GUARDIAN® FILTRATION SYSTEMS

Versatile and reliable recirculatory filtration for electroplating or chemical processing



- Flow rates to 10,000 GPH @ 60 Hz
 (31,500 LPH @ 50 Hz)
- Non-metallic solution contact
 PVC, CPVC or polypropylene
 PVDF systems available
- Choice of pump: magnetic coupled, single or double mechanical seal, self-priming
- Choice of media: sleeve, cartridge, disc, bag (See Bulletin F-155 for disc systems)

The following pages contain a representative sampling of standard Guardian systems. Consult Sales Department for additional selections.

Guardian Filtration Systems have gained wide approval for recirculatory purification of most electroplating and chemical process solutions. They have proven to be a reliable workhorse for over three decades. With hundreds of systems in service around the globe, you can be confident a Guardian Filtration System will improve the

clarity of your process solutions, increase production quality, and reduce process cost.

Choose a basic filtration system with your choice of media, pump and filter chamber. Then select from a wide range of optional equipment to customize your system. Call us and we'll help you select the perfect system for your application.

Guardian systems include the following standard features:

- Non-metallic solution contact
- Stainless steel external fasteners
- Swing bolt chamber closures
- EPDM elastomers standard, Viton optional
- Corrosion resistant FRP base
- Flow control valve between pump and filter
- Drain valve on filter chamber

- Industrial duty SERFILCO pump
- Hard piping and wet testing prior to shipping
- Corrosion resistant vent valve
- Silicon carbide seals on mechanical seal pumps
- Glycerin filled 316 SS pressure gauge and guard assembly

GUARDIAN CARTRIDGE FILTRATION SYSTEMS

CPVC single or double seal 2 direct drive pump and CPVC or PVC1 filter chamber

Custom	Flow	Rate	Pump	Duman	Pump	Cartridge	Filter		Solids	Suct. / Disch	Overall	Ship.
System Number	GPH @ 60 Hz	LPH @ 50 Hz	Series	Pump HP	Max. PSI	Change PSI	Series	Media	Area (sq. ft.)	FNPT Conns. (inches)	Dimensions (in.) (L x W x H)	Weight (lbs)
CG24HE115H	4,200	13,200	HE	1.5	24	20	G	12 - 20"	84	2 x 1 ¹ / ₂	50 x 24 x 32	205
CG36HE115H	4,200	13,200	HE	1.5	24	20	G	12 - 30"	126	2 x 1 ¹ / ₂	50 x 24 x 42	215
CG48HE115H	4,200	13,200	HE	1.5	24	20	G	12 - 40"	168	2 x 1 ¹ / ₂	50 x 24 x 52	230
CG36HE220H	5,400	17,000	HE	2.0	27	24	G	12 - 30"	126	2 x 1 ¹ / ₂	50 x 24 x 42	225
CG48HE220H	5,400	17,000	HE	2.0	27	24	G	12 - 40"	168	2 x 1 ¹ / ₂	50 x 24 x 52	240
CG60HE220H	5,400	17,000	HE	2.0	27	24	G	12 - 50"	210	2 x 1 ¹ / ₂	50 x 24 x 62	250
CG36HE330H	6,500	20,500	HE	3.0	36	32	G	12 - 30"	126	2 x 1 ¹ / ₂	50 x 24 x 42	235
CG48HE330H	6,500	20,500	HE	3.0	36	32	G	12 - 40"	168	2 x 1 ¹ / ₂	50 x 24 x 52	245
CG60HE330H	6,500	20,500	HE	3.0	36	32	G	12 - 50"	210	2 x 1 ¹ / ₂	50 x 24 x 62	255
CG36HE450H	8,500	26,800	HE	5.0	50	45	G	12 - 30"	126	2 x 1 ¹ / ₂	50 x 24 x 42	250
CG48HE450H	8,500	26,800	HE	5.0	50	45	G	12 - 40"	168	2 x 1 ¹ / ₂	50 x 24 x 52	260
CG60HE450H	8,500	26,800	HE	5.0	50	45	G	12 - 50"	210	2 x 1 ¹ / ₂	50 x 24 x 62	270
CG96HE450H	8,500	26,800	HE	5.0	50	45	(2)G	24 - 40"	336	2 x 2	66 x 24 x 52	395
CG120HE450H	8,500	26,800	HE	5.0	50	45	(2)G	24 - 50"	420	2 x 2	66 x 24 x 62	425
CG96HE575H	10,000	21,500	HE	7.5	60	45	(2)G	12 - 40"	336	2 x 2	66 x 24 x 52	440
CG120HE575H	10,000	21,500	HE	7.5	60	45	(2)G	12 - 50"	420	2 x 2	66 x 24 x 62	470

Polypropylene magnetic drive pump and CPVC, PVC¹ or polypropylene filter chamber

System	Flow	Rate	Pump	Pump	Pump	Cartridge	Filter		Solids	Suct. / Disch	Overall	Ship.
Number	GPH @ 60 Hz	LPH @ 50 Hz	Series	HP	Max. PSI	Change PSI	Series	Media	Area (sq. ft.)	FNPT Conns. (inches)	Dimensions (in.) (L x W x H)	Weight (lbs)
CG24M210H	3,000	13,200	М	1.0	20	16	G	12 - 20"	84	2 x 1 ¹ / ₂	50 x 24 x 32	185
CG36M210H	4,200	13,200	М	1.0	20	16	G	12 - 30"	126	2 x 1 ¹ / ₂	50 x 24 x 42	195
CG48M210H	4,200	13,200	М	1.0	20	16	G	12 - 40"	168	2 x 1 ¹ / ₂	50 x 24 x 52	210
CG36F315H	3,900	12,300	F	1.5	2.0	16	G	12 - 30"	126	1 ¹ /2 x 1 ¹ /2	50 x 24 x 42	215
CG48F315H	3,900	12,300	F	1.5	2.0	16	G	12 - 40"	168	1¹/2 x 1¹/2	50 x 24 x 52	230
CG60F315H	3,900	12,300	F	1.5	2.0	16	G	12 - 50"	210	1¹/2 x 1¹/2	50 x 24 x 62	240

Listed system includes CPVC chamber. To order system with PVC chamber — change the first C to P in System No. and Model No. For polypropylene systems, change the first C to PP in system No. For PVDF systems consult Sales Dept.

 $^{^{2} \;\;}$ To order pump with double mechanical seal — change ${\bf HE}$ to ${\bf HED}$ in System.

GUARDIAN CARTRIDGE FILTRATION SYSTEMS

Polypropylene magnetic drive pump and CPVC, PVC¹ or polypropylene filter chamber (Cont.)

System		Rate	Pump	Pump	Pump	Cartridge	Filter		Solids	Suct. / Disch	Overall	Ship.
Number	GPH @ 60 Hz	LPH @ 50 Hz	Series	HP	Max. PSI	Change PSI	Series	Media	Area (sq. ft.)	FNPT Conns. (inches)	Dimensions (in.) (L x W x H)	Weight (lbs)
CG36F420H	4,700	14,800	F	2.0	26	24	G	12 - 30"	126	1 ¹ / ₂ x 1 ¹ / ₂	50 x 24 x 42	225
CG48F420H	4,700	14,800	F	2.0	26	24	G	12 - 40"	168	1 ¹ / ₂ x 1 ¹ / ₂	50 x 24 x 52	240
CG60F420H	4,700	14,800	F	2.0	26	24	G	12 - 50"	210	1 ¹ / ₂ x 1 ¹ / ₂	50 x 24 x 62	250
CG36F530H	6,000	18,900	F	3.0	35	30	G	12 - 30"	126	1 ¹ /2 x 1 ¹ /2	50 x 24 x 42	235
CG48F530H	6,000	18,900	F	3.0	35	30	G	12 - 40"	168	11/2 x 11/2	50 x 24 x 52	245
CG60F530H	6,000	18,900	F	3.0	35	30	G	12 - 50"	210	1¹/2 x 1¹/2	50 x 24 x 62	255
CG48F850H	8,500	26,800	F2x2	5.0	45	33	G	12 - 40"	168	2 x 1 ¹ / ₂	50 x 24 x 52	260
CG60F850H	8,500	26,800	F2x2	5.0	45	33	G	12 - 50"	210	2 x 1 ¹ / ₂	50 x 24 x 62	270
CG96F850H	8,500	26,800	F2x2	5.0	45	33	(2)G	24 - 40"	336	2 x 2	66 x 24 x 52	395
CG120F850H	8,500	26,800	F2x2	5.0	45	33	(2)G	24 - 50"	420	2 x 2	66 x 24 x 62	425
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CG96F910H	10,000	31,500	F2x2	10.0	53	42	(2)G	24 - 40"	336	2 x 2	66 x 24 x 52	460
CG120F910H	10,000	31,500	F2x2	10.0	53	42	(2)G	24 - 50"	420	2 x 2	66 x 24 x 62	490

Bag Filtration Systems with Series 'G' Bag Chambers CPVC single or double seal ² direct drive pump and CPVC or PVC¹ filter chamber

Γ	System	Flow	Rate	Pump	Pump	Pump	Filter	Bag	Suct. / Disch	Overall	Ship.
	Number	GPH @ 60 Hz	LPH @ 50 Hz	Series	HP	Max. PSI	Series	Area (sq. ft.)	FNPT Conns. (inches)	Dimensions (in.) (L x W x H)	Weight (lbs)
ſ	CGB12HE115H	4,200	13,200	HE	1.5	24	G	12.0	1¹/2 x 1¹/2	50 x 24 x 42	215
	CGB12HE220H	5,400	17,000	HE	2.0	27	G	12.0	1¹/2 x 1¹/2	50 x 24 x 42	220
	CGB19.5HE220H	5,400	17,000	HE	2.0	27	G	19.5	1¹/2 x 1¹/2	50 x 24 x 62	240
١	CGB19.5HE330H	6,500	20,500	HE	3.0	36	G	19.5	1¹/2 x 1¹/2	50 x 24 x 62	255

Polypropylene magnetic drive pump and CPVC, PVC¹ or polypropylene filter chamber

System	Flow	Rate	Pump	Pump	Pump	Filter	Bag	Suct. / Disch	Overall	Ship.
Number	GPH @ 60 Hz	LPH @ 50 Hz	Series	HP	Max. PSI	Series	Area (sq. ft.)	FNPT Conns. (inches)	Dimensions (in.) (L x W x H)	Weight (lbs)
CGB12F315H	3,900	11,300	F	1.5	20	G	12.0	1 ¹ / ₂ x 1 ¹ / ₂	50 x 24 x 42	215
CGB12F420H	4,700	14,800	F	2.0	26	G	12.0	1 ¹ /2 x 1 ¹ /2	50 x 24 x 42	225
CGB19.5F420H	4,700	14,800	F	2.0	26	G	19.5	1 ¹ /2 x 1 ¹ /2	50 x 24 x 62	240
CGB19.5F530H	6,000	18,900	F	3.0	35	G	19.5	1 ¹ / ₂ x 1 ¹ / ₂	50 x 24 x 62	255

Listed system includes CPVC chamber. To order system with PVC chamber — change the first C to P in System No. and Model No. For polypropylene systems, change the first C to PP in System No. For PVDF systems consult Sales Dept.

 $^{^{\}rm 2}~$ To order pump with double mechanical seal — change ${\bf HE}$ to ${\bf HED}$ in System No.

Customize your Guardian with the following options

SLURRY TANK and VALVES						
SV4	SURFACE AREA	SLURRY	PRICE			
	(sq. ft.)	CAPACITY (gal.)	CODE NO.			
For chemical mixing, pump priming or precoating. Includes polyethylene tank w/CPVC frame, CPVC piping and four CPVC ball valves and tank strainer.	84	7	O-2084			
	126	11	O-2072			
	168 +	18	O-2090			
SV6 Same as above, pluse backwash and bypass valves.	84	7	O-2085			
	126	11	O-2073			
	168 +	18	O-2091			

MOTOR STARTERS						
NEMA 4X Watertight push button (mounted and wired)	PRICE CODE NO.					
Add -S to motor starter Price Code No. when ordering motor starter for use with DRI-STOP® Pump Protector <i>IMPORTANT</i> : Specify operating voltage 115 - 230V/1/50-60 230 - 460V/3/50-60	O-MS1P O-MS3P					
DRI-STOP® PUMP PROTECTOR						
DRI-STOP 2R for use with double mechanical seal pump.	O-2DS2R					
DRI-STOP 3 for use with magnetic drive or single mechanical seal pump.	O-DS3C					

CARBON PURIFICATION CHAMBER					
Includes extended base, adapter kit, flow control valve and drain valve.					
DESCRIPTION CARBON CAPACITY PRICE CODE NO.					
PVC chamber and internal canister(s) for use with granular carbon. For CPVC chamber, add C to end of Price Code No. Single 5" x 28" canister, 7.5 lbs. capacity Triple 5" x 28" canister, 22.5 lbs. capacity Triple 5" x 48" canister, 42 lbs capacity O-3528 O-3548					
CPVC chamber for use with Maxi-Carb cartridge.	Single 5" x 28" cartridge, 3.0 lbs carbon	O-1528M			

Order carbon media from Bulletin M-305.

	PRICE CODE NUMBER
PORTABLE	
Two fixed wheels, two swivel casters, pull handle	O-2042
OPERATING VOLTAGE 50 Hz	
Single phase @ 50 Hz Three phase @ 50 Hz	O-150H O-350H
EPDM ELASTOMERS	
'GC' chamber (12 column)	O-GL

SLEEVES FOR GUARDIAN (CPVC/Polypropylene)

NO. OF 10" CART.	LENGTH / QUANTITY OF SLEEVE ASSEMBLIES REQ'D	PRICE CODE NUMBER FOR COMPLETE SET
36	30"/12	O-3012
48	40"/12	O-4012
60	50"/12	O-5012
72	30"/24	O-3024
96	40"/24	O-4024
120	50"/24	O-5024

Contact Sales Department for additional options and materials of construction.

F.O.B. Northbrook, Illinois

Specifications subject to change without notice.

Registered trademarks: Viton - DuPont Dow Elastomers



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