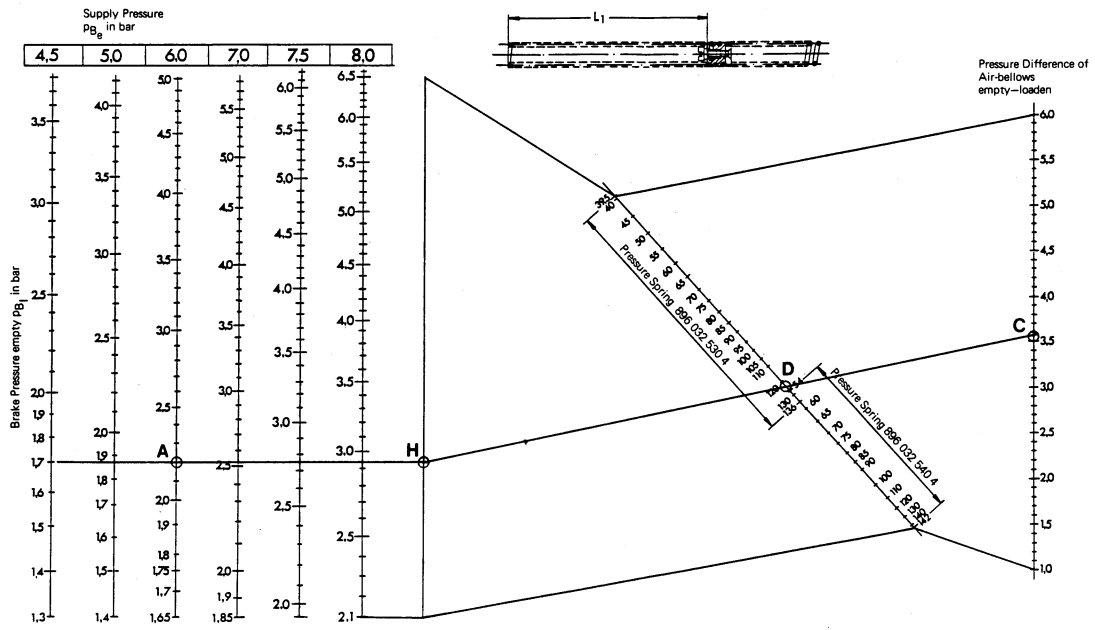


WABCO

Nomographs **for Determination of Adjusting Values** **of Load Sensing Valve 475 700,** **Variants 220 and 403**

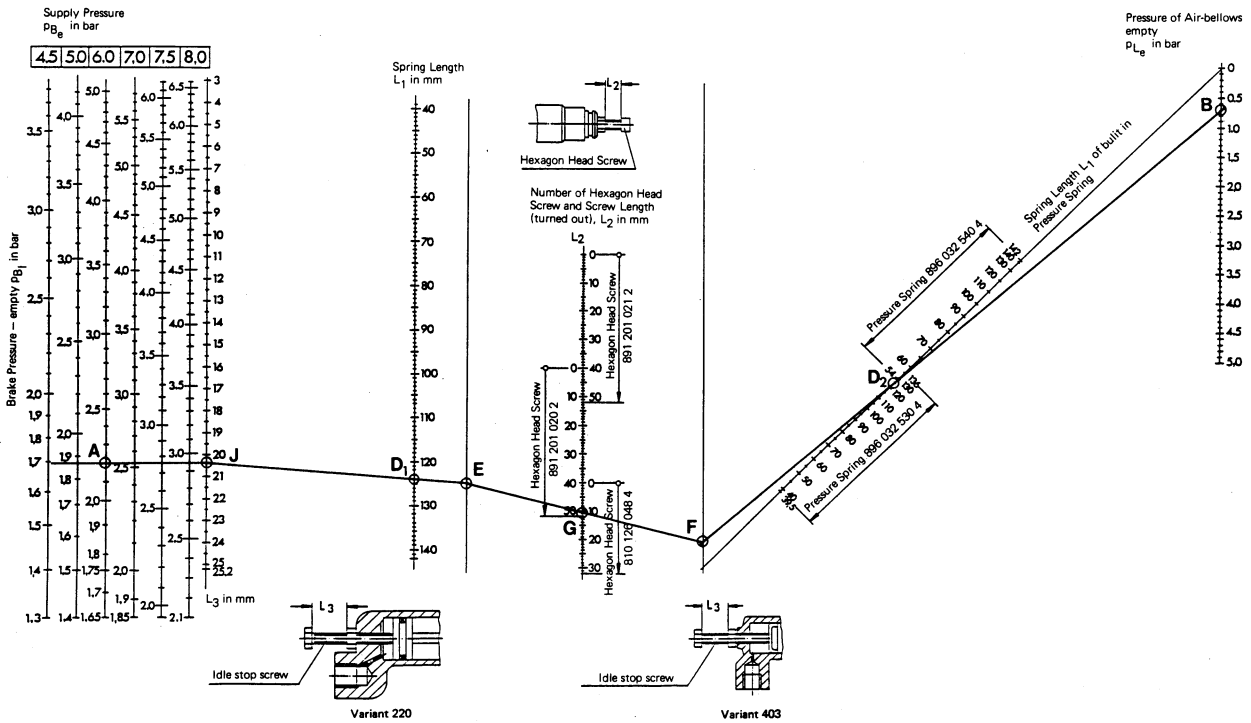
Nomograph I

Determination of Pressure Spring and of Spring Length L1



Nomograph II

Determination of Screw Setting Lengths L2 and L3



Description of Nomographs I and II – Adjustment of Load Sensing Valve 475 700 220 0 for Vehicles with Air Suspension

In order to determine device and pressure spring, the following values must be found out:

1. Brake pressure p_{B_b} (fully loaden) corresponds to supply pressure p_{B_e}

$$p_{B_b} = p_{B_e} = \dots\dots\dots \text{ bar}$$

2. Brake pressure (empty) p_{B_l} = $\dots\dots\dots$ bar

3. Air-bellow pressure (empty) p_{L_l} = $\dots\dots\dots$ bar

4. Air-bellow pressure (loaden) p_{L_b} = $\dots\dots\dots$ bar

5. Pressure difference of air-bellows
 $\Delta p_L = \dots\dots\dots$ bar

$$\Delta p_L = p_{L_b} - p_{L_l}$$

Scale point

A

B

C

Factory setting	
Fig. 220	Fig. 403
6.0 bar	6.0 bar
2.2 bar	1.75 bar
0.7 bar	0.7 bar
4.25 bar	3.8 bar
3.55 bar	3.1 bar

Use Nomograph I to determine Pressure Spring (Reference Number and Adjusting Length L_1 in mm)

Mark brake pressure (empty), in this case $p_{B_l} = 2.2$ bar, on corresponding scale at Scale Point A taking into account supply pressure p_{B_e} (in this case = 6.0 bar).

Intersection Point H can be found on an auxiliary vanishing line by drawing an horizontal line through Scale Point A.

Mark pressure difference of air-bellows Δp_L (in this case = 3.55 bar) at Scale Point C on corresponding scale.

Connect Points H and C to find Point D (Point D is the intersection point with the diagonal scale). It indicates reference number of pressure spring to be built in as well as Spring Length L_1 (in mm), in this case: Pressure spring = 896 032 530 4*) and $L_1 = 124$ mm.

*) Factory equipment of load Sensing Valve 475 700 220 0.

Use Nomograph II to determine Hexagon Head Screw (Reference Number and Adjusting Length L_2 in mm)

Mark brake pressure (empty), Scale Point A, air-bellow pressure (empty), Scale Point B (in this case $p_{B_l} = 2.2$ bar and $p_{L_l} = 0.7$ bar) on corresponding scales.

Intersection Point J can be found on an auxiliary vanishing line by drawing an horizontal line through Scale Point A.

Mark spring length determined in Nomograph I (in this case $L_1 = 124$ mm) at Point D_1 on corresponding scale and Point D_2 (in this case 896 032 530 4) in the range of spring pressure ascertained.

Connect Points J and D_1 in a straight line or lengthen this line beyond Point D_1 in order to find Intersection Point E on an auxiliary vanishing line.

Connect Points B and D_2 in a straight line, too. Lengthen this line beyond Point D_2 to find Intersection Point F on a second auxiliary line.

Connect auxiliary Points E and F on the scale to find Scale Point G, Reference Number of Hexagon Head Screw and its Adjusting Length L_2 (in mm). In this case, Hexagon Head Screw = 810 126 048 4*) and Adjusting Length $L_2 = 11$ mm.

Determine Adjusting Length L_3 of idle stop screw with help of scale used as auxiliary vanishing line when determining Hexagon Head Screw and with Scale Point J (in this case $L_3 = 20.4$ mm).

Check setting values theoretically determined according to Test Instruction 475 700 . . . 3 and, if necessary, correct them.

*) Factory equipment of Load Sensing Valve 475 700 220 0.

Only one pressure spring and hexagon head screw each are built in this device during manufacturing. They enable a modification of the factory setting and thus the adaption to a range of further brake and air-bellow pressure combinations according to application of the following nomographs.

If pressure spring or hexagon head screw cannot be used due to vehicle data given, the parts in question can be exchanged against those shown in table below.

Variant	Built in Device				Accessories	
	Pressure Spring		Hexagon Head Screw		Ref. No.	Pressure Spring
	Ref. No.	ØWire	Ref. No.	M 6 x . . .		
220	896 032 530 4	2.0	810 126 048 4	50	896 032 540 4	Wire: —Ø1.6
						Hexagon Head Screw
					891 201 020 2	M 6 x 90
					891 201 021 2	M 6 x 130
403						Pressure Spring
	896 032 540 4	1.6	891 201 021 2	130	896 032 530 4	Wire:—Ø2.0
						Hexagon Head Screw
					810 126 048 4	M 6 x 50
				891 201 020 2	M 6 x 90	

The following theoretical setting values are found for Variant 403 in Nomographs I and II when taking into account factory setting values indicated on page 1.

$L_1 = 74 \text{ mm}$ / Pressure Spring = 896 032 540 4*)

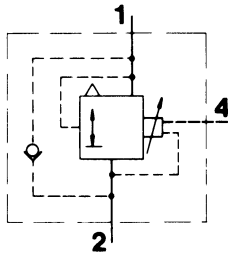
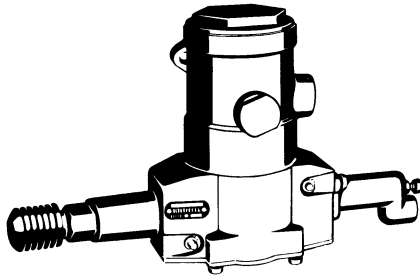
$L_2 = 34 \text{ mm}$ / Hexagon Head Screw = 891 201 021 2*)

$L_3 = 25.2 \text{ mm}$

*) Factory equipment of Load Sensing Valve 475 700 403 0

Testing Instruction

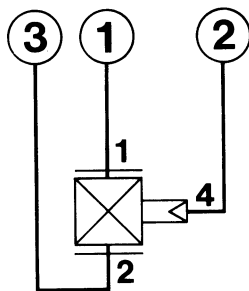
for Variants see Table



Reservoir Pressure:

max. 8,0 bar/min. 5,0 bar

Test Rig Connections



Basic Position of Shut-Off Cocks on Test Rig

Cock	A	B	C	D	E	F	L	V	2	3	4	6	7	11	12	21	22	
open	•														•		•	
shut		•	•	•	•	•	•	•	•	•	•	•	•	•		•		•

Specials Tools required

Clamping Square 899 709 035 2
Transfer Pipe 899 709 050 2

Testing Procedure

1. Preparation

Connect device according to diagram.

All testing values for variants are indicated in table.

2. Leakage

Vent Port 4 with 7 bar.

Vent Port 1 with 7 bar.

Check device for leakage.

Decrease pressure at Port 4 by 0.5 to 0.7 bar, so that it is inferior to braking pressure at Gauge 1.

Brake cylinder pressure at Gauge 3 can show pressure variations of ± 0.1 bar within 10 secs. There must be no leakage at exhaust port.

Vent Ports 1 and 4 to 0 bar.

3. Function

a) Adjusting

Adjust adjusting screw for initial spring tension, so that Value "L2" between lock nut and screw head is about 10 mm. (see Fig. 1)

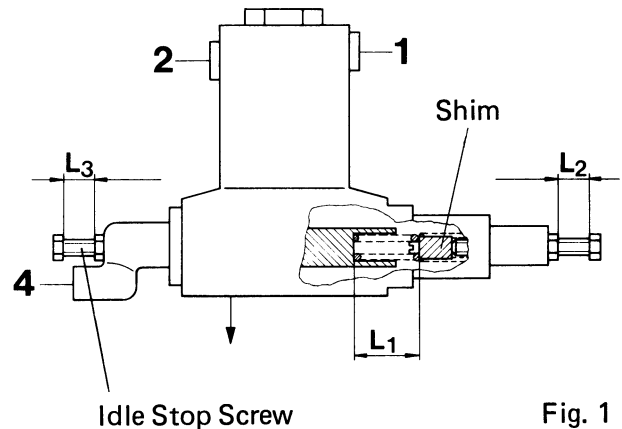


Fig. 1

b) Braking pressure for unladen vehicle

Feed in brake pressure at Port 1.

Gauge 3 must show a brake cylinder pressure for the empty vehicle. If the value is not reached at Gauge 3, vent Port 1 to 0 bar and correct Value "L3" at idle stop screw (see Fig. 1).

Turning in = Pressure increase

Turning out = Pressure decrease

Repeat testing process until pressure is reached at Gauge 3.

Vent Port 1 to 0 bar.

Pressurize Port 4 with air-bellow pressure necessary (empty).

Pressurize Port 1 with brake pressure necessary. Gauge 3 must indicate brake cylinder pressure (empty).

Gauge 3 must not show a brake cylinder pressure (empty) different to value indicated.

If the value at Gauge 3 is not reached, vent Port 1 to 0 bar and correct Value "L2" at adjusting screw for initial spring tension (see Fig. 1).

Turning in = Pressure decrease

Turning out = Pressure increase

Vent Ports 1 and 4 to 0 bar.

Pressurize Port 4 with air-bellow pressure (empty) of ± 0.3 bar.

Pressurize Port 1 with necessary brake pressure. Gauge 3 must now indicate a brake cylinder pressure (empty) increasing to a maximum of + 0.3 bar.

If brake cylinder pressure indicated is not reached, vent Ports 1 and 4 and adjust Value "L2" correspondingly.

Repeat this testing step several times.

Vent Ports 1 and 4 to 0 bar.

c) Braking Pressure for Loaden Vehicle

Pressurize Port 4 with air-bellow pressure necessary (loaden) of + 0.3 bar.

Pressurize Port 1 with brake pressure necessary.

Gauge 3 must show brake cylinder pressure indicated (loaden).

If brake cylinder pressure indicated is not reached, vent Ports 1 and 4 to 0 bar and adjust Value "L1" correspondingly.

Decrease of Value "L1" = Pressure decrease

Increase of Value "L1" = Pressure increase

Repeat this testing step several times.

Vent Ports 1 and 4 to 0 bar.

Decrease air-bellow pressure (loaden) of + 0.3 bar by 0.6 bar (Gauge 1).

For brake pressure corresponding to variant brake cylinder pressure at Gauge must be inferior to pressure indicated in table for loaden vehicle. Gauge 3 indicates a decreasing pressure (see Fig. 1).

If brake cylinder pressure exceeds the value indicated, Ports 1 and 4 must be vented and Value "L1" adjusted correspondingly.

(see Fig. 1).

Decrease pressure at Port 4 to air-bellow pressure indicated (empty).

Pressurize Port 1 with brake pressure indicated (empty).

Gauge 3 shows brake cylinder pressure (empty), max. + 0.4 bar. If brake cylinder pressure indicated is not reached, vent Ports 1 and 4 adjust Value "L2" accordingly. (see Fig. 1)

d) Checking of Exhaust

Vent Port 1.

The remaining pressure after venting must not exceed a maximum pressure of 0.3 bar. It should escape within 2 secs.

Before disconnecting hoses, vent device to 0 bar.

Variant	Braking Pressure	Vehicle (empty)		Vehicle (loaden)		Variant	Braking Pressure	Vehicle (empty)		Vehicle (loaden)	
		a	b	a	c			a	b	a	b
		bar		bar				bar		bar	
475 700 120 0	7	1,8	3,0	5,0	7	475 700 135 0	7	4	3,5	7,9	7
475 700 121 0	7	2	2,3	5,8	7	475 700 136 0	7	1,8	3,7	5,3	7
475 700 122 0	6	1	1,75	4,6	6	475 700 137 0	7	0	2,6	2,9	5,4
475 700 123 0	7	4,5	4,0	6,5	5,6	475 700 138 0	7	2,2	3,0	6,7	7
475 700 124 0	6	1	2,6	4,3	6	475 700 139 0	7	0,55	2,5	3,4	7
475 700 125 0	6	1,8	3,7	5,4	6	475 700 140 0	7	4,5	4,0	6,1	6,1
475 700 126 0	6	0,5	1,75	4,1	6	475 700 141 0	6	2,0	4,3	4,8	5,8
475 700 127 0	6	0,8	2,1	6,3	6	475 700 142 0	7	2,0	2,9	6,3	7
475 700 128 0	6	0,5	2,1	3,8	6	475 700 143 0	7	0,85	3,4	3,4	7
475 700 129 0	7	0,9	2,0	2,8	4,9	475 700 144 0	7	1,0	2,0	5,3	5,6
475 700 130 0	6	2,2	3,4	5,1	6	475 700 145 0	6	0,6	1,75	5,3	5,0
475 700 131 0	7	0,7	4,6	3,8	7	475 700 146 0	6	2,2	2,5	5	6
475 700 132 0	7	0	2,5	3,2	7	475 700 147 0	7	0,4	1,9	5,8	7
475 700 133 0	7	0,9	2,6	3,4	7	475 700 148 0	7	0,5	2,0	4,2	7
475 700 134 0	7	3,7	3,2	5,4	5	475 700 149 0	7	0,9	3,7	5,4	7

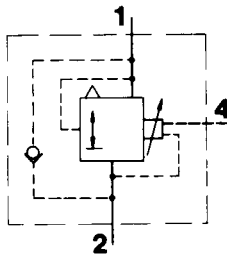
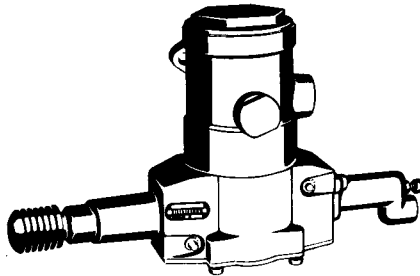
a = Air - Bellow Pressure

b = Cylinder Pressure $\pm 0,25$ bar

c = Cylinder Pressure $- 0,20$ bar

Testing Instruction

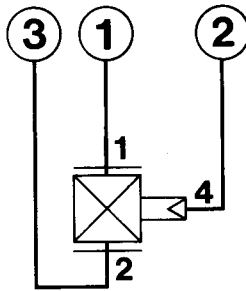
for Variants see Table



Reservoir Pressure:

max. 10.0 bar/min. 6.0 bar

Test Rig Connections



Basic Position of Shut-Off Cocks on Test Rig

Cock	A	B	C	D	E	F	L	V	2	3	4	6	7	11	12	21	22
open	•																
shut		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

Specials Tools required

Clamping Square 899 709 035 2
Transfer Pipe 899 709 050 2

Testing Procedure

1. Preparation

Connect device according to diagram.
All connecting elements are included in the normal accessories of the braking device test rig.

All testing values can be taken from the enclosed table according to variant.

2. Leakage

Pressurize Connection 4 with corresponding air-bellow pressure (loaden).
Pressurize Connection 1 with corresponding braking pressure. Check device for leakage.
Vent Connections 1 and 4 to 0 bar

3. Function

a) Adjusting

For Variant 220 please ensure that hexagon head screw calculated according to Nomograph is taken. Adjust shim to "L1" (Fig. 1).

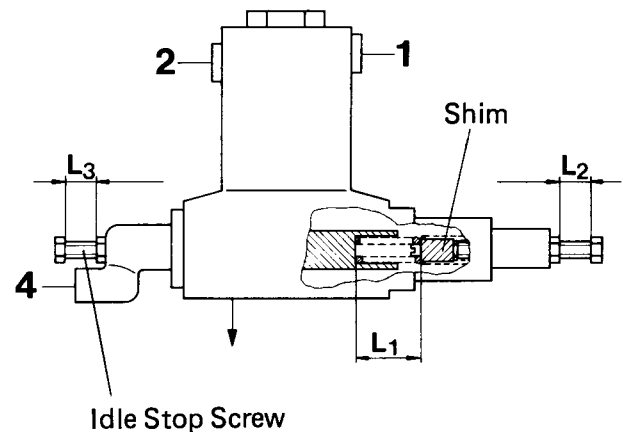


Fig. 1

Set adjusting screw for initial spring tension to "L2" (Fig. 1). Set Adjusting screw to "L3" for idle stop (Fig. 1).

These measures are standard values only and can be modified during testing.

Pressurize Connection 1 with pressure indicated under "A".

Gauge 3 should indicate pressure indicated under "B".

If the pressure indicated on Gauge 3 is not reached, vent Connection 1 and set Idle Stop Screw to "L3".

Turning in = Pressure increase

Turning out = Pressure decrease

Repeat this testing process until pressure indicated on Gauge 3 is reached.

Vent device to 0 bar.

b) Braking Pressure for Unloaden Vehicle

Pressurize Connection 4 with corresponding air-bellow pressure (empty).

Pressurize Connection 1 with corresponding braking pressure.

Gauge 3 must indicate brake cylinder pressure (empty).

Gauge 3 must not indicate a pressure different to the pressure indicated in table under "B".

Pressurize Connection 4 with corresponding air-bellow pressure (empty) (+ 0.3 bar).

Gauge 3 must now show a brake cylinder pressure (empty) increasing to a maximum pressure of + 0.3 bar. If brake cylinder pressure indicated is not reached, vent Connections 1 and 4 and adjust Value "L" accordingly (Fig. 1).

Turning out = Pressure increase

Turning in = Pressure decrease

Repeat testing process until pressure is reached on Gauge 3. Vent Connections 1 and 4 to 0 bar.

c) Braking Pressure for Loaden Vehicle

Pressurize Connection 4 with corresponding air-bellow pressure (loaden) (+ 0.3 bar).

Pressurize Connection 1 with corresponding braking pressure.

Gauge 3 must indicate brake cylinder pressure (loaden).

If brake cylinder pressure is not reached, Connections 1 and 4 must be vented to 0 bar and Value "L1" must be set accordingly (Fig. 1).

Value "L1"/increase = Pressure increase

Value "L1"/decrease = Pressure decrease

Value "L2" must be adjusted at the same time. Repeat this process several times.

Decrease air-bellow pressure (loaden) (+ 0.3 bar) by 0.6 bar (Gauge 1).

For the braking pressure corresponding to variant, brake cylinder pressure on Gauge 3 must be inferior to the pressure indicated in table for the loaden vehicle.

Gauge 3 must indicate pressure decrease.

If brake cylinder pressure exceeds the value indicated, Connections 1 and 4 must be vented and Value "L1" must be adjusted accordingly (Fig. 1). Repeat this testing step several time. If the pressure required for Variant 220 is not reached, replace Pressure Spring 896 032 530 4 by Pressure Spring 810 126 048 4 (see Nomograph for 475 700).

d) Checking of Exhaust

Vent Connection 1.

The remaining pressure must not exceed 0.3 bar and should escape within 2 seconds.

Before disconnecting hoses vent device t 0 bar.

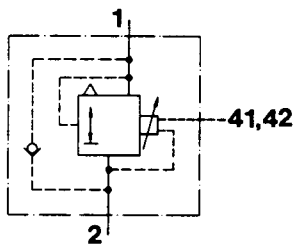
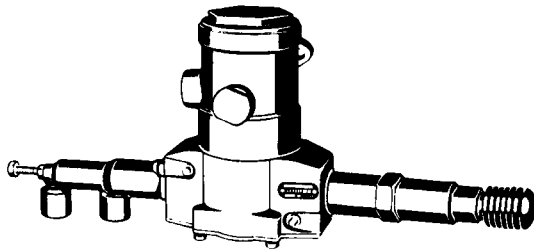
Variant	Service Pressure (delivered) (bar)	Vehicle (empty)		Vehicle (loaden)		Measures			"A" (bar)	"B" ±0,25 (bar)
		Air-Bellow Pressure (bar)	Brake Cylinder Pressure ± 0,25 (bar)	Air-Bellow Pressure (bar)	Brake Cylinder Pressure ± 0,2 (bar)	L1 (mm)	L2 (mm)	L3 (mm)		
475 700 220 0	6,0	0,7	2,2	4,25	6,0**	124	11	17,4	6,0	2,25
475 700 230 0	6,0	3,0	4,3	6,0	6,0	48	22	4,9	6,0	4,3
475 700 231 0	6,0	2,5	4,3	4,7	6,0	65	37,5	4,9	6,0	4,3
475 700 232 0	6,0	2,5	3,4	5,1	6,0	95	19	9,3	6,0	3,4
475 700 233 0	6,0	3,0	5,1	4,1	6,0	63	38	8	6,0	5,1
475 700 234 0	6,0	1,3	3,6	3,2	6,0	111	41,4	8	6,0	3,6
475 700 235 0	6,0	2,0	3,3	4,3	5,5	93	20	9,9	6,0	3,3
475 700 236 0	6,0	3,6	3,8	5,0	4,7	64	29	9,2	6,0	3,8
475 700 237 0	6,0	1,3	3,6	3,6	6,0	92	23,5	8,2	6,0	3,6
475 700 238 0	6,0	2,0	3,2	5,3	6,0	80	7,5	10,5	6,0	3,2
475 700 239 0	6,0	1,3	2,8*	3,4+ 0,2	4,8	105	31	12,8	6,0	2,8*
475 700 240 0	6,0	1,5	4,0	3,2	5,5	80	13,6	6,3	6,0	4,0
475 700 241 0	6,0	2,5	3,0	6,0	5,2	65	23,2	11,5	6,0	3,0
475 700 242 0	6,0	0,3	1,5	4,7	4,7	103	23	24	6,0	1,5
475 700 243 0	6,0	2,0	3,6	4,3	5,8	87	16	8	6,0	3,6
475 700 244 0	6,0	2,0	2,7	4,3	4,9	106	28	13,5	6,0	2,7
475 700 245 0	6,0	1,9	3,7	4,2	5,8	82	13	8	6,0	4,0
475 700 246 0	7,0	0,5	4,5	4,2	7,0	50	27	7	6,0	4,5
475 700 247 0	6,0	1,1	4,2	3,2	5,8	66	42,5	5	6,0	4,2
475 700 248 0	7,0	2,0	5,8	5,4	7,0	24	5	7	7,0	5,8
475 700 249 0	7,0	0,6	3,45	5,6	7,0	59	31	12	7,0	3,45
475 700 250 0	6,0	0,4	1,9	5,25	6,0	95	19	20	6,0	2,15
475 700 251 0	6,0	3,3	4,0	6,0	6,0	64	33	6	6,0	4,0
475 700 252 0	6,0	2,7	3,1	5,0	6,0	118	37	11	6,0	3,1
475 700 253 0	6,0	3,2	5,1	4,5	6,0	53	29	6,6	6,0	5,1
475 700 254 0	6,0	1,1	2,8	3,8	4,8	82	10	13	6,0	2,8
475 700 255 0	6,0	2,2	2,4	5,2	6,0	124	40	16	6,0	2,4
475 700 256 0	6,0	0,6	2,15	5,4	6,0	86	12	17	-	-
475 700 257 0	6,0	4,7	4,15	6,1	6,0	90	10	5	6,0	4,15
475 700 258 0	6,0	3,0	3,05	7,0	6,0	71	35	11	6,0	3,05
475 700 259 0	6,0	0,4	2,2	2,8	6,0	69	34	17	6,0	2,2
475 700 260 0	6,0	5,2	4,25	6,4	5,8	108	26	5	6,0	4,25
475 700 261 0	6,0	5,2	4,35	6,4	6,0	112	26	5	6,0	4,35
475 700 262 0	6,0	3,6	2,75	7,2	5,55	80	40	13	6,0	2,75
475 700 263 0	6,0	2,3	2,35	4,5	5,55	66	19	16	6,0	2,35
475 700 264 0	6,0	0,4	2,2	5,6+ 0,3	6,0	78	5	17	6,0	2,2

*) without tolerance

**) – 0.25 bar tolerance

Testing Instruction

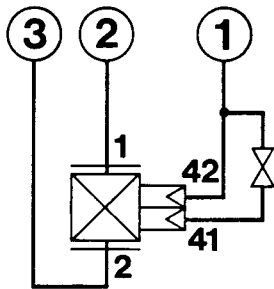
for Variants see Table



Reservoir Pressure:

max. 10.0 bar/min. 8.0 bar

Test Rig Connections



Basic Position of Shut-Off Cocks on Test Rig

Cock	A	B	C	D	E	F	L	V	2	3	4	6	7	11	12	21	22
open	•														•		•
shut		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

Specials Tools required

Clamping Square 899 709 035 2
Transfer Pipe 899 709 050 2

Testing Procedure

1. Preparation

Connect device according to diagram.

Required in addition to test rig for braking equipment:

1 three-way-cock with exhaust for example 452 002 114 0

All testing values can be taken from the enclosed table to variant.

2. Leakage

Pressurize Ports 41 and 42 to 6 bar.

Pressurize Port 1 up to 7 bar.

Check loading sensing valve for leakage.

Vent Port 41 via three-way-cock to 0 bar.

Release and unscrew hose connection at Port 41. Check Port 41 for leakage.

Connect hose connections again.

Pressurize Port 41 via three-way-cock up to 6 bar.

Vent Ports 41, 42 and Port 1 to 0 bar.

3. Function

a) Adjusting

For Variant 320 pay attention that hexagon head screw calculates according to Nomograph is taken

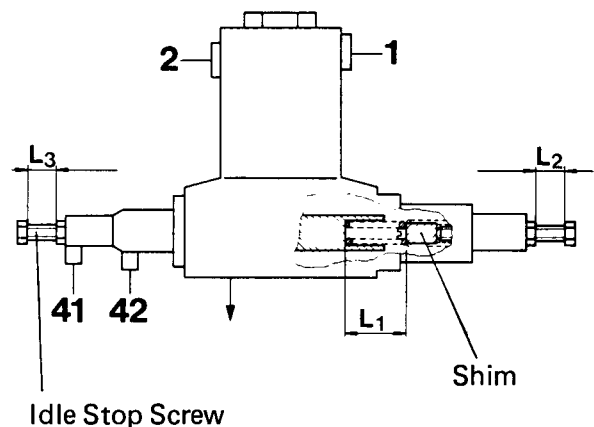


Fig. 1

Adjust shim to value "L1" (Fig. 1).
Set adjusting screw for initial spring tension to "L2" (Fig. 1). Set adjusting screw to "L3" for idle stop (Fig. 1).

These measures are standard values only and can be modified during testing.

b) Braking pressure for unladen vehicle

Pressurize Port 1 with corresponding braking pressure. Gauge 3 must indicate the air bellow pressure of unladen vehicle. If the value would not be reached at Gauge 3 vent Port 1 to 0 bar and modify "L3" at the idle stop screw (Fig. 1).

Turning in = increase of pressure

Turning out = decrease of pressure

Repeat testing procedure until pressure at Gauge 3 will be reached.

Vent Port 1 to 0 bar.

Pressurize Ports 41 and 42 with the necessary air bellow pressure (empty). Pressurize Port 1 with the necessary braking pressure.

Gauge 3 must not indicate a pressure difference against the air bellow pressure (empty).

If the value would not be reached at Gauge 3 vent Port 1 to 0 bar and modify the Value "L2" at the adjusting screw for initial spring tension

Turning in = decrease of pressure

Turning out = increase of pressure

Pressurize Ports 41 and 42 with the necessary air bellow pressure (empty) + 0.3 bar.

Pressurize Port 1 with the necessary braking pressure.

Gauge 3 must now indicate braking cylinder pressure empty increasing to max. 0.3 bar.

If the indicating braking cylinder pressure does not reach vent Ports 1, 41 and 42 and adjust

Value "L2" accordingly.

Repeat process several times.

Vent Parts 1, 41 and 42 to 0 bar.

c) Braking pressure for loaden vehicle

Pressurize Ports 41 and 42 with the necessary air bellow pressure (loaden) + 0.3 bar

Pressurize Port 1 with the necessary braking pressure .

Gauge 3 must indicate the declared braking cylinder pressure (loaden).

If the value at Gauge 3 would not be reached vent Ports 1, 41 and 42 to 0 bar and adjust the value "L1" at shim accordingly (Fig. 1).

Value "L1" decrease = pressure decrease

Value "L1" increase = pressure increase

Adjust the value "L2" parallel.

Repeat process several times.

Decrease air bellow pressure + 0.3 bar, by 0.6 bar (Gauge 1).

For the braking pressure corresponding to variant, braking cylinder pressure indicated at Gauge 3 must be inferior to the pressure indicated in table for loaden vehicle.

(Gauge 3 must indicate pressure decrease). If braking cylinder pressure exceeds the indicated value, Ports 1, 41 and 42 must be vented and the value "L1" must be adjusted at shim accordingly. (Fig. 1).

Value "L1" decrease = pressure decrease

Value "L1" increase = pressure increase

Adjust the value "L2" parallel.

Decrease pressure at Ports 41 and 42 to declared air bellow pressure (empty).

Pressurize Port 1 with declared braking pressure.

Gauge 3 indicate the declared braking pressure.

Gauge 3 indicate the declared braking cylinder pressure (empty) + max. 0.4 bar. If the value at Gauge 3 would not be reached vent Ports 1, 41 and 42 adjust the value "L2" accordingly (Fig. 1).

Turning in = decrease of pressure

Turning out = increase of pressure

d) Checking of exhaust

Vent Port 1.

The remaining pressure must not exceed 0.3 bar and should escape within 2 seconds.

Before disconnecting hoses vent device to 0 bar.

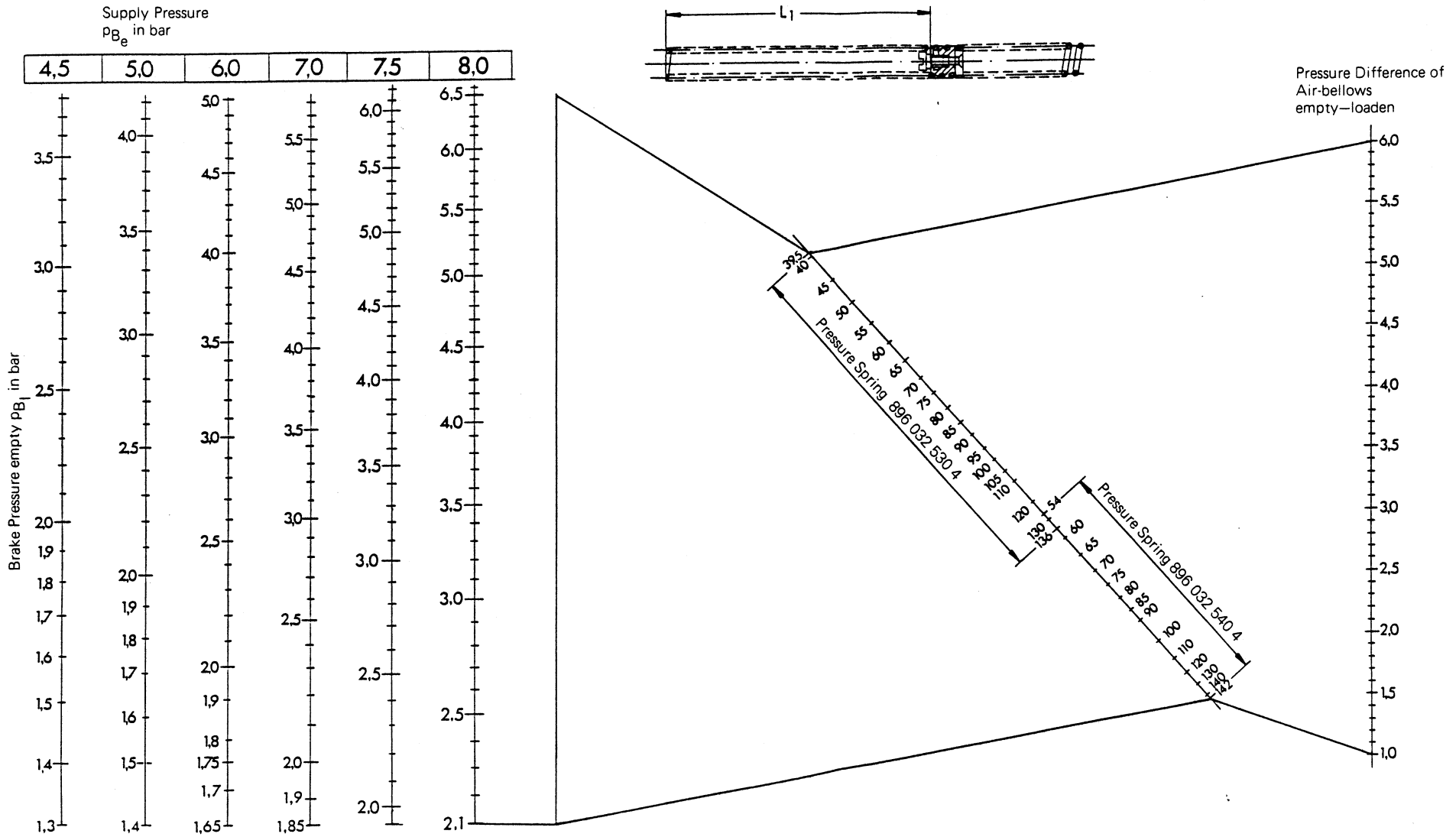
Variant	braking pressure bar	Vehicle unladen		Vehicle loaden		Value L1 (mm)	Value L2 (mm)	Value L3 (mm)
		a (bar)	b (bar)	a (bar)	b (bar)			
475 700 320 0	4,5	0,7	1,7	4,25	4,5	124	11	17
475 700 320 0	5,0	0,7	1,87	4,25	5,0	124	11	17
475 700 320 0	6,0	0,7	2,2	4,25	6,0	124	11	17
475 700 320 0	7,0	0,7	2,53	4,25	7,0	124	11	17
475 700 331 0	6,5	2,6	3,9 ± 0,25	3,9	6,1 ± 0,2	59	19	8
475 700 332 0	6,0	1,0	1,7	4,6	6,0	—	—	—
475 700 333 0	6,0	0,5	2,05	3,8	6,0	—	—	—
475 700 334 0	6,0	2,2	2,85	4,3	3,8 ± 0,2	56	23	12
475 700 335 0	6,0	2,2	3,05 ± 0,25	4,3	6,0 - 0,2	132	12	11
475 700 336 0	6,0	1,0	2,6 ± 0,25	4,3	6,0 - 0,2	— fixed —		
475 700 351 0	6,0	3,3	4,0 ± 0,25	6,0	6,0 ± 0,25	64	33	6
475 700 352 0	6,0	2,7	3,1 ± 0,25	5,0	6,0 ± 0,25	118	37	11

a Air Bellow Pressure

b Braking Cylinder Pressure

Nomograph I

for Load Sensing Valve 475 700 220 0 and 475 700 403 0



The adjusting values determined with help of this nomograph are standard values only. They should be corrected when testing the Load Sensing Valve, if necessary.

The right of amendment is reserved

WABCO

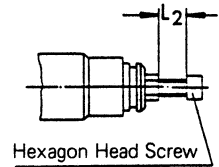
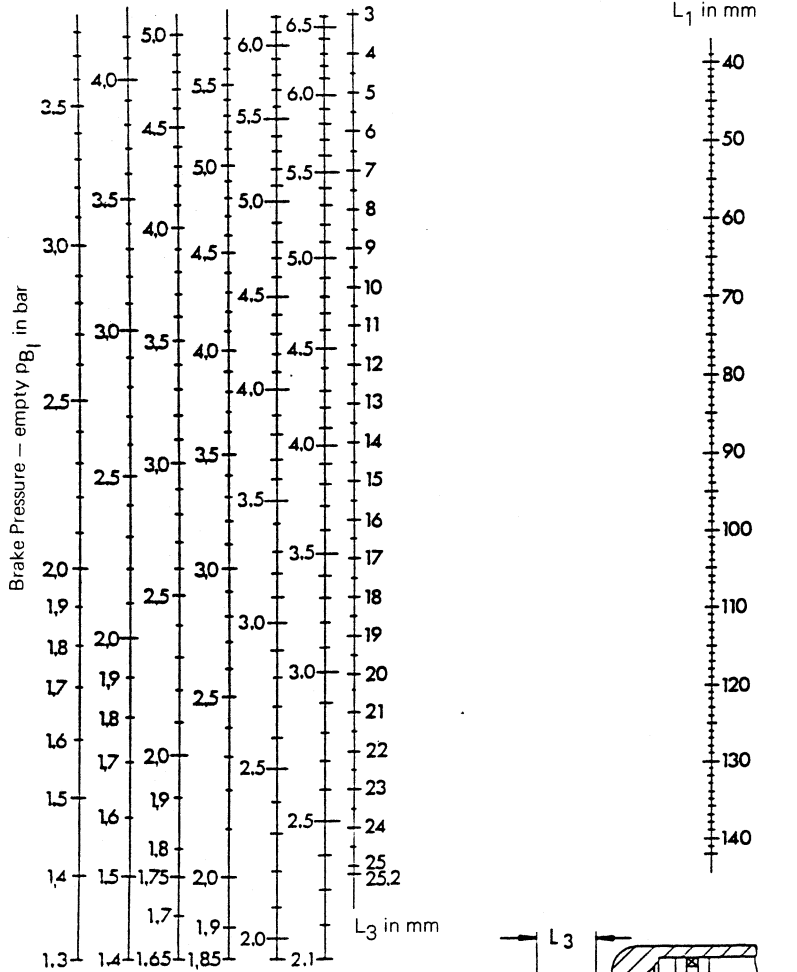
Nomograph II

for Load Sensing Valve 475 700 220 0 and 475 700 403 0

Supply Pressure
 p_{B_e} in bar

Pressure of Air-bellows
 empty
 p_{L_e} in bar

4.5 5.0 6.0 7.0 7.5 8.0



Number of Hexagon Head
 Screw and Screw Length
 (turned out), L_2 in mm

