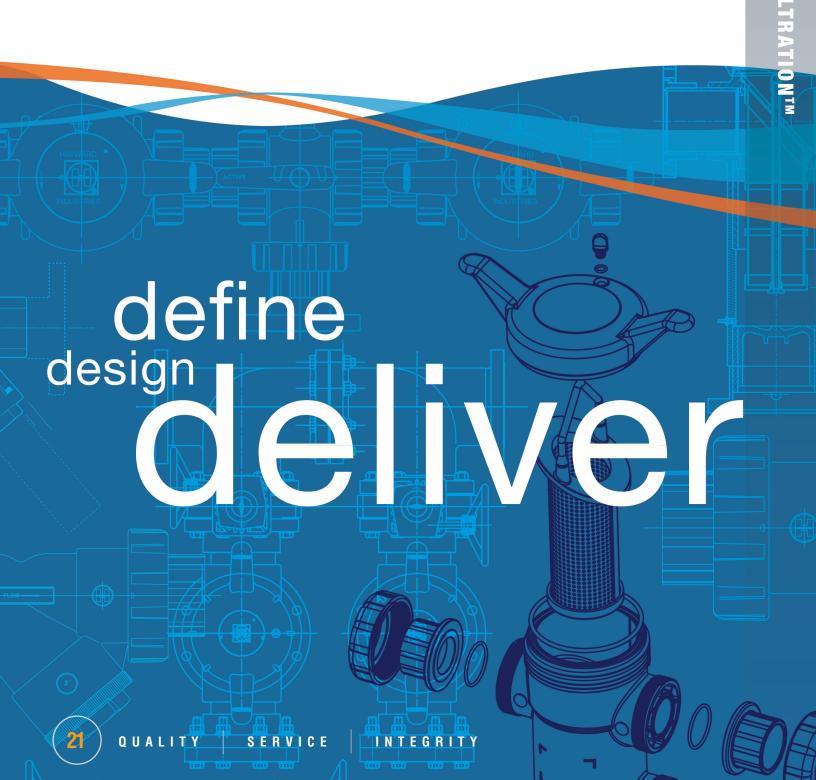
Thermoplastic Strainer Product Guide



Why Thermoplastic Strainers?

For more than 60 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.

Hayward's industry leading Basket and Y-Strainers are designed to protect pipeline system components from dirt and debris while allowing process media to flow freely. Simplex and duplex Basket Strainers are manufactured in PVC, CPVC, GFPP and clear Eastar®, and are available with thermoplastic, stainless steel or specialty alloy baskets in a variety of perfs and meshes. Y-Strainers are offered in PVC, clear PVC, CPVC and PVDF materials with FPM or EPDM o-ring seals and a range of perforated thermoplastic or metal screens.

Pipeline Strainers are the unsung heroes in a piping system. Their role in a piping system is simply protecting your investment by removing any potentially harmful solids from the process fluid that can damage inline sensors, pump impellers, valves, and other expensive equipment. Haward Flow Control Thermoplastic Strainers come in three families of products:

Y-strainers function in a variety of liquid straining applications to protect downstream process system components from damage or clogging by sand, gravel, or other debris. Y-strainers remove unwanted solids from piping systems by means of a perforated or mesh screen. Y-strainers are cost effective when removing a small amount of material resulting in long intervals between screen cleanings. To clean the strainer screen, shut down the line and remove the strainer cap. Hayward Y-Strainers are offered in both "molded-in" and True-Union designs.

Simplex basket strainers are used when liquids require regular or frequent cleaning, and when the line can be shut down for short periods to clean or change the basket. Basket strainers hold substantially more material than Y strainers and offer a lower pressure drop. Installed upright, in a horizontal line, the basket strainer lifts out from the top. This makes it easier to use with high loads, high viscosity fluids, or with large pipeline sizes where the filled basket weight can be considerable. They are indispensable for prefiltration systems.

Duplex basket strainers operate continuously so the pipeline flow never has to be shut down for strainer basket cleaning. When one basket is full, the flow shifts to the other one, making it easy to remove, clean, and replace the first basket. Duplex or "double basket" strainers are valuable in locations in which it is impossible to shut off flow to stop the operation. Examples of these processes include cleaning water intake for Water Treatment plants, prefiltration for membrane systems, screening water in cooling towers, and straining fluids in continuously running chemical operations.

KEY APPLICATIONS FOR HAYWARD THERMOPLASTIC STRAINERS INCLUDE AND NOT LIMITED TO:

Water Treatment Pump Seal Protection
Chilled Water Plating & Surface Finishing

Chemical Processing Sea Water

Scrubbers Plant Intake Water

Semicon Well Water
Parts Washing Pre-Filtration
Mining Remediation
Food Processing Marine

Hayward Flow Control products carry an industry-leading, full three-year warranty. As an ISO 9001:2015 certified company, we strive for the highest quality product possible for use in a wide range of demanding applications.









*ABS applies to CPVC Items Only







YS Series Y-Strainers

1/2" - 2" / DN15-DN50 PVC, CLEAR PVC AND CPVC

2-1/2" - 4" / DN65-DN100 PVC AND CPVC

KEY FEATURES

- Available in PVC, CPVC and Clear PVC Materials
- Horizontal or Vertical Installation
- FPM O-Ring Seals
- 2:1 Open Area Ratio
- Hex Cap for Easy Access to Screen
- Standard Screen has 1/32" Perforation

OPTIONS

 Stainless Steel Perforated or Mesh Strainer Screens Available in Various Sizes and Alloy Materials

MATERIALS

SELECTION CHART

- PVC Cell Class 12454 per ASTM D1784
- Clear PVC Cell Class 12454 per ASTM D1784
- CPVC Cell Class 23447 per ASTM D1784
- FPM and EPDM O-Ring Seals

TECHNICAL INFORMATION

EXPLODED VIEW

SIZE	MATERIAL	END CONNECTION	SEALS	PRESSURE RATING
1/2" - 1" (DN15 - DN25)	PVC, CPVC or Clear PVC			
1–1/4" (DN32)	PVC and Clear PVC	Socket or Threaded		
1–1/2" (DN40)	PVC, CPVC or		FPM and	150 PSI @ 70°F 10 Bar @ 21°C
2" (DN50)	Clear PVC		EPDM	Non-Shock
2-1/2" (DN65)	PVC	Socket, Threaded or Flanged		
3–4" (DN80-DN100)	PVC and CPVC			

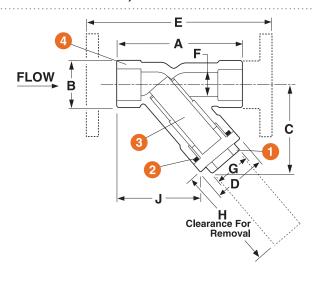
YS Series Y-Strainers

1/2" - 2" / DN15-DN50 PVC, CLEAR PVC AND CPVC 2-1/2" - 4" / DN65-DN100 PVC AND CPVC

TECHNICAL INFORMATION, CONTINUED

PARTS LIST

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



SCREEN OPTIO	SCREEN OPTIONS									
PERFORATION SIZES	MESH SIZES	SCREEN MATERIAL								
1/32"	20									
1/16"	40									
1/8"	60									
5/32"	80	SSTL, Hastelloy, Monel and Titanium								
3/16"	100									
1/4"	200									
3/8"										
1/32"	***************************************	• • • • • • • • • • • • • • • • • • • •								
1/16"	NI/A	DVO 0DV0								
1/8"	N/A	PVC, CPVC								
3/16"										

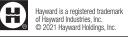
CODEEN ODTIONS

DIMENSIONS										WEIG lbs /	
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	SOC / THD	FLANGED
1/2 / 15	3.38/86	1.38/35	2.25/57	1.50/38	N/A	.56/14	1.00/25	2.13/54	2.50/64	.25/.11	N/A
3/4 / 20	4.18/106	1.69/43	2.88/73	2.00/51	N/A	.81 / 21	1.25 / 32	2.75/70	3.00/76	.63/.29	N/A
1 / 25	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	.88/.40	N/A
1-1/4 / 32	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/.79	N/A
1-1/2 / 40	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
2/50	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	3.00/1.36	5.00/2.27
2-1/2 / 65	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	7.75/3.52	N/A
3/80	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	7.50/3.40	12.25/5.56
4 / 100	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	9.50/4.30	17.50/7.94

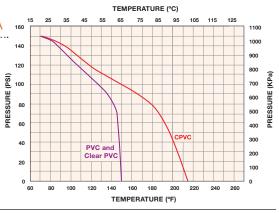
Cv VALUES*

SIZE SIZE PRESSURE LOSS Cv VALUES Cv VALUES **CALCULATION FORMULA** in / DN in / DN 1/2 / 15 4.0 2/50 28 $\Delta P = \left[\frac{Q}{CV}\right]^2$ 3/4 / 20 6.8 2-1/2 / 65 40 $\Delta P = Pressure Drop$ 1 / 25 9.0 3/80 65 Q = Flow in GPMCv = Flow Coefficient1-1/4 / 32 12 4/100 100 1-1/2 / 40 28

^{*} With 1 / 32" plastic screen



OPERATING TEMPERATURE/PRESSURE







YS Series Y-Strainers

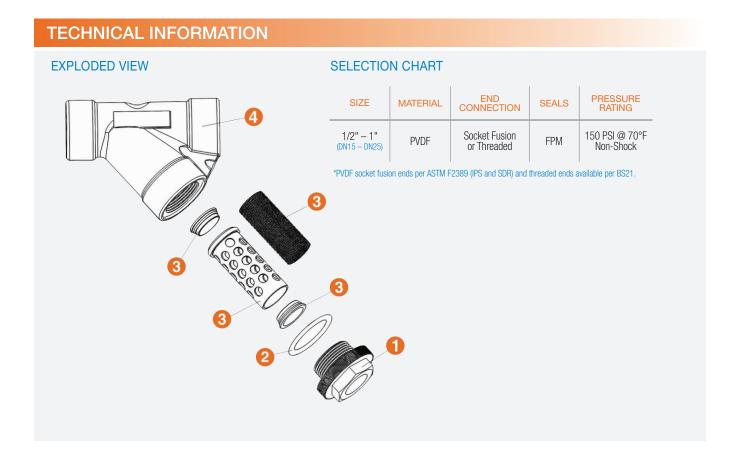
1/2", 3/4" AND 1" / DN15-DN25 PVDF

KEY FEATURES

- Natural PVDF 1-pc Molded Body
- NPT or BSP Threaded Ends
- Socket Fusion Ends for IPS Schedule 40 / 80, or for SDR21 / 33 Piping
- Horizontal or Vertical Installation
- FPM O-Ring Seals
- Hex Cap for Easy Access to Screen
- Standard Screen has 3/32" Perforation

MATERIALS

- Natural PVDF per ASTM D3222 Type 1
- FPM O-Ring Seals

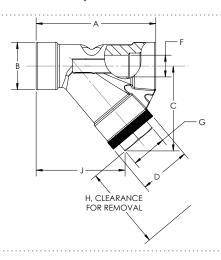


1/2", 3/4" AND 1" / DN15-DN25 PVDF

TECHNICAL INFORMATION, CONTINUED

PARTS LIST

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



SCREEN OPTIONS

PERFORATION SIZES	BASKET MATERIAL
1/16″	PTFF / PVDF
3/32"	FIFE / PVDF

WEIGHT

DIMENSIONS

	ı		ı	ı	ı	ı	ı	ı	lbs / kg
SIZE in / DN	A in / mm	B in / mm	C in / mm	D in / mm	F in / mm	G in / mm	H in / mm	J in / mm	SOC / THD
1/2 / 15	3.30/84	1.50/38	2.30/58	1.40/36	0.50/13	1.00/25	2.20/56	2.80/71	0.33/0.15
3/4 / 20	4.1/104	1.90/48	3.00/76	1.90/49	0.75/19	1.25/32	2.70/69	3.20/81	0.82 / 0.37
1 / 25	5.0/127	2.00/51	3.60/91	2.10/53	1.00/25	1.50/38	3.50/89	3.90/99	1.14/0.52

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

Cv VALUES*

SIZE in / DN	Cv VALUES
1/2 / 15	4.0
3/4 / 20	6.8
1 / 25	9.0

* With standard 3/32" perforation.

PRESSURE LOSS CALCULATION FORMULA

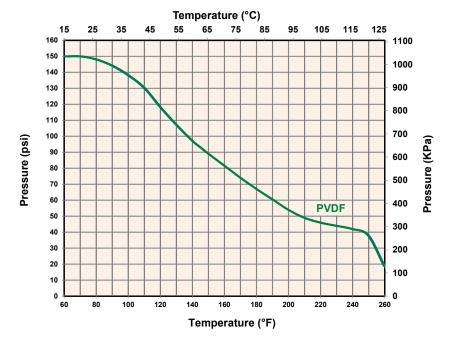
$$\Delta P = \left[\frac{Q}{Cv}\right]^2$$

 $\Delta P = Pressure Drop$

Q = Flow in GPM

Cv = Flow Coefficient

OPERATING TEMPERATURE/PRESSURE









YS Series True Union Y-Strainers

1/2" - 2" / DN15-DN50 PVC, CLEAR PVC AND CPVC

2-1/2" - 4" / DN65-DN100 PVC AND CPVC

KEY FEATURES

- True Union Connection for Ease of Installation
- Available in PVC, CPVC and Clear PVC Materials
- Horizontal or Vertical Installation
- FPM O-Ring Seals
- 2:1 Open Area Ratio
- Hex Cap for Easy Access to Screen
- Standard Screen has 1/32" Perforation

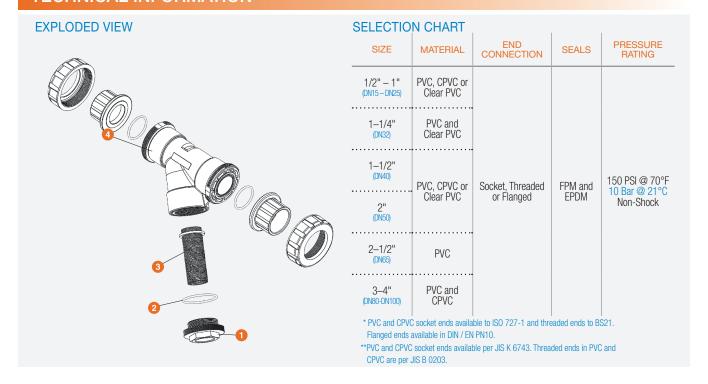
OPTIONS

• Stainless Steel Perforated or Mesh Strainer Screens Available in Various Sizes and Alloys

MATERIALS

- PVC Cell Class 12454 per ASTM D1784
- Clear PVC Cell Class 12454 per ASTM D1784
- CPVC Cell Class 23447 per ASTM D1784
- FPM and EPDM O-Ring Seals

TECHNICAL INFORMATION



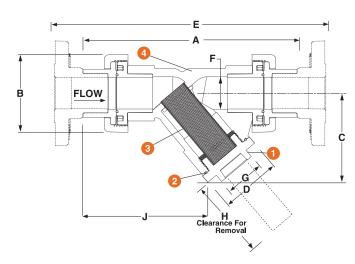
YS Series True Union Y-Strainers

1/2" - 2" / DN15-DN50 PVC, CLEAR PVC AND CPVC 2-1/2" - 4" / DN65-DN100 PVC AND CPVC

TECHNICAL INFORMATION, CONTINUED

PARTS LIST

- 1. Cap
- 2. O-Ring Seal
- 3. Screen
- 4. Body
- 5. Union Nuts
- 6. End Connectors



SCREEN OPTIONS								
PERFORATION SIZES	SCREEN MATERIAL							
1/32"	20							
1/16"	40							
1/8"	60							
5/32"	80	SSTL, Hastelloy, Monel and Titanium						
3/16"	100	There are reament						
1/4"*	200							
3/8"*	325							
1/32"								
1/16"	N/A	DVC CDVC						
1/8"	IN/A	PVC, CPVC						

*Specific sizes only. Consult factory.

3/16"

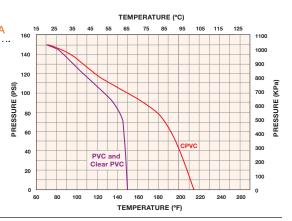
DIMENSIONS										WEIGHT lbs / kg	
SIZE in / DN	A in / mm	B in / mm	C in / mm	D in / mm	E in / mm	F in / mm	G in / mm	H in / mm	J in / mm	SOC/ THD	FLANGED
1/2 / 15	6.64/167	2.25/57	2.25/57	1.50/38	N/A	.56/14	1.00/25	2.13/54	4.13/105	.61 / .28	N/A
3/4 / 20	7.42/188	2.63/67	2.88/73	2.00/51	N/A	.81 / 21	1.25/32	2.75/70	4.62/118	1.17/.53	N/A
1 / 25	8.97/228	3.00/76	3.63/92	2.16/55	11.65/296	1.00/25	1.50/38	3.30/84	5.21 / 133	1.6/.73	2.3/1.1
1-1/4 / 32	13.01/330	4.75/121	5.38/137	3.75/95	N/A	1.25/32	2.38/60	5.06/129	7.64/195	4.5/2.0	N/A
1-1/2 / 40	12.07/307	4.75/121	5.38/137	3.75/95	15.25 / 387	1.56/40	2.38/60	5.06/129	7.17/183	3.7/1.7	4.5/2.1
2 / 50	13.05/331	4.75/121	5.38/137	3.75/95	16.56 / 421	2.00/51	2.38/60	5.06/129	7.59/193	5.3/2.4	7.5/3.4
2-1/2 / 65	16.77 / 426	6.40/163	7.25/184	5.25/133	N/A	2.90/74	3.50/89	6.60/168	9.77/249	13.1 / 5.9	N/A
3 / 80	16.77 / 426	6.40/163	7.25/184	5.50/140	21.25 / 540	2.90/74	3.50/89	6.60/168	9.77/249	13.2/6.0	16.4/7.4
4 / 100	21.23/539	8.56 / 217	8.88 / 226	6.18 / 157	26.18 / 665	3.78 / 96	4.25 / 108	8.00 / 203	12.79 / 325	17.7/8.0	23.3/10.6

 $\label{lem:decomposition} \mbox{Dimensions are subject to change without notice-consult factory for installation information}$

Cv VALUES*

SIZE in/DN	Cv VALUES	SIZE in/DN	Cv VALUES	PRESSURE LOSS CALCULATION FORMULA
1/2 / 15	4.0	2 / 50	28	$\Delta P = \left[\frac{Q}{Cv}\right]^2$
3/4 / 20	6.8	2-1/2 / 65	40	$\Delta P = \text{Pressure Drop}$
1 / 25	9.0	3 / 80	65	Q = Flow in GPM
1-1/4 / 32	12	4 / 100	100	Cv = Flow Coefficient
1-1/2 / 40	28			

OPERATING TEMPERATURE/PRESSURE



* With 1/32" plastic screen



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SB Series Simplex Basket Strainers

1/2" TO 4" / DN15-DN100 PVC AND CPVC

KEY FEATURES

- Available in PVC and CPVC Materials
- True Union Design
- Ergonomic Hand-Removable Cover
- In-Line or Loop Connections
- External Cover Threads
- Integral Flat Mounting Bases
- PVC or CPVC Baskets Standard
- NSF / ANSI 61 and NSF / ANSI 372 Listed

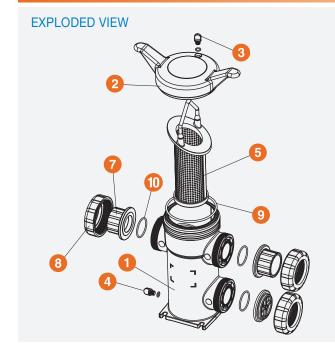
OPTIONS

- Drain Kit with Lockout Ball Valve
- Baskets Available with Perforated or Mesh Liners
- Stainless Steel, Monel®, Hastelloy® and Titanium Strainer Baskets

MATERIALS

- PVC Cell Class 12454 per ASTM D1784
- CPVC Cell Class 23447 per ASTM D1784
- FPM and EPDM O-Ring Seals

TECHNICAL INFORMATION



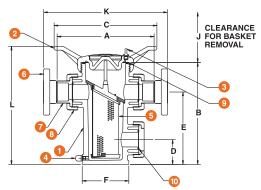
SIZE*	MATERIAL	END CONNECTION	SEALS	PRESSURE RATING
1/2" - 4" (DN15 - DN100)	PVC or CPVC	Socket, Threaded or Flanged	FPM or EPDM	150 PSI @ 70°F 10 Bar @ 21°C Non-Shock

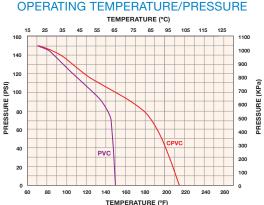
- * PVC and CPVC socket ends available to ISO 727-1 and threaded ends to BS21.
- Planged ends available in DIN / EN PN10 and JIS10K (specific sizes).
 PVC and CPVC socket ends available per JIS K 6743. Threaded ends in PVC and CPVC are per JIS B 0203.
- *** See Page 23 for Available Perf or Mesh

TECHNICAL INFORMATION, CONTINUED

PARTS LIST

- 1. Body PVC or CPVC
- 2. Cover PVC or CPVC
- 3. Vent Plug and O-Ring
- 4. Drain Plug and O-Ring
- 5. Basket PVC or CPVC
- 6. Flange (Optional)
- 7. End Connector PVC or CPVC
- 8. Nut PVC or CPVC
- 9. Cover O-Ring EPDM or FPM
- 10. End Connector O-Ring EPDM or FPM





DIMENSIONS											GHT / kg	
SIZE in / DN	A in / mm	B in / mm	C in / mm	D in / mm	E in / mm	F in / mm	J in / mm	K in / mm	L in / mm	SOC / THD	FLANGED	VOLUME gal / LT
1/2 / 15	8.64 / 219	9.63 / 245	11.00 / 279	2.25 / 57	6.75 / 171	4.31 / 109	8.00 / 203	10.77 / 274	11.70 / 297	8.00 / 3.63	9.00 / 4.08	.20 / .76
3/4 / 20	8.64 / 219	9.63 / 245	11.00 / 279	2.25 / 57	6.75 / 171	4.31 / 109	8.00 / 203	11.02 / 280	11.70 / 297	8.00 / 3.63	9.00 / 4.08	.20 / .76
1 / 25	8.64 / 219	9.63 / 245	11.00 / 279	2.25 / 57	6.75 / 171	4.31 / 109	8.00 / 203	11.64 / 296	11.70 / 297	8.00 / 3.63	9.00 / 4.08	.20 / .76
1-1/4 / 32	12.75 / 324	13.38 / 340	13.50 / 343	3.25 / 83	9.50 / 241	6.13 / 156	12.86 / 327	15.63 / 397	15.50 / 394	14.00 / 6.35	16.50 / 7.48	.70 / 2.65
1-1/2 / 40	12.69 / 322	13.38 / 340	13.50 / 343	3.25 / 83	9.50 / 241	6.13 / 156	12.86 / 327	15.89 / 403	15.50 / 394	14.00 / 6.35	16.50 / 7.48	.70 / 2.65
2/50	12.75 / 324	13.38 / 340	13.50 / 343	3.25 / 83	9.50 / 241	6.13 / 156	12.86 / 327	16.29 / 413	15.50 / 394	14.00 / 6.35	16.50 / 7.48	.70 / 2.65
2-1/2 / 65	16.52 / 420	19.83 / 504	16.00 / 406	4.83 / 123	14.83 / 377	7.25 / 184	17.25 / 438	21.02 / 534	22.30 / 566	28.00 / 12.70	33.00 / 14.97	2.80 / 10.60
3/80	16.40 / 417	19.83 / 504	16.00 / 406	4.83 / 123	14.83 / 377	7.25 / 184	17.25 / 438	20.36 / 517	22.30 / 566	28.00 / 12.70	33.50 / 15.20	2.80 / 10.60
4 / 100	17.27 / 439	19.83 / 504	16.00 / 406	4.83 / 123	14.83 / 377	7.25 / 184	17.25 / 438	22.13 / 562	22.30 / 566	28.00 / 12.70	37.00 / 16.78	2.80 / 10.60

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

PRESSURE DROP CALCULATIONS

BASKET PERFORATION CORRECTION FACTORS

For 1/2" to 4" Strainers										
Pla	stic		Stainless Steel							
1/32"	1.05	1/32"	.82	20 Mesh	.79					
1/16"	1.00	1/16"	.74	40 Mesh	1.01					
1/8"	.58	1/8"	.58	60 Mesh	1.20					
3/16"	.46	5/32"	.37	80 Mesh	1.16					
		3/16"	.46	100 Mesh	1.20					
		1/4"	.58	200 Mesh	1.09					
		3/8"	.45							
		0,0								

PRESSURE LOSS CALCULATION FORMULA

Cv VALUES

SIZE in / DN	Cv VALUES	SIZE in / DN	Cv VALUES
1/2 / 15	15	2/50	60
3/4 / 20	18	2-1/2 / 65	290
1 / 25	20	3/80	300
1-1/4 / 32	55	4 / 100	350
1-1/2 / 40	58		

The above Cv Values were determined using a 1 / 16" perforated plastic basket in 1/2" through 4" strainers.

To calculate pressure drop through vessels using other than 1 / 16" perforated baskets, first calculate the pressure drop using the listed Cv, and then multiply the result by the correction factor in the Correction Factors chart to the left.



Hastelloy is a registered trademark of Haynes International Inc.
 Monel is a registered trademark of Special Metals Corporation.





SB Series Simplex Basket Strainers

1/2" TO 4" / DN15-DN100 EASTAR®

KEY FEATURES

- Available in Clear Eastar® Material
- True Union Design
- For Non-Chemical Service
- Ergonomic Hand-Removable Cover
- In-Line or Loop Connections
- External Cover Threads
- Integral Flat Mounting Bases
- PVC Basket Standard

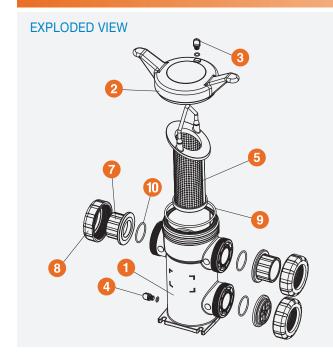
OPTIONS

- Drain Kit with Lockout Ball Valve
- Baskets Available with Perforated or Mesh Liners
- Stainless Steel, Monel[®], Hastelloy[®] and Titanium Strainer Baskets
- Pressure Differential Gauge and Switch

MATERIALS

- Eastar® Polyester
- PVC Cell Class 12454 per ASTM D1784
- FPM and EPDM O-Ring Seals

TECHNICAL INFORMATION



SIZE*	MATERIAL	END CONNECTION	SEALS	PRESSURE RATING
1/2" - 4" (DN15 - DN100)	Eastar®	Socket, Threaded or Flanged	FPM or EPDM	100 PSI @ 70°F 7 Bar @ 21°C Non-Shock

- * End connections and assembly nuts are PVC.
- ** PVC socket ends available to ISO 727-1 and threaded ends To BS21. Flanged ends available in DIIV / EN PN10.

 PVC socket ends available per JIS K 6743. Threaded ends in PVC and CPVC are available per JIS
- **** See Page 23 for Available Perf or Mesh.

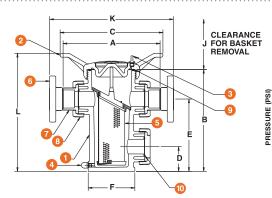
SB Series Simplex Basket Strainers

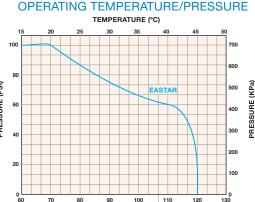
1/2" TO 4" / DN15-DN100 CLEAR EASTAR®

TECHNICAL INFORMATION, CONTINUED

PARTS LIST

- 1. Body Eastar
- 2. Cover Eastar
- 3. Vent Plug and O-Ring
- 4. Drain Plug and O-Ring
- 5. Basket PVC
- 6. Flange (Optional)
- 7. End Connector PVC
- 8. Nut PVC
- 9. Cover O-Ring EPDM or FPM
- 10. End Connector O-Ring EPDM or FPM





DIMENSI	ONS		WEI lbs									
SIZE in / DN	A in / mm	B in / mm	C in / mm	D in / mm	E in / mm	F in / mm	J in / mm	K in / mm	L in / mm	SOC / THD	FLANGED	VOLUME gal / LT
1/2 / 15	8.64 / 219	9.63 / 245	11.00 / 279	2.25 / 57	6.75 / 171	4.31 / 109	8.00 / 203	10.77 / 274	11.70 / 297	8.00 / 3.63	9.00 / 4.08	.20 / .76
3/4 / 20	8.64 / 219	9.63 / 245	11.00 / 279	2.25 / 57	6.75 / 171	4.31 / 109	8.00 / 203	11.02 / 280	11.70 / 297	8.00 / 3.63	9.00 / 4.08	.20 / .76
1 / 25	8.64 / 219	9.63 / 245	11.00 / 279	2.25 / 57	6.75 / 171	4.31 / 109	8.00 / 203	11.64 / 296	11.70 / 297	8.00 / 3.63	9.00 / 4.08	.20 / .76
1-1/4 / 32	12.75 / 324	13.38 / 340	13.50 / 343	3.25 / 83	9.50 / 241	6.13 / 156	12.86 / 327	15.63 / 397	15.50 / 394	14.00 / 6.35	16.50 / 7.48	.70 / 2.65
1-1/2 / 40	12.69 / 322	13.38 / 340	13.50 / 343	3.25 / 83	9.50 / 241	6.13 / 156	12.86 / 327	15.89 / 403	15.50 / 394	14.00 / 6.35	16.50 / 7.48	.70 / 2.65
2/50	12.75 / 324	13.38 / 340	13.50 / 343	3.25 / 83	9.50 / 241	6.13 / 156	12.86 / 327	16.29 / 413	15.50 / 394	14.00 / 6.35	16.50 / 7.48	.70 / 2.65
2-1/2 / 65	16.52 / 420	19.83 / 504	16.00 / 406	4.83 / 123	14.83 / 377	7.25 / 184	17.25 / 438	21.02 / 534	22.30 / 566	28.00 / 12.70	33.00 / 14.97	2.80 / 10.60
3/80	16.40 / 417	19.83 / 504	16.00 / 406	4.83 / 123	14.83 / 377	7.25 / 184	17.25 / 438	20.36 / 517	22.30 / 566	28.00 / 12.70	33.50 / 15.20	2.80 / 10.60
4 / 100	17.27 / 439	19.83 / 504	16.00 / 406	4.83 / 123	14.83 / 377	7.25 / 184	17.25 / 438	22.13 / 562	22.30 / 566	28.00 / 12.70	37.00 / 16.78	2.80 / 10.60

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

PRESSURE DROP CALCULATIONS

BASKET PERFORATION CORRECTION FACTORS

For 1/2" to 4" Strainers											
Pla	stic	Stainless Steel									
1/32"	1.05	1/32"	.82	20 Mesh	.79						
1/16"	1.00	1/16"	.74	40 Mesh	1.01						
1/8"	.58	1/8"	.58	60 Mesh	1.20						
3/16"	.46	5/32"	.37	80 Mesh	1.16						
		3/16"	.46	100 Mesh	1.20						
		1/4"	.58	200 Mesh	1.09						
		3/8"	.45								

PRESSURE LOSS CALCULATION FORMULA

Cv VALUES

SIZE in / DN	Cv VALUES	SIZE in / DN	Cv VALUES
1/2 / 15	15	2/50	60
3/4 / 20	18	2-1/2 / 65	290
1 / 25	20	3 / 80	300
1-1/4 / 32	55	4 / 100	350
1-1/2 / 40	58		

The above Cv Values were determined using a 1 / 16" perforated plastic basket in 1/2" through 4" strainers.

To calculate pressure drop through vessels using other than 1 / 16" perforated baskets, first calculate the pressure drop using the listed Cv, and then multiply the result by the correction factor in the Correction Factors chart to the left.



⁻ Eastar is a registered trademark of Eastman

Hastelloy is a registered trademark of Haynes International Inc.
 Monel is a registered trademark of Special Metals Corporation.





SB Series Simplex Basket Strainers

1/2" TO 4" / DN15-DN100 GFPP BLACK AND GFPP PLATINUM

KEY FEATURES

- Available in Black or Platinum GFPP Materials
- True Union Design
- Ergonomic Hand-Removable Cover
- In-Line or Loop Connections
- External Cover Threads
- Integral Flat Mounting Bases
- PP Baskets Standard

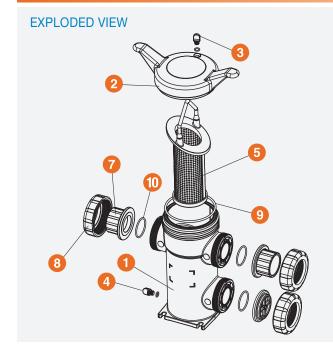
OPTIONS

- Drain Kit with Lockout Ball Valve
- Baskets Available with Perforated or Mesh Liners
- Stainless Steel, Monel®, Hastelloy® and Titanium Strainer Baskets

MATERIALS

- GFPP Cell Class 85580 per ASTM D4101
- FPM and EPDM O-Ring Seals

TECHNICAL INFORMATION



	SIZE*	MATERIAL	END CONNECTION	SEALS	PRESSURE RATING	
	1/2" - 4" (DN15 - DN100)	Black - GFPP	Threaded or Flanged	FPM or	150 PSI @ 70°F 10 Bar @ 21°C Non-Shock	
		Platinum GFPP	Socket Fusion, Threaded or Flanged	EPDM		

- * PP socket fusion ends per ASTM F2389 IPS or SDR and threaded ends available per BS21. Socket Fusion ends available only with Platinum units.

 ** Flanged ends available in DIN / EN PN10.

 *** See Page 23 for Available Perf or Mesh

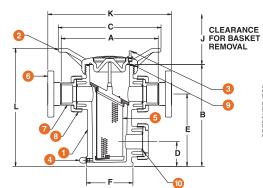
SB Series Simplex Basket Strainers

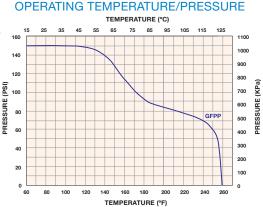
1/2" TO 4" / DN15-DN100 BLACK & PLATINUM GFPP

TECHNICAL INFORMATION, CONTINUED

PARTS LIST

- 1. Body GFPP
- 2. Cover GFPP
- 3. Vent Plug and O-Ring
- 4. Drain Plug and O-Ring
- 5. Basket PP or Alloy
- 6. Flange (Optional) GFPP
- 7. End Connector GFPP or PP
- 8. Nut GFPP
- 9. Cover O-Ring EPDM or FPM
- 10. End Connector O-Ring EPDM or FPM





DIMENSIONS											WEIGHT lbs / kg	
SIZE in / DN	A in / mm	B in / mm	C in / mm	D in / mm	E in / mm	F in / mm	J in / mm	K in / mm	L in / mm	SOC / THD	FLANGED	VOLUME gal / LT
1/2 / 15	8.64 / 219	9.63 / 245	11.00 / 279	2.25 / 57	6.75 / 171	4.31 / 109	8.00 / 203	10.77 / 274	11.70 / 297	8.00 / 3.63	9.00 / 4.08	.20 / .76
3/4 / 20	8.64 / 219	9.63 / 245	11.00 / 279	2.25 / 57	6.75 / 171	4.31 / 109	8.00 / 203	11.02 / 280	11.70 / 297	8.00 / 3.63	9.00 / 4.08	.20 / .76
1 / 25	8.64 / 219	9.63 / 245	11.00 / 279	2.25 / 57	6.75 / 171	4.31 / 109	8.00 / 203	11.64 / 296	11.70 / 297	8.00 / 3.63	9.00 / 4.08	.20 / .76
1-1/4 / 32	12.75 / 324	13.38 / 340	13.50 / 343	3.25 / 83	9.50 / 241	6.13 / 156	12.86 / 327	15.63 / 397	15.50 / 394	14.00 / 6.35	16.50 / 7.48	.70 / 2.65
1-1/2 / 40	12.69 / 322	13.38 / 340	13.50 / 343	3.25 / 83	9.50 / 241	6.13 / 156	12.86 / 327	15.89 / 403	15.50 / 394	14.00 / 6.35	16.50 / 7.48	.70 / 2.65
2/50	12.75 / 324	13.38 / 340	13.50 / 343	3.25 / 83	9.50 / 241	6.13 / 156	12.86 / 327	16.29 / 413	15.50 / 394	14.00 / 6.35	16.50 / 7.48	.70 / 2.65
2-1/2 / 65	16.52 / 420	19.83 / 504	16.00 / 406	4.83 / 123	14.83 / 377	7.25 / 184	17.25 / 438	21.02 / 534	22.30 / 566	28.00 / 12.70	33.00 / 14.97	2.80 / 10.60
3/80	16.40 / 417	19.83 / 504	16.00 / 406	4.83 / 123	14.83 / 377	7.25 / 184	17.25 / 438	20.36 / 517	22.30 / 566	28.00 / 12.70	33.50 / 15.20	2.80 / 10.60
4 / 100	17.27 / 439	19.83 / 504	16.00 / 406	4.83 / 123	14.83 / 377	7.25 / 184	17.25 / 438	22.13 / 562	22.30 / 566	28.00 / 12.70	37.00 / 16.78	2.80 / 10.60

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

PRESSURE DROP CALCULATIONS

BASKET PERFORATION CORRECTION FACTORS

For 1/2" to 4" Strainers										
Pla	stic	Stainless Steel								
1/32"	1.05	1/32"	.82	20 Mesh	.79					
1/16"	1.00	1/16"	.74	40 Mesh	1.01					
1/8"	.58	1/8"	.58	60 Mesh	1.20					
3/16"	.46	5/32"	.37	80 Mesh	1.16					
		3/16"	.46	100 Mesh	1.20					
		1/4"	.58	200 Mesh	1.09					
		3/8"	.45							
		0,0								

PRESSURE LOSS CALCULATION FORMULA

Cv VALUES

SIZE in / DN	CV VALUES	SIZE in / DN	Cv VALUES
1/2 / 15	15	2/50	60
3/4 / 20	18	2-1/2 / 65	290
1 / 25	20	3 / 80	300
1-1/4 / 32	55	4 / 100	350
1-1/2 / 40	58		

The above Cv Values were determined using a 1 / 16" perforated plastic basket in 1/2" through 4" strainers.

To calculate pressure drop through vessels using other than 1 / 16" perforated baskets, first calculate the pressure drop using the listed Cv, and then multiply the result by the correction factor in the Correction Factors chart to the left.



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 Monel is a registered trademark of Special Metals Corporation.





SB Series Simplex Basket Strainer

1/2" TO 2" / DN15-DN50 NATURAL PVDF

KEY FEATURES

- Injection Molded Natural PVDF Construction
- True Union Design
- Ergonomic Hand-Removable Cover
- In-Line or Loop Connections
- External Cover Threads
- Integral Flat Mounting Bases
- PVDF Basket Standard

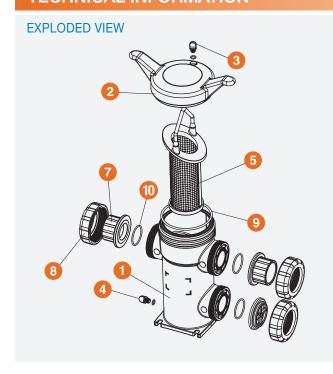
OPTIONS

- Stainless Steel, Monel®, Hastelloy® and Titanium Strainer Baskets
- Stainless Steel Baskets Available with Metal Mesh Liners

MATERIALS

- Natural PVDF per ASTM D3222 Type 1
- FPM O-Ring Seals

TECHNICAL INFORMATION



SIZE*	MATERIAL	END CONNECTION	SEALS	PRESSURE RATING
1/2" — 2" (DN15 — DN50)	PVDF	Socket Fusion, Threaded	FPM	150 PSI @ 70°F 10 Bar @ 21°C Non-Shock
1" - 2" (DN25 - DN50)	PVDF	Flanged	FPM	150 PSI @ 70°F 10 Bar @ 21°C Non-Shock

- * PVDF socket fusion ends per ASTM F2389 and threaded ends available per BS21.
 ** Flanged ends available in DIN /EN PN10.
 *** See page 23 for available Perf or Mesh

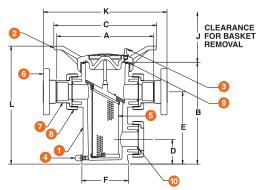
SB Series Simplex Basket Strainers

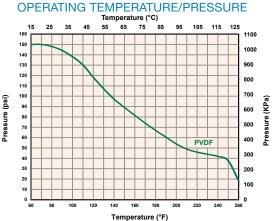
1/2" TO 2" / DN15-DN50 NATURAL PVDF

TECHNICAL INFORMATION, CONTINUED

PARTS LIST

- 1. Body PVDF
- 2. Cover PVDF
- 3. Vent Plug and O-Ring
- 4. Drain Plug and O-Ring
- 5. Basket PVDF
- 6. Flange (Optional) PVDF
- 7. End Connector PVDF
- 8. Nut PVDF
- 9. Cover O-Ring FPM
- 10. End Connector O-Ring FPM





DIMENSIONS											GHT / kg	
SIZE in / DN	A in / mm	B in / mm	C in / mm	D in / mm	E in / mm	F in / mm	J in / mm	K in / mm	L in / mm	SOC / THD	FLANGED	VOLUME gal / LT
1/2 / 15	8.33 / 212	9.47 / 241	10.70 / 272	2.20 / 56	6.63 / 168	4.22 / 107	8.00 / 203	-	11.63 / 295	6.50 / 2.95	-	.20 / .76
3/4 / 20	8.54 / 217	9.47 / 241	10.70 / 272	2.20 / 56	6.63 / 168	4.22 / 107	8.00 / 203	-	11.63 / 295	6.50 / 2.95	-	.20 / .76
1/25	8.60 / 218	9.47 / 241	10.70 / 272	2.20 / 56	6.63 / 168	4.22 / 107	8.00 / 203	11.1 / 282	11.63 / 295	6.50 / 2.95	7.5 / 3.40	.20 / .76
1-1/4 / 32	12.62 / 321	13.13 / 334	13.12 / 333	3.23 / 82	9.35 / 237	6.02 / 153	12.86 / 327	-	15.40 / 391	17.00 / 7.71	-	.70 / 2.65
1-1/2 / 40	12.53 / 318	13.13 / 334	13.12 / 333	3.23 / 82	9.35 / 237	6.02 / 153	12.86 / 327	15.53 / 394	15.40 / 391	17.00 / 7.71	19.5 / 8.85	.70 / 2.65
2/50	12.58 / 320	13.13 / 334	13.12 / 333	3.23 / 82	9.35 / 237	6.02 / 153	12.86 / 327	15.94 / 395	15.40 / 391	17.00 / 7.71	19.5 / 8.85	.70 / 2.65

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

PRESSURE DROP CALCULATIONS

BASKET PERFORATION CORRECTION FACTORS

For 1/2" to 2" Strainers											
Pla	stic	Stainless Steel									
1/32"	1.05	1/32"	.82	20 Mesh	.79						
1/16"	1.00	1/16"	.74	40 Mesh	1.01						
1/8"	.58	1/8"	.58	60 Mesh	1.20						
3/16"	.46	5/32"	.37	80 Mesh	1.16						
		3/16"	.46	100 Mesh	1.20						
		1/4"	.58	200 Mesh	1.09						
		3/8"	.45	325 Mesh	1.22						

PRESSURE LOSS CALCULATION FORMULA

Cv VALUES

SIZE in / DN	Cv VALUES
1/2 / 15	15
3/4 / 20	18
1 / 25	20
1-1/4 / 32	55
1-1/2 / 40	58
2/50	60

The above Cv Values were determined using a 1 / 16" perforated plastic basket in 1/2" through 2" strainers.

To calculate pressure drop through vessels using other than 1 / 16" perforated baskets, first calculate the pressure drop using the listed Cv, and then multiply the result by the correction factor in the Correction Factors chart to the left.







SB Series Simplex Basket Strainers

6" TO 8" / DN15-DN200 PVC AND CPVC

KEY FEATURES

- Available in PVC and CPVC Materials
- Ergonomic Hand-Removable Cover
- In-Line or Loop Connections
- External Cover Threads
- Integral Flat Mounting Bases
- PVC or CPVC Baskets Standard
- NSF / ANSI 61 and NSF / ANSI 372 Listed

OPTIONS

- Two Port Design for Restrictive Center Height Requirements
- Stainless Steel, Monel® Hastelloy® and **Titanium Strainer Baskets**
- Pressure Differential Gauge and Switch
- Baskets Available with Perforated or Mesh Liners

MATERIALS

- PVC Cell Class 12454 per ASTM D1784
- CPVC Cell Class 23447 per ASTM D1784
- FPM and EPDM O-Ring Seals

TECHNICAL INFORMATION

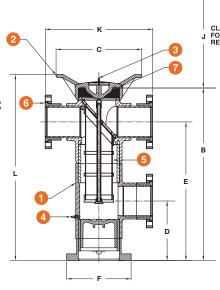
SIZE	MATERIAL	END CONNECTION	SEALS	PRESSURE RATING
6" - 8" (DN150 - DN200)	PVC or CPVC	Flanged*	FPM or EPDM	150 PSI @ 70°F 10 Bar @ 21°C Non-Shock

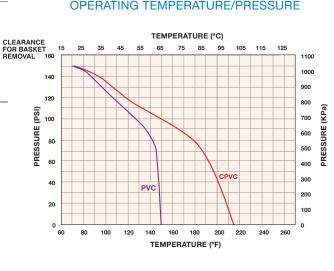
^{*} Flanged Ends available in ANSI/ASME 150 or DIN/ EN PN10 ** See Page 23 for Available Perf or Mesh

TECHNICAL INFORMATION, CONTINUED

PARTS LIST

- 1. Body PVC or CPVC
- 2. Cover PVC or CPVC
- 3. Vent Plug and O-Ring
- 4. Drain Plug and O-Ring
- 5. Basket PVC or CPVC
- 6. Flange (Optional) PVC or CPVC
- 7. Cover O-Ring EPDM or FPM





DIMENSIONS										WEI lbs		
SIZE in / DN	A in / mm	B in / mm	C in / mm	D in / mm	E in / mm	F in / mm	J in / mm	K in / mm	L in / mm	SOC / THD	FLANGED	VOLUME gal / LT
6 / 150	N/A	36.07 / 871	18.00 / 457	12.46 / 316	28.99 / 736	13.50 / 298	21.80 / 554	22.42 / 569	39.90 / 1013	N/A	60.00 / 27.21	6.80 / 25.74
8 / 200	N/A	36.07 / 871	18.00 / 457	12.46 / 316	28.99 / 736	13.50 / 298	28.75 / 730	25.44 / 640	39.90 / 1013	N/A	80.00 / 36.28	9.00 / 34.07

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

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

PRESSURE DROP CALCULATIONS

BASKET PERFORATION CORRECTION FACTORS

For 6" to 8" Strainers

	FOI	IIIeis						
Plas	tic		Stainless Steel					
1/8"	2.00	1/32"	2.25	20 Mesh	2.16			
3/16"	1.50	1/16"	2.03	40 Mesh	2.79			
		1/8"	1.58	60 Mesh	3.28			
		5/32"	1.00	80 Mesh	3.18			
		3/16"	1.26	100 Mesh	3.30			
		1/4"	1.58	200 Mesh	2.98			

PRESSURE LOSS CALCULATION FORMULA

The pressure drop across the strainer, for water or fluids $\Delta P = Pressure Drop$ with a similar viscosity, can Q = Flow in GPM be calculated using the formula at the right: Cv = Flow Coefficient

Cv VALUES

SIZE in / DN	CV VALUES			
6 / 150	1,000			
8 / 200	750			

The above Cv Values were determined using a 5 / 32" perforated plastic basket in

To calculate pressure drop through vessels using other than $5\,/\,32''$ perforated baskets, first calculate the pressure drop using the listed Cv, and then multiply the result by the correction factor in the Correction Factors chart to the left.



Hastelloy is a registered trademark of Haynes International Inc.
 Monel is a registered trademark of Special Metals Corporation.





DB Series Duplex Basket Strainers

1/2" TO 4" / DN15-DN100 PVC, CPVC AND EASTAR®

KEY FEATURES

- Available in PVC, CPVC and Eastar® Materials
- Ergonomic Hand-Removable Cover
- Uninterrupted Flow
- No System Shutdown for Basket Cleaning
- In-Line or Loop Piping
- Integral Flat Mounting Bases
- External Cover Threads
- Hand Removable Vents on Covers
- Hand Removable Drains on Bodies
- Liquid Displacing Covers

OPTIONS

- Stainless Steel, Monel[®], Hastelloy[®] and Titanium Strainer Baskets
- Pressure Differential Gauge and Switch
- Pneumatic or Electric Valve Automation
- Baskets Available with Perforated or Mesh Liners

MATERIALS

- PVC Cell Class 12454 per ASTM D1784
- CPVC Cell Class 23447 per ASTM D1784
- Eastar®
- FPM and EPDM O-Ring Seals

TECHNICAL INFORMATION

SIZE**	MATERIAL	END CONNECTION	SEALS	PRESSURE RATING
1/2" – 4"	PVC or CPVC	Socket, Threaded	FPM or	150 PSI @ 70°F 10 Bar @ 21°C Non-Shock
(DN15 – DN100)	Eastar*	or Flanged	EPDM	100 PSI @ 70°F 7 Bar @ 21°C Non-Shock

^{*} End connections and assembly nuts are PVC for Eastar units.

^{**} PVC and CPVC socket ends available to ISO 727-1 and threaded ends to BS21.

^{***} PVC and CPVC socket ends available per JIS K 6743. Threaded ends available in PVC and CPVC are per JIS B 0203.

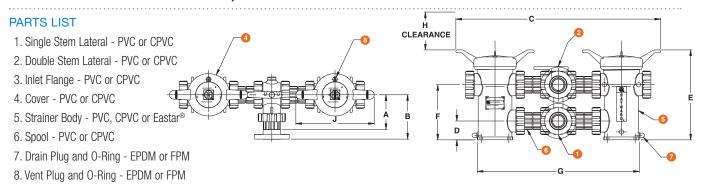
^{****} Flanged ends available in DIN / EN PN10 and JIS10K (specific sizes).

^{*****} See Page 23 for Available Perf or Mesh

DB Series Duplex Basket Strainers

1/2" TO 4" / DN15-DN100 PVC, CPVC AND EASTAR®

TECHNICAL INFORMATION, CONTINUED



DIMENSIONS										WEI lbs	
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	SOC / THD	FLANGED
1/2 / 15	4.14 / 105	5.21 / 132	27.20 / 691	2.25 / 57	11.70 / 297	6.75 / 171	20.50 / 521	5.00 / 127	11.00 / 279	20.00 / 9.07	21.00 / 9.53
3/4 / 20	4.14 / 105	5.33 / 135	27.20 / 691	2.25 / 57	11.70 / 297	6.75 / 171	20.50 / 521	5.00 / 127	11.00 / 279	20.00 / 9.07	21.00 / 9.53
1 / 25	4.14 / 105	5.64 / 143	27.20 / 691	2.25 / 57	11.70 / 297	6.75 / 171	20.50 / 521	5.00 / 127	11.00 / 279	20.00 / 9.07	21.00 / 9.53
1-1/4 / 32	6.00 / 152	7.44 / 189	35.30 / 897	3.25 / 83	15.50 / 394	9.50 / 241	28.00 / 711	10.80 / 274	13.50 / 343	39.50 / 17.92	42.00 / 19.05
1-1/2 / 40	6.00 / 152	7.60 / 193	35.30 / 897	3.25 / 83	15.50 / 394	9.50 / 241	28.00 / 711	10.80 / 274	13.50 / 343	39.50 / 17.92	42.00 / 19.05
2/50	6.00 / 152	7.77 / 197	35.30 / 897	3.25 / 83	15.50 / 394	9.50 / 241	28.00 / 711	10.80 / 274	13.50 / 343	39.50 / 17.92	42.00 / 19.05
2-1/2 / 65	7.60 / 193	9.85 / 250	44.40 / 1128	4.83 / 123	22.30 / 566	14.83 / 377	35.60 / 904	14.80 / 376	16.00 / 406	83.00 / 37.65	88.00 / 39.92
3/80	7.60 / 193	9.85 / 250	44.40 / 1128	4.83 / 123	22.30 / 566	14.83 / 377	35.60 / 904	14.80 / 376	16.00 / 406	83.00 / 37.65	88.50 / 40.14
4/100	9.33 / 237	11.76 / 299	47.50 / 1207	4.83 / 123	22.30 / 566	14.83 / 377	38.70 / 983	14.80 / 376	16.00 / 406	100.00 / 45.36	105.00 / 47.63

PRESSURE DROP CALCULATIONS

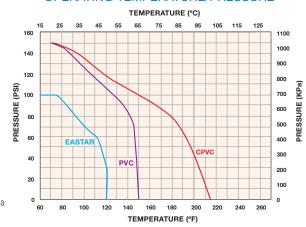
CORRECTION FACTORS

	For 1/2" to 4" Strainers									
Plas	stic		Stainl	ess Steel						
1/32"	1.05	1/32"	.82	20 Mesh	.79					
1/16"	1.00	1/16"	.74	40 Mesh	1.01					
1/8"	.58	1/8"	.58	60 Mesh	1.20					
3/16"	.46	5/32"	.37	80 Mesh	1.16					
		3/16"	.46	100 Mesh	1.20					
		1/4"	.58	200 Mesh	1.09					
		3/8"	.45							

PRESSURE LOSS **CALCULATION FORMULA**

The pressure drop across the strainer, for water or fluids with a similar viscosity, can be calculated using the formula at the right: $\Delta P = Pressure Drop$ $\mathsf{Q} = \mathsf{Flow} \; \mathsf{in} \; \mathsf{GPM}$ Cv = Flow Coefficient

OPERATING TEMPERATURE/PRESSURE



Cv VALUES

SIZE in / DN	Cv VALUES	SIZE in / DN	Cv VALUES
1/2 / 15	12.5	1-1/2 / 40	45
3/4 / 20	13	2 / 50	48
1/25	14	3 / 80	200
1-1/4 / 32	40	4 / 100	280

The Cv Values were determined using a 1/16" perforated plastic basket in 1/2" through 4" strainers.

To calculate pressure drop through vessels using other than 1/16" perforated baskets, first calculate the pressure drop using the listed Cv, and then multiply the result by the correction factor in the Correction Factors chart to the left.

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 Monel is a registered trademark of Special Metals Corporation.





DB Series Duplex Basket Strainers

6" TO 8" / DN150-DN200 PVC AND CPVC

KEY FEATURES

- Available in PVC and CPVC Materials
- Ergonomic Hand-Removable Cover
- Uninterrupted Flow
- No System Shutdown for Basket Cleaning
- In-Line or Loop Piping
- Integral Flat Mounting Bases
- External Cover Threads
- Hand Removable Vents on Covers
- Hand Removable Drains on Bodies
- Liquid Displacing Covers

OPTIONS

- Stainless Steel, Monel[®], Hastelloy[®] and Titanium Strainer Baskets
- Pressure Differential Gauge and Switch
- Pneumatic or Electric Valve Automation
- Baskets Available with Perforated or Mesh Liners

MATERIALS

- PVC Cell Class 12454 per ASTM D1784
- CPVC Cell Class 23447 per ASTM D1784
- FPM and EPDM O-Ring Seals

TECHNICAL INFORMATION

SIZE*	MATERIAL	END CONNECTION	SEALS	PRESSURE RATING
6" - 8" (DN150 - DN200)	PVC or CPVC	Flanged*	FPM or EPDM	150 PSI @ 70°F 10 Bar @ 21°C Non-Shock

^{*} Flanged Ends available in ANSI/ASME 150 or DIN/ EN PN10

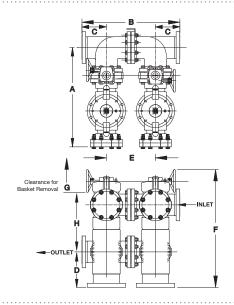
^{**} See Page 23 for Available Perf or Mesh

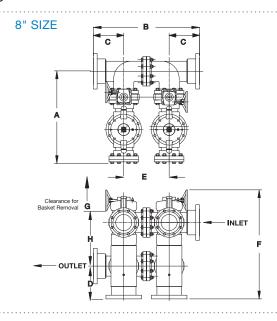
DB Series Duplex Basket Strainers

6" AND 8" / DN150-DN200 PVC AND CPVC

TECHNICAL INFORMATION, CONTINUED







DIMENSIONS

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	WEIGHT lbs / kg
6 / 150	34.91 / 887	34.42 / 874	8.59 / 218	12.45 / 316	17.24 / 438	41.40 / 1052	21.80 / 554	16.53 / 420	180.00 / 81.65
8 / 200	42.70 / 1085	53.15 / 1350	13.27 / 337	12.45 / 316	26.62 / 676	42.52 / 1080	28.75 / 730	16.53 / 420	250.00 / 113.40

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

PRESSURE DROP CALCULATIONS

BASKET PERFORATION CORRECTION FACTORS

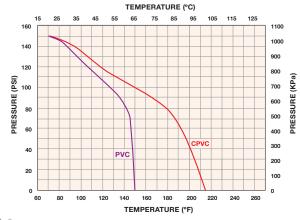
For 6" to 8" Strainers									
Pla	stic		Stainl	ess Steel					
1/8"	2.00	1/32"	2.25	20 Mesh	2.16				
3/16"	1.50	1/16"	2.03	40 Mesh	2.79				
		1/8"	1.58	60 Mesh	3.28				
		5/32"	1.00	80 Mesh	3.18				
		3/16"	1.26	100 Mesh	3.30				
		1/4"	1.58	200 Mesh	2.98				
		3/8"	1.24						

PRESSURE LOSS CALCULATION FORMULA

 $\Delta P = \left[\frac{Q}{Cv}\right]^2$ $\Delta P = \text{Pressure Drop}$ Q = Flow in GPM Cv = Flow Coefficient

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

OPERATING TEMPERATURE/PRESSURE



Cv VALUES

SIZE in / DN	Cv VALUES GPM			
6 / 150	1,000			
8 / 200	750			

 The Cv Values were determined using a 5/32" perforated plastic basket in 6" and 8" strainers.

To calculate pressure drop through vessels using other than 5/32" perforated baskets, first calculate the pressure drop using the listed Cv, and then multiply the result by the correction factor in the Correction Factors chart to the left.



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 Monel is a registered trademark of Special Metals Corporation.



How to Select a Basket Strainer

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, 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

Selecting the proper size basket strainer for a particular application is extremely important for optimum performance of the strainer. Factors such as viscosity, specific gravity and mesh lining size all influence pressure drop of flow through the strainer. As a general rule of thumb, a pressure drop of greater than 2 PSI through a clean strainer usually indicates the strainer selected is too small for the intended application.

In some cases, the strainer size may not always be the same size as the pipe diameter. For example, the pressure drop of highly viscous liquids passing through a mesh basket can cut flow considerably making it necessary to use a strainer several times larger than pipeline to ensure adequate flow. Likewise, if an unusually large amount of material needs to be taken out of the process flows, a larger strainer or multiple strainer should be specified. By using two strainers in series, the first with large openings designed to catch larger particles and the second with a fine mesh lining to trap smaller material, the load is spread over two strainers and time between maintenance for cleaning is also extended.

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

Comparative Particle Size

PERF	INCHES	MILLIMETERS	MICRONS	MESH	INCHES	MILLIMETERS	MICRONS
1/32	0.033	0.838	838	200	0.0027	0.0686	68
1/16	0.070	1.778	1776	100	0.0065	0.1651	165
3/32	0.094	2.387	2387	80	0.007	0.1778	177
1/8	0.125	3.175	3175	60	0.009	0.2286	228
5/32	0.150	3.810	3810	40	0.015	0.3800	380
3/16	0.1875	4.762	4762	20	0.034	0.8636	862
1/4	0.250	6.350	6350				
3/8	0.375	9.525	9525				

^{*}Perforations available in PVC, CPVC, PP, Stainless Steel, Monel, Hastelloy and Titanium

^{**}Mesh Baskets only in Stainless Steel, Monel, Hastelloy and Titanium

^{***}Not all perf or mesh sizes may be available or suitable for all strainers, consult with factory

Flow of Water Through Schedule 80 Plastic Pipe

	DISCHARGE VELOCITY IN SCHEDULE 80 PLASTIC PIPE FOR WATER @ 60°F/16°C VELOCITY									
GALLONS /	CUBIC METER/		FEET/SECOND	FEET/SECOND	FEET/SECOND	FEET/SECOND	I	FEET/SECOND	FEET/SECOND	FEET/SECOND
MINUTE	HOUR	SECOND	T LE I/OLOGNID	1/4"/DN8	3/8"/DN10	1/2"/DN15	3/4"/DN20	1"/DN25	1-1/4"/DN32	1-1/2"/DN40
0.2	0.05	0.000446	_	0.824	— — — — — — — — — — — — — — — — — — —	— I/Z /DIVIS	— UNE TO NE O	— T /DN23	—	—
0.3	0.07	0.000668	_	1.237	0.651	0.392	_	_	_	_
0.4	0.09	0.000891	_	1.646	0.867	0.529	_	_	_	_
0.5	0.11	0.00111	_	2.061	1.083	0.653	0.359	_	_	_
0.6	0.14	0.00134	_	2.476	1.303	0.782	0.431	_	_	_
0.8	0.18	0.00178 0.00223	_	3.295 4.122	1.728 2.167	1.043 1.311	0.574 0.718	0.435	_	_
2	0.25	0.00223		8.245	4.335	2.609	1.432	0.433	0.525	
3	0.68	0.00668	_	12.381	6.502	3.919	2.161	1.306	0.788	0.538
4	0.91	0.00891	2"	16.502	8.671	5.218	2.876	1.747	1.051	0.717
5	1.14	0.01114	_	_	10.837	6.528	3.592	2.181	1.313	0.896
6	1.36	0.01337	0.65	2-1/2"	13.005	7.827	4.308	2.614	1.579	1.076
8	1.82	0.01782	0.86	_		10.448	5.741	3.482	2.105	1.434
10	2.27	0.02228	1.08	0.752	3"	13.057	4.351	2.632	2.632	1.798
15	3.41	0.03342	1.61	1.134	_	_	10.778	6.531	3.941	2.697
20	4.54	0.04456	2.15	1.505	0.986	_		8.712	5.252	3.596
25	5.68	0.0557	2.69	1.886	1.238	_	4" —	10.881	6.574	4.484
30 35	6.81 7.95	0.06684 0.07798	3.23 3.78	2.256 2.638	1.476 1.726	_	0.973	13.062 15.232	7.884 9.193	5.383 6.282
40	9.09	0.07730	4.32	3.009	1.976		1.114	17.413	10.515	7.171
45	10.22	0.1003	4.84	3.391	2.215	_	1.247	— —	11.838	8.069
50	11.36	0.1114	5.39	3.761	2.465	_	1.391	_	13.147	8.969
60	13.63	0.1337	6.47	4.513	2.953	_	1.665	_	15.779	10.778
70	15.90	0.156	7.55	5.266	3.453	_	1.942	_	_	12.577
80	18.17	0.1782	8.62	6.018	3.942	_	2.228	_	6"/DN150	14.36
90	20.44	0.2005	9.69	6.771	4.442	_	2.504	_	_	16.162
100	22.71	0.2228	10.77	7.523	4.931	_	2.781	_	1.225	17.96
125	28.39	0.2785	13.48	9.409	6.168	_	3.475	_	1.534	22.445
150	34.07	0.3342	16.18	11.284	7.395	_	4.171	_	1.893	
175	39.75	0.3899	18.87	13.171	8.633	_	4.865	_	2.141	8"/DN200
200 225	45.43 51.10	0.4456 0.5013	21.56	15.068 16.943	9.861 11.098	_	5.561 6.255	_	2.451 2.759	1.577
250	56.78	0.557		10.343	12.325	_	6.951	_	3.069	1.752
275	62.46	0.6127	_	_	13.563	_	7.645	_	3.367	1.927
300	68.14	0.6684	_	_	14.768	_	8.341	_	3.675	2.102
325	73.82	0.7241	_	_	16.041	_	9.035	_	3.985	2.277
350	79.49	0.7798	_	_	_	_	9.731	_	4.294	2.453
375	85.17	0.8355	_	_	_	_	10.425	_	4.592	2.628
400	90.85	0.8912	_	_	_	_	11.121	_	4.901	2.803
425	96.53	0.9469	10"/DN250	_	_	_	11.815	_	5.211	2.989
450	102.21	1.003	_	_	_	_	12.511	_	5.519	3.164
475	107.88	1.059	2.199	_	_	_	13.205	_	5.817	3.329
500	113.56	1.114	2.229	_	_	_	13.901	_	6.126	3.515
550 600	124.92 136.28	1.225 1.337	2.459 2.679	12"/DN300	_	_	15.279 16.681	_	6.744 7.352	3.865 4.215
650	147.63	1.225	2.899	12 /DN300 —	_			_	7.971	4.566
700	158.99	1.56	3.129	2.205	_	_	_	_	8.588	4.916
750	170.34	1.671	3.349	2.359	_	_	_	_	9.195	5.267
800	181.70	1.56	3.569	2.513	_	_	_	_	9.802	5.617
850	193.06	1.782	3.799	2.677	_	_	_	_	10.421	5.968
900	204.41	2.005	4.019	2.831	_	_	_	_	11.028	6.318
950	215.77	2.117	4.239	2.984	_			_	11.646	6.668
1000	227.13	2.228	4.469	3.149	_	_	_	_	12.253	7.019
1100	249.84	2.451	4.919	3.458		_	_	_	13.489	7.719
1200 1300	272.55	2.674 2.896	5.359	3.775	_	_	_	_	14.715	8.431
1400	295.26 317.98	3.119	5.809 6.259	4.093 4.401	_	_	_	_	15.929 17.165	9.121 9.833
1500	340.69	3.342	6.698	4.401	_			_	18.391	10.534
1600	363.40	3.565	7.148	5.037		_		_	19.611	11.235
1800	408.83	4.01	8.038	5.662	_	_	_	_	22.067	12.636
2000	454.25	4.456	8.938	6.228	_	_	_	_	24.517	14.038
2500	567.81	5.57	11.168	7.868	_	_	_	_	_	17.552
3000	681.38	6.684	13.396	9.437	_	_	_	_	_	21.068
3500	794.94	7.798	15.637	11.006	_	_	_	_	_	24.572
4000	908.50	8.912	17.866	12.587	_	_	_	_	_	28.08
4500	1022.06	10.13	20.106	14.156	I —	l —		l —	-	31.613
5000	1135.63	11.14	The following wa	ave surge constan	ts may be used to	quickly calculate	pressure rise due	to water hammer	where: "C"= the	wave surge
6000	1362.75	13.37	constant from th	e table below mu	Itiplied by "V" the	line velocity in feet			is then added to the	
7000	1589.88	15.6			urge (Water Hamn					•
8000 9000	1817.00 2044.13	17.82 20.05	Pine	Size	1/4" 1/2"	3/4" 1"	1-1/2" 2"	3" 4"	6" 8"	10" 12"
10000	2271.25	22.28		stant	40 35	32 31	27 25	23 23	21 20	19 19
12000	2725.50	26.74			ocity is 8 feet per					
					, o .oo. poi		5 .00t por 0	,		



LIQUID/CHEMICALS TO BE STRAINED:

Application Information Form for Y-Strainers, Simplex and Duplex Basket Strainers

FLOW CONDITIONS _____ Maximum ____ Minimum ___ Flow (GPM / m³/hr) _ Vel (ft/sec) _ STD CU FT/MIN (SCFM) _____ OR LBS/HR Operating Pressure (PSI /BAR) _____ Design ___ Normal ___ Minimum Operating Temperature (°F) ______ Normal ___ Design _____ Minimum _ Maximum Allowable Pressure Drop: Clean ______ PSI Can flow be interrupted to clean strainer basket? \square Yes \square No **CONTAMINANT** _____ Are they? Solids to be Removed ____ ☐ Hard ☐ Soft ☐ Sticky ☐ Fibrous PPM % WT % Volume Solids Concentration Microns, or _____ *Mesh or Perforation Required. See page 23 STRAINER CONSTRUCTION ☐ GFPP Platinum ☐ Eastar[®] **PVDF** Body & Cover: □ PVC \Box CPVC ☐ GFPP Black Pipe Size (in or DN/d) ____ End Connections: Threaded ☐ Socket Weld Socket Fusion ☐ Flanged / ☐ ANSI ☐ EN/DIN PN10 O-Ring Seal Material: FPM EPDM SPECIAL FEATURES REQUIRED Differential Pressure: ☐ Gauge ☐ Switch ☐ Drain Valve □ Vent Valve SUBMITTALS (CHECK IF REQUIRED) □ Certificate of Origin ☐ EN2.2 Certificate ☐ EN3.1 Certificate

NOTICE: The data contained in this publication are correct to the best of our knowledge. However, we do not assume any liability for the accuracy or completeness of such data.

The final determination of suitability of product and information, use intended, manners of that use, or infringement of patents is the responsibility of the user.

Selection of products and features is limited to what is currently offered by Hayward Flow Control. Material selection subject to change to comply to chemical resistance or product performance

Options & Accessories

SPARE BASKETS, STAINLESS STEEL & ALLOY BASKETS

Hayward Baskets are designed with slanted top to ensure correct installation with SB & DB Series Basket Strainers. Each Strainer purchased is furnished with one standard thermoplastic basket (1 for Simplex, 2 for Duplex). Spare baskets are available in all thermoplastic materials offered.

We also offer a complete range of 316SS, Hastelloy, Monel and Titanium baskets with our standard perfs and mesh sizes



DRAIN KITS

Ideal for controlled draining on SB Series Strainers. Includes TBH Ball Valve, drilled ball and nipple piece. Available for all sizes of strainers in PVC, CPVC and Eastar. Please refer to the TBH Series Product Guide for more details.



PRESSURE DIFFERENTIAL GAUGE ASSEMBLIES & ACTUATION

Pressure Differential gauges show the difference between the inlet and outlet pressures and indicate when to clean out your baskets. The assemblies have tubing and a metal body that contacts the process fluid. Available for Duplex and Large Diameter Basket strainers.

Hayward also offers actuation for our Duplex units for installations where manual control of the Diverter valve may be problematic. Actuators can also be connected to the pressure differential gauge to provide complete monitoring and control of your duplex strainer.







Other Filtration Solutions from Hayward Flow Control...

GFPP FLV SERIES BAG & CARTRIDGE FILTERS

- Platinum Glass Filled Polypropylene Material
- One-Piece Injection Molded Construction with True Union Connections
- Hand Removable, Ergonomic Cover with Liquid Displacing Dome
- Vent Valve Included On Cover
- In-Line or Loop Configuration
- Integral Mounting Base
- Available for Bags or Cartridges
- Duplex and Triplex Assemblies



- Available in PVC or CPVC Materials
- True Union End Connections Socket, Threaded or Flanged
- Hand Removable, Ergonomic Cover with Liquid Displacing Dome
- Vent Valve Included on Cover
- Rated up to 100 GPM Flow Rates
- Solid 1-Piece Basket
- In-Line or Loop Flow Configurations
- Drain Port at Bottom
- Integral Mounting Base



INDUSTRIAL FILTER BAGS

- PP Needle Felt, Polyester Needle Felt, PP Mesh or Nylon Mesh
- 1 to 800 Micron Ratings
- Thermoplastic Ring Seal
- Thermoplastic Flange Seal
- Heavy Duty Welded Construction
- Silicone-Free



HIGH CAPACITY PLEATED CARTRIDGES

- Multiple Micron Ratings for High Efficiency Filtration
- Available in 7" and 2-1/2" Diameters, 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
- Low Pressure Drop
- Multiple Layered Media Construction Guarantees Dependable Performance



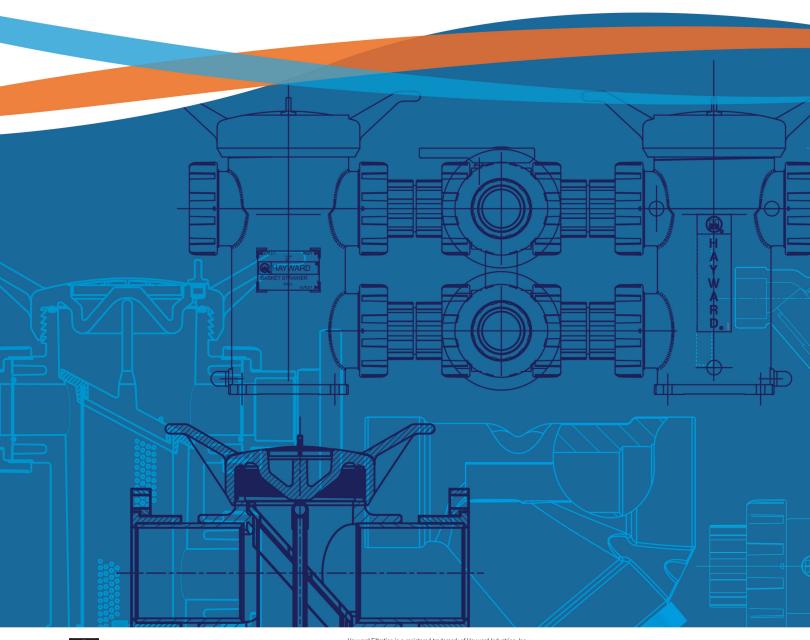
LS SERIES AQUATIC SAND FILTER

- Ideal for Sensitive Aquatic Environments or Salt Water Systems
- All Wetted Hardware Manufactured from 316 Stainless Steel
- Corrosion Resistant Thermoplastic Housing and Base
- Durable Flanged Inspection Cover
- Integral Top Diffuser
- Efficient, Multilateral Underdrain Assembly
- Intergral Molded Drain Plug

HCF SERIES COMMERCIAL SAND FILTER

- Ideal for Fresh Water Systems
- UV-Protectant Gel Coat Protects Filter From Elements
- Transparent Manway Design Simplifies Operation and Improves Durability
- Commercial-grade PVC and ABS Injection Molded Internals With 360° Slotted Laterals
- Industrial Valve and Pressure Gauge
- Available in 30", 34" and 36" sizes
- Flow Rates up to 143GPM
- NSF/ANSI 50 Listed





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