

Worm gear reducers have a distinct advantage of having very low audible noise. The right angle output configuration results in a compact, low profile mounting. Extraordinary efficiency, relative to standard worm gear reducers, is achieved with the use of a custom-designed bronze worm wheel with optimized tooth profile. This special design allows the gearmotor to be easily back-driven. The high efficiency allows the use of a smaller, more energy efficient motor to achieve the same output power versus a standard worm gear reducer.

### **SPECIFICATIONS & CONSTRUCTION**

**Gear Ratios:** 10:1, 15:1, & 30:1

**Axial Load / Radial Load:** 300 N / 500 N

**Efficiency:** 65 to 70 %

**Housing:** Die cast Zinc

**Lubrication:** Synthetic Grease

**Output speeds:** 35 to 400 RPM

**Voltage:** 12Vdc to 240Vdc

**Output Power:** 150 to 250 Watts

**Duty Cycle:** Intermittent

**Motors Available:** 8200D

**Bearing Type:** Ball for both motor and gearbox

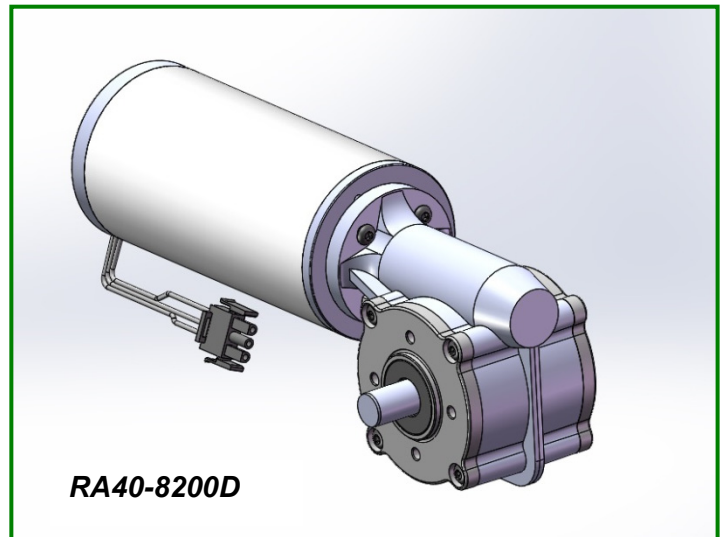
**Insulation Class:** F

**Rotation:** Reversible

**Regulatory Approvals:** UL, CE, RoHs

### **TYPICAL APPLICATIONS**

- Pumps
- Sliding Door Operators
- Low Energy "ADA" Doors
- Elevator Doors
- Transit Platform Screen Doors
- Turnstiles & Security Gates
- Wheelchair Ramps
- Material Handling- Conveyors
- Packaging Equipment



**RA40-8200D**

**Maximum Permissible Torque: 177 In.Lb (20 Nm)**

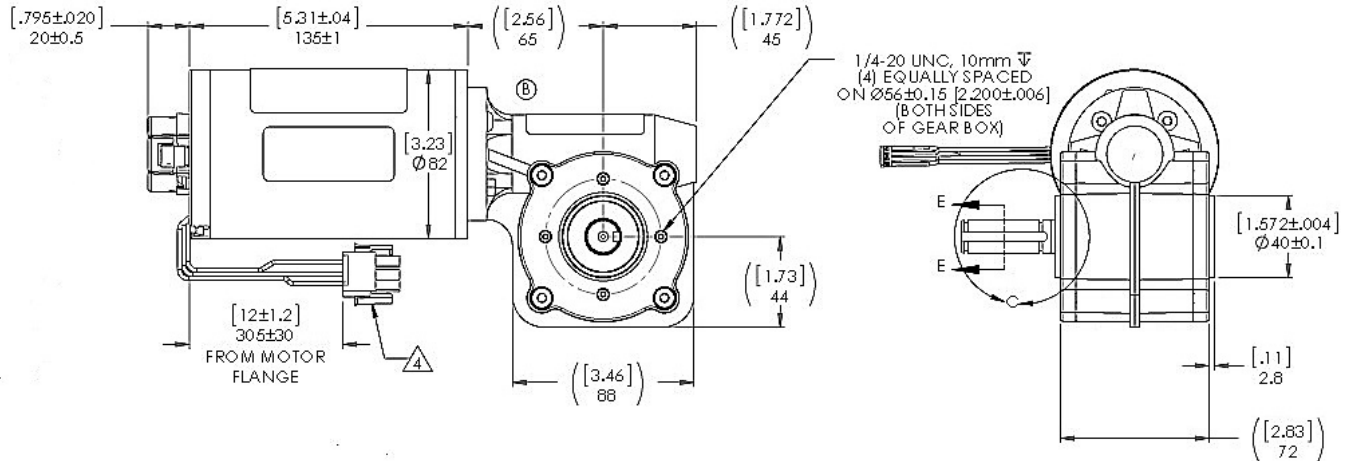
**Speed: 35 to 400 RPM**

*Note: Speed and torque combinations will vary depending on the motor/gearbox combination.*

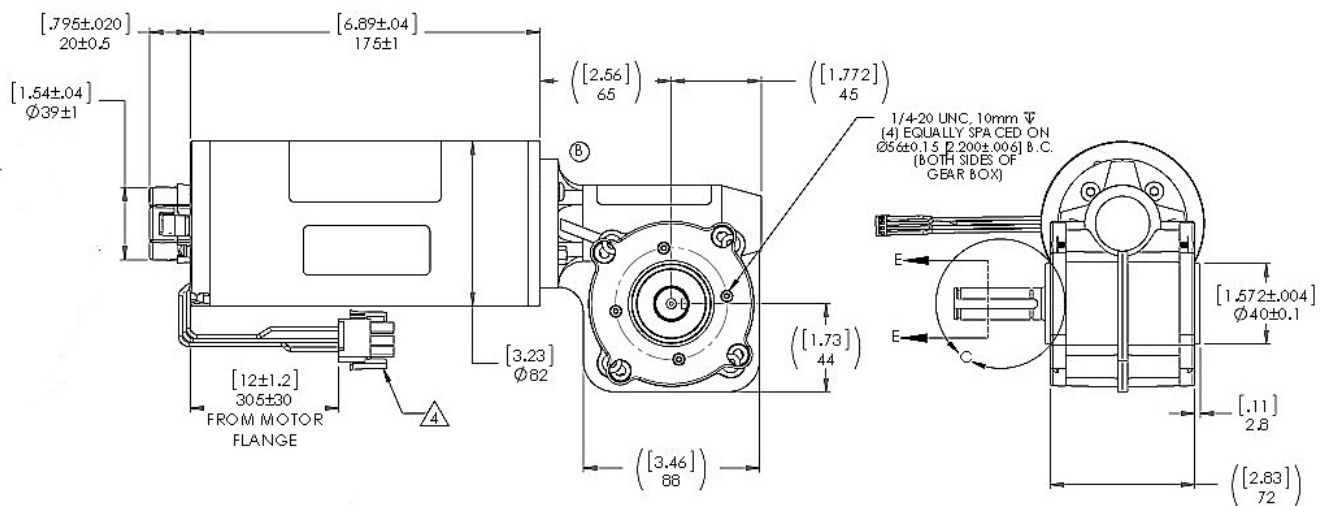
### **OPTIONAL FEATURES**

- Customized output shafts – single or double output
- Various lead lengths, terminals and connectors
- Pulleys
- Brakes: Electromagnetic
- EMI Filtering: Internal and External Suppression
- Magnetic Encoder: 2 to 12 PPR Resolution
- Optical or Capacitive: Up to 2048 PPR Resolution

## MODEL RA40-82135D WITH ENCODER



## MODEL RA40-82175D WITH ENCODER



## TYPICAL MOTOR PERFORMANCE

Data	Units	82135D				82175D			
		24	40	110	150	24	40	110	150
Voltage	Vdc	24	40	110	150	24	40	110	150
Output Power	Watts	120	120	120	120	240	240	240	240
Continuous Rated Speed	RPM	2900	2900	2900	2900	2900	2900	2900	2900
Continuous Rated Torque	N.m	0.35	0.35	0.35	0.35	0.62	0.62	0.62	0.62
Continuous Rated Current	Amps	5.8	4	1.4	0.27	10	6	2.2	1.6
No Load Speed	RPM	3200	3200	3200	3200	3200	3200	3200	3200
Torque Constant (Kt)	N.m/Amp	0.065	0.065	0.065	0.065	0.066	0.066	0.066	0.066
Voltage Constant (Ke)	V/rad/s	0.065	0.065	0.065	0.065	0.066	0.066	0.066	0.066

## RA40 GEAR REDUCER RATINGS

Data	Units	RA40		
		10:1	15:1	30:1
Gear Reduction	Ratio	10:1	15:1	30:1
Efficiency	%	70	65	50
Continuous Rated Torque	N.m	15	15	15
Maximum Permissible Torque	N.m	20	20	20
Axial /Radial Load	N	300/500	300/500	300/500