

FEATURES

SPM Series pump/motor units consist of a fuel pump direct coupled to a motor, an integral check valve and combination vacuum/pressure gauge. They are designed to supply fuel oil from a central storage tank to one or more overhead furnaces or day tanks. Four pump/motor sizes are available, with capacities of 15. 30, 65 and 135 GPH. 1/6, 1/4 and 1/3 hp (124 w, 186 w and 248 w) motors are split phase available for either 115 or 230 volt operation. 1/2 hp (373 w) motors are capacitor start - induction run, totally enclosed with dual 115/230 volt windings. The units are shipped completely assembled including check valve. Compound gauge is also included but not assembled to unit. All are 60 cycle, 1725 RPM, continuous duty.

SPM-15, SPM-30 and SPM-65 (pictured upper left) utilize modified, two stage Webster R Series fuel units. Model SPM-135 (pictured lower left) utilizes modified two stage V Series Pumps.

SPECIFICATIONS

Capacities:

15, 30, 65, and 135 GPH.

Pressure:

Maximum operating pressure to 80 PSI or 200' of head.

Motors:

All motors are 60 cycle, 1725 RPM, continuous duty. $\frac{1}{6}$, $\frac{1}{4}$, $\frac{1}{3}$ hp: split phase, 115 or 230 volt operation. 1/2 hp: capacitor start/induction run, TEFC, dual 115/230

SPM 15, 35, and 65: uses Webster "2R" Series pump

SPM 135: uses the Webster "2V" Series pump unit. Webster 2R and 2V are UL listed.

Porting:

SPM15, 30, 65:

1/4" NPTF — 2 inlets, outlet port and top and bottom returns.

SPM135:

1/4" NPTF — outlet port.
3/4" NPTF — return port, 2 optional inlets.

1/2" NPTF — inlet.

Seal:

All models — double lip type.

Mounting:

All models - four bolt foot mount.

Filter:

Rotary self cleaning type, except in SPM 135. Use of external line filter recommended.

Valves:

Pressure regulating assembly in pump maintains set pressure.

Check valve maintains oil in feeder lines for instant starts.

Gauge:

21/2" dia., calibrated from 30" vacuum to 100 PSI.

Maximum Inlet Vacuum:

All units - 15" Hg.

National Fire Protection Association compliance requires fuel inlet pressure not to exceed 3 PSIG.

SELECTION TABLE — SPM Series Single Units

Models	Motor Voltage	Motor Type No.	Motor HP	Watts at 85 PSI	Pump Assembly No. 1	Pump Model No.	Suction Capacity GPH	Max. Output Flow @ 0 PSI GPH	Total Firing Rate GPH ²	BTU (millions)
SPM-15-1 SPM-15-2	115 230	34499-1 34499-2	1/8	65	35196-5	2R181C-5BQ4	35	25	15	1.5
SPM-30-1 SPM-30-2	115 230	34499-3 34499-4	1/4	95	35196-6	2R283C-5BQ4	70	45	30	3.0
SPM-65-1 SPM-65-2	115 230	34499-8 34499-9	1/3	175	35196-7	2R686C-5BQ4	125	90	65	6.5
SPM-135	Dual 115/230	34499-6	1/2	300	35196-8	2V086C-5DO4	250	167	135	13.5

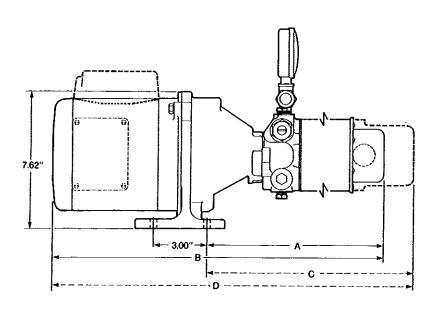
¹ SPM Series units are available less motor; order by Pump Assembly Part Number. Motor and Bracket Assemblies (less pump) are also available. (See page 14)

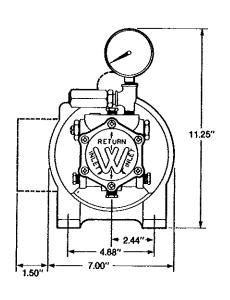
SPM Single Units Models Α В ¢ D **SPM-15** 6.88 16.36 SPM-30 7.44 17.42 **SPM-65** 8.96 18.94 SPM-135 10.94 21.51

DIMENSIONS

The basic dimensions indicated apply to all size SPM units. Refer to the table for variable dimensions "A" through "D."

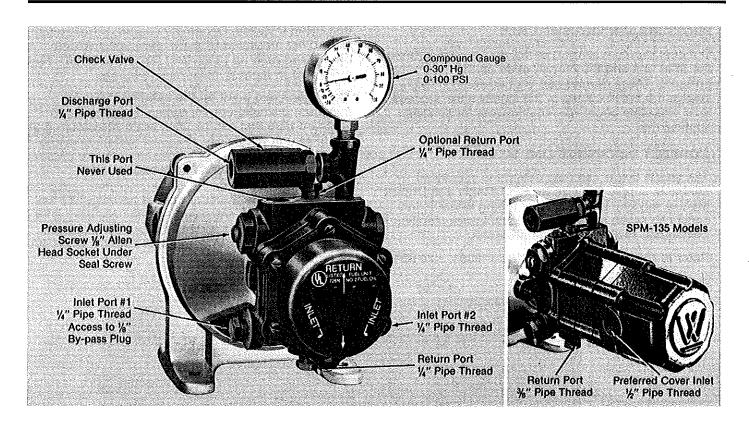
Model SPM-135 (with 1/2 HP motor) includes external motor starter capacitor and junction box illustrated by dotted lines. Larger cover with preferred inlet on Model SPM-135 also illustrated by dotted lines.





² Firing rate in GPH @ 1725 RPM pumping #2 fuel oil @ 75°F. Total firing rate is equal to the sum of burner firing rates when burners are set for one-pipe operation as recommended. Total must not exceed maximum rating shown.

Section Two: SPM Single Supply Units



SPECIFICATIONS

SPM Single and Duplex Manual units are capable of supplying fuel oil to heating units or tanks located up to 200 feet above the supply pumps. They are designed for use in maintained pressure or open loop systems. Pump pressures can be set at a range from 20 PSI to 100 PSI. See *Correct Supply Line Size* charts for maximum discharge head.

TANK TO PUMP CONNECTIONS

Connect suction line from the tank to preferred supply pump inlet port. Connect return line from pump return port to tank. Internal 1/8" by-pass plug (factory installed) must be in position for recommended two pipe operation. Be certain all plugs and connections are secure and leak tight.

The correct suction line size can be determined by referring to the line sizing charts. Generally, the return line should be sized the same as the suction line. Check valves in the suction lines between the tank and SPM units assure that pumps are full of oil, ready for

service. Check valves must be oil tight. Low pressure drop swing type are recommended to minimize friction loss.

For SPM Duplex Manual models, preferred installation calls for a separate suction line from tank to pump for each pump/motor unit. If system failure occurs because of a gross leak in the suction line of the primary unit, the second unit can still provide backup service. Check valves can be installed in return lines to allow removal of inactive pump for servicing, while primary pump continues to run.