Bush Mount : I²C Rotary Position Sensor

RotaCol® Bushing contactless rotary position sensors range are available in plastic and metal housings with 12, 22, 25, 28 ,30 mm Ø housing diameter. Bushing size : M6X0.75 / M9X0.75 / M10X0.75 / 3/8"X32 UNEF / 1/4"X32UNEF with shaft diameters of 3mm, 6mm,1/4" and 1/8" Ø are available. Bushing has brass sleeve bearing or ball bearing. Mechanical angle is 360° without stop as default version.Endstops at 320°, 270°,180° and 90° are also available. The standard torque offered is medium torque. 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 ERCB

Bush Mount : 22 mm Ø *Ecoline* I²C Rotary Position Sensor

Interconnection - Flat cable

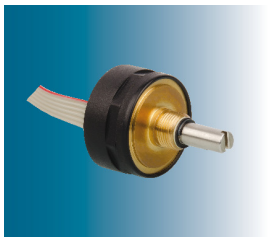
Link for Datasheet :
www.rotacol.info/22cercb.pdf

- 22mm ø plastic housing
- Hall CMOS technology
- I²C : Master- slave communication
- Bushing :
  M10X0.75 / M9X0.75 / 3/8"X32UNEF
- Shaft diameter : 6mm or 1/4"
- Mechanical angle :
  360° without stop (O)
  90°/180°/270°/320° with stop (S)
- Stainless steel shaft
- Brass sleeve bearing;
  polymer bearing (optional)
- Shock and vibration proof
- Interconnection :
  4 core flat cable 0.15 mtr long

Type	22C ERCB
Electrical angle	0-360°
Supply voltage	3.3V±10% / 5 VDC
Output signal	I²C Bidirectional SDA, always slave transmitter or receiver, NXP UM 10204 Prot., Master initiates data transfer .
Resolution	4096 steps (12 bit)
Mech.speed (max.)	800 rpm (brass), 3000 rpm (polymer bearing)
Elec. speed (max.)	800 rpm
Rotary Life	~ 10 mil. rotations (brass) ~ 15 mil. rotations (polymer bearing)

28C ERCB

Bush Mount : 28 mm Ø *Ecoline* I²C Rotary Position Sensor



Interconnection - Flat cable

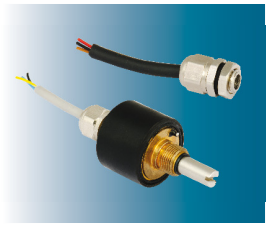
Link for Datasheet :
www.rotacol.info/28cercb.pdf

- 28mm ø plastic housing
- Hall CMOS technology
- I²C : Master- slave communication
- Bushing :
  M10X0.75 / M9X0.75 / 3/8"X32UNEF
- Shaft diameter : 6mm or 1/4"
- Mechanical angle :
  360° without stop (O)
  90°/180°/270°/320° with stop (S)
- Stainless steel shaft
- Brass sleeve bearing;
  polymer bearing (optional)
- Shock and vibration proof
- Interconnection :
  4 core flat cable 0.15 mtr long

Type	28C ERCB
Electrical angle	0-360°
Supply voltage	3.3V±10% / 5 VDC
Output signal	I²C Bidirectional SDA, always slave transmitter or receiver, NXP UM 10204 Prot., Master initiates data transfer .
Resolution	4096 steps (12 bit)
Mech.speed (max.)	800 rpm (brass), 3000 rpm (polymer bearing)
Elec. speed (max.)	800 rpm
Rotary Life	~ 10 mil. rotations (brass) ~ 15 mil. rotations (polymer bearing)

25C RSB

Bush Mount : 25 mm Ø *RS Speed Connect* I²C Rotary Position Sensor



Interconnection - Cable gland

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

- 25mm ø plastic housing
- Hall CMOS technology
- I²C : Master- slave communication
- Bushing :
  M10X0.75 / M9X0.75 / 3/8"X32UNEF
- Shaft diameter : 6mm or 1/4"
- Mechanical angle :
  360° without stop (O)
  90°/180°/270°/320° with stop (S)
- Stainless steel shaft
- Brass sleeve bearing;
  polymer bearing (optional)
- Shock and vibration proof
- Interconnection : cable gland (OCG), Miniature push-pull connector (OCM), terminal block axial (OCTA) / radial (OCTR)

Type	25C RSB
Electrical angle	0-360°
Supply voltage	3.3V±10% / 5 VDC
Output signal	I²C Bidirectional SDA, always slave transmitter or receiver, NXP UM 10204 Prot., Master initiates data transfer .
Resolution Steps	4096 (12 bit)
Mech.speed (max.)	800 rpm (brass), 3000 rpm (polymer bearing)
Elec. speed (max.)	800 rpm
Life (rotations)	~ 10 mil. rotations (brass) ~ 15 mil. rotations (polymer bearing)

30C RSB

Bush Mount : 30 mm Ø *RS Speed Connect* I²C Rotary Position Sensor

Interconnection - Minature Push- pull connector

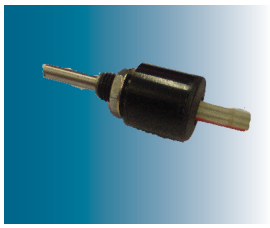
Link for Datasheet ::
www.rotacol.info/30crsb.pdf

- 30mm ø plastic housing
- Hall CMOS technology
- I²C : Master- slave communication
- Bushing :
  M10X0.75 / M9X0.75 / 3/8"X32UNEF
- Shaft diameter : 6mm or 1/4"
- Mechanical angle :
  360° without stop (O)
  90°/180°/270°/320° with stop (S)
- Stainless steel shaft
- Brass sleeve bearing;
  polymer bearing (optional)
- Shock and vibration proof
- Interconnection : cable gland (OCG), Miniature push-pull connector (OCM), terminal block axial (OCTA) / radial (OCTR)

Type	30C RSB
Electrical angle	0-360°
Supply voltage	3.3V±10% / 5 VDC
Output signal	I²C Bidirectional SDA, always slave transmitter or receiver, NXP UM 10204 Prot., Master initiates data transfer .
Resolution Steps	4096 (12 bit)
Mech.speed (max.)	800 rpm (brass), 3000 rpm (polymer bearing)
Elec. speed (max.)	800 rpm
Life (rotations)	~ 10 mil. rotations (brass) ~ 15 mil. rotations (polymer bearing)

12C M/Z MCB

Bush Mount : 12 mm Ø *Miniline* I²C Rotary Position Sensor



Interconnection :
5 core flat cable

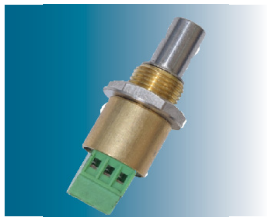
Link for Datasheet :
www.rotacol.info/12cmmcb.pdf
www.rotacol.info/12czmcb.pdf

- 12 mm ø metal housing
- Precision Miniature bushing mount
- I²C : Master- slave communication
- Low cost , Hall effect technology
- Bushing :
  Metric M6 X 0.75 (MMCB)
  Inch 1/4" X 32 UNEF (ZMCB)
- Shaft diameter :
  Metric : 3mm (MMCB)
  Inch : 1/8" (ZMCB)
- Interconnection :
  4 core flat cable 0.15 mtr long

Type	12C M/Z MCB
Electrical angle	0-360°
Supply voltage	3.3V±10% / 5V DC
Output signal	I²C Bidirectional SDA, always slave transmitter or receiver, NXP UM 10204 Prot., Master initiates data transfer
Resolution steps	4096 (12 bit)
Mech.speed (max)	800 rpm
Elec. speed (max)	800 rpm
Life (rotations)	~ 5 mil. rotations

13C M/Z MCB

Bush Mount : 12 mm Ø *Miniline* I²C Rotary Position Sensor



Interconnection :
Terminal block

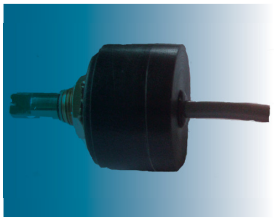
Link for Datasheet :
www.rotacol.info/13cmmcb.pdf
www.rotacol.info/13czmcb.pdf

- 12 mm Ø metal housing
- Precision Miniature bushing mount
- I²C : Master- slave communication
- Low cost , Hall effect technology
- Master slave communication
- Bushing : 3/8" X 32 UNEF
- Shaft diameter :
  Metric 6mm (MMCB)
  Inch 1/4" (ZMCB)
- Compact size, long life
- Sleeve bearing
- Interconnection : terminal block.

Type	13C M/Z MCB
Electrical angle	0-360°
Supply voltage	3.3V±10% / 5V DC
Output signal	I²C 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
Life (rotations)	~ 5 mil. rotations

30C LOCB

Bush Mount : 30 mm Ø *LoLoline* I²C Rotary Position Sensor



Interconnection : Round Cable with rubber grommet -OCR

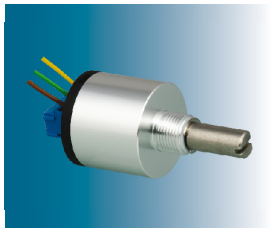
Link for Datasheet :
www.rotacol.info/30clocb.pdf

- 30mm ø plastic housing
- Hall CMOS technology
- I²C : Master- slave communication
- Bushing : M10X0.75 or 3/8"X32UNEF
- Shaft diameter : 6mm or 1/4”
- Mechanical angle : 360° without stop
- Stainless steel shaft
- Brass sleeve bearing
- Shock and vibration proof
- Interconnection : 4 core round cable

Type	30C LOCB
Electrical angle	0-360°
Supply voltage	3.3V±10% / 5V DC
Output signal	I²C Bidirectional SDA, always slave transmitter or receiver, NXP UM 10204 Prot., Master initiates data transfer
Resolution Steps	4096 steps (12 bit)
Mech.speed (max.)	800 rpm
Elec. speed (max.)	800 rpm
Life (rotations)	~ 10 mil. rotations

22C M/Z SL RCB

Bush Mount : 22 mm ø *Silverline* I²C Rotary Position Sensor



Interconnection :
Terminal block

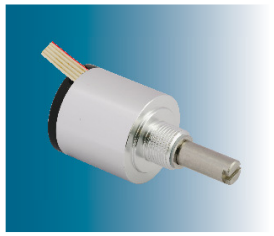
Link for Datasheet :
www.rotacol.info/22cmslrcb.pdf
www.rotacol.info/22czslrcb.pdf

- 22 mm Ø metal housing
- Sleeve bearing
- Hall effect magnetic sensor
- Robust metal aluminium housing
- I²C : Master- slave communication
- Bush mounting -
  Metric M10 X 0.75 (MSL)
  Inch 3/8” X32 UNEF (ZSL)
- Shaft diameter : Metric - 6mm (MSL)
  Inch - 1/4” (ZSL)
- Mechanical angle : 360° without stop
- Long life
- Interconnection :
  4 core flat cable 0.15 mtr long (std),
  terminal block (option)

Type	22C M/Z SL RCB
Electrical angle	0-360°
Supply voltage	3.3V±10% / 5 VDC
Output signal	I²C Bidirect always slave transmitter or receiver, NXP UN 10204 Prot. Master initiates data transfer
Resolution Steps	4096 (12 bit)
Mech.speed (Max)	1000 rpm
Elec. speed (Max)	800 rpm
Life (rotations)	~ 5 mil. rotations

22C M/Z SL RCBB

Bush Mount: 22 mm ø I²C *Silverline* Precision Rotary Position Sensor



Interconnection : flat cable

Link for Datasheet :
www.rotacol.info/22cmslrcbb.pdf
www.rotacol.info/22czslrcbb.pdf

- 22 mm Ø metal housing
- Ball bearing
- Hall effect magnetic sensor
- Robust metal aluminium housing
- I²C : Master- slave communication
- Bush mounting -
  Metric M10 X 0.75 (MSL)
  Inch 3/8” X32 UNEF (ZSL)
- Shaft diameter : Metric - 6mm (MSL)
  Inch - 1/4” (ZSL)
- Mechanical angle : 360° without stop
- Long life
- Interconnection :
  4 core flat cable 0.15 mtr long (std),
  terminal block (option)

Type	22C M/Z SLRCBB
Electrical angle	0-360°
Supply voltage	3.3V±10% / 5V DC
Output signal	I²C Bidirect always slave transmitter or receiver, NXP UN 10204 Prot. Master initiates data transfer
Resolution Steps	4096 (12 bit)
Mech. speed (Max)	4000 rpm
Elec. speed (Max)	800 rpm
Life (rotations)	~ 15 mil. rotations