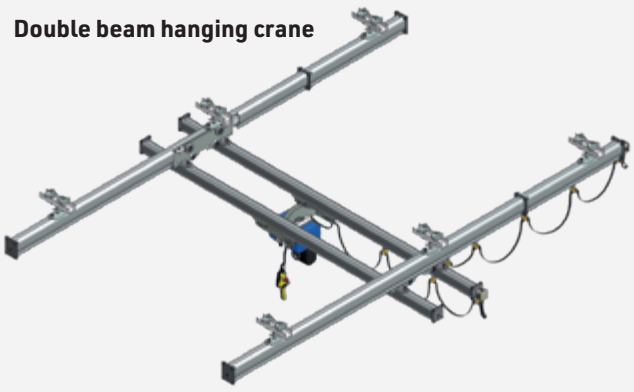
Hanging track

Single beam hanging crane

Double beam hanging crane



CRANE SYSTEM | **EMXKB-SYSTEM**

The flexible modular small crane system offers you an ideal solution for open hall transportation of your goods. Solid hollow profiles in four different sizes guarantee light, nearly frictionless movement. Rolling devices featuring lateral guide rollers prevent all tilting. The profiles are produced in the rolling process and enable low-noise transport of loads up to 1,600 kg. Especially high strength properties enables clamping widths of up to 7.5 m. Standard profiles enable any hanging tracks and hanging cranes to be planned and implemented. Together with PLANETA electric chain hoists (pages 32 – 35), three-dimensional movement of your goods becomes child's play.

Choose a single or double beam hanging crane according to your needs. Goods may be moved across all surfaces using both crane systems.

For line transportation, these are operated best of all using a hanging track. Flexibly combinable EMXKB profiles ensure that your system can be expanded or converted at any time.

A sophisticated hanging concept enables simple assembly of the crane system tailored to your existing ceiling and supporting structure.

Loads may be transported manually or electrically.

Optimal profile size

The following table is used for determining the optimal profile size, which depends on the load, P, and the clamping width, W.

The calculations in the tables below are based on a permissible deflection of W/400.

The crane systems are classified according to EN 13001: HC4; U2-U3; Q0-Q4; S0-S2 and in accordance with EN 15018: H2/H3; B3/B4.

Capacity kg	EMXKB I span (m)								EMXKB II span (m)								Capacity kg
			INP 120		INP 160		INP 180				INP 120		INP 160		INP 180		
80	5.1	6.3	7.8	7.8	7.8	7.8	7.8	7.8	7.6	7.8	7.8	7.8	7.8	7.8	7.8	7.8	80
100	4.8	6.0	7.8	7.8	7.8	7.8	7.8	7.8	7.2	7.8	7.8	7.8	7.8	7.8	7.8	7.8	100
125	4.5	5.7	7.8	7.8	7.8	7.8	7.8	7.8	6.9	7.8	7.8	7.8	7.8	7.8	7.8	7.8	125
160	4.1	5.4	7.8	7.8	7.8	7.8	7.8	7.8	6.4	7.8	7.8	7.8	7.8	7.8	7.8	7.8	160
200	3.8	5.0	7.6	7.8	7.8	7.8	7.8	7.8	6.0	7.4	7.8	7.8	7.8	7.8	7.8	7.8	200
250	3.5	4.7	7.2	7.8	7.8	7.8	7.8	7.8	5.6	7.1	7.8	7.8	7.8	7.8	7.8	7.8	250
320	3.1	4.3	6.7	7.8	7.8	7.8	7.8	7.8	5.1	6.6	7.8	7.8	7.8	7.8	7.8	7.8	320
400	2.8	3.9	6.3	7.7	7.7	7.8	7.8	7.8	4.7	6.1	7.5	7.8	7.8	7.8	7.8	7.8	400
500	2.6	3.6	5.8	7.3	7.3	7.8	7.8	7.8	4.3	5.7	7.0	7.8	7.8	7.8	7.8	7.8	500
630	2.2	3.2	5.0	6.8	6.5	7.8	7.3	7.8	3.8	5.2	6.4	7.8	7.8	7.8	7.3	7.8	630
800	1.6	2.9	4.0	6.3	5.0	7.8	5.7	7.8	2.9	4.7	5.1	7.5	6.2	7.8	6.9	7.8	800
1,000	-	2.6	-	5.8	-	7.3	-	7.8	2.8	4.3	5.4	7.0	6.7	7.8	7.3	7.8	1,000
1,250	-	2.3	-	5.3	-	6.7	-	7.4	2.3	3.9	4.1	6.5	5.2	7.8	5.6	7.8	1,250
1,600	-	1.7	-	3.9	-	5.2	-	5.8	1.7	3.4	3.0	5.9	3.7	7.3	4.2	7.8	1,600

Single crane beam Double crane beam without reinforcement with reinforcement

Single beam hanging crane with clamping width W (m)

Capacity kg	EMXKB III	EMXKB IV
80	10.2	11.8
100	9.8	11.8
125	9.4	11.8
160	9.0	11.8
200	8.5	11.2
250	8.0	10.7
320	7.3	10.0
400	6.8	9.4
500	6.2	8.7
630	5.6	7.9
800	4.1	5.8
1,000	4.6	6.5
1,250	3.5	4.9
1,600	2.4	3.4
2,000	-	-

Double beam hanging crane with clamping width (m)

Capacity kg	EMXKB III	EMXKB IV
80	11.3	11.8
100	11.1	11.8
125	10.8	11.8
160	10.5	11.8
200	10.1	11.8
250	9.7	11.8
320	9.2	11.8
400	8.6	11.4
500	8.1	10.9
630	7.4	10.1
800	6.8	9.4
1,000	6.3	8.7
1,250	5.7	8.0
1,600	5.1	7.2
2,000	4.6	6.6

Fig. 1

Fig. 2

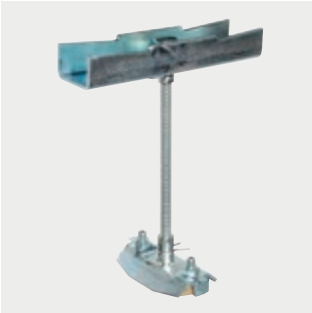
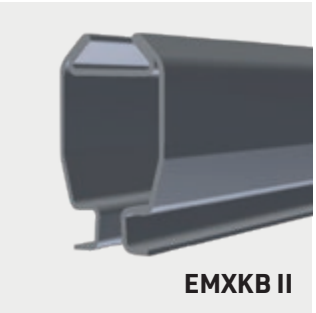


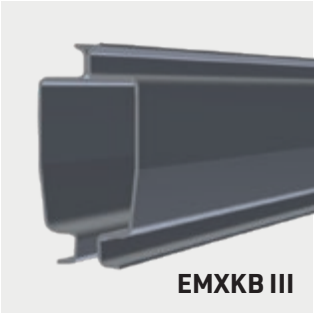
Fig. 3

Fig. 4

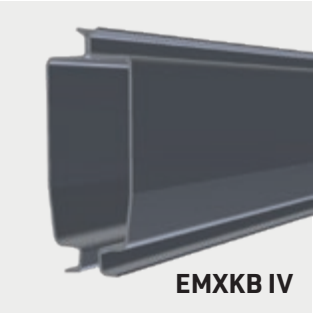
EMXKB I



EMXKB II



EMXKB III



EMXKB IV

Long curve

Short curve

HANGING FIXTURES

Short, rigid (Fig. 1)

- The rigid hanging fixture is available as a short model
- Small structural dimensions

Short, swinging and adjustable (Fig. 2)

- Ball pins and ball nut screw-fastened directly together
- Swinging movement of max. 10°
- Height adjustable ± 7.5 mm

Distanced, swinging and adjustable (Fig. 3)

- Hanging distance, variable length
- Height differences adjustable by ± 15 mm

Distanced, swinging, adjustable, anchored (Fig. 4)

- > 0.5 m distance: Anchoring required
- Lengthwise anchoring: both track ends
- Cross-wise anchoring: one-sided, every 2nd hanging fixture

Lateral hanging fixture

- Lateral assembly on wooden or concrete beams using special suspension
- Direct assembly under concrete ceilings with dynamic dowels and special suspension

STEEL PROFILES

EMXKB I + II

- Profile length max. 8 m
- EMXKB I: max. 800 kg capacity
- EMXKB II: max. 1,600 kg capacity

EMXKB III + IV

- Profile length max. 12 m
- EMXKB III: max. 2,000 kg capacity
- EMXKB IV: max. 2,000 kg capacity

Curves

- Available with 30° and 45° angles
- Radius: 1m
- End plate on both ends
- Hanging fixture on 2 points
- Conductor rail curve available in identical angles as the profile curve

Four trolleys with yoke

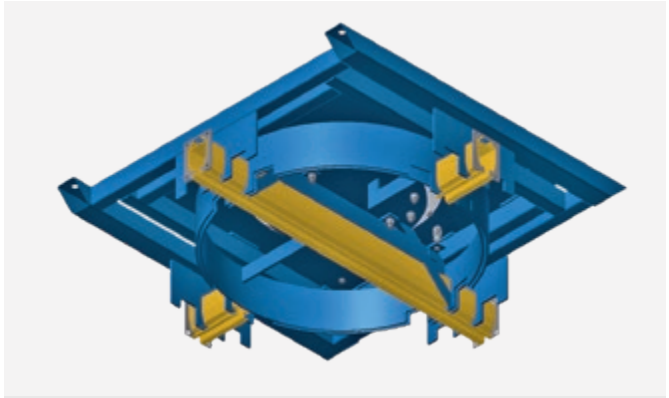
Electric drive

TROLLEYS

- Galvanised steel structure
- Use for lengthwise and cross-wise travel ensured
- Load distribution ensured by 2 trolleys
- 4 trolleys in use for the yoke of the double crane support
- Drive: manual or electrical

Your benefits:

- Maximum running silence thanks to plastic rollers
- Ideal for tricky, critical loads
- Convertible from manual to electrical
- Gentle start-up and braking thanks to frequency inverter

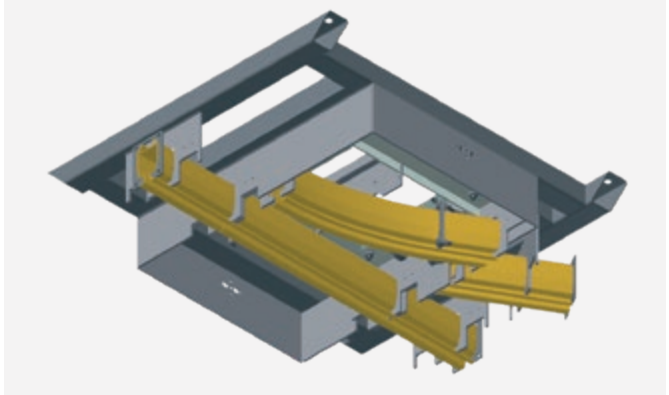


Spider: 90° direction change

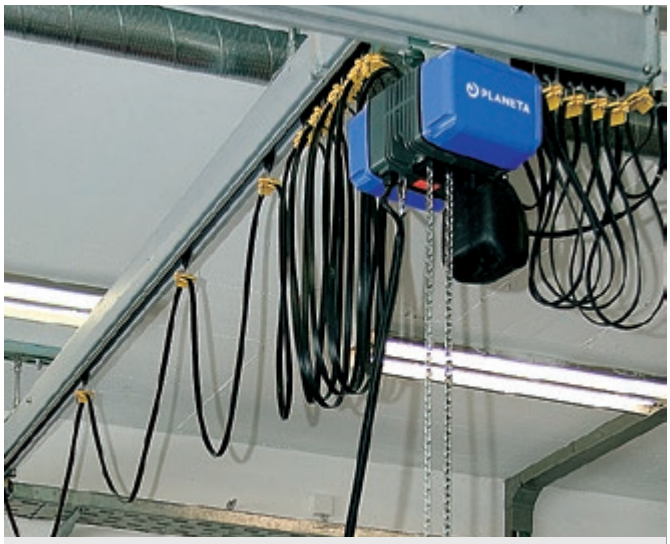
SWITCHES

Sliding deflectors/spiders

- Manual or electrical movement of profiles
- Manually: via pull cable
- Electrically: via 2-button control switch
- Hanging fixture on 2 points
- Optional: Delivery including conductor rails



Sliding deflectors: Connection between individual lines



Trailing cable

Conventional conductor rail

ELECTRICS

Power types

- 3 Ph., 380/400 V, 50 Hz
- or tailored to your company's electrical system

EMXKB-complete power supplies

- Cable trolley, travel limiter, connector, rail stopper, ...
- ... and around 30 additional elements

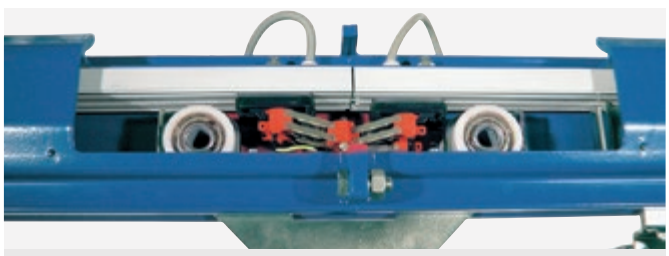
4 types of length and power supply

- Trailing cable
- C-rail
- Conventional conductor rail
- Profile-interior conductor rail


Pantograph

THE ELEGANT SOLUTION | **EMXKB II ST INTERIOR POWER RAIL**

- Flexible, universal
- Attractive design
- Universally usable
- Load 25 A at max. 100 m profile length


Internal conductor rail

Questionnaire for crane system PLANETA-EMXKB

1. KB crane system *(Sketch: see next page):*

☐ Single beam hanging crane ☐ Double beam hanging crane ☐ Hanging track

Capacity ⌊_____ kg Beam length ⌊_____ mm Track length B ⌊_____ mm

Span W = ⌊_____ mm Room height ⌊_____ mm Required lifting height ⌊_____ mm

2. Hanging fixture:

Hanging type ☐ Short, swinging ☐ Distanced, swinging = ⌊_____ mm ☐ Rigid

Ceiling construction ☐ Concrete ceiling ☐ Steel beam ☐ Wooden truss

Hanging gap ☐ variabel ☐ actual = ⌊_____ mm

3. Movements:

Trolley movement (diagonal) ☐ manual ☐ electrically ☐ 1 speed ☐ 2 speeds ☐ ⌊_____ m/min

Crane movement (longitudinal) ☐ manual ☐ electrically ☐ 1 speed ☐ 2 speeds ☐ ⌊_____ m/min

4. Hoist:

☐ Eletric chain hoist ☐ Manual chain hoist

Typ ⌊_____ Capacity ⌊_____ kg

Lifting speed ☐ 1 speed ☐ 2 speeds ☐ ⌊_____ m/min

Lift (standard 3 m) ⌊_____ m Period of use/day ⌊_____ hours

5. Control / electric:

Control ☐ Operating the electric hoist's control switch

☐ Ideal control (control switches can be pushed independently)

Power type ☐ 3 Ph., 400 V, 50 Hz ☐ 1 Ph., 230 V, 50 Hz ☐ ⌊_____V ⌊_____Hz

Longitudinal power supply ☐ without ☐ Trailing cable ☐ C-rail ☐ Conductor rail

Diagonal power supply ☐ without ☐ Trailing cable ☐ C-rail ☐ Conductor rail

6. Crane location:

☐ Factory ☐ Outdoors ☐ Close to acids/bases

7. Installation:

☐ By PLANETA ☐ By the customer ☐ Forklift available on-site

8. Additional technical specifications/customer requests

⌊_____

⌊_____

⌊_____

⌊_____

9. Requested quote:

☐ Quick quote ☐ Budget price ☐ Quote until ⌊_____ by ⌊_____

☐ Detailed quote ☐ Time of implementation or delivery date ⌊_____

10. Attachments:

☐ Sketch ☐ Plot/draft version

Company ⌊_____ Administrator ⌊_____

Address ⌊_____ Telephone ⌊_____

E-mail address ⌊_____ Company stamp / Signature ⌊_____

Questionnaire for crane system PLANETA-EMXKB