## OEL8G-K **8 BIT GRAY CODE ENCODER**

#### PART # DESCRIPTION

04.770 OEL8G-K Gray Code Encoder with 1.3 ft Cable
04.771 04.770 with 6.5 ft Extension Cable
04.778 6.5 ft Extension Cable Only
04.70 With Cable Only

30.180 NSO Adapter / Mounting Plate

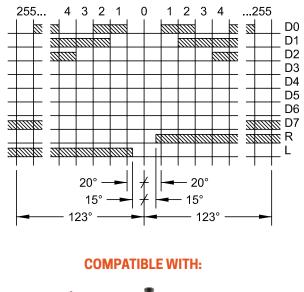
The OEL8G-K absolute encoder produces a gray coded digital output with a resolution of 255 discrete counts in each direction. This contactless system uses optoelectronics to identify each position, which eliminates the wear usually associated with analog potentiometer outputs. In addition to the 255 steps in each direction, the OEL8G-K has (2) directional bits and an LED to indicate zero position. The encoder seamlessly mounts to VNSO, VNS2, and NSO-SFA controllers via an adapter mounting plate, creating a heavy duty control solution for digital variable speed drives.

#### **FEATURES**

- High quality electronic design with long life and high accuracy
- 15 pin D-Sub connector with 1.3 ft [0.4 m] cable
- Special shaft with sealed ball bearing
- LED for zero pulse position
- Push button for setting zero
- Optional 6.5 ft [2 m] extension cable.

#### **OUTPUT SIGNALS**

J.R.MERRITT CONTROLS



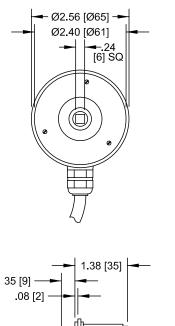


1

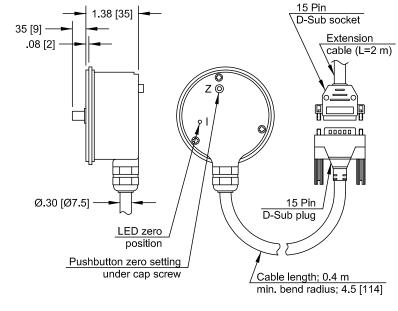
# **SPECIFICATIONS**



#### **DIMENSIONS & CONNECTIONS**



Connections:		
Function:	Pin:	Color:
Supply (V+)	9	White
Ground (0V)	8	Brown
D0	7	Green
D1	6	Yellow
D2	5	Grey
D3	4	Pink
D4	3	Blue
D5	2	Red
D6	15	Red / Blue
D7	14	Grey / Pink
Right	13	Black
Left	12	Violet
Shielding	Housing	



### **ELECTRICAL DATA** Supply Voltage (V+) 9-36 VDC 45 (typical) 75 (max) mA **Supply Current** @ 24 VDC Push / pull, short circuit **Output Signals** protected $V_{high} \ge (V+) - 3.0 V$ Outputs (all) $V_{low} \le 0.5 V @ max. load$ Max. Load 20 mA max. per channel Scanning Frequency 1 kHz **Resolution** 0.404° per step Precision ±1LSB **Directional Signals** R = 1 (0), L = 0 (1)(Looking at Shaft) CW (CCW) from 0 position **Shock** $\leq 200 \text{ m}^2/\text{s} (11 \text{ ms})$ **Vibrations** $\leq 300 \text{ m}^2/\text{s} (50 - 2000 \text{ Hz})$

MECHANICAL DATA		
Encoder Material	Aluminum Housing with Stainless Steel Shaft	
Standard Cable (LIYCY)	1.3 ft [0.4m] with 15-pin D-Sub Plug	
Optional Extension Cable	6.5 ft [2m] with D-Sub socket to single wires	
Weight	.77 lb [350 g]	

ENVIRONMENTAL DATA		
Operating & Storage Temperature	-40° to +70°C	
IP Rating	IP65	

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2