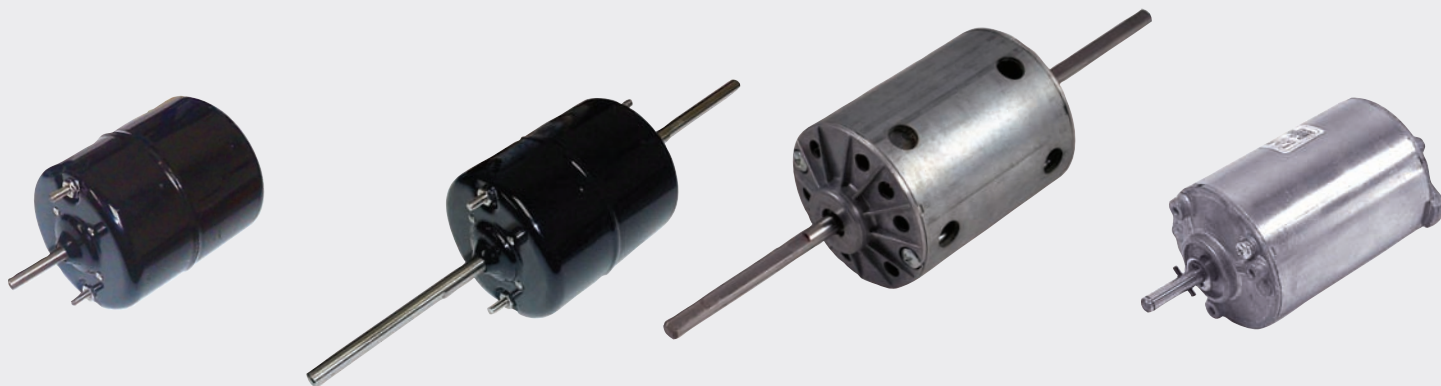


DC MOTORS



3" DIAMETER MOTOR SELECTION CRITERIA



MOUNTING:

"3 in. Diameter Can style" motors are available with various stud extensions on a 2.312 bolt circle. Extensions may be on one or both sides of the motor. Consult DCM for availability of a specific length.

CUSTOMER SUPPLIED DATA:

Voltage: (6 thru 48 Volt normally available)

Motor Load: Speed, Torque, and Current.
(An existing motor can be tested by DCM & matched)

Shaft Diameter: Length (Single or Double Extension)

Material: (Carbon Steel Standard - Stainless Steel)

PERFORMANCE & LIFE:

Many factors influence the life of the motor. Both electrical and mechanical factors are involved. In general, if a motor runs cooler, it has a longer life. Factors such as bearing style (i.e. ball, sleeve, etc.), motor length, air flow thru vents or Over non-vented motors, and size of the brush components, all help determine the motor life in a given application.



DCM Series Wound DC Motors have the armature and field windings connected in a series circuit. These type motors normally drive loads that require precise speed regulation. Starting torque developed in series motors normally ranges between 300% and 375% of full load, but can be as high as 800% of full load torque. These motors can easily be configured in 2 & 3 speed, as well as reversible models.



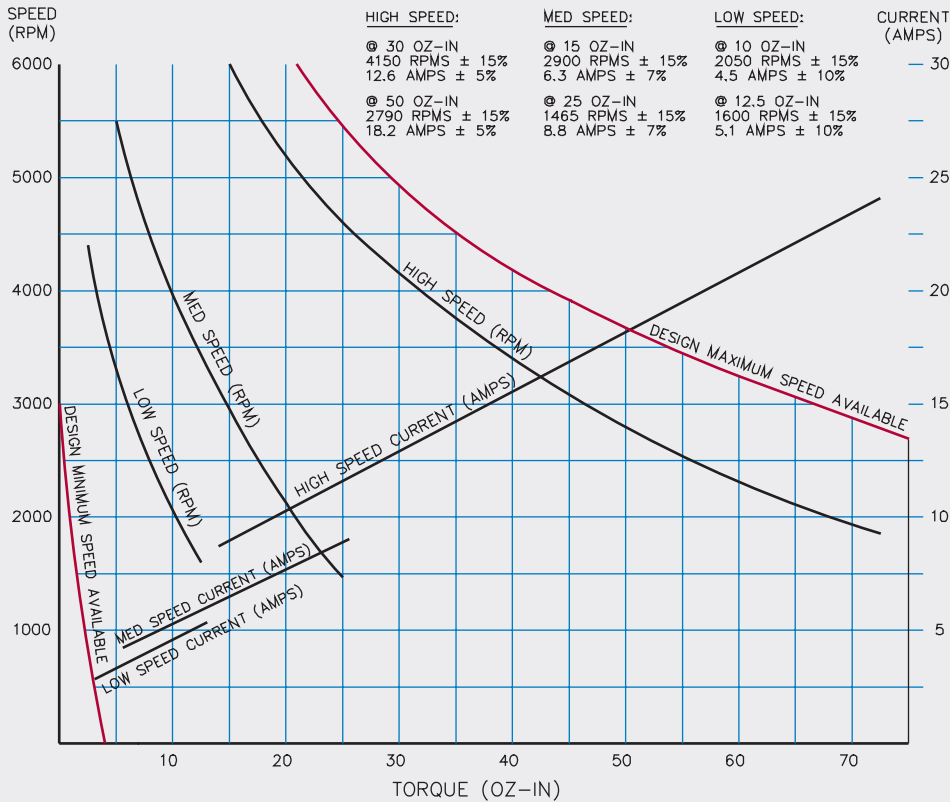
DCM Permanent Magnet DC Motors produce high running torque, and provide a relatively simple, high efficiency DC drive as compared to wound field motors. High efficiency and a linear speed torque curve are primary advantages of a DCM Permanent Magnet DC motor. These motors are easily reversed by changing polarity.

DC MOTORS

**SERIES
WOUND**

EXAMPLE: TYPICAL 3 SPEED MOTOR @ 13.5VDC:

HIGH SPEED:	MED SPEED:	LOW SPEED:	CURRENT (AMPS)
@ 30 OZ-IN 4150 RPMs $\pm$ 15% 12.6 AMPS $\pm$ 5%	@ 15 OZ-IN 2900 RPMs $\pm$ 15% 6.3 AMPS $\pm$ 7%	@ 10 OZ-IN 2050 RPMs $\pm$ 15% 4.5 AMPS $\pm$ 10%	30
@ 50 OZ-IN 2790 RPMs $\pm$ 15% 18.2 AMPS $\pm$ 5%	@ 25 OZ-IN 1465 RPMs $\pm$ 15% 8.8 AMPS $\pm$ 7%	@ 12.5 OZ-IN 1600 RPMs $\pm$ 15% 5.1 AMPS $\pm$ 10%	25



ELECTRICAL SPECIFICATIONS

INSULATION: CLASS B (130° C)

VOLTAGE RATING: 6-48 VOLTS DC NOMINAL

EFFICIENCY: UP TO 75%

ROTATION: CW, CCW, OR REVERSIBLE

BRUSH LIFE: UP TO 2,000 HOURS DEPENDING ON MODEL AND APPLICATION

UP TO 5,000 HOURS WITH SPECIAL BRUSHES & COMPONENTS

MECHANICAL SPECIFICATIONS

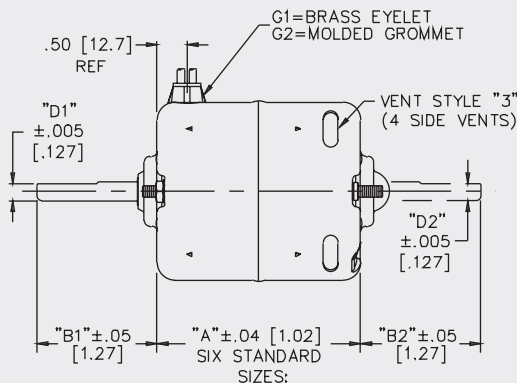
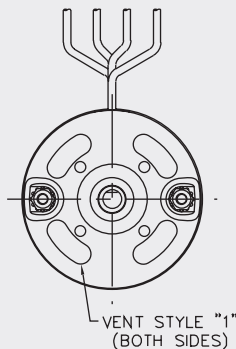
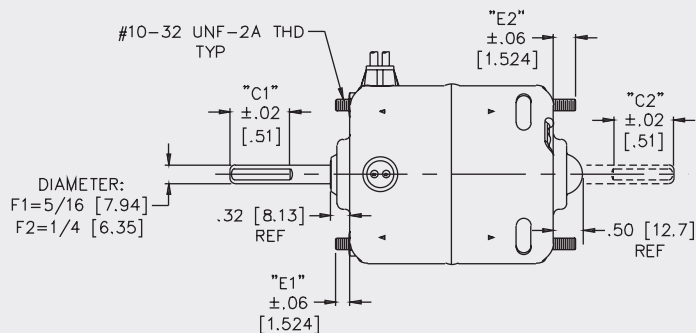
SHAFT: 1137-1144 CRS (STANDARD)
300/400 SERIES SS OR
CUSTOM AS REQ'D

BEARINGS: PM IRON (STANDARD)
PM BRONZE OR
BALL BEARINGS OPTIONAL

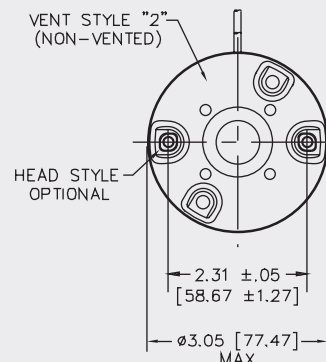
LUBRICATION: SYNTHETIC, LIFETIME LUBRICATED

LEADS: 16GA AWG TYPE GPT (80° C) (STANDARD)
OTHER GAUGES OR
HIGHER RATINGS AS REQ'D

WIRE TERMINATIONS: 1/4" STRIP (STANDARD)
OTHER TERMINALS
(I.E. #10 RING, BULLET) AS REQ'D



A1) 2.27 [57.66]	A2) 2.52 [64.01]
A3) 2.77 [70.36]	A4) 3.02 [76.71]
A5) 3.21 [81.53]	A6) 3.39 [86.12]



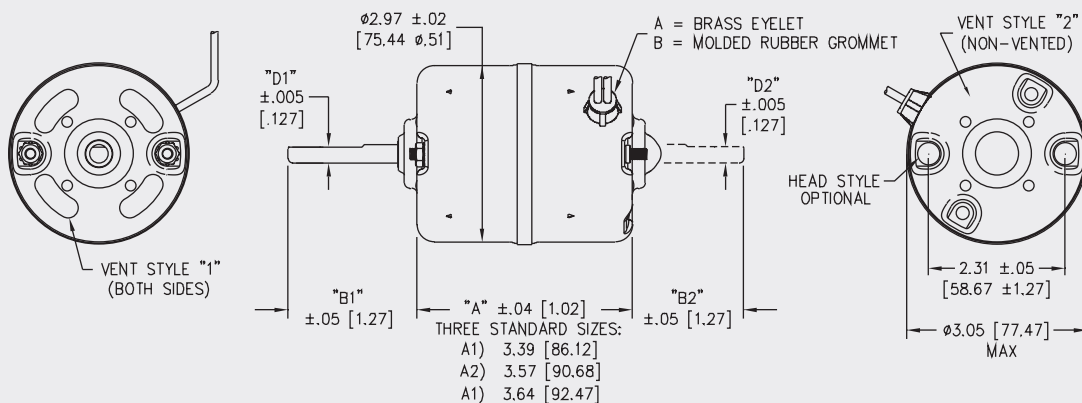
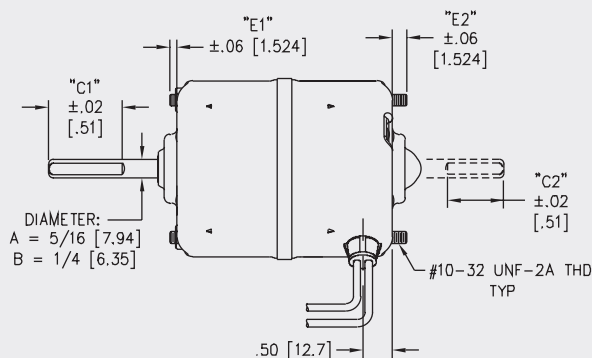
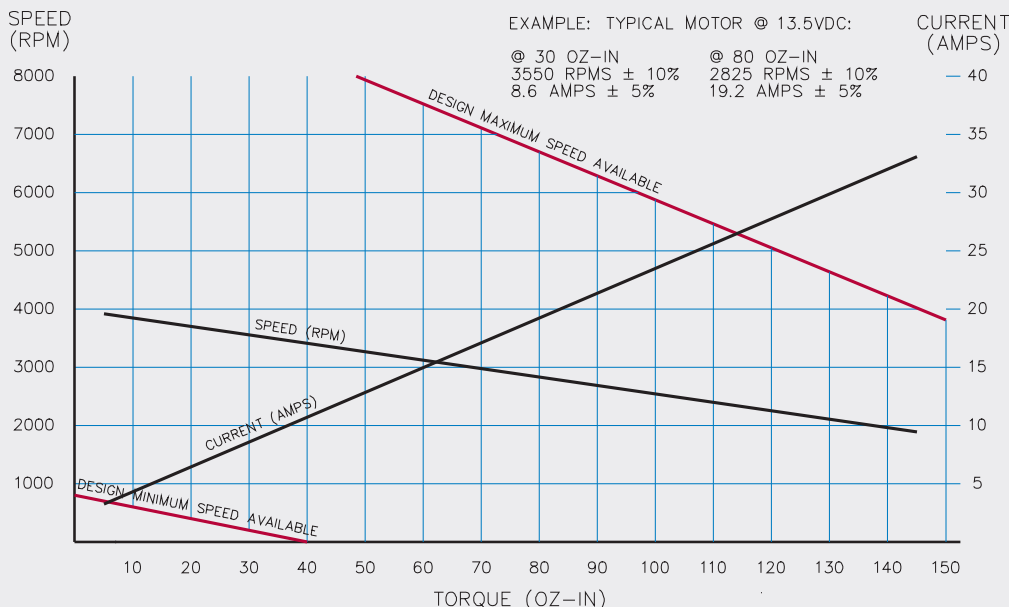
DC MOTORS

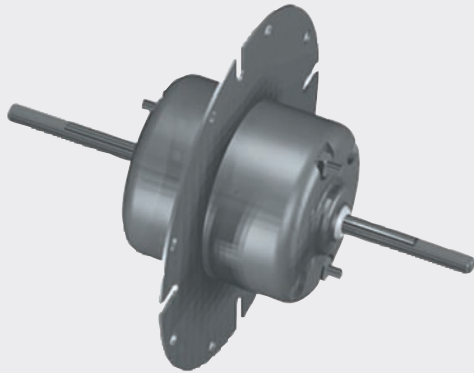
ELECTRICAL SPECIFICATIONS

INSULATION: CLASS B (130° C)
VOLTAGE RATING: 6-48 VOLTS DC NOMINAL
EFFICIENCY: UP TO 80%
ROTATION: CW, CCW, OR REVERSIBLE
BRUSH LIFE: UP TO 2,000 HOURS DEPENDING
ON MODEL AND APPLICATION

MECHANICAL SPECIFICATIONS

ENCLOSURE: CARBON STEEL (VENTED
OR NON-VENTED)
SHAFT: 1137-1144 CRS (STANDARD)
300/400 SERIES SS OR
CUSTOM AS REQ'D
BEARINGS: PM IRON (STANDARD)
PM BRONZE OR
BALL BEARINGS OPTIONAL
LUBRICATION: SYNTHETIC, LIFETIME LUBRICATED
LEADS: 14GA AWG TYPE GPT (80° C) (STANDARD)
OTHER GAUGES OR
HIGHER RATINGS AS REQ'D
WIRE TERMINATIONS: 1/4" STRIP (STANDARD)
OTHER TERMINALS
(I.E. #10 RING, BULLET) AS REQ'D





CUSTOM FLANGE MOUNT MOTOR

MORE INFORMATION & RFQ

MAIL TO:
DCM MANUFACTURING, INC.
4540 WEST 160th STREET
CLEVELAND, OH 44135
PHONE: (216) 265-8006
FAX: (216) 265-8340
E-MAIL: sales@dreison.com

Contact Information:

Company Name: _____
Customer Name: _____
Title: _____

Company Address:

Street: _____
City: _____ State: _____ Postal/Zip: _____
Country Code: _____
Country: _____ Phone: () _____ Fax: () _____
E-mail Address: _____

Motor Type: Series Wound DC Motor or Permanent Magnet DC Motor

Mechanical Configuration:

Face to Face Length ("A" Dimension): _____
Shaft Diameter ("F"): 1/4" or 5/16" or 3/8"
Shaft Material: 1137-1144 CRS (Standard) or Other: _____
Shaft Extension (Single - "B1" Dimension): _____ (Double - "B2" Dimension): _____
Shaft Flat Length (Single - "C1" Dimension): _____ (Double - "C2" Dimension): _____
Shaft Flat Height (Single - "D1" Dimension): _____ (Double - "D2" Dimension): _____
#10-32 Stud Extension ("E1" Dimension): _____ ("E2" Dimension): _____
Lead Exit Style ("C"): Black Grommet or Brass Eyelet or Molded Lead Grommet or Other: _____
Ventilation: Non-Vented or Axially Vented or Custom: _____

Performance Parameters:

Input Voltage: _____
Input Current: _____
Input Power: _____
Loaded Speed(s) (rpm): High: _____ Med: _____ Low: _____
Max Current(s) (amps): High: _____ Med: _____ Low: _____
Loaded Torque (oz-in): High: _____ Med: _____ Low: _____
Loaded Torque (oz-in): High: _____ Med: _____ Low: _____

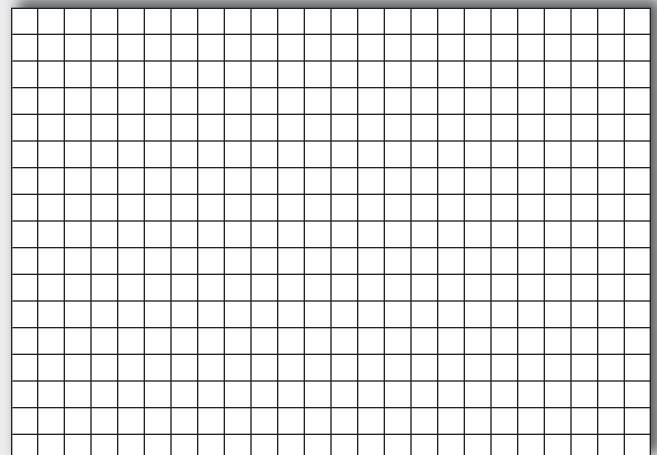
Part Application Information:

Estimated Annual Usage: _____
Shipment Lot Sizes: _____
Target Price: _____
Application: _____
End Product: _____

Special Instructions or Sketch:



LONG LIFE BRUSH OPTION





MODEL INFORMATION

PART#	VOLTS	TYPE	SHAFT
TA5000038	12VDC	PERMANENT MAGNET	SINGLE
TB5000026	24VDC	PERMANENT MAGNET	SINGLE

3" DIAMETER MOTOR

FEATURES

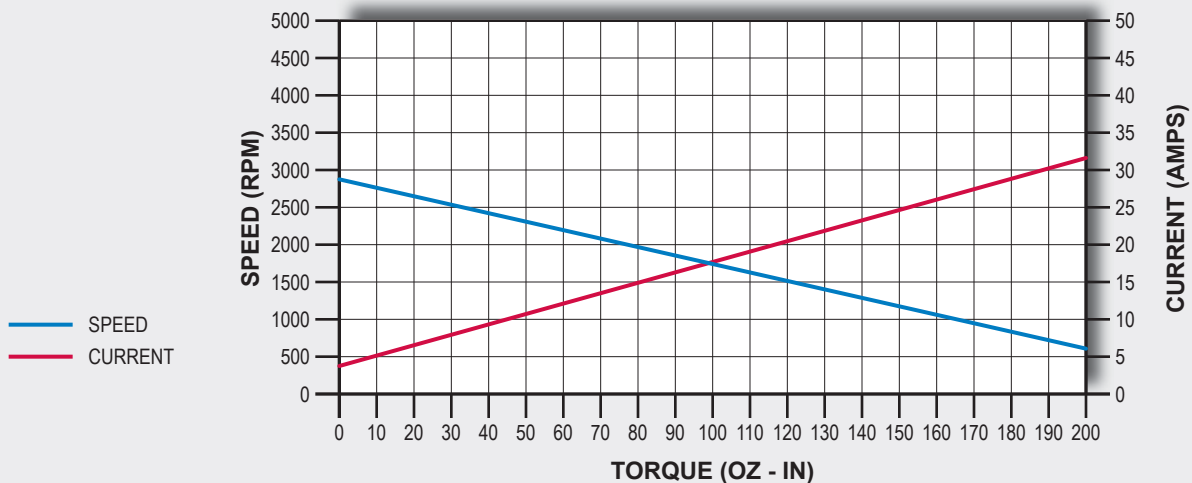
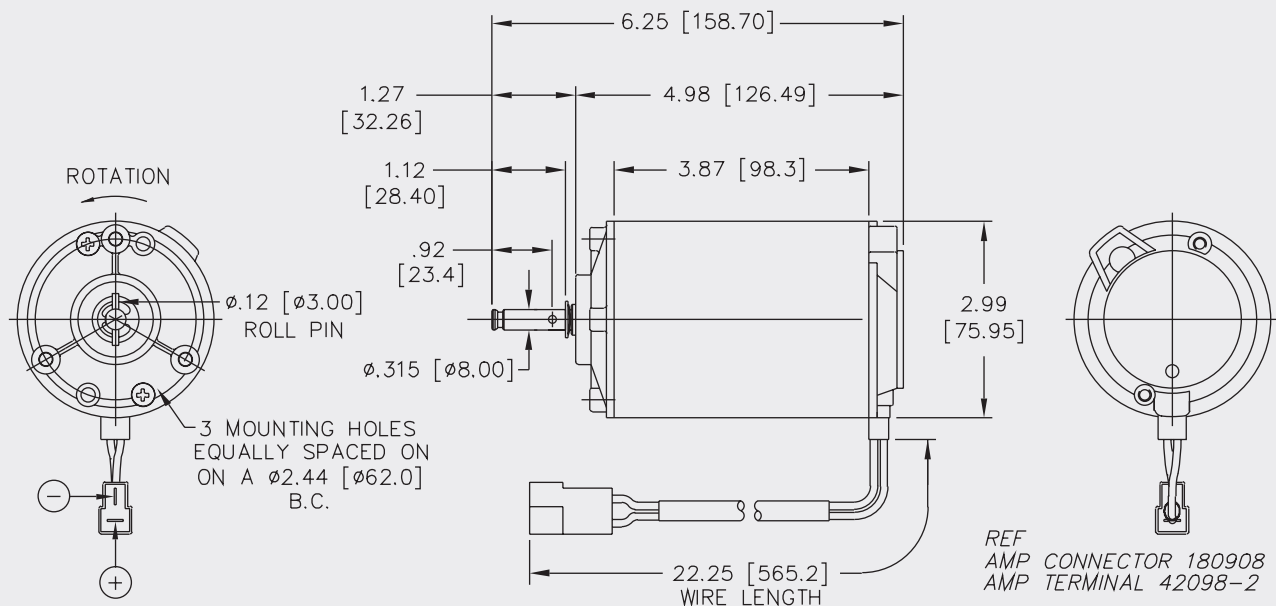
- BALL BEARINGS FRONT AND REAR
- MULTI-PURPOSE END CAP DESIGN FOR MOUNTING
- LONG LIFE
- VARIOUS SHAFT CONFIGURATIONS AVAILABLE

SPECIFICATIONS

- NOMINAL VOLTAGE: 26 VDC
- NOMINAL SPEED: 2600 RMP
- NOMINAL CURRENT: 3.5 A
- ROTATION: REVERSIBLE
- OPERATION: CONTINUOUS
- AMBIENT TEMP: -40° C +80° C

APPLICATIONS

- BLOWERS
- AXIAL SHIFT MOTORS
- REEL DRIVERS
- PUMPS
- BLOWERS FOR AUTOMOBILE AIR CONDITIONERS



DC MOTORS

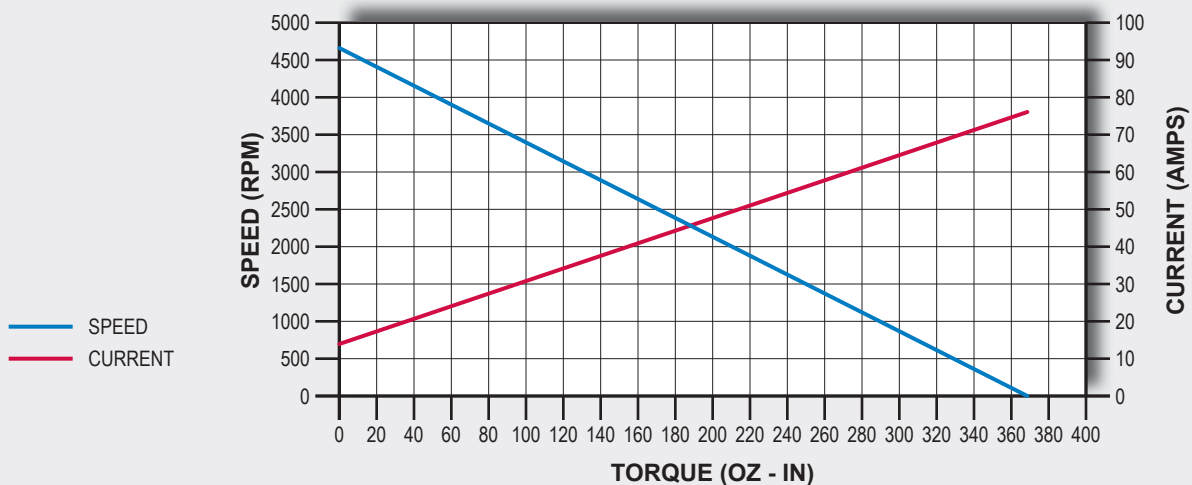
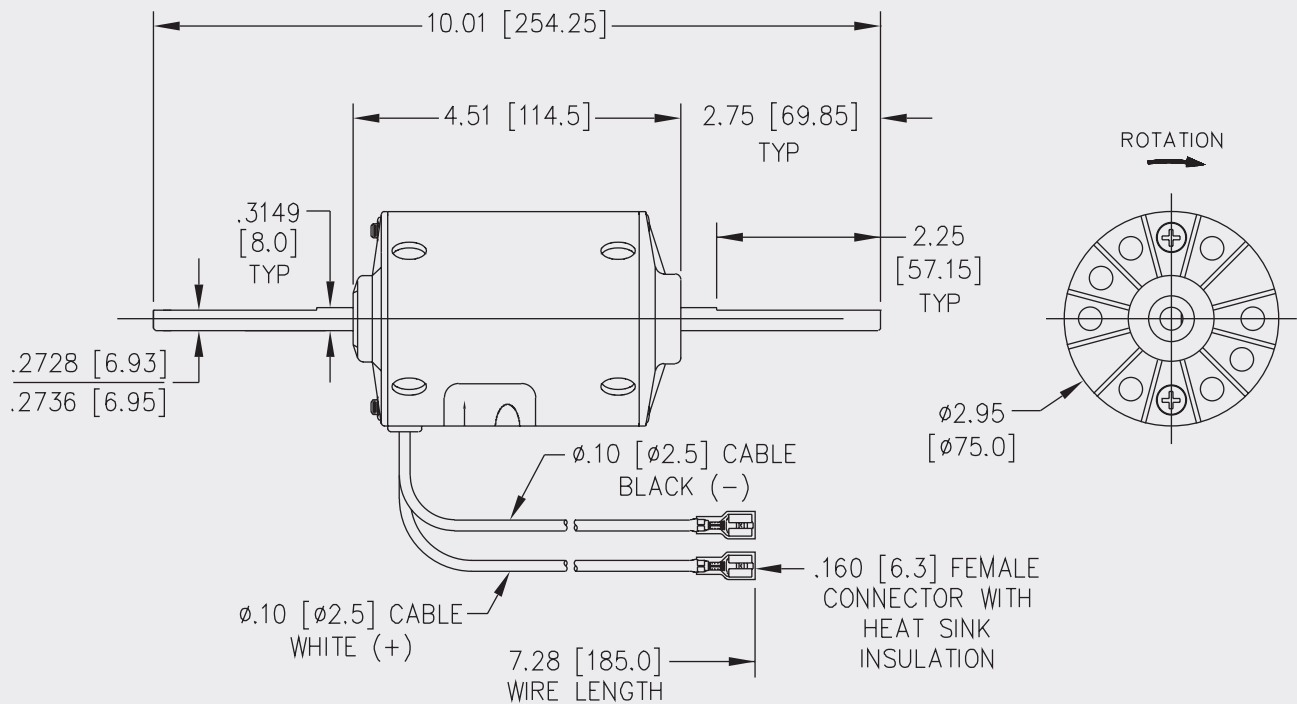
**PERMANENT
MAGNET**

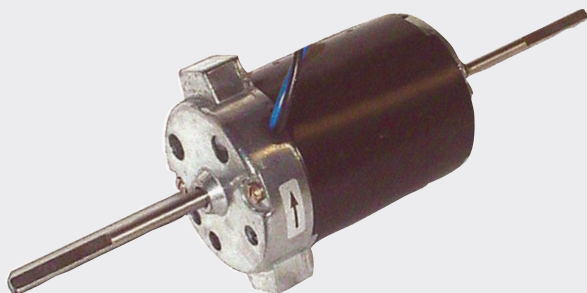


MODEL INFORMATION

PART#	VOLTS	TYPE	SHAFT
D-001-955BBS	12VDC	PERMANENT MAGNET	DOUBLE

3" DIAMETER MOTOR



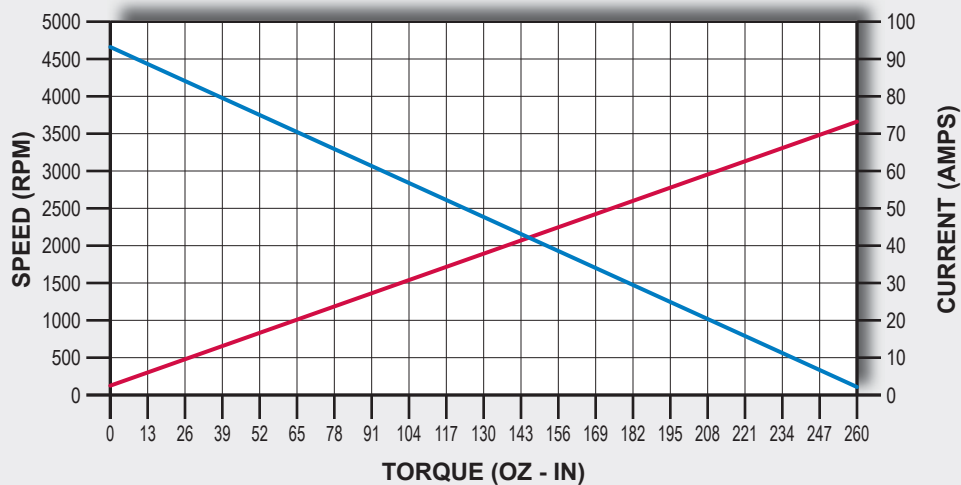
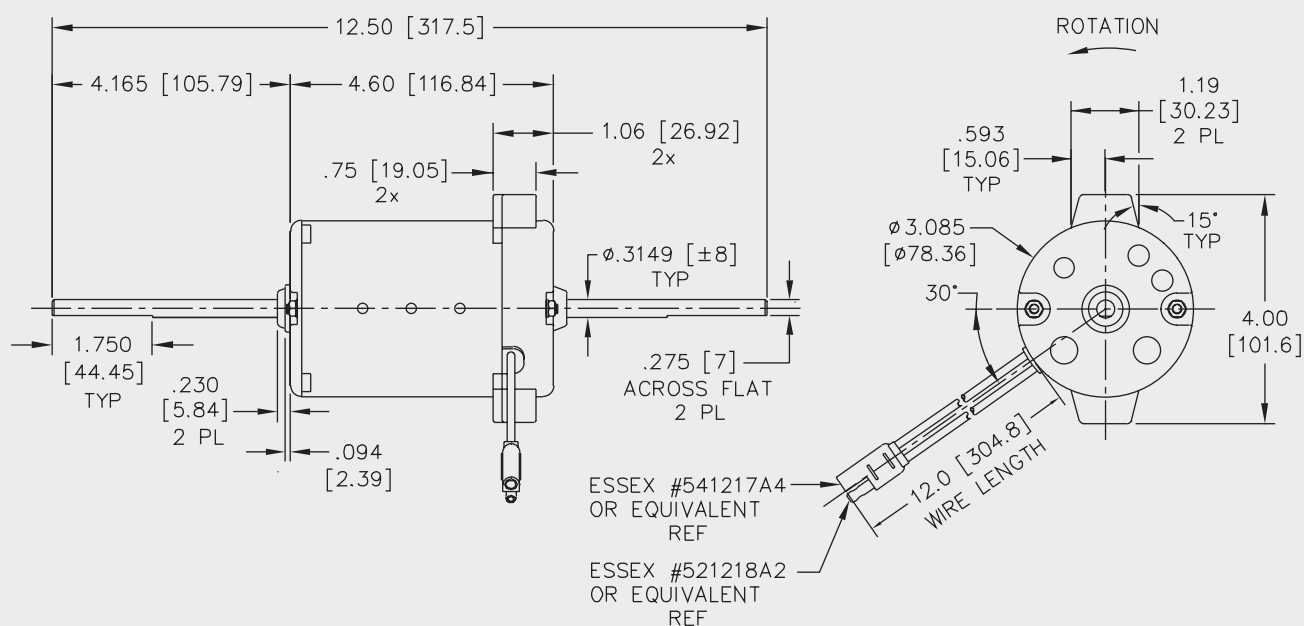


MODEL INFORMATION*

PART#	VOLTS	WATTS	TYPE	SHAFT
TA5000022	12VDC	180W	PERMANENT MAGNET	DUAL

*STANDARD BUILD 24VDC AND VARIOUS SHAFT LENGTHS AND CONNECTORS AVAILABLE

3.09" DIAMETER MOTOR



TYPICAL PERFORMANCE @ 13.5VDC 12V 180W 2-POLE PM MOTORS			
TORQUE (OZ/IN)	SPEED (RPM)	CURRENT (AMPS)	VOLTAGE (VOLTS)
10	4500	4.6	13.5
20	4320	7.2	13.5
30	4160	9.8	13.5
40	3980	12.6	13.5
50	3800	15.5	13.5
60	3570	18.6	13.5
70	3290	22.1	13.5

DC MOTORS

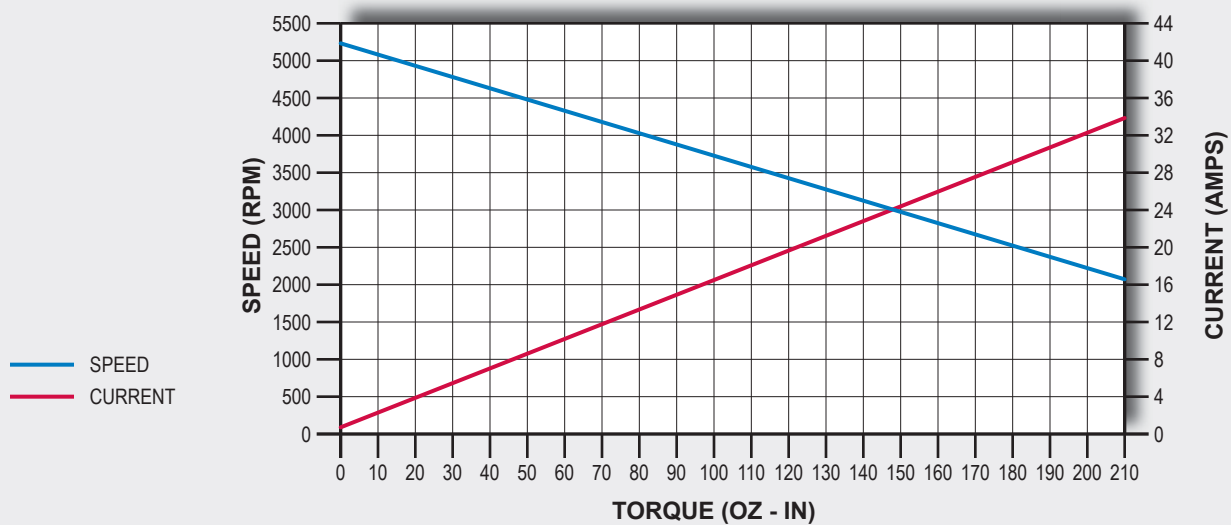
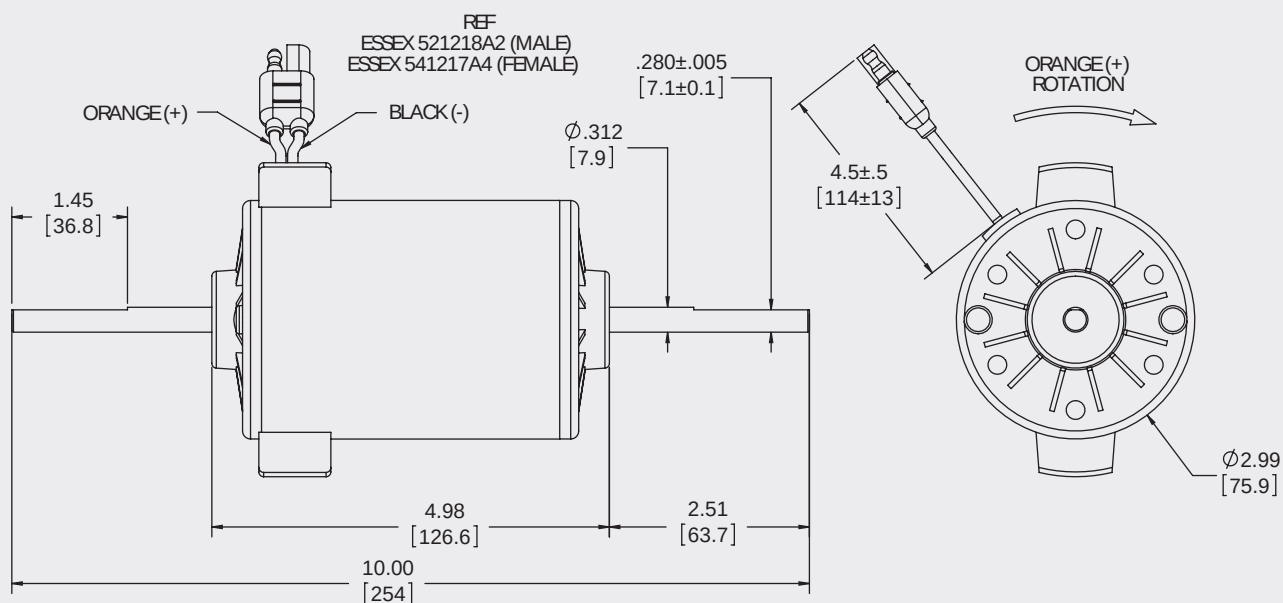
PERMANENT
MAGNET

MODEL INFORMATION

PART#	VOLTS	TYPE	SHAFT
MTR-5	12VDC	PERMANENT MAGNET	DOUBLE



3" DIAMETER MOTOR



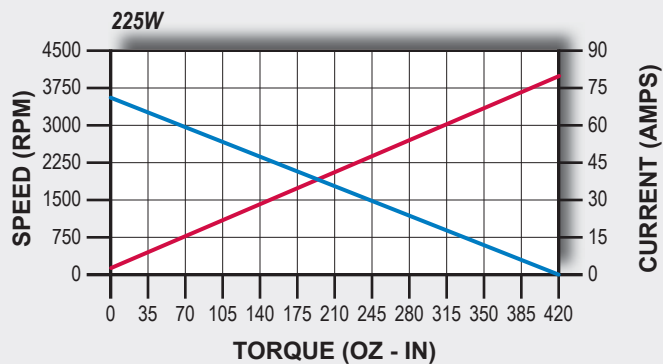
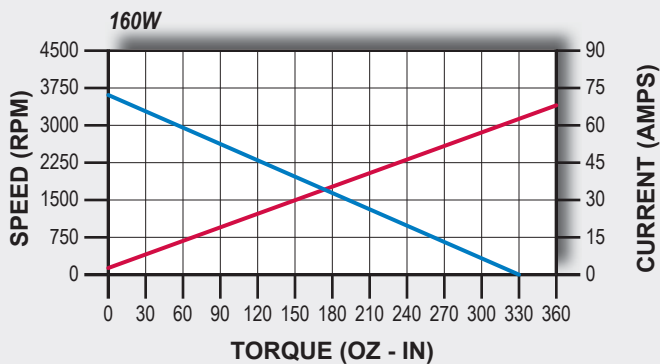
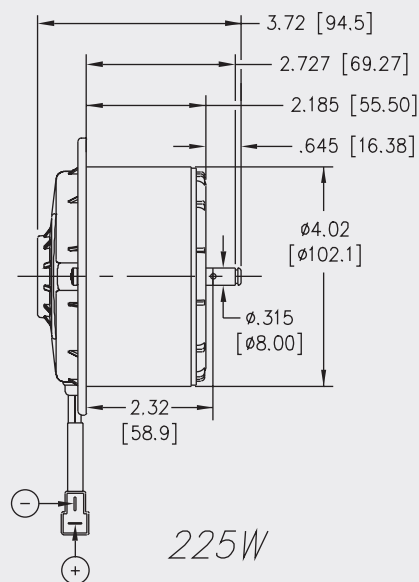
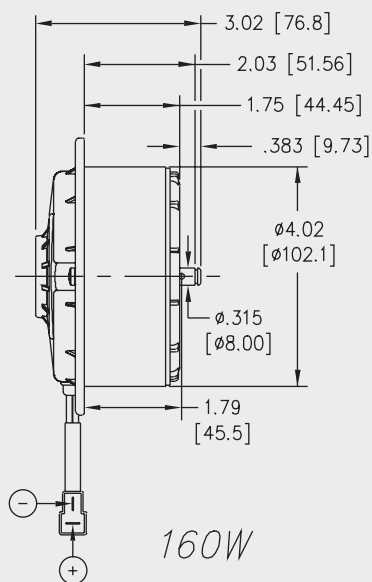
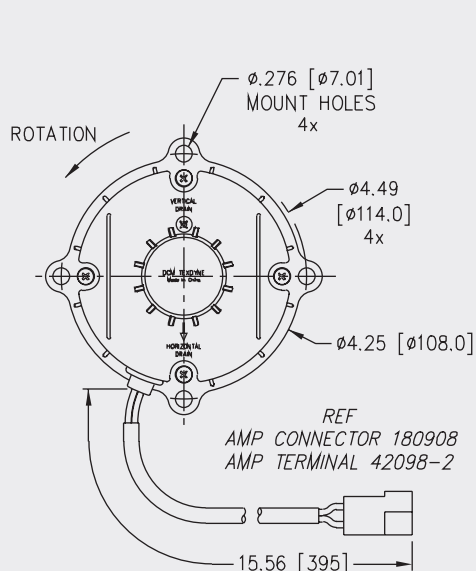


MODEL INFORMATION*

PART#	VOLTS	WATTS	TYPE	SHAFT
TA5000014	12VDC	160W	PERMANENT MAGNET	SINGLE
TB5000012	12VDC	225W	PERMANENT MAGNET	SINGLE

*STANDARD BUILD 24VDC AND VARIOUS SHAFT LENGTHS AVAILABLE

4" DIAMETER MOTOR



TYPICAL PERFORMANCE @ 13.5VDC 12V 160W 4-POLE PM MOTORS

TORQUE (OZ/IN)	SPEED (RPM)	CURRENT (AMPS)	VOLTAGE (VOLTS)
10	3520	4.0	13.5
20	3410	5.9	13.5
30	3290	7.9	13.5
40	3180	9.7	13.5
50	3070	11.6	13.5
60	2960	13.5	13.5
70	2850	15.3	13.5
80	2740	17.2	13.5
90	2630	19.1	13.5

TYPICAL PERFORMANCE @ 13.5VDC 12V 225W 4-POLE PM MOTORS

TORQUE (OZ/IN)	SPEED (RPM)	CURRENT (AMPS)	VOLTAGE (VOLTS)
10	3330	4.6	13.5
20	3250	6.2	13.5
30	3190	7.9	13.5
40	3180	9.6	13.5
50	3015	11.2	13.5
60	2930	12.9	13.5
70	2850	14.5	13.5
80	2780	16.1	13.5
90	2690	17.7	13.5

DC MOTORS

**PERMANENT
MAGNET**

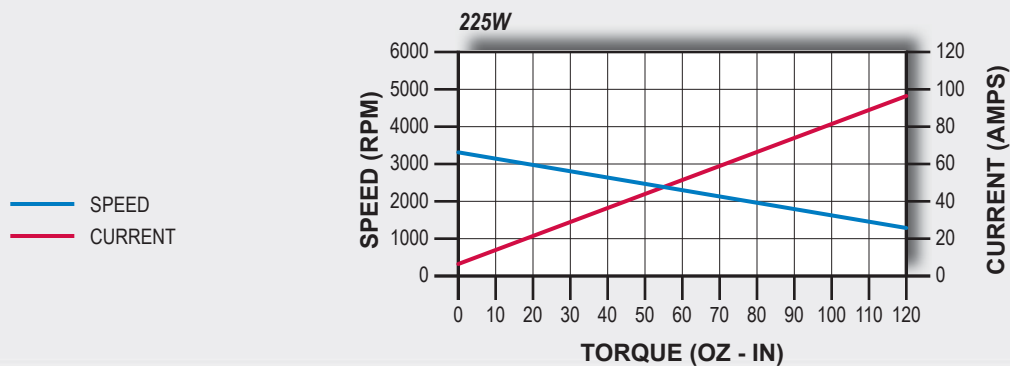
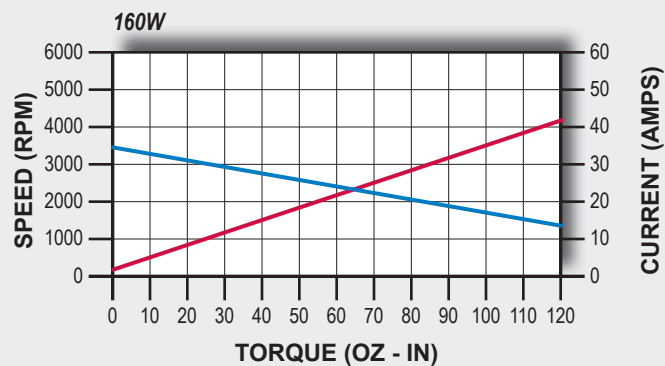
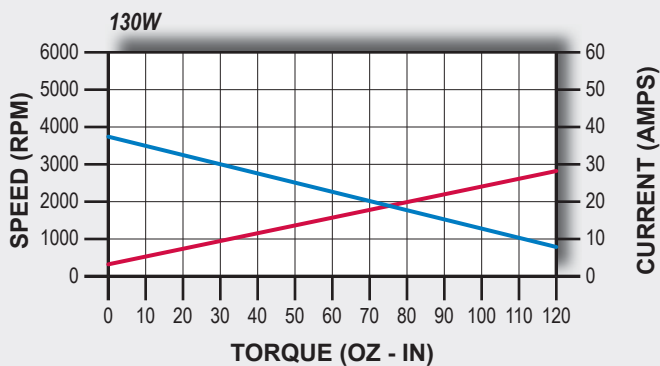
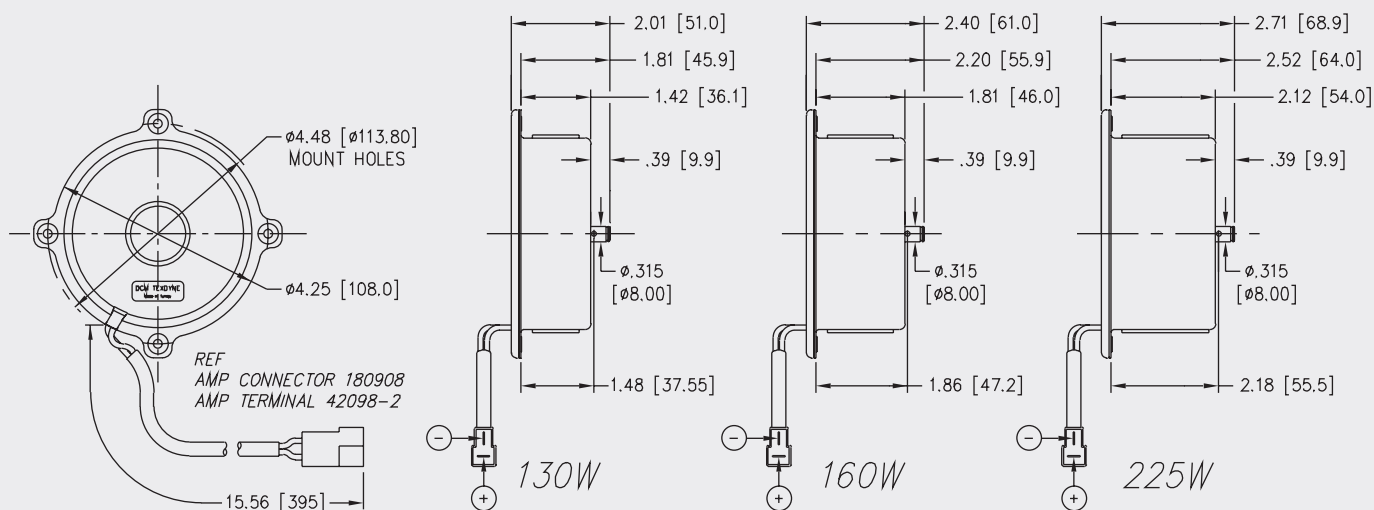
MODEL INFORMATION

PART#	VOLTS	WATTS	TYPE	SHAFT
TA5000076	12VDC	130W	PERMANENT MAGNET	SINGLE
TB5000077	12VDC	160W	PERMANENT MAGNET	SINGLE
TA5000078	12VDC	225W	PERMANENT MAGNET	SINGLE



4" DIAMETER MOTOR

IP68



DC MOTORS