

# CIO30P - Incremental encoder Ø30 mm – Solid shaft

## Technical characteristics

Power supply and output	4.75 to 32 Vdc –Push-Pull output (RS422 compatible)
Resolution	64 ; 128 ; 256 ; 512 ; 1024 PPR
Max. admissible rotational speed	12000 turns/min
Max. continuous rotational speed	12000 turns/min
Axial load	20N
Radial load	60N
Material	Body and cover: aluminum (RohS) Shaft: stainless steel
Protection	IP65 (IP67 optional)
Connections	M8 – 4 pins PVC cable 8 wires
Weight	approx. 60 g
Operating temperature	-20°C ... +100°C
Storage temperature	-40°C ... +100°C



## Ordering reference

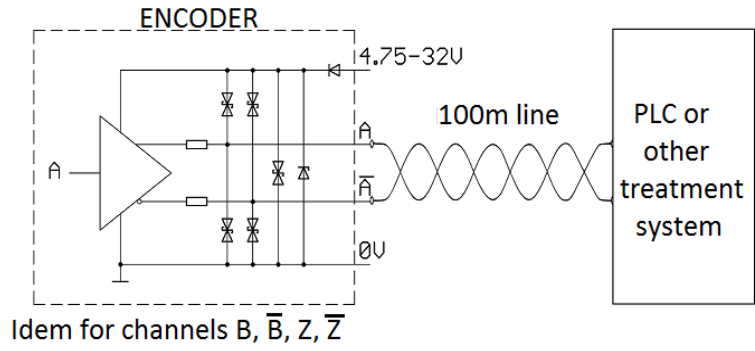
	<b>CIO30P_06</b> – <b>PPCA</b> – <b>01024</b> – <b>GR1/03</b> – <b>A0</b>
<b>Model</b>	
<b>CIO30P</b>	
<b>Shaft diameter</b>	
<b>04</b> = 4mm	
<b>05</b> = 5mm	
<b>06</b> = 6mm	
<b>Other: please consult us</b>	
<b>Output stage</b>	
<b>PP</b> = Push-Pull output, RS422 compatible	
<b>Supply</b>	
<b>C</b> = 4.75 - 32Vdc	
<b>Output signals</b>	
<b>A</b> = channels A, B, 0, /A, /B, /0 (0 gated A & B) (standard)	
<b>B</b> = one channel	
<b>C</b> = channels A, B, /A, /B	
<b>D</b> = channels A, B, 0, /A, /B, /0 (A gated)	
<b>E</b> = channels A and B	
<b>Resolution</b>	
<b>64 ; 128 ; 256 ; 512 ; 1024</b>	
<b>Connections</b>	
<b>G</b> = PVC cable 8 wires	
<b>O</b> = M8 – 4 pins	
<b>Other: please consult us</b>	
<b>Orientation</b>	
<b>A</b> = Axial	
<b>R</b> = Radial	
<b>Connection type</b>	
<b>1</b> = Standard (please refer to the connection table)	
<b>Other: please consult us</b>	
<b>Cable length for connection G</b>	
<b>/xx</b> = example: <b>/03</b> for 3m long cable	
<b>Mechanical options</b>	
<b>A</b> = None	
<b>B</b> = IP67	
<b>Electronics options</b>	
<b>0</b> = None	



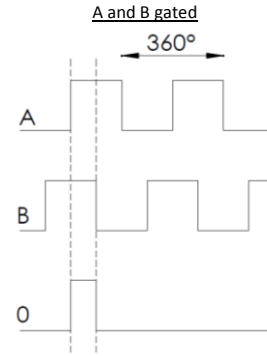
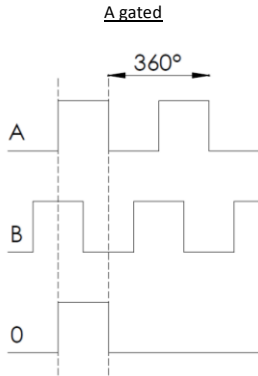
**Electronic characteristics**

**Push-Pull version**

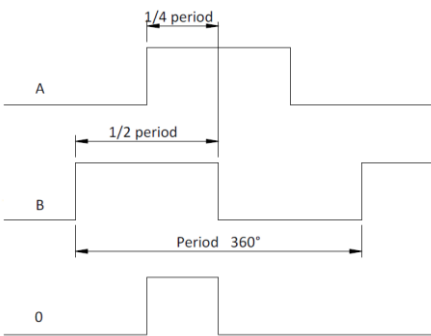
Power supply : 4.75 – 32VDC  
 No-load consumption : 40mA  
 Overvoltage, short circuits, reverse polarities and overcurrent protection



**Output signals**

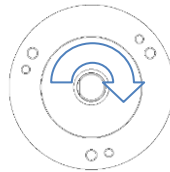


**Signals tolerance**



**B channel (rising edge) leads A channel in CW rotation, view on shaft.**

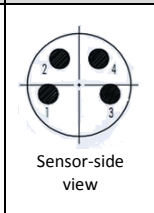
CW rotation direction:



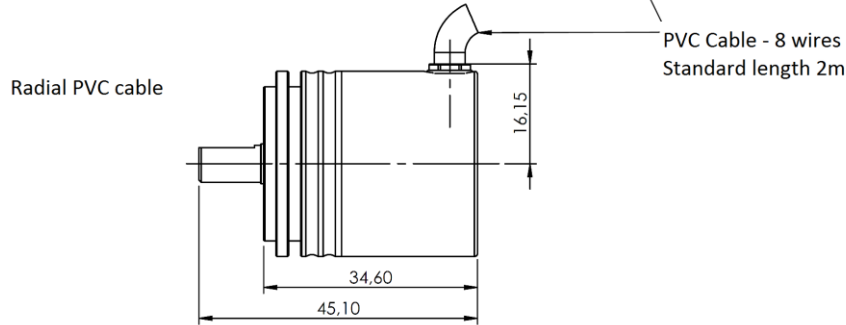
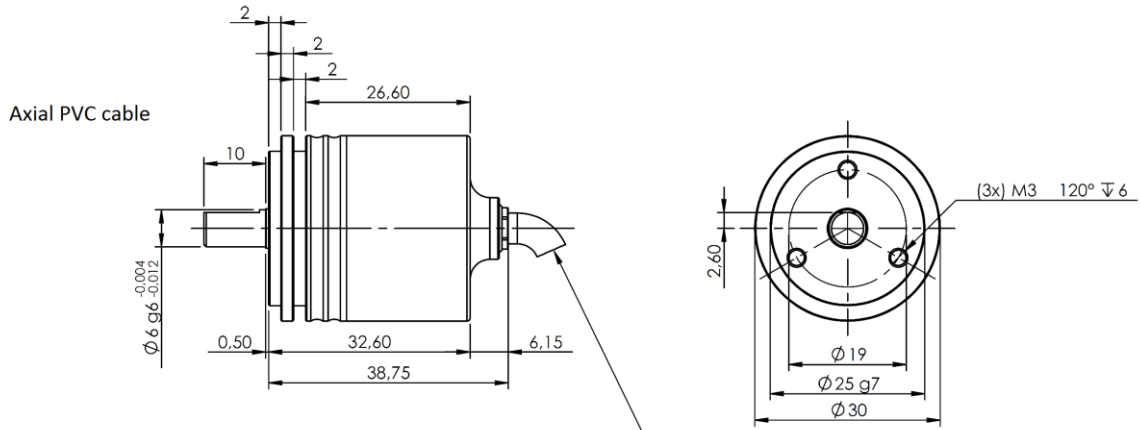
Period: 360° electrics  
 Duty cycle: 180° ± 10%  
 Phase shift: 90° ± 25%

**Connections type 1**

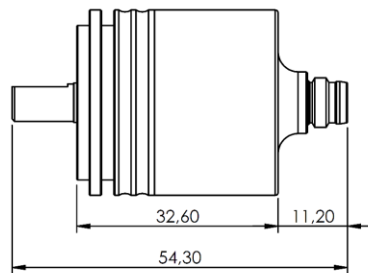
Standard connection	M8 4 pins	PVC cable 8 wires
Power -	1	White
Power +	2	Brown
Channel A	3	Green
Channel B	4	Yellow
Channel 0		Grey
Channel A/		Pink
Channel B/		Blue
Channel 0/		Red



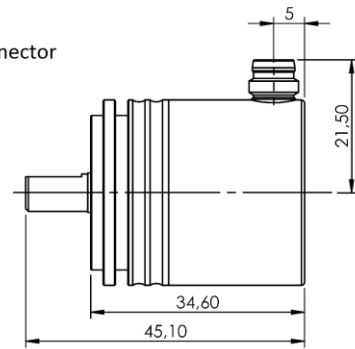
**Technical drawings**



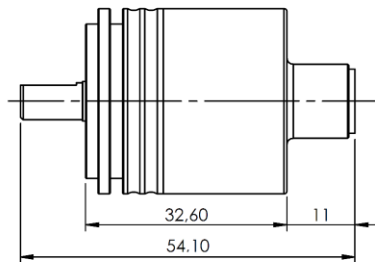
**Axial M8 connector  
(4 pins)**



**Radial M8 connector  
(4 pins)**



**Axial M12 connector  
(8 pins)**



**Radial M12 connector  
(8 pins)**

