

Model DE2

Custom Automotive, Industrial or Medical Applications Incremental Encoder



FEATURES

- Patented Silver-in-Glass™ Switching Element Technology
- Two Channel Quadrature Output
- Optional Index Pulse
- 32 Pulses Per Revolution (Can be resolved to 128 Increments per revolution)
- Additional Pulses Per Revolution Available (Consult Factory)
- Internal Active De-Bounce Circuitry Provides Clean, High Level Outputs with CMOS or TTL Logic
- Optional Shaft Seal
- Value Priced
- Medium Duty

ELECTRICAL SPECIFICATIONS (CMOS) FOR STD. DE2

PARAMETER	SYMBOL	MIN	MAX	UNITS
Input Specifications				
Supply Voltage	V_S	3.0	6.0	Volt
Supply Current ($V_S = 6.0V$, $I_O = 0A$)	I_S		4.0	mA
Output Specifications				
Output High Voltage ($V_S = 5.0V$, $I_O = 4.0mA$)	V_{OH}	3.8		Volt
Output Low Voltage ($I_O = 4.0mA$)	V_{OL}		0.4	Volt
Output Current	I_O		20	mA

MECHANICAL SPECIFICATIONS

PARAMETER	UNIT	CONTINUOUS	PERIODIC
Rotational Speed	RPM	200	400
Operating Torque	oz-in	STARTING 1.0 Max	RUNNING 0.7
Bearing	—	Sleeve	
Runouts:			
Shaft	TIR		0.002
Pilot	TIR		0.003
Lateral	TIR		0.005
End Play	—		0.008
Radial Play	—		0.003
Weight	oz		1 Max

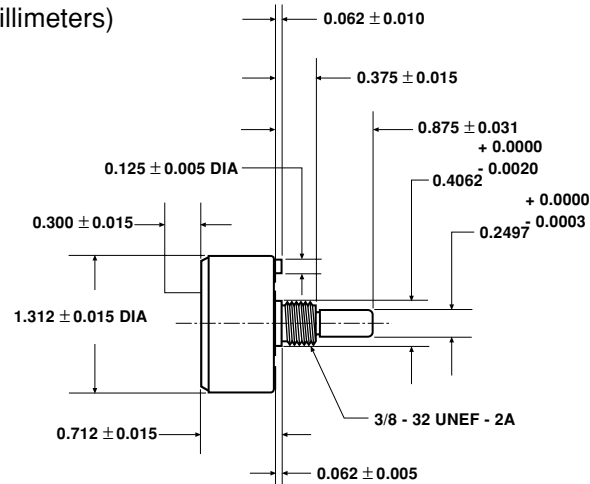
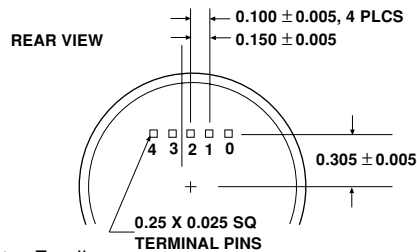
ORDERING INFORMATION

DE2	0	1	32
MODEL	0 - Standard 1 - *Index	0 - No Debounce 1 - CMOS Debounce Circuitry 2 - TTL Debounce Circuitry	OPTIONS AVAILABLE Call Factory

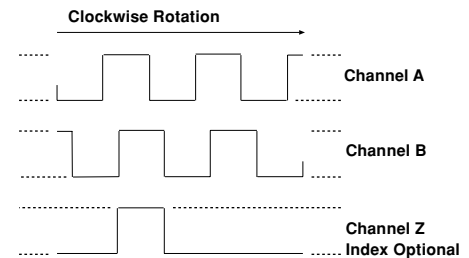
Index option requires debounce circuitry



Custom Automotive, Industrial or Medical Applications Vishay Spectrol Incremental Encoder

DIMENSIONS in inches (millimeters)**TERMINAL CONFIGURATION**

Mating Connector
AMP - MODU Connector Family
Molex 70066 Family

TIMING DIAGRAM

STANDARD (DE2-0-X-32)	
TERMINAL	FUNCTION
1	Input (V_S)
2	Common
3	Channel A Out
4	Channel B Out

INDEX (DE2-1-X-32)	
TERMINAL	FUNCTION
0	Input (V_S)
1	Common
2	Channel A Out
3	Channel Z Out
4	Channel B Out

MATERIAL SPECIFICATIONS	
Housing	Molded, Glass Filled Thermoplastic
Shaft	Stainless Steel
Bushing	Brass, Nickel Plated
Terminal Pins	Phosphor Bronze, Solderable
Mounting Hardware: Lockwasher Panel Nut	Steel, Nickel Plated Brass, Nickel Plated

ENVIRONMENTAL SPECIFICATIONS		
PARAMETER	UNIT	
Rotational Life	—	5 Million Shaft Revolutions
Temperature Range: Operating	°C	- 40 to + 85
Storage	°C	- 55 to + 125
Vibration	G, KHz	15, 0 to 2
Shock	G	50
Moisture Resistance	—	Method 106, MIL-STD-202
Salt Spray	Hours	48