

No Shaft Flange : I²C Rotary Position Sensor

RotaCol® No Shaft Flange contactless rotary position sensor are available in two types of mounting flanges with round hole and kit with oblong holes. As there is no shaft no wear hence these are long life sensors. Magnet holders of different shaft diameters 6mm, 8mm, 1/4" and 1/8" can be provided on request. It has no bearings. Magnet can be glued on user shaft. I²C interface has bidirectional Master- slave communication. The I²C address is fixed. It is "0x36" or "0110110". With I²C interface, sensor acts as slave and microcontroller is the master. The SDA signal is the bidirectional data line. The SCL signal is the clock generated by the I²C bus master to synchronize sampling data from SDA. change in the state of SDA from high to low while SCL is high defines the START condition. A change in the state of SDA from low to high while SCL is high defines the STOP condition.

22C ERCK

No Shaft Flange : 22mm Ø *Ecoline* I²C Rotary Position Sensor



Interconnection : flat cable

Link for Datasheet :
www.rotacol.info/22cerck.pdf

- 22mm Ø plastic housing
- Contactless Hall effect technology
- I²C : Master- slave communication
- Magnet on user shaft
- No bearings
- Blind hole diameter : 13mm Ø
- No wear, long life
- Interconnection :
4 core flat cable 0.15 mtr long

Type	22C ERCK
Electrical angle	0-360°
Supply voltage	3.3V±10% / 5 VDC
Output signal	I ² C Bidirectional SDA, always slave transmitter or receiver, NXP UM 10204 Prot., Master initiates data transfer .
Resolution Steps	4096 (12 bit)
Elec. speed (max)	800 rpm

28C ERCK

No Shaft Flange : 28mm Ø *Ecoline* I²C Rotary Position Sensor



Interconnection : flat cable

Link for Datasheet :
www.rotacol.info/28cerck.pdf

- 28mm Ø plastic housing
- Contactless Hall effect technology
- I²C : Master- slave communication
- Magnet on user shaft
- No bearings
- Blind hole diameter : 19mm Ø
- No wear, long life
- Interconnection :
4 core flat cable 0.15 mtr long

Type	28C ERCK
Electrical angle	0-360°
Supply voltage	3.3V±10% / 5 VDC
Output signal	I ² C Bidirectional SDA, always slave transmitter or receiver, NXP UM 10204 Prot., Master initiates data transfer .
Resolution Steps	4096 (12 bit)
Elec. speed (max)	800 rpm

25C RSK

No Shaft Flange : 25mm Ø *RS Speed Connect* I²C Rotary Position Sensor



Interconnection -
Terminal block

Link for Datasheet :
www.rotacol.info/25crsk.pdf

- 25mm Ø plastic housing
- Contactless Hall effect technology
- I²C : Master- slave communication
- Magnet on user shaft
- No bearings
- Blind hole diameter : 13mm Ø
- No wear, long life
- Interconnection : cable gland (OCG), miniature connector (OCM), terminal block axial (OCTA) / radial (OCTR)

Type	25C RSK
Electrical angle	0-360°
Supply voltage	3.3V±10% / 5 VDC
Output signal	I ² C Bidirectional SDA, always slave transmitter or receiver, NXP UM 10204 Prot., Master initiates data transfer
Resolution Steps	4096 (12 bit)
Elec. speed (max.)	800 rpm

30C RSK

No Shaft Flange : 30mm Ø *RS Speed Connect* I²C Rotary Position Sensor



Interconnection - cable gland

[Link for Datasheet :](http://www.rotacol.info/30crsk.pdf)
www.rotacol.info/30crsk.pdf

- 30mm Ø plastic housing
- Contactless Hall effect technology
- I²C : Master- slave communication
- Magnet on user shaft
- No bearings
- Blind hole diameter : 19mm Ø
- No wear, long life
- Interconnection : cable gland (OCG), miniature connector (OCM), terminal block axial (OCTA) / radial (OCTR)

Type 30C RSK

Electrical angle	0-360°
Supply voltage	3.3V±10% / 5 VDC
Output signal	I ² C Bidirectional SDA, always slave transmitter or receiver, NXP UM 10204 Prot., Master initiates data transfer
Resolution Steps	4096 (12 bit)
Elec. speed (max.)	800 rpm

30C LOCK

No Shaft Flange : 30 mm Ø *LoCoLine* I²C Rotary Position Sensor



Interconnection - Round Cable with rubber grommet -OCR

[Link for Datasheet :](http://www.rotacol.info/30clock.pdf)
www.rotacol.info/30clock.pdf

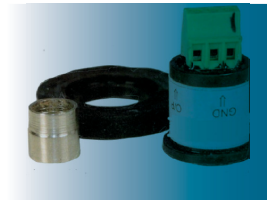
- 30mm Ø plastic housing
- Contactless Hall effect technology
- I²C : Master- slave communication
- Magnet on user shaft
- No bearings no wear, long life
- Blind hole diameter : 19mm Ø
- Very economical
- Interconnection : 4 core round cable

Type 30C LOCK

Electrical angle	0-360°
Supply voltage	3.3V±10% / 5V DC
Output signal	I ² C Bidirectional SDA, always slave transmitter or receiver, NXP UM 10204 Prot., Master initiates data transfer
Resolution Steps	4096 (12 bit)
Elec. speed (max.)	800 rpm

13C MCK

No Shaft Flange : 12 mm Ø *Miniline* I²C Rotary Position Sensor



Interconnection - Terminal block

[Link for Datasheet :](http://www.rotacol.info/13cmck.pdf)
www.rotacol.info/13cmck.pdf

- 12mm Ø plastic housing
- Miniature type
- Contactless Hall effect technology
- I²C : Master- slave communication
- Magnet on user shaft
- No bearings, no wear, long life
- Blind hole diameter : 9.5mm Ø
- Interconnection : Terminal block

Type 13C MCK

Electrical angle	0-360°
Supply voltage	3.3V±10% / 5V DC
Output signal	I ² C Bidirectional SDA, always slave transmitter or receiver, NXP UM 10204 Prot., Master initiates data transfer .
Resolution steps	16384 (14 bit)
Elec.speed (max)	800 rpm

50C DRCH

No Shaft Flange : 50mm Ø *Diamondline* I²C Rotary Position Sensor



Interconnection : round cable with 2.5 mtr long rubber grommet

[Link for Datasheet :](http://www.rotacol.info/50cdrch.pdf)
www.rotacol.info/50cdrch.pdf

- 50 mm Ø metal housing
- Contactless Hall effect technology
- Clamping flange with 2 screws
- Mounting flange (optional)
- I²C : Master- slave communication
- Servo mount - two ball bearings
- 360° Mechanical & electrical angle
- Can accomodate 8 mm Ø shaft diameter
- Heavy duty applications
- Interconnection : 4 core round cable 2.5 mtr long with rubber grommet

Type 50C DRCH

Electrical angle	0-360°
Supply voltage	3.3V±10% / 5V DC
Output signal	I ² C Bidirect always slave transmitter or receiver, NXP UN 10204 Prot.Master initiates data transfer
Resolution	4096 steps (12 bit)
Mech.speed (max)	5000 rpm
Elec. speed (max)	800 rpm
Life rotations	~ 75 mil. rotations