DISCSTAR™ I

FILTROX

LENTICULAR HOUSING

The choice for industrial and low critical filtration applications



The DISCSTARTM I is an economical stainless steel filter housing for lenticular depth filter modules. The enclosed system allows high capacity depth filtration with no drip loss (no edge leaking). Designed and manufactured for heavy duty use -24/7. System of choice for frequently changing filtration applications. This system provides pressure stability up to 10 bars.

Applications

- Pharmaceutical raw materials
- Oils
- Inks
- ...

Features

- Easy handling
- Simple and fast exchange of the lenticular modules
- High chemical resistant
- Small foot print
- Available for 12" and 16" modules
- Low investment cost with a relatively large filter area
- Easy CIP cleaning possible
- Easily adaptable to your process due to in-house production

| Filter area | | | | | | | |
|-------------|-------------------------------|-------------------------------|-------------------------------|---------------------------------|--|--|--|
| | Size 1 | Size 2 | Size 3 | Size 4 | | | |
| DISCSTAR™ I | 1.8 m ² (19 sq ft) | 3.6 m ² (39 sq ft) | 5.4 m ² (58 sq ft) | 7.2 m ² (78 sq ft) | | | |
| DISCSTAR™ I | n.a. | 7.2 m ² (78 sq ft) | 10.8 m² (116 sq ft) | 14.4 m ² (155 sq ft) | | | |

| Technical data | | | | | | | | | |
|----------------|--|-----------------|-----------------|----------------|-------------------|------------------|-------------|--|--|
| DISCSTAR™ | ISCSTAR TM Size $12'' = 30$ | | Max. operating | Max. operating | Inlet/outlet | Module interlock | Closing | | |
| type | 10 | 6 " = 40 | pressure | temperature | connection | | mechanism | | |
| DISCSTAR™ I | 30 | 40 | Liquid: | Liquid: | With welded | DOE/DOR | Swing bolts | | |
| | | | 10 bar / 87 psi | 140°C / 285°F | tube bent 90° | on request | | | |
| | | | Gas / steam: | Gas/steam: | DIN 11851 (dairy) | | | | |
| | | | 0.5 bar / 7 psi | 95°C / 203°F | DN 50 | | | | |

Limiting factor for the Δp of a module is the sheet grade and the application.

| Material | | | | | |
|--------------------------|--|-----------------------------|--|--------------------------------|---------|
| | Stainless steel material (product contact) | Other stainless steel parts | Surface finish (inside) | Surface finish (outside) | Gaskets |
| DISCSTAR TM I | AISI 316L | AISI 304 | All welds ground smooth polished Ra < 0.8 µm | Ground polished Ra < 1.2 µm | EPDM |

Options

The typical setup requires gauges and valves, as well as a check valve. For DISCSTAR TM I many options are available:

- Pharma version (please refer to special literature).
- Double-O-ring sealing and bayonet interlock to ensure highest integrity at easy handling.
- Connections can be TC-clamp (sanitary, DIN 32676), dairy (DIN 11851) or flange (DIN 2633).
- Housings with a higher edge at the base plate help to avoid spillage of hazardous liquids.

| Dimensions (mm) | | | | | | | | | |
|-----------------|--------|-----------|--------|------------------|-----------|--------|--------|--|--|
| | DISCS | TAR™ 30 | 0 | DISCS | TAR™ 40 |) | | | |
| | Size 1 | Size 2 | Size 3 | Size 4 | Size 2 | Size 3 | Size 4 | | |
| Α | 691 | 1052 | 1327 | 1602 | 1362 | 1657 | 1953 | | |
| В | 446 | 726 | 1001 | 1276 | 772 | 1067 | 1363 | | |
| C | 215 | 296 | | | 562 | | | | |
| D | 150 | 185 | | | 415 | | | | |
| E | 110 | | | | 164 | | | | |
| F | 329 | | | | | 589 | | | |
| G | 190 | 205 | 205 | | | 340 | | | |
| Н | 95 | 103 | | | 170 | | | | |
| 1 | 324 | | | | 450 | | | | |
| L | 49 | 177 | 177 | | | 256 | | | |
| М | 159 | 177 | | | 256 | | | | |
| DNX | DN 50 | DN 50 | | | DN 50 | | | | |
| | DIN | DIN 11851 | | | DIN 11851 | | | | |
| | 11851 | | | | | | | | |
| DNY | DN 10, | DIN 1185 | 51 | DN 10, DIN 11851 | | | | | |

| Vol./weight(approx.) | | | | | | | | |
|----------------------|--------------|-----------|-----------|-----------|--------------|-----------|-----------|--|
| | DISCSTAR™ 30 | | | | DISCSTAR™ 40 | | | |
| | Size 1 | Size 2 | Size 3 | Size 4 | Size 2 | Size 3 | Size 4 | |
| Void vol. (I) | 30 | 52 | 76 | 99 | 109 | 154 | 199 | |
| Empty (kg) | 59 | 68 | 78 | 88 | 119 | 130 | 141 | |
| Full (kg)) | 89 | 120 | 154 | 187 | 228 | 284 | 340 | |
| Dome (kg) | 20 | 28 | 36 | 45 | 41 | 52 | 63 | |

FILTROX quality assurance

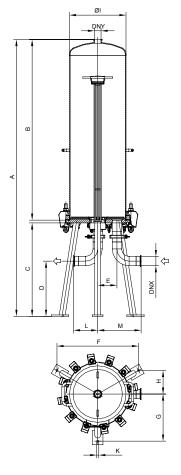
FILTROX assures the best quality control according to international standards:

- ISO 9001 (quality management).
- Vessel and equipment fulfil the requirements according to AD-2000.
- The module housings are manufactured according to good engineering practice.

Piping system

By customer request

- For filtrations with controlled temperature (cooling or heating) we recommend a double shell dome for temperature controlled liquid.
- For larger filter area, DISCSTAR™ I is also available as a multistack housing. (Up to 4 stacks, 4 high, 16 x 16" modules under one dome).
- Gaskets: EPDM (standard), silicone, Viton® or Teflon® encapsulated silicone.
- Converters from double-O-ring to flat gasket adaptors are available for both directions. They can be quickly and easily applied.
- Insulating jacket available.



Documents (on request)

- Ferrite measurements
- Surface roughness (< 0.8 µm [Ra])
- Certificate gaskets (FDA)
- Material certificate 3.1 or 2.2 (only for material in direct contact with the product)
- Guideline ATEX 94/9/EG
- ASME (U-Stamp)
- Pressure vessel guideline DGR 97/23/EG
- EU Guideline 89/392/EWG
- Welder certificate
- Pickle protocol