

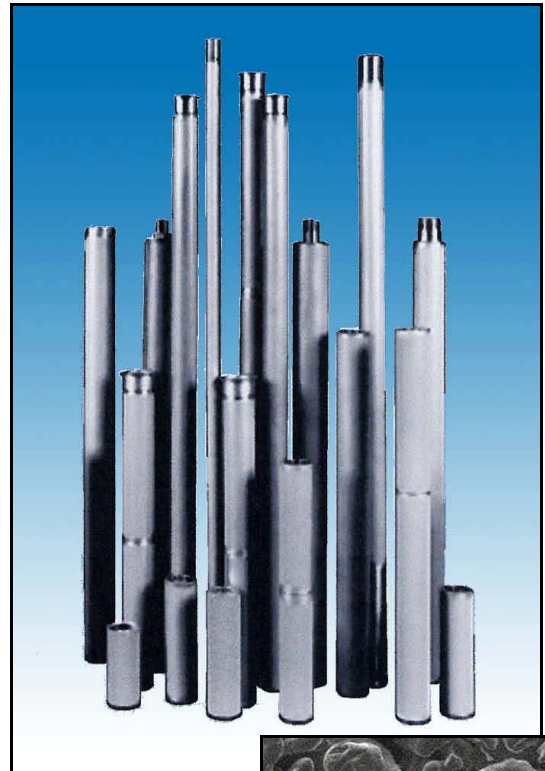
Sintered metal porous cartridge **SP series**

The SP series filter cartridges are fabricated using selected metallic powders sintered as plates that are then rounded and welded, or manufactured directly as seamless tubes. The accuracy in materials selection and the strict sinterizing process contribute to the high quality standard of the SP series cartridges.

To respect the highest quality standard requirements, ASCO Filtri selects for its SP series cartridges filter media from Mott Corp., a USA company which can boast over 40 years of experience in sintered powder products.

The availability of a wide range of media, including exotic materials, in addition to different arrangements, enable the use of SP series cartridges in the most critical applications. The SP series cartridges are the ideal solution for on site backwash in liquid applications.

Contaminants can also be chemically removed, with ultrasonic assistance or for calcinations in controlled air fluid bed furnace, so you can re-use these cartridges for many years.



CHARACTERISTICS

- Absolute rated filtration
- Low thickness (up to 0.039") to guarantee very low initial ΔP
- High temperature resistance
- High corrosion resistance
- Excellent mechanical strength
- Back-flushable on site
- Available in different stainless steels grades and many exotic materials
- Available in a wide range of sizes

FILTRATION RATING

| MEDIA | LIQUIDS | | DP calculations [1] | | | | GAS | |
|-------|-------------------|-------------------|---------------------|------|---------------|------|--------------------|--------------------|
| | | | Welded tube | | Seamless tube | | | |
| GRADE | 90% | 99,9% | KL | sp. | KL | sp. | 90,0% | 99,9% |
| A2 | 0,5 μm | 1,4 μm | 140 | 1 | - | - | 0,02 μm | 0,06 μm |
| A5 | 1 μm | 2,2 μm | 30 | 1,2 | 20,2 | 1,58 | 0,05 μm | 0,1 μm |
| 01 | 1,5 μm | 3,3 μm | 9 | 1,2 | 9,2 | 1,58 | 0,1 μm | 0,3 μm |
| 02 | 4 μm | 9 μm | 4 | 1,58 | 4,9 | 1,58 | 0,2 μm | 0,5 μm |
| 05 | 5 μm | 13 μm | 2 | 1,58 | 2,4 | 1,58 | 0,5 μm | 1 μm |
| 10 | 10 μm | 20 μm | 0,7 | 1,58 | 1,4 | 1,58 | 1 μm | 2 μm |
| 20 | 20 μm | 35 μm | [2] | 1,58 | [2] | 1,58 | 2 μm | 5 μm |
| 40 | 40 μm | 60 μm | [2] | 1,98 | [2] | 1,98 | 5 μm | 10 μm |
| 99 | 100 μm | 120 μm | [2] | 2,36 | [2] | 2,36 | 10 μm | 20 μm |

Liquids DP calculation:

$$DP [\text{bar}] = 6,637 \cdot 10^{-8} \cdot KL \cdot Q \cdot \eta \cdot \gamma \cdot sp$$

KL: Permeability factor

Q: Specific flow rate [lpm/m²]

η : Kinematics viscosity [cSt]

γ : Density [kg/m³]

sp: Filter media thickness [mm]

$$cSt = cP / \gamma \cdot 1000$$

1] Valid only for 316L SS. For other materials contact ASCO Filtri.

2] Contact ASCO Filtri

MAIN APPLICATIONS

Highly corrosive liquids and gases, air, nitrogen, CO₂, argon, helium, oxygen, ammonia, solvents, ketones, esters, amines, liquid hydrocarbons, hydrogen peroxide production, caprolactam production, Bleach plant in pulp and paper industry, Sulfuric acid environment, chlorinated organics, feed-water, make-up water, process water, sea water, condensate polishing, high pressure ethylene gas, cryogenic fluids, catalyst recovery, filtration of FCCU slurry oil, high temperature stack gas sampling, polishing of syrups and liquors, sparging (gas/liquid contacting)

A UNIT OF
Finder

Sintered metal porous cartridge **SF series**

PRODUCT SPECIFICATION

Retention ratings

0.5, 1, 2, 5, 10, 20, 40, 100 µm nominal for liquids

Max differential pressure

Standard version:

Outside - inside 0.5/100 µm 50 psid
 Inside - outside 0.5/100 µm 40 psid

Spring reinforced version:

Outside - inside 0.5/40 µm 250 psid
 Outside - inside 100 µm 150 psid
 Inside - outside 0.5/100 µm 40 psid

Max operating temperature

316L SS in oxidizing atmosphere: 750 °F
 in reducing atmosphere: 1000 °F
 Inconel 600 in oxidizing atmosphere: 1100 °F
 in reducing atmosphere: 1500 °F
 Hastelloy X in oxidizing atmosphere: 1450 °F
 in reducing atmosphere: 1700 °F

Construction materials

Sintered metal powder

"K" filter media

"W" filter media

End & side seam

Gaskets

Seamless tube made
 Rolled and welded tube
 Pulsed microTIG welding
 Buna-n, EPDM, Silicone, Viton, Natural rubber, PTFE,
 FEP Encapsulated, Kalrez®

Dimension

Length from 6" to 70"
 Outer diameter 2.5"

Inconel 600 is a trademark of INCO.

Kalrez is a registered trademark of DuPont Dow Elastomers.

ORDERING INFORMATION

| SP | K | 05 | - | 30 | S | 0 | V |
|----|------------|-------------------|---|------------|------------------|-------------------------|------------|
| | TYPE | MICRON RATING [1] | | LENGTH [2] | MATERIAL [3] | END CAPS | GASKETS |
| | K Seamless | A5 0.5 µm | | 06 06" | W 304L SS | 0 DOE | N Buna-n |
| | W Welded | 01 1 µm | | 10 10" | S 316L SS | 3 SOE - OR 222/FLAT END | E EPDM |
| | | 02 2 µm | | 20 20" | I Inconel 600 | 6 SOE - OR 226/FLAT END | S Silicone |
| | | 05 5 µm | | 30 30" | H Hastelloy C276 | 7 SOE - OR 226/FIN END | V Viton |
| | | 10 10 µm | | 40 40" | | 8 SOE - OR 222/FIN END | T PTFE [4] |
| | | 20 20 µm | | 50 50" | | 9 SOE - OR 225/FIN END | F FEP |
| | | 40 40 µm | | 60 60" | | T THREADED | |
| | | 99 100 µm | | 70 70" | | F FLANGED | |

1) Nominal filtration rating refers to liquid filtration.

2) Other size upon request (tailor-made design).

3) Other materials upon request (Monel 400, Nickel 200, etc.).

4) Available only in DOE configuration.



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