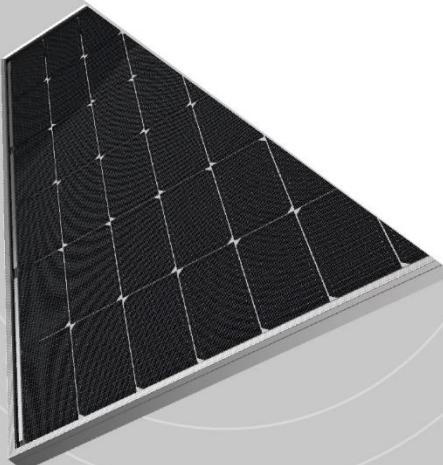




Jinko Solar
Installation manual for
Photovoltaic Module



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1. General Information

1.1 Overview

Thanks for choosing Jinko Solar PV modules. In order to ensure the PV modules are installed correctly, please read the following installation instructions carefully before modules are installed and used.

Please remember that these products generate electricity and certain safety measures need to be taken to avoid danger.

Make sure the module array is designed in such a way not to exceed the maximum system voltage of any system component such as connectors or inverters.

The assembly is to be mounted over a fire resistant roof covering rated for the application. Before mounting the module, please consult your local building department to determine approved roofing materials.

The modules are qualified for application class A: Hazardous voltage (IEC 61730: higher than 50V DC; EN 61730: higher than 120V), hazardous power applications (higher than 240W) where general contact access is anticipated. Modules qualified for safety through EN IEC 61730 -1 and - 2 within this application class are considered to meet the requirements for Safety Class II.

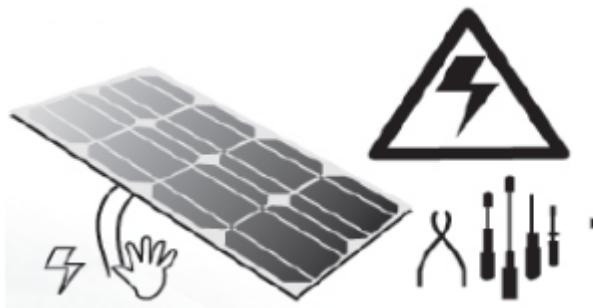
1.2 Warnings



- PV modules generate DC electrical energy when exposed to sunlight or other light sources. Active parts of module such as terminals can result in burns, sparks, and lethal shock.
- Artificially concentrated sunlight shall not be directed on the module or panel.
- Front protective glass is utilized on the module. Broken solar module glass is an electrical safety hazard (may cause electric shock or fire). These modules cannot be repaired and should be replaced immediately.
- To reduce the risk of electrical shocks or burns, modules may be covered with an opaque material during installation to avoid injury.
- The installation work of the PV array can only be done under the protection of sun-sheltering covers or sunshades and only qualified person can install or perform maintenance work on this module.



- Follow the battery manufacture's recommendations if batteries are used with modules.
- Do not use this module to replace or partly replace roofs and walls of living buildings.
- Do not install modules where flammable gas may be present.
- Do not remove any part installed by Jinko Solar or disassemble the module.
- All instructions should be read and understood before attempting to install, wire, operate and maintain the module.
- Don't lift up PV modules using the attached cables or the junction box.
- Do not touch live terminals with bare hands. Use insulated tools for electrical connections.
- Do not use water to extinguish the fire when the power supply is not disconnected.



Use insulated tools for electrical connection

- All PV systems must be grounded to earth. If there is no special regulation, please follow the National Electrical Code or other national code.
- Under normal conditions, a photovoltaic module is likely to experience conditions that produce more current and/or voltage than reported at standard test conditions. Accordingly, the value of Isc and Voc marked on the module should be multiplied by 1.25 when determining PV system component voltage ratings, conductor current ratings, fuse sizes, and size of controls connected to the PV output.
- Once the PV module has been shipped to the installation site, all of the parts should be unpacked properly with care.
- Do not stand or step on the PV module like below pictures show. This is prohibited and there is a risk of damage to the module and cause injury for you.



- Only PV modules with the same cell size should be connected in series.
- During transporting modules, please attempt to minimize shock or vibration to the module, as this may damage the module or lead to cell micro cracks.

- During all transportation situations, never drop the module from a vehicle, house or hands. This will damage module.
- Modules (glass, junction boxes, connectors, etc.) shall be protected from long-term exposure to environments containing sulfur, strong acid, strong alkaline, etc., which may pose a risk of corrosion to the product.
- Do not clean the glass with chemicals. Only use tap water. Make sure the module surface temperature is cool to the touch. Cleaning modules with cool water when module surface temp is high may result in glass breakage. Do not brush paint or corrosive substances on the surface of the modules.
- Do not disconnect any of the modules when under load. If you need to disconnect the connector, you must first close the DC and AC converter or disconnect junction box master switch.
- When looking at PV modules with anti-reflection (AR) coating technology, it will be normal to see some cells with a slight color difference at different angles. Modules with LRF(light reflective film) and without LRF should not be built in the same array or roof.
- The junction box connector should not be in contact with oily substances, organic solvents and other corrosive materials to avoid damage to the connector. For example, alcohol, gasoline, lubricants, rust inhibitors, herbicides and so on. If the connector is polluted, need to replace new connector to use again.
- Before the installation of modules, it is recommended to add rainproof facilities in the project site to avoid direct open-air placement.
- The maximum altitude the PV module is designed for $\leq 2000\text{m}$.
- The maximum irradiance is 1300W/m^2 for module with transparent rear.
- Meaning of crossed –out wheeled dustbin:
Do not dispose of electrical appliances as unsorted municipal waste, use separate collection facilities.
Contact your local government for information regarding the collection systems available.
If electrical appliances are disposed of in landfills or dumps, hazardous substances can leak into the groundwater and get into the food chain, damaging your health and well-being.

When replacing old appliances with new ones, the retailer is legally obligated to take back your old appliance for disposals at least free of charge.



2. Installation

2.1 Installation Safety

- Always wear protective head gear, insulating gloves and safety shoes (with rubber soles) and other protective measures during installation.
- When installing or maintaining the photovoltaic system, please do not wear metal rings, watches and other metal products, so as not to cause electric shock danger and damage the modules.
- Keep the PV module packed in the carton until installation. Once the modules are removed from the packing box, they should be installed and connected to the bus box in time. If they are not installed immediately, protective measures (such as adding rubber joint cover, etc.) should be taken on the connection head.
- Do not touch the PV module unnecessarily during installation. The glass surface and the frame may be hot. There is a risk of burns and electric shock.
- Do not work in rain, snow or windy conditions.
- Due to the risk of electrical shock, do not perform any work if the terminals of the PV module are wet.
- Use insulated tools and do not use wet tools.
- When installing PV modules, do not drop any objects (e.g., PV modules or tools).
- Make sure flammable gasses are not generated or present near the installation site.
- Insert module connectors fully and correctly. An audible "click" sound should be heard. This sounds confirms the connectors are fully seated. Check all connections.
- Connect the male and female connectors correctly, check the wiring condition, all wires shall not be separated from the modules, and secure the wires with cable ties so that the wires do not scratch or squeeze the back sheet of the modules.
- Do not touch the junction box and the end of the interconnect cables (connectors) with bare hands during installation or under sunlight, regardless if the PV module is connected to or disconnected from the system.
- The junction box must be protected from direct sunlight and water. The connector must meet the IP68 water-tight standard after being connected. However, it is not recommended to use the connector under water for a long time.
- Do not expose the PV module to excessive loads on the surface of the PV module or twist the frame.
- Do not hit or put excessive load on the glass or back sheet, this may break the cells or cause micro cracks.
- During the installation or operation, don't use sharp tools to wipe the back sheet and glass. Scratches can appear on the module.
- Do not drill holes in the frame. It may cause corrosion of the frame.

- When installing modules on roof mounted structures, please try to follow the “from top to bottom” and/or “from left to right” principle, and don’t step on the module. This will damage the module and would be dangerous for personal safety.
- Modules will have thermal expansion and cold contraction effect. When installing, the interval between two adjacent conventional modules is recommended > 10mm. The minimum clearance between two adjacent double-sided modules is recommended > 20mm; If there are special requirements, please confirm with Jinko and install it;
- During the installation, disassembly, maintenance and any other related processes of the product, it is recommended that the force applied between the cable and the connector, the cable and the junction box be no more than 60N.

2.1.1 Forklift handling precautions

- In the process of loading and unloading, the forklift should be selected reasonably according to the size and weight of the goods. If the fork length is less than 3/4 of the size of the goods, extension sleeves should be fitted on the forks before the assembly is forked, in order to avoid the packing container dumping when moving the forklift ;
- When the forklift is loaded with modules, the spacing between the two forks should be adjusted as required. The load of the two forks should be balanced without deflection. One side of the assembly box should be close to the retainer (Figure1) ;



Figure 1

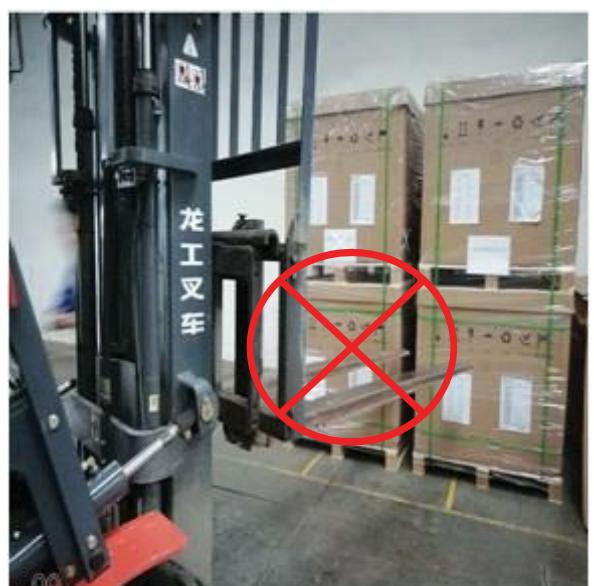


Figure 2

- Avoid sharp objects (such as forklift pallet fork) contact or collision with module box body parts, so as not to damage the internal modules(Figure 2);
- Loading and unloading process, except forklift operator, others should be kept at a safe distance

from range, ensure the safety of personnel;

- During loading and unloading, special command is required to avoid failure
- and making modules down;
- When using a forklift to move palletized packing boxes to the operation area, the forklift shall be slowly and steadily lifted and put down gently during loading and unloading, and the modules shall avoid turbulence and violent vibration during transportation.

2.1.2 Notes for container handling

- In order to prevent the safety of placing and unpacking modules affected by tilt and uneven ground, please choose flat ground when unloading.
- When unloading on the platform or ground, steel plate pads or tooling shall be used to assist in moving the goods out of the container smoothly, to avoid module bumps caused by the gap between the platform and the container floor (Figure 3);
- It is recommended that the inclination angle between the fixture pad and the plane should be less than 5°, so as to avoid the forklift hit the top of the container due to too much inclination when it comes out of the container;
- When unloading cross-loading modules, special command is required to ensure that the forklift does not exceed the modules, and prevent damage
- to adjacent modules when fork is raised or placed due to excessive length of forklift arms (Figure 4);
- When unloading, the whole modules should be balanced as far as possible, the forklift arm should be kept relatively horizontal, and the forklift truck should fork the modules out of the container slowly and smoothly;



Figure 3



Figure 4

- During the fork out of the modules, it is allowed of 2~3cm spacing between modules and box walls or adjacent modules, and then move back slowly to prevent the carton from being damaged by friction between modules and box wall or adjacent pallets (Figure 5);
- When the goods go out of the container port, please slow down and lower the height of the forklift arm from the ground (it is recommended to close to the bottom plate to reserve enough space for the top), pay attention to the distance between the bottom of the goods and the top of the container,

prevent the goods from colliding with the top of the container, and ensure that the whole pallet module is safely removed from the container (Figure 6);

- If the modules need to be temporarily stored after unloading, it is recommended to keep sufficient space between each pallet to avoid scratching the carton or pallet during the second transfer.



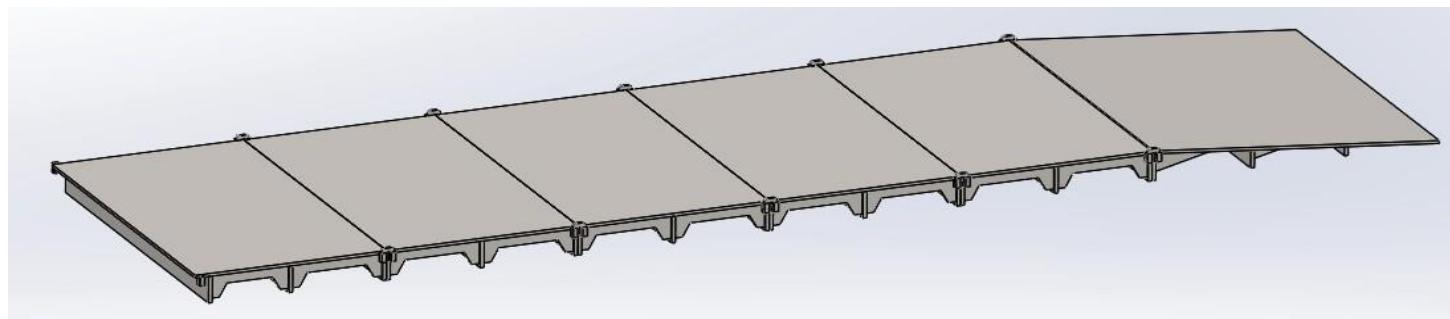
Figure 5



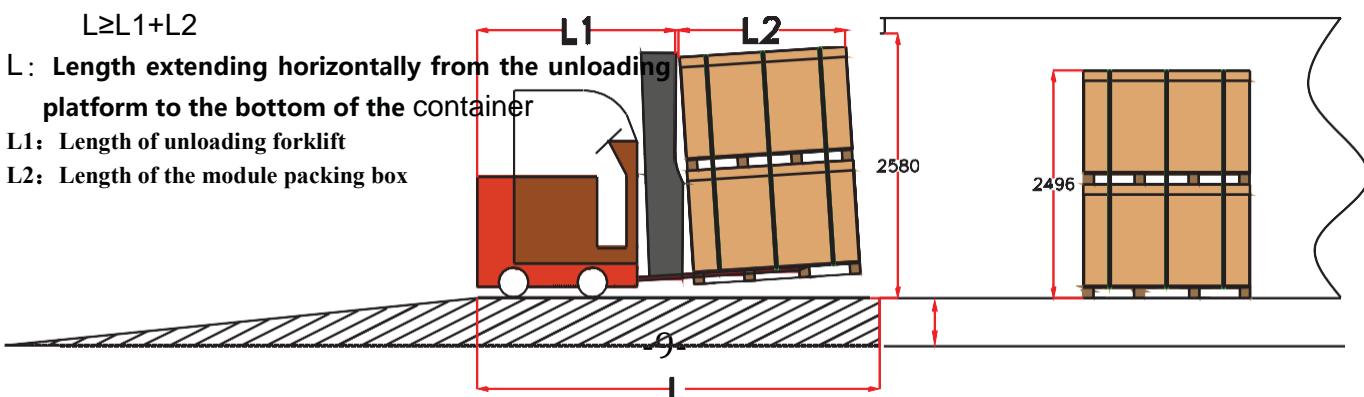
Figure 6

2.1.3 Tiger Pro/Neo container handling requirements and precautions

- Unloading Tools: Forklift/Unloading platform/Unloading pad tooling
- If the container is unloaded on the unloading platform, it is required to be used with the unloading platform or tooling.



- The height of the unloading platform and the height of the unloading tooling should be kept at the basic level with the bottom of the container (loading bottom plate), and the height tolerance should be controlled within ±10mm.
- The length of the horizontal extension of the unloading platform or unloading tooling
- $L \geq L_1 + L_2$ the total length of the unloading forklift and the length of the module packing box.

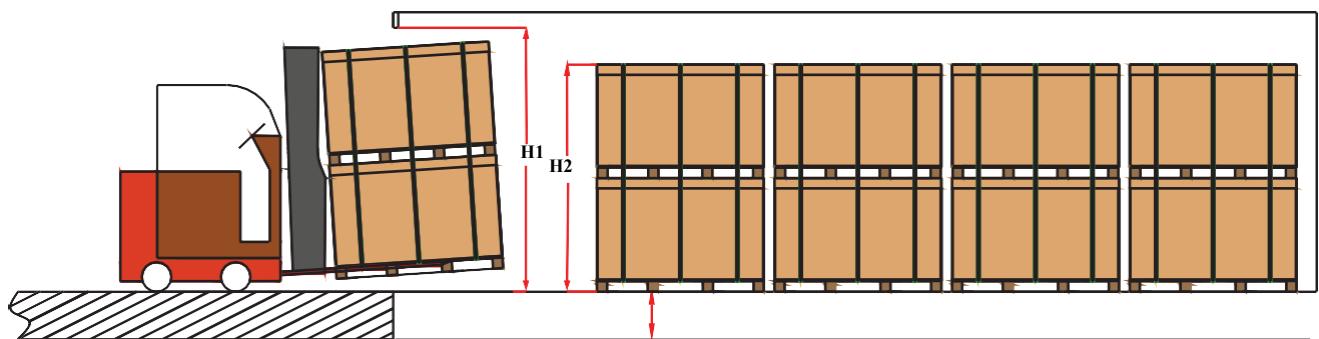


Height of the container above the ground

- When the container is unloaded:
- When using the fuel forklift, adjust the height of the forks from the ground, the forks into the short side of the pallet, after the forks into the bottom, lift the modules at an appropriate height (the tilt Angle required to lift the modules <2°), the smaller the distance from the ground when the forklift out of the container door, ensure that the height of the forks from the ground and the distance from the goods to the top of the container is not more than 80mm;
- When the horizontal electric forklift is used to unload the goods, the arm length of the forklift mechanical arm is required to be ≥1800mm. The arm length of the forklift mechanical arm is required to lift the modules from the short side of the pallet with a fork (the height of the forklift is required to be ≤40mm from the ground), and the modules are moved out slowly.
- If the modules are unloaded from long side forks, fuel oil forklifts are needed to unload.

H2: Height of the module packing

box H1: Height of the container door



Height of the container above the ground

2.1.4 Attention in loading and unloading with hoisting

- The hoisting rope of crane unloading needs to choose a longer nylon sling, wire rope is not allowed to use(Figure 7);
- Before lifting, the length of the sling should be evenly distributed on both sides to avoid the case body tilting to one side during lifting, which causes the sling to be too tight and the assembly to explode;
- When lifting, the box should be kept balanced to avoid module tilting ;
- When someone is required to direct the hoisting box to fall down during unloading, it shall be kept as flat as possible to avoid collision and throwing of the module box, and the ground shall be flat (Figure 8).



Figure 7



Figure 8

- In order to minimize the impact of sling on the safety of goods in the process of hoisting, the modules without frame should be supported during loading and unloading. For example, wooden sticks, boards or other fixtures of the same width as the outer packing cases should be used on the upper part of the box to reduce the pressure of the contact position on the box (Figure 9).

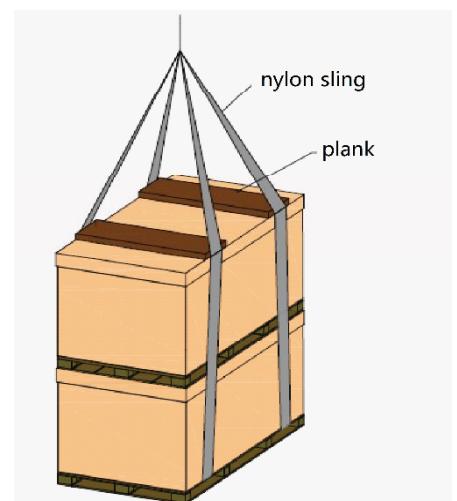


Figure 9

2.1.5 Attentions for storage

MODULE SHOULD BE HANDLED BY 2 PERSONS

KEEP DRY



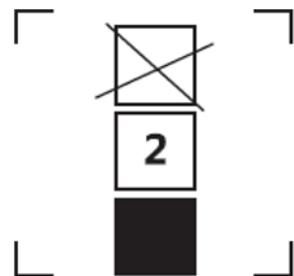
**MODULE SHOULD BE
HANDLED BY 2 PERSONS**



KEEP DRY

STACK LIMIT IN 2 UNITS THIS SIDE

THIS SIDEUP



STACK LIMIT IN 2 UNITS



THIS SIDE UP

FRAGILE

DONOTSTEPON



FRAGILE



DO NOT STEP ON

- Due to the complex environment and climate of the project site, it is recommended to store the

stacked modules with single support after dismounting in order to ensure the safe storage of the modules on site

- (Only after cutting the outer packing belt of the connecting two brackets,
- separate the upper and lower brackets) , The double glass modules should be stored with single support after dismounting ;
- The modules should be stored in a complete outer package, and the
- storage area should be protected and pallets and packing cases from damp, direct sunlight and waterproof (rain) measures ;
- The modules storage areas should be kept dry, level, the ground and the horizontal Angle is less than 10 ° ;
- Make sure that all modules with the same current gear are installed in the same area centrally (Square matrix, bus box) ;



Figure 10



Figure 11

- The modules should be placed neatly with a safe distance between the boxes. The spacing between boxes should be greater than 30cm (Figure 10) ;
- Please do not stack other items on the modules or boxes (Figure 11) .

2.1.6 Instructions for project site unpacking, handling

- When the modules are transported in the project site, the transportation route shall be selected on a smooth road to avoid damage or crack of the modules caused by turbulence, collision, extrusion, tilt and other factors. The modules shall be transported on a flat ground;
- Remove the packing belt and protective film of the upper and lower brackets, and separate the upper and lower brackets with a forklift truck (the shelf wall of the forklift truck shall have cushions, such as foam or silicone pads, to prevent hidden cracks caused by the collision or extrusion between the

modules and the shelf wall (Figure 14));

- If the modules need to be spot tested, please refer to the unpacking instructions of this manual 3.3/3.4 to unbox the modules;
- During the unpacking process, supports are provided on one side of the assembly to prevent it from toppling over (Figure 15);



Figure 14(1)

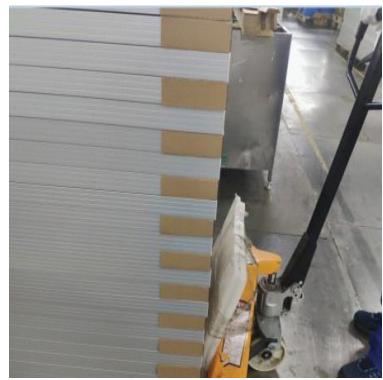


Figure 14(2)



Figure 15

- When taking the modules out of the packing box, it is recommended to use protective tooling to separate the modules to prevent friction from producing flecks. Hard pulling and skewed drawing of the modules are not allowed (Figure 15).
- After removing the modules, they should be placed on a vacant tray, which should be carried by two people and handled with care during the sampling test (Figure 17).
- In the process of sampling inspection and testing, the following precautions should be paid attention to avoid causing secondary hidden cracks of modules;
- If you need to remove the tie of the fixed wire, use scissors and other tools to cut off the tie. Do not hit the lead end on the back.
- If the module needs to be turned over, fixing measures (adhesive tape, etc.) shall be adopted to fix the lead head to prevent the hidden crack of the module caused by the drop of the lead (Figure 18);
- After the completion of the test, remove the tape of the fixed wire, and then fix the wire with a tie, and then pack the modules again for secondary transport;



Figure 16



Figure 17



Figure 18

2.2 Installation Condition

2.2.1 Climate Condition

Please install the modules in the following conditions:

- a) Operating temperature: within $-40^{\circ}\text{C}(-40^{\circ}\text{F})$ to $85^{\circ}\text{C}(185^{\circ}\text{F})$
- b) Humidity: < 85RH%

* Note: The mechanical load bearing (include wind and snow loads) of the module is based on the approved mounting methods. The professional system installer must be responsible for mechanical load calculation according to the system design.

2.2.2 Site Selection

In most applications, Jinko solar PV modules should be installed in a location where they will receive maximum sunlight throughout the year. In the Northern Hemisphere, the module should typically face south, and in the Southern Hemisphere, the modules should typically face north. Modules facing 30 degrees away from true South (or North) will lose approximately 10 to 15 percent of their power output. If the module faces 60 degrees away from true South (or North), the power loss will be 20 to 30 percent. When choosing a site, avoid trees, buildings or obstructions, which could cast shadows on the solar photovoltaic modules especially during the winter months when the arc of the sun is lowest over the horizon. Shading causes loss of output, even though the factory fitted bypass diodes of the PV module will minimize any such loss.

Do not install the PV module near open flame or flammable materials.

When solar modules are used to charge batteries, the battery must be installed in a manner, which will protect the performance of the system and the safety of its users. Follow the battery manufacturer's guidelines concerning installation, operation and maintenance recommendations. In general, the battery (or battery bank) should be away from the main flow of people and animal traffic. Select a battery site that is protected from sunlight, rain, snow, debris, and is well ventilated. Most batteries generate hydrogen gas when charging, which can be explosive. Do not light matches or create sparks near the battery bank. When a battery is installed outdoors, it should be placed in an insulated and ventilated battery case specifically designed for the purpose.

Do not install the PV module in a location where it would be immersed in water or continually exposed to water from a sprinkler or fountain etc.

The PV module can be installed at a distance of 50 m to 500m from the seashore. However, when installing module within the distance, protect the connectors or add dust plugs. After removing the dust plugs, connect the connectors immediately and take other anti-rust measures to prevent rust.

When the modules are installed on the roof, they must be separated from the roof by more than 10cm to facilitate air circulation and heat dissipation.

2.2.3 Tilt Angle Selection

The tilt angle of the PV module is measured between the surface of the PV module and a horizontal ground surface (Figure 1). The PV module generates maximum output power when it faces the sun directly.

For standalone systems with batteries where the PV modules are attached to a permanent structure, the tilt angle of the PV modules should be selected to optimize the performance based on seasonal load and sunlight. In general, if the PV output is adequate when irradiance is low (e.g., winter), then the angle chosen should be adequate during the rest of the year. For grid-connected installations where the PV modules are attached to a permanent structure, PV modules should be tilted so that the energy production from the PV modules will be maximized on an annual basis.

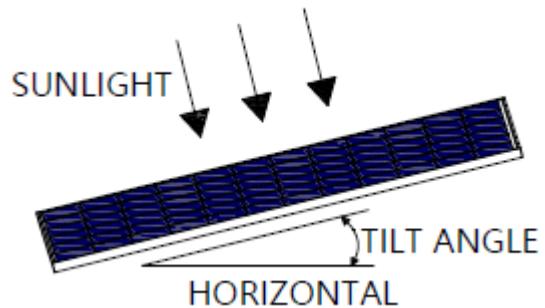


Figure1: PV module tilt angle

2.3 Mechanical Installation Introduction

Solar PV modules usually can be mounted by using the following methods: bolts and clamps.

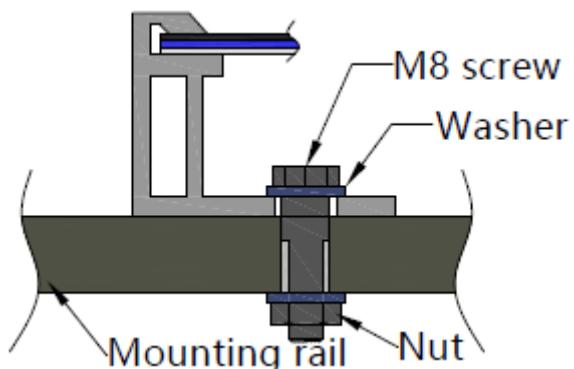
*** Note:**

- 1) All installation methods herein are only for reference, and Jinko solar will not provide related mounting components, the system installer or trained professional personnel must be responsible for the PV system's design, installation, and mechanical load calculation and security of the system.
- 2) Before installation, the following items should be addressed:
 - a) Visually check the module for any damage. Clean the module if any dirt or residue remains from shipping.
 - b) Check if module serial number stickers match.
- 3) Jinko modules are designed to meet a maximum positive (or downward) pressure of 3600Pa (Only refer to the mentioned module type in this manual) and negative (or upward) pressure of 1600Pa. This design load was then tested with a safety factor of 1.5 times. So Jinko modules are tested under a maximum downward pressure of 5400Pa and upward pressure of 2400Pa. When mounting modules in snow-prone or high-wind environments, special care should be taken to mount the modules in a manner that provides sufficient design strength while meeting local code requirements.

2.3.1 Mounting with Bolts

For mounting with bolts, the following modules in tables 1 are applicable.

The frame of each module has 8 mounting holes (Length* Width: 14mm*9mm) used to secure the modules to support structure. Always use all the eight mounting holes to secure the modules. The module frame must be attached to a mounting rail using M8 corrosion-proof bolts together with spring washers and flat washers in eight symmetrical locations on the PV module. The applied torque value should be big enough to fix the modules steadily. The reference value for M8 bolt is 16~20N*m. As to special support system or special installation requirement, please reconfirm with the support's supplier for the torque value. Please find detailed mounting information in the below illustration as Figure 2&3&4.



2.3.1.1 Mounting with Bolts (eight mounting holes)

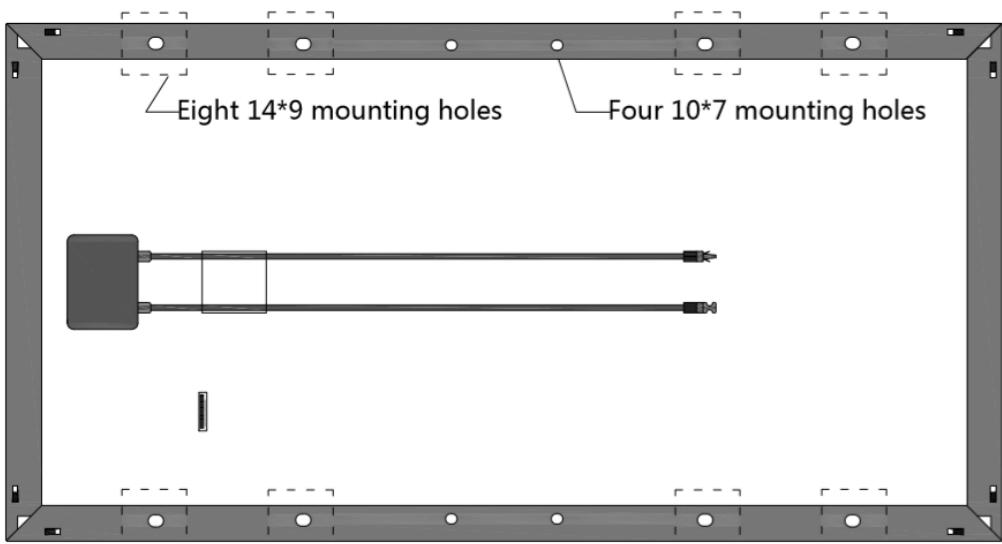


Figure 2: PV module installed with bolt fitting method (eight mounting holes)

| Module type | Max. Design Pressure: 3600Pa (positive) &1600Pa (negative) mechanical load | | Max. Design Pressure: 3600Pa (positive) &1600Pa (negative) mechanical load |
|-------------|---|---|---|
| | Module dimensions(mm) A*B | | |
| 54P | Height of the frame (mm) | / | 30 |
| | Group 65 & 74 | / | 1701*1122 &1717*1132 & 1718*1134 & 1719*1134*30 |
| | Group 66 & 75 | / | 1669*1122 &1685*1132 & 1686*1134 &1687*1134*30 |

| | Height of the frame (mm) | 35 | 30 |
|-----|--------------------------|--|--|
| 60P | Group 1 | 1650*992 & 1665*1002 | / |
| | Group 2 | 1665*992 & 1684*1002 | / |
| | Group 3 | 1650*992 & 1665*1002 | / |
| | Group 4 | 1665*992 & 1684*1002 | / |
| | Group 5 | 1650*992 & 1665*1002 | / |
| | Group 6 | 1665*992 & 1684*1002 | / |
| | Group 7 | 1650*992 & 1665*1002 | / |
| | Group 8 | 1665*992 & 1684*1002 | / |
| | Group 9 | 1665*992 & 1684*1002 1672*992 & 1704*1008 | / |
| | Group 20 | 1704*1008 | / |
| | Group 22 | 1684*1002 | / |
| | Group 30 | 1704*1008 | / |
| | Group 46 | 1684*1002 | / |
| | Group 57 | / | 1693*1029 |
| | Group 58 | / | 1693*1029 |
| | Group 59 | / | 1716*1032 |
| | Group 60 | / | 1716*1032 |
| | Group 56 | / | 1684*1002 |
| | Group 64 | / | 1756*1039 & 1750*1039 & 1750*1038 |
| | Group 61 | / | 1693*1029 & 1692*1029 |
| | Group 62 | / | 1693*1029 & 1692*1029 |
| | Group 67 & 76 | / | 1884*1122 & 1901*1132 & 1903*1134 & 1904*1134& 1906*1134 |
| | Group 68 & 77 | / | 1868*1134 & 1865*1132 & 1848*1122 & 1868*1134 |
| | Group 86 | 1726*1023 | / |
| 72P | Height of the frame (mm) | 40 | 30 |
| | Group 10 | 1956*992 & 1979*1002 | / |
| | Group 11 | 1987*992 & 2008*1002 | / |
| | Group 12 | 1956*992 & 1979*1002 | / |
| | Group 13 | 1987*992 & 2008*1002 | / |
| | Group 14 | 1956*992 & 1979*1002 | / |
| | Group 15 | 1987*992 & 2008*1002 | / |
| | Group 16 | 1956*992 & 1979*1002 | / |
| | Group 17 | 1987*992 & 2008*1002 | / |
| | Group 18 | 1987*992 & 2008*1002 & 2031*1008 | / |
| | Group 19 | 2031*1008 | / |
| | Group 21 | 2008*1002 | / |
| | Group 29 | 2031*1008 | / |

| | | | |
|-----|--------------------------|--|-----------|
| | Group 45 | 2008*1002 | / |
| | Group 55 | 2008*1002 | / |
| | Height of the frame (mm) | 35 | / |
| | Group 63 | 2096*1039 & 2090*1039 & 2090*1038 | / |
| | Group 85 | 2061*1023 | |
| 66P | Height of the frame (mm) | 35 | 30 |
| | Group 24 | 1796*995 & 1796*998 | / |
| | Group 26 | 1822*1008 | / |
| | Group 28 | 1822*1008 | / |
| | Group 32 | 1840*998 & 1841*1002 | / |
| | Group 34 | 1868*1008 & 1865*1005 | / |
| | Group 36 | 1868*1008 & 1865*1005 | / |
| | Group 38 | 1840*998 & 1841*1002 | / |
| | Group 40 | 1842*1021 & 1842*1024 1855*1029 & 1855*1032 | / |
| | Group 42 | 1868*1034 & 1878*1032 | / |
| | Group 44 | 1868*1034 & 1878*1032 | / |
| | Group 48 | 1842*1021 & 1842*1024 1855*1029 & 1855*1032 | / |
| | Height of the frame (mm) | 40 | 35 |
| 78P | Group 23 | 2113*995 & 2113*998 | / |
| | Group 25 | 2130*1002 & 2139*1008 | / |
| | Group 27 | 2130*1002 & 2139*1008 | / |
| | Group 31 | 2163*995 & 2167*997 & 2167*998 & 2166*1002 | / |
| | Group 33 | 2194*1008 & 2190*1005 | / |
| | Group 35 | 2194*1008 & 2190*1005 | / |
| | Group 37 | 2163*995 & 2167*997 & 2167*998 & 2166*1002 | / |
| | Group 39 | 2168*1021 & 2168*1024 2182*1029 & 2182*1032 | / |
| | Group 41 | 2194*1034 & 2205*1032 | / |
| | Group 43 | 2194*1034 & 2205*1032 | / |
| | Group 47 | 2168*1021 & 2168*1024 2182*1029 & 2182*1032 | / |
| | Group 49 | 2168*1021 & 2168*1024 & 2182*1029 & 2182*1032 | / |
| | Group 51 | 2168*1021 & 2168*1024 & 2182*1029 & 2182*1032 | / |
| | Group 83 & 84 | / | 2465*1134 |

Table 1: Mechanical dimensions for bolt fitting method (eight mounting holes)

Notes: Group 1~73 refer to appendix 1 for details.

The load described in this manual is the design load. When calculating the maximum test load, 1.5 times of safety factor should be considered.

2.3.1.2 Mounting with Bolts (four mounting holes)

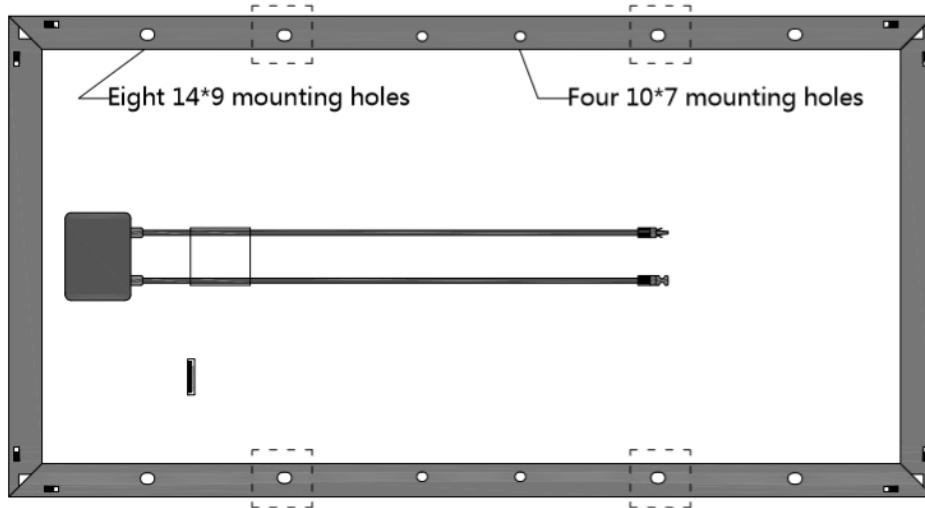


Figure 3: PV module installed with bolt fitting method (four mounting holes)

| Module type | Max. Design Pressure: 3600Pa (positive) &1600Pa (negative) mechanical load | | |
|-------------|---|--|----|
| | Module dimensions(mm) A*B | | |
| 60P | Height of the frame (mm) | 30 | / |
| | Group 1 | 1650*992 & 1665*1002 | / |
| | Group 2 | 1665*992 & 1684*1002 | / |
| | Group 3 | 1650*992 & 1665*1002 | / |
| | Group 4 | 1665*992 & 1684*1002 | / |
| | Group 5 | 1650*992 & 1665*1002 | / |
| | Group 6 | 1665*992 & 1684*1002 | / |
| | Group 7 | 1650*992 & 1665*1002 | / |
| | Group 8 | 1665*992 & 1684*1002 | / |
| | Group 9 | 1665*992 & 1684*1002 1672*992 & 1704*1008 | / |
| | Group 20 | 1704*1008 | / |
| | Group 22 | 1684*1002 | / |
| | Group 30 | 1704*1008 | / |
| | Group 46 | 1684*1002 | / |
| | Group 56 | 1684*1002 | / |
| 72P | Height of the frame (mm) | 30 | 35 |
| | Group 10 | 1956*992 & 1979*1002 | / |
| | Group 11 | 1987*992 & 2008*1002 | / |
| | Group 12 | 1956*992 & 1979*1002 | / |
| | Group 13 | 1987*992 & 2008*1002 | / |
| | Group 14 | 1956*992 & 1979*1002 | / |
| | Group 15 | 1987*992 & 2008*1002 | / |
| | Group 16 | 1956*992 & 1979*1002 | / |
| | Group 17 | 1987*992 & 2008*1002 | / |

| | | | |
|-----|--------------------------|--|--|
| | Group 18 | 1987*992 & 2008*1002 & 2031*1008 | / |
| | Group 19 | 2031*1008 | / |
| | Group 21 | 2008*1002 | / |
| | Group 29 | 2031*1008 | / |
| | Group 45 | 2008*1002 | / |
| | Group 55 | 2008*1002 | / |
| | Group 71 & 80 | / | 2274*1134 & 2278*1134&2335*1134 |
| | Group 72 & 81 | / | 2230*1134 |
| | Height of the frame (mm) | 30 | 35 |
| | Group 24 | 1796*995 & 1796*998 | / |
| 66P | Group 26 | 1822*1008 | / |
| | Group 28 | 1822*1008 | / |
| | Group 32 | 1840*998 & 1841*1002 | / |
| | Group 34 | 1868*1008 & 1865*1005 | / |
| | Group 36 | 1868*1008 & 1865*1005 | / |
| | Group 38 | 1840*998 & 1841*1002 | / |
| | Group 40 | 1842*1021 & 1842*1024 1855*1029 & 1855*1032 | / |
| | Group 42 | 1868*1034 & 1878*1032 | / |
| | Group 44 | 1868*1034 & 1878*1032 | / |
| | Group 48 | 1842*1021 & 1842*1024 1855*1029 & 1855*1032 | / |
| | Group 50 | / | 1842*1021 & 1842*1024 & 1855*1029 & 1855*1032 |
| | Group 52 | / | 1842*1021 & 1842*1024 & 1855*1029 & 1855*1032 |
| | Group 54 | / | 1840*998*35 (NP) |
| | Group 69 & 78 | / | 2067*1122 & 2086*1132 & 2089*1134 |
| | Group 70 & 79 | / | 2027*1122 & 2046*1132 & 2049*1134 |
| | Height of the frame (mm) | 30 | 35 |
| 78P | Group 23 | / | 2113*995 & 2113*998 |
| | Group 25 | / | 2130*1002 & 2139*1008 |
| | Group 27 | / | 2130*1002 & 2139*1008 |
| | Group 31 | / | 2163*995 & 2167*997 2167*998 & 2166*1002 |
| | Group 33 | / | 2194*1008 & 2190*1005 |
| | Group 35 | / | 2194*1008 & 2190*1005 |
| | Group 37 | / | 2163*995 & 2167*997 2167*998 & 2166*1002 |
| | Group 39 | / | 2168*1021 & 2168*1024 2182*1029 & 2182*1032 |
| | Group 41 | / | 2194*1034 & 2205*1032 |
| | Group 43 | / | 2194*1034 & 2205*1032 |
| | Group 47 | / | 2168*1021 & 2168*1024 2182*1029 & 2182*1032 |
| | Group 49 | / | 2182*1029 |

| | | | |
|--|---------------|---|--|
| | Group 51 | / | 2182*1029 |
| | Group 53 | / | 2166*1002 |
| | Group 73 & 82 | / | 2393*1130 & 2385*1122 & 2408*1132 & 2411*1134 |
| | Group 87 | | 2465*1134 & 2525*1134 |

Table 2: Mechanical dimensions for bolt fitting method (four mounting holes)

Note: The installation method of bolt fitting (four mounting holes) is based on the internal results in Jinko.

The load described in this manual is the design load. When calculating the maximum test load, 1.5 times of safety factor should be considered.

2.3.1.3 Mounting with Bolts (NEXTracker four mounting holes)

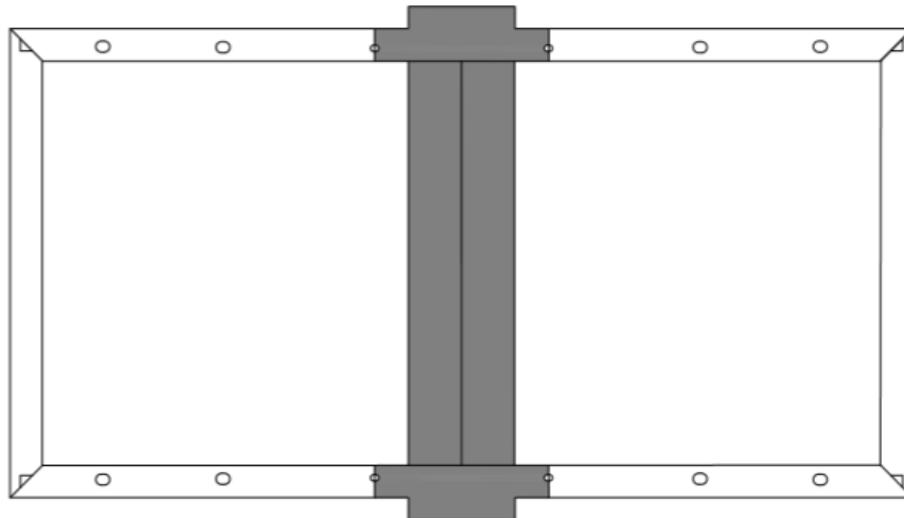


Figure 4: PV module installed with bolt fitting method (NEXTracker)

| Module type | | Module dimensions(mm) A*B | | Maximum designed mechanical load and Method of installation (400mm) |
|-------------|--------------------------|------------------------------|-------------------------|---|
| 72P | Height of the frame (mm) | 40 | 30 | |
| | JKMxxxM-72-V | 1956*992 & 1979*1002 | | +1067/-1067 |
| | JKMxxxM-72H | 1987*992 & 2008*1002 | | +1067/-1067 |
| | JKMxxxM-72H-TV | 1987*992 & 2008*1002 | | +1067/-1067 |
| 78P | Height of the frame (mm) | 30 | 35 | |
| | JKMxxxM-78H-V | / | 2167*998 & 2166*1002 | +1600/-1600 |
| | JKMxxxM-78H-TV | / | 2194*1008 | +1600/-1600 |
| | JKMxxxM-7RL3-V | / | 2182*1029 | +1600/-1600 |
| | JKMxxxM-7RL3-TV | / | 2205*1032 | +1600/-1600 |
| | JKMxxxN-78HL4-V | 2465*1134 | 2465*1134 | +1600/-1600 |

Table 3: Mechanical dimensions for bolt fitting method (NEXTracker)

Note: The installation method of bolt fitting (NEXTracker) is based on the experimental results in Jinko. The design of the NexTracker tracking bracket, the selection of accessories and the installation of modules should be completed by a professional system installer, which can refer to Jinko's mechanical load. The load described in this manual is the design load. When calculating the maximum test load, 1.5 times of safety factor should be considered.

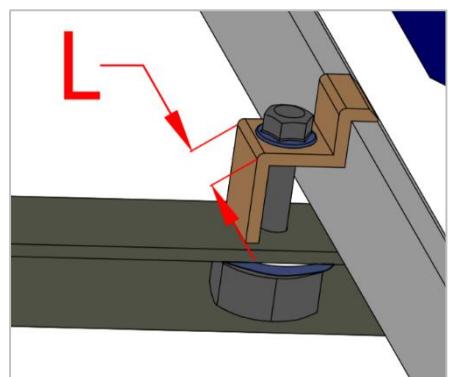
If the design load is greater than 1067Pa (test load is 1600Pa), please consult the NEXTracker supplier.

2.3.2 Mounting with clamps

The module clamps should not come into contact with the front glass and must not deform the frame. Be sure to avoid shadowing effects from the module clamps. The module frame is not to be modified under any circumstances. When choosing this type of clamp-mounting method, please be sure to use at least four clamps on each module, two clamps should be attached on each long sides of the module. Depending on the local wind and snow loads, if excessive pressure load is expected, additional clamps or support would be required to ensure the module can bear the load. The applied torque value should be big enough to fix the modules steadily (Please consult with the clamp or support's supplier for the specific torque value, Such as M8 Screw torque reference value is 16~20N*M). Please find detailed mounting information in the below illustration, the mounting place distance is suggested bigger than J and less than K. The installation diagram of clamp is shown in figure 5.

Note: The Movement of the mounting rail and the clamps center line are recommended to be within the black arrow area.

As shown in the figure on the right, the minimum length L of the clamps is 50mm.



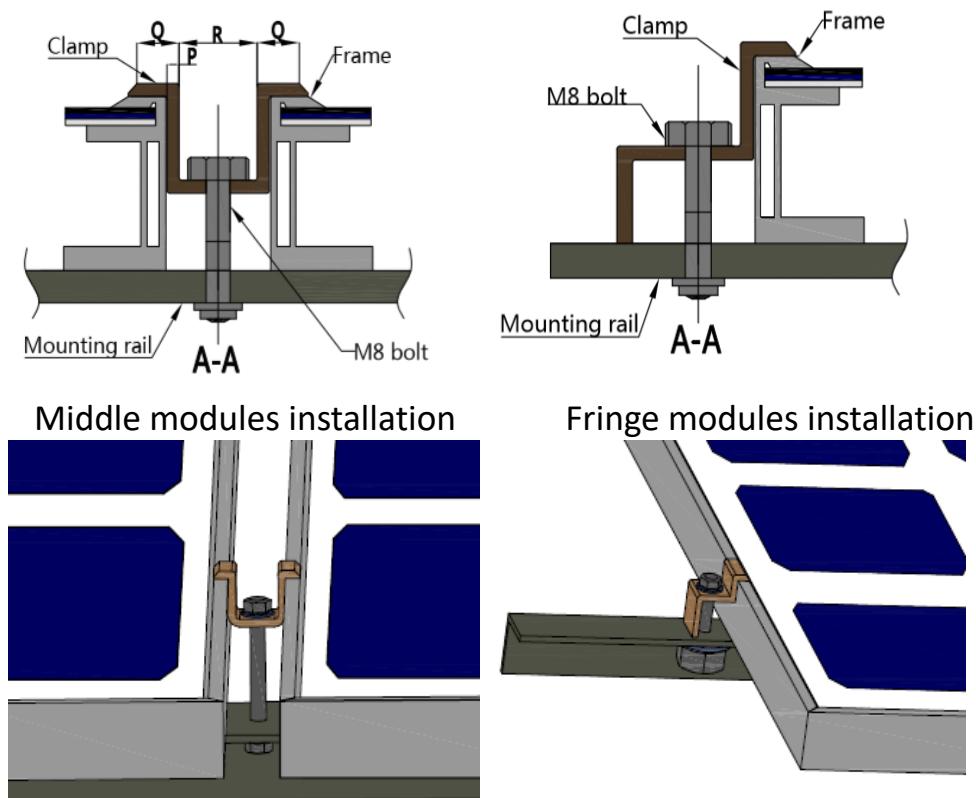


Figure 5: PV module installed at the side with Clamp fitting method

| Clamp type | Dimension(mm) | | | Composition material |
|---|---|----|-----|----------------------|
| End Clamp (40 mm thickness) | 39 x 50 x 42 39 x 60 x 42(For 1.5mm thickness frame) | | | |
| End Clamp (35 mm thickness) | 41.5 x 50 x 40 | | | |
| End Clamp (30 mm thickness) | 41.5 x 50 x 35 | | | |
| Middle Clamp (40 mm & 35 mm thickness) | 42 x 50 x 28 42 x 60 x 28(For 1.5mm thickness frame) | | | Aluminum-alloy |
| | Q | R | P | |
| | 13.5 | 15 | 2.5 | |
| Middle Clamp (30 mm thickness) | 42 x 50 x 29.5 | | | |
| | Q | R | P | |
| | 14 | 14 | 3 | |

Table 4: Mechanical dimensions, specification and material when modules installed with mid Clamp

When installing modules using clamps on the long side of the frame, the applicable product types and installation locations are shown in figure 6 and table 5.

When installing modules using clamps on the short side of the frame, the applicable product types and installation locations are shown in figure 7 and table 6.

When installing modules using clamps on the long side & short side of the frame, the applicable product

types and installation locations are shown in figure 8 and table 7.

When installing modules using clamps on the long side of the frame, the applicable product types and installation locations (The without C transparent backsheets series module) are shown in figure 9 and table 8.

2.3.2.1 Clamp Mounting on Long Sides of the Frames

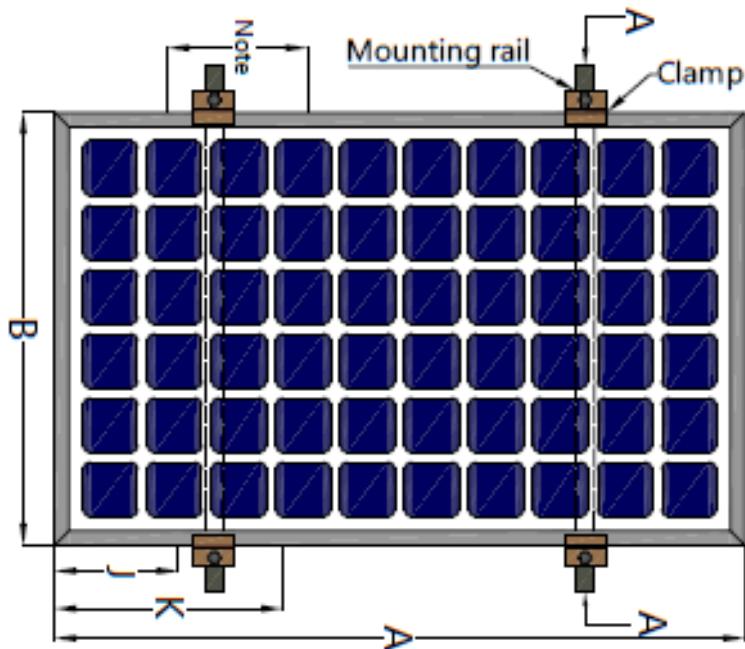


Figure 6: Installation of clamps on long side of frames

| Module type | Max. Design Pressure: | | 3600Pa (positive) &1600Pa (negative) mechanical load | | 3600Pa (positive) &1600Pa (negative) mechanical load | |
|-------------|------------------------------|---|---|-----|---|---|
| | Module dimensions(mm) A*B | | J | K | J | K |
| 54P | Height of the frame (mm) | | 35 | | 30 | |
| | Group 65 & 74 | 1701*1122 &1717*1132 & 1718*1134 & 1719*1134*30 | / | | L/4±50mm (L is the length of the long side of the module) | |
| | Group 66 & 75 | 1669*1122 &1685*1132 & 1686*1134 &1687*1134*30 | / | | | |
| 60P | Height of the frame (mm) | | 35 | | 30 | |
| | Group 1 | 1650*992 & 1665*1002 | | 280 | 420 | L/4±50mm (L is the length of the long side of the module) |
| | Group 2 | 1665*992 & 1684*1002 | | 280 | 420 | |
| | Group 3 | 1650*992 & 1665*1002 | | 280 | 420 | |
| | Group 4 | 1665*992 & 1684*1002 | | 280 | 420 | |
| | Group 5 | 1650*992 & 1665*1002 | | 280 | 420 | |
| | Group 6 | 1665*992 & 1684*1002 | | 280 | 420 | |
| | Group 7 | 1650*992 & 1665*1002 | | 280 | 420 | |
| | Group 8 | 1665*992 & 1684*1002 | | 280 | 420 | |
| | Group 9 | 1665*992 & 1684*1002 1672*992 & 1704*1008 | | 280 | 420 | |
| | Group 20 | 1704*1008 | | 280 | 420 | |

| | | | | | |
|-----|--------------------------|--|---|-----|---|
| | Group 22 | 1684*1002 | 280 | 420 | |
| | Group 30 | 1704*1008 | 280 | 420 | |
| | Group 46 | 1684*1002 | 280 | 420 | |
| | Group 57 | 1693*1029 | / | / | |
| | Group 58 | 1693*1029 | / | / | |
| | Group 59 | 1716*1032 | / | / | |
| | Group 60 | 1716*1032 | / | / | |
| | Group 56 | 1684*1002 | 280 | 420 | |
| | Group 64 | 1756*1039 & 1750*1039 & 1750*1038 | / | / | |
| | Group 61 | 1693*1029 & 1692*1029 | / | / | |
| | Group 62 | 1693*1029 & 1692*1029 | / | / | |
| | Group 67 & 76 | 1884*1122 & 1901*1132 & 1903*1134 & 1904*1134& 1906*1134 | / | / | |
| | Group 68 & 77 | 1868*1134 & 1865*1132 & 1848*1122 & 1868*1134 | / | / | |
| | Group 86 | 1726*1023 | L/4±50mm (L is the length of the long side of the module) | | |
| | Height of the frame (mm) | | 40 | | 30 |
| | Group 10 | 1956*992 & 1979*1002 | 280 | 420 | L/4±50mm (L is the length of the long side of the module) |
| | Group 11 | 1987*992 & 2008*1002 | 280 | 420 | |
| | Group 12 | 1956*992 & 1979*1002 | 280 | 420 | |
| | Group 13 | 1987*992 & 2008*1002 | 280 | 420 | |
| | Group 14 | 1956*992 & 1979*1002 | 280 | 420 | |
| | Group 15 | 1987*992 & 2008*1002 | 280 | 420 | |
| | Group 16 | 1956*992 & 1979*1002 | 280 | 420 | |
| | Group 17 | 1987*992 & 2008*1002 | 280 | 420 | |
| | Group 18 | 1987*992 & 2008*1002 & 2031*1008 | 280 | 420 | |
| | Group 19 | 2031*1008 | 280 | 420 | |
| | Group 21 | 2008*1002 | 280 | 420 | |
| | Group 29 | 2031*1008 | 280 | 420 | |
| | Group 45 | 2008*1002 | 280 | 420 | |
| | Group 55 | 2008*1002 | 280 | 420 | |
| | Height of the frame (mm) | | 35 | | / |
| | Group 63 | 2096*1039 & 2090*1039 & 2090*1038 | L/4±50mm (L is the length of the long side of the module) | | / |
| | Group 85 | 2061*1023 | | | / |
| | Group 71 & 80 | 2274*1134 & 2278*1134 &2335*1134 | 400 | 500 | / |
| | Group 72 & 81 | 2230*1134 | 400 | 500 | / |
| | Height of the frame (mm) | | 35 | | 30 |
| 66P | Group 24 | 1796*995 & 1796*998 | 280 | 420 | L/4±50mm (L is the length of the long side of the module) |
| | Group 26 | 1822*1008 | 280 | 420 | |
| | Group 28 | 1822*1008 | 280 | 420 | |
| | Group 32 | 1840*998 & 1841*1002 | 280 | 420 | |
| | Group 34 | 1868*1008 & 1865*1005 | 280 | 420 | |
| | Group 36 | 1868*1008 & 1865*1005 | 280 | 420 | |
| | Group 38 | 1840*998 & 1841*1002 | 280 | 420 | |

| | | | | | |
|--------------------------|---------------|--|--|-----|--|
| 78P | Group 40 | 1842*1021 & 1842*1024 & 1855*1029 & 1855*1032 | 280 | 420 | |
| | Group 42 | 1868*1034 & 1878*1032 | 280 | 420 | |
| | Group 44 | 1868*1034 & 1878*1032 | 280 | 420 | |
| | Group 48 | 1842*1021 & 1842*1024 & 1855*1029 & 1855*1032 | 280 | 420 | |
| | Group 50 | 1842*1021 & 1842*1024 & 1855*1029 & 1855*1032 | 280 | 420 | |
| | Group 52 | 1842*1021 & 1842*1024 & 1855*1029 & 1855*1032 | 280 | 420 | |
| | Group 54 | 1840*998*35 (NP) 1841*1002*30 (CDF) | 280 | 420 | |
| | Group 69 & 78 | 2067*1122 & 2086*1132 & 2089*1134 | L/4±50mm (L is the length of the long side of the module) | / | |
| | Group 70 & 79 | 2027*1122 & 2046*1132 & 2049*1134 | | | |
| Height of the frame (mm) | | | 40 | | 35 |
| 78P | Group 23 | 2113*995 & 2113*998 | 380 | 520 | L/4±50mm (L is the length of the long side of the module) |
| | Group 25 | 2130*1002 & 2139*1008 | 380 | 520 | |
| | Group 27 | 2130*1002 & 2139*1008 | 380 | 520 | |
| | Group 31 | 2163*995 & 2167*997 2167*998 & 2166*1002 | 380 | 520 | |
| | Group 33 | 2194*1008 & 2190*1005 | 380 | 520 | |
| | Group 35 | 2194*1008 & 2190*1005 | 380 | 520 | |
| | Group 37 | 2163*995 & 2167*997 2167*998 & 2166*1002 | 380 | 520 | |
| | Group 39 | 2168*1021 & 2168*1024 & 2182*1029 & 2182*1032 | 385 | 530 | 400 |
| | Group 41 | 2194*1034 & 2205*1032 | 390 | 540 | 400 |
| | Group 43 | 2194*1034 & 2205*1032 | 390 | 540 | 400 |
| | Group 47 | 2168*1021 & 2168*1024 & 2182*1029 & 2182*1032 | 385 | 530 | 400 |
| | Group 49 | 2168*1021 & 2168*1024 & 2182*1029 & 2182*1032 | 385 | 530 | 400 |
| | Group 51 | 2168*1021 & 2168*1024 & 2182*1029 & 2182*1032 | 385 | 530 | 400 |
| | Group 53 | 2166*1002 | / | / | L/5~L/4 (L is the length of the long side of the module) |
| | Group 73 & 82 | 2393*1130 & 2385*1122 & 2408*1132 & 2411*1134 | / | / | |
| | Group 83 & 84 | 2465*1134 | / | / | |
| | Group 87 | 2465*1134& 2525*1134 | / | / | |

Table 5: Mechanical dimensions of modules installed with clamps on long side of frame

The load described in this manual is the design load. When calculating the maximum test load, 1.5 times of safety factor should be considered.

Note: The Group 39 & 41 & 43 & 47 & 49 & 51 35 frame (400-500 installation position) and the Group 71 & 72 & 80 & 81 35 frame (400-500 installation position) in the installation method of long side clips are based on the internal results of Jinko.

2.3.2.2 Clamp Mounting on Short Sides of the Frames

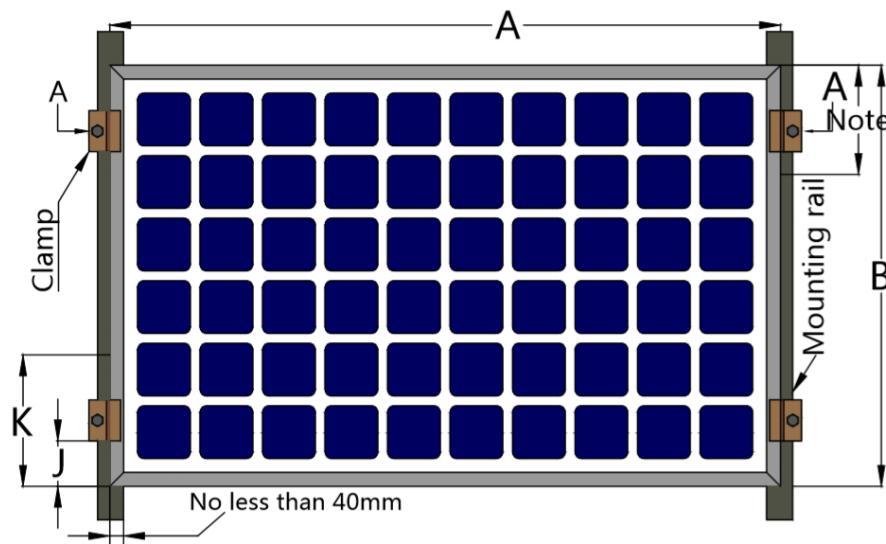


Figure 7: Installation of clamps on short side of frames

| Module type | | Max. Design Pressure: 1067Pa (positive) &1067Pa (negative) mechanical load | 1067Pa (positive) &1067Pa (negative) mechanical load | | | |
|-------------|--------------------------|--|---|-----|-----|-----|
| | | | J | K | J | |
| 54P | Height of the frame (mm) | | 35 | | 30 | |
| | Group 65 & Group 74 | 1722*1134 | / | / | 100 | 240 |
| 60P | Height of the frame (mm) | | 35 | | 30 | |
| | Group 1 | 1650*992 & 1665*1002 | 50 | 240 | 100 | 240 |
| | Group 2 | 1665*992 & 1684*1002 | 50 | 240 | 100 | 240 |
| | Group 3 | 1650*992 & 1665*1002 | 50 | 240 | 100 | 240 |
| | Group 4 | 1665*992 & 1684*1002 | 50 | 240 | 100 | 240 |
| | Group 5 | 1650*992 & 1665*1002 | 50 | 240 | 100 | 240 |
| | Group 6 | 1665*992 & 1684*1002 | 50 | 240 | 100 | 240 |
| | Group 7 | 1650*992 & 1665*1002 | 50 | 240 | 100 | 240 |
| | Group 8 | 1665*992 & 1684*1002 | 50 | 240 | 100 | 240 |
| | Group 9 | 1665*992 & 1684*1002 1672*992 & 1704*1008 | 50 | 240 | 100 | 240 |
| | Group 20 | 1704*1008 | 50 | 240 | 100 | 240 |
| | Group 22 | 1684*1002 | 50 | 240 | 100 | 240 |
| | Group 30 | 1704*1008 | 50 | 240 | 100 | 240 |
| | Group 46 | 1684*1002 | 50 | 240 | 100 | 240 |
| 72P | Height of the frame (mm) | | 40 | | 30 | |
| | Group 10 | 1956*992 & 1979*1002 | 50 | 240 | 100 | 240 |

| | | | | | | |
|-----|--------------------------|---|----|-----|-----|-----|
| | Group 11 | 1987*992 & 2008*1002 | 50 | 240 | 100 | 240 |
| | Group 12 | 1956*992 & 1979*1002 | 50 | 240 | 100 | 240 |
| | Group 13 | 1987*992 & 2008*1002 | 50 | 240 | 100 | 240 |
| | Group 14 | 1956*992 & 1979*1002 | 50 | 240 | 100 | 240 |
| | Group 15 | 1987*992 & 2008*1002 | 50 | 240 | 100 | 240 |
| | Group 16 | 1956*992 & 1979*1002 | 50 | 240 | 100 | 240 |
| | Group 17 | 1987*992 & 2008*1002 | 50 | 240 | 100 | 240 |
| | Group 18 | 1987*992 & 2008*1002 & 2031*1008 | 50 | 240 | 100 | 240 |
| | Group 19 | 2031*1008 | 50 | 240 | 100 | 240 |
| | Group 21 | 2008*1002 | 50 | 240 | 100 | 240 |
| | Group 29 | 2031*1008 | 50 | 240 | 100 | 240 |
| | Group 45 | 2008*1002 | 50 | 240 | 100 | 240 |
| | Height of the frame (mm) | | / | | 30 | |
| | Group 24 | 1796*995 & 1796*998 | / | / | 130 | 240 |
| | Group 26 | 1822*1008 | / | / | 130 | 240 |
| | Group 28 | 1822*1008 | / | / | 130 | 240 |
| 66P | Group 32 | 1840*998 & 1841*1002 | / | / | 130 | 240 |
| | Group 34 | 1868*1008 & 1865*1005 | / | / | 130 | 240 |
| | Group 36 | 1868*1008 & 1865*1005 | / | / | 130 | 240 |
| | Group 38 | 1840*998 & 1841*1002 | / | / | 130 | 240 |
| | Group 40 | 1842*1021 & 1842*1024 & 1855*1029 & 1855*1032 | / | / | 130 | 240 |
| | Group 42 | 1868*1034 & 1878*1032 | / | / | 130 | 240 |
| | Group 44 | 1868*1034 & 1878*1032 | / | / | 130 | 240 |
| | Group 48 | 1842*1021 & 1842*1024 & 1855*1029 & 1855*1032 | / | / | 130 | 240 |

Table 6: Mechanical dimensions of modules installed with clamps on short side of frame

Note : The installation method of clamps on short sides is based on the internal results in Jinko.

The load described in this manual is the design load. When calculating the maximum test load, 1.5 times of safety factor should be considered.

2.3.2.3 Clamp Mounting on Long & Short Sides

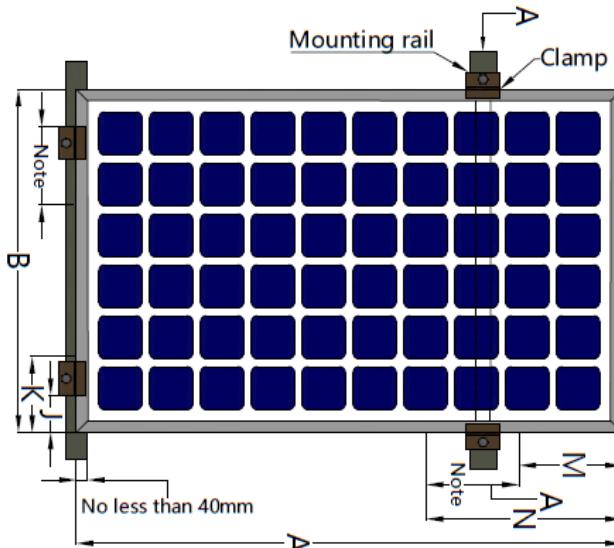


Figure 8: Installation methods of clamps on long and short sides

| Module type | | Max. Design Pressure: | 1600Pa (positive) &1600Pa (negative) mechanical load | | | | 1600Pa (positive) &1600Pa (negative) mechanical load | | | |
|-------------|---------------------------|-----------------------|---|-----|-----|-----|---|-----|---|---|
| | | | J | K | M | N | J | K | M | N |
| 54P | Height of the frame (mm) | | 35 | | | | 30 | | | |
| 54P | Group 65 & Group 74 | 1722*1134 | / | / | / | / | 100 | 240 | L/4±50mm (L is the length of the long side of the module) | |
| 60P | Height of the frame (mm) | | 35 | | | | 30 | | | |
| | Group 1 | 1650*992 & 1665*1002 | 50 | 240 | 280 | 420 | 100 | 240 | L/4±50mm (L is the length of the long side of the module) | |
| | Group 2 | 1665*992 & 1684*1002 | 50 | 240 | 280 | 420 | 100 | 240 | | |
| | Group 3 | 1650*992 & 1665*1002 | 50 | 240 | 280 | 420 | 100 | 240 | | |
| | Group 4 | 1665*992 & 1684*1002 | 50 | 240 | 280 | 420 | 100 | 240 | | |
| | Group 5 | 1650*992 & 1665*1002 | 50 | 240 | 280 | 420 | 100 | 240 | | |
| | Group 6 | 1665*992 & 1684*1002 | 50 | 240 | 280 | 420 | 100 | 240 | | |
| | Group 7 | 1650*992 & 1665*1002 | 50 | 240 | 280 | 420 | 100 | 240 | | |
| | Group 8 | 1665*992 & 1684*1002 | 50 | 240 | 280 | 420 | 100 | 240 | | |
| | Group 9 | 1665*992 & 1684*1002 | 50 | 240 | 280 | 420 | 100 | 240 | | |

| | | | | | | | | | |
|-----|--------------------------|---|----|-----|-----|-----|-----|-----|---|
| | | 1672*992 & 1704*1008 | | | | | | | |
| | Group 20 | 1704*1008 | 50 | 240 | 280 | 420 | 100 | 240 | |
| | Group 22 | 1684*1002 | 50 | 240 | 280 | 420 | 100 | 240 | |
| | Group 30 | 1704*1008 | 50 | 240 | 280 | 420 | 100 | 240 | |
| | Group 46 | 1684*1002 | 50 | 240 | 280 | 420 | 100 | 240 | |
| | Group 64 | 1756*1039 | / | / | / | / | 100 | 240 | |
| | Group 67 & Group 76 | 1903*1134 & 1906*1134 | / | / | / | / | 100 | 240 | |
| | Height of the frame (mm) | | 40 | | | | 30 | | |
| 72P | Group 10 | 1956*992 & 1979*1002 | 50 | 240 | 280 | 480 | 100 | 240 | L/4±50mm (L is the length of the long side of the module) |
| | Group 11 | 1987*992 & 2008*1002 | 50 | 240 | 280 | 480 | 100 | 240 | |
| | Group 12 | 1956*992 & 1979*1002 | 50 | 240 | 280 | 480 | 100 | 240 | |
| | Group 13 | 1987*992 & 2008*1002 | 50 | 240 | 280 | 480 | 100 | 240 | |
| | Group 14 | 1956*992 & 1979*1002 | 50 | 240 | 280 | 480 | 100 | 240 | |
| | Group 15 | 1987*992 & 2008*1002 | 50 | 240 | 280 | 480 | 100 | 240 | |
| | Group 16 | 1956*992 & 1979*1002 | 50 | 240 | 280 | 480 | 100 | 240 | |
| | Group 17 | 1987*992 & 2008*1002 | 50 | 240 | 280 | 480 | 100 | 240 | |
| | Group 18 | 1987*992 & 2008*1002 & 2031*1008 | 50 | 240 | 280 | 480 | 100 | 240 | |
| | Group 19 | 2031*1008 | 50 | 240 | 280 | 480 | 100 | 240 | |
| | Group 21 | 2008*1002 | 50 | 240 | 280 | 480 | 100 | 240 | |
| | Group 29 | 2031*1008 | 50 | 240 | 280 | 480 | 100 | 240 | |
| | Group 45 | 2008*1002 | 50 | 240 | 280 | 480 | 100 | 240 | |
| 66P | Height of the frame (mm) | | / | | | | 30 | | |
| | Group 24 | 1796*995 & 1796*998 | / | / | / | / | 130 | 240 | L/4±50mm (L is the length of the long side of the module) |
| | Group 26 | 1822*1008 | / | / | / | / | 130 | 240 | |
| | Group 28 | 1822*1008 | / | / | / | / | 130 | 240 | |
| | Group 32 | 1840*998 & 1841*1002 | / | / | / | / | 130 | 240 | |
| | Group 34 | 1868*1008 & 1865*1005 | / | / | / | / | 130 | 240 | |
| | Group 36 | 1868*1008 & 1865*1005 | / | / | / | / | 130 | 240 | |
| | Group 38 | 1840*998 & 1841*1002 | / | / | / | / | 130 | 240 | |
| | Group 40 | 1842*1021 & 1842*1024 & 1855*1029 & 1855*1032 | / | / | / | / | 130 | 240 | |

| | | | | | | | | | | |
|-----|--------------------------|---|---|---|---|---|-----|-----|---|--|
| 78P | Group 42 | 1868*1034 & 1878*1032 | / | / | / | / | 130 | 240 | L/4±50mm (L is the length of the long side of the module) | |
| | Group 44 | 1868*1034 & 1878*1032 | / | / | / | / | 130 | 240 | | |
| | Group 48 | 1842*1021 & 1842*1024 & 1855*1029 & 1855*1032 | / | / | / | / | 130 | 240 | | |
| | Height of the frame (mm) | | | / | | | 35 | | | |
| | Group 23 | 2113*995 & 2113*998 | / | / | / | / | 130 | 240 | | |
| | Group 25 | 2130*1002 & 2139*1008 | / | / | / | / | 130 | 240 | | |
| | Group 27 | 2130*1002 & 2139*1008 | / | / | / | / | 130 | 240 | | |
| | Group 31 | 2163*995 & 2167*997 2167*998 & 2166*1002 | / | / | / | / | 130 | 240 | | |
| | Group 33 | 2194*1008 & 2190*1005 | / | / | / | / | 130 | 240 | | |
| | Group 35 | 2194*1008 & 2190*1005 | / | / | / | / | 130 | 240 | | |
| | Group 37 | 2163*995 & 2167*997 2167*998 & 2166*1002 | / | / | / | / | 130 | 240 | | |
| | Group 39 | 2168*1021 & 2168*1024 & 2182*1029 & 2182*1032 | / | / | / | / | 130 | 240 | | |
| | Group 41 | 2194*1034 & 2205*1032 | / | / | / | / | 130 | 240 | | |
| | Group 43 | 2194*1034 & 2205*1032 | / | / | / | / | 130 | 240 | | |
| | Group 47 | 2168*1021 & 2168*1024 & 2182*1029 & 2182*1032 | / | / | / | / | 130 | 240 | | |

Table 7: Mechanical dimensions of modules installed with clamps on short side of frame

Note : The installation method of clamps on long and short sides is based on the internal results in Jinko. The load described in this manual is the design load. When calculating the maximum test load, 1.5 times of safety factor should be considered.

2.3.2.4 Clamp Mounting on Long Sides of the Frames (The without C transparent backsheets series module)

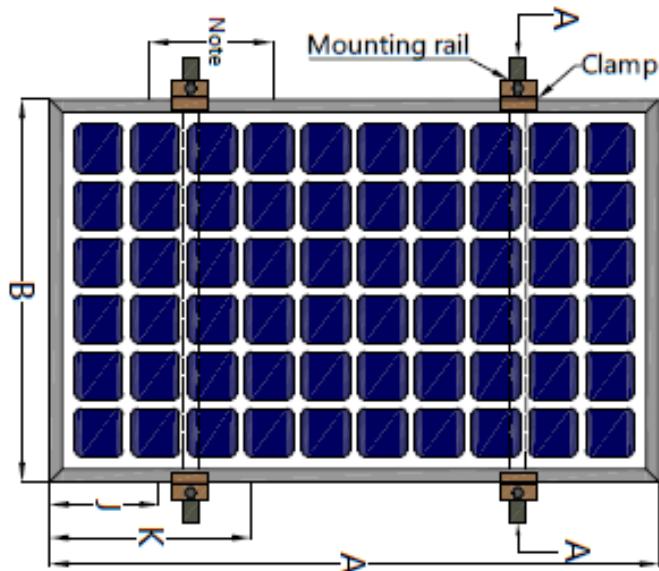


Figure 9: Installation methods of clamps on long sides

| Module type | | Max. Design Pressure: &1600Pa (negative) mechanical load | 3600Pa (positive) | |
|-------------|----------|--|--------------------|-----|
| | | | J | K |
| | | Height of the frame (mm) | | 40 |
| 72P | Group 19 | 2031*1008 | 300 | 480 |
| | Group 29 | 2031*1008 | 300 | 480 |
| | | Height of the frame (mm) | | 40 |
| 78P | Group 25 | 2130*1002 & 2139*1008 & 2110*998 | 300 | 480 |
| | Group 27 | 2130*1002 & 2139*1008 & 2110*998 | 300 | 480 |
| | Group 33 | 2194*1008 & 2190*1005 | 300 | 480 |
| | Group 35 | 2194*1008 & 2190*1005 | 300 | 480 |
| | Group 41 | 2194*1034 & 2205*1032 | 390 | 540 |
| | Group 43 | 2194*1034 & 2205*1032 | 390 | 540 |

Table 8: Mechanical dimensions when modules installed at long side with Clamp fitting method

The load described in this manual is the design load. When calculating the maximum test load, 1.5 times of safety factor should be considered.

3. Electrical

3.1 Electrical Safety

- If the PV modules are connected in series, the total voltage is equal to the sum of the individual module voltages.
- If PV modules are connected in parallel, the total current is equal to the sum of the individual module currents.
- Check for proper wiring before starting.
- Ensure that the connections are securely tightened, that the plugs are not subjected to external pressure, and that they are used only for connecting the wiring and not for switching the circuits on and off.
- All wiring work shall be performed by a qualified installer in accordance with local electrical construction codes, protocols, manuals and procedures.

3.2 Electrical Connection

- a) When installing and connecting modules, the foam tube must be removed first, Jinko will not guarantee the safety of products and the consistency of technical parameters if the connecting heads and tools used are not officially specified by Jinko or are not installed according to the official requirements
- b) PV modules connected in series shall have similar current, (please contact Jinko if there is any concern), and modules must not be connected together to create a voltage higher than the permitted system voltage. The maximum number of modules in series depends on system design and the rating of the inverter used.
- c) The maximum fuse rating value in an array string can be found on product label or product datasheet. The fuse rating value is also corresponding to the maximum reverse current that a module can withstand, for example, when one string is in shade then the other parallel strings of modules will be loaded by the shaded string and the current will pass through to create a current circuit. Based on the maximum series fuse rating of module and local electrical codes and standards, make sure the modules strings in parallel are protected with the appropriate in-line string fuse.
- d) Open the combiner box of the control system and connect the conductor from the PV arrays to the combiner box in accordance with the design and local codes and standards. The cross-sectional area and cable connector capacity must satisfy the maximum short-circuit of the PV system (for a single module, it is recommended that the cross-sectional area of cables be 4mm² and the rated current of connectors be more than 10A), otherwise cables and connectors will become overheating for large current. Please pay attention that the temperature limit of cables is 90°C.

- e) All module frames and mounting racks must be properly grounded in accordance with local and national electrical codes. Attach the equipment grounding conductor to the module frame using the hole and hardware provided. Note that a stainless-steel star washer is used between the grounding wire and module frame (see Figure 10.2 below). This washer is used to avoid corrosion due to dissimilar metals. Tighten the screw securely, and the tightening torque shall be big enough so that the grounding wire cannot be pulled off by hands. Follow the installer's guidance for the grounding installation.

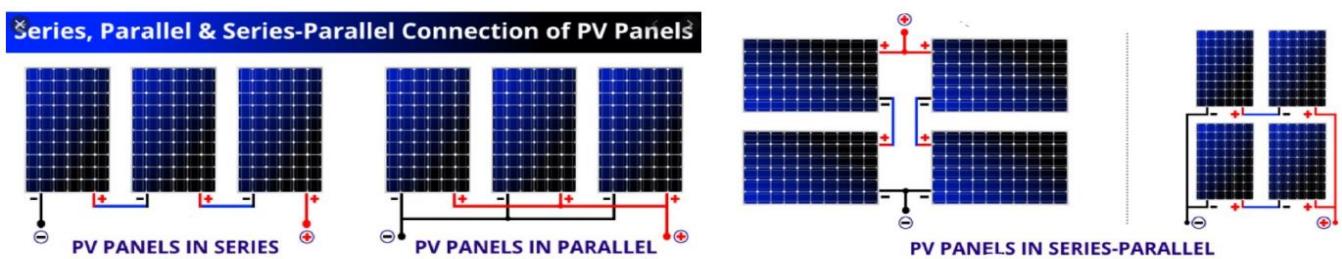


Figure 10.1: Connecting modules in series/parallel



Figure 10.2: Ground installation of PV modules

- f) Follow the requirements of applicable local and national electrical codes.
- g) Modules contain factory-installed bypass diodes. If modules are incorrectly connected to each other, the bypass diodes, cable or junction boxes may be damaged.

- h) The length of the junction box shall be determined according to the component specifications and the customer's design proposal. As shown in Figure 13 below, consider the length of the lead wire before designing the wiring.

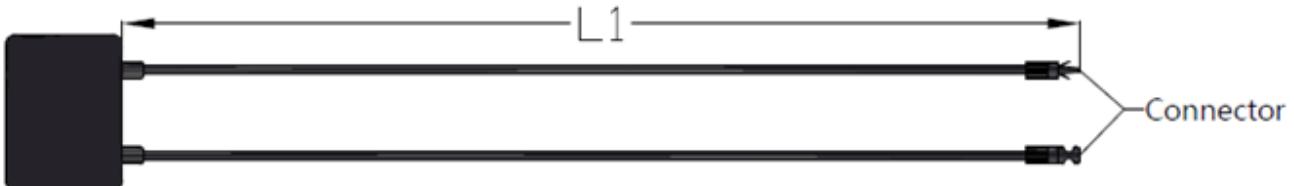


Figure 11 (1): The full-cell module junction box

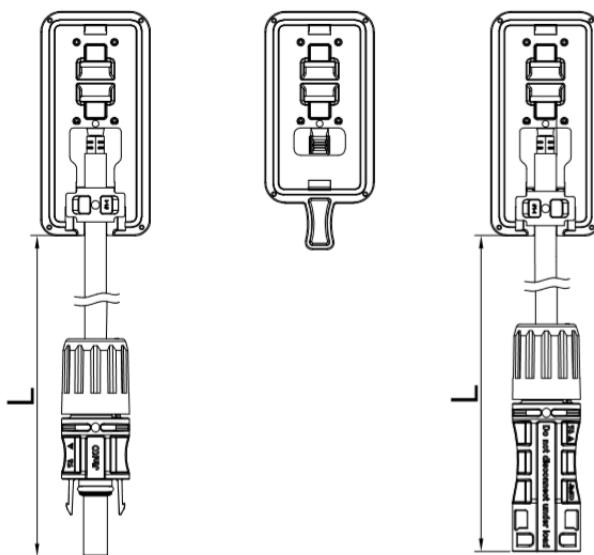


Figure 11 (2): The half-cut cell module/split junction box

- i) -If modules are connected in series, the total voltage is equal to the sum of individual voltages. The recommended system voltage is as below,

$$\text{System voltage} \geq N \cdot V_{oc} [1 + TCV_{oc}^* (T_{min} - 25)]$$

-If the modules are connected in parallel, the recommended number of modules in parallel is: maximum series fuse rating/ $I_{sc} + 1$

Where

N module numbers in series

V_{oc} Open circuit voltage (refer to product label or data sheet)

TCV_{oc} Temperature coefficient of open circuit voltage (refer to product label or data sheet)

T_{min} Minimum ambient temperature

- j) For floating projects, please contact local technical support.

- k) Connectors and bypass diodes from different manufacturers should not be mated together. If such replacement is needed, please contact Jinko Solar.

4. Maintenance and Care

It is required to perform regular inspection and maintenance of the modules, especially during the warranty period. To ensure optimum module performance, Jinko recommends the following maintenance measures:

4.1 Visual Inspection

Inspect the modules visually to find if there are any visual defects, If there are, the following items should be evaluated:

- a) If modules are observed having slight cell color differences at different angles, this is a normal phenomenon of modules with anti-reflection coating technology.
- b) Whether the glass is broken.
- c) No sharp objects are in contact with the PV module surfaces.
- d) PV modules are not shaded by unwanted obstacles and; or foreign material.
- e) Corrosion along the cells' bus-bar. The corrosion is caused by moisture intrusion thought the module back sheet. Check the back sheet for damage.
- f) Check whether the back sheet is burn out.
- g) Check if screws and mounting brackets are tight, adjust and tighten as necessary.

4.2 Cleaning

- a) A buildup of dust or dirt on the module front face will result in a decreased energy output. Clean the module preferably once per annum, more frequently in dusty conditions, using soft cloth dry or damp. Water with high mineral content may leave deposits on the glass surface and is not recommended. It is recommended to use neutral water of the PH value ranging from 6.5 to 8.5 to clean the glass, so as not to cause damage to the glass coating layer;
- b) Never use abrasive material under any circumstances;
- c) In order to reduce the potential for electrical and thermal shock, Jinko recommends to clean PV modules during early morning or late afternoon hours when solar irradiation is low and the modules are cooler, especially in regions with hot temperatures;
- d) Never attempt to clean PV module with broken glass or other signs of exposed wiring, as this presents a shock hazard;
- e) Never use chemicals when cleaning modules as this may affect the module warranty and energy yield. For the environment with extreme climate, please contact Jinko after-sales department for specific requirement if needed;
- f) For single-side module, backsheets cleaning is not necessary; for dual-glass module, cleaning the

module backside regularly when necessary, and follow the requirements in 4.2 a) – e). Please wear insulated gloves and pay special attention to the cables and electrical connections during the backside cleaning.

4.3 Inspection of Connector and Cable

It's recommended to implement the following preventive maintenance every 6 months:

- a) Check the sealing gels of the junction box for any damage.
- b) Examine the PV module(s) for signs of deterioration. Check all wiring for possible rodent damage, weathering and that all connections are tight and corrosion free. Check electrical leakage to ground.

5. Electrical Specification

The module electrical rating are measured under Standard Test Conditions, which are 1000W/m², irradiance with AM 1.5 spectrum and 25 deg (77°F) ambient temperature. The module might produce more or less voltage or current than rated value in uncertainty condition.

6. Disclaimer of Liability

Because the use of the manual and the conditions or methods of installation, operation, use and maintenance of photovoltaic (PV) product are beyond Jinko's control, Jinko does not accept responsibility and expressly disclaims liability for loss, damage, or expense arising out of or in any way connected with such installation, operation, use or maintenance.

No responsibility is assumed by Jinko for any infringement of patents or other rights of third parties, which may result from use of the PV product. NO license is granted by implication or otherwise under any patent or patent rights.

The information in this manual is based on Jinko's knowledge and experience and is believed to be reliable, but such information including product specification (without limitations) and suggestions do not constitute a warranty, expresses or implied. Jinko reserve the right to change the manual, the PV produce, the specifications, or product information sheets without prior notice.

Appendix 1 : Applicable Products

This document is applicable to the series of solar modules as listed below:

With 6" poly and mono c-Si:

Group 1

| | | | |
|---------------------------|--------------------------------|----------------------------|----------------|
| JKMxxxPP ^① -60 | JKMxxxPP-60(Plus) ^② | JKMS ^③ xxxPP-60 | JKMSxxxPP-60-J |
|---------------------------|--------------------------------|----------------------------|----------------|

| | | | |
|----------------------------|----------------------|----------------|------------------|
| JKMxxxPP-60-V ^④ | JKMxxxPP-60(Plus) -V | JKMSxxxPP-60-V | JKMSxxxPP-60-V-J |
| JKMxxxPP-60B | | | |

(xxx=260~290,in increment of 5)

Group 2

| | | | |
|---------------------------|----------------|---------------|--|
| JKMxxxPP-60H ^⑤ | JKMxxxPP-60H-V | JKMxxxPP-60HB | |
|---------------------------|----------------|---------------|--|

(xxx =260~315,in increment of 5)

Group 3

| | | | |
|---------------------|----------------------|--------------------|---------------------|
| JKMSxxxPP-60-V-MX3 | JKMSxxxPP-60B-V-MX3 | JKMSxxxPP-60-MX3 | JKMSxxxPP-60B -MX3 |
| JKMSxxxPP-60L-V-MX3 | JKMSxxxPP-60BL-V-MX3 | JKMSxxxPP-60L -MX3 | JKMSxxxPP-60BL -MX3 |

(xxx =260~290,in increment of 5)

Group 4

| | | | |
|----------------------|-----------------------|---------------------|----------------------|
| JKMSxxxPP-60H-V-MX3 | JKMSxxxPP-60HB-V-MX3 | JKMSxxxPP-60H-MX3 | JKMSxxxPP-60HB -MX3 |
| JKMSxxxPP-60HL-V-MX3 | JKMSxxxPP-60HBL-V-MX3 | JKMSxxxPP-60HL -MX3 | JKMSxxxPP-60HBL -MX3 |

(xxx =260~315,in increment of 5)

Group 5

| | | | |
|----------------|---------------------|-----------------|-------------------|
| JKMxxxM-60 | JKMxxxM-60(Plus) | JKMxxxM-60 | JKMxxxM-60-J |
| JKMxxxM-60-V | JKMxxxM-60(Plus)- V | JKMxxxM-60-V | JKMxxxM-60-V-J |
| JKMxxxM-60B | | | |
| JKMSxxxM-60-TI | JKMSxxxM-60-V-TI | JKMSxxxM-60B-TI | JKMSxxxM-60B-V-TI |

(xxx =270~340,in increment of 5)

| | | | |
|-----------------|-------------------|------------------|--------------------|
| JKMxxxM-60L | JKMxxxM-60L-V | JKMxxxM-60BL | |
| JKMSxxxM-60L-TI | JKMSxxxM-60L-V-TI | JKMSxxxM-60BL-TI | JKMSxxxM-60BL-V-TI |

(xxx =270~340,in increment of 5)

Group 6

| | | | |
|-----------------|-------------------|------------------|--------------------|
| JKMxxxM-60H | JKMxxxM-60H-V | JKMxxxM-60HB | |
| JKMSxxxM-60H-TI | JKMSxxxM-60H-V-TI | JKMSxxxM-60HB-TI | JKMSxxxM-60HB-V-TI |

(xxx =270~350,in increment of 5)

| | | | |
|------------------|--------------------|-------------------|---------------------|
| JKMxxxM-60HL | JKMxxxM-60HL-V | JKMxxxM-60HBL | |
| JKMSxxxM-60HL-TI | JKMSxxxM-60HL-V-TI | JKMSxxxM-60HBL-TI | JKMSxxxM-60HBL-V-TI |

(xxx =270~350,in increment of 5)

Group 7

| | | | |
|--------------------|---------------------|-------------------|--------------------|
| JKMSxxxM-60-V-MX3 | JKMSxxxM-60B-V-MX3 | JKMSxxxM-60-MX3 | JKMSxxxM-60B -MX3 |
| JKMSxxxM-60L-V-MX3 | JKMSxxxM-60BL-V-MX3 | JKMSxxxM-60L- MX3 | JKMSxxxM-60BL -MX3 |

(xxx =270~340,in increment of 5)

Group 8

| | | | |
|---------------------|----------------------|-------------------|--------------------|
| JKMSxxxM-60H-V-MX3 | JKMSxxxM-60HB-V-MX3 | JKMSxxxM-60H-MX3 | JKMSxxxM-60HB-MX3 |
| JKMSxxxM-60HL-V-MX3 | JKMSxxxM-60HBL-V-MX3 | JKMSxxxM-60HL-MX3 | JKMSxxxM-60HBL-MX3 |

(xxx =270~340,in increment of 5)

Group 9

| | | | |
|----------------|-----------------|---------------|----------------|
| JKMxxxM-60H-TV | JKMxxxM-60HL-TV | JKMxxxM-60H-T | JKMxxxM-60HL-T |
|----------------|-----------------|---------------|----------------|

(xxx =315~355,in increment of 5)

| | | | |
|----------------|-----------------|---------------|----------------|
| JKMxxxN-60H-TV | JKMxxxN-60HL-TV | JKMxxxN-60H-T | JKMxxxN-60HL-T |
|----------------|-----------------|---------------|----------------|

(xxx =315~355,in increment of 5)

Group 10

| | | | |
|---------------|---------------------|----------------|------------------|
| JKMxxxPP-72 | JKMxxxPP-72(Plus) | JKMSxxxPP-72 | JKMSxxxPP-72-J |
| JKMxxxPP-72-V | JKMxxxPP-72(Plus)-V | JKMSxxxPP-72-V | JKMSxxxPP-72-V-J |
| JKMxxxPP-72B | | | |

(xxx =320~355,in increment of 5)

Group 11

| | | | |
|--------------|----------------|---------------|--|
| JKMxxxPP-72H | JKMxxxPP-72H-V | JKMxxxPP-72HB | |
|--------------|----------------|---------------|--|

(xxx =330~380,in increment of 5)

Group 12

| | | | |
|---------------------|----------------------|-------------------|--------------------|
| JKMSxxxPP-72-V-MX3 | JKMSxxxPP-72B-V-MX3 | JKMSxxxPP-72-MX3 | JKMSxxxPP-72B-MX3 |
| JKMSxxxPP-72L-V-MX3 | JKMSxxxPP-72BL-V-MX3 | JKMSxxxPP-72L-MX3 | JKMSxxxPP-72BL-MX3 |

(xxx =320~355,in increment of 5)

Group 13

| | | | |
|----------------------|-----------------------|--------------------|---------------------|
| JKMSxxxPP-72H-V-MX3 | JKMSxxxPP-72HB-V-MX3 | JKMSxxxPP-72H-MX3 | JKMSxxxPP-72HB-MX3 |
| JKMSxxxPP-72HL-V-MX3 | JKMSxxxPP-72HBL-V-MX3 | JKMSxxxPP-72HL-MX3 | JKMSxxxPP-72HBL-MX3 |

(xxx =330~380,in increment of 5)

Group 14

| | | | |
|----------------|--------------------|-----------------|-------------------|
| JKMxxxM-72 | JKMxxxM-72(Plus) | JKMSxxxM-72 | JKMSxxxM-72-J |
| JKMxxxM-72-V | JKMxxxM-72(Plus)-V | JKMSxxxM-72-V | JKMSxxxM-72-V-J |
| JKMxxxM-72B | | | |
| JKMSxxxM-72-TI | JKMSxxxM-72-V-TI | JKMSxxxM-72B-TI | JKMSxxxM-72B-V-TI |

(xxx =335~410, in increment of 5)

| | | | |
|-----------------|-------------------|------------------|--------------------|
| JKMxxxM-72L | JKMxxxM-72L-V | JKMxxxM-72BL | |
| JKMSxxxM-72L-TI | JKMSxxxM-72L-V-TI | JKMSxxxM-72BL-TI | JKMSxxxM-72BL-V-TI |

(xxx =335~410, in increment of 5)

Group 15

| | | | |
|-----------------|-------------------|------------------|--------------------|
| JKMxxxM-72H | JKMxxxM-72H-V | JKMxxxM-72HB | |
| JKMSxxxM-72H-TI | JKMSxxxM-72H-V-TI | JKMSxxxM-72HB-TI | JKMSxxxM-72HB-V-TI |

(xxx =335~425,in increment of 5)

| | | | |
|--------------|----------------|---------------|--|
| JKMxxxM-72HL | JKMxxxM-72HL-V | JKMxxxM-72HBL | |
|--------------|----------------|---------------|--|

(xxx =335~425,in increment of 5)

Group 16

| | | | |
|--------------------|---------------------|------------------|-------------------|
| JKMSxxxM-72-V-MX3 | JKMSxxxM-72B-V-MX3 | JKMSxxxM-72-MX3 | JKMSxxxM-72B-MX |
| JKMSxxxM-72L-V-MX3 | JKMSxxxM-72BL-V-MX3 | JKMSxxxM-72L-MX3 | JKMSxxxM-72BL-MX3 |

(xxx =335~395,in increment of 5)

Group 17

| | | | |
|---------------------|----------------------|-------------------|--------------------|
| JKMSxxxM-72H-V-MX3 | JKMSxxxM-72HB-V-MX3 | JKMSxxxM-72H-MX3 | JKMSxxxM-72HB-MX3 |
| JKMSxxxM-72HL-V-MX3 | JKMSxxxM-72HBL-V-MX3 | JKMSxxxM-72HL-MX3 | JKMSxxxM-72HBL-MX3 |

(xxx =335~395,in increment of 5)

Group 18

| | | | |
|----------------|-----------------|---------------|----------------|
| JKMxxxM-72H-TV | JKMxxxM-72HL-TV | JKMxxxM-72H-T | JKMxxxM-72HL-T |
|----------------|-----------------|---------------|----------------|

(xxx =375~425,in increment of 5)

| | | | |
|----------------|-----------------|---------------|----------------|
| JKMxxxN-72H-TV | JKMxxxN-72HL-TV | JKMxxxN-72H-T | JKMxxxN-72HL-T |
|----------------|-----------------|---------------|----------------|

(xxx =375~425,in increment of 5)

Group 19

| | | | |
|--------------------|-------------------|--|--|
| JKMxxxN-72H-MBB-TV | JKMxxxN-72H-MBB-T | | |
|--------------------|-------------------|--|--|

(xxx =390~420,in increment of 5)

Group 20

| | | | |
|--------------------|-------------------|--|--|
| JKMxxxN-60H-MBB-TV | JKMxxxN-60H-MBB-T | | |
|--------------------|-------------------|--|--|

(xxx =330~350,in increment of 5)

Group 21

| | | | |
|-----------------|-------------------|---------------------|-----------------------|
| JKMxxxM-72H-MBB | JKMxxxM-72H-MBB-V | JKMSxxxM-72H-MBB-TI | JKMSxxxM-72H-MBB-V-TI |
|-----------------|-------------------|---------------------|-----------------------|

(xxx =385~415,in increment of 5)

Group 22

| | | | |
|-----------------|-------------------|---------------------|-----------------------|
| JKMxxxM-60H-MBB | JKMxxxM-60H-MBB-V | JKMSxxxM-60H-MBB-TI | JKMSxxxM-60H-MBB-V-TI |
|-----------------|-------------------|---------------------|-----------------------|

(xxx =320~345,in increment of 5)

Group 23

| | | | |
|----------------|----------------|--|--|
| JKSM3-DACA-xxx | JKSM3-DFCA-xxx | | |
|----------------|----------------|--|--|

(xxx =400~440,in increment of 5)

Group 24

| | | | |
|----------------|----------------|--|--|
| JKSM3-CACA-xxx | JKSM3-CFCA-xxx | | |
|----------------|----------------|--|--|

(xxx =335~370,in increment of 5)

Group 25

| | | | |
|----------------|----------------|--|--|
| JKSM3-DCCA-xxx | JKSM3-DHCA-xxx | | |
|----------------|----------------|--|--|

(xxx =400~450,in increment of 5)

Group 26

| | | | |
|----------------|----------------|--|--|
| JKSM3-CCCA-xxx | JKSM3-CHCA-xxx | | |
|----------------|----------------|--|--|

(xxx =340~380,in increment of 5)

Group 27

| | | | |
|----------------|----------------|--|--|
| JKSN3-DCCA-xxx | JKSN3-DHCA-xxx | | |
|----------------|----------------|--|--|

(xxx =410~440,in increment of 5)

Group 28

| | | | |
|----------------|----------------|--|--|
| JKSN3-CCCA-xxx | JKSN3-CHCA-xxx | | |
|----------------|----------------|--|--|

(xxx =345~370,in increment of 5)

Group 29

| | | | |
|--------------------|-------------------|--|--|
| JKMxxxM-72H-MBB-TV | JKMxxxM-72H-MBB-T | | |
|--------------------|-------------------|--|--|

(xxx =385~405,in increment of 5)

Group 30

| | | | |
|--------------------|-------------------|--|--|
| JKMxxxM-60H-MBB-TV | JKMxxxM-60H-MBB-T | | |
|--------------------|-------------------|--|--|

(xxx =320~335,in increment of 5)

Group 31

| | | | |
|---------------|-------------|-------------------|-----------------|
| JKMxxxM-78H-V | JKMxxxM-78H | JKMSxxxM-78H-V-TI | JKMSxxxM-78H-TI |
|---------------|-------------|-------------------|-----------------|

(xxx =405-465,in increment of 5)

Group 32

| | | | |
|---------------|-------------|-------------------|-----------------|
| JKMxxxM-66H-V | JKMxxxM-66H | JKMSxxxM-66H-V-TI | JKMSxxxM-66H-TI |
|---------------|-------------|-------------------|-----------------|

(xxx =340-390,in increment of 5)

Group 33

| | | | |
|----------------|---------------|--|--|
| JKMxxxM-78H-TV | JKMxxxM-78H-T | | |
|----------------|---------------|--|--|

(xxx =405-455,in increment of 5)

Group 34

| | | | |
|----------------|---------------|--|--|
| JKMxxxM-66H-TV | JKMxxxM-66H-T | | |
|----------------|---------------|--|--|

(xxx =340-385,in increment of 5)

Group 35

| | | | |
|----------------|---------------|--|--|
| JKMxxxN-78H-TV | JKMxxxN-78H-T | | |
|----------------|---------------|--|--|

(xxx =410-460,in increment of 5)

Group 36

| | | | |
|----------------|---------------|--|--|
| JKMxxxN-66H-TV | JKMxxxN-66H-T | | |
|----------------|---------------|--|--|

(xxx =345-385,in increment of 5)

Group 37

| | | | |
|----------------|--------------|--------------------|------------------|
| JKMxxxM-78HB-V | JKMxxxM-78HB | JKMSxxxM-78HB-V-TI | JKMSxxxM-78HB-TI |
|----------------|--------------|--------------------|------------------|

(xxx =405-435,in increment of 5)

Group 38

| | | | |
|----------------|--------------|--------------------|------------------|
| JKMxxxM-66HB-V | JKMxxxM-66HB | JKMSxxxM-66HB-V-TI | JKMSxxxM-66HB-TI |
|----------------|--------------|--------------------|------------------|

(xxx =340-365,in increment of 5)

Group 39

| | | | |
|--------------------|------------------|------------------|----------------|
| JKMxxxM-7RL3-V | JKMxxxM-7RL3 | JKMxxxM-7RL3-V-J | JKMxxxM-7RL3-J |
| JKMSxxxM-7RL3-V-TI | JKMSxxxM-7RL3-TI | | |

(xxx = 430~495,in increment of 5)

Group 40

| | | | |
|--------------------|------------------|------------------|----------------|
| JKMxxxM-6RL3-V | JKMxxxM-6RL3 | JKMxxxM-6RL3-V-J | JKMxxxM-6RL3-J |
| JKMSxxxM-6RL3-V-TI | JKMSxxxM-6RL3-TI | | |

(xxx = 360~415,in increment of 5)

Group 41

| | | | |
|-----------------|----------------|-------------------|------------------|
| JKMxxxM-7RL3-TV | JKMxxxM-7RL3-T | JKMxxxM-7RL3-TV-J | JKMxxxM-7RL3-T-J |
|-----------------|----------------|-------------------|------------------|

(xxx = 420~475,in increment of 5)

Group 42

| | | | |
|-----------------|----------------|-------------------|------------------|
| JKMxxxM-6RL3-TV | JKMxxxM-6RL3-T | JKMxxxM-6RL3-TV-J | JKMxxxM-6RL3-T-J |
|-----------------|----------------|-------------------|------------------|

(xxx = 355~400,in increment of 5)

Group 43

| | | | |
|-----------------|----------------|-------------------|------------------|
| JKMxxxN-7RL3-TV | JKMxxxN-7RL3-T | JKMxxxN-7RL3-TV-J | JKMxxxN-7RL3-T-J |
|-----------------|----------------|-------------------|------------------|

(xxx = 425~475,in increment of 5)

Group 44

| | | | |
|-----------------|----------------|-------------------|------------------|
| JKMxxxN-6RL3-TV | JKMxxxN-6RL3-T | JKMxxxN-6RL3-TV-J | JKMxxxN-6RL3-T-J |
|-----------------|----------------|-------------------|------------------|

(xxx = 355~400,in increment of 5)

Group 45

| | | | |
|-----------------|-------------------|---------------------|-----------------------|
| JKMxxxN-72H-MBB | JKMxxxN-72H-MBB-V | JKMSxxxN-72H-MBB-TI | JKMSxxxN-72H-MBB-V-TI |
|-----------------|-------------------|---------------------|-----------------------|

(xxx = 385~425,in increment of 5)

Group 46

| | | | |
|-----------------|-------------------|---------------------|-----------------------|
| JKMxxxN-60H-MBB | JKMxxxN-60H-MBB-V | JKMSxxxN-60H-MBB-TI | JKMSxxxN-60H-MBB-V-TI |
|-----------------|-------------------|---------------------|-----------------------|

(xxx = 320~350,in increment of 5)

Group 47

| | | | |
|----------------|--------------|------------------|----------------|
| JKMxxxN-7RL3-V | JKMxxxN-7RL3 | JKMxxxN-7RL3-V-J | JKMxxxN-7RL3-J |
|----------------|--------------|------------------|----------------|

| | |
|--------------------|------------------|
| JKMSxxxN-7RL3-V-TI | JKMSxxxN-7RL3-TI |
|--------------------|------------------|

(xxx = 430~490,in increment of 5)

Group 48

| | | | |
|----------------|--------------|------------------|----------------|
| JKMxxxN-6RL3-V | JKMxxxN-6RL3 | JKMxxxN-6RL3-V-J | JKMxxxN-6RL3-J |
|----------------|--------------|------------------|----------------|

| | |
|--------------------|------------------|
| JKMSxxxN-6RL3-V-TI | JKMSxxxN-6RL3-TI |
|--------------------|------------------|

(xxx = 360~420,in increment of 5)

Group 49

| | | | |
|----------------|------------------|--------------------|----------------------|
| JKMxxxM-7RL3-B | JKMxxxM-7RL3-B-V | JKMSxxxM-7RL3-B-TI | JKMSxxxM-7RL3-B-V-TI |
|----------------|------------------|--------------------|----------------------|

(xxx = 425~480,in increment of 5)

Group 50

| | | | |
|----------------|------------------|--------------------|----------------------|
| JKMxxxM-6RL3-B | JKMxxxM-6RL3-B-V | JKMSxxxM-6RL3-B-TI | JKMSxxxM-6RL3-B-V-TI |
|----------------|------------------|--------------------|----------------------|

(xxx = 360~405,in increment of 5)

Group 51

| | | | |
|----------------|------------------|--------------------|----------------------|
| JKMxxxN-7RL3-B | JKMxxxN-7RL3-B-V | JKMSxxxN-7RL3-B-TI | JKMSxxxN-7RL3-B-V-TI |
|----------------|------------------|--------------------|----------------------|

(xxx = 425~480,in increment of 5)

Group 52

| | | | |
|----------------|------------------|--------------------|----------------------|
| JKMxxxN-6RL3-B | JKMxxxN-6RL3-B-V | JKMSxxxN-6RL3-B-TI | JKMSxxxN-6RL3-B-V-TI |
|----------------|------------------|--------------------|----------------------|

(xxx = 360~405,in increment of 5)

Group 53

| | | | |
|-----------------|-------------------|---------------------|-----------------------|
| JKMxxxM-78H-MBB | JKMxxxM-78H-MBB-V | JKMSxxxM-78H-MBB-TI | JKMSxxxM-78H-MBB-V-TI |
|-----------------|-------------------|---------------------|-----------------------|

| |
|------------------------|
| JKMSxxxM-78H-MBB-V-MX3 |
|------------------------|

(xxx = 440~465,in increment of 5)

Group 54

| | | | |
|-----------------|-------------------|---------------------|-----------------------|
| JKMxxxM-66H-MBB | JKMxxxM-66H-MBB-V | JKMSxxxM-66H-MBB-TI | JKMSxxxM-66H-MBB-V-TI |
|-----------------|-------------------|---------------------|-----------------------|

| |
|------------------------|
| JKMSxxxM-66H-MBB-V-MX3 |
|------------------------|

(xxx = 370~390,in increment of 5)

Group 55

| | | | |
|-------------------|---------------------|----------------------|------------------------|
| JKMxxxN-72H-MBB-B | JKMxxxN-72H-MBB-B-V | JKMxxxN-72H-MBB-B-TI | JKMxxxN-72H-MBB-B-V-TI |
|-------------------|---------------------|----------------------|------------------------|

(xxx = 380-400,in increment of 5)

Group 56

| | | | |
|-------------------|---------------------|----------------------|------------------------|
| JKMxxxN-60H-MBB-B | JKMxxxN-60H-MBB-B-V | JKMxxxN-60H-MBB-B-TI | JKMxxxN-60H-MBB-B-V-TI |
|-------------------|---------------------|----------------------|------------------------|

(xxx = 315-330,in increment of 5)

Group 57

| | | | |
|----------------|--------------|--------------------|------------------|
| JKMxxxM-6TL3-V | JKMxxxM-6TL3 | JKMSxxxM-6TL3-V-TI | JKMSxxxM-6TL3-TI |
|----------------|--------------|--------------------|------------------|

(xxx = 335-380,in increment of 5)

Group 58

| | | | |
|----------------|--------------|--------------------|------------------|
| JKMxxxN-6TL3-V | JKMxxxN-6TL3 | JKMSxxxN-6TL3-V-TI | JKMSxxxN-6TL3-TI |
|----------------|--------------|--------------------|------------------|

(xxx = 335-375,in increment of 5)

Group 59

| | | | |
|-----------------|--|--|--|
| JKMxxxM-6TL3-TV | | | |
|-----------------|--|--|--|

(xxx = 325-365,in increment of 5)

Group 60

| | | | |
|-----------------|--|--|--|
| JKMxxxN-6TL3-TV | | | |
|-----------------|--|--|--|

(xxx = 325-365,in increment of 5)

Group 61

| | | | |
|----------------|--------------------|------------------|----------------------|
| JKMxxxM-6TL3-B | JKMSxxxM-6TL3-B-TI | JKMxxxM-6TL3-B-V | JKMSxxxM-6TL3-B-V-TI |
|----------------|--------------------|------------------|----------------------|

(xxx = 320-365,in increment of 5)

Group 62

| | | | |
|----------------|--------------------|------------------|----------------------|
| JKMxxxN-6TL3-B | JKMSxxxN-6TL3-B-TI | JKMxxxN-6TL3-B-V | JKMSxxxN-6TL3-B-V-TI |
|----------------|--------------------|------------------|----------------------|

(xxx = 320-365,in increment of 5)

Group 63

| | | | |
|-----------------|---------------|----------------------|--|
| JKMxxxM-72HLM-V | JKMxxxM-72HLM | JKMSxxxM-72HLM-V-MX3 | |
|-----------------|---------------|----------------------|--|

(xxx = 420-465,in increment of 5)

| | | | |
|-------------------|------------------------|--|--|
| JKMxxxM-72HLM-B-V | JKMSxxxM-72HLM-B-V-MX3 | | |
|-------------------|------------------------|--|--|

(xxx = 415-445,in increment of 5)

| | | | |
|------------------|--|--|--|
| JKMxxxM-72HLM-TV | | | |
|------------------|--|--|--|

(xxx = 425-460,in increment of 5)

Group 64

| | | | |
|-----------------|---------------|----------------------|--|
| JKMxxxM-60HLM-V | JKMxxxM-60HLM | JKMSxxxM-60HLM-V-MX3 | |
|-----------------|---------------|----------------------|--|

(xxx = 350-385,in increment of 5)

| | | | |
|-------------------|------------------------|--|--|
| JKMxxxM-60HLM-B-V | JKMSxxxM-60HLM-B-V-MX3 | | |
|-------------------|------------------------|--|--|

(xxx =350-370,in increment of 5)

| | | | |
|------------------|--|--|--|
| JKMxxxM-60HLM-TV | | | |
|------------------|--|--|--|

(xxx = 355-380,in increment of 5)

Group 65

| | | | |
|-----------------|---------------|--|--|
| JKMxxxM-54HL4-V | JKMxxxM-54HL4 | | |
|-----------------|---------------|--|--|

(xxx = 360-430,in increment of 5)

| | | | |
|-------------------|-----------------|--|--|
| JKMxxxM-54HL4-B-V | JKMxxxM-54HL4-B | | |
|-------------------|-----------------|--|--|

(xxx = 380-400,in increment of 5)

| | | | |
|------------------|--|--|--|
| JKMxxxM-54HL4-TV | | | |
|------------------|--|--|--|

(xxx = 360-410,in increment of 5)

Group 66

| | | | |
|----------------|--------------|--|--|
| JKMxxxM-5RL4-V | JKMxxxM-5RL4 | | |
|----------------|--------------|--|--|

(xxx = 375-405,in increment of 5)

| | | | |
|------------------|----------------|--|--|
| JKMxxxM-5RL4-B-V | JKMxxxM-5RL4-B | | |
|------------------|----------------|--|--|

(xxx = 375-395,in increment of 5)

| | | | |
|-----------------|--|--|--|
| JKMxxxM-5RL4-TV | | | |
|-----------------|--|--|--|

(xxx = 365-405,in increment of 5)

Group 67

| | | | |
|-----------------|---------------|--|--|
| JKMxxxM-60HL4-V | JKMxxxM-60HL4 | | |
|-----------------|---------------|--|--|

(xxx = 400-485,in increment of 5)

| | | | |
|-------------------|-----------------|--|--|
| JKMxxxM-60HL4-B-V | JKMxxxM-60HL4-B | | |
|-------------------|-----------------|--|--|

(xxx = 425-445,in increment of 5)

| | | | |
|------------------|--|--|--|
| JKMxxxM-60HL4-TV | | | |
|------------------|--|--|--|

(xxx = 400-455,in increment of 5)

Group 68

| | | | |
|----------------|--------------|--|--|
| JKMxxxM-6TL4-V | JKMxxxM-6TL4 | | |
|----------------|--------------|--|--|

(xxx = 415-450,in increment of 5)

| | | | |
|------------------|----------------|--|--|
| JKMxxxM-6TL4-B-V | JKMxxxM-6TL4-B | | |
|------------------|----------------|--|--|

(xxx = 415-440,in increment of 5)

| | | | |
|-----------------|--|--|--|
| JKMxxxM-6TL4-TV | | | |
|-----------------|--|--|--|

(xxx = 405-450,in increment of 5)

Group 69

| | | | |
|-----------------|---------------|--|--|
| JKMxxxM-66HL4-V | JKMxxxM-66HL4 | | |
|-----------------|---------------|--|--|

(xxx = 440-505,in increment of 5)

| | | | |
|-------------------|-----------------|--|--|
| JKMxxxM-66HL4-B-V | JKMxxxM-66HL4-B | | |
|-------------------|-----------------|--|--|

(xxx = 465-490,in increment of 5)

| | | | |
|------------------|--|--|--|
| JKMxxxM-66HL4-TV | | | |
|------------------|--|--|--|

(xxx = 440-500,in increment of 5)

Group 70

| | | | |
|----------------|--------------|--|--|
| JKMxxxM-6RL4-V | JKMxxxM-6RL4 | | |
|----------------|--------------|--|--|

(xxx = 455-495,in increment of 5)

| | | | |
|------------------|----------------|--|--|
| JKMxxxM-6RL4-B-V | JKMxxxM-6RL4-B | | |
|------------------|----------------|--|--|

(xxx = 455-485,in increment of 5)

| | | | |
|-----------------|--|--|--|
| JKMxxxM-6RL4-TV | | | |
|-----------------|--|--|--|

(xxx = 445-495,in increment of 5)

Group 71

| | | | |
|-----------------|---------------|-------------------|-----------------|
| JKMxxxM-72HL4-V | JKMxxxM-72HL4 | JKMxxxM-72HL4-V-J | JKMxxxM-72HL4-J |
|-----------------|---------------|-------------------|-----------------|

(xxx = 475-585,in increment of 5)

| | | | |
|-------------------|-----------------|--|--|
| JKMxxxM-72HL4-B-V | JKMxxxM-72HL4-B | | |
|-------------------|-----------------|--|--|

(xxx = 510-535,in increment of 5)

| | | | |
|------------------|--------------------|--|--|
| JKMxxxM-72HL4-TV | JKMxxxM-72HL4-TV-J | | |
|------------------|--------------------|--|--|

(xxx = 475-580,in increment of 5)

Group 72

| | | | |
|----------------|--------------|------------------|----------------|
| JKMxxxM-7TL4-V | JKMxxxM-7TL4 | JKMxxxM-7TL4-V-J | JKMxxxM-7TL4-J |
|----------------|--------------|------------------|----------------|

(xxx = 495-570,in increment of 5)

| | | | |
|------------------|----------------|--|--|
| JKMxxxM-7TL4-B-V | JKMxxxM-7TL4-B | | |
|------------------|----------------|--|--|

(xxx = 495-530,in increment of 5)

| | | | |
|-----------------|-------------------|--|--|
| JKMxxxM-7TL4-TV | JKMxxxM-7TL4-TV-J | | |
|-----------------|-------------------|--|--|

(xxx = 485-570,in increment of 5)

Group 73

| | | | |
|----------------|--------------|------------------|----------------|
| JKMxxxM-7RL4-V | JKMxxxM-7RL4 | JKMxxxM-7RL4-V-J | JKMxxxM-7RL4-J |
|----------------|--------------|------------------|----------------|

(xxx = 535-590,in increment of 5)

| | | | |
|------------------|-----------------|--|--|
| JKMxxxM-7RL4-B-V | JKMxxxM-7 RL4-B | | |
|------------------|-----------------|--|--|

(xxx = 540-575,in increment of 5)

| | | | |
|-----------------|-------------------|--|--|
| JKMxxxM-7RL4-TV | JKMxxxM-7RL4-TV-J | | |
|-----------------|-------------------|--|--|

(xxx = 525-590,in increment of 5)

Group 74

| | | | |
|-----------------|---------------|------------------|----------------|
| JKMxxxN-54HL4-V | JKMxxxN-54HL4 | JKMxxxN-54HL4R-V | JKMxxxN-54HL4R |
|-----------------|---------------|------------------|----------------|

(xxx = 365-455,in increment of 5)

| | | | |
|------------------|-----------------|--|--|
| JKMxxxN-54HL4R-B | JKMxxxN-54HL4-B | | |
|------------------|-----------------|--|--|

(xxx = 380-450,in increment of 5)

| | | | |
|-------------------|--|--|--|
| JKMxxxN-54HL4-B-V | | | |
|-------------------|--|--|--|

(xxx = 380-400,in increment of 5)

| | | | |
|------------------|--|--|--|
| JKMxxxN-54HL4-TV | | | |
|------------------|--|--|--|

(xxx = 360-430,in increment of 5)

Group 75

| | | | |
|----------------|--------------|--|--|
| JKMxxxN-5RL4-V | JKMxxxN-5RL4 | | |
|----------------|--------------|--|--|

(xxx = 375-405,in increment of 5)

| | | | |
|------------------|----------------|--|--|
| JKMxxxN-5RL4-B-V | JKMxxxN-5RL4-B | | |
|------------------|----------------|--|--|

(xxx = 375-395,in increment of 5)

| | | | |
|-----------------|--|--|--|
| JKMxxxN-5RL4-TV | | | |
|-----------------|--|--|--|

(xxx = 365-405,in increment of 5)

Group 76

| | | | |
|-----------------|---------------|------------------|----------------|
| JKMxxxN-60HL4-V | JKMxxxN-60HL4 | JKMxxxN-60HL4R-V | JKMxxxN-60HL4R |
|-----------------|---------------|------------------|----------------|

(xxx = 405-510, in increment of 5)

| | | | |
|-------------------|-----------------|--|--|
| JKMxxxN-60HL4-B-V | JKMxxxN-60HL4-B | | |
|-------------------|-----------------|--|--|

(xxx = 425-470, in increment of 5)

| | | | |
|------------------|--|--|--|
| JKMxxxN-60HL4-TV | | | |
|------------------|--|--|--|

(xxx = 400-480,in increment of 5)

Group 77

| | | | |
|----------------|--------------|--|--|
| JKMxxxN-6TL4-V | JKMxxxN-6TL4 | | |
|----------------|--------------|--|--|

(xxx = 415-450,in increment of 5)

| | | | |
|------------------|----------------|--|--|
| JKMxxxN-6TL4-B-V | JKMxxxN-6TL4-B | | |
|------------------|----------------|--|--|

(xxx = 415-440,in increment of 5)

| | | | |
|-----------------|--|--|--|
| JKMxxxN-6TL4-TV | | | |
|-----------------|--|--|--|

(xxx = 405-450,in increment of 5)

Group 78

| | | | |
|-----------------|---------------|--|--|
| JKMxxxN-66HL4-V | JKMxxxN-66HL4 | | |
|-----------------|---------------|--|--|

(xxx = 440-505,in increment of 5)

| | | | |
|-------------------|-----------------|--|--|
| JKMxxxN-66HL4-B-V | JKMxxxN-66HL4-B | | |
|-------------------|-----------------|--|--|

(xxx = 465-490,in increment of 5)

| | | | |
|------------------|--|--|--|
| JKMxxxN-66HL4-TV | | | |
|------------------|--|--|--|

(xxx = 440-495,in increment of 5)

Group 79

| | | | |
|----------------|--------------|--|--|
| JKMxxxN-6RL4-V | JKMxxxN-6RL4 | | |
|----------------|--------------|--|--|

(xxx = 455-495,in increment of 5)

| | | | |
|------------------|----------------|--|--|
| JKMxxxN-6RL4-B-V | JKMxxxN-6RL4-B | | |
|------------------|----------------|--|--|

(xxx = 455-485,in increment of 5)

| | | | |
|-----------------|--|--|--|
| JKMxxxN-6RL4-TV | | | |
|-----------------|--|--|--|

(xxx = 440-495,in increment of 5)

Group 80

| | | | |
|---------------------|---------------|-------------------|-----------------|
| JKMxxxN-72 HL4-V | JKMxxxN-72HL4 | JKMxxxN-72HL4-V-J | JKMxxxN-72HL4-J |
|---------------------|---------------|-------------------|-----------------|

| | | | |
|------------------|----------------|--|--|
| JKMxxxN-72HL4R-V | JKMxxxN-72HL4R | | |
|------------------|----------------|--|--|

(xxx = 485-615,in increment of 5)

| | | | |
|-------------------|-----------------|--|--|
| JKMxxxN-72HL4-B-V | JKMxxxN-72HL4-B | | |
|-------------------|-----------------|--|--|

(xxx = 510-535,in increment of 5)

| | | | |
|------------------|--------------------|--|--|
| JKMxxxN-72HL4-TV | JKMxxxN-72HL4-TV-J | | |
|------------------|--------------------|--|--|

(xxx = 480-605,in increment of 5)

Group 81

| | | | |
|----------------|--------------|------------------|----------------|
| JKMxxxN-7TL4-V | JKMxxxN-7TL4 | JKMxxxN-7TL4-V-J | JKMxxxN-7TL4-J |
|----------------|--------------|------------------|----------------|

(xxx = 495-570,in increment of 5)

| | | | |
|------------------|----------------|--|--|
| JKMxxxN-7TL4-B-V | JKMxxxN-7TL4-B | | |
|------------------|----------------|--|--|

(xxx = 495-530,in increment of 5)

| | | | |
|-----------------|-------------------|--|--|
| JKMxxxN-7TL4-TV | JKMxxxN-7TL4-TV-J | | |
|-----------------|-------------------|--|--|

(xxx = 480-570,in increment of 5)

Group 82

| | | | |
|----------------|--------------|------------------|----------------|
| JKMxxxN-7RL4-V | JKMxxxN-7RL4 | JKMxxxN-7RL4-V-J | JKMxxxN-7RL4-J |
|----------------|--------------|------------------|----------------|

(xxx = 535-590,in increment of 5)

| | | | |
|------------------|----------------|--|--|
| JKMxxxN-7RL4-B-V | JKMxxxN-7RL4-B | | |
|------------------|----------------|--|--|

(xxx = 540-575,in increment of 5)

| | | | |
|-----------------|-------------------|--|--|
| JKMxxxN-7RL4-TV | JKMxxxN-7RL4-TV-J | | |
|-----------------|-------------------|--|--|

(xxx = 520-585,in increment of 5)

Group 83

| | | | |
|-----------------|--|--|--|
| JKMxxxM-78HL4-V | | | |
|-----------------|--|--|--|

(xxx = 565-605,in increment of 5)

Group 84

| | | | |
|------------------|--|--|--|
| JKMxxxM-78HL4-TV | | | |
|------------------|--|--|--|

(xxx = 555-595,in increment of 5)

Group 85

| | | | |
|---------------------|--|--|--|
| JKMxxxN-72HL3-MBB-B | | | |
|---------------------|--|--|--|

(xxx = 400-445,in increment of 5)

Group 86

| | | | |
|---------------------|--|--|--|
| JKMxxxN-60HL3-MBB-B | | | |
|---------------------|--|--|--|

(xxx = 330-370,in increment of 5)

Group 87

| | | | |
|-----------------|--|--|--|
| JKMxxxN-78HL4-V | | | |
|-----------------|--|--|--|

(xxx = 590-625,in increment of 5)

Notes:

- ◆ PP: the eagle series module
- ◆ Plus: the eagle+ series module
- ◆ JKMS: the smart module
- ◆ V: module with 1500V
- ◆ H: half-cut series module
- ◆ L: large cell series module
- ◆ T/TV: transparent backsheet series module
- ◆ MX3: module with Z8S Junction Box
- ◆ MBB: nine busbar
- ◆ B: black backsheet
- ◆ L3: 163 large cell series module

- ◆ LM: 166 large cell series module
- ◆ L4: 182 large cell series module
- ◆ TI: module with RSD Junction Box

| Jinko Module | Wafer type | Technology | Cell Number | Module Type | Cell | Junction Box |
|------------------------|----------------|--------------|-------------|---------------------------|------------------------|--------------|
| STC condition: JKS | p-type Mono: M | Full cell: 1 | 60: A | Normal mono-facial: A | 158 5BB Mono-facial: A | Normal: A |
| BSTC condition: JKB | Poly: P | Half cell: 2 | 72: B | All black mono-facial: B | 158 5BB Bi-facial: B | MX: B |
| | N-type Mono: N | TR: 3 | 66: C | Transparent back sheet: C | 158 9BB Bi-facial: C | MX3: C |
| | | Shingling: 4 | 78: D | Bifacial dual glass: D | 161 9BB Bi-facial: D | EP: D |

Appendix 2 : Electrical Specifications

| Module Type | Maximum Power at STC (Pmax, Wp) | Maximum Power Voltage(Vmp ,V) | Maximum Power Current(I mp, A) | Open-circuit Voltage(Vo c,V) | Short-circuit Current(Is c,A) | Rated Max. output current (Optimized) [A]: | Rated Max. output voltage (Optimized) [V]: |
|--------------------|---------------------------------|-------------------------------|--------------------------------|------------------------------|-------------------------------|---|--|
| Group 1 Group 2 | 260 | 31.1 | 8.37 | 37.9 | 9.08 | | |
| | 265 | 31.4 | 8.44 | 38.1 | 9.19 | | |
| | 270 | 31.7 | 8.52 | 38.4 | 9.27 | | |
| | 275 | 32 | 8.61 | 38.7 | 9.38 | | |
| | 280 | 32.3 | 8.69 | 39 | 9.5 | | |
| | 285 | 32.5 | 8.77 | 39.3 | 9.78 | | |
| | 290 | 32.8 | 8.85 | 39.6 | 9.85 | | |
| Group 2 | 295 | 33.1 | 8.93 | 39.9 | 9.93 | | |
| | 300 | 33.4 | 9 | 40.2 | 10.01 | | |
| | 305 | 33.6 | 9.09 | 40.5 | 10.09 | | |
| | 310 | 33.9 | 9.16 | 40.8 | 10.16 | | |
| | 315 | 34.1 | 9.25 | 41.1 | 10.24 | | |
| Group 3 Group 4 | 260 | 31.1 | 8.37 | 37.9 | 9.08 | 12.0 | 33.6 |
| | 265 | 31.4 | 8.44 | 38.1 | 9.19 | 12.0 | 33.6 |
| | 270 | 31.7 | 8.52 | 38.4 | 9.27 | 12.0 | 33.6 |
| | 275 | 32 | 8.61 | 38.7 | 9.38 | 12.0 | 33.6 |
| | 280 | 32.3 | 8.69 | 39 | 9.5 | 12.0 | 33.6 |
| | 285 | 32.5 | 8.77 | 39.3 | 9.78 | 12.0 | 33.6 |
| | 290 | 32.8 | 8.85 | 39.6 | 9.85 | 12.0 | 33.6 |
| Group 4 | 295 | 33.1 | 8.93 | 39.9 | 9.93 | 12.0 | 33.6 |
| | 300 | 33.4 | 9 | 40.2 | 10.01 | 12.0 | 33.6 |

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|---------|-----|-------|-------|------|-------|------|------|
| | 305 | 33.6 | 9.09 | 40.5 | 10.09 | 12.0 | 33.6 |
| | 310 | 33.9 | 9.16 | 40.8 | 10.16 | 12.0 | 33.6 |
| | 315 | 34.1 | 9.25 | 41.1 | 10.24 | 12.0 | 33.6 |
| Group 5 | 270 | 31.4 | 8.6 | 38.4 | 9.29 | | |
| | 275 | 31.6 | 8.71 | 38.5 | 9.4 | | |
| | 280 | 31.8 | 8.81 | 38.6 | 9.51 | | |
| | 285 | 32 | 8.91 | 38.7 | 9.63 | | |
| | 290 | 32.2 | 9.02 | 39.5 | 9.76 | | |
| | 295 | 32.4 | 9.11 | 39.7 | 9.88 | | |
| | 300 | 32.6 | 9.21 | 40.1 | 9.98 | | |
| | 305 | 32.8 | 9.3 | 40.3 | 10.07 | | |
| | 310 | 33 | 9.4 | 40.5 | 10.15 | | |
| | 315 | 33.2 | 9.49 | 40.7 | 10.23 | | |
| | 320 | 33.4 | 9.59 | 40.9 | 10.31 | | |
| | 325 | 33.6 | 9.68 | 41.1 | 10.5 | | |
| | 330 | 33.8 | 9.77 | 41.3 | 10.61 | | |
| | 335 | 34 | 9.86 | 41.5 | 10.73 | | |
| | 340 | 34.2 | 9.95 | 41.7 | 10.82 | | |
| Group 6 | 345 | 34.4 | 10.03 | 41.9 | 10.91 | | |
| | 350 | 34.6 | 10.12 | 42.1 | 11.00 | | |
| | 270 | 31.07 | 8.69 | 37.7 | 9.29 | | |
| | 275 | 31.25 | 8.8 | 37.8 | 9.4 | | |
| | 280 | 31.46 | 8.9 | 37.9 | 9.51 | | |
| | 285 | 31.7 | 8.99 | 38 | 9.63 | | |
| | 290 | 31.9 | 9.09 | 38.8 | 9.76 | | |
| | 295 | 32.1 | 9.19 | 39 | 9.88 | | |
| | 300 | 32.3 | 9.29 | 39.4 | 9.98 | | |
| | 305 | 32.52 | 9.38 | 39.6 | 10.07 | | |
| | 310 | 32.74 | 9.47 | 39.8 | 10.15 | | |
| | 315 | 32.95 | 9.56 | 40 | 10.23 | | |
| | 320 | 33.16 | 9.65 | 40.2 | 10.31 | | |
| | 325 | 33.37 | 9.74 | 40.4 | 10.5 | | |
| | 330 | 33.54 | 9.84 | 40.6 | 10.61 | | |
| Group 7 | 335 | 33.74 | 9.93 | 40.8 | 10.73 | | |
| | 340 | 33.93 | 10.02 | 41 | 10.82 | | |
| | 345 | 34.12 | 10.11 | 41.2 | 10.91 | | |
| | 350 | 34.31 | 10.2 | 41.4 | 11 | | |
| Group 8 | 270 | 31.4 | 8.6 | 38.4 | 9.29 | 12.0 | 33.6 |
| | 275 | 31.6 | 8.71 | 38.5 | 9.4 | 12.0 | 33.6 |
| | 280 | 31.8 | 8.81 | 38.6 | 9.51 | 12.0 | 33.6 |
| | 285 | 32 | 8.91 | 38.7 | 9.63 | 12.0 | 33.6 |

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|-----------------|-----|-------|-------|-------|-------|------|------|
| | 290 | 32.2 | 9.02 | 39.5 | 9.76 | 12.0 | 33.6 |
| | 295 | 32.4 | 9.11 | 39.7 | 9.88 | 12.0 | 33.6 |
| | 300 | 32.6 | 9.21 | 40.1 | 9.98 | 12.0 | 33.6 |
| | 305 | 32.8 | 9.3 | 40.3 | 10.07 | 12.0 | 33.6 |
| | 310 | 33 | 9.4 | 40.5 | 10.15 | 12.0 | 33.6 |
| | 315 | 33.2 | 9.49 | 40.7 | 10.23 | 12.0 | 33.6 |
| | 320 | 33.4 | 9.59 | 40.9 | 10.31 | 12.0 | 33.6 |
| | 325 | 33.6 | 9.68 | 41.1 | 10.5 | 12.0 | 33.6 |
| | 330 | 33.8 | 9.77 | 41.3 | 10.61 | 12.0 | 33.6 |
| | 335 | 34 | 9.86 | 41.5 | 10.73 | 12.0 | 33.6 |
| | 340 | 34.2 | 9.95 | 41.7 | 10.82 | 12.0 | 33.6 |
| Group 9 (P型) | 315 | 32.7 | 9.63 | 39.9 | 9.99 | | |
| | 320 | 32.9 | 9.73 | 40.1 | 10.07 | | |
| | 325 | 33.1 | 9.82 | 40.3 | 10.15 | | |
| | 330 | 33.24 | 9.93 | 40.39 | 10.25 | | |
| | 335 | 33.4 | 10.03 | 40.46 | 10.34 | | |
| | 340 | 33.62 | 10.11 | 40.6 | 10.43 | | |
| | 345 | 33.76 | 10.22 | 40.75 | 10.53 | | |
| | 350 | 33.94 | 10.31 | 40.87 | 10.62 | | |
| | 355 | 34.11 | 10.41 | 41 | 10.71 | | |
| Group 9 (N型) | 315 | 33 | 9.55 | 40.19 | 10.12 | | |
| | 320 | 33.17 | 9.65 | 40.32 | 10.23 | | |
| | 325 | 33.38 | 9.74 | 40.43 | 10.32 | | |
| | 330 | 33.51 | 9.85 | 40.56 | 10.43 | | |
| | 335 | 33.68 | 9.95 | 40.73 | 10.53 | | |
| | 340 | 33.88 | 10.04 | 40.84 | 10.64 | | |
| | 345 | 34.07 | 10.13 | 40.94 | 10.73 | | |
| | 350 | 34.16 | 10.25 | 41.1 | 10.82 | | |
| | 355 | 34.32 | 10.35 | 41.2 | 10.93 | | |
| Group 10 | 320 | 37.4 | 8.56 | 45.3 | 9.21 | | |
| | 325 | 37.6 | 8.66 | 45.5 | 9.28 | | |
| | 330 | 37.8 | 8.74 | 45.8 | 9.35 | | |
| | 335 | 38 | 8.82 | 46.1 | 9.43 | | |
| | 340 | 38.2 | 8.91 | 46.5 | 9.54 | | |
| | 345 | 38.4 | 8.99 | 46.9 | 9.63 | | |
| | 350 | 38.6 | 9.07 | 47.2 | 9.71 | | |
| | 355 | 38.9 | 9.13 | 47.5 | 9.79 | | |
| Group 11 | 330 | 37.8 | 8.74 | 45.8 | 9.35 | | |
| | 335 | 38 | 8.82 | 46.1 | 9.43 | | |
| | 340 | 38.2 | 8.91 | 46.5 | 9.54 | | |
| | 345 | 38.4 | 8.99 | 46.9 | 9.63 | | |

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| | 350 | 38.6 | 9.07 | 47.2 | 9.71 | | |
| | 355 | 38.9 | 9.13 | 47.5 | 9.79 | | |
| | 360 | 39.1 | 9.21 | 47.8 | 9.87 | | |
| | 365 | 39.3 | 9.29 | 48.1 | 9.95 | | |
| | 370 | 39.5 | 9.37 | 48.4 | 10.02 | | |
| | 375 | 39.7 | 9.45 | 48.7 | 10.09 | | |
| | 380 | 39.9 | 9.53 | 49 | 10.16 | | |
| Group 12 | 320 | 37.4 | 8.56 | 45.3 | 9.21 | 12.0 | 37.2 |
| | 325 | 37.6 | 8.66 | 45.5 | 9.28 | 12.0 | 37.2 |
| | 330 | 37.8 | 8.74 | 45.8 | 9.35 | 12.0 | 37.2 |
| | 335 | 38 | 8.82 | 46.1 | 9.43 | 12.0 | 37.2 |
| | 340 | 38.2 | 8.91 | 46.5 | 9.54 | 12.0 | 37.2 |
| | 345 | 38.4 | 8.99 | 46.9 | 9.63 | 12.0 | 37.2 |
| | 350 | 38.6 | 9.07 | 47.2 | 9.71 | 12.0 | 37.2 |
| | 355 | 38.9 | 9.13 | 47.5 | 9.79 | 12.0 | 37.2 |
| Group 13 | 330 | 37.8 | 8.74 | 45.8 | 9.35 | 12.0 | 37.2 |
| | 335 | 38 | 8.82 | 46.1 | 9.43 | 12.0 | 37.2 |
| | 340 | 38.2 | 8.91 | 46.5 | 9.54 | 12.0 | 37.2 |
| | 345 | 38.4 | 8.99 | 46.9 | 9.63 | 12.0 | 37.2 |
| | 350 | 38.6 | 9.07 | 47.2 | 9.71 | 12.0 | 37.2 |
| | 355 | 38.9 | 9.13 | 47.5 | 9.79 | 12.0 | 37.2 |
| | 360 | 39.1 | 9.21 | 47.8 | 9.87 | 12.0 | 37.2 |
| | 365 | 39.3 | 9.29 | 48.1 | 9.95 | 12.0 | 37.2 |
| | 370 | 39.5 | 9.37 | 48.4 | 10.02 | 12.0 | 37.2 |
| | 375 | 39.7 | 9.45 | 48.7 | 10.09 | 12.0 | 37.2 |
| Group 14 | 380 | 39.9 | 9.53 | 49 | 10.16 | 12.0 | 37.2 |
| | 335 | 38.4 | 8.72 | 46.9 | 9.79 | | |
| | 340 | 38.7 | 8.79 | 47.1 | 9.81 | | |
| | 345 | 38.9 | 8.87 | 47.3 | 9.85 | | |
| | 350 | 39.1 | 8.94 | 47.5 | 9.88 | | |
| | 355 | 39.3 | 9.04 | 47.8 | 9.93 | | |
| | 360 | 39.5 | 9.12 | 48 | 10.02 | | |
| | 365 | 39.7 | 9.2 | 48.2 | 10.09 | | |
| | 370 | 39.9 | 9.28 | 48.5 | 10.15 | | |
| | 375 | 40.2 | 9.33 | 48.7 | 10.23 | | |
| | 380 | 40.5 | 9.39 | 48.9 | 10.3 | | |
| | 385 | 40.8 | 9.44 | 49.1 | 10.38 | | |
| | 390 | 41.1 | 9.49 | 49.3 | 10.46 | | |
| | 395 | 41.4 | 9.55 | 49.5 | 10.54 | | |
| | 400 | 41.7 | 9.6 | 49.8 | 10.61 | | |
| | 405 | 42 | 9.65 | 50.1 | 10.69 | | |

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| | 410 | 42.3 | 9.7 | 50.3 | 10.76 | | |
| | 415 | 42.6 | 9.75 | 50.6 | 10.82 | | |
| | 420 | 42.9 | 9.80 | 50.9 | 10.88 | | |
| | 425 | 43.2 | 9.85 | 51.2 | 10.94 | | |
| Group 15 | 335 | 36.74 | 9.12 | 46.2 | 9.79 | | |
| | 340 | 37 | 9.19 | 46.4 | 9.81 | | |
| | 345 | 37.25 | 9.26 | 46.6 | 9.85 | | |
| | 350 | 37.53 | 9.33 | 46.8 | 9.88 | | |
| | 355 | 37.81 | 9.39 | 47.1 | 9.93 | | |
| | 360 | 38.06 | 9.46 | 47.3 | 10.02 | | |
| | 365 | 38.34 | 9.52 | 47.5 | 10.09 | | |
| | 370 | 38.58 | 9.59 | 47.8 | 10.15 | | |
| | 375 | 38.86 | 9.65 | 48 | 10.23 | | |
| | 380 | 39.1 | 9.72 | 48.2 | 10.3 | | |
| | 385 | 39.37 | 9.78 | 48.4 | 10.38 | | |
| | 390 | 39.64 | 9.84 | 48.6 | 10.46 | | |
| | 395 | 39.9 | 9.9 | 48.8 | 10.54 | | |
| | 400 | 40.16 | 9.96 | 49.1 | 10.61 | | |
| | 405 | 40.42 | 10.02 | 49.4 | 10.69 | | |
| | 410 | 40.68 | 10.08 | 49.6 | 10.76 | | |
| | 415 | 40.93 | 10.14 | 49.9 | 10.82 | | |
| Group 16 Group 17 | 420 | 41.18 | 10.2 | 50.2 | 10.88 | | |
| | 425 | 41.43 | 10.26 | 50.5 | 10.94 | | |
| | 335 | 38.4 | 8.72 | 46.9 | 9.79 | 12.0 | 37.2 |
| | 340 | 38.7 | 8.79 | 47.1 | 9.81 | 12.0 | 37.2 |
| | 345 | 38.9 | 8.87 | 47.3 | 9.85 | 12.0 | 37.2 |
| | 350 | 39.1 | 8.94 | 47.5 | 9.88 | 12.0 | 37.2 |
| | 355 | 39.3 | 9.04 | 47.8 | 9.93 | 12.0 | 37.2 |
| | 360 | 39.5 | 9.12 | 48 | 10.02 | 12.0 | 37.2 |
| | 365 | 39.7 | 9.2 | 48.2 | 10.09 | 12.0 | 37.2 |
| | 370 | 39.9 | 9.28 | 48.5 | 10.15 | 12.0 | 37.2 |
| | 375 | 40.2 | 9.33 | 48.7 | 10.23 | 12.0 | 37.2 |
| | 380 | 40.5 | 9.39 | 48.9 | 10.3 | 12.0 | 37.2 |
| | 385 | 40.8 | 9.44 | 49.1 | 10.38 | 12.0 | 37.2 |
| | 390 | 41.1 | 9.49 | 49.3 | 10.46 | 12.0 | 37.2 |
| | 395 | 41.4 | 9.55 | 49.5 | 10.54 | 12.0 | 37.2 |
| Group 18 (P型) | 375 | 39.25 | 9.56 | 47.92 | 9.92 | | |
| | 380 | 39.36 | 9.66 | 47.96 | 10.02 | | |
| | 385 | 39.5 | 9.76 | 48.1 | 10.08 | | |
| | 390 | 39.62 | 9.84 | 48.14 | 10.17 | | |
| | 395 | 39.83 | 9.92 | 48.26 | 10.23 | | |

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| | 400 | 40.01 | 10 | 48.35 | 10.32 | | |
| | 405 | 40.19 | 10.08 | 48.45 | 10.42 | | |
| | 410 | 40.38 | 10.16 | 48.56 | 10.51 | | |
| | 415 | 40.5 | 10.25 | 48.64 | 10.61 | | |
| | 420 | 40.65 | 10.33 | 48.74 | 10.7 | | |
| Group 18 (N型) | 375 | 39.32 | 9.54 | 48.1 | 10.07 | | |
| | 380 | 39.43 | 9.64 | 48.2 | 10.17 | | |
| | 385 | 39.53 | 9.74 | 48.31 | 10.26 | | |
| | 390 | 39.64 | 9.84 | 48.4 | 10.36 | | |
| | 395 | 39.74 | 9.94 | 48.5 | 10.45 | | |
| | 400 | 39.85 | 10.04 | 48.63 | 10.54 | | |
| | 405 | 39.99 | 10.13 | 48.7 | 10.65 | | |
| | 410 | 40.09 | 10.23 | 48.8 | 10.75 | | |
| | 415 | 40.22 | 10.32 | 48.9 | 10.86 | | |
| | 420 | 40.32 | 10.42 | 49 | 10.96 | | |
| | 425 | 40.43 | 10.51 | 49.1 | 11.07 | | |
| | 390 | 39.64 | 9.84 | 48.4 | 10.36 | | |
| Group 19 | 395 | 39.74 | 9.94 | 48.5 | 10.45 | | |
| | 400 | 39.85 | 10.04 | 48.63 | 10.54 | | |
| | 405 | 39.99 | 10.13 | 48.7 | 10.65 | | |
| | 410 | 40.09 | 10.23 | 48.8 | 10.75 | | |
| | 415 | 40.22 | 10.32 | 48.9 | 10.86 | | |
| | 420 | 40.31 | 10.42 | 49 | 10.96 | | |
| | 425 | 40.43 | 10.51 | 49.1 | 11.07 | | |
| Group 20 | 330 | 33.51 | 9.85 | 40.56 | 10.43 | | |
| | 335 | 33.68 | 9.95 | 40.73 | 10.53 | | |
| | 340 | 33.88 | 10.04 | 40.84 | 10.64 | | |
| | 345 | 34.07 | 10.13 | 40.94 | 10.73 | | |
| | 350 | 34.16 | 10.25 | 41.1 | 10.82 | | |
| Group 21 | 385 | 40.66 | 9.47 | 47.9 | 10.19 | | |
| | 390 | 40.76 | 9.57 | 48.05 | 10.24 | | |
| | 395 | 40.85 | 9.67 | 48.2 | 10.3 | | |
| | 400 | 40.95 | 9.77 | 48.35 | 10.36 | | |
| | 405 | 41.04 | 9.87 | 48.5 | 10.42 | | |
| | 410 | 41.13 | 9.97 | 48.65 | 10.48 | | |
| | 415 | 41.26 | 10.06 | 48.8 | 10.54 | | |
| | 320 | 33.76 | 9.48 | 39.87 | 10.18 | | |
| Group 22 | 325 | 33.89 | 9.59 | 40.02 | 10.24 | | |
| | 330 | 34.03 | 9.7 | 40.17 | 10.3 | | |
| | 335 | 34.15 | 9.81 | 40.32 | 10.36 | | |
| | 340 | 34.28 | 9.92 | 40.47 | 10.42 | | |
| | 345 | 34.4 | 10.03 | 40.62 | 10.48 | | |

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| Group 23 | 400 | 42.97 | 9.31 | 52 | 9.99 | | |
| | 405 | 43.13 | 9.39 | 52.1 | 10.05 | | |
| | 410 | 43.25 | 9.48 | 52.2 | 10.11 | | |
| | 415 | 43.42 | 9.56 | 52.3 | 10.17 | | |
| | 420 | 43.57 | 9.64 | 52.4 | 10.23 | | |
| | 425 | 43.73 | 9.72 | 52.5 | 10.29 | | |
| | 430 | 43.88 | 9.80 | 52.60 | 10.35 | | |
| | 435 | 44.03 | 9.88 | 52.7 | 10.41 | | |
| | 440 | 44.18 | 9.96 | 52.80 | 10.47 | | |
| Group 24 | 335 | 36.55 | 9.17 | 43.9 | 9.71 | | |
| | 340 | 36.65 | 9.28 | 44 | 9.79 | | |
| | 345 | 36.75 | 9.39 | 44.1 | 9.87 | | |
| | 350 | 36.85 | 9.5 | 44.2 | 9.95 | | |
| | 355 | 36.95 | 9.61 | 44.30 | 10.03 | | |
| | 360 | 37.04 | 9.72 | 44.40 | 10.11 | | |
| | 365 | 37.14 | 9.83 | 44.50 | 10.19 | | |
| | 370 | 37.23 | 9.94 | 44.60 | 10.27 | | |
| Group 25 | 400 | 43.3 | 9.24 | 52 | 9.86 | | |
| | 405 | 43.41 | 9.33 | 52.1 | 9.91 | | |
| | 410 | 43.53 | 9.42 | 52.2 | 9.96 | | |
| | 415 | 43.64 | 9.51 | 52.3 | 10.01 | | |
| | 420 | 43.75 | 9.6 | 52.4 | 10.07 | | |
| | 425 | 43.86 | 9.69 | 52.5 | 10.16 | | |
| | 430 | 43.97 | 9.78 | 52.6 | 10.25 | | |
| | 435 | 44.08 | 9.87 | 52.7 | 10.34 | | |
| | 440 | 44.18 | 9.96 | 52.80 | 10.38 | | |
| | 445 | 44.28 | 10.05 | 52.90 | 10.47 | | |
| | 450 | 44.38 | 10.14 | 53.00 | 10.56 | | |
| Group 26 | 340 | 36.65 | 9.28 | 44 | 9.87 | | |
| | 345 | 36.75 | 9.39 | 44.1 | 9.93 | | |
| | 350 | 36.85 | 9.5 | 44.2 | 9.99 | | |
| | 355 | 36.95 | 9.61 | 44.30 | 10.05 | | |
| | 360 | 37.04 | 9.72 | 44.40 | 10.11 | | |
| | 365 | 37.14 | 9.83 | 44.50 | 10.22 | | |
| | 370 | 37.23 | 9.94 | 44.60 | 10.33 | | |
| | 375 | 37.32 | 10.05 | 44.70 | 10.44 | | |
| | 380 | 37.44 | 10.15 | 44.80 | 10.55 | | |
| Group 27 | 400 | 43.3 | 9.24 | 52 | 10.05 | | |
| | 405 | 43.41 | 9.33 | 52.1 | 10.1 | | |
| | 410 | 43.53 | 9.42 | 52.2 | 10.15 | | |
| | 415 | 43.64 | 9.51 | 52.3 | 10.2 | | |

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| | 420 | 43.75 | 9.6 | 52.4 | 10.25 | | |
| | 425 | 43.86 | 9.69 | 52.5 | 10.3 | | |
| | 430 | 43.97 | 9.78 | 52.6 | 10.35 | | |
| | 435 | 44.08 | 9.87 | 52.7 | 10.40 | | |
| | 440 | 44.18 | 9.96 | 52.80 | 10.45 | | |
| Group 28 | 340 | 36.65 | 9.28 | 44 | 10.05 | | |
| | 345 | 36.75 | 9.39 | 44.1 | 10.11 | | |
| | 350 | 36.85 | 9.5 | 44.2 | 10.18 | | |
| | 355 | 36.95 | 9.61 | 44.3 | 10.24 | | |
| | 360 | 37.04 | 9.72 | 44.4 | 10.31 | | |
| | 365 | 37.14 | 9.83 | 44.50 | 10.37 | | |
| | 370 | 37.23 | 9.94 | 44.60 | 10.44 | | |
| Group 29 | 385 | 40.66 | 9.47 | 48.47 | 10.31 | | |
| | 390 | 40.76 | 9.57 | 48.57 | 10.38 | | |
| | 395 | 40.85 | 9.67 | 48.67 | 10.45 | | |
| | 400 | 40.95 | 9.77 | 48.77 | 10.52 | | |
| | 405 | 41.04 | 9.87 | 48.87 | 10.59 | | |
| Group 30 | 320 | 33.76 | 9.48 | 40.31 | 10.22 | | |
| | 325 | 33.89 | 9.59 | 40.43 | 10.29 | | |
| | 330 | 34.03 | 9.7 | 40.55 | 10.36 | | |
| | 335 | 34.15 | 9.81 | 40.67 | 10.43 | | |
| Group 31 | 405 | 42.91 | 9.44 | 51.07 | 10.20 | | |
| | 410 | 43.03 | 9.53 | 51.16 | 10.27 | | |
| | 415 | 43.10 | 9.63 | 51.25 | 10.34 | | |
| | 420 | 43.17 | 9.73 | 51.34 | 10.41 | | |
| | 425 | 43.23 | 9.83 | 51.43 | 10.48 | | |
| | 430 | 43.49 | 9.89 | 51.52 | 10.57 | | |
| | 435 | 43.55 | 9.99 | 51.61 | 10.67 | | |
| | 440 | 43.65 | 10.08 | 51.70 | 10.77 | | |
| | 445 | 43.72 | 10.18 | 52.04 | 10.84 | | |
| | 450 | 43.82 | 10.27 | 52.13 | 10.92 | | |
| | 455 | 43.92 | 10.36 | 52.22 | 11.00 | | |
| | 460 | 44.02 | 10.45 | 52.32 | 11.08 | | |
| Group 32 | 465 | 44.12 | 10.54 | 52.43 | 11.16 | | |
| | 340 | 36.56 | 9.30 | 43.24 | 10.20 | | |
| | 345 | 36.67 | 9.41 | 43.32 | 10.27 | | |
| | 350 | 36.77 | 9.52 | 43.41 | 10.34 | | |
| | 355 | 36.87 | 9.63 | 43.49 | 10.41 | | |
| | 360 | 36.97 | 9.74 | 43.58 | 10.48 | | |
| | 365 | 37.06 | 9.85 | 43.66 | 10.55 | | |

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| | 370 | 37.15 | 9.96 | 43.75 | 10.62 | | |
| | 375 | 37.24 | 10.07 | 44.02 | 10.69 | | |
| | 380 | 37.33 | 10.18 | 44.09 | 10.77 | | |
| | 385 | 37.42 | 10.29 | 44.17 | 10.83 | | |
| | 390 | 37.54 | 10.39 | 44.29 | 10.93 | | |
| Group 33 | 405 | 42.90 | 9.44 | 51.55 | 10.15 | | |
| | 410 | 43.03 | 9.53 | 51.58 | 10.20 | | |
| | 415 | 43.20 | 9.61 | 51.61 | 10.28 | | |
| | 420 | 43.35 | 9.69 | 51.64 | 10.36 | | |
| | 425 | 43.50 | 9.77 | 51.67 | 10.44 | | |
| | 430 | 43.66 | 9.85 | 51.70 | 10.52 | | |
| | 435 | 43.85 | 9.92 | 51.80 | 10.60 | | |
| | 440 | 43.92 | 10.02 | 51.90 | 10.68 | | |
| | 445 | 43.98 | 10.12 | 52.00 | 10.78 | | |
| | 450 | 44.04 | 10.22 | 52.10 | 10.87 | | |
| Group 34 | 455 | 44.14 | 10.31 | 52.20 | 10.96 | | |
| | 340 | 36.72 | 9.26 | 43.56 | 10.12 | | |
| | 345 | 36.82 | 9.37 | 43.64 | 10.20 | | |
| | 350 | 36.92 | 9.48 | 43.67 | 10.28 | | |
| | 355 | 37.02 | 9.59 | 43.71 | 10.36 | | |
| | 360 | 37.12 | 9.70 | 43.75 | 10.44 | | |
| | 365 | 37.21 | 9.81 | 43.83 | 10.52 | | |
| | 370 | 37.30 | 9.92 | 43.92 | 10.60 | | |
| | 375 | 37.39 | 10.03 | 44.00 | 10.68 | | |
| | 380 | 37.48 | 10.14 | 44.11 | 10.76 | | |
| Group 35 | 385 | 37.57 | 10.25 | 44.17 | 10.84 | | |
| | 410 | 42.71 | 9.60 | 51.58 | 10.42 | | |
| | 415 | 42.79 | 9.70 | 51.61 | 10.51 | | |
| | 420 | 42.86 | 9.80 | 51.64 | 10.60 | | |
| | 425 | 42.93 | 9.90 | 51.67 | 10.69 | | |
| | 430 | 43.00 | 10.00 | 51.70 | 10.78 | | |
| | 435 | 43.07 | 10.10 | 51.80 | 10.87 | | |
| | 440 | 43.14 | 10.20 | 51.90 | 10.96 | | |
| | 445 | 43.21 | 10.30 | 52.00 | 11.05 | | |
| | 450 | 43.27 | 10.40 | 52.10 | 11.14 | | |
| Group 36 | 455 | 43.34 | 10.50 | 52.20 | 11.23 | | |
| | 460 | 43.40 | 10.60 | 52.30 | 11.32 | | |
| | 345 | 36.82 | 9.37 | 43.64 | 10.51 | | |
| Group 36 | 350 | 36.93 | 9.48 | 43.67 | 10.60 | | |
| | 355 | 37.02 | 9.59 | 43.70 | 10.69 | | |

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| | 360 | 37.12 | 9.70 | 43.72 | 10.78 | | |
| | 365 | 37.21 | 9.81 | 43.75 | 10.87 | | |
| | 370 | 37.30 | 9.92 | 43.83 | 10.96 | | |
| | 375 | 37.39 | 10.03 | 43.92 | 11.05 | | |
| | 380 | 37.48 | 10.14 | 44.01 | 11.14 | | |
| | 385 | 37.57 | 10.25 | 44.11 | 11.23 | | |
| Group 37 | 405 | 43.23 | 9.37 | 51.55 | 10.01 | | |
| | 410 | 43.3 | 9.47 | 51.58 | 10.11 | | |
| | 415 | 43.37 | 9.57 | 51.61 | 10.21 | | |
| | 420 | 43.44 | 9.67 | 51.64 | 10.31 | | |
| | 425 | 43.51 | 9.77 | 51.67 | 10.41 | | |
| | 430 | 43.57 | 9.87 | 51.7 | 10.51 | | |
| | 435 | 43.64 | 9.97 | 51.73 | 10.61 | | |
| Group 38 | 340 | 36.56 | 9.3 | 43.6 | 10.01 | | |
| | 345 | 36.63 | 9.42 | 43.63 | 10.13 | | |
| | 350 | 36.69 | 9.54 | 43.65 | 10.25 | | |
| | 355 | 36.76 | 9.66 | 43.68 | 10.37 | | |
| | 360 | 36.81 | 9.78 | 43.7 | 10.49 | | |
| | 365 | 36.87 | 9.9 | 43.73 | 10.61 | | |
| Group 39 | 430 | 42.41 | 10.14 | 51.10 | 10.96 | | |
| | 435 | 42.52 | 10.23 | 51.20 | 11.05 | | |
| | 440 | 42.64 | 10.32 | 51.30 | 11.14 | | |
| | 445 | 42.75 | 10.41 | 51.40 | 11.23 | | |
| | 450 | 42.86 | 10.50 | 51.50 | 11.32 | | |
| | 455 | 42.97 | 10.59 | 51.60 | 11.41 | | |
| | 460 | 43.08 | 10.68 | 51.70 | 11.50 | | |
| | 465 | 43.18 | 10.77 | 51.92 | 11.59 | | |
| | 470 | 43.28 | 10.86 | 52.14 | 11.68 | | |
| | 475 | 43.38 | 10.95 | 52.24 | 11.77 | | |
| | 480 | 43.48 | 11.04 | 52.34 | 11.86 | | |
| | 485 | 43.58 | 11.13 | 52.44 | 11.95 | | |
| | 490 | 43.68 | 11.22 | 52.54 | 12.04 | | |
| | 495 | 43.77 | 11.31 | 52.63 | 12.13 | | |
| Group 40 | 360 | 35.90 | 10.03 | 43.24 | 10.85 | | |
| | 365 | 36.00 | 10.14 | 43.32 | 10.94 | | |
| | 370 | 36.10 | 10.25 | 43.41 | 11.03 | | |
| | 375 | 36.20 | 10.36 | 43.49 | 11.12 | | |
| | 380 | 36.30 | 10.47 | 43.58 | 11.21 | | |
| | 385 | 36.39 | 10.58 | 43.66 | 11.30 | | |
| | 390 | 36.49 | 10.69 | 43.75 | 11.39 | | |

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| | 395 | 36.58 | 10.80 | 43.93 | 11.48 | | |
| | 400 | 36.67 | 10.91 | 44.12 | 11.57 | | |
| | 405 | 36.76 | 11.02 | 44.2 | 11.68 | | |
| | 410 | 36.84 | 11.13 | 44.29 | 11.79 | | |
| | 415 | 36.92 | 11.24 | 44.37 | 11.9 | | |
| Group 41 | 420 | 42.77 | 9.82 | 51.10 | 10.63 | | |
| | 425 | 42.85 | 9.92 | 51.20 | 10.72 | | |
| | 430 | 42.92 | 10.02 | 51.30 | 10.81 | | |
| | 435 | 42.99 | 10.12 | 51.40 | 10.90 | | |
| | 440 | 43.06 | 10.22 | 51.50 | 10.99 | | |
| | 445 | 43.13 | 10.32 | 51.60 | 11.08 | | |
| | 450 | 43.19 | 10.42 | 51.70 | 11.17 | | |
| | 455 | 43.25 | 10.52 | 51.80 | 11.26 | | |
| | 460 | 43.32 | 10.62 | 51.90 | 11.35 | | |
| | 465 | 43.38 | 10.72 | 52.00 | 11.44 | | |
| | 470 | 43.44 | 10.82 | 52.10 | 11.53 | | |
| | 475 | 43.50 | 10.92 | 52.16 | 11.63 | | |
| Group 42 | 355 | 36.49 | 9.73 | 43.32 | 10.45 | | |
| | 360 | 36.55 | 9.85 | 43.41 | 10.55 | | |
| | 365 | 36.61 | 9.97 | 43.49 | 10.65 | | |
| | 370 | 36.67 | 10.09 | 43.58 | 10.75 | | |
| | 375 | 36.73 | 10.21 | 43.66 | 10.85 | | |
| | 380 | 36.79 | 10.33 | 43.75 | 10.95 | | |
| | 385 | 36.85 | 10.45 | 43.83 | 11.05 | | |
| | 390 | 36.90 | 10.57 | 43.92 | 11.15 | | |
| | 395 | 36.95 | 10.69 | 44.00 | 11.25 | | |
| | 400 | 37.01 | 10.81 | 44.05 | 11.37 | | |
| Group 43 | 425 | 43.15 | 9.85 | 51.20 | 10.62 | | |
| | 430 | 43.22 | 9.95 | 51.30 | 10.71 | | |
| | 435 | 43.29 | 10.05 | 51.40 | 10.80 | | |
| | 440 | 43.36 | 10.15 | 51.50 | 10.89 | | |
| | 445 | 43.42 | 10.25 | 51.60 | 10.98 | | |
| | 450 | 43.48 | 10.35 | 51.70 | 11.07 | | |
| | 455 | 43.54 | 10.45 | 51.80 | 11.16 | | |
| | 460 | 43.60 | 10.55 | 51.90 | 11.25 | | |
| | 465 | 43.66 | 10.65 | 52.00 | 11.34 | | |
| | 470 | 43.72 | 10.75 | 52.10 | 11.43 | | |
| | 475 | 43.78 | 10.85 | 52.16 | 11.53 | | |
| Group 44 | 355 | 36.38 | 9.76 | 43.32 | 10.54 | | |
| | 360 | 36.44 | 9.88 | 43.41 | 10.68 | | |
| | 365 | 36.50 | 10.00 | 43.49 | 10.80 | | |

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| | 370 | 36.56 | 10.12 | 43.58 | 10.92 | | |
| | 375 | 36.62 | 10.24 | 43.66 | 11.04 | | |
| | 380 | 36.68 | 10.36 | 43.75 | 11.16 | | |
| | 385 | 36.74 | 10.48 | 43.83 | 11.28 | | |
| | 390 | 36.80 | 10.60 | 43.92 | 11.40 | | |
| | 395 | 36.85 | 10.72 | 44.00 | 11.52 | | |
| | 400 | 36.90 | 10.84 | 44.08 | 11.64 | | |
| Group 45 | 385 | 39.65 | 9.71 | 47.90 | 10.42 | | |
| | 390 | 39.76 | 9.81 | 48.05 | 10.48 | | |
| | 395 | 39.86 | 9.91 | 48.20 | 10.54 | | |
| | 400 | 39.96 | 10.01 | 48.35 | 10.60 | | |
| | 405 | 40.06 | 10.11 | 48.50 | 10.66 | | |
| | 410 | 40.16 | 10.21 | 48.65 | 10.72 | | |
| | 415 | 40.26 | 10.31 | 48.80 | 10.78 | | |
| | 420 | 40.35 | 10.41 | 48.95 | 10.84 | | |
| | 425 | 40.44 | 10.51 | 49.10 | 10.90 | | |
| Group 46 | 320 | 33.03 | 9.69 | 39.95 | 10.40 | | |
| | 325 | 33.13 | 9.81 | 40.08 | 10.46 | | |
| | 330 | 33.24 | 9.93 | 40.21 | 10.52 | | |
| | 335 | 33.37 | 10.04 | 40.34 | 10.58 | | |
| | 340 | 33.47 | 10.16 | 40.47 | 10.64 | | |
| | 345 | 33.60 | 10.27 | 40.60 | 10.70 | | |
| | 350 | 33.72 | 10.38 | 40.73 | 10.76 | | |
| Group 47 | 430 | 42.45 | 10.13 | 51.10 | 10.96 | | |
| | 435 | 42.57 | 10.22 | 51.20 | 11.05 | | |
| | 440 | 42.68 | 10.31 | 51.30 | 11.14 | | |
| | 445 | 42.79 | 10.40 | 51.40 | 11.23 | | |
| | 450 | 42.90 | 10.49 | 51.50 | 11.32 | | |
| | 455 | 43.01 | 10.58 | 51.60 | 11.41 | | |
| | 460 | 43.12 | 10.67 | 51.70 | 11.50 | | |
| | 465 | 43.22 | 10.76 | 51.90 | 11.59 | | |
| | 470 | 43.32 | 10.85 | 52.10 | 11.68 | | |
| | 475 | 43.42 | 10.94 | 52.20 | 11.77 | | |
| | 480 | 44.87 | 10.7 | 53.92 | 11.4 | | |
| | 485 | 45.08 | 10.76 | 54.14 | 11.46 | | |
| Group 48 | 490 | 45.29 | 10.82 | 54.36 | 11.51 | | |
| | 360 | 35.72 | 10.08 | 43.24 | 10.93 | | |
| | 365 | 35.79 | 10.20 | 43.32 | 11.03 | | |
| | 370 | 35.86 | 10.32 | 43.41 | 11.13 | | |
| | 375 | 35.92 | 10.44 | 43.49 | 11.23 | | |
| | 380 | 35.99 | 10.56 | 43.58 | 11.33 | | |

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| | 385 | 36.05 | 10.68 | 43.66 | 11.43 | | |
| | 390 | 36.11 | 10.80 | 43.75 | 11.53 | | |
| | 395 | 36.18 | 10.92 | 43.92 | 11.63 | | |
| | 400 | 36.24 | 11.04 | 44.08 | 11.73 | | |
| | 405 | 36.33 | 11.15 | 45.44 | 11.84 | | |
| | 410 | 36.42 | 11.26 | 45.62 | 11.95 | | |
| | 415 | 36.79 | 11.28 | 46.77 | 12.06 | | |
| | 420 | 36.94 | 11.37 | 47.00 | 12.17 | | |
| Group 49 | 425 | 43.06 | 9.87 | 51.67 | 10.69 | | |
| | 430 | 43.18 | 9.96 | 51.77 | 10.78 | | |
| | 435 | 43.29 | 10.05 | 51.87 | 10.87 | | |
| | 440 | 43.40 | 10.14 | 51.97 | 10.96 | | |
| | 445 | 43.50 | 10.23 | 52.07 | 11.05 | | |
| | 450 | 43.61 | 10.32 | 52.17 | 11.14 | | |
| | 455 | 43.72 | 10.41 | 52.48 | 11.23 | | |
| | 460 | 43.81 | 10.50 | 52.81 | 11.32 | | |
| | 465 | 43.91 | 10.59 | 53.14 | 11.41 | | |
| | 470 | 44.01 | 10.68 | 53.47 | 11.50 | | |
| | 475 | 44.11 | 10.77 | 53.80 | 11.59 | | |
| | 480 | 44.20 | 10.86 | 53.90 | 11.68 | | |
| Group 50 | 360 | 36.51 | 9.86 | 43.82 | 10.68 | | |
| | 365 | 36.61 | 9.97 | 43.92 | 10.79 | | |
| | 370 | 36.71 | 10.08 | 44.02 | 10.90 | | |
| | 375 | 36.80 | 10.19 | 44.12 | 11.01 | | |
| | 380 | 36.90 | 10.30 | 44.22 | 11.12 | | |
| | 385 | 37.02 | 10.40 | 44.34 | 11.22 | | |
| | 390 | 37.15 | 10.50 | 44.47 | 11.32 | | |
| | 395 | 37.27 | 10.60 | 44.59 | 11.42 | | |
| | 400 | 37.39 | 10.70 | 44.71 | 11.52 | | |
| | 405 | 37.50 | 10.80 | 44.82 | 11.62 | | |
| Group 51 | 425 | 43.19 | 9.84 | 51.77 | 10.54 | | |
| | 430 | 43.31 | 9.93 | 51.87 | 10.63 | | |
| | 435 | 43.42 | 10.02 | 51.97 | 10.72 | | |
| | 440 | 43.53 | 10.11 | 52.07 | 10.81 | | |
| | 445 | 43.63 | 10.20 | 52.17 | 10.90 | | |
| | 450 | 43.74 | 10.29 | 52.27 | 10.99 | | |
| | 455 | 43.84 | 10.38 | 52.58 | 11.08 | | |
| | 460 | 43.94 | 10.47 | 52.87 | 11.17 | | |
| | 465 | 44.04 | 10.56 | 53.16 | 11.26 | | |
| | 470 | 44.14 | 10.65 | 53.45 | 11.35 | | |
| | 475 | 44.24 | 10.74 | 53.74 | 11.44 | | |

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| | 480 | 44.33 | 10.83 | 53.84 | 11.53 | | |
| Group 52 | 360 | 36.66 | 9.82 | 43.90 | 10.52 | | |
| | 365 | 36.76 | 9.93 | 43.99 | 10.63 | | |
| | 370 | 36.86 | 10.04 | 44.09 | 10.74 | | |
| | 375 | 36.95 | 10.15 | 44.18 | 10.85 | | |
| | 380 | 37.04 | 10.26 | 44.28 | 10.96 | | |
| | 385 | 37.13 | 10.37 | 44.37 | 11.07 | | |
| | 390 | 37.25 | 10.47 | 44.49 | 11.17 | | |
| | 395 | 37.37 | 10.57 | 44.61 | 11.27 | | |
| | 400 | 37.49 | 10.67 | 44.72 | 11.37 | | |
| | 405 | 37.61 | 10.77 | 44.84 | 11.47 | | |
| Group 53 | 440 | 43.65 | 10.08 | 51.70 | 10.77 | | |
| | 445 | 43.72 | 10.18 | 52.04 | 10.84 | | |
| | 450 | 43.82 | 10.27 | 52.13 | 10.92 | | |
| | 455 | 43.92 | 10.36 | 52.22 | 11.00 | | |
| | 460 | 44.02 | 10.45 | 52.32 | 11.08 | | |
| | 465 | 44.12 | 10.54 | 52.43 | 11.16 | | |
| Group 54 | 370 | 36.78 | 10.06 | 44.09 | 10.7 | | |
| | 375 | 36.88 | 10.17 | 44.19 | 10.81 | | |
| | 380 | 36.97 | 10.28 | 44.29 | 10.92 | | |
| | 385 | 37.42 | 10.29 | 44.17 | 10.83 | | |
| | 390 | 37.54 | 10.39 | 44.29 | 10.93 | | |
| Group 55 | 380 | 39.55 | 9.61 | 47.75 | 10.36 | | |
| | 385 | 39.65 | 9.71 | 47.9 | 10.42 | | |
| | 390 | 39.76 | 9.81 | 48.05 | 10.48 | | |
| | 395 | 39.86 | 9.91 | 48.2 | 10.54 | | |
| | 400 | 39.96 | 10.01 | 48.35 | 10.6 | | |
| Group 56 | 315 | 32.92 | 9.57 | 39.82 | 10.34 | | |
| | 320 | 33.03 | 9.69 | 39.95 | 10.4 | | |
| | 325 | 33.13 | 9.81 | 40.08 | 10.46 | | |
| | 330 | 33.24 | 9.93 | 40.21 | 10.52 | | |
| Group 57 | 335 | 32.75 | 10.23 | 39.41 | 11.04 | | |
| | 340 | 32.85 | 10.35 | 39.51 | 11.16 | | |
| | 345 | 32.95 | 10.47 | 39.61 | 11.28 | | |
| | 350 | 33.05 | 10.59 | 39.71 | 11.40 | | |
| | 355 | 33.15 | 10.71 | 39.81 | 11.52 | | |
| | 360 | 33.24 | 10.83 | 39.91 | 11.64 | | |
| | 365 | 33.34 | 10.95 | 40.01 | 11.76 | | |
| | 370 | 33.43 | 11.07 | 40.11 | 11.88 | | |
| | 375 | 33.61 | 11.16 | 40.29 | 11.97 | | |
| | 380 | 33.78 | 11.25 | 40.46 | 12.06 | | |

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| Group 58 | 335 | 32.75 | 10.23 | 39.41 | 11.04 | | |
| | 340 | 32.85 | 10.35 | 39.51 | 11.16 | | |
| | 345 | 32.95 | 10.47 | 39.61 | 11.28 | | |
| | 350 | 33.05 | 10.59 | 39.71 | 11.40 | | |
| | 355 | 33.15 | 10.71 | 39.81 | 11.52 | | |
| | 360 | 33.24 | 10.83 | 39.91 | 11.64 | | |
| | 365 | 33.34 | 10.95 | 40.01 | 11.76 | | |
| | 370 | 370 | 34.49 | 10.73 | 41.46 | | |
| | 375 | 375 | 34.63 | 10.83 | 41.6 | | |
| Group 59 | 325 | 32.54 | 9.99 | 39.21 | 10.68 | | |
| | 330 | 32.64 | 10.11 | 39.31 | 10.80 | | |
| | 335 | 32.75 | 10.23 | 39.41 | 10.92 | | |
| | 340 | 32.85 | 10.35 | 39.51 | 11.04 | | |
| | 345 | 32.95 | 10.47 | 39.61 | 11.16 | | |
| | 350 | 33.05 | 10.59 | 39.71 | 11.28 | | |
| | 355 | 33.15 | 10.71 | 39.81 | 11.40 | | |
| | 360 | 33.24 | 10.83 | 39.91 | 11.52 | | |
| | 365 | 33.34 | 10.95 | 40.01 | 11.64 | | |
| Group 60 | 325 | 33.00 | 9.85 | 39.21 | 10.59 | | |
| | 330 | 33.10 | 9.97 | 39.31 | 10.71 | | |
| | 335 | 33.20 | 10.09 | 39.41 | 10.83 | | |
| | 340 | 33.30 | 10.21 | 39.51 | 10.95 | | |
| | 345 | 33.40 | 10.33 | 39.61 | 11.07 | | |
| | 350 | 33.50 | 10.45 | 39.71 | 11.19 | | |
| | 355 | 33.59 | 10.57 | 39.80 | 11.31 | | |
| | 360 | 33.68 | 10.69 | 39.89 | 11.43 | | |
| | 365 | 33.77 | 10.81 | 39.98 | 11.55 | | |
| Group 61 | 320 | 32.99 | 9.70 | 39.60 | 10.41 | | |
| | 325 | 33.10 | 9.82 | 39.70 | 10.53 | | |
| | 330 | 33.20 | 9.94 | 39.80 | 10.65 | | |
| | 335 | 33.30 | 10.06 | 39.90 | 10.77 | | |
| | 340 | 33.40 | 10.18 | 40.00 | 10.89 | | |
| | 345 | 33.50 | 10.30 | 40.10 | 11.01 | | |
| | 350 | 33.66 | 10.40 | 40.26 | 11.11 | | |
| | 355 | 33.81 | 10.50 | 40.41 | 11.21 | | |
| | 360 | 33.97 | 10.60 | 40.57 | 11.31 | | |
| Group 62 JKMxxxxN -6TL3-B | 320 | 32.96 | 9.71 | 40.58 | 10.29 | | |
| | 325 | 33.16 | 9.81 | 40.78 | 10.39 | | |
| | 330 | 33.35 | 9.9 | 40.97 | 10.48 | | |
| | 335 | 33.54 | 9.99 | 41.16 | 10.57 | | |

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| | 340 | 33.73 | 10.08 | 41.35 | 10.66 | | |
| | 345 | 33.93 | 10.17 | 41.55 | 10.75 | | |
| | 350 | 34.12 | 10.26 | 41.74 | 10.84 | | |
| | 355 | 34.3 | 10.35 | 41.92 | 10.93 | | |
| | 360 | 34.49 | 10.44 | 42.11 | 11.02 | | |
| | 365 | 34.67 | 10.53 | 42.29 | 11.11 | | |
| Group 63 JKMxxx M- 72HLM-V | 420 | 40.17 | 10.46 | 48.07 | 11.11 | | |
| | 425 | 40.37 | 10.53 | 48.27 | 11.18 | | |
| | 430 | 40.57 | 10.60 | 48.47 | 11.25 | | |
| | 435 | 40.77 | 10.67 | 48.67 | 11.32 | | |
| | 440 | 40.97 | 10.74 | 48.87 | 11.39 | | |
| | 445 | 41.17 | 10.81 | 49.07 | 11.46 | | |
| | 450 | 41.37 | 10.88 | 49.27 | 11.53 | | |
| | 455 | 41.56 | 10.95 | 49.46 | 11.60 | | |
| | 460 | 41.75 | 11.02 | 49.65 | 11.67 | | |
| | 465 | 41.94 | 11.09 | 49.84 | 11.74 | | |
| JKMxxx M- 72HLM- B-V | 415Wp | 41.13 | 10.09 | 49.32 | 10.79 | | |
| | 420 | 41.3 | 10.17 | 49.49 | 10.87 | | |
| | 425 | 41.47 | 10.25 | 49.66 | 10.95 | | |
| | 430 | 41.63 | 10.33 | 49.82 | 11.03 | | |
| | 435 | 41.79 | 10.41 | 49.98 | 11.11 | | |
| | 440 | 41.95 | 10.49 | 50.14 | 11.19 | | |
| | 445 | 42.1 | 10.57 | 50.29 | 11.27 | | |
| JKMxxx M- 72HLM- TV | 425 | 40.4 | 10.52 | 48.56 | 11.21 | | |
| | 430 | 40.61 | 10.59 | 48.76 | 11.28 | | |
| | 435 | 40.81 | 10.66 | 48.96 | 11.35 | | |
| | 440 | 41.01 | 10.73 | 49.16 | 11.42 | | |
| | 445 | 41.21 | 10.8 | 49.36 | 11.49 | | |
| | 450 | 41.4 | 10.87 | 49.56 | 11.56 | | |
| | 455 | 41.59 | 10.94 | 49.76 | 11.63 | | |
| | 460 | 41.78 | 11.01 | 49.96 | 11.7 | | |
| Group 64 JKMxxx M- 60HLM-V | 350 | 33.62 | 10.41 | 40.20 | 11.14 | | |
| | 355 | 33.81 | 10.50 | 40.39 | 11.23 | | |
| | 360 | 34.00 | 10.59 | 40.58 | 11.32 | | |
| | 365 | 34.18 | 10.68 | 40.76 | 11.41 | | |
| | 370 | 34.36 | 10.77 | 40.94 | 11.50 | | |
| | 375 | 34.53 | 10.86 | 41.12 | 11.59 | | |
| | 380 | 34.74 | 10.94 | 41.3 | 11.68 | | |
| | 385 | 34.91 | 11.03 | 41.48 | 11.77 | | |
| JKMxxx M- | 350 | 34.42 | 10.17 | 41.24 | 10.87 | | |
| | 355 | 34.6 | 10.26 | 41.42 | 10.96 | | |

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|--|-----|-------|-------|-------|-------|--|--|
| 60HLM-B-V | 360 | 34.79 | 10.35 | 41.61 | 11.05 | | |
| | 365 | 34.96 | 10.44 | 41.78 | 11.14 | | |
| | 370 | 35.14 | 10.53 | 41.96 | 11.23 | | |
| JKMxxx M-60HLM-TV | 355 | 33.85 | 10.49 | 40.65 | 11.18 | | |
| | 360 | 34.03 | 10.58 | 40.84 | 11.27 | | |
| | 365 | 34.24 | 10.66 | 41.03 | 11.35 | | |
| | 370 | 34.42 | 10.75 | 41.22 | 11.44 | | |
| | 375 | 34.6 | 10.84 | 41.41 | 11.53 | | |
| | 380 | 34.77 | 10.93 | 41.6 | 11.62 | | |
| Group 65 JKMxxx M-54HL4-V | 360 | 29.54 | 12.19 | 36.34 | 13.22 | | |
| | 365 | 29.65 | 12.31 | 36.42 | 13.29 | | |
| | 370 | 29.77 | 12.43 | 36.50 | 13.36 | | |
| | 375 | 29.88 | 12.55 | 36.58 | 13.43 | | |
| | 380 | 30.00 | 12.67 | 36.66 | 13.50 | | |
| | 385 | 30.11 | 12.79 | 36.74 | 13.57 | | |
| | 390 | 30.21 | 12.91 | 36.82 | 13.64 | | |
| | 395 | 30.32 | 13.03 | 36.90 | 13.71 | | |
| | 400 | 30.42 | 13.15 | 36.98 | 13.78 | | |
| | 405 | 30.52 | 13.27 | 37.06 | 13.85 | | |
| | 410 | 30.62 | 13.39 | 37.14 | 13.92 | | |
| | 415 | 30.79 | 13.48 | 37.31 | 14.01 | | |
| | 420 | 30.91 | 13.59 | 37.43 | 14.12 | | |
| | 425 | 31.07 | 13.68 | 37.59 | 14.22 | | |
| | 430 | 31.23 | 13.77 | 37.75 | 14.33 | | |
| JKMxxxM-54HL4-B-V | 380 | 30.48 | 12.47 | 36.58 | 13.23 | | |
| | 385 | 30.68 | 12.55 | 36.78 | 13.31 | | |
| | 390 | 30.88 | 12.63 | 36.98 | 13.39 | | |
| | 395 | 31.08 | 12.71 | 37.18 | 13.47 | | |
| | 400 | 31.28 | 12.79 | 37.38 | 13.55 | | |
| JKMxxx M-54HL4-TV | 360 | 29.73 | 12.11 | 36.42 | 13.19 | | |
| | 365 | 29.85 | 12.23 | 36.5 | 13.26 | | |
| | 370 | 29.96 | 12.35 | 36.58 | 13.33 | | |
| | 375 | 30.08 | 12.47 | 36.66 | 13.4 | | |
| | 380 | 30.19 | 12.59 | 36.74 | 13.47 | | |
| | 385 | 30.29 | 12.71 | 36.82 | 13.54 | | |
| | 390 | 30.4 | 12.83 | 36.9 | 13.61 | | |
| | 395 | 30.51 | 12.95 | 36.98 | 13.68 | | |
| | 400 | 30.61 | 13.07 | 37.06 | 13.75 | | |
| | 405 | 30.76 | 13.17 | 37.21 | 13.84 | | |
| | 410 | 30.9 | 13.27 | 37.35 | 13.93 | | |
| Group 66 | 375 | 29.88 | 12.55 | 36.58 | 13.43 | | |

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| JKMxxx M-5RL4- V | 380 | 30.00 | 12.67 | 36.66 | 13.50 | | |
| | 385 | 30.11 | 12.79 | 36.74 | 13.57 | | |
| | 390 | 30.21 | 12.91 | 36.82 | 13.64 | | |
| | 395 | 30.32 | 13.03 | 36.90 | 13.71 | | |
| | 400 | 30.42 | 13.15 | 36.98 | 13.78 | | |
| | 405 | 30.52 | 13.27 | 37.06 | 13.85 | | |
| JKMxxxM -5RL4-B- V | 375 | 30.27 | 12.39 | 36.37 | 13.15 | | |
| | 380 | 30.48 | 12.47 | 36.58 | 13.23 | | |
| | 385 | 30.68 | 12.55 | 36.78 | 13.31 | | |
| | 390 | 30.88 | 12.63 | 36.98 | 13.39 | | |
| | 395 | 31.08 | 12.71 | 37.18 | 13.47 | | |
| JKMxxx M-5RL4- TV | 365 | 29.85 | 12.23 | 36.5 | 13.26 | | |
| | 370 | 29.96 | 12.35 | 36.58 | 13.33 | | |
| | 375 | 30.08 | 12.47 | 36.66 | 13.4 | | |
| | 380 | 30.19 | 12.59 | 36.74 | 13.47 | | |
| | 385 | 30.29 | 12.71 | 36.82 | 13.54 | | |
| | 390 | 30.4 | 12.83 | 36.9 | 13.61 | | |
| | 395 | 30.51 | 12.95 | 36.98 | 13.68 | | |
| | 400 | 30.61 | 13.07 | 37.06 | 13.75 | | |
| | 405 | 30.76 | 13.17 | 37.21 | 13.84 | | |
| Group 67 JKMxxx M-60HL4- V | 400 | 32.87 | 12.17 | 40.38 | 13.25 | | |
| | 405 | 32.98 | 12.28 | 40.46 | 13.31 | | |
| | 410 | 33.09 | 12.39 | 40.54 | 13.37 | | |
| | 415 | 33.20 | 12.50 | 40.62 | 13.43 | | |
| | 420 | 33.31 | 12.61 | 40.70 | 13.49 | | |
| | 425 | 33.42 | 12.72 | 40.78 | 13.55 | | |
| | 430 | 33.52 | 12.83 | 40.86 | 13.61 | | |
| | 435 | 33.62 | 12.94 | 40.94 | 13.67 | | |
| | 440 | 33.72 | 13.05 | 41.02 | 13.73 | | |
| | 445 | 33.82 | 13.16 | 41.10 | 13.79 | | |
| | 450 | 33.91 | 13.27 | 41.18 | 13.85 | | |
| | 455 | 34.06 | 13.36 | 41.33 | 13.93 | | |
| | 460 | 34.2 | 13.45 | 41.48 | 14.01 | | |
| | 465 | 34.37 | 13.53 | 41.63 | 14.09 | | |
| | 470 | 34.56 | 13.60 | 41.78 | 14.17 | | |
| | 475 | 34.75 | 13.67 | 41.93 | 14.25 | | |
| | 480 | 34.94 | 13.74 | 42.08 | 14.33 | | |
| | 485 | 35.12 | 13.81 | 42.22 | 14.41 | | |
| JKMxxxM -60HL4- B-V | 425 | 34.06 | 12.48 | 40.83 | 13.24 | | |
| | 430 | 34.24 | 12.56 | 41.01 | 13.32 | | |
| | 435 | 34.42 | 12.64 | 41.19 | 13.4 | | |

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| | 440 | 34.59 | 12.72 | 41.36 | 13.48 | | |
| | 445 | 34.77 | 12.8 | 41.54 | 13.56 | | |
| JKMxxxM -60HL4- TV | 400 | 33.06 | 12.1 | 40.37 | 13.07 | | |
| | 405 | 33.17 | 12.21 | 40.46 | 13.15 | | |
| | 410 | 33.28 | 12.32 | 40.55 | 13.23 | | |
| | 415 | 33.39 | 12.43 | 40.64 | 13.31 | | |
| | 420 | 33.5 | 12.54 | 40.73 | 13.39 | | |
| | 425 | 33.6 | 12.65 | 40.82 | 13.47 | | |
| | 430 | 33.7 | 12.76 | 40.91 | 13.55 | | |
| | 435 | 33.8 | 12.87 | 41 | 13.63 | | |
| | 440 | 33.9 | 12.98 | 41.09 | 13.71 | | |
| | 445 | 34 | 13.09 | 41.18 | 13.79 | | |
| | 450 | 34.15 | 13.18 | 41.33 | 13.87 | | |
| | 455 | 34.29 | 13.27 | 41.47 | 13.95 | | |
| Group 68 | 415 | 33.20 | 12.50 | 40.62 | 13.43 | | |
| | 420 | 33.31 | 12.61 | 40.70 | 13.49 | | |
| | 425 | 33.42 | 12.72 | 40.78 | 13.55 | | |
| | 430 | 33.52 | 12.83 | 40.86 | 13.61 | | |
| JKMxxx M-6TL4-V | 435 | 33.62 | 12.94 | 40.94 | 13.67 | | |
| | 440 | 33.72 | 13.05 | 41.02 | 13.73 | | |
| | 445 | 33.82 | 13.16 | 41.1 | 13.79 | | |
| | 450 | 33.91 | 13.27 | 41.18 | 13.85 | | |
| | 415 | 33.69 | 12.32 | 40.46 | 13.08 | | |
| JKMxxxM -6TL4-B- V | 420 | 33.87 | 12.4 | 40.64 | 13.16 | | |
| | 425 | 34.06 | 12.48 | 40.83 | 13.24 | | |
| | 430 | 34.24 | 12.56 | 41.01 | 13.32 | | |
| | 435 | 34.42 | 12.64 | 41.19 | 13.4 | | |
| | 440 | 34.59 | 12.72 | 41.36 | 13.48 | | |
| | 405 | 33.17 | 12.21 | 40.46 | 13.15 | | |
| JKMxxxM -6TL4-TV | 410 | 33.28 | 12.32 | 40.55 | 13.23 | | |
| | 415 | 33.39 | 12.43 | 40.64 | 13.31 | | |
| | 420 | 33.5 | 12.54 | 40.73 | 13.39 | | |
| | 425 | 33.6 | 12.65 | 40.82 | 13.47 | | |
| | 430 | 33.7 | 12.76 | 40.91 | 13.55 | | |
| | 435 | 33.8 | 12.87 | 41 | 13.63 | | |
| | 440 | 33.9 | 12.98 | 41.09 | 13.71 | | |
| | 445 | 34 | 13.09 | 41.18 | 13.79 | | |
| | 450 | 34.15 | 13.18 | 41.33 | 13.87 | | |
| | 440 | 36.49 | 12.06 | 44.42 | 13.08 | | |
| Group 69 | 445 | 36.57 | 12.17 | 44.50 | 13.15 | | |
| | 450 | 36.65 | 12.28 | 44.58 | 13.22 | | |

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| JKMxxxM -66HL4-V | 455 | 36.73 | 12.39 | 44.66 | 13.29 | | |
| | 460 | 36.80 | 12.50 | 44.74 | 13.36 | | |
| | 465 | 36.88 | 12.61 | 44.82 | 13.43 | | |
| | 470 | 36.95 | 12.72 | 44.90 | 13.50 | | |
| | 475 | 37.03 | 12.83 | 44.98 | 13.57 | | |
| | 480 | 37.10 | 12.94 | 45.06 | 13.64 | | |
| | 485 | 37.17 | 13.05 | 45.14 | 13.71 | | |
| | 490 | 37.24 | 13.16 | 45.22 | 13.78 | | |
| | 495 | 37.31 | 13.27 | 45.3 | 13.85 | | |
| | 500 | 37.46 | 13.35 | 45.45 | 13.93 | | |
| | 505 | 37.61 | 13.43 | 45.6 | 14.01 | | |
| JKMxxx M-66HL4- B-V | 465 | 37.29 | 12.47 | 44.74 | 13.23 | | |
| | 470 | 37.48 | 12.54 | 44.93 | 13.3 | | |
| | 475 | 37.67 | 12.61 | 45.12 | 13.37 | | |
| | 480 | 37.86 | 12.68 | 45.31 | 13.44 | | |
| | 485 | 38.04 | 12.75 | 45.49 | 13.51 | | |
| | 490 | 38.55 | 12.82 | 45.67 | 13.58 | | |
| JKMxxxM -66HL4- TV | 440 | 36.37 | 12.1 | 44.4 | 13.09 | | |
| | 445 | 36.48 | 12.2 | 44.49 | 13.16 | | |
| | 450 | 36.59 | 12.3 | 44.58 | 13.23 | | |
| | 455 | 36.7 | 12.4 | 44.67 | 13.3 | | |
| | 460 | 36.8 | 12.5 | 44.76 | 13.37 | | |
| | 465 | 36.91 | 12.6 | 44.85 | 13.44 | | |
| | 470 | 37.01 | 12.7 | 44.94 | 13.51 | | |
| | 475 | 37.11 | 12.8 | 45.03 | 13.58 | | |
| | 480 | 37.21 | 12.9 | 45.12 | 13.65 | | |
| | 485 | 37.31 | 13 | 45.21 | 13.72 | | |
| | 490 | 37.41 | 13.1 | 45.3 | 13.79 | | |
| | 495 | 37.56 | 13.18 | 45.45 | 13.87 | | |
| | 500 | 37.71 | 13.26 | 45.6 | 13.95 | | |
| Group 70 JKMxxxM -6RL4-V | 455 | 36.73 | 12.39 | 44.66 | 13.29 | | |
| | 460 | 36.80 | 12.50 | 44.74 | 13.36 | | |
| | 465 | 36.88 | 12.61 | 44.82 | 13.43 | | |
| | 470 | 36.95 | 12.72 | 44.90 | 13.50 | | |
| | 475 | 37.03 | 12.83 | 44.98 | 13.57 | | |
| | 480 | 37.10 | 12.94 | 45.06 | 13.64 | | |
| | 485 | 37.17 | 13.05 | 45.14 | 13.71 | | |
| | 490 | 37.24 | 13.16 | 45.22 | 13.78 | | |
| | 495 | 37.31 | 13.27 | 45.3 | 13.85 | | |
| | 455 | 36.91 | 12.33 | 44.36 | 13.09 | | |
| | 460 | 37.1 | 12.4 | 44.55 | 13.16 | | |

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| JKMxxx M-6RL4- B-V | 465 | 37.29 | 12.47 | 44.74 | 13.23 | | |
| | 470 | 37.48 | 12.54 | 44.93 | 13.3 | | |
| | 475 | 37.67 | 12.61 | 45.12 | 13.37 | | |
| | 480 | 37.86 | 12.68 | 45.31 | 13.44 | | |
| | 485 | 38.04 | 12.75 | 45.49 | 13.51 | | |
| JKMxxxM -6RL4-TV | 445 | 36.48 | 12.2 | 44.49 | 13.16 | | |
| | 450 | 36.59 | 12.3 | 44.58 | 13.23 | | |
| | 455 | 36.7 | 12.4 | 44.67 | 13.3 | | |
| | 460 | 36.8 | 12.5 | 44.76 | 13.37 | | |
| | 465 | 36.91 | 12.6 | 44.85 | 13.44 | | |
| | 470 | 37.01 | 12.7 | 44.94 | 13.51 | | |
| | 475 | 37.11 | 12.8 | 45.03 | 13.58 | | |
| | 480 | 37.21 | 12.9 | 45.12 | 13.65 | | |
| | 485 | 37.31 | 13 | 45.21 | 13.72 | | |
| | 490 | 37.41 | 13.1 | 45.3 | 13.79 | | |
| | 495 | 37.56 | 13.18 | 45.45 | 13.87 | | |
| Group 71 JKMxxx M-72HL4- V | 475 | 39.69 | 11.97 | 48.38 | 12.94 | | |
| | 480 | 39.77 | 12.07 | 48.46 | 13.01 | | |
| | 485 | 39.86 | 12.17 | 48.54 | 13.08 | | |
| | 490 | 39.94 | 12.27 | 48.62 | 13.15 | | |
| | 495 | 40.02 | 12.37 | 48.70 | 13.22 | | |
| | 500 | 40.10 | 12.47 | 48.78 | 13.29 | | |
| | 505 | 40.18 | 12.57 | 48.86 | 13.36 | | |
| | 510 | 40.26 | 12.67 | 48.94 | 13.43 | | |
| | 515 | 40.33 | 12.77 | 49.02 | 13.50 | | |
| | 520 | 40.41 | 12.87 | 49.10 | 13.57 | | |
| | 525 | 40.48 | 12.97 | 49.18 | 13.64 | | |
| | 530 | 40.56 | 13.07 | 49.26 | 13.71 | | |
| | 535 | 40.63 | 13.17 | 49.34 | 13.79 | | |
| | 540 | 40.70 | 13.27 | 49.42 | 13.85 | | |
| | 545 | 40.8 | 13.36 | 49.52 | 13.94 | | |
| | 550 | 40.9 | 13.45 | 49.62 | 14.03 | | |
| | 555 | 40.99 | 13.54 | 49.72 | 14.12 | | |
| | 560 | 41.09 | 13.63 | 49.82 | 14.21 | | |
| | 565 | 41.21 | 13.71 | 49.93 | 14.3 | | |
| | 570 | 41.34 | 13.79 | 50.04 | 14.39 | | |
| | 575 | 41.46 | 13.87 | 50.14 | 14.48 | | |
| | 580 | 41.58 | 13.95 | 50.24 | 14.57 | | |
| | 585 | 41.7 | 14.03 | 50.34 | 14.66 | | |
| | 510 | 41.23 | 12.37 | 49 | 13.21 | | |
| | 515 | 41.4 | 12.44 | 49.17 | 13.28 | | |

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| JKMxxxM -72HL4- B-V | 520 | 41.57 | 12.51 | 49.34 | 13.35 | | |
| | 525 | 41.74 | 12.58 | 49.51 | 13.42 | | |
| | 530 | 41.9 | 12.65 | 49.67 | 13.49 | | |
| | 535 | 42.06 | 12.72 | 49.83 | 13.56 | | |
| JKMxxxM -72HL4- TV | 475 | 39.49 | 12.03 | 48.5 | 12.87 | | |
| | 480 | 39.61 | 12.12 | 48.58 | 12.94 | | |
| | 485 | 39.72 | 12.21 | 48.66 | 13.02 | | |
| | 490 | 39.84 | 12.3 | 48.74 | 13.1 | | |
| | 495 | 39.96 | 12.39 | 48.82 | 13.18 | | |
| | 500 | 40.07 | 12.48 | 48.9 | 13.25 | | |
| | 505 | 40.18 | 12.57 | 48.98 | 13.32 | | |
| | 510 | 40.29 | 12.66 | 49.05 | 13.4 | | |
| | 515 | 40.4 | 12.75 | 49.12 | 13.47 | | |
| | 520 | 40.5 | 12.84 | 49.2 | 13.54 | | |
| | 525 | 40.61 | 12.93 | 49.27 | 13.64 | | |
| | 530 | 40.71 | 13.02 | 49.35 | 13.71 | | |
| | 535 | 40.81 | 13.11 | 49.42 | 13.79 | | |
| | 540 | 40.91 | 13.2 | 49.49 | 13.87 | | |
| | 545 | 41.07 | 13.27 | 49.65 | 13.94 | | |
| | 550 | 41.23 | 13.34 | 49.81 | 14.01 | | |
| | 555 | 41.39 | 13.41 | 49.97 | 14.08 | | |
| | 560 | 41.55 | 13.48 | 50.13 | 14.15 | | |
| | 565 | 41.7 | 13.55 | 50.29 | 14.22 | | |
| | 570 | 41.85 | 13.62 | 50.45 | 14.29 | | |
| | 575 | 42 | 13.69 | 50.61 | 14.36 | | |
| | 580 | 42.15 | 13.76 | 50.77 | 14.43 | | |
| Group 72 JKMxxxM -7TL4-V | 495 | 40.02 | 12.37 | 48.70 | 13.22 | | |
| | 500 | 40.10 | 12.47 | 48.78 | 13.29 | | |
| | 505 | 40.18 | 12.57 | 48.86 | 13.36 | | |
| | 510 | 40.26 | 12.67 | 48.94 | 13.43 | | |
| | 515 | 40.33 | 12.77 | 49.02 | 13.50 | | |
| | 520 | 40.41 | 12.87 | 49.10 | 13.57 | | |
| | 525 | 40.48 | 12.97 | 49.18 | 13.64 | | |
| | 530 | 40.56 | 13.07 | 49.26 | 13.71 | | |
| | 535 | 40.63 | 13.17 | 49.34 | 13.79 | | |
| | 540 | 40.7 | 13.27 | 49.42 | 13.85 | | |
| JKMxxx M-7TL4- B-V | 495 | 40.71 | 12.16 | 48.48 | 13 | | |
| | 500 | 40.89 | 12.23 | 48.66 | 13.07 | | |
| | 505 | 41.06 | 12.3 | 48.83 | 13.14 | | |
| | 510 | 41.23 | 12.37 | 49 | 13.21 | | |
| | 515 | 41.4 | 12.44 | 49.17 | 13.28 | | |

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| | 520 | 41.57 | 12.51 | 49.34 | 13.35 | | |
| | 525 | 41.74 | 12.58 | 49.51 | 13.42 | | |
| | 530 | 41.9 | 12.65 | 49.67 | 13.49 | | |
| JKMxxxM-7TL4-TV | 485 | 39.72 | 12.21 | 48.66 | 13.02 | | |
| | 490 | 39.84 | 12.3 | 48.74 | 13.1 | | |
| | 495 | 39.96 | 12.39 | 48.82 | 13.18 | | |
| | 500 | 40.07 | 12.48 | 48.9 | 13.25 | | |
| | 505 | 40.18 | 12.57 | 48.98 | 13.32 | | |
| | 510 | 40.29 | 12.66 | 49.05 | 13.4 | | |
| | 515 | 40.4 | 12.75 | 49.12 | 13.47 | | |
| | 520 | 40.5 | 12.84 | 49.2 | 13.54 | | |
| | 525 | 40.61 | 12.93 | 49.27 | 13.64 | | |
| | 530 | 40.71 | 13.02 | 49.35 | 13.71 | | |
| | 535 | 40.81 | 13.11 | 49.42 | 13.79 | | |
| | 540 | 40.91 | 13.2 | 49.49 | 13.87 | | |
| Group 73 | 535 | 43.46 | 12.31 | 53.04 | 12.92 | | |
| | 540 | 43.59 | 12.39 | 53.14 | 13.00 | | |
| | 545 | 43.71 | 12.47 | 53.24 | 13.08 | | |
| | 550 | 43.83 | 12.55 | 53.34 | 13.17 | | |
| | 555 | 43.95 | 12.63 | 53.44 | 13.26 | | |
| | 560 | 44.06 | 12.71 | 53.54 | 13.35 | | |
| | 565 | 44.18 | 12.79 | 53.64 | 13.44 | | |
| | 570 | 44.29 | 12.87 | 53.74 | 13.52 | | |
| | 575 | 44.40 | 12.95 | 53.84 | 13.61 | | |
| | 580 | 44.52 | 13.03 | 53.94 | 13.68 | | |
| | 585 | 44.63 | 13.11 | 54.04 | 13.75 | | |
| | 590 | 44.73 | 13.19 | 54.14 | 13.81 | | |
| JKMxxxM-7RL4-B-V | 540 | 44.38 | 12.17 | 52.8 | 13.01 | | |
| | 545 | 44.53 | 12.24 | 52.95 | 13.08 | | |
| | 550 | 44.68 | 12.31 | 53.1 | 13.15 | | |
| | 555 | 44.83 | 12.38 | 53.25 | 13.22 | | |
| | 560 | 44.98 | 12.45 | 53.4 | 13.29 | | |
| | 565 | 45.13 | 12.52 | 53.55 | 13.36 | | |
| | 570 | 45.28 | 12.59 | 53.7 | 13.43 | | |
| | 575 | 45.42 | 12.66 | 53.84 | 13.5 | | |
| JKMxxxM-7RL4-TV | 525 | 43.11 | 12.18 | 52.85 | 12.92 | | |
| | 530 | 43.24 | 12.26 | 52.93 | 12.99 | | |
| | 535 | 43.36 | 12.34 | 53.02 | 13.06 | | |
| | 540 | 43.48 | 12.42 | 53.1 | 13.13 | | |
| | 545 | 43.6 | 12.5 | 53.19 | 13.2 | | |
| | 550 | 43.72 | 12.58 | 53.27 | 13.27 | | |

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| | 555 | 43.84 | 12.66 | 53.36 | 13.34 | | |
| | 560 | 43.96 | 12.74 | 53.44 | 13.41 | | |
| | 565 | 44.08 | 12.82 | 53.53 | 13.48 | | |
| | 570 | 44.19 | 12.9 | 53.61 | 13.55 | | |
| | 575 | 44.3 | 12.98 | 53.7 | 13.62 | | |
| | 580 | 44.41 | 13.06 | 53.81 | 13.7 | | |
| | 585 | 44.52 | 13.14 | 53.92 | 13.78 | | |
| | 590 | 44.63 | 13.22 | 54.03 | 13.86 | | |
| Group 74 JKMxxxN -54HL4R- V | 365 | 29.44 | 12.4 | 36.04 | 13.15 | | |
| | 370 | 29.63 | 12.49 | 36.23 | 13.24 | | |
| | 375 | 29.81 | 12.58 | 36.41 | 13.33 | | |
| | 380 | 30 | 12.67 | 36.6 | 13.42 | | |
| | 385 | 30.18 | 12.76 | 36.78 | 13.51 | | |
| | 390 | 30.38 | 12.84 | 36.98 | 13.59 | | |
| | 395 | 30.55 | 12.93 | 37.15 | 13.67 | | |
| | 400 | 30.75 | 13.01 | 37.35 | 13.75 | | |
| | 405 | 30.94 | 13.09 | 37.54 | 13.83 | | |
| | 410 | 31.54 | 13.00 | 38.11 | 13.45 | | |
| | 415 | 31.76 | 13.07 | 38.33 | 13.52 | | |
| | 420 | 31.97 | 13.14 | 38.54 | 13.59 | | |
| | 425 | 32.18 | 13.21 | 38.75 | 13.66 | | |
| | 430 | 32.38 | 13.28 | 38.95 | 13.73 | | |
| | 435 | 32.59 | 13.35 | 39.16 | 13.80 | | |
| | 440 | 32.81 | 13.41 | 39.38 | 13.86 | | |
| | 445 | 33.02 | 13.48 | 39.59 | 13.93 | | |
| JKMxxxN -54HL4R- B | 450 | 33.21 | 13.55 | 39.78 | 14.00 | | |
| | 455 | 33.41 | 13.62 | 39.98 | 14.07 | | |
| | 380 | 30.48 | 12.47 | 36.58 | 13.23 | | |
| | 385 | 30.68 | 12.55 | 36.78 | 13.31 | | |
| | 390 | 30.88 | 12.63 | 36.98 | 13.39 | | |
| | 395 | 31.08 | 12.71 | 37.18 | 13.47 | | |
| | 400 | 31.28 | 12.79 | 37.38 | 13.55 | | |
| | 405 | 31.52 | 12.85 | 38.10 | 13.30 | | |
| | 410 | 31.74 | 12.92 | 38.32 | 13.37 | | |
| | 415 | 31.95 | 12.99 | 38.53 | 13.44 | | |
| | 420 | 32.16 | 13.06 | 38.74 | 13.51 | | |
| | 425 | 32.37 | 13.13 | 38.95 | 13.58 | | |
| | 430 | 32.58 | 13.20 | 39.16 | 13.65 | | |
| | 435 | 32.78 | 13.27 | 39.36 | 13.72 | | |
| | 440 | 32.99 | 13.34 | 39.57 | 13.80 | | |
| | 445 | 33.19 | 13.41 | 39.77 | 13.87 | | |

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|------------------------------------|-----|-------|-------|-------|-------|--|--|
| | 450 | 33.39 | 13.48 | 39.97 | 13.94 | | |
| JKMxxxN -54HL4- TV | 360 | 29.39 | 12.25 | 35.87 | 13.02 | | |
| | 365 | 29.58 | 12.34 | 36.06 | 13.11 | | |
| | 370 | 29.77 | 12.43 | 36.25 | 13.2 | | |
| | 375 | 29.96 | 12.52 | 36.44 | 13.29 | | |
| | 380 | 30.14 | 12.61 | 36.62 | 13.38 | | |
| | 385 | 30.32 | 12.7 | 36.8 | 13.47 | | |
| | 390 | 30.52 | 12.78 | 37 | 13.55 | | |
| | 395 | 30.72 | 12.86 | 37.2 | 13.63 | | |
| | 400 | 30.92 | 12.94 | 37.4 | 13.71 | | |
| | 405 | 31.11 | 13.02 | 37.59 | 13.79 | | |
| | 410 | 31.3 | 13.1 | 37.78 | 13.87 | | |
| | 415 | 31.49 | 13.18 | 37.97 | 13.95 | | |
| | 420 | 31.68 | 13.26 | 38.16 | 14.03 | | |
| | 425 | 31.86 | 13.34 | 38.35 | 14.11 | | |
| | 430 | 32.07 | 13.41 | 38.54 | 14.19 | | |
| Group 75 JKMxxxN -5RL4-V | 375 | 29.81 | 12.58 | 36.41 | 13.33 | | |
| | 380 | 30 | 12.67 | 36.6 | 13.42 | | |
| | 385 | 30.18 | 12.76 | 36.78 | 13.51 | | |
| | 390 | 30.38 | 12.84 | 36.98 | 13.59 | | |
| | 395 | 30.55 | 12.93 | 37.15 | 13.67 | | |
| | 400 | 30.75 | 13.01 | 37.35 | 13.75 | | |
| | 405 | 30.94 | 13.09 | 37.54 | 13.83 | | |
| | 375 | 29.81 | 12.58 | 36.41 | 13.33 | | |
| | 380 | 30 | 12.67 | 36.6 | 13.42 | | |
| JKMxxxN -5RL4-B- V | 375 | 30.27 | 12.39 | 36.37 | 13.15 | | |
| | 380 | 30.48 | 12.47 | 36.58 | 13.23 | | |
| | 385 | 30.68 | 12.55 | 36.78 | 13.31 | | |
| | 390 | 30.88 | 12.63 | 36.98 | 13.39 | | |
| | 395 | 31.08 | 12.71 | 37.18 | 13.47 | | |
| JKMxxxN -5RL4-TV | 365 | 29.58 | 12.34 | 36.06 | 13.11 | | |
| | 370 | 29.77 | 12.43 | 36.25 | 13.2 | | |
| | 375 | 29.96 | 12.52 | 36.44 | 13.29 | | |
| | 380 | 30.14 | 12.61 | 36.62 | 13.38 | | |
| | 385 | 30.32 | 12.7 | 36.8 | 13.47 | | |
| | 390 | 30.52 | 12.78 | 37 | 13.55 | | |
| | 395 | 30.72 | 12.86 | 37.2 | 13.63 | | |
| | 400 | 30.92 | 12.94 | 37.4 | 13.71 | | |
| | 405 | 31.11 | 13.02 | 37.59 | 13.79 | | |
| | 410 | 33.58 | 12.21 | 41.50 | 12.82 | | |
| Group 76 | 405 | 33.39 | 12.13 | 41.35 | 12.75 | | |

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|---------------------------|-----|-------|-------|-------|-------|--|--|
| JKMxxxN -60HL4R- V | 415 | 33.77 | 12.29 | 41.65 | 12.89 | | |
| | 420 | 33.95 | 12.37 | 41.80 | 12.95 | | |
| | 425 | 34.14 | 12.45 | 41.95 | 13.03 | | |
| | 430 | 34.32 | 12.53 | 42.10 | 13.10 | | |
| | 435 | 34.50 | 12.61 | 42.25 | 13.18 | | |
| | 440 | 34.67 | 12.69 | 42.40 | 13.25 | | |
| | 445 | 34.85 | 12.77 | 42.55 | 13.32 | | |
| | 450 | 35.02 | 12.85 | 42.70 | 13.39 | | |
| | 455 | 35.19 | 12.93 | 42.85 | 13.46 | | |
| | 460 | 35.36 | 13.01 | 43.00 | 13.53 | | |
| | 465 | 35.52 | 13.09 | 43.15 | 13.61 | | |
| | 470 | 35.69 | 13.17 | 43.30 | 13.69 | | |
| | 475 | 35.88 | 13.24 | 43.45 | 13.77 | | |
| | 480 | 36.06 | 13.31 | 43.60 | 13.85 | | |
| | 485 | 36.25 | 13.38 | 43.76 | 13.93 | | |
| | 490 | 36.43 | 13.45 | 43.91 | 14.01 | | |
| | 495 | 36.62 | 13.52 | 44.07 | 14.09 | | |
| | 500 | 36.79 | 13.59 | 44.21 | 14.17 | | |
| | 505 | 36.97 | 13.66 | 44.36 | 14.25 | | |
| | 510 | 37.15 | 13.73 | 44.51 | 14.33 | | |
| JKMxxxN -60HL4- B-V | 425 | 34.06 | 12.48 | 40.83 | 13.24 | | |
| | 430 | 34.24 | 12.56 | 41.01 | 13.32 | | |
| | 435 | 34.42 | 12.64 | 41.19 | 13.4 | | |
| | 440 | 34.59 | 12.72 | 41.36 | 13.48 | | |
| | 445 | 34.77 | 12.8 | 41.54 | 13.56 | | |
| | 450 | 34.94 | 12.88 | 41.71 | 13.64 | | |
| | 455 | 35.11 | 12.96 | 41.88 | 13.72 | | |
| | 460 | 35.28 | 13.04 | 42.05 | 13.80 | | |
| | 465 | 35.45 | 13.12 | 42.21 | 13.88 | | |
| | 470 | 35.61 | 13.20 | 42.38 | 13.96 | | |
| JKMxxxN -60HL4- TV | 400 | 32.74 | 12.22 | 39.96 | 12.99 | | |
| | 405 | 32.93 | 12.3 | 40.15 | 13.07 | | |
| | 410 | 33.12 | 12.38 | 40.34 | 13.15 | | |
| | 415 | 33.31 | 12.46 | 40.53 | 13.23 | | |
| | 420 | 33.5 | 12.54 | 40.72 | 13.31 | | |
| | 425 | 33.68 | 12.62 | 40.9 | 13.39 | | |
| | 430 | 33.86 | 12.7 | 41.08 | 13.47 | | |
| | 435 | 34.04 | 12.78 | 41.26 | 13.55 | | |
| | 440 | 34.22 | 12.86 | 41.44 | 13.63 | | |
| | 445 | 34.39 | 12.94 | 41.61 | 13.71 | | |
| | 450 | 34.57 | 13.02 | 41.79 | 13.79 | | |

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|-------------------------------------|-----|-------|-------|-------|-------|--|--|
| | 455 | 34.74 | 13.1 | 41.96 | 13.87 | | |
| | 460 | 34.91 | 13.18 | 42.13 | 13.95 | | |
| | 465 | 35.07 | 13.26 | 42.29 | 14.03 | | |
| | 470 | 35.24 | 13.34 | 42.45 | 14.11 | | |
| | 475 | 35.40 | 13.42 | 42.61 | 14.19 | | |
| | 480 | 35.56 | 13.50 | 42.77 | 14.27 | | |
| Group 77 JKMxxxN -6TL4-V | 415 | 33.12 | 12.53 | 40.45 | 13.27 | | |
| | 420 | 33.31 | 12.61 | 40.64 | 13.35 | | |
| | 425 | 33.49 | 12.69 | 40.82 | 13.43 | | |
| | 430 | 33.68 | 12.77 | 41.01 | 13.51 | | |
| | 435 | 33.86 | 12.85 | 41.19 | 13.59 | | |
| | 440 | 34.03 | 12.93 | 41.36 | 13.67 | | |
| | 445 | 34.21 | 13.01 | 41.54 | 13.75 | | |
| | 450 | 34.38 | 13.09 | 41.71 | 13.83 | | |
| JKMxxxN -6TL4-B- V | 415 | 33.69 | 12.32 | 40.46 | 13.08 | | |
| | 420 | 33.87 | 12.4 | 40.64 | 13.16 | | |
| | 425 | 34.06 | 12.48 | 40.83 | 13.24 | | |
| | 430 | 34.24 | 12.56 | 41.01 | 13.32 | | |
| | 435 | 34.42 | 12.64 | 41.19 | 13.4 | | |
| | 440 | 34.59 | 12.72 | 41.36 | 13.48 | | |
| JKMxxxN -6TL4-TV | 400 | 32.74 | 12.22 | 39.96 | 12.99 | | |
| | 405 | 32.93 | 12.3 | 40.15 | 13.07 | | |
| | 410 | 33.12 | 12.38 | 40.34 | 13.15 | | |
| | 415 | 33.31 | 12.46 | 40.53 | 13.23 | | |
| | 420 | 33.5 | 12.54 | 40.72 | 13.31 | | |
| | 425 | 33.68 | 12.62 | 40.9 | 13.39 | | |
| | 430 | 33.86 | 12.7 | 41.08 | 13.47 | | |
| | 435 | 34.04 | 12.78 | 41.26 | 13.55 | | |
| | 440 | 34.22 | 12.86 | 41.44 | 13.63 | | |
| | 445 | 34.39 | 12.94 | 41.61 | 13.71 | | |
| | 450 | 34.57 | 13.02 | 41.79 | 13.79 | | |
| Group 78 JKMxxxN -66HL4-V | 445 | 36.45 | 12.21 | 44.48 | 13.07 | | |
| | 450 | 36.62 | 12.29 | 44.65 | 13.14 | | |
| | 455 | 36.79 | 12.37 | 44.82 | 13.21 | | |
| | 460 | 36.95 | 12.45 | 44.98 | 13.28 | | |
| | 465 | 37.11 | 12.53 | 45.14 | 13.35 | | |
| | 470 | 37.28 | 12.61 | 45.31 | 13.42 | | |
| | 475 | 37.43 | 12.69 | 45.46 | 13.49 | | |
| | 480 | 37.59 | 12.77 | 45.62 | 13.56 | | |
| | 485 | 37.75 | 12.85 | 45.78 | 13.63 | | |
| | 490 | 37.9 | 12.93 | 45.93 | 13.7 | | |

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| | 495 | 38.05 | 13.01 | 46.08 | 13.77 | | |
| | 500 | 38.2 | 13.09 | 46.23 | 13.84 | | |
| | 505 | 38.35 | 13.17 | 46.38 | 13.91 | | |
| JKMxxxN -66HL4- B-V | 465 | 37.29 | 12.47 | 44.74 | 13.23 | | |
| | 470 | 37.48 | 12.54 | 44.93 | 13.3 | | |
| | 475 | 37.67 | 12.61 | 45.12 | 13.37 | | |
| | 480 | 37.86 | 12.68 | 45.31 | 13.44 | | |
| | 485 | 38.04 | 12.75 | 45.49 | 13.51 | | |
| | 490 | 38.22 | 12.82 | 45.67 | 13.58 | | |
| JKMxxxN -66HL4- TV | 440 | 36.25 | 12.14 | 44 | 12.91 | | |
| | 445 | 36.42 | 12.22 | 44.19 | 12.99 | | |
| | 450 | 36.59 | 12.3 | 44.38 | 13.07 | | |
| | 455 | 36.76 | 12.38 | 44.57 | 13.15 | | |
| | 460 | 36.92 | 12.46 | 44.75 | 13.23 | | |
| | 465 | 37.09 | 12.54 | 44.94 | 13.31 | | |
| | 470 | 37.25 | 12.62 | 45.12 | 13.39 | | |
| | 475 | 37.41 | 12.7 | 45.3 | 13.47 | | |
| | 480 | 37.56 | 12.78 | 45.47 | 13.55 | | |
| | 485 | 37.72 | 12.86 | 45.65 | 13.63 | | |
| | 490 | 37.87 | 12.94 | 45.82 | 13.71 | | |
| | 495 | 38.02 | 13.02 | 45.97 | 13.79 | | |
| Group 79 JKMxxxN -6RL4-V | 455 | 36.79 | 12.37 | 44.82 | 13.21 | | |
| | 460 | 36.95 | 12.45 | 44.98 | 13.28 | | |
| | 465 | 37.11 | 12.53 | 45.14 | 13.35 | | |
| | 470 | 37.28 | 12.61 | 45.31 | 13.42 | | |
| | 475 | 37.43 | 12.69 | 45.46 | 13.49 | | |
| | 480 | 37.59 | 12.77 | 45.62 | 13.56 | | |
| | 485 | 37.75 | 12.85 | 45.78 | 13.63 | | |
| | 490 | 37.9 | 12.93 | 45.93 | 13.7 | | |
| | 495 | 38.05 | 13.01 | 46.08 | 13.77 | | |
| | | | | | | | |
| JKMxxxN -6RL4-B- V | 455 | 36.91 | 12.33 | 44.36 | 13.09 | | |
| | 460 | 37.1 | 12.4 | 44.55 | 13.16 | | |
| | 465 | 37.29 | 12.47 | 44.74 | 13.23 | | |
| | 470 | 37.48 | 12.54 | 44.93 | 13.3 | | |
| | 475 | 37.67 | 12.61 | 45.12 | 13.37 | | |
| | 480 | 37.86 | 12.68 | 45.31 | 13.44 | | |
| | 485 | 38.04 | 12.75 | 45.49 | 13.51 | | |
| JKMxxxN -6RL4-TV | 440 | 36.25 | 12.14 | 44 | 12.91 | | |
| | 445 | 36.42 | 12.22 | 44.19 | 12.99 | | |
| | 450 | 36.59 | 12.3 | 44.38 | 13.07 | | |
| | 455 | 36.76 | 12.38 | 44.57 | 13.15 | | |

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|---------------------------|-----|-------|-------|-------|-------|--|--|
| | 460 | 36.92 | 12.46 | 44.75 | 13.23 | | |
| | 465 | 37.09 | 12.54 | 44.94 | 13.31 | | |
| | 470 | 37.25 | 12.62 | 45.12 | 13.39 | | |
| | 475 | 37.41 | 12.7 | 45.3 | 13.47 | | |
| | 480 | 37.56 | 12.78 | 45.47 | 13.55 | | |
| | 485 | 37.72 | 12.86 | 45.65 | 13.63 | | |
| | 490 | 37.87 | 12.94 | 45.82 | 13.71 | | |
| | 495 | 38.02 | 13.02 | 45.97 | 13.79 | | |
| Group 80 | 485 | 39.72 | 12.21 | 48.66 | 13.08 | | |
| | 490 | 39.87 | 12.29 | 48.78 | 13.15 | | |
| | 495 | 40.02 | 12.37 | 48.9 | 13.22 | | |
| | 500 | 40.16 | 12.45 | 49.02 | 13.29 | | |
| | 505 | 40.31 | 12.53 | 49.14 | 13.36 | | |
| | 510 | 40.45 | 12.61 | 49.26 | 13.43 | | |
| | 515 | 40.59 | 12.69 | 49.38 | 13.5 | | |
| | 520 | 40.72 | 12.77 | 49.5 | 13.57 | | |
| | 525 | 40.86 | 12.85 | 49.62 | 13.64 | | |
| | 530 | 41 | 12.93 | 49.74 | 13.71 | | |
| | 535 | 41.13 | 13.01 | 49.86 | 13.77 | | |
| | 540 | 41.26 | 13.09 | 49.98 | 13.83 | | |
| | 545 | 41.38 | 13.17 | 50.1 | 13.91 | | |
| | 550 | 41.51 | 13.25 | 50.22 | 13.99 | | |
| | 555 | 41.64 | 13.33 | 50.34 | 14.07 | | |
| | 560 | 41.77 | 13.41 | 50.47 | 14.15 | | |
| | 565 | 41.92 | 13.48 | 50.60 | 14.23 | | |
| JKMxxxN -72HL4R- V | 570 | 42.07 | 13.55 | 50.74 | 14.31 | | |
| | 575 | 42.22 | 13.62 | 50.88 | 14.39 | | |
| | 580 | 42.37 | 13.69 | 51.02 | 14.47 | | |
| | 585 | 42.52 | 13.76 | 51.16 | 14.55 | | |
| | 590 | 42.67 | 13.83 | 51.30 | 14.63 | | |
| | 595 | 42.81 | 13.90 | 51.41 | 14.71 | | |
| | 600 | 42.95 | 13.97 | 51.56 | 14.79 | | |
| | 605 | 43.09 | 14.04 | 51.71 | 14.85 | | |
| | 610 | 43.24 | 14.11 | 51.82 | 14.95 | | |
| | 615 | 43.38 | 14.18 | 51.95 | 15.03 | | |
| JKMxxxN -72HL4- B-V | 510 | 40.9 | 12.47 | 49.16 | 13.23 | | |
| | 515 | 41.07 | 12.54 | 49.33 | 13.3 | | |
| | 520 | 41.24 | 12.61 | 49.5 | 13.37 | | |
| | 525 | 41.41 | 12.68 | 49.67 | 13.44 | | |
| | 530 | 41.57 | 12.75 | 49.83 | 13.51 | | |
| | 535 | 41.73 | 12.82 | 49.99 | 13.58 | | |

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|--------------------------|-----|-------|-------|-------|-------|--|--|
| JKMxxxN -72HL4- TV | 480 | 39.77 | 12.07 | 48.86 | 12.99 | | |
| | 485 | 39.92 | 12.15 | 48.99 | 13.05 | | |
| | 490 | 40.07 | 12.23 | 49.12 | 13.11 | | |
| | 495 | 40.22 | 12.31 | 49.25 | 13.17 | | |
| | 500 | 40.36 | 12.39 | 49.38 | 13.23 | | |
| | 505 | 40.50 | 12.47 | 49.38 | 13.23 | | |
| | 510 | 40.64 | 12.55 | 49.64 | 13.35 | | |
| | 515 | 40.78 | 12.63 | 49.77 | 13.41 | | |
| | 520 | 40.95 | 12.70 | 49.90 | 13.47 | | |
| | 525 | 41.12 | 12.77 | 50.03 | 13.53 | | |
| | 530 | 41.28 | 12.84 | 50.16 | 13.59 | | |
| | 535 | 41.48 | 12.90 | 50.29 | 13.65 | | |
| | 540 | 41.67 | 12.96 | 50.42 | 13.71 | | |
| | 545 | 41.86 | 13.02 | 50.55 | 13.77 | | |
| | 550 | 42.02 | 13.09 | 50.68 | 13.83 | | |
| | 555 | 42.18 | 13.16 | 50.81 | 13.89 | | |
| | 560 | 42.36 | 13.22 | 50.94 | 13.95 | | |
| | 565 | 42.55 | 13.28 | 51.08 | 14.01 | | |
| | 570 | 42.73 | 13.34 | 51.21 | 14.07 | | |
| | 575 | 42.91 | 13.40 | 51.34 | 14.13 | | |
| | 580 | 43.09 | 13.46 | 51.47 | 14.19 | | |
| | 585 | 43.27 | 13.52 | 51.60 | 14.25 | | |
| | 590 | 43.45 | 13.58 | 51.73 | 14.31 | | |
| | 595 | 43.62 | 13.64 | 51.85 | 14.37 | | |
| | 600 | 43.80 | 13.70 | 51.98 | 14.43 | | |
| | 605 | 43.97 | 13.76 | 52.10 | 14.49 | | |
| JKMxxxN -72HL4-V | 485 | 39.72 | 12.21 | 48.66 | 13.08 | | |
| | 490 | 39.87 | 12.29 | 48.78 | 13.15 | | |
| | 495 | 40.02 | 12.37 | 48.90 | 13.22 | | |
| | 500 | 40.16 | 12.45 | 49.02 | 13.29 | | |
| | 505 | 40.31 | 12.53 | 49.14 | 13.36 | | |
| | 510 | 40.45 | 12.61 | 49.26 | 13.43 | | |
| | 515 | 40.59 | 12.69 | 49.38 | 13.50 | | |
| | 520 | 40.72 | 12.77 | 49.50 | 13.57 | | |
| | 525 | 40.86 | 12.85 | 49.62 | 13.64 | | |
| | 530 | 41.00 | 12.93 | 49.74 | 13.71 | | |
| | 535 | 41.13 | 13.01 | 49.86 | 13.77 | | |
| | 540 | 41.26 | 13.09 | 49.98 | 13.83 | | |
| | 545 | 41.38 | 13.17 | 50.10 | 13.91 | | |
| | 550 | 41.51 | 13.25 | 50.22 | 13.99 | | |
| | 555 | 41.64 | 13.33 | 50.34 | 14.07 | | |

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| | 560 | 41.77 | 13.41 | 50.47 | 14.15 | | |
| | 565 | 41.92 | 13.48 | 50.60 | 14.23 | | |
| | 570 | 42.99 | 13.26 | 51.99 | 13.89 | | |
| | 575 | 43.17 | 13.32 | 52.15 | 13.95 | | |
| | 580 | 43.35 | 13.38 | 52.31 | 14.01 | | |
| | 585 | 43.53 | 13.44 | 52.47 | 14.07 | | |
| | 590 | 43.71 | 13.50 | 52.63 | 14.13 | | |
| | 595 | 43.88 | 13.56 | 52.79 | 14.19 | | |
| | 600 | 44.06 | 13.62 | 52.95 | 14.25 | | |
| | 605 | 43.09 | 14.04 | 51.71 | 14.85 | | |
| | 610 | 43.24 | 14.11 | 51.82 | 14.95 | | |
| | 615 | 43.38 | 14.18 | 51.95 | 15.03 | | |
| Group 81 JKMxxxN -7TL4-V | 495 | 40.02 | 12.37 | 48.9 | 13.22 | | |
| | 500 | 40.16 | 12.45 | 49.02 | 13.29 | | |
| | 505 | 40.31 | 12.53 | 49.14 | 13.36 | | |
| | 510 | 40.45 | 12.61 | 49.26 | 13.43 | | |
| | 515 | 40.59 | 12.69 | 49.38 | 13.5 | | |
| | 520 | 40.72 | 12.77 | 49.5 | 13.57 | | |
| | 525 | 40.86 | 12.85 | 49.62 | 13.64 | | |
| | 530 | 41 | 12.93 | 49.74 | 13.71 | | |
| | 535 | 41.13 | 13.01 | 49.86 | 13.77 | | |
| | 540 | 41.26 | 13.09 | 49.98 | 13.83 | | |
| JKMxxxN -7TL4-B- V | 495 | 40.38 | 12.26 | 48.64 | 13.02 | | |
| | 500 | 40.56 | 12.33 | 48.82 | 13.09 | | |
| | 505 | 40.73 | 12.4 | 48.99 | 13.16 | | |
| | 510 | 40.9 | 12.47 | 49.16 | 13.23 | | |
| | 515 | 41.07 | 12.54 | 49.33 | 13.3 | | |
| | 520 | 41.24 | 12.61 | 49.5 | 13.37 | | |
| | 525 | 41.41 | 12.68 | 49.67 | 13.44 | | |
| | 530 | 41.57 | 12.75 | 49.83 | 13.51 | | |
| JKMxxxN -7TL4-TV | 480 | 39.77 | 12.07 | 48.86 | 12.99 | | |
| | 485 | 39.92 | 12.15 | 48.94 | 13.05 | | |
| | 490 | 40.07 | 12.23 | 49.02 | 13.11 | | |
| | 495 | 40.22 | 12.31 | 49.1 | 13.17 | | |
| | 500 | 40.36 | 12.39 | 49.18 | 13.23 | | |
| | 505 | 40.5 | 12.47 | 49.26 | 13.29 | | |
| | 510 | 40.64 | 12.55 | 49.34 | 13.35 | | |
| | 515 | 40.78 | 12.63 | 49.42 | 13.41 | | |
| | 520 | 40.95 | 12.7 | 49.5 | 13.47 | | |
| | 525 | 41.12 | 12.77 | 49.58 | 13.53 | | |
| | 530 | 41.28 | 12.84 | 49.66 | 13.59 | | |

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|------------------------------------|-----|-------|-------|-------|-------|--|--|
| | 535 | 41.48 | 12.9 | 49.74 | 13.65 | | |
| | 540 | 41.67 | 12.96 | 49.87 | 13.71 | | |
| Group 82 JKMxxxN -7RL4-V | 535 | 43.75 | 12.23 | 53.2 | 13.05 | | |
| | 540 | 43.87 | 12.31 | 53.32 | 13.12 | | |
| | 545 | 43.99 | 12.39 | 53.44 | 13.19 | | |
| | 550 | 44.14 | 12.46 | 53.56 | 13.26 | | |
| | 555 | 44.3 | 12.53 | 53.68 | 13.33 | | |
| | 560 | 44.38 | 12.62 | 53.8 | 13.4 | | |
| | 565 | 44.49 | 12.7 | 53.92 | 13.47 | | |
| | 570 | 44.6 | 12.78 | 54.04 | 13.54 | | |
| | 575 | 44.72 | 12.86 | 54.16 | 13.61 | | |
| | 580 | 44.83 | 12.94 | 54.26 | 13.69 | | |
| | 585 | 44.94 | 13.02 | 54.36 | 13.77 | | |
| | 590 | 45.04 | 13.1 | 54.46 | 13.85 | | |
| JKMxxxN -7RL4-B- V | 540 | 44.02 | 12.27 | 53.11 | 13.02 | | |
| | 545 | 44.17 | 12.34 | 53.26 | 13.09 | | |
| | 550 | 44.32 | 12.41 | 53.41 | 13.16 | | |
| | 555 | 44.47 | 12.48 | 53.56 | 13.23 | | |
| | 560 | 44.62 | 12.55 | 53.71 | 13.3 | | |
| | 565 | 44.77 | 12.62 | 53.86 | 13.37 | | |
| | 570 | 44.92 | 12.69 | 54.01 | 13.44 | | |
| | 575 | 45.07 | 12.76 | 54.16 | 13.51 | | |
| JKMxxxN -7RL4-TV | 520 | 42.63 | 12.2 | 53.13 | 13.13 | | |
| | 525 | 42.83 | 12.26 | 53.22 | 13.18 | | |
| | 530 | 43.02 | 12.32 | 53.31 | 13.23 | | |
| | 535 | 43.22 | 12.38 | 53.4 | 13.28 | | |
| | 540 | 43.41 | 12.44 | 53.49 | 13.33 | | |
| | 545 | 43.6 | 12.5 | 53.58 | 13.37 | | |
| | 550 | 43.79 | 12.56 | 53.67 | 13.41 | | |
| | 555 | 43.98 | 12.62 | 53.76 | 13.45 | | |
| | 560 | 44.17 | 12.68 | 53.85 | 13.49 | | |
| | 565 | 44.35 | 12.74 | 53.94 | 13.53 | | |
| | 570 | 44.53 | 12.8 | 54.03 | 13.57 | | |
| | 575 | 44.72 | 12.86 | 54.12 | 13.61 | | |
| | 580 | 44.89 | 12.92 | 54.21 | 13.65 | | |
| | 585 | 45.07 | 12.98 | 54.3 | 13.69 | | |
| Group 83 | 565 | 44.67 | 12.65 | 53.34 | 13.48 | | |
| | 570 | 44.78 | 12.73 | 53.45 | 13.56 | | |
| | 575 | 44.89 | 12.81 | 53.56 | 13.64 | | |
| | 580 | 45.00 | 12.89 | 53.67 | 13.72 | | |
| | 585 | 45.11 | 12.97 | 53.78 | 13.80 | | |

| | | | | | | | |
|----------|-----|-------|-------|-------|-------|--|--|
| | 590 | 45.21 | 13.05 | 53.89 | 13.88 | | |
| | 595 | 45.32 | 13.13 | 54.00 | 13.96 | | |
| | 600 | 45.42 | 13.21 | 54.11 | 14.04 | | |
| | 605 | 45.53 | 13.29 | 54.22 | 14.12 | | |
| Group 84 | 555 | 44.47 | 12.48 | 53.22 | 13.41 | | |
| | 560 | 44.59 | 12.56 | 53.33 | 13.49 | | |
| | 565 | 44.70 | 12.64 | 53.44 | 13.57 | | |
| | 570 | 44.81 | 12.72 | 53.55 | 13.65 | | |
| | 575 | 44.92 | 12.80 | 53.66 | 13.73 | | |
| | 580 | 45.03 | 12.88 | 53.77 | 13.81 | | |
| | 585 | 45.14 | 12.96 | 53.88 | 13.89 | | |
| | 590 | 45.25 | 13.04 | 53.99 | 13.97 | | |
| | 595 | 45.35 | 13.12 | 54.10 | 14.05 | | |
| Group 85 | 400 | 40.90 | 9.78 | 48.90 | 10.47 | | |
| | 405 | 41.20 | 9.83 | 49.20 | 10.52 | | |
| | 410 | 41.50 | 9.88 | 49.50 | 10.57 | | |
| | 415 | 41.80 | 9.93 | 49.80 | 10.62 | | |
| | 420 | 42.09 | 9.98 | 50.09 | 10.67 | | |
| | 425 | 42.38 | 10.03 | 50.38 | 10.72 | | |
| | 430 | 42.66 | 10.08 | 50.66 | 10.77 | | |
| | 435 | 42.94 | 10.13 | 50.94 | 10.82 | | |
| | 440 | 43.22 | 10.18 | 51.22 | 10.87 | | |
| | 445 | 43.50 | 10.23 | 51.50 | 10.92 | | |
| Group 86 | 330 | 34.70 | 9.51 | 41.32 | 10.52 | | |
| | 335 | 34.83 | 9.62 | 41.45 | 10.63 | | |
| | 340 | 34.95 | 9.73 | 41.58 | 10.74 | | |
| | 345 | 35.06 | 9.84 | 41.69 | 10.85 | | |
| | 350 | 35.17 | 9.95 | 41.80 | 10.96 | | |
| | 355 | 35.29 | 10.06 | 41.92 | 11.07 | | |
| | 360 | 35.40 | 10.17 | 42.04 | 11.18 | | |
| | 365 | 35.51 | 10.28 | 42.15 | 11.29 | | |
| | 370 | 35.62 | 10.39 | 42.26 | 11.40 | | |
| Group 87 | 590 | 45.18 | 13.06 | 54.65 | 13.83 | | |
| | 595 | 45.29 | 13.14 | 54.80 | 13.90 | | |
| | 600 | 45.39 | 13.22 | 54.95 | 13.97 | | |
| | 605 | 45.49 | 13.3 | 55.10 | 14.04 | | |
| | 610 | 45.59 | 13.38 | 55.25 | 14.11 | | |
| | 615 | 45.69 | 13.46 | 55.40 | 14.18 | | |
| | 620 | 45.79 | 13.54 | 55.55 | 14.25 | | |
| | 625 | 45.92 | 13.61 | 55.7 | 14.32 | | |

Note
