PTV_R 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

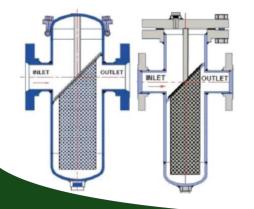
for ease in basket removal. The high pressure/temperature gasket between the body and cover is spiral wound 304 stainless steel. The BCF strainers have carbon steel hex head cap screws and come with a tapped and plugged NPT drain connection. For the duplex version of this strainer that allows for cleaning 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

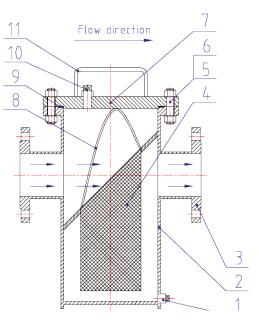


Other options:

- 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.

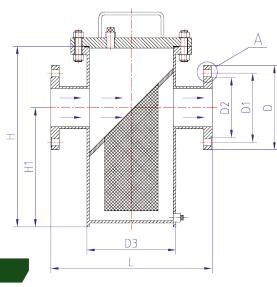
Part List: Basket Strainer Eco Series

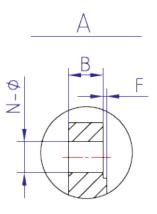
| No. | Part Name | Material | Standard |
|-----|---------------|----------------|---|
| 1. | Drain Plug | Carbon Steel | ASTM A105 |
| 2. | Body | Carbon Steel | ASTM A216 WCB ASTM A234 WPB ASTM A105 |
| 3. | Flange | Carbon Steel | ASTM A105 |
| 4. | Screen | SS316 | ASTM A276 |
| 5. | Bolt | В7 | 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 |

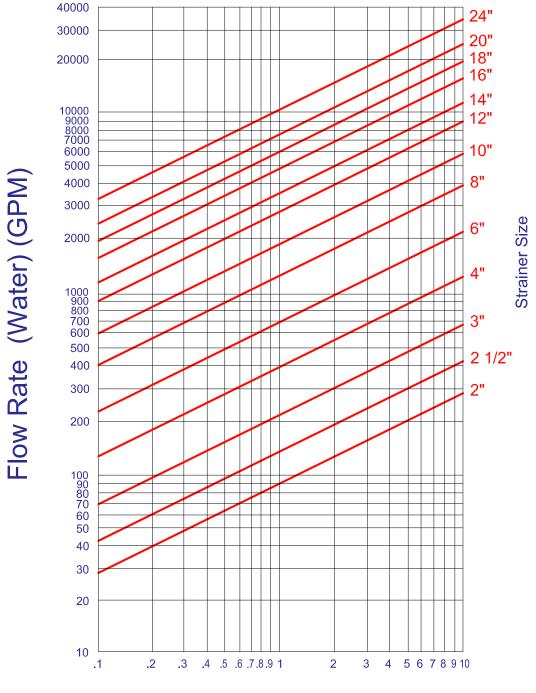
Basket Strainer Eco Series 300LB

| 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 | |