

## Basket Strainer Eco Series

Basket Strainer Eco Series is the best choice you can choose regarding quality and price. It is a custom fabricated compound strainer designed to remove foreign particles from pipeline. SBM-PTV basket strainers protect equipment by mechanically removing solids from liquids and other piping systems with the use of a perforated or wire mesh straining screen in a vertically oriented chamber. Basket strainers have more debris holding capacity than Y strainers, and generally have less of a pressure drop, which is why they are ideal in liquid applications.

Basket strainers are sometimes used in double arrangements so that flow can be diverted while the system remains in service and the screen is cleaned. Basket Strainers feature top removal of the screen. The screen is in the form of a basket, with a lifting handle, so that all particulate captured and retained by the screen can be easily removed for disposal. They are intended for applications where large amounts of solids particulate are expected and where the clean-out will be frequent.

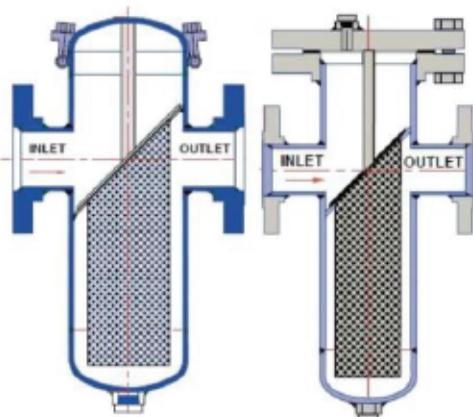
Cleaning of the strainer is accomplished by removing the cover and pulling out the basket, and a bolted top cover flange is provided for ease in basket removal. The high pressure/temperature gasket between the body and cover is spiral wound 304 stainless steel. The BCF strainers have carbon steel hex head cap screws and come with a tapped and plugged NPT drain connection. For the duplex version of this strainer that allows for cleaning without system shut down.

Carbon Steel performs exceptionally well in high temperatures, up to 425°C in continuous service. It provides high resistance to shock, vibration, piping strains, and fire and freezing hazards.

### Features:

- A) **Cast Body** made in WCB A216 Cast Steel plus Epoxy paint
- B) **Easy top removal** of the screen
- C) **Large straining capacity** without affecting pressure loss.
- D) **Provide a wide selection** of mesh sizes
- E) **High Quality stainless steel screen**; made out of high resistance wire, rugged and braided type.
- F) **Thick enough** to avoid deformation.
- G) **Drain port or drain ball valve** with NPT end; for in line emptying of condensate or water.
- H) **Bolting cover** to ease maintenance operations.
- I) **Low** pressure drop.
- J) **Large** strainer screens.

### Easy top removal of the screen



### Technical Specifications

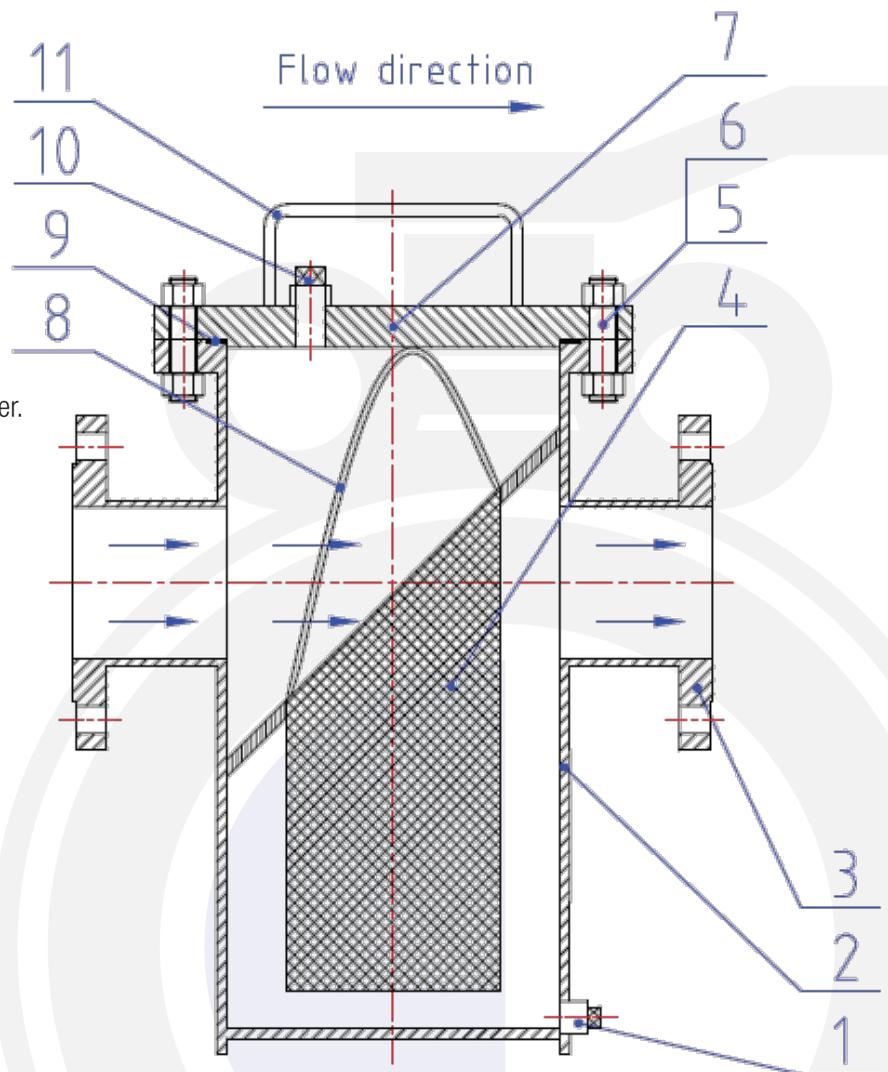
1. Design & Manufacture standard as to: ASME B31.4  
ASME B16.34
2. Face to Face dimension standard as to: MFR-STD
3. Flange dimension conforms as to: ASME B16.5 RF
4. Testing And Inspection as to: API 598
5. Pressure-temperature conforms as to: ASME B16.34
6. Anti Corrosion as per NACE MR-0175 requirement

## Technical Data

1. Size range: NPS 2"~16"
2. Pressure ratings: 150LB / 300LB
3. Working temperature: -29°C ~ +425°C
4. Suitable Medium: Process Industry, Power Industry, Chemical Industry, Oil and Gas, Pulp and Paper, Metals and Mining, Water and Waste
5. Standard Body Material: A216 WCB
7. Screen Material: A276 SS316L
8. Mesh: As per purchaser
9. Class 600/900 upon request

## Other options

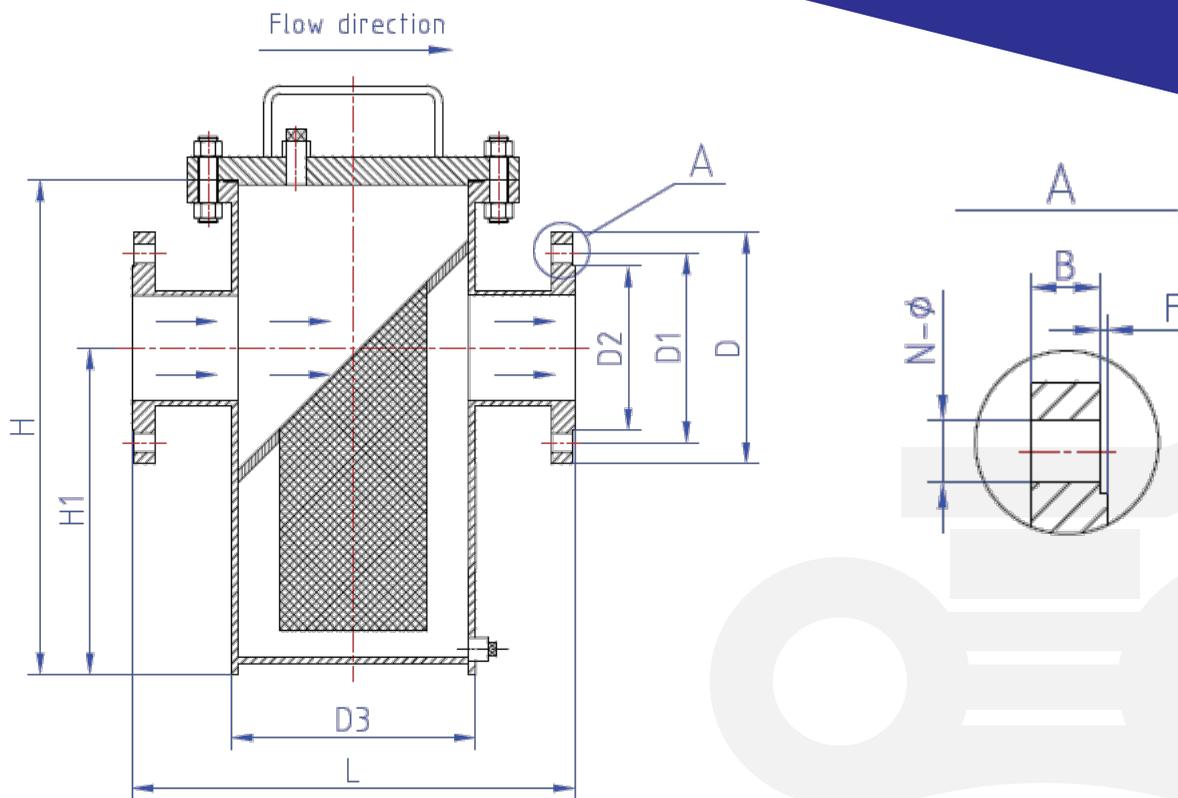
1. Quick open hinged or davit cover assembly bolted cover.
2. Steam jacket for highly viscous fluids.
3. Support legs or skirt.
4. Weld neck flanges.
5. Flanged class 600LB/900LB/1500LB/2500LB.  
RF, RTJ or butt weld piping connections.
6. DP gauge connections.
7. DP gauge/switch (fitted).
8. Self-cleaning option.



## Part List:

### Basket Strainer Eco Series

No.	Part Name	Material	Standard
1.	Drain Plug	Carbon Steel	ASTM A105
2.	Body	Carbon Steel	ASTM A216 WCB ASTM A234 WPB ASTM A105
3.	Flange	Carbon Steel	ASTM A105
4.	Screen	SS316	ASTM A276
5.	Bolt	B7	ASTM A193
6.	Nut	2H	ASTM A194
7.	Cover	Carbon Steel	ASTM A105
8.	Screen Handle	SS316	ASTM A276
9.	Gasket	SS316+Graphite	ASTM A276
10.	Vent Plug	Carbon Steel	ASTM A105
11.	Cover Handle	Carbon Steel	AISI 1025



## Main Dimensions:

### Basket Strainer Eco Series 150LB

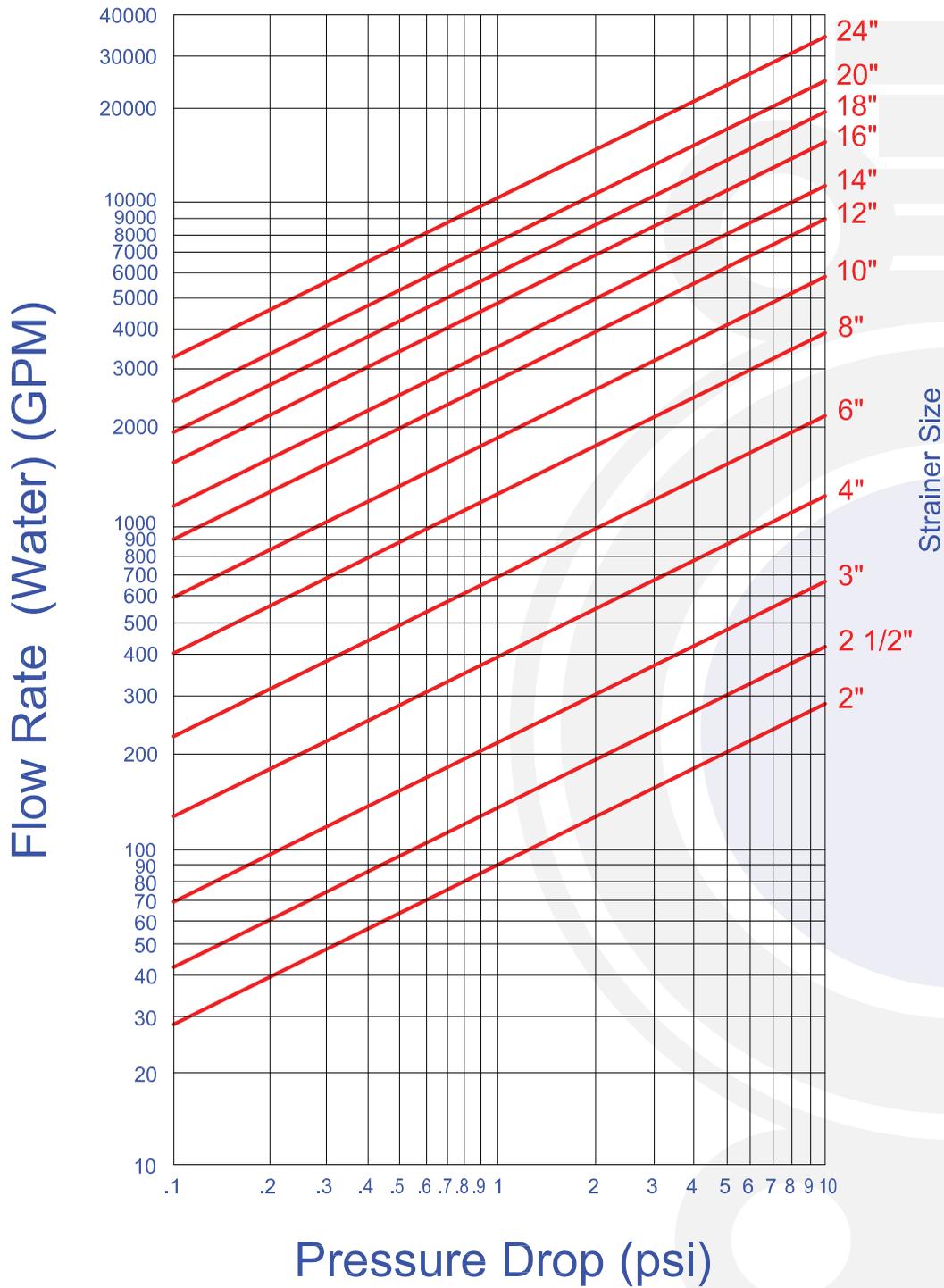
NPS	L	D3	H	H1	D	D1	D2	B	N-Φ	F	Weight (Kg)
2"	280	Φ133	300	180	Φ150	Φ120.7	Φ92	17.5	4-Φ19	2	21
2 1/2"	330	Φ133	350	220	Φ180	Φ139.7	Φ105	21	4-Φ19	2	25
3"	340	Φ159	400	260	Φ190	Φ152.4	Φ127	22.5	4-Φ19	2	35
4"	420	Φ219	470	310	Φ230	Φ190.5	Φ157	22.5	8-Φ19	2	60
6"	500	Φ273	620	430	Φ280	Φ241.3	Φ216	24	8-Φ22	2	98
8"	560	Φ325	780	530	Φ345	Φ298.5	Φ270	27	8-Φ22	2	125
10"	660	Φ377	930	640	Φ405	Φ362.0	Φ324	29	12-Φ25.5	2	210
12"	750	Φ478	1120	800	Φ485	Φ431.8	Φ381	31	12-Φ25.5	2	298
14"	800	Φ530	1300	930	Φ535	Φ476.3	Φ413	33.5	12-Φ29	2	370
16"	850	Φ530	1400	1000	Φ595	Φ539.8	Φ470	35	16-Φ29	2	458

### Basket Strainer Eco Series 300LB

NPS	L	D3	H	H1	D	D1	D2	B	N-Φ	F	Weight (Kg)
2"	280	Φ133	300	180	Φ165	Φ127	Φ92	21	8-Φ19	2	25
2 1/2"	330	Φ133	370	220	Φ190	Φ149.2	Φ105	24	8-Φ22	2	31
3"	360	Φ159	420	260	Φ210	Φ168.3	Φ127	27	8-Φ22	2	44
4"	460	Φ219	500	310	Φ255	Φ200	Φ157	30.5	8-Φ22	2	83
6"	540	Φ273	670	430	Φ320	Φ269.9	Φ216	35	12-Φ22	2	145
8"	600	Φ325	850	530	Φ380	Φ330.2	Φ270	40	12-Φ25.5	2	230
10"	700	Φ377	1000	640	Φ445	Φ387.4	Φ324	46.5	16-Φ29	2	380
12"	780	Φ478	1300	800	Φ520	Φ450.8	Φ381	50	16-Φ32	2	605
14"	800	Φ530	1300	930	Φ585	Φ514.4	Φ413	52.5	20-Φ32	2	640
16"	850	Φ530	1400	1000	Φ650	Φ571.5	Φ470	56	20-Φ35	2	755

# Basket Strainer Flow Rate Vs. Pressure Drop

(Clean Screen)



## ORDERING CODE:

**Example: BS-ES-121-1400**

Basket Strainer Eco Series

WCB Cast Steel + Epoxy Paint Body

SS316 Interior

Mesh20

Class 150

Size 14"

## Available Body Material Code:

A216 WCB Cast Steel: 1

A105 Forged Steel: 2

## Available Interior Material Code:

SS304 CF8 Stainless Steel: 1

SS316 CF8M Stainless Steel: 2

SS316L CF3M: 3

## Available Size Code:

2": 200

2 1/2": 250

3": 300

4" 400

5": 500

6": 600

8": 800

10": 1000

12": 1200

## Available Class

Class 150: 1

Class 300: 2

Class 600: 3

Class 900: 4