



## Ultipor® HT Series Filter Elements

### Description

Ultipor® HT filters have a pleated, high area construction for long service life. The unique medium structure consists of a high temperature binder resin which coats the fine glass fibers. The filter's materials of construction are qualified for uses up to 425°F (218°C) with compatible fluids. The double open ended filters are installed over a tie rod/seal nut assembly. The flow pattern is outside to inside.

### Benefits

- Optimized pleat pack filtration helps to develop filter cake
- Batch to batch consistency
- Core collapse pressure rated to 75 psid (5.17 bard) @ 425°F (218°C)
- Available with retention ratings of 1, 10, 20, and 70 micron (µm)<sup>1</sup>
- Able to process tough oil fractions, containing fine suspended solids
- Large surface area provides long service life

### Performance Specifications

**Filter Grades (rated at 99% efficiency):**<sup>2</sup>

1, 10, 20, 70 µm

**Maximum Temperature:**

425°F (218°C)

**Maximum Forward Differential Pressure:**<sup>3</sup>

40 psid (2.75 bard) @ 425°F (218°C)

**Recommended Changeout Differential Pressure:**

30 psid (2.0 bard) @ 425°F (218°C)

### Product Specifications

**Materials of Construction:**<sup>4</sup>

Filter Media:	Resin bonded glass fiber on aramid substrate
Drainage Mesh:	Steel
Support:	Glass
Gaskets:	Graphite Sheet, Fluorocarbon Elastomer
Adhesives:	Epoxy Resin
Core/End Caps:	Carbon Steel (zinc plated)



**Dimensions (nominal):**

Outside Flange	
Diameter:	6.12 inch (15.54 cm)
Outside Filter	
Diameter:	6 inch (15.24 cm)
Inside Filter	
Diameter:	3.45 inch (8.76 cm)
Length:	44 inch (111.76 cm)

<sup>1</sup> For information to order these grades, consult your local Pall representative.

<sup>2</sup> The test procedure used is an adaptation of ISO 16889, modified to determine the micron size above which particles are quantitatively removed.

<sup>3</sup> Normal flow direction is outside-to-inside. Reverse flow operation is not recommended.

<sup>4</sup> Ultipor HT elements are manufactured by Pall to exacting procedures and strict quality controls.

## Housing Information

ASME rated filter vessels are available in a variety of materials including carbon steel, stainless steel, and other alloys to meet service requirements. Vessels may also be custom built to comply with other regional and local codes and practices. Please contact your local representative to discuss fabrication specifications, instrumentation, piping/manifolding needs, and skid mounting.

## Applications

Ultipor HT filters are designed for a variety of applications. These high temperature filters are frequently used to process tough oil fractions, containing fine suspended solids typically found in processes related to desulphurization and fuels upgrading. These fluids, left untreated, can reduce reactor run-time and foul critical process equipment. Other applications include:

- Heated tank farm fluids
- Reactor bed feed filtration (e.g. Hydrotreaters)
- Heat exchanger protection
- Gas to liquid wax products
- Lubricant processing
- Hydrogenation product polishing
- Hot motor fuel product blending

## Liquid Retention Ratings (µm) (ISO 16889 modified)

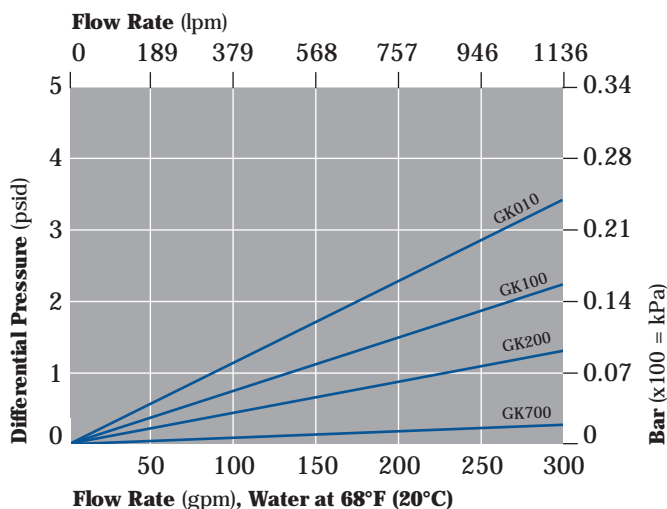
Cartridge Designation	99%Efficiency (Beta 100)
GK010	1
GK100	10
GK200	20
GK700	70

## Part Numbers/Ordering Information

HT0644 ■ ◆ (e.g., HT0644GK200G)

Code ■	Filter Grades (micron)	Code ◆	Gasket Materials
GK010	1	G	Graphite Sheet
GK100	10	H	Fluorocarbon Elastomer
GK200	20		
GK700	70		

## Typical Flow vs. Differential Pressure for Application Sizing



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