



BRX – menu navigation

Welcome to the Swarovski Optik ballistics program. The following instructions provide you with a few tips which will make it easier to use.

Long-range reticles enable an exact aiming point even for distant shots. They provide the hunter with a simple means of achieving the necessary sighting correction for precisely hitting distant targets without having to make any other adjustments to the rifle scope. Nothing, however, can take the place of a good and careful shooting technique, discipline and practice.

Please enter your exact ballistic data for the program to provide you with accurate output values. Try therefore, to provide the most accurate information possible for your weapon and the type of bullet used, as well as for the resulting combinations, e.g. muzzle velocity.

The following instructions will guide you through the program with brief explanations for each of the input items.

If you have any other questions about the program, please contact us and we will be pleased to help you further (info@swarovskioptik.at).

Language

You can run through the program in German or English, please select your language.

Units of measurement

You can work in metric units (mm, cm, m, g) or imperial units (in, ft, y, gr). Please click on the system you prefer.

Database

If you are using factory ammunition please select our Database for getting into it. There are approximately 1700 hunting loads listed.

Hand load

Please click on “Hand load” if you are using a hand load. All fields will be cleaned for your specific values of your used components.

Manufacturer

Find the manufacturer and individual cartridge of your chosen factory ammunition. If you do not find it, please turn to the website or catalog of the ammunition manufacturer and pick up your values there.

Bullet

After choosing your ammunition manufacturer you have to select your used load out of the list. When your specific load isn't shown please go back to “hand load” and put after this your values in.

Rifle scope

Select your Swarovski Optik rifle scope. Pay attention to the exact designation of your rifle scope model.

Power setting

Once you have selected your rifle scope, this rifle scope's maximum possible magnification will be displayed in this field.

The downrange values for the bars and dots are at the scope's highest magnification. You will achieve optimum precision at long range with the highest magnification. If you still desire a different power, you can enter the desired magnification in this field (setting power), but note that the downrange values of the bars and dots have changed and you must adjust the aiming points accordingly!

Please note that when changing the magnification, you are also changing the corresponding aiming points for the relevant bars and dots! The central aiming point - the first zero distance - remains unaffected by a change of magnification, it always remains the same.

Weight of bullet

If you have selected your load from the database, the bullet weight listed will automatically be displayed here. You can enter the hand load or a load not contained in the database manually.

Muzzle velocity

The muzzle velocity is a very important factor for precise output data. You can find the relevant muzzle velocity from the tables provided by the ammunition manufacturers. The information provided relates, however, to manufacturer's production runs and specifications.

We still recommend chronographing your rifle (if possible) to obtain "actual" velocity for the most accurate results of your combination of firearm and ammunition.

Ballistic coefficient

The ballistic coefficient (BC) is a crucial factor in determining your trajectory curve. This is a measure of a bullet's ability to overcome air resistance. Data for this may be found on manufacturer's web-sites, ammunition tables of the manufacturer's catalogs or in our ammunition database.

Altitude

In this field, enter the average height above sea level in meters/feet at which you usually hunt. If you have a dramatic change in altitude, when hunting abroad for example, you can enter the new conditions and carry out a new calculation.

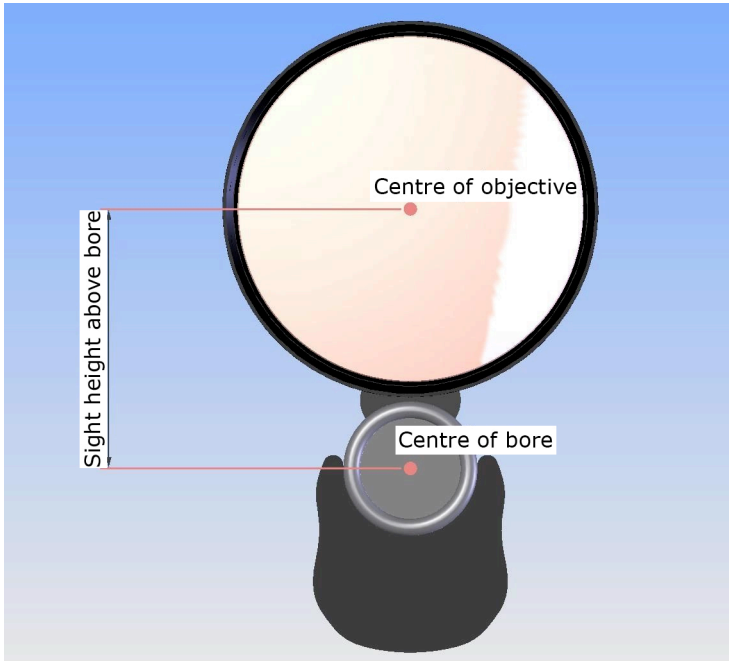
Desired zeroing in distance

With this entry you specify your zero or first sight-in distance. This may be selected at will. The corresponding calculations for the bars and dots are calibrated with the zero distance entered. A distance between 100 and 200 yards/meters is advisable, depending on caliber, anticipated hunting distances or personal preference of the shooter.

The grey box under the reticle drawing provides you with the necessary bullet impact height (in cm/inches) at 100 yards/meters for achieving your desired zeroing in distance when the zeroing in distance is over 100 yards/meters.

Sight height above bore

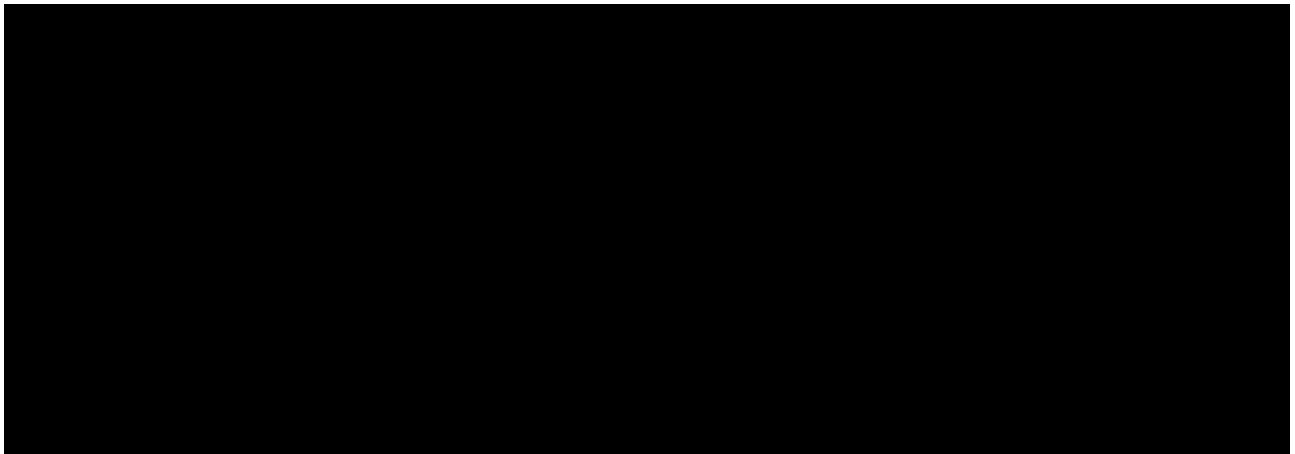
The sight height above bore describes the distance between the center of the bore (rifle bore axis) and the center of the objective (sight line). Please re-measure this distance for your combination of weapon and rifle.



The “standard” in the U.S. for this measurement is 1.5 inches (~ 4cm). This measurement is utilized by most ammunition manufacturers for downrange ballistic calculations.

Type of game

With this function you can determine an effective “Point Blank Range” with any given Bar or Dot of the BRX reticle. If you choose “Fox” in the game field, a measurement of 10cm, or about 4 inches will appear. In the example below, if Bar 1 happened to be dead on at 200 meters, you would hit within 4 inches (10 centimeters) on a Fox, as long as it was between 161 and 231 meters away. In other words you would be 2 inches (5 cm) high at 161 meters, dead on at 200 meters, 2 inches (5 cm) low at 231 meters. These values are reflected in the left hand (lower distance limit) column and right hand (upper distance limit) within the reticle drawing.



Calculation

Click on the "Calculation" field after entering your information, only now will the data you have entered be cross-linked. If you make corrections after an initial calculation, click on the "Calculation" field again afterwards to make the calculation.

Tips and Tricks for Practical Shooting

Dear Hunters,

As with every calculation, the result of the ballistics program can only be as precise as you are when entering your values. These entries must match the actual performance of your weapon and ammunition.

We recommend that you take sufficient time to determine the required values as precisely as possible.

The program also allows you to print out your calculation; the "Summary" field has been set up for this purpose. Here you will find all your data together with the output values calculated in verbal form.

You may download the program and then work with it offline at the shooting range as required.

Use the decals provided to make a note of the values determined for you personally. Together with the precisely measured distance, you will hit the target quickly and surely.

Good shooting and good hunting!

Swarovski Optik