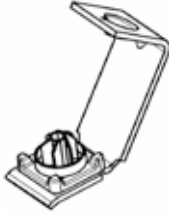


Electrical Hanger Systems X-EHS MX and X-ECC MX

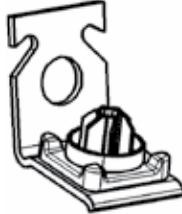
Product data

Dimensions

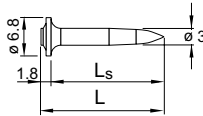
X-EHS MX



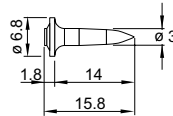
X-ECC MX



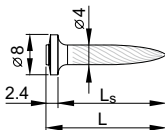
X-GHP 20/24



X-EGN 14



X-U 16/22



General information

Material specifications

X-EHS MX / X-ECC MX:

Zinc coating: $\geq 2.5 \mu\text{m}$

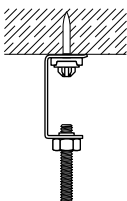
Recommended fastening tools

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

See **X-EHS MX** and **X-ECC MX** fastener program in the next pages and **Tools and equipment** chapter for more details.

Applications

Example



Hanger systems for light cable trays, etc.

- Threaded rod attachments
- Wire attachments

These fasteners are not recommended for fastening of suspended ceilings.

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

Load data

Recommended loads on concrete

| Fastener designation | $N_{rec} = V_{rec}$ [kN] |
|----------------------|--------------------------|
| X-EHS MX | 0.1 |
| X-ECC MX | 0.05 (N_{rec}^*) |
| | 0.1 (V_{rec}) |

*) eccentric loading considered

Conditions:

- Fastened with X-GHP 20/24 or X-U 22
- Minimum 5 fastenings per fastened unit (normal weight concrete).
- All visible failures must be replaced.
- With lightweight concrete base material and appropriate washers, greater loading may be possible, please contact Hilti.
- Predominantly static loading.
- Observance of all application limitations and recommendations.

Recommended loads on steel

| Fastener designation | $N_{rec} = V_{rec}$ [kN] |
|---------------------------|--------------------------|
| X-EHS MX, X-ECC MX | 0.45 |

Fastened with X-EGN 14 or X-U 16

Application requirements

Thickness of base material

| Concrete | | Steel |
|---------------|---------------------------|----------------------------|
| X-U: | $h_{min} = 80 \text{ mm}$ | $t_{II} \geq 4 \text{ mm}$ |
| X-GHP: | $h_{min} = 60 \text{ mm}$ | |

Spacing and edge distances

Spacing and edge distances depending on job site requirements.

Corrosion information

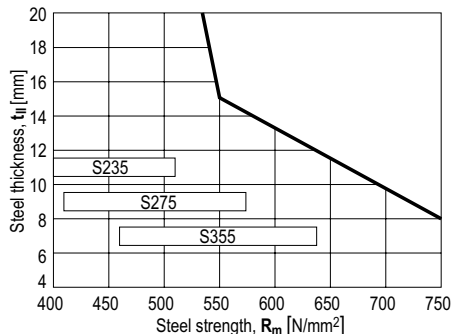
These zinc-coated fasteners are not suitable for long-term service outdoors or in otherwise corrosive environments.

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

Application limits

Fastening to steel

X-EGN 14



Fastener program

Fastener selection

| Base material | Nail | | | |
|---------------|--------------------|--------------------|-------------------------|--------|
| | Designation | Shank Ø d_s [mm] | Shank length L_s [mm] | L [mm] |
| Concrete | X-GHP 20 MX | 3.0 | 20 | 21.8 |
| | X-GHP 24 MX | 3,0 | 24 | 25,8 |
| | X-U 22 MX | 4.0 | 22 | 24.4 |
| Steel | X-EGN 14 MX | 3.0 | 14 | 15.8 |
| | X-U 16 MX | 4.0 | 16 | 18.4 |



Fastener selection: Order information

| Fastener | Designation | Item no. |
|---------------------|---------------------|----------|
| Threaded Rod Hanger | X-EHS M4 MX | 273367 |
| | X-EHS M6 MX | 272073 |
| | X-EHS W6 MX | 228341 |
| | X-EHS M8 MX | 273368 |
| | X-EHS W10 MX | 386468 |
| Ceiling clip | X-ECC MX | 228342 |
| GX nails | X-EGN 14 MX | 338872 |
| | X-GHP 20 MX | 285890 |
| | X-GHP 24 MX | 438945 |
| DX Nails | X-U 16 MX | 237344 |
| | X-U 22 MX | 237346 |

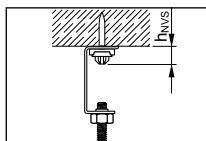
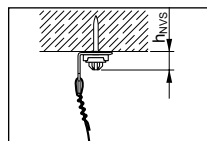
System recommendation

DX tools: Steel: **6.8/11M yellow or red cartridge**
 Concrete: **6.8/11M yellow cartridge** on green/ fresh and standard concrete
6.8/11M yellow or red cartridge on precast, old and hard concrete

GX 120-ME tool: **gas can GC 20, GC21 and GC22**

GX 100-E tool: **gas can GC 11** (GC 12 in USA)

Tool energy adjustment by setting tests on site.

Fastening quality assurance
X-EHS MX

 $h_{NVS} = 4-8 \text{ mm}$
X-ECC MX

 $h_{NVS} = 4-8 \text{ mm}$