

Appendix B—Specifications for Models D51 and F51

Operating Specifications

Minimum RPM:	1450
Maximum RPM:	1750
Minimum temperature:	-25°F (-32°C)
Maximum temperature:	225°F (107°C)
Maximum working pressure:	350 psig (24.1 bar g)
Maximum differential pressure:	125 psi (8.6 bar d)
Maximum driver size:	2 hp (1.5 kW)
Flow range:	1–6 gpm (4–23 L/min)

Material Specifications

Part	Model	Material
Case, head rotor	All	Ductile iron ASTM A536
Sideplate	All	Gray iron ASTM A48, Class 30
Seal seat	All	Silicon carbide
Seal rotor	All	Carbon
Seal metal parts	All	Steel
Vanes	All	Carbon
Relief valve springs	All	Steel, cadmium plated
Relief valve	All	Steel
Shaft	All	“Stressproof” steel
Mounting bracket	D51	Gray iron ASTM A48, Class 30
Base	F51	Steel
O-rings	All	Buna-N (standard), PTFE (optional), Viton ^{®1} (optional), Neoprene ^{®1} (optional)
Relief valve adjusting stem seal	All	Buna-N
Retainer rings	All	Steel
Bearings	All	Cylindrical roller

¹ Registered trademark of the DuPont company.

Appendix B—Specifications for Models 521, 1021, and F1021

Operating Specifications

Model	521	1021	F1021
RPM range	420–950	420–950	420–950
Temperature range	-25°F (-32°C) to 225°F (107°C)		
Maximum working pressure psig (bar g)	350 (24.1)	350 (24.1)	350 (24.1)
Maximum differential pressure psid (bar d)	125 (8.6)	125 (8.6)	125 (8.6)
Maximum driver size hp (kW)	10 (7.5)	20 (15)	20 (15)
Flow range gpm	30–85	65–195	65–195

Flange Options

Model		Standard	No Cost Option	Extra Cost Option
521	Inlet	2-1/2" NPT	2" NPT	2", 2-1/2" weld flange
	Outlet	2" NPT	1-1/2", 1-1/1" NPT	1-1/2", 2", 2-1/2" weld flange
1021	Inlet	3" NPT	4" NPT	3", 4" weld flange
	Outlet	3" NPT	4" NPT	3", 4" weld flange
F1021	Inlet	3" 300# ANSI	—	—
	Outlet	2-1/2" 300# ANSI	—	—

Material Specifications

Part	Model	Standard Material
Case, head, flange, rotor, seat adapter plate	All	Ductile iron ASTM A536, Class 30
Cam, sideplate, bearing cap	All	Gray iron ASTM A48, Class 30
Welding flange	All	Steel
Seal seat	All	Silicon carbide
Seal metal parts	All	Steel
Shaft	521, 1021	"Stressproof" steel
Vanes	All	Plastic
Relief valve spring	521, 1021	Steel, cadmium plated
Relief valve	521, 1021	Steel
Bearing	All	Cylinder roller
O-rings	All	Buna-N (standard), PTFE (optional), Viton ^{®1} (optional), Neoprene ^{®1} (optional)
Retainer rings	All	Steel

¹ Registered trademark of the DuPont company.