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For Kodak RETINA Cameras

Setting Tables for Kodak Close-up Lenses R1:4.5, R1:3 and R1:2

KODAK AG · STUTTGART-WANGEN

The **R Close-up Lenses** extend the scope of the RETINA to the close range from 11 in. down to 6 in. (related to the film plane). They are used in connection with the Close-up Attachment on the RETINA I B, II C, III C, II S, automatic II (with adapter) and III S. For the RETINA REFLEX and REFLEX S, however, the Close-up Attachment is not absolutely required.

The R Close-up Lenses, which can be used singly or in combination, permit picture-taking on scales of 1 : 4.5, 1 : 3, 1 : 2 and even 1 : 1.5. (Scales for the II S are 1 : 4.5, 1 : 3 and 1 : 2.) For the picture scale of 1 : 1.5, the R 1 : 2 and R 1 : 4.5 lenses are screwed together, the R 1 : 2 lens next to the camera lens. For exposures with the R 1 : 4.5 and R 1 : 3 close-up lenses stop down the lens aperture to at least 8 and to not less than 11 for the R 1 : 2 and the combined 1 : 2/R 1 : 4.5 lenses. The exposure time need not be extended.

Column I identifies the gauge rods. **Column II** indicates the R close-up lens to be used with each gauge rod. In **column III** is listed the subject size for the various RETINA models. **Column IV** is primarily meant for those photographing without gauge rods. In **column V** the depth of field for the various diaphragm stops is shown.

Table for Kodak R-Close-up Lenses

I	II	III		IV	V			
Gauge Rods	Close-up Lens	Subject Size in Inches		Subject Dist. in Inches*	Depth of Field in Inches**			
		Retina I B, III S, Reflex S	Retina II C III C, Reflex	Retina II S Ret. autom. II		f/8	f/11	f/16	f/22
4.5	R 1 : 4.5	$3^{15}/_{16} \times 5^{29}/_{32}$	$4^{7}/_{32} \times 6^{19}/_{64}$	$4^{21}/_{64} \times 6^{1}/_{2}$	$11^{7}/_{32}$	$^{19}/_{32}$	$^{53}/_{64}$	$1^{7}/_{32}$	$1^{11}/_{16}$
3	R 1 : 3	$2^{3}/_{4} \times 4^{9}/_{64}$	$3 \times 4^{3}/_{32}$	$3^{5}/_{64} \times 4^{39}/_{64}$	$8^{31}/_{32}$	$^{5}/_{16}$	$^{7}/_{16}$	$^{5}/_{8}$	$^{55}/_{64}$
2	R 1 : 2	$2^{1}/_{64} \times 3$	$2^{1}/_{8} \times 3^{3}/_{16}$	$2^{1}/_{2} \times 3^{11}/_{32}$	$7^{1}/_{4}$		$^{14}/_{64}$	$^{5}/_{16}$	$^{7}/_{16}$
1.5	R 1 : 2 and R 1 : 4.5	$1^{19}/_{64} \times 1^{31}/_{32}$	$1^{27}/_{64} \times 2^{1}/_{8}$	not suitable for Retina II S and autom. II	$5^{15}/_{16}$		$^{6}/_{64}$	$^{5}/_{32}$	$^{13}/_{64}$

Camera setting is ∞ (infinity). * from subject to film plane. Circle of confusion 0.002 inch.

**** The depths of field indicated are divided ½ each in front and behind the setting plane (setting plane in subject distance).**