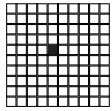
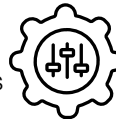


Partner With Bison[®] To...



Differentiate

... your bus, truck, off-road and rail equipment using the highest quality motors and pumps that provide heavy-duty, yet light weight and compact designs, CAN functionality, long life and much more.



Customize

... your vehicles' air- and other fluid-moving solutions, working side by side Bison[®] engineers who know the dynamics of fluid and have hundreds of years of cumulative experience.



Save Time

... by running performance tests and rapid prototyping and more through a Bison[®] state-of-the-art engineering laboratory.



Gain Access

... to heavy-duty transportation pumps and motors that are Buy America Compliant.

Differentiate Your End Products With ROTRON[®] Pumps and Motors

- Brushless sealless pumps
- Brushless DC motors
- SAE J1939 CAN functionality
- Long life up to 60,000 hours
- Maintenance-free design



Bison[®] also manufactures a full line of brushless DC fans and impeller style blowers.

Our Engineers Can Customize Your Air- and Other Fluid-Moving Solutions to...

- Heat and cool interiors
- Cool electronics, batteries & drive motors
- De-ice entryways
- Defrost windows
- And so much more!



LEARN
MORE

Helping
Fleet
Owners....



Reduce
Operational Costs



Eliminate
Downtime



Increase
Service Time,
Revenues & Profits

47 Frame

Brushless DC Motor 60,000 Hour Design Life

ROTRON®
Transportation

The 47 Frame, Electronically Commutated DC (ECDC™) motor series is a long-life brushless DC motor system for fans, blowers, pumps, and compressors up to .5 horsepower.

Features

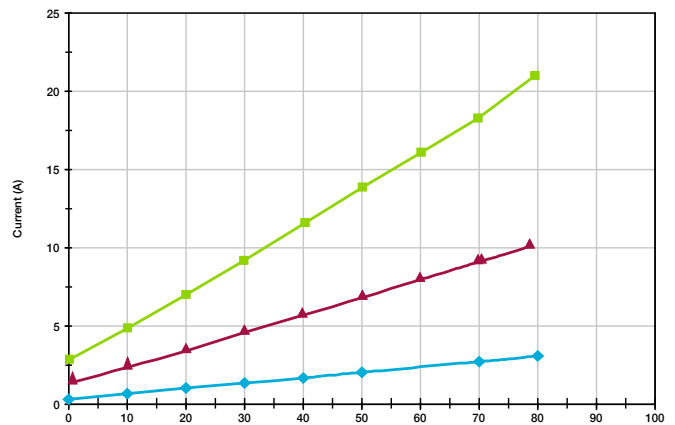
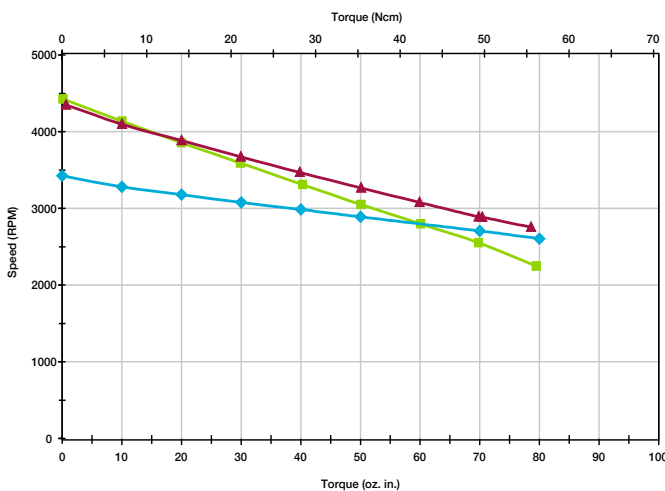
- ECDC™ motor design provides maintenance-free operation by eliminating brush motor failures and brush and commutator maintenance
- Rare-earth magnets provide high torque/weight ratio
- Integral electronics provides simple two-wire, DC operation (reverse polarity protected)
- Wide range of voltage inputs of 12, 24, 37, and 74
- 4H system for standard performance
- 3F system for high performance in a small package



Options

- Custom shaft and mounting configurations (foot and face)
- “O” ring sealed motor for harsh operating environments
- MS connectors
- Winding variations to meet exact speed/torque/voltage point
- Bi-directional operation
- Speeds up to 10,000 rpm

Performance



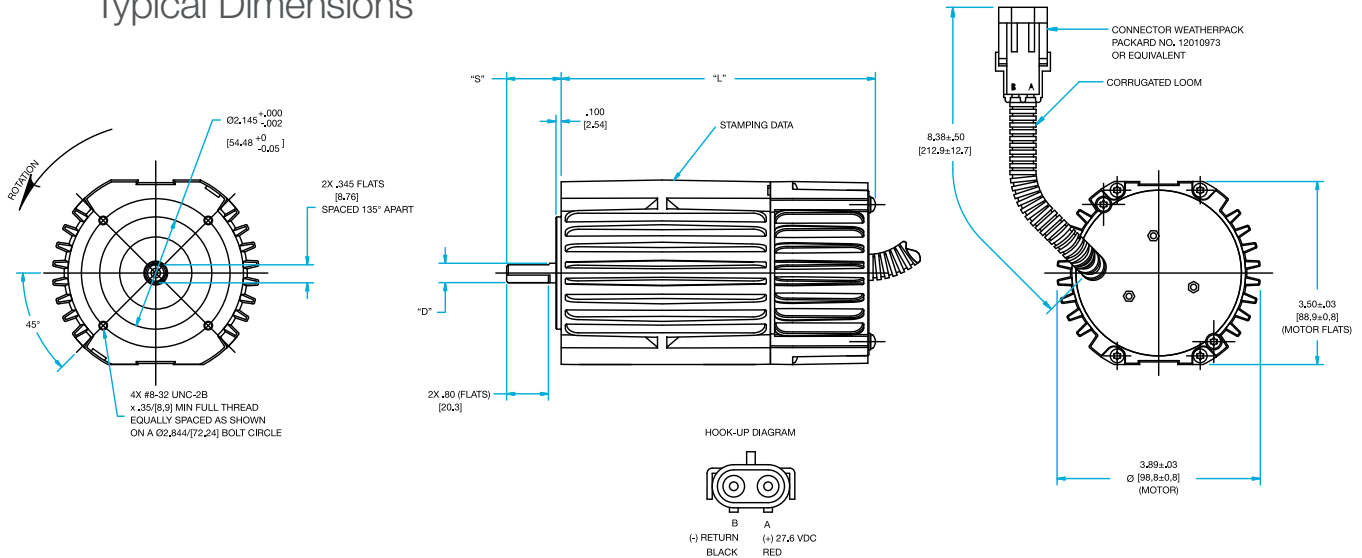
◆ 071031000 ▲ 150552-00 ■ 150551-00

47 Frame

Brushless DC Motor 60,000 Hour Design Life

ROTRON®
Transportation

Typical Dimensions



- Motor design characteristics are based on an operating environment of 85°C.

Motor Data	Unit of Measure	Part Numbers		
		150551-00	150552-00	071031000
Voltage Input	Volts DC	13.8	27.6	74
Voltage Range	Volts DC	9-16	18-32	50-80
No Load Speed, Nominal	RPM	4425	4350	3425
No Load Current, Nominal	Amps	2.5	1.4	0.3
Stall Torque, Theoretical	Oz.-In.	160	210	334
	Ncm	113	148	236
Continuous Torque	Oz.-In.	30	30	50
	Ncm	21	21	35
Speed @ Torque, Nominal	RPM	3575	3675	2900
Current @ Torque, Nominal	Amps	9.5	4.5	2.0
Continuous Power, Max.	Watts Out	80	82	108
	Horsepower	0.11	0.11	0.14
Torque Constant	Oz.-In. / Amp	4.41	8.58	29.21
	Ncm / Amp	3.11	6.06	19.1
Voltage Constant	V / k / RPM	3.12	6.34	21.61
	V / rad / sec	0.0298	0.0606	0.2063
Ambient Temperature, Max.	Degrees C	85	85	55
Motor Length ("L" above)	Inches	6.00	6.00	6.68
	mm	152,40	152,40	169,67
Weight	Lbs	7.3	7.3	8
	kg	3.3	3.3	3.6
Shaft Length ("S" above)	Inches	1	1	1.65
	mm	25,4	25,4	41,91
Shaft Diameter ("D" above)	Inches	0.375	0.375	0.312
	mm	9,52	9,52	7,925
Shaft Configuration		Single	Single	Single
Rotation	Viewed Lead Exit End	CW	CW	CCW
Speeds		1	1	1

This document is for informational purposes only and should not be considered as a binding description of the products or their performance in all applications. Actual performance will vary depending on the operating environment and application.



LEARN MORE

100

About **Bison®**

For more than 100 years, Bison® has helped customers differentiate their products by developing robust, flexible and durable motors, blowers and pumps under the brand names - Bison® Gearmotors, Lamb®, Nautilair®, Prestolite Motors, ROTRON® Regenerative Blowers, ROTRON® Transportation and Windjammer®.

Bison® engineers thrive on technical challenges and provide customers collaborative, customizable and optimized fluid-moving, fractional and integral horsepower solutions. Bison® has worldwide sales representative support, research facilities and manufacturing facilities in the United States, China and Mexico. The company is headquartered in Kent, Ohio.

Bison® is a business of AMETEK, Inc. — a leading global provider of industrial technology solutions serving a diverse set of attractive niche markets with annual sales over \$6.0 billion.

75

About **ROTRON® Transportation Pumps and Motors**

For more than 75 years, Bison® has designed and manufactured **ROTRON®** brushless sealless pumps and brushless DC motors for heavy-duty transportation OEMs building trucks, buses, locomotives, light rail equipment, off-road vehicles and more.

Our ROTRON® transportation products offer long life up to 60,000 hours, CAN J1939 functionality and maintenance-free designs. The fluid-moving technologies can be customized to OEM specs and are **Buy America Compliant**.