

## SENDIX F5863/5883, OPTYCZNY, WIELOBROTOWY, SSI, Ø58 MM

Enkodery wielobrotowe absolutne optyczne

SERIE F5863

- Średnica zewnętrzna: Ø 58 mm
- Maks. średnica wałka: Ø 10 mm. Maks. średnica otworu: Ø 15 mm
- Maks. rozdzielczość: 17 bitów ST + 24 bitów MT
- SSI, BiSS, + 2048 ppr SinCos, + 2048 ppr RS422
- Safety-Lock™



### OPIS PRODUKTU

Enkodery absolutne wielobrotowe F5863/5883 o całkowitej rozdzielczości do 41 bitów.

Wielokrotnie nagradzana i chroniona patentem technologia Intelligent Scan™ rodziny enkoderów F-Multiturn firmy Kübler ma teraz zastosowanie w enkoderze o standardowym wymiarze 58 mm.

Cechy:

- całkowitą rozdzielczość 41 bitów (17 bitów jednoobrotowe / 24 bity wielobrotowe)
- wyjście SSI lub BiSS-C, opcjonalnie dodatkowy wyjście inkrementalne, Sin/Cos
- obudowa z odlewanego ciśnieniowo stopu cynku
- budowa łożysk Safety Lock™ gwarantuje bardzo wysoką odporność wału na obciążenia osiowe i promieniowe
- w 100% odporne na zakłócenia magnetyczne
- częstotliwości taktowania do 2 MHz SSI / 10 MHz BiSS-C

W celu określenia numeru katalogowego proszę o zapoznanie się z poniższymi informacjami.

Order code	8.F5863	.XXXXX	.XXXXX	
Shaft version	Type	a b c d	e f g h	
<b>a Flange</b>	<b>1 = clamping flange, IP65 ø 58 mm [2.28"]</b> 3 = clamping flange, IP67 ø 58 mm [2.28"] <b>2 = synchro flange, IP65 ø 58 mm [2.28"]</b> 4 = synchro flange, IP67 ø 58 mm [2.28"]	<b>c Interface / power supply</b> 1 = SSI, BiSS / 5 V DC <b>2 = SSI, BiSS / 10 ... 30 V DC</b> 3 = SSI, BiSS + 2048 ppr. SinCos / 5 V DC 4 = SSI, BiSS + 2048 ppr. SinCos / 10 ... 30 V DC 5 = SSI, BiSS / 5 V DC, with sensor output 6 = SSI, BiSS + 2048 ppr. SinCos / 5 V DC, with sensor output 7 = SSI, BiSS + 2048 ppr. RS422 (TTL-comp.) / 5 V DC 8 = SSI, BiSS + 2048 ppr. RS422 (TTL-comp.) / 10 ... 30 V DC	<b>e Code</b> B = SSI, binary C = BiSS, binary <b>G = SSI, gray</b>	<b>h Resolution (multiturn)<sup>4)</sup></b> <b>2 = 12 bit MT</b> 6 = 16 bit MT 4 = 24 bit MT
<b>b Shaft (ø x L), with flat</b>	<b>1 = 6 x 10 mm [0.24 x 0.39"]<sup>1)</sup></b> <b>2 = 10 x 20 mm [0.39 x 0.79"]<sup>2)</sup></b> 3 = 1/4" x 7/8" 4 = 3/8" x 7/8"	<b>d Type of connection</b> 1 = axial cable, 1 m [3.28"] PVC A = axial cable, special length PVC *) <b>2 = radial cable, 1 m [3.28"] PVC</b> B = radial cable, special length PVC *) 3 = axial M23 connector, 12-pin <b>4 = radial M23 connector, 12-pin</b> 5 = axial M12 connector, 8-pin <sup>3)</sup> 6 = radial M12 connector, 8-pin <sup>3)</sup>	<b>f Resolution (singleturn)<sup>4)</sup></b> B = 9 bit ST A = 10 bit ST 1 = 11 bit ST 2 = 12 bit ST <b>3 = 13 bit ST</b> 4 = 14 bit ST 7 = 17 bit ST	<b>h Options (service)</b> 1 = no option 2 = status LED <b>3 = SET button and status LED</b>
		<b>*) Available special lengths (connection types A, B):</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.F5863.122A.G323.0030 (for cable length 3 m)	<b>Optional on request</b> - Ex 2/22 <sup>5)</sup> - surface protection salt spray tested - other singleturn resolutions	

**Order code**  
**Hollow shaft**

**8.F5883**

Type

. **XXXXX** . **XXXXX**  
**a b c d e f g h**

**a Flange**

- 1 = with spring element, long, IP65
- 2 = with spring element, long, IP67
- 3 = with stator coupling, IP65, ø 65 mm [2.56"]
- 4 = with stator coupling, IP67, ø 65 mm [2.56"]
- 5 = with stator coupling, IP65, ø 63 mm [2.48"]**
- 6 = with stator coupling, IP67, ø 63 mm [2.48"]

**b Through hollow shaft**

- 3 = ø 10 mm [0.39"]
- 4 = ø 12 mm [0.47"]**
- 5 = ø 14 mm [0.55"]
- 6 = ø 15 mm [0.59"]
- 8 = ø 3/8"
- 9 = ø 1/2"

**c Interface / power supply**

- 1 = SSI, BiSS / 5 V DC
- 2 = SSI, BiSS / 10 ... 30 V DC**
- 3 = SSI, BiSS + 2048 ppr. SinCos / 5 V DC
- 4 = SSI, BiSS + 2048 ppr. SinCos / 10 ... 30 V DC
- 5 = SSI, BiSS / 5 V DC, with sensor output
- 6 = SSI, BiSS + 2048 ppr. SinCos / 5 V DC, with sensor output
- 7 = SSI, BiSS + 2048 ppr. RS422 (TTL-comp.) / 5 V DC
- 8 = SSI, BiSS + 2048 ppr. RS422 (TTL-comp.) / 10 ... 30 V DC

**d Type of connection**

- 2 = radial cable, 1 m [3.28'] PVC
- B = radial cable, special length PVC \*
- E = tangential cable, 1 m [3.28'] PVC**
- F = tangential cable, special length PVC \*
- 4 = radial M23 connector, 12-pin**
- 6 = radial M12 connector, 8-pin <sup>2)</sup>

\*) Available special lengths (connection types B, 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.F5883.542B.G323.0030 (for cable length 3 m)

**e Code**

- B = SSI, binary
- C = BiSS, binary
- G = SSI, gray**

**f Resolution (singleturn) <sup>1)</sup>**

- B = 9 bit ST
- A = 10 bit ST
- 1 = 11 bit ST
- 2 = 12 bit ST
- 3 = 13 bit ST**
- 4 = 14 bit ST
- 7 = 17 bit ST

**g Resolution (multiturn) <sup>1)</sup>**

- 2 = 12 bit MT**
- 6 = 16 bit MT
- 4 = 24 bit MT

**h Options (service)**

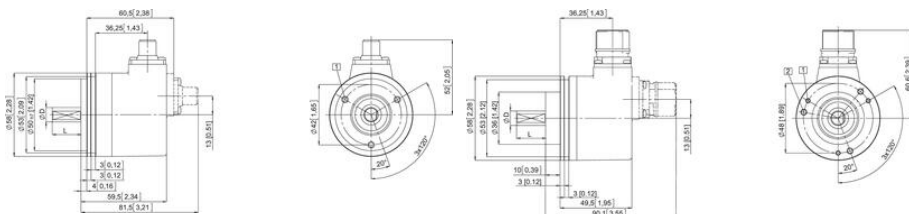
- 1 = no option
- 2 = status LED
- 3 = SET button and status LED**

*Optional on request*

- Ex 2/22 (not for type of connection E, F) <sup>3)</sup>
- surface protection salt spray tested
- other singleturn resolutions

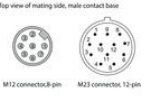
## SPECYFIKACJA TECHNICZNA

Max. temperatura pracy	85 °C
Min. temperatura pracy	-40 °C
Montaż	Wał
Napięcie zasilania DC max.	30 V DC
Napięcie zasilania DC min.	5 V DC
Podłączenie	Kabel, Złącze M12, Złącze M23
Rozdzielczość MT	SSI: max. 24 bit, BiSS: max. 24 bit
Rozdzielczość ST	SSI: 10-17 bit, BiSS: 10-17 bit
Średnica obudowy	58 mm
Średnica wału max	10 mm
Średnica wału min	6 mm
Stopień ochrony IP	IP65, IP67
Typ czujnika	Absolutny
Wersja	Wielobrotowy
Wyjście	SSI



Interface	Type of connection	Features	Cable (isolate unused wires individually before initial start-up)
1,2	1,2,A,B,E,F	SET,DIR,Status	Signal: 0V -V+ -V- C+ C- D+ D- SET DIR Stat N/C N/C H Cable colour: WH BN GN YE GF PK BU RD BK - - - (sheld)
Interface	Type of connection	Features	M12 connector
1,2	3,4	SET,DIR,Status	Signal: 0V -V+ -V- C+ C- D+ D- SET DIR Stat N/C N/C H Pin: 1 2 3 4 5 6 7 8 9 10 11 12 PH
Interface	Type of connection	Features	Cable (isolate unused wires individually before initial start-up)
5	1,2,A,B,E,F	SET,DIR,Status sensor output	Signal: 0V -V+ -V- C+ C- D+ D- SET DIR Stat N/C N/C H Cable colour: WH BN GN YE GF PK BU RD BK - - - (sheld)
Interface	Type of connection	Features	M12 connector
5	3,4	SET,DIR,Status sensor output	Signal: 0V -V+ -V- C+ C- D+ D- SET DIR Stat N/C N/C H Pin: 1 2 3 4 5 6 7 8 9 10 11 12 PH
Interface	Type of connection	Features	Cable (isolate unused wires individually before initial start-up)
3,4,7,8	1,2,A,B,E,F	SET,DIR,StatCos or Inco RS422	Signal: 0V -V+ -V- C+ C- D+ D- SET DIR A X B H Cable colour: WH BN GN YE GF PK BU RD BK VE - (sheld)
Interface	Type of connection	Features	M12 connector
3,4,7,8	3,4	SET,DIR,StatCos or Inco RS422	Signal: 0V -V+ -V- C+ C- D+ D- SET DIR A X B H Pin: 1 2 3 4 5 6 7 8 9 10 11 12 PH
Interface	Type of connection	Features	Cable (isolate unused wires individually before initial start-up)
6	1,2,A,B,E,F	StatCos or Inco RS422 sensor output	Signal: 0V -V+ -V- C+ C- D+ D- A X B H Cable colour: WH BN GN YE GF PK BU RD BK VE - (sheld)
Interface	Type of connection	Features	M12 connector
6	3,4	StatCos or Inco RS422 sensor output	Signal: 0V -V+ -V- C+ C- D+ D- A X B H Pin: 1 2 3 4 5 6 7 8 9 10 11 12 PH
Interface	Type of connection	Features	M12 connector
1,2	5,6	SET,DIR	Signal: 0V -V+ -V- C+ C- D+ D- SET DIR H Pin: 1 2 3 4 5 6 7 8 PH

V+ Encoder power supply +VDC  
 0V Encoder power supply ground (GND 0V)  
 0Vmax / 0Vmin: Using the sensor outputs of the encoder, the voltage present can be measured and if necessary increased accordingly.  
 C+, C-: Clock signal  
 D+, D-: Data signal  
 A, X: Incremental output channel A (zooies)  
 B, H: Incremental output channel B (lines)  
 SET: Set input. The current position becomes defined as position zero.  
 DIR: Direction input. If this input is active, output values are counted backwards (decrease) when the shaft is turning clockwise.  
 Stat: Status output  
 PH H: Plug connector housing (sheld)



Interface	Type of connection	Features	Cable (isolate unused wires individually before initial start-up)
1,2	1,2,A,B,E,F	SET,DIR,Status	Signal: 0V -V+ -V- C+ C- D+ D- SET DIR Stat N/C N/C H Cable colour: WH BN GN YE GF PK BU RD BK - - - (sheld)
Interface	Type of connection	Features	M12 connector
1,2	3,4	SET,DIR,Status	Signal: 0V -V+ -V- C+ C- D+ D- SET DIR Stat N/C N/C H Pin: 1 2 3 4 5 6 7 8 9 10 11 12 PH
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Interface	Type of connection	Features	M12 connector
5	3,4	SET,DIR,Status sensor output	Signal: 0V -V+ -V- C+ C- D+ D- SET DIR Stat N/C N/C H Pin: 1 2 3 4 5 6 7 8 9 10 11 12 PH
Interface	Type of connection	Features	Cable (isolate unused wires individually before initial start-up)
3,4,7,8	1,2,A,B,E,F	SET,DIR,StatCos or Inco RS422	Signal: 0V -V+ -V- C+ C- D+ D- SET DIR A X B H Cable colour: WH BN GN YE GF PK BU RD BK VE - (sheld)
Interface	Type of connection	Features	M12 connector
3,4,7,8	3,4	SET,DIR,StatCos or Inco RS422	Signal: 0V -V+ -V- C+ C- D+ D- SET DIR A X B H Pin: 1 2 3 4 5 6 7 8 9 10 11 12 PH
Interface	Type of connection	Features	Cable (isolate unused wires individually before initial start-up)
6	1,2,A,B,E,F	StatCos or Inco RS422 sensor output	Signal: 0V -V+ -V- C+ C- D+ D- A X B H Cable colour: WH BN GN YE GF PK BU RD BK VE - (sheld)
Interface	Type of connection	Features	M12 connector
6	3,4	StatCos or Inco RS422 sensor output	Signal: 0V -V+ -V- C+ C- D+ D- A X B H Pin: 1 2 3 4 5 6 7 8 9 10 11 12 PH
Interface	Type of connection	Features	M12 connector
1,2	5,6	SET,DIR	Signal: 0V -V+ -V- C+ C- D+ D- SET DIR H Pin: 1 2 3 4 5 6 7 8 PH

V+ Encoder power supply +VDC  
 0V Encoder power supply ground (GND 0V)  
 0Vmax / 0Vmin: Using the sensor outputs of the encoder, the voltage present can be measured and if necessary increased accordingly.  
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 SET: Set input. The current position becomes defined as position zero.  
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 PH H: Plug connector housing (sheld)

