

Pac-Seal Replacement Pump Shaft Seals

- Buna elastomer temp. range: -40° to 225°F
• Viton® elastomer temp. range: -25° to 400°F
• PTFE elastomer temp. range: -350° to 500°F
• 2cc P80 lubricant is included with every seal

Rotary units have crimped head to withstand higher pressures and shaft speeds; stay in-place during installation and protect against being dislodged by foreign material. Hex-torque drive system provides longer seal life and helps reduce wear on shaft.

Types 8T/9T—High-quality, positively driven multispring pusher style for industrial and severe chemical applications. The rotary unit is set-screwed to the shaft for positive drive. Rotaries feature replaceable seal rings. O-ring mount.

- Replace Crane Type 8 and 9, respectively

Type 16—Offer greater pressure and speed capabilities. Unitized rotary seal incorporates crimped-head design and hex-torque drive.

- Replace US Seal Type A, Crane Type 6, and Sealol Type 60L

Types 21/31—Offer dependable sealing in mechanical pumps up to 250 psi. Hex-shaped outer shell reduces stress on components. Type 31 O-ring mount. 1R316, 5NC05, 1R307, and 1R301 need no spring retainer.

- Replace US Seal Type C, Crane Type 21, and Sealol Type 43

Types 51/52—Convolution in seal bellows allows for greater axial movement and shaft deflection than Type 21. Narrow cross-section for ANSI and DIN 24960 seal bores.

- Replace US Seal Types E, D, and Crane Types 1 and 2



Type 68—Designed for use in pool and spa pumps. Install with the spring-loaded portion pressed into the pump housing and the mating ring rotating with the shaft.
• Replace US Seal Type B and Crane Type 6A

MATERIAL CONTENT table with columns: Elastomer (1st Letter), Seal Ring (2nd Letter), Shell (3rd Letter), Seat (4th Letter), Spring (5th Letter). Includes abbreviations like B=Buna, C=Carbon, S=Stainless Steel, etc.

Table with columns: Shaft Size (in.), Working Length (in.), Seat Bore (in.), Seat Thick. (in.), Material Content (see above), Std. Industry Seal No., Item No. Lists various seal types and their specifications.

Main seal specification table with columns: Nom. Shaft Size, Working Length, Seat Bore, Seat Thick., Material Content, Std. Industry Seal No., Item No. Lists detailed specs for Seal Type 21, Seal Type 31, Seal Type 51, Seal Type 52, and Seal Type 68.

* Pac Seal brand.



5NAR8

Eductor Jet Pumps

Pumps use high-pressure liquid or steam to create strong suction within the pump body. The suction draws a second liquid or gas into the pump and then forces it out, under pressure, through the discharge. Suitable for mixing fluids, vacuum pumping water, and seawater desalination.

Temp. range: -40° to 230°F, except liquid-operated PVC is -40° to 70°F. Max. head: 40 ft. Max. suction lift pumping liquids: 27 ft. liquid-operated models, 20 ft. steam-operated models. Inlet pressure pumping liquids: 35 to 150 psi, except 15 to 200 psi liquid-operated with 316 SS and bronze inlet and 15 to 100 psi liquid-operated with PVC inlet. Steam-operated models inlet pressure pumping gases: 20 to 80 psi.

Table listing various pump models (5NAR8, 5NAP5, 5NAN1, 5NAU3, etc.) and their specifications including Inlet, Suction Discharge, Sizing Factor, L, Brand, 316 SS, BRASS, BRONZE, CAST IRON, and PVC item numbers.

For Liquid-Operated Pumps* Liquid Suction (gpm)

Table showing suction flow for liquid-operated pumps with columns for Discharge Head (0, 10, 20, 30, 40 ft.), 25 psi Water, 5-ft. Lift 75 psi Water, 200 psi Water, 25 psi Water, 15-ft. Lift 75 psi Water, 200 psi Water, 25 psi Water, 25-ft. Lift 75 psi Water, 200 psi Water.

For Steam-Operated Pumps* Liquid Suction (gpm)

Table showing suction flow for steam-operated pumps with columns for Discharge Head (0-40 ft.), 50 psi Water, 5-ft. Lift 100 psi Water, 150 psi Water, 50 psi Water, 10-ft. Lift 100 psi Water, 150 psi Water, 50 psi Water, 20-ft. Lift 100 psi Water, 150 psi Water.

Table showing gas suction flow with columns for Gas Suction (cfm), Suction Pressure (15" Hg), 30 psi Steam, Max. Outlet 0 psi, 60 psi Steam, Max. Outlet 0 psi, 90 psi Steam, Max. Outlet 0 psi.

* Charts show suction flow based on a 1 1/2" suction/discharge pipe size. To determine the suction flow for other pipe sizes, use the sizing factor shown in the table as a multiplier. For example, a pump with a 40-ft. discharge head, 5-ft. lift, and 200 psi water pressure, has a suction flow of 22.5 gpm (based on 1 1/2" suction/discharge). For the suction flow of a pump with a 1 1/4" suction/discharge, multiply 22.5 gpm by the 0.61 sizing factor to get 13.7 gpm.