



X-DFB / X-EMTC DATA SHEET

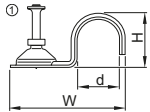
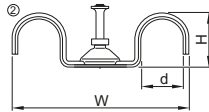
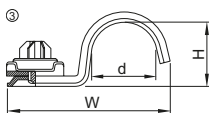
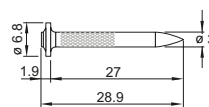
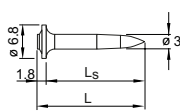
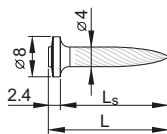
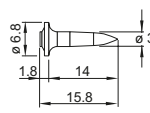
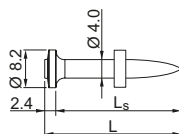
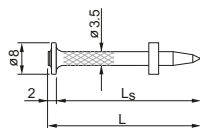
Electrical conduit fastener



X-DFB, X-EMTC Electrical conduit fastener

Product data

Dimensions

X-EMTC

X-DFB

X-BX/X-EMTC

X-GN 27

X-GHP 20/24

X-U 16/22/27

X-EGN 14

X-P 22/27

X-C 27


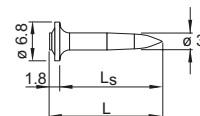
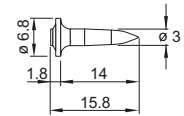
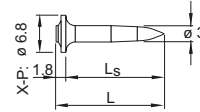
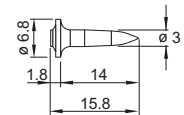
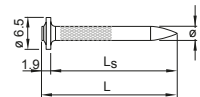
Material specifications



- See fastener program in the next pages.

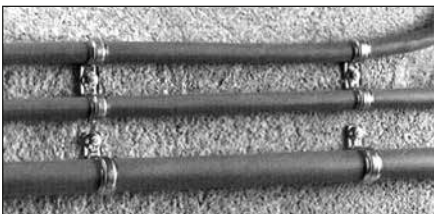
Recommended fastening tools

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

X-P 20/24 G3 MX

X-S 14 G3 MX

X-P 20/24 B3 MX

X-S 14 B3 MX

X-C 27 G3 MX


Applications

Example



Performance data

Recommended loads under shear and tension

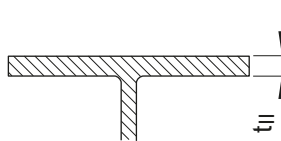
Designation	Concrete	Sandlime stone	Steel
	N_{rec}	N_{rec}	N_{rec}
X-DFB (pre-mounted)	0.06 kN	0.06 kN	–
X-EMTC MX with X-U, X-P or X-C ($L_s = 22-27$ mm)	0.06 kN	0.06 kN	–
X-EMTC MX with X-U 16 MX	–	–	0.06 kN
X-EMTC MX with X-P B3 MX, X-P G3 MX or X-GHP ($L_s = 20-24$ mm)	0.02 kN	–	–
X-EMTC MX with X-C 27 G3 MX or X-GN 27 MX	–	0.06 kN	–
X-EMTC MX with X-S 14 B3 MX, X-S 14 G3 MX, X-EGN 14 MX or X-U 16 MX	–	–	0.06 kN

- For more details in relation to base material properties, please refer to the chapter **Fastener selection guide** in the Direct Fastening Manual (DFTM).

Application recommendation

Base material thickness

Concrete		Steel
X-U, X-P or X-C	$h_{min} = 80$ mm	$t_{II} \geq 4$ mm
X-P B3 MX, X-P G3 MX, X-GHP, X-C 27 G3 MX, X-GN 27 MX	$h_{min} = 60$ mm	



Fastened material thickness

X-BX, X-EMTC To fasten conduits, pipes and tubes of \varnothing 5 mm to 50 mm

Fastener positioning

Space fastenings as needed to control sag and maintain alignment.

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).

Cartridge recommendation for fastening to concrete

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

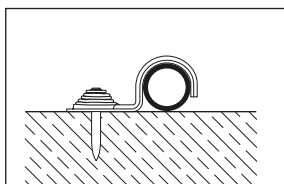
Cartridge recommendation for fastening to steel

Base material	Cartridge color (tool power level)	
	Tool type: DX 6 MX DX 6 F8 Cartridge type: 6.8/11 M	Tool type: DX 5 MX, DX 460 MX, DX 351 MX DX 5 F8, DX 460 F8, DX 351 F8, DX 2 Cartridge type: 6.8/11 M
S235, S275, S355	$4 \leq t_{II} \leq 20 \text{ mm}$	titanium ■ (2-8) yellow ■, red ■

- Tool power level adjustment by setting tests on site.
- Start tool energy selection with lowest recommended tool power level.
- Correct according requirement from chapter quality assurance.

Quality assurance

Nailhead not protruding



Fastener program
Technical information

With pre-mounted nail		Without pre-mounted nail		
Designation	Designation	d	W	H
① X-EMTC 3/8"-C27/-U22	③ X-EMTC 3/8" MX	10 mm (3/8")	33 mm	12 mm
① X-EMTC 3/8"-C27/-U22		13 mm (1/2")		
	③ X-EMTC 1/2" MX	13 mm (1/2")	42 mm	15 mm
① X-EMTC 3/4"-C27/-U22	③ X-EMTC 3/4" MX	19 mm (3/4")	47 mm	21 mm
	③ X-EMTC 1" MX	25 mm (1")	53 mm	27 mm
① X-EMTC 1"-C27/-U22		25 mm (1")		
	③ X-DFB 5 MX	5 mm	47 mm	7 mm
	③ X-DFB 6 MX	6 mm	50 mm	8 mm
	③ X-DFB 7 MX	7 mm	52 mm	9 mm
② X-DFB 8-C27	③ X-DFB 8 MX	8 mm		9.5 mm
	③ X-DFB 9 MX	9 mm	55.5 mm	11 mm
	③ X-DFB 10 MX	10 mm	57.5 mm	11.5 mm
② X-DFB 11-C27	③ X-DFB 11 MX	11 mm		12.5 mm
	③ X-DFB 13 MX	13 mm	64.2 mm	14.5 mm
② X-DFB 16-C27	③ X-DFB 16 MX	16 mm	66 mm	15 mm
② X-DFB 18-C27		18 mm	70 mm	18 mm
② X-DFB 20-C27	③ X-DFB 20 MX	20 mm	75 mm	20 mm
② X-DFB 22-C27	③ X-DFB 22 MX	22 mm	79 mm	22 mm
② X-DFB 24-C27	③ X-DFB 25 MX	24 mm	83 mm	24 mm
② X-DFB 25-C27		25 mm		
② X-DFB 28-C27	③ X-DFB 28 MX	28 mm	91 mm	28 mm
② X-DFB 35-C27		35 mm	106 mm	30 mm
② X-DFB 40-C27		40 mm	116 mm	37 mm

Material specification

- ① + ② Galvanized steel sheet, $f_u = 270-420 \text{ N/mm}^2$, 10-20 μm zinc coating
- ③ Galvanized steel sheet, $f_u = 270-420 \text{ N/mm}^2$, $\geq 5 \mu\text{m}$ zinc coating

Tools

DX 6 F8, DX 5 F8, DX 460 F8, DX 351 F8

for all X-DFB/EMTC with pre-mounted nails

and

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

for X-DFB/EMTC __MX

Item no. and description

Designation	Item no.	Description
X-EMTC 3/8"-C27/-U22		With pre-mounted nail
X-EMTC 3/8"-C27/-U22		
X-EMTC 3/4"-C27/-U22		
X-EMTC 1"-C27/-U22		
X-DFB 8-C27		
X-DFB 11-C27		
X-DFB 16-C27		
X-DFB 18-C27		
X-DFB 20-C27		
X-DFB 22-C27		
X-DFB 24-C27		
X-DFB 25-C27		
X-DFB 28-C27		
X-DFB 35-C27		
X-DFB 40-C27		
X-EMTC 3/8" MX		Without pre-mounted nail
X-EMTC 1/2" MX		
X-EMTC 3/4" MX		
X-EMTC 1" MX		
X-DFB 5 MX		
X-DFB 6 MX		
X-DFB 7 MX		
X-DFB 8 MX		
X-DFB 9 MX	2331463	
X-DFB 10 MX	2331464	
X-DFB 11 MX		
X-DFB 13 MX	2331465	
X-DFB 16 MX		
X-DFB 20 MX		
X-DFB 22 MX		
X-DFB 25 MX		
X-DFB 28 MX		