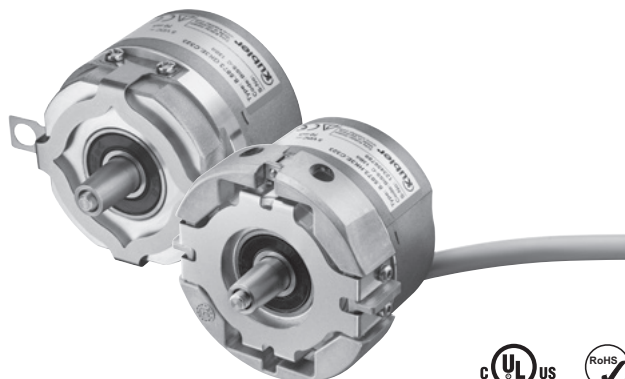


# Incremental encoders

<b>Standard Motor-Line, optical</b>	<b>Sendix 5834 (tapered shaft)</b>	<b>SinCos</b>
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The incremental encoder Sendix 5834 with SinCos interface is particularly suited for applications in the field of Drive and Elevator Technology.

Thanks to their high signal quality, they are optimally suited for further interpolation.



Safety-Lock™	High rotational speed	Temperature range -40°...+90°C	High protection level IP	High shaft load capacity	Shock / vibration resistant	Magnetic field proof	Reverse polarity protection	SinCos	Optical sensor

### Powerful

- With incremental SinCos tracks.
- Very high signal quality.
- Encoder specially designed for mounting on direct drives in the elevator technology.

### Flexible

- Stator coupling or expanding coupling.
- Cable or PCB-connector.
- 1024 or 2048 ppr.

<b>Order code</b>	<b>8.5834</b>	<b>. X K X X . XXXX</b>
<b>Tapered shaft</b>	Type	a b c d e
<b>a Flange</b>	G = with stator coupling, IP65, ø 72 mm [2.83"] H = with expanding coupling, IP65, ø 65 mm [2.56"]	<b>d Type of connection</b> E = tangential cable, 1 m PVC F = tangential cable, length PVC see below *) L = with PCB connector (without cable, including sealing cap for tangential cable outlet)
<b>b Tapered shaft</b>	K = ø 10 mm [0.39"]	<b>e Pulse rate</b> 1024, 2048
<b>c Output circuit / power supply</b>	1 = SinCos / 5 V DC 2 = SinCos / 10 ... 30 V DC	<b>*) Available lengths (connection type F):</b> 2, 3, 5, 8, 10, 15 m [5.56, 9.84, 16.40, 26.25, 32.80, 49.21'] order code expansion .XXXX = length in dm ex.: 8.5834.GK2F.1024.0030 (for cable length 3 m)

<b>Connection technology</b>	Order no.
<b>Cordset, pre-assembled</b> (suitable for type of connection L)	PCB connector (female contacts), 12-pin 2 m [6.56'] PVC cable <b>8.0000.6D91.0002.0097</b>

Additional connectors can be found in the connection technology section or in the connection technology area of our website at: [www.kuebler.com/connection\\_technology](http://www.kuebler.com/connection_technology).

# Incremental encoders

<b>Standard Motor-Line, optical</b>	<b>Sendix 5834 (tapered shaft)</b>	<b>SinCos</b>
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## Technical data

Mechanical characteristics	
<b>Maximum speed</b>	12000 min <sup>-1</sup> , 5000 min <sup>-1</sup> (continuous)
<b>Starting torque</b> – at 20°C [68°F]	< 0.01 Nm
<b>Mass moment of inertia</b>	3.0 x 10 <sup>-6</sup> kgm <sup>2</sup>
<b>Load capacity of shaft</b>	radial 80 N axial 40 N
<b>Weight</b>	approx. 0.45 kg [15.85 oz]
<b>Protection</b> acc. to EN 60529	IP65
<b>Working temperature range</b>	-40°C ... +90°C [-40°F ... +194°F] <sup>1)</sup>
<b>Materials</b>	tapered shaft stainless steel flange aluminum housing zinc die-cast cable PVC
<b>Shock resistance</b> acc. to EN 60068-2-27	2500 m/s <sup>2</sup> , 6 ms
<b>Vibration resistance</b> acc. to EN 60068-2-6	100 m/s <sup>2</sup> , 55 ... 2000 Hz

Electrical characteristics	
<b>Power supply</b>	5 V DC (±5 %) or 10 ... 30 V DC
<b>Current consumption</b> (no load)	5 V DC max. 70 mA 10 ... 30 V DC max. 45 mA
<b>Reverse polarity protection of the power supply</b>	yes
<b>UL approval</b>	file 224618
<b>CE compliant</b> acc. to	EMC guideline 2014/30/EU RoHS guideline 2011/65/EU

SinCos interface	
<b>Max. frequency -3dB</b>	400 kHz
<b>Signal level</b>	1 Vpp (±10 %)
<b>Short circuit proof</b>	yes <sup>2)</sup>
<b>Pulse rate</b>	1024 / 2048 ppr

Incremental encoders

### Terminal assignment

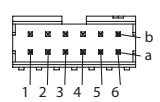
Output circuit	Type of connection	Cable (isolate unused wires individually before initial start-up)							
1, 2	E, F	Signal:	0 V	+V	A	$\bar{A}$	B	$\bar{B}$	$\perp$
		Core color:	WH	BN	GN	YE	GY	PK	shield

Output circuit	Type of connection	PCB connector (male contact), 12-pin													
1, 2	E, F	Signal:	0 V	+V	A	$\bar{A}$	B	$\bar{B}$	d.n.c.	d.n.c.	d.n.c.	d.n.c.	d.n.c.	d.n.c.	
		Pin:	4b	1b	2a	5b	4a	3b	1a	2b	3a	5a	6a	6b	

- +V: Encoder power supply +V DC
- 0 V: Encoder power supply ground GND (0 V)
- A,  $\bar{A}$ : Cosine signal
- B,  $\bar{B}$ : Sine signal
- d.n.c.: do not connect (used internally)

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

Type of connection L  
FCI Minitek connector (male contact),  
double-row, 12-pin (98424-F52-12-LF)



1) Cable version: -30°C ... +90°C [-22°F ... +194°F] fixed installation.  
2) Short circuit to 0 V or to output, one channel at a time, power supply correctly applied.

# Incremental encoders

**Standard  
Motor-Line, optical**

**Sendix 5834 (tapered shaft)**

**SinCos**

## Dimensions tapered shaft version

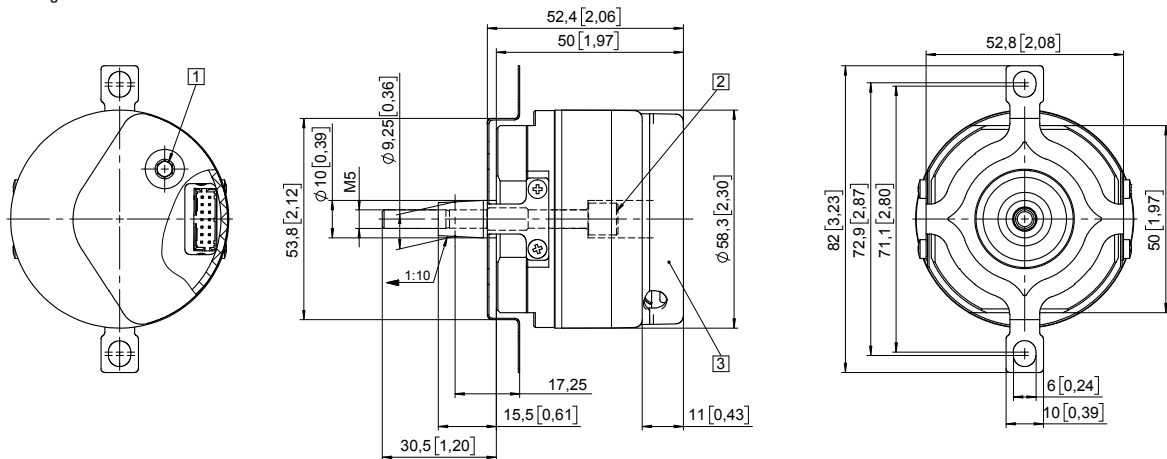
Dimensions in mm [inch]

### Flange with stator coupling, $\varnothing 72$ [2.83]

#### Flange type G

(with tapered shaft K and PCB connector)

- 1 Recommended torque for screw M6 (SW 4) 2.0 <sup>+0.5</sup> Nm
- 2 Recommended torque for tightening screw M6 (SW 4) 3.0 <sup>+0.5</sup> Nm
- 3 Sealing cap for tangential cable outlet



### Flange with expanding coupling,

$\varnothing 65$  [2.56"]

#### Flange type H

(with tapered shaft K and tangential cable)

- 1 Recommended torque for tightening screw M6 (SW 4) 3.0 <sup>+0.5</sup> Nm
- 2 Recommended torque for tightening screw M2.5 (SW 2) 1.0 Nm

