



MATERIALS of CONSTRUCTION
 Models: CRLR1.25, CRL1.25, CRL1.5,
 CRL2, CRL3, & CRL4A

Page Number	701-091
Effective	Jan 2002
Replaces	Nov 2000
Section	701

PART NAME		STANDARD MATERIALS		AVAILABLE OPTIONS
Casing, Heads, Relief Valve Cover		Ductile Iron: ASTM A536, 18%		
Liner, Discs		Cast Iron: ASTM A48		
Bearing Covers	1.25", 1.5"	Cast Iron: ASTM A48		
	2", 3", 4"	Steel		
Bearings		Ball (Single Row), Grease Lubricated		
Bearing Locknut and Lockwasher		Steel		
Rotor & Shaft	1.25", 1.5"	Single End Keyed Shaft, 4 Vane Rotor		
	2", 3", 4"	Double End Keyed Shaft, 6 Vane Rotor		
Rotor		Ductile Iron: ASTM A536		
Shaft		High Strength Steel		
Relief Valve	1.25", 1.5", 2", 3"	Cast Iron: ASTM A48		
	4"	Plated Cast Iron: ASTM A48		
Relief Valve Cap	1.25", 1.5"	Steel		
	2", 3"	N/A		
	4"	Ductile Iron: ASTM A536, 18%		
Relief Valve Spring		Plated Steel		
Relief Valve Spring Setting	1.25", 1.5"	125 psi (8.62 bar) Differential Pressure Adjustable 81-125 psi (5.58 - 8.62 bar)		
	2", 3"	150 psi (10.34 bar) Differential Pressure Non-Adjustable		
	4"	150 psi (8.62 bar) Differential Pressure Adjustable 125-150 psi (5.58 - 8.62 bar)		
O-Rings: Other than Mechanical Seal		Buna-N		
Gaskets: Bearing Cover		Fiber		
Vaness		Laminate – Full Size with Stainless Steel Wear Plate		
Push Rods		Case Hardened Steel		
Mechanical Seals				
Stationary O-Ring		Fluorocarbon (FKM)		
Stationary Seat		Carbon		
Rotating O-Ring		Fluorocarbon (FKM)		
Rotating Seal Face		Silicon Carbide		
Seal Jacket		Plated Steel		
Seal Spring		Stainless Steel		
Gage Ports		Inlet	Discharge	
	1.25", 1.5"	¼ " NPT Tapped	¾ " NPT Tapped	
	2", 3", 4"	¼ " NPT Tapped	¼ " NPT Tapped	

MATERIALS OF CONSTRUCTION

Models: CRLR1.25, CRL1.25, CRL1.5, CRL2, CRL3, & CRL4A

FLANGES OR PIPE CONNECTIONS

PUMP SIZE	STANDARD	OPTIONAL
CRLR1.25, CRL1.25	1¼ " NPT Tapped	Not Available
CRL1.5	1½ " NPT Tapped	Not Available
CRL2	Two 2" NPT Flanges, Ductile Iron: ASTM A536, 18%	Two 2" Weld Flanges, Steel: ASTM A216, WCB
CRL3	Two 3" NPT Flanges, Ductile Iron: ASTM A536, 18%	Two 3" Weld Flanges, Steel: ASTM A216, WCB
CRL4A	One 4" Weld Flange (inlet), Steel: SAEJ435C-0030 & One 3" Weld Flange (discharge), Steel: ASTM A216, WCB	Two 3" NPT Flanges, Ductile Iron: ASTM A536, 18% Two 3" Weld Flanges, Steel: ASTM A216, WCB Two 4" Weld Flanges, Steel: SAEJ435C-0030

OPERATING LIMITS

Minimum Temperature	-30°F (-34°C)
Maximum Differential Pressure	100 psi (6.90 Bar)
Maximum Working Pressure	525 psi (36.20 Bar)

