

KUEBLER - ABSOLUTE CODED ANGULAR TRANSMITTER SENDIX F3663 / F3683, OPTICAL, SSI, Ø36 MM

SERIE F3663

- Housing diameter Ø36 mm
- SSI / BiSS - interface
- Safety-Lock™
- Up to 17 + 24 bit resolution



PRODUCT DESCRIPTION

Sendix F3663 / F3683 is a series of multivalved optical axial outputs with SSI interface and a resolution of up to 17 + 24 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 F3663 / F3683 is also available in a salt water resistant version.

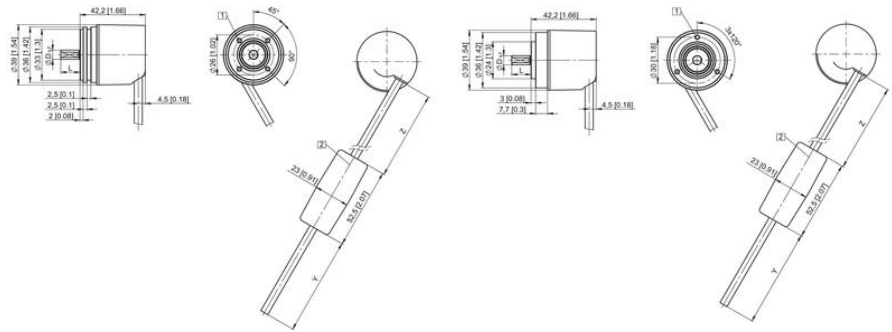
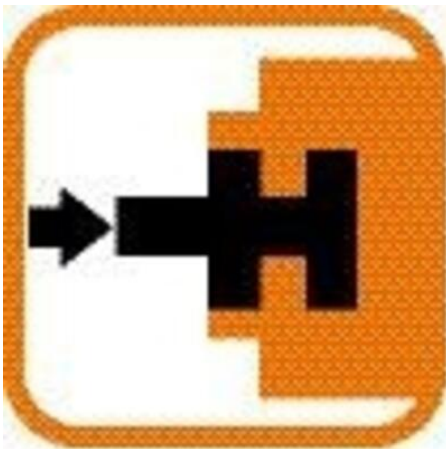
Please refer to the images below for ordering information.

Order code	8.F3663	.XXXX	.XXXX2	
Shaft version	Type	a b c d	e f g	
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	e Code B = SSI, binary C = BiSS, binary G = SSI, gray	<i>Optional on request</i> - surface protection - salt spray tested - other singleturn resolutions
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 U = tangential cable, 10 m [32.81'] PUR 5 = tangential cable, 1 m [3.28'] PUR with M12 connector for central fastening, 8-pin ¹⁾	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		

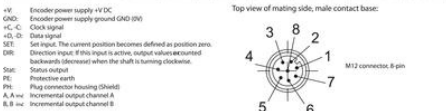
Order code	8.F3683	.XXXX	.XXXX2
Hollow shaft	Type	a b c d	e f g
a Flange 1 = with spring element, short, IP65 3 = with spring element, long, IP65 2 = with stator coupling, IP65, ø 46 mm [1.81"]	c Interface / power supply 1 = SSI, BiSS / 5 V DC 2 = SSI, BiSS / 10 ... 30 V DC 3 = SSI, BiSS + 2048 ppr. 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	e Code B = SSI, binary C = BiSS, binary G = SSI, gray	<i>Optional on request</i> - surface protection - salt spray tested - other singleturn resolutions
b Through hollow shaft 1 = ø 6 mm [0.24"] 3 = ø 8 mm [0.32"] 2 = ø 1/4" <i>Blind hollow shaft</i> <i>(insertion depth max. 14.5 mm [0.57"])</i> 4 = ø 10 mm [0.39"]	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 ¹⁾	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	

TECHNICAL DATA

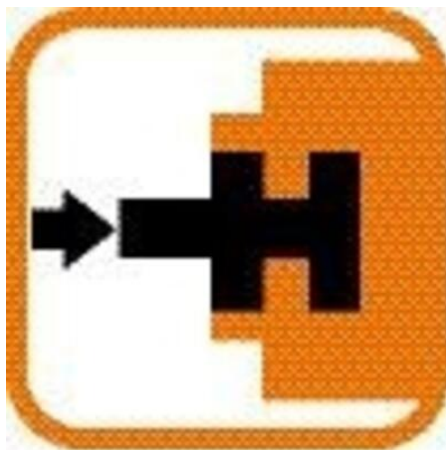
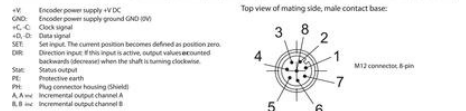
Connection	Cable
Housing diameter	36 mm
IP class	IP65, IP67
Mounting	Shoulder
Output	SSI
Sensor type	Absolute
Shaft diameter max	10 mm
Shaft diameter min	6 mm
Supply voltage dc max	30 V DC
Supply voltage dc min	5 V DC
Temperature operational max	90 °C
Temperature operational min	-40 °C
Version	Multiturn



Interface	Type of connector	Features	Cable
1,2	5,3	SSI or RS485, SET, DIR, Status	Signal: GND +V +C -C +D -D SET DIR Stat PE Cable colour: WH BN GN YE GY PK BU RD VT (CPN RD-BU) Shield
1,2	8	SSI or RS485, SET, DIR	M12 connector Signal: GND +V +C -C +D -D SET DIR Stat PE M12 connector: 1 2 3 4 5 6 7 8 Pin
3,4	1,3	SSI or RS485, SET, DIR, 2048 SinCos	Signal: GND +V +C -C +D -D SET DIR A Ainc B Binc PE Cable colour: WH BN GN YE GY PK BU RD BK VT (CPN RD-BU) Shield
5	1,3	SSI or RS485, SET, DIR, Sensor outputs	Signal: GND +V +C -C +D -D SET DIR DIO... +Vinc PE Cable colour: WH BN GN YE GY PK BU RD BK VT (CPN RD-BU) Shield
6	1,3	2048 SinCos, Sensor outputs	Signal: GND +V +C -C +D -D DIO... A Ainc B Binc PE Cable colour: WH BN GN YE GY PK BU RD BK VT (CPN RD-BU) Shield
7,8	1,3	2048 inc. RS422	Signal: GND +V +C -C +D -D A Ainc B Binc PE Cable colour: WH BN GN YE GY PK BU VT (CPN RD-BU) Shield



Interface	Type of connector	Features	Cable
1,2	5,3	SSI or RS485, SET, DIR, Status	Signal: GND +V +C -C +D -D SET DIR Stat PE Cable colour: WH BN GN YE GY PK BU RD VT (CPN RD-BU) Shield
1,2	8	SSI or RS485, SET, DIR	M12 connector Signal: GND +V +C -C +D -D SET DIR Stat PE M12 connector: 1 2 3 4 5 6 7 8 Pin
3,4	1,3	SSI or RS485, SET, DIR, 2048 SinCos	Signal: GND +V +C -C +D -D SET DIR A Ainc B Binc PE Cable colour: WH BN GN YE GY PK BU RD BK VT (CPN RD-BU) Shield
5	1,3	SSI or RS485, SET, DIR, Sensor outputs	Signal: GND +V +C -C +D -D SET DIR DIO... +Vinc PE Cable colour: WH BN GN YE GY PK BU RD BK VT (CPN RD-BU) Shield
6	1,3	2048 SinCos, Sensor outputs	Signal: GND +V +C -C +D -D DIO... A Ainc B Binc PE Cable colour: WH BN GN YE GY PK BU RD BK VT (CPN RD-BU) Shield
7,8	1,3	2048 inc. RS422	Signal: GND +V +C -C +D -D A Ainc B Binc PE Cable colour: WH BN GN YE GY PK BU VT (CPN RD-BU) Shield



+V: Encoder power supply +V DC
 GND: Encoder power supply ground GND (0V)
 +C: Clock signal
 -C: 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 (decrement) 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

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