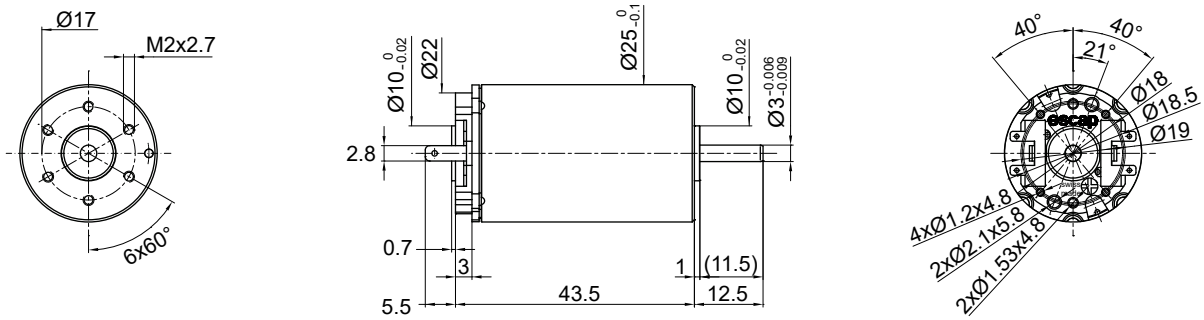


25GST2R82

Ø 25 mm • Graphite-Copper commutation • 33 mNm



Dimensions in 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	η_{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 ³ /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	τ_m	6.9	5.9	6.8	7.1	ms
17 Rotor Inertia	J	10.00	10.00	10.00	10.00	g-cm ²

General Data				
18 Thermal Resistance (rotor/body)	R_{th1}/R_{th2}	6/13		$^{\circ}\text{C}/\text{W}$
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)		$^{\circ}\text{C}$ ($^{\circ}\text{F}$)
	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)

Execution Table

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

