

CECO Mefiag

BULLETIN 560
SETHCO
BAG FILTER SYSTEMS
AND CHAMBERS
FOR FILTRATION OF
CORROSIVE LIQUIDS



CHOOSE FROM 22 SYSTEMS

CORROSION RESISTANT CONSTRUCTION

Wetted components of the bag filter chambers are non-contaminating CPVC, PVC or Kynar assuring absolutely no metal contact with solution. The available pumps are provided in several different materials of construction, chosen for optimum performance for each application.

BAG FILTRATION SYSTEMS

Complete systems include a pump and motor, chamber, filter bag, inlet and discharge hoses and all accessories required to set up and operate the system. All systems (except with ZDX Series pumps) are mounted on a corrosion resistant rigid plastic panel on rubber tire/ball bearing casters or rubber feet, depending on model. DBG-1/2, 1, & 1 1/2 chambers sold with a Model ZDX pump come with an adjustable polypropylene mounting panel. Chamber models 2, 3 and 5 are provided with a coated steel base unless customer requests tank flange mount.

HIGH STRENGTH REUSABLE BAG FILTERS

Filter bags are constructed of polypropylene felt. The high strength felt is produced by the kneading of two layers of polypropylene fibers into a supporting scrim. This provides depth filtration and a higher solids-loading capacity than an equivalent area of mesh fabric. The one-piece design of the filter bag provides a positive seal when locked into the chamber, ensuring no contaminant by-pass and high efficiency filtration.

The A, B, C size bags are for the DBG-1/2, DBG-1, & DBG-1-1/2 chambers respectively.

They provide up to 1-1/2 square feet of filtration area and are available in 1, 10, 25 and 50 micron sizes.

The 2, 3, and 5 size bags are for the 2, 3, and 5 series chambers respectively. They provide up to 5.2 square feet of filtration area and are available in 1, 3, 10, 25, 50, 100 and 300 micron sizes.



High Strength Reusable Bag Filters



Model PMSPBG-2 bag filtration system, with powerful self-priming, magnetic drive, sealless pump, can be positioned anywhere outside of tank, even above it or below it.



Model ZDBG-5 bag filtration system, shown with floor mounted DBG-5 chamber and the ZDX series bearing-free vertical pump mounted inside the tank.



Compact Model ZDBG-1/2 filtration system with pump and chamber mounted inside of tank. The chamber and pump can also be mounted outside of tank.



Model PMBG-5 for high volume filtration. The pump and chamber are mounted on a rigid plastic panel with rubber ball-bearing casters for portability.

TABLE #2

SELF PRIMING, MAGNETIC DRIVE* SEALLESS CENTRIFUGAL PUMP			WITH MAGNETIC DRIVE* SEALLESS PUMP			WITH, SELF PRIMING SEALLESS VERTICAL IN-TANK PUMP			WITH DIRECT DRIVE CENTRIFUGAL PUMP		
SYSTEM MODEL NO.	MAX. OPER. TEMP.	PUMP MODEL NO.	SYSTEM MODEL NO.	MAX. OPER. TEMP.	PUMP MODEL NO.	SYSTEM MODEL NO.	MAX. OPER. TEMP.	PUMP MODEL NO.	SYSTEM MODEL NO.	MAX. OPER. TEMP.	PUMP MODEL NO.
PMSPBG-1/2A	180°F (82°C)	PMSP-510	PMBG-1/2	180°F (82°C)	PM-510	ZDBG-1/2	200°F (93°C)	ZDX-1/2B	—	—	—
KMSPBG-1/2A	210°F (99°C)	KMSP-510	KMBG-1/2	210°F (99°C)	KM-510	ZKBG-1/2	210°F (99°C)	ZKX-1/2BS	—	—	—
PMSPBG-1A	180°F (82°C)	KMSP-510	PMBG-1	180°F (82°C)	PM-510	ZDBG-1	200°F (93°C)	ZDX-1/2B	—	—	—
KMSPBG-1A	210°F (99°C)	KMSP-510	KMBG-1/2	210°F (99°C)	KM-510	ZKBG-1	210°F (99°C)	ZKX-1/2BS	—	—	—
PMSPBG-1 1/2A	180°F (82°C)	PMSP-510	PMBG-1 1/2	180°F (82°C)	PM-510	ZDBG-1-1/2	200°F (93°C)	ZDX-1/2B	—	—	—
KMSPBG-1 1/2	210°F (99°C)	KMSP-510	KMBG-1	210°F (99°C)	KM-510	ZKBG-1	210°F (99°C)	ZKX-1/2BS	—	—	—
PMSPVBG-2	140°F (60°C)	PMSP-1040WT	PMVBG-2	140°F (60°C)	PM-1040WT	ZDVBG-2	140°F (60°C)	ZDX-3/4A	—	—	—
PMSPBG-2	180°F		PMBG-2	180°F		ZDBG-2	180°F		—	—	—
KMSPKBG-2	210°F	KMSP-1040WT	KMKBG-2	210°F	KM-1040WT	ZDKBG-2	210°F	ZKX-3/4A	—	—	—
PMSPVBG-3	140°F (60°C)	PMSP-1040HG	PMVBG-3	140°F (60°C)	PM-1040HG	ZDVBG-3	140°F (60°C)	ZDX-1F	CRSVBG-3	140°F (60°C)	CRS-110PP
PMSPBG-3	180°F		PMBG-3	180°F		ZDBG-3	180°F		CRSBG-3	180°F	
KMSPKBG-3	210°F	KMSP-1040HG	KMKBG-3	210°F	KM-1040HG	ZDKBG-3	210°F	ZKX-1F	KRSKBG-3	210°F	KRS-110PP
PMSPVBG-5	140°F (60°C)	PMSP-1040HG	PMVBG-5	140°F (60°C)	PM-1040HG	ZDVBG-5**	140°F (60°C)	ZDX-2D	CRSVBG-5	140°F (60°C)	CRS-110PP
PMSPBG-5	180°F		PMBG-5	180°F		ZDBG-5	180°F		CRSBG-5**	180°F	
KMSPKBG-5	210°F	KMSP-1040HG	KMKBG-5	210°F	KM-1040HG	ZDKBG-5	210°F	ZKX-2D	KRSKBG-5	210°F	KRS-110PP
PMSPVBG-5HF	140°F (60°C)	PMSP-1500	PMVBG-5HF	140°F (60°C)	PM-1500	ZDBG-5HF	140°F (60°C)	ZDX-3	—	—	—
PMSPBG-5HF	180°F 82°C		PMBG-5HF	180°F 82°C		ZDBG-5HF	160°F 71°C		—	—	—

† Bag Filter System flow rate is dependent on maximum pump flow. See Table #3 for pump characteristics. **Suction hose is not provided for these models

Sethco HIGH CAPACITY BAG FILTER CHAMBERS AND SYSTEMS

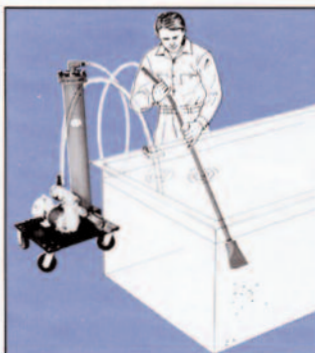
Low initial cost and reusable filter media make Sethco's bag filter an economical answer to a variety of corrosive liquid filtration needs.

FEATURES

- Filtration to 7500 GPH (28,390 LPH).
- Filters corrosive liquids down to 1 micron at temperatures to 200°F (93°C).
- CPVC Construction to 200°F (93°C), PVC to 140°F (60°C), Kynar to 210°F (99°C).
- Chamber pressure to 100 PSI at 73°F (23°C) (derate as temperature increases). For higher pressures or temperatures, consult factory.
- Easy "Drop-In" filter bag replacement.
- Positive bag seal prevents any liquid by-pass.
- Low cost filtration through reuse and finally through less bulky media disposal.



Filter bags are easy to replace.
1. Remove cover.
2. Pull out used filter bag.
3. New filter bag fits quickly and securely into chamber.



Custom bag filter system equipped with the Sethco PMSP Self Priming pump and vacuum wand kit can be used to vacuum out plating tanks. For complete information, request Bulletin 951.

SIX CHAMBER SIZES TO MEET YOUR FILTRATION REQUIREMENTS

Sethco bag filter chambers are designed for dependable, continuous duty service, simple operation and minimum maintenance.

The compact models DBG-1/2, DBG-1, and DBG-1-1/2 feature screw top covers for fast filter bag replacement and solid integral one piece shell and base construction. These chambers can filter up to 600 GPH and provide up to 1-1/2 square feet of filtration area. These CPVC chambers are recommended to 200°F (93°C). The larger models, series 2, 3, and 5 are designed to withstand fluid pressure to 60 psi and filter up to 7500 GPH (28,390 LPH). These chambers come mounted on a sturdy coated steel base. The CPVC DBG series are recommended to 200°F (93°C), PVC VBG series to 140°F (60°C) and Kynar KBG series to 210°F (99°C). Sethco custom filter bags are easy to install and fit securely into the chamber preventing any liquid by-pass. They are available in ratings to one micron.

APPLICATIONS

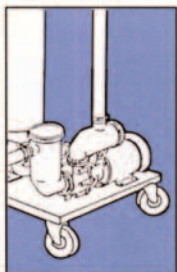
Sethco Bag Filter chambers and Systems are engineered to provide economical removal of foreign particulates from a wide range of chemical solutions including most metal finishing applications. When properly equipped, they are suitable for chrome plating solutions as well as electroless copper and electroless nickel, to 200°F (93°C). Always advise Sethco of your application when ordering.



TABLE #1

SPECIFICATIONS		BAG FILTER CHAMBERS						
AVAILABLE CHAMBERS AND DIMENSIONS	CHAMBER MODEL NO.	MAXIMUM RECOMMENDED FLOW RATE FOR OPTIMAL FILTRATION	FILTER AREA	FILTER BAGS	PORTS		MAX. TEMP.	NET WT
					INLET (NPT)	OUTLET (NPT)		
	DBG-1/2 CPVC	600 GPH (2,270 LPH)	.05 ft (15.2 cm)	A	3/4"	3/4"	200° F (93° C)	6 lbs. (2.7 kilos)
	KBG-1/2 KYNAR						210° F (99° C)	
	DBG-1 CPVC	600 GPH (2,270 LPH)	1.0 ft (30.5 cm)	B	3/4"	3/4"	200° F (93° C)	7-1/4 lbs. (3.3 kilos)
	KBG-1 KYNAR						210° F (99° C)	
	DBG-1-1/2 CPVC	600 GPH (2,270 LPH)	1.5 ft (46 cm)	C	3/4"	3/4"	200° F (93° C)	8-1/2 lbs. (3.8 kilos)
	KBG-1-1/2 KYNAR						210° F (99° C)	
	VBG-2	3000 GPH (11,356 LPH)	1.8 ft (55 cm)	#2	1-1/2"	1-1/2"	140° F (60° C)	18 lbs. (8.1 kilos)
	DBG-2						210° F (99° C)	
	KBG-2						210° F (99° C)	
	VBG-3	4500 GPH (17,033 LPH)	3 ft (91 cm)	#3	1-1/2"	1-1/2"	140° F (60° C)	22 lbs. (9.9 kilos)
	DBG-3						210° F (99° C)	
	KBG-3						210° F (99° C)	
	VBG-5	7500 GPH (28,390 LPH)	5.2 ft (158 cm)	#5	1-1/2"	1-1/2"	140° F (60° C)	28 lbs. (13.3 kilos)
	DBG-5						210° F (99° C)	
	KBG-5						210° F (99° C)	

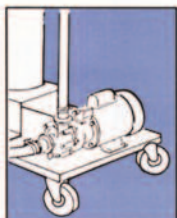
PUMP SELECTION GUIDE



Self-Priming Sealless Magnetic Drive Pumps

Features polypropylene or Kynar sealless construction with permanent encapsulated impeller-magnet. After initial priming, it can run "dry" without pump damage. Shaft wear and replacement problems are minimized. For temperatures to 180°F (82°C). For higher temperatures, the pump is available in Kynar® (consult factory).

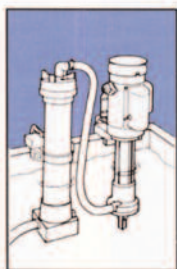
Visit Sethco's website at www.sethco.com for complete information



Sealless Magnetic Drive Pumps

Features sealless, polypropylene or Kynar construction with permanent encapsulated magnet. Shaft wear and replacement problems are minimized. For temperatures to 180°F (82°C). For higher temperatures pumps are available in Kynar® (consult factory).

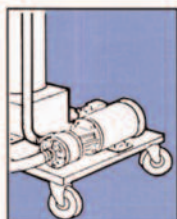
Visit Sethco's website at www.sethco.com for complete information



Bearing Free Sealless Vertical Pumps

Features bearing-free sealless CPVC or Kynar construction with no metal contact. Vertical design requires a minimum of space and the twin-impeller feature allows the pump to be positioned anywhere on tank flange, even outside the tank. Pumps are self priming when mounted inside tank. For temperatures to 200°F (93°C).

Visit Sethco's website at www.sethco.com for complete information



Direct Drive Centrifugal Pumps Model CDC-1-1/2 x 2 x 5-4-1/2

PP construction with PVDF impeller - for temperatures to 180° F.

See "Pumps" under Mefiag website

Motors: All motors are TEFC. All motors to 2 hp are equipped with waterproof switch and grounded cord. (Single phase motors greater than 1 HP are not provided with switch or cord).

TABLE #3

PUMP MOTOR	MAX. PUMP FLOW (GPH)	MAX. PUMP PRESSURE	MOTOR HP
SELF PRIMING SEALLESS MAGNETIC DRIVE PUMPS (Max. temp. 180°F/ 82°C)			
PMSP-510/KMSP-510	1080	15	1/3
PMSP-1040WT	3120	24	1
PMSP-1040HG	3600	26	2
PMSP-1500	4980	32	3

SEALLESS MAGNETIC DRIVE PUMPS (Max. temp. 180°F/82°C)

PM-510/ KM-510	1200	16	1/3
PM-1040WT	3360	24	1
PM-1040HG	3800	26	2
PM-1500	5760	33	3

SELF PRIMING SEALLESS VERTICAL IN-TANK PUMPS (Max. temp. 200° F/93°C)

ZDX-1/2 B / ZKX-1/2B	2600	10	1/4
ZDX-3/4B	3600	12	3/4
ZDX-1F	4560	21	1
ZDX-2D	6000	27	2
ZDX-3	6600	36	3

DIRECT DRIVE CENTRIFUGAL PUMPS

CRS-110-PP	6500	34	3
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WARRANTY: One year warranty against defective parts and workmanship. See Form TC-01 for full warranty details. Always be specific about your application in order that proper materials may be furnished. Let us or an authorized distributor know: liquids being handled, gallons, temperatures and pH. pH. The standard warranty does not apply when equipment is used contrary to factory recommendations. o factory recommendations. Since our policy is one of continual improvement, we reserve the right to change design or materials at any time, without giving notice or creating any obligation to previous or future customers.

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