Industrial filtration

Betapure AUL filter cartridges and capsules



Thermo Scientific™ Betapure™ AUL Filter Cartridges and Capsules represent a new generation in Chemical Mechanical Planarization (CMP) slurry classification providing superior reduction of large particle counts for improved yields. Based on bi-component fiber technology with targeted multi-zone filtration layers enable Large Particle Count (LPC) reduction and yield improvement in the most advanced CMP processes.

The rigid filter structure maintains a consistent pore size even under intermittent or unstable process conditions. Variations caused by pump fluctuations, system stops and restarts, or periods of high differential pressure have minimal impact—preserving filtration performance and overall product consistency. In addition, the depth-filtration design reduces LPCs and provides superior particle-size classification within the slurry, helping prevent rework, defects, and material rejection.

The targeted multi-zone construction is engineered to deliver both effective LPC reduction and enhanced flow performance —including exceptionally low pressure drop. This design minimizes slurry shearing while maintaining long service life and stable, predictable filtration performance.

Features and benefits

Rigid, targeted multi-zone structure

- Provides consistent filtration performance from start to finish
- Provides excellent classification of slurry particles, significantly reducing LPCs
- Delivers reliable filtration efficiency down to 50 nm for the most critical CMP applications

Quality manufacturing

- ISO 9001:2015 certified quality management system
- Manufactured to tightly controlled specifications to ensure repeatable, consistent performance throughout the planarization process

Table 1. Product specifications

Operating parameters and specifications		
Filter rating	Z13 grade	Z15 grade
	70 nm and 200 nm side)	50 nm and 60 nm
Materials		
Media	Z13 grade Polyethylene: Polypropylene bi-component fiber and glass fiber	Z15 grade Polyethylene: Polypropylene bi-component fiber and bound glass fiber
Core	Polypropylene	
O-rings	EPR	
Capsule body	Polypropylene	
Operating conditions — Cartridge		
Maximum operating differential pressure	80 psid @ 68°F (5.5 bar @ 20°C)	
Operating conditions — Capsule		
Maximum operating temperature	104°F (40°C)	

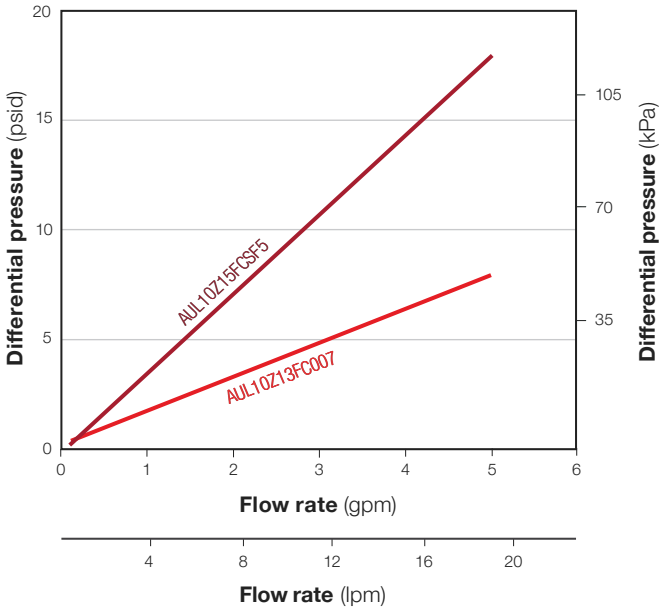


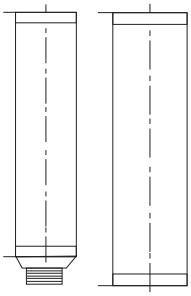
Fig. 1. Excellent flow rats at low differential pressure. Thermo Scientific™ Betapure™ AUL 10-inch Filter Cartridges designed to provide excellent flow rates with low differential pressures.

Ordering guides

Betapure AUL filter cartridges ordering guides

Capsule	Length	Grade designation	End modification	Gasket/ O-ring material	Grade/removal rating (micron)
AUL	02 / 2 in 05 / 5 in 09 / 9.75 in 10 / 10 in 20 / 20 in 30 / 30 in	01 / 10 in 02 / 20 in 03 / 30 in 04 / 40 in	F - 222 O-ring & flat cap N - No end modification	C - EPR	007 - 0.7 µm Abs.

Capsule	Length	Grade designation	End modification	Gasket/ O-ring material	Grade/removal rating (micron)
AUL	02 / 2 in 05 / 5 in 09 / 9.75 in 10 / 10 in 20 / 20 in 30 / 30 in	Z15 - Binderless glass insert	F - 222 O-ring & flat cap N - No end modification	C - EPR	007 - 0.7 µm Abs.



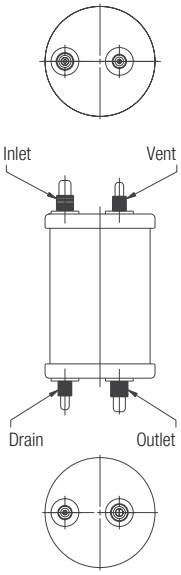
*AUL is available in 2.9-inch outer diameter only; 2-inch lab sample of AUL is available only in 2.7-inch outer diameter.
Part number example: AUL10Z13FC007 is a Betapure AUL "Z" grade filter cartridge, 10-inch long, glass insert, 222 flat cap with EPR O-ring, and 0.7 micron.

Ordering guide

Betapure AUL filter capsules ordering guide

Capsule	Grade	Grade code/ rating (µm)	Configuration	Length	In/out	Gasket/ O-ring material	Pack size
AUL	Z13 - Binderless glass insert Z15 - Binder glass insert	01 / 10 in 02 / 20 in 03 / 30 in 04 / 40 in	Y	02 / 2 in 04 / 4 in 10 / 10 in	L - 0.375-inch flaretek in/out, 0.25-inch flaretek vent/drain P - 0.25-inch MNPT in/out, vent/drain R - 0.25-inch flaretek in/out, vent/drain S - 0.75-inch flaretek in/out, 0.25-inch flaretek vent/drain	C - EPR	01

*Model example: AULZ15SF5Y10SC01: Betapure AUL filter capsule, 0.6 µm, 10-inch, 3/4" flaretek in/out, 1/4" flaretek vent/drain, EPR, 1 pack; 2-inch capsule is available only in 6 per case. Not all configurations are available, please consult with your Thermo Fisher Scientific representative to determine the appropriate part number for your application.



Capsule configurations

Intended Use: Betapure AUL filter cartridge and capsule products are intended for use in industrial, chemical, and electronics filtration applications of aqueous and non-aqueous fluids in accordance with the product instructions, specifications and where materials of construction are compatible.

Since there are many factors that can affect a product's use, the customer and user remain responsible for determining whether the Thermo Scientific product is suitable and appropriate for the user's specific application, including user conducting an appropriate risk assessment and evaluating the Thermo Scientific product in the user's application.

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Betapure AUL filter cartridge and capsule products are not for use in food contact applications.

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