

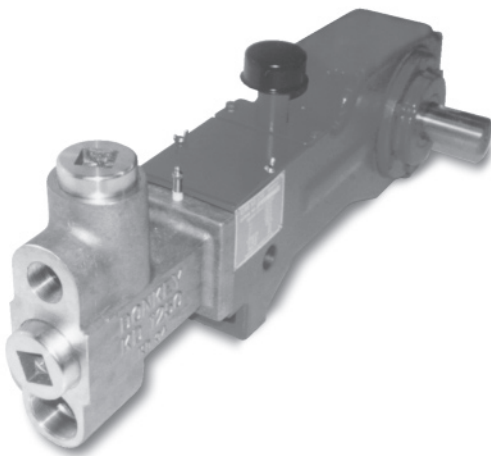
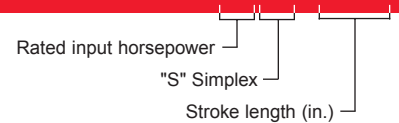
ROTATING RIGHT

# NATIONAL OILWELL 8S-25 TECHNICAL DATA SHEET



## Simplex Plunger Pump

# 8S-25



This 2 1/2" stroke pump is designed for a variety of fluid transfer applications.

### Field Connections in. (mm)

Pump Model	Discharge Connection Size	Suction Connection Size
8S-25	1-1/4 (31.8) FNP Threaded.	2" (50.8) FNP Threaded.

### Dimensions

Pump Type	Length	Width	Height
8S-25	31"	11"	10-3/4"

## Pump Specifications

Pump Size (Max. Plunger Diameter x Stroke) in. (mm) .....2 x 2-1/2 (50.8 x 63.5)  
 Rated BHP At 450 RPM (Kw) .....8 (6)  
 Rated Plunger Load, pounds (Kg).....2,560 (1162)

**Maximum Working Pressure:** PSI (kPa) .....2,350 (16,192)

**Crankshaft Extension:** in. (mm) .....2 (50.8)

**Weight:** - Lbs. (Kg)

Pump Only On Wood Shipping Skids.....160 (64)

## Standard Equipment

- Aluminum Bronze Fluid End
- Aluminum Bronze Valve Covers
- Aluminum Bronze Stuffing Boxes & Nuts
- Bronze Stuffing Box Internals
- Ceramic or Metal Plungers
- General Service Plunger Packing
- Stainless Steel Intermediate Rods
- Chamber Cover
- Crankcase Breather

## Optional Equipment

- Alternate Fluid End Materials
- Alternate Fluid End Valve Styles
- Custom Designs For Specialized Applications

## Accessories

- Packing Lubricator
- Pulsation Dampeners
- Relief Valves
- Valve Service Kit
- Complete Unitization Services

**Continuous Duty Performance Data** (Volumes Indicated Are Displacement of Incompressible Fluid)

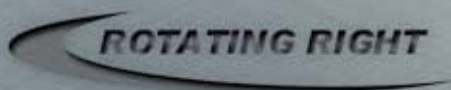
**English Units**

Plunger Dia. In.	Plunger Area (Sq. In.)	BPD Per RPM	GPM Per RPM	Max. Press. PSI	100 RPM		150 RPM		200 RPM		250 RPM		300 RPM		350 RPM		400 RPM		450 RPM	
					BPD	GPM	BPD	GPM	BPD	GPM	BPD	GPM	BPD	GPM	BPD	GPM	BPD	GPM	BPD	GPM
<b>8S-25</b>																				
1	0.7854	0.2916	0.0085	2350	29	0.85	44	1.28	58	1.70	73	2.13	87	2.55	102	2.98	117	3.40	131	3.83
1 1/4	1.2272	0.4555	0.0133	2086	46	1.33	68	1.99	91	2.66	114	3.32	137	3.98	159	4.65	182	5.31	205	5.98
1 1/2	1.7672	0.6560	0.0191	1449	66	1.91	98	2.87	131	3.83	164	4.78	197	5.74	230	6.69	262	7.65	295	8.61
1 3/4	2.4053	0.8929	0.0260	1064	89	2.60	134	3.90	179	5.21	223	6.51	268	7.81	313	9.11	357	10.41	402	11.71
2	3.1416	1.1662	0.0340	815	117	3.40	175	5.10	233	6.80	292	8.50	350	10.20	408	11.90	466	13.60	525	15.30
Brake Horsepower Required					1.8		2.7		3.6		4.5		5.4		6.3		7.2		8.0	

**Metric Units**

Plunger Dia. mm	Plunger Area Sq. cm.	M <sup>3</sup> /D Per RPM	L/Min. Per RPM	Max. Press. kPa	100 RPM		150 RPM		200 RPM		250 RPM		300 RPM		350 RPM		400 RPM		450 RPM	
					M <sup>3</sup> /D	L/Min.	M <sup>3</sup> /D	L/Min.	M <sup>3</sup> /D	L/Min.	M <sup>3</sup> /D	L/Min.	M <sup>3</sup> /D	GPM	M <sup>3</sup> /D	L/Min.	M <sup>3</sup> /D	L/Min.	M <sup>3</sup> /D	L/Min.
<b>8S-25</b>																				
25	5.0671	0.0464	0.0322	16,203	5	3.22	7	4.83	9	6.43	12	8.04	14	9.65	16	11.26	19	12.87	21	14.48
32	7.9174	0.0724	0.0503	14,382	7	5.03	11	7.54	14	10.05	18	12.57	22	15.08	25	17.59	29	20.11	33	22.62
38	11.4010	0.1043	0.0724	9,991	10	7.24	16	10.86	21	14.48	26	18.10	31	21.72	37	25.34	42	28.96	47	32.57
44	15.5180	0.1420	0.0985	7,336	14	9.85	21	14.78	28	19.71	35	24.63	43	29.56	50	34.48	57	39.41	64	44.34
51	20.2684	0.1854	0.1287	5,619	19	12.87	28	19.30	37	25.74	46	32.17	56	38.61	65	45.04	74	51.48	83	57.91
Kilowatts Required					1.3		2.0		2.7		3.3		4.0		4.7		5.3		5.9	

Volume is based on 100% volumetric efficiency. Brake horsepower is based on 90% mechanical efficiency



**Head Office:**  
6120 Davies Road  
Edmonton, AB  
T6E 4M9

Phone: (780) 485-2010 • Toll Free: (866) 707-7867  
Fax: (780) 485-1938  
• Calgary • Drayton Valley • Lethbridge  
[www.rotatingright.com](http://www.rotatingright.com)