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Installation instructions platform

KERN KXP`V20

Version 1.0

09/2013

GB



KXP_V20-BA-e-1310



KERN KXP V20

Version 1.0 09/2013

Operating Instruction Platforms

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1 General

These installation instructions cover all information required for the installation and start-up of the following platforms:

KXP 6V20LM

KXP 15V20M / KXP15V20LM

KXP 30V20M / KXP30V20LM

KXP 60V20M / KXP 60V20LM

KXP150V20M / KXP 150V20LM

KXP300V20M

2 Safety precautions

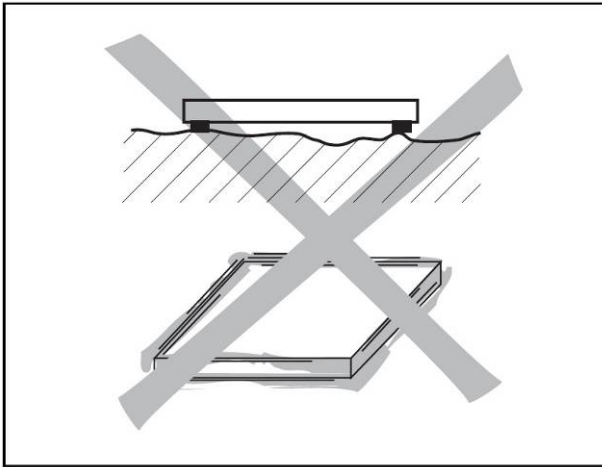
Product safety plays an important role at KERN & Sohn.

Non-observance of the following instructions can lead to damage to the weighing platform and/or injuries.

- ⇒ Before using the weighing platform read these instructions. Store these instructions for future use.
- ⇒ Take care when transporting or lifting heavy devices.
- ⇒ Only qualified personnel may install and maintain the weighing platform.
- ⇒ Disconnect the weighing terminal from the power supply before carrying out cleaning, installation and maintenance.
- ⇒ The weighing platform must have stabilized to room temperature before the supply voltage is switched on.
- ⇒ Do not use the weighing platform in hazardous environments.

3 Setting up the weighing platform

3.1 Selecting the site of installation



- The surface must be able to bear the weighing platform under maximum load at the points of support. At the same time it should be so stable that no vibrations arise during weighing. This is also to be observed when installing the weighing platform in conveyor and similar systems.
- If possible, vibrations from neighboring machines should not occur at the site of installation.

3.2 Package volume

- Platform
- Protect screw
- Operation Manual

3.3 Protect screw



Protect screw



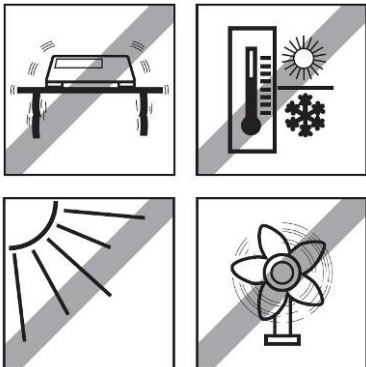
Packaging / return transport



- ⇒ Keep all parts of the original packaging for a possibly required return.
- ⇒ Only use original packaging for returning.
- ⇒ Reattach supplied transport securing devices.
- ⇒ Secure all parts against shifting and damage.

3.4 Ambient conditions

Do not use the weighing platform in wet or corrosive environments. Never immerse electronic products into liquids.

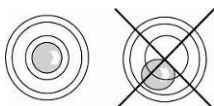


Observe the following ambient conditions:

- ⇒ No direct sunshine
- ⇒ No strong draught
- ⇒ No excessive temperature fluctuations
- ⇒ Temperature range $-10\text{ }^{\circ}\text{C}$ to $+40\text{ }^{\circ}\text{C}$.

3.5 Levelling

Only a weighing platform which is aligned exactly horizontally supplies exact weighing results. The weighing platform has to be levelled during the initial installation and whenever its location is changed.



- ⇒ Level platform with foot screws until the air bubble of the water balance is in the prescribed circle.

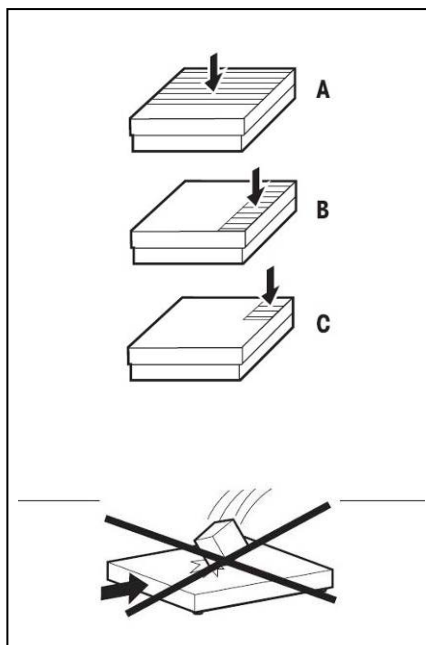
3.6 Connecting to the weighing terminal

| Deadweight cell output | KERN KXP V20 weighing platform connection |
|------------------------|---|
| EXC+ | See marking of the deadweight cell |
| EXC- | |
| SIG- | |
| SIG+ | |

4 Operating limits

The weighing platform is designed so robustly that an occasional exceeding of the maximum weighing load does not lead to damage.

The static bearing capacity, i.e. the maximum permissible load, depends on the type of load carrying (position A – C). The maximum static bearing capacity may not be exceeded.



⇒ Avoid falling loads, shock loads as well as impacts from the side.

A at centered load

B at load on side

C at one side corner load

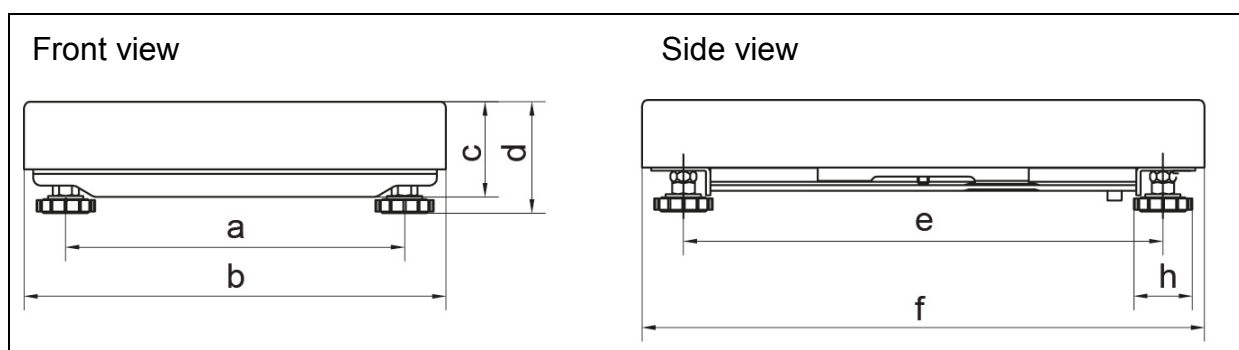
| Modell | A | B | C |
|---------------------------|--------|--------|--------|
| KXP 6V20LM | 9 kg | 6 kg | 3 kg |
| KXP 15V20M / KXP15V20LM | 22 kg | 15 kg | 7 kg |
| KXP 30V20M / KXP30V20LM | 45 kg | 30 kg | 15 kg |
| KXP 60V20M / KXP 60V20LM | 90 kg | 60 kg | 30 kg |
| KXP150V20M / KXP 150V20LM | 225 kg | 150 kg | 75 kg |
| KXP300V20M | 450 kg | 300 kg | 150 kg |

5 Cleaning

- ⇒ Clean the weighing platform with a soft cloth soaked with a mild cleaning agent.
- ⇒ Take off the load panel and remove any dirt and foreign substances which may have collected underneath it. Do not use any hard objects to do so. Do not open the weighing platform.

6 Technical data

6.1 Dimensions in mm



| Model | a | b | c | d | e | f | h |
|--------------|-----|-----|-----|------|-----|-----|----|
| KXP 6V20LM | 186 | 241 | 68 | 86 | 249 | 302 | 38 |
| KXP 15V20M | 186 | 241 | 68 | 86 | 249 | 302 | 38 |
| KXP15V20LM | 246 | 302 | 72 | 89 | 347 | 402 | 37 |
| KXP 30V20M | 246 | 302 | 72 | 89 | 347 | 402 | 37 |
| KXP30V20LM | 345 | 400 | 95 | 130 | 447 | 501 | 65 |
| KXP 60V20M | 246 | 302 | 72 | 89 | 347 | 402 | 37 |
| KXP 60V20LM | 345 | 400 | 95 | 130 | 44 | 501 | 65 |
| KXP150V20M | 345 | 400 | 95 | 1230 | 447 | 501 | 65 |
| KXP 150V20LM | 44 | 502 | 100 | 132 | 605 | 651 | 65 |
| KXP300V20M | 441 | 502 | 100 | 132 | 605 | 651 | 65 |

6.2 Technical data of the weighing cell

| | |
|-------------------|---------------|
| Sensitivity | 2.0 ±0.2 mV/V |
| | |
| Input resistance | 406 ±6 Ω |
| | |
| Output resistance | 350 ±3 Ω |
| | |
| Supply voltage | 5~12 VDC |
| | |
| OIML approval | C3 |

6.3 Preload, Deadload and Overload settings

| Kern model | max. Preload* (kg) * = additional initial load | Deadload** (kg) **= initial load placed earlier | Center Overload Protection circa (kg) | Corner Overload Protection circa (kg) | Loadcell Capacity (kg) |
|---------------|---|--|---------------------------------------|---------------------------------------|------------------------|
| KXP 6V20 LM | 1.86 | 2.14 | 8.5 | 4.8 | 10 |
| KXP 15V20 M | 2.86 | 2.14 | 23 | 12 | 30 |
| KXP 15V20 LM | 2.86 | 4.48 | 23 | 12 | 30 |
| KXP 30V20 M | 10.52 | 4.48 | 46 | 24 | 50 |
| KXP 30V20 LM | 10.52 | 9.02 | 46 | 24 | 50 |
| KXP 60V20 M | 35.52 | 4.48 | 85 | 48 | 100 |
| KXP 60V20 LM | 35.52 | 9.02 | 85 | 48 | 100 |
| KXP 150V20 M | 90.98 | 9.02 | 200 | 120 | 200 |
| KXP 150V20 LM | 136.14 | 13.86 | 270 | 120 | 300 |
| KXP 300V20 M | 186.14 | 13.86 | 550 | 240 | 500 |

| Platform type | Platform dimension (mm) | Load-cell Typ | TC Nr. | Class | Max | E _{max} | E _{min} | Y | V _{min} | n | Dead-load | T _{min} | T _{max} | Z | Cable- | P _{Lc} |
|---------------|-------------------------|---------------|-----------|-------|---------|------------------|------------------|------|------------------|------|-----------|------------------|------------------|-----------------|--------|-----------------|
| | | | | | Preload | -1 | -4 | | -2 | -3 | (kg) | -5 | -6 | oder | length | |
| | | | | | (kg) | (kg) | (g) | | (g) | | | | | DR | (m) | |
| KXP 6V20 LM | 300x240x86 | L6D | D09-03.20 | C3 | 1.86 | 10 | 0 | 5000 | 2 | 3000 | 2.14 | -10 | 40 | n _{LC} | 3 | 0,7 |
| KXP 15V20 M | 300x240x86 | L6D | D09-03.20 | C3 | 2.86 | 30 | 0 | 5000 | 2 | 3000 | 2.14 | -10 | 40 | n _{LC} | 3 | 0,7 |
| KXP 15V20 LM | 400x300x89 | L6D | D09-03.20 | C3 | 10.52 | 30 | 0 | 5000 | 10 | 3000 | 4.48 | -10 | 40 | n _{LC} | 3 | 0,7 |
| KXP 30V20 M | 400x300x89 | L6E | D09-03.21 | C3 | 10.52 | 50 | 0 | 6000 | 10 | 3000 | 4.48 | -10 | 40 | n _{LC} | 3 | 0,7 |
| KXP 30V20 LM | 500x400x130 | L6E | D09-03.21 | C3 | 10.52 | 50 | 0 | 6000 | 20 | 3000 | 9.02 | -10 | 40 | n _{LC} | 3 | 0,7 |
| KXP 60V20 M | 400x300x89 | L6G | D09-03.22 | C3 | 35.52 | 100 | 0 | 6000 | 20 | 3000 | 4.48 | -10 | 40 | n _{LC} | 3 | 0,7 |
| KXP 60V20 LM | 500x400x130 | L6G | D09-03.22 | C3 | 35.52 | 100 | 0 | 6000 | 50 | 3000 | 9.02 | -10 | 40 | n _{LC} | 3 | 0,7 |
| KXP 150V20 M | 500x400x130 | L6G | D09-03.22 | C3 | 90.98 | 200 | 0 | 6000 | 50 | 3000 | 9.02 | -10 | 40 | n _{LC} | 3 | 0,7 |
| KXP 150V20 LM | 650x500x132 | L6G | D09-03.22 | C3 | 136.14 | 300 | 0 | 6000 | 100 | 3000 | 13.86 | -10 | 40 | n _{LC} | 3 | 0,7 |
| KXP 300V20 M | 650x500x132 | L6G | D09-03.22 | C3 | 186.14 | 500 | 0 | 6000 | 100 | 3000 | 13.86 | -10 | 40 | n _{LC} | 3 | 0,7 |