

XpressKleen™ G3 Excellar ER KC Assemblies



Data Sheet MEG3ERKCENb

Description

The UltiKleen G3 Excellar ER filter combines enhanced retention (ER) and improved non-dewetting properties to enable semiconductor makers to meet the critical chemical process filtration requirements beyond the 45 nm manufacturing node.

The UltiKleen G3 Excellar ER filter media is made using Pall's proprietary Molecular Surface Tailoring (MST) technology. The advanced PTFE membrane has a hyperfine pore matrix design that provides a significant improvement in the retention of deep sub-micron size particles. Designed for critical single-pass point-of-use retention requirements, the UltiKleen G3 Excellar ER filter demonstrates a high flow rate that makes it suitable for recirculation bath applications.

Pall's non-chemical additive MST process increases the UltiKleen G3 Excellar ER filter's wettability in aqueous chemicals including SPM, SC-1 and SC-2. Pall's advanced ultra low extractables Me-KleenSM K7 post-treatment process is also available to reduce metal ion extractables to a low single digit ppb total.

The UltiKleen G3 KC assembly has a slightly larger diameter while maintaining the same face-to-face sealing distance as the UltiKleen G2 KC (T-flow) assembly. The increased diameter accommodates a larger format UltiKleen Excellar ER filter with significantly increased filter area for increased flow rates and longer service life.



Features

- Enhanced retention (ER) of particles
- Hyperfine PTFE media matrix design
- Increased filter area of 4.4 m²/47.4 ft²
- High flow rates
- All ultra high purity fluoropolymer construction
- Low extractables (Me-Kleen option is available)
- Provided fully prewet with ultrapure water as standard
- Downstream core vent reduces potential for bubble collection and premature blockage

Specifications

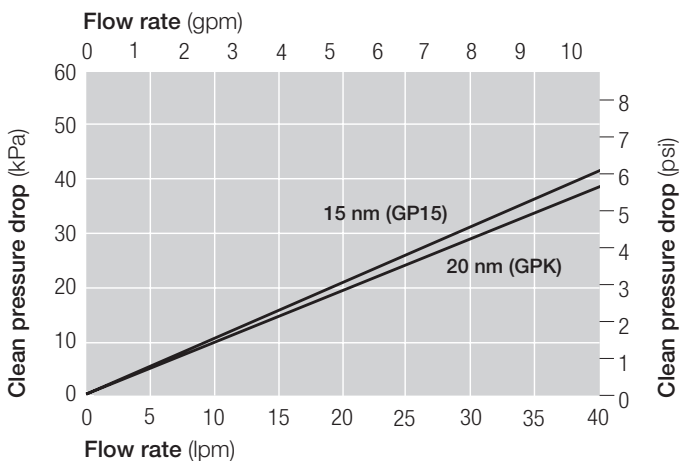
Materials of Construction

Components	Materials
Filter Medium	Surface-modified PTFE
Media Support	PFA
Core, Cage and End Caps	PFA
Housing	PFA

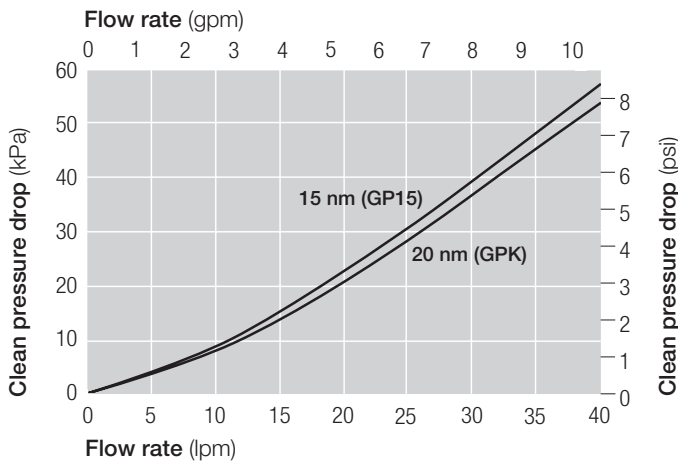
Removal Ratings	15 nm, 20 nm
Configurations	T-flow, In-line
Nominal Filter Area	4.4 m ² / 47.4 ft ²
Maximum Operating Temperature	185 °C / 365 °F
Maximum Operating Pressure	0.49 MPaG (71 psig) @ 25 °C (77 °F) 0.39 MPaG (57 psig) @ 60 °C (140 °F) 0.34 MPaG (49 psig) @ 90 °C (194 °F) 0.20 MPaG (29 psig) @ 120 °C (248 °F) 0.15 MPaG (22 psig) @ 150 °C (302 °F) 0.12 MPaG (17 psig) @ 185 °C (365 °F)

Typical Flow Characteristics – 1 cP fluid, 20 °C

1 inch T-flow, In-line

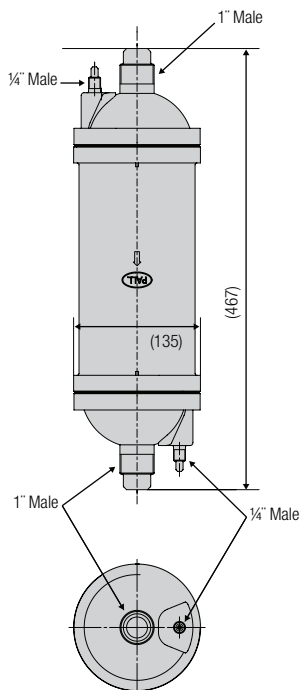


¾ inch T-flow

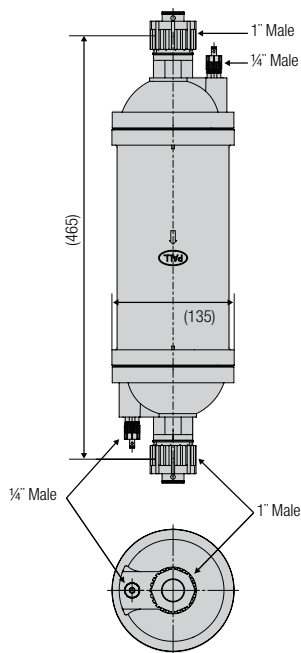


Dimensions

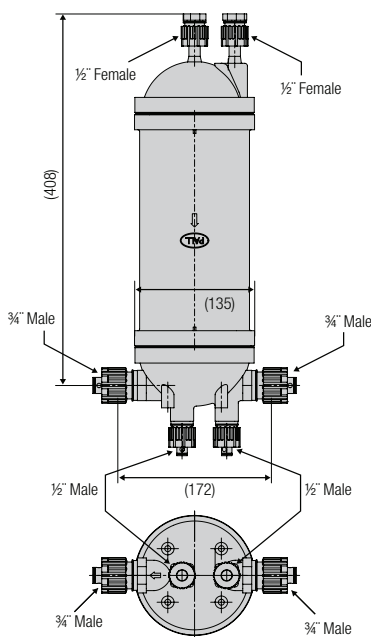
1 inch In-Line
Flare Style
LDFHN1GPK164E51



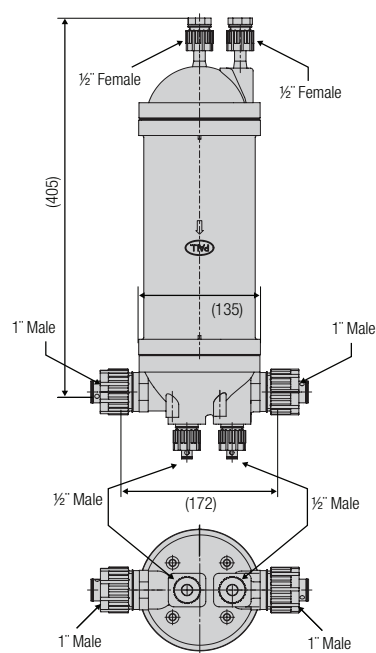
1 inch In-Line
Super Pillar 300P Series
LDFHN1GPK164E71



¾ inch T-Flow
Super Pillar 300P Series
LDFHT1GPK12E71/72



1 inch T-Flow
Super Pillar 300P Series
LDFHT1GPK16E71/72



Part Numbers / Ordering Information

LDFH 1 1GP 2 3 E 4 5

Table 1

Code	Flow
T	T-flow
N	In-line

Table 2

Code	Removal Rating
15	15 nm
K	20 nm

Table 3¹

Code	Inlet / Outlet	Vent / Drain		Memo
		Head end	Bowl end	
12	3/4" male	1/2" male	1/2" female	T-flow
128	3/4" male	1/2" male	1/2" male	T-flow
16	1" male	1/2" male	1/2" female	T-flow
164	1" male	1/4" male	1/4" male	In-line
168	1" male	1/2" male	1/2" male	T-Flow

Table 4

Code	Connections
2	Super Pillar Type (Nippon Pillar) ²
51	Flare style
71	Super Pillar 300 P Series (Nippon Pillar)
72	Super Pillar 300 P Series L Type (Nippon Pillar)

Table 5

Code	Prewet option
-K3	Prewet filter (packaged in DI water)
-K7	Prewet filter (packaged in DI water), low metal extractables ³

¹ Disposable capsules are not available with every option. Please contact Pall for the part number availability.

² Pillar is a trademark of Nippon Pillar Packing Co.

³ Please contact Pall for the extractable conditions.



Microelectronics

25 Harbor Park Drive
Port Washington, NY 11050
+1 516 484 3600 telephone
+1 800 360 7255 toll free US

Nihon Pall Ltd.


6-5-1, Nishishinjuku,
Shinjuku-ku
Tokyo 163-1325 Japan
+81 3 6901 5700 telephone
+81 3 5322 2109 fax

Visit us on the Web at www.pall.com/microelectronics
Contact us at www.pall.com/contact

Pall Corporation has offices and plants throughout the world. To locate the Pall office or distributor nearest you, visit www.pall.com/contact.

The information provided in this literature was reviewed for accuracy at the time of publication. Product data may be subject to change without notice. For current information consult your local Pall distributor or contact Pall directly.

IF APPLICABLE Please contact Pall Corporation to verify that the product conforms to your national legislation and/or regional regulatory requirements for water and food contact use.

© Copyright 2023, Pall Corporation. Pall, , is a trademarks of Pall Corporation.
® Indicates a trademark registered in the USA.