



KUEBLER - ABSOLUTE-CODED ANGULAR TRANSMITTER SENDIX F3653 / F3673, OPTICAL, SSI, Ø36 MM SERIE F3653

- Housing diameter Ø36 mm
- SSI-Interface
- 17 bit resolution
- -40 to +90 ° C working temperature



PRODUCT DESCRIPTION

Sendix F3653 / F3673 is a series of single-axis optical axial and hole axle outputs with SSI interface and a resolution of up to 17 bits, despite its compact size of 36x42 mm. The sensor also has high enclosure class, shock resistance and a wide temperature range. The sensor is therefore very suitable for applications where extreme environments or temperatures can occur, such as mobile applications. The sensor is supplied with a tangential cable, which means that there is no exposed cable input on the sensor, but it is embedded in the housing itself to increase impact on impact and impact. The Sendix F3653 / F3673 is also available in a salt water resistant version.

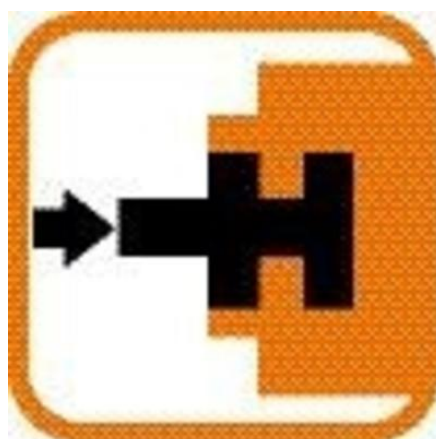
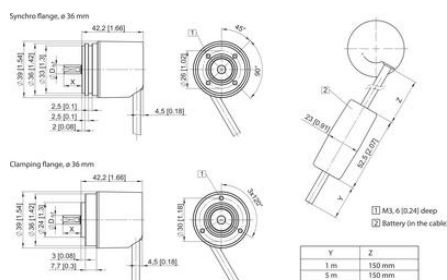
Please refer to the images below for ordering information.

Order code		8.F3653		.XXXXX		.XX12	
Shaft version		Type		a	b	c	d
a Flange		c Interface / power supply					
1 = clamping flange, IP67, ø 36 mm [1.42"]		1 = SSI, BiSS / 5 V DC					
3 = clamping flange, IP65, ø 36 mm [1.42"]		2 = SSI, BiSS / 10 ... 30 V DC					
2 = synchro flange, IP67, ø 36 mm [1.42"]		3 = SSI, BiSS + 2048 ppr. SinCos / 5 V DC					
4 = synchro flange, IP65, ø 36 mm [1.42"]		4 = SSI, BiSS + 2048 ppr. SinCos / 10 ... 30 V DC					
b Shaft (ø x L), with flat		5 = SSI, BiSS / 5 V DC, with sensor output					
1 = ø 6 x 12.5 mm [0.24 x 0.49"]		6 = SSI, BiSS + 2048 ppr. SinCos / 5 V DC, with sensor output					
3 = ø 8 x 15 mm [0.32 x 0.59"]		7 = SSI, BiSS + 2048 ppr. RS422 / 5 V DC					
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"]		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)					
		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					
		<i>Optional on request</i>					
		- surface protection					
		salt spray tested					
		- other resolutions					

Order code		8.F3673.XXX.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.F3673.242F.G312.0030 (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											

TECHNICAL DATA

Connection	Cable
Housing diameter	36 mm
IP class	IP65, IP67
Mounting	Shoulder
Output	SSI
Sensor type	Absolute
Shaft diameter max	10 mm
Shaft diameter min	6 mm
Supply voltage dc max	30 V DC
Supply voltage dc min	5 V DC
Temperature operational max	90 °C
Temperature operational min	-40 °C
Version	Singleturn



Terminal assignment	
Interface	Type of connection
1, 2	1, 3
Signal	SSI or BiSS
Cable colour	SET DMR, Status
Signal	GND +V +C -C +D -D SET DMR Stat PE
Cable colour	WH BN GN YL GF PK BU RD BT VT Shield
Interface	Type of connection
1, 2	5
Signal	SSI or BiSS
Cable colour	SET DMR
Signal	GND +V +C -C +D -D SET DMR A A inc B B inc PE
Cable colour	WH BN GN YL GF PK BU RD BT VT Shield
Interface	Type of connection
3, 4	1, 3
Signal	SSI or BiSS
Cable colour	SET DMR, 2048 SinCos
Signal	GND +V +C -C +D -D SET DMR A A inc B B inc PE
Cable colour	WH BN GN YL GF PK BU RD BT VT Shield
Interface	Type of connection
5	1, 3
Signal	SSI or BiSS
Cable colour	SET DMR, Sensor output
Signal	GND +V +C -C +D -D SET DMR A A inc B B inc PE
Cable colour	WH BN GN YL GF PK BU RD BT VT Shield
Interface	Type of connection
6	1, 3
Signal	SSI or BiSS
Cable colour	2048 SinCos
Signal	GND +V +C -C +D -D SET DMR A A inc B B inc PE
Cable colour	WH BN GN YL GF PK BU RD BT VT Shield
Interface	Type of connection
7, 8	1, 3
Signal	SSI or BiSS
Cable colour	2048 inc, RS422
Signal	GND +V +C -C +D -D A A inc B B inc PE
Cable colour	WH BN GN YL GF PK BU VT Shield

+V Encoder power supply +V DC
 GND Encoder power supply ground (GND (0V))
 +C -C Clock signal
 +D -D Data signal
 SET Set input. The current position becomes defined as position zero.
 DMR 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
 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

