

CAO58P – SSI ABSOLUTE SINGLE TURN ENCODER Ø58 – SOLID SHAFT

Technical characteristics:

Technology	Optical reading for the measurement of the angular position (optocoupler)
Input for the choice of the code direction	Input at POWER+ = CW increasing code Input to GND = CCW increasing code Input at POWER+ for 10µS = reset
Input Reset (Reset to Zero)	(optocoupler)
Accuracy	+/- 2LSB
Repeatability	+/- 1LSB
Power Supply	4.75 - 32Vdc (measured at the encoder terminals)
Current consumption	at 4.75 V = 250mA and at 32 V = 80 mA without load
Output stages	RS422 line driver
Output interface	SSI and BISS-C
Max frequency Clock in BISS-C	10 MHz
Max frequency Clock in SSI	4 MHz
Transmission length	1200 M (with shielded cable and twisted in pairs)
Max resolution	18 bits
Max rotation speed permissible	12000 rpm
Max rotation speed continuous	9000 rpm
Axial load	50N
Radial load	100N
Material	body and cover: Aluminum (Rohs) Shaft: Stainless steel
Protection class	IP65 (IP67 optional) Connections M23 male connector - 12 pins CW M23 male connector - 12 pins CCW PVC cable 8 wires (standard length: 2m) approx. 300 g Operating temperature -20 ° C... + 100 ° C Storage temperature -40 ° C... + 100 ° C
Weight	



Ordering reference

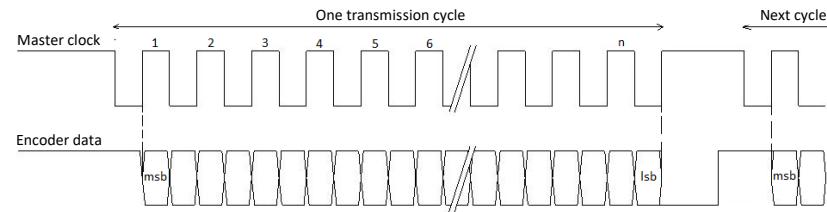
CAO58P_10 - C-SSI-B - 16 - AA1 - A0

Model	
CAO58P	
Shaft diameter	
06 = Ø6mm	
10 = Ø10mm	
Other dimensions on demand	
Power supply	
C = Power supply 4.75 - 32Vdc	
Output stage	
SSI = SSI Transmission (norm RS422)	
BISS = BISS-C Transmission	
Code format	
B = binary (SSI or BISS-C)	
G = gray (only with SSI)	
Resolution	
Resolution: 8 to 18 bits by power of 2	
8 = 8 bits (256 points/rotation)	
18 = 18 bits (262 144 points/rotation)	
Connections	
A = M23 male connector - 12 pins CW	
B = M23 male connector - 12 pins CCW	
G = PVC cable – 8 wires	
Other: please contact us	
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	
Electronical options	
0 = Aucune option	

Electrical characteristics

Power supply: 4.75-32V (measured at the encoder terminals)
Consumption without load: at 4.75 V= 250mA and at 32 V =80 mA
Protected against over-voltage, polarity inversion and overcurrent

SSI Transmission

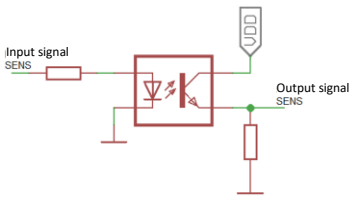


Encoder preset

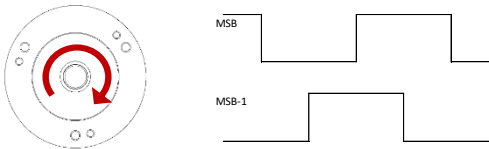
To do a preset of the value, put the pin «RAZ» at the «POWER+» for at least 10µs. To prevent any defect, please do it when the encoder is stopped.
For an optimal protection against parasites, connect the «RAZ» pin to the «POWER-» when unused.



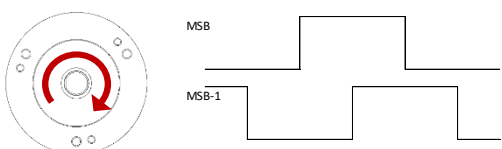
Choice for the counting direction



When the « SENS » input isn't connected to anything :
The counting direction will be increasing, in the CW rotation seen on shaft



When the « SENS » input is connected to « POWER + » :
The counting direction will be decreasing, in the CW rotation seen on shaft

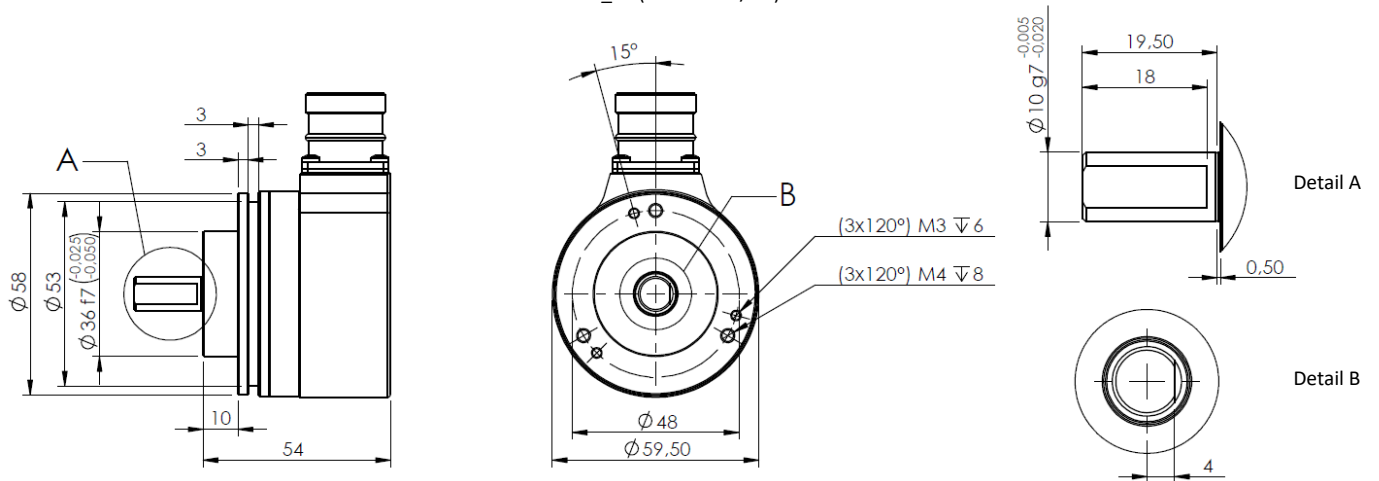


Standard connection (Type 1)

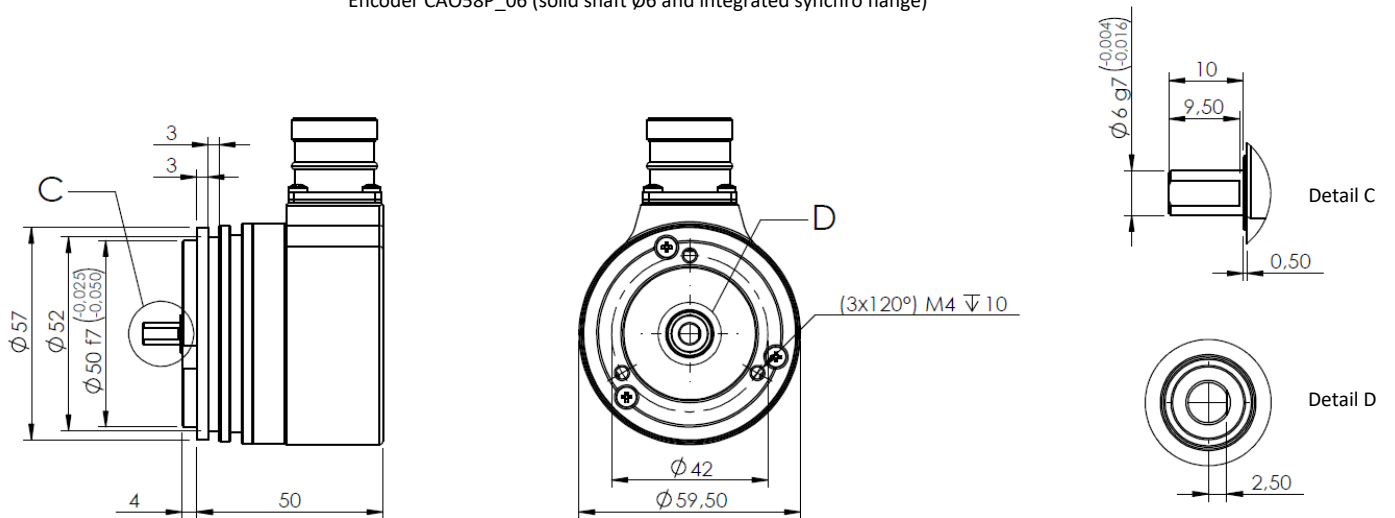
Standard connection	M23 12 pins - CW	M23 12 pins - CCW	Cable – 8 wires
Power +	1	8	Brown
Power -	2	1	White
CLK+	3	3	Green
Data+	4	2	Yellow
RAZ	5	6	Grey
Data-	6	10	Pink
CLK-	7	11	Blue
SENS	9	5	Red



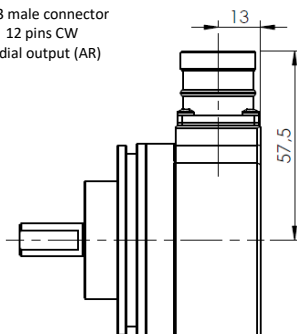
Encoder CA058P_10 (solid shaft Ø10)



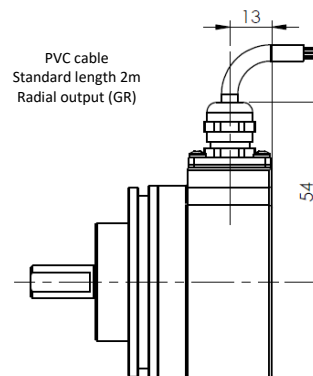
Encoder CA058P_06 (solid shaft Ø6 and integrated synchro flange)



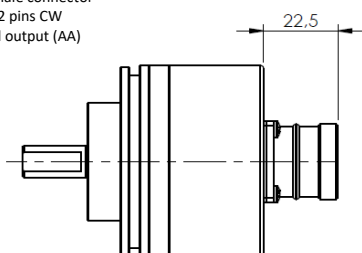
M23 male connector
12 pins CW
Radial output (AR)



PVC cable
Standard length 2m
Radial output (GR)



M23 male connector
12 pins CW
Axial output (AA)



PVC cable
Standard length 2m
Radial output (GA)

