

**B-Track K2RA****Rotary Actuator DC Motor**

Shown with extended gear box screws for ease of attachment.



Optional Configurations

**Features**

- **Protective coatings** and O-ring seals throughout
- **Efficient in-line load system**
- **Ball detent overload clutch**
- **Speeds up to 850 RPM**
- **Thermal overload** incorporated into the motor
- **Heavy wall construction**
- **Double ball bearing motors**
- **Heat treated gears**
- **Rugged output** bearing support
- **Customized mounting** configurations available
- **Optional 24 vdc motor** available to provide more speed selections

**Typical Applications**

- Salt/seed spreaders
- Scooter lift mechanisms
- Spout rotation
- Turntables
- Cable winch

**Up to 140 in.-lb. (16 Nm) Torque Output  
Speeds from 250 to 850 RPM**

K2RA rotary actuators are motor driven gear boxes and use the base drive design and components of the K2 linear actuator. K2RA models incorporate all of the features of the K2 model providing excellent weatherproofing for outdoor applications. The same long-life motors, hardened gears, corrosion protection, and lubrication are utilized. Several output shaft and mounting configurations are available with the standard configuration shown above.

**Load/Current/Speed/Duty Cycle**

- Maximum Static Rating: 3,000 lbs. (13345 N) Static (in-line load)
  - Refer to performance chart for current/speed capabilities
  - Motor is protected with auto reset breaker inside motor housing (temperature/current/time dependent)
  - Overload clutch setting: match customer requirements
  - Duty cycle is time/temperature/load dependent, suggested guidelines are:
    - 50% max on-time/50% off-time for loads up to 50% of capability
    - 25% max on-time/75% off-time for loads between 50%-80% of capability
    - 10% max on-time/90% off-time for loads between 80%-100% of capability
- (Load/RPM profiles will allow some adjustment variation from these guidelines.)

**Operating Environment**

- Ambient temp range:
  - 20° F to +150° F (-29° C to +65° C),
  - 40° F to +176° F (-40° C to +80° C) Upon Request.
- Weather resistant enclosure & seals (IP 65 capable, 250 hour salt spray, 500 hour for paint)
- Normal operating voltage: 12, 24, 36, 48 vdc (Ratings are at 12 vdc Normal.)

**Control/Connections**

- 14 gauge stranded lead wires - SAE J1128 SXL cross linked polyethylene insulation Class F 257° F (125° C)
- Lead wires abrasion protected with spiral covering
- Use momentary contact double pole/double throw switch in powering unit. (ON)-OFF-(ON) DPDT
- Connectors:
  - Packard 56 series or Delphi Weather-Pack
  - Packard 56 series with 56 series blades (#2984883 & #2962987)
  - Delphi Weather-Pack series (#121015792 & #12010973)

# B-Track K2RA

## Performance Graphs Imperial Measurements\*

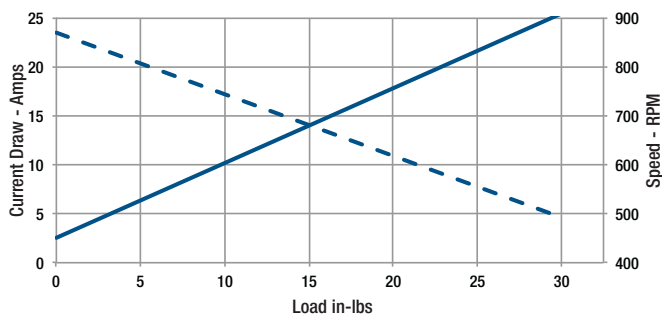
\*Performance Chart Measurements are Nominal



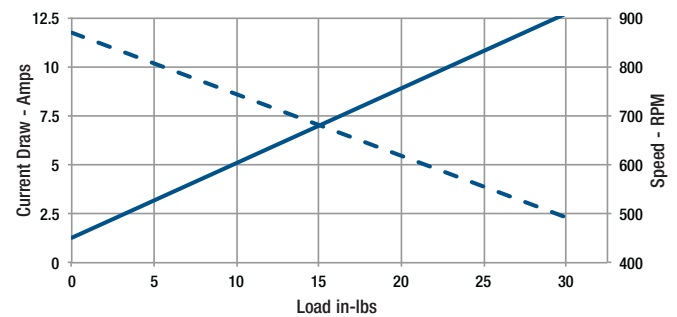
### Load Capacity 30 in-lbs.

For Metric Measurements, see page 53.

#### K2RAG05-12VDC



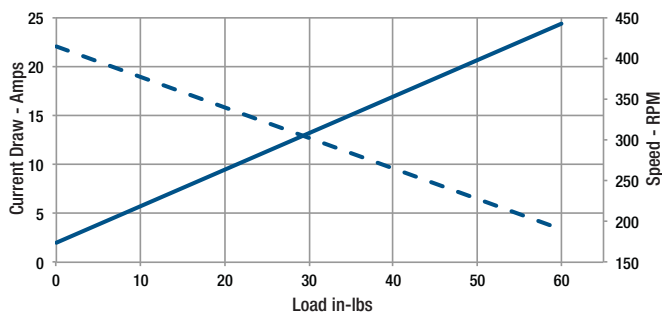
#### K2RAG05-24VDC



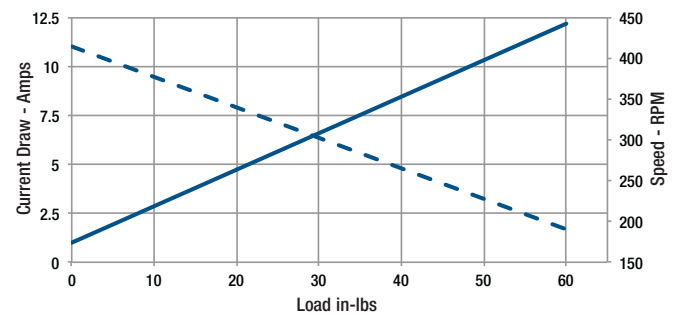
### Load Capacity 60 in-lbs.

For Metric Measurements, see page 53.

#### K2RAG10-12VDC



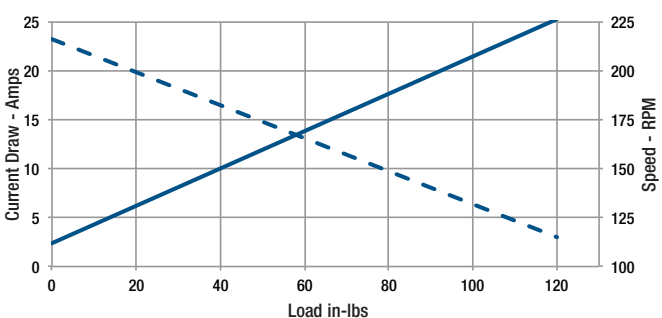
#### K2RAG10-24VDC



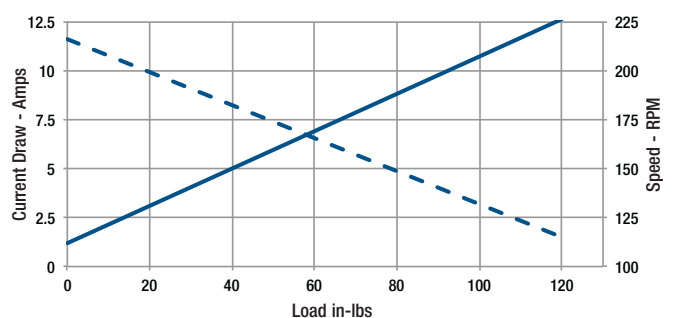
### Load Capacity 120 in-lbs.

For Metric Measurements, see page 53.

#### K2RAG20-12VDC



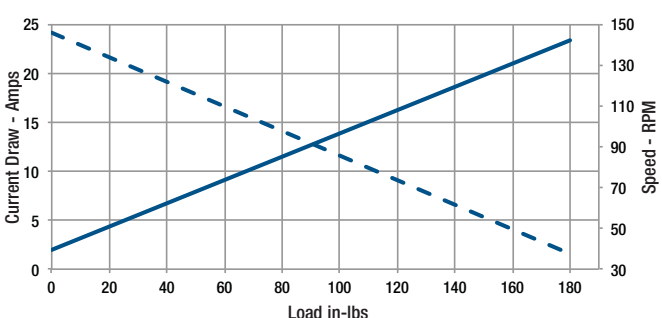
#### K2RAG20-24VDC



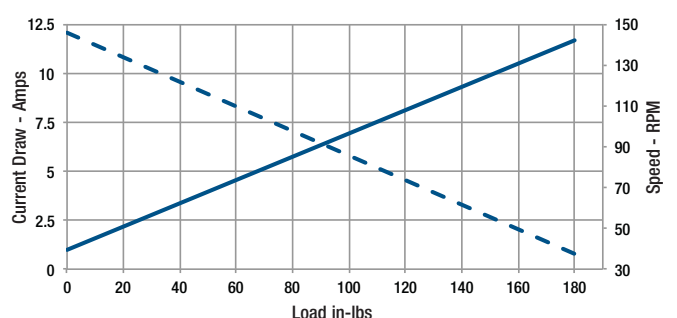
### Load Capacity 180 in-lbs.

For Metric Measurements, see page 53.

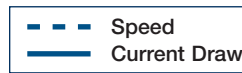
#### K2RAG30-12VDC



#### K2RAG30-24VDC



# B-Track K2RA



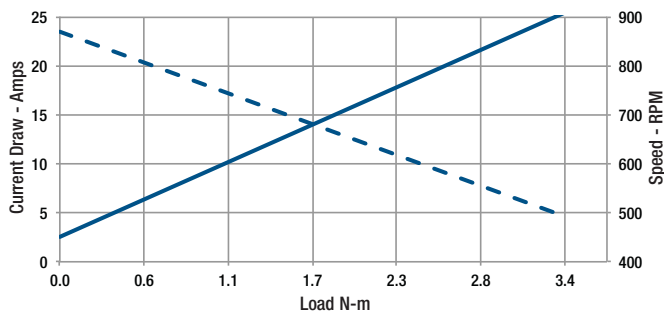
## Performance Graphs Metric Measurements\*

\*Performance Chart Measurements are Nominal

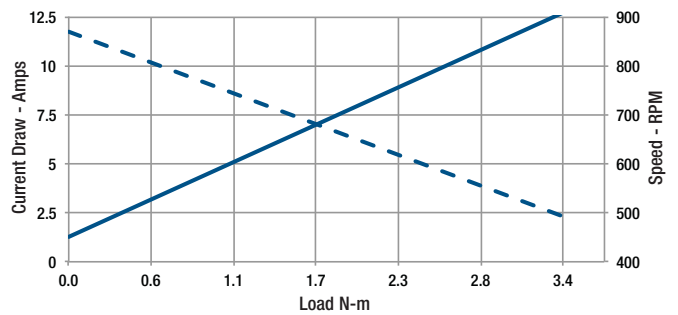
### Load Capacity 3.4 N-m

For Imperial Measurements, see page 52.

#### K2RAG05-12VDC



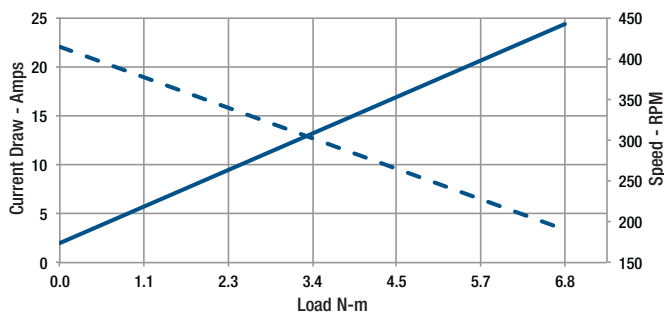
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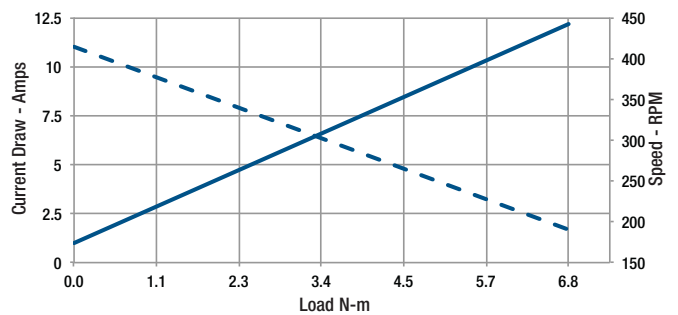
### Load Capacity 6.8 N-m

For Imperial Measurements, see page 52.

#### K2RAG10-12VDC



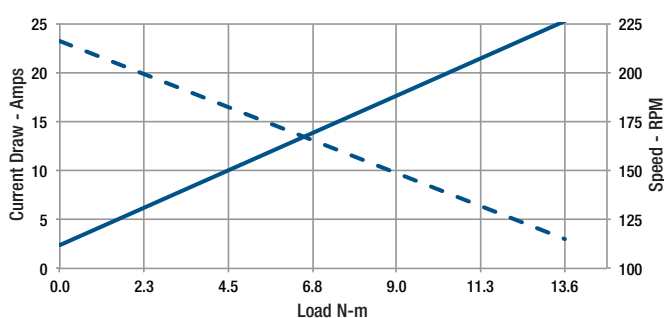
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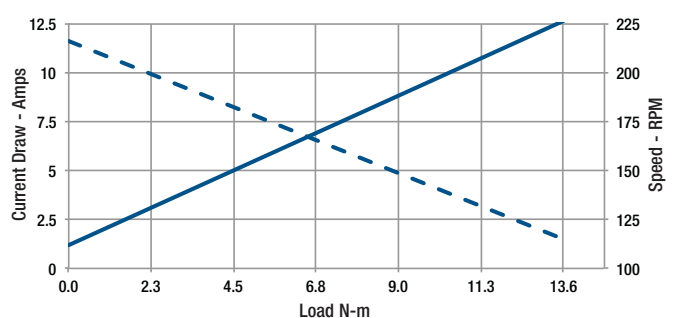
### Load Capacity 13.6 N-m

For Imperial Measurements, see page 52.

#### K2RAG20-12VDC



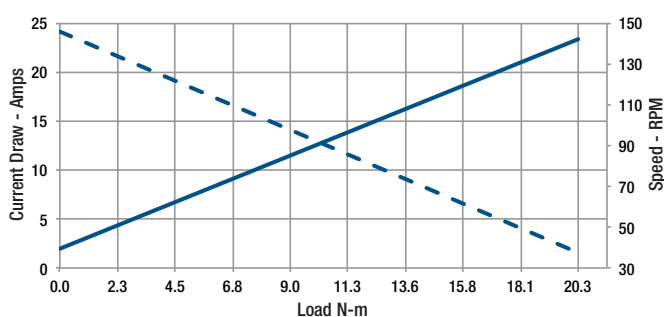
#### K2RAG20-24VDC



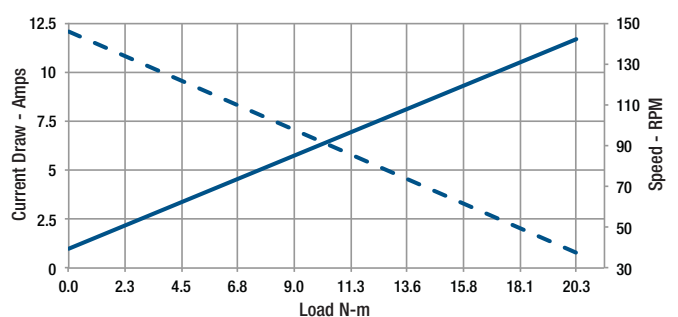
### Load Capacity 20.3 N-m

For Imperial Measurements, see page 52.

#### K2RAG30-12VDC

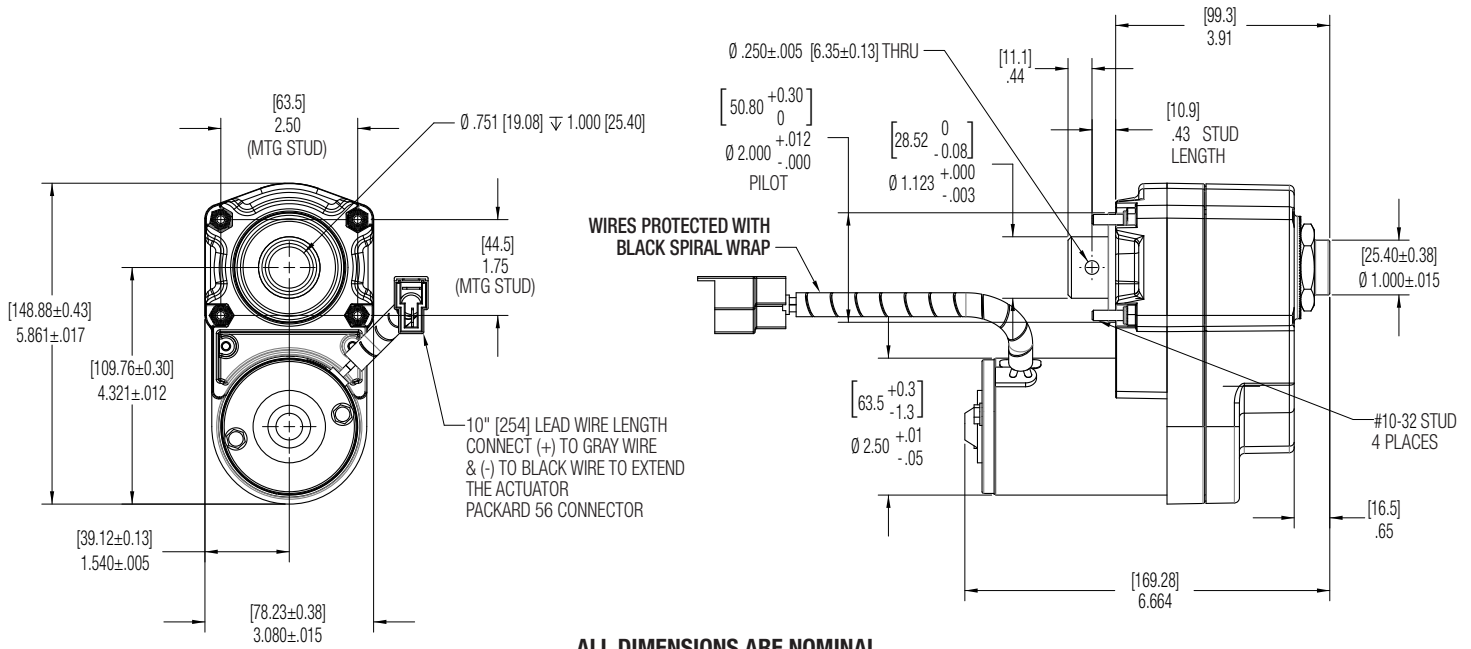


#### K2RAG30-24VDC



# B-Track K2RA

## Dimensions



**ALL DIMENSIONS ARE NOMINAL  
UNLESS OTHERWISE SPECIFIED**

Measurements in inches, metric in brackets.

## Performance Features

### **Warner Linear Actuator Controls available for a wide variety of applications**

Warner Linear actuators include a full set of actuator controls, well-suited for a broad range of application needs.

They range from simple to use switch box controls for basic extend/retract function, to state-of-the-art microprocessor based digital electronic controls using SMT design and manufacturing processes.

#### **Offered functions:**

- **Basic extend and retract**
- **Electric switch and electronic stroke limits**
- **End of stroke outputs**
- **Position feedback potentiometer and encoder outputs**
- **Electronic current limit – fixed and programmable**
- **Electronic dynamic braking**
- **Fixed, manual and electronic adjustable end stops**
- **Signal follower**

### **Dependable Operation**

Warner Linear controls are state-of-the-art using surface mount electronic components and automated circuit board manufacturing methods. Each control is field durability tested for use in demanding applications.

### **Rugged and Reliable**

Use of SMT manufacturing processes assures consistent performance from control to control.

- Integrated actuator sensors are protected from the environment
- Solid-state electronic components and non-contact sensors (Hall effect)
- Actuator mounted or remote mountable



### **Easy To Use**

- Simple plug-and-play switch box controls are hassle-free – just plug in and connect the power clips.
- Basic position controls are integrated with the actuators to simplify ease of use and maintain the rugged duty capabilities of Warner Linear actuators. They are easy to use and plug-and-play ready.
- Advanced microprocessor based controls are also available. They employ digital electronics using SMT processes and offer a broad range of intelligent actuator control options. Consult your Warner Linear technical specialist on how advanced controls might suit your needs.

Warner Linear BTc controls are specifically designed for use with the B-Track line of actuators. Some controls and options are also suitable for use with the M-Track models.

