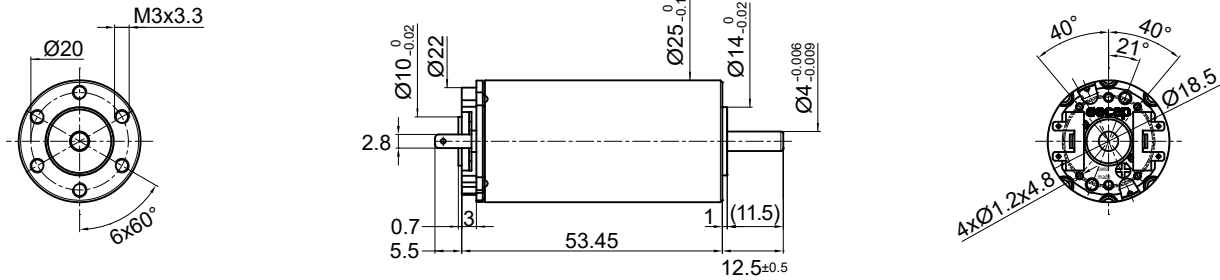


25GT2R82

Ø 25 mm • Graphite-Copper commutation • 47 mNm



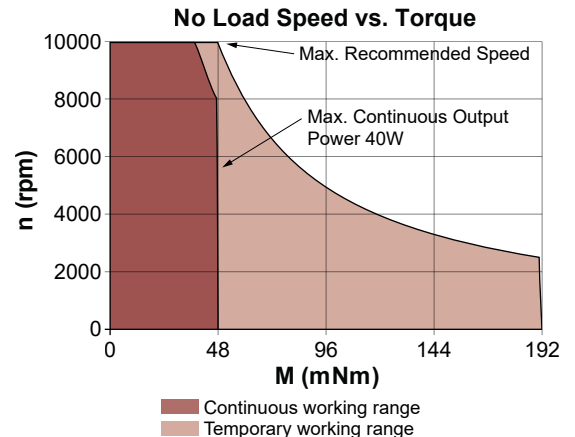
Dimensions in mm.

Electrical Data	Symbol	25GT2R82 1				Unit
		222E	222P	230E	219E	
1 Nominal Voltage	V	15	18	24	36	Volt
2 No-Load Speed	n_0	4,075	9,460	10,000	8,260	rpm
3 No-Load Current	I_0	80.0	140.0	120.0	65.0	mA
4 Terminal Resistance	R	4.0	1.3	1.8	7.4	Ω
5 Output Power	P_{2max}	36.8	33.0	37.0	33.0	W
6 Stall Torque	mNm	129 (18.27)	249 (35.27)	315 (44.61)	194 (27.48)	mNm (oz-in)
7 Efficiency	η_{max}	73	81	82	78	%
8 Max Continuous Speed	$n_{e max}$	10,000	10,000	10,000	10,000	rpm
9 Max Continuous Torque	$M_{e max}$	47 (5.95)	42 (5.95)	47 (6.67)	41 (5.81)	mNm (oz-in)
10 Max Continuous Current	$I_{e max}$	1.44	2.50	2.20	1.06	A
11 Back-EMF Constant	k_E	3.60	1.88	2.40	4.30	mV/rpm
12 Torque Constant	k_M	34.40	18.00	23.00	41.10	mNm/A
13 Motor Regulation	R/k^2	3.4	4.0	4.2	4.40	10 ³ /Nms
14 Friction Torque	T_F	2.75 (0.39)	2.5 (0.36)	2.76 (0.4)	2.65 (0.38)	mNm (oz-in)
15 Rotor Inductance	L	0.30	0.08	0.14	0.50	mH
16 Mechanical Time Constant	τ_m	4.4	5.2	5.5	5.7	ms
17 Rotor Inertia	J	13.00	13.00	12.50	13.00	g-cm ²

General Data				
18 Thermal Resistance (rotor/body)	R_{th1}/R_{th2}	5/11		°C/W
19 Thermal Time Constant (rotor/stator)	t_{W1}/t_{W2}	10/450		S
20 Operating Temperature Range:	motor	-30°C to 85°C (-22°F to 185°F)		°C (°F)
	rotor			100°C (212°F)
21 Shaft Load Max.: (5 mm. from bearing)		With ball bearings		
	-radial	25.0 (89.9)		N (oz)
	-axial	100 (359.69)		N (oz)
22 Shaft Play:	-radial	<0.03 (0.0012)		mm (inch)
	-axial	0.15 (0.0059)		mm (inch)
23 Weight	g	145 (5.12)		g (oz)
24 Commutation Segment	-	9		segment

Execution Table

Gearbox	Single Shaft	E9	HEDS	MR2
R32	6	8	-	Upon Request
R40	1	2	4	Upon Request
R22HT	20	21	Upon Request	Upon Request



► Motor shaft rotates CW when seen from motor front face when +ve and -ve supply is given to respective terminals.