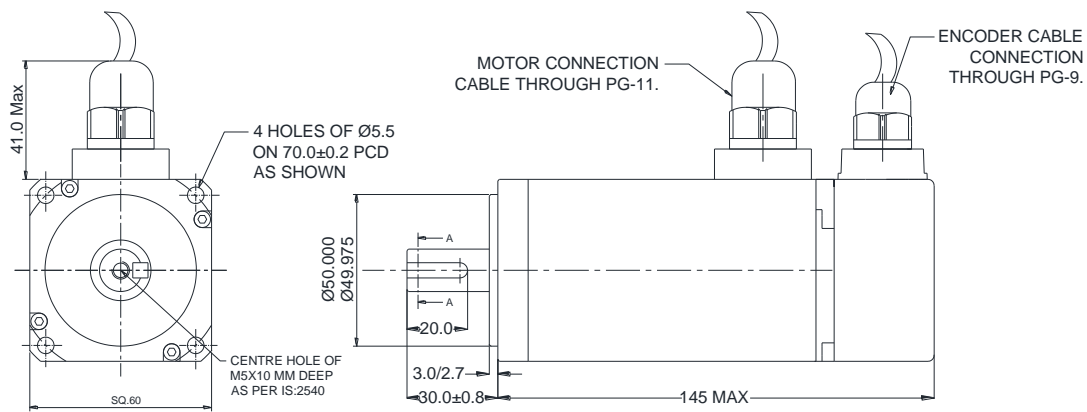


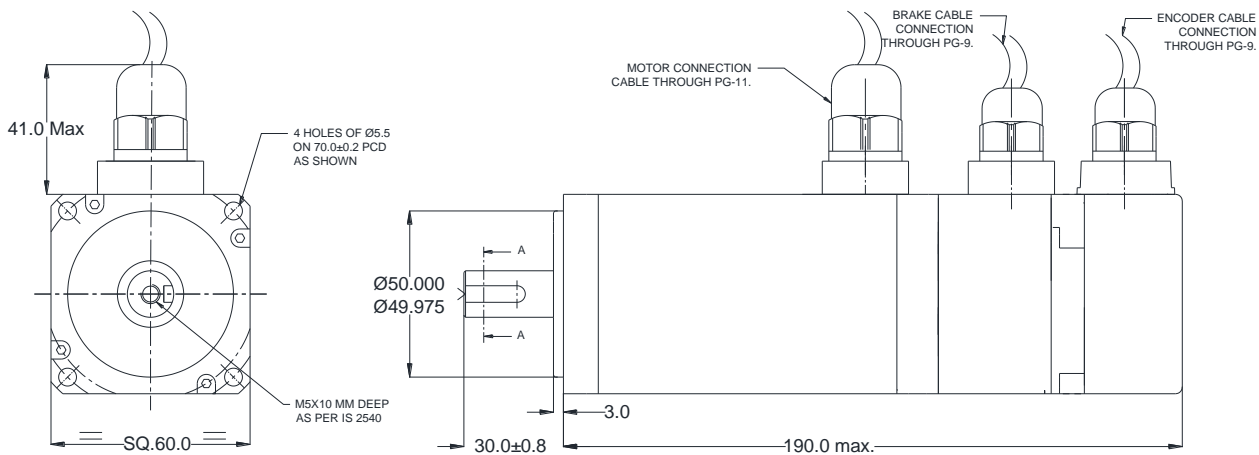
## Performance Data

Motor Model	060-400-048-30-I-L-X-X	060-400-230-30-I-L-X-X
Parameters	48 Volt	230 Volt
Rated Power (kW)	0.4	0.4
Rated Voltage	48	208-220
Rated Torque (Nm)	1.27	1.27
Maximum Torque (Nm)	3.82	3.8
Rated Speed (rpm)	3000	3000
Maximum speed (rpm)	4000	4500
Rated Current (A)	9.6	2.5
Maximum current (A)	28.8	7.5
Torque constant KT (Nm/A)	0.1322	0.484
Voltage constant KE (mV/rpm)	7.5	29
Motor Constant (Nm/ $\sqrt{W}$ )	0.256	0.24
Armature resistance (ohm)	0.267	3.7
Armature Inductance (mH)	1.2	12.9
Electric constant (ms)	4.49	4.07
Mechanical constant (ms)	1.204	3.486
Rotor inertia ( $10^{-4}$ kg-m <sup>2</sup> ) (w/o brake)	0.4269	0.4269
Insulation class	class F	class F
Insulation resistance	>100Mohm, 500Vdc	>100Mohm, 500Vdc
Insulation strength	1.8kVac, 1Sec	1.8kVac, 1Sec
Weight (kg) (w/o brake)	1.4	1.4
Weight (kg) (with brake)	1.9	1.9
Operating temperature (°C)	0 to 40 °C	0 to 40 °C
Storage temperature (°C)	-10 to 80 °C	-10 to 80 °C
IP rating	IP65 Except rotating portion of output shaft and lead wire end	IP65 Except rotating portion of output shaft and lead wire end

- 10 Pole Design.
- Star connected Stator winding.
- Closed aluminum housing with aluminum bearing flanges.
- Bi-directional speed control with continuous output of 400 Watts.
- Various combination options with gears, encoders and brakes.
- Customization available as per customer requirement.



400 Watts Motor without brake



400 Watts Motors with brake

**Pin Details for Encoder Signal Connector**

<b>Pin. No</b>	<b>Lead Color</b>	<b>Output Signal</b>
1	Blue	A
2	Green	B
3	Yellow/Black	$\bar{Z}$
4	White/Black	Hall $\bar{W}$
5	Blue/Black	$\bar{A}$
6	Green/Black	$\bar{B}$
7	Red	5 V
8	Brown	Hall U
9	Grey	Hall V
10	Grey/Black	Hall $\bar{V}$
11	Black	Ground
12	Black	Ground
13	Yellow	Z
14	White	Hall W
15	Brown/Black	Hall $\bar{U}$

**Pin Details for Power Connector**

<b>Pin no.</b>	<b>Lead Color</b>	<b>Phase Signal</b>
1	Red	R-Phase
2	Yellow	Y-Phase
3	Blue	B-Phase
4	Green	Earth

