



INDUCTIVE SENSORS

Ø 12

10 ÷ 30 Vdc - 3 WIRES NPN OR PNP OUTPUT

- 2 mm to 4 mm operating distance - shielded, unshielded
- Short housing models
- Cable or M8 or M12 connector models
- Output status LED

IS Series

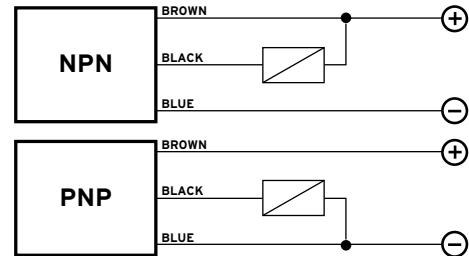


TECHNICAL DATA

| | SHIELDED | UNSHIELDED |
|--------------------------|---|---------------------------|
| OPERATING DISTANCE (Sn) | 2 mm | 4 mm |
| POWER SUPPLY | 10 ÷ 30 Vdc (-15 / +10%) | |
| RIPPLE | ≤ 10% | |
| HYSTERESIS | < 10% | |
| OUTPUT CURRENT | 200 mA max. | |
| CONSUMPTION | < 10 mA @ 24 Vdc | |
| SATURATION VOLTAGE | < 1.8 V (I = 100 mA) | |
| INDICATORS | Yellow LED | |
| SWITCHING FREQUENCY | 1000 Hz | |
| DELAY AT POWER ON | ≤ 50 ms | |
| REPEATABILITY | ≤ 3% | |
| SHORT CIRCUIT PROTECTION | Present (self-resetting) | |
| PROTECTIONS CIRCUIT | Against polarity reversal - inductive loads | |
| OPERATING TEMPERATURE | - 25 ÷ +60 °C | |
| MECHANICAL PROTECTION | IP67 | |
| CONNECTIONS | 2 m cable (3 x 0.25 mm ²) | |
| HOUSING MATERIAL | Nickel-plated brass | |
| WEIGHT | 110 g cable version | 60 g M8 connector version |
| | 60 g M12 connector version | |

⁽⁴⁾ Device marking II 3D IP67 T6X.

CONNECTIONS



M12 CONNECTOR



View of quadripole male connector

CONFIGURATION

| Outputs | PIN numbers | | | |
|------------|-------------|---|---|-------|
| | 1 | 2 | 3 | 4 |
| (NO or NC) | + | | - | NO/NC |

M8 CONNECTOR

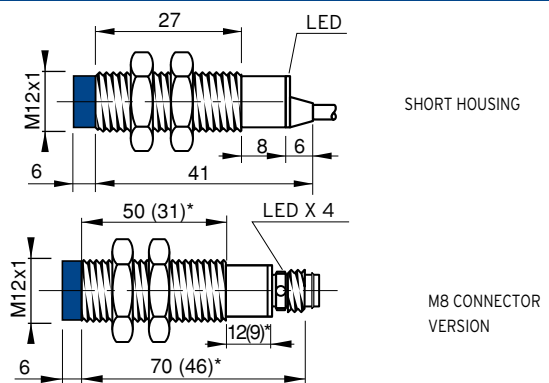


View of tripole male connector

CONFIGURATION

| Outputs | PIN numbers | | |
|------------|-------------|---|-------|
| | 1 | 3 | 4 |
| (NO or NC) | + | - | NO/NC |

DIMENSIONS (mm)



(* The dimensions in brackets refer to short housing models
Note: the front part in blue is valid only for unshielded models



MODEL SELECTION TABLE

| DIAMETER | CONSTRUCTION | OUTPUT | CONNECTION |
|------------|---|-------------------------------|-------------------|
| 04 = 4 mm | A= shielded standard housing | 1 = 10-30 Vdc PNP NO | 02 = 500 mm CABLE |
| 05 = 5 mm | B= shielded short housing | 2 = 10-30 Vdc PNP NC | 03 = 2 m CABLE |
| 08 = 8 mm | C= unshielded standard housing | 3 = 10-30 Vdc NPN NO | S1 = M8 CONN. |
| 12 = 12 mm | D= unshielded short housing | 4 = 10-30 Vdc NPN NC | S2 = M12 CONN. |
| 18 = 18 mm | E= shielded standard housing, double operating distance | 5 = 10-30 Vdc PNP NO-NC | |
| 30 = 30 mm | F= unshielded standard housing, double operating distance | 6 = 10-30 Vdc NPN NO-NC | |
| | G= shielded short housing, double operating distance | 7 = 24-230 Vac - 2 wires NO | |
| | H= unshielded short housing, double operating distance | 8 = 24-230 Vac - 2 wires NC | |
| | I= shielded standard metal housing | 9 = 10-30 Vac - 2 wires NO-NC | |
| | L= unshielded standard metal housing | 0 = 12-30 Vac - 4 wires | |

PRODUCT TABLE

| DESCRIPTION | CONNECTION | SHIELDED | HOUSING | ORDER CODE |
|-------------|---------------|----------|----------|------------|
| IS-12-A1-03 | 2 m CABLE | yes | standard | 95B061240 |
| IS-12-A1-S1 | M8 CONNECTOR | yes | standard | 95B061260 |
| IS-12-A1-S2 | M12 CONNECTOR | yes | standard | 95B061250 |
| IS-12-A2-03 | 2 m CABLE | yes | standard | 95B061270 |
| IS-12-A2-S1 | M8 CONNECTOR | yes | standard | 95B061290 |
| IS-12-A2-S2 | M12 CONNECTOR | yes | standard | 95B061280 |
| IS-12-A3-03 | 2 m CABLE | yes | standard | 95B061180 |
| IS-12-A3-S1 | M8 CONNECTOR | yes | standard | 95B061200 |
| IS-12-A3-S2 | M12 CONNECTOR | yes | standard | 95B061190 |
| IS-12-A4-03 | 2 m CABLE | yes | standard | 95B061210 |
| IS-12-A4-S1 | M8 CONNECTOR | yes | standard | 95B061230 |
| IS-12-A4-S2 | M12 CONNECTOR | yes | standard | 95B061220 |
| IS-12-B1-03 | 2 m CABLE | yes | short | 95B062040 |
| IS-12-B1-S1 | M8 CONNECTOR | yes | short | 95B062060 |
| IS-12-B1-S2 | M12 CONNECTOR | yes | short | 95B062050 |
| IS-12-B2-03 | 2 m CABLE | yes | short | 95B062070 |
| IS-12-B2-S1 | M8 CONNECTOR | yes | short | 95B062090 |
| IS-12-B2-S2 | M12 CONNECTOR | yes | short | 95B062080 |
| IS-12-B3-03 | 2 m CABLE | yes | short | 95B061980 |
| IS-12-B3-S1 | M8 CONNECTOR | yes | short | 95B062000 |
| IS-12-B3-S2 | M12 CONNECTOR | yes | short | 95B061990 |
| IS-12-B4-03 | 2 m CABLE | yes | short | 95B062010 |
| IS-12-B4-S1 | M8 CONNECTOR | yes | short | 95B062030 |
| IS-12-B4-S2 | M12 CONNECTOR | yes | short | 95B062020 |
| IS-12-C1-03 | 2 m CABLE | no | standard | 95B061640 |
| IS-12-C1-S1 | M8 CONNECTOR | no | standard | 95B061660 |
| IS-12-C1-S2 | M12 CONNECTOR | no | standard | 95B061650 |
| IS-12-C2-03 | 2 m CABLE | no | standard | 95B061670 |
| IS-12-C2-S1 | M8 CONNECTOR | no | standard | 95B061690 |
| IS-12-C2-S2 | M12 CONNECTOR | no | standard | 95B061680 |
| IS-12-C3-03 | 2 m CABLE | no | standard | 95B061580 |
| IS-12-C3-S1 | M8 CONNECTOR | no | standard | 95B061600 |
| IS-12-C3-S2 | M12 CONNECTOR | no | standard | 95B061590 |
| IS-12-C4-03 | 2 m CABLE | no | standard | 95B061610 |
| IS-12-C4-S1 | M8 CONNECTOR | no | standard | 95B061630 |
| IS-12-C4-S2 | M12 CONNECTOR | no | standard | 95B061620 |
| IS-12-D1-03 | 2 m CABLE | no | short | 95B062440 |
| IS-12-D1-S1 | M8 CONNECTOR | no | short | 95B062460 |
| IS-12-D1-S2 | M12 CONNECTOR | no | short | 95B062450 |
| IS-12-D2-03 | 2 m CABLE | no | short | 95B062470 |
| IS-12-D2-S1 | M8 CONNECTOR | no | short | 95B062490 |
| IS-12-D2-S2 | M12 CONNECTOR | no | short | 95B062480 |
| IS-12-D3-03 | 2 m CABLE | no | short | 95B062380 |
| IS-12-D3-S1 | M8 CONNECTOR | no | short | 95B062400 |
| IS-12-D3-S2 | M12 CONNECTOR | no | short | 95B062390 |
| IS-12-D4-03 | 2 m CABLE | no | short | 95B062410 |
| IS-12-D4-S1 | M8 CONNECTOR | no | short | 95B062430 |
| IS-12-D4-S2 | M12 CONNECTOR | no | short | 95B062420 |



INDUCTIVE SENSORS

Ø 12 DOUBLE OPERATING DISTANCE 10÷30 Vdc - 3 WIRES NPN OR PNP OUTPUT

- 4 mm to 8 mm operating distance - shielded, unshielded
- Short housing models
- Cable or M12 connector models
- Output status LED

IS Series



TECHNICAL DATA

| | SHIELDED | UNSHIELDED |
|--------------------------|---|------------|
| OPERATING DISTANCE (Sn) | 4 mm | 8 mm |
| POWER SUPPLY | 10 ÷ 30 Vdc (-15 / +10%) | |
| RIPPLE | ≤ 10% | |
| HYSTERESIS | < 10% | |
| OUTPUT CURRENT | 200 mA max. | |
| CONSUMPTION | < 10 mA @ 24 Vdc | |
| SATURATION VOLTAGE | < 1.2 V (I = 100 mA) | |
| INDICATORS | Yellow LED | |
| SWITCHING FREQUENCY | 500 Hz | |
| DELAY AT POWER ON | ≤ 75 ms | |
| REPEATABILITY | ≤ 3% | |
| SHORT CIRCUIT PROTECTION | Present (self-resetting) | |
| PROTECTIONS CIRCUIT | Against polarity reversal - inductive loads | |
| OPERATING TEMPERATURE | -25 ÷ +70 °C | |
| MECHANICAL PROTECTION | IP67 | |
| CONNECTIONS | 2 m cable (3 x 0.25 mm ²) | |
| HOUSING MATERIAL | Nickel-plated brass | |
| WEIGHT | 110 g cable version 60 g M12 connector version | |

CONNECTIONS



M12 CONNECTOR



View of
quadripole
male
connector

CONFIGURATION

| Outputs | PIN numbers | | | |
|------------|-------------|---|---|-------|
| | 1 | 2 | 3 | 4 |
| (NO or NC) | + | | - | NO/NC |

DIMENSIONS (mm)



Note: the front part in blue is valid only for unshielded models


MODEL SELECTION TABLE

| DIAMETER | CONSTRUCTION | OUTPUT | CONNECTION |
|------------|---|-------------------------------|-------------------|
| 04 = 4 mm | A= shielded standard housing | 1 = 10-30 Vdc PNP NO | 02 = 500 mm CABLE |
| 05 = 5 mm | B= shielded short housing | 2 = 10-30 Vdc PNP NC | 03 = 2 m CABLE |
| 08 = 8 mm | C= unshielded standard housing | 3 = 10-30 Vdc NPN NO | S1 = M8 CONN. |
| 12 = 12 mm | D= unshielded short housing | 4 = 10-30 Vdc NPN NC | S2 = M12 CONN. |
| 18 = 18 mm | E= shielded standard housing, double operating distance | 5 = 10-30 Vdc PNP NO-NC | |
| 30 = 30 mm | F= unshielded standard housing, double operating distance | 6 = 10-30 Vdc NPN NO-NC | |
| | G= shielded short housing, double operating distance | 7 = 24-230 Vac - 2 wires NO | |
| | H= unshielded short housing, double operating distance | 8 = 24-230 Vac - 2 wires NC | |
| | I= shielded standard metal housing | 9 = 10-30 Vac - 2 wires NO-NC | |
| | L= unshielded standard metal housing | 0 = 12-30 Vac - 4 wires | |

PRODUCT TABLE

| DESCRIPTION | CONNECTION | SHIELDED | HOUSING | ORDER CODE |
|-------------|------------|----------|---------|------------|
| IS-12-G1-03 | CABLE | yes | short | 95B063360 |
| IS-12-G1-S2 | M12 | yes | short | 95B063370 |
| IS-12-G2-03 | CABLE | yes | short | 95B063380 |
| IS-12-G2-S2 | M12 | yes | short | 95B063390 |
| IS-12-G3-03 | CABLE | yes | short | 95B063320 |
| IS-12-G3-S2 | M12 | yes | short | 95B063330 |
| IS-12-G4-03 | CABLE | yes | short | 95B063340 |
| IS-12-G4-S2 | M12 | yes | short | 95B063350 |
| IS-12-H1-03 | CABLE | no | short | 95B063440 |
| IS-12-H1-S2 | M12 | no | short | 95B063450 |
| IS-12-H2-03 | CABLE | no | short | 95B063460 |
| IS-12-H2-S2 | M12 | no | short | 95B063470 |
| IS-12-H3-03 | CABLE | no | short | 95B063400 |
| IS-12-H3-S2 | M12 | no | short | 95B063410 |
| IS-12-H4-03 | CABLE | no | short | 95B063420 |
| IS-12-H4-S2 | M12 | no | short | 95B063430 |

INDUCTIVE SENSORS

Ø 12 DOUBLE OPERATING DISTANCE 10÷30 Vdc - 4 WIRES NPN OR PNP OUTPUT

- 4 mm to 8 mm operating distance - shielded, unshielded
- Short housing models
- Cable or M12 connector models
- 200mA NPN or PNP
- Output status LED

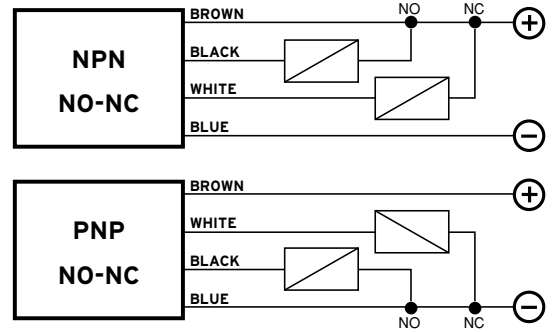
IS Series



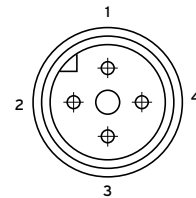
TECHNICAL DATA

| | SHIELDED | UNSHIELDED |
|--------------------------|---|------------|
| OPERATING DISTANCE (Sn) | 4 mm | 8 mm |
| POWER SUPPLY | 10 ÷ 30 Vdc (-15 / +10%) | |
| RIPPLE | ≤ 10% | |
| HYSTERESIS | < 10% | |
| OUTPUT CURRENT | 200 mA max. | |
| CONSUMPTION | < 10 mA @ 24 Vdc | |
| SATURATION VOLTAGE | < 1.2 V (I = 100 mA) | |
| INDICATORS | Yellow LED | |
| SWITCHING FREQUENCY | 500 Hz | |
| DELAY AT POWER ON | 75 ms | |
| REPEATABILITY | 3% | |
| SHORT CIRCUIT PROTECTION | Present (self-resetting) | |
| PROTECTIONS CIRCUIT | Against polarity reversal - inductive loads | |
| OPERATING TEMPERATURE | -25 ÷ +70 °C | |
| MECHANICAL PROTECTION | IP67 | |
| CONNECTIONS | 2 m cable (3 x 0.25 mm ²) | |
| HOUSING MATERIAL | Nickel-plated brass | |
| WEIGHT | 110 g cable version 60 g M12 connector version | |

CONNECTIONS



M12 CONNECTOR



View of
quadripole
male
connector

CONFIGURATION

| Outputs | PIN numbers | | | |
|-----------|-------------|----|---|----|
| | 1 | 2 | 3 | 4 |
| (NO + NC) | + | NC | - | NO |

DIMENSIONS (mm)



Note: the front part in blue is valid only for unshielded models



MODEL SELECTION TABLE

| DIAMETER | CONSTRUCTION | OUTPUT | CONNECTION |
|------------|---|-------------------------------|-------------------|
| 04 = 4 mm | A= shielded standard housing | 1 = 10-30 Vdc PNP NO | 02 = 500 mm CABLE |
| 05 = 5 mm | B= shielded short housing | 2 = 10-30 Vdc PNP NC | 03 = 2 m CABLE |
| 08 = 8 mm | C= unshielded standard housing | 3 = 10-30 Vdc NPN NO | S1 = M8 CONN. |
| 12 = 12 mm | D= unshielded short housing | 4 = 10-30 Vdc NPN NC | S2 = M12 CONN. |
| 18 = 18 mm | E= shielded standard housing, double operating distance | 5 = 10-30 Vdc PNP NO-NC | |
| 30 = 30 mm | F= unshielded standard housing, double operating distance | 6 = 10-30 Vdc NPN NO-NC | |
| | G= shielded short housing, double operating distance | 7 = 24-230 Vac - 2 wires NO | |
| | H= unshielded short housing, double operating distance | 8 = 24-230 Vac - 2 wires NC | |
| | I= shielded standard metal housing | 9 = 10-30 Vac - 2 wires NO-NC | |
| | L= unshielded standard metal housing | 0 = 12-30 Vac - 4 wires | |

PRODUCT TABLE

| DESCRIPTION | CONNECTION | SHIELDED | HOUSING | ORDER CODE |
|-------------|---------------|----------|----------|------------|
| IS-12-G5-03 | 2 m CABLE | yes | standard | 95B062680 |
| IS-12-G5-S2 | M12 CONNECTOR | yes | standard | 95B062690 |
| IS-12-G6-03 | 2 m CABLE | yes | standard | 95B062660 |
| IS-12-G6-S2 | M12 CONNECTOR | yes | standard | 95B062670 |
| IS-12-H5-03 | 2 m CABLE | no | standard | 95B062760 |
| IS-12-H5-S2 | M12 CONNECTOR | no | standard | 95B062770 |
| IS-12-H6-03 | 2 m CABLE | no | standard | 95B062740 |
| IS-12-H6-S2 | M12 CONNECTOR | no | standard | 95B062750 |



INDUCTIVE SENSORS

Ø 12 DOUBLE OPERATING DISTANCE 12÷30 Vdc - 4 WIRES PROGRAMMABLE OUTPUT

- 4 mm to 8 mm operating distance - shielded, unshielded
- Programmable outputs: NPN/PNP, NO or NC
- Cable models
- Nickel plated brass
- Output status LED
- 200 mA max output

IS Series



TECHNICAL DATA

| | SHIELDED | UNSHIELDED |
|--------------------------|---|------------|
| OPERATING DISTANCE (Sn) | 4 mm | 8 mm |
| POWER SUPPLY | 12 ÷ 30 Vdc (-15/+10%) | |
| RIPPLE | ≤ 10% | |
| HYSTERESIS | < 10% | |
| OUTPUT | NPN or PNP (selectable) | |
| CONTACT | NO or NC (selectable) | |
| OUTPUT CURRENT | 200 mA max. | |
| CONSUMPTION | < 1.2 mA @ 24 Vdc | |
| SATURATION VOLTAGE | < 1,8 V (I = 100 mA) | |
| INDICATORS | Yellow LED | |
| SWITCHING FREQUENCY | 500 Hz | |
| DELAY AT POWER ON | ≤ 50 ms | |
| REPEATABILITY | ≤ 3% | |
| SHORT CIRCUIT PROTECTION | Present (self-resetting) | |
| PROTECTIONS CIRCUIT | Against polarity reversal - inductive loads | |
| OPERATING TEMPERATURE | - 25 ÷ +70 °C | |
| MECHANICAL PROTECTION | IP67 | |
| CONNECTIONS | 2 m cable (4 x 0.25 mm ²) | |
| HOUSING MATERIAL | Nickel-plated brass | |
| WEIGHT | 110 g cable version | |

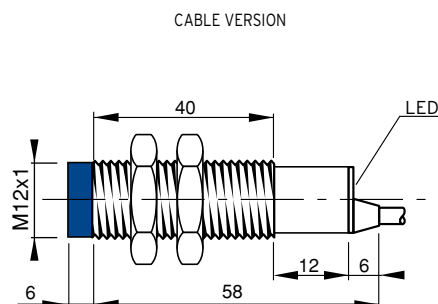
⁽¹⁾ Device marking II 3D IP67 T6X.

CONNECTIONS



These sensors, thanks to the unpaired output circuit offer 4 output configurations (NPN-NO, NPN-NC, PNP-NO, PNP-NC) on the same model.

DIMENSIONS (mm)



Note: the front part in blue is valid only for unshielded models



MODEL SELECTION TABLE

| DIAMETER | CONSTRUCTION | OUTPUT | CONNECTION |
|------------|---|-------------------------------|-------------------|
| 04 = 4 mm | A= shielded standard housing | 1 = 10-30 Vdc PNP NO | 02 = 500 mm CABLE |
| 05 = 5 mm | B= shielded short housing | 2 = 10-30 Vdc PNP NC | 03 = 2 m CABLE |
| 08 = 8 mm | C= unshielded standard housing | 3 = 10-30 Vdc NPN NO | S1 = M8 CONN. |
| 12 = 12 mm | D= unshielded short housing | 4 = 10-30 Vdc NPN NC | S2 = M12 CONN. |
| 18 = 18 mm | E= shielded standard housing, double operating distance | 5 = 10-30 Vdc PNP NO-NC | |
| 30 = 30 mm | F= unshielded standard housing, double operating distance | 6 = 10-30 Vdc NPN NO-NC | |
| | G= shielded short housing, double operating distance | 7 = 24-230 Vac - 2 wires NO | |
| | H= unshielded short housing, double operating distance | 8 = 24-230 Vac - 2 wires NC | |
| | I= shielded standard metal housing | 9 = 10-30 Vac - 2 wires NO-NC | |
| | L= unshielded standard metal housing | 0 = 12-30 Vac - 4 wires | |

PRODUCT TABLE

| DESCRIPTION | CONNECTION | SHIELDED | HOUSING | ORDER CODE |
|-------------|------------|----------|----------|------------|
| IS-12-E0-03 | CABLE | yes | standard | 95B063840 |



INDUCTIVE SENSORS

Ø 12 DOUBLE OPERATING DISTANCE
10÷30 Vdc 2 WIRES NO-NC PROGRAMMABLE OUTPUT

- 4 mm to 8 mm operating distance - shielded, unshielded
- Cable models
- Nickel plated brass

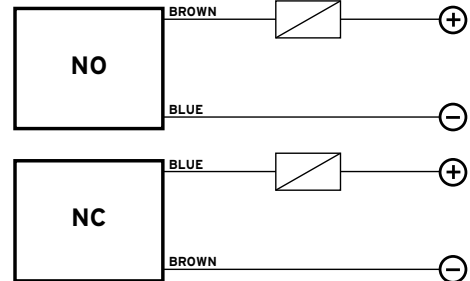
IS Series



TECHNICAL DATA

| | SHIELDED | UNSHIELDED |
|--------------------------------------|---|------------|
| OPERATING DISTANCE (S _n) | 4 mm | 8 mm |
| POWER SUPPLY | 10 ÷ 30 Vdc (-15 / +10%) | |
| RIPPLE | ≤ 10% | |
| HYSTERESIS | < 10% | |
| OUTPUT CURRENT | 100 mA max. | |
| OUTPUT CURRENT | > 1,6 mA min. | |
| CONSUMPTION | < 1,6 mA @ 24 Vdc | |
| SATURATION VOLTAGE | < 6,5 V (I = 100 mA) | |
| INDICATORS | Yellow LED | |
| SWITCHING FREQUENCY | 500 Hz | |
| DELAY AT POWER ON | ≤ 50 ms | |
| REPEATABILITY | ≤ 3% | |
| SHORT CIRCUIT PROTECTION | Present (self-resetting) | |
| PROTECTIONS CIRCUIT | Against polarity reversal - inductive loads | |
| OPERATING TEMPERATURE | - 25 ÷ +70 °C | |
| MECHANICAL PROTECTION | IP67 | |
| CONNECTIONS | 2 m cable (2 x 0.25 mm ²) | |
| HOUSING MATERIAL | Nickel-plated brass | |
| WEIGHT | 110 g cable version | |

CONNECTIONS



WARNING: The load can be connected in series to the blue wire or to the brown wire to simulate the NPN or PNP functioning logic.

DIMENSIONS (mm)



Note: the front part in blue is valid only for unshielded models



MODEL SELECTION TABLE

| DIAMETER | CONSTRUCTION | OUTPUT | CONNECTION |
|------------|---|-------------------------------|-------------------|
| 04 = 4 mm | A= shielded standard housing | 1 = 10-30 Vdc PNP NO | 02 = 500 mm CABLE |
| 05 = 5 mm | B= shielded short housing | 2 = 10-30 Vdc PNP NC | 03 = 2 m CABLE |
| 08 = 8 mm | C= unshielded standard housing | 3 = 10-30 Vdc NPN NO | S1 = M8 CONN. |
| 12 = 12 mm | D= unshielded short housing | 4 = 10-30 Vdc NPN NC | S2 = M12 CONN. |
| 18 = 18 mm | E= shielded standard housing, double operating distance | 5 = 10-30 Vdc PNP NO-NC | |
| 30 = 30 mm | F= unshielded standard housing, double operating distance | 6 = 10-30 Vdc NPN NO-NC | |
| | G= shielded short housing, double operating distance | 7 = 24-230 Vac - 2 wires NO | |
| | H= unshielded short housing, double operating distance | 8 = 24-230 Vac - 2 wires NC | |
| | I= shielded standard metal housing | 9 = 10-30 Vac - 2 wires NO-NC | |
| | L= unshielded standard metal housing | 0 = 12-30 Vac - 4 wires | |

PRODUCT TABLE

| DESCRIPTION | CONNECTION | SHIELDED | HOUSING | ORDER CODE |
|-------------|------------|----------|----------|------------|
| IS-12-E9-03 | CABLE | yes | standard | 95B063800 |



INDUCTIVE SENSORS

Ø 12

24 ÷ 230 Vac - 2 WIRES NO OR NC OUTPUT

- 2 mm to 4 mm operating distance - shielded, unshielded
- Cable or M12 connector models
- Very low consumption < 0,7 mA
- Inrush current (20ms) 1.5A
- 350 mA max output

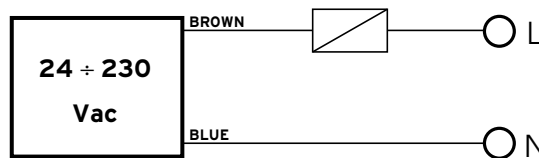
IS Series



TECHNICAL DATA

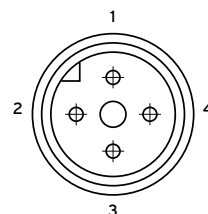
| | SHIELDED | UNSHIELDED |
|--------------------------|---|------------|
| OPERATING DISTANCE (Sn) | 2 mm | 4 mm |
| POWER SUPPLY | 24 ÷ 230 Vac (-15/+10%) | |
| RIPPLE | 50 ÷ 60 Hz | |
| HYSTERESIS | < 10% | |
| OUTPUT CURRENT | 350 mA max. | |
| OUTPUT CURRENT | 20 mA min. | |
| INRUSH CURRENT | 1,5 A max. (20 ms) | |
| CONSUMPTION | < 0,7 mA | |
| SATURATION VOLTAGE | < 5 V (I = 100 mA) | |
| INDICATORS | Yellow LED | |
| SWITCHING FREQUENCY | 12 Hz | |
| DELAY AT POWER ON | ≤ 300 ms | |
| REPEATABILITY | ≤ 3% | |
| SHORT CIRCUIT PROTECTION | -25 ÷ +70 °C | |
| MECHANICAL PROTECTION | IP67 | |
| CONNECTIONS | 2 m cable (2 x 0.25 mm ²) | |
| HOUSING MATERIAL | Nickel-plated brass | |
| WEIGHT | 110 g cable version 60 g M12 connector cable | |

CONNECTIONS



Warning: Output short circuit are not possible. Wrong supply cable connections can damage the sensor. Therefore sensors whose output status is short-circuited will not be replaced under warranty.

M12 CONNECTOR



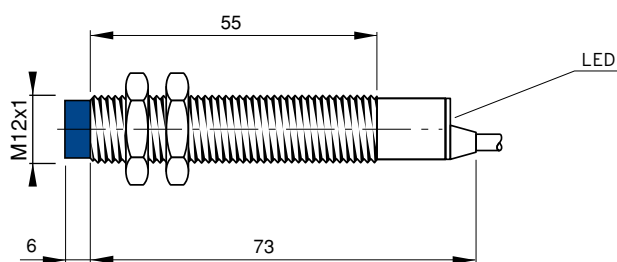
View of quadripole male connector.

CONFIGURATION

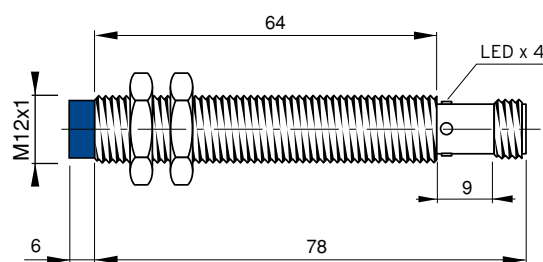
| Outputs | PIN numbers | | | |
|------------|-------------|---|---|---|
| | 1 | 2 | 3 | 4 |
| (NO or NC) | L | | N | |

DIMENSIONS (mm)

CABLE VERSION



M12 CONNECTOR VERSION



Note: the front part in blue is valid only for unshielded models



MODEL SELECTION TABLE

| DIAMETER | CONSTRUCTION | OUTPUT | CONNECTION |
|------------|---|-------------------------------|-------------------|
| 04 = 4 mm | A= shielded standard housing | 1 = 10-30 Vdc PNP NO | 02 = 500 mm CABLE |
| 05 = 5 mm | B= shielded short housing | 2 = 10-30 Vdc PNP NC | 03 = 2 m CABLE |
| 08 = 8 mm | C= unshielded standard housing | 3 = 10-30 Vdc NPN NO | S1 = M8 CONN. |
| 12 = 12 mm | D= unshielded short housing | 4 = 10-30 Vdc NPN NC | S2 = M12 CONN. |
| 18 = 18 mm | E= shielded standard housing, double operating distance | 5 = 10-30 Vdc PNP NO-NC | |
| 30 = 30 mm | F= unshielded standard housing, double operating distance | 6 = 10-30 Vdc NPN NO-NC | |
| | G= shielded short housing, double operating distance | 7 = 24-230 Vac - 2 wires NO | |
| | H= unshielded short housing, double operating distance | 8 = 24-230 Vac - 2 wires NC | |
| | I= shielded standard metal housing | 9 = 10-30 Vac - 2 wires NO-NC | |
| | L= unshielded standard metal housing | 0 = 12-30 Vac - 4 wires | |

PRODUCT TABLE

| DESCRIPTION | CONNECTION | SHIELDED | HOUSING | ORDER CODE |
|-------------|---------------|----------|----------|------------|
| IS-12-A7-03 | 2 m CABLE | yes | standard | 95B062820 |
| IS-12-A7-S2 | M12 CONNECTOR | yes | standard | 95B062830 |
| IS-12-A8-03 | 2 m CABLE | yes | standard | 95B062840 |
| IS-12-A8-S2 | M12 CONNECTOR | yes | standard | 95B062850 |
| IS-12-C7-03 | 2 m CABLE | no | standard | 95B062940 |
| IS-12-C7-S2 | M12 CONNECTOR | no | standard | 95B062950 |
| IS-12-C8-03 | 2 m CABLE | no | standard | 95B062960 |
| IS-12-C8-S2 | M12 CONNECTOR | no | standard | 95B062970 |



INDUCTIVE SENSORS

Ø 12 DOUBLE OPERATING DISTANCE 24÷230 Vac/dc - 2 WIRES WIRES NO OR NC OUTPUT

- 4 mm to 8 mm operating distance - shielded, unshielded
- Short circuit protection AC/DC
- Cable models
- Inrush current (20ms) 2.5A
- 350mA max output

IS Series



TECHNICAL DATA

| | SHIELDED | UNSHIELDED |
|--------------------------------------|---------------------------------------|------------|
| OPERATING DISTANCE (S _n) | 4 mm | 8 mm |
| POWER SUPPLY | 24 ÷ 230 Vca/dc (-15/+10%) | |
| RIPPLE | 50 ÷ 60 Hz | |
| HYSTERESIS | < 10% | |
| OUTPUT CURRENT | 350 mA max. | |
| OUTPUT CURRENT | 4 mA min. | |
| INRUSH CURRENT | 2,5 A max. (20 ms) | |
| CONSUMPTION | < 1,5 mA | |
| SATURATION VOLTAGE | < 6 V (I=100mA) | |
| INDICATORS | Yellow LED | |
| SWITCHING FREQUENCY | 12 Hz | |
| DELAY AT POWER ON | ≤ 300 ms | |
| REPEATABILITY | Present (manual resetting) | |
| OPERATING TEMPERATURE | ≤ 3% | |
| SHORT CIRCUIT PROTECTION | -25 ÷ +70 °C | |
| MECHANICAL PROTECTION | IP67 | |
| CONNECTIONS | 2 m cable (2 x 0.25 mm ²) | |
| HOUSING MATERIAL | Nickel-plated brass | |
| WEIGHT | 110 g cable version | |

CONNECTIONS



DIMENSIONS (mm)



Note: the front part in blue is valid only for unshielded models



MODEL SELECTION TABLE

| DIAMETER | CONSTRUCTION | OUTPUT | CONNECTION |
|------------|---|-------------------------------|-------------------|
| 04 = 4 mm | A= shielded standard housing | 1 = 10-30 Vdc PNP NO | 02 = 500 mm CABLE |
| 05 = 5 mm | B= shielded short housing | 2 = 10-30 Vdc PNP NC | 03 = 2 m CABLE |
| 08 = 8 mm | C= unshielded standard housing | 3 = 10-30 Vdc NPN NO | S1 = M8 CONN. |
| 12 = 12 mm | D= unshielded short housing | 4 = 10-30 Vdc NPN NC | S2 = M12 CONN. |
| 18 = 18 mm | E= shielded standard housing, double operating distance | 5 = 10-30 Vdc PNP NO-NC | |
| 30 = 30 mm | F= unshielded standard housing, double operating distance | 6 = 10-30 Vdc NPN NO-NC | |
| | G= shielded short housing, double operating distance | 7 = 24-230 Vac - 2 wires NO | |
| | H= unshielded short housing, double operating distance | 8 = 24-230 Vac - 2 wires NC | |
| | I= shielded standard metal housing | 9 = 10-30 Vac - 2 wires NO-NC | |
| | L= unshielded standard metal housing | 0 = 12-30 Vac - 4 wires | |

PRODUCT TABLE

| DESCRIPTION | CONNECTION | SHIELDED | HOUSING | ORDER CODE |
|-------------|------------|----------|----------|------------|
| IS-12-E7-03 | CABLE | yes | standard | 95B063890 |

INDUCTIVE SENSORS

Ø 12

10÷30 Vdc - 3 WIRES PNP OUTPUT

- 2 mm to 4 mm operating distance - shielded, unshielded
- Stainless steel housing
- Cable or M12 connector models
- Output status LED

IS Series



TECHNICAL DATA

| | SHIELDED | UNSHIELDED |
|--------------------------|--------------------------|------------|
| OPERATING DISTANCE (Sn) | 2 mm | 4 mm |
| POWER SUPPLY | 10 ÷ 30 Vdc (-15 / +10%) | |
| RIPPLE | ≤ 10% | |
| HYSTERESIS | < 15% | |
| OUTPUT CURRENT | 200 mA max. | |
| CONSUMPTION | < 10 mA @ 24 Vdc | |
| SATURATION VOLTAGE | < 1.5 V (I = 100 mA) | |
| INDICATORS | Yellow LED | |
| SWITCHING FREQUENCY | 2000 Hz | 1000 Hz |
| REPEATABILITY | ≤ 1% | |
| SHORT CIRCUIT PROTECTION | Present (self-resetting) | |
| OPERATING TEMPERATURE | - 25 ÷ +70 °C | |
| MECHANICAL PROTECTION | IP67 | |
| ACTIVE FACE MATERIAL | Stainless steel | |
| HOUSING MATERIAL | Stainless steel | |
| WEIGHT | 60 g cable version | |

CONNECTIONS



M12 CONNECTOR



View of quadripole male connector.

CONFIGURATION

| Outputs | PIN numbers | | | |
|---------|-------------|---|---|----|
| | 1 | 2 | 3 | 4 |
| NO | + | | - | NO |

DIMENSIONS (mm)

