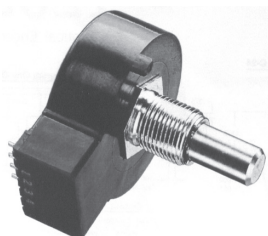


Incremental Optical Encoder Contactless Technology (128 Pulses per Turn)



FEATURES

- Long life: 10 million revolutions minimum (contactless)
- Cost effective: Elimination of A/D converters
- Stainless steel shafts and nickel-plated bushing in various lengths
- Stability: - 40 °C to + 65 °C operating temperature
- Variability: Cable and printed circuit terminations available



The Model 120E is a light-duty optical encoder that can be manually. This unique device outputs two square waves at a maximum rate of 128 pulses in quadrature with other resolutions as low as 10 pulses available. Typical applications includes Motion sensing and control, Motor control, Flow control, Low-to-high input for test and measurement, Medical instrumentation, Robotics and Computer Peripherals.

ELECTRICAL SPECIFICATIONS

PARAMETER	MINIMUM	NOMINAL	MAXIMUM
VCC Range (V)	4.75	5	5.25
Supply Current (mA)	-	-	30
Voh (V)	2.4	-	-
Vol (V)	-	-	0.4
Pull-up Resistor (kΩ)	-	10	-
Output	Channel A leads channel B by 90° electrically, CCW direction		

MECHANICAL SPECIFICATIONS

PARAMETER	
Vibration	10 to 2000 Hz, 15 G mil std., - 202 method 204 test condition C
Shock	100 G at 6 ms mil std. 202, method 213 test condition C
Rotational Torque	Sleeve Bearing 1.5 oz. in Other torque ranges available
Operating Speed	300 RPM
Rotational Life	10 000 000 revolutions
Shaft End Play	0.005 maximum
Shaft Radial Play	0.010 at 1"
Shaft Axial Force	15 lbs. push/pull
Terminal Strength	2 lbs.

ORDERING INFORMATION/DESCRIPTION

120	E	N	128	CBL	BO100	e4
MODEL	PRODUCT ID	SHAFT AND BUSHING SIZE	PULSES PER RESOLUTION	TERMINATION	PACKAGING	LEAD FINISH
Sleeve-bearing construction with two channel quadrature output	E = Encoder	N = 1/4" (6.35 mm) diameter by 0.875" (22.23 mm) long shaft 3/8" (9.53 mm) diameter x 32 NEF 2A by 3/8" (9.53 mm) long bushing	Number of pulses per revolution	B66 = PC terminal type B-66 horizontal mounting C24 = PC terminal type C-24, vertical mounting CBL = 7.5" (190.5 mm) long cable CN1 = Cable with connector	Box of 100 pieces	

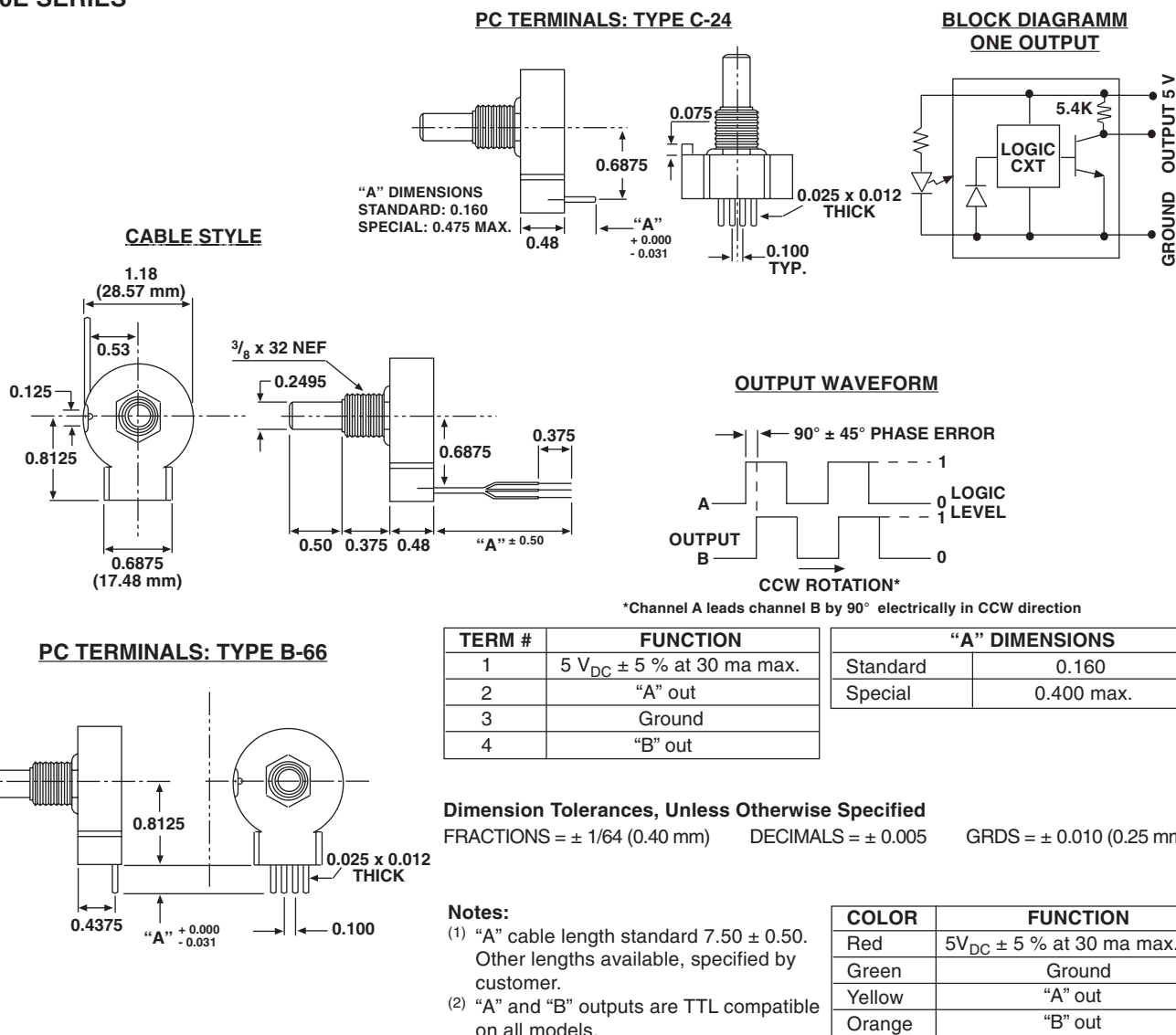
SAP PART NUMBERING GUIDELINES

120EN	128	CBL	B30
MODEL	PULSES PER REVOLUTION	TERMINAL CONFIGURATION	PACKAGING



DIMENSIONS in inches (millimeters)

120E SERIES



ENVIRONMENTAL SPECIFICATIONS

PARAMETER	MINIMUM	NOMINAL	MAXIMUM
Operating Temperature (°C)	- 40 °C	-	+ 65 °C
Storage Temperature (°C)	- 55 °C	-	+ 110 °C
Humidity	85 % RH at 40 °C, 240 h	-	-

TERMINAL

Terminal	B66: PC Terminals, horizontal mounting C24: PC Terminals, vertical mounting CBL: 7.5 including cable CN1: 7.5 including cable with connector
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Disclaimer

All product specifications and data are subject to change without notice.

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