



AUTOMATED  
FUNCTIONS IN BRAKING  
APPLICATIONS

Member of **DEXKO**  
GLOBAL

# SAFIM EVOLUTION

We analyze application features and requirements to deliver successful solutions.

Starting from our core braking components, our product evolution focuses on managing the vehicle's braking system and enhancing safety through advanced assistance features

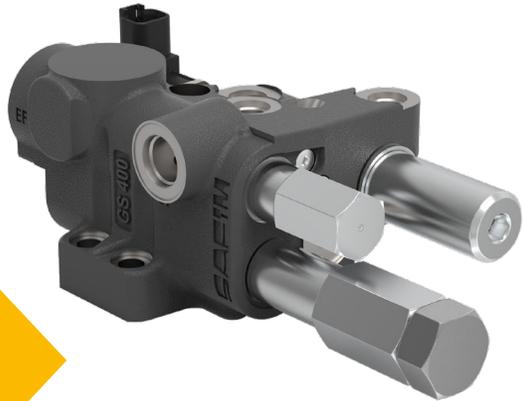
- MPV (MASTER PRIORITY VALVE) manages the priority between the different vehicle functions such as steering, braking, and auxiliary systems.
- EPB (ELECTRO-HYDRAULIC PARKING BRAKE VALVE) a valve fully compliant with current regulations and adaptable to any type of vehicle, making it a key innovation in the field of smart braking in terms of safety and comfort.
- MC BBW (MASTER CYLINDER BRAKE-BY-WIRE) a master cylinder virtually designed for any vehicle. Simple in concept but powerful in functionality
- S6E BBW (SMART POWER BRAKE VALVE) originally a purely hydraulic component, now enhanced with electro-hydraulic control.



# SAFIM EVOLUTION

FROM THE ROOTS of our most representative products  
TO THE FUTURE of smart applications

MPV-FL



EPB



MC-SB-S-EH

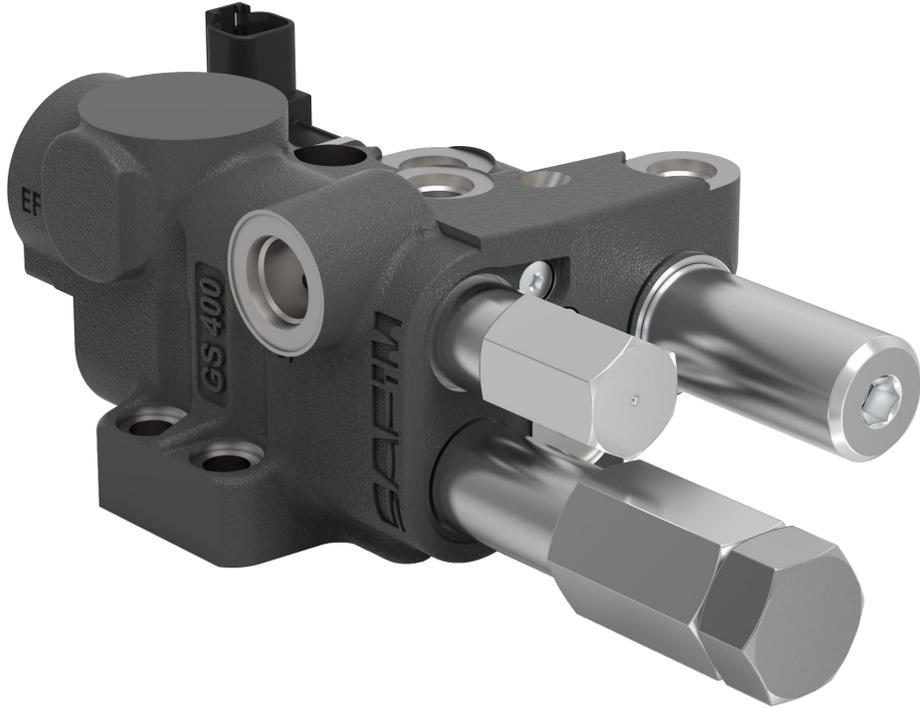


S6E-EH



# MPV-FL

MASTER PRIORITY WITH  
VARIABLE STAND-BY PRESSURE



## MORE EFFICIENCY

- **Less vehicle power need in typical operating conditions**
- **Lower Operating Costs**
- **Environmental Benefits – Lower energy footprint**

### Multi-Level Priority Valve designed to manage:

- Steering
- Brakes
- Transmission
- Auxiliary Functions

### Load Sensing margin electronically adjustable for several logics:

- Energy Saving
  - very low stand-by in idle
  - able to accept very low-pressure pump margin
- Maximum Performances
- Adaptive Working Conditions
- Simultaneous Functions

### Fault-Tolerant hydraulic design with different logics:

- Incorporated electro-proportional device
- Phased with external device (Pump compensator)
- Works with variable and fixed displacement pumps

# EPB

## ELECTRO-HYDRAULIC PARKING BRAKE VALVE

\*peculiarly designed for agricultural vehicles,  
finds its use even in different applications.



# MORE SAFETY

- **Mother Regulation compliant**
- **Works with vehicles up to 60 kph & over 60 kph**
- **Mechanical parking brake disengagement available**

# MORE ASSISTED FUNCTIONS

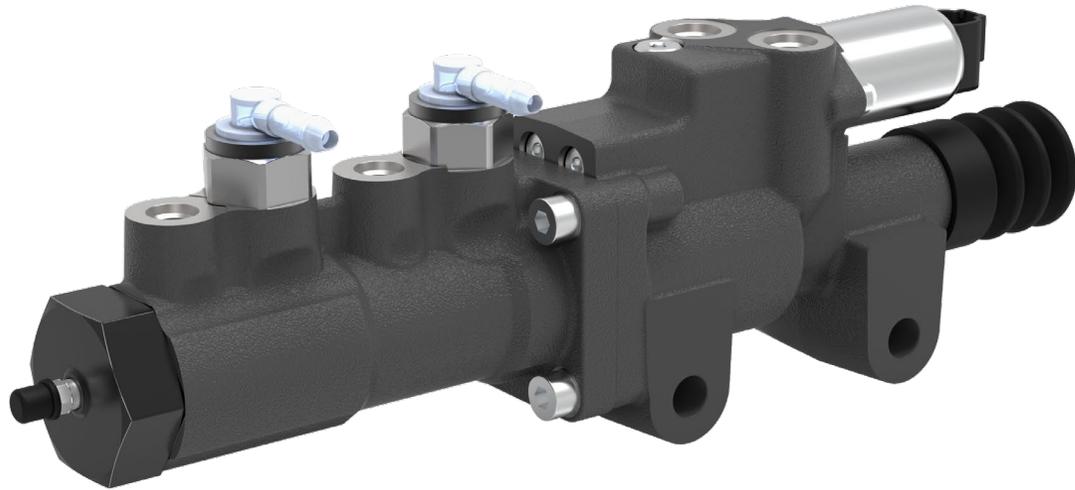
- **Comfort**
- **ADAS (Smart Functions)**

### **EH Parking Brake Valve:**

- Redundant Safety Logic (Mother Regulation UE 2015/68 and UE 167/2013 compatible)
- Negative Pilot Logic
- Modular Design to fit all application needs
- Optimized Modulation Range for each SAHR axle through electro-proportional control
- Compact design with 2 control valves and one high flow spool
- Control secondary brake function
- Max brake pressure controlled by main spool (independent from control signal and feeding pressure)

# MC-SB-S-EH

BRAKE BY WIRE  
MASTER CYLINDER



## MORE SAFETY

- Automatic Braking
- Remoted Braking

## MORE ASSISTED FUNCTIONS

- Comfort
- ADAS (Smart Functions)
- Selectable Braking Mode (On Road / Off Road / Working Modes)
- Suitable for reverse drive / dual operator station

## MORE AUTOMATED FUNCTIONS

- Braking for unmanned vehicles



### Master Cylinder with Hydraulic Booster:

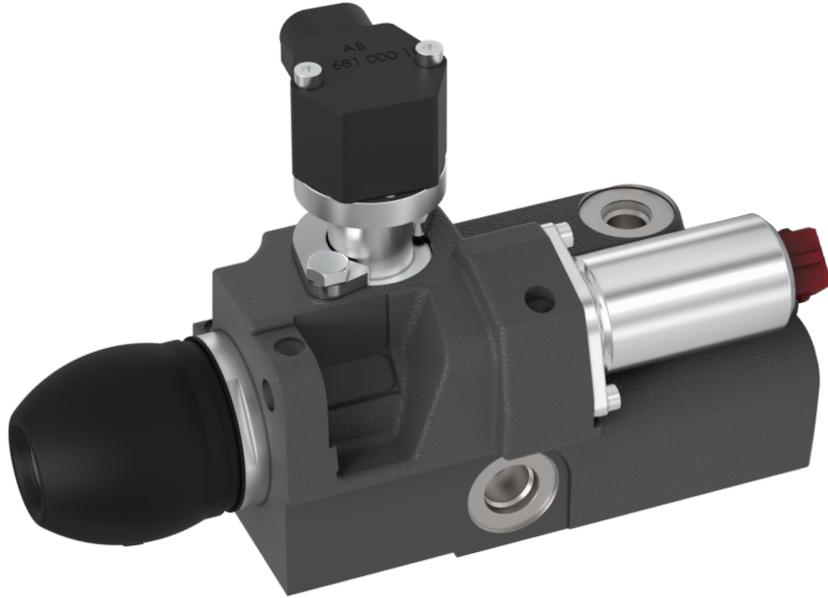
- CC Booster feeding by CP line
- Range of Booster/MC ratios available
- EH proportional control independent from hydraulic booster
- Up to 2 braking circuits
- Mineral Oil or Brake Fluid (DOT)

### EH-PRV integrated in Booster stage:

- Space-saving layout
- Position Sensor integrable (Fault diagnostic / Inching command)
- Different internal logics for different purposes
- Suitable for retrofitting (Interchangeable with current MC)

# S6E-EH

BRAKE BY WIRE  
POWER BRAKE VALVE



## MORE SAFETY

- Automatic Braking
- Remoted Braking

## MORE ASSISTED FUNCTIONS

- Comfort
- ADAS (Smart Functions)
- Selectable Braking Mode (On Road / Off Road / Working Modes)
- Suitable for reverse drive / dual operator station

## MORE AUTOMATED FUNCTIONS

- Braking for unmanned vehicles

### Dual-Circuit brake by wire Power Brake Valve:

- Engineered for large volume / high flow applications
- EH command acts only if greater than operator command
- Pedal Position / Brake feeling doesn't change
- Configurable Pedal Layout
- Various Options Integrable
- Suitable for retrofitting (Interchangeable with current valve)

### EH-Braking Option:

- EH-PRV integrated for Braking Actuation
- No Additional Feeding Circuit needed
- Position Sensor integrable (Fault diagnostic / Inching command)

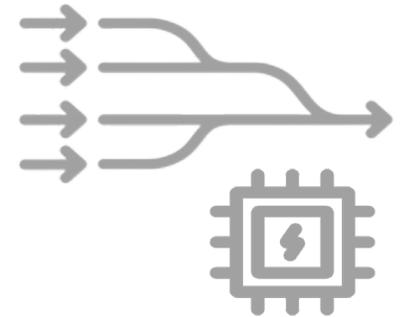
TOWARD  
NEXT GEN  
VEHICLES

**BRAKING APPS  
&  
ALGORITHMS**



**COMPLEXITY REDUCTION**

Software configuration  
Less variants



MORE EFFICIENCY

MORE SAFETY

MORE ASSISTED FUNCTIONS

MORE AUTOMATED FUNCTIONS

**MORE SAFIM**

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THANKS FOR YOUR ATTENTION

