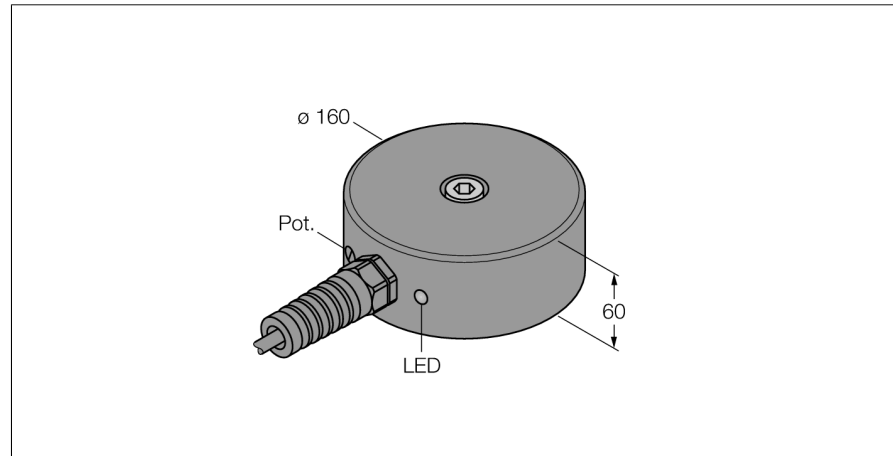
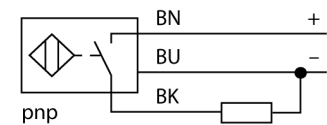


**Inductive sensor
with extended temperature range
NI100-Q160-AP44X/S120**



- Ø160 mm, height 60 mm
- Active face on top
- Plastic, PPO
- Sensitivity adjusted via potentiometer
- For temperatures up to +120°C
- 3-wire DC, 10...55 VDC
- NO contact, PNP output
- Cable connection

Wiring diagram

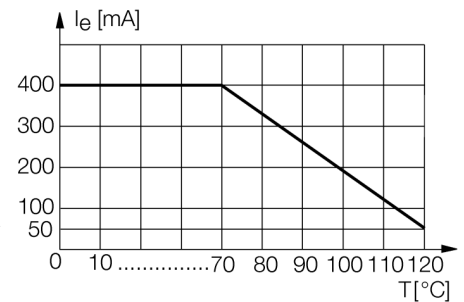


Functional principle

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.

derating curve



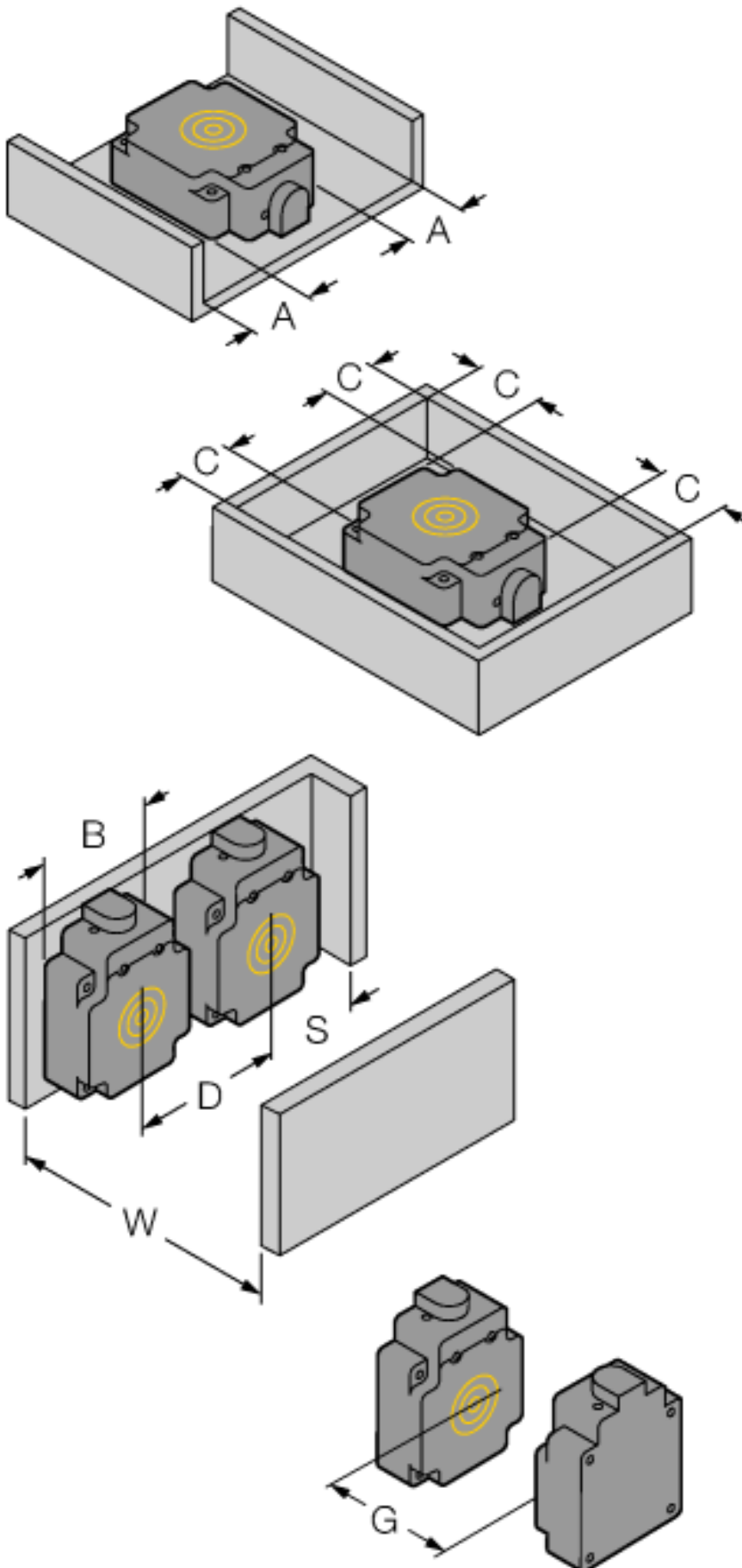
Type code	NI100-Q160-AP44X/S120
Ident no.	1440012
Rated operating distance Sn	100 mm
Mounting condition	non-flush
Assured sensing range	≤ (0,81 x Sn) mm
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeatability	≤ 2 % of full scale
Temperature drift	10 %
	≤ ± 20 %, ≥ +70 °C
Hysteresis	3...15 %
Ambient temperature	-25...+120 °C
Operating voltage	10...55VDC
Residual ripple	≤ 10 % U _{in}
DC rated operational current	≤ 400 mA
No-load current I ₀	≤ 20 mA
Residual current	≤ 0.1 mA
Rated insulation voltage	≤ 0.5 kV
Short-circuit protection	yes/ cyclic
Voltage drop at I ₀	≤ 2 V
Wire breakage / Reverse polarity protection	yes/ complete
Output function	3-wire, NO contact, PNP
Switching frequency	0.05 kHz
Design	rectangular, Q160
Dimensions	160 x 60 mm
Housing material	plastic, PPO, black
Connection	cable
Cable quality	6 mm, SiHSi, Silicone, 2 m
Cable 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 scope of supply	plastic mounting screw, hexagonal, M16 x 2

**Inductive sensor
with extended temperature range
NI100-Q160-AP44X/S120**

Distance W	3 x Sn
Distance S	1.5 x B
Distance G	6 x Sn
Distance N	2 x Sn
Distance A	1 x Sn
Distance C	2 x Sn

Width of the active face B	160 mm
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Inductive sensor
with extended temperature range
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**Inductive sensor
with extended temperature range
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