Simplex Basket Strainers

1/2" to 8" - PVC, Corzan® CPVC and Eastar® Clear Polyester

6" and 8" Design

Features

- External Body Threads
- Low Pressure Drop
- Wide Choice of Baskets
- In-line or Loop Piping Design
- True Union Connections
- Ergonomic Hand Removable Cover
- FPM Seals
- Integral, Flat Mounting Base
- Hand Removable Vent On Cover
- Hand Removable Drain On Body
- Liquid Displacing Cover

Options

- Stainless Steel Mesh Strainer Baskets
- EPDM Seals

Corzan® is a registered trademark of Noveon, Inc.
Eastar ® is a registered trademark of Eastman

Protect System Components

When pipeline system components require protection from dirt and debris and the line can be shut down for basket cleaning, a Hayward All Plastic Simplex Basket Strainer is the ideal choice. Unwanted particles are removed as the process media passes through a perforated strainer basket contained inside the strainer body. The basket traps the unwanted material while allowing the process media to flow freely.

Easy Basket Cleaning

Changing or cleaning the strainer basket is quick and easy. The hand removable, spin-off cover features two angled handles for easy access to the strainer basket. The housing features external cover threads that do not contact the process media and never need cleaning. Venting and draining are made possible by two hand removable, threaded plugs, one on the top of the cover and the other on the housing side.

Choice of Piping Connections

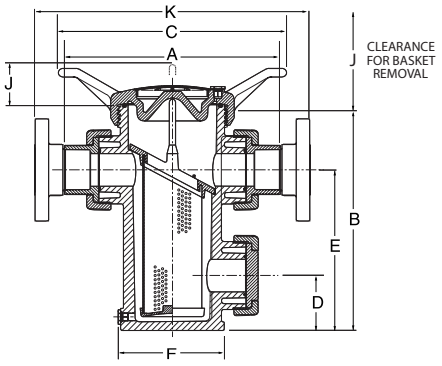
Hayward Simplex Basket Strainers can be installed either in-line or with loop piping configurations. This is made possible by a unique design that incorporates three piping connections on the strainer body that are used as inlets and outlets. The unused connection is plugged using a blind fitting (included). True union connections make it possible to remove the strainer from the piping system without disassembling the piping connections.

Wide Range of Strainer Baskets

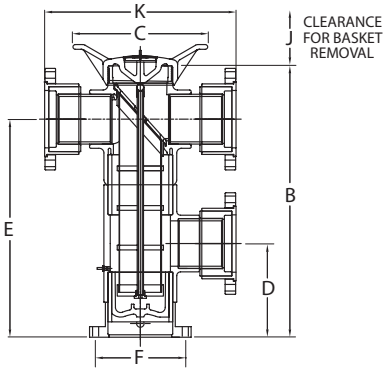
Plastic baskets in perforation sizes from 1/32” to 3/16” are available. Stainless steel perforated baskets are available from 1/2” to 1/32”. Mesh stainless steel baskets for very fine straining applications are available in sizes from 20 mesh down to 325 mesh.

Technical Information

1/2" to 4" Design



6" and 8" Design "Typical"



Dimensions - Inches / Millimeters

Size	a	b	c	d	e	f	j	k	WEIGHT Skt/Thd	WEIGHT Flange	VOLUME GAL / LT
1/2"	8.64 / 219	9.63 / 245	11.0 / 279	2.25 / 57	6.75 / 171	4.31 / 109	8.00 / 203	10.77 / 274	8.0 / 3.4	9.0 / 4	0.20 / 0.8
3/4"	8.64 / 219	9.63 / 245	11.0 / 279	2.25 / 57	6.75 / 171	4.31 / 109	8.00 / 203	11.02 / 280	8.0 / 3.4	9.0 / 4	0.20 / 0.8
1"	8.64 / 219	9.63 / 245	11.0 / 279	2.25 / 57	6.75 / 171	4.31 / 109	8.00 / 203	11.64 / 296	8.0 / 3.4	9.0 / 4	0.20 / 0.8
1-1/4"	12.75 / 324	13.38 / 340	13.5 / 343	3.25 / 83	9.5 / 241	6.13 / 156	12.86 / 327	15.63 / 397	14.0 / 6.4	16.5 / 7.5	0.70 / 2.7
1-1/2"	12.69 / 322	13.38 / 340	13.5 / 343	3.25 / 83	9.5 / 241	6.13 / 156	12.86 / 327	15.89 / 404	14.0 / 6.4	16.5 / 7.5	0.70 / 2.7
2"	12.75 / 324	13.38 / 340	13.5 / 343	3.25 / 83	9.5 / 241	6.13 / 156	12.86 / 327	16.29 / 414	14.0 / 6.4	16.5 / 7.5	0.70 / 2.7
2-1/2"	16.52 / 384	19.83 / 504	16.0 / 406	4.83 / 123	14.83 / 377	7.25 / 184	17.25 / 438	21.02 / 534	28.0 / 13	33.0 / 15	2.80 / 10.6
3"	16.40 / 384	19.83 / 504	16.0 / 406	4.83 / 123	14.83 / 377	7.25 / 184	17.25 / 438	20.36 / 517	28.0 / 13	33.5 / 15	2.80 / 10.6
4"	17.27 / 384	19.83 / 504	16.0 / 406	4.83 / 123	14.83 / 377	7.25 / 184	17.25 / 438	22.13 / 562	28.0 / 13	37.0/ 17	2.80 / 10.6
6"	n/a	34.28 / 871	18.0 / 457	10.66 / 271	27.19 / 691	11.75 / 298	21.80 / 554	22.42 / 569	n/a	60.0 / 27	6.8 / 25.7
8"	n/a	34.28 / 871	18.0 / 457	10.66 / 271	27.19 / 691	11.75 / 298	28.75 / 730	25.19 / 640	n/a	80.0 / 36	9.0 / 34.1

Cv Factors

Size	Factor	Size	Factor
1/2"	15	2-1/2"	290
3/4"	18	3"	300
1"	20	4"	350
1-1/4"	55	6"	1000
1-1/2"	58	8"	750
2"	60		

The above Cv Factors were determined using a 1/16" perforated plastic basket in 1/2" through 4" strainers and a 5/32" perforated stainless steel basket in 6" and 8" strainers. For other size basket perforations, multiply by the correction factor in the above Correction Factor charts.

Pressure Drop Calculations

Basket Perforation Correction Factors

For 1/2" to 4" Strainers

Plastic Baskets		Stainless Steel Baskets			
1/32"	1.05	1/32"	.82	3/8"	.45
1/16"	1.00	3/64"	.63	1/2"	.48
1/8"	.58	1/16"	.74	20 Mesh	.79
3/16"	.46	5/64"	.50	40 Mesh	1.01
		7/64"	.51	60 Mesh	1.20
		1/8"	.58	80 Mesh	1.16
		5/32"	.37	100 Mesh	1.20
		3/16"	.46	200 Mesh	1.09
		1/4"	.58	325 Mesh	1.22

For 6" to 8" Strainers

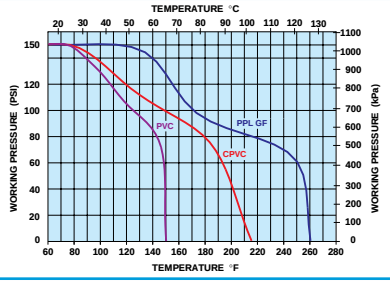
Plastic Baskets		Stainless Steel Baskets			
1/8"	2.00	1/32"	2.25	3/8"	1.24
3/16"	1.50	3/64"	1.73	1/2"	1.31
		1/16"	2.03	20 Mesh	2.16
		5/64"	1.37	40 Mesh	2.79
		7/64"	1.40	60 Mesh	3.28
		1/8"	1.58	80 Mesh	3.18
		5/32"	1.00	100 Mesh	3.30
		3/16"	1.26	200 Mesh	2.98
		1/4"	1.58	325 Mesh	3.33

The pressure drop across the strainer, for water or fluids with a similar viscosity, can be calculated using the formula at the right:

$$\Delta P = \left[\frac{Q}{Cv}\right]^2$$

Where ΔP = Pressure Drop
Q = Flow in GPM
Cv = Flow Coefficient

Operating Temperature/Pressure



Selection Chart

Size	Material	End Connection	Seal*	Rating
1/2" to 4"	PVC, CPVC	Thd, Skt, Flg	FPM	150 PSI @ 70F
1/2" to 2"	EASTAR®**	Thd, Skt, Flg	FPM	100 PSI @ 70F
6" to 8"	PVC, CPVC	Flg	FPM	150 PSI @ 70F

*EPDM seals POA.

Basket Selection

- The 1/2" to 1" strainers can be ordered with either a 1/32" or 1/16" perf plastic basket.
- The 1-1/2" and 2" with a 1/32", 1/16", 1/8", or 3/16" perf plastic basket.
- The 3" and 4" with a 1/16", 1/8" or 3/16" perf plastic basket.
- The 6" and 8" with a 1/8" or 3/16" perf plastic basket.
- Stainless steel baskets for all size strainers are available in these perfs: 1/32", 3/64", 1/16", 5/64", 7/64", 1/8", 5/32", 3/16", 1/4", 3/8", 1/2"; and in mesh sizes: 20, 40, 60, 80, 100, 200, 325

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Duplex Basket Strainers

1/2" to 4" - PVC, Corzan® CPVC and Eastar® Clear Polyester

Features

- Uninterrupted Flow
- External Cover Threads
- Low Pressure Drop
- Wide Choice of Baskets
- In-Line or Loop Piping
- True Union Connections
- Ergonomic Hand Removable Cover
- FPM* Seals
- Integral Flat Mounting Bases
- Hand Removable Vents On Covers
- Hand Removable Drains On Bodies
- Liquid Displacing Covers

Options

- Stainless Steel Mesh Strainer Baskets
- EPDM Seals

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Protect System Components

When pipeline system components require protection from dirt and debris and the line cannot be shut down for basket cleaning, a Hayward All Plastic Duplex Basket Strainer is the ideal choice. Unwanted particles are removed as the process media passes through a perforated strainer basket contained inside the strainer body. The basket traps the unwanted material while allowing the process media to flow freely.

Easy Basket Cleaning

Cleaning or changing the strainer basket is quick and easy. Turning the operating handle on the diverter valve assembly switches the flow from one strainer housing to the other. Then, the out of service housing can be serviced by opening the hand removable, spin-off cover for access to the basket. The cover features two angled handles for easy opening and closing. The housing has external cover threads that do not contact the process media eliminating the need for cleaning. Venting and draining are easily accomplished by using the hand removable, threaded plugs on the cover and the side of the housing.

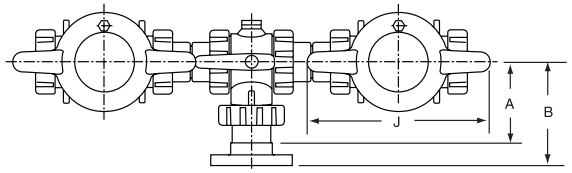
Choice of Piping Connections

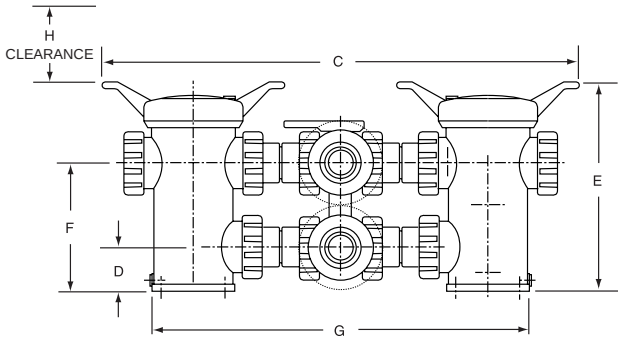
The strainer can be installed either in-line or with a loop piping configuration. This is made possible by changing the orientation of the bottom outlet connection. Just loosen the connection assembly nuts on the bottom diverter valve and rotate it 180 degrees to convert from one type of connection to the other. Maintenance is simplified by the strainers true union piping connections which make it possible to remove the strainer from the pipeline without breaking down piping connections.

Wide Range of Strainer Baskets

Plastic baskets in perforation sizes from 1/32” to 3/16” and stainless steel baskets from 1/2” perforation down to 325 mesh are available.

Technical Information





Dimensions - Inches / Millimeters

Size	A	B	C	D	E	F	G	H	J	Weight (lb / kg) Skt / Thd	Weight (lb / kg) Flg
1/2"	4.14 / 105	5.21 / 132	27.2 / 693	2.25 / 57	11.7 / 297	6.75 / 171	20.5 / 521	5.0 / 127	11.0 / 279	20.0 / 9	21.0 / 9.5
3/4"	4.14 / 105	5.33 / 135	27.2 / 693	2.25 / 57	11.7 / 297	6.75 / 171	20.5 / 521	5.0 / 127	11.0 / 279	20.0 / 9	21.0 / 9.5
1"	4.14 / 105	5.64 / 143	27.2 / 693	2.25 / 57	11.7 / 297	6.75 / 171	20.5 / 521	5.0 / 127	11.0 / 279	20.0 / 9	21.0 / 9.5
1-1/4"	6.0 / 152	7.44 / 189	35.3 / 897	3.25 / 83	15.5 / 394	9.5 / 241	28.0 / 711	10.8 / 274	13.5 / 343	39.5 / 18	42.0 / 20
1-1/2"	6.0 / 152	7.6 / 193	35.3 / 897	3.25 / 83	15.5 / 394	9.5 / 241	28.0 / 711	10.8 / 274	13.5 / 343	39.5 / 18	42.0 / 20
2"	6.0 / 152	7.77 / 197	35.3 / 897	3.25 / 83	15.5 / 394	9.5 / 241	28.0 / 711	10.8 / 274	13.5 / 343	39.5 / 18	42.0 / 20
2-1/2"	7.6 / 178	9.85 / 250	44.4 / 1128	4.83 / 123	22.3 / 566	14.83 / 377	35.6 / 904	14.8 / 376	16.0 / 406	83.0 / 38	88.0 / 40
3"	7.6 / 178	9.85 / 243	44.4 / 1128	4.83 / 123	22.3 / 566	14.83 / 377	35.6 / 904	14.8 / 376	16.0 / 406	83.0 / 38	88.5 / 40
4"	9.33 / 237	11.76/ 299	47.5 / 1207	4.83 / 123	22.3 / 566	14.83 / 377	38.7 / 983	14.8 / 376	16.0 / 406	100 / 45	105 / 48

Cv Factors

Size	Factor	Size	Factor
1/2"	12.5	1-1/2"	45
3/4"	13	2"	48
1"	14	3"	200
1-1/4"	40	4"	230

The above Cv Factors were determined using a 1/16" perforated plastic basket.

Pressure Drop Calculations

Basket Perforation Correction Factors

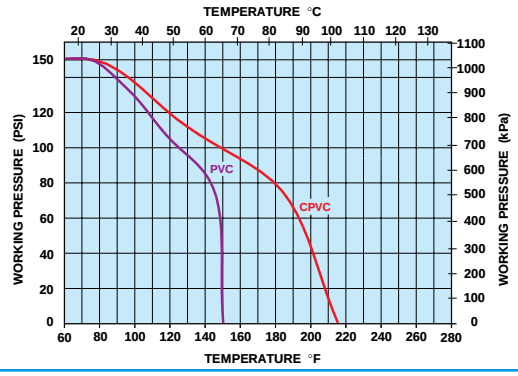
Plastic Baskets		Stainless Steel Baskets			
1/32"	1.05	1/32"	.82	3/8"	.45
1/16"	1.00	3/64"	.63	1/2"	.48
1/8"	.58	1/16"	.74	20 Mesh	.79
3/16"	.46	5/64"	.50	40 Mesh	1.01
		7/64"	.51	60 Mesh	1.20
		1/8"	.58	80 Mesh	1.16
		5/32"	.37	100 Mesh	1.20
		3/16"	.46	200 Mesh	1.09
		1/4"	.58	325 Mesh	1.22

The pressure drop across the strainer, for water or fluids with a similar viscosity, can be calculated using the formula below:

$$\Delta P = \left[\frac{Q}{Cv}\right]^2$$

Where ΔP = Pressure Drop
Q = Flow in GPM
Cv = Flow Coefficient

Operating Temperature/Pressure



Selection Chart

Size	Material	End Connection	Seal	Rating
1/2" to 4"	PVC, CPVC	Thd, Skt, Flg	FPM	150 PSI @ 70°F
1/2" to 2"	EASTAR®*	Thd, Skt, Flg		100 PSI @ 70°F

Basket Selection

- The 1/2" to 1" strainers can be ordered with either a 1/32" or 1/16" perf plastic basket.
- The 1-1/2" and 2" with a 1/32", 1/16", 1/8", or 3/16" perf plastic basket.
- The 3" and 4" with a 1/16", 1/8" or 3/16" perf plastic basket.
- The 6" with a 1/8" perf plastic basket.
- Stainless steel baskets for all size strainers are available in these perfs: 1/32", 3/64", 1/16", 5/64", 7/64", 1/8", 5/32", 3/16", 1/4", 3/8", 1/2"; and in mesh sizes: 20, 40, 60, 80, 100, 200, 325.

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Y Strainers

1/2" to 4" - PVC and Corzan® CPVC

Features

- Rated to 150 PSI
- FPM Seals
- Standard 1/32" perf screen
- All-Plastic Construction
- Easy Screen Access
- Can Be Used in Horizontal or Vertical Position

Options

- Stainless Steel Strainer Screens

Corzan® is a trademark of Noveon, Inc.

Economical Protection

Hayward Y Strainers protect piping system components from damage caused by dirt or debris in the process media. They cost less than other types of strainers and are lightweight and very compact. Because they can often be supported by the pipeline alone, they work in applications where other strainers cannot.

Rugged Plastic Screens

Hayward Y Strainers are supplied with a 1/32" perforated plastic screen. This screen is ultrasonically welded, not glued, for superior strength. Screens fabricated from type 316 stainless steel are also available in openings from 1/2" down to super fine 325 mesh. All screens have an open area at least twice that of the equivalent pipe size cross-sectional area to minimize pressure drop.

Easy Clean Out

All sizes of Hayward Y Strainers feature a heavy-duty hex cap that permits quick and easy removal of the strainer screen when cleanout becomes necessary.

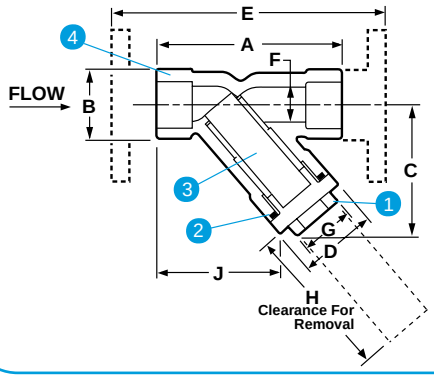
Adaptable Design

Hayward Y Strainers will work equally well in the horizontal or vertical position, simplifying piping system layout.

All Plastic Construction

Hayward Plastic Y Strainers will never rust or corrode – and they don't require painting or coating to survive corrosive environmental conditions.

Technical Information



Parts List
Y Strainer

1. Cap
2. O-Ring Seal
3. Screen
4. Body

Dimensions - Inches / Millimeters

Size	A	B	C	D	E	F	G	H	J	Weight (lb / kg) Skt / Thd	Weight (lb / kg) Flg
1/2"	3.38 / 86	1.38 / 35	2.25 / 57	1.50 / 38	N/A	0.56 / 14	1.00 / 25	2.13 / 54	2.50 / 64	0.25 / .11	N/A
3/4"	4.18 / 106	1.69 / 43	2.88 / 73	2.00 / 51	N/A	0.81 / 21	1.25 / 32	2.75 / 70	3.00 / 76	0.63 / .29	N/A
1"	5.19 / 132	2.00 / 51	3.63 / 92	2.16 / 55	N/A	1.00 / 25	1.50 / 38	3.30 / 84	3.32 / 84	0.88 / .40	N/A
1-1/4"	6.63 / 168	2.63 / 67	4.50 / 114	2.94 / 75	N/A	1.25 / 32	2.00 / 51	4.50 / 114	4.45 / 113	1.75 / .80	N/A
1-1/2"	6.63 / 168	2.63 / 67	4.50 / 114	2.94 / 75	N/A	1.56 / 40	2.00 / 51	4.50 / 114	4.45 / 113	1.63 / .74	N/A
2"	7.63 / 194	3.38 / 86	5.38 / 137	3.75 / 95	11.00 / 279	2.00 / 51	2.38 / 60	5.06 / 129	4.88 / 124	3.00 / 1.4	5.00 / 2.3
2-1/2"	10.31 / 262	4.69 / 119	7.25 / 184	5.25 / 133	N/A	2.90 / 74	3.50 / 89	6.60 / 168	6.54 / 166	7.75 / 3.5	N/A
3"	10.31 / 262	4.69 / 119	7.25 / 184	5.50 / 140	14.37 / 365	2.90 / 74	3.50 / 89	6.60 / 168	6.54 / 166	7.50 / 3.4	12.25 / 5.7
4"	12.81 / 325	5.75 / 146	8.88 / 226	6.18 / 157	17.73 / 450	3.78 / 96	4.25 / 108	8.00 / 203	8.58 / 218	9.50 / 4.3	17.50 / 8.0

Cv Factors*

Size	Factor	Size	Factor
1/2"	4.0	2"	28
3/4"	6.8	2-1/2"	40
1"	9.0	3"	65
1-1/4"	12	4"	100
1-1/2"	28		

* With 1/32" plastic screen

Pressure Drop Calculations

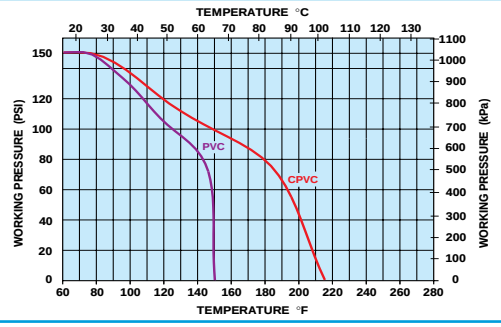
The pressure drop across the strainer, for water or fluids with a similar viscosity, can be calculated using the formula at the right:

$$\Delta P = \left[\frac{Q}{Cv}\right]^2$$

Where ΔP = Pressure Drop
Q = Flow in GPM
Cv = Flow Coefficient

The pressure loss across a valve or filter can be calculated using the system's flow rate and the Cv factor for that valve or filter.
For example, a 1" strainer with a Cv factor of 8 will have a 4 psi pressure loss in a system with a 16 gpm flow rate $(16 \div 8)^2 = 4$

Operating Temperature/Pressure



Selection Chart

Size	Material	End Connection	Seal	Rating
1/2" to 4"	PVC, CPVC	Thd, Skt, Flg*	FPM	150 PSI @ 70F

* 1/2" to 1-1/2" not available with flanged connections

Strainer Screen Selection

- Y Strainers are furnished with a 1/32" perf plastic screen.
- Stainless steel strainer screens are available in these perfs: 1/32", 3/64", 1/16", 5/64", 7/64", 1/8", 5/32", 3/16", 1/4", 3/8", 1/2"; and in mesh sizes: 20, 40, 60, 80, 100, 200, 325

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Y Strainers – Clear PVC

1/2" to 2"

Features

- Clear PVC construction
- Rated to 150 PSI
- FPM Seals
- Standard 1/32" Perf Screen
- All-Plastic Construction
- Easy Screen Access
- Can Be Used in Horizontal or Vertical Position

Options

- Stainless Steel Strainer Screens

Clear PVC Construction

See how much dirt and debris have been trapped by the strainer screen in the Hayward Clear PVC Y Strainer. The translucent PVC body shows the strainer screen in operation. This helps determine when it needs cleaning based on a visual check of the amount of debris retained by the screen. These Y strainers are available in pipeline sizes up to 2" with socket or threaded connections, and are rated at a full 150 psi.

Economical Protection

Hayward Y Strainers protect piping system components from damage caused by dirt or debris in the process media. They cost less than other types of strainers and are lightweight and very compact. Because they can often be supported by the pipeline alone, they work in applications where other strainers cannot.

Screens for All Applications

Hayward Y Strainers are supplied with a 1/32" perforated plastic screen. This screen is ultrasonically welded, not glued, for superior strength. Screens fabricated from type 316 stainless steel are also available in openings from 1/2" down to super fine 325 mesh. All screens have an open area at least twice that of the equivalent pipe size cross-sectional area to minimize pressure drop.

Easy Clean Out

All sizes of Hayward Y Strainers feature a heavy-duty hex cap that permits quick and easy removal of the strainer screen when cleanout becomes necessary.

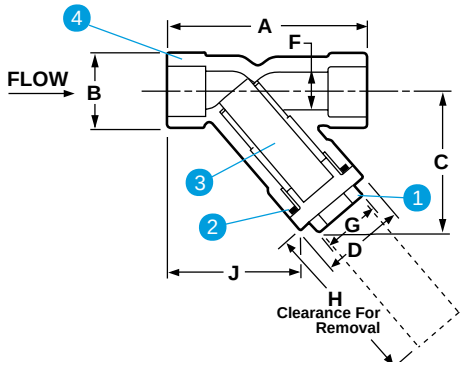
Adaptable Design

Hayward Y Strainers will work equally well in the horizontal or vertical position, simplifying piping system layout.

All Plastic Construction

Hayward Plastic Y Strainers will never rust or corrode – and they will not contaminate sensitive process media.

Technical Information



Parts List
Y Strainer

1. Cap
2. O-Ring Seal
3. Screen
4. Body

Dimensions - Inches / Millimeters

Size	A	B	C	D	F	G	H	J	Weight (lb / kg) Skt / Thd
1/2"	3.38 / 86	1.38 / 35	2.25 / 57	1.50 / 38	0.56 / 14	1.00 / 25	2.13 / 54	2.50 / 64	0.25 / .11
3/4"	4.18 / 106	1.69 / 43	2.88 / 73	2.00 / 51	0.81 / 21	1.25 / 32	2.75 / 70	3.00 / 76	0.63 / .29
1"	5.19 / 132	2.00 / 51	3.63 / 92	2.16 / 55	1.00 / 25	1.50 / 38	3.30 / 84	3.32 / 84	0.88 / .40
1-1/4"	6.63 / 168	2.63 / 67	4.50 / 114	2.94 / 75	1.25 / 32	2.00 / 51	4.50 / 114	4.45 / 113	1.75 / .80
1-1/2"	6.63 / 168	2.63 / 67	4.50 / 114	2.94 / 75	1.56 / 40	2.00 / 51	4.50 / 114	4.45 / 113	1.63 / .74
2"	7.63 / 194	3.38 / 86	5.38 / 137	3.75 / 95	2.00 / 51	2.38 / 60	5.06 / 129	4.88 / 124	3.00 / 1.4

Cv Factors*

Size	Factor	Size	Factor
1/2"	4.0	1-1/4"	12.0
3/4"	6.8	1-1/2"	28.0
1"	9.0	2"	28.0

* With 1/32" plastic screen

Pressure Drop Calculations

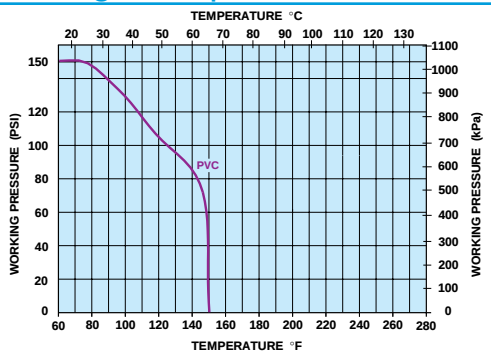
The pressure drop across the strainer, for water or fluids with a similar viscosity, can be calculated using the formula at the right:

$$\Delta P = \left[\frac{Q}{Cv}\right]^2$$

Where ΔP = Pressure Drop
Q = Flow in GPM
Cv = Flow Coefficient

The pressure loss across a valve or filter can be calculated using the system's flow rate and the Cv factor for that valve or filter.
For example, a 1" strainer with a Cv factor of 8 will have a 4 psi pressure loss in a system with a 16 gpm flow rate $(16 \div 8)^2 = 4$

Operating Temperature/Pressure



Selection Chart

Size	Material	End Connection	Seal	Rating
1/2" to 2"	Clear PVC	Thd or Skt	FPM	150 PSI @ 70F

Strainer Screen Selection

- Y Strainers are furnished with a 1/32" perf plastic screen.
- Stainless steel strainer screens are available in these perfs: 1/32", 3/64", 1/16", 5/64", 7/64", 1/8", 5/32", 3/16", 1/4", 3/8", 1/2"; and in mesh sizes: 20, 40, 60, 80, 100, 200, 325.

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Simplex Bag Filters

Single or Double Length - PPL, PVDF

Features

- All-Plastic Construction
- PPL Offered in Single & Double Length; PVDF in Double Length
- Hand-Removable Cover
- Integral Mounting Flange
- External Cover Threads
- In-Line or Loop Flow
- FPM Seals

Options

- Flanged Connections
- EPDM Seals
- Vent Gauge with Gauge Guard
- Pressure Differential Gauge and Switch
- Vent Gauge with Gauge Guard
- Multi-Vessel Manifolded Units
- 1/4" NPT Differential Pressure Gauge Holes

Corrosion Is Never a Problem

A metal filter housing will ultimately rust or corrode and contaminate the process media. There is no danger of this happening with a Hayward All-Plastic Simplex Bag Filter. It will never rust or corrode and never compromise the quality of the process fluid.

Wide Range of Filter Bags

Non-woven polypropylene filter bags are available in 1, 5, 10, 25, 50, 100 and 200 micron sizes. The retaining basket that holds the bag has a unique, universal seat that works with almost any standard 7" x 16" or 7" x 32" filter bag.

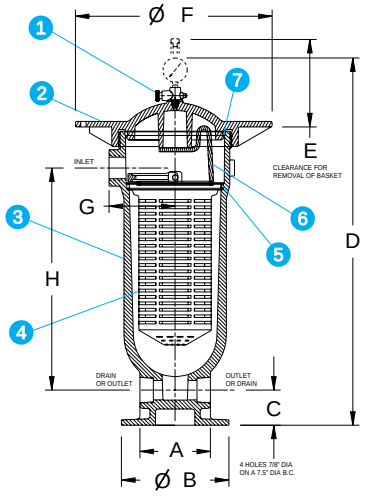
Extra Features, No Extra Cost

Features such as a vent/bleed valve installed on the cover of the polypropylene model and an integral mounting flange are all standard with every Hayward Simplex Bag Filter.

Easy Bag Change-Out

These filters are designed for easy service. A hand-removable cover and built-in basket and bag handles, make bag change-out fast and easy. No tools are needed and the filter is back in service in a matter of minutes. The external cover threads are not in contact with the process media – thus eliminating the need for cleaning each time the bag is changed. For extra strength the cover features specially designed buttress style threads.

Technical Information



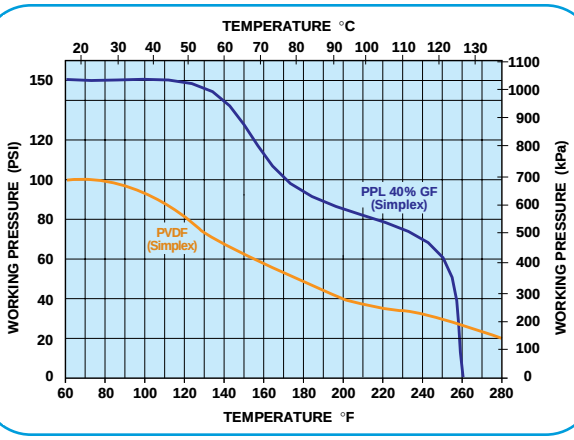
Parts List
Simplex Bag Filter

1. Vent Valve with Optional Gauge (PPL Vessels Only)
2. Cover
3. Body (PPL Double & Single Length, PVDF Double Length Only)
4. Basket
5. Viton “O” Ring
6. Bag Retainer
7. Viton “O” Ring

Dimensions - Inches / Millimeters

Vessel Size	A	B	C	D	E	F	G	H	J	K	Weight (lb / kg)
Single Length	6.50 / 165	10.00 / 254	3.25 / 83	34.10 / 866	20.00 / 508	18.30 / 465	6.13 / 156	20.75 / 527	11.5 / 292	8.75 / 222	60 / 27
Double Length	6.50 / 165	10.00 / 254	3.25 / 83	50.10 / 1273	36.00 / 914	18.30 / 465	6.13 / 156	36.75 / 933	11.5 / 292	8.75 / 222	80 / 36

Operating Temperature/Pressure



Technical Specifications

Material of Construction:	Glass-reinforced polypropylene – single & double length; PVDF – double length only
Piping Connections:	PPL: 2" NPT threaded or 150# ANSI flange. PVDF: 2" flange
Drain Connections:	PPL: 2" NPT threaded or 150# ANSI flange. PVDF: 2" flange
Bag Size:	Single length - 7" x 16", 2.0 square feet; double length - 7" x 32", 4.1 square feet, PPL fabric and ring
Pressure Rating:	PPL 150 psi, PVDF 100 psi
Seals:	Viton (EPDM optional)
Nominal Bag Ratings:	1, 5, 10, 25, 50, 100, 150, 200, 400, 600 and 800 microns. Universal seat accepts most standard 7" diameter bags
Flow Rate:	Single length, 50 gpm with clean bag double length, 100 gpm with clean bag

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Simplex Bag Filters

Single or Double Length - PVC or Corzan CPVC

Features

- All Plastic, No Metal Contacts the Flow
- Accepts Standard Size Filter Bags
- Choose from PVC or CPVC Construction
- Hand Removable Cover
- True Union Piping Connections
- Integral Mounting Base
- In-Line or Loop Piping Installations
- FPM Seals
- Vent Connection On Cover with Valve

Options

- Flanged Connections
- EPDM Seals
- Pressure Differential Gauge and Switch
- Multi-Vessel Manifolded Units
- 1/4” NPT Pressure Differential Gauge Taps (Requires Spools)
- Heavy Duty Shrouded Vent Valve Assembly

Corrosion Is Never a Problem

A metal filter housing will ultimately rust or corrode and contaminate the process media. This can never happen with a Hayward PVC or CPVC all plastic filter bag housing. It will never rust, corrode, or contaminate the process media. The housing weighs much less than a metal one making installation easier.

Accepts Most Standard Filter Bags

For application versatility the housing will accept most standard 7” diameter filter bags. The single length vessel uses Size 01 bags, 7” x 16”. While the double length vessel uses Size 02 bags, 7” x 32”. This permits the vessel to be used with thousands of different types of filter bags to exactly match the application requirements. With a Hayward PVC or CPVC Bag Filter Vessel you are not limited to just a few “non-standard” size bags.

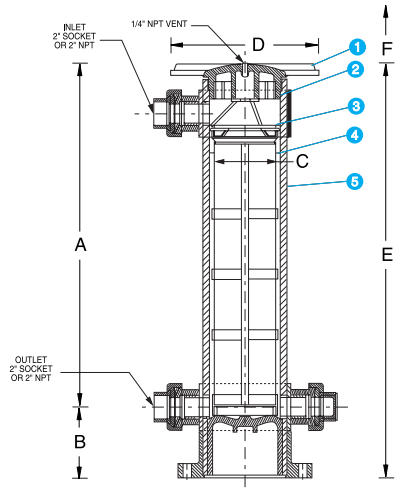
Advanced Design

This all plastic filter housing is designed to stand up to the most demanding industrial and commercial applications around. Rugged, thick wall construction insures years of trouble free service and the housing is rated at a full 150 psi. The built in true union piping and drain connections make installation and operation quick and easy. With this feature the filter housing can be removed from the piping system without having to break down the piping system. Just unscrew the assembly nut and remove the connecting pipe. The integral mounting base also makes for an easy installation and eliminates the need for extra cost support legs. The housing has two bottom outlet connections so that either can be used as a drain connection. This makes possible both in-line or loop piping installations.. The one-piece, corrosion resistant plastic body has an extremely smooth interior surface that is very easy to clean.

Easy Bag Change

The hand removable, no tools required spin-off cover makes filter bag changing quick and easy. There are no swing bolts to deal with like on a metal filter housing. Just a few turns of the cover using the built in 15” handle opens and closes the housing with little effort.

Technical Information



Parts List
Simplex Bag Filter Housing

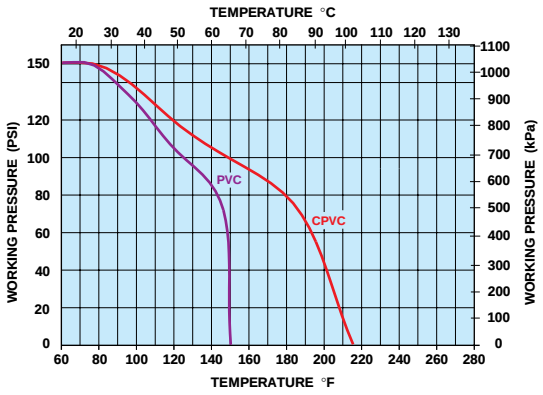
1. Cover - PVC or CPVC
2. O-Ring - Viton (EPDM Optional)
3. Bag Hold Down - PVC or CPVC
4. Restrainer Basket - PVC or CPVC
5. Body - PVC or CPVC

Dimensions - Inches / Millimeters

Vessel Size	A	B	C	D	E	F *	Weight (lb / kg)
Single Length	13.75 / 349	7.87 / 200	6.13 / 156	15.0 / 381	26.63 / 676	16.0 / 407	50 / 23
Double Length	29.75 / 756	7.87 / 200	6.13 / 156	15.0 / 381	42.63 / 1083	32.0 / 813	75 / 34

Note: * Clearance from top for basket removal

Operating Temperature/Pressure



Technical Specifications

Material of Construction: PVC or CPVC

Piping Connections: True Union 2", Socket, NPT Threaded or Optional 150# ANSI Flanged

Drain Connections: True Union 2" Socket, NPT Threaded or Optional 150# ANSI Flanged

Bag Size: Single Length - Size 01, 7" x 16" Double Length - Size 02, 7" x 32"

Pressure Rating: 150 psi at 70 F Non-Shock

Seals: Viton (EPDM optional)

Nominal Bag Ratings: PPL bags, 1, 5, 10, 25, 100, 150, 200, 400, 600, and 800 microns. Universal seat accepts most standard single and double length bags

Flow Rate: With clean bag, Double Length 100 gpm, Single Length 50 gpm

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Duplex Plastic Bag Filters

Single or Double Length - Polypropylene, PVC, CPVC

No Downtime for Bag Change-Out

With an all-plastic, corrosion-resistant Hayward Duplex Bag Filter, there is never a need to shut down the line and there is never any downtime necessary when changing filter bags. Just turn the lever handle to divert flow from one filter housing to the other. Then spin off the hand-removable cover, remove the dirty bag and install a new one.

Extra Features...No Extra Cost

Features such as a rugged, lightweight fiberglass mounting platform and a vent/bleed valve installed on both filter housing covers are standard with every Hayward All-Plastic Duplex Bag Filter.

Corrosion Is Never a Problem

A metal filter housing will ultimately rust or corrode and contaminate the process media. There is no danger of this happening with a Hayward All-Plastic Duplex Bag Filter. It will never rust or corrode and never compromise the quality of the process fluid.

Wide Range of Filter Bags

Non-woven polypropylene filter bags are available in 1, 5, 10, 25, 50, 100, 150, 200, 400, 600 and 800 micron sizes. The retaining basket that holds the bag has a unique, universal seat that works with almost any single or double length filter bag.

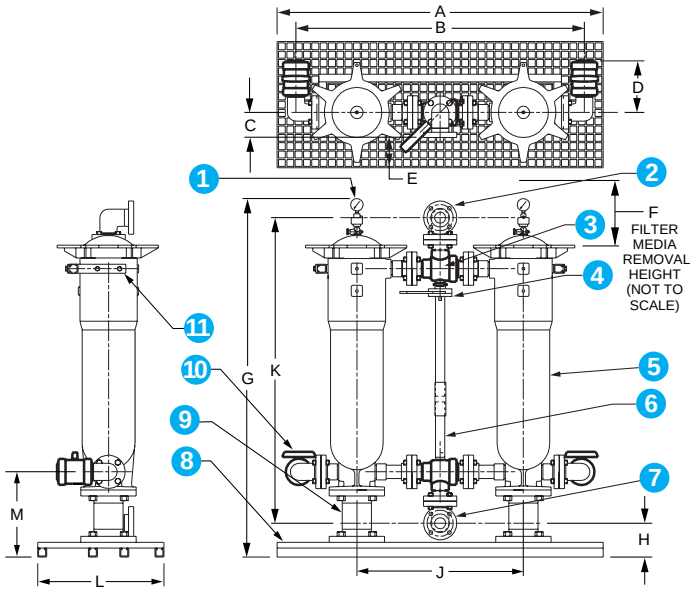
Features

- No Line Shutdown for Bag Change-Out
- Available in Both Single and Double Length Bag Sizes
- Can't Rust or Corrode
- Reversible Inlet and Outlet
- Rated to 150 PSI

Options

- Pressure Differential Gauges
- Pressure Differential Switches
- Automated Operation – Electric or Pneumatic

Technical Information



Parts List
*Duplex Bag Filter - PPL**

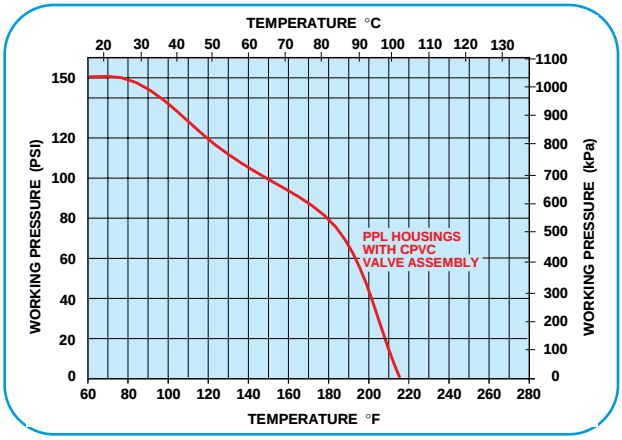
1. Vent Valve with Optional Gauge
2. Inlet Connection
3. Valve Assembly – Corzan™ CPVC
4. Lever Handle
5. Filter Housing – Polypropylene
6. Linkage Assembly
7. Outlet Connection
8. Base Assembly
9. Support Stand
10. Drain Valve
11. Differential Gauge Mounting Bracket– Optional

* Consult Hayward for PVC and CPVC dimensions.

Dimensions - Inches / Millimeters

Vessel Size			C		E							M	eight lb / g
Single ength	59 / 150	52 / 132	4.5 / 11	9.3 / 24	5.5 / 14	20 / 51	49 / 123	6.1 / 16	30 / 76	39 / 99	23 / 58	15.3 / 39	162 / 74
ouble ength	59 / 150	52 / 132	4.5 / 11	9.3 / 24	5.5 / 14	36 / 91	65 / 164	6.1 / 16	30 / 76	55 / 140	23 / 58	15.3 / 39	190 / 86

Operating Temperature/Pressure



Technical Specifications

Bag Size:	Single length - 7" x 16", 2.0 square feet; double length - 7" x 32", 4.1 square feet, PPL fabric and ring
Basket Open Area Ratio:	Single length 28:1; double length 60:1
Piping Connections:	2" 150# class flange
Drain Connections:	2" NPT
Material of Construction:	Glass-reinforced polypropylene and Corzan® CPVC
Seals:	FPM
Pressure Rating:	150 psi @ 70° F
Nominal Bag Ratings:	1, 5, 10, 25, 50, 100, 150, 200, 400, 600 and 800 microns. Universal seat accepts most standard 7" diameter bags
Maximum Flow Rate:	100 gpm
Mounting Base:	Fiberglass
Hardware:	Stainless steel

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How to Select a Bag Filter

1. Check the Chart on the Right

…to make sure that the temperature/pressure of the application falls within the OK range.

2. Determine the Flow Rate

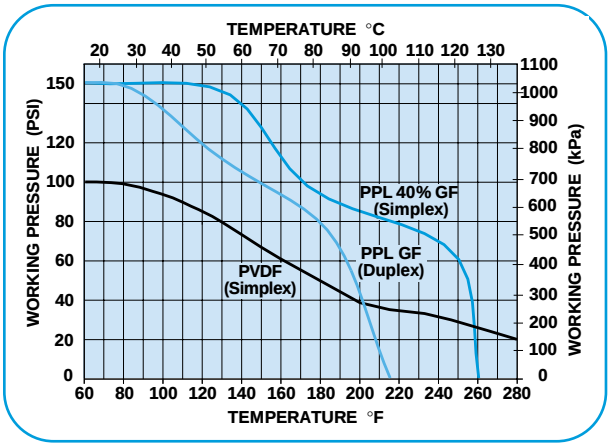
…in gpm, of the system into which the bag filter is to be installed. Hayward single and double-length bag filters work with flows of up to 100 gpm. If the system's flow rate is greater, consider using two or more filters manifolded together. For example, if the system flow rate is 150 gpm, using two manifolded filters would reduce the flow to a manageable 75 gpm through each.

3. Select the Bag

…Hayward bags are available in 5, 10, 25, 50 and 100 micron ratings. The bags are made from non-woven polypropylene felt material. They are double stitched and heat treated to minimize fiber migration. All bags are individually plastic wrapped and sealed to prevent contamination in shipping and handling. A single length bag has a surface area of 2.0 sq ft and a double length 4.1 sq ft.

4. Consider Startup 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. Remember that in most applications filtration efficiency falls off at about 8 to 10 psi loss and bag changeout should take place before a 20 psi loss is reached. When in doubt select the filter with the lowest pressure loss. The time between bag changeouts for a double length filter is more than twice that of a single length filter in the same application.



5. Calculate Startup 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 vessel without a bag and the bag loss.

First: Use the system flow rate and Chart Number One to determine the loss across the filter without a bag (single and double length filter vessels 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 is cps units from Table Number One. Multiply the pressure drop by this factor.

Second: Single and double length filter bags have different pressure losses. Use Chart Number Two 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 ÷ 2.0) and 0.05 for a double length bag (0.2 ÷ 4.1). For fluids with viscosities other than water, select the correction factor from Table Two 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 vessel and the bag together to get the pressure loss across the filter with the bag installed.

Chart Number One
Vessel Pressure Loss

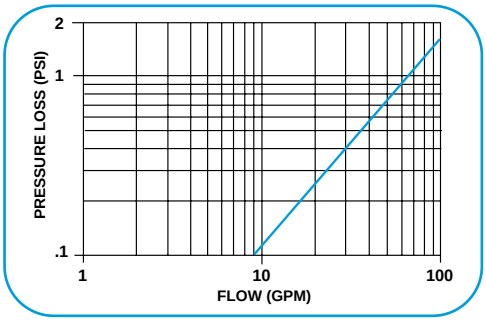


Chart Number Two
Bag Pressure Loss

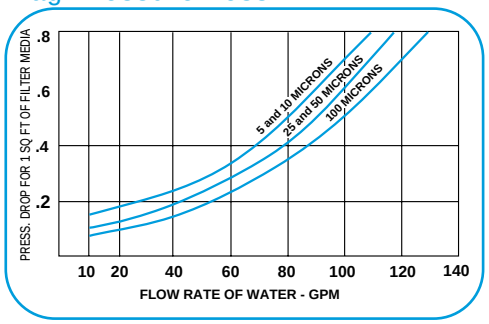


Table Number One
Vessel Viscosity Correction

Viscosity in CPS	200	400	600	800	1000	2000
Correction Factor	1.10	1.20	1.40	1.50	1.60	1.80

Pressure differential data determined by ISA S75.02 test procedure. It is shown only as a guide only and may vary by application.

Table Number Two
Bag Viscosity Correction

Viscosity	Factor	Viscosity	Factor	Viscosity	Factor
Water 1	1.0	200	16.6	800	50.0
50	4.5	400	27.7	1000	56.2
100	8.5	600	38.9	2000	113.6

Basket Strainer Technical Information

Selection Criteria

The first consideration when selecting a Hayward basket strainer is the amount of free open area. This is the ratio of the open area through the strainer basket to the cross sectional area of the pipe. A well-designed basket strainer should have an open area ratio of at least 4 to 1. Anything less may cause excessive pressure drop. The area is calculated with a clean basket – and as the basket begins to clog, the ratio will drop. Unless there is a wide safety margin, the area through the basket may quickly become smaller than the pipe area. This will reduce flow through the strainer and necessitate very frequent cleaning. A small open area ratio also means the holding capacity of the basket is small (an important consideration if there is a lot of solid material to be removed.)

Second, is ease of basket removal. Since a basket strainer is used where cleaning may occur often, it stands to reason that the basket should be able to be removed and replaced as simply as possible. Hayward simplex and duplex strainers feature hand removable, precision machined threaded covers which can be quickly loosened or tightened by hand without the use of tools.

Another item to look for in selecting a strainer is compactness of design. Is the strainer unnecessarily bulky or tall? In many industrial areas, space is at a premium and the less room a strainer takes the better.

Lastly, a wide variety of basket perforation sizes should be available. This is necessary to cope with the great range of particle sizes which the strainer may be called upon to remove.

Selection and Sizing

When installing Hayward basket strainers, it is sometimes a good idea to use two of them in tandem. This is especially true when there is a great deal of material to be taken out of the line and the particles vary in size. If a single strainer with a fine mesh lining were used alone, it could fill quickly and necessitate very frequent cleaning. By using two strainers in series, the first with large openings to trap the large particles and the second with a fine mesh lining, the load is spread out and time between cleaning is also spread out.

Selecting the proper size basket strainer for a particular application is most important. A general rule of thumb is that pressure drop through a clean strainer should not be greater than 2 psi. If it is, the strainer selected is too small. Factors such as viscosity, specific gravity and mesh lining size all influence pressure drop through the unit and they must be taken into account.

Thus, the strainer size is not automatically the same as pipe size. In the case of highly viscous liquids, for instance, where pressure drop through a mesh lined basket can cut down flow considerably, it is sometimes necessary to use a strainer several times larger than the pipeline in order to assure adequate flow. However, this is not undesirable because, aside from the slightly larger initial investment, there are no subsequent added costs. Basket strainers last almost indefinitely and there is nothing to wear out. If there is an unusually large amount of material to be taken out of the line, then a larger strainer or multiple strainers are almost certainly called for. Too small a unit will fill quickly and require frequent basket changing – which can be expensive in the long run. If a basket has to be changed more than once an hour, the strainer is probably too small.

Proper Basket Selection

The question of which perforation or mesh lining size to use comes up regularly. Here again, the basic rule is to use the coarsest size which will strain out the product to be removed. Using a finer mesh than needed will only result in premature clogging. When in doubt about which of two basket screens to use, it is best to choose the larger. As a rule of thumb, size the baskets for one half the particle size to be removed.

Basket Sizes Offered for Hayward Simplex and Duplex Plastic Basket Strainers

Pressure Drop Correction Factors for Various Size Basket Screens

PLASTIC		STAINLESS STEEL		STAINLESS STEEL	
Perforation	Correction Factor	Perforation	Correction Factor	Mesh	Correction Factor
1/32"	1.05	1/32"	0.82	20	0.79
1/16"	1.00	3/64"	0.63	40	1.01
1/8"	0.58	1/16"	0.74	60	1.20
3/16"	0.46	5/64"	0.50	80	1.16
		7/64"	0.51	100	1.20
		1/8"	0.58	200	1.09
		5/32"	0.37	325	1.22
		3/16"	0.46		
		1/4"	0.58		
		3/8"	0.45		
		1/2"	0.48		

Note: Pressure Drop Correction Factors for various size basket screens may be applied to data for 1/16" perforation plastic baskets. Simply multiply the pressure drop shown in the 1/16" basket chart by the appropriate correction factor.

Comparative Particle Size

Mesh	Inches	Microns	Mesh	Inches	Microns	Mesh	Inches	Microns
3250	0.0002	6	130	0.0043	110	24	0.028	718
1600	0.0005	14	120	0.0046	118	20	0.034	872
750	0.0010	25	110	0.0051	131	18	0.039	1000
325	0.0016	40	100	0.0055	149	16	0.045	1154
250	0.0024	62	90	0.0061	156	14	0.051	1308
200	0.0029	74	80	0.0070	179	12	0.060	1538
180	0.0033	85	70	0.0078	200	10	0.075	1923
170	0.0035	90	60	0.0092	238	8	0.097	2488
160	0.0038	97	50	0.0117	300	6	0.132	3385
150	0.0041	100	40	0.015	385	5	0.159	4077
140	0.0042	108	30	0.020	513	4	0.203	5205

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FLT Cartridge Filters

All Plastic PVC or CPVC Construction Removes Fine Particulate Matter

Features

- All plastic CPVC construction will never rust or corrode.
- Compact, easy to install.
- No metal in contact with the process fluid.
- Quick and easy filter cartridge changes.
- FPM O-Ring seal.

Simple In-Tank Filtration

Designed to filter process fluid within a tank eliminating the time and expense needed to install a separate, stand alone, filter and pump. The filter features all plastic, CPVC construction with FPM for exceptional chemical resistance and are available with either one or two filter cartridges.

Easy Operation

Changing filter cartridges is quick and easy for both single and double filter units. A simple quick disconnect union is used to connect the filter cartridge to the pump. Just unscrew the union, no tools are required, and remove the filter cartridge and assembly. It takes only seconds and there are no plastic screws that could be cross-threaded, especially at higher temperatures. To make the cartridge change our process even faster additional disconnect unions are available to make up preloaded assemblies with clean filter cartridges.

Choice of Filter Media

The In Tank Filtration unit comes standard with one 50 micron wound, polypropylene filter cartridge. Cartridges are also available in 1, 5, 10, 30, 75 and 100 micron ratings and have a 1" I.D. and a 2 1/2" O.D. Single or double cartridge configurations are available in either 10", 20", or 30" lengths. In Tank Filtration Systems are available with S or D-Series pumps that are seal-less and can be run dry. These heavy duty, reliable pumps come with Hayward's unique two year warranty.

Two Year Warranty

The heavy duty Webster S or D-Series Pumps that are part of the In-Tank Filtration System are rugged pumps designed to stand up to the most aggressive, and demanding of applications and are backed by the exclusive Hayward two year warranty.

Consult your Webster distributor for warranty information.

In-Tank Filtration Systems

Our Exclusive Two Year Warranty

Other pumps claim to be heavy duty but check the warranty behind the claim..is it only for 1 year..only for water service? Compare price, features, specifications and warranty…then move up to Webster.

Features

- For use with S and D-Series Pumps
- CPVC Corrosion-Resistant Construction
- Compact and Easy to Install
- Immersible, Seal-Less, Bearing Free Pump
- Can Run Dry
- Quick and Easy Filter Change
- Single or Double Filter
- 1/15 HP Model features a built in power cord.

HAYWARD FlowControl

Hayward Industrial Products, Inc.
One Hayward Industrial Drive, Clemmons, NC 27012
Tel: 1-888-429-4635 (1-888-HAYINDL) • Fax: 1-888-778-8410
E-mail: hflow@haywardnet.com
Web Site: http://www.haywardindustrial.com

MC-5-PAD Rev. 6 Printed in U.S.A.

All-Plastic High Capacity Cartridge Filters

For Water or Chemical Filtration

Housings Feature

- All-plastic PPL or PVDF construction
- FPM or EPDM seals
- Threaded or flanged connections
- Hand-removable cover
- High pressure ratings
- Inline or loop piping setup
- Simplex or duplex models

Cartridges Feature

- Nominal and absolute rated cartridges
- Large filtration area
- High dirt holding capacity

An Important Advance in Cartridge Filtration

Now you can have all the benefits of cartridge filtration for industrial and commercial applications – while getting complete corrosion resistance. Hayward's one-piece, seamless, plastic-body cartridge filters will never rust or corrode, nor will they contaminate the process fluid.

Thousands of Applications

Hayward's Series 4200 all-plastic cartridge filters have been designed to work in the most demanding of applications – whether for high purity water or aggressive chemical filtration. These heavy-wall-housing filters will withstand operating pressures of up to 150 psi with no problem. Series 4200 filters will work in corrosive atmospheres and harsh environments, places where a metal housing would have to be painted or epoxy-coated just to survive. All this, plus light weight and easy installation, make the Hayward Series 4200 cartridge filter right for your application.

The Right Configuration for Your Application

Series 4200 cartridge filter housings are offered in three sizes – making it easier to choose the exact filter for your application requirements. And you can choose between two types of Hayward cartridges. Hayward HC cellulose cartridges are perfect for all types of water filtration up to 165°F. Their special design packs 47 sq ft of filter media into a 16" tall cartridge. Hayward PF polypropylene cartridges are silicone-free and feature graded density construction for superior particle retention.

Duplex Models

Choose a Hayward Series 4200 duplex cartridge filter for those applications where the pipeline flow cannot be shut down to change out filter cartridges. Duplex filters allow the pipeline flow to be diverted to one of the two filter housings. This permits the off-line housing to be serviced without flow shutdown.

Series 4200 Plastic Filter Housings for Cartridges

Features

- *All-plastic PPL or PVDF construction*
- *FPM or EPDM seals*
- *Threaded or flanged connections*
- *Hand-removable cover*
- *High pressure ratings*
- *Inline or loop piping setup*
- *For water filtration applications, CFLT4201 accepts one 16" cartridge; CFLT4202 accepts two 16" cartridges, end to end*
- *For absolute filtration applications, five-element 20" and 30" cartridges are accepted by housings CFLT4203 and CFLT4202, respectively*

Will Not Rust or Corrode

A metal filter housing will ultimately rust or corrode and contaminate the process media. There is no danger of this happening with a Hayward Series 4200, all-plastic, seamless body, polypropylene cartridge filter housing. It will never compromise the quality of the filtration system by rusting or corroding. The Model CFLT4202 simplex housing is also available in PVDF for the filtration of extremely corrosive fluids such as bromine, chlorine, toluene and trichloroethylene.

Application Versatility

With three filter housing sizes, the Series 4200 easily adapts to all Hayward filter cartridges. The Hayward HC cartridge, a nominally rated water filter cartridge, fits the Model CFLT4201 and CFLT4202 housings, while the absolute-rated PF cartridge fits the CFLT4203 and CFLT4202 housings for high purity and aggressive chemical applications. Adapter kits custom configure each housing to the specific filter cartridge.

Easy to Service

The Series 4200 filter housings are designed for quick and easy filter cartridge changeout. A hand removable cover simplifies cartridge changing. No tools are needed and the filter is back in service in a matter of minutes. The external cover threads are not in contact with the process media – eliminating the need for cleaning each time the cartridge is changed – a real time saving feature. Extra strength buttress style cover threads are a standard feature on all filter housings.

Easy Installation

Support stands are not needed for the Series 4200 housings. An integrally molded support flange insures fast, rock solid installation. The 2" inlet and outlet connections are parallel and easy to pipe into. Two outlet connections are available for either in-line or loop piping arrangements.

Extra Features, No Extra Cost

An all-plastic vent/bleed valve on the cover is standard on every all-plastic Series 4200 cartridge filter housing. Duplex models come ready mounted on a fiberglass mounting skid.

Duplex Model for Continuous Flow

In many applications it is not possible to shut the process line down for cartridge changeout. For these applications a duplex cartridge filter skid assembly is available. Here, two filter housings are linked with a special all-plastic CPVC valve assembly that diverts the flow from one housing to the other without having to shut down the system. Just a quarter turn of a handle diverts the flow from one housing to the other – making it possible to change the cartridge in the out of service housing while the flow continues through the other housing.

Housing/Cartridge Specifier

Housing	Hayward HC Cartridge	Max. Flow Rate	Hayward PF Cartridge	Max. Flow Rate
CFLT4201	One 16"	50 gpm	—	—
CFLT4202	Two 16"	100 gpm	Five 30"	100 gpm
CFLT4203	—	—	Five 20"	50gpm

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Hayward HC Cartridges for Water Filtration

Features

- *FDA-approved materials*
- *High particle retention*
- *Long life*
- *High holding capacity*
- *5-micron size*

More Filtration Area

The Hayward HC cartridge is a high capacity cartridge that has over 47 sq ft of filter area. That's more than 10 times the filtration area of a typical standard 10" cartridge – resulting in a higher dirt loading capacity and less downtime for cartridge changeout. These cartridges measure almost 16" tall. For flow rates of up to 50 gpm, use one cartridge installed in a CFLT4201 filter housing. Two cartridges can be installed end-to-end in a CFLT4202 housing – creating a total of 94 sq ft of filtration area for applications requiring flow rates up to 100 gpm.

Heavy Duty Construction

HC cartridges are constructed with a polypropylene core, cellulose element and sealed with plastisol end caps. All materials are FDA approved. HC cartridge is offered in 5 nominally rated micron size.

Best Cartridge for Water Filtration Applications

HC cartridges are ideal for all types of water filtration up to 165 F. Whether your application requires the filtering of salt water, cooling water, well water, waste water or drinking water, the Hayward HC cartridge is the right choice for your filtration requirements.

Hayward PF Cartridges for Absolute Filtration

Features

- *Large pleat design – more filter for the money*
- *Silicone free – for high purity applications*
- *Graded density – for superior particle retention*
- *Ratings of 1, 5 and 10 microns*
- *FDA-approved materials*

Absolute Filtration to 99.98%

Hayward PF cartridges are the perfect choice when the quality of the process liquid cannot be compromised. They are designed for applications that require absolute filtration to 99.98% and are rated at 1, 5 and 10 microns.

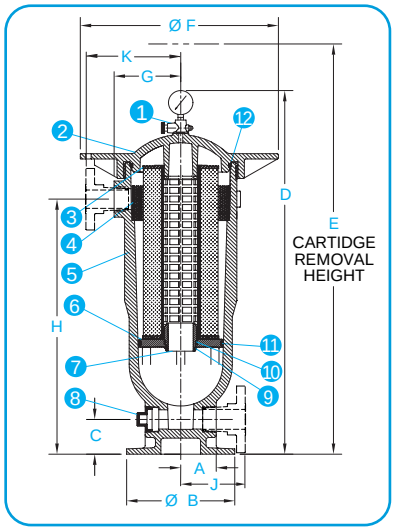
Superior Design for Long Life

PF cartridges are silicone free and constructed from a continuous, graded, polypropylene fiber. A high efficiency pleat configuration results in high flow rates and dirt loading capacity with minimal pressure drop. The media is housed within a polypropylene cage for support under high flow conditions and permits a more even distribution of the process liquid through the filter media for longer cartridge life. Easy, positive installation of the cartridge into the housing is assured by the Type 222 double o-ring seal design. You never have to guess if the cartridge is properly installed. The PF cartridges consist of five filtration elements and are available in two lengths. The 20" cartridge fits the CFLT4203 filter housing for flow rates up to 50 gpm and a 30" cartridge in the CFLT4202 filter housing for applications requiring flow rates up to 100 gpm.

Unlimited Applications

The Hayward PF cartridge, combined with the Hayward Series 4200 housing, is the best chemically resistant filtration system available. It is ideal for applications requiring quality filtration of bulk chemicals, oils, photographic chemicals, cosmetics, pharmaceuticals, inks, dyes, paints and water. Hayward PF cartridges also meet FDA requirements for food and beverage contact.

Technical Information

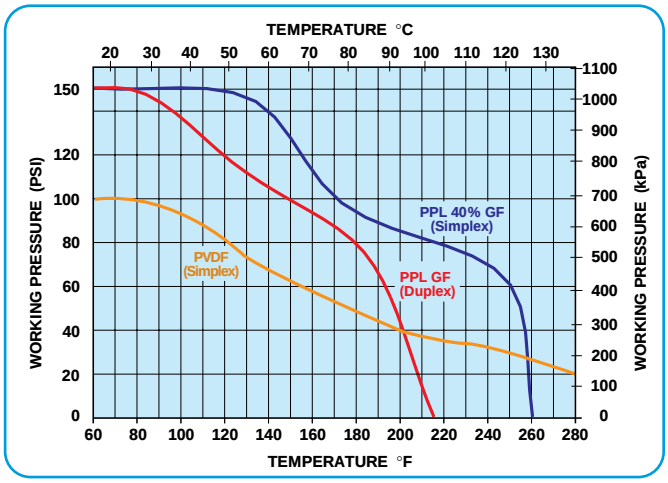


Series CFLT4200 Simplex Parts List

1. PPL vent valve (with optional gauge)
2. Cover
3. HC cartridge
4. Flow diffuser (HC only)
5. Body
6. Support
7. Connector
8. Drain plug

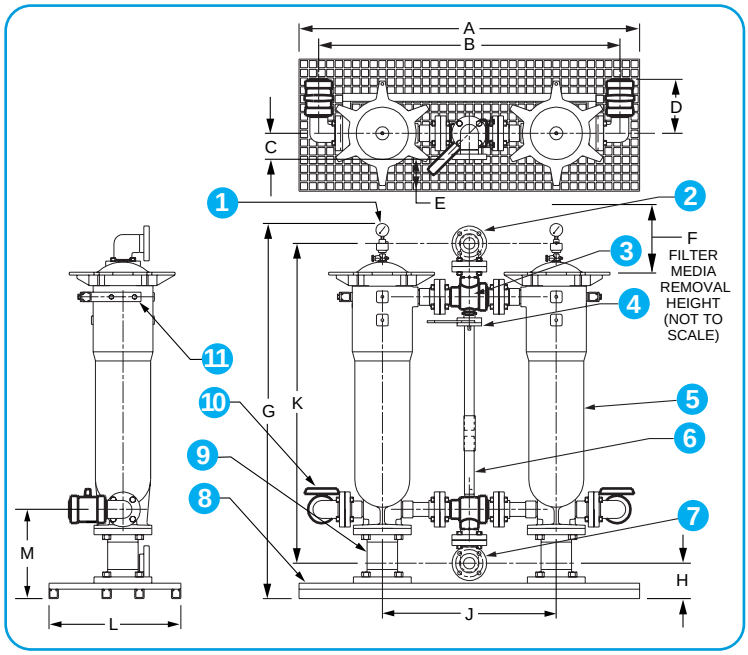
9-12. O-ring

Operating Temperatures/Pressures



Model 4200 Simplex Dimensions – inches (mm)

Model	A	B	C	D	E (HC Cart.)	E (PF Cart.)	F	G	H	J	K	Weight (lb/kg)
CFLT4201	6.5 (165)	10 (254)	3.25 (83)	34.1 (866)	45 (1143)	—	18.38 (467)	6.21 (156)	20.75 (527)	5.75 (146)	8.75 (222)	50 (22.7)
CFLT4202				50.2 (1275)	61 (1549)	75 (1905)			36.75 (933)			65 (29.5)
CFLT4203				38.1 (967)	—	49 (1245)			24.75 (628)			58 (26.4)



Series CFLT4200 Duplex Parts List

1. PPL vent valve with optional gauge
2. Inlet connection
3. Valve assembly, Corzan® CPVC
4. Lever handle
5. Filter housing, polypropylene
6. Linkage assembly
7. Outlet connection
8. Base assembly
9. Support stand
10. Drain valve, optional
11. Differential gauge mounting bracket, optional

Technical Specifications

Material of Construction:	Glass reinforced polypropylene or PVDF (Model CFLT4202 only)
Piping Connections:	PPL – 2" NPT threaded or optional 150# ANSI flanged. PVDF – 2" socket fusion or optional flanged
Pressure Rating:	PPL – 150 psi. PVDF – 100 psi non-shock at 70 F
Seals:	FPM or optional EPDM

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Model 4200 Duplex Dimensions – inches (cm)

Model	A	B	C	D	E	F (HC Cart.)	F (PF Cart.)	G	H	J	K	L	M	Weight (lb/kg)
CFLT4201	59 (150)	52 (132)	4.5 (11)	9.3 (24)	5.5 (14)	55 (1397)	—	49 (123)	6.1 (16)	30 (76)	39 (99)	23 (58)	15.3 (39)	162 (74)
CFLT4202						71 (1803)	85 (2159)	65 (164)			55 (140)			190 (86)
CFLT4203						—	59 (1499)	53 (135)			43 (109)			170 (77)

HAYWARD®

FlowControl SYSTEMS

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