



X-ECH-FE MX, X-EKB-FE MX DATA SHEET

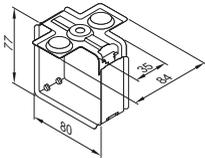
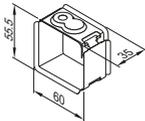
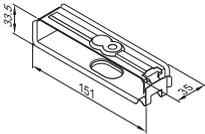
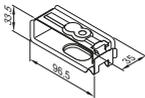
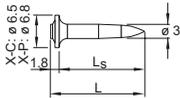
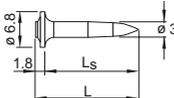
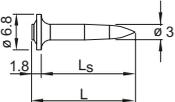
Circuit integrity fastener



X-ECH-FE MX, X-EKB-FE MX Circuit integrity fastener

Product data

Dimensions

X-ECH-FE 30 MX

X-ECH-FE 15 MX

X-EKB-FE 15 MX

X-EKB-FE 8 MX

X-P 17 B3 MX

X-GHP 18 MX

X-P 17 G3 MX


General information

Material specifications

Galvanized steel sheet	≥ 5 μm zinc coating
X-GHP	Carbon steel, HRC 57.5, zinc coating 2-10 μm
X-P G3 MX	Carbon steel, HRC 57.5, zinc coating 2-10 μm
X-P B3 MX	Carbon steel, HRC 57.5, zinc coating 2-10 μm

Recommended fastening tools

GX 120-ME, GX 3-ME, BX 3-ME

Approval

AbP P-MPA-E-16-010
 AbP P-2401/198/16-MPA BS
 AbP P-1023 DMT DO

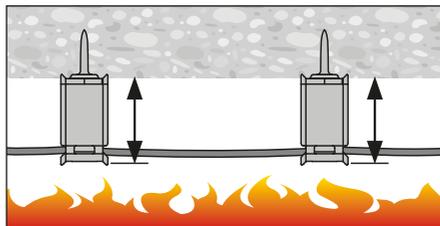
Expert review on MLAR application by MPA
 IBMB Braunschweig

Expert review on nail load in circuit integrity
 applications by MPA IBMB Braunschweig

Applications



Circuit integrity system (CIS) application with fire rating and load data according to **AbP**



Application to non-circuit integrity cables in escape routes (according to **MLAR**)

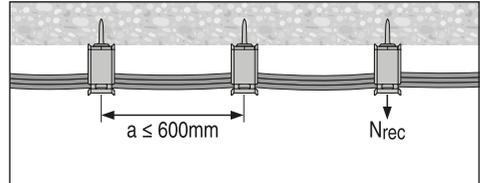
Load Data
Recommended loads (ceiling and wall application)

Application →	Escape routes (MLAR)		Circuit integrity system		Spacing a [mm]
	Fastener ↓	Load N_{rec} [kN]	Fire Rating	Cable weight [kg/m]	
X-ECH-FE 30 MX	0.04*	F90	According to AbP documents, fire rating (E30 - E90) and cable weights specific to combination of:	-	$a \leq 600$ mm
X-ECH-FE 15 MX	0.02**				
X-EKB-FE 15 MX	0.02**				
X-EKB-FE 8 MX	0.02**				

* 6.6 kg/m with spacing $a = 600$ mm

** 3.3 kg/m with spacing $a = 600$ mm

- Pre-loading of the elements with load $\geq N_{rec}$ after setting
- All visible failures must be replaced (see “Fastening quality assurance”)


Fastener selection and system recommendation
Thickness of base material

Corrosion Information

The intended use only comprises fastenings which are not directly exposed to external weather conditions or moist atmospheres.

Application requirements
Fastener program

Designation	Item no.
X-ECH-FE 30 MX	2142822
X-ECH-FE 15 MX	2142823
X-EKB-FE 15 MX	2142824
X-EKB-FE 8 MX	2142825

Fastener program

Base material	Nail designation	Shank length Ls [mm]	Nail length L [mm]	Tool
Concrete	X-GHP 18 MX	18	19.8	GX 120-ME
	X-P 17 G3 MX	17	18.8	GX 3-ME
	X-P 17 B3 MX	17	18.8	BX 3-ME

System recommendation

GX 120-ME	Gas can GC 20, GC 21 and GC 22
GX 3-ME	Gas can GC 40, GC 41 and GC 42
BX 3-ME	No gas can required

Fastening quality assurance
