

E30 Series

Compact and low profile, E30 Series Encoders provide parameters of reflective optical technology, transmissive optical technology with and without differential line drivers, and multitude of line counts.

Modular and bearing construction options. Bearing style encoders provide significant performance upgrades in demanding applications. Factory installed and tested for quick start-up.

■ Benefits

- Resolutions from 200 to 2048
- TTL Quadrature output
- Frequency response to 220 kHz
- Low power consumption, 5V @ 20mA max.
- Locking connector

■ Optional Assemblies

- Index pulse
- Differential line driver with complementary outputs
- Detachable cable with optional axial orientation

■ Characteristics

Encoder Data	Units	Part No.	
		E30C	E30D
Available Resolutions		200, 250, 256, 400, 500	500, 512, 1000, 1024, 2000, 2048
Output		2-Channel Quadrature	3-Channel Quadrature with Index
Output Interface		TTL Compatible	TTL Compatible
Supply Voltage	V _{CC}	VDC	4.5 to 5.5
Supply Current	I _{CC}	mA	20 max.
High Level Output Voltage	V _{OR}	V	2.4 min.
High Level Output Voltage	V _{OL}	V	0.4 max.
Max. Operating Frequency	f _{MAX}	kHz	55 (500-512 CPR)
			40 (200-500 CPR)
			110 (1000-1024 CPR)
Operating Temperature	Θ _{MAX}	°C	-20 to +85
			220 (2000-2048 CPR)
			-20 to +85
Encoder Weight (Mass)	W _E	oz	0.2
		g	5.6

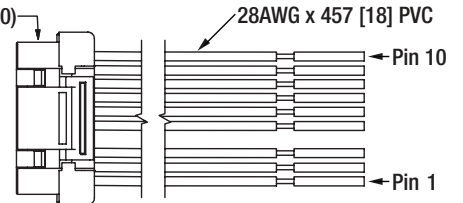
■ Connection Chart / Radial Connector

PIN	COLOR	E30C	E30D	E30C ¹	E30D ¹
1	Black	Encoder Ground			
2	White	Vcc			
3	Green/White	-	-	-	Index I
4	-	-	-	-	-
5	Blue/White	-	-	-	Channel A
6	Blue	Channel A	Channel A	Channel A	Channel A
7	Violet	Channel B	Channel B	Channel B	Channel B
8	Violet/White	-	-	-	Channel B
9	Green	-	Index I	-	Index I
10	Green/Yellow	Motor Ground	Motor Ground	Motor Ground	Motor Ground

¹Optional differential LD connections shown in gray.

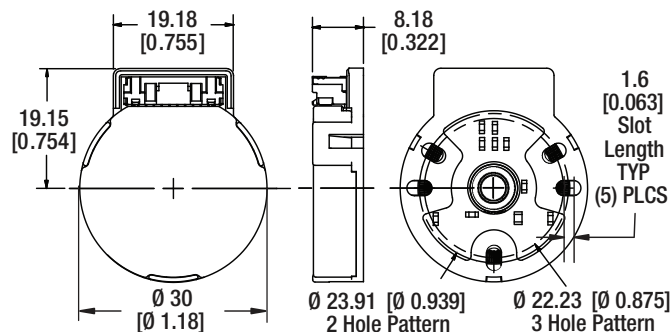
■ Optional Cable Assembly (82-1108-1)

MOLEX 502380-1000 (10)
POS. CONN. HSG,
W/ 502381-0000
CRIMP TERMINALS

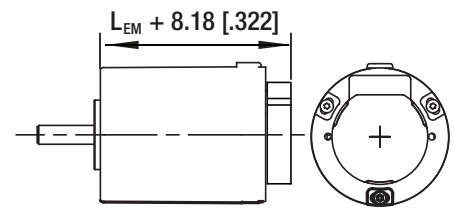


Dimensional Drawings: E30C • E30D

Dimensions = mm [in]



■ Typical Motor with Encoder



Scale = 50%