

Whatman GD/X™ syringe filters

The Whatman GD/X range is specifically designed for high particulate loaded samples. Constructed of a pigment-free polypropylene housing with a prefiltration stack of Whatman GMF 150 (graded density) and GF/F glass microfiber media, these filters remove sample contamination and allow you to filter even the most difficult samples with less hand pressure. GD/X syringe filters can process three to seven times more sample volume than standard syringe filters.

GMF 150 and GF/F are produced from 100% borosilicate glass microfiber. Graded density GMF 150 medium has a coarse top layer meshed with a fine bottom layer that retains particles to 1.0 µm. A GF/F filter then retains particles down to 0.7 µm. The prefilter stack ends with a final membrane.

The filter construction facilitates exceptional loading capacity with fast flow rates. This prevents the build up of back pressure typically caused by the blocking of an unprotected membrane.

Features and benefits

- 13 mm devices for samples up to 10 mL and 25 mm devices for samples greater than 10 mL (however, the volume of sample that can be filtered through each filter depends on the characteristics of the sample)
- Sterile options
- Pigment-free polypropylene housing
- Prefiltration stack of Whatman GMF 150 (graded density) and GF/F glass microfiber media
- Minimizes sample contamination
- Requires less hand pressure, even with the most difficult samples
- Processes three to seven times more sample volume

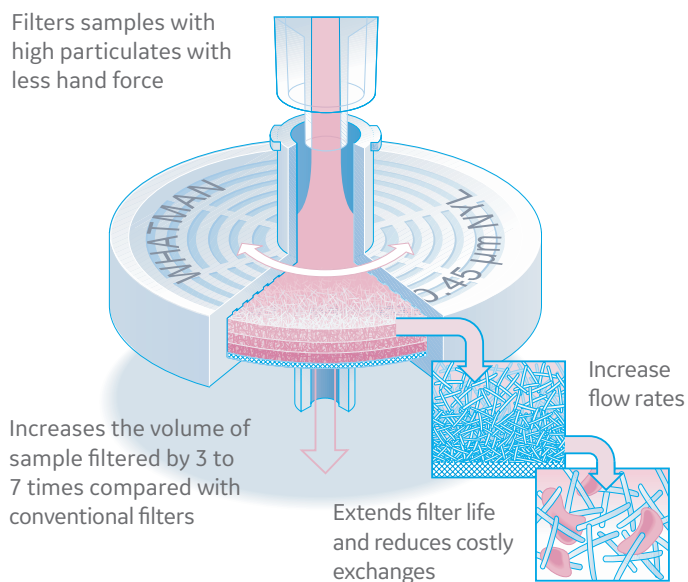
Applications

Whatman GD/X syringe filters are excellent for heavily particulate-laden samples found in:

- Dissolution testing
- Content uniformity
- Concentration analysis
- Routine sample preparation
- Food analysis
- Environmental samples
- Composite assay



Whatman GD/X Syringe filter



Typical properties – Whatman GD/X syringe filters

| | GD/X 13 mm | GD/X 25 mm |
|---|---|---|
| Housing | Polypropylene (pigment free) | Polypropylene (pigment free) |
| Filtration area | 1.3 cm ² | 4.6 cm ² |
| Maximum pressure | 100 psi (6.9 bar) | 75 psi (5.2 bar) |
| Volume hold-up – full housing – with air purge | 0.5 mL 50 µL (approx) | 1.4 mL 250 µL (approx) |
| Dimensions* | 20.8 × 30.0 mm | 20.8 × 30.0 mm |
| Weight | 3 g (approx) | 3 g (approx) |
| Flow direction | Flow should enter from the inlet | Flow should enter from the inlet |
| Inlet connection | Female luer lock | Female luer lock |
| Outlet connection | Male luer | Male luer |
| Sterilization | Autoclave at 121°C (131°C max) at 15 psi (1 bar) for 20 min | Autoclave at 121°C (131°C max) at 15 psi (1 bar) for 20 min |
| Glass microfiber prefiltration media | 100% borosilicate glass fiber GMF 150 10 µm: 1 µm GF/F 0.7 µm | 100% borosilicate glass fiber GMF 150 10 µm: 1 µm GF/F 0.7 µm |

* Housings are the same size but the filtration size is smaller

Ordering information – Whatman GD/X syringe filters

| Pore size (µm) | Catalog number | Media | Quantity/pack |
|--------------------------------|----------------|--------|---------------|
| GD/X 13 mm – nonsterile | | | |
| 0.2 | 6880-1302 | CA | 150 |
| 0.45 | 6880-1304 | CA | 150 |
| 0.2 | 6870-1302 | Nylon | 150 |
| 0.2 | 6871-1302 | Nylon | 1500 |
| 0.45 | 6870-1304 | Nylon | 150 |
| 0.45 | 6871-1304 | Nylon | 1500 |
| 0.2 | 6876-1302 | PES | 150 |
| 0.45 | 6876-1304 | PES | 150 |
| 0.2 | 6872-1302 | PVDF | 150 |
| 0.45 | 6872-1304 | PVDF | 150 |
| 0.45 | 6873-1304 | PVDF | 1500 |
| 0.2 | 6878-1302 | PP*** | 150 |
| 0.45 | 6878-1304 | PP*** | 150 |
| 0.2 | 6874-1302 | PTFE | 150 |
| 0.2 | 6875-1302 | PTFE | 1500 |
| 0.45 | 6874-1304 | PTFE | 150 |
| 0.45 | 6875-1304 | PTFE | 1500 |
| 1.6* | 6882-1316 | GF/A** | 150 |
| 1.0* | 6884-1310 | GF/B** | 150 |
| 1.2* | 6886-1312 | GF/C** | 150 |
| 2.7* | 6888-1327 | GF/D** | 150 |
| 0.7* | 6890-1307 | GF/F** | 150 |
| 0.45* | 6894-1304 | GMF | 150 |

* Glass microfiber particle retention rating

** Contains GMF 150 without the GF/F prefilter

*** Mildly hydrophobic

CA – Cellulose Acetate

GF – Glass Fiber

GMF – Glass Microfiber

PES – Polyethersulfone

PP – Polypropylene

PTFE – Polytetrafluoroethylene

PVDF – Polyvinylidene Difluoride

Ordering information – Whatman GD/X syringe filters (continuation)

| Pore size (µm) | Catalog number | Media | Quantity/pack |
|--------------------------------|----------------|------------------------------|---------------|
| GD/X 25 mm – nonsterile | | | |
| 0.2 | 6887-2502 | RC | 150 |
| 0.45 | 6882-2504 | RC | 150 |
| 0.2 | 6888-2502 | RC | 1500 |
| 0.45 | 6883-2504 | RC | 1500 |
| 0.2 | 6880-2502 | CA | 150 |
| 0.45 | 6880-2504 | CA | 150 |
| 0.45 | 6881-2504 | CA | 1500 |
| 0.2 | 6869-2502 | Nylon high charge (positive) | 150 |
| 0.45 | 6869-2504 | Nylon high charge (positive) | 150 |
| 0.2 | 6870-2502 | Nylon | 150 |
| 0.2 | 6871-2502 | Nylon | 1500 |
| 0.45 | 6870-2504 | Nylon | 150 |
| 0.45 | 6871-2504 | Nylon | 1500 |
| 5.0 | 6870-2550 | Nylon | 150 |
| 5.0 | 6871-2550 | Nylon | 1500 |
| 0.2 | 6876-2502 | PES | 150 |
| 0.2 | 6905-2502 | PES | 1500 |
| 0.45 | 6876-2504 | PES | 150 |
| 0.45 | 6905-2504 | PES | 1500 |
| 0.2 | 6872-2502 | PVDF | 150 |
| 0.2 | 6873-2502 | PVDF | 1500 |
| 0.45 | 6872-2504 | PVDF | 150 |
| 0.45 | 6873-2504 | PVDF | 1500 |
| 0.2 | 6878-2502 | PP | 150 |
| 0.45 | 6878-2504 | PP | 150 |
| 0.45 | 6879-2504 | PP | 1500 |
| 0.2 | 6874-2502 | PTFE | 150 |
| 0.2 | 6875-2502 | PTFE | 1500 |
| 0.45 | 6874-2504 | PTFE | 150 |
| 0.45 | 6875-2504 | PTFE | 1500 |
| 1.6* | 6882-2516 | GF/A** | 150 |
| 1.6* | 6883-2516 | GF/A** | 1500 |
| 1.0* | 6884-2510 | GF/B** | 150 |
| 1.2* | 6886-2512 | GF/C** | 150 |
| 2.7* | 6888-2527 | GF/D** | 150 |
| 0.7* | 6890-2507 | GF/F** | 150 |
| 0.7* | 6891-2507 | GF/F** | 1500 |
| 0.45* | 6894-2504 | GMF** | 150 |
| 0.45* | 6895-2504 | GMF** | 1500 |
| 1.5* | 6892-2515 | 934-AH** | 150 |
| GD/X 25 mm – sterile | | | |
| 0.2 | 6896-2502 | PES | 50 |
| 0.45 | 6896-2504 | PES | 50 |
| 0.2 | 6897-2502 | PES | 500 |
| 0.45 | 6897-2504 | PES | 500 |
| 0.2 | 6900-2502 | PVDF | 50 |
| 0.45 | 6900-2504 | PVDF | 50 |
| 0.45* | 6902-2504 | GMF** | 50 |
| 0.2 | 6901-2502 | CA | 50 |
| 0.45 | 6901-2504 | CA | 50 |

* Glass microfiber particle retention rating

** Contains GMF 150 without the GF/F prefilter

CA – Cellulose Acetate

GF – Glass Fiber

GMF – Glass Microfiber

PES – Polyethersulfone

PP – Polypropylene

PTFE – Polytetrafluoroethylene

PVDF – Polyvinylidene Difluoride

RC – Regenerated Cellulose