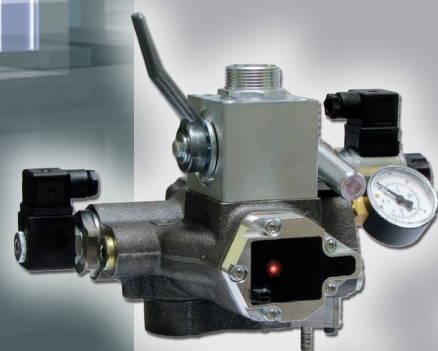
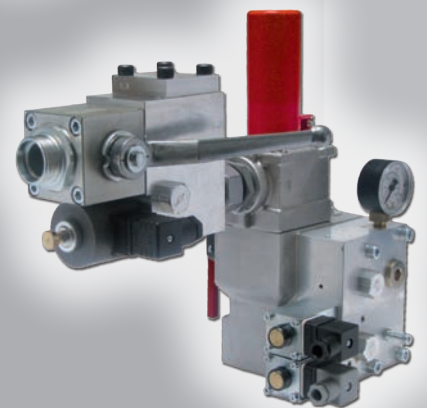
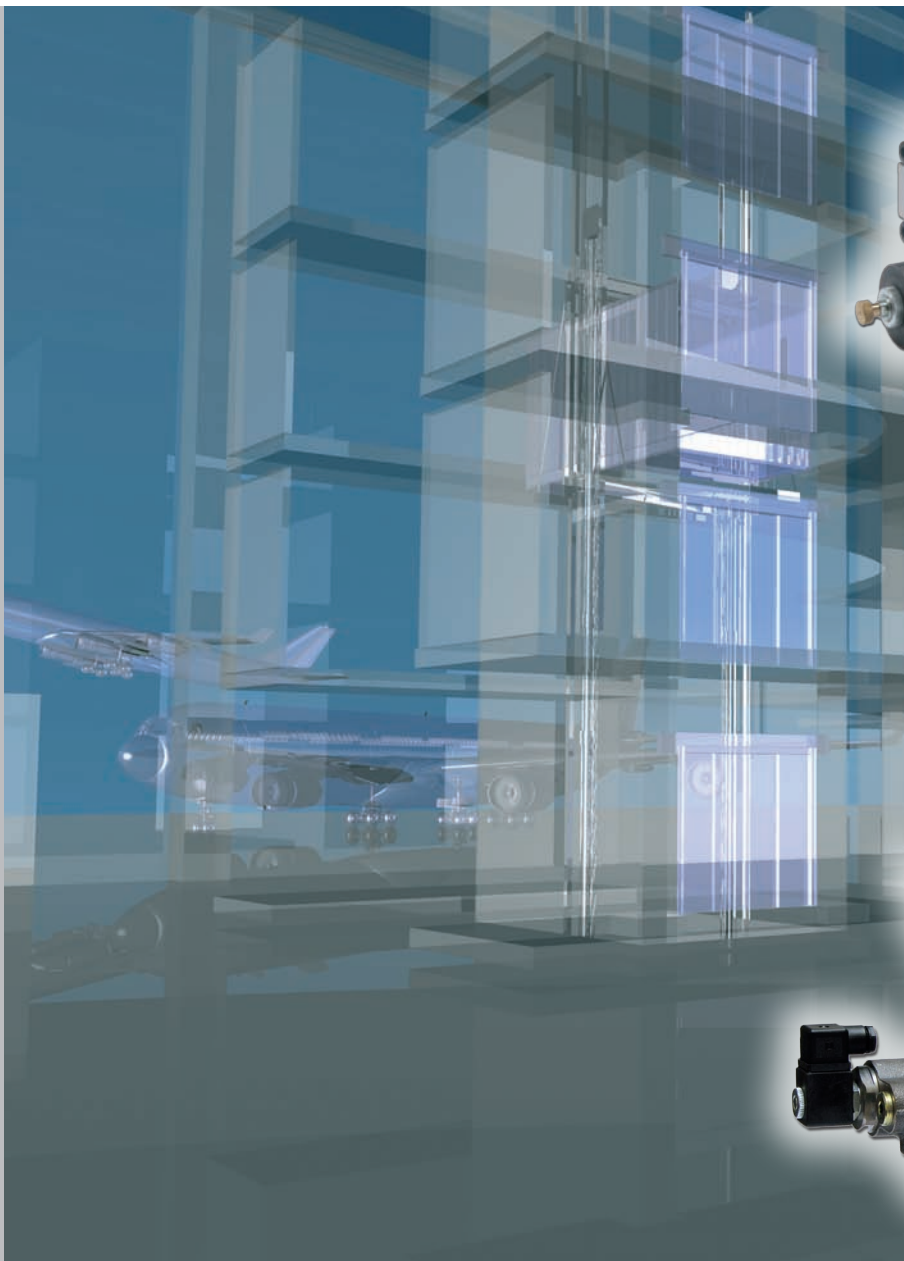


## Safety Solutions for A3

Safety valves against unintended car movement (EN81-2:2010)



Safety valves against unintended car movement

# Double Safety Valve DSV-A3

## Universal additional safety valve

The Double Safety Valve DSV-A3 is the new TÜV SÜD certified additional valve for protection from unintended car movement according to DIN EN81-2 2010. It can be used as an additional universal safety valve to any lift control valve of any manufacturer and has successfully passed type-examination by TÜV SÜD.

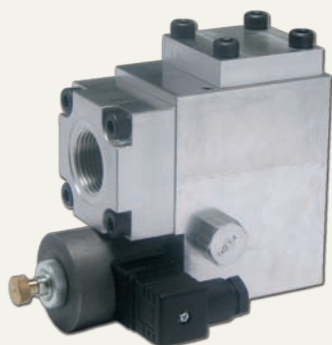
## Application:

- For new installations of LRV-1
- For new installations of any other lift control valve (any manufacturer)
- For retrospective modifications of LRV-1
- For retrospective modifications of any other lift control valve (any manufacturer)

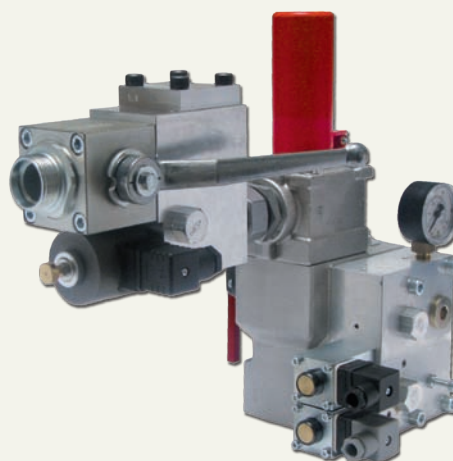
## Technical data:

DSV-A3 type	Flow range l/min	Max. oil pressure bar
DSV-175 A3	15 - 250	80
DSV-350 A3	150 - 500	80
DSV-700 A3	250 - 1000	67

Additional Safety Valve DSV-A3  
Standalone



Safety Valve DSV-A3  
Combined with LRV-1



**A3 integrated!**

Intelligent lift valve with integrated A3 requirements

## Lift Control Valve „iValve“

### **Intelligent and safe**

The iValve combines simplicity, safety and intelligence. It is certified to correspond to DIN EN81-2:2010 and does not need any additional safety valve - the landing accuracy of  $\pm 3\text{mm}$  exceeds the required precision by far.

### **iTeach: valve adjusts itself**

The iValve adjusts its parameters itself during the first rides.

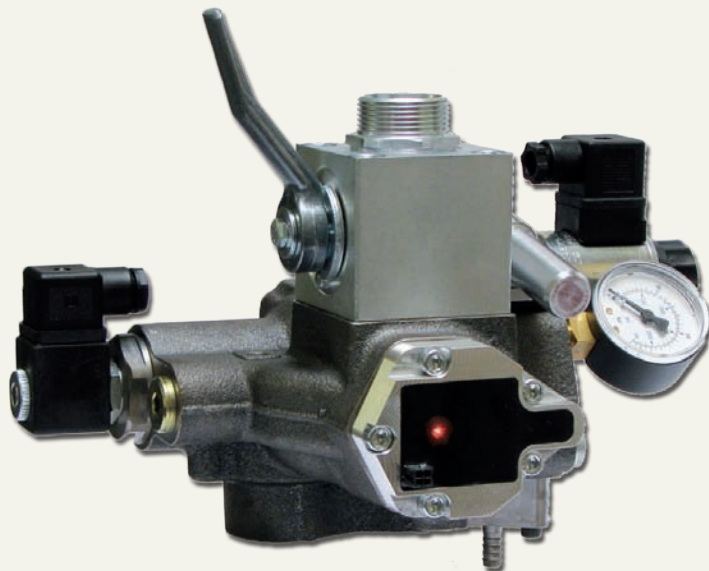
- No need for interminable setting of complex parameters anymore!
- Your staff do not have to be hydraulic professionals for a fast, advantageous and safe installation.
- Anybody can set the iValve - no hydraulic experience is required!

### **iAccess and iMonitoring (optional):**

Remote Management and Condition Monitoring: the iValve monitors itself.

- The iValve monitors itself, delivers prognosis and it can do all that online.
- You know what has to be done at what point of time (e.g. time left until cleaning an oil filter)
- You save redundant service visits and follow-up services!
- You only do what is needed and satisfy the end customer!

**The intelligent lift control valve iValve  
Integrated A3-Valve**



Augmenting the safety of operator and user

# The A3 Requirements

## The requirements of the new standard:

The new european standard DIN EN81-2:2010 includes all previous editions and is compulsory for all hydraulic lifts. Some specific changes of the standard are generally known as „A3“. Here are the two most important ones:

### § 9.13 Protection against unintended car movement

„Hydraulic lifts shall be provided with a means to stop unintended car movement away from the landing with the landing door not in the locked position and the car door not in the closed position [...]“

### § 12.15 Normal stopping of the car at landings and levelling accuracy

„The stopping accuracy of the car shall be  $\pm 10$  mm“

These requirements have to be fulfilled for every lift commissioned starting from end of 2011.

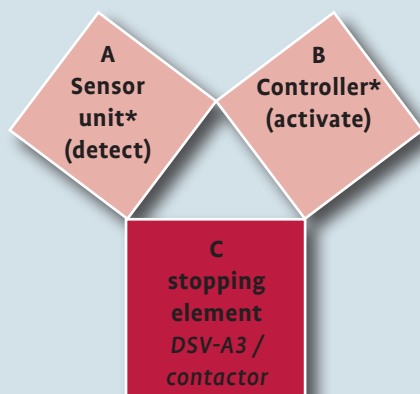
## Solutions fulfill the standard's requirements

To fulfil these demands with a hydraulic lift, you have two options:

- use a lift control valve that is officially corresponding to the new standard (e.g. iValve)
- put an additional safety valve between the cylinder and a lift control valve that offers a sufficient stopping accuracy (e.g. DSV-A3 combined with LRV-1)

**The iValve and the DSV-A3 valve meet these requirements and are certified by TÜV SÜD.**

## The means:



The means consists of three parts:

- A) A sensor unit\* that detects unintended movement of the car
- B) A controller\* that processes the signal and interrupts the power supply to the stopping element.
- C) A stopping element that stops the movement of the car

### Up:

As to date contactors fulfil this function.

### Down:

The car is stopped by

- the new, redundant safety valve „DSV-A3“, or
- The integrated A3-Function of the new, intelligent lift control valve „iValve“

\* not from Bucher Hydraulics

## Benefits for your customers

The standard provides important benefits for your customers and the lift user:

- The danger of stumbling is reduced (the most common cause of accidents!)
- Unsafe operation conditions are prevented
- The safety of the lift user is enhanced

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