

Bush Mount : SPI 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. The Serial Peripheral Interface (SPI) is a bus system for a serial synchronous data transmission between different integrated circuits. The bus consists of a) 3 lines MOSI (Master Out --> Slave In) / MISO (Master In <-- Slave Out)- one common line, SCLK -(Serial Clock, output from master) and SS - Slave Select (active low; output from master) or b) 4 lines MOSI (Master Out --> Slave In), MISO (Master In <-- Slave Out), SCLK -(Serial Clock, output from master) and SS - Slave Select (active low; output from master). By these signal lines the master selects the slave for communication. With supply voltage of 5V ±10% output signal of SPI is provided. Dual channel SPI output is also available. Full duplex with 4 wire or half duplex with 3 wire are available.

22P ERCB



Interconnection - Flat cable

Link for Datasheet :

www.rotacol.info/22percb.pdf

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

- 22mm Ø plastic housing
- Hall CMOS technology
- SPI output - 3 wire
- 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 :
5 core flat cable 0.15 mtr long

Type	22P ERCB
Electrical angle	0 - 360°
Supply voltage	5V ± 10%
Output signal	Absolute SPI - (3 wire) Single / dual channel
Resolution steps	16383 (14 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)

28P ERCB



Interconnection - Flat cable

Link for Datasheet :

www.rotacol.info/28percb.pdf

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

- 28mm Ø plastic housing
- Hall CMOS technology
- SPI output - 3 wire
- 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 :
5 core flat cable 0.15 mtr long

Type	28P ERCB
Electrical angle	0 - 360°
Supply voltage	5V ± 10%
Output signal	Absolute SPI - (3 wire) Single / dual channel
Resolution steps	16383 (14 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)

25P RSB



Interconnection - Cable gland

Link for Datasheet :

www.rotacol.info/25prsb.pdf

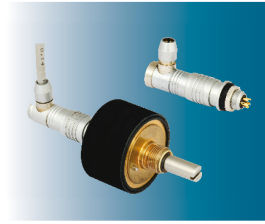
Bush Mount : 25mm Ø *RS SPEED CONNECT* SPI Rotary Position Sensor

- 25mm Ø plastic housing
- Hall CMOS technology
- SPI output - 3 wire
- 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	25P RSB
Electrical angle	0 - 360°
Supply voltage	5V ± 10%
Output signal	Absolute SPI - (3 wire) Single / dual channel
Resolution Steps	16383 (14 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)

30P RSB

Bush Mount : 30mm Ø *RS SPEED connect* SPI Rotary Position Sensor



Interconnection -
Miniature connector

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

- 30mm Ø plastic housing
- Hall CMOS technology
- SPI output - 3 wire
- 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

Type

30P RSB

Electrical angle	0 - 360°
Supply voltage	5V ± 10%
Output signal	Absolute SPI - (3 wire) Single / dual channel
Resolution Steps	16383 (14 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)

30P LOCB

Bush Mount : 30mm Ø *LoColine* SPI Rotary Position Sensor



Interconnection : Round Cable
with rubber grommet -OCR

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

- 30mm Ø plastic housing
- Hall CMOS technology
- SPI output - 4 wire
- Bushing : M10X0.75 / 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 : 6 core round cable

Type

30P LOCB

Electrical angle	0 - 360°
Supply voltage	3.3V±10% / 5V ± 10%
Output signal	Absolute SPI - (4 wire) 3.3V / 5V Single channel
Resolution Steps	16383 steps (14 bit)
Mech.speed (max.)	800 rpm
Elec. speed (max.)	800 rpm
Life (rotations)	~ 10 million

12P M/Z MCB

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



Interconnection :
6 core flat cable

Link for Datasheet :
www.rotacol.info/12pmmcb.pdf
www.rotacol.info/12pzmcmb.pdf

- 12 mm Ø metal housing
- Precision Miniature bushing mount
- SPI output - 4 wire
- 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 : 6 core flat cable
0.15 mtr long

Type

12P M/Z MCB

Electrical angle	0 - 360°
Supply voltage	3.3V±10% / 5V ± 10%
Output signal	Absolute SPI - (4 wire) 3.3V / 5V Single channel
Resolution steps	16383 (14 bit)
Mech.speed (max)	800 rpm
Elec. speed (max)	800 rpm
Life (rotations)	~ 5 million

13P M/Z MCB**Bush Mount : 12mm Ø *MiniLine* SPI Rotary Position Sensor**

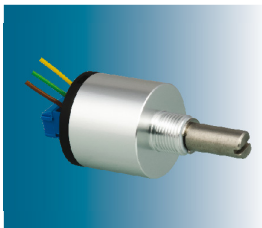
Interconnection :
Terminal block

Link for Datasheet :
www.rotacol.info/13pmmcb.pdf
www.rotacol.info/13pzmcmb.pdf

- 12 mm Ø metal housing
- Precision Miniature bushing mount
- Low cost , Hall effect technology
- SPI output - 4 wire
- 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**13P M/Z MCB**

Electrical angle	0 - 360°
Supply voltage	3.3V±10% / 5V ± 10%
Output signal	Absolute SPI (4 wire) 3.3V, 5V SPI Single channel
Resolution steps	16383 (14 bit)
Elec.speed (max)	800 rpm
Life (rotations)	~ 5 million

22P M/Z SL RCB**Bush Mount : 22mm Ø *SilverLine* SPI Rotary Position Sensor**

Interconnection :
Terminal block

Link for Datasheet :
www.rotacol.info/22pmslrcb.pdf
www.rotacol.info/22pzslrcb.pdf

- 22 mm Ø metal housing
- Sleeve bearing
- Hall effect magnetic sensor
- Robust metal aluminium housing
- SPI output - 3 wire
- 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 :
5 core flat cable 0.15 mtr long(std),
terminal block (option)

Type**22P M/Z SL RCB**

Electrical angle	0 - 360°
Supply voltage	5V ± 10%
Output signal	Absolute SPI - (3 wire) Single / dual channel
Resolution Steps	16383 (14 bit)
Mech.speed (Max)	1000 rpm
Elec. speed (Max)	800 rpm
Life (rotations)	~ 5 million

22P M/Z SL RCBB**Bush Mount : 22mm Ø *SilverLine* SPI Precision Rotary Position Sensor**

Interconnection : flat cable

Link for Datasheet :
www.rotacol.info/22wmslrcbb.pdf
www.rotacol.info/22wzslrcbb.pdf

- 22 mm Ø metal housing
- Ball bearing
- Hall effect magnetic sensor
- Robust metal aluminium housing
- SPI output - 3 wire
- 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 :
5 core flat cable 0.15 mtr long(std),
terminal block (option)

Type**22P M/Z SL RCBB**

Electrical angle	0-20° to 0-360° in 1°step prog.(std 360°)
Supply voltage	5V DC ±10%
Output signal	Absolute SPI - (3 wire) Single / dual channel
Resolution Steps	4096 (12 bit)
Mech. speed (Max)	4000 rpm
Elec. speed (Max)	800 rpm
Life (rotations)	~ 15 million