



**MATERIALS OF CONSTRUCTION**

Models: HXL6G, HXL8G,  
HXLJ8G, HXL10E

Page Number	102-091
Effective	Oct 2006
Replaces	Nov 2001
Section	102

**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, Heads		Ductile Iron: ASTM 536, 18%	
R/V Cover, Cap, Body		Ductile Iron: ASTM 536, 18%	
Liner, Discs, Bearing Covers		Cast Iron: ASTM A48	
Removable Hubs: HXL8 & HXL10 Only		Ductile Iron: ASTM 536, 18%	
Bearings		Spherical Roller Bearing; to 300°F (149°C) Maximum <sup>1</sup>	
Bearing Locknuts: HXL8 <sup>2</sup> & HXL10 Only		Steel	
<b>Rotor &amp; Shaft</b>			
Rotor	HXL6, HXL8	Cast Iron: ASTM A48	EC Cast Iron <sup>3</sup> : ASTM A48
	HXLJ8	EC Cast Iron: ASTM A48	---
	HXL10	Ductile Iron: ASTM 536, 18%	EC Cast Iron <sup>3</sup> : ASTM A48
Shaft		High Strength Steel	
Optional Relief Valve (R/V)			
	HXL6, HXL8, HXLJ8	Plated Cast Iron	---
	HXL10	Cast Iron	Internal or External RV
Relief Valve Spring		Plated Steel	HXL6, HXL8, HXLJ8 only: Stainless Steel to 500°F (260°C)
R/V Spring Ranges	HXL6	25-125 psi (172-862 kPa)	See Parts List for Specific Spring Ranges
	HXL8, HXLJ8	30-150 psi (207-1034 kPa)	
	HXL10	35-150 psi (241-1034 kPa)	
O-Rings: Other than Mechanical Seal		Fluorocarbon (FKM) to 400°F (204°C)	
Gaskets		Composition to 500°F (260°C)	
<b>Mechanical Seals</b>			
Stationary O-Ring		FKM to 400°F (204°C)	
Stationary Seat		Ni-Resist	
Rotating O-Ring / Seal Ring		FKM to 400°F (204°C)	
Rotating Seal Face			
	HXL6, HXL8, HXL10	Carbon – 20,000 SSU (4,250 cP) Max.	Bronze – 500 SSU (105 cP) Min. 250,000 SSU (54,100 cP) Max.
	HXLJ8	Bronze – 500 SSU (105 cP) Minimum 250,000 SSU (54,100 cP) Maximum	----
Seal Jacket		Stainless Steel	
Seal Spring		Stainless Steel	

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

<sup>1</sup> Intermittent Approved Service to 400°F (204°C).

<sup>2</sup> HXLJ8 Jacketed Models are not equipped with locknuts.

<sup>3</sup> EC (Extra Clearance) Rotor for Viscosities Over 20,000 SSU (4, 250 cP).

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PART NAME	STANDARD MATERIALS	AVAILABLE OPTIONS
<b>Vanes</b> HXL6, HXL8, HXL10	<b>EC Laminate</b> – Extra Clearance with 316 Stainless Steel Wear Plate to 350°F (176°C); 40,000 SSU (8.500 cP) Max.	<b>EC Bronze</b> - Extra-Clearance to 500°F (260°C); 500 SSU (105 cP) Minimum, 250,000 SSU (54,100 cP) Max.
HXLJ8	<b>EC Bronze</b> - Extra-Clearance to 500°F (260°C); 500 SSU (105 cP) Minimum, 250,000 SSU (54,100 cP) Max.	<b>EC Laminate</b> – Extra Clearance with 316 Stainless Steel Wear Plate to 350°F (176°C); 40,000 SSU (8.500 cP) Max.
Push Rods	Case Hardened Steel	
Gage Ports	1/4" NPT	

### PIPE COMPANION FLANGES

PUMP SIZE	STANDARD	
HXL6	Ductile Iron, 6" NPT companion flange: ASTM 536, 18%	Pump Casing Ports are 150 lb. ANSI Compatible (Flat Face).
HXL8, HXLJ8	Ductile Iron, 8" NPT companion flange: ASTM 536, 18%	
HXL10	ANSI Compatible Casing	

### OPERATING LIMITS

	STANDARD MATERIALS	OPTIONAL MATERIALS
Maximum Temperature HXL6, HXL8, HXLJ8	300°F (149°C)	400°F (204°C) <b>Intermittent Duty</b> with Metal Vanes and Stainless Steel R/V Spring (limited by ball bearings)
HXL10	300°F (149°C)	300°F (149°C) with Metal Vanes and R/V Assy. 400°F (1204°C) with Metal Vanes, w/o R/V Assy.
Maximum Viscosity	20,000 SSU (4,250 cP) Limited by Carbon Mechanical Seal Face	250,000 SSU (54,100 cP) with Metal Vanes, EC Rotor/Shaft and Bronze Mechanical Seal Face.
Maximum Pressure of Jacketed Heads (HXLJ8)	150 psi (1034 kPa) Max.	
Maximum Differential Pressure*		
HXL6	125 psi (8.6 Bar)	
HXL8, HXLJ8, HXL10	150psi (10.3)	
Maximum Working Pressure		
HXL6	150si (10.3)	
HXL8, HXLJ8, HXL10	250 psi (17.2 Bar)	

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

\* Maximum Relief Valve Setting

