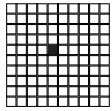
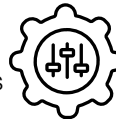


## Partner With Bison<sup>®</sup> To...



### 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> Pumps and Motors

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



Bison<sup>®</sup> 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

# 64 Frame

## Brushless DC Motor

60,000 Hour Design Life

ROTRON®  
Transportation

The 64 Frame, Electronically Commutated DC (ECDC™) motor series is a long-life, brushless DC motor system for fans, blowers, pumps, and compressors up to 1.25 horsepower.

### Features

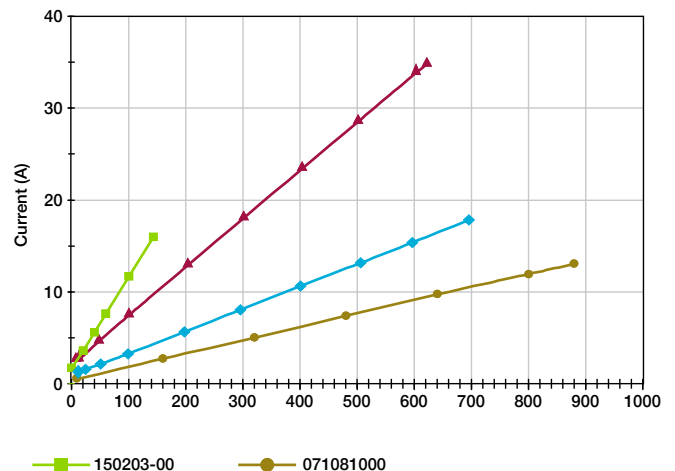
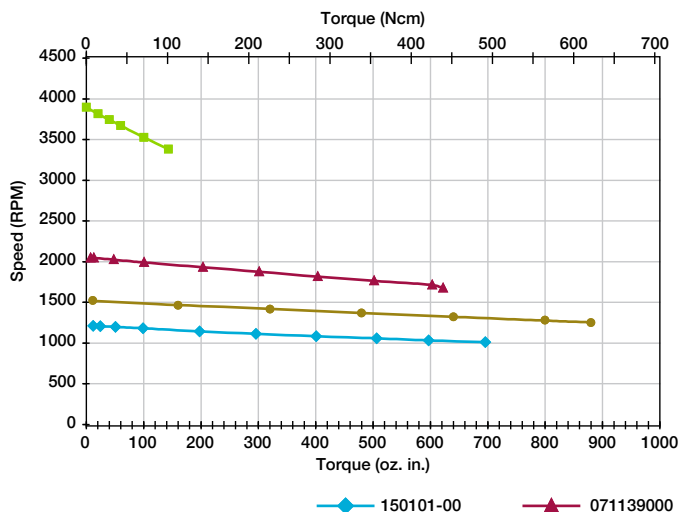
- ECDC™ motor design provides maintenance-free operation by eliminating brush motor failures and brush and commutator maintenance
- Rare-earth magnets provide high torque/weight ratio
- Wide range of voltage inputs of 12, 24, 37, and 74 VDC
- “O” ring sealed for harsh operating environments
- Reverse polarity and voltage surge protected



### Options

- Custom shaft and mounting configurations (foot and face)
- Winding variations to meet exact speed/torque/voltage point
- Drop-in replacement motor design for existing brush motors
- Available for OEM and retrofit applications
- Complete blowers, fans, and pumps available

### Performance



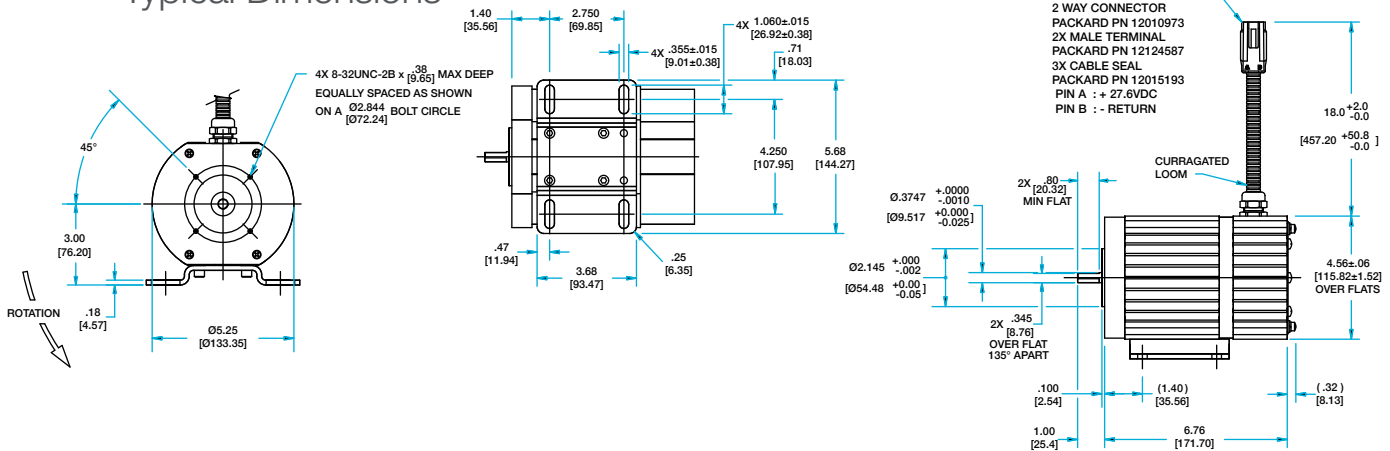
# 64 Frame



## 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			
		150203-00	071139000	150101-00	071081000
Voltage Input	Volts DC	27.6	27.6	36.0	74.0
Voltage Range	Volts DC	18-32	18-32	24-40	50-80
No Load Speed, Nominal	RPM	3900	2050	1220	1525
No Load Current, Nominal	Amps	1.7	2.5	1.3	0.5
Stall Torque, Theoretical	Oz.-In.	150	625	700	900
	Ncm	106	441	494	636
Continuous Torque	Oz.-In.	75	400	500	800
	Ncm	53	282	353	565
Speed @ Torque, Nominal	RPM	3600	1825	1050	1250
Current @ Torque, Nominal	Amps	9.0	23.5	13.2	12
Continuous Power, Max.	Watts Out	200	542	400	765
	Horsepower	0.27	0.73	0.54	1.00
Torque Constant	Oz.-in. / Amp	9.57	18.20	39.90	65.61
	Ncm / Amp	6.76	12.86	28.18	46.33
Voltage Constant	V / k RPM	7.08	13.46	29.51	48.52
	V / rad / sec	0.0676	0.1286	0.2818	0.4634
Ambient Temperature, Max.	°C	72	70	70	85
Motor Length ("L" above)	Inches	7.08	10.36	10.125	13.34
	mm	179,83	263,14	257,18	338,83
Weight	Lbs.	18	23	26	29
	kg	8.16	10.43	11.79	13.15
Shaft Length ("S" above)	Inches	1	2.5	1.68	2.16
	mm	25,4	63,5	42,67	54,86
Shaft Diameter ("D" above)	Inches	0.375	0.625	0.5	0.7497
	mm	9,53	15,88	12,7	19,04
Shaft Configuration		Single	Single	Single	Single
Rotation	Viewed Lead Exit End	CW	CW	CCW	CCW
Speeds		1	2	1	1

25°C ambient mounted on 12 in. x 12 in. x 1/2 in. aluminum sink.

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.

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*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**.