DR274

Direct replacement encoder for the Microcut Controller for Perfecta Printing Presses

BRITISH ENCODER PRODUCTS COMPANY

Features:

- **High precision 38.1mm incremental encoder**
- **Stainless steel 3/8" shaft**
- **Quadrature A & B with reference channels**
- **500 PPR**
- **Line Driver output**
- **114mm of cable with RJ45 phone jack**
- **3 hole servo mount 120° apart**

For many years, Encoder Products Company supplied an encoder to Goldengate Microsystems for their "Microcut" Controller, often used as backstop gauges in the printing and binding industry. Perfecta USA manufactures printing presses that use this Microcut Controller. With the RJ45 connector, replacement of this encoder is usually as simple as just plugging it in.

Connector Options :-

Encoders produced for Goldengate Microsystems included both male and female connectors. Because DR274 is offered with either a male or female connector, be sure to select the proper connector to match your application.

ACCU-CODER™ by Encoder Products Company

The Accu-Coder™ Advantage

- Get this encoder **FAST!**
- ***Huge savings*** in price!
- The accuracy, reliability, and quality that only come from an Accu-Coder™
- Industry Best **3-year** warranty!

DR274-01

DR274-02

Don't see the exact encoder you need?

Call +44(0)1978 262100 and our Technical Sales Department will cross-reference your encoder to the correct BEPC model.

Rev: A

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DR274 Specifications

Electrical

- Input Voltage: 4.75 to 28 VCC max for temperatures up to 70° C
  4.75 to 24 VCC 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 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)
- Freq Response: Up to 1 MHz
- 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° (±18°) electrical at 100 kHz output
- Quad Phasing: 90° (±22.5°) electrical at 100 kHz output
- Min Edge Sep: 67.5° electrical at 100 kHz output
- Rise Time: Less than 1 microsecond
- Accuracy: 0.017° mechanical (1.0 arc minutes) from one cycle to any other cycle.

Mechanical

- Max Shaft Speed: 7500 RPM. Higher shaft speeds may be achievable, contact Customer Service.
- Shaft Size: 0.375" Diameter
- Shaft Tolerance: g6, Sliding fit for H7 host bore

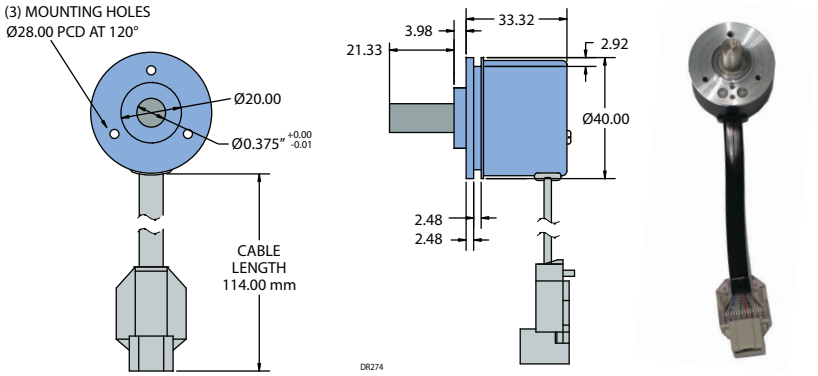
User Shaft Tolerances

- Radial Shaft Load: 2.25 Kg max
- Axial Shaft Load: 1.36 Kg max
- Starting Torque: 9.886×10^{-3} Nm typical
  2.824×10^{-2} Nm typical for -40° C operation
- Max Acceleration: 1×10^{5} rad/sec^2
- Electrical Conn: 2M cable (foil and braided shield, 24 SWG conductors) 5 Pin, 6 Pin or 8 Pin connectors available - see Appendix data sheet for connector cover options
- Housing: Black non-corrosive finish
- Bearings: Precision ABEC ball bearings
- Mounting: 3 x M3 on a 28mm PCD
- Weight: 100gm typical

Environmental

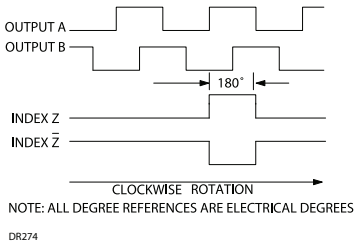
- Operating Temp: 0° to 70° C for standard models
  -40 to 70° C for low temperature option
  0° to 100° C for high temperature option
  (0° to 85° C for certain resolutions, see PPR Options.)
- Storage Temp: -25° to +85° C
- Humidity: 98% RH non-condensing
- Vibration: 10 g @ 58 to 500 Hz
- Shock: 50 g @ 11 ms duration
- Sealing: IP50 standard

DR274 Dimensions



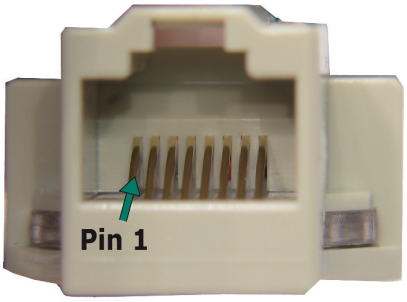
All dimensions are in mm with a tolerance of ±0.127mm or ±0.254 unless otherwise specified

Waveform Diagram



Wiring Table

Function	Pin
+VDC	1
A	4
B	6
Z	8
Z'	5
Not Used	3, 7
Ground	2



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