

# 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 multicore 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"] <b>4 = 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 <b>4 = radial M12 connector, 8-pin</b>  *) 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>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"]	<b>f</b> Resolution (singleturn) A = 10 bit ST 2 = 12 bit ST <b>3 = 13 bit ST</b> 4 = 14 bit ST
<b>c</b> Interface / power supply	<b>2 = SSI / 10 ... 30 V DC</b>	<b>g</b> Resolution (multiturn) <b>2 = 12 bit MT</b> 6 = 16 bit MT A = 20 bit MT 4 = 24 bit MT
<b>e</b> Code	B = SSI, binary <b>G = SSI, gray</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

Type

XX2X

XXXX

2

**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

Technical drawing of the encoder housing showing front, side, and top views with dimensions in mm and inches.

Interface	Type of connection	Features	Cable (cable unused wires individually before initial start-up)
2	1, 2, A, B	SET, DR	Signal: 0V, +V, C+, C-, D+, D-, MT, DR, H Cable colour: WH, BK, GR, YE, GT, PN, BU, RD, sheld

Interface	Type of connection	Features	M12 connector, 8-pin
2	3, 4	SET, DR	Signal: 0V, +V, C+, C-, D+, D-, SET, DR, H Pin: 1, 2, 3, 4, 5, 6, 7, 8, PH

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

Top view of mating side, male contact base

M12 connector, 8-pin