

## INCREMENTAL ENCODER

- Optical Incremental encoder, Industry Standard Size 38mm
- Robustness and excellent resistance to shocks / vibrations.
- High protection level IP65, IP67 option with a sealing flange
- Maximum pulses per turn 3 600ppr
- Universal electronic circuits from 5 to 30 Vdc
- High performances in temperature  $-30^{\circ}\text{C}$  to  $100^{\circ}\text{C}$  (option  $-40^{\circ}\text{C}$ ).
- 300 kHz Maximum Frequency.



### ELECTRICAL CHARACTERISTICS

Output Circuit	RS422 (TTL-compatible)	Push-pull (HTL)
Supply Voltage	5V or 5-30V	5-30V
Current Consumption	40 mA (max)	40 mA (max)
Impulse Frequency	300 kHz (max)	300 kHz (max)
"Low" signal level	VOL < 0,5 V	VOL < 2.5 V
"High" signal level	VOH > 2.5 V	VOH > Vcc - 3 V
EMC	EN61000-6-2 and EN61000-6-4	

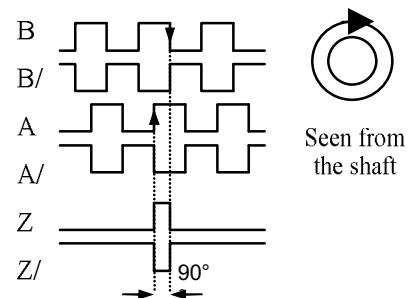
### MECHANICAL CHARACTERISTICS

Housing	Aluminium
Shaft	Stainless Steel
Bearings	Ballraces
Maximum number of revolutions permitted mechanically	10 000rpm
Bearings lifetime	$1 \times 10^{10}$ rev
Rotor inertia moment	30 gcm <sup>2</sup>
Starting Torque	< 0.5 N cm
Maximum load permitted on shaft	Axial 5N, Radial 10N
Protection	IP 65
Operating Temperature	$-30^{\circ}\text{C}$ ... $+100^{\circ}\text{C}$
Storage Temperature	$-40^{\circ}\text{C}$ ... $+100^{\circ}\text{C}$
Shock resistance	100g, 6ms (IEC 68-2-27)
Vibration resistance	100g, 6ms (IEC 68-2-27)
Weight	500g
Axial or radial connection	Cable 2 metres (other cable lenght available on order)

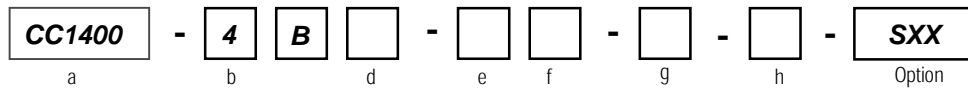
### CONNECTION AND OUTPUT SIGNALS

Function	Cable Colour Code
0 Volt	white
+ Volt	brown
A	green
B	yellow
0	grey
$\bar{A}$	pink
$\bar{B}$	blue
$\bar{0}$	red
Ground case	shielding

### Output waveforms



## ORDERING CODE



**a Series**

Incremental Encoder

**b Shaft Type**

4= Blind hollow shaft

**d Shaft size**

6,8mm

**e Power supply**

2= 5Vdc

6= 5-30Vdc

**f Output circuit**

3 = Driver 5Vdc RS422 (TTL)

5 = Push-Pull 5-30Vdc (HTL)

**g Pulse per Revolution**

1024,2048,2500....

**h Connector**

N = Cable Radial 2m

## MECHANICAL DRAWINGS

Blind Hollow shaft , Radial Cable exit 2m

