

# KUEBLER - ABSOLUTE-CODED ANGULAR TRANSMITTER SENDIX M3663 / M3683, MAGNETIC, SSI, Ø36 MM

SERIE M3663

- Housing diameter Ø36 mm
- SSI - interface
- New multicolor technology
- IP67



## PRODUCT DESCRIPTION

Sendix M3663 / M3683 is a magnetically encoded absolute encoder with the latest in multicolor technology with "Energy Harvesting". Energy Harvesting technology is based on magnetic recharging, eliminating both battery and gear.

With its magnetic coding, the pulse sensor becomes more shockproof and insensitive. The high IP rating allows the Sendix M3663 / M3683 for outdoor environments and mobile applications.

Please refer to the images below for ordering information.

Order code	8.M3663.XX2X.XXX2																
Shaft version	Type	a	b	c	d	e	f	g									
<b>a</b> 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 = <b>synchro flange, IP65, ø 36 mm [1.42"]</b>	<b>d</b> Type of connection	1 = axial cable, 1 m [3.28'] PUR	A = axial cable, special length PUR *)	2 = radial cable, 1 m [3.28'] PUR	B = radial cable, special length PUR *)	3 = axial M12 connector, 8-pin	4 = <b>radial M12 connector, 8-pin</b>	<b>f</b> Resolution (singleturn)	A = 10 bit ST	2 = 12 bit ST	<b>3 = 13 bit ST</b>	4 = 14 bit ST
<b>b</b> Shaft (ø x L), with flat		1 = ø 6 x 12.5 mm [0.24 x 0.49"]	<b>3 = ø 8 x 15 mm [0.32 x 0.59"]</b>	5 = ø 10 x 20 mm [0.39 x 0.79"]	2 = ø 1/4" x 12.5 mm [0.49"]	*) Available special lengths (connection types A, B):	2, 3, 5, 8, 10, 15 m [5.56, 9.84, 16.40, 26.25, 32.80, 49.21']	order code expansion .XXXX = length in dm	ex.: 8.M3663.432A.G322.0030 (for cable length 3 m)	<b>g</b> Resolution (multiturn)	<b>2 = 12 bit MT</b>	6 = 16 bit MT	A = 20 bit MT	4 = 24 bit MT			
<b>c</b> Interface / power supply		<b>2 = SSI / 10 ... 30 V DC</b>										<b>Optional on request</b>					
												- Ex 2/22 (only for connection types 3 and 4)					
												- surface protection salt spray tested					

**Order code**  
**Hollow shaft**

**8.M3683.XX2X.XXX2**  
Type

**a Flange**

- 2 = with stator coupling, IP65, ø 46 mm [1.81"]**
- 3 = with spring element, long, IP65
- 5 = with stator coupling, IP67, ø 46 mm [1.81"]
- 6 = with spring element, long, IP67

**b Blind hollow shaft**

(insertion depth max. 18.5 mm [0.73"])

- 1 = ø 6 mm [0.24"]
- 3 = ø 8 mm [0.32"]
- 4 = ø 10 mm [0.39"]**
- 2 = ø 1/4"

**c Interface / power supply**

- 2 = SSI / 10 ... 30 V DC**

**d Type of connection**

- 1 = axial cable, 1 m [3.28'] PUR
- A = axial cable, special length PUR \*)
- 2 = radial cable, 1 m [3.28'] PUR
- B = radial cable, special length PUR \*)
- 3 = axial M12 connector, 8-pin
- 4 = radial M12 connector, 8-pin**

\*) Available special lengths (connection types A, B):  
2, 3, 5, 8, 10, 15 m [5.56, 9.84, 16.40, 26.25, 32.80, 49.21']  
order code expansion .XXXX = length in dm  
ex.: 8.M3683.242A.G322.0030 (for cable length 3 m)

**e Code**

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

**f Resolution (singleturn)**

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

**g Resolution (multiturn)**

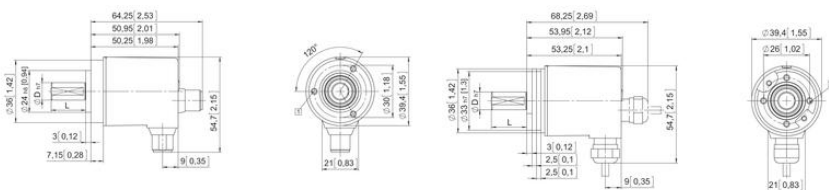
- 2 = 12 bit MT**
- 6 = 16 bit MT
- A = 20 bit MT
- 4 = 24 bit MT

**Optional on request**

- Ex 2/22 (only for connection types 3 and 4)
- surface protection salt spray tested

## TECHNICAL DATA

Connection	Cable, M12
Housing diameter	36 mm
IP class	IP65, IP67
Mounting	Shoulder
Output	SSI
Resolution MT	Max. 24 bit
Resolution ST	10-14 bit
Sensor type	Absolute
Shaft diameter max	10 mm
Shaft diameter min	6 mm
Supply voltage dc max	30 V DC
Supply voltage dc min	10 V DC
Temperature operational max	85 °C
Temperature operational min	-40 °C
Version	Multiturn



Interface	Type of connection	Features	Cable (isolate unused wires individually before initial start up)
2	1, 2, A, B	SET, DR	Signal: V <sup>+</sup> , V <sup>-</sup> , C+, C-, D+, D-, SET, DR, H Cable colour: BW, BU, GR, YE, KY, PK, BU, RD, WH
2	3, 4	SET, DR	M12 connector, 8-pin Signal: V <sup>+</sup> , V <sup>-</sup> , C+, C-, D+, D-, SET, DR, H Pin: 1, 2, 3, 4, 5, 6, 7, 8, PH

V<sup>+</sup> Encoder power supply +V DC  
V<sup>-</sup> Encoder power supply ground GND (0 V)  
C+, C- Clock signal  
D+, D- Data signal  
SET Set input. The current position becomes defined as position zero.  
DR Detection input. If this input is active, output values are counted backwards (decreases) when the shaft is turning clockwise.  
PH Plug connector housing shield

Top view of mating side, male contact base



M12 connector, 8-pin