Inductive Proximity Sensor

M12 Series

| Dimension | | M12 x1 | M12 x1 | |
|---|--|------------------|---|---|
| Installation | | Flush (shielded) | Flush (shielded) | |
| Mounting distance Sn | | 4.0mm | 4.0mm | |
| Detect distance Sn | | | 03.6mm | 03.6mm |
| | |) | Unit: mm - Short Body | Unit: mm - Standard Body |
| | | NO | DSS-CPS-POM12SB-4FM | DSS-CPS-POM12LB-4FM |
| PNP | DC 3 wires | NC | DSS-CPS-PCM12SB-4FM | DSS-CPS-PCM12LB-4FM |
| NDN | | NO | DSS-CPS-NOM12SB-4FM | DSS-CPS-NOM12LB-4FM |
| NPN | DC 3 wires | NC | DSS-CPS-NCM12SB-4FM | DSS-CPS-NCM12LB-4FM |
| Rated operational voltage (DC/AC) | | | 24V DC | |
| Supply voltage (DC/AC) | | | | 24010 |
| | | | | 24V DC |
| | (DC/AC) | | 10-30V DC | 10-30V DC |
| Voltage drop | | | 10-30V DC <2.0V | 10-30V DC ≤2.0V |
| Voltage drop Rated insulation | n voltage | | 10-30V DC ≤ 2.0V >20M Ω | 10-30V DC ≤2.0V ≥20M Ω |
| Voltage drop Rated insulation Load current ca | n voltage apacity (DC/AC) | | 10-30V DC ≤ 2.0V ≥ 20M Ω 100mA | 10-30V DC ≤2.0V ≥20M Ω 200mA |
| Voltage drop Rated insulation Load current ca Off-state current | n voltage apacity (DC/AC) | | 10-30V DC ≤2.0V ≥20M Ω 100mA ≤15mA | 10-30V DC ≤2.0V ≥20M Ω 200mA ≤15mA |
| Voltage drop Rated insulation Load current ca Off-state curren Leak current | n voltage apacity (DC/AC) nt (NPN/PNP) | | 10-30V DC ≤ 2.0V >20M Ω 100mA ≤15mA ≤20 μA | 10-30V DC ≤2.0V >20M Ω 200mA ≤15mA ≤20 μA |
| Voltage drop Rated insulation Load current ca Off-state curren Leak current Against polarity | n voltage apacity (DC/AC) nt (NPN/PNP) y reversal | | 10-30V DC <2.0V >20M Ω 100mA <15mA <20 μA YES | 10-30V DC 2.0V >20M Ω 200mA |
| Voltage drop Rated insulation Load current ca Off-state current Leak current Against polarity Short circuit pro | n voltage apacity (DC/AC) nt (NPN/PNP) y reversal | | 10-30V DC <2.0V >20M Ω 100mA <15mA <20 μA YES YES | 10-30V DC 2.0V 20M Ω 200mA < |
| Voltage drop Rated insulation Load current ca Off-state current Leak current Against polarity | n voltage apacity (DC/AC) nt (NPN/PNP) y reversal | | 10-30V DC <2.0V >20M Ω 100mA <15mA <20 μA YES | 10-30V DC 2.0V >20M Ω 200mA |
| Voltage drop Rated insulation Load current ca Off-state current Leak current Against polarity Short circuit pro | n voltage apacity (DC/AC) nt (NPN/PNP) y reversal otected | | 10-30V DC <2.0V >20M Ω 100mA <15mA <20 μA YES YES | 10-30V DC 2.0V 20M Ω 200mA < |
| Voltage drop Rated insulation Load current ca Off-state curren Leak current Against polarity Short circuit pro Load capacity | n voltage apacity (DC/AC) nt (NPN/PNP) y reversal otected | | | |
| Voltage drop Rated insulation Load current ca Off-state current Leak current Against polarity Short circuit pro Load capacity Repeated accur Ambient tempe | n voltage apacity (DC/AC) nt (NPN/PNP) y reversal otected | | | |
| Voltage drop Rated insulation Load current ca Off-state current Leak current Against polarity Short circuit pro Load capacity Repeated accur Ambient tempe | n voltage apacity (DC/AC) nt (NPN/PNP) y reversal otected racy erature range 2wires / AC 2 wires) | | | |
| Voltage drop Rated insulation Load current ca Off-state current Against polarity Short circuit pro Load capacity Repeated accur Ambient tempe Frequency (DC 3/2 Function indica | n voltage apacity (DC/AC) nt (NPN/PNP) y reversal otected racy erature range 2wires / AC 2 wires) | | 10-30V DC <2.0V | 10-30V DC <2.0V |
| Voltage drop Rated insulation Load current ca Off-state current Against polarity Short circuit pro Load capacity Repeated accur Ambient tempe Frequency (DC 3/2 Function indica | n voltage apacity (DC/AC) nt (NPN/PNP) y reversal otected racy erature range 2wires / AC 2 wires) tion | | 10-30V DC <2.0V | 10-30V DC <2.0V |
| Voltage drop Rated insulation Load current ca Off-state current Leak current Against polarity Short circuit pro Load capacity Repeated accur Ambient tempe Frequency (DC 3/2 Function indica IP ratings Housing materi | n voltage apacity (DC/AC) nt (NPN/PNP) y reversal otected racy erature range 2wires / AC 2 wires) tion | | | |
| Voltage drop Rated insulation Load current ca Off-state current Against polarity Short circuit pro Load capacity Repeated accur Ambient tempe Frequency (DC 3/2 Function indica IP ratings Housing materi Material of sens | n voltage apacity (DC/AC) nt (NPN/PNP) y reversal otected racy erature range 2wires / AC 2 wires) tion ial sing face | | 10-30V DC <2.0V | |
| Voltage drop Rated insulation Load current ca Off-state current Leak current Against polarity Short circuit pro Load capacity Repeated accur Ambient tempe Frequency (DC 3/2 Function indica IP ratings Housing materi | n voltage apacity (DC/AC) nt (NPN/PNP) y reversal otected racy erature range 2wires / AC 2 wires) tion ial sing face | | | |

Normally Open (NO):

When metal is within proximity to the sensor, the circuit will close and the indicating LED light will be ON.

Normally Closed (NC):

When metal is within proximity to the sensor, the circuit will open and the indicating LED light will be OFF.

P-5 (M12)