient temperature	-20...+55 °C
	Observe derating/heat dissipation, see manual
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP65
MTTF	126 years Acc. to SN 29500 (Ed. 99) 25 °C, duty cycle 21 %

Wiring accessories

Dimension drawing	Type	ID	
	RKP46PL-2-RSP46PL	UX11803	Extension cable, M12 female connector, straight, 4-pin, L-coded; M12 male connector, straight, 4-pin, L-coded; cable length: 2 m, jacket material: TPU, black
	PSU67-1P-1S-2L-24150-IOL-F	100028305	1-phase power supply unit in IP67, 24 VDC, 15-A output current with IO-Link
	PSU67-11-2440/M	6884141	Power supply unit in IP67, 24 VDC, 4 A output current
	RSSD-RSSD-441-2M	U-02482	Cable for Industrial Ethernet, M12 male connector, D-coded, straight to M12 male connector, straight, cable length: 2 m, jacket material: TPE, teal