



Duplex Basket Strainers

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



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.

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

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.



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Technical Information

Parts List Duplex Basket Strainer

1. Single Stem Lateral
2. Double Stem Lateral
3. Inlet Flange
4. Cover
5. Strainer Body
6. Spool
7. Drain Plug
8. Vent Plug

Dimensions - Inches / Millimeters

Size	A	B	C	D	E	F	G	H	J	Weight (lb / kg)	
										Skt / Thd	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

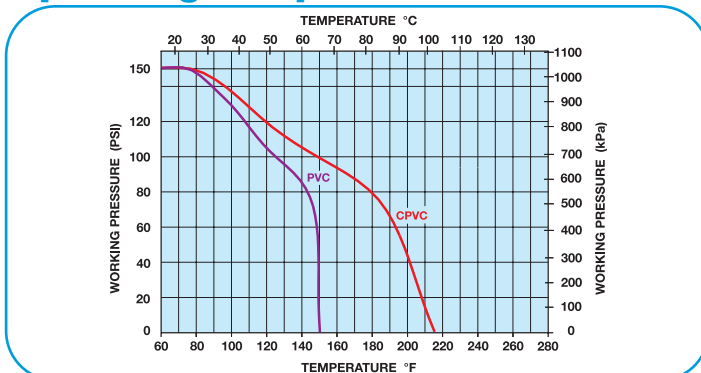
Plastic Baskets		Stainless Steel Baskets	
1/32"	1.05	3/8"	.45
1/16"	1.00	3/64"	.63
1/8"	.58	1/2"	.48
3/16"	.46	1/16"	.74
		20 Mesh	.79
		5/64"	.50
		40 Mesh	1.01
		7/64"	.51
		60 Mesh	1.20
		1/8"	.58
		80 Mesh	1.16
		5/32"	.37
		100 Mesh	1.20
		3/16"	.46
		200 Mesh	1.09
		1/4"	.58
		325 Mesh	1.22

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

*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 perms: 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