

## 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

maximum temperati	ures and viscositie	es for the rated pump, see " <b>Operating</b> I	Limits" on backside.
PART NAME		STANDARD MATERIALS	AVAILABLE OPTIONS
Cylinder, Relief	2", 2.5", 3"	Cast Iron: ASTM A48	
Valve Cover	4"	Ductile Iron: ASTM 536	
Heads	2", 2.5", 3"	Cast Iron: ASTM A48	
	GX4B (inboard)	Cast Iron: ASTM A48	
	GX4B (outboard)	Ductile Iron: ASTM 536	
	X4B	Ductile Iron: ASTM 536	
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		Ductile Iron: ASTM 536	
Shaft		High Strength Steel	
Relief Valve (R/V)		Cast Iron: ASTM A48	Nickel Plated Cast Iron
Relief Valve Cap	2", 2.5"	Steel	
	3", 4"	Ductile Iron: ASTM 536	
Relief Valve Spring		Plated Steel	
R/V Spring Ranges	2", 2.5", 3"	51-75 psi (3.5 – 5.2 Bar)	Optional springs range from 35-125 psi
	4"	51-110 psi (3.5 – 7.6 Bar)	(2.4 – 8.6 Bar) - See Parts List.
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		<b>Duravane -</b> Full Size with Stainless Steel Wear Plate to 240°F (115°C); 20,000 SSU (4,250 cP) Maximum.	EC Laminate - Extra-Clearance with Stainless Steel Wear Plate to 350°F (176°C); 40,000 SSU (8,500 cP) Max.  'X' Models only:
			<b>EC Cast Iron</b> - Extra-Clearance to 500°F (260°C); 500 SSU (105 cP) Min.
Push Rods		Case Hardened Steel	( )
Mechanical Seals		IVCV	IACT
Stationary O-R	ina	FKM to 400°F (204°C)	PTFE to 500°F (260°C)
Stationary O-R Stationary Sea	•	Cast Iron	Cast Iron
		FKM to 400°F (204°C)	PTFE to 500°F (260°C)
Rotating O-Ring / Seal Ring			` '
Rotating Seal Face		Carbon - 20,000 SSU (4,250 cP) Max.	Carbon - 20,000 SSU (4,250 cP) Max.
Seal Jacket & Spring		Plated Steel	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: ASTM A216 WCB
		2" 150# RF ANSI compatible
2.5"	2.5" Cast Iron, NPT Tapped	2.5" Steel, Weld: ASTM A216 WCB
		2.5" 150# RF ANSI compatible
3"	3" Cast Iron, NPT Tapped	3" Steel, Weld: ASTM A216 WCB
		3" 150# RF ANSI compatible
4"	4" Ductile Iron: ASTM 536, NPT Tapped	4" Steel, Weld: ASTM A105
		4" 150# RF ANSI compatible

## **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)	
	X4	20,000 SSU (4,250 cP)	
		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)	

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<sup>\*</sup> Maximum Relief Valve Setting