

#### 979 THIRD AVENUE, NEW YORK, NY 10022 (212) 421-5220

# PERI-APOLLAR 360°

CIRCULAR IMAGE LENSES, PERISCOPES







THE INCREDIBLE
PERI-APOLLAR 360°

### Description

Precision-built by VOLPI, Switzerland, the PERI-APOLLAR 360° is an entirely new and revolutionary optical design, which covers an unbelievable angle of 360°.

Its complete circular image offers you entirely new picture effects for conventional photography, motion picture techniques and television, as well as for projection and periscopes. The absolutely unique concept of the PERI-APOLLAR 360° enables you to simultaneously record in all directions, around you or your camera, with ONE and the same lens. And it becomes totally unnecessary to select any specific subject in advance, because you can project and enlarge both the complete 360° circular image, or any of its sections, without aberration.

The exclusive  $360^{\circ}$  lens can be adapted to 16mm, 18x24mm, 24x36mm, 70mm and  $2\ 1/4\ \text{x}\ 2\ 1/4$ " formats, to Vidicon, Plumbicon, Orthicon and other TV cameras, and may also be used as periscope without camera.

#### Instructions

The PERI-APOLLAR 360° covers a complete circular image of 360°, without any gaps. If mounted in vertical position, the horizontal field of view has a vertical angle of 60°, i.e. 30° above and 30° below the horizon. Distances and f/stops are set as with any normal lens.

The taking point, i.e. the lens itself in the image center, is blocked out. The complete image - with reference to the image center - is recorded at the correct angle and unreversed. All vertical lines extend to the image center.

The PERI-APOLLAR 360° can be used for circular photography, filming, TV recording and viewing as well as for circular projection. Mounted on a PERI-PROJECTOR (available soon), the lens projects the recorded scene on a cylindrical 360° screen. This can be either a small rear screen, surrounding the lens like a lampshade for viewing from the outside, or a large panoramic screen around a room for viewing from the inside.

## Applications

The exclusive 360° coverage of the PERI-APOLLAR 360° can be used for industry, commerce, science, forestry, education, astronomy, photogrammetry, geodesy, army, navy, airforce, government, police, meteorology, underwater, space, and numerous other applications.

Industry : Photography or remote observation inside larger cavities, tubes,

sewers, tanks, wells, pipes, drilling holes, etc.

Commerce : Security recording inside of rooms

Atomic Energy : Internal inspection of nuclear reactors, etc.

Science : Forestry, recording growth of trees at periodic intervals

Education : Circular training films

Geodesy : Establishing of maps and surveying levels, etc.

Motion-Pictures, TV: Filming of complete interiors or outside surroundings

Army : Recording from tanks

Navy : Recording from submarines

Air Force : Photography from airplane wings, flight simulators, particularly

with the projection system

Police : Recording at traffic junctions, etc.

Meteorology : Filming of entire horizon

Space : Photography of space, earth, moon, etc.

These are only a few examples, but there is an unlimited number of applications for this amazing lens. The incredible PERI-APOLLAR 360° literally provides the "impossible" for demanding photographers, cinematographers and TV specialists.

For further information, please call or write to:

KARL HEITZ, INC. 979 Third Avenue New York, NY 10022 (212) 421-5220



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## THE INCREDIBLE PERI-APOLLAR 360°



Precision-built by VOLPI OPTICS, Switzerland, the PERI-APOLIAR  $360^{\circ}$  is an entirely new and revolutionary optical design, that covers an unbelievable angle of  $360^{\circ}$ .

Its complete circular image offers entirely new picture effects for motion picture techniques and video, as well as for projection and periscope viewing. The absolutely unique concept of the PERI-APOLLAR  $360^{\circ}$  enables you to simultaneously record in all directions, around you or your camera, with ONE and the same lens. It becomes totally unnecessary to select any specific subject in advance, because you can project the complete  $360^{\circ}$  circular image.

The  $360^{\rm o}$  lens can be used with 16mm and video cameras, and may also be used as periscope without camera.

PERI-APOLLAR 25mm f/4 in C-mount with attachable 90° Periscope Angle Viewfinder with adjustable 10x ocular

4995.00

#### INSTRUCTIONS

The PERI-APOLLAR  $360^{\circ}$  covers a complete circular image of  $360^{\circ}$ , without any gaps. If mounted in vertical position, the field of view has an angle of  $60^{\circ}$ , i.e.  $30^{\circ}$  above and  $30^{\circ}$  below the horizon. Distance and f/stops can be set as with any normal lens.

The complete image - with reference to the center - is recorded at the correct angle and unreversed. ALL vertical lines extend to the image center.

The center of the image, i.e. the circle above the lens itself is also filmed, but not in the same filmplane. To increase the sharpness of this center section, the lens must be specially focused or stopped down.

The PERI-APOLLAR  $360^{\circ}$  can be used for circular filming, video and periscope viewing, as well as for circular projection. Mounted on a projector the lens projects the recorded scene on a cylindrical  $360^{\circ}$  screen. This can be either a rear screen, surrounding the lens like a lampshade for viewing from the outside, or a large panoramic screen around a room for viewing from the inside.

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