

12mm Rotary Encoder with LED

Type DPL12 Series

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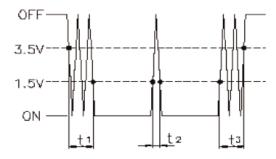
12mm Rotary incremental encoder with LED for use in electronic equipment. Can be supplied with or without switch with customisation to standard options.

Key Features

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

Characteristics - Electrical

Pulses:	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):	16VDC 3A
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		
LED	Switch – Dual colour – see below for characteristics	
	No Switch Single colour– see below for characteristics	
Colour options	No Switch – Red, Green, Blue	
	Switch - 1: Blue/Green, 2: Blue/Orange, 3: Green/Red	

Characteristics - Mechanical

Total Mechanical Travel:	Continuous
Detents:	0, 24
Switch Operating Force:	400+/- 200gf
Switch Travel:	0.5mm
Shaft Type:	F – Flatted, K - Knurled
Shaft Length (from Mounting Surface):	See Chart below

Characteristics - Environmental

Operating Temperature	-40 - +85 degrees C
Rotational Life	30,000 Cycles

Output Signal Format

Shaft Rotational Direction	Signal	Format
	A (Terminal A-C)	OFF T
Clockwise		ON
G.GG.M.I.GG	D (T I D 0)	OFF
	B (Terminal B-C)	on — L
	A (Townsing) A C)	OFF —
Anticlockwise -	A (Terminal A-C)	ON
	D (T : 100)	OFF 7
	B (Terminal B-C)	ONLJ L

Literature No. 1-1773449-0 Issued: 02-08

Dimensions are shown for reference purposes only.

Dimensions are in millimetres unless otherwise specified.

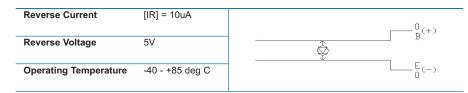
Specifications subject to change.

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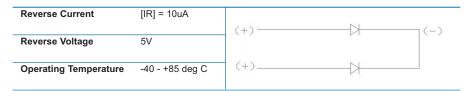
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LED Characteristics - Without Switch



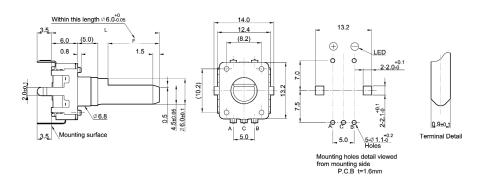
Emitted	Power	DC Forward	Forward Voltage	
Colour	Dissipation	Current	Typical	Max.
Blue	100mW	20mA	3.2V	4.0V
Red	58mW	25mA	1.8V	2.3V
Green	48mW	20mA	2.0V	2.4V

With Switch



Emitted	Power	DC Forward	Peak Forward	Forward Voltage	
Colour	Dissipation	Current	Current	Typical	Max.
Red	170mW	30mA	185mA	1.95V	2.5V
Orange	75mW	30mA	195mA	2.1V	2.5V
Blue	105mW	30mA	150mA	3.3V	4.0V
Green	105mW	25mA	130mA	3.1V	3.8V

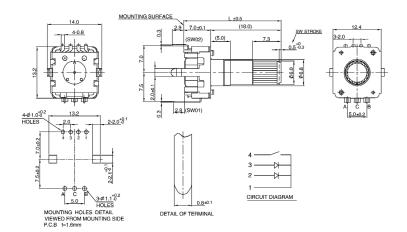
Dimensions DPL12V





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Dimensions DPL12SV



Shaft Length Without Switch

Type	Dim	Options (mm)		
K	L (from mounting surface)	24 only		
E	L (from mounting surface)	17.5	20	25
•	F	5	7	12

Shaft Length With Switch

Type	Dim	Options (mm)		
K	L (from mounting surface)		25 only	
	L (from mounting surface)	18.5	21	26
•	F	5	7	12

LED Colour Codes

Switch Option	Code	Description
	1	Blue / Green
Switch (Dual Colour)	2	Blue / Orange
	3	Green / Red
	R	Red
No Switch (Single Colour)	G	Green
	В	Blue

