

# BLAIN HYDRAULICS MODERNIZATION SOLUTIONS



*Excellence in Simplicity and Performance*

**BLAIN HYDRAULICS** is the leading manufacturer of high quality hydraulic elevator products for five decades. Blain products have proven their safety and quality by possessing more than one third of the global market share and one million valves in operation in more than 75 countries worldwide.



## Ease of modernizing with Blain products

- Simple & compact design
- ½ day installation time
- Easy set-up
- Plug & Play
- Integrated A3 solution - iL10 / L20
- Interface module for old controllers - Variotech
- Technical support and availability of other components like pumps and motors if required



**EV4/40 VVVF** - control valve for high performance passenger elevators. Inverter driven, energy efficient control valve for environment friendly lift applications.



**SEV** - Servo electronic valve offers excellent ride quality independent of oil temperature and load variations for commercial & residential lifts.

## Benefits of modernization with Blain products

- Convertibility amongst solutions
- No change in lift controller
- Interchangeable spare parts
- Familiar design
- Straightforward installation & setup
- Upgradable with options
- Latest norm compliance



**iL10**- UCM (A3) safety valve against unintended car movement - Integrated safety valve.



**L20**- UCM (A3) safety valve against unintended car movement - Built-on safety valve.

Save up to 65% energy • Improve safety & comfort • Protect the environment

## Tank with a non-BLAIN valve



A non-Blain valve on the tank can be replaced by a Blain EV4/40 easily.

When the existing valve is a Blain EV100 valve, it can be converted to an EV4/40 in less than 10 minutes by using a renovation kit.

## Tank with a BLAIN EV100 valve



Remove the existing valve



The GA700/L1000H inverter and its electrical components can be either fixed in the lift controller or placed in a separate cabinet. Necessary lift parameters are set in the inverter through a digital operator/smart phone as shown in quick start guide.

Renovation kit



Fix the EV4/40 valve on the tank

Finally, perform a teach run only with the empty cabin. Your lift is ready to run with a green solution.

When necessary, A3 compliance can be easily satisfied by the integration of an iL10 valve.



Conversion into EV4/40

## EV40 valve

No need to replace the existing lift controller



Parameter set-up as shown in quick start guide



# Modernize it with SEV

Up to 30% energy savings • Excellent ride comfort • A3 compliance • Adjustment free installation

## Tank with a non-BLAIN valve



**SEV** is an electronically controlled valve, which provides a comfortable ride independent of load and temperature changes. The valve is delivered with an electronic card, which can be easily connected to any existing lift controllers. The **SEV** can be implemented in half a day by one person.

The valve & the card are factory adjusted and do not need any manual correction. If necessary, parameter set-up can be done as shown in the quick start guide. **SEV** is applicable to old lift controllers and withstands extreme harsh environments.



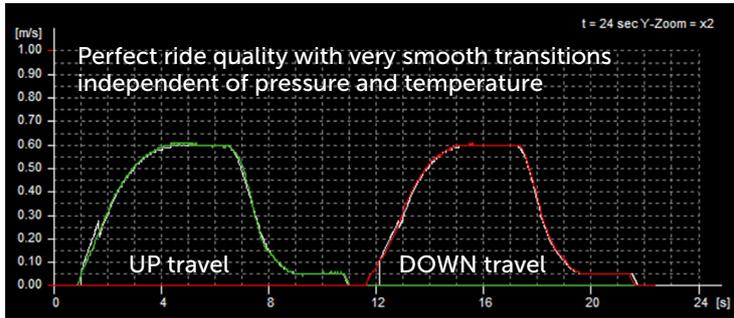
Remove the existing valve

Stable travel characteristics for a wide range of operating conditions and an intelligent energy saving mode help reducing electricity bills by 30%.

An existing EV100 mechanical valve can be replaced by an **SEV** without modernising the old lift controller. The **SEV** can also be combined with the EV4-vvvf solution (**SEV4**) where, up travel is inverter driven and down is electronic.

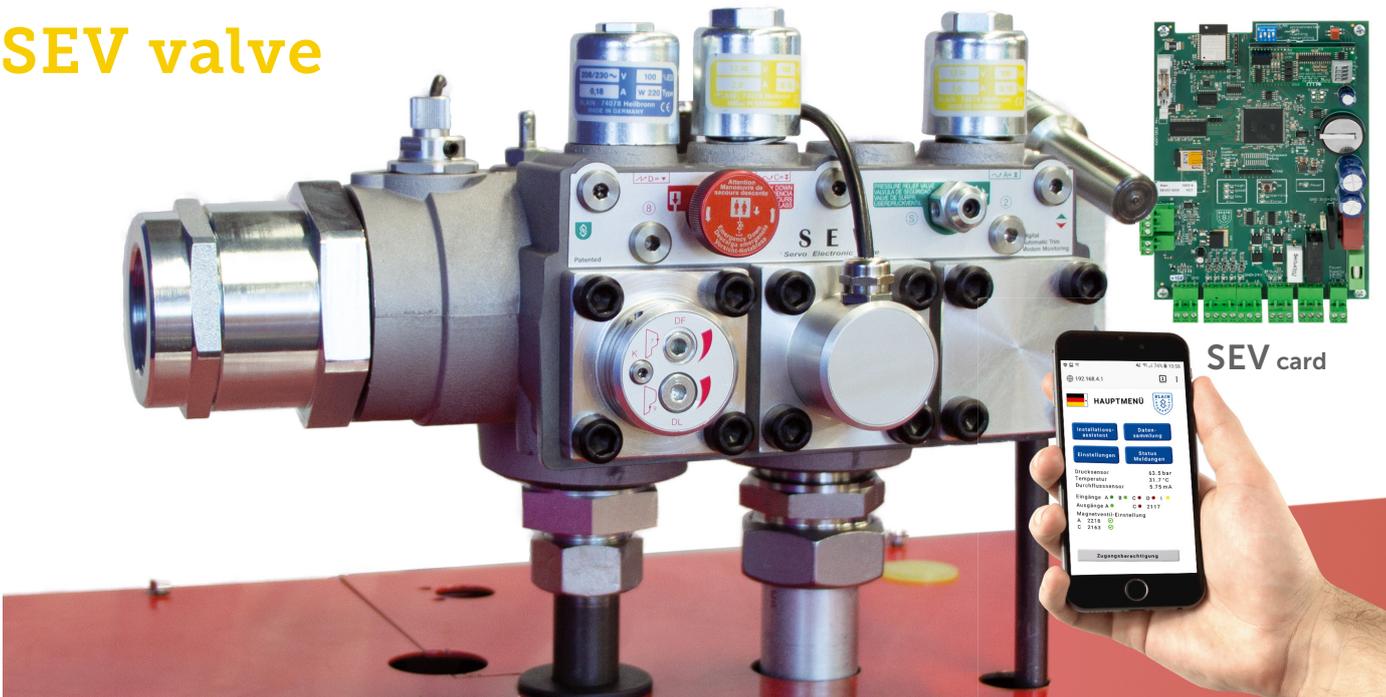


Fix the SEV valve on the tank



SEV travel graph

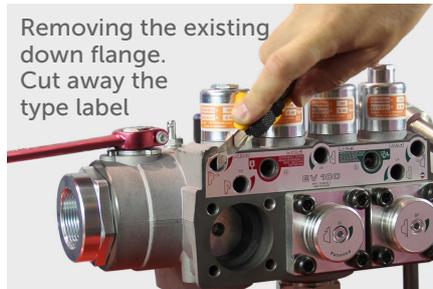
## SEV valve



# Modernize it with iL10 / L20

**Practical, compact, easy to adopt and energy saving A3 solutions for preventing Unintended Car Movement - UCM**

**iL10** is applicable to 1½" and 2" EV type valves whereas **L20** is used for ¾" EV's. Both can be delivered separately for upgrading the existing valve or come as already integrated on the Blain EV valve. The solutions do not require extra adaptors, reduce energy consumption & labour cost. The risk of external leakage is eliminated and the complete control valve becomes very compact.



Removing the existing down flange. Cut away the type label



Fix iL10 on the valve and new type label

Upgrading can be done easily by simply replacing the down flange with the new **iL10** valve. After removing the existing down adjustments and the flange, the type label is cut away and the **iL10** valve is installed as shown in the manual.

Because **iL10** is not placed in between the cylinder line, no additional connectors are needed. It introduces a compact solution that saves considerable amount of energy and labour time.



**iL10**



EV valve without A3 solution



Fix L20 on the valve



Connecting the ball valve

**L20** is a compact and energy saving UCM solution that can be simply fixed on any existing ¾" EV valve by using 4 screws. No additional connectors are needed. When delivered as integrated on the EV valve an internal tank connection is provided, whereas a separately delivered **L20** valve requires an extra tank connection. **L20** reduces heat generation and improves ride quality.



**L20**

## Vairotech control module

The variotech control module makes it possible to upgrade old lift controllers to be used with Blain valves.



Holders at floor level



Sensors to detect movement



Vairotech control unit