



Flat shape inductive sensor in compact plastic housing

The TL-W family offers a wide range of block style inductive sensors for simple mounting on flat surfaces. With sensing distances from 1.5 mm to 20 mm the TL-W is the ideal solution for all standard applications.

- IP67
- DC 2-wire and DC 3-wire models
- Sensing distances from 1.5 mm to 20 mm
- Side facing sensing face

Ordering information

DC 2-wire models

| Size in mm (HxWxD) | | | Sensing distance | Order code (for pre-wired types with 2 m cable length) | |
|-----------------------|---|---|------------------|--|-------------------|
| | | | | Operation mode NO | Operation mode NC |
| 31x18x10 | — | ■ | 5 mm | TL-W5MD1 | TL-W5MD2 |

DC 3-wire models

| Size in mm (HxWxD) | | | Sensing distance | Order code (for pre-wired types with 2m cable length) | | | |
|-----------------------|---|---|------------------|---|----------|------------|-----------|
| | | | | PNP-NO | PNP-NC | NPN-NO | NPN-NC |
| 25x8x5 | — | ■ | 1.5 mm | TL-W1R5MB1 | — | TL-W1R5MC1 | — |
| 22x8x6 | | | 3 mm | TL-W3MB1 | TL-W3MB2 | TL-W3MC1 | TL-W3MC2 |
| 31x18x10 | | | 5 mm | TL-W5MB1 | TL-W5MB2 | TL-W5MC1 | TL-W5MC2 |
| 53x40x23 | | | 20 mm | — | — | TL-W20ME1 | TL-W20ME2 |
| 31x18x10 | ■ | — | 5 mm | TL-W5F1 | TL-W5F2 | TL-W5E1 | TL-W5E2 |

Specifications

| Item | TL-W5MD_ | TL-W1R5M_1 | TL-W3M_ | TL-W5M_ | TL-W5E_/F_ | TL-W20ME_ |
|--|--|--|-------------|-------------|--|--|
| Sensing distance | 5 mm ±10% | 1.5 mm ±10% | 3 mm ±10% | 5 mm ±10% | | 20 mm ±10% |
| Response frequency | 0.5 kHz | 1 kHz min. | 600 Hz min. | 500 Hz min. | 300 Hz min. | 40 Hz min. |
| Power supply voltage (operating voltage) | 12 to 24 VDC (10 to 30 VDC) ripple (p-p): 10% max. | | | | 10 to 30 VDC with a ripple (p-p) of 20% max. | 12 to 24 VDC (10 to 30 VDC) ripple (p-p): 10% max. |
| Protective circuit | Surge absorber; short-circuit protection | Surge suppressor; power supply reverse polarity protection | | | | |
| Ambient temperature | Operating/Storage: -25 to 70°C (with no icing or condensation) | | | | | |
| Degree of protection | IEC60529 IP67 | | | | | |
| Material | Case | Heat-resistant ABS resin | | | Diecast aluminum | Heat-resistant ABS resin |
| | Sensing surface | Heat-resistant ABS resin | | | | |

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| General purpose | Food, Beverage and Pharma | Automotive | Semiconductor | Material handling | Accessories |
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