

Self-cleaning Edge Filters

Structure and Functioning

Our self-cleaning edge filters for hydrous to highly viscous media are extremely stable and designed for highly demanding applications. They essentially consist of the following components:

Two-piece housing, split tube element, scraper basket with wiper and gear motor. The filtration takes place through the split tube from the outside to the inside. The solids thereby settle down on the outside of the split tube element. The rotating filter element is cleaned by means of a wiper. The solids settle at the bottom of the filter housing and are discharged by the system pressure through a ball valve. Optionally the discharge of the solids can also be done automatically by an electronic control system with differential pressure control and solenoid valve. Clogging of the filter element is virtually impossible because the gaps widen trapezoidally inwards. The filter fineness is determined by the gap width of the filter element. The filter element can be changed without special tools.



Main features

- Self-cleaning without interrupting the filtration
- No filter candle disposal
- Minimal product loss at solids discharge
- Easy dismantling of the filter element
- Suitable for almost all liquids
- Filter fineness from 25 µm to 3 mm
- High resistance to differential pressure
- Robust two-piece housing
- Filtration from the outside to the inside
- Emptying by ball valve and optionally also automatically with magnetic valve
- Maximum operating temperature: 200°C (depending on sealing material)
- The filter is also available in manual version (without motor)

To help you choose the right size of filter, the following data is required

- Filter medium
- Flow rate
- Filter fineness
- Viscosity
- Operating pressure / temperature
- Solid content of the filtrate

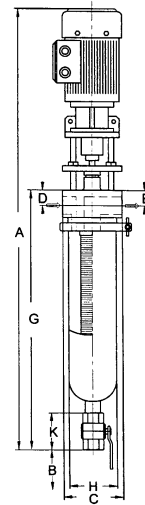
Applications

- ✓ Paints and coatings
- ✓ Emulsion paints
- ✓ Printing inks
- ✓ Underbody protection
- ✓ Adhesives
- ✓ Tar products
- ✓ Solvents
- ✓ Gear oils, rolling oils, rapeseed oils
- ✓ Emulsions
- ✓ Cooling lubricants
- ✓ Chocolate mass
- ✓ Plasticizers

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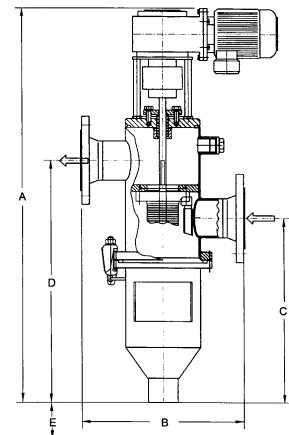
Technical data (type AS 50/1 and AS 50/2)

| | | |
|-----------------------------|--|---------------|
| Material-filter housing: | Stainless steel AISI/SAE 304 | |
| Material-filter element: | Stainless steel AISI/SAE 316 L | |
| Sealing: | Viton O-ring | |
| Fineness: | 25 - 3000 µm | |
| Operating pressure: | 16 bar | |
| Operating temperature: | 200°C (with FEP-sealing) | |
| Drive: | spur gear motor | |
| Electrical connection: | 400 V, 50 Hz (Special voltage on request) | |
| Protection class: | IP54 or IP65, optionally with Ex-protection | |
| Total height A in mm: | AS 50/1 = 810 | AS 50/2 = 880 |
| Removal height B in mm: | AS 50/1 = 300 | AS 50/2 = 300 |
| Install. dimension C in mm: | AS 50/1 = 100 | AS 50/2 = 100 |
| Inlet D in mm: | AS 50/1 = 27 | AS 50/2 = 27 |
| Outlet E in mm: | AS 50/1 = 27 | AS 50/2 = 27 |
| Housing height G in mm: | AS 50/1 = 460 | AS 50/2 = 530 |
| Drain valve K in mm: | AS 50/1 = 80 | AS 50/2 = 80 |



Technical data (type AS 70, AS 110 and AS 175)

| | | | |
|------------------------------|--|--------------|---------------|
| Material-filter housing: | Stainless steel AISI/SAE 316 Ti | | |
| Material-filter element: | Stainless steel AISI/SAE 316 L | | |
| Sealing: | Viton O-ring | | |
| Fineness: | 25 - 3000 µm | | |
| Operating pressure: | 10 bar (16 bar upon request) | | |
| Operating temperature: | 200°C (with FEP-Sealing) | | |
| Drive: | worm gear motor | | |
| Electrical connection: | 400 V, 50 Hz (Special voltage on request) | | |
| Protection class: | IP65, optionally with Ex-protection | | |
| Installation height A in mm: | AS 70 = 865 | AS 110 = 965 | AS 175 = 1030 |
| Flange height B in mm: | AS 70 = 365 | AS 110 = 365 | AS 175 = 465 |
| Flange height C in mm: | AS 70 = 370 | AS 110 = 470 | AS 175 = 520 |
| Flange height D in mm: | AS 70 = 500 | AS 110 = 600 | AS 175 = 670 |
| Removal height E in mm: | AS 70 = 300 | AS 110 = 400 | AS 175 = 400 |



Further Technical Data

| | AS 50/1 | AS 50/2 | AS 70 | AS 110 | AS 175 |
|--------------------------------|---------------|----------|-------------|---------|---------|
| Flow rate ¹⁾ | 3.5 m³/h | 3.5 m³/h | 13 m³/h | 25 m³/h | 35 m³/h |
| Inlet | R 1" | R 1" | DN 50 | DN 65 | DN 80 |
| Outlet | R 1" | R 1" | DN 50 | DN 65 | DN 80 |
| Emptying | R 3/4" | R 3/4" | R 2" | R 2" | R 2" |
| De-aeration | R 1/8" | R 1/8" | R 1" | R 1" | R 1" |
| Housing lock | Tension clamp | | Clamp screw | | |
| Volume (Liter) | 1.5 | 1.8 | 10.5 | 12.5 | 22.5 |
| Rated power (watt) | 20 | 20 | 90 | 90 | 90 |
| Weight (kg) | 12 | 12.5 | 41 | 47 | 81 |

¹⁾ The values are based on water and a filter fineness of 100 µm.