



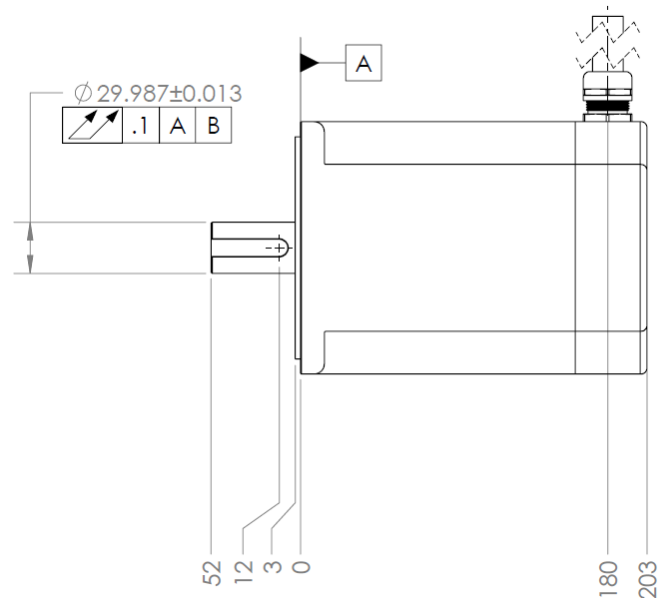
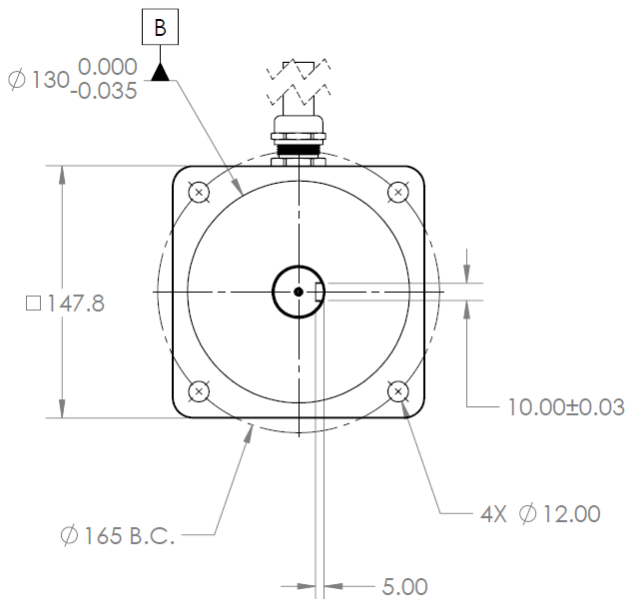
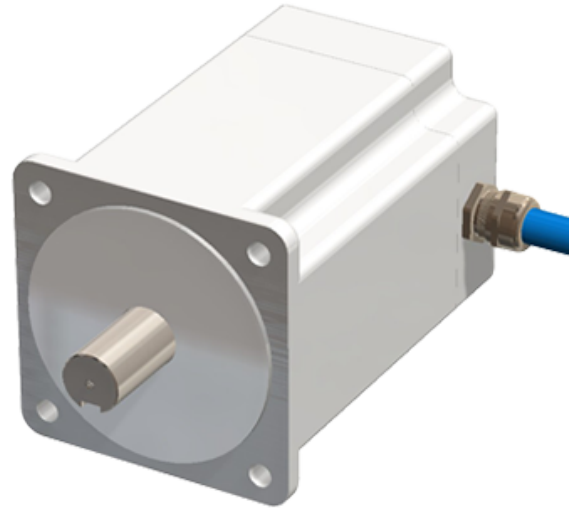
# M165-H Direct Drive Motor

## Washdown Capable

Electric Torque Machines (ETM) provides direct drive solutions for demanding applications. ETM manufactures high efficiency, high continuous torque, direct drive motors.

### Features and Benefits:

- ETM proprietary motors provide a **10X** **continuous torque** advantage over AC induction motors, 3-6X over BLDC motors.
- Direct drive enables compact, lightweight, efficient, low maintenance system
- High efficiency under load at low RPM.
- Compatible with standard BLDC drives.
- IP67
- Smooth, hygienic, white epoxy exterior
- Food grade lubricants





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General Specifications		
Continuous Stall Torque (Ambient 25°C, Max Motor Surface Temperature = 85°C)	N·m	43
	ft·lb	32
Peak Torque (80% of Linear $k_T$ )	N·m	64
	ft·lb	47
Max Continuous Power (at 500 RPM and 27 N·m)	kW	1.6
	hp	2.2
Max Continuous Speed	RPM	850
Motor Efficiency (at Max Continuous Power)	94%	
Rotor Inertia	kg·cm <sup>2</sup>	46
Weight (Entire Motor)	kg	13
	lb	28
Motor Constant (At Continuous Torque and Max Surface Temp. of 85°C)	N·m/ $\sqrt{W}$	4.4
	ft·lb/ $\sqrt{W}$	3.3
Winding Specifications		
Bus Voltage	$V_{DC}$	350
Phase Current at Continuous Torque	$A_{rms}$	14
Phase Current at Peak Torque	$A_{rms}$	24
Torque Constant (at Continuous Stall Torque)	N·m/ $A_{rms}$	3.1
BEMF Constant	$V_{pk(L-L)}/kRPM$	290
Resistance	$\Omega_{(L-L)}$	0.35
Inductance	$mH_{(L-L)}$	5.2



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