

# BODAS-work EHC

## Application Software Electrohydraulic Hitch Control



A core function of agricultural machineries is the efficient and soil-preserving transmission of machine forces during field use. This also includes simple adaptability to customer specific requirements and the integration of new functions. With the BODAS-work EHC software, BOSCH Rexroth offers a ready-to-use and scalable solution to control hitch valves and to increase their performance and efficiency. BODAS-work EHC is the right solution to achieve sustainable yield increases with tractors and agricultural telehandler.

### CUSTOMER BENEFITS

- Easy integration on machine-level
- Ready-to-use and scalable control solution
- Modular software concept for efficient, customer-specific adaptations
- ENTRY features for simplicity and automated soil cultivation
- PREMIUM features for even more tillage performances
- Integrated safety functions according to EN ISO 25119
- Try It First: Develop your perfect machine solution in 3 steps

### FUNCTION AND BENEFITS

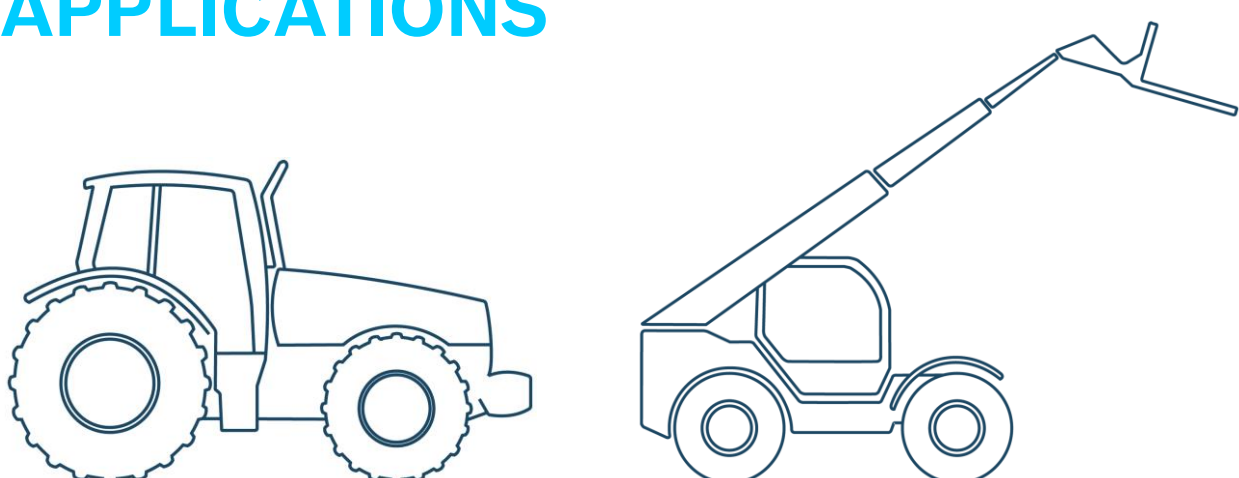
#### Easy integration on machine-level

BODAS-work EHC is a software solution embedded in Rexroth controllers series 40. In combination with BODAS-service, the graphical interface enables easy integration into the vehicle and provides valuable application hints for guided commissioning. A clearly structured step-by-step optimization is guaranteed. Algorithms automatically define most of the parameters. This reduces complexity during commissioning.

#### Modular software concept for efficient, customer-specific adaptations

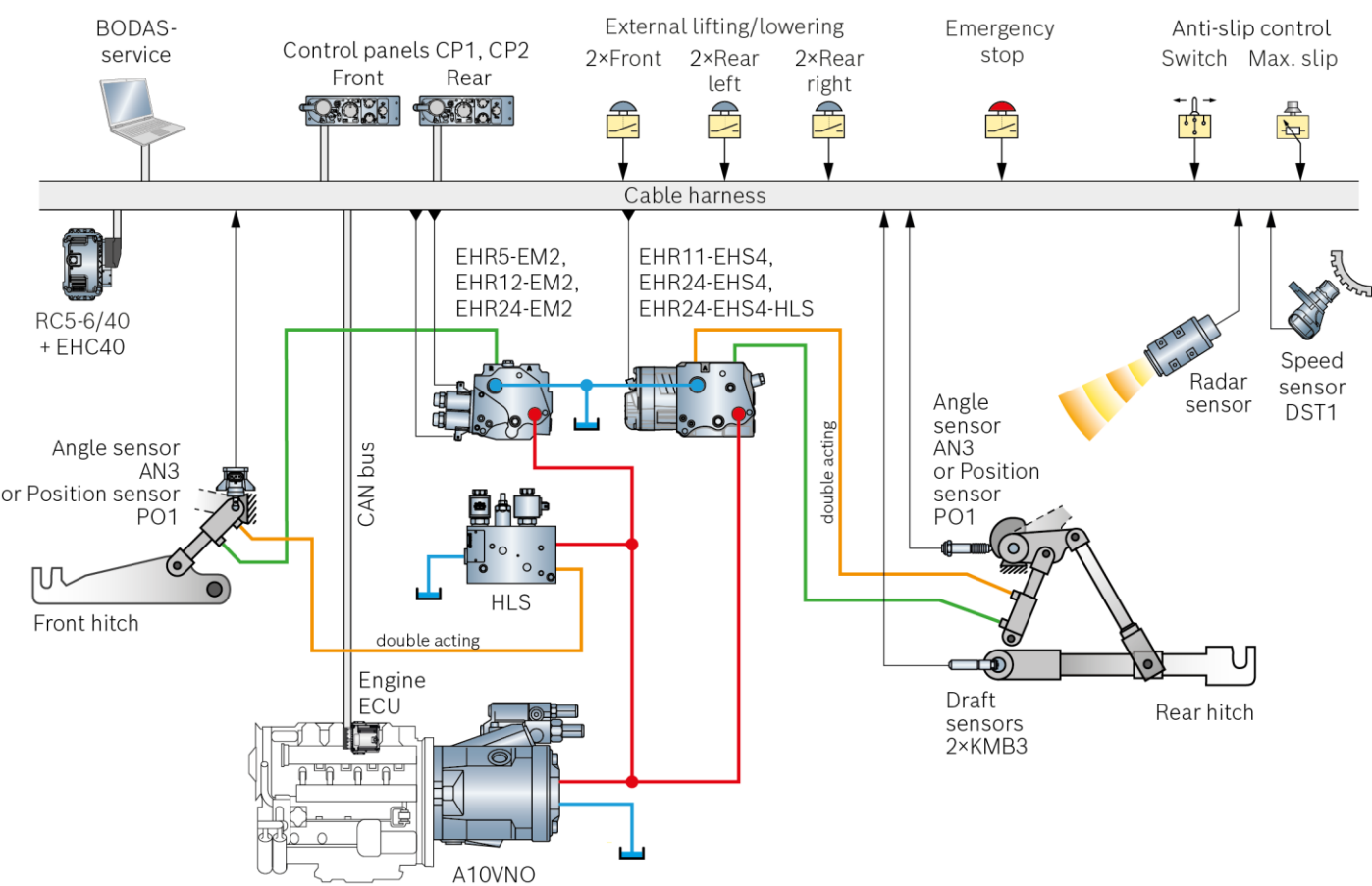
The software structure is open and simplifies efficient, customer-specific adaptations. In combination with the wide Rexroth portfolio of hitch valves, sensors and BODAS RC controllers, BODAS-work EHC is fully scalable. Each system component can either use the Rexroth Control unit hardwired or connected via CAN. The CAN protocol is based on the SAE J1939 standard. Thanks to the standard functions of BODAS-work EHC, unnecessary programming is a thing of the past.

### APPLICATIONS



TECHNICAL DATA

Table with 2 columns: Component and Specification. Rows include: Controllable valves (Up to two hitch control valves), Rexroth hitch control valves (EHR5-EM2, EHR24-EM2, EHR24-EHS4), Rexroth sensors (Position: PO1, AN3; Draft: KMB3, DP1; Wheel speed: DST1 or CAN), Rexroth control panels (CP1, CP2), Safety Standards (EN ISO 25119), Operator interface (Discrete or CAN SAE J1939), Rexroth controller (RC5-6/40, RC18-12/40, RC27-18/40), Diagnostics and Parametrization (BODAS-service), and Data sheet (95337).



Example system overview BODAS-work EHC

ENTRY features for simplicity and automated soil cultivation

By controlling the exact amount of force, the exact positioning or a mixture of both, the ENTRY features performs precise lifting and lowering of the hitch and thus makes precise plowing possible. An integrated assistance feature ensures more even soil cultivation in different soil conditions by automatically and dynamically regulating the ratio between position and tractive force. Only the required working depth has to be set. A manual override is still available. Furthermore, when it comes to transporting items with the plow raised or with other attachments, the system implements a damping function when driving on poorly constructed roads, thus avoiding unsafe driving conditions.

PREMIUM features for even more tillage performances

The PREMIUM features deploy their full potential in combination with additional components. The Anti Slip Control (ASC) feature also reduces slippage and significantly prevents the drive wheels from losing traction. This lowers fuel consumption, tire wear and at the same time protects the soil. Simple to integrate, simple to use: an external or an integrated lowering support feature (HLS) provides pressure to the hitch to lower it actively and thereby significantly faster. The advantages are realized especially when the hitch has no load and when ambient temperatures are low.

Integrated safety functions according to EN ISO 25119

The combination of BODAS-work EHC and a Rexroth controller offers a generic approach and ready-to-use safety functions according to the EN ISO 25119 standard. The machine manufacturer is able to use the BODAS RC + EHC subsystem within the machines safety design in order to realize the additional safety functions for the hydraulics system. Bosch Rexroth therefore provides the best possible safety of a mobile machine to protect the driver and the entire operation site.

Try It First: Develop your perfect machine solution in 3 steps

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