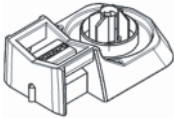


# X-ECT MX Electrical Cable Tie, X-EKS MX Conduit Clip Fastener

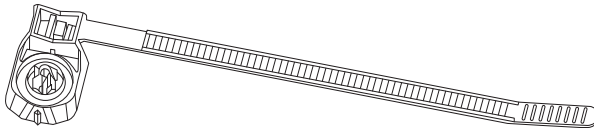
## Product data

### Dimensions

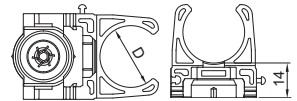
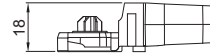
X-ECT MX



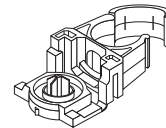
X-ECT 40 MX



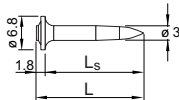
X-EKS MX



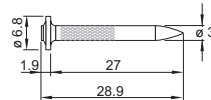
X-EKSC MX



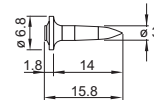
X-GHP 20/24



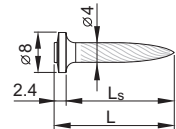
X-GN 27



X-EGN 14



X-U 16/22/27



## General information

### Material specifications

X-ECT and X-EKS:

Polyamide (halogen and silicon free), light grey RAL 7035 and PBT (silicon free, flame retardant), stone grey RAL 7030

Nails:

Carbon Steel HRC 58  
HRC 53.5

**X-GHP 20/24, X-EGN 14, X-U**  
**X-GN 27**

Zink coating 2–8 µm  
5–13 µm

**X-GHP 20/24, X-GN 27, X-EGN 14**  
**X-U**

### Fastening tools

GX 120-ME, GX 100-E, DX 460-MX, DX 351-MX

See fastener selection for more details.

### Approvals

CSTB (France)

X-ECT MX, X-EKS MX, X-EKSC MX (all with X-U22 MX nail)

UL (USA)

X-ECT MX

## Applications

### Examples



Flexible or rigid cable conduits with cable ties



Rigid conduits



Cable conduits or light duty pipes

## Load data

### Design data

#### Recommended loads

Fastener	Service load <sup>1)</sup> [kN]
<b>X-ECT MX / X-ECT 40 MX</b>	0.04
<b>X-EKS MX</b>	0.02

<sup>1)</sup> The recommended service load is determined by the serviceability of the plastic part.

### Test data (Examples)

Important note: test data are for information only.

### Load capacity of the nails:

The nail resistance is not controlling the failure of the fastener.

#### Fastenings to concrete

Nail	Average tensile failure load $N_{u,m}$ [kN]	Scatter [%]	Embedment depth $h_{\text{ET}}$ [mm]	Concrete strength $f_{\text{cc}}$ [N/mm <sup>2</sup> ]
<b>X-GHP 20 MX</b>	1.61	52.0	14.0	52.2
<b>X-GN 27 MX</b>	1.91	47.1	19.2	23.7
<b>X-U 22 MX</b>	3.18	37.8	20.1	54.7
<b>X-U 27 MX</b>	4.04	35.4	24.5	30.9

**Application requirements**

**Thickness of base material**

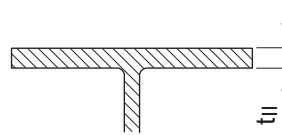
Concrete

**X-U:**  $h_{\min} = 80 \text{ mm}$

**X-GHP, X-GN:**  $h_{\min} = 60 \text{ mm}$

Steel

$t_{II} \geq 4 \text{ mm}$



**Spacing and edge distances**

50–100 cm along the cable tie. Adjust spacing as needed to achieve stability of cable tie

**Corrosion information**

These zinc-coated fasteners are not suitable for long-term service outdoors or in otherwise corrosive environments.

For further detailed information on corrosion see relevant chapter in **Direct Fastening Principles and Technique** section.

## Fastener selection

### Suitable cables with **X-ECT MX** and **X-ECT 40 MX** fastener

Cable type	Cable measure [Ø mm]	No. of cables
<b>NYM 3x1.5</b>	8	14
<b>NYM 5x1.5</b>	10	10

### Suitable conduits with **X-EKS / X-EKSC MX** fastener

Conduit type	Conduit size [mm]	No. of conduits
Plastic conduit	16–40	1

## Fastener program

Base material	Nail			Shank Ø *) d <sub>s</sub> [mm]	Shank length*) L <sub>s</sub> [mm]	L [mm]
	Designation	Technology				
Concrete	<b>X-U 22 MX</b>	DX		4.0	22	–
Concrete	<b>X-U 27 MX</b>	DX		4.0	27	–
Steel	<b>X-U 16 MX</b>	DX		4.0	16	–
Concrete	<b>X-GHP 20 MX</b>	GX		3.0	20	21.8
Concrete	<b>X-GHP 24 MX</b>	GX		3.0	24	25.8
Concrete or masonry	<b>X-GN 27 MX</b>	GX		3.0	27	28.9
Steel	<b>X-EGN 14 MX</b>	GX		3.0	14	15.8

\*) Standard chank diameters and shank lengths. Other combinations available on special order.

## Tools:

DX technology: DX 460-MX, DX 351-MX

GX technology: GX 120-ME, GX 100-E

### X-EKS

Item no.	Designation
285719	<b>X-EKS 16 MX</b>
285720	<b>X-EKS 20 MX</b>
285721	<b>X-EKS 25 MX</b>
285722	<b>X-EKS 32 MX</b>
285723	<b>X-EKS 40 MX</b>

### X-ECT

Item no.	Designation
285709	<b>X-ECT MX</b>
285710	<b>X-ECT UV MX</b>
285711	<b>X-ECT FR MX</b>
432947	<b>X-ECT 40 MX</b>

### GX nails

Item no.	Designation
338872	<b>X-EGN 14 MX</b>
340229	<b>X-GHP 20 MX</b>
438945	<b>X-GHP 24 MX</b>
34541	<b>X-GN 27 MX</b>

### DX Nails

Item no.	Designation
237344	<b>X-U 16 MX</b>
237346	<b>X-U 22 MX</b>
237347	<b>X-U 27 MX</b>

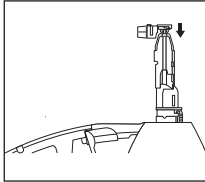
### X-EKSC

Item no.	Designation
274083	<b>X-EKSC 16 MX</b>
274086	<b>X-EKSC 20 MX</b>
274087	<b>X-EKSC 25 MX</b>
386469	<b>X-EKSC 32 MX</b>
386470	<b>X-EKSC 40 MX</b>

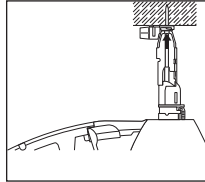
### System recommendation

DX tools:	Steel:	<b>6.8/11M yellow or red cartridge</b>
	Concrete:	<b>6.8/11M yellow cartridge</b> on green/fresh and standard concrete <b>6.8/11M red cartridge</b> on precast, old and hard concrete
	Masonry:	<b>6.8/11M green cartridge</b>
GX 120 tool:	<b>Gas can GC 21</b> (GC 22 in USA)	
GX 100 tool:	<b>Gas can GC 11</b> (GC 12 in USA)	

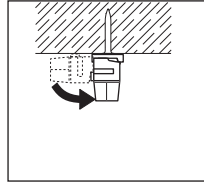
Tool energy adjustment by setting tests on site.

**Fastening quality assurance****Installation**

**1.**  
Load X-EKS, X-ECT  
in the tool.



**2.**  
Apply X-EKS, X-ECT  
to surface with tool,  
compress the tool and  
pull the trigger.



**3.**  
Turn down the X-EKS  
clip or assemble a  
cable binder into the  
X-ECT  
(Example: X-EKS)



**4.**  
Fasten the cable to the  
X-EKS clip, the X-ECT  
(Example: X-EKS)

## Spacing:

- 50–100 cm along the cable tie
- Adjust spacing as needed to achieve stability of cable tie