

SENDIX F3653/F3673, OPTYCZNY, JEDNOOBROTOWY, SSI, Ø36 MM

Enkodery jednoobrotowe absolutne optyczne

SERIE F3653



- Średnica zewnętrzna: Ø 36 mm
- Maks. średnica wałka: Ø 10 mm. Maks. średnica otworu: Ø 10 mm
- Maks. rozdzielczość: 17 bitów ST
- SSI, BiSS, + 2048 ppr SinCos, + 2048 ppr RS422
- Temp. pracy: -40 do +90 ° C

OPIS PRODUKTU

Enkodery jednoobrotowe 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 otworem przelotowym do 8 mm, a przy otworze nieprzelotowym do 10 mm.

Wysoka precyzja wykonania umożliwia uzyskanie rozdzielczości do 17 bitów.

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

Order code	8.F3653 . XXXX . XX12							
Shaft version	Type	a	b	c	d	e	f	
a Flange		c Interface / power supply		e Code		f Resolution		
1 = clamping flange, IP67, ø 36 mm [1.42"]		1 = SSI, BiSS / 5 V DC		B = SSI, binary		A = 10 bit		
3 = clamping flange, IP65, ø 36 mm [1.42"]		2 = SSI, BiSS / 10 ... 30 V DC		C = BiSS, binary		2 = 12 bit		
2 = synchro flange, IP67, ø 36 mm [1.42"]		3 = SSI, BiSS + 2048 ppr. SinCos / 5 V DC		G = SSI, gray		3 = 13 bit		
4 = synchro flange, IP65, ø 36 mm [1.42"]		4 = SSI, BiSS + 2048 ppr. SinCos / 10 ... 30 V DC				4 = 14 bit		
		5 = SSI, BiSS / 5 V DC, with sensor output				7 = 17 bit		
b Shaft (ø x L), with flat		6 = SSI, BiSS + 2048 ppr. SinCos / 5 V DC, with sensor output						
1 = ø 6 x 12.5 mm [0.24 x 0.49"]		7 = SSI, BiSS + 2048 ppr. RS422 / 5 V DC						
3 = ø 8 x 15 mm [0.32 x 0.59"]		8 = SSI, BiSS + 2048 ppr. RS422 / 10 ... 30 V DC						
5 = ø 10 x 20 mm [0.39 x 0.79"]								
2 = ø 1/4" x 12.5 mm [0.49"]		d Type of connection						
4 = ø 3/8" x 5/8"		1 = tangential cable, 1 m [3.28] PUR						
		3 = tangential cable, 5 m [16.40] PUR						
		F = tangential cable, special length PUR *)						
		8 = axial M12 connector, 8-pin ¹⁾						
		*) Available special lengths (connection type F):						
		2, 3, 8, 10, 15 m [6.56, 9.84, 26.25, 32.80, 49.21']						
		order code expansion .XXXX = length in dm						
		ex.: 8.F3653.432F.G312.0030 (for cable length 3 m)						
						<i>Optional on request</i>		
						- surface protection		
						- salt spray tested		
						- other resolutions		

Order code **8.F3673** . **XXXX.XX12**
 Hollow shaft Type **a b c d e f**

a Flange

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

b Through hollow shaft

- 1 = ø 6 mm [0.24"]
- 3 = ø 8 mm [0.32"]
- 2 = ø 1/4"
- Blind hollow shaft (insertion depth max. 14.5 mm [0.57"])
- 4 = ø 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
- F = tangential cable, special length PUR *)
- 8 = axial M12 connector, 8-pin ¹⁾

*) Available special lengths (connection type F):
 2, 3, 8, 10, 15 m [6.56, 9.84, 26.25, 32.80, 49.21"]
 order code expansion .XXXX = length in dm
 ex.: 8.F3673.242FG312.0030 (for cable length 3 m)

e Code

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

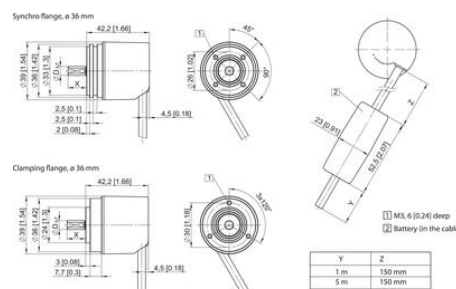
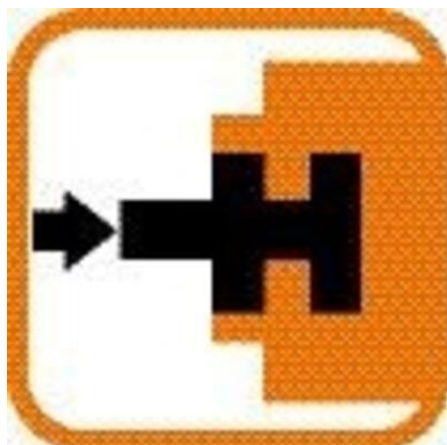
f Resolution

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

Optional on request
 - surface protection
 - salt spray tested
 - other 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	Jednoobrotowy
Wyjście	SSI



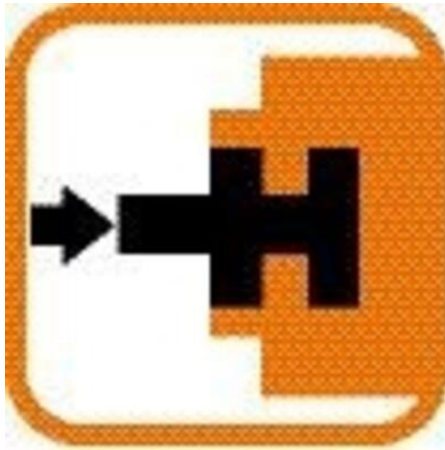
Terminal assignment

Interface	Type of connection	Features	Cable
1,2	5,3	SSI or BiSS, SET, DIR, Status	Signal: GND +V +C -C +D -D SET DIR Stat PE Cable colours: WH BN GN YE GY PK BU RD VT Shield
1,2	5	SSI or BiSS, SET, DIR	M12 connector Signal: GND +V +C -C +D -D SET DIR M12 connector: 1 2 3 4 5 6 7 8 PE
3,4	5,3	SSI or BiSS, SET, DIR, 2048 SinCos	Signal: GND +V +C -C +D -D SET DIR A A inc B B inc PE Cable colours: WH BN GN YE GY PK BU RD BK VT GY PK RD BU Shield
5	5,3	SSI or BiSS, 2048 SinCos	Signal: GND +V +C -C +D -D SET DIR GND inc +V inc PE Cable colours: WH BN GN YE GY PK BU RD BK VT GY PK RD BU Shield
6	5,3	SSI or BiSS, 2048 SinCos	Signal: GND +V +C -C +D -D GND inc +V inc A A inc B B inc PE Cable colours: WH BN GN YE GY PK BU RD BK VT GY PK RD BU Shield
7,8	5,3	SSI or BiSS, 2048 inc. RS422	Signal: GND +V +C -C +D -D A A inc B B inc PE Cable colours: WH BN GN YE GY PK BK VT GY PK RD BU Shield

+V: Encoder power supply +V DC
 GND: Encoder power supply ground (GND pin)
 +C: Clock signal
 -C: Data signal
 +D: Set input. The current position becomes defined as position zero.
 -D: Direction input. If this input is active, output values are counted backwards (decrease) when the shaft is turning clockwise.
 Stat: Status output
 PE: Protective earth
 PK: 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

M12 connector, 8-pin



Terminal assignment

Interface	Type of connector	Features	Cable
1,2	1,3	SSI or BiSS, SET, DIR, Status	Signal: GND +V -C -D SET DIR Stat PE Cable colour: WH BN GN YE GY PK BU RD VT Shield
Interface	Type of connector	Features	M12 connector
1,2	5	SSI or BiSS, SET, DIR	Signal: GND +V -C -D SET DIR Shield/PE M12 connector: 1 2 3 4 5 6 7 8 PH
Interface	Type of connector	Features	Cable
3,4	1,3	SSI or BiSS, SET, DIR, 2048 SinCos	Signal: GND +V +C -C -D SET DIR A Ainv B Binv PE Cable colour: WH BN GN YE GY PK BU RD BK VT GY/PK RD/BU Shield
Interface	Type of connector	Features	Cable
5	1,3	SSI or BiSS, SET, DIR, Sensor outputs	Signal: GND +V +C -C -D SET DIR GND _{ext} +V _{ext} PE Cable colour: WH BN GN YE GY PK BU RD VT RD/BU Shield
Interface	Type of connector	Features	Cable
6	1,3	SSI or BiSS, 2048 SinCos Sensor outputs	Signal: GND +V +C -C -D GND _{ext} +V _{ext} A Ainv B Binv PE Cable colour: WH BN GN YE GY PK BU RD BK VT GY/PK RD/BU Shield
Interface	Type of connector	Features	Cable
7,8	1,3	SSI or BiSS, 2048 incl. RS422	Signal: GND +V +C -C -D A Ainv B Binv PE Cable colour: WH BN GN YE GY PK BK VT GY/PK RD/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 (otherwise when the shaft is turning clockwise).
- Stat: Status output
- PE: Protective earth
- PH: Plug connector housing (Shield)
- A, Ainv: Incremental output channel A
- B, Binv: Incremental output channel B

Top view of mating side, male contact base



M12 connector, 8 pin