

Installation Instructions

352 070 0..

05/10



Installation Instructions for **IAS-E**

352 070 ...

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Use

ILAS[®]-E is used for electrically controlled raising and lowering of one or more lift-axes with conventional air suspension systems. On EB⁺ systems, a load-dependent output signal is used to provide electrical actuation of the ILAS[®]-E. In the case of standard installations (without EB⁺), ILAS[®]-E can also be controlled by means of a separate special pressure switch with two adjustable pressure switching points (load dependent).

Method of operation

Electrically operated lift-axle control unit for raising and lowering the lift-axle(s).

When the voltage is on: Axle is lifted

When the voltage is off: Axle is lowered

Approach assistant: When using an approach assistant, it is essential that the statutory provisions with regard to lifting equipment (97/29/EC) are observed.

Fitting guidelines

Mechanical part:

The unit is mounted using the two holes drilled in the housing for this purpose. The installation site should be chosen such that ILAS[®]-E is shielded from stone impacts, is not exposed to splashing or flood waters and is protected from high pressure cleaning. Appropriate safeguards against unauthorised activation should be provided by the vehicle manufacturer. Pneumatic connection can be made according to a installation diagram, for example.

Pneumatic part:

Plastic tubing that complies with DIN 74 324 - 8x1 should be used for pneumatic lines for equipment with plug connections. When fitting the pneumatic lines, care should be taken to cut the tubing to the required length square and without leaving burrs by using a suitable tool.

Before the tubes are inserted into the plug connections, support no sleeves into the ends of the tubing, because the sleeves are integrated inside of the brass fittings. Push the tube at least 23 mm deep into the plug connection. After removing the protection cap, the plastic pipe can be removed again (e.g. for replacement) by pressing down on the protruding locking ring (using an open-ended spanner, for example).

During painting, all open plug-in connections, the connection to the atmosphere and the air exhaust must be protected from the ingress of paint by using appropriate shielding. This shielding must be removed again after painting.

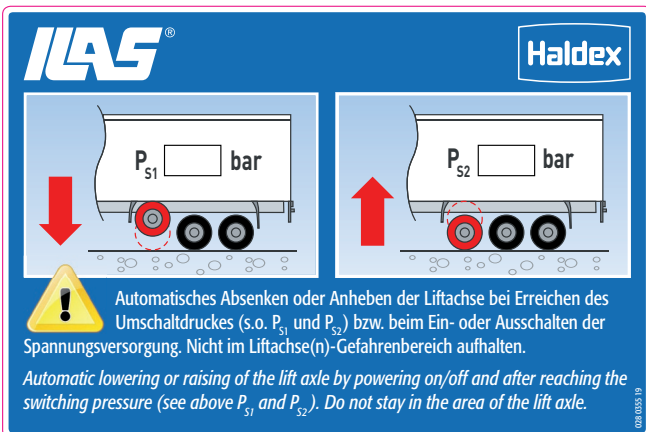
Electrical part:

Bayonet connection complying with DIN 72585. When making the bayonet connection, care should be taken that the gland nut is correctly seated and locks properly into place when turned clockwise, so as to ensure optimum sealing. The cable with the order no. 814 012 ... can be used for Haldex EB⁺. For connecting to EB⁺, see installation note 000 700 240.

Haldex Brake Products GmbH accepts no liability for any other method of actuation.

Instruction label 028 0355 19

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Attention - Danger!

The lift axle rises or lowers automatically when the change-over pressure is reached or when the voltage is switched on or off, respectively. Keep away from the hazardous area.

Strip the insulation from the cable only as far as illustrated. **3**
 After making the electrical connection, secure the PUR cable with the PG gland (4-6 Nm).
 Attach (0.5 - 0.6 Nm) the contact box with its seal using the screw (M3), sealing the screw with an O-ring \varnothing 3 x 1.5 (included with the mounting kit). The electrical cable outlet must be directed downwards. Connect in accordance with the electric wiring diagram.

Maintenance

To lower the lift axle, for example, during servicing (HU, SP), the voltage must be interrupted. Alternatively, a shut-off valve with an air exhaust (e.g. 334 077 001) can be installed upstream of Connection 1, which, when operated, likewise switches off the lifting device (so that the axle lowers).
 If defects are discovered, whether during examination of the vehicle, when travelling or in the course of commissioning, the device must be replaced.
 A safe distance to the ILAS®-E of at least 50 cm must be maintained when working with high pressure cleaners.

Check

- Check functionality and leak tightness.
- Function: When the voltage is on: Axle is lifted
 When the voltage is off: Axle is lowered

Technical data

Operating pressure	pe = 8.5 bar
Change-over pressure	min. 2.5 bar
Operating temperature	-40°C - +80°C
Weight	approx. 0.8 kg
Limited heat resistance	1h at 110°C
	depressurised
Voltage	U = 24V DC
	+6 / -8
Current / power	Io = 250 mA /
	Po = 6 W
Duty ratio	100% DR
Protection type	DIN 40050-IP
	6K 9K
Plug connection	for plastic tubing 8 x 1
	DIN 74324

Port designations

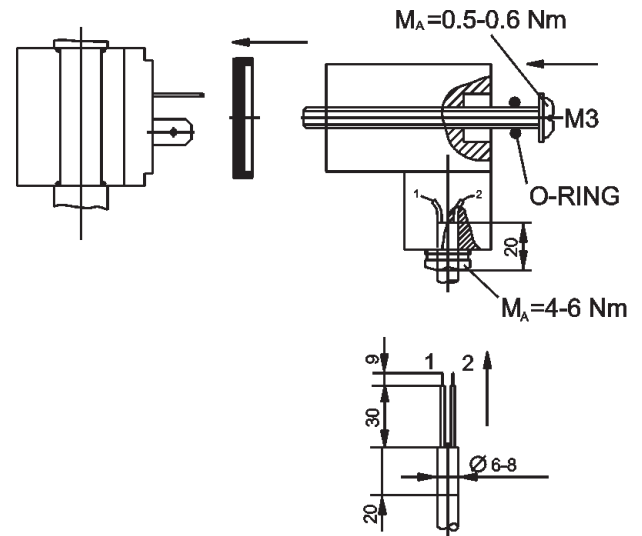
- 1, 1.1, 1.2 = supply
- 11 = air suspended axle
- 21.1, 21.2 = lift axle
- 22.1, 22.2 = lift bellows / actuators
- 3 = exhaust

Versions

- 352 070 101** Spade connector, 3-pin, Version I
- 352 070 111** DIN 72585-A12,1-SN/K1, Version II
- 352 070 121** DIN 72585-A12,1-SN/K1, Version III

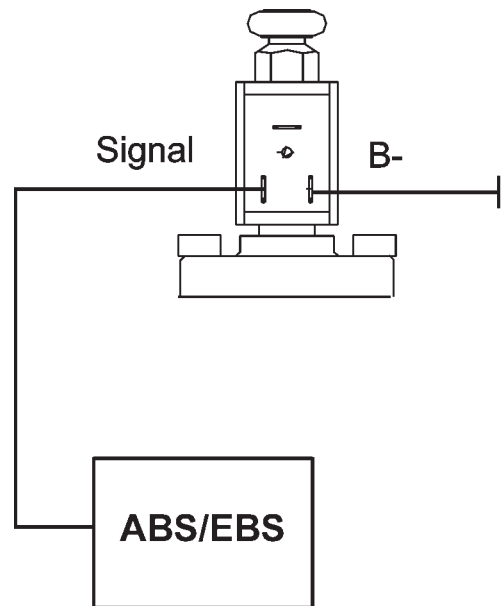
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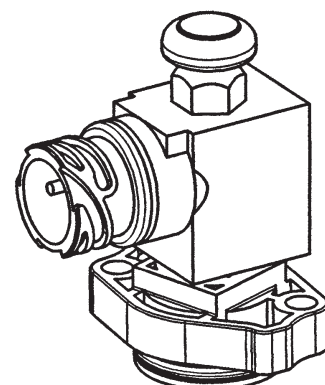
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Electric wiring diagram

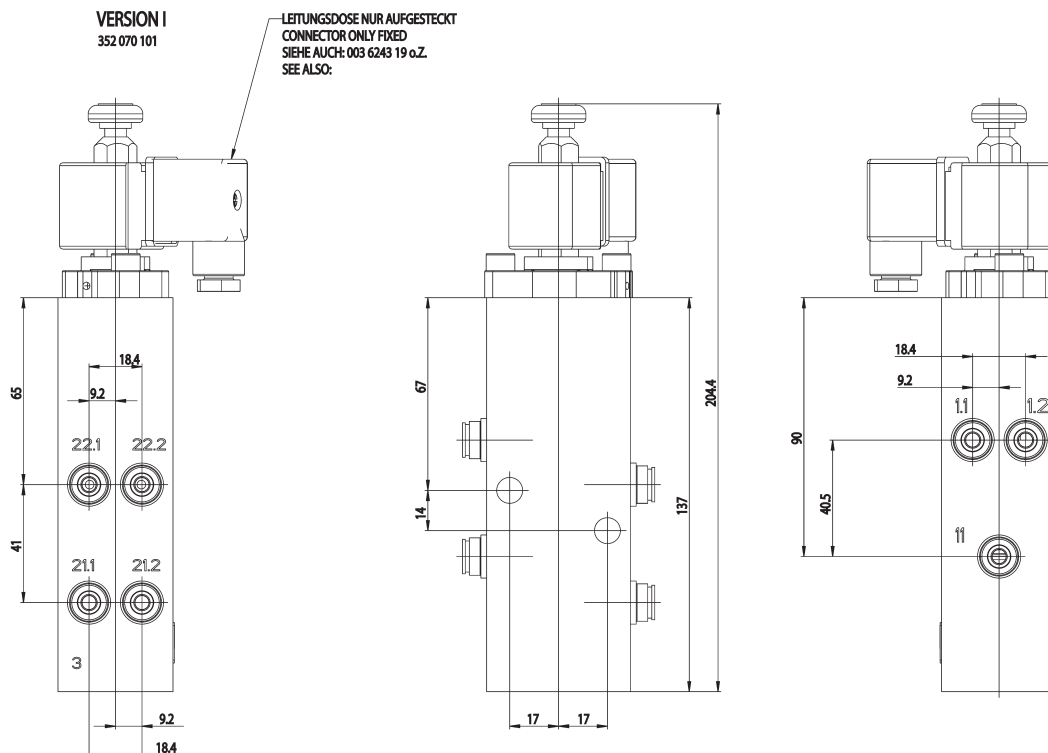


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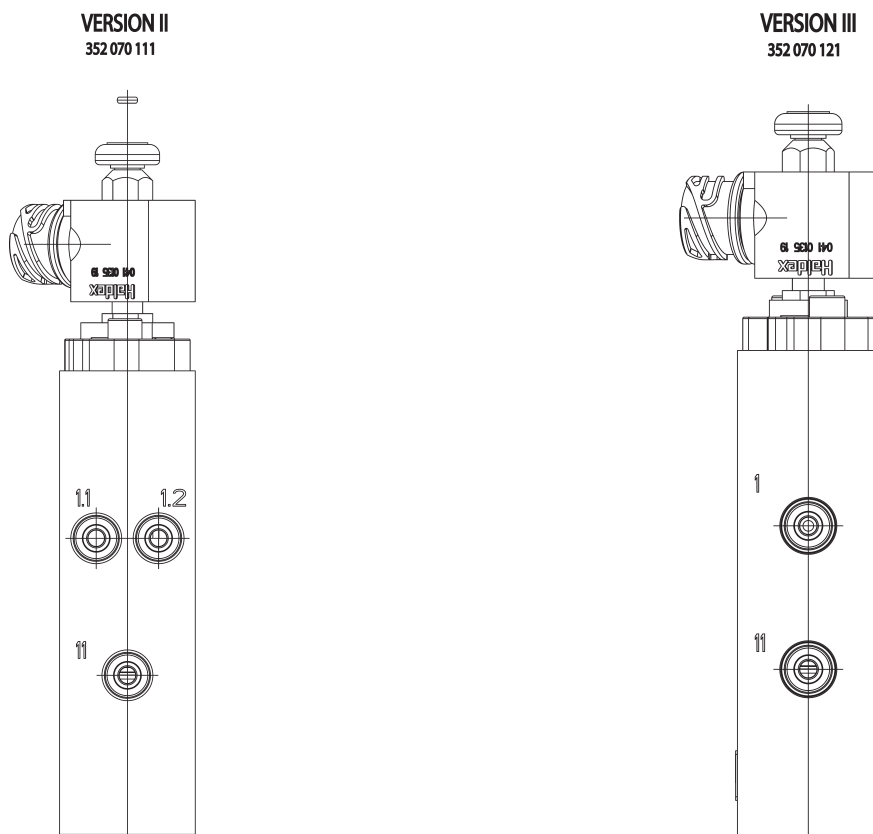
**Bayonet connection
 DIN 72585**



Installation drawing 338 07. ...

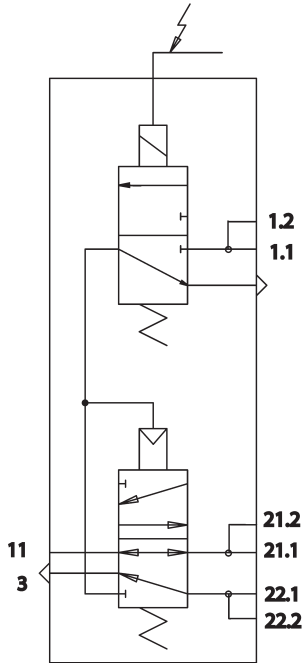


Installation drawing 352 070 ...

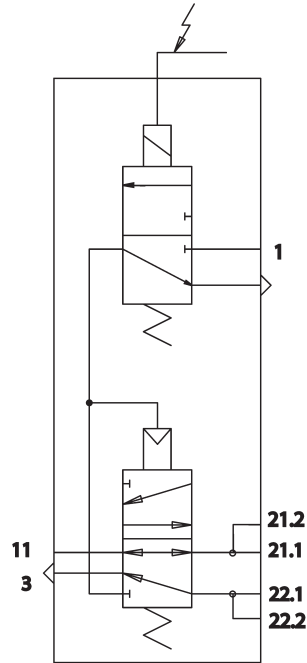


Symbol DIN ISO 1219

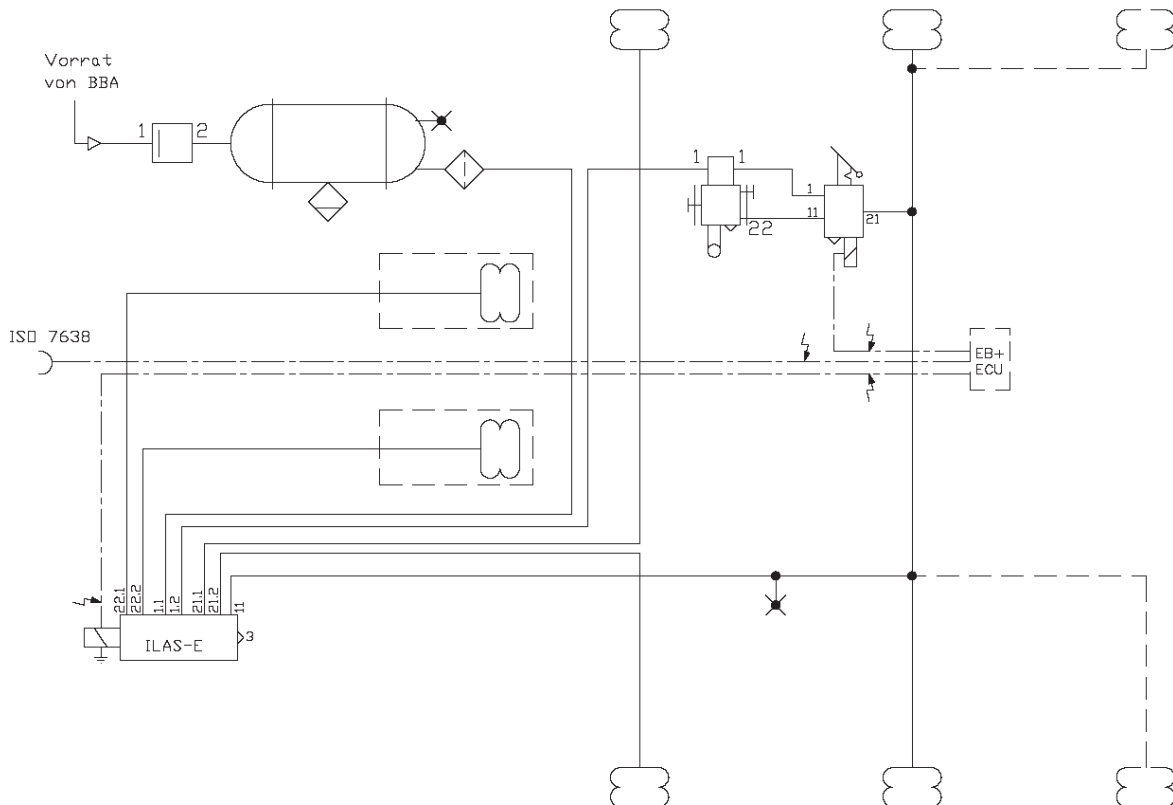
Symbol
DIN ISO 1219
VERSION I, II



Symbol
DIN ISO 1219
VERSION III



Installation diagram 352 070 ...



The pneumatic air suspension system has to be installed after consultation of the axle manufacturer

Haldex (www.haldex.com), headquartered in Stockholm, Sweden, is a provider of proprietary and innovative solutions to the global vehicle industry, with focus on products in vehicles that enhance safety, environment and vehicle dynamics.

Haldex is listed on the Stockholm Stock Exchange. Haldex has a yearly turnover of close to 5.6 billion SEK and employs 4,300 people.

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