

12mm Rotary Encoder

Type DP12 Series

Type DP12 Series



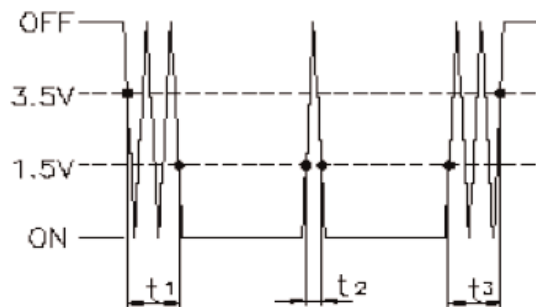
12mm Rotary incremental encoder for use in electronic equipment. Can be supplied with or without switch with customisation to standard options.

Key Features

- 12mm Rotary Encoder
- Incremental Type
- Push on Switch Option
- Various Shaft Lengths
- Pulse Options
- Detent Options

Characteristics - Electrical

| | |
|-------------------------------------|----------------------------------|
| Pulses: | 12 & 24 |
| Contact Rating: | 0.5mA 5VDC |
| Dielectric Strength: | 300VAC / 1mA, 1 minute |
| Insulation Resistance (min): | 100M ohms at 250VAC |
| Operating Speed (RPM): | 60 RPM |
| Switch Power Rating (where fitted): | 5VDC, 10mA (1mA Min) |
| Switch Contact Resistance: | 100m ohm Max |
| Electrical Travel: | Continuous |
| Rotational Noise: | t2 = 2.0 ms max (see below) |
| Chattering: | t1 & t3 = 3.0 ms max (see below) |



Code Off area V = 3.5V or more. Code on area V=1.5V or less









Characteristics - Mechanical

| | |
|---------------------------------------|--------------------|
| Total Mechanical Travel: | Continuous |
| Detents: | 0, 12, 24 |
| Switch Operating Force: | 500+/- 100gf |
| Switch Travel: | 0.5mm |
| Shaft Type: | F – Flatted |
| Shaft Length (from Mounting Surface): | 17.5, 20, 22.5, 25 |

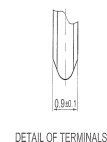
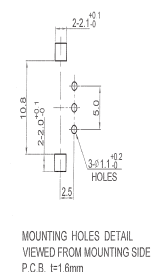
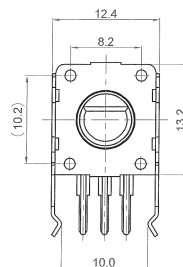
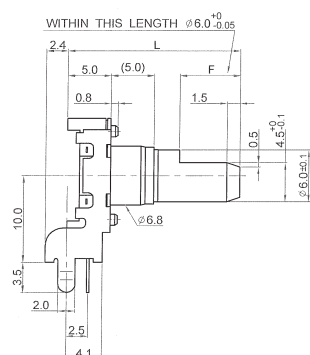
Characteristics - Environmental

| | |
|-----------------------|---------------------|
| Operating Temperature | -30 ~ +70 degrees C |
| Rotational Life | 15,000 Cycles |

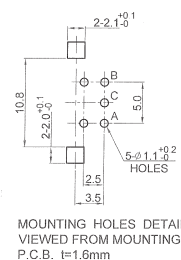
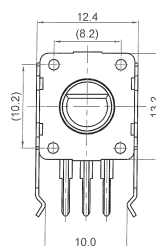
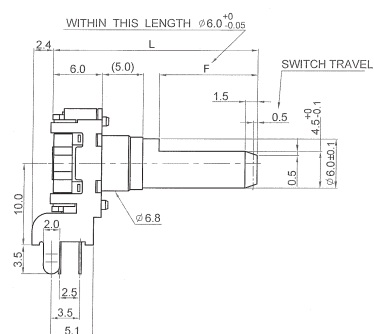
Output Signal Format

| Shaft Rotational Direction | Signal | Format |
|----------------------------|------------------|---|
| Clockwise | A (Terminal A-C) | OFF  ON  |
| | B (Terminal B-C) | OFF  ON  |
| Anticlockwise | A (Terminal A-C) | OFF  ON  |
| | B (Terminal B-C) | OFF  ON  |

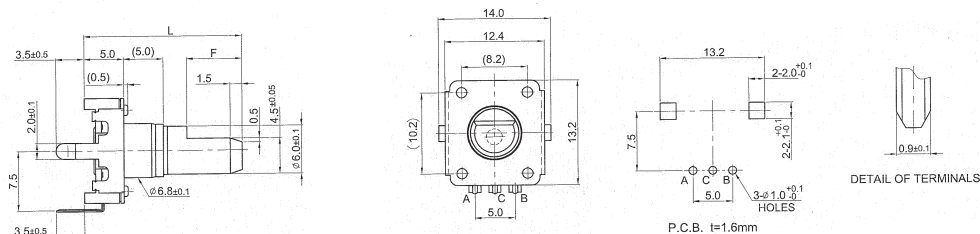
Dimensions DP12H



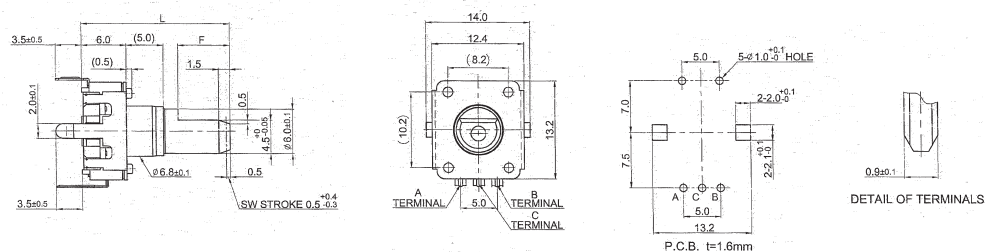
DP12SH



Dimensions DP12V



DP12SV



Shaft Length

| L | 17.5 | 20 | 22.5 | 25 |
|---|------|----|------|----|
| F | 5 | 7 | 7 | 12 |

How to Order

| DP12 | H | N | 12 | A | 20 | F |
|---|--------------------------------|--|----------------------------------|---------------------------|--|-------------|
| Common Part | Orientation | Detent | Pulses | Bush Details | Shaft Length | Shaft Style |
| DP12 – No Switch DP12S – With Switch | H - Horizontal V - Vertical | N - None 12 – 12 clicks 24 – 24 Clicks | 12 – 12 Pulses 24 – 24 Pulses | A – 5mm V & H Standard | 17.5 – 17.5mm 20 – 20mm 22.5 – 22.5mm 25 – 25mm | F - Flatted |

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[TE Connectivity:](#)

[DP12SVN24A17.5F](#)