## Stacked Disc Cartridge Housing BECO INTEGRA® DISC MP Range

# **Enclosed Stacked Disc Cartridge Housing in Sanitary Design**

The BECO INTEGRA DISC MP stacked disc cartridge housing is an enclosed depth filtration system which can be used for the filtration of various liquids in the biotechnology and pharmaceutical industries.

#### **Special Features**

- CIP/SIP cleaning of the enclosed system without stacked disc cartridges is possible
- Completely drain housing through specially designed base
- Easy handling thanks to v-clamp closure for 12" and 16" stacked disc cartridge housings
- Low capital costs with relatively large filter areas and simple integration into existing processes
- Variable application using stacked disc cartridges with flat or double O-ring adapter. Variable column heights allow for adaptable filter area
- Small footprint through compact design and easy integration into the filtration process
- The design and construction of BECO INTEGRA DISC MP housing complies with the requirements of the cGMP guidelines and the FDA regulations

Customized housings or additional components allow for system expansion or complete systems according to customer specifications

## **Technical Data**

| Operating pressure liquids and gases: | max. 87 psi<br>(600 kPa/6 bar) |  |  |
|---------------------------------------|--------------------------------|--|--|
| Operation temperature:                | -4/+284 °F<br>(-20/+140 °C)    |  |  |







| Туре          | Filter<br>area*   | Stacked<br>disc<br>cartridges | Dimensions<br>A / B / C / D / E / F                           | Vessel<br>volume | Article no. flat adapter | Article no.<br>double O-<br>ring | Weight         |
|---------------|-------------------|-------------------------------|---|------------------|--------------------------|----------------------------------|----------------|
|               | ft²<br>(m²)       |                               | in<br>(mm)  | gal<br>(I)       | F                        | S                                | ≈ lbs<br>(kg)  |
| 12"/1F(S)5/6P | 6.4<br>(0.59)     | 1 x 12"                       | 17.36/7.72/12.76/6.30/1/1<br>(441/196/324/160/1"/1")          | 3.44<br>(13)     | MPF1K210                 | MPS1K210                         | 88.2<br>(40)   |
| 12"/1F(S)9/6P | 11.8<br>(1.10)    | 1 x 12"                       | 21.10/11.46/12.76/6.30/1/1<br>(536/291/324/160/1"/1")         | 5.55<br>(21)     | MPF1M210                 | MPS1M210                         | 94.8<br>(43)   |
| 12"/1F(S)/6P  | 20.5<br>(1.90*)   | 1 x 12"                       | 24.29/14.65/12.76/6.30/1/1<br>(617/372/324/160/1"/1.5")       | 7.13<br>(27)     | MPF1G210                 | MPS1G210                         | 99.2<br>(45)   |
| 12"/2F(S)/6P  | 40.9<br>(3.80*)   | 2 x 12"                       | 41.42/28.58/12.76/6.30/1/1.5<br>(1,052/726/324/160/1"/1.5")   | 14.53<br>(55)    | MPF2G215                 | MPS2G215                         | 143.3<br>(65)  |
| 12"/3F(S)/6P  | 61.4<br>(5.70)*   | 3 x 12"                       | 52.24/39.41/12.76/6.30/1/1.5<br>(1,327/1,001/324/160/1"/1.5") | 20.10<br>(76)    | MPF3G215                 | MPS3G215                         | 187.4<br>(85)  |
| 12"/4F(S)/6P  | 81.8<br>(7.60*)   | 4 x 12"                       | 63.07/50.24/12.76/6.30/1/1.5<br>(1,602/1,276/324/160/1"/1.5") | 25.89<br>(98)    | MPF4G215                 | MPS4G215                         | 231.5<br>(105) |
| 16"/1F(S)/6P  | 39.8<br>(3.70*)   | 1 x 16"                       | 32.68/20.00/17.72/9.84/1.5/2<br>(830/508/450/250/1.5"/2")     | 17.96<br>(68)    | MPF1G620                 | MPS1G620                         | 231.5<br>(105) |
| 16"/2F(S)/6P  | 79.7<br>(7.40*)   | 2 x 16"                       | 43.70/30.83/17.72/9.84/1.5/2<br>(1,110/783/450/250/1.5"/2")   | 28.79<br>(109)   | MPF2G620                 | MPS2G620                         | 264.6<br>(120) |
| 16"/3F(S)/6P  | 119.5<br>(11.10*) | 3 x 16"                       | 54.33/41.65/17.72/9.84/1.5/2<br>(1,380/1,058/450/250/1.5"/2") | 39.89<br>(151)   | MPF3G620                 | MPS3G620                         | 297.6<br>(135) |
| 16"/4F(S)/6P  | 159.3<br>(14.80*) | 4 x 16"                       | 65.35/52.48/17.72/9.84/1.5/2 (1,660/1,333/450/250/1.5"/2")    | 50.99<br>(193)   | MPF4G620                 | MPS4G620                         | 330.7<br>(150) |

<sup>\*</sup> if stacked disc cartridges with 16 cells are used

#### **Materials**

| Parts in contact with product: | Stainless steel<br>AISI 316L                                       |  |
|--------------------------------|--|--|
| Other Parts:                   | Stainless steel<br>AISI 304  |  |
| Gaskets/O-rings:               | EPDM, alternatively<br>silicone, Viton, FEP<br>coated (FDA listed) |  |

#### **Surface Treatment**

| Parts in contact with product: | Ground to Ra ≤<br>(0.8 µm), electro<br>polished |  |
|--------------------------------|---|--|
| Other Parts:                   | Ground to Ra ≤ (1.6 µm), electro polished       |  |

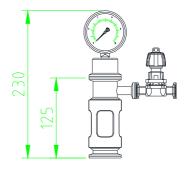
## **Connections**

| Filter inlet/outlet: | Tri-clamp, ASME BPE alternatively ISO 2852, |  |  |
|----------------------|---|--|--|
|                      | DIN 32676, others                           |  |  |

## Manufactured and inspected

According to Pressure Equipment Directive (PED) 2014/68/EC (AD-2000 regulations). Classification as fluid group 1, dangerous liquids and gases

#### Vent unit





| Pos. | Description         | Silicone | EPDM     | Viton    | FEP coated |
|------|---------------------|----------|----------|----------|------------|
| 1    | O-ring (12")        | P8800404 | P8800102 | P8800501 | P8800601   |
| 2    | O-ring              | 53070911 | 53070912 | 53070913 | MDE28F12   |
| 4    | Clamp gasket 1"     | -        | P8800702 | -        | -          |
| 5    | Clamp gasket 1/2"   | P7510505 | P7510501 | P7510513 | P7510510   |
| 6    | Clamp gasket 1 1/2" | P7510511 | P7510507 | P7510514 | P8800713   |
| 7    | Clamp gasket 2"     | P7510512 | P8800724 | P8800715 | P8800723   |
| 8    | O-ring              | -        | P8800132 | P8800143 | P8800157   |
| 9    | O-ring              | -        | P8800130 | P8800142 | P8800156   |
| 10   | O-ring              | -        | P8800129 | P8800141 | P8800135   |
| 11   | O-ring              | -        | P8800131 | P8800144 | P8800137   |
| 12   | O-ring (16")        | P4500964 | P8800133 | P8800148 | P8800107   |

