# M12 Cylindrical Inductive Proximity Sensor

BIDS-M12-F4.0-F6.0-S124-S series · Operating Voltage: 10...30VDC(±10%) · Switching Freq.: 3000Hz / 800Hz

**IP67**
Ingress Protection



①②



③④

## KEY SPECIFICATIONS

| | |
|---|---|
| OPERATING VOLTAGE<br>**10...30VDC(±10%)** | SWITCHING FREQ.<br>**3000Hz / 800Hz** |
| AMBIENT TEMP.<br>**-25...70°C** | HOUSING<br>**M12*1mm** |
| INGRESS PROTECTION<br>**IP67** | |

FEATURES

- Flush mounting
- Middle and long distance detection
- Multiple connection options available

## MODEL CODES

| Output Type | ① | ② | ③ | ④ |
|---|---|---|---|---|
| NPN N.O | **BIDS-M12-N11F4.0-S124**<br>SKU 10103541 | **BIDS-M12-N11F6.0-S124**<br>SKU 10103585 | **BIDS-M12-N11F4.0-S124-S**<br>SKU 10103545 | **BIDS-M12-N11F6.0-S124-S**<br>SKU 10103589 |
| NPN N.C | **BIDS-M12-N21F4.0-S124**<br>SKU 10103542 | **BIDS-M12-N21F6.0-S124**<br>SKU 10103586 | **BIDS-M12-N21F4.0-S124-S**<br>SKU 10103546 | **BIDS-M12-N21F6.0-S124-S**<br>SKU 10103590 |
| PNP N.O | **BIDS-M12-P11F4.0-S124**<br>SKU 10103543 | **BIDS-M12-P11F6.0-S124**<br>SKU 10103587 | **BIDS-M12-P11F4.0-S124-S**<br>SKU 10103547 | **BIDS-M12-P11F6.0-S124-S**<br>SKU 10103591 |
| PNP N.C | **BIDS-M12-P21F4.0-S124**<br>SKU 10103544 | **BIDS-M12-P21F6.0-S124**<br>SKU 10103588 | **BIDS-M12-P21F4.0-S124-S**<br>SKU 10103548 | **BIDS-M12-P21F6.0-S124-S**<br>SKU 10103592 |

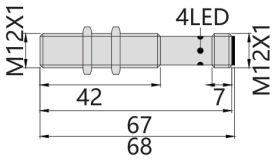
## TECHNICAL DATA

| | |
|---|---|
| **Exterior structure** | M12*1mm |
| **Sensing distance** | ①: 4mm(Flush)<br>②: 6mm(Quasi-Flush)<br>③: 4mm(Flush)<br>④: 6mm(Quasi-Flush) |
| **Switching frequency** | ①: 3000Hz<br>②: 800Hz<br>③: 3000Hz<br>④: 800Hz |
| **Operating voltage** | 10...30VDC(±10%) |
| **Voltage drop** | ≤2.0V |
| **Load current** | 200mA |
| **Leakage current** | ≤0.01mA |
| **No-load current** | ≤10mA(24V) |

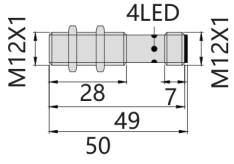
| | |
|---|---|
| **Hysteresis** | <15%(Sr) |
| **Repeatability** | <1.0%(Sr) |
| **Switch protection** | Short-circuit protection, Polarity reversal protection, Power-on |
| **LED indicator** | With (Action: LED Indicator Lights Up) |
| **Ambient temperature** | -25...70°C |
| **Ingress protection** | IP67 |
| **Housing material** | Brass, nickel-plated |
| **Sensing face material** | PBT |
| **Connection** | M12 Connector |
| **Accessories** | M12 4 pin cable with connector |

## DIMENSIONAL DRAWINGS

M12X68 Connector ①②




M12X50 Connector ③④




*All dimensions in mm.*