

Z100 Heavy Duty Pre-filter

Z100 Pre-Filter offers high performance and durability in hostile operating environments

Description

The Pneumafil Z-series extended area pre-filter is a heavy-duty pre-filter designed for installations immediately upstream of the Pneumafil TMP/STMP barrier style final filter. It can also be used in other pre-filter mounting systems. The contoured shape and spacing of the pleated medium allows dust to collect uniformly over every square inch of the media.

The media options are both 100% synthetic non-woven. A galvanized expanded metal support grid is bonded to the media with non-water soluble adhesive. The galvanized expanded metal is 0.017" thick compared to 0.011" thick that is standard conventional HVAC type pre-filters.

The media is completely bonded to a 0.052" thick beverage board frame which is twice as thick as commercial grade HVAC pre-filter materials which are designed for normal and dry environmental use.

Also note that all pre-filters coalesce the moisture pending air density and pressure resistance against the media. When fog and moisture is an issue, the Z100 frame includes drain holes punched on the air entering side to allow for coalesced water to drain out.

Benefits

Low Air Flow Resistance - Open pleat design creates the lowest pressure drop available in a compact depth loaded pre-filter. The low pressure drop maximizes energy savings and performance.

Longer Filter Life: The highly durable corrugated frame construction and double thickness expanded wire backing of the media provides maximum rigidity and structural support during extreme moisture conditions.

Light Weight: The Z100 is also light in weight, allowing for simple installation and removal. Specifically recommended for applications where space constraints and the labor associated with material handling and installation are critical.



Available Designs

Z100 Pre-filters are available in 24" x 24" x 4" sizes

Filters are rated to withstand a continuous operating temperature of up to 150 F. Filters shall have a recommended final resistance of 1.5" w.c.

Application Parameters

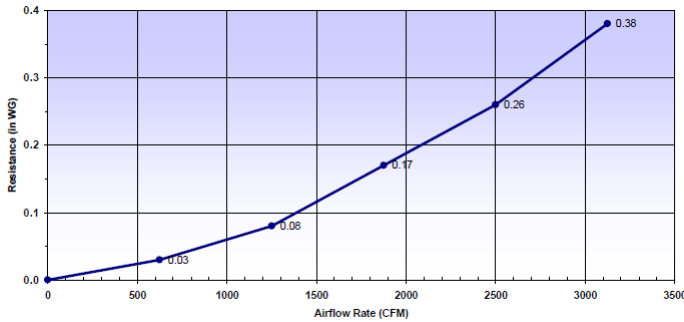
- Temperature resistance:
- Continuous to 150 F Peaks to 175 F
- Flammability: UL Classified
- Media: Synthetic
- Frame: Double Wall Cardboard
- Relative humidity: 100%
- Recommended final resistance: 1.5" w.g.

| Media Rating | Part Number | Size |
|--------------|-------------|----------------|
| MERV 7 | S52061A1 | 24" x 24" x 4" |

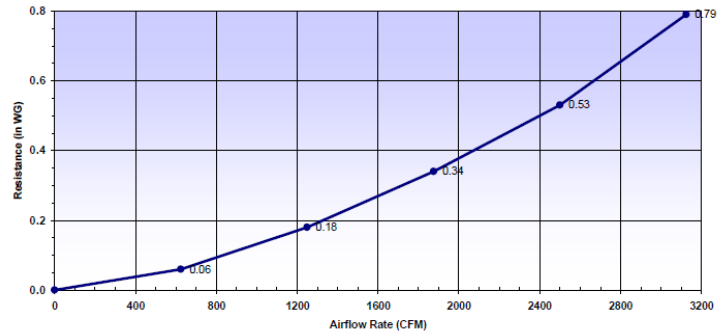
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Performance Information

Air Flow Resistance - S52061A1

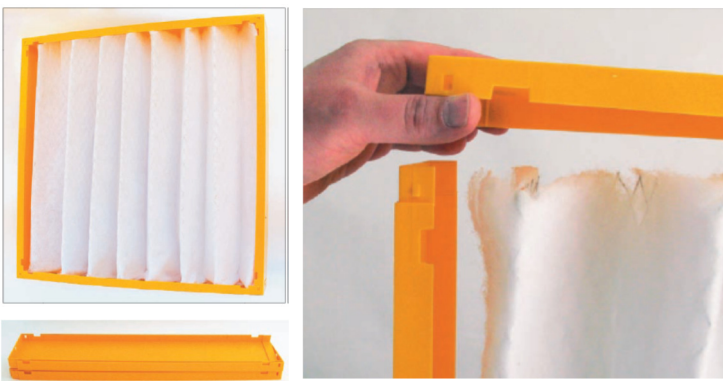


Air Flow Resistance - S52061A2



Summary Test Results—ASHRAE 52.1

| | S52061A1 | S52061A2 |
|-------------------------------|------------|------------|
| Initial Resistance (2000 CFM) | 0.19" w.g. | 0.38" w.g. |
| Initial Resistance (2500 CFM) | 0.26" w.g. | 0.53" w.g. |
| Final Resistance | 1.4" w.g. | 1.4" w.g. |
| Average Arrestance | 86.6% | 87.2% |
| DHC (grams) ISO Fine | 2148 | 1154 |



Z100 Pleated Media with plastic holding frames

For the most severe moisture applications, use Pneumafil's Z-series pre-filter media with plastic holding frames and replaceable media elements. The interlocking frame is easily snapped apart so the media can be inserted or removed for replacement or for shipping. Shipping the frame and media separately provides costs savings.

| Media Type | Part No. | Actual Size | Comment |
|------------|----------|-------------------------|--------------------------------------|
| MERV 6 | S52514C2 | 23.28" x 23.28" x 3.75" | Completely assembled with media |
| MERV 7 | S52514C3 | 23.28" x 23.28" x 3.75" | Completed assembled with media |
| None | S52514C1 | 23.28" x 23" x 3.75" | Assembled frame without media |
| None | S52513C1 | 23.30" x 3.75" x 0.75" | Plastic Frame Channel, four required |