

DR86A

Extra Heavy Duty Machine Tool Encoder



Model DR86A is an extra heavy duty unit that employs a highly reliable Opto-ASIC encoder module mounted within a rugged mechanical housing. The heavy duty sealed bearings, together with double O-ring sealing, makes this encoder a serious and reliable alternative to a wide range of machine tool encoders, and at an economical price.

Common Applications

Motion Control Feedback, Conveyors, Elevator Controls, Machine Control, Food Processing, Process Control, Robotics, Material Handling, Textile Machines

Replaces

Fanuc, Sumtak, Tamagawa, Koyo, Kwangwoo

Price: \$750

Additional discounts available for volume orders.

ORDER NUMBER	CPR
DR86A-01	1024

Features:

- Rugged All Metal Housing
- 68 mm Flange Mount
- 1024 CPR*
- 17-Pin MS Style Connector
- IP65 Double O-ring Seal
- Line Driver Output
- 15 mm Stainless Steel Shaft

*Other CPRs may be available. Contact Customer Service.

The Accu-Coder™ Advantage

- ✓ Get this encoder FAST – you'll get your encoders in days, not weeks.
- ✓ Huge savings in price comparison – the DR86A is your economical solution
- ✓ The accuracy, reliability, and quality that only come from an Accu-Coder™
- ✓ Industry Best 3-year warranty!

ACCU>CODER™
by Encoder Products Company

Model DR86A Specifications

Electrical

Input Voltage 4.75 to 24 VCC max for temperatures up to 70° C
 Input Current 100 mA max with no output load
 Input Ripple 100 mV peak-to-peak at 0 to 100 kHz
 Output Format Incremental – Two square waves in quadrature with channel A leading B for clockwise shaft rotation, as viewed from the encoder mounting face. See Waveform Diagrams below.
 Output Types Line Driver – 20 mA max per channel (Meets RS 422 at 5 VCC supply)
 Index Occurs once per revolution. The index is Ungated. See Waveform Diagrams below.
 Freq Response Up to 100 KHz
 Noise Immunity Tested to BS EN61000-4-2; IEC801-3; BS EN61000-4-4; DDENV 50141; DDENV 50204; BS EN55022 (with European compliance option); BS EN61000-6-2; BS EN50081-2
 Symmetry 180° ($\pm 18^\circ$) electrical at 100 kHz output
 Quad Phasing 1 to 2540 PPR: 90° ($\pm 22.5^\circ$) electrical at 100 kHz output
 Min Edge Sep 1 to 2540 PPR: 67.5° electrical at 100 kHz output
 Rise Time Less than 1 microsecond
 Accuracy Instrument and Quadrature Error: For 1024CPR, 0.017° mechanical (1.0 arc minutes) from one cycle to any other cycle

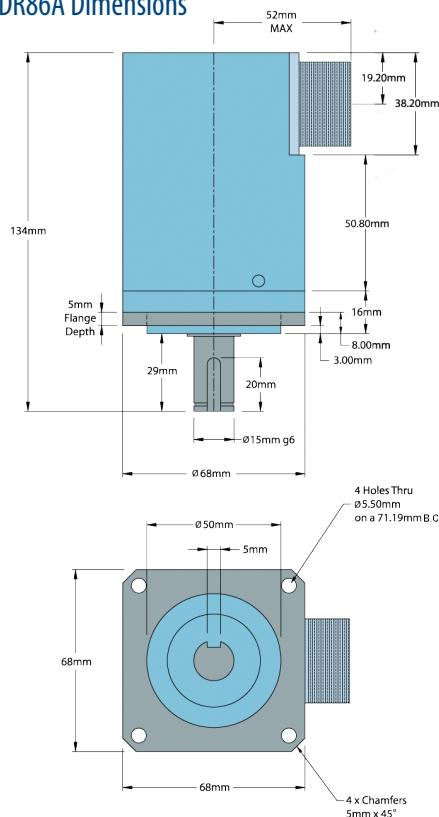
Mechanical

Max Shaft Speed 3600 RPM. Higher shaft speeds may be achievable, contact Customer Service
 Shaft Size 15 mm
 Shaft Material 303 stainless steel
 Shaft Rotation Bi-directional
 Radial Shaft Load 35 kg max
 Axial Shaft Load 35 kg max
 Starting Torque 2.118 x 10-2 Nm typical
 Max Acceleration 1 x 105 rad/sec²
 Electrical Conn 17-pin MS Style
 Housing Anodized Aluminium
 Bearings Precision ABEC ball bearings
 Mounting Square Flange with 4 Holes 5.50 mm Dia on a 71.19 mm Bolt Circle (B.C.)
 Weight 800 gms typical

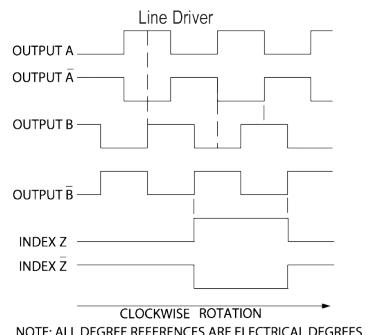
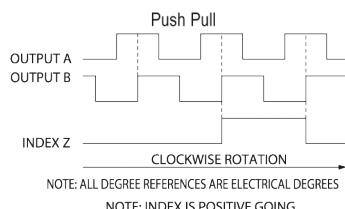
Environmental

Operating Temp 0° to 70° C
 Storage Temp -25° to 85° C
 Humidity 95% RH non-condensing
 Vibration 10 g @ 58 to 500 Hz
 Shock 50 g @ 11 ms duration
 Sealing IP65

DR86A Dimensions



DR86A Waveform Diagram



DR86A Wiring Table

17-Pin Conn	Function
A	A
B	Z
C	B
D	---
E	---
F	---
G	---
H	+VCC
J	---
K	0 Volts
L	---
M	---
N	A'
P	Z'
R	B'
S	---
T	---