

# **PVC & CPVC BASKET STRAINERS**

BS-2-0820



# Multi-Featured Industrial Basket Strainer

Spears® fabricated Basket Strainers are constructed of heavy bodied PVC or CPVC. Available in IPS sizes 1/2" through 12" with choice of socket, spigot or flanged ends and EPDM or FKM O-ring seals. A convenient quick release clamp cap is equipped with safety pressure gauge and pressure release ball valve for safer system operation and strainer cleaning. Additional drain plug allows complete drain and flush of unit. Designed to remove unwanted solids from plastic or metal piping systems, Spears® Basket Strainers are ideal for protecting valves, filters, pumps, nozzles or other liquid control devices in corrosive or non-corrosive fluid systems.

#### **PVC or CPVC Construction**

Spears® Basket Strainers produced from heavy bodied PVC or CPVC never rust, scale or pit, providing exceptional chemical and corrosion resistance.

#### **Multiple O-ring Options**

Choice of high grade, abrasion resistant EPDM, or FKM elastomer O-rings allows application specific selection for optimum chemical resistance.

#### **Strainer Basket Options**

Choice of PVC, CPVC baskets in standard 1/8" or 3/32" perforation or Stainless Steel baskets in perforated or standard mesh sizes. Additional Stainless Steel perforation or wire mesh can be supplied based on customer specifications.

#### **Convenient Safety Pressure Gauge**

Easy to read 0-160 psi pressure gauge for monitoring system pressure. Optional gauge guards available for corrosive fluids.

#### **Pressure Release Valve**

1/4" ball valve for simplified pressure release for maintenance and service of system. Valve O-ring options are provided to match Basket Strainer unit supplied.

#### **Quick Release Cap**

Eliminates problems with seized threads. Quick, convenient access to strainer.

#### Maximum Flow

Minimum 6:1 open area ratio through the strainer basket to the corresponding piping system allows maximum straining capacity with minimum pressure loss.

#### **Maximum Service Temperatures**

PVC 140° F ( 60°C ), CPVC 200° F ( 93°C )

#### **Internal Pressure Ratings**

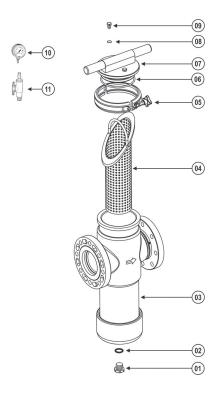
1/2" - 8" 150 psi, 10" - 12" 50 psi, Maximum Internal Pressure at 73° F. Derating required at elevated temperatures.

#### Sample Engineering Specifications

All thermoplastic Basket Strainers shall be fabricated from PVC Type I Cell Classification 12454 or CPVC Type IV Cell Classification 23447 material. All O-rings shall be EPDM or FKM. Strainer baskets shall be perforated PVC, CPVC or type 316 stainless steel wire mesh. Standard strainer perforation shall be 1/8" or 3/32" with a minimum open area ratio of 6:1, or specified perforation/mesh opening. Basket strainer shall have quick release clamp retained bonnet with safety nut, pressure release valve and safety pressure gauge. Unit shall be equipped with O-ring sealed drain plug at lower end. Basket strainer sizes 1/2" - 8" shall be pressure rated at 150 psi, sizes 10" - 12" 50 psi for water at 73°F, as manufactured by Spears® Manufacturing Company.

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## **Replacement Parts**

No.	Component	Quantity	Material		
1	Drain Plug	1	PVC/CPVC		
2	Drain Plug O-ring	1	EPDM/FKM		
3	Body	1	PVC/CPVC		
4	Strainer Basket	1	PVC/CPVC /316 Stainless Steel		
5	Bonnet Clamp	1	SS 316		
6	Bonnet O-ring	1	EPDM/FKM		
7	Bonnet	1	PVC/CPVC		
8	Plug O-ring	2	EPDM/FKM		
9	Gauge Port Plug	2	PVC/CPVC		
10	Pressure Gauge	1	0-160 psi		
11	Pressure Relief Valve	1	PVC/CPVC		

Notes:

- 1) Bolt-on Bonnet on Sizes 10" & 12"
- 2) Port plugs for use when pressure gauge and relief valve are not installed.
  3) Valve O-rings correspond to Strainer Basket Specification.

# **Spigot Style** Flanged Style **Socket Style**

# Dimensions, Weights & C<sub>v</sub> Values

Size	н	H¹	L	L1	L <sup>2</sup>	L <sup>3</sup>	N	Approx. Wt. (Lbs.)		Cu
								Socket/ Spigot	Flanged	Cv
1/2	5-5/8	4-1/2	10-1/8	9-1/4	6-3/4	9-9/16	5-1/4	2.97	3.35	4.5
3/4	5-5/8	4-1/2	10-1/8	9-1/4	6-7/16	9-7/16	4-7/16	2.99	3.44	10
1	5-5/8	4-1/2	10-1/8	10-3/8	6-13/16	10-1/16	4-1/2	3.02	3.50	15
1-1/4	10-3/4	8	18-3/4	8-3/16	11-5/16	10-5/16	8-5/16	3.20	3.60	30
1-1/2	10-3/4	8	18-3/4	8-3/4	11-1/8	11	8-1/8	3.50	3.75	46
2	10-3/4	8	18-3/4	8-3/4	12-1/8	11	8-5/8	11.00	11.40	72
2-1/2	10-3/4	8	18-3/4	8-3/4	12-3/8	12-7/8	8-3/8	12.30	12.60	110
3	14-1/4	9-1/8	23-3/8	11-5/8	16-1/8	15	11-5/8	25.00	25.40	172
4	17-3/4	9-1/8	26-7/8	12	18	17-1/2	13-1/2	25.70	26.80	270
6	18-7/8	11-9/16	30-7/16	17-1/8	24-3/8	23-5/16	17-7/8	58.40	60.80	630
8	24-1/2	12-9/16	37-1/16	20-1/2	30-1/2	27-1/2	22	93.60	96.00	750
10	27-1/8	16-5/8	43-3/4	26	34-9/16	34-1/2	24-1/16	200.20	210.30	893
12	34-5/16	17-1/8	51-1/2	28-1/8	39-3/16	36-1/4	26-11/16	229.30	239.80	1063

Cv = Gallons per minute at 1 psi pressure drop

### Contact Spears® for information on Special Designed "Suction Strainers"



Assessed to ISO 9001: 2015 Certificate number 293



#### **SPEARS® MANUFACTURING COMPANY CORPORATE OFFICE**

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