

## INCREMENTAL ENCODER

- Sturdy model to Industry Standard, 120mm housing
- Through hollow shaft 60mm with reduction hubs in aluminium of 38,40 and 45mm
- Easy mounting for the hollow shafts thanks to DAC (Anti-Coupling Device)
- Robustness and excellent resistance to shocks / vibrations.
- Maximum pulses per turn 8192 ppr
- Universal complementary push-pull (short circuit protected, 7272)  
RS422 compatible with 5 V supply voltage
- 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	

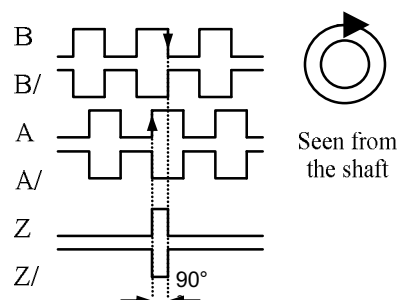
### MECHANICAL CHARACTERISTICS

Housing	Aluminium
Shaft	Stainless Steel
Shaft fixation	Front or Rear clamp
Bearings	Ballraces
Maximum number of revolutions permitted mechanically	6000 rpm
Bearings lifetime	$1 \times 10^{10}$ rev
Rotor inertia moment	80 gcm <sup>2</sup>
Starting Torque	< 6 N cm
Maximum load permitted on shaft	Axial 80N, Radial 100N
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	900g

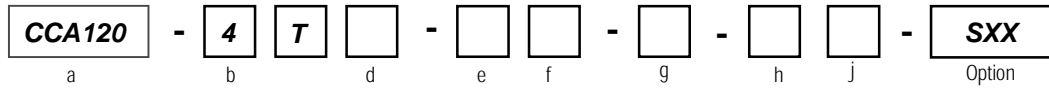
### CONNECTION AND OUTPUT SIGNALS

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

#### Output waveforms



## ORDERING CODE



- |   |  |
|---|--|
| <p>a <b>Series</b><br/>Incremental Encoder</p> <p>b <b>Shaft Type</b><br/>4=hollow shaft</p> <p>d <b>Shaft size</b><br/>30,35,38,40,45,50 and 60mm</p> <p>e <b>Power supply</b><br/>2= 5Vdc<br/>6= 5-30Vdc</p> <p>f <b>Output circuit</b><br/>3 = Driver 5Vdc RS422 (TTL)<br/>5 = Push-Pull 5-30Vdc (HTL)</p> | <p>g <b>Pulse per Revolution</b><br/>1024,2048,4096....</p> <p>h <b>Connector Location</b><br/>2=Radial</p> <p>j <b>Connection</b><br/>6= 2m Cable (standard)<br/>8= M23 Connector</p> |
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## MECHANICAL DRAWINGS

Flange with spring plate, Radial Cable exit 2m

