

# Mini SPIDER

30 kg. SWL (Safe Working Load)

## Pole Operated Pantograph

For either 4 or 6 m. Maximum Height support  
Manual & Motorized Pole options



## OVERVIEW

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 SPIDER is the Lightest Weight and most compact Pole Operated Pantograph in the market for 30 kg. lifting capacity, with exceptional stability of the movable part:*

A Manual Suspension with exclusive Special Fiber Pantograph Arms, a built in cable management system and TOP/BOTTOM offset load Stabilizers, the MINI SPIDER is a unique product for stable support of the Lighting fixture.

The special Shape of the Arms provide additional stability to the moving part of the pantograph, yet the fact that they are built in a special structural fiber material make this pantograph the lightest weight in the industry (the Self weight of a 4 m. net extension MINI SPIDER, for 6 m. hanging heights, complete with Mains and DMX Load circuits is only 11,5 kg.).

The following HIGHLIGHTS are representing the innovation introduced by the MINI SPIDER:

1. A stable support at any height of the lighting fixture.
2. A special cable management to keep electrical conductor within the scissor arms structure and avoid stress on cables without severe bending radius.
3. An extremely contained Self Weight of 11,5 kg. (to minimize loading the Studio ceiling).
4. Compact height when fully closed to maximize the use of the Studio height.
5. Ability to lift 30 kg. net, that can carry the majority of lighting fixtures for studio use.
6. Built In Mains and DMX Distribution on the moving part.
7. Compatible with the all D RAIL Range for full flexibility of positioning the Lighting Fixture.
8. Contained Pricing.


The MINI SPIDER is the product that makes the Manual (Pole Operated) positioning of your studio LIGHTS affordable in costs and provide the best flexibility to the lighting system.

Energy efficiency is also about being able to optimally locate your lighting fixtures to obtain the best picture.

## FEATURES

The Mini SPIDER is a Pole Operated Pantograph, featuring a unique scissor arm assembly with a patented stabilizing system built in a special structural fiber material, in order to provide a steady support for the lighting fixtures and allowing also the assembling of an horizontal pipe or rail at bottom to hang more than one instrument.

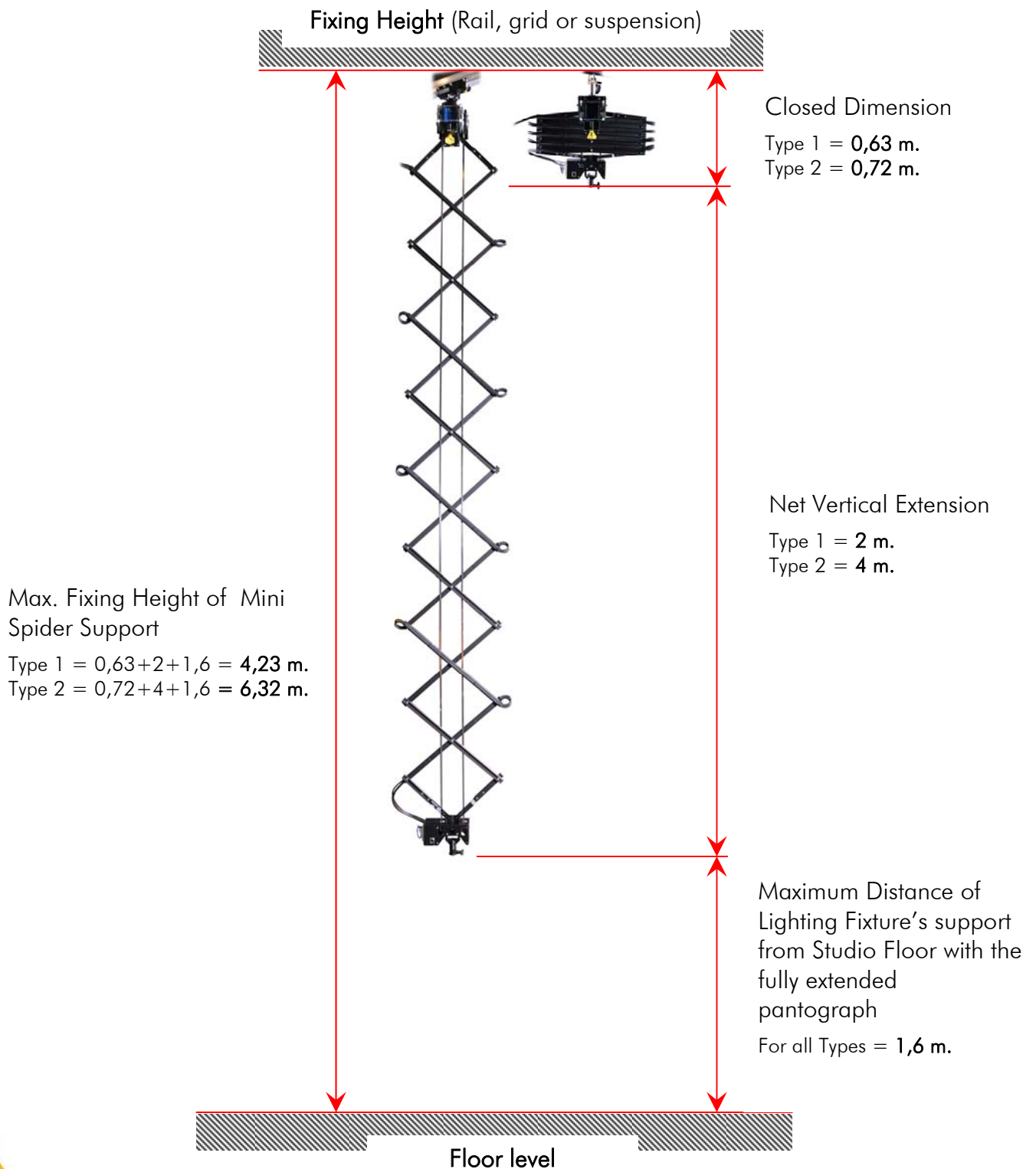
The following are the Mini SPIDER main features:

- 30 kg. S.W.L. (Safe Working Load) which is the maximum net lifting capacity of the machine, with Static and Dynamic Self Sustaining Gearbox, having constant resisting Torque, for either Manual or Motorized Pole activation.
- 2 independent STAINLESS METAL BANDS 20x0,3 cross section, minimum breaking load per band 948 kg. Rounded edges.
- Mechanical TOP and BOTTOM Limits, Scissor Arms Stabilization and PATENTED STABILIZING GEARED Hinges to reduce Lateral sway and permit off centred loading.
- Structural Fiber SCISSOR ARMS for stability of the moving part and minimized self-weight of the pantograph. Each hinge is junction by screws, self-locking nuts and brass spacing rims for accurate control and functionality.
- Bottom moving part with 1 circuit 20A POWERCON and 1 DMX on XLR5P. Electrical Cables are contained within the Scissor Arm for protection and to minimize the bending stress on the conductors.
- Very Small Height occupancy when fully retracted, to maximize the studio height use.
- Two Types of NET VERTICAL EXTENSION :
  - Type 1 = 2 m. (appropriate for a Fixing height of max. 4 m.) – Closed Dimension 0,63 m.
  - Type 2 = 4 m. (appropriate for a Fixing height of max. 6 m.) – Closed Dimension 0,72 m.
- Either B.S. or DIN Spigot at TOP and Receiver at bottom.
- Easy install of "D" RAIL OR 48 mm. DIAMETER PIPE of maximum 1 m. length at bottom, for multiple fixtures hanging on the Mini SPIDER.
- Safety Certified by TUV 

## EXTENSION DIAGRAM

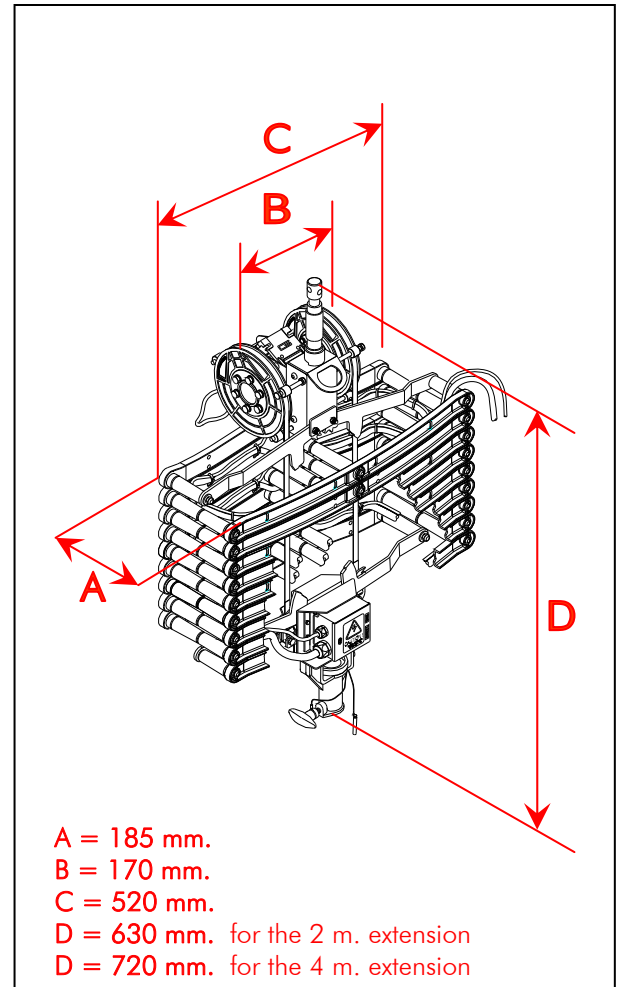
Two Types of MINI SPIDER with the respective NET VERTICAL EXTENSION :

- o **Type 1 = 2 m.** (appropriate for a Fixing height of max. 4 m.) – Closed Dimension 0,63 m.
- o **Type 2 = 4 m.** (appropriate for a Fixing height of max. 6 m.) – Closed Dimension 0,72 m.



## CHARACTERISTICS & PERFORMANCE DATA

DESCRIPTION	VALUE	
⇒ S.W.L. Safe Working Load (net lifting capacity)	30 kg. / 66 Lbs.	
⇒ Self Weight	Type 1 = 2m.	Type 2 = 4m.
	11,5 kg.	14 kg.
⇒ Model Numbers for B.S. Versions	Type 1 = 2m	Type 2 = 4m.
	8120.120	8120.140
⇒ Model Numbers for DIN Versions	Type 1 = 2m	Type 2 = 4m.
	8120.320	8120.340
⇒ Winch GEAR BOX	Transmission Ratio 1:80 Automatic Interlock: <b>SD Static and Dynamic Self Sustaining</b> Nominal Output Torque 35 Nm	
⇒ Vertical movement per turn of Activation Ring	19 mm.	
⇒ Stainless steel FLAT Bands /Lifting lines	2 Bands Cross Section 10x0.3 mm. with Round Edges. Min. RESISTANCE = 1.550 N/mm <sup>2</sup> Min. BREAKING LOAD each = 474,3 kg SAFETY FACTOR each > 22 TIMES	
⇒ Electrical Circuits	1 Mains 20A and 1 DMX circuits with 1,5 mt. cable tails at top with the following connection stds: - 3x1,5mm <sup>2</sup> with 1x20A POWERCON - 1 DMX 2x0,22+shield with XLR5P	



## POWER & DMX CONNECTIONS:



The Mini Spider is equipped with:

### For DMX with XLR5p:

- 1 XLR5 pin Panel Mount Female on bottom moving part
- 1 XLR5 pin In Line Male on a 1,5m. Cable Tail at top

### For Mains Supply POWERCON WHITE:

- 1 Panel Mounting Connector NAC3MPB on bottom moving part
- 1 In Line Connector NAC3FCB on a 1,5m. Cable Tail at top

Mini SPIDER *VERSIONS & MODEL NUMBERS*

<i>MOD.</i>	<i>DESCRIPTION</i>
<b><i>MINI SPIDER pantograph for 4 m. hanging height</i></b>	
8120.120 D	<p>Mini SPIDER P.O. 2M B.S.  <i>Mains (Powercon 20A) &amp; DMX (XLR5p) circuits</i>            For hanging heights up to 4 m.            Includes:</p> <ul style="list-style-type: none"> <li>- 2 mt. Extension (net vertical run)</li> <li>- 4 mt. Max. height of support (1,5 m. distance from the floor at bottom limit).</li> <li>- MAX S.W.L. (Max net lifting capacity) = 30Kg.</li> <li>- P.O. special hook with lower centering for either manual or motorized lighting pole operation.</li> <li>- B.S. Spigot at Top and Receiver at Bottom.</li> <li>- 1,5 mt. cable tail on top 3 x 1,5 sqmm. with 1 x 20A POWERCON plug.</li> <li>- 1 x 20A POWERCON socket on lower moving part.</li> <li>- 1 XLR 5 pin panel socket for DMX at BOTTOM</li> <li>- 1 DMX cable of 2x0,22+shield on scissor arms and 1,5 mt. cable tail on top with XLR 5pin in-line plug for DMX at TOP</li> </ul>
<b><i>MINI SPIDER pantograph for 6 m. hanging height</i></b>	
8120.140 D	<p>Mini SPIDER P.O. 4M B.S.  <i>Mains (Powercon 20A) &amp; DMX (XLR5p) circuits</i>            For hanging heights up to 6 m.            Includes:</p> <ul style="list-style-type: none"> <li>- 4 mt. Extension (net vertical run)</li> <li>- 6 mt. Max. height of support (1,5 m. distance from the floor at bottom limit).</li> <li>- MAX S.W.L. (Max net lifting capacity) = 30Kg.</li> <li>- P.O. special hook with lower centering for either manual or motorized lighting pole operation.</li> <li>- B.S. Spigot at Top and Receiver at Bottom.</li> <li>- 1,5 mt. cable tail on top 3 x 1,5 sqmm. with 1 x 20A POWERCON plug.</li> <li>- 1 x 20A POWERCON socket on lower moving part.</li> <li>- 1 XLR 5 pin panel socket for DMX at BOTTOM</li> <li>- 1 DMX cable of 2x0,22+shield on scissor arms and 1,5 mt. cable tail on top with XLR 5pin in-line plug for DMX at TOP</li> </ul>

The DIN Versions model numbers are respectively:

- Mod. **8120.320** for the **2 m.** extension type  
&
- Mod. **8120.340** for the **4 m.** extension type

Mini SPIDER *ACCESSORIES*

<i>MOD.</i>	<i>DESCRIPTION</i>
<b>MANUAL LIGHTING POLES</b>	
DGP-427B-4,0	<b>MANUAL LIGHTING OPERATING POLE</b> <ul style="list-style-type: none"> <li>- Aluminium Sections (Black colour)</li> <li>- Top Hook with ISULATED SPACER</li> <li>- 4 Sections, 3 risers</li> <li>- Min. Length 1,6 m.</li> <li>- Max. Length 4 m.</li> <li>- Dismountable Crank Handle</li> <li>- Closed Length 1,42 m.</li> </ul>
DGP-427B-6,5	<b>MANUAL LIGHTING OPERATING POLE</b> <ul style="list-style-type: none"> <li>- Aluminium Sections (Black colour)</li> <li>- Top Hook with ISULATED SPACER</li> <li>- 4 Sections, 3 risers</li> <li>- Min. Length 2,2 m.</li> <li>- Max. Length 6,5 m.</li> <li>- Dismountable Crank Handle</li> <li>- Closed Length 2 m.</li> </ul>
<b>MOTORIZED BATTERY DRIVE &amp; ACTIVATION POLES FOR MINI SPIDER</b>	
HBDTK	<b>BATTERY DRIVE TOOL KIT for MOTORISED POLE,</b> includes: <ul style="list-style-type: none"> <li>- 1 Hilti TRANSPORT CASE</li> <li>- 1 Hilti BATTERY POWER TOOL including: <ul style="list-style-type: none"> <li>- ADJUSTABLE TORQUE LIMITER</li> <li>- SELECTABLE MAXIMUM SPEED</li> </ul> </li> <li>- 1 BATTERY fitted as STANDARD</li> <li>- 1 SPARE BATTERY</li> <li>- 1 BATTERY CHARGER</li> <li>- 1 BIT with HOOK</li> </ul>
DGP-427B-4,0-MP	<b>OPERATING POLE for MOTORIZED TOOL HBDTK</b> <ul style="list-style-type: none"> <li>- Aluminium Sections (Black colour)</li> <li>- Top Hook with ISULATED SPACER</li> <li>- 4 Sections, 3 risers</li> <li>- Min. Length 1,45 m.</li> <li>- Max. Length 4 m.</li> <li>- Shaped Ring at bottom for fast connection of Battery Powered drive unit</li> <li>- Closed Length 1,45 m.</li> </ul>
DGP-427B-6,5-MP	<b>OPERATING POLE for MOTORIZED TOOL HBDTK</b> <ul style="list-style-type: none"> <li>- Aluminium Sections (Black colour)</li> <li>- Top Hook with ISULATED SPACER</li> <li>- 4 Sections, 3 risers</li> <li>- Min. Length 2,2 m.</li> <li>- Max. Length 6,5 m.</li> <li>- Shaped Ring at bottom for fast connection of Battery Powered drive unit</li> <li>- Closed Length 2 m.</li> </ul>
<b>HANGING ACCESSORIES FOR SPIGOT VERSIONS</b>	
91.200	<b>Solid brass "C" clamp</b> to hang fixtures overhead and for mounting on pipe with diameters up to 52 mm. (2"), with Locking Knob and safety pin (no adapters)
20.100	<b>Safety cable 800 mm. (3 feet) long</b> with 4 mm. diameter steel rope and safety catch.