

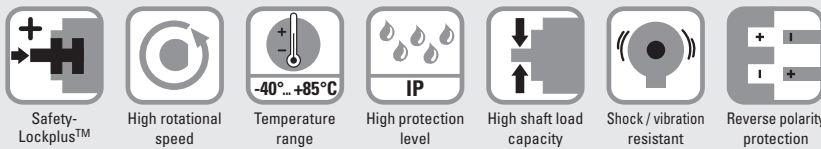
# Absolute encoders – singleturn

<b>Standard magnetic</b>	<b>Sendix M5858A (shaft)</b>	<b>IO-Link</b>
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The Sendix M58 is a magnetic singleturn encoder in compact design. High robustness and high resolution make this encoder the ideal device for use in demanding applications.

With Smart Sensor Profile for easy and fast integration into the application.



## Reliable and insensitive

- Sturdy bearing construction in Safety-Lock™ design for resistance against vibration and installation errors.
- Reduced number of components ensures magnetic insensitivity.
- IP67 protection and wide temperature range -40°C ... +85°C.

## Up-to-the-minute performance

- Operation possible with any IO-Link master.
- Point-to-point communication in automation networks.
- Use of cost-effective unshielded cables possible.
- Automatic saving of device parameters.
- Firmware update via IO-Link.

<b>Order code</b>	<b>8.M5858A.XX4X.41X2</b>						
<b>Shaft version</b>	Type	a	b	c	d	e	f
		<b>a</b> Flange 3 = clamping flange, ø 58 mm [2.28"] 4 = synchro flange, ø 58 mm [2.28"]	<b>b</b> Shaft (ø x L), with flat 1 = ø 6 x 12.5 mm [0.24 x 0.49"] 5 = ø 10 x 20 mm [0.39 x 0.79"]	<b>c</b> Interface / power supply 4 = IO-Link / 18 ... 30 V DC	<b>d</b> Type of connection 3 = axial M12 connector, 4-pin 4 = radial M12 connector, 4-pin	<b>e</b> Fieldbus profile 41 = IO-Link	<b>f</b> Profile 2 = Standard Profile <sup>1)</sup> 3 = Smart Sensor Profile <sup>2)</sup>  <i>Optional on request</i> - Ex 2/22

Mounting accessory for shaft encoders		Order no.
<b>Coupling</b>	Bellows coupling ø 19 mm [0.75"] for shaft 10 mm [0.39"]	<b>8.0000.1102.1010</b>
Cables and connectors		Order no.
<b>Preassembled cables</b>	M12 female connector with coupling nut, 4-pin, A coded, straight single-ended 2 m [6.56'] PUR cable	<b>05.00.6061.6211.002M</b>
<b>Connectors</b>	M12 female connector with coupling nut, 4-pin, A coded, straight	<b>05.B8141-0</b>

Further Kübler accessories can be found at: [kuebler.com/accessories](http://kuebler.com/accessories)  
 Further Kübler cables and connectors can be found at: [kuebler.com/connection-technology](http://kuebler.com/connection-technology)

1) Delivered with default setting for Standard Profile (switchable to Smart Sensor Profile).  
 2) Delivered with default setting for Smart Sensor Profile (switchable to Standard Profile).

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## Technical data

Mechanical characteristics	
<b>Maximum speed</b>	4000 min <sup>-1</sup> 2000 min <sup>-1</sup> (continuous)
<b>Starting torque at 20°C [68°F]</b>	< 0.01 Nm
<b>Shaft load capacity</b>	radial 80 N axial 40 N
<b>Weight</b>	approx. 280 g [9.88 oz]
<b>Protection acc. to EN 60529/DIN 40050-9</b>	IP65
<b>Working temperature range</b>	-40 °C ... +85 °C [-40 °F ... +185 °F]
<b>Materials</b>	shaft V2A flange aluminum housing zinc die-cast
<b>Shock resistance acc. to EN 60068-2-27</b>	5000 m/s <sup>2</sup> , 4 ms
<b>Vibration resistance acc. to EN 60068-2-6</b>	300 m/s <sup>2</sup> , 10 ... 2000 Hz

Electrical characteristics	
<b>Power supply</b>	18 ... 30 V DC
<b>Current consumption (no load)</b>	max. 40 mA
<b>Reverse polarity protection of the power supply</b>	yes

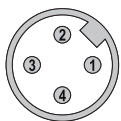
Interface characteristics IO-Link	
<b>Resolution</b>	1 ... 16.384 (14 bit), scalable default: 16.384 (14 bit)
<b>Angular measurement deviation <sup>1)</sup></b>	±0,5°
<b>Repeat accuracy</b>	±0,2°
<b>Interface</b>	IO-Link version 1.1 acc. to IEC 61131-9
<b>Profile (details see manual)</b>	Kübler Standard Profile or Smart Sensor Profile
<b>Port classe</b>	Type A

Approvals	
<b>UL compliant</b> in accordance with	File no. E224618
<b>CE compliant</b> in accordance with	
EMC Directive	2014/30/EU
RoHS Directive	2011/65/EU
ATEX Directive	2014/34/EU (for Ex 2/22 variants)
<b>UKCA compliant</b> in accordance with	
EMC Regulations	S.I. 2016/1091
RoHS Regulations	S.I. 2012/3032
UKEX Regulations	S.I. 2016/1107 (for Ex 2/22 variants)

## Terminal assignment

Interface	Type of connection	M12 connector, 4-pin				
4	3, 4	Signal:	Power supply +V DC	Reserved (no function)	Power supply 0 V (GND)	IO-Link communication (Data line)
		Abbreviation:	L+	res.	L-	C/Q
		Pin:	1	2	3	4

### Top view of mating side, male contact base



M12 connector, 4-pin

1) Over the whole temperature range.

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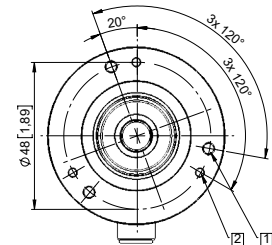
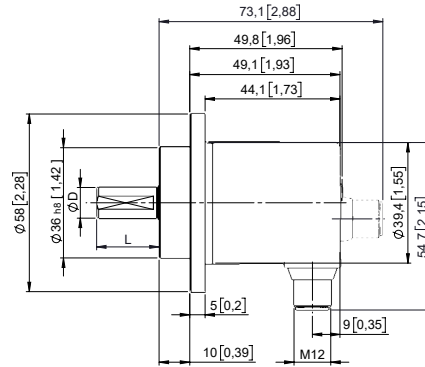
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## Dimensions

Dimensions in mm [inch]

### Clamping flange, ø 58 [2.28] Flange type 3

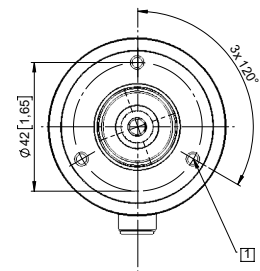
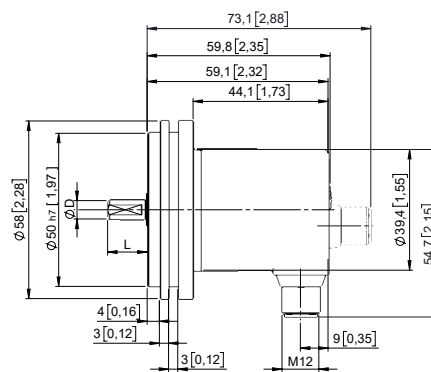
- 1 3 x M4
- 2 3 x M3



D	Fit	L
6 [0.24]	h7	12.5 [0.49]
10 [0.39]	f7	20 [0.79]

### Synchro flange, ø 58 [2.28] Flange type 4

- 1 3 x M4, 10 [0.39] deep



D	Fit	L
6 [0.24]	h7	12.5 [0.49]
10 [0.39]	f7	20 [0.79]