

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

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



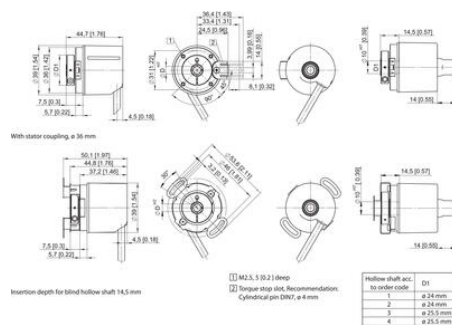
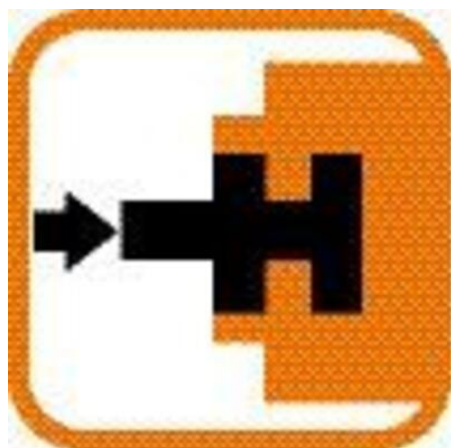
PRODUCT DESCRIPTION

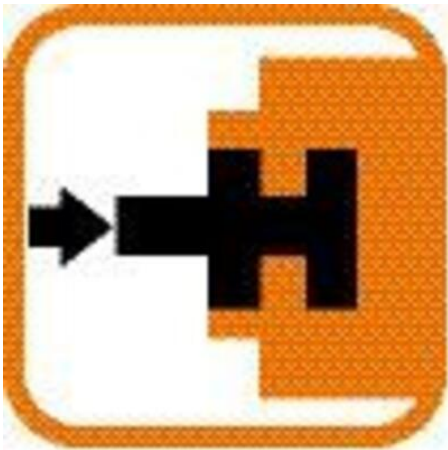
Sendix F3653 / F3673 is a series of single-axis optical axial and hole axle outputs with SSI interface and a resolution of up to 17 bits, despite its compact size of 36x42 mm. The sensor also has high enclosure class, shock resistance and a wide temperature range. The sensor is therefore very suitable 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	.XXXX.XX12
Shaft version	Type	a b c d e f
a Flange	1 = clamping flange, IP67, ø 36 mm [1.42"] 3 = clamping flange, IP65, ø 36 mm [1.42"] 2 = synchro flange, IP67, ø 36 mm [1.42"] 4 = synchro flange, IP65, ø 36 mm [1.42"]	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
b Shaft (ø x L), with flat	1 = ø 6 x 12.5 mm [0.24 x 0.49"] 3 = ø 8 x 15 mm [0.32 x 0.59"] 5 = ø 10 x 20 mm [0.39 x 0.79"] 2 = ø 1/4" x 12.5 mm [0.49"] 4 = ø 3/8" x 5/8"	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⁾
		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
		*) 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)

Connection	Cable
Housing diameter	36 mm
IP class	IP65, IP67
Mounting	Hollow shaft
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

[illegible]



Terminal assignment

Interface	Type of connector	Features	Cable											
			Signal	GND	+V	+C	-C	+D	-D	SET	DIR	Status	PE	
1,2	5,3	5V or BISS, SET, DIR, Status	Signal	BN	BN	GN	YE	GY	PK	BU	RD	VT	Shield	
Interface	Type of connector	Features	M12 connector											
			Signal	GND	+V	+C	-C	+D	-D	SET	DIR	Status	PE	
1,2	5	5V or BISS, SET, DIR	M12 connector	1	2	3	4	5	6	7	8	Pin		
Interface	Type of connector	Features	Cable											
			Signal	GND	+V	+C	-C	+D	-D	SET	DIR	A	B	PE
3,4	5,3	5V or BISS, SET, DIR, 2048 SinCos	Signal	BN	GN	YE	GY	PK	BU	RD	BK	VT	C1 PK RD BU	Shield
Interface	Type of connector	Features	Cable											
			Signal	GND	+V	+C	-C	+D	-D	SET	DIR	GND _{ext}	+V _{ext}	PE
5	5,3	5V or BISS, SET, DIR, Sensor outputs	Signal	BN	GN	YE	GY	PK	BU	RD	VT		RD BU	Shield
Interface	Type of connector	Features	Cable											
			Signal	GND	+V	+C	-C	+D	-D	GND _{ext}	A	A inc	B	PE
6	5,3	5V or BISS, 2048 SinCos Sensor outputs	Signal	BN	GN	YE	GY	PK	BU	RD	BK	VT	C1 PK RD BU	Shield
Interface	Type of connector	Features	Cable											
			Signal	GND	+V	+C	-C	+D	-D	A	A inc	B	B inc	PE
7,8	5,3	5V or BISS, 2048 inc. RS422	Signal	BN	GN	YE	GY	PK	BK	VT	C1 PK RD BU			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.
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
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 pins