

# **CONTENTS** PH Cranes SwingLift Cranes Winches Loading Platforms Accessories, Planned Maintenance & Glossary

## HSE safety statistics... point to the benefits of lifting equipment.

The latest statistics from the HSE expose yet again the need to avoid manual handling and give more credence to calls for wider use of vehicle mounted cranes and other load handling devices.

The figures show that across all industries 31% of all fatal, serious and over-three-day injuries during the last reporting year were related to manual handling. This represents 37,000 people whose lives have been directly affected.

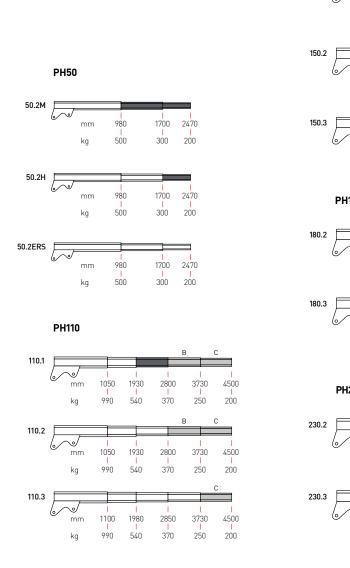
In the motor transport sector the story is even worse, with 38% of all reportable injuries related to manual handling. So while handling related injuries are significant in all industries the road transport sector has even more work to do to improve its safety record. The simplest and most effective way to reduce the risk of this type of injury is to eliminate the need for manual handling by changing the processes involved and providing employees with suitable load handling equipment.

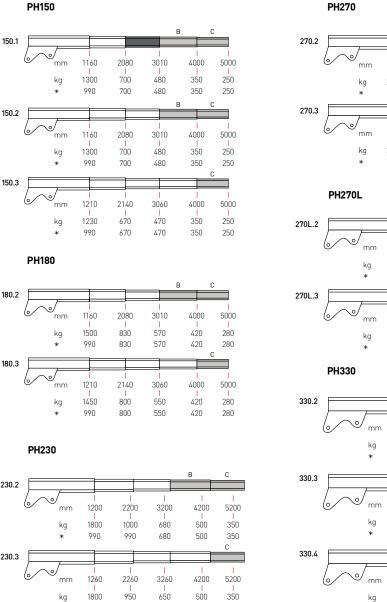
In the road transport industry a further 35% of all reportable injuries were caused by slips, trips and falls from height. This includes falls from delivery and service vehicles. Incidents like this can be avoided by removing the need to approach or climb on a vehicle. Provision of appropriate load handling equipment is one possible solution.

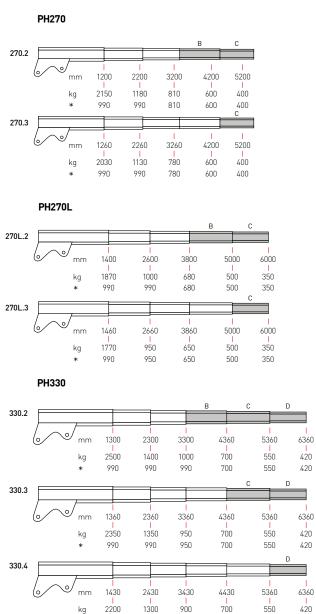
While there may be a temptation to think that injuries are not going to happen there is another way of looking at the HSE figures: an accident or injury caused by manual handling or a slip, trip or fall is much more likely than one caused by fire or electric shock which have historically been taken far more seriously.

Often the simplest way to reduce the risk of an accident and resulting injury is to remove the potential cause. Providing employees with a crane on their vehicles is a good place to start. Manufacturers such as Penny Hydraulics continue to play their part by adding new features that promote safety and make it easier for operators to specify and install their products.

## PH Range



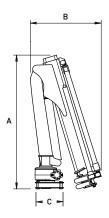




\* "D" version







#### **SPECIFICATIONS**

					Slewing angle	Basic weight	Weight inc. base		Vei	rsions	
Model	A mm	B mm	C mm	kNm	0	kg	kg	D	LLC	LME04	SCU
PH50	1060	510	310	5	330	60-95	-	-	-	-	
PH110	1210	665	315	10	330	105-175	180-250	-	-	-	-
PH150	1320	690	310	14	330	165-205	240-280	•	•	-	-
PH180	1320	690	310	17	330	180-210	285-315	•	•	•	-
PH230	1420	790	310	22	360	225-275	330-380	•	•	•	•
PH270	1420	790	310	25	360	225-275	330-380	•	•	•	•
PH270L	1510	1130	310	25	360	235-290	340-395	•	•	•	•
PH330	1550	820	370	32	360	270-345	405-480	0	•	•	•
PH380	1630	870	370	37	360	310-395	470-555	0	•	•	•
PH400	1830	1280	450	42	360	460-500	-	-	-	•	-
PH400L	1790	1450	450	42	360	490-540	-	-	-	•	-
PH500	1830	1280	450	48	360	470-510	-	-	-	•	-
PH500L	1790	1450	450	48	360	500-550	-	-	-	•	-
PH510	1830	1380	545	48	330	465-500	-	-	-	•	-
PH510L	1790	1510	545	48	330	485-565	-	-	-	•	-

Versions: D = de-rated / LLC = load limiting cell / LM = load limiting device / SC = load limiting device with stability control
• = standard / o = optional / - = not applicable

## PH cranes.

## Safety for the future.

All PH cranes now incorporate full hydraulic control for even the lightest units. Hydraulic control prevents the need to access the bed of the vehicle and helps ensure smooth and precise load handling with reduced risk of the sudden and unexpected movements that can cause accidents to users and bystanders. These features are now widely available on cranes with maximum working loads from just 200kg upwards. The use of proportional controls, another recent innovation on smaller cranes, helps to ensure precise and controlled movements which promotes even greater safety.

Remote controls are also becoming more popular. These are especially useful from a safety point of view because they reduce the need for operators to stand in close proximity of the load thereby increasing operator safety. Two types of control are generally available. The first is attached to the crane by a length of cable known as a wander lead while the second is a wireless device that provides the user with complete autonomy, enabling them to stand in any position with the best all-round view of the working area.

Another trend in crane design is to remove weight without compromising on performance and safety. Penny Hydraulics uses its in-house advanced CAD and finite element analysis tools to re-engineer its range to reduce weight through optimised design and use of alternative materials which replace some steel components with lighter alloys. Operators can now install one of these devices with reduced impact on the overall vehicle weight to leave more carrying capacity for improved operational flexibility and productivity. Although this helps with all types of vehicle it is especially useful for those in the 3.5t and 7.5t classes where remaining within the overall weight and carrying capacity limits are always of concern to operators.

PH cranes are manufactured from the latest high quality steels, including Domex and Weldox. This means that the crane structures are high strength and durable yet lightweight, helping to reduce emissions, maximise fuel economy and maximise payload.







3 function proportional control

A small, lightweight, compact crane with a wide range of variations to suit most applications including pick-ups, vans, ATVs and trailers.

#### **FEATURES**

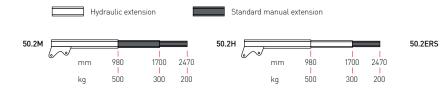
- Manual version with pump up boom, pump operated slewing & boom extension
- Electro-hydraulic version with hydraulic boom lift, extension & slew powered by simple connection to a battery source
- Easy to assemble & demount
- Simple to operate

- Counter flange mounting plate
- Quick fastening kit allows for fast & easy deployment and removal of the crane. Also allows one crane to be mounted to multiple vehicles
- Manual stabiliser leg kit
- Backward attachment kit for van applications to help centre the load for ease of loading

- Fitting kit
- Stabiliser/outrigger pads
- Stabiliser leg extensions
- Marinised paint finish







CRANE WEIGHTS	kg (without winch)	kg (with winch)
PH50.2M PLH	74	85
PH50.2H PLH	83	94
PH50.2H ELH	81	92
PH50.2M ERH	78	89
PH50.2H ERH	85	96
PH50.2 ERS	91	-

## TECHNICAL DATA

mm

kg

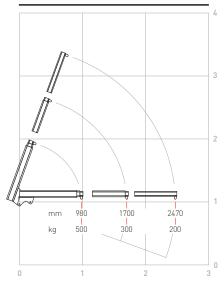
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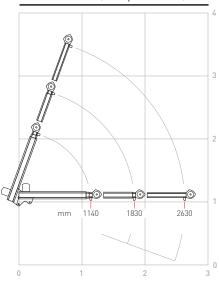
1 1 300 200

Lifting capacity	5kNm	
Max. lifting height from crane base	3400mm	
Max. working slope	4°	
Max. working pressure	170bar	
Electro-hydraulic power unit supply voltage	12V/24V	
Max. absorption electro-hydraulic power unit	100A/50A	
Hydraulic oil tank capacity	1.6l	
Max. absorption electrical winch	30A	
ACCESSORIES WEIGHTS	kg	
Stabiliser kit	20	
Counter flange	6	
Quick fitting kit	20	
Back load attachment kit	1.7	





## LOAD CHART PH50 (with optional winch)









ECI: Electronic Capacity Indicator

An extremely compact crane with a very low self-weight, from only 105kg. This robust little crane only stands 1.2 metres tall but has a maximum outreach of up to 4.5 metres.

#### **FEATURES**

- Standard outreach from 2.80 to 3.73m
- ECI Electronic Capacity Indicator
- 330° slewing rotation
- 3 function valve bank (4th function for optional winch available on request)
- Motor pump kit with 5 lt. oil tank for electro-hydraulic versions 12/24V (along with battery connection cables)

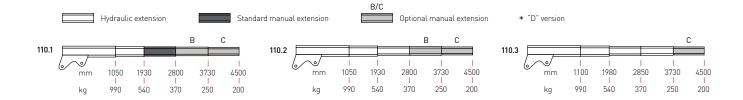
- 15 lt. oil tank for H (PTO - Power Take Off) version
- Fitting kit inc. tie bolts set, nuts
   & lock nuts, spare grease cartridge
   for slewing worm gear

- Manual extension to 4.5m
- Quick fastening kit with mechanical stabiliser
- Crane base with hydraulic or mechanical stabilisers (fixed or tilting)
- Slew limit kit
- Boom in transit warning kit
- Micro-switch kit to confirm leg stowage

- 3 function proportional remote control (by cable or radio)
- 300kg electric winch (for 1 & 2 extension versions only)
- Stabiliser/outrigger pads
- Stabiliser leg extensions
- Marinised paint finish
- Flashing light kit for remote control

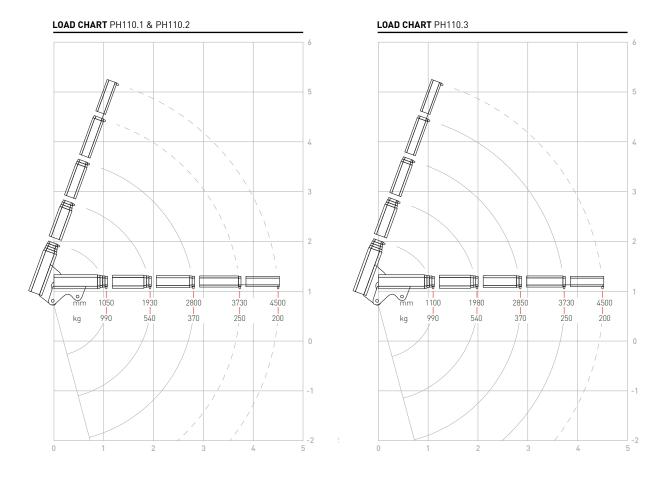


## PH110 Weights & measurements All dimensions in millimetres; all weights to the nearest kilogram; E & 0E



CRANE WEIGHTS	kg
PH110.1	105-125
PH110.2	125-145
PH110.3	155-175
Base weight with quick fitting kit & 1 mechanical stabiliser	40
Base weight with 2 extendable stabilisers	64-88

TECHNICAL DATA	PH110.1	PH110.2	PH110.3
Lifting capacity	10kNm	10kNm	10kNm
Max. lifting height from crane base	3400mm	3400mm	4400mm
Max. working slope	5°	5°	5°
Max. working pressure	200bar	200bar	200bar
Suggested oil flow	4-6l per min.	4-6l per min.	4-6l per min.
Electro-hydraulic power unit supply voltage	12V/24V	12V/24V	12V/24V
Max. absorption electro-hydraulic power unit (12V)	160A	160A	160A
Max. absorption electro-hydraulic power unit (24V)	75A	75A	75A
Hydraulic oil tank capacity (H version)	15l	15l	15l
Hydraulic oil tank capacity (electric version)	5l	51	5l





PH150 in stowed position



4 function proportional control

A lightweight crane from 165kg that can be supplied with ECI, optional LLC or LME04 to comply with current legislation.

#### **FEATURES**

- Standard outreach from 3 to 4m
- ECI Electronic Capacity Indicator
- 330° slewing rotation
- 4 function valve bank
- Motor pump kit with 11 lt. oil tank for electro-hydraulic versions 12/24V (along with battery connection cables)
- 15 lt. oil tank for H (PTO - Power Take Off) version
- Fitting kit inc. tie bolts set, nuts
   & lock nuts, spare grease cartridge
   for slewing worm gear

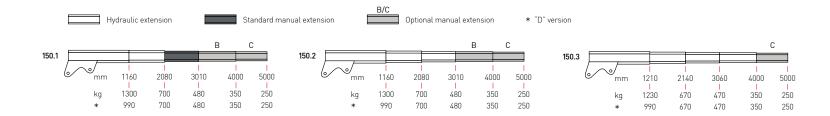
- Manual extension to 5m
- Crane base with 1 hydraulic and 1 mechanical stabiliser (fixed or tilting)
- Crane base with 2 hydraulic stabilisers (fixed or tilting)
- "D" rated or LLC control system
- Slew limit kit
- Boom in transit warning kit

- Micro-switch kit to confirm leg stowage
- 3 4 function proportional remote control (by cable or radio)
- 500kg hydraulic winch
- Stabiliser/outrigger pads
- Stabiliser leg extensions
- Marinised paint finish
- Flashing light kit for remote control



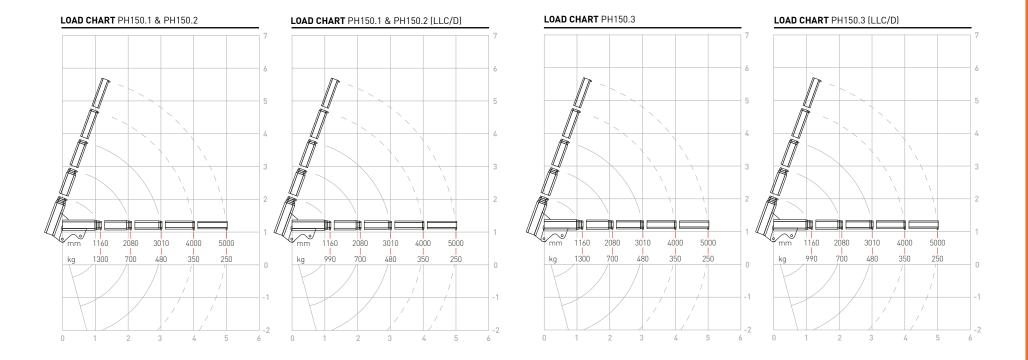


## PH150 Weights & measurements All dimensions in millimetres; all weights to the nearest kilogram; E & OE



CRANE WEIGHTS	kg
PH150.1	165-185
PH150.2	175-195
PH150.3	185-205
Base with extendable stabilisers	64-88
Beam with 2 extendable stabilisers	58-62

TECHNICAL DATA	PH150.1	PH150.2	PH150.3
Lifting capacity	14kNm	14kNm	14kNm
Max. lifting height from crane base	4000mm	4000mm	5000mm
Max. working slope	50	5°	5°
Max. working pressure	210bar	210bar	210bar
Suggested oil flow	6-8l per min.	6-8l per min.	6-8l per min.
Electro-hydraulic power unit supply voltage	12V/24V	12V/24V	12V/24V
Max. absorption electro-hydraulic power unit (12V)	170A	170A	170A
Max. absorption electro-hydraulic power unit (24V)	85A	85A	85A
Hydraulic oil tank capacity (H version)	15l	15l	15l
Hydraulic oil tank capacity (electric version)	111	111	111









4 function proportional control

The PH180 weighs in at only 180kg and can be supplied with ECI, optional LLC or LME04 and SCU to suit the user's requirements.

### **FEATURES**

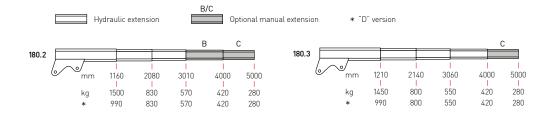
- Standard outreach from 3 to 4 m
- 330° slewing rotation
- ECI Electronic Capacity Indicator
- 4 function valve bank
- Motor pump kit with 11 lt. oil tank for electro-hydraulic versions 12/24V (along with battery connection cables)
- 15 lt. oil tank for H (PTO - Power Take Off) version
- Fitting kit inc. tie bolts set, nuts & lock nuts, spare grease cartridge for slewing worm gear

- Crane base with 1 hydraulic and 1 mechanical stabiliser (fixed or tilting)
- Crane base with 2 hydraulic stabilisers (fixed or tilting)
- "D" rated, LLC or LME04 & SCU monitoring devices
- Slew limit kit
- Boom in transit warning kit

- Micro-switch kit to confirm leg stowage
- 3 4 function proportional remote control (by cable or radio)
- 500kg hydraulic winch
- Stabiliser/outrigger pads
- Stabiliser leg extensions
- Marinised paint finish
- Flashing light kit for remote control

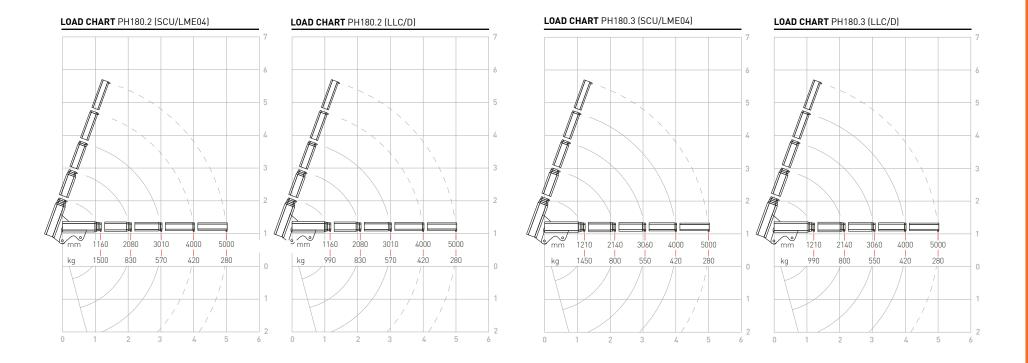


## Weights & measurements All dimensions in millimetres; all weights to the nearest kilogram; E & OE



CRANE WEIGHTS	kg
PH180.2	180-200
PH180.3	190-210
Base with extendable stabilisers	102-109
Beam with 2 extendable stabilisers	69-83

TECHNICAL DATA	PH180.2	PH180.3
Lifting capacity	17kNm	17kNm
Max. lifting height from crane base	4000mm	5000mm
Max. working slope	50	5°
Max. working pressure	210bar	210bar
Suggested oil flow	6-8l per min.	6-8l per min.
Electro-hydraulic power unit supply voltage	12V/24V	12V/24V
Max. absorption electro-hydraulic power unit (12V)	170A	170A
Max. absorption electro-hydraulic power unit (24V)	85A	85A
Hydraulic oil tank capacity (H version)	15l	15l
Hydraulic oil tank capacity (electric version)	111	111











The PH230 is the lightweight crane that packs a heavyweight punch, with a self-weight from only 225kg and optional boom outreach of 5.2 metres.

### **FEATURES**

- Standard outreach from 3.20 to 4.20m
- 360° slewing rotation
- ECI Electronic Capacity Indicator
- 4 function valve bank
- Motor pump kit with 11 lt. oil tank for electro-hydraulic versions 12/24V (along with battery connection cables)

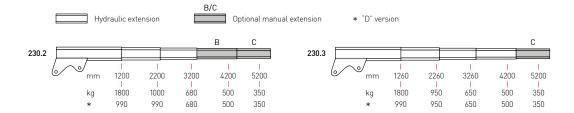
- 15 lt. oil tank for H (PTO - Power Take Off) version
- Fitting kit inc. tie bolts set, nuts
   & lock nuts, spare grease cartridge
   for slewing worm gear

- Crane base with 1 hydraulic and 1 mechanical stabiliser (fixed or tilting)
- Crane base with 2 hydraulic stabilisers (fixed or tilting)
- LLC, LME04 or LME04 & SCU monitoring devices
- Slew limit kit
- Boom in transit warning kit
- Stabiliser/outrigger pads

- Micro-switch kit to confirm leg stowage
- 3 4 function proportional remote control (by cable or radio)
- 500kg hydraulic winch (for H versions only)
- Stabiliser leg extensions
- Marinised paint finish
- Flashing light kit for remote control

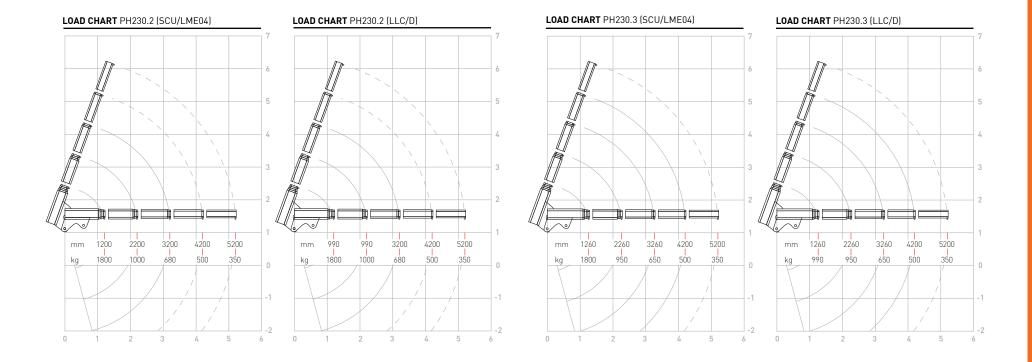


## PH230 Weights & measurements All dimensions in millimetres; all weights to the nearest kilogram; E & 0E



CRANE WEIGHTS	kg
PH230.2	225-245
PH230.3	255-275
Base with extendable stabilisers	102-109
Beam with 2 extendable stabilisers	69-83

TECHNICAL DATA	PH230.2	PH230.3
Lifting capacity	22kNm	22kNm
Max. lifting height from crane base	4300mm	5200mm
Max. working slope	5°	5°
Max. working pressure	200bar	200bar
Suggested oil flow	8-10l per min.	8-10l per min.
Electro-hydraulic power unit supply voltage	12V/24V	12V/24V
Max. absorption electro-hydraulic power unit (12V)	230A	230A
Max. absorption electro-hydraulic power unit (24V)	120A	120A
Hydraulic oil tank capacity (H version)	15l	15l
Hydraulic oil tank capacity (electric version)	111	111
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## PH270/270L



PH270 in stowed position

PH270 has a remarkably low self-weight from only 225kg and fully rated can lift in excess of 2000kg. The 270L.3 has a boom outreach of 6 metres making this a top choice for 3.5t+ vehicles.

#### **FEATURES**

- Standard outreach from 3.2 to 5m
- ECI Electronic Capacity Indicator
- 360° slewing rotation
- 4 function valve bank
- Motor pump kit with 11 lt. oil tank for electro-hydraulic versions 12/24V (along with battery connection cables)
- 15 lt. oil tank for H (PTO - Power Take Off) version
- Fitting kit inc. tie bolts set, nuts
   & lock nuts, spare grease cartridge
   for slewing worm gear

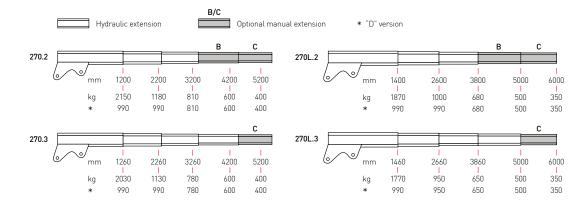
- Crane base with 2 hydraulic stabilisers (fixed or tilting)
- Additional beam with hydraulic or mechanical stabilisers
- "D" rated, LLC, LME04 or LME04 & SCU monitoring devices
- · Slew limit kit
- . Boom in transit warning kit
- Micro-switch kit to confirm leg stowage

- 3 4 function proportional remote control (by cable or radio)
- 700kg hydraulic winch (for H versions only)
- Stabiliser/outrigger pads
- Stabiliser leg extensions
- Marinised paint finish
- Flashing light kit for remote control



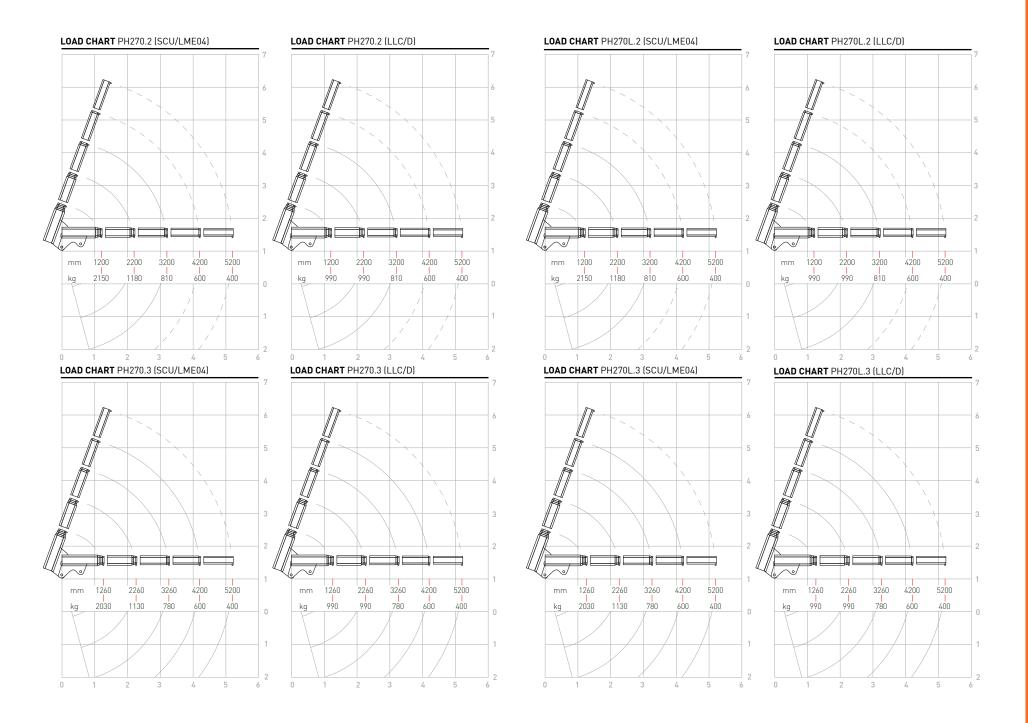


## PH270/270L Weights & measurements All dimensions in millimetres; all weights to the nearest kilogram; E & 0E



CRANE WEIGHTS	kg
PH270.2	225-245
PH270.3	255-275
PH270L.2	235-255
PH270L.3	270-290
Base with extendable stabilisers	102-109
Beam with 2 extendable stabilisers	69-83

TECHNICAL DATA	PH270.2	PH270.3	PH270L.2	PH270L.3
Lifting capacity	22kNm	22kNm	22kNm	22kNm
Max. lifting height from crane base	4300mm	5200mm	4800mm	5900mm
Max. working slope	5°	5°	5°	5°
Max. working pressure	220bar	220bar	220bar	220bar
Suggested oil flow	10-12l per min.	10-12l per min.	10-12l per min.	10-12l per min.
Electro-hydraulic power unit supply voltage	12V/24V	12V/24V	12V/24V	12V/24V
Max. absorption electro-hydraulic power unit (12V)	240A	240A	240A	240A
Max. absorption electro-hydraulic power unit (24V)	150A	150A	150A	150A
Hydraulic oil tank capacity (H version)	15l	15l	15l	15l
Hydraulic oil tank capacity (electric version)	111	111	111	111











Stabiliser leg extension

Penny Hydraulics
VEHICLE MOUNTED EQUIPMENT

The PH330 weighs from just 270kg. Rated fully the crane can lift 2500kg and with an optional maximum outreach of over 6.3 metres this is a serious contender.

## **FEATURES**

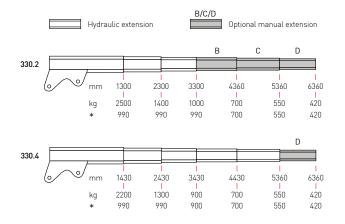
- Standard outreach from 3.3 to 5.36m
- ECI Electronic Capacity Indicator
- 360° slewing rotation
- 4 function valve bank
- Motor pump kit with 11 lt. oil tank for electro-hydraulic versions 12/24V (along with battery connection cables)
- 15 lt. oil tank for H (PTO - Power Take Off) version
- Fitting kit inc. tie bolts set, nuts
   & lock nuts, spare grease cartridge
   for slewing worm gear

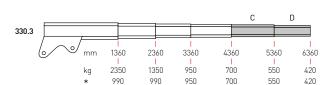
- Crane base with 2 hydraulic stabilisers (fixed or tilting)
- Additional beam with hydraulic stabilisers
- LLC, LME04 or LME04 & SCU monitoring devices
- Slew limit kit
- Boom in transit warning kit
- Micro-switch kit to confirm leg stowage

- 3 4 function proportional remote control (by cable or radio)
- 700kg hydraulic winch (for H versions only)
- Stabiliser/outrigger pads
- Stabiliser leg extensions
- Marinised paint finish
- Flashing light kit for remote control



## PH330 Weights & measurements All dimensions in millimetres; all weights to the nearest kilogram; E & 0E

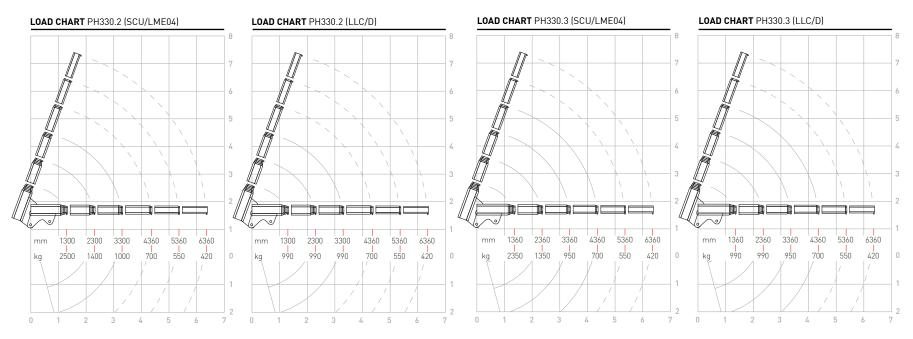


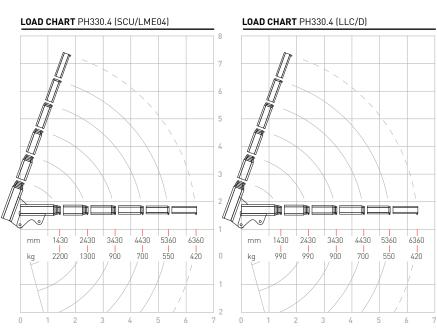


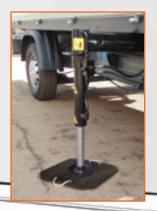
\* "D" version

CRANE WEIGHTS	kg		
PH330.2	270-290		
PH330.3	295-315		
PH330.4	325-345		
Base with extendable stabilisers	130-140		

TECHNICAL DATA	PH330.2	PH330.3	PH330.4
Lifting capacity	32kNm	32kNm	32kNm
Max. lifting height from crane base	4500mm	5500mm	6400mm
Max. working slope	5°	5°	5°
Max. working pressure	220bar	220bar	220bar
Suggested oil flow	10-12l per min.	10-12l per min.	10-12l per min.
Electro-hydraulic power unit supply voltage	12V/24V	12V/24V	12V/24V
Max. absorption electro-hydraulic power unit (12V)	260A	260A	260A
Max. absorption electro-hydraulic power unit (24V)	160A	160A	160A
Hydraulic oil tank capacity (H version)	15l	15l	15l
Hydraulic oil tank capacity (electric version)	111	111	111









Stabiliser/outrigger pad

Barrel grat

The PH380 is the largest crane available with 12/24v battery power. This crane has a maximum rated capacity of 2650kg and an optional outreach in excess of 6.7 metres. With a low self-weight from only 310kg, this crane is ideally suited to 5t-7.5t+ vehicles.

#### **FEATURES**

- Standard outreach from 3.65 to 5.79m
- ECI Electronic Capacity Indicator
- 360° slewing rotation
- 4 function valve bank
- Motor pump kit with 11 lt. oil tank for electro-hydraulic versions 12/24V (along with battery connection cables)
- 15 lt. oil tank for H (PTO - Power Take Off) version
- Fitting kit inc. tie bolts set, nuts
   & lock nuts, spare grease cartridge
   for slewing worm gear

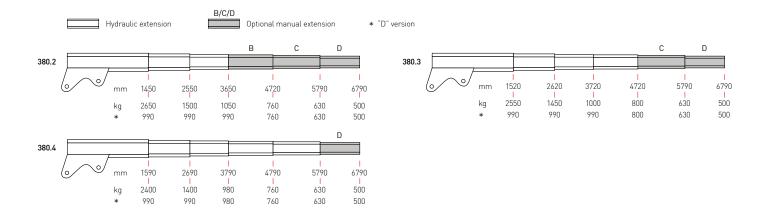
- Crane base with 2 hydraulic stabilisers (fixed or tilting)
- Additional beam with hydraulic stabilisers
- LLC, LME04 or LME04 & SCU monitoring devices
- Slew limit kit
- Boom in transit warning kit
- Micro-switch kit to confirm leg stowage

- 3 4 function proportional remote control (by cable or radio)
- 990kg hydraulic winch (for H versions only)
- Stabiliser/outrigger pads
- Stabiliser leg extensions
- · Marinised paint finish
- Flashing light kit for remote control



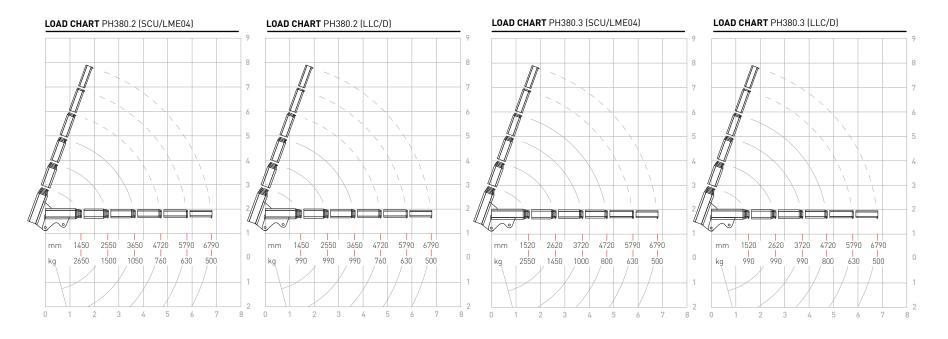


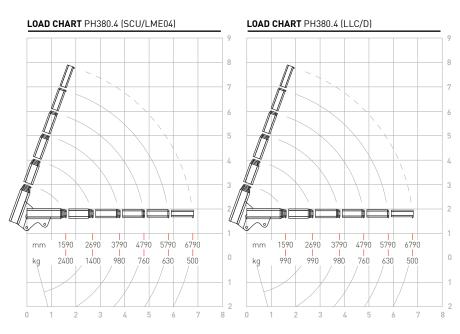
## PH380 Weights & measurements All dimensions in millimetres; all weights to the nearest kilogram; E & 0E



CRANE WEIGHTS	kg
PH380.2	310-330
PH380.3	345-365
PH380.4	375-395
Base with extendable stabilisers	158-160

TECHNICAL DATA	PH380.2	PH380.3	PH380.4
Lifting capacity	37kNm	37kNm	37kNm
Max. lifting height from crane base	5000mm	6000mm	7000mm
Max. working slope	5°	5°	5°
Max. working pressure	220bar	220bar	220bar
Suggested oil flow	12-15l per min.	12-15l per min.	12-15l per min.
Electro-hydraulic power unit supply voltage	12V/24V	12V/24V	12V/24V
Max. absorption electro-hydraulic power unit (12V)	260A	260A	260A
Max. absorption electro-hydraulic power unit (24V)	160A	160A	160A
Hydraulic oil tank capacity (H version)	15l	15l	15l
Hydraulic oil tank capacity (electric version)	111	111	111









The PH range is topped by the PH510. This PTO driven crane has a self-weight from 465kg. It has a maximum rated capacity of 3300kg and optional boom outreach of over 6.8 metres. At 6.8 metres the PH510 is still capable of lifting 700kg.

#### **FEATURES**

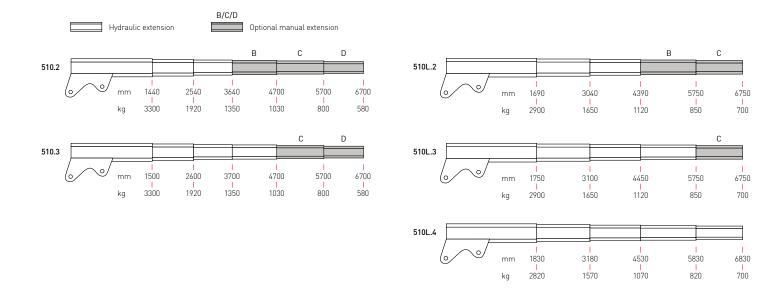
- Standard outreach from 3.64 to 6.83m
- LME04 Load Limiting Device
- 330° ball bearing slewing rotation
- 4 function valve bank (one free)
- PTO (Power Take Off)
- 30 lt. oil tank
- Fitting kit inc. tie bolts set, nuts & lock nuts, spare grease cartridge for slewing worm gear

- Supplementary hydraulic stabiliser legs with manual or hydraulic extension (3300mm - 4400mm spread)
- LME04 Load Limiting Device & SCU Stability Control Unit
- Slew limit kit
- Boom in transit warning kit
- Micro-switch kit to confirm leg stowage

- 3 4 function proportional remote control (by cable or radio)
- 990kg hydraulic winch
- Stabiliser/outrigger pads
- Hydraulic leg extensions
- Marinised paint finish

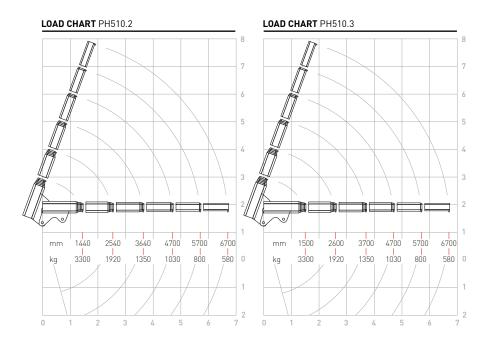


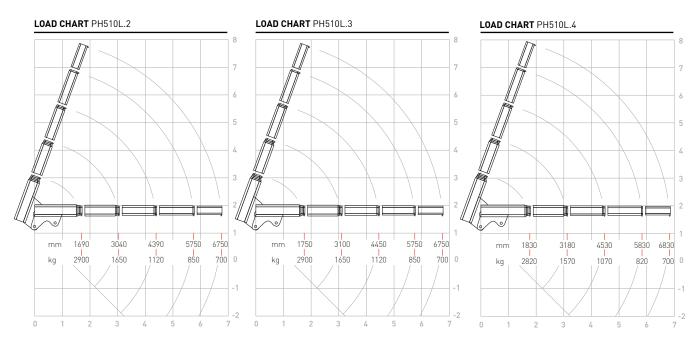
# PH510/510L Weights & measurements All dimensions in millimetres; all weights to the nearest kilogram; E & 0E



CRANE WEIGHTS	kg
PH510.2	465
PH510.3	500
PH510L.2	485
PH510L.3	530
PH510L.4	565
3300mm base weight with extendable stabilisers	240-270
4400mm base weight with extendable stabilisers	305-345

TECHNICAL DATA	PH510.2	PH510.3	PH510L.2	PH510L.3	PH510L.4
Lifting capacity	48kNm	48kNm	48kNm	48kNm	48kNm
Max. lifting height from crane base	5000mm	6000mm	5700mm	7000mm	8.00m
Max. working slope	5°	5°	5°	5°	5°
Max. working pressure	230bar	230bar	230bar	230bar	230bar
Suggested oil flow	15-18l per min.				
Hydraulic oil tank capacity	30l	30l	30l	301	301





# PH400/PH400L/MARINE



- 3 4 function proportional remote control (by cable or radio)
- 990kg high speed winch with 30m rope
- Flashing light kit for remote control





The PH400 and PH500 cranes are designed for heavy duty industrial use and for installation on off-road vehicles, pay welders, tracked vehicles and boats. Their unique structural features, including high slewing torque and double rack and pinion rotation system, mean they are able to withstand stronger winds and steeper inclines than standard cranes. They are often incorporated in complex machinery and used without a hook as hydraulic booms in order to meet the specific needs of different industries such as mining, forestry and marine applications. A special corrosion-proof treatment is carried out on the marine version. The PH400 has a 4tm\* capacity and an outreach from 3.64 to 5.75 metres.

#### **FEATURES**

- Standard outreach from 3.64 to 5.75m
- ECI Electronic Capacity Indicator
- LME04 Load Limiting Device
- 360° double rack & pinion slewing
- Maximum working slope 15°
- 4 function valve bank (one free)
- Slewing torque 16 kNm
- PTO (Power Take Off)

- 30 lt. oil tank
- Counter flange
- Fitting kit inc. tie bolts set, nuts & lock nuts, spare grease cartridge



#### MARINE FEATURES

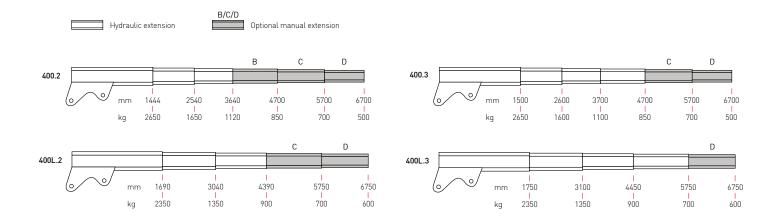
#### In addition to standard PH400

- Sand-blasting of structural elements
- Painting: Organic epoxy galvanizing primer 20-30µ
- Bi-component epoxy priming coat  $50\text{-}60\mu$
- $Bi-component\ polyure than e$  final painting 50-60  $\mu$
- NITREG treatment oil link pins
- Stainless pipes

- Stainless JIC fittings
- Rods treatment with guarantee of 250 hours in saline fog
- Valves protected by anti-corrosion paint
- Offshore JIC flexible hoses
   & stainless hose terminals
- Accessories protected by corrosion proofing treatment

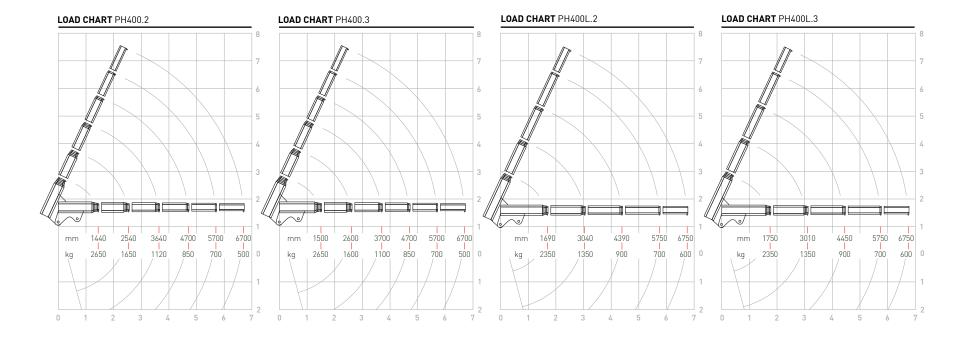
<sup>\*</sup> for static applications or special applications where stability control is not required

# PH400/PH400L/MARINE Weights & measurements All dimensions in millimetres; all weights to the nearest kilogram; E & OE



CRANE WEIGHTS	kg
PH400.2	460
PH400.3	500
PH400L.2	490
PH400L.3	540

PH400.2	PH400.3	PH400L.2	PH400L.3
42kNm	42kNm	42kNm	42kNm
4850mm	5850mm	5600mm	6850mm
15°	15°	15°	15°
230bar	230bar	230bar	230bar
15-18l per min.	15-18l per min.	15-18l per min.	15-18l per min.
30l	30l	301	30l
	42kNm 4850mm 15° 230bar 15-18l per min.	42kNm 42kNm 4850mm 5850mm 15° 15° 230bar 230bar 15-18l per min. 15-18l per min.	42kNm       42kNm       42kNm         4850mm       5850mm       5600mm         15°       15°       15°         230bar       230bar       230bar         15-18l per min.       15-18l per min.       15-18l per min.



### PH500/PH500L/MARINE

This crane is designed for special or static applications where stability control (SCU) is not required. The PH500 offers a 5tm capacity and an outreach from 3.64 to 5.75 metres.

#### **FEATURES**

- Standard outreach from 3.64 to 5.75m
- ECI Electronic Capacity Indicator
- LME04 Load Limiting Device
- 360° double rack & pinion slewing
- Maximum working slope 15°
- 4 function valve bank (one free)
- Slewing torque 16 kNm
- PT0 (Power Take Off)

- 30 lt. oil tank
- Counter flange
- Fitting kit inc. tie bolts set, nuts
   & lock nuts, spare grease cartridge
   for slewing worm gear



#### MARINE FEATURES

#### In addition to standard PH500

- Sand-blasting of structural elements
- Painting: Organic epoxy galvanizing primer 20-30µ
   Bi-component epoxy priming coat 50-60µ
- Bi-component polyurethane final painting 50-60µ
- NITREG treatment oil link pins
- Stainless pipes

- Stainless JIC fittings
- Rods treatment with guarantee of 250 hours in saline fog
- Valves protected by anti-corrosion paint
- Offshore JIC flexible hoses
   & stainless hose terminals
- Accessories protected by corrosion proofing treatment

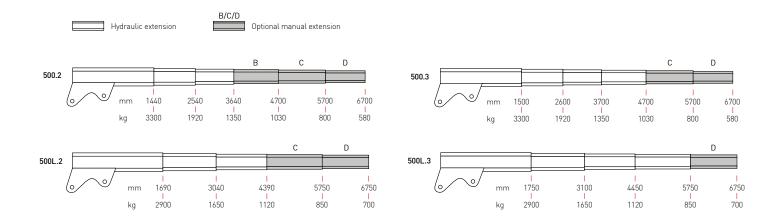


Pay welder

- Proportional radio remote control
- Proportional cable remote control
- 990kg high speed winch with 30m rope
- Flashing light kit for remote control

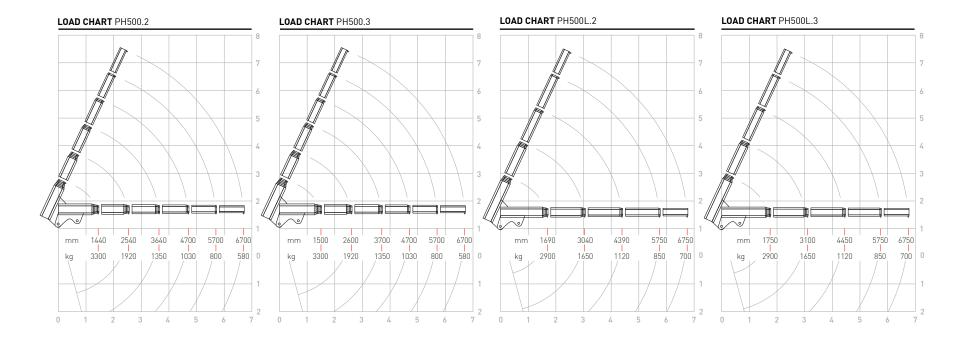


# PH500/PH500L/MARINE Weights & measurements All dimensions in millimetres; all weights to the nearest kilogram; E & 0E



CRANE WEIGHTS	kg
PH500.2	470
PH500.3	510
PH500L.2	500
PH500L.3	550

TECHNICAL DATA	PH500.2	PH500.3	PH500L.2	PH500L.3
Lifting capacity	48kNm	48kNm	48kNm	48kNm
Max. lifting height from crane base	4850mm	5850mm	5600mm	6850mm
Max. working slope	15°	15°	15°	15°
Max. working pressure	230bar	230bar	230bar	230bar
Suggested oil flow	15-18l per min.	15-18l per min.	15-18l per min.	15-18l per min.
Hydraulic oil tank capacity	30l	301	301	301



### Trailer Cranes







ML500 special

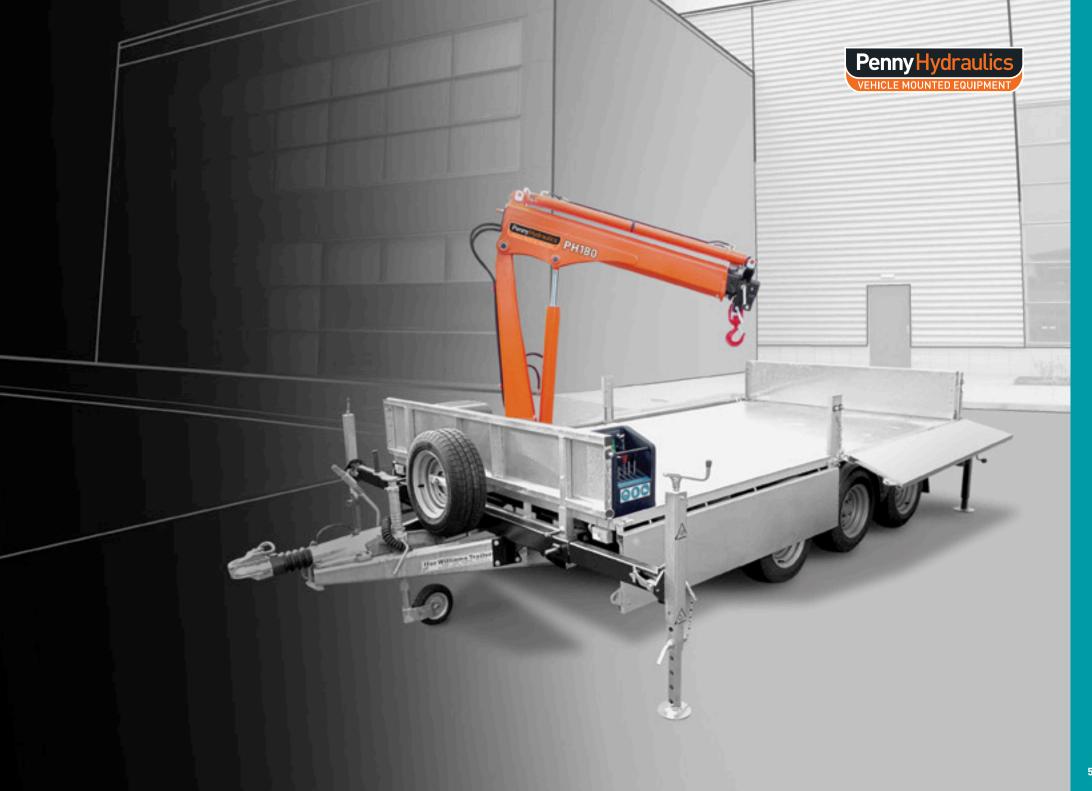
Penny Hydraulics manufactures a wide range of cranes suitable for trailer mounting. Whether it's a special crane for military applications, a bespoke hydraulic crane tailored to your specific requirements or the standard range of electric SwingLifts and hydraulic PH cranes from the product range, we have the right crane for the job.

When specifying a trailer mounted crane, please note that stability calculations will need to be carried out prior to order and installation. A suitable sub-frame will be required for all cranes and multiple support legs may be required. The trailer should be of suitable structure with an adequate capacity for the load and crane installation, taking into account that the crane will be tested at 1.25 x its Maximum Working Load. Care should be given to the number of axles and the position of the crane installation which may alter the nose weight of the trailer.



PH Crane plant trailer













Kawasaki Mule ML Special

Polaris Quad ML150

Penny Hydraulics design and manufacture a diverse range of cranes to suit both military spec and domestic all terrain vehicles, including Kawasaki Mules, Unimogs, Land Rovers and Polaris Quad Bikes. Crane applications vary from the PH510L with 5.1 t/m capacity and just under 7m boom reach for loading heavy plant, machinery and even tank batteries, to the SwingLift Miniloader 150, fitted to all-terrain quads to aid the repair and service of firing range target motors and gearboxes.

Domestic applications include cranes and winches for farming and forestry activities in remote areas where standard vehicles fitted with lifting and winching equipment would prove inadequate.

Hydraulic cranes can be supplied with fixed proportional controls, wander lead or radio remote control.

Electric cranes can be simply powered via the vehicle's own 12 or 24 volt battery and controlled via a wander lead remote control or optional radio remote.

All Penny Hydraulics cranes can be painted or powder coated to individual customer specifications where required.

### SwingLift KJ250/1







The KJ250/1 is a 250kg capacity knuckle joint crane ideal for handling general items of plant anywhere within a two metre arc.

#### **FEATURES**

- Lifts up to 250kg
- Ideal for general items of plant such as whacker plates & generators
- 1 metre boom plus 2 pivot points means operator can carry out lifts within a 2 metre arc
- Overload device will not lift more than MWL
- · Low crane weight from 22kg

- Compact design maximising vehicle floor space
- Fully demountable can be deployed on other vehicles or removed altogether, therefore maintaining maximum fleet flexibility
- Can be re-fitted to new or replacement vehicles
- Easy to operate with wander lead control

- 12v or 24v operation from vehicle battery
- Radio remote control
- Cranked hinge available allowing even greater flexibility
- · Additional pillar height
- Extra rope length 9m/30'
- Battery protection
- · Lifting accessory kit

- Corner bracket for mounting direct to headboard
- Down-rated versions available
- Stabiliser/outrigger pads
- Manual stabiliser legs
- · Powder coated paint finish













Side & rear door applications





The KJ250/1.5 is a one-and-a-half metre knuckle joint crane offering a complete handling solution, combining simplicity, reliability and proven durability. It provides a safe, efficient and cost-effective means of handling loads for all types of vehicle.

#### **FEATURES**

- Lifts up to 250kg
- Ideal for general items of plant including whacker plates
   & compressors
- 1.5 metre boom plus 2 pivot points means operator can carry out lifts within a 3 metre arc
- Overload device will not lift more than MWL
- Low crane weight of approx. 47kg

- Compact design maximising vehicle floor space
- Fully demountable can be deployed on other vehicles or removed altogether, therefore maintaining maximum fleet flexibility
- Can be re-fitted to new or replacement vehicles
- Easy to operate wander lead remote control

- 12v or 24v operation from vehicle battery
- Radio remote control
- Corner bracket for mounting direct to headboard
- Cranked hinge available allowing even greater flexibility
- Additional pillar height
- Extra rope length 9m/30'

- Battery protection
- Lifting accessory kit
- Down-rated versions available
- Manual stabiliser legs
- Stabiliser/outrigger pads
- Powder coated paint finish













Kerb grab

Two pivot points

Four metre arc

The KJ250/2GHT can be fitted directly to the vehicle headboard to save floor space and is ideal for tipper vehicles. Its two metre boom and two pivot points mean the operator can carry out lifts within a four metre arc.

### **FEATURES**

- Built in overload protection
- Compact design
- Low crane weight of approximately 78kg maximises payload
- Can be re-fitted to new replacement vehicles
- Easy to operate wander lead remote control

 Versatile - can be used to lay kerb stones as well as lift general plant such as whacker plates
 & compressors

- A range of kerb
   & bollard handlers available
- Down-rated versions available
- 12v or 24v operation from vehicle battery
- Radio remote control
- Corner bracket for mounting direct to headboard
- Pillar mounting

- Additional pillar height
- Extra rope length 9m/30'
- Manual stabiliser legs
- Stabiliser/outrigger pads
- Battery protection
- Lifting accessory kit
- Powder coated paint finish



### SwingLift KJ250/2RPT







Use from the side or rear of the vehicle

The KJ250/2RPT is a two metre knuckle-joint crane offering even greater flexibility, reliability and durability. It offers an efficient and cost-effective means of handling loads for pickups, dropsides and larger trucks and can be operated from the ground, eliminating the risks associated with climbing up onto vehicles. 350° slew means the RPT can be fitted at the rear of the vehicle body.

#### **FEATURES**

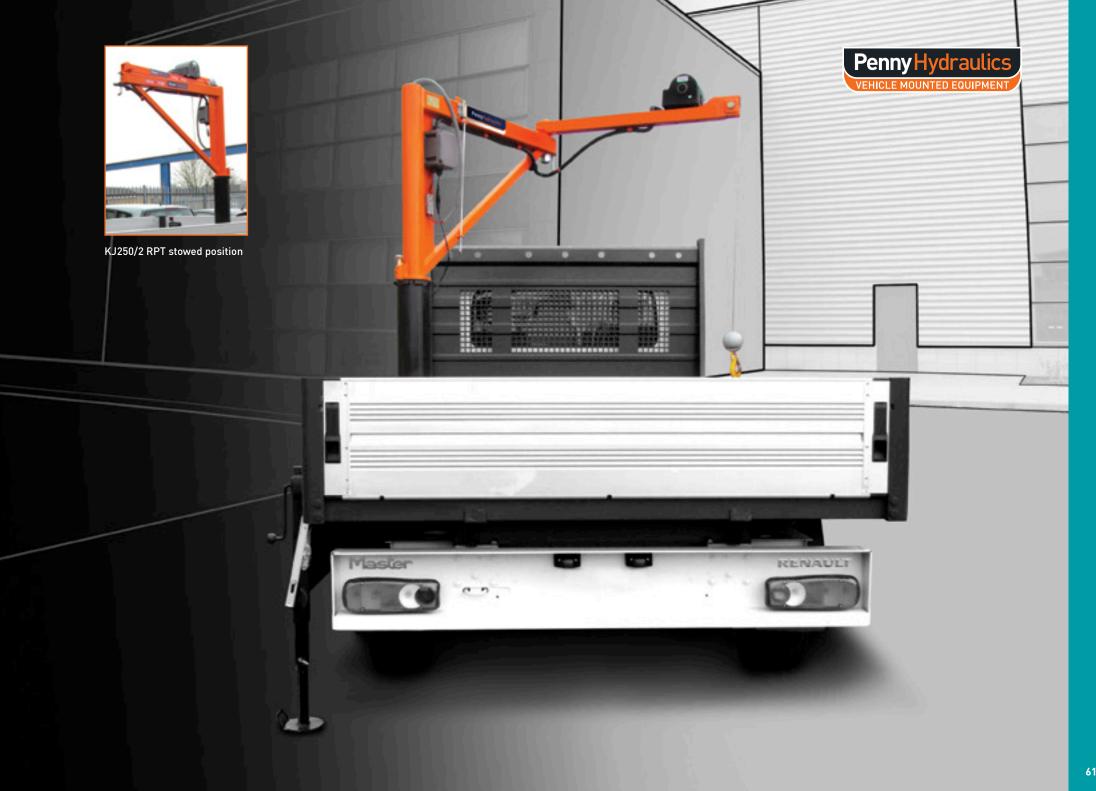
- 2m boom length with 2 pivot points a total arc of 4m
- Lifts up to 250kg
- . Built in overload device
- Low crane weight of approximately 100kg
- · Compact design
- Can be re-fitted to new or replacement vehicles

- Can be deployed & operated from ground level
- Easy to operate wander lead remote control
- Versatile 350° slew allows handling operations to take place at the rear or side of the vehicle
- · Ideal for plant & machinery

- A range of kerb & bollard handlers available
- Down-rated versions available
- 12v or 24v operation from vehicle battery
- · Radio remote control
- · Additional pillar height
- Extra rope length 9m/30'

- Manual stabiliser legs
- Battery protection
- · Lifting accessory kit
- Stabiliser/outrigger pads
- \* Powder coated paint finish





### SwingLift ML250

Pickup Type



ML250 stowed position

The ML250 is a lightweight, demountable crane for pickups and box bodies. Its compact size is ideal where space is limited and with a 250kg capacity it can lift heavy items quickly and easily off and onto vehicles.

#### **FEATURES**

- Lifts 250kg in all configurations of boom position
- Low crane weight of approximately 23kg
- Easy to operate wander lead remote control
- Easily demountable
- Built in overload protection
- Compact design folds away when not in use

- Corner bracket for mounting direct to headboard
- 12v or 24v operation from vehicle battery
- Radio remote control
- Extra rope length-9m/30
- · Additional pillar height
- Socket mounting

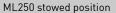
- Manual stabiliser legs
- Stabiliser/outrigger pads
- Battery protection
- . Lifting accessory kit
- Down-rated versions available
- Powder coated paint finish













Special applications available

This is the van type version of the ML250. Its fully demountable design and wide range of options make it a versatile and cost-effective load handling solution.

#### **FEATURES**

- Lifts 250kg in all configurations of boom position
- Low crane weight of approximately 23kg
- Wander lead remote control
- Easily demountable
- Built in overload protection
- Compact design folds away when not in use

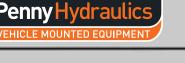
#### OPTIONS

- Down-rated versions available
- 12v or 24v operation from vehicle battery
- Radio remote control
- Extra rope length 9m/30'
- Manual stabiliser legs
- Stabiliser/outrigger pads
- Battery protection

- Lifting accessory kit
- Powder coated paint finish

Please note that nearside and offside fittings require a different crane, pillar & fitting kit. It is not always possible to raise the crane boom to its highest position inside a van.

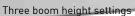












Wireless remote control option

Its extra boom reach and heavy duty winch make this the ideal crane for pickups, flatbeds and dropsides - perfect for loading items of plant such as motors, pumps and compressors.

#### **FEATURES**

- Lifts 500kg in all configurations of boom position
- Easy to use wander lead remote control
- Easily demountable
- Low crane weight from 76kg
- Overload protection
- Compact design folds away when not in use

 Manual boom extension with three height settings

- Down-rated versions available
- 12v or 24v operation from vehicle battery
- Extra rope length up to 12m/40'
- Manual stabiliser legs
- Stabiliser/outrigger pads
- Radio remote control
- Additional pillar height

- Battery protection
- Lifting accessory kit
- Socket mounting
- Powder coated finish



### SwingLift ML500LB

Van Type



Manual slew



ML500 stowed position



1.5m manual boom extension

The ML500LB is a demountable 500kg Swing Lift for lifting goods into vans. Its extra boom reach and heavy duty winch make it the perfect tool for cost-effective below ground handling for the utility and construction industries.

#### **FEATURES**

- Lifts 500kg in all configurations of boom position
- Low crane weight of approximately 86kg
- Easy to use wander lead remote control
- Demountable
- · Built in overload protection

- Compact design folds away when not in use
- Manual boom extension with three height settings



#### **OPTIONS**

- Down-rated versions available
- 12v or 24v operation from vehicle battery
- · Radio remote control
- Extra rope length 12m/40'
- Manual stabiliser legs
- Stabiliser/outrigger pads
- Battery protection
- Lifting accessory kit

- Cranked hinge for even greater flexibility
- Snatch block kit allows loads to be centrally positioned within the van
- Powder coated paint finish

Please note that nearside and offside fittings require a different crane, pillar & fitting kit. It is not always possible to raise the crane boom to its highest position inside a van.











...& items of plant



Side door applications also available



ML500 stowed position



A demountable 500kg Swing Lift for lifting goods into vans. The heavy duty winch ensures reliability and extended duty cycle making it the ideal choice for multi-drop applications.

#### **FEATURES**

- Lifts 500kg in all configurations of boom position
- Low crane weight of approximately 82kg
- Easy to use wander lead remote control
- Easily demountable
- Built in overload protection

- Compact design folds away when not in use
- Manual boom extension with three height settings

#### **OPTIONS**

- Down-rated versions available
- 12v or 24v operation from vehicle battery
- Radio remote control
- Extra rope length 12m/40'
- Manual stabiliser legs
- Stabiliser/outrigger pads
- Battery protection
- Lifting accessory kit

- Cranked hinge for even greater flexibility
- Powder coated paint finish

Please note that nearside and offside fittings require a different crane, pillar & fitting kit. It is not always possible to raise the crane boom to its highest position inside a van.



### SwingLift F500







F500 stowed position



Manual slew

An extremely compact, 500kg capacity electric crane for pickups, dropsides and box bodies, ideally suited where space and payload are at a premium. The heavy duty winch ensures reliability and extended duty cycle.

#### **FEATURES**

- Low crane weight of approximately 75kg maximises payload
- Lifts 500kg in all configurations of boom position
- Easy to use wander lead remote control
- Built in overload protection
- Compact design maximises floor space & payload

 Manual boom extension with three height settings

- Down-rated versions available
- 12v or 24v operation from vehicle battery
- Manual stabiliser legs
- Stabiliser/outrigger pads
- Radio remote control
- Extra rope length up to 12m/40'
- Additional pillar height

- Battery protection
- Lifting accessory kit
- Powder coated paint finish













FV500 stowed position



Hydraulic boom lift



The SwingLift FV500 removes the risks associated with climbing on and off vehicles. Its remote control and hydraulic operation offer precise and safe handling. The heavy duty 500kg capacity hoist allows vertical below ground handling making it the ideal solution for local authorities, highways and utilities.

#### **FEATURES**

- Suitable for pickup, dropside & box body applications
- Low crane weight of approximately 119kg maximises payload
- Compact design, integral oil tank & motor pump unit maximises load space
- Easy to use wander lead remote control
- Fully hydraulic operation boom raise, lower, extension & slew

- Electric winch for below ground applications
- Built in overload protection
- Lifts 500kg in all boom positions

- Down-rated versions available
- Manual or hydraulic stabiliser legs
- Stabiliser/outrigger pads
- 12 or 24v operation from standard vehicle battery
- Extra rope length up to 40'/12m
- Additional pillar height
- Crane slew stops

- Battery protection
- Lifting accessory kit
- Powder coated paint finish



# SwingLift FV500

Van Type







Left: FV500 hydraulic extension Middle: FV500 stowed position Right: Hydraulic slew & boom lift

The van type FV500 is a fully hydraulic 500kg capacity vehicle mounted crane. Our latest model incorporates hydraulic slew, boom raise, lower and extension for controlled, precise and safe handling. Designed for a wide range of applications including service, engineering and deliveries, its compact design, robust construction and light weight ensure the FV500 can be installed on a wide range of commercial vehicles to provide reliable and flexible load handling capabilities. Its 500kg capacity hoist allows vertical below ground work, making it the ideal solution for local authorities, highways and utilities.

#### **FEATURES**

- Suitable for most van applications
- Low crane weight, maximising payload
- Compact design, integral oil tank
   motor pump unit maximises
   load space
- Easy to use wander lead remote control
- Fully hydraulic operation boom raise, lower, extension & slew

- Electric winch for below ground applications
- Built in overload protection
- Lifts 500kg in all boom positions

# OPTIONS

- Down-rated versions available
- Manual stabiliser legs
- Stabiliser/outrigger pads
- 12 or 24v operation from standard vehicle battery
- Extra rope length up to 40'/12m
- Crane slew stops
- Battery protection

- Lifting accessory kit
- Powder coated paint finish

Please note that nearside and offside fittings require a different crane, pillar and fitting kit. It is not always possible to raise the crane boom to its highest position inside a van.





# SwingLift CC250 LB/CC250 SB



Pod mounted CC250 SB



Corner crane short boom

A lightweight, corner mounted crane for loading plant, signage or chemical drums where space is at a premium. Ideal for mounting inside pod style mobile workshops or on headboards between the cab and the body.

#### **FEATURES**

- 250kg MWL
- Low crane weight of approx.
   20kg (CC250 SB) to 45kg (CC250 LB)
- Easy to use wander lead remote control
- . Built in overload device
- Fully demountable, maintaining fleet flexibility

 Light weight pillar available for pod vehicles or corner bracket for headboard mounting

- · Down-rated versions available
- · Radio remote control
- 12v or 24v operation from vehicle battery
- · Pillar or corner bracket
- Extra rope length
- Battery protection
- · Lifting accessory kit

- Manual stabiliser legs
- Stabiliser/outrigger pads
- Powder coated paint finish





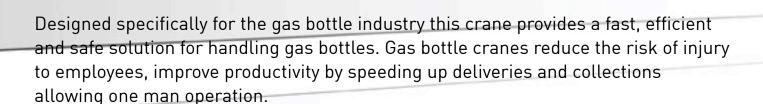








Overwind cut out



#### **FEATURES**

- 100kg MWL
- Specially designed "fast" up & down action
- Overwind cut-out allowing safe, speedy operation
- Easy swing action utilising precision bearings
- Height to suit tallest cylinders
- Easy to use wander lead remote control

- Low crane weight of approximately 43kg
- Built in overload protection

- Radio remote control
- 12v or 24v operation from vehicle battery
- Extra rope length
- Battery protection
- Lifting accessory kit
- Powder coated paint finish

# SwingLift DC500/DC995







Easy to assemble

Light weight, robust construction and ease of use combine to provide users with a portable, effective and versatile load handling tool. Choose either 500kg or 995kg capacity, both available with electric hoists that simply plug into the vehicle or pump control box and additional boom extensions. A davit crane is the perfect choice for below ground handling when vehicle access is impractical.

#### **FEATURES**

- 500kg or 995kg MWL
- · Lightweight & portable
- Manufactured from high strength aluminium
- · Robust construction
- Self-contained within a carry bag for ease when working on remote sites
- Helps prevent the risk of injury through manual handling & working over deep wells

- · Industry standard base socket
- 12v or 24v 500kg hoist with built in overload protection & remote control
- Manual chain block & shackles
- Boom extensions up to 2020mm for DC500 & 1900mm for DC995
- Extra rope length up to 40'/12m
- · Anodised/powder coated paint finish

- Lifting accessory kit
- Electrical transformer





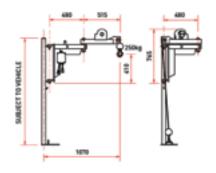
# SwingLift Weights & measurements All dimensions in millimetres; all weights to the nearest kilogram; E & 0E

#### SwingLift KJ250/1

Rating 0.25 tenne metres Crane section 27kg

Van pillar 25kg Corner bracket 5.5kg Van support leg 8.5kg

Rope diameter/length 5mm/15' standard

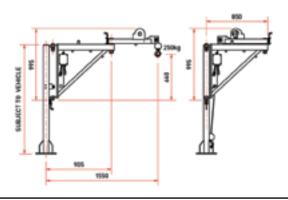


#### SwingLift KJ250/1.5

Rating 0.375 tonne metres

Crane section 22kg Van pillar 25kg Corner bracket 5.5kg Van support leg 8.5kg

Rope diameter/length 5mm/15' standard

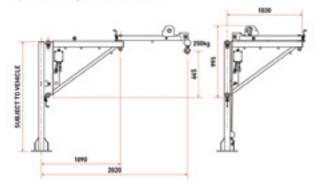


#### SwingLift KJ250/2 GHT

Rating 0.5 tonne metres

Crane section 50kg
Van combi pillar 32kg
Pickup combi pillar 28kg
Corner bracket 5.5kg
Van support log 8.5kg
Kerbgrab 8kg

Rope diameter/length Smm/15' standard



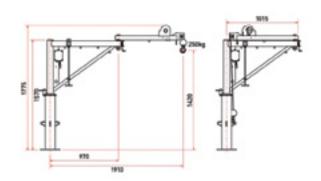
#### SwingLift KJ250/2 RPT

Rating 0.5 tonne metres

Crane section 100kg (including rotating pillar)

Van support leg 8.5kg Kerbgrab 8kg

Rope diameter/length 5mm/15' standard



### SwingLift ML250 Pickup Type

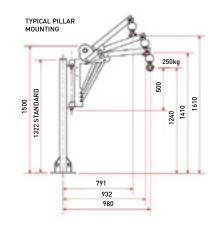
Rating 0.25 tonne metres

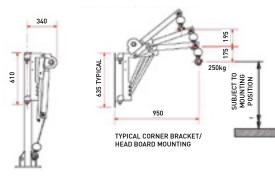
Crane section 23kg

Pickup combi pillar 28kg (with base plate)

Corner bracket 5.5kg
Pickup support leg 11.5kg

Rope diameter/length 5mm/15' standard



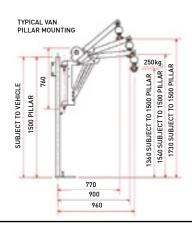


### SwingLift ML250 Van Type

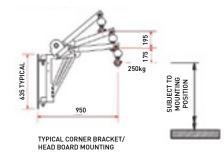
Rating 0.25 tonne metres

Crane section **23k**g Van pillar 25kg 5.5kg Corner bracket Van support leg 8.5kg

Rope diameter/length 5mm/15' standard







## SwingLift ML500LB Pickup Type

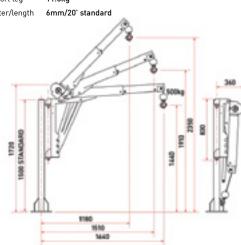
Rating 0.8 tonne metres

Crane section **48k**g

Pickup combi pillar 28kg (with base plate)

Pickup support leg 11.5kg

Rope diameter/length

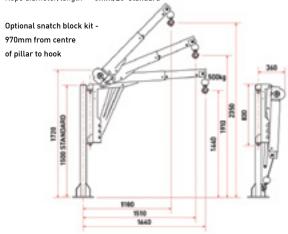


# SwingLift ML500LB Van Type

Rating 0.8 tonne metres

Crane section **48k**g Van pillar 38kg 8.5kg Van support leg

Rope diameter/length 6mm/20' standard

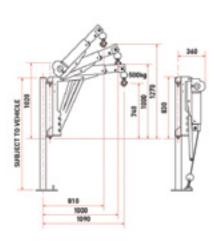


# SwingLift ML500SB Van Type

Rating 0.8 tonne metres

Crane section **44k**g Van pillar 38kg 8.5kg Van support leg

Rope diameter/length 6mm/20' standard



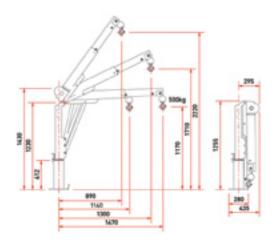
# SwingLift Weights & measurements All dimensions in millimetres; all weights to the nearest kilogram; E & OE

## SwingLift F500

Rating 0.75 tonne metres

Crane section 75kg
Pickup support leg 11.5kg

Rope diameter/length 6mm/20' standard

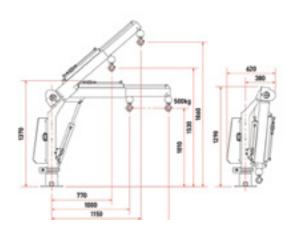


### SwingLift FV500 Pickup Type

Rating 0.75 tonne metres

Crane 119kg
Pickup support leg 11.5kg

Rope diameter/length 6mm/20' standard

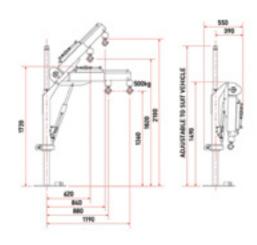


### SwingLift FV500 Van Type

Rating 0.75 tonne metres

Crane section 95kg
Van support leg 8.5kg

Rope diameter/length 6mm/20' standard



### SwingLift CC250LB

Rating 0.28 tonne metres

Crane 45kg

Pickup combi pillar 30kg (with base plate)

### SwingLift CC250SB

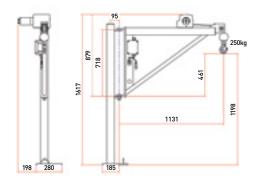
Rating 0.15 tonne metres

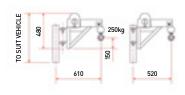
Crane 20kg

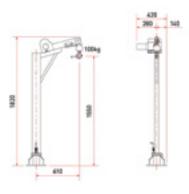
### SwingLift Gas Bottle Crane

Rating 0.06 tonne metres

Crane 43kg

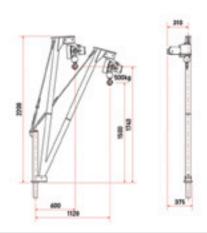






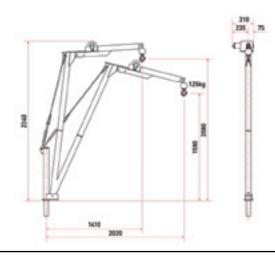
# SwingLift DC500

Upper crane section 8kg
Base (incl. turnbuckle) 16.5kg
Winch 20.5kg



# SwingLift DC500BE

Upper crane section 11.5kg
Base (incl. turnbuckle) 16.5kg
Winch 20.5kg



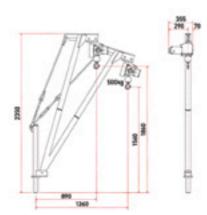
# SwingLift DC995

 Boom section (incl. turnbuckle)
 10kg

 Pillar
 5kg

 Base
 20kg

 Winch
 20.5kg



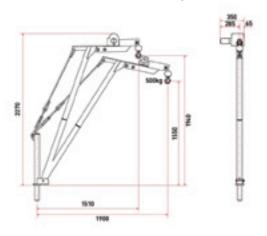
# SwingLift DC995BE

 Boom section (incl. turnbuckle)
 13.5kg

 Pillar
 5kg

 Base
 20kg

 Winch
 20.5kg



# Winches



Warn H800 DC winch



Warn H1200 DC winch



Warn H1600 DC winch

We hold a large stock of both electric and hydraulic winches from our own PH Range as well as from leading manufacturers such as Warn and Superwinch.



Warn 2000DC winch

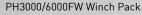


Warn 4000DC winch



PH6000FWE Winch Pack







Warn 4700 utility winch

# Penny Hydraulics VEHICLE MOUNTED EQUIPMENT

#### **TYPICAL APPLICATIONS**

- ATV's
- Boats
- Trailers
- 4 x 4's
- Commercial vehicles
- Static applications
- Garages/workshops

Our cost effective electric winches are ideal for light duty applications, while our hydraulic winches offer controlled power and are especially suited to arduous and heavy duty applications.

A full range of winch spares and winching accessories is available from our e-shop.













A unique, lightweight and compact lifting platform for loading vans quickly and efficiently via the rear or side cargo doors.

#### **FEATURES**

- 800mm long (front to back) x 650mm wide flat platform
- 2 fixed toes
- Maintains unhindered access
- Compact design & folding platform maximise floor space
- Low weight of approximately 100kg for minimal impact on vehicle payload

- Lifts up to 250kg as standard
- Hydraulically powered for a smooth action
- 12v or 24v operation from vehicle battery
- Fixed & remote controls
- Built in overload protection



#### **OPTIONS**

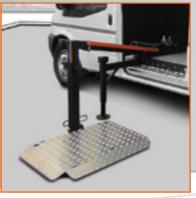
- Box section frame with alloy top
- Bespoke platform size
- Uprated MWL (max. 500kg subject to vehicle)
- Folding toes
- · Additional fixed toe
- Stowage bracket with catch & lashing rings
- Bespoke stowage bracket

- Platform lashing rings
- Ratchet straps
- · Radio remote control
- Bespoke finish
- Side door application

Note: Please check platform dimensions if the van is to have racking installed.

An up-rated power pack may be required if aftermarket steps or tow bars are fitted.







Sidedoor box section frame with alloy top

Rear door box section frame with alloy top

The unique folding action of this lift means It can be stowed without obstructing access and with minimal impact on the vehicle's payload. We often collaborate with our customers to develop industry specific lifts, this version has been adapted specifically to handle oil barrels.

#### **FEATURES**

- Maintains unhindered access
- 800mm long (front to back)
   x 554mm wide flat platform
- 3 fixed toes
- Rear door application
- Compact design & folding platform maximise floor space
- Stowage bracket incorporating lashing rings

- Low weight of approximately 100kg for minimal impact on vehicle payload
- Lifts up to 250kg as standard
- Hydraulically powered for a smooth action
- 12v or 24v operation from vehicle battery
- Fixed & remote controls
- Built in overload protection

#### OPTIONS

- Box section frame with alloy top
- Bespoke platform size
- Uprated MWL (max. 500kg subject to vehicle)
- Folding toes
- Bespoke stowage bracket
- Platform lashing rings
- Ratchet straps

- · Radio remote control
- Bespoke finish
- Side door application

Note: Please check platform dimensions if the van is to have racking installed. An up-rated power pack may be required if aftermarket steps or tow bars are fitted.



# LoadLift 250 Trolley Type



Trolley type with manual folding toes

The trolley type lift is a compact and lightweight lifting platform specifically designed for loading trolleys. A number of options are available including automatic roll-stops to ensure the load remains secure on the platform during the lift cycle. Additional lashing rings can be specified to secure the load during transit.

#### **FEATURES**

- 940mm long (front to back) x 750mm wide flat platform
- Lifts up to 250kg as standard
- 2 fixed toes
- Compact design & folding platform maximises floor space
- Low weight of approximately 140kg for minimal impact on vehicle payload

- Internal mounting prevents damage due to sleeping policemen & unauthorised use
- Maintains unhindered access.
- Hydraulically powered for a smooth action
- 12v operation from vehicle battery
- Fixed & remote controls
- Built in overload protection

#### **OPTIONS**

- Bespoke platform size
- Uprated MWL (max. 500kg subject to vehicle)
- Folding toes
- Stowage bracket with catch & lashing rings
- Bespoke stowage bracket
- · Platform lashing rings
- Ratchet straps

- · Radio remote control
- Bespoke finish
- Side door application
- Automatic roll-stops

Note: Please check platform dimensions if the van is to have racking installed.

An up-rated power pack may be required if aftermarket steps or tow bars are fitted.









Penny Hydraulics
VEHICLE MOUNTED EQUIPMENT

Automatic flaps ensure the load remains secure on the platform

The York adaptation LoadLift as used by Royal Mail is a lightweight and compact lifting platform for loading containerised goods via the rear doors. It is especially useful for handling roll cages and similar items that can be rolled on and off its platform.

When mounted next to the side door of a delivery vehicle our other LoadLift Specials offer an excellent alternative where a tail lift would be unsafe or impractical such as congested urban areas or when parking spaces are too small for convenient access to the rear doors.

Deliveries can be made directly to the kerbside to reduce the space required to park and enter the vehicle. This also reduces waiting time which helps to promote better relationships with authorities.

# LoadLift SWL







SWL125 stowed

LoadLift SWL125/250/500 solves lifting and re-treading problems associated with large vehicle tyres. This lightweight yet powerful lift manages super singles with ease, and the roll-on/roll-off platform with easy to operate locking device creates the ideal tool for re-grooving tyres. Tasks can now be handled inside or outside the vehicle away from the elements.

#### **FEATURES**

- Extremely light weight approx. 60kg
- 125kg MWL as standard
- Maintains unhindered access
- Hydraulically powered for a smooth, controlled operation
- · Minimal impact on vehicle payload
- Fixed & remote controls
- Roll-on/roll-off platform
- Hydraulic overload protection

- Up-rated MWL 250kg-500kg (subject to vehicle)
- Radio remote control
- Additional top re-grooving clamp
- Battery protection

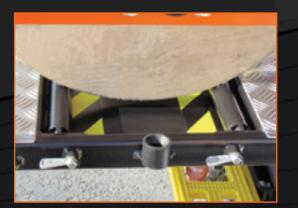




Side door application



# LoadLift Specials





Cable drum handling equipment for Siemens

We have been designing and manufacturing bespoke lifting solutions since 1978. In this time we have developed a wide range of award winning vehicle mounted lifting equipment, much of which was the result of direct consultation with our customers.



Oil/chemical barrels - Vauxhall & VW



Side door applications



Lightweight pump & boat safety kit - Shropshire Fire







# TailLift EL4x4 AP1/AP2



EL 4 x 4 stowed position; excellent ground clearance

The TailLift EL4x4 is specially designed for 4x4 pickups and other off-road vehicles. It has a compact cantilever action and pillar-free design - the lift has no components underneath the vehicle which reduces the risk of damage when driving off-road. The EL4x4 allows operators to access jobs no other TailLift can reach. The AP1 model has a platform depth of 600mm with an additional 200mm toe. The AP2 measures 800mm plus a 200mm toe.

#### **FEATURES**

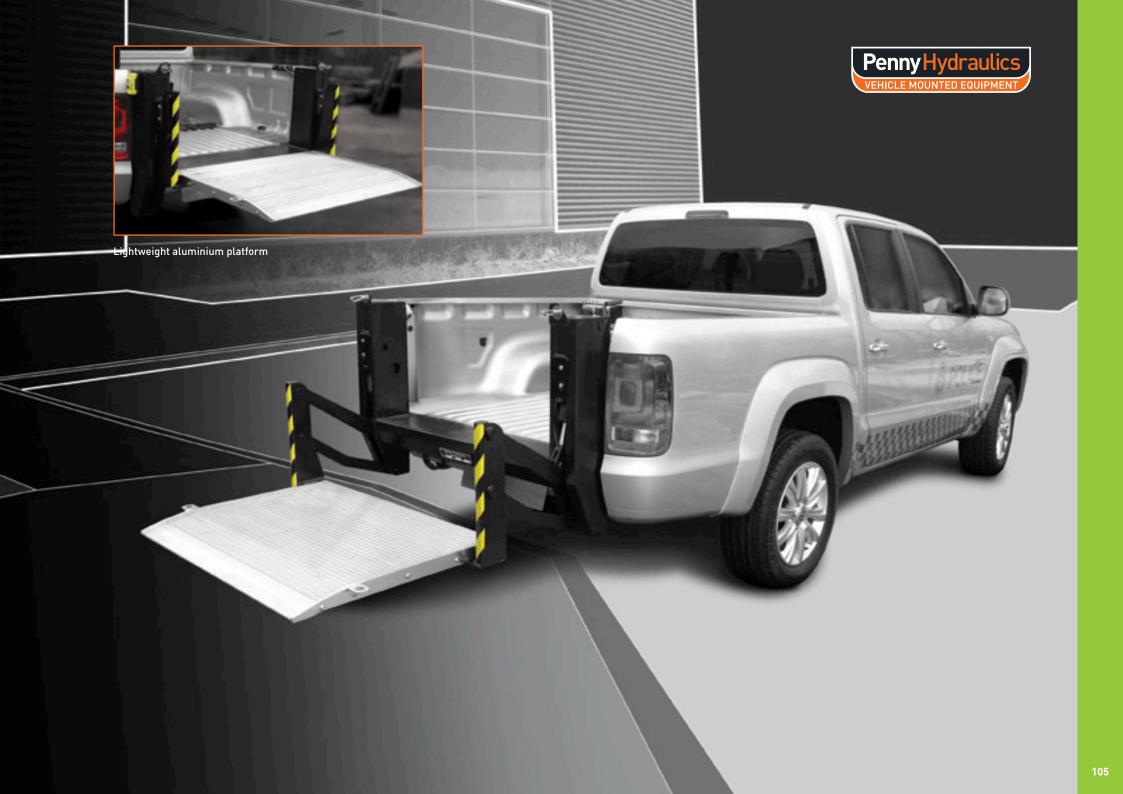
- Low self weight of approximately 110-125kg maximises payload
- No under-slung columns, ropes or chains
- Ideal for off-road operation
- Standard 500kg MWL
- Cantilever action means standard tow bars can be fitted



#### **OPTIONS**

- · Radio remote control
- Folding or drop-in guard frames
- Battery protection
- A wide range of platform sizes including folding platforms

Note: It may be necessary to obtain WVTA IVA if additional lighting is required on un-registered vehicles.



# LoadLift/TailLift Weights & measurements All dimensions in millimetres; all weights to the nearest kilogram; E & OE

## LoadLift 250 Standard

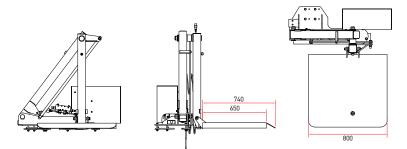
Total self-weight

100-140kg

## LoadLift Oil Drum Type

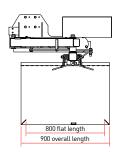
Total self-weight

100-140kg





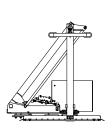




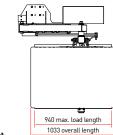
## LoadLift 250 Trolley Type

Total self-weight

100-140kg

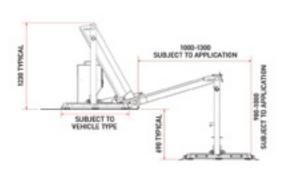






## LoadLift Y250

Total self-weight 180kg

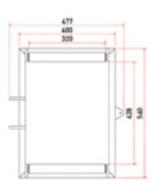






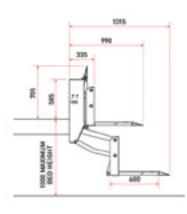
## LoadLift SWL125/250/500

Total self-weight 60-100kg



## TailLift EL4x4 AP1

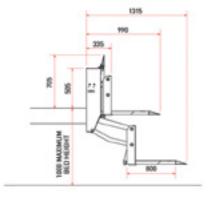
Weight approx. 110-125kg
Width to suit application 2020mm (max.)





# TailLift EL4x4 AP2

Weight approx. 115-130kg
Width to suit application 2020mm (max.)





# **Lifting Accessories**

Penny Hydraulics supply a wide range of lifting accessories including slings, shackles and special attachments such as kerb grabs, barrel slings and dumpy bag lifters.

We stock a comprehensive range of spare parts for our range of cranes and loading platforms everything from wire ropes, solenoids and winch motors to complete boom assemblies.



Kit bags & straps



Crane hoists



Shackles & chain blocks



Davit hoists



Slings & strops



Stabiliser/outrigger pads



Barrel chains



Cooler lifts







### Planned maintenance

Current legislation requires that each item of lifting equipment be thoroughly examined at least once in every 12 month period by a competent person. Our planned maintenance programmes will ensure continued, safe, reliable use of the equipment and full compliance with current legislation.

Key benefits of a Penny Hydraulics planned maintenance programme include...

- Combined maintenance & statutory inspection saves time & money
- Nationwide coverage
- · Dedicated service engineers
- · Statutory inspections completed
- OEM spares available ex-stock
- High first time fix rate
- · Reduced vehicle downtime

### Installation

Penny Hydraulics offer a full and comprehensive fitting service at their purpose built facility in Clowne, Derbyshire. Not only does this ensure the correct and safe installation of your lifting equipment it minimises vehicle movement and downtime.

Thank you for taking the time to look through this brochure we hope it has been of interest and that you have found a product that will meet your needs.

Remember, as well as offering unbeatable features and superb value for money, every one of our products also delivers...

- · Increased productivity
- · Increased efficiency
- · Increased flexibility of labour
- · Reduced injury claims
- · Reduced damage to equipment & property
- · Reduced vehicle down time
- Full compliance with manual handling regulations
   & current HSE guidelines

We look forward to being of service.

#### WHAT WE DO

Our key services include:

- Statutory Examinations & Testing
- Inspection
- Service
- Test Certificates
- Quality Reports & Surveys









# Glossary

#### BS: EN: 12999:2011 + A1:2012

5.6.1.8 For cranes with a rated capacity of 1000 kg or above, the stability of the vehicle shall be included in the safety function of the rated capacity limiter.

**Note:** Stability in this case means: Deployment of every stabiliser is monitored by the rated capacity limiter and the rated capacity is reduced or the crane is stopped, if not fully deployed.

# Safety System Options

#### ECI: Electronic Capacity Indicator

The ECI unit is a device displaying the lifted load capacity by means of an LED scale. The lower green LED shows that power is ON. Five further green LED's show a range from 30% - 70% of the maximum rated capacity permissible. Two yellow LED's indicate 80% and 90% while the final red LED (100%) shows that the maximum rated capacity has been reached or "exceeded".

**Note:** The operator should at all times prevent lighting up the red LED (OVERLOAD) whilst using the crane.

### LLC: Load Limiting Cell

The LLC system is a safety device for the lifted load, with a limitation of 990kg and an LED scale indicating the rated capacity. The LED scale ranges from 30% - 100% (OVERLOAD) similar to the ECI. However, in the case of the LLC the system intervenes and locks the crane functions when the load applied to the hook, sensed by a load cell, reaches the set value of 990kg, which is the maximum lifting capacity for an LLC rated crane. In this condition all LED's flash and it is not possible to carry out any manoeuvre except for the boom lowering function.

**Note:** The operator should at all times prevent lighting up the red LED (OVERLOAD) whilst using the crane.

#### LME04: Load Limiting Device

The LME04 load limiting device locks the crane when overload occurs. This system only has two LED's, a yellow LED which indicates 90% of the rated capacity and a red LED which indicates 100% (OVERLOAD). A constant monitoring device senses the pressure in the lift ram and compares this with the "nominal lifting moment" of the crane or the load being lifted compared to the position of the boom outreach. When the pre-set value is reached LME04 will prevent an overload condition occurring by locking all functions except for the "boom in" function, at the same time the red LED will illuminate. When retracting the boom, the red LED will go off and the yellow LED lights up. In order to continue work without locking the crane again it is necessary to retract further extensions until the yellow LED goes off.



ECI: Electronic Capacity Indicator



LLC: Load Limiting Cell



#### SCU: Load Limiting Device including Stability Control Unit

The SCU system is a device that monitors the stability of the vehicle and interacts with the LME04 load limiting device to warn of and prevent an overload situation.

The SCU has two alarm thresholds. When turning the system ON from the LME04 control panel, any of the functions are allowed but only in a "low threshold" condition. This is signalled by the yellow LED on the SCU panel. The low threshold is set to prevent the vehicle overturning if the stabilisers are not deployed.

In order to achieve the full lifting capacity or "high threshold mode", it is necessary to set all stabilisers in their full operating position, completely extended and lowered to the ground until all of the stability sensors are activated. This is achieved and indicated when the "low threshold" yellow LED goes OFF. All activated sensors show up as illuminated green LED's on the SCU display.

All stability sensors are constantly monitored and the system will return to low threshold mode when:-

- One or more of the extension sensors are de-activated.
- If one leg beam is fitted, when two ground sensors are de-activated.
- If two leg beams are fitted, when three ground sensors are de-activated.

**Note:** If the crane is being used in the low threshold mode and effort is made to lift a greater load which may cause the intervention of the load limiter, the crane will lock. If this occurs, the only function available is "boom lower".



LME04: Load Limiting Device



SCU: Stability Control Unit with LME04

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