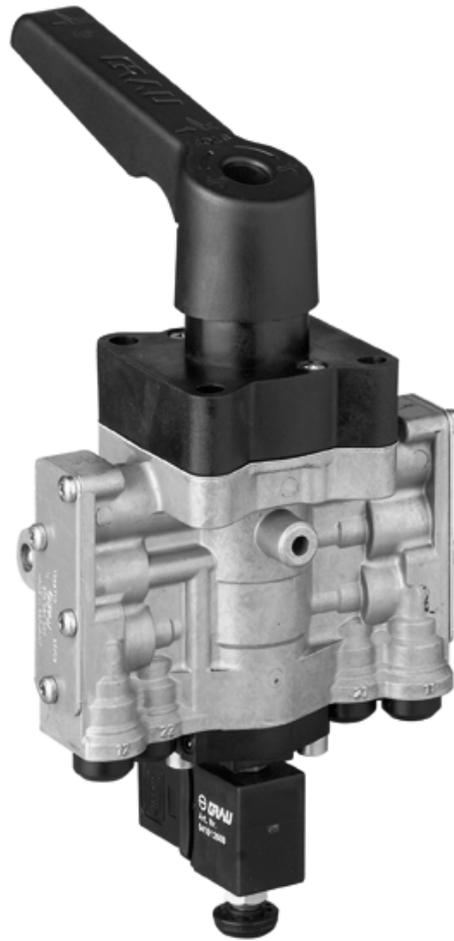


Innovation

Safety

Quality

Performance



INSTALLATION INSTRUCTION

COLAS®

Raise-Lower Valve

338 0.. ...



338 051/054...



1

Introduction

The manually Raise/Lower valve with dead man's function, is used for raising and lowering the deck height of commercial vehicles and trailers. When electrically connected to the ABS via a solenoid valve, the system provides automatic reset to ride.

Operation

Position "drive" 11

When the lever is in the central position it may be **pulled out** and locked to prevent unintentional operation. Connections 11 are linked with 21 and 22 providing a direct connection between the height control valve and the air bellows. See **15**

Position "Stop" 11

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

Position "raising" 11

When the lever is operated from the 'stop' position in an anticlockwise direction approx. 45° connections 21, 22 are linked with connection 1 and the air bellows are inflated.

On release, the lever automatically returns to the central 'stop' position and isolates connections 21, 22 from connection 1 preventing further bellow inflation.

(Note that the deadman function' is **not available on 338 053/055...**).

Position "lowering" 11

When the levers is operated approx 45° in a clockwise direction form the "Stop" position, connections 21, 22 are linked with connections 3 and the air bellows are deflated.

On release the lever automatically returns to the central position and isolates connections 21, 22 from connection 3 preventing further deflation of the bellows.

(Note that the deadman function' is **not available on 338 053/055...**).

Reset from "Stop" position to "Drive"position

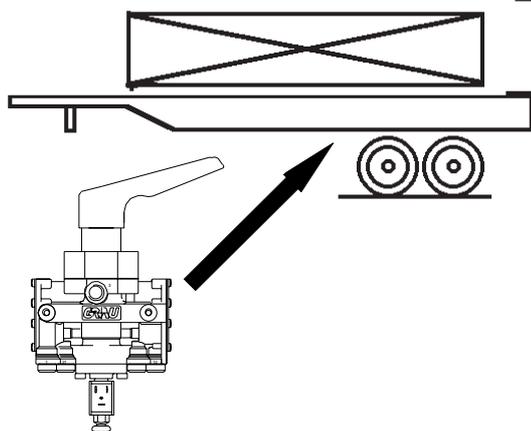
When the lever is in the central position it may be locked by pulling it out so that unintentional operation is prevented.

Only 338 051/054....: if the solenoid valve on the underside of the unit **5** (UB= 24 VDC +2,5.- 3,5) of the **Haldex-ABS 10** is controlled with a pulse (when vehicle speed>15km/h) then reset of the lever from the 'stop' position to the 'drive' position is automatic.

338 052/053...



2

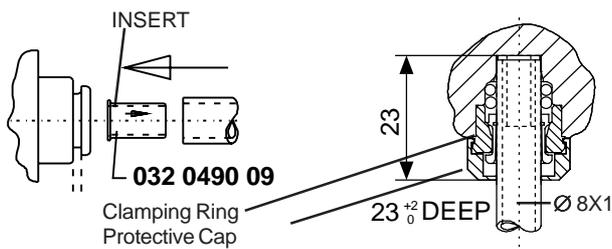


NOTE : DANGER !

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

Assembly Guidelines

3



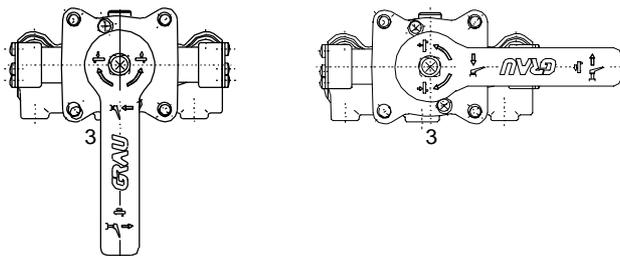
The assembly is mounted by least 2xM8 bolts **5,6** via holes provided on the housing**. The installation location should be selected, clear of direct spray or splash and with some protection from high pressure cleaners. The operating lever should be easily accessible. **2** Care should be taken to ensure the lever does not protrude over the edge of the vehicle when pulled out. Corresponding protection against unintentional operation should be provided by the vehicle manufactures. Pneumatic connection should be in accordance with assembly diagrams. **13,14** The exhaust port "3" **5,6** should be protected against contamination by fitting a silencer 059 0460 09, or by means of an elbow and a short length of tube of minimum inside diameter 9mm (e.g. Tube 12x1.5).

Assembly Positions

4

338 051/052/053/054/
055/056 001

338 051/052/053/054/
055/056 002



For 338 051/054....: A throttle **12** is provided with COLAS which is fitted in the "T" piece and is required in order to bypass the height limiting device.

As t-piece you can use the components from fig. **12** If no height restriction is used, the throttle is not required. Plastic tubing in accordance with DIN 74324-Ø 8x1 or 10x1 should be used for pneumatic lines. When assembling pneumatic lines care should be taken to ensure that the tubes are cut square and free from burrs. Before inserting the tubes in the push in connections, insert must be fitted in the tube ends in accordance with Haldex number 032 0490 09 (8mm) or 032 0491 09 (10 mm).

Tube penetration should be at least 23mm deep in the **push in fittings* 3**

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 restriction devise (e.g. Haldex height control valve with height limitaiton) **13,14**. All open plug and socket connections and exhausts should be protected against contamination during painting. After painting, the protective devices should be removed again. Reference plate 028 0410 09 **11** should be fixed in the vicinity of the COLAS valve.

338 051/054....: An electrical connection to the solenoid valve only permissible **10** by means of a Haldex ABS ECU which delivers a signal 'reset-to-ride height'. Haldex does not accept any liability for other types of control**.

*After removing the protective cap, the plastic tube can be removed again by pressing down the clamping ring with the flat face of an open ended spanner. (e.g. when changing).

** For other controls please note: Fixing with 4 bolts.

Accessories

Insert (8mm)	032 0490 09	5x	3
Insert (10 mm)	032 0491 09	5X	
Option: Silencer	059 0460 09	1x	12
Kit for throttle (8mm)	003 6206 09	1x	12
double nipple (10 mm)	032 0716 09	1X	12
t-piece (10 mm)	032 0715 09	1X	12

Included

Throttle 0.8mm for 338 051...	027 0665 09	1x	12
Throttle 0.8mm for 338 054 ...	027 0670 09	1X	12
Instruction Label	028 0410 09	1x	11

Maintenance

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

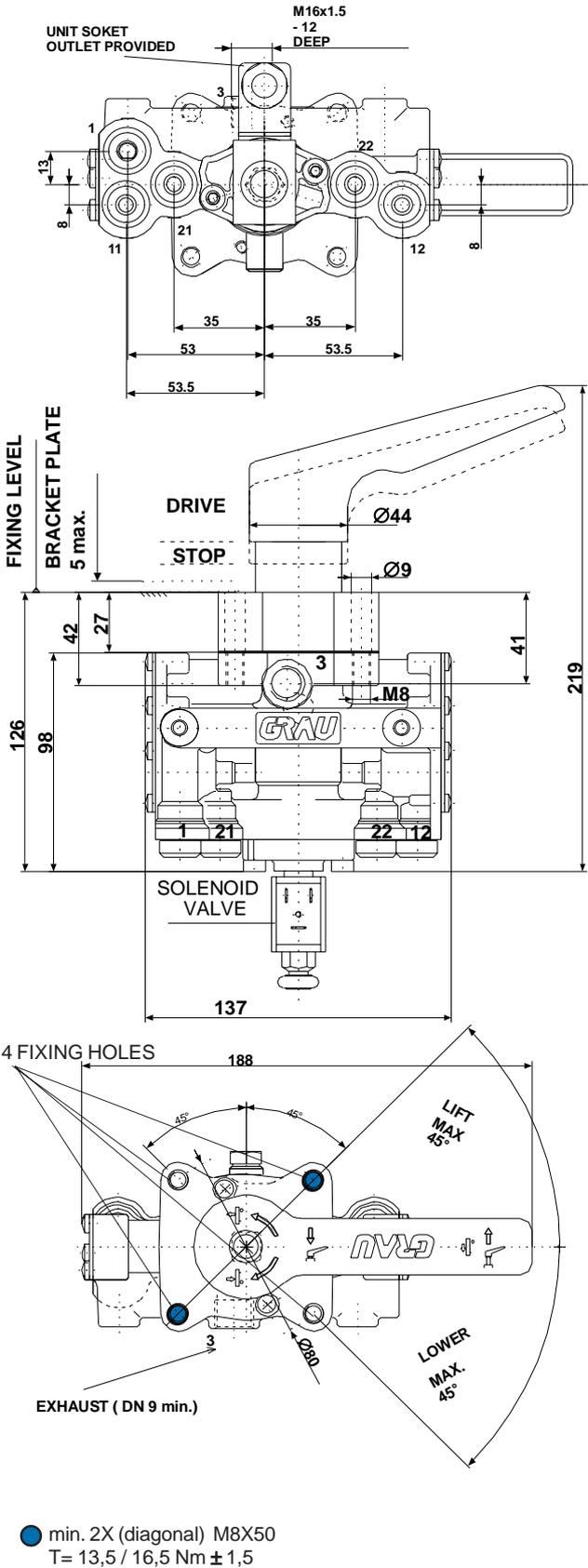
NOTE: With high pressure cleaners a safe distance of a least 50 cm from the COLAS should be observed.

Testing

- check function and leak-tightness of equipment
- correct assembly position **5,6**
- instruction Label in position **11**

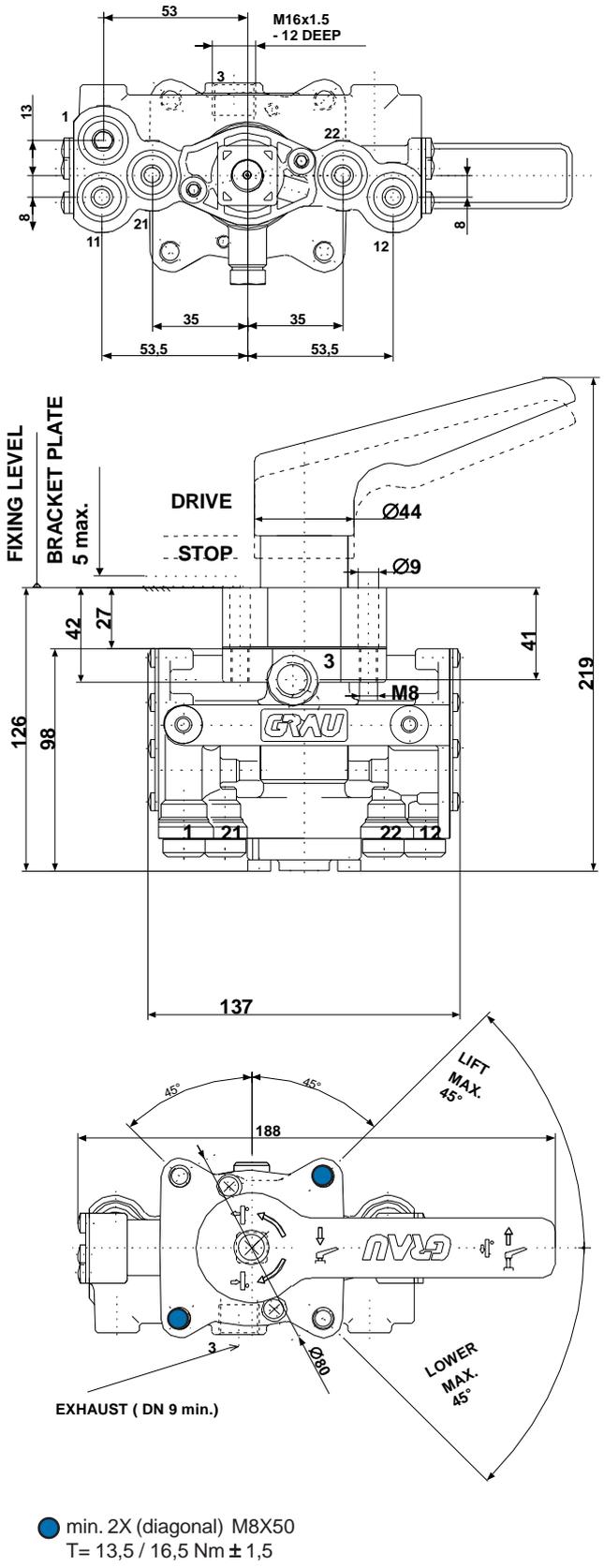
5

ASSEMBLY DRAWING 338 051 ...



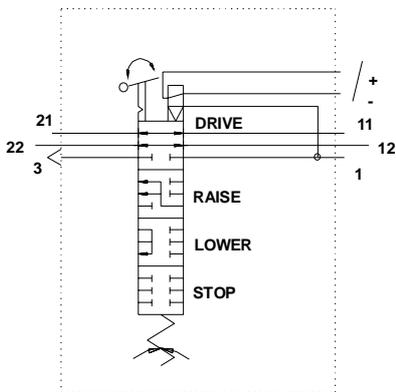
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ASSEMBLY DRAWING 338 052/053 ...



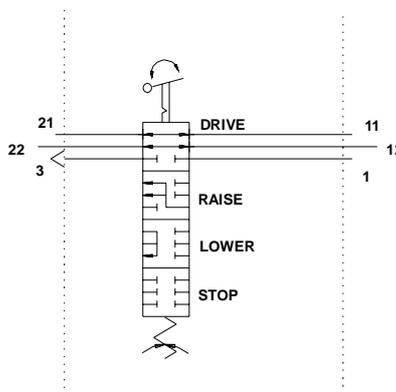
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Symbol 338 051/054 ...



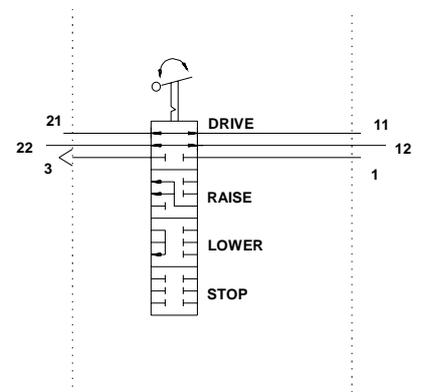
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Symbol 338 052 ...



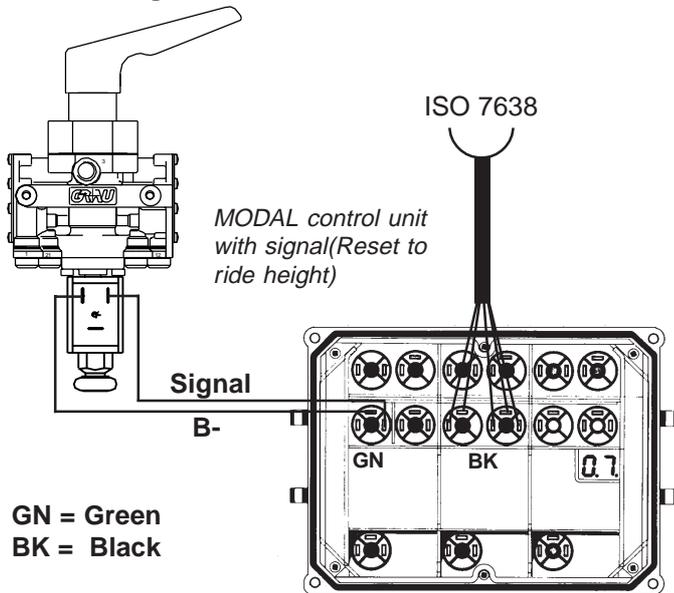
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Symbol 338 053 ...



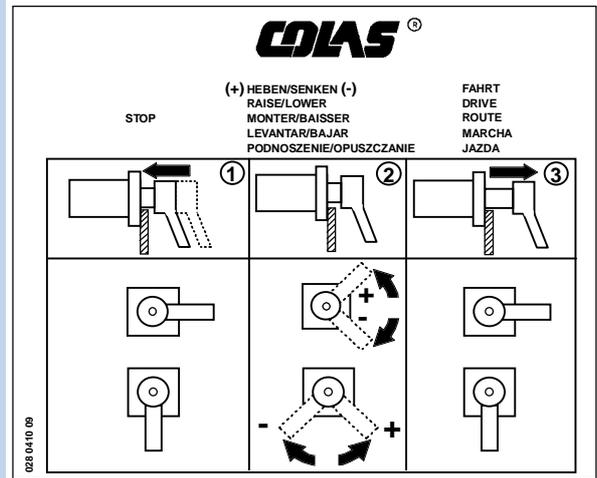
10

Circuit diagram for 338 051...



11

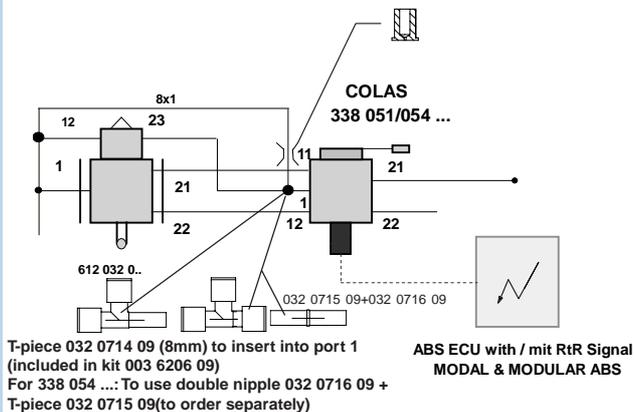
Instruction Label 028 0410 09



12

Use of throttle 027 0665 09

(Only for 338 051/054... in conjunction with a height restriction device without exhaust)



Port Designation

- 1 =Supply
- 11,12 =From height control valve
- 21,22 =To the air bellows
- 3 =Exhaust (at least DN 9)

Ports 1,11,12,21 and 22 accepts \varnothing 8x1
Nylon pipe DIN 74324
338 054 /056 ...: Nylon pipe \varnothing 10 mm

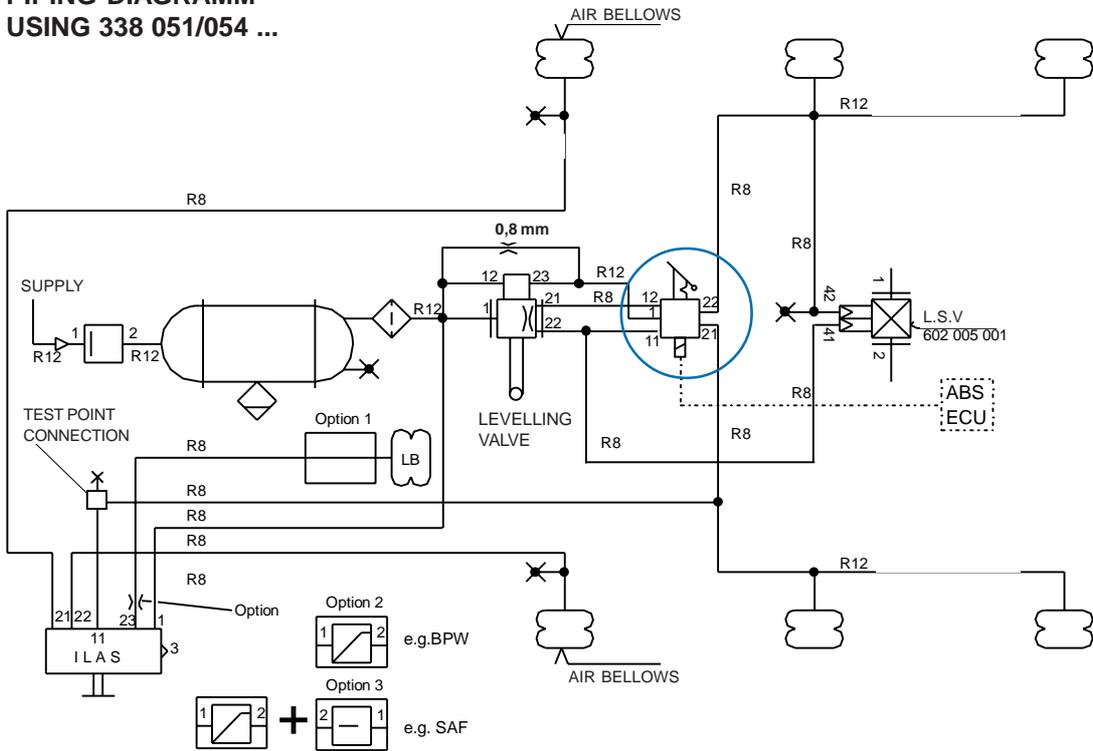
Technical Data

Operating pressure pe max.8.5 bar
Operating temperature - 40° C to + 80° C

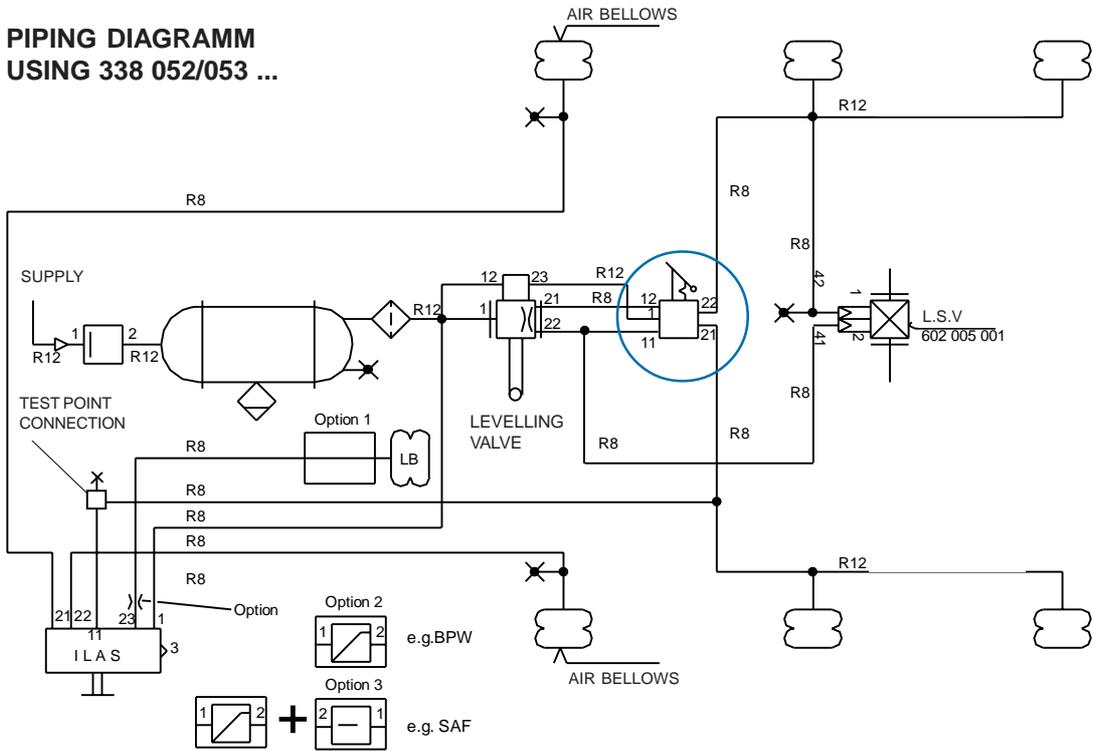
Solenoid valve (only 338 051/054...)

Permissible duty: 10 seconds
Voltage: UB= 24 VDC + 2.5 - 3.5
Current/power: Io = 250 mA/Po=6W
Type of protection: DIN 40050-Ip 65 A

**PIPING DIAGRAMM
USING 338 051/054 ...**



**PIPING DIAGRAMM
USING 338 052/053 ...**



Versions

338 051 001/002: c/w dead man's handle and reset-to ride ABS; 8mm push in

338 051 011/012: c/w dead man's handle and reset-to ride ABS and pneumatic; 8mm push in

338 052 001/002: c/w dead man's handle w/o reset-to ride via ABS; 8mm push in

338 053 001/002: w/o dead man's handle w/o reset-to ride via ABS; 8mm push in

338 054 001/002: c/w dead man's handle and reset-to ride ABS; 10mm push in

338 055 001/002: w/o dead man's handle c/w reset-to ride (pneumatic); 8mm push in

338 056 001/002: c/w dead man's handle w/o reset-to ride via ABS; 10mm push in

Operating instructions

On claims we have seen, that the handle was broken, due to wrong operation. Position "**RAISE**" or "**LOWER**" is only possible from position "**STOP**". In position "**DRIVE**" the handle is fixed. If You try to turn the handle from the position "**DRIVE**" with more than **35 Nm** you will **break the unit**. To get position "**STOP**" you have to push the handle from position "**DRIVE**" **15**



Belgium**Haldex N.V./S.A.**

Zaventem (Brussels)
Tel +32-2 725 37 07
Fax +32-2 725 40 99
E-mail: Info@hbe.haldex.com

Germany**Haldex Brake Products GmbH**

Heidelberg
Tel +49-6221 703-0
Fax +49-6221 703-400

France**Haldex Europe S.A.**

Weyersheim
Tel +33-3 88 68 22 00
Fax +33-3 88 68 22 09
E-mail: info@hfr.haldex.com

Great Britain**Haldex Ltd.**

Newton Aycliffe
Tel +44-1325 310 110
Fax +44-1325 311 834

Poland**Haldex Sp.z.O.O.**

Wielun
Tel +48-43 843 45 16
Fax +48-43 843 36 89
E-mail: haldexpl@si.onet.pl

Sweden**Haldex Brake Products AB**

Landskrona
Tel +46-418-57700
Fax +46-418-24435
E-mail: info@hbpse.haldex.com

Austria**Haldex Wien Ges.m.b.H**

Wien
Tel +43-1 8 65 16 40
Fax +43-1 8 65 16 40 27

Spain**Haldex S.A**

Parets del Valles (Barcelona)
Tel +34-93 573 10 30
Fax +34-93 573 07 28
E-mail: haldexsa_esp@passwordsta.es

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Special instructions are required in these cases.

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Performance & Safety in Vehicles