### 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

February 16, 2011 page 1 of 4

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

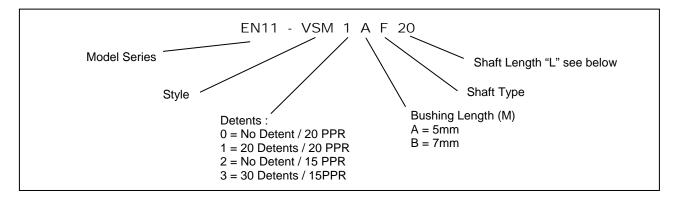
### Model EN11

### **ENVIRONMENTAL**

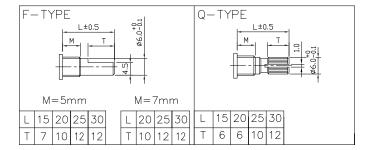
Operating Temperature Range -30°C to +85°C

Rotational Life 30,000 cycles

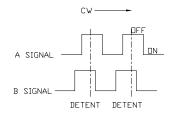
### ORDERING INFORMATION<sup>2</sup>



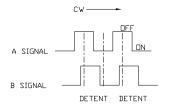
### **Shaft Types**



### CIRCUIT DIAGRAM



For 20 PPR (B leads A)



For 15 PPR (A leads B)

**BI Technologies Corporation** 

4200 Bonita Place, Fullerton, CA 92835 USA

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

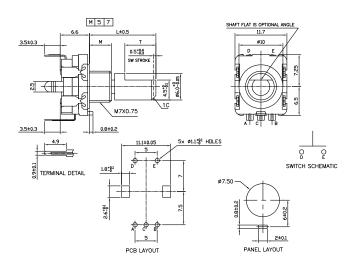




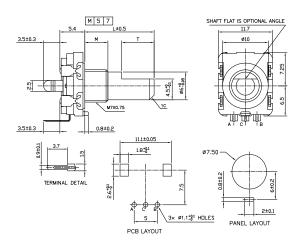
Contact our customer service for custom designs and features.

### **OUTLINE DRAWING**

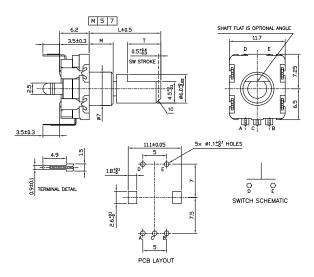
# MODEL EN11-HSM (Top Adjust, with Switch, Threaded Bushing)



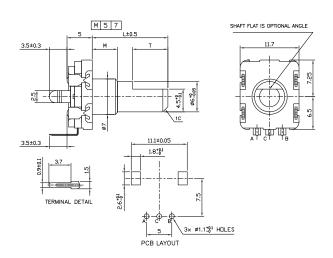
# MODEL EN11-HNM (Top Adjust, without Switch, Threaded Bushing)



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



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

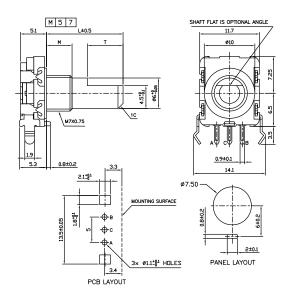


### Model EN11

# 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.

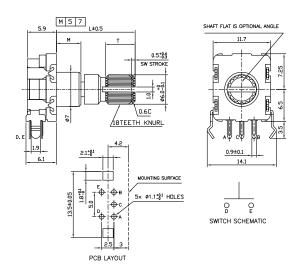
## MODEL EN11-VNM (Side Adjust, without Switch, Threaded Bushing)



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

2.5

PCB LAYOUT



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

