

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

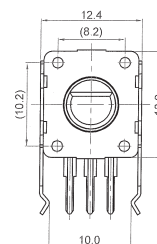
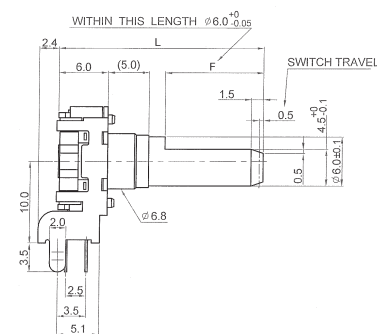
Output Signal Format

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:](#)

[DP12SV2424A20F](#)