What Makes a Filter Fully Custom?

A filter requires a new coating run if it meets any of the following criteria:

› New design

› Spectral modifications (Any change that would cause the current coated stock to FAIL when checking against the new specifications)

› Mechanical modifications, i.e., change to the glass thickness, material, or properties (Wedge, TWE, Flatness)

Quick Reference Guide

While many customization options are available, changes to spectral specifications, glass thickness, or material (Type, Wedge, TWE, Flatness) will require a new custom run and make the part fully custom.

Fully Custom Versus Custom-Sized Catalog & Semi-Custom Options	CUSTOM-SIZED CATALOG	SEMI-CUSTOM	FULLY CUSTOM
Summary	› Custom sizing of Semrock catalog filters › Available from Custom Part Builder Tool for most sizes, otherwise use the <u>Custom Form</u> › Uses a catalog part number	› Customization of catalog coated material › Uses a custom part number › Available using <u>Custom Form</u>	› Full customization › New coating run › Uses a custom part number › Available using <u>Custom Form</u>
Examples	**FF01-620/52-12-D:** Custom transverse dimension **FF01-620/52-25x5.0:** Non-standard cell thickness **FF506-Di03-15x15-EB:** Custom transverse dimension with edge blackening	**IDEX-0001:** FF01-387/11-15-D with custom +0/-0.1 mm tolerance (standard = ±0.1 mm) **IDEX-0002:** FF409-Di03-28x35 with custom 85% CA (standard = 80%)	**IDEX-0003:** FF01-592/8-25 but coated on 2 mm Fused Silica **IDEX-0004:** Specifications of FF01-468/553, but with the second passband widened by 10 nm
Spectral Specifications	Identical to the catalog filter	Very similar to the catalog part; slight adjustments allowed if compatible with the catalog design	New design or spectral modifications

	CUSTOM-SIZED CATALOG	SEMI-CUSTOM	FULLY CUSTOM
Substrate Material, Thickness, and/or Specifications (Wedge, TWE, Flatness)	Identical to the catalog part; no change to the glass thickness or material	Identical to the catalog part; no change to the glass thickness or material	Glass thickness and substrate specification (Type, Wedge, TWE, Flatness) are custom
Dimensions	❭ Custom dimensions ❭ Any standard housing can be selected ❭ Option to change the housing thickness	❭ Custom dimensions ❭ Standard or custom housings available ❭ Option to change the housing thickness	❭ Custom dimensions ❭ Standard or custom housings available
Corner Cuts	None	Can be specified	Can be specified
Dimensional Tolerances	❭ ± 0.1 mm ❭ +0/-0.1 mm for housed parts	❭ Other than ± 0.1 mm ❭ +0/-0.1 mm for housed parts, unless using a custom housing	❭ Other than ± 0.1 mm ❭ +0/-0.1 mm for housed parts, unless using a custom housing
Clear Aperture	85% (round filters) or 80% elliptical (square / rectangular filters)	Can be customized	Can be customized
Part Marking	❭ Hand drawn caret mark ">" on the edge ❭ Laser engraved catalog reference & arrow for housed parts	Can be customized	Can be customized
Cosmetic Quality, Edge Chip & Bevel Specification	Identical to the catalog part	Can be customized	Can be customized
TWE, Flatness, RWE	Identical to the catalog part	Can be customized provided it is compatible with the catalog design	Can be customized
Packaging & Package Labeling	Individual packaging and standard package label	Can be customized	Can be customized
QC Data	No	Can be customized	Can be customized