



MATERIALS OF CONSTRUCTION
 Models: GX2B, GX2.5B, GX3E, GX4B
 X2B, X2.5B, X3E, X4B

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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
Cylinder, Relief Valve Cover	2", 2.5", 3"	Cast Iron: ASTM A48
	4"	Ductile Iron: ASTM 536, 18%
Heads	2", 2.5", 3"	Cast Iron: ASTM A48
	GX4B (inboard)	Cast Iron: ASTM A48
	GX4B (outboard) X4B	Ductile Iron: ASTM 536, 18%
Bearing Covers	2", 2.5", 3"	Steel
	4"	Cast Iron: ASTM A48
Bearings	Single Ball Bearing; Grease Lubricated, to 300°F (149°C) Max.	
Locknut and Lockwasher	X2.5, X3 ONLY: Steel	
Rotor & Shaft		
Rotor	2", 2.5", 3"	Ductile Iron: ASTM 536, 18%
	4"	Cast Iron: ASTM A48
Shaft	High Strength Steel	
Relief Valve (R/V)	Cast Iron: ASTM A48	Nickel Plated Cast Iron
Relief Valve Cap	2", 2.5", 3"	Brass: ASTM B16
	4"	Ductile Iron: ASTM 536, 18%
Relief Valve Spring	Plated Steel	
R/V Spring Ranges	2", 2.5", 3"	51-75 psi (3.5 – 5.2 Bar)
	4"	51-110 psi (3.5 – 7.6 Bar)
O-Rings: Other than Mechanical Seal	Fluorocarbon (FKM) to 400°F (204°C)	PTFE to 500°F (260°C)
Gaskets	Fiber to 300°F (149°C)	
Vanes	Duravane - Full Size with Stainless Steel Wear Plate to 240°F (115°C); 20,000 SSU (4,250 cP) Maximum.	'X' Models only: EC Bronze - Extra-Clearance to 500°F (260°C); 500 SSU (105 cP) Minimum.
Push Rods	Case Hardened Steel	
Mechanical Seals		
Stationary O-Ring	FKM to 400°F (204°C)	PTFE to 500°F (260°C)
Stationary Seat	Cast Iron	Stainless Steel
Rotating O-Ring / Seal Ring	FKM to 400°F (204°C)	PTFE to 500°F (260°C)
Rotating Seal Face	Carbon - 20,000 SSU (4,250 cP) Max.	'X' Models only Bronze – 500 SSU (105 cP) Minimum 75,000 SSU (15,750 cP) Maximum
Seal Jacket & Spring	Plated Steel	
Gage Ports	1/4" NPT	

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

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PIPE COMPANION FLANGES

PUMP SIZE	STANDARD	OPTIONAL
2"	2" Cast Iron, NPT Tapped	2" Steel, Weld
2.5"	2.5" Cast Iron, NPT Tapped	2.5" Steel, Weld
3"	3" Cast Iron, NPT Tapped	3" Steel, Weld
4"	4" Ductile Iron: ASTM 536, NPT Tapped	4" Steel, Weld

OPERATING LIMITS

	STANDARD MATERIALS	OPTIONAL MATERIALS
Maximum Temperature	240°F (115°C)	300°F (149°C) With FKM or PTFE O-Rings and metal vanes Note: Temperature is limited by ball bearings
Maximum Viscosity	X2, X2.5, X3 20,000 SSU (4,250 cP)	75,000 SSU (15,750 cP) with metal vanes and Bronze seal faces.
	X4 20,000 SSU (4,250 cP)	50,000 SSU (10,500 cP) with metal vanes and Bronze seal faces.
	GX2, GX2.5, GX3, GX4 20,000 SSU (4,250 cP) GX Pumps are limited by the gear reducer. Consult Pump Characteristic Curves and Reducer Horsepower Capabilities	
Maximum Differential Pressure*	125 psi (8.6 Bar)	
Maximum Working Pressure	175 psi (12.1 Bar)	

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

* Maximum Relief Valve Setting

