



INSTALLATION PRODUCTS FOR THE SHIPBUILDING INDUSTRY



OUR PRODUCTION

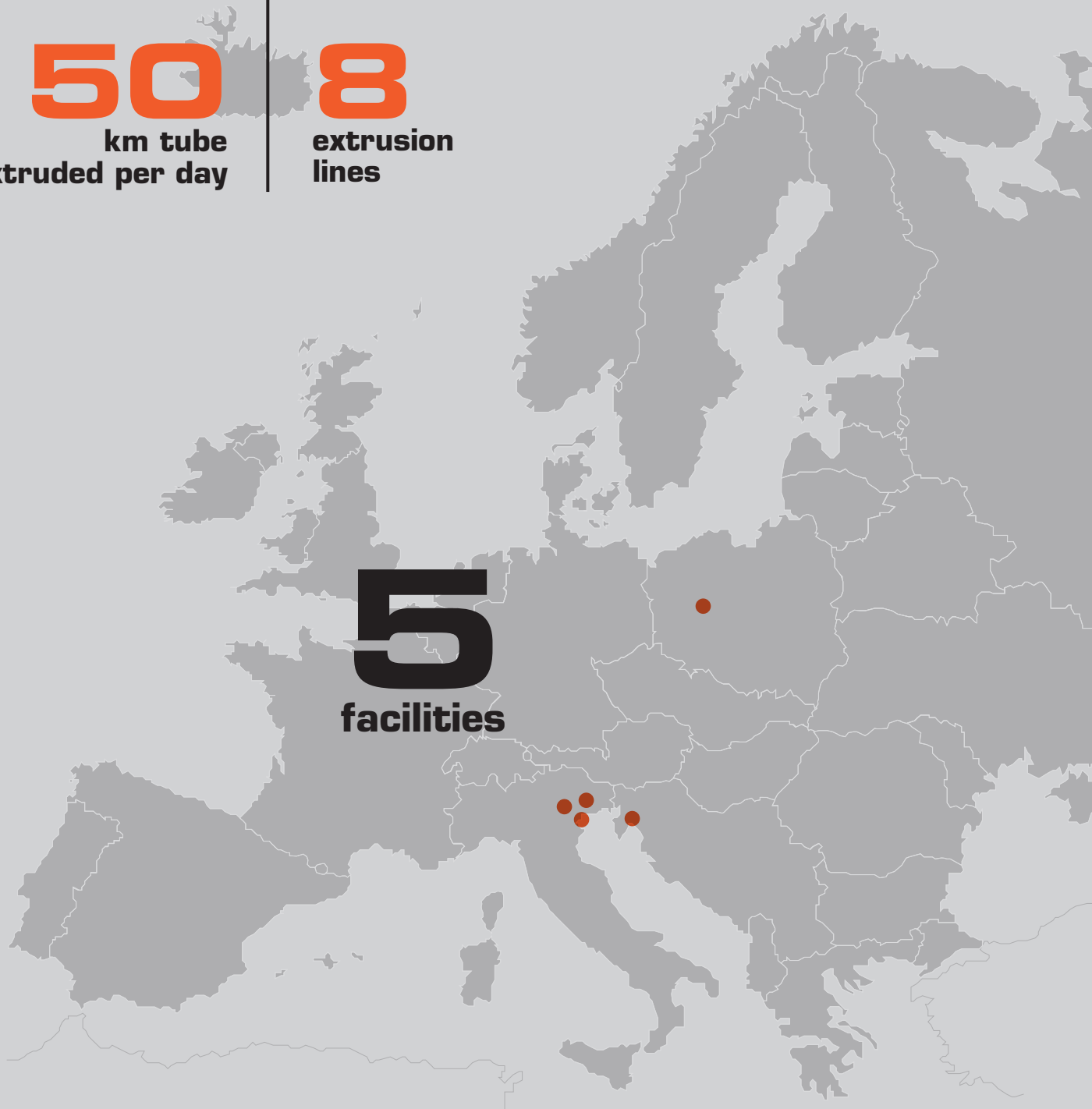
75
injection
moulding machines

14 million
cable ties
produced per day

150
km tube
extruded per day

8
extrusion
lines

5
facilities





ADVANCED FASTENING SOLUTIONS

We **DEVELOP** and **PRODUCE** solutions dedicated to different types of industry, combining our Italian and European **COMPETENCES**.

The only multi-product and multi-solution offer for your profession.

THE STRENGTH OF A **GLOBAL** **GROUP**

Elematic is part of **ITW**, an American **MULTINATIONAL** group with over 100 years of history: the **IDEAL PARTNER** for every professional looking for innovative, differentiating, and high-quality products.



SYSTEM CERTIFICATIONS



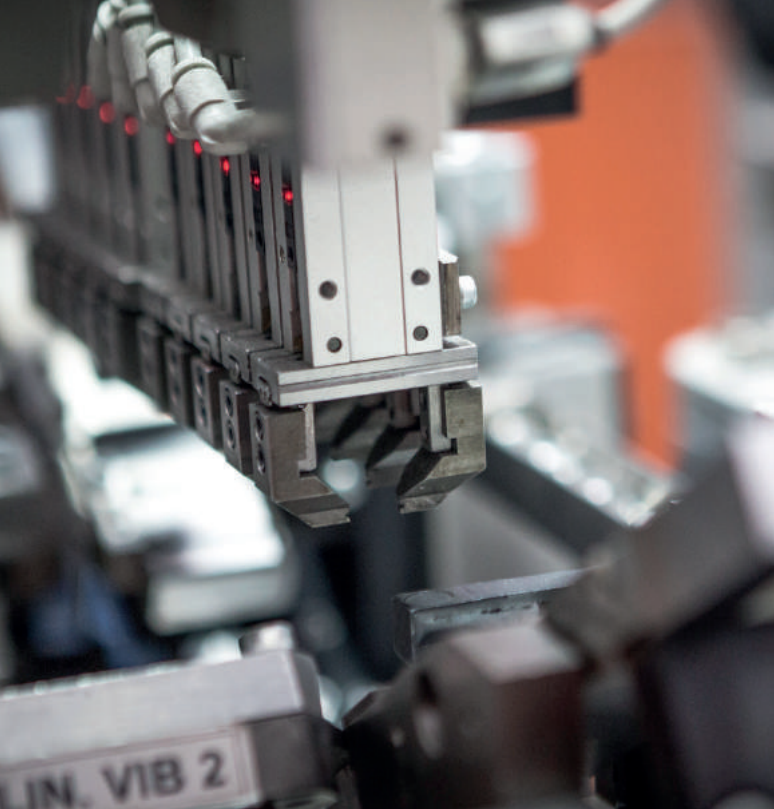
The company is certified **ISO 9001:2015** for the design and manufacturing of cable ties and fixing systems with technopolymers, and trading of cabling and fixing accessories.

The certification guarantees the **quality of the production processes** thanks to the implementation of strict operational procedures and quality controls at all levels.

ENVIRONMENTAL CERTIFICATIONS



Aware of the importance of our impact on the environment, we undertook an environmental certification procedure to reduce our impact as much as possible. All our Italian sites are certified according to **ISO 14001: 2015** standard for the design and production of cable ties and fixing systems in technopolymers by injection moulding, and trading of cabling and fixing accessories.



WHY CHOOSING



- Elematic products are tested periodically to comply with the latest **safety standards**;
- Producing our cable ties with **durable materials** makes them resistant to the toughest weather conditions and widely increases the product longevity;
- Because your time is precious, we developed a **simpler installation process**;
- Our product range gives you the possibility to choose **the right solutions** accordingly to the different operational environments;
- Elematic produces in Europe and **guarantees full traceability**;
- As an Elematic partner, you will save time working with a single company to **satisfy all your needs** for an electrical system compliant with flame, smoke and toxicity requirements.

PRODUCT CERTIFICATIONS AND COMPLIANCE



DNV

DNV certification guarantees that Elematic cable ties comply with the “Det Norske Veritas” and “Ger-manischer Lloyd” standards for cable fixing in naval and offshore constructions, for both internal and external applications.



R.I.NA.

The Italian Naval Register homologation, according to the IEC EN 60092-101 “Electrical Installations in Ship” certifies that Elematic cable ties have been tested for flame propagation in ships.



UL LISTED



UL RECOGNIZED

UL

Elematic cable ties are recognised and listed by UL (Underwriters Laboratories Inc.) according to UL 62275 standard - Cable Management Systems - Cable Ties for Electrical Installation.



BUREAU VERITAS

This homologation, according to the IEC standard 60092-IEC 62275, ensures that Elematic cable ties comply with the “Bureau Veritas” standard for cables fixing in shipbuilding.

EN 45545-2

EN 45545-2

Products are tested according to UNI EN 45545-2: Railway applications - Fire protection for railway rolling stock - Part 2: Requirements for the fire behavior of materials and components.



CE MARKING

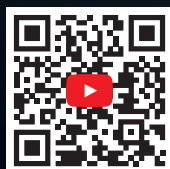
E **ELEMATIC**

2-LOCK

**THE ONLY DOUBLE STEEL
TOOTH CABLE TIE**



EN 45545-2



MAXIMUM GRIP



**SAFETY AND
RELIABILITY**



**RESISTANT TO UV
RAYS AND LOW
TEMPERATURES**



**INNOVATION AND
EXCLUSIVITY**

2-LOCK CABLE TIES



Professional cable ties, in polyamide 6.6, having an innovative double locking system in stainless steel: maximum performance and reliability



CHALLENGES

UV resistance/ great resistance to cold temperatures -40° / high tensile strength/ smooth profile not to damage the cables / easy insertion

FEATURES AND BENEFITS

- The special AISI 316 stainless steel locking system, directly incorporated into the head during the injection manufacturing process, allows the highest performances and reliability
- The double tooth mechanism allows a double locking, on both side of ties, for an ultimate tightening of the bundles
- Perfect wiring: the smooth profile without racks offers infinite adjustment along the length of the tie and always a correct tensioning for any bundling diameters
- Resistance and reliability at low operating temperature up to -40° C
- 2-LOCK™ cable ties, in black color, are manufactured of special UV-resistant polyamide, for extreme outdoor applications
- 2-LOCK™ cable ties are packed in an innovative resealable bag: this avoids any dispersion after the first opening, maintaining the superior characteristics of the ties.

APPROVALS AND CERTIFICATIONS



TECHNICAL DATA

| | |
|--|-----------------------------------|
| Body material | polyamide 6.6 |
| Cage material | stainless steel INOX AISI 316 |
| Halogen | absent |
| Humidity absorption (50% relative humidity) | 2,7% |
| Working temperature | -40° C ÷ $+85^{\circ}$ C |
| Installation temperature | -40° C ÷ 60° C |
| Flammability rating | UL94 class V2 |

Resistance external agents:

UV-resistant (2-Lock in black color). Excellent chemical resistance to aromatic solvents, oils, greases, oil-based products. Good chemical resistance to bases. Limited resistance to acids. Does not resist to phenol and chlorinated solvents. Corrosion Resistant (Overmoulded Locking System in A4-AISI 316 stainless Steel)

2-LOCK™
NATURAL



| Description | Width (mm) | Length (mm) | Ø bundle max (mm) | Tensile Strength (kg) | Tensile Strength (N) | Pack (pcs.) | Code |
|----------------|------------|-------------|-------------------|-----------------------|----------------------|-------------|-------|
| 2-LOCK 2,5x100 | 2,5 | 100 | 21 | 15,30 | 150 | 100 | 1203 |
| 2-LOCK 2,5x200 | 2,5 | 200 | 50 | 15,30 | 150 | 100 | 1207 |
| 2-LOCK 3,5x140 | 3,5 | 140 | 35 | 25,5 | 250 | 100 | 1209 |
| 2-LOCK 3,5x200 | 3,5 | 200 | 50 | 25,5 | 250 | 100 | 1214 |
| 2-LOCK 3,5x290 | 3,5 | 290 | 80 | 25,5 | 250 | 100 | 1210 |
| 2-LOCK 4,5x200 | 4,5 | 200 | 50 | 36,72 | 360 | 100 | 1215 |
| 2-LOCK 4,5x250 | 4,5 | 250 | 68 | 36,72 | 360 | 100 | 1216 |
| 2-LOCK 4,5x290 | 4,5 | 290 | 80 | 36,72 | 360 | 100 | 1217 |
| 2-LOCK 4,5x360 | 4,5 | 360 | 101 | 36,72 | 360 | 100 | 1219 |
| 2-LOCK 7,5x220 | 7,5 | 220 | 55 | 79,56 | 780 | 100 | 1225* |
| 2-LOCK 7,5x360 | 7,5 | 360 | 100 | 79,56 | 780 | 100 | 1227 |

*not DNV-GL certified

2-LOCK™
BLACK - UV-RESISTANT

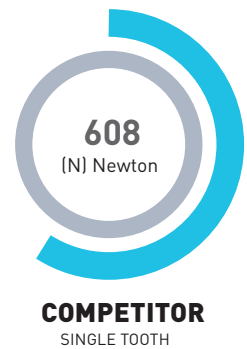
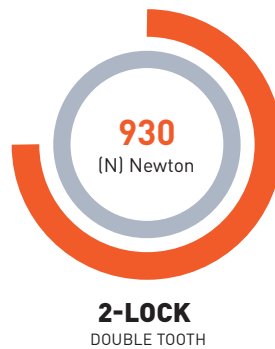


| Description | Width (mm) | Length (mm) | Ø bundle max (mm) | Tensile Strength (kg) | Tensile Strength (N) | Pack (pcs.) | Code |
|----------------|------------|-------------|-------------------|-----------------------|----------------------|-------------|------|
| 2-LOCK 2,5x100 | 2,5 | 100 | 21 | 15,3 | 150 | 100 | 1303 |
| 2-LOCK 2,5x200 | 2,5 | 200 | 50 | 15,3 | 150 | 100 | 1307 |
| 2-LOCK 3,5x140 | 3,5 | 140 | 35 | 25,5 | 250 | 100 | 1309 |
| 2-LOCK 3,5x200 | 3,5 | 200 | 50 | 25,5 | 250 | 100 | 1314 |
| 2-LOCK 3,5x290 | 3,5 | 290 | 80 | 25,5 | 250 | 100 | 1310 |
| 2-LOCK 4,5x200 | 4,5 | 200 | 50 | 36,72 | 360 | 100 | 1315 |
| 2-LOCK 4,5x250 | 4,5 | 250 | 68 | 36,72 | 360 | 100 | 1316 |
| 2-LOCK 4,5x290 | 4,5 | 290 | 80 | 36,72 | 360 | 100 | 1317 |
| 2-LOCK 4,5x360 | 4,5 | 360 | 101 | 36,72 | 360 | 100 | 1319 |
| 2-LOCK 7,5x220 | 7,5 | 220 | 55 | 79,56 | 780 | 100 | 1325 |
| 2-LOCK 7,5x360 | 7,5 | 360 | 100 | 79,56 | 780 | 100 | 1327 |

COMPARISON BETWEEN 2-LOCK WITH METALLIC DOUBLE TOOTH CABLE TIE AND COMPETITOR'S SINGLE TOOTH CABLE TIES



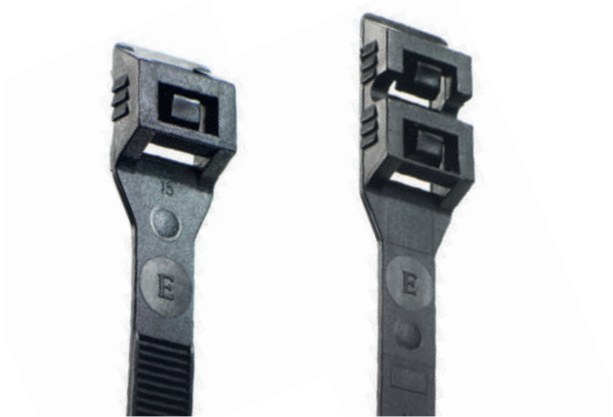
TENSILE STRENGTH
+ 53%



EASY TO APPLY
+ 47%



Outside serrated cable ties with low profile head for a fast and reliable bundling, no tool needed even when space is tight



CHALLENGES
High strength performance in narrow space, no tools required

FEATURES AND BENEFITS

- Flexible and elongated tail for reduced insertion effort
- Smooth shape, ergonomic ribbed grips for an easy installation also without any tools.
- The external rack and the parallel locking system offer a smooth surface to the fastened cables avoiding any damages to the insulation
- For using in application where high-strength performances are definitely required

APPROVALS AND CERTIFICATIONS



HALOGEN FREE

TECHNICAL DATA

| | |
|---|---------------|
| Material | polyamide 6.6 |
| Halogen | absent |
| Humidity absorption (50% relative humidity) | 2,7% |
| Working temperature | -40°C ÷ +85°C |
| Installation temperature | -10°C ÷ 60°C |
| Flammability rating | UL94 class V2 |

Resistance external agents:
Excellent chemical resistance to aromatic solvents, oils, greases, oil-based products. Good chemical resistance to bases. Limited resistance to acids. Does not resist to phenol and chlorinated solvents.

COLSPEED BLACK

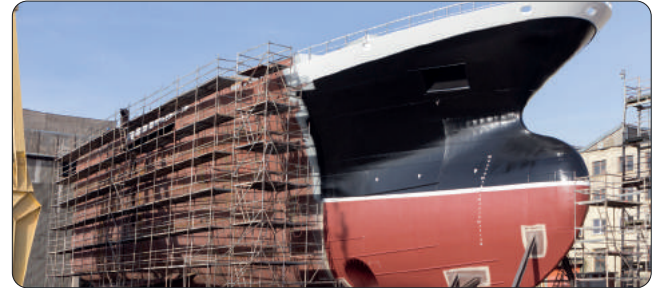


| Description | Width (mm) | Length (mm) | Ø bundle max (mm) | Tensile Strength (kg) | Tensile Strength (N) | Pack (pcs.) | Code |
|-------------------------------------|------------|-------------|-------------------|-----------------------|----------------------|-------------|------|
| Colspeed 8,8x200 single head | 8,8 | 200 | 40 | 40,8 | 400 | 100 | 6501 |
| Colspeed 8,8x290 double head | 8,8 | 290 | 70 | 59,16 | 580 | 100 | 6502 |
| Colspeed 8,8x380 double head | 8,8 | 380 | 100 | 59,16 | 580 | 100 | 6503 |

BELTURING PLUS



Outside serrated cable ties with low profile head and manufactured with UV-resistant polymer. For high resistance outdoor application



TEMPORARY
INSTALLATION
(RELEASABLE)



DEFINITIVE
INSTALLATION

CHALLENGES

High resistance to UV in outdoor, temporary locking position allows re-opening of the ties for addition or removal of cables.

FEATURES AND BENEFITS

- High resistance to ultraviolet radiation and in outdoor conditions with significant thermal excursion
- The external rack and the parallel locking system offer a smooth surface to the fastened cables avoiding any damages to the insulation
- Temporary locking position allows re-opening of the ties for addition or removal of cable
- Packed in a special box, with hanging system and re-closing top, for the best using confort and protection in the jobsite

APPROVALS AND CERTIFICATIONS



TECHNICAL DATA

| | |
|--------------------------|----------------|
| Material | technopolymer |
| Halogen | absent |
| Humidity absorption | <1% |
| Working temperature | -45°C ÷ 85°C |
| Installation temperature | -30°C ÷ 60°C |
| Flammability rating | UL 94 class HB |

Resistance external agents:

UV-resistant. (See Approvals: Tested according to ISO 4892-2: Xenon-Arc Lamp exposure). Excellent chemical resistance to aromatic solvents, oils, greases, oil-based products. Good chemical resistance to bases. Limited resistance to acids. Does not resist to phenol and chlorinated solvents.

BELTURING PLUS
SINGLE HEAD



| Description | Width (mm) | Length (mm) | Ø bundle max (mm) | Tensile Strength (kg) | Tensile Strength (N) | Pack (pcs.) | Code |
|----------------------|------------|-------------|-------------------|-----------------------|----------------------|-------------|-------|
| Belturing plus 6x115 | 6 | 115 | 25 | 28,56 | 280 | 100 | 6449X |
| Belturing plus 6x180 | 6 | 180 | 45 | 28,56 | 280 | 100 | 6450X |
| Belturing plus 6x290 | 6 | 290 | 78 | 28,56 | 280 | 100 | 6452X |
| Belturing plus 6x360 | 6 | 360 | 100 | 28,56 | 280 | 100 | 6454X |
| Belturing plus 9x132 | 9 | 132 | 27 | 39,78 | 390 | 100 | 6447X |
| Belturing plus 9x180 | 9 | 180 | 40 | 39,78 | 390 | 100 | 6451X |

BELTURING PLUS
DOUBLE HEAD



| Description | Width (mm) | Length (mm) | Ø bundle max (mm) | Tensile Strength (kg) | Tensile Strength (N) | Pack (pcs.) | Code |
|----------------------|------------|-------------|-------------------|-----------------------|----------------------|-------------|-------|
| Belturing plus 9x260 | 9 | 260 | 60 | 55,08 | 540 | 100 | 6453X |
| Belturing plus 9x300 | 9 | 300 | 80 | 55,08 | 540 | 100 | 6448X |
| Belturing plus 9x360 | 9 | 360 | 93 | 55,08 | 540 | 100 | 6455X |
| Belturing plus 9x510 | 9 | 510 | 140 | 55,08 | 540 | 100 | 6456X |
| Belturing plus 9x760 | 9 | 760 | 220 | 55,08 | 540 | 100 | 6457X |



- Vessel's electrical systems are the mainstay of life onboard. The electrical system supplies the starting power for the engine and gensets.
- Without electrical power you aren't going anywhere, as we all need power to operate radio communication equipment, electronics / navigation systems, refrigeration / freezers, navigation lights / interior lighting, electrical powered bilge pumps and more.



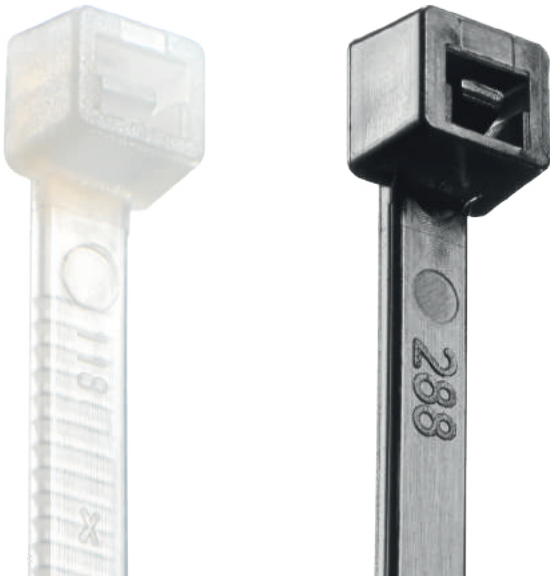
STANDARD

Elematic cable ties can assure that the cabling of these critical systems will be done with the right certified cable tie.

STANDARD CABLE TIES



Technical cable ties, in polyamide 6.6, for professional application



FEATURES AND BENEFITS

- Guaranteed quality and performances by numerous approvals according to different international product standard
- Black cable ties, made of polyamide with special additives, have superior UV resistance than the natural colour ties
- Cost effective solution for vehicle wiring harness

APPROVALS AND CERTIFICATIONS



TECHNICAL DATA

| | |
|---|---------------|
| Material | polyamide 6.6 |
| Halogen | absent |
| Humidity absorption (50% relative humidity) | 2,7% |
| Working temperature | -40°C ÷ +85°C |
| Installation temperature | -10°C ÷ 60°C |
| Flammability rating | UL94 class V2 |

Resistance external agents:

Excellent chemical resistance to aromatic solvents, oils, greases, oil-based products. Good chemical resistance to bases. Limited resistance to acids. Does not resist to phenol and chlorinated solvents.

STANDARD CABLE TIE
NATURAL



| Description | Width (mm) | Length (mm) | Ø bundle max (mm) | Tensile Strength (kg) | Tensile Strength (N) | Pack (pcs.) | Code |
|-------------------------------|------------|-------------|-------------------|-----------------------|----------------------|-------------|--------|
| Standard cable tie 2,5x98 | 2,5 | 98 | 21 | 8,16 | 80 | 100 | 5203C |
| Standard cable tie 2,5x98 | 2,5 | 98 | 21 | 8,16 | 80 | 1.000 | 5203 |
| Standard cable tie 2,5x98 | 2,5 | 98 | 21 | 8,16 | 80 | 20.000 | 5203B2 |
| Standard cable tie 2,5x135 | 2,5 | 135 | 32 | 8,16 | 80 | 100 | 5205C |
| Standard cable tie 2,5x135 | 2,5 | 135 | 32 | 8,16 | 80 | 1.000 | 5205 |
| Standard cable tie 2,6x160 | 2,6 | 160 | 40 | 8,16 | 80 | 100 | 5206C |
| Standard cable tie 2,6x200 | 2,6 | 200 | 52 | 8,16 | 80 | 100 | 5207C |
| Standard cable tie 2,6x200 | 2,6 | 200 | 52 | 8,16 | 80 | 1.000 | 5207 |
| Standard cable tie 3,5x140 | 3,5 | 140 | 32 | 18,36 | 180 | 100 | 5209C |
| Standard cable tie 3,5x140 | 3,5 | 140 | 32 | 18,36 | 180 | 1.000 | 5209 |
| Standard cable tie 3,5x200 | 3,5 | 200 | 50 | 18,36 | 180 | 100 | 5214C |
| Standard cable tie 3,5x200 | 3,5 | 200 | 50 | 18,36 | 180 | 1.000 | 5214 |
| Standard cable tie 3,5x290 | 3,5 | 290 | 80 | 18,36 | 180 | 100 | 5210C |
| Standard cable tie 3,5x290 | 3,5 | 290 | 80 | 18,36 | 180 | 500 | 5210 |
| Standard cable tie 3,5x370 | 3,5 | 365 | 103 | 18,36 | 180 | 100 | 5208 |
| Standard cable tie 4,5x160 | 4,5 | 160 | 40 | 22,44 | 220 | 100 | 5211C |
| Standard cable tie 4,5x160 | 4,5 | 160 | 40 | 22,44 | 220 | 1.000 | 5211 |
| Standard cable tie 4,8x178 | 4,8 | 178 | 45 | 22,44 | 220 | 100 | 5213C |
| Standard cable tie 4,8x178 | 4,8 | 178 | 45 | 22,44 | 220 | 1.000 | 5213 |
| Standard cable tie 4,5x200 | 4,5 | 200 | 50 | 22,44 | 220 | 100 | 5215C |
| Standard cable tie 4,8x200 | 4,5 | 200 | 50 | 22,44 | 220 | 1.000 | 5215 |
| Standard cable tie 4,8x250 | 4,8 | 250 | 68 | 22,44 | 220 | 100 | 5216C |
| Standard cable tie 4,5x290 | 4,5 | 290 | 78 | 22,44 | 220 | 100 | 5217 |
| Standard cable tie 4,5x360 | 4,5 | 360 | 100 | 22,44 | 220 | 100 | 5219 |
| Standard cable tie 4,5x390 | 4,5 | 390 | 106 | 22,44 | 220 | 100 | 5218 |
| Standard cable tie 4,5x430 | 4,5 | 430 | 115 | 22,44 | 220 | 100 | 5220 |
| Standard cable tie 7,8x180 | 7,8 | 180 | 45 | 55,08 | 540 | 100 | 5223 |
| Standard cable tie 7,8x240 | 7,5 | 240 | 63 | 55,08 | 540 | 100 | 5225 |
| Standard cable tie 7,5x300 | 7,5 | 300 | 80 | 55,08 | 540 | 100 | 5226 |
| Standard cable tie 7,5x365 | 7,5 | 365 | 100 | 55,08 | 540 | 100 | 5227 |
| Standard cable tie 7,5x450 | 7,5 | 450 | 130 | 55,08 | 540 | 100 | 5229 |
| Standard cable tie 7,5x540 | 7,5 | 540 | 158 | 55,08 | 540 | 100 | 5231 |
| Standard cable tie 7,5x750 | 7,5 | 750 | 220 | 55,08 | 540 | 100 | 5233 |
| Standard cable tie 9,0x780 | 9 | 780 | 233 | 71,4 | 700 | 100 | 5234 |
| Standard cable tie 12,5x225 | 12,5 | 225 | 57 | 110 | 1.080 | 50 | 5235 |
| Standard cable tie 12,5x500 | 12,5 | 500 | 143 | 110 | 1.080 | 50 | 5237 |
| Standard cable tie 12,5x720 | 12,5 | 720 | 213 | 110 | 1.080 | 50 | 5239 |
| Standard cable tie 12,5x850 | 12,5 | 850 | 255 | 110 | 1.080 | 50 | 5241 |
| Standard cable tie 12,5x1.000 | 12,5 | 1.000 | 302 | 110 | 1.080 | 50 | 5243 |

STANDARD CABLE TIE
BLACK



| Description | Width (mm) | Length (mm) | Ø bundle max (mm) | Tensile Strength (kg) | Tensile Strength (N) | Pack (pcs.) | Code |
|-------------------------------|------------|-------------|-------------------|-----------------------|----------------------|-------------|--------|
| Standard cable tie 2,5x98 | 2,5 | 98 | 21 | 8,16 | 80 | 100 | 5303C |
| Standard cable tie 2,5x98 | 2,5 | 98 | 21 | 8,16 | 80 | 1.000 | 5303 |
| Standard cable tie 2,5x98 | 2,5 | 98 | 21 | 8,16 | 80 | 20.000 | 5303B2 |
| Standard cable tie 2,5x135 | 2,5 | 135 | 32 | 8,16 | 80 | 100 | 5305C |
| Standard cable tie 2,5x135 | 2,5 | 135 | 32 | 8,16 | 80 | 1.000 | 5305 |
| Standard cable tie 2,6x160 | 2,6 | 160 | 40 | 8,16 | 80 | 100 | 5306C |
| Standard cable tie 2,6x200 | 2,6 | 200 | 52 | 8,16 | 80 | 100 | 5307C |
| Standard cable tie 2,6x200 | 2,6 | 200 | 52 | 8,16 | 80 | 1.000 | 5307 |
| Standard cable tie 3,5x140 | 3,5 | 140 | 32 | 18,36 | 180 | 100 | 5309C |
| Standard cable tie 3,5x140 | 3,5 | 140 | 32 | 18,36 | 180 | 1.000 | 5309 |
| Standard cable tie 3,5x200 | 3,5 | 200 | 50 | 18,36 | 180 | 100 | 5314/C |
| Standard cable tie 3,5x200 | 3,5 | 200 | 50 | 18,36 | 180 | 1.000 | 5314 |
| Standard cable tie 3,5x290 | 3,5 | 290 | 80 | 18,36 | 180 | 100 | 5310C |
| Standard cable tie 3,5x290 | 3,5 | 290 | 80 | 18,36 | 180 | 500 | 5310 |
| Standard cable tie 3,5x370 | 3,5 | 365 | 103 | 18,36 | 180 | 100 | 5308 |
| Standard cable tie 4,5x160 | 4,5 | 160 | 40 | 22,44 | 220 | 100 | 5311C |
| Standard cable tie 4,5x160 | 4,5 | 160 | 40 | 22,44 | 220 | 1.000 | 5311 |
| Standard cable tie 4,8x178 | 4,8 | 178 | 45 | 22,44 | 220 | 100 | 5313C |
| Standard cable tie 4,8x178 | 4,8 | 178 | 45 | 22,44 | 220 | 1.000 | 5313 |
| Standard cable tie 4,5x200 | 4,5 | 200 | 50 | 22,44 | 220 | 100 | 5315C |
| Standard cable tie 4,8x200 | 4,5 | 200 | 50 | 22,44 | 220 | 1.000 | 5315 |
| Standard cable tie 4,8x250 | 4,8 | 250 | 68 | 22,44 | 220 | 100 | 5316C |
| Standard cable tie 4,5x290 | 4,5 | 290 | 78 | 22,44 | 220 | 100 | 5317 |
| Standard cable tie 4,5x360 | 4,5 | 360 | 100 | 22,44 | 220 | 100 | 5319 |
| Standard cable tie 4,5x390 | 4,5 | 390 | 106 | 22,44 | 220 | 100 | 5318 |
| Standard cable tie 4,5x430 | 4,5 | 430 | 115 | 22,44 | 220 | 100 | 5320 |
| Standard cable tie 7,8x180 | 7,8 | 180 | 45 | 55,08 | 540 | 100 | 5323 |
| Standard cable tie 7,8x240 | 7,5 | 240 | 63 | 55,08 | 540 | 100 | 5325 |
| Standard cable tie 7,5x300 | 7,5 | 300 | 80 | 55,08 | 540 | 100 | 5326 |
| Standard cable tie 7,5x365 | 7,5 | 365 | 100 | 55,08 | 540 | 100 | 5327 |
| Standard cable tie 7,5x450 | 7,5 | 450 | 130 | 55,08 | 540 | 100 | 5329 |
| Standard cable tie 7,5x540 | 7,5 | 540 | 158 | 55,08 | 540 | 100 | 5331 |
| Standard cable tie 7,5x750 | 7,5 | 750 | 220 | 55,08 | 540 | 100 | 5333 |
| Standard cable tie 9,0x780 | 9 | 780 | 233 | 71,40 | 700 | 100 | 5334 |
| Standard cable tie 12,5x225 | 12,5 | 225 | 57 | 110 | 1.080 | 50 | 5335 |
| Standard cable tie 12,5x500 | 12,5 | 500 | 143 | 110 | 1.080 | 50 | 5337 |
| Standard cable tie 12,5x720 | 12,5 | 720 | 213 | 110 | 1.080 | 50 | 5339 |
| Standard cable tie 12,5x850 | 12,5 | 850 | 255 | 110 | 1.080 | 50 | 5341 |
| Standard cable tie 12,5x1.000 | 12,5 | 1.000 | 302 | 110 | 1.080 | 50 | 5343 |

UV-RESISTANT CABLE TIES



Technical cable ties, in polyamide 6.6
uv-resistant, suitable for outdoor
applications



FEATURES AND BENEFITS

- Excellent resistance to ultraviolet radiation; cable ties passed the tests, for UV resistance, defined by the CEI EN 62275 standard, maintaining, after the test conditions, the 100% of the tensile declared strength (ISO 4892 - 2 - A method - 1000 hours at the xenon arc - equivalent to about 10 years of solar irradiation typical of southern European regions)
- Also suitable for installations at high operating temperatures (up to 85°C)

APPROVALS AND CERTIFICATIONS



TECHNICAL DATA

| | |
|--------------------------|------------------------------|
| Material | polyamide 6.6. |
| Halogen | absent |
| Humidity absorption | 2,7% (50% relative humidity) |
| Working temperature | -40°C ÷ 85°C |
| Installation temperature | 10°C ÷ 60°C |
| Flammability rating | UL 94 class V2 |

Resistance external agents:
High UV resistance (certified by DNV), excellent resistance to aromatic solvents, oils, greases, petroleum products, good resistance to bases, limited resistance to acids. Does not resist phenol and chlorinated solvents.

UV-RESISTANT BLACK



| Description | Width (mm) | Length (mm) | Ø bundle max (mm) | Tensile Strength (kg) | Tensile Strength (N) | Pack (pcs.) | Code |
|--------------------------------|------------|-------------|-------------------|-----------------------|----------------------|-------------|---------|
| UV-resistant cable tie 2,5x98 | 2,5 | 98 | 21 | 8,16 | 80 | 100 | 5303CUV |
| UV-resistant cable tie 3,5x140 | 3,5 | 140 | 32 | 13,26 | 130 | 100 | 5309CUV |
| UV-resistant cable tie 3,5x200 | 3,5 | 200 | 50 | 18,36 | 130 | 100 | 5314CUV |
| UV-resistant cable tie 4,8x200 | 4,8 | 200 | 50 | 22,44 | 220 | 100 | 5315CUV |
| UV-resistant cable tie 4,5x290 | 4,5 | 290 | 78 | 22,44 | 220 | 100 | 5317UV |
| UV-resistant cable tie 7,5x365 | 7,5 | 365 | 100 | 55,08 | 540 | 100 | 5327UV |

SELF-EXTINGUISHING CABLE TIES



Self-extinguishing cable ties, in polyamide V0, for higher fire protection. Halogen and phosphorus free



FEATURES AND BENEFITS

- Manufactured in self-extinguish polyamide with extremely low toxic gas emission in fire situations
- Good flammability behaviour

APPROVALS AND CERTIFICATIONS



HALOGEN FREE

EN 45545-2

TECHNICAL DATA

| | |
|---|------------------------------|
| Material | polyamide 6.6 with additives |
| Halogen | absent |
| Humidity absorption (50% relative humidity) | 2,7% |
| Working temperature | -40°C ÷ +85°C |
| Installation temperature | -10°C ÷ 60°C |
| Flammability rating | UL94 class V2 |

Resistance external agents:
Excellent flammability behaviour (UL94 V0). Excellent chemical resistance to aromatic solvents, oils, greases, oil-based products. Good chemical resistance to bases. Limited resistance to acids. Does not resist to phenol and chlorinated solvents.

SELF-EXTINGUISHING CABLE TIE WHITE



| Description | Width (mm) | Length (mm) | Ø bundle (mm) | Tensile Strength (kg) | Tensile Strength (N) | Pack (pcs.) | Code |
|--------------------------------------|------------|-------------|---------------|-----------------------|----------------------|-------------|---------|
| Self-extinguishing cable tie 2,5x98 | 2,5 | 98 | 21 | 8,16 | 80 | 100 | 5203CV0 |
| Self-extinguishing cable tie 3,5x140 | 3,5 | 140 | 32 | 18,36 | 180 | 100 | 5209CV0 |
| Self-extinguishing cable tie 3,5x200 | 3,5 | 200 | 50 | 18,36 | 180 | 100 | 5214CV0 |
| Self-extinguishing cable tie 4,8x200 | 4,8 | 200 | 50 | 22,44 | 220 | 100 | 5215CV0 |
| Self-extinguishing cable tie 4,5x290 | 4,5 | 290 | 78 | 22,44 | 220 | 100 | 5217V0 |
| Self-extinguishing cable tie 7,5x365 | 7,5 | 365 | 100 | 55,08 | 540 | 100 | 5227V0 |



COLSTEEL CABLE TIES

Completely stainless steel cable tie with high mechanical strength, resistant to fire and corrosion



FEATURES AND BENEFITS

- Quick installation, by manual tightening and tensioning with the specific tool
- The ball locking mechanism and the smooth surface offer a very low insertion effort and a infinitely calibrated closing adjustment along all the length of the tie
- High mechanical strength: for safety and high performance applications, which can be guaranteed, only with a metal tie
- The total-smooth profiles and surfaces avoid any damage to the insulation of the electrical cables to be bundled
- Fire resistant, suitable for very high operating temperatures
- Available in 304 and also in 316 stainless steel grade for the highest corrosion and chemical resistance

APPROVALS AND CERTIFICATIONS



TECHNICAL DATA

| | |
|----------------------------|---------------------------------------|
| Material | stainless steel INOX AISI 304 and 316 |
| Working temperature | -60°C ÷ 530°C |
| | Not inflammable |

Resistance external agents:
Excellent resistance to acids, oils, greases, oil-based products, chemical and oxidizing agents, solvents. High resistance in salt mist atmosphere. Corrosion resistant. UV-resistant

TENSIONING TOOL 5407

Automatic tensioning tool for stainless steel cable ties up to 7,9 mm maximum width



COLSTEEL
AISI 304



| Description | Width (mm) | Length (mm) | Ø bundle max (mm) | Tensile Strength (kg) | Tensile Strength (N) | Pack (pcs.) | Code | Recommended tool |
|-------------------------------|------------|-------------|-------------------|-----------------------|----------------------|-------------|------|------------------|
| Colsteel 4,6x127 - AISI 304 | 4,6 | 127 | 25 | 45,4 | 445 | 100 | 6701 | 5407 |
| Colsteel 4,6x201 - AISI 304 | 4,6 | 201 | 51 | 45,4 | 445 | 100 | 6703 | 5407 |
| Colsteel 4,6x266 - AISI 304 | 4,6 | 266 | 69 | 45,4 | 445 | 100 | 6706 | 5407 |
| Colsteel 4,6x362 - AISI 304 | 4,6 | 362 | 102 | 45,4 | 445 | 100 | 6708 | 5407 |
| Colsteel 4,6x521 - AISI 304 | 4,6 | 521 | 152 | 45,4 | 445 | 50 | 6710 | 5407 |
| Colsteel 4,6x838 - AISI 304 | 4,6 | 838 | 254 | 45,4 | 445 | 50 | 6712 | 5407 |
| Colsteel 7,9x201 - AISI 304 | 7,9 | 201 | 51 | 113,4 | 1.112 | 100 | 6719 | 5407 |
| Colsteel 7,9x266 - AISI 304 | 7,9 | 266 | 69 | 113,4 | 1.112 | 100 | 6720 | 5407 |
| Colsteel 7,9x362 - AISI 304 | 7,9 | 362 | 102 | 113,4 | 1.112 | 100 | 6722 | 5407 |
| Colsteel 7,9x521 - AISI 304 | 7,9 | 521 | 152 | 113,4 | 1.112 | 50 | 6724 | 5407 |
| Colsteel 7,9x838 - AISI 304 | 7,9 | 838 | 254 | 113,4 | 1.112 | 50 | 6726 | 5407 |
| Colsteel 7,9x1.067 - AISI 304 | 7,9 | 1.067 | 304 | 113,4 | 1.112 | 50 | 6728 | 5407 |

COLSTEEL
AISI 316



| Description | Width (mm) | Length (mm) | Ø bundle max (mm) | Tensile Strength (kg) | Tensile Strength (N) | Pack (pcs.) | Code | Recommended tool |
|-----------------------------|------------|-------------|-------------------|-----------------------|----------------------|-------------|------|------------------|
| Colsteel 4,6x201 - AISI 316 | 4,6 | 201 | 51 | 91,8 | 445 | 100 | 6753 | 5407 |
| Colsteel 4,6x266 - AISI 316 | 4,6 | 266 | 69 | 91,8 | 445 | 100 | 6756 | 5407 |
| Colsteel 4,6x362 - AISI 316 | 4,6 | 362 | 102 | 91,8 | 445 | 100 | 6758 | 5407 |
| Colsteel 4,6x521 - AISI 316 | 4,6 | 521 | 152 | 91,8 | 445 | 50 | 6760 | 5407 |
| Colsteel 7,9x201 - AISI 316 | 7,9 | 201 | 51 | 204 | 1.112 | 100 | 6769 | 5407 |
| Colsteel 7,9x266 - AISI 316 | 7,9 | 266 | 69 | 204 | 1.112 | 100 | 6770 | 5407 |
| Colsteel 7,9x362 - AISI 316 | 7,9 | 362 | 102 | 204 | 1.112 | 100 | 6772 | 5407 |

TENSIONING TOOL
5407



| Description | Length (mm) | Weight (gr) | Tensile Strength (N) | Pack (pcs.) | Code |
|--|-------------|-------------|----------------------|-------------|------|
| Stainless steel tensioning tool for ties 7,9 max | 178 | 560 | 445 | 1 | 5407 |

HEAT RESISTANT CABLE TIES



Technical cable ties, suitable for high temperature applications, up to 150°C



CHALLENGES

Heat resistant cable ties up to 150°C for indoor applications

FEATURES AND BENEFITS

- High temperatures resistance: up to 125°C in continuous, up to 150°C for 500 h.

APPROVALS AND CERTIFICATIONS



TECHNICAL DATA

| | |
|--------------------------|-------------------------------|
| Material | polyamide 6.6. with additives |
| Halogen | absent |
| Humidity absorption | 2,7% (50% relative humidity) |
| Working temperature | -40°C ÷ 125°C |
| Installation temperature | 10°C ÷ 60°C |
| Flammability rating | UL 94 class V2 |

Resistance external agents:

Resistant to high temperatures. Excellent chemical resistance to aromatic solvents, oils, greases, oil-based products. Good chemical resistance to bases. Limited resistance to acids. Does not resist to phenol and chlorinated solvents.

HEAT RESISTANT CABLE TIE
NATURAL



| Description | Width (mm) | Length (mm) | Ø bundle max (mm) | Tensile Strength (kg) | Tensile Strength (N) | Pack (pcs.) | Code |
|----------------------------------|------------|-------------|-------------------|-----------------------|----------------------|-------------|--------|
| Heat resistant cable tie 2,5x98 | 2,5 | 98 | 21 | 8,16 | 80 | 100 | 5203CT |
| Heat resistant cable tie 3,5x140 | 3,5 | 140 | 32 | 18,36 | 180 | 100 | 5209CT |
| Heat resistant cable tie 3,5x200 | 3,5 | 200 | 50 | 18,36 | 180 | 100 | 5214CT |
| Heat resistant cable tie 4,8x200 | 4,8 | 200 | 50 | 22,44 | 220 | 100 | 5215CT |
| Heat resistant cable tie 4,5x290 | 4,5 | 290 | 78 | 22,44 | 220 | 100 | 5217T |
| Heat resistant cable tie 7,5x365 | 7,5 | 365 | 100 | 55,08 | 540 | 100 | 5227T |

HEAT RESISTANT CABLE TIE
BLACK

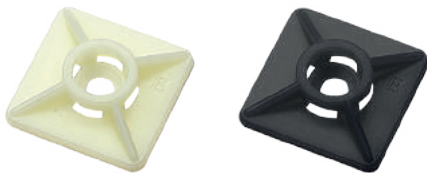


| Description | Width (mm) | Length (mm) | Ø bundle max (mm) | Tensile Strength (kg) | Tensile Strength (N) | Pack (pcs.) | Code |
|----------------------------------|------------|-------------|-------------------|-----------------------|----------------------|-------------|---------|
| Heat resistant cable tie 2,5x98 | 2,5 | 98 | 21 | 8,16 | 80 | 100 | 5303CT |
| Heat resistant cable tie 3,5x140 | 3,5 | 140 | 32 | 18,36 | 180 | 100 | 5309CT |
| Heat resistant cable tie 3,5x200 | 3,5 | 200 | 50 | 18,36 | 180 | 100 | 5314CT |
| Heat resistant cable tie 4,8x200 | 4,8 | 200 | 50 | 22,44 | 220 | 100 | 5315C T |
| Heat resistant cable tie 4,5x290 | 4,5 | 290 | 78 | 22,44 | 220 | 100 | 5317T |
| Heat resistant cable tie 7,5x365 | 7,5 | 365 | 100 | 55,08 | 540 | 100 | 5327T |

TWO-WAY MOUNTING BASES



Bi-directional mounts, in ABS material, white or black colour, self-adhesive or for screw fixing



FEATURES AND BENEFITS

- Available for two different mounting, these bases allow a simple, flexible and safe fastening by cable ties up to 4,8 mm width
- The syntetic rubber adhesive ensures a very fast adhesiveness, allowing an immediate fixing of the cables and pipes.
- The acrylate adhesive, which ensures very high pull-off performances after 24 hours, allows the mounts to be used for long-term and heavy applications, even when exposed to high temperatures

APPROVALS AND CERTIFICATIONS

HALOGEN FREE

ADHESIVE PROPERTIES

| Type of support | Rubber base - Polyethylene | Acrylic base - Polyurethane |
|-------------------------------------|----------------------------|-----------------------------|
| Density | 85 Kg/cm ³ | 320 Kg/cm ³ |
| 100 hour static shear adhesion* | 0,7 kg/cm ² | 0,6 kg/cm ² |
| Tensile strength | 10 kg/cm ² | 16,5 kg/cm ² |
| U.V. Resistance | not recommended | good |
| Working temperature | -40 °C ÷ 60 °C | -40 °C ÷ 90 °C |
| Recommended application temperature | 18 °C ÷ 35 °C | 18 °C ÷ 35 °C |
| Stocking temperature | 18 °C ÷ 30 °C | 18 °C ÷ 30 °C |
| Shelf life | 12 months | 24 months |
| Use | immediate application | application after 24h rest |

* On degreased and dry galvanized metal surface

MOUNTING BASES ADHESIVITY

| Maximum static load recommended | Rubber base adhesive | Acrylic base adhesive |
|---------------------------------|----------------------|-----------------------|
| Dimensions 19x19 mm | 125 gr | 150 gr |
| Dimensions 27x27 mm | 300 gr | 300 gr |

INSTALLATION INSTRUCTIONS



Clean the surface using an appropriate cleaner and wait until completely dried.



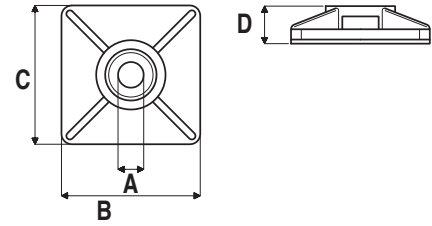
Peel off the protective film avoiding touching the adhesive.



Apply the base on the surface pressing down for few seconds.



For the best results wait time indicated in the technical table.



**TWO-WAY MOUNTING BASE
WITHOUT ADHESIVE**

| Description | ∅ hole (mm) | Length (mm) | Width (mm) | Height (mm) | Tensile Strength (kg) | Tensile Strength (N) | Max. cable tie width (mm) | Color | Pack (pcs.) | Code |
|---|-------------|-------------|------------|-------------|-----------------------|----------------------|---------------------------|-------|-------------|------|
| | A | B | C | D | | | | | | |
| Two-way mounting base 4,8x27x27 natural | 4,8 | 27 | 27 | 6,5 | 18,36 | 180 | 4,8 | ○ | 100 | 5472 |
| Two-way mounting base 4,8x27x27 black | 4,8 | 27 | 27 | 6,5 | 18,36 | 180 | 4,8 | ● | 100 | 5474 |

**TWO-WAY MOUNTING BASE
WITH RUBBER BASE ADHESIVE**

| Description | ∅ hole (mm) | Length (mm) | Width (mm) | Height (mm) | Tensile Strength (kg) | Tensile Strength (N) | Max. cable tie width (mm) | Color | Pack (pcs.) | Code |
|---|-------------|-------------|------------|-------------|-----------------------|----------------------|---------------------------|-------|-------------|--------|
| | A | B | C | D | | | | | | |
| Two-way mounting base 4,1x19x19 natural | 4,1 | 19 | 19 | 5 | 10,20 | 100 | 3,6 | ○ | 100 | 5467RB |
| Two-way mounting base 4,1x19x19 black | 4,1 | 19 | 19 | 5 | 10,20 | 100 | 3,6 | ● | 100 | 5469RB |
| Two-way mounting base 4,8x27x27 natural | 4,8 | 27 | 27 | 6,5 | 18,36 | 180 | 4,8 | ○ | 100 | 5473RB |
| Two-way mounting base 4,8x27x27 black | 4,8 | 27 | 27 | 6,5 | 18,36 | 180 | 4,8 | ● | 100 | 5475RB |

**TWO-WAY MOUNTING BASE
WITH ACRYLIC BASE ADHESIVE**

| Description | ∅ hole (mm) | Length (mm) | Width (mm) | Height (mm) | Tensile Strength (kg) | Tensile Strength (N) | Max. cable tie width (mm) | Color | Pack (pcs.) | Code |
|---|-------------|-------------|------------|-------------|-----------------------|----------------------|---------------------------|-------|-------------|---------|
| | A | B | C | D | | | | | | |
| Two-way mounting base 4,1x19x19 natural | 4,1 | 19 | 19 | 5 | 10,20 | 100 | 3,6 | ○ | 100 | 54673MV |
| Two-way mounting base 4,1x19x19 black | 4,1 | 19 | 19 | 5 | 10,20 | 100 | 3,6 | ● | 100 | 54693MV |
| Two-way mounting base 4,8x27x27 natural | 4,8 | 27 | 27 | 6,5 | 18,36 | 180 | 4,8 | ○ | 100 | 54733MV |
| Two-way mounting base 4,8x27x27 black | 4,8 | 27 | 27 | 6,5 | 18,36 | 180 | 4,8 | ● | 100 | 54753MV |

A series of 20 horizontal dashed lines for writing or drawing.

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