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.

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.

Order code Tapered shaft

8.5834	.	X	K	X	X	.	XXXX
Type		a	b	c	d		e

a *Flange*
G = with stator coupling, ø 72 mm [2.83“]
H = with expanding coupling, ø 65 mm [2.56“]

b *Tapered shaft*
K = ø 10 mm [0.39“]

c *Output circuit / supply voltage*
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

Cables and connectors		Order no.
Preassembled cables (suitable for type of connection L)	PCB connector (female contacts), 12-pin single ended 2 m [6.56'] PVC cable	**8.0000.6D91.0002.0097**

Further Kübler cables and connectors can be found at: 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

Supply voltage		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 supply voltage		yes

SinCos interface

Max. frequency -3dB	400 kHz
Signal level	1 Vpp (±10 %)
Short circuit proof	yes [2]
Pulse rate	1024 / 2048 ppr

Approvals

UL compliant in accordance with	File no. E224618
CE compliant in accordance with	
EMC Directive	2014/30/EU
RoHS Directive	2011/65/EU
UKCA compliant in accordance with	
EMC Regulations	S.I. 2016/1091
RoHS Regulations	S.I. 2012/3032

Terminal assignment

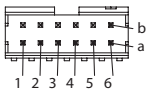
Output circuit	Type of connection	Cable (isolate unused cores individually before initial start-up)							
1, 2	E, F	Signal:	0 V	+V	A	$\overline{A}$	B	$\overline{B}$	⏚
		Core color:	WH	BN	GN	YE	GY	PK	shield

Output circuit	Type of connection	PCB connector (male contact), 12-pin											
1, 2	L	Signal:	0 V	+V	A	$\overline{A}$	B	$\overline{B}$	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: Supply voltage encoder +V DC
0 V: Supply voltage encoder ground GND (0 V)
A, $\overline{A}$: Cosine signal
B, $\overline{B}$: 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, supply voltage correctly applied.

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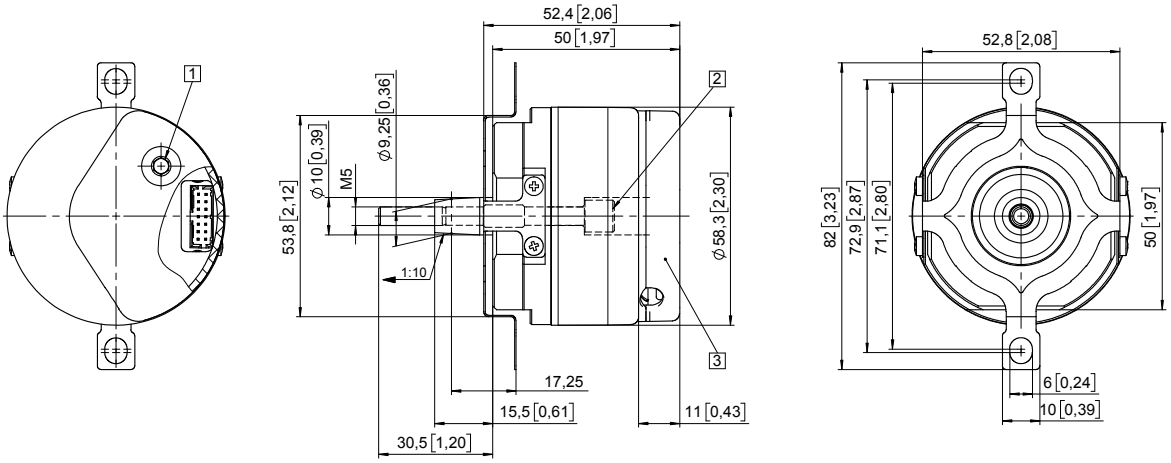
Dimensions tapered shaft version

Dimensions in mm [inch]

Flange with stator coupling, ø 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 central screw M5 (SW 4) 3.0 +0.5 Nm (tapered shaft)
3 Sealing cap for tangential cable outlet



Flange with expanding coupling, ø 65 [2.56"]
Flange type H
(with tapered shaft K and tangential cable)

1 Status-LED
2 SET button
3 Recommended torque for central screw M5 (SW 4) 3.0 +0.5 Nm (tapered shaft
4 Recommended torque for tightening screw M2.5 (SW 2) 1.0 Nm (expanding coupling)