

# MARCO

## Series UP2 Gear Pumps for Water & Engine Oil

Water to 2.6 GPM, Oil to 52.9 GPH

### DESCRIPTION

Model UP2/Oil and UP2/P are self-priming, compact, powerful, 12 or 24 VDC electric gear pumps. UP2/Oil is constructed of helical bronze gears, nickel-plated brass body and stainless steel shaft. UP2/P has PTFE gears.

Use UP2/Oil for transfer, circulation or drainage of lubricating oils and viscous liquids. Use UP2-P for fresh and salt water as well as for diesel fuel.

The E Option for UP2 is a built in pressure control whereby a factory programed pressure setting is maintained via a built-in micro-processor based variable pump speed control circuit that utilizes an internal pressure sensor for loop feedback. Main application is low cost pressure/flow control for small water and process systems.

The UP2 measures a mere 4 3/8" in length and fits easily in the tightest of spaces.

### SPECIFICATIONS

#### GENERAL

Ports: Tapped 3/8" BSP, pump supplied with 2 ea 3/8" NPT adaptors

Motor: 12VDC or 24VDC, powdered epoxy coated

Circuit Protection: Install fuse

UP2/OIL- 12 V, 3A; 24 V, 1.5A

UP2/P- 12V, 5A; 24 V, 3A

Current: See Curves

Flow Rate :See Curves

Self Priming With Wet Gears: 4.92 ft (1.5 m)

Pump Duty: Intermittant

Motor Life: Approx. 2000 hours

Max. Operating Temperature: 14-140°F (-10-60°C)

Max. Relative Humidity: 90%

Pump Body: Nickel plated Brass

Gears: UP2/Oil, Bronze; UP2/P (PTFE)

Shaft: Stainless Steel

Suitable Fluid Media:

UP2/OIL: Fresh Water (max. 85°C, 185°F), engine oil & non-corrosive viscous liquids (max viscosity 85cSt), diesel fuel with viscosity between 2 & 5.35 cSt to 37.8°C, 100°F; minimum flashpoint (PM): 55°C, 131°F

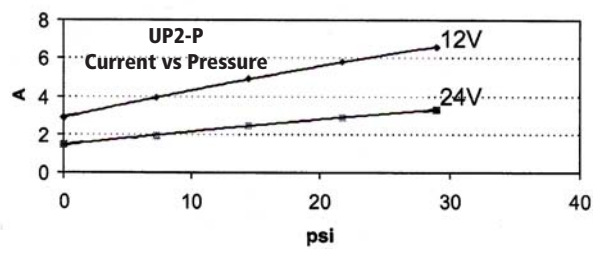
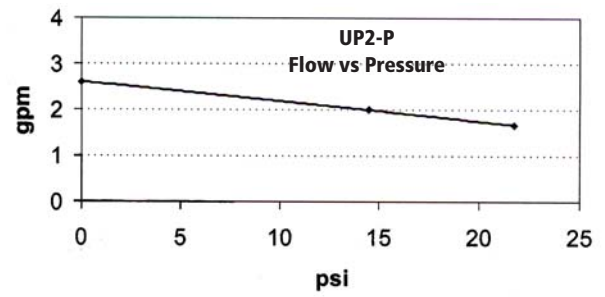
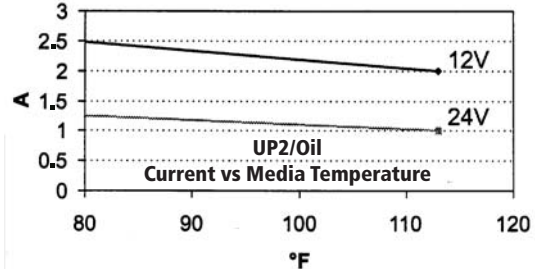
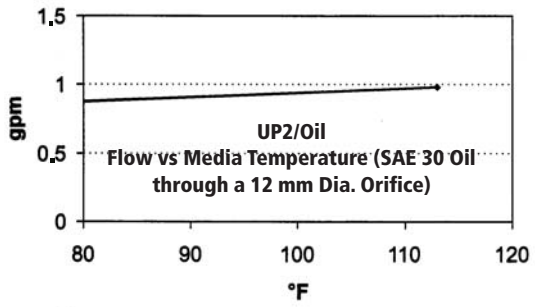
UP2/P: Fresh water & sea water (max. 40°C, 104°F), diesel fuel with viscosity between 2 & 5.35 cSt to 37.8°C, 100°F; minimum flashpoint (PM): 55°C, 131°F  
 Unsuitable Fluid Media (UP2/Oil & UP2-P): DO NOT USE for Gasoline, flammable liquids with PM<131°F, liquids with viscosity> 20 cSt, food products, corrosive chemicals & solvents



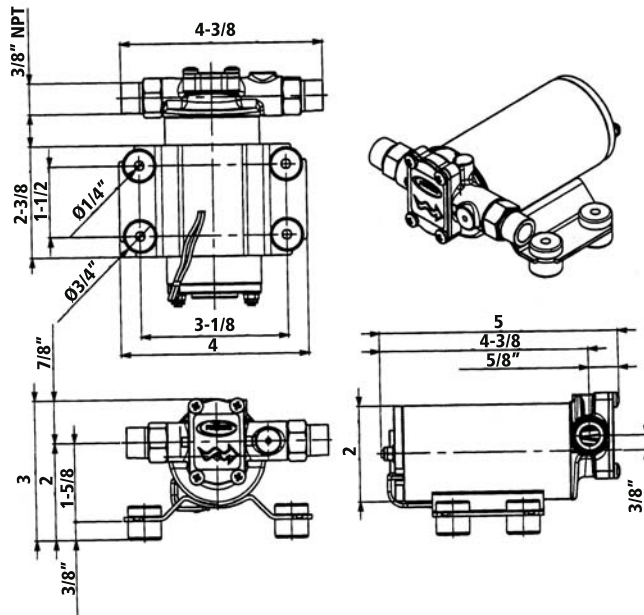
UP2/Oil & UP2-P



UP2/Oil & UP2-P With Pressure Control



## DIMENSIONS (INCHES)



## ORDERING INFORMATION

### ABC

Example: UP2/Oil24V

A Model	B Voltage	C Options
UP2/P UP2/Oil	12V= 12 VDC 24V= 24 VDC	- None E= Electronic Pressure Control, Specify Pressure Setpoint

**Note: A 250-400 micron filter is recommended for applications where the fluid media contains particles.**