

SERIES: ACZ12

DESCRIPTION: mechanical incremental encoder

ELECTRICAL SPECIFICATIONS

parameter	conditions/description
output waveform	square wave
output signals	A, B phase
current consumption	10 mA
output phase difference	T1, T2, T3, T4 $\geq$ 3.5 ms @ 60 rpm (see output waveform)
supply voltage	12 V dc max.
output resolution	12, 24 ppr
switch rating	12 V dc, 50 mA (ACZ12BRXE models only)
insulation resistance	300 V dc, 100 M Ω
withstand voltage	300 V ac

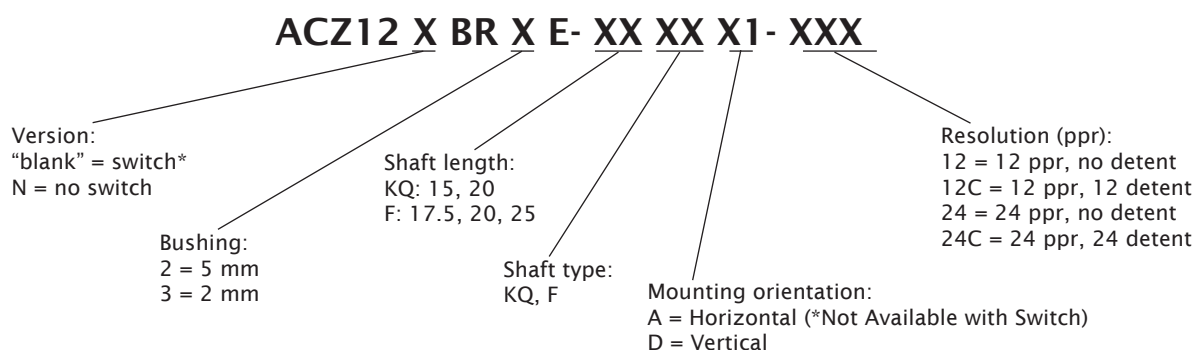
MECHANICAL SPECIFICATIONS

parameter	conditions/description	min	nom	max	units
shaft load	axial			3	kgf
rotational torque	with detent click	30		200	gf·cm
	without detent click	60	80	100	gf·cm
push switch operational force	(ACZ12BRXE models only)	300		900	gf·cm
push switch life	(ACZ12BRXE models only)			50,000	
rotational life				30,000	cycles

ENVIRONMENTAL SPECIFICATIONS

parameter	conditions/description	min	nom	max	units
operating temperature		-10		75	°C
storage temperature		-20		85	°C
humidity		85			% RH
vibration	0.75 mm max. travel for 2 hours	10		55	Hz

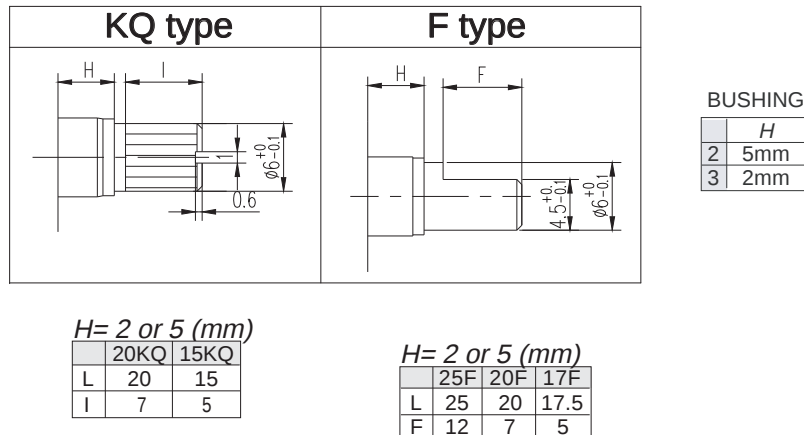
PART NUMBER KEY



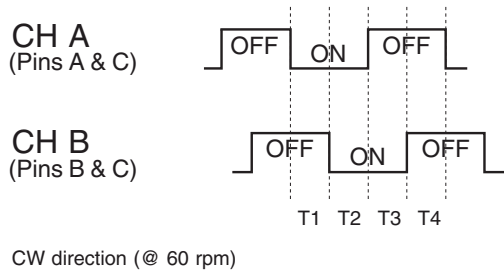
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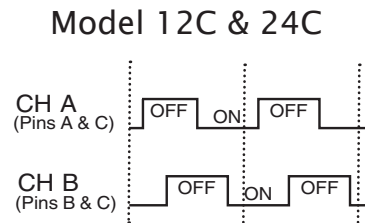
SHAFT OPTIONS



OUTPUT WAVEFORM

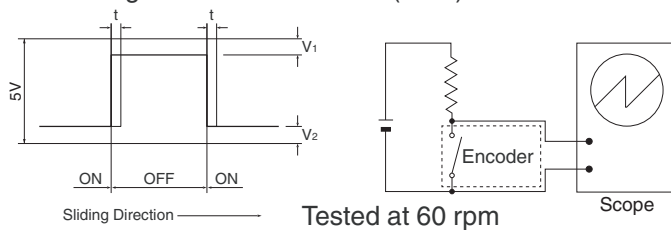


DETENT POSITIONS

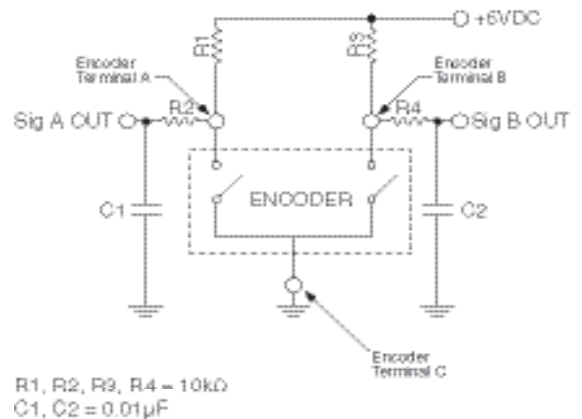


SLIDING NOISE

t = Masking time to avoid chatter (5mS) $V_1 = V_2 = 1V$ max.



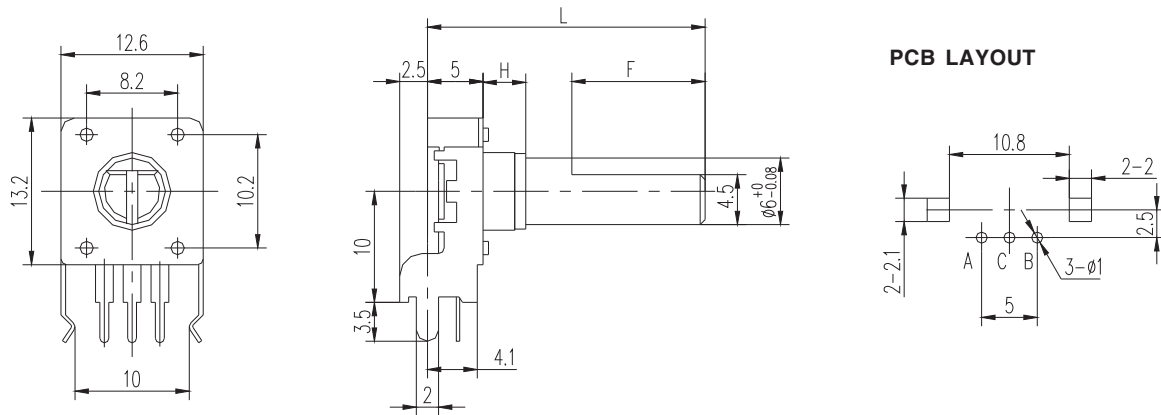
SUGGESTED FILTER



SERIES: ACZ12

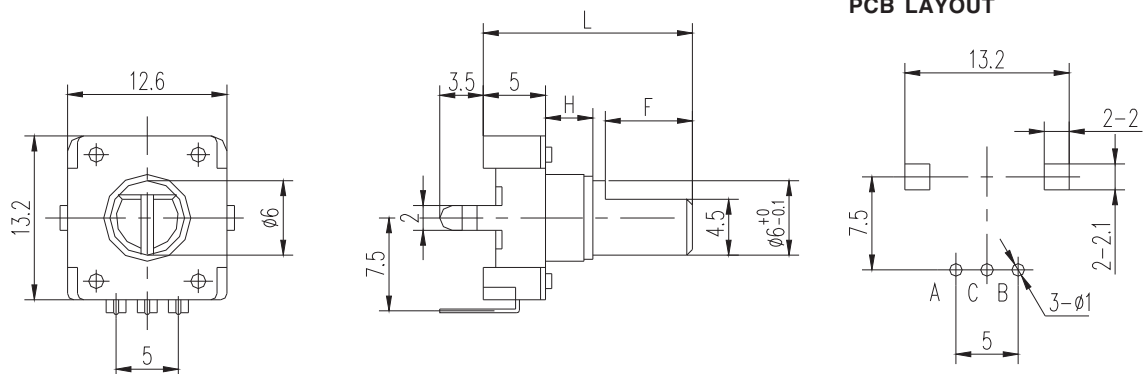
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MECHANICAL DRAWING (horizontal)



MECHANICAL DRAWING (vertical)

ACZ12NBRXE



ACZ12BRXE

