



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
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"]							
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"							
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 ¹⁾							
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							

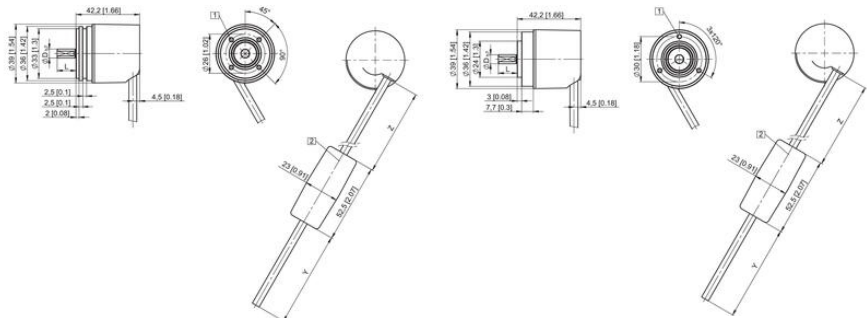
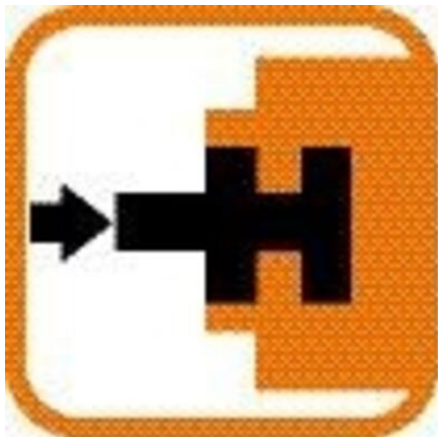
Optional on request

- surface protection salt spray tested
- other singleturn resolutions

Order code		8.F3683 . XXXX . XXX2									
Hollow shaft		Type									
a Flange		c Interface / power supply				e Code		Optional on request			
1 = with spring element, short, IP65		1 = SSI, BiSS / 5 V DC				B = SSI, binary		- surface protection - salt spray tested - other singleturn resolutions			
3 = with spring element, long, IP65		2 = SSI, BiSS / 10 ... 30 V DC				C = BiSS, binary					
2 = with stator coupling, IP65,		3 = SSI, BiSS + 2048 ppr. SinCos / 5 V DC				G = SSI, gray					
ø 46 mm [1.81"]		4 = SSI, BiSS + 2048 ppr. SinCos / 10 ... 30 V DC									
5 = SSI, BiSS / 5 V DC, with sensor output		5 = SSI, BiSS + 2048 ppr. SinCos / 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		8 = SSI, BiSS + 2048 ppr. RS422 / 10 ... 30 V DC									
b Through hollow shaft		d Type of connection				f Resolution (singleturn)					
1 = ø 6 mm [0.24"]		1 = tangential cable, 1 m [3.28'] PUR				B = 9 bit ST					
3 = ø 8 mm [0.32"]		3 = tangential cable, 5 m [16.40'] PUR				A = 10 bit ST					
2 = ø 1/4"		U = tangential cable, 10 m [32.81'] PUR				2 = 12 bit ST					
Blind hollow shaft		5 = tangential cable, 1 m [3.28'] PUR				3 = 13 bit ST					
(insertion depth max. 14.5 mm [0.57"])		with M12 connector for central fastening, 8-pin ¹⁾				4 = 14 bit ST					
4 = ø 10 mm [0.39"]						7 = 17 bit ST					
						g Resolution (multiturn)					
						2 = 12 bit MT					
						6 = 16 bit MT					
						4 = 24 bit MT					

Specifications

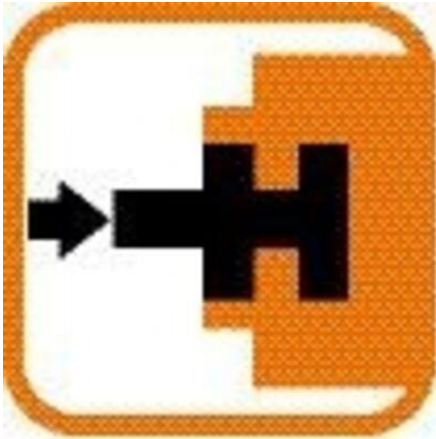
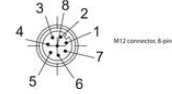
Connection Thread	Cable
Housing diameter	36
IP Class	IP65, IP67
Mounting	Shoulder
Output	SSI
Sensor type	Absolute
Shaft Diameter max	10
Shaft Diameter min	6
Supply Voltage DC Max	30
Supply Voltage DC Min	5
Temperature range from	-40
Temperature range to	90
Version	Multiturn



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 GF PK BK BU VT Shield
Interface	Type of connection	Features	M12 connector
1,2	8	SSI or BiSS, SET, DIR	Signal: GND +V +C -C +D -D SET DIR Shield/PE M12 connector: 1 2 3 4 5 6 7 8 Pin
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 GF PK BK BU VT GT-PN RD-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 _{ext} +V _{ext} PE Cable colour: WH BN GN YE GF PK BK BU VT RD-BU Shield
Interface	Type of connection	Features	Cable
6	1,3	SSI or BiSS, 2048 SinCos	Signal: GND +V +C -C +D -D GND _{ext} +V _{ext} A A inc B B inc PE Cable colour: WH BN GN YE GF PK BK BU VT GT-PN RD-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 GF PK BK VT GT-PN 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 (decrease) when the shaft is turning clockwise.
Stat Status output
PE Protective earth
PN 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 GF PK BK BU VT Shield
Interface	Type of connection	Features	M12 connector
1,2	8	SSI or BiSS, SET, DIR	Signal: GND +V +C -C +D -D SET DIR Shield/PE M12 connector: 1 2 3 4 5 6 7 8 Pin
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 GF PK BK BU VT GT-PN RD-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 _{ext} +V _{ext} PE Cable colour: WH BN GN YE GF PK BK BU VT RD-BU Shield
Interface	Type of connection	Features	Cable
6	1,3	SSI or BiSS, 2048 SinCos	Signal: GND +V +C -C +D -D GND _{ext} +V _{ext} A A inc B B inc PE Cable colour: WH BN GN YE GF PK BK BU VT GT-PN RD-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 GF PK BK VT GT-PN 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.
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Stat Status output
PE Protective earth
PN 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:

