



MATERIALS OF CONSTRUCTION

Models: SMVP15B, SMVP30B,
SMVP50B, SMVP100B,
SMVP200B

Page Number	108-093
Effective	Sept 2007
Replaces	July 2002
Section	108

NOTE: Temperature and viscosity ratings given below apply to individual components **Only**. For actual maximum temperatures and viscosities for the rated pump, see "**Operating Limits**" on backside.

PART NAME	STANDARD MATERIALS	AVAILABLE OPTIONS
Heads, R/V Body & Cover, Dowel Pins	316 Stainless Steel, ASTM A743, CF-8M	
Cylinder	15, 30 316 Stainless Steel, ASTM A743, CF-8M	
	50, 100, 200 Duplex Stainless: ASTM 890-4A	
Discs	15, 30 Carbon	
	50, 100, 200 Chem Disc	
Bearing Covers	316 Stainless Steel, ASTM A743, CF-8M	
Sleeve Bearings	Metal Impregnated Graphite	
Rotor & Shaft		
Rotor	316 Stainless Steel, ASTM A743, CF-8M	
Shaft	316 Stainless Steel Coated with Hard Chrome-Cobalt Alloy	
Optional Relief Valve (R/V)	316 Stainless Steel, ASTM A743, CF-8M (PTFE Coated Valve)	
Relief Valve Spring	316 Stainless Steel	
R/V Spring Ranges	15, 30, 50, 100 51-75 psi (352-517 kPa)	See Parts List for Specific Spring Ranges.
	200 35-75 psi (241-517 kPa)	
O-Rings / Seal Rings	PTFE to 500°F (260°C)	
Capscrews (Non-wetted)	Stainless Steel	
Vanes	Duravane - Full Size with 316 Stainless Steel wear plate to 240°F (115°C)	
Push Rods	Nitronic "60" [®] Chrome Plated	
Magnet Housing	Ductile Iron: ASTM 536, 18%	
Magnet Assembly		
Inner Magnet	15, 30 Samarium Cobalt Magnets enclosed in 316 Stainless Steel	
	50, 100, 200	
Outer Magnet	15, 30 Samarium Cobalt Magnets enclosed in Steel	
	50, 100, 200	
Containment Can	15, 30 316 Stainless Steel	
	50, 100, 200 Hastelloy	
Motor Adaptor	15, 30 Cast Iron	
	50, 100, 200 Ductile Iron	
Impeller	15, 30 NA	
	50, 100, 200 316 Stainless Steel	
Gage Ports	1/4" NPT	

Centipoise (cP) = centistokes (cSt) at fluid specific gravity of 1.0.

[®]Nitronic "60" is a trademark of Armco Steel, Inc.

Models: SMVP15B, SMVP30B, SMVP50B, SMVP100B, SMVP200B

PIPE COMPANION FLANGES

PUMP SIZE	STANDARD ¹	OPTIONAL ¹
SMVP15, SMVP30	1½" ANSI 150 lb. Compatible, Flat Faced	
SMVP50B, SMVP100B	2" ANSI 150 lb. Compatible, Flat Faced	
SMVP200B	3" ANSI 150 lb. Compatible, Raised Faced	

¹ All flanges are 316 Stainless, ASTM A473, CF-8M

OPERATING LIMITS

	STANDARD MATERIALS	OPTIONAL MATERIALS
Maximum Temperature	-40°F (-40°C) to 200°F (93°C)	Consult Factory for higher temperature ratings.
Maximum Viscosity	5,000 SSU (1,050 cP) 10,000 SSU (2,100 cP) 25,000 SSU (5,250 cP)	Consult Factory for higher viscosity ratings
Maximum Pump Speed	1750 RPM 1150 RPM	
Maximum Differential Pressure*	125 psi (8.6 Bar) 100 psi (6.9 Bar)	
Maximum Working Pressure	175 psi (12.1 Bar) 150 psi (10.3 Bar)	

Centipoise (cP) = centistokes (cSt) at fluid specific gravity of 1.0.

* Maximum Relief Valve Setting

