

### INCREMENTAL ENCODER

- Optical Incremental encoder, Industry Standard Size 90mm
- Through hollow shaft 45mm with reduction hubs in aluminium of 12,16,20,25,30 and 42mm
- Easy mounting for the hollow shafts thanks to DAC (Anti-Coupling Device)
- Robustness and excellent resistance to shocks / vibrations.
- Maximum 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	

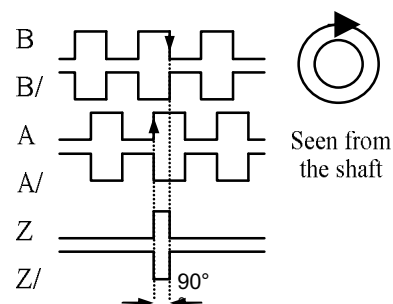
#### MECHANICAL CHARACTERISTICS

Housing	Aluminium
Shaft	Stainless Steel
Shaft fixation	Front or Rear clamp
Bearings	Ballraces
Maximum number of revolutions permitted mechanically	6000 rpm
Bearings lifetime	1x10 <sup>6</sup> rev
Rotor inertia moment	30 gcm <sup>2</sup>
Starting Torque	< 0.5 Nm
Maximum load permitted on shaft	Axial 20 N,Radial 50 N
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	0.8 kg

#### CONNECTION AND OUTPUT SIGNALS

Function	Cable Colour Code	12 Pin Connector
0 Volt	white	1
+ Volt	brown	2
A	green	3
B	yellow	4
0	grey	5
Ā	pink	6
B̄	blue	7
0	red	8
Ground case	shielding	shielding

#### Output waveforms



## ORDERING CODE

<b>CC1900</b>	-	<b>4</b>	<b>T</b>		-			-			-	<b>SXX</b>
a		b		d		e	f		g	h	j	Option

a **Series**  
Incremental Encoder

b **Shaft Type**  
4=hollow shaft

d **Shaft size**  
12,16,20,25,30,42 and 45mm

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**  
1024,2048,4096....

h **Connector Location**  
2=Radial

j **Connection**  
6= 2m Cable (standard)  
8= M23 Connector  
9= Terminal Box

## MECHANICAL DRAWINGS

With Radial CABLE - With M23 CONNECTOR

