

Servo Mount : I²C Rotary Position Sensor

RotaCol® Servo Mount contactless 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 housing diameters and with shaft diameters of 3,6,8,10mm, 1/8" & 1/4" Ø are available. 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. The 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.

12C M/Z MCS

Servo mount : 12 mm Ø *Miniline* I²C Rotary Position Sensor



Interconnection -
4 core flat cable

Link for Datasheet :
www.rotacol.info/12cmmcs.pdf
www.rotacol.info/12czmcs.pdf

- 12 mm Ø metal housing
- Precision Miniature servo mount
- 2 Precision Ball bearings
- I²C : Master- slave communication.
- Hall effect technology
- Aluminium housing with stainless steel shaft
- Shaft diameter :
Metric : 3mm Ø (MMCS)
Inch : 1/8" Ø (ZMCS)
- Interconnection :
4 core flat cable 0.15 mtr long

Type **12C M/Z MCS**

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)
Mech. speed (max)	3000 rpm
Elec. speed (max)	800 rpm
Rotary Life	~ 15 mil. rotations

22C M/Z SL RCS

Servo Mount : 22 mm Ø *Silverline* I²C Rotary Position Sensor



Interconnection -
Flat cable OCF (Standard)

Link for Datasheet :
www.rotacol.info/22cmlrscs.pdf
www.rotacol.info/22czslrscs.pdf

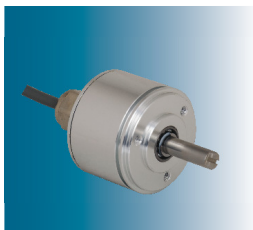
- 22mm Ø metal housing
- Servo mount
- I²C : Master- slave communication.
- Hall effect technology
- 360° Mechanical & electrical angle
- Aluminium housing with stainless steel shaft
- Metric shaft : 6mm (MSL RCS)
Inch shaft : 1/8" (ZSL RCS)
- 2 Precision Ball bearings
- Interconnection :
4 core flat cable 0.15 mtr long- (std),
terminal block - (option)

Type **22C M/Z SLRCS**

Electrical angle	0-360°
Supply voltage	3.3V±10% / 5 VDC
Output signal	I ² C Bidirect always slave transmitter or receiver, NXP UN 10204 Prot. Master initiates data transfer
Resolution Steps	4096 (12 bit)
Mech. speed (Max)	6000 rpm
Elec. speed (Max)	800 rpm
Life (rotations)	~ 25 mil. rotations

36C M/Z SL RCS

Servo Mount : 36 mm Ø *Silverline* I²C Rotary Position Sensor



Interconnection - cable gland

Link for Datasheet :
www.rotacol.info/36cmlrscs.pdf
www.rotacol.info/36czslrscs.pdf

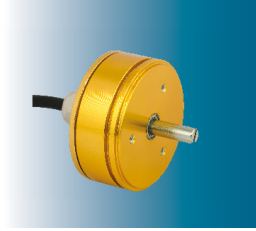
- 36mm Ø metal housing
- Servo mount ; synchro15
- I²C : Master- slave communication.
- Hall effect technology
- 360° Mechanical & electrical angle
- Aluminium housing with stainless steel shaft
- Metric shaft : 6mm (MSL RCS)
Inch shaft : 1/4" (ZSL RCS)
- 2 Precision Ball bearings
- Interconnection :
4 core round cable - (std),
cable gland (OCG),
Miniature push-pull connector (OCM),
terminal block axial (OCTA) /
radial (OCTR) - (option)

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

Electrical angle	0-360°
Supply voltage	5V±10%
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)	8000 rpm
Elec. speed (Max)	800 rpm
Life (rotations)	~ 35 mil. rotations

50C MSL RCS

Servo Mount : 50 mm \varnothing *Silverline* I²C Rotary Position Sensor



Interconnection - cable gland

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

- 50mm \varnothing metal housing
- Servo mount ; synchro 20
- I²C : Master- slave communication.
- Hall effect technology
- 360° Mechanical & electrical angle
- Aluminium housing with stainless steel shaft
- Shaft diameter : 6mm \varnothing
- 2 Precision Ball bearings
- Interconnection :
 - 4 core round cable - (std), cable gland (OCG),
 - Miniature push-pull connector (OCM),
 - terminal block axial (OCTA) /
 - radial (OCTR) - (option)

Type

50C MSL RCS

Electrical angle	0-360°
Supply voltage	5V \pm 10%
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)	9000 rpm
Elec. speed (max)	1600 rpm
Life (rotations)	~ 40 mil. rotations

58C DRCS

Servo Mount : 58 mm \varnothing *Diamondline* I²C Rotary Position Sensor



Interconnection :
4 core round cable 2.5 mtr long

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

- 58mm \varnothing metal housing
- Synchro flange
- I²C : Master- slave communication
- 360° Mechanical & electrical angle
- Shaft diameter : 10mm \varnothing
- Heavy duty applications
- Stainless steel shaft
- Interconnection : 4 core round cable 2.5 mtr long with rubber grommet

Type

58C DRCS

Electrical angle	0-360°
Supply voltage	3.3V \pm 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)	1600 rpm
Life rotations	~ 75 mil. rotations