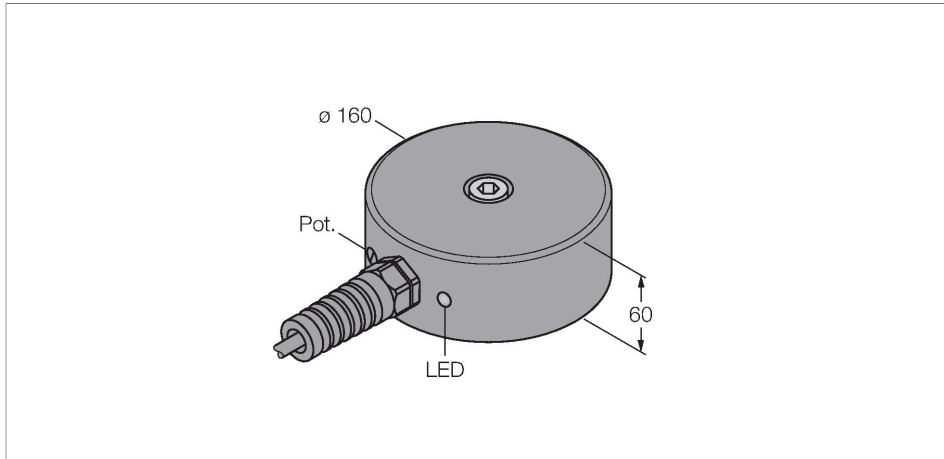


NI100-Q160-AP44X/S120

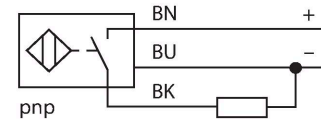
Inductive Sensor – With Increased Temperature Range



Features

- Ø 160 mm, height 60 mm
- Active face on top
- Plastic, PPO
- Sensitivity adjusted via potentiometer
- S120 = Temperatures up to +120 °C
- DC 3-wire, 10...55 VDC
- NO contact, PNP output
- Cable connection

Wiring diagram

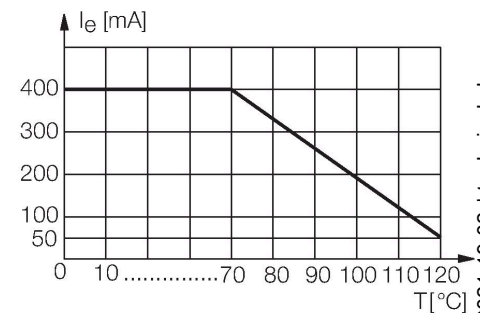


Technical data

Type	NI100-Q160-AP44X/S120
ID no.	1440012
Special version	S120 corresponds to: Maximum ambient temperature = 120 °C
Rated switching distance	100 mm
Mounting conditions	Non-flush
Secured operating distance	≤ (0.81 × S _n) mm
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeat accuracy	≤ 2 % of full scale
Temperature drift	≤ ± 10 % ≤ ± 20 %, ≥ +70 °C
Hysteresis	3...15 %
Ambient temperature	-25...+120 °C
Operating voltage	10...55 VDC
Residual ripple	≤ 10 % U _{ss}
DC rated operational current	≤ 400 mA
No-load current	≤ 20 mA
Residual current	≤ 0.1 mA
Isolation test voltage	≤ 0.5 kV
Short-circuit protection	yes / Cyclic
Voltage drop at I _o	≤ 2 V
Wire breakage/Reverse polarity protection	yes / Complete
Output function	3-wire, NO contact, PNP
Switching frequency	0.05 kHz

Functional principle

Inductive sensors detect metal objects contactless and wear-free. For this purpose they use a high-frequency electromagnetic AC field that interacts with the target. The sensors hosting a ferrite core coil generate the AC field through an LC resonant circuit. Special versions are available for ambient temperatures between -60°C and +250°C.

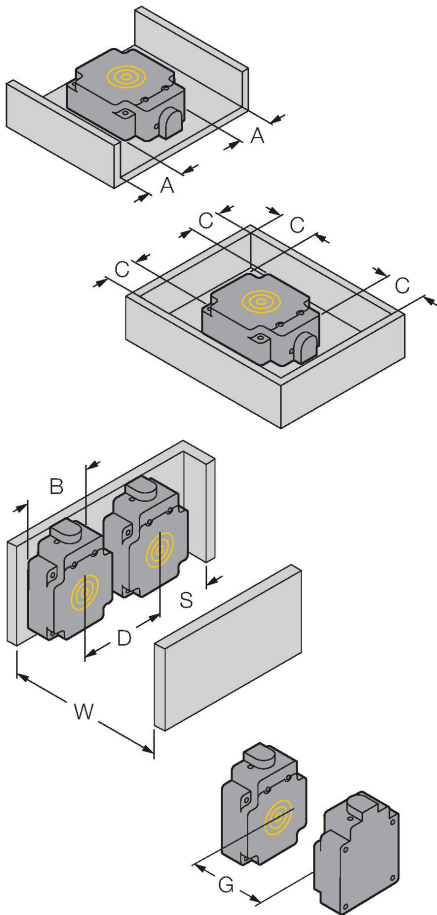


Technical data

Design	Rectangular, Q160
Dimensions	160 x 160 x 60 mm
Housing material	Plastic, PPO, Black
Active area material	PPO, black
Electrical connection	Cable
Cable quality	Ø 6 mm, SiHSi, Silicone, 2 m
Core cross-section	3 x 0.75 mm ²
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP67
Switching state	LED, Yellow
Included in delivery	plastic mounting screw, hexagonal, M16 x 2

Mounting instructions

Mounting instructions/Description



Distance D	$3 \times B$
Distance W	$3 \times Sn$
Distance S	$1.5 \times B$
Distance G	$6 \times Sn$
Distance N	$2 \times Sn$
Distance A	$1 \times Sn$
Distance C	$2 \times Sn$
Width active area B	160 mm