# RP

### **Oil Pump and Motor Sets**



### **Features**

- Available with ODP or TEFC motors
- Factory assembled
- Capacities to 3200 gph



## **Benefits**

- Quiet operation
- Long service life

# HAUCK MANUFACTURING COMPANY

P.O. Box 90 Lebanon, PA 17042 Phone: 717-272-3051 Fax: 717-273-9882 www.hauckburner.com Hauck's RP series pump and motor sets are factory assembled units designed to meet your specific volume, viscosity, and discharge pressure requirements. Each set combines a positive displacement rotary gear pump with a suitable 'T' frame industrial electric motor mounted on a steel base. The motor and pump are matched to ensure that the requirements of the application are met with maximum efficiency.

**Combustion Excellence Since 1888** 

# Hauck Manufacturing Company

# **RP** Oil Pump and Motor Sets

# ADVANTAGES OF THE RP

### **Factory Assembled**

**Quiet Operation** 

#### Long Service Life

### Construction

RP pump units consist of a pump, motor, direct coupling, and shaft and coupling guard (as required by OSHA standards) - all preassembled and mounted on a steel base.

The pump's helical herringbone gears are fabricated of high-alloy steel to provide quiet, pulse-free flow and prevent the trapping of liquids. All internal bearings are force-fed lubricated by the liquid passing through the pump. The drive shafts are made from hardened steel and ground to meet high quality control standards.

The electric motors are furnished by leading industrial motor manufacturers who maintain stringent inspection procedures to ensure long service life. The motors are available in two models; open, drip proof (ODP) and totally enclosed, fan cooled (TEFC).

### Operation

The specific operational characteristics of each assembly will depend on the pump and motor selected. However, a pressure relief valve must be installed immediately downstream of the pump. This pressure relief valve (bypass valve) should be designed

and adjusted to control and maintain the required pump discharge pressure of either 50, 100, or 150 psig.





Schematic representation of the pump showing the oil flow path.

### **Required Suction Head**

A characteristic of each pump, determined by test or computation, is the required N.P.S.H (net positive suction head). It is the maximum amount of suction pressure<sup>\*</sup> the pump can develop without cavitation to pull the oil into the pump. In other words, it is the maximum amount of suction pressure available to lift the oil, if required, and overcome pressure losses in the inlet piping to the pump.

The required N.P.S.H. varies with the pump design and pump size. The values listed in the table below refer to the pump sizes listed in the RP-2 (Capacities) product literature.

\* In absolute pressure

#### Required N.P.S.H

PUMP SIZE	VISCOSITY					
	40 SSU	90 SSU	400 SSU	2000 SSU	3000 SSU	10,000 SSU
1	6.3	6.5	6.8	7.5	7.8	8.8
2	6.5	6.8	7.3	8.0	8.0	9.5
3	7.5	7.8	9.0	10.0	10.3	12.0
4	7.5	7.8	9.0	10.0	10.3	12.0
5	8.5	8.8	9.5	10.8	11.5	15.0
6	8.5	8.8	9.5	10.8	11.5	15.0