

# Application Profile



### Application

### Highlights

- Centrifugal Throwout (C/T) design
- Instantaneous action
  with no backlash
- High torque density
- Sprags feature patented Formchrome<sup>®</sup> surface hardening
- AS9100 Rev. C and ISO9001:2008 certifications



# Centrifugal Throwout Sprag Retainer Assembly Military Cargo/Transport Aircraft

Formsprag Clutch was selected to provide an overrunning clutch solution for the engine starter system on a multi-national turboprop military transport aircraft. Designed for use on short landing strips, the plane can be configured for cargo, troops or med-evac transport.

Formsprag centrifugal throwout (C/T) sprag retainer assemblies are incorporated into the starters for the aircraft's 4 turboprop engines. Rated to drive the engine to light off, the C/T sprag retainer assembly overruns with no contact at full engine speed.

The planes engines, rated at 8,250 kW (11,000 hp) each, are some of the most powerful turboprops in use. Unlike most other propeller-driven aircraft, the pair of propellers on each wing of the plane turn in opposite directions, producing more lift and reducing torque and prop wash on each wing.

Originally developed to meet the demands of aircraft and helicopter applications, the sprag retainer design provides reliable performance, even under extreme torsional vibration and severe transient overload.

## Altra Industrial Motion Australia

**Sydney** 1/11 Penny Place Arndell Park, NSW 2148 Sydney, Australia +61 (0) 2 9622 1333 Perth 271 Great Eastern Highway Belmont, WA 6104 Perth, Australia +61 (0) 8 9416 0300

#### www.altramotion.com.au

P-7989-FC 4/18