

# **SERVO COMMAND**° FOAM PROPORTIONING SYSTEM

**NME110** 

- For The Foam Proportioning System Of Your Choice
- Foam Proportioning Pump Modules For Serious Flammable Liquid Response
- Simply The Best Industrial Foam Proportioning Solution Available
- Request By Name From Your Preferred Apparatus Manufacturer
- Eliminates Problems Associated With Other Systems In Areas Of Training,
   Maintenance And Reliability



# Description

Servo Command Foam Proportioning Modules are available from National Foam and your preferred Fire Truck manufacturer. By specifying Servo Command, National Foam will provide the industry standard "On-Demand" foam system and pump module built, tested and certified for the most reliable and accurate foam proportioning. This module's construction and reliability are based on decades of experience and proven performance in the most challenging environments. With over one thousand units in the world, NF is clearly the market leader. NF's module in combination with the apparatus of your choice will provide years of dependable service.

Whether Industrial or Municipal fire service, having the versatility of a Water/Foam apparatus with Servo Command within your department will greatly add to your capabilities. Refineries and chemical companies have and will continue to select NF Servo Command for flammable liquid fire protection. Municipal fire departments that anticipate similar hazards in their areas such as terminals, storage tanks, and hazardous materials have also seen the need to incorporate the foam proportioning strength of Servo Command.

#### **Features**

 On-demand foam proportioning water or foam at every discharge

- Unmatched foam proportioning accuracy
- Designed for the most extreme environmental conditions
- All Hydraulic no fragile or sensitive electronic components
- Pump ratings from 1000 to 3000 GPM from draft. Higher from pressurized water sources.
- Side & Top Control Modules
- No recirculation of foam liquid concentrate
- · No flushing required
- Ease of field calibration and low maintenance
- No need for PTO Drive
- · Minimal training required
- Follows 1901 guidelines
- Foam Tank and auxiliary foam pick up connection standard
- Nearly 30 years of proven reliability

### **Specifications**

# <u>Design</u>

Servo Command is an automatic, balanced pressure, demand-type foam proportioning system with all hydraulic drive and controls.

#### **Characteristics**

Foam concentrate flow and pressure automatically match system demand; there is no recirculation back to the foam concentrate tank or around the pump. The Servo Command system is maintained in a flooded ready-to-pump condition and requires no flushing after use. Water and/or foam solution can be discharged simultaneously from any combination of outlets up to the rated capacity of the water and foam pumps.

#### **Pump Selection and Configuration**

#### HALE QMAX100 thru 200:

- 1000 GPM (3785 LPM) to 2000 GPM (7570 LPM) from draft. Higher flows easily attained from pressurized water sources.
- 10 Discharges
- 2 Suctions, one each side
- 1 Auxiliary Suction
- 1 External foam suction with pick-up hose
- 1 External foam discharge
- · 150 GPM (567 LPM) Foam Pump

#### HALE 8FG300:

- 3000 GPM (11,355 LPM) from draft. Higher flows easily attained from pressurized water sources.
- 11 Discharges
- 3 Suctions on right side
- 1 Auxiliary Suction
- 2 External foam suctions with pick-up hoses
- · 1 External foam discharge
- 250 GPM (946 LPM) Foam Pump

**Note**: Pumps need to be matched to appropriate Engine HP to attain ratings.

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# **Proportioning Rate**

Adjustable at each outlet from 1% to 6%.

# **Hydrostatic Drive**

The truck's engine is the power source for the "Servo Command" hydrostatic transmission. The hydraulic pump drives a hydraulic motor connected to the foam concentrate pump. Output of the foam concentrate pump is regulated to match system demand by controlling the flow in the hydrostatic system. No use of sensitive electric controls which could be unstable or fail in fire ground conditions.

# **Foam Concentrate Pump**

Positive displacement type, rotary gear, bronze body, bronze rotors and stainless steel shafts. Pump which is designed to operate efficiently with foam liquid concentrates.

# Operator Controls Side & Top Control Units available

Easy to operate foam system controls. Duplex gauge indicates foam concentrate pump pressure and water pump pressure simultaneously, selector valve provides control of system functions, manual override provides operator control of foam concentrate pressure, and individual Variable Proportioning Valves control proportioning rate at each outlet.

# Variable Proportioning Valves (VPV)

Plug type bronze body and cap, stainless steel stem, acetal plugs, Buna N seals and plastic knobs. Each VPV is individually calibrated to ensure superior accuracy. Increments including 1%, 3%, 6% are clearly marked on the VPV indicator plates.

#### **Ratio Flow Controllers (Proportioners)**

Each foam discharge outlet is provided with an individual brass ratio flow controller that has a solution capacity matched to the capacity of the outlet.

#### **Frame Construction**

Durable and strong 304 Stainless Steel.

# **System Piping**

High-pressure hose, brass valves, brass proportioners, 304 stainless steel pipe and fittings.

Foam Concentrate Manifold:

A stainless steel foam discharge manifold eliminates unnecessary piping and provides a stable foam concentrate pressure reference to promote accurate proportioning.

#### Strainer

In-line type with a stainless steel screen.

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