Mikro-X Series

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High-Precision Coalescing & Particulate Filters for Compressed Air and Technical Gases

HIGH PRECISION

RELIABLE PROTECTION

OPTIMIZED PERFORMANCE

VERSATILE APPLICATION

ADVANCED PURIFICATION ENGINEERING **OPTIMIZED ENERGY EFFICIENCY** **CRITICAL DOWNSTREAM PROTECTION**

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Maximum Efficiency, Ultra-Low Differential Pressure

The Mikro-X Series has been engineered to meet the most stringent industrial compressed air purity standards. By combining hydro-dynamically optimized filter housings with advanced-media elements, the system ensures the precise removal of solid particulates, water aerosols, and oil mists, protecting your critical automated equipment and processes.

01
Bayonet-Type Connection (Quick-Interchange)

Push-and-turn bayonet lock design enables fast, tool-free element replacement in seconds, minimizing maintenance time and reducing system downtime.

02
Intelligent Differential Gauge

Built-in differential pressure indicator continuously monitors filter performance. Clear visual cue provides an early warning of element saturation for proactive maintenance.

03
Industrial Coating & Corrosion Shield

Shot-blasted housings with premium external powder coating using high-density epoxy resin deliver superior corrosion resistance in aggressive factory environments.

04
Enhanced Flow Path

Hydro-dynamically optimized internal flow geometries minimize turbulence and pressure drop (ΔP), ensuring higher efficiency and direct electrical energy savings.

05
Reliable Automatic Drain

Heavy-duty automatic purge valve reliably expels condensate without air loss, ensuring continuous operation and consistent system performance.

NPT / BSPP CONNECTIONS

3/8" - 2"

ADVANCED-MEDIA ELEMENT

High-efficiency depth media for superior particulate, water and oil removal.

DURABLE CONSTRUCTION

Optimized for high pressure (up to 16 bar) and extended service life.

AUTOMATIC DRAIN

Zero air loss purge ensures continuous condensate removal.

MAX. PRESSURE
16 bar / 232 psi

TEMPERATURE RANGE
1.5 - 65°C / 35 - 149 °F

MAX. FLOW RATE
Up to 13,200 m³/h (7,765 scfm)

FILTRATION GRADE
0.01 µm to 1 µm (Coalescing & Particulate)

COMPLIANT WITH
ISO 8573-1 Class 1.2.1*

*Depending on configuration and application.

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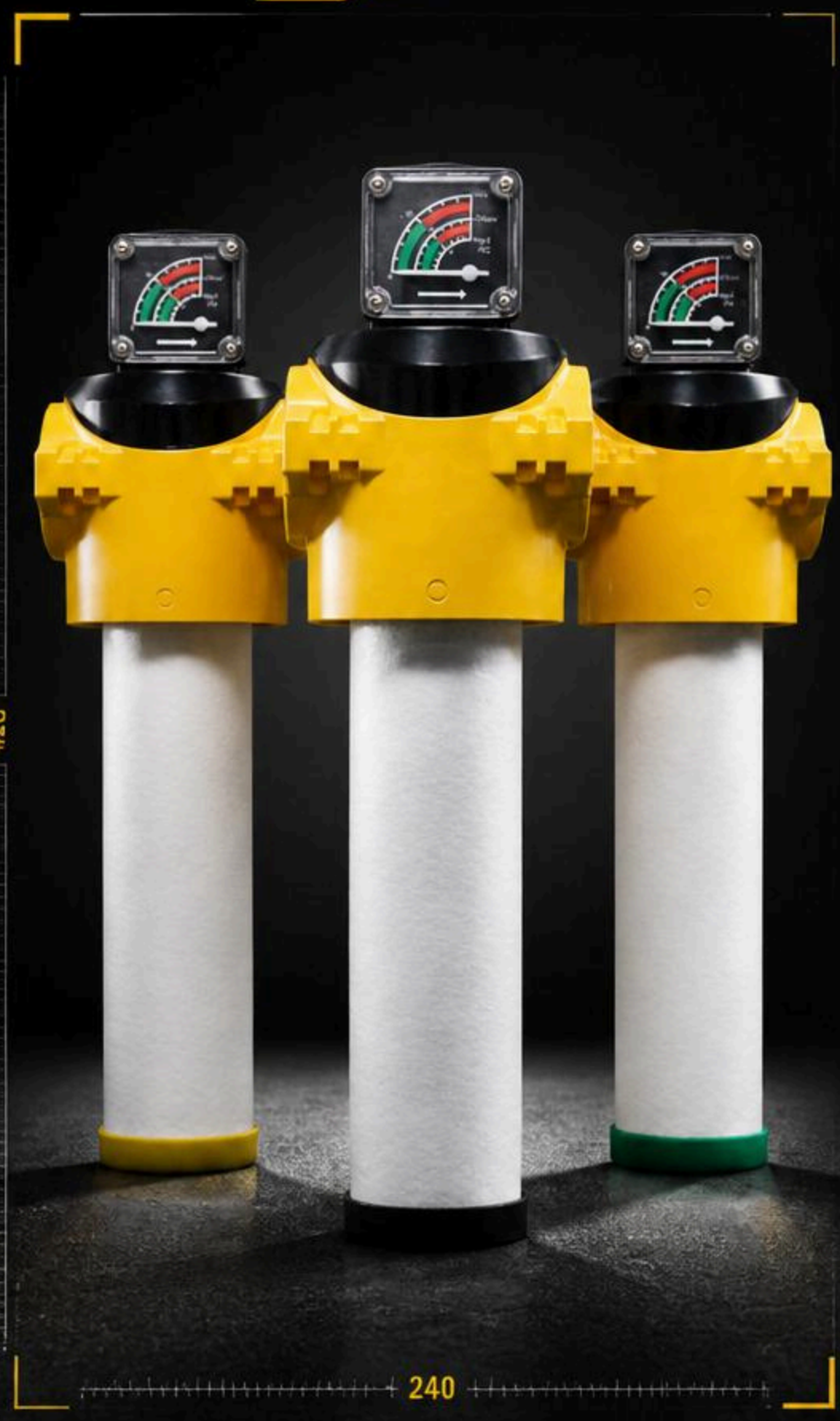
Select the exact Mikro-X configuration to meet your specific ISO 8573-1 air quality class requirements:

MIKRO-X SERIES
COMPRESSED AIR FILTRATION



1 Grade AO – General Purpose Coalescing

PRIMARY FUNCTION:	Bulk liquid and solid particulate removal.
PARTICLE RETENTION:	≤ 1.0 µm
MAX RESIDUAL OIL CONTENT:	≤ 3.0 ppm (mg/m³)
TYPICAL APPLICATIONS:	General pneumatic tools, air distribution mainlines, and pre-filtration for refrigerant air dryers.

2 Grade AA – Fine Coalescing

PRIMARY FUNCTION:	High-efficiency oil and water aerosol retention.
PARTICLE RETENTION:	≤ 0.1 µm
MAX RESIDUAL OIL CONTENT:	≤ 0.1 ppm (mg/m³)
TYPICAL APPLICATIONS:	High-precision pneumatic cylinders, standard control instrumentation, and localized piping protection.

3 Grade AX – High-Efficiency Coalescing

PRIMARY FUNCTION:	Ultra-fine oil mist and micro-particle extraction.
PARTICLE RETENTION:	≤ 0.01 µm
MAX RESIDUAL OIL CONTENT:	≤ 0.05 ppm (mg/m³)
TYPICAL APPLICATIONS:	Critical pneumatic control systems, technical sandblasting, automotive paint booths, and essential pre-filtration for desiccant adsorption dryers.

4 Grade AC (or ACS) – Activated Carbon Adsorption

PRIMARY FUNCTION:	Vapor-phase hydrocarbon and odor removal.
PARTICLE RETENTION:	N/A (Molecular adsorption)
MAX RESIDUAL OIL CONTENT:	≤ 0.003 ppm (mg/m³)
MANDATORY NOTE:	Always requires a Grade AX pre-filter installed directly upstream to prevent oil fouling of the carbon bed.
TYPICAL APPLICATIONS:	Food & beverage processing, pharmaceutical packaging, cleanrooms, medical air supply, and bioprocess lines.

- ULTRA-LOW DIFFERENTIAL PRESSURE
- MAXIMUM EFFICIENCY & RELIABILITY
- ADVANCED FILTRATION TECHNOLOGY
- EASY SERVICE & MAINTENANCE

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ADVANCED FILTRATION. PURE PERFORMANCE.

ISO 8573-1 COMPATIBLE | ENGINEERED FOR PERFORMANCE | BUILT FOR RELIABILITY

Mikropore Model

Mikropore Model	Flow Capacity (m^3/min)	Dimensions (Diam. × Height mm)	Port Interface (NPT/BSP)	Replacement Element Code
MKX-015-(Grade)	1.5	96 × 235	3/4”	EL-MKX-015-(Grade)
MKX-024-(Grade)	2.5	96 × 235	1”	EL-MKX-024-(Grade)
MKX-035-(Grade)	3.8	140 × 310	1 1/2”	EL-MKX-035-(Grade)
MKX-060-(Grade)	6.5	140 × 410	1 1/2”	EL-MKX-060-(Grade)
MKX-090-(Grade)	10.5	175 × 530	2”	EL-MKX-090-(Grade)
MKX-120-(Grade)	13.5	175 × 530	2 1/2”	EL-MKX-120-(Grade)
MKX-150-(Grade)	17.0	175 × 815	2 1/2”	EL-MKX-150-(Grade)
MKX-220-(Grade)	22.0	240 × 724	3”	EL-MKX-220-(Grade)
MKX-240-(Grade)	28.5	240 × 724	3”	EL-MKX-240-(Grade)

Ordering Instructions: Replace the bracketed (Grade) with your desired performance level: AO, AA, AX, or AC. Example: MKX-035-AX

Need expert technical sizing or custom pressure vessel calculations?

Contact our application engineering department.

Target Industries:
Industrial Automation, Food & Beverage, Electronics & Semiconductors, Automotive Manufacturing, Chemical Processing, and Biopharmaceuticals.

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Mikropore Ltd

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