# **PTV**<sub>R</sub> Solutions

# **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

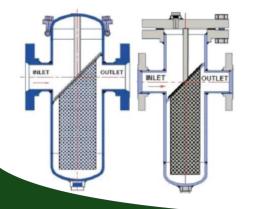
for ease in basket removal. The high pressure/temperature gasket between the body and cover is spiral wound 304 stainless steel. The BCF strainers have carbon steel hex head cap screws and come with a tapped and plugged NPT drain connection. For the duplex version of this strainer that allows for cleaning 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 resist ance wire, rugged and braided type. -
- F) Thick enough to avoid deformation.
- G)**Drain port or drain ball valve** with NPT end; for in line empty ing 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 Data 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



### Part List:

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

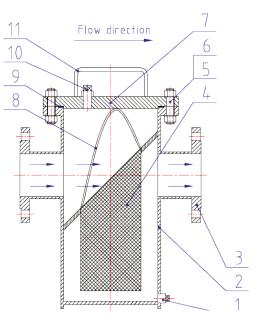


### Other options:

- 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.

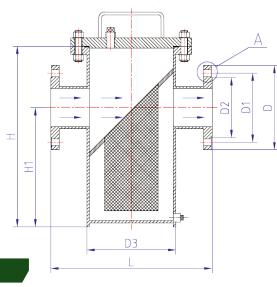
# Part List: Basket Strainer Eco Series

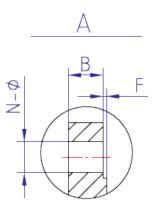
No.	Part Name	Material	Standard
1.	Drain Plug	Carbon Steel	ASTM A105
2.	Body	Carbon Steel	ASTM A216 WCB ASTM A234 WPB ASTM A105
3.	Flange	Carbon Steel	ASTM A105
4.	Screen	SS316	ASTM A276
5.	Bolt	В7	ASTM A193
6.	Nut	2H	ASTM A194
7.	Cover	Carbon Steel	ASTM A105
8.	Screen Handle	SS316	ASTM A276
9.	Gasket	SS316+Graphite	ASTM A276
10.	Vent Plug	Carbon Steel	ASTM A105
11.	Cover Handle	Carbon Steel	AISI 1025





Flow direction





Main Dimensions:

# Basket Strainer Eco Series 150LB

NPS	L	D3	н	H1	D	D1	D2	В	Ν-Φ	F	Weight (Kg)
2″	280	Φ133	300	180	Φ150	Ф120.7	Φ92	17.5	4-Φ19	2	21
2 1/2″	330	Φ133	350	220	Φ180	Ф139.7	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	Ф230	Φ190.5	Φ157	22.5	8-Ф19	2	60
6"	500	Φ273	620	430	Φ280	Φ241.3	Φ216	24	8-Ф22	2	98
8"	560	Ф325	780	530	Ф345	Ф298.5	Φ270	27	8-Ф22	2	125
10"	660	Ф377	930	640	Φ405	Ф362.0	Ф324	29	12-Ф25.5	2	210
12"	750	Φ478	1120	800	Φ485	Ф431.8	Ф381	31	12-Ф25.5	2	298
14"	800	Φ530	1300	930	Φ535	Ф476.3	Ф413	33.5	12-Ф29	2	370
16"	850	Φ530	1400	1000	Φ595	Ф539.8	Ф470	35	16-Ф29	2	458

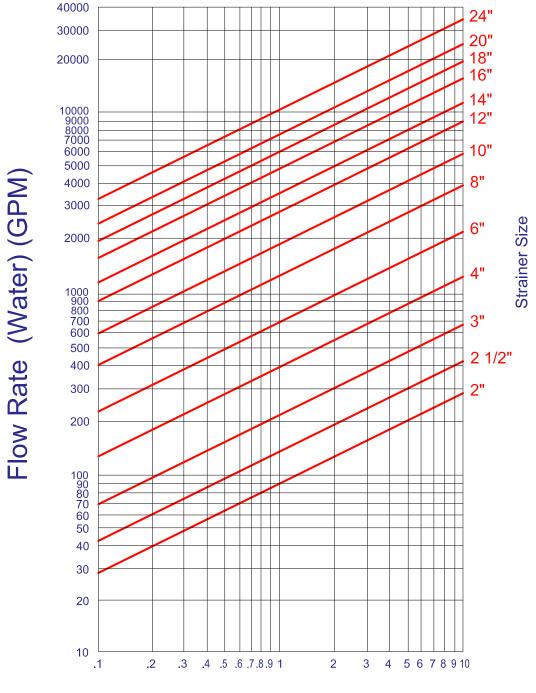
# Basket Strainer Eco Series 300LB

NPS	L	D3	н	H1	D	D1	D2	В	Ν-Φ	F	Weight (Kg)
2″	280	Φ133	300	180	Φ165	Φ127	Ф92	21	8-Ф19	2	25
2 1/2″	330	Φ133	370	220	Φ190	Ф149.2	Φ105	24	8-Ф22	2	31
3"	360	Φ159	420	260	Φ210	Ф168.3	Φ127	27	8-Ф22	2	44
4"	460	Φ219	500	310	Φ255	Φ200	Φ157	30.5	8-Ф22	2	83
6"	540	Φ273	670	430	Ф320	Ф269.9	Φ216	35	12-Ф22	2	145
8"	600	Φ325	850	530	Ф380	Ф330.2	Φ270	40	12-Ф25.5	2	230
10"	700	Ф377	1000	640	Φ445	Ф387.4	Ф324	46.5	16-Ф29	2	380
12"	780	Ф478	1300	800	Φ520	Ф450.8	Ф381	50	16-Ф32	2	605
14"	800	Φ530	1300	930	Φ585	Ф514.4	Ф413	52.5	20-Ф32	2	640
16"	850	Φ530	1400	1000	Φ650	Φ571.5	Φ470	56	20-Ф35	2	755



# Basket Strainer Flow Rate Vs. Pressure Drop

(Clean Screen)



Pressure Drop (psi)



# ORDERING CODE:

# Example: LDC-2-400

Lined Duo Check SS316 Body, Size 4"

# Available Body Material Code:

WCB A216 Cast Steel: 1

SS316 CF8M Stainless Steel: 2

SS316L CF3M Stainless Steel: 3

## Available Size Code:

2": 200	
2 ½″: 250	
3″: 300	
4″: 400	
6″:600	
8": 800	
10″: 1000	
12": 1200	
14": 1400	