



**GATEKEEPER® CORROSIVE (C-HCI) GAS PURIFIERS**

*Superior gas purity*



**Entegris GateKeeper Inert Gas Purifier**

Model Number: xxxxxxxx 0003  
 Let Number: 0.003 micron  
 Max Flow Rate: 48.2 barg (4.82 Mpa) (700 psig)  
 Max Pressure: 13.8 bar (1.38 Mpa) (200 PSIG)  
 Max Temp: 65° C (150° F)  
 Date Mfg: June 2006  
 Date Install: June 2006  
 Date Re-generation:

MINIMIZE EXPOSURE TO ATMOSPHERE  
 FOR USE WITH N<sub>2</sub>, He, Ne, Kr, Xe, Ar, HALOCARBONS, LIGHT HYDROCARBONS  
 DO NOT USE WITH O<sub>2</sub>, CDA (AIR), NF<sub>3</sub>, SF<sub>6</sub>

Made in USA  
 6975 Flanders Drive, San Diego, CA 92121  
 www.entegris.com

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**Entegris GateKeeper Inert Gas Purifier**

Model Number: 564416345  
 Let Number: 0.003 micron  
 Max Flow Rate: 20 MPa/2900 PSIG  
 Max Temp: 120 MPa/1740 PSIG  
 Date Mfg: June 2006  
 Date Install: June 2006  
 Date Re-generation:

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Model Number: 564416345  
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# superior gas purity

## Overview

Available for low and high-flow point-of-use applications, GateKeeper® corrosive gas purifiers are designed for use with HCl, DCS and TCS. The purifiers reduce moisture and volatile metals (ie: TiCl<sub>4</sub>, FeCl<sub>3</sub>, etc.) from Hydrogen Chloride (HCl).

- Does not release hydrocarbons that may contaminate the process
- Low pressure drop across purifiers
- CE certified to the Pressure Equipment Directive (PED) and manufactured in an ISO 9001:2000 facility
- Backed by global service and support staff

## Features and Benefits

### Cost-effective

- Gas purification improves process consistency, increases product yields and lengthens tool life
- Transforms low-purity gas into UHP grade, reducing process costs

### Process Protection

- Consistently delivers ultrapure gas
- Guards against bulk gas purifier breakthrough, impurity spikes from liquid storage tanks, cylinder changeouts and unexpected contaminants in the process

### Safe and Simple to Use

- Easy to install
- Uses ambient temperature purification technology – no power or heat required
- No moving parts

## General Specifications

Materials of construction:	316L stainless steel, electropolished 10 Ra	
Gases purified:	HCl, Cl <sub>2</sub> , DCS, TCS	
Outlet purity:	<1 ppb H <sub>2</sub> O in N <sub>2</sub> , <30 ppb in HCl, <1 ppb volatile metals in HCl	
Outlet particle filtration:	30KF to 10MH	0.003 µm 316L stainless steel
	17M	20 µm 316L stainless steel
Media:	Proprietary	
Minimum operating pressure:	101 kPa (14.7 psia)	
Leak rating:	1 × 10 <sup>-9</sup> atm cc/sec	
Maximum inlet challenge of H <sub>2</sub> O to maintain product efficiency:	10 ppm (parts-per-million)	
Lifetime:	One year at nominal flow rate with 1 ppm inlet challenge of moisture	
Maximum operating temperature:	65°C (149°F)	

## Operating Specifications

Model	Maximum Flow Rate (SLPM)	Nominal Flow Rate (SLPM)	Maximum Operating Pressure Purifier Only <sup>1</sup>	Maximum Operating Pressure Purifier with Options <sup>2</sup>	Pressure Drop <sup>3</sup>
35KF	1	0.8	20096 kPa (2900 psig)	1828 kPa (250 psig)	3.4 kPa (0.5 psid)
70KF	3	1.4	20096 kPa (2900 psig)	1828 kPa (250 psig)	4.8 kPa (0.7 psid)
80KF	10	1.3	20096 kPa (2900 psig)	1828 kPa (250 psig)	2.8 kPa (0.4 psid)
100KF	20	2.8	6996 kPa (1000 psig)	1828 kPa (250 psig)	27.6 kPa (4 psid)
200KF	20	3.3	6996 kPa (1000 psig)	1828 kPa (250 psig)	2.8 kPa (0.4 psid)
500KF	60	15	4928 kPa (700 psig)	1828 kPa (250 psig)	48.3 kPa (7 psid)
700KF	120	20	4928 kPa (700 psig)	1828 kPa (250 psig)	48.3 kPa (7 psid)
2500KF	300	48	3583 kPa (505 psig)	1828 kPa (250 psig)	96.5 kPa (14 psid)
2500KH	300 500	48	3583 kPa (505 psig)	1828 kPa (250 psig)	27.6 kPa (4.0 psid)
10MH	1000 1500	178	1828 kPa (250 psig)	1828 kPa (250 psig)	<sup>1</sup> / <sub>2</sub> " - 62 kPa (9 psid) <sup>3</sup> / <sub>4</sub> " - 36.5 kPa (5.3 psid)
17M	2500	285	3135 kPa (440 psig)	N/A	1" - 7.9 kPa (5.5 psid)

### Drop-in Replacements for Waferpure® Purifiers

30KF (Micro)	1	0.5	20096 kPa (2900 psig)	1828 kPa (250 psig)	3.4 kPa (0.5 psid)
75KF (Mini-XL)	5	0.9	20096 kPa (2900 psig)	1828 kPa (250 psig)	10.3 kPa (1.5 psid)
300KF (Megaline)	50	5.0	4928 kPa (700 psig)	1828 kPa (250 psig)	34.5 kPa (5 psid)

<sup>1</sup> Do not use under vacuum. Minimum pressure should be 1 atm (14.7 psia). <sup>2</sup> Pressure limited by standard valves, higher pressures available; please consult your local sales representative. <sup>3</sup> Pressure drop at maximum flow rate and 90 psig (620 kPa) inlet pressure. For a detailed pressure drop curve and other pressures or flows, please consult your local sales representative or visit [www.entegris.com](http://www.entegris.com). All product information is subject to change without notice.

## Facility Specifications

Model	Fitting Sizes	Configuration (inlet/outlet)	Approximate Weight	Length (end-to-end)	Diameter	Fitting Offset
35KF	1/4" face seal	male/male	0.3 kg (0.66 lb)	8.4 cm (3.31")	3.8 cm (1.5")	Centered
70KF	1/4" face seal	male/male	0.4 kg (0.88 lb)	11.4 cm (4.5")	3.8 cm (1.5")	Centered
80KF	1/4" face seal	male/male	0.5 kg (1.1 lb)	12.7 cm (5.0")	3.8 cm (1.5")	Centered
100KF	1/4" face seal	male/male	0.5 kg (1.1 lb)	8.4 cm (3.31")	3.8 cm (1.5")	Tee
200KF	1/4" face seal	male/male	0.5 kg (1.1 lb)	16.5 cm (6.5")	5.1 cm (2")	Centered
500KF	1/4" face seal	male/male	1.6 kg (3.5 lb)	20.2 cm (7.94")	7.6 cm (3")	Centered
700KF	1/4" face seal	male/male	1.6 kg (3.5 lb)	25.4 cm (10")	7.6 cm (3")	Centered
2500KF	1/4" face seal	male/male	5.4 kg (12 lb)	43.9 cm (17.3")	10.2 cm (4")	Centered
2500KH	1/2" face seal	male/male	5.4 kg (12 lb)	44.7 cm (17.6")	10.2 cm (4")	Centered
10MH	1/2" face seal	female/male	27 kg (59.5 lb)	97.4 cm (38.36")	15.2 cm (6")	Centered
	3/4" face seal	female/female	41 kg (90.3 lb)	143.3 cm (56.4")	15.2 cm (6")	Centered
17M	1" face seal	male/male	45.0 kg (99.26 lb)	108.9 cm (42.9")	15.2 cm (6")	Centered

### Drop-in Replacements for Waferpure Purifiers

30KF (Micro)	1/4" face seal	male/male	0.3 kg (0.66 lb)	8.4 cm (3.31")	3.8 cm (1.5")	0.97 cm (0.38")
75KF (Mini-XL)	1/4" face seal	male/male	0.4 kg (0.88 lb)	12.7 cm (5")	3.8 cm (1.5")	0.97 cm (0.38")
300KF (Megaline)	1/4" face seal	male/male	1.8 kg (4 lb)	20.8 cm (8.2")	5.1 cm (2")	Centered

## Options

Model	Isolation Valves	GC 300 Manifold	3 Valve Bypass Manifold	5 Valve Bypass Manifold
35KF, 70KF, 80KF	Yes		Yes	Yes
100KF	Yes			
200KF	Yes		Yes	Yes
500KF	Yes		Yes	Yes
700KF	Yes			
2500KF/KH	Yes		Yes	Yes
10MH	Included		Yes	
17M	Yes			

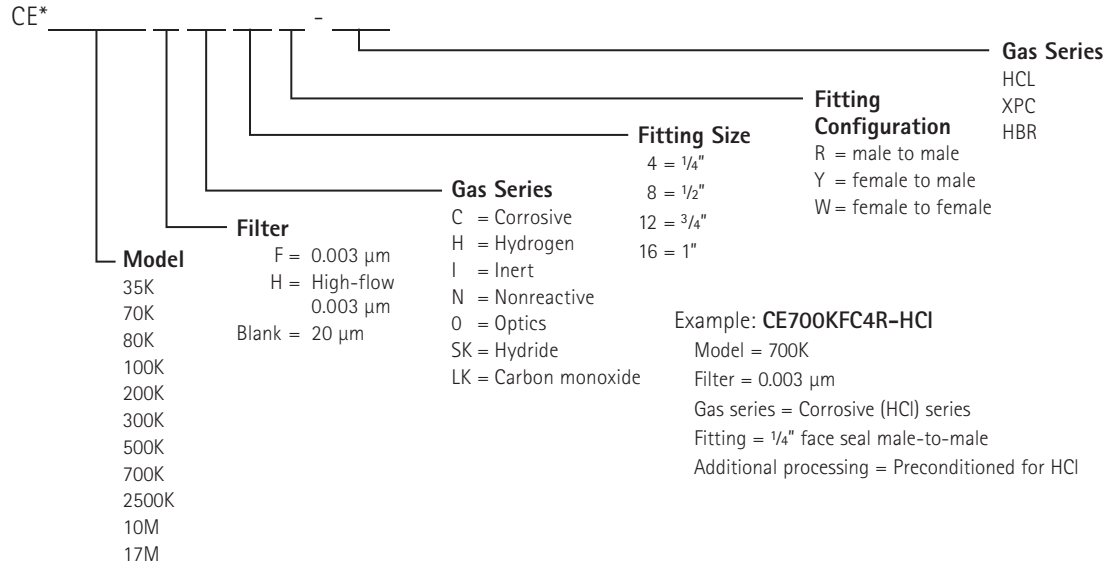
### Drop-in Replacements for Waferpure Purifiers

30KF (Micro)	Yes		Yes	Yes
75KF (Mini-XL)	Yes			
300KF (Megaline)	Yes	Yes		

# Ordering Information

## GateKeeper Corrosive (C-HCl) Gas Purifiers

### Part Number



Note: Not all models are available with all gas series, fittings or additional processing; contact your salesperson for more information.

Note: For Entegris replacement, specify 30K, 75K or 300K for all models.

For detailed product information including dimension drawings, pressure drop curves, safety information, regeneration service and for help selecting a purifier and determining purifier lifetimes, please visit our website at [www.entegris.com](http://www.entegris.com). Go to Products>Purification>Gas Purification

All products meet CE Directive 97/23/EC requirements.



## For More Information

Please call your Regional Customer Service Center today to learn what Entegris can do for you. Visit [www.entegris.com](http://www.entegris.com) and select the Customer Service link for the center nearest you.

## Terms and Conditions of Sale

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