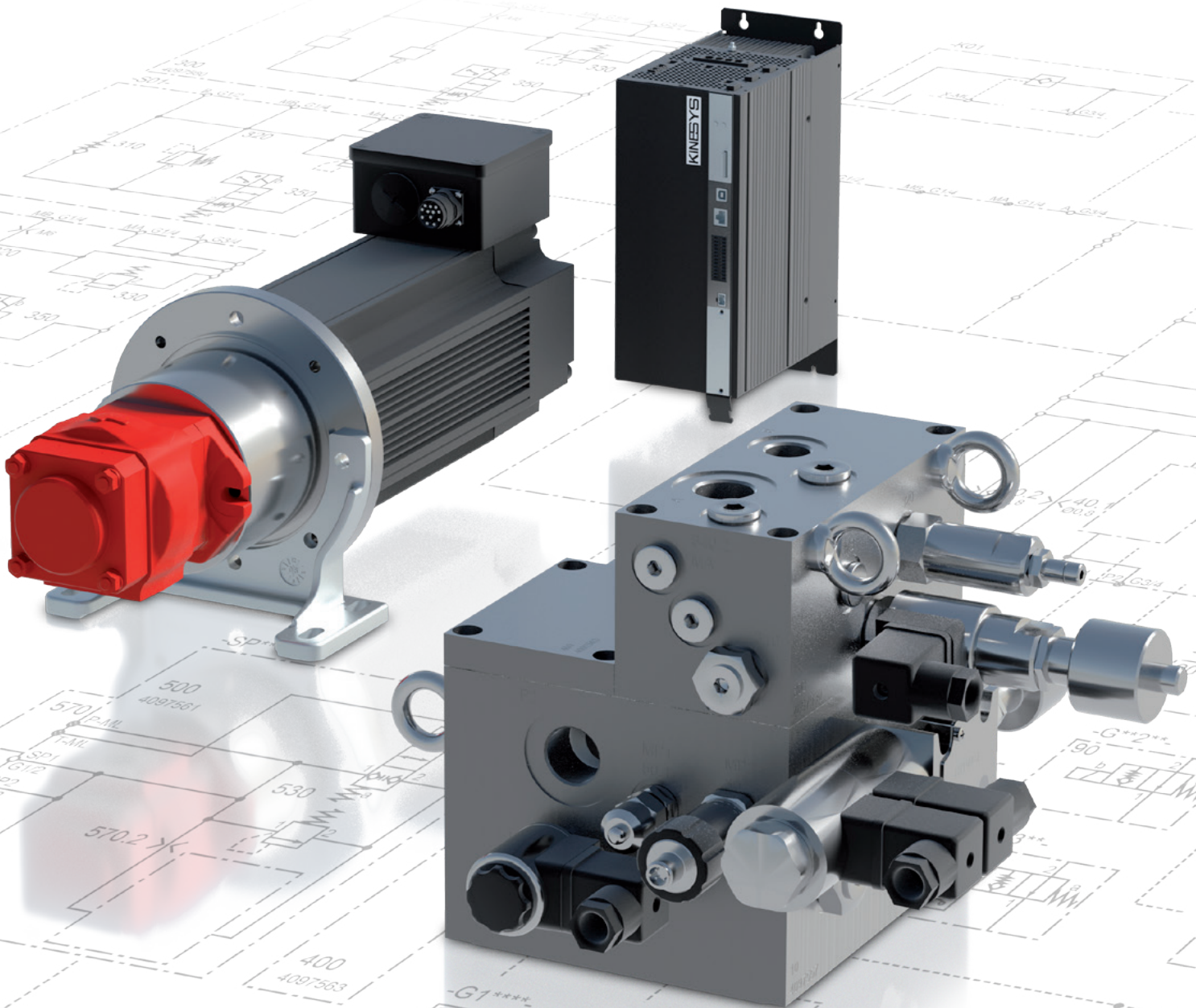




HYDAC KineSys Controls for Hydraulic Presses



Your Professional Partner for Expertise in Safe Hydraulic Press Controls

With over 8,000 employees worldwide, HYDAC is one of the leading suppliers of fluid technology, hydraulic and electronic equipment.

The HYDAC KineSys team is your partner for expertise in control and drive solutions for hydraulic presses.

System Solutions, one Supplier, one Contact

For the individual project planning of the required control and drive solution, HYDAC KineSys uses its intelligent drive systems along with the extensive product portfolio of the entire HYDAC group.

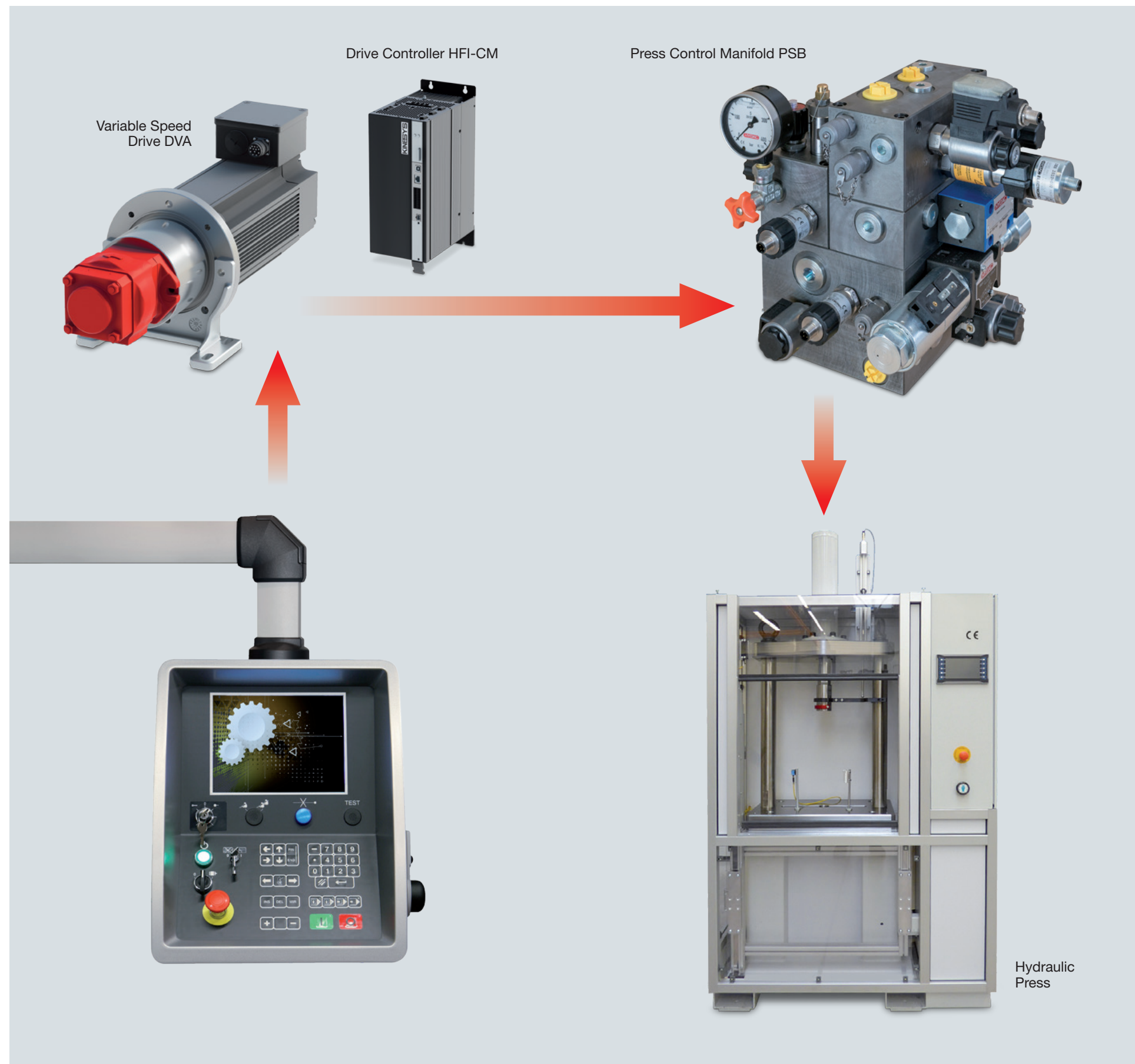
The press safety manifolds are adjusted to suit the application and can be used regardless of the press drive. The combination of valve control and variable speed drive (DVA) enables additional functionalities to be integrated and the complexity to be reduced. The decision is yours.

Forward-Thinking

The use of HYDAC drive controllers offers new possibilities with regard to combination of the hydraulic system with electrical control technology.

- Coupling of axes
- Integration of bus systems

Ready for "Internet of Things"



Uniform Control Strategy

From modular control manifolds and variable speed drives to entire systems.

- EC type examination of the hydraulic control system according to EN 693
- Extra functions can be integrated
- Compact design
- Minimum pipework, short installation time

Technical Data of the Control Manifold

- $p_{\max} = 350 \text{ bar}$
- For nominal size NG 6:
 $Q_{\text{nom}} = 40 \text{ l/min}$
- For nominal size NG 10:
 $Q_{\text{nom}} = 80 \text{ l/min}$

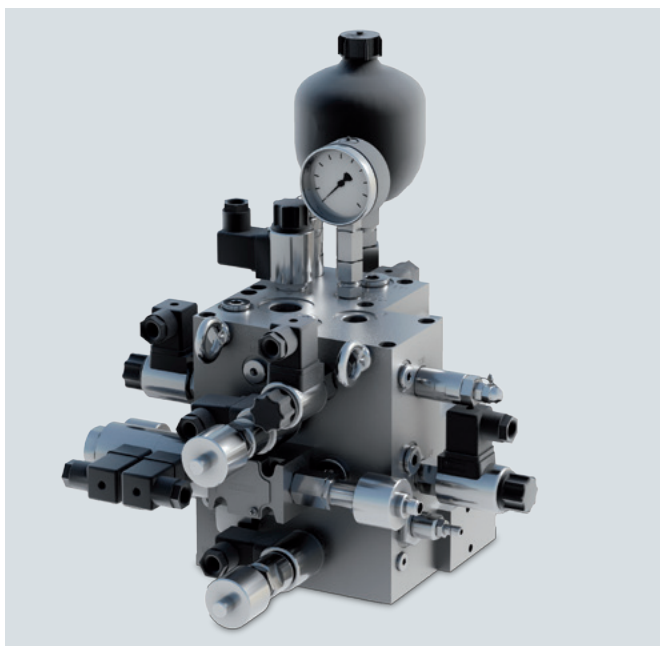
Features of the Press Drive

- Closed-loop pressure and speed control possible
- Asynchronous or servo motor with drive controllers proper for press applications
- Asynchronous motor for efficient and robust applications
- High system dynamics possible with servo drive

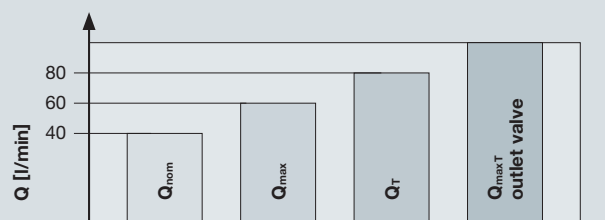
Control Manifold and Press Drive – Guaranteed Safety from a Single Source

HYDAC Control Manifolds and Press Drives

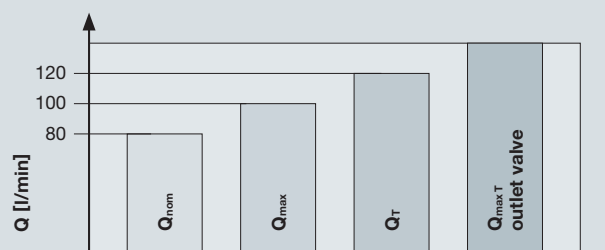
Press Control Manifold PSB in NG 6 and NG 10



Flow rates at size NG6



Flow rates at size NG10



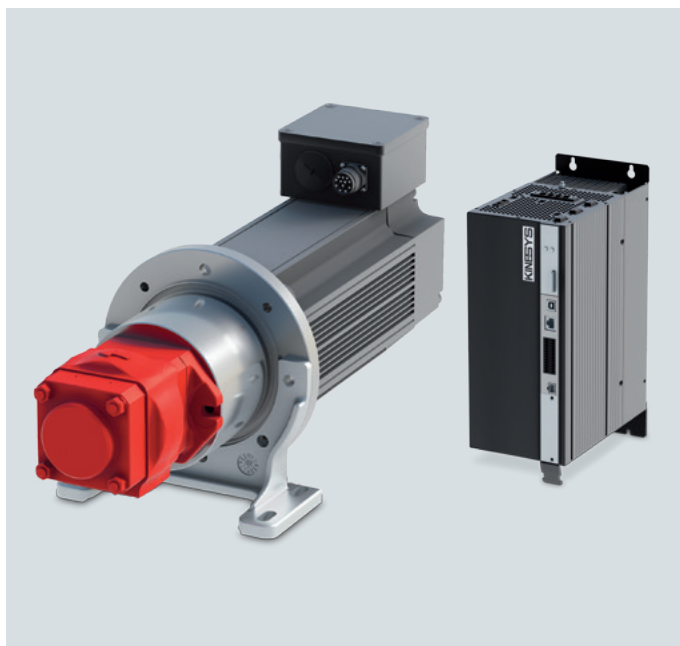
Safety Features

- Redundant monitoring: pressure build-up on piston side, load holding

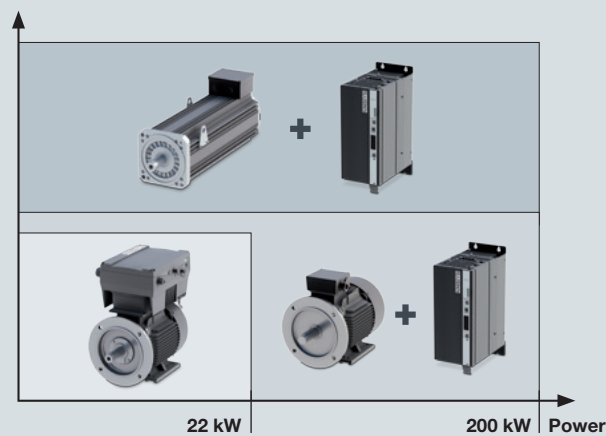
Functional Features

- Direction control
- Regenerative circuit
- Pressure limiting
- System pressure monitoring
- Decompression

Variable Speed Drive DVA with Drive Controller HFI-CM



Dynamics



The variable speed drive DVA combined with the variable speed drive controller HFI-CM forms a perfect symbiosis of hydraulics and electronics. For various types of task, the entire parameterisation and adjustment of the drive system is performed in the frequency inverter.

Technical Features

- Electronic variable displacement pump
- Pre-parameterised plug&play unit
- External and internal gear pumps
- Power 0.75 kW up to 200 kW

Counterbalance

- Load-holding valve
- Rapid "down" movement with own weight
- Mechanical counterbalance valve
- Electronic counterbalance valve

Sandwich Plates (options)

- Regenerative circuit
- Depressurised "down" movement with own weight

Basic Module (options)

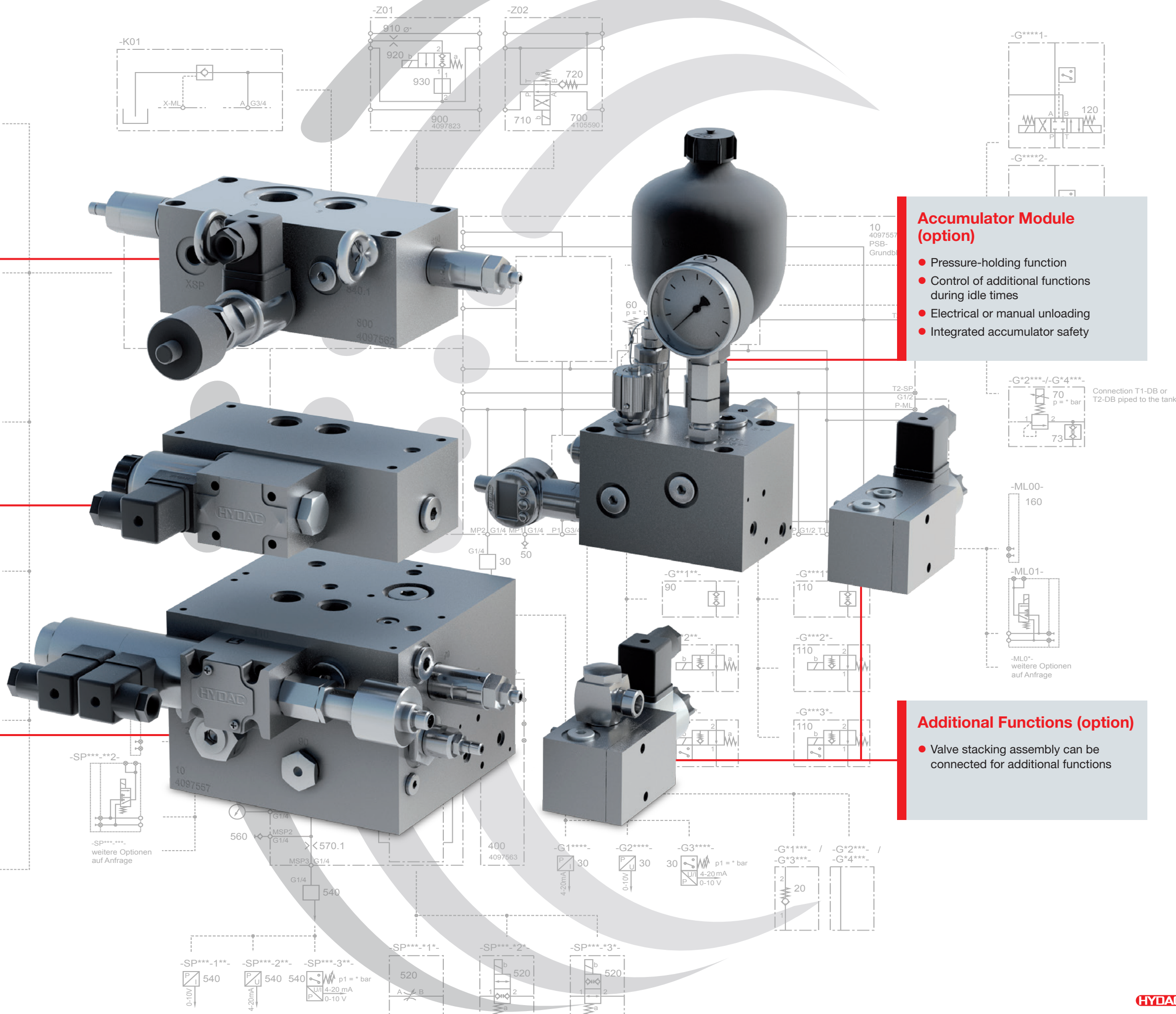
- Proportional pressing force adjustment
- Safe set-up speed
- Various options for safely depressurising the system
- Various options for decompression
- Piston side unloaded or loaded in normal position

Accumulator Module (option)

- Pressure-holding function
- Control of additional functions during idle times
- Electrical or manual unloading
- Integrated accumulator safety

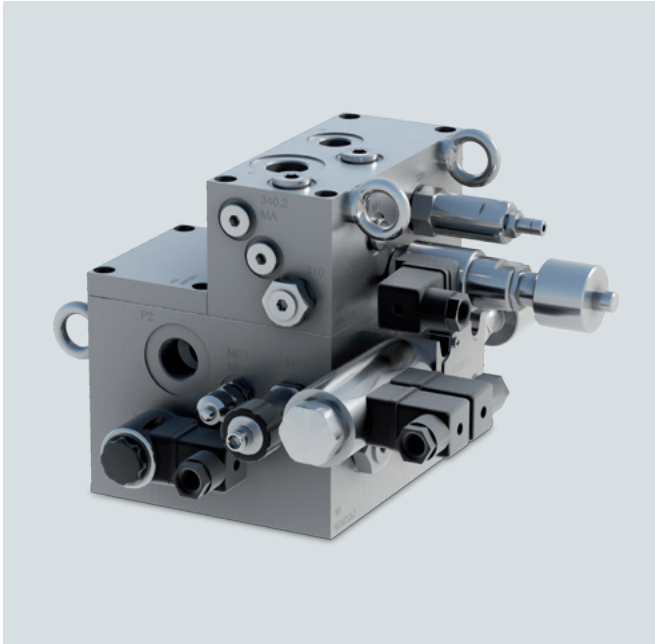
Additional Functions (option)

- Valve stacking assembly can be connected for additional functions



Systems for Maximum Safety

Press Control Manifold PSB combined with Drive DVA



The combination of modular press control manifold PSB and variable speed drive system DVA (with drive controller HFI-CM) guarantees highly accurate controls and maximum safety in your applications.

The transmission drive is adjusted to suit the function and application, enabling the control manifold to be simplified. Some safety and functional features are realised by the drive directly.

Safety Features

- Safe set-up operation is enabled
- Less monitored valves

Functional Features

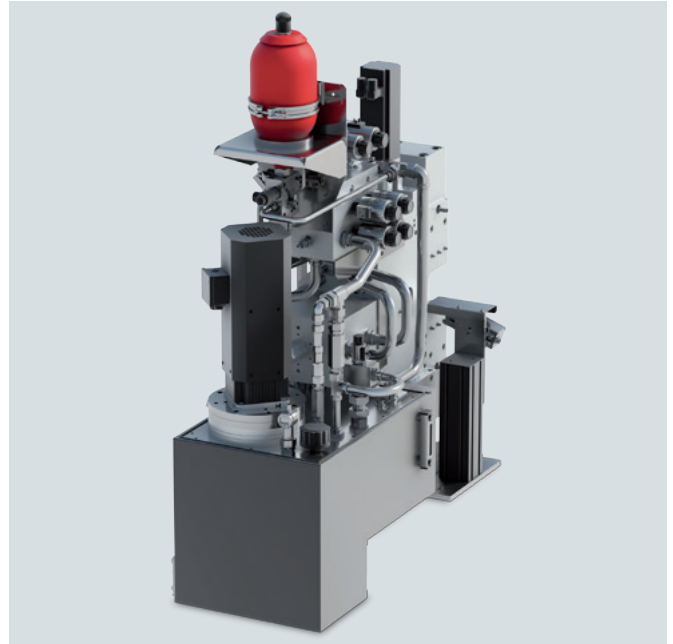
- Closed-loop speed control
- Closed-loop pressure control
- Less valves

Note

The information in this brochure relates to the operating conditions and applications described. For applications and operating conditions not described, please contact the relevant technical department.

All technical details are subject to change without notice.

Customised Hydraulic Systems

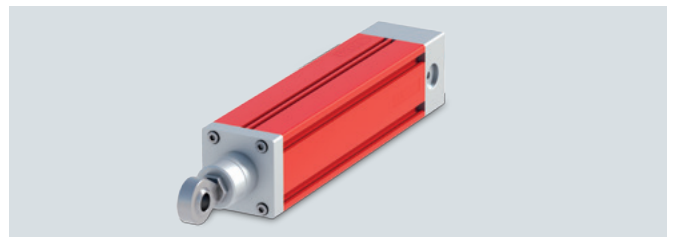


Application Example

System for forming pipe ends:

- Customer-specific tank and control manifold
- HSM servo motor
- Motor rating 7.5 kW
- HFI-CM servo controller
- Internal gear pump
- Only directional valves
- Positioning accuracy 10 µm
- No cooling required
- Control on the electrical side
- Plug&play solution

Additional HYDAC Components for Press Construction

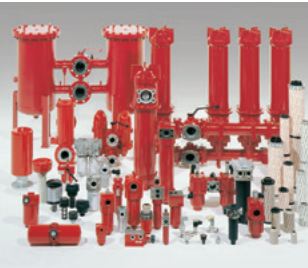


- Electro-cylinders in wide range of designs
- Pumps, Valves, Cylinders
- Coolers
- Accumulators
- Filters / Filter Systems
- Sensors / Condition Monitoring
- Clamps / Mounting Technology
- Ball Valves / Fittings

Our entire product range can be found at www.hydac.com



Accumulator Technology 30,000



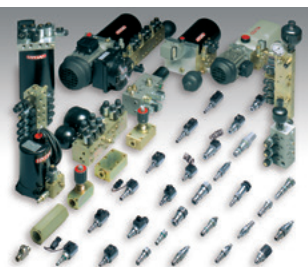
Filter Technology 70,000



Process Technology 77,000



Filter Systems 79,000



Compact Hydraulics 53,000



Accessories 61,000

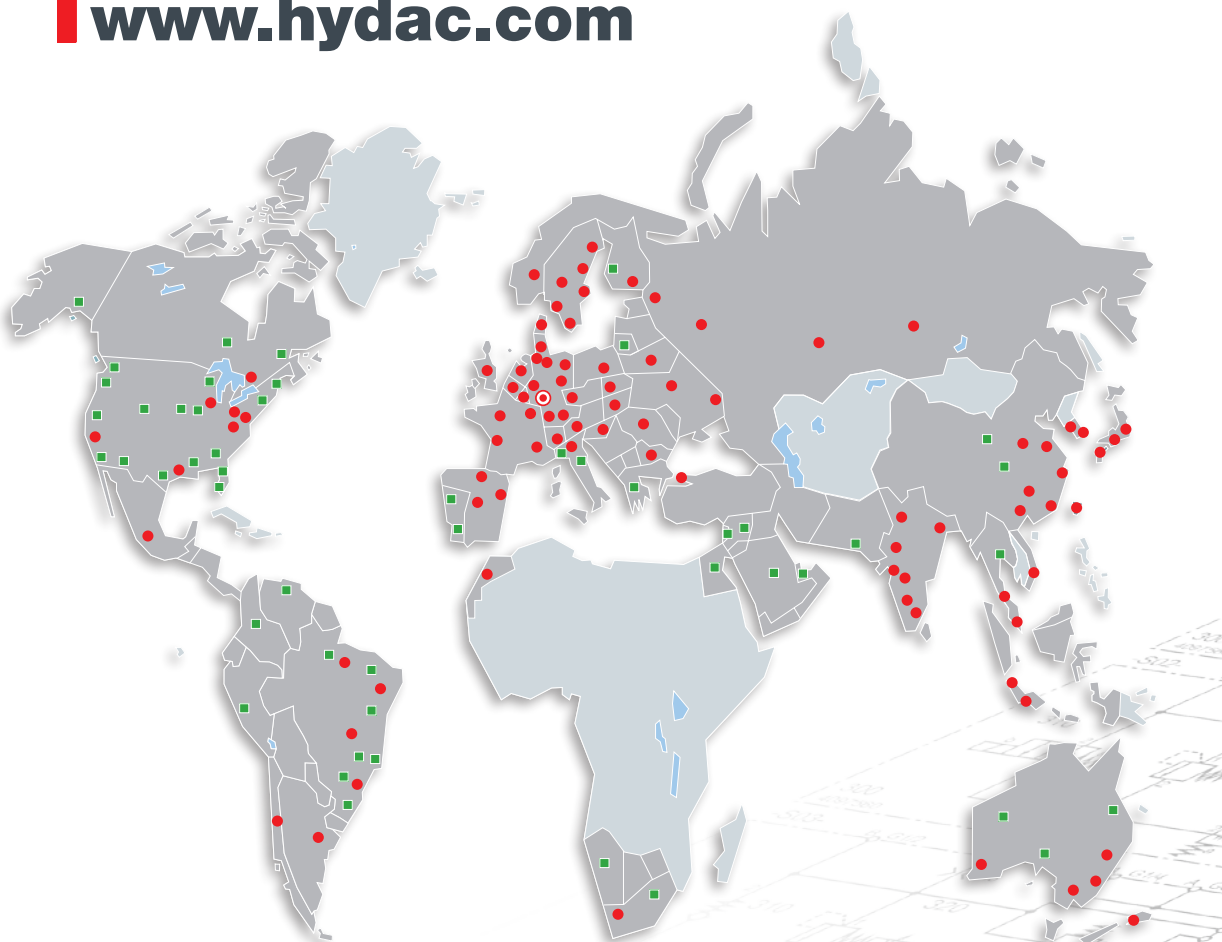


Electronics 180,000



Cooling Systems 57,000

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HYDAC

INTERNATIONAL

HYDAC INTERNATIONAL
GMBH

Industriegebiet
66280 Sulzbach/Saar
Germany

Tel.: +49 6897 509-01
Fax: +49 6897 509-577

E-mail: kinesys@hydac.com
Internet: www.hydac.com