

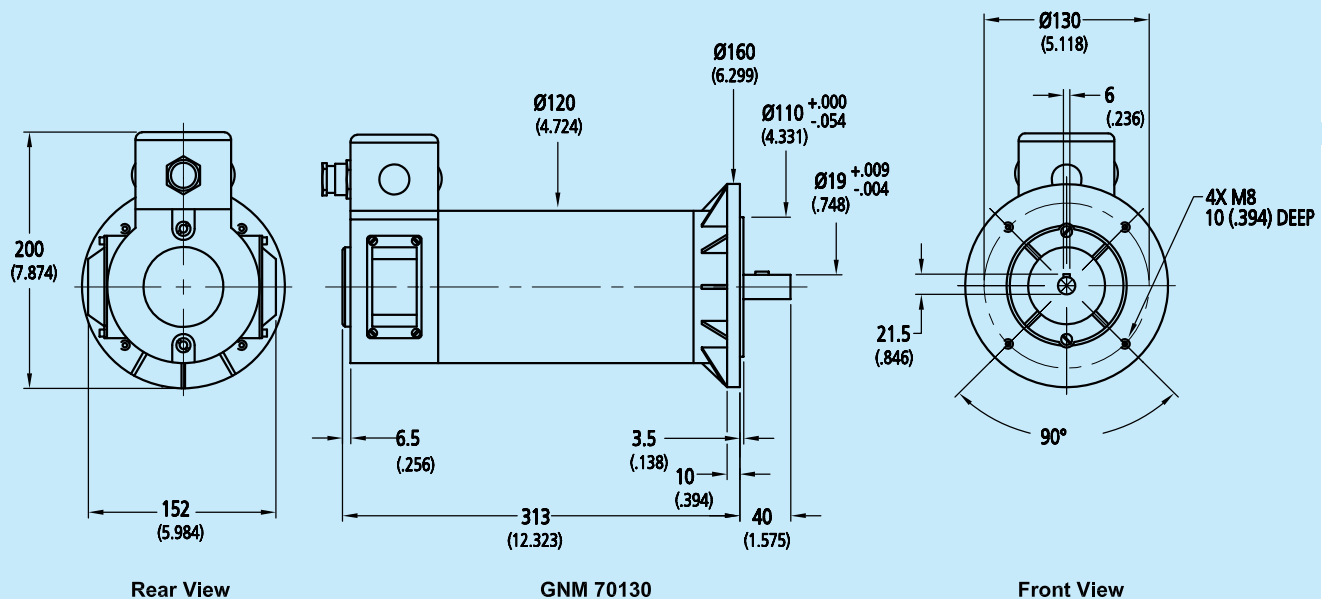
## PMDC Motors

For combination with:  
Gearheads: G50.1 & GCN

### Series GNM70130

		GNM70130					
1	Nominal voltage	$U_N$	24	24	180	180	Volt
2	Armature resistance	R	0.09	0.026	5.7	1.45	$\Omega$
3	Nominal output power	$P_2$	430	700	430	700	W
4	Efficiency	$\eta_{max}$	86	88	85	89	%
5	No-load speed	$n_o$	1,697	3,340	1,688	3,203	rpm
6	No-load current	$I_o$	1.41	3.36	0.19	0.43	A
7	Stall torque	$M_H$	2,804	2,846	2,605	2,761	oz-in
8	Friction torque	$M_R$	26.91	32.57	26.91	32.57	oz-in
9	Speed constant	$k_n$	71.06	139.63	9.47	17.85	rpm/V
10	Back-EMF constant	$k_E$	14.07	7.16	105.75	56.02	mV/rpm
11	Torque constant	$k_M$	19.04	9.69	143.01	75.76	oz-in/A
12	Maximum peak current	$k_I$	165	330	20.5	41	Amps <sup>1)</sup>
13	Rotor inductance	L	0.39	0.105	24	6	mH
14	Nominal speed		1,500	3,000	1,500	3,000	rpm
15	Nominal torque		388.02	315.80	388.02	315.80	oz-in
16	Mechanical time constant	$\tau_m$	10.9	12.8	10.8	10.5	ms
17	Rotor inertia	J	265	265	265	265	$\times 10^{-3}$ oz-in-sec <sup>2</sup>
18	Thermal resistance	$R_{th 1} / R_{th 2}$	1.25	0.89	1.25	0.89	$^{\circ}C/W$
19	Thermal time constant	$\tau_w$	53	53	53	53	minutes
20	Motor weight		29.1				lbs.
21	Operating temperature range:						
	- maximum ambient temperature		40 (104)				$^{\circ}C (^{\circ}F)$
	- motor operating temperature range		-20 to +100 (-4 to +212)				$^{\circ}C (^{\circ}F)$

<sup>1)</sup> 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