

	ROD 700 incremental	ROD 780 incremental
Power supply	5 V ± 5%/max. 90 mA	5 V ± 10%/max. 150 mA (with no load)
Incremental signals	~ 11 µApp	~ 1 Vpp
Line count/Accuracy	18 000/± 2" 36 000/± 2"	
Recommended meas. step	0.0001°	
Reference mark	ROD 700: one ROD 700 C: distance-coded	ROD 780: one ROD 780 C: distance-coded
Cutoff frequency (–3 dB)	≥ 90 kHz	≥ 180 kHz
Mech. perm. speed	Max. 1000 rpm	
Max. operating temp.	50 °C (122 °F)	
Min. operating temp.	0 °C (32 °F)	
Protection (IEC 529)	IP 64	
Starting torque at 20 °C (68 °F)	≤ 0.012 Nm	
Moment of inertia of rotor	360 · 10 ^{–6} kgm ²	
Shaft load	Axial: 30 N Radial: 30 N at shaft end	
Weight	Approx. 2.8 kg (6.2 lb)	
Vibration (55 to 500 Hz) Shock (6 ms)	≤ 100 m/s ² (IEC 68-2-6) ≤ 300 m/s ² (IEC 68-2-27)	
Electrical connection	Cable 1 m (3.3 ft), radial and axial; Preferred model (with 18 000 lines): cable 1 m with connecting element	
	With or without connector	With or without coupling
Permissible cable length* to subsequent electronics	Max. 30 m (98.5 ft)	Max. 150 m (492 ft)

* with HEIDENHAIN cable, see *Connectors and Cables*

Preferred models are manufactured in larger quantities and are available at short notice