

Brain, heart and muscle of drive technology

HELAX – The Solution for Decentralized Drive Concepts With High Efficiency

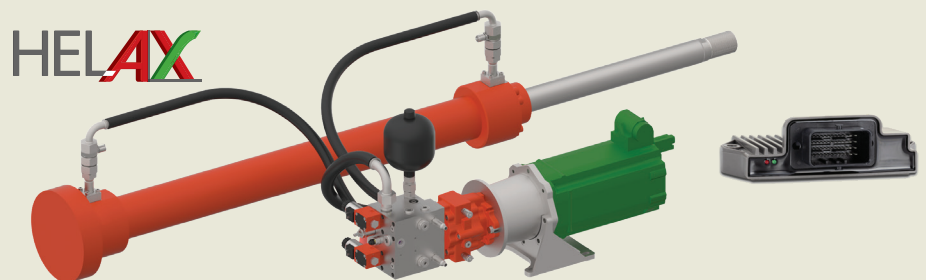
HELAX stands for:

Hydraulic

Electric

Linear axis

AX technology based



Current challenges

- Reduction of CO₂- emissions in the EU (min. 60 % until 2030)
- “Energy efficiency comes first” – reduction of energy demand and use of renewable energies, see “Energy Efficiency Strategy 2050” of the German government
- “Zero emissions” the target for a positive environmental balance

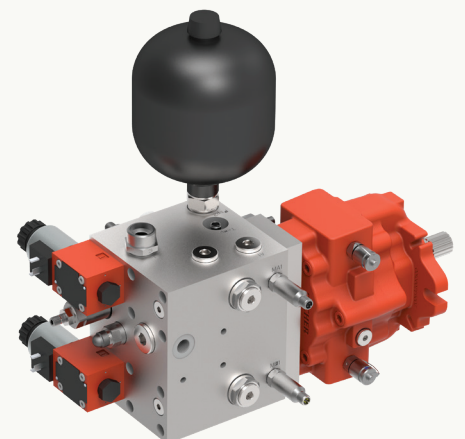


As a strong partner we support our customers with innovative and efficient system solutions.

Advantages

- Robust, reliable and overload-proof
- Plug & Produce with little hydraulic knowledge
- No restrictions in the operating range
- High energy efficiency
- Energy feedback with high efficiency
- High modular flexibility to adapt in systems

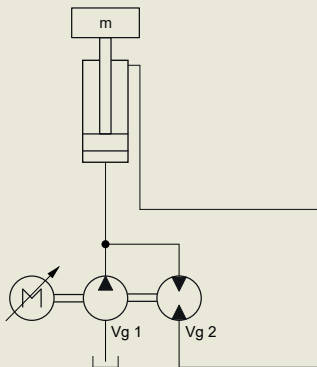
Discover more exciting insights on our youtube channel:



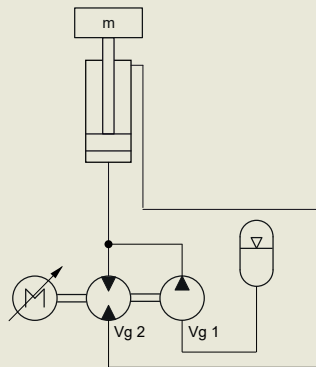
Decentralized linear drive

HELAX – Subsystem Components

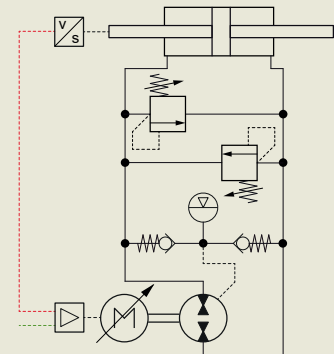
4-quadrant displacement control with electric energy recovery



4-quadrant displacement control with hydraulic and electric energy recovery



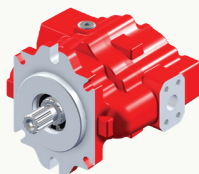
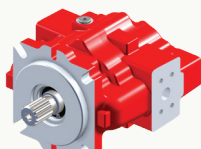
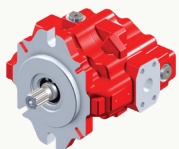
4-quadrant closed-circuit linear drive



AX pump

The revolutionary AX pump opens up new possibilities for decentralized high-efficiency drive solutions:

- Stationary application in the industry
- Electrification of mobile machines



Advantages of the innovative AX pump:

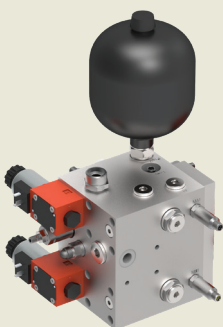
- 94 % Overall Efficiency:
- Very high start efficiency 99 %
- High torque also at low speed (< 1 rpm)
- Ideal for electrification projects
- Low pulsations
- Low noise
- High power density

Technical data

Type	Displacement cm ³ /rev	Continuous pressure max. bar	Peak pressure bar	Speed max. rpm
AXFP	18...76	450	500	<1...3600

Valve technology

Auxiliary and safety valves for adaptation to the cylinder of the respective applications.



Controller

Decentralized hardware and software solutions for all common systems in the area of mobile and stationary applications.



Further components

- Electric motor
- Inverter
- Additional customized parts

