

CIOD58C – INCREMENTAL OPTICAL ENCODER Ø58 – HOLLOW SHAFT DUPLICATED OUTPUTS

Technical characteristics

Output	Push-Pull, RS422 compatible
Power supply	4.75 ... 32 Vdc
Resolution	1 to 100 000 PPR
Max. admissible velocity	6000 turns/min
Max. continuous velocity	6000 turns/min
Material	Body and cover - Aluminum (RohS) Shaft - stainless steel
Protection class	IP65 (IP67 optional)
Connections	M23 – 12 pins CW M12 – 8 pins (A coding) PVC cable 8 wires (standard length 2m)
Weight	approx. 300 g
Operating temperature	-20°C ... +100°C
Storage temperature	-40°C ... +100°C



Ordering reference

CIOD58C_14 – PPCA – 001024 – AR1 – A00

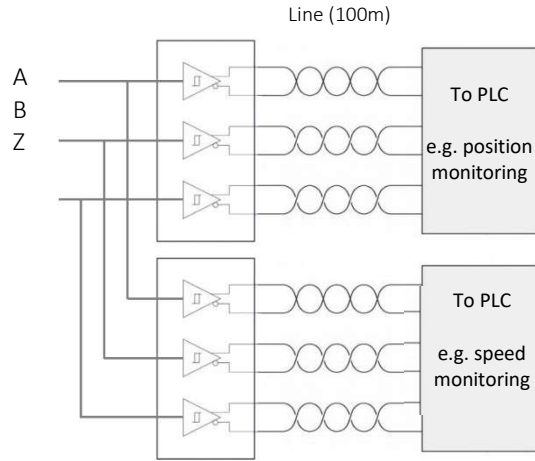
Model CIOD58C_	
Bore diameter 06 = Hollow shaft Ø6 mm 08 = Hollow shaft Ø8 mm 10 = Hollow shaft Ø10 mm 12 = Hollow shaft Ø12 mm 14 = Hollow shaft Ø14 mm 15 = Hollow shaft Ø15 mm <i>Other : please consult us</i>	
Output signals PP = Push-Pull output - RS422 compatible	
Supply C = 4.75 to 32Vdc	
Channel options A = A, B, 0, /A, /B, /0 (A & B gated) (standard) <i>Other : please consult us</i>	
Resolution 1 to 100 000 PPR	
Connections A = M23 – 12 pins CW F = M12 – 8 pins (A coding) G = PVC cable 8 wires <i>Other connection on demand</i>	
Orientation R = Radial	
Connection type 1 = Standard (please refer to the connections table) <i>Other : please consult us</i>	
Cable length (for G connection) /xx = for example /03 for 3m long cable	
Mechanical options A = None B = IP67 protection	
Electronical options 00 = None	



Electrical characteristics

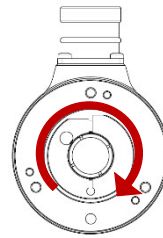
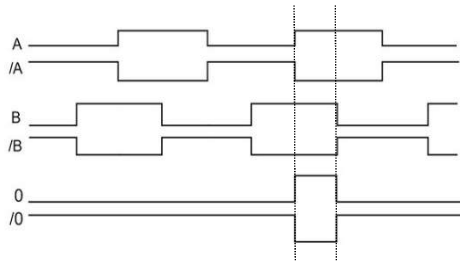
PPCA electronics

Output stage: Push-Pull – compatible RS422
 Power supply: 4.75 ... 32Vdc
 Consumption without load:
 at 5Vdc = 300 mA
 at 12Vdc = 80 mA
 at 24Vdc = 30 mA
 at 32Vdc = 25 mA
 Protected against over-voltage, polarity inversion and overcurrent



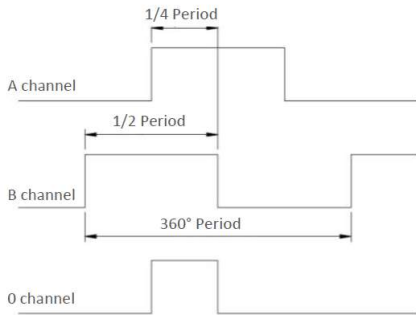
Output signals

0 calibrated on A & B (standard)



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

Signals tolerance

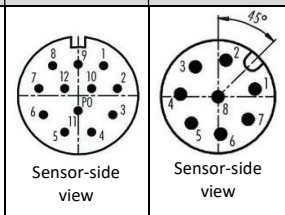


Period: electrical 360°
 Duty cycle: 180° ± 10%
 Phase shift: 90° ± 25%
 Starting time: less than 100ms

Connections type 1

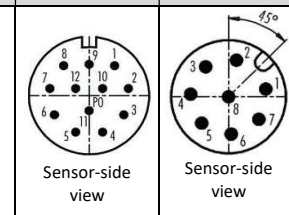
Connector 1

Standard connection	M23 - 12 pins CW	M12 - 8 pins	Cable 8 wires
Power supply -	1	1	White
Power 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
NC	9 – 10 – 11 – 12	/	/



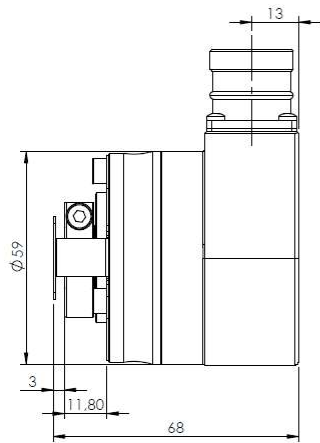
Connector 2

Standard connection	M23 - 12 pins CW	M12 - 8 pins	Cable 8 wires
Power supply -	1	1	White
Power supply +	NC	NC	NC
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
NC	9 – 10 – 11 – 12	/	/

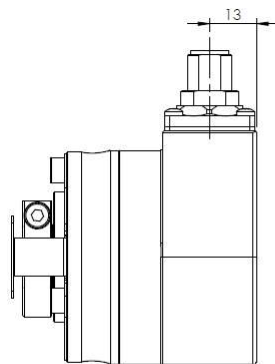
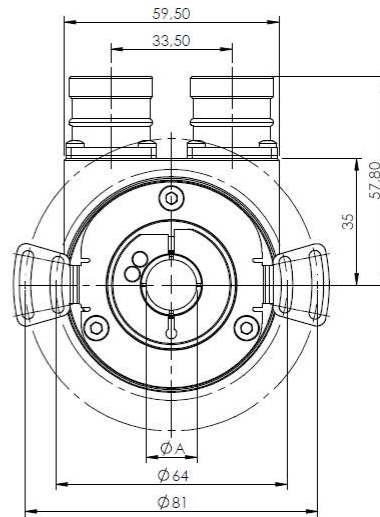


Tel : +33 (0)3 88 02 09 02 / Fax : +33 (0)3 88 02 09 03 / E-mail : info@ak-industries.com / Web : http://www.ak-industries.com

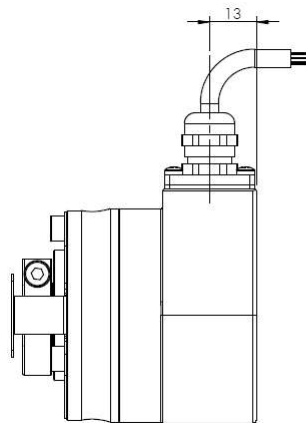
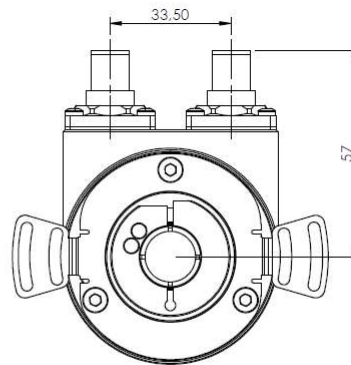
Dimensional drawing



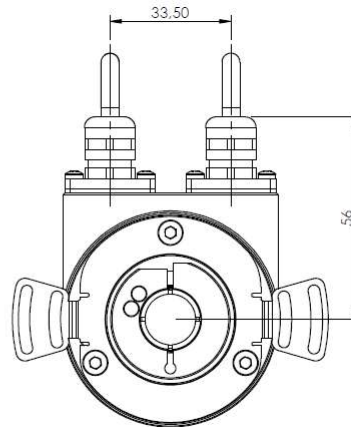
M23 – 12 pins
(CW)
Radial output (AR)



M12 – 8 pins
(A-coded)
Radial output (FR)



PVC cable
Standard length 2m
Radial output (GR)



Reference	Bore diameter (A)	Bore depth
CIOD58_T06	Ø6 H7	30
CIOD58_T08	Ø8 H7	30
CIOD58_T10	Ø10 H7	30
CIOD58_T12	Ø12 H7	30
CIOD58_T14	Ø14 H7	30
CIOD58_T15	Ø15 H7	30