



# Ty-Rap®

## Cable ties for the railway industry



- Premium cable ties with steel locking barb to secure and manage cables
- The “Grip of Steel” non-magnetic stainless steel locking barb – marine grade type 316
- Rounded edges to prevent sharp edges from damaging cables
- Smooth, notchless body, making the cable ties stronger
- Ribbed and stippled surface to prevent the tie from slipping under vibration conditions and external shock

## Ty-Rap® cable tie

The right cable tie for the right application



UV-resistant



Flame retardant

### Technical information: UV-resistant

- Moulding material: Polyamide 6.6
- Locking barb material: 316 grade stainless steel
- Temperature range: -60°C to +105°C
- Color: Black
- Flammability rating: UL 94 V-2
- Other properties: UV-resistant, Halogen free, Silicon free
- Tested to EN 45545-2

### Technical information: Flame Retardant

- Moulding material: Polyamide 6.6
- Locking barb material: 316 grade stainless steel
- Temperature range: -20°C to +65°C
- Color: White
- Flammability rating: UL 94 V-0
- Other properties: Halogen free, Silicon free
- Tested to EN 45545-2

### UV-resistant cable tie

Product code	GID Number	Length [mm]	Width [mm]	Bundle diameter from ... to [mm]	Minimum tensile strength [N]	Quantity [pieces]
TY23MX-RW	7TCG009040R0015	92	2,4	1,5 - 22	80	1000
TY232MX-RW	7TCG009040R0014	203	2,4	1,5 - 51	80	1000
TY234MX-RW	7TAG009050R0005	356	2,4	1,5 - 102	80	1000
TY24MX-RW	7TCG009130R0010	140	3,6	2 - 35	180	1000
TY242MX-RW	7TCG009130R0011	204	3,6	2 - 51	180	1000
TY26MX-RW	7TCG009120R0006	284	3,6	2 - 76	130	1000
TY244MX-RW	7TCG009130R0012	368	3,6	2 - 102	130	1000
TY25MX-RW	7TCG009210R0085	186	4,8	3 - 48	220	1000
TY253MX-RW	7TCG009220R0011	295	4,8	3 - 78	220	1000
TY28MX-RW	7TCG009210R0086	361	4,8	3 - 102	220	1000
TY271MX-RW	7TCG009450R0226	150	7,6	6 - 31	540	500
TY272MX-RW	7TAG009330R0008	223	6,9	6 - 51	540	500
TY277MX-RW	7TAG009340R0003	617	7,0	6 - 177	540	500
TY27MX-RW	7TAG009320R0006	340	6,9	6 - 102	540	500
TY29MX-RW	7TCG009330R0012	771	8,2	6 - 229	540	500

To order the small packaging please add a 5 and an R in the product reference: TY23MX-RW becomes TY523MXR-RW.

### Flame retardant cable tie

Product code	GID Number	Length [mm]	Width [mm]	Bundle diameter from ... to [mm]	Minimum tensile strength [mm]	Quantity [pieces]
TY23MFR-RW	7TCG009570R0008	92	2,4	1,5 - 22	80	1000
TY232MFR-RW	7TCG009570R0013	203	2,4	1,5 - 51	80	1000
TY24MFR-RW	7TCG009570R0009	140	3,6	2 - 35	180	1000
TY25MFR-RW	7TCG009570R0010	186	4,8	3 - 48	220	1000
TY28MFR-RW	7TCG009570R0011	360	4,8	3 - 102	220	500
TY27MFR-RW	7TCG009570R0012	340	7,0	4,8 - 95	540	100

To order the small packaging please add a 5 and an R in the product reference: TY23MFR-RW becomes TY523MFR-RW.

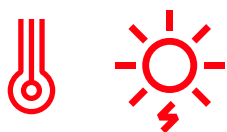
## Dedicated tooling: ERG-50 and ERG-120

A comprehensive range of tensioning and cutting tools are available:

- Economy tools for low volumes
- Semi-automatic hand tools for medium volumes







UV-resistant and tested according to  
**EN 45545-2**  
fire safety standard, making them ideal for  
rail-based applications





#### Ease of installation:

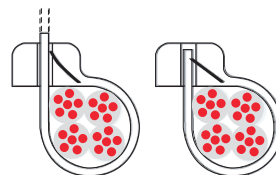
The flat, low-profile head and oval shape make it easier to pull bundled cables through bulkheads. And tie installer's hands are exposed to less strain and abrasion.

#### Fewer stress points:

Their smooth, solid-body construction reduces the number of stress points and enhances durability.

#### The Grip of Steel®

The non-magnetic stainless-steel locking barb is firmly anchored in the tie head, providing a secure, reliable and consistently sturdy fastening quality, even under the harshest conditions.



#### Small projections on the inner surface of the tape

Tensure that ties hold firmly to the cable bundle even when exposed to vibration. If ties shift in position, these rounded projections reliably protect against mechanical damage to the cable bundle.

The requirements of modern rail vehicles are high and constantly increasing. Tight installation conditions, demanding environmental conditions and increasing (passenger) safety requirements require the highest performance.

ABB offers specially developed cable ties for the rail industry (RW), meeting the requirements for modern rail vehicles. The type MX-RW cable ties offer UV protection according to ISO 4892-2 for outdoor use and also tested according to IEC / EN 62275 and UL 62275 and EN 45545 HL2 (R22 and R23) for use in areas with special fire protection requirements such as passenger carriages.

#### For installers and panel builders, too

Ty-Rap cable ties are used not only in railway applications: the complete Ty-Rap portfolio from ABB encompasses premium cable ties developed for all kinds of applications. They're resistant to

extreme temperatures, fire, UV radiation and aggressive chemicals, and offer high tensile strength wherever needed. This is why installers, panel builders and other specialists also rely on Ty-Rap cable ties to bundle, secure and manage cables.

#### Contact details

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