C2 ENCODER



A new compact encoder with internal bearing and coupling was tested and approved by our Engineering Department. This encoder called “C2” will be used with our small DC motors R and F series.

It is intended to replace gradually both K10 and C4 encoders (36 mm diameter).

On the K10 kit encoder the disk is directly fitted on the motor second shaft extension. For this reason the reliability is directly related on the risk of axial displacement of the shaft or the geometric default of the 2nd shaft (run out).
In addition the K10 encoder resolution is limited to 500 ppr.

The C4 encoder with integrated bearing and coupling don’t have theses disadvantages. However the price was too high and limited the sales. It was only used in critical cases when the K10 encoder didn’t solved the need.
The maximum resolution of the C4 encoder is 2500 ppr.

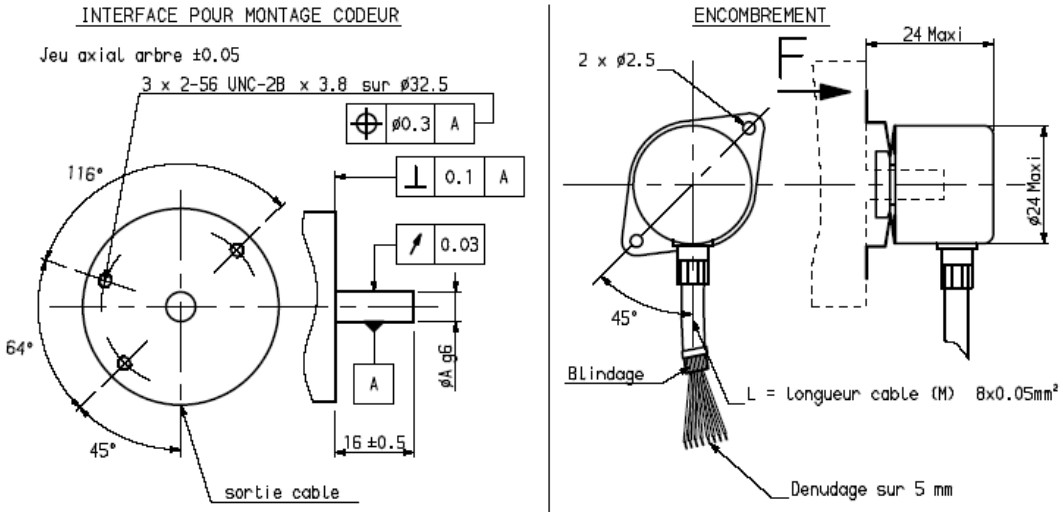
This is why the C2 encoder (diameter 24 mm) has the advantages of the C4 encoder and also a very competitive price, which is lower than the K10 encoder. Also the maximum resolution is of 7500 ppr.
The cable, in standard version, is 1m length, but on request, it is possible to have a longer cable.

The weakness of this encoder can be the fitting using a stainless steel spring plate with a limited mechanical resistance.
Other model of encoder (C3) with a stronger fitting is actually on test and will probably replace the C4 when the C2 encoder isn’t strong enough.

The encoder protection is IP64 but the associated motors are only in IP40.

Dimension and fitting

Exactly the same motor mechanical interface is requested to fit a C2 encoder than a K10 or C4, using 2 screws at 180° on a 32.5 mm diameter.
In order to fit the encoder on the motor you should purchase in addition the fitting kit **220071R0025**.

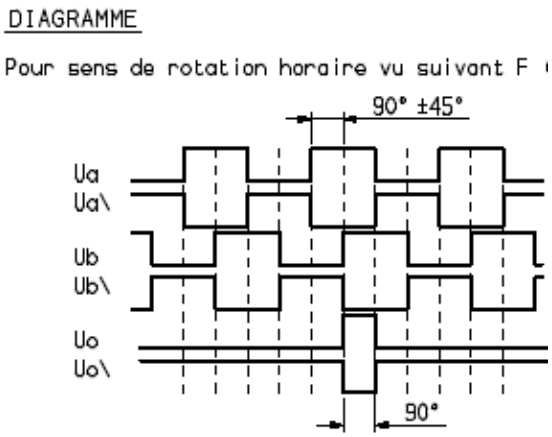


Features

Tracks	A, B, Z, A/, B/, Z/
Supply voltage	5V +/- 5%
Input current (no load)	35 mA
Output signals	Square incremental waveform, inverted, differential (RS422A compatible)
Max load output	20 mA
Phasing	90°+/- 45
Max. pulse frequency	200 kHz
Protection	IP64
Weight	< 35g
Max. revolution	12 000 rpm
Operating temp.	- 40℃ to 85℃
Storage temp.	- 40℃ to 85℃
Vibration	(10 - 2000Hz) / 10G
Max shock	100G / 11 ms

Connections

Red	+ 5V
Blue	0V
Pink	A
Grey	A/
Green	B
Yellow	B/
White	Z
Brown	Z/



Usual references

Reference	Pulses/Rev	Shaft Diam	Remarks	Long cable
220215P0001	500	6		1m
220215P0002	500	4	for RS1	1m
220215P0004	1000	6		1m
220215P0012	1000	4	for RS1	1m