

# KUEBLER - ABSOLUTE-CODED ANGULAR TRANSMITTER SENDIX 5863/5883, OPTICAL, SSI, Ø58 MM SERIE 5863

- Housing diameter Ø58 mm
- SSI / BiSS
- Safety-Lock™
- High enclosure class



## PRODUCT DESCRIPTION

Sendix 5863/5883 is a multivariate sensor with SSI / BiSS interface in robust design. Thanks to the construction of Safety-Lock™ as well as the fully cast housing, the sensor is able to handle even the more demanding applications where there are high demands on the sensor. The wide temperature range combined with the high enclosure class allows the sensor to be used outdoors as well as applications where large temperature changes occur. Sendix 5863/5883 has LED indication which facilitates diagnosis of the sensor and a set button that facilitates calibration.

Please refer to the images below for ordering information.

Order code	8.5863	.XXXX	.XX2X
Shaft version	Type	a b c d	e f g h
<b>a Flange</b>			
1 = clamping flange, IP65 ø 58 mm [2.28"]			
3 = clamping flange, IP67 ø 58 mm [2.28"]			
2 = synchro flange, IP65 ø 58 mm [2.28"]			
4 = synchro flange, IP67 ø 58 mm [2.28"]			
5 = square flange, IP65 □ 63.5 mm [2.5"]			
7 = square flange, IP67 □ 63.5 mm [2.5"]			
6 = servo flange, IP65 ø 63.5 mm [2.5"] <sup>1)</sup>			
8 = servo flange, IP67 ø 63.5 mm [2.5"] <sup>1)</sup>			
<b>b Shaft (ø x L), with flat</b>			
1 = 6 x 10 mm [0.24 x 0.39"] <sup>2)</sup>			
2 = 10 x 20 mm [0.39 x 0.79"] <sup>3)</sup>			
3 = 1/4" x 7/8"			
4 = 3/8" x 7/8"			
<b>c Interface / power supply</b>			
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			
9 = SSI, BiSS + 2048 ppr. RS422 (TTL-comp.) / 5 V DC, with sensor output			
<b>d Type of connection</b>			
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 *)			
3 = axial M23 connector, 12-pin			
4 = radial M23 connector, 12-pin			
5 = axial M12 connector, 8-pin <sup>4)</sup>			
6 = radial M12 connector, 8-pin <sup>4)</sup>			
*) Available special lengths (connection types A, 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.: 8.5863.112A.G323.0030 (for cable length 3 m)			
<b>e Code</b>			
B = SSI, binary			
C = BiSS, binary			
G = SSI, gray			
<b>f Resolution<sup>5)</sup></b>			
A = 10 bit ST + 12 bit MT			
1 = 11 bit ST + 12 bit MT			
2 = 12 bit ST + 12 bit MT			
3 = 13 bit ST + 12 bit MT			
4 = 14 bit ST + 12 bit MT			
7 = 17 bit ST + 12 bit MT			
<b>g Inputs / outputs<sup>5)</sup></b>			
2 = SET, DIR input			
additional status output			
<b>h Options (service)</b>			
1 = no option			
2 = status LED			
3 = SET button and status LED			
<b>Optional on request</b>			
- Ex 2/22 <sup>6)</sup>			
- other singleturn resolutions			
- surface protection salt spray tested			
- seawater resistant (stainless steel V4A)			
<b>Salt spray tested / stainless steel V4A as standard types (deliverable as from 1 unit)</b>			
	salt spray tested: 8.5863.32X6.XX22-C		stainless steel V4A: 8.5863.32X6.XX22-V4A
			1.4404

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

**8.5883** . **XXXXX** . **XX2X**  
Type      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"]
  - 8 = ø 3/8"
  - 9 = ø 1/2"
- Blind hollow shaft*  
(insertion depth max. 30 mm [1.18"])
- 6 = ø 15 mm [0.59"]

**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
- 9 = SSI, BiSS + 2048 ppr. RS422 (TTL-comp.) / 5 V DC, with sensor output

**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.: 8.5883.542B.G323.0030 (for cable length 3 m)

**e Code**

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

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

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

**g Inputs / outputs <sup>1)</sup>**

- 2 = SET, DIR input**
- additional status output

**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>
- other singleturn resolutions
- surface protection salt spray tested
- seawater resistant (stainless steel V4A)

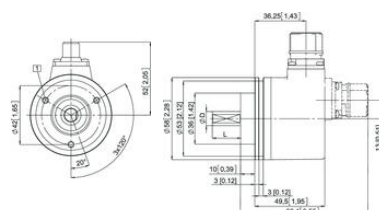
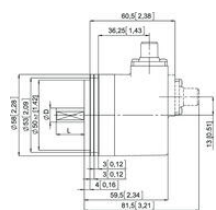
*Salt spray tested / stainless steel V4A as standard types (deliverable as from 1 unit)*

 salt spray tested:  
8.5883.24X6.XX22-C  
8.5883.25X6.XX22-C

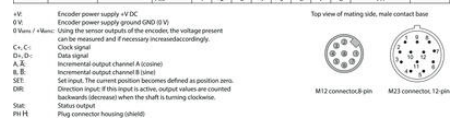
 stainless steel V4A:  
8.5883.24X6.XX22-V4A  
1.4404

**SPECIFICATIONS**

Housing diametre	58
IP Class	IP65, IP67
Resolution More Yards	Max. 12 bit
Shaft Diameter max	10
Shaft Diameter min	6
Supply Voltage DC Max	30
Supply Voltage DC Min	5
Temperature range from	-40
Temperature range to	90



Interface	Type of connection	Features	Cable (Isolate unused wires individually before initial start-up)
1,2	1, 2, A, E, F	SET, DIR, Status	Signal: 0V +V +C+ C- D+ D- SET DIR Stat. N/C N/C H Cable colour: WH BK GN YE GF PK BU RD BK - - - (sheld)
1,2	3,4	M23 connector	Signal: 0V +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
5	1, 2, A, E, F	SET, DIR, Status, sensor output	Cable (Isolate unused wires individually before initial start-up) Signal: 0V +V +C+ C- D+ D- SET DIR Stat. N/C (Sheld) (Sheld) H Cable colour: WH BK GN YE GF PK BU RD BK - - - (GF PK RD-BU) (sheld)
5	3,4	M23 connector	Signal: 0V +V +C+ C- D+ D- SET DIR Stat. N/C (Sheld) (Sheld) H Pin: 1 2 3 4 5 6 7 8 9 10 11 12 PH
3,4,7,8	1, 2, A, E, F	SET, DIR, SinCos (or res. RS422)	Cable (Isolate unused wires individually before initial start-up) Signal: 0V +V +C+ C- D+ D- SET DIR A B B H Cable colour: WH BK GN YE GF PK BU RD BK - - - (GF PK RD-BU) (sheld)
3,4,7,8	3,4	M23 connector	Signal: 0V +V +C+ C- D+ D- SET DIR A B B H Pin: 1 2 3 4 5 6 7 8 9 10 11 12 PH
6	1, 2, A, E, F	SinCos (or res. RS422), sensor output	Cable (Isolate unused wires individually before initial start-up) Signal: 0V +V +C+ C- D+ D- A B B B Cable colour: WH BK GN YE GF PK BU RD BK - - - (Sheld) (Sheld) H Pin: 1 2 3 4 5 6 7 8 9 10 11 12 PH
6	3,4	M23 connector	Signal: 0V +V +C+ C- D+ D- A B B B Pin: 1 2 3 4 5 6 7 8 9 10 11 12 PH
1,2	5,6	SET, DIR	Signal: 0V +V +C+ C- D+ D- SET DIR H Pin: 1 2 3 4 5 6 7 8 PH



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 C+ C- D+ D- SET DIR Stat N/C N/C N/C HI Cable colour: WH BN GN YE GT PK BU RD BK - - - shield
Interface	Type of connection	Features	M23 connector
1,2	3,4	SET, DIR, Status	Signal: 0V +V C+ C- D+ D- SET DIR Stat N/C N/C N/C HI 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 C+ C- D+ D- SET DIR Stat N/C (Status) (Status) HI Cable colour: WH BN GN YE GT PK BU RD BK - - (DPN) (RD-BU) shield
Interface	Type of connection	Features	M23 connector
5	3,4	SET, DIR, Status sensor output	Signal: 0V +V C+ C- D+ D- SET DIR Stat N/C (Status) (Status) HI 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, SinCos or incr RS422	Signal: 0V +V C+ C- D+ D- SET DIR A X B B HI Cable colour: WH BN GN YE GT PK BU RD BK VT (DPN) (RD-BU) shield
Interface	Type of connection	Features	M23 connector
3, 4, 7, 8	3,4	SET, DIR, SinCos or incr RS422	Signal: 0V +V C+ C- D+ D- SET DIR A X B B HI 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	SinCos or incr RS422 sensor output	Signal: 0V +V C+ C- D+ D- A X B B (Status) (Status) HI Cable colour: WH BN GN YE GT PK BU RD BK VT (DPN) (RD-BU) shield
Interface	Type of connection	Features	M23 connector
6	3,4	SinCos or incr RS422 sensor output	Signal: 0V +V C+ C- D+ D- A X B B (Status) (Status) HI 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 C+ C- D+ D- SET DIR H Pin: 1 2 3 4 5 6 7 8 PH

0V Encoder power supply +V DC  
Encoder power supply ground (GND) 0V  
0Vmax / +Vmax: Using the sensor outputs of the encoders, the voltage present can be measured and if necessary increased accordingly.  
C+, C-: Clock signal  
D+, D-: Data signal  
A, B: Incremental output channel A (clockwise)  
B, B: Incremental output channel B (anti-clockwise)  
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: Plug connector housing (shield)

