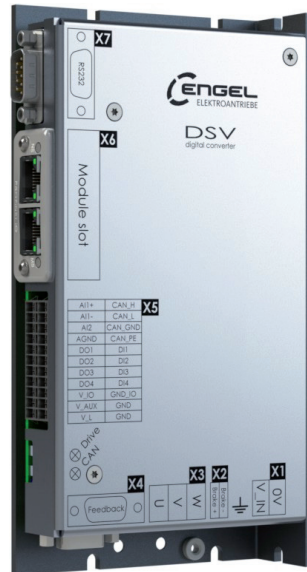


# DSV 1032

## Digital Servo Controller for Synchronous Servomotors Motor Series HBR

fully digital closed loop control, point-to-point positioning capability, multiple field bus systems up to 900W output power



### Description:

The Digital Servo Controller DSV1032 is suited for operation with Synchronous Servomotors. Using the motors HBR16, HBR22 and HBR26 is recommended especially.

Designed for low voltage operation, the device provides very short cycle times for the current-, speed- (100µs) and the position-controller and in combination with a high peak current capability it therefore reaches high drive dynamics and accuracy.

The device features a module slot suited to carry modules type Anybus CompactCom™ Module M40 to support a variety of fieldbus systems.

A CAN interface with galvanic isolation supports relevant parts of CANopen® Device Profile for drives, CiA® DSP 402.

Beside fieldbus operation the DSV1032 can be operated through a number of digital / analogue inputs and outputs. In this case, setpoints for speed or current (i.e. torque) may be applied by means of an analog control voltage. Additionally, the integrated positioning capability offers point-to-point positioning for up to 16 different target positions stored in the device, which can be selected via binary coded digital inputs.

A BiSS interface is used for communication with the motor's angle sensor. Singleturn sensors are supported.

Configuration and monitoring of the servo controller can be done with the clear and easy-to-use configuration software „DSerV“, which runs under MS-Windows and communicates with the device via RS232.

The device is designed for operation with 20 ... 60VDC. A separate logic supply can be used to keep the fieldbus communication alive while the power supply is switched off.

The device complies with the EMC regulations according to DIN EN 61800-3 (max. motor cable length: 10m), filtering measures at the voltage supply might be necessary.

The DSV1032 is equipped with a dedicated output automatically activating/deactivating a holding brake.

A ballast circuit with internal ballast resistor dissipates recuperation energy generated by the drive.

type	suited for Motors	Rated Input Voltage	Rated Current	Output Values	
				Peak Current (max. 5 sec)	Rated Power *) (@48 VDC)
DSV 1032	HBR 16 ... HBR 26	20 ... 60 VDC	28 A <sub>pk</sub>	84 A <sub>pk</sub>	900 W

\*) Values valid for use with Three-phase Synchronous Motors for 48VDC bus voltage.

### Features:

- Module slot for Anybus CompactCom™ Module M40
- CANopen®
- BiSS interface
- Short circuit proof power stage
- Internal ballast circuit
- Parking brake output
- Separated logic supply
- Status and error indicator
- RS232 „DSerV“ communication
- Compact dimensions approx. 190 x 100 x 32 mm<sup>3</sup>

### Options:

- Fieldbus modules
- Customized functions

### Typical applications:

Positioning tasks or speed control for material handling, dosing units, electric pumps etc.

## In- and outputs:

- 4 Digital inputs 24V/7,5kOhm
  - 4 Digital outputs 24V/0,05A
  - 1 Analogue input  $\pm 10V$  12Bit
  - 1 Analogue input 0 ... 10V 12Bit
  - Status LEDs
  - Feedback
  - Output parking brake 24V, 1,5A
  - Auxiliary voltage 16V, 30mA
  - Serial interface RS232
  - Slot for Anybus CompactCom™ Module M40
  - CAN interface
- Control Enable, Limit Switches etc. (partly configurable)
  - Speed/Current threshold, Target Reached signal etc. (configurable) (Digital inputs and outputs are optically isolated)
  - Differential input for analogue setpoint setting (speed/current)
  - Input for analogue setpoint setting (speed/current)
  - Indication of Enable / Device status and Error codes
  - BiSS-C, sensor supply voltage 8V
  - For direct connection of a parking brake
  - For stimulation of digital inputs
  - Communication with „DSerV“ software (PC / Laptop)
  - Interface for multiple fieldbus modules (PROFINET, EtherCAT etc)
  - Galvanically isolated, Device Profile CANopen® DSP 402

## „DSerV“ parametrizing software:

The „DSerV“ software is a simple and easy-to-use tool, enabling users to set up the DSV servo controllers quickly.

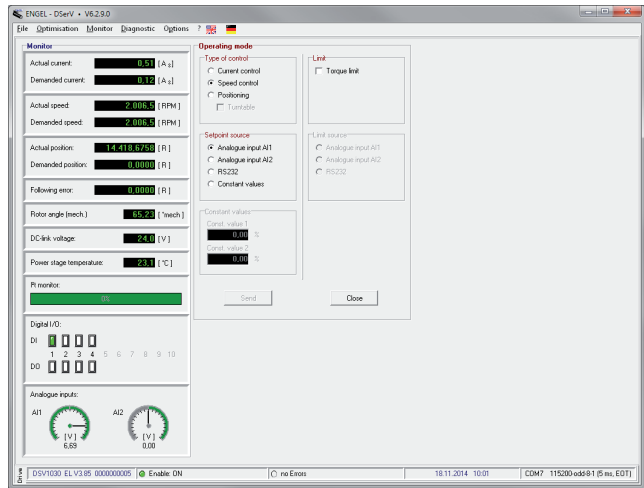
The menu-driven user interface allows to adjust scaling values, current limits, modes of operation and more.

Drive settings can be stored in a parameter file on the computer's hard disk.

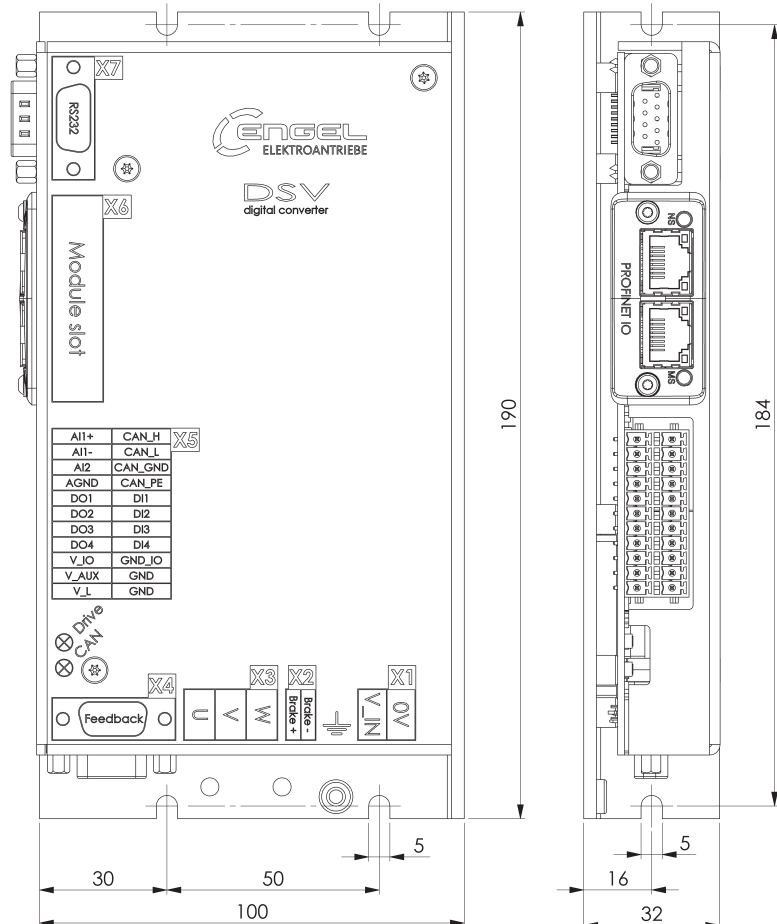
Operational status information such as speed values, current values, enable status etc. are available at a glance.

Selectable language options include English and German.

The software is executable under MS-Windows. The PC's RS232 interface is used for communication with the servo controller.



## Dimensional Drawing:



## Accessoirs (optional):

- Connecting cable motor, assembled Length: 2m / 5m \*)
- Connecting cable BiSS, assembled Length: 2m / 5m \*)
- Connector set with all mating connectors for DSV1032
- Anybus CompactCom™ Modules

\*) other length on demand