

# OGR8G-M1

## 8 BIT GRAY CODE ABSOLUTE ENCODER

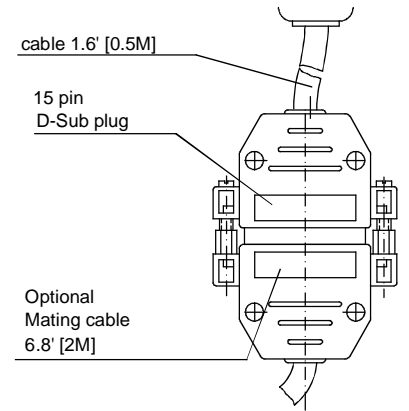
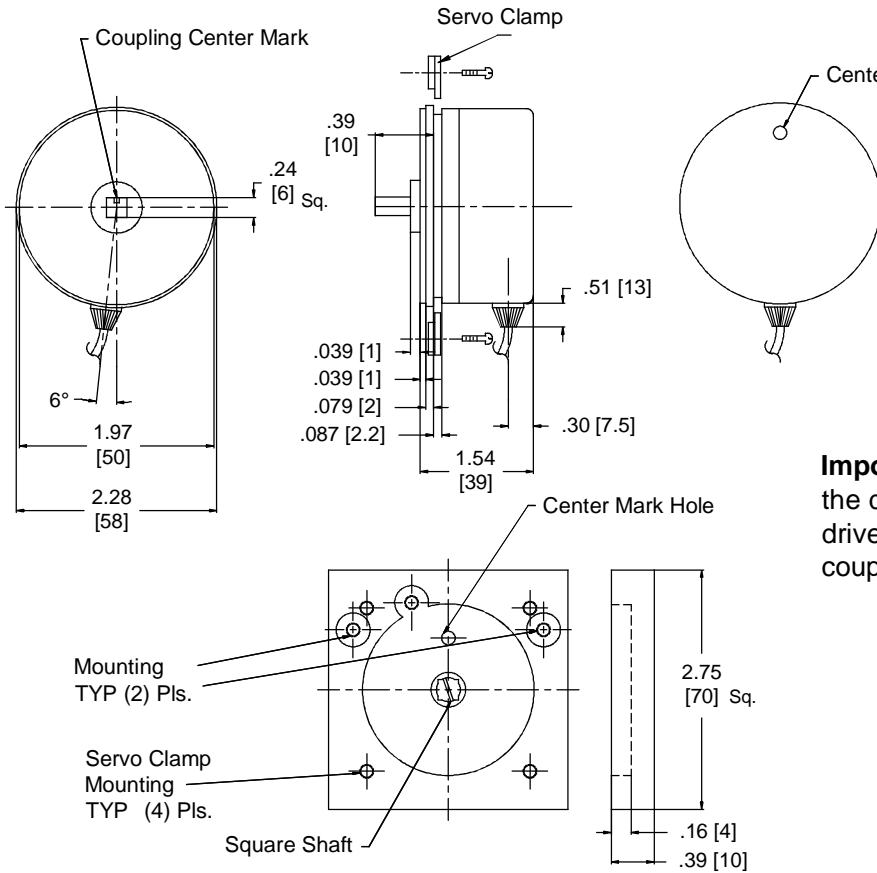
The OGR8G-M1 absolute encoder produces a gray coded digital output with a resolution of 255 discrete counts in each direction. This contactless system uses optoelectronics to identify each position, which eliminates the wear usually associated with analog potentiometer outputs. In addition to the 255 steps in each direction, the OGR also has (2) directional bits and an LED to indicate zero position. The encoder servo mounts directly to the (V)NSO Joystick, creating a mill-duty controller for digital variable speed drives.

### Features:

- Gray Code
- Special Shaft with sealed ball bearing
- 15 pin Sub-D connector
- Cable Length with connector 1.6' [0.5M]
- LED for zero pulse position
- High quality electronic design with high noise immunity
- All photoelectric LED principle on a chip, not discrete components
- Aging circuitry compensation
- Long life and high accuracy
- Optional Mating cable 6.8' [2M].



# OGR8G-M1 Absolute Encoder



**Important:** Add 1.875" [47.5] to the depth of the NSO contact drive assembly for encoder and coupling.

## Technical Data:

### Mechanical Data:

**Material:** Aluminum flange, Steel Housing  
**Cable:** 12 x 0.14 shielded, L=1.6' [0.5M] with 15 pin Sub-D Connector  
**Shaft:** Square 6mm, stainless steel  
**Torque:** Typ. 2.8 cNm (3000 rev/min. 20°C)  
**Max. Revolution:** 12,000 rev/min  
**Protection Class:** Shaft & Housing NEMA 3  
**Weight:** 10.6 oz [300 gr.]  
**Steps per Revolution:** 512

### Electrical Data:

**Output Circuit:** Push-pull, short circuit protection  
**Voltage Supply Range Vs:** 10-30 VDC, reverse polarity protection  
**Supply Current:** Typ. 100 mA (+Vs=24V/no load)  
**Output Current:** Max. 20 mA  
**Max. Switching Frequency:** 50 kHz  
**Temperature Range:** -20...+85°C  
**Shock:** ≤ 500 m/s<sup>2</sup> / 11 ms (IEC 68 Teil 2-27)  
**Vibration:** ≤ 100 m/s<sup>2</sup> / 10-200 Hz (IEC 68 Teil 2-6)  
**Life:** 100,000 Hours

