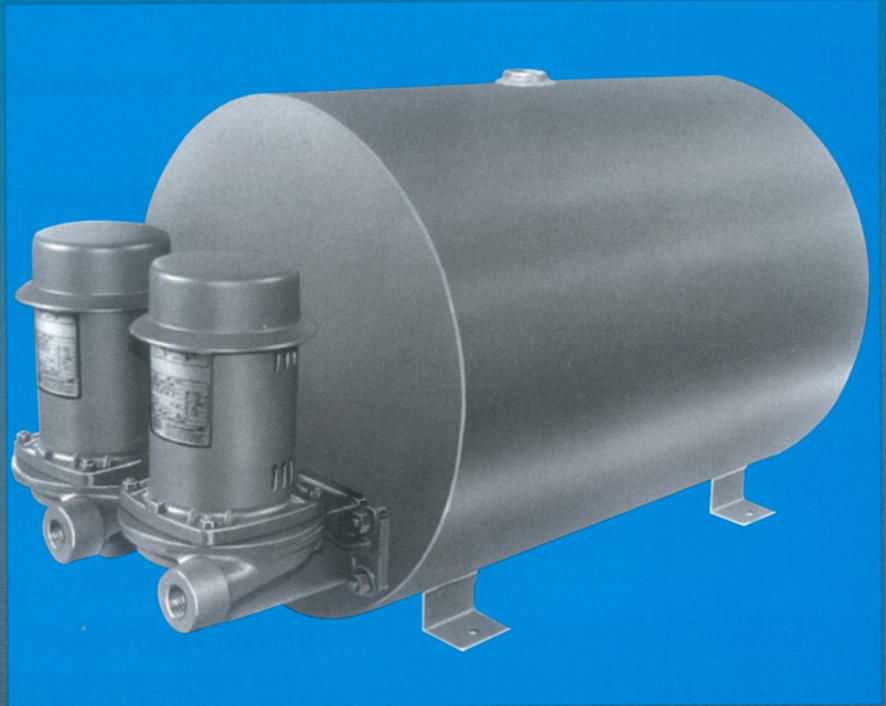
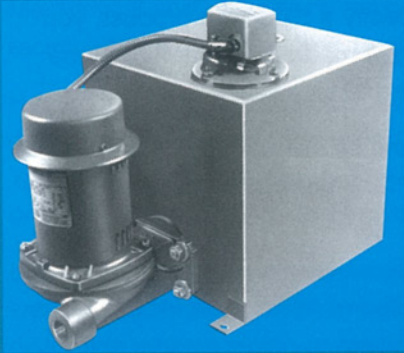


Skidmore®

Bulletin 24 A-5
February, 2006

10MX SERIES CONDENSATE AND BOILER FEED PUMPS



Simplex and duplex units

Cast iron and steel receivers

Capacity to 12,000 sq. ft. EDR or 18 gpm

Discharge pressures: 20, 30, and 40 psi



GENERAL INFORMATION

Skidmore™ 10MX Series condensate and boiler feed pumps are packaged units, completely assembled, wired, and tested at the manufacturing plant. They are designed to provide maximum efficiency, reliability, and easy maintenance in a compact, space-saving configuration. Manufacturing is done in clean, modern facilities by people who take pride in producing dependable products. Each unit is factory tested before shipment to assure the product is ready for service when it is received. Most importantly, when you specify a Skidmore product, you are assured of the many benefits that have made the Skidmore name synonymous with quality and pride since 1921.

We invite you to compare the features and specifications of the 10MX Series with other condensate and boiler feed pumps. We are sure Skidmore will be your choice.

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Skidmore pumps, an integral part of 10MX Series condensate and boiler feed units, provide outstanding benefits due to these important features:

Close coupled, centrifugal design with bronze enclosed type impeller.

Impeller is designed to assure smooth, efficient water passage.

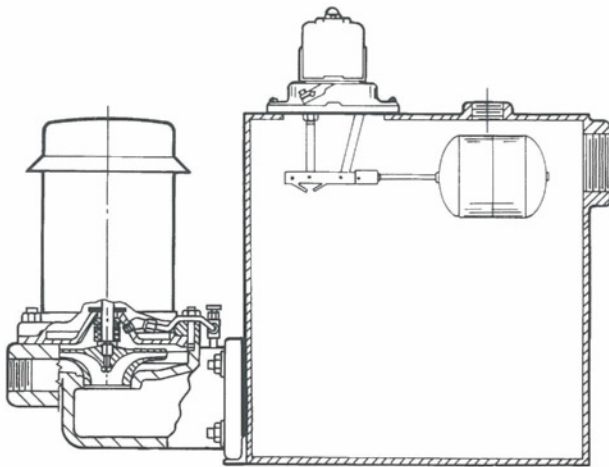
Designed for long-life.

Mechanical seal withstands temperatures to 250° F. Seal water is recirculated to pump suction to assure adequate lubrication at all times.

Heavy duty, drip proof, 3450 rpm, 60 Hz motor—designed for continuous duty with pre-lubricated, shielded ball bearings and stainless steel shaft. Your choice of single phase 115/230 volt with built-in overload protection or three phase 230/460 or 208 volt. T.E.F.C. available upon request.

Low maintenance, easily serviceable design—any part subject to normal wear is readily accessible. Impeller and seal can be serviced without disturbing system piping or electrical connections.

Universal type 4-bolt flange mounting.



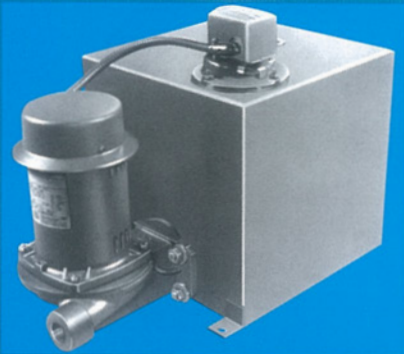
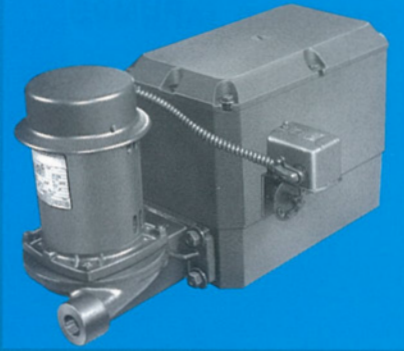
Skidmore pump mounted on 10MX Condensate Pumping Unit

OPTIONAL SUCTION ISOLATION VALVE

An optional suction isolation valve is available for simplex and duplex units. When installed between the pump and receiver on simplex units, it allows the pump motor assembly to be removed without draining the receiver. On duplex units it permits one pump to be removed while the other one continues to operate without interrupting system operation.



CONDENSATE PUMPS



CONDENSATE PUMP SPECIFICATIONS

Capacity: to 12,000 sq. ft. EDR or 18 gpm

Discharge pressures: 20, 30, and 40 psi

Condensate pumps are used in low pressure steam heating systems to collect and quickly return condensate to the boiler or boiler feed unit. Pumping action is controlled by an integral float switch on simplex (one pump) units or mechanical alternator on duplex (two pump) units. Unlike boiler feed units, which are controlled by a boiler mounted control and equipped with a make-up valve mechanism, condensate pumps usually do not directly supply boiler make-up water.

SIMPLEX UNITS

Simplex units are equipped with a vapor tight, heavy duty float switch control with a stainless steel float. They are easily field adjustable to provide proper pump control and operation.

Receivers are available in your choice of cast iron or welded steel construction.

Long lasting, close grained cast iron receivers; available in 6, 15, 21, and 45 gallon sizes. Larger receivers available, consult factory.

Welded, copper bearing steel receivers; available in 10, 20, and 45 gallon capacities. Larger and custom-size receivers available, consult factory.

Simplex units may be ordered mounted on duplex reservoirs to provide an opportunity for conversion to a duplex unit at a later time.

DUPLEX UNITS

Duplex units offer some additional distinct advantages over simplex units. They are used where an unusually heavy amount of condensate must be returned or where it is desirable to have a stand-by pump available. Equipped with a float operated, automatic mechanical alternator, they provide several benefits.

System overload protection—The second pump is activated if the rate of condensate return exceeds the limits of the first pump.

Extra-long service life—Each of the two pumps is activated automatically on alternating pumping cycles so the work load is evenly distributed between the two pumps.

Back-up system protection—A second pump is automatically activated if the first one fails to start. Maintenance or repairs can be made on either pump without shutting down the other one or interrupting the system operation.

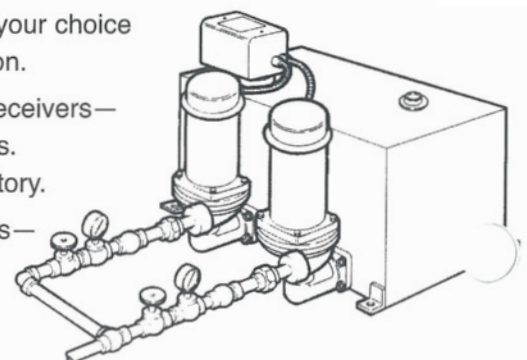
Duplex unit receivers are available in your choice of cast iron or welded steel construction.

Long lasting, close grained cast iron receivers—available in 15, 21, and 45 gallon sizes. Larger receivers available, consult factory.

Welded, copper bearing steel receivers—available in 20 and 45 gallon sizes. Larger and custom-size receivers available, consult factory.

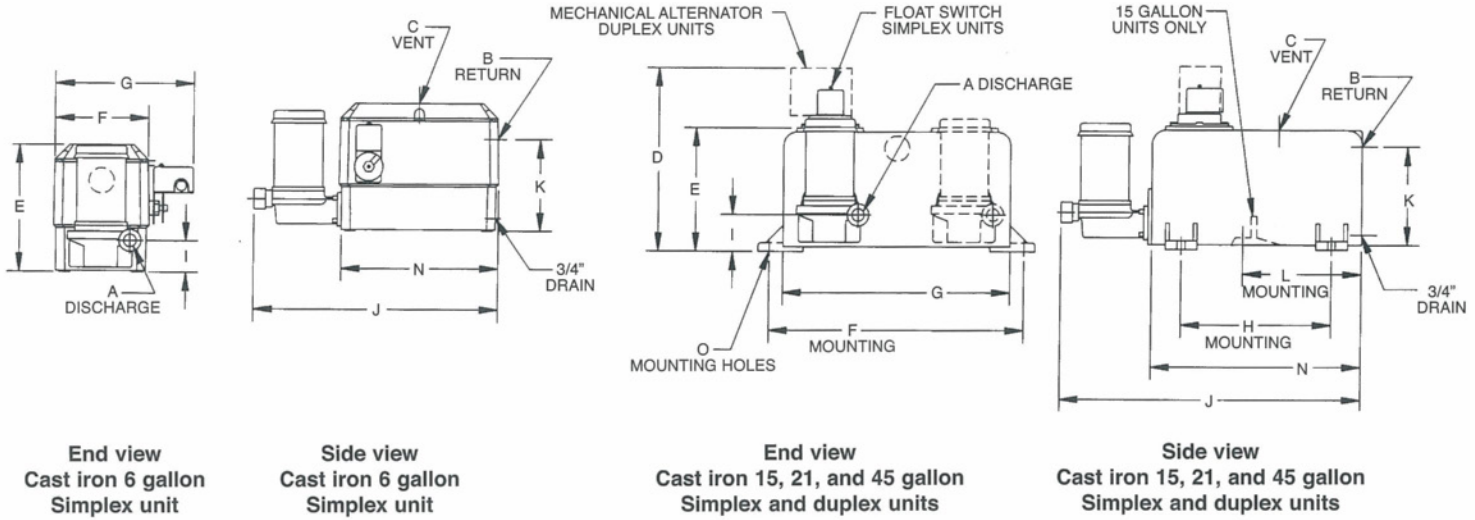
Welded, copper bearing steel receivers—available in 20 and 45 gallon sizes. Larger and custom-size receivers available, consult factory.

Larger and custom-size receivers available, consult factory.



Typical duplex pump installation

CAST IRON RECEIVERS

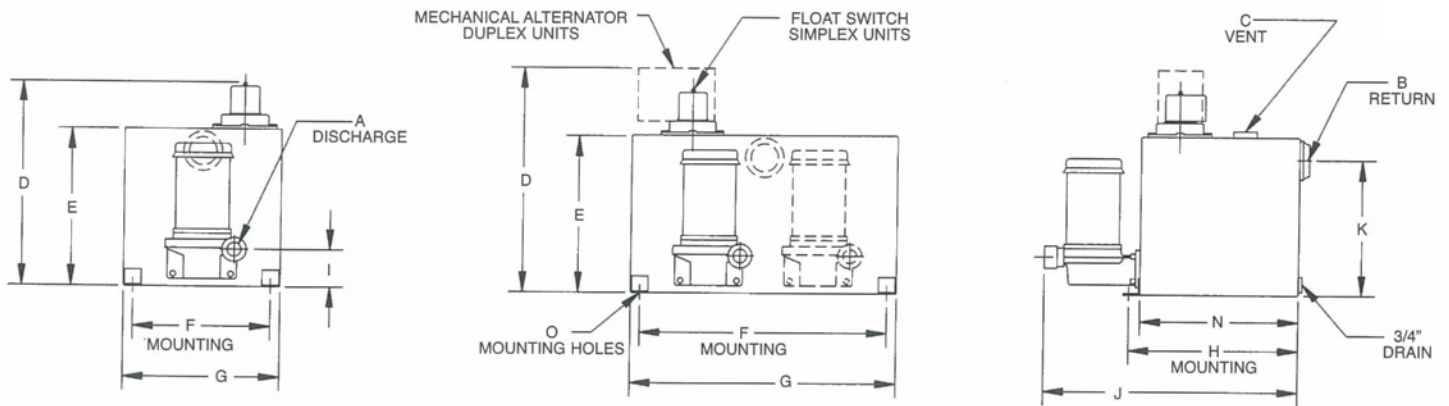


NOTE: All dimensions are approximate.

DIMENSIONS														
UNIT STYLE	A	B	C	D	E	F	G	H	I	J	K	L	N	O
Simplex 6 gallon	1	2	1	—	12.8	9.2	14.2	—	3.3	26	9.1	—	15.7	—
Simplex 15 gallon	1	2	1	19.8	15.6	19.8	17.6	—	3.3	26.5	13.3	9.3	15.5	.6
Duplex 15 gallon	1	2	1	22.1	15.6	19.8	17.6	—	3.3	26.5	13.3	9.3	15.5	.6
Simplex 21 gallon	1	2	1.2	17.5	12.7	25.5	22.7	14.9	4.1	31.8	10.2	—	20.7	.6
Duplex 21 gallon	1	2	1.2	19.8	12.7	25.5	22.7	14.9	4.1	31.8	10.2	—	20.7	.6
Simplex 45 gallon	1	2.5	1.5	21.5	17.3	28.7	26.7	20	4.1	36.7	15	—	26	.6
Duplex 45 gallon	1	2.5	1.5	23.8	17.3	28.7	26.7	20	4.1	36.7	15	—	26	.6

ORDERING DATA											
MOTOR		PUMP		MODEL CODES							
Phase and Voltage	HP	Discharge Pressure psi	gpm	Cast Iron Receiver Sizes							
				Simplex				Duplex			
				8000 EDR	12000 EDR			12000 EDR			
				6 gallon	15 gallon	21 gallon	45 gallon	15 gallon	21 gallon	45 gallon	
Single 115/230 v	1/3	20	18	XC2S61	XC2S151	XC2S211	XC2S451	XC2D151	XC2D211	XC2D451	
	1/2	30	18	XC3S61	XC3S151	XC3S211	XC3S451	XC3D151	XC3D211	XC3D451	
	3/4	40	18	XC4S61	XC4S151	XC4S211	XC4S451	XC4D151	XC4D211	XC4D451	
Three 230/460 or 208 v	1/3	20	18	XC2S63	XC2S153	XC2S213	XC2S453	XC2D153	XC2D213	XC2D453	
	1/2	30	18	XC3S63	XC3S153	XC3S213	XC3S453	XC3D153	XC3D213	XC3D453	
	3/4	40	18	XC4S63	XC4S153	XC4S213	XC4S453	XC4D153	XC4D213	XC4D453	

STEEL RECEIVERS



End view
Steel 10 gallon
Simplex unit

End view
Steel 20 and 45 gallon
Simplex and duplex units

Side view
Steel 10, 20, and 45 gallon
Simplex and duplex units

NOTE: All dimensions are approximate.

DIMENSIONS													
UNIT STYLE	A	B	C	D	E	F	G	H	I	J	K	N	O
Simplex 10 gallon	1	2	1	18.5	14.2	12.5	14.3	15.2	3.3	25	12.2	14	.6
Simplex 20 gallon	1	2	1	18.5	14.2	22.5	24.3	15.2	3.3	25	12.2	14	.6
Duplex 20 gallon	1	2	1	20.8	14.2	22.5	24.3	15.2	3.3	25	12.2	14	.6
Simplex 45 gallon	1	3	1.5	22.7	18.4	26.4	24.4	22.5	4.1	35.4	15.7	24	.6
Duplex 45 gallon	1	3	1.5	25	18.4	26.4	24.4	22.5	4.1	35.4	15.7	24	.6

ORDERING DATA									
MOTOR		PUMP		MODEL CODES					
Phase and Voltage	HP	Discharge Pressure psi	gpm	Welded Steel Receiver Sizes					
				Simplex			Duplex		
				8000 EDR 10 gallon	12000 EDR 20 gallon	12000 EDR 45 gallon	12000 EDR 20 gallon	12000 EDR 45 gallon	
Single 115/230 v	1/3	20	18	XS2S101	XS2S201	XS2S451	XS2D201	XS2D451	
	1/2	30	18	XS3S101	XS3S201	XS3S451	XS3D201	XS3D451	
	3/4	40	18	XS4S101	XS4S201	XS4S451	XS4D201	XS4D451	
Three 230/460 or 208 v	1/3	20	18	XS2S103	XS2S203	XS2S453	XS2D203	XS2D453	
	1/2	30	18	XS3S103	XS3S203	XS3S453	XS3D203	XS3D453	
	3/4	40	18	XS4S103	XS4S203	XS4S453	XS4D203	XS4D453	

BOILER FEED PUMP SPECIFICATIONS

Capacity: to 18 gpm
Discharge pressures: 20, 30, and 40 psi

Skidmore 10MX Series boiler feed units are used to pump condensate and makeup water directly into the boiler(s). Pumping action is determined by a boiler mounted control which senses boiler water level requirements.

Each boiler feed unit is equipped with a heavy duty makeup valve activated by the position of its seamless float within the receiver. The mechanism is readily adjustable for various water levels. It is mounted on the end of the receiver and can be easily removed as a complete unit.

Standard simplex or duplex units are available with cylindrical welded steel horizontal or vertical receivers in 49, 71, 117, or 209 gallon capacities. Larger and custom-size receivers available, consult factory. Simplex units are also available mounted on duplex receivers to provide the option for conversion to a duplex unit at a future time.

Standard equipment also includes a water level gauge with sight glass.

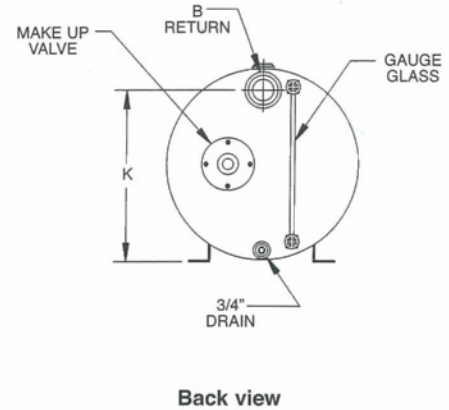
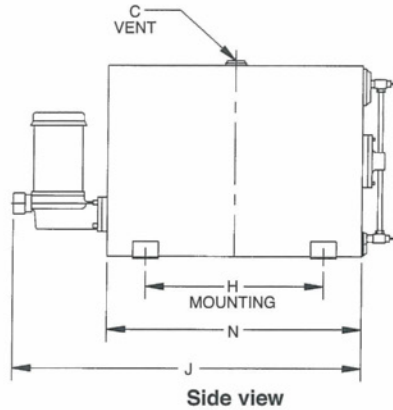
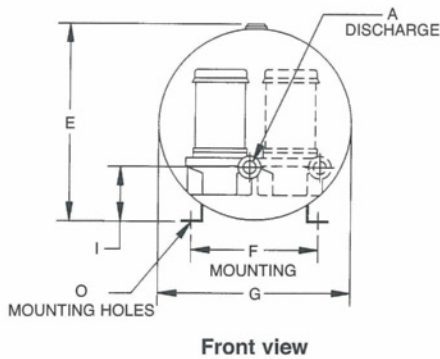
When ordering, specify model number and voltage required.



ORDERING DATA

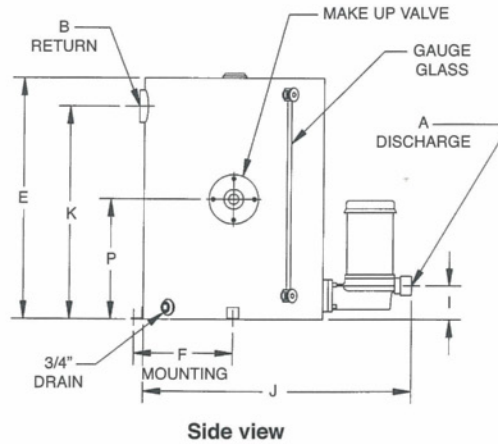
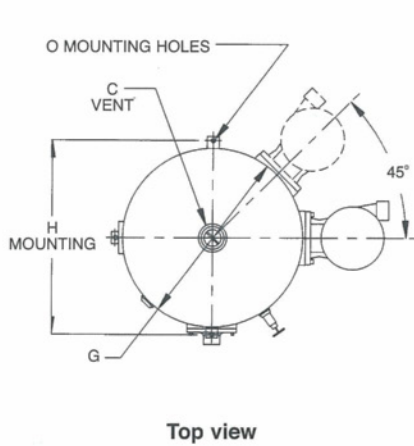
MOTOR		PUMP		RECEIVER SIZES—MODEL CODES							
Phase and Voltage	HP	Discharge Pressure psi	gpm	49 gallon		71 gallon		117 gallon		209 gallon	
				Simplex	Duplex	Simplex	Duplex	Simplex	Duplex	Simplex	Duplex
Single 115/230 v	1/3	20	18	XM2S491	XM2D491	XM2S711	XM2D711	XM2S1171	XM2D1171	XM2S2091	XM2D2091
	1/2	30	18	XM3S491	XM3D491	XM3S711	XM3D711	XM3S1171	XM3D1171	XM3S2091	XM3D2091
	3/4	40	18	XM4S491	XM4D491	XM4S711	XM4D711	XM4S1171	XM4D1171	XM4S2091	XM4D2091
Three 230/460 or 208 v	1/3	20	18	XM2S493	XM2D493	XM2S713	XM2D713	XM2S1173	XM2D1173	XM2S2093	XM2D2093
	1/2	30	18	XM3S493	XM3D493	XM3S713	XM3D713	XM3S1173	XM3D1173	XM3S2093	XM3D2093
	3/4	40	18	XM4S493	XM4D493	XM4S713	XM4D713	XM4S1173	XM4D1173	XM4S2093	XM4D2093

CYLINDRICAL UNITS



NOTE: All dimensions are approximate.

DIMENSIONS												
UNIT STYLE	A	B	C	E	F	G	H	I	J	K	N	O
49 gallon	1	2.5	1.2	23	15	22	21	6	40.5	20.1	30	.6
71 gallon	1	3	1.5	25.4	15	24	21	5.8	46.5	21.5	36	.6
117 gallon	1	4	2	25.4	15	24	30	5.8	70.5	21.2	60	.6
209 gallon	1	5	2	34.5	28	32	48	5.9	70.5	29	60	.6



NOTE: All dimensions are approximate.

DIMENSIONS												
UNIT STYLE	A	B	C	E	F	G	H	I	J	K	O	P
49 gallon	1	2.5	1.2	30	12	22	24	3.8	32.5	26.5	.6	15
71 gallon	1	3	1.5	36	13	24	26	3.8	34.5	32.5	.6	18
117 gallon	1	4	2	60	13	24	26	3.8	34.5	56.5	.6	30
209 gallon	1	5	2	60	17	32	34	3.8	42.5	55.5	.6	30

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