

# Motor Drive

Electric Drive for medical carts



Control



Drive Unit



**Jansen**  
medicars

## Motor Drive

The Motor Drive is an electric drive designed to easily move heavy and difficult to move medical equipment carts. Carts equipped with this drive system run entirely on their own and are very easy to drive. By using this system, large and heavy carts can easily be moved by one person over large distances.

## Modular concept

The system consists of a drive unit and a console to operate the system. The modular design makes the system easy and quick to assemble, even onto carts that are already in use. The drive unit is mounted as one unit underneath the cart and is connected to the control console with only one cable.

The drive unit contains all the elements necessary for electrically moving the cart. Important elements inside this unit are the drive motor on which the drive wheel is mounted, the batteries, the battery charger and the motor controller.



The console is attached to the side wall of the cart and is used to control the movement of the cart. A number of switches, indicators, an emergency stop switch and a gas throttle are available for this.

## Operation

As soon as the system is switched on, the drive wheel will be placed on the floor. This is a rigid wheel which makes it easy to steer the cart around corners. The system has a gas throttle with which the speed can be adjusted steplessly. The cart can move both backwards and forwards and has two gears in both directions. The low gear is used to maneuver the cart in small spaces and the high gear is intended for driving long distances, for example through long corridors.

During driving, energy is consumed from the batteries of the system. The system is provided with an indicator that indicates remaining energy.

## Technical specifications

### speed

- forward : 0 – 5 [km/u] (continuously variable)
- reverse : 0 – 5 [km/u] (continuously variable)
- gears : 2 (in both directions)

### battery

- voltage : 24 [V]
- capacity : 10 [Ah]
- type : LifePo4
- axiradius/charge : >10 [km] (indicative)

### charger

- Input voltage : 198 – 264 [VAC]
- Output current : 3,5 [A]
- standardization : EN 60601-1  
EN 60335-2-29
- EMC standard : EN 60601-1-2 (medical)  
EN 61000-6-3 (emission)  
EN 61000-6-1 (immunity)

### drive motor

- voltage : 24 [V]
- maximale shaft speed : 220 [rpm]
- power : 250 [W]
- IP value : IP44

