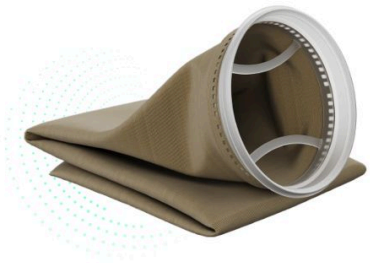
LIQUID BAG FILTERS

Cotton Bag Filter

General-purpose bag made from natural cotton fibre by the needle-punched felt method. Used in standard bag filter housings to retain solids and free oil in liquids, and in shaker-type dust collectors for low-temperature dry dust.



FIBRE	MAX. TEMPERATURE	CHANGE-OUT ΔP	SURFACE TREATMENT
Cotton	**90 °C**	**2–2.5 bar**	**Plain · FR**
Natural cotton, needle felt	Liquid · 82 °C in dust	Liquid filtration	Flame retardant optional

Technical specifications

Fibre type	Natural cotton
Fabric structure	Needle-punched felt
Micron ratings	1 · 5 · 10 · 25 · 50 · 75 · 100 · 150 · 200 µm
Max. operating temperature	90 °C (liquid filtration) · 82 °C (dust filtration)
Recommended change-out ΔP	2–2.5 bar (liquid filtration)
Chemical resistance	Moderate to common acids and alkalis · limited to strong solvents
Moisture resistance	Low; dust filtration requires a dry operating environment
Oil retention	Partially absorbs non-emulsified free oil
Silicone content	Free of silicone and contaminating additives
Flammability	Flammable; optional flame-retardant (FR) surface treatment
Surface treatment	Plain · Flame retardant (FR)
System compatibility	Liquid: standard bag filter housing · Dust: shaker cleaning systems
Collar types	PP ring · Steel ring · Drawstring · Plastic flange · Plain top · Snap band
Preferred for	Grain mills · flour mills · woodworking · seed cleaning · general liquid filtration
Not used for	Hot gas above 100 °C · chemical vapours · moist or oily dust loads
Usage type	Single use · inside-out flow

Surface treatment options

SURFACE TREATMENT	PROPERTY	RECOMMENDED APPLICATION
Plain	Raw cotton structure; general-purpose standard filtration	Woodworking, general dust collection, liquid filtration
Flame retardant (FR)	Chemical impregnation slows burning; not fully non-combustible	Workshops and dust collection with spark risk

Natural cotton fibre is not suitable for the membrane or chemical coating treatments used on synthetic media.

Temperature, moisture and chemical resistance

Temperature
Up to 90 °C in liquid, 82 °C in dust. Sudden rises above 100 °C make the fibres brittle.

Moisture
In high humidity the fibres absorb moisture, causing mould and rot; dust filtration needs dry conditions.

Chemical
Moderate to acids and alkalis; for chemical vapours and strong solvents use polyester or antistatic felt.

Collar options

PP ring
Stitched or welded polypropylene ring; for lines where chemical resistance matters.

Steel ring (snap ring)
Galvanised or stainless steel ring; the most widely used, economical standard collar.

Drawstring
Tied by hand to a pipe outlet or special hanger with the drawstring.

Plastic flange
The plastic collar seats on the housing to seal; suitable for high-pressure systems.

Plain top
No ring; for machines with a special clamping device.

Snap band
The flexible steel band clicks into its seat; allows fast bag change-outs.

Use and maintenance

- In liquid filtration replace the bag when ΔP reaches 2–2.5 bar; complete the change-out before 2.5 bar is exceeded.
- In dust filtration gas temperature must not exceed 82 °C; high humidity and dew point transitions weaken the fibres.
- For organic dusts with a risk of sparks choose FR-treated or antistatic bags; use separate bags for liquid and dust.
- The bags are single use; they are not washed and reused.
- If you are not sure of the collar type, send a photo or sample of your current bag; an exact replica will be made.

Values in this data sheet are typical and for information only. Product selection should be made with our engineers based on process fluid, temperature, pressure and flow conditions. Proses T.İ.M. reserves the right to change product specifications without prior notice.

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