

1011170094. S30Rev.00

Specification	unit	value	tolerance	
Measured values				
1	Measuring voltage	V	7.5	-
2	No-load speed	rpm	8300	±10%
3	No-load current	mA	13.7	max
4	Starting voltage	V	0.16	max
5	Terminal resistance	Ohm	5.80	± 8%
Recommended values				
10	Continuous current (at 22°C)	A	0.63	max
11	Continuous torque	mNm	10.8	max
12	Angular acceleration	10 ³ rad/s ²	267	max
13	Ambient working temperature range	°C	-30 to +85	typical
14	Rated coil temperature	°C	100	max
Intrinsic parameters				
20	Back-EMF constant	V/1000 rpm	0.9	±8%
21	Torque constant	mNm/A	8.6	±8%
22	Motor regulation R/k2	10 ³ /Nms	81	typical
23	Rotor inductance (@1kHz)	mH	0.14	typical
24	Mechanical time constant	ms	6.5	-
25	Thermal resistance rotor-body	°C/W	10	typical
26	Thermal resistance body-ambient	°C/W	30	typical
27	Thermal time constant – rotor	s	7	typical
28	Thermal time constant –stator	s	400	typical
29	Rotor Inertia	Kgm ² 10 ⁻⁷	0.8	typical
30	Stall torque	mNm	10.8	±8%
Other specifications				
40	Shaft runout		≤ 10 μm	
41	Axial Play		≤ 150 μm	
42	Max side load at 5 mm from mounting face		1.5N	
43	Max static force for press-fit		100 N	
44	Viscous damping constant		0.04x 10 ⁻⁶ Nms	
45	Weight		27 g	
46	Outline Dimensions		Refer Drawing 1011170094.S11	

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Approvals

Name Dheeraj Saxena
 Function Associate Director - R&D
 Company Portescap
 Date
 Signature

Name Srinivas Rao
 Function Head - QA
 Company Portescap
 Date
 Signature

Name Dave Beckstoffer
 Function Manager – Product Sales
 Company Portescap
 Date
 Signature

Name
 Function
 Company TATSoul
 Date
 Signature

Name
 Function
 Company
 Date
 Signature

Rev No	Modification	Communication	Prepared by	Date
00	Initial release	Codif#14-0043	Sandeep Gandre	6-May-14