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PART NUMBER: C14 DESCRIPTION: panel mount optical encoder

ELECTRICAL SPECIFICATIONS

supply voltage	5 V dc ±5% (optional: 3.3 V dc ±10%)
supply current	20 mA max. (open collector)
output code	2-bit Quadature, Channel A leads Channel B by 90° with
	clockwise rotation
power consumption	100 mW
angle of throw	22.5° for code change and 16 detent positions
	11.25° for code change and 32 detent positions

MECHANICAL SPECIFICATIONS

operational torque	without detent	0.2 N·cm (20.4 gf·cm max.)			
	16 position w/detent	0.4 ±0.2 N·cm (40.8 ±20.4 gf·cm)			
	32 position w/detent	0.4 ±0.2 N·cm (40.8 ±20.4 gf·cm)			
mounting torque		100 N·cm (10.2 kgf·cm)			
shaft strength	radial	10 N (1.02 kgf)			
	thrust	15 N (1.53 kgf)			
rotational life		1,000,000 cycles			
weight (approx)		11 g			

PUSH SWITCH SPECIFICATIONS

rated voltage	12 V dc, 50 mA
contact resistance	200 m $Ω$ max.
insulation resistance	100 m Ω min.
voltage proof	250 V ac for 1 minute
operating force	4.5 ± 1 N (459 ±102 g·f)
travel	0.5 ±0.3 mm
bounce	10 msec.
life	1,000,000

ENVIRONMENTAL SPECIFICATIONS

operating temp. range	0° to +60° C
storage temp. range	-20 ~ 80°C
vibration	frequency range: 10 ~ 55 Hz, peak to peak amplitude: 1.5 mm
shock	50 G for 11 ms, half sine wave
cold proof	-20°C for 96 hours
heat proof	80°C for 96 hours
change to temp.	-10 ~ 70°C for 30 minutes each
humidity	90 ~ 95% for 96 hours at 40°C

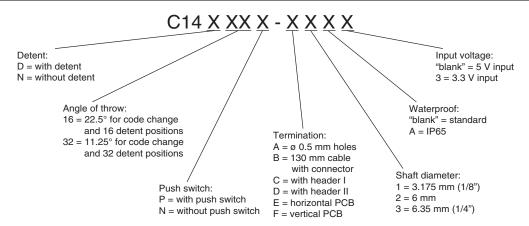


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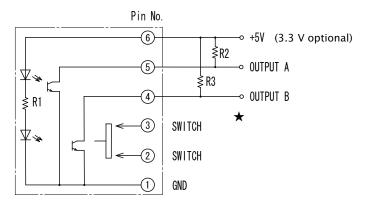
ORDERING INSTRUCTIONS

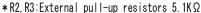


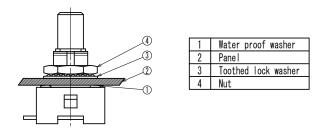
CIRCUIT CONNECTION

WATER PROOF MOUNTING

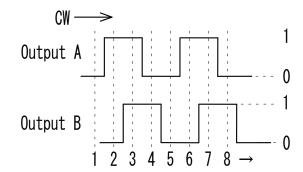
Protects against ingress of water from mounting panel side only.







OUTPUT WAVEFORM



*The code repeats from 1 to 4.

Position Output	1	2	3	4	5 /	7
A	0	1	1	0	0	\Rightarrow
В	0	0	1	1	0 /)

*"0":1V max. "1":3V min.

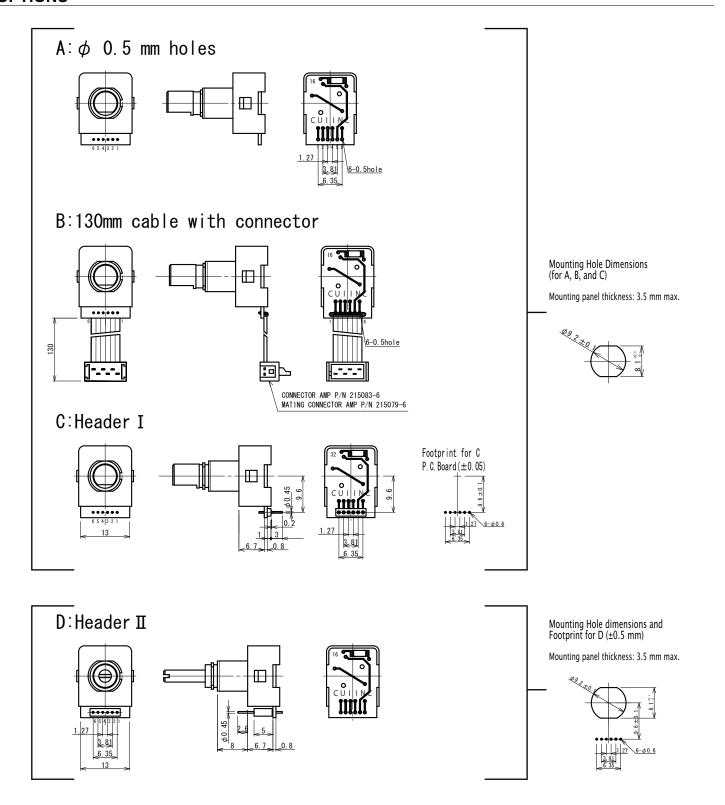


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OPTIONS

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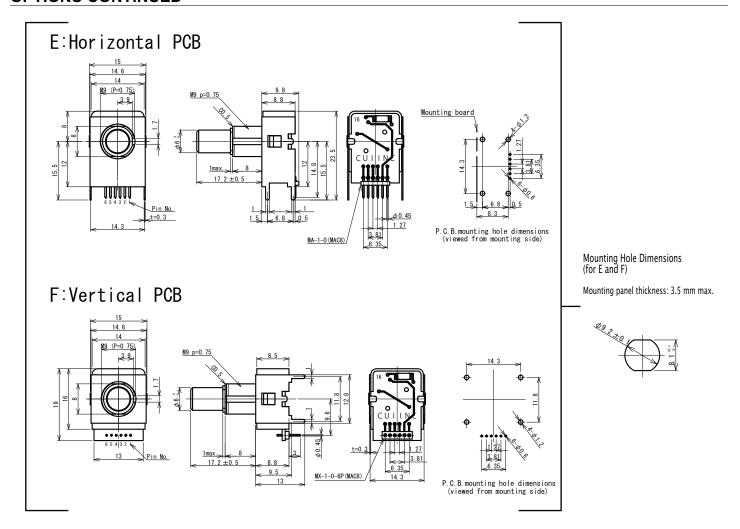


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DESCRIPTION: panel mount optical encoder

OPTIONS CONTINUED

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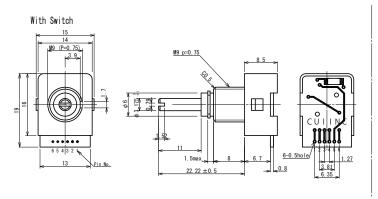


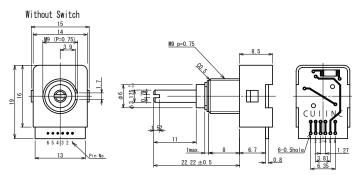
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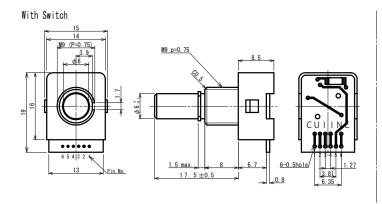
MECHANICAL DRAWING

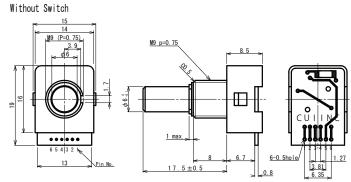
3.175 mm





6.0 mm





6.35 mm

