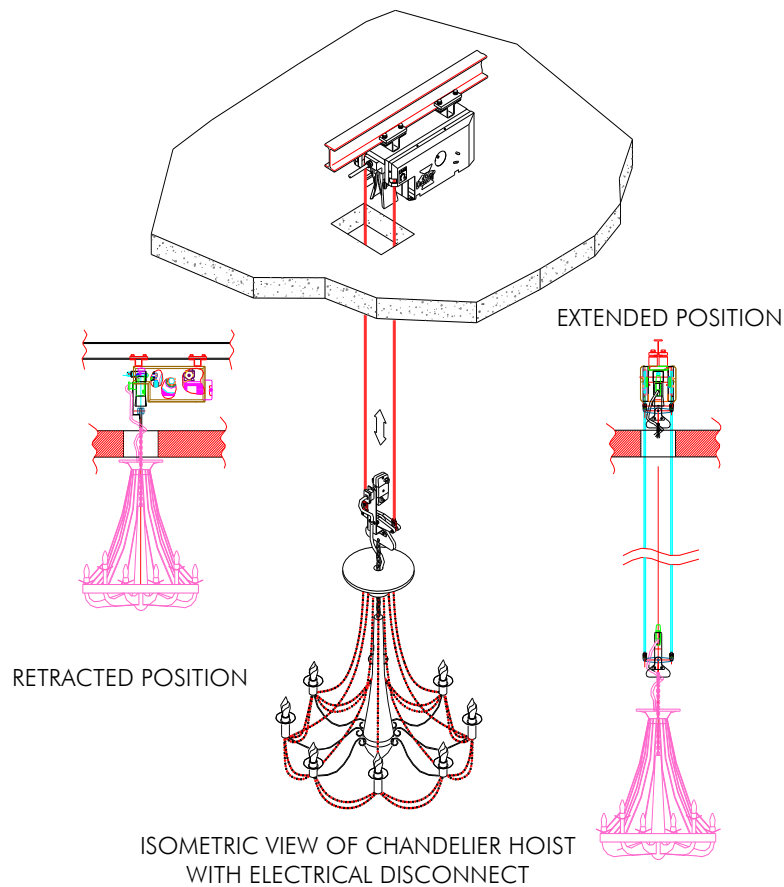




CH 250 POINT HOIST Lighting Suspension



Mod. 8350.025



FEATURES

- SAFETY** The **CHANDELIER HOIST (motorized lifting device)** features an **ELECTRICAL DISCONNECT** which allows a lighting Fixture to be lowered to ground level for relamping or servicing without the need to manage the electrical feed cables as the device is lowered. This is accomplished by disconnecting the **stationary upper contact member** (the Power feed) from the **lower contact / movable member** (the luminaire) without the need to unlatch the device. While in the upper position and connected to the current, the **stem and guide assembly** and the **upper contact assembly** maintain positive contact pressure while being held in position via the self sustaining worm-gear set motor. The **CHANDELIER HOIST** is capable of lifting loads up to 250lbs (114 kg) SWL (safe working load) and has a **TRAVEL DISTANCE** of up to 65' (19.8 meters). The **CHANDELIER HOIST** incorporates 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 **CHANDELIER HOIST** include, a dynamic self sustaining worm-gear set motor with a screw helix angle less than 4 degrees to prevent back winding in a dynamic or static position. **TWO independent Stainless Steel Band (10x0.3 mm. section each with rounded edges) lifting lines**, with the breaking force of each Lifting Line being 990 lbs (450 kg). There are two sets of 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 Chandelier Hoist has both overload and slack line detection on each Stainless Steel Band.
- FLEXIBILITY** The **CHANDELIER HOIST'S upper stationary member** measures only **9" H X 10" W X 25" L** and houses **TWO Independent Lifting Band Drums** capable of lowering the Luminaire up to 65', a Motor Winch Assembly, Safety Micro Switches for Overload and Slack Line Detection and the Limit Switches, Two for the top and Two for the bottom (1 + 1) safety. The shallow housing of the Stationary Member allows the hoist to be mounted in tight spaces within the ceiling. The **CHANDELIER HOIST** can

be specified with a 5 pole electrical disconnect for up to (2) 20 amp Circuits with a Common Ground. The **lower Stem and Guide Assembly**, which is disconnected as the hoist is lowered to ground level for lamp replacement, also contains an outlet for testing the replacement lamps while it is at ground level.

- **MECHANICAL** The Mechanical Design incorporates TWO elements, a **stationary upper contact assembly** which houses **TWO Independent Lifting Drums**, one for each lifting line, a Motor Winch Assembly, Safety Micro Switches for Overload and Slack Line Detection and the Limit Switches, The **movable Lower member** contains the **Mating Stem and Guide Assembly, which disconnects the single or double 20 amp circuits as the hoist is lowered** and a 20amp outlet for testing the replacement lamps.
- **OPERATIONAL** The **CHANDELIER HOIST** is capable of lifting a (SWL) safe working load of 250lbs / 114 kg, the maximum travel distance is 65 feet / 19.8 meters.
- **OPTIONAL FEATURES** The De Sisti **CHANDELIER HOIST** offers several unique optional features:
 1. **SIMPLE UP/DOWN PUSH BUTTON CONTROL VIA PBS CONTROL SYSTEM.**
 2. **GROUP CONTROL WITH REMOTE VIA HMC CONTROL SYSTEM.**
 3. **DMX Up/Down and Positioning Control via a standard lighting control board or any DMX control**

SPECIFICATIONS

The De Sisti Rigging and Automation **Chandelier HOIST** shall be made up of two elements. The first is the Motor Module and upper **Stationary Contact Assembly** which while in the upper position and connected via the Stem and Guide Assembly to the Chandelier, shall maintain positive contact pressure (without the need for a latching mechanism) and be held in place by a self sustaining gear motor. The self sustaining gear motor shall also prevent back winding. (The use of an electrically held breaking device to prevent back winding or free fall shall not be permitted). The Motor Module shall be a completely self contained enclosure and house a motorized winch drive unit with independent dual lifting drums for two stainless steel lifting bands (hoists with single lifting cables shall not be acceptable), a 5 pole electrical disconnect for up to 2 – 20amp circuits, limit and load sensing switches and terminals for both the motor feed and control terminals. The second element is the **Stem and Guide Assembly**, which shall be attached to the Chandelier and make or break the electrical connection when the Lighting Fixture is moved to the upper or lowered positions. The assembly shall also include an outlet for testing the lamps when the Chandelier is at Ground level.

The motor assembly shall house a 0.45 kw 208 volt, 60 Hz 3-phase motor, integrated with a **dynamic self sustaining worm-gear set** with a screw helix angle less than 4 degrees to prevent back winding in both a dynamic (when the hoist is moving), or a static position. The maximum torque shall be 88Nm, with permanent lubrication.

The average lifting speed shall be 25' per minute. The SWL (safe working load) shall be 250 lbs (114Kg). The maximum travel distance is 65' (19.8 meters). It shall have two independent stainless steel lifting bands 10x0.3 mm. section each with rounded edges, with a breaking force on each Band of at least 990 lbs (450 kg). **Hoists having only one lifting cable shall not be accepted.** Incorporated into the hoist system shall be cut out safety micro switches (double activated spring lever type, for each lifting Band) for slack line and overload detection, plus travel limit switches, one for the top plus extra safety switch and one bottom limit switch plus safety stop switch.

All circuit protection panel boards, emergency contactors, three phase feed to the motors, control wiring and load circuit wiring to the hoist shall be by others.

The entire device shall be **DIN approved** under section #15560 Part 46, (Worldwide Safety Standard for overhead devices) be **TÜV certified** and carry the **U.L. label** approved as a complete system.

There are several Control Options offered by De Sisti.

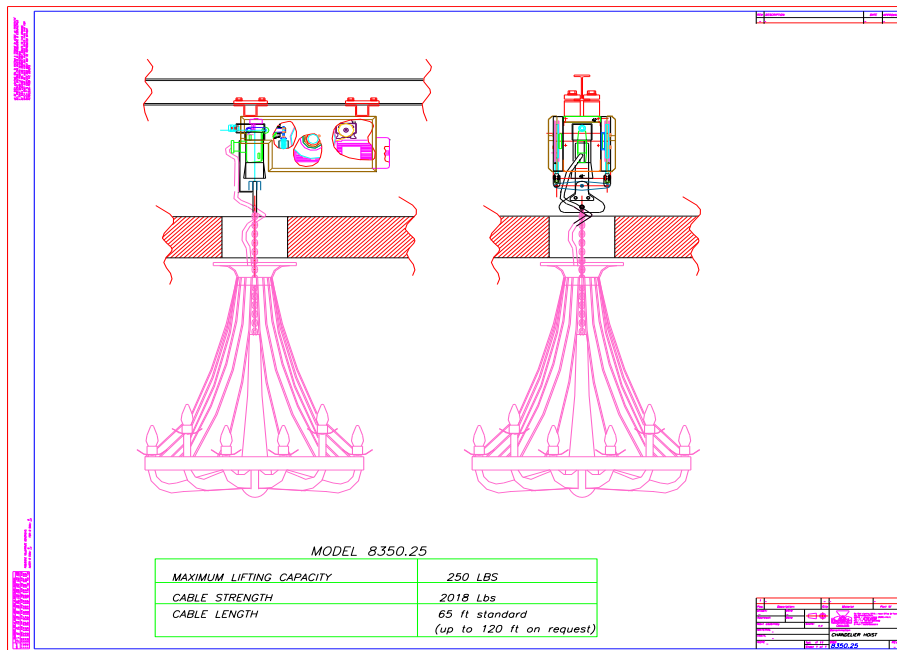
- PBS Up /Down Push Button Control with (optional) remote control
- HDC Digital Control System, for 12 or 24 channels with manual backup.
- DMX Up / Down Control as well as Positioning Control.
- HDC System (hoist digital control) with manual back up.

ICARUS Control System for (memory control of hoists and automated lighting)

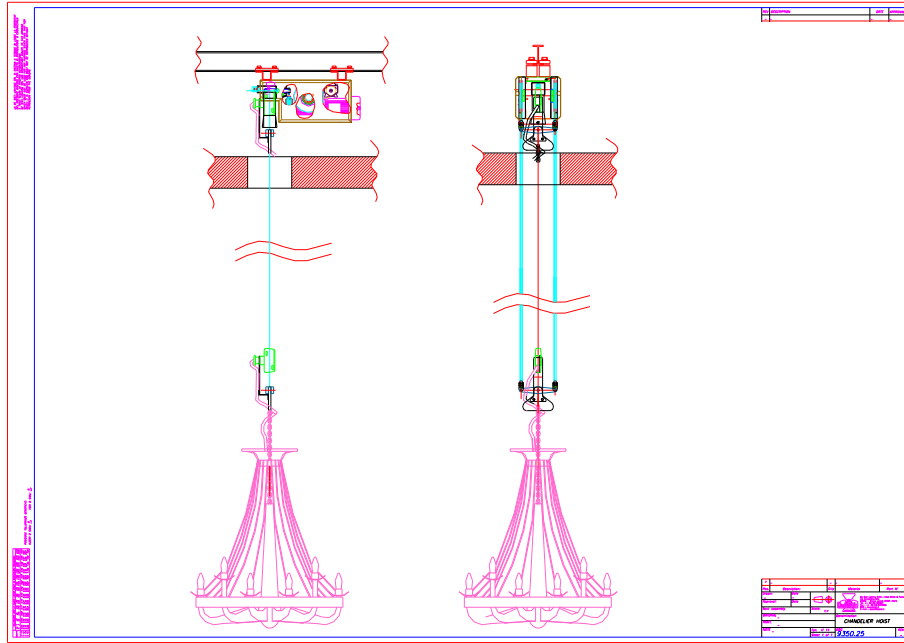
CHARACTERISTICS & PERFORMANCE DATA

Net lifting capacity of HOIST (PAYLOAD):	250lbs / 114 kg
Number of lift bands:	2 independent stainless steel lifting bands.
Lift bands specifications:	Stainless Steel lifting band 10x0.3 mm. section each with rounded edges, specific resistance class 150 kg.:sq.mm. (1550 N:sq.mm). Minimum breaking load 458.7kg. / 1009 lbs.
Lifting speed (average):	6.2 m/min. – 20' 6" / min.
Winch Unit specs for Vertical lift:	0.45 kW, 3 phase AC primary supply: either one of the 3 following voltages are available 240/415 V 50 Hz +/- 5 %, 220/380V-50 Hz +/- 5 %, 120/208 V 60 Hz +/- 5 %. Dynamic automatic interlock (DIN 15560 – 46 SELF SUSTAINING)
Load Sensing:	Over/under load sensing mechanism independent on each lift cable
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.

CHANDELIER HOIST RETRACTED



CHANDELIER HOIST EXTENDED



TYPICAL TOP ATTACHMENTS FOR CHANDELIER HOIST

