OIL ABSORPTION FILTER BAG

Polypropylene Melt-Blown Media · Liquid Filter Bag Series · ISO 16889 / β-Ratio Rated

FILTLAB

DESIGN FEATURES & PRODUCT CHARACTERISTICS

High Efficiency Multi-Layer Media Density gradient microfibre increases dirt capacity and extends service life beyond single-layer alternatives.	**Double Outer Protective Layer** Outer PP sheath prevents fibre migration from flow turbulence, maintaining clean effluent and protecting downstream systems.
Welded One-Piece Construction Hot-weld bottom seam provides superior seal integrity — verified zero-bypass at rated differential pressure.	**Resin-Free Polypropylene** Pure melt-blown PP with no resin binders or surface treatment ensures broad chemical compatibility and food-grade compliance.
Oil & Particle Dual Capture Microfibre capillary network simultaneously absorbs emulsified oils and retains particulate contaminants in a single pass.	**Chemical & Thermal Resistance** PP/Melt-Blown Polyester resists acids, alkalis and solvents; rated to 82 °C for demanding industrial environments.

PERFORMANCE MATRIX — MICRON RATING & β-RATIO (ISO 16889)

Nominal Micron (µm)	β-Ratio (βx ≥ 200)	Efficiency (%)	Max Flow S1 (gpm / lpm)	Max Flow S2 (gpm / lpm)	Init. ΔP (psid)	Max ΔP (psid)
1 µm	β1 ≥ 200	99.5%	45 / 170	90 / 340	2.0	35
5 µm	β5 ≥ 200	99.5%	45 / 170	90 / 340	1.5	35
10 µm	β10 ≥ 200	99.5%	45 / 170	90 / 340	1.0	35
25 µm	β25 ≥ 200	99.5%	45 / 170	90 / 340	0.8	35
50 µm	β50 ≥ 200	99.5%	45 / 170	90 / 340	0.5	35
100 µm	β100 ≥ 200	99.5%	45 / 170	90 / 340	0.3	35

PRODUCT SELECTION — BAG SIZE & DIMENSIONS

Bag Size	Body Dimensions	Collar OD	Max Flow (gpm / lpm)	Collar	Housing Series
Size 1 (7"×17")	Ø178×432 mm	Ø178 mm	45 / 170	PP Ring	Standard single-bag housing
Size 2 (7"×32")	Ø178×813 mm	Ø178 mm	90 / 340	PP Ring	High-flow single-bag housing

BILL OF MATERIALS & CHEMICAL COMPATIBILITY

Collar	Polypropylene (PP)	**Max Temperature**	82 °C (180 °F)
Filter Media	Melt-Blown Polyester / PP	**pH Resistance**	1 – 13
Sealing Method	Hot-Weld Bonded (One-Piece)	**CFR Compliant**	Yes — 21 CFR 177.152
Outer Layer	Double-layer PP protective sheath	**Compatible Fluids**	Water, oils, solvents, hydraulic fluids
Resin / Binders	None — pure PP construction	**Incompatible**	Oxidising acids (>70%), ketones
Metal Parts	None (fully non-metallic)	**Sterilisation**	Not recommended

APPLICATIONS GUIDE

Application	Process Fluid	Target Contaminants	Rec. Micron	Change Interval
Parts Cleaning	Water-based / Alkaline	Metal fines, swarf, grinding particles	10–50 µm	Weekly – Monthly
Lacquer Filtration	Solvent-based	Pigment agglomerates, gel particles	1–10 µm	Per production batch
Activated Carbon Removal	Process water	Carbon fines, black particulate	5–25 µm	Per regeneration cycle
Hydraulic Oils & Lubricants	Mineral / Synthetic oil	Metal wear particles, sludge	10–50 µm	Condition-based