

dimensions in mm  
mass: 111 g

**25GST2R82** ☉☉ • 1

**25GST2R82** ☉☉ • 2

**Winding Type**

☉☉

-324P

-224P

-216P

-216E

**Measured Values**

Measuring voltage	V	6	12	24	48
No-load speed	rpm	10300	11300	10300	10800
Stall torque	mNm (oz-in)	81 (11.5)	150 (21)	160 (25)	161 (23)
Average No-load current	mA	300	170	70	40
Typical starting voltage	V	--	--	--	--

**Max. Recommended Values**

Max. continuous current	A	4.2	2.9	1.45	0.75
Max. continuous torque	mNm (oz-in)	21 (3)	27 (3.8)	30 (4.2)	30 (4.2)
Max. angular acceleration	10 <sup>3</sup> rad/s <sup>2</sup>	104	139	152	148

**Intrinsic Parameters**

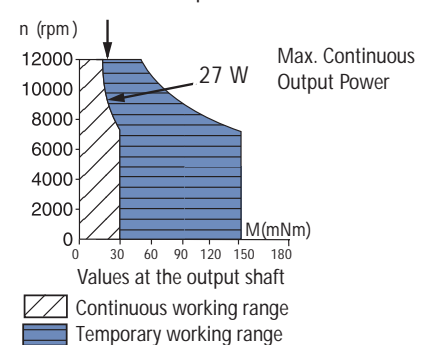
Back-EMF constant	V/1000 rpm	0.57	1.05	2.3	4.4
Torque constant	mNm/A (oz-in/A)	5.4 (0.77)	10 (1.42)	22 (3.11)	42 (5.9)
Terminal resistance	ohm	0.4	0.8	3.3	12.5
Motor regulation R/k <sup>2</sup>	10 <sup>3</sup> /Nms	14	8	6.8	7.1
Rotor inductance	mH	0.07	0.05	0.1	0.8
Rotor inertia	kgm <sup>2</sup> 10 <sup>-7</sup>	10	10	10	10
Mechanical time constant	ms	14	8	6.8	7.1

**Executions**

		Single Shaft	For E9	HEDS
Gearbox	Page	25GT2R82	25GT2R82	25GT2R82
RG1/8	111	1	2	4
RG1/9	112	1	2	4
K38	110	1	2	4
R32	109	1	2	4
M22	106	5	6	--

- Thermal resistance: rotor-body 6°C/W, body-ambient 13°C/W
- Thermal time constant - rotor / stator: 10 s/450 s
- 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-fitting without holding shaft (sleeve/ball b.) 500 N/68N
- Axial/radial play (ball bearings) neglectable
- Max axial/radial play (sleeve b.) 150µm/30µm
- Shaft runout: ≤10 µm
- Max. side load at 5 mm from mounting face:
  - sleeve bearings 6N
  - ball bearings 12N
- Motor fitted with ball bearings (sleeve bearings opt.)
- 83 Commutation is recommended for servo applications
- For filter add 'F' to designation before the coil

**Max. Recommended Speed**



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