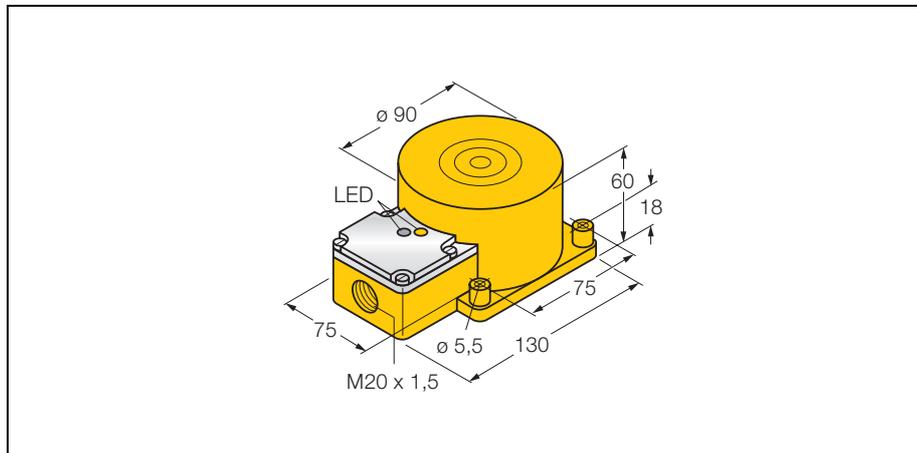
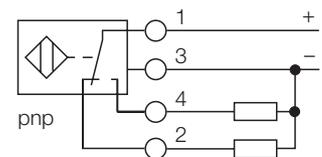


**Inductive sensor
extended switching distance
Ni100U-K90SR-VP4X2**



- rectangular, height 60 mm
- plastic, PBT-GF30-V0
- factor 1 for all metals
- extended switching distance
- magnetic field immune
- extended temperature range
- high switching frequency
- predamping protection through self-compensation
- 4-wire DC, 10...65 VDC
- SPDT, pnp output
- terminal chamber

Wiring diagram



Function principles

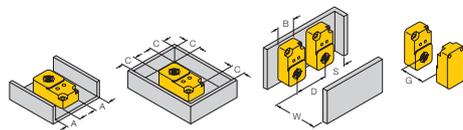
Inductive proximity switches are designed for wear-free non-contact detection of metal objects. Due to a ferrite-less 3-coil system, Uprox factor 1 sensor have distinct advantages. The detect all metals at the same switching distance, are magnetic field immune and feature large switching distances.

Type	Ni100U-K90SR-VP4X2
Ident-No.	1625834
Rated operating distance S_n	100 mm
Mounting mode	non-flush, partial flush mountable
Hysteresis (switching distance)	3... 15 %
Min. repeat accuracy	≤ 2 %
Temperature drift	≤ ± 10 %
Operating temperature	≤ ± 15 %, ≤ -25 °C v ≥ +70 °C -30 ...+ 85 °C
Rated operational voltage (DC) U_B	10... 65 VDC
Max. ripple	≤ 10 % U_{pp}
Rated operational current (DC) I_e	≤ 200 mA
No-load current I_0	≤ 15 mA
Max. OFF-state current	≤ 0,1 mA
Max. switching frequency	≤ 0,25 kHz
Rated insulation voltage	≤ 0,5 kV
Output function	4-wire, complementary, PNP
Short-circuit protection	yes, cyclic
Max. voltage drop at I_e	≤ 1,8 V
Wire breakage / reverse polarity protection	yes / complete
Protection class	☐
Housing style	rectangular; K90SR
Dimensions	130 x 75 x 60 mm
Housing material	plastic, PBT-GF30-V0
Active face	plastic, PBT-GF30-V0
Wiring	terminal chamber
Clamping ability	≤ 2,5 mm ²
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 x g (11 ms)
Degree of protection	IP67
Supply voltage indication	LED green
Switching status indication	LED yellow

Inductive sensor extended switching distance Ni100U-K90SR-VP4X2

Mounting instructions	minimum gap
Gap D	3 x B
Gap W	3 x Sn
Gap S	1 x B
Gap G	6 x Sn
Gap N	2 x Sn
Gap A	1 x Sn
Gap C	2 x Sn

Width of active face B	90 mm
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1-side flush mounting possible
1-side flush mounting: $S_r = 70 \text{ mm}$