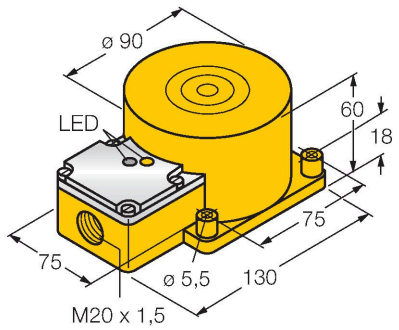
NI100U-K90SR-VP4X2/S977
Inductive sensor



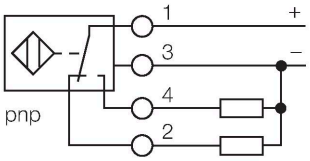
Technical data

Type	NI100U-K90SR-VP4X2/S977
Ident. no.	1515502
Rated switching distance	115 mm
Mounting conditions	Non-flush, partially embeddable
Secured operating distance	≤ (0,81 x Sn) mm
Repeat accuracy	≤ 2 % of full scale
Temperature drift	≤ ± 10 %
Hysteresis	3…15 %
Ambient temperature	0…+50 °C
Operating voltage	10…65 VDC
Residual ripple	≤ 10 % U_{ss}
DC rated operational current	≤ 200 mA
No-load current	≤ 15 mA
Residual current	≤ 0.1 mA
Isolation test voltage	≤ 0.5 kV
Short-circuit protection	yes / Cyclic
Voltage drop at I_e	≤ 1.8 V
Wire breakage/Reverse polarity protection	yes / Complete
Output function	4-wire, Complementary contact, PNP
Insulation class	⧈
Switching frequency	0.25 kHz
Design	Rectangular, K90SR
Dimensions	130 x 75 x 60 mm
Housing material	Plastic, PBT-GF30-V0
Active area material	PBT-GF30-V0
Electrical connection	Terminal chamber
Clamping ability	≤ 2.5 mm²

Features

- Rectangular, height 60 mm
- Plastic, PBT-GF30-V0
- Factor 1 for all metals
- Increased switching distance
- Protection class IP68
- Resistant to magnetic fields
- DC 4-wire, 10…65 VDC
- Changeover contact, PNP output
- Terminal chamber

Wiring diagram



Functional principle

Inductive sensors detect metal objects contactless and wear-free. Due to the patented multi-coil system, *uprox*®+ sensors have distinct advantages over conventional sensors. They excel in largest switching distances, maximum flexibility and operational reliability as well as efficient standardization.

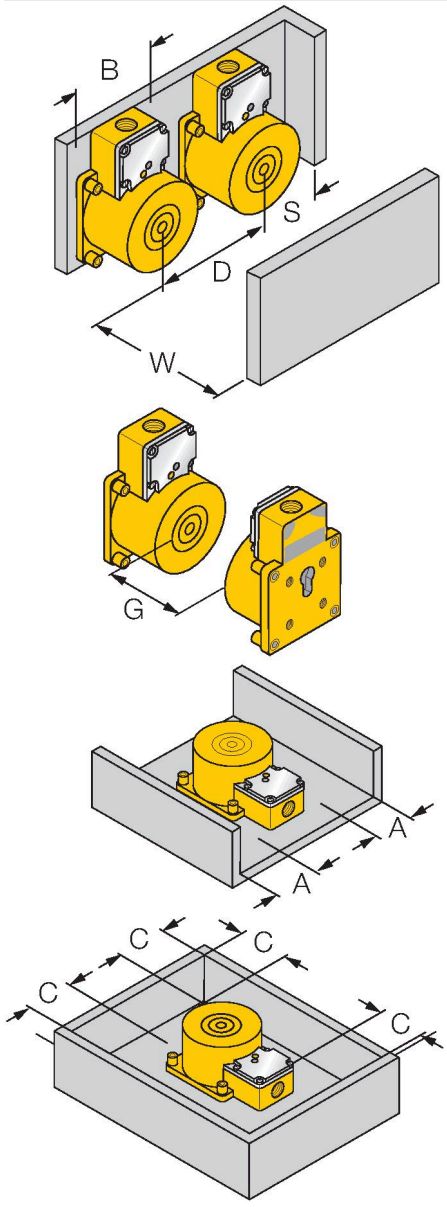
NI100U-K90SR-VP4X2/S977| 07-02-2020 08-19 | Technical modifications reserved

Technical data

Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP68
MTTF	874 years acc. to SN 29500 (Ed. 99) 40 °C
Power-on indication	LED,Green
Switching state	LED, Yellow
Included in delivery	cable gland

Mounting instructions

Mounting instructions/Description



Distance D	3 x B
Distance W	3 x Sn
Distance S	1 x B
Distance G	6 x Sn
Distance A	1 x Sn
Distance C	2 x Sn
Width active area B	90 mm

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