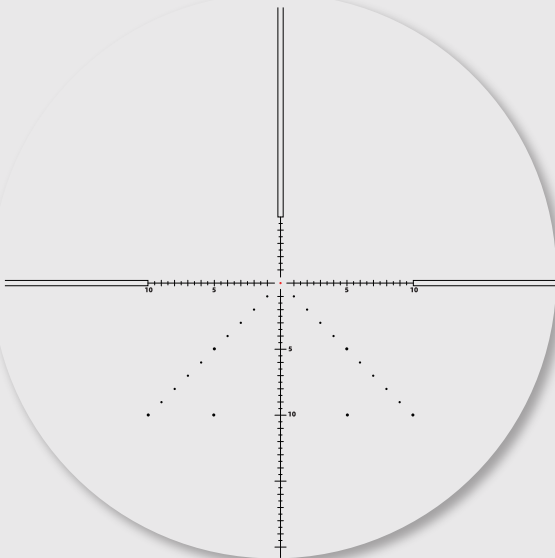
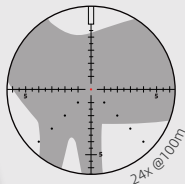
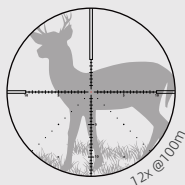


# MPR-V5 MIL SFP RETICLE

The Vector Optics MPR-V5 FFP reticle features an inverted "T" Mil-Radian ranging scale, with a center dot and cascading dots along the vertical line to help you quickly and easily adjust for a 10 m.p.h crosswind. The Mil-Radian graduations are evenly spaced across the reticle.

The MPR-V5 reticle can be used to achieve long-range accuracy, calculate target distance and size, and help you quickly and easily adjust for wind. The reticle is good for precise holdover and windage corrections. With its versatile design, the Vector Optics MPR-V5 reticle is a valuable tool for shooters looking to improve their long-range shooting capabilities.

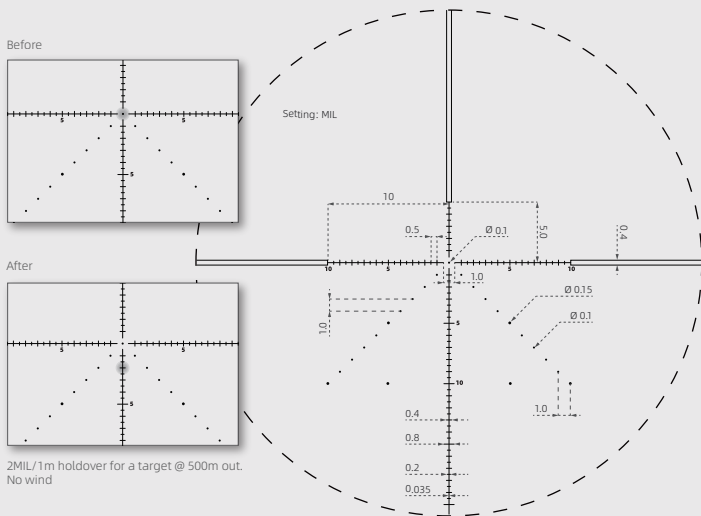


Red indicated illuminated portion of the reticle

# COMPENSATION BULLET DROP

Holdover refers to the technique of adjusting the aim of a firearm to compensate for the effect of gravity on the bullet's trajectory. Bullet drop is the decrease in bullet height as it travels through the air. The shooter can use the MIL markings on the reticle to calculate the bullet drop. The MIL markings on the vertical axis represent the distance in MILs between each hash mark. The horizontal axis represents the windage adjustment.

For example, under no wind condition, after zeroing your scope at 100m, if you know your target is at 500m and your ammo has a 1m bullet drop at that distance, you will need to use 2MIL holdover point. Here is how you get the 2MIL: since 1MIL equals 10cm at 100m, 50cm at 500m, and then 2MIL equals  $2 \times 50\text{cm} = 1\text{m}$  at 500m, you need to hold the 2MIL drop point to compensate for the 1m bullet drop, thus bring the aim point to line up with the bullet's point of impact.



When it comes to wind correction in shooting, there are three key factors to keep in mind: the flying time of the bullet, the velocity and direction of the wind, and the ballistics coefficient (BC) of the bullet. By taking into account these three factors, a shooter can make the necessary adjustments to account for wind drift and achieve accurate shots even in challenging conditions.

# HOW TO MEASURE TARGET HEIGHT & LENGTH

To use the MPR-V5 FFP Reticle for ranging, the shooter first needs to know the height of the target in question. Once the height of the target is determined, the shooter can use the MPR-V5 FFP Reticle to measure the target in mils.

$$\text{Height of Target (yards)} / \text{mils} * 1000 = \text{Distance to Target (yards)}$$

If the height of target is in Inches, then the formula should be:

$$\text{Height of Target (inches)} / \text{mils} * 27.78 = \text{Distance to Target (yards)}$$

(1 inch  $\approx$  0.0277778 yards)

This formula works equally well with meters, but don't mix meters and yards:

$$\text{Height of Target (meters)} / \text{mils} * 1000 = \text{Distance to Target (meters)}$$

If the distance of the target is determined, then the shooter can use the MPR-V5 FFP Reticle to measure the target length. You can use the following formula:

$$\text{Distance to Target (yards)} / 1000 * \text{Mils} = \text{Length of Target (yards)}$$

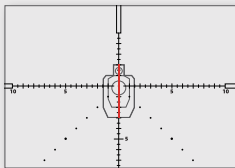
$$\text{Distance to Target (yards)} / 27.78 * \text{Mils} = \text{Length of Target (inches)}$$

(1 inch  $\approx$  0.0277778 yards)

This formula works equally well with meters, but don't mix meters and yards:

$$\text{Distance to Target (meters)} / 1000 * \text{Mils} = \text{Length of Target (meters)}$$

Measure the object in yards to find the distance in yards, and use meters to yield distances in meters.



Red indicates the height of the target

If the height of an adult male is 5.91ft, and measures 5Mils across the reticle, that is:

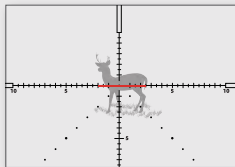
$$\text{Distance to Target (yards)} / 27.78 * \text{Mils} = \text{Height of Target (inches)}$$

$$5.91\text{ft} = 70.9 \text{ inches}$$

$$70.9 \text{ (inches)} / 5 \text{ mil} \times 27.78 = 394 \text{ (yards)}$$

$$2.0 \text{ (yards)} / 5 \text{ MIL} \times 1000 = 394 \text{ (yards)}$$

$$1.8 \text{ (meters)} / 5 \text{ MIL} \times 1000 = 360 \text{ (meters)}$$



Red indicates MILS of the target in reticle

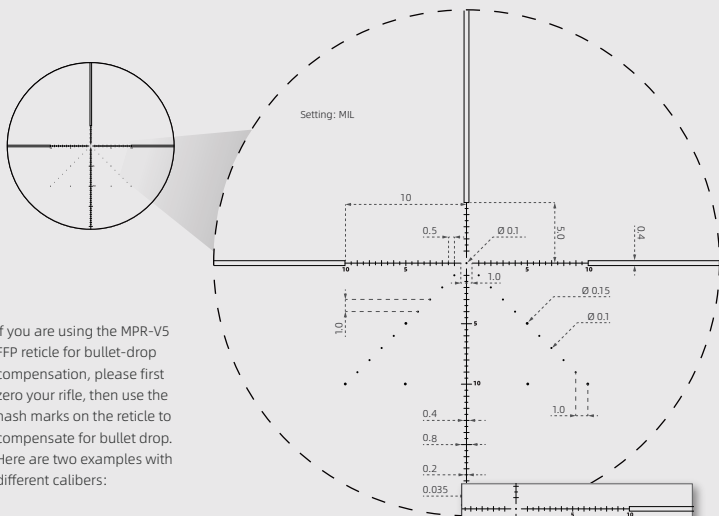
If the Distance to Target is 400m, and the target measures 4.5Mils across the reticle, then the target length is:

$$400 \text{ (meters)} / 1000 * 4.5 \text{ MIL} = 1.8 \text{ (meters)}$$

$$437 \text{ (yards)} / 1000 * 4.5 \text{ MIL} = 2.0 \text{ (yards)}$$

$$437 \text{ (yards)} / 27.78 * 4.5 \text{ MIL} = 70 \text{ (inches)}$$

# USING FOR BULLET DROP COMPENSATION



If you are using the MPR-V5 FFP reticle for bullet-drop compensation, please first zero your rifle, then use the hash marks on the reticle to compensate for bullet drop. Here are two examples with different calibers:

.223, 5.56 @200yds

A point: 300yds | 1.5" drop  
B point: 400yds | 4.5" drop  
C point: 500yds | 7.5" drop  
D point: 600yds | 11" drop



.308, 7.62 @100yds

A point: 200yds | 1.5" drop  
B point: 300yds | 4.5" drop  
C point: 400yds | 7.5" drop  
D point: 500yds | 11" drop

