

TCU10025 Ø10mm Precious Metal Brushes 1.1/2.5W

Motor Data		Part Numbers		
		TCU10025P03	TCU10025P06	TCU10025P12
Nominal voltage	V	3	6	12
No load speed	rpm	13200	11900	13100
No load current	mA	19.2	10.4	4.6
Nominal speed	rpm	6790	5900	6500
Max. continuous torque	mNm	1.63	1.73	1.58
Max. continuous current	A	0.777	0.374	0.188
Stall torque	mNm	3.39	3.48	3.19
Stall current	A	1.58	0.73	0.37
Max efficiency	%	79	78	79
Terminal Resistance	Ohm	1.9	8.2	32.4
Terminal Inductance	mH	0.026	0.128	0.432
Torque constant	mNm / A	2.15	4.75	8.60
Speed constant	rpm / V	4450	2010	1110
Speed/torque gradient	rpm / mNm	3940	3469	4180
Mechanical time constant	ms	4.46	4.07	4.25
Rotor inertia	gcm ²	0.108	0.112	0.097

Specification		
Bearing	Sleeve bearing	
Max speed	rpm	15000
Axial play	mm	≤0.3
Number of commutator segments	5	
Ambient temperature	° C	-20~+65
Max winding temperature	° C	100
Thermal resistance		
Housing - Ambient	° C/ W	41.3
Winding - Housing	° C/ W	10.8
Thermal time constant		
Motor	s	135
Winding	s	1.78
Number of pole pairs	1	
Weight	g	10.7

Combination	
Gearbox	
PG10C	
Ø10mm	0.15 Nm 16:1-1024:1
Page 42	
Encoder	
RS10	
Ø10mm	12 Lines 2 Channels
Page 47	

