

*At the heart of tomorrow's
mobile machinery*



H1 - the new generation of hydrostatics



**SAUER
DANFOSS**

What really matters is inside®

DESIGNED FOR QUALITY AND RELIABILITY

INSTALLATION AND PACKAGING BENEFITS

OPTIMIZED FOR ELECTRICAL CONTROL

EXPANDED FUNCTIONALITY

GREATER TOTAL EFFICIENCY



For more than 40 years, Sauer-Danfoss has been developing state-of-the-art components and systems for mobile machinery used in off-highway operations around the world. We have become a preferred supplier by offering the best of what really matters: The hardware inside your vehicle application. H1 – our new generation of servo-controlled hydrostatic pumps – is no exception.

The H1 range is built around an advanced electrical control and available in a wide range of displacements. It is designed for quality and reliability and offers expanded functionality, greater total efficiency, and easy installation. Working quietly inside, at the heart of the system, H1 will keep your application going – today, tomorrow, a lifetime. Believe it. H1 is at the heart of tomorrow's mobile machinery.





Reduced part count, improved quality, and easy installation

Sauer-Danfoss engineers had one goal developing the H1 family of single and tandem pumps: To make life easier for off-highway vehicle OEMs. They succeeded. The H1 range features a simple and robust servo system, reduced length, and reduced part count. In some components the number of parts has been reduced by as much as 30%.

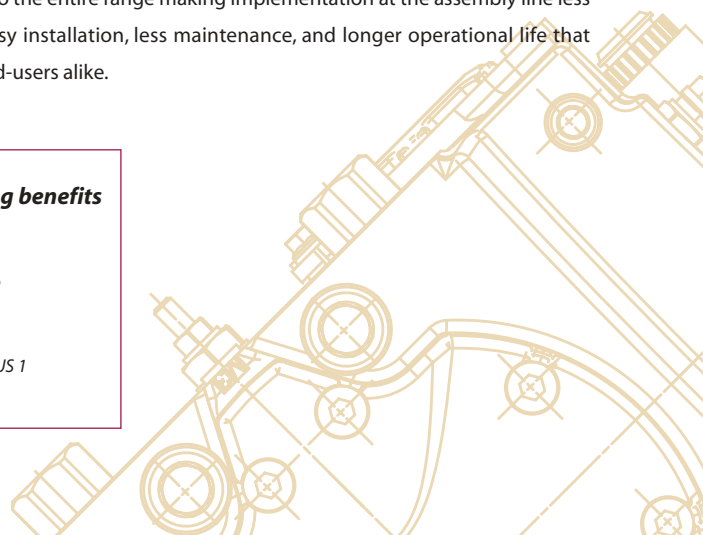
Due to an extremely robust design, H1 pumps and controls last longer too. And Sauer-Danfoss' unique Plug & Perform® concept applies to the entire range making implementation at the assembly line less time-consuming. The results? Easy installation, less maintenance, and longer operational life that benefits vehicle designers and end-users alike.

Designed for quality and reliability

- One design concept*
- Reduced part count*
- Single piece swash plate*
- Fewer control variants*
- Reduced EDC part count*

Installation and packaging benefits

- Length optimized pump*
- Minimum one clean side*
- Higher corner HP/package size ratio*
- Integral control function*
- Standardized connector interface*
- Expanded functionality through PLUS 1*



Optimized for electrical control

One electrical displacement control for all pumps
Integral electronic automotive control
Best in class EDC and PLUS 1 compliant
SIL 2 electronic automotive control (AC)
4 electrical control options
(EDC, NFPE, electronic AC or FNR)

Expanded functionality

Integral automotive pump and motor control functions
Control override
Integral speed limitation
Optional integral sensors (pressure, angle, speed)
Optional electronic operated pressure limiter
PLUS 1 compliant

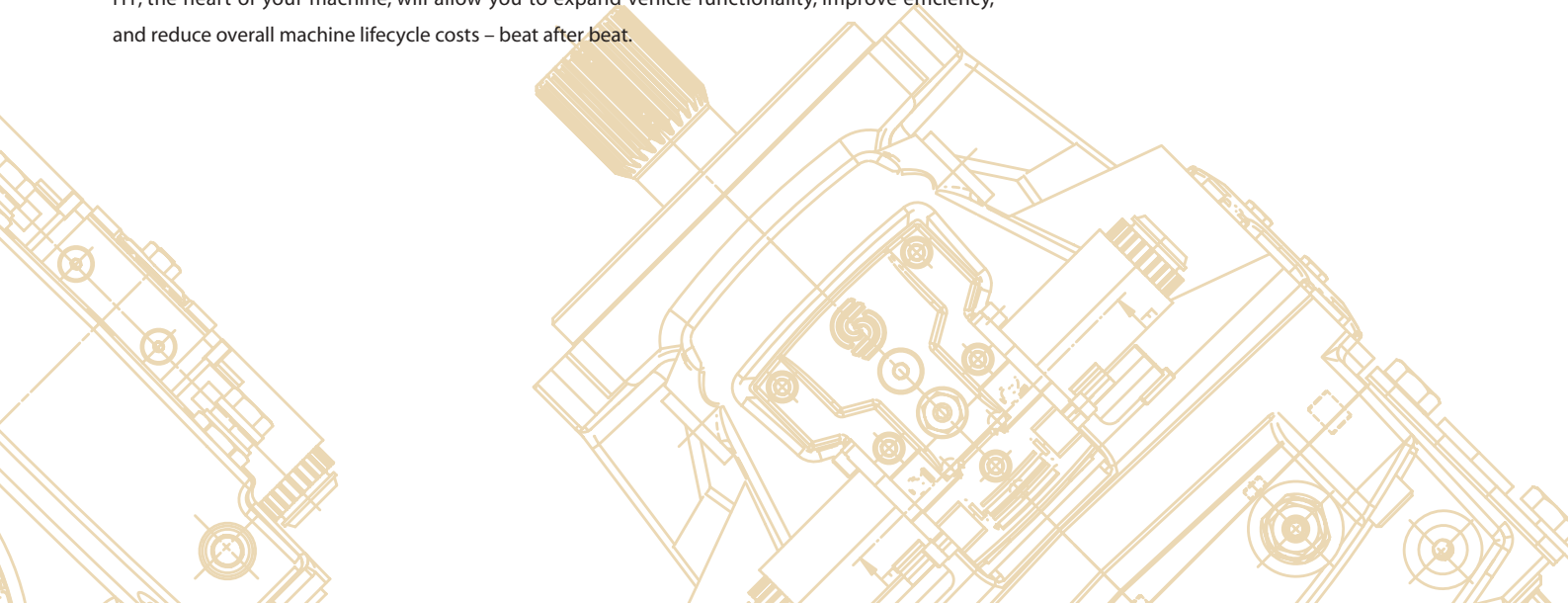
Greater total efficiency

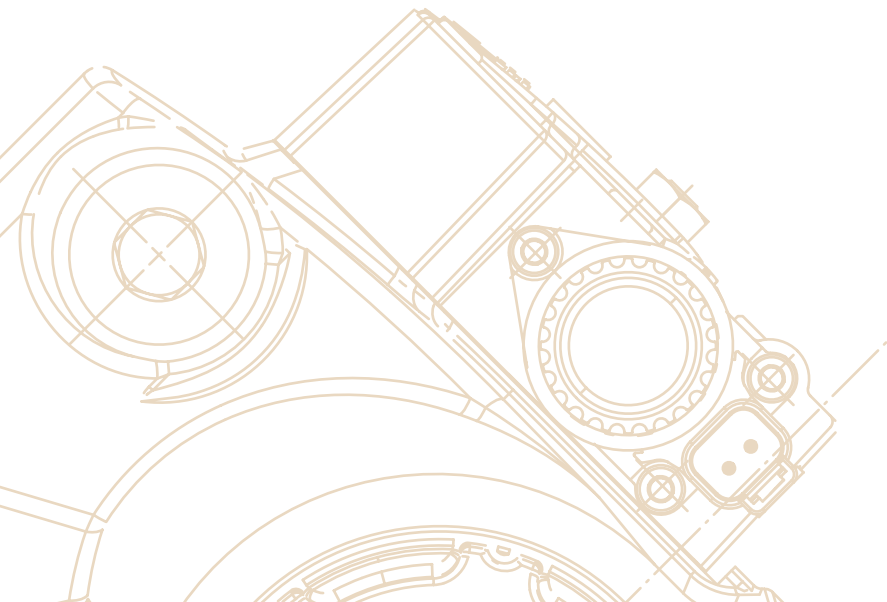
Minimum control losses
Improved charge circuit
Improved kit efficiency
Lower control pressure



Expanded functionality and higher efficiency

H1 advantages are not limited to reduced part count and a robust design. The new family of hydrostatic pumps also offers control override, integrated sensors, integrated speed limitation, and improved charge pump performance. And there is more. H1 pumps allow the same electrical control to be used for the entire family, thereby easing service and operator training. The message is clear: H1, the heart of your machine, will allow you to expand vehicle functionality, improve efficiency, and reduce overall machine lifecycle costs – beat after beat.





PLUS 1
by SAUER-DANFOSS



PLUS 1 compliant – the intelligent liaison

The entire H1 family is compatible with Sauer-Danfoss PLUS 1 micro-controllers and software. PLUS 1 allows you to rapidly develop and customize electronic machine control. It opens up the future by combining machine controls and diagnostics in an integrated operating network. The system connects the interactive control of different machine components, for example valves, motors, joysticks, inverters, sensors, and – of course – H1 pumps.

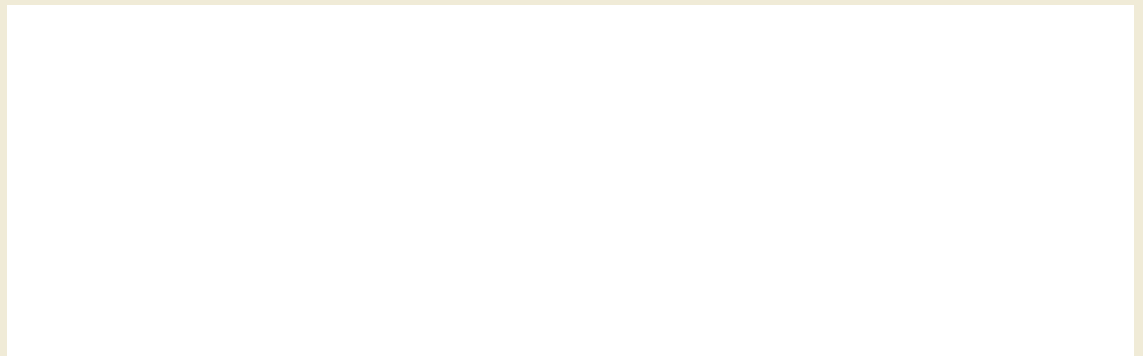
Combined, the H1 family and PLUS 1 system form a genuinely intelligent liaison offering superior solutions for off-highway OEMs in agriculture, construction, road building, materials handling, forestry, and turf care.

Sauer-Danfoss is a comprehensive supplier providing complete systems to the global mobile market. We offer our customers optimum solutions for their needs and develop new products and systems in close cooperation and partnership with them. Sauer-Danfoss specializes in integrating a full range of system components to provide vehicle designers with the most advanced total system design.

- Hydrostatic transmissions
- Hydraulic power steering
- Electric power steering
- Electrohydraulic power steering
- Closed and open circuit axial piston pumps and motors
- Gear pumps and motors
- Bent axis motors
- Orbital motors
- Transit mixer drives
- Planetary compact gears
- Proportional valves
- Directional spool valves
- Cartridge valves
- Hydraulic integrated circuits
- Hydrostatic transaxles
- Integrated systems
- Fan drive systems
- Electrohydraulics
- Microcontrollers and software
- Electric motors and inverters
- Joysticks and control handles
- Displays
- Sensors

Sauer-Danfoss provides comprehensive worldwide service for its products through an extensive network of Authorized Service Centers strategically located in all parts of the world

Please contact the Sauer-Danfoss representative nearest you.



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