

The 8200D series is a precision permanent magnet DC, brush commutated motor that can be mounted to a variety of Merkle-Korff gear reducer options. The 8200D series motor can be paired with a KB Electronics SCR or PWM Drive for speed control.

### **SPECIFICATIONS**

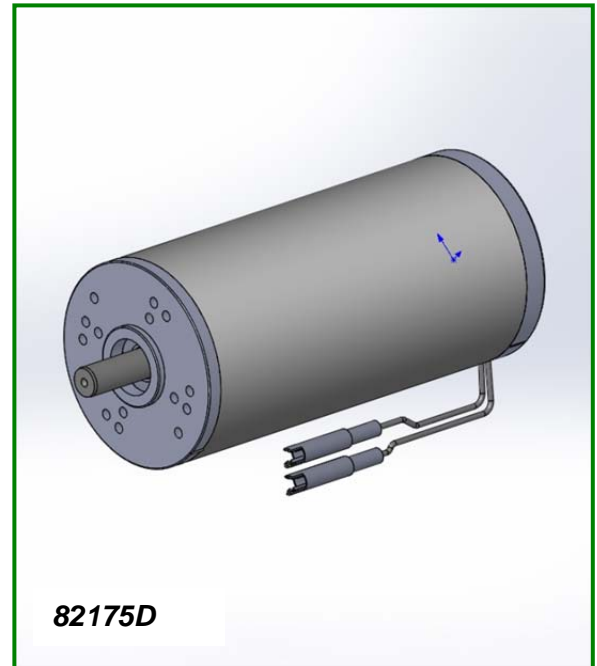
**Input Voltage:** 12 to 240 Vdc  
**Output Power:** 120 to 240 Watts  
**Rotation:** Bi-Directional  
**Maximum Speed:** 6000 RPM  
**Temperature Range:** -30 °C to +80 °C

### **Construction Features**

**Poles:** 2  
**Bearings:** Ball  
**Brushes:** Long life copper or silver graphite  
**Insulation Class:** F  
**Windings:** Trickle Resin Impregnated  
**Armature:** Dynamically balanced for low vibration  
**Shaft Diameters:** 8mm  
**Termination:** #18 AWG Lead Wires  
**Regulatory Approvals:** UL, CE, RoHs

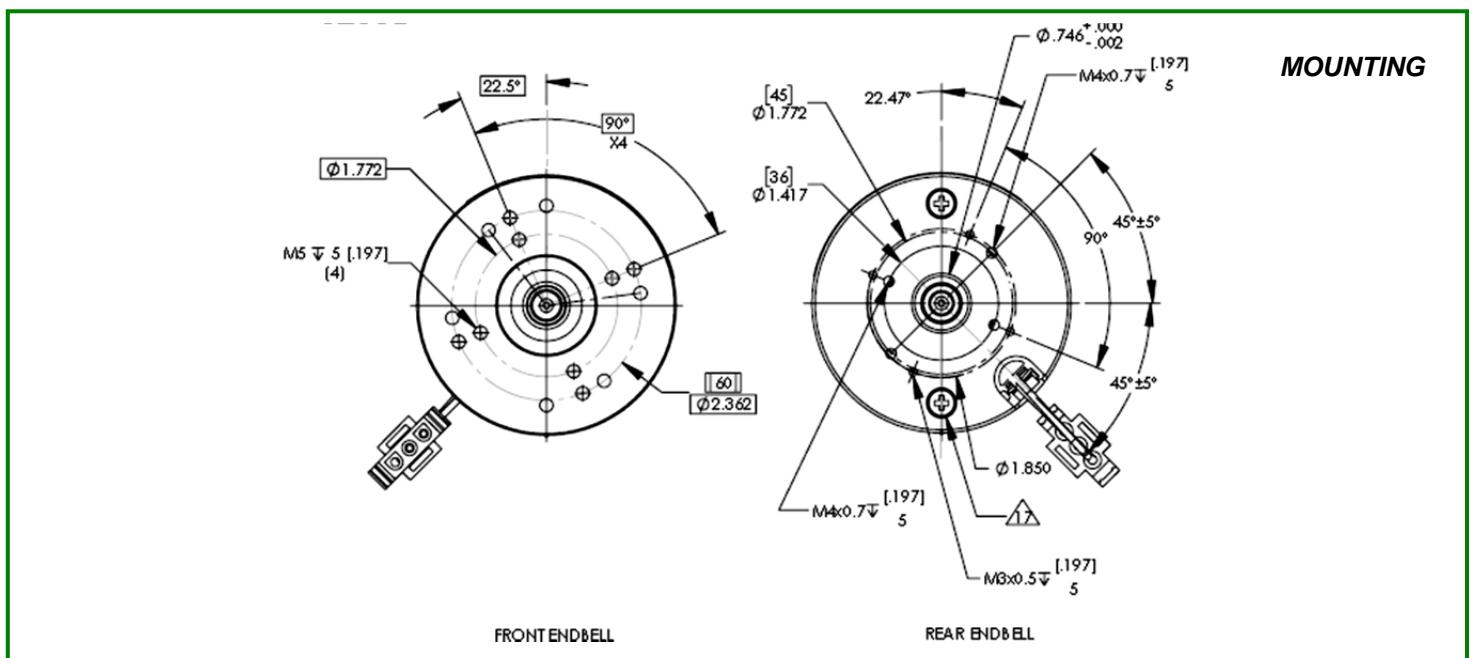
### **TYPICAL APPLICATIONS**

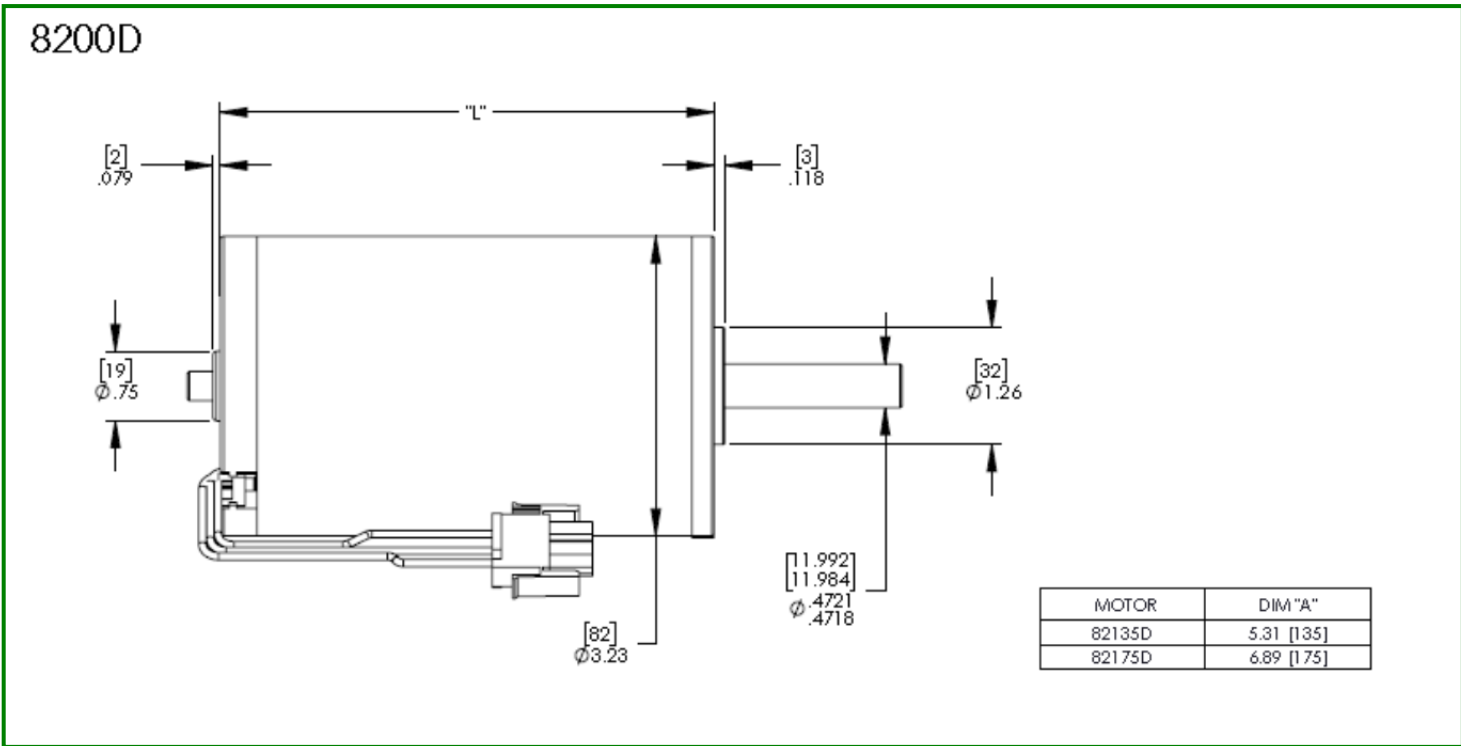
- Analytical Laboratory Equipment
- Food Service Equipment
- Actuators
- Pumps
- Conveyors
- Material Handling
- Packaging equipment
- Automatic Door Operators



### **OPTIONAL FEATURES**

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





**8200D SERIES MOTOR PERFORMANCE**

Parameter	Symbol	Units	82135D	82135D	82135D	82175D	82175D	82175D
<b>Voltage</b>	E	Volts	12	24	60	12	24	60
<b>Continuous Torque</b>	T <sub>c</sub>	N.m	0.35	0.35	0.35	0.62	0.62	0.62
<b>Continuous Current</b>	I	Amps	11.5	5.7	2.5	20.5	10.0	4.2
<b>Continuous Speed</b>	n <sub>c</sub>	RPM	2900	2900	3300	2900	2900	3000
<b>Stall Torque</b>	T <sub>s</sub>	N.m	3.1	3.1	3.1	6.1	6.1	6.1
<b>No Load Speed</b>	N <sub>0</sub>	RPM	3200	3200	3450	3200	3200	3100
<b>Output Power</b>	P	Watts	120	120	120	240	240	240
<b>No Load Current</b>	I <sub>0</sub>	Amps	0.95	0.45	0.25	1.33	0.65	0.27
<b>Maximum Winding Temperature</b>	Θ <sub>max</sub>	°C	155	155	155	155	155	155
<b>Torque Constant</b>	K <sub>t</sub>	N.m/Amp	0.033	0.067	0.155	0.033	0.067	0.155
<b>Back-EMF Constant</b>	K <sub>e</sub>	V.s/rad	0.033	0.067	0.155	0.033	0.067	0.155
<b>Length</b>	L	Mm	135	135	135	175	175	175