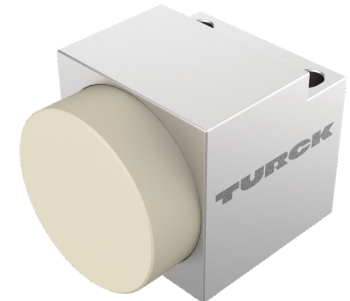
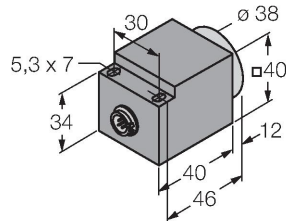


NI25-CQ40-L1131/S1102

Inductive Sensor – With Increased Temperature Range



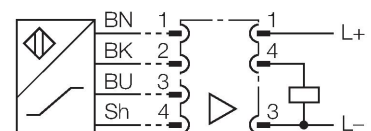
Technical data

Type	NI25-CQ40-L1131/S1102
ID	1602405
Special version	S1102 Corresponds to: Ambient temperature up to 250 °C
General data	
Rated switching distance	25 mm
Mounting conditions	Non-flush, partially embeddable
Secured operating distance	$\leq (0.81 \times S_n)$ mm
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeat accuracy	$\leq 2\%$ of full scale
Hysteresis	3...15 %
Electrical data	
Output function	NO contact, PNP
Mechanical data	
Design	Rectangular, CQ40
Dimensions	52 x 40 x 40 mm
Housing material	Plastic, AL
Active area material	PEEK
Electrical connection	Connector
Environmental conditions	
Ambient temperature	0...+250 °C
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP50
MTTF	1437 years acc. to SN 29500 (Ed. 99) 40 °C

Features

- Rectangular, height 40 mm
- Sensor housing, Aluminium
- Plastic, PEEK
- Temperatures up to +250 °C
- Functions only with signal processor EM30-AP6X2-H1141/S1102 as well as high-temperature connecting cable HTC1102 * M
- Switchpoint adjusted at the processing unit
- 3-wire connection to the processor

Wiring diagram

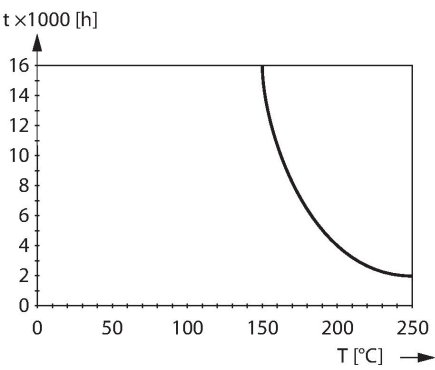


Functional principle

The sensors must be operated with an EM30-AP6X2-H1141/S1102 signal processor. The switching distance is set using a potentiometer (continuous) on the signal processor. This is located under a cover screw next to the LED. Where possible, the switching distance must be set at operating temperature. When setting the switching distance at room temperature, the temperature sensitivity of the sensor system must be taken into account.

Setting:

1. Place the target (steel, min. 1 mm thick, square, edge length min. 3x rated switching distance) at a safe switching distance in front of the sensor
2. Turn the potentiometer counterclockwise until the LED lights up green
3. Turn the potentiometer clockwise until the LED lights up yellow
4. Perform functional checks in the operating state



Mounting instructions

Mounting instructions/Description

Distance D	3 x B
Distance W	3 x Sn
Distance S	1.5 x B
Distance G	6 x Sn
Distance N	2 x Sn
Width active area B	38 mm

1-side mounting on metal without modification of the switching distance

Accessories

EM30-AP6X2-H1141/S1102

1602411

Signal processor for 250 °C sensor; housing material: Stainless steel 1.4571; protection class: IP67; function display: LED/yellow; operating voltage display: LED/green; ambient temperature: -20...+70 °C

HTC1102 10M

1602407

High-temperature extension cable with aluminum protective sleeve, 10 m; up to 250 °C ambient temperature