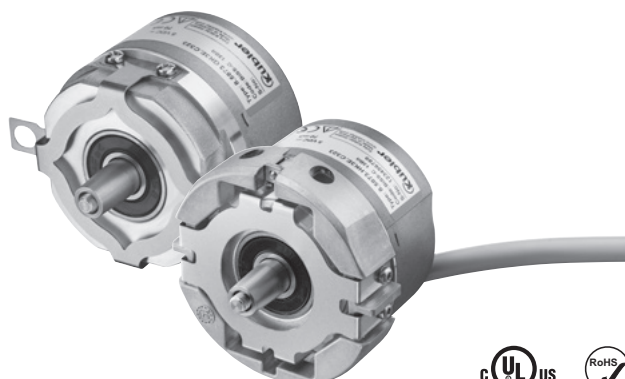


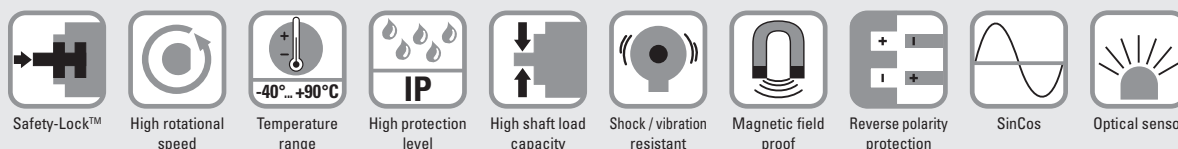
# Incremental encoders

| Standard<br>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](http://www.kuebler.com/connection_technology).

# Incremental encoders

|                                         |                                    |               |
|-----------------------------------------|------------------------------------|---------------|
| <b>Standard<br/>Motor-Line, optical</b> | <b>Sendix 5834 (tapered shaft)</b> | <b>SinCos</b> |
|-----------------------------------------|------------------------------------|---------------|

## Technical data

| Mechanical characteristics                       |                                                                                        |  | Electrical characteristics                             |                                                       |
|--------------------------------------------------|----------------------------------------------------------------------------------------|--|--------------------------------------------------------|-------------------------------------------------------|
| <b>Maximum speed</b>                             | 12000 min <sup>-1</sup> ; 5000 min <sup>-1</sup> (continuous)                          |  | <b>Power supply</b>                                    | 5 V DC (±5 %) or 10 ... 30 V DC                       |
| <b>Starting torque</b> – at 20°C [68°F]          | < 0.01 Nm                                                                              |  | <b>Current consumption</b><br>(no load)                | 5 V DC max. 70 mA<br>10 ... 30 V DC max. 45 mA        |
| <b>Mass moment of inertia</b>                    | 3.0 x 10 <sup>-6</sup> kgm <sup>2</sup>                                                |  | <b>Reverse polarity protection of the power supply</b> | yes                                                   |
| <b>Load capacity of shaft</b>                    | radial 80 N<br>axial 40 N                                                              |  | <b>UL approval</b>                                     | file 224618                                           |
| <b>Weight</b>                                    | approx. 0.45 kg [15.85 oz]                                                             |  | <b>CE compliant acc. to</b>                            | EMC guideline 2014/30/EU<br>RoHS guideline 2011/65/EU |
| <b>Protection</b> acc. to EN 60529               | IP65                                                                                   |  | <b>SinCos interface</b>                                |                                                       |
| <b>Working temperature range</b>                 | -40°C ... +90°C [-40°F ... +194°F] <sup>1)</sup>                                       |  | <b>Max. frequency -3dB</b>                             | 400 kHz                                               |
| <b>Materials</b>                                 | tapered shaft stainless steel<br>flange aluminum<br>housing zinc die-cast<br>cable PVC |  | <b>Signal level</b>                                    | 1 Vpp (±10 %)                                         |
| <b>Shock resistance</b> acc. to EN 60068-2-27    | 2500 m/s <sup>2</sup> , 6 ms                                                           |  | <b>Short circuit proof</b>                             | yes <sup>2)</sup>                                     |
| <b>Vibration resistance</b> acc. to EN 60068-2-6 | 100 m/s <sup>2</sup> , 55 ... 2000 Hz                                                  |  | <b>Pulse rate</b>                                      | 1024 / 2048 ppr                                       |

## Terminal assignment

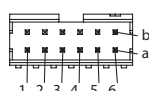
| Output circuit | Type of connection | Cable (isolate unused wires individually before initial start-up) |     |    |    |           |    |           |         |
|----------------|--------------------|-------------------------------------------------------------------|-----|----|----|-----------|----|-----------|---------|
| 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

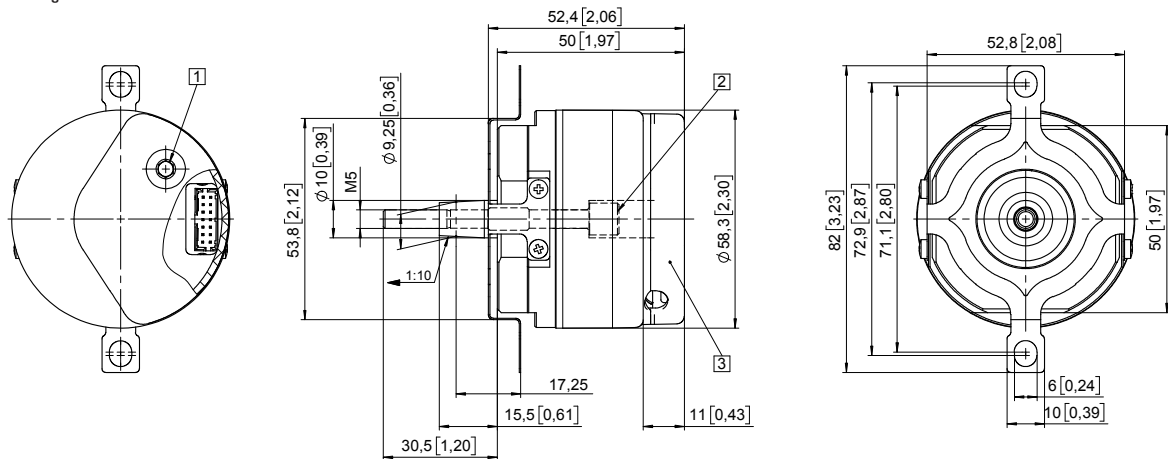
Dimensions in mm [inch]

#### 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

