



# ELECTRIC CHAIN MOTORS ENTERTAINMENT LPML & LPL (D8)





# THE THREE LIGHTWEIGHTS



# Light

The LPML and LPL D8 Series chain motor maximum lifting capacity compares favourably to the self-weight, making it the lightest entertainment chain motor in its class worldwide.

LPML250, weighing only 12 kg, lifts 500 kg. The self-weight of the LPL500 is just 23 kg, offering a lifting capacity of 1000 kg.

The ideal motors for mobile use, the lower self-weight and compact size also has a positive impact on transport costs.

# Compact

LPML and LPL are modular in design with compact construction which is why they are perfectly suited for integration in trusses. LPML250 fits in the 300 mm square truss and LPL500 in the 400 mm square truss. Regardless of its compact size, wearing parts can be replaced in a simple manner, making it the hoist technicians' friend as well.

# **Powerful**

The case hardened and manganese phosphated steel chain provides around 15 % more capacity at an identical nominal diameter when compared to traditional round steel chain.

The larger cross-sectional area

The larger cross-sectional area reduces wear and increases the lifetime of the chain. The load hook with stable, guided hook latch and safety rubber buffer provides maximum safety.

# Weather resistant

A feature of the chain motor is the protection class IP65. It is dust proof and protected against water jets. The motors is perfectly suitable for outside use, even under the most arduous conditions.

On open air events and concert tours, the rigging professional will appreciate the weather resistance and reliability of these electric chain motors.











# **Product features**



#### Design

- Compact and light
- Robust aluminium casing and cover for mobile and outdoor use
- Powerful built-in motor
- Liquid drain



#### **Brake**

- Reliable spring loaded DC-brake
- Safe braking of the load
- Optionally independent second brake on existing shaft (no cover extension required)



#### **Transmission**

- Smooth running
- 3-step drive with helical gearing
- Permanent lubrication
- Self-contained gearbox



#### **Geared limit switch**

- The upper and lower end position of the load hook can be set easily and precisely
- For direct or contactor control
- Optionally 2 additional emergency stop contacts available
- Optionally external limit switch



#### **Polygonal connections**

- All shaft-hub connections are built in a self-centering polygonal design
- Optimal power transmission
- Quick assembly and disassembly



#### Hooks

- Skeleton load and suspension hooks
- Hook safety catch fastened into position when closed
- Dampening system
- Matched to shackle 3.25

# **Product accessories**



#### Load measurement

- Load sensor integrated in suspension
- Simple installation in special eyebolt or hook suspension
- Optionally mechanical protection



#### Path measurement

- Absolute or incremental encoder
- Encoder on chain wheel (no housing extension)
- Optionally encoder on drive shaft (with housing extension)



#### Flight case

- Stable transport unit
- Heavy duty castors (2 with brake)
- Low transport weight
- Stackable



# Controller

- Various control systems
- Group control systems with extension options
- Direct or low voltage control
- Stationary or mobile use



# Further options

- Handles
- 42 V low voltage control
- Safety load locking hook
- Manual & electric trolleys



# Maintenance

- Easy to maintain
- Good accessibility of wearing parts
- Quick and simple replacement
- No special tools required
- Wear plate



# Standard version

D8 motor according to EN14492-2, SQP2:2018, DIN56950, EN17206

Standard voltages:  $3 \times 400 \,\text{V} / 50 \,\text{Hz}$ ,  $3 \times 230 \,\text{V} / 50 \,\text{Hz}$ 

Direct control

1 lifting speed

Housing and cover made of aluminum

Housing and equipping parts black

Profile steel chain manganese phosphated black

Eyebolt or hook suspension

Usable as stationary or climbing hoist

Protection class IP65

Liquid drain for outdoor use

Isolation class F (motor)

DC spring-loaded brake

Slipping clutch not in the flow of forces

Wear plate as additional chain guidance

Load hook with interlocking hook lug, dampening system

# **Accessories and options**

42 V low voltage control with geared limit switch

Other operating and control voltages on request

Safety load locking hook

Geared limit switch with two additional emergency stops

Safety radio remote control

Ergonomic control switch on cable

Second, independent brake

Chain bags for various lifting heights

Push and motorised trolleys

Handles

Load and path measurement

Flight cases (4 × LPML250, 2 × LPL500, 1 × LPL1000)

Controller: Group controls / frequency controls

Power and control cable with plug

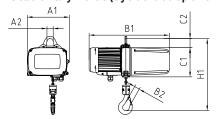
# Performance data

Туре	Load capacity Classification 1-fall (kg) EN/ISO (FEM)		Speed, 50 Hz (m/min)	Speed, 60 Hz (m/min)	Motor power, 50 (kW)	Power consumption fully-loaded, 400 V (A)	Chain diameter (mm)	Sound pressure level in hall 1 m distance (dBA)	Chain safety factor static	
LPML250/1NL.D8	500	A3/M3 (1Bm)	4	4.8	0.38	2.4	4.1 x 11.5	65	5	
LPL500/1NL.D8	1000	A3/M3 (1Bm)	4	4.8	0.76	2.6	5.7 x 16	60	5	
LPI1000/1NL D8	2000	Δ3/M3(1Rm)	4	4.8	15	4.4	8 2x23 7	75	5	

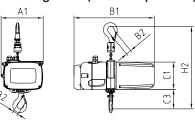
# Weight and dimensions

Туре	Net weight	Equipped 10 m lift	Equipped 18 m lift	Equipped 24 m lift	Chain weight per meter	Hoists per	Weight per	A1	A2	B1	В2	C1	C2	C3	H1	H2
	(kg)	(kg)	(kg)	(kg)	(kg)	punct		(mm)				(mm)		(mm)		
LPML250/1NL.D8	12	18	21	24	0.43	20	482	206	Ø30	368	24	134	39	90	378	429
LPL500/1NL.D8	23	34	40	46	0.84	16	694	272	Ø40	414	24	162	49	127	447	525
LPL1000/1NL.D8	46	67	80	90	1.64	8	690	353	Ø52	514	34	212	58	139	598	680

#### Stationary hoist (eyebolt suspension)



#### Climbing hoist (hook suspension)



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