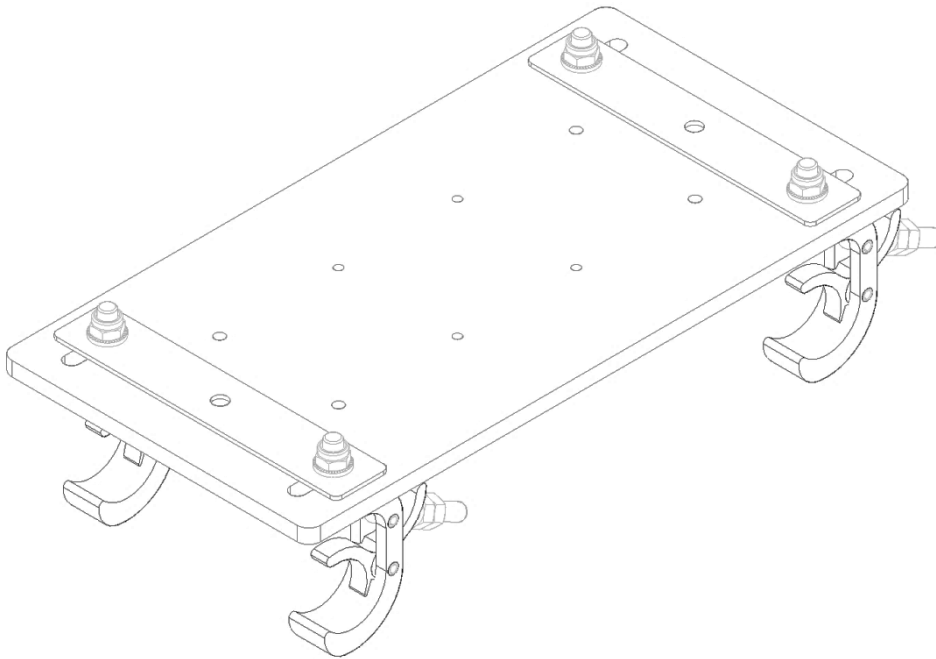# User Manual and Installation Guide

PF-UNI-PORAD-L Portrait Adapter Large

Rev 1.0

Date	Revision No.	Author	1st Check	Final Check	Description
01.12.2016	1.0	VIU	TSN	VIU / TSN	First Draft

Frames compatible with the Portrait Adapter:

- FRAME-BOXER
- FRAME-PTRZ31K/RQ32K
- FRAME-EPSON-EBL25000

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Tools required:

• 1 x Nr. 19 Screw wrench • 1 x Nr. 16 Screw wrench • 1 x Nr. 13 Screw wrench	• 1 x Nr. 10 Allen key • 1 x Nr. 8 Allen key • 1 x Nr. 6 Allen key

• 1 x Universal torque wrench

These installation instructions must always be handed over to the installing person[1]

Read these instructions carefully before installing the system.

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[1] Only a qualified person should install this product

1. IMPORTANT SAFTEY NOTICE

Congratulations on your purchase of the PF-UNI-PORAD-L Portrait Adapter Large from LANG AG.

Please read very carefully the instructions provided in this manual and you will find all the information needed for a safe and fast installation.

After the installation is done properly, you can enjoy all the features of your new product.

Please consider keeping the original box and packaging materials, in case you ever need to ship the Portrait Adapter.

Model number: **PF-UNI-PORAD-L-AA**

INTENDED USE

The Portrait Adapter Large is intended for use by fully qualified, trained and competent persons as an aid to provide safe and secure installation and adjustment of projector frames.

Only use the Portrait Adapter Large with the projector frame in a closed environment (conference rooms, theaters, convention halls, etc.) where there is no wind, moisture, heat, etc.

Make sure that only the corresponding projector frames are installed with this Portrait Adapter Large! Do not try to use it with other projector frames because serious accidents can occur!

WARNING

Installation work should only be carried out by a qualified technician.

- If this product is not installed correctly, serious accidents may result.

Do not use the Portrait Adapter Large outdoors.

- This product is made only for indoor usage. If the Portrait Adapter Large is installed outdoor there are many influences like wind or rain that can have an effect on the stability of the whole system. This can cause serious accidents and property damage.

Do not hang the Portrait Adapter Large on unstable structures.

- If the Portrait Adapter Large is hanged on an unstable structure, the entire system can fall down and injuries may occur. Make sure that the construction on which the Portrait Adapter Large is hanged can support a total weight of 200 kg (440.924 lbs.).

Make sure to not exceed the maximum weight load limits (WLL)

- For suspended installations, use only designated hanging accessories, like ETPFD550TMS2 / TH-SHORTY-150-8 and TH-SHORT-350-8/10.
- When installing the Portrait Adapter Large with the TH-SHORTY-150-8 / ETPFD550TMS2 make sure to not exceed the maximum weight load limits of 150 kg (330.69 lbs.)
- When installing the Portrait Adapter Large with the TH-SHORTY-350-8/10 make sure to not exceed the maximum weight load limits of 150 kg (330.69 lbs.)

Do not install the Portrait Adapter Large while people are present under the installation zone.

- When installing the projector, make sure no one is in the area underneath the installation zone. **Otherwise serious accidents may occur if the projector is dropped during installation.**

Always secure the frame to the rigging truss with safety cable.

- The frame should always be secured with an appropriate safety cable so that in case of a malfunction it doesn't fall more than 5cm. Please consult the local laws or regulations regarding the additional safety of hanging equipment.

CAUTION

Before installing the projector frames with the Portrait Adapter Large, please read the projector's user manual and the frame installation guide.

- The Portrait Adapter Large with the projector and the projector frame must be installed only in an environment that is recommended by the projector manufacturer.

Minimum 2 persons are required to install the Portrait Adapter Large.

- With regard to the overall weight of all necessary installation devices, make sure to handle those with at least two people.

Make sure that the structure from which you hang the Portrait Adapter Large and the projector frame is capable of carrying the overall weight of approx. 200 kg (440.924 lbs.) plus cabling etc.

- Prior to any installation, you have to do a visual inspection to make sure that the setup is in a good condition.

Always double check the rigging clamps against fissures and loose screws.

- Before and after the setup please perform a visual inspection of the rigging clamps and make sure that they are not damaged or bended.
- Also make sure that the main screw (the one that is used for securing the rigging clamps jaws together) is not damaged and the two M12 nuts are properly tightened.

RISK SITUATIONS

Risk of injury due to the possibility of falling objects during the assembly or disassembly of the Portrait Adapter Large

- Protection objective: avoid injury from falling parts.
- Wear appropriate safety shoes, gloves and helmet.
- Make sure the area is clear under the frame during installation

Risk of hitting the head with the Portrait Adapter Large during the hanging setup process

- Protection objective: avoid injury from hitting the head.
- Wear a helmet

Incorrect installation may lead to certain parts of the Portrait Adapter Large or the entire Portrait Adapter Large to fall down.

- Protection objective: prevent personal injury and property damage.
- Double check the Portrait Adapter Large and its installation.

Insufficient load capacity of the supporting structure may lead to certain parts of the Portrait Adapter Large or the entire Portrait Adapter Large to fall down.

- Protection objective: prevent personal injury and property damage.
- Provide adequate dimensioning of the supporting structure.
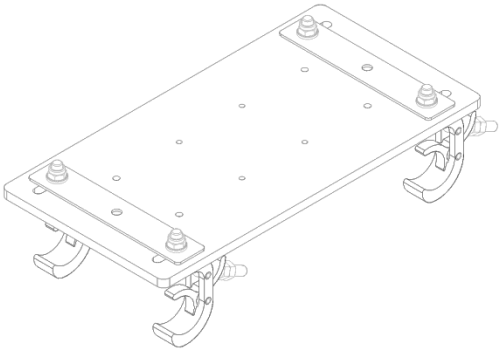- Ensure correct installation of the supporting structure.

Missing components

- Protection objective: prevent personal injuries and property damage.
- Always check prior to every installation that there are no missing parts.
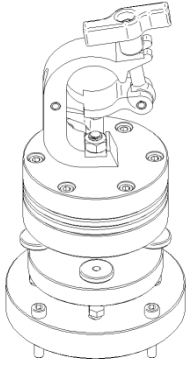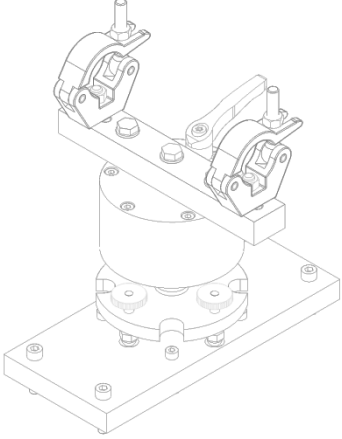
Loose components

- Protection objective: prevent personal injuries and property damage.
- Always check prior to every installation if there are no loose parts.

WHAT'S IN THE BOX?

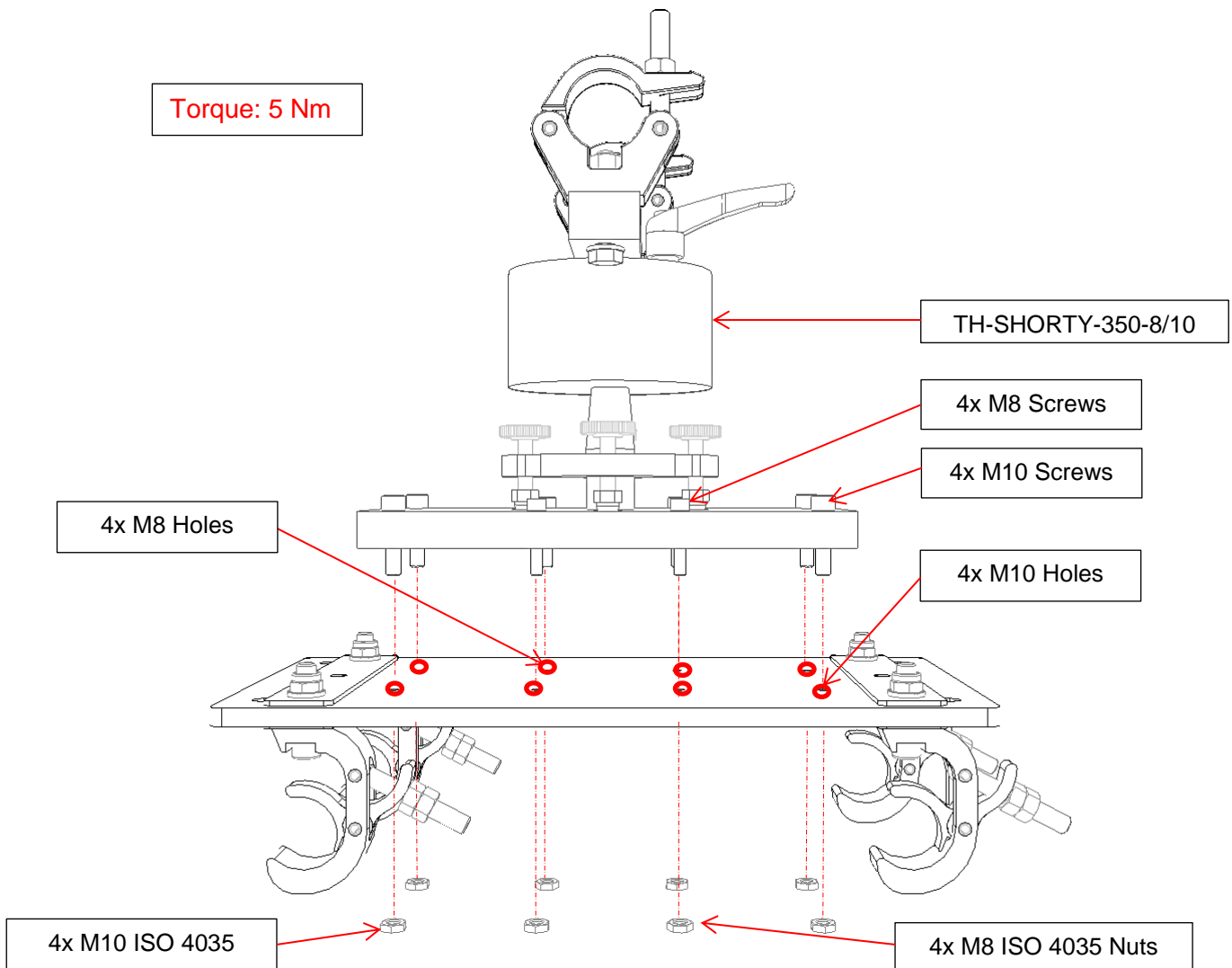|	

	PF-UNI-PORAD-L Portrait Adapter Large
	
	• Used for hanging projector frames in portrait mode.
	• Number of units: **1;**
	• **Including:**
	   - **4 x** 38-51mm T58301 Doughty ™ Simline Quick Trigger Clamp SWL100 Kg;
	   - **4 x** 12mm RippLock™ Zinc-Plated washers 400-500 HV;
	   - **4 x** M12x50 DIN912 Zinc-Plated Steel-Class 8.8;
	   - **4 x** M12 DIN 980 Zinc-Plated Steel-Class 8*;
	• **Weight: 7 kg / 15.432 lbs;**
	
	***do not** change by any case the DIN980 nuts with other types of nuts (normal DIN 934 or DIN 985 Nylon-insert).

1) 2)	**1) 4 x** M8 ISO 4035 Zinc-Plated Steel-Class 4; **2) 4 x** M10 ISO 4035 Zinc-Plated Steel-Class 4;
	User manual and installation guide: **PF-UNI-PORAD-L Portrait Adapter Large**

Make sure your box contains everything you ordered. If any pieces are missing, contact the seller.

2. OPTIONAL ACCESSORIES

	TH-SHORTY-150-8 / ETPFD550TMS2 • **Optional accessory** for ceiling mount installations. • It has **M8** mounting screws. *More information can be found in the "TH-SHORTY-150-8 Installation manual".*
	TH-SHORTY-350-8/10 • **Optional accessory** for ceiling mount installations. • It has **M8** and **M10** mounting screws. *More information can be found in the "TH-SHORTY-350-8/10 Installation manual".*

The optional accessories must be <u>purchased separately</u>. They are not included in the standard package!

3. FITTING THE TH-SHORTY-350-8/10 WITH THE PORTRAIT ADAPTER LARGE

Torque: 5 Nm

TH-SHORTY-350-8/10

4x M8 Screws

4x M10 Screws

4x M8 Holes
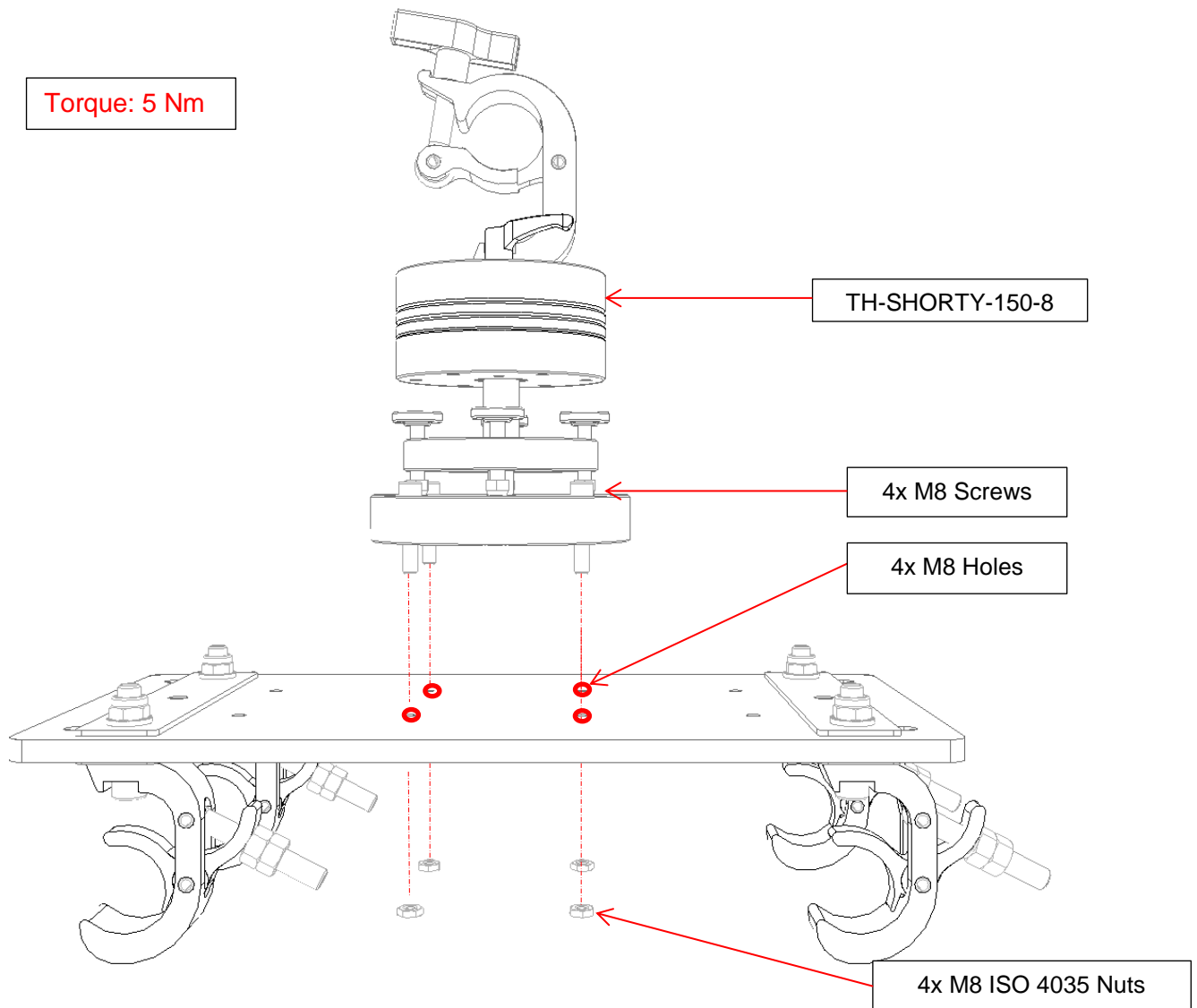
4x M10 Holes

4x M10 ISO 4035

4x M8 ISO 4035 Nuts

Step1: Place the Portrait Adapter Large on a suitable surface and make sure that the four TH-SHORTY-350-8/10 M8 screws and the four M10 screws are aligned with the four M8 and M10 Portrait Adapter Large holes.

Step 2: Using the Nr.6 allen key, screw the four M8 screws with a torque of 5 Nm and using the Nr.8 allen key, screw the four M10 screws with a torque of 5Nm.

Step 3: With the help of the Nr 13. screw wrench, tighten the four M8 ISO 4035 nuts at 5 Nm torque and with the Nr.16 screw wrench, tighten the four M10 ISO 4035 nuts at 5 Nm torque.

4. FITTING THE TH-SHORTY-150-8 / ETPFD550TMS2 WITH THE PORTRAIT ADAPTER LARGE

Torque: 5 Nm

TH-SHORTY-150-8
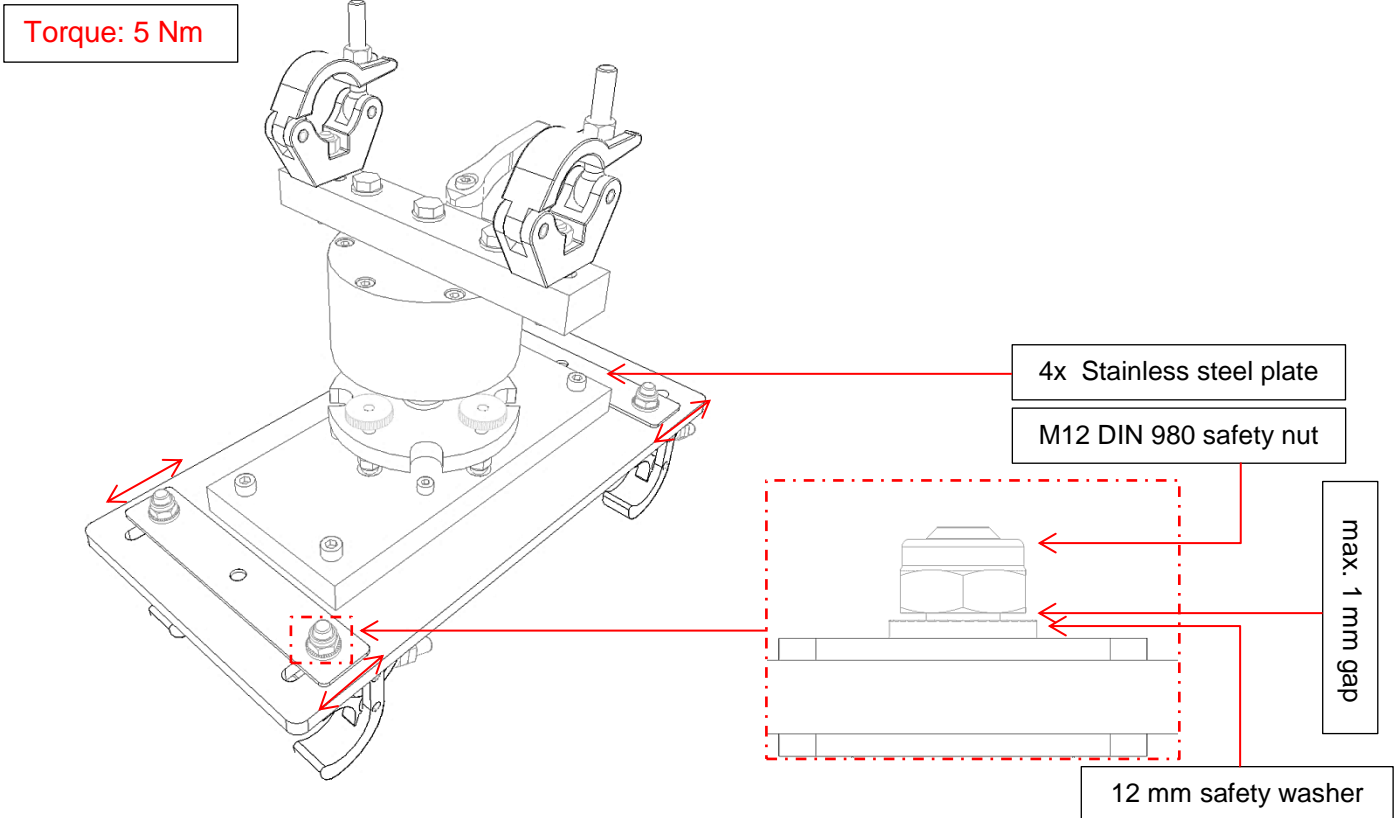
4x M8 Screws

4x M8 Holes

4x M8 ISO 4035 Nuts

Step1: Place the Portrait Adapter Large on a suitable surface and make sure that the four TH-SHORTY-150-8 M8 screws are aligned with the four M8 Portrait Adapter Large holes.

Step 2: Using the Nr.6 allen key, screw the four M8 screws with a torque of 5 Nm.

Step 3: With the help of the Nr 13. screw wrench, tighten the four M8 ISO 4035 nuts at 5 Nm torque.

5. ADJUSTING THE RIGGING CLAMP POSITION

Torque: 5 Nm

4x Stainless steel plate

M12 DIN 980 safety nut

max. 1 mm gap

12 mm safety washer

Always do this procedure before attaching the Portrait Adapter Large to the frame. Otherwise accidents can occur!

Step 1: Untighten the four M12 DIN 980 safety nuts until there is a gap of max.1 mm between the nut and the 12 mm safety washer.
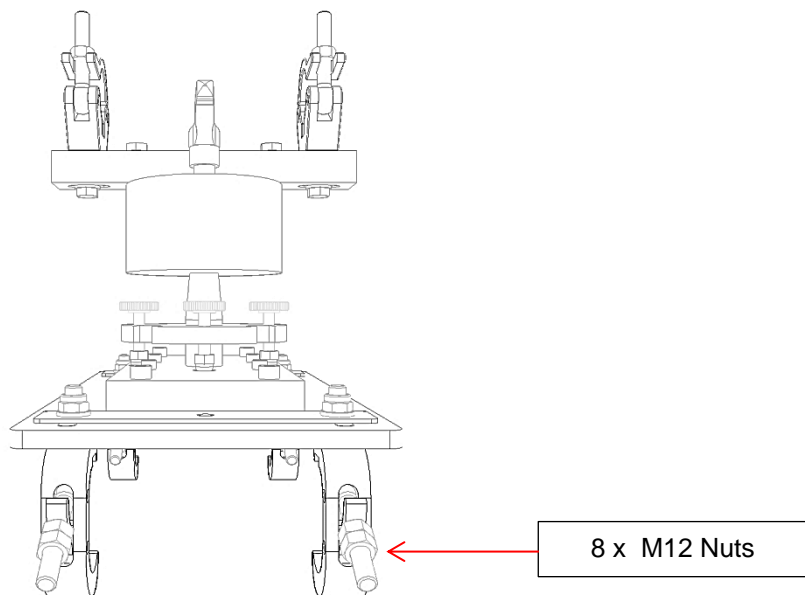
Do not remove the M12 DIN 980 safety nuts completely because accidents can occur!

Step 2: Move the rigging clamps together with the four stainless steel plates until the desired position is reached and then tighten back the four M12 DIN 980 safety nuts with a torque of 5 Nm. Please move the rigging clamps and the stainless steel plates in such a way that when the desired position is reached, they are symmetric toward the center of the Portrait Adapter Large.
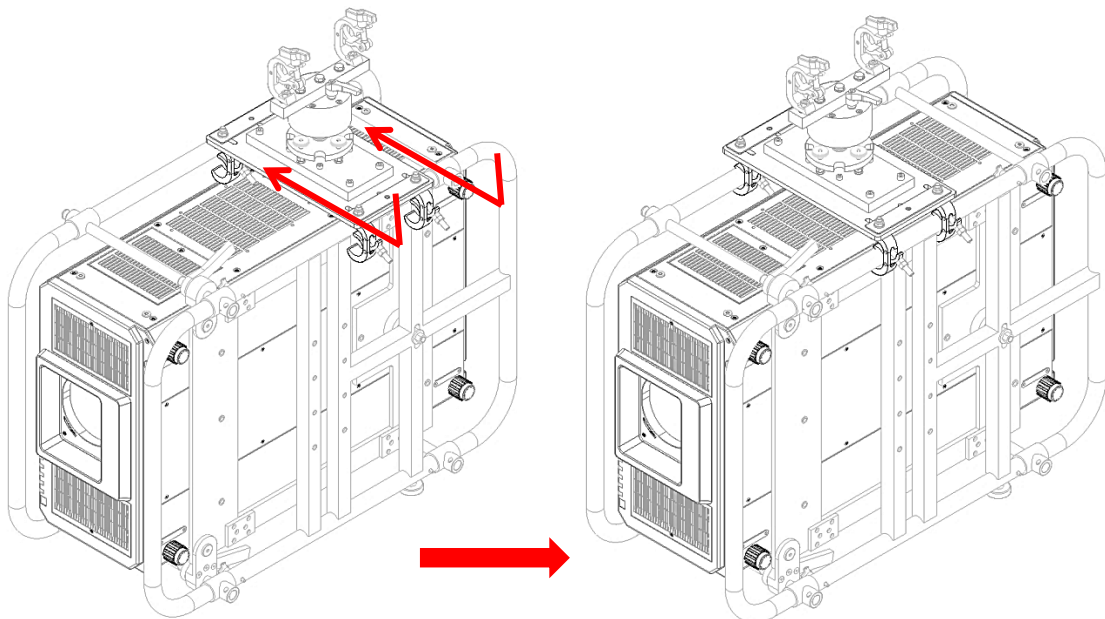
The distances between the rigging clamps and the compatibility with the LANG AG frames are as follows:

Frame name	Distance between two clamps
FRAME-BOXER	389mm / 15.315 In
FRAME-EPSON-EBL25000	399 mm / 15.708 In
FRAME-PTRZ31K/RQ32K	452,5 mm / 17.814 In

6. ATTACHING THE PORTRAIT ADAPTER LARGE TO THE FRAME-BOXER OR TO THE FRAME-PTRZ31K/RQ32K
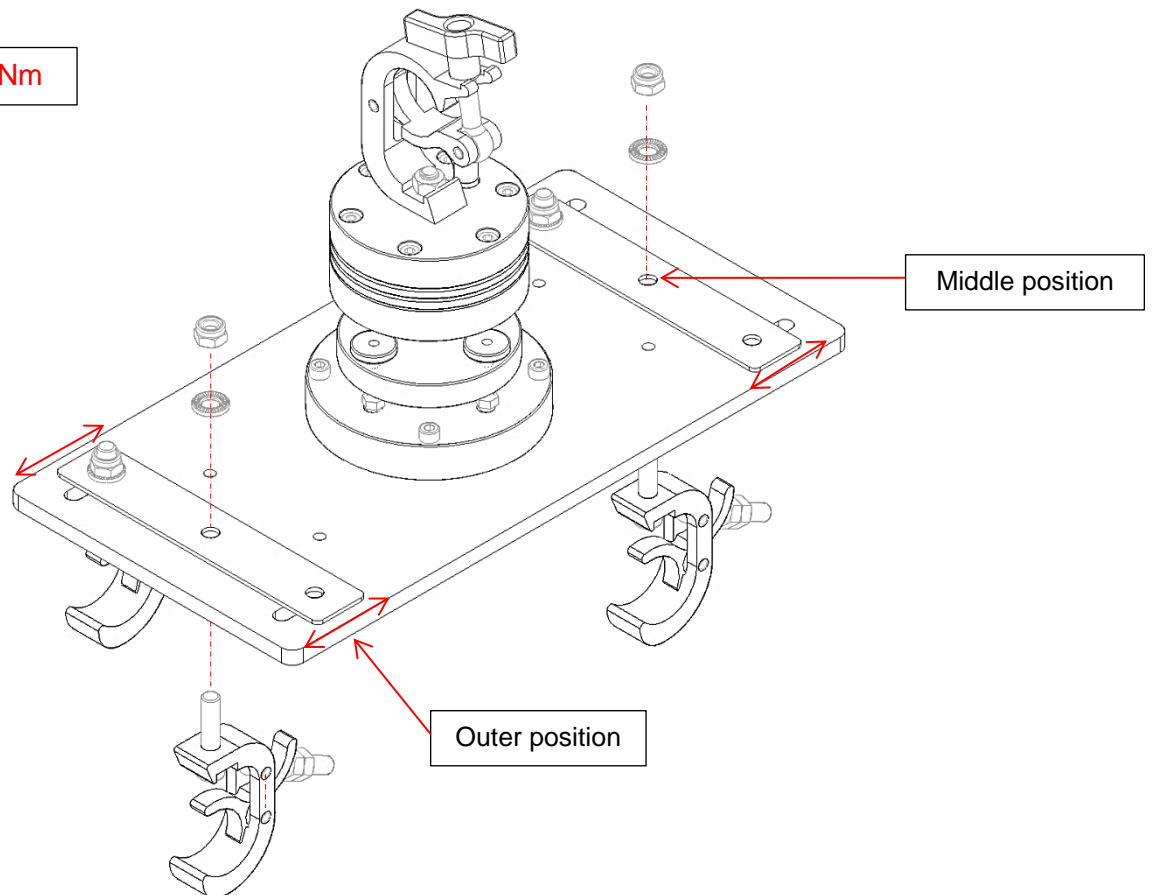

8 x M12 Nuts

Step 1: Unscrew the eight M12 nuts and loose the four rigging clamps jaws.

Step 2: Attach the Portrait Adapter Large to the frame by sliding it from top-to-right until the rigging clams jaws are in contact with the frame pipes and then tighten back the eight M12 nuts using the Nr.16 screw wrench. Please make sure that the nuts are properly tightened, otherwise accidents can occur!

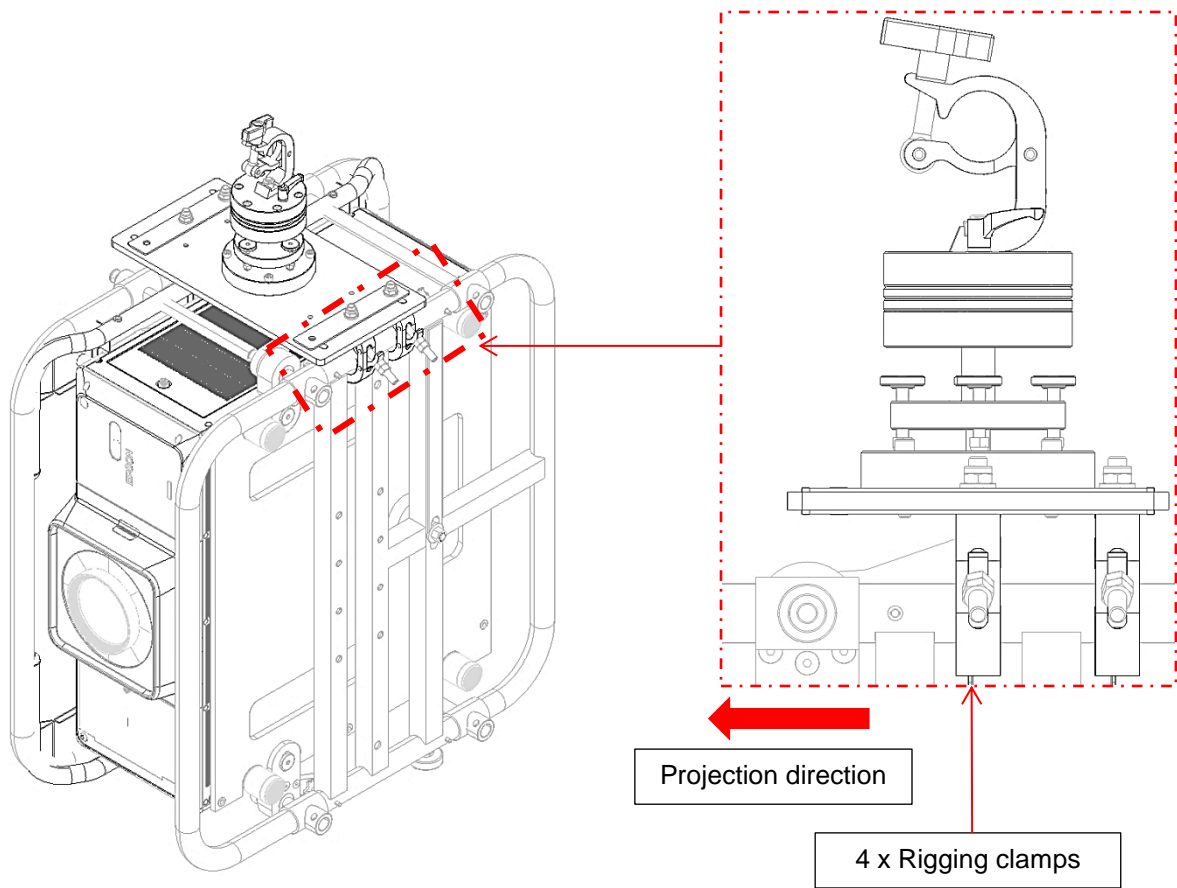## 7. ATTACHING THE PORTRAIT ADAPTER LARGE TO THE FRAME EPSON-EBL25000

Torque: 5 Nm

Middle position

Outer position

For attaching the Portrait Adapter Large to the FRAME EPSON-EBL25000 two rigging clamps must be repositioned from the outer position to the middle position.

Step 1: Using the Nr.19 screw wrench, completely remove the two M12 DIN 980 safety nuts.

Step 2: Reposition the two clamps in the middle of the plate and then secure the rigging clamps by screwing the two M12 DIN 980 safety nuts back with a torque of 5 Nm.

Projection direction

4 x Rigging clamps

Step 3: Attach the Portrait Adapter Large to the frame and tighten back the <u>eight M12 nuts</u> using the <u>Nr.12 screw wrench</u>. Please make sure that the nuts are properly tightened, otherwise accidents can occur!

8. SYSTEM MAINTENACE AND INSPECTION (RE-EXAMINATION)

The Portrait Adapter Large does not required special maintenance but a visual inspection must be done prior to every installation in which the Adapter is involved:

- Please make a visual inspection to be sure that all the screws are in the right place and none are missing;
- Please control the Portrait Adapter Large plate threads (presented in chapter 3 and 4) to be sure that none is destroyed.
- Make sure that the screws, the rigging clamps, the stainless steel plates and all the components are not damaged and no sign of corrosion is present;
- Please control, with corresponding tool (torque screw wrench), that all the screws are properly tightened;
- If any parts are broken or missing, please contact the seller so he can provide the spare parts;

Do not exchange broken or malfunctioning parts with ones that are not accredited by the manufacturer because serious injuries and property damage can occur!
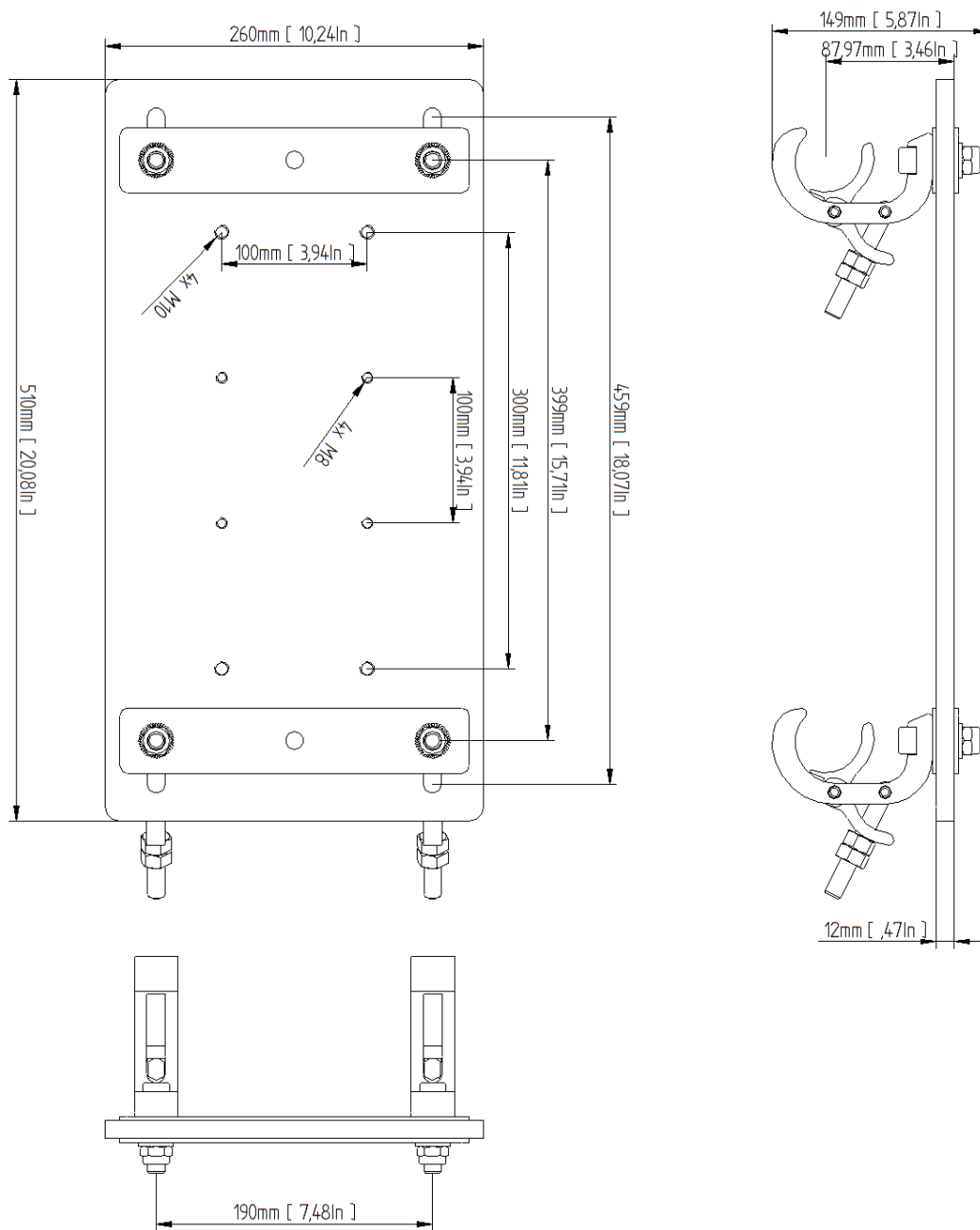
The inspection must be done by a qualified person!

One DGUV V17 inspection must be performed each year. For that, a qualified person needs to disassemble the entire device and carefully check that none of the components are damaged or broken.

Inspections and tests shall be performed according to the manufacturer's instructions and then documented. The tests must be repeated at least annually by an expert.
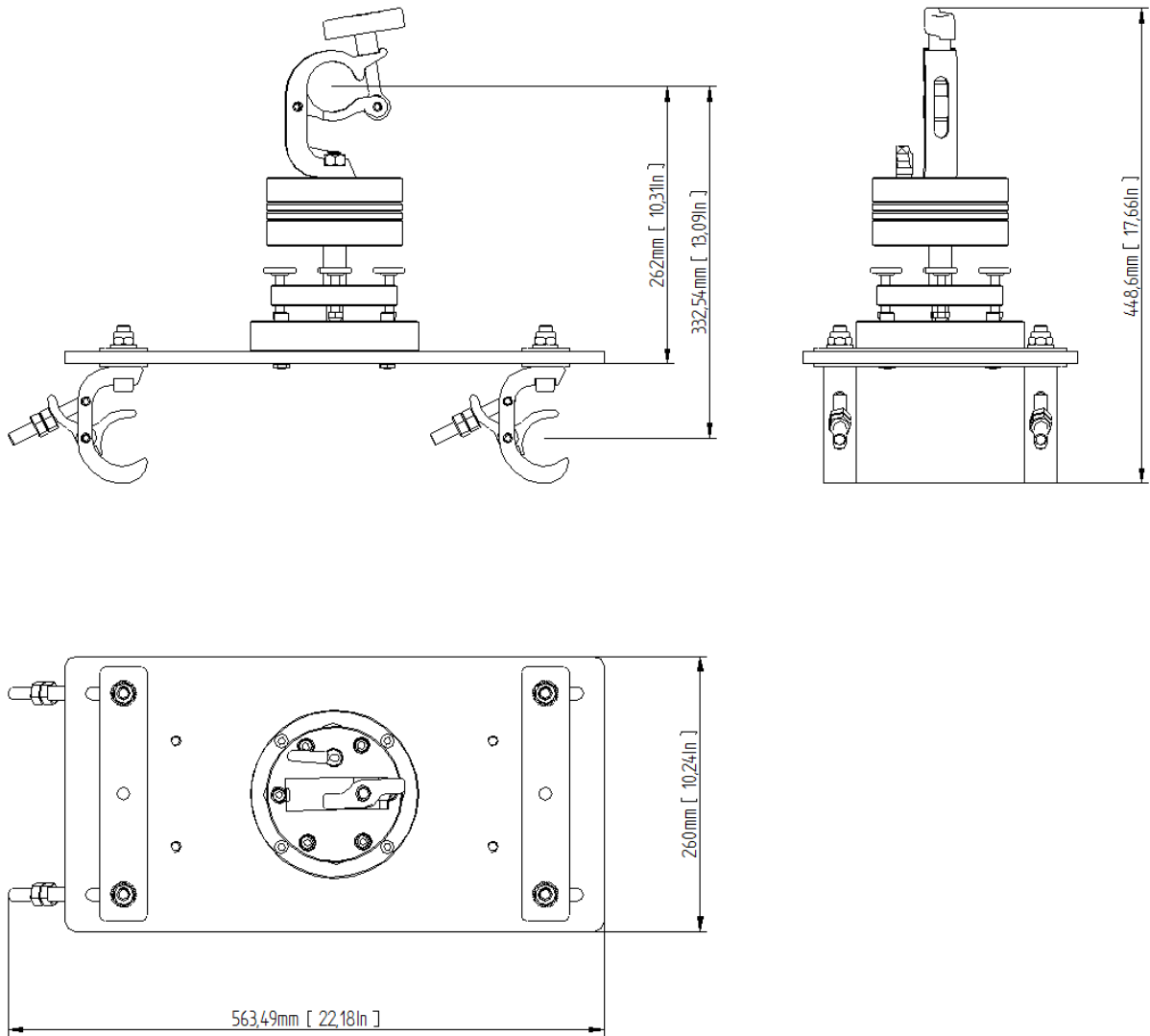
9. DIMENSIONS

1) Portrait Adapter Large

Portrait adapter weight: 7 kg / 15.432 lbs (only the Portrait Adapter with clamps)
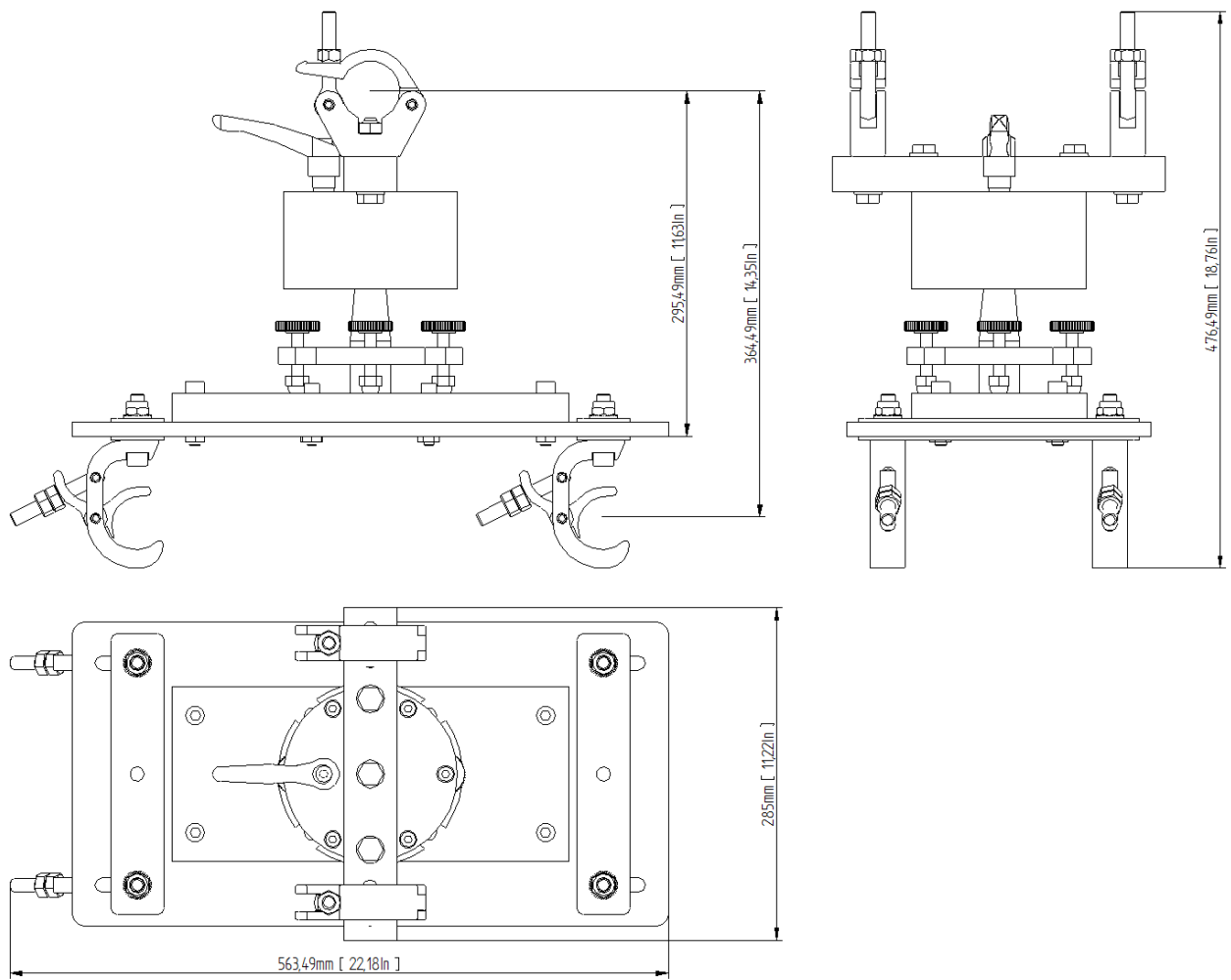
2) Portrait Adapter Large and TH-SHORTY-150-8 / ETPFD550TMS2

Portrait adapter and TH-SHORTY-150-8 / ETPFD550TMS2 weight: 15,8 kg / 34.833 lbs

3) Portrait Adapter Large and TH-SHORTY-350-8/10

Portrait adapter and TH-SHORTY-350-8/10 weight: 19,3 kg / 42.549 lbs

CE-Declaration of Conformity

We hereby confirm that the following described lifting accessory in its conception, construction and form put by us in circulation is in full accordance with all relevant health and safety requirements and complies with the following EC-directive:

   2006 / 42 / EG   (EG-Machinery Directive)

This declaration is no longer valid if the lifting accessory is modified without our written consent.

   Manufacturer:

   LANG AG

   Schlosserstraße 8

   D-51789 Lindlar

   Tel.: +49(0)226674764-0

Description of the lifting accessory:

- Function: Hanging system for projector frames in portrait mode: FRAME-BOXER, FRAME-PTRZ31K/RQ32K, FRAME-EPSON-EBL25000
- Type/model: PF-PORAD-UNI-L
- Serial number: PF-PORAD-UNI –L-AA.xxx,
- Year of construction: 2016

The applied harmonized EN - standards include:

- DIN EN ISO 1200:2010	Safety of machinery – General principles for design – Risk assessment and risk reduction

Further applied standards and regulations include:

- DIN EN 1991-1	Nationaler Anhang - National festgelegte Parameter - Eurocode 1: Einwirkungen auf Tragwerke - Teil 1-1: Allgemeine Einwirkungen auf Tragwerke - Wichten, Eigengewicht und Nutzlasten im Hochbau
- DIN EN 1993 -1	Eurocode 3: Bemessung und Konstruktion von Stahlbauten - Teil 1-1: Allgemeine Bemessungsregeln und Regeln für den Hochbau
- BGV C1	UVV Veranstaltungs- und Produktionsstätten für szenische Darstellung, Stand Januar 2011
- BGI 810-3	Lasten über Personen. Sicherheit bei Produktionen und Veranstaltungen von Fernsehen, Hörfunk, Film, Theater, Messen, Veranstaltungen

Place/date: Lindlar, 01.12.2016

Personal data of signer (name, position): TOBIAS LANG, CEO

Signature:

LANG AG
SCHLOSSERSTR. 8
51789 LINDLAR - GERMANY
FON + 49 (0)2266 4764-0
FAX + 49 (0)2266 4764-43

Made in Germany

by

LANG

www.lang-ag.com

Schlosserstraße 8

51789 Lindlar

Germany

12/16