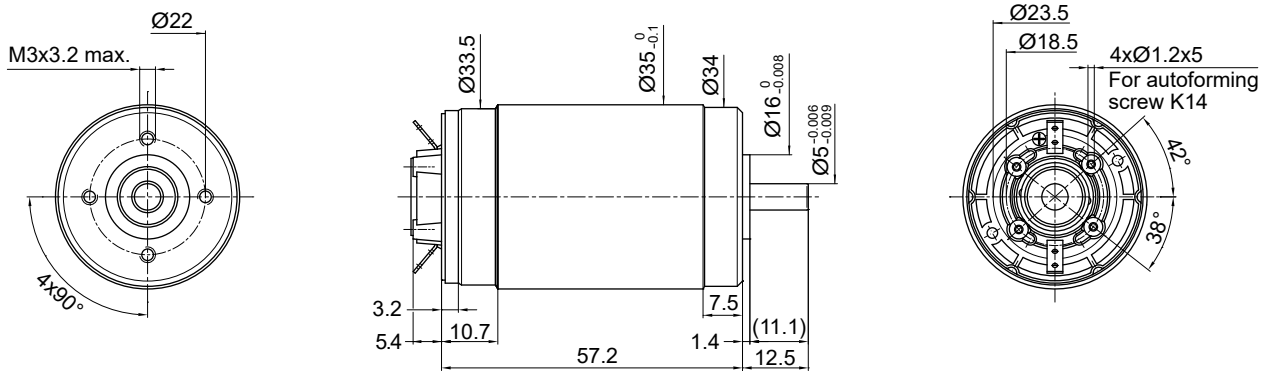
35NT2R82

Ø 35 mm • Graphite-Copper commutation • 114 mNm



Dimensions in mm.

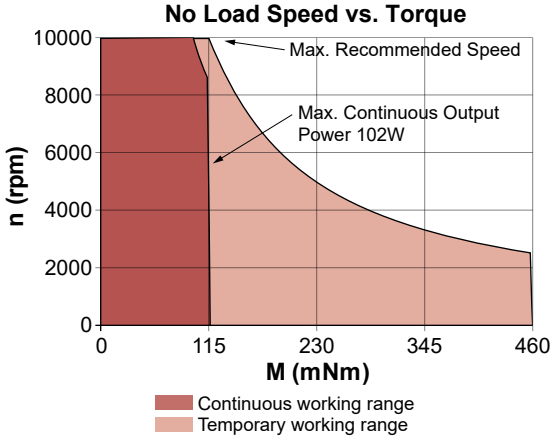
Electrical Data	Symbol	35NT2R82 •••• .1 426P	226E	426SP	426E	Unit
1 Nominal Voltage	V	18	28	32	60	Volt
2 No-Load Speed	n_0	6,765	6,935	5,850	5,760	rpm
3 No-Load Current	I_0	141.0	80.0	80.0	40.0	mA
4 Terminal Resistance	R	0.6	1.6	2.2	7.7	Ω
5 Output Power	$P_{2max.}$	102.0	91.0	103.0	107.0	W
6 Stall Torque	mNm	828 (117.26)	676 (95.73)	756 (107.06)	782 (110.75)	mNm (oz-in)
7 Efficiency	$h_{max.}$	87	87	86	86	%
8 Max Continuous Speed	$n_{e\ max.}$	9,000	9,000	9,000	9,000	rpm
9 Max Continuous Torque	$M_{e\ max.}$	108 (13.74)	97 (13.74)	109 (15.44)	114 (16.15)	mNm (oz-in)
10 Max Continuous Current	$I_{e\ max.}$	4.40	2.60	2.20	1.19	A
11 Back-EMF Constant	k_E	2.65	4.02	5.45	10.37	mV/rpm
12 Torque Constant	k_M	25.30	38.40	52.00	99.00	mNm/A
13 Motor Regulation	R/k^2	0.9	1.1	0.8	0.77	10^3/Nms
14 Friction Torque	T_F	3.57 (0.51)	3.07 (0.44)	4.16 (0.59)	3.96 (0.57)	mNm (oz-in)
15 Rotor Inductance	L	0.10	0.22	0.40	1.70	mH
16 Mechanical Time Constant	τ_m	6.1	5.9	5.9	5.5	ms
17 Rotor Inertia	J	71.40	54.00	71.40	71.40	g-cm²

General Data			
18 Thermal Resistance (rotor/body)	R_{th1}/R_{th2}	4/8	°C/W
19 Thermal Time Constant (rotor/stator)	t_{W1}/t_{W2}	40/920	S
20 Operating Temperature Range:	motor rotor	-30°C to 85°C (-22°F to 185°F) 100°C (212°F)	°C (°F) °C (°F)
21 Shaft Load Max.: (5 mm. from bearing)	 -radial -axial	With ball bearings 35.0 (125.9) 100 (359.6)	 N (oz) N (oz)
22 Shaft Play:	-radial -axial	negligible negligible	mm (inch) mm (inch)
23 Weight	g	310 (10.94)	g (oz)
24 Commutation Segment	-	13	segment

Execution Table

Gearbox	Single Shaft	E9	HEDS
R32	54	66	Upon Request
R40	1	96	Upon Request

No Load Speed vs. Torque



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