



MWS120-22Q4NR18X16

MWS120

MEASURING WHEEL ENCODERS

SICK
Sensor Intelligence.



Illustration may differ

Ordering information

Type	part no.
MWS120-22Q4NR18X16	1151263

Included in delivery: ANM58B-FENNA0000301000XX018X16 (1), BEF-MWS120-ARM (1), BEF-MR010030R (1)Other models and accessories → www.sick.com/MWS120

Detailed technical data

Safety-related parameters

MTTF_D (mean time to dangerous failure)	165 years (EN ISO 13849-1) ¹⁾ ²⁾
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¹⁾ This product is a standard product and does not constitute a safety component as defined in the Machinery Directive. Calculation based on nominal load of components, average ambient temperature 40 °C, frequency of use 8760 h/a. All electronic failures are considered hazardous. For more information, see document no. 8015532.

²⁾ Value refers to the mounted encoder.

Performance

Max. resolution (number of steps per revolution x number of revolutions)	18 bit x 16 bit (262,144 x 65,536)
Measuring increment (resolution in mm/pulse)	0.0008 ¹⁾ ²⁾
Repeatability	< 0.1 mm ³⁾

¹⁾ Calculation example: Circumference of wheel / pulses per revolution = 200 mm / 16384 pulses per revolution = 0,012mm/pulse.

²⁾ Value based on measuring wheel circumference. The measuring wheel circumference depends on manufacturing tolerances, wear and tear, the selected spring tensioning force, and the behavior of the measurement wheel surface at different temperatures and on different measurement surfaces. To obtain the most accurate measurement results, we recommend performing a reference run for positioning tasks so that application-specific measuring wheel characteristics can be taken into account.

³⁾ Value is based on the mechanics. Backlash of the measuring wheel mechanics, is at a minimum. This enables a precise and repeatable measurement results.

Interfaces

Communication interface	PROFINET
Programmable/configurable	✓

Electrical data

Connection type	Male connector, 1x, M12, 4-pin, radial Female connector, 2x, M12, 4-pin, radial
Supply voltage	10 V ... 32 V
Reverse polarity protection	–

Mechanical data

Measuring wheel surface	O-ring NBR70
Mounting	Measuring wheel mounted at the front

¹⁾ The right spring tension force for the application shall keep the slippage at a minimum in the application working conditions and measuring surface, without damaging the measuring surface.

²⁾ The clamping force can be set in 6 fixed increments of 4 N. 4 N corresponds to one increment.

³⁾ When mounted from below, the encoder weight during spring pretensioning must be taken into account.

Spring arm mechanism material	
Spring element	Stainless steel
Measuring wheel, spring arm	Aluminum
Start up torque	1.1 Ncm
Operating torque	0.5 Ncm
Bearing lifetime	$L_{mn} 30 \times 10^9$ revolutions
Minimum spring tension force	4 N ¹⁾ ²⁾
Max. permissible working area for the spring (continuous operation)	± 10 mm
Service life of spring element	> 1.5 million cycles
Mounting position relative to the measuring object	Preferably from above, from below possible ³⁾
Mounted encoder	ANM58 PROFINET, ANM58B-FENNA0000301000XX018X16, 1146130
Mounted mechanic	BEF-MWS120-ARM, 2118239
Attached measuring wheel	BEF-MR010030R, 2049278

¹⁾ The right spring tension force for the application shall keep the slippage at a minimum in the application working conditions and measuring surface, without damaging the measuring surface.

²⁾ The clamping force can be set in 6 fixed increments of 4 N. 4 N corresponds to one increment.

³⁾ When mounted from below, the encoder weight during spring pretensioning must be taken into account.

Ambient data

EMC	According to EN 61000-6-2 and EN 61000-6-3 ¹⁾
Operating temperature range	-30 °C ... +80 °C ²⁾
Storage temperature range	-40 °C ... +100 °C ²⁾

¹⁾ EMC according to the standards quoted is achieved if shielded cables are used.

²⁾ This value reflects the smallest temperature value of the installed products. For more information, please look at the individual data sheets.

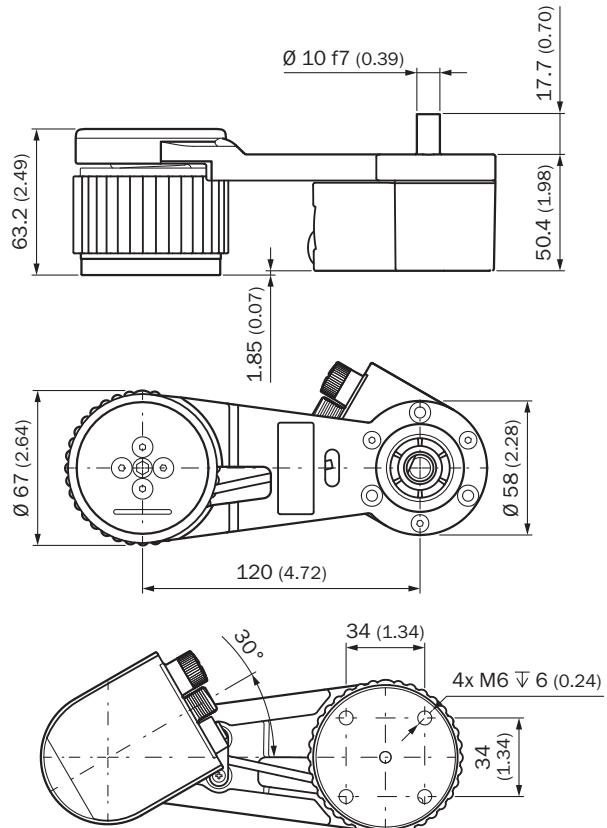
Certificates

EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓
China-RoHS	✓

Classifications

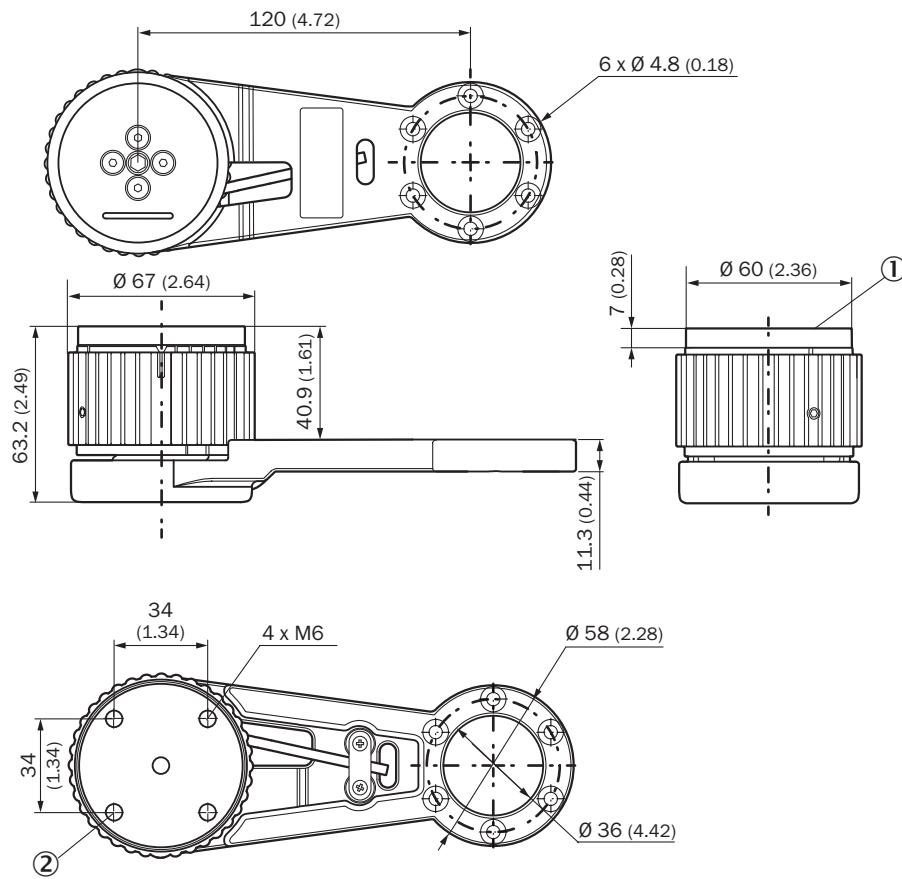
ECLASS 5.0	27270501
ECLASS 5.1.4	27270501
ECLASS 6.0	27270590
ECLASS 6.2	27270590
ECLASS 7.0	27270501
ECLASS 8.0	27270501
ECLASS 8.1	27270501
ECLASS 9.0	27270501
ECLASS 10.0	27270790
ECLASS 11.0	27270707

ECLASS 12.0	27270504
ETIM 5.0	EC001486
ETIM 6.0	EC001486
ETIM 7.0	EC001486
ETIM 8.0	EC001486
UNSPSC 16.0901	41112113

Dimensional drawing

Dimensions in mm (inch)

Dimensional drawing

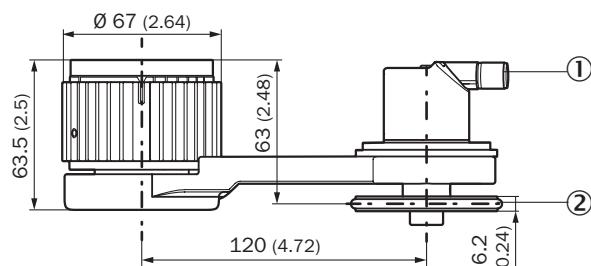


Dimensions in mm (inch)

① Adapter plate

② Holes of the adapter plate, maximum thread depth 6 mm

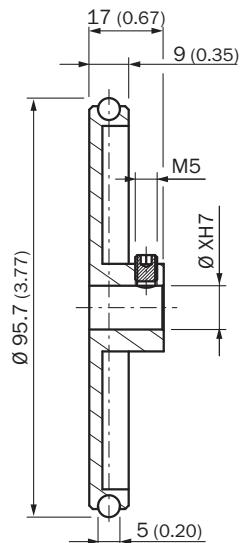
Dimensional drawing



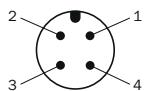
Dimensions in mm (inch)

① Please refer to the dimensional drawings in the respective data sheet for the installed encoder.

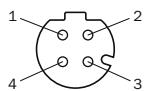
② The measuring wheel circumference and surface depend on the installed measuring wheel.

Dimensional drawing

Dimensions in mm (inch)

PIN assignment Male connector**Supply voltage**

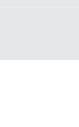
PIN	Wire color	Signal
1	Brown	U _S 10 V ... 30 V
2	White	Not assigned
3	Blue	GND
4	Black	Not assigned

PIN assignment Female connector**Port 1, Port 2**

PIN	Wire color	Signal
1	Yellow	T x D+
2	White	R x D+
3	Orange	T x D-
4	Blue	R x D-

Recommended accessories

Other models and accessories → www.sick.com/MWS120

	Brief description	Type	part no.
measuring wheels and measuring wheel mechanics			
	<ul style="list-style-type: none"> Product segment: Measuring wheels and measuring wheel mechanics Product family: Measuring wheels Description: Aluminium measuring wheel with O-ring (NBR70) for 10 mm solid shaft, circumference 200 mm 	BEF-MR010020R	2055224
	<ul style="list-style-type: none"> Product segment: Measuring wheels and measuring wheel mechanics Product family: Measuring wheels Description: Aluminium measuring wheel with O-ring (NBR70) for 10 mm solid shaft, circumference 300 mm 	BEF-MR010030R	2049278
	<ul style="list-style-type: none"> Product segment: Measuring wheels and measuring wheel mechanics Product family: Measuring wheels Description: Measuring wheel with O-ring (NBR70) for 10 mm solid shaft, circumference 500 mm 	BEF-MR010050R	2055227
	<ul style="list-style-type: none"> Product segment: Measuring wheels and measuring wheel mechanics Product family: Measuring wheels Description: Aluminum measuring wheel with cross-knurled surface for 10 mm solid shaft, circumference 500 mm 	BEF-MR10500AK	4084733
	<ul style="list-style-type: none"> Product segment: Measuring wheels and measuring wheel mechanics Product family: Measuring wheels Description: Aluminum measuring wheel with cross-knurled surface for 10 mm solid shaft, circumference 200 mm 	BEF-MR10200AK	4084737
	<ul style="list-style-type: none"> Product segment: Measuring wheels and measuring wheel mechanics Product family: Measuring wheels Description: Aluminum measuring wheel with smooth polyurethane surface for 10 mm solid shaft, circumference 200 mm 	BEF-MR10200AP	4084738
	<ul style="list-style-type: none"> Product segment: Measuring wheels and measuring wheel mechanics Product family: Measuring wheels Description: Aluminum measuring wheel with ridged polyurethane surface for 10 mm solid shaft, circumference 200 mm 	BEF-MR10200APG	4084740
	<ul style="list-style-type: none"> Product segment: Measuring wheels and measuring wheel mechanics Product family: Measuring wheels 	BEF-MR10200APN	4084739

	Brief description	Type	part no.
	<ul style="list-style-type: none">Description: Aluminum measuring wheel with studded polyurethane surface for 10 mm solid shaft, circumference 200 mm		
	<ul style="list-style-type: none">Product segment: Measuring wheels and measuring wheel mechanicsProduct family: Measuring wheelsDescription: Aluminum measuring wheel with smooth polyurethane surface for 10 mm solid shaft, circumference 500 mm	BEF-MR10500AP	4084734
	<ul style="list-style-type: none">Product segment: Measuring wheels and measuring wheel mechanicsProduct family: Measuring wheelsDescription: Aluminum measuring wheel with ridged polyurethane surface for 10 mm solid shaft, circumference 500 mm	BEF-MR10500APG	4084736
	<ul style="list-style-type: none">Product segment: Measuring wheels and measuring wheel mechanicsProduct family: Measuring wheelsDescription: Aluminum measuring wheel with studded polyurethane surface for 10 mm solid shaft, circumference 500 mm	BEF-MR10500APN	4084735
	<ul style="list-style-type: none">Product segment: Measuring wheels and measuring wheel mechanicsProduct family: Measuring wheel mechanicsDescription: Spring arm for linear measurement with contact, spring contact pressure manually adjustable without tools in 6 increments of 4 N from 0 ... 24 N, can be combined with separately available encoders and measuring wheels.Items supplied: MWS120 spring arm (part number: 2118239), 3 pcs. M4 x 16 cylinder head screws for adapter or encoder mountingSuitable for: MWS120, direct mounting Ø 60 mm face mount flange encoder with mechanical shaft design "S4" = Ø 10 mm, DBS60, DFS60, AFS60 AFM60. Ø 36 mm encoders such as AHS/	BEF-MWS120-ARM	2118239

	Brief description	Type	part no.
	AHM36 can be mounted with an adapter flange (part no.: 2072298), MWS120 mounting bracket (part number: 2113284)		
	<ul style="list-style-type: none"> Product segment: Measuring wheels and measuring wheel mechanics Product family: Measuring wheels Description: Mounting bracket for MWS120 measuring wheel system and SPEETEC 1D laser surface motion sensors Suitable for: MWS120, NCV50 (in conjunction with BEF-WN-NCV50 mounting bracket part no.: 2117456) 	BEF-WF-MWS-NCV	2113284
	<ul style="list-style-type: none"> Product segment: Measuring wheels and measuring wheel mechanics Product family: Measuring wheels Description: Aluminum measuring wheel with cross-knurled surface for 10 mm solid shaft, circumference 300 mm 	BEF-MR10300AK	2115703
	<ul style="list-style-type: none"> Product segment: Measuring wheels and measuring wheel mechanics Product family: Measuring wheels Description: Aluminum measuring wheel with smooth polyurethane surface for 10 mm solid shaft, circumference 300 mm 	BEF-MR10300AP	2118512
	<ul style="list-style-type: none"> Product segment: Measuring wheels and measuring wheel mechanics Product family: Measuring wheels Description: Aluminum measuring wheel with ridged polyurethane surface for 10 mm solid shaft, circumference 300 mm 	BEF-MR10300APG	2118496
	<ul style="list-style-type: none"> Product segment: Measuring wheels and measuring wheel mechanics Product family: Measuring wheels Description: Aluminum measuring wheel with studded polyurethane surface for 10 mm solid shaft, circumference 300 mm 	BEF-MR10300APN	2118494

	Brief description	Type	part no.
connectors and cables			
	<ul style="list-style-type: none">Connection type head A: Male connector, RJ45, 4-pin, straightConnection type head B: Male connector, M12, 4-pin, angled, D-codedSignal type: Ethernet, PROFINETCable: 30 m, 4-wire, CAT5, CAT5e, PVCDescription: Ethernet, shielded, PROFINET	SSL-2J04-F30MZ	6059450
	<ul style="list-style-type: none">Connection type head A: Male connector, M12, 4-pin, angled, D-codedSignal type: PROFINETCable: CAT5, CAT5eDescription: PROFINET, shieldedConnection systems: IDC quick connectionPermitted cross-section: 0.14 mm² ... 0.34 mm²	STE-1204-WZ	6048262
	<ul style="list-style-type: none">Connection type head A: Female connector, M12, 4-pin, straight, A-codedConnection type head B: Flying leadsSignal type: Sensor/actuator cableCable: 1 m, 4-wire, PUR, halogen-freeDescription: Sensor/actuator cable, unshieldedApplication: Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation	YF2A14-010UB3XLEAX	2145655
	<ul style="list-style-type: none">Connection type head A: Female connector, M12, 4-pin, straight, A-codedConnection type head B: Flying leadsSignal type: Sensor/actuator cableCable: 2 m, 4-wire, PUR, halogen-freeDescription: Sensor/actuator cable, unshieldedApplication: Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation	YF2A14-020UB3XLEAX	2095607
	<ul style="list-style-type: none">Connection type head A: Female connector, M12, 4-pin, straight, A-codedConnection type head B: Flying leadsSignal type: Sensor/actuator cableCable: 3 m, 4-wire, PUR, halogen-freeDescription: Sensor/actuator cable, unshieldedApplication: Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation	YF2A14-030UB3XLEAX	2145656
	<ul style="list-style-type: none">Connection type head A: Female connector, M12, 4-pin, straight, A-codedConnection type head B: Flying leadsSignal type: Sensor/actuator cableCable: 5 m, 4-wire, PUR, halogen-freeDescription: Sensor/actuator cable, unshieldedApplication: Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation	YF2A14-050UB3XLEAX	2095608
	<ul style="list-style-type: none">Connection type head A: Female connector, M12, 4-pin, straight, A-codedConnection type head B: Flying leadsSignal type: Sensor/actuator cableCable: 10 m, 4-wire, PUR, halogen-freeDescription: Sensor/actuator cable, unshieldedApplication: Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation	YF2A14-100UB3XLEAX	2095609
	<ul style="list-style-type: none">Connection type head A: Female connector, M12, 4-pin, straight, A-codedConnection type head B: Flying leadsSignal type: Sensor/actuator cableCable: 20 m, 4-wire, PUR, halogen-freeDescription: Sensor/actuator cable, unshieldedApplication: Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation	YF2A14-200UB3XLEAX	2095611
	<ul style="list-style-type: none">Connection type head A: Female connector, M12, 4-pin, straight, A-codedConnection type head B: Flying leadsSignal type: Sensor/actuator cableCable: 25 m, 4-wire, PUR, halogen-freeDescription: Sensor/actuator cable, unshieldedApplication: Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation	YF2A14-250UB3XLEAX	2095615
	<ul style="list-style-type: none">Connection type head A: Female connector, M12, 4-pin, straight, A-codedConnection type head B: Flying leadsSignal type: Sensor/actuator cableCable: 0.6 m, 4-wire, PUR, halogen-freeDescription: Sensor/actuator cable, unshieldedApplication: Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation	YF2A14-C60UB3XLEAX	2145654
	<ul style="list-style-type: none">Connection type head A: Female connector, M12, 4-pin, angled, A-codedConnection type head B: Flying leadsSignal type: Sensor/actuator cableCable: 1 m, 4-wire, PUR, halogen-freeDescription: Sensor/actuator cable, unshielded	YG2A14-010UB3XLEAX	2145658

	Brief description	Type	part no.
	<ul style="list-style-type: none"> Application: Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation Connection type head A: Female connector, M12, 4-pin, angled, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 2 m, 4-wire, PUR, halogen-free Description: Sensor/actuator cable, unshielded Application: Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation 	YG2A14-020UB3XLEAX	2095766
	<ul style="list-style-type: none"> Connection type head A: Female connector, M12, 4-pin, angled, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 5 m, 4-wire, PUR, halogen-free Description: Sensor/actuator cable, unshielded Application: Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation 	YG2A14-050UB3XLEAX	2095767
	<ul style="list-style-type: none"> Connection type head A: Female connector, M12, 4-pin, angled, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 10 m, 4-wire, PUR, halogen-free Description: Sensor/actuator cable, unshielded Application: Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation 	YG2A14-100UB3XLEAX	2095768
	<ul style="list-style-type: none"> Connection type head A: Female connector, M12, 4-pin, angled, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 20 m, 4-wire, PUR, halogen-free Description: Sensor/actuator cable, unshielded Application: Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation 	YG2A14-200UB3XLEAX	2095770
	<ul style="list-style-type: none"> Connection type head A: Female connector, M12, 4-pin, angled, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 25 m, 4-wire, PUR, halogen-free Description: Sensor/actuator cable, unshielded Application: Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation 	YG2A14-250UB3XLEAX	2095771
	<ul style="list-style-type: none"> Connection type head A: Male connector, M12, 4-pin, straight, D-coded Connection type head B: Male connector, RJ45, 4-pin, straight Signal type: Ethernet, PROFINET Cable: 2 m, 4-wire, PUR, halogen-free Description: Ethernet, shielded, PROFINET Application: Drag chain operation, Zones with oils and lubricants 	YM2D24-020P-N1MRJA4	2106182
	<ul style="list-style-type: none"> Connection type head A: Male connector, M12, 4-pin, straight, D-coded Connection type head B: Male connector, M12, 4-pin, angled, D-coded Signal type: Ethernet, PROFINET Cable: 2 m, 4-wire, PUR, halogen-free Description: Ethernet, shielded, PROFINET Application: Drag chain operation, Zones with oils and lubricants 	YM2D24-020P-N1N2D24	2106165
	<ul style="list-style-type: none"> Connection type head A: Male connector, M12, 4-pin, straight, D-coded Connection type head B: Flying leads Signal type: Ethernet, PROFINET Cable: 2 m, 4-wire, PUR, halogen-free Description: Ethernet, shielded, PROFINET Application: Drag chain operation, Zones with oils and lubricants 	YM2D24-020P-N1XLEAX	2106171
	<ul style="list-style-type: none"> Connection type head A: Male connector, M12, 4-pin, straight, D-coded Connection type head B: Male connector, M12, 4-pin, straight, D-coded Signal type: Ethernet, PROFINET Cable: 5 m, 4-wire, PUR, halogen-free Description: Ethernet, shielded, PROFINET Application: Drag chain operation, Zones with oils and lubricants 	YM2D24-050P-N1M2D24	2106160
	<ul style="list-style-type: none"> Connection type head A: Male connector, M12, 4-pin, straight, D-coded Connection type head B: Male connector, RJ45, 4-pin, straight Signal type: Ethernet, PROFINET Cable: 5 m, 4-wire, PUR, halogen-free Description: Ethernet, shielded, PROFINET Application: Drag chain operation, Zones with oils and lubricants 	YM2D24-050P-N1MRJA4	2106184
	<ul style="list-style-type: none"> Connection type head A: Male connector, M12, 4-pin, straight, D-coded Connection type head B: Male connector, M12, 4-pin, angled, D-coded Signal type: Ethernet, PROFINET Cable: 5 m, 4-wire, PUR, halogen-free Description: Ethernet, shielded, PROFINET Application: Drag chain operation, Zones with oils and lubricants 	YM2D24-050P-N1N2D24	2106166

	Brief description	Type	part no.
	<ul style="list-style-type: none">Application: Drag chain operation, Zones with oils and lubricantsConnection type head A: Male connector, M12, 4-pin, straight, D-codedConnection type head B: Flying leadsSignal type: Ethernet, PROFINETCable: 5 m, 4-wire, PUR, halogen-freeDescription: Ethernet, shielded, PROFINETApplication: Drag chain operation, Zones with oils and lubricants	YM2D24-050P-N1XLEAX	2106172
	<ul style="list-style-type: none">Connection type head A: Male connector, M12, 4-pin, straight, D-codedConnection type head B: Male connector, M12, 4-pin, straight, D-codedSignal type: Ethernet, PROFINETCable: 10 m, 4-wire, PUR, halogen-freeDescription: Ethernet, shielded, PROFINETApplication: Drag chain operation, Zones with oils and lubricants	YM2D24-100P-N1M2D24	2106161
	<ul style="list-style-type: none">Connection type head A: Male connector, M12, 4-pin, straight, D-codedConnection type head B: Male connector, RJ45, 4-pin, straightSignal type: Ethernet, PROFINETCable: 10 m, 4-wire, PUR, halogen-freeDescription: Ethernet, shielded, PROFINETApplication: Drag chain operation, Zones with oils and lubricants	YM2D24-100P-N1MRJA4	2106185
	<ul style="list-style-type: none">Connection type head A: Male connector, M12, 4-pin, straight, D-codedConnection type head B: Male connector, M12, 4-pin, angled, D-codedSignal type: Ethernet, PROFINETCable: 10 m, 4-wire, PUR, halogen-freeDescription: Ethernet, shielded, PROFINETApplication: Drag chain operation, Zones with oils and lubricants	YM2D24-100P-N1N2D24	2106167
	<ul style="list-style-type: none">Connection type head A: Male connector, M12, 4-pin, straight, D-codedConnection type head B: Flying leadsSignal type: Ethernet, PROFINETCable: 10 m, 4-wire, PUR, halogen-freeDescription: Ethernet, shielded, PROFINETApplication: Drag chain operation, Zones with oils and lubricants	YM2D24-100P-N1XLEAX	2106173
	<ul style="list-style-type: none">Connection type head A: Male connector, M12, 4-pin, angled, D-codedConnection type head B: Male connector, RJ45, 4-pin, straightSignal type: Ethernet, PROFINETCable: 2 m, 4-wire, PUR, halogen-freeDescription: Ethernet, shielded, PROFINETApplication: Drag chain operation, Zones with oils and lubricants	YN2D24-020P-N1MRJA4	2106162
	<ul style="list-style-type: none">Connection type head A: Male connector, M12, 4-pin, angled, D-codedConnection type head B: Male connector, M12, 4-pin, angled, D-codedSignal type: Ethernet, PROFINETCable: 2 m, 4-wire, PUR, halogen-freeDescription: Ethernet, shielded, PROFINETApplication: Drag chain operation, Zones with oils and lubricants	YN2D24-020P-N1N2D24	2106168
	<ul style="list-style-type: none">Connection type head A: Male connector, M12, 4-pin, angled, D-codedConnection type head B: Male connector, RJ45, 4-pin, straightSignal type: Ethernet, PROFINETCable: 3 m, 4-wire, PUR, halogen-freeDescription: Ethernet, shielded, PROFINETApplication: Drag chain operation, Zones with oils and lubricants	YN2D24-030P-N1MRJA4	2144265
	<ul style="list-style-type: none">Connection type head A: Male connector, M12, 4-pin, angled, D-codedConnection type head B: Male connector, RJ45, 4-pin, straightSignal type: Ethernet, PROFINETCable: 5 m, 4-wire, PUR, halogen-freeDescription: Ethernet, shielded, PROFINETApplication: Drag chain operation, Zones with oils and lubricants	YN2D24-050P-N1MRJA4	2106163
	<ul style="list-style-type: none">Connection type head A: Male connector, M12, 4-pin, angled, D-codedConnection type head B: Male connector, M12, 4-pin, angled, D-codedSignal type: Ethernet, PROFINETCable: 5 m, 4-wire, PUR, halogen-freeDescription: Ethernet, shielded, PROFINETApplication: Drag chain operation, Zones with oils and lubricants	YN2D24-050P-N1N2D24	2127662
	<ul style="list-style-type: none">Connection type head A: Male connector, M12, 4-pin, angled, D-codedConnection type head B: Flying leadsSignal type: Ethernet, PROFINETCable: 5 m, 4-wire, PUR, halogen-freeDescription: Ethernet, shielded, PROFINETApplication: Drag chain operation, Zones with oils and lubricants	YN2D24-050P-N1XLEAX	2106175

	Brief description	Type	part no.
	<ul style="list-style-type: none"> Application: Drag chain operation, Zones with oils and lubricants Connection type head A: Male connector, M12, 4-pin, angled, D-coded Connection type head B: Male connector, RJ45, 4-pin, straight Signal type: Ethernet, PROFINET Cable: 10 m, 4-wire, PUR, halogen-free Description: Ethernet, shielded, PROFINET Application: Drag chain operation, Zones with oils and lubricants 	YN2D24-100P-N1MRJA4	2106164
	<ul style="list-style-type: none"> Connection type head A: Male connector, M12, 4-pin, angled, D-coded Connection type head B: Male connector, M12, 4-pin, angled, D-coded Signal type: Ethernet, PROFINET Cable: 10 m, 4-wire, PUR, halogen-free Description: Ethernet, shielded, PROFINET Application: Drag chain operation, Zones with oils and lubricants 	YN2D24-100P-N1N2D24	2106170
	<ul style="list-style-type: none"> Connection type head A: Male connector, M12, 4-pin, angled, D-coded Connection type head B: Flying leads Signal type: Ethernet, PROFINET Cable: 10 m, 4-wire, PUR, halogen-free Description: Ethernet, shielded, PROFINET Application: Drag chain operation, Zones with oils and lubricants 	YN2D24-100P-N1XLEAX	2106176
	<ul style="list-style-type: none"> Connection type head A: Male connector, M12, 4-pin, angled, D-coded Connection type head B: Male connector, RJ45, 4-pin, straight Signal type: Ethernet, PROFINET Cable: 20 m, 4-wire, PUR, halogen-free Description: Ethernet, shielded, PROFINET Application: Drag chain operation, Zones with oils and lubricants 	YN2D24-200P-N1MRJA4	2127664
	<ul style="list-style-type: none"> Connection type head A: Male connector, M12, 4-pin, angled, D-coded Connection type head B: Flying leads Signal type: Ethernet, PROFINET Cable: 25 m, 4-wire, PUR, halogen-free Description: Ethernet, shielded, PROFINET Application: Drag chain operation, Zones with oils and lubricants 	YN2D24-250P-N1XLEAX	2106180
	<ul style="list-style-type: none"> Connection type head A: Female connector, M12, 4-pin, angled, A-coded Description: Unshielded Connection systems: Screw-type terminals Permitted cross-section: ≤ 0.75 mm² 	DOS-1204-W	6007303
	<ul style="list-style-type: none"> Connection type head A: Female connector, M12, 4-pin, D-coded Connection type head B: Female connector, RJ45, 8-pin Signal type: Ethernet Cable: CAT5, CAT5e Description: Ethernet, shielded Note: Cabinet through 	Feedthrough female connector Ethernet RJ45	6048180

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.

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