



RETICLE MANUAL

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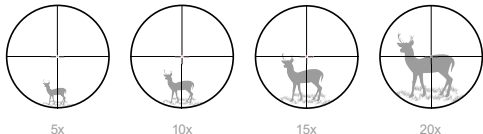
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SECOND FOCAL PLANE RETICLES

The second focal plane (SFP) reticles are located near the scope's eyepiece behind the image erecting and magnifying lenses.

This style of reticle does not visually change in size when you change the magnification. The advantage of an SFP reticle is that it always maintains the same ideally-sized appearance.

When shooting with this SFP scope, be aware that the listed reticle subtensions used for estimating range, holdover, and wind drift correction are only accurate at the specified magnification.



MOA EXPLAINED

Minute of Angle (MOA) is a unit of angular measurement that is commonly used in shooting sports and ballistics. It is a unit of measurement that describes both accuracy and scope adjustments.

1 MOA is approximately 1 inch (1.047") at 100 yards. This means that if a shooter can consistently hit a target with a group of shots that measures 1 MOA in size, they can expect to hit the same-sized target at any distance. For example, a group of shots that measures 2 MOA in size at 100 yards will measure 4 MOA at 200 yards, 6 MOA at 300 yards, and so on.

In addition to measuring shot groups, MOA is also used to describe the adjustments that need to be made to a rifle scope in order to compensate for bullet drop and windage. For example, if a shooter is shooting at a target that is 500 yards away and the bullet is hitting 4 inches low, they will need to adjust their scope by 4 MOA in order to hit the target.

Understanding MOA can help shooters improve their accuracy and make the necessary adjustments to hit targets at longer distances.

THE Vector Optics® German #4 SFP MOA RETICLE

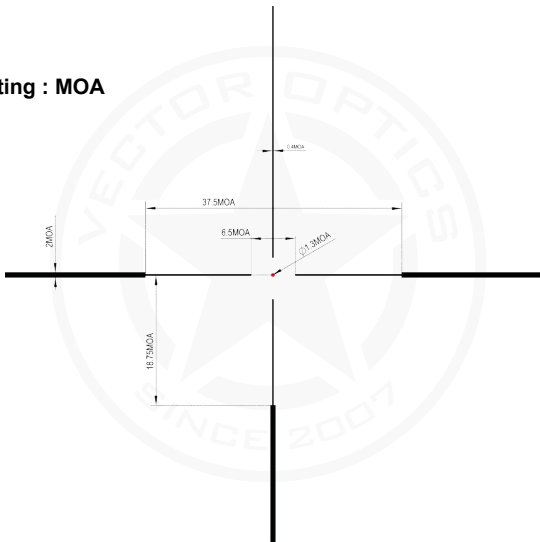
The **German #4** reticle is a type of reticle commonly found in hunting scopes. It features thicker outer lines on the left, right, and bottom, with thinner inner crosshairs and a top vertical line. The thicker lines allow for easier target acquisition, while the thinner crosshairs and a top vertical line provide for greater precision when aiming at smaller targets.

The center dot of the reticle is used to provide a point of aim, which can be especially useful when shooting at small targets or aiming at long ranges. The illumination feature of the reticle provides additional visibility in low-light conditions, making it easier to acquire targets and aim accurately.

The etched glass German #4 reticle is especially useful for hunting applications, as it provides a clear-sight picture and allows for quick acquisition of targets. The 6 levels of illumination provide the shooter with the ability to adjust the brightness of the reticle based on the lighting conditions, ensuring optimal visibility and accuracy.

★ For SCOM-38 model, the suspension is valid at 15x; for SCOC-23 & SCOC-37 model, the suspension is valid at 4x.

Setting : MOA



WIND DRIFT COMPENSATION

The German #4 reticle is designed to help the shooter compensate for wind drift and range estimation. You can use the horizontal line width changes as reference points to complete wind drift compensation. To compensate for wind drift, first, estimate the wind's speed and direction. Then, using the line width changes, estimate the amount of holdover required to counteract the wind drift.

RANGING WITH THE MIL-DOT RETICLE

The German #4 reticle can also help the shooter estimate the range to a target. If the shooter knows the target object's size at shooting distance, then he can compare it to either the vertical or horizontal hash mark spacing and roughly estimate the range.

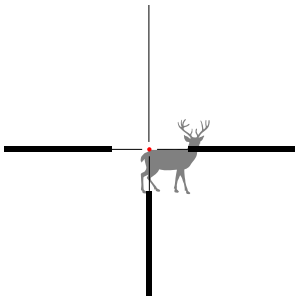
The formula for range estimation is as follows:

Range (yards) = Target Height or Width (inches) * 100 / Target Height or Width measured on reticle (MOA)

EXAMPLE — Ranging with target's height

Reticle at the set magnification, If a shooter is looking at an elk, its back to bottom height is 18 inches, and it spans about 9MOA on the vertical line. Using the formula above, the range to the elk is calculated as follows:

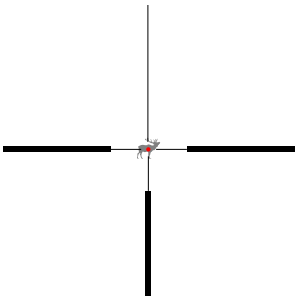
$$\text{Range} = 18 \text{ inches} * 100 / 9 \text{ MOA} = 200 \text{ yards}$$



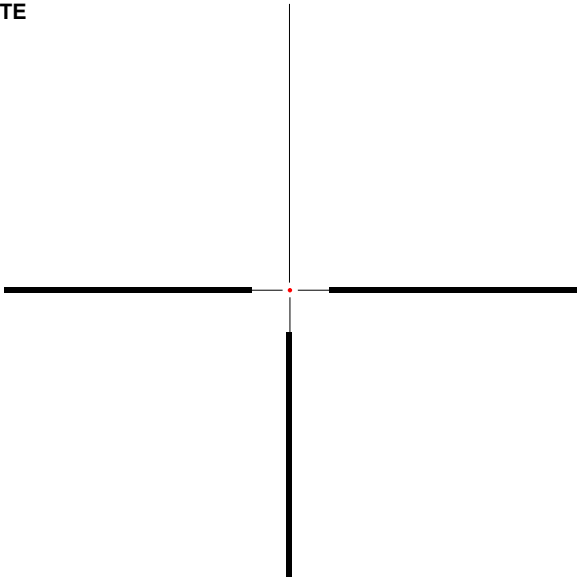
EXAMPLE — Ranging with target's width

Reticle at the set magnification, If a shooter is looking at a 36 inches long wolf, and it spans about 10MOA on the horizontal line. Using the formula above, the range to the wolf is calculated as follows:

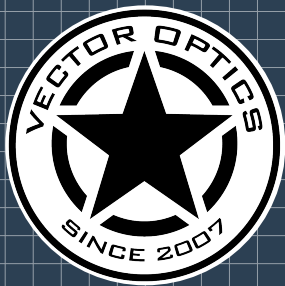
$$\text{Range} = 36\text{inches} * 100 / 10 \text{ MOA} = 360 \text{ yards}$$



NOTE



NOTE



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