

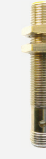
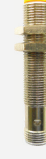
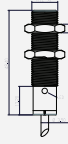
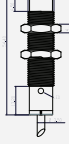
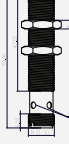
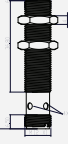




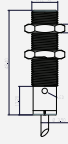
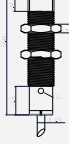
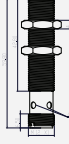
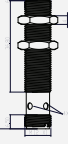


| Size | M12 Standard | | | |
|-----------------------------|---|---|---|---|
| | Cable | | Connector | |
| Standard | 2mm | 4mm | 2mm | 4mm |
| Sensing range | 2mm | | 4mm | |
| |  |  |  |  |
| | CE RoHS | CE RoHS | CE RoHS | CE RoHS |
| 3 wire PNP NO | IB1001 | IB1005 | IB1009 | IB1013 |
| 3 wire PNP NC | IB1002 | IB1006 | IB1010 | IB1014 |
| 3 wire NPN NO | IB1003 | IB1007 | IB1011 | IB1015 |
| 3 wire NPN NC | IB1004 | IB1008 | IB1012 | IB1016 |
| Sensing surface | Flush | Non-flush | Flush | Non-flush |
| Operating voltage[V] | 10...36DC | 10...36DC | 10...36DC | 10...36DC |
| Current loading[mA] | 100 | 100 | 100 | 100 |
| Short-circuit protection | Pulsed | Pulsed | Pulsed | Pulsed |
| Reverse polarity protection | Yes | Yes | Yes | Yes |
| Overload protection | Yes | Yes | Yes | Yes |
| Voltage drop[V] | IB1001,IB1002<2.5 IB1003,IB1004<3 | IB1005,IB1006<2.5 IB1007,IB1008<3 | IB1009,IB1010<2.5 IB1011,IB1012<3 | IB1013,IB1014<2.5 IB1015,IB1016<3 |
| Current consumption[mA] | <10(24VDC) | <10(24VDC) | <10(24VDC) | <10(24VDC) |
| Real sensing range[mm] | 2 ± 10% | 4 ± 10% | 2 ± 10% | 4 ± 10% |
| Operating range[mm] | 0...1.6 | 0...3.2 | 0...1.6 | 0...3.2 |
| Switch-point drift [%Sr] | -10...10 | -10...10 | -10...10 | -10...10 |
| Hysteresis [%Sr] | 3...20 | 3...20 | 3...20 | 3...20 |
| Switching frequency [Hz] | 1000 | 1000 | 1000 | 1000 |
| Ambient temperature [°C] | -25...80 | -25...80 | -25...80 | -25...80 |
| Ambient humidity [%] | 35...95 | 35...95 | 35...95 | 35...95 |
| Protection classification | IP67 | IP67 | IP67 | IP67 |
| Adjustment factors | Low carbon steel=1/stainless steel approx 0.7/Brass approx 0.5/Aluminium approx 0.4/Copper approx 0.3 | | | |
| Housing material | Stainless steel ; Sensing surface: PBT | | | |
| Display LED | Red(90°) | Red(90°) | Red(90°) | Red(90°) |
| Connection | PVC-cable/2m;3 × 0.14mm ² | | M12 Connector | |
| Accessories | Two fixed nuts | | | |
| Drawing |  |  |  |  |

| Size | M12 Standard | | | |
|-----------------------------|---|---|---|---|
| | Cable | | Connector | |
| Standard | 2mm | 4mm | 2mm | 4mm |
| Sensing range | 2mm | | 4mm | |
| |  |  |  |  |
| | CE RoHS | CE RoHS | CE RoHS | CE RoHS |
| 2 wire NO | IB1017 | IB1019 | IB1021 | IB1023 |
| 2 wire NC | IB1018 | IB1020 | IB1022 | IB1024 |
| Sensing surface | Flush | Non-flush | Flush | Non-flush |
| Operating voltage[V] | 10...36DC | 10...36DC | 10...36DC | 10...36DC |
| Current loading[mA] | 100 | 100 | 100 | 100 |
| Short-circuit protection | Pulsed | Pulsed | Pulsed | Pulsed |
| Reverse polarity protection | Yes | Yes | Yes | Yes |
| Overload protection | Yes | Yes | Yes | Yes |
| Voltage drop[V] | <4 | <4 | <4 | <4 |
| Leakage current | <0.6(24VDC) | <0.6(24VDC) | <0.6(24VDC) | <0.6(24VDC) |
| Real sensing range[mm] | 2 ± 10% | 4 ± 10% | 2 ± 10% | 4 ± 10% |
| Operating range [mm] | 0...1.6 | 0...3.2 | 0...1.6 | 0...3.2 |
| Switch-point drift [%Sr] | -10...10 | -10...10 | -10...10 | -10...10 |
| Hysteresis [%Sr] | 3...20 | 3...20 | 3...20 | 3...20 |
| Switching frequency [Hz] | 1000 | 1000 | 1000 | 1000 |
| Ambient temperature [°C] | -25...80 | -25...80 | -25...80 | -25...80 |
| Ambient humidity[%] | 35...95 | 35...95 | 35...95 | 35...95 |
| Protection classification | IP67 | IP67 | IP67 | IP67 |
| Adjustment factors | Low carbon steel=1/stainless steel approx 0.7/Brass approx 0.5/Aluminium approx 0.4/Copper approx 0.3 | | | |
| Housing material | Stainless steel ; Sensing surface: PBT | | | |
| Display LED | Red(90°) | Red(90°) | Red(90°) | Red(90°) |
| Connection | PVC-cable/2m;2 × 0.25mm ² | | M12 Connector | |
| Accessories | Two fixed nuts | | | |
| Drawing |  |  |  |  |

| Size | M12 Extra length | | | |
|-----------------------------|---|---|---|---|
| | Cable | | Connector | |
| Standard | 4mm | 6mm | 4mm | 6mm |
| Sensing range |  |  |  |  |
| 3 wire PNP NO | IB1101 | IB1105 | IB1109 | IB1113 |
| 3 wire PNP NC | IB1102 | IB1106 | IB1110 | IB1114 |
| 3 wire NPN NO | IB1103 | IB1107 | IB1111 | IB1115 |
| 3 wire NPN NC | IB1104 | IB1108 | IB1112 | IB1116 |
| Sensing surface | Flush | Non-flush | Flush | Non-flush |
| Operating voltage[V] | 10...36DC | 10...36DC | 10...36DC | 10...36DC |
| Current loading[mA] | 100 | 100 | 100 | 100 |
| Short-circuit protection | Pulsed | Pulsed | Pulsed | Pulsed |
| Reverse polarity protection | Yes | Yes | Yes | Yes |
| Overload protection | Yes | Yes | Yes | Yes |
| Voltage drop[V] | IB1101,IB1102<2.5 IB1103,IB1104<3 | IB1105,IB1106<2.5 IB1107,IB1108<3 | IB1109,IB1110<2.5 IB1111,IB1112<3 | IB1113,IB1114<2.5 IB1115,IB1116<3 |
| Current consumption[mA] | <10(24VDC) | <10(24VDC) | <10(24VDC) | <10(24VDC) |
| Real sensing range[mm] | 4 ± 10% | 6 ± 10% | 4 ± 10% | 6 ± 10% |
| Operating range[mm] | 0...3.2 | 0...4.8 | 0...3.2 | 0...4.8 |
| Switch-point drift [%Sr] | -10...10 | -10...10 | -10...10 | -10...10 |
| Hysteresis [%Sr] | 3...20 | 3...20 | 3...20 | 3...20 |
| Switching frequency [Hz] | 1000 | 1000 | 1000 | 1000 |
| Ambient temperature [°C] | -25...80 | -25...80 | -25...80 | -25...80 |
| Operation humidity [%] | 35...95 | 35...95 | 35...95 | 35...95 |
| Protection classification | IP67 | IP67 | IP67 | IP67 |
| Adjustment factors | Low carbon steel=1/stainless steel approx 0.7/Brass approx 0.5/Aluminium approx 0.4/Copper approx 0.3 | | | |
| Housing material | Stainless steel ; Sensing surface: PBT | | | |
| Display LED | Red(90°) | Red(90°) | Red(90°) | Red(90°) |
| Connection | PVC-cable/2m;3×0.14mm ² | | M12 Connector | |
| Accessories | Two fixed nuts | | | |
| Drawing |  |  |  |  |

| Size | M12 Extra length | | | |
|-----------------------------|---|---|---|---|
| | Cable | | Connector | |
| Standard | 4mm | 6mm | 4mm | 6mm |
| Sensing range |  |  |  |  |
| 2 wire NO | IB1117 | IB1119 | IB1121 | IB1123 |
| 2 wire NC | IB1118 | IB1120 | IB1122 | IB1124 |
| Sensing surface | Flush | Non-flush | Flush | Non-flush |
| Operating voltage[V] | 10...36DC | 10...36DC | 10...36DC | 10...36DC |
| Current loading[mA] | 100 | 100 | 100 | 100 |
| Short-circuit protection | Pulsed | Pulsed | Pulsed | Pulsed |
| Reverse polarity protection | Yes | Yes | Yes | Yes |
| Overload protection | Yes | Yes | Yes | Yes |
| Voltage drop[V] | <4 | <4 | <4 | <4 |
| Current consumption[mA] | <0.6(24VDC) | <0.6(24VDC) | <0.6(24VDC) | <0.6(24VDC) |
| Real sensing range[mm] | 4 ± 10% | 6 ± 10% | 4 ± 10% | 6 ± 10% |
| Operating range[mm] | 0...2 | 0...4.8 | 0...3.2 | 0...3.2 |
| Switch-point drift [%Sr] | -10...10 | -10...10 | -10...10 | -10...10 |
| Hysteresis [%Sr] | 3...20 | 3...20 | 3...20 | 3...20 |
| Switching frequency [Hz] | 1000 | 1000 | 1000 | 1000 |
| Ambient temperature [°C] | -25...80 | -25...80 | -25...80 | -25...80 |
| Ambient humidity [%] | 35...95 | 35...95 | 35...95 | 35...95 |
| Protection classification | IP67 | IP67 | IP67 | IP67 |
| Adjustment factors | Low carbon steel=1/stainless steel approx 0.7/Brass approx 0.5/Aluminium approx 0.4/Copper approx 0.3 | | | |
| Housing material | Stainless steel ; Sensing surface: PBT | | | |
| Display LED | Red(90°) | Red(90°) | Red(90°) | Red(90°) |
| Connection | PVC-cable/2m;2×0.14mm ² | | M12 Connector | |
| Accessories | Two fixed nuts | | | |
| Drawing |  |  |  |  |