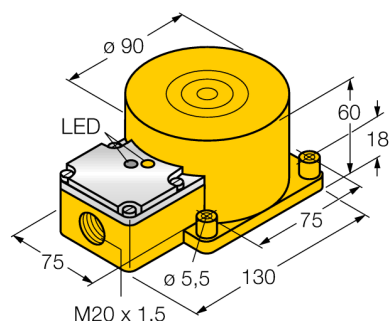
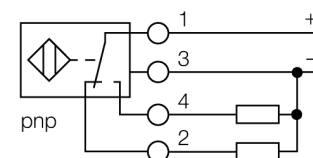




- Rectangular, height 60 mm
- Plastic, PBT-GF30-V0
- Factor 1 for all metals
- Increased switching distance
- Protection class IP68
- Resistant to magnetic fields
- Extended temperature range
- Auto-compensation protects against pre-attenuation
- One-sided fitting possible
- DC 4-wire, 10...65 VDC
- Changeover contact, PNP output
- Terminal chamber

|                                           |                                                               |
|-------------------------------------------|---------------------------------------------------------------|
| <b>Type designation</b>                   | NI100U-K90SR-VP4X2                                            |
| Ident-No.                                 | 1625834                                                       |
| <b>Rated switching distance Sn</b>        | 100 mm                                                        |
| Mounting conditions                       | Non-flush, partially embeddable                               |
| Secured operating distance                | $\leq (0,81 \times S_n)$ mm                                   |
| Repeat accuracy                           | $\leq 2\%$ of full scale                                      |
| Temperature drift                         | $\leq \pm 10\%$                                               |
| Hysteresis                                | $\leq \pm 15\%$ , $\leq -25\text{ °C}$ v $\geq +70\text{ °C}$ |
| Ambient temperature                       | -30...+85 °C                                                  |
| <b>Operating voltage</b>                  | 10...65 VDC                                                   |
| Residual ripple                           | $\leq 10\% U_{ss}$                                            |
| DC rated operational current              | $\leq 200\text{ mA}$                                          |
| No-load current $I_0$                     | $\leq 15\text{ mA}$                                           |
| Residual current                          | $\leq 0,1\text{ mA}$                                          |
| Isolation test voltage                    | $\leq 0,5\text{ kV}$                                          |
| Short-circuit protection                  | yes                                                           |
| Voltage drop at $I_0$                     | $\leq 1,8\text{ V}$                                           |
| Wire breakage/Reverse polarity protection | yes/ Complete                                                 |
| Output function                           | 4-wire, Complementary contact, PNP                            |
| Protection class                          | IP68                                                          |
| Switching frequency                       | 0.25 kHz                                                      |
| <b>Design</b>                             | Rectangular, K90SR                                            |
| Dimensions                                | 130 x 75 x 60 mm                                              |
| Housing material                          | Plastic, PBT-GF30-V0                                          |
| Electrical connection                     | Terminal chamber                                              |
| Clamping ability                          | $\leq 2,5\text{ mm}^2$                                        |
| 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                     |
| <b>Power-on indication</b>                | LED, Green                                                    |
| Switching state                           | LED, Yellow                                                   |
| Included in delivery                      | cable gland                                                   |

#### Wiring Diagram

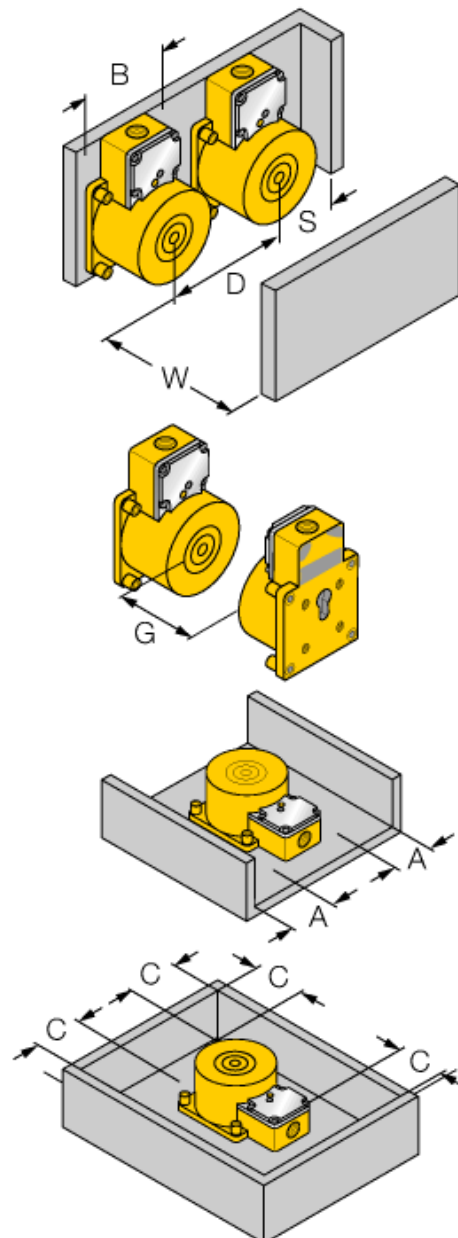


#### Functional principle

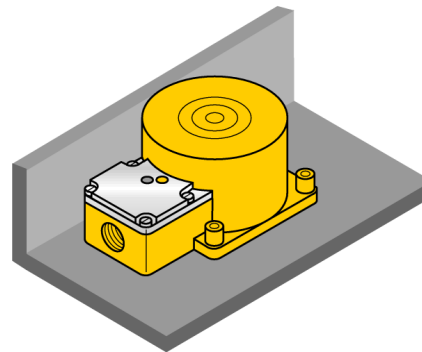
Inductive sensors detect metal objects contactless and wear-free. Due to the patented multi-coil system, *uprox®* sensors have distinct advantages over conventional sensors. They excel in largest switching distances, maximum flexibility and operational reliability as well as efficient standardization.

|            |        |
|------------|--------|
| 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 |
|---------------------|-------|



1-side flush mounting



1-side mounting:

Sr = 70 mm