

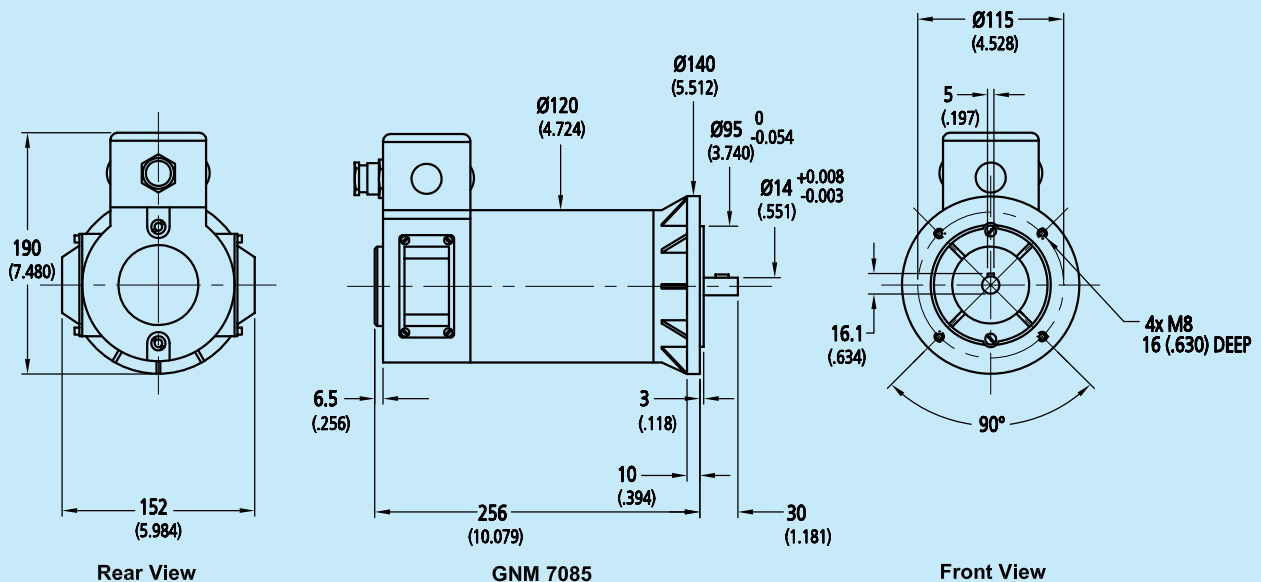
PMDC Motors

For combination with:
Gearheads: G40.1

Series GNM7085A

		GNM7085A					
1	Nominal voltage	U_N	24	24	180	180	Volt
2	Armature resistance	R	0.154	0.044	7.2	2.1	Ω
3	Nominal output power	P_2	300	530	300	530	W
4	Efficiency	η_{max}	83	86	84	87	%
5	No-load speed	n_o	1,603	3,191	1,718	3,200	rpm
6	No-load current	I_o	1.27	2.94	0.18	0.39	
7	Stall torque	M_H	1,968	1,968	1,940	1,812	A
8	Friction torque	M_R	25.49	29.74	25.49	29.74	oz-in
9	Speed constant	k_n	67.34	133.69	9.62	17.86	oz-in
10	Back-EMF constant	k_E	14.85	7.48	104	56	rpm/V
11	Torque constant	k_M	20.08	10.11	140.62	75.76	mV/rpm
12	Maximum peak current	k_I	110	220	15.5	27	oz-in/A
13	Rotor inductance	L	0.62	0.165	30.5	10	Amps ¹⁾
14	Nominal speed		1,500	3,000	1,500	3,000	mH
15	Nominal torque		270.46	239.30	270.46	239.30	rpm
16	Mechanical time constant	τ_m	10.9	13.4	10.3	11	oz-in
17	Rotor inertia	J	194	194	194	194	ms
18	Thermal resistance	R_{th1} / R_{th2}	1.61	1.01	1.61	1.01	$\times 10^{-3}$ oz-in-sec ²
19	Thermal time constant	τ_w	53	53	53	53	$^{\circ}C/W$
20	Motor weight		14.77				minutes
21	Operating temperature range:						lbs
	- maximum ambient temperature		40 (104)				
	- motor operating temperature range		-20 to +100 (-4 to +212)				$^{\circ}C (^{\circ}F)$
							$^{\circ}C (^{\circ}F)$

¹⁾ Rated at 40°C. Exceeding this value may cause field demagnetization. For lower temperatures, reduce value at 0.5%/°C



For notes on technical data refer to "Technical Information". Specifications subject to change without notice. MIMED0306