

Single Metal Element Filter Housing

for high temperature and pressure polymer melt applications

Description

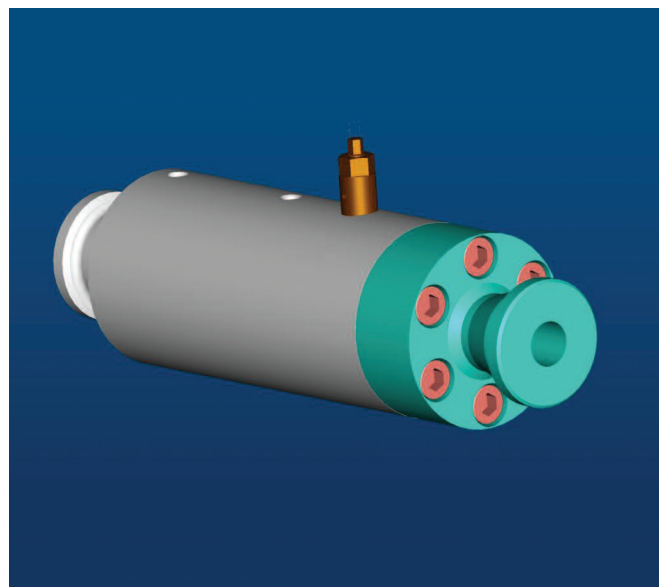
- Single element housing designed to accommodate 25.4 cm (10 in), 50.8 cm (20 in), and 88.9 cm (35 in) length elements. Other sizes are available upon request.
- Housings are constructed of 316L stainless steel for strength and corrosion resistance
- Designed for use with Pall's Ultipleat® Polymer candles and fan pleat polymer candles
- Straight through assembly – fluid flow enters and exits in a straight line
- Quick connect/disconnect for easy installation and removal
- Includes vent fitting and ports for pressure & temperature (P&T) measurements
- Reliable metal-to-metal sealing

Applications

- Pilot lines
- Polymer recycling lines
- Filtering of medical grade plastics
- Specialty polymers and pigments

Benefits

- Revolutionary Ultipleat geometry packs a high filter area per element
- Smaller and more economical than most standard screen changer equipment
- Low operational costs
- Low capital costs



Housing Specifications

Maximum operating pressure¹

343.6 bar (5000 psig) @ 330°C (626°F)

Materials of Construction

Housing:	316L stainless steel
O-ring:	321 stainless steel
Bolting:	Alloy steel
Code:	ASME, no stamp
Insulation:	Customer furnished
Heating:	Customer furnished
Surface finish:	63Rms for all process wetted surfaces

Connections

Inlet/outlet:	1" – 3" Securamax ² with mating hubs and seals
Vent:	½" threaded bleed fitting
Drain:	Customer furnished

¹ Maximum operating pressure ratings are vessel ratings only. Safe operating temperature and pressure will depend on the filter element used. For questions concerning compatibility, contact Pall.

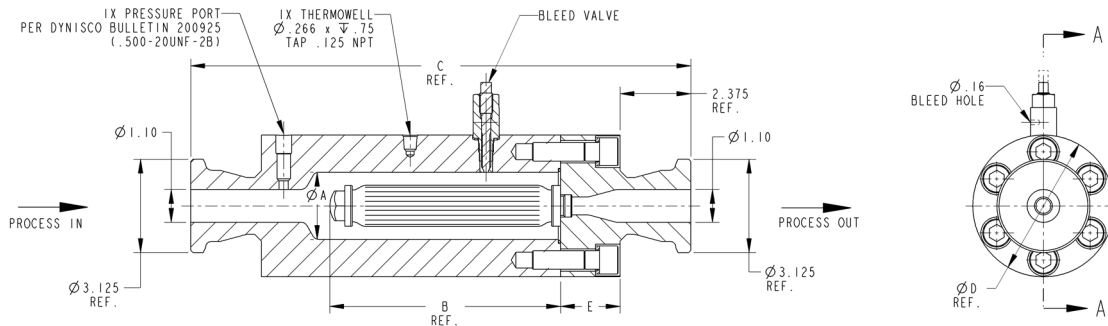
² Securamax, the pipe connector and flow control products company, re-launched around the world as SMX International.

Housing Dimensional Data (nominal)

Ordering Part #	Dimensions (cm / in)					Housing Filter Area (m ² / ft ²) ³	Estimated Housing Weight (kg / lbs)
	A	B	C	D	E		
110_FP	5.72 / 2.25	19.69 / 7.75	42.67 / 16.80	12.07 / 4.75	5.08 / 2.00	0.05 / 0.49	26.31 / 58
110_UP	5.72 / 2.25	19.69 / 7.75	42.67 / 16.80	12.07 / 4.75	5.08 / 2.00	0.08 / 0.89	26.31 / 58
120_FP	5.72 / 2.25	41.91 / 16.50	64.90 / 25.55	12.07 / 4.75	5.08 / 2.00	0.10 / 1.12	45.36 / 100
120_UP	5.72 / 2.25	41.91 / 16.50	64.90 / 25.55	12.07 / 4.75	5.08 / 2.00	0.19 / 2.05	45.36 / 100
135_FP	7.19 / 2.83	78.74 / 31.00	102.74 / 40.45	14.86 / 5.85	6.10 / 2.40	0.31 / 3.37	115.67 / 255
135_UP	7.19 / 2.83	78.74 / 31.00	102.74 / 40.45	14.86 / 5.85	6.10 / 2.40	0.54 / 5.78	115.67 / 255
140_FP	7.19 / 2.83	41.43 / 16.31	65.43 / 25.76	14.86 / 5.85	6.10 / 2.40	0.16 / 1.72	69.40 / 153
140_UP	7.19 / 2.83	41.43 / 16.31	65.43 / 25.76	14.86 / 5.85	6.10 / 2.40	0.27 / 2.92	69.40 / 153

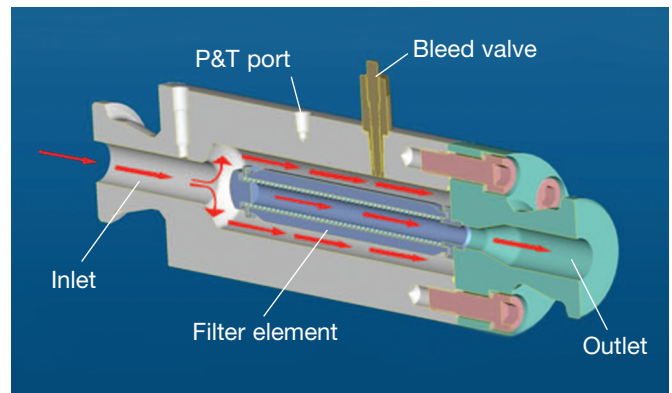
³ The filter area is based on Pall's Dynalloy® 1407 media, 20 µm, 127.6 bard (1850 psid) cartridge.
The actual filter area will vary depending on the micron rating and pressure rating of the element used.

Housing Drawing



Element Specifications

Pall's proprietary Ultipleat Polymer candles and standard fan pleat metal candles are designed for use in the Single Metal Element Filter Housings. The high surface area of the Ultipleat Polymer candles coupled with the uniform flow distribution produces a significant increase in the filter medium's effective dirt-holding capacity. The end result is an extended on-stream life and improved melt quality. Manufactured from 300 series stainless steel, Pall metal candles are designed to be corrosion-resistant and are cleanable, with the ability to withstand numerous cleaning cycles.



	Fan pleat polymer candle	Ultipleat Polymer candle
Media	316 SS	316 SS
Hardware (except adapter)	316 SS	316 SS
Adapter	316 SS	UNS S21800

	Fan pleat polymer candle	Ultipleat Polymer candle
Dynalloy ⁴ media	3 µm – 80 µm	7 µm – 80 µm
Dynamesh ⁵ media	5 µm – 230 µm	7 µm – 430 µm

⁴ Dynalloy media is Pall's sintered random fiber depth style media.

⁵ Dynamesh media is Pall's wiremesh style media.

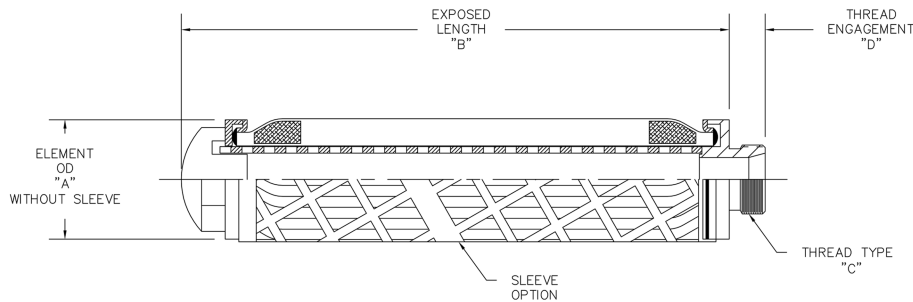
Note: Contact Pall for additional types of media, micron ranges and materials of construction.

Element Dimensional Data (nominal)

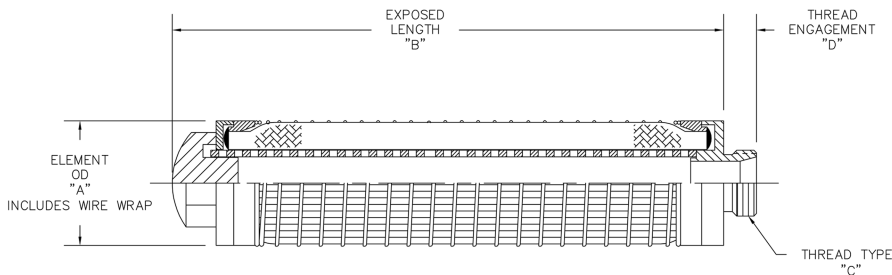
Model	Filter Element P/N#	Type of Pleat	Element OD (cm /in) A	Element Exposed Length (cm / in) B	External Thread Size C	Element Thread Engagement D
110_FP	D116205-2001407	Fan Pleat candle	3.51 / 1.38	19.69 / 7.75	0.750-16 UNF	0.375"
120_FP	D116150-1001407		3.51 / 1.38	41.43 / 16.31	0.750-16 UNF	0.375"
135_FP	119353-03-1407		4.45 / 1.75	78.74 / 31	1.250-12 UNF	0.4"
140_FP	119353-02-1407		4.45 / 1.75	41.43 / 16.31	1.250-12 UNF	0.4"
110_UP	D360197AAB-1407	Ultipleat candle	3.61 / 1.42	19.69 / 7.75	0.750-16 UNF	0.375"
120_UP	D360414AAB-1407		3.61 / 1.42	19.69 / 7.75	0.750-16 UNF	0.375"
135_UP	D460787AAA-1407		4.60 / 1.81	78.74 / 31	1.250-12 UNF	0.4"
140_UP	D460414AAA-1407		4.60 / 1.81	41.43 / 16.31	1.250-12 UNF	0.4"

Element Drawing

Fan pleat polymer candle



Ultipleat polymer candle



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