SHIPCO® PUMPS
www.shipcopumps.com

SHIPPENSBURG PUMP CO. INC.
P.O. BOX 279, SHIPPENSBURG, PA 17257
PH 717-532-7321 • FAX 717-532-7704
WWW.SHIPCOPUMPS.COM

Pride

Quality

Craftsmanship

BULLETIN 162
Revised 8/17



TYPE PS

PROPELLER CONDENSATE PUMPS WITH STEEL RECEIVERS

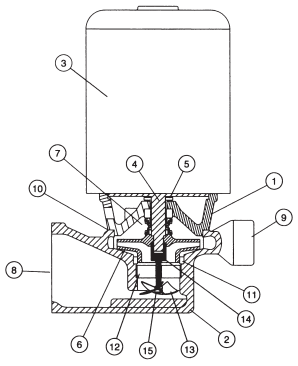
PS Units handle condensate to 210˚F

and

TYPE PES

PROPELLER ELEVATED CONDENSATE PUMPS WITH STEEL RECEIVERS

PES Units handle condensate to 212˚F



SHIPCO® PUMPS are equipped with Mechanical Seals rated up to a standard 250°F.
Higher temperature seals and special faces available upon request.
Charted units are a representation of the typical systems and sizes used.
Higher pump pressures and larger pump capacities are available.

TYPE PS CONDENSATE UNITS

CAP. SQ.FT. EDR	PUMP CAP. GPM	DISCH. PRESS. PSIG	MOTOR HP 3500 RPM ONLY	PHASE	DISCH. SIZE INCHES	SIMPLEX CATALOG NO.	DUPLEX CATALOG NO.	REC. CAP. GALS.	INLET SIZE INCHES
6,000	6	10	1/3	1	3/4"	60 PS1	60 PSD1	15	2"
		10	1/3	3		60 PS3	60 PSD3		
		15	1/3	1		61 PS1	61 PSD1		
		15	1/3	3		61 PS3	61 PSD3		
		20	1/3	1		62 PS1	62 PSD1		
		20	1/3	3		62 PS3	62 PSD3		
		25	1/2	1		62.5 PS1	62.5 PSD1		
		25	1/2	3		62.5 PS3	62.5 PSD3		
		30	3/4	1		63 PS1	63 PSD1		
		30	3/4	3		63 PS3	63 PSD3		
		40	1-1/2	3		64 PS3	64 PSD3		
		50	1-1/2	3		65 PS3	65 PSD3		
		60	3	3		66 PS3	66 PSD3		
		70	3	3		67 PS3	67 PSD3		
		80	5	3	1-1/2"	68 PS3	68 PSD3		
		90	5	3		69 PS3	69 PSD3		
9,000	9	10	1/3	1	3/4"	90 PS1	90 PSD1	15	2"
		10	1/3	3		90 PS3	90 PSD3		
		15	1/3	1		91 PS1	91 PSD1		
		15	1/3	3		91 PS3	91 PSD3		
		20	1/3	1		92 PS1	92 PSD1		
		20	1/3	3		92 PS3	92 PSD3		
		25	1/2	1		92.5 PS1	92.5 PSD1		
		25	1/2	3		92.5 PS3	92.5 PSD3		
		30	3/4	1		93 PS1	93 PSD1		
		30	3/4	3		93 PS3	93 PSD3		
		40	1-1/2	3		94 PS3	94 PSD3		
		50	1-1/2	3		95 PS3	95 PSD3		
		60	3	3		96 PS3	96 PSD3		
		70	3	3		97 PS3	97 PSD3		
		80	5	3	1 1/2"	98 PS3	98 PSD3		
		90	5	3		99 PS3	99 PSD3		
12,000	12	10	1/3	1	3/4"	120 PS1	120 PSD1	15	2"
		10	1/3	3		120 PS3	120 PSD3		
		15	1/3	1		121 PS1	121 PSD1		
		15	1/3	3		121 PS3	121 PSD3		
		20	1/2	1		122 PS1	122 PSD1		
		20	1/2	3		122 PS3	122 PSD3		
		25	3/4	1		122.5 PS1	122.5 PSD1		
		25	3/4	3		122.5 PS3	122.5 PSD3		
		30	3/4	1		123 PS1	123 PSD1		
		30	3/4	3		123 PS3	123 PSD3		
		40	1-1/2	3		124 PS3	124 PSD3		
		50	1-1/2	3		125 PS3	125 PSD3		
		60	3	3		126 PS3	126 PSD3		
		70	3	3		127 PS3	127 PSD3		
		80	5	3	1-1/2"	128 PS3	128 PSD3		
		90	5	3		129 PS3	129 PSD3		
15,000	15	10	1/3	1	3/4"	150 PS1	150 PSD1	15	2"
		10	1/3	3		150 PS3	150 PSD3		
		15	1/3	1		151 PS1	151 PSD1		
		15	1/3	3		151 PS3	151 PSD3		
		20	1/2	1		152 PS1	152 PSD1		
		20	1/2	3		152 PS3	152 PSD3		
		25	3/4	1		152.5 PS1	152.5 PSD1		
		25	3/4	3		152.5 PS3	152.5 PSD3		
		30	1	1		153 PS1	153 PSD1		
		30	1	3		153 PS3	153 PSD3		
		40	1-1/2	3		154 PS3	154 PSD3		
		50	2	3		155 PS3	155 PSD3		
		60	3	3		156 PS3	156 PSD3		
		70	5	3		157 PS3	157 PSD3		
		80	5	3	1 1/2"	158 PS3	158 PSD3		
		90	5	3		159 PS3	159 PSD3		
18,000	18	10	1/2	1	1-1/2"	180 PS1	180 PSD1	21	2"
		10	1/2	3		180 PS3	180 PSD3		
		15	1/2	1		181 PS1	181 PSD1		
		15	1/2	3		181 PS3	181 PSD3		
		20	1/2	1		182 PS1	182 PSD1		
		20	1/2	3		182 PS3	182 PSD3		
		25	3/4	1		182.5 PS1	182.5 PSD1		
		25	3/4	3		182.5 PS3	182.5 PSD3		
		30	1	1		183 PS1	183 PSD1		
		30	1	3		183 PS3	183 PSD3		
		40	1-1/2	3		184 PS3	184 PSD3		
		50	2	3		185 PS3	185 PSD3		
		60	3	3		186 PS3	186 PSD3		
		70	5	3		187 PS3	187 PSD3		
		80	5	3		188 PS3	188 PSD3		
		90	5	3		189 PS3	189 PSD3		

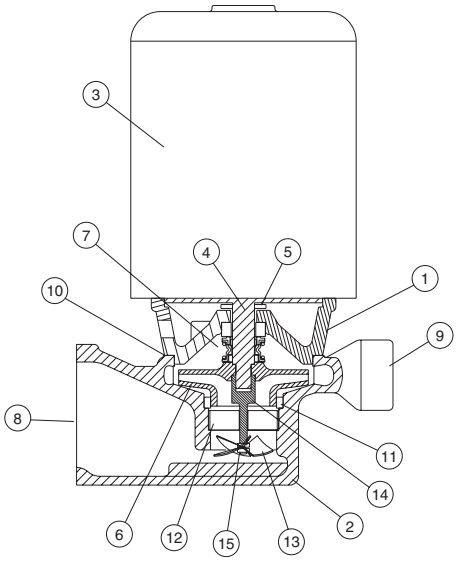
TYPE PS CONDENSATE UNITS

CAP. SQ.FT. EDR	PUMP CAP. GPM	DISCH. PRESS. PSIG	MOTOR HP 3500 RPM ONLY	PHASE	DISCH. SIZE INCHES	SIMPLEX CATALOG NO.	DUPLEX CATALOG NO.	REC. CAP. GALS.	INLET SIZE INCHES
		10	1/2	1		220 PS1	220 PSD1		
		10	1/2	3		220 PS3	220 PSD3		
		15	1/2	1		221 PS1	221 PSD1		
		15	1/2	3		221 PS3	221 PSD3		
		20	3/4	1		222 PS1	222 PSD1		
		20	3/4	3		222 PS3	222 PSD3		
		25	3/4	1		222.5 PS1	222.5 PSD1		
		25	3/4	3		222.5 PS3	222.5 PSD3		
22,000	22	30	1	1	1-1/2"	223 PS1	223 PSD1	21	2”
		30	1	3		223 PS3	223 PSD3		
		40	1-1/2	3		224 PS3	224 PSD3		
		50	2	3		225 PS3	225 PSD3		
		60	3	3		226 PS3	226 PSD3		
		70	5	3		227 PS3	227 PSD3		
		80	5	3		228 PS3	228 PSD3		
		90	5	3		229 PS3	229 PSD3		
		10	3/4	1		300 PS1	300 PSD1		
		10	3/4	3		300 PS3	300 PSD3		
		15	3/4	1		301 PS1	301 PSD1		
		15	3/4	3		301 PS3	301 PSD3		
		20	3/4	1		302 PS1	302 PSD1		
		20	3/4	3		302 PS3	302 PSD3		
		25	3/4	1		302.5 PS1	302.5 PSD1		
		25	3/4	3		302.5 PS3	302.5 PSD3		
30,000	30	30	1	1	1-1/2"	303 PS1	303 PSD1	35	3"
		30	1	3		303 PS3	303 PSD3		
		40	2	3		304 PS3	304 PSD3		
		50	2	3		305 PS3	305 PSD3		
		60	3	3		306 PS3	306 PSD3		
		70	5	3		307 PS3	307 PSD3		
		80	5	3		308 PS3	308 PSD3		
		90	7-1/2	3		309 PS3	309 PSD3		
		10	3/4	1		370 PS1	370 PSD1		
		10	3/4	3		370 PS3	370 PSD3		
		15	3/4	1		371 PS1	371 PSD1		
		15	3/4	3		371 PS3	371 PSD3		
		20	3/4	1		372 PS1	372 PSD1		
		20	3/4	3		372 PS3	372 PSD3		
		25	1	1		372.5 PS1	372.5 PSD1		
		25	1	3		372.5 PS3	372.5 PSD3		
37,000	37	30	1-1/2	3	1-1/2”	373 PS3	373 PSD3	35	3"
		40	2	3		374 PS3	374 PSD3		
		50	3	3		375 PS3	375 PSD3		
		60	5	3		376 PS3	376 PSD3		
		70	5	3		377 PS3	377 PSD3		
		80	5	3		378 PS3	378 PSD3		
		90	7-1/2	3		379 PS3	379 PSD3		
		10	3/4	1		450 PS1	450 PSD1		
		10	3/4	3		450 PS3	450 PSD3		
		15	3/4	1		451 PS1	451 PSD1		
		15	3/4	3		451 PS3	451 PSD3		
		20	1	1		452 PS1	452 PSD1		
		20	1	3		452 PS3	452 PSD3		
45,000	45	25	1-1/2	3	1-1/2"	452.5 PS3	452.5 PSD3	45	3"
		30	2	3		453 PS3	453 PSD3		
		40	3	3		454 PS3	454 PSD3		
		50	3	3		455 PS3	455 PSD3		
		60	5	3		456 PS3	456 PSD3		
		70	5	3		457 PS3	457 PSD3		
		80	7-1/2	3		458 PS3	458 PSD3		
		90	7-1/2	3		459 PS3	459 PSD3		
		10	1-1/2	3		600 PS3	600 PSD3		
		15	2	3		601 PS3	601 PSD3		
		20	2	3		602 PS3	602 PSD3		
		25	2	3		602.5 PS3	602.5 PSD3		
		30	3	3		603 PS3	603 PSD3		
60,000	60	40	3	3	1-1/2"	604 PS3	604 PSD3	60	3"
		50	5	3		605 PS3	605 PSD3		
		60	5	3		606 PS3	606 PSD3		
		70	7-1/2	3		607 PS3	607 PSD3		
		80	7-1/2	3		608 PS3	608 PSD3		
		90	7-1/2	3		609 PS3	609 PSD3		

TYPE PS CONDENSATE UNITS

CAP. SQ.FT. EDR	PUMP CAP. GPM	DISCH. PRESS. PSIG	MOTOR HP 3500 RPM ONLY	PHASE	DISCH. SIZE INCHES	SIMPLEX CATALOG NO.	DUPLEX CATALOG NO.	REC. CAP. GALS.	INLET SIZE INCHES
75,000	75	10	2	3	2"	750 PS3	750 PSD3	81	4"
		15	2	3		751 PS3	751 PSD3		
		20	3	3		752 PS3	752 PSD3		
		25	3	3		752.5 PS3	752.5 PSD3		
		30	3	3		753 PS3	753 PSD3		
		40	5	3		754 PS3	754 PSD3		
		50	5	3		755 PS3	755 PSD3		
		60	5	3		756 PS3	756 PSD3		
		70	7-1/2	3		757 PS3	757 PSD3		
		80	10	3		758 PS3	758 PSD3		
		90	10	3		759 PS3	759 PSD3		
90,000	90	10	3	3	2"	900 PS3	900 PSD3	81	4”
		15	3	3		901 PS3	901 PSD3		
		20	3	3		902 PS3	902 PSD3		
		25	3	3		902.5 PS3	902.5 PSD3		
		30	3	3		903 PS3	903 PSD3		
		40	5	3		904 PS3	904 PSD3		
		50	7-1/2	3		905 PS3	905 PSD3		
		60	7-1/2	3		906 PS3	906 PSD3		
		70	10	3		907 PS3	907 PSD3		
		80	10	3		908 PS3	908 PSD3		
112,000	112	10	3	3	2"	1120 PS3	1120 PSD3	128	4"
		15	3	3		1121 PS3	1121 PSD3		
		20	3	3		1122 PS3	1122 PSD3		
		25	5	3		1122.5 PS3	1122.5 PSD3		
		30	5	3		1123 PS3	1123 PSD3		
		40	7-1/2	3		1124 PS3	1124 PSD3		
		50	7-1/2	3		1125 PS3	1125 PSD3		
		60	10	3		1126 PS3	1126 PSD3		
		70	10	3		1127 PS3	1127 PSD3		
		80	15	3		1128 PS3	1128 PSD3		

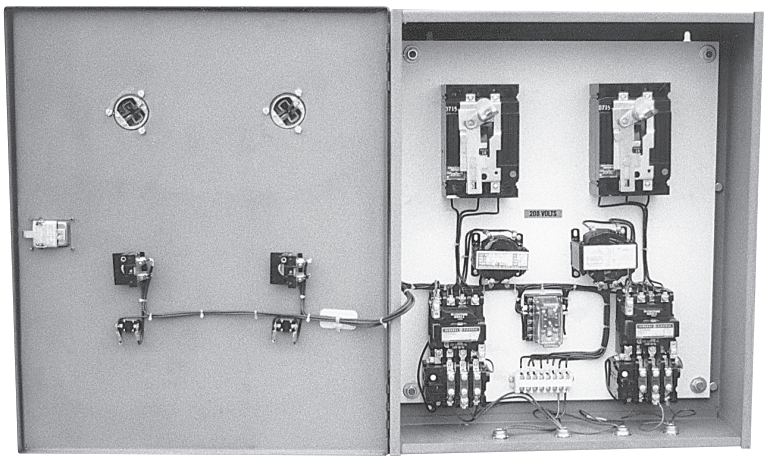
Charted units are a representation of the typical system and sizes used. Higher pump pressures and larger pump capacities are available.



Model P

1. Pump Head
2. Pump Case
3. Motor
4. Motor Shaft
5. Water Slinger
6. Impeller
7. Mechanical Seal
8. Pump Suction
9. Pump Discharge
10. Gasket
11. Case Wearing Ring
12. Straightening Vanes
13. Propeller
14. Propeller Shaft
15. Locking Nut (2)

Control panels available and can be factory mounted and wired to NEMA and J.I.C. specifications.
(Note: Magnetic starters should be provided for all three phase motors.)



ENGINEERING SELECTION DATA

SHIPCO® PUMPS has the panel assemblies to make your installation an easy and fast connection. Control Panels are available to comply with all NEMA and JIC specifications. The controls are designed for efficient automatic operation of the condensate, vacuum and boiler feed pumps, as required. Panels are clearly identified with nameplates for easy reference to unit serial number and corresponding wiring diagrams.

Panels feature independent pump control circuits. This allows partial operation of duplex units for servicing and repairs. Internal wiring is numbered to match the wiring diagram for identification.

Magnetic Starters are usually required for single phase motors 1 horsepower and over, and all 3 phase motors. Overload relays are recommended to protect the wiring and motors, should an unbalanced condition occur.

Disconnects are available as an integral part of the panel to meet electrical code and service requirements.

Selector Switches are available for pump control. SHIPCO® PUMPS recommends two normal types.

Lead-off-Lag selector switches allow manual alternation of the lead pump for even wear.

Auto-Off selector switches with test push buttons — for use with mechanical or electrical alternators.

Mechanical Alternators are provided by float operated switching devices.

Electrical Alternators are available as an integral part of the panel. Two float switches are required to be used with the electrical alternator.

Control Circuit Transformers provide step down voltage for control circuits. Control circuits are normally recommended to be 115/1/60.

Relay, Pilot Lights, Alarm Lights, Alarm Bells, etc. are available upon request.

TYPE PES CONDENSATE UNITS

CAP. SQ.FT. EDR	PUMP CAP. GPM	DISCH. PRESS. PSIG	MOTOR HP 3500 RPM ONLY	PHASE	DISCH. SIZE INCHES	SIMPLEX CATALOG NO.	DUPLEX CATALOG NO.	REC. CAP. GALS.	INLET SIZE INCHES
6,000	6	10	1/3	1	3/4"	60 PES1	60 PESD1	15	2"
		10	1/3	3		60 PES3	60 PESD3		
		15	1/3	1		61 PES1	61 PESD1		
		15	1/3	3		61 PES3	61 PESD3		
		20	1/3	1		62 PES1	62 PESD1		
		20	1/3	3		62 PES3	62 PESD3		
		25	1/2	1		62.5 PES1	62.5 PESD1		
		25	1/2	3		62.5 PES3	62.5 PESD3		
		30	3/4	1		63 PES1	63 PESD1		
		30	3/4	3		63 PES3	63 PESD3		
		40	1-1/2	3		64 PES3	64 PESD3		
		50	1-1/2	3		65 PES3	65 PESD3		
		60	3	3		66 PES3	66 PESD3		
		70	3	3		67 PES3	67 PESD3		
		80	5	3	1-1/2"	68 PES3	68 PESD3		
		90	5	3		69 PES3	69 PESD3		
9,000	9	10	1/3	1	3/4"	90 PES1	90 PESD1	15	2"
		10	1/3	3		90 PES3	90 PESD3		
		15	1/3	1		91 PES1	91 PESD1		
		15	1/3	3		91 PES3	91 PESD3		
		20	1/3	1		92 PES1	92 PESD1		
		20	1/3	3		92 PES3	92 PESD3		
		25	1/2	1		92.5 PES1	92.5 PESD1		
		25	1/2	3		92.5 PES3	92.5 PESD3		
		30	3/4	1		93 PES1	93 PESD1		
		30	3/4	3		93 PES3	93 PESD3		
		40	1-1/2	3		94 PES3	94 PESD3		
		50	1-1/2	3		95 PES3	95 PESD3		
		60	3	3		96 PES3	96 PESD3		
		70	3	3		97 PES3	97 PESD3		
		80	5	3	1-1/2"	98 PES3	98 PESD3		
		90	5	3		99 PES3	99 PESD3		
12,000	12	10	1/3	1	3/4"	120 PES1	120 PESD1	15	2"
		10	1/3	3		120 PES3	120 PESD3		
		15	1/3	1		121 PES1	121 PESD1		
		15	1/3	3		121 PES3	121 PESD3		
		20	1/2	1		122 PES1	122 PESD1		
		20	1/2	3		122 PES3	122 PESD3		
		25	3/4	1		122.5 PES1	122.5 PESD1		
		25	3/4	3		122.5 PES3	122.5 PESD3		
		30	3/4	1		123 PES1	123 PESD1		
		30	3/4	3		123 PES3	123 PESD3		
		40	1-1/2	3		124 PES3	124 PESD3		
		50	1-1/2	3		125 PES3	125 PESD3		
		60	3	3		126 PES3	126 PESD3		
		70	3	3		127 PES3	127 PESD3		
		80	5	3	1-1/2"	128 PES3	128 PESD3		
		90	5	3		129 PES3	129 PESD3		

TYPE PES CONDENSATE UNITS

CAP. SQ.FT. EDR	PUMP CAP. GPM	DISCH. PRESS. PSIG	MOTOR HP 3500 RPM ONLY	PHASE	DISCH. SIZE INCHES	SIMPLEX CATALOG NO.	DUPLEX CATALOG NO.	REC. CAP. GALS.	INLET SIZE INCHES
15,000	15	10	1/3	1	3/4"	150 PES1	150 PESD1	15	2"
		10	1/3	3		150 PES3	150 PESD3		
		15	1/3	1		151 PES1	151 PESD1		
		15	1/3	3		151 PES3	151 PESD3		
		20	1/2	1		152 PES1	152 PESD1		
		20	1/2	3		152 PES3	152 PESD3		
		25	3/4	1		152.5 PES1	152.5 PESD1		
		25	3/4	3		152.5 PES3	152.5 PESD3		
		30	1	1		153 PES1	153 PESD1		
		30	1	3		153 PES3	153 PESD3		
		40	1-1/2	3		154 PES3	154 PESD3		
		50	2	3		155 PES3	155 PESD		
		60	3	3		156 PES3	156 PESD3		
		70	5	3		157 PES3	157 PESD3		
		80	5	3	1-1/2"	158 PES3	158 PESD3		
		90	5	3		159 PES3	159 PESD3		
18,000	18	10	1/2	1	1-1/2"	180 PES1	180 PESD1	21	2"
		10	1/2	3		180 PES3	180 PESD3		
		15	1/2	1		181 PES1	181 PESD1		
		15	1/2	3		181 PES3	181 PESD3		
		20	1/2	1		182 PES1	182 PESD1		
		20	1/2	3		182 PES3	182 PESD3		
		25	3/4	1		182.5 PES1	182.5 PESD1		
		25	3/4	3		182.5 PES3	182.5 PESD3		
		30	1	1		183 PES1	183 PESD1		
		30	1	3		183 PES3	183 PESD3		
		40	1-1/2	3		184 PES3	184 PESD3		
		50	2	3		185 PES3	185 PESD3		
		60	3	3		186 PES3	186 PESD3		
		70	5	3		187 PES3	187 PESD3		
		80	5	3		188 PES3	188 PESD3		
		90	5	3		189 PES3	189 PESD3		
22,000	22	10	1/2	1	1-1/2"	220 PES1	220 PESD1	21	2"
		10	1/2	3		220 PES3	220 PESD3		
		15	1/2	1		221 PES1	221 PESD1		
		15	1/2	3		221 PES3	221 PESD3		
		20	3/4	1		222 PES1	222 PESD1		
		20	3/4	3		222 PES3	222 PESD3		
		25	3/4	1		222.5 PES1	222.5 PESD1		
		25	3/4	3		222.5 PES3	222.5 PESD3		
		30	1	1		223 PES1	223 PESD1		
		30	1	3		223 PES3	223 PESD3		
		40	1-1/2	3		224 PES3	224 PESD3		
		50	2	3		225 PES3	225 PESD3		
		60	3	3		226 PES3	226 PESD3		
		70	5	3		227 PES3	227 PESD3		
		80	5	3		228 PES3	228 PESD3		
		90	5	3		229 PES3	229 PESD3		
30,000	30	10	3/4	1	1-1/2"	300 PES1	300 PESD1	35	3"
		10	3/4	3		300 PES3	300 PESD3		
		15	3/4	1		301 PES1	301 PESD1		
		15	3/4	3		301 PES3	301 PESD3		
		20	3/4	1		302 PES1	302 PESD1		
		20	3/4	3		302 PES3	302 PESD3		
		25	1	1		302.5 PES1	302.5 PESD1		
		25	1	3		302.5 PES3	302.5 PESD3		
		30	1	1		303 PES1	303 PESD1		
		30	1	3		303 PES3	303 PESD3		
		40	2	3		304 PES3	304 PESD3		
		50	2	3		305 PES3	305 PESD3		
		60	3	3		306 PES3	306 PESD3		
		70	5	3		307 PES3	307 PESD3		
		80	5	3		308 PES3	308 PESD3		
		90	7-1/2	3		309 PES3	309 PESD3		
37,000	37	10	3/4	1	1-1/2"	370 PES1	370 PES1	35	3"
		10	3/4	3		370 PES3	370 PESD3		
		15	3/4	1		371 PES1	371 PESD1		
		15	3/4	3		371 PES3	371 PESD3		
		20	3/4	1		372 PES1	372 PESD1		
		20	3/4	3		372 PES3	372 PESD3		
		25	1	1		372.5 PES1	372.5 PESD1		
		25	1	3		372.5 PES3	372.5 PESD3		
		30	1-1/2	3		373 PES3	373 PESD3		
		40	2	3		374 PES3	374 PESD3		
		50	3	3		375 PES3	375 PESD3		
		60	5	3		376 PES3	376 PESD3		
		70	5	3		377 PES3	377 PESD3		
		80	5	3		378 PES3	378 PESD3		
		90	7-1/2	3		379 PES3	379 PESD3		

TYPE PES CONDENSATE UNITS

CAP. SQ.FT. EDR	PUMP CAP. GPM	DISCH. PRESS. PSIG	MOTOR HP 3500 RPM ONLY	PHASE	DISCH. SIZE INCHES	SIMPLEX CATALOG NO.	DUPLEX CATALOG NO.	REC. CAP. GALS.	INLET SIZE INCHES
		10	3/4	1		450 PES1	450 PESD1		
		10	3/4	3		450 PES3	450 PESD3		
		15	3/4	1		451 PES1	451 PESD1		
		15	3/4	3		451 PES3	451 PESD3		
		20	1	1		452 PES1	452 PESD1		
		20	1	3		452 PES3	452 PESD3		
		25	1-1/2	3		452.5 PES3	452.5 PESD3		
45,000	45	30	2	3	1-1/2"	453 PES3	453 PESD3	45	3"
		40	3	3		454 PES3	454 PESD3		
		50	3	3		455 PES3	455 PESD3		
		60	5	3		456 PES3	456 PESD3		
		70	5	3		457 PES3	457 PESD3		
		80	7-1/2	3		458 PES3	458 PESD3		
		90	7-1/2	3		459 PES3	459 PESD3		
		10	1-1/2	3		600 PES3	600 PESD3		
		15	2	3		601 PES3	601 PESD3		
		20	2	3		602 PES3	602 PESD3		
		25	2	3		602.5 PES3	602.5 PESD3		
		30	3	3		603 PES3	603 PESD3		
60,000	60	40	3	3	1-1/2"	604 PES3	604 PESD3	60	3"
		50	5	3		605 PES3	605 PESD3		
		60	5	3		606 PES3	606 PESD3		
		70	7-1/2	3		607 PES3	607 PESD3		
		80	7-1/2	3		608 PES3	608 PESD3		
		90	7-1/2	3		609 PES3	609 PESD3		
		10	2	3		750 PES3	750 PESD3		
		15	2	3		751 PES3	751 PESD3		
		20	3	3		752 PES3	752 PESD3		
		25	3	3		752.5 PES3	752.5 PESD3		
		30	3	3		753 PES3	753 PESD3		
75,000	75	40	5	3	2"	754 PES3	754 PESD3	81	4"
		50	5	3		755 PES3	755 PESD3		
		60	5	3		756 PES3	756 PESD3		
		70	7-1/2	3		757 PES3	757 PESD3		
		80	10	3		758 PES3	758 PESD3		
		90	10	3		759 PES3	759 PESD3		
		10	3	3		900 PES3	900 PESD3		
		15	3	3		901 PES3	901 PESD3		
		20	3	3		902 PES3	902 PESD3		
		25	3	3		902.5 PES3	902.5 PESD3		
90,000	90	30	3	3	2"	903 PES3	903 PESD3	81	4"
		40	5	3		904 PES3	904 PESD3		
		50	7-1/2	3		905 PES3	905 PESD3		
		60	7-1/2	3		906 PES3	906 PESD3		
		70	10	3		907 PES3	907 PESD3		
		80	10	3		908 PES3	908 PESD3		
		10	3	3		1120 PES3	1120 PESD3		
		15	3	3		1121 PES3	1121 PESD3		
		20	3	3		1122 PES3	1122 PESD3		
		25	5	3		1122.5 PES3	1122.5 PESD3		
112,000	112	30	5	3	2"	1123 PES3	1123 PESD3	128	4"
		40	7-1/2	3		1124 PES3	1124 PESD3		
		50	7-1/2	3		1125 PES3	1125 PESD3		
		60	10	3		1126 PES3	1126 PESD3		
		70	10	3		1127 PES3	1127 PESD3		
		80	15	3		1128 PES3	1128 PESD3		

Charted units are a representation of the typical system and sizes used. Higher pump pressures and larger pump capacities are available.

PS & PES UNIT DESCRIPTION

PS & PES Pumps are "The Pumps That Pump" even when traps start to leak and temperatures go to boiling!

Propeller Condensate Pumps are designed to handle hot condensate with low NPSH requirements. The type P pumps require only 2 feet of NPSH to handle water at its saturation temperature. Floor mounted units can handle condensate at temperatures to 210°F.

Elevated units can handle condensate at temperatures to 212°F.

Steel Receivers provide years of service even with the most aggressive waters. Receivers are available from 15 gallon to 235 gallon capacity. The receivers are fully vented and operate at atmospheric pressure. (Receivers are not ASME code stamped.)

Butterfly Suction Valves are an integral part of the service features of the PS units. By closing the butterfly suction valves the PS pumps are isolated from the receiver for servicing without draining the receiver. PES units (elevated) have valves in the suction piping.

Basket Inlet Strainers are a recommended feature of the PS units. The large dirt pocket and vertical self cleaning screens help prevent unnecessary wear and problems with the PS pumps.

Gauge Glass provides a quick check of receiver water level.

Dial Thermometer provides a quick check of condensate temperature.

Discharge Pressure Gauges provide a quick check of pump operation at design conditions.

The heart of the PS & PES unit is the type P pump. The type P pump is designed for vertical flange mounting as shown.

Pump Head and Case are made of close grained cast iron.

Impeller is cast bronze, enclosed vane, precision balanced, and trimmed to design conditions for smooth durable operation.

Case Wearing Ring is bronze and easily renewable to keep the type P pump at peak performance.

Motors are heavy duty ball bearing design.

Water Safety Slingers are installed to help prevent water from entering the motor from seal leakage.

Motor Shaft is stainless steel on 56 J Frame motors. JM motors have a bronze shaft sleeve or optional stainless steel shaft sleeve.

Straightening Vanes provide a directed flow into the eye of the centrifugal impeller.

Axial Flow Impeller provides low NPSH characteristics and is precision finished for smooth vibration-free operation.

Discharge Companion Flange allows the pump to be removed and eliminates the need of additional unions.

All units are completely assembled, piped, wired, and individually tested before shipment. Testing includes a complete hydrostatic test for leaks, electrical tests for controls and accessories, and performance test for pumps at design conditions. After testing, the units are packaged for shipment.

ENGINEERING SELECTION DATA

Receiver Sizing – PS & PES Units

The receivers in this series of units are sized to allow for approximately one minute net storage capacity (where practical). The condensate return pumps need to run for approximately a one minute period to prolong the life of the motors in intermittent operation. The condensate is returned to the boiler room as quickly as possible to reduce make-up requirements and heat loss.

Condensate Pump Sizing – PS & PES Units

The condensing rate for 1,000 sq. ft. EDR is .5 GPM (see table). The type PS Condensate return pumps are sized at twice (2 times) the normal condensing rate or 1.0 GPM per 1,000 sq. ft. EDR. The low NPSH requirements and minimal capacity loss of centrifugal pumps from normal wear has shown from experience to provide more than adequate pump capacity.

Table — Values of Heat and Power

	GPM	BTU	Lbs/Hr	Sq. Ft. EDR
1 Boiler Horsepower	.069	33,475	34.5	139.4
1,000 sq. ft. EDR	.50	240,000	247.3	1,000

SHIPCO® IS A REGISTERED TRADEMARK OF SHIPPENSBURG PUMP CO., INC.

SHIPPENSBURG PUMP COMPANY, INC., P.O. BOX 279, SHIPPENSBURG, PA 17257 • PHONE 717-532-7321 • FAX 717-532-7704 • WWW.SHIPCOPUMPS.COM

PRINTED IN THE U.S.A. • BEIDEL PRINTING HOUSE, INC., 717-532-5063

COPYRIGHT © 2017 SHIPPENSBURG PUMP COMPANY, INC.