



High-precision photolithography and glass machining

PRODUCT DATASHEET

Optical Encoder Scale - Glass Substrate

SUBSTRATE

Glass Type	Sodalime, Quartz, D263, black glass — other substrates on request
Thickness	From 0.3 to 4.8 mm
Flatness	<10 µm / 100 mm

COATING & PATTERN

Coating	High reflective chrome. Low reflective chrome at specific wavelength
Minimum line width	5µm standard. Down to 2 µm on request
Global length accuracy	Down to ± 1µm

DIMENSIONS

Linear Length	Up to 900 mm as standard
Dimensional Tolerance	±0.1 mm for Length and Width

COATING OPTIONS

Reflective Chromium

High reflective chrome(R>60%) combined with black glass provide high contrast between chrome and glass areas.

Low reflective Chromium

Low reflective chrome with R<10% at a defined wavelength can be used to minimize unwanted reflections of patterned area.

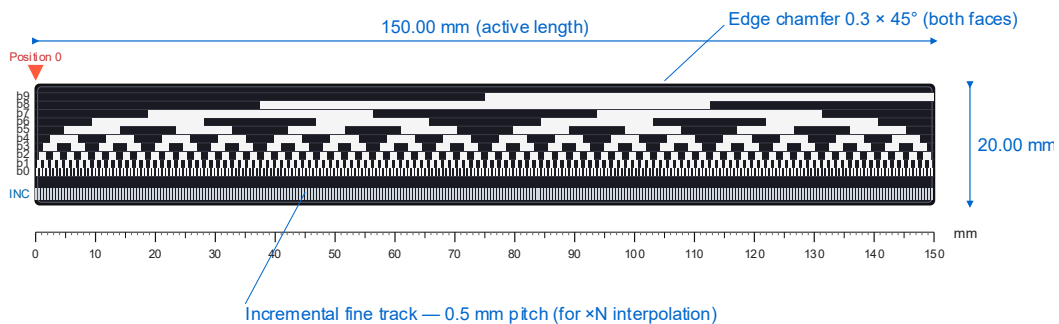


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PRODUCT DATASHEET

ABSOLUTE LINEAR ENCODER SCALE — 150 × 20 mm

Dark glass substrate — 10-bit Gray code (1024 positions, 0.146 mm step) + incremental fine track



Substrate: dark glass (B270 / soda-lime tinted, OD ≥ 4), polished both sides, thickness 3.0 mm $\pm$ 0.05 mm — edge chamfer 0.3 $\times$ 45°
Pattern: chrome opaque with clear (etched) windows — 10-bit reflected binary (Gray) code, MSB top $\rightarrow$ LSB above incremental
Resolution: 1024 absolute positions over 150 mm (0.1465 mm/step). Incremental fine track at 500 μ m pitch enables interpolation

HOW TO ORDER

Please provide the following information when requesting a quotation:

- 1 Linear scale dimensions
- 2 Data input — DXF, Gerber, GDS or PDF format
- 3 Glass type
- 4 Coating type
- 5 Required quantity and delivery timeframe

Request a Quote

Contact us for custom solutions tailored to your application and specifications.

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* All values are nominal. Selba reserves the right to update specifications without prior notice. Custom tolerances and special requirements available on request.