# **Conductors**

# Visible • Reliable • Proven • Backed by Expertise

# Why our conductors excel...

- **Knowledge.** Premier's low-tension conductors are made to our specifications based on the results of more than 40 years of testing, observing and modifying. We continue to "tweak" them because all products can be improved.
- We specialize in electric fences. Amazon doesn't. And neither do most farm stores. We are interested in what works and what might fail for specific purposes for specific species. We are not interested in what sells best, fancy packages or exaggerated claims.
- **Best cost of similar quality items.** It's almost a given that if someone is selling rope or twine for less than Premier, it is inferior in diameter, conductivity, filament quality or visibility. (Check the labels for yourself.)
- Our goal is to supply you with choices—for unique and proven products with features, capabilities and performance not found elsewhere.

# Tips to buying...

- **Visibility against all backgrounds.** Black and white is best combination. Blue is also picked up by livestock.
- **Conductivity.** Higher conductivity provides a reliable pulse from end to end. Essential on long fences.
- **Durability.** Match conductors to intended use, don't buy a 2-year twine for a 20-year job.
- **Exposure of metal filaments.** The best conductors have these spread around their exterior.
- Support. We support and use what we sell—and have confidence in our products.

# **Buyer beware!**

Many store labels don't tell you exactly what the plastic filaments are. They should—because there can be large differences in performance and cost per year of life.

# We've stood behind all of our products for over 40 years!

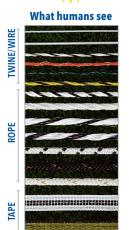
If a Premier item disappoints within its expected life, we either replace it or refund its prorated value—based on years of use. It's as simple as that!



# Which conductor is the most visible?













# Relative visibility for animals and humans differs. And it's critical. Why?

- 1. If it's easy to see night and day, it's more likely to stop livestock and wildlife.
- 2. Visibility = avoidance = safety for both animals and humans.

Photos (*above*) simulate direct sunlight and "nightlight". To achieve this we eliminated the color from the photo and enhanced the amount of night light.

#### **Key conclusions:**

- Size in diameter or width matters—larger is always better for visibility.
- **Contrast matters**—black/white is more visible than solid colors.

# Conductivity Compared

## A smaller $\Omega$ = a bigger "pipe" for each pulse

Higher ohm number is more constrictive to flow while lower ohm number is more open to flow.





# Rope Size Comparison

## Circles represent the diameter of rope

We know there can be some confusion converting millimeters to inches—use this handy chart to help. See our braid, ropes and twine on pp. 62–63.

6.35 mm   0.25"		
4.78 mm   0.1875"		
3.05 mm   0.12"	0	
2.6 mm   0.10"	0	
2.3 mm   0.09"	0	
1.8 mm   0.07"	0	

# Shortcuts for ordering

#### **Best for long fences:**

- IntelliBraid 6.0
- EnduraSoft 6.0
- $\bullet$ Intelli Rope PE 4.5 & 6.0

#### **Best for semi-permanent:**

• IntelliRope PE 4.5 & 6.0

## **Best for reel systems:**

• IntelliBraid Twine 2.25 & 3.0

#### **Most UV resistant:**

- IntelliBraid 6.0
- EnduraSoft 6.0

#### Lowest cost per ft:

• IntelliTwine 2.25

#### Least cost per year of use:

- IntelliBraid 6.0
- EnduraSoft 6.0
- IntelliRope PE 4.5

#### Least weight:

- IntelliBraid Twine
- IntelliTwine 2.25

#### Most resistant to mildew:

- IntelliRope PE 4.5 & 6.0
- IntelliBraid Twine
- IntelliTwine 2.25

#### **Most conductive:**

• IntelliBraid Grazer

# Low-Tensile wire & tape



actual size .07" dia.

## MaxiShock™

MaxiShock is ideal for semi-permanent fences when visibility is not a factor.

Highly regarded for 3 qualities:

- Very thick zinc coating (Class IV) of each of the 7 strands in this cable. It should last 10 years without rusting in humid climates.
- Low-tensile strength. Therefore it's
  easy to wind, unwind, cut, tie and join.
  Enables simple, conductive, durable
  "no-tool" connections.
- 3. Excellent conductivity. 19 ohms/1000 ft.

#### MaxiShock

1320', 12 lb	#251000
2640', 26 lb	#251015



# IntelliTape™

The most visible, narrow tape on the market. That's why it is so effective at stopping deer, horses and "spooked" cattle—and why many prefer it for temporary cattle fences.

Narrow tapes resist wind better than wider tapes, but even so, tape fences generally require more maintenance.

3 stainless steel and 3 tinned copper filaments. Made of virgin polyethylene monofilaments. 50 ohms/1000 ft.

#### IntelliTape

330', 2 lb	#257010
660', 3 lb	#257020
1320', 6 lb	#257040



#### **SEE CONDUCTOR CHART**

Conductive filaments: Tinned Copper (TC), Stainless Steel (SS) Non-conductive filaments: Polyester (PES), Virgin polyethylene monofilament (v-PE) Comparing ohms ( $\Omega$ ): For most people, it's counterintuitive because higher ohm numbers equal

<u>lower conductivity</u>. The pictograph (p. 61) shows the relative conductivity of conductors.

\*Important: "Probable Lifespan" is not a warranty by Premier. Why not? Because we know that longevity is highly dependent upon, but not limited to, quality of installation, insulator(s) used, rope tension, animal/ wind/snow/ice/vegetation pressure and UV exposure (altitude and climate).

# **Conductors** Compared







	IntelliBraid 6.0	EnduraSoft 6.0	IntelliRope BLUE PE 6.0	
Fence Usage	Permanent	Permanent	Semi- & Permanent	
Size (in diameter)	1/4"	1/4"	1/4"	
Color	White/Black/White	White/Black/White	White/Black/Blue	
Conductivity (per 1000')	45Ω	32Ω	32Ω	
Conductive Filaments	2 TC / 12 SS	3TC/3SS	3TC/3SS	
Non-conductive Filaments	PES	PES	v-PE	
Visibility to Animals	Good	Fair	Very Good	
Mildew Resistance	Fair	Fair	Excellent	
Ultraviolet (UV) Resistance	Excellent	Excellent	Good	
Breaking Strength	1800 lbs	1800 lbs	1200 lbs	
Probable Lifespan*	25 yrs	25 yrs	10 yrs	



#### IntelliBraid® 6.0

A long lasting braided rope conductor for permanent electric fences.

Tinned copper filaments (2) run along the inner core. Braided polyester and 12 stainless steel filaments provide support. This method reduces stress on copper filaments and increases strand strength.

#### IntelliBraid 6.0

660', 9.8 lb	.#256710
1320', 19.35 lb	.#256730



#### IntelliRope® BLUE PE 6.0

Same design as IntelliRope 6.0, modified with bright blue filaments.

Research shows that animals are able to see shades of blue. Adding blue increases the conductors visibilityneeded for fast moving animals with poor vision.

#### **IntelliRope BLUE PE 6.0**

660', 8.95 lb	.#256901
1320', 18.45 lb	.#256911



## EnduraSoft® 6.0

For permanent electrified fences. Twisted instead of braided (IntelliBraid). Its good conductivity is suited for any length of fence and nearly all energizers.

Has 3 "cables" of twisted polyester strands into which 3 tinned copper and 3 stainless steel filaments are intertwined.

#### **EnduraSoft 6.0**

660', 12 lb	#256500
1320', 22 lb	#256600



## IntelliRope® PE 6.0

Excellent for both semi-permanent and permanent fences.

Its built-in elasticity means extra P-springs are useful but not essential.

Made of virgin polyethylene monofilaments interwoven with 3 tinned copper and 3 stainless steel filaments.

#### IntelliRope PE 6.0

660', 7.90 lb	.#256900
1320', 16.05 lb	.#256910













IntelliRope PE 6.0	IntelliRope PE 4.5	IntelliBraid Twine PE 3.0	IntelliBraid Grazer 2.6	IntelliBraid Twine PE 2.25	IntelliTwine 2.25
Semi- & Permanent	Semi- & Permanent	Portable	Portable	Portable	Portable
1/4"	3/16"	12g / .12"	2.6mm / .10"	12g / .09"	12g / .09"
White/Black/White	White/Black/White	White/Black/White	White/Blue/White	White/Black/White	White/Black/White
32Ω	32Ω	48Ω	20Ω	48Ω	32Ω
3TC/3SS	3TC/3SS	2TC/4SS	3TC/6SS	2TC/4SS	3TC/3SS
v-PE	v-PE	v-PE	PE	v-PE	v-PE
Very Good	Good	Fair	Good	Fair	Fair
Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Good	Good	Good	Good	Good	Good
1200 lbs	750 lbs	325 lbs	243 lbs	280 lbs	280 lbs
10 yrs	10 yrs	5 yrs	5 yrs	5 yrs	5 yrs



# IntelliRope® PE 4.5

For portable and semi-permanent fencing situations.

Identical to PE 6.0 (*left*) except it has fewer polyethylene (PE) monofilaments. This 4.5mm version is less weight, lower cost and better for short-term fences.

Excellent built-in elasticity.

#### IntelliRope PE 4.5

660', 5 lb	#245100
1320', 11.65 lb	#245200



## IntelliBraid® Twine PE 3.0

Lightweight polywire for portable fences. Braided strands increase frequent exposure of metal filaments. Tinned copper filaments (2) run along the inner core, polyethylene and 4 stainless steel filaments provide support.

#### IntelliBraid Twine PE 3.0

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660', 2.90 lb	#253530
1320', 5.50 lb	#253531
2000' 8lb	#253532





## IntelliBraid® Grazer 2.6

This low ohm (20 $\Omega$  per 1000 ft) twine is the most conductive of our rope/tape/twine selection.

Easy handling for portable, temporary fences. Braided, keeps strands tight together to resist catching on brush and bramble.

Blue/white color pattern is visible to humans and livestock (animals can see shades of blue).

Braided twines are stiffer than twisted designs—knots don't pull tight when connecting to posts or gate handles. Use an extra overhand knot or two to secure.

Polyethylene with 3 tinned copper and 6 stainless steel filaments.

#### **IntelliBraid Grazer 2.6**

2000', 8 lb	#253537



Preferred by those who unwind and rewind their fences often (e.g., rotational grazing applications).

Braid pattern seldom snags and pulls easily through insulators.

Polyethylene with 2 tinned copper and 4 stainless steel filaments.

#### **IntelliBraid Twine PE 2.25**

660', 1.85 lb	#235360
1320', 4 lb	.#235361
2000', 5.95 lb	#235362



## IntelliTwine™ 2.25

Excellent for portable fences for rotational grazing cattle and sheep.

Has 3 tinned copper and 3 stainless steel filaments so it's as conductive as 420 stainless steel filaments. 24 virgin polyethylene monofilaments.

#### IntelliTwine 2.25

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660', 2 lb	#253500
1320', 3.50 lb	#253510
2000', 6.75 lb	#253520