

You Need Pure Compressed air & gas

If compressed air & gas is the energy source behind your production, you depend on its economic and efficient operation. Every cubic meter of air contains as many as 140 million particles of dirt. These particles, mixed with water vapor and hydrocarbon vapor from unburnt fuel and industrial processes, are drawn into the compressor and concentrated under compression. After compression, as of these contaminants can combine in the piping system with condensed moisture, pipe scale and rust, creating a damaging abrasive emulsion. NSEC, has developed a perfectly matched filter system, which reduces all type of contamination right from the source according to your individual requirement.

FSP grade to meet your compressed air quality needs.

- P Grade: Particulate filter for dust protection, removal particles down to 3 micron including liquid (water and oil) and solid particles.
- Z- Grade: coalescing filters for general purpose protection for removal of particles down to 1 micron including coalesced liquid water and oil, providing maximum remaining oil aerosol content of 0.5 mg/m3 @ 20°C.
- X Grade: Super fine high efficiency coalescing filter for removal of particles down to 0.01 micron including coalesced liquid water and oil, providing maximum remaining oil aerosol content of 0.01 mg/m3 @ 20° C. (Precede grade X with Grade Z)
- S Grade: Super fine high efficiency coalescing filter for removal of particle down to 0.01 micron including coalesced liquid water and oil, providing maximum remaining oil aerosol content of 0.001 mg/m3 @ 20°
- C Grade: Activated carbon filter for removal of oil vapor and hydrocarbon odour giving a maximum remaining oil content of < 0.003 mg/m3@ 20° C (Precede C with Grade Z&X)



COMPRESSED AIR QUALITY TO ISO 8573.1

| Class | Maximum | Solid Particles number of partic | Water Pressure | Oil (Incl. Vapor) mg/m3 | |
|-------|----------------|----------------------------------|-------------------------|-------------------------------|------|
| | 0.1-0.5 micron | 0.5-1.0 micron | Dewpoint ^o C | | |
| 1 | 100 | 1 | 0 | -70 | 0.01 |
| 2 | 10,000 | 1,000 | 10 | -40 | 0.1 |
| 3 | - | 10,000 | 500 | -20 | 1 |
| 4 | - | - | 1,000 | 3 | 5 |
| 5 | - | - | 20,000 | 7 | - |
| 6 | - | - | 1 | 10 | - |

FSP filter housing

FSP supplies Micro filters in two housing formats:

G- Housing with threaded connection F-Flanged housings from G 1/4 to G 3

- High grade aluminum casting
- Alocrom in and outside to prevent corrosion
- Powder coated to ensure top outside quality finish

Both types of housings are built to the highest quality standards and have a double surface protection. The aluminum housings with alocrom and epoxy powder coating and the steel housings with intensive cleaning. polyester priming and acrylic paint.

Thanks to the attention to quality surface treatment, Filtrex offers a 10 year guarantee on the filter housings. This gives confidence to the user.



FSP filter elements

FSP Filters use machine wrapped elements, which form the heart of the filter. These pictures will illustrate the benefits of a Multiple wrapping filter. They have 3 to 4.5 times the high dirt holding capacity with respect to conventional filter elements and they deliver consistent quality as air/gas.

DN 80 to DN 300

- Welded mild steel vessels
- Sand blasted, cleaned and de-greased
- Polyester primed in and Acrylic paint outside



Have following benefits

- Lower velocity
- Lower differential pressure
- Better separation
- High dirt holding capacity
- Lower operating cost



RSG air filter specification

| Model | | Inlet & Outlet | Capacity (m³ / min) | App. Weight | Dimensions | | | | | Elements | |
|--------|----------------|-------------------|---------------------------|----------------|------------|------|-------|-----|-----|-------------------|--|
| | | Conn. | | | Α | В | С | D | Е | | |
| | G-0017 (grade) | 1/2" | 1.0 | 1.1 | 89 | 42 | 160 | | 95 | L 017 (grade) | |
| | G-0030 (grade) | 1/2" | 1.8 | 1.5 | 89 | 42 | 193 | | 130 | L 030 (grade) | |
| | G-0058 (grade) | 3/4" | 3.5 | 2.5 | 120 | 58 | 252 | | 172 | L 058 (grade) | |
| ۵ | G-0080 (grade) | 1" | 4.8 | 3.2 | 120 | 58 | 352 | | 272 | L 145 (grade) | |
| ш | G-0125 (grade) | 11/4" | 7.2 | 3.2 | 120 | 58 | 352 | | 272 | L 145 (grade) | |
| A D | G-0205 (grade) | 11/2" | 12.0 | 6.6 | 162 | 66.5 | 509.6 | | 320 | L 220 (grade) | |
| E | G-0220 (grade) | 2" | 13.2 | 6.6 | 162 | 74 | 424 | | 320 | L 220 (grade) | |
| ~ | G-0330 (grade) | 2" | 19.8 | 10.9 | 162 | 74 | 738 | | 625 | L 330 (grade) | |
| エ | G-0405 (grade) | 21/2" | 24.0 | 12.9 | 200 | 90 | 488 | | 400 | L 430 (grade) | |
| | G-0430 (grade) | 3" | 25.8 | 12.9 | 200 | 90 | 488 | | 400 | L 430 (grade) | |
| | G-0620 (grade) | 3" | 40.0 | 17.5 | 200 | 90 | 749 | | 625 | L 620 (grade) | |
| | F-1000 (grade) | DN 100 | 60.0 | 115 | 493 | 263 | 1119 | 340 | 650 | L 330 (grade) | |
| | F-1300 (grade) | DN 125 | 80.0 | 150 | 617 | 290 | 1199 | 340 | 650 | L 330 (grade) | |
| ۵ | F-1950 (grade) | DN 150 | 120.0 | 195 | 617 | 300 | 1209 | 340 | 650 | L 330(grade) | |
| ш | F-2500 (grade) | DN 1200 | 156.0 | 240 | 666 | 343 | 1369 | 340 | 650 | L 620 (grade) | |
| S S | F-3250 (grade) | DN 200 | 200.0 | 425 | 736 | 368 | 1459 | 340 | 650 | L 330 (grade) (2) | |
| A | F-4650 (grade) | DN 250 | 280.0 | 450 | 420 | 420 | 1583 | 340 | 650 | L 330 (grade) (3) | |
| FL | F-5200 (grade) | DN 250 | 312.0 | 515 | 850 | 433 | 1552 | 340 | 650 | L 330 (grade) (4) | |
| | F-7800 (grade) | DN 300 | 468.0 | 690 | 996 | 480 | 1739 | 340 | 650 | L 330 (grade) (6) | |
| | F-0205 (grade) | DN 40 | 12.0 | 35 | 162 | 182 | 667 | 340 | 650 | L 220 (grade) (6) | |
| | F-0220 (grade) | DN 50 | 13.2 | 35 | 162 | 182 | 667 | 340 | 650 | L 220 (grade) (6) | |
| | F-0330 (grade) | DN 50 | 19.8 | 45 | 162 | 182 | 967 | 340 | 650 | L 330 (grade) (6) | |
| | F-0430 (grade) | DN 80 | 25.8 | 60 | 90 | 215 | 823 | 340 | 650 | L 430 (grade) (6) | |
| | G-145 (grade) | 11/2" | 8.7 | 3.2 | 120 | 58 | 352 | | 272 | L 145 (grade) (6) | |

Capacity Correction Factor Various Operating Pressure

| Pressure (bar g) | 1 | 2 | 3 | 5 | 7 | 9 | 11 | 13 | 15 | 17 | 20 |
|-------------------|------|------|------|------|-----|------|------|------|------|------|-----|
| Correction Factor | 0.38 | 0.53 | 0.65 | 0.85 | 1.0 | 1.13 | 1.25 | 1.36 | 1.46 | 1.56 | 1.7 |

Filter Element Performance

| Filter Grade | Particle Removal Down to | Oil Removal Down 10*l | Nominal Initial Pressure Drop | | |
|-----------------|-----------------------------|--------------------------|----------------------------------|--|--|
| Р | 3 micron | | 0.03 bar g | | |
| Z | 1 micron | 0.1 mg/m ³ | 0.05 bar g | | |
| Х | 0.01 micron | 0.01 mg/m ³ | 0.09 bar g | | |
| S | 0.01 micron | 0.001 mg/m ³ | 0.10 bar g | | |
| С | Activated Carbon | 0.003 mg/m ³ | 0.10 bar g | | |

General Information

Maximum recommended operating temperature of 600° C (high temperature range is also available)

Minimum recommended operating temperature 10° C. Maximum recommended operating pressure of 16 bar g. Maximum recommended pressure differential for element charge is 0.6 bar g. (Except Grade C)

Material for G-Type filters housing is aluminum. Material for F-Type filters is steel.

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Filters come complete with auto drain. Gauges are

optional.
The Weight of the compressed air filters does not include packaging and gauge.

High Pressure Filters also available upto 400 bars.