



X-DHS MX DATA SHEET

Pipe support system

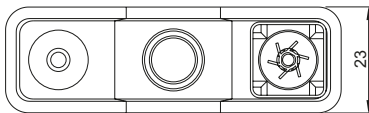
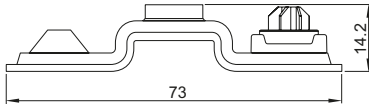


X-DHS MX Pipe support system

Product data

Dimensions

X-DHS 3/8" MX



Features and benefits

- Securely fastened threaded rod hangers to steel and concrete (soft and tough) base material
- Easy installation of threaded rods on floors, walls and ceiling

General information

Material specification

X-DHS:

Zinc coating 10-20 µm

Applications

Example



Hanger system for:

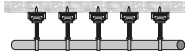
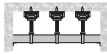
- Light-duty fastenings of pipes on ceilings
- Supporting pipes on floors
- Positioning of vertical pipes on walls

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 (Base material = concrete)

Number of X-DHS MX elements per pipe	N_{rec} [kN] per X-DHS MX
≥ 5 	0.2
1 to 4 with fixed end supports 	0.2

Design conditions:

- Each X-DHS MX element has to be fastened with 2 nails
- All visible failures must be replaced.
- Predominantly static loading.
- Valid for soft and tough concrete with strength of $f_{c, cube} = 25-60 \text{ N/mm}^2$. For more details regarding concrete types, please refer to **Concrete Fastener Selection** section in Hilti Direct Fastening Technology Manual (DFTM).
- Observance of all application limitations and recommendations.
- **For wall application (i.e. vertical pipes on walls), X-DHS MX is used for positioning purpose only, with NO imposed loading.**
- Maximum spacing = 100 cm

Recommended loads (Base material = steel)

Fastener	N_{rec} [kN]
Recommended load per X-DHS MX element (fastened with 2 Nails)	0.8

Nail recommendations

For **concrete** base material

Fastening tool	Nail types	Length [mm]	Tip	Shank Ø [mm]	Material	Hardness [HRC]	Coating [µm]
BX3	X-P B3 MX	24	Ballistic	3.0	Carbon steel	57.5	Zinc, 2-13 µm
GX3	X-P G3 MX					57.5	Zinc, 2-13 µm
GX120	X-GHP MX					57.5	Zinc, 2-13 µm

- For X-DHS MX element, only 24 mm length nails are recommended for concrete base material to ensure sufficient embedment depth.
- Premium nails (as listed above) are the only recommended nails based on intended use of X-DHS element (soft and some tough concrete, GX/BX tools). For more details regarding nail classification and concrete types, please refer to **Concrete Fastener Selection** section in Hilti Direct Fastening Technology Manual (DFTM).

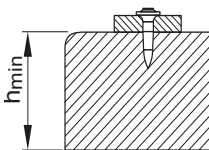
For **steel** base material

Fastening tool	Nail types	Length [mm]	Tip	Shank Ø [mm]	Material	Hardness [HRC]	Coating [µm]
BX3	X-P B3 MX	17	Ballistic	3.0	Carbon steel	57.5	Zinc, 2-13 µm
GX3	X-P G3 MX	17				57.5	Zinc, 2-13 µm
GX120	X-GHP MX	18				57.5	Zinc, 2-13 µm

- For X-DHS MX element, only 17-18 mm length nails are recommended for steel base material to ensure sufficient embedment depth.

Application requirements

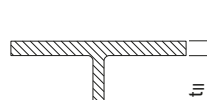
Thickness of base material



Concrete

X-GHP MX, X-P G3 MX,
X-P B3 MX

$h_{\min} = 60 \text{ mm}$



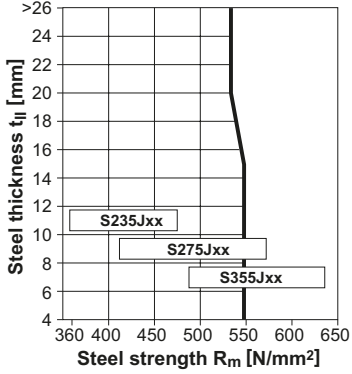
Steel

X-GHP MX, X-P G3 MX,
X-P B3 MX

$t_{II} \geq 4.0 \text{ mm}$

Application limits

X-P 17 G3 MX, X-P 17 B3 MX, X-GHP 18 MX



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 and system recommendation

Fastener program

Designation	Item no.
X-DHS 3/8" MX	2161569

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

