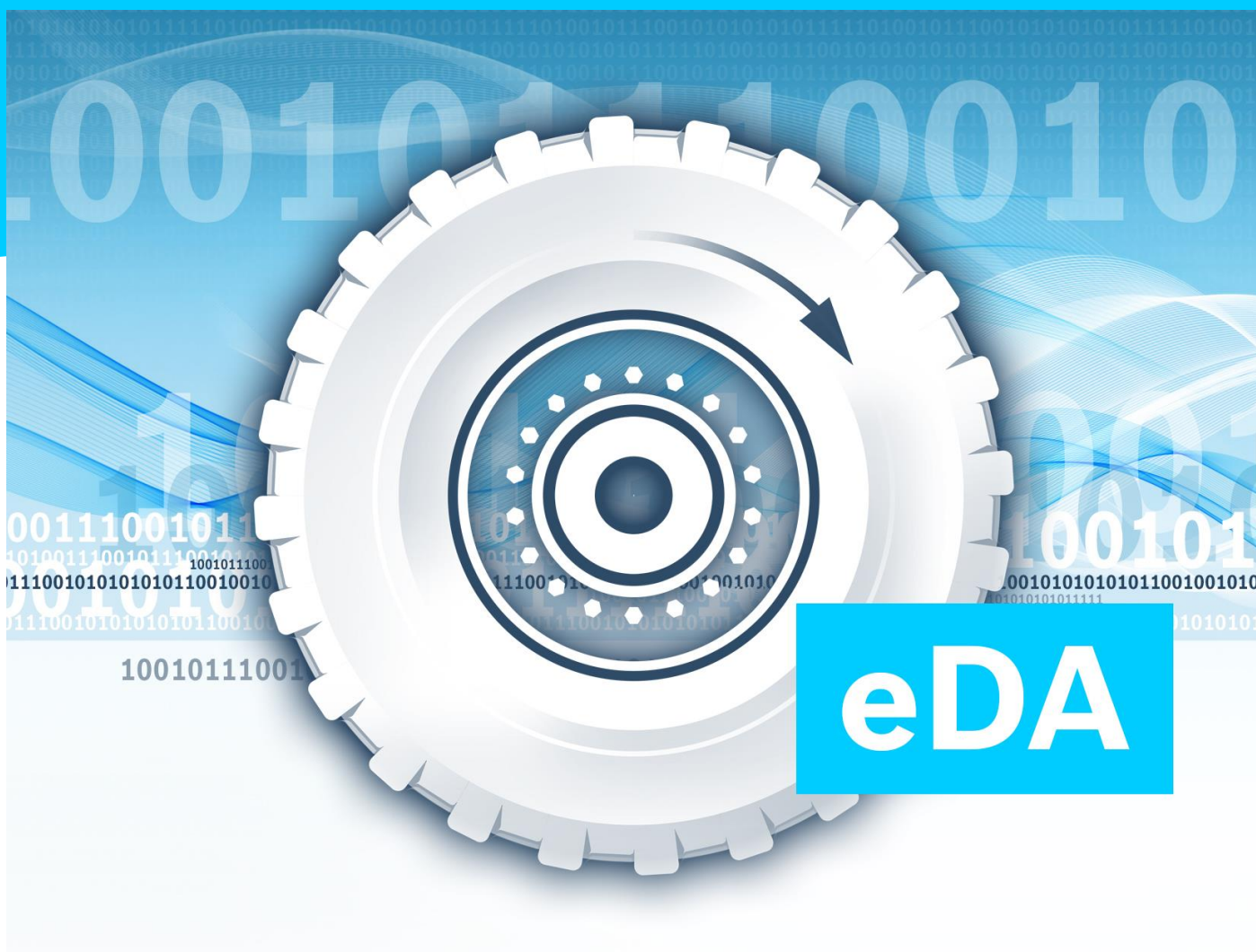


BODAS-drive eDA

Control solution for standard hydrostatic drivetrains



The most important requirements for hydrostatic drives are high performance and efficiency. This also includes simple adaptability to customer requirements and the integration of new functions. With the BODAS-drive eDA software, Bosch Rexroth offers a ready-to-use and scalable solution to control hydrostatic travel drives and to increase their performance and efficiency. BODAS-drive eDA is particularly suitable for wheeled vehicles such as wheel loaders, telehandler or forklifts – in general for conventional hydraulic DA applications.

CUSTOMER BENEFITS

- Ready-to-use and scalable control solution
- Easy integration on machine-level
- Modular software concept for efficient, customer-specific adaptations
- Integrated safety functions according to EN ISO 13849
- ENTRY version for simplicity and full driving performance
- PREMIUM version with various functions
- Highly efficient due to electrified hydraulics

FUNCTION AND BENEFITS

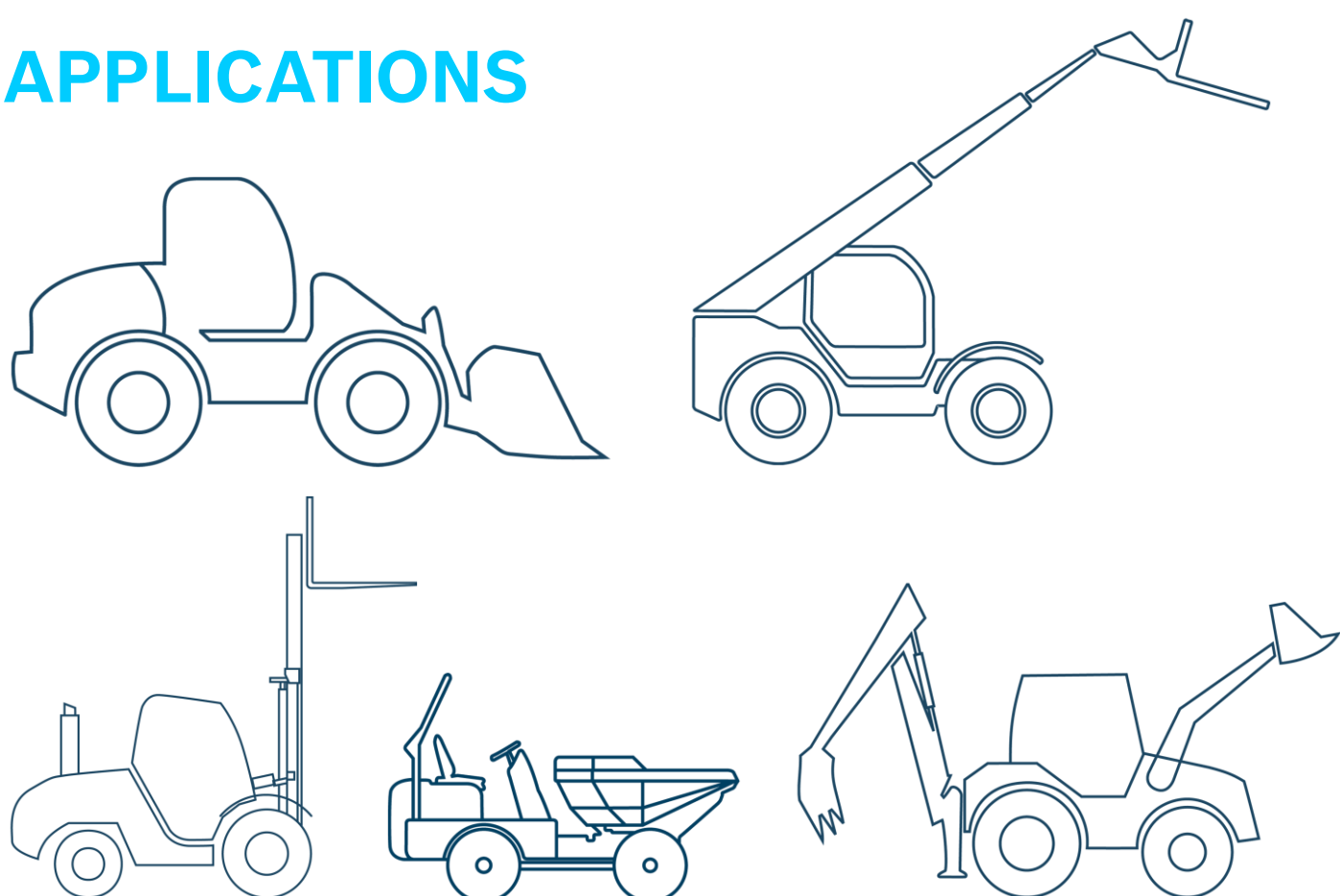
Easy integration on machine-level

BODAS-drive eDA is a software solution embedded in the Rexroth eDA controller. 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 of the drive is guaranteed. Algorithms automatically define most of the parameters. This reduces complexity during commissioning.

Modular software concept for efficient, customer-specific adaptations

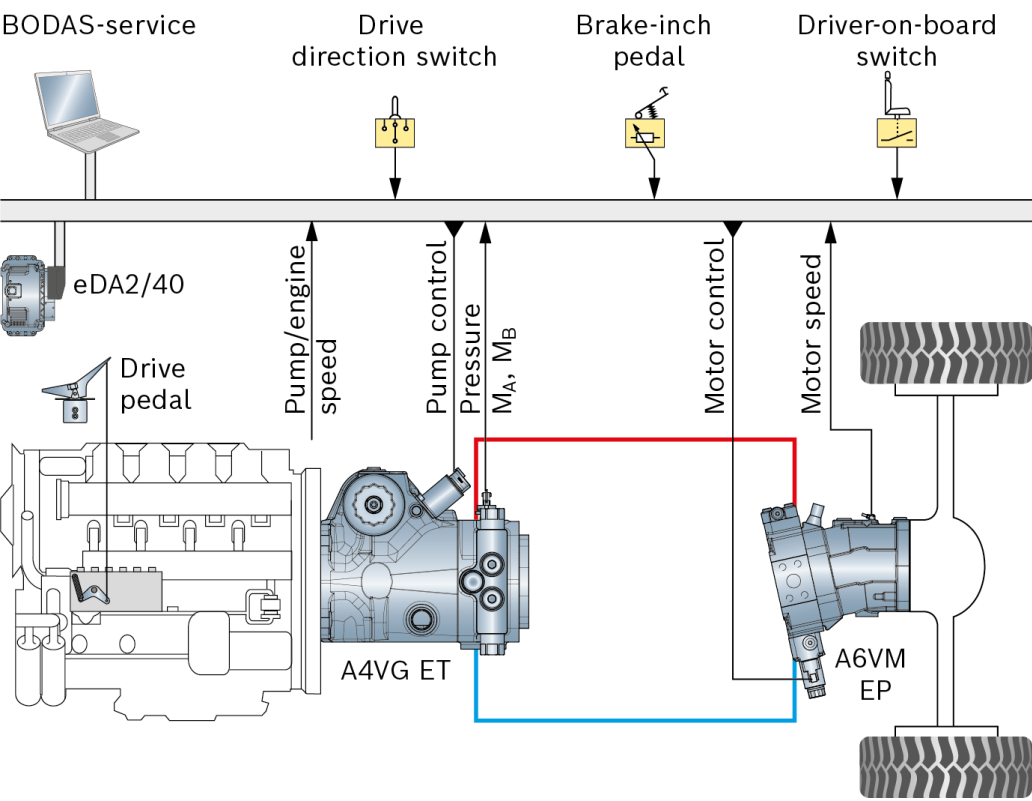
The software structure is open and simplifies efficient customer-specific adaptations. In combination with the wide Rexroth portfolio of pumps, motors and BODAS RC controllers, BODAS-drive eDA is fully scalable. Each operator device can either be hard-wired to the Rexroth controller or provides the signal via CAN, based on the SAE J1939 standard. Thanks to the standard functions of BODAS-drive eDA, unnecessary programming is a thing of the past.

APPLICATIONS

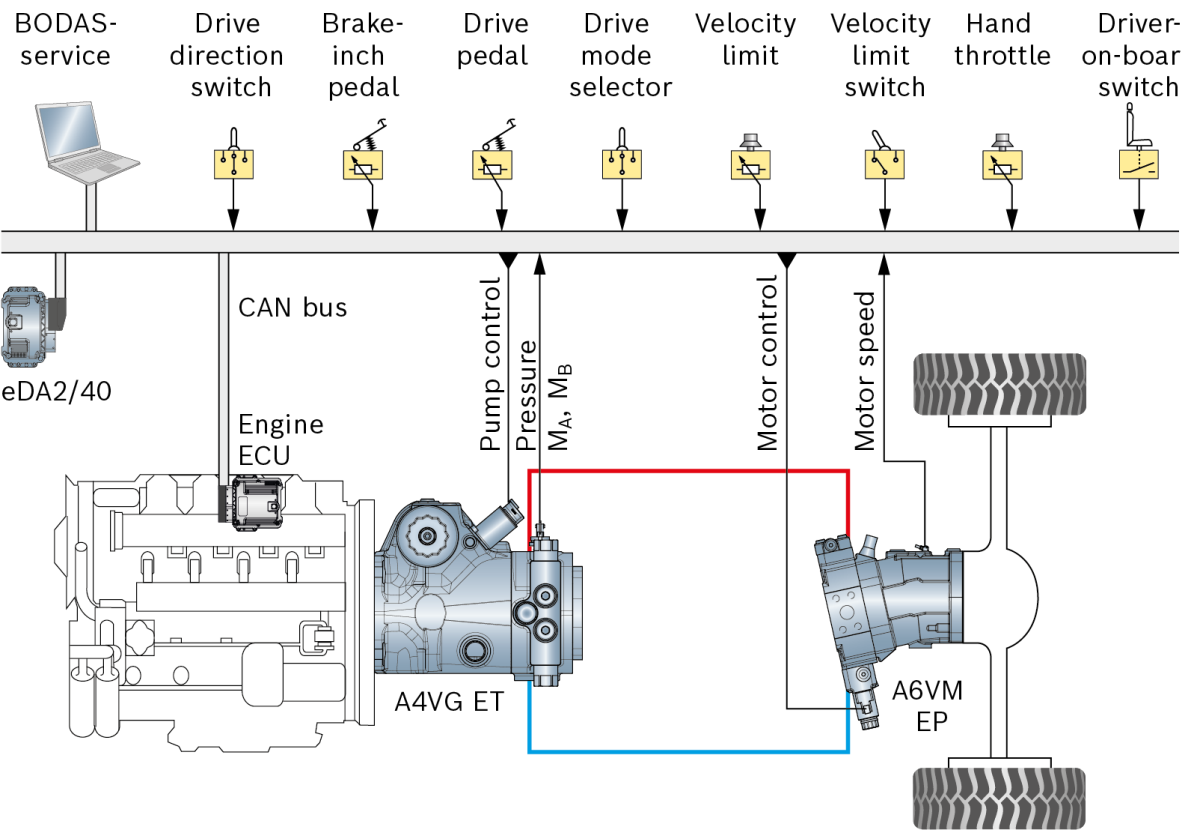


TECHNICAL DATA

BODAS-drive eDA	
Engine:	Mechanical or CAN SAE J1939
Hydraulic drive units:	Pump: A4VG with ET control Motor: A6VM with EP control
Rexroth sensors:	Pump/Engine speed: DSA, DSM or CAN; Pressure: PR4 SENT for MA and MB; Motor speed: DSM or DSA
Operator interface:	Discrete or CAN SAE J1939
Rexroth controller:	eDA2/40
Safety standard:	EN ISO 13849
Variants:	ENTRY and PREMIUM
Diagnostics:	BODAS-service and CAN SAE J1939
Data sheet:	95316



Example system overview BODAS-drive eDA ENTRY



Example system overview BODAS-drive eDA PREMIUM

Integrated safety functions according to EN ISO 13849

BODAS-drive eDA is a so called “Safety Element out of Context”. This means, the software is developed using a generic approach and ready-to-use safety functions according to the standard EN ISO 13849. A sophisticated software monitor separates standard functions from safety functions, allows independent modifications and reduces the effort for verification and validation. This makes BODAS-drive eDA an important component for efficient machine safety.

ENTRY-version for simplicity and full driving performance

Conventional, hydraulic DA solutions can be easily upgraded to BODAS-drive eDA. The ENTRY-version offers the full driving performance for mechanically controlled combustion engines and additional comfort features like creeping, different drive modes or a basic ECOdrive.

PREMIUM-version with various functions

The PREMIUM version deploys its full potential in combination with an electronified diesel engine with CAN SAE J1939 communication interface and sets actively the target engine speed. The integrated Rexroth Diesel Hydraulic Control (DHC) ECOdrive reduces fuel consumption up to 20% and provides still full power-on-demand. The creeping feature in combination with an electronic hand throttle supports in working tasks whenever a constant engine speed at fully variable vehicle velocity is required. A smart diagnostic lamp enables easy diagnostics via smart devices.

Highly efficient due to electronified hydraulics

BODAS-drive eDA provides in combination with the latest generation of the fully electronified Rexroth A4VG variable displacement pump and the variable displacement motors A36VM and A6VM a safe, efficient and powerful machine operation.

EXPLORE MORE



BODAS-drive eDA