



The Accu-Coder™ Direct Replacement Encoder DR580 is an exact substitute for the Dynapar H23 used on Magnetek Vector/Inverter Duty motors. Available with CPR's of 1024 or 2048, the DR580 is a heavy duty, rugged industrial encoder capable of withstanding higher temperatures and shock than the Dynapar H23. With either a body mount, or in-line connector option, the DR580 will provide a simple direct fit installation with superior performance for your motor mount application.

Features:

- Rugged 2" industrial encoder with 2.25" flex mount and 5/8" bore
- Able to withstand temperatures up to 100°C
- Quadrature with index
- Line Driver output
- 5 to 28VDC
- 10-pin in-line or body mount MS connectors
- Frequency up to 200 kHz
- Sealing of IP64
-

Typical Price: for Comparable Encoder: \$525 - \$650

DR580 Price: \$490

Additional discounts available for volume orders.

DR580
MODEL DR580
Size 20 (2.0") Encoder with
Flex Mount

A
CONNECTOR
A In-line 10-Pin MS Connector on 15" of Cable
B 10-Pin MS Body Mount Connector

1024
CYCLES PER REVOLUTION
1024 CPR
2048 CPR

The Accu-Coder™ Advantage

- ✓ Get this encoder FAST – you'll get your encoders in days, not weeks.
- ✓ Huge savings in price comparison – the DR580 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 DR580 Specifications

Electrical

Input Voltage 4.75 to 28 VDC max for temperatures up to 70° C; 4.75 to 24 VDC for temperatures between 70° C to 100° 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 B leading A for clockwise shaft rotation, as viewed from the encoder mounting face. See Waveform Diagrams below.
 Output Type Line Driver- 20 mA max per channel (Meets RS 422 at 5 VDC supply)
 Index Occurs once per revolution. See Waveform Diagram below.
 Freq Response 200 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 90° ($\pm 22.5^\circ$) electrical at 100 kHz output
 Min Edge Sep 67.5° electrical at 100 kHz output
 Rise Time Less than 1 microsecond
 Accuracy Instrument and Quadrature Error: 0.017° mechanical (1.0 arc minutes) from one cycle to any other cycle. (Total Optical Encoder Error = Instrument + Quadrature + Interpolation)

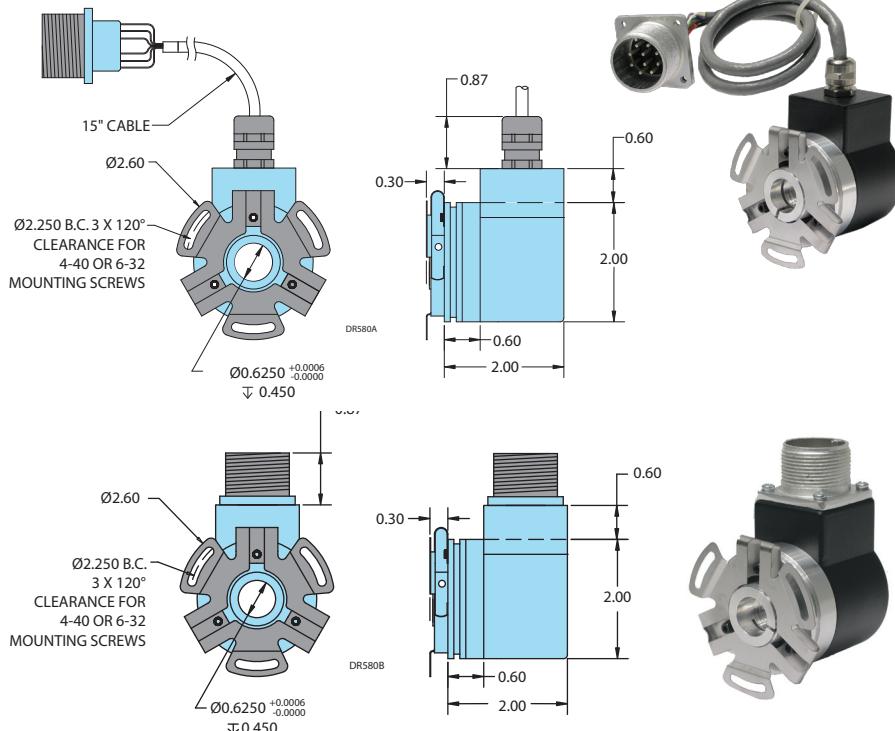
Mechanical

Max Shaft Speed 8000 RPM. Higher shaft speeds may be achievable, contact Customer Service.
 Bore Size 0.625",
 Bore Tolerance +0.0006" / -0.0000"
 User Shaft Tolerances
 Radial Runout 0.007" max
 Axial Endplay ± 0.030 " max
 Starting Torque 1.0 oz-in typical with IP64 seal
 Moment of Inertia 5.2×10^{-4} oz-in-sec²
 Max Acceleration 1 x 105 rad/sec²
 Electrical Conn 10-pin MS on 15" of cable, or body mount
 Housing All metal construction with black protective coating
 Bearings Precision ABEC ball bearings
 Mounting 2.250" Flex mount
 Weight 11 oz typical

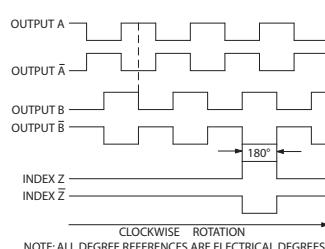
Environmental

Operating Temp 0° to 100° C
 Storage Temp -25° to +85° C
 Humidity 98% RH non-condensing
 Vibration 20 g @ 58 to 500 Hz
 Shock 75 g @ 11 ms duration
 Sealing IP64

DR580 Dimensions



DR580 Waveform Diagrams



Line Driver

The Line Driver output waveform is shown in the figure to the right. Output B leads Output A for clockwise rotation, as viewed from the encoder mounting face.

DR580 Wiring Tables

Pin	Function	Cable Color
A	A	Violet
B	B	Brown
C	Z	Orange
D	+VDC	Red
E	Shield	Black Tube
F	COM	Black
G	Case	Green
H	A'	Blue
I	B'	White
J	Z'	Yellow