



**ANM58B-FENNA0000201000XX018X16**

ANS/ANM58

**ABSOLUTE ENCODERS**

**SICK**  
Sensor Intelligence.



## Ordering information

Type	part no.
ANM58B-FENNA0000201000XX018X16	1152170

Other models and accessories → [www.sick.com/ANS\\_ANM58](http://www.sick.com/ANS_ANM58)

Illustration may differ



## Detailed technical data

### Safety-related parameters

<b>MTTF<sub>D</sub> (mean time to dangerous failure)</b>	165 years (EN ISO 13849-1) <sup>1)</sup>
--	--

<sup>1)</sup> 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.

### Performance

<b>Number of steps per revolution (max. resolution)</b>	262,144 (18 bit)
<b>Number of revolutions</b>	65,536 (16 bit)
<b>Max. resolution (number of steps per revolution x number of revolutions)</b>	18 bit x 16 bit (262,144 x 65,536)
<b>Error limits G</b>	0.03°
<b>Repeatability standard deviation σ<sub>r</sub></b>	0.002°

### Interfaces

<b>Communication interface</b>	PROFINET
<b>PROFINET version</b>	PROFINET Version 2.3
<b>Encoder profile</b>	V4.2
<b>Transmission medium</b>	CAT-5e cable
<b>Initialization time</b>	5 s
<b>Cycle time</b>	≥ 1 ms
<b>Process data</b>	Position, speed, Encoder status (errors, warnings)
<b>Parameterising data</b>	Number of steps per revolution Total measuring range PRESET Direction of rotation

	Filter for speed calculation Unit for output of the speed value Round axis functionality
<b>Available diagnostics data</b>	Minimum and maximum temperature Maximum speed Power-on counter Operating hours counter power-on/motion Counter of direction changes/number of movements cw/number of movements ccw Configurable limit values with limit value monitoring
<b>Status information</b>	Via status LED

## Electronics

<b>Connection type</b>	Male connector, 1x, M12, 4-pin, radial <sup>1)</sup> Female connector, 2x, M12, 4-pin, radial <sup>2)</sup>
<b>Supply voltage</b>	10 ... 32 V
<b>Power consumption</b>	≤ 3 W
<b>Reverse polarity protection</b>	✓
<b>Short-circuit protection</b>	✓

<sup>1)</sup> A-coded.<sup>2)</sup> D-coded.

## Mechanics

<b>Mechanical design</b>	Solid shaft, face mount flange
<b>Shaft diameter</b>	10 mm
<b>Shaft length</b>	19 mm
<b>Characteristics of the shaft</b>	Round
<b>Weight</b>	Approx. 0.5 kg
<b>Shaft material</b>	Stainless steel
<b>Flange material</b>	Aluminum
<b>Housing material</b>	Zinc die-cast with copper-nickel coating
<b>Start up torque</b>	1.1 Ncm (+20 °C)
<b>Operating torque</b>	0.5 Ncm (+20 °C)
<b>Permissible shaft loading</b>	100 N (radial) 50 N (axial)
<b>Operating speed</b>	≤ 9,000 min <sup>-1</sup>
<b>Moment of inertia of the rotor</b>	45 gcm <sup>2</sup>
<b>Bearing lifetime</b>	L <sub>mnr</sub> 30 x 10 <sup>9</sup> revolutions <sup>1)</sup>
<b>Angular acceleration</b>	≤ 300,000 rad/s <sup>2</sup>

<sup>1)</sup> The value corresponds to L 10mr (ISO/TS 16281) at 60 °C operating temperature, rotational speed: 3,000 rpm, with shaft load/shaft movement of max. 50% of the specified maximum value.

## Ambient data

<b>EMC</b>	According to EN 61000-6-2 and EN 61000-6-3
<b>Enclosure rating</b>	IP65 (IEC 60529)
<b>Permissible relative humidity</b>	90 % (Condensation not permitted)

<sup>1)</sup> Relative to the measuring point on the plug connection side, see dimensional drawing.<sup>2)</sup> Operation of the mounted encoder in resonance ranges should be avoided to prevent possible damage or malfunctions.

<b>Operating temperature range</b>	-40 °C ... +85 °C <sup>1)</sup>
<b>Storage temperature range</b>	-40 °C ... +100 °C, without package
<b>Resistance to shocks</b>	200 g, 6 ms (EN 60068-2-27)
<b>Resistance to vibration</b>	30 g, 10 Hz ... 2,000 Hz (EN 60068-2-6) <sup>2)</sup>
<b>Operating height (above sea level)</b>	≤ 3,000 m (70 kPa)

<sup>1)</sup> Relative to the measuring point on the plug connection side, see dimensional drawing.

<sup>2)</sup> Operation of the mounted encoder in resonance ranges should be avoided to prevent possible damage or malfunctions.

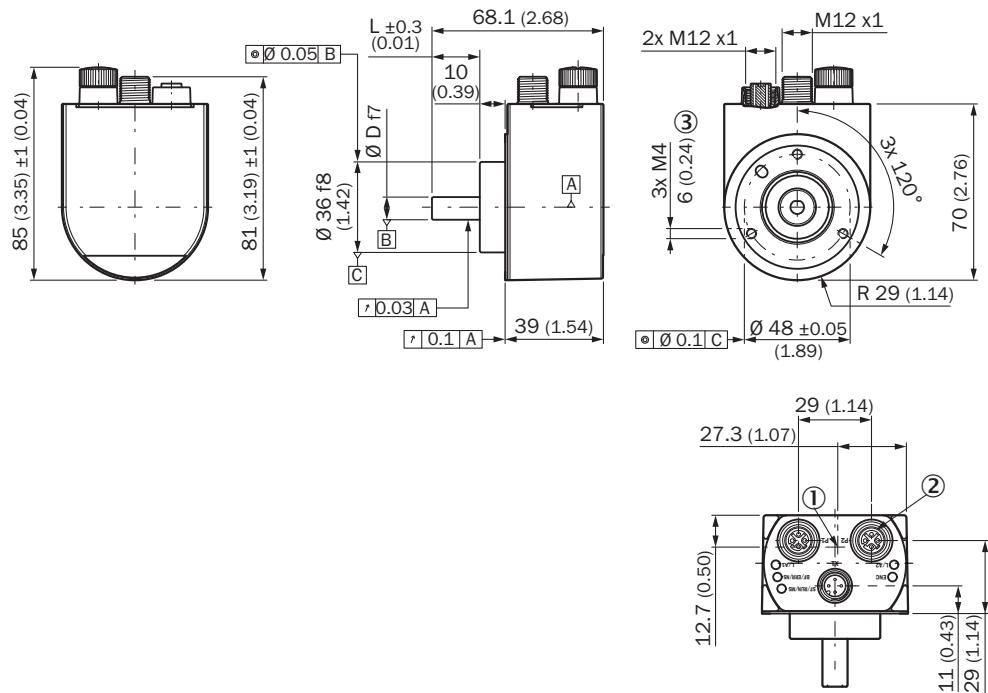
## Certificates

<b>EU declaration of conformity</b>	✓
<b>UK declaration of conformity</b>	✓
<b>ACMA declaration of conformity</b>	✓
<b>Moroccan declaration of conformity</b>	✓
<b>China-RoHS</b>	✓
<b>cULus certificate</b>	✓
<b>Profinet certificate</b>	✓
<b>Information according to Art. 3 of Data Act (Regulation EU 2023/2854)</b>	✓

## Classifications

<b>ECLASS 5.0</b>	27270502
<b>ECLASS 5.1.4</b>	27270502
<b>ECLASS 6.0</b>	27270590
<b>ECLASS 6.2</b>	27270590
<b>ECLASS 7.0</b>	27270502
<b>ECLASS 8.0</b>	27270502
<b>ECLASS 8.1</b>	27270502
<b>ECLASS 9.0</b>	27270502
<b>ECLASS 10.0</b>	27270502
<b>ECLASS 11.0</b>	27270502
<b>ECLASS 12.0</b>	27270502
<b>ETIM 5.0</b>	EC001486
<b>ETIM 6.0</b>	EC001486
<b>ETIM 7.0</b>	EC001486
<b>ETIM 8.0</b>	EC001486
<b>UNSPSC 16.0901</b>	41112113

## Dimensional drawing



Dimensions in mm (inch)

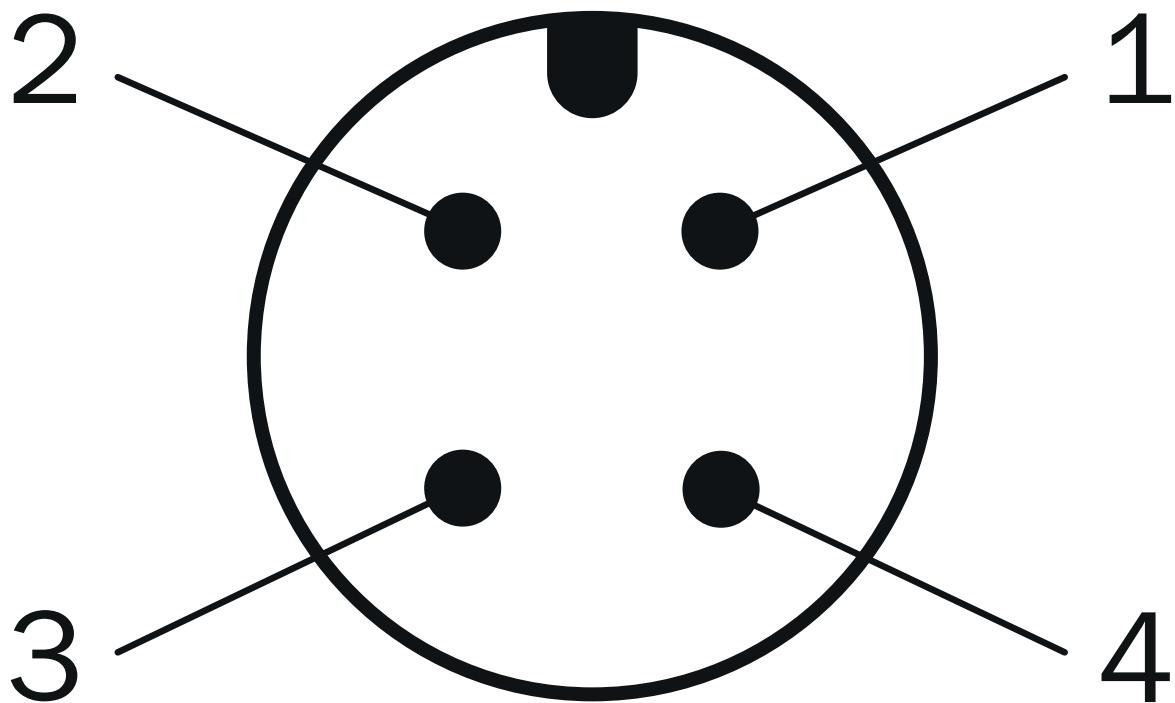
diameter x f7 corresponds to the shaft diameter

① Operating temperature measuring point: On the plug connection side, see drawing

② Protective cap removed

③ depth

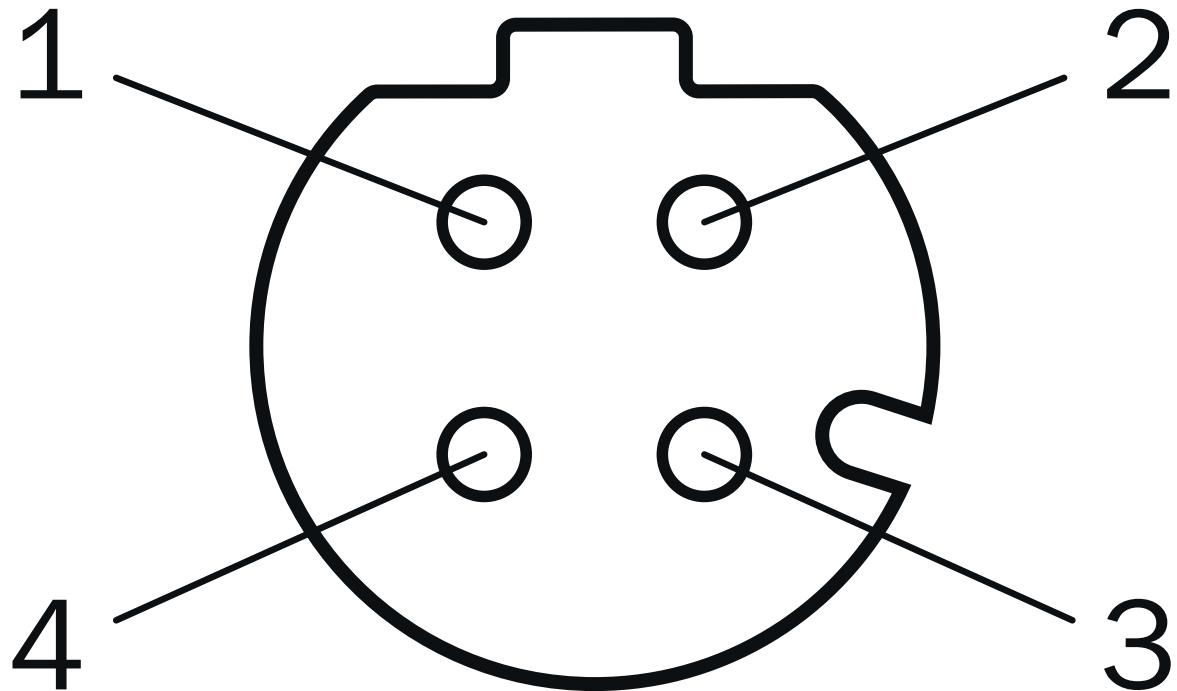
## PIN assignment Male connector



## Supply voltage

PIN	Wire color	Signal
1	Brown	U <sub>S</sub> 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/ANS\\_ANM58](http://www.sick.com/ANS_ANM58)

	Brief description	Type	part no.
connectors and cables			
	<ul style="list-style-type: none"> <li><b>Connection type head A:</b> Female connector, M12, 4-pin, straight, A-coded</li> <li><b>Connection type head B:</b> Flying leads</li> <li><b>Signal type:</b> Sensor/actuator cable</li> <li><b>Cable:</b> 1 m, 4-wire, PUR, halogen-free</li> <li><b>Description:</b> Sensor/actuator cable, unshielded</li> <li><b>Application:</b> Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation</li> </ul>	YF2A14-010UB3XLEAX	2145655
	<ul style="list-style-type: none"> <li><b>Connection type head A:</b> Female connector, M12, 4-pin, straight, A-coded</li> <li><b>Connection type head B:</b> Flying leads</li> <li><b>Signal type:</b> Sensor/actuator cable</li> <li><b>Cable:</b> 2 m, 4-wire, PUR, halogen-free</li> <li><b>Description:</b> Sensor/actuator cable, unshielded</li> <li><b>Application:</b> Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation</li> </ul>	YF2A14-020UB3XLEAX	2095607
	<ul style="list-style-type: none"> <li><b>Connection type head A:</b> Female connector, M12, 4-pin, straight, A-coded</li> <li><b>Connection type head B:</b> Flying leads</li> <li><b>Signal type:</b> Sensor/actuator cable</li> <li><b>Cable:</b> 3 m, 4-wire, PUR, halogen-free</li> <li><b>Description:</b> Sensor/actuator cable, unshielded</li> <li><b>Application:</b> Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation</li> </ul>	YF2A14-030UB3XLEAX	2145656
	<ul style="list-style-type: none"> <li><b>Connection type head A:</b> Female connector, M12, 4-pin, straight, A-coded</li> <li><b>Connection type head B:</b> Flying leads</li> <li><b>Signal type:</b> Sensor/actuator cable</li> <li><b>Cable:</b> 5 m, 4-wire, PUR, halogen-free</li> <li><b>Description:</b> Sensor/actuator cable, unshielded</li> <li><b>Application:</b> Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation</li> </ul>	YF2A14-050UB3XLEAX	2095608
	<ul style="list-style-type: none"> <li><b>Connection type head A:</b> Female connector, M12, 4-pin, straight, A-coded</li> <li><b>Connection type head B:</b> Flying leads</li> <li><b>Signal type:</b> Sensor/actuator cable</li> <li><b>Cable:</b> 10 m, 4-wire, PUR, halogen-free</li> <li><b>Description:</b> Sensor/actuator cable, unshielded</li> <li><b>Application:</b> Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation</li> </ul>	YF2A14-100UB3XLEAX	2095609
	<ul style="list-style-type: none"> <li><b>Connection type head A:</b> Female connector, M12, 4-pin, straight, A-coded</li> <li><b>Connection type head B:</b> Flying leads</li> <li><b>Signal type:</b> Sensor/actuator cable</li> <li><b>Cable:</b> 20 m, 4-wire, PUR, halogen-free</li> <li><b>Description:</b> Sensor/actuator cable, unshielded</li> <li><b>Application:</b> Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation</li> </ul>	YF2A14-200UB3XLEAX	2095611
	<ul style="list-style-type: none"> <li><b>Connection type head A:</b> Female connector, M12, 4-pin, straight, A-coded</li> <li><b>Connection type head B:</b> Flying leads</li> <li><b>Signal type:</b> Sensor/actuator cable</li> <li><b>Cable:</b> 25 m, 4-wire, PUR, halogen-free</li> <li><b>Description:</b> Sensor/actuator cable, unshielded</li> <li><b>Application:</b> Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation</li> </ul>	YF2A14-250UB3XLEAX	2095615
	<ul style="list-style-type: none"> <li><b>Connection type head A:</b> Female connector, M12, 4-pin, straight, A-coded</li> <li><b>Connection type head B:</b> Flying leads</li> <li><b>Signal type:</b> Sensor/actuator cable</li> <li><b>Cable:</b> 0.6 m, 4-wire, PUR, halogen-free</li> <li><b>Description:</b> Sensor/actuator cable, unshielded</li> <li><b>Application:</b> Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation</li> </ul>	YF2A14-C60UB3XLEAX	2145654
	<ul style="list-style-type: none"> <li><b>Connection type head A:</b> Female connector, M12, 4-pin, angled, A-coded</li> <li><b>Connection type head B:</b> Flying leads</li> <li><b>Signal type:</b> Sensor/actuator cable</li> <li><b>Cable:</b> 1 m, 4-wire, PUR, halogen-free</li> <li><b>Description:</b> Sensor/actuator cable, unshielded</li> <li><b>Application:</b> Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation</li> </ul>	YG2A14-010UB3XLEAX	2145658
	<ul style="list-style-type: none"> <li><b>Connection type head A:</b> Female connector, M12, 4-pin, angled, A-coded</li> <li><b>Connection type head B:</b> Flying leads</li> <li><b>Signal type:</b> Sensor/actuator cable</li> <li><b>Cable:</b> 2 m, 4-wire, PUR, halogen-free</li> <li><b>Description:</b> Sensor/actuator cable, unshielded</li> <li><b>Application:</b> Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation</li> </ul>	YG2A14-020UB3XLEAX	2095766

	<b>Brief description</b>	<b>Type</b>	<b>part no.</b>
	<ul style="list-style-type: none"><li><b>Application:</b> Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation</li><li><b>Connection type head A:</b> Female connector, M12, 4-pin, angled, A-coded</li><li><b>Connection type head B:</b> Flying leads</li><li><b>Signal type:</b> Sensor/actuator cable</li><li><b>Cable:</b> 5 m, 4-wire, PUR, halogen-free</li><li><b>Description:</b> Sensor/actuator cable, unshielded</li><li><b>Application:</b> Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation</li></ul>	YG2A14-050UB3XLEAX	2095767
	<ul style="list-style-type: none"><li><b>Connection type head A:</b> Female connector, M12, 4-pin, angled, A-coded</li><li><b>Connection type head B:</b> Flying leads</li><li><b>Signal type:</b> Sensor/actuator cable</li><li><b>Cable:</b> 10 m, 4-wire, PUR, halogen-free</li><li><b>Description:</b> Sensor/actuator cable, unshielded</li><li><b>Application:</b> Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation</li></ul>	YG2A14-100UB3XLEAX	2095768
	<ul style="list-style-type: none"><li><b>Connection type head A:</b> Female connector, M12, 4-pin, angled, A-coded</li><li><b>Connection type head B:</b> Flying leads</li><li><b>Signal type:</b> Sensor/actuator cable</li><li><b>Cable:</b> 20 m, 4-wire, PUR, halogen-free</li><li><b>Description:</b> Sensor/actuator cable, unshielded</li><li><b>Application:</b> Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation</li></ul>	YG2A14-200UB3XLEAX	2095770
	<ul style="list-style-type: none"><li><b>Connection type head A:</b> Female connector, M12, 4-pin, angled, A-coded</li><li><b>Connection type head B:</b> Flying leads</li><li><b>Signal type:</b> Sensor/actuator cable</li><li><b>Cable:</b> 25 m, 4-wire, PUR, halogen-free</li><li><b>Description:</b> Sensor/actuator cable, unshielded</li><li><b>Application:</b> Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation</li></ul>	YG2A14-250UB3XLEAX	2095771
	<ul style="list-style-type: none"><li><b>Connection type head A:</b> Male connector, M12, 4-pin, straight, D-coded</li><li><b>Connection type head B:</b> Flying leads</li><li><b>Signal type:</b> Ethernet, PROFINET</li><li><b>Cable:</b> 2 m, 4-wire, PUR, halogen-free</li><li><b>Description:</b> Ethernet, shielded, PROFINET</li><li><b>Application:</b> Drag chain operation, Zones with oils and lubricants</li></ul>	YM2D24-020P-N1XLEAX	2106171
	<ul style="list-style-type: none"><li><b>Connection type head A:</b> Male connector, M12, 4-pin, straight, D-coded</li><li><b>Connection type head B:</b> Flying leads</li><li><b>Signal type:</b> Ethernet, PROFINET</li><li><b>Cable:</b> 5 m, 4-wire, PUR, halogen-free</li><li><b>Description:</b> Ethernet, shielded, PROFINET</li><li><b>Application:</b> Drag chain operation, Zones with oils and lubricants</li></ul>	YM2D24-050P-N1XLEAX	2106172
	<ul style="list-style-type: none"><li><b>Connection type head A:</b> Male connector, M12, 4-pin, straight, D-coded</li><li><b>Connection type head B:</b> Flying leads</li><li><b>Signal type:</b> Ethernet, PROFINET</li><li><b>Cable:</b> 10 m, 4-wire, PUR, halogen-free</li><li><b>Description:</b> Ethernet, shielded, PROFINET</li><li><b>Application:</b> Drag chain operation, Zones with oils and lubricants</li></ul>	YM2D24-100P-N1XLEAX	2106173
	<ul style="list-style-type: none"><li><b>Connection type head A:</b> Male connector, M12, 4-pin, angled, D-coded</li><li><b>Connection type head B:</b> Flying leads</li><li><b>Signal type:</b> Ethernet, PROFINET</li><li><b>Cable:</b> 5 m, 4-wire, PUR, halogen-free</li><li><b>Description:</b> Ethernet, shielded, PROFINET</li><li><b>Application:</b> Drag chain operation, Zones with oils and lubricants</li></ul>	YN2D24-050P-N1XLEAX	2106175
	<ul style="list-style-type: none"><li><b>Connection type head A:</b> Male connector, M12, 4-pin, angled, D-coded</li><li><b>Connection type head B:</b> Flying leads</li><li><b>Signal type:</b> Ethernet, PROFINET</li><li><b>Cable:</b> 10 m, 4-wire, PUR, halogen-free</li><li><b>Description:</b> Ethernet, shielded, PROFINET</li><li><b>Application:</b> Drag chain operation, Zones with oils and lubricants</li></ul>	YN2D24-100P-N1XLEAX	2106176
	<ul style="list-style-type: none"><li><b>Connection type head A:</b> Male connector, M12, 4-pin, angled, D-coded</li><li><b>Connection type head B:</b> Flying leads</li><li><b>Signal type:</b> Ethernet, PROFINET</li><li><b>Cable:</b> 25 m, 4-wire, PUR, halogen-free</li><li><b>Description:</b> Ethernet, shielded, PROFINET</li><li><b>Application:</b> Drag chain operation, Zones with oils and lubricants</li></ul>	YN2D24-250P-N1XLEAX	2106180
	<ul style="list-style-type: none"><li><b>Connection type head A:</b> Male connector, M12, 4-pin, straight, D-coded</li><li><b>Connection type head B:</b> Male connector, M12, 4-pin, angled, D-coded</li><li><b>Signal type:</b> Ethernet, PROFINET</li><li><b>Cable:</b> 2 m, 4-wire, PUR, halogen-free</li><li><b>Description:</b> Ethernet, shielded, PROFINET</li><li><b>Application:</b> Drag chain operation, Zones with oils and lubricants</li></ul>	YM2D24-020P-N1N2D24	2106165

	<b>Brief description</b>	<b>Type</b>	<b>part no.</b>
	<ul style="list-style-type: none"> <li><b>Application:</b> Drag chain operation, Zones with oils and lubricants</li> <li><b>Connection type head A:</b> Male connector, M12, 4-pin, straight, D-coded</li> <li><b>Connection type head B:</b> Male connector, M12, 4-pin, straight, D-coded</li> <li><b>Signal type:</b> Ethernet, PROFINET</li> <li><b>Cable:</b> 5 m, 4-wire, PUR, halogen-free</li> <li><b>Description:</b> Ethernet, shielded, PROFINET</li> <li><b>Application:</b> Drag chain operation, Zones with oils and lubricants</li> </ul>	YM2D24-050P-N1M2D24	2106160
	<ul style="list-style-type: none"> <li><b>Connection type head A:</b> Male connector, M12, 4-pin, straight, D-coded</li> <li><b>Connection type head B:</b> Male connector, M12, 4-pin, angled, D-coded</li> <li><b>Signal type:</b> Ethernet, PROFINET</li> <li><b>Cable:</b> 5 m, 4-wire, PUR, halogen-free</li> <li><b>Description:</b> Ethernet, shielded, PROFINET</li> <li><b>Application:</b> Drag chain operation, Zones with oils and lubricants</li> </ul>	YM2D24-050P-N1N2D24	2106166
	<ul style="list-style-type: none"> <li><b>Connection type head A:</b> Male connector, M12, 4-pin, straight, D-coded</li> <li><b>Connection type head B:</b> Male connector, M12, 4-pin, straight, D-coded</li> <li><b>Signal type:</b> Ethernet, PROFINET</li> <li><b>Cable:</b> 10 m, 4-wire, PUR, halogen-free</li> <li><b>Description:</b> Ethernet, shielded, PROFINET</li> <li><b>Application:</b> Drag chain operation, Zones with oils and lubricants</li> </ul>	YM2D24-100P-N1M2D24	2106161
	<ul style="list-style-type: none"> <li><b>Connection type head A:</b> Male connector, M12, 4-pin, straight, D-coded</li> <li><b>Connection type head B:</b> Male connector, M12, 4-pin, angled, D-coded</li> <li><b>Signal type:</b> Ethernet, PROFINET</li> <li><b>Cable:</b> 10 m, 4-wire, PUR, halogen-free</li> <li><b>Description:</b> Ethernet, shielded, PROFINET</li> <li><b>Application:</b> Drag chain operation, Zones with oils and lubricants</li> </ul>	YM2D24-100P-N1N2D24	2106167
	<ul style="list-style-type: none"> <li><b>Connection type head A:</b> Male connector, M12, 4-pin, angled, D-coded</li> <li><b>Connection type head B:</b> Male connector, M12, 4-pin, angled, D-coded</li> <li><b>Signal type:</b> Ethernet, PROFINET</li> <li><b>Cable:</b> 2 m, 4-wire, PUR, halogen-free</li> <li><b>Description:</b> Ethernet, shielded, PROFINET</li> <li><b>Application:</b> Drag chain operation, Zones with oils and lubricants</li> </ul>	YN2D24-020P-N1N2D24	2106168
	<ul style="list-style-type: none"> <li><b>Connection type head A:</b> Male connector, M12, 4-pin, angled, D-coded</li> <li><b>Connection type head B:</b> Male connector, M12, 4-pin, angled, D-coded</li> <li><b>Signal type:</b> Ethernet, PROFINET</li> <li><b>Cable:</b> 10 m, 4-wire, PUR, halogen-free</li> <li><b>Description:</b> Ethernet, shielded, PROFINET</li> <li><b>Application:</b> Drag chain operation, Zones with oils and lubricants</li> </ul>	YN2D24-100P-N1N2D24	2106170
	<ul style="list-style-type: none"> <li><b>Connection type head A:</b> Male connector, M12, 4-pin, straight, D-coded</li> <li><b>Connection type head B:</b> Male connector, RJ45, 4-pin, straight</li> <li><b>Signal type:</b> Ethernet, PROFINET</li> <li><b>Cable:</b> 2 m, 4-wire, PUR, halogen-free</li> <li><b>Description:</b> Ethernet, shielded, PROFINET</li> <li><b>Application:</b> Drag chain operation, Zones with oils and lubricants</li> </ul>	YM2D24-020P-N1MRJA4	2106182
	<ul style="list-style-type: none"> <li><b>Connection type head A:</b> Female connector, M12, 4-pin, angled, A-coded</li> <li><b>Description:</b> Unshielded</li> <li><b>Connection systems:</b> Screw-type terminals</li> <li><b>Permitted cross-section:</b> <math>\leq 0.75 \text{ mm}^2</math></li> </ul>	DOS-1204-W	6007303
	<ul style="list-style-type: none"> <li><b>Connection type head A:</b> Male connector, M12, 4-pin, angled, D-coded</li> <li><b>Signal type:</b> PROFINET</li> <li><b>Cable:</b> CAT5, CAT5e</li> <li><b>Description:</b> PROFINET, shielded</li> <li><b>Connection systems:</b> IDC quick connection</li> <li><b>Permitted cross-section:</b> <math>0.14 \text{ mm}^2 \dots 0.34 \text{ mm}^2</math></li> </ul>	STE-1204-WZ	6048262
	<ul style="list-style-type: none"> <li><b>Connection type head A:</b> Male connector, M12, 4-pin, straight, D-coded</li> <li><b>Connection type head B:</b> Male connector, RJ45, 4-pin, straight</li> <li><b>Signal type:</b> Ethernet, PROFINET</li> <li><b>Cable:</b> 5 m, 4-wire, PUR, halogen-free</li> <li><b>Description:</b> Ethernet, shielded, PROFINET</li> <li><b>Application:</b> Drag chain operation, Zones with oils and lubricants</li> </ul>	YM2D24-050P-N1MRJA4	2106184
	<ul style="list-style-type: none"> <li><b>Connection type head A:</b> Male connector, M12, 4-pin, straight, D-coded</li> <li><b>Connection type head B:</b> Male connector, RJ45, 4-pin, straight</li> <li><b>Signal type:</b> Ethernet, PROFINET</li> <li><b>Cable:</b> 10 m, 4-wire, PUR, halogen-free</li> <li><b>Description:</b> Ethernet, shielded, PROFINET</li> <li><b>Application:</b> Drag chain operation, Zones with oils and lubricants</li> </ul>	YM2D24-100P-N1MRJA4	2106185
	<ul style="list-style-type: none"> <li><b>Connection type head A:</b> Male connector, M12, 4-pin, angled, D-coded</li> <li><b>Connection type head B:</b> Male connector, RJ45, 4-pin, straight</li> <li><b>Signal type:</b> Ethernet, PROFINET</li> <li><b>Cable:</b> 2 m, 4-wire, PUR, halogen-free</li> </ul>	YN2D24-020P-N1MRJA4	2106162

	<b>Brief description</b>	<b>Type</b>	<b>part no.</b>
	<ul style="list-style-type: none"><li><b>Description:</b> Ethernet, shielded, PROFINET</li><li><b>Application:</b> Drag chain operation, Zones with oils and lubricants</li></ul>		
	<ul style="list-style-type: none"><li><b>Connection type head A:</b> Male connector, M12, 4-pin, angled, D-coded</li><li><b>Connection type head B:</b> Male connector, RJ45, 4-pin, straight</li><li><b>Signal type:</b> Ethernet, PROFINET</li><li><b>Cable:</b> 3 m, 4-wire, PUR, halogen-free</li><li><b>Description:</b> Ethernet, shielded, PROFINET</li><li><b>Application:</b> Drag chain operation, Zones with oils and lubricants</li></ul>	YN2D24-030P-N1MRJA4	2144265
	<ul style="list-style-type: none"><li><b>Connection type head A:</b> Male connector, M12, 4-pin, angled, D-coded</li><li><b>Connection type head B:</b> Male connector, RJ45, 4-pin, straight</li><li><b>Signal type:</b> Ethernet, PROFINET</li><li><b>Cable:</b> 5 m, 4-wire, PUR, halogen-free</li><li><b>Description:</b> Ethernet, shielded, PROFINET</li><li><b>Application:</b> Drag chain operation, Zones with oils and lubricants</li></ul>	YN2D24-050P-N1MRJA4	2106163
	<ul style="list-style-type: none"><li><b>Connection type head A:</b> Male connector, M12, 4-pin, angled, D-coded</li><li><b>Connection type head B:</b> Male connector, RJ45, 4-pin, straight</li><li><b>Signal type:</b> Ethernet, PROFINET</li><li><b>Cable:</b> 10 m, 4-wire, PUR, halogen-free</li><li><b>Description:</b> Ethernet, shielded, PROFINET</li><li><b>Application:</b> Drag chain operation, Zones with oils and lubricants</li></ul>	YN2D24-100P-N1MRJA4	2106164
	<ul style="list-style-type: none"><li><b>Connection type head A:</b> Male connector, M12, 4-pin, angled, D-coded</li><li><b>Connection type head B:</b> Male connector, RJ45, 4-pin, straight</li><li><b>Signal type:</b> Ethernet, PROFINET</li><li><b>Cable:</b> 20 m, 4-wire, PUR, halogen-free</li><li><b>Description:</b> Ethernet, shielded, PROFINET</li><li><b>Application:</b> Drag chain operation, Zones with oils and lubricants</li></ul>	YN2D24-200P-N1MRJA4	2127664
	<ul style="list-style-type: none"><li><b>Connection type head A:</b> Male connector, M12, 4-pin, angled, D-coded</li><li><b>Connection type head B:</b> Male connector, M12, 4-pin, angled, D-coded</li><li><b>Signal type:</b> Ethernet, PROFINET</li><li><b>Cable:</b> 5 m, 4-wire, PUR, halogen-free</li><li><b>Description:</b> Ethernet, shielded, PROFINET</li><li><b>Application:</b> Drag chain operation, Zones with oils and lubricants</li></ul>	YN2D24-050P-N1N2D24	2127662
	<ul style="list-style-type: none"><li><b>Connection type head A:</b> Male connector, RJ45, 4-pin, straight</li><li><b>Connection type head B:</b> Male connector, M12, 4-pin, angled, D-coded</li><li><b>Signal type:</b> Ethernet, PROFINET</li><li><b>Cable:</b> 30 m, 4-wire, CAT5, CAT5e, PVC</li><li><b>Description:</b> Ethernet, shielded, PROFINET</li></ul>	SSL-2J04-F30MZ	6059450
	<ul style="list-style-type: none"><li><b>Connection type head A:</b> Female connector, M12, 4-pin, D-coded</li><li><b>Connection type head B:</b> Female connector, RJ45, 8-pin</li><li><b>Signal type:</b> Ethernet</li><li><b>Cable:</b> CAT5, CAT5e</li><li><b>Description:</b> Ethernet, shielded</li><li><b>Note:</b> Cabinet through</li></ul>	Feedthrough fe-male connector Ethernet RJ45	6048180

	<b>Brief description</b>	<b>Type</b>	<b>part no.</b>
measuring wheels and measuring wheel mechanics			
	<ul style="list-style-type: none"> <li><b>Product segment:</b> Measuring wheels and measuring wheel mechanics</li> <li><b>Product family:</b> Measuring wheel mechanics</li> <li><b>Description:</b> O-ring for measuring wheels (circumference 300 mm)</li> <li><b>Items supplied:</b> 2x O-ring</li> </ul>	BEF-OR-083-050	2064076
	<ul style="list-style-type: none"> <li><b>Product segment:</b> Measuring wheels and measuring wheel mechanics</li> <li><b>Product family:</b> Measuring wheel mechanics</li> <li><b>Description:</b> O-ring for measuring wheels (circumference 200 mm)</li> </ul>	BEF-OR-053-040	2064061
	<ul style="list-style-type: none"> <li><b>Product segment:</b> Measuring wheels and measuring wheel mechanics</li> <li><b>Product family:</b> Measuring wheels</li> <li><b>Description:</b> Plastic measuring wheel with smooth plastic surface (Hytrex), for 10 mm solid shaft, circumference 200 mm</li> </ul>	BEF-MR-010020	5312988
	<ul style="list-style-type: none"> <li><b>Product segment:</b> Measuring wheels and measuring wheel mechanics</li> <li><b>Product family:</b> Measuring wheels</li> <li><b>Description:</b> Measuring wheel with ridged plastic surface (Hytrex) for 10 mm solid shaft, circumference 200 mm</li> </ul>	BEF-MR-010020G	5318678
	<ul style="list-style-type: none"> <li><b>Product segment:</b> Measuring wheels and measuring wheel mechanics</li> <li><b>Product family:</b> Measuring wheels</li> <li><b>Description:</b> Aluminium measuring wheel with O-ring (NBR70) for 10 mm solid shaft, circumference 200 mm</li> </ul>	BEF-MR010020R	2055224
	<ul style="list-style-type: none"> <li><b>Product segment:</b> Measuring wheels and measuring wheel mechanics</li> <li><b>Product family:</b> Measuring wheels</li> <li><b>Description:</b> Aluminium measuring wheel with O-ring (NBR70) for 10 mm solid shaft, circumference 300 mm</li> </ul>	BEF-MR010030R	2049278
	<ul style="list-style-type: none"> <li><b>Product segment:</b> Measuring wheels and measuring wheel mechanics</li> <li><b>Product family:</b> Measuring wheels</li> <li><b>Description:</b> Plastic measuring wheel with smooth plastic surface (Hytrex) for 10 mm solid shaft, circumference 500 mm</li> </ul>	BEF-MR-010050	5312989
	<ul style="list-style-type: none"> <li><b>Product segment:</b> Measuring wheels and measuring wheel mechanics</li> <li><b>Product family:</b> Measuring wheels</li> <li><b>Description:</b> Measuring wheel with O-ring (NBR70) for 10 mm solid shaft, circumference 500 mm</li> </ul>	BEF-MR010050R	2055227

	Brief description	Type	part no.
Mounting systems			
	<ul style="list-style-type: none"><li><b>Description:</b> Flange adapter, adaptation of face mount flange with 36 mm centering hub to 50 mm servo flange, aluminum, including 3 flat head screws M4 x 10</li><li><b>Material:</b> Aluminum</li><li><b>Details:</b> Aluminum</li><li><b>Items supplied:</b> Including 3 countersunk screws M3 x 10</li></ul>	BEF-FA-036-050	2029160
	<ul style="list-style-type: none"><li><b>Description:</b> Flange adapter, adaptation of face mount flange with 36 mm centering hub to 60 mm square mounting plate, aluminum, including 3 flat head screws M4 x 8</li><li><b>Material:</b> Aluminum</li><li><b>Details:</b> Aluminum</li><li><b>Items supplied:</b> Including 3 countersunk screws M4 x 8</li></ul>	BEF-FA-036-060REC	2029162
	<ul style="list-style-type: none"><li><b>Description:</b> Flange adapter, adaptation of face mount flange with 36 mm centering hub to 58 mm square mounting plate with shock absorbers, aluminum</li><li><b>Material:</b> Aluminum</li><li><b>Details:</b> Aluminum</li></ul>	BEF-FA-036-060RSA	2029163
	<ul style="list-style-type: none"><li><b>Description:</b> Flange adapter, adaptation of face mount flange with 36 mm centering hub to 63 mm square mounting plate, aluminum, including 3 flat head screws M4 x 10</li><li><b>Material:</b> Aluminum</li><li><b>Details:</b> Aluminum</li><li><b>Items supplied:</b> Including 3 countersunk screws M3 x 10</li></ul>	BEF-FA-036-063REC	2034225

## 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](http://www.sick.com)