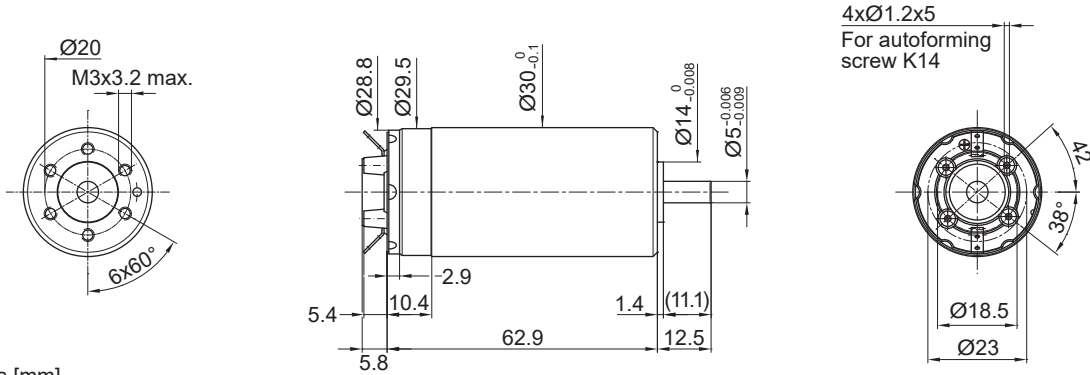


30GT2R82

Ø 30 mm • Graphite-Copper commutation • 92 mNm



Dimensions in inches [mm]

Electrical Data	Symbol	30GT2R82 4		Unit
		234P	234E	
1 Nominal Voltage	V	15	35	Volt
2 No-Load Speed	n_0	7,090	8,600	rpm
3 No-Load Current	I_0	180.0	90.0	mA
4 Terminal Resistance	R	0.5	1.6	Ω
5 Output Power	P_{2max}	77.0	82.0	W
6 Stall Torque	mNm	628 (88.94)	847 (119.95)	mNm (oz-in)
7 Efficiency	η_{max}	85	88	%
8 Max Continuous Speed	$n_{e max}$	10,000	10,000	rpm
9 Max Continuous Torque	$M_{e max}$	87 (13.03)	92 (13.03)	mNm (oz-in)
10 Max Continuous Current	$I_{e max}$	4.50	2.50	A
11 Back-EMF Constant	k_E	2.10	4.05	mV/rpm
12 Torque Constant	k_M	20.10	38.70	mNm/A
13 Motor Regulation	R/k^2	1.2	1.1	$10^3/Nms$
14 Friction Torque	T_F	3.62 (0.52)	3.48 (0.5)	mNm (oz-in)
15 Rotor Inductance	L	0.06	0.24	mH
16 Mechanical Time Constant	τ_m	4.0	3.6	ms
17 Rotor Inertia	J	33.00	33.00	g-cm ²

General Data				
18 Thermal Resistance (rotor/body)	R_{th1}/R_{th2}	4.5/9		$^{\circ}C/W$
19 Thermal Time Constant (rotor/stator)	t_{W1}/t_{W2}	18/630		S
20 Operating Temperature Range:	motor	-30°C to 85°C (-22°F to 185°F) 100°C (212°F)		$^{\circ}C (^{\circ}F)$
	rotor			$^{\circ}C (^{\circ}F)$
21 Shaft Load Max.: (5 mm from bearing)		With ball bearings		
	-radial	35.0 (125.9)		N (oz)
	-axial	100 (359.6)		N (oz)
22 Shaft Play:	-radial	negligible		mm (inch)
	-axial	negligible		mm (inch)
23 Weight	g	310 (10.94)		g (oz)
24 Commutation Segment	-	13		segment

Execution Table

Gearbox	Single Shaft	E9	HEDS
R32	4	5	20
R40	4	5	Upon Request

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

