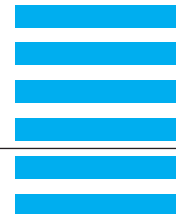


# Mercury and Analytical Line Filters



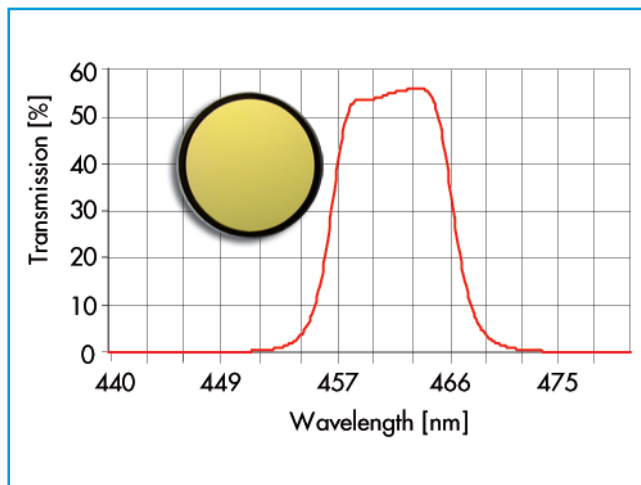
- isolated atomic emission lines
- narrow 10 nm bandwidth
- excellent blocking outside of bandpass
- measured transmission curve supplied

These narrow band interference filters are available for the most frequently used mercury discharge lines to provide high energy transmission and elimination of the continuum.

There are also filters isolating atomic emission lines from plasmas, flames or other line lamps. The narrow band, sharp cutoffs and excellent blocking are responsible for the good line to background ratios. These high rejection type filters also provide excellent isolation from other mercury lines.

## Incident Power

No general specification can be given because of the disparate sources used with these filters. Temperature changes in excess of 5 degree C per minute, whether environment or absorbed radiation induced, can cause cracking or delamination of filters. Most filters have a highly reflective (mirror-like) side and a darker absorptive or colored side. Always place the highly reflective side towards a high intensity source. In this way the large majority of the unwanted radiation is reflected rather than absorbed and converted to heat in the filter itself. Check that the reflected radiation will not damage the source. With high power broadband incident radiation of ( $\geq 300$  W) arc or halogen sources it may be necessary to use a liquid filter before optical components in order to absorb excess infrared radiation.



## Ordering Information

Mercury Line Filters				
CWL [nm]	Min. Peak Transmission [%]	N*	Part Number 25 mm dia.	Part Number 50 mm dia.
253,7	12	-	254FS10-25	254FS10-50
312,6	15	-	313FS10-25	313FS10-50
334,1	25	1,45	334FS10-25	334FS10-50
365,0	25	1,45	365FS10-25	365FS10-50
404,7	45	1,45	405FS10-25	405FS10-50
435,8	45	1,45	436FS10-25	436FS10-25
546,1	55	2,05	546FS10-25	546FS10-50
577,0	55	2,05	577FS10-25	577FS10-50
690,7	55	2,05	690FS10-25	690FS10-50
1014,0	45	2,05	014FS10-25	014FS10-50

Analytical Line Filters					
Element	CWL [nm]	Min. Peak Transmission [%]	N*	Part Number 25 mm dia.	Part Number 50 mm dia.
Zn	280,0	12	-	280FS10-25	280FS10-50
H	486,1	50	2,05	486FS10-25	486FS10-50
Cd	508,5	55	2,05	508FS10-25	508FS10-50
Ti	535,0	55	2,05	535FS10-25	535FS10-50
Na	590,0	55	2,05	590FS10-25	590FS10-50
Zn	636,2	60	2,05	636FS10-25	636FS10-50
H	656,3	55	2,05	656FS10-25	656FS10-50