



# Carbon Filtration with Scale Reduction Technology

## Sediment Wrapped Carbon Block Filter with Scale Reduction Media

Designed for residential and light commercial water treatment applications

Atlas Filtri® RE4502CS5, CB-AF CTO 4.5" OD, is a double open-ended (DOE) filter cartridge, designed to perform at high flow rates with a very low pressure drop. It also has a high adsorptive capability and efficiently reduces contaminants, with high dirt-holding capacity and shorter flush time. The filter is offered in 20" with a nominal filtration rate at 5-micron.

Wrapped around the outside of the carbon block is a sediment filter to reduce particulate build up on the surface. This prolongs the life of the block in high dirt load capacities. Included in the center core of the carbon block is polyphosphate media designed to release slowly over time. The carbon block filter and the polyphosphate media have been tested and certified separately under NSF/ANSI Standard 42 and 60 as shown at the bottom right of the page.

Polyphosphate media prevents the formation of scale and eliminates existing scale by accelerating the transformation of the calcium and magnesium minerals into harmless "Aragonite" crystal particles. As these particles flow through plumbing systems and do not attach to pipes, fixtures, valves, or heating elements.

The polyphosphate acts as a corrosion inhibitor. It is used to form a protective coating on metal surfaces and provide corrosion protection against acidity, alkalinity, and many other mineral salts which may lead to the "rusting out" of water system pipes and equipment. Iron is also reduced through sequestering dissolved iron up to 10 ppm and prevent the iron from precipitating, staining, discoloring, and distasteful flavor.

Polyphosphate has been tested and certified under ANSI/NSF Standard 42: Drinking Water Treatment Units- Aesthetic Effects ANSI/NSF Standard 60: Drinking Water Treatment Chemicals-Health Effects, for use in potable water systems at concentrations up to 10ppm.



4.5"x20"  
Sediment, Carbon Block  
Filter with Scale  
Reduction Media

Features	Specifications
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- Sediment Wrapped Carbon Block Filter Cartridge:**
- Designed for residential and light commercial filtration applications
  - 5-micron sediment/carbon block cartridge
  - Reduction of sediment in the water down to 5-micron nominal
  - Standard double open-ended DOE design
  - Controlled release polyphosphate, low acid, slow release
  - Cartridge designed to last 12 months on 15 grain hard water
  - Color-coded caps and label for easy identification

**Materials:**

Filter Construction:

- Coconut Shell Carbon Filter Media
- Glassy Polyphosphate

**Working Conditions:**

Working Temperature Range:  
Min 39.2°F (4°C) – Max 177°F (80.6°C)

**Media Temperature Range:**

Max 220°F (104°C) in heated environment (Boiler Recirculation)



CB-AF series is tested and certified by NSF International against NSF/ANSI Standard 42 for materials requirements only



COMPONENT  
This SLOW PRODS is tested and certified by NSF International against NSF/ANSI Standard 42 for material requirements only.

Certified to NSF/ANSI 60

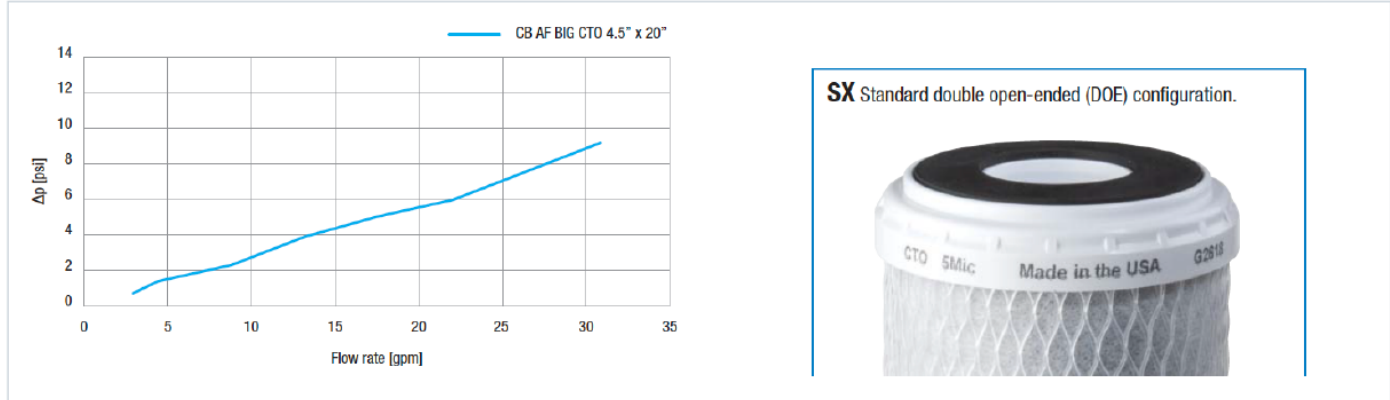


## PRODUCTS SPECIFICATIONS and PERFORMANCE

Listed CB AF CTO are standard double open-ended models.

PART NO.	MODEL	OD X LENGTH NOMINAL	MICRON NOMINAL	INITIAL PRESSURE DROP @ FLOW RATE	CAPACITY
RE4520CS5	CB-AF BIG CTO 20 SX 5 mcr	4.5" x 20"	5	1.4 psi @ 4.5 gpm (0.10 bar @ 17.1 lpm)	34,000 g @ 7 gpm (128,520 l @ 26.6 lpm)

FLOW RATE vs PRESSURE DROP  $\Delta p$  | Testing mode: 68°F - 43.5 psi (20°C - 3 bar)



Performance and capacity claims are based on independent and internal testing, and upon the filter cartridge being integrated with a complete system (i.e. filter, housing, fittings, tubing) connected to a regulated pressurized water source. The system must be operated according to system installation and operation manual, for proper installation and proper filter cartridge replacement process. It is essential to follow operational, maintenance and filter replacement procedures to ensure proper filter cartridge performance. The cartridge capacity may vary upon the of the inlet water conditions and according to flow rate and inlet line pressure, which may require more frequent filter cartridge replacement. The contaminants and substances reduced by this filter cartridge are not necessarily in user's water. *Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before and after the system. To start, flush the system for 5 minutes before use.*

### Optional Filter Housings for use with Carbon Block Scale Filter



- ZA1800621L  
Standard Housing  
Brass Inserts
- ZA1800746  
Standard Housing
- ZA1801745L  
Gauge Ports and Drain
- ZA1801746L  
Gauge Ports and Drain
- ZA1800746L  
Gauges and Drain Kit
- ZA1802746  
Gauges and Drain Kit

**Note: DP Big - 1" NPT - 4.5" x 20" – Housing Kits**  
**Include the housing, bracket, wrench, and lubricant. Filter cartridges sold separately**



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