12mm Rotary Encoder

Type DP12 Series

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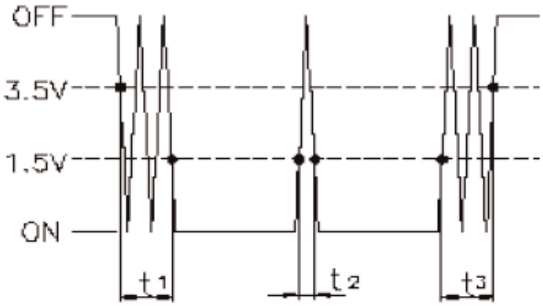
12mm Rotary incremental encoder for use in electronic equipment. Can be supplied with or without switch with customisation to standard options.

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

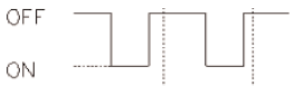
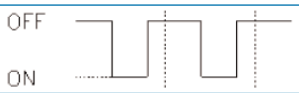
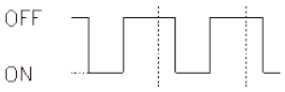
Characteristics - Mechanical

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

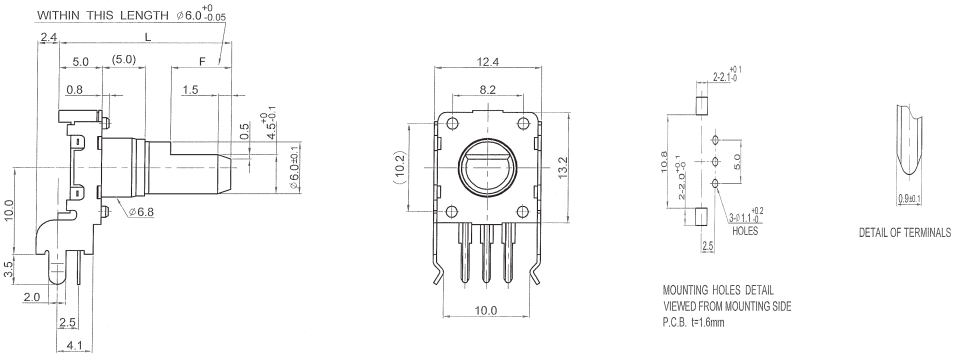
Characteristics - Environmental

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

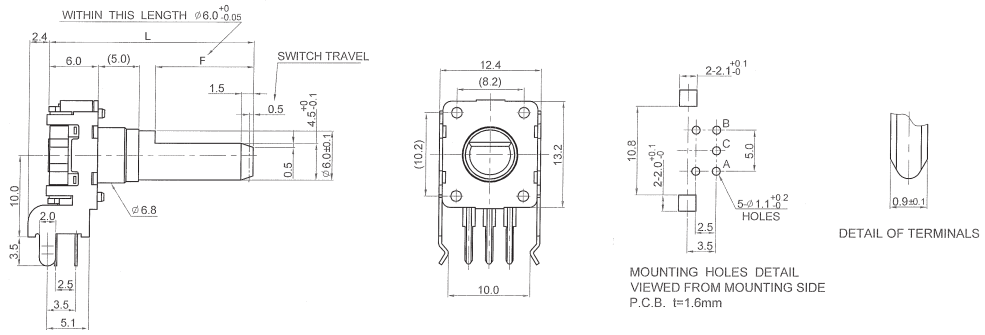
Output Signal Format

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

Dimensions
DP12H



DP12SH



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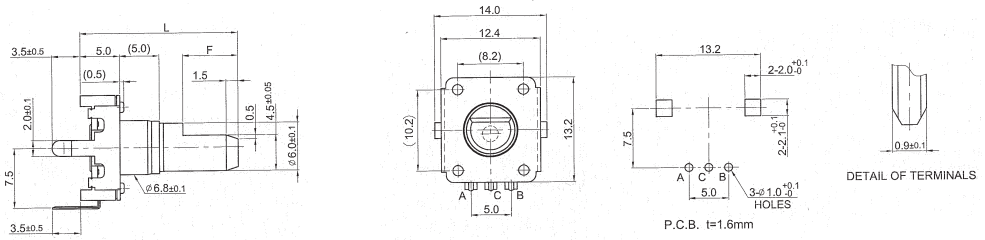
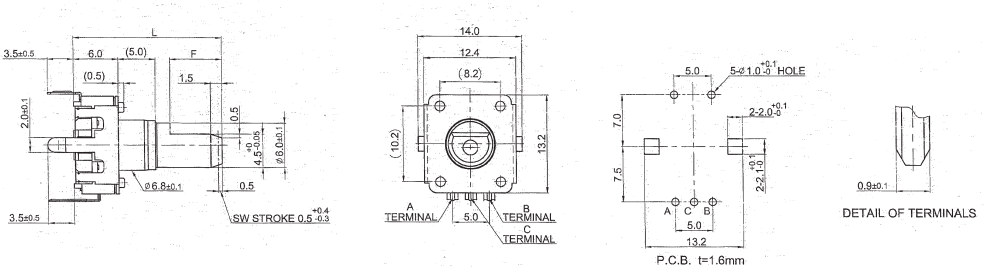
Dimensions
DP12V



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:
DP12SHN24A25F