GETTING STARTED

TABLE OF CONTENTS

USER MANUAL OVERVIEW

OVERVIEW OF THIS PUBLICATION

The IronHorse Worm Gearbox User Manual describes the installation, operation, and preventative maintenance of IronHorse Worm Gearboxes.

WHO SHOULD READ THIS MANUAL

This manual contains important information for people who will install, maintain, and/or operate any of the IronHorse Worm Gearboxes.

TECHNICAL SUPPORT

Our technical support group is glad to work with you to answer your questions. Please call the technical support group if you need technical assistance, or visit our web site. Our website contains technical and non-technical information about our products and our company.

BY TELEPHONE: *(770) 844-4200* (Mon – Fri, 9:00 am – 6:00 pm ET)

ON THE WEB: www.automationdirect.com

SPECIAL SYMBOLS

NOTE: When you see the "notepad" icon in the left-hand margin, the paragraph to its immediate right will be a special note which presents information that may make your work quicker or more efficient.

WARNING: WHEN YOU SEE THE "EXCLAMATION MARK" ICON IN THE LEFT-HAND MARGIN, THE PARAGRAPH TO ITS IMMEDIATE RIGHT WILL BE A WARNING. THIS INFORMATION COULD PREVENT INJURY, LOSS OF PROPERTY, OR EVEN DEATH (IN EXTREME CASES). ANY WARNING IN THIS MANUAL SHOULD BE REGARDED AS CRITICAL INFORMATION THAT SHOULD BE READ IN ITS ENTIRETY.

IRONHORSE® WORM GEARBOX INTRODUCTION

PURPOSE OF WORM GEARBOXES

Gearboxes, also known as enclosed gear drives or speed reducers, are mechanical drive components that can control a load at a reduced fixed ratio of the motor speed. The output torque is also increased by the same ratio, while the horsepower remains the same (less efficiency losses). For example, a 10:1 ratio gearbox outputs approximately the same motor output horsepower, but motor speed is divided by 10, and motor torque is multiplied by 10.

Worm gearboxes contain a worm-type gear on the input shaft, and a spur-type mating gear on the output shaft. Worm gearboxes also change the drive direction by 90 degrees. IronHorse worm gearboxes are manufactured in an ISO9001 certified plant by one of the leading and most internationally acclaimed gearbox manufacturers in the world today. Only the highest quality materials are tested, certified, and used in the manufacturing process. Strict adherence to and compliance with the toughest international and U.S. testing standards and manufacturing procedures assure you the highest quality products.

We offer right-angle worm gearboxes with aluminum frames and with cast-iron frames. The output shafts are perpendicular to the inputs, and change the drive direction(s) by 90°. Our gearboxes utilize C-face mounting interfaces for C-face motors.

Our cast-iron gearboxes feature right-hand and dual (both right and left) output shafts, and with hollow-bore outputs (all the way through from one side to the other). We also offer optional gearbox mounting bases for ease of installation of these cast-iron gearboxes.
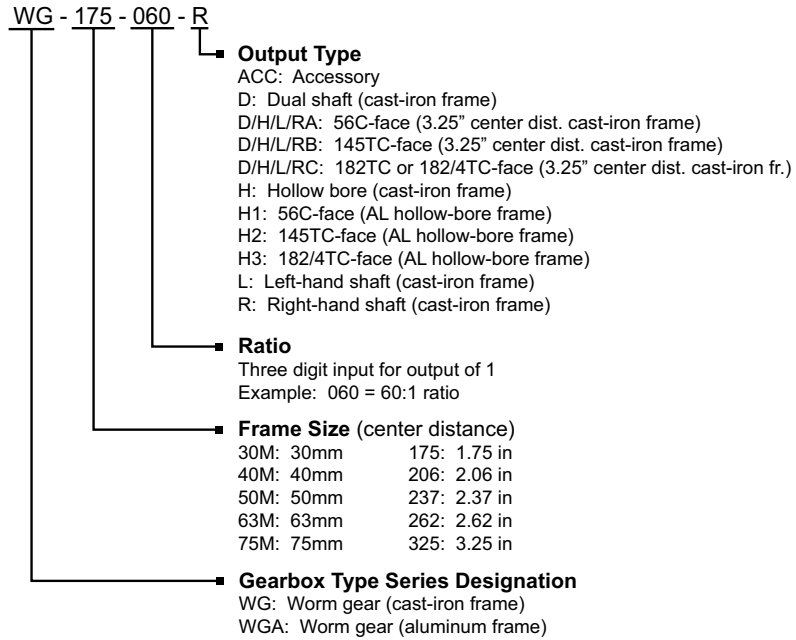
Our aluminum gearboxes feature hollow-bore outputs (all the way through from one side to the other). We also offer optional single and double output shafts, output flanges, torque arms, and output covers.

PACKAGE CONTENTS

After receiving the IronHorse Worm Gearbox, please check for the following:

- *Make sure the package includes the speed reducer and the vent plug.*
- *Inspect the unit to insure it was not damaged during shipment.*
- *Make sure that the part number on the gearbox nameplate is the same as the part number that you ordered.*

PART NUMBER EXPLANATION

WG - 175 - 060 - R

Output Type
ACC: Accessory
D: Dual shaft (cast-iron frame)
D/H/L/RA: 56C-face (3.25" center dist. cast-iron frame)
D/H/L/RB: 145TC-face (3.25" center dist. cast-iron frame)
D/H/L/RC: 182TC or 182/4TC-face (3.25" center dist. cast-iron fr.)
H: Hollow bore (cast-iron frame)
H1: 56C-face (AL hollow-bore frame)
H2: 145TC-face (AL hollow-bore frame)
H3: 182/4TC-face (AL hollow-bore frame)
L: Left-hand shaft (cast-iron frame)
R: Right-hand shaft (cast-iron frame)

Ratio
Three digit input for output of 1
Example: 060 = 60:1 ratio

Frame Size (center distance)
30M: 30mm   175: 1.75 in
40M: 40mm   206: 2.06 in
50M: 50mm   237: 2.37 in
63M: 63mm   262: 2.62 in
75M: 75mm   325: 3.25 in

Gearbox Type Series Designation
WG: Worm gear (cast-iron frame)
WGA: Worm gear (aluminum frame)

NAMEPLATE INFORMATION

WG Cast-Iron Gearbox

Gearbox Model #
Gearbox Serial #

Gearbox Frame Size (center distance) & Gearbox Ratio
Country of Origin

WGA Aluminum Gearbox

Gearbox Model #
Gearbox Serial #

Country of Origin