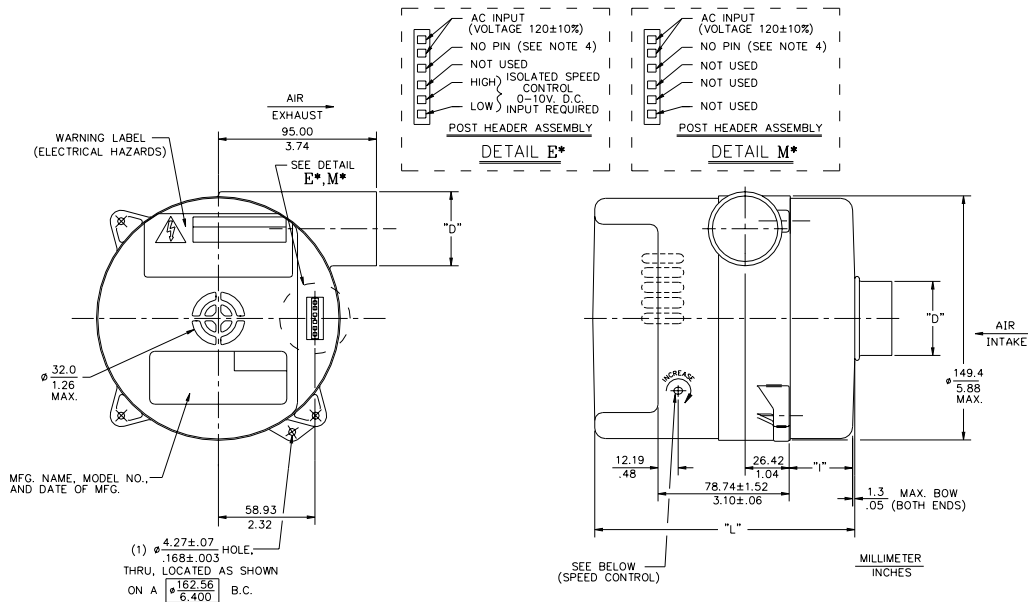


Tech Bulletin

5.7" (145mm) BLDC Bypass Blower

250 WATT, 120 VOLT



Blower Data	Unit of Measure	Part Number					
		Standard Flow			High Flow		
		116634 M*	116633 M	116632 M*	116637 M*	116636 M*	116635 M
		116640 E*	116639 E	116638 E*	116643 E*	116642 E*	116641 E
Stages		1	2	3	1	2	3
Vacuum, Max. (Sealed Vacuum)	in. H ₂ O	29	48	65	26	57.5	42
	mBar	72	119	161	64	143	104
Pressure, Max. (Sealed Pressure)	in. H ₂ O	32	56	76	27	48	46
	mBar	79	139	188	67	119	114
Flow Rate, Max. (Open Flow)	CFM	68	63	49	115	90	80
	L/sec	32	30	23	54	42	38
Inlet/Outlet Diameter (Dimension "D" above)	inches	1.25	1.25	1.25	1.75	1.75	1.75
	mm	31.75	31.75	31.75	44.45	44.45	44.45
Length (Dimension "I" above)	inches	0.33	1.25	2.14	0.47	1.53	2.53
	mm	8.38	31.75	54.36	11.94	38.86	64.26
Length (Dimension "L" above)	inches	5.08	6.35	6.89	5.22	6.27	7.28
	mm	129.03	161.29	175.01	132.59	159.26	184.91

Typical Performance Points

Air Flow		Pressure					
0 CFM	in. H ₂ O	31.8	56.1	76.2	27.1	48.1	46.0
10 CFM	in. H ₂ O	28.7	48.0	60.3	25.0	44.0	42.8
20 CFM	in. H ₂ O	27.7	44.3	44.1	24.4	41.6	39.2
30 CFM	in. H ₂ O	24.7	38.1	28.9	22.9	37.9	34.9
40 CFM	in. H ₂ O	20.1	28.9	16.1	21.2	32.2	30.0
50 CFM	in. H ₂ O	14.5	18.2		19.1	25.8	24.3
60 CFM	in. H ₂ O	7.3	4.2		17.2	20.5	16.2
70 CFM	in. H ₂ O				15.0	15.8	9.8
80 CFM	in. H ₂ O				12.2	7.1	
90 CFM	in. H ₂ O				8.0		
100 CFM	in. H ₂ O				5.5		

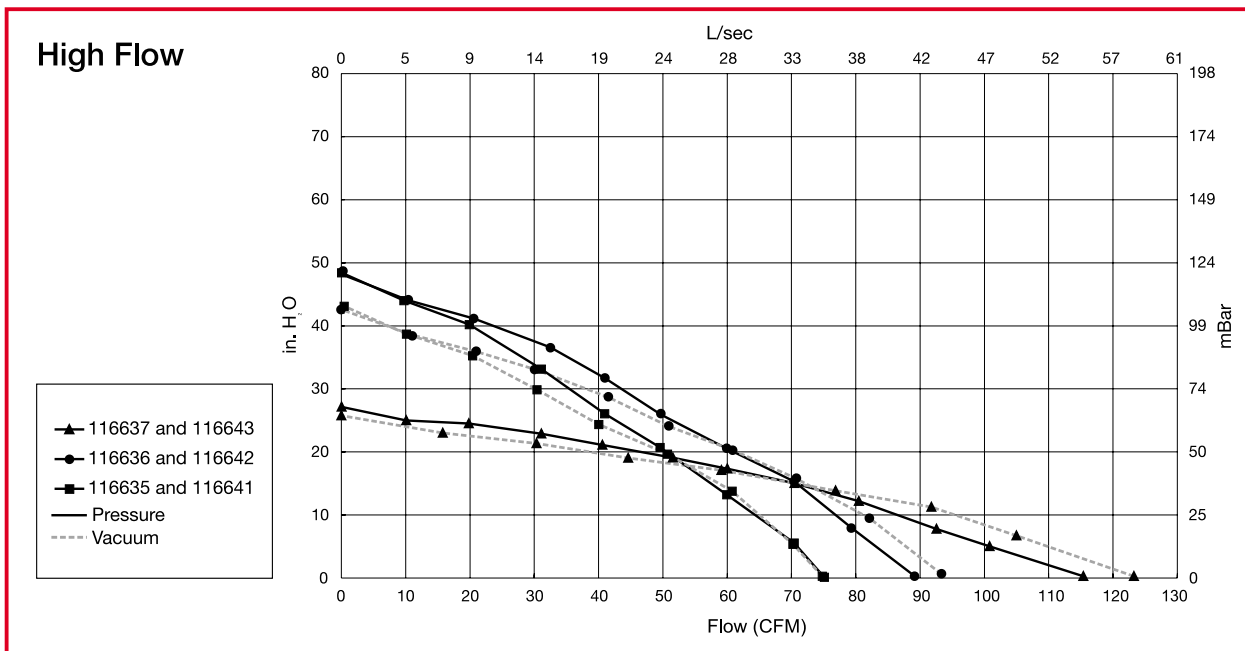
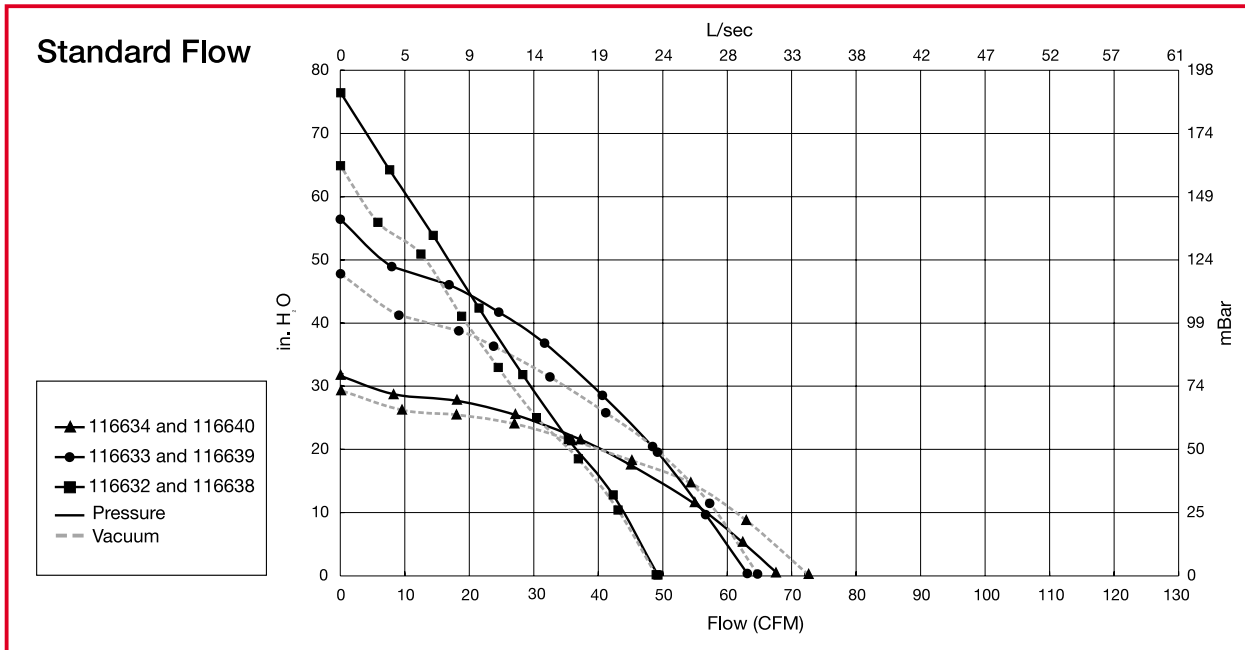
*These part numbers are available through AMETEK Rotron distributors.

NOTES:

- **Nominal input voltage:** 120 Volts AC RMS +/- 10%, 50/60Hz
- **Input current:** 5 amps AC RMS maximum
- **Temperature:** Working Air: 0°C to 50°C, Ambient Air: 0°C to 50°C, Storage Air: -40°C to 85°C
- **Dielectric Testing:** 1500 volts AC RMS 60Hz applied for one second between input pins and ground, 3mA leakage max.
- **Speed Control:** E (Electrical): Pulse Width Modulation or Analog input voltage (User Supplied), 0 to 10 Volts DC Nominal, 10mA Maximum, 3 to 15 volts DC Maximum. Access to sensitivity adjustment for 0-10 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 to speed adjustment.

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- **Maximum Approximate Weight:** 6 lbs.
- **Regulatory Agency Certification:** Underwriters Laboratories, Inc. is qualified per UL507 under File E-94403; Canadian Standards Association is qualified per C22.2#113 under File LR 43448.
- **Miscellaneous:** Intake & exhaust tubes, all cooling ducts and vents must not be obstructed. Intake and exhaust are free of grease, oil, or foreign particles. Amp housing #640250-6 (to be supplied by customer), mates with post header assembly. Mating harness available upon request. Refer to (page 84) for specific part numbers.

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. The performance data on this page depicts typical performance under controlled laboratory conditions, data is corrected to 0.075 lb./ft³ air density (29.92" Hg @ 70° F.). Actual performance will vary depending on the operating environment and application. AMETEK Rotron products are not designed for use with volatile, hazardous or corrosive gases. Blower housings are not sealed, slight air/gas leakage will occur. AMETEK Rotron products are not designed for and should not be used in medical life support applications. AMETEK reserves the right to revise its products without notification. The above characteristics represent standard products. For product designed to meet specific applications contact AMETEK Rotron Marketing and Sales.