



**MATERIALS of CONSTRUCTION**  
**Models: SGLD2, SGLD3, SGLD4B,**  
**SGLWD3, SGLWD4**

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PART NAME	STANDARD MATERIALS		AVAILABLE OPTIONS
Casing, Heads, Relief Valve Cover, Relief Valve Cap	Ductile Iron: ASTM A536		
Discs, Liner	Cast Iron: ASTM A48		Hardened Ductile Iron <sup>3</sup>
Bearing Covers	Steel		
Bearings	Ball (Single Row); Grease Lubricated		
Bearing Locknut and Lockwasher	Steel		
<b>Rotor &amp; Shaft</b>	Double End Keyed Shaft, 6 Vane Rotor		
Rotor	Ductile Iron: ASTM A536		
Shaft	High Strength Steel		
Relief Valve   SGLD2, SGL(W)D3	Cast Iron: ASTM A48		
SGL(W)D4B	Plated Cast Iron: ASTM A48		
Relief Valve Spring	Plated Steel		
Relief Valve Spring Range	Range 51–75 psi (3.52–5.17 bar) differential pressure <sup>1</sup>		Up to 150 psi (10.34 bar); see parts pages
O-Rings: Other than Mechanical Seal	HNBR		FKM, Neoprene, PTFE
Gaskets, Bearing Cover	Fiber		
<b>Vanes</b>	Duravane - Full Size with Stainless Steel Wear Plate		EC Laminate – 350 °F (176 °C), 40,000 SSU (8,500 Cp) Max <sup>3</sup>
<b>Push Rods</b> SGLD2, SGLD3	Case Hardened Steel		
SGLD4B	Non-metallic Composite		
<b>Mechanical Seals</b>	<b>Single Seal</b>	<b>Dual Seal (52 &amp; 53) <sup>2</sup></b>	<b>Single Seal (ONLY)</b>
Stationary O-Ring	HNBR	FKM	FKM, Neoprene, PTFE
Stationary Seat	Hardened Steel	Carbon	Silicon Carbide
Rotating O-Ring	HNBR	FKM	FKM, Neoprene, PTFE, *Kalrez®
Rotating Seal Face	Carbon	Hardened Steel	
Seal Jacket	Plated Steel		
Seal Spring	Stainless Steel	Stainless Steel	
Gage Ports	1/4" NPT		
<b>Seal Pot Assembly</b>			
Tank material	Steel		
Ports to Seal	1/2" NPT		
Barrier Fluid Type	Phillips 66 Syncon 5 cst weight		
Tank Capacity	3 Gal std. 5 Gal optional		
Ports to Cooling Feed	1/2" NPT		
Cooling water Requirement	Per application. Consult factory.		
Electrical Requirement	24 VDC std. 120 VAC optional		

<sup>1</sup> Relief Valve Springs are factory set at the range midpoint unless otherwise specified.

<sup>2</sup> Dual Seals are available with the SGLD3, SGLD4, SGLWD3, and SGLWD4 pump models

<sup>3</sup> Only Available with the SGLWD3 and SGLWD4

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### PIPE COMPANION FLANGES

PUMP SIZE	STANDARD	OPTIONAL
SGLD2	Two 2" NPT Flanges, Ductile Iron::ASTM A536	Two 2" Weld Flanges, Steel: ASTM A216 WC Two 2" 300# ANSI RF Flanges, Ductile Iron ASTM A536
SGL(W)D3	Two 3" NPT Flanges, Ductile Iron::ASTM A536	Two 3" Weld Flanges, Steel: ASTM A216 WCB Two 3" 300# ANSI RF Flanges, Steel: ASTM A216 WCB/ASTM A105
SGL(W)D4B	4" x 3" Weld Flanges Steel: ASTM A216 WCB	4" x 4" Weld Flanges Steel: ASTM A216 WCB 4" x 4" 300# ANSI RF Flanges Steel: ASTM A216 WCB/ASTM A105

### OPERATING LIMITS

Minimum Temperature	Single Seal: -30°F (-34°C) / Dual Seal: -15°F (-26°C)
Maximum Differential Pressure	SGLD2, SGL(W)D3: 150 psi (10.34 bar) SGL(W)D4B: 125 psi (8.62 bar)
Maximum Working Pressure	Single Seal - 525 psi (36.20 bar) / Dual Seal – 350 psi (24.13 bar)

