Filter Bags

PROGAF™ ACCUGAF™ ABP LOFCLEAR™ MAX-LOAD<sup>™</sup> HAYFLOW<sup>™</sup> HAYFLOW Q DURAGAF<sup>™</sup>

CLEARGAF™ SENTINEL® SNAP-RING® BANDSEAL™

# High performance unparalleled selection



# Wide range of filter bag materials and fabrication technologies to meet every need

From unique element designs that range from multilayer construction, pleated extended surfaces and fully-welded seams to advanced sealing technology, Eaton delivers performance products for both simple and complex applications.

Whether sewn or welded, Eaton filter bags are fabricated using the most advanced techniques and equipment in the world. Highly automated welding systems produce consistent, dependable bag construction. Eaton's proprietary UNIWELD system provides bag seals that are strong, yet flexible to conform to restrainer baskets. Foodgrade products are manufactured in facilities where both the environment and materials are controlled to assure cleanliness.

This range of design and fabrication options offers solutions for the full spectrum of fine and coarse filtration applications. Repeatable, durable, cost-effective technology is working for Eaton's customers.

Eaton's complete line of single and multi-bag filter housings and filter bags are used in a variety of industries and are designed to meet the needs of the most demanding applications. Eaton's bag filtration systems help customers around the world meet their need for efficiency, safety, convenience and value.



## **Selection Guide**

#### HIGH EFFICIENCY



#### **PROGAF** filter bags

Combines high-efficiency media with a high-capacity pre-filter for effective retention rating down to the submicron level.



ACCUGAF / ABP filter bags

Highly efficient with an extremely high particle retention rating. Cost-effective filtration solutions for demanding applications with efficiencies greater than 99%.



LOFCLEAR filter bags Highly effective filter bags with a special, multi-layer construction that results in *absolute* efficiency for demanding applications.



# MAX-LOAD coreless filter bags

High efficiency, meltblown filter bag without inner core.

#### **HIGH CAPACITY**



# MAX-LOAD pleated filter bags

Extended-life pleated material increases dirt-holding capacity and lasts up to ten times longer than standard needle-felt filter bags.



HAYFLOW filter elements Combines the best of filter bags and filter cartridges in one element.



HAYFLOW Q filter elements High capacity extended-life needle felt with ultrafine nylon mesh cover layer with *absolute* efficiency.



DURAGAF filter bags Extended-life material results in fewer filter bag change-outs, improves operating efficiencies and reduces operating costs.

# FOOD

## CLEARGAF filter bags

Meets EC and FDA requirements for pharmaceutical, food and beverage industries.





SENTINEL filter bags Fully-welded construction for high efficiency and bypass-free filtration.



SNAP-RING filter bags Sewn construction in needle felt, monofilament and multifilament material.



# ABSORPTION INSERT filter elements

The ultimate solution for increased dirt and oil removal capacity.



Monofilament filter bags Different materials of SENTINEL and SNAP-RING monofilament filter bags cover many applications with chemical and thermal properties.



Multifilament filter bags Basic line of nominal rated sewn SNAP-RING multifilament mesh bags.



BANDSEAL filter bags Tie-on filter bags for filtration without a bag filter housing.

## **Technical Data**

Ranges	Codes								A	vailab	le grai	des							Sizes	Seal rings	Welded or sewn ring/side/bottom	Materials	Media types	Surface finish	Max. oper. temp. (°C)
PROGAF	PGF	50, 5	51 or	55															02	Е	W/W/W	PP	Melt		90
ACCUGAF	AGF	51, 5	53, 55	, 57 o	r 59														01, 02	Е	W/W/W	PP	Melt		90
	AGFE	51, 5	55 or	57															01, 02	Н	W / S / S	PET	Melt		150
ABP	ABP	1, 5,	10 o	r 25															03, 04	Е	W/W/W	PP	Melt		90
LOFCLEAR	LCR	123,	124,	125, 1	26,	128, 1	29, 1	30 or	135										01, 02	Е	W / S / S	PP	Melt		90
	LCR	522,	525,	527 o	r 529	9													02	Z	W/W/W	PP	Melt		90
MAX-LOAD	CLPO	1, 5, 10, 20, 50,100 or 150									01, 02	Е	W/W/W	PP	Melt		90								
coreless	CLPE	1, 5, 10, 20, 50,100 or 150									01, 02	Н	W/W/W	PET	Melt		135								
Ranges	Codes	1	5	10	25	50	80	100	Av 125	vailab 150	le grad 200	des 250	300	400	600	800	1000	1250	Sizes	Seal rings	Welded or sewn ring/side/bottom	Materials	Media types	Surface finish	Max. oper. temp. (°C)
MAX-LOAD	POXL			•		•	Ì												01, 02	Е	W/W/W	PP	Felt	Glazed	90
pleated	PEXL																		01, 02	Н	W/W/W	PET	Felt	Glazed	135
HAYFLOW	POXL																		02	Е	W/W/W	PP	Felt	Glazed	90
	PEXL			•															02	Н	W/W/W	PET	Felt	Glazed	150
	LCR	128																	02	Е	W / S / W	PP	Melt		90
HAYFLOW Q	POXL																		02	Е	W/W/W	PP	Felt	Glazed	90
	PEXL																		02	Н	W/W/W	PET	Felt	Glazed	150
DURAGAF	POXL																		01, 02	Е	W/W/W	PP	Felt	Glazed	90
	PEXL																		01, 02	Н	W/W/W	PET	Felt	Glazed	150
CLEARGAF	POF																		01, 02	Е	W/W/W	PP	Felt	Singed	90
	POXLF																		01, 02	Е	W/W/W	PP	Felt	Glazed	90
	PEF																		01, 02	Н	W/W/W	PET	Felt	Singed	140
	PEXLF																		01, 02	Н	W/W/W	PET	Felt	Glazed	140
	NMOF																		01, 02	Н	W / S / S	Nylon	Mesh		140
SENTINEL	PO																		01, 02, 03, 04	Е	W/W/W	PP	Felt	Singed	90
	PE	•		•	•														01, 02, 03, 04	Н	W/W/W	PET	Felt	Singed	150
SNAP-RING	PO																		01, 02	S	S / W / S	PP	Felt	Singed	110
	PO	•		•															03, 04	S	S / S / S	PP	Felt	Singed	110
	PE			•															01, 02	S	S / W / S	PET	Felt	Singed	190
	PE	•	•					•			•								03, 04	S	S / S / S	PET	Felt	Singed	190
	NY			•															01, 02, 03, 04	S	S / S / S	Nylon	Felt		190
	РТ	•		•															01, 02	А	S / S / S	PTFE	Felt		260
	НТ				•														01, 02	А	S / S / S	MA	Felt	Singed	205
Monofilament	NMO																		01, 02, 03, 04	S	S / S / S	Nylon	Mesh		190
	NM0		•	•	•	•		•			•	•	•			•			01, 02, 03, 04	Z	S / S / S	Nylon	Mesh		125
	PM0							•			•		•		•	•			01, 02	А	S/S/S	PP	Mesh		110
	PEM0						•												01, 02	S	S/S/S	PET	Mesh		190
	PEEKMO										•				•				01, 02	А	S/S/S	PEEK	Mesh		240
Multifilament	PEMU																		01, 02	S	S/S/S	PET	Mesh		145
BANDSEAL	NMO				•		•												01		S/S/S	Nylon	Mesh		190
	NMO				•	•					•	•							43, 45	R	S/S/S	Nylon	Mesh		190

Chart abbreviations: PET: polyethylene terephthalate, PP: polypropylene, MA: Meta-Aramid, Melt: melt-blown, W: welded seams, S: sewn seams. **Ring abbreviations**: E: polypropylene/SENTINEL seal ring, H: polyester/SENTINEL seal ring, Z: Santoprene™/SENTINEL seal ring, S: zinc-plated steel SNAP-RING, A: Stainless steel SNAP-RING, R: without seal ring

Maximum flow rates for most filter bag ranges are as shown below with the following exceptions:

1) POXL, PEXL, POXLF and PEXLF filter bags, size 01: 15 m³/h and size 02: 30 m³/h. 2) AGF, AGFE and LCR 100 filter bags, size 01: 8 m³/h and

size 02: 15 m<sup>3</sup>/h. 3) LCR 500 filter bags, size 02: 12 m<sup>3</sup>/h. 4) PGF filter bags, size 02: 10 m<sup>3</sup>/h

#### **Filter specifications**

Size	Max. flow rate (m³/h)	Filter area (m²)	Volume (I)	Diameter (mm)	Length (mm)
01	20	0.24	7.6	180	430
02	40	0.48	17.0	180	810
03	6	0.08	1.9	100	230
04	12	0.16	2.7	100	380
43	6	0.09	3.0	89	300
45	12	0.15	4.5	89	500

Santoprene^ $\ensuremath{^{\rm TM}}$  is a registered trademark of Exxon Mobile Corporation

#### Chemical resistance of filter bags

Materials	Codes	Aqueous media	Aromatic solvents	Alkaline media	Strongly alkaline	Acid media	Strongly acidic
Needle felt polypropylene	PO/POXL/POF/POXLF						
Needle felt polyester	PE/PEXL/PEF/PEXFL						
Needle felt nylon	NY	•					
Needle felt meta-Aramid	HT						
Multifilament polyester	PEMU						
Monofilament polypropylene	PMO						
Monofilament nylon	NMO						
Needle felt PTFE	PT						
Monofilament PEEK	PEEKMO						

## **Applications**

Automotive Filtration of pre-treatment bath, filtration of e-coat, top coat and clear coat, primer, paint ring line filters, parts cleaning fluids, drawing compounds, lubricants, metal working fluids and pump intake filters.

#### **Chemical** Catalyst

recovery, removal of pipe scale, polishing of aqueous process fluids, alkalis, acids and solvents, filtration of emulsions and dispersions, gel removal from resins. Activated carbon or catalyst removal in the fine chemicals industry is a typical example of a demanding application in chemical processing. Eaton filter bags meet the requirements for high-efficiency, yet also offer long service life and reliability.

**Electronics** Wafer and chip processing, electronic etching baths, photo-chem-

ical polishing, and highpurity water filtration and pre-filtration of various membrane filtration processes to improve their cost-effectiveness. Eaton filter bags demonstrate the required purity, efficiency and consistent performance.

#### Food and beverage

Filtration of wine, spirits and beer, removal of particles from edible oils, removal of carbon black from cellulose, slime removal in gelatin, liquid sugar, thick juice, corn syrup polishing, starch processing, milk processing and soft drinks. Many Eaton filter bags conform to FDA and EC food processing standards and can meet the unique and varied demands of these applications.

**Metal working** Filtration of hydraulic oil, pre-treatment system filtration, precious metal recovery, metal working fluids and drawing compounds. Parts cleaning machines use our filter bags for minimizing residual dirt on parts.

#### **Paint and lacquer**

Removal of agglomerates, removal of paint coagulates, solvent filtration, removal of storage contaminants, filling lines, paint mixing lines and monomer purification.

**Petrochemicals** Filtration of lube oils, fuel additives, enhanced oil recovery, filtration of amine solutions, filtration of glycol fluids, gas purification processes, distillation and cracking processes, amine washers, off-shore filter stations, oil drilling and injection fluids.

**Pharmaceutical** Recovery of expensive active ingredients, catalyst recovery, active carbon purification and removal, filtration of gelatin, hormones, vitamin extracts, polishing of herbal mixtures, protein removal from plasma, filtration of saline solutions

#### **Resins, plastics, inks**

and coatings Oil and polymer filtration, dispersions, polymerization batches, resins for can coatings, plastics compounding, printing ink, plastics processing, paper coatings, high-purity ink-jet fluid filtration.

Water treatment Well water filtration, water treatment plants, silt removal, pipe scale removal, sand and algae removal from sea water, ion exchange resin recovery, calcium deposit removal, filtration of chemicals used for water treatment, dust removal from cooling tower installations.

## Contaminant Spectrum Factors to consider when selecting a filter bag range

	Contaminant particle size							
	Fine filtration		Coarse filtration					
	1 µm	10 µm	100 µm	1,000 μm				
Ranges		Monofilamen	t filter bags • SNAP-RING filter bags					
		<ul> <li>MAX-LOAD pleated filter bags</li> <li>HAYFLOW filter elements</li> <li>DURAGAF filter bags</li> <li>CLEARGAF filter bags</li> <li>SENTINEL filter bags</li> </ul>						
	PROGAF filter bags     ACCUGAF filter bags     MAX-LOAD coreless / ABP filt     LOFCLEAR filter bags	ter bags						
Materials			mesh materials colute retention rating 1					
		Precision needle felt materials • MAX-LOAD pleated filter bags • HAYFLOW filter elements • DURAGAF extended-life filter bags • CLEARGAF filter bags • Standard needle felt filter bags						
	Precision melt-blown materia PROGAF filter bags ACCUGAF filter bags LOFCLEAR filter bags MAX-LOAD coreless filter bag							
Seal rings			<b>BANDSEAL seal ring</b> • Simple, effective					
		<ul><li>SNAP-RING seal rings</li><li>Versatile, cost-effective</li><li>Wide range of material</li></ul>						
	SENTINEL seal rings • "The best in the business" • Pressure activated seal ring • Wide fluid and temperature co	mpatibility						

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