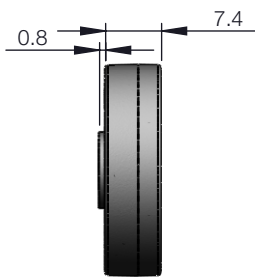


# Control of DC Motors

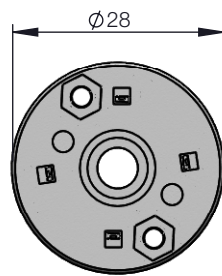
## Dual Channel Encoder (Capacitive)

Issue: 01

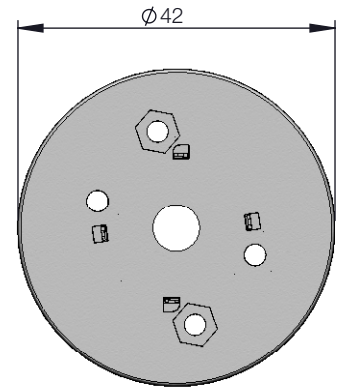
The incremental dual channel encoder is available across our modular range of brushed and brushless DC motors and gearboxes. The encoder has a 48 line quadrature output (giving 192 positions per rev with signal processing). A capacitive design based around a custom ASIC, the encoder can successfully operate over a wide range of temperatures and is unaffected by external magnetic forces. The ASIC has internal amplification and can directly drive TTL logic. For use with our ovoid gearbox range there are two different size variants, both provide a sandwich mount between our standard single shaft DC motors and gearboxes. For our planetary gearbox range the encoder fits neatly into the motor endplate resulting in no additional length.



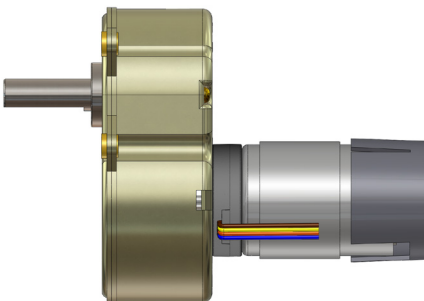
28mm encoder



42mm encoder



### Typical Applications



Cad drawing to be added later

230 Gearbox with 28mm encoder and D2938 motor

PG24 Gearbox with integral encoder and D2431 motor

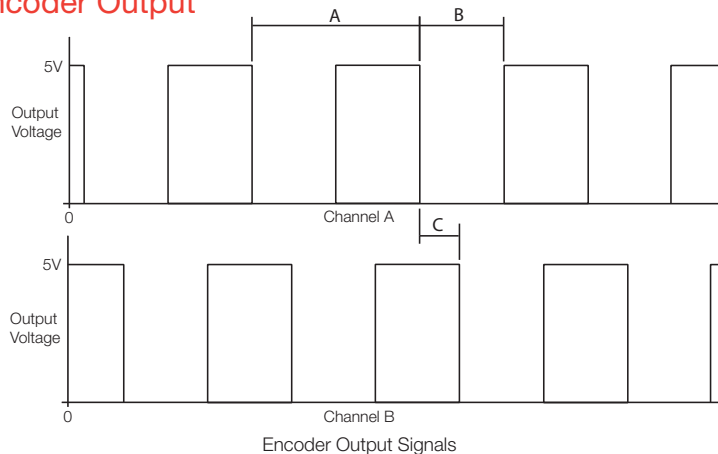
### General Specification

Number of Channels	2
Pulses per Motor rev.	48
Output	TTL
Supply Voltage	5 Vdc ±10%
Pulse Width (B)	180°±76°
Phase Shift (C)	90°±70°
Frequency Range	up to 48Khz (10Krpm)
Operating Temperature	-40 to +80°C

### Wiring Colour Code

+5V	Brown
Ground	Blue
Channel A	Yellow
Channel B	Orange

### Typical Encoder Output



### Contact:

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