



# Vivitar Series 1® 28-90mm f2.8-3.5 Macro Focusing Zoom Lens



28mm



90mm

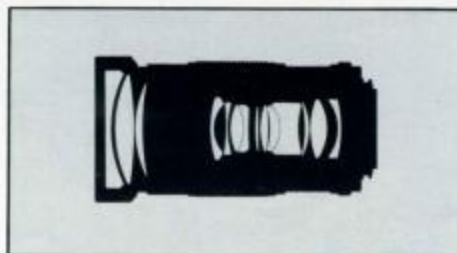


Macro focus at 1/3 life size

- Fastest wide angle to telephoto zoom lens on the market today. Fast f2.8 aperture is perfect for indoor or low-light applications. Patented Series 1 optics and performances assure sharp, clear results throughout the zoom range.
- Macro focusing to almost 1/3 lifesize
- One-touch zoom and focus in a remarkably compact and light-weight package.
- Multi-coated to reduce flare and increase light transmission.
- Vivitar Accessories: 67mm Filters, Step-up Adapter Rings, Close-up Sets, Lens Hood, 135mm Hard Lens Case and Large Pouch Case. Accepts Vivitar 2X Macro Focusing Teleconverter and regular Vivitar 2X and 3X Tele Converters.
- 5 year Limited Warranty

Items	Numbers
Minolta MD	316037
Canon	316048
Nikon/AI	316059
Olympus	316060
Pentax	316071
Yashica/Contax	316082

### 14 elements, 12 groups



### Specifications:

Zoom ratio	3.2:1
Aperture range	f/2.8-f/16 at 28mm f3.5-f22* at 90mm
Optical Construction	14 elements 12 groups
Angles of acceptance	75°-27°
Min. focusing distance from film plane	230mm (9 in.)
Maximum reproduction ratio	1:3.3 at 28mm
Minimum length	111.5mm (4.5 in.)
Weight	680g (24 oz.)
Maximum barrel diameter	70mm (2.8 in.)
Lens coating	VMC Multi-coated
Accessory size	67mm
Lens case size	Hard Case: 135mm Large Pouch Case

\*effective aperture