

MINI HOIST

Lighting Suspension Mod. 8563 100-120 kg. SWL



30-6-2017



GENERAL INFORMATION

MINI HOIST: The Lightest Weight & most compact closed height motorized hoist in the market with up to 120 kg. SWL:

With the important success in the Market of DE SISTI LED FRESNELS and ENERGY EFFICIENT LIGHTS, we have experienced a very high percentage of newer Studios using more DMX Controlled devices and really getting the flexibility and benefit of being able to position the different FIXTURES anywhere within the Studio Area.

The MINI HOIST is really the optimal answer to such a need, as it is offering:

1. An extremely contained Self Weight of 68 kg. (to minimize loading the Studio ceiling).
2. Compact height when fully closed of 0,58 m. (to maximize the use of the Studio height).
3. Ability to lift up to 120 kg. net, which is more than required to lift 4 to 5 lighting fixtures.
4. Built In Mains and DMX Distribution on the motorized moving barrel.
5. Tracking ability on the horizontal plan, for fine adjustment of the Lighting Fixture position, including
6. Hoist horizontal Panning of 30° in each direction.
7. Contained Pricing.

The MINI HOIST is the product that makes it possible to motorized your studio at affordable costs and provide the best flexibility to the lighting system. Energy efficiency is also about being able to optimally position your lighting fixtures to obtain the best picture.

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FEATURES

- **SAFETY** The **MINI HOIST** complies with all safety standards set forth by the Internationally recognized testing authorities of TÜV to the German standards, the DIN 15560 part 46 standards, and by UL laboratories standards. These standards are directly associated with the safety of suspensions systems mounted above an assembly of people. The safety features incorporated into the **MINI HOIST** include, a dynamic self sustaining worm-gear set motor with a with screw helix angle less than 4 degrees to prevent back winding in a dynamic or static position. Four independent stainless steel FLAT BANDS, with the breaking force of each band being 460 kg (948 kg for the EHD version). There are four Safety Micro Switches, one for the top limit plus an extra emergency safety switch and one for the bottom limit, plus an extra emergency safety switch. The **MINI HOIST** has both overload and slack line detection on each band.
- **FLEXIBILITY** The **MINI HOIST** is available in standard lengths of up to 10' (3 meters), but longer versions are available on request. It is designed for either fixed positions in Television, Stage or Architectural applications or as a Trackable Hoist System with the ability to be moved into the set area via a tracks mounted to the sub-structure and running the length of the studio. Because the **MINI HOIST** overall height is only 30 inches, it is ideal for Studio's with grid heights as low as 16 Feet. The **MINI HOIST** can travel up to 15 meters, carry a wide combination of load circuits and retract to 30 inches. Using the Trackable Hoist System, not only can the hoists be moved into the set area but can also be angled to conform to the angle of the set pieces for improved lighting positions. Motorized tracking is also available.
- **MECHANICAL** The mechanical design incorporates three elements; a motor compartment and diverter pulley assembly pre-mounted to a D rail, a connector strip that houses the load circuits, and either a pipe batten or rail for hanging lighting instruments. The **MINI HOIST** is pre-wired and pre-assembled from the factory making the installation an easy task. The special cable management system makes the load circuit handling neat and easily managed when the hoist is raised or lowered.
- **OPERATIONAL** The **MINI HOIST** is capable of lifting a (SWL) safe working load of up to 120 kg. plus the self-weight of the hoist which is based on the travel distance and the optional features included. The maximum travel distance is 15 meters.
- **OPTIONAL FEATURES** The De Sisti **MINI HOIST** offers several unique optional features:
 1. **Positioning Control** memorizes and recalls the position of each hoist recorded in preset.
 2. **Speed and synchronized Group Control** as an expansion of the Positioning Control system.
 3. **DMX Up/Down and Positioning Control** via a standard lighting control board or any DMX control system
 4. **HDC Group control**

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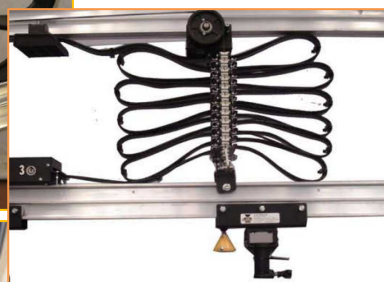


CHARACTERISTICS & PERFORMANCE DATA

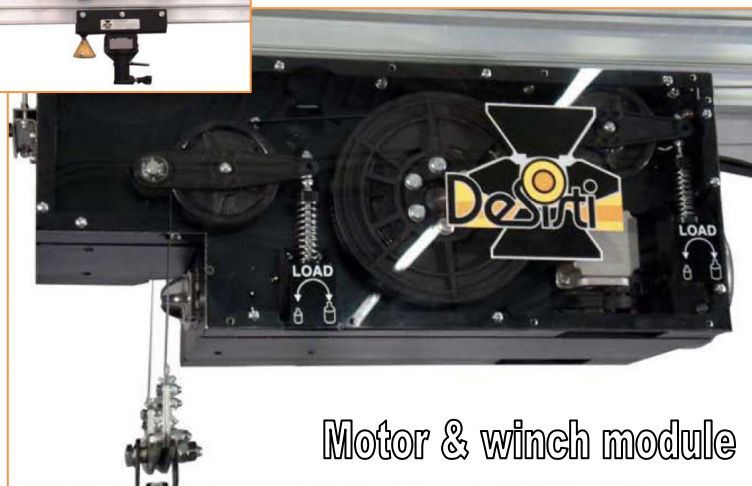
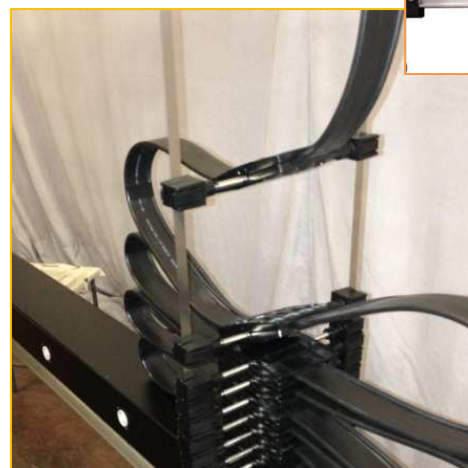
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|---|---|
| Net lifting capacity of HOIST (PAYLOAD): | 120 kg. (with self weight of moving batten & cable management of max. 40 kg.) |
| Lift Bands: | 4 independent STAINLESS STEEL METAL BANDS 10x0,3 cross section, minimum breaking load per band 460 kg. Rounded edges. |
| Winch Unit specs for Vertical lift: | 0.37 kW, 3 phase AC primary supply: either one of the 3 following voltages are available 240/415 V 50 Hz +/- 5 %, 230/400V-50 Hz +/- 5 %, 120/208 V 60 Hz +/- 5 %. Dynamic automatic interlock (DIN 15560 – 46 SELF SUSTAINING). |
| Lifting speed (average): | 6 m/min. (if combined with Vectorial Inverter + 15% to 20%) |
| Load Sensing: | Over/No load (Slack Line) sensing mechanism independent on each lift band OPTIONAL: Load Measuring with STRAIN GAUGES implementation (only in combination with positioning control system) |
| Travel limit system | TÜV approved mechanism, including 4 fine adjustable safety switches (resolution of 3 mm. in a 10.5 m. travel), including: ET = EXTRA TOP LIMIT TL = TOP LIMIT BL = BOTTOM LIMIT EB = EXTRA BOTTOM LIMIT The mechanism can be easily retrofitted with positioning sensor. |

TYPICAL DETAILS OF THE MINI HOIST

Cable management



End Stops



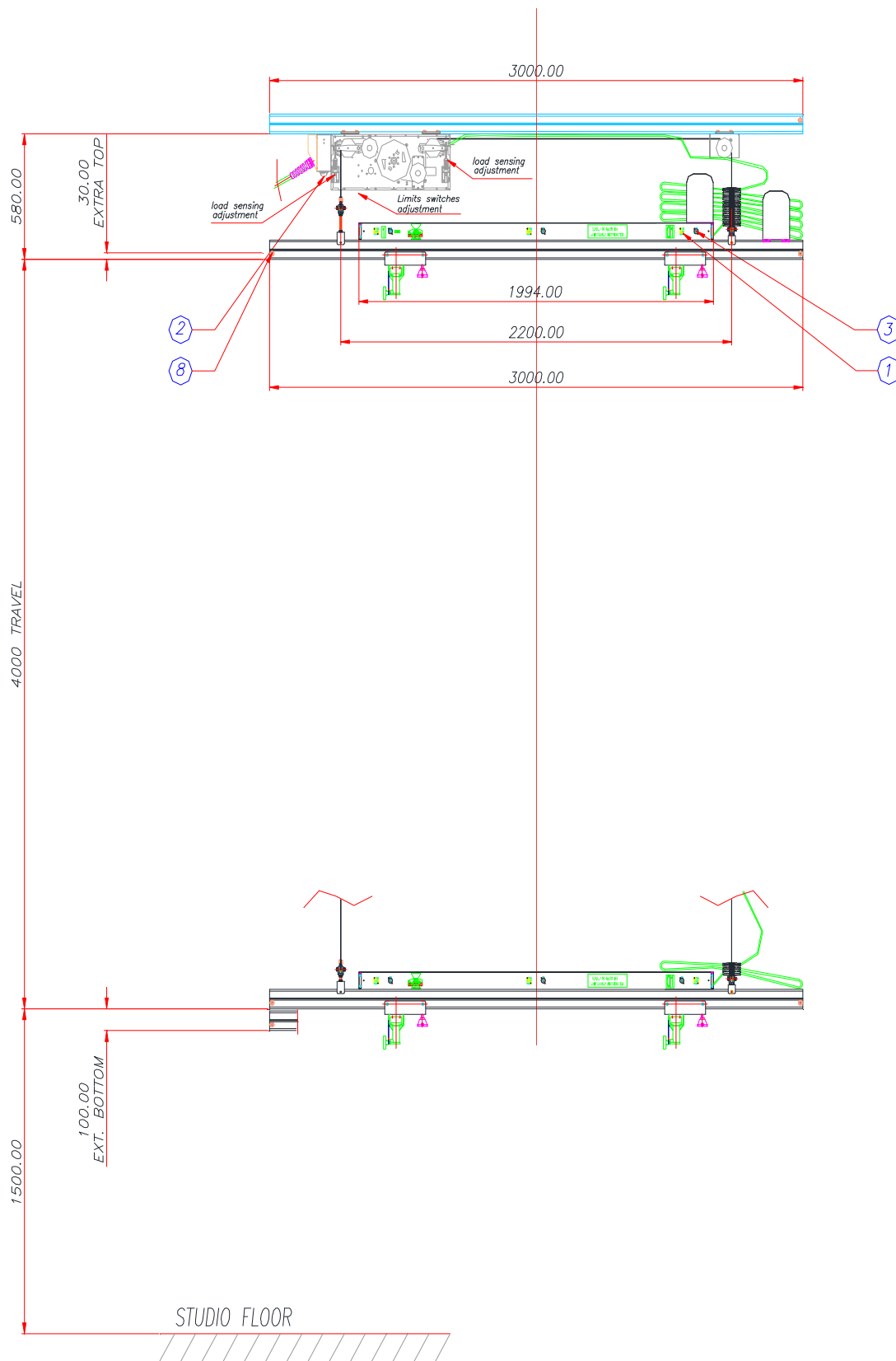
Motor & winch module

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TYPICAL SHOP DRAWINGS MINI HOIST

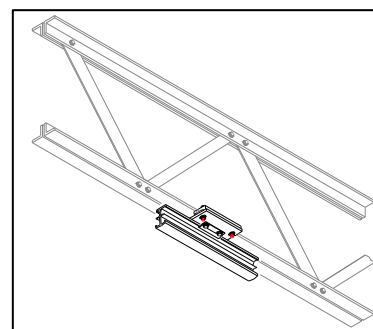
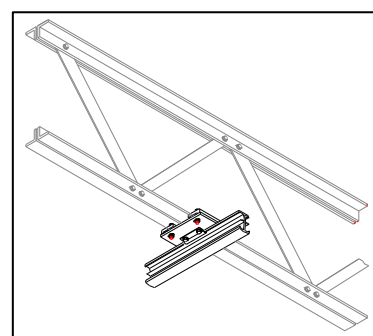
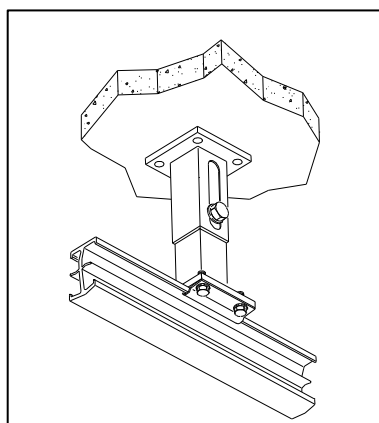
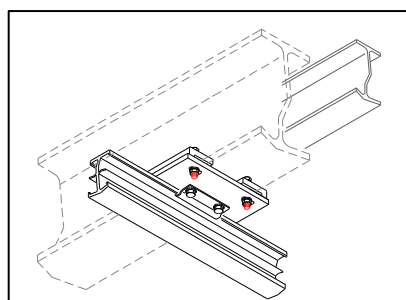
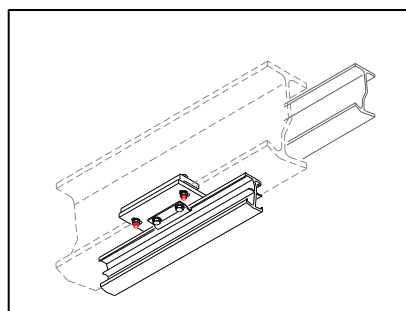
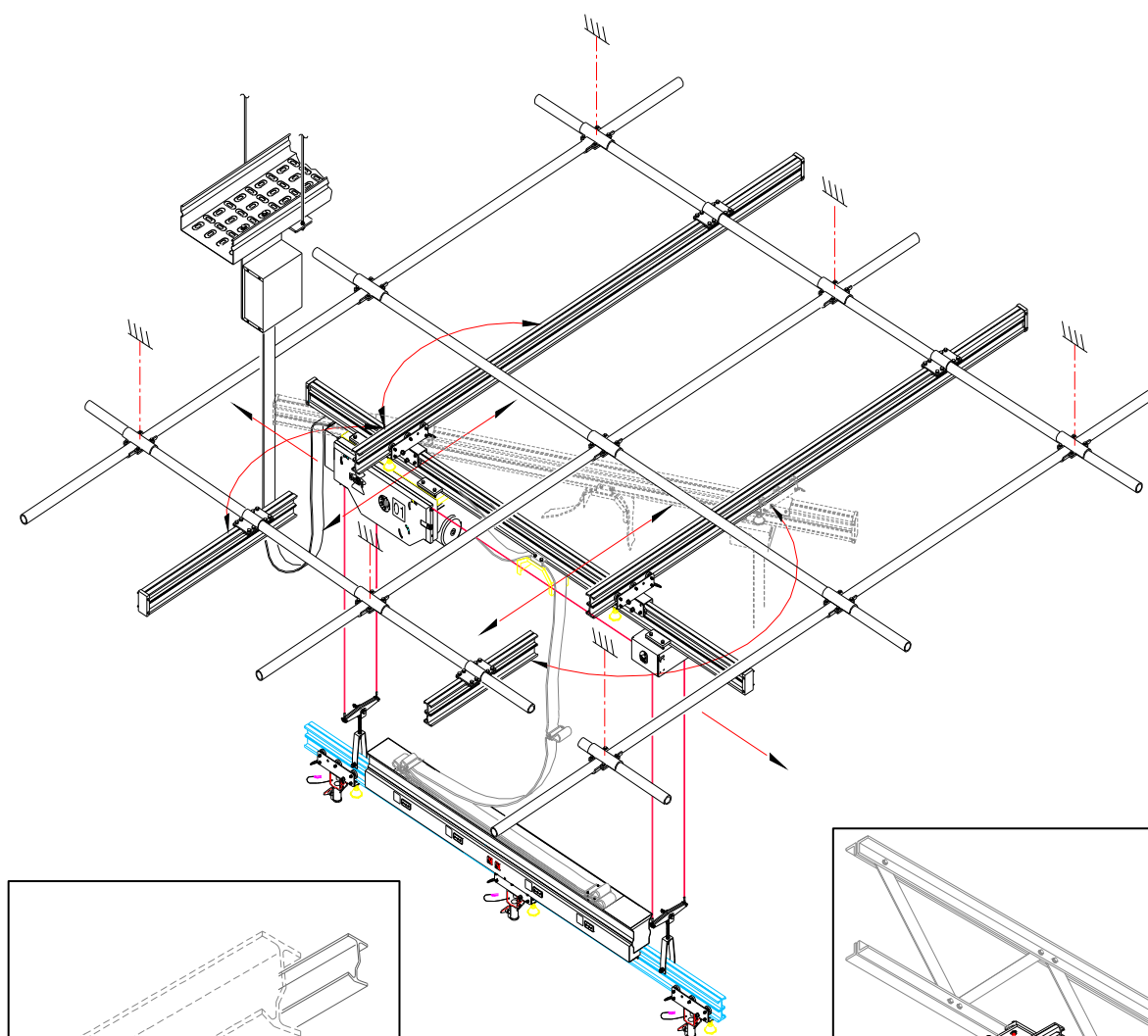


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TYPICAL TRACKABLE & SWIVELING MINI HOIST



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CONTROLS SYSTEMS OPTIONS



PBS - Push Button System (up to 4 hoists)



HMC - Hoist Manual Control (from 4 to 12 hoists)



HDC - Hoist Digital Control
(from 12 to 312 hoists)

Mark 1 as shown
Mark 2 with Colour Touch Screen

POSITIONING CONTROL SYSTEM

CONTROLS User Interfaces

Main Control
rolling desk version (optional)



Main Control
Wall Mtg. Version (standard)



Hand Held Remote
HPDA (standard)
or TABLET (optional)



Desk or Lapp Top
PC for Optional
SERVER



STANDARD LAN
At 10/100 Mbps
All the control devices have
their own IP

CAT 5 or 6

DATA HANDLING Signal Processing

Signal Distribution including:

CAN OUTPUT signal
Patch bay

Emergency & movement
Confirmation (dead man handling)

LAN/CAN HUB «Net Port»

Wi-fi
Access Point



CAN bus 2.0 at 50 Kbps.
The Netport decrypt data from
CONTROLS to RIGGING and
encrypt data from RIGGING to
CONTROLS

CAT 5 FTP (shielded) or SPECIAL BUS BAR (Power Rail with sliding contacts)

RIGGING & LIGHTING DEVICES

DE SISTI distributed electronics at
each device, with the following
IN/OUT features:

- Contactor or INVERTER control
- Potentiometer or Encoder reading.
- Safety Switches Monitor
- Local Control
- Grey Code SCSII interface (APOS)
- Blinking Lamp handling



DE SISTI ITCB card
Distributed on rigging & lights.

- 16-bit CPU SIEMENS 167CR, 20 MHz, with integrated CAN controller
- 4 digit display & 4 key control panel to set and/or monitor the configuration
- integrated Monitor on RS232 communication port
- local and remote setting of operating parameters, with on board storage
- multi-tasking environment for concurrent processing of data items
- code produced with high level C language by Keil Corporation

Self Climbing or Grid Hoists



Spiders & Telescopes w/ mot. trolleys



Scenery Hoists w/ mot. Trolleys
or TOP GRID rack systems

