

MCP655™ INSTALLATION GUIDE

□ General Use

The MCP655 pump is a magnetically driven centrifugal pump featuring a 12 V DC motor. It requires no maintenance when used with de-mineralized water and the appropriate anti-fungal additives. We recommend using 5% Swiftech's HydrX™ as an additive. The pump is designed to be connected to your computer power supply using the standard Molex 4 pin connectors.

The MCP655 pump is neither submersible, nor self-priming. The inlet needs to be continuously supplied with fluid for the pump to operate properly.

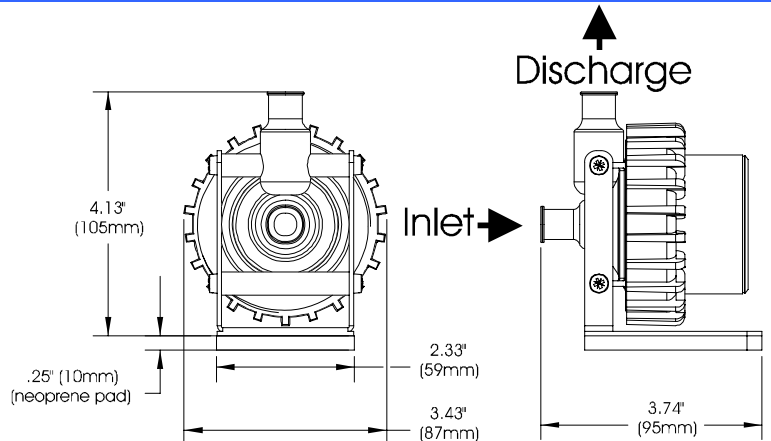
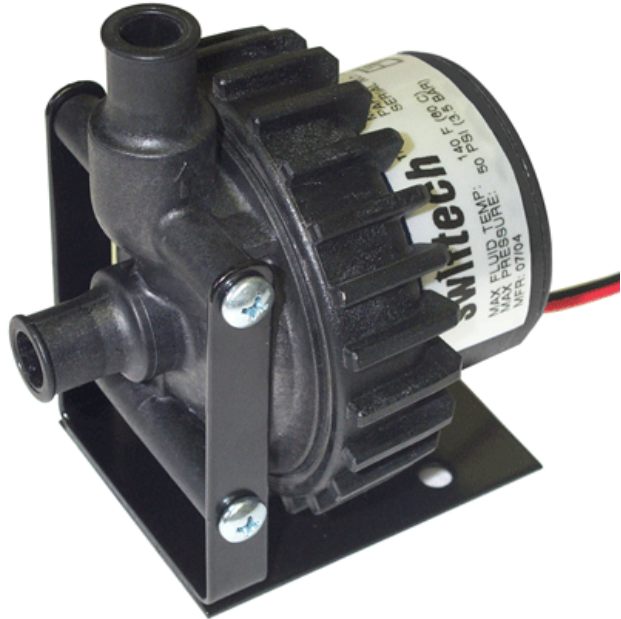
□ Physical installation

- Determine the best location for your pump by observing how the tubing will be routed to the rest of the circuit. Sharp bends in the tubing should always be avoided to prevent kinks, which will reduce or completely prevent flow of the cooling fluid.
- In general, we recommend installation of the pump at the bottom of the chassis.
- The base of the pump features a soft neoprene pad coated with **strong** adhesive material. Once the final location for the pump has been determined, simply peel-off the pad's protective paper, and press the pump against the chassis surface. The surface should be clean, and non greasy. Thru-bolts are also provided for permanent installation, and require drilling holes in the chassis.
- The back of the pump features a potentiometer to allow users to vary the pump speed from 1800 to 4800 rpm. Full speed is suggested for maximum performance. When reducing the pump speed, the operating noise will also decrease proportionally, but so will the performance. A flow rate chart is provided below

□ Pump operating precautions:

The MCP655 pump should never be run dry, even for a quick test. You should always prime the pump with fluid before you start operating it (see warranty note *).

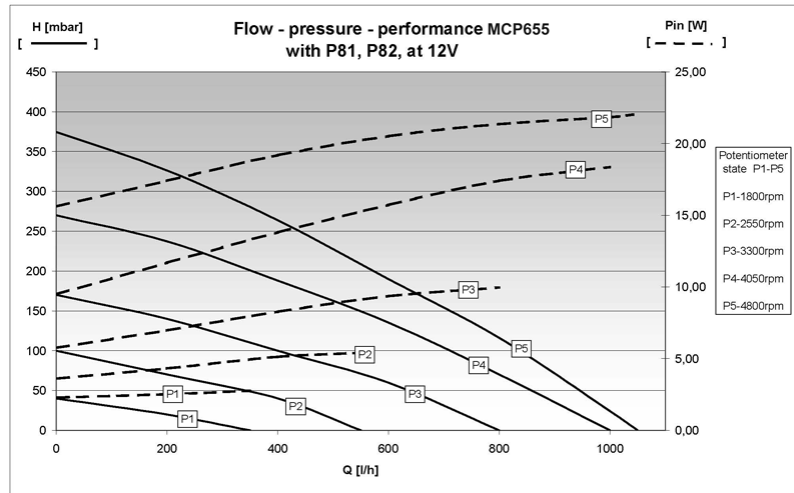
Use of coloring die or fluorescent additives containing particulate fillers will cause excessive wear to the pump's impeller bearing (see warranty note **).



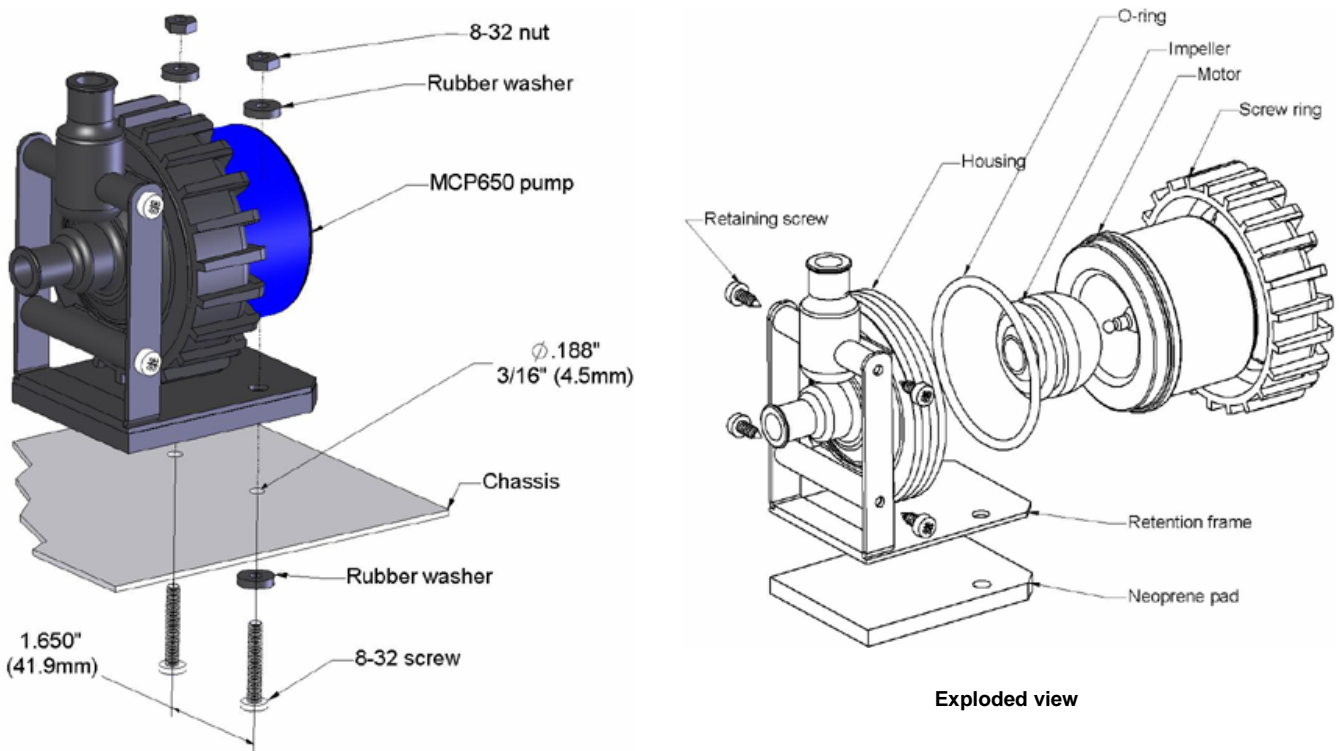
Note: It is preferable to directly connect the RESERVOIR DISCHARGE to the PUMP INLET (no other components between pump and reservoir)

Specifications

Nominal voltage / Connector	12 V DC / Molex 4 pin	Maximum pressure	50 PSI (3.5 BAR)
Operating voltage range	8 to 24 VDC	Maximum head	10 ft (3.1 m)
Nominal current (@ 12 V)	2 amps	Maximum discharge	~ 317 GPH (1200 LPH)
Nominal power (@ 12 V)	24 W	Temperature range	32 °F to 140°F (0 °C to 60 °C)
Motor type	Brushless, microprocessor controlled	Weight	1.4 LB (650 gr.)
Impeller Housing material	Noryl®	Connection size	½" barbs



Performance curves



Permanent Installation to the Chassis

WARRANTY: This product is guaranteed for a period of **24 months** from date of purchase for defects in material, and workmanship. Guarantee consists of replacing defective parts with new or reconditioned parts. Guarantee is considered void in case of **improper use (*) (**) (***)**, handling or negligence on the part of user. Original invoice showing date and place of purchase is required for exercise of the warranty. **(*) WARNING: DO NOT ATTEMPT TO RUN THIS PUMP DRY. THIS WILL CAUSE IMMEDIATE AND PERMANENT DAMAGE TO THE PUMP. (**) EXCESSIVE WEAR DUE TO INNAPROPRIATE FLUIDS. (***) EXCESSIVE RESTRICTION TO THE PUMP'S INLET**

DISCLAIMER: Swiftech assumes no liability whatsoever, expressed or implied, for the use of this product, and more specifically for any, and all damages caused by the use of this product to any other devices in a personal computer, whether due to product failure, leak, electrical shorts, and or electro-magnetic emissions

Copyright Swiftech 2006 – All rights reserved – Last revision date: 03-20-06
 Rouchon Industries, Inc., dbA Swiftech – 1703 E. 28th Street, Signal Hill, CA 90755 – Tel. 562-595-8009 – Fax 562-595-8769
 E Mail: Swiftech @swiftnets.com – URL: <http://www.swiftnets.com> - Information subject to change without notice