TI-P216-02-US Issue 2



Stainless Steel Electric Condensate Return Units SSCRU Series

Description

Condensate pumps are used in low pressure heating systems to collect and quickly return condensate to the boiler feed unit. Their pumping action is controlled by the water level in the receiver.

Available in either simplex or duplex configuration, simplex units consist of an electric motor close-coupled to a centrifugal pump mounted on a receiver with a float operated pump control, duplex units are used when greater pumping capacity or back-up pump protection is required.

The SSCRU Series is designed for long-life, low maintenance and reliable service.

Stainless Steel Washdown Duty, Epoxy Washdown Duty and Explosion Proof Options Available.

Features

304 Stainless Steel Receivers with 20 year warranty	
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304 Stainless Steel Vertical Flange Mounted Pumps

Heavy Duty SS Sight Gauge Valve Assembly

NEMA 1 Float Switch (Simplex)

NEMA 1 Mechanical Alternator (Duplex)

TEFC Motor Enclosures

NEMA 3R Control Panel Rating

Standard configurations

Capacities: 1,000-150,000 Sq Ft (93 - 13,935 m²) EDR

Receiver: 12-135 gallons (45 - 511 liters)

Discharge Pressures: 10-50 psi g (0.69 - 3.4 bar g)

Motor Voltages: 115V, 208V, 230V, 460V, 575V

Other configurations and enclosure ratings available upon request.

Available accessories

3" SS Dial Thermometer

Stainless Steel Pump Suction Isolation Valve

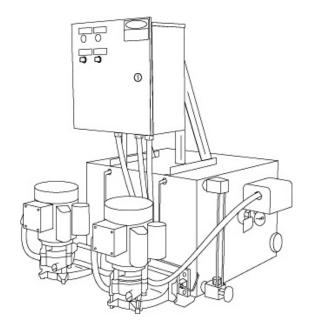
Discharge Check Valve

Discharge Ball Valve

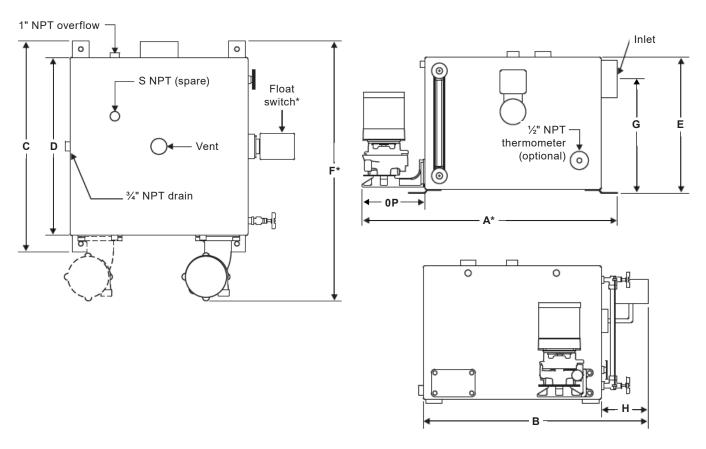
Discharge Throttling (Globe) Valve

Discharge Pressure Gauge

Inlet Basket Strainer



Tank Dimensions (approximate) in inches (mm)



Tank	Inlet	Vent	A*	В	С	D	E	F	G	н	s
12	2 (50.8)	1 (25.4)	26 (660)	22 (559)	20 (508)	15 (381)	14 (356)	26 (660)	10 (254)		0.75 (19.1)
25		1.25 (31.8)	29 (737)	25 (635)	23 (584)	18 (457)	19 (483)	29 (737)	16 (406)	6 (152)	0.75 (19.1)
45		2 (50.8)	35 (889)	31 (787)	29 (737)	24 (610)		35 (889)			1.5
70	4 (102)	2.5 (63.5)	41 (1041)	37 (940)	35 (889)	30 (762)		41 (1041)			
100		3	47 (1194)	43 (1092)	41 (1041)	36 (914)		47 (1194)			(38.1)
135		(76.2)	46 (1168)	43 (1092)	41 (1041)	36 (914)	25 (635)	47 (1194)	22 (559)		

*Notes

- 1. Dimensional drawings available upon request
- 2. Pump extends additional 3" when the optional isolation valve is added
- 3. Alternator will replace float switch for duplex units
- 4. For duplex unit, 2nd pump shown hidden on left

Simplex and Duplex Tank/Pump Selection Guide

All Simplex and Duplex Condensate Return Units include 304SS tank, SS vertical flange mounted centrifugal pumps, NEMA 1 float switch (simplex) or mechanical alternator (duplex) and SS gauge glass assembly.

Note: Pumps and tanks can be interchanged. Contact Spirax Sarco for custom systems.

Tank size GAL (litres)	EDR	GPM Pump dishcharge flow	Pump discharge pressure	HP	Simple	c model	Duplex model	
					number three phase	number single phase	number three phase	number single phase
			psi g (bar g)					
			15 (1 bar)	1/3	12150503SXS0063S	12150303SXS0061S	12150503SXS0063D	12150303SXS0061D
			20 (1.4 bar)	1/3	12200503SXS0063S	12200303SXS0061S	12200503SXS0063D	12200303SXS0061D
	2000		25 (1.7 bar)	1/2	12250505SXS0063S	12250505SXS0061S	12250505SXS0063D	12250505SXS0061D
	6000	6	30 (2.1 bar)	3/4	12300707SXS0063S	12300707SXS0061S	12300707SXS0063D	12300707SXS0061D
			40 (2.8 bar)	1½	12401515SXS0063S	12401515SXS0061S	12401515SXS0063D	12401515SXS0061D
			50 (3.4 bar)	1½	12501515SXS0063S	12501515SXS0061S	12501515SXS0063D	12501515SXS0061D
			15 (1 bar)	1/3	12150503SXS0093S	12150303SXS0091S	12150503SXS0093D	12150303SXS0091D
			20 (1.4 bar)	1/3	12200503SXS0093S	12200303SXS0091S	12200503SXS0093D	12200303SXS0091D
12			25 (1.7 bar)	3/4	12250707SXS0093S	12250707SXS0091S	12250707SXS0093D	12250707SXS0091D
(45 liters)	9000	9	30 (2.1 bar)	3/4	12300707SXS0093S	12300707SXS0093S	12300707SXS0093D	12300707SXS0091D
			40 (2.8 bar)	1½	12401515SXS0093S	12401515SXS0091S	12401515SXS0093D	12401515SXS0091D
			50 (3.4 bar)	1½	12501515SXS0093S	12501515SXS0091S	12501515SXS0093D	12501515SXS0091D
	12000	12	15 (1 bar)	1/3	12150503SXS0123S	12150503SXS0121S	12150503SXS0123D	12150503SXS0121D
			20 (1.4 bar)	1/3	12200503SXS0123S	12200303SXS0121S	12200503SXS0123D	12200303SXS0121D
			25 (1.7 bar)	3/4	12250707SXS0123S	12250707SXS0121S	12250707SXS0123D	12250707SXS0121D
			30 (2.1 bar)	3/4	12300707SXS0123S	12300707SXS0121S	12300707SXS0123D	12300707SXS0121D
			40 (2.8 bar)	1½	12401515SXS0123S	12401515SXS0121S	12401515SXS0123D	12401515SXS0121D
			50 (3.4 bar)	1½	12501515SXS0123S	12501515SXS0121S	12501515SXS0123D	12501515SXS0121D
		15	15 (1 bar)	1/3	25150503SXS0153S	25150503SXS0151S	25150503SXS0153D	25150503SXS0151D
			20 (1.4 bar)	1/3	25200503SXS0153S	25200503SXS0151S	25200503SXS0153D	25200503SXS0151D
	45000		25 (1.7 bar)	1	25251010SXS0153S	25251010SXS0151S	25251010SXS0153D	25251010SXS0151D
	15000		30 (2.1 bar)	1	25301010SXS0153S	25301010SXS0151S	25301010SXS0153D	25301010SXS0151D
			40 (2.8 bar)	1½	25401515SXS0153S	25401515SXS0151S	25401515SXS0153D	25401515SXS0151D
25			50 (3.4 bar)	2	25502020SXS0153S	25502020SXS0151S	25502020SXS0153D	25502020SXS0151D
(95 liters)			15 (1 bar)	1/3	25150503SXS0223S	25150503SXS0221S	25150503SXS0223D	25150503SXS0221D
			20 (1.4 bar)	1/2	25200505SXS0223S	25200505SXS0221S	25200505SXS0223D	25200505SXS0221D
	00000		25 (1.7 bar)	1	25251010SXS0223S	25251010SXS0221S	25251010SXS0223D	25251010SXS0221D
	22000	22	30 (2.1 bar)	1	25301010SXS0223S	25301010SXS0221S	25301010SXS0223D	25301010SXS0223D
			40 (2.8 bar)	2	25401515SXS0223S	25401515SXS0221S	25401515SXS0223D	25401515SXS0221D
			50 (3.4 bar)	3	25503030SXS0223S		25503030SXS0223D	

Simplex and Duplex Tank/Pump Selection Guide, continued on next page

Simplex and Duplex Tank/Pump Selection Guide (continued)

Tank size GAL (litres)	EDR	GPM Pump dishcharge flow	Pump discharge pressure psi g (bar g)	НР	Simple	k model	Duplex model	
					number three phase	number single phase	number three phase	number single phase
			15 (1 bar)	1/2	45150505SXS0303S	45150505SXS0301S	45150505SXS0303D	45150505SXS0301D
			20 (1.4 bar)	1/2	45200505SXS0303S	45200505SXS0301S	45200505SXS0303D	45200505SXS0301D
			25 (1.7 bar)	1	45250101SXS0303S	45250101SXS0301S	45250101SXS0303D	45250101SXS0301D
	30000	30	30 (2.1 bar)	1½	45301515SXS0303S	45301515SXS0301S	45301515SXS0303D	45301515SXS0301D
			40 (2.8 bar)	2	45400202SXS0303S	45400202SXS0301S	45400202SXS0303D	45400202SXS0301D
			50 (3.4 bar)	3	45503030SXS0303S		45503030SXS0303D	
			15 (1 bar)	1/2	45150505SXS0383S	45150505SXS0381S	45150505SXS0383D	45150505SXS0381D
			20 (1.4 bar)	3/4	45200707SXS0383S	45200707SXS0381S	45200707SXS0383D	45200707SXS0381D
15	27500	38	25 (1.7 bar)	1½	45251515SXS0383S	45251515SXS0381S	45251515SXS0383D	45251515SXS0381D
170 liters)	37500		30 (2.1 bar)	1½	45301515SXS0383S	45301515SXS0381S	45301515SXS0383D	45301515SXS0381D
			40 (2.8 bar)	3	45403030SXS0383S		45403030SXS0383D	
			50 (3.4 bar)	3	45503030SXS0383S		45503030SXS0383D	
	45000	45	15 (1 bar)	1/2	45150505SXS0453S	45150505SXS0451S	45150505SXS0453D	45150505SXS0451D
			20 (1.4 bar)	3/4	45200707SXS0453S	45200707SXS0451S	45200707SXS0453D	45200707SXS0451D
			25 (1.7 bar)	1½	45251515SXS0453S	45251515SXS0451S	45251515SXS0453D	45251515SXS0451D
			30 (2.1 bar)	2	45302020SXS0453S	45302020SXS0451S	45302020SXS0453D	45302020SXS0451D
			40 (2.8 bar)	3	45403030SXS0453S		45403030SXS0453D	
			50 (3.4 bar)	3	45503030SXS0453S		45503030SXS0453D	
	60000	60	15 (1 bar)	3/4	70150707SXS0603S	70150707SXS0601S	70150707SXS0603D	70150707SXS0601D
			20 (1.4 bar)	1	70201010SXS0603S	70201010SXS0601S	70201010SXS0603D	70201010SXS0601D
			25 (1.7 bar)	2	70252020SXS0603S	70252020SXS0601S	70252020SXS0603D	70252020SXS0601D
			30 (2.1 bar)	2	70302020SXS0603S	70302020SXS0601S	70302020SXS0603D	70302020SXS0601D
			40 (2.8 bar)	3	70403030SXS0603S		70403030SXS0603D	
' 0			50 (3.4 bar)	3	705030SXS0603S		70503SXS0603D	
(265 liters)	75000	75	15 (1 bar)	1	70151010SXS0753S	70151010SXS0751S	70151010SXS0753D	70151010SXS0751D
			20 (1.4 bar)	1½	70201515SXS0753S	70201515SXS0751S	70201515SXS0753D	70201515SXS0751D
			25 (1.7 bar)	2	702520SXS0753S		702520SXS0753D	
	75000		30 (2.1 bar)	3	703030SXS0753S		703030SXS0753D	
			40 (2.8 bar)	3	704030SXS0753S		704030SXS0753D	
			50 (3.4 bar)	5	705050SXS0753S		705050SXS0753D	

Simplex and Duplex Tank/Pump Selection Guide, continued on next page

Simplex and Duplex Tank/Pump Selection Guide (continued)

Tank size GAL (litres)	EDR	GPM Pump dishcharge flow	Pump discharge pressure psi g (bar g)	НР	Simple	k model	Duplex model		
					number three phase	number single phase	number three phase	number single phase	
			15 (1 bar)	1 ½	100151510SXS0903S	100151510SXS0901S	1001515SXS0903D	100151510SXS0901D	
			20 (1.4 bar)	2	1002020SXS0903S	100202SXS0901S	1002020SXS0903D	1002020SXS0901D	
	90000	90	25 (1.7 bar)	2	1002520SXS0903S	100252SXS0901S	1002520SXS0903D	1002520SXS0901D	
	90000		30 (2.1 bar)	3	1003030SXS0903S		1003030SXS0903D		
			40 (2.8 bar)	5	1004050SXS0903S		1004050SXS0903D		
100 (379 liters)			50 (3.4 bar)	5	1005050SXS0903S		1005050SXS0903D		
	112000	112	15 (1 bar)	3	1001530SXS1123S		1001530SXS1123D		
			20 (1.4 bar)	3	1002030SXS1123S		1002030SXS1123D		
			25 (1.7 bar)	3	1002530SXS1123S		1002530SXS1123D		
			30 (2.1 bar)	5	1003050SXS1123S		1003050SXS1123D		
			40 (2.8 bar)	5	1004050SXS1123S		1004050SXS1123D		
			50 (3.4 bar)	5	1005050SXS1123S		1005050SXS1123D		
	150000	00 150	15 (1 bar)	5	1351550SXS1503S		1351550SXS1503D		
			20 (1.4 bar)	5	1352050SXS1503S		1352050SXS1503D		
135 (511 liters)			25 (1.7 bar)	5	1352550SXS1503S		1352550SXS1503D		
			30 (2.1 bar)	5	1353075SXS1503S		1353075SXS1503D		
			40 (2.8 bar)	7 ½	1354075SXS1503S		1354075SXS1503D		
			50 (3.4 bar)	7 ½	1355075SXS1503S		1355075SXS1503D		

Spares Available:

- Pump and Motor Assembly
- Mechanical Seal Assembly
- Float Switch Assembly
- Mechanical Alternator Assembly
- Gasket Kit (Pump Housing to Motor and Receiver to Pump Housing)
- Mechanical Seal Kits