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
Casing, Heads, Relief Valve Cover	Ductile Iron: ASTM 536	
Liner	Hardened Ductile Iron	
Discs	Hardened Cast Iron: ASTM A48	
Bearing Covers	Steel	
Bearings	Single Ball Bearing; Grease Lubricated, to 300°F (149°C) Max.	
Locknuts and Lockwasher	Steel	
Rotor & Shaft		
Rotor	Extra Clearance (0.045" Reduced) Hard Ductile Iron: ASTM 536	XLW2 and XLW3: Full Size Hard Ductile Iron: ASTM 536
Shaft	High Strength Steel with Hard Chrome Plating in Mechanical Seal and Bearing Areas	
Relief Valve (R/V) XLW2, XLW3	Cast Iron: ASTM A48	
XLW4	Plated Cast Iron: ASTM A48	
Relief Valve Cap	Ductile Iron: ASTM 536	
Relief Valve Spring	Plated Steel	
R/V Spring Ranges	51 - 75 psi (3.5 – 5.2 bar)	Optional springs range from 51 - 150 psi (3.5 – 10.3 bar) - See Parts Lists.
O-Rings: Other than Mechanical Seal	Fluorocarbon FKM to 400°F (204°C)	PTFE to 500°F (260°C)
Gaskets: Bearing Cover	Fiber to 300°F (149°C)	
Vanes	**EC Hardened Cast Iron -** Extra Clearance to 400°F (204°C); 500 SSU (105 cP) Minimum.	**EC Laminate** - Extra-Clearance to 350°F (176°C); 40,000 SSU (8,500 cP) Max.
Push Rods	Case Hardened Steel	
Mechanical Seals		
Stationary O-Ring	FKM to 400°F (204°C)	PTFE to 500°F (260°C)
Stationary Seat	Silicon Carbide	
Rotating O-Ring / Seal Ring	FKM to 400°F (204°C)	PTFE seal ring to 500°F (260°C)
Rotating Seal Face	Hardened Steel	XLW2 and XLW3: Silicon Carbide
Seal Jacket	Plated Steel	
Seal Spring	Plated Steel	
Gage Ports	1/4" NPT	

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

GEARBOX (NORD N15)

Part Name	**STD Materials**
Body	Aluminum
Shafts	Steel
Gears	Steel
Bearings	Steel
Couplings	Plastic

PIPE COMPANION FLANGES

PUMP SIZE	**STANDARD**	**OPTIONAL[1]**
XLW2	2” Ductile Iron, NPT Tapped: ASTM 536	2” Steel Weld: ASTM A216 ANSI: 2”, 150 lb. RF
XLW3	3” Ductile Iron, NPT Tapped: ASTM 536	3” Steel Weld: ASTM A216 ANSI: 3”, 150 lb. RF
XLW4	4” Steel Weld: ASTM A216 WCB	3” Ductile Iron ASTM 536, NPT

OPERATING LIMITS

		STANDARD MATERIALS	**OPTIONAL MATERIALS**
Maximum Temperature		300°F (149°C) **NOTE: Temperature is limited by ball bearings**	
Minimum Temperature		-25ºF (-31ºC)	
Maximum Viscosity	XLW2, XLW3	75,000 SSU (15,750 cP)	20,000 SSU (4,250 cP) Maximum with Full Size Rotor & Shaft
	XLW4	20,000 SSU (4,250 cP)	
Minimum Viscosity		500 SSU (105 cP)	30 SSU (1 cP) Minimum w/ Laminate Vanes
Maximum Differential Pressure*		150 psi (10.3 Bar)	
Maximum Working Pressure		350 psi (24.1 Bar)	

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

* Maximum Relief Valve Setting