

### ■ Measuring Magnifier, 7x



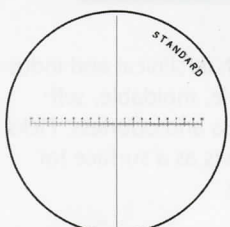
*simplicity, accuracy, economic in cost*

Coated achromatic lenses comprised of 3 elements and 2 groups. With metric scale 20mm long, having 0.1mm divisions or inch scale 0.8" long, having 0.005" divisions. Focusing ring. Objective lens: 19mm. With case, lens cap and cloth.

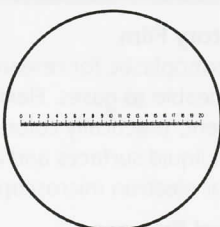
Field of view: 24mm; Eyepiece: 18mm; Scale diameter: 26mm

Diameter: 36mm; Height: 44mm

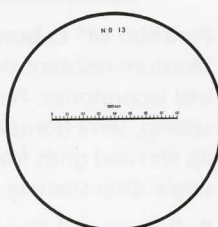
Weight: 56g.



Standard Metric Scale  
Comes with Metric Magnifiers  
0 to ±10mm



Reticle No. 8, Metric Scale  
0 to 20mm, 75318



Reticle No. 13, Inch Scale  
0 to .8", 75346

**751** Measuring Magnifier, 7x,  
w/Standard **Metric** Scale .....each

**75120** Measuring Magnifier, 7x,  
with **Inch** Scale .....each

#### Optional Scales for 7x Magnifier

**75318** **Metric** Scale for Measuring Magnifier,  
7x (751), Reticle No. 8, 26mm .....each

**75346** **Inch** Scale for Measuring Magnifier,  
7x (75120), Reticle No. 13, 26mm .....each

**751-1W** **Metric** Scale for Measuring Magnifier,  
7x, Standard Scale, White Line, 26mm .....each

**751-1R** **Metric** Scale for Measuring Magnifier,  
7x, Standard Scale, Red Line, 26mm .....each

### ■ Measuring Magnifier, 10x

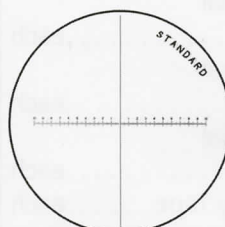


Fine quality, coated achromatic lenses, (4 elements, 2 groups), precision made. Objects are easily visualized and accurately measured. High resolving power and wide visual field. With metric scale 20mm long, having 0.1mm divisions or inch scale 0.8" long, having 0.005" divisions. With case, lens cap and cloth.

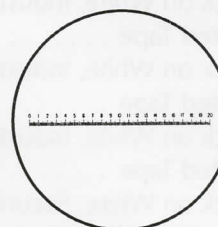
Field of view: 28mm; Eyepiece: 20mm; Scale diameter: 35mm.

Diameter: 46mm; Height: 44mm

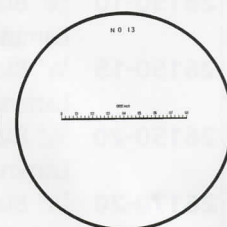
Weight: 74g.



Standard Metric Scale  
Comes with Metric Magnifiers  
0 to ±10mm



Reticle No. 8, Metric Scale  
0 to 20mm, 75338



Reticle No. 13, Inch Scale  
0 to .8", 75348

**752** Measuring Magnifier, 10x ,  
w/Standard **Metric** Scale .....each

**75220** Measuring Magnifier, 10x,  
with **Inch** Scale .....each

#### Optional Scales for 10x Magnifier

**75338** **Metric** Scale for Measuring Magnifier,  
10x (752), Reticle No. 8, 35mm .....each

**75348** **Inch** Scale for Measuring Magnifier,  
10x (75220), Reticle No. 13, 35mm .....each

### ■ Measuring Magnifier, 7x Set



Included are the 751 Magnifier, 7x, and five of the most widely used reticles (No's. 2, 3, 7, 8 and 10). They are housed in a handy, cushioned plastic box.

*Reticles pp 000-000*

**751-2** Measuring Magnifier, 7x Set .....each

### ■ Measuring Magnifier, 10x Set



Included are the 752 Magnifier, 10x, and five of the most widely used reticles (No's. 2, 3, 7, 8 and 10). They are housed in a handy, cushioned plastic box.

*Reticles pp 000-000*

**752-2** Measuring Magnifier, 10x Set .....each



## ■ Measuring Magnifier, 15x



A wide-field magnifying glass of 15x magnifying power, combined with a graduated measuring scale. Similar to the 7x and 10x Scale Magnifiers. However, to allow the sharp observation of the entire field of a 14mm diameter object magnified 15 times, the magnifier has been designed to correct almost perfectly the curvature of field and the lateral chromatic aberration by a combination of 4 lenses in 3 groups. Provided with metric scale 20mm long, with 0.1mm divisions or with inch scale, 0.5" long with 0.005" divisions. With case, lens cap and cloth.

nation of 4 lenses in 3 groups. Provided with metric scale 20mm long, with 0.1mm divisions or with inch scale, 0.5" long with 0.005" divisions. With case, lens cap and cloth.

### Metric

**753** Measuring Magnifier, 15x, with mm scale . . .each

**75358** Metric Scale for 15x . . . . .each

### Inch

**75260** Measuring Magnifier, 15x, with inch scale . . .each

**75360** Inch Scale for 15x . . . . .each



## ■ Mini Comparator, 7x

Economical measuring magnifier, light-weight and convenient to carry. Doublet type achromatic lens with sharp and clear resolving power. Adjustable focus, photo-engraved scale. Effective diameter is 25mm. Diameter: 29mm. Height: 46mm. Weight: 25g. Scale 20mm, in 0.1mm divisions.

**749** Mini Comparator, 7x . . . . .each

## ■ Measuring Magnifier, 30x

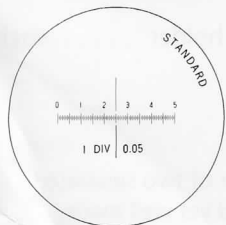
*high magnification, upright image*



This adjustable focus 30x Magnifier has 4 elements in 2 groups of lenses, and has upright image visualization. The scale is 5mm long with major divisions every millimeter and minor divisions every 0.05mm. Magnifier with case, lens cap and cloth. Inch scale not available for this product.

Diameter: 30mm.; Height: 19mm.; Weight: 16g.; Effective aperture is 7mm.

**754** Measuring Magnifier, 30x, w/metric scale . . . . .each



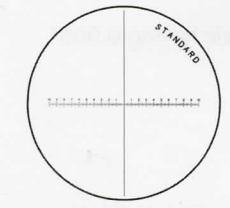
## ■ Measuring Magnifier, 7x and 10x, Flashlight Type

*allows for increased illumination while blocking outside light interference.*

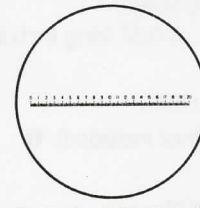
Fine quality, coated achromatic lenses, (4 elements, 2 groups), precision made. High resolving power and wide visual field. Provided with a 20mm long metric scale having 0.1mm divisions, or a 0.8" long inch scale having 0.005" divisions. With case, lens cap and cloth.

The Light Scale Loupe 10x consists of the magnifier, holder device and flashlight, enclosed in an attractive case. Metric scale good to 0.1mm.

- Scale Diameters: 10x = 35mm, 7x = 26mm)
- Overall size is 47 OD x 45 x 185mm (1.8 OD x 1.8 x 7.3")
- Net weight: 134g (4.7 ounces) ex-batteries. Batteries (size C) not included.
- Standard Inch scale good to 0.005" available extra.



Standard Metric Scale  
Comes with Metric Magnifiers  
0 to ±10mm



Reticle No. 8, Metric Scale  
0 to 20mm



Reticle No. 13, Inch Scale  
0 to .8"

**741** Flashlight Measuring Magnifier, 7x, w/Standard Metric Scale . . . . .each

### Optional Scales for 7x Magnifier

**75318** Metric Scale for Measuring Magnifier, 7x (741), Reticle No. 8, 26mm . . . . .each

**75346** Inch Scale for Measuring Magnifier, 7x (741), Reticle No. 13, 26mm . . . . .each

**743** Flashlight Measuring Magnifier, 10x, w/Standard Metric Scale . . . . .each

### Optional Scales for 10x Magnifier

**75338** Metric Scale for Measuring Magnifier, 10x (743), Reticle No. 8, 26mm . . . . .each

**75348** Inch Scale for Measuring Magnifier, 10x (743), Reticle No. 13, 26mm . . . . .each

## ■ Magnifier, 10x, Flashlight Type



*simple magnifier with increased light for clear image in a new modern flashlight case*

An improved model of the 10x fixed focus magnifier, widely used because of its magnification. Field of view: 28mm. Overall size: 36mm OD x 41 x 175mm. Net weight: 81g (2.8 ounces) ex batteries. Batteries (2 ea size C) not Included.

**741** Illuminated Magnifier, 10x . . . . .each



# MAGNIFIERS

## Measuring Flashlight Type; Zoom; Economy

### ■ Magnifier, 15x with Penlight

*small device adds light to improve illumination*



A wide-field magnifying glass of 15x magnifying power, combined with a graduated measuring scale. Similar to the 7x and 10x Scale Magnifiers. However, to allow the

sharp observation of the entire field of a 14mm diameter object magnified 15 times, the magnifier has been designed to correct almost perfectly the curvature of field and the lateral chromatic aberration by a combination of 4 lenses in 3 groups. Provided with a 20mm long metric scale having 0.1mm divisions. A 0.5" long Inch scale having 0.005" divisions is available.

With case, lens cap and cloth.

Requires 2 AA batteries (not included). ⓘ

- Field of view: 20mm
- Effective aperture: 13mm
- Size: 43 OD x 65 x 184mm (1.7 OD x 2.6 x 7.2")

see all reticles available at the end of the Magnifiers section.

**753-1** Penlight Measuring Magnifier, 15x,  
w/Standard Metric Scale .....each

**Optional Scales for 15x Magnifier, see pictures on previous page.**

**75358** Metric Scale for Measuring Magnifier,  
15x (753-1), Reticle No. 8 .....each

**75360** Inch Scale for Measuring Magnifier, 15x,  
(753-1), Reticle No. 13 .....each

### ■ Magnifier, 30x with Penlight

*illuminated, 30x Measuring Magnifier with 0.05mm Scale  
high magnification, upright image*



This adjustable focus 30x Magnifier has 4 elements in 2 groups of lenses, and has upright image visuali-

zation. The removable threaded glass scale is 5mm long with major divisions every millimeter and minor divisions every 0.05mm. The inch scale is not available for this product.

Diameter: 30mm; Height: 19mm; Weight: 16g; Effective aperture is 7mm.

Fitted with a penlight to improve lighting. Requires 2 AA batteries (not included). It has the same optical elements as our Product No. 754 non-illuminated magnifier. ⓘ

**756** Illuminated Measuring Magnifier, 30x  
with 0.05mm scale .....each

### ■ Zoom Magnifier

*an important optical advance in hand magnifiers  
furnished with one scale having both metric and inch scales*



This stepless hand magnifier has click stops (shown in a small window) at 8x, 10x, 12x, 14x, and 16x, to reach a known magnification. 8 lenses in 6 groups. The design maintains sufficient brightness at each magnification stage.

The black body, finished with aluminum precision machining similar to camera lenses, allows smooth zooming-in and zooming-out. Before starting an observation, move the adjustment ring at the bottom of the lens body

to select the optimum magnification in accordance with the purpose of the inspection. When completed, adjust the ring around the eyepiece so that the scale will be clearly visible. **The zooming mechanism changes magnification to allow for continuous observation.** With case, lens cap and cloth.

- Field of view: 10 to 20 mm
- Diopter ring adjustment: +2.5D to -5D
- Minimum scale division: 0.1mm or 0.005"
- Size: 45mm diameter x 65mm high
- Weight: 149 grams

**750** Zoom Magnifier, 8-16x, mm/inch scale .....each

**750-1** Replacement scale .....each

### ■ Zoom Magnifier 750 with Light Holder



*convenient light source for clearer observations*

Not only is light added to your picture but disturbing outside light is blocked.

It will help for smooth focusing and zooming. Overall size: 47mm OD x 45 x 185mm (1.8" OD x

1.78" x 7.3"). Net weight: 65g (2.3 ounces) ex-batteries. Batteries (2 ea. size C) not included.

**742** Zoom Magnifier 8-16x with light holder .....each

### ■ 10x Economy Magnifier



An all-purpose magnifier of two separated plastic lenses, low priced yet well made.

**75410** Magnifier 10x .....each

ⓘ = Tech Note on web page



## Pocket, Fixed Focus, Folding, Headband

### ■ Pocket Magnifiers, 7x, 10x, 14x



These Pocket Magnifiers have a sliding frame of black plastic that covers and protects both lens surfaces from dust and mechanical damage. The frame also acts as a gripping handle when in use. They are composed of a

bi-convex lens with strong curvatures of crown glass and 2 negative meniscus lenses of flint glass. A carrying case is provided.

7x: Effective aperture, 16mm, 39 x 24 x 22mm; 22g

10x: Effective aperture, 15.5mm, 39 x 24 x 22mm; 19g

14x: Effective aperture, 12mm, 39 x 24 x 22mm; 18g

**75907** Pocket Magnifier, 7x .....each

**75910** Pocket Magnifier, 10x .....each

**75914** Pocket Magnifier, 14x .....each

### ■ Fixed Focus Magnifiers



*light from 360°*

A series of simple magnifiers, very handy for EM, microelectronics, and other purposes. A plastic tube allows light to enter from the outside, helping

to illuminate the subject. No focal adjustment is required; simply set the fixed focus magnifier on the object. As magnification is increased, the optical complexity increases. The 15x model has 3 elements, while the 22x model has 3-component, 4-element construction.

**754-5** Magnifier, 5x .....each

**754-10** Magnifier, 10x .....each

**754-15** Magnifier, 15x .....each

**754-22** Magnifier, 22x .....each

### ■ Folding Magnifier, 3x



Widely used as a portable magnifier because of its folding design. 3x magnification with a base opening which is 1" square and marked every 1/8" on 2 sides and every millimeter on the other two sides. Sides are visible through the magnifier for measuring purposes. Black anodized aluminum.

**75460** Folding Magnifier, 3x .....each

### ■ Mark II Magni-Focuser Headband Magnifier

*adjustable headband; flip-up magnifier*



Exclusive single clear-view lens without centerpost, which increases the viewing area about 20%. Shatter resistant optical lens for safety.

Lens size: 3-1/8" x 1-1/8" (79 x 29mm).

Prod. No.	Power	Focal Range
<b>7252</b>	1.75x	14" (36cm)
<b>7254</b>	2.25x	8" (20cm)
<b>7257</b>	2.75x	6" (15cm)

**7252** Magni-Focuser, 1.75x .....each

**7254** Magni-Focuser, 2.25x .....each

**7257** Magni-Focuser, 2.75x .....each

### ■ Light Weight Headband, Flip Up Magnifier



- Velcro-type adjustable, comfortable headband, easy flip up
- Extremely lightweight and sturdy construction
- Interchangeable lens plates, no tools required

- Lens plates separately available
- Large lens area
- Optical quality acrylic lenses with an abrasion resistant hard coating
- Swings out of way when not in use
- No tunnel vision; you can see your work area

Prod. No.	Power	Focal Range	Lens Plate
<b>744-3</b>	1.75x	14" (36cm)	No. 3
<b>744-5</b>	2.25x	8" (20cm)	No. 5
<b>744-7</b>	2.75x	6" (15cm)	No. 7

**744-3** Light Weight Headband Magnifier, No. 3, 1.75x, 14" focal range .....each

**744-5** Light Weight Headband Magnifier, No. 5, 2.25x, 8" focal range .....each

**744-7** Light Weight Headband Magnifier, No. 7, 2.75x, 6" focal range .....each

**744-10** Light Weight Headband Magnifier kit with 1.75x; 2.25x and 2.75x lens plates .....each

**744-13** Lens Plate No. 3 (1.75x) only .....each

**744-15** Lens Plate No. 5 (2.25x) only .....each

**744-17** Lens Plate No. 7 (2.75x) only .....each



# MAGNIFIERS

## Magnifying Glasses

### Economy Magnifying Glasses

A selection of quality magnifying glasses with a favorable price. Can be used in the lab, factory or at home where that extra magnification is needed to reveal fine details difficult to see with the unaided eye. Routine applications are forensics, printing, quality control, manufacturing, education and reading fine print.



### Round Magnifiers

The round magnifiers offer 2x, 2.25x and 3.5x magnification and are of solid construction with a glass lens, a metal rim and a plastic handle. Produce sharp images with minimal distortion.

**7401** Round Magnifier, 100mm glass lens, 2x . . . .each

**7402** Round Magnifier, 75mm glass lens, 2.25x . . . .each

**7403** Round Magnifier, 50mm glass lens, 3.5x . . . .each

### 3x and 6x, Dual Plastic Magnifier



The dual plastic magnifier offers 3x and 6x magnification and is ideal to carry in a tool kit, for field use and educational purposes.

Overall size is 50.8 x 115.8mm (2" x 4-9/16").

**7404** Dual Magnifier, 45 and 19mm plastic lens, 3x and 6x . . . . .each

### 2x Rectangular Magnifier



The rectangular magnifier with the glass lens has a 2x magnification and a plastic handle.

Lens size is 47.6 x 95.2mm (1-7/8" x 3-3/4").

**7407** Rectangular Magnifier, 50x100mm glass lens, 2x . . . . .each

### 2x Rectangular Folding Magnifier with 4x Power Inset



The rectangular 2x magnifier has a 4x inset area. It has a plastic lens, folding handle and comes with a vinyl case. This is the most popular magnifier for forensics and field use.

Lens size is 47.6 x 98.4mm (1-7/8" x 3-7/8").

**7408** Rectangular Dual Magnifier, 50x100mm plastic lens, 2x and 4x . . . . .each

### Magnifying Glass, High Quality



A classic magnifying glass giving a sharp image without chromatic effect. Double-glass lens; no vagueness throughout the entire image field. At the base of the lens frame is a red dot which should be kept upwards in use. Solid lens frame and rosewood handle. Lens faces are coated. Zippered storage pouch to cover and protect lens when not in use.

Use for microscopy preparation, viewing micrographs or general around the desk or home, in art, horticulture, photography, etc.

Prod. No.	Power	Lens dia.	Frame dia.	Length	Thick-ness	Weight
<b>75492</b>	4x	37mm	39mm	156mm	15mm	67g
<b>75491</b>	2x	54mm	56mm	175mm	20mm	117g
<b>75493</b>	1.3x	75mm	77mm	195mm	25mm	243g

**75492** 4x Magnifying Glass . . . . .each

**75491** 2x Magnifying Glass . . . . .each

**75493** 1.3x Magnifying Glass . . . . .each



### ■ Pocket Microscope

*a high quality, 100x or 25x microscope in your pocket!*



These quality, lightweight, Pocket Microscopes have sharp resolving power throughout their field of view, yet are designed to give a bright image. Image viewed is inverted. To focus, place the tip on the surface and directly above the subject to be examined, holding it

so that the notch at the tip of the plastic cylinder faces you and tilt the cylinder back and forth until the sharpest image is perceived. The clear plastic tip allows available light to illuminate the specimen. This is a useful tool for the field biologist, geologist, forensic investigator, jeweler, printer, quality control manager, etc. The size of Pocket Microscope is 12.4mm dia. x 127mm long. Weight: 12g (25x); 16g (100x) and .

Field of View: 3.30mm dia. (25x); 0.84mm dia. (100x)

**75930** Pocket Microscope, 25x . . . . .each

**75936** Pocket Microscope, 100x . . . . .each

### Print, Photo, Film and Slide Magnifiers

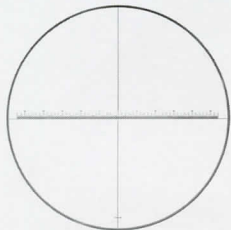
### ■ Anastigmatic Magnifier, 4x



*inspect entire large areas, 32 x 45mm*

...or, flat objects less than 58mm in diameter. The image observed through the loupe is critically sharp from the center to the edge of the image field because of the careful optical correction of the lupe for astigmatism and curvature of field as well as aberrations concerning the image of the central image. Ordinary magnifiers are corrected only for the central image. This lupe is similar to anastigmatic photographic lenses and is manufactured with the same care and precision.

One point which distinguishes this lupe from photo-lenses is the position of the effective pupil of the loupe. It is placed as far as 25mm above the upper plane of the lupe. The observer can inspect the whole image field by merely moving the eye.



**75511 Metric Scale**  
(included with Magnifier 755)

- Magnification: 4x
- Field of View: 58mm
- Effective Aperture: 30mm.
- Min. Scale Division: 0.1mm, 0 to  $\pm 27$ mm
- Working Distance: 54mm
- Size: 73 OD x 77mm (2.9" OD x 3") (OD = Outside Diameter)
- Weight: 272g (9.6 ounces)

**755** Anastigmatic 4x Magnifier, metric scale . . . . .each

**75511** Replacement Metric Scale for 4x . . . . .each

### ■ Anastigmatic Magnifier, 7x



Using the optical system of Anastigmatic 4x, this magnifier increases power as high as 7x. Reticle scale is provided. Strap attached provided for various possible needs.

- Magnification: 7x
- Field of View: 41mm
- Effective Aperture: 22mm
- Min. Scale Division: 0.1mm, 0 to  $\pm 17$ mm

- Working Distance: 36mm
- Size: 55 OD x 53mm (excluding strap hooks)(2.1" OD x 2.1") (OD = Outside Diameter)
- Weight: 103g (3.6 ounces)

**757** Anastigmatic 7x Magnifier, metric scale . . . . .each

### ■ 2x Magnifier Lamp with Table Clamp



This magnifier lamp is an ideal tool to view objects at two times magnification. The integrated illumination provides additional light for clearer images and vivid details. Designed specifically for laboratory and assembly applications requiring precise work. Useful in sample preparation, failure analysis, quality control, inspection, biological analysis, assembly and electronics.

Large viewing area (4"x2-1/2") is easy on the eyes. Glass lens provides a crisp image. Sliding shutter protects lens from dust and scratches when not in use.

Integrated, bright 60W elongated incandescent bulb lights the area to be viewed and resembles daylight for optimal color detection. Convenient front handle provides easy control to raise, lower, extend and pivot the magnifier lamp. Maximum extension is 31 inches. Clamps vertically or horizontally to bench top or side to a thickness of 2-1/8".

115V/60Hz version only. UL and CSA listed.

**7410** 2x Magnifier Lamp, 115V/60Hz . . . . .each

**7410-1** 60 W (115V/60Hz) Incandescent

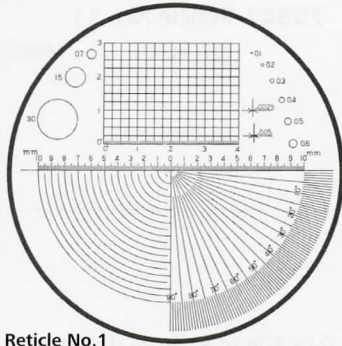
Replacement Bulb for 7410 . . . . .each



### Reticles for 7x, 10x, 15x Measuring Magnifiers

Reticles for 7x and 10x Measuring Magnifiers, 751, 752, 741 and 743. Scale Diameters: 10x = 35mm, 7x = 26mm.

#### Reticle No. 1



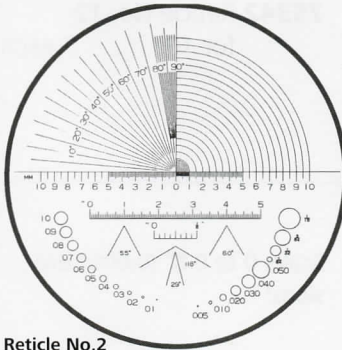
Reticle No.1

Degrees: 0-90° (1° intervals)  
 Circles: 0.1 to 3.0mm dia.  
 Scale:  $\pm 0$  to 10mm (0.1mm divisions)  
 Inch Scale: 0 to 0.4" (0.005" divisions)  
 Squares 0.025"

**75311** Reticle No. 1  
 for 7x .....each  
**75331** Reticle No. 1  
 for 10x .....each

#### Reticle No. 2

Degrees: 0-90° (one 10° area marked in 1° intervals)  
 Circles: 0.1 to 1.0mm dia. and .005 to  $\frac{1}{16}$ " dia.  
 Scales: 0 to .5" (0.005" divisions); 0 to  $\frac{1}{8}$ " ( $\frac{1}{64}$ " divisions);  $\pm 0$  to 10mm (0.1mm divisions)  
 Angles: 29°, 50°, 55°, 118°  
 Radius: 0-90° (0.1 and 0.5mm divisions).



Reticle No.2

**75312** Reticle No. 2  
 for 7x .....each

#### Reticle No. 3

Lines 0.02 to 0.16mm thick

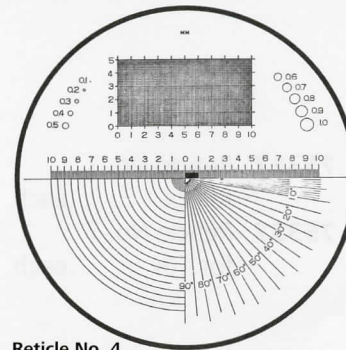


Reticle No.3

**75313** Reticle No. 3  
 for 7x .....each  
**75333** Reticle No. 3  
 for 10x .....each

#### Reticle No. 4

Degrees: 0-90° (one 10° area marked in 1° intervals)



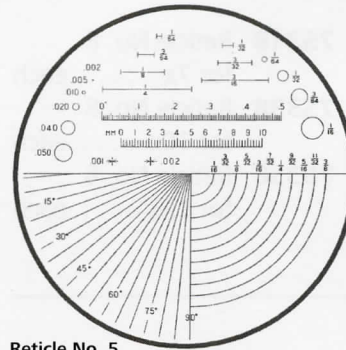
Reticle No. 4

Scale:  $\pm 0$  to 10mm (0.1mm divisions)  
 Squares: 5 x 10mm (0.1mm divisions)  
 Circles: 0.1 to 1.0mm dia. (0.1mm divisions)  
 Radius: 0-90° (0.1 and 0.5mm divisions)

**75314** Reticle No. 4  
 for 7x .....each  
**75334** Reticle No. 4  
 for 10x .....each

#### Reticle No. 5

Degrees: 0-90° (5° intervals)  
 Scales 0 to 0.5" (0.005" divisions); 0 to 10mm (0.2mm divisions)  
 Circles  $\frac{1}{64}$  to  $\frac{1}{16}$ "; .002 to .050mm  
 Radius: 0-90° ( $\frac{1}{16}$  to  $\frac{3}{8}$ " at  $\frac{1}{32}$ " divisions)  
 Line lengths:  $\frac{1}{64}$  to  $\frac{1}{4}$ " ( $\frac{1}{32}$ " divisions)  
 Line thickness: .001" and .002"

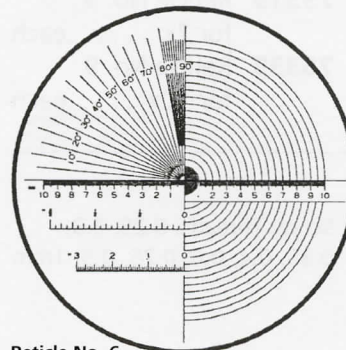


Reticle No. 5

**75315** Reticle No. 5  
 for 7x .....each  
**75335** Reticle No. 5  
 for 10x .....each

#### Reticle No. 6

Degrees: 0-90° (one 10° area marked in 1° intervals)  
 Scales:  $\pm 0$  to 10mm (0.1mm divisions); 0 to  $\frac{3}{8}$ " ( $\frac{1}{64}$ " divisions); 0 to .3" (.005" divisions)  
 Radius: 0 to 180° (.5mm divisions)



Reticle No. 6

**75316** Reticle No. 6  
 for 7x .....each  
**75336** Reticle No. 6  
 for 10x .....each

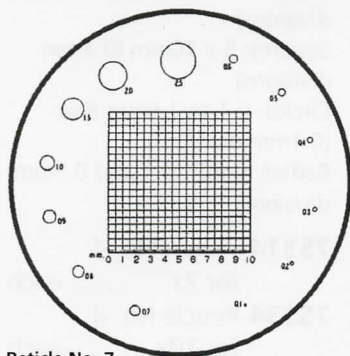
continued on next page

# MAGNIFIERS

## Reticles

### ■ Reticle No. 7

Squares: 10 x 10mm (0.5mm divisions with 0.1mm markings)  
Circles 0.1 to 2.5mm diameter

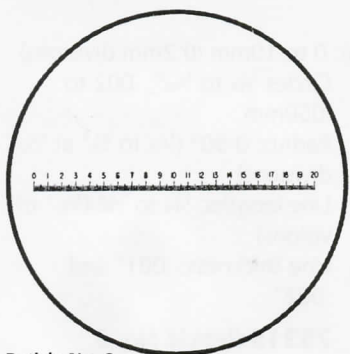


Reticle No. 7

**75317** Reticle No. 7  
for 7x .....each

**75337** Reticle No. 7  
for 10x .....each

### ■ Reticle No. 8



Reticle No. 8

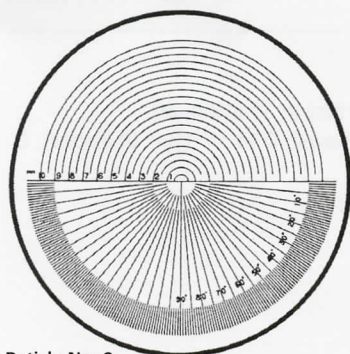
Scale: 0 to 20mm (0.1mm divisions)

**75318** Reticle No. 8  
for 7x .....each

**75338** Reticle No. 8  
for 10x .....each

**75358** Reticle No. 8  
for 15x .....each

### ■ Reticle No. 9



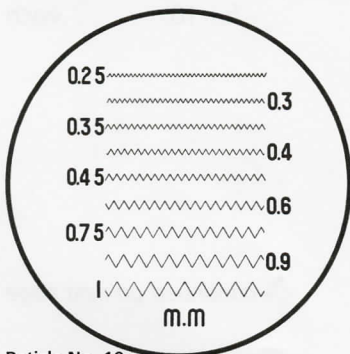
Reticle No. 9

Degrees: 0-180° (1° intervals)  
Radius: 0 to 180°, 0 to 10mm  
(0.5mm divisions)

**75319** Reticle No. 9  
for 7x .....each

**75339** Reticle No. 9  
for 10x .....each

### ■ Reticle No. 10



Reticle No. 10

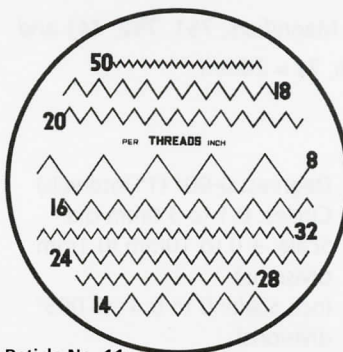
Screw Threads: 0.25, 0.3,  
0.35, 0.4, 0.6, 0.75, 0.9, 1mm

**75320** Reticle No. 10  
for 7x .....each

**75340** Reticle No. 10  
for 10x .....each

### ■ Reticle No. 11

Screw Threads: 50, 18, 20, 8, 16, 32, 24, 28, 14 per inch.



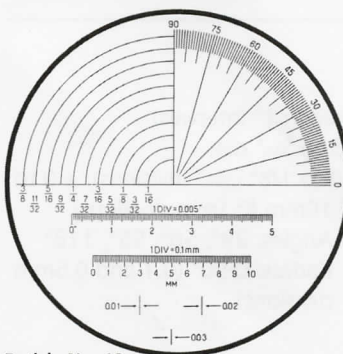
Reticle No. 11

**75321** Reticle No. 11  
for 7x .....each

**75341** Reticle No. 11  
for 10x .....each

### ■ Reticle No. 12

Degrees: 0-90° (1° intervals)  
Radius: 1/16 to 3/8" (1/32" divisions)  
Scales: 0 to .5" (0.005" divisions); 0 to 10mm (0.1mm divisions)  
Line Thickness: 0.01", 0.02", 0.03"

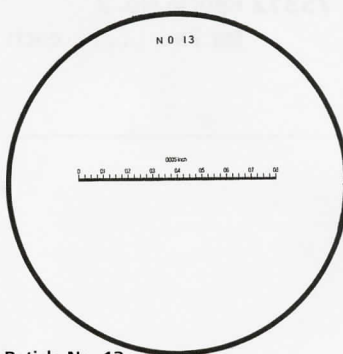


Reticle No. 12

**75322** Reticle No. 12  
for 7x .....each

**75342** Reticle No. 12  
for 10x .....each

### ■ Reticle No. 13



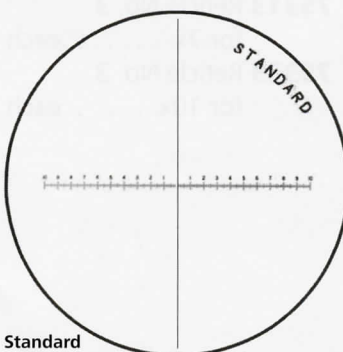
Reticle No. 13

Scale: 0 to 0.8" (0.005" divisions)

**75346** Reticle No. 13  
for 7x .....each

**75348** Reticle No. 13  
for 10x .....each

**75360** Reticle No. 13  
for 15x .....each



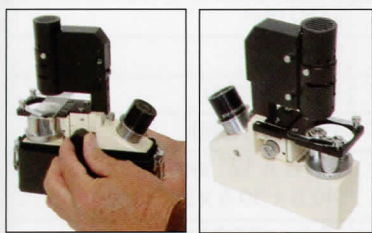
Standard

Standard Reticle  
Scale that comes with all  
measuring magnifiers.  
0 to ±10mm (0.1mm divisions)



## ■ Evolution®, Portable Field Microscope

*brings the microscope to the specimen*



The Evolution® Portable Scientific Field Microscope comprises virtually all features and performance of a full size microscope in a light weight handheld instrument with high quality optics. The microscope features a robust die cast base, metal parts and a padded protective case to ensure it withstands rigorous field use. The Evolution® Portable Scientific Microscope is ideal for forensic scientists, medical professionals, geology and biology field work and mobile laboratories. The standard Evolution® microscope delivers 40x, 100x and 400x magnification

### The Evolution® Field Microscope comes in two versions:

a bright field microscope with 4x, 10x and 40x objectives  
a phase contrast/bright field version with 4x, P10x and P20x objectives.

### Optical System

The standard optics features a 10x wide field eyepiece with an FN of 18mm and a convenient eye point of 15.5mm. The bright field version has a triple nosepiece with 4x, 10x and 40x objectives, with an optional 20x objective available. The phase contrast version also has a triple nosepiece with 4x, P10x and P20x objectives. Focusing knobs are on both sides with an additional larger cover to supply better grip.

### Illumination system

The Evolution® uses a bright LED source for illumination. Advantages are the low voltage (3V, needs only 2 AA batteries not included), low power consumption and long bulb life. The illumination has a built-in condenser and filter holder. A 3V power supply is included with the microscope.

### Options

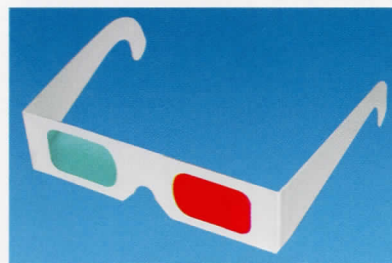
The standard versions of the Evolution® Portable Field Microscope will be suitable for most applications. However to make the microscope more versatile a range of options are available; see page 387.

**2289-10** Evolution® Portable Brightfield Microscope with 4x, 10x and 40x objectives, 10x eyepiece, brightfield LED illuminator, white frosted filter and carry case . . . . .each

**2289-20** Evolution® Phase Contrast Microscope with 4x, P10x and P20x objectives, 10x eyepiece, phase illuminator, green filter, white frosted filter and carry case . . . . .each

Note: For more information and accessories see page 387.

## ■ Anaglyph 3D Stereo Glasses, Red-Cyan Type



White cardboard frame temple bar, with quality red and cyan filters. Cyan is a mixture of green and blue.

**1121** Red-Cyan 3D Stereo Glasses . . . . .pkg/10

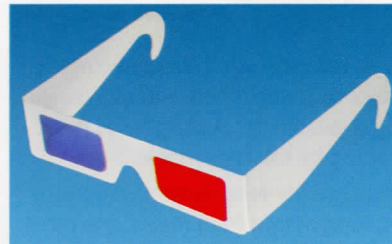


White cardboard frame temple bar, with quality red and cyan filters. Cyan is a mixture of green and blue.

**1121-2** Red-Cyan 3D Stereo Glasses, hand-held . . .pkg/10

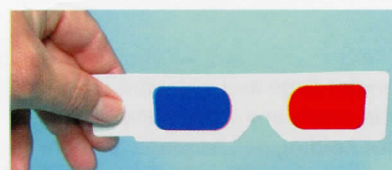
**Note:** Red-Cyan primarily used for books; Red-Blue primarily used for computer screens and movies.

## ■ Anaglyph 3D Stereo Glasses, Red-Blue Type



White cardboard frame temple bar, with quality red and blue filters.

**1121-4** Red-Blue 3D Stereo Glasses . . . . .pkg/10



White cardboard frame temple bar, with quality red and Blue filters.

**1121-6** Red-Blue 3D Stereo Glasses, hand-held . . .pkg/10



Solid frame, quality solid lenses, red-blue, with temple bars.

**1121-9** Solid Frame Red-Blue 3D Stereo Glasses . . . .each

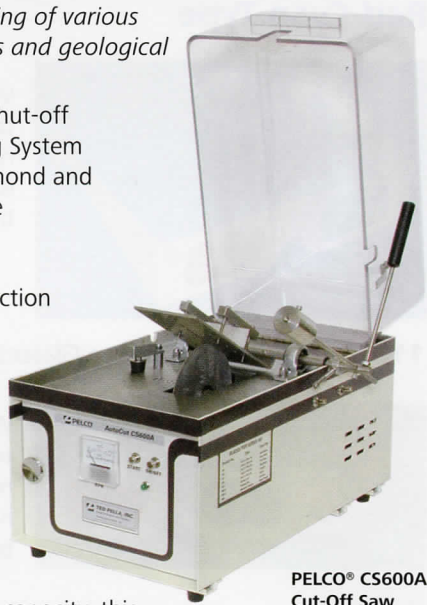


## ■ Automated Metallurgical Cut-Off Saw

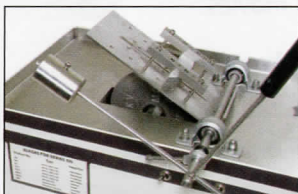
*low deformation sectioning of various metals, plastics, ceramics and geological specimens*

- Automatic Feed and Shut-off
- Self-contained Cooling System
- Abrasive Wheels, Diamond and Borazon Blade capable
- Cutting Capacity, 1-1/2"
- Universal Vises
- Stainless Steel Construction
- Specialty Fixtures
- 6" dia. Cutting Blades

The CS600A Metallographic Cut-Off Saw incorporates the advantages of low-deformation sectioning with quick cutting times usually associated with larger machines. At 1-1/2" capacity, this saw will accommodate most laboratory samples while reducing set-up and cutting time.



PELCO® CS600A  
Cut-Off Saw



Protective cover down

The wide variety of abrasive and diamond wheels allow cutting everything from delicate ceramics to tough steels and alloys. The thin 0.015" abrasive wheels are available for cutting small parts that would otherwise be consumed by thicker wheels.

The design incorporates a unique gravity-feed system. Through the use of an adjustable sliding weight and load meter, the most efficient feed rate for the sample is easily determined. With this system, sample heat-up and wheel glazing are virtually eliminated.

### Features

#### Ease of Fixturing

A large 8-1/2" x 4" vise plate handles large and awkward shapes. Standard universal vise bars hold nearly any shape sample. Special fixtures are also available for holding ball bearings, fracture specimens, drills and bolts.

#### Automatic Feed, Shut-Off and Safety Switch System

Just fixture your sample, start the machine and walk away. The machine will automatically shut off when the cut is complete. If someone should lift the safety cover the saw will shut down until reset is pushed.

#### Corrosion Resistance and Ease of Maintenance

Stainless steel used for all wet surfaces and a large easy-access coolant tank.

#### Air-cooled Motor

Cool and efficient operation.

#### Low Voltage Controls

Added safety.

### Specifications

Power	115VAC, 6 Amps
Motor	Air-cooled, 1/3 Hp
Wheel Speed	3450 rpm
Arbor	5/8"
Maximum Cutting Diameter	1-1/2" (38mm)
Maximum Cutting Width	5-1/4" (133mm)
Dimensions	16" H X 12" W x 21" L (40.6 x 30.5 x 53.4cm)
Net Weight	60 lbs. (27.3 kg)
Shipping Weight	71 lbs. (32.3 kg)

### Accessories Included

8-1/2" x 4" Vise Plate and two 1/2" Vise Bars mounted on saw; Handle and Rod with counterweight; set of Assorted Bolts for the vise plate; 8 oz. of Soluble Cutting Oil (mix 1:40 water); 15/16" and 7/16" wrenches; 1 Allen wrench; Dressing Stick for abrasive blades with handle. Cut-off Blade assortment: 2 ea. 812-610 Alumina Oxide (one mounted on saw); 1 ea. 812-612 Alumina Oxide; 1 ea. 812-613 Alumina Oxide; 1 ea. 812-614 Alumina Oxide; 1 ea. 812-620 Silicon Carbide; 1 ea. 812-624 Reinforced Abrasive Blade - for a total of 7 blades.

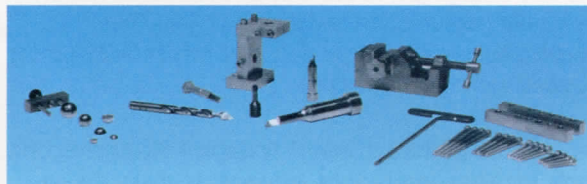


### Ordering Information

- 812-600** PELCO® CS600A Cut-Off Saw, Fixed Speed, 3450 RPM, 115V .....each
- 812-600-220** PELCO® CS600A Cut-Off Saw, Fixed Speed, 3450 RPM, 220V .....each
- 812-600D** PELCO® CS600A Cut-Off Saw, Dual Speed, 2000 and 3450 RPM, 115V .....each
- 812-600V** PELCO® CS600A Cut-Off Saw, Variable Speed, 0-3450 RPM, 115V .....each

## CS600A Cut-Off Saw Supplies and Accessories

### ■ Ball Bearing Fixture



Unique Ball Bearing Fixture allows ball bearings and other spherical shapes from 1/8" to 3/4" to be cut in half.

- 812-670** Ball Bearing Fixture .....each

### ■ Fixture Collets in Standard Sizes



Outside diameter: 0.75" (19mm)  
Inside diameters: 0.51", 0.39" and 0.26" (13mm, 9.8mm, 6.7mm) for 1/2", 3/8", 1/2" round stock.

- 812-674** Fixture Collets, set of 3 .....each