

FoamPro 2001 DETAILED SPECIFICATIONS

Special Note: When preparing specifications for your new foam proportioning system, assure the use of a FoamPro by incorporating these specifications as written. No competitive foam proportioning system can match FoamPro for performance.

The apparatus shall be equipped with an electronic, fully automatic, variable speed, direct injection, discharge side foam proportioning system. The system shall be capable of handling Class A foam concentrates and most Class B foam concentrates. The foam proportioning operation shall be based on direct measurement of water flows, and remain consistent within the specified flows and pressures. System must be capable of delivering accuracy to within 3% of calibrated settings over the advertised operation range when installed according to factory standards. The system shall be equipped with a digital electronic control display suitable for installation on the pump panel. Incorporated within the control display shall be a microprocessor that receives input from the system flowmeter(s), while also monitoring foam concentrate pump output, comparing values to ensure that the operator preset proportional amount of foam concentrate is injected into the discharge side of the fire pump.

Paddlewheel-type flowmeter(s) shall be installed in the discharges specified to be "foam capable." When the use of more than one flowmeter is required, an interface electronics module will be provided to totalize these flows and send the flow total to the microprocessor in the computer control display.

The digital computer control display shall enable the pump operator to perform the following control and operation functions for the foam proportioning system:

- Provide push-button control of foam proportioning rates from 0.1% to 9.9%, in 0.1% increments
- Show current flow-per-minute of water
- Show total volume of water discharged during and after foam operations are completed
- Show total amount of foam concentrate consumed
- Simulate flow rates for manual operation
- Perform setup and diagnostic functions for the computer control microprocessor
- Flash a "low concentrate" warning when the foam concentrate tank(s) runs low
- Flash a "no concentrate" warning and shut the foam concentrate pump off, preventing damage to the pump, should the foam tank(s) empty

A 12 or 24-volt electric motor drive positive displacement foam concentrate pump, rated up to 2.5 gpm (9.5 L/min) @ 150 psi with operating pressures up to 400 psi (27.6 BAR), shall be installed in a suitable, accessible location. The system will draw a maximum of 40 amps @ 12 VDC or 21 amps @ 24 VDC. A pump motor electronic driver (mounted to the base of the pump) shall receive signals from the computer control display and power the 1/2 hp (0.40 Kw) electric motor directly coupled to the concentrate pump in a variable speed duty cycle to ensure that the correct proportion of concentrate preset by the pump operator is injected into the water stream.

When two types of foam concentrates are to be used, a dual tank switch over system consisting of the following options will be installed to provide rapid changeover of foam concentrate reservoirs. The digital computer control display shall interface with the options listed, provide dual foam calibration, and display separate totals for each foam concentrate used.

An electronic dual tank system providing dual foam tank switching via a switch located on the pump operator's panel. The dual tank switch will also provide a clean water flush of the foam concentrate pump. The system shall automatically read the low tank sensor for whichever foam tank is in use. The valves shall be capable of operating pressures to 500 psi (34.5 BAR).

Or

A manual dual tank system providing dual foam tank switching via a manual valve located on the pump operator's panel. The dual tank valve will provide a clean water flush of the foam concentrate pump. The system shall automatically read the low tank sensor for whichever foam tank is in use. The valve shall be capable of operating pressures to 500 psi (34.5 BAR).

When two types of foam concentrates are to be used, two foam concentrate tanks shall be installed and piped to the foam concentrate pump via the electric dual tank valve or the manual dual tank valve. *(The user shall determine the tank capacities.)*

Full flow check valve shall be provided to prevent foam contamination of fire pump and water tank or water contamination of foam tank.

Components of the complete proportioning system shall include:

- Operator control and display
- Paddlewheel flowmeter(s)
- Pump and electric motor/motor driver
- Wiring harnesses
- Low level tank switch
- Multi-Flo electronic module (if more than one flowmeter is used)
- Foam tank(s)
- Electronic dual tank valve or manual dual tank valve (if more than one tank)
- Foam injection check valve
- Main waterway check valve

An installation and operation manual shall be provided for the unit, along with a one-year limited warranty by the manufacturer. The system must be installed and calibrated by a Certified FoamPro Dealer.

The system design shall have passed environmental testing which simulates heavy use on off-road mobile apparatus. Testing shall have been conducted in accordance to SAE standards.

(Note: Clarify discharges to be supplied with foam solution by specifying size and location)

Hypro Corporation cannot assume responsibility for product failure resulting from improper maintenance or operation. Hypro is responsible only to the limits stated in the product warranty. Product specifications contained in this material are subject to change without notice.