

Incremental encoders

Standard optical	Sendix 5000 / 5020 (shaft / hollow shaft)	Push-pull / RS422 / Open collector
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Order code	8.5000	. XXXXX . XXXX
Shaft version	Type	a b c d e

If for each parameter of an encoder the underlined preferred option is selected, then the delivery time will be 10 working days for a maximum of 10 pieces. Qts. up to 50 pcs. of these types generally have a delivery time of 15 working days.



An additional requirement is the combination of flange "7" or "8" with shaft "3" or the combination of flange "A" or "B" with shaft "1".

e. g.: 8.5000.7344.1024 or 8.5000.B144.1024

a Flange

- 5 = synchro flange, IP66/IP67 ø 50.8 mm [2"]
- 6 = synchro flange, IP65 ø 50.8 mm [2"]
- 7 = clamping flange, IP66/IP67 ø 58 mm [2.28"]
- 8 = clamping flange, IP65 ø 58 mm [2.28"]
- A = synchro flange, IP66/IP67 ø 58 mm [2.28"]
- B = synchro flange, IP65 ø 58 mm [2.28"]
- C = square flange, IP66/IP67 □ 63.5 mm [2.5"]
- D = square flange, IP65 □ 63.5 mm [2.5"]
- G = Euro flange, IP66/IP67 ø 115 mm [4.53"]²⁾

- 1 = servo flange, IP66/IP67 ø 50.8 mm [2"]³⁾
- 2 = servo flange, IP65 ø 50.8 mm [2"]³⁾
- 3 = square flange, IP66/IP67 □ 52.3 mm [2.06"]³⁾
- 4 = square flange, IP65 □ 52.3 mm [2.06"]³⁾
- E = servo flange, IP66/IP67 ø 63.5 mm [2.5"]³⁾
- F = servo flange, IP65 ø 63.5 mm [2.5"]³⁾

b Shaft (ø x L), with flat

- 1 = ø 6 x 10 mm [0.24 x 0.39"]
- 2 = ø 1/4 x 5/8" (6.35 x 15.875 mm)
- 6 = ø 8 x 15 mm [0.32 x 0.59"]
- 3 = ø 10 x 20 mm [0.39 x 0.79"]
- 4 = ø 3/8 x 5/8" (9.5 x 15.875 mm)
- 5 = ø 12 x 20 mm [0.47 x 0.79"]

- 7 = ø 1/4 x 7/8"³⁾
- 8 = ø 3/8 x 7/8"³⁾

Shaft (ø x L), with feather keyway and enclosed feather key

- B = ø 11 x 33 mm⁴⁾

c Output circuit (with inverted signal) / supply voltage

- 4 = RS422 / 5 V DC

- 1 = RS422 / 5 ... 30 V DC
- 2 = push-pull (7272 compatible) / 5 ... 30 V DC
- 5 = push-pull / 10 ... 30 V DC

- 3 = open collector / 5 ... 30 V DC⁵⁾
- 8 = push-pull (7272 compatible), without capacitor / 5 ... 30 V DC¹⁾³⁾⁶⁾

d Type of connection – cable

- 1 = axial cable, 1 m [3.28"] PVC
- A = axial cable, special length PVC *)
- 2 = radial cable, 1 m [3.28"] PVC
- B = radial cable, special length PVC *)

Type of connection – connector

- P = axial M12 connector, 5-pin⁵⁾
- R = radial M12 connector, 5-pin⁵⁾
- 3 = axial M12 connector, 8-pin
- 4 = radial M12 connector, 8-pin
- 7 = axial M23 connector, 12-pin
- 8 = radial M23 connector, 12-pin
- Y = radial MIL connector, 10-pin
- W = radial MIL connector, 7-pin⁵⁾
- 9 = radial MIL connector, 6-pin³⁾⁵⁾

Type of connection – connector with cable

- L = radial cable with M12 connector, 8-pin, special length PVC *)
- M = radial cable with M23 connector, 12-pin, special length PVC *)
- N = radial cable with Sub-D connector, 9-pin, special length PVC *)

*) Available special lengths (connection types A, B, L, M, N):
0.3, 0.5, 1, 2, 3, 4, 5, 6, 8, 10, 12, 15, 20 m [0.98, 1.64, 3.28, 6.56, 9.84, 13.12, 16.40, 19.69, 26.25, 32.80, 39.37, 49.21, 65.62']
order code expansion .XXXX = length in dm
ex.: 8.5000.814A.1024.0030 (for cable length 3 m)

e Pulse rate

- 1, 2, 4, 5, 10, 12, 14, 20, 25, 28, 30, 32, 36, 50, 60, 64, 80, 100, 120, 125, 150, 180, 200, 240, 250, 256, 300, 342, 360, 375, 400, 500, 512, 600, 625, 720, 800, 900, 1000, 1024, 1200, 1250, 1500, 1800, 2000, 2048, 2500, 3000, 3600, 4000, 4096, 5000
(e.g. 100 pulses => 0100)

Optional on request

- other pulse rates
- Ex 2/22 only for variants with IP66/IP67⁷⁾
(not for type of connection L, M, N)
- surface protection salt spray

Salt spray tested as standard type
(deliverable as from 1 unit)



8.5000.73X4.XXXX-C

2) Only in conjunction with shaft type B.

3) US version.

4) Only in conjunction with flange type G.

5) Without inverted signal.

6) Attention: no CE types!

7) For type of connection cable, the cable material is PUR.

EU-Konformitätserklärung
EU Declaration of Conformity
Déclaration de conformité UE



Kübler Gruppe
 Fritz Kübler GmbH
 Schubertstraße 47
 D -78054 Villingen-Schwenningen
 www.kuebler.com

Produktbezeichnung: Product designation: Désignation du produit:	Incremental Encoder
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Typenreihe: Type code: Type:	Sendix 5000 Sendix 5020
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Hersteller / Bevollmächtigt zur Zusammenstellung der technischen Unterlagen: Manufacturer / Person authorised to compile the technical file: Fabricant / Personne autorisée à constituer le dossier technique:	Fritz Kübler GmbH Schubertstraße 47 D-78054 Villingen-Schwenningen Germany
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Das bezeichnete Produkt stimmt mit den folgenden Europäischen Richtlinien überein: We herewith confirm that the above mentioned product meets the requirements of the following european Directives: <i>Le produit désigné ci-dessus est conforme à la ligne directrice européenne suivante:</i>	Die Übereinstimmung des bezeichneten Produktes mit den Vorschriften der Richtlinie wird nachgewiesen durch die vollständige Einhaltung folgender Normen: The correspondance of the above mentioned product with these requirements is proved by the fact that these products meet with the following single standards: <i>La conformité du produit désigné aux prescriptions de la ligne directrice est certifiée par la observation totale des normes suivantes:</i>
Richtlinien / Directives / Directives	Norm / Standard / Norme
EMV Richtlinie: 2014/30/EU EMC Directive: 2014/30/EU Directive CEM: 2014/30/EU	EN 55011 Class B:2016 / A1:2017 / A11:2020 EN 61326-1:2013 EN IEC 61326-1:2021 for industrial, commercial and residential use
ATEX Richtlinie: 2014/34/EU nur für Varianten mit IP66/67 (nicht für Anschlussart L, M, N) ATEX Directive: 2014/34/EU only for variants wiht IP66/67 (not for type of connection L, M, N) Directive ATEX: 2014/34/EU <i>uniquement pour les variantes avec IP66/67 (ne s'applique pas aux types de raccordements L, M, N)</i>	EN IEC 60079-0:2018 EN IEC 60079-15:2019 EN 60079-31:2014
RoHS Richtlinie: 2011/65/EU RoHS Directive: 2011/65/EU Directive RoHS: 2011/65/EU	EN IEC 63000:2018

Der Hersteller trägt die alleinige Verantwortung für die Ausstellung der Konformitätserklärung.
 The manufacturer is solely responsible for issuance of the declaration of conformity.
Le fabricant est seul responsable de la délivrance du certificat de conformité.

Villingen-Schwenningen, 16.08.2024

Ort und Datum der Ausstellung
 Place and date of issue
Lieu et date d'établissement


 Dr. Jochen Bolte
 Leiter Entwicklung
rechtsverbindliche Unterschrift
 Name and signature of authorised person
Nom et signature de la personne autorisée