Vortex

PRODUCT PROGRAM

Optional On Request
1. **ELECTROMAGNETIC MULTI-DISC CLUTCHES & BRAKES**
   *(FLUX THROUGH PLATES)*
   - Wet Operation
   - Steel-Steel friction Combination
   - Stationary field or rotating field option
   Rated dynamic torque Range: 5 N-m to 10,000 N-m
   Outer diam range: 70 mm to 470 mm

2. **ELECTROMAGNETIC MULTI-DISC CLUTCHES AND BRAKES**
   *(FLUX OUTSIDE PLATES)*
   - Wet or Dry Operation (Special self adjusting design possible)
   - Steel-Sintered bronze or Steel-Liner friction combination
   - Rotating field (Special Stationary field design possible)
   Rated dynamic torque range: 10 N-m to 10,000 N-m
   Outer dia range: 100 mm to 560 mm

3. **ELECTROMAGNETIC RELEASE SPRING APPLIED MULTI-DISC FAIL-SAFE CLUTCHES & BRAKES**
   - Wet or dry operation
   - Zero backlash option
   - Steel-Bronze or Steel-Sintered Bronze or steel-Liner (Non-Asbestos) friction combination
   - Rotating field (Special stationary field design possible)
   Rated dynamic torque range: 10 N-m to 600 N-m
   Outer Dia range: 100 mm to 235 mm

4. **ELECTROMAGNETIC TOOTHEO CLUTCHES & BRAKES**
   - Wet or Dry operation
   - Zero backlash option
   - Variable tooth profiles as option (Overload protection toothing, single position engagement toothing, Self locking under load toothing, etc)
   - Stationary or rotating field options
   - Highest Torque v/s dimension ratio
   Transmittin Torque range: 6 N-m to 40,000 N-m
   Outer dia range: 40 mm to 560 mm
5. ELECTROMAGNETIC SINGLE-DISC CLUTCHES & BRAKES

» Zero backlash
» Dry operation
» Non-asbestos liner friction surface
» Stationary field
» Various mounting options

Transmitting Torque range: 0.2 N·m to 2,400 N·m
Outer friction diameter range: 23 mm to 500 mm

6. ELECTROMAGNETIC SELF-ADJUSTING SINGLE-DISC CLUTCHES & BRAKES

» Zero backlash
» Dry operation
» Non-Asbestos liner friction surface
» Stationary field or rotating field option
» Self wear adjusting
» Long Life & higher heat dissipation capacity
» Various mounting options

Transmitting torque range: 0.15 N·m to 1,800 N·m
Outer friction diameter range: 23 mm to 390 mm

7. ELECTROMAGNETIC POLE-FACE FRICTION CLUTCHES & BRAKES

» Zero backlash
» Dry operation (Wet Operation is also possible)
» Steel-Steel friction surfaces
» Stationary field
» 4-pole or 6-pole faces for high torque v/s size ratio
» Various mounting options

Rated dynamic torque range: 5 N·m to 4,800 N·m
Transmitting torque range: 6 N·m to 6,000 N·m
Outer friction diameter range: 58 mm to 480 mm

8. ELECTROMAGNETIC CLUTCH BRAKE COMBINATION UNITS

» Clutch-Clutch or Clutch-Brake combination
» Open or enclosed units
» Zero backlash
» High cycling frequency
» Enclosed units with simple wear adjustment device
» Up to IP65 Protection with enclosed version
» Many mounting and adaption versions available

Torque range 8 N·m to 2,400 N·m
9. ELECTROMAGNETIC RELEASE SPRING APPLIED FAIL-SAFE BRAKES (D.C & A.C DESIGNS)

» Versions for D.C or A.C Operation Voltage
» Modular with several optional features & accessories
» Special versions for port, explosion-proof requirements
» Standard non-asbestos dual friction surfaces (Option, sintered friction surfaces)
» IEC or NEMA Motor mounting ready

Rated brake torque range: 1 N·m to 1,000 N·m
(up to 6,300 N·m on request)
Outer diameter range: 60 mm to 365 mm
(up to 560 mm on request)

10. ELECTROMAGNETIC RELEASE SPRING APPLIED FAIL-SAFE HOLDING BRAKES (D.C VOLTAGE)

» Low cost brake designed for holding application
» Emergency braking capability
» IEC or NEMA Motor mounting ready

Rated brake torque range: 0.1 N·m to 1,500 N·m
Outer Diameter range: 37 mm to 365 mm

11. PERMANENT MAGNET BRAKES & CLUTCHES

» Dry Operation
» Brake: Steel-Steel friction surface as standard
» Clutch: Steel-Liner (Non-Asbestos) friction combination standard
» Zero backlash
» High Temperature resistant, rare-earth magnets
» Variety of mounting and adapting options

Rated brake torque range: 0.4 N·m to 130 N·m
Outer friction diameter range: 32 mm to 160 mm

12. ELECTROMAGNETIC CLUTCHES FOR VEHICLE AIR-CONDITIONING COMPRESSORS

» Steel-Steel friction surface
» Optional with temperature sensor to avoid coil burn out
» Integrated pulley
» Pulley through magnetic circuit or pulley outside magnetic circuit options
» All SPA & SPB Single and multi groove can be integrated

Transmitting Torque range: 120 N·m to 800 N·m
13. HYDRAULICALLY/PNEUMATICALLY OPERATED MULTI-DISC CLUTCHES & BRAKES

- Hydraulic Actuation: Steel-Sintered Bronze friction combination
- Pneumatic Actuation: Steel-Liner (Non Asbestos) friction combination
- Rated dynamic torque range (Hydraulic): 100 N-m to 6,000 N-m
- Operating hydraulic pressure: 16 to 24 bar
- Rated dynamic torque range (Pneumatic): 60 N-m to 3750 N-m
- Operating pneumatic pressure: 5.5 bar
- Outer diameter range: 90 mm to 315 mm

14. CUSTOM BUILT ELECTROMAGNETIC, MECHANICAL & PNEUMATIC CLUTCHES & BRAKES

- Transmissible torque range: 0.1 N-m to 60,000 N-m
- Outer diameter range: Up to 600 mm

Pneumatic toothed Clutch-Clutch combination unit for tyre building M/C

Electromagnetic single position toothed clutch for moving, positioning & holding the scanner in a SPECT-CT Scanning & Nuclear Imaging Machine

Electromagnetic bistable clutch with permanent magnet for power sliding doors & power Lift gate on luxury passenger cars & SUV’s: 4 torque/position modes
India’s foremost manufacturer of a wide range of clutches & brakes

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