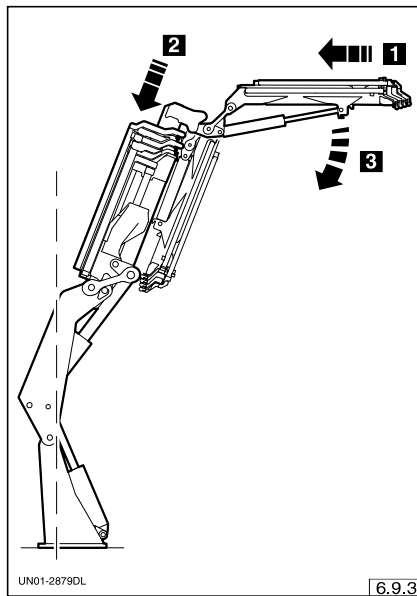


6.9.1 - Crane resting position with jib



To place the jib in resting position proceed as outlined below.

- 1 - Retract the jib arms completely.
- 2 - Retract the crane arms completely.
- 3 - Close up the articulation jack.
- 4 - Perform the manoeuvres described in para. "Crane resting position".

6.10- Crane destabilisation and circulation on the roads

6.10.1- Crane destabilisation

- 1 - Close up the machine into the resting position.
- 2 - Retract all the stabiliser jacks completely.
- 3 - Retract all the stabiliser arms completely.
- 4 - Engage all the locking devices for road transit.
- 5 - Deactivate the power takeoff.
- 6 - Check that the crane is within the maximum outreach limits foreseen by the Highway Code.

6.10.2- Circulation on the roads



WARNING !

Before setting off, make sure the power takeoff is switched off to prevent serious damage to the vehicle.

Driving the vehicle and crane outfitting requires particular skill and training, in addition to a extreme awareness of the responsibility it entails, which is why only suitably trained and authorised persons may drive the machine.

Circulation on the road network is only permitted to approved machines and drivers meeting the requirements of the current highway code.

In any case, before setting off, ensure:

- the safety pins for circulation on the roads are fitted properly;
- any mobile parts which could move suddenly and unexpectedly are locked securely;
- all protruding parts are clearly marked with the relative warning plates.



WARNING !

Check the signal lights and acoustic signals in the driver's cab to make sure that the crane is within the vehicle's outer profile.

6.11 - Lock situations and manoeuvres permitted

It is impossible to explain every lock situation that can be verified during the use of the machine.

As a general rule, manoeuvres that are permitted are those which bring the load towards the column, thereby reducing the pressure inside main jacks "P1" and secondary jack "P2".

Even if there are no loads being lifted, manoeuvres performed at the limits of the primary and secondary jack strokes can cause lock conditions, which require use of the "3-30" system.

The crane lock condition is shown by a red flashing signal light on the functional control unit.

The following illustrations show a series of lock situations and permitted manoeuvres.



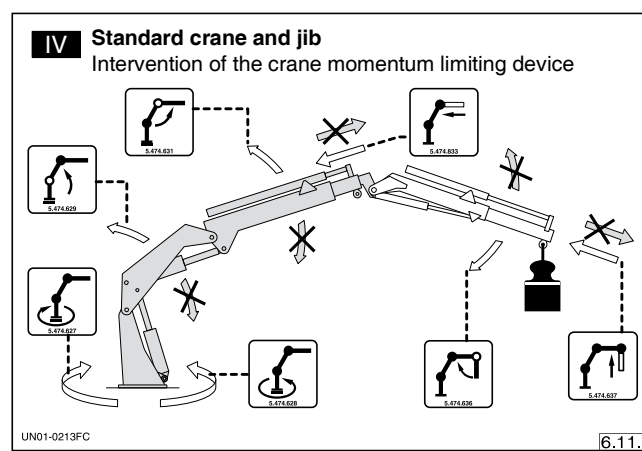
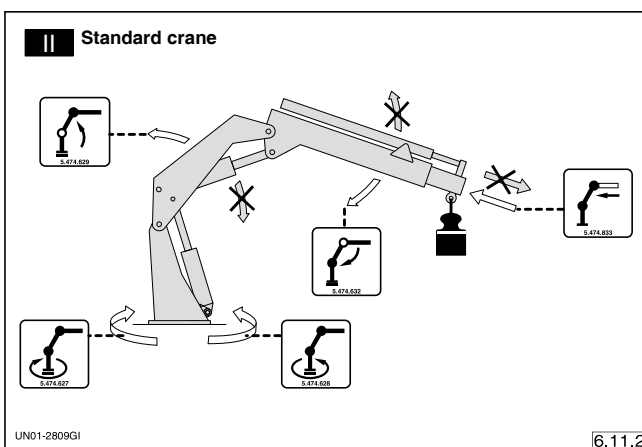
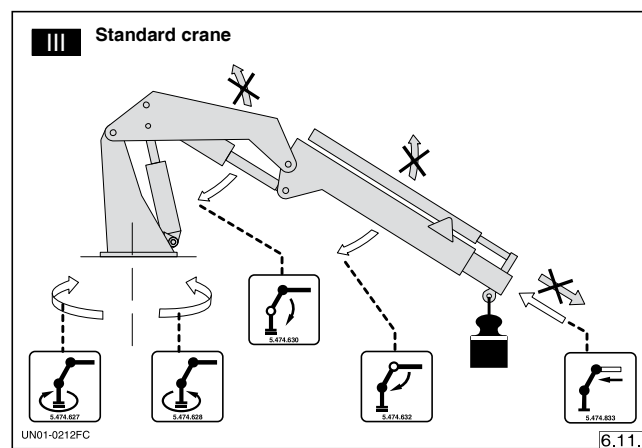
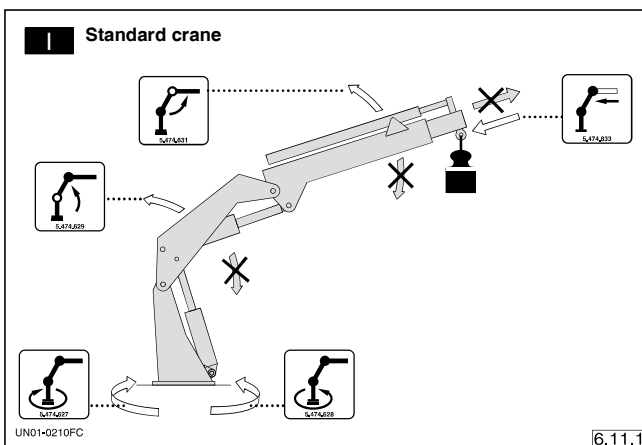
Information

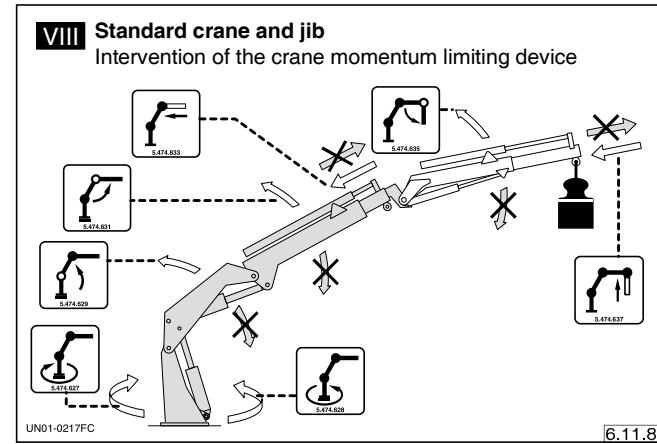
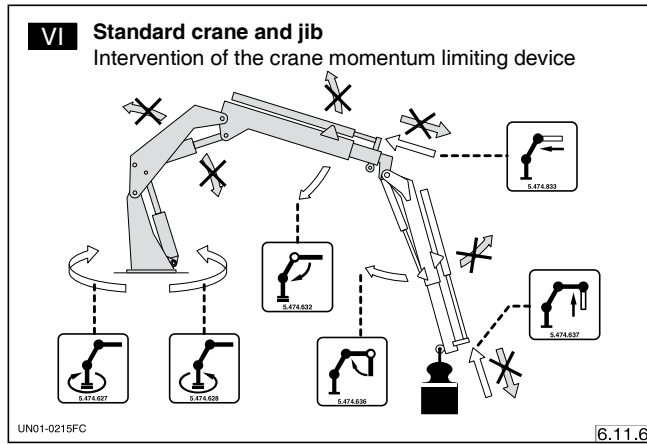
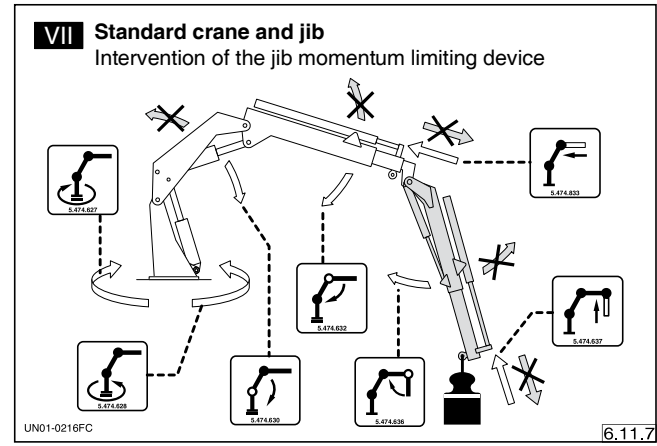
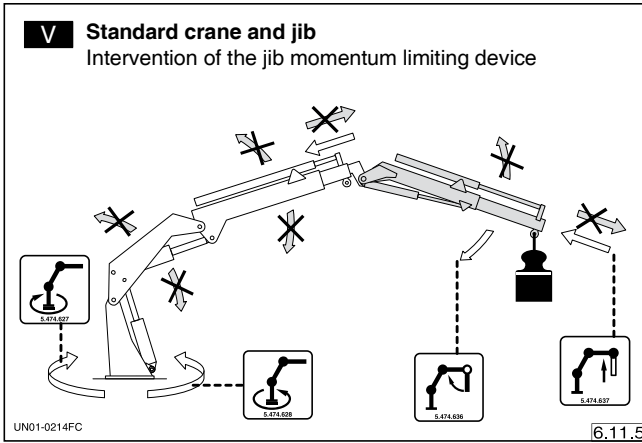
In lock conditions, arm retraction is always permitted, except in particular situations where the movement overloads the main jack.

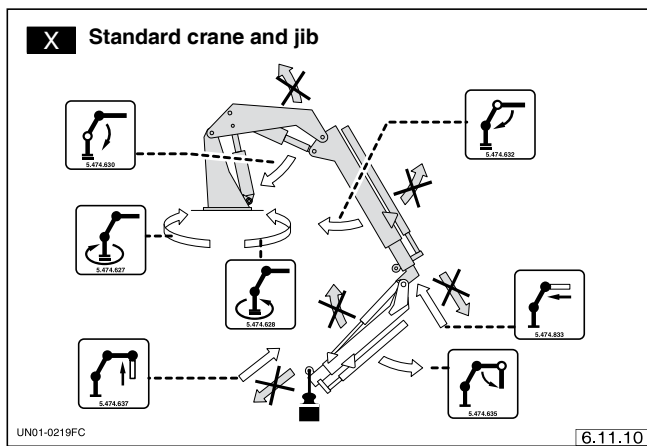
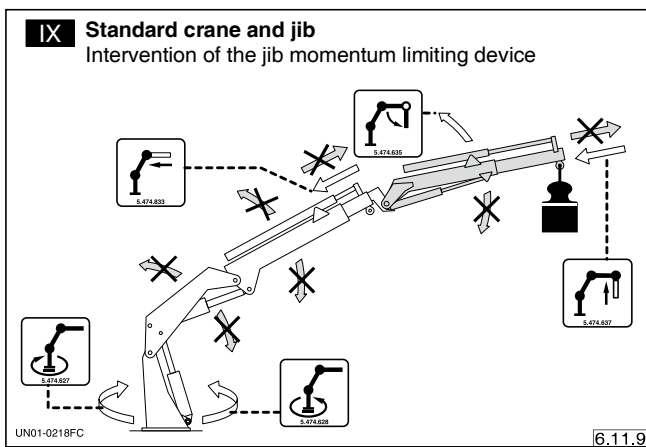
In these cases, arm retraction locks and the load can be handled with the remaining permitted manoeuvres.

In the front limited area, sector "B", the same manoeuvres are allowed, under lock conditions, as in sector "A" (or "C") - see "Work sectors", with the exception of the rotation manoeuvre, which is always prevented.

If all the controls are disabled, perform the system release manoeuvres (3-30).





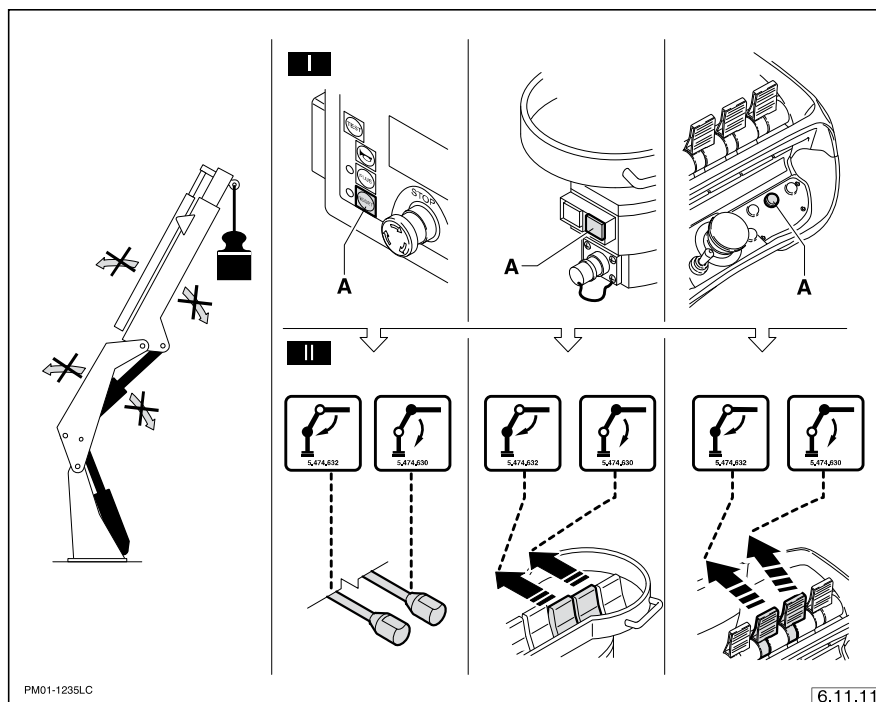


6.11.1- Resetting the functioning using the “3-30” system



Information

It is only possible to carry out the lowering of the load with the arms completely retracted.



Use the system when the manoeuvres necessary to get out of the emergency situation are inhibited.

"3-30" means the system requires 3 seconds of manoeuvres and 30 seconds of machine stoppage (if the previous manoeuvres were not sufficient to get out of the lock condition).

Proceed as outlined below.

- Press reset button "A" (fig 6.11.11): when the open padlock icon appears on the display, use the controls for the locked jack to lower the load.

At the end of the activation time, if the lock condition has been removed, the crane will resume normal operation.

If the lock condition continues, all manoeuvres are inhibited for 30 seconds; a flashing signal light will show how long you have to wait, accompanied by the closed padlock icon on the display.

When the "Reset" button is used, the condition is stored as an event in the "Black Box" internal memory.

6.11.2- Winch lock

Lifting a load that exceeds the maximum allowed by the winch causes the current manoeuvre to lock. Lower the load to get out of the lock situation and return the equipment to the starting position. If the reverse manoeuvre is not enough to get out of the lock situation (e.g. because the crane also locked at the same time), activate the crane controls to move the load near the column. The winch lock condition is shown by a red signal light appearing on the functional control unit and on the handheld radio control unit.

6.11.3- Crane rotation lock

The rotation limiters (fig. 2.3.3) allow the crane to be safely operated as regards the stability of the equipment in the reduced load capacity work sectors (see the work sectors). When manoeuvring with the rotation control, if you reach a sector with a load capacity lower than the load lifted, the crane will lock and the reverse manoeuvre will be allowed to return to the original sector.

6.12- Failure situations

6.12.1- Quick Reset / Restart

This feature allows you to reset any temporary alarms detected by the functional control unit and indicated by the appearance of error codes/icons on the display (see "Information and alarm messages").

- Quick Reset

Activate the "Quick Reset" function by pressing the "Reset" key on the functional control unit or on the transmitter unit.

If the error icon / code clears, normal crane operation can be resumed.

- Restart

If the alarm signal continues, turn off and restart the system (i.e. by switching the power take-off off and on again or by cutting off the power via the truck battery cut-out switch).

6.12.2- Radio control transmission failure / error

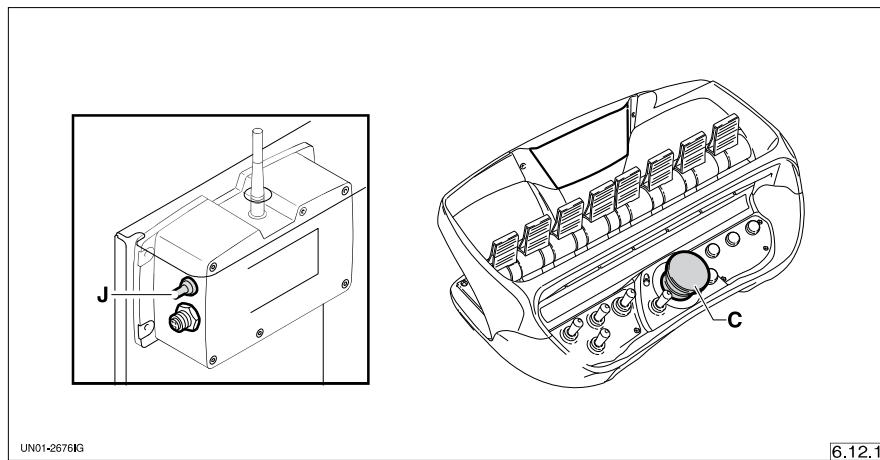
- Radio signal interference

Switch the transmitter unit off then on again.

If the problem persists, use the cable connecting the handheld transmitter unit and the receiver unit to cut off radio communications.

- Radio control error

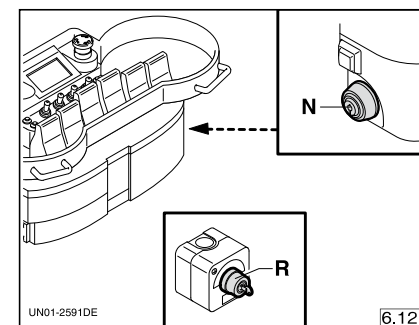
Scanreco radio control



If the transmitter failure remains even after performing the operations concerning radio signal interference, proceed as follows.

- 1 - Set the selector "J" to "MANUAL".
- 2 - Turn off the transmitter unit with button "C".
- 3 - Use the controls on board the machine to carry out the manoeuvres to place the crane in resting position.

Hetronic radio control



If the transmitter failure remains even after performing the operations concerning radio signal interference, proceed as outlined below.

- 1 - Turn switch "R" to the "HAND" position.
- 2 - Turn switch "N" to position "0".
- 3 - Use the controls on board the machine to carry out the manoeuvres to place the crane in resting position.

6.13- Radio control/CAN-BUS network failure and electrical-electronic failure

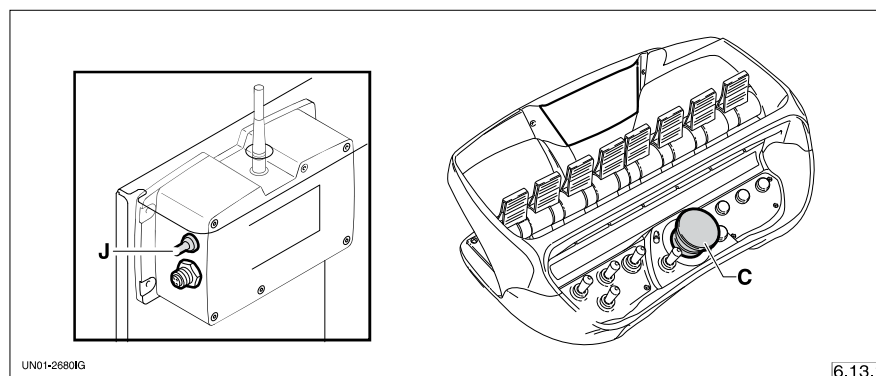
These types of failure are signalled by the appearance of one or more alarm icons and the relevant error codes (see the "Information and alarm messages" table) on the display of the transmitter unit and of the functional control unit.

6.13.1- Closing the crane in case of mains failure

In the event of a failure in the communication network between the functional control unit and the radio control, proceed as outlined below.

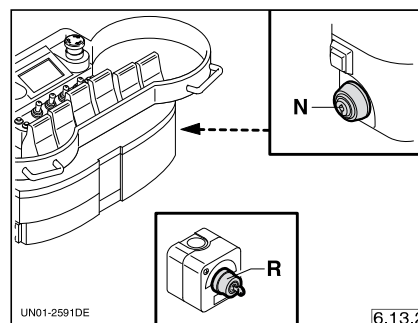
Scanreco radio control

- 1 - Set the selector "J" to "MANUAL".
- 2 - Turn off the transmitter unit with button "C".
- 3 - Use the controls on board the machine to carry out the manoeuvres to place the crane in resting position.



Hetronic radio control

- 1 - Turn switch "R" to the "HAND" position.
- 2 - Turn switch "N" to position "0".
- 3 - Use the controls on board the machine to carry out the manoeuvres to place the crane in resting position.



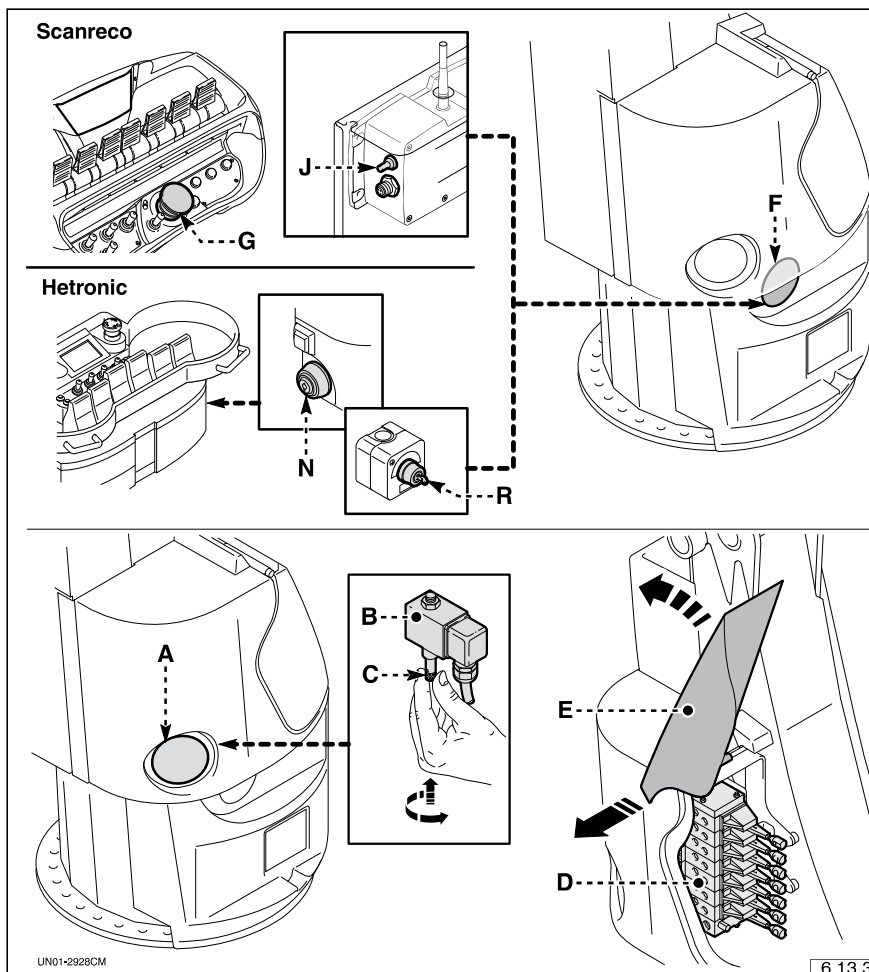
6.13.2- Closing the crane in case of electrical-electronic failure

In case of electrical-electronic failure, the crane must be manoeuvred from the control post on board the machine.



HAZARD !

Shutting off of the moment limiter involves the shutting off of all limiting and control devices (moment limiter, stability control, etc.), so proceed with the utmost caution. Only carry out the manoeuvres that move the load towards the column, in order to place the load on the ground.



Scanreco radio control

- 1 - Turn off the transmitter unit with button "G".
- 2 - Open cover "F".
- 3 - Set the selector "J" to "MANUAL".

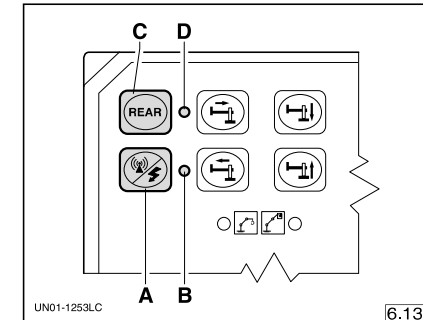
Hetronic radio control

- 1 - Turn switch "N" to the "0" position.
- 2 - Open cover "F".
- 3 - Turn switch "R" to the "HAND/MANUAL" position.

- 4 - Remove the cover "A".
- 5 - Remove the seals from the shut-off device "B".
- 6 - Press and turn the pawl "C" fully.
- 7 - Open cover "E".
- 8 - Manoeuvre the crane from the distributor "D" in order to place the load on the ground and close the crane in the resting position.

6.13.3- Closing the outriggers

I° - Network failure situation

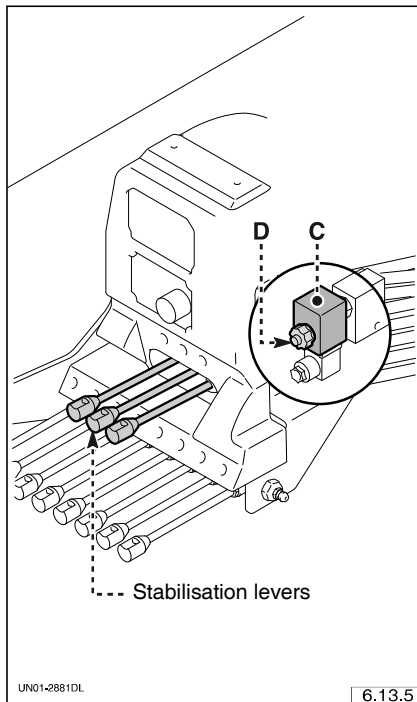


In the event of a failure involving the communication network between the control unit and the stabilisation controls, destabilise the machine as outlined below:

- 1 - push button "A" and keep it pushed throughout the operations (signal light "B" = ON).
- 2 - Use the "MCS" keyboard controls to retract first the outrigger jacks and then the crane outriggers.
- 3 - Push button "C" (signal light "D" = ON).
- 4 - Use the controls to retract first the outrigger jacks and then the outriggers on the supplementary cross-beam.

6.69

- Electrical-electronic failure



When a failure occurs in the communication network between the control unit and the outrigger control distributor (the situation cannot be solved with the Quick Reset / Restart procedure or from the "MCS" panel), it becomes

necessary to shut off the specific control unit to perform the outrigger closure manoeuvres.

Proceed as outlined below.

- 1 - Remove the seals from shut-off device "C".
- 2 - Press and turn the pawl "D" until reaches the stroke limit.
- 3 - Close the jacks and outrigger arms.



HAZARD !

Crane use with device shut off is prohibited.

The seal on the shut off device must be replaced by the authorised service centre.

6.14 - Sensor exclusion during malfunction

If a malfunction occurs in one or more sensors, (with the exception of the pressure sensors), it is possible to exclude them and operate temporarily to complete the operation in progress and re-close the crane.

The exclusion of the sensors causes an automatic reduction of the lifting capacity by 10%.

Proceed as outlined below.

- 1) Press and keep pressed the "Reset" button on the transmitter unit of the remote control or on the control panel of the function control unit. The intermittent buzzer informs the operator that the reset function is active.

- 2) Move the crane.
If a lock condition occurs, re-press the "Reset" button.

It is possible to use the reset function three times, then only movements that bring the load closer to the column are permitted.

If a block is caused, it is necessary to carry out the procedures described in para "Lock situations and manoeuvres permitted" to activate the crane.

6.15 - Use of the manual extension load limiter



WARNING !

Before moving the load with the extensions, check that the transmitter pin is working and that it is mounted onto the extension that you wish to use. Always select the number relating to the extension in use.

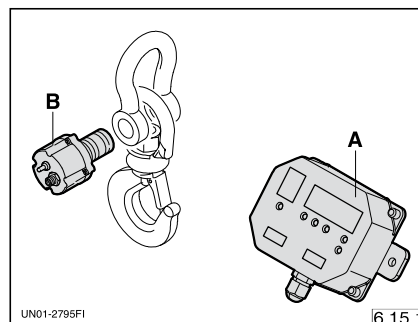
During movement of the load, do not for any reason change the number of the extension in use. It is prohibited to lift loads larger than those indicated on the capacity diagrams (whatever the geometric configuration of the crane is).

- General description

The limiting device informs the operator of the weight lifted by the extension in use.

On reaching the preset value (depending on the extension in use), all the load lifting manoeuvres stop immediately and so the overloading of the extension is avoided.

- Main parts

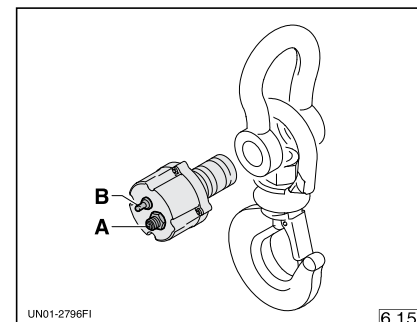


- A - Receiver unit
- B - Transmitter pin

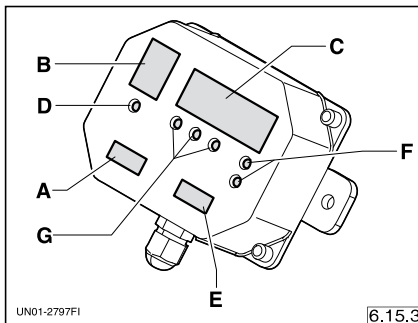
- Technical data

Power voltage	from 9 to 24 V dc
Absorption	250 mA max.
Protection	IP 65
Emission frequency	FM 2,4 Ghz (ISM)
Battery	Ni-Mh 3,6V 2,4 Ah
Indicative battery duration	120 hours

- Controls and indicators

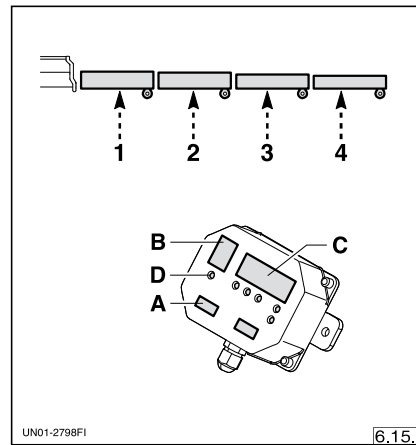


- A - Battery charger connector.
- B - Switch to switch the transmitter unit on/off.



- A** - Selection key for the extension in use.
- B** - Display for the extension selected.
- C** - Display for the weight lifted by the extension in use.
- D** - Light signal: when it is lit it means the load preset for the extension in use has been exceeded.
- E** - Measurement unit selection button.
- F** - Signal lights: they signal which measurement unit is shown on the display (kg or lbs).
- G** - Signal lights: they show the charge of the battery of the transmitter unit (green, yellow and red).
When the battery is completely flat the message "-" and "- - - -" appears on the displays "B" and "C".

- Functioning



Proceed as outlined below.

- 1 - Using button "A", select the manual extension that you wish to use, in accordance with the diagram in fig. 6.15.4. The number of the extension appears on the display "B".
- 2 - Fit the transmitter/pin on the selected extension and switch it on.
- 3 - Lift the load.

When the maximum load liftable by the extension in use is reached, the signal light lamp "D" will light up. The corresponding icon will appear on the radio control and/or transmitter unit display and on the control

unit.

All the lifting manoeuvres by the crane are blocked and only lowering movements to place the load on the ground are permitted.

With the load on the ground, the alarm stops and it is possible to start work again.



WARNING !

If all the commands are inhibited press button "A" until a flashing dash appears on the display "B", indicating that the load limiter has been deactivated.

The operator has to manoeuvre with maximum care and place the load on the ground in order to avoid any accidents.

- Displaying the maximum preset values (fig. 6.15.4)

When an extension is selected using the button "A", the corresponding preset load is shown on the display "C".



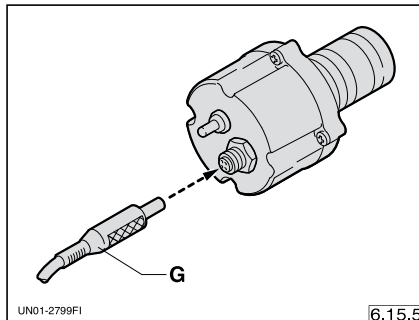
WARNING !

The values for the maximum loads of the manual extensions were originally preset by PM Group or at an authorised service centre.

Any re-calibrations may only be carried out at an authorised service centre.

The maximum preset values are slightly higher than those indicated in the load diagrams, due to the tolerance of the device.

- Charging the battery



Connect the cable "G" of the battery charger to the transmitter unit and to the 12 - 24 V dc socket of the vehicle (charging time: about 4 hours).

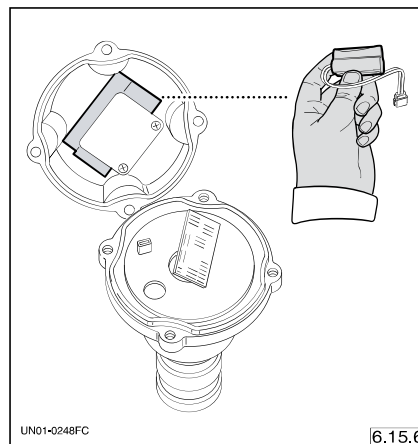


Information

Switch off the transmitter when not in use.

After a long period out of use it is recommended to charge the transmitter before use.

- Replacing the battery



Proceed as outlined below.

- 1 - Unscrew the four screws and open the case.
- 2 - Turn the casing upside down and unscrew the four fixing screws of the circuit board.

- 3 - Remove the connector that connects the board and replace the battery pack.



Information

Do not use lithium batteries, as they are not suitable.

Only use batteries of the type specified by the manufacturer, the same as those already fitted in the transmitter.

7 Maintenance

7.1 - Regular checks

All the maintenance operations that are not provided for in this chapter must be carried out at an authorised PM service centre.



CAUTION !

Before carrying out any maintenance operation check that the oil has completely cooled down.

Regular checks						
Checks to be carried out by the operator						
Component	Operation	Every 10 hours	Every 100 hours	Every 500 hours (6 months)	Every 1000 hours (1 year)	Para.
Pipes and hoses	Check	•				7.2
Hosing guard	Check integrity	•				7.3
Connections	Check for leaks	•				7.4
Plates	Check integrity	•				2.4
Hook	Check	•				3.1
Hydraulic oil	Check	•				7.6
Control and limiting devices	Check	•				2.3
Structure	Inspection	•				7.7
Winch cable	Check	•				7.9
	Lubrication		•			7.10
Pulleys	Check integrity	•				7.8
	Running check	•				7.8
	Lubrication		•			7.22
Pin lock	Check		•			7.11
Crane stay rod	Check		•			7.12
Supplementary crossmembers	Check					7.14
Crane	Cleaning		•			7.17
Pins	Lubrication		•			7.22
Arms	Lubrication		•			7.16
Sliding blocks	Lubrication		•			7.22
Rotation block	Lubrication		•			7.22
Control levers	Lubrication		•			7.22
Jack sliding blocks	Check		•			7.13
Fifth wheel	Lubrication		•			7.22
Reduction gears oil	Check		•			7.5

7.1

7

MAINTENANCE

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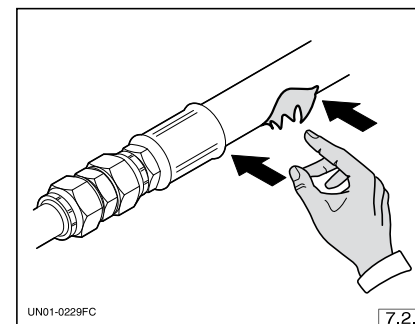
Regular checks Checks to be carried out by the operator						
Component	Operation	Every 10 hours	Every 100 hours	Every 500 hours (6 months)	Every 1000 hours (1 year)	Para.
Filters	Check	•				7.15
	Replacement			•		7.15
Radio control batteries	Replacement				•	6.2
Manual extension limiter batteries	Replacement				•	6.15

Regular checks Checks that must be carried out at an authorised service centre						
Component	Operation	Every 200 hours	Every 500 hours (6 months)	Every 1000 hours (1 year)	Every 2000 hours (2 years)	Every 4000 hours (4 years)
Hydraulic oil	Check, replacement			•		
	Check contamination		•			
Control and limiting devices	Check			•		
Supplementary crossmembers	Nut and bolt tightness test		•			
Structure	Inspection		•			
Sliding blocks	Replacement					•
Valves	Calibration		•			
Manual extensions	Adjustment		•			
Winch	Lubrication check	•				
	Lubrication replacement (*)		•			
	Check brake			•		
Hydraulic system	Washing					•
Reduction gears oil	Replacement				•	

(*) For oil bath lubricated winches

7.2

7.2 - Checking the condition of the hoses

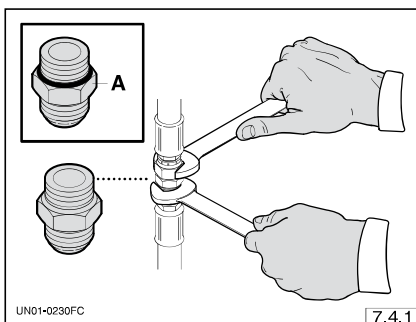


Check the fastening of the pipe connection and the condition of the hose. If the pipe shows any signs of ageing, breakage, bulging, abrasion, etc., it must be replaced.

7.3 - Checking the hosing guards

These guards protect the operator from oil spurts in the event of a breakage in the hosing. If they are worn or broken, they must be replaced.

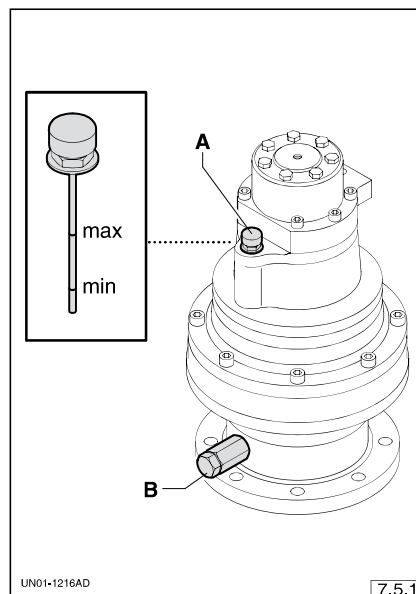
7.4 - Checking for oil leaks from the hydraulic system



Oil leaks from the connections can normally be eliminated by tightening the connections correctly.

Oil leaks from connection "A", which is supplied with an airtight washer, can only be eliminated by replacing the connection.

7.5 - Checking the oil level in the rotation reduction gears



A - Air vent stopper

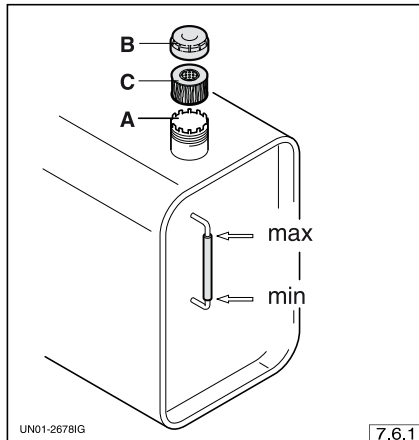
B - Exhaust stopper

To check the level, clean and insert the dipstick.

Top up until the level is between the minimum and maximum marks on the dipstick.

For the oil characteristics see para "Oils and lubricants".

7.6 - Checking the hydraulic oil level



Check the oil level daily, which must be between the minimum and maximum marks.

If necessary top up via inlet "A", remembering to first remove cap "B" and breather filter "C".

Replace breather filter "C" as regularly as the oil filters (as specified in the maintenance schedule (see "Routine checks").

For the oil characteristics see para "Oils and lubricants".

i Information

Carry out the check with the crane in the resting position, with all the jacks retracted and the vehicle on a flat surface.

7.7 - Structure inspection

Wash the crane carefully before carrying out the checks.

Visually inspect the integrity of the structure in general and in particular the welding.

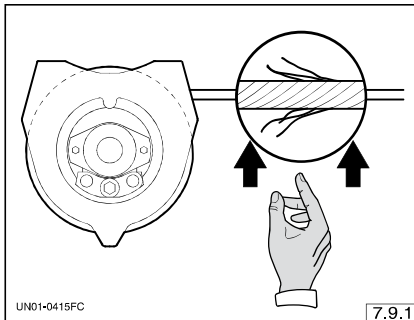
If any weakening or small cracks are noticed, immediately contact an authorised PM service centre.

As stated in the regular check schedule (para. "Regular checks") have the structure checks carried out at an authorised PM service centre.

7.8 - Pulley check

- Check that the pulley races and flaps are in good condition; if they are worn or broken, they must be replaced.
- Check that they run smoothly when rotating and if they do not, contact an authorised PM workshop.

7.9 - Cable check



According to the law, the cables must be checked every three months by expert personnel unless otherwise specified by the manufacturer. The results of these checks must be recorded in the special check register in the appendix of this manual. The cable must be carefully examined for any wear which could alter its technical features. The cable must be replaced when:

- the quantity of the broken wires (in a section whose length is equal to four times the screw pitch of the elementary wire in the strand) is over 10% of the total wires making up the cable;
- the wire wear is extremely visible (10% reduction in the diameter of the elementary wire);
- the cable is permanently warped with

slackening of the trefoils;

- the cable has considerable dents or permanent twisting, has been crushed, its core is coming out or has any other significant signs of wear;
- the sealing on the cable ends is damaged.

7.10 - Cable lubrication

The lubrication must be carried out with particular care to protect the cable from corrosive external elements and to reduce the friction with the pulleys.

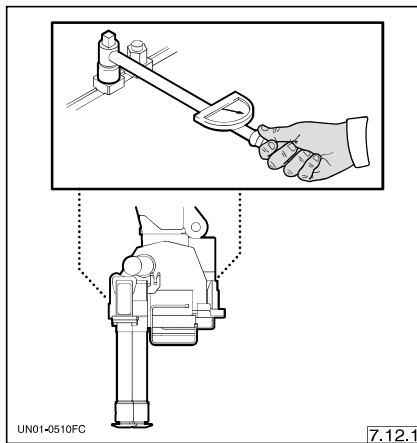
For lubricant specifications, see para. "Oils and lubricants".

7.11 - Checking the pin locks



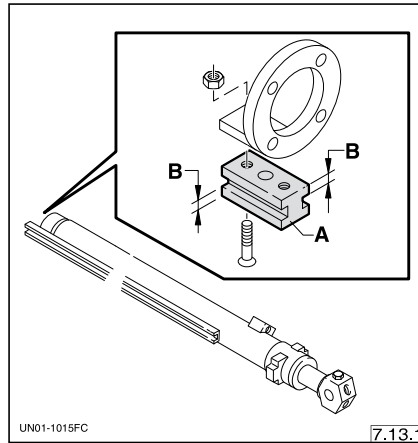
~~Check the fixing screws of the pin locks.~~ If they have loosened, tighten the screws to the tightening torque of 4 daNm (30 lbf - ft).

7.12- Checking the anchorage stay rods



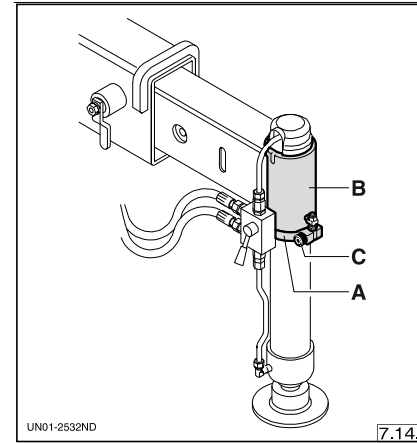
Check that the anchorage stay rods are tightened; if not, tighten the nuts to the tightening torque of 70 daNm (516 lbf - ft).

7.13- Checking the jack sliding blocks



Check the wear of sliding blocks "A". At an authorised service centre, have the sliding blocks replaced when the wings "B" are less than 4 mm (0.157").

7.14- Checking the supplementary crossmember



Check visually that the outrigger jacks have not moved upwards and that, with the jacks at rest, there is no play between locking collar "A" and sleeve "B". If this is not the case, contact an authorised service centre. Periodically check fastening screws "C" on the outrigger jacks. If loose, tighten the screws with a torque of 20 daNm (147 lbf - ft).

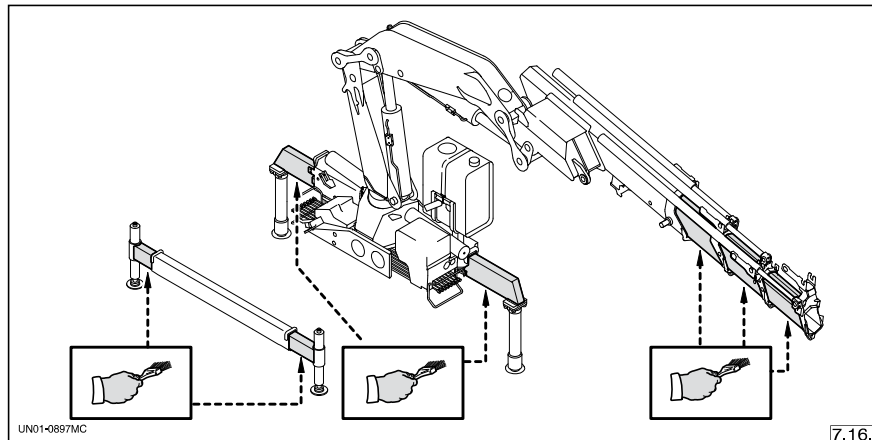
7.15 - Filters



Information

Carry out the clogging check and replace filter cartridges at the intervals specified in the maintenance schedule and in general after any maintenance on the hydraulic system (see “Filters replacement”).

7.16 - Lubrication of the crane arms and stabilisers



For the lubricant characteristics see para. “Oils and lubricants”.
After having carried out the lubrication, carry out some arm extension manoeuvres without a load, in order to distribute the lubricant.

- Lubricating the crane arms

Extend the outrigger arms fully and grease all the upper, lower and side surfaces.

- Lubricating the outrigger arms

Extend the outrigger arms fully and grease all the side surfaces.

7.17- Cleaning the machine

Clean the jack shafts to avoid dirt building up.

Clean the machine with a jet of pressurised water, using detergents that are authorised by the standards in force. Do not orient a jet of pressurised water to electrical equipment to avoid damaging it.

7.18- Long periods of machine inactivity

If the crane has to remain inactive for a long period of time, it is necessary to:

- 1) wash it and fold it back into the resting position with all the jacks closed. If this is not possible, clean and lubricate the part of the jackshafts that remains exposed to the atmospheric agents.
- 2) Park the machine in a sheltered area, which can only be accessed by authorised personnel;
- 3) check and replace the damaged and worn components;
- 4) check and remove any fluid leaks;
- 5) check and top up all the fluid levels if necessary.

7.8

7.19- Starting the machine up again

Before starting the machine up again after a long period of inactivity, carry out the following checks and operations:

- 1) wash the machine completely;
- 2) grease all the components that are subject to lubrication;
- 3) check and top up all the fluid levels if necessary;
- 4) check and remove any fluid leaks;
- 5) check the integrity of the pipes and hoses;
- 6) check and replace any damaged components;
- 7) check the correct functioning of the controls and visual indicators;
- 8) check that all the control and limiting devices work properly;
- 9) carry out the maintenance operations in accordance with the planned maintenance schedule (see para. "Regular checks").

7.20- Scrapping and disposal

The demolition of the machine must be carried out by specifically qualified personnel with the necessary hydraulic and mechanical skills.

The components removed must be sorted according to the type of materials they contain and in compliance with the laws in force concerning waste collection, sorting and disposal.

With reference to European directives 2002/95 EC, 2002/96 EC, and 2003/108 EC (Waste from Electrical and Electronic Equipment), the electric and electronic parts, marked with the relative symbol, must be disposed of via a specific collection centre or returned to the dealer, still fitted, when purchasing a new machine.

Waste from electrical and electronic equipment can contain substances which may be environmentally hazardous and pose health risks, therefore you are advised to dispose of it correctly.

Illegal disposal of electric and electronic components is punishable by law with sanctions applicable according to the law in force where the parts are dumped.

7.21 - Oils and lubricants

Never mix oils of different types together, in order to avoid machine malfunctions.

For top ups, only use preventively filtered oils (maximum filtration grade, class 9, in accordance with Nas 1638-18/14 ISO 4406).



Information

Do not dispose of the oil in the environment, as it causes pollution.

Oil working temperature -30 ÷ +140 °C (-22 °F ÷ 284 °F)

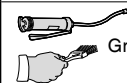
Lubricant	AGIP ⁽¹⁾	MOBIL	SHELL	TOTAL	ESSO
Hydraulic oil	OSO 32	DTE OIL 24	TELLUS OIL 32	AZOLLA ZS 32	NUTO H 32
Grease	GREASE PV 2	-	RETINAX HD 2	-	-

(1) Lubricant used by the manufacturer the first time the system is filled.

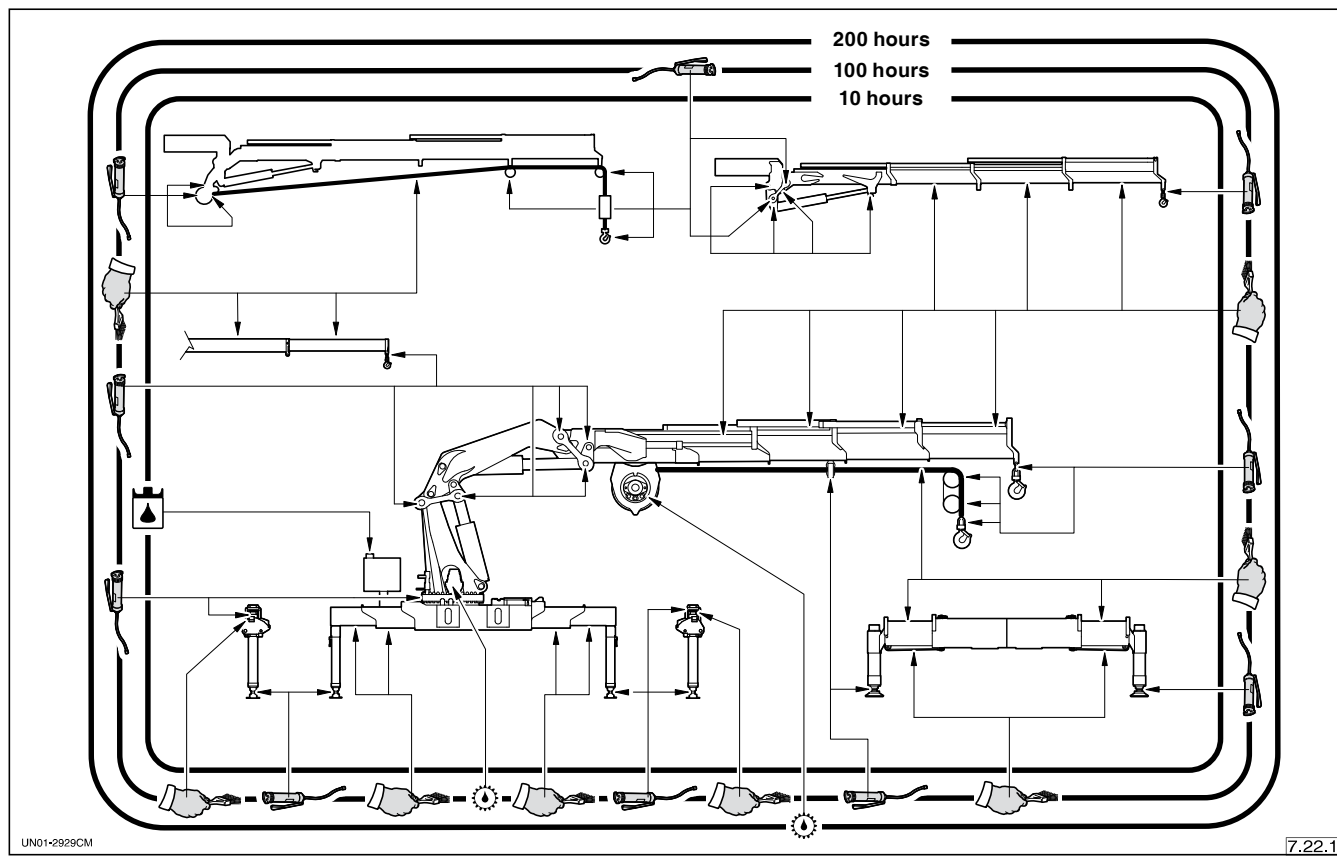
Intensive use (saline environment) oil working temperatures -30 ÷ +140 °C (-22 °F ÷ 284 °F)

Lubricant	AGIP	MOBIL	SHELL	TOTAL	ESSO
Hydraulic oil	OSO 32	DTE OIL 22	TELLUS OIL 22	AZOLLA ZS 22	NUTO H 22
Grease	RACOL SHAPPIRE AQUA2	-	-	-	-

7.21.1- Lubricant comparison table

Lubricant		Oil working temperatures		
		-30 ÷ +140 °C		
Hydraulic oil	ISO 3348	ISO VG 32	ISO VG 46	ISO VG 22
 Grease	NLGI 2 calcium/lithium			

7.22 - Greasing and lubrication diagrams



Symbols =
7.10



Hydraulic oil



Grease



Grease

8 Fault, cause, remedy

Fault	Cause possible	Remedy
The crane is completely stopped	Emergency buttons pressed	Release the emergency stop buttons
	The moment control device has come into operation	See "Block situation and manoeuvres allowed"
	The P.T.O is not engaged correctly	Engage the P.T.O
	P.T.O. engagement malfunctioning	Repair the P.T.O. engagement.
	Electrical system malfunctioning	Check signals on push-button panel or electronic control unit displays
	Low temperature of hydraulic oil	Let the oil flow through the system until the working temperature is reached
	There may be a lever switch for a dump body located on the latter	Position the switch on crane
	Radio control malfunctioning	Check radio control devices

8.1

8

FAULT, CAUSE, REMEDY

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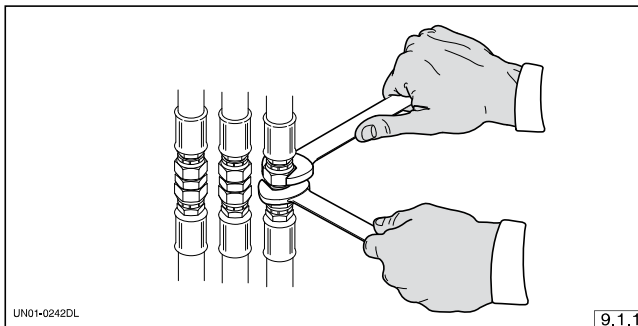
Fault	Cause possible	Remedy
The crane boom cannot hold the load and creep down considerably	The pilot operated check valve fitted on the lift cylinder in question leaks Oil leakage inside the cylinder concerned	Have the valve checked and/or replaced by an authorized repair workshop Have the seals inside the cylinder replaced by an authorised repair workshop
Permanent vibrations while operating on all the movements	Insufficient hydraulic oil Clogging of hydraulic oil filter Suction hose obstructed Inefficient pump	Add hydraulic oil to the tank (see para. "Checking the hydraulic oil level") Replace the filter cartridge (see para. "Filters replacement") Locate the cause of the obstruction and remove it Check the pump flow; if it is not regular replace the pump
Considerable reduction in the speed of the movements	Low speed of the engine Radio and/or distributor system malfunctioning Inefficient pump	Check the exact speed of the vehicle's engine on the basis of the hydraulic boom extension time Check signals on push-button panel or electronic control unit displays Check the pump flow; if it has decreased, replace the pump

Fault	Cause possible	Remedy
It is hard to engage the P.T.O.	If pneumatic: the air into the appropriate vehicle system is insufficient If mechanical: the control cable is obstructed	Check the pressure of the air in the vehicle's pneumatic system; stop any leaks Free the control cable
Vibrations in the arm unit during load translation	Sliding pads insufficiently lubricated Sliding pads too worn Insufficient hydraulic oil	Lubricate the sliding pads according to the relative instructions Consult an authorised workshop Check the level of the hydraulic oil
Lack of tension on the whole crane	Interrupted fuses P.T.O. relay malfunctioning	Replace the fuses Replace the relay
Electronic control unit off and crane not working	Control unit malfunctioning	Consult an authorised workshop

Fault	Cause possible	Remedy
Radio control off or not working	Interrupted radio fuse	Replace the fuse (see para. "Fuse replacement")
	Radio unit malfunctioning	Consult an authorised workshop
	Push-button panel battery exhausted	Recharge the battery
	Interferenced radio transmission	Connect via cable the push-button panel to the receiver on the crane
	Receiver antenna malfunctioning	Consult an authorised workshop
	Emergency stop push-button pressed	Release the emergency stop push-button
Heat exchanger not working	Exchanger activation device malfunctioning	Have the device replaced by an authorized repair workshop
	Exchanger electrical connections cut-off	Check all electrical contacts
	Fan motor not working	Have the device replaced by an authorized repair workshop
	Satellite electronic control unit malfunctioning	Have the device replaced by an authorized repair workshop

9 Spare part replacement

9.1 - Hose replacement



HAZARD !

The hosing must be replaced with the hydraulic system depressurised and when the oil has completely cooled down.

To depressurise the system, disconnect the power take off, stop the truck engine and move the control levers back and forwards. Unscrew the joints and collect oil into a suitable tank.

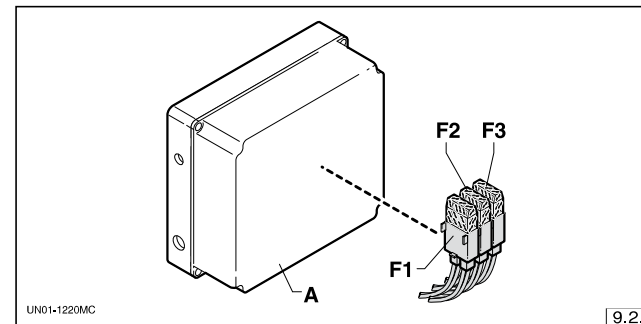
Replace the hose and tighten the joints.

9.2 - Fuse replacement

Before replacing the interrupted fuse, remove the cause of its blowing up.

Replace the blown fuse with a new one having the same characteristics.

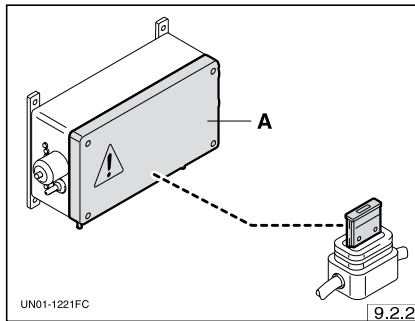
9.2.1 - Connector block fuse replacement



Remove the cap "A" and replace the interrupted fuse.

Pos.	Protected circuit	Ampère
F1	Main circuit (electronic control units, radio)	15
F2	Secondary circuit (operating control unit)	5
F3	Heat exchanger circuit	20

9.2.2 - Radio receiver fuse replacement



Remove the cap "A" and replace the interrupted fuse with a 10 A new one.

9.2

9.3 - Filters replacement

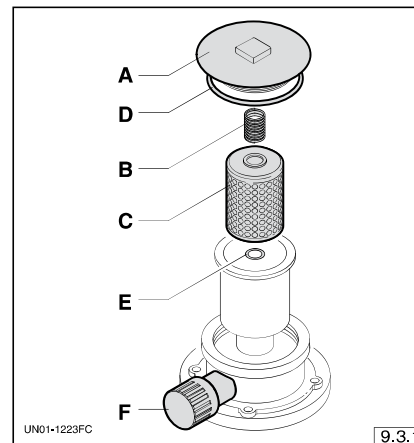


CAUTION !

The filters must be replaced with the hydraulic system de-pressured and the oil completely cooled.

When the filter cartridge is replaced, the exhaust plug "F", equipped with a 3 micron filtering grade air filter, must also be replaced.

9.3.1 - Replacing the exhaust filter

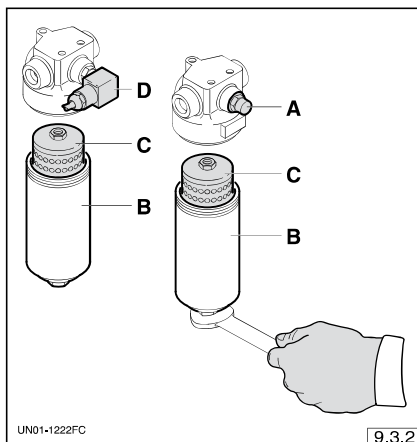


Replace the filtering cartridge, as it is made of non-washable material, by the expiry date provided for in the planned maintenance schedule (see para. "Regular checks").

- 1 - Carefully clean the external surfaces of the filter;
- 2 - unscrew the cap "A";
- 3 - remove the spring "B" and the filtering cartridge "C";
- 4 - check the condition of the washers "D" and "E"; if they are damaged replace them.

To reassemble the filter, carry out the disassembly operations in reverse.

9.3.2 - Delivery filter replacement



For machines fitted with a delivery filter, replace the filter cartridge when the clogging signal light “A” turns red or when the “filtered clogged” alarm message is displayed (for filters fitted with sensor “D”).

In any case, carry out the replacement by the expiry date provided for in the planned maintenance schedule (see para. “Regular checks”).

For the replacement proceed as follows.

- 1 - Turn off the tank tap.
- 2 - Carefully clean the external surfaces of the filter;
- 3 - Unscrew the filter unit “B” and drain the oil inside it
- 4 - Replace the filter cartridge “C”.

To reassemble the filter, carry out the disassembly operations in reverse.

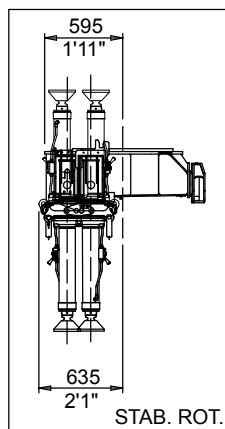
Tighten the filter unit to a tightening torque of 10 daNm (73,7 lbf - ft).

Turn on the tank tap.

- Overall dimensions

A	mm	ft
Vers.22	1325	4'4"
Vers.23	1325	4'4"
Vers.24	1325	4'4"
Vers.25	1325	4'4"
Vers.26	1415	4'8"
Vers.27	1445	4'9"
Vers.28	1445	4'9"
Oil Tank	1390	4'7"

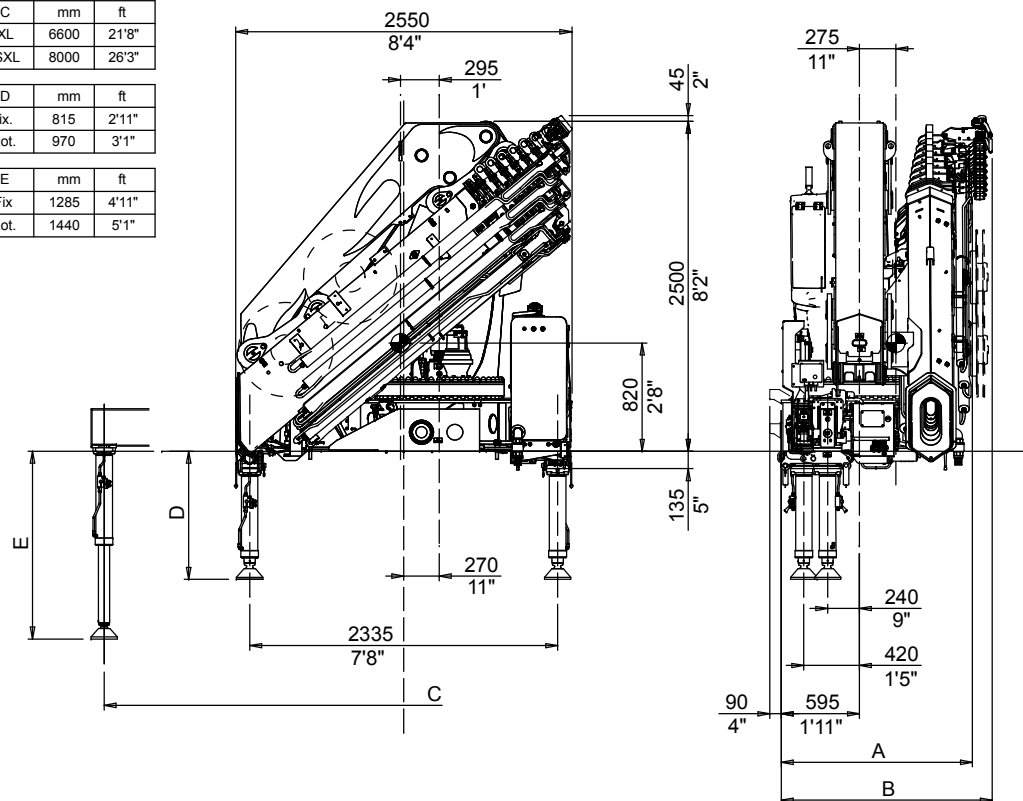
B	mm	ft	mm	ft
Vers.22	1560	5'1"	----	----
Vers.23	1560	5'1"	----	----
Vers.24	1560	5'1"	----	----
Vers.25	1560	5'1"	----	----
Vers.26	1560	5'1"	----	----
Vers.27	1580	5'2"	----	----
Vers.28	1575	5'2"	----	----
Vers.29	1605	5'3"	----	----



C	mm	ft
XL	6600	21'8"
SXL	8000	26'3"

D	mm	ft
Fix.	815	2'11"
Rot.	970	3'1"

E	mm	ft
Fix.	1285	4'11"
Rot.	1440	5'1"



A.1

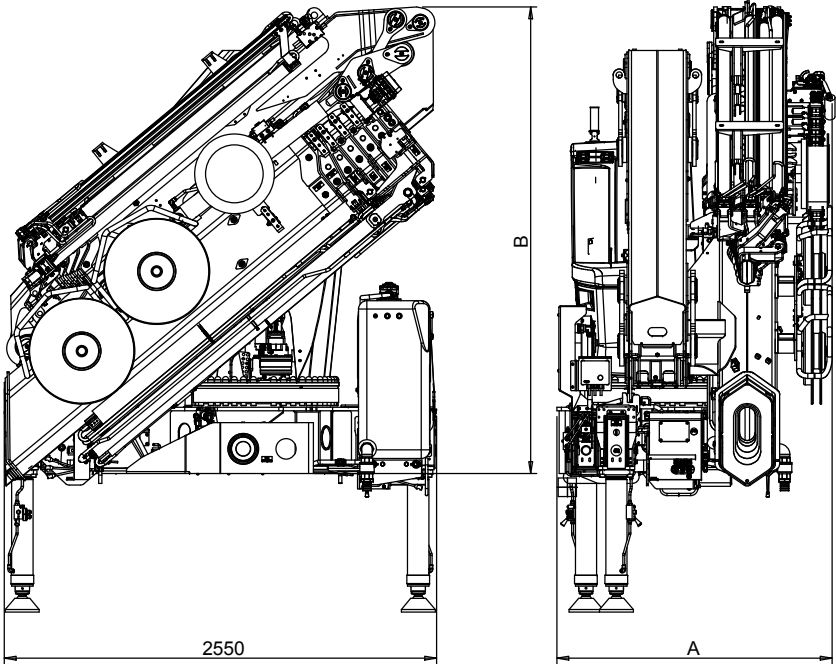
ENCLOSURES

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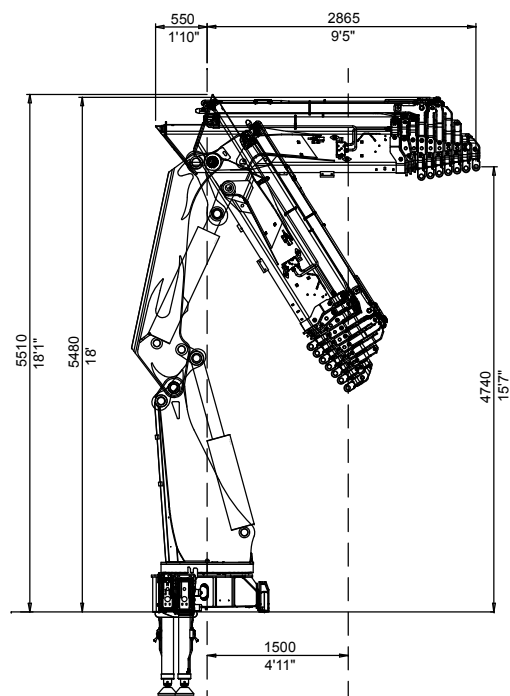
- Overall dimensions of standard basic machine with jib

A				
	mm	ft	mm	ft
48524 SP +J1414.20	1640	5' 5"	1505	4' 11"
48524 SP +J1415.20	1640	5' 5"	1505	4' 11"
48524 SP +J1416.20	1640	5' 5"	1505	4' 11"
48525 SP +J1214.20	1630	5' 4"	1505	4' 11"
48525 SP +J1215.20	1630	5' 4"	1505	4' 11"
48525 SP +J1216.20	1630	5' 4"	1505	4' 11"
48526 SP +J1214.20	1630	5' 4"	1505	4' 11"
48526 SP +J1215.20	1630	5' 4"	1505	4' 11"
48526 SP +J1216.20	1630	5' 4"	1505	4' 11"
48527 SP +J813.20	1580	5' 2"	---	---
48527 SP +J814.20	1580	5' 2"	---	---
48527 SP +J815.20	1580	5' 2"	---	---
48528 SP +J612.20	1605	5' 3"	---	---
48528 SP +J613.20	1605	5' 3"	---	---
48528 SP +J614.20	1605	5' 3"	---	---

B	mm	ft
48524 SP +JIB	2770	9' 1"
48525 SP +JIB	2770	9' 1"
48526 SP +JIB	2765	9' 1"
48527 SP +JIB	2725	8' 11"
48528 SP +JIB	2760	9' 1"

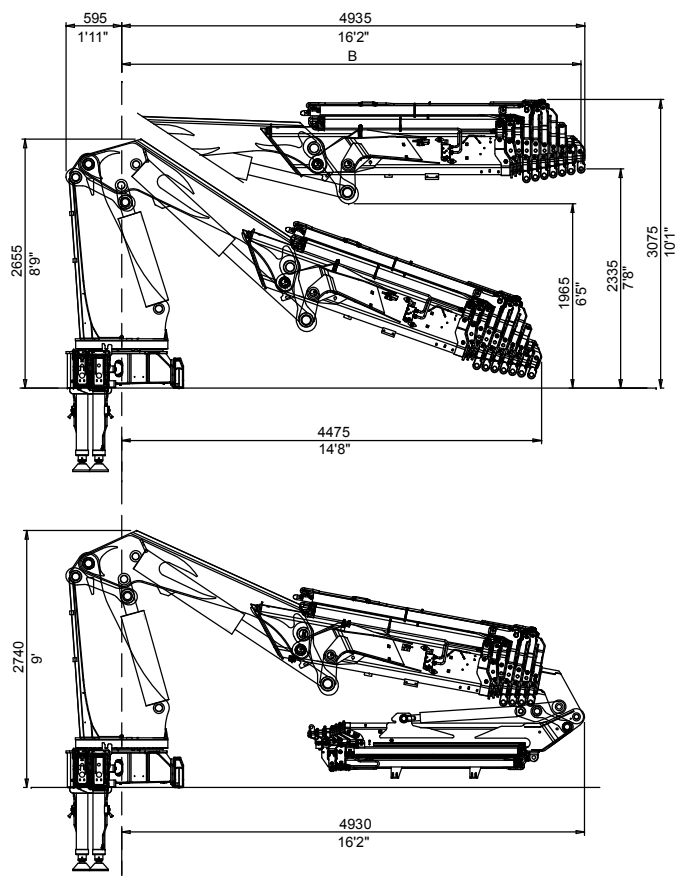


- Overall dimensions - Working positions



A	mm	ft
Vers.22	2785	9'2"
Vers.23	3090	10'2"
Vers.24	2970	9'9"
Vers.25	2850	9'4"
Vers.26	2735	9'
Vers.27	2620	8'7"
Vers.28	2510	8'3"
Vers.29	2385	7'10"

B	mm	ft
Vers.22	4550	14'11"
Vers.23	4310	14'2"
Vers.24	4405	14'5"
Vers.25	4500	14'9"
Vers.26	4595	15'1"
Vers.27	4690	15'5"
Vers.28	4785	15'8"
Vers.29	4890	16'1"



A.3

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- Specifications and performances

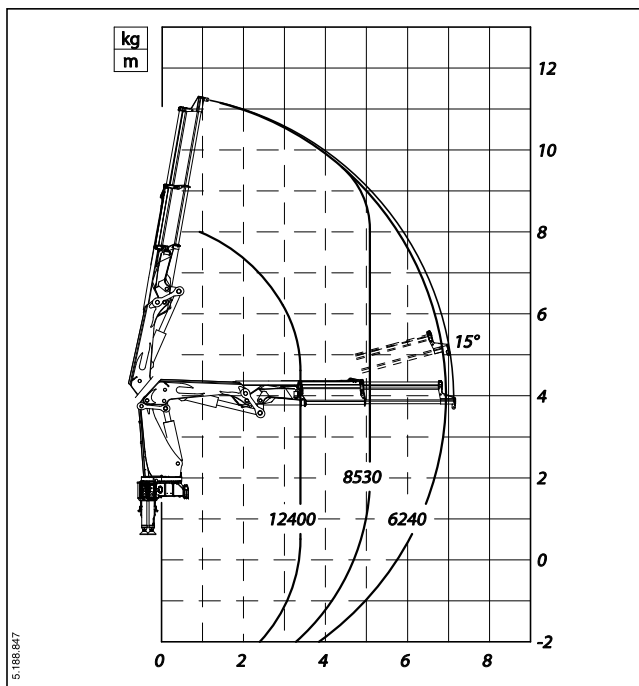
PM 48522 SP C

Max. lifting momentum	kNm	427	 ft lbs	314660
	tm	43,5	 /	/
Hydraulic outreach:				
Horizontal.....	m	7,15	 ft	23' 5"
Vertical	m	11,25	 ft	36' 11"
Outreach with manual extensions:				
Horizontal.....	m	-	 ft	0,00
Vertical	m	-	 ft	-
Hydraulic system:				
Recommended capacity	l/min	80	 gals/min	21
Maximum pressure	Mpa	32	 psi	4640
Oil tank capacity.....	l	200	 gals	32
Rotation unit:				
Rotation angle.....	°	∞	 °	∞
Rotation torque	kNm	44,0	 ft lbs	32450,0
Weight of standard crane without oil tank.....	kg	4315	 lbs	9515
Maximum power absorbed by the hydraulic pump	kW	47,4	 HP	64
Maximum force exerted on ground by stabilisers	kN	170	 lbs	38220
Specific operating pressure of each stabiliser with Ø 200 mm (8") disk.....	Mpa	5,4	 psi	790
Arm pack extension time for standard machine (Plus device off).....	sec.	16	 sec.	16
"Mobile" hook maximum load capacity - Hook capacity	kg	16000	 lbs	35275

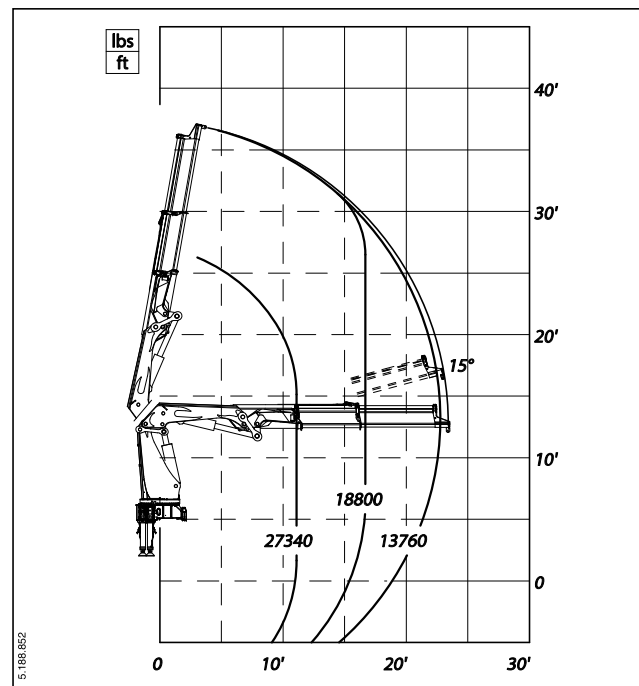
∞ = Continuous rotation

- Capacities diagram

PM 48522 SP C



** Maximum capacity at mobile hook
 *** Maximum capacity from horizontal to vertical
 Note: the performances stated are obtained with the main arm inclined to 20°



** Maximum capacity at mobile hook
 *** Maximum capacity from horizontal to vertical
 Note: the performances stated are obtained with the main arm inclined to 20°

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- Specifications and performances

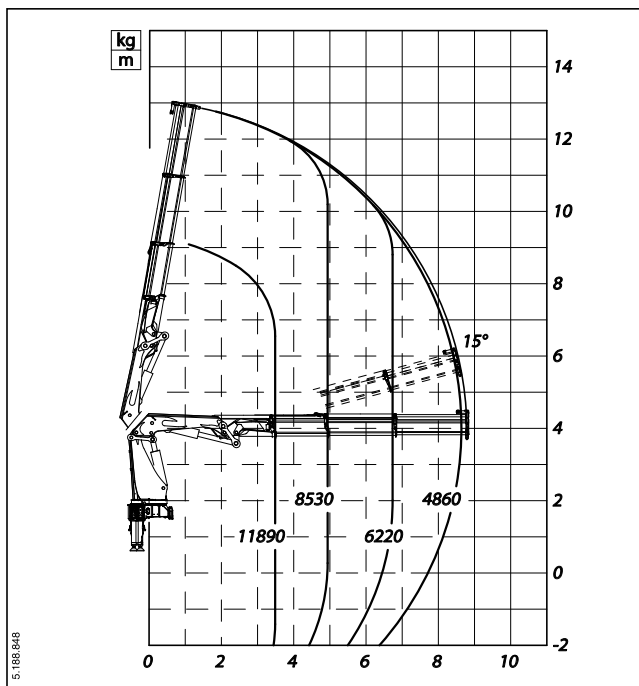
PM 48523 SP C

Max. lifting momentum	kNm	414	 ft lbs	305400
	tm	42,2	 /	/
Hydraulic outreach:				
Horizontal.....	m	8,80	 ft	28' 10"
Vertical	m	12,85	 ft	42' 2"
Outreach with manual extensions:				
Horizontal.....	m	-	 ft	0,00
Vertical	m	-	 ft	-
Hydraulic system:				
Recommended capacity	l/min	80	 gals/min	21
Maximum pressure	Mpa	32	 psi	4640
Oil tank capacity.....	l	200	 gals	32
Rotation unit:				
Rotation angle.....	°	∞	 °	∞
Rotation torque	kNm	44,0	 ft lbs	32450,0
Weight of standard crane without oil tank.....	kg	4530	 lbs	9990
Maximum power absorbed by the hydraulic pump	kW	47,4	 HP	64
Maximum force exerted on ground by stabilisers	kN	170	 lbs	38220
Specific operating pressure of each stabiliser with Ø 200 mm (8") disk.....	Mpa	5,4	 psi	790
Arm pack extension time for standard machine (Plus device off).....	sec.	25	 sec.	25
"Mobile" hook maximum load capacity - Hook capacity	kg	16000	 lbs	35275

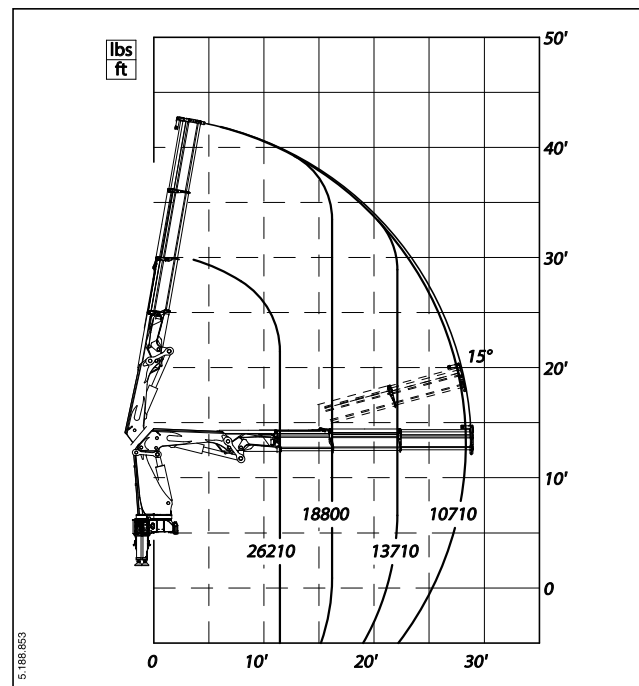
∞ = Continuous rotation

- Capacities diagram

PM 48523 SP C



** Maximum capacity at mobile hook
 *** Maximum capacity from horizontal to vertical
 Note: the performances stated are obtained with the main arm inclined to 20°



** Maximum capacity at mobile hook
 *** Maximum capacity from horizontal to vertical
 Note: the performances stated are obtained with the main arm inclined to 20°

ENCLOSURES

01-GB-AA-357DM

- Specifications and performances

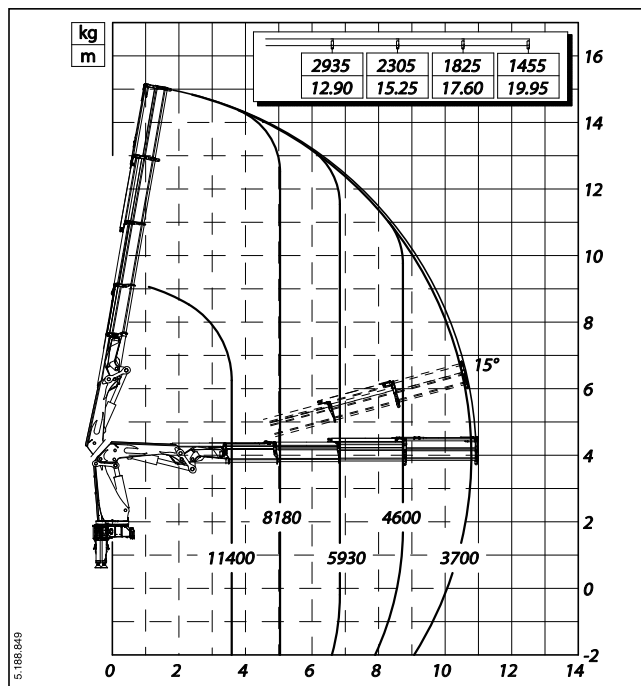
PM 48524 SP C

Max. lifting momentum	kNm	405	 ft lbs	298790
	tm	41,3	 /	/
Hydraulic outreach:				
Horizontal.....	m	10,95	 ft	35' 11"
Vertical	m	15,00	 ft	49' 3"
Outreach with manual extensions:				
Horizontal.....	m	20,25	 ft	0,00
Vertical	m	24,15	 ft	20,25
Hydraulic system:				
Recommended capacity	l/min	80	 gals/min	21
Maximum pressure	Mpa	32	 psi	4640
Oil tank capacity.....	l	200	 gals	32
Rotation unit:				
Rotation angle.....	°	∞	 °	∞
Rotation torque	kNm	44,0	 ft lbs	32450,0
Weight of standard crane without oil tank.....	kg	4775	 lbs	10530
Maximum power absorbed by the hydraulic pump	kW	47,4	 HP	64
Maximum force exerted on ground by stabilisers	kN	170	 lbs	38220
Specific operating pressure of each stabiliser with Ø 200 mm (8") disk.....	Mpa	5,4	 psi	790
Arm pack extension time for standard machine (Plus device off).....	sec.	34	 sec.	34
"Mobile" hook maximum load capacity - Hook capacity	kg	16000	 lbs	35275

∞ = Continuous rotation

- Capacities diagram

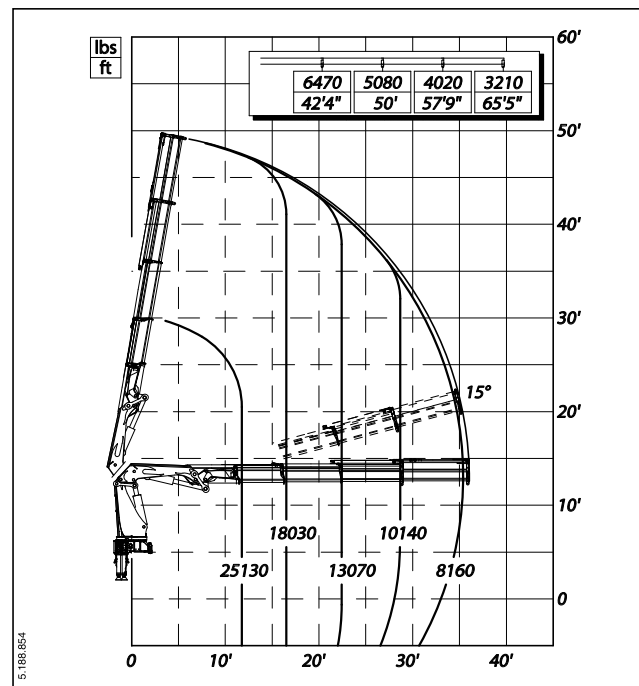
PM 48524 SP C



** Maximum capacity at mobile hook

*** Maximum capacity from horizontal to vertical

Note: the performances stated are obtained with the main arm inclined to 20°



** Maximum capacity at mobile hook

*** Maximum capacity from horizontal to vertical

Note: the performances stated are obtained with the main arm inclined to 20°

- Specifications and performances

PM 48525 SP C

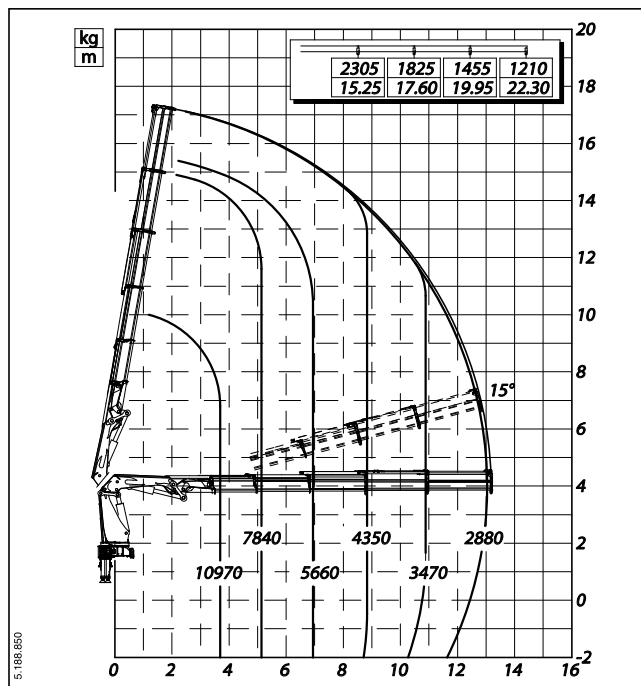
Max. lifting momentum	kNm	398	 ft lbs	293580
	tm	40,6	 /	/
Hydraulic outreach:				
Horizontal.....	m	13,20	 ft	43' 4"
Vertical	m	17,20	 ft	56' 5"
Outreach with manual extensions:				
Horizontal.....	m	22,60	 ft	0,00
Vertical	m	26,45	 ft	22,60
Hydraulic system:				
Recommended capacity	l/min	80	 gals/min	21
Maximum pressure	Mpa	32	 psi	4640
Oil tank capacity.....	l	200	 gals	32
Rotation unit:				
Rotation angle.....	°	∞	 °	∞
Rotation torque	kNm	44,0	 ft lbs	32450,0
Weight of standard crane without oil tank.....	kg	4995	 lbs	11015
Maximum power absorbed by the hydraulic pump	kW	47,4	 HP	64
Maximum force exerted on ground by stabilisers	kN	170	 lbs	38220
Specific operating pressure of each stabiliser with Ø 200 mm (8") disk.....	Mpa	5,4	 psi	790
Arm pack extension time for standard machine (Plus device off).....	sec.	42	 sec.	42
"Mobile" hook maximum load capacity - Hook capacity	kg	16000	 lbs	35275

∞ = Continuous rotation

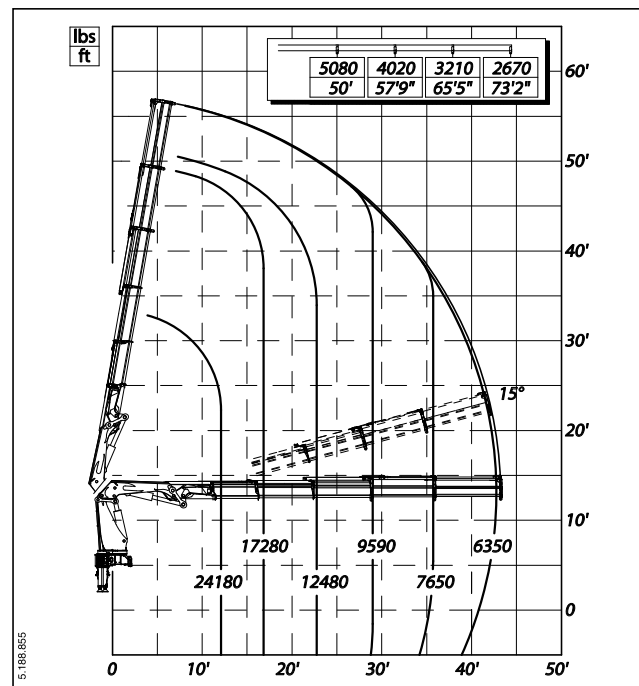
A.10

- Capacities diagram

PM 48525 SP C



** Maximum capacity at mobile hook
 *** Maximum capacity from horizontal to vertical
 Note: the performances stated are obtained with the main arm inclined to 20°



** Maximum capacity at mobile hook
 *** Maximum capacity from horizontal to vertical
 Note: the performances stated are obtained with the main arm inclined to 20°

ENCLOSURES

01-GB-AA-357DM

- Specifications and performances

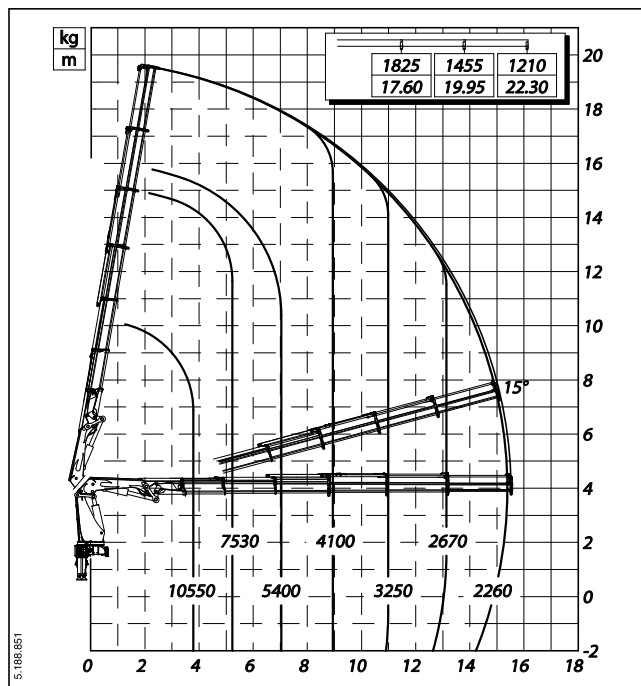
PM 48526 SP C

Max. lifting momentum	kNm	393	 ft lbs	289970
	tm	40,1	 /	/
Hydraulic outreach:				
Horizontal.....	m	15,55	 ft	51'
Vertical	m	19,50	 ft	64'
Outreach with manual extensions:				
Horizontal.....	m	22,60	 ft	0,00
Vertical	m	26,45	 ft	22,60
Hydraulic system:				
Recommended capacity	l/min	80	 gals/min	21
Maximum pressure	Mpa	32	 psi	4640
Oil tank capacity.....	l	200	 gals	32
Rotation unit:				
Rotation angle.....	°	∞	 °	∞
Rotation torque	kNm	44,0	 ft lbs	32450,0
Weight of standard crane without oil tank.....	kg	5195	 lbs	11455
Maximum power absorbed by the hydraulic pump	kW	47,4	 HP	64
Maximum force exerted on ground by stabilisers	kN	170	 lbs	38220
Specific operating pressure of each stabiliser with Ø 200 mm (8") disk.....	Mpa	5,4	 psi	790
Arm pack extension time for standard machine (Plus device off).....	sec.	50	 sec.	50
"Mobile" hook maximum load capacity - Hook capacity	kg	16000	 lbs	35275

∞ = Continuous rotation

- Capacities diagram

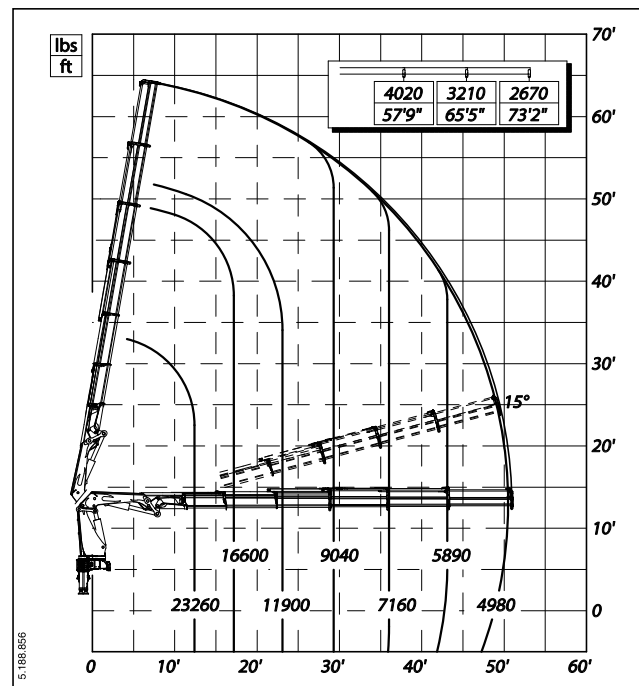
PM 48526 SP C



** Maximum capacity at mobile hook

*** Maximum capacity from horizontal to vertical

Note: the performances stated are obtained with the main arm inclined to 20°



** Maximum capacity at mobile hook

*** Maximum capacity from horizontal to vertical

Note: the performances stated are obtained with the main arm inclined to 20°

ENCLOSURES

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- Specifications and performances

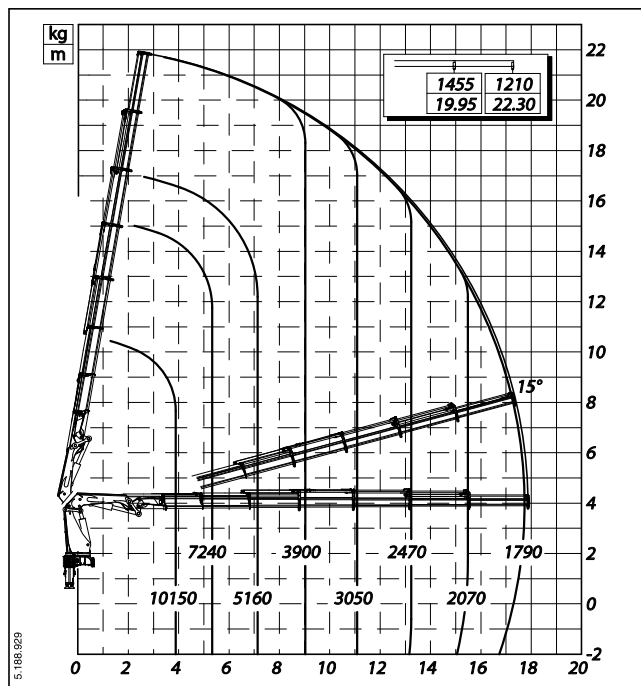
PM 48527 SP C

Max. lifting momentum	kNm	388	 ft lbs	286320
	tm	39,6	 /	/
Hydraulic outreach:				
Horizontal.....	m	17,90	 ft	58' 9"
Vertical	m	21,80	 ft	71' 6"
Outreach with manual extensions:				
Horizontal.....	m	22,60	 ft	0,00
Vertical	m	26,45	 ft	22,60
Hydraulic system:				
Recommended capacity	l/min	80	 gals/min	21
Maximum pressure	Mpa	32	 psi	4640
Oil tank capacity.....	l	200	 gals	32
Rotation unit:				
Rotation angle.....	°	∞	 °	∞
Rotation torque	kNm	44,0	 ft lbs	32450,0
Weight of standard crane without oil tank.....	kg	5370	 lbs	11840
Maximum power absorbed by the hydraulic pump	kW	47,4	 HP	64
Maximum force exerted on ground by stabilisers	kN	170	 lbs	38220
Specific operating pressure of each stabiliser with Ø 200 mm (8") disk.....	Mpa	5,4	 psi	790
Arm pack extension time for standard machine (Plus device off).....	sec.	57	 sec.	57
"Mobile" hook maximum load capacity - Hook capacity	kg	16000	 lbs	35275

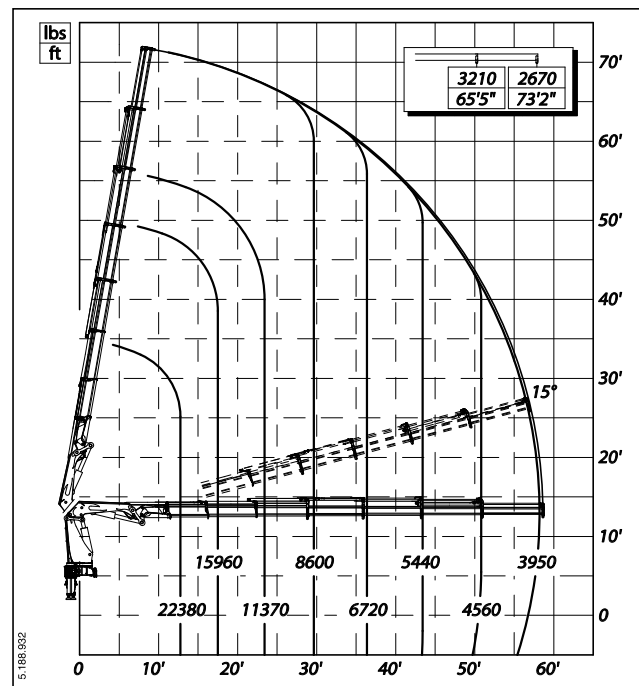
∞ = Continuous rotation

- Capacities diagram

PM 48527 SP C



** Maximum capacity at mobile hook
 *** Maximum capacity from horizontal to vertical
 Note: the performances stated are obtained with the main arm inclined to 20°



** Maximum capacity at mobile hook
 *** Maximum capacity from horizontal to vertical
 Note: the performances stated are obtained with the main arm inclined to 20°

ENCLOSURES

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- Specifications and performances

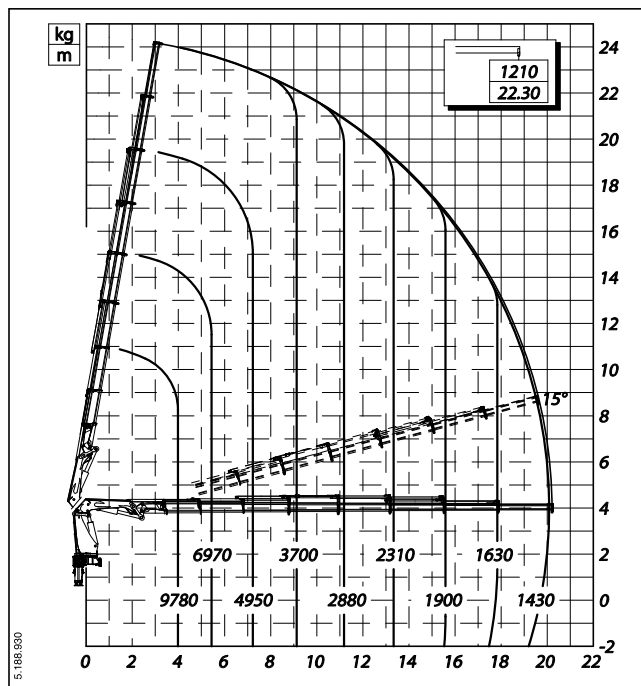
PM 48528 SP C

Max. lifting momentum	kNm	384	 ft lbs	282960
	tm	39,1	 /	/
Hydraulic outreach:				
Horizontal.....	m	20,25	 ft	66' 5"
Vertical	m	24,15	 ft	79' 3"
Outreach with manual extensions:				
Horizontal.....	m	22,60	 ft	0,00
Vertical	m	26,45	 ft	22,60
Hydraulic system:				
Recommended capacity	l/min	80	 gals/min	21
Maximum pressure	Mpa	32	 psi	4640
Oil tank capacity.....	l	200	 gals	32
Rotation unit:				
Rotation angle.....	°	∞	 °	∞
Rotation torque	kNm	44,0	 ft lbs	32450,0
Weight of standard crane without oil tank.....	kg	5545	 lbs	12225
Maximum power absorbed by the hydraulic pump	kW	47,4	 HP	64
Maximum force exerted on ground by stabilisers	kN	170	 lbs	38220
Specific operating pressure of each stabiliser with Ø 200 mm (8") disk.....	Mpa	5,4	 psi	790
Arm pack extension time for standard machine (Plus device off).....	sec.	63	 sec.	63
"Mobile" hook maximum load capacity - Hook capacity	kg	16000	 lbs	35275

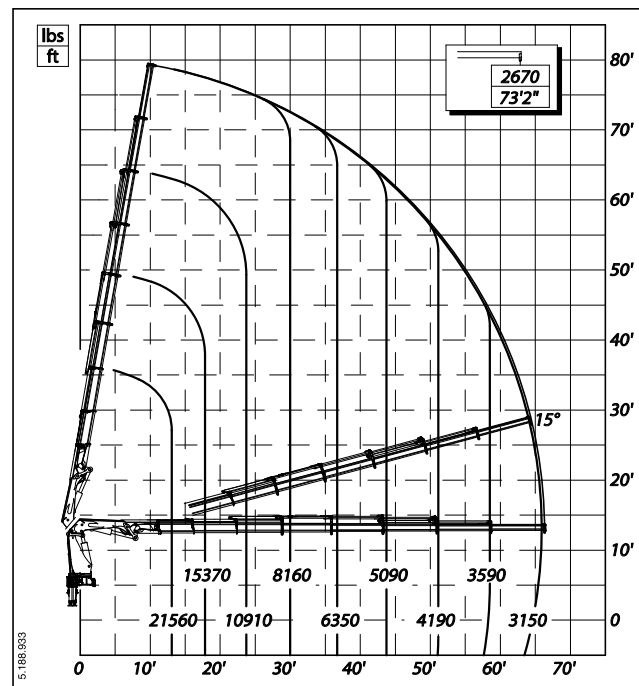
∞ = Continuous rotation

- Capacities diagram

PM 48528 SP C



** Maximum capacity at mobile hook
 *** Maximum capacity from horizontal to vertical
 Note: the performances stated are obtained with the main arm inclined to 20°



** Maximum capacity at mobile hook
 *** Maximum capacity from horizontal to vertical
 Note: the performances stated are obtained with the main arm inclined to 20°

ENCLOSURES

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- Specifications and performances

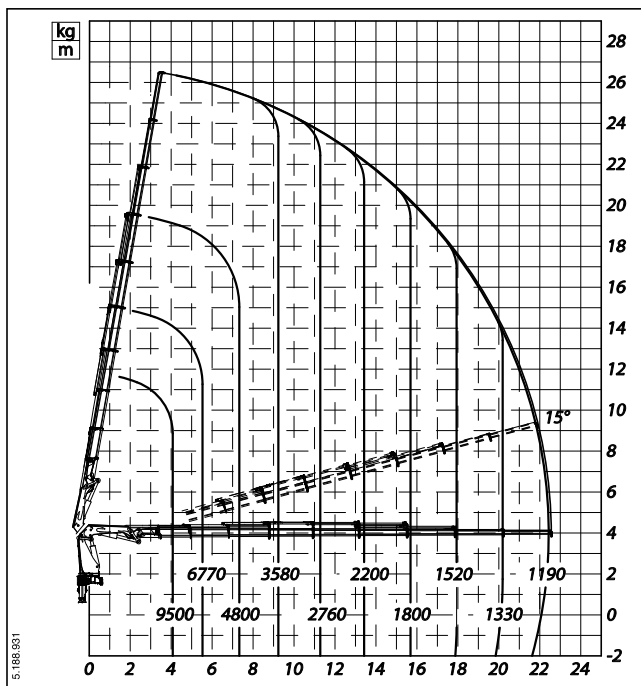
PM 48529 SP C

Max. lifting momentum	kNm	382	 ft lbs	281730
	tm	39,0	 /	/
Hydraulic outreach:				
Horizontal.....	m	22,60	 ft	74' 2"
Vertical	m	26,45	 ft	86' 9"
Outreach with manual extensions:				
Horizontal.....	m	-	 ft	0,00
Vertical	m	-	 ft	-
Hydraulic system:				
Recommended capacity	l/min	80	 gals/min	21
Maximum pressure	Mpa	32	 psi	4640
Oil tank capacity.....	l	200	 gals	32
Rotation unit:				
Rotation angle.....	°	∞	 °	∞
Rotation torque	kNm	44,0	 ft lbs	32450,0
Weight of standard crane without oil tank.....	kg	5680	 lbs	12525
Maximum power absorbed by the hydraulic pump	kW	47,4	 HP	64
Maximum force exerted on ground by stabilisers	kN	170	 lbs	38220
Specific operating pressure of each stabiliser with Ø 200 mm (8") disk.....	Mpa	5,4	 psi	790
Arm pack extension time for standard machine (Plus device off).....	sec.	69	 sec.	69
"Mobile" hook maximum load capacity - Hook capacity	kg	16000	 lbs	35275

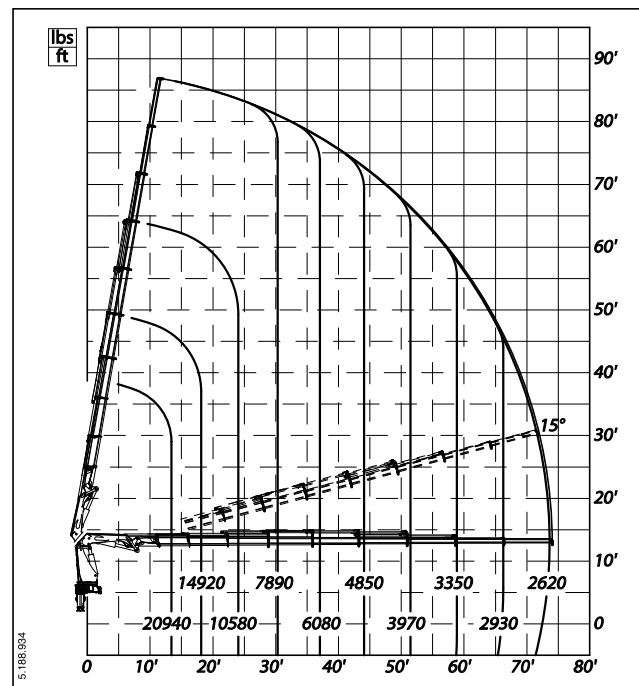
∞ = Continuous rotation

- Capacities diagram

PM 48529 SP C



** Maximum capacity at mobile hook
 *** Maximum capacity from horizontal to vertical
 Note: the performances stated are obtained with the main arm inclined to 20°



** Maximum capacity at mobile hook
 *** Maximum capacity from horizontal to vertical
 Note: the performances stated are obtained with the main arm inclined to 20°

ENCLOSURES

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- Specifications and performances

PM 48522 SP

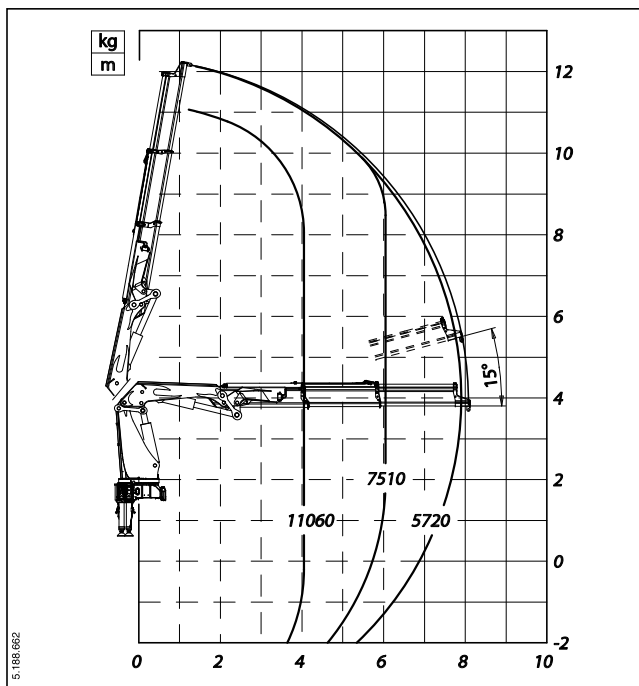
Max. lifting momentum	kNm	446		ft lbs	328640
	tm	45,4	.....	/	/
Hydraulic outreach:					
Horizontal.....	m	8,10	.....	ft	26' 7"
Vertical	m	12,75	.....	ft	41' 10"
Outreach with manual extensions:					
Horizontal.....	m	-	.....	ft	-
Vertical	m	-	.....	ft	-
Hydraulic system:					
Recommended capacity	l/min	80	.....	gals/min	21
Maximum pressure	Mpa	33	.....	psi	4790
Oil tank capacity.....	l	200	.....	gals	53
Rotation unit:					
Rotation angle.....	°	∞	.....	°	∞
Rotation torque	kNm	44,0	.....	ft lbs	32450,0
Weight of standard crane without oil tank.....	kg	4365	.....	lbs	9625
Maximum power absorbed by the hydraulic pump	kW	48,9	.....	HP	66
Maximum force exerted on ground by stabilisers	kN	170	.....	lbs	38220
Specific operating pressure of each stabiliser with Ø 200 mm (8") disk.....	Mpa	5,4	.....	psi	790
Arm pack extension time for standard machine (Plus device off).....	sec.	19	.....	sec.	19
"Mobile" hook maximum load capacity - Hook capacity	kg	16000	.....	lbs	35275

∞ = Continuous rotation

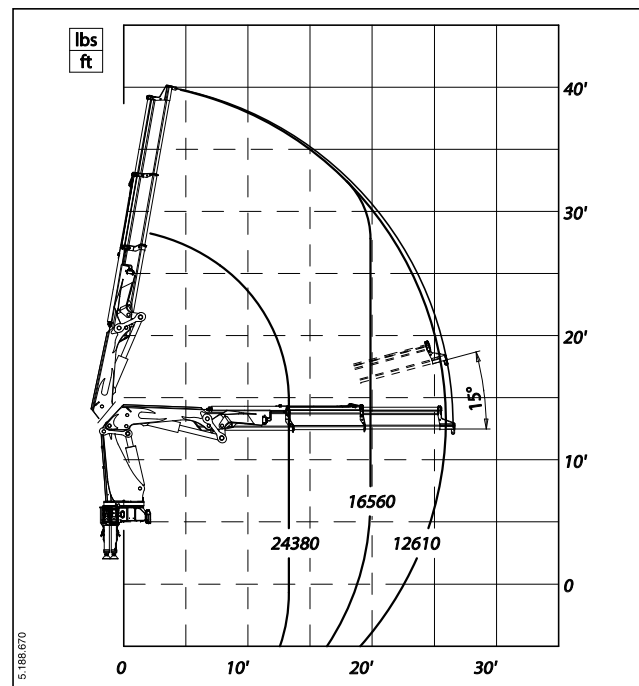
A.20

- Capacities diagram

PM 48522 SP



** Maximum capacity at mobile hook
 *** Maximum capacity from horizontal to vertical
 Note: the performances stated are obtained with the main arm inclined to 20°



** Maximum capacity at mobile hook
 *** Maximum capacity from horizontal to vertical
 Note: the performances stated are obtained with the main arm inclined to 20°

ENCLOSURES

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- Specifications and performances

PM 48523 SP

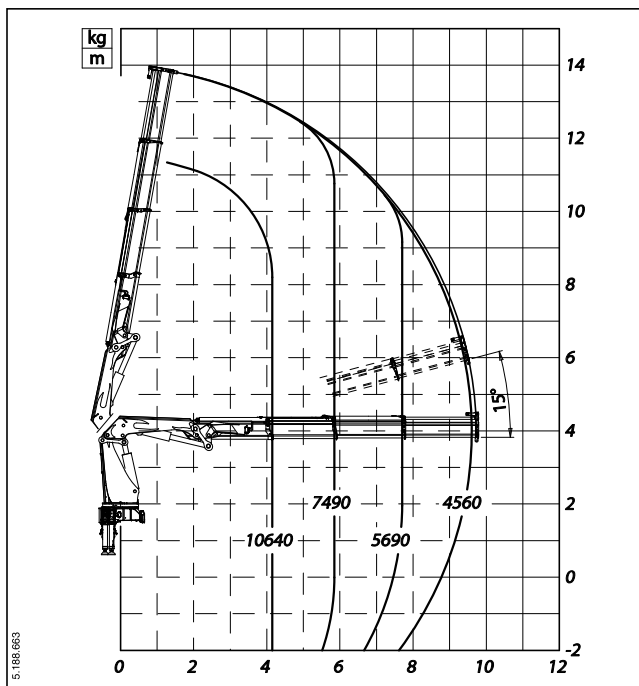
Max. lifting momentum	kNm	433	 ft lbs	319380
	tm	44,2	 /	/
Hydraulic outreach:				
Horizontal.....	m	9,75	 ft	32'
Vertical	m	14,30	 ft	46' 11"
Outreach with manual extensions:				
Horizontal.....	m	-	 ft	-
Vertical	m	-	 ft	-
Hydraulic system:				
Recommended capacity	l/min	80	 gals/min	21
Maximum pressure	Mpa	33	 psi	4790
Oil tank capacity.....	l	200	 gals	53
Rotation unit:				
Rotation angle.....	°	∞	 °	∞
Rotation torque	kNm	44,0	 ft lbs	32450,0
Weight of standard crane without oil tank.....	kg	4580	 lbs	10100
Maximum power absorbed by the hydraulic pump	kW	48,9	 HP	66
Maximum force exerted on ground by stabilisers	kN	170	 lbs	38220
Specific operating pressure of each stabiliser with Ø 200 mm (8") disk.....	Mpa	5,4	 psi	790
Arm pack extension time for standard machine (Plus device off).....	sec.	28	 sec.	28
"Mobile" hook maximum load capacity - Hook capacity	kg	16000	 lbs	35275

∞ = Continuous rotation

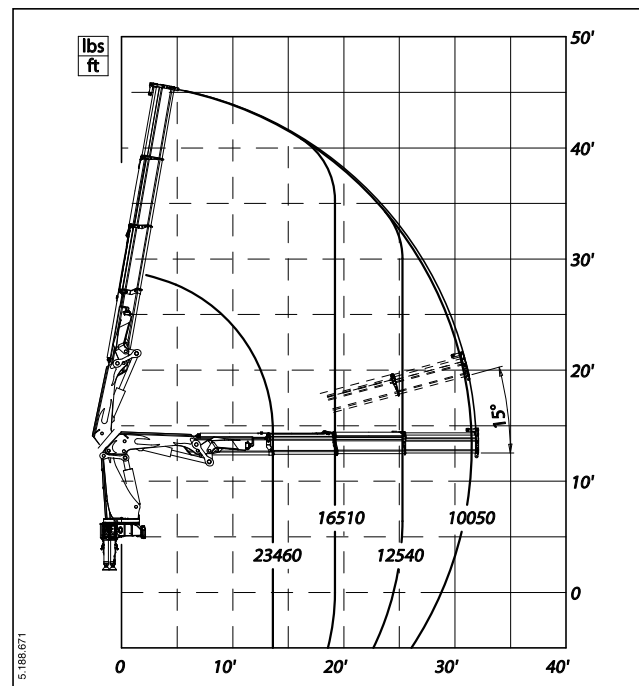
A.22

- Capacities diagram

PM 48523 SP



** Maximum capacity at mobile hook
 *** Maximum capacity from horizontal to vertical
 Note: the performances stated are obtained with the main arm inclined to 20°



** Maximum capacity at mobile hook
 *** Maximum capacity from horizontal to vertical
 Note: the performances stated are obtained with the main arm inclined to 20°

ENCLOSURES

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- Specifications and performances

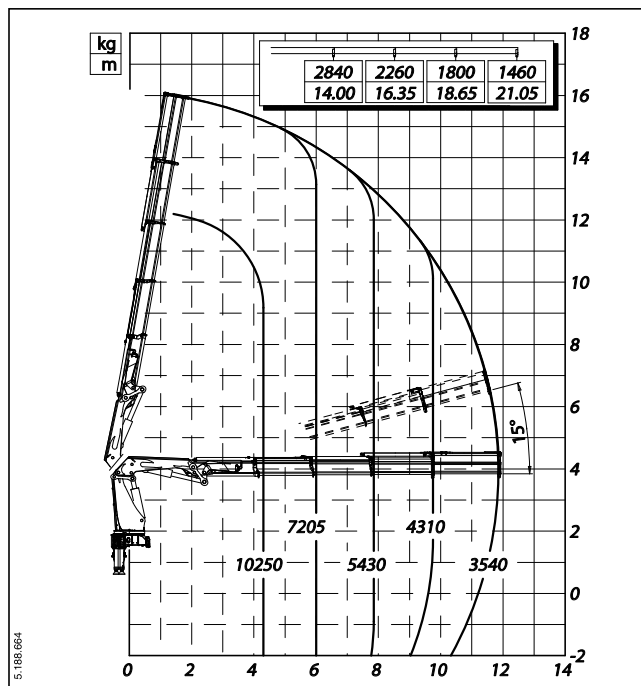
PM 48524 SP

Max. lifting momentum	kNm	432	 ft lbs	318800
	tm	44,1	 /	/
Hydraulic outreach:				
Horizontal.....	m	11,90	 ft	39' 1"
Vertical	m	16,35	 ft	53' 8"
Outreach with manual extensions:				
Horizontal.....	m	21,20	 ft	69' 7"
Vertical	m	25,15	 ft	82' 6"
Hydraulic system:				
Recommended capacity	l/min	80	 gals/min	21
Maximum pressure	Mpa	33	 psi	4790
Oil tank capacity.....	l	200	 gals	53
Rotation unit:				
Rotation angle.....	°	∞	 °	∞
Rotation torque	kNm	44,0	 ft lbs	32450,0
Weight of standard crane without oil tank.....	kg	4825	 lbs	10640
Maximum power absorbed by the hydraulic pump	kW	48,9	 HP	66
Maximum force exerted on ground by stabilisers	kN	170	 lbs	38220
Specific operating pressure of each stabiliser with Ø 200 mm (8") disk.....	Mpa	5,4	 psi	790
Arm pack extension time for standard machine (Plus device off).....	sec.	37	 sec.	37
"Mobile" hook maximum load capacity - Hook capacity	kg	16000	 lbs	35275

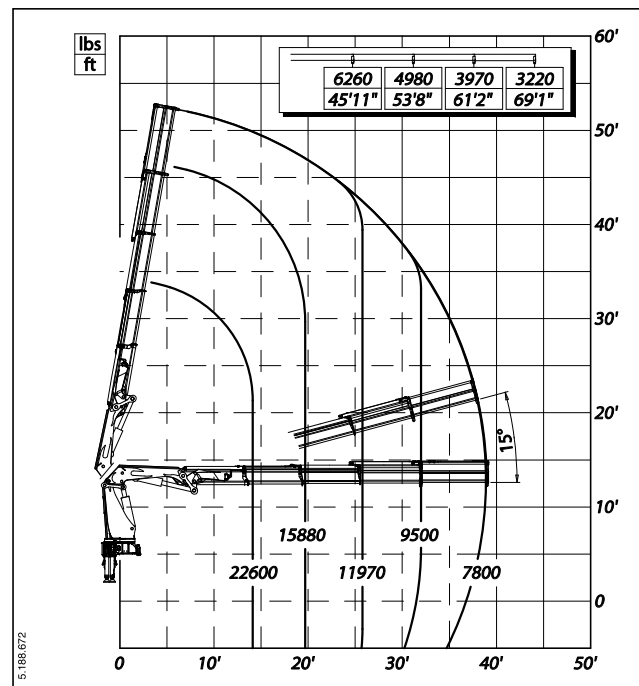
∞ = Continuous rotation

- Capacities diagram

PM 48524 SP



** Maximum capacity at mobile hook
 *** Maximum capacity from horizontal to vertical
 Note: the performances stated are obtained with the main arm inclined to 20°



** Maximum capacity at mobile hook
 *** Maximum capacity from horizontal to vertical
 Note: the performances stated are obtained with the main arm inclined to 20°

ENCLOSURES

01-GB-AA-357DM

- Specifications and performances

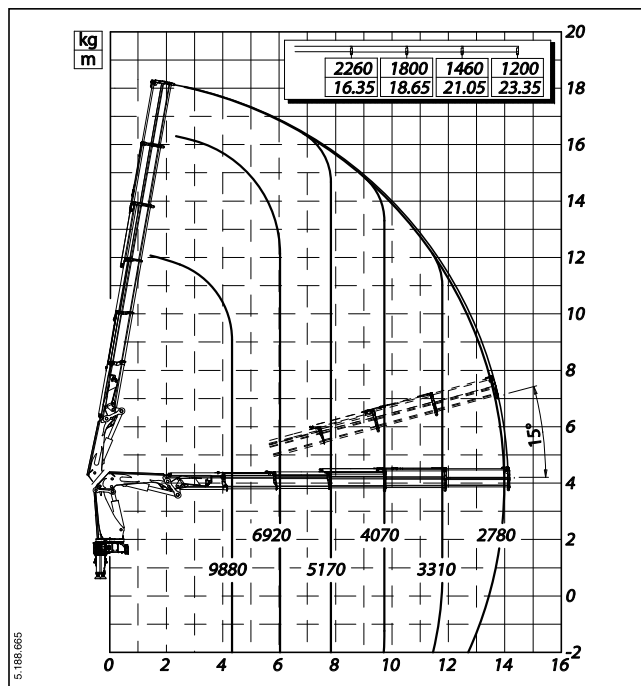
PM 48525 SP

Max. lifting momentum	kNm	421	 ft lbs	310860
	tm	43,0	 /	/
Hydraulic outreach:				
Horizontal.....	m	14,15	 ft	46' 5"
Vertical	m	18,45	 ft	60' 6"
Outreach with manual extensions:				
Horizontal.....	m	23,55	 ft	77' 3"
Vertical	m	27,35	 ft	89' 9"
Hydraulic system:				
Recommended capacity	l/min	80	 gals/min	21
Maximum pressure	Mpa	33	 psi	4790
Oil tank capacity.....	l	200	 gals	53
Rotation unit:				
Rotation angle.....	°	∞	 °	∞
Rotation torque	kNm	44,0	 ft lbs	32450,0
Weight of standard crane without oil tank.....	kg	5045	 lbs	11125
Maximum power absorbed by the hydraulic pump	kW	48,9	 HP	66
Maximum force exerted on ground by stabilisers	kN	170	 lbs	38220
Specific operating pressure of each stabiliser with Ø 200 mm (8") disk.....	Mpa	5,4	 psi	790
Arm pack extension time for standard machine (Plus device off).....	sec.	45	 sec.	45
"Mobile" hook maximum load capacity - Hook capacity	kg	16000	 lbs	35275

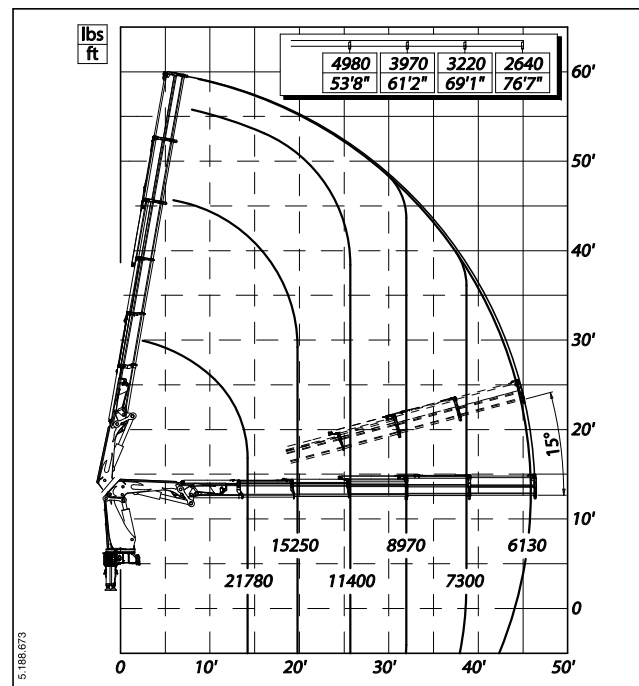
∞ = Continuous rotation

- Capacities diagram

PM 48525 SP



** Maximum capacity at mobile hook
 *** Maximum capacity from horizontal to vertical
 Note: the performances stated are obtained with the main arm inclined to 20°



** Maximum capacity at mobile hook
 *** Maximum capacity from horizontal to vertical
 Note: the performances stated are obtained with the main arm inclined to 20°

ENCLOSURES

01-GB-AA-357DM

- Specifications and performances

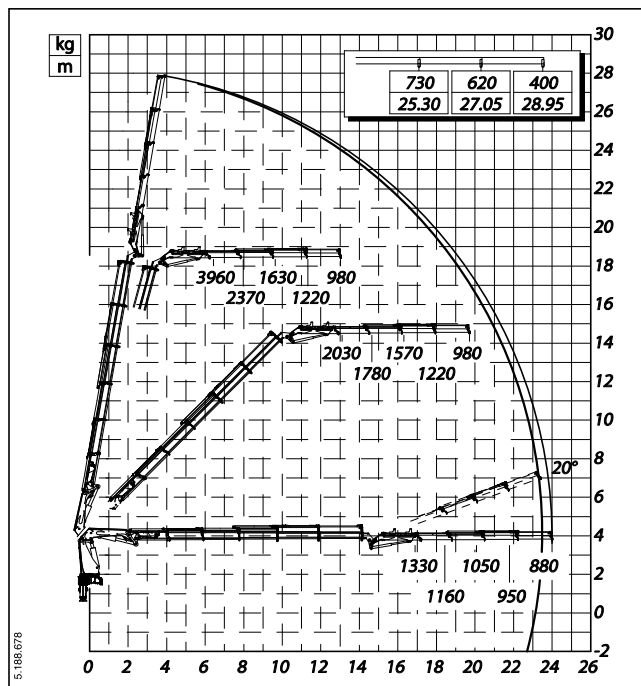
PM 48525 SP - with jib J1214.20

Max. lifting momentum	kNm	- ft lbs	-
	tm	- /	/
Hydraulic outreach:			
Horizontal.....	m	24,00 ft	78' 9"
Vertical	m	27,85 ft	91' 4"
Outreach with manual extensions:			
Horizontal.....	m	29,20 ft	95' 10"
Vertical	m	32,95 ft	108' 1"
Hydraulic system:			
Recommended capacity	l/min	80 gals/min	21
Maximum pressure	Mpa	33 psi	4790
Oil tank capacity.....	l	200 gals	53
Rotation unit:			
Rotation angle.....	°	∞ °	∞
Rotation torque	kNm	44,0 ft lbs	32450,0
Weight of standard crane without oil tank.....	kg	6115 lbs	13485
Maximum power absorbed by the hydraulic pump	kW	48,9 HP	66
Maximum force exerted on ground by stabilisers	kN	170 lbs	38220
Specific operating pressure of each stabiliser with Ø 200 mm (8") disk.....	Mpa	5,4 psi	790
Arm pack extension time for standard machine (Plus device off).....	sec.	- sec.	-
"Mobile" hook maximum load capacity - Hook capacity	kg	16000 lbs	35275
Jib hook - Hook capacity	kg	8000 lbs	17640

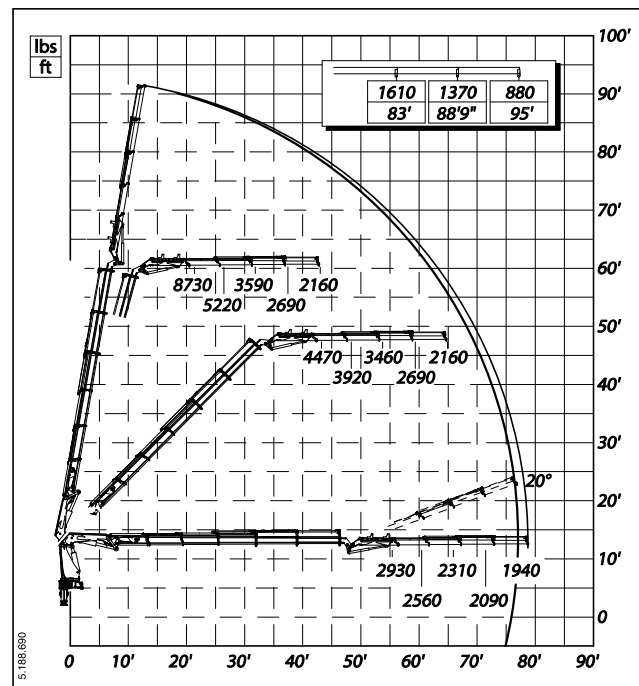
∞ = Continuous rotation

- Capacities diagram

PM 48525 SP - with jib J1214.20



Note: the performances stated are obtained with the main arm inclined to 20°



Note: the performances stated are obtained with the main arm inclined to 20°

ENCLOSURES

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- Specifications and performances

PM 48525 SP - with jib J1215.20

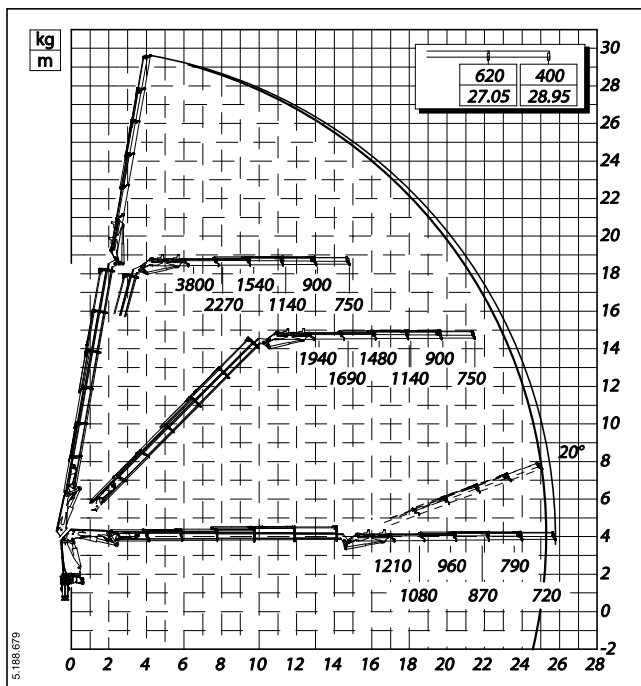
Max. lifting momentum	kNm	- ft lbs	-
	tm	- /	/
Hydraulic outreach:			
Horizontal.....	m	25,75 ft	84' 6"
Vertical	m	29,60 ft	97' 1"
Outreach with manual extensions:			
Horizontal.....	m	29,20 ft	95' 10"
Vertical	m	32,95 ft	108' 1"
Hydraulic system:			
Recommended capacity	l/min	80 gals/min	21
Maximum pressure	Mpa	33 psi	4790
Oil tank capacity.....	l	200 gals	53
Rotation unit:			
Rotation angle.....	°	∞ °	∞
Rotation torque	kNm	44,0 ft lbs	32450,0
Weight of standard crane without oil tank.....	kg	6175 lbs	13615
Maximum power absorbed by the hydraulic pump	kW	48,9 HP	66
Maximum force exerted on ground by stabilisers	kN	170 lbs	38220
Specific operating pressure of each stabiliser with Ø 200 mm (8") disk.....	Mpa	5,4 psi	790
Arm pack extension time for standard machine (Plus device off).....	sec.	- sec.	-
"Mobile" hook maximum load capacity - Hook capacity	kg	16000 lbs	35275
Jib hook - Hook capacity	kg	8000 lbs	17640

∞ = Continuous rotation

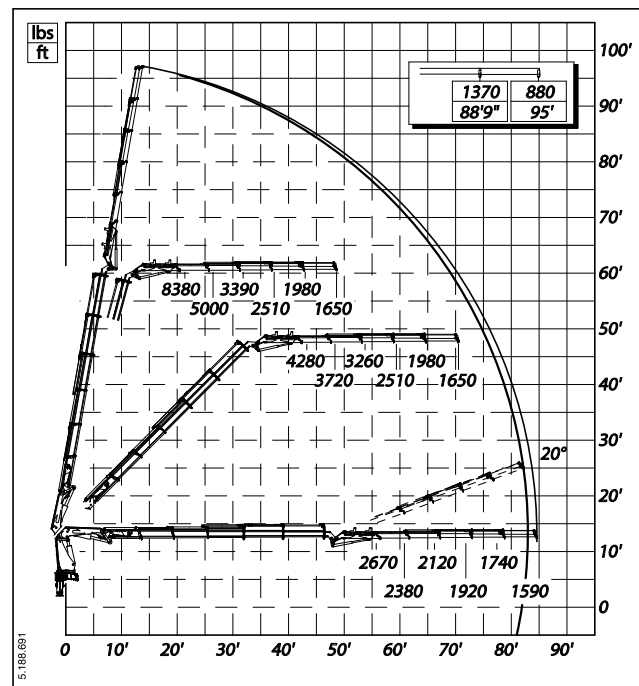
A.30

- Capacities diagram

PM 48525 SP - with jib J1215.20



Note: the performances stated are obtained with the main arm inclined to 20°



Note: the performances stated are obtained with the main arm inclined to 20°

ENCLOSURES

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- Specifications and performances

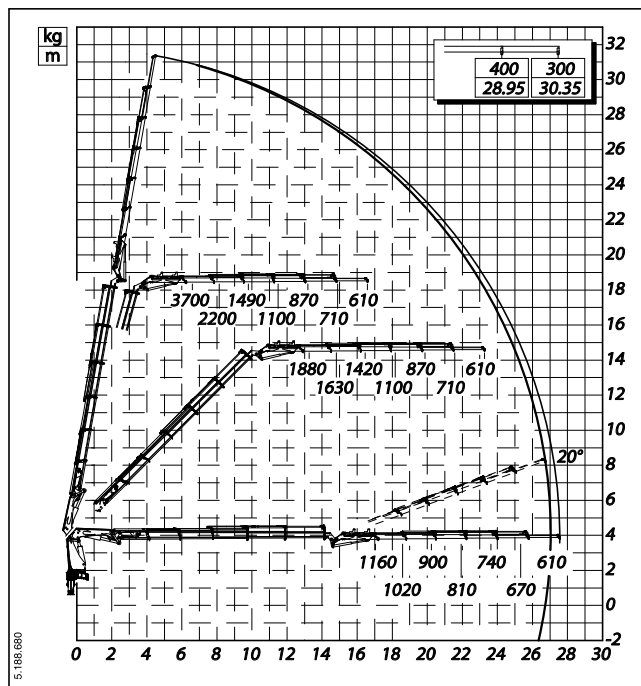
PM 48525 SP - with jib J1216.20

Max. lifting momentum	kNm	- ft lbs	-
	tm	- /	/
Hydraulic outreach:			
Horizontal.....	m	27,55 ft	90' 5"
Vertical	m	31,35 ft	102' 10"
Outreach with manual extensions:			
Horizontal.....	m	30,60 ft	100' 5"
Vertical	m	34,35 ft	112' 8"
Hydraulic system:			
Recommended capacity	l/min	80 gals/min	21
Maximum pressure	Mpa	33 psi	4790
Oil tank capacity.....	l	200 gals	53
Rotation unit:			
Rotation angle.....	°	∞ °	∞
Rotation torque	kNm	44,0 ft lbs	32450,0
Weight of standard crane without oil tank.....	kg	6260 lbs	13805
Maximum power absorbed by the hydraulic pump	kW	48,9 HP	66
Maximum force exerted on ground by stabilisers	kN	170 lbs	38220
Specific operating pressure of each stabiliser with Ø 200 mm (8") disk.....	Mpa	5,4 psi	790
Arm pack extension time for standard machine (Plus device off).....	sec.	- sec.	-
"Mobile" hook maximum load capacity - Hook capacity	kg	16000 lbs	35275
Jib hook - Hook capacity	kg	8000 lbs	17640

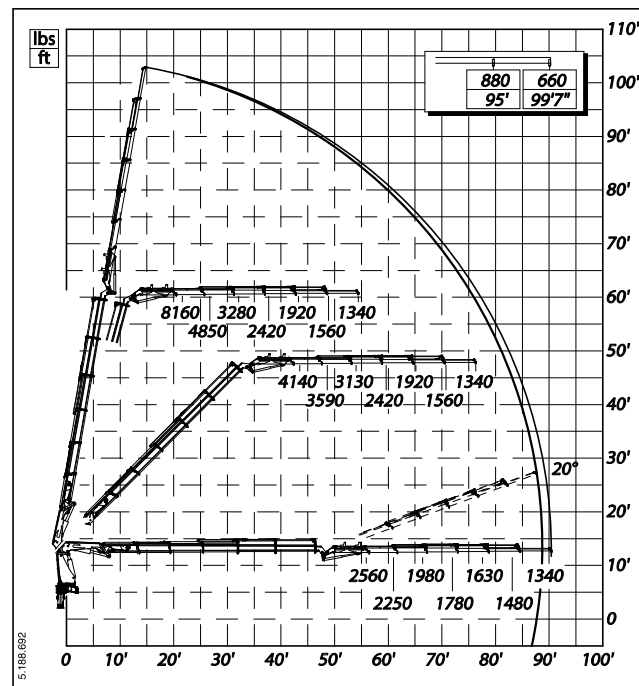
∞ = Continuous rotation

- Capacities diagram

PM 48525 SP - with jib J1216.20



Note: the performances stated are obtained with the main arm inclined to 20°



Note: the performances stated are obtained with the main arm inclined to 20°

ENCLOSURES

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- Specifications and performances

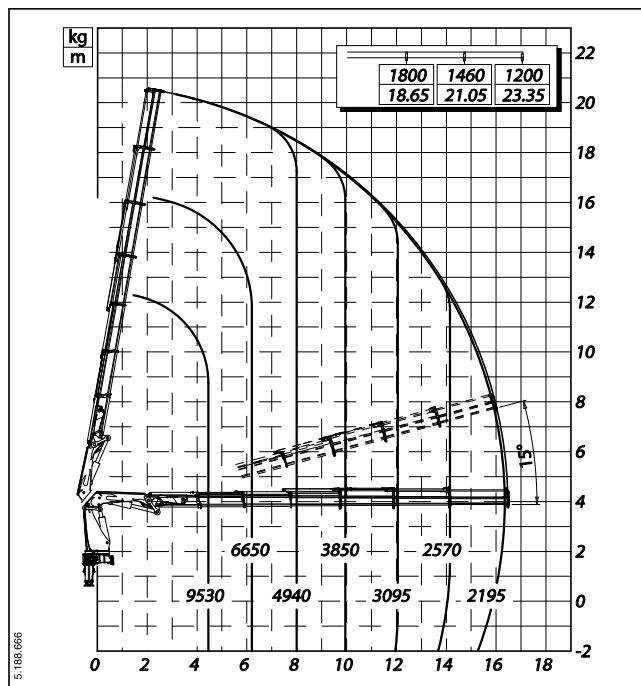
PM 48526 SP

Max. lifting momentum	kNm	416		ft lbs	306740
	tm	42,4	.....	/	/
Hydraulic outreach:					
Horizontal.....	m	16,50	.....	ft	54' 2"
Vertical	m	20,70	.....	ft	67' 11"
Outreach with manual extensions:					
Horizontal.....	m	23,55	.....	ft	77' 3"
Vertical	m	27,35	.....	ft	89' 9"
Hydraulic system:					
Recommended capacity	l/min	80	.....	gals/min	21
Maximum pressure	Mpa	33	.....	psi	4790
Oil tank capacity.....	l	200	.....	gals	53
Rotation unit:					
Rotation angle.....	°	∞	.....	°	∞
Rotation torque	kNm	44,0	.....	ft lbs	32450,0
Weight of standard crane without oil tank.....	kg	5245	.....	lbs	11565
Maximum power absorbed by the hydraulic pump	kW	48,9	.....	HP	66
Maximum force exerted on ground by stabilisers	kN	170	.....	lbs	38220
Specific operating pressure of each stabiliser with Ø 200 mm (8") disk.....	Mpa	5,4	.....	psi	790
Arm pack extension time for standard machine (Plus device off).....	sec.	53	.....	sec.	53
"Mobile" hook maximum load capacity - Hook capacity	kg	16000	.....	lbs	35275

∞ = Continuous rotation

- Capacities diagram

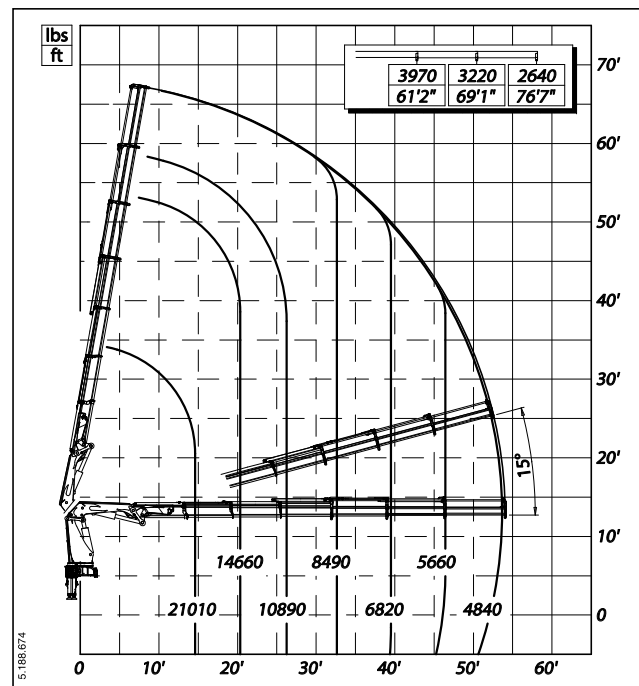
PM 48526 SP



** Maximum capacity at mobile hook

*** Maximum capacity from horizontal to vertical

Note: the performances stated are obtained with the main arm inclined to 20°



** Maximum capacity at mobile hook

*** Maximum capacity from horizontal to vertical

Note: the performances stated are obtained with the main arm inclined to 20°

ENCLOSURES

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- Specifications and performances

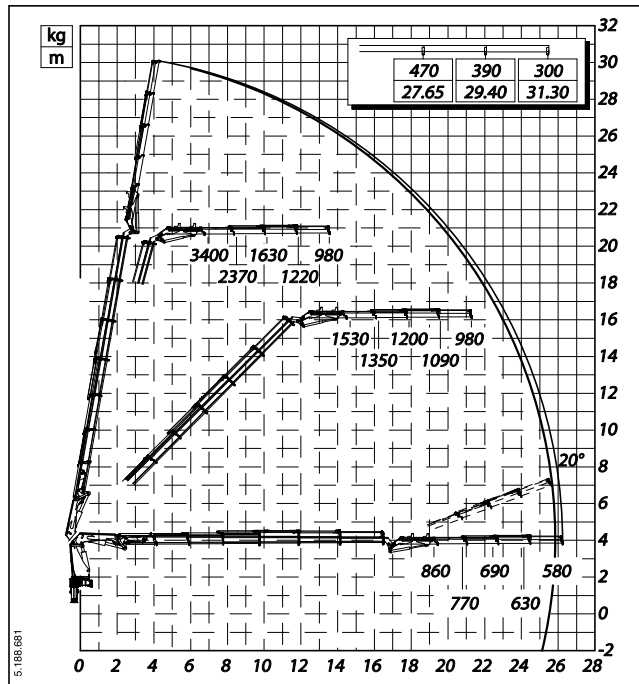
PM 48526 SP - with jib J1214.20

Max. lifting momentum	kNm	- ft lbs	-
	tm	- /	/
Hydraulic outreach:			
Horizontal.....	m	26,25 ft	86' 1"
Vertical	m	30,05 ft	98' 7"
Outreach with manual extensions:			
Horizontal.....	m	31,45 ft	103' 2"
Vertical	m	35,20 ft	115' 6"
Hydraulic system:			
Recommended capacity	l/min	80 gals/min	21
Maximum pressure	Mpa	33 psi	4790
Oil tank capacity.....	l	200 gals	53
Rotation unit:			
Rotation angle.....	°	∞ °	∞
Rotation torque	kNm	44,0 ft lbs	32450,0
Weight of standard crane without oil tank.....	kg	6325 lbs	13945
Maximum power absorbed by the hydraulic pump	kW	48,9 HP	66
Maximum force exerted on ground by stabilisers	kN	170 lbs	38220
Specific operating pressure of each stabiliser with Ø 200 mm (8") disk.....	Mpa	5,4 psi	790
Arm pack extension time for standard machine (Plus device off).....	sec.	- sec.	-
"Mobile" hook maximum load capacity - Hook capacity	kg	16000 lbs	35275
Jib hook - Hook capacity	kg	8000 lbs	17640

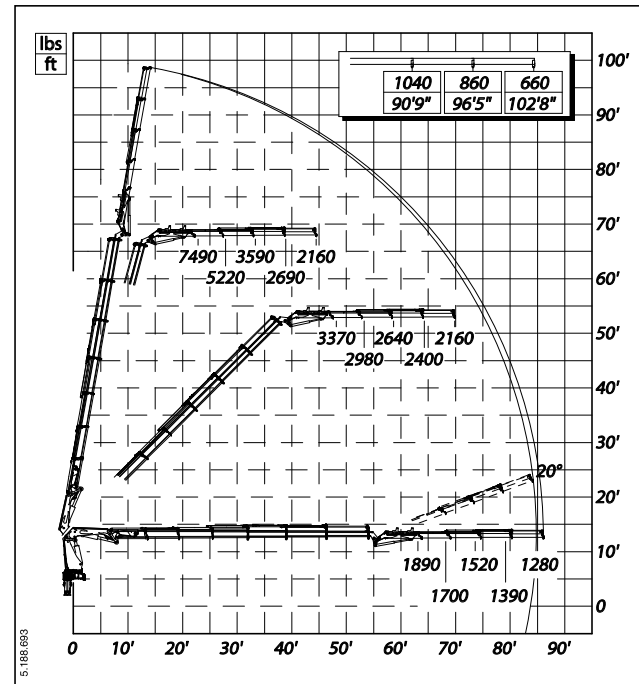
∞ = Continuous rotation

- Capacities diagram

PM 48526 SP - with jib J1214.20



Note: the performances stated are obtained with the main arm inclined to 20°



Note: the performances stated are obtained with the main arm inclined to 20°

ENCLOSURES

01-GB-AA-357DM

- Specifications and performances

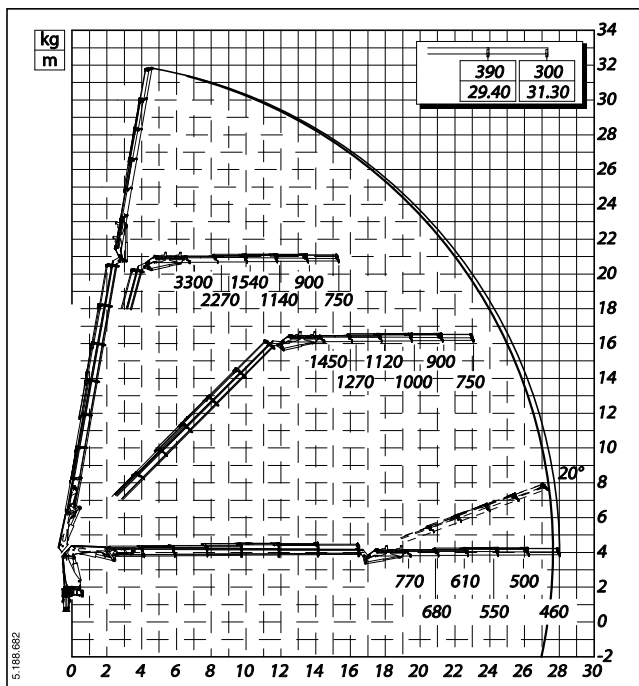
PM 48526 SP - with jib J1215.20

Max. lifting momentum	kNm	- ft lbs	-
	tm	- /	/
Hydraulic outreach:			
Horizontal.....	m	28,00 ft	91' 10"
Vertical	m	31,80 ft	104' 4"
Outreach with manual extensions:			
Horizontal.....	m	31,45 ft	103' 2"
Vertical	m	35,20 ft	115' 6"
Hydraulic system:			
Recommended capacity	l/min	80 gals/min	21
Maximum pressure	Mpa	33 psi	4790
Oil tank capacity.....	l	200 gals	53
Rotation unit:			
Rotation angle.....	°	∞ °	∞
Rotation torque	kNm	44,0 ft lbs	32450,0
Weight of standard crane without oil tank.....	kg	6385 lbs	14080
Maximum power absorbed by the hydraulic pump	kW	48,9 HP	66
Maximum force exerted on ground by stabilisers	kN	170 lbs	38220
Specific operating pressure of each stabiliser with Ø 200 mm (8") disk.....	Mpa	5,4 psi	790
Arm pack extension time for standard machine (Plus device off).....	sec.	- sec.	-
"Mobile" hook maximum load capacity - Hook capacity	kg	16000 lbs	35275
Jib hook - Hook capacity	kg	8000 lbs	17640

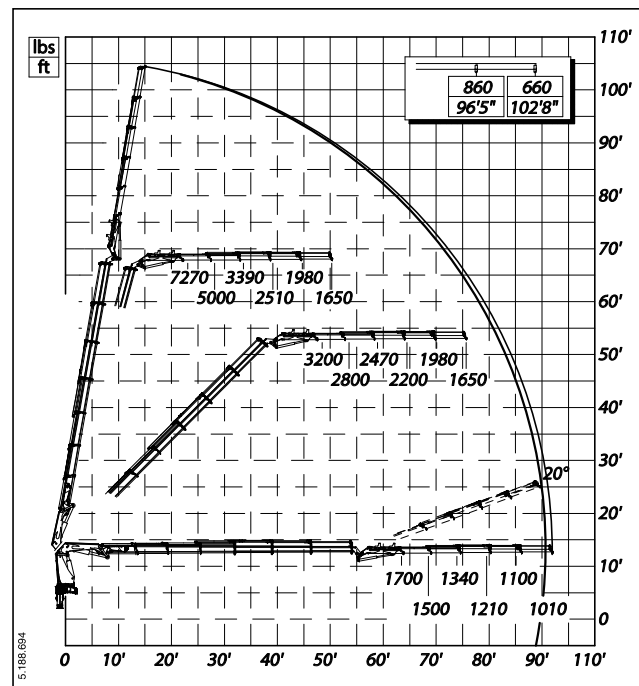
∞ = Continuous rotation

- Capacities diagram

PM 48526 SP - with jib J1215.20



Note: the performances stated are obtained with the main arm inclined to 20°



Note: the performances stated are obtained with the main arm inclined to 20°

ENCLOSURES

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- Specifications and performances

PM 48526 SP - with jib J1216.20

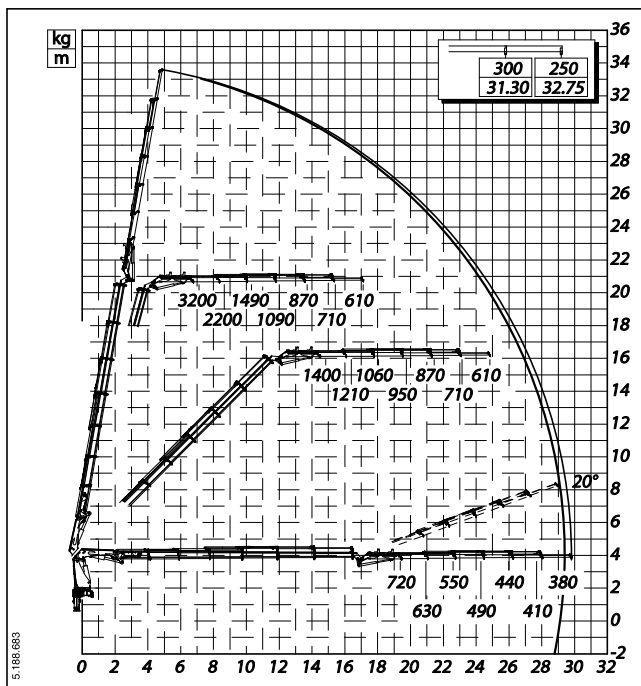
Max. lifting momentum	kNm	- ft lbs	-
	tm	- /	/
Hydraulic outreach:			
Horizontal.....	m	29,80 ft	97' 9"
Vertical	m	33,55 ft	110' 1"
Outreach with manual extensions:			
Horizontal.....	m	32,85 ft	107' 9"
Vertical	m	36,55 ft	119' 11"
Hydraulic system:			
Recommended capacity	l/min	80 gals/min	21
Maximum pressure	Mpa	33 psi	4790
Oil tank capacity.....	l	200 gals	53
Rotation unit:			
Rotation angle.....	°	∞ °	∞
Rotation torque	kNm	44,0 ft lbs	32450,0
Weight of standard crane without oil tank.....	kg	6470 lbs	14265
Maximum power absorbed by the hydraulic pump	kW	48,9 HP	66
Maximum force exerted on ground by stabilisers	kN	170 lbs	38220
Specific operating pressure of each stabiliser with Ø 200 mm (8") disk.....	Mpa	5,4 psi	790
Arm pack extension time for standard machine (Plus device off).....	sec.	- sec.	-
"Mobile" hook maximum load capacity - Hook capacity	kg	16000 lbs	35275
Jib hook - Hook capacity	kg	8000 lbs	17640

∞ = Continuous rotation

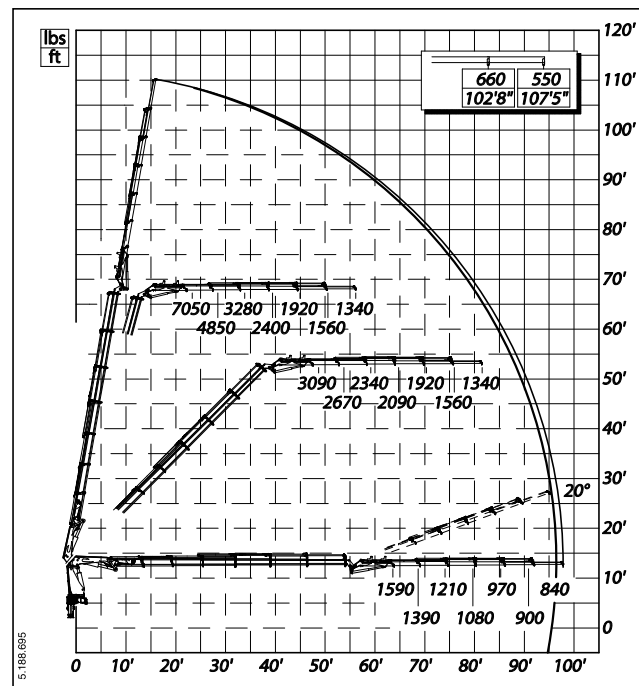
A.40

- Capacities diagram

PM 48526 SP - with jib J1216.20



Note: the performances stated are obtained with the main arm inclined to 20°



Note: the performances stated are obtained with the main arm inclined to 20°

ENCLOSURES

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- Specifications and performances

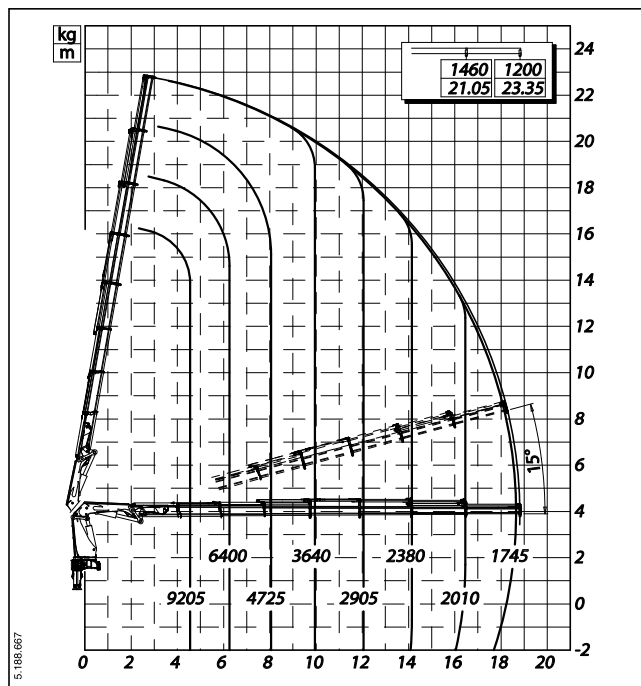
PM 48527 SP

Max. lifting momentum	kNm	411	 ft lbs	302940
	tm	41,9	 /	/
Hydraulic outreach:				
Horizontal.....	m	18,85	 ft	61' 10"
Vertical	m	22,90	 ft	75' 2"
Outreach with manual extensions:				
Horizontal.....	m	23,55	 ft	77' 3"
Vertical	m	27,35	 ft	89' 9"
Hydraulic system:				
Recommended capacity	l/min	80	 gals/min	21
Maximum pressure	Mpa	33	 psi	4790
Oil tank capacity.....	l	200	 gals	53
Rotation unit:				
Rotation angle.....	°	∞	 °	∞
Rotation torque	kNm	44,0	 ft lbs	32450,0
Weight of standard crane without oil tank.....	kg	5420	 lbs	11950
Maximum power absorbed by the hydraulic pump	kW	48,9	 HP	66
Maximum force exerted on ground by stabilisers	kN	170	 lbs	38220
Specific operating pressure of each stabiliser with Ø 200 mm (8") disk.....	Mpa	5,4	 psi	790
Arm pack extension time for standard machine (Plus device off).....	sec.	60	 sec.	60
"Mobile" hook maximum load capacity - Hook capacity	kg	16000	 lbs	35275

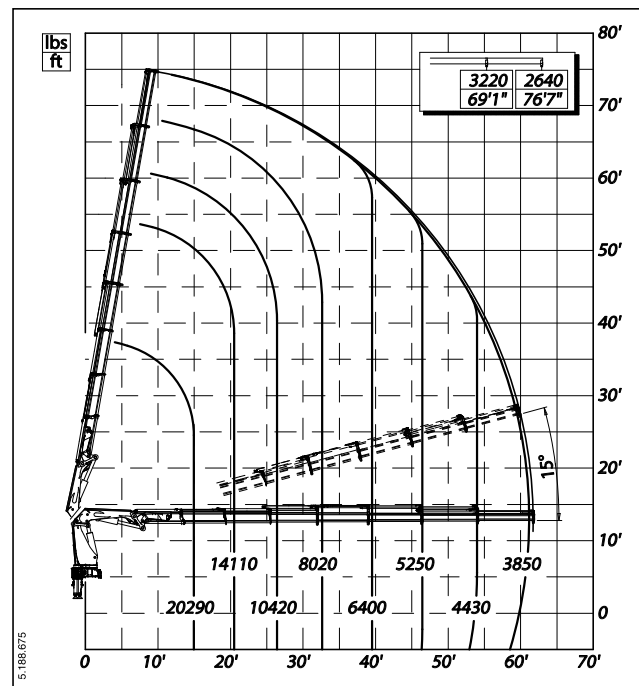
∞ = Continuous rotation

- Capacities diagram

PM 48527 SP



** Maximum capacity at mobile hook
 *** Maximum capacity from horizontal to vertical
 Note: the performances stated are obtained with the main arm inclined to 20°



** Maximum capacity at mobile hook
 *** Maximum capacity from horizontal to vertical
 Note: the performances stated are obtained with the main arm inclined to 20°

ENCLOSURES

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- Specifications and performances

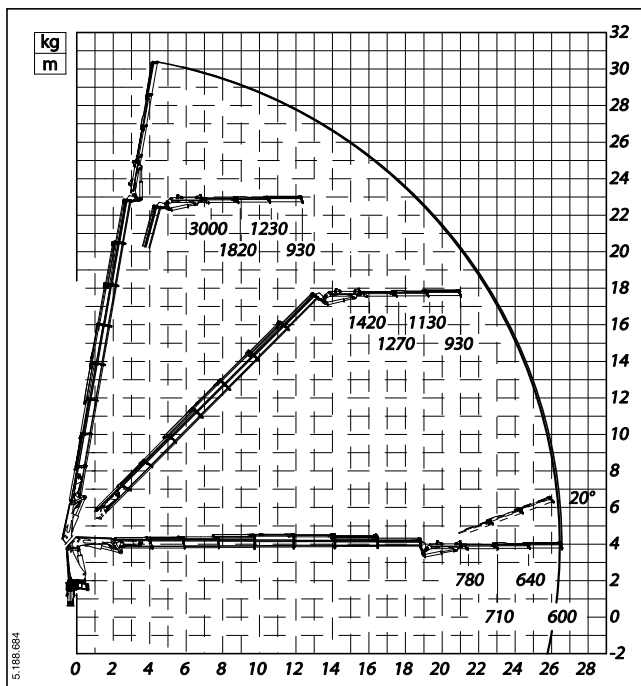
PM 48527 SP - with jib J813.20

Max. lifting momentum	kNm	- ft lbs	-
	tm	- /	/
Hydraulic outreach:			
Horizontal.....	m	26,55 ft	87' 1"
Vertical	m	30,35 ft	99' 7"
Outreach with manual extensions:			
Horizontal.....	m	- ft	-
Vertical	m	- ft	-
Hydraulic system:			
Recommended capacity	l/min	80 gals/min	21
Maximum pressure	Mpa	33 psi	4790
Oil tank capacity.....	l	200 gals	53
Rotation unit:			
Rotation angle.....	°	∞ °	∞
Rotation torque	kNm	44,0 ft lbs	32450,0
Weight of standard crane without oil tank.....	kg	6125 lbs	13505
Maximum power absorbed by the hydraulic pump	kW	48,9 HP	66
Maximum force exerted on ground by stabilisers	kN	170 lbs	38220
Specific operating pressure of each stabiliser with Ø 200 mm (8") disk.....	Mpa	5,4 psi	790
Arm pack extension time for standard machine (Plus device off).....	sec.	- sec.	-
"Mobile" hook maximum load capacity - Hook capacity	kg	16000 lbs	35275
Jib hook - Hook capacity	kg	8000 lbs	17640

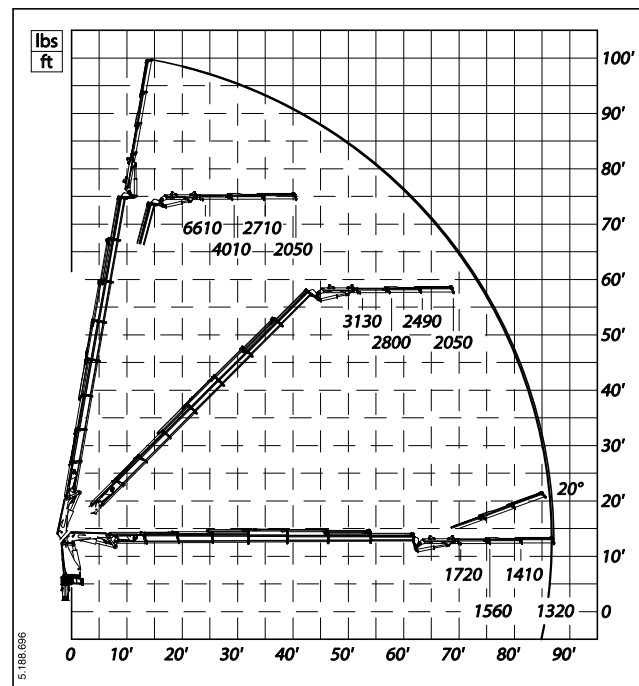
∞ = Continuous rotation

- Capacities diagram

PM 48527 SP - with jib J813.20



Note: the performances stated are obtained with the main arm inclined to 20°



Note: the performances stated are obtained with the main arm inclined to 20°

ENCLOSURES

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- Specifications and performances

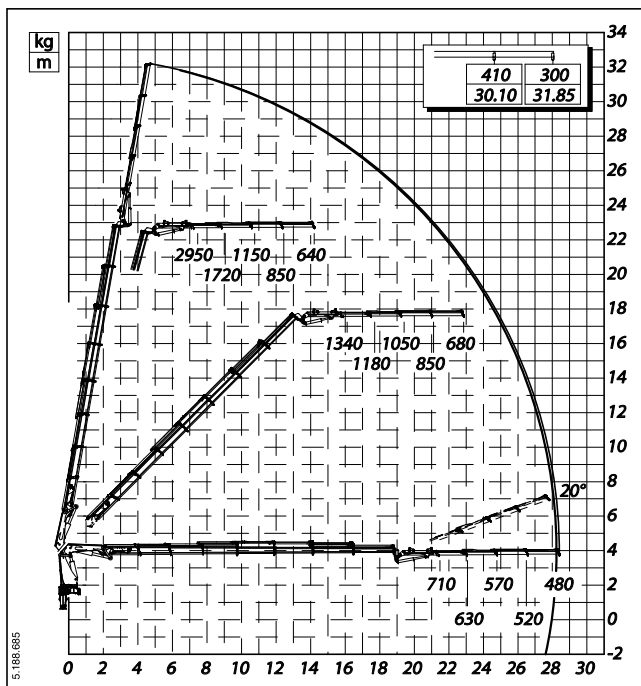
PM 48527 SP - with jib J814.20

Max. lifting momentum	kNm	- ft lbs	-
	tm	- /	/
Hydraulic outreach:			
Horizontal.....	m	28,40 ft	93' 2"
Vertical	m	32,15 ft	105' 6"
Outreach with manual extensions:			
Horizontal.....	m	31,95 ft	104' 10"
Vertical	m	35,65 ft	117'
Hydraulic system:			
Recommended capacity	l/min	80 gals/min	21
Maximum pressure	Mpa	33 psi	4790
Oil tank capacity.....	l	200 gals	53
Rotation unit:			
Rotation angle.....	°	∞ °	∞
Rotation torque	kNm	44,0 ft lbs	32450,0
Weight of standard crane without oil tank.....	kg	6185 lbs	13640
Maximum power absorbed by the hydraulic pump	kW	48,9 HP	66
Maximum force exerted on ground by stabilisers	kN	170 lbs	38220
Specific operating pressure of each stabiliser with Ø 200 mm (8") disk.....	Mpa	5,4 psi	790
Arm pack extension time for standard machine (Plus device off).....	sec.	- sec.	-
"Mobile" hook maximum load capacity - Hook capacity	kg	16000 lbs	35275
Jib hook - Hook capacity	kg	8000 lbs	17640

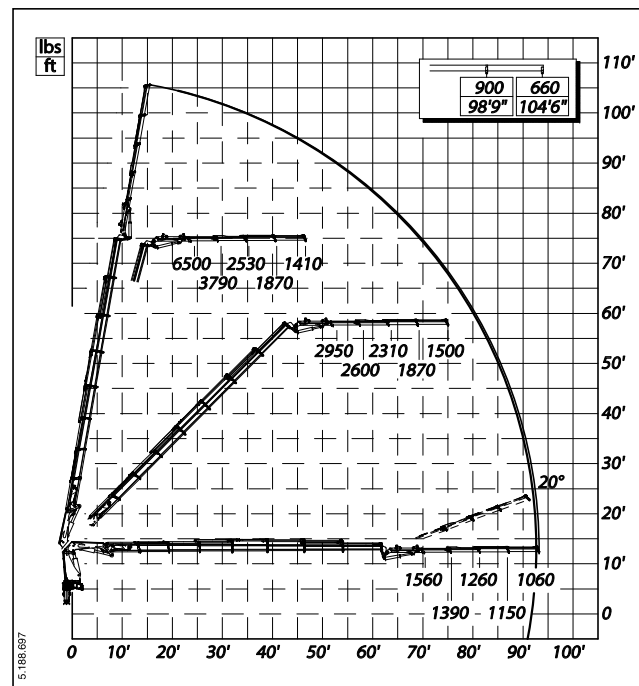
∞ = Continuous rotation

- Capacities diagram

PM 48527 SP - with jib J814.20



Note: the performances stated are obtained with the main arm inclined to 20°



Note: the performances stated are obtained with the main arm inclined to 20°

ENCLOSURES

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- Specifications and performances

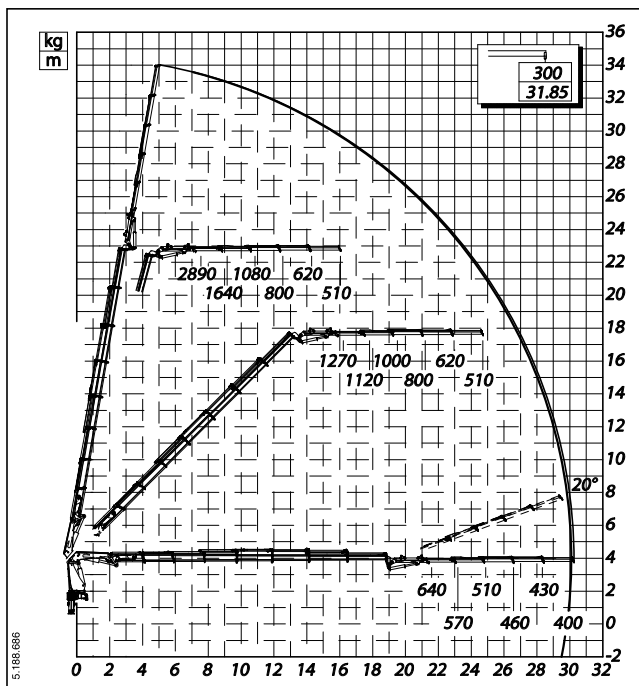
PM 48527 SP - with jib J815.20

Max. lifting momentum	kNm	- ft lbs	-
	tm	- /	/
Hydraulic outreach:			
Horizontal.....	m	30,25 ft	99' 3"
Vertical	m	34,00 ft	111' 7"
Outreach with manual extensions:			
Horizontal.....	m	31,95 ft	104' 10"
Vertical	m	35,65 ft	117'
Hydraulic system:			
Recommended capacity	l/min	80 gals/min	21
Maximum pressure	Mpa	33 psi	4790
Oil tank capacity.....	l	200 gals	53
Rotation unit:			
Rotation angle.....	°	∞ °	∞
Rotation torque	kNm	44,0 ft lbs	32450,0
Weight of standard crane without oil tank.....	kg	6240 lbs	13760
Maximum power absorbed by the hydraulic pump	kW	48,9 HP	66
Maximum force exerted on ground by stabilisers	kN	170 lbs	38220
Specific operating pressure of each stabiliser with Ø 200 mm (8") disk.....	Mpa	5,4 psi	790
Arm pack extension time for standard machine (Plus device off).....	sec.	- sec.	-
"Mobile" hook maximum load capacity - Hook capacity	kg	16000 lbs	35275
Jib hook - Hook capacity	kg	8000 lbs	17640

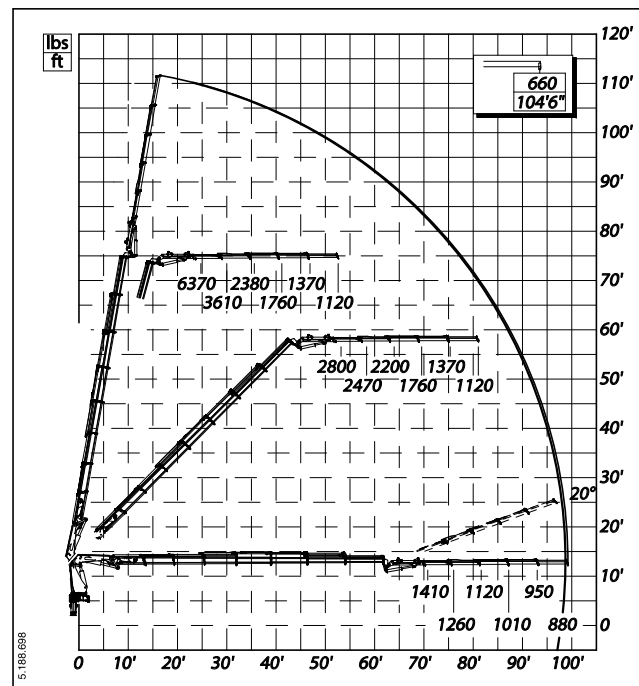
∞ = Continuous rotation

- Capacities diagram

PM 48527 SP - with jib J815.20



Note: the performances stated are obtained with the main arm inclined to 20°



Note: the performances stated are obtained with the main arm inclined to 20°

ENCLOSURES

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- Specifications and performances

PM 48528 SP

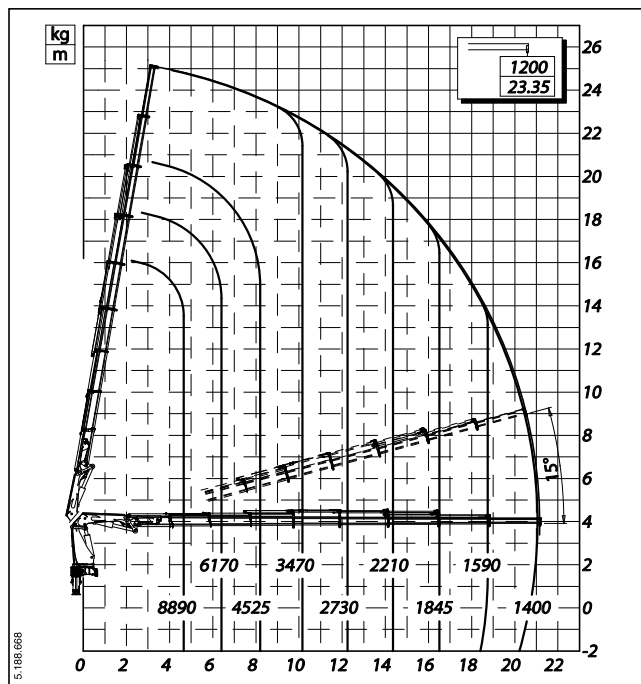
Max. lifting momentum	kNm	405	 ft lbs	298980
	tm	41,3	 /	/
Hydraulic outreach:				
Horizontal.....	m	21,20	 ft	69' 7"
Vertical	m	25,15	 ft	82' 6"
Outreach with manual extensions:				
Horizontal.....	m	23,55	 ft	77' 3"
Vertical	m	27,35	 ft	89' 9"
Hydraulic system:				
Recommended capacity	l/min	80	 gals/min	21
Maximum pressure	Mpa	33	 psi	4790
Oil tank capacity.....	l	200	 gals	53
Rotation unit:				
Rotation angle.....	°	∞	 °	∞
Rotation torque	kNm	44,0	 ft lbs	32450,0
Weight of standard crane without oil tank.....	kg	5595	 lbs	12335
Maximum power absorbed by the hydraulic pump	kW	48,9	 HP	66
Maximum force exerted on ground by stabilisers	kN	170	 lbs	38220
Specific operating pressure of each stabiliser with Ø 200 mm (8") disk.....	Mpa	5,4	 psi	790
Arm pack extension time for standard machine (Plus device off).....	sec.	66	 sec.	66
"Mobile" hook maximum load capacity - Hook capacity	kg	16000	 lbs	35275

∞ = Continuous rotation

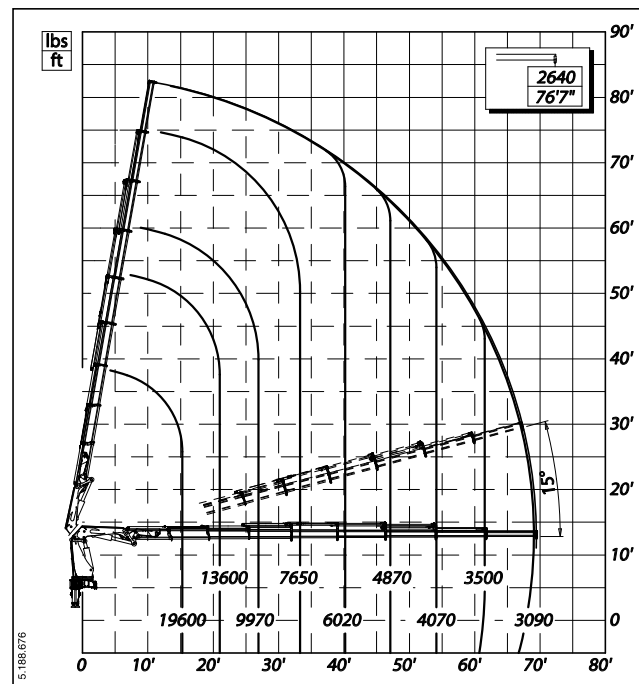
A.50

- Capacities diagram

PM 48528 SP



** Maximum capacity at mobile hook
 *** Maximum capacity from horizontal to vertical
 Note: the performances stated are obtained with the main arm inclined to 20°



** Maximum capacity at mobile hook
 *** Maximum capacity from horizontal to vertical
 Note: the performances stated are obtained with the main arm inclined to 20°

ENCLOSURES

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- Specifications and performances

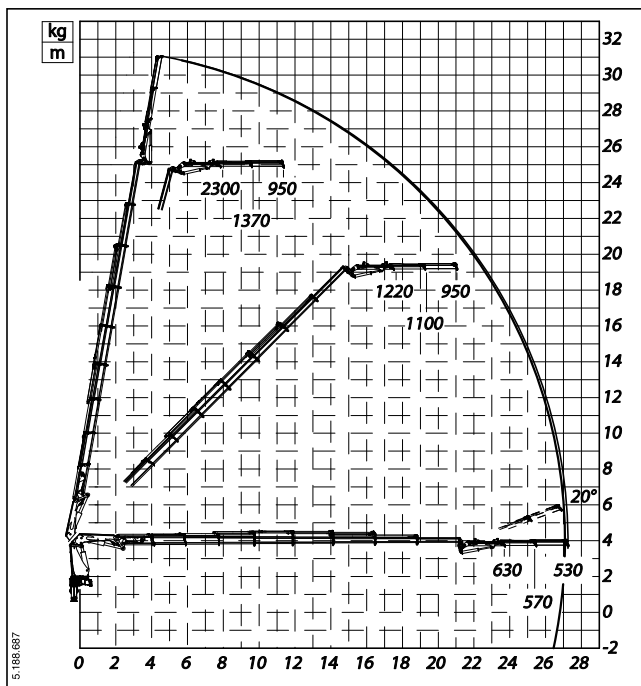
PM 48528 SP - with jib J612.20

Max. lifting momentum	kNm	- ft lbs	-
	tm	- /	/
Hydraulic outreach:			
Horizontal.....	m	27,25 ft	89' 5"
Vertical	m	31,00 ft	101' 8"
Outreach with manual extensions:			
Horizontal.....	m	- ft	-
Vertical	m	- ft	-
Hydraulic system:			
Recommended capacity	l/min	80 gals/min	21
Maximum pressure	Mpa	33 psi	4790
Oil tank capacity.....	l	200 gals	53
Rotation unit:			
Rotation angle.....	°	∞ °	∞
Rotation torque	kNm	44,0 ft lbs	32450,0
Weight of standard crane without oil tank.....	kg	6230 lbs	13735
Maximum power absorbed by the hydraulic pump	kW	48,9 HP	66
Maximum force exerted on ground by stabilisers	kN	170 lbs	38220
Specific operating pressure of each stabiliser with Ø 200 mm (8") disk.....	Mpa	5,4 psi	790
Arm pack extension time for standard machine (Plus device off).....	sec.	- sec.	-
"Mobile" hook maximum load capacity - Hook capacity	kg	16000 lbs	35275
Jib hook - Hook capacity	kg	8000 lbs	17640

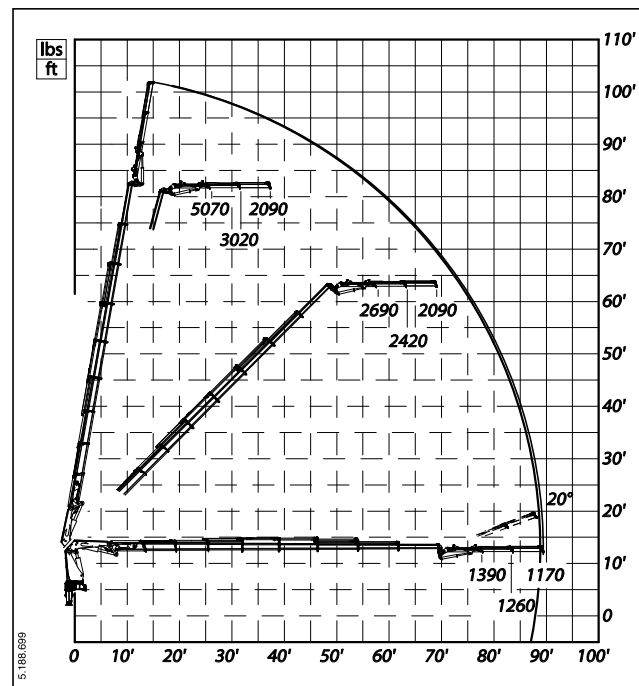
∞ = Continuous rotation

- Capacities diagram

PM 48528 SP - with jib J612.20



Note: the performances stated are obtained with the main arm inclined to 20°



Note: the performances stated are obtained with the main arm inclined to 20°

- Specifications and performances

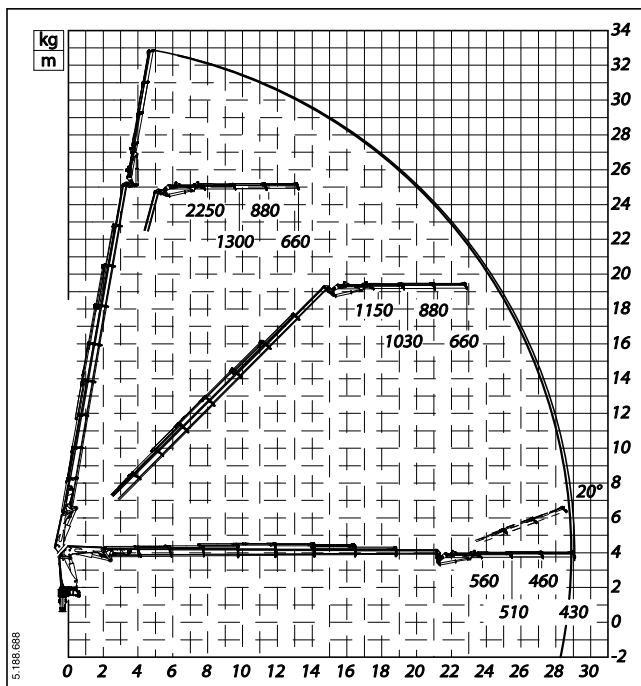
PM 48528 SP - with jib J613.20

Max. lifting momentum	kNm	- ft lbs	-
	tm	- /	/
Hydraulic outreach:			
Horizontal.....	m	29,10 ft	95' 6"
Vertical	m	32,85 ft	107' 9"
Outreach with manual extensions:			
Horizontal.....	m	- ft	-
Vertical	m	- ft	-
Hydraulic system:			
Recommended capacity	l/min	80 gals/min	21
Maximum pressure	Mpa	33 psi	4790
Oil tank capacity.....	l	200 gals	53
Rotation unit:			
Rotation angle.....	°	∞ °	∞
Rotation torque	kNm	44,0 ft lbs	32450,0
Weight of standard crane without oil tank.....	kg	6280 lbs	13850
Maximum power absorbed by the hydraulic pump	kW	48,9 HP	66
Maximum force exerted on ground by stabilisers	kN	170 lbs	38220
Specific operating pressure of each stabiliser with Ø 200 mm (8") disk.....	Mpa	5,4 psi	790
Arm pack extension time for standard machine (Plus device off).....	sec.	- sec.	-
"Mobile" hook maximum load capacity - Hook capacity	kg	16000 lbs	35275
Jib hook - Hook capacity	kg	8000 lbs	17640

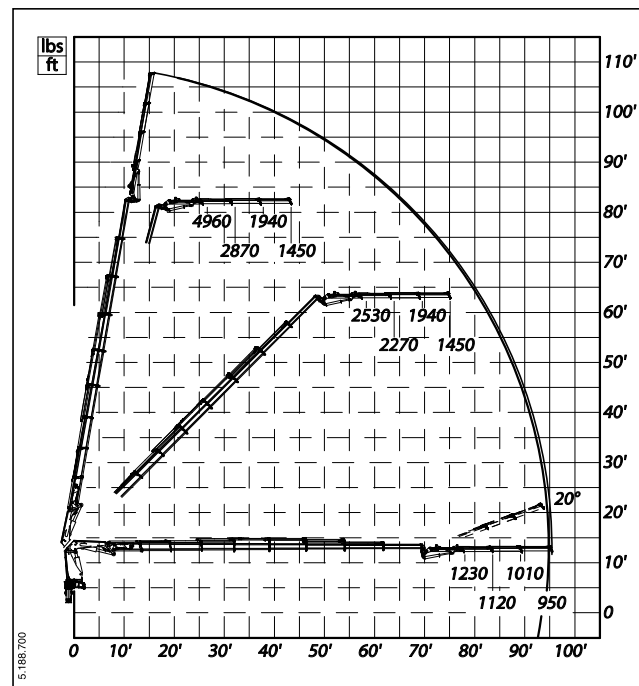
∞ = Continuous rotation

- Capacities diagram

PM 48528 SP - with jib J613.20



Note: the performances stated are obtained with the main arm inclined to 20°



Note: the performances stated are obtained with the main arm inclined to 20°

ENCLOSURES

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- Specifications and performances

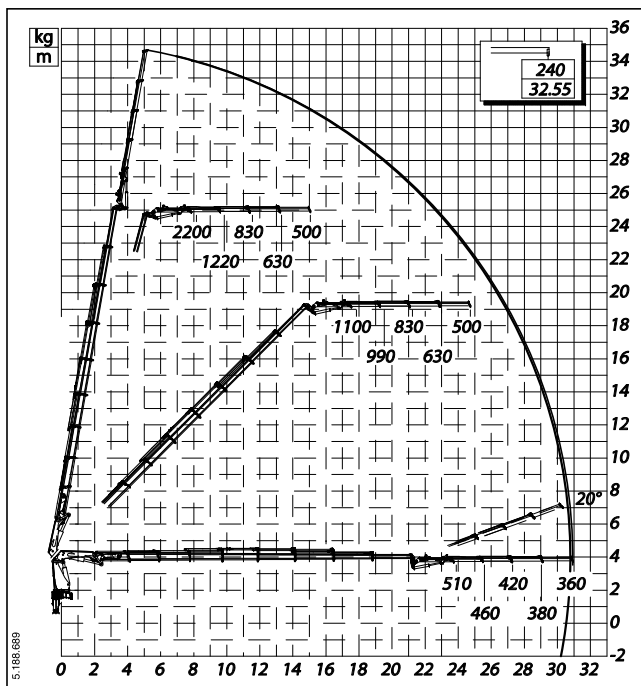
PM 48528 SP - with jib J614.20

Max. lifting momentum	kNm	- ft lbs	-
	tm	- /	/
Hydraulic outreach:			
Horizontal.....	m	30,90 ft	101' 5"
Vertical	m	34,65 ft	113' 8"
Outreach with manual extensions:			
Horizontal.....	m	32,70 ft	107' 3"
Vertical	m	36,35 ft	119' 3"
Hydraulic system:			
Recommended capacity	l/min	80 gals/min	21
Maximum pressure	Mpa	33 psi	4790
Oil tank capacity.....	l	200 gals	53
Rotation unit:			
Rotation angle.....	°	∞ °	∞
Rotation torque	kNm	44,0 ft lbs	32450,0
Weight of standard crane without oil tank.....	kg	6340 lbs	13980
Maximum power absorbed by the hydraulic pump	kW	48,9 HP	66
Maximum force exerted on ground by stabilisers	kN	170 lbs	38220
Specific operating pressure of each stabiliser with Ø 200 mm (8") disk.....	Mpa	5,4 psi	790
Arm pack extension time for standard machine (Plus device off).....	sec.	- sec.	-
"Mobile" hook maximum load capacity - Hook capacity	kg	16000 lbs	35275
Jib hook - Hook capacity	kg	8000 lbs	17640

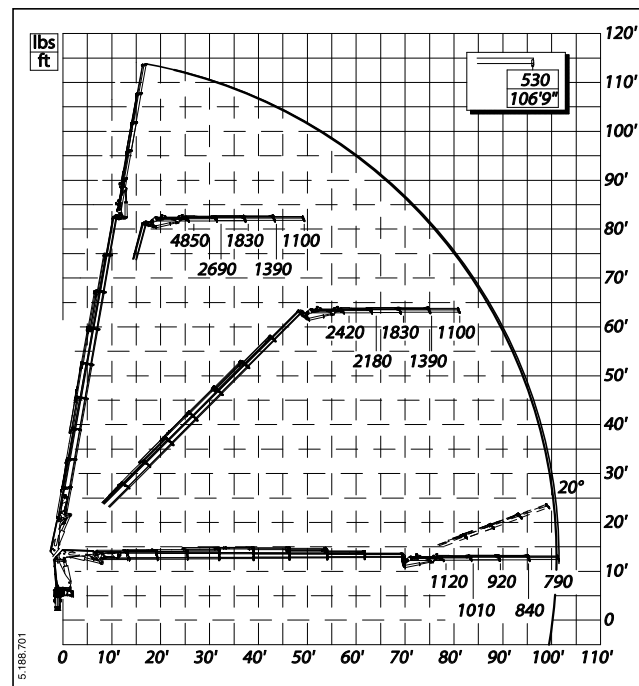
∞ = Continuous rotation

- Capacities diagram

PM 48528 SP - with jib J614.20



Note: the performances stated are obtained with the main arm inclined to 20°



Note: the performances stated are obtained with the main arm inclined to 20°

ENCLOSURES

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- Specifications and performances

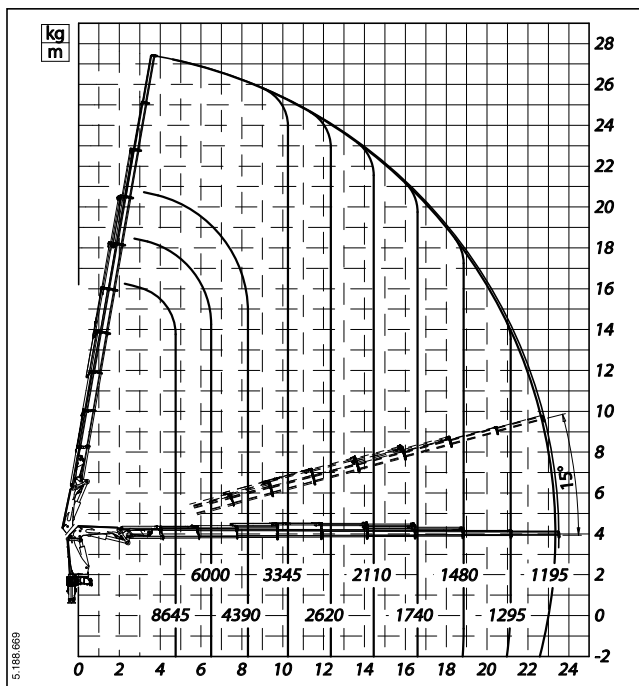
PM 48529 SP

Max. lifting momentum	kNm	403	 ft lbs	297010
	tm	41,1	 /	/
Hydraulic outreach:				
Horizontal.....	m	23,55	 ft	77' 3"
Vertical	m	27,35	 ft	89' 9"
Outreach with manual extensions:				
Horizontal.....	m	-	 ft	-
Vertical	m	-	 ft	-
Hydraulic system:				
Recommended capacity	l/min	80	 gals/min	21
Maximum pressure	Mpa	33	 psi	4790
Oil tank capacity.....	l	200	 gals	53
Rotation unit:				
Rotation angle.....	°	∞	 °	∞
Rotation torque	kNm	44,0	 ft lbs	32450,0
Weight of standard crane without oil tank.....	kg	5730	 lbs	12635
Maximum power absorbed by the hydraulic pump	kW	48,9	 HP	66
Maximum force exerted on ground by stabilisers	kN	170	 lbs	38220
Specific operating pressure of each stabiliser with Ø 200 mm (8") disk.....	Mpa	5,4	 psi	790
Arm pack extension time for standard machine (Plus device off).....	sec.	72	 sec.	72
"Mobile" hook maximum load capacity - Hook capacity	kg	16000	 lbs	35275

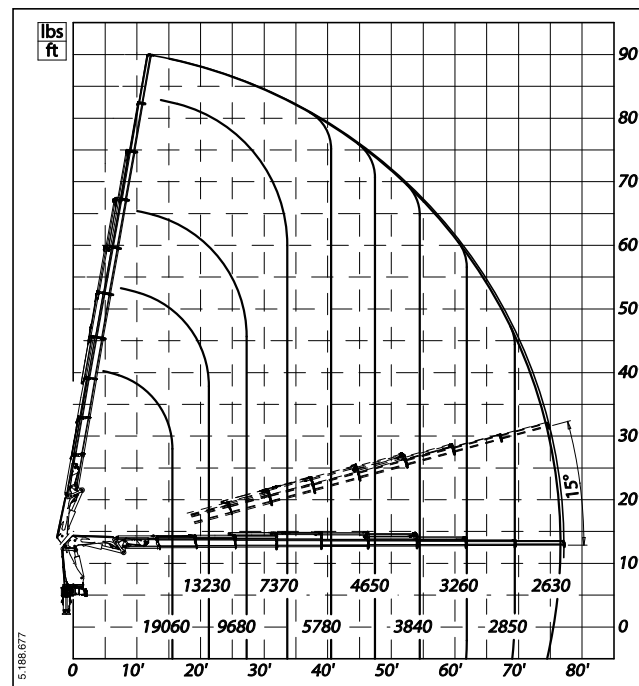
∞ = Continuous rotation

- Capacities diagram

PM 48529 SP



** Maximum capacity at mobile hook
 *** Maximum capacity from horizontal to vertical
 Note: the performances stated are obtained with the main arm inclined to 20°



** Maximum capacity at mobile hook
 *** Maximum capacity from horizontal to vertical
 Note: the performances stated are obtained with the main arm inclined to 20°

ENCLOSURES

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- “CE” declaration of conformity of the machine

The figure shows a copy of the “CE” declaration of conformity; the original is issued by the manufacturer together with this manual.

- a) Crane model
- b) Serial number
- c) Date of declaration
- d) Signature of the person authorised to write the declaration

If the machine is equipped with accessories.

- e) Accessory name
- f) Accessory model
- g) Accessory serial number



CE declaration of conformity

PM Group S.p.A.
Via Verdi 22
41018 San Cesario sul Panaro MO Italia

Declares that the loader crane

a

b

Equipped with the following accessories

Name	Model	Serial No.
e	f	g

e

f

**Complies in all its parts with directive 2006/42/EC
and directive 2004/108/EC.**

The technical dossier can be requested by writing to the manufacturer
PM Group S.p.A.Via Verdi 22 41018 San Cesario sul Panaro MO Italia info@pm-group.eu

c

San Cesario s.p.lli " / / "

d

The legal representative
" / / "

UN01-2642AG

- Register of the periodic technical inspections of the control and limiting devices

Crane model

Year of manufacture

Serial number

Year of installation

Device inspected	Kind of inspection performed	Inspection result	Date	Date of next inspection	Name, businnes name and signature of the person responsible for inspection

Device inspected	Kind of inspection performed	Inspection result	Date	Date of next inspection	Name, business name and signature of the person responsible for inspection

Device inspected	Kind of inspection performed	Inspection result	Date	Date of next inspection	Name, business name and signature of the person responsible for inspection

Device inspected	Kind of inspection performed	Inspection result	Date	Date of next inspection	Name, business name and signature of the person responsible for inspection

Device inspected	Kind of inspection performed	Inspection result	Date	Date of next inspection	Name, business name and signature of the person responsible for inspection

ENCLOSURES

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- EXTRAORDINARY MAINTENANCE check register

Description of the operations carried out and/or parts replaced	Actual hours of work (hour meter)	Servicing date	Stamp and signature of authorised service centre

NB: after servicing make sure that this register has been correctly filled in and stamped by the PM GROUP authorised service centre.

Description of the operations carried out and/or parts replaced	Actual hours of work (hour meter)	Servicing date	Stamp and signature of authorised service centre

NB: after servicing make sure that this register has been correctly filled in and stamped by the PM GROUP authorised service centre.

Description of the operations carried out and/or parts replaced	Actual hours of work (hour meter)	Servicing date	Stamp and signature of authorised service centre

NB: after servicing make sure that this register has been correctly filled in and stamped by the PM GROUP authorised service centre.

Description of the operations carried out and/or parts replaced	Actual hours of work (hour meter)	Servicing date	Stamp and signature of authorised service centre

NB: after servicing make sure that this register has been correctly filled in and stamped by the PM GROUP authorised service centre.

Description of the operations carried out and/or parts replaced	Actual hours of work (hour meter)	Servicing date	Stamp and signature of authorised service centre

NB: after servicing make sure that this register has been correctly filled in and stamped by the PM GROUP authorised service centre.

Description of the operations carried out and/or parts replaced	Actual hours of work (hour meter)	Servicing date	Stamp and signature of authorised service centre

NB: after servicing make sure that this register has been correctly filled in and stamped by the PM GROUP authorised service centre.

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- CABLES AND CHAINS quarterly check register

Conditions	Inspector's observations	Inspection date	Inspector's signature

Conditions	Inspector's observations	Inspection date	Inspector's signature

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Conditions	Inspector's observations	Inspection date	Inspector's signature

Conditions	Inspector's observations	Inspection date	Inspector's signature

ENCLOSURES

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NOTES

- Maintenance intervention confirmation

The service interventions must be carried out in series respecting the schedule.

Interventions must be marked with a cross.

At 500 hours	
. Hydraulic oil pollution check	☐
. Structural inspection	☐
. Valves calibration	☐
. Manual extension adjustments	☐
stamp	signature

At 1500 hours	
. Hydraulic oil pollution check	☐
. Structural inspection	☐
. Valves calibration	☐
. Manual extension adjustments	☐
stamp	signature

At 1000 hours	
. Hydraulic oil replacement	☐
. Structural inspection	☐
. Valves calibration	☐
. Manual extension adjustments	☐
. Reduction gears oil replacement	☐
. Inspection of control and limiting devices	☐
stamp	signature

At 2000 hours	
. Hydraulic oil replacement	☐
. Structural inspection	☐
. Valves calibration	☐
. Manual extension adjustments	☐
. Reduction gears oil replacement	☐
. Inspection of control and limiting devices	☐
stamp	signature

At 2500 hours

. Hydraulic oil pollution check	☐
. Structural inspection	☐
. Valves calibration	☐
. Manual extension adjustments	☐

.....	
stamp	signature

At 3500 hours

. Hydraulic oil pollution check	☐
. Structural inspection	☐
. Valves calibration	☐
. Manual extension adjustments	☐

.....	
stamp	signature

At 3000 hours

. Hydraulic oil replacement	☐
. Structural inspection	☐
. Valves calibration	☐
. Manual extension adjustments	☐
. Reduction gears oil replacement	☐
. Inspection of control and limiting devices	☐

.....	
stamp	signature

At 4000 hours

. Hydraulic oil replacement	☐
. Structural inspection	☐
. Valves calibration	☐
. Manual extension adjustments	☐
. Reduction gears oil replacement	☐
. Inspection of control and limiting devices	☐
. Runner replacement	☐
. Hydraulic system washing	☐

.....	
stamp	signature

At 4500 hours

. Hydraulic oil pollution check

☐

. Structural inspection

☐

. Valves calibration

☐

. Manual extension adjustments

☐

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At 6500 hours

. Hydraulic oil pollution check

☐

. Structural inspection

☐

. Valves calibration

☐

. Manual extension adjustments

☐

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At 6000 hours

. Hydraulic oil replacement

☐

. Structural inspection

☐

. Valves calibration

☐

. Manual extension adjustments

☐

. Reduction gears oil replacement

☐

. Inspection of control and limiting devices

☐

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At 7000 hours

. Hydraulic oil replacement

☐

. Structural inspection

☐

. Valves calibration

☐

. Manual extension adjustments

☐

. Reduction gears oil replacement

☐

. Inspection of control and limiting devices

☐

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At 7500 hours

- . Hydraulic oil pollution check ☐
- . Structural inspection ☐
- . Valves calibration ☐
- . Manual extension adjustment ☐

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At hours

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At 8000 hours

- . Hydraulic oil replacement ☐
- . Structural inspection ☐
- . Valves calibration ☐
- . Manual extension adjustments ☐
- . Reduction gears oil replacement ☐
- . Inspection of control and limiting devices ☐
- . Runner replacement ☐
- . Hydraulic system washing ☐

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At hours

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