



# 1600 Series Gearbox

Heavy Duty - Sealed Housing



## Gearbox Specifications

The rugged 1600 Series is designed for tough applications. Able to handle a continuous torque rating up to 150 in-lb. Constructed with a zinc die-cast, gasket-sealed housing for dust and moisture resistance. Output shaft diameters range from 1/4" through 1/2" with flats, keyways, threads, or square ends to meet your application needs. An optional dust cover over the motor is available.



**Applications:** Foodservice Equipment, Agriculture, Industrial Machinery, Gaming, Sporting Goods, and Fluid Control.

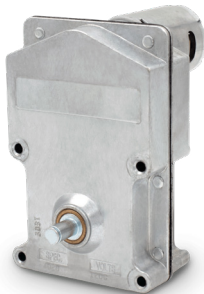
**Features:**

- Zinc die-cast housing
- Gasketed housing for environmental protection
- Permanently lubricated with synthetic gear grease
- Sealed ball bearings optional
- Noise-reducing phenolic high-speed gearing

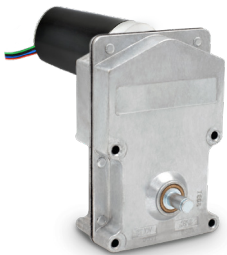


### 1600 DC GEARMOTOR

### Information and Specifications



1600 w/ 615 Economical Motor



1600 w/ Brushless Motor



Shown w/ Dust Cover

#### Compatible DC Motor Options



DC Model	615	983	28Y	30Y & 55Y	Brushless
Voltage	12 / 24V	12 / 24V	12 / 24V	12 / 24V	24V
Speed	1450-5745 RPM	3100-4800 RPM	2538-5615 RPM	1275-4700 RPM	4172 RPM
Torque	1.4-2.5 oz-in.	20-40 oz-in.	2.6-4.0 oz-in.	6.5-18.1 oz-in.	10.0 oz-in.
Power	—	—	4.8-16.3W	3.9-55.2W	30.8W
Frame Size	36mm	52mm	40mm	54mm	42mm
Reversible	Yes	Yes	Yes	Yes	Yes
Motor Life*	1000+ Hours	1000+ Hours	3000+ Hours	3000+ Hours	20000+ Hours

\*Estimated life - brush life dependent on duty cycle, application, and environment.

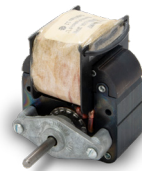
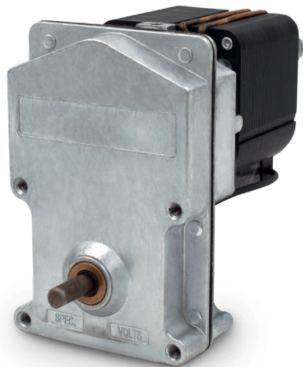
#### DC Gearmotor Performance Specifications

DC Motor	Voltage	Rated Torque	Rated Speed	Rotation	Shaft Size
615 & 28Y - Medium Frame	12 / 24V	4 - 100 in-lbs.	4 - 150 RPM	Reversible	1/4" to 1/2"
983 Large Frame	12 / 24V	5.5 - 150 in-lbs.	4 - 200 RPM	Reversible	1/4" to 1/2"

### 1600 AC GEARMOTOR

### Information & Specifications

#### Compatible AC Motor Options



AC Motor	Shaded Pole
Voltage	24 - 480 V
Frequency	50 / 60 Hz
Rated Speed	3000 RPM
Rated Torque	Up to 11 in-oz
Rotation	Uni-directional

#### AC Gearmotor Performance Specifications

Core Stack Size	Voltage	Rated Torque	Rated Speed	Rotation	Shaft Size
0.625"	120 - 240 VAC	0.7 - 48 in-lbs.	4 - 200 RPM	Uni-directional	3/8" or 1/2"
0.75"	120 - 240 VAC	1.0 - 81 in-lbs.	4 - 200 RPM	Uni-directional	3/8" or 1/2"
1.0625"	120 - 240 VAC	1.4 - 150 in-lbs.	4 - 200 RPM	Uni-directional	3/8" or 1/2"
2.00"	120 - 240 VAC	2.1 - 150 in-lbs	4 - 200 RPM	Uni-directional	3/8" or 1/2"



# Outline Drawings

DC and AC Motor Outline Drawings



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## DC Gearmotor Drawing

**FRONT VIEW DIMENSIONS:**  
 3.00 REF. (width)  
 1.50 REF. (width)  
 4.62 REF. (height)  
 1.08 REF. (height)  
 1.28 (width)  
 2.56 (width)  
 2.06 (height)  
 .86 (height)  
 MOUNTING HOLES (4)  
 SPEC. VOLTS

**SIDE VIEW DIMENSIONS:**  
 TO END OF MOTOR (length)  
 $\phi$  1.12 REF. (2) (shaft diameter)  
 .24 REF. (2) (shaft diameter)  
 1.54 REF. (width)  
 SHAFT EXTENSION (length)  
 $\phi$  "X" (shaft diameter)

MOTOR SIZE "X"	$\phi$ 1.46 (35 MM)	$\phi$ 2.04 (55 MM)
OVERALL SIZE "Y"	3.73	5.12

**FEATURES:**

- RUGGED AND POWERFUL
- OUTPUT SPEEDS FROM 4-200 RPM
- 12 OR 24 VOLTS DC
- DIE CAST ZINC CASE
- LARGE DIAMETER IDLER PINS
- OP SHAFT  $\phi$  .38 TO  $\phi$  .50
- OP SHAFT FRONT, REAR OR BOTH
- CUSTOMER SPEC'D FLATS, KEYWAYS, HOLES, ETC

**TOLERANCES**

XXX:  $\pm$ .010  
 XXXX:  $\pm$ .005  
 FRACTION:  $\pm$ 1/64  
 ANGLE:  $\pm$ 2°  
 UNLESS OTHERWISE SPECIFIED

**MULTI PRODUCTS**  
Company, Inc.

PART NAME/DESCRIPTION: MODEL 1600 DC

DRAWN BY: DAB DATE: 9/20/2017 SCALE: 0.75:1 MATERIAL: VARIOUS

CHKD BY: - DATE: PART NUMBER: MOD-1600-DC

APPRD BY: - DATE:

WWW.MULTIPRODUCTS.COM 262-554-3700

## AC Gearmotor Drawing

**FRONT VIEW DIMENSIONS:**  
 3.00 REF. (width)  
 1.50 REF. (width)  
 4.62 REF. (height)  
 1.08 REF. (height)  
 1.28 (width)  
 2.56 (width)  
 2.06 (height)  
 .86 (height)  
 MOUNTING HOLES (4)  
 SPEC. VOLTS

**SIDE VIEW DIMENSIONS:**  
 TO BEARING BRACKET (length)  
 $\phi$  1.12 REF. (2) (shaft diameter)  
 .24 REF. (2) (shaft diameter)  
 1.55 REF. (width)  
 SHAFT EXTENSION (length)  
 "X" (shaft diameter)  
 OPTIONAL COOLING FAN

STACK SIZE "X"	.63	.75	1.06	2.00
OVERALL SIZE "Y"	3.22	3.34	3.67	4.59

**FEATURES:**

- RUGGED AND POWERFUL
- OUTPUT SPEEDS FROM 4-200 RPM
- AC VOLTAGES FROM 120 THRU 240
- DIE CAST ZINC CASE
- LARGE DIAMETER IDLER PINS
- OP SHAFT  $\phi$  .38 TO  $\phi$  .50
- OP SHAFT FRONT, REAR OR BOTH
- CUSTOMER SPEC'D FLATS, KEYWAYS, HOLES, ETC
- OPTIONAL CAST MOTOR COVER AVAILABLE

**TOLERANCES**

XXX:  $\pm$ .010  
 XXXX:  $\pm$ .005  
 FRACTION:  $\pm$ 1/64  
 ANGLE:  $\pm$ 2°  
 UNLESS OTHERWISE SPECIFIED

**MULTI PRODUCTS**  
Company, Inc.

PART NAME/DESCRIPTION: MODEL 1600 AC

DRAWN BY: DAB DATE: 9/20/2017 SCALE: 0.75:1 MATERIAL: SEE BOM

CHKD BY: - DATE: PART NUMBER: MOD-1600-AC

APPRD BY: - DATE:

WWW.MULTIPRODUCTS.COM 262-554-3700