

Reliable, Safe and Durable Vaporizer AX5 Model

Capacity: 50kg/hr~500kg/hr



Leading Manufacturer of Vaporizer in JAPAN

Kagla Vaportech Corp has been the leading manufacturer of LPG vaporizers in Japan. With the knowledge based on long history of product development, we assure to provide you the most reliable vaporizers to your facilities.

FEATURES OF KAGLA "AX5" VAPORIZER

1. Advanced Safety Mechanism

- Float valve with built-in magnet (KAGLA's Patented Technology) prevents LPG liquid carryover.

** See below for its operation principle.

- Prevention of over-heating

Water level switch monitors water level in the bath.

Safety thermostat functions against abnormal high water temperature.

2. User Friendly Interface

Easy operation is realized by equipping electric control panel with digital indicator. Combination of the number display and indicator lamps on the panel will tell operation status and cause of troubles of AX5 with a single glance.

** See next page for more details.

3. Space Saving Compact Body

AX5 has the minimum body size among all vaporizers of the same categories by its sophisticated design backed by long term experience of KAGLA.

It enables AX5 to be installed in the limited spaces.

4. Easy Maintenance Structure

Top cover of AX5 is removable from its body for easy maintenance and overhaul.

KAGLA wishes our customers to use our products as long as possible with good maintenance.

5. Varieties of Line-ups

Wishing to provide the best equipment for facilities of any scale, KAGLA prepares 6 different vaporizing capacity models from 50kg/hr to 500kg/hr.

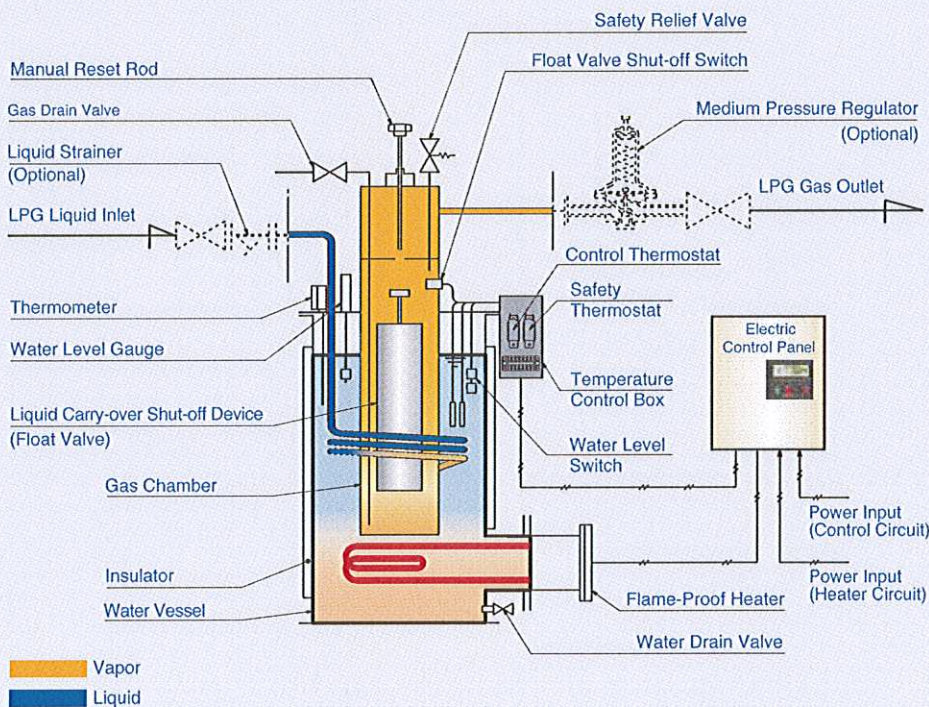
You can choose the best model to match your usage.

6. Drainage Measure

To maintain stable supply of vaporized LPG, KAGLA has designed the structures of heat exchanger and gas chamber which will minimize drainage to remain.

Also the fat drain pipe contributes to discharge the drainage effectively.

STRUCTURE AND FLOW SHEET OF AX5



Operation Principle of FLOAT VALVE

FLOAT VALVE is a safety function to prevent LPG liquid carryover to the consumption side.

- 1) LPG liquid flows into gas chamber because of...
 - water temperature goes down by certain error.
 - over capacity usage causes overload of vaporizer.
- 2) Liquid in the chamber lifts the float inside.
- 3) At certain upper level, the float shuts the outlet port of chamber by power of magnet and prevents LPG liquid to flow into consumption side.
- 4) Magnet on top of float holds the outlet port shut-off until the vaporization problem is solved and the float is reset.

◆ This function is controlled by the float and magnet only, but not by electricity or pilot air. Simple and reliable mechanism secures safe operation.



DISPLAY ON ELECTRIC CONTROL PANEL

AX5 Control Panel

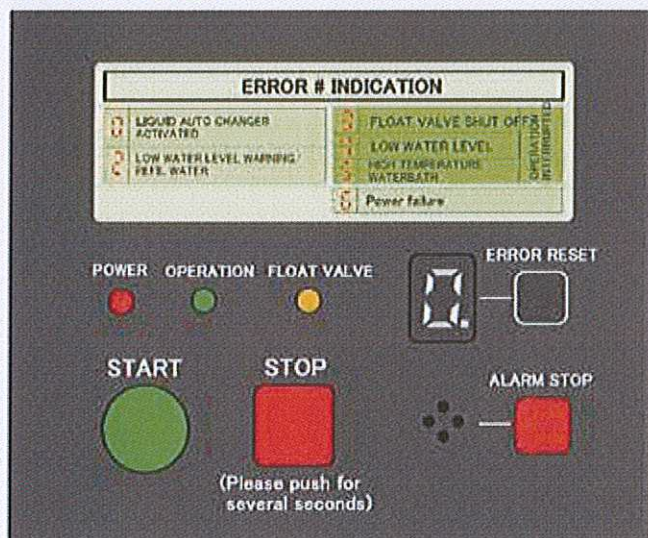


Table of Operation Status

Display	Operation of Vaporizer	Status
2	ON	Low Water Level Warning
3 (Lighting)	SHUT DOWN	Float Valve Shutoff (overload / heater defective)
3 (Flashing)		Float Valve Shutoff (thermostat defective)
4		Low Water Level Shutdown
5 (Lighting)		High Water Temperature Shutdown (minimum controller defective / magnet switch defective)
5 (Flashing)		High Water Temperature Shutdown (thermostat defective)
6		Float Valve Shutoff by blackout (not a defect)
. (Dot)	ON	Electric Heater ON
0		Liquid Auto Changer activated (optional)

AX5 SPECIFICATION

MODEL		EV-50AX5	EV-100AX5	EV-150AX5	EV-200AX5	EV-300AX5	EV-500AX5
Vaporization	kg/hr	50	100	150	200	300	500
Capacity	U.S Gal/hr *	25	50	75	100	150	250
	lb/hr	110	220	330	440	660	1100
Water Bath Capacity	liters	50	50	95	120	130	275
Heat Exchanger	kg/cm ²	18					
Design Pressure	psig	257					
	MPa	1.77					
Liquid inlet bore		Rc3/4					Rc1
Gas outlet bore		Rc1					Rc1•1/4
Hydrostatic Test Pressure	kg/cm ²	27					
	psig	386					
	MPa	2.66					
Relief Valve	kg/cm ²	17.5					
Setting Pressure	psig	250					
	MPa	1.72					
Flame-Proof Electric Heater	kW	8	14	21	28 (14kWx2)	42 (21kWx2)	63 (21kWx3)
Electric Requirement	Heater	200/220/380/415/440/460V,3-Phase					
	Control Circuit	220V,1-Phase					
Dimension(mm)	Width	420	420	480	520	520	670
	Depth	684	642	682	732	732	847
	Height	857	857	1058	1098	1158	1357
Vaporizer Control	Width	300					450
Panel Dimensions(mm)	Depth	150					250
	Height	400					500
Weight	kg	160	160	235	290	320	665
	lb	350	350	510	630	700	1460
Design Standard Approval		Pressure Vessel/JIS B-8265 Explosion-Proof Construction/NEPSI (National Supervision and Inspection Center for Explosion Protection and Safety Instrumentation)					

*When gas composition is Propane50:Butane50 / outside temperature is 25°C

Heat Source : Hot water circulation / Steam heating type also available upon inquiries

VARIETIES OF RELATED PRODUCTS

Heat Source :  Electric  Hot water  Steam

LPG Mixer SNG (Synthetic Natural Gas) system

By mixing air and LPG, LPG mixer can create similar calorific value to natural gas when natural gas supply is unstable or your factory cannot afford to stop its operation, LPG Mixer will be a reliable back-up to your natural gas facility.

Capacity: 50kg/hr-500kg/hr

Larger size available upon inquiries.



Compact wall mounting type vaporizer "KVR"

Compact design will allow you to install into limited spaces by hanging on the wall. LPG hot water heater which is widely accepted in Japan does not use electricity for its heat source; Therefore, electricity cost can be greatly reduced.



Liquid auto changer "LR series"

This is a device which switches over the usage of the cylinders automatically at set pressure when one side becomes empty. Output signal device is also available to alert you when switch over gets activated (optional).

LR-UNIT (with strainer & bypass line) also available.



Strainer valve "PUREFLOW"

As the strainer and the ball valve are combined in one unit, it will save you space when structuring a piping layout. Strainer can be cleaned easily by shutting the valve.



NH3 (Ammonia) Vaporizer

NH3 vaporizer is available on our regular line-up now. For NOx removal measurement, NH3 vaporizer will be a reliable solution to power generating facilities, chemical factories and steel factories.

Capacity: 30kg/hr-160kg/hr

Larger size available upon inquiries.



Large size vaporizer "BW/BS series"

For large consumption such as factory usage, BW and BS series can support up to 3ton/hr and above using your existing steam boiler or hot water boiler. Widely accepted by Japanese large factories and control method can be chosen from either electric or air.

Capacity: 1ton/hr, 2ton/hr,

Larger size available upon inquiries



LNG vaporizer "NATURIZER"

Based on the experience of developing LPG vaporizers, KAGLA delivers highly reliable LNG vaporizer standard line-up model at a reasonable price.



Flow limiter "PARAFLOW"

When two or more vaporizers are running at the same time, either side of the vaporizers may divergate and cause overload from pressure loss etc. By limiting the flow, Paraflow will prevent you from this trouble.

Capacity: 50kg/hr-500kg/hr



Others : KAGLA's Best Selling domestic products

All-in-one unit "BAiO series"

BAiO(Bulk All in One) is a bulk tank with built-in vaporizer and piping's pre-installed in its body.

Less construction cost and easy maintenance.



Auto Gas Station "AUTO COMPO"

Compact and reasonable auto gas station. Basically installed for private usage for transport companies.

KAGLA's AUTO COMPO contributed to spread the use of LPG cars in Japan.



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