

	Incremental		
	ROD 220	ROD 270	ROD 280
Incremental signals	□□TTL x 2	□□TTL x 10	~ 1 V _{PP}
Line count Integrated interpolation Output signals/revolution	9000 2-fold 18000	18000 10-fold 180000	18000 – 18000
Reference mark*	One		ROD 280: One ROD 280 C: Distance-coded
Cutoff frequency –3 dB Output frequency Edge separation <i>a</i>	– ≤ 1 MHz ≥ 0.125 μs	– ≤ 1 MHz ≥ 0.22 μs	≥ 180 kHz –
Elec. permissible speed	3333 rpm	≤ 333 rpm	–
Recommended meas. step for position capture	0.005°	0.0005°	0.0001°
System accuracy	± 5"		
Power supply without load	5 V ±10% max. 150 mA		
Electrical connection*	Cable 1 m, with or without M23 coupling		
Max. cable length ¹⁾	100 m	150 m	
Shaft	Solid shaft D = 10 mm		
Mech. permissible speed	≤ 10000 rpm		
Starting torque	≤ 0.01 Nm at 20 °C		
Moment of inertia of rotor	20 · 10 ⁻⁶ kgm ²		
Shaft load	<i>Axial:</i> 10 N <i>Radial:</i> 10 N at shaft end		
Vibration 55 to 2000 Hz Shock 6 ms	≤ 100 m/s ² (IEC 60068-2-6) ≤ 1000 m/s ² (IEC 60068-2-27)		
Operating temperature	<i>Moving cable:</i> –10 to 70 °C <i>Stationary cable:</i> –20 to 70 °C		
Protection IEC 60529	IP 64		
Weight	Approx. 0.7 kg		

* Please indicate when ordering

¹⁾ With HEIDENHAIN cable