

YM2D24-100PN1N2D24

Industrial Ethernet cables and fieldbus cables

PLUG CONNECTORS AND CABLES

SICKSensor Intelligence.



Ordering information

Туре	Part no.
YM2D24-100PN1N2D24	2106167

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



Detailed technical data

Technical specifications

Accessory group Plug connectors and cables Accessory family Connection cables Connection type head A Male connector, M12, 4-pin, straight, D-coded Connector type head B Male connector, M12, 4-pin, angled, D-coded Locking plug connector Screw connection Connector material TPU Connector color Black Locking nut material Jack description Tightening torque Jo. 6 Nm Wildth across flats 13 Cable Jo. M Awire, PUR, halogen-free Jacket material PUR, halogen-free Jacket material Green Cable diameter 6.7 mm Conductor cross section 9.34 mm² Shielded Shielded Bending radius > 12 x cable diameter Flexible use Stationary position Drag chain operation > 5 x cable diameter Stationary position Drag chain operation > 12 x cable diameter Stationary position Drag chain operation > 12 x cable diameter Stationary position Drag chain operation > 12 x cable diameter Stationary position Drag chain operation	•	
Connection type head B Male connector, M12, 4-pin, straight, D-coded Locking plug connector Screw connection 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 material PUR, halogen-free Cable diameter 6.7 mm Conductor cross section 0.34 mm² Shielding Shielded Bending radius 12 x cable diameter Flexible use Stationary position > 12 x cable diameter Stationary position > 12 x cable diameter Drag chain operation > 12 x cable diameter Stature cable 3000 v AC Test voltage, cable 300 v AC Reference voltage 48 v AC Gov V DC Rated impulse voltage 1.5 kV Current loading 4 A Tiversing speed 3.3 my/s	Accessory group	Plug connectors and cables
Connection type head B Male connector, M12, 4-pin, angled, D-coded Locking plug connector Screw connection Connector material TPU Connector color Black Locking nut material Zinc die-cast, nickel-plated Tightening forque 0.6 Nm Width across flats 13 Cable 10m, 4-wire, PUR, halogen-free Jacket material PUR, halogen-free Jacket material PUR, halogen-free Conductor cross section G-7 mm Conductor cross section 0.34 mm² Shelding Shelded Bending radius Flexible use Stationary position Pora on Drag chain operation Porag chain o	Accessory family	Connection cables
Locking plug connector Screw connection 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 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 Drag chain operation > 12 x cable diameter Stationary position > 5 x cable diameter Bending cycles 3,000,000 Nominal voltage, cable 300 V AC Test voltage, cable 48 V AC 60 V DC 60 V DC Rated impulse voltage 1.5 kV Current loading 4 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 10 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 > 5 x cable diameter Flexible use Stationary position > 5 x cable diameter Drag chain operation > 22 x cable diameter Nominal voltage, cable 3,000,000 Nominal voltage, cable 300 V AC Test voltage, cable 48 V AC GoV DC AC Rated impulse voltage 1.5 kV Current loading 4 A Taversing speed 3.3 m/s	Connection type head B	Male connector, M12, 4-pin, angled, D-coded
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 Conductor cross section 0.34 mm² Shielding Shielded Bending radius Flexible use Stationary position Drag chain operation 5 x cable diameter Drag chain operation 5 x cable diameter Bending cycles 3,000,000 Nominal voltage, cable 3,000,000 Reference voltage 48 V AC Go V DC Rated impulse voltage 4.8 Current loading 4.A Tiversing speed 3.3 m/s	Locking plug connector	Screw connection
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 Cable diameter 6.7 mm 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 Drag chain operation > 12 x cable diameter Bending cycles 3.000,000 Nominal voltage, cable 3.000,000 Reference voltage 48 V AC Reference voltage 48 V AC Current loading 4 A Taversing speed 4 A Taversing speed 3.3 m/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 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 300 ∨ AC Reference voltage 48 ∨ AC 60 ∨ DC Rated impulse voltage 1.5 kV Current loading 4 A Taversing speed 3,3 m/s	Connector color	Black
Width across flats 13 Cable 10 m, 4-wire, PUR, halogen-free Jacket material PUR, halogen-free 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 Shominal 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 1.5 kV Current loading 4 A Taversing speed 3,3 m/s	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 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 1.5 kV Current loading 4 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 1.5 kV Current loading 4 A Traversing speed 3.3 m/s	Width across flats	13
Jacket colorGreenCable diameter6.7 mmConductor cross section0.34 mm²ShieldingShieldedBending radius* 12 x cable diameterPrag chain operation> 5 x cable diameterDrag chain operation> 12 x cable diameterBending cycles3,000,000Nominal voltage, cable300 V ACTest voltage, cable2,000 V ACReference voltage48 V ACGo V DCActed impulse voltage1.5 kVCurrent loading4 ATaversing speed3.3 m/s	Cable	10 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 A8 V AC 60 V DC Rated impulse voltage Current loading Traversing speed 6.7 mm 0.34 mm² 5.2 k mm² 5 kielded 5.12 x cable diameter 5.5 x cable diame	Jacket material	PUR, halogen-free
Conductor cross section Shielding Shielding Bendling radius Flexible use Stationary position Drag chain operation Drag chain operation Stationary position operation Drag chain operation Shool, 000 Nominal voltage, cable Test voltage, cable Reference voltage 48 V AC 60 V DC Rated impulse voltage Current loading Traversing speed 0.34 mm² Shielded 0.34 mm² Shielded 12 x cable diameter > 12 x cab	Jacket color	Green
Shielding Bending radius Flexible use Stationary position Drag chain operation Drag chain operation Shielded Stationary position Stationary position Drag chain operation Drag chain operation Show Ac Solv Ac Sol	Cable diameter	6.7 mm
Flexible use Stationary position 5 x cable diameter 7 x cable diameter	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 4 A Traversing speed > 12 x cable diameter > 5 x cable diameter > 12 x cable diameter > 12 x cable diameter	Shielding	Shielded
Stationary position Drag chain operation Pending cycles Nominal voltage, cable Test voltage, cable Reference voltage 48 V AC 60 V DC Rated impulse voltage Current loading Traversing speed > 5 x cable diameter > 12 x cable diameter	Bending radius	
Drag chain operation > 12 x cable diameter 3,000,000 Nominal voltage, cable Test voltage, cable Reference voltage 48 V AC 60 V DC Rated impulse voltage 1.5 kV Current loading Traversing speed > 12 x cable diameter 3,000,000 400 400 400 400 400 40	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 1.5 kV Current loading 4 A Traversing speed 3,000,000 3,000,000 400 400 400 4	Stationary position	> 5 x cable diameter
Nominal voltage, cable Test voltage, cable Reference voltage 48 V AC 60 V DC Rated impulse voltage 1.5 kV Current loading Traversing speed 300 V AC 2,000 V AC 48 V AC 60 V DC 3.3 m/s	Drag chain operation	> 12 x cable diameter
Test voltage, cable Reference voltage 48 V AC 60 V DC Rated impulse voltage 1.5 kV Current loading 4 A Traversing speed 2,000 V AC	Bending cycles	3,000,000
Reference voltage 48 V AC 60 V DC Rated impulse voltage 1.5 kV Current loading 4 A Traversing speed 3.3 m/s	Nominal voltage, cable	300 V AC
48 V AC 60 V DC Rated impulse voltage 1.5 kV Current loading 4 A Traversing speed 3.3 m/s	Test voltage, cable	2,000 V AC
60 V DC Rated impulse voltage 1.5 kV Current loading 4 A Traversing speed 3.3 m/s	Reference voltage	
Rated impulse voltage 1.5 kV Current loading 4 A Traversing speed 3.3 m/s		48 V AC
Current loading 4 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	IP65 / IP66K / IP67
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.

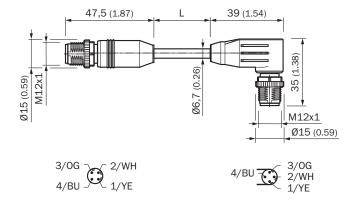
Classifications

ECLASS 5.0	27061801
ECLASS 5.1.4	27061801
ECLASS 6.0	27061801
ECLASS 6.2	27061801
ECLASS 7.0	27061801
ECLASS 8.0	27061801
ECLASS 8.1	27061801
ECLASS 9.0	27061801
ECLASS 10.0	27061801
ECLASS 11.0	27061801
ECLASS 12.0	27061801
ETIM 5.0	EC002599
ETIM 6.0	EC002599
ETIM 7.0	EC002599
ETIM 8.0	EC002599
UNSPSC 16.0901	26121604

YM2D24-100PN1N2D24 | Industrial Ethernet cables and fieldbus cables

PLUG CONNECTORS AND CABLES

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."

WORLDWIDE PRESENCE:

Contacts and other locations -www.sick.com

