11mm Rotary Encoder
2 Bits Gray Code
Incremental/Contacting Type
Metal Bushing/Shaft
Push-on Switch Option
RoHS Compliant



MODEL CTVLES	
MODEL STYLES	
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 <sup>1</sup>	
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, I 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

<sup>&</sup>lt;sup>1</sup> Specifications subject to change without notice.

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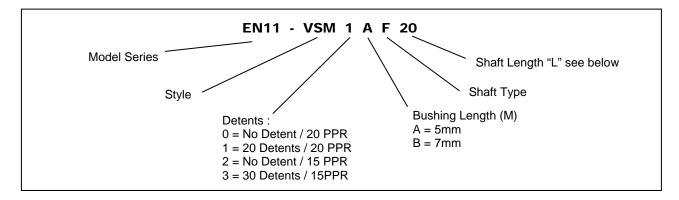
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#### **ENVIRONMENTAL**

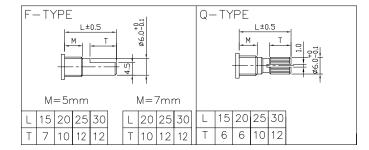
Operating Temperature Range -30°C to +85°C

Rotational Life 30,000 cycles

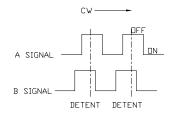
#### ORDERING INFORMATION<sup>2</sup>



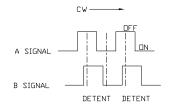
#### **Shaft Types**



#### **CIRCUIT DIAGRAM**



For 20 PPR (B leads A)



For 15 PPR (A leads B)

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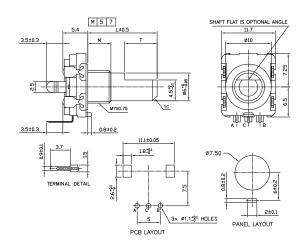
<sup>&</sup>lt;sup>2</sup> Contact our customer service for custom designs and features.

#### **OUTLINE DRAWING**

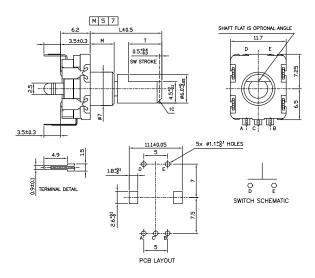
## MODEL EN11-HSM (Top Adjust, with Switch, Threaded Bushing)

## 

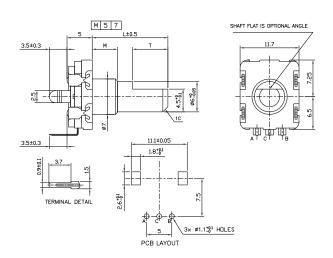
## MODEL EN11-HNM (Top Adjust, without Switch, Threaded Bushing)



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



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



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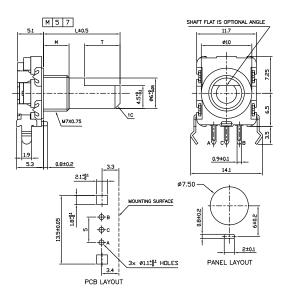


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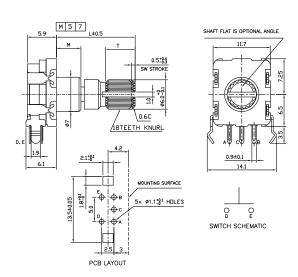
## MODEL EN11-VSM (Side Adjust, with Switch, Threaded Bushing)

# SHAFT FLAT IS OPTIONAL ANGLE 11.7

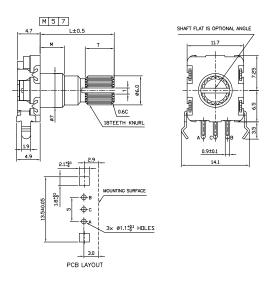
## MODEL EN11-VNM (Side Adjust, without Switch, Threaded Bushing)



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



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



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