

Heavy Duty I²C Rotary Position Sensors

For heavy duty applications, the **Diamondline** is the best choice. Larger housing diameters 40 mm, 50 mm & 58 mm with 8 mm \varnothing & 10 mm \varnothing shafts and also without shaft in semi hollow version. 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.

40C DRCW



Interconnection : 2.5 mtr round cable with rubber grommet

[Link for Datasheet :](http://www.rotacol.info/40cdrw.pdf)
www.rotacol.info/40cdrw.pdf

Heavy Duty : 40mm \varnothing Diamondline I²C Rotary Position Sensor

- 40 mm \varnothing metal housing
- Contactless Hall effect technology
- I²C : Master- slave communication
- Two ball bearings
- Clamping flange with 3 mounting screws
- 360° Mechanical & electrical angle
- Shaft diameter : 8 mm \varnothing
- Heavy duty applications
- Stainless steel shaft
- Interconnection : 4 core round cable 2.5 mtr long with rubber grommet

Type	40C DRCW
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)	800 rpm
Life rotations	~ 75 mil. rotations

50C DRCW



Interconnection : 2.5 mtr round cable with rubber grommet

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

Heavy Duty : 50mm \varnothing Diamondline I²C Rotary Position Sensor

- 50 mm \varnothing metal housing
- Contactless Hall effect technology
- I²C : Master- slave communication
- Two ball bearings
- Clamping flange with 3 mounting screws
- 360° Mechanical & electrical angle
- Shaft diameter : 8 mm \varnothing
- Heavy duty applications
- Stainless steel shaft
- Interconnection : 4 core round cable 2.5 mtr long with rubber grommet

Type	50C DRCW
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)	800 rpm
Life rotations	~ 75 mil. rotations

50C DRCH



Interconnection : 2.5 mtr round cable with rubber-grommet

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

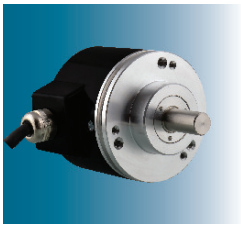
Heavy Duty : 50mm \varnothing Diamondline I²C Rotary Position Sensor

- 50 mm \varnothing metal housing
- Contactless Hall effect technology
- I²C : Master- slave communication
- Clamping flange with 2 screws
- Mounting flange (optional)
- Servo mount - two ball bearings
- 360° Mechanical & electrical angle
- Can accomodate 8 mm \varnothing 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 \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)	800 rpm
Life rotations	~ 75 mil. rotations

58C DRCW

Heavy Duty Clamping Flange : 58 mm \varnothing *Diamondline* I²C Rotary Position Sensor



Interconnection :
2.5 mtr round cable

[Link for Datasheet :](http://www.rotacol.info/58cdrw.pdf)
www.rotacol.info/58cdrw.pdf

- 58 mm \varnothing metal housing
- Contactless Hall effect technology
- I²C : Master- slave communication
- Two ball bearings
- Clamping flange with 3 mounting screws
- 360° Mechanical & electrical angle
- Shaft diameter : 10 mm \varnothing
- Heavy duty applications
- Stainless steel shaft
- Interconnection : 4 core round cable
2.5 mtr long with rubber grommet

Type	58C DRCW
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)	800 rpm
Life rotations	~ 75 mil. rotations

58C DRCS

Heavy Duty Synchro Flange : 58 mm \varnothing *Diamondline* I²C Rotary Position Sensor



Interconnection :
2.5 mtr round cable

[Link for Datasheet :](http://www.rotacol.info/58cdrs.pdf)
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)	800 rpm
Life rotations	~ 75 mil. rotations