

Servo mount : SPI Rotary Position Sensor

RotaCol® Precision contactless SPI interface Hall Rotary position sensors are available in aluminium housing with stainless steel shafts and precision ball bearings. Servo mounting method with 12, 22, 36, 50 & 58 mm \varnothing housing diameters and with shaft diameters of 6,8,10mm, 1/8" & 1/4" \varnothing are available. 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 \pm 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 SPI output are available.

12P M/Z MCS



Interconnection -
6 core flat cable

Link for Datasheet :
www.rotacol.info/12pmcs.pdf
www.rotacol.info/12pzmc.pdf

Servo mount : 12 mm \varnothing *Miniline* SPI Rotary Position Sensor

- 12 mm \varnothing metal housing
- Precision Miniature servo mount
- SPI output - 4 wire
- Hall effect technology
- Aluminium housing with stainless steel shaft
- Shaft diameter :
Metric : 3mm \varnothing (MMCS)
Inch : 1/8" \varnothing (ZMCS)
- 2 Precision Ball bearings
- Interconnection :
6 core flat cable 0.15 mtr long

Type **12P M/Z MCS**

Electrical angle	0-360°
Supply voltage	3.3V \pm 10% ; 5V \pm 10%
Output signal	Absolute SPI - (4 wire) 3.3V, 5V SPI Single channel
Resolution steps	16383 (14 bit)
Mech.speed (max)	3000 rpm
Elec. speed (max)	800 rpm
Life (rotations)	~ 15 mil. rotations

22P M/Z SL RCS



Interconnection -
Flat cable OCF (Standard)

Link for Datasheet :
www.rotacol.info/22pmslracs.pdf
www.rotacol.info/22pzslracs.pdf

Servo Mount : 22 mm \varnothing *Silverline* SPI Rotary Position Sensor

- 22mm \varnothing metal housing
- 2 Precision Ball bearings
- Servo mount
- SPI output - 3 wire
- Hall effect technology
- 360° Mechanical & electrical angle
- Aluminium housing with stainless steel shaft
- Metric shaft : 6mm (MSL RCS)
Inch shaft : 1/8" (ZSL RCS)
- Interconnection :
5 core flat cable 0.15 mtr long - (std),
terminal block - (option)

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

Electrical angle	0 - 360°
Supply voltage	5V \pm 10%
Output signal	Absolute SPI - (3 wire) Single / dual channel
Resolution Steps	16383 (14 bit)
Mech. speed (Max)	6000 rpm
Elec. speed (Max)	800 rpm
Life (rotations)	~ 25 milion

36P M/Z SL RCS



Interconnection - cable gland

Link for Datasheet :
www.rotacol.info/36pmslracs.pdf
www.rotacol.info/36pzslracs.pdf

Servo Mount : 36 mm \varnothing *Silverline* SPI Rotary Position Sensor

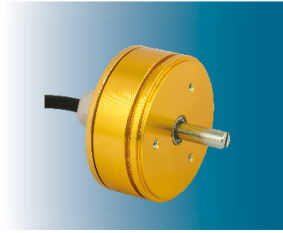
- 36mm \varnothing metal housing
- 2 Precision Ball bearings
- Servo mount ; synchro15
- SPI output - 3 wire
- Low cost , Hall effect technology
- 360° Mechanical & electrical angle
- Aluminium housing with stainless steel shaft
- Metric shaft : 6mm (MSL RCS)
Inch shaft : 1/4" (ZSL RCS)
- Interconnection :
5 core round cable - (std),
cable gland (OCG),
Miniature push-pull connector (OCM),
terminal block axial (OCTA) /
radial (OCTR) - (option)

Type **36P M/Z SL RCS**

Electrical angle	0 - 360°
Supply voltage	5V \pm 10% / 9-30V DC
Output signal	Absolute SPI - (3 wire) Single/dual channel
Resolution	16383 steps (14 bit)
Mech. speed (Max)	8000 rpm
Elec. speed (Max)	800 rpm
Life (rotations)	~ 35 million

50P MSL RCS

Servo Mount : 50 mm \varnothing *Silverline* SPI Rotary Position Sensor



Interconnection - cable gland

Link for Datasheet :
www.rotacol.info/50pmslracs.pdf

- 50mm \varnothing metal housing
- 2 Precision Ball bearings
- Servo mount ; synchro 20
- SPI output - 3 wire
- Hall effect technology
- 360° Mechanical & electrical angle
- Aluminium housing with stainless steel shaft
- Shaft diameter : 6mm \varnothing
- Interconnection :
 - 5 core round cable - (std),
 - Cable gland (OCG),
 - Miniature push-pull connector(OCM),
 - terminal block axial (OCTA) /
 - radial (OCTR) - (option)

Type

50P MSL RCS

Electrical angle	0 - 360°
Supply voltage	5V \pm 10% / 9-30V DC
Output signal	Absolute SPI - (3 wire) Single/dual channel
Resolution	16383 steps (14 bit)
Mech. speed (Max)	9000 rpm
Elec. speed (Max)	800 rpm
Life (rotations)	~ 40 million

58P DRCS

Servo Mount : 58mm \varnothing *Diamondline* SPI Rotary Position Sensor



Interconnection : 2.5 mtr round cable

Link for Datasheet :
www.rotacol.info/58pdrcs.pdf

- 58mm \varnothing metal housing
- Synchro flange
- SPI output - 3 wire
- 360° Mechanical & electrical angle
- Shaft diameter : 10mm \varnothing
- Heavy duty applications
- Stainless steel shaft
- Interconnection : 5 core round cable 2.5 mtr long with rubber grommet

Type

58P DRCS

Electrical angle	0 - 360°
Supply voltage	5V \pm 10%
Output signal	Absolute SPI - (3 wire) Single/dual channel
Resolution	16383 step (14 bit)
Mech.speed (Max)	5000 rpm
Update rate	5KHz
Life (rotations)	~ 75 million