BOLEX TECHNICAL BULLETIN

## PAILLARD Incorporated, 100 Sixth Avenve, New York 13, Now York

Charts for 12.5 and 13 mm Standard Lenses


FIXED FOCUS SETTING

| $f / 0.9$ | $30^{\prime}$ |
| :---: | :---: |
| 1.5 | $18^{\prime}$ |
| 1.8 | $14^{\prime}$ |
| 2.8 | $10^{\prime}$ |
| 4 | $7^{\prime}$ |
| 5.6 | $5^{\prime}$ |
| 8 | $31 / 2^{\prime}$ |
| 11 | $21 / 2^{\prime}$ |
| 16 | $21 / 2^{\prime}$ |
| 22 | 10 |

When the scale on a focusing mount lens is set to this distance (hyperfocal distance), the depth of field extends from half this distance to infinity.

MINIMUM FILMING DISTANCES FOR FIXED FOCUS LENSES
Fixed focus lenses render sharp pictures from infinity down to the following distances:

| $f / 1.9$ | $8^{\prime}$ |
| :---: | :---: |
| 2.5 | $61 / 2^{\prime}$ |
| 4 | $43 / 4^{\prime}$ |
| 5.6 | $312^{\prime}$ |
| 8 | $23 / 4^{\prime}$ |
| 11 | $2^{\prime}$ |
| 16 | $112^{\prime}$ |
| 22 | $11 / 4^{\prime}$ |

These minimum distances are engraved in orange or some lenses.

DISTANCES ARE ALWAYS MEASURED FROM THE FILM PLANE.

## DEPTH OF FIELD

| Distance to Subject, Feet | f/0.9 |  | f/1.5 |  | $\begin{aligned} & f / 1.8 \\ & f / 1.9 \\ & f / 2 \end{aligned}$ |  | $\begin{aligned} & f / 2.5 \\ & f / 2.8 \end{aligned}$ |  |  | f/4 |  | f/5.6 |  |  |  | f/8 |  |  |  | f/11 |  |  |  | +/16 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | from | to | from | to | from to |  | from |  | to | from | to | from |  | to |  | from |  | to |  | from |  | to |  | from |  | to |  |
| $3 / 4$ | $83 / 4$ " | 91/4" |  | 91/2" | 81/2" | 91/2" |  | 81/2" | 10" | 8" | $10^{\prime \prime}$ |  | $8{ }^{\prime \prime}$ |  | $11 "$ |  | $7{ }^{\prime \prime}$ | 1 ' |  |  | 7" | $1 '$ |  |  | 6" | I' | 4" |
| 1 | $111 / 2^{\prime \prime}$ | $121 / 2^{\prime \prime}$ | $111 / 2^{\prime \prime}$ | $1^{\prime} 1^{\prime \prime}$ | 11" | $1^{\prime} 1^{\prime \prime}$ |  | 11" | 1' 1" | ' 10 " | $1^{\prime} 2^{\prime \prime}$ |  | $10^{\prime \prime}$ | I' | $3^{\prime \prime}$ |  | $9 \prime$ | $I^{\prime}$ | 5" |  | $8{ }^{\prime \prime}$ | $1^{\prime}$ |  |  | $8^{\prime \prime}$ | $2{ }^{\prime}$ | $6^{\prime \prime}$ |
| $11 / 4$ | $141 / 2^{\prime \prime}$ | 151/2" | 1' 2 " | 1' 4" | $1^{\prime} 2^{\prime \prime}$ | $1^{\prime} 4^{\prime \prime}$ | 1 ' | I" | 1' 5" | 1 ' | $1^{\prime} 6^{\prime \prime}$ | $1 \cdot$ |  | 1 ' | $8^{\prime \prime}$ |  | 11 " | $2{ }^{\prime}$ |  |  | $10^{\prime \prime}$ | $2 '$ | $7{ }^{\prime \prime}$ |  | 9 9" | $5{ }^{\prime}$ | $3^{\prime \prime}$ |
| $11 / 2$ | $1^{\prime} 5^{\prime \prime}$ | 1' ${ }^{\prime \prime}$ | 1' 5" | 1' 8 " | $1^{\prime} 4^{\prime \prime}$ | 1' $81 / 2^{\prime \prime}$ |  | 3" | $1^{\prime} 9 \prime \prime$ | 1' 2 " | 1'11" |  | $1 "$ | 2 ' |  | 1 ' |  | $3^{\prime}$ | $3^{\prime \prime}$ |  | $11 "$ | $4^{\prime}$ |  |  | $10^{\prime \prime}$ | $16^{\prime}$ |  |
| 2 | $1^{\prime} 10^{\prime \prime}$ | 2' $2^{\prime \prime}$ | $1^{\prime} 9$ " | 2'3" | $1^{\prime} 9$ " | $2^{\prime} 4^{\prime \prime}$ | 1 ' | 8" | 2' $6^{\prime \prime}$ | 1' 6 " | $2^{\prime} 10^{\prime \prime}$ |  | $5^{\prime \prime}$ | $3^{\prime}$ | $6^{\prime \prime}$ |  | 3" | $5{ }^{\prime}$ |  |  | $1 "$ | $12^{\prime}$ |  |  | $11 "$ | Inf. |  |
| 21/2 | 2' 3" | 2.9" | $2^{\prime} 2^{\prime \prime}$ | 2'1" | 2' 1" | $3^{\prime} 1$ 1" | $2 \cdot$ |  | $3^{\prime} 5^{\prime \prime}$ | 1.9" | $4^{\prime}$ |  | 7" | 5 ' | 4" |  | 5" | $10^{\prime}$ |  |  |  | Inf. |  | $I^{\prime}$ |  | Inf. |  |
| 3 | 2'9" | 3' 4" | 2'9" | 3' 7 '' | 2' 5" | $3^{\prime} 11$ " |  | 3" | $4^{\prime} 5^{\prime \prime}$ |  | $5^{\prime} 6^{\prime \prime}$ |  | 9" | $8{ }^{\prime}$ | $3^{\prime \prime}$ |  | $6^{\prime \prime}$ | $33^{\prime}$ |  |  | 4" | Inf. |  |  |  | Inf. |  |
| 4 | $3^{\prime} 6^{\prime \prime}$ | $4^{\prime} 8^{\prime \prime}$ | 3. $3^{\prime \prime}$ | $5^{\prime} 2^{\prime \prime}$ | 3. | 5. $8^{\prime \prime}$ | 2 ' | 9 " | 7 | 2' 6 " | $10^{\prime}$ | 2 ' | 2" | 27 |  |  | 8" | Inf. |  |  | 6" | Inf. |  |  |  | Inf. |  |
| 6 | 5 | $7{ }^{7 \prime}$ | $4^{\prime} 6^{\prime \prime}$ | 9. | 4'1" | 11 |  | 9 9" | 16 | $3^{\prime} 3^{\prime \prime}$ | $66^{\prime}$ |  | $7{ }^{\prime \prime}$ |  |  |  | $1 "$ | Inf. |  |  |  | Inf. |  |  | 4" | Inf. |  |
| 12 | $8^{\circ} 6^{\prime \prime}$ | $20^{\prime}$ | 7. | 38. | 6.3 " | 120' |  | $3 "$ | Inf. | $4^{\prime} 3^{\prime \prime}$ | Inf. | $3^{\prime}$ | 5" | Inf. |  |  |  | Inf. |  | $2 '$ |  | Inf. |  |  |  | Inf. |  |
| 60 | $20^{\circ} 6^{\prime \prime}$ | Inf. | 13: $6^{\prime \prime}$ | Inf. | 11 | Inf. |  | 2" | Inf. |  | Inf. |  | 4" |  |  |  |  | Inf. |  |  |  | Inf. |  |  |  | Inf. |  |
| Inf. | $30^{\prime} 6^{\prime \prime}$ | Inf. | $17^{\prime}$ | Inf. | 13 | Inf. |  | 6" | Inf. | $6^{\prime} 7^{\prime \prime}$ | Inf. | $4^{\prime}$ |  | Inf. |  |  |  | Inf. |  |  |  | Inf. |  |  |  | Inf. |  |

This table is based on a circle of confusion of $1 / 1250^{\prime \prime}$.

