

LIMITED ROTATION SECTIONAL TORQUE MOTORS



Limited rotation sectional torque motors are unique motion components that can be used to control or move elements that only require limited rotation. These devices provide very linear torque and high acceleration. They are ideal for limited movement applications where space is critical, no room for a full sized round motor.

Since the angle of rotation is limited, these motors require no commutation, which makes the design brushless, regardless of the excitation method used. The brushless design means that there is no brush wear debris to contend with in applications where cleanliness is an issue.

These devices are supplied as a parts-set and are intended to use existing structures as their supporting elements. This concept reduces the total mass of the complete assembly by eliminating redundant support structures and reduces total system cost.

BENEFITS

- Provides a consistent torque over a limited angle
- Saves physical space
- Ripple free operation
- Less friction
- Better heat dissipation
- Winding is on the outside element, namely the stator
- No cogging
- Two leads: simpler electronics
- Excellent form-factor: allows for use in very tight volume
- Integrate feedback devices

TYPICAL APPLICATIONS

- Missiles, precision guided munition and radar applications
- Short and medium range missiles with small diameters
- Small diameter FLIRs
- Scanners

STROKE INFORMATION

Model	Stroke
AS-912-001	± 35.5°
AS-912-002	± 35.5°
AS-913-001	± 33.0°
AS-913-002	± 28.5°