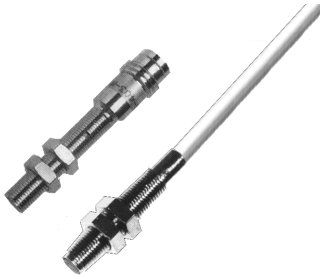
1.1

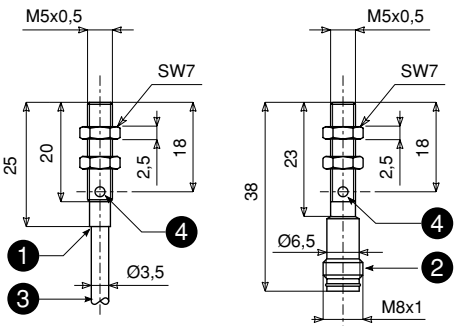
## SERIE PD



**Miniature inductive proximity sensors M5 - DC**

- **Extremely reduced dimensions**
- **Metal housing**
- **Axial cable exit and miniature M8 plug cable exit**
- **LED status indicator**
- **IP67 protection degree**
- **Complete protection against electrical damages**

## DIMENSIONAL DRAWING



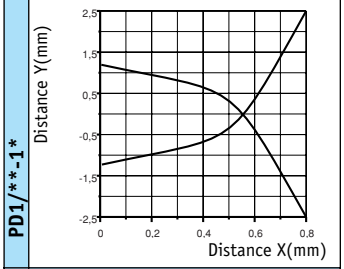

PD1/**-1A PD1/**-1F

### Key

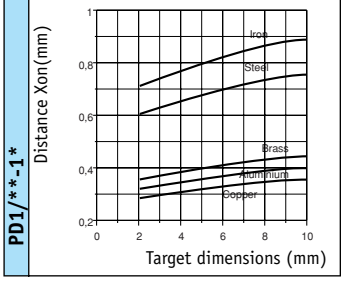
| | |
|---|---|
| 1 | Axial cable exit |
| 2 | M8 miniature plug cable exit |
| 3 | Cable 3x0,14mm², Ø3,5mm, PVC, 2m |
| 4 | LED status indicator (NO output energized) |
| | Connectors **CD** serie |

## CHARACTERISTIC CURVES

### Detection area




### Distance / target size




## ORDERING SYSTEM

**P D 1 / A N - 1 A**

| | | | |
|---|---|---|---|
| serie | | cable exit | |
| miniature inductive proximity sensors | PD1 | A | axial cable exit |
| output state | | F | M8 miniature plug cable exit |
| NO output state | A | sensing range | |
| NC output state | C | 1 | standard shielded 0,8mm |
| | | logic | |
| | | N | NPN output |
| | | P | PNP output |

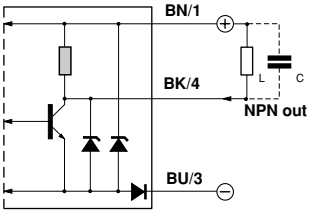
## SPECIFICATIONS

| Model | PD1/**-1A | PD1/**-1F |
|---|---|---|
| **Nominal sensing distance Sn** (1) | 0,8mm | |
| Operating distance | 0...0,65mm (shielded) | |
| Differential travel | 10% Typ | |
| Repeat accuracy | 1,5% | |
| **Operating voltage** | 10-30Vdc | |
| Ripple | ≤ 20% | |
| No-load supply current | 10mA | |
| **Load current** | ≤ 200mA | |
| Leakage current | ≤ 10µA | |
| Voltage drop | 2V max. $I_L$=200mA | |
| **Output type** | NPN or PNP<br>NO or NC | |
| Switching frequency | 5KHz | |
| Time delay before availability | 10ms | |
| **Supply electrical protections** | polarity reversal, transient | |
| Output electrical protections | short circuit (autoreset) | |
| **Temperature range** | -25°...+70°C | |
| Temperature drift | 10% Sr | |
| **Protection degree (DIN 40 050)** | IEC IP67 | |
| LED indicators | Yellow (NO output energized) | |
| **Housing material** | stainless steel | |
| Sensing face material | PBT | |
| Tightening torque | 1,5Nm | |
| Weight (approx.) | 43g | 10g |

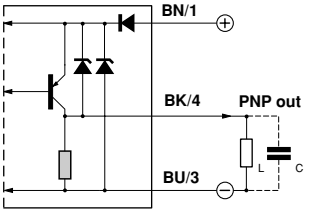
(1) with 5x5mm FE360 target.

## WIRING DIAGRAMS

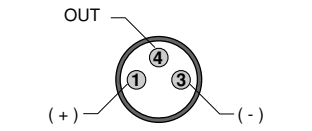
### NPN output




### PNP output




The max. admissible capacity C = 200nF for max. output voltage and current.

## CONNECTORS

### M8 (F type)