



X-ECT MX, X-UCT MX AND X-EKS MX DATA SHEET

**Electrical cable tie
and conduit clip fastener**

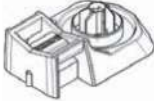


X-ECT MX, X-UCT MX, X-EKS MX Electrical cable tie and conduit clip fastener

Product data

Dimensions

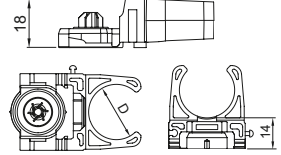
X-ECT MX



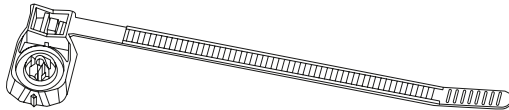
X-UCT MX



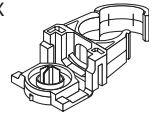
X-EKS MX



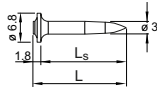
X-ECT 40 MX



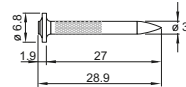
X-EKSC MX



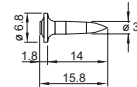
X-GHP 20/24



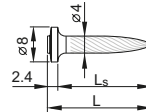
X-GN 27



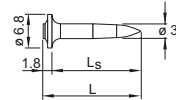
X-EGN 14



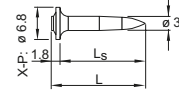
X-U 16/22/27



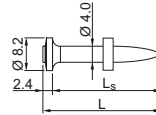
X-P 20/24 G3 MX



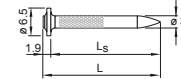
X-P 20/24 B3 MX



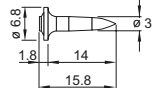
X-P 22/27



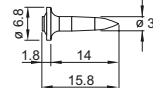
X-C 27 G3 MX



X-S 14 G3 MX



X-S 14 B3 MX



Material specifications and material properties

Material specification			Material properties			
Designation	Material	Colour	Silicone free	Halogen free	Flame retardant acc. to EN 60695-2-11, IEC 60695-2-11, VDE 0471 part 2-11 at 650°C at 960°C	
X-EKS 16 MX	PA	light grey (RAL 7035)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
X-EKS 19 MX	PA	light grey (RAL 7035)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
X-EKS 20 MX	PA	light grey (RAL 7035)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
X-EKS 25 MX	PA	light grey (RAL 7035)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
X-EKS 32 MX	PA	light grey (RAL 7035)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
X-EKS 40 MX	PA	light grey (RAL 7035)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
X-EKSC 16 MX	PA	light grey (RAL 7035)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
X-EKSC 20 MX	PA	light grey (RAL 7035)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
X-EKSC 25 MX	PA	light grey (RAL 7035)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
X-EKSC 32 MX	PA	light grey (RAL 7035)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
X-EKSC 40 MX	PA	light grey (RAL 7035)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
X-ECT MX	PA	light grey (RAL 7035)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
X-ECT UV MX	PA	black (RAL 9011)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
X-ECT FR MX	PBT	stone grey (RAL 7030)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
X-ECT 40 MX	PA	light grey (RAL 7035)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
X-ECT U22	PA	black (RAL 9011)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
X-ECT UV 22	PA	black (RAL 9011)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
X-UCT MX	HDPE	light grey (RAL 7035)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- PA = Polyamide
- PBT = Polybutylenterephthalate
- HDPE = High-density polyethylene


Recommended fastening tools

DX 6 MX, DX 5 MX, DX 351 MX, DX 460 MX
 DX 6 F8, DX 5 F8, DX 460 F8, DX 351 F8, DX 2
 GX 120-ME, GX 3-ME, BX 3-ME

- See fastener program in the next pages.

Approvals and certificates

CSTB (France) X-ECT MX, X-EKS MX, X-EKSC MX (all with X-U22 MX nail)
 UL (USA) X-ECT MX

 Not all information presented in this product data sheet might be subject to approval / certificate content. Please refer to approval/certificate for further information.

Applications
Examples


Flexible or rigid cable conduits with cable ties



Rigid conduits




Cable conduits or light duty pipes

Performance data
Recommended tension and shear load for fastening electrical elements

Designation	Tension load N_{rec}	Shear load V_{rec}
X-ECT 40 MX, X-ECT MX, X-ECT FR MX	0.040 kN	0.040 kN
X-UCT MX	0.040 kN	0.040 kN
X-EKS MX	0.011 kN	0.011 kN
X-EKSC MX	0.032 kN	0.032 kN

Recommended tension and shear load for fastening pipes

Designation	Tension load N_{rec}	Shear load V_{rec}
X-ECT 40 MX, X-ECT MX, X-ECT FR MX	0.040 kN	0.040 kN
X-EKSC MX	0.032 kN	0.032 kN

- 
 - copper pipes and plastic pipes, e.g. PEX pipes
 - pipes filled with 90°C hot fluid
 - tests according to Kiwa standard BRL-K506

Application recommendation

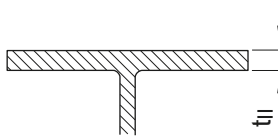
Base material thickness

Concrete

X-U, X-P:	$h_{\min} = 80 \text{ mm}$
X-P B3 MX:	$h_{\min} = 60 \text{ mm}$
X-P G3 MX, X-GHP:	$h_{\min} = 60 \text{ mm}$
X-C 27 G3 MX, X-GN 27 MX:	$h_{\min} = 60 \text{ mm}$

Steel

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



Spacing

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 more details, please refer to following technical document: Hilti Corrosion Handbook.

System recommendation



- For more details, please refer to the chapter **Accessories and consumables compatibility** in the Direct Fastening Technology Manual (DFTM).

Service installation information

Suitable cables with X-ECT MX, X-ECT 40 MX and X-UCT MX fastener

Cable type	Cable measure diameter	No. of cables
NYM 3x1.5	8 mm	14
NYM 5x1.5	10 mm	10

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

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

Power-actuated tool and fastener recommendation

Base material	Cable holder	Power-actuated tool	Fastener
Concrete or masonry	X-ECT MX X-EKS MX X-UCT MX	GX 3-ME	X-P 20/24 G3 MX X-C 27 G3 MX
		GX 120-ME	X-GHP 20/24 MX X-GN 27 MX
		BX 3-ME	X-P 20/24 B3 MX
	X-ECT MX X-EKS MX	DX 6 MX, DX 5 MX, DX 351 MX, DX 460 MX	X-U 22/27 MX
			X-P 22/27 MX
Steel	X-ECT MX X-EKS MX X-UCT MX	GX 3-ME	X-S 14 G3 MX
		GX 120-ME	X-EGN 14 MX
		BX 3-ME	X-S 14 B3 MX
	X-ECT MX X-EKS MX	DX 6 MX, DX 5 MX, DX 351 MX, DX 460 MX	X-U 16 MX

Cartridge recommendation for fastening to concrete and masonry

Base material	Cartridge color (tool power level)	
	Tool type: DX 6 MX	Tool type: DX 5 MX, DX 460 MX, DX 351 MX
	DX 6 F8	DX 5 F8, DX 460 F8, DX 351 F8, DX 2
	Cartridge type: 6.8/11 M	Cartridge type: 6.8/11 M
Sand lime masonry	titanium ■ (1-5)	green ■, yellow ■
Soft/medium concrete	titanium ■ (2-5)	yellow ■, red ■
Tough concrete	titanium ■ (4-7)	yellow ■, red ■



- Tool power level adjustment by setting tests on site.
- Start tool energy selection with lowest recommended tool power level.

System recommendation for gas-actuated tools

GX tools	GX 120-ME	Gas can GC 20, GC 21 and GC 22
	GX 3-ME	Gas can GC 40, GC 41 and GC 42

Fastener program

Item no. and description

Designation	Item no.	Description
X-EKS 16 MX	285719	X-EKS
X-EKS 19 MX	2105391	
X-EKS 20 MX	285720	
X-EKS 25 MX	285721	
X-EKS 32 MX	285722	
X-EKS 40 MX	285723	
X-EKSC 16 MX	274083	X-EKSC
X-EKSC 20 MX	274086	
X-EKSC 25 MX	274087	
X-EKSC 32 MX	386469	
X-EKSC 40 MX	386470	
X-ECT MX	285709	X-ECT
X-ECT UV MX	285710	
X-ECT FR MX	285711	
X-ECT 40 MX	432947	
X-ECT U22	288312	
X-ECT UV 22	288313	
X-UCT MX	2095183	X-UCT