	Absolute			
	RCN 228 **RCN 226**		**RCN 227F** **RCN 223F**	**RCN 227M** **RCN 223M**
Absolute position values	EnDat 2.2	EnDat 2.2	Fanuc serial interface	Mitsubishi high-speed serial interface
Ordering designation*	EnDat 22	EnDat 02	Fanuc 02	Mit 02-4
Positions per revolution	*RCN 228:* 268435456 (28 bits) *RCN 226:* 67108864 (26 bits)		*RCN 227:* 134217728 (27 bits) *RCN 223:* 8388608 (23 bits)	
Elec. permissible speed	≤ 1500 rpm			
Clock frequency	≤ 8 MHz	≤ 2 MHz	–	
Calculation time t_{cal}	5 µs		–	
Incremental signals	–	~ 1 V_{PP}	–	
Line count	–	16384	–	
Cutoff frequency –3 dB	–	≥ 180 kHz	–	
Recommended meas. step for position capture	0.0001°			
System accuracy*	*RCN 228:* ± 2.5" *RCN 226:* ± 5"		*RCN 227F:* ± 2.5" *RCN 223F:* ± 5"	*RCN 227M:* ± 2.5" *RCN 223M:* ± 5"
Power supply without load	3.6 V to 5.25 V at encoder/max. 350 mA			
Electrical connection	Cable 1 m, with M12 coupling	Cable 1 m, with M23 coupling	Cable 1 m, with M23 coupling	
Max. cable length[1]	150 m		30 m	25 m
Shaft	Hollow through shaft D= 20 mm			
Mech. permissible speed	≤ 3000 rpm			
Starting torque	≤ 0.08 Nm at 20 °C			
Moment of inertia of rotor	$73 \cdot 10^{-6}$ kgm^2			
Natural frequency	≥ 1200 Hz			
Permissible axial motion of measured shaft	± 0.1 mm			
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	*For accuracy of ± 2.5":* 0 to 50 °C *For accuracy of ± 5":* *Moving cable* –10 to 70 °C *Stationary cable* –20 to 70 °C			
Protection IEC 60529	IP 64			
Weight	Approx. 0.8 kg			

* Please indicate when ordering
[1] With HEIDENHAIN cable