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Fishing line diameter guide

A fishing line size chart compares different types of lines, including PE number, diameter, and strength (measured in mono lb and braid lb tests). This information helps anglers choose the right line for their target species, location, and fishing style. Note that there is no universal conversion between fishing lines due to differences in manufacturing processes among brands. **PE**Diameter (mm)**Mono Line Strength (lb)****Braid Line Strength (lb)** 0.40.100n/a60 0.60.128n/a80 0.80.1482.21 1.00.1653.51 1.50.2054.42 2.10.2355.82 2.50.2606.43 3.00.2858.83 3.50.3109.64 4.00.33014.25 5.00.37015.96 6.00.40517.48 7.00.44019.52 8.00.47021.56 This calculator can convert between PE, diameter (mm), mono lb, and braid lb. You can select your measurement type and input your value to get the other measurements. The PE system is used primarily for braided lines made from Dyneema or Spectra, which have high tensile strengths despite small diameters. The PE number refers to the line's diameter, with a 1.0 PE having a diameter of approximately 0.165mm. Diameter measures the thickness of the fishing line, expressed in millimeters (mm) or thousandths of an inch. It affects line visibility, capacity on your reel, and behavior in wind or casting conditions. Mono lb measures how much weight a monofilament line can support before breaking, while braid lb is used for braided lines. Braided lines are made from multiple strands that are braided together and tend to be stronger than monofilament lines of the same diameter but are also more visible in water. The size of a fishing line is crucial in fishing because it affects casting distance, line capacity, visibility, abrasion resistance, and stretch. A thinner line can help you cast your bait or lure further, and its diameter influences line capacity on your reel. A quick reference guide for selecting the right fishing line size for your target species. Fishing Line Basics: Understanding Monofilament, Fluorocarbon, and Braided Lines Many anglers refer to fishing lines by their diameter, as it's a crucial factor in choosing the right line for bait fishing or spinning. ****Monofilament Fishing Line**** Monofilament is the most versatile and widely used line, ideal for beginners. It boasts good abrasion resistance and elasticity, allowing it to stretch and absorb shocks when casting or striking at bites. However, it's less expensive than other lines but needs replacement more often. ****Fluorocarbon Fishing Line**** Fluorocarbon, also known as Fluoro, is made from a polymer and is renowned for its exceptional abrasion resistance and UV protection. It's almost invisible underwater and suitable for bait fishing or spinning coarse and game fish. However, it lacks flexibility and is prone to knot failure. ****Braided Fishing Line**** Braided lines are constructed from synthetic fibers like nylon, Dacron, Dyneema, or Spectra, which are twisted together to create a strong and thin line. They have no stretch, making them ideal for long-distance casting and bite detection. However, they can be prone to line breakage and have a lower breaking strain than monofilaments. ****Diameter and Breaking Strains**** A guide to diameter and approximate breaking strains of commonly used monofilament lines is as follows: | Diameter | Average Breaking Strain | | --- | --- | | 0.06mm | 12oz | | 0.07mm | 1lb 2oz | | 0.08mm | 1lb 12oz | | 0.09mm | 2lb | | 0.10mm | 2lb 6oz | A fishing line size chart provides comparative data, including PE number, line diameter, and strength. It's essential to choose the right line based on targeted fish species, fishing location, and style. The first step in using this calculator is to select your measurement type and input your value. The output will include all other measurements relevant for braided lines, particularly those made from Dyneema or Spectra. The PE number refers to the line's diameter according to a Japanese system, with a PE 1.0 having a diameter of approximately 0.165mm. Braided lines can have high tensile strengths despite small diameters. This calculator measures the thickness of fishing lines in millimeters (mm) or thousandths of an inch, which is important for visibility, line capacity on reels, and resistance to abrasion. The pound test determines how much weight a monofilament line can support before breaking, with braided lines requiring more force. The size of fishing lines impacts various aspects of fishing, including casting distance, line capacity, visibility, abrasion resistance, and stretch. Thinner lines can help you cast farther and take up less space on reels, making them beneficial for species that make long runs. Thicker lines are stronger and more resistant to breaking but may be more noticeable underwater. The amount of stretch in a line is also size-dependent, with thicker monofilament lines stretching more than thinner ones. This can affect hook setting and bite detection. If you're looking to convert between fishing line sizes for a particular species, this quick reference guide will help you choose the right line size. A fishing line size chart provides essential information for anglers to select the right line based on factors such as targeted fish species, location, and style of fishing. The chart displays data including PE number, line diameter, and strength in units of mono lb and braid lb tests. **### Conversion Chart | Diameter (mm) | Mono Line Strength (lb) | Braid Line Strength (lb) |** | --- | --- | | 0.40 | n/a | n/a | | 0.60 | 1/10 | n/a | | 0.80 | 2/10 | 3/8 | | 0.90 | 4/10 | 5/16 | | 1.00 | 5/16 | 7/32 | | 1.20 | 9/32 | 11/64 | | 1.40 | 13/32 | 15/64 | | 1.50 | 17/32 | 19/64 | | 1.60 | 21/32 | 23/64 | | 1.80 | 25/32 | 29/64 | | 2.00 | 31/32 | 35/64 | This chart can be used to convert between PE diameter, mono lb, and braid lb strengths. **### Key Factors Influencing Line Size** The size of a fishing line is crucial due to its impact on carting distance, line capacity, visibility, abrasion resistance, and stretch. Thinner lines are lighter and more visible in water, making them ideal for casting long distances or targeting species with keen eyesight. However, thinner lines may not provide sufficient strength against sharp objects or the teeth of hooked fish. Using a thicker line can offer improved abrasion resistance and greater safety when fishing in challenging conditions, when targeting larger or fishing in rough waters, choosing the right line size and strength becomes crucial. The amount of stretch a line has is also linked to its thickness; thicker monofilament lines tend to be more prone to stretching than thinner ones, which can impact how effectively you set hooks and detect bites from fish. If you're looking for a specific line size conversion guide, this reference will help you pick the right one for your target species. ****Fish Species Reference Guide**** | Fish Species | PE Number | Diameter (mm) | Mono lb Test | Braid lb Test | | --- | --- | | Trout | 0.6 | 0.12 | 8-16 | | Small Bass | 0.8 | 0.14 | 10-18 | 20-25 | | Large Bass | 1.5 | 0.20 | 15-25 | 30-40 | | Walleye | 1.0 | 0.16 | 10-15 | 20-25 | | Catfish | 2.0 | 0.23 | 20-30 | 35-45 | | Small Salmon | 2.5 | 0.26 | 25-35 | 40-50 | | Large Salmon | 3.0 | 0.28 | 30-40 | 50-60 | | Tarpon | 4.0 | 0.33 | 40-50 | 60-70 | | Marlin | 6.0 | 0.40 | 60-80 | 90-110 | | Tuna | 8.0 | 0.47 | 80-100 | 120-140 | | Shark | 10.0 | 0.52 | 100-130 | 150-170 | The breaking strain of your line is essential for a successful catch; lines that are too light may break under the weight of larger fish, while those that are too strong can scare fish away due to their visibility. With so many materials and varying strengths available, choosing the right line can be overwhelming. Modern high-tech fishing lines have improved significantly, offering higher breaking strains with lower diameters, which enhances usability, presentation, and casting properties for both monofilament and braided lines. To better understand each line's true strength, a list of commonly used line diameters and their average relative breaking strains has been compiled: * For commercial carp fishing: 0.14-0.22mm * For silverfish: 0.10-0.14mm * For feeder fishing: 0.16-0.22mm * For float fishing on a river: 0.14-0.18mm By using the best fishing line for your chosen discipline, you can make your fishing experience easier and more effective. The provided buyers guide contains some great options to consider. A fishing line size chart provides comparative data, including PE number, line diameter, and strength (often as mono lb and braid lb tests). This information helps anglers choose the right line based on targeted fish species, fishing location, and style. The thickness of a fishing line is measured in millimeters or thousandths of an inch using the PE system. The system originated from Japan and categorizes lines by their diameter, with smaller diameters indicating thinner lines. For instance, a PE 1.0 line has a diameter of approximately 0.165mm. This measurement affects various aspects of fishing, including the line's visibility underwater, its capacity on a reel, and how it behaves in windy conditions or when casting. The pound test measures a monofilament line's weight-bearing ability before breaking. It is often expressed in terms of mono lb test. On the other hand, braided lines are made up of multiple strands that can support greater weights than their respective diameters would suggest, making them more resistant to breaking. In addition to these factors, a fishing line's size influences various aspects of the sport, including casting distance, line capacity, visibility, abrasion resistance, and stretch. For instance, thinner lines enable anglers to cast farther due to their lighter weight. The diameter of the line also affects its capacity on a reel, with smaller diameters allowing for more line to be spooled onto the reel. Visibility underwater is another important consideration, as smaller-diameter lines are less noticeable to fish. Additionally, thicker lines tend to be stronger and more resistant to damage from rocks or fish teeth, making them suitable for fishing in rough environments or targeting larger species. Lastly, the amount of stretch a line exhibits depends on its size, with thicker monofilament lines tending to exhibit more stretch than thinner ones. This stretch can affect how effectively an angler sets their hook and detects bites from fish. A fishing line size chart can be used to compare different sizes of lines based on their PE number, diameter, and strength (often expressed in mono lb test for monofilament lines or braid lb test for braided lines). Targeted fishing requires consideration of species, location, and style. However, there's no universal conversion for fishing lines due to varying manufacturing processes among brands. **# | PE**Diameter (mm) | **Mono Line Strength (lb) | Braid Line Strength (lb) |** | --- | --- | | 0.4 | 1.00 | n/a | | 0.6 | 1.28 | 60 | | 0.8 | 1.48 | 80 | | 1.2 | 2.21 | 100 | | ... | ... | ... | This calculator converts between PE, diameter (mm), mono lb, and braid lb. Select your measurement type and input the value to get all other measurements. The conversion chart is primarily for braided lines made from Dyneema or Spectra. The PE number refers to the line's diameter in a Japanese system. For example, a PE 1.0 line has a diameter of approximately 0.165mm. Braided lines are often used due to their high tensile strengths despite small diameters. **# * Diameter**, measures the thickness of the fishing line (mm or thousandths of an inch). *** Mono Pound Test**, measures the weight in pounds that a monofilament line can support before breaking. *** Braid Pound Test**, similar to mono pound test, but for braided lines. The size of a fishing line is crucial in fishing due to factors like casting distance, line capacity, visibility, abrasion resistance, and stretch. Thinner lines can help you cast farther, while thicker lines are stronger and more resistant to breaking. The selection of a suitable fishing line size is critical to achieving optimal performance during fishing. The diameter of the line affects not only the casting distance and accuracy but also the visibility of the line to the target fish. A comprehensive guide has been compiled to assist anglers in choosing the right line size for their specific needs. Fishing Line Diameter: Factors Affecting its Size and Importance in Selection Material of fishing line has significant impact on its size or diameter. There are three main types of materials: monofilament (mono), fluorocarbon (fluoro), and braided lines. The research conducted shows that braided lines usually have a smaller diameter, 35-45% less than the mono and fluoro lines. For instance, at a 6lb test, the mono and fluoro lines have a diameter of about 0.009 inches whereas the braided line has 0.005 inches which makes it significantly thinner. Another factor that affects fishing line size is its breaking strength or how much weight the line can handle before snapping. Generally, as the line's breaking strength increases so does its diameter. The stronger the line, the thicker it will be. For instance, at a 10lb test monofilament lines have a diameter of 0.011 inches. The manufacturing process also plays a crucial role in determining a fishing line's size or diameter. Different types of resins and methods used by different companies lead to variations in diameter across brands and models. Companies continuously innovate and experiment with these processes to develop lines with the optimal balance of strength, castability, and abrasion resistance which ultimately affects the diameter. In conclusion, main factors affecting fishing line size are material, breaking strength, and manufacturing process. It's essential to consider these when selecting a fishing line for your specific needs such as species of fish you are targeting. Selecting appropriate line size is crucial because different species require different line sizes or diameters. For example, trout require 4-8lb test lines with a diameter between 0.007-0.010 inches while bass need 8-14lb test lines with a diameter between 0.010-0.014 inches. Depending on the fishing technique used, the line size may vary. For instance, spinning reels generally require thinner lines for better casting and lure action which is ideal for a line diameter between 0.006-0.010 inches. Similarly, baitcasting reels need heavier lines with thicker diameters around 0.010-0.014 inches for better control and accuracy. It's also important to ensure that the chosen line size is compatible with the rod and reel being used. Most manufacturers specify the line capacity in terms of diameter and length such as 140 yards of 0.012 inch diameter line. When it comes to having a great day out on the water, several key factors come into play. The type of fish being targeted, the fishing technique used, and the compatibility of the rod and reel with the chosen line all contribute to a successful experience. In my own experience, I've found that the diameter of the fishing line has a significant impact on casting distance. Thinner lines tend to cast farther than thicker ones due to reduced air resistance and lighter weight. Furthermore, thinner lines have less friction when leaving the spool, allowing for smoother and more extended casts. For example, a line with a 0.005in diameter often outperforms one with a 0.009in diameter in terms of casting distance. Not only do thinner lines improve casting distance, but they also provide better sensitivity compared to thicker lines. This is because thinner lines have less give, enabling me to feel subtle bites and changes in underwater conditions more easily. They also exhibit less resistance underwater, resulting in a more direct connection between my fishing rod and the bait or lure. This enhanced connection can aid in detecting when a fish has taken an interest in my lure. In my experience, another crucial aspect to consider when discussing line diameter is its visibility. Thicker lines tend to be more noticeable underwater, which may cause fish to be hesitant to bite. Conversely, thinner lines are less apparent to fish, increasing the likelihood of a successful catch. It's essential to note that the type of fishing line also influences visibility. For instance, braided lines often appear more visible than monofilament or fluorocarbon lines due to their multi-strand construction. Ultimately, understanding how line diameter affects fishing performance is vital for any angler. By taking into account casting distance, sensitivity, and line visibility, you can make informed decisions when selecting the right fishing line for your specific situation.

Fishing line diameter chart mm. Line fishing method. Fishing line color. Fishing line diameters. Line diameter.