

# Algas-SDI™

*...Innovative liquid vaporizing and gas mixing solutions*

ISO 9001  
Certified

# Azeovaire

*Steam Heated Vaporizer; Models: A160S through A4400S*



- *100% turndown capability.*
- *Both LPG and steam fabrication are stamped in accordance with ASME.*
- *Explosion Proof configuration meets Class I, Division 1, Group D as defined by NFPA pamphlet 70.*
- *Factory Mutual (FM) approved.*
- *Two safety devices to ensure dry superheated vapor.*
- *Bayonet style tubes allow stress-free expansion unlike other designs.*
- *Fully insulated for maximum thermal efficiency.*
- *Ready to connect to plant facilities.*
- *Strainer included.*
- *Stainless steel outer heat exchanger tubes standard.*

# Specifications

	MODEL	A160S	A320S	A480S	A640S	A800S	A960S	A1120S	A1650S	A2200S	A3300S	A4400S	
<b>Vaporization Capacity**</b>	kg/hr	305	610	920	1,230	1,535	1,840	2,150	3,170	4,220	6,330	8,450	
	MM BTU/hr	15	29	44	58	73	87	102	150	200	300	400	
	MM kcal/hr	3.7	7.3	11	15	18	22	26	38	50	76	101	
<b>Nominal Capacity</b>	U.S. Gal/hr	160	320	480	640	800	960	1,120	1,650	2,200	3,300	4,400	
<b>Heat Exchanger Surface Area</b>	ft <sup>2</sup>	8	16	23	31	39	50	58	83	110	167	267	
	m <sup>2</sup>	.75	1.5	2.1	2.9	3.6	4.6	5.4	7.7	10.2	15.5	20.5	
<b>Shipping Weight</b>	lbs	600	700	800	1100	1,150	1,500	1,750	2,000	2,400	3,000	3,400	
	kg	272	318	369	506	529	690	805	920	1,090	1,364	1,545	
<b>Heat Exchanger Design Pressure</b>	psig	250	250	250	250	250	250	250	250	250	250	250	
	kg/cm <sup>2</sup>	17.6	17.6	17.6	17.6	17.6	17.6	17.6	17.6	17.6	17.6	17.6	
<b>Heat Exchanger Test Pressure</b>	psig	375	375	375	375	375	375	375	375	375	375	375	
	kg/cm <sup>2</sup>	26.3	26.3	26.3	26.3	26.3	26.3	26.3	26.3	26.3	26.3	26.3	
<b>Steam Requirements</b>	psig	15	15	15	15	15	15	15	15	15	15	15	
	kg/cm <sup>2</sup>	1	1	1	1	1	1	1	1	1	1	1	
<b>Electrical</b>	Vltg, 1 Ph Frequency	←					110/50 Hz 110/60 Hz	220/50 Hz 208-240/60 Hz	→				

For larger models please contact ASDI for more information.

\*\*Vaporization capacity ratings at 100 psig [7.0 kg/cm<sup>2</sup>] and at 0°F (-17.8°C) liquid propane.

STEAM CONSUMPTION REQUIRED FOR LPG VAPORIZATION	STEAM CONSUMPTION				
	Model	Vaporization Capacity		Steam Required @ 100% Load	
		GPH	kg/hr	lbs/hr	kg/hr
<p>AZEOVAIRE<sup>®</sup> Steam Heated LPG vaporizers require a quantity of steam proportional to usage. A simple rule when estimating steam consumption is 1lb. of steam to vaporize 1 gallon of LPG.</p> <p>For example, an AZEOVAIRE<sup>®</sup> model A2200S with a maximum LPG vaporization capacity of 2200 GPH, (4202 kg/hr), but with a plant usage of only 1100 GPH (2120 kg/hr) will consume approximately 1100 lbs. of steam per hour (509 kg/hr).</p> <p>A phase separator may be required if the condensate is recirculated.</p>	A160S	160	306	160	73
	A320S	320	611	320	145
	A480S	480	917	480	218
	A640S	640	1222	640	291
	A800S	800	1528	800	364
	A960S	960	1834	960	436
	A1120S	1120	2139	1120	509
	A1650S	1650	3152	1650	750
	A2200S	2200	4202	2200	1000
	A3300S	3300	6303	3300	1500
	A4400S	4400	8404	4400	2000

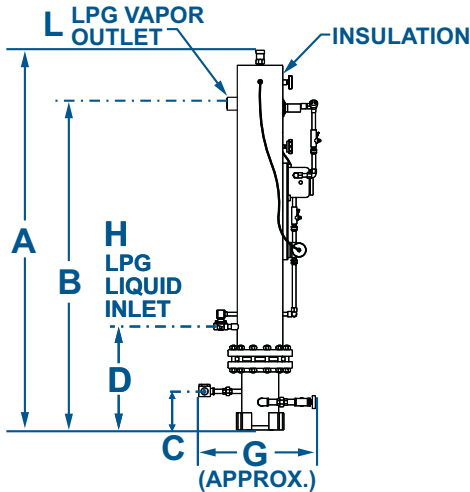
## Features

- LPG pressure vessel is fabricated and stamped in accordance with ASME Pressure Vessel Code, Section VIII, Division 1.
- LPG pressure vessel rating: 250 psig at 650°F (17.6 kg/cm<sup>2</sup> at 343°C).
- U.L. stamped external relief valve: 250 psig (17.6 kg/cm<sup>2</sup>).
- All wiring, controls, electrical components and their installation comply with recognized code standards defined in NFPA pamphlet 58 and NFPA pamphlet 70.
- Pressure balanced LPG supply/delivery operation.
- Fully insulated.
- Two safety devices prevent liquid carryover - low vapor temperature switch and high liquid level float switch.
- Inlet safety solenoid valve.
- Steam trap with strainer.
- Steam temperature gauge.
- All exposed metal surfaces are mechanically cleaned, primed and painted.
- Factory tested and packaged.

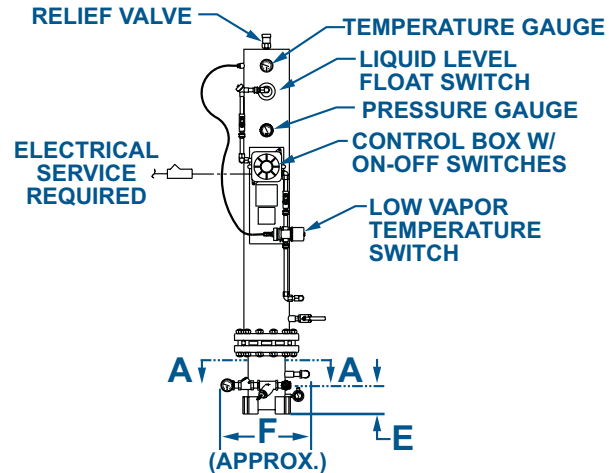
### Options

- Stainless steel heat exchanger tubes.

# Dimensions

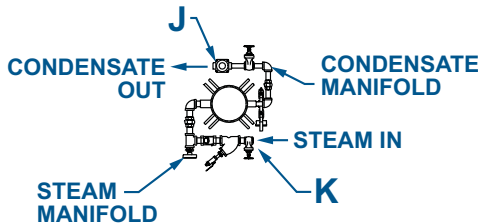


**LEFT SIDE VIEW**

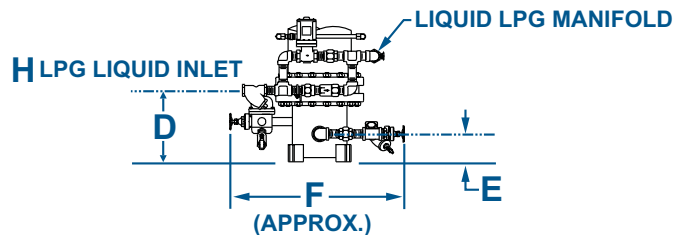


**FRONT VIEW**

(MODELS A160S THROUGH A1120S)



**LOWER SECTIONAL VIEW**



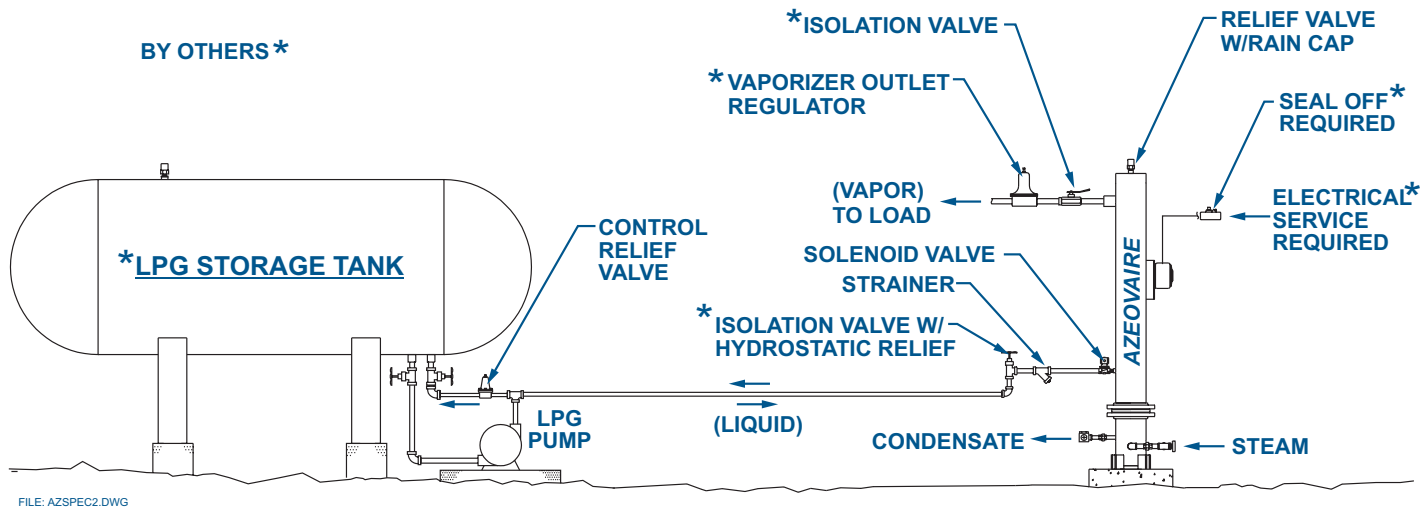
**LEFT SIDE VIEW**

(MODELS A1650S THROUGH A4400S)

FILE: AZSPEC1C.DWG

MODEL	A	B	C	D	E	F	G	H	J	K	L
<b>A160S</b>	88" 2235 mm	75 3/4" 1924 mm	9 1/4" 235 mm	23 3/4" 603 mm	6 1/2" 165 mm	18 1/2" 470 mm	25 1/2" 648 mm	3/4" FNPT	3/4" FNPT	3/4" FNPT	1" FNPT
<b>A320S</b>	88" 2235 mm	75 3/4" 1924 mm	9 1/4" 235 mm	23 3/4" 603 mm	6 1/2" 165 mm	18 1/2" 470 mm	25 1/2" 648 mm	3/4" FNPT	3/4" FNPT	3/4" FNPT	2" FNPT
<b>A480S</b>	88 1/2" 2248 mm	76" 1930 mm	9 1/4" 235 mm	24" 610 mm	6 1/2" 165 mm	21" 533 mm	27" 685 mm	3/4" FNPT	3/4" FNPT	1" FNPT	2" FNPT
<b>A640S</b>	88 1/2" 2248 mm	76" 1930 mm	9 1/4" 235 mm	24" 610 mm	6 1/2" 165 mm	21" 533 mm	27" 685 mm	3/4" FNPT	3/4" FNPT	1" FNPT	2" FNPT
<b>A800S</b>	88 1/2" 2248 mm	76" 1930 mm	9 1/4" 235 mm	24" 610 mm	6 1/2" 165 mm	21" 533 mm	27" 685 mm	1" FNPT	1" FNPT	1 1/2" FNPT	2" FNPT
<b>A960S</b>	92" 2337 mm	76 3/8" 1940 mm	9 3/8" 238 mm	24 1/4" 616 mm	6 1/2" 165 mm	27" 686 mm	36 1/2" 927 mm	1" FNPT	1" FNPT	1 1/2" FNPT	2" FNPT
<b>A1120S</b>	92" 2337 mm	76 3/8" 1940 mm	9 3/8" 238 mm	24 1/4" 616 mm	6 1/2" 165 mm	27" 686 mm	36 1/2" 927 mm	1" FNPT	1" FNPT	1 1/2" FNPT	2" FNPT
<b>A1650S</b>	93 1/4" 2369 mm	76 3/8" 1940 mm	9 3/8" 238 mm	16 1/2" 419 mm	6 1/2" 165 mm	30" 762 mm	38 1/2" 978 mm	1 1/2" FNPT	1 1/2" FNPT	1 1/2" FNPT	2" FNPT
<b>A2200S</b>	101 3/4" 2584 mm	76 3/8" 1940 mm	9 3/4" 248 mm	16 1/2" 419 mm	6 1/2" 165 mm	33 1/2" 851 mm	42 1/2" 1080 mm	1 1/2" FNPT	1 1/2" FNPT	1 1/2" FNPT	2 1/2" FNPT
<b>A3300S</b>	103 1/2" 2662 mm	76 5/8" 1940 mm	9 11/16" 246 mm	16 1/2" 419 mm	6 1/2" 165 mm	38 1/2" 978 mm	42" 1092 mm	2" FNPT	1 1/2" FNPT	2" FNPT	3" 300# FLG
<b>A4400S</b>	105 1/2" 2680 mm	76 5/8" 1940 mm	9 11/16" 246 mm	16 1/2" 419 mm	6 1/2" 165 mm	41 1/2" 1054 mm	50" 1270 mm	2" FNPT	1 1/2" FNPT	2 1/2" FNPT	4" 300# FLG

Product improvement is a continuing goal at Algas-SDI. Designs and specifications are subject to change without notice or obligation.  
 \* Size may depend upon steam conditions. Refer to factory for specific size.



Note: No check valves in the propane liquid line; liquid must be able to flow both directions.

**AZEOVAIRE®** is a registered U.S. trademark of **Algas-SDI**



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