

YM2D24-100PN1MRJA4





Ordering information

Туре	Part no.
YM2D24-100PN1MRJA4	2106185

Other models and accessories → www.sick.com/



Detailed technical data

Technical specifications

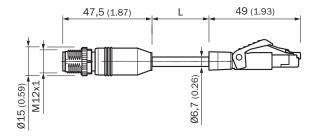
Accessory group Plug connectors and cables Accessory family Connection cables Connection type head B Male connector, M12, 4-pin, straight, D coded Connection type head B Male connector, R145, 4-pin, straight Locking plug connector Screw-on connection (M12), snap-in locking (RJ45) Connector material TPU Connector color Black Locking nut material Zinc die-cast, nickel-plated Tightening torque 0.6 Nm Width across flats 13 Cable 10 m, 4-wire, PUR, halogen-free Jacket material PUR, halogen-free Jacket toolor Green Cable diameter 6.7 mm Shelding Shelded Bending radius 12 x cable diameter Flexible use Stationary position Drag chain operation > 12 x cable diameter Stationary position Drag chain operation > 12 x cable diameter Bending cycles 3,000,000 Reference voltage 460 Y DC Rated impulse voltage 1 kW Current loading 1.5 A Travelling distance	·	
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 Tightening torque 0.6 Nm Width across flats 13 Cable 10 m, 4-wire, PUR, halogen-free Jacket actival PUR, halogen-free Jacket color Green Cable diameter 6.7 mm Shielding Shielded Bending radius Flexible use Flexible use > 12 x cable diameter Stationary position > 5 x cable diameter Stationary position > 12 x cable diameter Stacelle diameter > 12 x cable diameter Bending cycles Seed on VDC Rated impulse voltage 1 kV Rated impulse voltage 1 kV Current loading 1.5 A Traversing speed 3.3 m/s Traversing speed 3.3 m/s Travelling distance 5 m Acceleration \$ 2 m/s² Signal type Ethernet, PROFINET Transmission characteristics </th <th>Accessory group</th> <th>Plug connectors and cables</th>	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 torque 0.6 Nm Width across flats 13 Cable 10 m, 4-wire, PUR, halogen-free Jacket material PUR, halogen-free Jacket color Green Cable dlameter 6.7 mm Shielding Shielded Bending radius Flexible use Stationary position > 12 x cable diameter Stationary position > 5 x cable diameter Drag chain operation > 12 x cable diameter Bending cycles 3.000,000 Reference voltage 5 60 V DC Rated impulse voltage 1.6 A Traversing speed 3.3 m/s Traversing speed 3.3 m/s Traversing speed 5 m Acceleration \$ 2 m/s² Signal type Ethernet, PROFINET Transmission charact	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 10 m, 4-wire, PUR, halogen-free Jacket material PUR, halogen-free Jacket color Green Cable diameter 6.7 mm 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 Reference voltage ≤ 60 V DC Rated impulse voltage 1 kV Current loading 1.5 A Traversing speed 3.3 m/s Travelling distance 5 m Acceleration ≤ 2 m/s² Signal type Ethernet, PROFINET Transmission characteristics CATSe Out of th	Connection type head A	Male connector, M12, 4-pin, straight, D-coded
Connector material TPU Connector color Black Locking nut material Zinc die-cast, nickel-plated Tightening torque 0.6 Nm Width across flats 13 Cable 10 m, 4-wire, PUR, halogen-free Jacket material PUR, halogen-free Jacket color Green Cable dlameter 6.7 mm Shielding Shielded Bending radius Flexible use Stationary position Flexible use Stationary position 5 x cable diameter 5 x cable diameter 5 x cable diameter Prag chain operation > 12 x vable diameter Bending cycles 3.000,000 Reference voltage ≤ 60 V DC Rated impulse voltage 1 kV Current loading 1.5 A Travesling speed 3.3 m/s Travelling distance 5 m Acceleration ≤ 2 m/s² Signal type Ethernet, PROFINET Transmission characteristics CATSe Data transmission rate	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 10 m, 4-wire, PUR, halogen-free Jacket material PUR, halogen-free Green 6.7 mm 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 Reference voltage ≤ 60 V DC Rated impulse voltage 1 kV Current loading 1.5 A 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	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 10 m, 4-wire, PUR, halogen-free Jacket material PUR, halogen-free Jacket color Green Cable diameter 6.7 mm 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 Reference voltage ≤ 60 V DC Rated impulse voltage 1 kV Current loading 1.5 A 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	Connector material	TPU
Tightening torque 0.6 Nm Width across flats 13 Cable 10 m, 4-wire, PUR, halogen-free Jacket material PUR, halogen-free Jacket color Green Cable diameter 6.7 mm Shielding Shielded Bending radius > 12 x cable diameter Flexible use > 12 x cable diameter Stationary position > 5 x cable diameter Drag chain operation > 12 x cable diameter Bending cycles 3,000,000 Reference voltage ≤ 60 V DC Rated impulse voltage 1 kV Current loading 1.5 A 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	Connector color	Black
Width across flats 13 Cable 10 m, 4-wire, PUR, halogen-free Jacket material PUR, halogen-free Jacket color Green Cable diameter 6.7 mm Shielding Shielded Bending radius Flexible use Stationary position Drag chain operation > 12 x cable diameter Drag chain operation Dra	Locking nut material	Zinc die-cast, nickel-plated
Cable 10 m, 4-wire, PUR, halogen-free Jacket material PUR, halogen-free Jacket color Green Cable diameter 6.7 mm Shielding Shielded Bending radius Flexible use Stationary position > 5 x cable diameter Drag chain operation Drag chain operation Drag chain operation > 12 x cable diameter Bending cycles 3,000,000 Reference voltage ≤ 60 V DC Rated impulse voltage 1 kV Current loading 1.5 A 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	Tightening torque	0.6 Nm
Jacket material PUR, halogen-free Cable diameter 6.7 mm Shielding Shielded Bending radius Flexible use Stationary position Paragchain operation Paragchain Paragchain operation Paragchain Operation Paragchain Operation Paragchain Paragchain Paragchain	Width across flats	13
Jacket color Green Cable diameter 6.7 mm 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 Reference voltage ≤ 60 V DC Rated impulse voltage 1 kV Current loading 1.5 A 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	Cable	10 m, 4-wire, PUR, halogen-free
Cable diameter Shielding Shielding Bending radius Flexible use Stationary position Drag chain operation Drag chain operation Bending cycles Reference voltage Reference voltage 1 kV Current loading 1.5 A Traversing speed 3.3 m/s Travelling distance Acceleration Signal type Ethernet, PROFINET Transmission characteristics CAT5e Data transmission rate Shielded	Jacket material	PUR, halogen-free
Shielding Bending radius Flexible use Stationary position Drag chain operation Drag chain operation Bending cycles Reference voltage Reference voltage Current loading Travelling distance Acceleration Signal type Transmission characteristics Data transmission rate Stationary position > 12 x cable diameter > 5 x cable diameter > 12 x cable diameter	Jacket color	Green
Bending radius Flexible use Stationary position Drag chain operation Bending cycles Reference voltage Rated impulse voltage 1 kV Current loading Traversing speed Travelling distance Acceleration Signal type Transmission characteristics Data transmission rate > 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 Bending cycles 3,000,000 Reference voltage Rated impulse voltage 1 kV Current loading Traversing speed 3.3 m/s Travelling distance Acceleration Signal type Transmission characteristics CAT5e Data transmission rate > 12 x cable diameter	Shielding	Shielded
Stationary position Drag chain operation Page chain operation Drag chain operation 12 x cable diameter 3,000,000 Reference voltage 1 kV Current loading 1.5 A Traversing speed 3.3 m/s Travelling distance Acceleration Signal type Ethernet, PROFINET Transmission characteristics CAT5e Data transmission rate > 5 x cable diameter > 12 x cable diameter > 13 x cable diameter > 12 x cable diameter	Bending radius	
Drag chain operation > 12 x cable diameter Bending cycles 3,000,000 Reference voltage ≤ 60 V DC Rated impulse voltage 1 kV Current loading 1.5 A 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	Flexible use	> 12 x cable diameter
Bending cycles 3,000,000 Reference voltage ≤ 60 V DC Rated impulse voltage 1 kV Current loading 1.5 A 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	Stationary position	> 5 x cable diameter
Reference voltage ≤ 60 V DC Rated impulse voltage 1 kV Current loading 1.5 A 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	Drag chain operation	> 12 x cable diameter
Rated impulse voltage 1 kV Current loading 1.5 A Traversing speed 3.3 m/s Travelling distance 5 m Acceleration ≤ 2 m/s² Signal type Ethernet, PROFINET Transmission characteristics CAT5e ≤ 0.1 Gbit/s	Bending cycles	3,000,000
Current loading 1.5 A 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	Reference voltage	≤ 60 V DC
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	Rated impulse voltage	1 kV
Travelling distance 5 m Acceleration ≤ 2 m/s² Signal type Ethernet, PROFINET Transmission characteristics CAT5e Data transmission rate ≤ 0.1 Gbit/s	Current loading	1.5 A
Acceleration $\leq 2 \text{ m/s}^2$ Signal type Ethernet, PROFINET Transmission characteristics CAT5e Data transmission rate $\leq 0.1 \text{ Gbit/s}$	Traversing speed	3.3 m/s
Signal type Ethernet, PROFINET Transmission characteristics CAT5e Data transmission rate ≤ 0.1 Gbit/s	Travelling distance	5 m
Transmission characteristicsCAT5eData transmission rate $\leq 0.1 \text{ Gbit/s}$	Acceleration	≤ 2 m/s²
Data transmission rate ≤ 0.1 Gbit/s	Signal type	Ethernet, PROFINET
	Transmission characteristics	CAT5e
Application Drag chain operation	Data transmission rate	≤ 0.1 Gbit/s
	Application	Drag chain operation

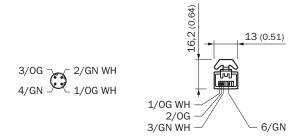
	Zones with oils and lubricants Weld-spark resistant
Authorizations	CE UL
Enclosure rating	IP67 (M12), IP20 (RJ45)
Ambient operating temperature	
Flexible use	-30 °C +70 °C
Stationary position	-40 °C +80 °C
Drag chain operation	-30 °C +70 °C
Head	-25 °C +85 °C
Contamination rating	3
Insulation resistance	> 100 MΩ
Overvoltage category	III
Specific insulation resistance	< 30 mΩ
Thermal resistance, cable	Flame retardant according to UL 1581 Section 1060 (FT1), Section 1061 (cable flame), Section 1080 (VW-1) / IEC 60332-1-2

Classifications

ECI@ss 5.0	19030312
ECI@ss 5.1.4	19030312
ECI@ss 6.0	27060304
ECI@ss 6.2	27060304
ECI@ss 7.0	27060304
ECI@ss 8.0	27060304
ECI@ss 8.1	27060304
ECI@ss 9.0	27060304
ECI@ss 10.0	27060304
ECI@ss 11.0	27060304
ETIM 5.0	EC000830
ETIM 6.0	EC000830
ETIM 7.0	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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