FILTER COMPONENTS

Stainless Steel Basket Filter

Cylindrical stainless steel element with a closed bottom, fitted into bag and basket filter housings. The perforated support basket holds the bag filter under pressure; the wire mesh-lined basket filters without a bag in the 5–10,000 µm range. Used in food, pharmaceutical, chemical, paint and water treatment processes.



STAINLESS GRADE	WIRE MESH-LINED	PERFORATED BASKET	BASKET DIAMETER
4 grades	**5–10,000 µm**	**4 mm holes**	**Ø100 / Ø180**
AISI 304 · 316 · 316Ti · 904L	3 layers below 500 µm	Retains >4,000 µm alone	140–720 mm · 4 lengths

Technical specifications

Usage type	Perforated support basket (with a bag) · Wire mesh-lined filtration basket (without a bag)
Body	Perforated stainless sheet · Standard 4 mm holes · Other holes on request
Stainless grade	AISI 304 / 304L · AISI 316 / 316L · AISI 316Ti · AISI 904L
Filtration (perforated)	With a bag, the bag micron rating applies · On its own, retains above 4 mm (4,000 µm)
Filtration (wire mesh-lined)	5–10,000 µm · Apertures as on the stainless steel wire mesh page
Layer structure	Perforated: single layer · Wire mesh-lined: two layers · Below 500 µm: three layers (protection layer)
Wire mesh weave	Coarse and medium: Plain · Fine: Dutch · Twilled Dutch
Flow direction	Inside out · Particles collect on the inner surface of the basket
Standard diameter	Ø100 mm · Ø180 mm
Standard length	140 · 290 · 340 · 720 mm · 90 mm shorter than the bag to stop it bursting
Compatible bag	Ø100 × 230 / 380 mm · Ø180 × 430 / 810 mm
Compatible housings	Standard bag filter housings · Stainless steel basket filter housings
Temperature	Operates at high temperatures · Polymer, oven and hot process lines
Surface	Inert, releases no substances into the process · Washable and reusable
Custom manufacturing	Any length, diameter, flange detail, micron · Replica of a sample basket
Certification	CE-marked manufacturing

Standard dimensions

SIZE	BAG (MM)	BASKET (MM)	M³/H
Size 1	Ø180 × 430	Ø180 × 340	20
Size 2	Ø180 × 810	Ø180 × 720	40
Size 3	Ø100 × 230	Ø100 × 140	6
Size 4	Ø100 × 380	Ø100 × 290	12

Usage types

Perforated support basket (with a bag)

Single layer, sheet with 4 mm holes. Holds the bag against pressure; on its own, retains above 4,000 µm.

Wire mesh-lined basket (without a bag)

Perforated body + wire mesh; three layers below 500 µm. Filters 5–10,000 µm without a bag.

Micron bands

BAND	MICRON (MESH)	TYPICAL APPLICATION
Coarse	10,000 · 5350 (4) · 4080 (5) · 3230 (6) · 2630 (7) · 2380 (8) · 1970 (10) · 1520 (12) · 1340 (14) · 1220 (16) · 1040 (18) · 970 (20) · 716 (25)	Burrs, sand, rust
Medium	545 (30) · 505 (35) · 425 (40) · 330 (50) · 280 (60) · 242 (70) · 200 (80)	Paint, resin, water
Fine	182 (90) · 154 (100) · 120 (120) · 109 (150) · 90 (180) · 77 (200) · 61 (250) · 45 (300) · 43 (325)	Food, beverage, chemicals
Precision	Below 43 µm; down to 5 µm with Dutch and Twilled Dutch weave	Pharma, electronics

Finest plain weave aperture is about 325 mesh / 43 µm; mesh equivalents are approximate, confirm before production.

Stainless steel grade options

GRADE	COMPOSITION	SUITABLE FOR	AVOID
AISI 304 / 304L	18% Cr, 8% Ni	Mains water, paint, coating, general process	Chlorides, high salinity
AISI 316 / 316L	18% Cr, 10% Ni, 2% Mo	Food, pharma, chemicals, marine, saltwater, acids	Conc. sulphuric acid
AISI 316Ti	Titanium-stabilised	Hot fluids, heat treatment, welded structures	Strong reducing acids
AISI 904L	High Ni, Cr, Cu	Sulphuric and phosphoric acid, high chloride	–

Use and maintenance

- When ΔP rises, remove the basket, empty and wash it.
- Do not press hard objects on the mesh-lined inner surface.
- Replace the basket if dented, holed or the mesh is torn.
- State bag size and basket length when ordering (810 mm bag: 720 mm basket).

Values in this data sheet are typical and for information only. Product selection should be made with our engineers based on process fluid, temperature, pressure and flow conditions. Proses T.İ.M. reserves the right to change product specifications without prior notice.

PROSES T.İ.M.®

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