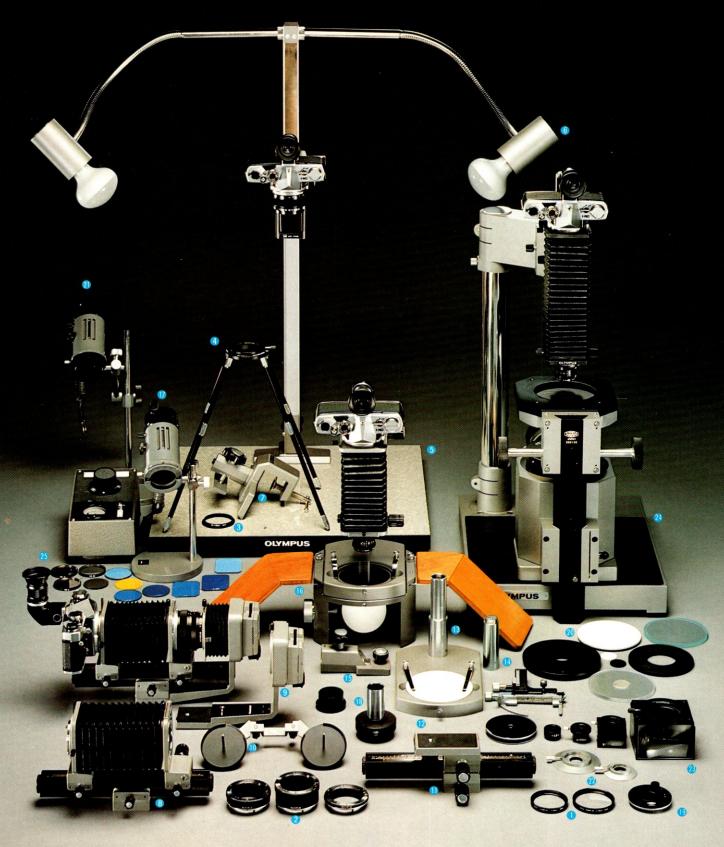
MACROPHOTO GROUP



- Macrophoto Stand VST-1 Macrophoto Stand Extension Bar VST-E Macrophoto Stand B Adapter Trans-Illuminator Base X-DE
- 17 Trans-Illuminator LSD 18 Adapter PM-EA 19 Objective Lens Mount PM-MTob 20 Stage Glasses/Stage Plates 21 Epi-Illuminator PM-LSD2
- Lieberkuhn Reflectors PM-LM 20/PM-LM 38 Incident Illuminator Mirror Housings PM-EL 80/PM-EL 38/PM-EL 20
- 2 Macrophotographic Equipment PMT-35 2 Filters





 They are auxiliary lenses to screw into standard OM System lenses for close-up work.

Main Characteristics

- With the close-up lenses, the minimum focusing distance of the standard lenses can be reduced from 45cm to 19cm, at which distance the subject area will be 12 ×8cm.
- These close-up lenses permit the automatic diaphragm operation of the standard lenses to facilitate a bright image observation through the fully-opened aperture and exposure adjustment.

Notes · Related Units

- The respective diameters of these filter mounting threads are 49mm and 55mm.
 Make a choice between them that accepts a filter in use.
- Since the depth of field is extremely small in close-up photography, the lens aperture should be stopped down between F8 and F11 to obtain sharp image definition.
- Recommended to use a focusing stage, tripod and shutter release cable to eliminate any vibration that may affect a picture.

CLOSE-UP LENSES 49^{mm}f=40^{cm}/55^{mm}f=40^{cm}

Close-up Lens 49mm f=40cm

• Threaded Ring
The thread diameter is 49mm.
A filter or one more close-up lens of the same diameter can be screwed.



Close-up Lens 55mm f = 40cm



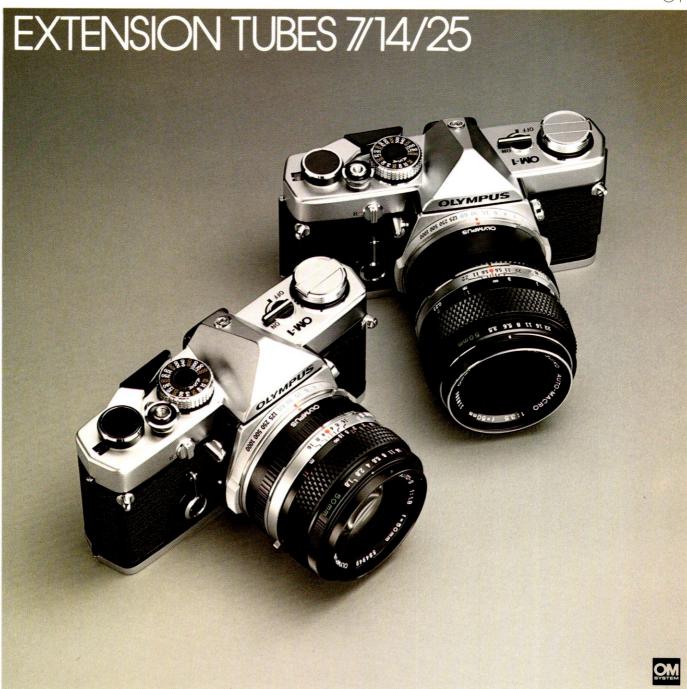
Actual size

TABLE OF CLOSE-UP RANGES

Lens	Covering Area Magnification			120×180 $120 \times 7\frac{3}{32}$		60×90 (2 ²³ / ₆₄ ×3 ³⁵ / ₆₄)		40×60 $\frac{3}{4}$) $(1\frac{37}{64} \times 2\frac{23}{64})$
	Number of Close-up Lenses	0.	1	0.2	0.3	0.4	0.5	0.6
50mm F1.8	1	40.2(1	553) •		▶ 19.3 (7½)			
	2			$20.2(7\frac{61}{64})$	«	13.0 (5	(4)	
50mm F1.4	1	40.2 (15	3)		▶ 19.3(7 18)			
	2			20.2 (764)		13.0(5	1/8)	
55mm F1.2	1	40.2(1	5器)	4	18.9	$(7\frac{7}{16})$		
	2			20.1(7§	<u> </u>	12.8	(5 ³ / ₆₄)	

Numbers printed at both ends of each arrow indicate distances in cm (inches) between lens and subject. Halftone area indicates magnification ranges of standard lenses without close-up lens.





 These tubes are used as adapters to mount OM System lenses on the OM bodies to take close-ups.

Main Characteristics

- The respective lengths of these tubes are 7mm, 14mm and 25mm, which make seven different lengths by single or combined uses.
- They can be mounted on the camera body by bayonet mounting as in case with the standard lenses.
- If all of these three tubes are used in conjunction with the 50mm F1.8, it is possible to achieve a life size magnification or 2.3 × 3.4cm with a lens-to-subject distance 6.8cm.
- The 25mm extension tube can be used to extend the magnification range of the Zuiko Macro Lens 50mm to 1/2 and 1/1 (life size).

For life-size pictures, however, most recommended is the 1:1 Macro 80mm F4.

Notes · Related Units

- The depth of field is extremely small in close-up work. Therefore, not only correct focus but also a small aperture such as F8 or F11 are recommended.
- Even a smallest movement of the camera affects pictures especially when enlarged to great extent. To avoid this, make it a point to use a focusing stage, tripod and cable release whenever available.
- Exposure is adjusted by stopping down the lens aperture, but focusing is easier at the full aperture.

OLYMPUS

EXTENSION TUBES 7/14/25

Extension Tube 7

Extension Tube 14

Extension Tube 25



Lens Mounting Ring

Accepts the camera lens or extension tube

Meter Coupling

Connects to the exposure meter built in the DM body for stopping down measurement.

Release Button

To remove the tube from camera, press this button and rotate the tube counter-clockwise by 70° in the same manner as with the lens. To mount the tube do not apply pressure to the release button during the mounting procedure.

TABLE OF CLOSE-UP RANGES

Actual size

OLYMPUS

	Causais a Assa		SUSPECTIVE SERVICES		TDLL C						58/30 / S 20/30 (1974)					<i></i>
Lens	Covering Area	mm	120×180		50×90		40×60		30×45		24×36		20×30		17.1×25.1	
	Magnification \	(inch)	$(4\frac{23}{32} \times 7\frac{3}{32})$	(2)	器×3器)	($(1\frac{37}{64} \times 2\frac{23}{64})$)	$(1\frac{3}{16} \times 1\frac{4!}{6!})$	()	$(\frac{15}{16} \times 1\frac{27}{64})$) ($(\frac{35}{32} \times 1\frac{3}{16})$	($\frac{43}{64} \times 1^{\frac{1}{64}}$	1
	Extension Tube	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5
Std. 50mm - F1.8 -	7	39.1(15壽		20.0(7	(종)											
	14		20.5(81/16)		1	4.1(5%	54)									
	7+14			14.3(5 5)		110 (421)									
	25				12.4(4 7/8)		1	0.0 (38	2)							
	7+25					10.	$1(3\frac{31}{32})$	LA KE	▶ 8.5 (3)	11 32)						
	14+25						8	3.6(3餐			7.5 (261)					
	7+14+25								7.6(2	2 63 €		6.8 (243))			
Std. 50mm F 1.4 7 2 7 1	7	38.1(15)		19.1(7	33 64)											
	14		19.5(743)		13.1	$(5\frac{5}{32})$										
	7+14			13.3 (5 d	5 (4)		10.1(331)									
	25				114(431)			9.0 (3종	1)							
	7+25					9.	1(337)		▶ 7.5 (21	5)						
	14+25							7.6(2鬃)		6.5 (2器)					
	7+14+25								6.5(2	(16) ◀	5.8	$(2\frac{9}{32})$				
Std. 50mm F 1.2	7 4	43.8(17-1)		16.9(6	543)											
	14		21.9(8 \frac{5}{8})		-	$(5\frac{5}{16})$										
	7+14			14.6(5 3)		10.3 (4-1/6)									
	25			12	24(4-7/8)			(3-5)								
	7+25					9.7(3	13) 43		7.6 (2 ⁶³ ₆₄)							
	14+25						7.9(3			6.5 (2 35)					
	7+14+25								5.7(2 41) ◀		5.6	$(2\frac{13}{64})$				
Macro 50mm F 3.5	25				11.8 (441)							2 ³⁵ ₆₄)				

Halftone area indicates magnification ranges of standard lenses without close-up lens.

Numbers printed at both ends of each arrow indicate distances in cm (inches) between lens and subject.





 The Auto Bellows is placed between the OM body and taking lens to adjust the distance between them for close-up and macrophotography.

Main Characteristics

- The aperture iris diaphragm built into the bellows can be stopped down to the preselected aperture by the use of the Double Cable Release simultaneously with the shutter release.
- A simple lever operation makes it possible for the photographer to view the subject prior to taking the picture through the aperture diaphragm fully opened or stopped down as desired without exposure.
- This unit incorporates a removable lens mount board which requires no adapter to reverse the lens.

Notes · Related Units

- In most cases accurate focus and lens apertures smaller than F8 are necessary for fine macrophotographs because of the extremely small depth of field.
- Use of a tripod or Macrophoto Stand VST-1 is recommended to steady the Auto Bellows for the slow shutter speeds that are often required in macrophotography.
- Move the preset lever to the vertical position to stop down the aperture for exposure reading.
- Focusing Screens recommended for the Auto Bellows are 1-4, 1-10, 1-11 and 1-12.

M AUTO BELLOWS Clamping Screw This screw clamps the lens mount

board to the bellows. Lens Mount -Directly accepts OM System lenses

except the Macro lenses 38mm F3.5 or 20mm F3.5 which must be mounted via the Objective Lens Mount PM-MTob.

 Lens Mount Board -To reverse the lens mounted on the Auto Bellows:

By loosening the bellows clamping screw and front rail screw, remove the lens and the lens mount board together from the rail. Remount the lens on the rail so that the lens faces the bellows.

• Focusing Rail -

This is a sturdy dovetail type rail to assure steady, smooth movement of the OM body for accurate focus.

• Front Rail Screw

mount board.

• Scale

The scale engraved on the rail is graduated in increments of 5mm over a total range of 180mm.

Magnification Scale

The magnification indexes are engraved on the rail surface for use with the slide copier. The front of the lens mount board should be aligned to the orange-white line, and the camera body mount can be adjusted according to the lens position. 1X and 1.5X magnifications are graduated for the 1:1 Macro 80mm and Macro 50mm Connecting Plate

This plate connects the bellows to the lens mount board. When the lens is reversed, it connects the bellows to the lens hood.

Bellows

As screwed into the front of the rail, it prevents the lens mount board from running off the rail. Removable to reverse the lens

Lens Shift Knob-

Actual size

The distance between the lens and camera body can be adjusted by rotating this knob after loosening the rail clamping knob.

Preset Lever

By this lever operation, the aperture diaphragm can be stopped down or opened fully for convenience of focusing and exposure adjustment.

Focusing Knob-

After completing the magnification adjustment, bring the subject into focus by means of this knob.

Camera Shift Knob

By rotating this knob, adjust the length of the bellows. Prior to rotating the camera shift knob, the camera clamping knob (located on the opposite side to the shift knob) must be loosened.

Focusing Tripod Block

Provided with two tripod sockets at the lower surface of the block. Screw the tripod into one of the sockets as required, taking into consideration the weight with camera and lens, bellows extension required, focallength of lens, etc.

Camera Body Mount -

Loosen the camera mount clamping screw on the bellows and remove the camera body mount. Attach the camera body mount to the OM body in the same manner as you would attach a standard lens.

• Camera Body Release Lever —

Back Rail Screw

SPECIFICATIONS

Camera: OM Bodies.

Prevents the camera body mount

Lens mount: OM-Mount bayonet (rotation angle 70°)

F3.5, Standard 50mm F1.8, 50mm F1.4, 55mm F1.2)

56-218mm ($2\frac{3}{16} - 8\frac{9}{16}$) (lens in reversed position)

Graduated focusing rail is 180mm (7¹/₁₆") long.

Bellows extension range: 36-198mm $(1\frac{3}{8}-7\frac{3}{4}")$ (lens in normal position)

Focusing: Adjustable by focusing knob on the focusing stage with locking device.

Automatic stop-down exposure: Diaphragm linked with shutter by means of the

Lenses: 1:1 Macro 80mm F4, Macro 38mm F3.5, Macro 20mm F3.5 (Macro 50mm

board from running off the rail.

double cable release.

Functions in the same way as the lens release button of any OM System

Camera Body Mount Board

Camera Mount Clamping Screw

 Shutter Release Socket When using the standard lenses or Macro 50mm F3.5 in conjunction with

the Auto Bellows, automatic stop-

down exposure can be obtained by

using the double cable release. To

ensure proper stop-down exposure,

the double cable release must be

correctly adjusted to stop down the

aperture diaphragm immediately

 Camera Clamping Knob After the subject is sharply focused at the magnification desired, clamp the lens and camera body on the rail with their respective shift knobs, then tighten the camera clamping knob.

Rail Clamping Knob-

Actual size

Preset lever: Stop down of diaphragm to preset aperture for previewing depth of field.

Lens reverse mounting: Lens and camera mount boards are detachable, for convenient reversal of the lens

Tripod mounting socket: Two sockets provided for mounting on a tripod or on the Macrophoto Stand B Adapter

Focusing stage: After removal of the bellows, the focusing rail is mountable on the focusing stage.

before exposure.

Dimensions: $74 \times 132 \times 240 \text{mm} \left(2\frac{15}{16} \times 5\frac{3}{16} \times 9\frac{3}{8}\right)$

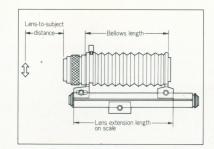
Weight: 930g. (32 3/4 oz.)

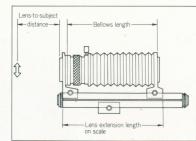
OLYMPUS

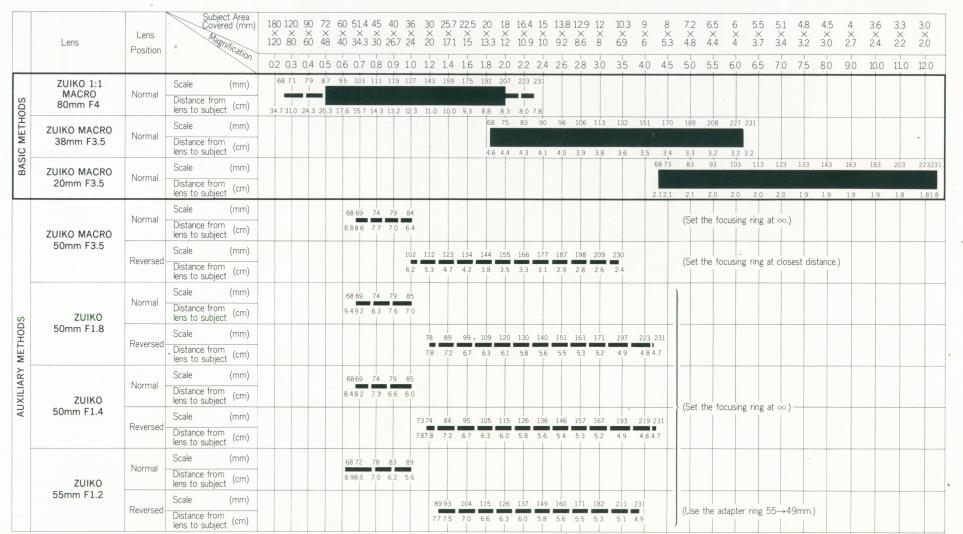
INDICATION OF LENS EXTENSION DISTANCE

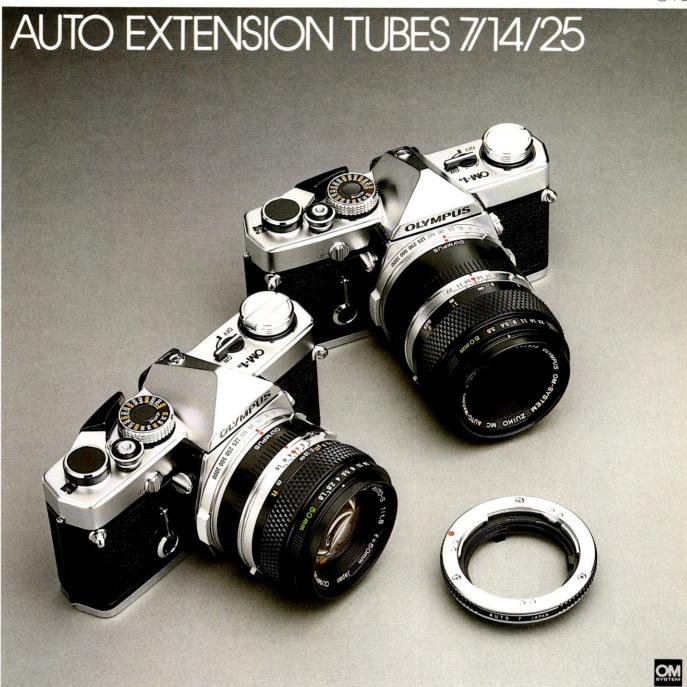
The scale engraved on the rail surface indicates the lens extension length. The left side picture shows the normal lens position and the right side one shows the lens reversed.

The reference table below indicates the lens extension length in mm and the distance from lens front end to subject in cm









- These tubes are used as adapters to mount OM System lenses on the OM bodies to take close-ups.
- Each tube incorporates a coupling lever to automatically stop down the lens diaphragm to the preset aperture at the exposure.

Main Characteristics

- The respective lengths of these tubes are 7mm, 14mm and 25mm, which make seven different lengths by single or combined uses.
- They can be mounted on the camera body by bayonet mounting as in case with the standard lenses.
- If all of these three tubes are used in conjunction with the 50mm F1.8, it is possible to achieve a life size magnification or 2.3 × 3.4cm with a lens-to-subject distance 6.8cm.
- ◆ The 25mm extension tube can be used to extend the magnification range of the Zuiko Macro Lens 50mm to 1/2 and 1/1 (life size).

For life-size pictures, however, most recommended is the 1:1 Macro 80mm F4.

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Notes · Related Units

- The depth of field is extremely small in close-up work. Therefore, not only correct focus but also a small aperture such as F8 or F11 are recommended.
- Even a smallest movement of the camera affects pictures especially when enlarged to great extent. To avoid this, make it a point to use a focusing stage, tripod and cable release whenever available.

Auto Extension Tube 7 Stock NO. 104-013 Auto Extension Tube 14 Stock NO. 104-014 Auto Extension Tube 25 Stock NO. 104-015

AUTO EXTENSION TUBES 7/14/25

Auto Extension Tube 7

Auto Extension Tube 14

Auto Extension Tube 25

OLYMPUS Meter Coupling Connects to the exposure meter built in the OM body for stopping down measurement. OLYMPUS Coupling Lever Links up with the automatic lever of the lens.

Release Button

To remove the tube from camera, press this button and rotate the tube counter-clockwise by 70° in the same manner as with the lens. To mount the tube do not apply pressure to the release button during the mounting procedure.

OLYMPUS

Actual size

TABLE OF CLOSE-UP RANGES

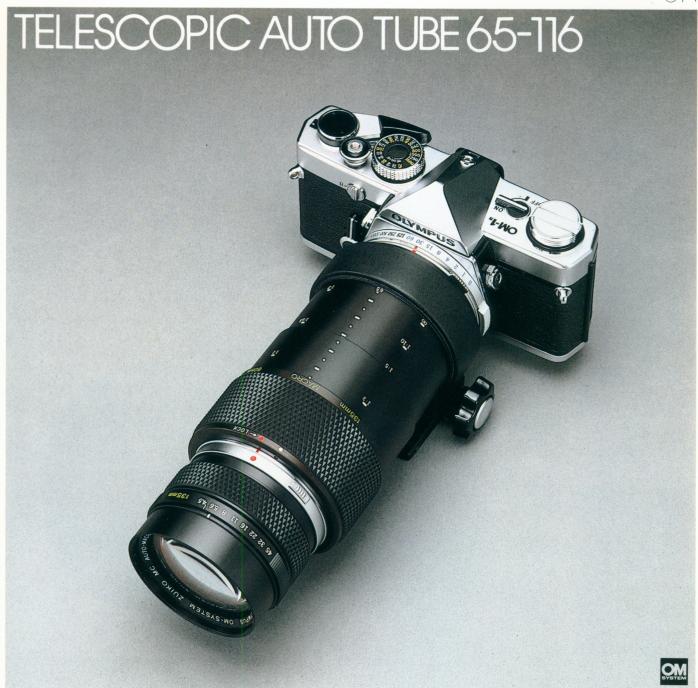
mm 360×240 180×120 120×80 72×48 60×40 51.4×34.3 45×30 40×26.4 36×24 327×21.8 30×20 27.7×18.5 25.7×17.1 24×16 Covering Area Lens Magnification (inch) 14.2×9.4 7.1×4.7 4.7×3.1 3.5×2.4 2.8×1.9 1.8×1.2 Tubes 0.1 0.2 0.3 0.5 0.8 0.9 1.0 1.2 1.3 1.4 1.5 0.4 0.6 0.7 1.1 39.1(1.5) 20.0(0.8) 14 20.5(0.8) 14.1(0.6) 7 + 1414.3(0.6) 11.0(0.4) Std. 50mm 12.4(0.5) F1.8 7 + 2510.1(0.4) 14 + 258.6(0.3) 7 + 14 + 257.6(0.3 6.8(0.3) 34.1(1.3) 19.1(0.8) 14 19.5(0.8) 13.1(0.5) 7 + 1413.3(0.5) 10.1(0.4) Std. 50mm 11.4(0.4) 9.0(0.4) F1.4 7 + 259.1(0.4) 14 + 257.6(0.3) 65/03 7 + 14 + 256.5(0.3) 5.8(0.2) 43.8(1.7) 16.9(0.7) 21.9(0.9) 14 13.5(0.5 7 + 1414.6(0.6) 10.3(0.4) Std. 55mm 25 12.4(0.5) 9.2(0.4) F1.2 7 + 259.7(0.4) 14 + 257 + 14 + 25Macro 50mm 8.8(0.3) F3.5

Numbers printed at both ends of each bar indicate distances in mm (inches) between lens and subject.

Light blue area indicates magnification ranges of standard lenses without extension tubes.

You can obtain optimum resolution at $0.5 \times$ magnification when the Macro 50mm F3.5 lens is used with the auto extension tube 25.





 This unique Telescopic Auto Tube functions as a portable bellows for outstanding versatility and convenience in outdoor macrophotography, medical close-up photography, etc.

Main Characteristics

- It telescopes in a direct outward motion, minimizing the risk of frightening animal or insect subjects.
- It allows automatic aperturing (with the Zuiko MC Macro 135mm F4.5 and 1:1 Macro 80mm F4, 50mm F3.5 and other 50mm~200mm OM system lenses).
- Magnifications can be continuously changed between infinity and 0.43X for the Auto Macro 135mm. With the Telescopic Auto Tube, this lens can also be used for telephotography at infinity as an ordinary 135 mm telephoto lens.
- The 80mm F4 macro lens has a magnification range with the Auto Tube from 0.5X to 1.2x which can be further extended to 1X-2X in conjunction with the close-up lens 80mm macro.

OLYMPUS

Notes · Related Units

- In close-up photography the depth of field is so small that pinpoint focusing and lens apertures of F8 or smaller are needed for good results.
- When a tripod is used, make sure to connect the tripod to the Auto Tube.
- The Auto Tube can be used either for vertical or horizontal formats.
- In conjunction with a T10 Ring Flash 1, the Auto Tube permits flash photography of extremely close-up subjects.
- This unit can be used with any OM lenses between 50mm and 200mm.
- This unit should be used after locking the Auto Tube extension.
- Focusing screens 1-4, 1-10, 1-11 and 1-12 are recommended for use with the Auto Tube.
- Do not use two Auto Tubes or more simultaneously or an Auto Tube in conjunction with extension rings.

Stock number (s) shown on next page



Actual size

Main Specifications

Camera: OM bodies.

Lens mount: OM Mount bayonet type (rotation angle 70°).

Lenses: OM System lenses between 50mm and 200mm.

Extension range: 65mm to 116mm (2.6" to 4.6").

Focusing: Directly outward telescoping motion with lock at any position (locking rotation angle 15*).

Automatic aperture control: Bayonet mount for interlocking with lens diaphragm and meter coupling lever for automatic stop down control and exposure metering.

Tripod mount: Accepts any tripod, allowing photography at any angle.

Magnification indication: For automatic aperturing with Zuiko MC Auto Macro 135mm and MC Auto-1:1 Macro 80mm lenses; with scale from 65mm to 115mm in 5mm increments.

Tubes are extended all the way up to 116mm.

Photographic ranges: ∞ to 0.43 \times ... Zuiko MC Macro 135mm F4.5

0.5×to 1.2×···Zuiko MC 1:1 Macro 80mm F4

 $1 \times$ to $2 \times \cdots$ Zuiko MC 1:1 Macro 80mm F4 + Close-up lens 80mm Macro.

Dimensions and weight: 70mm diam. \times 65mm(2.8°diam. \times 2.6°), 325g(11.5 oz.) Tripod mount: 100g(3.5 oz.)

OLYMPUS

Body Mount Ring

TELESCOPIC AUTO TUBE 65-116

• Slide Ring-

Rotate the slide ring in the direction of the arrow to lock, and reverse to unlock and adjust the extension until the desired magnification is obtained. The extension ring (A) should be extended after the ring (B) is fully extended only when necessary.

Lock Index



• Lens Mount -

Accepts any OM lenses between 50mm and 200mm.

Tripod Mount—

Rotatable through 360° so that the camera can be set at any angle. This mount can be removed from the Auto Tube, for more convenient handheld photography.

Clamping Screw-

Loosen this screw to turn the Auto Tube for vertical or horizontal position.

Tripod Socket

Actual size

