

date 09/08/2022

page 1 of 4

### SERIES: ACZ16 | DESCRIPTION: MECHANICAL INCREMENTAL ENCODER

#### **ELECTRICAL SPECIFICATIONS**

parameter	conditions/description	min	typ	max	units
output waveform	square wave				
output signals	A, B phase				
current consumption	0.5 mA				
output phase difference	T1, T2, T3, T4 ≥ 3.5 ms @ 60 rpm (see output waveform)				
supply voltage	5 V dc max.				
output resolution	12, 24 ppr				
insulation resistance	50 V dc, 100 M $\Omega$				
withstand voltage	50 V ac				

#### **MECHANICAL SPECIFICATIONS**

parameter	conditions/description	min	typ	max	units
shaft load	axial			7	kgf
rotational torque	with detent click	50		130	gf•cm
	without detent click	90		210	gf•cm
rotational life				100,000	cycles

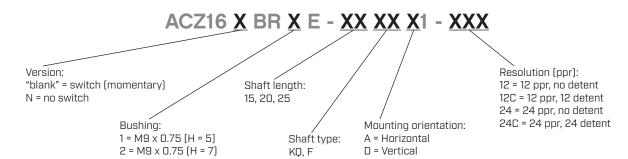
#### **ENVIRONMENTAL SPECIFICATIONS**

parameter	conditions/description	min	typ	max	units
operating temperature		-10		65	°C
storage temperature		-40		75	°C
humidity		85			% RH
vibration	0.75 mm max. travel for 2 hours	10		55	Hz

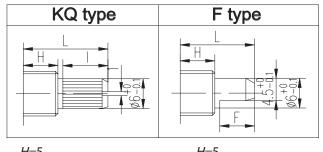
Notes:

- 1. It is recommended to use products within 6 months.
- 2. For storage conditions, it is recommended to keep away from direct sunlight, corrosive gas, or high humidity conditions.
- 3. Use the product as soon as possible once the plastic bag has been unsealed, and reseal the bag if product is not immediately used.
- 4. The products are packaged in sealed bags with anti humidity tablets.

### PART NUMBER KEY



### **SHAFT OPTIONS**



<b>B USHING</b>			
Condition   F			
1	M9-P0.7 5	5	
2	M9-P0.7 5	7	

H=5					
	15KQ	20KQ	25K Q		
L	15	20	25		
1	7	12	12		

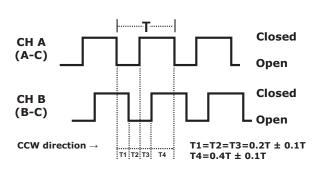
,,_	_		
	15F	20F	25F
L	15	20	25
F	8	10	12

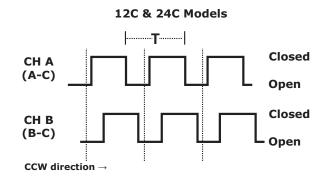
H=7					
	15KQ	20KQ	25K Q		
L	15	20	25		
1	7	12	12		

H=7					
	15F	20F	25F		
L	15	20	25		
F	8	10	12		

#### **OUTPUT WAVEFORM**

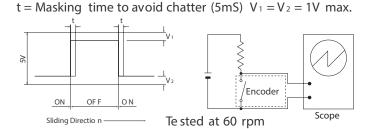
#### **DETENT POSITIONS**

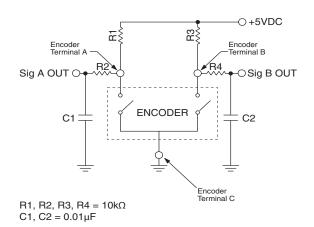




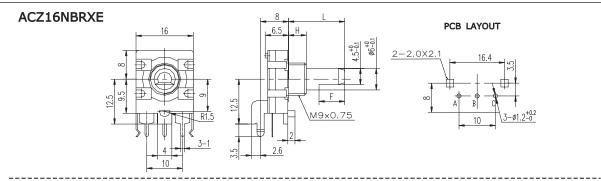
#### **SLIDING NOISE**

#### SUGGESTED FILTER

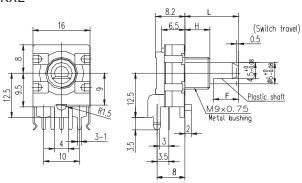


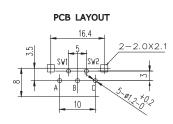


## **MECHANICAL DRAWING (HORIZONTAL)**

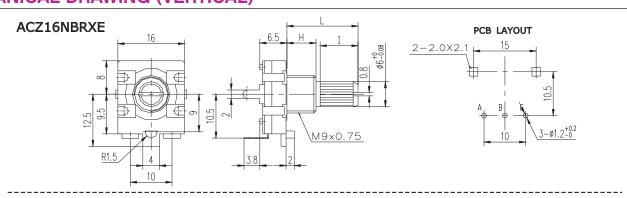


#### ACZ16BRXE

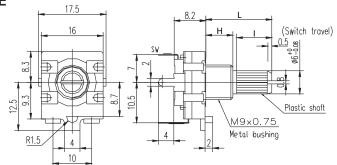


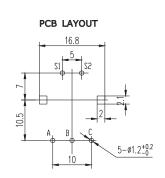


# **MECHANICAL DRAWING (VERTICAL)**









#### **REVISION HISTORY**

rev.	description	date
1.0	initial release	10/30/2009
1.01	added storage details	12/04/2014
1.02	brand update	10/04/2019
1.03	updated datasheet	06/15/2020
1.04	updated drawings	07/14/2020
1.05	logo, datasheet style update	09/08/2022

The revision history provided is for informational purposes only and is believed to be accurate.



CUI Devices offers a one (1) year limited warranty. Complete warranty information is listed on our website.

CUI Devices reserves the right to make changes to the product at any time without notice. Information provided by CUI Devices is believed to be accurate and reliable. However, no responsibility is assumed by CUI Devices for its use, nor for any infringements of patents or other rights of third parties which may result from its use.

CUI Devices products are not authorized or warranted for use as critical components in equipment that requires an extremely high level of reliability. A critical component is any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.

## **X-ON Electronics**

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Encoders category:

Click to view products by CUI Devices manufacturer:

Other Similar products are found below:

6-1393048-0 6-1393048-5 62AG22-H5-P 700-09-36 1393047-3 ECW1J-C36-SE0/077L 2-1393047-2 25LB22-G-Z T101-5C3-111-M1
385001M0439 385001M0216 V23401H1409B101 V23401T8002B802 V23401U6019B609 62B11-LPP-040C 62HS22-H0-040S 700-16-16
700-24-24 V23401D1001B102 3-1393048-1 288T220R161A2 1-1879391-5 GH65C11-N-SO 1393047-1 702-01-24 703-20-00 62V22-02-P
62D15-02-140S 61K128-075 EC21C1520402 62AG18-L5-020C E6F-AG5C 720 2M 62B22-SPP-030C 60016-005 31215-003 01039-2677
ACZ11BR2E-20FD1-20CZ-0546 DXM510-2000S002 01002-2133 01002-9375 01002-9572 01026-476 01039-1102 01039-1981 010701315 01072-513 01080-056 01084-089 01094-017 01102-031