



®

SEPAAC®

Your Clutch and Brake Company



CAPABILITIES

Military Applications

HSEB-1450



Type: HSEB Hydraulically Released, Spring Engaged Brake

Application: X and Y axis brakes on a 70 meter radar antenna

Features: Spline drive armatures and hub, cadmium plating, proximity sensor to indicate position of armature plate

Specs: 14.5" dia. X 4.0" high, 665 lb. ft. torque, releases under 2000 psi hydraulic pressure

70 Meter Diameter Deep Space Radar Antenna



SEB-175



Type: SEB-175 Spring Set, Power Off, Fail-safe brake

Application: Brake for actuator which holds the radar dish from moving when radar is not in use

Features: High-torque friction material, e-nickel plating, hex drive

Specs: 1.75" dia. X 1.06" high, 6.5 lb. in. torque

Global Hawk UAV



SEB-140-2



Type: SEB-140-2 Power Off, Spring Set, Fail-safe Brake, Double "D" Drive

Application: Control surface actuators

Features: Dual disks, high-torque friction material and high-torque plated plates, potted coil

Specs: 1.45" dia. X 1.110" high, 7 lb. in. torque

AGM-158 (JASSM)



SEB-386-MR



Type: SEB-386-MR Power Off, Spring Set, Fail-safe Brake

Application: Antenna cable drum brake

Features: Nitride treated parts, manual release, Mil-Spec connector and potted coil

Specs: 3.86" dia. X 2.30" high, 100 lb. in. torque

E2C Hawkeye



SEB-175



Type: SEB-175 Spring Set, Power Off, Fail-safe Brake

Application: Stabilator actuator holding brake.

Features: Plating, potting coil wire and lead wire are designed to meet MIL-STD-810, designed for rear end motor mounting, e-nickel plating, hex drive hub, high torque friction material

Specs: 1.75" dia. X 1.10" long, 6.5 lb. in. torque

BELL UH-1 "Huey"



SEB-245-3



Type: SEB-245-3 Dual Disk, Power Off, Spring Set, Fail-safe Brake

Application: Boom Ruddervator actuator

Features: Low-weight aluminum spider, reverse mount, spline drive dual disks, nitride treated plates and nickel magnet body

Specs: 2.45" dia. X 1.70" high, 66 lb. in. torque

767 Tanker



SEB-245-2



Type: SEB-245-2 Dual Disk, Power Off, Spring Set, Fail-safe Brake

Application: Electric rescue hoist motor brake

Features: Low-weight aluminum spider, reverse mount, spline drive dual disks, electroless nickel plated magnet body, nitride treated plates

Specs: 2.45" dia. X 1.70" high, 66 lb. in. torque

SH-60 Seahawk



SEB-137



Type: SEB-137 Spring Set, Power Off Brake

Application: Electric actuator to position ejection seat

Features: Plating, potting, coil wire and lead wire are all Mil-Spec requirements, designed for rear end motor mounting, nickel plated, potted coil, square drive hub, high coef., friction material

Specs: 21.375" dia X .750" long, one lb. in. torque

F-16 Fighting Falcon



WMTC-265



Type: WMTC-265 Stationary Field, Wall Mounted Tooth Clutch

Application: Ammo feed mechanism for the cannon

Features: Plating is cadmium with gold chromate, armature adapter is made of aluminum bronze, spline drive rotor and armature

Specs: 2.65" dia. X 1.37" in. high, 420 lb. in. torque

AH-1W Cobra Helicopter



SFTC-225



Type: SFTC-225 Stationary Field Tooth Clutch

Application: Ammunition feed mechanism for the Gatling guns

Features: Non magnetic armature teeth, e-nickel plated, aluminum bronze adapter plate, fully potted coil, ball bearing supported rotor

Specs: 2.25" dia. X 1.625" long, 450 lb. in. torque, 3500 rpm

AC-130H Gunship



SEB-500-2



Type: SEB-500-2 Dual Disk Power Off Spring Set Brake

Application: Leveling leg actuators on the Patriot missile radars

Features: Two discs, fully enclosed, Mil-Spec connector, nitride corrosion protection, internal and external splines

Specs: 5.50" dia. X 7.62" long, 45 lb. ft. torque

Patriot Missile Radars



MDC



Type: MDC Multi Disk Clutch (Special)

Application: The clutch moves the optical sight, then holds it in position when the grenade launcher fires

Features: Six outer disks and five inner disks, moves +/- 15 degrees from null, magnet body has springs to provide pressure when power is removed from the coil providing the torque

Specs: 6.33" long X 2.2" high X 4.19" wide, 1000 lb. in. torque

MK-47 Striker Grenade Launcher



RFTC-290



Type: RFTC-290 Rotating Field Tooth Clutch

Application: A clutch to connect the servos in the throttle and navigation control joy sticks

Features: Rod end linkages provided by the two ears, rotor is supported by radial and thrust DU washers and splined rotor

Specs: 2.87" dia. X 1.80" long, 720 lb. in. torque

Boeing X-32 JSF Candidate



SFTC-225



Type: SFTC-225 Stationary Field Tooth Clutch

Application: Ammunition feed for Gatling gun, ship mounted for missile protection

Features: (Pictured with cover removed) aluminum bronze adapter plate, e-nickel plating, ball bearing supported rotor, potted coil with Teflon lead wire, 28 VDC coil

Specs: 2.32" dia. X 1.7" long, 450 lb. in. torque, 3500 rpm

Gatekeeper



SSB-350



Type: SSB-350 Housed Single Disk Power On Brake

Application: Boom hoist actuator

Features: Cadmium plating, gold chromate coated, single surface, dual coil, Mil-Spec connectors, potted coils and sealed

Specs: 3.50" dia. X 3.75" high, 235 lb. in. torque

767 Tanker



MDVSC-850



Type: MDVSC-850 Multiple Disk Variable Speed Clutch

Application: M-113 motor-mounted variable speed fan and direct-speed alternator clutch for all M-113 variants

Features: Oil cooled, Mil-Spec connector, fully potted coil, cadmium plating with gold chromate coating

Specs: 8.50" dia. X 5.50" long, 3000 rpm, 450 lb. ft. torque, weight 60 lbs.

M-113 Light Armored Vehicle



SEMD-340-2



Type: SEMD-340-2 Spring Engaged Multi Disk Fail-safe Clutch

Application: Electric turret drive mechanism

Features: Dual friction disks, dual coils, worm gear driven rotor, spline drive split locking hub and fully potted coils, nitride treated plates, e-nickel plated magnet body and rotor

Specs: 3.40" dia. X 4.62" long, 200 lb. in. torque

LAV Light Armored Vehicle



TC/B-525



Type: TC/B-525 Tooth Clutch and Brake

Application: Clutch brake controls raising and lowering of radio antennas

Features: All stainless steel construction, Mil-Spec connectors, manual control of the clutch and brake

Specs: 8.50" dia. X 13.50" long, 1,000 lb. ft. torque, weight 70 lbs.

Submarine



SEB-500-4



Type: SEB-500-4 Multiple Disk Power Off Fail-safe Brake

Application: MLRS-ILMS elevation actuator brake

Features: Four friction disks, Mil-Spec connector, aluminum housing, clear anodized ball bearing supported stainless shaft, fly wheel, internal and external spline shaft and electrically bonded

Specs: 7.50" dia. X 8.12" long, 1,750 lb. in. torque, speed 8,000 rpm, weight 28 lbs.

Multiple Launch Rocket System
Improved Launch Mechanical System



Commercial Applications

SEB-300-3



Type: SEB-300-3 Power Off, Spring set, Fail-safe Brake, Spline Drive

Application: Thrust reverser brakes on the jet engines

Features: Triple disks, Kevlar friction surfaces, manual release provisions, potted coil and electroless nickel plating

Specs: 3.000" dia. X 2.200". high, 550 lb. in. torque

Airbus A-380



SEB-245-3



Type: SEB-245-3 Triple Disk, Power Off, Spring Set, Fail-safe Brake, Manual Release

Application: Hydraulic pump motor brake

Features: Low weight aluminum spider, reverse mount, spline drive triple disks, nitride treated plates and magnet body, submerged in MIL-H-5606 oil

Specs: 2.45" dia. X 2.420" high, 22 lb. in. torque

Gulfstream G-5



Aerospace Applications

SETB-320



Type: SETB-320 Stationary Coil Tooth Brake

Application: Antenna array actuator brake

Features: Stainless steel rotor, nitride treated armature and magnet body, potted coil and DU bushings and thrust washers

Specs: 2.87" dia. X 1.412" high, 20 lb. ft. torque

Low Earth Orbit Satellite
(LEO)



MDB-640



Type: MDB-640 Power On Multiple Disk Brake

Application: Brake to stop satellite spin table

Features: Space rated materials, processes, potting and plating, six outer and seven inner disks

Specs: 6.375" dia. X 2.437" long, 200 lb. ft. torque, speed 2500 rpm, weight 17 lbs.

Space Shuttle



At SEPAC, innovation goes into everything we do from the design and manufacture of custom brake and clutch solutions for a variety of applications, to the enhancement of tried-and-true motion-control products. To view our range of expertise, visit our Web site: www.sepac.com.

STANDARD MODELS or SPECIAL DESIGNS



Multiple Disc Clutches & Brakes
(Electromagnetic, Hydraulic, Air & Mechanical)
2.75" - 11.60" Dia.
5 lb-ft. - 2,657 lb-ft.
Many special designs available



Tooth Clutches & Brakes
(Electromagnetic)
2.25" - 18.7" Dia.
10 lb-ft. - 24,000 lb-ft.
Many special designs available



Spring Engaged Brakes
(Electromagnetic & Hydraulic Release)
5" - 21" Dia.
3 lb-ft. - 12,000 lb-ft.
Many special designs available



Clutch/Brake & Clutch/Clutch Combinations
Special designs to meet specific customer requirements



Heavy Duty Multiple Disc Clutches & Brakes
(Electromagnetic)
8.75" - 22.75" Dia.
600 lb-ft. - 12,000 lb-ft.
Many special designs available



Special Clutches & Brakes
(Electromagnetic, Hydraulic & Pneumatic)
Special designs to meet specific customer requirements



Overload Clutches
(Electromagnetic)
Special designs to meet specific customer requirements



Single Surface Clutches & Brakes
(Electromagnetic)
.9" - 18" Dia.
30 oz-in. - 2,500 lb-ft.
Many special designs available



Permanent Magnet Brake
(Electromagnetic)
1.2" - 3.5" Dia.
3.5 lb-in. - 190 lb-in.
Many special designs available



Spring Engaged Brakes
(Electromagnetic)
1.375" - 3.5" Dia.
1 lb-in. - 50 lb-in.
Many special designs available



2000 Lake Road, Elmira, New York 14903-1822
800-331-3207, 607-732-2030, Fax: 607-732-0273
www.sepac.com, e-mail: info@sepac.com