DB Series Duplex Basket Strainers

1/2″ TO 4″ PVC, CPVC AND EASTAR®

KEY FEATURES

- PVC, CPVC and Eastar®
- 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
- GFPP Cell Class 85580 per ASTM D4101
- Eastar®
- FPM and EPDM O-Ring Seals

TECHNICAL INFORMATION

BASKET OPTIONS

PERFORATION SIZES	MESH SIZES	BASKET MATERIAL
1/32″	20	SSTL, Hastelloy, Monel and Titanium
1/16″	40	
1/8″	60	
5/32″	80	
3/16″	100	
1/4″	200	
3/8″	325	
1/32″	N/A	PVC, CPVC and PP
1/16″		
1/8″		
3/16″		

SELECTION CHART

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 Non-Shock
	Eastar*			100 PSI @ 70°F Non-Shock

* End connections and assembly nuts are PVC

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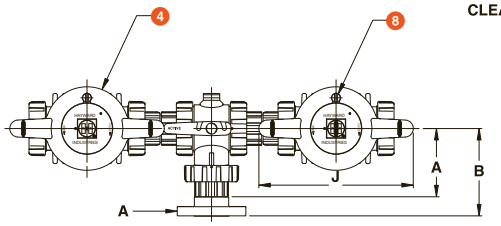
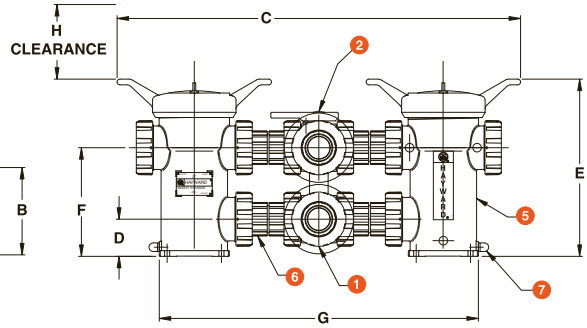
TECHNICAL INFORMATION, *CONTINUED*

PARTS LIST

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





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	J in/mm	WEIGHT lbs/kg SOC/THD	WEIGHT lbs/kg 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

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

Plastic		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

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

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

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

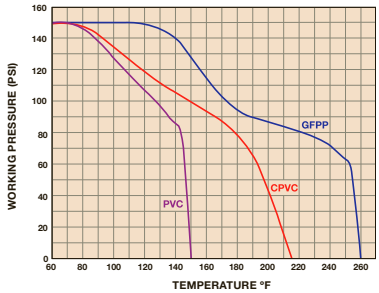
Cv VALUES

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 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.

OPERATING TEMPERATURE/PRESSURE



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Contact Hayward Flow Control with questions: **USA:** 1-888-429-4635 • Fax: 1-888-778-8410 • One Hayward Industrial Drive • Clemmons, NC 27012 USA
Canada: 1.888.238.7665 • Fax: 1.905.829.3636 • 2880 Plymouth Drive • Oakville, ON L6H 5R4 Canada • Email: hflowcanada@haywardnet.com
Visit us at: www.haywardflowcontrol.com • E-mail: hflow@haywardnet.com