

## S-Adapter & Power Frame

### S-Adapter

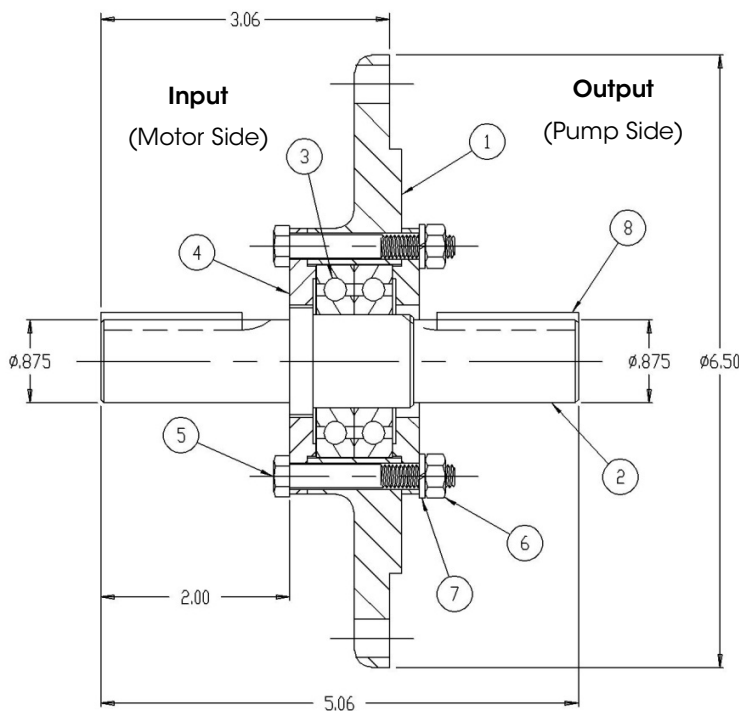
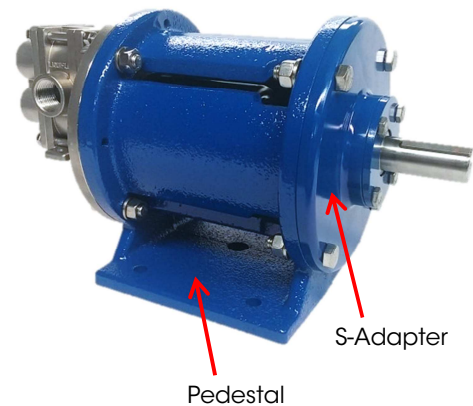
The S-adapter is used to long-couple mag-drive pumps, most commonly to odd-sized or non C-face motors. When using an S-adapter, specify a NEMA 143/145TC motor frame size for the pump, so the S-adapter, outer magnet and pedestal all fit together. The outer magnet attaches to the output shaft (pump side) of the S-adapter; the input shaft (motor side) of the S-adapter connects to the motor shaft with a mechanical coupling.

### Maintenance

The S-adapter uses greased-for-life bearings. Maintenance is not required unless the bearing needs to be replaced. If needed, the bearings can be replaced by first removing the S-adapter from the pump. Then, remove the 4 bolts (5) which hold the end cap (4) in place. The shaft (2) and bearing (3) will slide out. Press the shaft carefully out of the bearing. Reverse the procedure to install.

### S-Adapter Specifications

Weight	6 lbs
Input Shaft (Motor Side) Dia.	0.875 in
Input Shaft (Motor Side) Length	2.00 in
Output Shaft (Pump Side) Dia.	0.875 in
Max Temperature	250 °F
Max Speed	3600 RPM



S-Adapter Parts List (Part # SADAPT)			
Ref. #	Part #	Description	Qty
1	SP0043	Flange	1
2	SP0042	Shaft	1
3	SP0044	Bearing	1
4	SP0041	End Cap	2
5	620011	1/4-20 x 1-3/4 HHCS	4
6	862108	1/4-20 Hex Nut	4
7	863701	1/4 Lock Washer	4
8	SP0045	Key (3/16 Square)	2

## Power Frame

The Power Frame is used to long couple mag-drive gear or centrifugal pumps for use in high-temperature applications, up to the pump's maximum temperature rating. The integral cooling jacket keeps the bearing system of the pedestal cool, even when it is coupled to a pump running at high temperature.

When using the Power Frame, specify a motor frame size of NEMA 56C for the pump, so the pedestal, outer magnet and Power Frame all fit together. The outer magnet attaches to the output shaft (pump side) of the Power Frame; the input shaft (motor side) of the Power Frame connects to the motor shaft with a mechanical coupling. The Power Frame input shaft is 0.75 (3/4) inch in diameter.

The Power Frame needs to be lubricated with about **4 fluid ounces of #20 wt. non-detergent type oil**. The stainless steel plugs located near the input shaft are the oil fill and drain plugs. The red plastic plugs can be replaced with cooling lines to utilize the cooling jacket feature of the Power Frame when required.

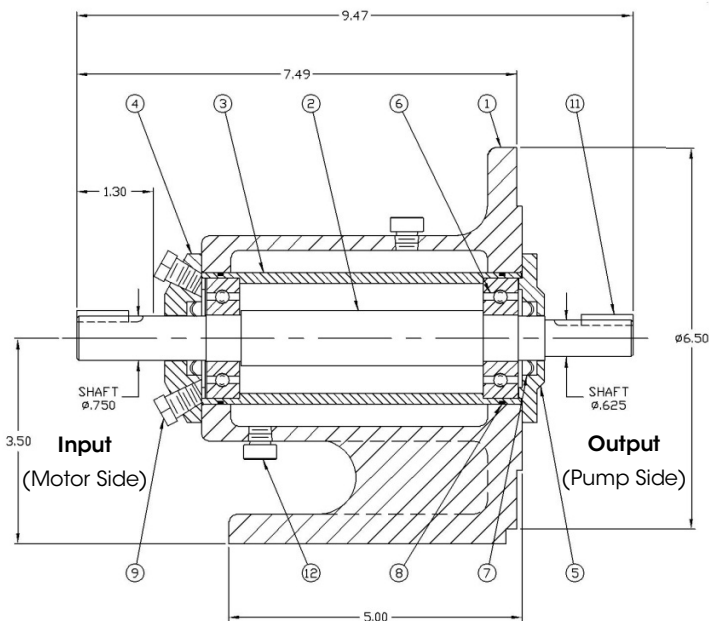
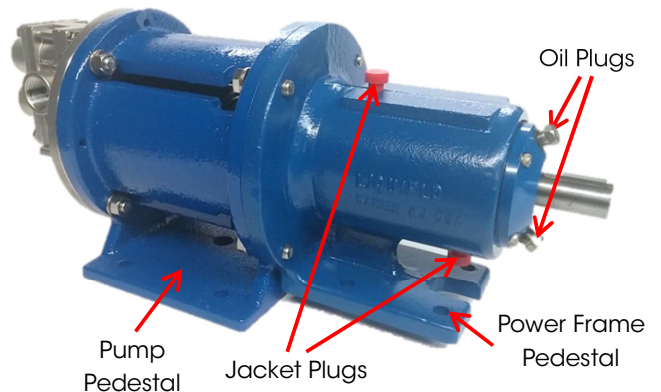
Even though the Power Frame has feet, it can be supported by the pedestal, as shown in the picture below.

## Maintenance

If the bearings need to be replaced, be sure the Power Frame is cool to the touch and remove it from the pump and system. Remove the two end caps (**4 & 5**) and slide the bearings (**6**) out of the sleeve (**3**). Carefully press the bearings off the shaft (**2**). Reverse the procedure to install. Seal the end caps and oil plugs with RTV Silicone or similar.

## Power Frame Specifications

Weight (Empty)	16 lbs
Input Shaft (Motor Side) Dia.	0.750 in
Input Shaft (Motor Side) Length	1.30 in
Output Shaft (Pump Side) Dia.	0.625 in
Max Temperature	500 °F
Max Speed	3600 RPM



Power Frame Parts List (Part # A-620804)			
Ref. #	Part #	Description	Qty
1	620804	Pedestal	1
2	620824	Shaft, Pedestal	1
3	620820	Sleeve, Pedestal	1
4	620821	Cap, Bearing, Motor End	1
5	620822	Cap, Bearing, Pump End	1
6	620826	Bearings, Ball	2
7	620827	Seal, Oil	2
8	620830	O-Ring (2-034)	2
9	362304	Plug, Pipe	2
10	620823	10-32 x 1/2 SHCS*	8
11	620828	Key (3/16 Square)	2
12	867210	NPT Plug, Plastic	2

\* Not Shown