

YM2D24-050PN1MRJA4

Industrial Ethernet cables and fieldbus cables

PLUG CONNECTORS AND CABLES

SICKSensor Intelligence.



Ordering information

Туре	Part no.
YM2D24-050PN1MRJA4	2106184

Other models and accessories \Rightarrow www.sick.com/Industrial_Ethernet_cables_and_fieldbus_cables



Detailed technical data

Technical specifications

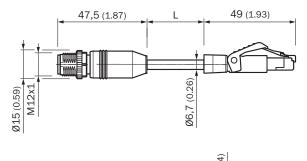
Accessory group Plug connectors and cables Connection type head A Connection cables Connection type head B Male connector, M12, 4-pin, straight, D-coded Connector material TPU Connector material TPU Connector color Black Locking nut material Zinc die-cast, nickel-plated Tightening torque 0.6 Nm Width across flats 13 Cable 5 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 Steicled Bending radius 12 x cable diameter Flexible use Stationary position paration 5 x cable diameter Stationary position Drag chain operation 3 x 000.00 Nominal voltage, cable 3 x 000.00 Reference voltage 48 V AC 60 V DG Rated Impulse voltage 1 kV Current loading 1.5 A <	•	
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 Uight across flats 13 Cable 5 m, 4-wire, PUR, halogen-free Jacket material PUR, halogen-free Jacket material PUR, halogen-free Cable diameter 6.7 mm Conductor cross section 0.34 mm² Shielding Shielded Bending radius Flexible use Stationary position > 12 x cable diameter Stationary position > 12 x cable diameter Drag chain operation > 12 x cable diameter Stationary position	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 5 m, 4-wire, PUR, halogen-free Cable 5 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 S x cable diameter > 5 x cable diameter Drag chain operation > 12 x cable diameter S x cable diameter > 12 x cable diameter S x cable diameter > 12 x cable diameter S x cable diameter > 12 x cable diameter S x voltage, cable 300 v AC Reference voltage 48 v AC GOV DC Rated impulse voltage	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 5 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 > 5 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 5 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 5 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 5 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 Nominal voltage, cable 3,000,000 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 material	TPU
Tightening torque 0.6 Nm Width across flats 13 Cable 5 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 Bending cycles 3,000,000 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 5 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 Shending 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 5 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	5 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 > 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

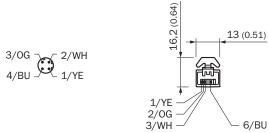
Acceleration	≤ 2 m/s²
Signal type	Ethernet, PROFINET
Transmission characteristics	CAT5e
Data transmission rate	≤ 0.1 Gbit/s
Application	Drag chain operation Zones with oils and lubricants
Authorizations	CE UL
Enclosure rating	IP67 (M12), IP20 (RJ45)
Ambient operating temperature	
Flexible use	-30 °C +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.

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For us, that is "Sensor Intelligence."

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