

# **KERN**

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## Installation instructions platform

### **KERN KFP\_V20 ( $\leq 300$ kg)**

Version 2.3

2018-04

GB



**KFP\_V20 $\leq$ 300-BA-e-1823**



# KERN KFP\_V20

Version 2.3 2018-04

## 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:

**KERN KFP 6V20M, KFP 6V20LM**

**KERN KFP 15V20M, KFP 15V20LM**

**KERN KFP 30V20SM ,KERNKFP 30V20M**

**KERN KFP 60V20M, KFP 60V20LM**

**KERN KFP150V20M, KFP 150V20LM**

**KERN KFP300V20M**

**KERN KFP600V20AM**

## 2 Safety precautions

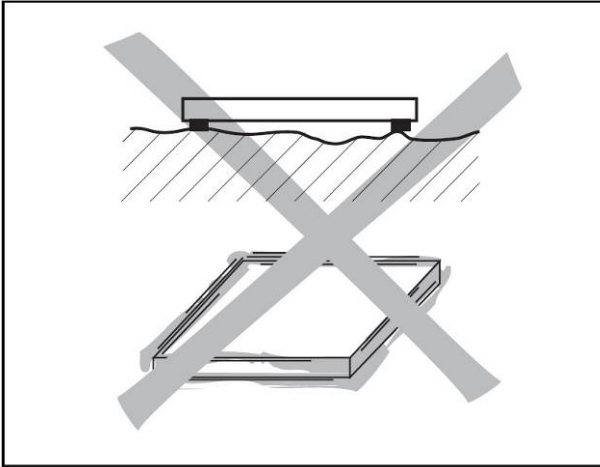
Product safety plays an important role at KERN & Sohn.

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



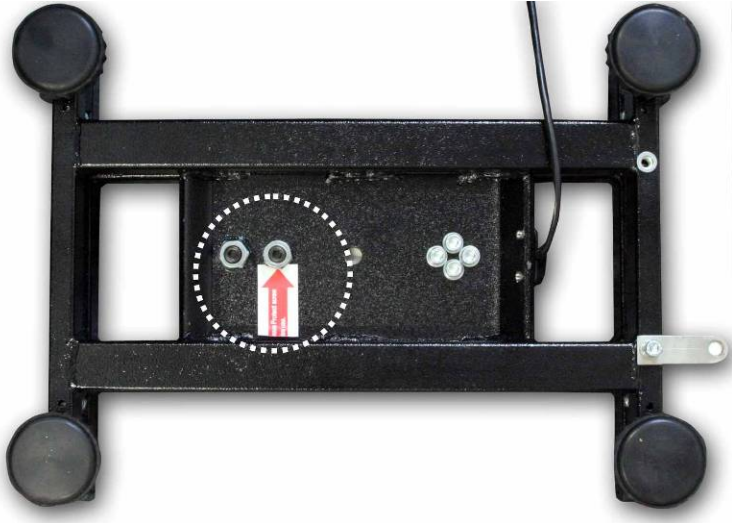
- The surface must be able to bear the weighing platform under maximum load at the points of support. At the same time it should be so stable that no vibrations arise during weighing. This is also to be observed when installing the weighing platform in conveyor and similar systems.
- If possible, vibrations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

#### 3.2 Package volume

- Weighing plate (stainless steel)
- Protect screw
- Operation Manual

3.3 Protect screw (Exemplification) ≤ 30 kg

Version 1



KERN KFP KFP 6V20M, KFP 6V20LM, KFP 15V20M:

1.

2.



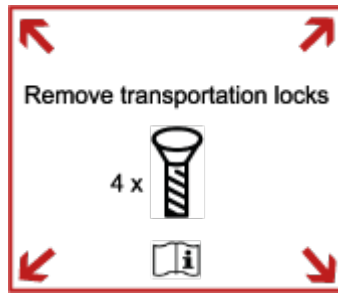
Sealed Screws  may not be loosened (see figure).

3.

4.



## Version 2



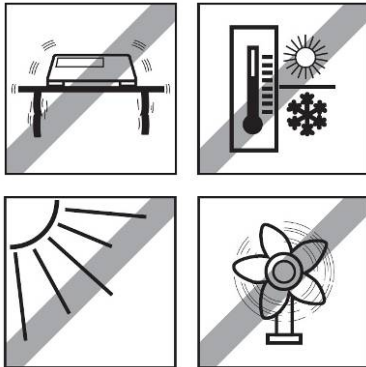
### 3.4 Packaging / return transport



- ⇒ 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.

### 3.5 Ambient conditions

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

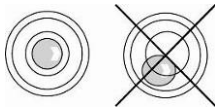


Observe the following ambient conditions:

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

### 3.6 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.



- ⇒ As the spirit level is underneath the weighing platform it has to be removed.
- ⇒ Level balance with foot screws until the air bubble of the water balance is in the prescribed circle.

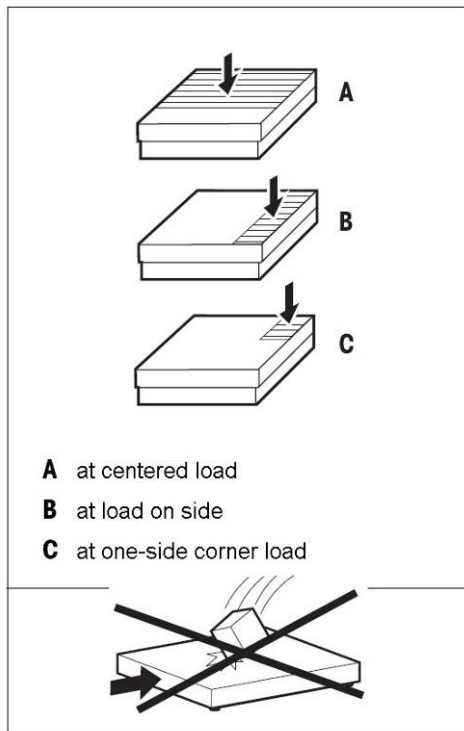
### 3.7 Connecting to the weighing terminal

Deadweight cell output	KERN KFP weighing platform connection
EXC+(5V)	See marking of the deadweight cell
EXC-(0)	
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.

Model	A	B	C
KFP 6V20M, KFP 6V20LM	9 kg	6 kg	3 kg
KFP 15V20M, KFP 15V20LM	22 kg	15 kg	7 kg
KFP 30V20SM ,KFP 30V20M	45 kg	30 kg	15 kg
KFP 60V20M, KFP 60V20LM	90 kg	60 kg	30 kg
KFP150V20M, KFP 150V20LM	225 kg	150 kg	75 kg
KFP300V20M	450 kg	300 kg	150 kg
KFP600V20AM	900 kg	600 kg	300 kg

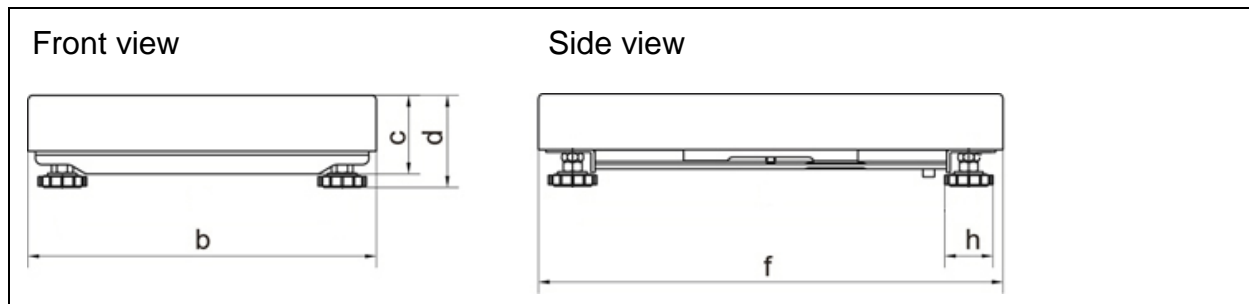
## 5 Cleaning

- ⇒ 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	b	c	d	f	h
KFP 6V20M	230	78	108	230	56
KFP 6V20LM KFP 15V20M KFP 30V20SM	240	78	105	300	56
KFP 15V20LM KFP 30V20M KFP 60V20M	300	92	118	400	56
KFP 60V20LM KFP150V20M	400	105	130	500	56
KFP 150V20LM KFP300V20M	500	110	135	650	56
KFP 600V20AM	800	160	150	600	70



Other dimensions, see Appendix Chapter 6.4

### 6.2 Technical data of the weighing cell

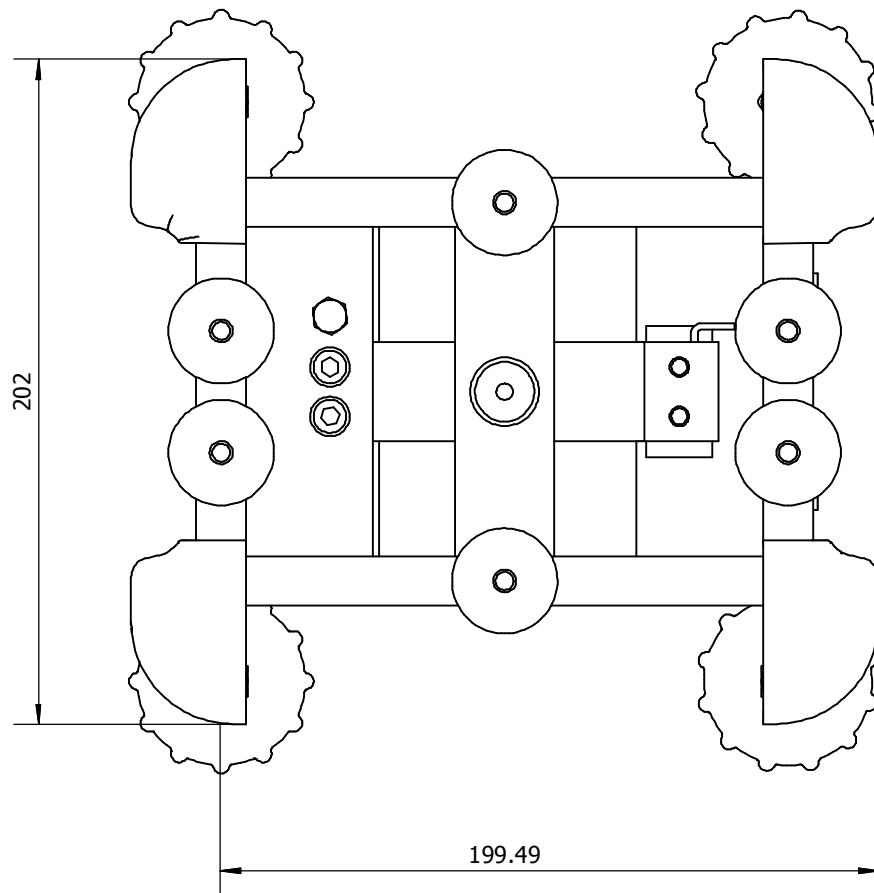
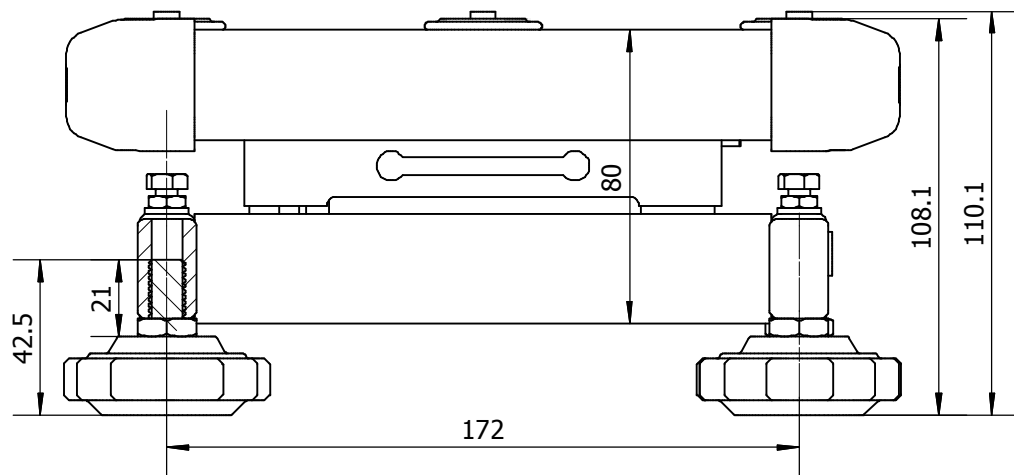
Sensitivity	2mV/V
Input resistance	409 $\Omega$
Output resistance	350 $\Omega$
Supply voltage	10VDC
OIML approval	C3

### 6.3 Deadload and Overload settings

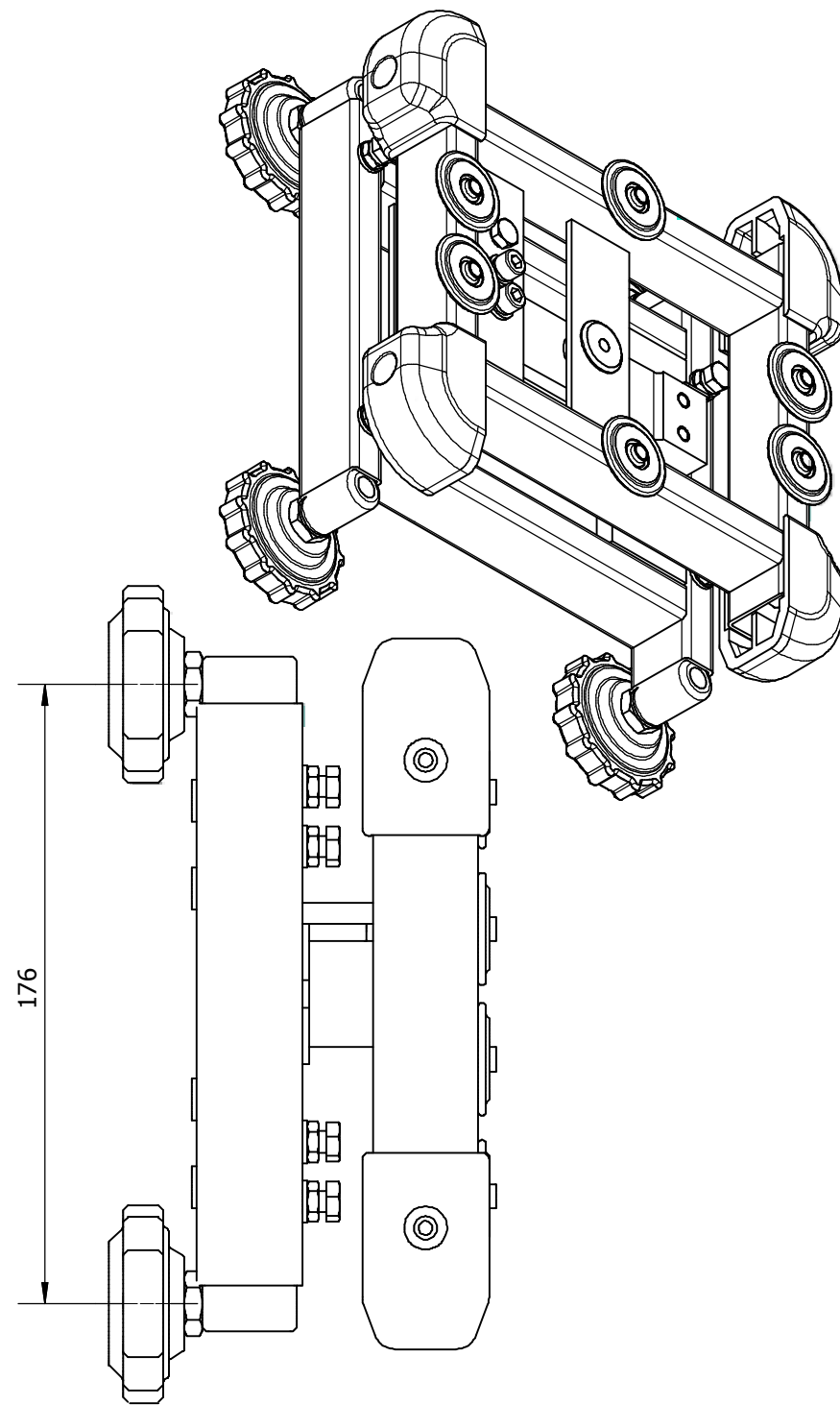
<b>Kern model</b>	<b>Center Overload Protection circa (kg)</b>	<b>Corner Overload Protection circa (kg)</b>	<b>Loadcell Capacity (kg)</b>
KFP 6V20 M	8.5	5	10
KFP 6V20 LM	8.5	5	10
KFP 15V20 M	23	12	30
KFP 15V20L M	23	12	30
KFP 30V20SM	46	30	50
KFP 30V20 M	46	30	50
KFP 60V20 M	85	50	100
KFP 60V20 LM	85	50	100
KFP 150V20 M	200	130	200
KFP 150V20 LM	270	130	300
KFP 300V20 M	550	230	500
KFP600V20AM	900	450	750

Platform type	Platform dimension (mm)	Loadcell	TC	Class	E <sub>max</sub>	E <sub>min</sub>	Y	V <sub>min</sub>	n	T <sub>min</sub>	T <sub>max</sub>	Z	Cable-length	P <sub>Lc</sub>
		Typ	Nr.		-1	-4	-2	-3	-5	-6	oder			
					(kg)	(g)	(g)				DR	(m)		
KFP 6V20M	230x230x100	L6D	D09-03.20	C3	10	0	5000	2	3000	-10	40	n <sub>LC</sub>	2	0,7
KFP 6V20LM	300x240x100	L6D	D09-03.20	C3	10	0	5000	2	3000	-10	40	n <sub>LC</sub>	2	0,7
KFP 15V20M	300x240x100	L6D	D09-03.20	C3	30	0	5000	10	3000	-10	40	n <sub>LC</sub>	2	0,7
KFP 15V20L M	400x300x128	L6D	D09-03.20	C3	30	0	5000	10	3000	-10	40	n <sub>LC</sub>	2	0,7
KFP 30V20SM	300x240x110	L6D	D09-03.20	C3	30	0	5000	10	3000	-10	40	n <sub>LC</sub>	2	0,7
KFP 30V20M	400x300x128	L6E	D09-03.21	C3	50	0	6000	10	3000	-10	40	n <sub>LC</sub>	2	0,7
KFP 60V20M	400x300x128	L6E	D09-03.21	C3	100	0	6000	20	3000	-10	40	n <sub>LC</sub>	2	0,7
KFP 60V20LM	500x400x137	L6G	D09-03.22	C3	100	0	6000	20	3000	-10	40	n <sub>LC</sub>	2	0,7
KFP 150V20M	500x400x137	L6G	D09-03.22	C3	200	0	6000	50	3000	-10	40	n <sub>LC</sub>	2	0,7
KFP 150V20LM	650x500x142	L6G	D09-03.22	C3	300	0	6000	50	3000	-10	40	n <sub>LC</sub>	2	0,7
KFP 300V20M	650x500x142	L6G	D09-03.22	C3	500	0	6000	100	3000	-10	40	n <sub>LC</sub>	2	0,7
KFP 600V20AM	800x600x150	PW12B	TC5259	C3	750	0	6000	100	3000	-10	40	n <sub>LC</sub>	2	0,7

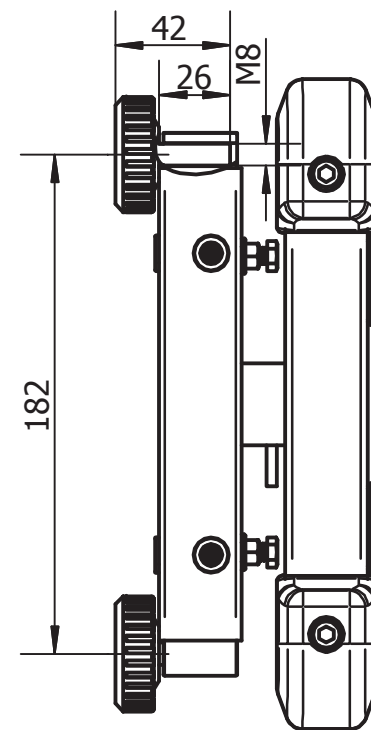
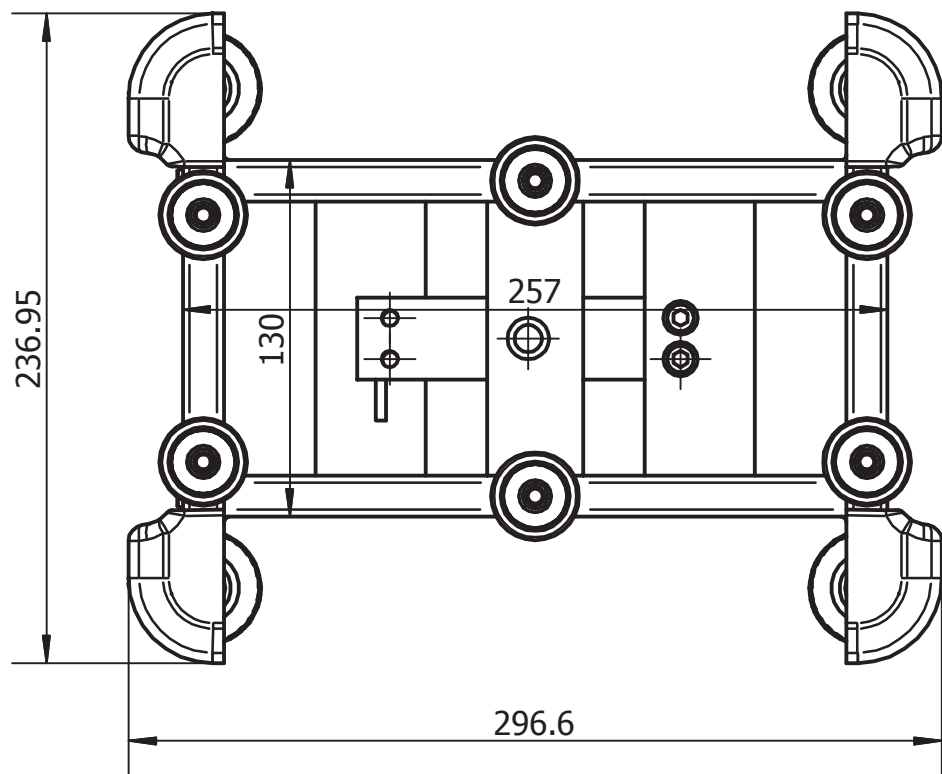
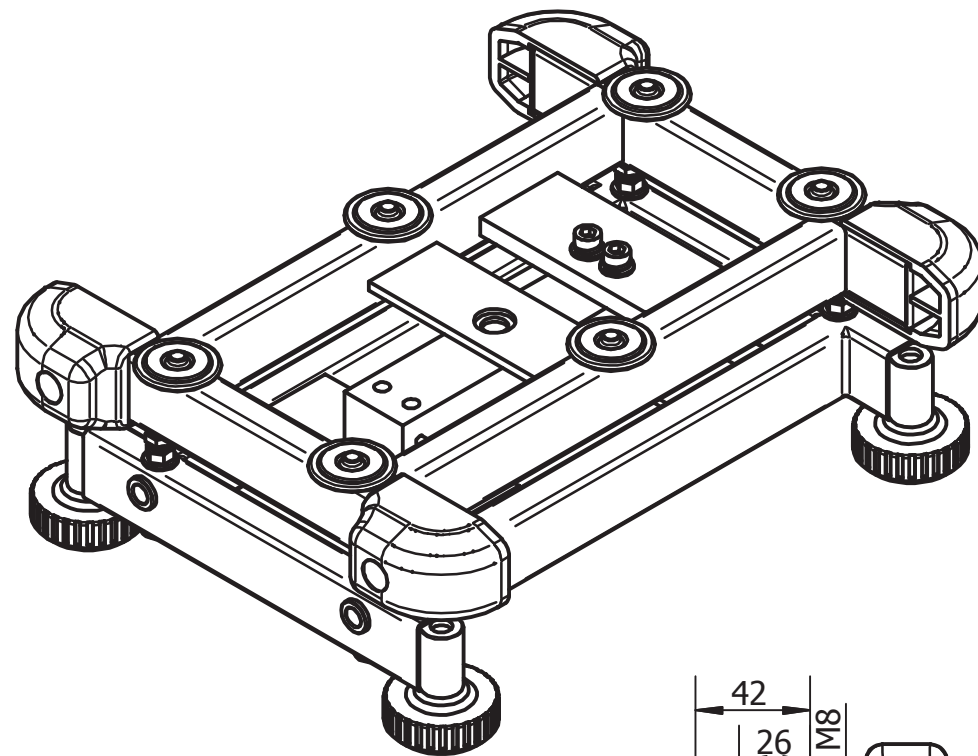
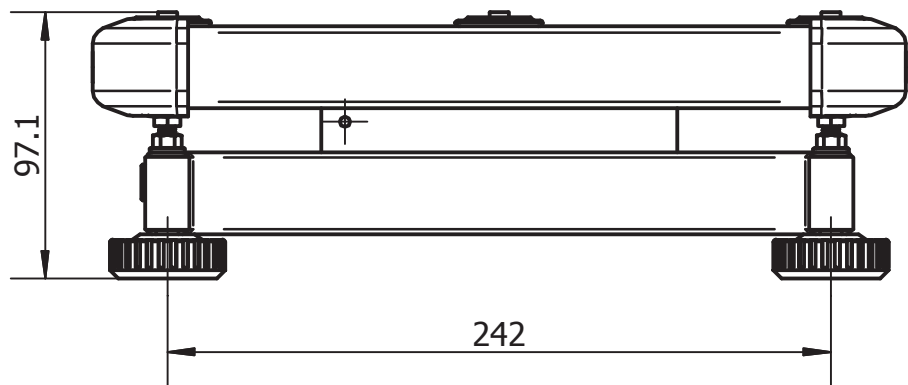
## 6.4 Appendix



KFP\_V20≤300-BA-1823

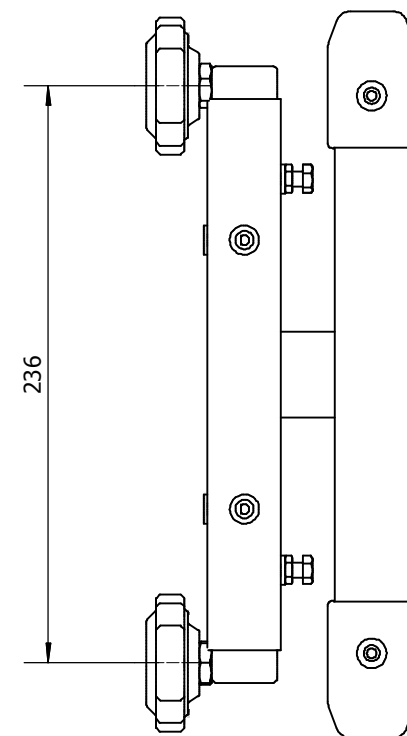
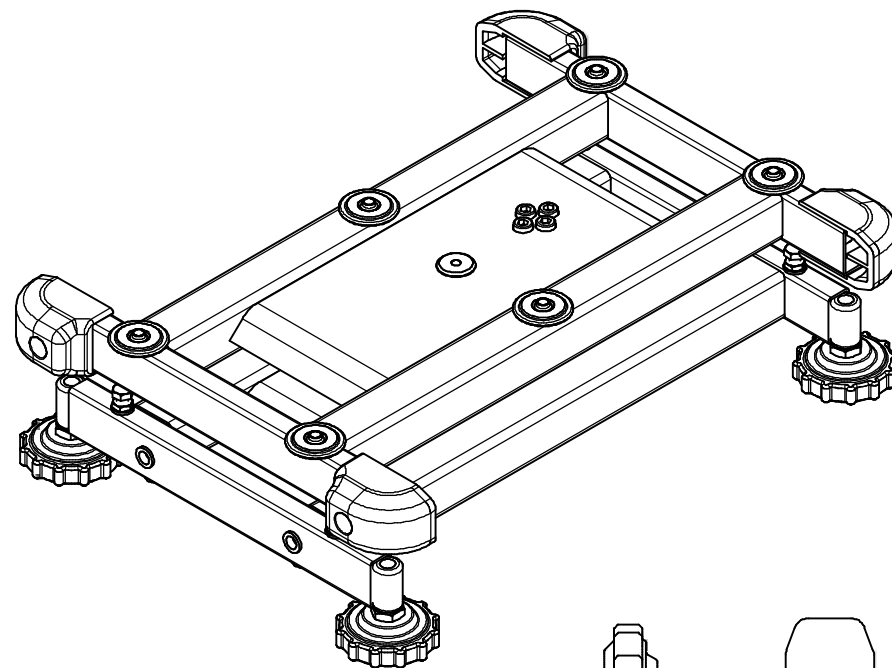
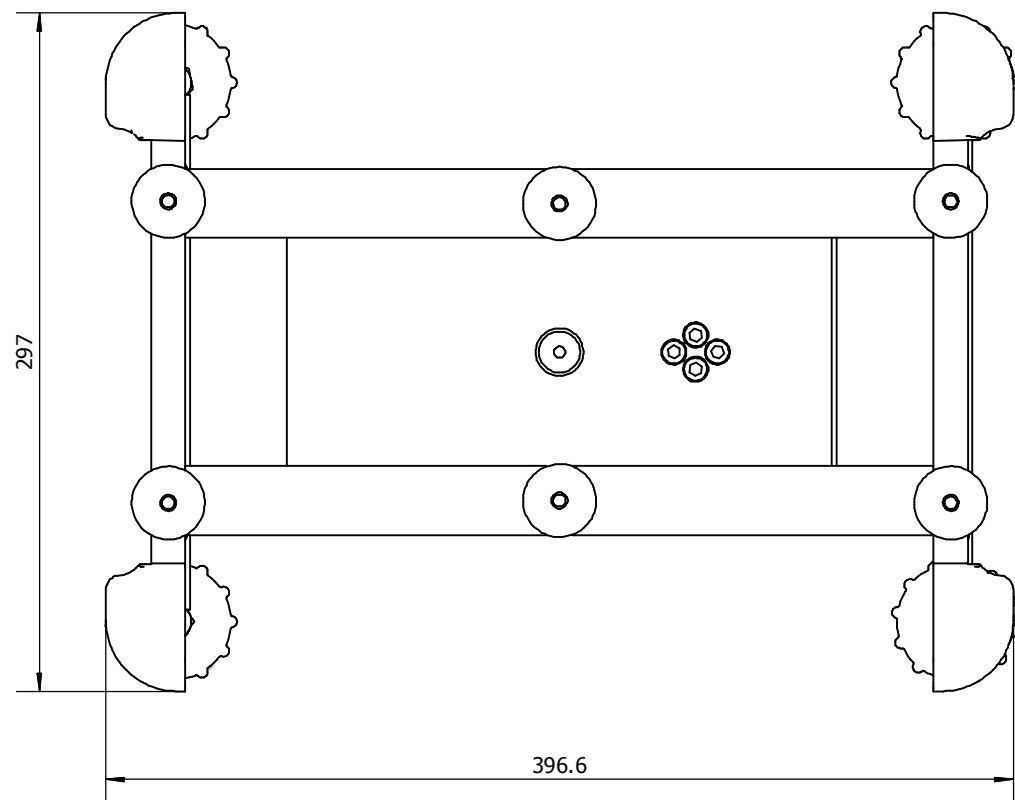
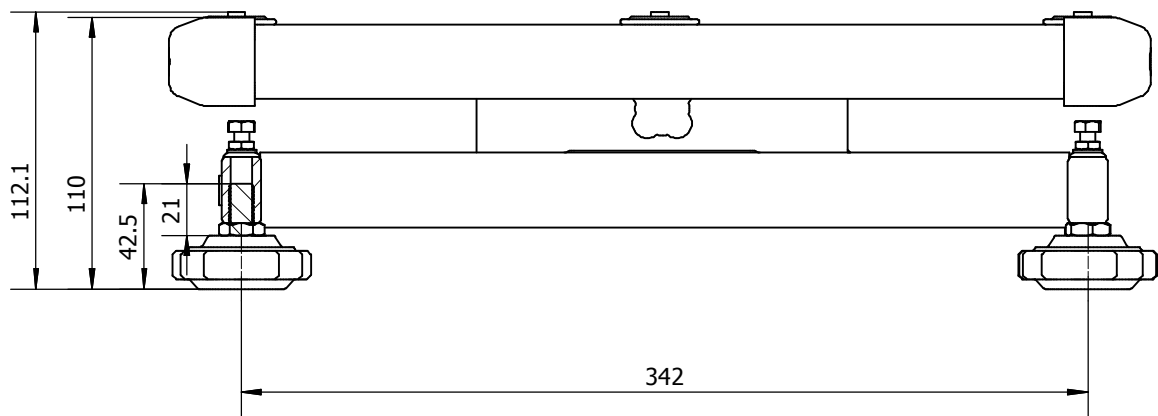


230 x 230 cm



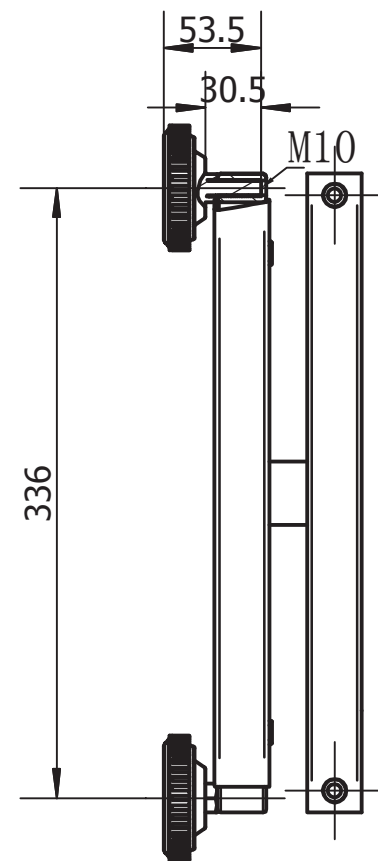
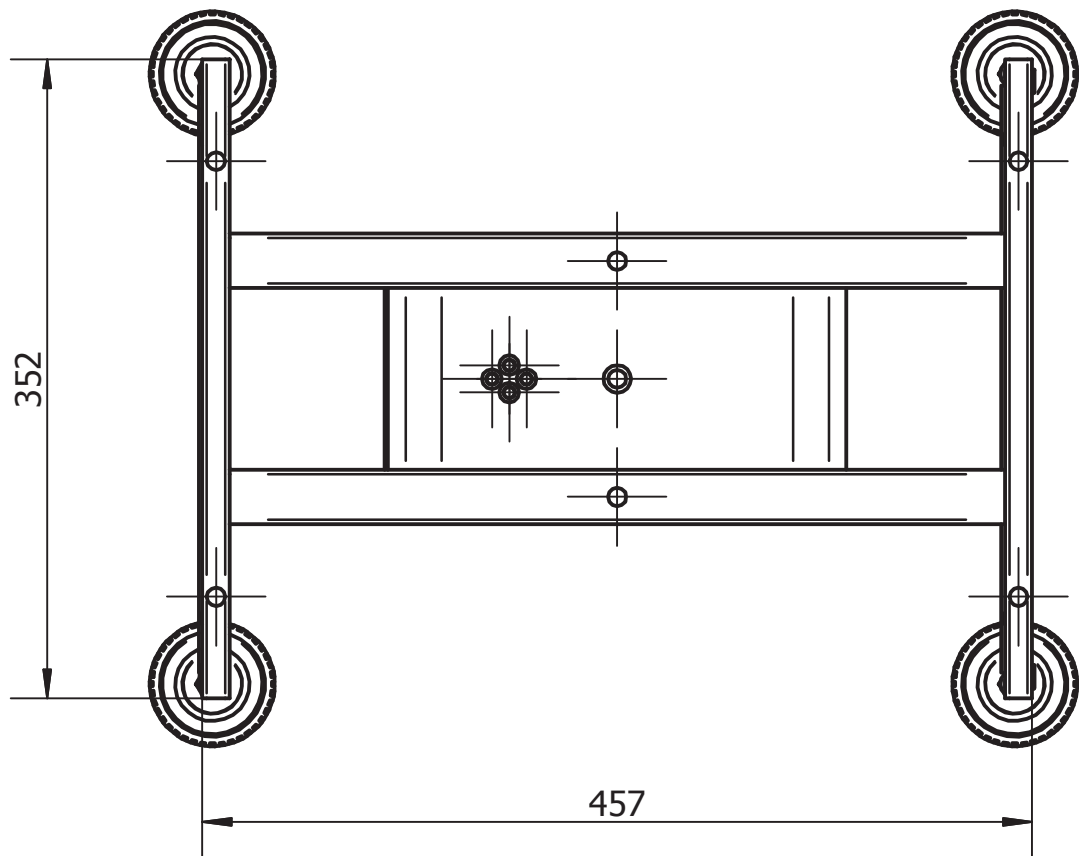
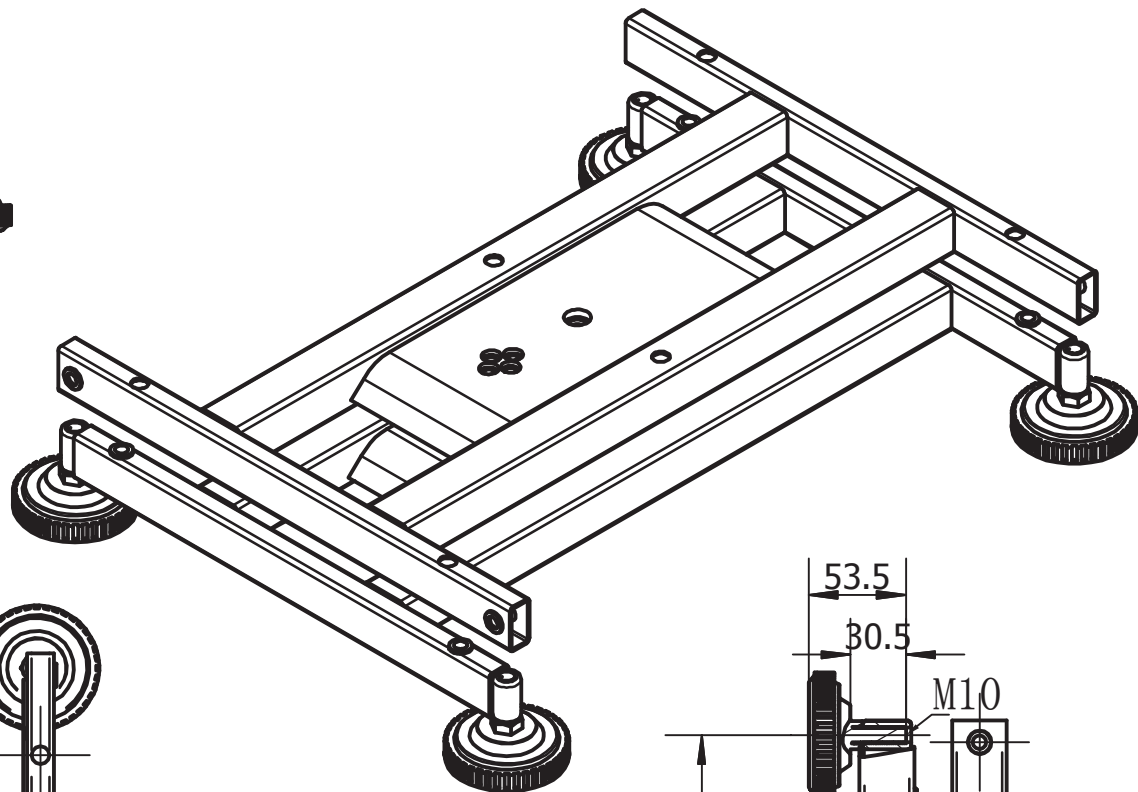
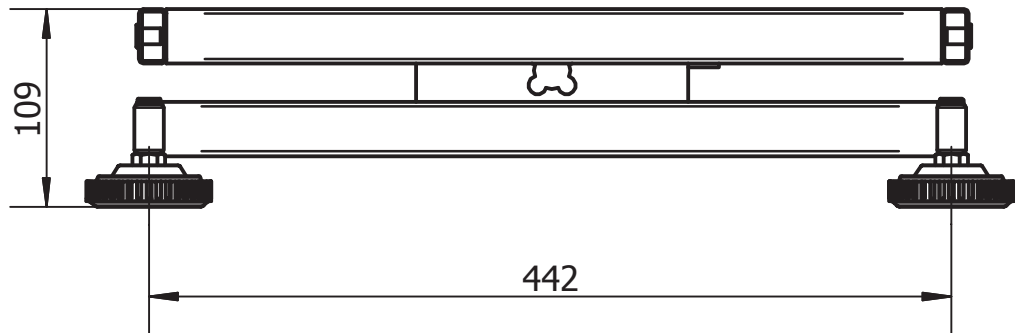
KFP\_V20≤300-BA-1823

300 x 240 cm



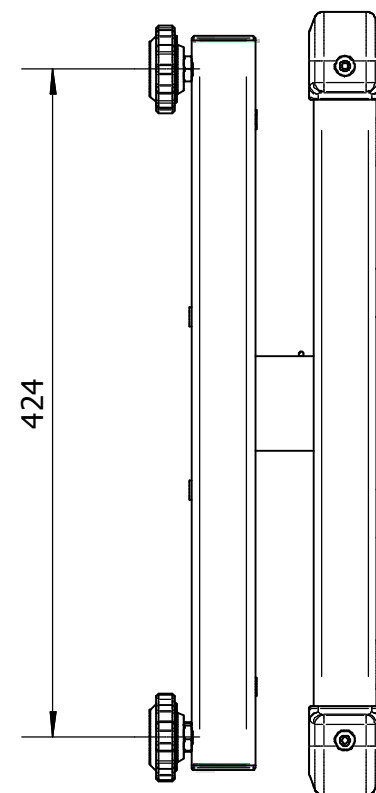
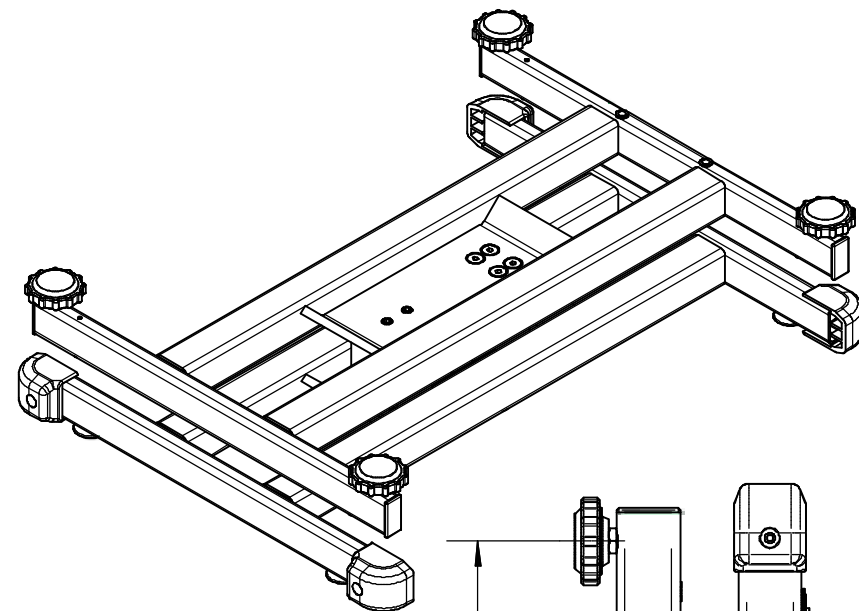
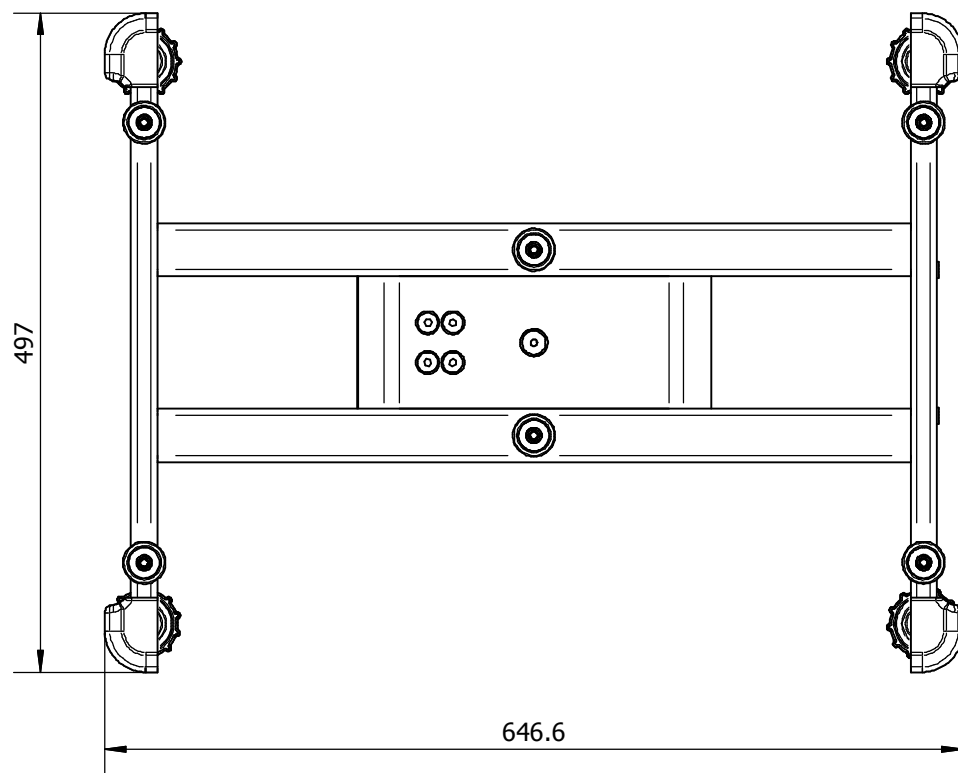
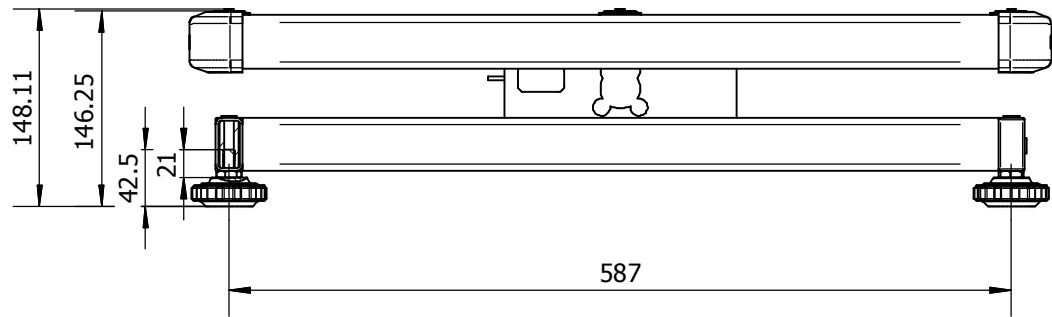
KFP\_V20≤300-BA-1823

300 x 400 cm



KFP\_V20≤300-BA-1823

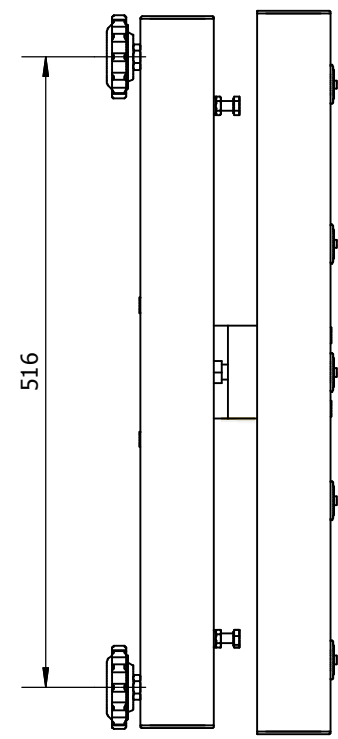
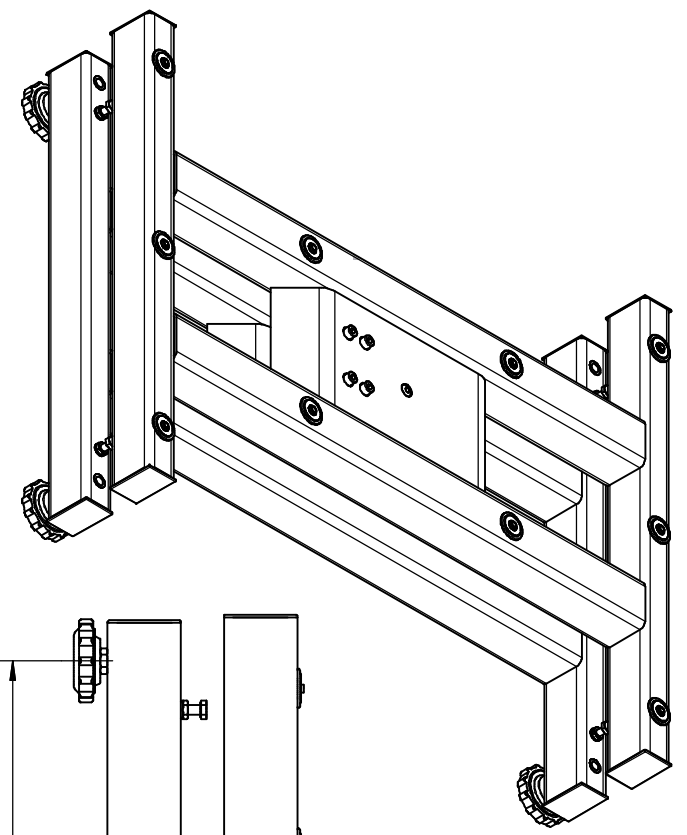
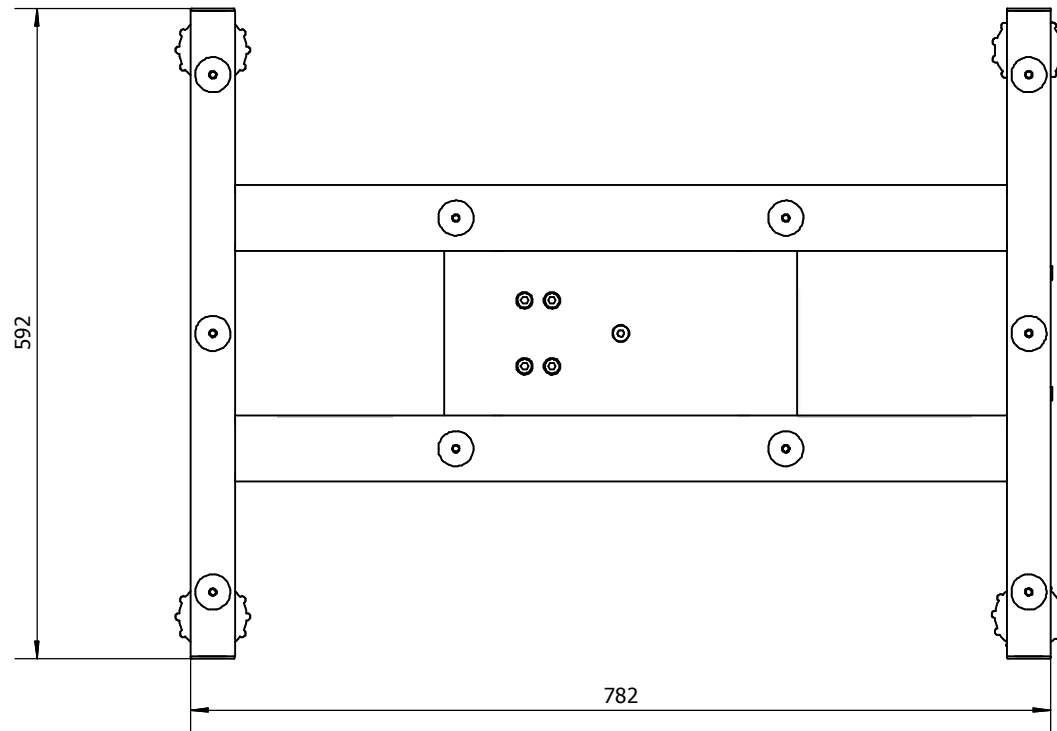
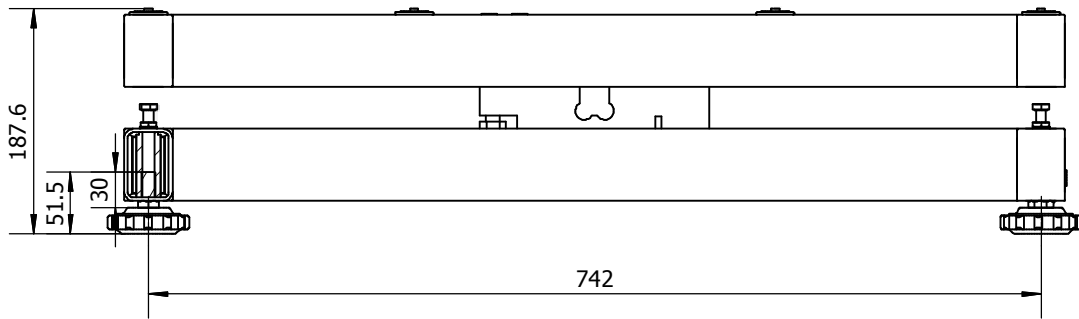
400 x 500 cm



KFP\_V20≤300-BA-1522

500 x 650 cm





KFP\_V20≤300-BA-1522

600 x 800 cm