

UltiKleen™ SPM KC Assemblies

UltiKleen™ G2 SPM KC Assemblies



Data Sheet MEUKSPMENb

Description

The Pall UltiKleen SPM KC and UltiKleen G2 SPM KC assemblies are completely disposable filter units containing all fluoropolymer cartridges. They are specifically designed and ideally suited for high-temperature process chemicals, particularly sulfuric acid/hydrogen peroxide mixtures (SPM). The unique downstream venting-type assemblies allow gas to exhaust from chemical fluids efficiently and provide higher particle cleanliness levels.

UltiKleen SPM KC assemblies are available for both standard diameter (68 mm / 2.67 in) cartridges and higher-flow-rate G2 cartridges (83 mm / 3.27 in diameter).

Features & Benefits

- Proprietary media construction with high resistance to shear forces in high-temperature, viscous chemical filtration
- Downstream venting available in G2-type assembly
- Acid-cleaned filter cartridge for significantly low metals contribution to process chemicals
- Disposable filter unit with filter cartridge integrally sealed in housing
- Sealed assembly for safer handling, faster change-out and less downtime
- 100% integrity tested

Materials of construction

Filter Medium	PTFE
Media Support	PFA
Inner Core	PFA
Outer Cage	PFA
End Caps	PFA
Housing	PFA



UltiKleen SPM KC Assemblies



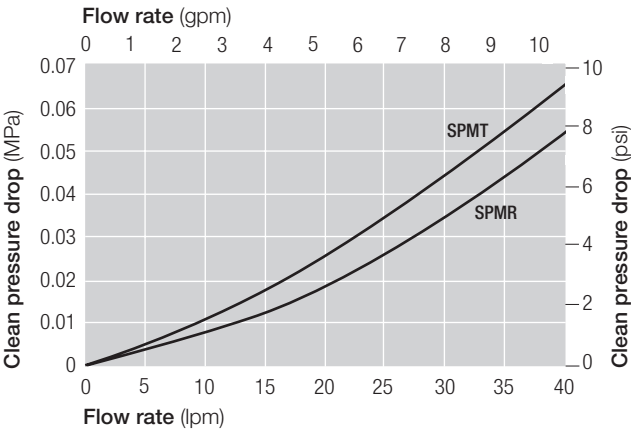
UltiKleen G2 SPM KC Assemblies

Specifications

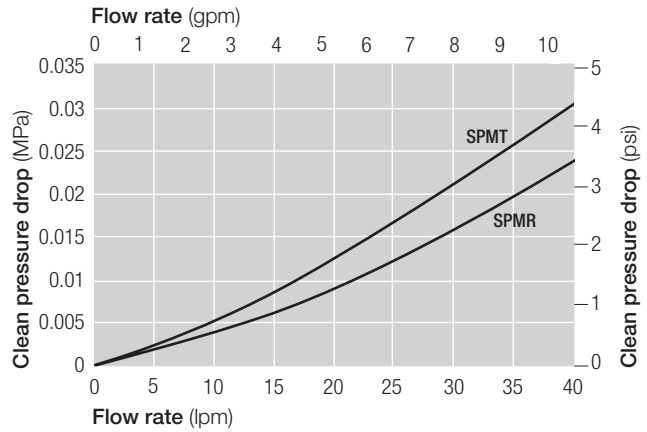
Product Name	UltiKleen SPM KC Assemblies	UltiKleen G2 SPM KC Assemblies
Removal Ratings	0.1 µm, 0.2 µm	0.1 µm, 0.2 µm, 0.05 µm (available with downstream venting-type only)
Configurations	T- flow, In-line (10 in)	T-flow, In-line, L-flow (10 in)
Filter Area	1.2 m ² / 13 ft ²	1.7 m ² / 18.9 ft ²
Maximum Operating Temperature	170 °C / 338 °F	170 °C / 338 °F
Maximum Operating Pressure	0.49 MPaG (71 psig) @ 25 °C (77 °F) 0.39 MPaG (56.6 psig) @ 60 °C (140 °F) 0.34 MPaG (49.3 psig) @ 90 °C (194 °F) 0.20 MPaG (29.0 psig) @ 120 °C (248 °F) 0.15 MPaG (21.8 psig) @ 150 °C (302 °F) 0.12 MPaG (17.4 psig) @ 170 °C (338 °F)	0.49 MPaG (71 psig) @ 25 °C (77 °F) 0.39 MPaG (56.6 psig) @ 60 °C (140 °F) 0.34 MPaG (49.3 psig) @ 90 °C (194 °F) 0.20 MPaG (29.0 psig) @ 120 °C (248 °F) 0.15 MPaG (21.8 psig) @ 150 °C (302 °F) 0.12 MPaG (17.4 psig) @ 170 °C (338 °F)

Typical Flow Characteristics - 1cP fluid, 20 °C

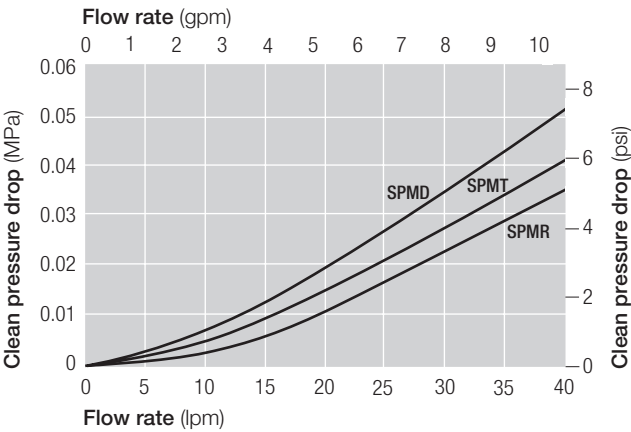
LDFVT1 (3/4" nozzle)



LDFGN1 (3/4" nozzle)



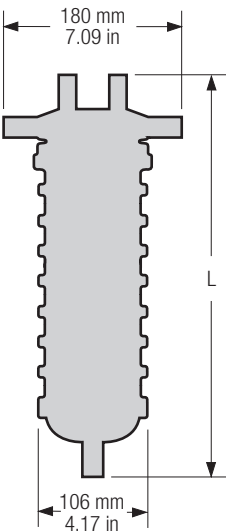
LDFVT1, LDFVL1 (3/4" nozzle)



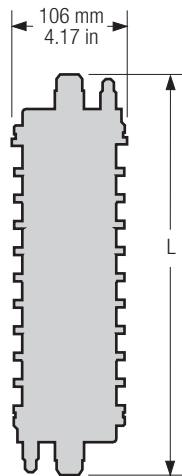
Dimensions

UltiKleen SPM KC Assemblies

T-Flow

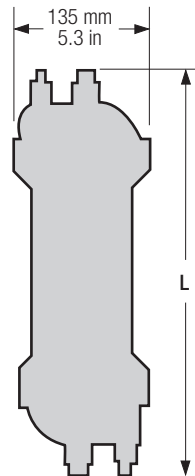


In-Line

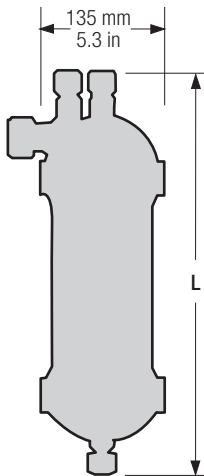


UltiKleen G2 SPM KC Assemblies

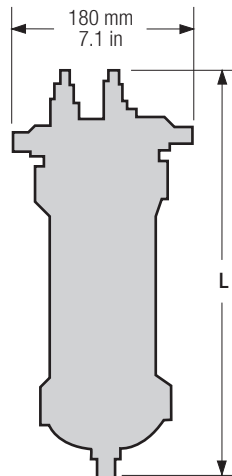
In-Line



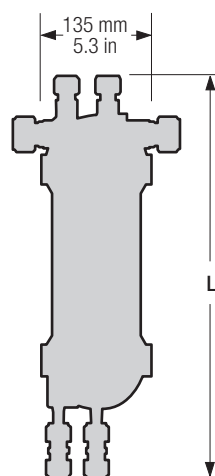
L-Flow



T-Flow



T-Flow Downstream Vent



Kleen-Change Assembly (LDF)

In-Line	Nominal Length (L) (mm / in)	T-style	Nominal Length (L) (mm / in)	TR-style	Nominal Length (L) (mm / in)
09-12E51	356 / 14.02	13E0	416 / 16.38	13E1	382 / 15.0
		13E1	382 / 15	13E2	369 / 14.5
12E51	387 / 15.23	13E2	369 / 14.5	13E51	384 / 15.1
13E1	468 / 17.3	13E6	396.5 / 15.6	13E71	369 / 14.5
13E51	475 / 18.7	13E51	369 / 14.5		
13E71	440 / 17.3	13E71	370 / 14.6		

Ordering Information - UltiKleen SPM KC Assemblies¹

LDF 1 1 SPM 2 3 E 4 5

Table 1

Code	Flow
T	T-flow
N	In-line

Table 3

Code	Inlet / outlet	Vent / drain		Memo
		Head end	Bowl end	
12	3/4" male	1/2" male	1/2" male	T-flow
12	3/4" male	1/4" male	1/4" male	In-line
13	3/4" female	1/2" female	1/2" female	T-flow / In-line

Table 2

Code	Removal ratings (µm)
T	0.1
R	0.2

Table 4

Code	Connections
0	No connection
1	20 Series (Flowell)
2	Super Pillar Type (Nippon Pillar) ²
51	Flare style
6	FinalLock ³
71	Super Pillar 300 P Series (Nippon Pillar)
72	Super Pillar 300 P Series L Type (Nippon Pillar)
8	60 Series (Flowell)
9	11CR Series (Flowell)

Table 5

Code	Prewet option
-K3	Prewet filter (packaged in DI water)
-K7	Prewet filter (packaged in DI water), low metal extractables ⁴

¹ Part numbers in combination with all codes are not always available. Please contact Pall for the part number availability.

² Pillar is a trademark of Nippon Pillar Packing Co.

³ FinalLock is a trademark of Kurabo Industries Ltd.

⁴ Please contact Pall on the extractable conditions.

G2 Kleen-Change Assembly (LDFG)

In-Line	Nominal Length (L) (mm / in)	T-style	Nominal Length (L) (mm / in)	VT-style	Nominal Length (L) (mm / in)
12E2	396.5 / 15.6	12E2	408 / 16.1	12E2	377 / 14.8
12E51	412 / 16.2	12E71	403 / 15.9	128E2	385 / 15.2
124E51	412 / 16.2	13E0	495 / 19.5	12E71 / 72	377 / 14.8
16E8	428 / 16.9	13E1	432 / 17	128E71 / 72	402 / 15.8
16E51	436 / 17.2	13E2	442 / 17.4	13E1	445 / 17.5
17E0	448 / 17.6	13E6	416 / 16.4	13E51	444 / 17.4
17E1	445 / 17.7	13E9	433 / 17.1	168E71 / 72	403 / 15.9
17E51	442 / 17.4	13E51	473 / 18.6		
17E71	462 / 18.2	13E71	444 / 17.5		
		L-style		VL-style	
		12E2	408 / 16.1	12E2	440 / 17.35

Ordering Information - UltiKleen G2 SPM KC Assemblies⁵

LDF 1 2 1 SPM 3 4 E 5 6

Table 1

Code	Downstream venting
G	N/A
V	Available

Table 2

Code	Flow
T	T-flow
N	In-line
L	L-flow

Table 3

Code	Removal ratings (µm)
D	0.05 (available with downstream venting-type only)
T	0.1
R	0.2

Table 4

Code	Inlet / outlet	Vent / drain		Memo
		Head end	Bowl end	
12	3/4" male	1/2" male	1/2" male	T-flow / L-flow
12	3/4" male	1/2" male	1/2" male	Downstream venting-type
12	3/4" male	3/8" male	3/8" male	In-line
124	3/4" male	1/4" male	1/4" male	In-line
128	3/4" male	1/2" male	1/2" male	Downstream venting-type
13	3/4" female	1/2" female	1/2" female	T-flow
16	1" male	1/2" male	1/2" male	T-flow
16	1" male	1/2" male	1/2" male	Downstream venting-type
16	1" male	3/8" male	3/8" male	In-line
164	1" male	1/4" male	1/4" male	In-line
168	1" male	1/2" male	1/2" male	Downstream venting-type
17	1" female	1/2" female	1/2" female	In-line

⁵ Part numbers in combination with all codes are not always available. Please contact Pall for the part number availability.

Table 5

Code	Connections
0	No connection
1	20 Series (Flowell)
2	Super Pillar Type (Nippon Pillar) ⁶
51	Flare style
71	Super Pillar 300 P Series (Nippon Pillar)
72	Super Pillar 300 P Series L Type (Nippon Pillar)
8	60 Series (Flowell)
9	11CR Series (Flowell)

Table 6

Code	Prewet option
-K3	Prewet filter (packaged in DI water)
-K7	Prewet filter (packaged in DI water), low metal extractables ⁷

⁶ Pillar is a trademark of Nippon Pillar Packing Co.
⁷ Please contact Pall on the extractable conditions.

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