VICI® Valco Instruments Co. Inc.
VICI AG International

PRODUCTS

Instrumentation

Miniature helium and nitrogen purifiers

The Valco miniature helium purifier (HPM) and miniature nitrogen purifier (NPM) are designed to be installed in a gas chromatograph's flow path immediately upstream of the injector. The HPM/NPM will remove any contaminants introduced by flow controllers, elastomeric tube seals, pressure regulators, crude traps, or other system components that are not completely clean and leak-tight.

Carrier gas purity is essential in any application requiring extreme sensitivity. Impurities limit detector sensitivity and can even destroy capillary columns. The Valco miniature helium purifier provides "point-of-use" gas purification of helium or other noble gases, such as Ar, Ne, Kr, and Xe, to sub-ppm levels of reactive gaseous impurities. The miniature nitrogen purifier does the same for nitrogen.

The purification substrate in Valco gas purifiers is a non-evaporable heat-activated gettering alloy. This stable alloy is contained in a welded assembly, so the purifiers can be used safely in industrial applications with minimal precautions. The getter is activated by heating, which eliminates the oxide film on the particle surface and allows helium to diffuse into the bulk of the getter particles. The helium and nitrogen purifiers feature a self-regulating design which maintains the getter material at the optimum temperature and eliminates the possibility of thermal runaway.

Available for 110 VAC and 230 VAC.

Specs

Jump to specs and list of impurities removed for both purifiers.

Product numbers

Jump to product numbers.

Further reference

Standard helium and nitrogen purifiers
Declaration of CE Compliance

Specifications

CE certified

Maximum operating pressure: 1000 psig

Purifier	Gases purified	Impurities removed	Impurities *not* removed
Helium	He, Ne, Ar, Kr, Xe, Rn	Outlet impurities less than 10ppb H_2O, H_2, O_2, N_2, NO, NH_3, CO, CO_2, and CH_4, based on 10ppm total inlet impurities. Other impurities removed include CF_4, CCl_4, SiH_4 and light hydrocarbons.	He, Ne, Ar, Kr, Xe, Rn
Nitrogen	N_2 only	Outlet impurities less than 10ppb H_2O, H_2, O_2, NO, NH_3, CO, CO_2, and CH_4, based on 10ppm total inlet impurities. Other impurities removed include CF_4, CCl_4, SiH_4 and light hydrocarbons.	He, Ne, Ar, Kr, Xe, Rn, N_2

Miniature purifiers

Includes universal power supply.

Description	Voltage	Product No.
Helium purifier	110 VAC	HPM
	230 VAC	HPM-220
Nitrogen purifier	110 VAC	NPM
	230 VAC	NPM-220

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Instrumentation

Helium and nitrogen purifiers

Note: *These heated helium purifiers are unsurpassed at removing nitrogen. For applications which can tolerate slightly more nitrogen, unheated Mat/Sen gas purifiers offer an economical gas purification option.*

Carrier gas purity is essential in any application requiring extreme sensitivity. Impurities limit detector sensitivity and can even destroy capillary columns. The Valco helium purifier (HP2) provides "point-of-use" gas purification of helium or other noble gases, such as Ar, Ne, Kr, and Xe, to sub-ppm levels of reactive gaseous impurities. The nitrogen purifier (NP2) does the same for nitrogen.

The purification substrate in Valco gas purifiers is a non-evaporable heat-activated gettering alloy. This stable alloy is contained in a welded assembly, so the purifiers can be used safely in industrial applications with minimal precautions. The getter is activated by heating, which eliminates the oxide film on the particle surface and allows helium to diffuse into the bulk of the getter particles. The helium and nitrogen purifiers feature a self-regulating design which maintains the getter material at the optimum temperature and eliminates the possibility of thermal runaway.

Available for 110 VAC and 230 VAC.

Specs

Jump to specs and list of impurities removed for both purifiers.

Product numbers

Jump to product numbers:

Standard purifiers
Replacement getter assembly

Further reference

Specifications

CE certified

Maximum operating pressure: 1000 psig

Purifier	Gases purified	Impurities removed	Impurities *not* removed
Helium	He, Ne, Ar, Kr, Xe, Rn	Outlet impurities less than 10ppb H_2O, H_2, O_2, N_2, NO, NH_3, CO, CO_2, and CH_4, based on 10ppm total inlet impurities. Other impurities removed include CF_4, CCl_4, SiH_4 and light hydrocarbons.	He, Ne, Ar, Kr, Xe, Rn
Nitrogen	N_2 only	Outlet impurities less than 10ppb H_2O, H_2, O_2, NO, NH_3, CO, CO_2, and CH_4, based on 10ppm total inlet impurities. Other impurities removed include CF_4, CCl_4, SiH_4 and light hydrocarbons.	He, Ne, Ar, Kr, Xe, Rn, N_2

Standard purifiers

Includes universal power supply.

Description	Voltage	Product No.
Helium purifier	110 VAC	HP2
	230 VAC	HP2-220
Nitrogen purifier	110 VAC	NP2
	230 VAC	NP2-220

Replacement getter assembly

For use with:	Product No.
Helium	I-23572
Nitrogen	I-23572NP2