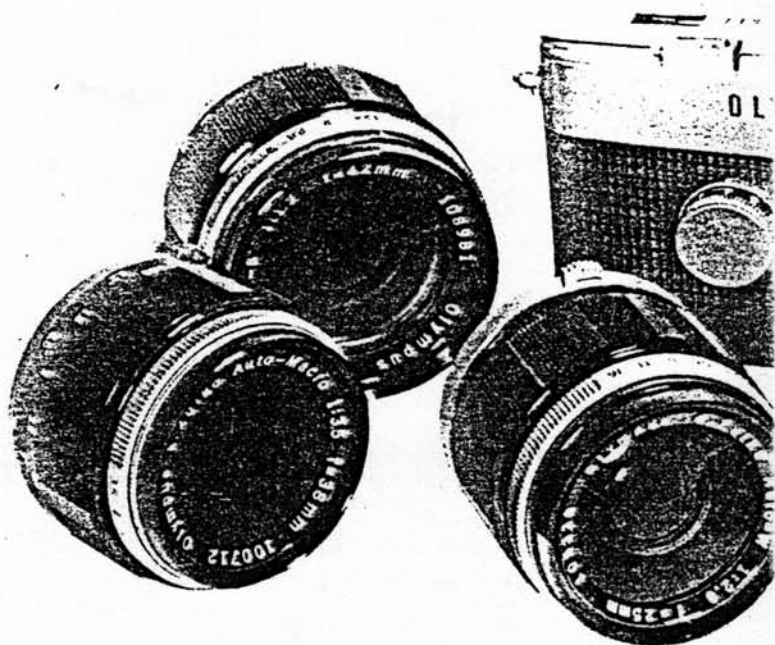


NINE OLYMPUS PEN FT LENSES



20mm f/3.5 Olympus Zuiko

Lens # 107514

DIAPHRAGMAutomatic
DIAPHRAGM RANGEf/3.5 to f/16
FOCUSING RANGE8 in. to Inf.
WEIGHT5.12 oz.
LENGTH1 3/8 in.
FILTER SIZE43mm Screw
ELEMENTS7 in 6 groups
ANGLE OF VIEW73°
PRICE\$89.95

RESOLUTION TESTS

APERTURE	CENTER	EDGE
f/3.5	56	34
f/4	56	40
f/5.6	80+	40
f/8	80+	48
f/11	68	40
f/16	56	40

An excellent wideangle lens, the 20mm f/3.5 has little flare, even at maximum aperture, and it disappears completely when stopped down to f/4. All things considered, the field is relatively flat, especially for an ultra-wide, and the lens turns into a great performer when stopped down to f/5.6 or f/8. The minimum focusing distance of 8 inches makes it an excellent copy lens, and permits it to be used to its full advantage. The image, as seen through the viewfinder, snaps in and out of focus with ease—something which was appreciated because of the tremendous depth-of-field inherent in an optic of this short a focal length.

25mm f/2.8 Olympus Zuiko

Lens # 105330

DIAPHRAGMAutomatic
DIAPHRAGM RANGEf/2.8 to f/16
FOCUSING RANGE10 in. to inf.
WEIGHT5.64 oz.
LENGTH1 13/16 in.
FILTER SIZE43mm Screw
ELEMENTS7 in 5 groups
ANGLE OF VIEW62°
PRICE\$99.95

RESOLUTION TESTS

APERTURE	CENTER	EDGE
f/2.8	56	40
f/4	80	48
f/5.6	80+	56
f/8	80+	68
f/11	80	56
f/16	56	56

This 25mm lens is truly fabulous, and the slightly longer focal length of five millimeters, as opposed to the 20mm wide angle lens, doesn't detract from its wideangle possibilities. This lens, too, exhibited little flare at maximum aperture which disappeared when the lens was stopped down to f/4. At f/4 through f/11, it is an amazing piece of glass, and negatives made with this lens were wire sharp. For the additional \$10 you get an extra third of an f/stop, if you need the speed. The field was very flat for a wideangle lens, and it should satisfy the demands of the most critical photographer.

38mm f/2.8 Olympus Zuiko

Lens # 100689

DIAPHRAGMAutomatic
DIAPHRAGM RANGEf/2.8 to f/16
FOCUSING RANGE2 1/2 ft. to inf.
WEIGHT2.50 oz.
LENGTH9/16 in.
FILTER SIZE43mm Screw
ELEMENTS5 in 4 groups
ANGLE OF VIEW43°
PRICE\$69.95

RESOLUTION TESTS

APERTURE	CENTER	EDGE
f/2.8	48	34
f/4	56	40
f/5.6	80	48
f/8	80+	56
f/11	68	56
f/16	56	48

Considered a "normal" focal length lens for the half-frame format, this 38mm optic is a good performer. Some flare at maximum aperture caused a slight loss of contrast and resolution. However, by the time it was stopped down to f/4 the flare disappeared. At f/5.6 through f/11 it performed admirably and the field was quite flat. The image snapped in and out of focus quite easily. It's an all around lens, and can easily handle the majority of photographic needs. If lens speed is no object and price is a consideration, the suggested \$69.95 price tag should prove quite attractive.



When a half-frame and a full-frame 35mm negative are enlarged to the same image size, the demands on the lens used to take the half-frame picture increase significantly. For example, a lens capable of resolving 80 lines per millimeter on a full-frame format would be equivalent to about 60 lines per millimeter when used with a half-frame camera. (The half-frame format is actually much closer to the so called "ideal format" and thus wastes less of the negative than full frame when blown up to 8x10 proportions. In this sense, the half-frame format is only 25% smaller than a full-frame negative.)

35mm f/3.5 Olympus Zuiko

Lens # 100712

DIAPHRAGM Automatic
 DIAPHRAGM RANGE f/3.5 to f/16
 FOCUSING RANGE 6.2 in. to inf.
 WEIGHT 6.72 oz.
 LENGTH 1.9 1/16 in.
 FILTER SIZE 43mm Screw
 ELEMENTS 5 in 4 groups
 ANGLE OF VIEW 43°
 PRICE \$99.95

RESOLUTION TESTS

APERTURE	CENTER	EDGE
f/1.4	48	48
f/2	56	56
f/2.8	68	56
f/4	68	68
f/5.6	68	56
f/8	56	48

As a general purpose lens, the Olympus can focus as close as 6.2 inches, giving an image ratio of 1:2. Although the resolution figures as given are low, the lens was tested at 26 times its focal length. However, it was able to operate at peak optical efficiency at 1/10th its focal length, and used for close up purposes it turned out to be an extremely sharp optic. The lens is extremely flat, thus rendering it an excellent tool for copying documents. Also, studies of minute objects were accomplished with relative ease. The built-in exposure meter system of the camera handles the job of compensating for changes in effective aperture and close focusing distances. It's a superb macro lens.

40mm f/1.4 Olympus Zuiko

Lens # 168586

DIAPHRAGM Automatic
 DIAPHRAGM RANGE f/1.4 to f/16
 FOCUSING RANGE 14 in. to inf.
 WEIGHT 5.82 oz.
 LENGTH 1 3/8 in.
 FILTER SIZE 43mm Screw
 ELEMENTS 7 in 6 groups
 ANGLE OF VIEW 41°
 PRICE \$69.95

RESOLUTION TESTS

APERTURE	CENTER	EDGE
f/1.4	34	24
f/2	48	34
f/2.8	56	34
f/4	68	48
f/5.6	80+	56
f/8	68	56
f/11	56	56
f/16	56	40

Most high speed lenses suffer from some flare at maximum apertures (unless the lens is of aspheric design), and this 40mm f/1.4 lens is no exception. However, by the time the lens is stopped down between f/2.8 and f/4 all flare disappears and the lens turns in an excellent performance. If you need the speed of an f/1.4 lens, you can't go far wrong for the suggested list price of \$69.95. Optical performance reached its peak between f/5.6-f/8, and the field was quite flat. For the photographer who doesn't believe in flash and would rather rely upon fast films and large apertures, this lens is ideal. Despite some loss of image quality, it is capable of producing crisp negatives which enlarge easily.

42mm f/1.2 Olympus Zuiko

Lens # 108981

DIAPHRAGM Automatic
 DIAPHRAGM RANGE f/1.2 to f/16
 FOCUSING RANGE 14 in. to inf.
 WEIGHT 8.99 oz.
 LENGTH 1 3/8 in.
 FILTER SIZE 49mm Screw
 ELEMENTS 8 in 6 groups
 ANGLE OF VIEW 39°
 PRICE \$99.95

RESOLUTION TESTS

APERTURE	CENTER	EDGE
f/1.2	17	14
f/1.4	17	14
f/2	40	24
f/2.8	56	24
f/4	68	40
f/5.6	68	56
f/8	80	56
f/11	68	56
f/16	56	40

As noted in the discussion of the f/1.4 lens, most high speed lenses have inherent problems with flare and other aberrations at maximum apertures. Unfortunately, this f/1.2 lens suffers to a marked degree. Even when stopped down to f/1.4, it doesn't approach the resolution of the f/1.4 lens. However, some may consider an f/1.2 lens an absolute necessity, especially when it means the difference between a picture and no picture at all. When stopped down to f/4, the flare in this lens all but disappears, and optimum performance is reached at f/8.

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But it is smaller, and because of this one fact alone, medium or slow speed films should be the rule rather than the exception, at least if you want superior prints. Fast films such as Tri-X, should be reserved for specific purposes. Also, the usual rule of thumb for hand-holding a full-frame 35mm camera (for sharpest results) is to

use a shutter speed equal to one second divided by the focal length. For example, a 58mm lens on a full-frame 35mm camera can be hand held at 1/60th of a second without too much danger of blur. However, if the same 58mm lens were used on a half frame camera the ratio would be reduced to 1/2 second divided by the focal length,

and a shutter speed no slower than 1/125th of a second is recommended.

The Olympus Zuiko lenses are truly excellent. They exhibit a high degree of correction, and can be relied upon to cram an awful lot of information into the tiny negative format. There is no denying the fact that a half-frame camera demands attention to details, and such errors as overexposure, camera shake, and faulty focusing must be avoided if optimum prints or transparencies are your objective. Needless to say, meticulous darkroom habits are also mandatory. But the most critical requirement—the need for superior optics—has already been satisfied. —Paul Farber

60mm f/1.5 Olympus Zuiko

Lens # 102328

DIAPHRAGM Automatic
 DIAPHRAGM RANGE f/1.5 to f/16
 FOCUSING RANGE 2½ ft. to inf.
 WEIGHT 9.52 oz.
 LENGTH 2 in.
 FILTER SIZE 49mm Screw
 ELEMENTS 7 in 5 groups
 ANGLE OF VIEW 28°
 PRICE \$99.95

RESOLUTION TESTS

APERTURE	CENTER	EDGE
f/1.5	24	24
f/2	40	34
f/2.8	56	40
f/4	56	48
f/5.6	68	56
f/8	80	56
f/11	68	56
f/16	56	48

This 60mm f/1.5 lens would be the full equivalent of a 120mm f/1.5 lens if it were designed for a full frame 35mm negative. For a moderate telephoto of high speed it is a solid contender. Resolution figures were amazing for a moderate telephoto, and the slight flare which was in evidence at f/1.5 disappeared when the lens was stopped down to f/2.8. Optimum resolution and performance came in at f/8, with a good flat field. Its maximum length of 2 in. makes it easily portable. It is an excellent lens for portraiture, or for catching tight candid from a distance.

70mm f/2 Olympus Zuiko

Lens # 200138

DIAPHRAGM Automatic
 DIAPHRAGM RANGE f/2 to f/22
 FOCUSING RANGE 2½ ft. to inf.
 WEIGHT 8.11 oz.
 LENGTH 2¾ in.
 FILTER SIZE 43mm Screw
 ELEMENTS 6 in 5 groups
 ANGLE OF VIEW 24°
 PRICE \$89.95

RESOLUTION TESTS

APERTURE	CENTER	EDGE
f/2	40	34
f/2.8	48	40
f/4	56	40
f/5.6	56	48
f/8	68	56
f/11	68	56
f/16	56	48
f/22	48	40

As a general rule, as lenses for full-frame 35mm cameras get longer, their resolving power lessens. However, this 70mm telephoto for the Pen Ft (which would be the equivalent of a 140mm lens for a full-frame 35mm camera), is still only a 70mm lens. Therefore it is still capable of achieving a high degree of optical correction. At f/2 there is a little flare, and it disappears when the lens is stopped down between f/2.8 and f/4. Optimum resolving power and optical characteristics were had at f/5.6, and they held even when the lens was stopped down to f/16. It is an excellent lens for portraiture and sports action, or when it is difficult to approach your subject.

100mm f/3.5 Olympus Zuiko

Lens # 225272

DIAPHRAGM Automatic
 DIAPHRAGM RANGE f/3.5 to f/22
 FOCUSING RANGE 5 ft. to inf.
 WEIGHT 8.81 oz.
 LENGTH 3 in.
 FILTER SIZE 43mm Screw
 ELEMENTS 5 in 4 groups
 ANGLE OF VIEW 17°
 PRICE \$99.95

RESOLUTION TESTS

APERTURE	CENTER	EDGE
f/3.5	34	24
f/4	34	24
f/5.6	40	40
f/8	56	48
f/11	56	56
f/16	56	48
f/22	48	40

This 100mm telephoto lens checked out to be an exceptional lens. Resolving power and flatness of field were excellent. A slight bit of flare was in evidence at f/3.5, but this quickly disappeared when the lens was stopped down to f/4. Optimum performance was reached at f/8, and held through f/16. The equivalent of a 200mm telephoto for a full frame 35mm camera, this 100mm lens proved ideal for reaching distant subjects. Perfect for sports, and most work where you cannot easily approach the subject, this lens will prove to be no disappointment. A delight to use, and the small length of 3 in. means it can be slipped into a spare pocket without a bulge.