

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

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[TE Connectivity:](#)

[DP09H3015B20F](#)