

dimensions in mm  
mass: 145 g

25GT2R82 ⊙ ⊙ • 1

25GT2R82 ⊙ ⊙ • 2

**Winding Type**

**Measured Values**

	⊙ ⊙	-324P	-230P	-222P	-219P	-219E
Measuring voltage	V	9	12	18	24	26
No-load speed	rpm	9300	9500	9500	10300	8300
Stall torque	mNm (oz-in)	171 (24)	246 (35)	249 (35)	258 (37)	200 (28)
Average No-load current	mA	.320	210	140	120	65
Typical starting voltage	V	--	--	--	--	--

**Max. Recommended Values**

Max. continuous current	A	4.2	3.8	2.5	2	1.06
Max. continuous torque	mNm (oz-in)	36 (5.1)	43 (6.1)	42 (5.9)	41 (5.8)	41 (5.8)
Max. angular acceleration	10 <sup>3</sup> rad/s <sup>2</sup>	135	163	165	160	157

**Intrinsic Parameters**

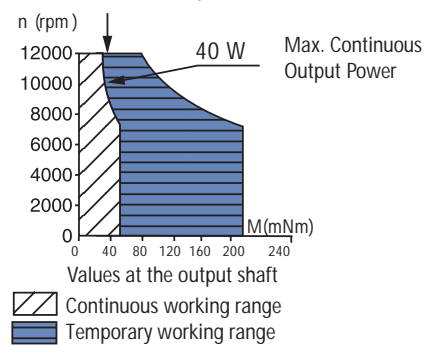
Back-EMF constant	V/1000 rpm	0.95	1.25	1.88	2.3	4.3
Torque constant	mNm/A (oz-in/A)	9.1 (1.28)	11.9 (1.69)	18 (2.54)	22 (3.11)	41.1 (5.8)
Terminal resistance	ohm	0.48	0.58	1.3	2.05	7.4
Motor regulation R/k <sup>2</sup>	10 <sup>3</sup> /Nms	5.8	4.1	4	4.2	4.4
Rotor inductance	mH	0.024	0.035	0.08	0.14	0.5
Rotor inertia	kgm <sup>2</sup> 10 <sup>-7</sup>	13	13	13	13	13
Mechanical time constant	ms	7.6	5.3	5.2	5.5	5.7

**Executions**

		Single Shaft	For E9	HEDS
Gearbox	Page	25GST2R82	25GST2R82	25GST2R82
K40	113	6	8	--
R32	109	6	8	--
R40	114	1	2	4

- Thermal resistance: rotor-body 5 °C/W, body-ambient 11 °C/W
- Thermal time constant - rotor / stator: 10s / 450s
- Max. rated coil temperature: 155°C
- Recom. ambient temperature range: -30°C to +125°C (-22°F to +257°F)
- Max. axial static force for press-fitted without holding shaft (sleeve/ball bearings) 500 N / 100N
- Axial/radial play (ball bearings) neglectable
- Max axial/radial play (sleeve b.) 150 µm / 30 µm
- Shaft runout: ≤10 µm
- Max. side load at 5 mm from mounting face
  - sleeve bearings 8N
  - ball bearings 25 N
- Motor fitted with ball bearings (sleeve bearings optional)
- 83 Commutation is recommended for servo applications

**Max. Recommended Speed**



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