



SPECIFICATIONS – SLIDE-IN CAFSYSTEMS: 100-50-DS A Medium Sized Slide-In with Extra Large Performance

Our slide-in, modular compressed air foam 100-50-DS unit is designed and constructed to discharge water, foam solution or compressed air foam, developing 80 GPM of water at 125 PSIG (300 L/min @ 8.6 bar) and 40 CFM of air at 125 PSIG (1.13 m³/min @ 8.6 bar) simultaneously. The 100-50-DS also provides compressed air for pneumatic tools and comes with an industry exclusive five-year warranty.



Pump and Transmission Specifications:

Pump:

Hydro centrifugal water pump utilizing close-grained iron case, reinforced nylon impeller, stainless steel shaft and maintenance-free mechanical seal.

Intake:

1-1/2 inch

Discharge:

1-1/2 inch

Priming:

Pneumatic oil-free primer capable of priming the water pump through 20 feet (6 m) of 2-1/2 (63.5 mm) inch hard intake hose with a 10 foot (3 m) lift. Controls are mounted on the operator's panel.

Transmission:

"Poly Chain" drive with an automatic tensioner and 8mm pitch sprockets.

Engine Specifications:

Briggs-Diahatsu, three cylinder, turbo, liquid-cooled, developing 31 horsepower at 3600 rpm (23.1 kW), four-cycle, diesel fueled.

Fuel System:

Lift pump, fuel filter. The engine draws fuel from the chassis fuel tank.

Lubrication:

Spin-on oil filter. An extension hose is installed on the engine oil drain with a valve located at the oil pan and a plug installed in the end of the hose to facilitate oil changes.

Electrical:

12-volt electric with 40A alternator, electric ignition and start switch.

Exhaust:

Spark arrestor muffler

Approximate Dimensions and Weights:

Length (in/cm)	Width (in/cm)	Height (in/cm)	Dry Weight (lb/kg)
96.0 (244)	47.5 (121)	34.5 (88)	1300 (590)

Frame / Pump Operator's Panel / Tanks:

Frame:

Constructed of 1/8" wall steel square tubing. The sub-frame is made of steel tubing sufficient to support the weight of the module while in the apparatus and during loading and unloading. A 3/16" steel plate welded to the subframe provides for the mounting of the engine, compressor, pump and related components. A provision incorporated into the sub-frame enables the use of a forklift for loading and unloading of the unit.

Pump Operator's Panel:

Incorporated into frame. Contains Auto Sync™, air compressor, foam proportioner controls, and water pressure and air pressure gauges.

Tanks:

Booster:

200 gallon (757 liter), 1/2" polypropylene construction is standard. Optional 250 or 300 gallon tanks are available. Contact factory for pricing.

Foam:

10 gallon (37.9 liter), polypropylene construction
All steel structural members are primed and painted with a high-quality black powder coat.

Industry-Leading Sales and Support

When you purchase Waterous equipment, not only do you get quality products, you get quality service. Our expert service technicians are the best in the business and they are always happy to answer any service questions you might have.

Sales/Applications Assistance

Phone: 651-450-5234 (Press 3)
pumpsales@waterousco.com

Service Assistance

Phone: 651-450-5200
Fax: 800-488-1228
service@waterousco.com

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Air Compressor:

The air compressor is an oil-flooded, rotary screw type, sized to supply a minimum of 50 scfm (1.4 m³/min) of usable air.

Pneumatic Modulating Inlet Valve:

The air compressor is controlled by the pneumatic modulation inlet valve mounted on the air end. The pneumatic modulation inlet valve controls air delivery while maintaining constant pressure.

Auto Sync Balancing System:

Automatically maintains the air pressure within +/- 5% of the water pump pressure throughout the pressure range. The Auto Sync Balancing System is located on the operator's panel and allows for the following modes:

- Automatic - Air pressure matched to water pressure
- Fixed - Air pressure defaults to manual setting on compressor mounted control valve.
- Unload - Air pressure reduced to 40 psig (2.8 bar) for standby operations

Air Compressor Oil System:

A spin-on, full-flow oil filter unit is part of the system to control oil flow to the cooler. All lines are routed in braided hose conforming to SAE 100R1 standards for hydraulic hose.

Modular Air/Oil Separator:

Replacement elements for the oil filter and separator are available.

Air Compressor Cooling System:

The air compressor is cooled by the unit's water pump, utilizing a copper and brass shell and tube heat exchanger. When the fire pump is operating, water flows through the heat exchanger. The system maintains recommended operating temperatures throughout the full operational range in ambient temperatures up to 115°F (46.1° C).

Air Lines:

All air lines are rated to a minimum of 250 psig (17.2 bar). Air line fittings are constructed of brass, bronze or steel. Stainless steel or brass check valves are provided at all air injection points to prevent water back-flow into the air lines. All hoses shall be secured to the frame with insulating clamps and located away from any heat sources.

Plumbing:

Inlet:

Inlet piping is 2" stainless steel pipe with a 2" tank to pump valve controlled at the pump panel. An inline strainer is also provided. A 2" valve is provided behind the pump panel for overboard pump inlet with a 1.5" M-NST connection. Victaulic-type couplings are utilized in the pump inlet for flexibility and improved serviceability.

Discharge:

Plumbing to two panel mounted 1.5" discharge outlets incorporate a stainless steel manifold, welded stainless steel pipe and/or Class 1 high-pressure hydraulic hose with stainless steel fittings. A 1" tank fill provision with 1" valve is provided. Victaulic-type couplings are utilized in the discharge plumbing for flexibility and serviceability. All discharge plumbing is designed and tested to a minimum of 500 psig (34.5 bar) burst pressure.

Drains:

Panel mounted drain valves are provided to drain water from the water pump, discharge manifold and compressor cooler.

Foam Proportioner:

- FoamPro 1601 Proportioner with 1.5" paddlewheel (Class A foam only).
- Aquis™ Foam Proportioner with operator interface terminal (OIT), pump module with electric motor/motor driver and microcontroller unit, foam concentrate strainer, shielded electrical cables for connection of all electronic components, foam inject check valve, WYE Strainer and flowmeter and tee.

On-Site Delivery Instruction (Optional):

Contact factory for pricing.