

YOUNG PUMP COMPANY

Dunham Building—450 East Ohio Street, CHICAGO, ILLINOIS



Factory

MICHIGAN CITY, INDIANA

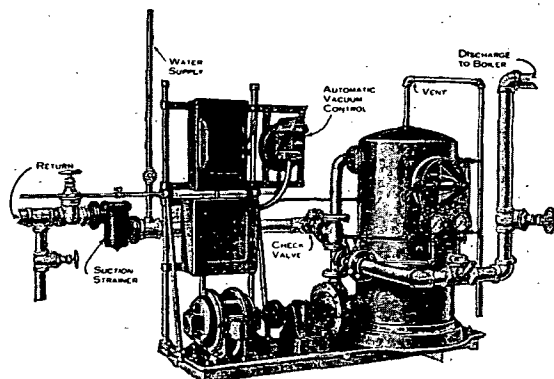
Agencies in All Principal Cities in U. S.

Canadian Office and Factory

C. A. DUNHAM CO., Ltd., 1523-41 Davenport Road, Toronto, 4, Ontario

THE YOUNG CENTRIFUGAL VACUUM AND BOILER FEED PUMP

Patented December 10, 1918



The Young Pump is a reliable Vacuum System pump for handling both gases and liquids efficiently.

The units are completely assembled (including electrical equipment) at the factory and tested before shipment. They are ready to run when the feed wiring is connected to the unit.

The unit consists of a Centrifugal Pump, bronze fitted, of enclosed impeller and high efficiency type, an approved make of motor and electrical equipment, mounted with a heavy welded tank on a substantial cast iron base.

The motor used is of 40° rating, of more than ample power for the maximum load that will come on the unit. A safety factor insuring freedom from motor trouble.

All Standard Units are built to discharge against a pressure of 20 pounds at the pump, except the Standard Unit V0A which is built to discharge against 18 pounds pressure at the pump. Special pumps can be furnished to discharge against 35 pounds pressure at the pump.

Both the standard and special units are furnished for either continuous or automatic control operation.

TABLE OF CAPACITIES

Size	Sq. Ft. of Direct Radiation	Horsepower of Motor	Normal Power Load	Water Capacity G. P. M.	Air Capacity Cu. Ft.	Size of Suction	Size of Discharge	*Approx. Shipping Weight, lbs.
V0A	5,000	3/4	.6	8	4.5	1 1/4	1 1/4	750
V1A	8,000	1	.8	12	6.0	1 1/2	1 1/2	900
V2A	16,000	1 1/2	1.3	25	9.8	1 1/2	2	950
V3A	26,000	2	1.8	40	16.0	2	2 1/2	1,100
V4A	40,000	3	2.7	70	20.0	2 1/2	3	1,200
V5A	65,000	5	4.1	100	32.0	3	3	1,250
V6A	100,000	7 1/2	6.8	160	50.0	5	3 1/2	1,670

*Crated F.O.B. Michigan City, Indiana.

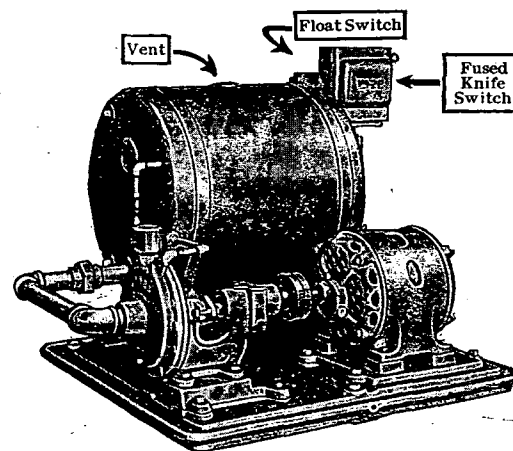
The capacity rating in square feet of equivalent direct radiation given in the table is for a properly laid out and equipped vacuum system that is tight. The air capacities are ample and standardized to produce under these conditions 10 inches of vacuum with reasonably tight vacuum traps, and temperature of returns not to exceed 180 deg. Fahr.

The principle of the vacuum producing element is the oldest and most efficient in practice—that of the ejector. Whenever the pump is in operation, water is supplied under pressure to the ejector nozzle, which causes the ejector to pull a strong suction on the return line of the heating system. This suction produced by the ejector is particularly positive.

Where the returns come back at a low level an accumulator tank is recommended in preference to an ordinary lift connection, with all the returns gravitating into it.

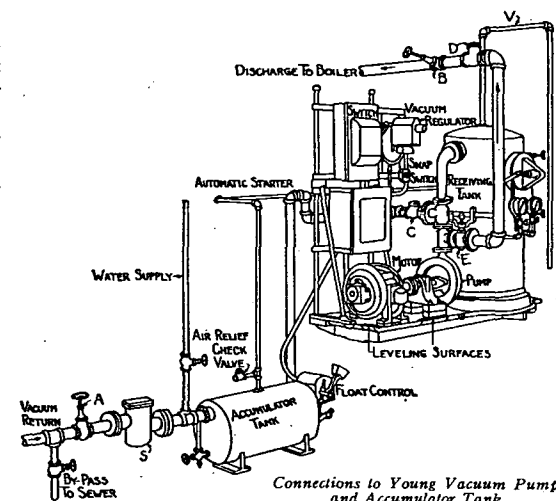
The accumulator tank is equipped with a float switch control wired to the other control. Air and the water of condensation flow into the accumulator tank from which they are pumped by the pump unit. Should the accumulator tank fill with water, the float control will function whether or not there is vacuum on the return line of system. The snap switch between the vacuum regulator and starter can be used thus operating the pump as a condensation pump and receiver. This insures water being returned to the boiler at all times.

YOUNG CONDENSATION PUMP AND RECEIVER



A Complete and Assembled Unit Ready for Piping and Wiring Connections

YOUNG ACCUMULATOR TANK



Connections to Young Vacuum Pump and Accumulator Tank

This accumulator tank equipment is particularly valuable where blast or other radiation is at a low level which must always be drained when vacuum is not required on other parts of the system.