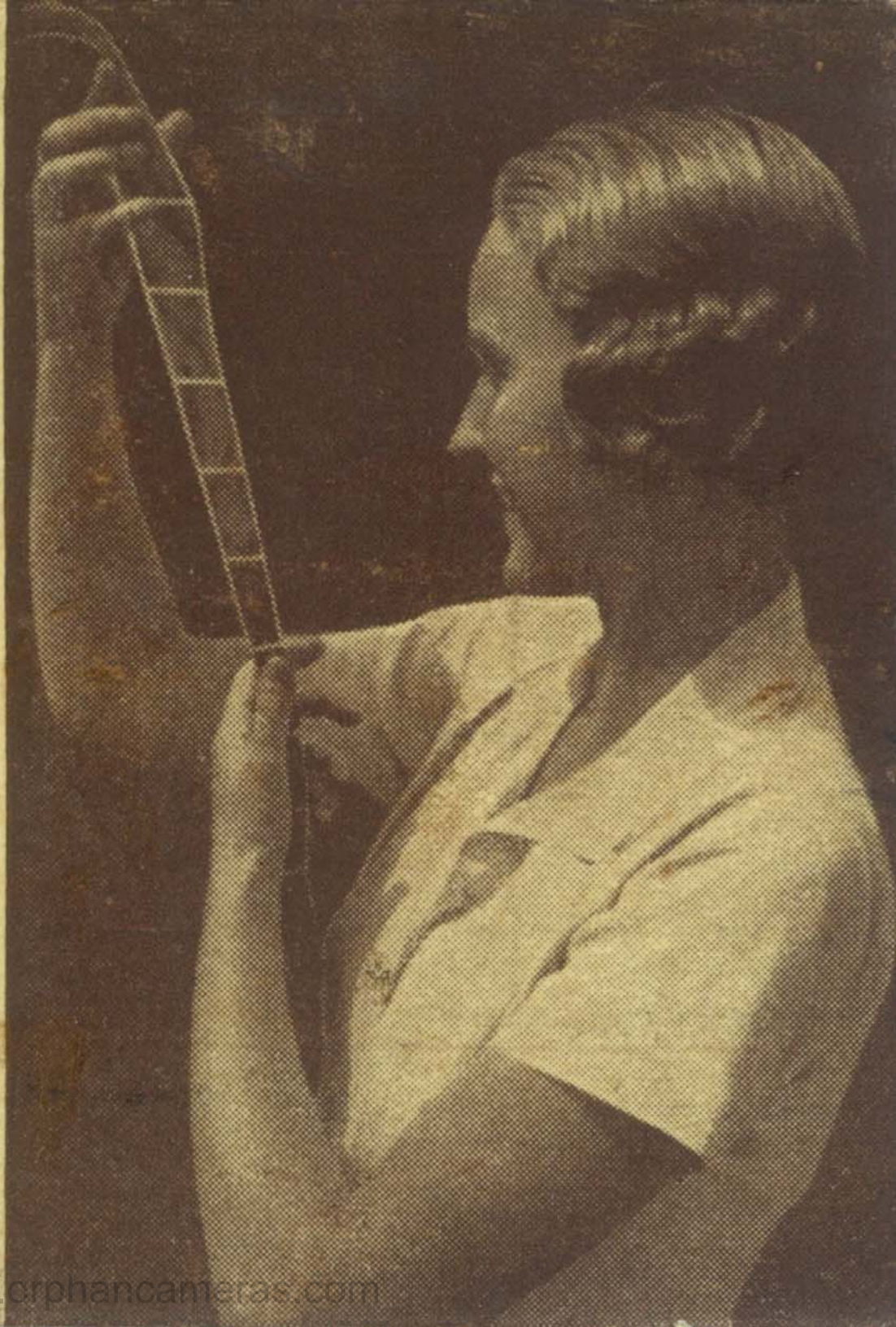


Exposure Time Tables



**ZEISS IKON AG.
DRESDEN**



EXPOSURE TIME TABLES

Dr. Max Leo's system

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No. I Time of Day and Year

| Fore-noon | After-noon | January December | February November | March October | April September | May August | June July | Northern Hemisphere |
|-----------|------------|---------------------|----------------------|------------------|--------------------|---------------|--------------|------------------------|
| 5 | 7 | — | — | — | — | 8 | 7 | |
| 6 | 6 | — | — | — | 8 | 6 | 5 | |
| 7 | 5 | — | 9 | 7 | 5 | 3 | 2 | |
| 8 | 4 | 8 | 7 | 5 | 3 | 2 | 1 | |
| 9 | 3 | 7 | 5 | 3 | 2 | 1 | 1 | |
| 10 | 2 | 5 | 4 | 2 | 1 | 1 | 0 | |
| 11 | 1 | 4 | 3 | 1 | 1 | 0 | 0 | |
| 12 | | 4 | 3 | 1 | 1 | 0 | 0 | |

| Fore-noon | After-noon | July June | August May | September April | October March | November February | December January | Southern Hemisphere |
|-----------|------------|--------------|---------------|--------------------|------------------|----------------------|---------------------|------------------------|
|-----------|------------|--------------|---------------|--------------------|------------------|----------------------|---------------------|------------------------|

No. II Lighting

Objects, which in the shade, when the sun shines, are not directly struck by the light rays, come within 2 (slightly clouded) unless Table III (diffused light) is already used

| Sunny with white clouds | Sunny | Sky slightly overcast | Sky rather clouded | Sky strongly clouded | Dark thun- der-storm clouds |
|----------------------------|-------|-----------------------------|--------------------------|----------------------------|-----------------------------------|
| 0 | 1 | 2 | 3 | 4 | 6 |

No. III Object to be exposed

| | Light diffused | | | | | | | | Architecture (dark) | Architecture (light, white) | Narrow street | Large street | Public squares, Race-course | Strand, Downs | Scenes on sea and ashore | Landscape | | | | | Clouds | |
|----------------------------|------------------------------------|------------------------------------|---------------|----|--------------------|---------------------|-------------|------------------|---------------------|-----------------------------|---------------|--------------|-----------------------------|---------------|--------------------------|----------------------------|-------------------|-------------------------|----------------------|---|--------|---|
| | Portraits and Still-life | | | | | | | | | | | | | | | Dark fore-ground (foliage) | Light fore-ground | Distant, no fore-ground | Water, Snow, Glacier | | | |
| | Inside | | | | beneath dark trees | beneath light trees | In open air | with fore-ground | | | | | | | | | | | without fore-ground | | | |
| | at 6 feet distance from the window | at 3 feet distance from the window | at the window | | | | | | | | | | | | | | | | | | | |
| Dark interior | 30 | 24 | 18 | 17 | 14 | 12 | 14 | 11 | 9 | 8 | 3 | 8 | 6 | 5 | 3 | 2 | 8 | 6 | 4 | 4 | 1 | 0 |
| Light interior | | | | | | | | | | | | | | | | | | | | | | |
| Reproduction at the window | | | | | | | | | | | | | | | | | | | | | | |

No. IV Dryplate and Film

| | | | | | | | |
|----------------------|------|------|-------|-------|-------|-------|-------|
| 0° DIN | 7/10 | 9/10 | 11/10 | 13/10 | 16/10 | 18/10 | 20/10 |
| Scheiner . . approx. | 17° | 19° | 21° | 23° | 26° | 28° | 30° |
| Hurter & Driffield » | 351 | 570 | 930 | 1300 | 2700 | 4700 | 7200 |
| | 3 | 2 | 0 | -2* | -4* | -5* | -6* |

* These values must be deducted from the sum total.

No. V Diaphragm

| | | | | | | | | | | | | | | |
|-------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|-----------|-----------|-----------|-----------|
| F. Nos. | F : 1.4 | — | 2 | 2.8 | — | 4 | — | 5.6 | — | 8 | 11 | 16 | 22 | 32 |
| Continental Scale | F : 1.5 | 1.8 | 2.2 | 2.7 | 3.5 | — | 4.5 | — | 6.3 | 9 | 12.5 | 18 | 25 | 36 |
| | 0 | 1 | 2 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 12 | 14 | 16 | 18 |

No. VI Exposure Time

| | | | | | | | | | | | | | | | | | | |
|---------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Total | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | |
| Seconds | 1/1500 | 1/1000 | 1/750 | 1/500 | 1/400 | 1/250 | 1/200 | 1/125 | 1/100 | 1/60 | 1/50 | 1/30 | 1/25 | 1/15 | 1/12 | 1/8 | 1/6 | |
| Total | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | | |
| Seconds | 1/4 | 1/3 | 1/2 | 3/4 | 1 | 1 1/2 | 2 | 3 | 4 | 6 | 8 | 12 | 15 | 25 | 30 | 50 | | |
| Total | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 |
| Minutes | 1 | 1 1/2 | 2 | 3 | 4 | 6 | 8 | 12 | 15 | 25 | 30 | 50 | 60 | 90 | 120 | 180 | 240 | 360 |

When working with colour filters, increase the exposure time as follows :

| | | | | |
|------------------------|---------------------|---------|-------------------|---------|
| Light yellow filter : | Orthochromatic film | 2 times | Panchromatic film | 2 times |
| Medium yellow filter : | » | 3 times | » | 3 times |
| Dark yellow filter : | » | 4 times | » | 4 times |
| Yellow green filter : | » | 2 times | » | 2 times |

How to use it

Take from Tables I to V the red numbers respectively, the total sum of which gives in table VI the time of exposure; e. g. intended exposure: End of May, fore-noon 10 o'clock (Table I No. **1**), sunny sky with white clouds (Table II No. **0**), landscape with foliage in the fore-ground (Table III No. **8**), dryplate 17° Scheiner (Table IV No. **3**), and diaphragm f/16 (Table V No. **14**). Values found :

$$1 + 0 + 8 + 3 + 14 = 26$$

No. **26** in table VI indicates $\frac{1}{3}$ of a second as the correct exposure time.

The figures indicated in this chart apply especially to countries situated as follows:

In the North from 30° septentrional latitude, as, for example:

Europe, Siberia, China, Japan, North Africa, U. S. A., Canada.

In the South from 30° meridional latitude, as, for example:

Argentine, Chili, The Cape, Southern Australia.

Take one half of the values obtained by means of this table for the following countries :

At the Equator and northward as far as 30° septentrional latitude, as, for example :

Mexico, Sudan, India,

in the months of January February March

December November October

at the Equator and southward as far as 30° meridional latitude, as, for example :

Ecuador, Venezuela, Brasil, Bolivia, Peru, South Africa, Central and North Australia,

in the months of June May April

July August September

When estimating the values in Table No. III take into account the SHADOWS of the subject — especially in tropical regions.

**A few accessories
are recommended
for your camera:**

Tripods, tilting heads, exposure-meters, telemeters, yellow filters, sundries for the darkroom, Ideal and Paranal developers, Fotolin — — — in fact, everything that simplifies photography and renders it a delightful hobby can be obtained from Zeiss Ikon. Always use a Zeiss Ikon film in a Zeiss Ikon camera to ensure the very best results.

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