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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. 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 is linked with 21 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 port 11 is isolated from port 21.

Position ‘Lowering’ 2.

When the lever is operated approx 35° in a clockwise direction from the ‘Stop’ position, ports 21 is linked with port 3 and the air bellows are deflated. On release, the lever automatically returns to the central position and isolate port 21 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 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 is connected with connection 1 and therefore the bellows are ventilated.
On release, the lever automatically returns to the central position and isolates port 21 from port 1 preventing further charging of the bellows.

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.

Position ‘Raising fixed’ 3.

Operate the lever approx 35° in an anti-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. The ports 1 and 21 are durable linked together and the bellows are inflated.

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.
Haldex-ABS/EB+ is controlled 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.

Reset from position ‘Stop’ to position ‘Drive’ or Reset from position ‘Lowering fixed’ or ‘Raising fixed’ (optional) to position ‘Drive’ 3.

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. Haldex - ABS/EB+ is controlled 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.

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 / 006 300 018. 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.
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.

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 18.5 mm (on 12 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.

Schematic pneumatics 338 06. …
The pneumatic air suspension system has to be installed after consultation of the axle manufacturer.
Design and function

6.

Dimensions 338 06. ...

7.

Dimensions 338 06. ...

8.

Dimensions 338 06. ...
Maintenance

COLAS®+ is effectively maintenance free and only needs to be changed if the functionality is compromised or leakage is detected during normal servicing. Not: 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: $p_{e}$ max 8.5 bar
Operating temperature: -40°C bis +80°C

Solenoid

Permissible: 10 s
Voltage: $U_b = 24VDC \pm 7/-8$
Current/power: $I_0 = 150mA / P_0 = 3.5W$
Type of protection: DIN 40050-IP 6K 9K

Port description

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

Versions

338 061 201: with dead man’s function, with RtR, 2x8 mm push-in, 1x12 mm push-in, c/w test point, with RoRo at lowering locked

338 062 201: with dead man’s function, with RtR, 2x8 mm push-in, 1x12 mm push-in, c/w test point, with RoRo at lowering locked
RoRo at raising locked

Attention - Danger!

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