



FOAM SYSTEMS

CAFSystems™

FIRE PUMPS

MODULAR SLIDE-IN

150-70-DS

Our slide-in, modular compressed air foam system is designed and constructed to simultaneously discharge water, foam solution or compressed air foam. The system also features compressed air for pneumatic tools and can pump water or air independently.



BENEFITS OF COMPRESSED AIR FOAM

- 80% of water content in the foam is effectively used for fire fighting
- Improved firefighting safety
- Faster knockdown time
- Less property damage
- Less water used

SPECIFICATIONS

PERFORMANCE

- 150 GPM @ 150 PSI
- 567 l/min @ 10 bar
- 70 SCFM @ 125 PSI
- 1.97 M³/min @ 8.6 bar

- Kohler 49 HP (36.5 kW) diesel-fueled engine
- Waterous CPD-2 Pump
- Rand 70 CFM compressor
- Steel Frame
- AQUIS™ 1.5 Foam Proportioner
- Rotary Dial Foam Proportioning Rate Panel
- Optional Operator Interface Terminal (OIT) for selecting foam proportioning rates

SPECIFICATIONS – SLIDE-IN CAFSYSTEM: 150-70-DS

Heavy Duty Slide-In's for Heavy Duty Applications



150-70-DS Performance							
	FLOW			PRESSURE			
	GPM	l/min	l/sec	PSI	bar	kPa	MPa
Water Performance	250	950	15.8	100	6.9	690	0.69
	150	567	9.45	150	10	1000	1.0
	CFM	M ³ /Min		PSI	bar	kPa	MPa
Air Performance	70	1.97		100	6.9	690	0.69
				125	8.6	860	0.86
SIMULTANEOUS FLOWS							
140 GPM and 70 CFM @ 125 PSI (532 l/min and 1.97 M ³ /Min @ 8.6 bar)							

CAFSsystem Components

- GHH Rand 70 CFM (1.9 m³/min)
- Aquis™ 1.5 Foam Proportioner
- Electric Auto-Sync Balancing System

Pump / Transmission Specifications

- Waterous CPD-2 Centrifugal water pump, aluminum case, double-hubbed bronze impeller, stainless steel shaft and maintenance-free mechanical seal.
- 3-inch NPT Intake
- 2-inch NPT Discharge
- Venturi Primer w/electric activation switch
- "Poly Chain" drive transmission with an automatic tensioner and 8mm pitch sprockets.

Engine Specifications

- Kohler, Model KD1903TCR, three-cylinder, liquid-cooled, delivering a maximum of 49 HP (36.5 kW), four-cycle, diesel fueled. Three (3) year manufacturer's warranty.
- The engine uses a pulse fuel pump (fuel tank not supplied). Pressure lube system with spin-on oil filter. An extension hose is installed on the engine oil drain located at the oil pan and a plug installed in the end of the hose to facilitate oil changes.
- 12 or 24-volt electric with 80A/12v or 40A/24v alternator, electric ignition and start switch panel.
- Spark Arrestor Muffler

Pump Operator's Panel:

- Auto Sync™
- Engine control panel display with start/stop, throttle
- Air compressor, foam proportioner controls
- Water pressure and air pressure gauges
- Chrome-plated discharge connection
- Venturi priming system w/push to prime activation
- Auxiliary compressed air outlet and valve control
- LED Lighting
- I/C Push-Pull valve actuators and gauge

Frame:

High-strength, steel frame

Warranty

Waterous Seven-Year Limited Warranty

Conditions of Sales

For details on Waterous Conditions of Sales, refer to F-2190, *Conditions of Sales* located on the Waterous web site at www.waterousco.com or by contacting Waterous.

Air Compressor:

The air compressor is an oil-flooded, rotary screw type, sized to supply a minimum of 70 cfm (1.97 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 psi (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 a shell/cooler. 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 psi (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 3" with 2.5" tank to pump stainless steel pipe with 2.5" overboard suction connection F-NST swivel.

Discharge:

Plumbing to two panel mounted 1.5" discharge water/foam/CAFS outlets, and one panel mounted 1.5" water only outlet M-NST incorporate a stainless-steel manifold and welded stainless steel pipe. All discharge plumbing is designed and tested to a minimum of 500 psi (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:

Aquis™ Foam Proportioner with manual rotary dial proportioner selector (optional operator interface terminal (OIT) available), 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.

Optional Items:

Electronic Automatic Discharge Valves w/Electric Air Valves: Elkhart UICS automatically controlled discharge valves are used to control water/solution flow and the consistency of the compressed air foam. They also control the electric solenoid-type, compressed air discharge valves, allowing the air discharge valves to open and close simultaneously as their respective water discharge valves are opened or closed.

- On-Site Delivery Instruction - Contact factory for pricing.
- Threads on panel intake and discharges HN/NST, NPSH, BSP or STORZ
- Direct tank fill 2" valve w/2.5" panel connection
- 1" discharge w/panel control, water/foam
- Top and Side Enclosures