

Drive Units



- Sterling Motor and Worm Reducer
- AC Motors
- Controls
- Gearmotors
- Conveyors and more...



STERLING
ELECTRIC, INC.



Since 1964

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Motors and Controls

AC Motors



HP: .25 - 2000
RPM: 3600, 1800, 1200, 900, 720 and 600 (also 2 & 4 speed)
Power Supply: 3 phase, 60Hz, standard 208-230/460 or 575 VAC; also above 200 HP- 2300 or 4000 VAC; wide variety of special voltages and frequencies available
Frames: 182 - 587U (cool running U-frames), 56 - 449T (stock T-frames) and over NEMA frames above 400 HP
Enclosures: ODP, TENV, WP-I, WP-II, TEWAC, TEFV and Sterli- Seal® (Washdown Duty)
Nema Designs: A, B, C,D and Wound Rotor; special designs for specific applications
Mountings: Footed, C-face, D-flange, P-base and special mounting faces or flanges for specific applications
Brakemotors: .25 -30 HP (T-frames) and .25 -60 HP (U-frames)
Outstanding Features: CONSTRUCTION - rugged cast iron or rolled steel (.25 -2hp) available; BEARINGS - oversized ball bearings; SERVICE FACTOR - standard 1.15; INSULATION - Class B or F insulation available; NAMEPLATE - stainless steel standard

Sterli- Seal® Stainless Motors

HP: .33 -10
RPM: 3600 and 1800
Power Supply: 3 phase, 60 Hz, standard 208-230/460 and 575 VAC
Enclosure: TENV and TEFC (Washdown Duty)
Nema Design: B
Mountings: Footed, C-face footed, C-face footless and Close Coupled Pump Style "JM"
Outstanding Features: CONSTRUCTION - All stainless steel frame, brackets, fan cover, conduit box and shaft; BEARINGS - oversized ball bearings; SERVICE FACTOR - standard 1.15; INSULATION - Class F; all fits with RTV sealant and four-quadrant stainless steel drain plugs in C-face bracket



Adjustable Frequency AC Motors



HP: 1 - 150
RPM: 3600, 1800 and 1200
Power Supply: 3 phase, 60 Hz, standard 208-230/460 or 575 VAC; wide variety of special voltages and frequencies available
Enclosures: TEFC, TEBC (totally enclosed blower cooled) and Sterli-Seal® (Washdown Duty)
Mountings: Footed, C-face and special mounting faces available for specific applications
Outstanding Features: Special spike resistant magnet wire; Class "H" insulation with Class "B" temperature rise; full phase to phase insulation; winding temperature thermostats standard; optional encoder for closed loop applications

Speed-Tron® 2000AC Controls

Power Supply: 3 phase input, 3 phase output; .25 -5 HP 230 VAC; .25 - 20 HP 460 VAC
Enclosures: NEMA 1, NEMA 12, and NEMA 4X/12 Sterli-Seal® (Washdown Duty)
Outstanding Features: 50 or 60 Hz input line frequency; 3 - 240 Hz operating frequency range; selectable local or remote operation; 0 - 10 VDC or 4 - 20 ma signal follower capability; simple approach to programming functions by use of a keypad and digital display



STERLING
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Motors, Controls and Gearmotors & Reducers

Speed-Tron® DC Controls



Power Supply: 115 or 230 VAC, 1 phase jumper selectable; .25 - 1 HP 115 VAC 90 VDC armature; .25 - 2 HP 230 VAC 180 VDC armature

Enclosures: Chassis, NEMA 1 and NEMA 4/12 Sterli-Seal® (Washdown Duty)

Options: Run/log with operator controls; reversing with operator controls; instrument interface 0 - 10 VDC or 4 - 20 ma; torque with operator controls; torque with instrument interface

DC Motors (Permanent Magnet)

HP: .25 - 2

RPM: 1725 base speed

Power Supply: 90 or 180 VDC

Enclosures: TEFC and Sterli-Seal® (Washdown Duty)

Mountings: C-face footed and C-face footless

Options: 7 VDC / 1000 RPM tachometer



Classic Helical Gearmotors & Reducers

HP: .25 - 100

Reductions: Single, Double, Triple and Quadruple

RPM: 780 - 3.3

Power Supply: 3 phase, 60 Hz, standard 230/460 or 575 VAC; wide variety of special voltages and frequencies available

Enclosures: ODP, TEFC, Explosion Proof and Sterli-Seal® (Washdown Duty)

Nema Designs: B, C, D and special designs for specific application

Input: Solid shaft, C-face (coupling) and integral

Mountings: REDUCER - base, C-face and flange; MOTOR - base, C-face, shelf and motor-over mount

Outstanding Features: Oversized, rugged cast iron construction; positive oil seals allow mounting in any position without modification; all gears located between bearings-no overhung loads; rugged gears diameter and wide face; bearing housing integrally cast to assure proper alignment; low shaft places torsional stress close to feet



2000HG Helical Gearmotors & Reducers

HP: .25 - 75

Reductions: Double and Triple

RPM: 887 - 7

Power Supply: 3 phase, 60 Hz, standard 230/460 or 575 VAC; wide variety of special voltages and frequencies available

Enclosures: ODP, TEFC, Explosion Proof and Sterli-Seal® (Washdown Duty)

Nema Designs: B, C, D and special designs for specific applications

Input: Solid shaft and C-face (quill style with nylon bushing)

Mountings: Base and flange; interchangeable with major European suppliers

Outstanding Features: REDUCER - compact single piece cast iron housing; positive oil seals allow mounting in any position without modification; all gears located between bearings - no overhung loads; hardened and ground pinions and gears; bearings housings integrally cast to assure proper alignment; unique C-face bushing system prevents fretting and corrosion of motor shaft



STERLING
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Gearmotors & Reducers, Shaft Mounts and Conveyors

2000SM Shaft Mount Gearmotors & Reducers

HP: .25 - 100

Reductions Double and Triple

RPM: 337 - 5

Power Supply: 3 phase, 60 Hz, standard 230/460 or 575 VAC; wide variety of special voltages and frequencies available

Enclosures: ODP, TEFC, Explosion Proof and Sterli-Seal® (Washdown Duty)

Nema Designs: B, C, D and special designs for specific applications

Input: Solid shaft and C-face (quill style with nylon bushing)

Mountings: Base, flange, solid shaft and hollowshaft; interchangeable with major European suppliers

Outstanding Features: REDUCER - single piece cast iron housing; positive oil seals allow mounting in any position without modification; all gears located between bearings-no overhung loads; hardened and ground pinions and gears; bearing housings integrally cast in case to assure proper alignment; unique C-face bushing system prevents fretting and corrosion of motor shaft



AGMA Shaft Mounts and Screw Conveyors

HP: .25 - 60

Ratios: 5:1, 15:1 and 25:1

Output Shaft Bores: 15/16 - 3 7/16

Options: Motor mounts, backstops and taconite seals

Outstanding Features: ribbed cast iron housing; single tapered bushing design is self-locking and will not back off shaft; fretting and corrosion of bushing to shaft is prevented; hardened and ground pinions and gears; standard double lip seals on ground and polished shafts protect against leaking



2000C Cycloidal Gearmotors & Reducers

HP: .25 - 200

Stages: Single and Double

RPM: 300 - .23

Power Supply: 3 phase, 60Hz, standard 230/460 or 575 VAC; wide variety of special voltages and frequencies available

Enclosures: ODP, TEFC, Explosion Proof and Sterli-Seal® (Washdown Duty)

Nema Designs: B, C, D and special designs for specific applications

Input: Solid shaft, C-face (coupling) and C-face (quill)

Mountings: Base and flange; interchangeable with major cycloidal suppliers

Outstanding Features: Rolling contact for high torque; compact design (high ratios in small cases); high shock load capability; thermal ratings exceed mechanical ratings; high efficiency at high ratios



Right Angle Gearmotors & Reducers

HP: .25 - 30

Reduction: Single and double worm or combination helical/worm

RPM: 345 - .48

Power Supply: 3 phase, 60 Hz, standard 230/460 or 575 VAC; wide variety of special voltages and frequencies available

Enclosures: ODP, TEFC, Explosion Proof and Sterli-Seal® (Washdown Duty)

Nema Designs: B, C, D and special designs for specific applications

Input: solid shaft, C-face (coupling) and C-face (quill)

Mountings: Base, ring, bracket, flange and hollowshaft

Center Distance: 1" - 10"

Outstanding Features: Precision ground worms of high quality alloy steel; accurate hobbled cast bronze gears; tapered roller bearings on output shaft permit maximum overhung load capacity; large oil reservoir for splash lubrication affords cool operation and oil seal design provides trouble free operation



STERLING
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Motors & Drives and Gearmotors & Reducers

2000HW Helical Worn Gearmotors & Reducers



HP: .25 - 20

Reducers: Double and Triple

RPM: 219 - 2

Power Supply: 3 PHASE, 60 Hz, standard 230/460 or 575 VAC; wide variety of special voltages and frequencies available

Enclosures: ODP, TEFC, Explosion Proof and Sterli-Seal® (Washdown duty)

Nema Designs: B, C, D and special designs for specific applications

Input: Solid shaft and C0face (quill style with nylon bushing)

Mountings: Base, flange, solid shaft and hollowshaft; interchangeable with major European suppliers

Outstanding Features: REDUCER - all cast iron housing; positive oil seals allow mounting in any position without modification. All gears located between bearings-no overhung loads; hardened and ground pinions, gears and worn shafts; high quality bronze worm gearing; bearing housings integrally cast in case to assure proper alignment; unique C-face bushing system prevents fretting and corrosion of motor shaft

2000HB Helical Bevel Gearmotors & Reducers

HP: 5 - 150

Reduction: Triple

RPM: 225 - 11

Power Supply: 3 phase, 60 Hz, standard 230/460 or 575 VAC; wide variety of special voltages and frequencies available

Enclosures: ODP, TEFC, Explosion Proof and Steri-Seal® (Washdown duty)

Nema Designs: B, C, D and special designs for specific applications

Input: solid shaft and C-face (quill style with nylon bushing)

Mounting: Base, flange, solid shaft and hollowshaft; interchangeable with major European suppliers

Outstanding Features: REDUCER - all cast iron housing including integral feet; positive oil seals allow mounting in any position without modification. All gears located between bearings-no overhung loads; hardened and ground pinions, gears and worn shafts; high quality bronze worm gearing; bearing housings integrally cast in case to assure proper alignment; unique c-face bushing system prevents fretting and corrosion of motor shaft



Speed-Trol® Mechanical Variable Speed Drives

HP: .50 - 50

Speed Variation: Up to 10:1

Power Supply: 3 phase, 60 Hz, standard 230/460 or 575 VAC; wide variety of special voltages and frequencies available

Enclosures: ODP, TEFC, Explosion Proof and Sterli-Seal® (Washdown Duty)

Nema Designs: B, C, D and special designs for specific applications

Standard Variations: Available with T or U-frame motors; variety of assembly positions; with or without reducers (helical and right angle); can be supplied with modular, C-face input and output to accept any type of motor or reducer

Outstanding Features: Lube-Free® (no grease) design of pulleys and shafts; positive speed control over stepless range; heavy duty belt with large thermal capacity to ensure long, cool-running operation; full length cover plates on both sides of transmission provide easy access to internal parts; various means available for changing speed (manual, electric or pneumatic); tachometer speed read-out; modular design provides the ultimate in flexibility and ease of service; automatic belt tensioning ensures the smooth transmission of power and prevents excess belt wear; can provide extra high starting torque



Application Specific Motors & Drives

· Designed to meet customer's mechanical and/or electrical requirements

Example:

- High and low temperature applications
- Multi-speeds and voltages
- Special shafts and flanges
- Quick lead-times from design to production
- Large and small quantities
- Modified stock specials and complete custom design and manufacture



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