

Precision Plex Reticle

The Precision Plex reticle included in every Gameseeker rifle scope is designed for the dual purpose of compensating for bullet drop and yardage estimation. This system will provide accurate aiming from 100 yards to 500 yards with many of the most common hunting cartridges and will assist in determining the distance to your target. The bullet path of the most common cartridges comes very close to the Precision Plex calibration.

The Precision Plex is extremely useful even if you do not shoot one of the example cartridges on this sheet. Each line on the reticle represents a given yardage for the cartridge you shoot. For example, the 500 yard ballistic line for a less powerful cartridge may be 465 yards. Make sure you visit a rifle range that can simulate the target distance and shooting conditions you expect to encounter on a hunt.

Please note that this instruction sheet and system is a guide. Many variables are involved in bullet trajectories. For maximum accuracy, practice with your rifle and scope combination before taking them into the field.

Using the Drop Compensating Feature

At the range:

- 1) Set your scope on its highest magnification.
- 2) Sight-in exactly at 100 yards or 200 yards, depending on your cartridge and bullet selection.
- 3) Determine the bullet path of your cartridge at the climatic conditions you will be shooting. We highly recommend actual firing at each 100 yard increment for best accuracy. From this information, you can create a table similar to Table 1 for your cartridge/bullet combination.

In the field:

- 1) Determine the distance to your target and select the corresponding ballistic line.
- 2) Slight hold-over or under may be necessary to handle in-between yardages.
- 3) Good shooting!

Fine Tuning

The Precision Plex reticle is much more accurate than guessing hold-over and is easier to use than target turret type adjustments. Bullet ballistics are theoretical and if any one variable changes (altitude, temperature, barometric pressure, humidity, bullet design, barrel length, chamber fit, seating depth, etc.) so does the trajectory of the bullet. For maximum accuracy, practice at long ranges under similar conditions to those you will experience on your hunt.

Technical Tip

For maximum accuracy, sight in at a longer range, such as 300 or 400 yards, using the corresponding yardage line of the Precision Plex reticle. This can decrease the amount of error when shooting at longer ranges due to environmental conditions.

Using the Yardage Estimation Feature

Half the width of each of the drop compensating lines represent 40 inches, the average length from chest to tail of a whitetail deer, at a specific yardage when your Gameseeker rifle scope is set at 6x magnification. While not as accurate as a laser rangefinder, this system will help you estimate a target's distance in the field.

Instructions

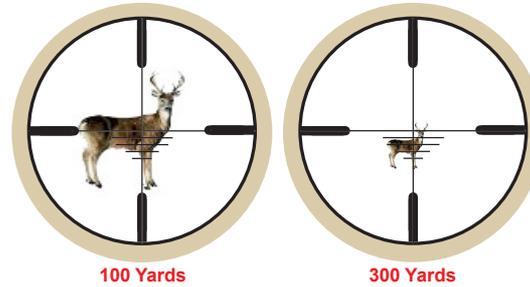
- 1) Set the magnification ring to the 6x position.
- 2) Find an object in the same plane as your target that is approximately 40 inches long (the average size from shoulder to tail of a whitetail deer).
- 3) Determine which drop line this object fits within most closely.
 - Half of the thin portion of central vertical crosshair - approx 100 yds
 - Half of the 200 yard drop line - approximately 200 yards
 - Half of the 300 yard drop line - approximately 300 yards
 - Half of the 400 yard drop line - approximately 400 yards
 - Half of the 500 yard drop line - approximately 500 yards

- 4) You will need to make an educated estimation if the object falls between two of the bullet drop lines.

Keep in mind that this is a simple yardage estimation device and does not take the place of an accurate laser rangefinder.

The object length will be slightly longer when using the Gameseeker 4x fixed power rifle scope.

Example of Yardage Estimation



Responsibility

Long range shooting can be challenging and rewarding, but along with it comes responsibility to the animal in your sights. Many factors, such as target distance, how much wind drift is present, muzzle velocity, angle to the target, etc. effect the point of impact. A perfectly still rest, accurate rifle, and calm nerves are also important to a clean shot. With all of these factors involved, we highly discourage taking hunting shots beyond 300 yards, or your own self imposed range. The slightest mistake in shooting or not accounting for all the relevant conditions can result in a non-vital, irresponsible wound to the animal you respect enough to hunt.

Ballistic Sources

Barnes Bullets

750 North 2600 West, Lindon, UT 84042 (800) 574-9200

Hornady

3625 Old Potash Hwy., Grand Island, NE 68803 (308) 382-1390

Lee Precision, Inc.

4275 County Road U, Hartford, WI 53027 (414) 673-3075

Nosler

P.O. Box 671, Bend, OR 97709 (541) 382-3921

RCBS

605 Oro Dam Blvd., Oro, CA 95965 (916) 533-5191

Sierra Bullets

1400 West Henry Street, Sadalia, MO 65301 (606) 827-6300

Speer

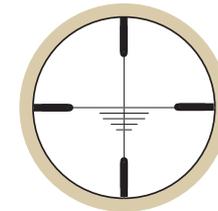
2299 Snake River Avenue, Lewiston, ID 83501 (208) 746-2351

PENTAX is unable to accommodate requests for customized reticles for specific cartridges. PENTAX does not staff ballisticians to determine ballistic tables for you. Please reference various reloading manuals and ballistic software programs for help in this area.

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Precision Plex



Precision Plex

Standard Calibers drop @ 100		Close-up of center section	Standard Calibers drop @ 200	
yards	yard zero		yards	yard zero
100	0.0		100,200	+1.2.0
200	-3.0		300	-4.5
300	-13.0		400	-18.0
400	-29.0		500	-38.0
500	-54.0		600	-66.0

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Precision Plex Reticle Calculation Table 1

Best Fit Popular Factory Cartridges with 100 Yard Center-of-Reticle Zero

Cartridge -		.223Rem		.243Win		.25-06		.260Rem		.270Win		.270Win		7mm-08	
Precision	bullet weight -	55gr	Diff ¹	100gr	Diff ¹	120gr	Diff ¹	140gr	Diff ¹	130gr	Diff ¹	150gr	Diff ¹	140gr	Diff ¹
Plex	muzzle velocity -	3240	from	2960	from	2990	from	2750	from	3060	from	2850	from	2860	from
Drop	yards	Drop	PrecPlex	Drop	PrecPlex	Drop	PrecPlex	Drop	PrecPlex	Drop	PrecPlex	Drop	PrecPlex	Drop	PrecPlex
0.0	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-3.0	200	-3	0	-3	+0	-3	+0	-4	-1	-3	+0	-3	+0	-3	+0
-13.5	300	-13	1	-12	+2	-12	+2	-14	-1	-11	+3	-13	+1	-13	+1
-30.0	400	-32	-2	-28	+2	-27	+3	-31	-1	-26	+4	-29	+1	-30	+0
-55.0	500	-66	-11	-53	+2	-51	+4	-58	-3	-49	+6	-55	+0	-54	+1

Cartridge -		7mmRem Mag		.308Win		30-06		30-06		30-06		.300Win Mag		.338Win Mag	
Precision	bullet weight -	175gr	Diff ¹	150gr	Diff ¹	150gr	Diff ¹	165gr	Diff ¹	180gr	Diff ¹	180gr	Diff ¹	225gr	Diff ¹
Plex	muzzle velocity -	2860	from	2820	from	2910	from	2800	from	2700	from	2960	from	2780	from
Drop	yards	Drop	PrecPlex	Drop	PrecPlex	Drop	PrecPlex	Drop	PrecPlex	Drop	PrecPlex	Drop	PrecPlex	Drop	PrecPlex
0.0	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-3.0	200	-3	+0	-4	-1	-3	+0	-4	-1	-4	-1	-3	+0	-4	-1
-13.5	300	-13	+1	-15	-2	-13	+1	-14	-1	-15	-2	-11	+3	-14	-1
-30.0	400	-29	+1	-34	-4	-31	-1	-32	-2	-34	-4	-26	+4	-31	-1
-55.0	500	-53	+2	-64	-9	-59	-4	-59	-4	-64	-9	-48	+7	-56	-1

Best Fit Popular Factory Cartridges with 200 Yard Center-of-Reticle Zero

Cartridge -		.25-06		.270Win		7mmRem Mag		7STW		.300Win Mag		.300Ultra Mag		.300Ultra Mag	
Precision	bullet weight -	100gr	Diff ¹	130gr	Diff ¹	140gr	Diff ¹	150gr	Diff ¹	150gr	Diff ¹	180gr	Diff ¹	200gr	Diff ¹
Plex	muzzle velocity -	3210	from	3060	from	3138	from	3250	from	3290	from	3300	from	3100	from
Drop	yards	Drop	PrecPlex	Drop	PrecPlex	Drop	PrecPlex	Drop	PrecPlex	Drop	PrecPlex	Drop	PrecPlex	Drop	PrecPlex
	100	+1.2	+1.2	+1.4	+1.4	+1.3	+1.3	+1.1	+1.1	+1.3	+1.3	+1.3	+1.3	+1.3	+1.3
0.0	200	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-4.5	300	-6	-1	-7	-2	-6	-2	-6	-2	-6	-2	-6	-2	-6	-2
-18.0	400	-17	+1	-20	-2	-18	+0	-17	+1	-19	-1	-18	+0	-19	-1
-38.0	500	-36	+2	-41	-3	-36	+2	-34	+4	-39	-1	-36	+2	-39	-1
-66.0	600	-62	+4	-72	-6	-63	+3	-59	+7	-69	-3	-63	+3	-67	-1

Diff¹ from PrecPlex = bullet impact above (+) or below (-) point of aim from when using the yardage - corresponding ballistic line.
 All data derived from Sierra Infinity™ Ballistics software program using a sampling of several popular factory loaded ammunition with spitzer-type bullets.
 OfT Altitude; 59 degree F temperature; 78% Humidity, Center of Scope 1.6" above center of bore.
 Your rifle, cartridges, mounting, environmental conditions may vary. Chronograph testing is recommended.
 Handloads with premium bullets and premium factory loads can generally produce slightly flatter trajectories.