## : ©hipsmall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation, and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!


## Contact us

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Mechanical Encoders

## SERIES 25

## Multi-Deck

## FEATURES

- Multiple Code and Indexing Choices
- Reliability Tested to Listed Specifications
- Less than $1.0^{\prime \prime}$ Square
- Termination Choices
- Panel and Shaft Seal Option
- Manufactured to ISO 9001 and Military Standards
- Custom Configurations Available


DIMENSIONS in inches (and millimeters)


## SPECIFICATIONS

## Electrical Ratings

Switching Loads: 150 mA at 120 Vac, resistive; 150 mA at 28 Vdc , resistive
Current Carrying Capacity: 250 mA at 28 Vdc, resistive
Contact Resistance: $75 \mathrm{~m} \Omega$ max. after life Insulation Resistance: $1000 \mathrm{~m} \Omega$ minimum between terminals and shaft
Voltage Breakdown: 1000 Vac minimum between terminals and shaft
Life Expectancy: 50,000 cycles at rated loads Contacts: Shorting

## Mechanical Ratings

Stop Strength: 10 in-lbs minimum
Rotational Torque: 4-20 in-oz, dependent on
the number of decks
Operating Temperature Range: $-65^{\circ} \mathrm{C}$ to $+85^{\circ} \mathrm{C}$
Non-Turn Device: Flatted mounting bushing, .375" dia. x .320"
Package Size: . 865 " square
Termination: PC terminals, $100^{\prime \prime}$ on center.
Decks are .200 apart
Hardware: Hex nut and lockwasher supplied

## Materials and Finishes

Bushing: Die cast zinc alloy, tin-zinc plated
Mounting Hardware: plated brass
Decks, Deck Separators, End Plate:
Thermoplastic
Contacts and Terminals: Gold, silver, nickelplated beryllium copper
Shaft, Stop Blades: Stainless Steel
Detent Balls: Steel, nickel-plated
Rivets: Brass, zinc-plated

ORDERING INFORMATION


## Series 25: Multi-deck

Shaft size: $B=1 / 4$ " diameter shaft
Sealed or non-sealed: S = Shaft and panel seal; No letter = no seal
Terminal structure: $P=P C$, perpendicular to shaft; $R=P C$, rear facing (one deck only); F = PC, front facing (one deck only).
Angle of throw (determines the maximum number of positions):
$10=10^{\circ}, 36$ positions; $11=11.25^{\circ}, 32$ positions; $12=12^{\circ}, 30$ positions;
$15=15^{\circ}, 24$ positions; $18=18^{\circ}, 20$ positions; $22=22.5^{\circ}, 16$ positions;
$30=30^{\circ}, 12$ positions; $36=36^{\circ}, 10$ positions; $45=45^{\circ}, 8$ positions; $60=60^{\circ}, 6$ positions; $90=90^{\circ}, 4$ positions .

Stop arrangement: For switches with maximum positions, add C for continuous rotation; add F for stop between first and last. No notation required for less than maximum positions.
Number of positions: Maximum is dependent on the angle of throw. Minimum is two. Number of decks: One through four possible.

## Code output:

$\mathrm{B}=$ Binary (contact Grayhill for availability)
Q = Quadrature
$\mathrm{G}=$ Gray (contact Grayhill for availability)
Specials include ${ }^{1} / 8^{\prime \prime}$ diameter shaft, custom angles of throw for binary, binary complement and gray code outputs. Contact Grayhill Sales for availability.
Control knobs available.
For prices and discounts, contact a local Sales Office, an authorized local Distributor or Grayhill.

