



MATERIALS of CONSTRUCTION
Model: SX1220A

Page Number	104-095
Effective	Aug 2023
Replaces	New
Section	104

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**".

PART NAME	STANDARD MATERIALS	AVAILABLE OPTIONS
Cylinder, Heads	316 Stainless Steel: ASTM A743, CF-8M	
Bearing Covers	Steel: Zinc Plated	
Bearings	Single Ball Bearing, Grease Lubricated to 300°F (149°C)	
Rotor & Shaft		
Rotor	316 Stainless Steel	
Shaft	17-4 PH Stainless Steel	
Relief Valve (R/V)	316 Stainless Steel: ASTM A743, CF-8M	
Relief Valve Cover	316 Stainless Steel: ASTM A743, CF-8M	
Relief Valve Cap	316 Stainless Steel	
Relief Valve Spring	Stainless Steel to 500°F (260°C)	
R/V Spring Ranges	36-50 PSI (2.48-3.45 bar) 51-75 PSI (3.51-5.17 bar) 76-110 PSI (5.24-7.58 bar)	
Bolts	316 Stainless Steel	
O-Rings / Seal Rings	Fluorocarbon (FKM)	Polytetrafluoroethylene (PTFE) Ethylene Propylene (EPDM)
Vanes	Duravane - With 316 Stainless Steel Wear Plate to 240°F (115°C); 20,000 SSU (4,250 cP) Max.	
Mechanical Seals		
	Stationary O-Ring	FKM 400°F (204°C)
Stationary Seat	316 Stainless Steel: ASTM A743, CF-8M with Silicon Carbide Insert	PTFE 500°F (260°C) or EPDM 240°F (115°C)
Rotating O-Ring / Seal Ring	FKM	
Rotating Seal Face	Carbon to 20,000 SSU (4,250 cP) Max.	PTFE or EPDM
Seal Jacket, Spring	Inconel	
Seal Jacket	304 Stainless Steel	
Gage Ports	¼" NPT	
Pipe Flanges	2" Butt Weld Stainless Steel	

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

OPERATING LIMITS

Maximum Temperature	240°F (115°C)
Minimum Temperature	-25°F (-31°C)
Maximum Viscosity	100 SSU (22 cP)
Maximum Differential Pressure*	125 psi (8.6 Bar)
Maximum Working Pressure	175 psi (12.1 Bar)
Maximum Torque	495 lb-in (56 Nm)

* Maximum Relief Valve Setting