



HAWKE[®]

| FFP MOA

OVERVIEW

The FFP MOA reticle was developed specifically for first focal plane optical systems and based around the common principles of MOA spaced reticles. With MOA spaced markings out beyond 20 MOA in all directions, the FFP MOA is a versatile reticle that provides aim points no matter how extreme the conditions.

A series of crosses etched on the lower section of the reticle make for extra windage aimpoints and act to give an easy quick-glance method of counting which MOA spacing you're aiming with. Outer posts are segmented into MOA spacings, so can be used for bracketing and rangefinding.



RETICLE SUBTENSIONS

MOA-MOA SETUP

The MOA spaced reticle and $\frac{1}{4}$ MOA turrets make for easy point of aim adjustment. Every 4 clicks on the turret will measure exactly 1 MOA spacing on the reticle. Because of FFP this is true on all magnifications.

IMPERIAL

1 MOA = 1.047in @ 100yds. At different ranges this MOA gap will change:
50yds = 0.5in, 100yds = 1.0in, 200yds = 2.1in, 300yds = 3.1in.

METRIC

1 MOA = 29mm @ 100m. At different ranges this MOA gap will change:
50m = 15mm, 100m = 29mm, 200m = 59mm, 300m = 87mm.

ÜBERSICHT

Das MOA-Absehen mit erster Brennebene (First Focal Plane, FFP) wurde speziell für optische Systeme mit erster Brennebene entwickelt und baut auf den gängigen Prinzipien für Absehen mit MOA-Abstand auf. Mit Markierungen im MOA-Abstand außerhalb von 20 MOA in allen Richtungen ist das FFP MOA ein vielseitiges Absehen, das selbst unter extremsten Bedingungen Zielpunkte bietet.



Eine Reihe von Zielkreuzen, die im unteren Bereich des Absehens eingätzt sind, stellen zusätzliche Einstellzielpunkte bereit und helfen Ihnen, mit einem schnellen Blick zu zählen, mit welchem MOA-Abstand Sie zielen. Die Markierungen sind in MOA-Abstände unterteilt, so dass sie für Bracketing und Entfernungsmessung benutzt werden können.

ABSEHENSABDECKUNGEN

MOA-MOA-Setup

Das Absehen im MOA-Abstand und die $\frac{1}{4}$ MOA-Verstelltürme ermöglichen eine einfache Zielpunkteinstellung. Jeweils 4 Verstell Schritte an dem Verstellturm entsprechen genau 1 MOA-Abstand auf dem Fadenkreuz. Aufgrund der ersten Brennebene (FFP) gilt dies für alle Vergrößerungen.

ZÖLLIG

1 MOA = 1.047in @ 100yds. Für unterschiedliche Entfernungen ändern sich diese MOA-Lücke:
50yds = 0.5in, 100yds = 1.0in, 200yds = 2.1in, 300yds = 3.1in.

METRISCH

1 MOA = 29mm @ 100m. Für unterschiedliche Entfernungen ändern sich diese MOA-Lücke:
50m = 15mm, 100m = 29mm, 200m = 59mm, 300m = 87mm.

PRESENTATION

Le réticule FFP MOA a été développé spécifiquement pour les systèmes optiques à premier plan focal et il utilise les principes communs à tous les réticules avec marquage tous les MOA. Avec



des marquages tous les MOA au-delà de 20 MOA dans toutes les directions, le réticule FFP MOA est un réticule polyvalent donnant des points de visée dans les conditions les plus difficiles.

Des croix gravées sur la partie inférieure du réticule donnent des points de visée supplémentaires de déplacement latéral, et permettent, avec un rapide coup d'oeil, de connaître le nombre de MOA de déplacement latéral, avec lequel vous visez. Les montants sont segmentés avec des intervalles de MOA, afin de pouvoir les utiliser pour le bracketing et la télémessure.

SUBTENSIONS DE RETICULES

CONFIGURATION MOA-MOA

Le réticule marqué tous les MOA et les tourelles $\frac{1}{4}$ MOA facilitent le réglage du point de visée.

4 clics sur la tourelle correspondront exactement à un espacement de 1 MOA sur le réticule.
Grâce au réticule FFP, ceci est vrai pour tous les grossissements.

IMPERIAL (Unités anglo-saxonnes)

1 MOA = 1.047in @ 100yds. À des distances différentes, cet intervalle MOA variera.
50yds = 0.5in, 100yds = 1.0in, 200yds = 2.1in, 300yds = 3.1in.

METRIC (Unités métriques)

1 MOA = 29 mm @ 100 m. À des distances différentes, cet intervalle MOA variera.
50m = 15mm, 100m = 29mm, 200m = 59mm, 300m = 87mm.



RESUMEN

La retícula FFP MOA se ha diseñado de forma específica para sistemas ópticos de primer plano focal tomando como base los principios comunes a las retículas espaciadas por MOA. Con marcas espaciadas cada MOA, a partir de los 20 MOA, en todas direcciones, la FFP MOA es una retícula versátil que ofrece puntos de mira en las condiciones más extremas.

Una serie de cruces grabadas en la parte inferior de la retícula aportan puntos de mira adicionales de ajuste lateral y ofrecen un método sencillo a primera vista para calcular el espaciado en MOA con el que se está apuntando. Los postes se dividen en espaciados de MOA, de forma que se puedan utilizar para el horquillado y la telemetría.

COBERTURA DE LA RETÍCULA

CONFIGURACIÓN MOA-MOA

Las retículas espaciadas en MOA y las torretas $\frac{1}{4}$ MOA ofrecen un ajuste sencillo del punto de mira. 4 clics de la torreta equivalen exactamente a un espaciado de 1 MOA en la retícula. Dado que se trata de un sistema de primer plano focal, esto es aplicable a cualquier aumento.

SISTEMA IMPERIAL

1 MOA = 1.047 pulgadas @ 100 yardas. Estos espaciados MOA van cambiando según el rango:
50 yardas = 0.5 pulgadas, 100 yardas = 1.0 pulgadas, 200 yardas = 2.1 pulgadas,
300 yardas = 3.1 pulgadas.



SISTEMA MÉTRICO

1 MOA = 29mm @ 100m. Estos espaciados MOA van cambiando según el rango:
50m = 15mm, 100m = 29mm, 200m = 59mm, 300m = 87mm.

PANORAMICA

Il reticolo FFP MOA è stato realizzato appositamente per le ottiche sul primo piano focale, e si basa sui principi comuni dei reticoli con distanziatori MOA. Con dei distanziatori MOA impostati oltre 20 MOA in tutte le direzioni il reticolo FFP MOA si dimostra altamente versatile e fornisce punti di tiro anche nelle situazioni più estreme.

Una serie di crocette impresse sulla parte inferiore del reticolo offre ulteriori punti di mira in deriva, e inoltre un modo rapido e semplice con cui contare la distanza in MOA con cui si sta



mirando al bersaglio. All'interno dei distanziatori in MOA sono stati segmentati montanti cavi, utilizzabili per tiro a forcella e telemetria.

SOTTOTENSIONI DEL RETICOLO

IMPOSTAZIONE MOA/MOA

Con il reticolo con distanziatori MOA e torrette $\frac{1}{4}$ MOA, regolare il punto di mira è facile. 4 scatti sulla torretta equivalgono esattamente a una distanza di 1 MOA sul reticolo. Grazie al primo piano focale (FFP), questo vale a tutti i livelli di ingrandimento

SISTEMA IMPERIALE BRITANNICO

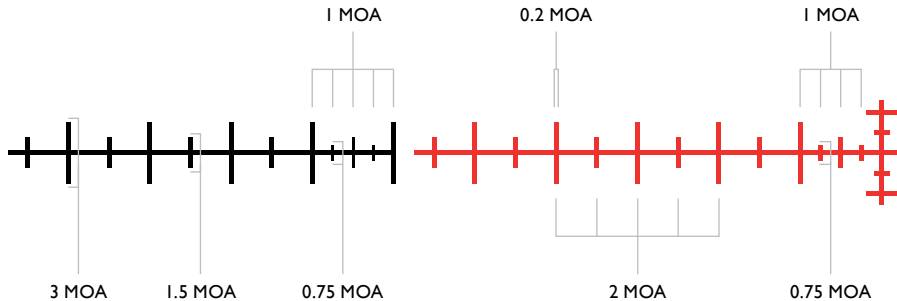
1 MOA = 1.047 pollici @ 100 iarde. A distanze diverse, questo spazio MOA cambierà:
50 iarde = 0.5 pollici, 100 iarde = 1.0 pollici, 200 iarde = 2.1 pollici, 300 iarde = 3.1 pollici.



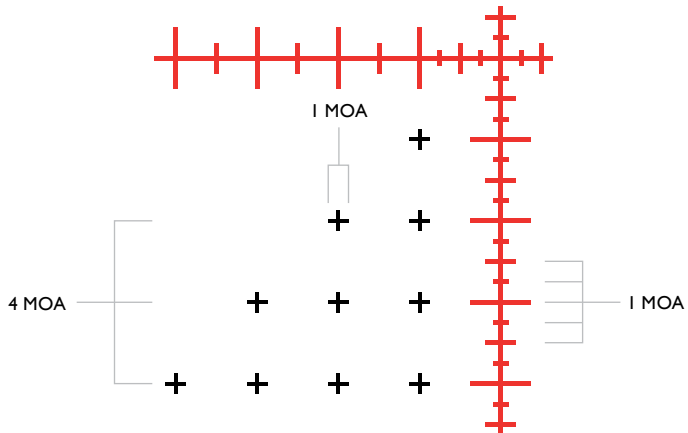
SISTEMA METRICO DECIMALE

1 MOA = 29mm @ 100m. A distanze diverse, questo spazio MOA cambierà:
50m = 15mm, 100m = 29mm, 200m = 59mm, 300m = 87mm.

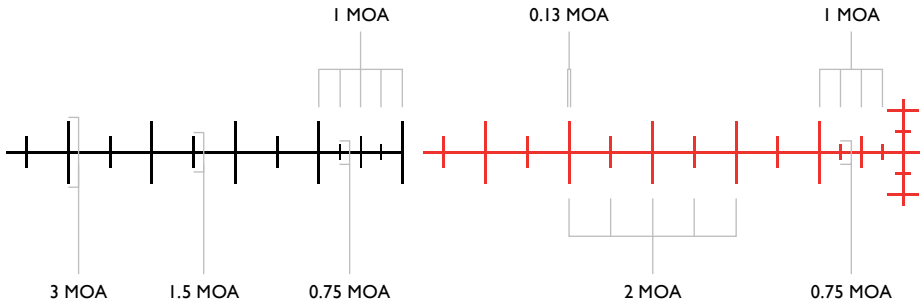
FFP MOA (16x)



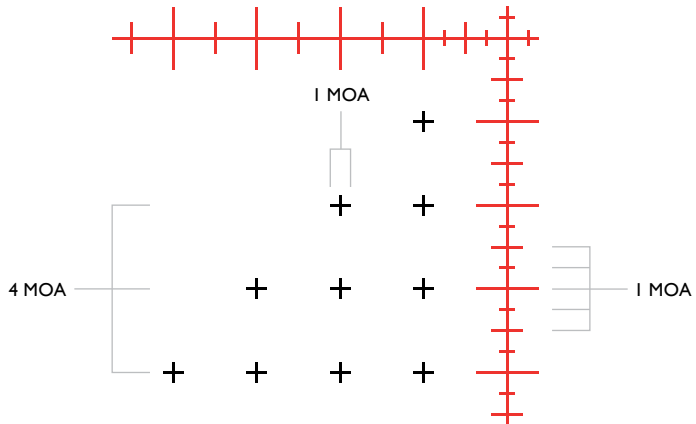
FFP MOA (16x)



FFP MOA (24x)

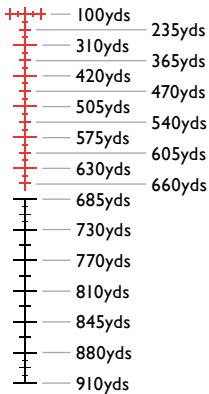


FFP MOA (24x)



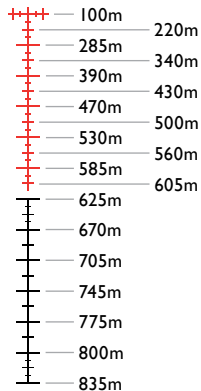
.223 REM CENTERFIRE

Muzzle Velocity: 3240fps
Ballistic Coefficient: 0.2135
Zero Range: 100yds



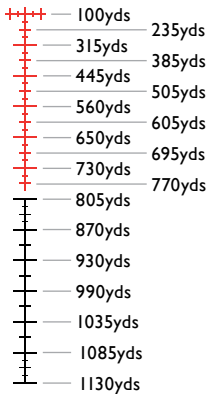
.223 REM CENTERFIRE

Muzzle Velocity: 988m/s
Ballistic Coefficient: 0.2135
Zero Range: 100m



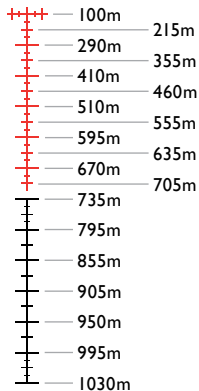
.243 WIN CENTERFIRE

Muzzle Velocity: 2960fps
Ballistic Coefficient: 0.3691
Zero Range: 100yds



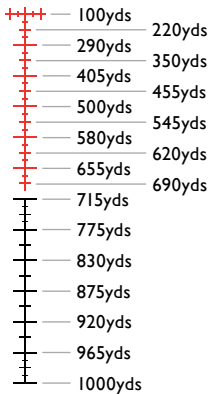
.243 WIN CENTERFIRE

Muzzle Velocity: 902m/s
Ballistic Coefficient: 0.3691
Zero Range: 100m



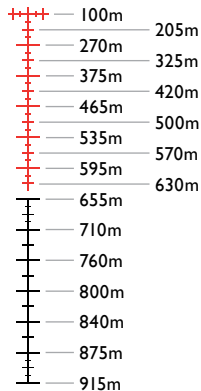
.308 WIN CENTERFIRE

Muzzle Velocity: 2820fps
Ballistic Coefficient: 0.3208
Zero Range: 100yds



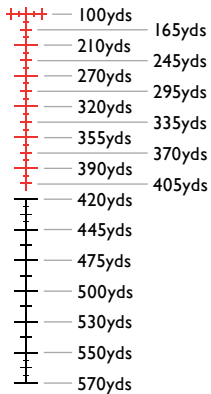
.308 WIN CENTERFIRE

Muzzle Velocity: 860m/s
Ballistic Coefficient: 0.3208
Zero Range: 100m



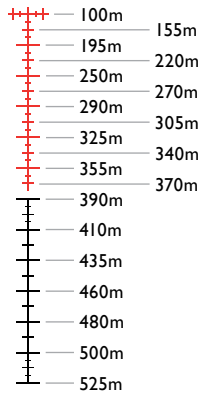
.17 HMR RIMFIRE

Muzzle Velocity: 2550fps
Ballistic Coefficient: 0.1251
Zero Range: 100yds



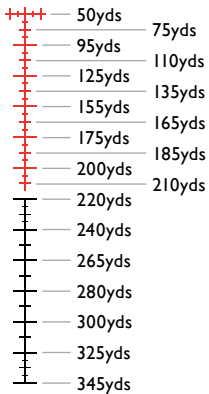
.17 HMR RIMFIRE

Muzzle Velocity: 777m/s
Ballistic Coefficient: 0.1251
Zero Range: 100m



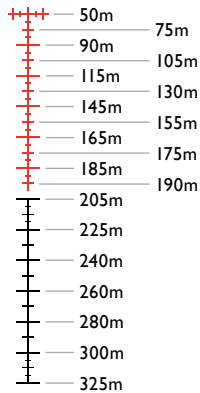
.22 LR HV RIMFIRE

Muzzle Velocity: 1260fps
Ballistic Coefficient: 0.1300
Zero Range: 50yds



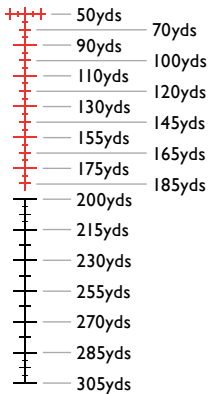
.22 LR HV RIMFIRE

Muzzle Velocity: 384m/s
Ballistic Coefficient: 0.1300
Zero Range: 50m



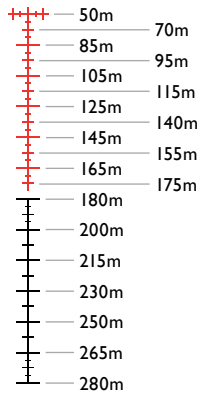
.22 LR SUB RIMFIRE

Muzzle Velocity: 1057fps
Ballistic Coefficient: 0.1300
Zero Range: 50yds



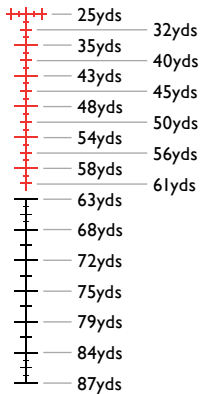
.22 LR SUB RIMFIRE

Muzzle Velocity: 322m/s
Ballistic Coefficient: 0.1300
Zero Range: 50m



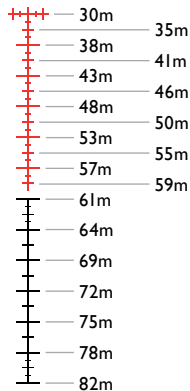
.22 AIRGUN (12ft/lb)

Muzzle Velocity: 560fps
Ballistic Coefficient: 0.0183
Zero Range: 25yds



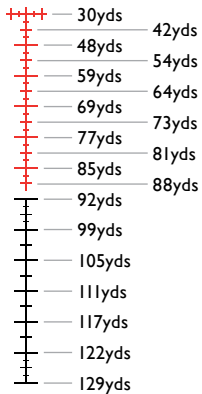
.22 AIRGUN (16 Joules)

Muzzle Velocity: 171m/s
Ballistic Coefficient: 0.0183
Zero Range: 30m



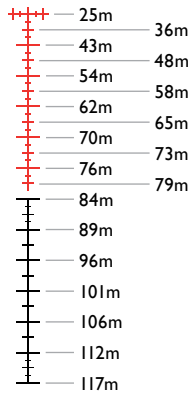
.177 AIRGUN (12ft/lb)

Muzzle Velocity: 786fps
Ballistic Coefficient: 0.0193
Zero Range: 30yds



.177 AIRGUN (16 Joules)

Muzzle Velocity: 240m/s
Ballistic Coefficient: 0.0193
Zero Range: 25m





VISION ACCOMPLISHED

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 Born in the UK