

## Heavy Duty : SPI Rotary Position Sensors

RotaCol® **Diamondline** is the best choice for heavy duty applications. Robust aluminium housing with housing diameters of 40 mm, 50 mm & 58 mm  $\varnothing$  are available. Stainless steel shaft with 8 mm  $\varnothing$  & 10 mm  $\varnothing$  shaft diameters are available. It has two ball bearings. Clamping flange has 3 mounting screws. It also has synchro flange and hollow shaft version. Hollow shaft housing can accommodate 8mm  $\varnothing$  shaft diameter. Complex bearings allow the use in construction machines, railways & trucks. The Serial Peripheral Interface (SPI) is a bus system for a serial synchronous data transmission between different integrated circuits. The bus consists of 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). 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. Half duplex 3 wire is standard.

### 40P DRCW

### Heavy Duty : 40mm $\varnothing$ *Diamondline* SPI Rotary Position Sensor



Interconnection : 5 core round cable with rubber grommet 2.5 mtr

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

- 40mm  $\varnothing$  rugged aluminium housing
- Clamping flange with 3 mounting screws
- Two ball bearings
- SPI output - 3 wire
- 360° Mechanical & electrical angle
- 8mm  $\varnothing$  shaft diameter
- Heavy duty applications
- Stainless steel shaft
- Interconnection : 5 core round cable 2.5 mtr long with rubber grommet

#### Type 40P DRCW

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
Elec. speed (max)	800 rpm
Life rotations	~ 75 mil rotations

### 50P DRCW

### Heavy Duty : 50mm $\varnothing$ *Diamondline* SPI Rotary Position Sensor



Interconnection : 5 core round cable with rubber grommet 2.5 mtr

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

- 50mm  $\varnothing$  rugged aluminium housing
- Clamping flange with 3 mounting screws
- Two ball bearings
- SPI output - 3 wire
- 360° Mechanical & electrical angle
- 8mm  $\varnothing$  shaft diameter
- Heavy duty applications
- Stainless steel shaft
- Interconnection : 5 core round cable 2.5 mtr long with rubber grommet

#### Type 50P DRCW

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
Elec. speed (max)	800 rpm
Life rotations	~ 75 mil rotations

### 50P DRCH

### Heavy Duty : 50mm $\varnothing$ *Diamondline* SPI Rotary Position Sensor



Interconnection : 2.5 mtr round cable with rubber-grommet

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

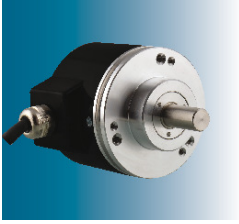
- 50mm  $\varnothing$  rugged metal housing
- Clamping flange with 2 mounting screws
- Mounting flange (optional)
- Two ball bearings
- SPI output - 3 wire
- 360° Mechanical & electrical angle
- Can accommodate 8mm  $\varnothing$  shaft diameter
- Heavy duty applications
- Interconnection : 5 core round cable 2.5 mtr long with rubber grommet

#### Type 50P DRCH

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
Elec. speed (max)	800 rpm
Life rotations	~ 75 mil. rotations

## 58P DRCW

## Heavy Duty Clamping Flange : 58mm $\varnothing$ *Diamondline* SPI Rotary Position Sensor



Interconnection : 5 core round cable with rubber grommet  
2.5 mtr

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

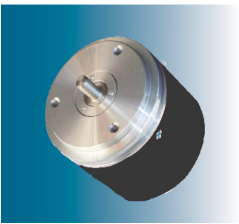
- 58mm $\varnothing$  rugged metal housing
- Clamping flange with 3 mounting screws
- Two ball bearings
- SPI output - 3 wire
- 360° Mechanical & electrical angle
- 10mm  $\varnothing$  shaft diameter
- Heavy duty applications
- Stainless steel shaft
- Interconnection : 5 core round cable  
2.5 mtr long with rubber grommet

### Type **58P DRCW**

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
Elec. speed (max)	800 rpm
Life rotations	~ 75 mil. rotations

## 58P DRCS

## Heavy Duty Synchro Flange : 58mm $\varnothing$ *Diamondline* SPI Rotary Position Sensor



Interconnection : 2.5 mtr  
round cable

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

- 58mm  $\varnothing$  metal housing
- Synchro flange
- Two ball bearings
- 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
Elec. speed (max)	800 rpm
Life rotations	~ 75 mil. rotations