

FoamPro AccuMax 150

DETAILED SPECIFICATIONS

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

The apparatus shall be equipped with an electronically controlled, direct injection, discharge side foam proportioning system. It shall be demand based, fully automatic and be compatible with all current foam concentrates. Electronics shall be EMI/RFI compliant. The foam proportioning operation shall be based on direct measurement of water flow, 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. Performance must not be affected by hose length or size, nozzle, incoming water pressure or nozzle elevation. The system shall be capable of controlling up to eight different foam capable discharges; number and sized per specifications. Each foam capable outlet shall allow the choice of plain water or foam solution at the percentage chosen by the operator. Each foam capable discharge will be equipped with: an individual line controller, foam flowmeter, automatic foam control valve, water flowmeter and check valves to prevent backflow contamination (main waterway check valve optional). The individual line controller manages concentrate injection, continuously monitors performance and feeds the master control with information and requirements. The master control totals concentrate requirements and directs the Edwards Manufacturing rotary gear pump to perform accordingly. All electronic control modules are suitable for mounting on a fire truck operator panel. A diagnostic self-check will be run each time the system is powered up. Water flow measurement of each foam capable discharge is accomplished by non-restricting flowmeter. Devices placed in the discharge piping that restrict water flow and reduce nozzle performance are not acceptable. Depending on piping size, flowmeter shall be of paddlewheel or magnetic meter design. All system components are to be constructed of non-corrosive materials. To prevent waste of costly foam concentrate, the system shall allow calibration and performance testing without mixing concentrate with water.

Individual Line Controller

A microprocessor equipped individual line controller shall be provided for each foam capable discharge. Each includes an ultra bright LED digital display for maximum viewing. The display shall enable the pump operator to perform the following control and operation functions for each discharge:

Chose between plain water or foam solution

Provide push-button control of foam proportioning rates

Display current flow-per-minute of water

Display total volume of water discharged during and after foam operations are completed

Display total amount of foam concentrate consumed

Display injection percentage

Simulate flow rates for manual operation

Perform setup and diagnostic functions for the computer control microprocessor

Allow three injection percentage defaults to be stored

Master Controller

A microprocessor equipped master controller shall be provided for each proportioning system. It includes an ultra bright LED digital display for maximum viewing. The display shall enable the pump operator to perform the following control and operation functions for the total foam proportioning system:

Activate the proportioning system at the push of a button

Display total current flow-per-minute of water

Display total volume of water discharged during and after foam operations are completed

Show total amount of foam concentrate consumed

Perform setup and diagnostic functions for the computer control microprocessor

Flash a "low concentrate" warning when the foam concentrate tank runs low

Flash a "no concentrate" warning and shut the foam concentrate pump off, preventing damage to the pump, should the foam tank empty

Hydraulic System

The hydraulic piston pump shall be variable displacement to provide longer life and reduce service. Hydraulic gear pumps are not acceptable. The hydraulic system must comply with all applicable SAE and DOT standards. The hydraulic system shall contain oil cooler and an appropriately sized hydraulic reservoir to maintain the temperature of the hydraulic oil at or below 200 F. An oil cooler must be installed to provide adequate cooling.

Concentrate Pump

A hydraulic motor driven positive displacement foam concentrate pump, rated at 150 gpm (567.8 L/min) minimum 6 gpm (22.7 L/min) with maximum operating pressure of 250 psi (13.8 BAR), shall be installed in a suitable and 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.

The concentrate pump shall be an Edwards Manufacturing all bronze 150 gpm rotary gear pump.

Construction includes:

Use of bearings to extend pump life. Bushings not acceptable

Timing gears to reduce rotor wear. Direct rotor contact not acceptable

Solid stainless steel shafts

Capable of dry run without causing pump damage

FoamPro Supplied Items:

Master controller

Individual line controllers (number per specifications)

Individual line components (number & size per specifications):

 Foam concentrate Flowmeter

 Foam concentrate control valve

 Check valve

Main waterway flowmeter(s) (number & size per specifications)

Edwards Manufacturing concentrate pump coupled to hydraulic motor

Variable displacement piston hydraulic pump

Strainer

Molded cables

Optional 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.

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

Hypro 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.