

CIO40P – INCREMENTAL OPTICAL ENCODER Ø40 – SOLID SHAFT

Technical characteristics

Output	Push-Pull (HTL), RS422 (TTL) compatible
Power supply	5Vdc
	4.75 ... 32 Vdc
Resolution	1 to 65 536 PPR
Max. admissible rotational speed	12 000 rpm
Max. continuous rotational speed	9 000 rpm
Max. axial load	20N
Max. radial load	60N
Material	Body and cover: aluminum (RohS)
	Shaft: stainless steel
Protection	IP64 (IP67 optional)
Connection	M16 – 8 pins (DIN)
	M12 – 8 pins (A-coded)
	PVC cable 8 wires (standard length : 2m)
Weight	~ 120 g
Operating temperature	-20°C ... +100°C
Storage temperature	-40°C ... +100°C



Ordering reference

CIO40P_06 – PPCA – 01024 – GR1/03 – A00

Model	CIO40P
Shaft diameter	06 = Ø6mm – Length 10mm 06A = Ø6mm – Length 16mm Other dimensions on demand
Output stage	PP = Push-Pull (HTL) - RS422 (TTL) compatible
Power supply	A = 5Vdc C = 4.75 ... 32Vdc
Output signals	A = A, B, 0, /A, /B, /0 (A & B gated) Other output signals on demand
Resolution	1 to 65 536 PPR
Connections	D = M16 – 8 pins (DIN) F = M12 – 8 pins (A-coded) G = PVC cable - 8 wires Other connections on demand
Orientation	A = Axial R = Radial
Connection type	1 = Standard (please refer to the connection table page 2) Other connection types on demand
Cable length for G connection	/xx = example /03 for 3m long cable (standard 2m)
Mechanical options	A = None B = IP67 protection
Electronic options	00 = None



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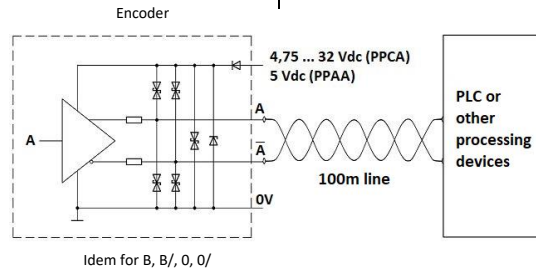
Electrical characteristics

PPCA electronics

Output stage: Push-Pull – compatible RS422
 Power supply: 4.75 ... 32Vdc
 Consumption without load:
 at 5Vdc = 250 mA
 at 12Vdc = 55 mA
 at 24Vdc = 30 mA
 at 32Vdc = 25 mA
 Protected against over-voltage, polarity inversion
 and overcurrent

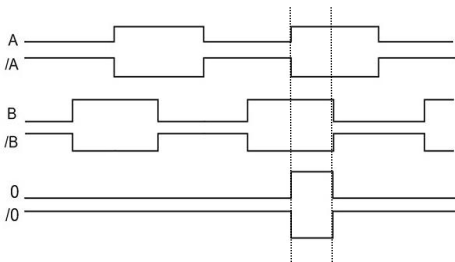
PPAA electronics

Output stage: Push-Pull – compatible RS422
 Power supply: 5Vdc
 Consumption without load: at 5Vdc = 50 mA
 Protected against over-voltage, polarity inversion
 and overcurrent



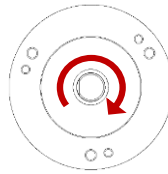
Output signals

A & B gated (standard)

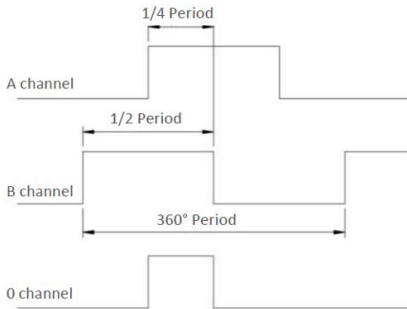


B channel (rising edge) before A channel in CW direction, view on axis.

Clockwise direction



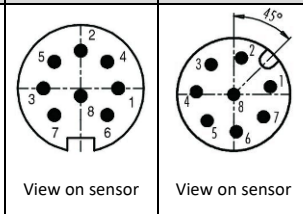
Signal tolerances



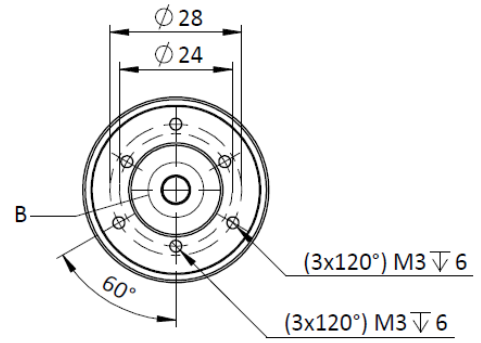
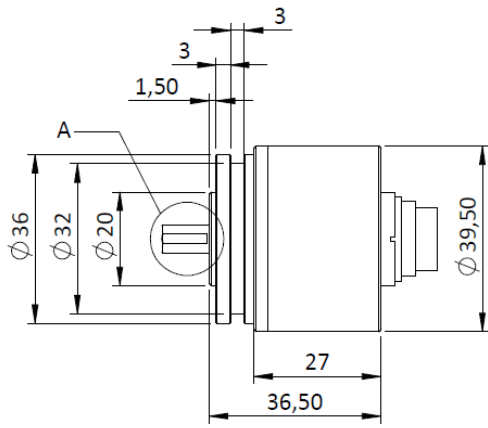
Period: electrical 360°
 Duty cycle: 180° ± 10%
 Phase shift: 90° ± 25%
 Starting time: less than 100ms

Connections type 1

Standard connection	M16 - 8 pins (DIN)	M12 - 8 pins	Cable – 8 wires
Supply -	1	1	White
Supply +	2	2	Brown
Channel A	3	3	Green
Channel B	4	4	Yellow
Channel 0	5	5	Grey
Channel A/	6	6	Pink
Channel B/	7	7	Blue
Channel 0/	8	8	Red

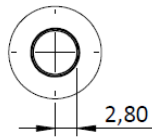
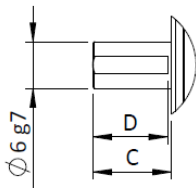


Technical drawing



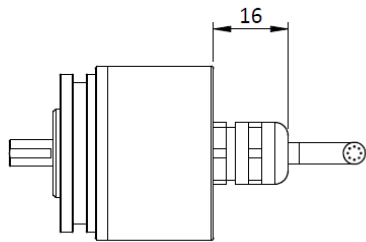
Detail A

Detail B

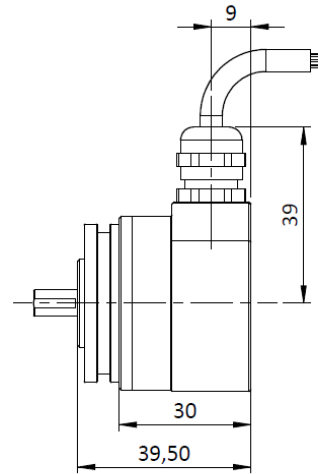


	C	D
CIO40P_06	10,00	9,00
CIO40P_6A	16,00	9,00

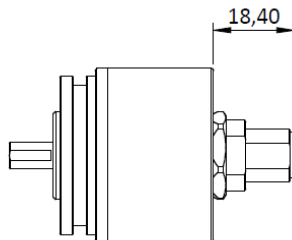
PVC cable
Standard length 2m
Axial output (GA)



PVC cable
Standard length 2m
Radial output (GR)



M12 8 pins
(A-coded)
Axial output (FA)



M16
8 pins (DIN)
Axial output (DA)

