FILTRATION AND SEPARATION

GON Series

Mikropor, which constantly develops products beyond expectations and needs, has recently begun manufacturing the brand new GON Series Industrial Air Filters for compressed air users to acquire high efficiency filtration experience at the lowest pressure drops.

GON SERIES COMPRESSED AIR FILTERS

The new GON Series have more port sizes and offer a reliable performance by minimizing airborne contamination in Compressed Air Systems to the maximum possible extent. With the GON Series, the compressed air users will have the opportunity to replace the inner element and assemble the filter in any compressed air unit extremely easily by means of an innovative design concept which basically puts its unique "Zero Clearence" feature forward.

The GON Series are incredibly economical and also manufactured according to **ISO 8573** standards along with its eligibility for PED due to their sustainable and durable structure which is formed up with aluminium construction.

Features

- 35 m³/h- 1200 m³/h air flow range
- NPT/BSP pipe sizes ranging from 1/4 "to 4"
- Aluminium construction without any pores
- Options:
 - "Standard Drain" having 1/2" connection size or
 - "Drainless" having ½ connection size with adapter.
- Elegantly designed connection clips and wall apparatus
- Production in accordance with ISO8573
- Zero Clearance
- Anodising
- Lock System Indicator

GON-HC Series

In Addition to GON Series, Mikropor has also developed the GON-HC Series in order to respond to high capacity air pressure needs.

High capacity GON-HC Series Filters are designed to increase the capacity of air filters used in compressed air systems. Thus, the utilization of compressed air volume can be easily pushed up to $5400 \, \text{m}^3\text{/h}$.

Compressed air users will be able to install GON-HC Series in their systems without any need for ASME Standards eligibility requirements.



14 Models Between 35 m³/h - 1200 m³/h





6 Models Between 1550 m³/h - 5400 m³/h

Features

- 1550 m³/h- 5400 m³/h air flow range
- NPT/BSP pipe and DN Flange sizes ranging from 1/4 to 4
- Aluminium construction without any pores

• Options:

- "Standard Drain" having ½ connection size or
- "Drainless" having ½ connection size with adapter.
- Elegantly designed connection clips and wall apparatus
- Production in accordance with ISO8573
- Zero Clearance
- Anodising
- Lock System Indicator

GON Series Advantages

- Low initial investment costs
- Low maintenance costs
- Compact design
- Easy to use and install
- High performance
- Third party tested





| | | | ISO | 8573.1: 2010 C | ompressed Air Q | uality Standard | | | |
|-----------------|----------------|-------------------|-------------------|-----------------|------------------|----------------------|--------|------------------------------|--|
| Purity | | 9 | Solid Particulate | Water | | Oil | | | |
| Purity Class | Max. nun | nber of Particles | per m³ | Particle Size | Concentration | Vapor Pressure | Liquid | Total Oil (Aerosol, Liquid v | |
| | 0.1-0.5 micron | 0.5-1 micron | 1-5 micron | (micron) | (mg/m³) | Dew Point | (g/m³) | Vapor) (mg/m³) | |
| 0 | | | As speci | fied and determ | nined by equipme | nt user and supplier | | | |
| 1 | ≤20000 | ≤400 | ≤10 | - | - | ≤-70°C | - | ≤0.01 | |
| 2 | ≤400000 | ≤6000 | ≤100 | - | - | ≤-40°C | - | ≤0.1 | |
| 3 | - | ≤900000 | ≤1000 | - | - | ≤-20°C | | ≤1 | |
| 4 | - | - | ≤10000 | - | - | ≤+3°C | - | ≤5 | |
| 5 | - | - | ≤100000 | - | - | ≤+7°C | - | - | |
| 6 | - | - | - | 5 | 5 | ≤+10°C | - | - | |
| 7 | - | - | - | 40 | 10 | - | 0.5 | - | |
| 8 | - | - | - | - | - | - | 5 | - | |
| 9 | - | - | - | - | - | - | 10 | - | |

| for Solid Particles | for Water | for Oil | | | |
|--------------------------|---|---|--|--|--|
| Element Type P - Class 3 | Mikropor Refrigerated Air Dryers are Class 4 | Element Type P - Class 3 | | | |
| Element Type X - Class 2 | Mikropor Reingerated Air Dryers are Class 4 | Element Type X - Class 2 | | | |
| Element Type Y - Class 1 | Milwanay Dagiacant Air Drugga are Class 1 and 2 | Element Type Y - Class 1 | | | |
| Element Type A - N/A | Mikropor Desiccant Air Dryers are Class 1 and 2 | Element Type A - Class 1 (when used with Y) | | | |

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Mikropor offers Superior protection - from 1 micron to 0.01 micron. Durable element construction and efficient drain layer ensures continued performance with optimal element change intervals. Elements are also easy to replace with the plastic handles.

Mikropor Elements Have Been Designed for Easy Handling

- 1- Depth media construction offers higher coalescing performance.
- 2- Supreme collapse resistance due to usage of fluted stainless tube, providing strength against pressure drops while improving the performance by passing air diagonally through the element.
- 3- PVC impregnated foam favors water/oil drainage.



Element Advantages

- High energy efficiency due to low pressure drops
- Durability under high pressure conditions (20 bar)
- 4 different ranges of filtration efficiency which offers an oppurtunity to operate at various different filtration applications.
- High filtration capacity, which can target the smallest contaminants (0.01 micron and above) at 20 bar pressure.
- Minimization of valuable compressed air loss with Zero-Loss Drain option
- Third Party tested



Head Clamping

Head Clamping provides serial connection of filters without any extra piping, connection clamps are used for connecting multiple filters to each other. Wall mounting clamps are used to connect the filters to the wall easily.

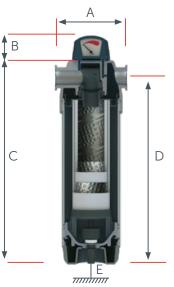
Drainage Ribs

Drainage Ribs favors the humidity flow.

Correction Factor

For maximum flow rate of the filter model, multiply model flow rate shown in the below table by the correction factor corresponding to the working pressure.

| Operating Pressure (bar) | PSI | Correction Factor |
|-----------------------------|-----|----------------------|
| 3 | 44 | 0.71 |
| 5 | 73 | 0.87 |
| 7 | 100 | 1 |
| 9 | 131 | 1.12 |
| 11 | 160 | 1.22 |
| 13 | 189 | 1.32 |
| 15 | 218 | 1.44 |
| 16 | 232 | 1.50 |
| 18 | 261 | 1.57 |
| 20 | 290 | 1.63 |
| | | |





Zero Clearance

A major innovation for servicing the zero clearance design gives a quicker, easier, simpler filter change, with no need for any special tools.

Anodising

Anodising provides supreme corrosion resistance. Anodised surface treatment is proven to be better than other surface treatment methods such as Alocrome coating. Contact Mikropor to get comparison test results between competitor filters with Alocrome coating and Mikropor filters with anodising treatment.

Options

• Drains: Automatic / Manuel / Zero Loss

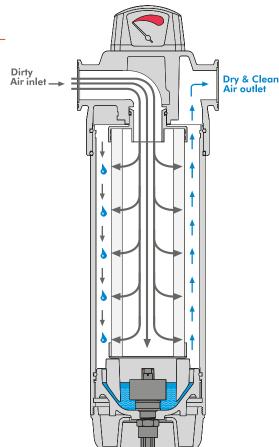
• Indicator or No indicator

• O-rings: Viton

Alternative Filters

"S" Grade: Sterile Filter "H" Grade: Hopcalite Filter

"T" Grade: 25 micron Coarse Dust Filter"HT" Grade: High Temperature Filters



The reliability of GON Series is guaranteed by the results obtained from "Third Party Tests" which is renowned worldwide in the Compressed Air Industry.



| Model | Connection Size | | Flow Rate | | Max. Working | Element Model | Housing Dimensions (mm) | | | | | |
|-------------|-----------------|-------------|-----------|--------|--------------|----------------|-------------------------|-----|------|-------|-------|----|
| Model | | ii iccdoi i | 5120 | (m³/h) | (cfm) | Pressure (bar) | Liement Model | Α | В | С | D | Е |
| GON-35 | 1/4" | 3/8" | 1/2" | 35 | 21 | 20 | MON35 | 90 | 36.5 | 214 | 192 | 19 |
| GON-55 | 1/4" | 3/8" | 1/2" | 55 | 33 | 20 | MON55 | 90 | 36.5 | 251.5 | 230 | 19 |
| GON-70 | 3/8" | 1/2" | - | 70 | 42 | 20 | MON70 | 128 | 45 | 273 | 249.5 | 32 |
| GON-100 | 3/8" | 1/2" | - | 100 | 60 | 20 | MON100 | 128 | 45 | 302.5 | 279 | 32 |
| GON-125 | 3/8" | 1/2" | - | 125 | 75 | 20 | MON125 | 128 | 45 | 343 | 319.5 | 32 |
| GON-150 | 3/4" | 1" | - | 150 | 90 | 20 | MON150 | 140 | 45 | 369 | 334.5 | 31 |
| GON-225 | 3/4" | 1" | - | 225 | 135 | 20 | MON225 | 140 | 45 | 398 | 364.5 | 31 |
| GON-300 | 11/4" | 11/2" | - | 300 | 180 | 20 | MON300 | 140 | 45 | 474 | 432 | 31 |
| GON-400 | 11/4" | 11/2" | - | 400 | 240 | 20 | MON400 | 140 | 45 | 564 | 522 | 31 |
| GON-500 | 11/4" | 11/2" | 2" | 500 | 300 | 20 | MON500 | 151 | 45 | 511 | 464.5 | 25 |
| GON-600 | 11/2" | 11/2" | 2" | 600 | 360 | 20 | MON600 | 151 | 45 | 626 | 579.5 | 25 |
| GON-800 | 11/4" | 11/2" | 2" | 800 | 480 | 20 | MON800 | 151 | 45 | 696 | 649.5 | 25 |
| GON-1000 | 11/4" | 11/2" | 2" | 1000 | 600 | 20 | MON1000 | 151 | 45 | 851 | 804.5 | 25 |
| GON-1200 | 11/4" | 11/2" | 2" | 1200 | 720 | 20 | MON1200 | 151 | 45 | 976 | 929.5 | 25 |
| GON-HC-1550 | 2 1/2" | 3" | - | 1550 | 930 | 20 | MONHC1550 | 240 | 45 | 707 | 659.5 | 25 |
| GON-HC-2000 | 2 1/2" | 3" | - | 2000 | 1200 | 20 | MONHC2000 | 240 | 45 | 862 | 814.5 | 25 |
| GON-HC-2700 | 2 1/2" | 3" | - | 2700 | 1620 | 20 | MONHC2700 | 240 | 45 | 987 | 939.5 | 25 |
| GO-HC-3400 | DN100 | - | - | 3400 | 2040 | 16 | MO3400 | 360 | 45 | 871 | 810 | 30 |
| GO-HC-4500 | DN100 | - | - | 4500 | 2700 | 16 | MO4500 | 360 | 45 | 926 | 865 | 30 |

MO5400

360

45

| Specifications | Pre Filtering | General Purpose | Oil Removal | Activated Carbon |
|---|------------------|--------------------|----------------|---------------------|
| Grade | Р | Χ | Υ | Α |
| Particle Removal (Micron) | 5 | 1 | 0.01 | 0.01 |
| Max. Oil Carryover at 21°C (mg/m³) | 5 | 0.5 | 0.01 | 0.003 |
| Max. Recommended Temperature (°C) | 80 | 80 | 80 | 50 |
| Initial Pressure Loss (mbar) | 40 | 80 | 100 | 80 |
| Pressure Loss for Element Change (mbar) | 700 | 700 | 700 | 700 |
| Element Color Mode | White | White | White | Metal SS |

5400

3240

16

| Indicator Type |
|-----------------------------|
| Differential Pressure Gauge |
| Drain Type |
| Electro-Adjustable |
| External Float Type |
| Zero-Loss Drain |
| Manual |

1070

1009

30

For 0.003 mg/m³ quality oil in the air, the inlet temperature should be 25°C.

Notes

GO-HC-5400

- 1) Given flows are at 7 barg pressure with reference to 20°C and 1 bar atmospheric air suction as per ISO 7183. In order to calculate the flow capacities at other pressures please refer to the correction factor table on page 9.
- 2) Grade A must not operate in oil saturated conditions.

DN100

- 3) Grades P, X and Y elements need to be replaced periodically to suit applications but must be changed at least every 8000 hours.
- 4) Grade A elements should be replaced periodically to suit the applications but must be changed at least every six months.
- 5) Grade A will not remove certain gases including carbon monoxide and carbon dioxide.
- 6) Flow rates are based on a 7 bar operating pressure, for flows at other pressures use correction factor given above.
- 7) All filters are suitable for use with mineral and synthetic oils.
- 8) Gauge type pressure indicators are fitted to all models as standard except Activated Carbon Filters.
- 9) All filters are in conformity with the 2014/68/EU Pressure Equipment Directive.

Ordering

The complete filter model number contains the size and grade, example – GON-150-1-X represents 150 m 3 /h capacity and 1" connection general purpose filter model with replacement filter element model X.

