

FoamPro 3020D 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 5% 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 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 runs low

Flash a "non concentrate" warning and shut the foam concentrate pump off, preventing damage to the pump, should the foam tank empty

A hydraulic motor driven positive displacement foam concentrate pump, rated at 20 gpm (75.7 L/min) with maximum operating pressure of 200 psi (13.8 BAR), shall be installed in a suitable accessible location. An electronically-operated valve shall receive signals from the computer control display to control the flow of hydraulic oil to the hydraulic motor coupled to the concentrate pump. The concentrate pump turns at a variable speed to ensure that the correct proportion of concentrate selected by the pump operator is injected into the fire pump discharge stream.

System includes a 12 or 24-volt electric motor driven positive displacement foam concentrate pump, rated up to 5.0 gpm (18.9 L/min) with operating pressures up to 400 psi (27.6 BAR), shall be installed in a suitable, accessible location. A pump motor electronic drive (mounted to the base of the pump) shall receive signals from the computer control display and power the 3/4 hp (0.56 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.

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

A hydraulic oil supply shall be provided that is capable of providing 3000 psi (206.9 BAR) of hydraulic oil at a minimum flow of 15 gpm (56.8 L/min). A separate hydraulic pump must be provided. The hydraulic system must comply with all applicable SAE and DOT standards. The hydraulic system shall contain an oil cooler and an appropriately sized hydraulic reservoir to maintain the temperature of the hydraulic oil at or below 180°F. An oil to air cooler mounted in front of the apparatus engine radiator will provide adequate cooling.

Components of the complete proportioning system shall include:

- Operator control and display
- Paddlewheel flowmeter(s)
- Pump and electric motor/motor driver
- Concentrate pump and hydraulic motor
- Wiring harnesses
- Hydraulic hoses
- Low level tank switch
- Multi-Flo electronic module (if more than one flowmeter is used)
- Foam 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.

***Standard System Specs 3020D** Max. Foam Output gpm (L/min) 20 (75.7) Max. Operating Pressure psi (BAR) 200 (13.8) Hyd. Supply Pressure psi (BAR) 3000 (206.9) Hyd. Supply Flow gpm (L/min) 15 (56.8)

***Electric Motor Section Additional Specs for 3020D Model** Max. Foam Output gpm (L/min) 5 (18.9) Max. HP (Kw) 3/4 (.56) Max. Amp Draw @ 12 VDC 56