



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 ¹ | |
| Bearing Locknuts: HXL8 ² & HXL10 Only | | Steel | |
| Rotor & Shaft | | | |
| Rotor | HXL6, HXL8 | Cast Iron: ASTM A48 | EC Cast Iron ³ : ASTM A48 |
| | HXLJ8 | EC Cast Iron: ASTM A48 | --- |
| | HXL10 | Ductile Iron: ASTM 536, 18% | EC Cast Iron ³ : 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) | |
| Mechanical Seals | | | |
| 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.

¹ Intermittent Approved Service to 400°F (204°C).

² HXLJ8 Jacketed Models are not equipped with locknuts.

³ 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 | EC Laminate – Extra Clearance with 316 Stainless Steel Wear Plate to 350°F (176°C); 40,000 SSU (8.500 cP) Max. | EC Bronze - Extra-Clearance to 500°F (260°C); 500 SSU (105 cP) Minimum, 250,000 SSU (54,100 cP) Max. |
| HXLJ8 | EC Bronze - Extra-Clearance to 500°F (260°C); 500 SSU (105 cP) Minimum, 250,000 SSU (54,100 cP) Max. | EC Laminate – 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) Intermittent Duty 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

