



Gas Purifiers and Filters

Pure gas is a critical requirement in gas chromatography, spectroscopy, optics, lithography, and numerous other applications in manufacturing and analytical laboratories. The ZPure™ line of filters remove a wide range of contaminants to trace levels.

Features and Benefits

- High-efficiency in-line traps with outstanding capacity.
- High quality activated adsorbents for long purifier life and efficient contaminant removal.
- Various size and fitting configurations to fit existing installations.
- Filter lifetime is dependent on quality of incoming gas, and the flow rate.
- Individually leak-tested.

Recommended Applications

ZPure™ H₂O: It can be used to remove water from inert gases, He, Ar, N₂, H₂, methane and clean dry air (CDA) to low ppb levels. It is recommended for any application requiring ultra-dry gas.

ZPure™ HC : It can be used to remove hydrocarbons heavier than butane from inert gases, He, Ar, N₂, H₂, and clean dry air (CDA) to low ppb levels. It is recommended for most applications requiring hydrocarbon-free gas.

SPure™ H₂O: It can be used to remove moisture, oil and dust from air and inert gases. It is suitable for general purpose, non-critical laboratory use.



Compression fittings seal well and can be broken and retightened many times if used properly. They are compatible with industry standard ferrules and tubing.



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ZPure™ H₂O

ZPure™ gas filters are the core of our broad program of inline purifiers. The ZPure products represent the highest quality and most reasonably priced gas filters both in stainless steel bodies and in shielded glass bodies for applications requiring visual indicators. They offer long life, efficient contaminant removal and come in various size and fitting configurations for most laboratory analytical applications.

Standard filters

- Stainless steel bodies.
- Integrated stainless steel frits for particle removal.
- High capacity absorbents with well-characterized performance data.
- All-metal sealing system.
- Individually helium leak-checked in vacuum.

Glass filters

- Double seal glass body with polycarbonate shell isolates the gas stream in the event of glass failure.
- Highly sensitive visual indicators for oxygen and water.
- Integrated stainless steel frits for particle removal.
- High capacity absorbents with well characterized performance data.
- Fluoroelastomer seals for inertness.
- Individually helium leak-checked in vacuum.

SPure™ H₂O

The SPure™ line is a general-purpose filter for removing moisture, oil, and dust from air and inert gases. SPures are made from strong acrylic and polycarbonate with aluminum end caps and use a cobalt free indicator. Not for carrier, compressed air, hydrogen, or any other hazardous, flammable, or reactive gas..

Pure gas is a critical requirement in gas chromatography, spectroscopy, optics, lithography, and numerous other applications in manufacturing and analytical laboratories. The SPure™ H₂O filters remove moisture, oil and dust from air and inert gases.

Features and Benefits

- High-strength polycarbonate body with aluminum end caps.
- Available with standard brass and stainless steel compression fittings.
- Not recommended for house compressed air lines or for GC carrier gases.
- Not for use with hazardous, flammable, or reactive gases.



Glass filters

Product Specifications

ZPure™ H ₂ O							
Volume	Function	Capacity (nominal-max)	Outlet Concentration at Nominal Flow Rate	Flow rate (nominal-max)	Max Pressure	Dimensions	Fittings
130 cc	Removes water	12 - 22 g water	Moisture < 20 ppb	1 - 10 SLPM	68.9 bar/1000 psi	3.2 cm x 28 cm	1/8" and 1/4" brass and stainless steel compression
475 cc		45 - 79 g water		3.7 - 36 SLPM		3.8 cm x 57 cm	
500 cc		48 - 83 g water		3.8 - 38 SLPM		5 cm x 35 cm	
750 cc		72 - 124 g water		5.8 - 57 SLPM		5 cm x 50 cm	

1) The nominal water capacity is determined for an inlet impurity level of 200 ppm H₂O. The maximum water capacity is determined for an inlet impurity level of 10000 ppm H₂O.

2) Nominal flow rate is the recommended flow rate for an estimated gas purifier life of 1 year. This assumes the following inlet impurities: 1 ppm H₂O. The maximum recommended flow rate is recommended for intermittent use only.

Product Specifications

ZPure™ HC							
Volume	Function	Capacity (nominal-max)	Outlet Concentration at Nominal Flow Rate	Flow rate (nominal-max)	Max Pressure	Dimensions	Fittings
130 cc	Removes hydrocarbons (C5 and heavier)	11 - 36 g	< 5 ppb	1 - 10 SLPM	68.9 bar/1000 psi	3.2 cm x 28 cm	1/8" and 1/4" brass and stainless steel compression
475 cc		40 - 131 g		3.7 - 36 SLPM		3.8 cm x 57 cm	
500 cc		42 - 137 g		3.8 - 38 SLPM		5 cm x 35 cm	
750 cc		63 - 206 g		5.8 - 57 SLPM		5 cm x 50 cm	

- 1) The nominal hydrocarbon capacity is determined for an inlet impurity level of 500 ppm pentane.
- 2) The maximum hydrocarbon capacity is determined for an inlet impurity level of 2300 ppm pentane.
- 3) The nominal flow rate is the recommended flow rate for an estimated gas purifier life of 1 year. This assumes the following inlet impurities: 1 ppm hydrocarbons (C5 and heavier)
- 4) The maximum recommended flow rate is recommended for intermittent use only.

SPure™ H ₂ O							
Volume	Function	Capacity (nominal-max)	Flow rate (nominal-max)	Max Pressure	Dimensions	Fittings	Body Material
88 cc	Removes water, oil and dust	6.3 - 11.0 g water	0.680 - 6.8 SLPM	6.89 bar/100 psi	3.8 cm x 26.3 cm	1/8" and 1/4" brass and stainless steel compression	Polycarbonate
116 cc		8.3 - 14.4 g water	0.900 - 9.0 SLPM		3.8 cm x 31.8 cm		Polycarbonate
240 cc		17.2 - 29.9 g water	1.85 - 18.5 SLPM		5.6 cm x 28.5 cm		Polycarbonate
400 cc		28.6 - 49.8 g water	3.0 - 30.0 SLPM		5.6 cm x 41.9 cm		Polycarbonate

- 1) The nominal water capacity is determined for an inlet impurity level of 200 ppm H₂O. The maximum water capacity is determined for an inlet impurity level of 10000 ppm H₂O.
- 2) Nominal flow rate is the recommended flow rate for an estimated gas purifier life of 1 year. This assumes the following inlet impurities: 1 ppm H₂O. The maximum recommended flow rate is recommended for intermittent use only.

Description	Part No.
ZPure H₂O Gas Filters	
ZPure DS H ₂ O Filter, 1/8" Stainless Steel Fittings	CG-100025
ZPure Glass H ₂ O/HC Filter, 1/4" Stainless Steel Fittings	CG-100034
ZPure Glass H ₂ O Filter, 1/8" Brass Fittings	CG-100028
ZPure GlassH ₂ O Filter, 1/4" Brass Fittings	CG-100029
ZPure HC (Hydrocarbon) Gas Filters	
ZPure LS Hydrocarbon Filter, 1/4" Stainless Steel Fittings	CG-100026
ZPure XLS Hydrocarbon Filter, 1/4" Stainless Steel Fittings	CG-100027
SPure H₂O Gas Filters	
SPureH ₂ O Filter, 1/8" Brass Fittings	CG-100030
SPure XLS H ₂ O Filter, 1/8" Brass Fittings	CG-100031
SPure XLS H ₂ O Filter, 1/4" Brass Fittings	CG-100032
SPure XLS H ₂ O Filter, 1/4" Stainless Steel Fittings	CG-100033