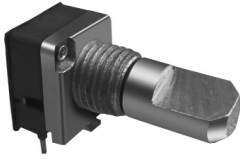


9mm Rotary Encoder

Type DP09 Series

Type DP09 Series



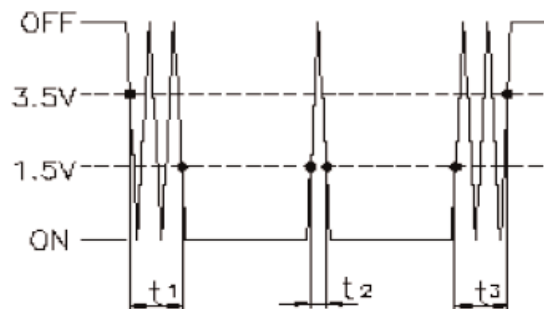
9mm Rotary incremental encoder for use in electronic equipment. Can be supplied with or without switch with customisation to standard options

Key Features

- 9mm Rotary Encoder
- Incremental Type
- Push on Switch Option
- Various Shaft Lengths
- Pulse Options
- Detent Options

Characteristics - Electrical

| | |
|-------------------------------------|----------------------------------|
| Pulses: | 12 & 15 |
| Contact Rating: | 10mA 5VDC |
| Dielectric Strength: | 300VAC / 1mA, 1 minute |
| Insulation Resistance (min): | 100M ohms at 250VAC |
| Operating Speed (RPM): | 60 RPM |
| Switch Power Rating (where fitted): | 12VDC, 0.5A |
| Switch Contact Resistance: | 100m ohm |
| Electrical Travel: | Continuous |
| Rotational Noise: | t2 = 5.0ms max (see below) |
| Chattering: | t1 & t3 = 5.0 ms max (see below) |



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








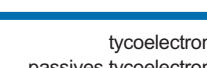
Characteristics - Mechanical

| | |
|---------------------------------------|--------------------------|
| Total Mechanical Travel: | Continuous |
| Detents: | 0, 12, 24, 30 |
| Switch Operating Force: | 400 + 400/- 200 gf |
| Switch Travel: | 1.5mm |
| Shaft Type: | F – Flatted, K – Knurled |
| Shaft Length (from Mounting Surface): | 15, 20, 25, 30 |

Characteristics - Environmental

| | |
|-----------------------|---------------------|
| Operating Temperature | -10 - +65 degrees C |
| Rotational Life | 30,000 Cycles |

Output Signal Format

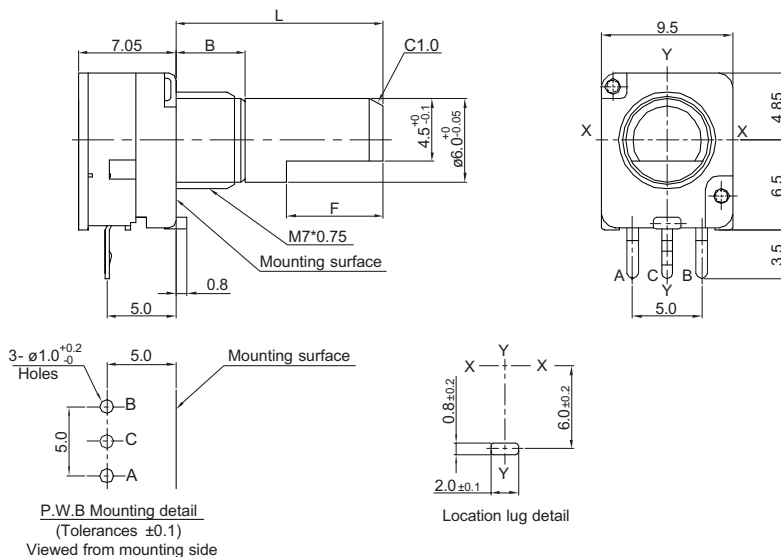
| Shaft Rotational Direction | Signal | Format |
|----------------------------|------------------|---|
| Clockwise | A (Terminal A-C) | OFF  ON  |
| | B (Terminal B-C) | OFF  ON  |
| Anticlockwise | A (Terminal A-C) | OFF  ON  |
| | B (Terminal B-C) | OFF  ON  |

Dimensions

DP09H-K



DP09H-F



DP09SH-K



Dimensions DP09SH-F



Shaft Dimensions

| Shaft | Dim. | | | | |
|-------|------|----|----|----|----|
| K | L | 15 | 20 | 25 | 30 |
| | T | 7 | 12 | 12 | 14 |
| F | L | 15 | 20 | 25 | 30 |
| | F | 7 | 12 | 12 | 12 |
| B | B | 5 | 7 | — | — |

How to Order

| DP09 | H | 24 | 12 | A | 20 | K |
|---|----------------|--|----------------------------------|---|--|----------------------------|
| Common Part | Orientation | Detent | Pulses | Bush Details | Shaft Length | Shaft Style |
| DP09 – No Switch DP09S – With Switch | H - Horizontal | N - None 12 – 12 clicks 24 – 24 clicks 30 – 30 clicks | 12 – 12 Pulses 15 – 15 Pulses | A – M7 x 5mm B – M7 x 7mm (standard) | 15 – 15mm FMF 20 – 20mm FMF 25 – 25mm FMF 30 – 30mm FMF | K - Knurled F - Flatted |

Mouser Electronics

Authorized Distributor

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[DP09SH1212A20F](#)