



GATEKEEPER® CORROSIVE (C-HCI) GAS PURIFIERS

Superior gas purity



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Overview

Available for low and high-flow point-of-use applications, GateKeeper® corrosive gas purifiers are designed for use with HCl, DCS, TCS and Cl₂. The purifiers reduce moisture and volatile metals (ie: TiCl₄, FeCl₃, etc.) from corrosive chlorinated gases.

- 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 ₂ , DCS, TCS	
Outlet purity:	<1 ppb H ₂ O in N ₂ , <20 ppb validated in HCl, <1 ppb volatile metals validated in HCl	
Outlet particle filtration:	30KF to 10MH	0.003 µm 316L stainless steel
	17M	20 µm 316L stainless steel
Media:	Proprietary	
Leak rating:	1 × 10 ⁻⁹ atm cc/sec	
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 ¹	Maximum Operating Pressure Purifier with Options ²	Pressure Drop ³
35KF	1	0.6	20096 kPa (2900 psig)	1828 kPa (250 psig)	3.4 kPa (0.5 psid)
70KF	3	1.1	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	1.8	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	10	4928 kPa (700 psig)	1828 kPa (250 psig)	48.3 kPa (7 psid)
700KF	120	14	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)	¹ / ₂ " – 62 kPa (9 psid) ³ / ₄ " – 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)

¹Optimal operating pressure is 1 atm (14.7 psia) or higher. ²Pressure limited by standard valves, higher pressures available; please consult your local sales representative. ³Pressure 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. 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

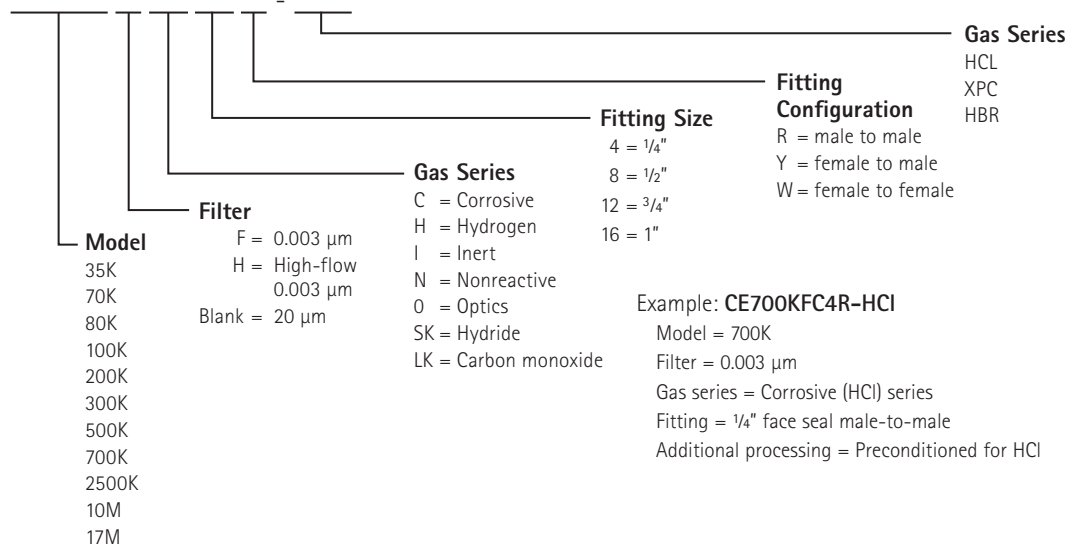
Model	Isolation Valves	GC 300 Manifold	3 Valve Bypass Manifold	5 Valve Bypass Manifold
35KF, 70KF, 80KF	Yes		Yes	Yes
100KF	Yes			
200KF	Yes		Yes	Yes
500KF	Yes		Yes	Yes
700KF	Yes			
2500KF/KH	Yes		Yes	Yes
10MH	Included		Yes	
17M	Yes			
Drop-in Replacements for Waferpure Purifiers				
30KF (Micro)	Yes		Yes	Yes
75KF (Mini-XL)	Yes			
300KF (Megaline)	Yes	Yes		

Ordering Information

GateKeeper Corrosive (C-HCl) Gas Purifiers

Part Number

CE*



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. 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 and select the Customer Service link for the center nearest you.

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