3 Ph Stepper Motor

Stepper motor is an electromechanical device which converts electrical power into mechanical power.
Also, it is a brushless, synchronous electric motor that can divide a full rotation into a discrete number of steps through the digital pulse received by its control unit. The motor's position can be controlled accurately without any feedback mechanism.

Increase in pulse rate, the step movement change to continuous rotation. The speed of rotation is directly proportional to the pulse rate.

This stepper motor with a step of 1.8° is designed and developed to use in the fuel metering system in Aircraft and Gas Turbine Engine.

PRODUCT FEATURES

Performance Specifications

No. of Phases:	3 Phases(A,B,C)
Polarity:	Unipolar
Type:	Variable Reluctance
Step Angle:	1.8° (Full Step)
Step Rate:	400-500 Steps /sec
No. of Steps:	≈372 steps / turn
Dynamic Torque:	240-600 gm-cm
Step Accuracy:	±5%
Maximum Speed:	1500 RPM

Environmental Specifications

Operating Temp Range:	-40°C to +70°C
Coil Type:	Single Coil type
Winding Insulation:	Class H
Medium:	Fuel Immersed

Electrical Specifications

Operating Voltage:	24-28 VDc
Operating Current:	1 A±10 mA
Phase Resistance:	120±10 Ω
No. Phase Leads:	4 (A,B,C, Common)
Termination Leads:	Through PTFE wires
Pulse Sequence:	A-AB-B-BC-C-CA

Mechanical Specifications

Overall Length:	≈50mm (Including shaft)
Diameter:	≈∅40mm
Shaft Length:	≈10mm
Shaft Diameter:	≈∅5mm

Compliance and Standards:*

Quality Standard:	AS9100 Rev D

APPLICATIONS:

- Aeronautics
- Military
- Space
- Marine
- Industrial

ADVANTAGES:

- Increases Torque
- Increases Motor Speed
- Low Noise, Vibration and Resonance
- Helps to Reduce Torque Ripple
- Improves Smooth Motor Performance

CUSTOMIZATION:

Stepper Motor can be customized based on the application requirement of the customer.

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