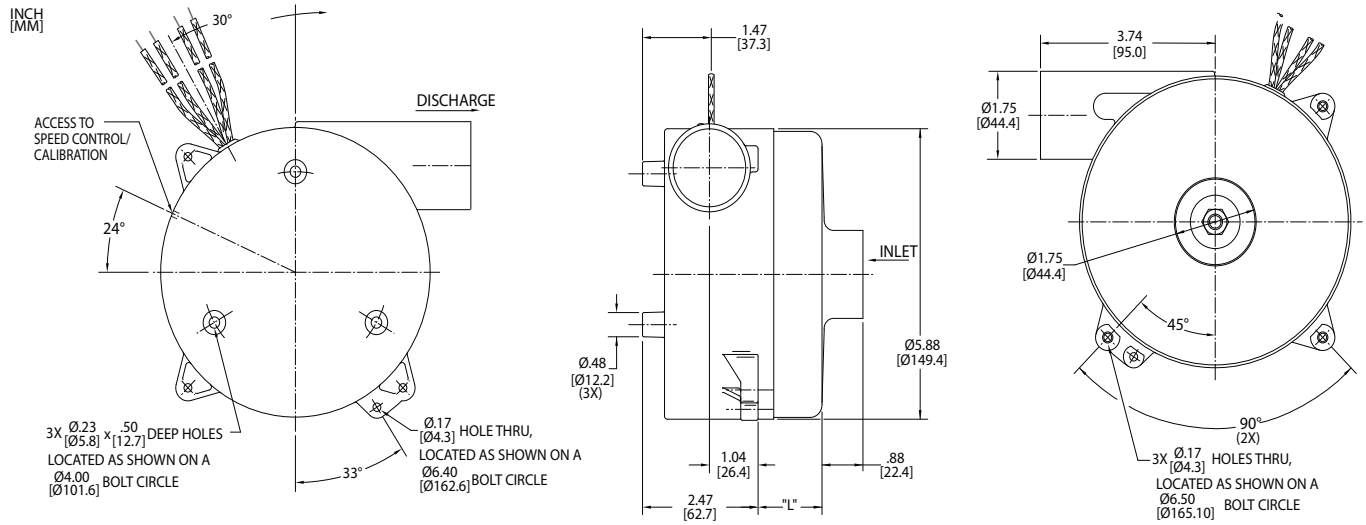
## Low Voltage Brushless DC Blowers

# 5.7" (145mm) BLDC Thru Flow Blower

Windjammer® BRUSHLESS BLOWERS

24 VDC Input, High Flow System




| | | Part/ Model Number | | | |
|---|---|---|---|---|---|
| Specification | Units | 150409 | 150439 | 150410 | 150440 |
| Stages | - | 1 | 1 | 2 | 2 |
| Input Voltage | VDC | 24 | 24 | 24 | 24 |
| Max Sealed Pressure | in. H2O | 33 | 33 | 55 | 55 |
| | mbar | 82.2 | 82.2 | 137 | 137 |
| Max Open Flow Rate | CFM | 123 | 123 | 95 | 95 |
| | m3/hr | 209.1 | 209.1 | 161.5 | 161.5 |
| Length (L) | Inches | 0.81 | 0.81 | 1.81 | 1.81 |
| | mm | 20.6 | 20.6 | 46 | 46 |
| Speed Control | - | Anlg. Spd. Cmd. | Potent. Adjust. | Anlg. Spd. Cmd. | Potent. Adjust. |

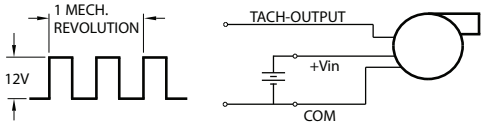
**Notes:**

- **Temperature**: Working Air: 0°C to 45°C , Ambient Air: 0°C to 45°C, Storage: -40°C to 85°C.
- When used as a vacuum, the blower performance might be less then shown herein, depending on the operating point.
- **Weight** = 6 lb / 2.2 Kg

**Potentiometer Adjustment** (Potent. Adjust.) - The specified supply voltage is applied and the speed is set by adjusting a potentiometer on the side of the blower.

**Analog Speed Command** (Anlg. Spd. Cmd.) - Blower speed is proportional to an analog speed command signal. The range over which the speed command signal operates can be calibrated within 0-10V by adjusting the sensitivity potentiometer accessed through the side of the blower. The sensitivity adjustment is also useful for precisely calibrating a group of blowers to the same speed for a given operating point and command signal voltage.

**Tachometer Output** - All of the models listed above come equipped with a tachometer output: a square wave output that is proportional to blower speed. The frequency of the tachometer output sigal is 2x the blower's rotational frequency.

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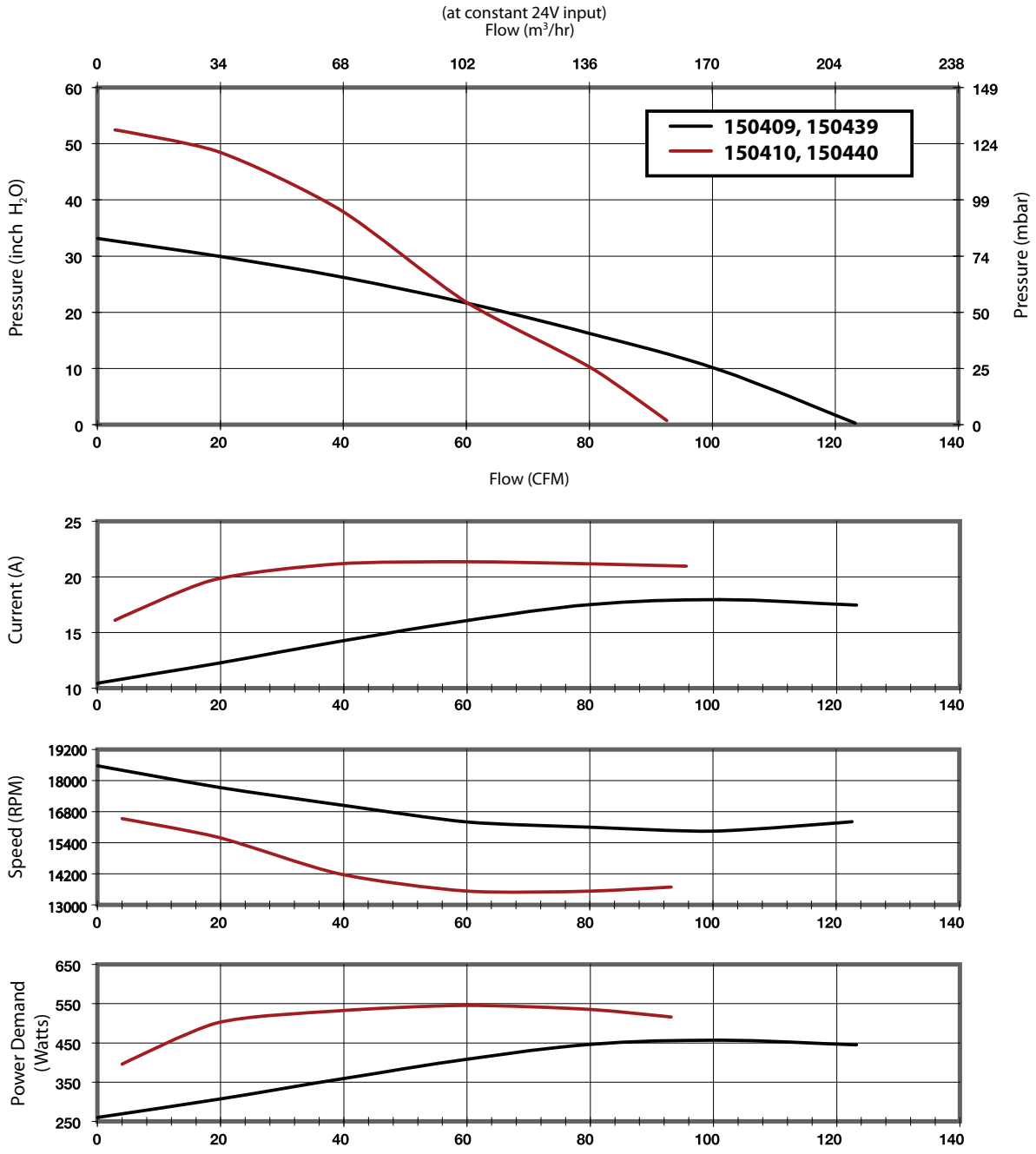
AMETEK®
PRECISION MOTION CONTROL

## 5.7" (145mm) BLDC Thru Flow Blower

24 VDC Input, High Flow System

### Typical Performance




Data presented represents blower performance at STANDARD AIR DENSITY, .075 lb/ft$^3$ (29.92" Hg, Sea Level, 68° F)
Vacuum performance available upon request.

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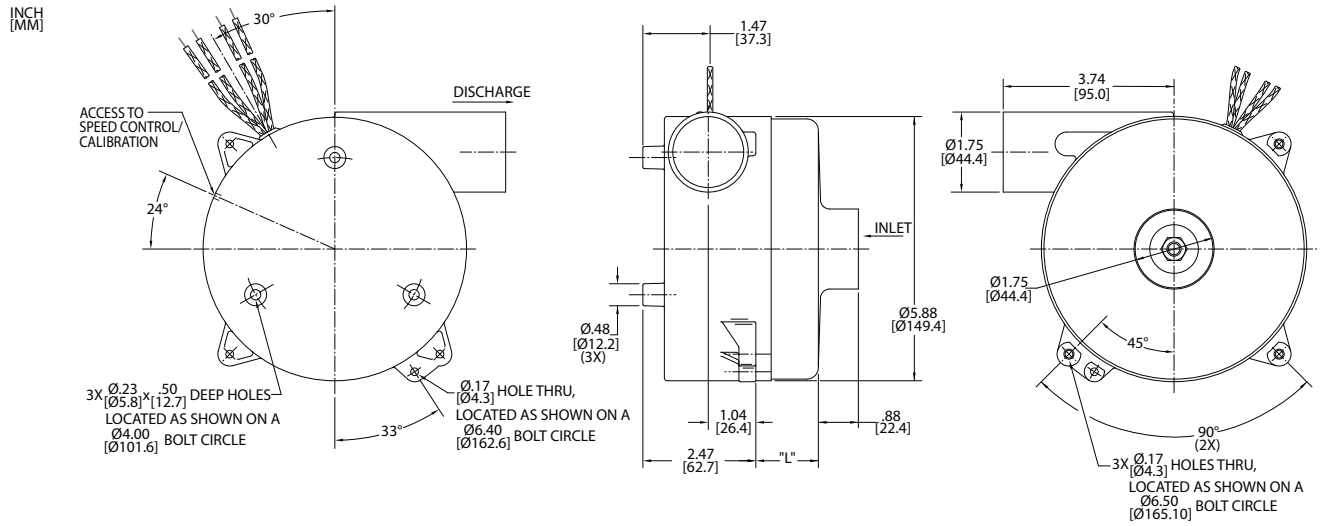
Windjammer® BRUSHLESS BLOWERS

24 VDC Input, Standard Flow System




| | | Part/ Model Number | | | |
|---|---|---|---|---|---|
| Specification | Units | 150406 | 150437 | 150407 | 150438 |
| Stages | - | 1 | 1 | 2 | 2 |
| Input Voltage | VDC | 24 | 24 | 24 | 24 |
| Max Sealed Pressure | in. H2O | 37 | 37 | 62 | 62 |
| | mbar | 92.2 | 92.2 | 154.4 | 154.4 |
| Max Open Flow Rate | CFM | 79 | 79 | 72 | 72 |
| | m3/hr | 134.3 | 134.3 | 122.4 | 122.4 |
| Length (L) | Inches | .81 | .81 | 1.50 | 1.50 |
| | mm | 20.6 | 20.6 | 38.1 | 38.1 |
| Speed Control | - | Anlg. Spd. Cmd. | Potent. Adjust. | Anlg. Spd. Cmd. | Potent. Adjust. |

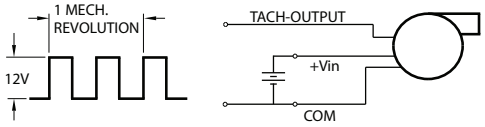
**Notes:**

- **Temperature**: Working Air: 0°C to 45°C , Ambient Air: 0°C to 45°C, Storage: -40°C to 85°C.
- When used as a vacuum, the blower performance might be less then shown herein, depending on the operating point.
- **Weight** = 6 lb / 2.2 Kg

**Potentiometer Adjustment** (Potent. Adjust.) - The specified supply voltage is applied and the speed is set by adjusting a potentiometer on the side of the blower.

**Analog Speed Command** (Anlg. Spd. Cmd.) - Blower speed is proportional to an analog speed command signal. The range over which the speed command signal operates can be calibrated within 0-10V by adjusting the sensitivity potentiometer accessed through the side of the blower. The sensitivity adjustment is also useful for precisely calibrating a group of blowers to the same speed for a given operating point and command signal voltage.

**Tachometer Output** - All of the models listed above come equipped with a tachometer output: a square wave output that is proportional to blower speed. The frequency of the tachometer output signal is 2x the blower's rotational frequency.

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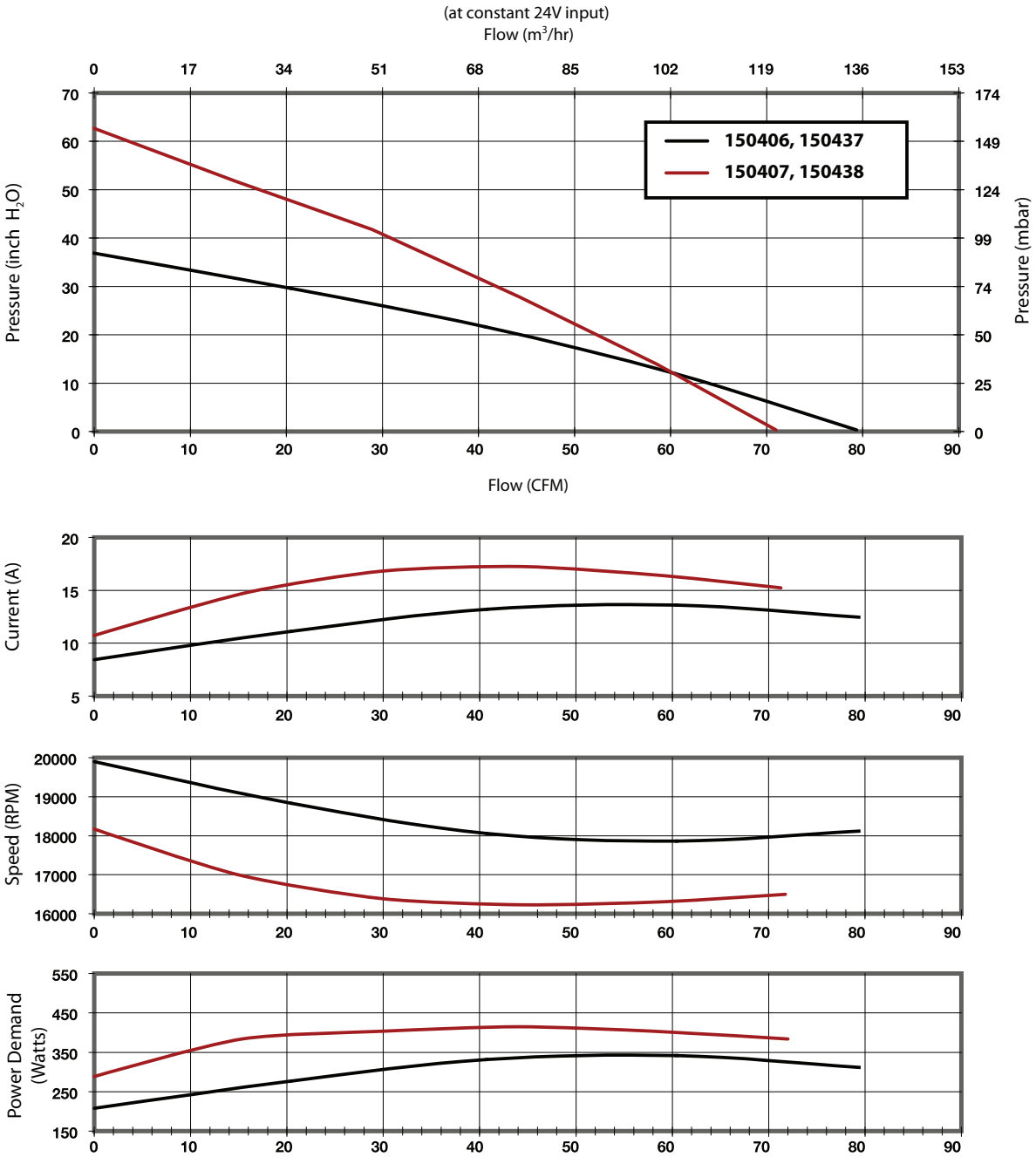
AMETEK® PRECISION MOTION CONTROL

## 5.7" (145mm) BLDC Thru Flow Blower

24 VDC Input, Standard Flow System

### Typical Performance

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Vacuum performance available upon request.

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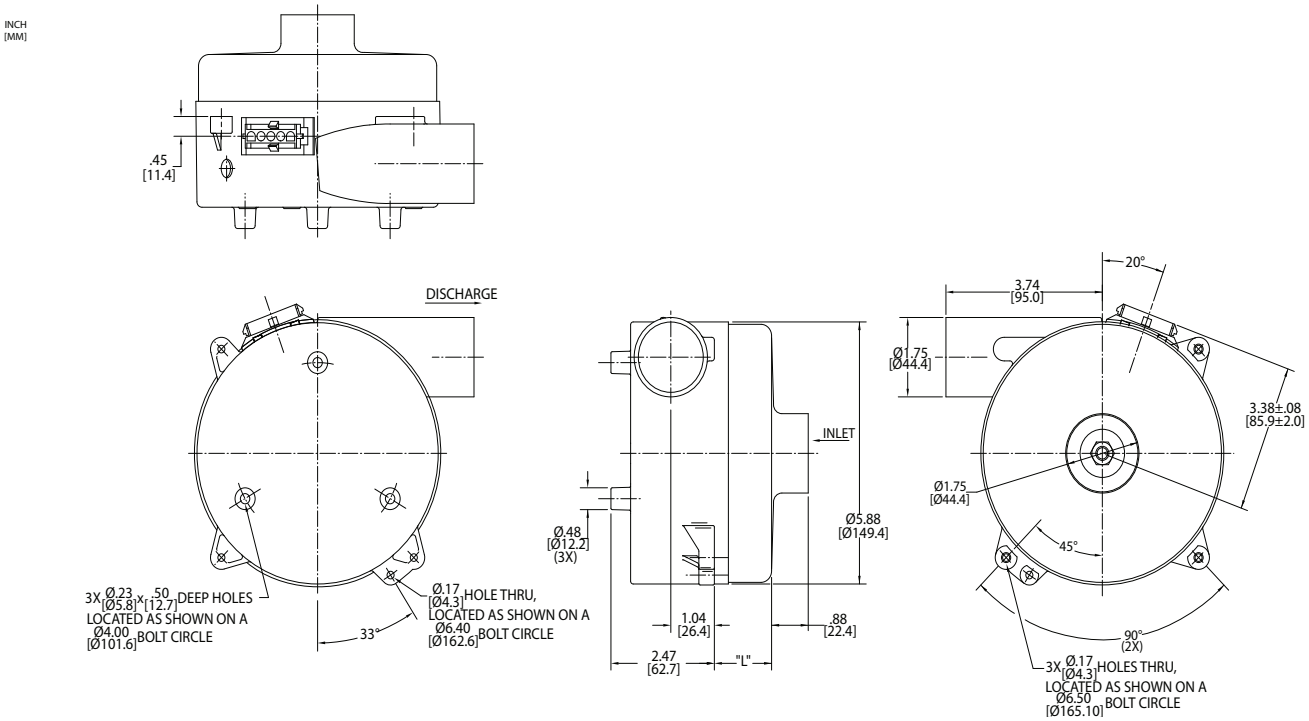
## Low Voltage Brushless DC Blowers

## 5.7" (145mm) BLDC Thru Flow Blower

Windjammer® BRUSHLESS BLOWERS

48 VDC Input, High Flow System




| | | Part/ Model Number | | | |
|---|---|---|---|---|---|
| Specification | Units | 150419 | 150449 | 150420 | 150450 |
| Stages | - | 1 | 1 | 2 | 2 |
| Input Voltage | VDC | 43-53 | 43-53 | 43-53 | 43-53 |
| Max Sealed Pressure | in. H2O | 26.0 | 26.0 | 53 | 53 |
| | mbar | 64.8 | 64.8 | 132 | 132 |
| Max Flow Rate | CFM | 111.0 | 111.0 | 85.9 | 85.9 |
| | m3/hr | 188.7 | 188.7 | 146 | 146 |
| Length (L) | Inches | .81 | .81 | 1.81 | 1.81 |
| | mm | 20.6 | 20.6 | 46 | 46 |
| Speed Control | - | Analog | Potent. Adjust. | Analog | Potent. Adjust. |

**Notes:**

- **Temperature**: Working Air: 0°C to 45°C , Ambient Air: 0°C to 45°C, Storage: -40°C to 85°C.
- When used as a vacuum, the blower performance might be less then shown herein, depending on the operating point.
- **Weight** = 6 lb / 2.2 Kg

**Potentiometer Adjustment** (Potent. Adjust.) - The specified supply voltage is applied and the speed is set by adjusting a potentiometer on the side of the blower.

**Analog Speed Command** (Anlg. Spd. Cmd.) - Blower speed is proportional to an analog speed command signal. The range over which the speed command signal operates can be calibrated within 0-10V by adjusting the sensitivity potentiometer accessed through the side of the blower. The sensitivity adjustment is also useful for precisely calibrating a group of blowers to the same speed for a given operating point and command signal voltage.

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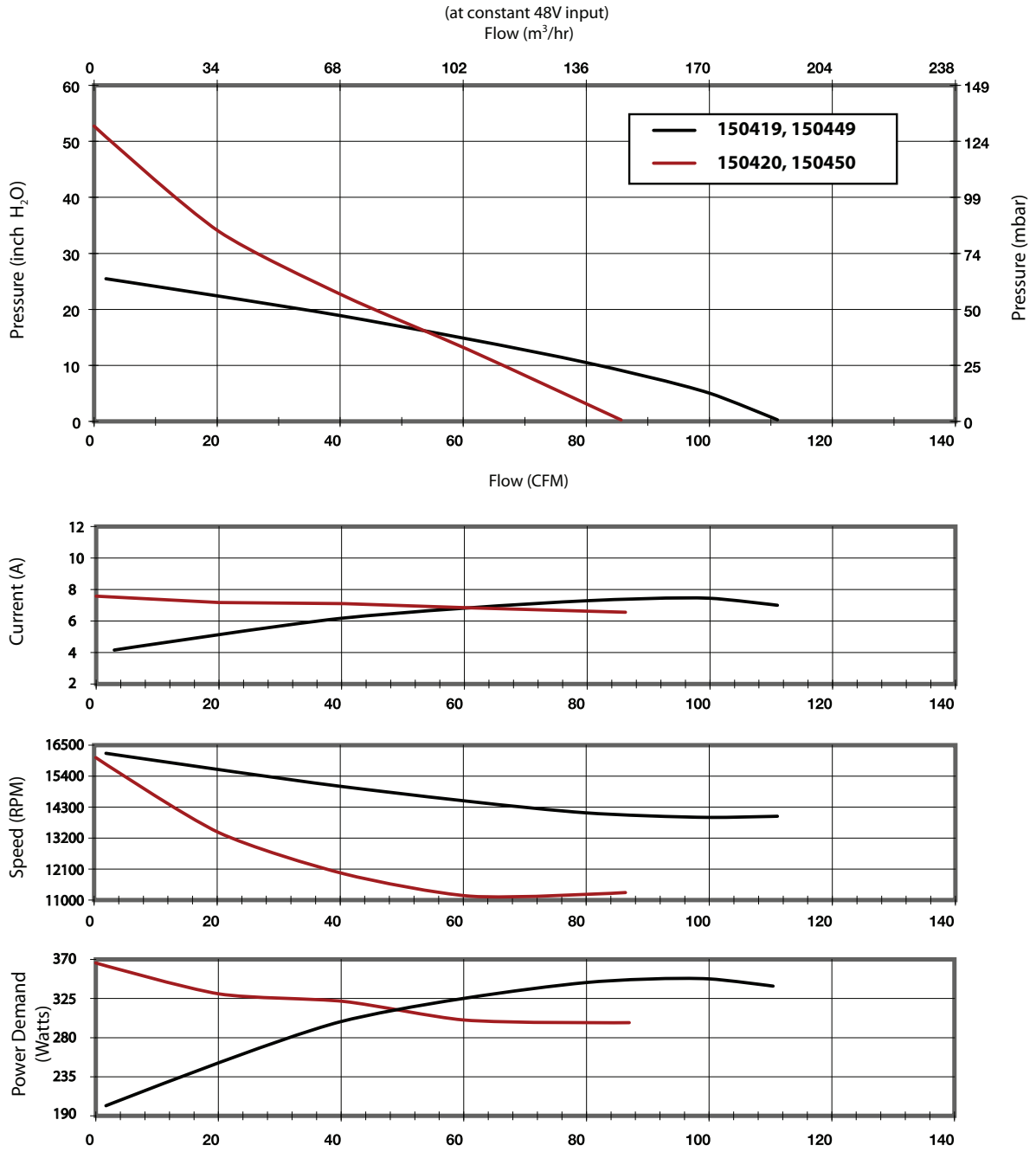
AMETEK® PRECISION MOTION CONTROL

## 5.7" (145mm) BLDC Thru Flow Blower

48 VDC Input, High Flow System

### Typical Performance

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## Low Voltage Brushless DC Blowers

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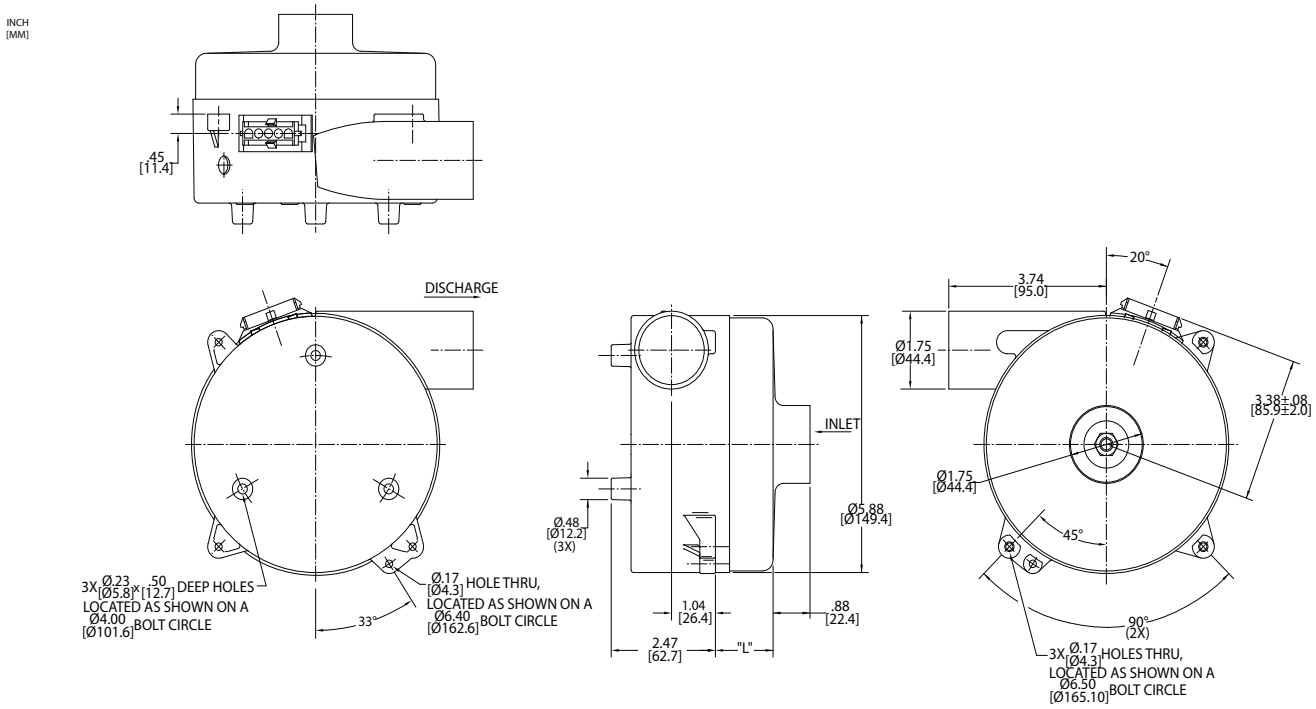
Windjammer® BRUSHLESS BLOWERS

48 VDC Input, High Flow System




| | | Part/ Model Number | | | | | |
|---|---|---|---|---|---|---|---|
| Specification | Units | 150417 | 150447 | 150129 | 150462 | 150418 | 150448 |
| Stages | - | 1 | 1 | 2 | 2 | 3 | 3 |
| Input Voltage | VDC | 43-53 | 43-53 | 43-53 | 43-53 | 43-53 | 43-53 |
| Max Sealed Pressure | in. H2O | 41.5 | 41.5 | 71.8 | 71.8 | 80 | 80 |
| | mbar | 103.4 | 103.4 | 178.9 | 178.9 | 199.3 | 199.3 |
| Max Flow Rate | CFM | 80.5 | 80.5 | 65.9 | 65.9 | 63 | 63 |
| | m3/hr | 136.9 | 136.9 | 112 | 112 | 107.1 | 107.1 |
| Length (L) | Inches | 0.81 | 0.81 | 1.50 | 1.50 | 2.17 | 2.17 |
| | mm | 20.6 | 20.6 | 38.1 | 38.1 | 55.1 | 55.1 |
| Speed Control | - | Analog | Potent. Adjust. | Analog | Potent. Adjust. | Analog | Potent. Adjust. |

**Notes:**

- **Temperature**: Working Air: 0°C to 45°C , Ambient Air: 0°C to 45°C, Storage: -40°C to 85°C.
- When used as a vacuum, the blower performance might be less then shown herein, depending on the operating point.
- **Weight** = 6 lb / 2.2 Kg

**Potentiometer Adjustment** (Potent. Adjust.) - The specified supply voltage is applied and the speed is set by adjusting a potentiometer on the side of the blower.

**Analog Speed Command** (Anlg. Spd. Cmd.) - Blower speed is proportional to an analog speed command signal. The range over which the speed command signal operates can be calibrated within 0-10V by adjusting the sensitivity potentiometer accessed through the side of the blower. The sensitivity adjustment is also useful for precisely calibrating a group of blowers to the same speed for a given operating point and command signal voltage.

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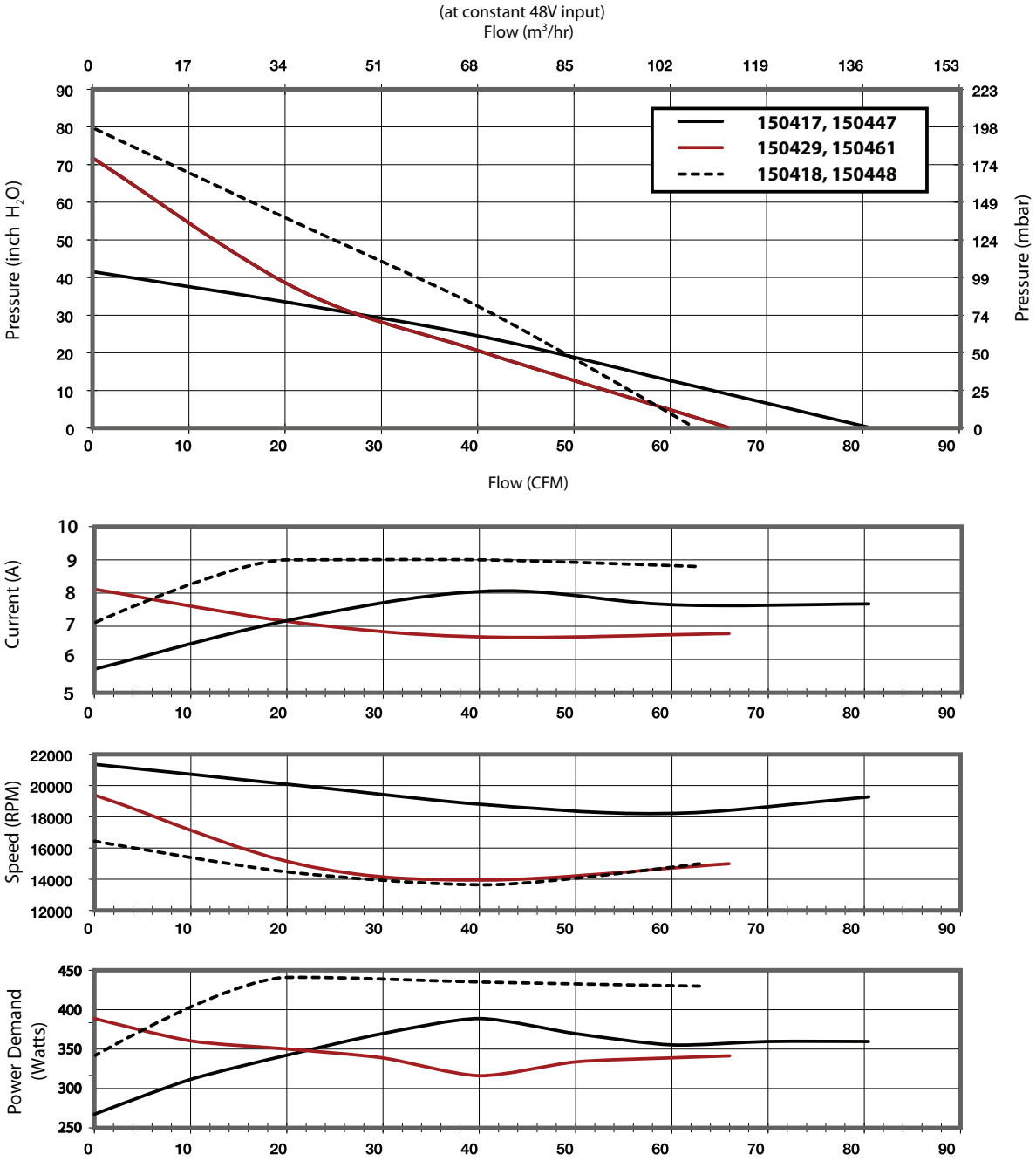
AMETEK® PRECISION MOTION CONTROL

## 5.7" (145mm) BLDC Thru Flow Blower

48 VDC Input, Standard Flow System

### Typical Performance

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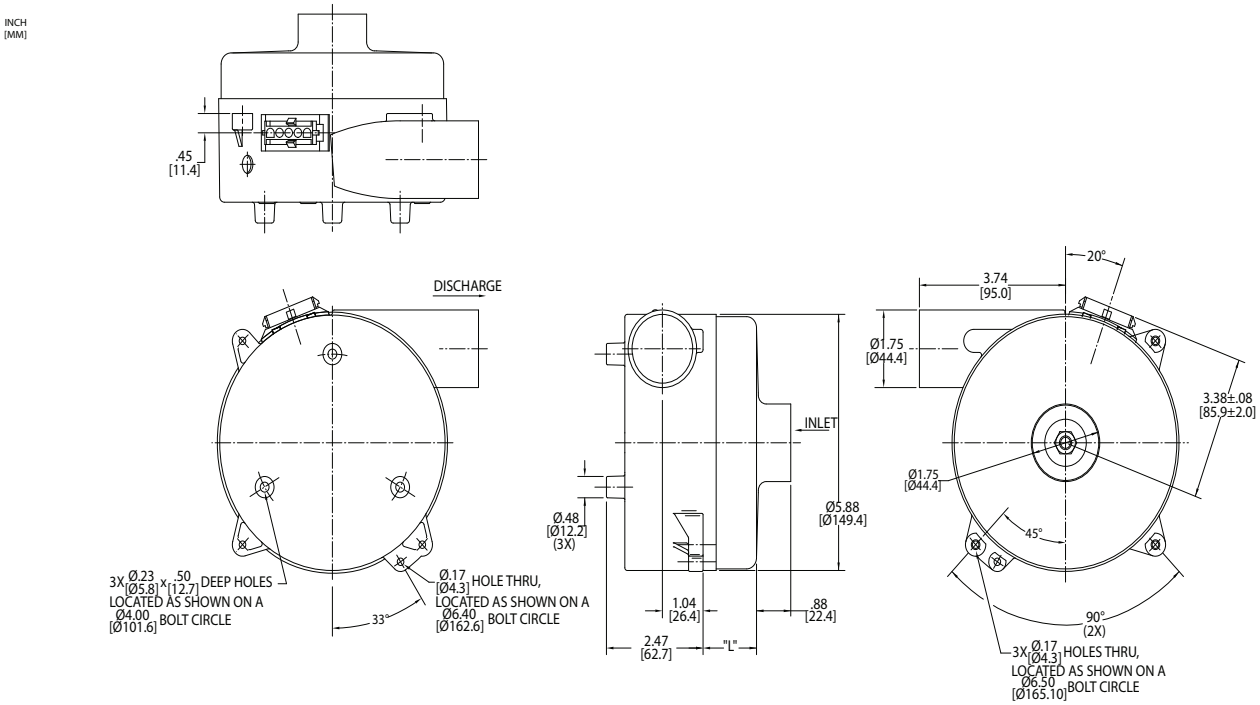
PRECISION MOTION CONTROL

## Low Voltage Brushless DC Blowers

## 5.7" (145mm) BLDC Thru Flow Blower

72 VDC Input, High Flow System




| | | Part/ Model Number | | | |
|---|---|---|---|---|---|
| Specification | Units | 150429 | 150459 | 150430 | 150460 |
| Stages | - | 1 | 1 | 2 | 2 |
| Input Voltage | VDC | 64-79 | 64-79 | 64-79 | 64-79 |
| Max Sealed Pressure | in. H2O | 37.9 | 37.9 | 65.8 | 65.8 |
| | mbar | 94.4 | 94.4 | 163.9 | 163.9 |
| Max Flow Rate | CFM | 118.9 | 118.9 | 95.2 | 95.2 |
| | m3/hr | 202.1 | 202.1 | 161.8 | 161.8 |
| Length (L) | Inches | 0.81 | 0.81 | 1.81 | 1.81 |
| | mm | 20.6 | 20.6 | 46 | 46 |
| Speed Control | - | Analog Spd. Cmd. | Potent. Adjust. | Analog | Potent. Adjust. |

**Notes:**

- **Temperature**: Working Air: 0°C to 45°C , Ambient Air: 0°C to 45°C, Storage: -40°C to 85°C.
- When used as a vacuum, the blower performance might be less then shown herein, depending on the operating point.
- **Weight** = 6 lb / 2.2 Kg

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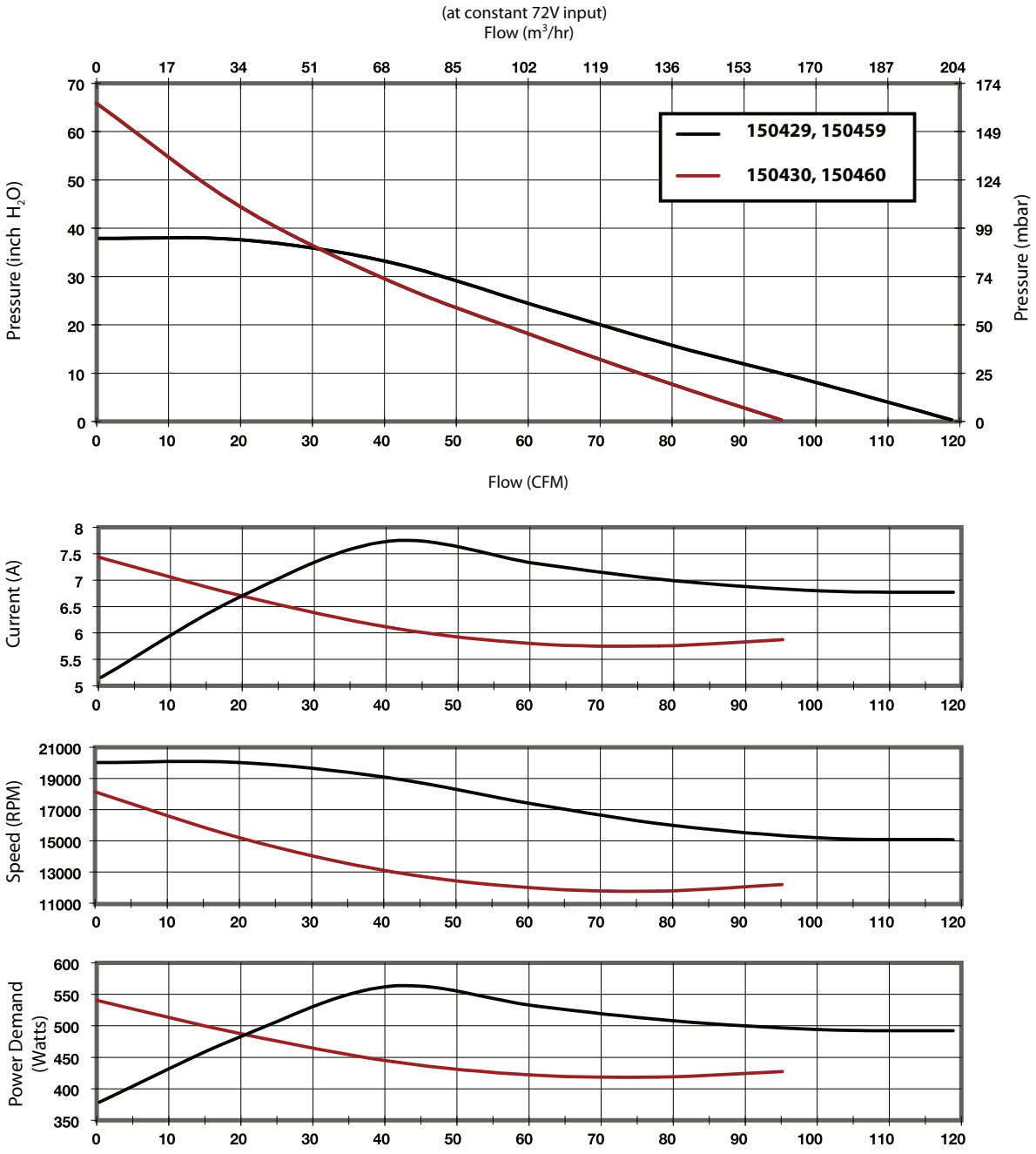


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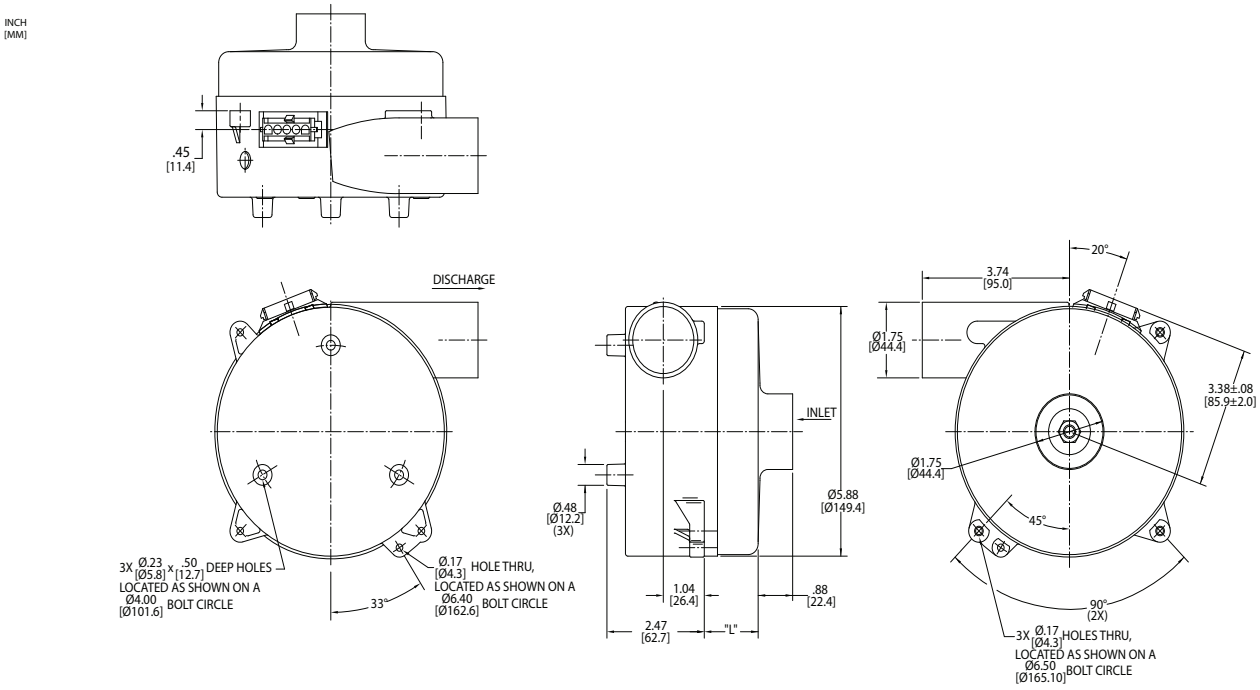


| | | Part/ Model Number | | | | | |
|---|---|---|---|---|---|---|---|
| Specification | Units | 150427 | 150457 | 150128 | 150462 | 150428 | 150458 |
| Stages | - | 1 | 1 | 2 | 2 | 3 | 3 |
| Input Voltage | VDC | 64-79 | 64-79 | 64-79 | 64-79 | 64-79 | 64-79 |
| Max Sealed Pressure | in. H2O | 35.8 | 35.8 | 72.1 | 72.1 | 97.7 | 97.7 |
| | mbar | 89.2 | 89.2 | 179.6 | 179.6 | 243.4 | 243.4 |
| Max Flow Rate | CFM | 85.5 | 85.5 | 74.7 | 74.7 | 63.5 | 63.5 |
| | m3/hr | 145.4 | 145.4 | 127 | 127 | 108 | 108 |
| Length (L) | Inches | 0.81 | 0.81 | 1.50 | 1.5 | 2.17 | 2.17 |
| | mm | 20.6 | 20.6 | 38.1 | 38.1 | 55.1 | 55.1 |
| Speed Control | - | Analog | Potent. Adjust. | Analog | Potent. Adjust. | Analog | Potent. Adjust. |

**Notes:**

- **Temperature**: Working Air: 0°C to 45°C , Ambient Air: 0°C to 45°C, Storage: -40°C to 85°C.
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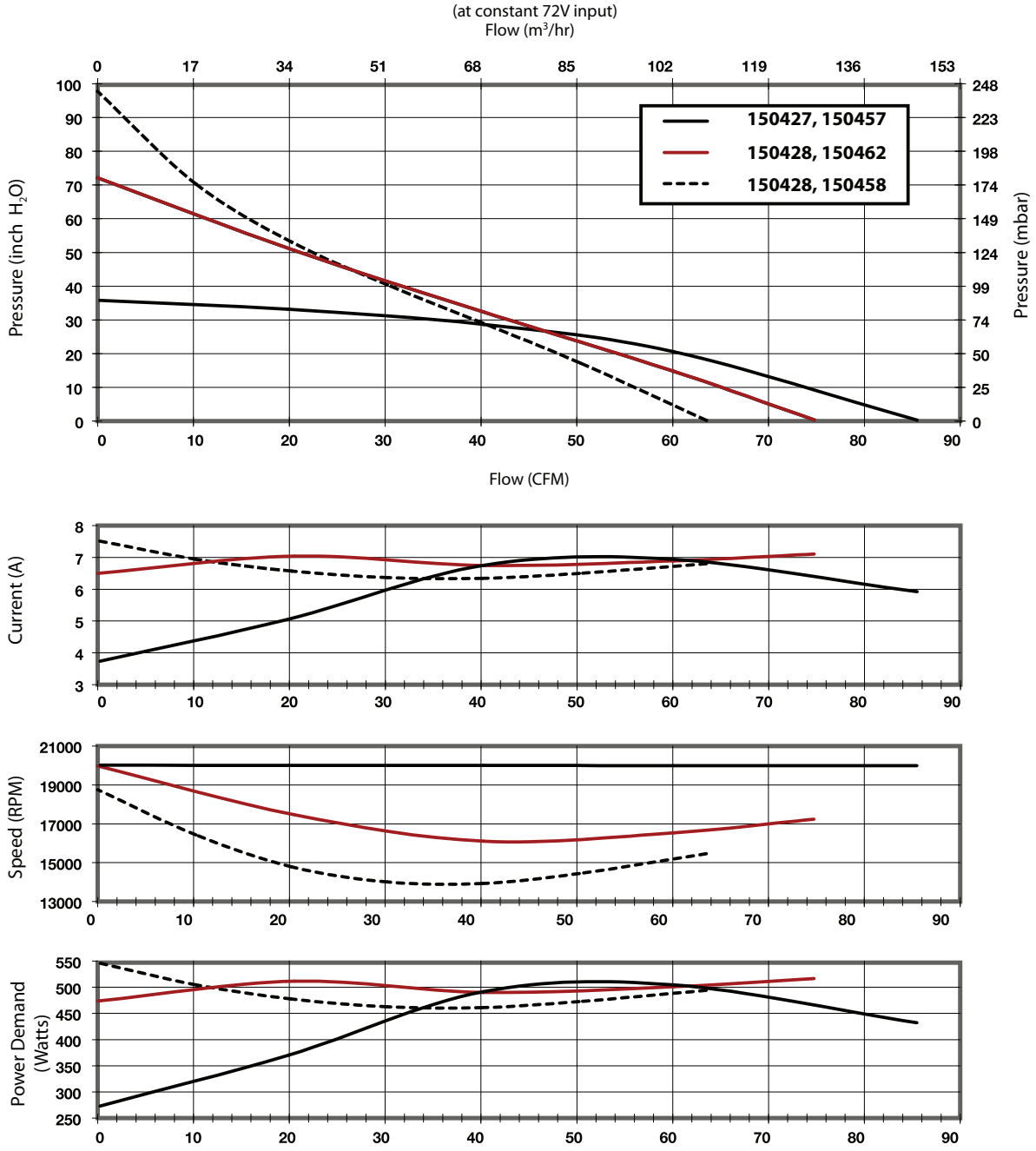
## 5.7" (145mm) BLDC Thru Flow Blower

72 VDC Input, Standard Flow System

### Typical Performance




Data presented represents blower performance at STANDARD AIR DENSITY, .075 lb/ft³ (29.92" Hg, Sea Level, 68° F)
Vacuum performance available upon request.

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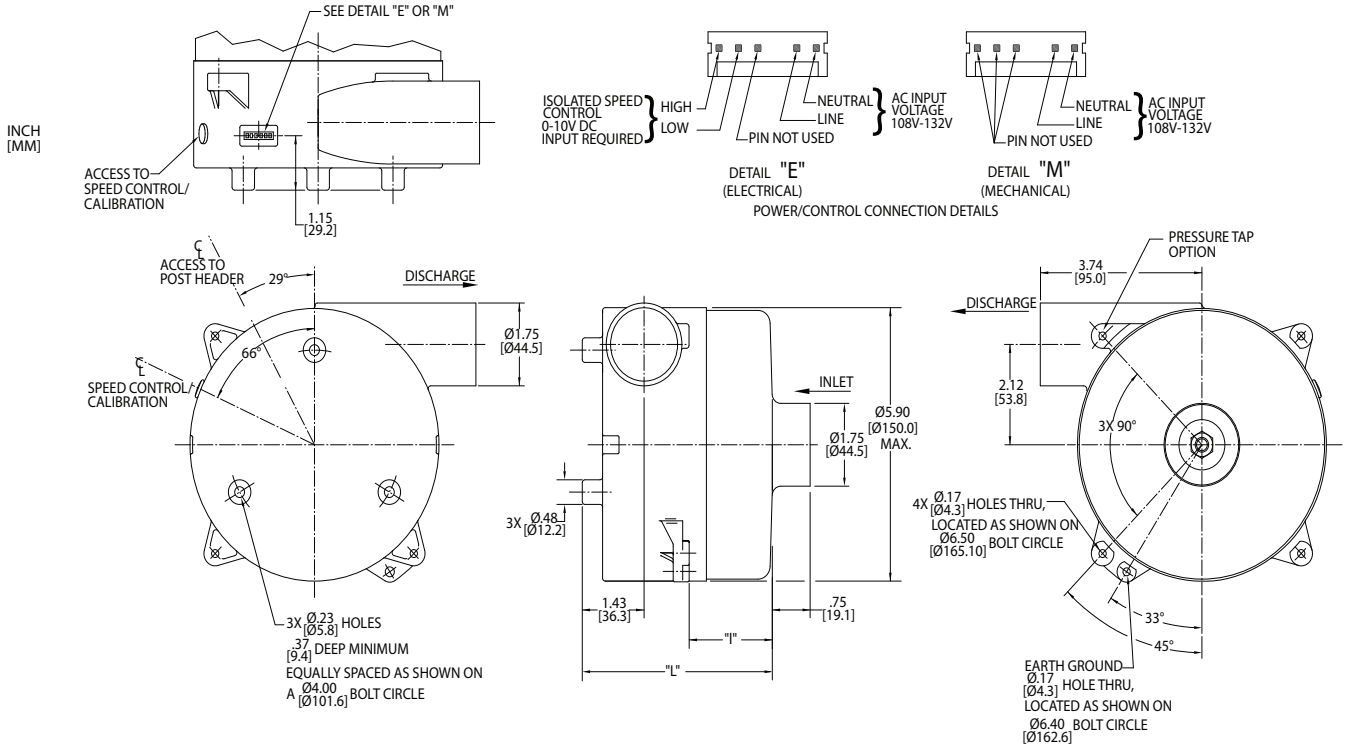
AMETEK®
PRECISION MOTION CONTROL

## High Voltage Brushless DC Blowers

# 5.7" (145mm) BLDC Thru Flow Blower

250 Watt, 120 Volt High Flow




| | | Part/ Model Number | | | |
|---|---|---|---|---|---|
| Specification | Units | 116644 M | 116647 E | 116645 M | 116648 E |
| Stages | - | 1 | 1 | 2 | 2 |
| Max Sealed Vacuum | in. H2O | 26.5 | 26.5 | 46.7 | 46.7 |
| | mbar | 66 | 66 | 116.3 | 116.3 |
| Max Sealed Pressure | in. H2O | 27.3 | 27.3 | 48.1 | 48.1 |
| | mbar | 68 | 68 | 119.8 | 119.8 |
| Max Flow Rate | CFM | 130.5 | 130.5 | 98.2 | 98.2 |
| | m3/hr | 221.9 | 221.9 | 166.9 | 166.9 |
| Length (I) | Inches | 0.76 | 0.76 | 1.81 | 1.81 |
| | mm | 19.3 | 19.3 | 46 | 46 |
| Length (L) | Inches | 3.23 | 3.23 | 4.28 | 4.28 |
| | mm | 82 | 82 | 108.7 | 108.7 |
| Speed Control | - | Mechanical | Electrical | Mechanical | Electrical |

**Notes:**

- **Input Voltage Range:** 108-132 Volts AC RMS, 50/60 Hz., Single Phase.
- **Input Current:** 5 amps AC RMS
- **Operating Temperature (Ambient Air and Working Air):** 0˚ C to 50˚ C
- **Storage Temperature:** -40˚ C to 85˚ C
- **Dielectric Testing:** 1500 Volts AC RMS 60 Hz applied for one second between input pins and ground, 3mA leakage maximum.
- **Speed Control:** E (Electrical) Pulse Width Modification or Analog input voltage (user supplied), 0 to 10 Volts DC,10mA maximum, 3 to 15 Volts DC. Access to sensitivity adjustment for 0 to 10 VDC speed control. (Ref. pin connection).
  M (Mechanical): A potentiometer is available for speed control of the blower. The potentiometer can be preset for a specific speed. Access for speed adjustment located in blower housing.
- **Approximate Weight:** 6 Lbs. / 2.2 Kg.
- **Regulatory Agency Certification:** Underwriters Laboratories, Inc. qualified per UL507 under File E-94403. Canadian Standards Association qualified per C22.2#113 under File LR 43448.
- **Miscellaneous:** Intake and exhaust tubes, all cooling ducts and vents must not be obstructed. Intake and exhaust must be free of grease, oil and foreign particles. Amp housing 640250-6 w/SL-156 contacts (suppied by customer) mates with post header assembly.
  Mating harness available upon request.
  Optional IntelliGen™ controller available for customized performance and features including: tachometer output card; Universal AC input (100V-240V).

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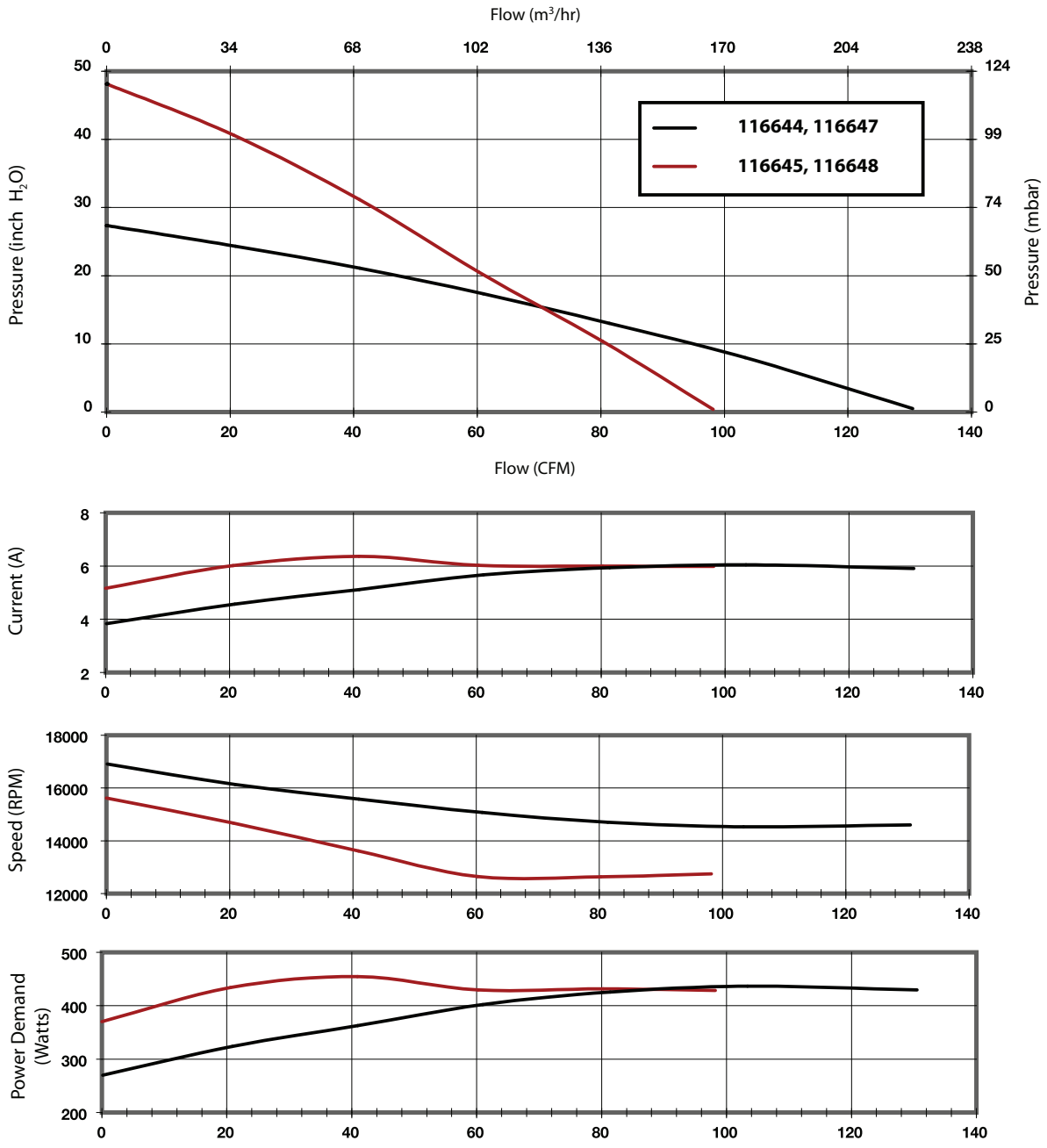
## 5.7" (145mm) BLDC Thru Flow Blower

250 Watt, 120 Volt High Flow

### Typical Performance

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Vacuum performance available upon request.

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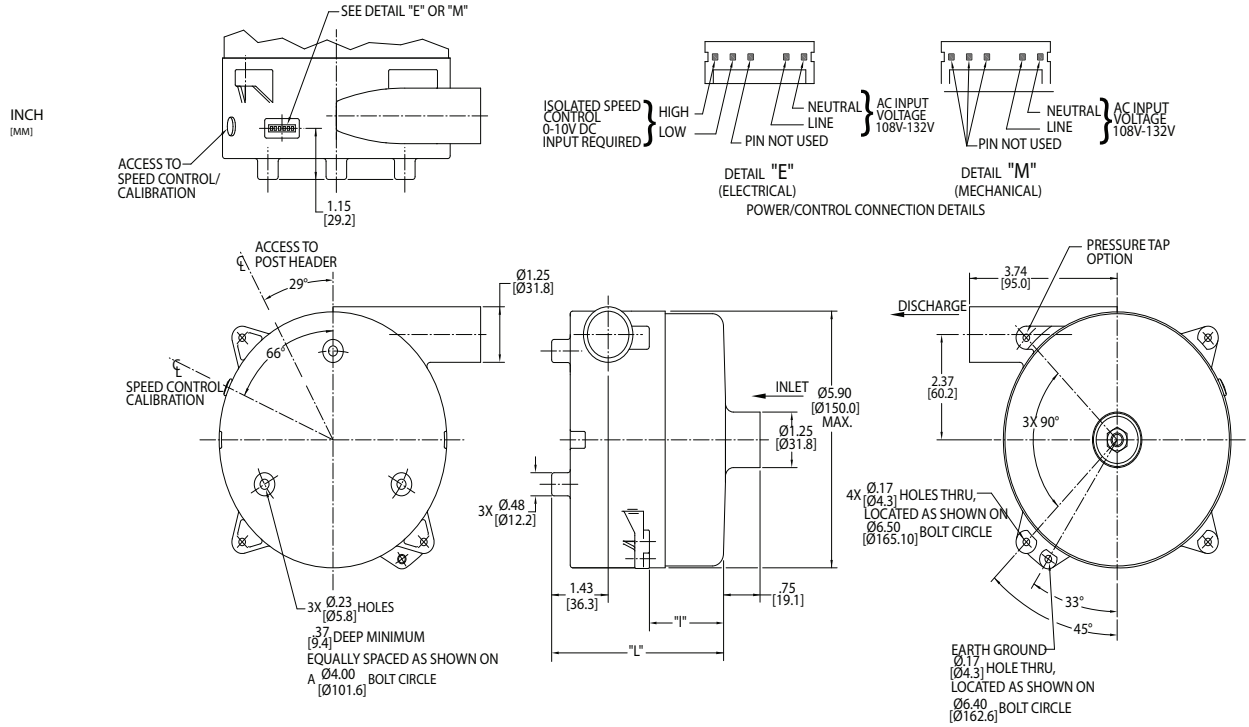
## High Voltage Brushless DC Blowers

# 5.7" (145mm) BLDC Thru Flow Blower

250 Watt, 120 Volt Standard Flow




| | | Part/ Model Number | | | |
|---|---|---|---|---|---|
| Specification | Units | 116626 | 116629 | 116627 | 116630 |
| Stages | - | 1 | 1 | 2 | 2 |
| Max Sealed Vacuum | in. H2O | 28.4 | 28.4 | 50.0 | 50.0 |
| | mbar | 70.7 | 70.7 | 124.6 | 124.6 |
| Max Sealed Pressure | in. H2O | 29.3 | 29.3 | 50.6 | 50.6 |
| | mbar | 73 | 73 | 126 | 126 |
| Max Flow Rate | CFM | 64.5 | 64.5 | 66 | 66 |
| | m3/hr | 109.7 | 109.7 | 112.2 | 112.2 |
| Length (I) | Inches | 0.69 | 0.69 | 1.60 | 1.60 |
| | mm | 17.5 | 17.5 | 40.6 | 40.6 |
| Length (L) | Inches | 3.16 | 3.16 | 4.07 | 4.07 |
| | mm | 80.3 | 80.3 | 103.4 | 103.4 |
| Speed Control | - | Mechanical | Electrical | Mechanical | Electrical |

**Notes:**

- **Input Voltage Range:** 108-132 Volts AC RMS, 50/60 Hz., Single Phase.
- **Input Current:** 5 amps AC RMS
- **Operating Temperature (Ambient Air and Working Air):** 0˚ C to 50˚ C
- **Storage Temperature:** -40˚ C to 85˚ C
- **Dielectric Testing:** 1500 Volts AC RMS 60 Hz applied for one second between input pins and ground, 3mA leakage maximum.
- **Speed Control:** E (Electrical) Pulse Width Modification or Analog input voltage (user supplied), 0 to 10 Volts DC,10mA maximum, 3 to 15 Volts DC. Access to sensitivity adjustment for 0 to 10 VDC speed control. (Ref. pin connection).
  M (Mechanical): A potentiometer is available for speed control of the blower. The potentiometer can be preset for a specific speed. Access for speed adjustment located in blower housing.
- **Approximate Weight:** 6 Lbs. / 2.2 Kg.
- **Regulatory Agency Certification:** Underwriters Laboratories, Inc. qualified per UL507 under File E-94403. Canadian Standards Association qualified per C22.2#113 under File LR 43448.
- **Miscellaneous:** Intake and exhaust tubes, all cooling ducts and vents must not be obstructed. Intake and exhaust must be free of grease, oil and foreign particles. Amp housing 640250-6 w/SL-156 contacts (suppied by customer) mates with post header assembly.
  Mating harness available upon request.
  Optional IntelliGen™ controller available for customized performance and features including: tachometer output card; Universal AC input (100V-240V).

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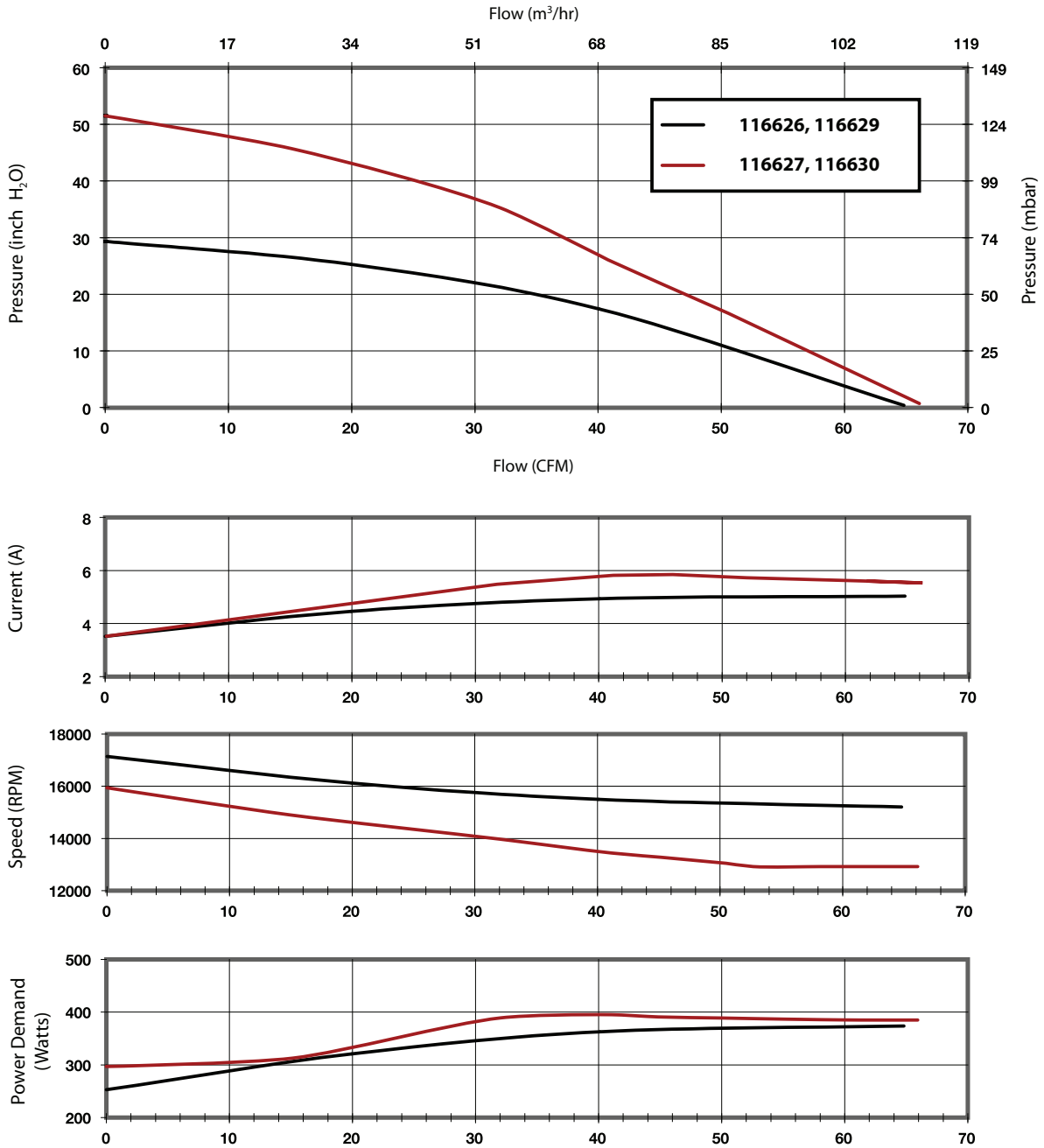
## 5.7" (145mm) BLDC Thru Flow Blower

250 Watt, 120 Volt Standard Flow

### Typical Performance

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Vacuum performance available upon request.

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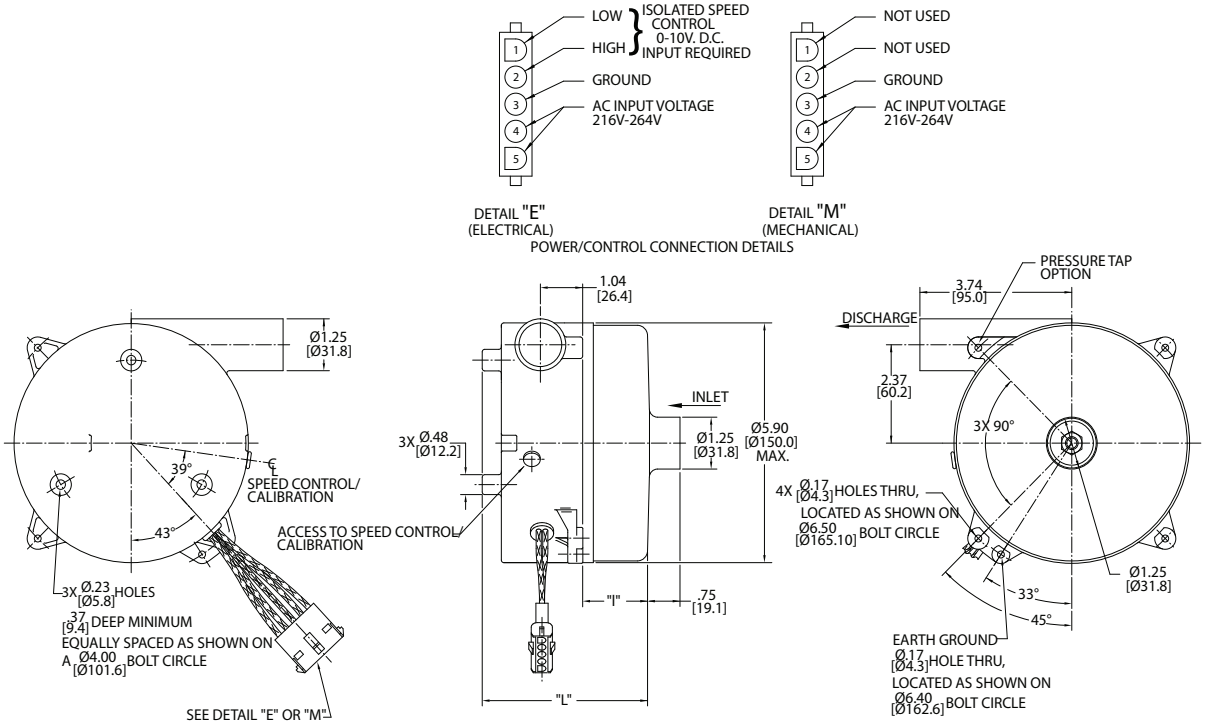
## High Voltage Brushless DC Blowers

## 5.7" (145mm) BLDC Thru Flow Blower

400 Watt, 240 Volt Standard Flow

INCH
[MM]




| | | Part/ Model Number | |
|---|---|---|---|
| Specification | Units | 117629 | 117630 |
| Stages | - | 1 | 2 |
| Max Sealed Vacuum | in. H2O | 28 | 47 |
| | mbar | 69.7 | 117.1 |
| Max Sealed Pressure | in. H2O | 31 | 50 |
| | mbar | 77.2 | 124.6 |
| Max Airflow | CFM | 67 | 65 |
| | m3/hr | 113.9 | 110.5 |
| Length (I) | Inches | .69 | 1.6 |
| | mm | 17.5 | 40.6 |
| Length (L) | Inches | 3.21 | 4.12 |
| | mm | 81.5 | 104.6 |
| Speed Control | - | Electrical | Electrical |

**Notes:**

- **Input Voltage Range:** 216-264 Volts AC RMS, 50/60 Hz., Single Phase.
- **Input Current:** 5 amps AC RMS
- **Operating Temperature (Ambient Air and Working Air):** 0˚ C to 50˚ C
- **Storage Temperature:** -40˚ C to 85˚ C
- **Dielectric Testing:** 1800 Volts AC RMS 60 Hz applied for one second between input pins and ground, 3mA leakage maximum.
- **Speed Control:** E (Electrical) Pulse Width Modification or Analog input voltage (user supplied), 0 to 10 Volts DC, 10mA maximum, 3 to 15 Volts DC. Access to sensitivity adjustment for 0 to 10 VDC speed control. (Ref. pin connection).
  M (Mechanical): A potentiometer is available for speed control of the blower. The potentiometer can be preset for a specific speed. Access for speed adjustment located in blower housing.
- **Approximate Weight:** 6 Lbs. / 2.2 Kg.
- **Regulatory Agency Certification:** Underwriters Laboratories, Inc. qualified per UL507 under File E-94403. Canadian Standards Association qualified per C22.2#113 under File LR 43448.
- **Miscellaneous:** Intake and exhaust tubes, all cooling ducts and vents must not be obstructed. Intake and exhaust must be free of grease, oil and foreign particles. Amp housing 350809-1 with sockets for 18 awg lead wire (suppied by customer) mates with post header assembly.
  Mating harness available upon request.
  Optional IntelliGen™ controller available for customized performance and features including; tachometer output card; Universal AC input (100V-240V).

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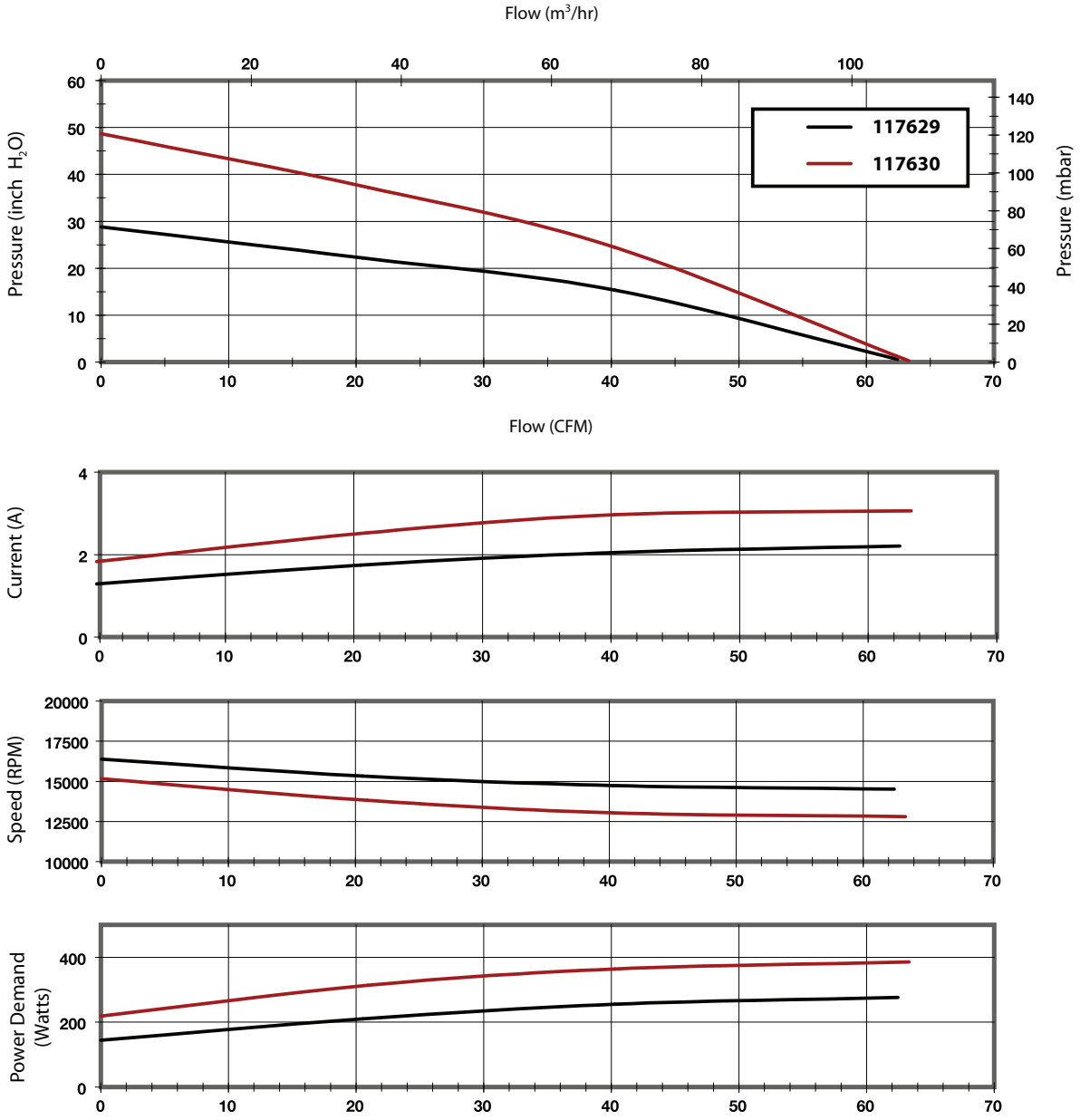
## 5.7" (145mm) BLDC Thru Flow Blower

Windjammer® BRUSHLESS BLOWERS

400 Watt, 240 Volt Standard Flow

### Typical Performance

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Vacuum performance available upon request.

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AMETEK® PRECISION MOTION CONTROL

AMETEK *Windjammer* Low Voltage Brushless DC blowers offer a wide range of performance for applications with power supplies of 72 VDC and less. The following pages detail each model family, including performance, size, and input voltage.

All brushless DC blowers require an electronic controller for operation. Most of the model families herein are offered with an onboard controller, and there are features and/or options available for customization.

***Speed Control:*** Among the low voltage model families there are several methods for modulating blower speed.

Potentiometer Adjustment → the specified supply voltage is applied to power the blower and the speed is set by simply adjusting a potentiometer on the side of the blower.

Analog Speed Command Signal → blower speed is proportional to an analog command signal. Depending on the particular model, the range of the command signal is either 0-4V, 0-5V, or adjustable within 0-10V.

(i) For *5.0 inch Windjammer* models equipped with analog speed command, blowers operate on a 0-4V command signal. Maximum speed is reached at 4V or less depending on the blower's operating point. The speed command pin may by connected to the blower's 12V or 24V $V_{in}$ pin to ensure full speed.

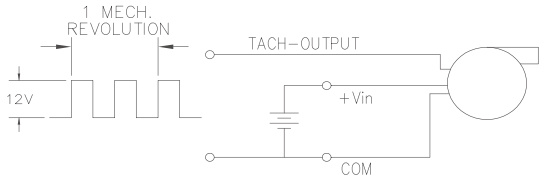
(ii) The *5.7 inch Windjammer* models have a calibration potentiometer that allows the user to set the range over which the speed command signal operates within a 0-10V range, or to precisely calibrate a group of blowers to the same speed for a given command voltage and operating condition.

(iii) Blowers designed for one of AMETEK's low voltage external controllers can be configured to modulate speed via either a 0-5V analog command signal or potentiometer adjustment as described above.

2-Wire Operation → The *3.0, 3.3, and 4.5 inch Windjammers* operate with a different type of controller than other model families. These blowers have a simple two-wire configuration. The blower speed is directly proportional to the supply voltage, and there is no separate speed command signal input. The supply voltage powers both the motor winding and the motor controller. Operating points below the minimum specified supply voltage can be achieved by providing a third wire to power the motor controller separately from the motor winding. This feature is available upon request. The specification pages for each of these blower models list the supply voltage range.

***Note:*** None of the blowers herein are designed to maintain constant speed if the blower operating point changes. The speed will change with changing load (the amount of backpressure), even if the speed control remains fixed.

***Tachometer Output:*** A square wave output that is proportional to blower speed comes as a standard feature in the 24VDC *5.7 inch Windjammer* models, and it's an option that is available in the *3.0, 3.3, and 4.5 inch Windjammers*. The output signal is a square wave whose signal is 2x the blowers rotational frequency:




***External Controllers:*** All of the models herein can be configured to operate with a separate external controller, and AMETEK's product offering does include several stand-alone controller models. The *5.0 inch Windjammer* model family has standard blower models already configured for external control. The other models (*3.0, 3.3, 4.5, and 5.7 inch Windjammers*) can be custom ordered to operate with an external controller - please contact an Ametek sales representative to inquire. Note: the *5.1 inch Windjammer* must use an external controller - it is not available with internal controller at this time.

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***5.7 Bypass or Thru Flow:*** The *5.7 inch Windjammer* product family offers two flow path configurations: Bypass or Thru Flow. The Bypass configuration separates the motor and controller from the working air, whereas the working air passes over the motor and controller in a Thru Flow configuration. The Thru Flow configuration shortens the package size but has a narrower range of operation due to thermal limitations of the motor and controller.

***Locked-Rotor and Thermal Protection:***

*5.7 inch Windjammers* → All models include locked rotor and thermal protection

*5.1 inch Windjammer* → Locked rotor protection depends on the controller being used. If using Ametek 48140 controller, locked rotor protection is enabled. No thermal protection.

*5.0 inch Windjammers* → All models with on-board controllers include locked rotor protection. If using an external controller, locked rotor protection depends on the controller design. Thermal protection is not available for this model family.

*3.0, 3.3, and 4.5 inch Windjammers* → These models have neither locked rotor nor thermal protection. Users are advised to include a fuse for circuit protection. See performance sheets for individual blower models for fuse sizing.

***Other Features and Miscellaneous Notes:***

- *5.0 inch Windjammers* are available with inlet tube for connecting a hose to the blower inlet. See *5.0 inch Windjammer* pages herein for details.
- *5.0 inch Windjammers* can be equipped with an external balancing disk for applications with tight noise and vibration constraints. Contact AMETEK Sales for inquiries regarding this feature.
- *3.0, 3.3, and 4.5 inch Windjammers* can be configured to have separate $V_{in}$ for the controller and the motor, as mentioned above. This allows very low input voltage on the motor (low speed) without shutting down the drive electronics. The controller $V_{in}$ can be configured to accept a specific supply voltage depending on an application's needs.
- *5.7 Windjammers* designed for 48V and 72V input do not have an option for tachometer output at this time. 24V models have a tachometer output as a standard feature. Also, the analog speed command for 24V *5.7 Windjammer* shares a common with the 24V supply voltage. For the 48V and 72V 5.7 Windjammers, the analog speed command input is isolated from the power supply input. See pages herein for specifics about each model.

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