

Incremental encoders

**Standard
Motor-Line, optical**

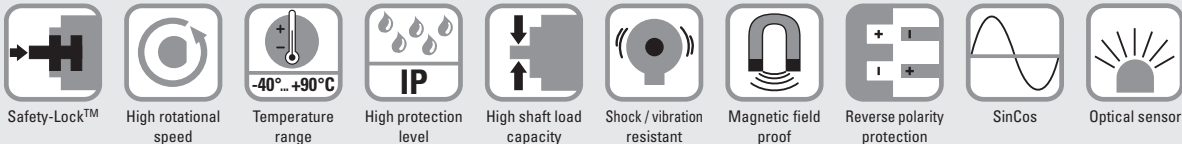
Sendix 5834 (tapered shaft)

SinCos



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.



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.

**Order code
Tapered shaft**

8.5834

Type

. **X** **K** **X** **X** . **XXXX**

a

b

c

d

e

a Flange

G = with stator coupling, IP65, ø 72 mm [2.83"]
H = with expanding coupling, IP65, ø 65 mm [2.56"]

b Tapered shaft

K = ø 10 mm [0.39"]

c Output circuit / power supply

1 = SinCos / 5 V DC
2 = SinCos / 10 ... 30 V DC

d Type of connection

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)

*) Available lengths (connection type F):
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)

e Pulse rate

1024, 2048

Connection technology

Order no.

Cordset, pre-assembled

(suitable for type of connection L)

PCB connector (female contacts), 12-pin
2 m [6.56'] PVC cable

8.0000.6D91.0002.0097

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.

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Technical data

Mechanical characteristics

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

Electrical characteristics

Power supply	5 V DC (±5 %) or 10 ... 30 V DC	
Current consumption (no load)	5 V DC	max. 70 mA
	10 ... 30 V DC	max. 45 mA
Reverse polarity protection of the power supply	yes	
UL approval	file no. E224618	
CE compliant acc. to	EMC guideline 2014/30/EU RoHS guideline 2011/65/EU	

SinCos interface

Max. frequency -3dB	400 kHz
Signal level	1 V _{pp} (±10 %)
Short circuit proof	yes ²⁾
Pulse rate	1024 / 2048 ppr

Terminal assignment

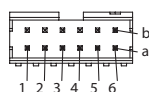
Output circuit	Type of connection	Cable (isolate unused cores individually before initial start-up)							
1, 2	E, F	Signal:	0 V	+V	A	\bar{A}	B	\bar{B}	\perp
		Core color:	WH	BN	GN	YE	GY	PK	shield

Output circuit	Type of connection	PCB connector (male contact), 12-pin												
1, 2	L	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.

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Dimensions tapered shaft version

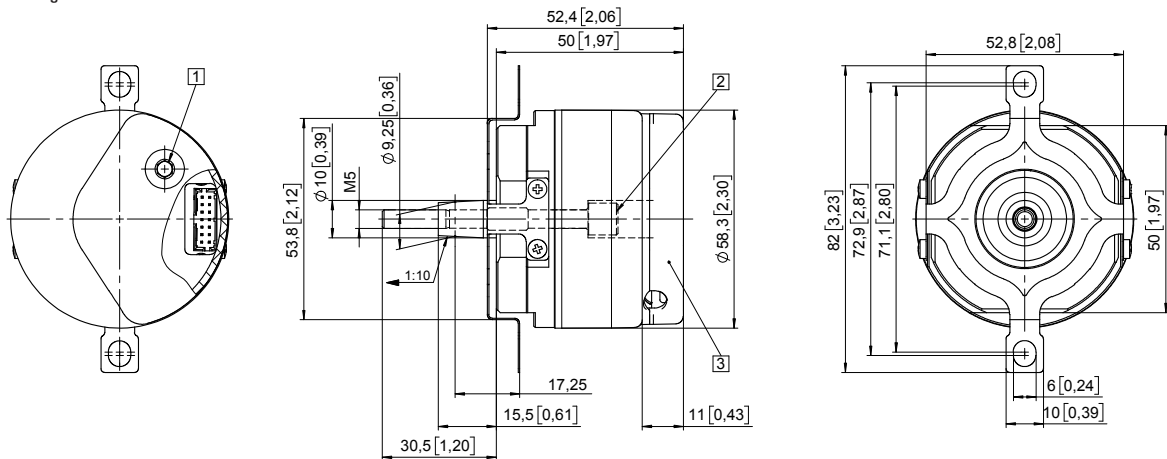
Dimensions in mm [inch]

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) $2.0^{+0.5}$ Nm
- 2 Recommended torque for tightening screw M6 (SW 4) $3.0^{+0.5}$ 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) $3.0^{+0.5}$ Nm
- 2 Recommended torque for tightening screw M2.5 (SW 2) 1.0 Nm

