

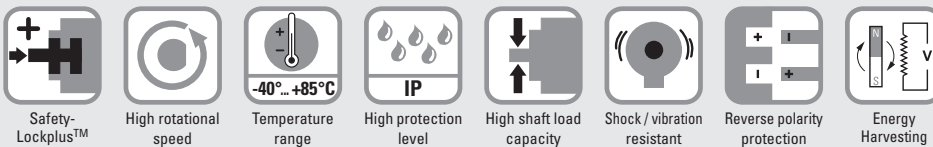
# Absolute encoders – multiturn

<b>Standard electronic multiturn, magnetic</b>	<b>Sendix M5868 (shaft)</b>	<b>IO-Link</b>
--	-----------------------------	----------------



The Sendix M58 with Energy Harvesting Technology is an electronic multiturn encoder without gear and without battery – in the standard format with 58 mm flange. 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.



## Highest robustness

- Sturdy bearing construction in Safety-Lockplus™ design for particularly high resistance.
- Extra large bearings.
- Mechanically protected shaft seal.
- Wide temperature range -40 °C ... +85 °C.
- Without gear and without battery, thanks to the Energy Harvesting technology.

## 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.M5868</b>					
<b>Shaft version</b>	Type	.XX	4X	.41	X2	
<b>a</b> Flange	3 = clamping flange, IP65, ø 58 mm [2.28"]	<b>d</b> Type of connection	3 = axial M12 connector, 4-pin	<b>f</b> Profile	2 = Standard Profil <sup>1)</sup>	
	4 = synchro flange, IP65, ø 58 mm [2.28"]		4 = radial M12 connector, 4-pin		3 = Smart Sensor Profile <sup>2)</sup>	
<b>b</b> Shaft (ø x L), with flat	1 = ø 6 x 12.5 mm [0.24 x 0.49"]	<b>e</b> Fieldbus profile	41 = IO-Link		<i>Optional on request</i>	
	5 = ø 10 x 20 mm [0.39 x 0.79"]				- Ex 2/22	
<b>c</b> Interface / supply voltage	4 = IO-Link / 18 ... 30 V DC					

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 (plastic)	<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).

# Absolute encoders – multiturn

<b>Standard electronic multiturn, magnetic</b>	<b>Sendix M5868 (shaft)</b>	<b>IO-Link</b>
--	-----------------------------	----------------

## 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

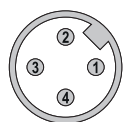
Approvals	
<b>UL compliant</b> in accordance with	File no. E224618
<b>CE compliant</b> in accordance with	
EMC Directive	2014/30/EU
RoHS Directive	2011/65/EU
ATEX Directive	2014/34/EU (for Ex 2/22 variants)
<b>UKCA compliant</b> in accordance with	
EMC Regulations	S.I. 2016/1091
RoHS Regulations	S.I.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

Interface characteristics IO-Link	
<b>Resolution singleturn</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>Number of revolutions (multiturn)</b>	1 ... 262.144 (18 bit), scalable only via the total resolution default: 262.144 (18 bit)
<b>Total resolution</b>	4 ... 4.294.967.296 (32 bit), scalable default: 4.294.967.296 (32 bit)
<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

## Terminal assignment

Interface	Type of connection	M12 connector, 4-pin				
		Signal:	Supply voltage +V DC	Reserved (no function)	Supply voltage 0 V (GND)	IO-Link communication (Data line)
4	3, 4	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.

# Absolute encoders – multiturn

<b>Standard electronic multiturn, magnetic</b>	<b>Sendix M5868 (shaft)</b>	<b>IO-Link</b>
--	-----------------------------	----------------

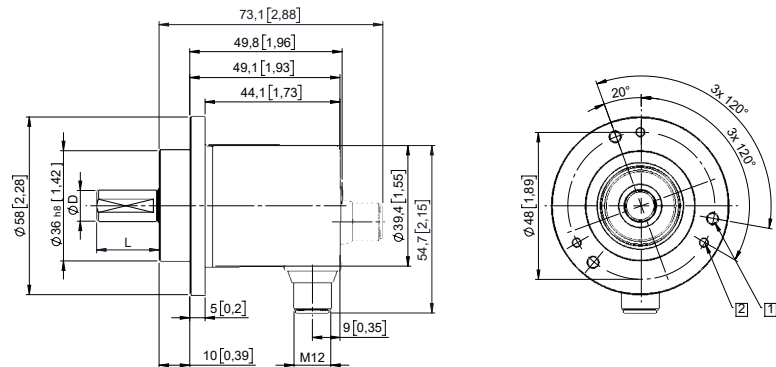
## Dimensions

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]	h7	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]	h7	20 [0.79]

