

	Absolute Singleturn		Multiturn	
	ROC 1023	ROC 1013	ROQ 1035	ROQ 1025
Absolute position values	EnDat 2.2			
Ordering designation	EnDat 22	EnDat 01	EnDat 22	EnDat 01
Positions per revolution	8388608 (23 bits)	8192 (13 bits)	8388608 (23 bits)	8192 (13 bits)
Revolutions	–		4096 (12 bits)	
Code	Pure binary			
Elec. permissible speed Deviations ¹⁾	12000 min ⁻¹ (for continuous position value)	4000 min ⁻¹ /12000 min ⁻¹ ± 1 LSB/± 16 LSB	12000 min ⁻¹ (for continuous position value)	4000 min ⁻¹ /12000 min ⁻¹ ± 1 LSB/± 16 LSB
Calculation time t _{cal}	≤ 5 μs			
Incremental signals	–	~ 1 V _{PP} ²⁾	–	~ 1 V _{PP} ²⁾
Line count	–	512	–	512
Cutoff frequency –3 dB	–	≥ 190 kHz	–	≥ 190 kHz
System accuracy	± 60"			
Power supply Current consumption without load	3.6 V to 14 V ≤ 110 mA ³⁾		3.6 V to 14 V ≤ 140 mA ³⁾	
Electrical connection	Cable 1 m, with M12 coupling	Cable 1 m, with M23 coupling	Cable 1 m, with M12 coupling	Cable 1 m, with M23 coupling
Shaft	Stub shaft Ø 4 mm			
Mech. permissible speed n	12000 min ⁻¹			
Starting torque	≤ 0.001 Nm (at 20 °C)		≤ 0.002 Nm (at 20 °C)	
Moment of inertia of rotor	Approx. 0.5 · 10 ⁻⁶ kgm ²			
Shaft load	Axial: 5 N Radial: 10 N at shaft end			
Vibration 55 to 2000 Hz Shock 6 ms	≤ 100 m/s ² (EN 60068-2-6) ≤ 1000 m/s ² (EN 60068-2-27)			
Max. operating temp.	100 °C			
Min. operating temp.	For fixed cable: –30 °C For frequent flexing: –10 °C			
Protection EN 60529	IP 64			
Weight	Approx. 0.09 kg			

¹⁾ Velocity-dependent deviations between the absolute and incremental signals

²⁾ Restricted tolerances: Signal amplitude 0.80 to 1.2 V_{PP}

³⁾ Depends on the power supply; see *General Electrical Information*