

# WHAT WILL YOUR LINE ACTUALLY BREAK AT?

An essential guide to  
nylon, flourocarbon and  
braided main lines.



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## WHAT LINE IS BEST FOR YOU?

*As so many lines are labelled the same but behave very differently, we suggest buying line by diameter rather than by the breaking strain on the label.*

### **For weed and snag free situations...**

We recommend lines of between 0.33mm and 0.35mm. These will usually break between 16lb and 18lb.

### **For waters with snags and heavy weed...**

Thicker lines of between 0.35mm and 0.40mm will have better abrasion resistance and be stronger, usually breaking between 20lb and 22lb.

### **For distance casting...**

Lower diameter lines of 0.25mm to 0.30mm generally enable longer casts and will usually break between 10lb and 15lb.

### **One last thing...**

Remember, diameter and breaking strain do not give the complete picture. Cost, suppleness, abrasion resistance and value for money should also be considered.



## WHAT BRAID IS BEST FOR YOU?

*Braid can be an essential part of any angler's tackle, but there are a few things to consider when choosing which one to buy...*



### **FLOATING BRAID**

Ideal for marker float use, spodding / spombing or drifting and lure fishing for pike.

### **SINKING BRAID**

Ideal for pinning down main line when a much less detectable approach is required.

### **Braid, the pros...**

Most braids are exceptionally thin, making them superior casting lines, and have virtually no stretch, which improves bite indication, makes them more sensitive for feature finding and ideal for spodding / spombing. Braids generally deteriorate a lot more slowly than nylon or fluorocarbon, so the need to re-spool is less and it is also less troublesome with line twist.

### **Braid, the cons...**

Care must be taken when spooling new braid. It is important not to overfill your reels otherwise wind knots will occur, and it is best loaded on to your spools wet and under tension. The lack of stretch in braid can result in fish losses due to hook pulls or hook link breakages, so extra care needs to be taken when playing fish, and this zero stretch can also result in a broken rod if the braid gets wrapped around rings during casting or general handling.

## WHAT WILL YOUR LINE ACTUALLY BREAK AT?

*Almost every line commonly used for carp fishing has an underrated breaking strain indicated on the spool or box. With a good knot, most lines will always break at a higher strain.*

With no international guidelines for indicating breaking strain or diameter, most manufacturers underrate lines to different degrees. A line labelled 12lb by one company may consistently break around 20lb, whereas a line labelled 12lb by a different company may regularly break at just 14lb. To give a better idea of the specifications of the main lines that we sell we have tested breaking strains and diameters ourselves.

### **How we measure the breaking strain**

We took line from different points on the spool and measured breaking strains five times using our own custom and precision made line tester, and diameters using a high quality digital calliper. Breakage tests were conducted with five turn grinner knots and a knotless knot to mimic what the average angler uses. Braid diameters shown below are as accurate as possible, but unlike nylon lines, some braids do not have round profiles. Each spool of line was tested brand new, but we accept that the performance of most lines varies with age, and that different batches of lines supplied to shops may show slight differences in performance. However we hope the chart will provide useful general guidance.







# LINE TESTS

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## FLUOROCARBON MAIN LINES

Fluorocarbons are usually very abrasion resistant, virtually invisible in water and have fast sinking qualities.



MAKE OF LINE	Stated Strain	Average Strain	Stated Diameter	Measured Diameter
Berkley Super Strong 100% Fluorocarbon	12lb	13lb	0.33mm	0.33mm
	15lb	14.5lb	0.381mm	0.365mm
	17lb	14.88lb	Unstated	0.38mm
Berkley Connect CF600	12lb	11.64lb	0.34mm	0.31mm
	15lb	11.66lb	0.38mm	0.3mm
Daiwa Floorit Brown	10lb	9.26lb	0.27mm	0.26mm
	12lb	10.55lb	0.31mm	0.28mm
	14lb	14.13lb	0.33mm	0.34mm
	17lb	16.08lb	0.37mm	0.38mm
Daiwa Floorit Clear	12lb	11.09lb	0.31mm	0.28mm
	14lb	13.14lb	0.33mm	0.34mm
	17lb	16.08lb	0.37mm	0.38mm
Daiwa Infinity Floorit Super Soft Clear	15lb	12.36lb	0.33mm	0.31mm
	18lb	14.87lb	0.35mm	0.34mm
	20lb	17.31lb	0.39mm	0.38mm
Fox Illusion®	16lb	13.01lb	0.30mm	0.34mm
	19lb	16.26lb	0.35mm	0.38mm
Gardner Mirage	12lb	11.75lb	0.33mm	0.33mm
	14lb	12.88lb	0.35mm	0.35mm
	16lb	13.38lb	0.37mm	0.36mm
Korda Kontour	12lb	11.5lb	0.33mm	0.31mm
	15lb	11.36lb	0.35mm	0.34mm
	18lb	14.39lb	0.37mm	0.37mm

MAKE OF LINE	Stated Strain	Average Strain	Stated Diameter	Measured Diameter
RidgeMonkey FluoroCast 1000m	15lb	12.72	0.33mm	0.32mm
	18lb	15.70	0.37mm	0.37mm
RidgeMonkey RM-Tec Fluoro	15lb	15.4lb	0.33mm	0.35mm
	20lb	17.71lb	0.37mm	0.39mm
Taska Deceptive	16lb	10.66lb	0.33mm	0.34mm
	20lb	14.95lb	0.37mm	0.38mm
TF Gear Secret Trap	17lb	13.38lb	0.35mm	0.35mm
Ultima Pure Power Fluorocarbon Clear	12lb	9.38lb	0.30mm	0.30mm
	14lb	10.75lb	0.32mm	0.32mm
	16lb	11.5lb	0.35mm	0.35mm
Ultima Pure Power Fluorocarbon Green	12lb	8.25lb	0.30mm	0.30mm
	14lb	10.5lb	0.32mm	0.32mm
	16lb	13lb	0.35mm	0.35mm
X Line	12lb	9.38lb	0.26mm	0.28mm
	15lb	10.25lb	0.31mm	0.29mm
	17lb	11.13lb	0.33mm	0.31mm
	20lb	12.63lb	0.37mm	0.35mm
X2 Secure	15lb	13.82lb	0.30mm	0.31mm
	20lb	15.14lb	0.35mm	0.34mm

## BRAIDED MAIN LINES

Braid can be an essential part of any angler's tackle. Ideal for main line, feature finding and spodding.



MAKE OF LINE	Stated Strain	Average Strain	Stated Diameter	Measured Diameter
Berkley Fireline Braid	14lb	21.38lb	0.23mm	0.28mm
	20lb	26.38lb	0.30mm	0.34mm
	30lb	38.13lb	0.36mm	0.43mm
Berkley Fireline Tournament Exceed	14lb	21lb	0.23mm	0.26mm
	20lb	24.88lb	0.30mm	0.33mm
	30lb	38.13lb	0.36mm	0.43mm
Berkley Fireline Ultra 8 Carrier Smoke	24lb	9.06lb	0.17mm	0.21mm
Berkley Nanofil	12.64kg (28lb)	12lb	0.20mm	0.23mm
Berkley Whiplash Braid	20lb	15.88lb	0.06mm	0.20mm
	30lb	17.63lb	0.10mm	0.26mm
	50lb	29.31lb	0.17mm	0.31mm
Berkley Whiplash 8 Braid Green	24lb	15.35lb	0.06mm	0.18mm
	32.6lb	20.34lb	0.10mm	0.27mm
	50.4lb	29.15lb	0.18mm	0.33mm
Berkley Whiplash 8 Braid Yellow	32.6lb	17.31lb	0.10mm	0.26mm
Berkley Connect CB2000	35lb	22.27lb	0.22mm	0.26mm
Daiwa J-Braid x 4 Dark Green	32lb	23.98lb	0.25mm	0.32mm
	50lb	47.23lb	0.33mm	0.41mm
Daiwa J-Braid x 4 Yellow	32lb	17.09lb	0.25mm	0.33mm
Daiwa J-Braid x 8 Dark Green	29lb	16.79lb	0.25mm	0.22mm
	37.5lb	20.27lb	0.25mm	0.23mm
	40lb	24.49lb	0.32mm	0.31mm
	58lb	28.77lb	0.37mm	0.34mm
	79lb	44.41lb	0.50mm	0.48mm
Daiwa Tournament 8 Braid	50lb	26lb	0.26mm	0.26mm
Dynon SK Braid	22lb	19.88lb	Unstated	0.30mm
	34lb	27.25lb	Unstated	0.39mm
E+S+P Spod & Marker Braid	20lb	18.88lb	0.28mm	0.28mm
Faith OctoX 8	25lb	17.20lb	0.16mm	0.25mm
	30lb	19.19lb	0.20mm	0.30mm
	40lb	24.91lb	0.25mm	0.34mm
Fox Excot Distance Spod & Marker Braid	23lb	13.5lb	0.18mm	0.24mm
Fox Excot MK2 Marker Braid	20lb	10.23lb	0.18mm	0.24mm
Fox Excot MK2 Spod Braid	20lb	15.32mm	0.18mm	0.24mm

MAKE OF LINE	Stated Strain	Average Strain	Stated Diameter	Measured Diameter
Avid Carp Depth Charge Marker Braid	40lb	17.63lb	0.10mm	0.26mm
Avid Carp Extremity Marker Braid	25lb	17.56lb	0.23mm	0.31mm
Avid Carp Extremity Spod Braid	25lb	22.28lb	0.23mm	0.31mm
Avid Carp Outline Camo Braided Mainline 600m	30lb	21.82lb	0.25mm	0.31mm

MAKE OF LINE	Stated Strain	Average Strain	Stated Diameter	Measured Diameter
Fox Submerge®	25lb	19.10lb	0.16mm	0.31mm
	40lb	25.58lb	0.20mm	0.33mm
	55lb	34.39lb	0.3mm	0.36mm
Fox Gravitrone Pro	15lb	13.88lb	0.30mm	0.31mm
	20lb	18.13lb	0.35mm	0.37mm
	25lb	21.37lb	0.40mm	0.38mm
Gardner Hydro Sink Noir	25lb	30.47lb	0.35mm	0.43mm
Gardner Kinetic	15lb	20.4lb	0.23mm	0.30mm
	20lb	20.42lb	0.27mm	0.31mm
	30lb	28.33lb	0.34mm	0.36mm
	40lb	33.42lb	0.36mm	0.45mm
Korda Apex	30lb	24.5lb	0.23mm	0.33mm
	50lb	33.30lb	0.36mm	0.38mm
Korda Marker Braid	20lb	13.39lb	0.16mm	0.24mm
Korda Spod Braid	20lb	13.93lb	0.16mm	0.23mm
Korda Sub Braid	15lb	19.47lb	0.30mm	0.33mm
	20lb	21.52lb	0.34mm	0.36mm
Nash Bullet Braid	15lb	19.5lb	0.30mm	0.32mm
	20lb	20.63lb	0.35mm	0.34mm
	25lb	22.63lb	0.40mm	0.34mm
Nash NXT Bullet Braid	15lb	18.13lb	0.23mm	0.30mm
	20lb	23.63lb	0.30mm	0.35mm
	25lb	26.63lb	0.34mm	0.38mm
PB Products Gator Braid 1000m	30lb	22.21lb	0.30mm	0.27mm
Power Pro Braid	66lb	33.23lb	0.36mm	0.38mm
RidgeMonkey Descend Sinking Braid Mainline	20lb	20.22lb	0.28mm	0.27mm
RidgeMonkey Descend Sinking Braid Mainline	30lb	31.97lb	0.35mm	0.42mm
RidgeMonkey RM-Tec Braided Mainline	20lb	16.61lb	0.28mm	0.30mm
	30lb	23.32lb	0.357mm	0.40mm
RidgeMonkey RM-Tec Transmit Spod & Marker Braid	25lb	26.19lb	0.28mm	0.33mm
Spiderwire Ultracast Fluoro Braid	20lb	19lb	0.25mm	0.27mm
	30lb	23.63lb	0.30mm	0.31mm
Spomb Braid	20lb	16.04lb	0.18mm	0.21mm
TF Gear Banana Braid	30lb	24lb	0.28mm	0.24mm
	50lb	30.67lb	N/A	0.36mm
Ultima Vertibraid	20lb	20lb	Unstated	0.25mm
	30lb	27.75lb	Unstated	0.34mm
X2 Durabraid	31.5lb (14.3kg)	21lb	0.20mm	0.24mm
	37lb (16.8kg)	24lb	0.25mm	0.32mm
	42lb (19.3kg)	27lb	0.30mm	0.35mm
	42.5lb (19.3kg)	27lb	0.30mm	0.35mm