

## SENDIX F3663/3683, OPTYCZNY, WIELOBROTOWY, SSI, Ø36 MM

Enkodery wielobrotowe absolutne optyczne

SERIE F3663



- Średnica zewnętrzna: Ø 36 mm
- Maks. średnica wałka: Ø 10 mm. Maks. średnica otworu: Ø 10 mm
- Maks. rozdzielczość: 17 bitów ST + 24 bitów MT
- SSI, BiSS, + 2048 ppr SinCos, + 2048 ppr RS422
- Safety-Lock™

### OPIS PRODUKTU

Enkodery absolutne wielobrotowe serii Sendix F36 Kubler z opatentowaną Technologią Inteligentnego Pomiaru (Intelligent Scan Technology™) oraz interfejsem SSI lub BiSS są wyjątkowo wytrzymałe i kompaktowe.

Przy rozmiarze zaledwie 36 x 42 mm dostępne są wersje z wałem 10 mm, z otworem przelotowym do 8 mm, a przy otworze nieprzelotowym do 10 mm.

Wysoka precyzja wykonania umożliwia uzyskanie rozdzielczości do 17 bitów ST oraz 24 bitów MT.

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

Order code	8.F3663 . XXXX . XXXX 2	
Shaft version	Type	
<b>a</b> Flange	<b>c</b> Interface / power supply	<b>e</b> Code
1 = clamping flange, IP67, ø 36 mm [1.42"]	1 = SSI, BiSS / 5 V DC	B = SSI, binary
3 = clamping flange, IP65, ø 36 mm [1.42"]	<b>2 = SSI, BiSS / 10 ... 30 V DC</b>	C = BiSS, binary
2 = synchro flange, IP67, ø 36 mm [1.42"]	3 = SSI, BiSS + 2048 ppr. SinCos / 5 V DC	<b>G = SSI, gray</b>
<b>4 = synchro flange, IP65, ø 36 mm [1.42"]</b>	4 = SSI, BiSS + 2048 ppr. SinCos / 10 ... 30 V DC	<i>Optional on request</i>
<b>b</b> Shaft (ø x L), with flat	5 = SSI, BiSS / 5 V DC, with sensor output	- surface protection
1 = ø 6 x 12.5 mm [0.24 x 0.49"]	6 = SSI, BiSS + 2048 ppr. SinCos / 5 V DC, with sensor output	- salt spray tested
<b>3 = ø 8 x 15 mm [0.32 x 0.59"]</b>	7 = SSI, BiSS + 2048 ppr. RS422 / 5 V DC	- other singleturn resolutions
5 = ø 10 x 20 mm [0.39 x 0.79"]	8 = SSI, BiSS + 2048 ppr. RS422 / 10 ... 30 V DC	
2 = ø 1/4" x 12.5 mm [0.49"]	<b>d</b> Type of connection	<b>f</b> Resolution (singleturn)
4 = ø 3/8" x 5/8"	<b>1 = tangential cable, 1 m [3.28'] PUR</b>	B = 9 bit ST
	3 = tangential cable, 5 m [16.40'] PUR	A = 10 bit ST
	U = tangential cable, 10 m [32.81'] PUR	2 = 12 bit ST
	5 = tangential cable, 1 m [3.28'] PUR	<b>3 = 13 bit ST</b>
	with M12 connector for central fastening, 8-pin <sup>1)</sup>	4 = 14 bit ST
		7 = 17 bit ST
		<b>g</b> Resolution (multiturn)
		<b>2 = 12 bit MT</b>
		6 = 16 bit MT
		4 = 24 bit MT

Order code  
Hollow shaft

8.F3683  
Type

.XXXX.XXX2  
a b c d e f g

**a** Flange

- 1 = with spring element, short, IP65
- 3 = with spring element, long, IP65
- 2 = with stator coupling, IP65,  $\varnothing$  46 mm [1.81"]**

**b** Through hollow shaft

- 1 =  $\varnothing$  6 mm [0.24"]
- 3 =  $\varnothing$  8 mm [0.32"]
- 2 =  $\varnothing$  1/4"

Blind hollow shaft

(insertion depth max. 14.5 mm [0.57"])

- 4 =  $\varnothing$  10 mm [0.39"]**

**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 / 5 V DC
- 8 = SSI, BiSS + 2048 ppr. RS422 / 10 ... 30 V DC

**d** Type of connection

- 1 = tangential cable, 1 m [3.28'] PUR**
- 3 = tangential cable, 5 m [16.40'] PUR
- U = tangential cable, 10 m [32.81'] PUR
- 5 = tangential cable, 1 m [3.28'] PUR with M12 connector for central fastening, 8-pin <sup>1)</sup>

**e** Code

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

**f** Resolution (singleturn)

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

**g** Resolution (multiturn)

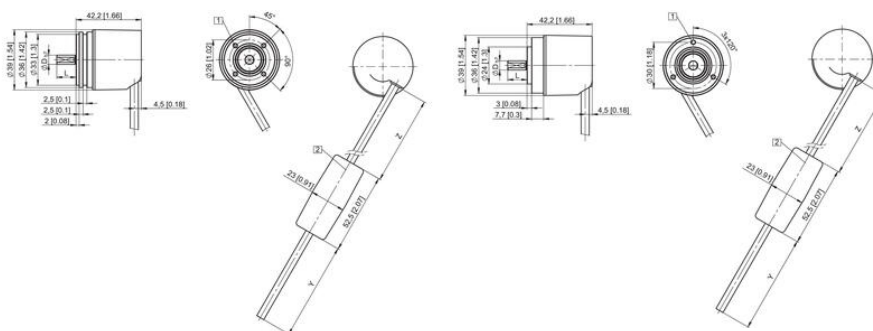
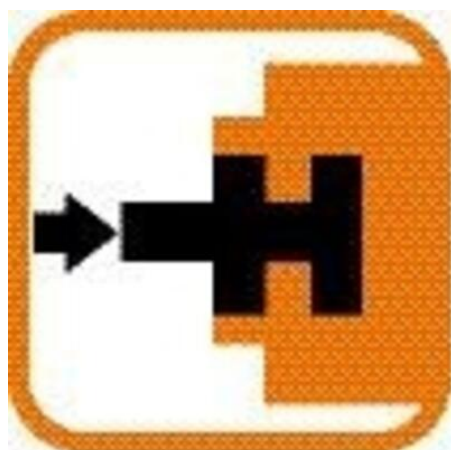
- 2 = 12 bit MT**
- 6 = 16 bit MT
- 4 = 24 bit MT

Optional on request

- surface protection
- salt spray tested
- other singleturn resolutions

## SPECYFIKACJA TECHNICZNA

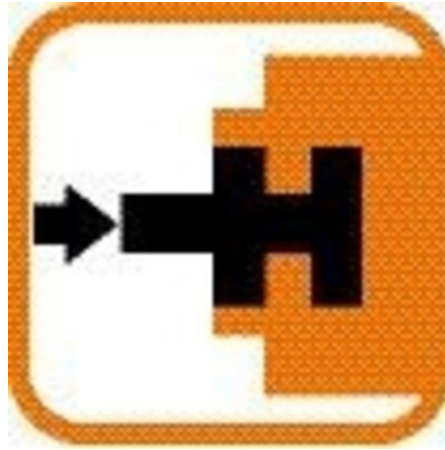
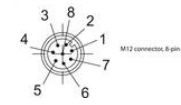
Max. temperatura pracy	90 °C
Min. temperatura pracy	-40 °C
Montaż	Wał
Napięcie zasilania DC max.	30 V DC
Napięcie zasilania DC min.	5 V DC
Podłączenie	Kabel
Średnica obudowy	36 mm
Średnica wału max	10 mm
Średnica wału min	6 mm
Stopień ochrony IP	IP65, IP67
Typ czujnika	Absolutny
Wersja	Wielobrotowy
Wyjście	SSI



Interface	Type of connection	Features	Cable
1,2	1,3	SSI or BISS, SET, DIR, Status	Signal: GND +V -C -C +D -D SET DIR Stat PE Cable colour: WH BN GN YE GY PK BU RD BK VT (Cr/Pk/RO/BU) Shield
Interface	Type of connection	Features	Cable
1,2	8	SSI or BISS, SET, DIR	M12 connector Signal: GND +V -C -C +D -D SET DIR Shield/PE M12 connector: 1 2 3 4 5 6 7 8 PH
Interface	Type of connection	Features	Cable
3,4	1,3	SSI or BISS, SET, DIR, 2048 SinCos	Signal: GND +V +C -C -D -D SET DIR A A inc B B inc PE Cable colour: WH BN GN YE GY PK BU RD BK VT (Cr/Pk/RO/BU) Shield
Interface	Type of connection	Features	Cable
5	1,3	SSI or BISS, SET, DIR, Sensor outputs	Signal: GND +V +C -C -D -D SET DIR GND <sub>ext</sub> +V <sub>ext</sub> PE Cable colour: WH BN GN YE GY PK BU RD BK VT (Cr/Pk/RO/BU) Shield
Interface	Type of connection	Features	Cable
6	1,3	SSI or BISS, 2048 SinCos, Sensor outputs	Signal: GND +V +C -C -D -D GND <sub>ext</sub> +V <sub>ext</sub> A A inc B B inc PE Cable colour: WH BN GN YE GY PK BU RD BK VT (Cr/Pk/RO/BU) Shield
Interface	Type of connection	Features	Cable
7,8	1,3	SSI or BISS, 2048 inc. RS422	Signal: GND +V +C -C -D -D A A inc B B inc PE Cable colour: WH BN GN YE GY PK BU VT (Cr/Pk/RO/BU) Shield

+V: Encoder power supply +V DC  
 GND: Encoder power supply ground (0V)  
 -C: Clock signal  
 +D: Data signal  
 SET: Set input. The current position becomes defined as position zero.  
 DIR: Direction input. If this input is active, output values are counted backwards (decreased) when the shaft is turning clockwise.  
 Stat: Status output  
 PE: Protective earth  
 PH: Plug connector housing (Shield)  
 A, A inc: Incremental output channel A  
 B, B inc: Incremental output channel B

Top view of mating side, male contact base:



Interface	Type of connection	Features	Cable
1,2	1,3	SSI or BISS, SET, DIR, Status	Signal: GND +V -C -C +D -D SET DIR Stat PE Cable colour: WH BN GN YE GY PK BU RD BK VT (Cr/Pk/RO/BU) Shield
Interface	Type of connection	Features	Cable
1,2	8	SSI or BISS, SET, DIR	M12 connector Signal: GND +V -C -C +D -D SET DIR Shield/PE M12 connector: 1 2 3 4 5 6 7 8 PH
Interface	Type of connection	Features	Cable
3,4	1,3	SSI or BISS, SET, DIR, 2048 SinCos	Signal: GND +V +C -C -D -D SET DIR A A inc B B inc PE Cable colour: WH BN GN YE GY PK BU RD BK VT (Cr/Pk/RO/BU) Shield
Interface	Type of connection	Features	Cable
5	1,3	SSI or BISS, SET, DIR, Sensor outputs	Signal: GND +V +C -C -D -D SET DIR GND <sub>ext</sub> +V <sub>ext</sub> PE Cable colour: WH BN GN YE GY PK BU RD BK VT (Cr/Pk/RO/BU) Shield
Interface	Type of connection	Features	Cable
6	1,3	SSI or BISS, 2048 SinCos, Sensor outputs	Signal: GND +V +C -C -D -D GND <sub>ext</sub> +V <sub>ext</sub> A A inc B B inc PE Cable colour: WH BN GN YE GY PK BU RD BK VT (Cr/Pk/RO/BU) Shield
Interface	Type of connection	Features	Cable
7,8	1,3	SSI or BISS, 2048 inc. RS422	Signal: GND +V +C -C -D -D A A inc B B inc PE Cable colour: WH BN GN YE GY PK BU VT (Cr/Pk/RO/BU) Shield

+V: Encoder power supply +V DC  
 GND: Encoder power supply ground (0V)  
 -C: Clock signal  
 +D: Data signal  
 SET: Set input. The current position becomes defined as position zero.  
 DIR: Direction input. If this input is active, output values are counted backwards (decreased) when the shaft is turning clockwise.  
 Stat: Status output  
 PE: Protective earth  
 PH: Plug connector housing (Shield)  
 A, A inc: Incremental output channel A  
 B, B inc: Incremental output channel B

Top view of mating side, male contact base:

