

TI-P208-01-US Issue 4

## Vented Pressure Powered Pump Packages PPEC/PTC/PTF

The modular pumping system consists of the standard PPEC/PTC/PTF Pressure Powered Pumps, pre-piped with the necessary auxiliary components and integral receiver mounted on a skid base. The unit offers versatility of providing a base mounted module and pump with added modular options for a comprehensive fully engineered modular package ensuring a technically correct and complete hook up.

All packages are designed for service in open loop, vented applications; Care should be taken to ensure adequate venting is available based on the maximum rated flash steam loads per pump package.

## **Standard Pump Packages**

Model		PPEC Simplex Pump Package	PPEC Duplex Pump Package	
Limiting conditions	PMA:	See TI-P208-02-US		
	TMA:			
	Receiver Tank:	Non-ASME: Rated for atmospheric pressure only. 650 °F @ 0 psi g (343 °C @ 0 bar g) ASME: Rated for 200 psi g @ 400 °F	Non-ASME: Rated for atmospheric pressure only. 650 °F @ 0 psi g (343 °C @ 0 bar g) ASME: Rated for 200 psi g @ 400 °F	
		Sized for flash steam rates of up to 600 lb/hr (272 kg/hr).	Sized for flash steam rates of up to 1200 lb/hr (544 kg/hr).	
	Pump:	1½" x 1½"	1½" x 1½"	
Sizes	Receiver:	Commercial Grade: 8 Gallons (35 L)	Commercial Grade: 1" PPEC 8 Gallons (35 L) 1½" PPEC 26 Gallons (115 L)	
		Industrial Grade: 14 Gallon (62 L) ASME	Industrial Grade: 1½" PPEC 35 Gallon (154 L) ASME	
Capacity		See	TI-P208-03-US	
Construction		Commercial Grade: Fabricated steel receiver tank and frame Cast iron pump body Stainless steel pump internals Stainless steel check valves	Commercial Grade: Fabricated steel receiver tank and frame Cast iron pump body Stainless steel pump internals Stainless steel check valves	
		Industrial Grade:Industrial Grade:Fabricated steel receiver tank and frameFabricated steel receiver tank and frameCast steel pump bodyCast steel pump bodyStainless steel pump internalsStainless steel check valvesStainless steel check valvesStainless steel check valves		

## Standard Pump Packages (continued)

Model		PTC Simplex Pump Package	PTC Duplex Pump Package
Limiting conditions	PMA		
	ТМА	- See TI-P207-05-US	
	Receiver Tank	Rated for atmospheric pressure only. 650 °F @ 0 psi g (343 °C @ 0 bar g)	Rated for atmospheric pressure only. 650 °F @ 0 psi g (343 °C @ 0 bar g)
		Sized for flash steam rates of up to 1,350 lb/hr (612 kg/hr).	Sized for flash steam rates of up to 2,700 lb/hr (1225 kg/hr).
Sizes	Pump	3" x 2"	3" x 2"
	Receiver	49 Gallons (185 L)	82 Gallons (310 L)
Capacity		See TI-P207-12-US	
Construction		Fabricated steel receiver tank and frame Ductile Iron pump body Stainless steel pump internals Stainless steel check valves	Fabricated steel receiver tank and frame Ductile Iron pump body Stainless steel pump internals Stainless steel check valves

Model		PTC Triplex Pump Package	PTC Quadraplex Pump Package	
	PMA	0	2007.05.110	
Limiting conditions	ТМА	- See TI-P207-05-US		
	Receiver Tank	Rated for atmospheric pressure only. 650 °F @ 0 psi g (343 °C @ 0 bar g)	Rated for atmospheric pressure only. 650 °F @ 0 psi g (343 °C @ 0 bar g)	
		Sized for flash steam rates of up to 4,000 lb/hr (1814 kg/hr)	Sized for flash steam rates of up to 4,500 lb/hr (2041 kg/hr)	
Sizes	Pump	3" x 2"	3" x 2"	
	Receiver	158 Gallons (598 L)	207 Gallons (784 L)	
Capacity		See TI-P207-12-US		
Construction		Fabricated Steel Receiver, Tank, and Frame Ductile Iron pump body Stainless Steel Pump Internals Stainless Steel check valves	Fabricated Steel Receiver, Tank, and Frame Ductile Iron pump body Stainless Steel Pump Internals Stainless Steel check valves	

Model		PTF Simplex Pump Package	PTF Duplex Pump Package	
Limiting conditions	РМА			
	ТМА	- See TI-P207-06-US		
	Receiver Tank	Rated for 200 psi g @ 395 °F (13.8 bar g @ 202 °C)	Rated for 200 psi g @ 395 °F (13.8 bar g @ 202 °C)	
		Sized for flash steam rates of up to 1,350 lb/hr.(612 kg/hr)	Sized for flash steam rates of up to 2,700 lb/hr (1225 kg/hr)	
Sizes	Pump	3" x 2"	3" x 2"	
	Receiver	49 Gallons (185 L)	82 Gallons (310 L)	
Capacity		See TI-P207-12-US		
Construction		Fabricated steel receiver tank and frame Fabricated pump body, ASME coded Stainless steel pump internals Stainless steel check valves	Fabricated steel receiver tank and frame Fabricated pump body, ASME coded Stainless steel pump internals Stainless steel check valves	

## Standard Pump Packages (continued)

Model		PTF Triplex Pump Package	PTF Quadraplex Pump Package	
Limiting conditions	РМА			
	ТМА	- See TI-P207-06-US		
	Receiver Tank	Rated for 200 psi g @ 395 °F (13.8 bar g @ 202 °C)	Rated for 200 psi g @ 395 °F (13.8 bar g @ 202 °C)	
		Sized for flash steam rates of up to 4,000 lb/hr (1814 kg/hr)	Sized for flash steam rates of up to 4,500 lb/hr (2041 kg/hr)	
Sizes	Pump	3" x 2"	3" x 2"	
	Receiver	158 Gallons (598 L)	207 Gallons (784 L)	
Capacity		See TI-P	207-12-US	
Construction		Fabricated Steel Receiver, Tank, and Frame Fabricated Pump Body, ASME Coded Stainless Steel Pump Internals Stainless Steel check valves	Fabricated Steel Receiver, Tank, and Frame Fabricated Pump Body, ASME Coded Stainless Steel Pump Internals Stainless Steel check valves	

## **Standard Pump Package Options**

Standard Pump Package Includes 1:

- <sup>1</sup>: For a complete list of the bill of materials, please consult the pump package sales drawing.
- Motive and exhaust piping with motive drip trap
- Inlet Isolation Valve(s)
- Inlet Strainer(s)
- Pump Gauge Glass Assembly(s)

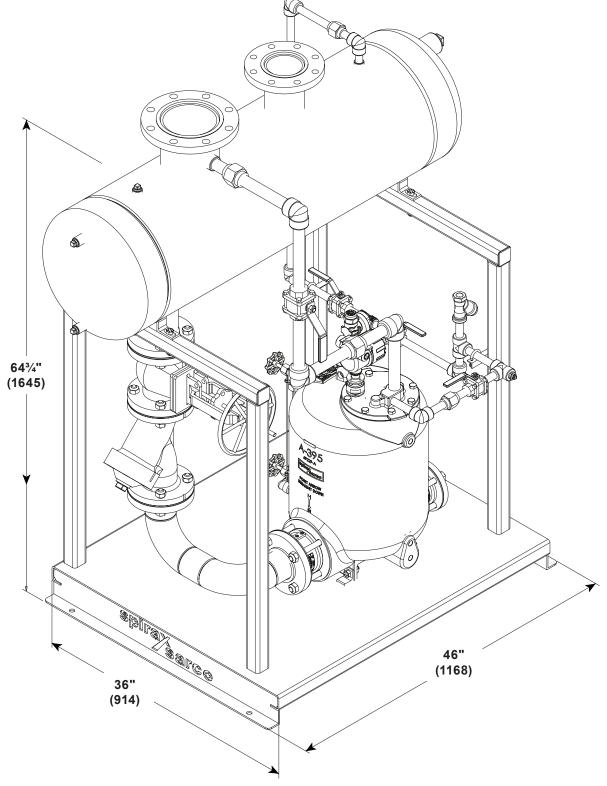
#### Additional Options Include:

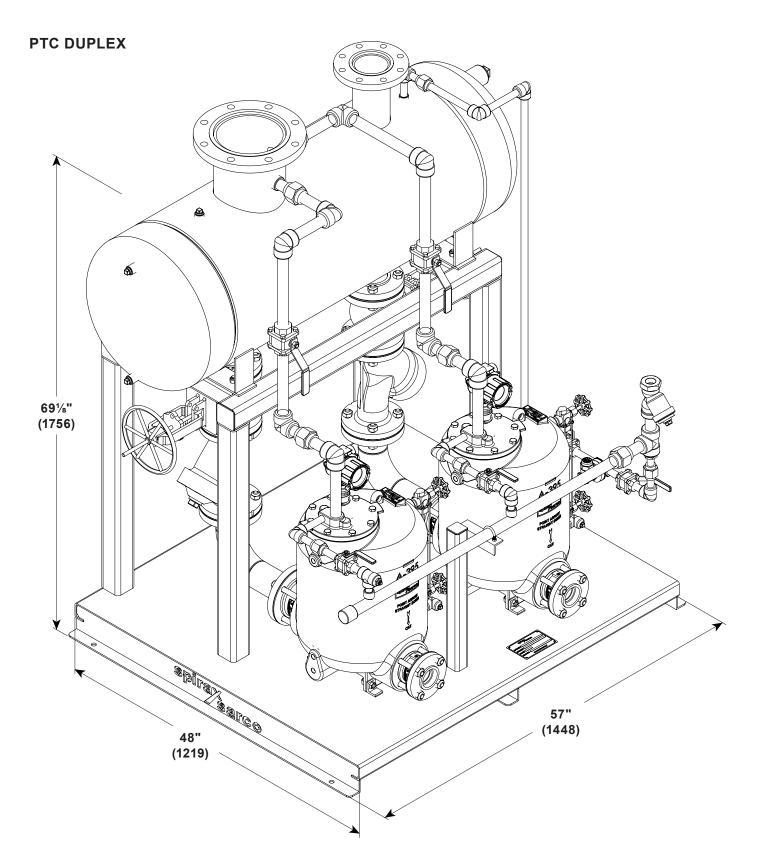
- Pump Insulation Blanket(s)
- Receiver Insulation Blanket
- Receiver Gauge Glass <sup>1</sup>
- Overflow Piping <sup>1</sup>
- Pump Discharge Gate Valve(s)
- Pump Drain Valve(s)
- Discharge Manifold <sup>2</sup>

<sup>2</sup>: Not available with Simplex; Does not include discharge gate valves

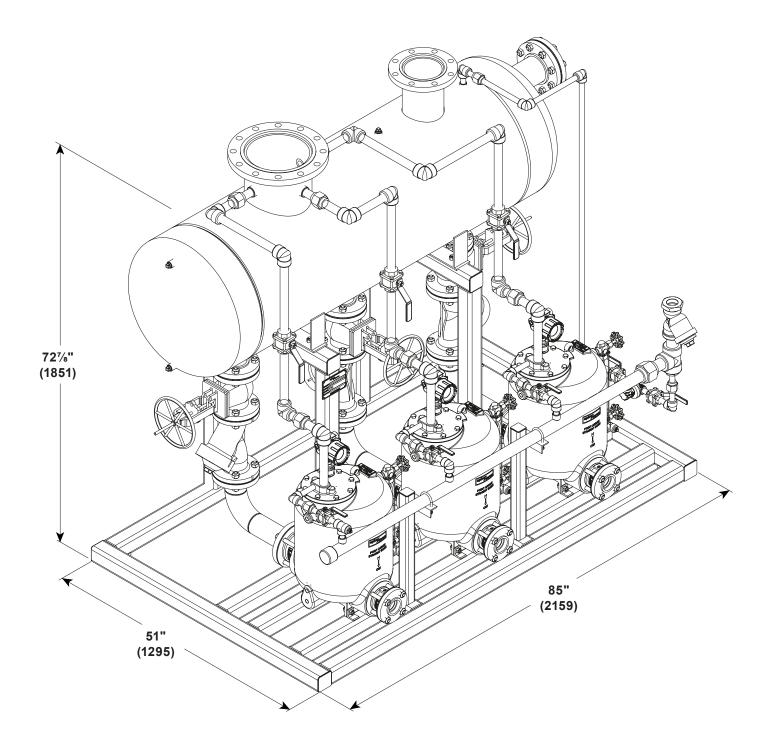
1: Item ships loose with package

## PTC SIMPLEX

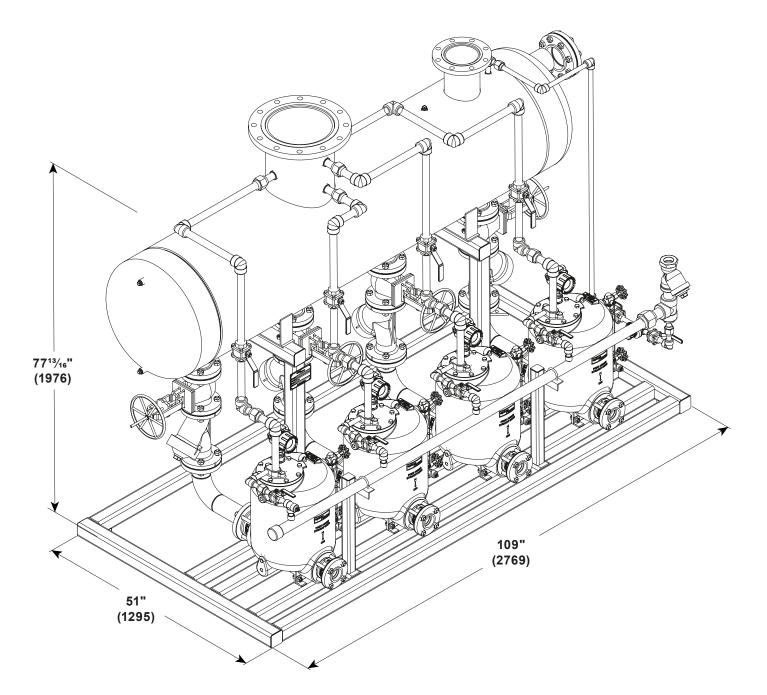




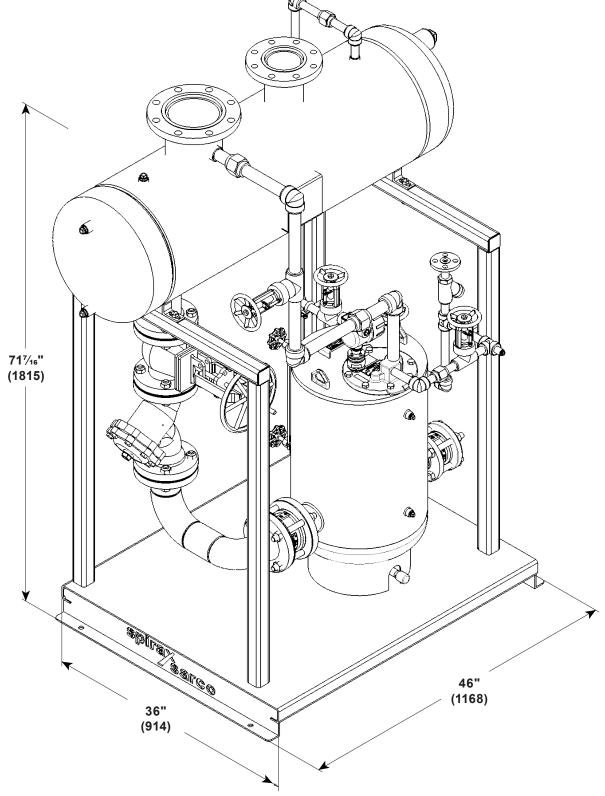
## PTC TRIPLEX



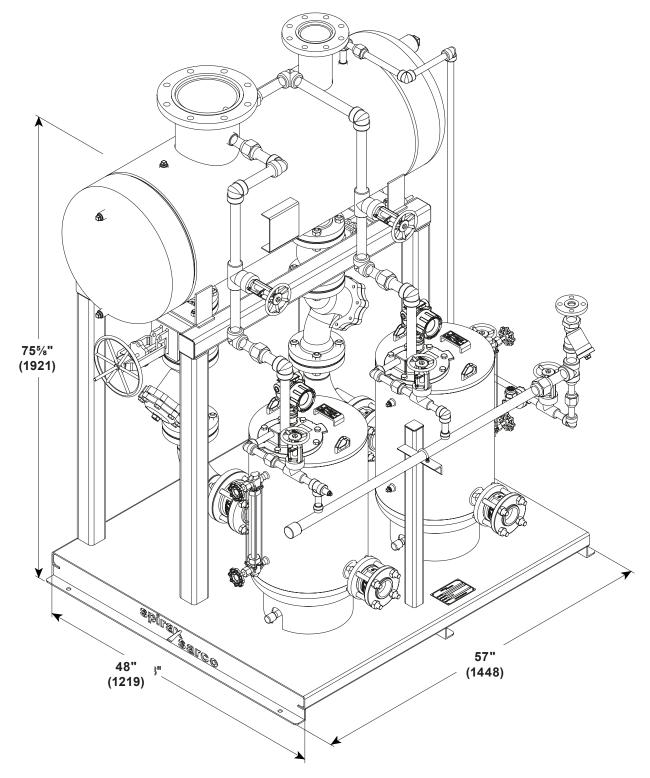
## PTC QUADRAPLEX



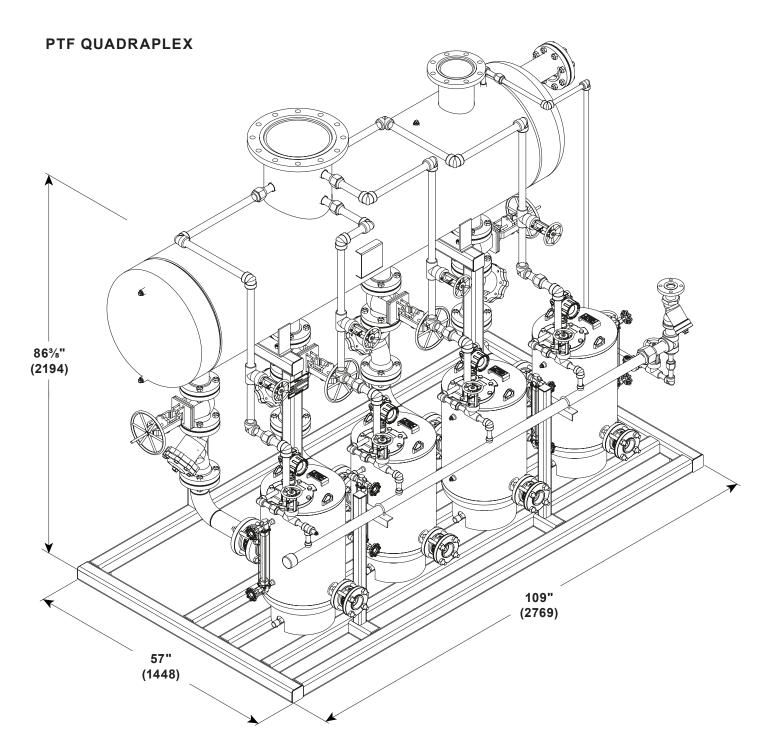
## **PTF SIMPLEX**

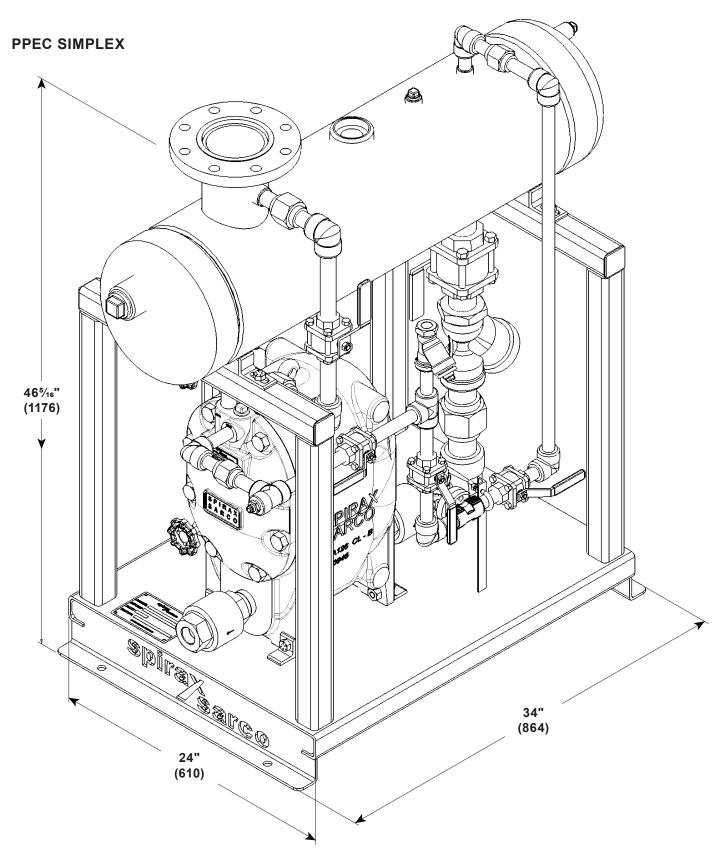


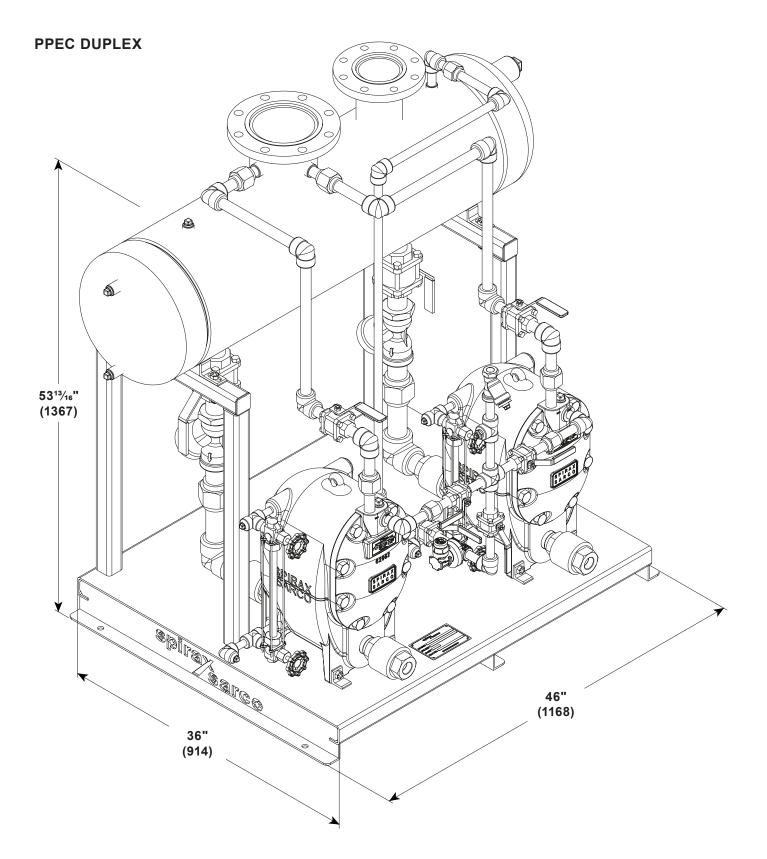
## PTF DUPLEX

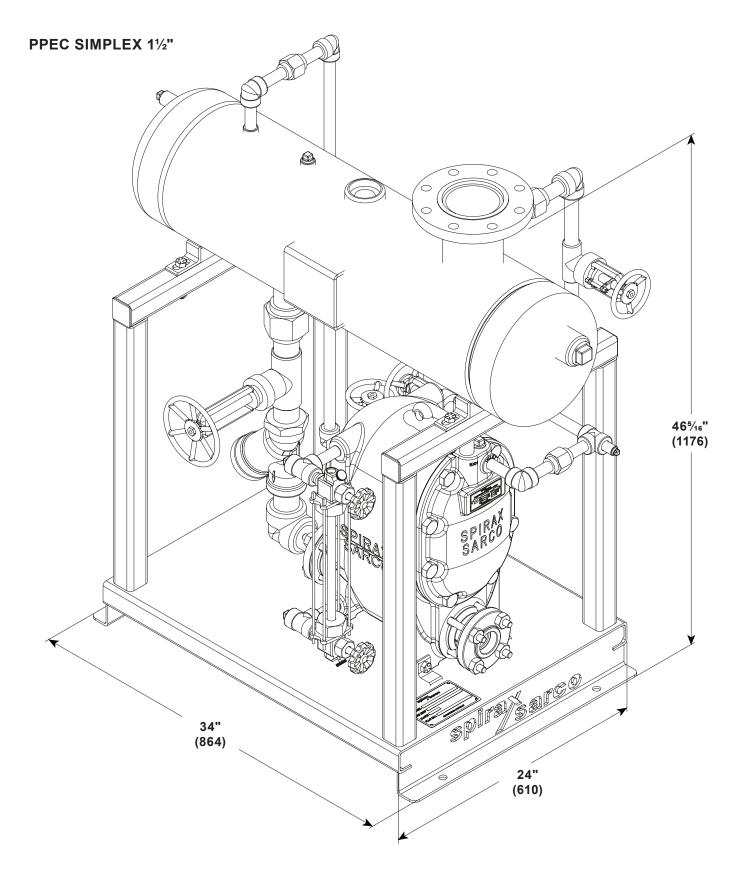


# **PTF TRIPLEX** 6 81¾" (2067) 2 85" R (2159) 57" (1448)

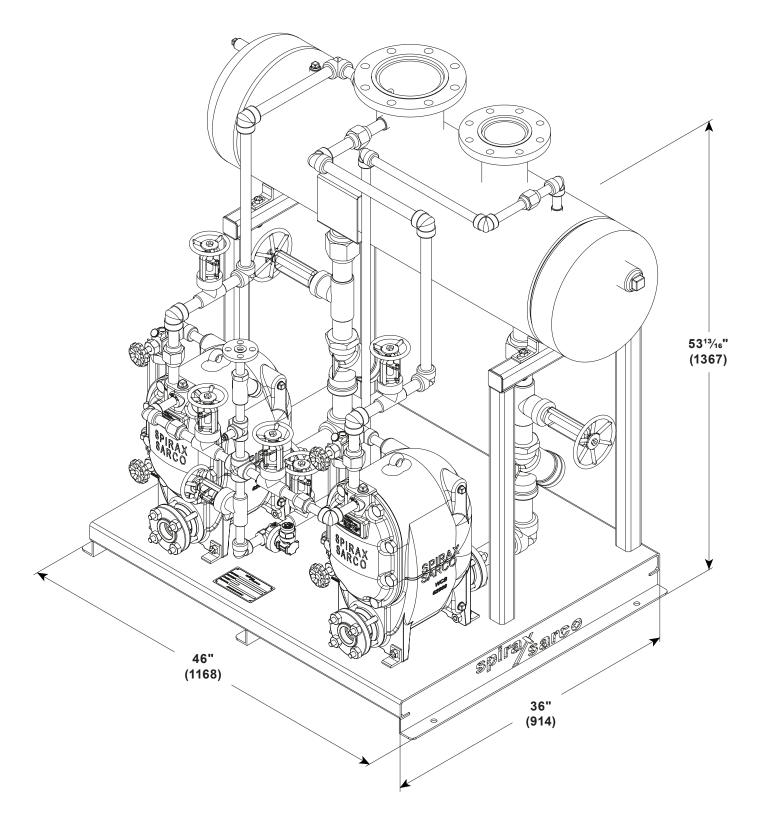








## PPEC DUPLEX 11/2"



## Vented Pressure Powered Pump Packages - PPEC/PTC/PTF

Pump		Part Number	Description	
		ES001618	Simplex Industrial PPEC Package	
	PPEC	ES001619	Duplex Industrial PPEC Package	
	PPEC	ES003120	Simplex Commercial PPEC Package	
		ES003220	Duplex Commercial PPEC Package	
		ES003140	Simplex PTC Package	
Series	PTC	ES003240	Duplex PTC Package	ES003140
Series	FIG	ES003340	Triplex PTC Package	
		ES003440	Quadraplex PTC Package	
		ES003160	Simplex PTF Package	
	PTF	ES003260	Duplex PTF Package	
	FIF	ES003360	Triplex PTF Package	
		ES003460	Quadraplex PTF Package	
		А	Pump Insulation Blanket <sup>1</sup>	
		В	Receiver Insulation Blanket	
		С	Receiver Gauge Glass <sup>2</sup>	
Options	All	D	Overflow Piping <sup>2</sup>	-ABE
		E	Pump Discharge Gate Valve <sup>1</sup>	
		F	Pump Drain Valve <sup>1</sup>	
		G	Discharge Manifold <sup>3</sup>	

## Standard Pump Package Series Selection Guide:

 $^{\rm 1}$  Options A, E, and F will include QTY (1) per pump on standard skid package

 $^{\rm 2}$  Options C and D will ship loose for field installation by customer

<sup>3</sup> Option G is not available with one pump (Simplex) designs

## How to order/selection example:

1 off Simplex PTC package with Pump Insulation Blanket, Receiver Insulation Blanket, and Pump Discharge Gate Valves