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:**

<table>
<thead>
<tr>
<th>DSV-A3 type</th>
<th>Flow range l/min</th>
<th>Max. oil pressure bar</th>
</tr>
</thead>
<tbody>
<tr>
<td>DSV-175 A3</td>
<td>15 - 250</td>
<td>80</td>
</tr>
<tr>
<td>DSV-350 A3</td>
<td>150 - 500</td>
<td>80</td>
</tr>
<tr>
<td>DSV-700 A3</td>
<td>250 - 1000</td>
<td>67</td>
</tr>
</tbody>
</table>

**Additional Safety Valve DSV-A3**
- **Standalone**

**Safety Valve DSV-A3**
- **Combined with LRV-1**
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 ± 3mm 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!
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 ± 10 mm“

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

Solutions fulfill the standard's requirements

To fulfill 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“

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

* not from Bucher Hydraulics