NSF

PVC and CPVC

SB Series Simplex Basket Strainers

1/2″ TO 4″ PVC, CPVC, GFPP BLACK, GFPP PLATINUM AND EASTAR®

KEY FEATURES

- PVC, CPVC, GFPP and Eastar®
- True Union
- Ergonomic Hand-Removable Cover
- In-Line or Loop Connections
- External Cover Threads
- Integral Flat Mounting Bases
- PVC or CPVC Baskets Standard
- NSF/ANSI 61 Listed

OPTIONS

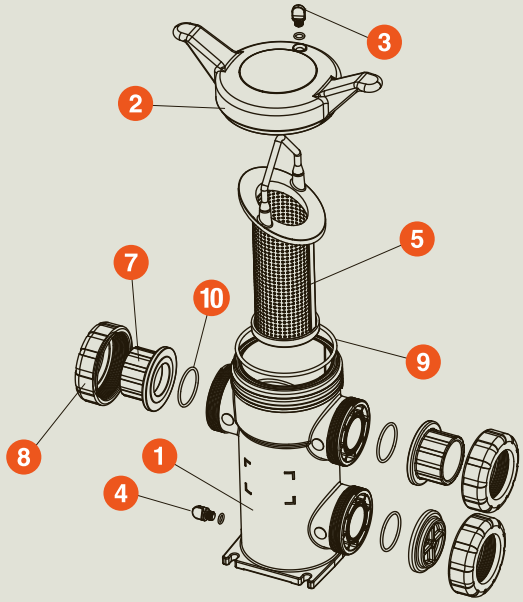
- Stainless Steel, Monel®, Hastelloy® and Titanium Strainer Baskets
- Pressure Differential Gauge and Switch
- Baskets Available with Perforated or Mesh Liners

MATERIALS

- PVC Cell Class 12454 per ASTM D1784
- CPVC Cell Class 23447 per ASTM D1784
- GFPP Cell Class 85580 per ASTM D4101
- Eastar®
- FPM and EPDM O-Ring Seals

TECHNICAL INFORMATION

EXPLODED VIEW



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
	GFPP	Threaded or Flanged		150 PSI @ 70°F Non-Shock

* End connections and assembly nuts are PVC

SB Series Simplex Basket Strainers

1/2″ TO 4″ PVC, CPVC, GFPP AND EASTAR®

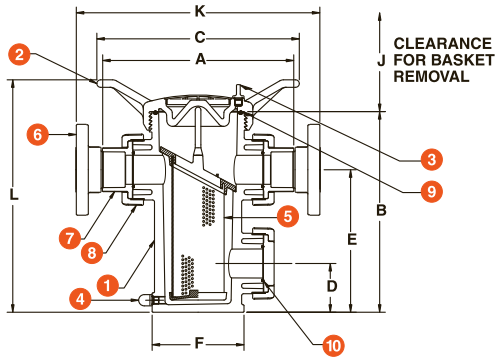
MONARCH INDUSTRIAL PRODUCTS

www.monarchindustrial.com.au
www.monarchasiapacific.com.au

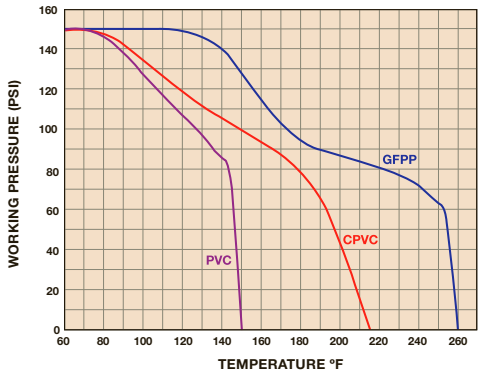
TECHNICAL INFORMATION, *CONTINUED*

PARTS LIST

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



OPERATING TEMPERATURE/PRESSURE



DIMENSIONS

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	WEIGHT lbs/kg SOC/THD	WEIGHT lbs/kg 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

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	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.

MONARCH INDUSTRIAL PRODUCTS

– 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.

NSF

PVC and CPVC

SB Series Simplex Basket Strainers

6″ TO 8″ PVC AND CPVC

KEY FEATURES

- PVC and CPVC
- Ergonomic Hand-Removable Cover
- In-Line or Loop Connections
- External Cover Threads
- Integral Flat Mounting Bases
- PVC or CPVC Baskets Standard

OPTIONS

- 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

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	
1/8″	N/A	PVC, CPVC and PP
3/16″		

SELECTION CHART

SIZE	MATERIAL	END CONNECTION	SEALS	PRESSURE RATING
6″–8″ (DN150 – DN200)	PVC or CPVC	Flanged	FPM or EPDM	150 PSI @ 70°F Non-Shock

SB Series Simplex Basket Strainers

6″ TO 8″ PVC AND CPVC

MONARCH INDUSTRIAL PRODUCTS

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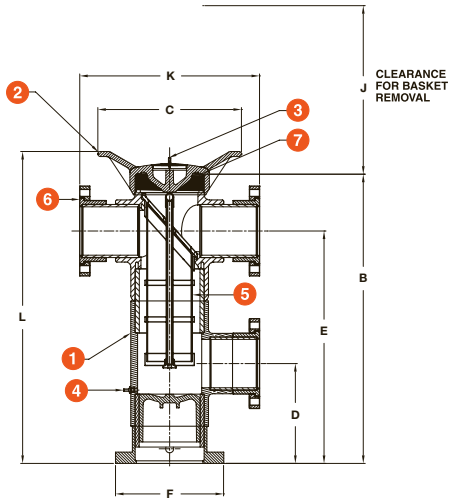
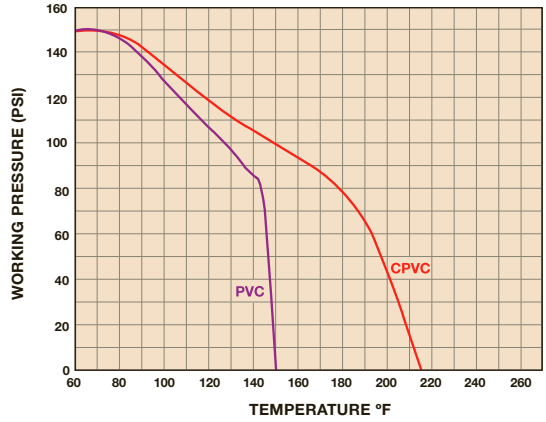
TECHNICAL INFORMATION, *CONTINUED*

PARTS LIST

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



OPERATING TEMPERATURE/PRESSURE



DIMENSIONS

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	WEIGHT lbs/kg SOC/THD	WEIGHT lbs/kg 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

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

PRESSURE DROP CALCULATIONS

BASKET PERFORATION CORRECTION FACTORS

For 6″ to 8″ Strainers

Plastic		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
		3/8″	1.24	325 Mesh	3.33

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
6/150	1,000
8/200	750

The above 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.

MONARCH INDUSTRIAL PRODUCTS

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– Monel is a registered trademark of Special Metals Corporation.