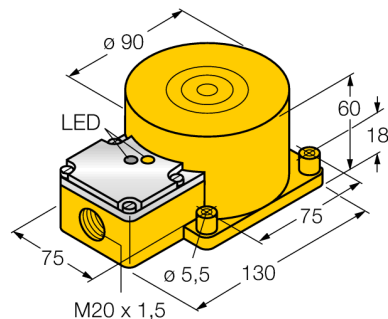


Inductive sensor NI60-K90SR-VP4X2

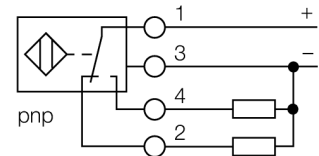
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- Rectangular, height 60 mm
- Plastic, PBT-GF30-V0
- DC 4-wire, 10...65 VDC
- Changeover contact, PNP output
- Terminal chamber

Wiring diagram



Functional principle

Inductive sensors detect metal objects contactless and wear-free. 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.

| | |
|---|---|
| Type code | NI60-K90SR-VP4X2 |
| Ident no. | 15640 |
| Rated operating distance Sn | 60 mm |
| Mounting condition | non-flush |
| Assured sensing range | $\leq (0,81 \times S_n)$ mm |
| Correction factors | St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4 |
| Repeatability | $\leq 2\%$ of full scale |
| Temperaturdrift | 10 % |
| Hysteresis | 3...15 % |
| Ambient temperature | -25...+70 °C |
| Operating voltage | 10...65VDC |
| Residual ripple | $\leq 10\% U_{ss}$ |
| DC rated operational current | ≤ 200 mA |
| No-load current I_0 | ≤ 15 mA |
| Residual current | ≤ 0.1 mA |
| Rated insulation voltage | ≤ 0.5 kV |
| Short-circuit protection | yes |
| Voltage drop at I_0 | ≤ 1.8 V |
| Wire breakage / Reverse polarity protection | yes/ complete |
| Output function | 4-wire, changeover contact, PNP |
| Switching frequency | 0.06 kHz |
| Design | rectangular, K90SR |
| Dimensions | 130x 75x 60 mm |
| Housing material | Plastic, PBT |
| Connection | Terminal chamber |
| Clamping ability | ≤ 2.5 mm ² |
| Vibration resistance | 55 Hz (1 mm) |
| Shock resistance | 30 g (11 ms) |
| Protection class | IP67 |
| MTTF | 2283 years acc. to SN 29500 (Ed. 99) 40 °C |
| Operating voltage | LED green |
| Switching state | ● yellow |
| Included in scope of supply | cable gland |

Inductive sensor NI60-K90SR-VP4X2

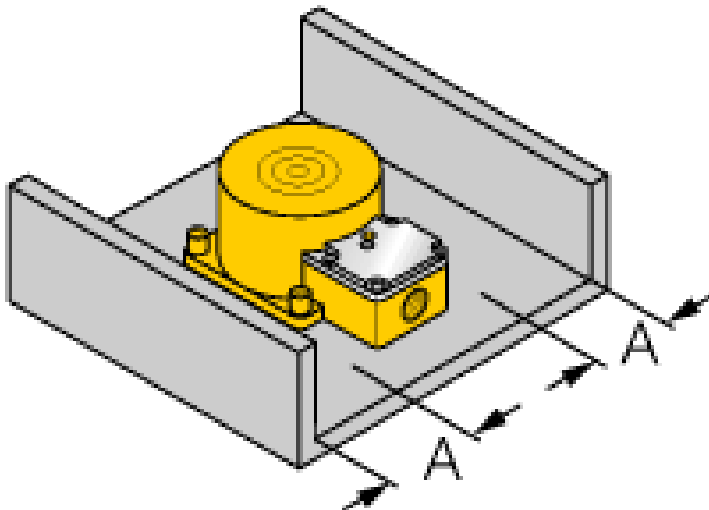
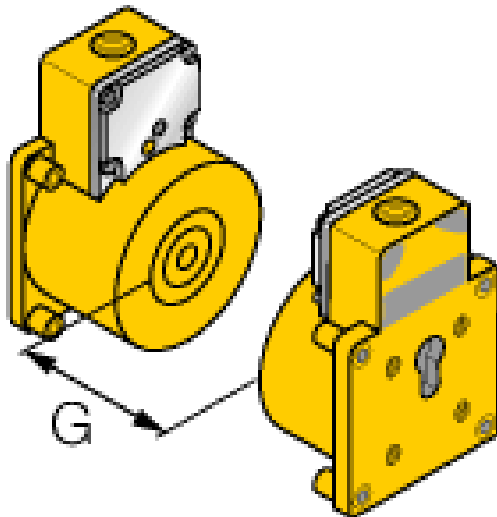
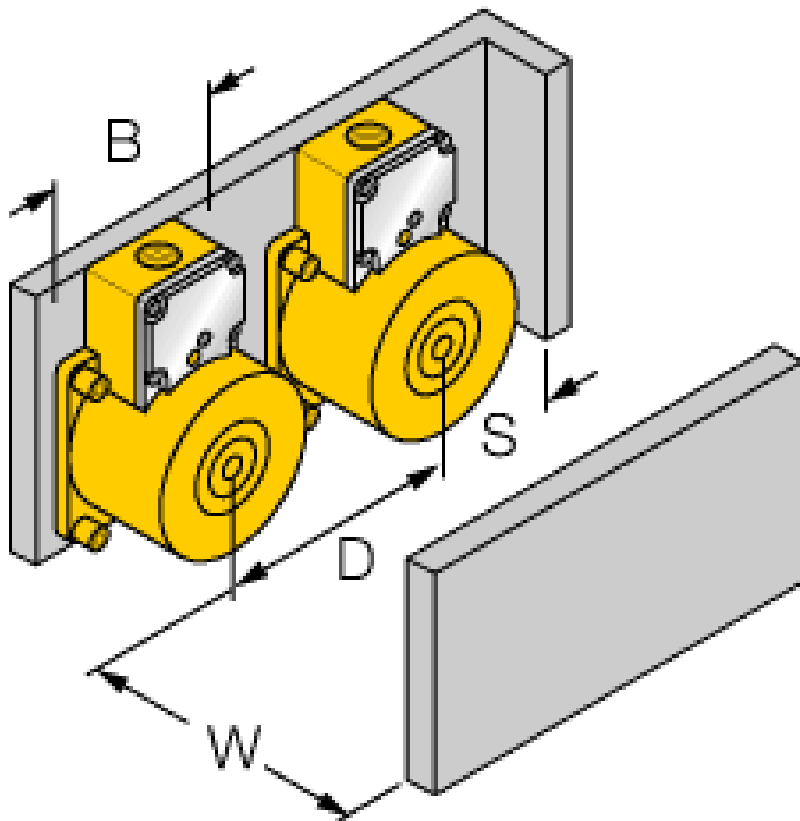
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| | |
|-------------------|---------|
| Distance D | 3 x B |
| Distance W | 3 x Sn |
| Distance S | 1.5 x B |
| Distance G | 6 x Sn |
| Distance A | 1 x Sn |
| Distance C | 2 x Sn |

| | |
|-----------------------------------|-------|
| Width of the active face B | 90 mm |
|-----------------------------------|-------|

Inductive sensor
NI60-K90SR-VP4X2



**Inductive sensor
NI60-K90SR-VP4X2**

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