

CIO90T - Optical incremental encoder Ø90 mm with through shaft

Technical features

Power supply / output circuit	4.75 to 32 VDC – Push-Pull output
Resolution	Up to 100000 PPR
Max speed	4000 min ⁻¹
Max speed (continuous)	6000 min ⁻¹
Axial load	100 N
Radial load	200 N
Material	Body and cover: aluminum (RohS) Shaft: Stainless steel
Protection	IP64 (IP67 optional)
Type of connection	M23 – 12 pins CW PVC cable 8 wires
Weight	~900 g
Temperature range	-20°C ... +80°C
Storage temperature	-40°C ... +80°C



Ordering reference

CIO90T_12 – **PPCA** – **00512** – **GR1/03** – **A0**

Model CIO90P	
Through shaft diameter 30 = 30mm Other: please contact us	
Output PP = Push-Pull output (RS422 compatible)	
Power supply C = 4.75 - 32Vdc	
Output channels A = A, B, 0, /A, /B, /0 (calibrated on A and B) (standard) Other: please contact us	
Available resolutions All resolution from 1 to 100000	
Connectors A = M23 – 12 pins CW G = PVC cable 8 wires Other on demand	
Orientation R = Radial	
Connection 1 = Standard (please refer to the table below) Other: please contact us Please indicate the desired cable length in meters (ex: 03 for 3 meters)	
Mechanical options A = None B = IP67 protection	
Electronics options 00 = None	



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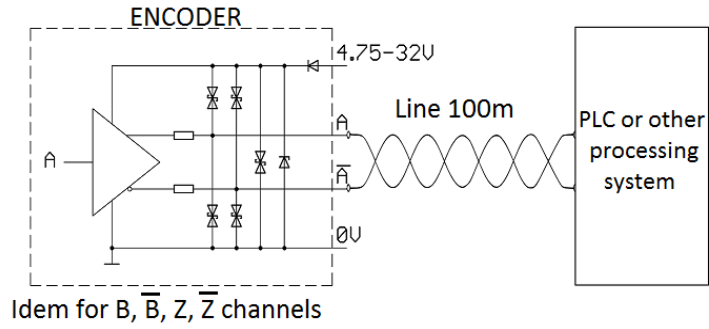
Electrical characteristics

Push-pull version

Power supply : 4.75 – 32V

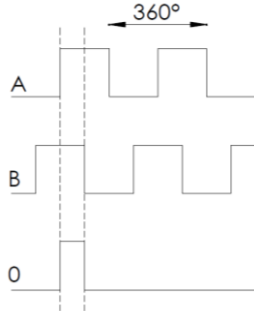
Consumption without load : at 5Vdc = 250 mA
 at 12Vdc = 55 mA
 at 24Vdc = 30 mA
 at 32Vdc = 25 mA

Protection against reverse polarity, short circuits, overcurrent, overvoltage



Output signals

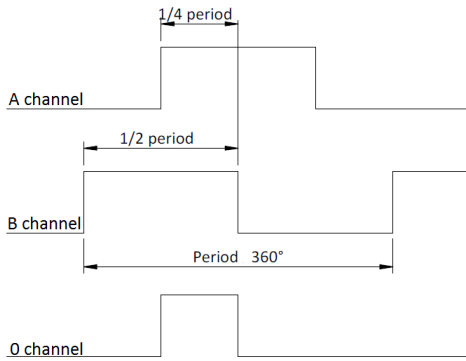
Zero calibrated on A and B



Channel A leads the rising edge of channel B in clockwise rotation direction.
 View on the shaft, threaded side of the flange



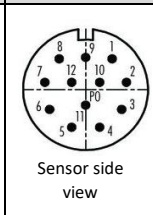
Signal tolerances



Period: electrical 360°
 Duty cycle: electrical 180° ± 10%
 Déphasage : electrical 90° ± 25%
 Starting time: less than 100ms

Standard connection (Type 1)

Standard connection	M23 – 12 pins CW	Cable 8 wires
Supply -	1	White
Supply +	2	Brown
A channel	3	Green
B channel	4	Yellow
0 channel	5	Grey
A/ channel	6	Pink
B/ channel	7	Blue
0/ channel	8	Red
	9	/



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