

KUEBLER - ABSOLUTE-CODED ANGULAR TRANSMITTER SENDIX M3661 / M3681, MAGNETIC, ANALOGUE, Ø36 MM

SERIE M3661

- Housing diameter Ø36 mm
- Analogue output
- New multicolor technology
- IP67



PRODUCT DESCRIPTION

Sendix M3661 / M3681 is a magnetically encoded absolute encoder with the latest in multi-color 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 M3661 / M3681 for outdoor environments and mobile applications.

Please refer to the images below for ordering information.

Order code	8.M3661	.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"]

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"]

c Output circuit ¹⁾

3 = current output

4 = voltage output

d Type of connection

1 = axial cable, 1 m [3.28'] PVC

A = axial cable, special length PVC *)

2 = radial cable, 1 m [3.28'] PVC

B = radial cable, special length PVC *)

3 = axial M12 connector, 5-pin

4 = radial M12 connector, 5-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.M3661.433A.3112.0030 (for cable length 3 m)

e Interface / resolution / power supply

3 = 4 ... 20 mA / 12 bit / 10 ... 30 V DC

4 = 0 ... 10 V / 12 bit / 15 ... 30 V DC

5 = 0 ... 5 V / 11 bit / 10 ... 30 V DC

f Measuring range

1 = 16 revolutions / ccw

2 = 16 revolutions / ccw

3 = scalable up to 65,536 revolutions, with limit switch function / cw

4 = scalable up to 65,536 revolutions, without limit switch function / cw

5 = scalable up to 65,536 revolutions, with limit switch function / ccw

6 = scalable up to 65,536 revolutions, without limit switch function / ccw

Optional on request

- Ex 2/22 (only for connection types 3 and 4)

- surface protection salt spray tested

Order code	8.M3681	.XXXX	.XX12
Hollow shaft	Type	a b c d	e f

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 Output circuit ¹⁾

3 = current output

4 = voltage output

d Type of connection

1 = axial cable, 1 m [3.28'] PVC

A = axial cable, special length PVC *)

2 = radial cable, 1 m [3.28'] PVC

B = radial cable, special length PVC *)

3 = axial M12 connector, 5-pin

4 = radial M12 connector, 5-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.M3681.243A.3112.0030 (for cable length 3 m)

e Interface / resolution / power supply

3 = 4 ... 20 mA / 12 bit / 10 ... 30 V DC

4 = 0 ... 10 V / 12 bit / 15 ... 30 V DC

5 = 0 ... 5 V / 11 bit / 10 ... 30 V DC

f Measuring range

1 = 16 revolutions / ccw

2 = 16 revolutions / ccw

3 = scalable up to 65,536 revolutions, with limit switch function / cw

4 = scalable up to 65,536 revolutions, without limit switch function / cw

5 = scalable up to 65,536 revolutions, with limit switch function / ccw

6 = scalable up to 65,536 revolutions, without limit switch function / ccw

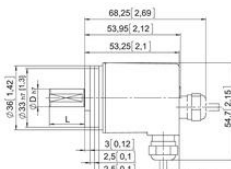
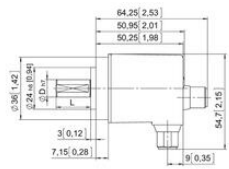
Optional on request

- 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	Analog
Resolution	4-20 mA: 12 bit, 0-10 V: 12 bit, 0-5 V: 11 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	Cable (isolate unused wires individually before initial start-up)
3 (current)	1, 2, A, B	Signal: 0 V +V +I SET 1 ¹⁾ SET 2 ¹⁾ Cable colour: WH BN GN GF PK
Interface	Type of connection	M12 connector, 5-pin
3 (current)	3, 4	Signal: 0 V +V +I SET 1 ¹⁾ SET 2 ¹⁾ Pin: 3 2 1 5 4
Interface	Type of connection	Cable (isolate unused wires individually before initial start-up)
4, 5 (current)	1, 2, A, B	Signal: 0 V +V +U SET 1 ¹⁾ SET 2 ¹⁾ Cable colour: WH BN GN GF PK
Interface	Type of connection	M12 connector, 5-pin
4, 5 (current)	3, 4	Signal: 0 V +V +U SET 1 ¹⁾ SET 2 ¹⁾ Pin: 3 2 1 5 4

Top view of mating side, male contact base



M12 connector, 5-pin

+V: encoder power supply +V DC +U: voltage SET 1: set input for teachpoint 1
0 V: encoder power supply ground (0 V) +I: current SET 2: set input for teachpoint 2

¹⁾ For absolute version.

Interface	Type of connection	Cable (isolate unused wires individually before initial start-up)
3 (current)	1, 2, A, B	Signal: 0 V +V +I SET 1 ¹⁾ SET 2 ¹⁾ Cable colour: WH BN GN GF PK
Interface	Type of connection	M12 connector, 5-pin
3 (current)	3, 4	Signal: 0 V +V +I SET 1 ¹⁾ SET 2 ¹⁾ Pin: 3 2 1 5 4
Interface	Type of connection	Cable (isolate unused wires individually before initial start-up)
4, 5 (current)	1, 2, A, B	Signal: 0 V +V +U SET 1 ¹⁾ SET 2 ¹⁾ Cable colour: WH BN GN GF PK
Interface	Type of connection	M12 connector, 5-pin
4, 5 (current)	3, 4	Signal: 0 V +V +U SET 1 ¹⁾ SET 2 ¹⁾ Pin: 3 2 1 5 4

Top view of mating side, male contact base



M12 connector, 5-pin

+V: encoder power supply +V DC +U: voltage SET 1: set input for teachpoint 1
0 V: encoder power supply ground (0 V) +I: current SET 2: set input for teachpoint 2

¹⁾ For absolute version.