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Use

COLAS®+ Raise/lower valve, which has an unparalleled high range of functions. Integrated are: Dead man’s function, RoRo-position and the ‘Reset to Ride height’ (RtR) function at versions with solenoid. As further flexibility, a high air flow is realised.

Method of operation

Position ‘Drive’ 1.

When the lever is in the central position it may be pulled out and locked to prevent unintentional operation. Ports 11, 12 are linked with 21, 22 providing a direct connection between the height control valve and the air bags.

Position ‘Stop’ 1.

When the lever is in the central position and pushed in, ports 11 and 12 are isolated from ports 21 and 22.

Position ‘Lowering’ 2.

When the lever is operated approx 35° in a clockwise direction from the ‘Stop’ position, ports 21 and 22 are linked with port 3 and the air bellows are deflated. On release, the lever automatically returns to the central position and isolates ports 21 and 22 from port 3 preventing further deflation of the bellows.

Position ‘RoRo’ (Lowering fixed) 2.

Operate the lever approx 35° in a clockwise direction from the ‘Stop’ position then push it down. Due to this, the dead man’s function is inactive and the lever is fixed in this position. Ports 21, 22 and 3 are now linked together and the bellows are now permanently exhausted.

⚠️ Attention - Danger!

No-one should be standing in the danger area when raising and lowering procedures are being carried out.
Position ‘Raising’ 3.

Operate the lever from position ‘Stop’ clockwise approx. 35°, so that the connection 21 and 22 are connected with connection 1 and therefore the bellows are ventilated.

On release, the lever automatically returns to the central position and isolates ports 21 and 22 from port 1 preventing further charging of the bellows.

Reset from ‘Stop’ position to ‘Drive’ position 3.

When the lever is in the central position it may be locked by pulling it out, so that unintentional operation is prevented.

If the solenoid valve on the underside of the unit (UB= 24 VDC +2.5 -3.5) controlled by the Haldex ABS/EB+ is with a pulse (when vehicle speed >15km/h individual setable) then reset of the lever from the ‘Stop’ position to the ‘Drive’ position is automatic (RtR).

Reset from position ‘Lowering fixed’ to position ‘Drive’

When the lever is in the fixed position it may be locked by pulling it out, then operate it to the central position.

Again pull it out to the ‘Drive’ position so that unintentional operation is prevented.

If the solenoid valve on the underside of the unit of the ABS/EB+ is controlled with a pulse (when vehicle speed >15 km/h individual setable) then reset of the lever from the ‘Stop’ position to the ‘Drive’ position is automatic.

Fitting guidelines

Electric 4.

Bayonet according to DIN 72585. On the bayonet the union nut must be attached suitable and engaged correctly by turning clockwise to guarantee optimal sealing. For Haldex EB+ you can use cable with part no. 814 012 ... . To connect to the EB+ see Installation instructions 000 700 240.

An electrical connection to the solenoid valve is only permissible by means of a Haldex EB+/ABS ECU which delivers a signal ‘reset-to-ride height’. Haldex does not accept any liability for other types of control.

Flat contact, remove insulation from cable. After connecting the lead you have to fix the cable with the PG-screw (4-6 Nm). Connect the cover together with the sealing by fixing the screw (M3) to 0.5 .6 Nm. On the screw you have to use in addition an O-ring diameter 3 x 1.5.
Pneumatic 5.

Pneumatic connection should be in accordance with assembly diagrams. The exhaust port „3” should be protected against contamination.

When assembling pneumatic lines care should be taken to ensure that the tubes are cut square and free from burrs.

Before inserting the pipes in the push-in fittings don’t support sleeves in the ends of the pipes because the sleeves are integrated inside of the brass fittings. Pipes are to be inserted at least 17.6 mm (on 8 mm pipe) or 20.5 mm (on 10 mm pipe) deep in the connections.

So that the permissible height is not exceeded when raising the deck height, it is advisable to use the equipment in conjunction with a height limitation devise (e.g. Haldex height control valve with height limitation). All open plug and socket connections and exhausts should be protected against contamination during painting. After painting, the protective devices should be removed again. Instruction label 028 0478 09 should be fixed in the vicinity of the COLAS+ valve.

Mechanical installation 7.

The assembly is mounted by a minimum of 2 x M8 bolts via holes provided on the housing tightening torque 15+2 Nm. The installation location should be selected, clear of direct spray or splash and with some protection from high pressure cleaners. The operating lever should be easily accessible. Care should be taken to ensure the lever does not protrude from the edge of the vehicle when pulled out. If required, protection against unintentional operation should be provided by the vehicle manufacturers.

![Instruction label 028 0478 09](image)

Schematic pneumatics 338 07...

The pneumatic air suspension system has to be installed after consultation of the axle manufacturer.
Design and function

6.

Dimensions 338 07. ...

7.

MIN. 2 x (DIAGONAL) M8 x 50
ANTIZIIDREINDMENT: 15 ±2Nm
TIGHTENING TORQUE:

Dimensions 338 07. ...

8.

Dimensions 338 07. ...
Maintenance

COLAS®+ is effectively maintenance free and only needs to be changed if the functionality is compromised or leakage is detected during normal servicing.

Note: With high pressure cleaners a safe distance of at least 50 cm from the COLAS®+ should be observed.

Testing

- Check function and leak-tightness of equipment
- Correct assembly position
- Instruction label in position

Technical data

Operating pressure \( p_{e\text{max}} \) 8.5 bar
Operating temperature -40°C bis +80°C

Solenoid

Permissible \( \text{lo} = 150\text{mA} / \text{Po} = 3.5\text{W} \)

Type of protection DIN 40050-IP 6K 9K

Port description

1 = Supply, DIN 74324-8x1
11, 12 = Levelling valve, DIN 74324-8x1
21, 22 = to the air bellows, DIN 74324-8x1.5
3 = Exhaust

Versions

338 071 101: with Dead man’s function, with RtR, 8 mm Push-In, c/w test point, with „RoRo” at lowering, c/w bayonet, c/w filter

338 071 111: with Dead man’s function, with RtR, 8 mm Push-In, w/o test point, with „RoRo” at lowering, c/w flat contact, c/w filter

338 071 121: w/o Dead man’s function, w/o RtR, 8 mm Push-In, c/w test point, with „RoRo” at lowering, c/w filter

338 071 131: with Dead man’s function, with RtR, 10 mm Push-In, c/w test point, with „RoRo” at lowering, c/w bayonet, c/w filter

338 071 141: with Dead man’s function, with RtR, 10 mm Push-In, w/o test point, with „RoRo” at lowering, c/w flat contact, c/w filter

338 071 151: with Dead man’s function, w/o RtR, 10 mm Push-In, c/w test point, c/w filter

Attention - Danger!

when vehicle speed > 15km/h, then reset of the lever from the 'stop' position to the 'drive' position is automatic (RtR).
Innovative Vehicle Solutions

Haldex develops and provides reliable and innovative solutions focused on brake and air suspension products to the global commercial vehicle industry. In 2016, the company had net sales of approximately 4.4 billion SEK and employed a workforce of 2,100 people.