



*Representative photograph, actual product appearance may vary.*

*Due to regional agency approval requirements, some products may not be available in your area. Please contact your regional Honeywell office regarding your product of choice.*

## 600EN-128-CN1

600 Series Optical, 128 Pulse Per Rev, 2-bit gray code

### Features

- Long life-10 million revolutions minimum (no contacts)
- Cost effective, eliminates need for A/D converters
- Stainless steel shafts and nickel-plated bushings
- Stability from -40 °C to 65 °C [-40 °F to 149 °F]
- Cable and printed circuit terminations available

### Typical Applications

- Motion sensing and control
- Motor control
- Flow control
- Low-to-high input for test and measurement
- Medical and instrumentation
- Robotics
- Computer peripherals

### Description

The 600 Series controls are manually operated, rotary, optical encoders that output two square waves in quadrature at a rate of 128 pulses per channel per revolution as a standard with other resolutions down to 60 pulses available. The outputs are TTL compatible. PC terminals or cable leads are available.



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Product Specifications	
Encoder Type	Optical
Pulse Per Rev	128 pulses/rev
Dome Switch	No
Output	2-square wave, Channel A leads Channel B by 90 ° electrically in counterclockwise direction
Electrical Travel	Continuous
Source Voltage Range	4.75 Vdc min., 5.0 Vdc nom., 5.25 V max.
Supply Current	30 mA
Voltage Out High	2.4 Vdc min.
Voltage Out Low	0.4 Vdc max.
Pull-up Resistor	10 kOhms
Operating Speed	300 RPM max.
Operating Torque	0,011 Nm [1.5 oz in] max.
Terminals	190,5 mm [7.5 in] long cable/connector
Terminals Strength	0,9 kg [2.0 lbs]
Housing	Molded thermoplastic
Mechanical Travel	Continuous
Rotational Life	10 million shaft rotations
Shaft Axial Force	6,8 kg [15 lbs] push/pull
Shaft End Play	0,127 mm [0.005 in] max.
Shaft Radial Play	0,254 mm [0.01 in] at 25,4 mm [1 in]
Shaft Material	Stainless Steel
Shaft Diameter	6,35 mm [0.25 in]
Shaft length	19,05 mm [0.75 in]
Bushing Material	Nichel plated brass
Bushing Diameter	9,53 mm [0.375 in] x 32 NEF-2A

<b>Bushing length</b>	9,53 mm [0.375 in]
<b>Operating Temperature</b>	-40 °C to 65 °C [-40 °F to 149 °F]
<b>Storage Temperature</b>	-55 °C to 110 °C [-67 °F to 230 °F]
<b>Humidity</b>	85% RH at 40 °C [104 °F] 240 Hr
<b>Shock</b>	100 G at 6 per MIL-STD-202; Method 213, Condition C
<b>Vibration</b>	10 Hz to 2000 Hz, 15 G; MIL-STD-202, Method 204, Condition C
<b>Series Name</b>	600 Series
<b>Availability</b>	Global
<b>UNSPSC Code</b>	30211929
<b>UNSPSC Commodity</b>	30211929 Encoders



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## **WARNING**

### **PERSONAL INJURY**

DO NOT USE these products as safety or emergency stop devices, or in any other application where failure of the product could result in personal injury.

**Failure to comply with these instructions could result in death or serious injury.**

## **WARNING**

### **MISUSE OF DOCUMENTATION**

- The information presented in this product sheet (or catalog) is for reference only. DO NOT USE this document as product installation information.
- Complete installation, operation and maintenance information is provided in the instructions supplied with each product.

**Failure to comply with these instructions could result in death or serious injury.**

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