

### Description:

The CP-850-12GC-PLC and CP-950-12GC-PLC are 12-bit absolute encoders with built-in programmable logic controllers.

While the typical absolute encoder outputs Gray, natural binary, or BCD position information, most applications use a PLC to interpret and perform actions based on the data received from the encoder. To facilitate and foster economical control solutions, the CP-850/950-12GC-PLC integrate a simple but effective PLC within the encoder itself.

Eight outputs are available and can be thought of as eight cams, each with 16 set-points. Each set-point can be assigned to any of 4096 positions within each shaft revolution. Outputs can be defined as either static HI or LO or as negative or positive pulses. Pulse duration is programmable from 1 to 255 milliseconds. Direction is either software or hardware controlled and the encoder ZERO position can be set anywhere at anytime.

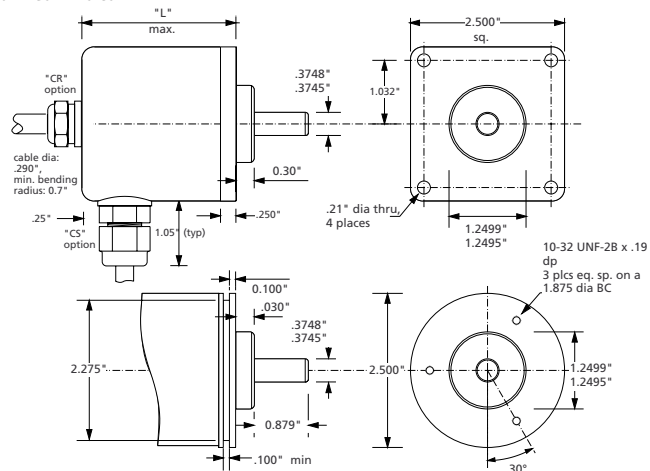
Programming is done in real time, which means changes take effect immediately even as the encoder is turning. All parameters are stored in EEPROM non-volatile memory. Built-in self diagnostics is performed at start-up to insure reliable operation.

### Specifications:



- shaft diameter: .3745" / .3748"
- shaft loading: 40 lbs axial, 35 lbs radial
- shaft runout: .0005" T.I.R.
- starting torque: 1.5 oz.in max @20°C
- shaft rotation: continuous, reversible
- slew speed: 160 RPS
- bearings: ABEC 7, shielded
- shaft material: 416 stainless
- housing material: aluminum
- cover material: aluminum
- bearing life: manufacturer's specs
- moment of inertia: 4.1x10<sup>-4</sup> oz.in.sec<sup>2</sup>
- weight: approx. 13 oz
- temperature: operating: -20°C to +90°C
- shock: 50 G's @ 11 ms
- vibration: 5-2,000 Hz @ 20 G's
- humidity: 98% without condensation
- protection: IP 65

### Mechanical Data:



## CP-950-12GC-PLC, Absolute, 12 bit, Built-in PLC

### Specifications:



- shaft diameter: 12.7 mm, 0.5" max
- shaft loading: 40 lbs. axial, 35 lbs. radial
- shaft runout: .0005" T.I.R.
- allowable host shaft movement: 0.05" axial, 0.005" radial
- starting torque: 1.5 oz in max @ 20°C
- shaft rotation: continuous, reversible
- slew speed: 160 RPS
- bearings: ABEC 7, shielded
- shaft material: 416 stainless
- housing material: aluminum
- cover material: aluminum
- bearing life: manufacturer's specs
- moment of inertia: 4.1 x 10<sup>-4</sup> oz. in sec<sup>2</sup>
- weight: approx. 13 oz.
- temperature: operating: -20°C to +90°C
- shock: 50 G's @ 11 ms
- vibration: 5-2000 Hz @ 20 G's
- humidity: 98% without condensation
- protection: IP 65

### Mechanical Data:

