#### permobil



# Permobil Battery and Charger System FAQ

#### Do all Permobil power wheelchairs have Permobil batteries?

No. The new Permobil battery will be introduced into our production line beginning 1st October, 2020. Please check with your provider to confirm what type of batteries were provided in your Permobil power wheelchair.

#### What model wheelchairs are the new Permobil batteries available on?

The new Permobil batteries are available on the following models: M3 Corpus; M5 Corpus; M1; M400HD; F3 Corpus; F5 Corpus; F5 Corpus VS.

## What sizes are the new Permobil batteries available in? And are they available for purchase as spare parts for existing power wheelchairs?

The new Permobil Group 24 size (85Ah) battery and the new charger are available from 1st October, 2020 for aftermarket sales.

The new Permobil Group 34 (65Ah) battery will become available Mid-November 2020.

### Is the new Permobil battery the same size as the previously supplied batteries? (Internal question only)

Both batteries are similarly sized; however, due to its increased capacity and higher energy density, the new Group 24 Permobil battery weighs approximately 450gr more.

New Permobil Gr24 (85 Ah): 23,8 kg

New Permobil Gr34 (65 Ah): 17,5 kg

### What are the dimensions of the new Permobil battery L x W x H?

New Permobil battery Group 24: 259 x 170 x 200 mm

New Permobil battery Group 34: 259 x 170 x 160 mm

#### How much further can I go with the new Permobil batteries?

The new Permobil batteries can provide up to 25% further driving distance when charged properly.

#### What is the range on the new Permobil batteries?

For the M & F-Series models, the Group 24 Permobil batteries can achieve a range of up to 40 kilometres (please see product datasheet for relevant details) under normal driving conditions. The Group 34 Permobil batteries can achieve a range of up to 30 kilometres (F3 Corpus; M3 Corpus) under normal driving conditions for the same models.

## Why is there a difference between battery status information in the MyPermobil app versus on the joystick display?

The methods used to calculate a power wheelchair's battery level are different so discrepancies between the app and joystick indicator lights may occur. The joystick display may consider a surface charge or fast increase in voltage when representing battery status. MyPermobil uses battery health and battery current consumption to calculate charge status. As you learn how your wheelchair performs in different driving conditions (such as hilly terrain), you can better use the information presented on both the joystick and the app to gauge how far you can go each day.

#### How are the new Permobil batteries different from typical gel batteries?

The new Permobil batteries and previously supplied gel batteries are valve regulated lead acid (VRLA) batteries with a gelled electrolyte. Gel batteries support a higher number of charging cycles, which is important for daily power wheelchair usage. The new Permobil batteries feature a different material composition and unique battery plate design that reduces grid corrosion, increases energy density and improves battery life. The new Permobil batteries also include an absorbed glass mat (AGM) separator that helps the batteries better resist vibrations that occur during wheelchair movement.

### Do the new Permobil batteries require a break-in period?

New batteries require 3-4 charging cycles to fully activate. It's also important to note that Permobil batteries exhibit a dome-shaped performance curve. Over the first 100-200 cycles, they are expected to outperform their rated capacity before dropping off. To get the most out of the new Permobil batteries, always charge them fully after each use with the new Permobil VoltPro charger.

#### How should I charge my chair?

Customers should review the instructions and warnings in the battery charger user manual before charging their power wheelchair for the first time. Batteries should be charged every day after use, for at least 8 hours, in a cool, well-ventilated area. To help batteries achieve their maximum capacity and extend battery life, be sure to charge the batteries fully with the proper charger. Use the lights on the front of the charger to see the current charge level and to ensure the batteries are fully charged before use.

#### How is the Permobil VoltPro charger optimized for the new Permobil batteries?

The new Permobil VoltPro charger delivers a unique charging profile that modulates voltage and current to completely and efficiently charge Permobil batteries. The optimized charging not only reduces charging time, it also helps extend battery life.

## What happens if I use the "wrong" or different charger than what was shipped with my power wheelchair?

Using a non-approved battery/charger combination can lead to overcharging or undercharging the batteries. Overcharging can damage the batteries and may result in a potential safety hazard. Undercharging the batteries can increase charging time, reduce battery life and impact wheelchair performance. The Permobil VoltPro charger is factory set for the batteries originally installed in your power wheelchair at the time of order. When the batteries are replaced, the technician should consult the service manual and properly set the charger for safe and efficient charging.

### Can I use a charger from another manufacturer's power wheelchair with the Permobil batteries?

No. Permobil power wheelchairs should only be charged using approved battery/charger combinations. This is to ensure safe and efficient charging.

### Can I use the new Permobil VoltPro charger on my old Permobil power wheelchair?

The answer depends on what batteries are installed and how the charger is set. Customers should consult with their service provider before attempting to use the new Permobil VoltPro charger on an older Permobil model. The Permobil VoltPro charger is factory set for the batteries originally installed in your new power wheelchair at the time of order.

#### Can I use my old Permobil charger on my new Permobil power wheelchair?

Use of older chargers on new chairs, particularly chairs with the new Permobil batteries, is **not recommended.** The new charger is configured to optimally charge these batteries to maximize battery capacity and life. Older chargers may be less efficient and can lead to reduced battery life and poor wheelchair performance.

# Does the Permobil VoltPro charger provide a "maintenance charge" to the batteries to maintain full capacity when plugged in?

The Permobil VoltPro charger provides safe and efficient charging for Permobil batteries. Once the batteries are charged, the charger will provide a float charge to maintain full capacity. If battery voltage should drop below 26V (for the pair), the charger switches back to bulk charging to restore full charge.

#### Can I overcharge my batteries?

Not if you use the new Permobil batteries and charger with the correct settings. This enables the Permobil VoltPro charger to deliver a battery-specific charging profile that minimizes charging time and maximizes battery capacity. Therefore, it is important that the charger setting be matched to the batteries. When the batteries are replaced, the technician should consult the service manual and ensure the charger is properly set to reduce the risk of overcharging.

#### How do I know which batteries are installed in my chair?

Your authorized provider should be able to confirm the type of batteries that were originally ordered and installed in your power wheelchair or let you know the battery type/make if replacement batteries are installed. Additionally, the original factory-installed batteries should be listed under wheelchair details in the MyPermobil app. Consumers should consult with their service provider to confirm if any battery changes have occurred since the wheelchair was produced.

#### Can I get the new Permobil batteries for my existing Permobil power wheelchair?

Permobil batteries will be available for aftermarket/spare part sales in the near future. When converting from non-Permobil batteries to the new Permobil batteries, a Permobil VoltPro charger will also be required.

#### What do I do if my provider replaces my batteries with non-Permobil batteries?

If batteries are replaced with non-Permobil batteries, customers should bring their charger to their service visit to ensure that the technician properly configures it for the non-Permobil batteries. The technician should consult the service manual for instructions on how to set the charger for safe and efficient charging of the non-Permobil batteries and also the safe of use of the chair, as it may have affected the chair beyond the battery system. Also important to note: third-party batteries will not work optimally with the Permobil VoltPro charger and the *MyPermobil* app battery capacity information.

### Are the new Permobil batteries approved for air transport?

The new Permobil batteries are "non-spillable" type AGM Gel batteries and are approved for air transport. Please check with applicable airlines for information regarding traveling with a power wheelchair.

#### What is the warranty on the Permobil battery?

The Permobil battery is covered under a one-year limited warranty.

