

FLV Series Bag and Cartridge Filter Product Guide



13

#### FILTERS

FLV Series Filters - Overview	3-8
FLV Series Simplex Bag Filters - Double Length	9-12
FLV Series Simplex Bag Filters - Single Length	13-14
FLV Series Duplex Bag Filters - Double Length	15-16
FLV Series Duplex Bag Filters - Single Length	17-18

#### FILTER MEDIA / TECHNICAL INFORMATION

Needled Felt and Monofilament Mesh Filter Bags	. 19-21
How to Select a Bag Filter	. 22-23
Flow of Water Through Schedule 80 Plastic Pipe	24
How to Order Filter Bags	25
Stainless Steel Basket	26
Cartridge Filter Adapter Kits	. 27-28
Pleated Filter Cartridges	. 29-30

## Hayward® Flow Control - Define, Design, Deliver...

For more than 50 years, Hayward Flow Control's leading thermoplastic fluid handling products and solutions have proven to excel in the harshest environments. Thousands of customers worldwide have installed our products into aggressive and corrosive systems, as well as delicate life support systems where the strictest chemical balance is required. We understand the rigorous demands of industrial piping and are committed to offering advantageous products for your application that will keep your systems working.

Unlike traditional metal and plastic filters, Hayward's new patent pending FLV Series Bag Filter features a one-piece injection molded thermoplastic glass filled polypropylene body with true union end connections, ergonomic cover design with liquid displacing dome, vent valve and drain plug. Available in simplex through quadplex assembly, the FLV Series can accommodate filter bags or a single 7<sup>°</sup> cartridge or five 2-1/2<sup>°</sup> cartridges.

Hayward's industry leading thermoplastic Basket and Y-Strainers protect pipeline system components and maintenance facilities from dirt and debris while allowing process media to flow freely. Simplex and duplex strainers are manufactured in PVC, CPVC, GFPP and clear Eastar<sup>™</sup>, and are available with thermoplastic, stainless steel or alloy, perf and mesh lined baskets in a wide range of sizes. Our Y-Strainers are offered in PVC, clear PVC or CPVC, with FPM or EPDM seals.

Hayward Flow Control products carry an industry-leading, full two-year warranty. As an ISO 9001:2008 certified company, we strive for the highest quality product possible for use in a wide range of demanding applications.





### FLV Series Bag and Cartridge Filters -Overview

ALL THERMOPLASTIC, GLASS FILLED POLYPROPYLENE INJECTION MOLDED CONSTRUCTION, FOR SUPERIOR CORROSION RESISTANCE PERFORMANCE

### DOUBLE LENGTH, DUPLEX



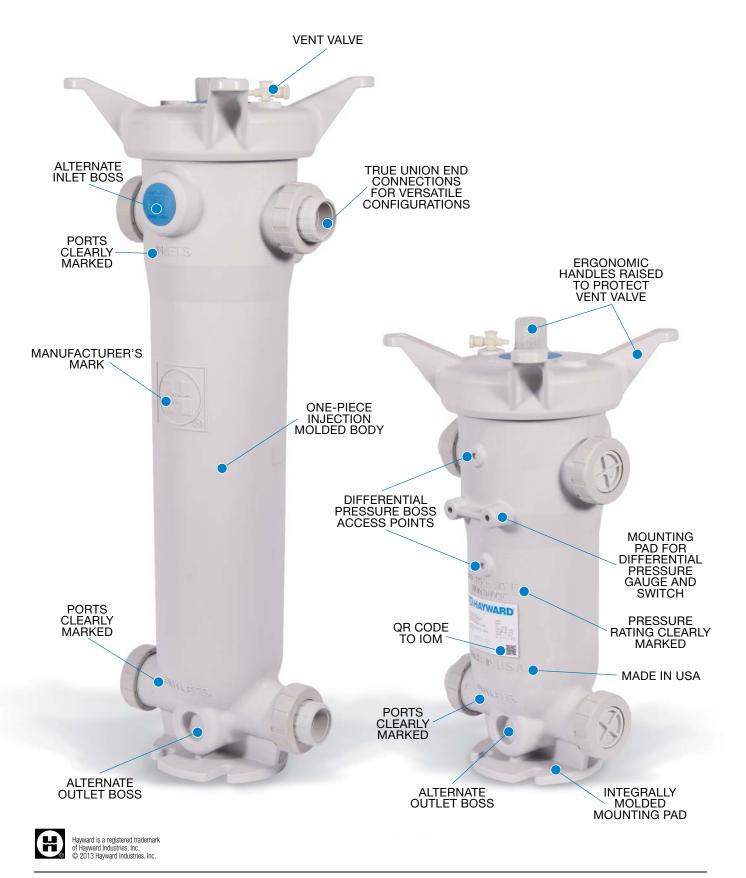
SINGLE LENGTH, SIMPLEX

#### DOUBLE LENGTH, SIMPLEX



SINGLE LENGTH, DUPLEX

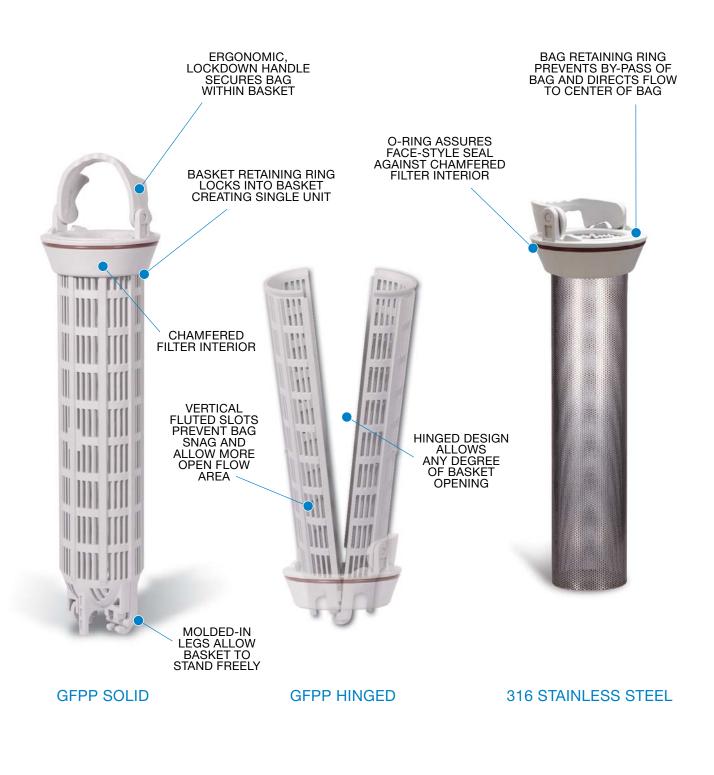
### FLV Series Filters, OVERVIEW



Contact Hayward Flow Control with questions: 1-888-429-4635 • Fax: 1-888-778-8410 • One Hayward Industrial Drive • Clemmons, NC 27012 • USA Visit us at: www.haywardflowcontrol.com • Email: hflow@haywardnet.com



## FLV Series Bag Filters, BASKET OPTIONS



## FLV Series Filters, FEATURES

#### COVER-

- Ergonomic Handles Raised to Protect the Vent Valve
- Integral Pressure Relief Valve Threads in Cover
- Vent Valve Provided with Every Filter
- Solid, Buttress Threads
- Liquid Displacing Dome Inside Cover
- Cover Retains Pressure with Hand-Tight Seal (No Additional Tools Necessary)





#### BODY -

- Self-Draining O-Ring Groove Directs Overflow Back Inside Filter
- Pressure Energized Face-Style Seal Prevents Basket Sticking
- No Internal Threads
- Chamfered Interior Shoulder Surface Ensures Basket Sealing
- Molded-In Legs Assure Proper Basket Placement Within Filter
- Drill and Tap Locations and Mounting Pads for Differential Pressure Gauges
- Optional Drill and Tap NPT (Offset) Ports Available (Must be Ordered) for Alternate Configurations
- Integrally Molded True Union End Connections
- QR Code on Filter Label Leads Directly to Online IOM











## FLV Series Filters, FEATURES - CONTINUED

#### BASKET (BAG FILTER ONLY) -

- Solid Basket
- Optional Hinged Basket can be Fully Opened Without Coming Apart
- Optional Stainless Steel Basket available for High Cv and High Differential Pressure
- Ergonomically Molded Basket Lockdown Handle
- Basket Lockdown Handle and Ring Secures Bag Within Filter
- Basket Retaining Ring has Turn-N-Lock Feature Which Secures Basket and Ring Together as Single Entity Until Necessary to Take Apart (Bags can be Replaced Without Disassembling the Components)
- Vertical Flute Slots in GFPP Basket Prevent Bag Catching and Allow More Open Flow Area

### TRUE UNION END CONNECTIONS

- Allows for Various Sizes and Options Which Includes Socket, Threaded and Flanged
- Makes Disconnect of Filter from the Line Easier for Replacement or Maintenance
- Versatile Flow Path for In-line or Loop Configurations (Easily Changed by User)
- Size range of 1-1/4" 4"
- No Direct Threading into the Filter Required

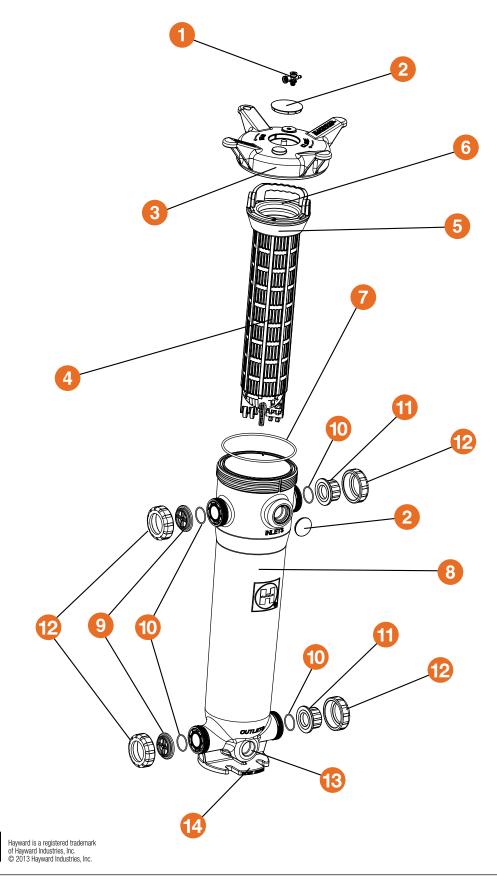


#### MOUNTING PAD

- Features Same Footprint as Previous Generation
- Stand-Alone Mounting Capabilities
- Slotted for Easy Installation



## FLV Series Filters, EXPLODED VIEW



#### PARTS LIST

- 1. Vent Valve (Included)
- 2. Hayward Bezel
- 3. Cover
- 4. Basket
- 5. Basket Ring with Lock Down Handle
- 6. Bag Retaining Ring
- 7. Cover O-Ring
- 8. Filter Body
- 9. End Cap
- 10. End Connector O-Ring
- 11. End Connector
- 12. Assembly Nut
- 13. Alternate 2" NPT Ports (Optional)
- 14. Integrally Molded Mounting Pad

ĨĨ





### **TECHNICAL INFORMATION**

# SELECTION CHART

MATERIAL	CONNECTIONS	PIPING SIZES	SEALS	RATING (BAR)			
Double Length 7" x 32" GFPP	GFPP (Threaded and Flanged)			150 PSI @ 70°F			
	PVC (Socket)	1-1/4" – 2" rated @ 100 GPM*	FPM or EPDM	Non-Shock (10 Bar / 1 MPa			
	CPVC (Socket)			@ 21°C)			
* May be Limited by Pipe Size or Bag Choice							

## FLV Series Simplex Bag Filters

DOUBLE LENGTH – 32" GFPP 1-1/4" TO 2" PIPE SIZES

#### **KEY FEATURES**

- Platinum Glass Filled Polypropylene
- One-Piece Injection Molded Construction
- Hand Removable, Ergonomic Cover with Liquid Displacing Dome
- Vent Valve Included on Cover
- Rated up to 100 GPM
- True Union Socket, Threaded or Flanged End Connections
- In-Line or Loop Flow Configurations
- Solid Basket
- Drain Port at Bottom
- Integral Mounting Base

#### BENEFITS

- Easier Installations Due to True Union Connectivity
- Vertical Flow Flutes in Basket, No Bag Snag and More Flow Area

#### **TYPICAL APPLICATIONS**

- Water and Wastewater Treatment
- Desalinization, RO and Deionized Water Systems
- Chemical Processing
- Food and Beverage
- Aquatic and Animal Life Support Systems
- Metal Finishing and Plating
- Marine and Corrosive Environments

#### **OPTIONS**

- Gauge with Gauge Guard
- Pressure Differential Gauge and Switch
- EPDM O-Ring Seals
- Cartridge Adapters
- Hinged Basket
- 316 Stainless Steel Basket

#### MATERIALS

- GFPP per ASTM D4101, Cell Class 85580
- FPM Standard O-Ring Seals

PRESSURE

### **FLV Series Simplex Bag Filters**

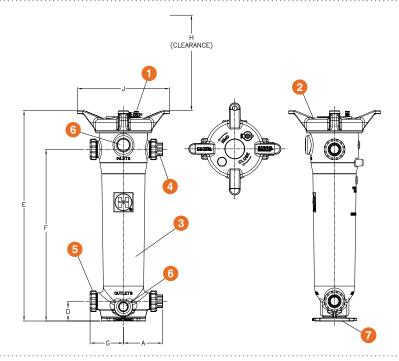
DOUBLE LENGTH – 32" GFPP 1-1/4" TO 2" PIPE SIZES

### TECHNICAL INFORMATION, CONTINUED

#### PARTS LIST\*

- 1. Vent Valve (Included)
- 2. Cover
- 3. Filter Body
- 4. End Connector
- 5. Assembly Nut
- 6. Alternate 2" NPT Ports
- 7. Integrally Molded Mounting Pad

\* See page 8 for a complete Parts List

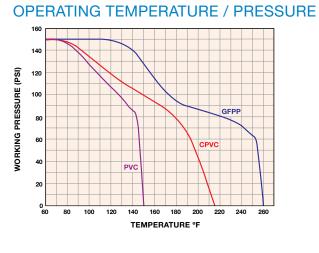


### **DIMENSIONS - INCHES / MILLIMETERS**

FILTER SIZE in / DN	A in / mm	D in / mm	E in / mm	F in / mm	G in / mm	H* in / mm	J in / mm
1-1/4" / 32	8.86 / 225	4.50 / 114	47.83 / 1215	39.00 / <del>99</del> 1	7.60 / 193	31.25 / 794	20.93 / 532
1-1/2" / 40	8.86 / 225	4.50 / 114	47.83 / 1215	39.00 / 991	7.60 / 193	31.25 / 794	20.93 / 532
2" / 50	8.91 / 226	4.50 / 114	47.83 / 1215	39.00 / 991	7.60 / 193	31.25 / 794	20.93 / 532

M

Dimensions are subject to change without notice - consult factory for installation information



Hayward is a registered trademark of Hayward Industries, Inc. © 2013 Hayward Industries, Inc.

#### \* Clearance from top for basket removal

#### SPECIFICATIONS

laterial of Construction:	GFPP
Inlet Connections:	GFPP (Threaded and Flanged) PVC (Socket) CPVC (Socket)
Outlet Connections:	GFPP (Threaded and Flanged) PVC (Socket) CPVC (Socket)
Bag Size:	Bag Size #2: 7" x 32"
Pressure Rating:	150 PSI @ 70°F Non-Shock
0-Ring Seals:	FPM or EPDM
Bag Ratings:	1, 5, 10, 25, 50, 100, 150, 200, 400, 600 and 800 Microns
Flow Rate:	100 GPM (May be Limited by Pipe Size or Bag Choice)
Weight:	64.1 lbs.

Contact Hayward Flow Control with questions: 1-888-429-4635 • Fax: 1-888-778-8410 • One Hayward Industrial Drive • Clemmons, NC 27012 • USA Visit us at: www.haywardflowcontrol.com • Email: hflow@haywardnet.com





### **TECHNICAL INFORMATION**

#### SELECTION CHART

SIZE / BODY MATERIAL	END CONNECTIONS	PIPING SIZES	O-RING SEALS	PRESSURE RATING (BAR)				
Double Length 7" x32" GFPP	GFPP (Threaded and Flanged) PVC (Socket) CPVC (Socket)	2-1/2" – 4" rated @ 150 GPM*	FPM or EPDM	150 PSI @ 70°F Non-Shock (10 Bar / 1 MPa @ 21°C)				
* May be Limited by Pipe Size or Bag Choice								

### FLV Series Simplex Bag Filters

DOUBLE LENGTH – 32" GFPP 2-1/2" TO 4" PIPE SIZES

#### **KEY FEATURES**

- Platinum Glass Filled Polypropylene
- One-Piece Injection Molded Construction
- Hand Removable, Ergonomic Cover with Liquid Displacing Dome
- Vent Valve Included on Cover
- Rated up to 150 GPM
- True Union Socket, Threaded or Flanged End Connections
- In-Line or Loop Flow Configurations
- Solid Basket
- Drain Port at Bottom
- Integral Mounting Base

#### BENEFITS

- Easier Installations Due to True Union Connectivity
- Vertical Flow Flutes in Basket, No Bag Snag and More Flow Area

#### **TYPICAL APPLICATIONS**

- Water and Wastewater Treatment
- Desalinization, RO and Deionized Water Systems
- Chemical Processing
- Food and Beverage
- Aquatic and Animal Life Support Systems
- Metal Finishing and Plating
- Marine and Corrosive Environments

#### **OPTIONS**

- · Gauge with Gauge Guard
- Pressure Differential Gauge and Switch
- EPDM O-Ring Seals
- Cartridge Adapters
- Hinged Basket
- 316 Stainless Steel Basket

#### MATERIALS

- GFPP per ASTM D4101, Cell Class 85580
- FPM Standard O-Ring Seals

## **FLV Series Simplex Bag Filters**

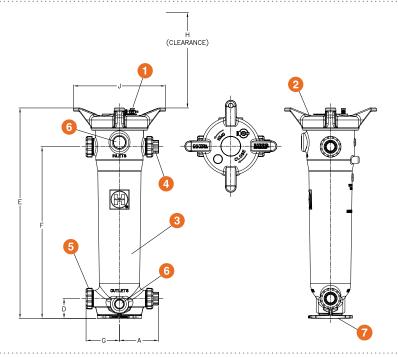
**DOUBLE LENGTH - 32" GFPP** 2-1/2" TO 4" PIPE SIZES

### **TECHNICAL INFORMATION, CONTINUED**

#### PARTS LIST\*

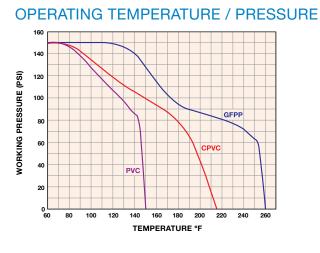
- 1. Vent Valve (Included)
- 2. Cover
- 3. Filter Body
- 4. End Connector
- 5. Assembly Nut
- 6. Alternate 2" NPT Ports
- 7. Integrally Molded Mounting Pad

\* See page 8 for a complete Parts List



### **DIMENSIONS - INCHES / MILLIMETERS**

FILTER SIZE in / DN	A in / mm	D in / mm	E in / mm	F in / mm	G in / mm	H* in / mm	J in / mm	
2-1/2" / 65	9.79 / 249	4.50 / 114	47.83 / 1215	39.00 / 991	8.38 / 213	31.25 / 794	20.93 / 532	
3" / 80	9.73 / 247	4.50 / 114	47.83 / 1215	39.00 / 991	8.38 / 213	31.25 / 794	20.93 / 532	
4" / 100	10.17 / 258	4.50 / 114	47.83 / 1215	39.00 / <mark>991</mark>	8.38 / 213	31.25 / 794	20.93 / 532	
Dimensions are subject to change without notice – consult factory for installation information * Clearance from top for basket removal								



Hayward is a registered trademark of Hayward Industries, Inc. © 2013 Hayward Industries, Inc.



#### Material of Construction: GFPP

aterial of Construction:	GFPP
Inlet Connections:	GFPP (Threaded and Flanged) PVC (Socket) CPVC (Socket)
Outlet Connections:	GFPP (Threaded and Flanged) PVC (Socket) CPVC (Socket)
Bag Size:	Bag Size #2: 7" x 32"
Pressure Rating:	150 PSI @ 70°F Non-Shock
<b>O-Ring Seals:</b>	FPM or EPDM
Bag Ratings:	1, 5, 10, 25, 50, 100, 150, 200, 400, 600 and 800 Microns
Flow Rate:	150 GPM (May be Limited by Pipe Size or Bag Choice)
Weight:	69.1 lbs.

Contact Hayward Flow Control with questions: 1-888-429-4635 • Fax: 1-888-778-8410 • One Hayward Industrial Drive • Clemmons, NC 27012 • USA Visit us at: www.haywardflowcontrol.com • Email: hflow@haywardnet.com





### **TECHNICAL INFORMATION**

#### SELECTION CHART

SIZE / BODY MATERIAL	END CONNECTIONS	PIPING SIZES	O-RING SEALS	PRESSURE RATING (BAR)			
Single Length 7"×16" GFPP	GFPP (Threaded and Flanged)			150 PSI @ 70°F			
	PVC (Socket)	1-1/4" – 2" rated @ 100 GPM*	FPM or EPDM	Non-Shock (10 Bar / 1 MPa			
	CPVC (Socket)			@ 21°C)			
* May be Limited by Pipe Size or Bag Choice							

## FLV Series Simplex Bag Filters

SINGLE LENGTH – 16" GFPP 1-1/4" TO 2" PIPE SIZES

#### **KEY FEATURES**

- Platinum Glass Filled Polypropylene
- One-Piece Injection Molded Construction
- Hand Removable, Ergonomic Cover with Liquid Displacing Dome
- Vent Valve Included On Cover
- · Rated up to 100 GPM
- True Union Socket, Threaded or Flanged End Connections
- In-Line or Loop Flow Configurations
- Solid Basket
- Drain Port at Bottom
- Integral Mounting Base

#### **BENEFITS**

- Easier Installations Due to True Union Connectivity
- Vertical Flow Flutes in Basket, No Bag Snag and More Flow Area

#### **TYPICAL APPLICATIONS**

- Water and Wastewater Treatment
- Desalinization, RO and Deionized Water Systems
- Chemical Processing
- Food and Beverage
- Aquatic and Animal Life Support Systems
- Metal Finishing and Plating
- Marine and Corrosive Environments

#### **OPTIONS**

- Gauge with Gauge Guard
- Pressure Differential Gauge and Switch
- EPDM O-Ring Seals
- Cartridge Adapters
- Hinged Basket
- 316 Stainless Steel Basket

#### MATERIALS

- GFPP per ASTM D4101, Cell Class 85580
- FPM Standard O-Ring Seals

FILTERS

## **FLV Series Simplex Bag Filters**

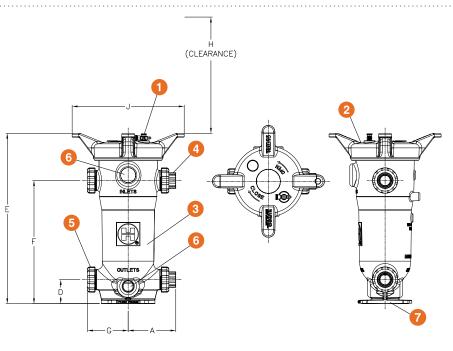
SINGLE LENGTH – 16" GFPP 1-1/4" TO 2" PIPE SIZES

### TECHNICAL INFORMATION, CONTINUED

#### PARTS LIST\*

- 1. Vent Valve (Included)
- 2. Cover
- 3. Filter Body
- 4. End Connector
- 5. Assembly Nut
- 6. Alternate 2" NPT Ports
- 7. Integrally Molded Mounting Pad

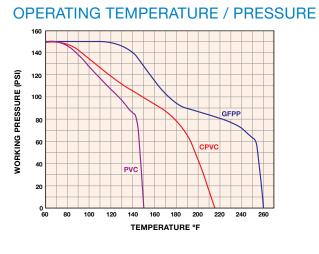
\* See page 8 for a complete Parts List



### **DIMENSIONS – INCHES / MILLIMETERS**

FILTER SIZE in / DN	A in / mm	D in / mm	E in / mm	F in / mm	G in / mm	H* in / mm	J in / mm
1-1/4" / 32	8.86 / 225	4.50 / 114	31.83 / 808	23.00 / 584	7.60 / 193	15.25 / 387	20.93 / 532
1-1/2" / 40	8.86 / 225	4.50 / 114	31.83 / 808	23.00 / 584	7.60 / 193	15.25 / 387	20.93 / 532
2" / 50	8.91 / 226	4.50 / 114	31.83 / 808	23.00 / 584	7.60 / 193	15.25 / 387	20.93 / 532

Dimensions are subject to change without notice - consult factory for installation information



Hayward is a registered trademark of Hayward Industries, Inc. © 2013 Hayward Industries, Inc. \* Clearance from top for basket removal

#### SPECIFICATIONS

Material of Construction:	GFPP
Inlet Connections:	GFPP (Threaded and Flanged) PVC (Socket) CPVC (Socket)
Outlet Connections:	GFPP (Threaded and Flanged) PVC (Socket) CPVC (Socket)
Bag Size:	Bag Size #1: 7" x 16"
Pressure Rating:	150 PSI @ 70°F Non-Shock
0-Ring Seals:	FPM or EPDM
Bag Ratings:	1, 5, 10, 25, 50, 100, 150, 200, 400, 600 and 800 Microns
Flow Rate:	100 GPM (May be Limited by Pipe Size or Bag Choice)
Weight:	47.8 lbs.

Contact Hayward Flow Control with questions: 1-888-429-4635 • Fax: 1-888-778-8410 • One Hayward Industrial Drive • Clemmons, NC 27012 • USA Visit us at: www.haywardflowcontrol.com • Email: hflow@haywardnet.com





### **TECHNICAL INFORMATION**

#### SELECTION CHART



\* May be Limited by Pipe Size or Bag Choice

## FLV Series Duplex Bag Filters

DOUBLE LENGTH – 32" GFPP 2" TO 4" PIPE SIZES

#### **KEY FEATURES**

- Platinum Glass Filled Polypropylene
- One-Piece Injection Molded Construction
- Hand Removable, Ergonomic Cover with Liquid Displacing Dome
- Vent Valve Included on Cover
- Rated up to 100 GPM 2"
- Rated up to 150 GPM 3" to 4"
- True Union Socket, Threaded or Flanged End Connections
- In-Line or Loop Flow Configurations
- Solid Basket
- Drain Port at Bottom
- Integral Mounting Base

#### BENEFITS

- · Easier Installations Due to True Union Connectivity
- Vertical Flow Flutes in Basket, No Bag Snag and More Flow Area

#### **TYPICAL APPLICATIONS**

- Water and Wastewater Treatment
- Desalinization, RO and Deionized Water Systems
- Chemical Processing
- Food and Beverage
- Aquatic and Animal Life Support Systems
- Metal Finishing and Plating
- Marine and Corrosive Environments

#### **OPTIONS**

- · Gauge with Gauge Guard
- · Pressure Differential Gauge and Switch
- EPDM O-Ring Seals
- Cartridge Adapters
- Hinged Basket
- 316 Stainless Steel Basket

#### MATERIALS

- CPVC per ASTM D1784, Cell Class 23447
- GFPP per ASTM D4101, Cell Class 85580
- FPM Standard O-Ring Seals

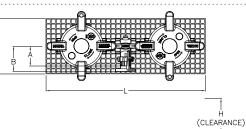
### **FLV Series Duplex Bag Filters**

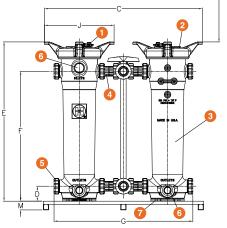
**DOUBLE LENGTH - 32" GFPP** 2" TO 4" PIPE SIZES

### **TECHNICAL INFORMATION, CONTINUED**

#### PARTS LIST\*

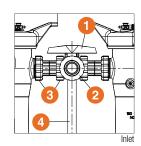
- 1. Vent Valve (Included)
- 2. Cover
- 3. Filter Body
- 4. End Connector
- 5. Assembly Nut
- 6. Alternate 2" NPT Ports
- 7. Integrally Molded Mounting Pad
- \* See page 8 for a complete Parts List

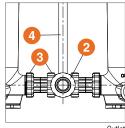




### PIPING

- PARTS LIST 1. Handle
- 2. Hayward<sup>®</sup> LA Series Three-Way Lateral Valve
- 3. Spool Assembly (Each Side)
- 4. Stem Extension Pipe



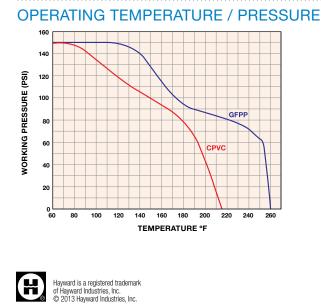


Outlet

### **DIMENSIONS – INCHES / MILLIMETERS**

FILTER SIZE	Α	В	С	D	E	F	G	H*	J	К	L	М
in / DN	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm
2″/50	6.00 / 152	7.77 / 197	47.44 / 1205	4.50 / 114	47.83 / 1215	39.00 / 991	41.70 / 1059	31.25 / 794	20.93 / 532	16.75 / 425	48.00 / 1219	2.62 / 67
3″/80	7.60 / <mark>193</mark>	9.85 / 205	55.17 / 1401	4.50 / 114	47.83 / 1215	39.00 / 991	50.99 / 1295	31.25 / 794	20.93 / 532	16.75/425	48.00 / 1219	2.62/67
4″ / 100	9.33 / 237	11.76/299	55.17 / <mark>1401</mark>	4.50 / 114	47.83 / 1215	39.00 / 991	50.99 / 1295	31.25 / 794	20.93 / 532	16.75 / 425	48.00 / 1219	2.62 / 67
Dimensions are subject to change without notice – consult factory for installation information * Clearance from top for basket removal												

Dimensions are subject to change without notice - consult factory for installation information



#### **SPECIFICATIONS** Material of Construction: GEPP

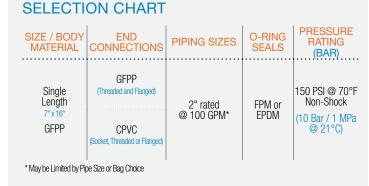
Vaterial of Construction:	GEPP
Inlet Connections:	GFPP (Threaded and Flanged) CPVC (Socket, Threaded or Flanged)
Outlet Connections:	GFPP (Threaded and Flanged) CPVC (Socket, Threaded or Flanged)
Bag Size:	Bag Size #2: 7" x 32"
Pressure Rating:	150 PSI @ 70°F Non-Shock
0-Ring Seals:	FPM or EPDM
Bag Ratings:	1, 5, 10, 25, 50, 100, 150, 200, 400, 600 and 800 Microns
Maximum Flow Rates:	100 GPM – 2"
	(May be Limited by Pipe Size or Bag Choice) 150 GPM – 3" to 4"
	(May be Limited by Pipe Size or Bag Choice)
Mounting Base:	Fiberglass
Hardware:	Stainless Steel
Weight:	up to 2" - 132.0 lbs. / 3" to 4" - 145.0 lbs.

Contact Hayward Flow Control with questions: 1-888-429-4635 • Fax: 1-888-778-8410 • One Hayward Industrial Drive • Clemmons, NC 27012 • USA Visit us at: www.haywardflowcontrol.com • Email: hflow@haywardnet.com





### **TECHNICAL INFORMATION**



## FLV Series Duplex Bag Filters

SINGLE LENGTH – 16" GFPP 2" PIPE SIZE

#### **KEY FEATURES**

- Platinum Glass Filled Polypropylene
- One-Piece Injection Molded Construction
- Hand Removable, Ergonomic Cover with Liquid Displacing Dome
- Vent Valve Included on Cover
- Rated up to 100 GPM
- True Union Socket, Threaded or Flanged End Connections
- In-Line or Loop Flow Configurations
- Solid Basket
- Drain Port at Bottom
- Integral Mounting Base

#### BENEFITS

- Easier Installations Due to True Union Connectivity
- Vertical Flow Flutes in Basket, No Bag Snag and More Flow Area

#### **TYPICAL APPLICATIONS**

- Water and Wastewater Treatment
- Desalinization, RO and Deionized Water Systems
- Chemical Processing
- Food and Beverage
- Aquatic and Animal Life Support Systems
- Metal Finishing and Plating
- Marine and Corrosive Environments

#### OPTIONS

- Gauge with Gauge Guard
- Pressure Differential Gauge and Switch
- EPDM O-Ring Seals
- Cartridge Adapters
- Hinged Basket
- 316 Stainless Steel Basket

#### MATERIALS

- CPVC per ASTM D1784, Cell Class 23447
- GFPP per ASTM D4101, Cell Class 85580
- FPM Standard O-Ring Seals

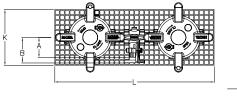
### **FLV Series Duplex Bag Filters**

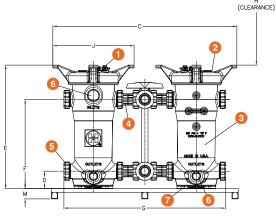
SINGLE LENGTH - 16" GFPP 2" PIPE SIZE

### TECHNICAL INFORMATION, CONTINUED

#### PARTS LIST\*

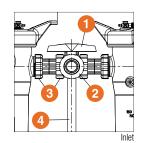
- 1. Vent Valve (Included)
- 2. Cover
- 3. Filter Body
- 4. End Connector
- 5. Assembly Nut
- 6. Alternate 2" NPT Ports
- 7. Integrally Molded Mounting Pad
- \* See page 8 for a complete Parts List

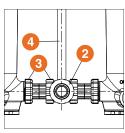




#### PIPING PARTS LIST

- 1. Handle
- 2. Hayward<sup>®</sup> LA Series Three-Way Lateral Valve
- 3. Spool Assembly (Each Side)
- 4. Stem Extension Pipe



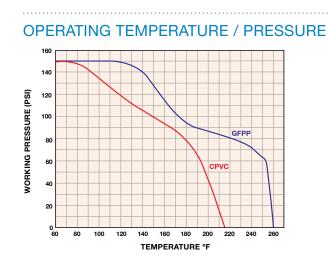


Outlet

### **DIMENSIONS - INCHES / MILLIMETERS**

FILTER SIZE in / DN	A in / mm	B in / mm	C in / mm	D in / mm	E in / mm	F in / mm	G in / mm	H* in / mm	J in / mm	K in / mm	L in / mm	M in / mm
2" / 50	6.00 / 152	7.77 / 197	47.44 / 1205	4.50/114	31.83 / 808	23.00 / 584	41.70 / 1059	15.25 / <mark>387</mark>	20.93 / 532	16.75/425	48.00 / 1219	2.62 / 67
Dimensions are subject to change without notice – consult factory for installation information w												

change ubjec



Hayward is a registered trademark of Hayward Industries, Inc. © 2013 Hayward Industries, Inc.

#### **SPECIFICATIONS** Material of Construction: GFPP

	GITT
Inlet Connections:	GFPP (Threaded or Flanged) CPVC (Socket, Threaded and Flanged)
Outlet Connections:	GFPP (Threaded and Flanged) CPVC (Socket, Threaded or Flanged)
Bag Size:	Bag Size #1: 7" x 16"
Pressure Rating:	150 PSI @ 70°F Non-Shock
0-Ring Seals:	FPM or EPDM
Bag Ratings:	1, 5, 10, 25, 50, 100, 150, 200, 400, 600 and 800 Microns
Maximum Flow Rate:	100 GPM (May be Limited by Pipe Size or Bag Choice)
Mounting Base:	Fiberglass
Hardware:	Stainless Steel
Weight:	100.0 lbs.

Contact Hayward Flow Control with questions: 1-888-429-4635 • Fax: 1-888-778-8410 • One Hayward Industrial Drive • Clemmons, NC 27012 • USA Visit us at: www.haywardflowcontrol.com • Email: hflow@haywardnet.com



### Needled Felt and Monofilament Mesh Filter Bags

HEAVY-DUTY POLYPROPYLENE, POLYESTER AND NYLON FILTER BAGS

#### **KEY FEATURES**

- All Bag Materials Silicone-Free
- Size 1 Single Length 7" x 16"
- Size 2 Double Length 7" x 32"
- Sewn or Welded Construction
- Size 1 Maximum Flow Rate 90 GPM
- Size 2 Maximum Flow Rate 180 GPM
- Sewn Bags Have Sewn-In Cloth Handles
- Flanged Bags Have Molded-In Handles

#### BENEFITS

- Easy Change-Out Reduces Down Time
- Compact, for Easy Disposal
- Versatile Micron Ratings Will Accommodate Most Applications

#### TYPICAL APPLICATIONS

- Water and Wastewater Treatment
- Desalinization, RO and Deionized Water Systems
- Chemical Processing
- · Food and Beverage
- Aquatic and Animal Life Support Systems
- Metal Finishing and Plating
- Marine and Corrosive Environments

#### **MICRON RATINGS**

- 1 Micron (Material Polypropylene and Polyester Needled Felt)
- 5 Microns (Material Polypropylene and Polyester Needled Felt)
- 10 Microns (Material Polypropylene and Polyester Needled Felt)
- 25 Microns (Material Polypropylene and Polyester Needled Felt)
- 50 Microns (Material Polypropylene and Polyester Needled Felt)
- 100 Microns (Material Polypropylene and Polyester Needled Felt)
- 150 Microns (Material Polypropylene and Nylon Monofilament Mesh)
- 200 Microns (Material Polypropylene and Polyester Needled Felt)
- 400 Microns (Material Polypropylene and Nylon Monofilament Mesh)
- 600 Microns (Material Polypropylene and Nylon Monofilament Mesh)
- 800 Microns (Material Polypropylene and Nylon Monofilament Mesh)

#### MATERIALS

- Glazed Polypropylene Needled Felt Rated up to 200°F
- Singed Polyester Needled Felt Rated up to 300°F
- Polypropylene Monofilament Mesh Rated up to 200°F
- Nylon Monofilament Mesh Rated up to 325°F

### **Needled Felt and Monofilament Mesh Filter Bags**, CONTINUED

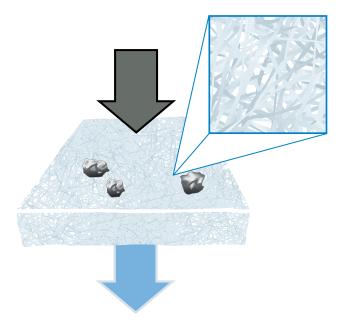
#### GLAZED\* POLYPROPYLENE AND SINGED\*\* POLYESTER NEEDLED FELT FILTER BAGS:

Felt material offers particle filtration by a depth process. Particles larger than the felt openings are trapped against the surface as particles that are smaller are forced into the material and trapped by the fibrous web. This three-dimensional media filtration is effective at removing both solid and gelatinous particles and is available in silicone-free polypropylene and polyester materials. Bags are available in 1 to 100 and 200 microns.

#### **KEY FEATURES**

- Needled Felt Structure
- Silicone-Free Material
- Suitable to Lower Viscosity Fluid
- Stable Filtration with High-Flow Velocity
- No Chemical or Fiber Release
- Temperature for Polypropylene: up to 200°F
- Temperature for Polyester: up to 300°F
- Chemical Resistance: Water, Aromatics, Weak Acids, Alkali

- SPECIFIC APPLICATIONS
- Prefiltration in Water Treatment
- Amine Filtration in Petroleum Industries
- Electrophoretic Paint Filtration in Automotive Industries
- Syrup Filtration
- Raw Medicine Filtration
- Recycled Water Filtration in Electronics Industries



\*Glazed: This process involves putting the felt media through heated rollers to melt back the loose surface fibers to prevent process fluid contamination

\*\*Singed: This process involves exposing the felt media to an open flame to melt back the loose fibers to prevent process fluid contamination

#### POLYPROPYLENE AND NYLON MONOFILAMENT MESH FILTER BAGS:

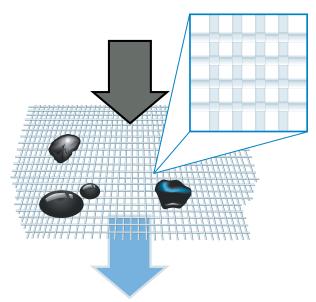
Monofilament mesh offers particle filtration on the surface of a single interwoven fiber. All the holes are uniform providing the same filtration from top to bottom and are fusion welded for strength. Filtration is available at 150 microns and 400 to 800 microns.

#### **KEY FEATURES**

- Monofilament Mesh Structure
- Silicone-Free Material
- Fixed Aperture
- Good Stretch-Proof Performance
- Suitable to Intercept Rigid Impurity and High Viscosity Fluid
- Easy to Clean
- Temperature for Polypropylene: up to 200°F
- Temperature for Nylon: up to 325°F
- Chemical Resistance: Water, Aromatics, Aliphatic, Alkali

#### SPECIFIC APPLICATIONS

- Prefiltration in Metallurgy Industries
- Degreasing in Automotive Industries
- Raw Water Filtration in Water Treatment Industries
- Coolant Filtration in Paint Industries
- Cutting Fluid Filtration in Machine Industries
- Coarse Filtration in Chemical Industries
- Recycled Water Filtration in Paper Mills





Hayward is a registered trademark of Hayward Industries, Inc. © 2013 Hayward Industries, Inc.



### **Needled Felt and Monofilament Mesh Filter Bags**, CONTINUED

#### SINGLE AND DOUBLE LENGTH

All bags are made with silicone-free material. Bags are made in two lengths. Type 1 single length is 7" x 16" and Type 2 double length is 7" x 32". Both industry standard bag sizes fit Hayward's single or double length filter.





#### SEWN CONSTRUCTION

A sewn bag has the strength of a mechanically secure, sewn seam. These bags have two sewn lines to make sure that certain particles do not pass through the filter bag. These bags are made from media that is silicone free and are sewn with silicone free thread so that the filtrate is not contaminated.



#### WELDED CONSTRUCTION

Welded construction filter bags have the fabric fused together to form the bag and secure the sealing ring. Modern fabric welding technology provides a strong seal that won't leak or come apart in the flow.



#### SEWN-IN BAG RING

Another construction consideration is the type of sealing ring. This is a ring at the opening of the bag that helps seal it to the housing. It can be made of plastic or metal. The ring material is important not only for chemical compatibility, but also for disposal purposes. If the bag is going to be disposed of by incineration, it's important that the ring be plastic, and not metal. Hayward bags are made with a sewn-in PP ring.



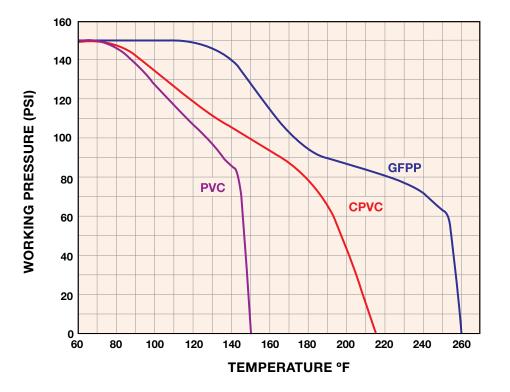
#### **PP FLANGE RING**

Consider the ring material of the bag when looking at chemical compatibility of the application. Hayward flanged bags have a PP flange ring.

#### **PP FLANGE HANDLES**

Flanged bags have PP handles at the top to make removal easier. Other bags have a sewn-in cloth handle for removal.

### **How to Select a Bag Filter**



#### 1. CHECK THE TEMPERATURE AND PRESSURE RATING OF A FILTER

To make sure that the temperature/pressure of the application falls within the OK range, see the chart on each individual catalog page or check the chart above for FLV Series Filters.

#### 2. DETERMINE THE FLOW RATE

In GPM, of the system into which the bag filter is to be installed. Hayward<sup>®</sup> single and double length bag filters work with flows of up to 150 GPM. If the system's flow rate is greater, consider using two or more filters manifolded together in parallel. For example, if the system flow rate is 150 GPM or higher, using two manifolded filters would reduce the flow to a manageable 75 GPM through each. Constantly running the flow through the filters at their maximum rating limit is not recommended.

#### 3. SELECT THE BAG

Hayward bags are available from 1 to 800 microns. The bags are made from several types of materials and are either of a sewn or welded construction. All bags are sold in Carton Quantities. A single length bag has a surface area of 2.0 sq ft and a double length of 4.1 sq ft.

#### 4. CONSIDER START-UP PRESSURE LOSS

Bag filters are typically sized so that there is a 2 PSI or less pressure loss across them with a clean bag installed. Keep in mind that this is just a guide. The time between bag change-outs for a double length filter is more than twice that of a single length filter in the same application.



Hayward is a registered trademark of Hayward Industries, Inc. © 2013 Hayward Industries, Inc.



## How to Select a Bag Filter, CONTINUED

#### 5. CALCULATE START-UP PRESSURE LOSS

To figure the total pressure loss across the filter with a clean bag requires making two pressure loss calculations and adding them together: The loss across the filter without a bag and the bag loss.

*First:* Use the system flow rate and Chart 1 to determine the loss across the filter without a bag (single and double length filters have virtually the same pressure loss without a bag). Example: A flow rate of 30 GPM results in a 0.4 PSI pressure loss. If the process media is water or has a viscosity less than 200 CPS, that's it. If the viscosity is greater, select the correction factor that matches the process media viscosity in CPS units from Table Number 1. Multiply the pressure drop by this factor.

#### Table 1 – Filter Viscosity Correction

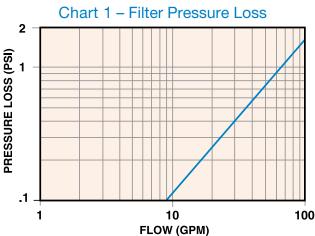
VISCOSITY IN CPS	200	400	600	800
CORRECTION FACTOR	1.10	1.20	1.40	1.50

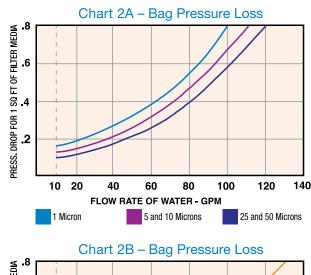
Second: Single and double length filter bags have different pressure losses. Use Charts 2A and 2B to determine the pressure loss per square foot of bag surface. Example: with a system flow rate of 30 GPM, a 5 or 10 micron bag would have a 0.2 PSI loss per square foot. This loss is divided by 2.0 for a single length bag or 4.1 for a double length bag. These factors are the respective surface areas of the bags in square feet. The loss for a single bag would be 0.1 PSI (0.2  $\div$  2.0) and 0.05 for a double length bag (0.2  $\div$  4.1). For fluids with viscosities other than water, select the correction factor from Table 2 and multiply the pressure drop by it. Example: If the fluid viscosity were 800 CPS, the pressure loss for a single length bag would be 5.0 (0.1 x 50.0).

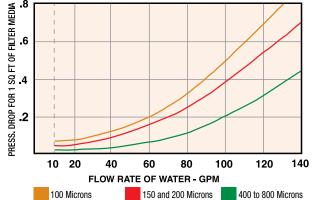
*Last:* Add the pressure loss of the filter and the bag together to get the pressure loss across the filter with the bag installed.

#### Table 2 – Bag Viscosity Correction

VISCOSITY IN CPS	Water 1	50	100	200	400	600	800
CORRECTION FACTOR	1.00	4.50	8.50	16.60	27.70	38.90	50.00







## Flow of Water Through Schedule 80 Plastic Pipe

DISCH	HARGE			DCITY IN SCH		CITY			
Gallons / Minute	Cubic Feet / Second	Feet / Second	Feet / Second	Feet / Second	Feet / Second	Feet / Second	Feet / Second	Feet / Second	Feet / Second
0.2	0.000446		1/4" 0.824	3/8"	1/2"	3/4"		1-1/4"	1-1/2"
0.3	0.000668	_	1.237	0.651	0.392	_	_	_	_
0.4	0.000891	_	1.646	0.867	0.529	_	_	_	_
0.5	0.00111	—	2.061	1.083	0.653	0.359	—	_	_
0.6	0.00134	—	2.476	1.303	0.782	0.431	_	—	—
0.8	0.00178	—	3.295	1.728	1.043	0.574	—	_	—
1	0.00223	_	4.122	2.167	1.311	0.718	0.435	_	_
2	0.00446	—	8.245	4.335	2.609	1.432	0.871	0.525	—
3	0.00668	—	12.381	6.502	3.919	2.161	1.306	0.788	0.538
4	0.00891	2"	16.502	8.671	5.218	2.876	1.747	1.051	0.717
5	0.01114	_	—	10.837	6.528	3.592	2.181	1.313	0.896
6	0.01337	0.65	2-1/2"	13.005	7.827	4.308	2.614	1.579	1.076
8	0.01782	0.86	—		10.448	5.741	3.482	2.105	1.434
10	0.02228	1.08	0.752	3"	13.057	7.185	4.351	2.632	1.798
15	0.03342	1.61	1.134	—	—	10.778	6.531	3.941	2.697
20	0.04456	2.15	1.505	0.986	_		8.712	5.252	3.596
25	0.0557	2.69	1.886	1.238	—	4"	10.881	6.574	4.484
30	0.06684	3.23	2.256	1.476	_		13.062	7.884	5.383
35	0.07798	3.78	2.638	1.726	—	0.973	15.232	9.193	6.282
40	0.08912	4.32	3.009	1.976	_	1.114	17.413	10.515	7.171
45	0.1003	4.84	3.391	2.215	—	1.247	—	11.838	8.069
50	0.1114	5.39	3.761	2.465	_	1.391	_	13.147	8.969
60	0.1337	6.47	4.513	2.953	—	1.665	—	15.779	10.778
70	0.156	7.55	5.266	3.453	_	1.942	_		12.577
80	0.1782	8.62	6.018	3.942	—	2.228	—	6"	14.36
90	0.2005	9.69	6.771	4.442	_	2.504	_		16.162
100	0.2228	10.77	7.523	4.931	—	2.781	—	1.225	17.96
125	0.2785	13.48	9.409	6.168	_	3.475	_	1.534	22.445
150	0.3342	16.18	11.284	7.395	—	4.171	—	1.893	
175	0.3899	18.87	13.171	8.633	_	4.865	_	2.141	8"
200	0.4456	21.56	15.068	9.861	—	5.561	—	2.451	
225	0.5013	_	16.943	11.098	_	6.255	_	2.759	1.577
250	0.557	_	—	12.325	—	6.951	—	3.069	1.752
275	0.6127	—	_	13.563	_	7.645	—	3.367	1.927
300	0.6684	_	—	14.768	—	8.341	-	3.675	2.102
325	0.7241	—	—	16.041	—	9.035	_	3.985	2.277
350	0.7798	_	—	—	—	9.731	_	4.294	2.453
375	0.8355		_	_	_	10.425	_	4.592	2.628
400	0.8912			—	—	11.121	—	4.901	2.803
425	0.9469	10"	_	_	_	11.815	_	5.211	2.989
450	1.003	2 100				12.511	_	5.519	3.164
475	1.059	2.199	—	—	—	13.205	_	5.817	3.329
500	1.114	2.229	—	_	_	13.901	—	6.126	3.515
550	1.225	2.459	12"	—	_	15.279	_	6.744	3.865
600	1.337	2.679		_		16.681	—	7.352	4.215
650	1.225	2.899		_	—	_	—	7.971	4.566
700	1.56	3.129	2.205	_	—	_	—	8.588	4.916
750	1.671	3.349	2.359		—	_	_	9.195	5.267
800	1.56	3.569	2.513	—	—	_	_	9.802	5.617
850	1.782	3.799	2.677	_	_	_	_	10.421	5.968
900 950	2.005	4.019 4.239	2.831 2.984	_	_	_	_	11.028	6.318
1000	2.117	4.239	2.984	_	_	_	_	11.646 12.253	6.668 7.019
1100	2.228	4.469	3.149	_	_	_	_	12.253	7.019
1200	2.431	5.359		_	_	_			
1300	2.896	5.809	3.775 4.093		_	_		14.715 15.929	8.431 9.121
1400	3.119	6.259			_		_		
1500	3.342	6.698	4.401 4.718			_		17.165 18.391	9.833 10.534
1600	3.565	7.148	4.718	_		_		18.391	10.534
1800	4.01	8.038	5.662		_			22.067	12.636
2000	4.456	8.038	6.228		_	_	_	22.067 24.517	12.030
2500	5.57	11.168	7.868		_			24.017	14.038
3000	6.684	13.396	9.437		_				21.068
3500	7.798	15.637	9.437 11.006		-	_			24.572
4000	8.912	17.866	12.587	_	_	_	_	_	24.572
4000	10.13	20.106	12.587		_				28.08
5000	11.14	20.100	14.100	· -			. —	. —	31.013
6000	13.37	The following way	e surge constants	may be used to qui	ckly calculate pres	sure rise due to wat	er hammer where:	"C"= the wave sur	ge
7000	15.6	constant from the	table below multip	lied by "V" the line	velocity in feet per	second. The resulta	int number is then a	added to the line pr	essure
8000	17.82	to determine the i	resulting wave surg	e (Water Hammer E	ttect).				
9000	20.05	Pino	Size	1/4" 1/2"	3/4" 1"	1-1/2" 2"	3" 4"	6" 8"	10" 12"
10000	20.05	Cons		40 35	32 31	27 25	23 23	21 20	19 19



## **How to Order Filter Bags**

### HOW TO SELECT A PART NUMBER

MATERIAL		MICRON F	RATING	FINIS	FINISH		BAG SIZE		BAG STYLE*		OPTIONS	
Glazed Polypropylene Needled Felt	PO	1 Micron	001	Glazed Needled Felt	G	16"	1	PP Ring	PR	Sewn with Handle	SH	
Polypropylene Monofilament Mesh	PMO	5 Microns	005	Singed Needled Felt	S	32"	2	PP Flange	PF	Welded with Flange	WF	
Singed Polyester Needled Felt	PE	10 Microns	010	Monofilament Mesh	М							
Nylon Monofilament Mesh	NMO	25 Microns	025									
		50 Microns	050									
		100 Microns	100									
		150 Microns	150									
		200 Microns	200									
		400 Microns	400									
		600 Microns	600									
		800 Microns	800									
To find your part number, please select your Material, Micron Rating, Finish, etc., and place the corresponding identifier (PO, 001, G, etc.) in the boxes below.												
EXAMPLE	PO		100		G		1		PR		SH	

\* Carbon Steel and Stainless Steel rings are available upon request - consult factory for information

### STANDARD FIBER AND MICRON RATINGS

FIBER CONSTRUCTION	MATERIAL						E MICRON					
		1	5	10	25	50	100	150	200	400	600	800
Needled Felts	Polypropylene	•	•	•	•	•	•		•			
Neeuleu I eits	Polyester	•	•	•	•	•	•		•			
Monofilament Meshes	Polypropylene							•		•	•	٠
	Nylon							•		•	•	•

### COMPATIBILITY AND TEMPERATURE LIMITS

T.

FIBER	COMPATIBLE WITH								
	Organic Solvent	Animal, Vegetable and Petro Oils	Microorganisms	Alkalies	Organic Agents	Oxidizing Agents	Mineral Acids	Temperature Limits (Max °F)	
Polyester	А	А	А	В	В	В	В	300	
Polypropylene	А	А	А	А	А	С	С	200	
Nylon	А	А	А	В	С	D	D	325	
A Excellent	E	Good	С	Fair	D Po	or			

### **FLV Stainless Steel Basket**



#### FOR USE IN FLV SERIES WITH FILTER BAGS

Available in both single and double lengths, the 316 Stainless Steel basket provides a highly efficient option for increased differential pressure conditions. The basket itself provides the structural strength required when processing highly viscous materials or when experiencing high solids loading.

The construction of this basket prevents by-pass of unprocessed fluids. With enhanced strength, it allows for a wide application range for the FLV Series bag filters.

The large open area ratio, robust construction and easy installation makes this design an optimal choice for demanding chemical and corrosive applications.

#### **KEY FEATURES**

- 5/32" Perforation for High Open Area Ratio
- Welded 316 Stainless Steel Construction
- Includes GFPP Basket Ring Assembly and Seal

#### BENEFITS

- Seal in Basket Ring Assembly Prevents Fluid By-Pass
- High Cv
- Robust Chemical and Corrosion Resistance

#### **TYPICAL APPLICATIONS**

- Water and Wastewater Treatment
- Desalinization, RO and Deionized Water Systems
- Chemical Processing
- Food and Beverage
- Aquatic and Animal Life Support Systems
- Metal Finishing and Plating
- Marine and Corrosive Environments

#### MATERIALS

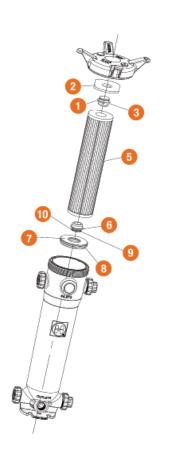
- 316 Stainless Steel
- GFPP Cell Class 85580 per ASTM D4101
- FPM Standard O-Ring Seal

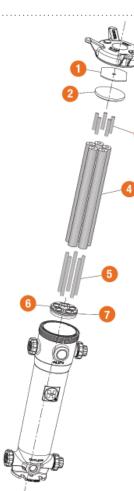






## SINGLE AND MULTIPLE CARTRIDGE EXPLODED VIEWS





## Cartridge Filter Adapter Kits

FOR SINGLE AND MULTIPLE CARTRIDGES

### **KEY FEATURES**

- Polypropylene Construction
- For Single or Multiple up to 5 Cartridges
- Accommodates Melt Blown, Spun or Pleated Cartridges
- Adapters for Single Length and Double Length CFLV's
- Adapters are designed to work with DOE and 222 End Connectors (where applicable)

### BENEFITS

- Simple Install of Adapter and Cartridges
- Access Top Plate Allows for Effortless Removal of Cartridges

### TYPICAL APPLICATIONS

- Water and Wastewater Treatment
- Desalinization, RO and Deionized Water Systems
- Chemical Processing
- Food and Beverage
- Aquatic and Animal Life Support Systems
- Metal Finishing and Plating
- Marine and Corrosive Environments

### MATERIALS

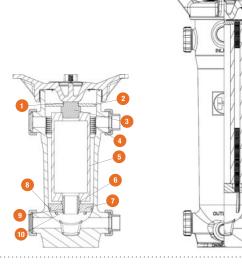
- PP per ASTM D4101
- Heavy Duty FPM Seals
- EPDM Seals Optional

### **Cartridge Filter Adapter Kits**, CONTINUED

FOR SINGLE AND MULTIPLE CARTRIDGES (cartridges not included)

#### SINGLE CARTRIDGE PARTS LIST

- 1. Cartridge Connector Retaining 0-Ring
- 2. Upper Plate
- 3. Cartridge Connector (Upper)
- 4. Flow Diffuser
- 5. Cartridge (not included in kit)
- 6. Cartridge Connector (Lower)
- 7. Lower Plate
- 8. Lower Plate Seal
- 9. Cartridge Connector Sealing 0-Ring
- 10. Cartridge Connector Retaining 0-Ring



#### MULTIPLE CARTRIDGE PARTS LIST

- 1. Anti-Rotation Ring
- 2. Upper Plate
- 3. Perforated Tube (Short)
- 4. Cartridge (not included in kit)
- 5. Perforated Tube (Long)
- 6. Lower Plate Seal
- 7. Lower Plate



#### CARTRIDGE FILTER ADAPTER KITS FOR INSTALLATION OF SINGLE (1) CARTRIDGES/HAYWARD

PART NUMBER	DESCRIPTION
CFLVKIT716	Cartridge Adapter, For Single Length Series Cartridge Filter, Cartridge 7" x 16" (DOE)
CFLVKIT732	Cartridge Adapter, For Double Length Series Cartridge Filter, Cartridge 7" x 16" (DOE) Double Stacked
CFLVKIT730	Cartridge Adapter, For Double Length Series Cartridge Filter, Cartridge 7" x 30" (DOE)



## CARTRIDGE FILTER ADAPTER KITS FOR INSTALLATION OF **SINGLE (1) CARTRIDGES/OTHER MANUFACTURERS**\*\*\*\*

PART NUMBER	DESCRIPTION
CFLVKIT410	Cartridge Adapter, For Single Length Series Cartridge Filter, Cartridge 4-1/2" x 10"** (DOE, 222 CAP or FIN))*
CFLVKIT430	Cartridge Adapter, For Double Length Series Cartridge Filter, Cartridge 4-1/2" x 30"** (DOE, 222 CAP or FIN)*
CFLVKIT810	Cartridge Adapter, For Single Length Series Cartridge Filter, Cartridge 7-3/4" x 10"*** (DOE)
CFLVKIT830	Cartridge Adapter, For Double Length Series Cartridge Filter, Cartridge 7-3/4" x 30"*** (DOE)



Havward is a registered trademark of Hayward Industries, Inc. © 2013 Hayward Industries, Inc

#### CARTRIDGE FILTER ADAPTER KITS FOR INSTALLATION OF **MULTIPLE (5) CARTRIDGES/HAYWARD AND OTHER MANUFACTURERS\*\*\*\***

#### PART NUMBER DESCRIPTION

MFLVKIT210	Cartridge Adapter, For Single Length Series Cartridge Filter, Cartridge 2-1/2"-2-3/4" x 10"** (DOE, 222 CAP or FIN)*
MFLVKIT230	Cartridge Adapter, For Double Length Series Cartridge Filter, Cartridge 2-1/2"-2-3/4" x 30"** (DOE, 222 CAP or FIN)*

· Consult factory for other cartridge kit sizes.

- Some kits contain dual purpose components.
  Cartridges shown are sold separately. Kits do not include cartridges.

\*\*\*\* When using non-Hayward manufactured cartridges, it is suggested to check cartridge dimensions and/or consult factory for proper fit.

Contact Hayward Flow Control with questions: 1-888-429-4635 • Fax: 1-888-778-8410 • One Hayward Industrial Drive • Clemmons, NC 27012 • USA Visit us at: www.haywardflowcontrol.com • Email: hflow@haywardnet.com





#### SINGLE AND MULTIPLE CARTRIDGE VIEWS





## Pleated Filter Cartridges

HIGH CAPACITY/EFFICIENCY

#### **KEY FEATURES**

- Multiple Micron Ratings for High Efficiency Filtration
- For use with Single (7" diameter) and Multiple (2-1/2" diameter) Cartridge CFLVs (Single and Double Length)
- High Surface Area Design Provides Excellent Flow Rates and Comprehensive Service Life
- Thermally Bonded DOE End-Caps, Core and Filter Media

#### **BENEFITS**

- Low Pressure Drop
- Multiple Layered Media Construction Guarantees
   Dependable Performance

#### TYPICAL APPLICATIONS

- Water and Wastewater Treatment
- Desalinization, RO and Deionized Water Systems
- Chemical Processing
- Food and Beverage
- Aquatic and Animal Life Support Systems
- Metal Finishing and Plating
- Marine and Corrosive Environments

#### MATERIALS

- PP Media
- Cellulose Media
- Plastisol PVC
- PP Core
- ABS Core

#### **OPERATING CHARACTERISTICS**

- Max.  $\Delta P$ : 60 PSI at maximum recommended temperature of 140°F
- Change-out recommended at 30 PSID

## **Pleated Filter Cartridges**, CONTINUED

**HIGH CAPACITY/EFFICIENCY** 



#### PLEATED FILTER CARTRIDGES SINGLE (1), FOUR IN CARTON/HAYWARD - PROPRIETARY

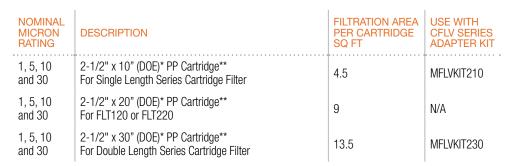
ominal IICRON Ating	DESCRIPTION	FILTRATION AREA PER CARTRIDGE SQ FT	USE WITH CFLV SERIES ADAPTER KIT
5, 10 nd 30	7" x 16" (DOE)* PP Cartridge** For Single Length Series Cartridge Filter	45	CFLVKIT716
5, 10 nd 30	7" x 16" (DOE)* PP Double Stacked Cartridge** For Double Length Series Cartridge Filter	45 x 2	CFLVKIT732
5, 10 nd 30	7" x 30" (DOE)* PP Cartridge For Double Length Series Cartridge Filter	85	CFLVKIT730



#### PLEATED FILTER CARTRIDGES SINGLE (1), FOUR IN CARTON/HAYWARD - PROPRIETARY

Nominal Micron Rating	DESCRIPTION	FILTRATION AREA PER CARTRIDGE SQ FT	USE WITH CFLV SERIES ADAPTER KIT
5	7" x 16" (DOE)* Polyester Cellulose Cartridge** For Single Length Series Cartridge Filter	45	CFLVKIT716
5	7" x 16" (DOE)* Polyester Cellulose Double Stacked Cartridge** For Double Length Series Cartridge Filter	45 x 2	CFLVKIT732

#### PLEATED FILTER CARTRIDGES - MULTIPLE (5), 25 IN CARTON



#### NOTES:

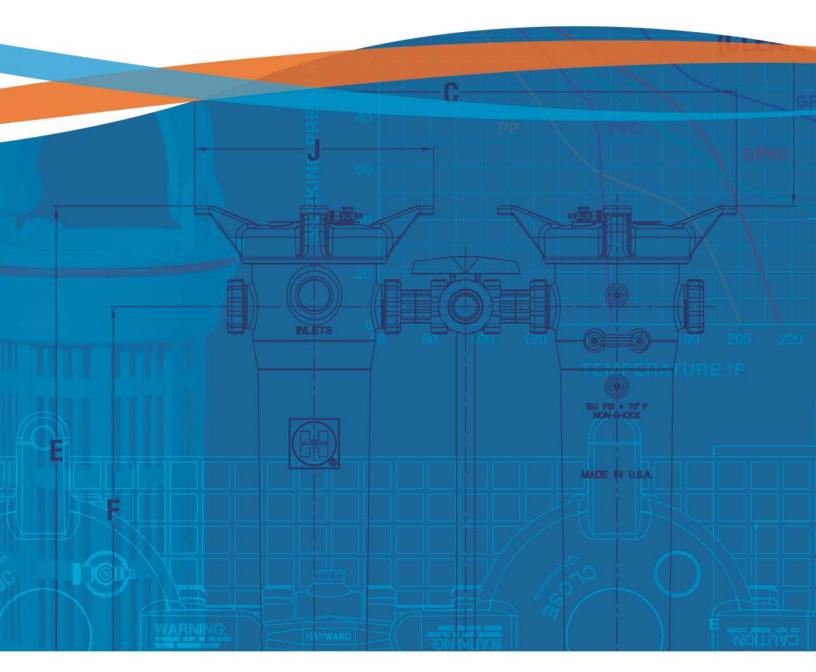
- \* All end caps are Plastisol PVC.
- \*\* For chemical compatibility, refer to the Hayward Engineering Product Guide (EPG113) or consult factory. For other media and micron ratings, please consult factory.



Hayward is a registered trademark of Hayward Industries, Inc. © 2013 Hayward Industries, Inc.



NOTES





Hayward is a registered trademark of Hayward Industries, Inc. © 2013 Hayward Industries, Inc. Eastar is a trademark of Eastman.
 Hastelloy is a registered trademark of Haynes International, Inc.
 Monel is a registered trademark of Advanced Elastomer Systems.

FLV0913

Contact Hayward Flow Control with questions: 1-888-429-4635 • Fax: 1-888-778-8410 • One Hayward Industrial Drive • Clemmons, NC 27012 • USA Visit us at: www.haywardflowcontrol.com • Email: hflow@haywardnet.com