
Security measurements

Remind:

- The installation and configuration of Touch Contact, Drive link / Magic Drive and the wheel chair controller should only be conducted by a specialist with an in depth technical knowledge of the system. Incorrect installation, configuration or programming could result in an unsafe set-up of the wheelchair for the user. Permobil accepts no liability for losses of any kind which result from such conditions.
- This document needs to be read and understood by the installation engineer. In case of doubt, contact Permobil.
- The installation engineer needs to read and understand all relative documentation about the wheel chair and its control system.
- The user needs to be able to manipulate the on/off switch of the controller or there needs to be an extra emergency stop which can be controlled by the user.
- Route and secure all cables in order to prevent damage by crushing, cutting or caused by other reasons.
- The metal object/clip must be isolated from ground (shields the human capacitance influence), large metal plates (hard to detect the capacitance rise) and water (hard to detect the capacitance rise).
- The capacitance of the human body changes according to its surroundings (temperature, humidity etc.) The Touch Contact must calibrate itself to those same surroundings to obtain accurate measurements. When RAPID changes in the surrounding area appear, the Touch Contact will time out for 60 seconds to recalibrate. During this time the Touch Contact will no longer respond to input.
- Strong magnetic fields may cause the Touch Contact to fail. During the exposure to the magnetic field the contact may be permanently in the ON state. Do NOT use the Touch Contact as an emergency stop button. Try to avoid areas with high magnetic fields like power plants. The lower magnetic fields induced by for example warehouse security systems have no influence on the Touch Contact.

Problems with the Touch Contact

Error Messages

The LED does not blink anymore when the metal disk is being touched but the Touch Contact still works.

- > Replace the battery

Touch Contact



0037-7002a DLMC / MDEC Touch Contact
105550-99-0 DLMC / MDEC Touch Contact
0037-7003a Touch Contact cell on battery

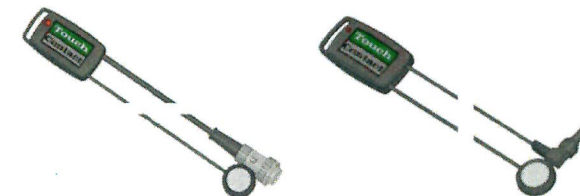
Principle

Every human body is an electrical conductor. Like any conductor the human body stores charge. Because we store charge, the human body acts as a capacitor. Metal also has a certain capacitance. When touching a metal object, the human body increases the capacitance of the metal object. This change in capacitance is detected and translated to a workable electrical signal. This signal is used to drive an electrical switch.

General

The Touch Contact is an input module and is coupled to the wheelchair electronics. Its single purpose is to act as an electric switch.

- It's a small switch which can be handled with no strength.
- The Touch Contacts' power supply can be a 3V battery or 24V coming directly from the Drive link / Magic Drive module.
- You can adjust the Touch Contact to the needs of the user because of the different shapes and sizes of the connection wire and the metal disc. In combination with a mounting kit it's possible to manipulate the Touch Contact by finger, hand, tongue, chin, etc.



Use of the Touch Contact

The Touch Contact is used as a replacement of or in combination with the usual or original joystick.

- If the metal disk is touched, the electronic switch will close.
- The led will light up when the metal disc of the contact is touched.
- Do not use the Touch Contact as an emergency stop button, but as a function button.

Installation of the Touch Contact

Battery fed

- Place the metal disk on the desired place.
- Plug the 3,5 mm jack into the connector of the device you want to operate (for example, the Drive link / Magic Drive)
- The led will light up for as long as the metal disk is touched.

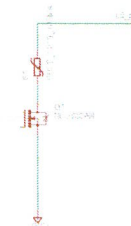
Using the Drive link / Magic Drive power supply

- Place the metal disk on the desired place.
- Plug the DIN3P male plug in the female connector of the Drive link / Magic Drive.
- The led will light up for as long as the metal disk is touched.

The Touch Contact output

The output is an open drain secured with a multi fuse of 100mA. The maximum voltage rating on the drain is 25V.

The FET package has an integrated protection diode. This diode will protect the Touch Contact when the wires are connected the other way around. The connected device may not survive.



ANVÄND BATTERI: CR 2032 (3V)

**Öppnas med skruv på undersida (ev under etikett).
lyft locket på ovansidan där skruven satt.
Skruvmejsel: liten Philips kryss eller Torx T7**