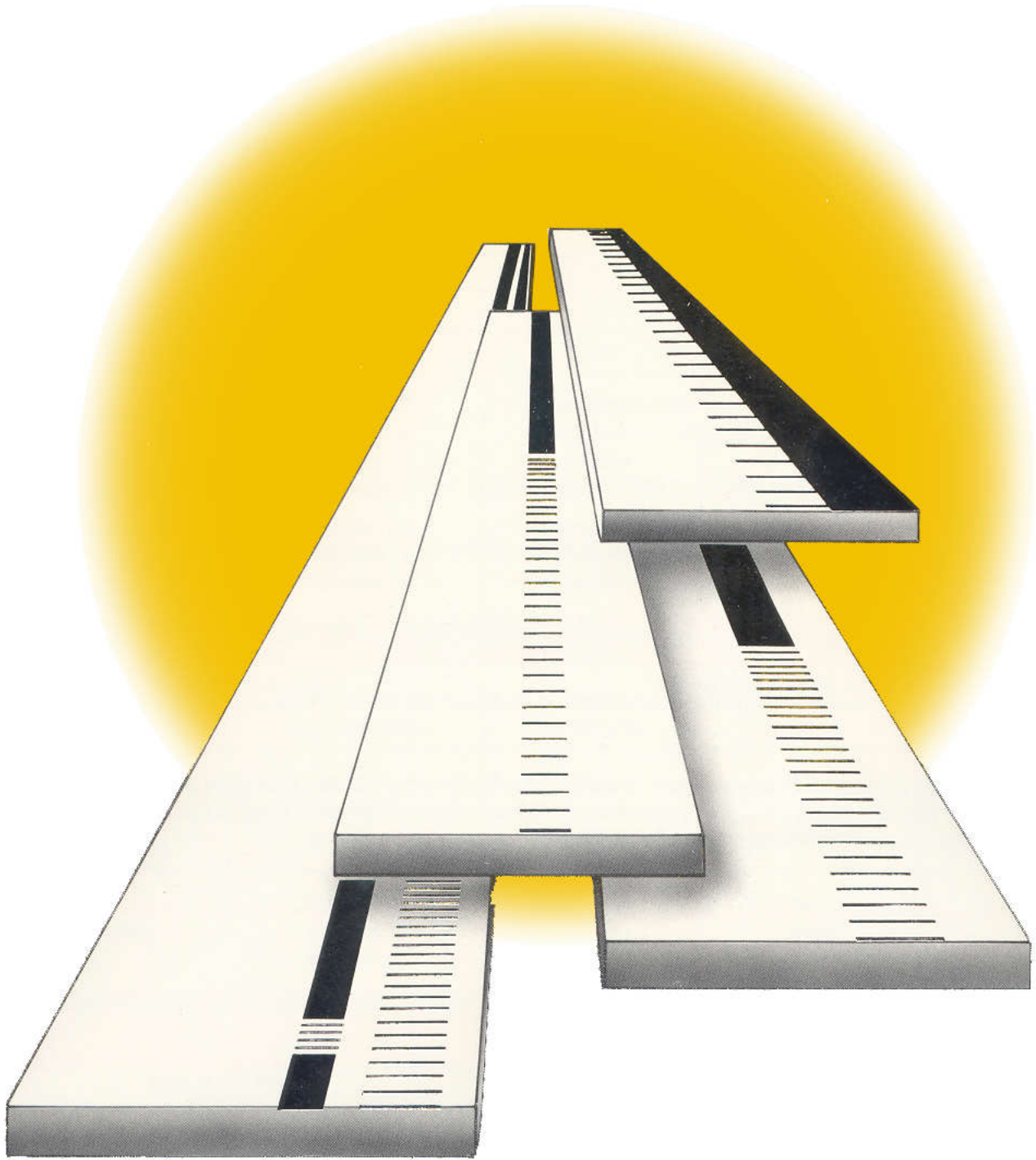


PRECISION LINEAR SCALES



SHORT FORM CATALOG NO. M-3004-B

METRIGRAPHICS DIVISION/DYNAMICS RESEARCH CORPORATION

50 CONCORD STREET, WILMINGTON, MA 01887 • 978/658-6100 • FAX 978/657-7765

METRIGRAPHICS PRECISION LINEAR SCALES

Metrigraphics offers Linear Encoder Scales in a variety of line counts for the most demanding applications. The accuracy of each scale is traceable to the National Institute for Standards and Technology and is offered in continuous lengths up to 83 inches or 2120 millimeters.

The masters used in replication have been generated using advanced numerically controlled laser interferometer techniques. Environmental conditions have been stringently controlled with seismic isolation equipment, temperature uniformity of .01° Fahrenheit, humidity controls and automatic barometric compensation to within 1 part in 10 million. Replication techniques are similarly controlled.

BENEFITS

Metrigraphics Precision Linear Scales offer:

- **Low Cost**
 - No tooling or setup charges for standard scales.
 - Scales cut to your specific length.
 - Priced on a per inch basis.
 - Choice of three accuracy grades permits selection to fit your requirements.
- **Immediate Delivery**
 - Most scales are stocked in 72 inch lengths and can be cut to your lengths and shipped within 5 days.
- **High Reliability**
 - All scales are produced using the Metrifilm™ process. (Vacuum Deposited Inconel)
- **Ultra Precision**
 - Accuracy to 1 micron in 48 inches. (Traceable to National Institute for Standards and Technology)

Additional types of positioning scales generated by Metrigraphics include absolute and non-linear functions. We encourage your request for quotation/information on a custom precision scale. Of course, you will be under no obligation.

If you are currently having a problem with accuracy, submit a sample scale to Metrigraphics for measurement and evaluation on our Precision Laser Interferometer Measurement System (see Figure 1).

SPECIFICATIONS

All scales supplied on .09" nominal thickness soda lime glass.

Accuracy is determined at 68° F and 760 mm barometric pressure.

Scale pattern is formed using the Metriform™ process (Vacuum Deposited Inconel).

Matching gratings which are quadra-phased (electronic phasing 0°, 90°, 180°, 270°) are also available. Please contact Metrigraphics for details.

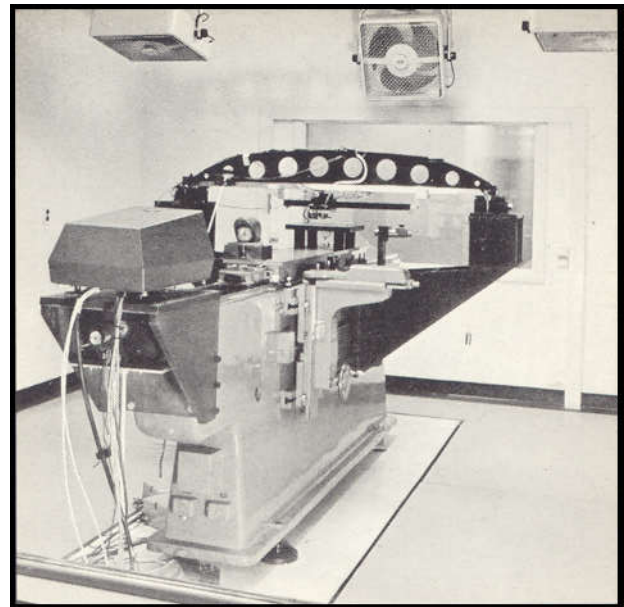


FIGURE 1 →

ENCODER SCALES

ENGLISH ENCODER SCALES		PROTOTYPE QUANTITIES		
Frequency	Catalog Number	3"-50"	100"	200"
500 LPI	3004-500 - A	\$17.50/in	\$14.00/in	\$10.50/in
	3004-500 - B	15.75/in	12.25/in	8.75/in
	3004-500 - C	14.00/in	10.50/in	7.00/in
1250 LP	3004-1250 - A	\$35.00/in	\$24.50/in	\$17.50/in
	3004-1250 - B	31.50/in	22.25/in	15.75/in
	3004-1250 - C	28.00/in	21.00/in	14.00/in

Frequencies available on special orders, 250, 1000, 2500 LPI. Telephone for details

METRIC ENCODER SCALES		PROTOTYPE QUANTITIES		
Frequency	Catalog Number	76-1270mm	2540mm	5080mm
25 LPMM	3004-25 - A	\$1.10/mm	\$.85/mm	\$.55/mm
	3004-25 - B	1.00/mm	.70/mm	.50/mm
	3004-25 - C	.85/mm	.55/mm	.40/mm
50 LPMM	3004-50 - A	\$1.20/mm	\$.90/mm	\$.60/mm
	3004-50 - B	1.10/mm	.80/mm	.55/mm
	3004-50 - C	1.00/mm	.75/mm	.50/mm

Frequencies available on special orders, 20, 62.5, 100, 125 LPMM. Telephone for details.

TABLE II ACCURACY SPECIFICATIONS

Grade	Error In One Foot of Scale	Max. Error Slope
A	50 Micro Inches	150 Micro Inches/Ft.
B	100 Micro Inches	300 Micro Inches/Ft.
C	250 Micro Inches	300 Micro Inches/Ft.

DELIVERY GRADES B AND C - 2 WEEKS
GRADE A - INQUIRE

HOW TO ORDER

Specify by filling in required:

FREQUENCY - GRADE - LENGTH

M3004A - - -

TERMS:
DOMESTIC TERMS NET 30 DAYS
OUTSIDE U.S. PAYMENT WITH ORDER - MIN. ORDER \$250.00
PRICES ARE U.S. DOLLARS, FOB WILMINGTON, MA., U.S.A.
PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

OTHER PRODUCTS CREATED BY METRIGRAPHICS

Incremental Code Discs	M-3001-D
Electroformed Parts	M-3011-A
Resolution Target Arrays	M-3000-D
Metriform™ II	M-3010A



METRIGRAPHICS®

DIVISION OF DYNAMICS RESEARCH CORPORATION

50 CONCORD STREET, WILMINGTON, MA 01887 • 978/658-6100 • FAX 978/657-7765

E-Mail: metsales@drc.com • WEB: <http://www.drc.com> • 800/261-2557

CONTROL THRU MEASUREMENT