

LOCKWOOD®

TYPE UV CONDENSATE RETURN SYSTEMS

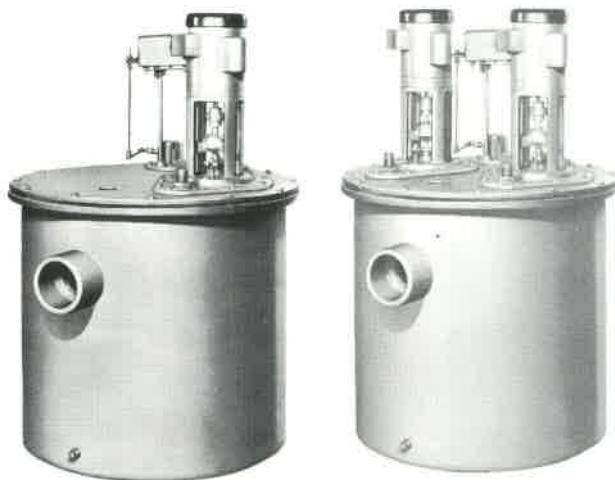


STANDARD FEATURES

Type UV condensate systems are manufactured in both the single and duplex units. Furnished with either float switch mechanism to control pump from water level in receiver, or with float operated make-up valve for supplying cold water make-up to receiver when pump is controlled from boiler water level.

Open type concrete pits are not required and the pump can be installed with the receiver underground and the receiver cover plate flush with the floor. Pump motor and control switches are above floor level and out of danger from flooding such as is often the case in open pits. Systems are offered in a wide range of capacities and discharge pressures up to 75 lb.

- **The Type UV pump consists of a vertical pump and motor unit** with flange-type float and float switch mechanism or flange-type float operated make-up valve bolted to main cover plate which in turn is bolted to top of sump-type receiver. Each unit is completely assembled and carefully tested before leaving the factory, and a permanent record of such test is retained.
- **The pump unit is bronze fitted throughout**, with pump housing, shaft housing, and main cover plate of close grain cast iron construction. The impeller is of bronze construction, centrifugal enclosed type, especially designed for handling hot water up to 200°F and it is keyed and locked on a stainless steel pump shaft.
- **The motor stand is of cast iron construction** with integral stuffing or packing box and a ball thrust bearing elevated above the stuffing box. The vertical pump shaft is well supported by the ball thrust bearing, and guided below by a self-lubricating sleeve type bronze bearing directly above the impeller. This construction assures long life and proper alignment of rotating parts. Both bearings are quite accessible and therefore easily replaced at small cost.
- **The packing gland is made of bronze** and it is of the split type for accessibility when repacking the stuffing box. A heavy duty type flexible coupling connects the pump shaft to the motor shaft. The electric motor facetype flange fits into a machined register on top of motor stand, thereby guaranteeing perfect alignment. Motor is attached by means of four cap screws.
- **The float switch mechanism** of the Lockwood Type UV pump is a complete departure from the usual design found in competitive makes of pumps. It is of direct acting type and the entire float and switch mechanism can be removed from main cover plate without disturbing or removing pump and motor unit. This mechanism is adjustable to various water levels directly at the switch lever, eliminating the usual float rod stops or adjustments, within the receiver.
- **The float operated make-up water valve** has features equal to the float switch mechanism and it also can be removed from main sump cover plate without disturbing or removing pump and motor unit. Flanges of the float switch mechanism and float operated makeup valve are of same physical dimensions, bolt holes, etc., so that they are interchangeable. Required changes, therefore, after pump installation are simple and inexpensive.
- **Receivers, standard construction**, are of close grain cast iron with inlet opening. Completely prime coated, interior as well as exterior. Welded steel receiver can also be furnished if desired. Steel receivers are constructed of 3/16" thick rust resisting copper bearing steel, and are completely prime coated inside and out.
- **Pumps can be furnished with receivers** deeper than the standard depths indicated in the selection data. With deeper than standard receivers, the pump units are furnished with intermediate bronze bearings to support and align the pump shaft. The higher pressure pumps which operate at 3500 R.P.M. motor speeds are not recommended for deeper than standard receivers. For these applications we recommend furnishing low pressure pumps operating at 1750 R.P.M. plus booster pumps of proper capacity and pressure.
- **Float switches and electric motors** used on all pumps sizes are of proper capacity, as manufactured and guaranteed by leading manufacturers. Electric motors are of standard design, NEMA C face mounting, and open drip-proof motors are supplied with a canopy.
- **The Type UV pump** complies with all applicable Federal specifications and standards for capacities and types of materials used. Electric motors furnished comply with Federal specification No. CC-M-636 for fractional H.P. and No. CC-M-641 for integral H.P.



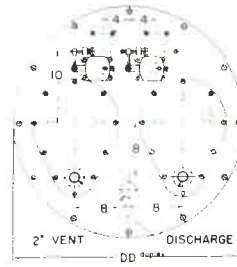
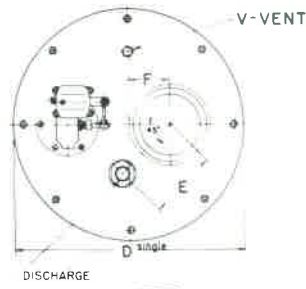
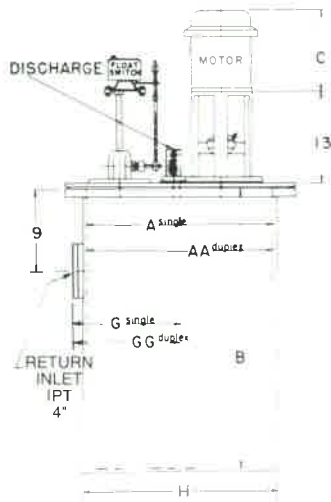
SELECTION CHART

TYPE UV LOCKWOOD CONDENSATE RETURN SYSTEMS

For 60 cycle motors only — operating at 1750 and 3500 rpm.
3500 rpm units have gauge and plug cock installed at factory and set at pump design pressure.

| Pump Type and Size | Max. Sq. Ft. E. D. R. | Disch. Press. at Pump | Pump Cap. G. P. M. | Motor H. P. | Receiver Size | | Return Pipe Size | Disch. Pipe Size | Pump Type and Size | Max. Sq. Ft. E. D. R. | Disch. Press. at Pump | Pump Cap. G. P. M. | Motor H. P. | Receiver Size | | Return Pipe Size | Disch. Pipe Size | |
|--------------------|-----------------------|-----------------------|--------------------|-------------|---------------|--------|------------------|------------------|--------------------|-----------------------|-----------------------|--------------------|-------------|---------------|--------|-------------------|------------------|--------|
| | | | | | Single | Duplex | | | | | | | | Single | Duplex | | | |
| UV-21 | 2,000 | 10 | 3 | * 1/4 | 16" | 30" | 3" | 1 1/4" | UV-251 | 25,000 | 10 | 37 1/2 | * 1/2 | 30" | 36" | Single and Duplex | 1 1/2" | |
| UV-21 1/2 | | 15 | | * 1/3 | Dia. x | Dia. x | Single | | UV-251 1/2 | | 15 | | * 3/4 | Dia. x | Dia. x | | | 1 1/2" |
| UV-22 | | 20 | | * 1/2 | x | x | 3" | | UV-252 | | 20 | | * 1 | x | x | | | 1 1/2" |
| UV-22 1/2 | | 25 | | * 3/4 | 36" | 36" | 4" | | UV-253 | 25,000 | 30 | 37 1/2 | 1 1/2 | 36" | 36" | 4" | " " | |
| UV-23 | | 30 | | * 1 | Deep | Deep | Duplex | | UV-254 | 40 | 2 | Deep | Deep | " | " | " | | |
| UV-23 | 30 | 3/4 | " | " | " | " | UV-255 | 50 | 3 | " | " | " | " | | | | | |
| UV-24 | 40 | 1 | " | " | " | " | UV-256 | 60 | 3 | " | " | " | " | | | | | |
| UV-25 | 50 | 1 1/2 | " | " | " | " | UV-257 1/2 | 75 | 5 | " | " | " | " | | | | | |
| UV-26 | 60 | 2 | " | " | " | " | UV-301 | 30,000 | 10 | 45 | * 1/2 | " | " | " | " | | | |
| UV-27 1/2 | 75 | 3 | " | " | " | " | UV-301 1/2 | | 15 | | * 3/4 | " | " | " | " | | | |
| UV-41 | 4,000 | 10 | 6 | * 1/4 | " | " | " | | UV-302 | | 20 | * 1 | " | " | " | " | | |
| UV-41 1/2 | | 15 | | * 1/3 | " | " | " | " | UV-303 | 30,000 | 30 | 45 | 1 1/2 | " | " | " | | |
| UV-42 | | 20 | | * 1/2 | " | " | " | " | UV-304 | 40 | 2 | " | " | " | " | | | |
| UV-42 1/2 | | 25 | | * 3/4 | " | " | " | " | UV-305 | 50 | 3 | " | " | " | " | | | |
| UV-43 | | 30 | | * 1 | " | " | " | " | UV-306 | 60 | 3 | " | " | " | " | | | |
| UV-43 | 30 | 3/4 | " | " | " | " | UV-307 1/2 | 75 | 5 | " | " | " | " | | | | | |
| UV-44 | 40 | 1 | " | " | " | " | UV-401 | 40,000 | 10 | 60 | * 3/4 | 36" | " | " | " | | | |
| UV-45 | 50 | 1 1/2 | " | " | " | " | UV-401 1/2 | | 15 | | * 1 | Dia. x | " | " | " | | | |
| UV-46 | 60 | 2 | " | " | " | " | UV-402 | | 20 | | * 1 1/2 | x | " | " | " | | | |
| UV-47 1/2 | 75 | 3 | " | " | " | " | UV-403 | 40,000 | 30 | 60 | 2 | 36" | " | " | | | | |
| UV-61 | 6,000 | 10 | 9 | * 1/4 | " | " | " | UV-404 | 40 | 3 | 36" | " | " | " | | | | |
| UV-61 1/2 | | 15 | | * 1/3 | " | " | " | " | UV-405 | 50 | 5 | " | " | " | | | | |
| UV-62 | | 20 | | * 1/2 | " | " | " | " | UV-406 | 60 | 5 | " | " | " | | | | |
| UV-62 1/2 | | 25 | | * 3/4 | " | " | " | " | UV-407 1/2 | 75 | 7 1/2 | " | " | " | | | | |
| UV-63 | | 30 | | * 1 | " | " | " | " | UV-501 | 50,000 | 10 | 75 | * 1 | " | " | " | 2" | |
| UV-63 | 30 | 3/4 | " | " | " | " | UV-501 1/2 | 15 | * 1 1/2 | | " | | " | " | | | | |
| UV-64 | 40 | 1 | " | " | " | " | UV-502 | 20 | * 2 | | " | | " | " | | | | |
| UV-65 | 50 | 1 1/2 | " | " | " | " | UV-503 | 50,000 | 30 | 75 | 3 | " | " | " | | | | |
| UV-66 | 60 | 2 | " | " | " | " | UV-504 | 40 | 3 | " | " | " | " | 1 1/2" | | | | |
| UV-67 1/2 | 75 | 3 | " | " | " | " | UV-505 | 50 | 5 | " | " | " | " | | | | | |
| UV-101 | 10,000 | 10 | 15 | * 1/4 | 20" | 30" | " | UV-506 | 60 | 5 | " | " | " | | " | | | |
| UV-101 1/2 | | 15 | | * 1/3 | Dia. | Dia. | " | " | UV-507 1/2 | 75 | 7 1/2 | " | " | " | | | | |
| UV-102 | | 20 | | * 1/2 | x | x | " | " | UV-651 | 65,000 | 10 | 97 1/2 | * 1 1/2 | 42" | 42" | " " | 2" | |
| UV-102 1/2 | | 25 | | * 3/4 | 36" | 36" | " | " | UV-651 1/2 | | 15 | | * 1 1/2 | Dia. x | Dia. x | | | |
| UV-103 | | 30 | | * 1 | Deep | Deep | " | " | UV-652 | | 20 | | * 2 | x | x | | | |
| UV-103 | 30 | 3/4 | " | " | " | " | UV-653 | 65,000 | 30 | 97 1/2 | 3 | 36" | 36" | " | | | | |
| UV-104 | 40 | 1 | " | " | " | " | UV-654 | 40 | 5 | Deep | Deep | " | " | | | | | |
| UV-105 | 50 | 1 1/2 | " | " | " | " | UV-655 | 50 | 5 | " | " | " | " | | | | | |
| UV-106 | 60 | 2 | " | " | " | " | UV-656 | 60 | 7 1/2 | " | " | " | " | | | | | |
| UV-107 1/2 | 75 | 3 | " | " | " | " | UV-657 1/2 | 75 | 7 1/2 | " | " | " | " | | | | | |
| UV-151 | 15,000 | 10 | 22 1/2 | * 1/3 | " | " | " | UV-801 | 80,000 | 10 | 120 | * 1 1/2 | " | " | " | " | | |
| UV-151 1/2 | | 15 | | * 1/2 | " | " | " | " | | UV-801 1/2 | | 15 | * 2 | " | " | " | | |
| UV-152 | | 20 | | * 3/4 | " | " | " | " | | UV-802 | | 20 | * 3 | " | " | " | | |
| UV-152 1/2 | | 25 | | * 1 | " | " | " | " | UV-803 | 80,000 | 30 | 120 | 5 | " | " | " | | |
| UV-153 | | 30 | | * 1 1/2 | " | " | " | " | UV-804 | 40 | 5 | " | " | " | " | | | |
| UV-153 | 30 | 1 | " | " | " | " | UV-805 | 50 | 7 1/2 | " | " | " | " | | | | | |
| UV-154 | 40 | 1 1/2 | " | " | " | " | UV-806 | 60 | 7 1/2 | " | " | " | " | | | | | |
| UV-155 | 50 | 2 | " | " | " | " | UV-807 1/2 | 75 | 10 | " | " | " | " | | | | | |
| UV-156 | 60 | 3 | " | " | " | " | UV-1001 | 100,000 | 10 | 150 | * 1 1/2 | 48" | 48" | " | " | | | |
| UV-157 1/2 | 75 | 3 | " | " | " | " | UV-1001 1/2 | | 15 | | * 2 | Dia. x | Dia. x | " | " | | | |
| UV-201 | 10 | * 1/3 | " | " | " | " | UV-1002 | | 20 | | * 3 | x | x | " | " | | | |
| UV-201 1/2 | 15 | * 1/2 | " | " | " | " | UV-1003 | 100,000 | 30 | 150 | 5 | 36" | 36" | " | " | | | |
| UV-202 | 20 | * 3/4 | " | " | " | " | UV-1004 | 40 | 7 1/2 | Deep | Deep | " | " | | | | | |
| UV-202 1/2 | 25 | * 1 | " | " | " | " | UV-1005 | 50 | 7 1/2 | " | " | " | " | | | | | |
| UV-203 | 20,000 | 30 | 30 | * 1 1/2 | " | " | UV-1006 | 60 | 10 | " | " | " | " | | | | | |
| UV-203 | 30 | 1 1/2 | " | " | " | " | UV-1007 1/2 | 75 | 15 | " | " | " | " | | | | | |
| UV-204 | 40 | 1 1/2 | " | " | " | " | | | | | | | | | | | | |
| UV-205 | 20,000 | 50 | 30 | 2 | " | " | | | | | | | | | | | | |
| UV-206 | 60 | 3 | " | " | " | " | | | | | | | | | | | | |
| UV-207 1/2 | 75 | 5 | " | " | " | " | | | | | | | | | | | | |

*Units marked with shading operate at 1750 R.P.M.
All other units operate at 3500 R.P.M.



The above dimensions are correct to within 1" and are intended for lay-out work only. Certified construction prints will be furnished upon request.

The duplex unit like the single unit consists of one cast iron receiver, two pumps, two motors, one cast iron cover plate with vent opening, mechanical alternator and complete float mechanisms. Each pump of the duplex unit is mounted on its own plate so that any one of the pumps may be removed for inspection without disturbing the second unit.

Special duplex units available on 24" receivers—consult factory.

DIMENSIONAL DATA

| CAP. SQ. FT. E.D.R. | RECEIVER CAP. GALS | | MOTOR H.P. | APPROXIMATE DIMENSIONS | | | | | | | | | | | | |
|---------------------|--------------------|-------|-----------------------------------|------------------------|-------|-------------------|-----|--------|----|-----|--------|-----|-----|-----|-----|-----|
| | SINGLE | DUPLX | | A | B | C | D | E | F | G | V | A-A | D-D | G-G | H | |
| | | | | SINGLE | DUPLX | | | | | | | | | | | |
| 2,000 to 6,000 | 31 | 110 | 1/4 - 3/4 1 - 1 1/2 2 - 3 | 16" | 36" | 11" 13" 14" | 20" | 7 1/2" | 4" | 11" | 1" | 30" | 34" | 18" | 18" | 32" |
| 10,000 to 20,000 | 48 | 110 | 1/4 - 3/4 1 - 1 1/2 2 - 3 | 20" | 36" | 11" 13" 14" | 24" | 7 1/2" | 4" | 13" | 1 1/4" | 30" | 34" | 18" | 22" | 32" |
| 25,000 to 30,000 | 110 | 158 | 1/2 - 3/4 1 - 1 1/2 3 - 5 | 30" | 36" | 11" 13" 15" | 34" | 7 1/2" | 4" | 18" | 1 1/2" | 36" | 40" | 21" | 32" | 38" |
| 40,000 | 158 | 158 | 3/4 1 - 3 5 - 7 1/2 | 36" | 36" | 11" 13" 16" | 40" | 8" | 4" | 21" | 2" | 36" | 40" | 21" | 38" | 38" |
| 50,000 | 158 | 158 | 1 - 2 3 - 5 7 1/2 | 36" | 36" | 13" 14" 16" | 40" | 8" | 4" | 21" | 2" | 36" | 40" | 21" | 38" | 38" |
| 65,000 | 216 | 216 | 1 1/2 - 2 3 - 5 7 1/2 | 42" | 36" | 13" 14" 16" | 46" | 8" | 4" | 24" | 2" | 42" | 46" | 24" | 44" | 44" |
| 80,000 | 216 | 216 | 1 1/2 - 3 5 - 7 1/2 10 | 42" | 36" | 14" 16" 19" | 46" | 8" | 4" | 24" | 2" | 42" | 46" | 24" | 44" | 44" |
| 100,000 | 282 | 282 | 1 1/2 - 3 5 - 7 1/2 10 - 15 | 48" | 36" | 14" 16" 20" | 52" | 8" | 4" | 27" | 2" | 48" | 52" | 27" | 50" | 50" |

SPECIFICATIONS

Furnish and install as indicated on plans, (1) Lockwood Type UV (single or duplex) condensate return unit. Pumping units shall each have a capacity of _____ GPM against _____ psi when pumping 200°F condensate.

Motors shall be (open drip-proof, T.E.F.C. or explosion proof) _____ HP, for _____ volts, (single or three phase, 60 cycle, AC, _____ (1750 or 3500) RPM.

Receiver shall be (close grained cast iron or 3/16" steel) _____ dia, x _____ deep, with center-line of return inlet _____ inches below top flange.

Pumps shall be controlled by (mechanical alternator) (two float switches) for condensate service.

For boiler feed service, pump shall be equipped with a float-operated make-up valve mounted on the main cover of the receiver.

Provide motor protection (magnetic starter, fused or unfused comb, circuit breaker comb) with (H-O-A selector switch) (pilot light) (transformer) as required.

The specifications contained in this bulletin were effective at the time of publishing. Lockwood Products, Inc. reserves the right to discontinue products at any time or to change specifications or design without incurring any obligation.

LOCKWOOD PRODUCTS, INC.

4450 Commerce Drive, S.W.

P.O. Box 43961

Atlanta, Georgia 30336

Local (404) 505-2520 • WATS (800) 365-1500 • FAX (404) 505-2518