

# **INCREMENTAL ENCODER**

- Optical Incremental sensing, Industry Standard Size 24mm
- Robustness and excellent resistance to shocks / vibrations
- Max pulses per turn 10 000ppr
- Universal complementary push-pull (short circuit protected, 7272) RS422 compatible with 5 V supply voltage



# 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 |                 |

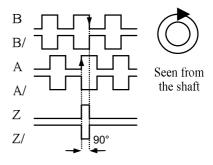
## MECHANICAL CHARACTERISTICS

| Housing                                                        |
|----------------------------------------------------------------|
| Shaft Bearing Stainless Steel                                  |
| Shaft fixation Front or Rear clamp                             |
| Bearings Ballraces                                             |
| Maximum number of revolutions permitted mechanically 12 000ppr |
| Bearings lifetime 1x10 <sup>10</sup> rev                       |
| Rotor inertia moment 30 gcm²                                   |
| Starting Torque <= 0.5 N cm                                    |
| Maximum load permitted on shaft                                |
| Protection IP 65                                               |
| Operating Temperature -30°+100° C                              |
| Storage Temperature -40°+100° C                                |
| Shock resistance 100g, 6ms (IEC 68-2-27)                       |
| Vibration resistance 100g, 6ms (IEC 68-2-27)                   |
| Weight                                                         |

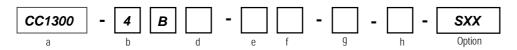
### CONNECTION AND OUTPUT SIGNALS

| Function    | Cable<br>Colour Code |
|-------------|----------------------|
| 0 Volt      | white                |
| + Volt      | brown                |
| A           | green                |
| В           | yellow               |
| 0           | grey                 |
| Ā           | pink                 |
| B           | blue                 |
| Ō           | red                  |
| Ground case | shielding            |

## **Output waveforms**



### ORDERING CODE



a Series

Incremental Encoder

b Shaft Type

4= Blind hollow shaft

d Shaft size

4,6mm

e Power supply

2 = 5Vdc

6= 5-30Vdc

f Output circuit

3 = Driver 5Vdc RS422 (TTL)

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

**9** Pulse perRevolution

1024,2048.2500....

h Connector

N = Cable Radial 2m

### MECHANCIAL DRAWINGS

#### Cable connection with 2m cable

