

## 9mm Rotary Encoder

#### **Type DP09 Series**

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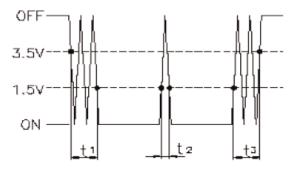
9mm Rotary incremental encoder for use in electronic equipment. Can be supplied with or without switch with customisation to standard options

#### **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       |

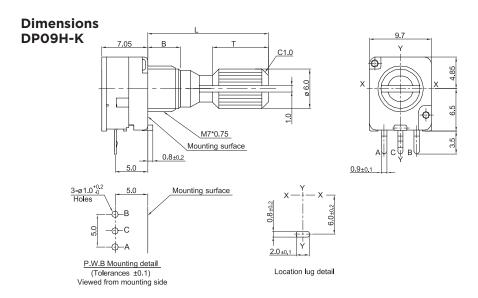
#### **Output Signal Format**

| Shaft Rotational<br>Direction | Signal           | Format  |  |
|-------------------------------|------------------|---------|--|
| Clockwise -                   | A (Terminal A-C) | OFF 7   |  |
|                               | (                | ON      |  |
|                               |                  | OFF     |  |
|                               | B (Terminal B-C) | ON      |  |
| Anticlockwise                 |                  | OFF — — |  |
|                               | A (Terminal A-C) | он      |  |
|                               | 2 (7             | OFF 7 T |  |
|                               | B (Terminal B-C) | on L    |  |

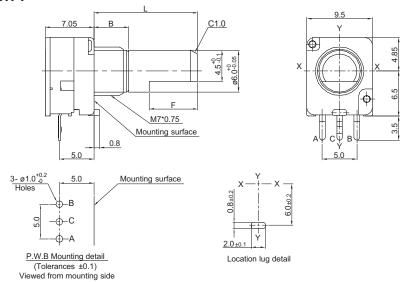




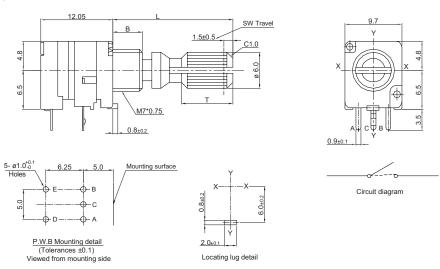
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#### DP09H-F



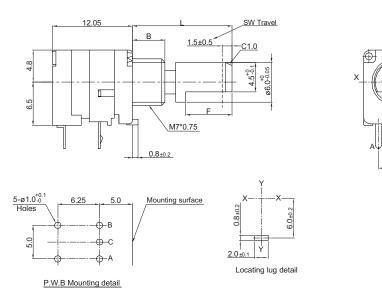
#### DP09SH-K



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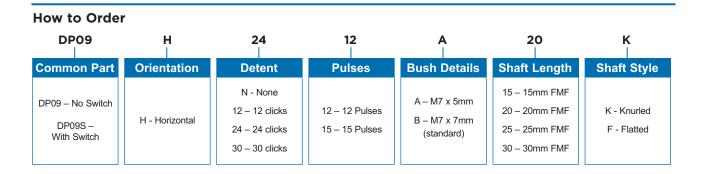
# Dimensions DP09SH-F



#### **Shaft Dimensions**

(Tolerances ±0.1)
Viewed from mounting side

| Shaft | Dim. |    |    |    |    |
|-------|------|----|----|----|----|
| K     | L    | 15 | 20 | 25 | 30 |
|       | Т    | 7  | 12 | 12 | 14 |
| F     | L    | 15 | 20 | 25 | 30 |
|       | F    | 7  | 12 | 12 | 12 |
| В     | В    | 5  | 7  | -  | -  |



# **Mouser Electronics**

**Authorized Distributor** 

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TE Connectivity: DP09SH1212B30K