

# -ROUECOD250PP series

Single wheel spring type incremental encoder

Ref : 4221

Rev : A



## DESCRIPTION

With its single wheel structure (250- or 256-mm wheel circumference), the ROUECOD250PP series is perfectly adapted for measuring the length and speed of the target moving.

The output waveform according to measurement distance is suitable for international measurement units.

The robust structure of the ROUECOD250PP series ensures a long service life, and the simple design makes them very easy to mount, with a wide variety of mounting possibilities thanks to the **spring lever**.

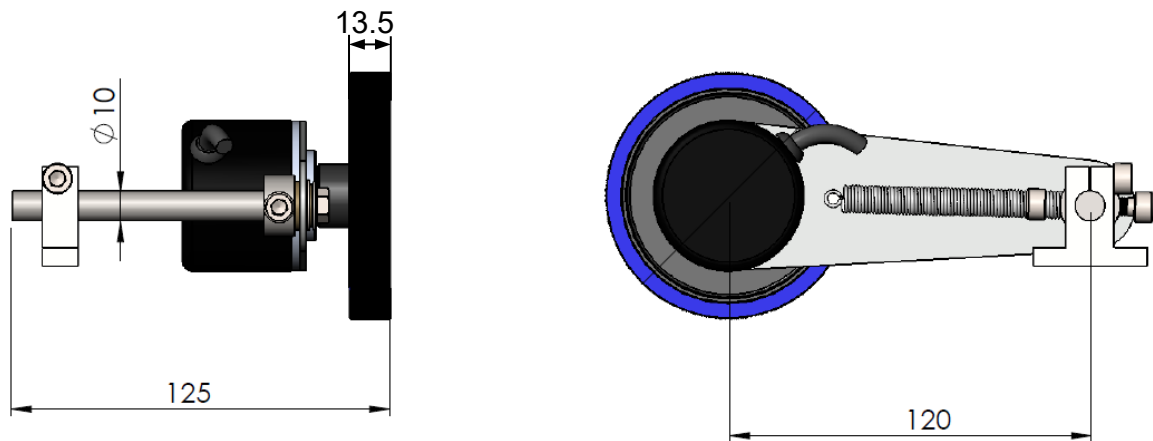
The spring system enables compensate uneven parts of the measuring surface. The ROUECOD250PP series can operate at the speed of 3000 RPM and is used in various industrial applications to measure position, velocity and path in linear motion, such as sheet manufacturing, wood industry, textile or packing machinery, conveyor bands...

## TECHNICAL DATA

ELECTRICAL DATA						
<b>Resolution</b>	Refer to resolution table p.2					
<b>Electrical Interface*</b>	<b>PP</b>	<b>TTL</b>	<b>HTL</b>	<b>HPL</b>	<b>OCL</b>	<b>OCP</b>
<b>Supply</b>	10...30 VDC	5 VDC	10...30 VDC	5...30 VDC	Supply signal should not be lower than Output signal	
<b>Output</b>	10...30 VDC PP	5 VDC TTL	5 VDC TTL	5...30 VDC PP	NPN Open Collector	PNP Open Collector
<b>Output signals*</b>	A, /A, B, /B, Z, /Z					
<b>Response Frequency</b>	300 KHz					
<b>Current Consumption</b>	50 mA nominal					
<b>Output Current</b>	100 mA max. (per channel)					
<b>Electrical Connection*</b>	5 or 8x0,14 mm <sup>2</sup> shielded cable M16 / 8 pin male connector					
MECHANICAL DATA						
<b>Wheel Circumference</b>	250 mm			256 mm		
<b>Wheel Diameter</b>	79,6 mm			81,5 mm		
<b>Starting Torque</b>	According to coefficient of friction					
<b>Operating Speed</b>	3000 RPM max.					
<b>Operating Temp.</b>	-25...+85 °C					
<b>Storage Temp.</b>	-40...+100 °C					
<b>Ambient Humidity</b>	35%...85% RH					
<b>Construction material</b>	Encoder: Aluminum / Wheel: NBR (outer part) + POM (body)					
<b>Protection Class</b>	IP54					

**Note:** The specifications indicated by (\*) vary according to the model selected. The detailed code table for product selection is shown on page 3.


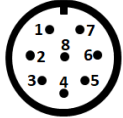
## MECHANICAL DIMENSIONS (mm)

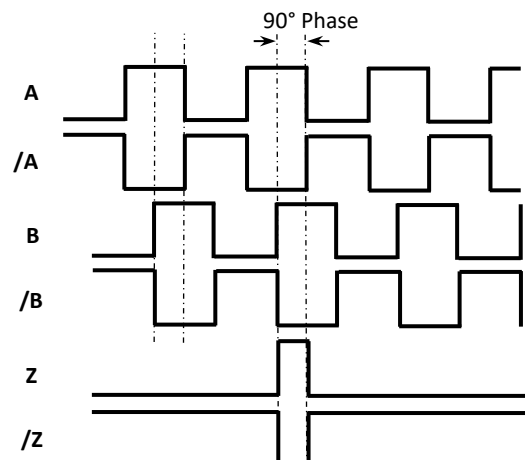


## RESOLUTION

Number of Encoder Pulse	Gear Ratio	Wheel Circumference	Resolution (Moving distance per 1 pulse)
5000 pulses	1:1	250mm	0,05mm/pulse
2500 pulses	1:1	250mm	0,1mm/pulse
1000 pulses	1:1	250mm	0,25mm/pulse
500 pulses	1:1	250mm	0,5mm/pulse
250 pulses	1:1	250mm	1mm/pulse
50 pulses	1:1	250mm	5mm/pulse
25 pulses	1:1	250mm	10mm/pulse
10 pulses	1:1	250mm	25mm/pulse
1 pulse	1:1	250mm	250mm/pulse
1024 pulses	1:1	256mm	0,25mm/pulse
512 pulses	1:1	256mm	0,5mm/pulse
256 pulses	1:1	256mm	1mm/pulse

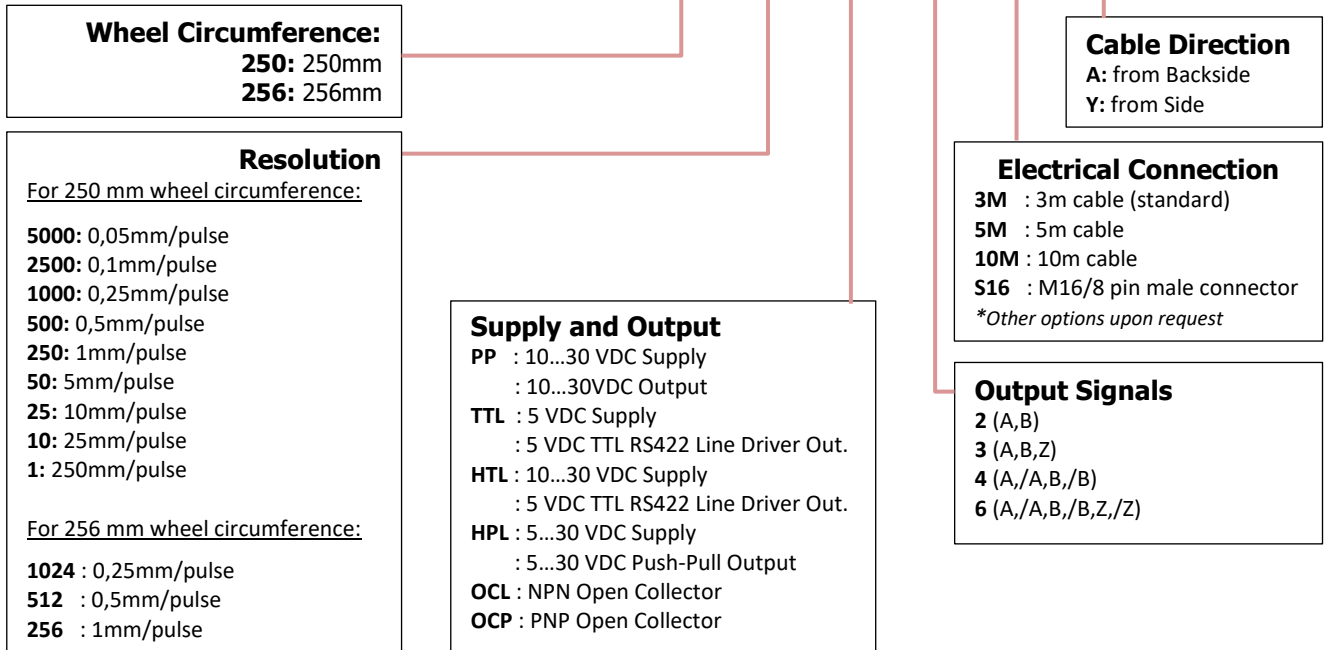
## ELECTRICAL CONNECTIONS

Signal	M16-8 Pin Male Conn.	Cable
		
A	Pin 1	Yellow
/B	Pin 2	White
+V	Pin 3	Red
0 V	Pin 4	Black
/A	Pin 5	Blue
B	Pin 6	Green
/Z	Pin 7	Grey
Z	Pin 8	Pink



The table above shows the cable colors of the sensor output signals. If the control circuit is suitable in the Line Driver sensors of the not output signals (/A, /B, /Z) have to be added to the system. If it is not suitable /A, /B, /Z signal cables must be fixed as insulated separately. Keep in mind these edges also have electricity.

## ORDERING INFORMATION

**-ROUECOD**

## REVISIONS HISTORY

REVISION	DATE	DESCRIPTION
A	07/07/2025	Creation of the document

## CONTACT

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