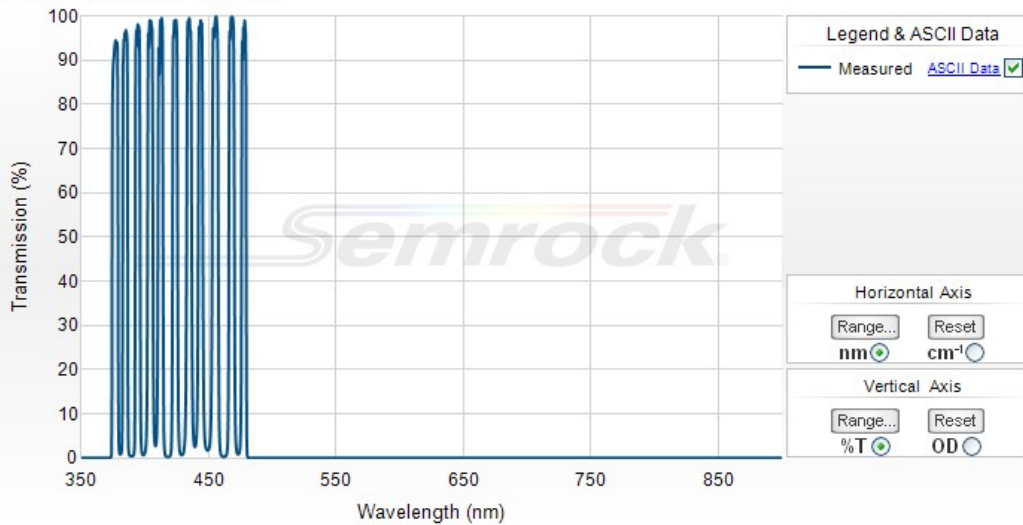


376/384/394/404/412.2/423.6/434.7/443.6/455/468/478 nm BrightLine® hendeca-band bandpass filter

Part Number: FF01-CH2O-25



**Semrock, Inc**

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Toll Free Phone: 866.736.7625 (866-SEMROCK)  
(within US and Canada)

Your filter spectrum may differ slightly from the typical spectrum above, but is certified to meet the optical specifications noted below.



**376/384/394/404/412.2/423.6/434.7/443.6/455/468/478 nm BrightLine® hendeca-band bandpass filter**

Semrock designed an 11-band bandpass filter optimized to capture the peaks of formaldehyde emission over the 380 – 480nm wavelength range to improve the fluorescence signal. Formaldehyde is an ideal chemical for use in laser-induced fluorescence (LIF) when excited at 355nm. Individual multiband fluorescence bandpass filters that utilize Semrock's patented single-substrate construction. These filters have extremely high transmission, steep and well-defined edges, and outstanding blocking between the passbands. All thin-film, hard-coated construction for unsurpassed performance and reliability.

Part Number	Size	Price <sup>1</sup>	Stock Status
FF01-CH2O-25	25 mm x 5.0 mm	\$945	In Stock

Don't see a size you need? Contact us for custom sizing – available in less than a week (sizing fee applies).

1) US domestic pricing only. If you are ordering from outside the US, please contact your nearest [regional distributor](#) for the correct list price.

**Optical Specifications**

Specification	Value
Transmission Band 1	Tabs > 80% 376 nm
Center Wavelength 1	376 nm
Guaranteed Minimum Bandwidth 1	Transmission guaranteed for nominal wavelength only
FWHM Bandwidth 1 (nominal)	4.7 nm (typical)
Transmission Band 2	Tabs > 80% 384 nm
Center Wavelength 2	384 nm
Guaranteed Minimum Bandwidth 2	Transmission guaranteed for nominal wavelength only
FWHM Bandwidth 2 (nominal)	3.9 nm (typical)
Transmission Band 3	Tabs > 80% 394 nm
Center Wavelength 3	394 nm
Guaranteed Minimum Bandwidth 3	Transmission guaranteed for nominal wavelength only
FWHM Bandwidth 3 (nominal)	3.8 nm (typical)
Transmission Band 4	Tabs > 80% 404 nm
Center Wavelength 4	404 nm
Guaranteed Minimum Bandwidth 4	Transmission guaranteed for nominal wavelength only
FWHM Bandwidth 4 (nominal)	4.2 nm (typical)
Transmission Band 5	Tabs > 90% 412.2 nm
Center Wavelength 5	412.2 nm
Guaranteed Minimum Bandwidth 5	Transmission guaranteed for nominal wavelength only
FWHM Bandwidth 5 (nominal)	4.0 nm (typical)
Transmission Band 6	Tabs > 90% 423.6 nm
Center Wavelength 6	423.6 nm
Guaranteed Minimum Bandwidth 6	Transmission guaranteed for nominal wavelength only
FWHM Bandwidth 6 (nominal)	4.0 nm (typical)
Transmission Band 7	Tabs > 90% 434.6 nm

Center Wavelength 7	434.6 nm
Guaranteed Minimum Bandwidth 7	Transmission guaranteed for nominal wavelength only
FWHM Bandwidth 7 (nominal)	4.0 nm (typical)
Transmission Band 8	Tabs > 90% 443.5 nm
Center Wavelength 8	443.5 nm
Guaranteed Minimum Bandwidth 8	Transmission guaranteed for nominal wavelength only
FWHM Bandwidth 8 (nominal)	3.6 nm (typical)
Transmission Band 9	Tabs > 90% 455 nm
Center Wavelength 9	455 nm
Guaranteed Minimum Bandwidth 9	Transmission guaranteed for nominal wavelength only
FWHM Bandwidth 9 (nominal)	4.8 nm (typical)
Transmission Band 10	Tabs > 90% 468 nm
Center Wavelength 10	468 nm
Guaranteed Minimum Bandwidth 10	Transmission guaranteed for nominal wavelength only
FWHM Bandwidth 10 (nominal)	4.3 nm (typical)
Transmission Band 11	Tabs > 90% 478 nm
Center Wavelength 11	478 nm
Guaranteed Minimum Bandwidth 11	Transmission guaranteed for nominal wavelength only
FWHM Bandwidth 11 (nominal)	3.7 nm (typical)
Blocking Band 1	OD <sub>avg</sub> > 5 350 – 365 nm
Blocking Band 2	OD <sub>avg</sub> > 1 365 – 490 nm (Excluding Passbands)
Blocking Band 3	OD <sub>avg</sub> > 5 490 – 900 nm
Blocking Band 4	OD <sub>avg</sub> > Z XXX – YYY nm
Blocking Band 5	OD <sub>avg</sub> > Z XXX – YYY nm
Blocking Band 6	OD <sub>avg</sub> > Z XXX – YYY nm
Blocking Band 7	OD <sub>avg</sub> > Z XXX – YYY nm
Blocking Band 8	OD <sub>avg</sub> > Z XXX – YYY nm
Blocking Band 9	OD <sub>avg</sub> > Z XXX – YYY nm

### General Filter Specifications

Specification	Value
Angle of Incidence	0 ± 2 degrees
Cone Half-angle	0.5 degrees
Optical Damage Rating	Testing has proven to show no signs of degradation when exposed to at least 6.0 W of power from an unfiltered xenon arc lamp over a 25 mm diameter (corresponding to 1.2 W/cm <sup>2</sup> ) for over 500 hrs.
Effective Index	1.97

### Physical Filter Specifications (applies to standard sized parts; contact us regarding other sizes)

Specification	Value
Transverse Dimensions (Diameter)	25 mm
Transverse Tolerance (mounted)	+ 0.0 / - 0.1 mm
Filter Thickness (Mounted)	5.0 mm
Filter Thickness Tolerance (Mounted)	± 0.1 mm
Clear Aperture	≥ 21 mm
Scratch-Dig	60-40
Substrate Thickness (unmounted)	3.5 mm
Substrate Thickness Tolerance (unmounted)	± 0.1 mm
Orientation	Arrow on ring indicates preferred direction of propagation of light