

## NR25 Series Absolute Encoder Single-Turn & Multi-Turn

### Features

- DeviceNet interface
- Up to 30 bit (65536 x 16384) Resolution
- IP67 Rated Housing
- Solid Shaft, Hub Shaft, and Stainless Units avail.
- Programmable resolution, count direction, total measure range, velocity format, & position preset

### Capabilities

Provide an overall measuring range of 16 bits (single-turn resolution) plus 14 bits (number of revolutions), or 30 bits total\*

Designed in accordance with ODVA guidelines, the AMCI DeviceNet encoders are 100% compatible with PLCs that support DeviceNet

Visit [www.amci.com](http://www.amci.com) to learn about these capabilities, and more.

\*Specifications on back



## Product Specifications

### NR25 Mechanical Specifications:

#### Shaft Loading:

*Solid Shaft:*

1/4", 3/8", 5/8", 6mm, and 10mm Shafts:

40 lbs. radial/20 lbs. axial maximum shaft loading.  
Bearing life rated at  $2 \times 10^9$  revolutions minimum at maximum shaft load

*5/8" Shaft:*

100 lbs. radial/50 lbs. axial maximum shaft loading. Bearing life rated at  $2 \times 10^9$  revolutions minimum at maximum shaft load

*Hub Shaft:*

40 lbs. radial/20 lbs. axial maximum shaft loading.  
Bearing life rated at  $2 \times 10^9$  revolutions minimum at maximum shaft load

**Package Style:** 2.5" diameter housing available with flange, servo, or hub shaft mounting

**Housing:** Powder coated aluminum or stainless steel

**Moment of Inertia:** (3/8" Shaft)  
 $6.00 \times 10^{-4}$  oz-in-sec<sup>2</sup>

#### Shaft sizes:

Solid Shaft Diameter:

1/4" (*single-turn only*), 3/8", 5/8", 6mm, or 10mm diameter stainless steel

Hub Shaft Inner Diameter:

1/2" standard inner diameter stainless steel  
3/8", 10mm, 12mm, and 14mm bore reducers

### NR25 Electrical Specifications:

**Output Code:** DeviceNet

#### Resolution:

Single-turn = 65536 counts max

Multi-turn = (2 versions)

65536 counts/turn & 4096 turns maximum

65536 counts/turn & 16384 turns maximum

#### Direction of Increasing Counts:

Programmable over the network  
default = CW increasing looking at the shaft

#### Programmable Parameters:

Direction of increasing counts, counts per turn, velocity units, preset function, total measurement range

#### Power Requirements:

11 to 25Vdc | 1.5W maximum | 50mA @ 24Vdc

### NR25 Environmental Specifications:

**Enclosure:** IP67 Rated

**Shock:** 50G's for 11mSec

**Vibration:** 20 g, 5 to 2000 Hz

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