

E7 Encoder Data Sheet

Electrical Specifications

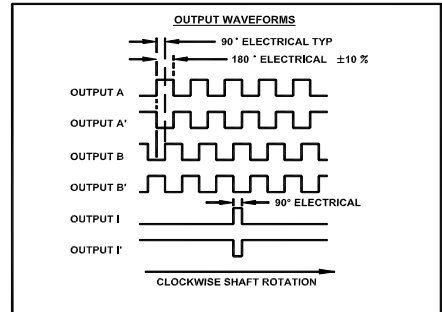
Input Voltage	5 VDC +/- 5%
Input Current Requirements	135 mA Typical @ 5 VDC Plus Interface Loads
Input Ripple	2% Peak to Peak @ 5 VDC
Output Circuit	AM26LS31 RS 422A Line Driver Output sinks and sources up to 20 mA
Frequency Response	200 kHz max.
Incremental Output Format	Quadrature with A leading B for CW rotation.* Index Pulse gated with A and B.
Symmetry	180 Degrees +/- 10% Typical
Minimum Edge separation	45 electrical degrees

CAUTION:

1. If another connector is to be used cut each wire individually and use caution to avoid static discharge

Environmental Specifications

Storage Temperature	-30 to +110° C
Operating Temperature	-10 to +100° C Typical
Humidity	90% Non-Condensing
Vibration	5 - 2000 Hz @ 10 G's
Shock	50 G's @ 11 ms duration
IP Rating	IP 40



Mechanical Specifications

Line Count	1000 lines/revolution
Maximum Shaft Speed	12,000 RPM
Through Shaft Diameter	0.1875" (-0.0000", +0.0005")
Radial Shaft Movement	0.001" TIR
Axial Shaft Movement	+0.010 - 0.040 inch MAX
Housing	Glass-filled polycarbonate
Termination	8 conductor cable, with Shield and drain wire 18" Long with Amp connector P/N 103971-7 or equal
Mounting	1.812" Bolt Circle
Moment of Inertial	7.3 x 10 ⁻⁵ oz-in-s ²

ENCODER CONNECTIONS		
PIN	COLOR	FUNCTION
1	RED	V _{cc} =+5V
2	BLACK	GROUND
3	WHITE	CH. A
4	YELLOW	CH. A'
5	GREEN	CH. B
6	BLUE	CH. B'
7	ORANGE	INDEX
8	BROWN	INDEX'

*CW rotation of motor front shaft with encoder mounted on rear shaft

