

Economy Line

*The solution for high-use, high load applications:
More rides for less energy with frequency control*



Ideal for modernisation and upgrades

Saturn ALPHA



The perfect solution for frequently used lift installations in public buildings such as airports, train stations and shopping centres.

Save energy

Energy savings of up to 60% can be achieved.

High travel performance

Up to 200 rides per hour are possible without oil cooler and costly machine-room ventilation.

Low-noise technology

As much as 10 dBA quieter in the machine room.

Short and consistent travel times, irrespective of load and temperature

Irrespective of load and temperature, this hydraulic drive ensures a high degree of stopping accuracy, short and consistent slow-speed travels, and delay-free starts – with unvarying, unsurpassed ride comfort.

Flexible

Existing installations with overheating issues can be upgraded easily. Ziehl-Abegg inverters can also be used.

Inexpensive installation, operation and maintenance

The effort and costs of installing oil cooling are eliminated. Hydraulic components suffer less wear thanks to the lower oil temperatures.

Before

60°C

After

Optional MULTIKIT*

Power unit with oil cooling and costly machine-room ventilation

Power unit with frequency control, 200 rides/hour without an oil cooler and up to 60% energy savings
* for modernisation without changing the controller

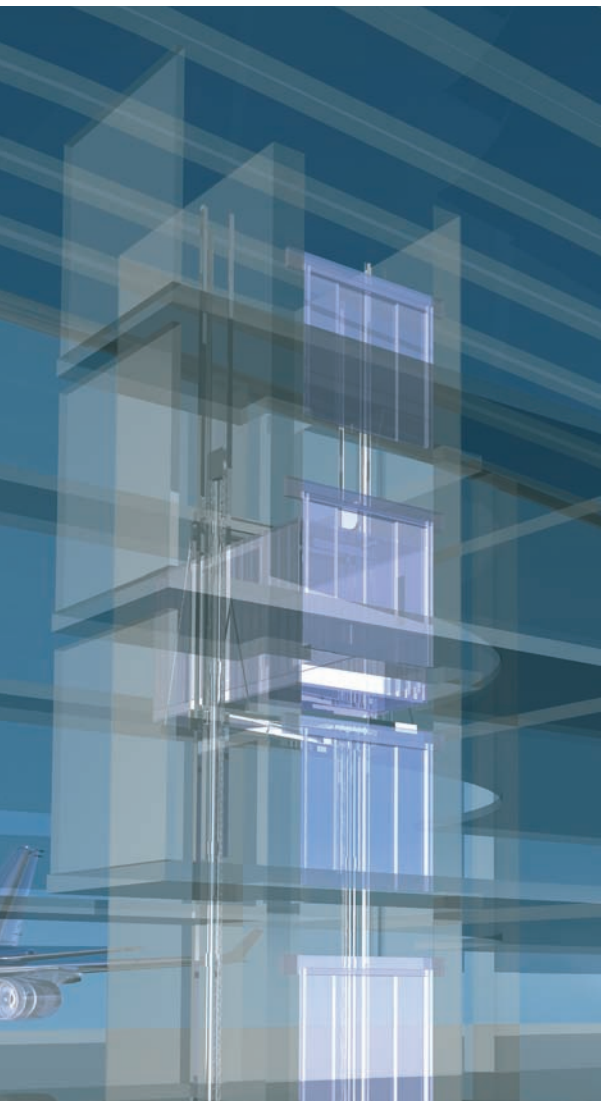
Typical application areas

Saturn ALPHA	Valve	Payload kg	Cabin weight kg	Travel height m	Speed m/s	System
UDA 230	VF-LRV 350	630	700	up to 17	1.00	Rucksack 2:1
UD 350	VF-LRV 350	1000	1500	up to 17	1.00	Rucksack 2:1
UD 500	VF-LRV 700	1500	2000	up to 20	1.00	Rucksack 2:1
UC 750	VF-LRV 700	3000	3000	up to 20	0.63	Tandem 2:1

more applications possible, incl. multiple power units

Unmatched hydraulic efficiency

Economy Line



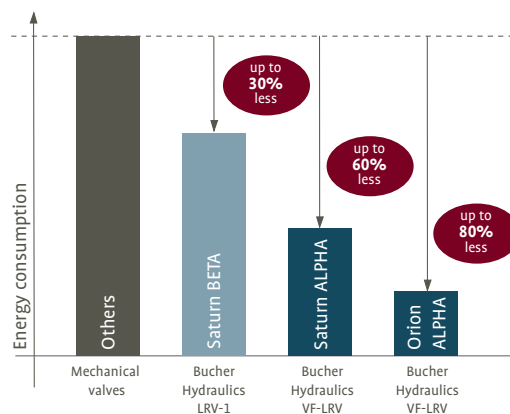
The powerful, economical and low-noise drive solutions with reduced energy consumption of as much as 80 %.

Power units in the Economy Line are available in two versions

- Saturn ALPHA: the perfect solution for high-use, high-load applications.
- Orion ALPHA: the solution with hydraulic counterweight for reduced power input.

Variable-frequency technology

Your investment in VVVF technology easily pays for itself.



We will be pleased to calculate the possible energy- and cost-savings for an actual project!

Years of experience

Thousands of Bucher Hydraulics VF drive systems have been in successful operation since 1998.

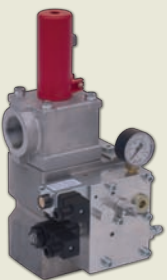
Further advantages of variable frequency drives

The combination of electronic VF-LRV valve and the frequency inverter allows for absolutely perfect ride characteristics:

- Precision leveling in up and down directions (+/- 3mm)
- No start lag, fast and smooth start
- Start current limited without soft starter

Optional

- Further reduction of installation and maintenance costs
> operation without motor contactors (TÜV-certified)
- Max. reduction of power connection
> load dependent speed control (limits current required)
- Regeneration package available to feed up to 30% of the drive energy back into the grid



Frequency control and hydraulic counterweight

Orion ALPHA



Instead of a counterweight, hydraulic pressure accumulators are installed.

During every UP travel, these release their stored pressure once again, thus relieving the load on the electrical drive.

Save energy costs and reduce standing charges

Up to 80% energy saving and 40% lower connection power possible.

Maximum travel performance

The high efficiency means that, maximum travel performance can be attained with the existing electrical supply rating.

Up to 200 travels per hour are possible without oil cooler and costly machine-room ventilation.

Low-noise technology

As much as 10 dBA quieter in the machine room.

Short and consistent travel times, irrespective of load and temperature

Irrespective of load and temperature, this hydraulic drive ensures a high degree of stopping accuracy, short and consistent slow-speed travels, and delay-free starts – with unvarying, unsurpassed ride comfort.

Inexpensive installation, operation and maintenance

The effort and costs of installing a cooling facility are eliminated. In addition, when a hydraulic counterweight in the form of a pressure accumulator is installed, it is more compact than a conventional counterweight and also safer, particularly in earthquake zones.

Hydraulic components suffer less wear thanks to the lower oil temperatures.

Typical application areas

Orion ALPHA	Valve	Payload kg	Cabin weight kg	Travel height m	Speed m/s	System
UD 450A	VF-LRV 350	500	750	up to 20	0.63	Side-ram 2:1
UD 600	VF-LRV 350	2000	2500	up to 15	0.63	Tandem 2:1

more applications possible, incl. multiple power units

Products

The Bucher Hydraulics range

Bucher Hydraulics offers a wide range of hydraulic lift components.



Electronically controlled lift valves

LRV: The proven lift control valves provide unsurpassed ride comfort, irrespective of load and temperature.

iValve: The next generation lift control valve adjusts the ride curve by itself to an optimum after a few rides only. It comes prepared for remote access, remote monitoring and intelligent self-prognosis.

Power units

Compact Line: the good-value package solution with the innovative synthetic tank and the C-LRV electronically controlled lift valve.

Comfort Line: the standard power unit with the LRV-1 electronically controlled lift valve offers unlimited application possibilities and numerous options.

Economy Line: the high-performance, economical, and low-noise drive solution with the VF-LRV electronically controlled lift valve reduces energy consumption by up to 80% in comparison with mechanically controlled hydraulic lift installations.

Frame kits

BLF: The range of side-ram frame kits is suited for hydraulic passenger and goods/passenger lifts with payloads up to 1,600 kg.

Jupiter: The range of tandem-frame kits is suited for hydraulic goods/passenger lifts with payloads up to 6,000 kg.

MRL-drive systems (machine room-less)

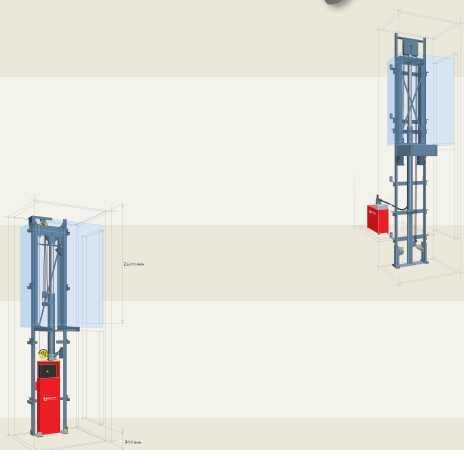
Tiger: the best system for optimised shaft utilisation with greater design freedom: The shaft pit can be as low as 300 mm and the shaft head as low as 2600 mm.

Modernisation

MULTIKIT: the route to perfect modernisation of a hydraulic lift drive, without time-consuming and costly replacement of the lift controller.

Cylinders

Versatile, robust and reliable.



Bucher Hydraulics AG

Industriestrasse 15

CH-6345 Neuheim

Phone +41 41 757 03 33

Fax +41 41 757 03 17

elevator@bucherhydraulics.com

www.bucherhydraulics.com