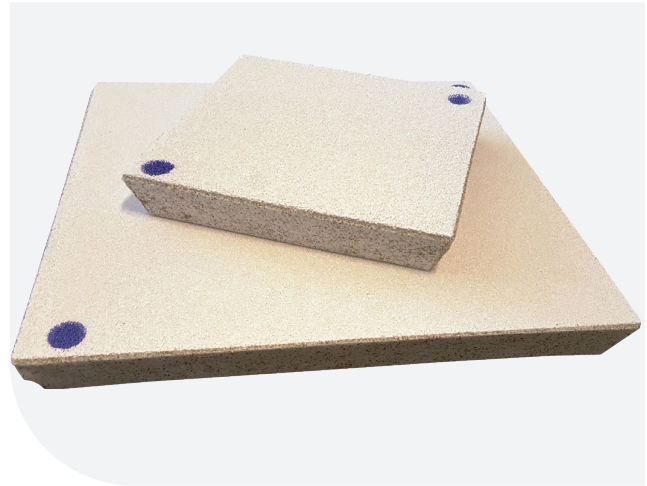




# SIVEX<sup>®</sup>-S

## CERAMIC FOAM FILTER

SIVEX<sup>®</sup>-S ceramic foam filters (CFF) are used to filter and clean aluminium used for beverage can applications and aircraft alloys. They are a proven, cost effective way to remove inclusions from aluminium melts. These filters are machined to tight dimensional tolerances, are treated during processing and have very low friability. SIVEX<sup>®</sup>-S CFF manufactured by Pyrotek China, is a combination of excellent strength, thermal properties and resistance to attack from molten aluminium.



SIVEX<sup>®</sup>-S is a phosphate-bonded, high-purity alumina-based product. It is available in sizes from 22.9–66 centimetres (9–26 inches) and in filter PPI of 20–60.

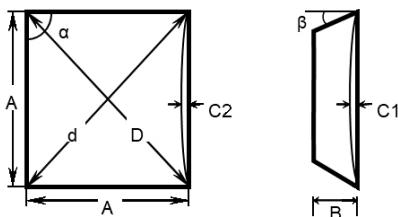
SIVEX<sup>®</sup>-S has a gasket on the edges to help seat the filter in the filter bowl and ensure no metal bypasses the filter. Two types of gaskets are available; a standard fibre gasket that is 6 millimetres (0.24 inches) thick and a sureseal expandable gasket that is 3.5 millimetres (0.14 inches) thick.

### PRODUCT SPECIFICATIONS – PPI

- PPI — pores per inch. The term porosity, measured in PPI, designates the number of pores in one linear inch.
- 20~60 PPI SIVE-S CFF are available.

### PRODUCT SPECIFICATIONS – DIMENSIONS

Dimensional accuracy ensures a correct fit in the filter bowl and prevents metal bypass or stresses on the filter.



| Filter Sizes (in) | Dimension (mm) | Tolerances (mm) | Bend C1 (mm) |
|-------------------|----------------|-----------------|--------------|
| 9                 | 229 x229       | ±3              | 3            |
| 12                | 305 x305       | ±3              | 3            |
| 15                | 381 x381       | ±4              | 4            |
| 17                | 432 x432       | ±4              | 5            |
| 20                | 508 x508       | ±4              | 5            |
| 23                | 584 x584       | ±4              | 5            |
| 26                | 660 x660       | ±5              | 5            |

| Property       | Specification                |
|----------------|------------------------------|
| Angle $\alpha$ | 90° ±0.5°                    |
| Angle $\beta$  | 17.5° ±1°                    |
| B              | 50 ±2 mm (2 ±0.08 in)        |
| Bend C2        | ±2 mm (0.08 in) on each edge |
| D-d            | ≤1% x A                      |



### PRODUCT SPECIFICATIONS – TYPICAL APPLICATIONS

The following tables provide capacity and flow rates for each filter size. For increased flow rates, two (or more) filters are used in parallel. The capacity data displayed should only be used as a guide. Actual filter capacity depends on the on the project's casting conditions (alloy, temperature, inclusion load, etc.).

| Filter Size – mm (in) | Effective Filter Area – m <sup>2</sup> (ft <sup>2</sup> ) | Minimum Flow – kg/min (lb/min) | Maximum Flow – kg/min (lb/min) | Typical Capacity – (tonnes Al) |
|-----------------------|---|--------------------------------|--------------------------------|--------------------------------|
| 229 (9)               | 0.03 (0.32)   | 47 (103.62)                    | 90 (198.42)                    | 5.1 (5.10)                     |
| 305 (12)              | 0.07 (0.75)   | 90 (198.42)                    | 172 (379.20)                   | 9.8 (10.80)                    |
| 381 (15)              | 0.12 (1.29)   | 147 (324.08)                   | 280 (617.29)                   | 15.9 (17.53)                   |
| 432 (17)              | 0.16 (1.72)   | 193 (425.49)                   | 367 (809.10)                   | 20.8 (22.93)                   |
| 508 (20)              | 0.23 (2.48)   | 274 (604.07)                   | 521 (1148.61)                  | 29.5 (32.52)                   |
| 584 (23)              | 0.30 (3.23)   | 369 (813.51)                   | 700 (1543.24)                  | 39.7 (43.76)                   |
| 660 (26)              | 0.40 (4.31)   | 492 (1084.67)                  | 933 (2056.91)                  | 53 (58.42)                     |

### Quantity Per Pallet for Standard Pallets (Truck Loads)

| Filter Size – mm (in) | Filters Per Box | Filters Per Pallet | Pallet Dimensions – cm         | Pallet Weight – kg |
|-----------------------|-----------------|--------------------|--------------------------------|--------------------|
| 229 (9)               | 10              | 240                | 130 x112 x102                  | 295                |
| 305 (12)              | 10              | 120<br>180         | 132 x105 x123<br>132 x105 x190 | 425<br>640         |
| 381 (15)              | 5               | 80                 | 115 x110 x103                  | 310                |
| 432 (17)              | 5               | 80                 | 116 x115 x113                  | 370                |
| 508 (20)              | 5               | 105                | 120 x110 x190                  | 630                |
| 584 (23)              | 5               | 90                 | 126 x100 x208                  | 680                |
| 660 (26)              | 4               | 48                 | 126 x100 x160                  | 450                |

### PRODUCT SPECIFICATIONS – QUANTITY PER PALLET FOR CONTAINER LOADS

Packaging can be modified to meet individual project requirements.

| Filter Size – mm (in) | Per Pallet | 20" Container | 40" Container |
|-----------------------|------------|---------------|---------------|
| 229 (9)               | 240        | 3,840         | 7,680         |
| 305 (12)              | 120<br>180 | 2,400         | 5,400         |
| 381 (15)              | 80         | 1,600         | 3,200         |
| 432 (17)              | 80         | 1,600         | 3,200         |
| 508 (20)              | 105        | 1050          | 2,100         |
| 584 (23)              | 90         | 900           | 1,800         |
| 660 (26)              | 48         | 480           | 960           |

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