

YM2D24-020PN1MRJA4

Industrial Ethernet cables and fieldbus cables

PLUG CONNECTORS AND CABLES





Ordering information

| Туре | Part no. |
|--------------------|----------|
| YM2D24-020PN1MRJA4 | 2106182 |

Other models and accessories -> www.sick.com/Industrial_Ethernet_cables_and_fieldbus_cables



Detailed technical data

Technical specifications

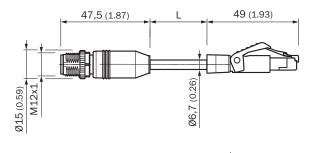
| Accessory group Plug connectors and cables Connection type head A Connection cables Connection type head B Male connector, M12, 4-pin, straight, D-coded Connector material TPU Connector material TPU Connector color Black Locking nut material Zinc die-cast, nickel-plated Tightening torque 0.6 Nm Width across flats 13 Cable 2 m. 4-wire, PUR, halogen-free Jacket material PUR, halogen-free Jacket material O.34 mm² Jacket color Green Cable diameter 6.7 mm Conductor cross section 0.34 mm² Shielded 5 is is ided Bending radius 12 x cable diameter Flexible use Stationary position paration 5 x cable diameter Stationary position paration 6 x 2 x able | • | |
|--|-------------------------|---|
| Connection type head A Male connector, M12, 4-pin, straight, D-coded Connection type head B Male connector, RJ45, 4-pin, straight Locking plug connector Screw-on connection (M12), snap-in locking (RJ45) Connector material TPU Connector color Black Locking nut material Zinc die-cast, nickel-plated Underson flats 13 Cable 2 m, 4-wire, PUR, halogen-free Jacket material PUR, halogen-free Jacket material PUR, halogen-free Jacket color Green Conductor cross section 0.34 mm² Shielding Shielded Bending radius Flexible use Stationary position > 12 x cable diameter Stationary position > 12 x cable diameter Stationary position > 12 x cable diameter Bending cycles 300 v AC Reference voltage 48 v AC 60 v DC 48 v AC 60 v DC 48 v AC 60 v DC 45 x AB Rated impulse voltage 15 A Tiversing speed 3.3 m/s | Accessory group | Plug connectors and cables |
| Connection type head B Male connector, RJ45, 4-pin, straight Locking plug connector Screw on connection (M12), snap-in locking (RJ45) Connector material TPU Connector color Black Locking nut material Zinc die-cast, nickel-plated Tightening forque 0.6 Nm Width across flats 2 m, 4-wire, PUR, halogen-free Cable 2 m, 4-wire, PUR, halogen-free Jacket material PUR, halogen-free Jacket material PUR, halogen-free Conductor cross section 6.7 mm Conductor cross section 0.34 mm² Shielding Shielded Bending radius Flexible use Stationary position > 12 x cable diameter Stationary position <th< th=""><th>Accessory family</th><th>Connection cables</th></th<> | Accessory family | Connection cables |
| Locking plug connector Screw-on connection (M12), snap-in locking (RJ45) Connector material TPU Connector color Black Locking nut material Zinc die-cast, nickel-plated Tightening torque 0.6 Nm Width across flats 13 Cable 2 m, 4-wire, PUR, halogen-free Jacket material PUR, halogen-free Jacket color Green Conductor cross section 0.34 mm² Shielding Shielded Bending radius > 12 x cable diameter Flexible use > 12 x cable diameter Stationary position > 5 x cable diameter Stationary position > 12 x cable diameter Bending cycles 3,000,000 Nominal voltage, cable 3,000,000 Reference voltage 48 V AC 60 V DC 60 V DC Rated impulse voltage 1 kV Current loading 1,5 A Taversing speed 3,3 m/s | Connection type head A | Male connector, M12, 4-pin, straight, D-coded |
| Connector color Black Locking nut material Zinc die-cast, nickel-plated Tightening torque 0.6 Nm Width across flats 13 Cable 2 m, 4-wire, PUR, halogen-free Jacket material PUR, halogen-free Jacket color Green Cable diameter 6.7 mm Conductor cross section 0.34 mm² Shelding > 12 x cable diameter Stationary position > 5 x cable diameter Prag chain operation > 12 x cable diameter Prag chain operation > 12 x cable diameter Stationary position > 2 x cable diameter Prag voltage, cable 3000,000 Nominal voltage, cable 3000 ∨ AC Test voltage, cable 48 ∨ AC 60 ∨ DC Rated impulse voltage 1 kW Current loading 1.5 A Tive voltages goed 33 m/s | Connection type head B | Male connector, RJ45, 4-pin, straight |
| Connector color Black Locking nut material Zinc die-cast, nickel-plated Tightening torque 0.6 Nm Width across flats 13 Cable 2 m, 4-wire, PUR, halogen-free Jacket material PUR, halogen-free Jacket color Green Conductor cross section 0.34 mm² Shielding Shielded Bending radius 5 x cable diameter Stationary position Drag chain operation 5 x cable diameter Drag chain operation 12 x cable diameter Bending cycles 3,000,000 Nominal voltage, cable 300 V AC Test voltage, cable 2,000 V AC Reference voltage 48 V AC Go V DC Rated impulse voltage 1 kV Current loading 1.5 A Tiversing speed 3.3 m/s | Locking plug connector | Screw-on connection (M12), snap-in locking (RJ45) |
| Locking nut material Zinc die-cast, nickel-plated Tightening torque 0.6 Nm Width across flats 13 Cable 2 m, 4-wire, PUR, halogen-free Jacket material PUR, halogen-free Jacket color Green Cable diameter 6.7 mm Conductor cross section 0.34 mm² Shielding Shielded Bending radius * 12 x cable diameter Flexible use > 5 x cable diameter Stationary position > 5 x cable diameter Drag chain operation > 12 x cable diameter Bending cycles 3,000,000 Nominal voltage, cable 300 V AC Test voltage, cable 48 V AC 60 V DC Rated impulse voltage 1 kV Current loading 1.5 A Taversing speed 3,3 m/s | Connector material | TPU |
| Tightening torque 0.6 Nm Width across flats 13 Cable 2 m, 4-wire, PUR, halogen-free Jacket material PUR, halogen-free Jacket color 6-7 mm Cable diameter 6.7 mm Conductor cross section 0.34 mm² Shielding Shielded Bending radius > 12 x cable diameter Flexible use > 5 x cable diameter Stationary position > 5 x cable diameter Drag chain operation > 12 x cable diameter Nominal voltage, cable 3,000,000 Reference voltage 48 V AC 60 V DC Rated impulse voltage 1 kV Current loading 1.5 A Taversing speed 3.3 m/s | Connector color | Black |
| Width across flats 13 Cable 2 m, 4-wire, PUR, halogen-free Jacket material PUR, halogen-free Jacket color Green Cable diameter 6.7 mm Conductor cross section 0.34 mm² Shielding Shielded Bending radius > 12 x cable diameter Stationary position Drag chain operation > 5 x cable diameter Drag chain operation > 12 x cable diameter Bending cycles 3,000,000 Nominal voltage, cable 300 V AC Test voltage, cable 2,000 V AC Reference voltage 48 V AC 60 V DC Rated impulse voltage 1 kV Current loading 1.5 A Traversing speed 3,3 m/s | Locking nut material | Zinc die-cast, nickel-plated |
| Cable 2 m, 4-wire, PUR, halogen-free Jacket material PUR, halogen-free Jacket color Green Cable diameter 6.7 mm Conductor cross section 0.34 mm² Shielding Shielded Bending radius > 12 x cable diameter Stationary position Drag chain operation > 5 x cable diameter Drag chain operation > 12 x cable diameter Nominal voltage, cable 3,000,000 Nominal voltage, cable 300 V AC Test voltage, cable 2,000 V AC Reference voltage 48 V AC 60 V DC Rated impulse voltage 1 kV Current loading 1.5 A Taversing speed 3.3 m/s | Tightening torque | 0.6 Nm |
| Jacket material PUR, halogen-free Cable diameter 6.7 mm Conductor cross section 0.34 mm² Shielding Shielded Bending radius Flexible use Stationary position Drag chain operation > 12 x cable diameter Drag chain operation > 12 x cable diameter Bending cycles 3,000,000 Nominal voltage, cable 300 V AC Test voltage, cable 2,000 V AC Reference voltage 48 V AC 60 V DC Rated impulse voltage 1 kV Current loading 1.5 A Taversing speed 3.3 m/s | Width across flats | 13 |
| Jacket color Green Cable diameter 6.7 mm Conductor cross section 0.34 mm² Shielding Shielded Bending radius * 12 x cable diameter Flexible use Stationary position Drag chain operation > 5 x cable diameter Drag chain operation > 12 x cable diameter Bending cycles 3,000,000 Nominal voltage, cable 300 V AC Test voltage, cable 2,000 V AC Reference voltage 48 V AC 60 V DC Rated impulse voltage 1 kV Current loading 1.5 A Taversing speed 3.3 m/s | Cable | 2 m, 4-wire, PUR, halogen-free |
| Cable diameter Conductor cross section Shielding Shielded Bending radius Flexible use Stationary position Drag chain operation Drag chain operation Show AC Test voltage, cable Reference voltage Rated impulse voltage Current loading Traversing speed 6.7 mm 0.34 mm² 5. kielded 5. 12 x cable diameter 5. 5 x cable diameter 5. 5 x cable diameter 5. 5 x cable diameter 5. 2 x cable diameter 5. 2 x cable diameter 5. 3,000,000 5. 300 V AC 7. 48 V AC 60 V DC 8. 48 V AC 60 V DC 8. 48 V AC 60 V DC 8. 5 A 7. 5 | Jacket material | PUR, halogen-free |
| Conductor cross section Shielding Shielding Shielded Flexible use Stationary position Drag chain operation Nominal voltage, cable Reference voltage Rated impulse voltage Current loading Traversing speed Shielded 0.34 mm² Shielded 0.34 mm² Shielded 12 x cable diameter > 5 x cable diameter > 5 x cable diameter > 12 x cable diameter | Jacket color | Green |
| Shielding Bending radius Flexible use Stationary position Drag chain operation Drag chain operation Sending cycles Nominal voltage, cable Reference voltage 48 V AC 60 V DC Rated impulse voltage Current loading Traversing speed Stationary position > 12 x cable diameter > 5 x cable diameter > 12 x cable diameter | Cable diameter | 6.7 mm |
| Flexible use Stationary position Drag chain operation Drag chain operation 200 V AC Test voltage, cable 48 V AC Reference voltage 60 V DC Rated impulse voltage 60 Current loading Traversing speed 10 X 12 X 2 x able diameter 12 X 2 x 2 x 2 x 2 x 2 x 2 x 2 x 2 x 2 x | Conductor cross section | 0.34 mm ² |
| Flexible use Stationary position Drag chain operation Bending cycles Nominal voltage, cable Test voltage, cable Reference voltage 48 V AC 60 V DC Rated impulse voltage 1 kV Current loading Traversing speed > 12 x cable diameter > 5 x cable diameter > 12 x cable diameter | Shielding | Shielded |
| Stationary position Drag chain operation Pending cycles Nominal voltage, cable Test voltage Reference voltage 48 V AC 60 V DC Rated impulse voltage 1.5 A Traversing speed 2 x cable diameter > 12 x cable diameter 3,000,000 AB **Common of the common of th | Bending radius | |
| Drag chain operation > 12 x cable diameter 3,000,000 Nominal voltage, cable 300 V AC Test voltage, cable 2,000 V AC Reference voltage 48 V AC 60 V DC Rated impulse voltage 1,5 A Traversing speed 1,5 A 3,000,000 300 V AC 2,000 V AC | Flexible use | > 12 x cable diameter |
| Bending cycles Nominal voltage, cable 2,000 V AC Reference voltage 48 V AC 60 V DC Rated impulse voltage 1 kV Current loading 1.5 A Traversing speed 3,000,000 3,000,000 400 V AC 2,000 V AC 48 V AC 60 V DC 3,000,000 48 V AC 60 V DC 3,000,000 48 V AC 60 V DC 3,000,000 48 V AC 60 V DC | Stationary position | > 5 x cable diameter |
| Nominal voltage, cable Test voltage, cable Reference voltage 48 V AC 60 V DC Rated impulse voltage 1 kV Current loading 1.5 A Traversing speed 300 V AC 2,000 V AC 48 V AC 60 V DC 300 V AC 48 V AC 60 V DC 300 V AC 48 V AC 60 V DC 300 V AC 48 V AC 60 V DC 300 V AC 48 V AC 60 V DC 300 V AC | Drag chain operation | > 12 x cable diameter |
| Test voltage, cable Reference voltage 48 V AC 60 V DC Rated impulse voltage 1 kV Current loading 1.5 A Traversing speed 2,000 V AC | Bending cycles | 3,000,000 |
| Reference voltage 48 V AC 60 V DC Rated impulse voltage 1 kV Current loading 1.5 A Traversing speed 3.3 m/s | Nominal voltage, cable | 300 V AC |
| 48 V AC 60 V DC Rated impulse voltage 1 kV Current loading 1.5 A Traversing speed 3.3 m/s | Test voltage, cable | 2,000 V AC |
| 60 V DC Rated impulse voltage 1 kV Current loading 1.5 A Traversing speed 3.3 m/s | Reference voltage | |
| Rated impulse voltage 1 kV Current loading 1.5 A Traversing speed 3.3 m/s | | 48 V AC |
| Current loading 1.5 A Traversing speed 3.3 m/s | | |
| Traversing speed 3.3 m/s | | |
| | | |
| Travelling distance 5 m | Traversing speed | 3.3 m/s |
| | Travelling distance | 5 m |

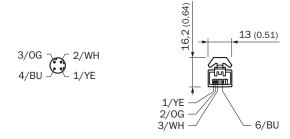
| Acceleration | ≤ 2 m/s² |
|--------------------------------|--|
| Signal type | Ethernet, PROFINET |
| Transmission characteristics | CAT5e |
| Data transmission rate | ≤ 0.1 Gbit/s |
| Application | Drag chain operation Zones with oils and lubricants |
| Authorizations | CE UL |
| Enclosure rating | IP67 (M12), IP20 (RJ45) |
| Ambient operating temperature | |
| Flexible use | -30 °C +70 °C |
| Stationary position | -40 °C +80 °C |
| Drag chain operation | -30 °C +70 °C |
| Head | -25 °C +85 °C |
| Contamination rating | 3 |
| Insulation resistance | > 100 MΩ |
| Overvoltage category | III |
| Specific insulation resistance | < 30 mΩ |
| Thermal resistance, piping | Flame retardant acc. to UL 1581 Section 1090, Section 1100 (FT2), IEC 60332-1-2 Std. |

Classifications

| ECLASS 5.0 | 19030312 |
|----------------|----------|
| ECLASS 5.1.4 | 19030312 |
| ECLASS 6.0 | 27060304 |
| ECLASS 6.2 | 27060304 |
| ECLASS 7.0 | 27060304 |
| ECLASS 8.0 | 27060304 |
| ECLASS 8.1 | 27060304 |
| ECLASS 9.0 | 27060304 |
| ECLASS 10.0 | 27060304 |
| ECLASS 11.0 | 27060304 |
| ECLASS 12.0 | 27060304 |
| ETIM 5.0 | EC000830 |
| ETIM 6.0 | EC000830 |
| ETIM 7.0 | EC003249 |
| ETIM 8.0 | EC003249 |
| UNSPSC 16.0901 | 26121604 |

Dimensional drawing (Dimensions in mm (inch))





SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is "Sensor Intelligence."

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