

## PowerSTAR®



## PMDC Product Line Catalog

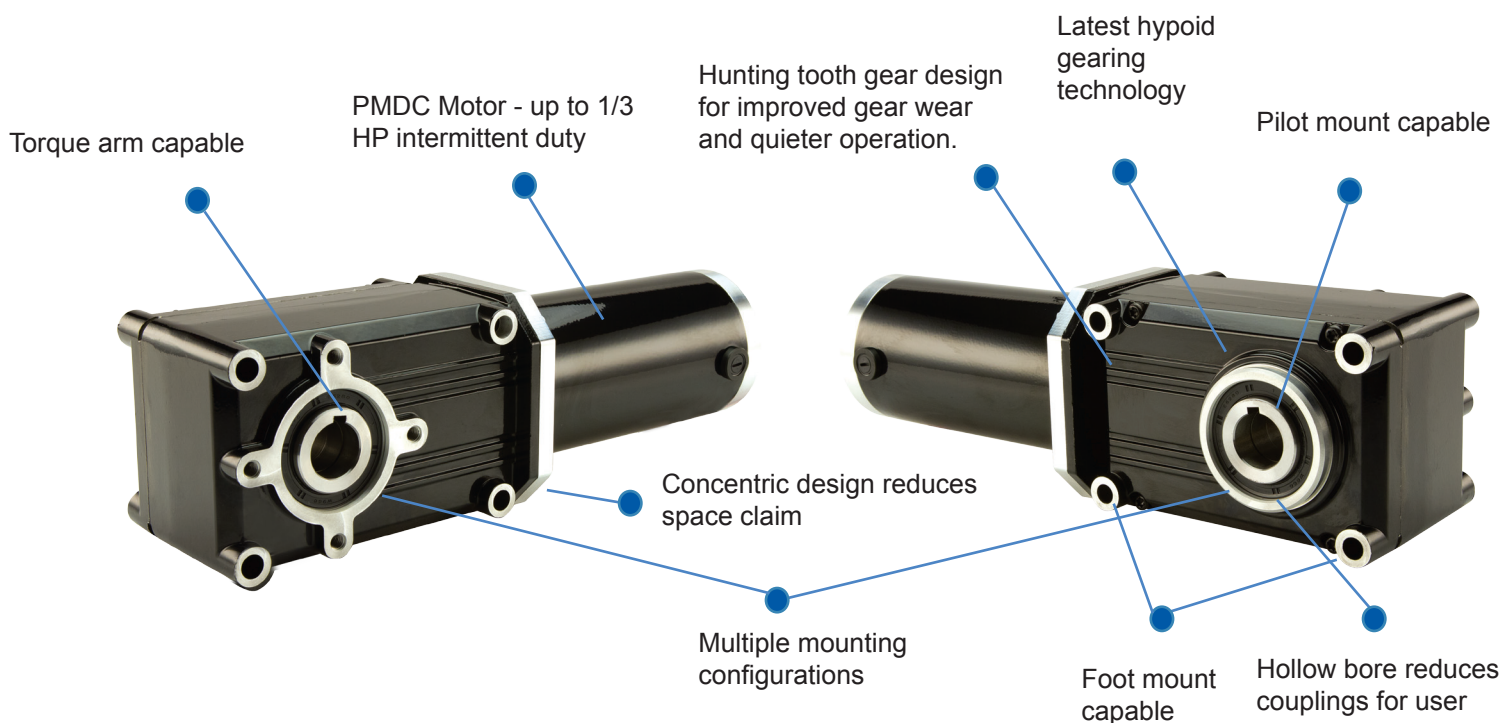
### Best-in-Class DC Right Angle Hypoid Gearmotors

- Advanced hypoid gearing technology for improved energy efficiency
- High start-up torque
- Variable speed control
- Maximum power density means a compact profile without compromising performance
- Exclusive PowerSTAR® EP lubricant for extended life
- Ground gearing provides whisper quiet operation, low backlash precision
- Custom options available
- Perfect for gate operators, pumping stations and conveyors!

## New Hypoid Gear Technology from Bison

The new right-angle design PowerSTAR® gearmotor combines the latest technology in hypoid gearing with Bison's long-established reputation of providing best-in-class power transmission solutions under our Robusticity® design philosophy. PowerSTAR features hypoid gearing manufactured using technology exclusive to Bison to offer several operational advantages:

- Higher torque capability
- Up to 4X more efficient than right-angle worm gearmotors
- Quieter operation
- Unmatched energy efficiency
- Available in Imperial and Metric sizes with AC & DC input motors

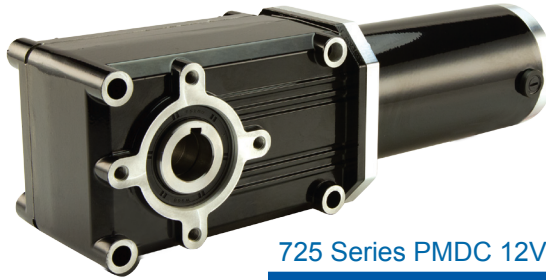


PowerSTAR's PMDC product offering includes 12V, 24V, 90V, 130V and 180V PMDC motor options on a 720, 725 and 730 gearbox in 13 standard ratios offering output torque from 42-1662 in-lbs. Other frame sizes and gearing packages coming soon.

Bison's right-angle PowerSTAR gearmotor is ideally suited to drive higher torque at improved efficiencies in packaging, light industrial or other light-to-medium conveying applications, saving the end user on power consumption and cost.

## Maximum Efficiency Right-angle Gearmotors

### 725 PMDC 12V



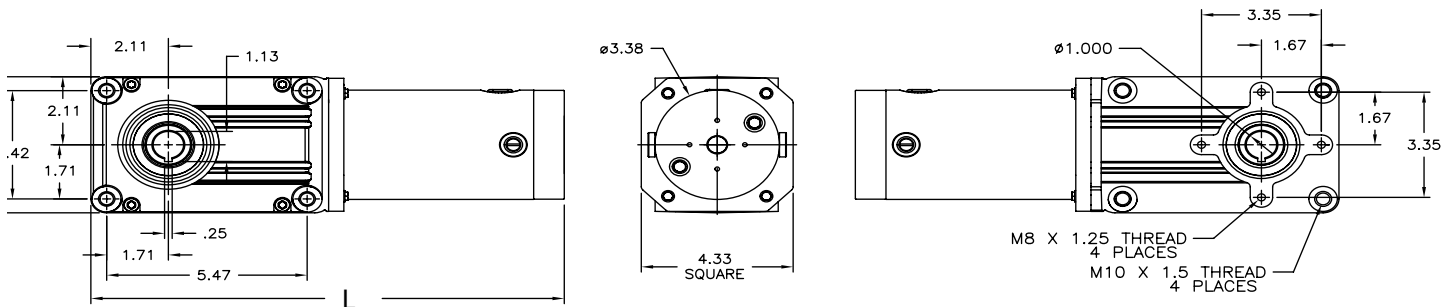
PowerSTAR® 725 Series PMDC 12V right-angle gearmotor offers up to 831 in-lbs of torque running continuously for energy efficient operation in a sleek, compact profile. Uses a 32 Frame TENV PMDC motor with 36" cordset.

#### 725 Series PMDC 12V Gearmotor - TENV

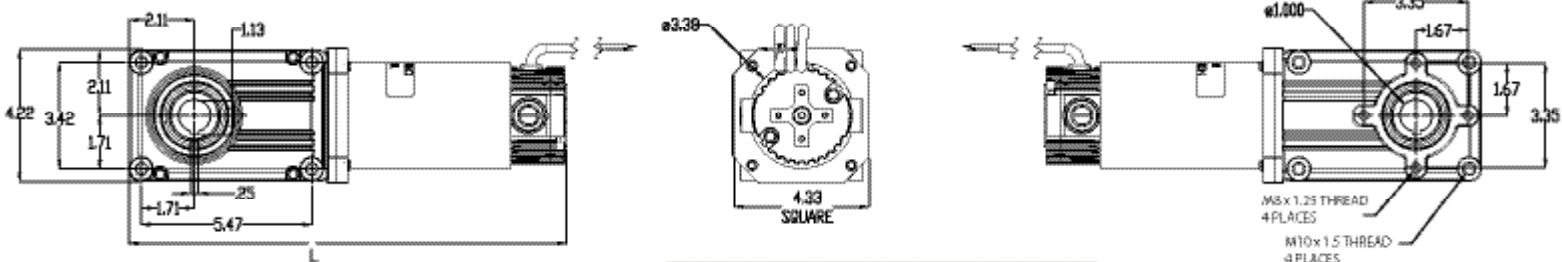
Part Number	Speed (RPM)	Torque (in-lbs)	Input HP	Gear Ratio	OHL (lbs)	Amps
021-725A0010	200	55	1/5	10	355	18.6
021-725A0015	133	83	1/5	15	400	18.6
021-725A0020	100	111	1/5	20	430	18.6
021-725A0030	67	166	1/5	30	475	18.6
021-725A0040	50	222	1/5	40	510	18.6
021-725A0050	40	277	1/5	50	550	18.6
021-725A0060	33	332	1/5	60	580	18.6
021-725A0080	25	443	1/5	80	620	18.6
021-725A0100	18	346	1/8	100	740	11.6
021-725A0120	15	415	1/8	120	780	11.6
021-725A0150	12	519	1/8	150	820	11.6
021-725A0180	10	623	1/8	180	870	11.6
021-725A240	7.5	831	1/8	240	940	11.6

See accessories on page 16

#### 725 1/5HP Drawing



#### 725 1/8HP Drawing



L = Gearmotor length:

1/8 HP: 14.01  
1/5 HP: 15.32

#### DC GEARMOTOR

WHITE +LINE  
BLACK -LINE  
GREEN GROUND

To reverse rotation interchange white and black leads

## Maximum Efficiency Right-angle Gearmotors

### 725 PMDC 24V

PowerSTAR® 725 Series PMDC 24V right-angle gearmotor offers up to 831 in-lbs of torque running continuously for energy efficient operation in a sleek, compact profile. Uses a 32 Frame TENV PMDC motor with 36" cordset.

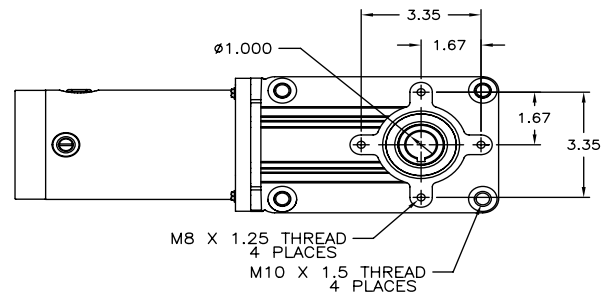
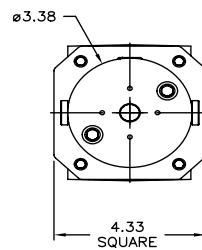
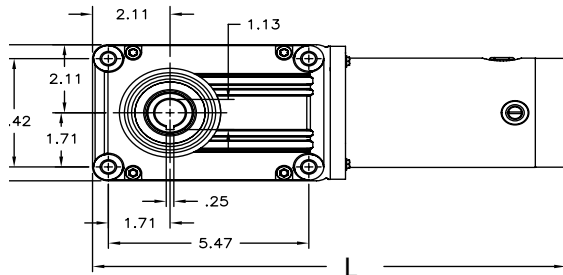


#### 725 Series PMDC 24V Gearmotor - TENV

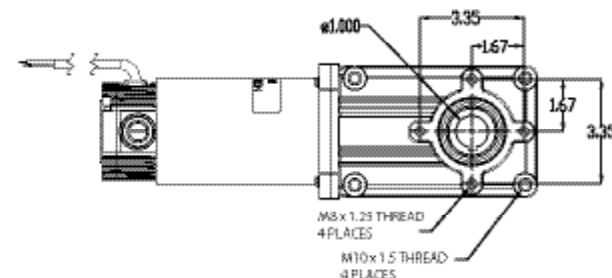
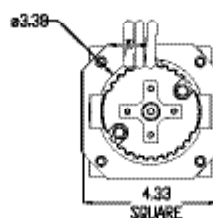
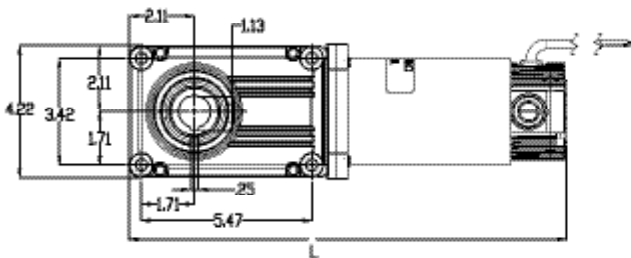
Part Number	Speed (RPM)	Torque (in-lbs)	Input HP	Gear Ratio	OHL (lbs)	Amps
021-725C0010	180	55	1/5	10	355	9.5
021-725C0015	120	83	1/5	15	400	9.5
021-725C0020	90	111	1/5	20	430	9.5
021-725C0030	60	166	1/5	30	475	9.5
021-725C0040	45	222	1/5	40	510	9.5
021-725C0050	36	277	1/5	50	550	9.5
021-725C0060	30	332	1/5	60	580	9.5
021-725C0080	23	443	1/5	80	620	9.5
021-725C0100	18	346	1/8	100	740	5.9
021-725C0120	15	415	1/8	120	780	5.9
021-725C0150	12	519	1/8	150	820	5.9
021-725C0180	10	623	1/8	180	870	5.9
021-725C0240	7.5	831	1/8	240	940	5.9

See accessories on page 16

725 1/5HP Drawing



725 1/8HP Drawing



L = Gearmotor length:

1/8 HP: 14.01  
1/5 HP: 15.32

#### DC GEARMOTOR

WHITE +LINE

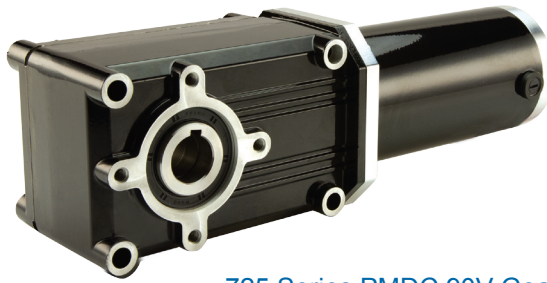
BLACK -LINE

GREEN GROUND

To reverse rotation interchange white and black leads

## Maximum Efficiency Right-angle Gearmotors

### 725 PMDC 90V



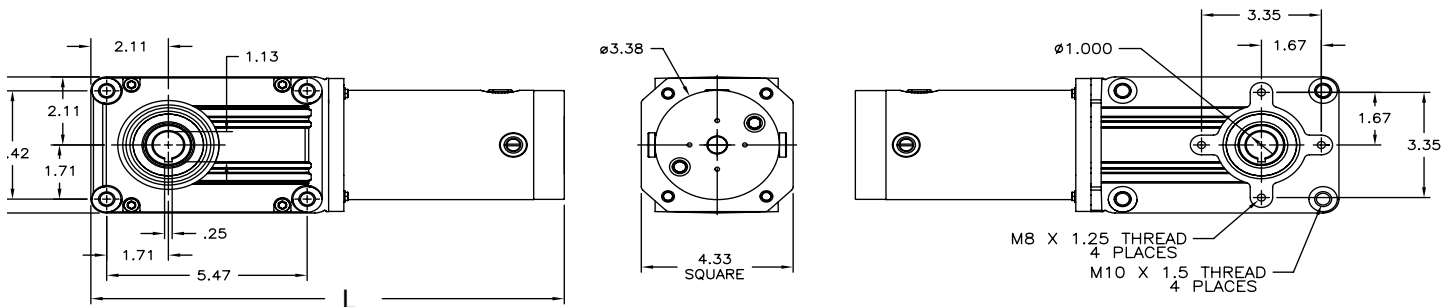
PowerSTAR® 725 Series PMDC 90V right-angle gearmotor offers up to 831 in-lbs of torque running continuously for energy efficient operation in a sleek, compact profile. Uses a 32 Frame TENV PMDC motor with 36" cordset.

#### 725 Series PMDC 90V Gearmotor - TENV

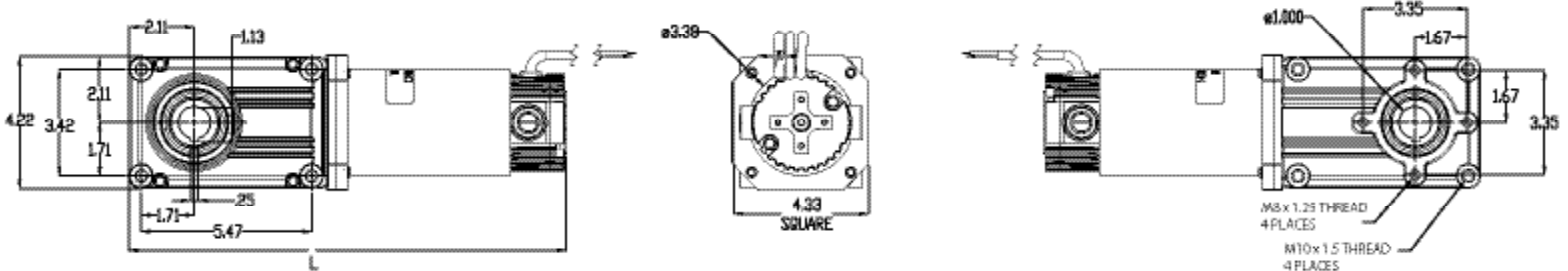
Part Number	Speed (RPM)	Torque (in-lbs)	Input HP	Gear Ratio	OHL (lbs)	Amps
021-725D0010	180	55	1/5	10	355	2.3
021-725D0015	120	83	1/5	15	400	2.3
021-725D0020	90	111	1/5	20	430	2.3
021-725D0030	60	166	1/5	30	475	2.3
021-725D0040	45	222	1/5	40	510	2.3
021-725D0050	36	277	1/5	50	550	2.3
021-725D0060	30	332	1/5	60	580	2.3
021-725D0080	23	443	1/5	80	620	2.3
021-725D0100	18	346	1/8	100	740	1.6
021-725D0120	15	415	1/8	120	780	1.6
021-725D0150	12	519	1/8	150	820	1.6
021-725D0180	10	623	1/8	180	870	1.6
021-725D0240	7.5	831	1/8	240	940	1.6

See accessories on page 16

#### 725 1/5HP Drawing



#### 725 1/8HP Drawing



L = Gearmotor length:

1/8 HP: 14.01  
1/5 HP: 15.32

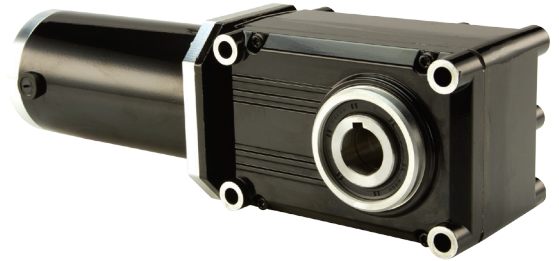
#### DC GEARMOTOR

WHITE +LINE  
BLACK -LINE  
GREEN GROUND

To reverse rotation interchange white and black leads

## Maximum Efficiency Right-angle Gearmotors 725 PMDC 130V

PowerSTAR® 725 Series PMDC 130V right-angle gearmotor offers up to 831 in-lbs of torque running continuously for energy efficient operation in a sleek, compact profile. Uses a 32 Frame TENV PMDC motor with 36" cordset.

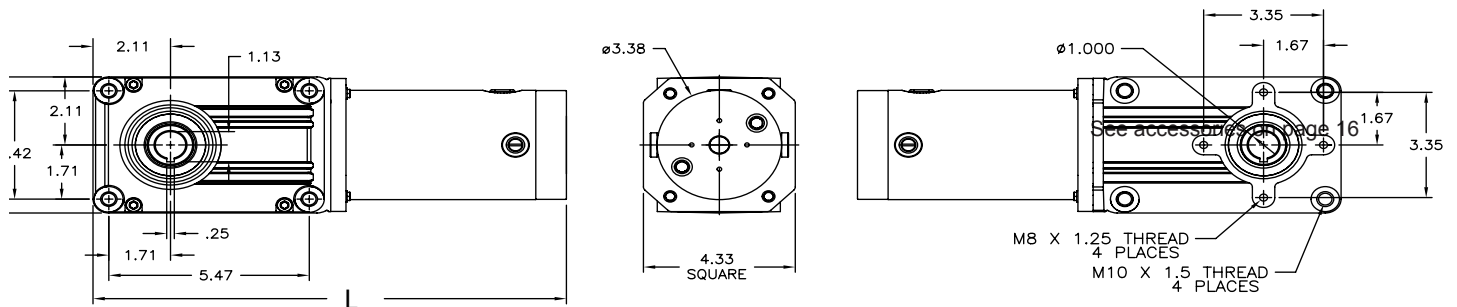


### 725 Series PMDC 130V Gearmotor - TENV

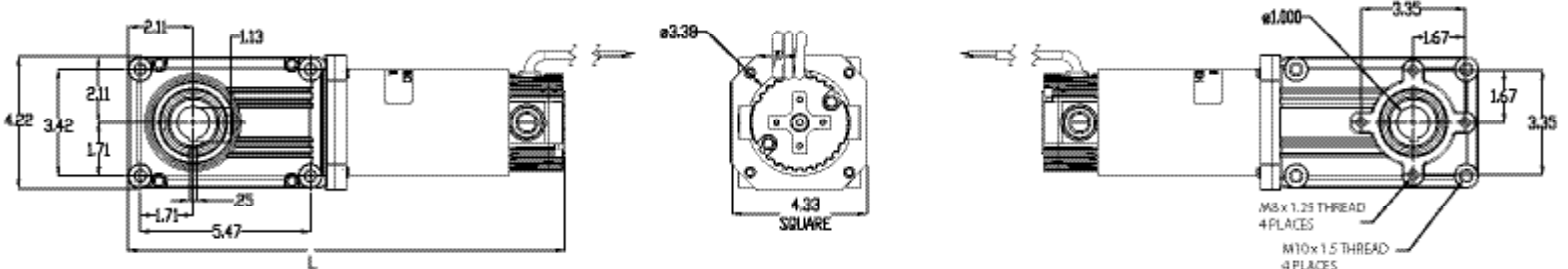
Part Number	Speed (RPM)	Torque (in-lbs)	Input HP	Gear Ratio	OHL (lbs)	Amps
021-725E0010	180	55	1/5	10	355	1.7
021-725E0015	120	83	1/5	15	400	1.7
021-725E0020	90	111	1/5	20	430	1.7
021-725E0030	60	166	1/5	30	475	1.7
021-725E0040	45	222	1/5	40	510	1.7
021-725E0050	36	277	1/5	50	550	1.7
021-725E0060	30	332	1/5	60	580	1.7
021-720E0080	23	443	1/5	80	620	1.7
021-725E0100	18	346	1/8	100	740	1.2
021-725E0120	15	415	1/8	120	780	1.2
021-725E0150	12	519	1/8	150	820	1.2
021-725E0180	10	623	1/8	180	870	1.2
021-725E0240	7.5	831	1/8	240	940	1.2

See accessories on page 16

725 1/5HP Drawing



725 1/8HP Drawing



L = Gearmotor length:

1/8 HP: 14.01  
1/5 HP: 15.32

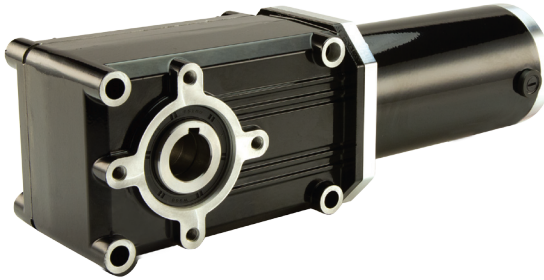
#### DC GEARMOTOR

WHITE +LINE  
BLACK -LINE  
GREEN GROUND

To reverse rotation interchange white and black leads

## Maximum Efficiency Right-angle Gearmotors

### 725 PMDC 180V



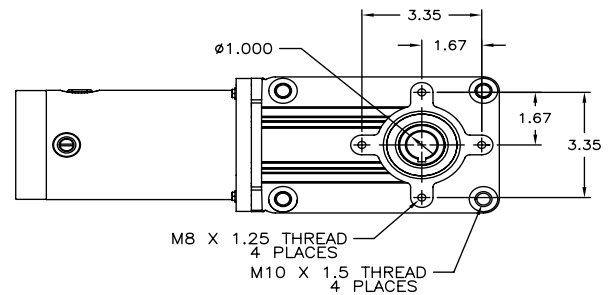
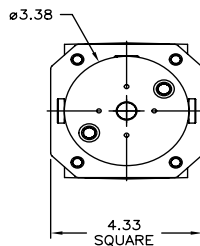
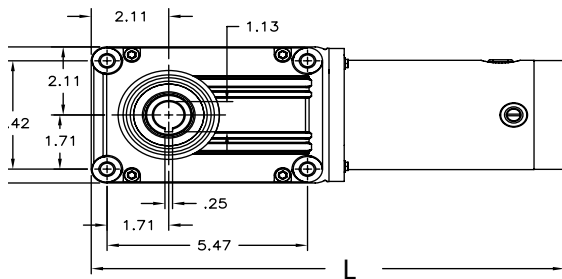
PowerSTAR® 725 Series PMDC 180V right-angle gearmotor offers up to 831 in-lbs of torque running continuously for energy efficient operation in a sleek, compact profile. Uses a 32 Frame TENV PMDC motor with 36" cordset.

#### 725 Series PMDC 180V Gearmotor - TENV

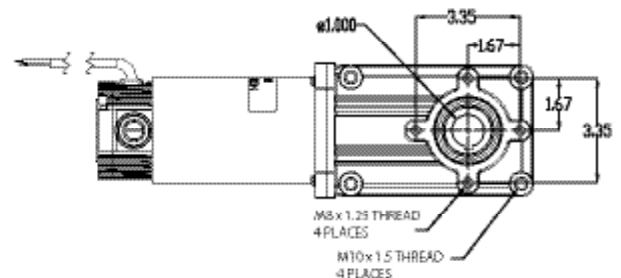
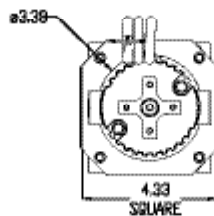
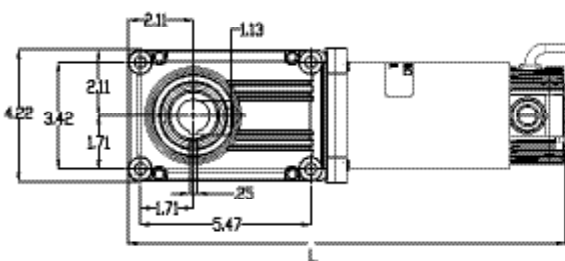
Part Number	Speed (RPM)	Torque (in-lbs)	Input HP	Gear Ratio	OHL (lbs)	Amps
021-725F0010	180	55	1/5	10	355	1.1
021-725F0015	120	83	1/5	15	400	1.1
021-725F0020	90	111	1/5	20	430	1.1
021-725F0030	60	166	1/5	30	475	1.1
021-725F0040	45	222	1/5	40	510	1.1
021-725F0050	36	277	1/5	50	550	1.1
021-725F0060	30	332	1/5	60	580	1.1
021-725F0080	23	443	1/5	80	620	1.1
021-725F0100	18	346	1/8	100	740	0.8
021-725F0120	15	415	1/8	120	780	0.8
021-725F0150	12	519	1/8	150	820	0.8
021-725F0180	10	623	1/8	180	870	0.8
021-725F0240	7.5	831	1/8	240	940	0.8

See accessories on page 16

725 1/5HP Drawing



725 1/8HP Drawing



L = Gearmotor length:

1/8 HP: 14.01  
1/5 HP: 15.32

#### DC GEARMOTOR

WHITE +LINE

BLACK -LINE

GREEN GROUND

To reverse rotation interchange white and black leads