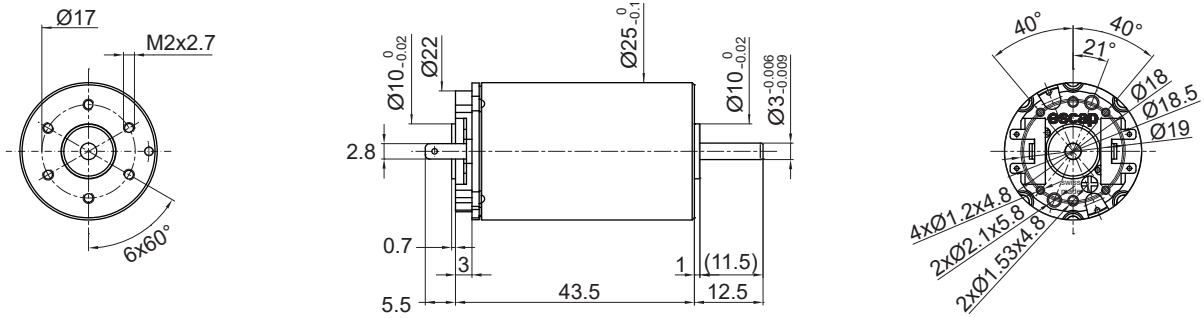


**25GST2R82**

Ø 25 mm • Graphite-Copper commutation • 33 mNm



Dimensions in inches [mm]

Electrical Data	Symbol	25GST2R82 .... 1				Unit
		228E	230E	216P	216E	
1 Nominal Voltage	V	18	18	24	35	Volt
2 No-Load Speed	$n_0$	11,125	11,450	10,320	7,850	rpm
3 No-Load Current	$I_0$	110.0	110.0	70.0	40.0	mA
4 Terminal Resistance	R	1.6	1.3	3.3	12.5	Ω
5 Output Power	$P_{2max}$	23.8	26.0	24.0	23.3	W
6 Stall Torque	mNm	172 (24.36)	206 (29.18)	160 (22.66)	118 (16.72)	mNm (oz-in)
7 Efficiency	$\eta_{max}$	81	83	81	78	%
8 Max Continuous Speed	$n_{e max}$	10,000	10,000	10,000	10,000	rpm
9 Max Continuous Torque	$M_{e max}$	30 (4.68)	33 (4.68)	30 (4.25)	30 (4.25)	mNm (oz-in)
10 Max Continuous Current	$I_{e max}$	2.10	2.30	1.45	0.75	A
11 Back-EMF Constant	$k_E$	1.60	1.56	2.30	4.40	mV/rpm
12 Torque Constant	$k_M$	15.30	14.90	22.00	42.00	mNm/A
13 Motor Regulation	$R/k^2$	6.9	5.9	6.8	7.10	10 <sup>3</sup> /Nms
14 Friction Torque	$T_F$	1.68 (0.24)	1.64 (0.24)	1.54 (0.22)	1.68 (0.24)	mNm (oz-in)
15 Rotor Inductance	L	0.10	0.10	0.10	0.80	mH
16 Mechanical Time Constant	$\tau_m$	6.9	5.9	6.8	7.1	ms
17 Rotor Inertia	J	10.00	10.00	10.00	10.00	g-cm <sup>2</sup>

General Data				
18 Thermal Resistance (rotor/body)	$R_{th1}/R_{th2}$	6/13		°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	12.0 (43.2)		N (oz)
	-axial	68 (244.59)		N (oz)
22 Shaft Play:	-radial	<0.03 (0.0012)		mm (inch)
	-axial	0.15 (0.0059)		mm (inch)
23 Weight	g	111 (3.92)		g (oz)
24 Commutation Segment	-	9		segment

**Execution Table**

Gearbox	Single Shaft	E9	HEDS	MR2
R32	1	2	4	Upon Request
R22HT	24	25	Upon Request	Upon Request

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

**No Load Speed vs. Torque**

