



**MATERIALS OF CONSTRUCTION**

Models: HXL6G, HXL8G,  
HXLJ8G<sup>2</sup>, HXL10E

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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, Heads, R/V Cover, Cap, Body	Ductile Iron: ASTM 536	
Liner	Ductile Iron: ASTM 536	
HXL6	Cast Iron: ASTM A48	
HXL8, HXLJ8, HXL10		
Discs, Bearing Covers	Cast Iron: ASTM A48	
Removable Hubs: HXL8 & HXL10 Only	Ductile Iron: ASTM 536	
Bearings	Spherical Roller Bearing; to 300°F (149°C) Maximum <sup>1</sup>	
Bearing Locknuts: HXL8 & HXL10 Only (not used on HXL6 and HXLJ8)	Steel	
<b>Rotor &amp; Shaft</b>		
Rotor	Cast Iron: ASTM A48	EC Cast Iron <sup>3</sup> : ASTM A48
HXL6, HXL8	EC Cast Iron: ASTM A48	---
HXLJ8	Ductile Iron: ASTM 536	EC Ductile Iron <sup>3</sup> : ASTM 536
HXL10		
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	46-125 psi (3.2-8.6 bar)	See Parts List for Specific Spring Ranges
Ranges	51-150 psi (3.5-10.3 bar)	
HXL6	51-150 psi (3.5-10.3 bar)	
HXL8, HXLJ8		
HXL10		
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. 100,000 SSU (21,000 cP) Max.
HXLJ8	Bronze – 500 SSU (105 cP) Minimum 100,000 SSU (21,000 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 features jacketed heads.

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

Models: HXL6G, HXL8G, HXLJ8G, HXL10E

PART NAME	STANDARD MATERIALS	AVAILABLE OPTIONS
Vanes HXL6, HXL8, HXL10	<b>EC Laminate</b> <sup>1</sup> – Extra Clearance with 316 Stainless Steel Wear Plate to 350°F (176°C); 40,000 SSU (8.500 cP) Max.	<b>EC Bronze</b> <sup>1</sup> – Extra-Clearance to 500°F (260°C); 500 SSU (105 cP) Minimum, 100,000 SSU (21,000 cP) Max.
HXLJ8	<b>EC Bronze</b> - Extra-Clearance to 500°F (260°C); 500 SSU (105 cP) Minimum, 100,000 SSU (21,000 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	

<sup>1</sup> Use metal vanes above 20,000 SSU (4,250 cP)

### PIPE COMPANION FLANGES

PUMP SIZE	STANDARD	
HXL6	Ductile Iron, 6" NPT companion flange: ASTM 536	Pump Casing Ports are 150 lb. ANSI Compatible (Flat Face).
HXL8, HXLJ8	Ductile Iron, 8" NPT companion flange: ASTM 536	
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)
Minimum Temperature	-25°F (-31°C)	
HXL10	300°F (149°C)	300°F (149°C) with Metal Vanes and R/V Assy. 400°F (204°C) with Metal Vanes, w/o R/V Assy.
Minimum Temperature	-25°F (-31°C)	
Maximum Viscosity	20,000 SSU (4,250 cP) Limited by Carbon Mechanical Seal Face	100,000 SSU (21,000 cP) with Metal Vanes, EC Rotor/Shaft and Bronze Mechanical Seal Face.
Maximum Pressure of Jacketed Heads (HXLJ8)	150 psi (10.3 Bar) Max.	
Maximum Differential Pressure*		
HXL6	125 psi (8.6 Bar)	
HXL8, HXLJ8, HXL10	150psi (10.3 Bar)	
Maximum Working Pressure		
HXL6	150si (10.3 Bar)	
HXL8, HXLJ8, HXL10	250 psi (17.2 Bar)	

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

\* Maximum Relief Valve Setting

