



Powerstar[®]



Higher Torque Capability



Quieter Operation



Unmatched Energy Efficiency

The right-angle designed PowerSTAR gearmotor combines the latest technology in hypoid gearing with Bison's long established reputation of providing best-in-class power transmission solutions.

PowerSTAR features hypoid gearing manufactured using technology exclusive to Bison which offers several operational advantages: including higher torque capability, quieter operation and unmatched energy efficiency.

PowerSTAR 712 Series AC and DC **Hypoid Gearmotors**

Power: 1/30 HP (25 W) **Speed:** 7 - 168 RPM

Torque: 10 - 240 in-lbs (1.1 - 27 Nm)



PowerSTAR 720/725/730 Series AC and DC **Hypoid Gearmotors**

Power: 1/15 - 1/2 HP (50 - 373 W)

Speed: 7 - 168 RPM

Torque: 35 - 1730 in-lbs (4 - 195 Nm)



PowerSTAR 725F Series **AC Flanged Hypoid Gearmotors**

Power: 1/8 - 1/5 HP (93 - 149 W)

Speed: 7 - 168 RPM

Torque: 60 - 900 in-lbs (6.8 - 102 Nm)



746 Series **AC & PMDC Gearmotors**

Power: 1/15 - 1/12 HP (50-62 W)

Speed: 30 - 180 RPM Torque: 20 - 75 in-lbs (2.3 - 8.5 Nm)



750 Series AC, PMDC Gearmotors

Power: 1/6 - 1/4 HP (93-187 W) Speed: 28 - 360 RPM

Torque: 14 - 120 in-lbs (1.6 - 13.6 Nm)



060 Series AC & PMDC Gearmotors

Power: 1/20 - 1/12 HP (37-62 W)

Speed: 1.5 - 90 RPM Torque: 18 - 250 in-lbs (2 - 28 Nm)



060 Series **Universal Gearmotor**

Power: 1/15 HP (50 W) **Speed:** 4.5 - 90 RPM Torque: 18 - 250 in-lbs (2 - 28 Nm)



Parallel Shaft Gearmotors

100 Series AC & DC Gearmotors

Power: 1/80 - 1/10 HP (9-75 W) Speed: 7.7 - 360 RPM Torque: 10 - 170 in-lbs (1.1 - 19 Nm)



200/300 Series AC & DC Gearmotors

Power: 1/20 - 1/4 HP (37-187 W) Speed: 7.7 - 360 RPM Torque: 19 - 385 in-lbs (2.2 - 44 Nm)



400/483 Series AC & DC Gearmotors

Power: 1/4 - 1/2 HP (187-375 W) Speed: 5.4 - 283 RPM Torque: 70 - 1105 in-lbs (8 - 125 Nm)



650 Series AC & DC Gearmotors

Power: 1/58 - 1/2 HP (13-373 W)

Speed: 1 - 119 RPM **Torque:** 240 - 710 in-lbs (27 - 80 Nm)



261 Series Sanimotor Stainless Steel Washdown Gearmotors

Power: 1/8 - 1/7 HP (93-107 W) **Speed:** 7 - 353 RPM



055 Series AC Gearmotors

Power: 1/25 HP (30 W) Speed: 14 - 164 RPM Torque: 12 - 67 in-lbs (1.4 - 7.6 Nm)



050 Series AC & DC Gearmotors

Power: 1/30 - 1/20 HP (25-37 W)

Speed: 4 - 181 RPM **Torque:** 12 - 50 in-lbs (1.4 - 5.7 Nm)



020 Series AC Gearmotors

Power: 1/20 - 1/10 HP (37-75 W)

Speed: 2 - 60 RPM **Torque:** 42 - 113 in-lbs (4.3 - 13 Nm)



010 Series AC & DC Gearmotors

Power: 1/15 - 1/10 HP (50-75 W) **Speed:** 6 - 85 RPM

Speed: 6 - 85 RPM **Torque:** 50 - 500 in-lbs (5.7 - 57 Nm)



030 Series AC Gearmotors

Power: 1/4 HP (187 W) Speed: 6 - 120 RPM Torque: 100 - 600 in-lbs (11.2 - 67.8 Nm)



040 Series AC Gearmotors

Power: 1/4 - 1/2 HP (187-373 W)

Speed: 6 - 120 RPM **Torque:** 100 - 800 in-lbs (11.2 - 90 Nm)



Offset Parallel Gearmotors





Reducers

Integral Horsepower Q Series Aluminum Worm Gear Reducers

Power: 1/4 - 5 HP (186 - 3728 W) Speed: 17.2 - 250 RPM Torque: 257 - 2921 in-lbs (29.04 - 330.03 Nm)

Compatible With:

- Bison VFsync PMAC Motors
- Prestolite Motors
 Brushed DC Motors



Integral Horsepower S Series Stainless Steel Worm Gear Reducers

Power: 1/4 - 5 HP (186 - 3728 W) Speed: 17.2 - 250 RPM Torque: 248 - 2921 in-lbs (28.02 - 330.03 Nm)

Compatible With:

 Bison SS30 Series Stainless Steel Washdown Motors





185/250/385 Series Gear Reducers

Power: 1/40 - 1/3 HP (19 - 249 W)

Speed: 13 - 160 RPM

Torque: 20 - 350 in-lbs (2.3 - 40 Nm)

NEMA 23, 34, 42C Inputs Helical/Spur Gearing



881 Series Gear Reducers

Power: 1/4 - 1 1/2 HP (187-1119 W)

Speed: 12 - 457 RPM

Torque: 32 - 1195 in-lbs (3.6 - 135 Nm)

NEMA 56C Quill Mount Helical/Spur Gearing











Designed with high-tech automated machines in mind, Bison's VFsync motors deliver the velocity control that engineers have previously only found in much more expensive servo motors.

Configuration Options

Horsepower

25

.50

1.0

1.5

Mounting

IEC 71 B14

IEC 80 B14

IEC 90 B14

NEMA 56C

Enclosure

Voltage

230 Volt

460 Volt

TENV

TENV w/Encoder



TEFO

SS30 Series - Stainless Steel Washdown Motor

Power: 1/6 - 2 HP (124-1491 W) **Speed:** 1720 & 1760 RPM

Torque: 6.1 - 73.3 in-lbs (.69 - 8.28 Nm)





Compatible with Bison S Series Integral Horsepower Beducers



Motor Only

For customers requiring a motor only solution. Bison designs and manufactures the following motor types:

- AC (PSC, Split Phase & Three Phase)
- PMAC
- PMDC



AC, DC and VFD Drives

Variable Frequency Drives Compatible with VFsync, Sanimotor and 3 Phase Powerstar

VFsync motors require a variable frequency drive that is designed to run 230/460V three phase PMAC motors.

Two VFD Models Available

- IP20 for in-cabinet mounts
- IP66 for exterior mounts





AC & DC Drives NEMA 4X and Chassis Adjustable Speed Control

TightDrive - Motor Mounted Speed Control

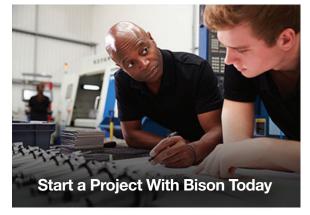
- Easily mounts on Bison PMDC motors
- Input Voltage: 115V Single Phase, 60Hz
- Output Voltage: 90V DC
- Max Current: 2.5 Amps











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AMETEK Dynamic Fluid Solutions and Bison Gear & Engineering combined in 2023 to form a new business of AMETEK, called Bison®.

This blended organization provides customers: An expanded portfolio, in-depth application knowledge, unparalleled customization and integration support, accelerated time to production, and global manufacturing flexibility.

Bison® gearmotors, motors and reducers have been making your products go for more than 60 years. The ability to choose from more than 1,000 standard products or work with our engineering team to design a custom solution is what makes Bison a preferred partner in the power transmission market.

Many industries like food & beverage, transportation, and agriculture use Bison® gearmotors, motors and reducers in their lines of products because they can count on their performance.















