









# **INCREMENTAL THRU-BORE & MOTOR MOUNT ENCODERS**

### MODEL 58T/HP Ø58 MM MODEL 15T/H Ø1.5" MODEL 25T/H Ø2.5"

Programmable

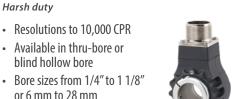
 Programmable output type, waveform, and resolutions from 1 to 65.536 CPR

- Available in thru-bore or blind hollow bore
- Bore sizes to 5/8" or 15 mm
- · Variety of flexible mounting options
- Operating temps: -40° to 100° C
- · Sealing to IP67

High performance & economical

- Resolutions to 10,000 CPR
- Available in thru-bore or blind hollow bore
- Bore sizes to 3/8" or 10 mm
- Up to 12 pole commutation
- Simple, innovative flex mounting system
- Operating temps: -40° to 120° C
- Sealing to IP64





- Frequencies to 1 MHz
- Variety of flexible mounting options
- Single replacement solution for 2.0" to 3.5" encoders
- Operating temps: -20° to 105° C
- Sealing to IP66

#### **MODEL 225A/Q**

Ø2.25"

Ø2.1"

#### **MODEL 755A**

Ø1.5"

#### **MODEL 260**

Ø2.0"

Economical tachometer/motor feedback

- Single channel and quadrature
- Bore sizes to 7/8" or 22 mm
- · Variety of connector options
- Flexible mounting arm available



Compact, high resolution, blind hollow bore

- Resolutions to 30,000 CPR
- Bore sizes to 3/4" or 14 mm
- Frequencies to 1 MHz
- Flexible mounting brackets
- Operating temps: -40° to 100° C



Compact, economical thru-bore

- Resolutions to 10,000 CPR
- Bore sizes to 5/8" or 15 mm
- Up to 12 pole commutation
- Simple, innovative flexible mounting system
- Operating temps: -40° to 120° C
- Sealing to IP64



### **ENCODER MODULES**

## MODEL 121

Auto-aligning

- · Resolutions to 2500 CPR
- Patented auto-aligning mounting
- Bore sizes to 5/8" or 15 mm
- Up to 12 pole commutation
- Operating temps: 0° to 100° C
- · Includes IP50 dust seal kit

# MODEL 30M / MODEL 30MT Magnetic encoder modules

- Resolutions to 1024 CPR (4096 PPR with quadrature counting)
- Compact 30 mm (1.18") size
- Available with 8-pin Molex\*, 16-pin Molex\*, or 8-pin M12 connector
- Optional 2-pole or 32-pole commutation
- Large air gap and tolerance to misalignment
- Model 30MT features threaded housing for built-in alignment
- Operating temps: -40° to 120°C

Ø6.5" / Ø9.0"

· Sealing to IP69K



Model 30M

\*Model 30M only

Ø4.3"

Ø30 MM

### LARGE BORE ENCODERS

### MODEL 770 / MODEL 771

· Resolutions to 4096 CPR

- Fits NEMA frame size 56C thru 184C (Model 770) and 182TC thru 256TC (Model 771)
- Bore sizes to 1" or 24 mm (Model 770) or sizes to 1 7/8" or 43 mm (Model 771)
- · Variety of connector options
- Operating temps: 0° to 100° C



Resolutions to 4096 CPR
 Slim profile — only 1.36"

• Slim profile – only 1.36" deep

**MODEL 775 / MODEL 776** 

- Available with a variety of bore sizes, resolutions, and connector types
- · CE marking available
- · Easy over-shaft installation
- Operating temps: 0° to 100° C



Model 775

Model 776

# **INCREMENTAL SHAFT ENCODERS**

Ø1.5" **MODEL 25SP** Ø2.5" **MODEL 15S MODEL 702** Ø2.0"

Programmable

 Programmable output type, waveform, and resolutions from 1 to 65,536 CPR

- Flange or servo mounting
- Teachable index
- Shaft sizes up to 5/16" or 10 mm
- Dual bearings rated 80 lbs axial or radial
- Operating temps: -40° to 100° C
- · Sealing to IP67

High performance & economical

- Resolutions to 10,000 CPR\*
- Up to 12 pole commutation available
- Operating temps: -40° to 120° (
- · Sealing to IP64

\*See Model 755A Shaft for higher resolutions



Harsh duty

- Resolutions to 30,000 CPR
- Shaft sizes to 3/8" or 10 mm
- 80 lb maximum radial and axial load
- Operating temps: 0° to 100° C
- Sealing to IP67



#### **MODEL 758**

#### Ø58 MM

#### **MODEL 725**

#### Ø2.5"

### MODEL 711, MODEL 715, MODEL 716

Commonly-used size

- Resolutions to 30,000 CPR
- Clamping or synchro flange options
- 80 lb maximum radial and axial load
- Operating temps: 0° to 100° C
- · Sealing to IP67



Industrial double-bearing option

- Resolutions to 30,000 CPR Frequencies to 1 MHz
- "Encoder-within-encoder option" industrial isolated flex housing available
- Operating temps: 0° to 100° C
- Sealing to IP67



Cube encoders

- The original Cube encoders
- Resolutions to 10,000 CPR
- Single channel, quadrature, and timed pulse
- Versatile housing styles, from standard to ultraheavy duty



# **ABSOLUTE ENCODERS**

**PROFINET® & EtherCAT®** 

Ethernet-ready absolute encoder

Maintenance-free magnetic design

Compact 58 mm (2.28") diameter

Shaft (A58SE) or blind hollow bore

package with bus cover

(A58HE) options

**MODEL A58SE MODEL A58HE** 

Ø58 MM

**MODEL A36SB MODEL A36HB** 

Ø36 MM

**MODEL A58SB MODEL A58HB** 

Ø58 MM

**MODEL A25SB** 

Ø2.5"

Double-bearing absolute encoder











 Standard Size 36 mm (1.42") package

Compact bus absolute encoders

- · Shaft (A36SB) or blind hollow bore (A36HB) options
- Flex mount eliminates couplings ideal for motors or shafts







• Maintenance-free magnetic design 58 mm (2.28") diameter

CANopen® & SSI

Robust bus absolute encoders

- Shaft (A58SB) or blind hollow bore encoder (A58HB)
- Flex mount eliminates couplings ideal for motors or shafts



- Standard Size 25 package (2.5" x 2.5")
- Sealing to IP67
- · Servo and flange mounting
- Proven double bearing design









For detailed product specifications, drawings, and photos, please refer to the product datasheet at encoder.com/product-datasheets

# LINEAR MEASUREMENT SOLUTIONS

### **MODEL TR1 • MODEL TR2 • MODEL TR3**

- Encoder and measuring wheel in one compact unit
- Model TR1 and Model TR3 offers a variety of options for measuring wheel sizes, with various contact surfaces to accommodate most materials
- Heavy duty Model TR3 is available in single or dual wheel configuration
- · Resolutions to 10,000 CPR
- Operates over a variety of surfaces at speeds up to 3000 feet per minute (400 feet per minute for TR2 with rack & pinion gear)
- Easily installed in a vertical, horizontal or upside down orientation
- Model TR1 and Model TR2 offer sealing to IP66
- Model TR3 offers sealing to IP67







Model TR3

### **MODEL PLMS**

### Programmable · Absolute

- Bracket fits any 2.5" shafted encoders with servo flange or 58 mm with clamping flange, including these EPC models:
  - Model 25SP Accu-CoderPro<sup>™</sup> for programmable incremental options
  - Model A58SE for absolute feedback with EtherCAT® or PROFINET® communication protocol
  - Model A58SB for absolute feedback with CANopen® or SSI communication protocol
  - Model A25SB for absolute feedback with CANopen® or SSI communication protocol
- Variety of options for measuring wheels, with various contact surfaces to accommodate most materials
- Optional angled mounting bracket available

### **MODEL LCX SERIES DRAW WIRE**

Absolute • Incremental • Stainless steel

- · Fast and easy encoder mounting
- Wire length options from 1 to 42.5 m
- Linearity ± 0.05 % of full range (with encoder)
- · Optional high corrosion protection
- Temperature range -20° C to 85° C
- Optional low temp range of -40° C
- Bracket fits any 2.5" shaft encoders with servo flange or 58 mm with clamping flange, including these EPC models:



Model LCX80

Model LCX135

- Model A58SB for absolute feedback with SSI or CANopen® communication protocol
- Model A58SE for absolute feedback with EtherCAT® or PROFINET® communication protocol
- · Model 758 high-performance incremental encoder
- Model 858S stainless steel incremental encoder

# STAINLESS STEEL INCREMENTAL ENCODERS

Ø2.0"

### • Resolutions to 30,000 CPR

**MODEL 802S** 

- Resolutions to 30,000 CFN
   Flange or servo mounting
- 80 lb maximum axial and radial shaft loading
- Operating temps: 0° to 100° C
- Sealing to IP67



### **MODEL 858S**

- Up to 30,000 CPR
- 80 lb maximum axial and radial shaft loading
- Operating temps: -40° to 100° C
- · Sealing to IP67

Ø58 MM

### **MODEL 865T**

- · Resolutions to 4096 CPR
- Fits NEMA Size 56C thru 184C motor faces (4.5" AK)
- Slim profile only 1.00" deep
- Operating temps: 0° to 100° C



Ø6.0"

# SIGNAL ENHANCEMENT

### **MODEL RX/TXD**

4-in-1 Repeater, converter, splitter, tester

- · Splits one input signal into two or three outputs
- For use when multiple devices need to receive an encoder signal several RX/TXD units can be combined to
  provide as many outputs as needed
- Signal conditioner or repeater for long-distance transmission
- Provides conversion between common signal types accommodates a variety of digital signal types (RS422, NPN, PNP, TTL, etc.) and voltages (5VDC or 5-24VDC) as both input and output options
- Level changes from Vcc to 5V or 5V to Vcc
- Convenient DIN rail package



# **LINEAR MEASUREMENT ACCESSORIES**

### LINEAR MEASUREMENT BRACKETS



- EPC brackets are manufactured of durable materials and have the proper mounting holes and geometry for easy application to EPC's encoders.
- Pivot brackets use the combined weight of the encoder, measuring wheel, and bracket to provide surface torsion, while the single pivot action allows the assembly to adjust pitch for variations in material
- Spring loaded pivot brackets provide an adjustable surface torsion, which allows the encoder and measuring wheel to be mounted in almost any orientation, even upside down.
- Angled mounting brackets allow for a variety of mounting positions.

### **MEASURING WHEELS**





EPC offers measuring wheels in a variety of sizes and different materials:

- · Polyurethane in a variety of durometer ratings
- · Rubber insert
- Knurled aluminum
- · Hard-anodized knurled aluminum

## **CABLES, CONNECTORS & MATING CORDSETS**

### **ENCODER POWER CABLES, CONNECTORS, AND INDUSTRIAL ETHERNET COMMUNICATION & POWER**

- EPC cable and mating connector assemblies can be ordered to your specified length and with the proper pin-out
- Encoder cables and mating connectors can be ordered separately
- 5-pin and 8-pin M12 cordsets are available in a variety of lengths



# **Get the EPC Advantage**

### **US-Based Since 1969**

Encoder Products Company, Inc. (EPC) is a leading designer and manufacturer of motion sensing devices. Founded in the US in 1969, EPC began operations with a small line of custom encoders and has remained a US-based company, with our main manufacturing facility, our 100,000 square foot vertically-integrated location, in Sagle, Idaho, USA.

### **Quality You Can Rely On**

At EPC, quality is designed into every product and each product is fully tested against EPC's exacting quality standards. EPC is ISO 9001:2015 certified, RoHS, and WEEE compliant.

### **Outstanding Value**

Our products are competitively priced and come with an industry-leading 3-year warranty\* – and we routinely hear from customers who are replacing EPC encoders that are decades old.

\*For products with a high-operating-temperature option, warranty is two years.

### **Exceptional Customer Service**

When you call EPC, you talk to real engineers and encoder experts to answer your questions. We're here to answer your calls Monday through Friday, 5:00 am - 4:30 pm PST.

### Standard Lead Time of Just 4 – 6 Days

EPC is known for our fast lead times. We can produce your custom encoders faster than most suppliers' standard products, offering lead times of 4 to 6 days on most orders - that's DAYS not weeks. We even offer same-day expedite service on many models.



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