



PVR SERIES VANE PUMPS

GENERAL SPECIFICATIONS

GENERAL SPECIFICATIONS

Recommended Fluids

Petroleum base and most phosphate ester fluids, water glycols and emulsions with water content not exceeding 40%. Consult the factory for other fluids.

Viscosity

Maximum at Start-Up 1000 SUS (220 CS)
 Optimal 175 SUS (40 CS)
 Limits See Chart Below

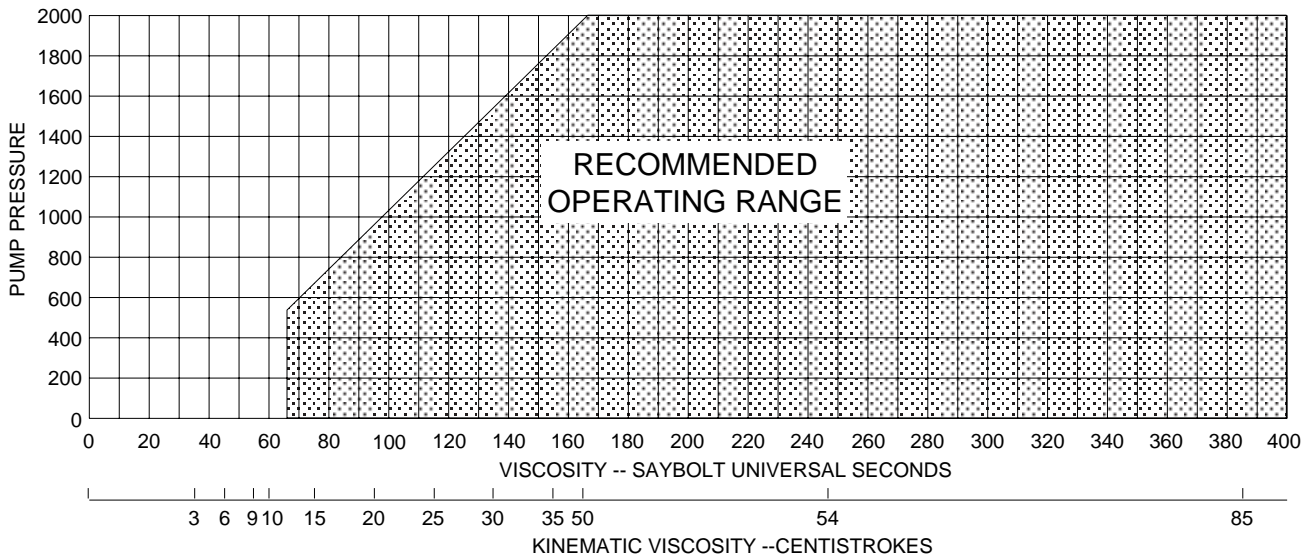
Start-up at 1000 SUS (220 CS) is intended to be used for warm-up only. Actual hydraulic circuit should not be attempted above 400 SUS (90 CS). Be certain the entire hydraulic circuit has been warmed up before full flow, full pressure application begins.

Operating Temperature

Fluid temperatures up to 160° F. (71° C.) will not appreciably affect pump performance as long as fluid viscosity is not allowed to drop too low. However, from a safety standpoint, temperatures above 130° F. (54° C.) are not recommended.

Specified operating viscosities must be followed for optimum life and performance. For continuous operating temperatures above 140° (60° C.), consult the fluid manufacturer for correct fluid at elevated temperatures.

Recommended Operating Range



Filtration

The following recommendations are for maximum service life. Consult with your fluid and filter manufacturer for concurrence.

Suction

Petroleum Fluids 100 Mesh Screen
 Water Base Fluids 60 Mesh Screen
 Phosphate Esters 60 Mesh Screen

Return

ISO 18/15/13 (25 micron) to 1000 psi (69 bar)
 ISO 16/13/11 (10 micron) to 2000 psi (138 bar)

Drive Coupling

Jaw-type with flexible web is recommended. Tire-type flexing elements and chain-type are **NOT** recommended. For belt, chain and gear drives, consult the factory.

Drive Shaft Alignment

Pump and motor shaft alignment must be within .003" (.08 mm) TIR for maximum bearing life.

PVR SERIES VANE PUMPS

GENERAL SPECIFICATIONS

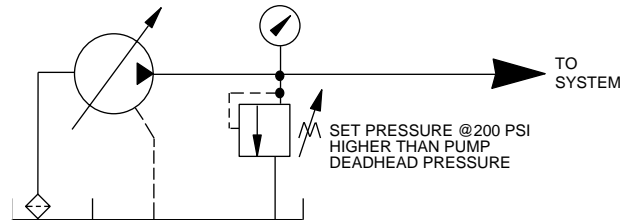


GENERAL SPECIFICATIONS (Continued...)

Relief Valves

A relief valve is not required or necessary for pump outlet pressures less than 1500 psi (103 bar). For pressures greater than 1500 psi (103 bar), it is recommended that a direct-operated, rapid response differential piston relief valve be used to relieve pressure spikes and/or surges. Set the relief valve approximately 200 psi (14 bar) higher than the pump setting.

Typical Relief Valve Application Schematic





**P
V
R

V
A
N
E

P
U
M
P
S**

