



## Why choose Bekaert?

### Experience based capabilities

Bekaert has the flexibility, the historical background, and the technical skills to create any steel wire no matter what shape, composition or mechanical characteristic. We have been producing continuously for over 135 years and are available in over 120 countries.

### Customer driven innovation

If there's a way for us to bring you to the next level, we'll find it. Because your designs and needs fuel our drive for innovation. We have an in-house engineering department which develops our own machinery, testing and process equipment to learn your requirements inside and out.

### Your strategic partner

Our global presence means that your products are manufactured to strict international standards of safety and quality. Our local support means that we are at your service at all times. In the event of a question or concern, a trained professional will respond to you as soon as possible.

## Conductive yarns and cables for smart textiles

### Durable and discrete conductors

#### What can we offer you?

Bekaert offers you a wide range of flexible, conductive yarns and cables for the production of smart textiles. Our product portfolio consists of conductive, spun yarns and fine cables made of ultra-fine, stainless steel filaments and other metal combinations.

These durable, conductive yarns and cables can be discretely integrated into your material. They enable safe, reliable and efficient energy and data transfer in a wide range of applications, including: smart clothing, wearable technology, antennas and sensors. Bekaert's conductive yarns and cables maintain their conductivity over extended usage and numerous washes giving them a long flex, service lifetime.

Other tailor-made cable solutions can be produced.

#### Benefits

- Long flex life
- Easy to process using traditional textile techniques
- Wide, customizable, conductivity range
- Can be discretely integrated into textiles

### Proven performance

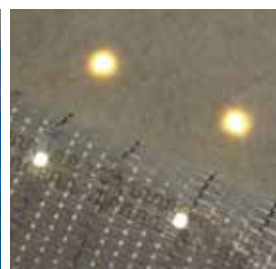
The performance of Bekaert's conductive yarns and cables has been successfully proven in a wide range of applications in various industries. These include, among others, the medical, automotive, aeronautic industry.

The world's leading nano-electronics and nano-technology research center imec, and the University of Gent, tested the performance of Bekaert's conductive yarns and cables in a number of conditions and applications in combination with their integration methodologies.

The test results show that our conductive yarns and cables can be reliably integrated into flexible materials. They will continue to perform well under severe conditions.



Waterproof insulated conductors and LED modules integrated into a scrim.



Smart conductors and LED modules integrated into carpet trims.



Flexible and stretchable conductors in multi-chip modules in electronic textiles

Bekaert is a world market and technology leader in steel wire transformation and coating technologies. To be the preferred supplier of steel wire products and solutions, we consistently deliver superior value to our customers worldwide. Bekaert (Euronext Brussels: BEKB) was established in 1880 and is a global company with approximately 30 000 employees worldwide.

## Product range

Bekaert offers a wide range of standard or custom-made conductors with electrical conductivity that ranges from 0,1 to 70  $\Omega$ /m or more. Our solutions include:

### Conductive spun yarns for sensors

Bekinox® BK composition	Count		Electrical conductivity*
	Nm	Dtex	
Bekinox®/Polyester	50/1	200	40 $\Omega$ /cm ( $\pm$ 20%)
Bekinox®/Polyester	50/2	400	20 $\Omega$ /cm ( $\pm$ 20%)

\*distance between electrodes = 5 cm

### Cables for sensors and other conductive applications

Bekaert	Composition	Electrical conductivity*
Bekinox® VN	100% stainless steel	70 $\Omega$ /m
Bekinox® VN	100% stainless steel	30 $\Omega$ /m
Bekinox® VN	100% stainless steel	29 $\Omega$ /m
Bekinox® VN	100% stainless steel	14 $\Omega$ /m
Bekiflex® MR	Galvanized steel	1.63 $\Omega$ /m
Bekiflex® MR	Galvanized steel	1.09 $\Omega$ /m
Bekiflex® LR L02	Copper coated steel	0.39 $\Omega$ /m

\*Other electrical conductivities available upon demand

## Packing

Depending on your quality and production needs our products are available on cones, tubes or DIN bobbins.

Would you like to discuss your projects and ideas?

Feel free to contact us.

[ect.info@bekaert.com](mailto:ect.info@bekaert.com)

[www.bekaert.com](http://www.bekaert.com)

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