

CIO58P – INCREMENTAL OPTICAL ENCODER Ø58 – SOLID SHAFT

Technical characteristics

Output	Push-Pull (HTL), RS422 (TTL) compatible
Power supply	5Vdc 4.75 ... 32 Vdc
Resolution	1 to 100 000 PPR
Max. admissible rotational speed	12 000 rpm
Max. continuous rotational speed	9 000 rpm
Max. axial load	50N
Max. radial load	100N
Material	Body and cover: aluminum (RohS) Shaft: stainless steel
Protection	IP64 (IP67 optional) M23 – 12 pins CW M16 – 8 pins (DIN) M12 – 8 pins (A-coded)
Connection	PVC cable 8 wires (standard length : 2m)
Weight	~ 300 g
Operating temperature	-20°C ... +100°C
Storage temperature	-40°C ... +100°C



Ordering reference

CIO58P_10 – PPCA – 001024 – GR1/03 – A00

Model	CIO58P
Shaft diameter	10 = Ø6mm 10 = Ø10mm 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 100 000 PPR
Connections	A = M23 – 12 pins CW 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



Tel : +33 (0)3 88 02 09 02 / Fax : +33 (0)3 88 02 09 03 / E-mail : info@ak-industries.com / Web : http://www.ak-industries.com

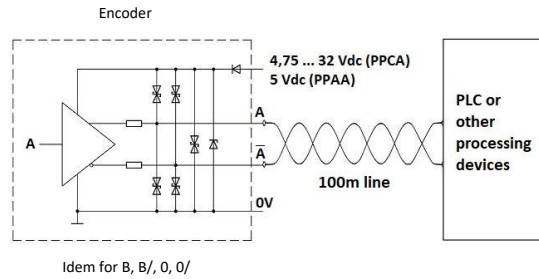
Electrical characteristics

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

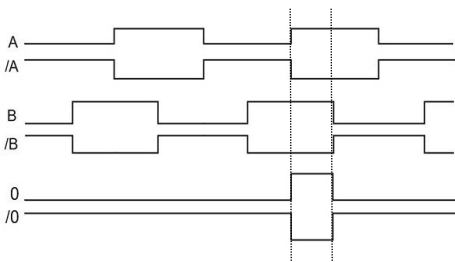
PPAA electronics

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

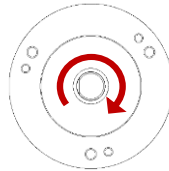


Output signals

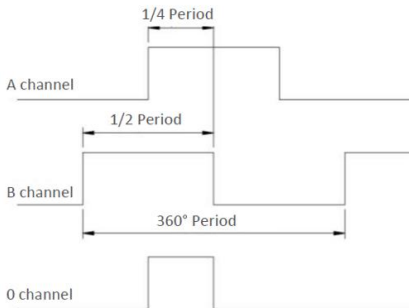
A & B gated (standard)



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



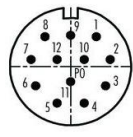
Signal tolerances



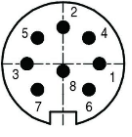
Period: electrical 360°
 Duty cycle: 180° ± 10%
 Phase shift: 90° ± 25%
 Starting time: less than 100ms

Standard connection (Type 1)

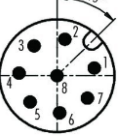
Standard connection	M23 12 pins (CW direction)	M16 - 8 pins (DIN)	M12 - 8 pins A-coded	Cable – 8 wires
Supply -	1	1	1	White
Supply +	2	2	2	Brown
Channel A	3	3	3	Green
Channel B	4	4	4	Yellow
Channel 0	5	5	5	Grey
Channel A/	6	6	6	Pink
Channel B/	7	7	7	Blue
Channel 0/	8	8	8	Red
nc	9 – 10 – 11 – 12	/	/	/



View on sensor



View on sensor

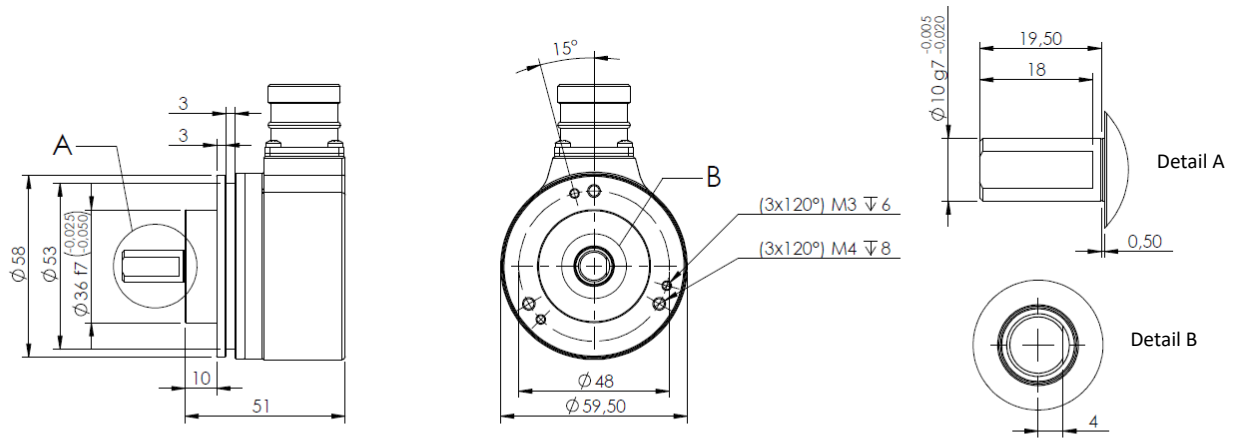


View on sensor



Tel : +33 (0)3 88 02 09 02 / Fax : +33 (0)3 88 02 09 03 / E-mail : info@ak-industries.com / Web : http://www.ak-industries.com

Encoder CIO58P_10 (solid shaft $\varnothing 10$)



Encoder CIO58P_06 (solid shaft $\varnothing 6$ and integrated synchro flange)

