

NEUTRAL DENSITY FILTERS

FILTER FACTOR / F-STOP / OPTICAL DENSITY CONVERSION CHART

How much light an ND filter blocks may be indicated in any of 3 common ways:

- As an f-stop
- In terms of its filter factor
- By identifying the filter's optical density

Here's a handy chart which shows the equivalents among these 3 methods.

FILTER FACTOR	F-STOP(S)	OPTICAL DENSITY
ND2	1	0.3
ND4	2	0.6
ND8	3	0.9
ND16	4	1.2
ND32	5	1.5
ND64	6	1.8
ND128	7	2.1
ND256	8	2.4
ND512 (commonly shown as ND500)	9	2.7
ND1028 (commonly shown as ND1000)	10	3.0
ND2056 (commonly shown as ND2000)	11	3.3
ND4112 (commonly shown as ND4000)	12	3.6

• Please note, these indicators may be used for single density ND filters, VND filters (to identify the light blocking at a particular setting), and Graduated ND filters (where the light blocking of the most-dense area is typically identified).