

## sterile air depth filters



### stainless steel process filters for bio-burden reduction in compressed air and gas

The nano P<sup>1</sup> range of sterile depth process filters are fabricated from polished 304 or 316 stainless steel for critical compressed air and gas applications in the high tech manufacturing, food processing and beverage industries.

This range encompasses ten models with connections from 1/4" to 3" and rated flows from 50 to 1150 scfm.

Specifically designed for particulate and bacteria retention in sterile environments, these filters are ideally suited for process applications such as food and beverage facilities with washdown requirements.

The non-woven depth pleated polypropylene elements incorporate a positive double o-ring click-lock seal and are 100% integrity tested prior to shipment for reliable performance.

### high performance filtration for sterile process applications

With high efficiency and low pressure drop, filters provide efficient, cost effective performance for bio-burden reduction in compressed air or gas prior to incidental product contact. There is no better filter for your process filtration needs.



#### applications include:

food processing

beverage

dairy

biotechnology

hospitals

packing industry

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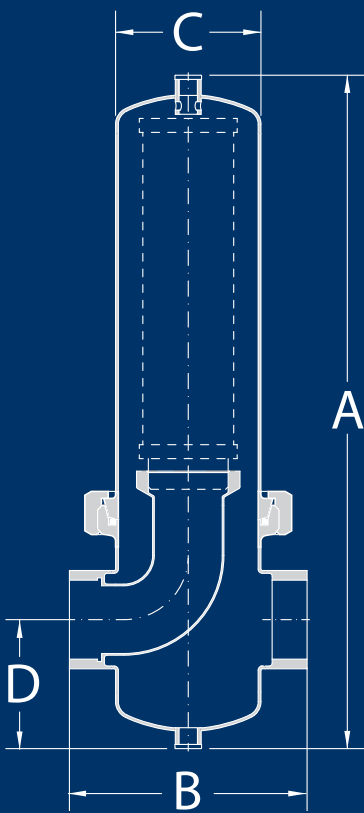
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# technical specification

|              |      | rated flow <sup>(1)</sup> |                    | dimensions (inches) |                  |      |      | approx. weight | replacement element |
|--------------|------|---------------------------|--------------------|---------------------|------------------|------|------|----------------|---------------------|
|              |      | scfm                      | Nm <sup>3</sup> /h | A                   | B <sup>(2)</sup> | C    | D    | lbs            | part no.            |
| PF 0050 SD-N | ¼"   | 50                        | 85                 | 9.45                | 4.14             | 2.76 | 2.24 | 4.2            | E 102 SD            |
| PF 0065 SD-N | ⅜"   | 65                        | 110                | 9.45                | 4.14             | 2.76 | 2.24 | 4.4            | E 102 SD            |
| PF 0085 SD-N | ½"   | 85                        | 144                | 9.45                | 4.25             | 2.76 | 2.24 | 4.6            | E 102 SD            |
| PF 0120 SD-N | ¾"   | 120                       | 204                | 9.45                | 4.92             | 2.76 | 2.24 | 5.1            | E 102 SD            |
| PF 0170 SD-N | 1"   | 170                       | 289                | 11.40               | 4.92             | 3.35 | 2.78 | 7.3            | E 105 SD            |
| PF 0295 SD-N | 1 ½" | 295                       | 501                | 12.70               | 5.51             | 3.35 | 3.49 | 11.4           | E 105 SD            |
| PF 0460 SD-N | 2"   | 460                       | 782                | 19.02               | 6.70             | 4.10 | 3.64 | 12.1           | E 110 SD            |
| PF 0680 SD-N | 2"   | 680                       | 1156               | 29.37               | 6.70             | 4.10 | 3.64 | 15.0           | E 120 SD            |
| PF 0850 SD-N | 2 ½" | 850                       | 1444               | 29.53               | 7.17             | 4.10 | 3.80 | 15.2           | E 120 SD            |
| PF 1150 SD-N | 3"   | 1150                      | 1954               | 40.04               | 7.17             | 4.10 | 3.96 | 19.4           | E 130 SD            |



| specifications                         | standard                                    | optional                               |
|--|---|--|
| design operating pressure range (psig) | 0 to 232                                    | -                                      |
| inlet & outlet connections             | NPT(F)                                      | tri-clamp sanitary                     |
| drain & vent connections               | 1/4" BSPP                                   | -                                      |
| filter housing material                | 1.4301 quality<br>304 stainless steel       | 1.4404 quality<br>316L stainless steel |
| filter housing polishing               | passivated & polished to<br>grade Ra <1.6um | -                                      |
| filter housing seals                   | aseptic EPDM                                | consult factory                        |

| element performance                            | SD   |
|--|--|
| particle removal (at 100% pleated depth PP)    | 0.01 micron                                    |
| continuous operating temperature range         | 35 to 120°F                                    |
| maximum sterilizing temperature <sup>(3)</sup> | 257°F  |
| media material                                 | polypropylene <sup>(4)</sup>                   |
| media support & endcap material                | polypropylene                                  |
| element to housing connection                  | positive click lock with dual silicone o-rings |

| pressure correction factors |      |      |      |      |      |      |      |      |      |
|-----------------------------|------|------|------|------|------|------|------|------|------|
| operating pressure (psig)   | 60   | 70   | 85   | 100  | 115  | 145  | 175  | 205  | 232  |
| correction factor           | 0.76 | 0.84 | 0.92 | 1.00 | 1.07 | 1.19 | 1.31 | 1.41 | 1.51 |

- (1) at 100 psig. For all other pressures, refer to the pressure correction factors above
- (2) +/- 0.118"
- (3) at 30 psia for 20 minutes. Applies to element only
- (4) hydrophobic graded porosity non-woven depth pleated
- validation documentation available on request
  - not for use in air or gas streams containing water or oil
  - all materials conform to 21CFR Part 177 of the US code of Federal Regulations and USP Class VI Biological test for plastics
  - air flow from outside to inside