

Appendix B—Specifications

Operating Specifications

Standard connections:	2 in., 2-1/2 in., and 3 in. NPT
Optional connections:	Slip-on weld
Maximum differential pressure:	125 psid (8.6 bar)
Temperature range:	-25° to 300°F (-32° to 149°C)
Maximum working pressure:	200 psi (13.8 bar)
Maximum speed:	780 RPM—all models 20 and 25
	640 RPM—all models 30
Maximum flow:	Up to 271 GPM (1,026 L/min)
Maximum viscosity:	20,000 SSU (4,250 cP)
Fluids:	Refined petroleum products, industrial solvents, and other fluids

Material Specifications

Part	Standard Material	Optional Material
Case	Cast iron ASTM A48	
Head	Cast iron ASTM A48	
Flanges	Cast iron ASTM A48	
Rotor	Ductile iron ASTM A536	
Bearing cap	Steel	Bearing cover / spacer with hydraulic motor adapter (cast aluminum) and coupling (steel)
Bearings	Ball (single row), grease lubricated to 300°F (149°C) Max.	
Vanes	Full size with 316 stainless steel wear plate to 240°F (115°C); 20,000 SSU (4,250 cP) max.	
Bypass valve	Cast iron ASTM A48 electroless nickel plated	
Bypass/AOV cap	Cast iron ASTM A48	
Bypass valve cover	Cast iron ASTM A48	
Bypass valve spring	Plated steel	
Bypass valve spring ranges	35–125 psi (2.4–8.6 bar)	
Seal seat	Cast iron	Stainless steel and Ni-Resist
Seal metal parts	Steel	
Shaft	Keyed shaft, high strength steel	
O-rings	Buna-N to 240°F (115°C)	Viton ^{®2} to 300°F (149°C)
Gaskets	Composition to 500°F (260°C)	
Vane drivers	Case hardened steel	
Gage ports	1/4 in. NPT	

¹ Registered trademark of the DuPont company.