



Industrial  
Farm/Ag Motors



Built to last in the demanding  
agricultural industry.

A Regal Brand

**REGAL**

# Don't let a motor decide

LEESON Farm/Ag Industrial Motors.





# when your day ends.

LEESON Farm/Ag motors are designed for one thing—work. Specifically, to handle high-starting loads and severe-duty applications of the agricultural industry. For more than 40 years LEESON has listened to user feedback to help engineer motor solutions that work just as you expect. This process led the development of specialty OEM motor designs, stock replacement motors as well as new equipment solutions. LEESON Farm/Ag motors—just like you, they're not afraid of work.



# Big Red



Industry leader that performs in the demanding applications experienced daily in the Farm/AG environment. The "Big Red" and ECO-Ag Series of motors are engineered to perform in all weather conditions.

LEESON designed these motors for the agricultural industry to work the land, tend to livestock and put food on the table for consumers everywhere. They're built to last in the most demanding applications.

The "Big Red" series of Farm Duty and ECO-Ag Premium efficient motors are built to meet industry demands. The single-phase motors provide starting torque up to 400%. Designed and engineered for the hard-working people that simply cannot afford downtime in demanding applications such as: feeders, fans, grain elevators, silo unloaders and barn cleaners.

## FEATURES & BENEFITS:

- Double-sealed Ball Bearings—Long life in dusty and moist conditions
- EXXON Polyrex<sup>®</sup> EM Grease -20°F to +350°F—Ideal for extreme temperatures
- Low Temperature Manual Overload Protector—Ensure proper motor protection in low temperatures
- Shaft Flinger—Helps prevent dirt and rain from damaging bearings
- Condensation Drains—Enable moisture or condensation draining







**High Torque • Rigid Base •  
Single-Phase • TEFC**

- 1/3–10HP
- Manual overload protection
- Class F insulation
- Rubber boot over protector
- Shaft flinger
- C-Face motors
- Gasketed conduit box and capacitor cases



**Extra-High Torque • Rigid Base •  
Single-Phase • TEFC**

- 5–10HP
- Produce up to 400% starting torque
- 230V
- Manual overload protection
- Drain holes
- Gasketed conduit box



**Premium Efficient • Rigid Base •  
Single-Phase**

- 1/3–2HP
- Up to 22% higher efficiency than standard Ag motors
- High starting torque
- Sealed bearings
- Manual overload protection
- Condensation drains
- Shaft flinger



**Premium Efficient • Rigid Base •  
Three-Phase**

- 1/2–10HP
- Meet or exceed NEMA Premium efficiencies
- Normally closed, thermostat protected
- Double-sealed ball bearings
- C-Face kits available
- High starting torque

# Definite Purpose

Designed specifically for everyday applications that demand a rugged motor that will hold up in the harsh and weather-affected machinery found in the Farm/Ag industry.



LEESON has a variety of definite purpose motors used in the Farm/Ag industry. They are drop-in replacements for many OEM designed machines and can be used on new equipment as well.

## APPLICATIONS & BENEFITS:

- Irrigation Pumps and Drives—Corrosion-resistant paint and rain canopy protects motors from the elements
- Fish Pond Aerators—Weather resistant finish and high torque designs
- Grain Stirring Equipment—Vertical shaft up-mounting design and over-size drive end-bearing helps ensure motor reliability
- Milk Transfer Pumps—Direct replacement for surge milk pumps
- Feed Auger Drives—Motor switches have over-speed protection and solid-state type switch designs to deliver long motor life





### Grain Stirring Motors

- 1½HP
- High torque design
- Vertical shaft up mounting design
- ¾" diameter shaft



### Irrigation Booster Pump Motors

- 2HP
- Threaded jet pump shaft
- Vertical shaft down design
- Rain canopy provided
- Corrosion-resistant epoxy paint



### Irrigation Drive Motors

- 1HP
- Double-sealed ball bearings
- Vertical shaft down design
- Rain canopy provided
- Corrosion-resistant epoxy paint



### Milk Transfer Pump Motors

- ½HP
- Direct replacement for surge milk pumps
- Permanent split capacitor design
- Double-sealed ball bearings



### Feed Auger Drive Motors

- ⅓–1½HP
- 50/60 Hz designs available
- Mechanical switch and solid-state switch designs
- Over-speed protection on mechanical switches
- Manual overload protected



### Catfish Pond Motors

- 10HP
- Single- and three-phase
- Corrosion resistant finish
- High-torque designs
- Double-sealed ball bearings
- C-face with base



# Fan & Blower Motors

Fans play a crucial role in the Ag industry, from providing climate controlled air for raising animals to providing forced air to dry crops. LEESON has field-proven motor designs that hold up and won't let you down when needed.



LEESON has a broad line of fan motors designed specifically for use in the demanding Ag industry and function as drop-in replacements. Their designs include heavy-duty insulation and protection systems that ensure lasting motor life.

## APPLICATIONS & BENEFITS:

- Crop Dryers—Rodent screen protects against animal and insect motor damage
- Aeration Fans—Installed terminal boards simplify wiring connections to motors
- Centrifugal Fans—E-pact and Premium efficient designs save energy and power consumption
- Variable Speed Ag Fans—Automatic overload protection ensures safe working environments
- Hatchery and Incubator Fans—Resilient base and thru-bolt mounting platforms meet many application needs
- Belt Drive Ag Fans—High-torque designs ensure proper fan speed







### Aeration Fan Motors

- ¾–3HP
- Single- and three-phase designs available
- TEAO designs—must be mounted in fan's airstream
- Terminal board connections on single-phase designs
- Epoxy painted to resist corrosion



### Crop Dryer Motors

- 3–15HP
- Single- and three-phase designs available
- Overload protected
- Rodent screens provided
- Double-sealed ball bearings



### Centrifugal Fan Motors

- 10–30HP
- EPACT (Energy Policy Act) compliant
- Premium efficient three-phase motors
- Open drip-proof designs
- Rodent screens provided
- Regreasable bearings
- Cast iron construction
- Inverter duty



### Hatchery and Incubator Fan Motors

- ¼–½HP
- TEAO designs
- Automatic overload protected
- Double-sealed ball bearings



### Variable Speed Ag Fan Motors

- ¼–2HP
- Water-tight connection end compartment
- Double-sealed ball bearings
- TEAO designs
- Automatic overload protected



### Belt Drive Agricultural Fan Motors

- ½–2HP
- High efficiency capacitor start/run designs
- TEAO designs
- Combination 56/140 frames stamped steel base
- Automatic overload protected

## Thousands of Stock Power Transmission Solutions

Rugged, Power+Plus sheaves are an excellent choice for agricultural equipment, MRO, as well as a superior drop-in replacement for existing brands. Available in fixed bore and bushing style.

Maintaining full ISO 9001 quality assurance LEESON Stock Power+Plus Sheaves and Bushings represent unprecedented value. Using advanced production equipment sheave products are manufactured to the highest quality standards. Sheave products are available in all standard configurations.

### PRODUCTS

#### Taper Bushings

BTL— Bushing Taper Lock  
1008, 1108, 1210, 1215  
and more

QTL—Quick Detachable  
JA, SH, SDS and more

STL—Split Taper Lock  
G, H and more

#### V-Pulleys

Finished Bore  
AK, 2AK, BK, 2BK

Taper Bore—STL/H  
AK-H, 2AK-H, BK-H, 2BK-H

Finished Bore—Adjustable Speed  
VL, VM, 1VP, 2VP

Taper Bore—QTL  
A/B-C-D

Finished Bore—Light Duty  
AL

### BENEFITS

Precision installation

Easy assembly and disassembly

Manufactured in high-quality  
grey cast iron

### FEATURES

Cast iron construction—They hold up  
in severe applications

Precision machined—Close tolerance  
designs hold up in high speed  
applications

Dynamically balanced—Insures  
smooth performance

Phosphatized coated bushings—Finish  
holds up in demanding environments

Direct replacements to competitive  
brands—Industry standard designs  
insures interchangeability

Individually packaged

### APPLICATIONS

Conveyor belts

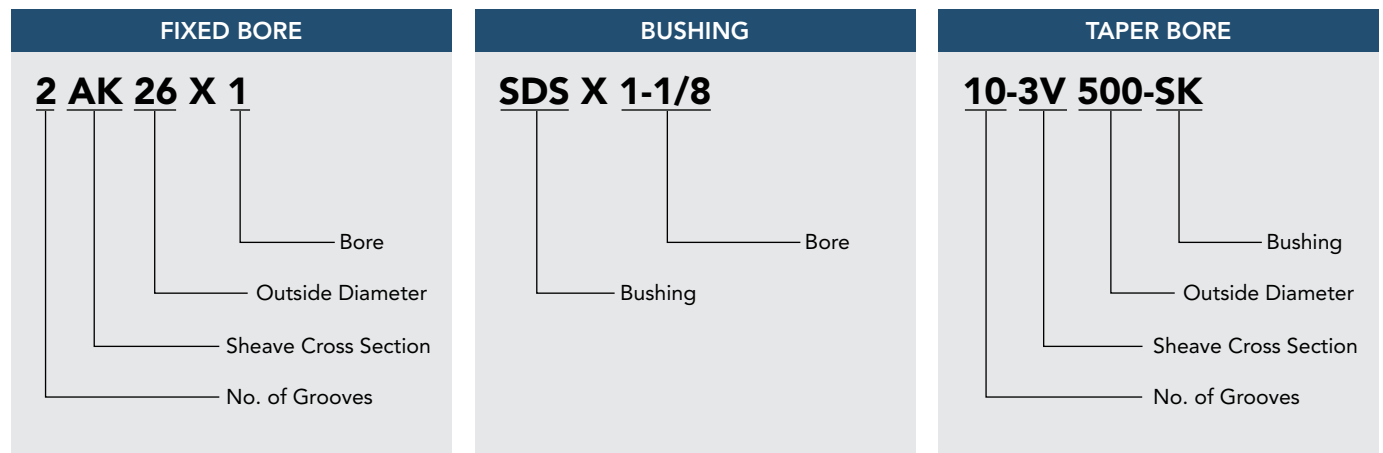
Pumps

Fans

Air handling

Other agricultural applications

## How to order



Dynamically balanced to Q6.3 ISO 1940 precision

Dual bolt pattern enables reverse mounting in limited clearance applications

Quality, gray, cast iron grade GG25 (ASTM A48 grade 40B)

Industry standard taper design ensures interchangeability

Fixed bores are CNC machined to H7 precision

6,500 ft/min Max rim speed

Castings are vibration aged to relieve internal stresses ensuring long, trouble free service life

Set screw over key\*\* secures it in place. Especially helpful for vertical shaft down applications

Precision machined-taper ensuring a snug, concentric fit with the sheave

Industry standard taper design ensures interchangeability

Full split enables even bushing compression throughout the bushing length for a secure, even fit

Precision CNC machined grooves

Made from GGG40\* ductile iron, precision machined and phosphate coated.

Two sets of mounting holes ensure easy installation and removal. Use the thru holes to draw the bushing tight. Use the threaded holes to push the bushing off the sheave.



Supplied with all the necessary mounting hardware including 12.9 grade UNC bolts, lock washers, set screws and shaft key.

\* STL Mfg. in GG25 Material.

\*\* Contact Factory for availability on smaller sizes.





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