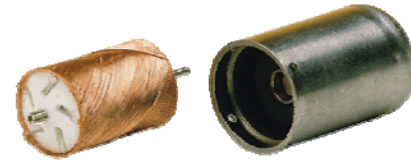


Features	
Axial (Dynamic)	≤1.0N
Radial (4mm From Jamming Ring)	≤2.7N
Press-Fit Force (Static)	≤80N
Axial Play (Measured Under Less Than 4N Axial Force)	0.05 - 0.15mm
Maximum Radial Play	0.02mm



Specifications		CD20-0203	CD20-0206	CD20-0209					
Assigned power rating	W	1.6	1.6	1.6					
Nominal voltage	V	3.0	6	9					
Terminal resistance ±10%	Ω	0.66	4	8.1					
No load speed ±10%	rpm	8500	8200	8170					
No load current	mA	60.2	19.0	19.5					
Speed constant	rpm/V	2833	1367	908					
Torque constant	mN.m/A	3.33	6.90	10.34					
Starting current	mA	4580	1535	1112					
Stall torque	mN.m	15.24	10.59	11.50					
Max. efficiency	%	78	79	75					
Current	mA	628	352	228					
Torque	mN.m	2.09	2.43	2.4					
Speed	rpm	7335	6319	6496					
Output power	W	1.760	0.840	2.540					
Max. permissible winding temp.	°C	85	85	85					
Ambient temperature range	°C	-20 -- +65	-20 -- +65	-20 -- +65					
Weight	g	39.0	40	39					

Specifications		CD20-0309							
Assigned power rating	W	3.2							
Nominal voltage	V	9.0							
Terminal resistance ±10%	Ω	2.20							
No load speed ±10%	rpm	8130							
No load current	mA	23.2							
Speed constant	rpm/V	903							
Torque constant	mN.m/A	10.52							
Starting current	mA	4091							
Stall torque	mN.m	43.02							
Max. efficiency	%	86							
Current	mA	396							
Torque	mN.m	4.16							
Speed	rpm	7343							
Output power	W	3.200							
Max. permissible winding temp.	°C	85							
Ambient temperature range	°C	-20 -- +65							
Weight	g	61.1							

Note:

1. Motor data tested at ambient temperature 25°C. Data varies when the temperature changes.
2. Motor service life different from operating conditions. In common condition, service life is achievable between approx. 1000 to 3000 hours.
3. Excessive bending of motor terminals may result in breakage when more than 3 times.