



# POWERBOX iSERVO HVC.45



The **PowerBox iServo HVC.45** has been completely developed according to our specifications. The housing design alone indicates that the new **iServo** is something special. Top quality, maximum durability and, above all, maximum precision were the top priorities during development.

The **PowerBox iServo HVC.45** was designed in coreless technology for high starting torque, maximum position accuracy and

rock-solid holding accuracy. In conjunction with a high-precision Hall sensor, a special control algorithm has been developed that is unparalleled in terms of positioning speed. The **PowerBox iServo HVC.45** does not overshoot when reaching the target position.

The largest possible ball bearings on the 8 mm output shaft and solid gears give our high-end servo the necessary durability.

The connection for the patch cable disappears completely into the housing and is secured with a screw-on retaining clip. Cutting cables and soldering extensions is therefore a thing of the past.

Electronically, the **PowerBox iServo HVC.45** has something unique to offer: for the first time, two large capacitors are built into the servo. This effectively prevents reverse currents and, above all, provides energy for the motor when current peaks have to be absorbed due to the cable length.

The software puts the new iServo at the forefront of what is technically feasible. The **HVC.45** not only works with the **PWM** standard, but also with the widely used **S.BUS**. However, the full functionality of the **iServo** is utilized with the **P<sup>2</sup>-BUS**. The **P<sup>2</sup>-BUS** provides all telemetry data in real time on the transmitter display. In addition, the servo can be fully parameterized via the transmitter. The setting options are huge: servo travel ( $\pm 5000^\circ$ ), current limiting, holding characteristics, start-up characteristics and much more.

The settings can be made not only via our PowerBox transmitters, but also with a PC program and a USB interface or the **Mobile Terminal**.

## FEATURES

- + Ultra-precise High-Torque Servo
- + Advanced Coreless Technology
- + High resolution Hall Sensor
- + Large heavy duty ballbearings
- + Large heavy duty gears
- + Supports PWM, P<sup>2</sup>-BUS and S.BUS
- + Telemetry data with P<sup>2</sup>-BUS
- + Wide options for parameter programming
- + Internal capacitors to absorb feedback current
- + Internal connector with screw locking
- + Outstanding design
- + Designed in EU

## SPECIFICATION

|               |                     |
|---------------|---------------------|
| Power supply: | 6.0-8.4 V DC Volt   |
| Dimensions:   | 41.8 x 41.5 x 20 mm |
| Weight:       | 94 g                |
| Torque 8.4V:  | 45 kg*cm            |
| Speed 8.4V:   | 0.12 s              |
| Housing:      | Aluminium           |
| Motor:        | Coreless Motor      |
| Gears:        | Metal               |
| Bearings:     | 2x Ballbearings     |
| Servodrive:   | 8 mm / 25 T         |

## DIMENSIONS

