

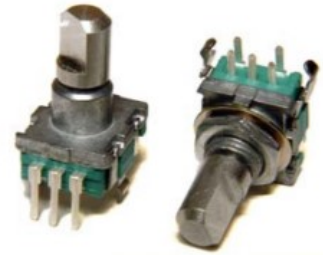
# Rotary Encoder

## Model EN11 Series



### Features:

- 11 mm
- 2 bits gray code
- Incremental/contacting type
- Metal bushing/shaft
- Push-on switch option



### Model Styles Available

Top Adjust, with Switch, Threaded Bushing	EN11-HSM
Top Adjust, without Switch, Threaded Bushing	EN11-HNM
Top Adjust, with Switch, Plain Bushing	EN11-HSB
Top Adjust, without Switch, Plain Bushing	EN11-HNB
Side Adjust, with Switch, Threaded Bushing	EN11-VSM
Side Adjust, without Switch, Threaded Bushing	EN11-VNM
Side Adjust, with Switch, Plain Bushing	EN11-VSB
Side Adjust, without Switch, Plain Bushing	EN11-VNB

### Electrical

Pulses ( Per Revolution )	15, 20
Encoder Closed Circuit Resistance	3 Ohms, max.
Encoder Contact Rating	10mA/ 5Vdc
Operating Current, Maximum	10mA
Dielectric Strength	300Vac/1mA, 1 minute
Insulation Resistance, Minimum	100M ohms at 250Vdc/ 1mA
Sliding Noise ( at 60 RPM )	2.0ms max.
Contact Bounce ( at 15 RPM)	5.0ms max.
Operating Speed ( RPM )	100 RPM max.
Switch Power rating	10mA/ 5Vdc
Switch Contact Resistance	100 milliohms
Actual Electrical Travel, Nominal	Continuous

### Mechanical

Total Mechanical Travel	Continuous
Detents ( per Revolution)	0, 20 and 30
Rotational Torque of Detent, Maximum	2.5 oz-in
Switch Operating Force	550 gf
Switch Travel	0.5mm

#### General Note

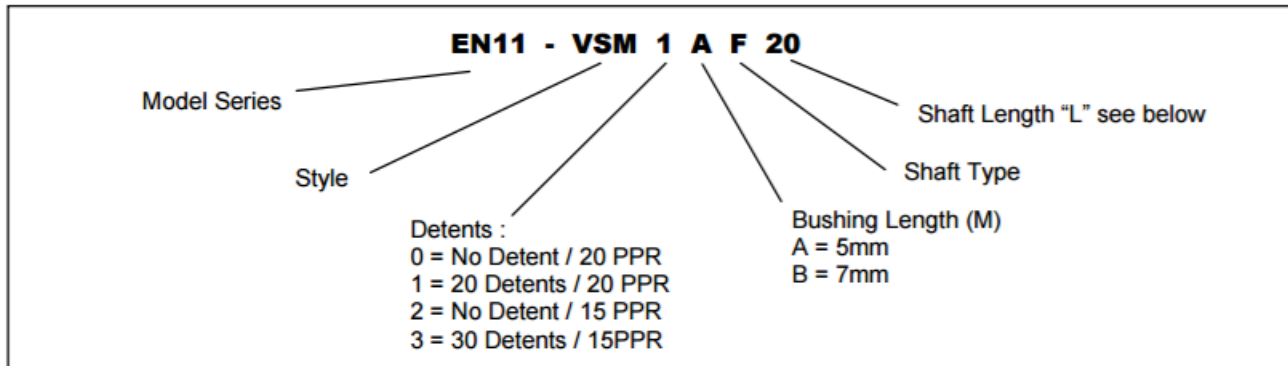
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### Environmental

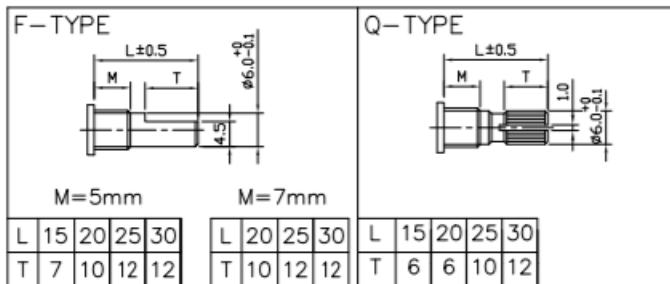
Rotational Life

30,000 cycles

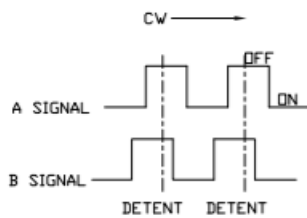
### Ordering



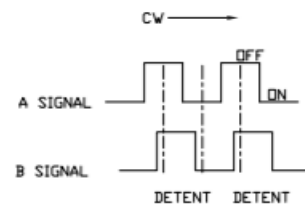
### Shaft Types



### Circuit Diagram



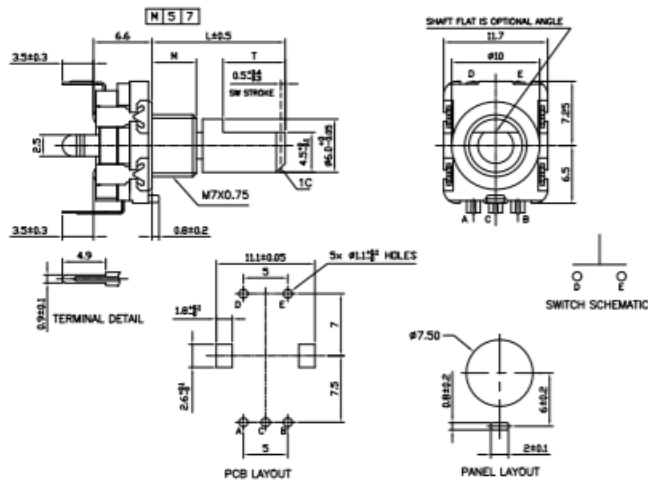
**For 20 PPR (B leads A)**



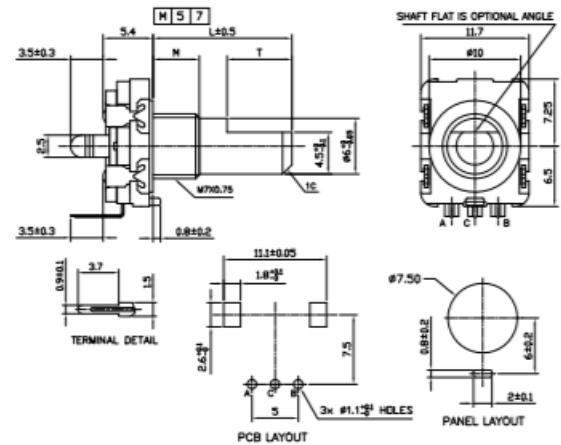
**For 15 PPR (A leads B)**

### Outline Drawings

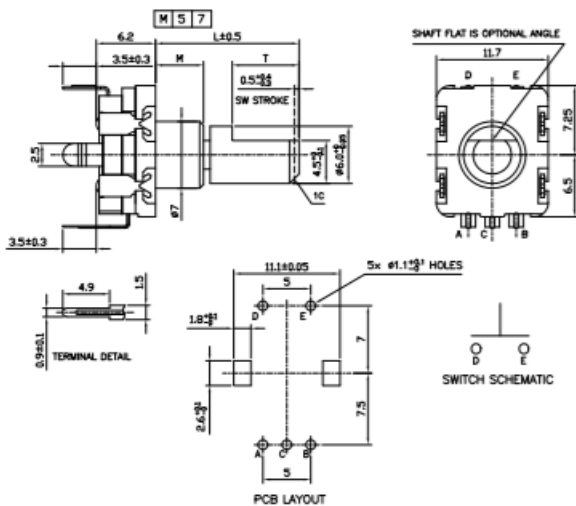
**MODEL EN11-HSM**  
(Top Adjust, with Switch, Threaded Bushing)



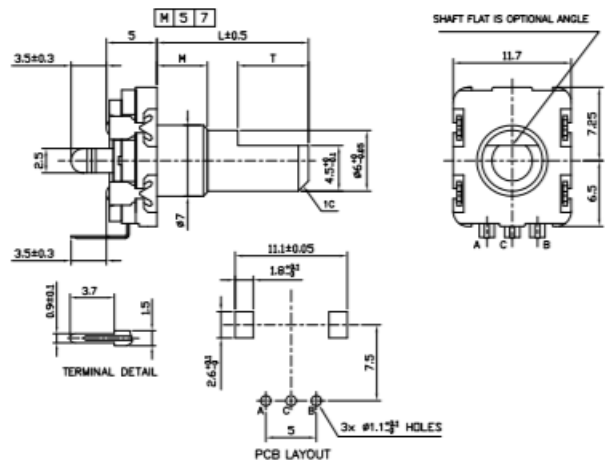
**MODEL EN11-HNM**  
(Top Adjust, without Switch, Threaded Bushing)



**MODEL EN11-HSB**  
(Top Adjust, with Switch, Plain Bushing)



**MODEL EN11-HNB**  
(Top Adjust, without Switch, Plain Bushing)

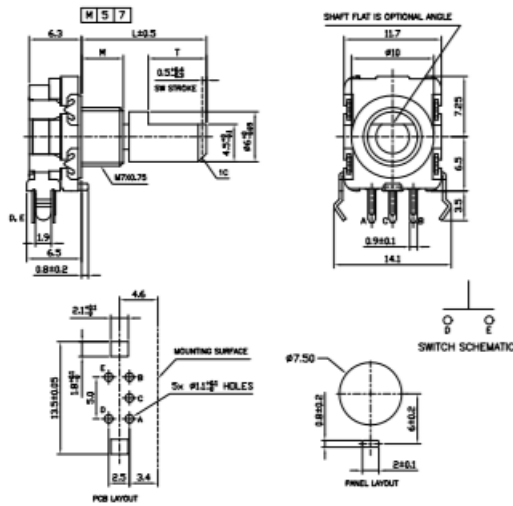


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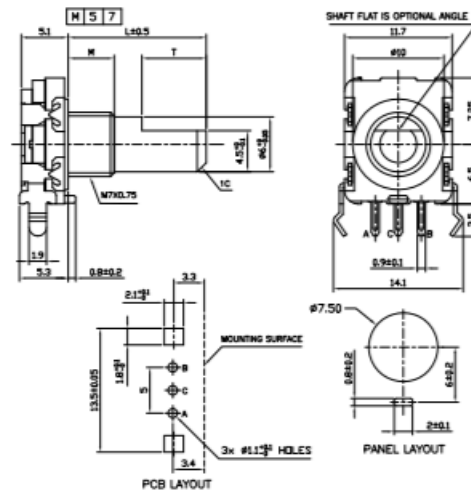
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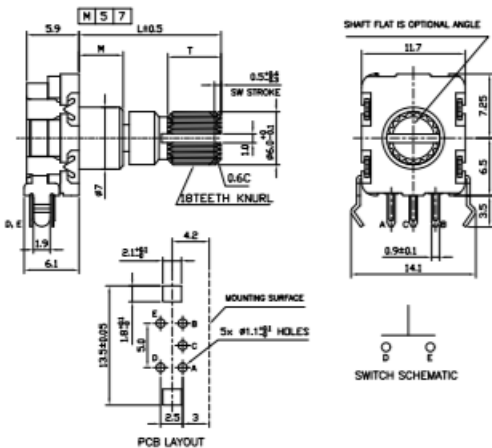
**MODEL EN11-VSM**  
(Side Adjust, with Switch, Threaded Bushing)



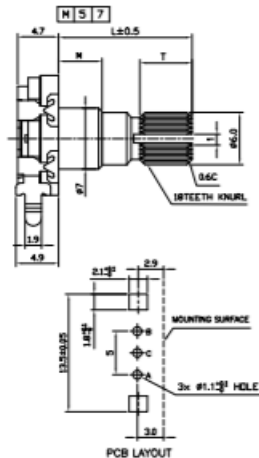
**MODEL EN11-VNM**  
(Side Adjust, without Switch, Threaded Bushing)



**MODEL EN11-VSB**  
(Side Adjust, with Switch, Plain Bushing)



**MODEL EN11-VNB**  
(Side Adjust, without Switch, Plain Bushing)



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