



## In-Line Bilge Blower Installation Instructions

Rule in-line blowers provide ventilation for bilges, engine compartments, galleys and heads. Designed for efficient, high output operation, these blowers feature our exclusive front and rear shaft seals and corrosion resistant motor housings for long life. Compact and easily installed on any flat surface, Rule in-line blowers provide higher air flow, lower amp draw and quieter operation than standard blowers.

### PLEASE SAVE THESE INSTRUCTIONS

#### FEATURES

- Rule In-Line Blowers provide ventilation for engine compartments, bilges, galleys, and marine head closets
- Computer optimized blade profile and housing design produce efficient high volume air flow
- Designed for easy installation. Mounts in any position to any flat surface
- Grip tab duct connections prevent clamp slide-off
- Sealed motor shafts for moisture protection
- Low current draw
- Corrosion resistant materials throughout
- ISO 9097 MARINE compliant
- N.M.M.A. Type Accepted
- Meets ISO 8846 MARINE and USCG Regulation 183.419 (Ignition protected)



## WARNING:

Read and understand instructions thoroughly before proceeding with installation. Improper installation may result in loss of adequate ventilation in engine compartment.

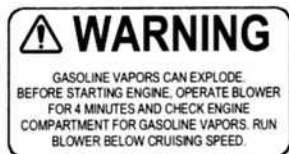
- ✓ To prevent personal injury, always disconnect one of the main battery leads when installing or servicing this product.
- ✓ Make sure the power source matches the voltage rating printed on the top of the product.
- ✓ Always use a fuse with amperage rating specified for the blower model. Failure to do so may result in serious personal injury or fire hazards.

#### MODELS AVAILABLE

Model No.	Duct Diameter	Specification Voltage	Open Flow CFM	Amp Draw	Fuse Size
140	3" (75mm)	13.6	135 (3.8 m <sup>3</sup> /min.)	2.9A	4A
140-24V	3" (75mm)	27.2	135 (3.8 m <sup>3</sup> /min.)	1.7A	2.5A
240	4" (100mm)	13.6	235 (6.6 m <sup>3</sup> /min.)	4.3A	7A
240-24V	4" (100mm)	27.2	235 (6.6 m <sup>3</sup> /min.)	2.4A	4A

#### REQUIRED FOR INSTALLATION

- Drill and suitable drill bit
- Screwdriver
- Wire cutter/stripper
- Flexible Blower Ducting, 3" (75mm) or 4" (100mm) I.D. (depending on blower model)
- Two cable tie wraps (15.5" STD)
- Two #10 (13mm) stainless steel pan head screws
- Fuse: 4 amp for 3" (75mm) blower  
7 amp for 4" (100mm) blower
- In-line fuse holder suitable for above fuse
- ON/OFF switch: 5 amp for 3" (75mm) blower  
10 amp for 4" (100mm) blower
- 16 gauge wire: yellow and black
- Crimp-on wire connectors for 16 gauge wire



M-1416

#### INSTALLATION

INSTALLATIONS MUST MEET APPLICABLE SECTIONS OF TITLE 33, PART 183; SUB-PART K, USCG VENTILATION REGULATIONS.

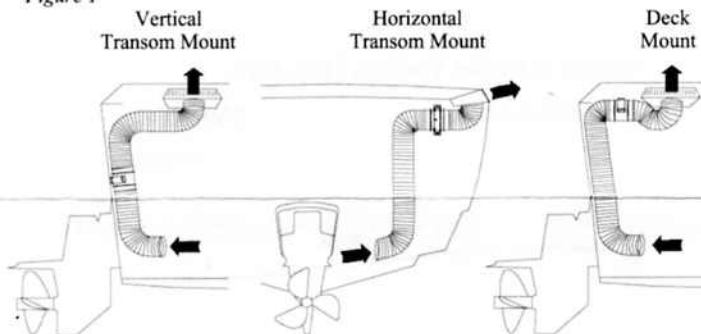
To prevent personal injury, disconnect one of the main battery leads before installing the blower.

The Rule In-Line Blower is designed for easy installation. It may be positioned anywhere along the length of ducting leading to the area being ventilated. (see Fig. 1) The blower may be secured to any solid, flat mounting surface and oriented in any direction. For maximum motor protection, it is best to mount the blower where it will not be exposed to moisture from spray or deck wash and slightly inclined so any moisture will drain back to the lower end of the duct run.

#### MOUNTING INSTRUCTIONS

1. Locate a suitable flat mounting surface on the transom or under the deck. Position blower with flow arrow towards exhaust vent and slightly angled towards engine compartment to avoid moisture build-up.
2. Using the blower as a template, mark holes for mounting feet and drill for #10 screws. Secure blower in place taking care not to over tighten screws or penetrate the hull.
3. Twist duct hose over blower ends up to stiffening rings. Use of a good quality, reinforced (non-collapsing) non flame supporting duct is recommended.
4. Secure duct with cable tie wraps positioned around the blower housing between the stiffening rings and the end flange tabs. The tabs will prevent the duct from coming off of the unit. The use of metal hose clamps is not recommended, but if you must, please do not overtighten as this may adversely affect blade clearance.
5. Run intake duct to the bilge with as few bends as possible. The intake must be below the top of the engine stringers, yet must not become submerged in the normal level of bilge water accumulation.
6. Run exhaust duct to the exhaust vent or collector box with as few bends as possible. Secure duct to vent.

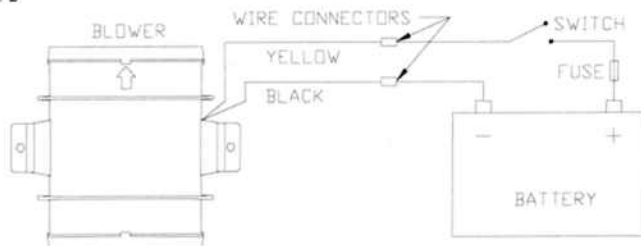
Figure 1



#### WIRING INSTRUCTIONS

1. Using a quality marine grade stranded copper wire, wire blower as shown in Figure 2. For runs up to 50 feet (measured from power source to blower and back to ground) use 16 gauge wire. For runs of 50 to 80 feet, use 14 gauge wire. To comply with A.B.Y.C. and N.M.M.A. recommendations, the positive (+) conductor must be yellow and the negative (-) conductor must be black.
2. Splice a suitable fuseholder into the conductor from the positive (+) battery terminal. Choose an easily accessible location that is within 72" (180cm) of the battery.
3. Connect on-off switch to the positive (+) conductor and mount switch in the dash control panel. If your boat does not have a blower warning label like the one shown below, contact Rule customer service and ask for a free label. Part No. M-1416

Figure 2



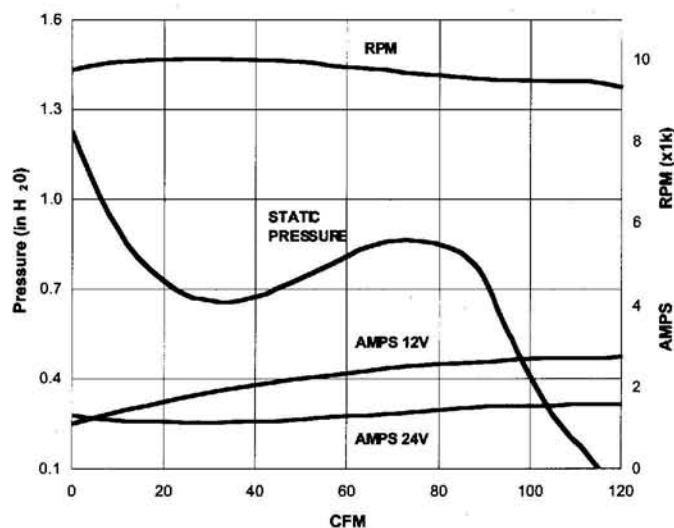
Rule



# ABYC H2/ISO MARINE Blower Performance Specifications

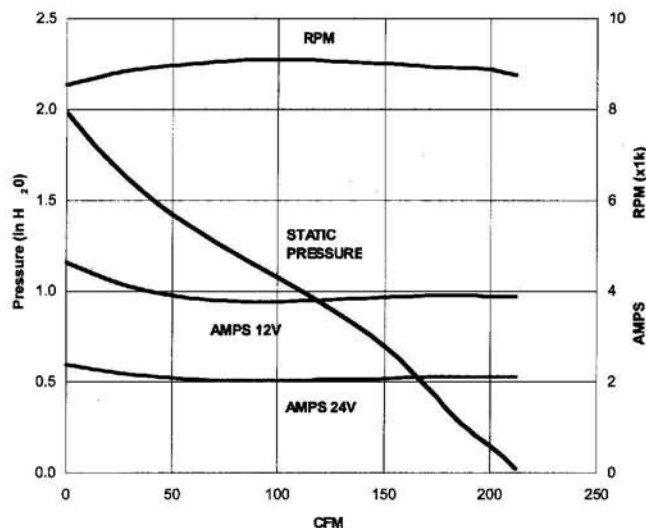
## Performance at Nominal Voltage

**3" Blower Model 140**      **12 VDC**  
**Model 140-24V**      **24 VDC**



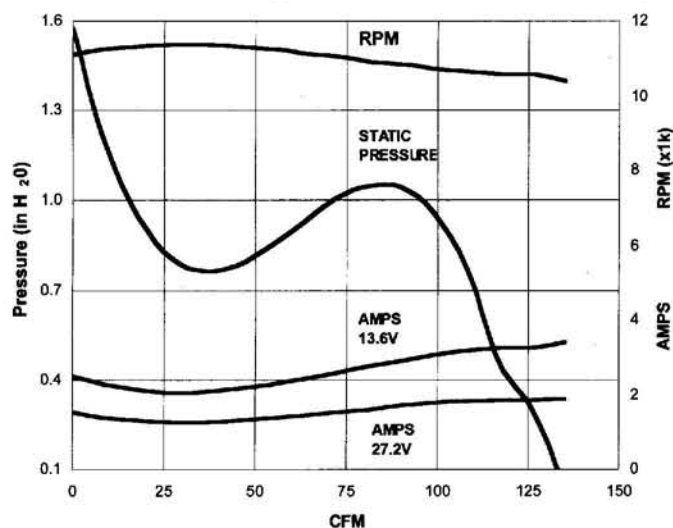
## Performance at Nominal Voltage

**4" Blower Model 240**      **12 VDC**  
**Model 240-24V**      **24 VDC**



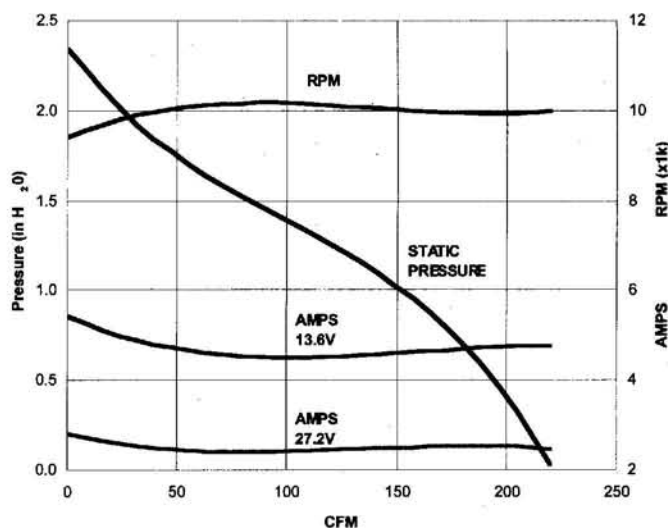
## Performance at Rated Voltage (113.3%)

**3" Blower Model 140**      **13.6 VDC**  
**Model 140-24V**      **27.2 VDC**



## Performance at Rated Voltage (113.3%)

**4" Blower Model 240**      **13.6 VDC**  
**Model 240-24V**      **27.2 VDC**



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