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PRODUCT BROCHURE

# **Ty-Rap<sup>®</sup> TyGenic<sup>™</sup> antimicrobial detectable cable ties**

A break-through fastening solution for  
contamination-sensitive environments.

***Ty-Rap<sup>®</sup>***



# Ty-Rap® TyGenic™ antimicrobial detectable cable ties

Resistant to the growth of microbes and detectable by x-ray, visual and metal detection systems.

In response to the needs of customers in food and beverage processing, healthcare, pharmaceuticals and other contamination-sensitive industries, ABB introduces the industry's first two-piece cable tie that is both antimicrobial and detectable.



ABB Installation Products introduced the Ty-Rap two-piece detectable cable tie in 2006 and a single-piece bacteria-resistant cable tie in 2018. Since then, ABB's Ty-Rap engineers have been working to combine the two ideas into one for customers in food and beverage and other contamination-sensitive industries.

The result is the Ty-Rap TyGenic antimicrobial detectable cable tie. This new tie is molded from an FDA-compliant proprietary nylon resin blend that contains both an EPA-registered antimicrobial additive and detectable particles. The antimicrobial additive is effective against a broad spectrum of micro-organisms, including various bacteria, viruses, protozoans and fungi, such as mold and mildew.

Now customers for whom **cleanliness** and product **safety** are top concerns have two fewer things to worry about.



**Antimicrobial  
detectable  
cable ties**



## A two-pronged approach to product safety

### No home for micro-organisms

By its very design, full of notches and grooves, a cable tie makes an attractive home for micro-organisms to collect and reproduce. In food processing and healthcare facilities, where reducing the growth of unhealthy micro-organisms is critical, the presence of heat, moisture and organic material common in these environments can encourage the growth of bacteria, fungus and mold.

Ty-Rap® TyGenic™ antimicrobial detectable cable ties are molded from an FDA-compliant, silver-free, proprietary nylon resin blend to inhibit the growth of micro-organisms, such as various bacteria, fungus and mold, on their surface. Cable ties molded from ABB's proprietary blend have been verified more than 99% effective in prohibiting common surface microbes from forming on the cable tie in independent laboratory tests in accordance with ISO22196.

Standard cable tie compared to Ty-Rap TyGenic tie after **24 hours of exposure to bacteria**



No more  
“**secret ingredients**”



The detectable particles in Ty-Rap TyGenic antimicrobial detectable cable ties help ensure that cable ties won't end up in product and remain undetected.



**Metal detection** — Having been tested and verified to meet or exceed the detection of a 1.5 mm ferrous sphere, Ty-Rap TyGenic antimicrobial detectable cable ties are detectable by nearly every metal detector in service today. Customers should test and calibrate their equipment to detect the smallest portion of a cable tie piece that they want to detect.



**X-ray detection** — Depending on the density of product being verified, Ty-Rap TyGenic antimicrobial detectable cable ties display a differential of between 200 and 2000 on the x-ray gray scale.



**Visual detection** — Visual detection systems detect surface irregularities and volume changes. The deep blue color of Ty-Rap TyGenic antimicrobial detectable cable ties helps to ensure easy visual detection.

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## Features and benefits

- The industry's first two-piece cable tie that inhibits microbial growth while also delivering x-ray, metal and visual detectability
- Provides a surface on which microbes cannot adhere and replicate
- Proven to be more than 99% effective in prohibiting common surface microbes from forming on the cable tie as tested by independent laboratory
- Made from an FDA and EU food contact-approved, halogen-free nylon 6.6 (polyamide) resin blend
- UL recognized and RoHS compliant
- Deep blue color for easy visual detection — easily distinguishable from the lighter blue color of standard Ty-Rap detectable cable ties
- Offers all the superior-performance advantages of standard Ty-Rap® cable ties including “The Grip of Steel®” stainless steel locking device
- Designed with UV-resistant material for operating temperatures up to 85 °C (185 °F)
- Available in four sizes
- Patent pending

# 99%

effective at  
prohibiting  
microbes



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## Typical applications

- Food and beverage processing
- Food preparation and food service
- Hospital and other healthcare facilities
- Pharmaceutical production
- Medical device manufacturing
- Chemical and compounds manufacturing
- Cosmetics manufacturing
- Tire and airbag manufacturing
- Other contamination-sensitive industries

**Note:** Ty-Rap TyGenic™ antimicrobial detectable cable ties provide no antimicrobial inhibitory activity beyond protection of the cable ties themselves. They do not provide protection against specific pathogenic organisms, nor do they prevent growth of bacteria on adjacent or nearby surfaces. The antimicrobial efficacy of the material is designed to last for the life of the cable tie under normal use conditions.



## Ordering information



### Ty-Rap® TyGenic™ antimicrobial detectable cable ties

Cat. number	Length in. (mm)	Width in. (mm)	Bundle diameter range in. (mm)	Min. tensile strength lb (N)	Application tool	Std. pkg. qty.	UPC number
TY523M-ADT	3.6 (92)	0.09 (2.3)	0.08–0.63 (2–16)	11 (50)	ERG50	100	786210-36164
TY525M-ADT	7.2 (181)	0.18 (4.6)	0.12–1.77 (3–45)	50 (222)	ERG50 ERG120	100	786210-36166
TY527M-ADT	13.5 (343)	0.27 (6.9)	0.20–3.74 (5–95)	120 (533)	ERG120	50	786210-36167
TY528M-ADT	14.2 (361)	0.18 (4.6)	0.20–4.01 (5–101)	50 (222)	ERG50 ERG120	100	786210-36168

### Ty-Rap® cable tie application tools

- Ergonomic hand tools for installing Ty-Rap cable ties
- Adjustable hand-span grip for user comfort and 360° rotating nose for use in tight spaces
- Cuts cable tie tail flush with no sharp edges and holds cut tails captive in the tool for a safer, cleaner installation



Cat. number	For use with tie tensile strength lb (N)	For use with tie width in. (mm)	UPC number
ERG50	Up to 50 (222)	0.09–0.18 (2.3–4.6)	786209-86729
ERG120	50–120 (222–534)	0.18–0.30 (4.6–7.6)	786209-86730



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**US**

ABB Installation Products Inc.  
Electrification business

**[electrification.us.abb.com](http://electrification.us.abb.com)**

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