



Open Frame Hydraulic Power Supplies

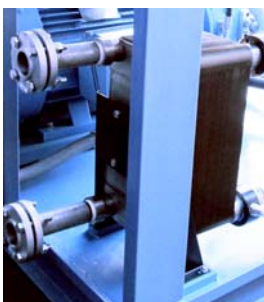
High performance, cost effective, scalable hydraulic power.

The BIA West Open Frame style Hydraulic Power supplies are laboratory quality pumps designed to meet the exacting requirements of Servo Hydraulic Control Systems. These power supplies utilize quality components and micro-clean filtration to provide trouble-free long life with minimum maintenance. A complete system of interlocks and controls allow failsafe unattended continuous operation. Unlike our Whisperpack® series, these units require a pump room to prevent noise from entering the test cell. **They are the perfect match for installations that need one centralized system that provides oil for a large laboratory.**



Rugged and serviceable motor pump units coupled to an oversized stainless steel reservoir

The hydraulic pump is mounted with a bell housing which provides the pump with perfect alignment and facilitates replacement. Pump drive is from a face mounted, fully-enclosed, fan-cooled electric motor coupled directly via a flexible drive coupling with replaceable insert spider. The pump drive speed is 1800 RPM at 60 Hz (1500 RPM at 50 Hz).



System oil is stored in an oversized stainless steel reservoir, which contains baffling and return line diffusers to allow dissipation of entrained air. The reservoir has a full-size removable top for unrestricted access and clean-out.

The hydraulic control components are incorporated in a machined manifold block, which is mounted on the perimeter of the unit. This manifold serves to provide the hydraulic interface from the pump and reservoir to the test system.

Features

- Variable volume, axial piston pump. Displaces only the output volume required to maintain system pressure minimizing power consumption and heat buildup in the oil.
- High pressure rating. The pumps are rated for up to 5000 psi working pressure (345 bar)
- Kidney loop cooling and filtration. Oil flows continuously through a 3 micron filter and the heat exchanger to assure sufficient cooling during extended periods of low flow operation. Oil temperature is controlled by a water-modulating valve that monitors the reservoir temperature.
- High quality stainless plate type heat exchanger. An oil-to-water heat exchanger is sized to dissipate the full hydraulic heat load presented by the system return line.
- Compensated pump pressure control. The pump compensator has a solenoid operated bypass, which allows each pump to be vented to a low pressure mode. An emergency backup relief valve, installed in the pressure control manifold, acts as a limit to system pressure in the event of failure of the main compensator control.
- Wye-delta motor starter.
- 460 volt, 3 phase, 60 Hz (380/400/415 volt, 3 phase, 50 Hz). Operation on other power systems is available on request.
- NEMA 12 oil-tight controls enclosure. A step-down control transformer provides 115 volt VAC power for control of the main motor starter and operation of the solenoid valves.
- 24v remote controls. Compatible with BIA West and other vendors' controllers.
- ISO 16/14/11 filtration. A high pressure full-flow filter with a 10 micron absolute replaceable element is provided on the pump discharge. An optional non-bypass filter with high crush replaceable element is available. The kidney loop filter with replaceable element provides 3 micron absolute oil filtration and polishing. A one micron air filter prevents airborne contamination from entering the enclosed hydraulic system.
- Swivel Casters. On units up to 60 gpm (227 lpm)
- Sealed fittings. All possible connections, including components, are sealed by o-ring fittings or welded joints to eliminate external oil leaks. Hoses use static o-ring face seals for leak free connections.

Model	Flow 60 Hz (gpm)	Flow 50 Hz (lpm)	Pressure (Bar)	Sound (dBA)	Flow Water (lpm)	Temp (C)
112	12.4	40	210	75	24	27
120	20	60	210	80	38	27
130	32	100	210	82	60	27
160	63	200	210	85	120	27
1120	126	400	210	88	240	27
1180	190	600	210	90	360	27