

# YM2D24-030EF4M2D24

Industrial Ethernet cables and fieldbus cables



### YM2D24-030EF4M2D24 | Industrial Ethernet cables and fieldbus cables



Ordering information

Туре	Part no.
YM2D24-030EF4M2D24	2129305

Other models and accessories 

www.sick.com/Industrial\_Ethernet\_cables\_and\_fieldbus\_cables



#### Detailed technical data

Technical specifications

Connection type head AMale connector, M12, 4 pin, straight, D-codedConnection type head BMale connector, M12, 4 pin, straight, D-codedLocking ping connectorFWConnector materialTWConnector materialSalexLocking nut materialCin cliceast, nickel-platedTightening torque0.8 NmVidth across flatsSin diverseJacket materialSin diverseLocking nut materialSin diverseJacket colorSin diverseJacket colorSin diverseSheidingSin diverseJacket colorSin diverseStationary postingSin diverseJackat stationary postingSin diverseStationary postingSin diverseJon diverseSin diverseTig diverseSin diverseStationary postingSin diverseJon diverseSin diverseStationary postingSin diverseJon diverseSin diverseStationary postingSin diverse		
Locking plug connectorScew connectionConnector colorFIPConnector colorBiackLocking nut materialCin die cast, nickel-platedTigthening torque0.8 NnWidth across flatsI3Cablem, 4-wire, TPELacket materialTrguolaseCableSinderJacket colorTrguolaseCable diameterSinderSheldingSinderStationary position>10x cable diameterStationary position>10x cable diameterSt	Connection type head A	Male connector, M12, 4-pin, straight, D-coded
Connector materialFPUConnector colorBackLocking nut materialZinc die-cast, nickel-platedLocking nut material0.6 NmVidth across flats13CableSm, 4-wire, TPEJacket materialTPEJacket colorUrquoiseCableSheldedSheldingSheldedSheldingSheldedStationary position>10 x cable diameterStationary position>10 x cable diamete	Connection type head B	Male connector, M12, 4-pin, straight, D-coded
Connect colorBlackLocking nut materialCin dic cast, nickel-platedTightening torque0.6 NmVidth aeross flats3CableSm. 4vire, TPELaket naterialTrquoiseLaket colorKin dic diameterSabieldingbieldedStationary posts>10 x cable diameterStationary posts>100 x Cable diameterStationary posts>10	Locking plug connector	Screw connection
Locking nut materialDia die-cast, nickel-platedTightening torque0.6 NnWith aeross flats13CableIm, Awire, TPELacket naterialTreJacket color10 mainCable diameter6.6 mmSheldingbieleddShelding radius> 10 x cable diameterStationary position20 x cable diameterStationary position10 x cable diameterStationary position10 x cable diameterStationary position20 x cable diameterStationary position20 x cable diameterStationary position10 x cable diameterStationary position10 x cable diameterStationary position20 x cable diameterStationary position20 x cable diameterStationary position10 x cable diameterStationary position10 x cable diameterStationary position10 x cable diameterStationary position20 x Colon XReference voltage48 v ACGov Do VaC20 v DCRatel Inpulse voltage15 kVCurrent loading14 x ATavelling distance0.6 mAcalestion2.1 m/s²Stationary position2.1 m/s²Stationary position2.1 m/s²	Connector material	TPU
Tightening torque0.8 kmWitch across flats3Gable3m,4wire,TPEJacket materialTPEJacket color1/uquoiseGable diameter6.6 mmShelding9Stationary position101x cable diameterStationary position100x cable diameterDarge chain opper100x cable diameterStationary position100x cable diameterDarge chain opper100x cable diameterStationary position100x cable diameterStationary position10x c	Connector color	Black
With across flatsIWith across flatsICableSin, 4wire, TPEJacket materialTPECable diameter6.8 mmCable diameterShieldedStationary position> 10 x cable diameterYang achain operation> 10 x cable diameterStationary position> 10 x cable diameterYang achain operation>	Locking nut material	Zinc die-cast, nickel-plated
Cablean, 4wire, TPEJacket materialTPEJacket colorTrupuiseCable diameter6.6 mShelding radius> 10.x cable diameterStationary postion> 8.x cable diameterDrag chain operation> 10.x cable diameterStationary postion> 8.x cable diameterDrag chain operation> 10.x cable diameterStationary postion> 8.x cable diameterStationary postion> 8.x cable diameterStationary postion> 8.x cable diameterStationary postion> 0.00,000Reference voltage.000,000Reference voltage.000,VACReference voltage.000,VACRated Impulse voltage.05 VACRated Impulse voltage.4.XCurrent loading.4.XTavesling speed.2.m/sJacketeration.2.m/sStationary postion.2.m/sStationary postion.2.4.m/s²Stationary postionary postion.2.4.m/s²	Tightening torque	0.6 Nm
Jacket materialTPEJacket colorIurquoiseCable diameterSheiddometerStationary position>8 x cable diameterStationary position>8 x cable diameterDrag chain operation>10 x cable diameterBending cycles100 x cable diameterReference voltage000 x 000Reference voltage000 x 0ARated implement38 x Cable diameterStationary position000 x 0ATotag chain operation000 x 0AReference voltage48 x ACRated implement voltage, cable10 x 0ARated implement voltage, cable15 kVRated implement voltage, cable10 x 0ARated implement voltage, cable10 x 0ARated implement voltage48 x ACRated implement voltage10 x 0ARated implement voltage10 x 0ARated implement voltage10 x 0ARated implement voltage10 x 0ARated implement voltage2 x mysRated implement voltage2 x mysStation position voltage0 x mysStation position voltage2 x mys²Rated implement voltage2 x mys²Rated implement voltage2 x mys²Station position voltage2 x mys²	Width across flats	13
Jacket colorTurquoiseCable diameter6.6 mmShieldingShieldaBending radius-Fistibles>10 x cable diameterStationary posito>10 x cable diameterDrag chain operato>10 x cable diameterDrag chain operato>10 x cable diameterTest voltage, cable.000,000Reference voltage.000 ACReference voltage.000 ACReference voltage.000 ACReference voltage.000 ACReference voltage.000 ACRated impulse voltage.000 ACRated impulse voltage.000 ACRater impulse voltage.000 ACRater impulse voltage.000 ACRater impulse voltage.000 ACCarrent loading.050 ACTarverling distance.000 ACAcceleration.000 ACSigni type.000 AC<	Cable	3 m, 4-wire, TPE
Cable diameter         6.6 mm           Shielding         Shielded           Bending radius         Voltable diameter           Flexible use         > 10 x cable diameter           Stationary positin         > 8 x cable diameter           Drag chain operatin         > 10 x cable diameter           Drag chain operatin         > 10 x cable diameter           Nominal voltage, cable         000,000           Reference voltage         200 x Call           Reference voltage         XV           Rated impulse voltage         1.5 kV           Current loading         1.2 m/s           Travelling distance         0.6 m           Grade station         2.2 m/s <sup>2</sup> Stationary positin         2.2 m/s <sup>2</sup>	Jacket material	TPE
ShieldingShieldingBending radius> 10 x cable diameterFlexible us> 10 x cable diameterStationary position> 10 x cable diameterDrag chain operation> 10 x cable diameterBending cycles.000,000Nominal voltage, cable600 V ACTest voltage, cable.000,VACReference voltage.500 V ACVoltage, cable.500 V ACReference voltage.500 V ACRated impulse voltage.5 kVRated impulse voltage.5 kVTaversing speed.12 m/sTaveling distance.6 mAcceleration.6 1 mSignal typeEthernket/IPIM	Jacket color	Turquoise
Bending radiusInterster interster interst	Cable diameter	6.6 mm
Flexible use>10 x cable diameterStationary position> 8 x cable diameterDrag chain opperute> 10 x cable diameterBending cycles.000,000Kominal voltage, cable.000 x CTest voltage, cable.000 x CReference voltage.000 x CKeference voltage.000 x CCurrent loading.050 x CTaversing speed.15 x VFaveling distance.000 x CAcceleration.010 x CSignal type.010 x C <tr< th=""><th>Shielding</th><th>Shielded</th></tr<>	Shielding	Shielded
Stationary position> 8 x cable diameterDrag chain operation> 10 x cable diameterBending cycles0.00,000Nominal voltage, cable600 VACTest voltage, cable1,500 VACReference voltage48 VAC 60 VDCRated impulse voltage1,5 VACRated impulse voltage1,5 VACCurrent loading1,5 VACTraversing speed1,2 m/sIraveling distance0.6 mAccleration5,2 M/s²Signal typeEthernket/IPM	Bending radius	
Drag chain operation> 10 x cable diameterBending cycles1,000,000Nominal voltage, cable600 V ACTest voltage, cable1,500 V ACReference voltage4,80 ACCorrent loading1,5 kVCurrent loading1,5 kVTraveling distance0.6 mAcceleration2,2 4 m/s²Signal typeEthernet / IPTM	Flexible use	> 10 x cable diameter
Bending cycles1,000,000Nominal voltage, cable600 V ACTest voltage, cable1,500 V ACReference voltage48 V AC60 V DC60 V DCRated impulse voltage1.5 kVCurrent loading4 ATraversing speed1.2 m/sTravelling distance0.6 mAcceleration\$2.4 m/s²Signal typeEthernet, IIP™	Stationary position	> 8 x cable diameter
Nominal voltage, cable600 V ACTest voltage, cable1,500 V ACReference voltage48 V AC60 v DC60 v DCRated impulse voltage1.5 kVCurrent loading4ATraversing speed1.2 m/sTravelling distance0.6 mAcceleration2.4 m/s²Signal typeEthernet, EtherNet/IPTM	Drag chain operation	> 10 x cable diameter
Test voltage, cable       1,500 VAC         Reference voltage       48 V AC         60 V DC       60 V DC         Rated impulse voltage       1.5 kV         Current loading       4A A         Traversing speed       1.2 m/s         Travelling distance       0.6 m         Acceleration       \$2.4 m/s²         Signal type       Ethernet, EtherNet/IP <sup>TM</sup>	Bending cycles	1,000,000
Reference voltage       48 ∨ AC         48 ∨ AC       60 ∨ DC         Rated impulse voltage       1.5 ×V         Current loading       4 A         Traversing speed       1.2 m/s         Travelling distance       0.6 m         Acceleration       ≤ 2.4 m/s²         Signal type       Ethernet./IP™	Nominal voltage, cable	600 V AC
48 ∨ AC60 ∨ DCRated impulse voltage1.5 k∨Current loading4 ATraversing speed1.2 m/sTravelling distance0.6 mAcceleration≤.24 m/s²Signal typeEthernNet/IP™	Test voltage, cable	1,500 V AC
60 V DCRated impulse voltage1.5 kVCurrent loading4 ATraversing speed1.2 m/sD Composition0.6 mAcceleration≤ 2.4 m/s²Signal typeEthernNet/IP™	Reference voltage	
Rated impulse voltage1.5 kVCurrent loading4 ATraversing speed1.2 m/sTravelling distance0.6 mAcceleration≤ 2.4 m/s²Signal typeEthernet,EtherNet/IP™		48 V AC
Current loading4 ATraversing speed1.2 m/sTravelling distance0.6 mAcceleration≤ 2.4 m/s²Signal typeEthernet, EtherNet/IP™		60 V DC
Traversing speed     1.2 m/s       Travelling distance     0.6 m       Acceleration     ≤ 2.4 m/s <sup>2</sup> Signal type     Ethernet, EtherNet/IP™	Rated impulse voltage	1.5 kV
Travelling distance     0.6 m       Acceleration     ≤ 2.4 m/s²       Signal type     Ethernet, EtherNet/IP™	Current loading	4 A
Acceleration     ≤ 2.4 m/s <sup>2</sup> Signal type     Ethernet, EtherNet/IP™	Traversing speed	1.2 m/s
Signal type Ethernet, EtherNet/IP™	Travelling distance	0.6 m
	Acceleration	≤ 2.4 m/s²
Transmission characteristics CAT5e	Signal type	Ethernet, EtherNet/IP™
	Transmission characteristics	CAT5e

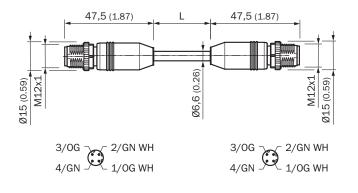
### YM2D24-030EF4M2D24 | Industrial Ethernet cables and fieldbus cables

Data transmission rate	≤ 0.1 Gbit/s
Torsion force	270°/1m
Torsion cycles	3,000,000
Cycles per minutes	60
Application	Drag chain operation Robot Zones with oils and lubricants
Authorizations	CE UL
Enclosure rating	IP65 / IP66K / IP67
Operating temperature	
Stationary position	-40 °C +80 °C
Head	-25 °C +85 °C
Contamination rating	3
Insulation resistance	> 100 MΩ
Overvoltage category	III
Specific insulation resistance	< 30 mΩ

#### 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

#### Dimensional drawing (Dimensions in mm (inch))



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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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Online data sheet

