Pall Corporation

# Acro® Last Chance Filters


Pall Ink Jet Team

*Filtration. Separation. Solution.*SM

IJ 1796d


# High performance point-of-use filters ensure printhead protection from contamination and optimum printer performance

The Acro® Last Chance Filter (LCF) is a self-contained filter assembly for point-of-use filtration in digital printing systems. It is designed to be used together with any of Pall's larger capsules in large systems or as a stand-alone filter in smaller systems. A laboratory-size filter is also available for testing new ink formulations and conducting printing trials.

HDC® II and Rigimesh® media options are available for the Acro LCF. HDC II media is all polypropylene and has a tapered pore structure. It provides good flow rates, long service life, and excellent gel retention. Rigimesh media is a sintered woven stainless steel wire mesh structure that provides excellent chemical compatibility across a wide range of ink chemistries.

## Key Features

- Economical and compact point-of-use filter for digital printers
- Specially selected connections for fast filter changes
- Available in three sizes, for a wide range of applications
- Housing material optimized for maximum blockage of UV light
- Media selected for maximum performance in ink jet systems
- Designed to be used together with another Pall capsule or as a stand-alone filter

| Features | Advantages | Value |
|---|---|---|
| Manufactured using Pall's Premium Syringe Filter technology (Acro 25 LCF) | Large effective filter area in a compact design | Can handle a wide range of flow rates without printhead starvation |
| UV-light-resistant housing materials (Acro 25 LCF, Acro 37 LCF) | Negligible UV light penetration into the filter assembly (<0.02%) | Helps prevent curing of UV-sensitive materials |
| Low internal ink hold-up volume | Minimal ink required for flow | Rapid ink system priming cycles |
| Economical construction | Minor impact on initial build and maintenance costs | Performance improvement with minimal impact on cost |
| All versions feature all–polypropylene construction | Good compatibility across a wide range of ink jet ink chemistries | One filter design can be applied universally across multiple printer families |
| Luer-Lok[1] compatible and compression fitting connectors on both inlet and outlet | Secure inlet and outlet connections with positive sealing architecture | Minimal chance for leakage; fast filter changes |
| No binders, glues, or mold release agents used | Low extractables | Good chemical compatibility; economical disposal |

[1] Luer-Lok is a trademark of Becton, Dickinson & Company; Jaco is a trademark of Jaco Manufacturing Company.

# Technical Information

## Acro 25 Last Chance Filters

### Opaque White Housing

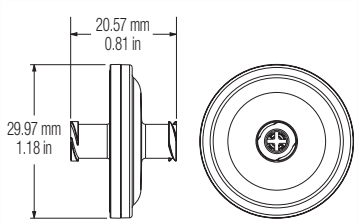
#### Materials of Construction

| | |
|---|---|
| Housing | Polypropylene with white colorant |
| Filter media | Polypropylene |
| Effective filter area | 3.9 $cm^2$ / 0.6 $in^2$ |

#### Operating Conditions[2]

| | |
|---|---|
| Maximum allowable pressure | 5.2 barg / 75 psig @ 20˚C / 68°F |

#### Dimensions




## Acro 37 Last Chance Filters

### Opaque White Housing

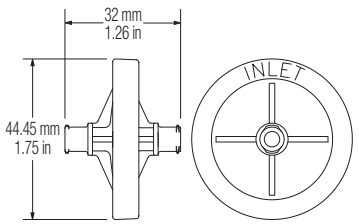
#### Materials of Construction

| | |
|---|---|
| Housing | Polypropylene with white colorant |
| Filter media | Polypropylene or 300 series stainless steel |
| Effective filter area | 7.5 $cm^2$ / 1.16 $in^2$ |

#### Operating Conditions[2]

| | |
|---|---|
| Maximum allowable pressure | 2.1 barg / 30 psig @ 20°C / 68°F |

#### Dimensions




Luer-Lok compatible variant

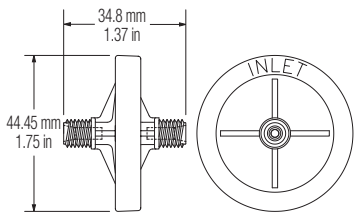
### Opaque Black Housing

#### Materials of Construction

| | |
|---|---|
| Housing | Polypropylene with black colorant |
| Filter media | Polypropylene or 300 series stainless steel |
| Effective filter area | 7.5 $cm^2$ / 1.16 $in^2$ |

#### Operating Conditions[2]

| | |
|---|---|
| Maximum allowable pressure | 1.9 barg / 27 psig @ 20°C / 68°F |




Jaco[1] variant

## Acro 50 Last Chance Filters

### Standard Housing

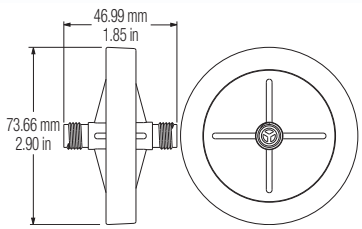
#### Materials of Construction

| | |
|---|---|
| Housing | Natural polypropylene |
| Filter media | Polypropylene |
| Effective filter area | 19.6 $cm^2$ / 3.04 $in^2$ |

#### Operating Conditions[2]

| | |
|---|---|
| Maximum allowable pressure | 2.1 barg / 30 psig @ 20°C / 68°F |

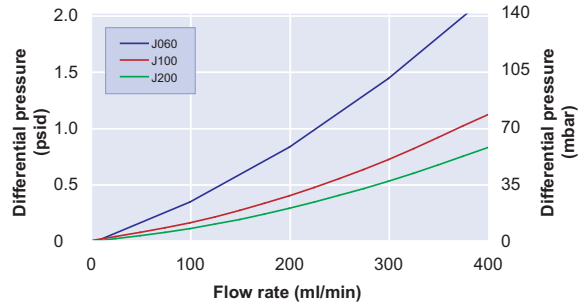
#### Dimensions



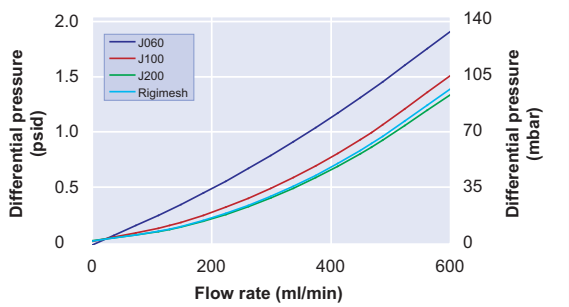

2 Fluids that do not soften, swell or adversely affect the filter or materials of construction.

## Typical Liquid Flow Rate versus Differential Pressure (at 1 cps)

### Acro 25 LCF

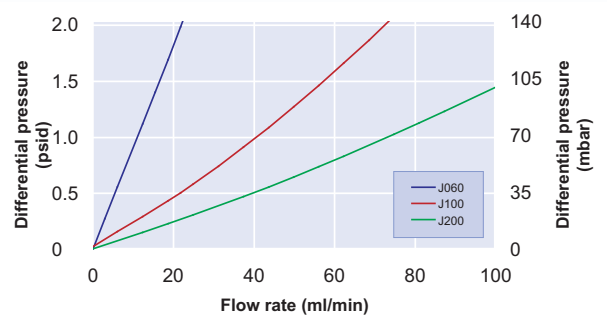



### Acro 37 LCF

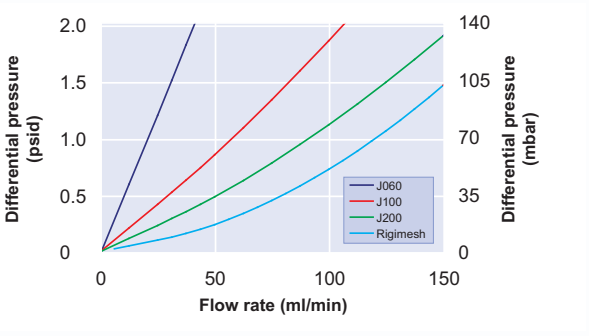



## Typical Liquid Flow Rate versus Differential Pressure (at 10 cps)

### Acro 25 LCF




### Acro 37 LCF



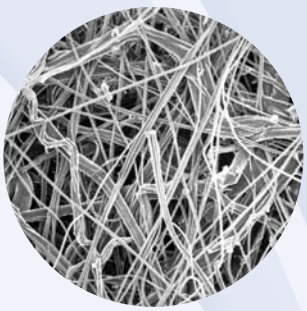

Unit conversion: 1 bar = 100 kilopascals

## Filter Media Options

Two Pall filter media options are currently offered.

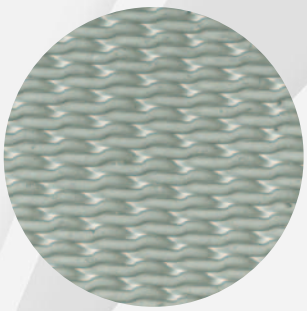
### HDC II Media

- All polypropylene media with tapered pore structure
- Thick media structure for excellent gel retention in UV-curable inks
- Available in three beta-rated removal ratings



### Rigimesh Media

- 300-series stainless steel media for excellent ink compatibility
- Woven mesh structure that is sintered for strength
- High porosity for very low pressure loss



# Ordering Information / Part Numbers[3]

## LCF-10000 Series Filters

Acro 25 Last Chance Filter with opaque white polypropylene housing (packaged 50 units per pack)

| Part Number | Media | Connection |
|---|---|---|
| LCF-11100 | HDC II (6 um) | Female Luer-Lok compatible |
| LCF-12100 | HDC II (10 um) | Female Luer-Lok compatible |
| LCF-13100 | HDC II (20 um) | Female Luer-Lok compatible |

## LCF-20000 Series Filters

Acro 37 Last Chance Filter with opaque white polypropylene housing (packaged 50 units per pack)

| Part Number | Media | Connection |
|---|---|---|
| LCF-21100 | HDC II (6 um) | Female Luer-Lok compatible |
| LCF-22100 | HDC II (10 um) | Female Luer-Lok compatible |
| LCF-23100 | HDC II (20 um) | Female Luer-Lok compatible |
| LCF-24100 | Rigimesh (18 um) | Female Luer-Lok compatible |
| LCF-21200 | HDC II (6 um) | ⅛ in Jaco fitting |
| LCF-22200 | HDC II (10 um) | ⅛ in Jaco fitting |
| LCF-23200 | HDC II (20 um) | ⅛ in Jaco fitting |
| LCF-24200 | Rigimesh (18 um) | ⅛ in Jaco fitting |

Acro 37 Last Chance Filter with opaque black polypropylene housing (packaged 50 units per pack)

| Part Number | Media | Connection |
|---|---|---|
| LCF-21110 | HDC II (6 um) | Female Luer-Lok compatible |
| LCF-22110 | HDC II (10 um) | Female Luer-Lok compatible |
| LCF-23110 | HDC II (20 um) | Female Luer-Lok compatible |
| LCF-24110 | Rigimesh (18 um) | Female Luer-Lok compatible |
| LCF-23210 | HDC II (20 um) | ⅛ in Jaco fitting |
| LCF-24210 | Rigimesh (18 um) | ⅛ in Jaco fitting |

## LCF-30000 Series Filters

Acro 50 Last Chance Filter with natural polypropylene housing (packaged 18 units per box)

| Part Number | Media | Connection |
|---|---|---|
| LCF-31300 | HDC II (6 um) | ¼ in Jaco fitting |
| LCF-32300 | HDC II (10 um) | ¼ in Jaco fitting |
| LCF-33300 | HDC II (20 um) | ¼ in Jaco fitting |

[3] This is a guide to the part numbering structure only. For availability of specific options, please contact your local Pall representative.


Pall Corporation

**Microelectronics**
25 Harbor Park Drive
Port Washington, NY 11050
+1 516 484 3600 telephone
+1 800 360 7255 toll free US
inkjet@pall.com

*Filtration. Separation. Solution.SM*

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