



## Scancon 2SUN



### Introduction

This encoder is especially designed for use on outdoor solar cells, solar parabols and other solar energy systems.

To avoid corrosion nearby the ocean or other harsh environments the encoder housing and the encoder cap are made of ocean grade aluminium anodized with maximum possible surface treatment of 22 microns.

The shaft is of stainless, and the cable gland of nikkel plated brass.

### MECHANICAL SPECIFICATIONS

Material	Housing - ocean grade aluminum anodized to 22 microns Shaft - Coarse Stainless Bearings - Lifetime lubricated ball bearings
Shaft Loads	axial maximum = 20N radial maximum = 20N
Max. rev.	9,000 rev./min.
IP-rating	Standard IP 67
Starting Torque	< 0,005 Nm at 25° C
Mass Moment of Inertia	0,8 g/cm <sup>2</sup>
Shock	maximum 100G / 11 ms
Bump	10G - 16 ms (1000 X 3 axis)
Vibration	(10-2000Hz)/ 10G

### ELECTRICAL SPECIFICATIONS

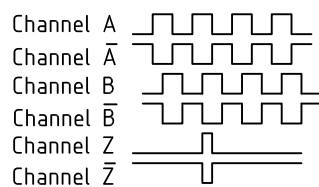
Output Waveform	Incremental (A, A-, B, B-, Z, Z-)
Output Signals	Standard Inverted Differential Line driver OL 7272 RS-422A compatible @ 5 Volt
Current No Load	35 mA
Maximum Load per Output	20 mA*
Supply Voltage	minimum 4.5 V to maximum 30 V (Reverse polarity protection)
V <sub>out</sub> low	maximum 500 mV @ I = 10 mA
V <sub>out</sub> high	minimum (Vin -0.6) @ I = -10 mA minimum (Vin -1.3) @ I = -25 mA

Operating Temperature - 40°C to +85°C

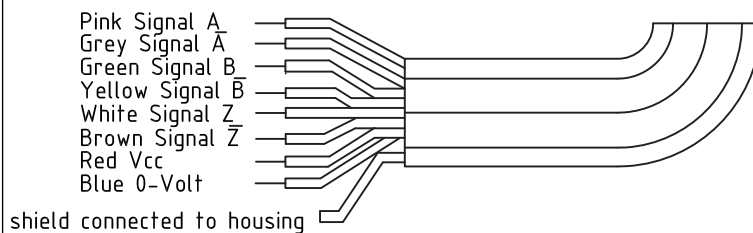
Storage Temperature - 40°C to +85°C

## OUTPUT WAVEFORM

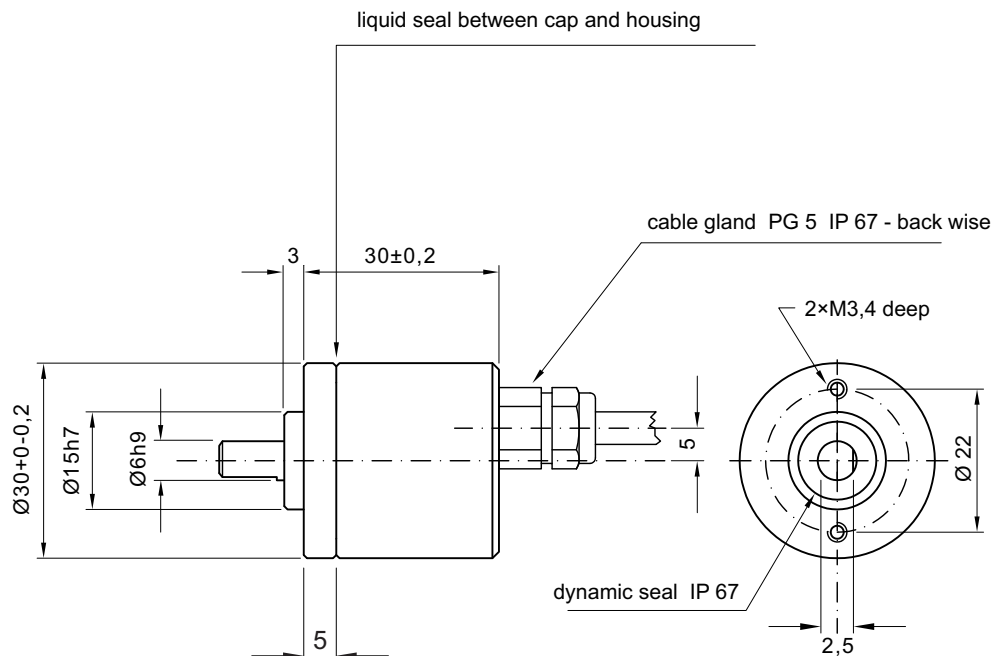
↻ CW Seen from the shaft end

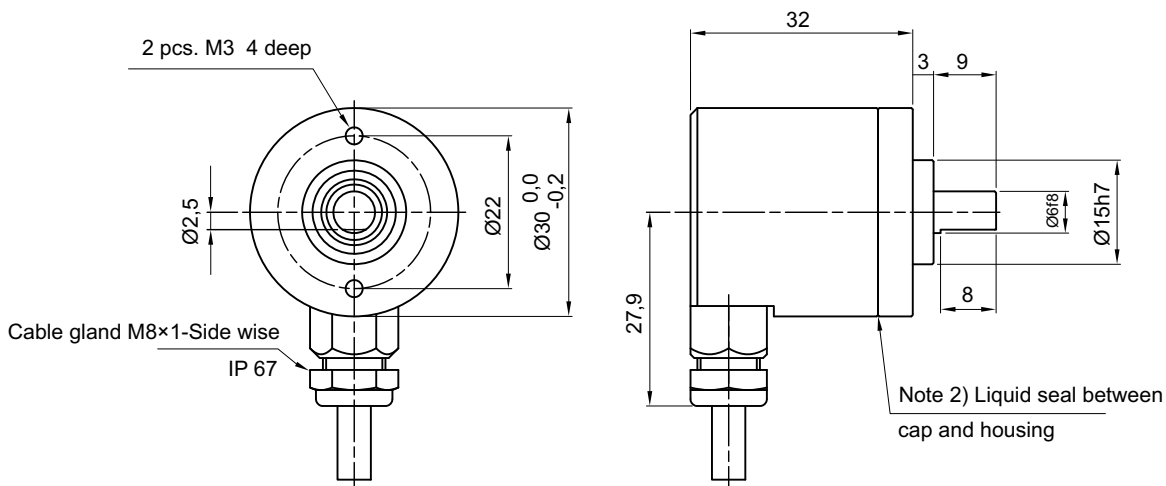


## CONNECTIONS



## MECHANICAL DIMENSIONS





## Warranty

Scancon A/S warrants against manufacturing defects for a period of 24 months from the date of manufacture. Product dimensions, weights and all product illustrations are approximate and may be modified without prior notice.

This warranty does not cover problems or consequences due to common usage (wear and tear) for which the product was designed. Nor does it cover product failures caused by improper installation or use, overloading, incorrect maintenance, or operation outside the product's specifications.

Detailed warranty information can be found in Scancon's Terms & Conditions

**ORDERING CODES**
**Ordering Codes System  
Incremental Shaft Encoder — 2SUN**

Ordering Codes: 2SUN      XXXX — X — XXXX — XX — XX — X

Pulses pr. rev:	No. of pulses	XXXX				
	4    60    256	2500				
	10   75    300	3000				
	11   90    360	3600				
	12   100   400	5000				
	15   125   500	7500				
	25   150   600					
	30   180   1000					
	36   200   1250					
	50   250   2048					
Output signal:	Normal, Standard, A, B, Z (3 channels)	N				
	Differential: A, B, Z and A-inv, B-inv, Z-inv (6 channels)	D				
	Line driver OL 7272 for extra long cable, up to 100 meters (Differential)	M				
	Line driver chip 26C31 (V out low <0,4 V) (RS-422A compatible @ 5V) Only 5 Volt (Differential)	L				
Shaft dimensions:	Ø6 × 9 mm (Flat and Shaft)	06 × 9				
IP-rating:	IP 67	67				
Round Cable Length of cable:	Standard 1 meter No. of meters	01 XX				
Round Cable take out:	Side Back	S B				