### Model EN11

**MODEL STYLES** 

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



| 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               |

**BI Technologies Corporation** 

Detents (per Revolution)

Switch Operating Force

Switch Travel

4200 Bonita Place, Fullerton, CA 92835 USA

Rotational Torque of Detent, Maximum

Phone: 714 447 2345 Website: www.bitechnologies.com



0, 20 and 30

2.5 oz-in

550 gf

0.5mm

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

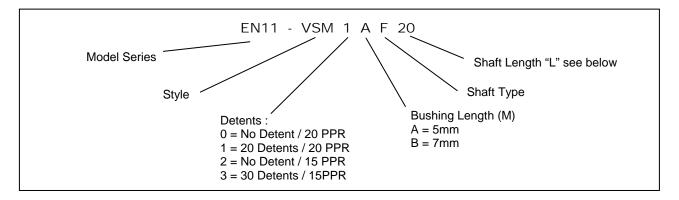
### Model EN11

### **ENVIRONMENTAL**

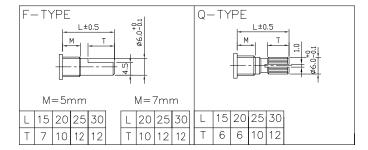
Operating Temperature Range -30°C to +85°C

Rotational Life 30,000 cycles

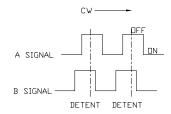
### ORDERING INFORMATION<sup>2</sup>



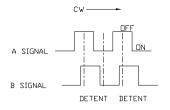
### **Shaft Types**



### CIRCUIT DIAGRAM



For 20 PPR (B leads A)



For 15 PPR (A leads B)

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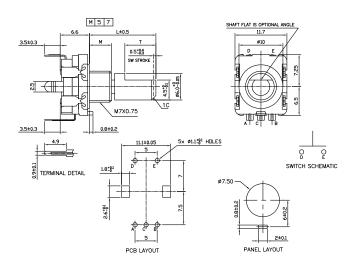




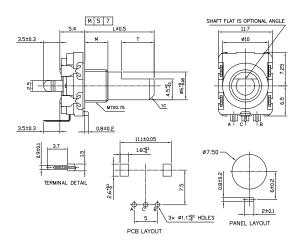
Contact our customer service for custom designs and features.

### **OUTLINE DRAWING**

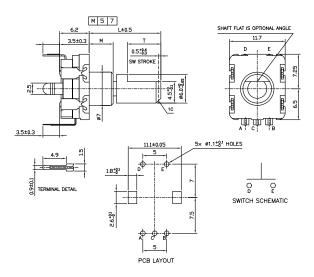
# MODEL EN11-HSM (Top Adjust, with Switch, Threaded Bushing)



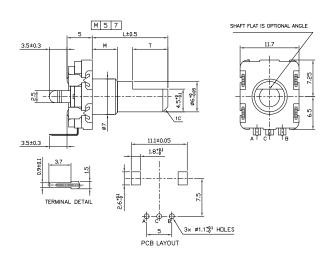
# MODEL EN11-HNM (Top Adjust, without Switch, Threaded Bushing)



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



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

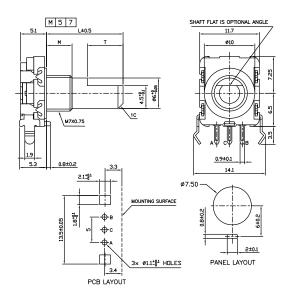


### Model EN11

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

# SHAFT FLAT IS OPTIONAL ANGLE 11.7 6.3 M 0.5243 SW STROKE 11.7 0.920.1 14.1 0.920.1 14.1 0.920.1 14.1 0.920.1 14.1 0.920.1 14.1 0.920.1 14.1 14.1 15.1 16.5 17.5 16.5 17.5 16.5 17.5 17.5 18.

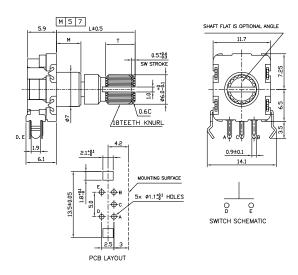
## MODEL EN11-VNM (Side Adjust, without Switch, Threaded Bushing)



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

2.5

PCB LAYOUT



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

