DR553

Direct Replacement Encoder For Dynapar Rotopulser Model 60

The Accu-Coder™ DR553 is a direct replacement encoder for the Dynapar Rotopulser Model 60. These encoders are used on Ink Jet printers, cut to length applications, motor drive speed feedback, and a variety of other applications. If you have tried to order the Rotopulser 60 you may have encountered long lead times. The DR553 from Encoder Products Company is the perfect substitution for the Rotopulser 60, and can be delivered today!

Order The DR553 As A Direct Replacement Encoder For Videojet Triumph and Excel Printers!

Blue type indicates price adder options. Contact Customer Service for details.

DR553	A	A	E	1000	A	B
MODEL **DR553** Size 20 (2.0") Encoder with 3.5" servo hub	**HOUSING** **A** Standard Housing For Single Shaft	**SHAFT** **A** 1/2" Diameter 1" Length with Flat	**OUTPUT TYPE 5-28V In/Out** **E** Push-Pull **D** Line Driver	**CYCLES PER REVOLUTION** Up to 2500 Call for resolution availabilty	**CONNECTOR TYPE** **A** MS Side Mount	**SEAL** **B** IP64

Model DR553 CPR Options

0001	0002	0004	0005	0006	0010	0012	0020	0025
0040	0045	0050	0060	0064	0100	0120	0125	0128
0150	0180	0192	0200	0240	0250	0256	0300	0360
0400	0500	0512	0530	0600	0625	0720	0800	0900
1000	1024	1200	1270	1500	1800	2000	2400	2500

The Accu-Coder™ DR553 Features:

- 3.5" servo hub on a rugged 2" encoder
- 1/2" stainless steel shaft
- Quadrature with index
- Resolutions up to 2500 CPR
- Line Driver and Push-Pull outputs
- 5 to 28 VDC
- 6-pin and 10-pin side mount MS connectors
- Sealing up to IP64

The Accu-Coder™ Advantage

- This encoder is available and ready for **quick delivery!**
- ***Huge savings*** in price comparison!
- The accuracy, reliability, and quality that only come from an Accu-Coder™
- A **3-year** satisfaction guaranteed warranty!

ACCU-CODER™ by Encoder Products Company

MADE IN U.S.A.

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Model DR553 Specifications

Electrical

Input Voltage	4.75 to 28 VDC 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 Type	Push-Pull- 20 mA max per channel Line Driver- 20 mA max per channel (Meets RS 422 at 5 VDC supply)
Index	Occurs once per revolution. 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° (±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	Instrument and Quadrature Error: For 200 to 1999 CPR, 0.017° mechanical (1.0 arc minutes) from one cycle to any other cycle. For 2000 to 2500 CPR, 0.01° mechanical (0.6 arc minutes) from one cycle to any other cycle.

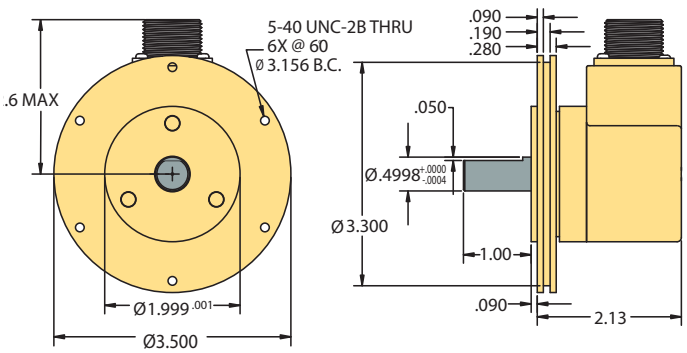
Mechanical

Max Shaft Speed	8000 RPM. Higher shaft speeds may be achievable, contact Customer Service.
Shaft Size	0.50"
Shaft Rotation	Bi-directional
Radial Shaft Load	80 lb max. Rated load of 20 to 40 lb for bearing life of 1.5 x 10^9 revolutions
Axial Shaft Load	80 lb max. Rated load of 20 to 40 lb for bearing life of 1.5 x 10^9 revolutions
Starting Torque	1.0 oz-in typical with IP64 seal or no seal
Moment of Inertia	5.2 x 10^{-4} oz-in-sec^2
Max Acceleration	1 x 10^5 rad/sec^2
Connector Type	6-, and 10-pin side mount MS connector
Housing	All metal construction with black protective coating
Bearings	Precision ABEC ball bearings
Mounting	3.5" servo mount
Weight	11 oz typical

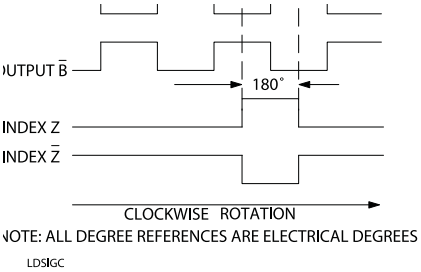
Environmental

Operating Temp	0° to 70° C for standard models
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	standard, or IP64

DR553 Dimensions



DR553 Waveform Diagram



NOTE: ALL DEGREE REFERENCES ARE ELECTRICAL DEGREES

LDSIGC

Line Driver and Push Pull Waveform

The Line Driver output waveform is shown in the figure to the left. Output A leads Output B for clockwise rotation of the encoder shaft as viewed from the encoder mounting face. Push Pull outputs do not include complimentary channels.

DR553 Wiring Table

Function	6-Pin MS (E)	10-Pin MS (D)	10-Pin Cable Assy
COM	C	C	Black *[
+VDC	E	E	White *]
A	B	B	Red *[
A'	----	G	Black *]
B	D	D	Blue *[
B'	----	H	Black *]
Z	A	A	Green *[
Z'	----	I	Black *]
Shield	F	F	Bare
Not Used	----	J	

*NOTE: Cable is twisted pairs. Wire pairs indicated by brace ( ])

Mating Connectors

To order a 6-pin MS mating connector order stock # 080014

To order a 10-pin MS mating connector order stock # 080113

Cordsets

To order a 10-pin MS cable assemby order stock # 410C-*xxx*-HV-R-N-SPEC553

xxx=cable length in feet