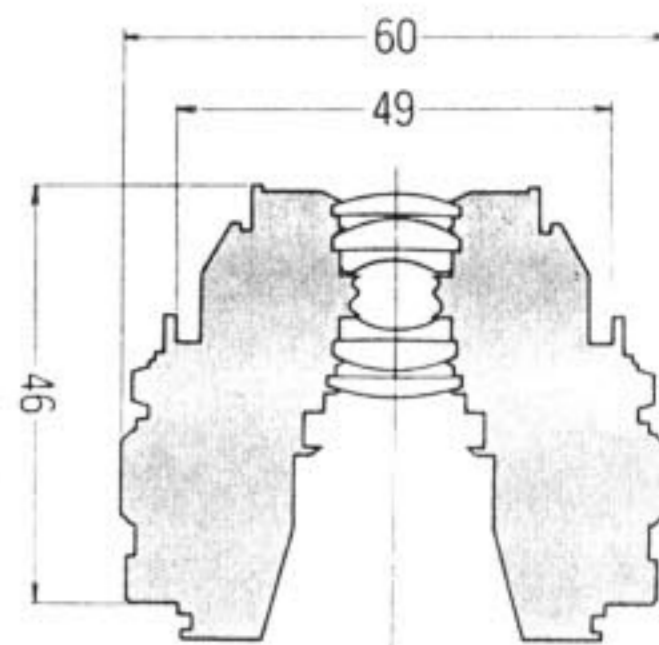
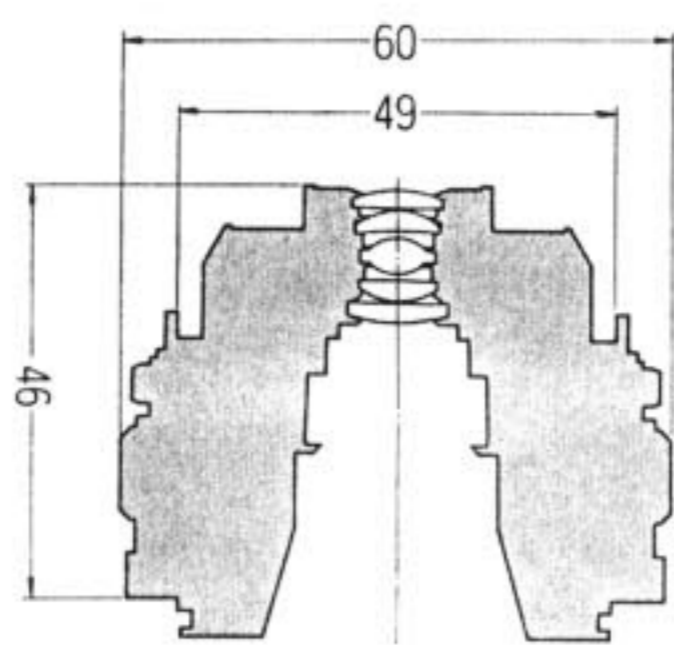


ZUIKO AUTO-MACRO 20mm 1:2

ZUIKO AUTO-MACRO 38mm 1:2.8



These macro lenses feature the world's first automatic diaphragm operation for high magnification works in conjunction with the OM System macrophoto units.

Ces optiques macro autorisent la commande automatique du diaphragme, une première mondiale, pour les travaux de forts agrandissements réalisés en combinaisons avec les unités macrophoto du Système OM.

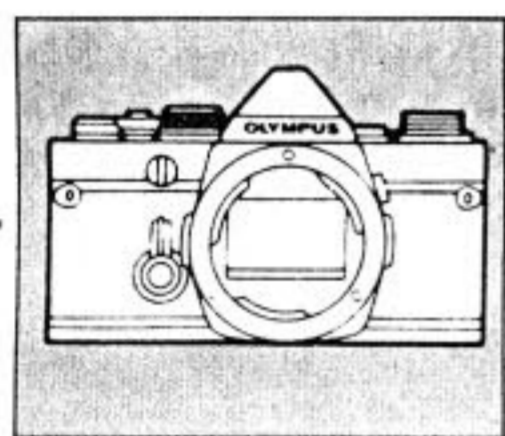
Diese Makroobjektive besitzen der Welt erste Blendenautomatik für Großformat-Vergrößerungsarbeiten zusammen mit den Makrofoto-Einheiten des OM-Systems.

Estos macroobjetivos son los primeros en el mundo de funcionamiento automático del diafragma para trabajos de gran aumento en combinación con las unidades de macrofotografía del Sistema OM.

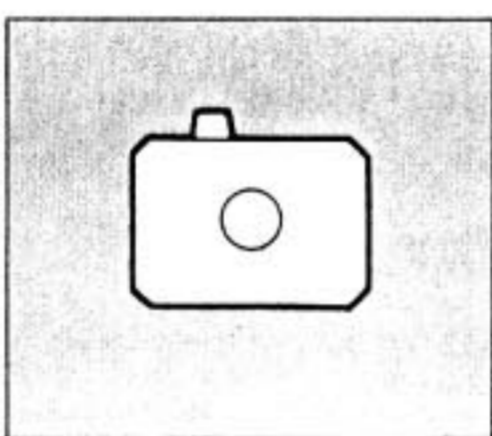
Combinations



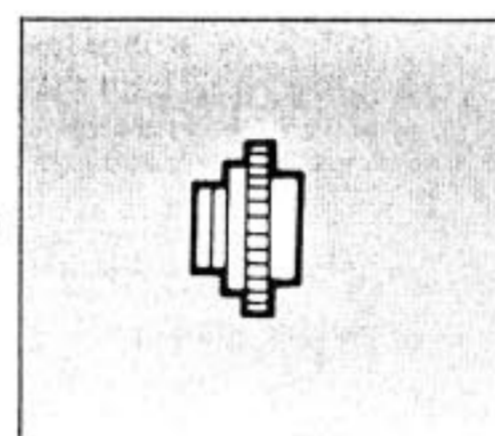
Varimag Finder



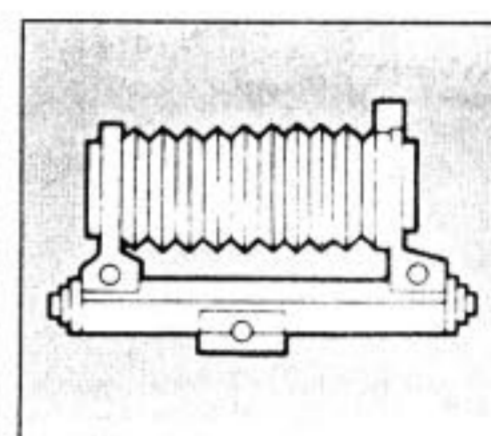
OM-2N
OM-1N



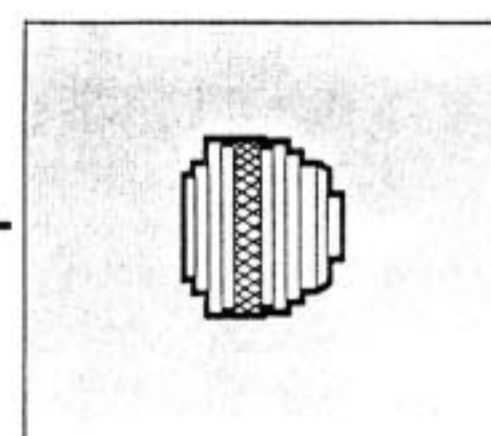
Focusing Screen 1-4



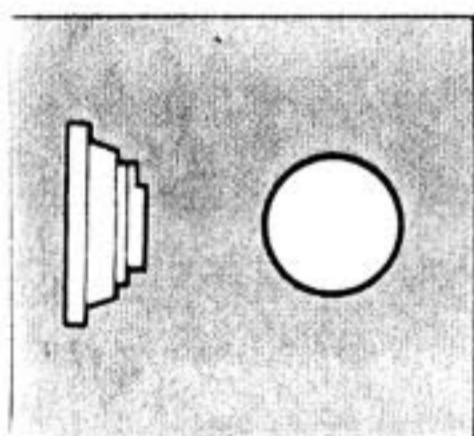
Auto Extension
Tube 14



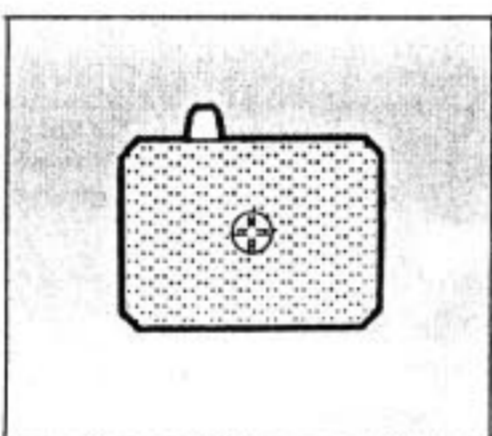
Auto Bellows



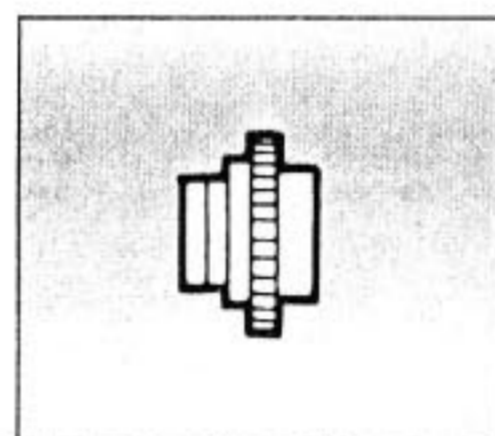
Macro 20mm F2



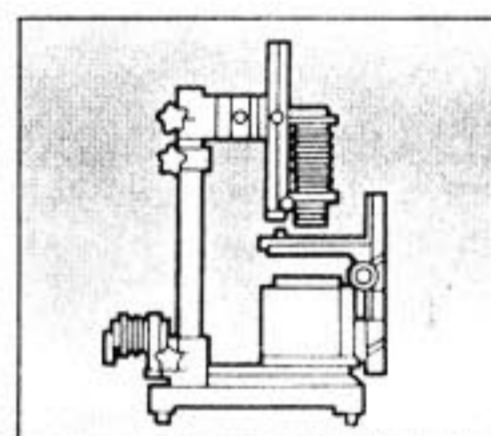
Dioptic
Correction
Lens 1 Eyecup 1



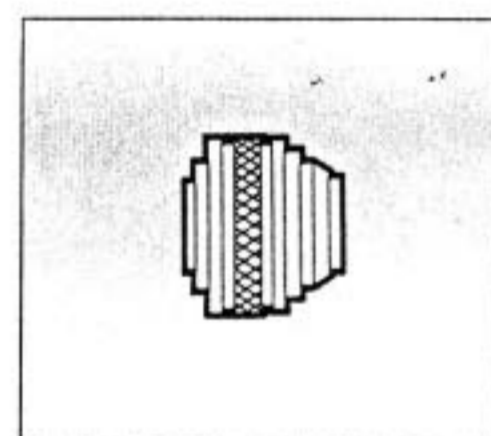
Focusing Screen 1-11



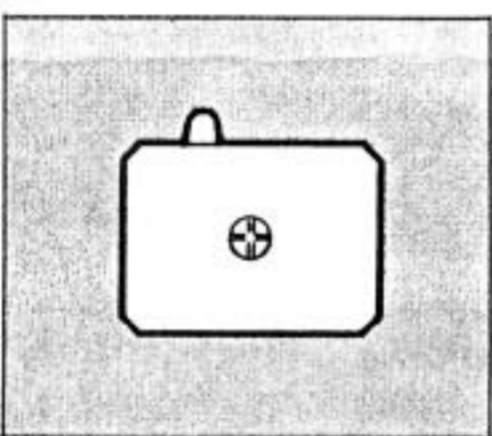
Auto Extension
Tube 25



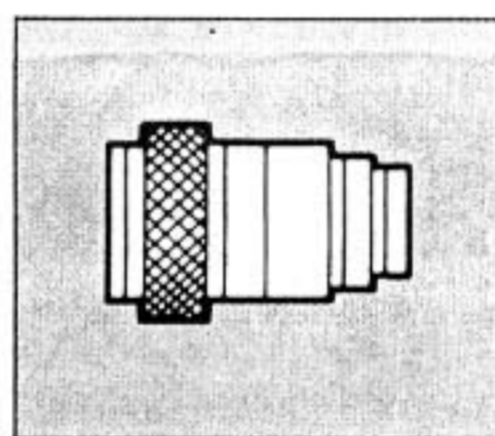
Macrophotographic
Equipment PMT-33



Macro 38mm F2.8



Focusing Screen 1-12



Telescopic Auto
Extension Tube
65 ~ 116

Specifications

Caractéristiques

	Macro 20mm 1:2	Macro 38mm 1:2.8
Focal length Focale	20 mm	38 mm
Angle of view Angle de champ	9° (at high magnification) 9° (à fort grossissement)	
Optical construction Construction optique	6 elements in 4 groups, multi-coated 6 lentilles en 4 groupes, traitement multi-couches	
Diaphragm operation Présélection de diaphragme	Automatic Automatique	
F/stop range Ouverture	2 ~ 16 F2 à 16	2.8 ~ 22 F2,8 à 22
Minimum field size Cadrage minimal	Max. 5.7 x 8.6mm (4.2x) Min. 1.8 x 2.6mm (13.6x)	Max. 14 x 21mm (1.7x) Min. 3.6 x 5.4mm (6.7x)
Focusing Mise au point	With Auto Extension Tube 14, 25, 65 ~ 116 or Auto Bellows à l'aide de tube-allonge 14, 25, 65 ~ 116 ou soufflet-auto	
Fine-focusing Réglage fin de mise au point	With direct helicoid built into lens par rampe hélicoïdale du objectif	
Length Longueur	46mm (1.8 in.)	
Maximum diam. Diamètre hors tout	60mm (2.4 in.)	
Weight Poids	170g (6.0 oz.)	

Technische Daten

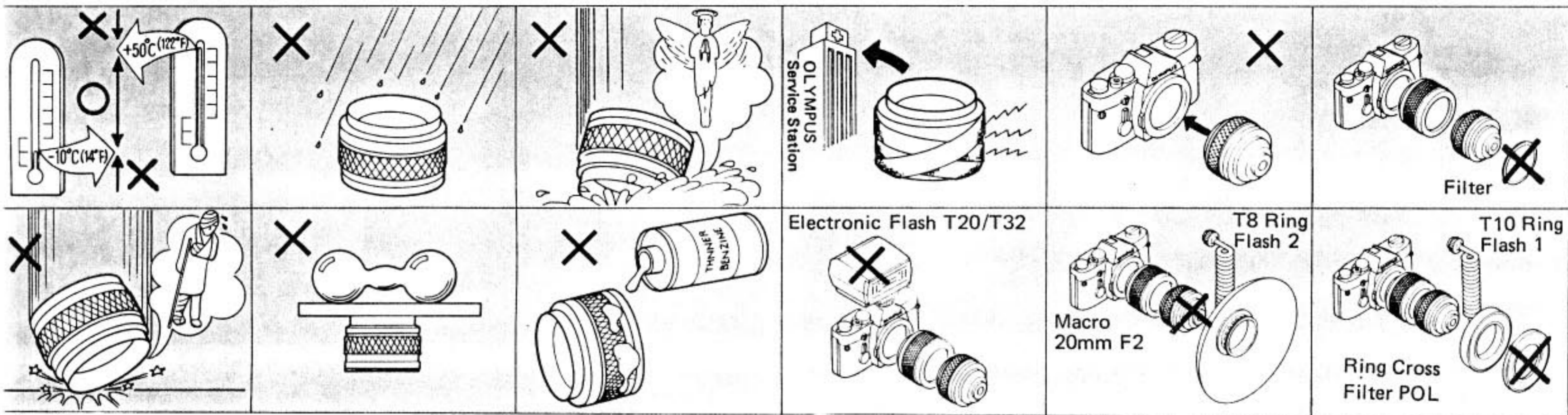
Especificaciones

	Macro 20mm 1:2	Macro 38mm 1:2.8
Brennweite Distancia focal	20mm	38mm
Bildwinkel Angulo de visión	9° (bei stärkster Vergrößerung) 9° (con gran ampliación)	
Optische Bauart Construcción óptica	6 Linsen in 4 Gruppen, mehrschicht vergütet 6 elementos en 4 grupos (multicapas)	
Blendensteuerung Diafragma	Automatisch Función automática	
Blendenbereich Aberturas	1:2 bis 1:16 2 hasta 16	1:2,8 bis 1:22 2,8 hasta 22
Kleinste Objektfeld Campo fotográfico mínimo	Max. 5,7 x 8,6mm (4,2x) Min. 1,8 x 2,6mm (13,6x)	Max. 14 x 21mm (1,7x) Min. 3,6 x 5,4mm (6,7x)
Scharfeinstellung Enfoque	Mit Auto Zwischenring 14, 25, 65 ~ 116 od. Balgengerät Con Tubo Extensión Automático 14, 25, 65 ~ 116 o Fuelle Automático	
Feinscharfeinstellung Enfoque micro metrico	Schnecken gang Helicoidal	
Baulänge Longitud	46mm	
Maximaler Durchmesser Diámetro máximo	60mm	
Gewicht Peso	170g	



ZUIKO AUTO-MACRO 20mm 1:2/ZUIKO AUTO-MACRO 38mm 1:2.8

Care and storage/Entretien et rangement/Pflege und Lagerung/Cuidado y conservación



X : NO
O : YES

With Auto Bellows/avec Soufflet-auto/mit Balgengerät;/con Fuelle Automático

Lens	Lens Position	Subject Area ¹⁾ Covered (mm)	Magnification ²⁾	Scale (mm) ³⁾		Distance from lens ⁴⁾ to subject (cm)	
				Scale (mm) ³⁾	Distance from lens ⁴⁾ to subject (cm)		
Zuiko Macro 135mm F4.5	Normal	∞ 360 180 120 90 72 60 51.4 45 40 36 30 25.7 22.5 20 18 16.4 15 13.8 12.9 12 10.3 9 8 7.2 6.5 6 5.5 5.1 4.8 4 3.6 3.3 3.0 2.7	0-1 0-2 0-3 0-4 0-5 0-6 0-7 0-8 0-9 1-0 1-2 1-4 1-6 1-8 2-0 2-2 2-4 2-6 2-8 3-0 3-5 4-0 4-5 5-0 5-5 6-0 6-5 7-0 8-0 9-0 10-0 11-0 12-0 13-0	98 111-5 125 138-5 142 165 179 192-5 206 229 231	144 77-1 54-6 43-4 36-6 32-1 28-4 25-5 24-6 21-1		
Zuiko Macro 1:1 80mm F4	Normal	∞ 360 180 120 90 72 60 51.4 45 40 36 30 25.7 22.5 20 18 16.4 15 13.8 12.9 12 10.3 9 8 7.2 6.5 6 5.5 5.1 4.8 4 3.6 3.3 3.0 2.7	0-1 0-2 0-3 0-4 0-5 0-6 0-7 0-8 0-9 1-0 1-2 1-4 1-6 1-8 2-0 2-2 2-4 2-6 2-8 3-0 3-5 4-0 4-5 5-0 5-5 6-0 6-5 7-0 8-0 9-0 10-0 11-0 12-0 13-0	68 79 78 86 94 102 110 118 126 134 142 150 158 174 190 206 221 231	84-3 44-4 31-1 24-4 20-4 17-7 15-8 14-4 13-3 12-4 11-1 10-2 9-4 8-9 8-4 8-2		
Zuiko Macro 38mm F2.8	Normal	∞ 360 180 120 90 72 60 51.4 45 40 36 30 25.7 22.5 20 18 16.4 15 13.8 12.9 12 10.3 9 8 7.2 6.5 6 5.5 5.1 4.8 4 3.6 3.3 3.0 2.7	0-1 0-2 0-3 0-4 0-5 0-6 0-7 0-8 0-9 1-0 1-2 1-4 1-6 1-8 2-0 2-2 2-4 2-6 2-8 3-0 3-5 4-0 4-5 5-0 5-5 6-0 6-5 7-0 8-0 9-0 10-0 11-0 12-0 13-0	68 72 79 87 95 114 133 152 171 190 209 228 231-4	4-6-5 4-4 4-3 4-2 4-0 3-9 3-8 3-7 3-6 3-6 3-5-3-5		
Zuiko Macro 20mm F2	Normal	∞ 360 180 120 90 72 60 51.4 45 40 36 30 25.7 22.5 20 18 16.4 15 13.8 12.9 12 10.3 9 8 7.2 6.5 6 5.5 5.1 4.8 4 3.6 3.3 3.0 2.7	0-1 0-2 0-3 0-4 0-5 0-6 0-7 0-8 0-9 1-0 1-2 1-4 1-6 1-8 2-0 2-2 2-4 2-6 2-8 3-0 3-5 4-0 4-5 5-0 5-5 6-0 6-5 7-0 8-0 9-0 10-0 11-0 12-0 13-0	68 73 83 93 109 123 143 163 183 203 223	2-0-2 2-0 1-9 1-9 1-9 1-8 1-8 1-8 1-8 1-8 1-8 1-8		

Objektiv / Position de l'objectif / 1) Surface couverte du sujet en mm. / 2) Grossissement / 3) Echelle / 4) Distance de l'objectif au sujet (cm)

With Telescopic Auto Extension Tube 65 ~ 116/avec Tube-allonge 65 ~ 116/mit Auto Zwischenring 65 ~ 116/con Tubo Extensión Automático 65 ~ 116

Lens	Lens Position	Subject Area ¹⁾ Covered (mm)	Magnification ²⁾	Tube length ⁵⁾ (mm)		Distance from lens ⁴⁾ to subject (cm)	
				Tube length ⁵⁾ (mm)	Distance from lens ⁴⁾ to subject (cm)		
Zuiko Macro 135mm F4.5	Normal	∞ 360 180 120 90 72 60 51.4 45 40 36 30 25.7 22.5 20 18 16.4 15 13.8 12.9 12 10.3 9 8 7.2 6.5 6 5.5 5.1 4.8 4 3.6 3.3 3.0 2.7	0-1 0-2 0-3 0-4 0-5 0-6 0-7 0-8 0-9 1-0 1-2 1-4 1-6 1-8 2-0 2-2 2-4 2-6 2-8 3-0 3-5 4-0 4-5 5-0 5-5 6-0 6-5 7-0 8-0 9-0 10-0 11-0 12-0 13-0	65 78 92 106 116 - helicoid	144 77-1 54-6 43-4		
Zuiko Macro 1:1 80mm F4	Normal	∞ 360 180 120 90 72 60 51.4 45 40 36 30 25.7 22.5 20 18 16.4 15 13.8 12.9 12 10.3 9 8 7.2 6.5 6 5.5 5.1 4.8 4 3.6 3.3 3.0 2.7	0-1 0-2 0-3 0-4 0-5 0-6 0-7 0-8 0-9 1-0 1-2 1-4 1-6 1-8 2-0 2-2 2-4 2-6 2-8 3-0 3-5 4-0 4-5 5-0 5-5 6-0 6-5 7-0 8-0 9-0 10-0 11-0 12-0 13-0	65 69 77 85 93 101 109 116 - helicoid	20-4 17-7 15-8 14-4 13-3 12-4 11-4		
Zuiko Macro 1:1 80mm F4 + Close-Up Lens 80mm	Normal	∞ 360 180 120 90 72 60 51.4 45 40 36 30 25.7 22.5 20 18 16.4 15 13.8 12.9 12 10.3 9 8 7.2 6.5 6 5.5 5.1 4.8 4 3.6 3.3 3.0 2.7	0-1 0-2 0-3 0-4 0-5 0-6 0-7 0-8 0-9 1-0 1-2 1-4 1-6 1-8 2-0 2-2 2-4 2-6 2-8 3-0 3-5 4-0 4-5 5-0 5-5 6-0 6-5 7-0 8-0 9-0 10-0 11-0 12-0 13-0	65 74-8 87 100 112 116 - helicoid	86 79 71 66 62 59		
Zuiko Macro 38mm F2.8	Normal	∞ 360 180 120 90 72 60 51.4 45 40 36 30 25.7 22.5 20 18 16.4 15 13.8 12.9 12 10.3 9 8 7.2 6.5 6 5.5 5.1 4.8 4 3.6 3.3 3.0 2.7	0-1 0-2 0-3 0-4 0-5 0-6 0-7 0-8 0-9 1-0 1-2 1-4 1-6 1-8 2-0 2-2 2-4 2-6 2-8 3-0 3-5 4-0 4-5 5-0 5-5 6-0 6-5 7-0 8-0 9-0 10-0 11-0 12-0 13-0	65 81 100 116 - helicoid	4-2 4-0 3-9 3-8		
Zuiko Macro 20mm F2	Normal	∞ 360 180 120 90 72 60 51.4 45 40 36 30 25.7 22.5 20 18 16.4 15 13.8 12.9 12 10.3 9 8 7.2 6.5 6 5.5 5.1 4.8 4 3.6 3.3 3.0 2.7	0-1 0-2 0-3 0-4 0-5 0-6 0-7 0-8 0-9 1-0 1-2 1-4 1-6 1-8 2-0 2-2 2-4 2-6 2-8 3-0 3-5 4-0 4-5 5-0 5-5 6-0 6-5 7-0 8-0 9-0 10-0 11-0 12-0 13-0	65 70 90 110 116 - helicoid	1-9 1-9 1-9 1-8		

5) Longueur de tube-allonge (mm) / Länge des Auto Zwischenring (mm) / Longitud de Tubo Extensión (mm)

With Auto Extension Tube 14 (25)/avec Tube-allonge 14 (25)/mit Auto Zwischenring 14 (25)/con Tubo Extensión Automático 14 (25)

Lens	Lens Position	Subject Area ¹⁾ Covered (mm)	Magnification ²⁾	Tube length ⁵⁾ (mm)		Distance from lens ⁴⁾ to subject (cm)	
				Tube length ⁵⁾ (mm)	Distance from lens ⁴⁾ to subject (cm)		
Zuiko Macro 38mm F2.8	Normal	∞ 360 180 120 90 72 60 51.4 45 40 36 30 25.7 22.5 20 18 16.4 15 13.8 12.9 12 10.3 9 8 7.2 6.5 6 5.5 5.1 4.8 4 3.6 3.3 3.0 2.7	0-1 0-2 0-3 0-4 0-5 0-6 0-7 0-8 0-9 1-0 1-2 1-4 1-6 1-8 2-0 2-2 2-4 2-6 2-8 3-0 3-5 4-0 4-5 5-0 5-5 6-0 6-5 7-0 8-0 9-0 10-0 11-0 12-0 13-0	14 14 - helicoid	5-1 5-0		
Zuiko Macro 20mm F2	Normal	∞ 360 180 120 90 72 60 51.4 45 40 36 30 25.7 22.5 20 18 16.4 15 13.8 12.9 12 10.3 9 8 7.2 6.5 6 5.5 5.1 4.8 4 3.6 3.3 3.0 2.7	0-1 0-2 0-3 0-4 0-5 0-6 0-7 0-8 0-9 1-0 1-2 1-4 1-6 1-8 2-0 2-2 2-4 2-6 2-8 3-0 3-5 4-0 4-5 5-0 5-5 6-0 6-5 7-0 8-0 9-0 10-0 11-0 12-0 13-0	14 14 - helicoid	2-1 2-1		
Zuiko Macro 20mm F2	Normal	∞ 360 180 120 90 72 60 51.4 45 40 36 30 25.7 22.5 20 18 16.4 15 13.8 12.9 12 10.3 9 8 7.2 6.5 6 5.5 5.1 4.8 4 3.6 3.3 3.0 2.7	0-1 0-2 0-3 0-4 0-5 0-6 0-7 0-8 0-9 1-0 1-2 1-4 1-6 1-8 2-0 2-2 2-4 2-6 2-8 3-0 3-5 4-0 4-5 5-0 5-5 6-0 6-5 7-0 8-0 9-0 10-0 11-0 12-0 13-0	25 25 - helicoid	2-0 2-0		

Optimum lens application range (with helicoid retracted) / La meilleure utilisation (avec le objectif rétracté) / Optimal Anwendungsbereich (mit eingefahrenem Schneckengang) / Los usos óptimos (con el objetivo comprimida)