Rotary Encoder

Model EN11 Series

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

RoHS 2 compliant

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, 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

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Environmental

Rotational Life	30,000 cycles

Ordering

EN11 - VSM 1 A F 20

Model Series

Style

Detents :
0 = No Detent / 20 PPR
1 = 20 Detents / 20 PPR
2 = No Detent / 15 PPR
3 = 30 Detents / 15PPR

Bushing Length (M)
A = 5mm
B = 7mm

Shaft Length "L" see below

Shaft Type

Shaft Types

F-TYPE

M=5mm				M=7mm			
L	15	20	25	30	L	20	25	30
T	7	10	12	12	T	10	12	12

Q-TYPE

L	15	20	25	30
T	6	6	10	12
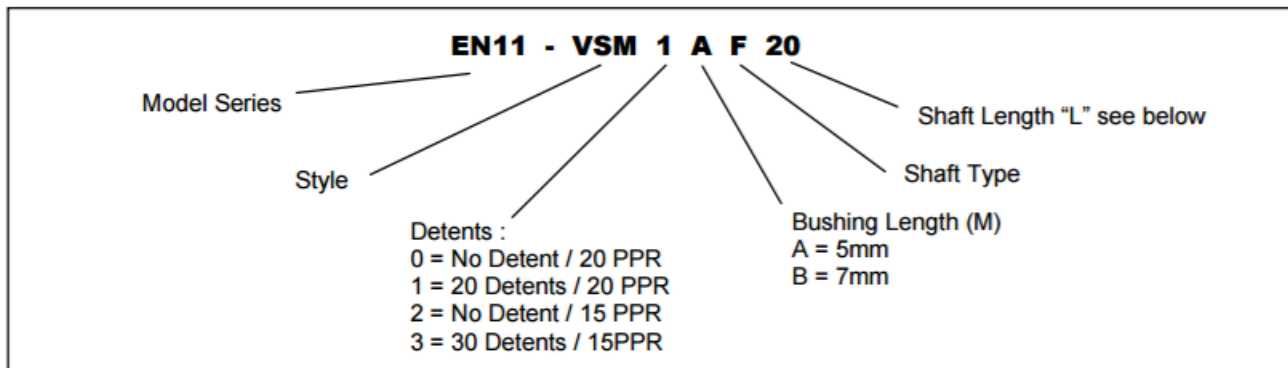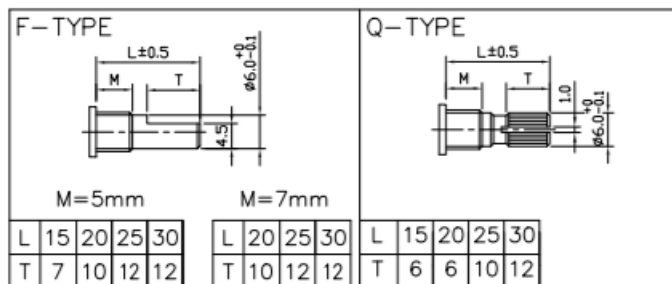
Circuit Diagram
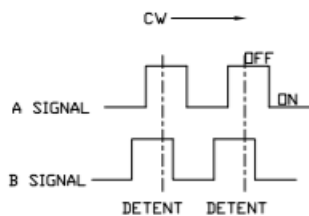
For 20 PPR (B leads A)
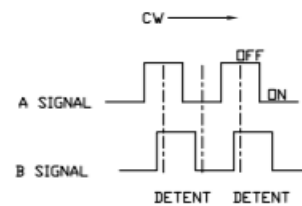
For 15 PPR (A leads B)

Rotary Encoder
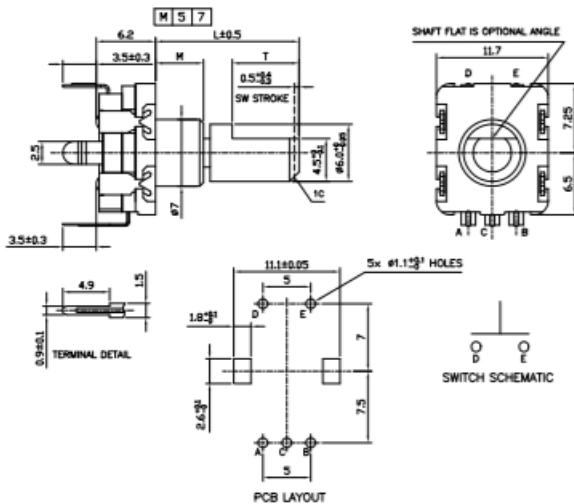## Model EN11 Series

Outline Drawings

MODEL EN11-HSM
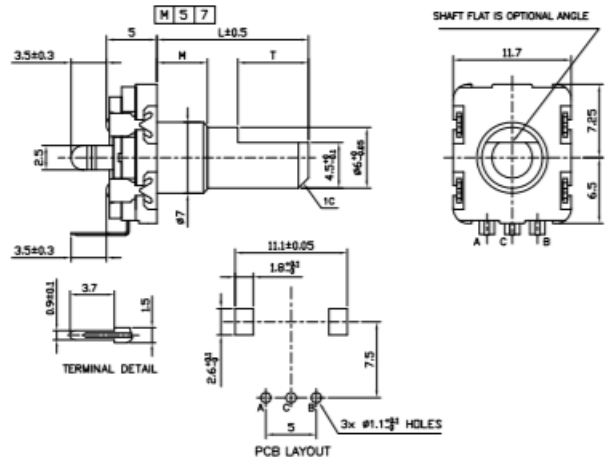(Top Adjust, with Switch, Threaded Bushing)
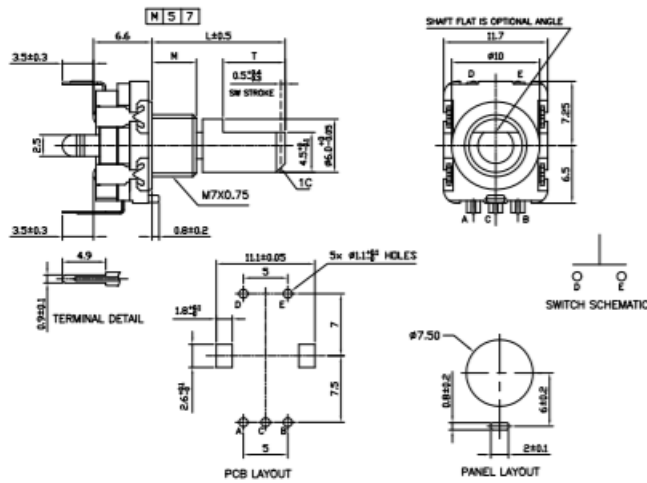
MODEL EN11-HNM
(Top Adjust, without Switch, Threaded Bushing)
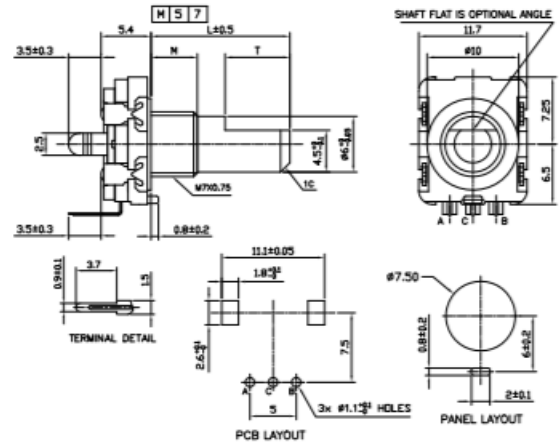
MODEL EN11-HSB
(Top Adjust, with Switch, Plain Bushing)

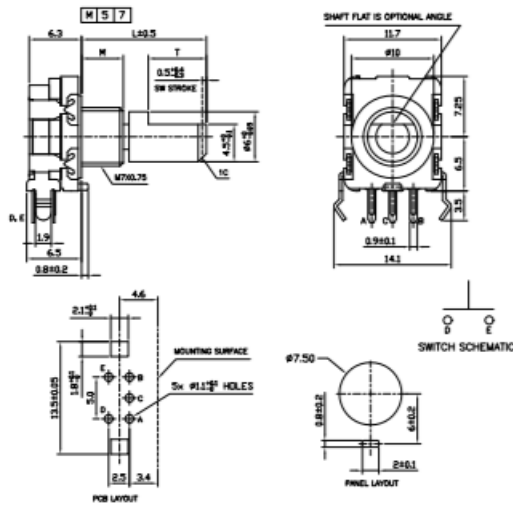### MODEL EN11-HNB
(Top Adjust, without Switch, Plain Bushing)

Rotary Encoder

Model EN11 Series
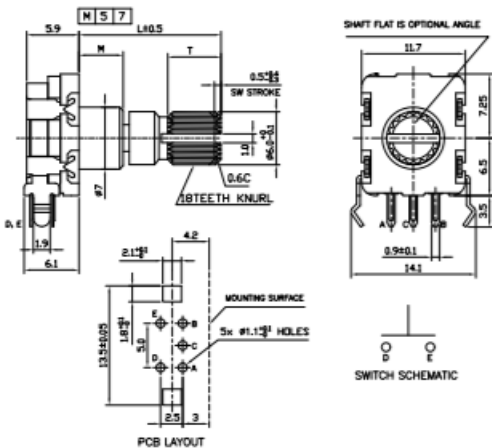
TT Electronics

Outline Drawings

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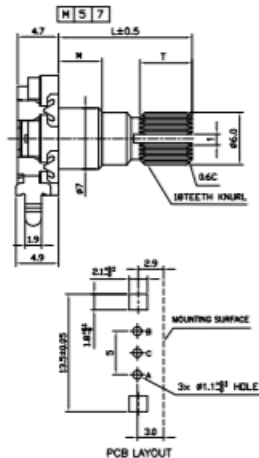### (Side Adjust, with Switch, Threaded Bushing)

MODEL EN11-VNM
(Side Adjust, without Switch, Threaded Bushing)
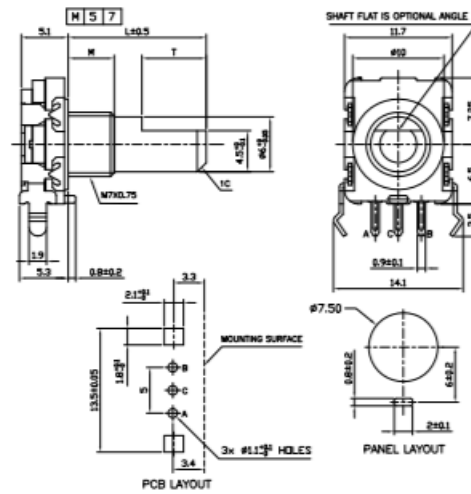
MODEL EN11-VSB
(Side Adjust, with Switch, Plain Bushing)

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

Mouser Electronics

Authorized Distributor

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

[TT Electronics](#):

[EN11-HSM1AF15](#) [EN11-VNB1AQ15](#) [EN11-HSM1BF20](#) [EN11-HSM1AQ20](#) [EN11-VSM1AF20](#) [EN11-HNM1BF25](#)