Solaris® CL Depth Filters

The solution for CMP on-tool filtration

The semiconductor fabrication processes for 65 nm and 45 nm require greater cleanliness standards as the smaller circuit geometries are more sensitive to defect-causing particulate and agglomerates. Variations in slurry and the number of process turnovers often increase defect-causing large particles and gels. Solaris® CL filters are optimized for on-tool filtration of current and next-generation silica and alumina-based slurries. The filter media is optimized to provide process-specific protection against defect-causing particles and agglomerates, and provides a good balance between particle retention and lifetime. Several retention ratings are available to suit slurry type and dilution scheme.

Superior Gel Holding Capability, Longer Life

Solaris CL uses wrapped-depth media that is optimized for the particle-sized distribution of current and next-generation slurries. This configuration balances high particle retention with larger surface area and greater depth for gel holding capability.

Low Hold Up Volume Design

Solaris CL filters have molded surfaces that are designed to be "well-swept" with minimal dead space. This minimizes the entrapment of "seed" particles, ensures good venting of any bubbles formed from hydrogen peroxide additives, and eliminates potential slurry dry-out.

Less Handling, More Cleanliness and Safety

The convenient disposable design minimizes exposure to the slurry and minimizes slurry waste. Solaris CL is available with Entegris' patented Connectology® design for fast filter changeouts and less slurry waste.



FEATURES & BENEFITS

Optimized depth media	Superior agglomerate and gel holding capability prolongs filter life over traditional depth filters	
Self-venting filtration	Eliminates dead space and potential for slurry dryout in the filtration media, prolonging filter life	
Available in a variety of retention ratings	Filters optimized for fine or large particle distribution slurries prolonging filter life	
Disposable, Connectology design	Allows for quick installation, minimizes downtime and limits operator handling of hazardous chemicals during the installation and disposal processes	

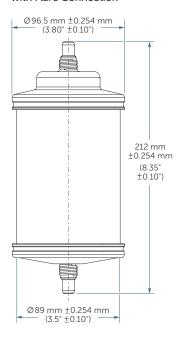


SPECIFICATIONS

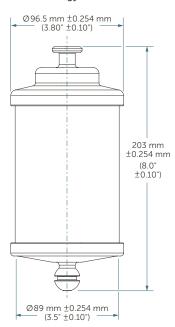
Materials of construction	Media	Wrapped meltblown polypropylene
	O-ring	EthylenePolypropylene Rubber (EPR)
Maximum operating conditions	Maximum forward pressure: 50 psi @ 20°C (68°F)	

DIMENSIONS

Solaris CL Depth Filter with Flare Connection

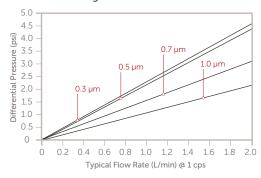


Solaris CL Depth Filter with Connectology Connection

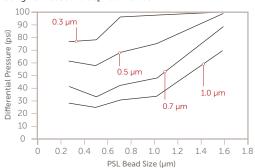


PERFORMANCE DATA

Flow Curves Using DI Water



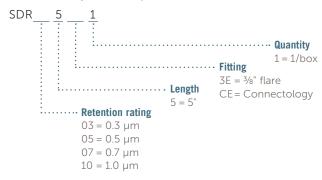
Retention Curves for 0.3, 0.5, 0.7, 1.0 μm Using PSL Beads and SO₂ Test Method



ORDERING INFORMATION

Solaris CL filters are used exclusively with Entegris' Connectology manifold (part number SLRM10350).

Solaris CL Depth Filters: part number



Example: SDR075CE1

- Retention rating = $0.7 \mu m$
- Length = 5"
- Fitting = Connectology
- Quantity = 1/box

FOR MORE INFORMATION

Please call your Regional Customer Service Center today to learn what Entegris can do for you. Visit <u>entegris.com</u> and select the <u>Contact Us</u> link to find the customer service center nearest you.

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