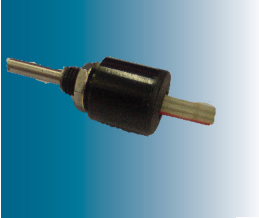


## Miniature : PWM Rotary Position Sensor

RotaCol® miniature type contactless rotary position sensors range are available in plastic and metal housing with 12, 15, 22 mm Ø housing diameter in bush, flange, no shaft flange and servo type. Bushing size : M6X0.75 / 1/4"X32 UNEF / 3/8"X32 TPI with shaft diameters of 3mm, 6mm, 1/4" and 1/8" are available. Bushing has sleeve and servo has ball bearings. PWM as a output is pulse width modulated signal based on constant carrier frequency which defines high to low ratio. The ratio between high & low corresponds to the signal characteristics. Within one period of this frequency the change in duty cycle indicates the angle.

### 12W M/Z MCB

### Bush Mount : 12 mm Ø *Miniline* PWM Rotary Position Sensor



Interconnection : Flat Cable

**Link for Datasheet :**

[www.rotacol.info/12wmmcb.pdf](http://www.rotacol.info/12wmmcb.pdf)  
[www.rotacol.info/12wzmcmb.pdf](http://www.rotacol.info/12wzmcmb.pdf)

- 12 mm Ø metal housing
- Sleeve bearing
- Precision Miniature bushing mount
- Pulse width modulated output
- 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 :  
3 core flat cable 0.15 mtr

**Type**

**12W M/Z MCB**

Electrical angle	0-20° to 0-360° in 1°step prog. (std 360°)
Supply voltage	5V DC ±10%
Output signal	PWM Single channel
Resolution steps	4096 (12 bit)
Mech.speed (max)	800 rpm
Elec. speed (max)	160 rpm
Life (rotations)	~ 5 mil. rotations

### 12W M/Z MCS

### Servo mount : 12 mm Ø *Miniline* PWM Rotary Position Sensor



Interconnection - Flat cable

**Link for Datasheet :**

[www.rotacol.info/12wmmcs.pdf](http://www.rotacol.info/12wmmcs.pdf)  
[www.rotacol.info/12wzmcs.pdf](http://www.rotacol.info/12wzmcs.pdf)

- 12 mm Ø metal housing
- Precision Miniature servo mount
- Low cost , Hall effect technology
- 360° Mechanical & electrical angle
- Aluminium housing with stainless steel shaft
- Shaft diameter :  
Metric shaft : 3mm (MMCS)  
Inch shaft : 1/8" (ZMCS)
- 2 Precision Ball bearings
- Interconnection :  
3 core flat cable 0.15 mtr long

**Type**

**12W M/Z MCS**

Electrical angle	0-20° to 0-360° in 1°step prog. (std 360°)
Supply voltage	5V±10%
Output signal	PWM single channel
Resolution steps	4096 (12 bit)
Mech.speed (max)	3000 rpm
Elec. speed (max)	160 rpm
Life (rotations)	~ 15 million

### 13W M/Z MCB

### Bush Mount : 12 mm Ø *Miniline* PWM Rotary Position Sensor



Interconnection : terminal lock

**Link for Datasheet :**

[www.rotacol.info/13wmmcb.pdf](http://www.rotacol.info/13wmmcb.pdf)  
[www.rotacol.info/13wzmcmb.pdf](http://www.rotacol.info/13wzmcmb.pdf)

- 12 mm Ø metal housing
- Precision Miniature bushing mount
- Low cost , Hall effect technology
- Pulse width modulated output
- 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**

**13W M/Z MCB**

Electrical angle	0-20° to 0-360° in 1°step prog. (std 360°)
Supply voltage	5V DC ±10%
Output signal	PWM Single channel
Resolution steps	4096 (12 bit)
Elec.speed (max)	160 rpm
Life (rotations)	~ 5 mil. rotations

## 13W MCK

## No Shaft Flange : 12mm Ø *Miniline* PWM Rotary Position Sensor



Interconnection - Terminal block

**Link for Datasheet :**  
[www.rotacol.info/13wmck.pdf](http://www.rotacol.info/13wmck.pdf)

- 12mm Ø plastic housing
- Miniature type
- Contactless Hall effect technology
- Pulse width modulated output
- Magnet on user shaft
- No bearings
- Blind hole diameter : 9.5mm Ø
- No wear, long life
- Interconnection : Terminal block

### Type

### 13W MCK

Electrical angle	0-20° to 0°-360° in 1°step prog. (standard 360°)
Supply voltage	5V±10%
Output signal	PWM Single channel
Resolution steps	4096 (12 bit)
Elec.speed (max)	160 rpm

## 15W MCF

## Flange Mount : 15mm Ø *Miniline* PWM Rotary Position Sensor



Interconnection :  
3 leads multistrand wire 0.15mtr

**Link for Datasheet :**  
[www.rotacol.info/15wmcf.pdf](http://www.rotacol.info/15wmcf.pdf)

- 15mm Ø flange mount
- Miniature size
- Pulse width modulated output
- Metal case, economical
- Contactless rotary position sensor
- Shaft diameter : 3mm Ø
- Ball bearing
- Interconnection :  
3 leads multistrand wire 0.15mtr long

### Type

### 15W MCF

Electrical angle	0-20° to 0-360° in 1°step prog. (standard 360°)
Supply voltage	5V±10%
Output signal	PWM Single channel
Resolution steps	4096 (12 bit)
Mech.speed (max)	4000 rpm
Elec.speed (max)	160 rpm
Life (rotations)	~ 15 mil. rotations

## 22W MCF

## Flange Mount : 22mm Ø *Miniline* PWM Rotary Position Sensor



Interconnection :  
3 leads multistrand wire 0.15mtr

**Link for Datasheet :**  
[www.rotacol.info/22wmcf.pdf](http://www.rotacol.info/22wmcf.pdf)

- 22mm Ø Flange mount
- Miniature size
- Pulse width modulated output
- Metal case, economical
- Contactless rotary position sensor
- Shaft diameter : 6mm Ø
- Ball bearing
- Interconnection :  
3 leads multistrand wire 0.15mtr long

### Type

### 22W MCF

Electrical angle	0-20° to 0-360° in 1°step prog. (standard 360°)
Supply voltage	5V±10%
Output signal	PWM Single channel
Resolution steps	4096 (12 bit)
Mech.speed (max)	4000 rpm
Elec.speed (max)	160 rpm
Life (rotations)	~ 15 mil. rotations