

Heavy vehicle specialist inspector's or manufacturing inspecting organisation's name (PRINT IN CAPS)

ID

CHRIS CLARKE
CJC

Vehicle registration (optional)

VIN/chassis number

7 A 9 E 2 0 0 1 1 M 2 0 2 3 0 3 3

Make

DOMETT

Component being certified:

- Chassis
 Log bolsters
 SRT
 Swept path

 Chassis

 Towing connection

 PSV stability

 PBS

- Load anchorage
 Brakes
 PSV rollover

Model (optional)

E2001 PH

Certification category

HVEK

Description of work

CERTIFY TO SCHEDULE 5 OF LTR 32015/5: NZ HEAVY VEHICLE BRAKE SPECIFICATION.

CARRY OUT BRAKE CALCULATIONS, INSPECTION AND ECU END OF LINE PROTOCOL.

5AFT CURTAININSIDE

RSS ON TYRE: 265 70 R19.5

FOR SYSTEM ARCHITECTURE, PLEASE REFER TO PDS WORKSHEET & SCHEMATIC.

Code/standard/rule certified to

LTR 32015/5

Component load rating(s)

32 Tonnes GVM

General drawing number(s)

N/A
16 Tonne (Front brake mass)
19 Tonne (Rear brake mass)

Supporting documents

BRAKE RULE CERTIFICATE JH210104

BRAKE CALCULATION # TP52209

Special conditions (optional)

WARNING LAMP MUST ILLUMINATE WHEN IGNITION IS SWITCHED ON & THEN

EXTINGUISH IMMEDIATELY OR WHEN VEHICLE SPEED EXCEEDS 7 KM/H

Certification expiry date (if applicable)

N/A [UNLESS MODIFIED]
OR

Hubodometer reading (whichever comes first)

| | | | | | | |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|

Designer's ID (if different from inspector below)

JOHN HIRST
J E H

Inspector's signature

Inspector's name (PRINT IN CAPS)

ID number

CHRIS CLARKE
CJC

Date

Number

10-Feb-21
770280

CoF vehicle inspector ID (if applicable)

CoF vehicle inspector signature (if applicable)

Date

All fields are mandatory unless otherwise stated.

trailer (full, semi-, centre-axle) with air brake system acc. to UN/ECE-R.13.11

distribution: DOMETT TRAILERS
7A9E20011M2023033
SODC: JH210104
LT400: CJC 770280

please note!

This brake calculation is made under consideration of
-the legal prescriptions mentioned above in the version valid
at the time of making the program (V6.18.07.12).
-the functional characteristics of our products
as well as the data of the brake out of the test
approvals of the axle manufacturers, and
-the other vehicle data included in the brake calculation.
Please check whether these data correspond to the actual vehicle data.
Our conditions of delivery apply (particularly section 9.0).
In any case we recommend to do a braking harmonisation!
WABCOBrake V6.18.07.12 db 31.08.2018

vehicle manufacturer: DOMETT TRAILERS
trailer model : 5AFT CURTAININSIDE
trailer type : 5-axle-full-trailer
remarks : air / hydraulic / VA suspension
WABCO TRAILER - EBS E
TRISTOP 3+4: 16/24
265/70 R 19,5
THE FRONT CHAMBERS ARE HALDEX T20 [125 200 ..]

axle 1 + 2 + 3 + 4 + 5 : Assali Stefen, K, 361-071-04 ECE Re 432,

| | | <u>unladen</u> | <u>laden</u> |
|--------------------------|----------|----------------|--------------|
| total mass | P in kg | 7200 | 35050 |
| axle 1 | P1 in kg | 1650 | 8000 |
| axle 2 | P2 in kg | 1650 | 8000 |
| axle 3 | P3 in kg | 1300 | 6350 |
| axle 4 | P4 in kg | 1300 | 6350 |
| axle 5 | P5 in kg | 1300 | 6350 |
| wheel base | E in mm | 6555 - 6655 | |
| centre of gravity height | h in mm | 1080 | 2100 |

| | | <u>axle 1</u> | <u>axle 2</u> | <u>axle 3</u> | <u>axle 4</u> | <u>axle 5</u> |
|-------------------------------------|----------------|---------------|---------------|---------------|---------------|---------------|
| no. of combined axles | | 1 | 1 | 1 | 1 | 1 |
| no. of brake chambers per axle line | KDZ | 2 | 2 | 2 | 2 | 2 |
| The power output corresponds to | BZ 122.1 | BZ 122.1BC | 0165.2BC | 0165.2BC | 0169.2 | |
| brake chamber manufacturer | Meritor | Meritor | Haldex | Haldex | Haldex | |
| chamber size | 20. | 20. | 16/24 | 16/24 | 16" | |
| lever length | LBH in mm | 74 | 74 | 74 | 74 | 74 |
| brake factor | [-] | 20.26 | 20.26 | 20.26 | 20.26 | 20.26 |
| dyn. rolling radius | rdyn min in mm | 421 | 421 | 421 | 421 | 421 |
| dyn. rolling radius | rdyn max in mm | 421 | 421 | 421 | 421 | 421 |
| threshold torque | Co Nm | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 |

calculation:

| | | | | | | |
|---|-------|-------|-------|-------|-------|------|
| chamber pressure(rdyn min)pH at z=22,5%bar | 2.4 | 2.4 | 2.2 | 2.2 | 2.2 | |
| chamber pressure(rdyn max)pH at z=22,5%bar | 2.4 | 2.4 | 2.2 | 2.2 | 2.2 | |
| chamber press.(servo)pcha at pm6,5bar bar | 6.6 | 6.6 | 4.8 | 4.8 | 4.8 | |
| piston force ThA at pm6,5bar N | 7687 | 7687 | 4573 | 4573 | 4573 | |
| brake force(rdyn min)T lad. at pm6,5bar N | 54861 | 54861 | 32519 | 32519 | 32519 | |
| brake force(rdyn max)T lad. at pm6,5bar N | 54861 | 54861 | 32519 | 32519 | 32519 | |
| Brake force incl. 1 % rolling resistance proportion | % | 22.2 | 22.2 | 18.5 | 18.5 | 18.5 |

Trailer may only be operated in combination with trucks/tractors with ISO 7638 supply (5 or 7 polar).

brake diagram :

maximum pressure: 8.5 bar

axle 1:

valve 1: 971 002 ... 0 WABCO
EBS emergency valve

valve 2: 480 207 0.. 0 WABCO or 480 207 2.. 0
EBS relay valve

brake cylinder: Meritor 20HSCLD65

axle 2:

valve 1: 971 002 ... 0 WABCO
EBS emergency valve

valve 2: 480 207 0.. 0 WABCO or 480 207 2.. 0
EBS relay valve

brake cylinder: Meritor 20HSCLD65

axle 3:

valve 1: 971 002 ... 0 WABCO
EBS emergency valve

valve 2: 480 102 ... 0 WABCO
EBS trailer modulator

brake cylinder: Haldex 135 1624 ... / 175 1624...

axle 4:

valve 1: 971 002 ... 0 WABCO
EBS emergency valve

valve 2: 480 102 ... 0 WABCO
EBS trailer modulator

brake cylinder: Haldex 135 1624 ... / 175 1624...

axle 5:

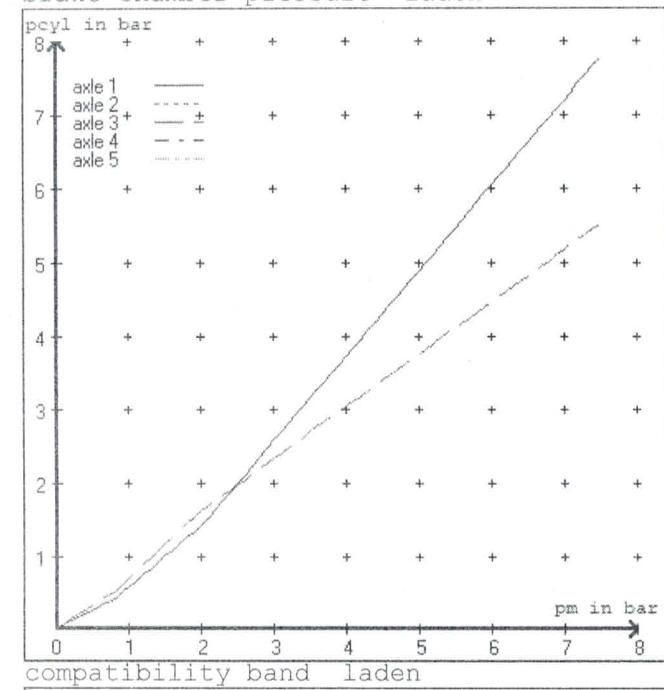
valve 1: 971 002 ... 0 WABCO
EBS emergency valve

valve 2: 480 102 ... 0 WABCO
EBS trailer modulator

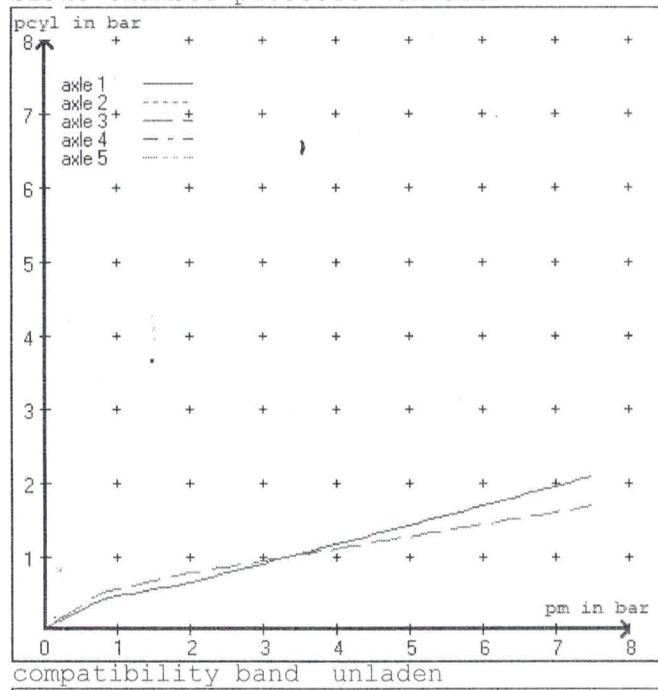
brake cylinder: Haldex 125 160 0.. - 125 160 5.. / 125 160 6.. - 125 160 9..

test type III (zIII = 0.30) for rdyn min : axle1 axle2 axle3 axle4 axle5
at pm 3.6 bar => pcha in bar : 3.3 3.3 2.7 2.7 2.7
test type III (zIII = 0.06) for rdyn min : axle1 axle2 axle3 axle4 axle5
at pm 1.3 bar => pcha in bar : 0.8 0.8 0.9 0.9 0.9

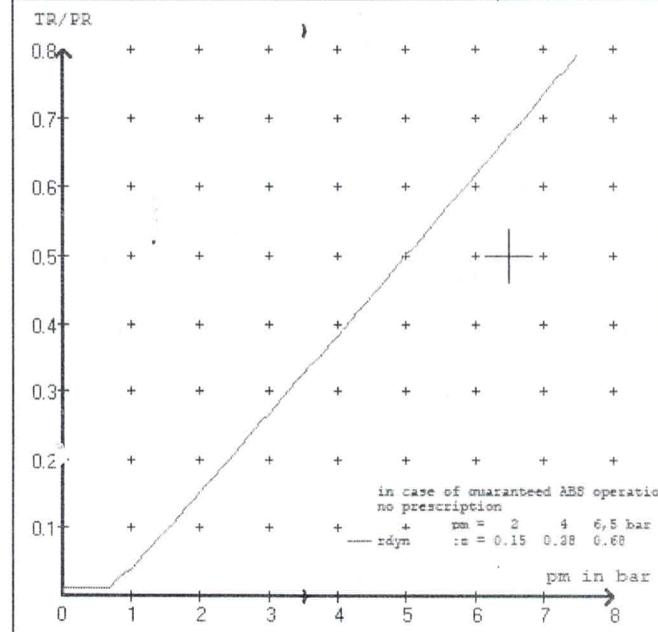
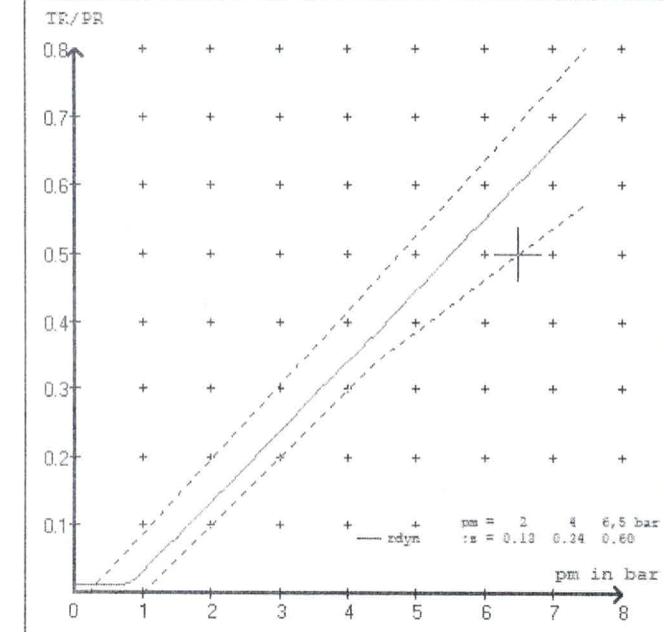
brake chamber pressure laden



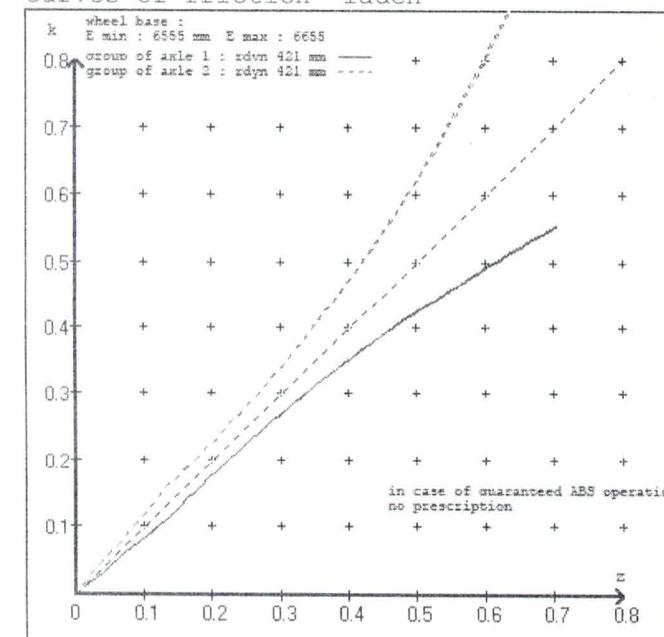
brake chamber pressure unladen



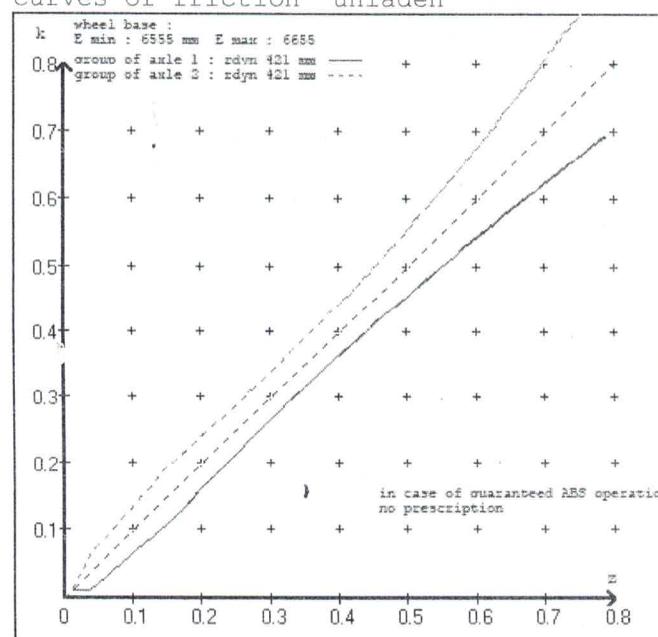
compatibility band laden



curves of friction laden



curves of friction unladen



vehicle manufacturer: DOMETT TRAILERS
 trailer model : 5AFT CURTAININSIDE
 trailer type : 5-axle-full-trailer

brake chamber and lever length :

| | | | | |
|----------|-------------------|-------|-----------|--------------------|
| axle 1 : | 2 x type/diameter | 20. | (Meritor) | lever length 74 mm |
| axle 2 : | 2 x type/diameter | 20. | (Meritor) | lever length 74 mm |
| axle 3 : | 2 x type/diameter | 16/24 | (Haldex) | lever length 74 mm |
| axle 4 : | 2 x type/diameter | 16/24 | (Haldex) | lever length 74 mm |
| axle 5 : | 2 x type/diameter | 16" | (Haldex) | lever length 74 mm |

brake diagram :

valve :

| | | |
|---------------|-----------------------------|-------------------|
| 971 002 ... 0 | WABCO EBS emergency valve | |
| 480 207 0.. 0 | WABCO EBS relay valve | or. 480 207 2.. 0 |
| 480 102 ... 0 | WABCO EBS trailer modulator | |

EBS input data

=====

| | |
|-----------------------|---------------------|
| vehicle manufacturer: | DOMETT TRAILERS |
| trailer model : | 5AFT CURTAININSIDE |
| trailer type : | 5-axle-full-trailer |
| brake calculation no. | : TP 52209A |

| | |
|-----------------------------------|---------------------|
| tire circumference main axle | : 2650 for rdyn max |
| tire circumference auxiliary axle | : 2650 for rdyn max |

| | |
|--|-------------------|
| assignment pm / deceleration z: pm 0.8 bar z = 0.010 | |
| (laden condition) | 2.0 bar z = 0.134 |
| | 6.5 bar z = 0.600 |

| control pressure pm | | | 6,5 | control pressure pm | | | 0.8 | 2.0 | 6.5 |
|---------------------|----------------------|---|----------------------|---------------------|---|--------------------|-----|-----|-----|
| axle | axle load unladen | bellow pr. unladen | brake pr. unladen | axle load laden | bellow pr. laden | brake pr. laden | | | |
| 1 | 1650 | to be entered by the vehicle manufact. | 1.8 | 8000 | to be entered by the vehicle manufact. | 0.4 | 1.4 | 6.6 | |
| 2 | 1650 | | 1.8 | 8000 | | 0.4 | 1.4 | 6.6 | |
| 3 | 1300 | | 1.5 | 6350 | | 0.5 | 1.6 | 4.8 | |
| 4 | 1300 | | 1.5 | 6350 | | 0.5 | 1.6 | 4.8 | |
| 5 | 1300 | | 1.5 | 6350 | | 0.5 | 1.6 | 4.8 | |

The unladen values indicated in the above table are values for the basic parameter set. Higher unladen axle loads and liftaxles are automatically recognized and do not require separate adjustment. The above unladen axle loads must not be fallen below.

| axle 1 | axle 2 | axle 3 | axle 4 | axle 5 |
|----------------|----------------|----------------|----------------|----------------|
| axle load pcyl |
| 1650 | 1.8 | 1650 | 1.8 | 1300 |
| 2150 | 2.2 | 2150 | 2.2 | 1800 |
| 2650 | 2.6 | 2650 | 2.6 | 2300 |
| 3150 | 2.9 | 3150 | 2.9 | 2800 |
| 3650 | 3.3 | 3650 | 3.3 | 3300 |
| 4150 | 3.7 | 4150 | 3.7 | 3800 |
| 4650 | 4.1 | 4650 | 4.1 | 4300 |
| 5150 | 4.4 | 5150 | 4.4 | 4800 |
| 8000 | 6.6 | 8000 | 6.6 | 6350 |

data sheet to ECE vehicle type-approval certificate concerning braking equipment: according to ECE R13 annex 11

| | |
|---|---------------------------------|
| axle 1 : reference axle: Assali SteftTM or LM or LCen | brake lining: ROR 8616 AF (M13) |
| test report : 361-071-04 ECE Re 432 | date : GA310709 |
| axle 2 : reference axle: Assali SteftTM or LM or LCen | brake lining: ROR 8616 AF (M13) |
| test report : 361-071-04 ECE Re 432 | date : GA310709 |
| axle 3 : reference axle: Assali SteftTM or LM or LCen | brake lining: ROR 8616 AF (M13) |
| test report : 361-071-04 ECE Re 432 | date : GA310709 |
| axle 4 : reference axle: Assali SteftTM or LM or LCen | brake lining: ROR 8616 AF (M13) |
| test report : 361-071-04 ECE Re 432 | date : GA310709 |
| axle 5 : reference axle: Assali SteftTM or LM or LCen | brake lining: ROR 8616 AF (M13) |
| test report : 361-071-04 ECE Re 432 | date : GA310709 |

calc. verif. of residual (hot) braking force type III
(item 4.2.1 of appendix 2 to annex 11)

| | |
|----------------------|---------------|
| axle 1 (rdyn 421 mm) | T = 23.6 % Fe |
| axle 2 (rdyn 421 mm) | T = 23.6 % Fe |
| axle 3 (rdyn 421 mm) | T = 16.1 % Fe |
| axle 4 (rdyn 421 mm) | T = 16.1 % Fe |
| axle 5 (rdyn 421 mm) | T = 16.1 % Fe |

calculated actuator stroke in mm

(item 4.3.1.1 of appendix 2 to annex 11)

| | |
|---------------------|-----------|
| axle 1 (sp = 58 mm) | s = 38 mm |
| axle 2 (sp = 58 mm) | s = 38 mm |
| axle 3 (sp = 50 mm) | s = 38 mm |
| axle 4 (sp = 50 mm) | s = 38 mm |
| axle 5 (sp = 50 mm) | s = 38 mm |

average thrust output in N at pm = 6,5 bar (however max. pcha = 7,0 bar)

| | |
|-------|--------------|
| axle1 | ThA = 7687 N |
| axle2 | ThA = 7687 N |
| axle3 | ThA = 4573 N |
| axle4 | ThA = 4573 N |
| axle5 | ThA = 4573 N |

calc. residual (hot) braking force in N

(item 4.3.1.4 of appendix 2 to annex 11)

| | |
|----------------------|-------------|
| axle 1 (rdyn 421 mm) | T = 47013 N |
| axle 2 (rdyn 421 mm) | T = 47013 N |
| axle 3 (rdyn 421 mm) | T = 27893 N |
| axle 4 (rdyn 421 mm) | T = 27893 N |
| axle 5 (rdyn 421 mm) | T = 27893 N |

| basic test of subject trailer (E) | type III (calculated) residual (hot)braking |
|---|--|
|---|--|

| | |
|---|-----------|
| braking rate of the vehicle (item 4.3.2 to appendix 2 to annex 11) | 0.60 0.52 |
|---|-----------|

| | |
|--|-------------------------------|
| required braking rate (items 1.5.3 and 1.7.2 to annex 11) | >= 0,4 and >= 0,6*E (0.36) |
|--|-------------------------------|

| | |
|----------------------|-------------|
| axle 1 (rdyn 421 mm) | T = 47013 N |
| axle 2 (rdyn 421 mm) | T = 47013 N |
| axle 3 (rdyn 421 mm) | T = 27893 N |
| axle 4 (rdyn 421 mm) | T = 27893 N |
| axle 5 (rdyn 421 mm) | T = 27893 N |

| basic test of subject trailer (E) | type III (calculated) residual (hot)braking |
|---|--|
|---|--|

| | |
|---|-----------|
| braking rate of the vehicle (item 4.3.2 to appendix 2 to annex 11) | 0.60 0.52 |
|---|-----------|

| | |
|--|-------------------------------|
| required braking rate (items 1.5.3 and 1.7.2 to annex 11) | >= 0,4 and >= 0,6*E (0.36) |
|--|-------------------------------|

spring parking brake

| | | axle 3 | axle 4 |
|---|-----------------|---------|---------|
| no of TRISTOP-actuators per axle line KDZ | | 2 | 2 |
| TRISTOP-actuator type | | 16/24 | 16/24 |
| lever length | lBh in mm | 74 | 74 |
| stat. tyre radius | rstat max in mm | 401 | 401 |
| at a stroke of | s in mm | 30 | 30 |
| min. force of spring brake | TFZ in N | 6003 | 6003 |
| sp.brake chamber no Haldex | | 135 162 | 135 162 |
| sp.brake chamber no Haldex | | 175 162 | 175 162 |
| release pressure | pLs in bar | 5.2 | 5.2 |

calculation:

| | | | |
|-----------------------------------|----------|--------|--------|
| ratio until road | | 3.7388 | 3.7388 |
| iFb = lBh*Eta*C*rBt/(rBn*rstat) | | 401 | 401 |
| for rstat in mm | | 44180 | 44180 |
| brake force of spring br. Tf in N | | 44180 | 44180 |
| Tf = (TFZ*KDZ-2*Co/lBh)*iFb | | | |
| braking rate | zf laden | 0.267 | |
| zf = sum (Tf)/P + 0,01 | | | |

Test of the frictional connection required by the parking brake

minimum wheelbase/minimum supporting width min Ef necessary
to fulfil the regulations

$$\text{min Ef} = E * (1 - PR/P + zferf * h/E) / (1 - zferf / (fzul * nf/ng))$$

$$\begin{aligned} \text{min Ef} &= 5087 \text{ mm} \quad \text{for } E = 6555 \text{ mm} \\ \hline \text{min Ef} &= 5156 \text{ mm} \quad \text{for } E = 6655 \text{ mm} \end{aligned}$$

| | |
|---|---|
| min Ef = | minimum distance between front axle(s) (trailer) or support (semitrailer) |
| and the rear axle(s) (resultant of the bogie) | |
| E = | wheel base |
| fzul = 0.80 | maximum permissible frictional connection required |
| zferf = 0.18 | maximum required braking ratio of the parking brake |
| h = 2100 mm | height of center of gravity - laden |
| PR = 19050 kg | maximum bogie mass - laden |
| P = 35050 kg | maximum total mass - laden |
| nf = 2 | no. of axle(s) with TRISTOP spring brake actuators |
| ng = 3 | no. of bogie axle(s) |

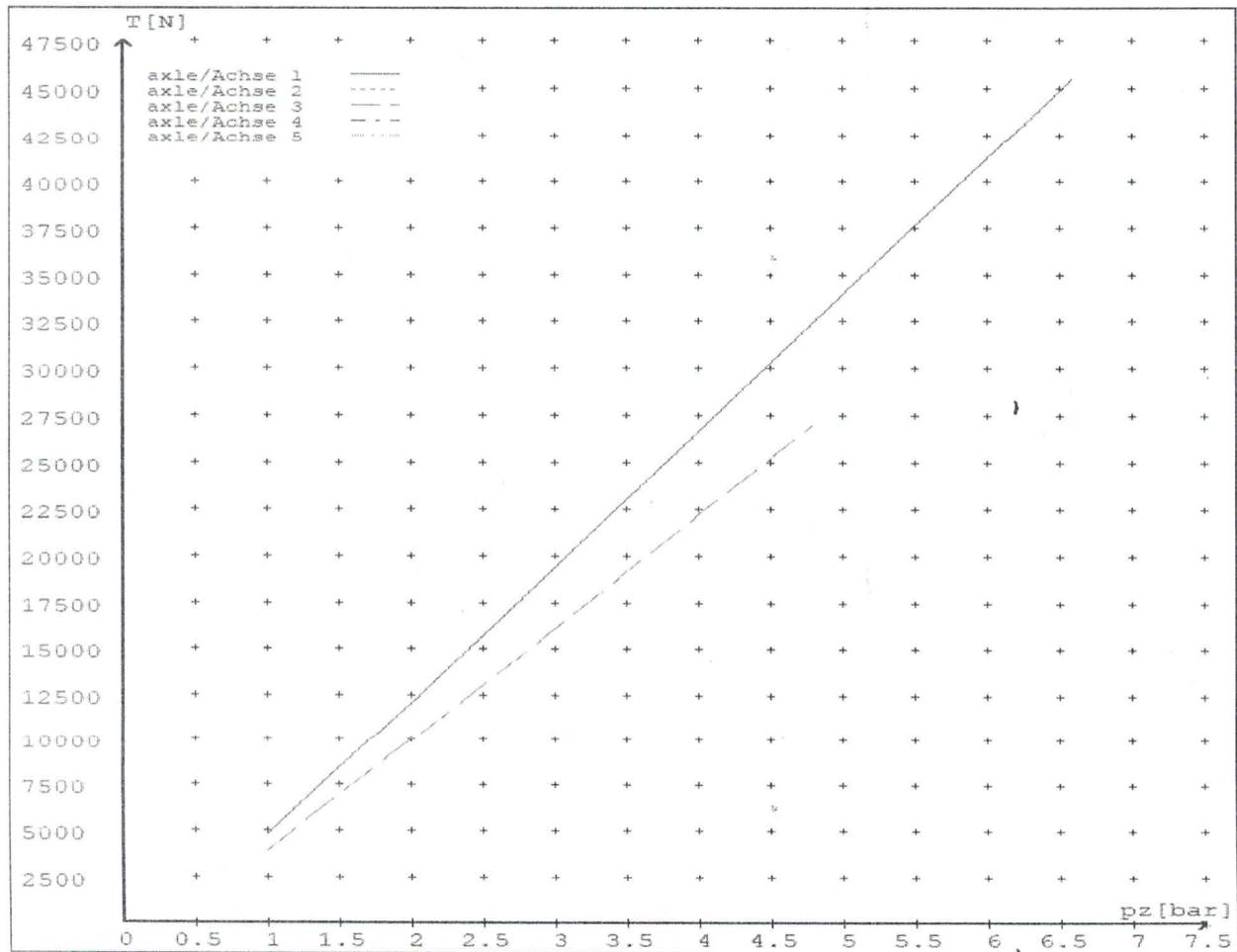
reference values

reference values for z = 50% for max rdyn: 421 mm

| | pz [bar] | T [N] | T [N] |
|--------|----------|-------|-------|
| axle 1 | 1.0 | 4746 | |
| | 6.6 | 45490 | |
| axle 2 | 1.0 | 4746 | |
| | 6.6 | 45490 | |
| axle 3 | 1.0 | | 3850 |
| | 4.8 | | 26965 |
| axle 4 | 1.0 | | 3850 |
| | 4.8 | | 26965 |
| axle 5 | 1.0 | | 3850 |
| | 4.8 | | 26965 |

VIN - no.:

| | Axe(s) / Achse(n) | | | | |
|---|-------------------|------|-------|-------|------|
| brake cylinder type (service / parking) Bremszylinder Typ (Betrieb / Fest) | 20.7 | 20.7 | 16/24 | 16/24 | 16"/ |
| Maximum stroke smax = ...mm maximaler Hub smax =mm | 65 | 65 | 65 | 65 | 65 |
| Lever length =mm Hebellänge =mm | 74 | 74 | 74 | 74 | 74 |



NOTICE TO VEHICLE OPERATOR

THIS VEHICLE HAS A BRAKE SYSTEM WHICH HAS BEEN DESIGNED AND FITTED IN ACCORDANCE WITH THE LAND TRANSPORT HEAVY VEHICLE BRAKE RULE 32015/5.

IF THIS VEHICLE IS OPERATED IN CONJUNCTION WITH NON-CERTIFIED VEHICLES, THERE MAY BE OPERATIONAL FACTORS WHICH NEED TO BE TAKEN INTO CONSIDERATION.

PLEASE REFER TO THE CERTIFIER FOR FURTHER INFORMATION.

EXCERPT FROM LAND TRANSPORT RULE; HEAVY-VEHICLE BRAKES RULE 32015/5. SECTION 10,

10.1 RESPONSIBILITIES OF OPERATORS

A person who operates a vehicle must ensure that the vehicle complies with this rule.

10.2 RESPONSIBILITIES OF REPAIRERS

A person who repairs or adjusts a brake must ensure that the repair or adjustment:

- a) does not prevent the vehicle from complying with this rule;
- b) complies with Land Transport Rule: Vehicle Repair 1998.

10.3 RESPONSIBILITIES OF MODIFIERS

A person who modifies a vehicle so as to affect the braking performance of the vehicle must:

- a) ensure that the modification does not prevent the vehicle from complying with this Rule; and
- b) notify the operator that the vehicle must be inspected and, if necessary, certified by a person or organisation appointed to carry out specialist inspection and certification of heavy vehicle brakes.

IF YOU ARE UNSURE ABOUT YOUR RESPONSIBILITIES, PLEASE CONTACT THE VEHICLE MANUFACTURER, OR MYSELF.

COMPLAINTS. Complaints and Warranty issues which relate to Brake Certification will be acknowledged within 7 working days and a resolution proposed within 25 working days. Resolution of complaints and Warranty issues is subject to Transpecs Warranty policy. Customers have the right to appeal to the New Zealand Transport Authority if dissatisfied with a Compliance issue. (Refer NZTA Deed Of Appointment Para 47.4) NZTA Helpdesk 0800 699 000

(p.p.).....
(J.Hirst (JEH) HVEK)

NOTICE TO VEHICLE OPERATOR

This trailer is equipped with an **Electronic Brake System**.

To comply with the New Zealand Heavy Vehicle Brake Rule 32015/5, it must be used only in conjunction with a truck/tractor equipped with a 5 or 7 pin ABS/EBS power supply socket.

Failure to connect to such supply invalidates Brake Rule compliance.

The trailer ABS/EBS warning light on the towing vehicle dashboard must illuminate when the ignition is switched on and extinguish when the vehicle is in motion.

If the light does not illuminate when ignition is switched on, the system must be checked. If the light remains illuminated when the vehicle is in motion, Brake Rule compliance is compromised. Repairs must be made as soon as possible.

If you are unsure of your responsibilities and/or obligations, please contact either the vehicle manufacturer or myself.



(p.p.)
J E Hirst
(JEH HVEK)
(09 980 7300)

NOTICE TO VEHICLE OPERATOR

WABCO Park Release Emergency Valve (PREV)

This trailer is equipped with a WABCO'PREV
Part # 971 002 900 0

Application of the park brake via the cab control valve will actuate and apply all service brakes on the trailer. In the event of a leak in the service brake system the Spring Brakes will automatically override and hold the vehicle in compliance to Land Transport Rule: Heavy-vehicle Brakes Rule 32015/5.

When the vehicle is presented for COF the trailer park brake system is tested by pulling the red actuation knob on the PREV, situated mid way down the chassis rail. The cab control in the prime mover does not have to be applied for this test procedure.

If you are unsure of any aspect relating to this instruction please contact either the vehicle manufacturer or myself.

(p.p.)
J E Hirst
(JEH HVEK)
(09 980 7300)



NEW ZEALAND HEAVY VEHICLE BRAKE RULE 32015-5
WORKSHEET, PROCEDURE DOCUMENTATION SHEET
& CONFIRMATION OF COMPLIANCE

CLIENT

MANUFACTURER:

DOMETT TRAILERS

ADDRESS:

TAURIKURA DRIVE, TAURANGA 3110

FLEET:

NOT SPECIFIED

VEHICLE DETAILS

VEHICLE TYPE:

SAFT CURTAININSIDE

CERT #:

JH210104

YEAR:

2021

CALCULATION #:

TP52209

MAKE:

DOMETT

REGO #:

N/A

MODEL:

E2001 PH

LT400 #:

770280

CHASSIS #:

2033

ORDER #:

7718

VIN #:

7A9E20011M2023033

GVM: t

32

PRIME MOVER:

EBS / EUROPEAN

LOAD CONFIGURATION:

MIXED FREIGHT

GROUP RATINGS: t

FRONT

REAR

16

19

WHEEL BASE: m

6.605

UNLADEN COG m

MAX HEIGHT m

HEIGHT DECK m

1.08

4.3

1.088

COG: m

2.082

FRONT

REAR

TOTAL

TARE: t

3.3

3.9

7.2

TYRE SIZE:

265 70 R19.5

265 70 R19.5

ROLLING CIRCUMFERENCE: mm

2645

2645

AXLE SPACING: m

1.25

2.7

BRAKE & AXLE DETAILS

| | MAKE | MODEL | TEST REPORT |
|-------------------|-------------------|------------------|-------------|
| AXLE: | ROR_ASSALI_STEFEN | ROR-CS9 I DISC | 361-071-04 |
| POLE WHEEL FRONT: | 90 | POLE WHEEL REAR: | 90 |
| LINING MATERIAL: | ROR 8616 | BRAKE FACTOR: | 20.26 |
| SENSED AXLES: | 2 + 4 | | NOTES: |
| SERIAL NUMBERS: | 1 | N/A | ROR - CS9L |
| | 2 | N/A | ROR - CS9L |
| | 3 | N/A | ROR - CS9L |
| | 4 | N/A | ROR - CS9L |
| | 5 | N/A | ROR - CS9L |

CHAMBER AND VALVING DETAILS

| CHAMBERS: | AXLE 1 & 2 | AXLE 3 & 4 | AXLE 5 |
|-----------------------|---|-----------------------|-----------------|
| BRAND: | HALDEX_CHAMBERS | HALDEX_CHAMBERS | HALDEX_CHAMBERS |
| SIZE: | 20, (125 200) | 1624 (135 1624) | 16, (125 160) |
| STROKE: mm | 66 | 65 | 65 |
| TEST REPORT #: | BC0175.0 | BC0165.0 | BC0169.0 |
| SPRINGBRAKE FORCE: kN | N/A | 6.003 | N/A |
| HOLDOFF PRESSURE: Bar | N/A | 5.2 | N/A |
| FOUNDATION BRAKE: | MERITOR | MERITOR | MERITOR |
| LEVER LENGTH: mm | 74 | 74 | 74 |
| BRAKE VALVES: | MAKE: | PART NUMBER: | PM PRESS. kPa |
| ECU PART #: | WABCO | 480 102 020 0 (12v) | 80 kPa |
| 3RD MODULATOR #: | WABCO | 480 207 202 0 (12V) | 80 kPa |
| ANTI-COMPOUNDING: | YES | | |
| SPRING BRAKE RELAY: | WABCO_PREV | 971 002 900 0 | |
| YARD RELEASE VALVE: | WABCO-PREV | 971 002 900 0 | |
| INLINE RELAY FITTED: | N/A | N/A | |
| ECU DIRECTION: | <input checked="" type="checkbox"/> FRONT <input type="checkbox"/> REAR | FRONT FRICTION: μ | 0.49 |

SUBSYSTEMS:

| | | |
|---|------------------------------------|---|
| <input type="checkbox"/> SMARTBOARD | <input type="checkbox"/> OPTI-LINK | <input type="checkbox"/> CAN ROUTER 446 122 050 0 |
| <input type="checkbox"/> ELEX 446 122 070 0 | <input type="checkbox"/> TAILGUARD | |

SUSPENSION**SUSPENSION TYPE:**

| FRONT | REAR |
|-----------|-----------|
| PNEUMATIC | PNEUMATIC |

MAKE:

| | |
|---------------|---------------|
| ROR_AIRSPRING | ROR_AIRSPRING |
|---------------|---------------|

MODEL:

| | |
|-----------|-----------|
| ROR_INTRA | ROR_INTRA |
|-----------|-----------|

BELLOW SIZE:

| | |
|------|------|
| CS91 | CS91 |
|------|------|

HEIGHT CONTROL VALVE:

| | |
|-----------------|-----------------|
| HALDEX 90554950 | HALDEX 90554950 |
|-----------------|-----------------|

OTHER VALVES:

| | |
|-----|-----|
| N/A | N/A |
|-----|-----|

RIDE HEIGHT mm :

| | |
|-----|-----|
| 280 | 280 |
|-----|-----|

HANGER HEIGHT mm :

| | |
|-----|-----|
| 250 | 250 |
|-----|-----|

PEDESTAL HEIGHT mm :

| | |
|----|----|
| 75 | 75 |
|----|----|

LIFTAXLE:

| |
|-----|
| N/A |
|-----|

TIPPING DUMP SWITCH:

| |
|-----|
| N/A |
|-----|

LIFTAXLE VALVE:

| |
|-----|
| N/A |
|-----|

PRESSURE LIMITING:

| |
|-----|
| N/A |
|-----|

AIR TANKS**AIR TANKS STANDARD:**

| |
|--------------------|
| SAE J10A / EN286-2 |
|--------------------|

FRONT**REAR****BRAKE TANK SIZE: L**

| | |
|----|---------|
| 46 | 46 + 25 |
|----|---------|

AUXILLARY TANK SIZE: L

| | |
|-----|----|
| N/A | 46 |
|-----|----|

PRESSURE PROTECTION:

| |
|--------------------------|
| WABCO PEM: 461 513 002 0 |
|--------------------------|

AIR LINES**TEST POINTS:****CONTROL LINE:**

| | | |
|-----|-------|-----|
| X 1 | TANK: | X 1 |
|-----|-------|-----|

REAR CHAMBER:

| | | |
|-----|----------------|-----|
| X 2 | FRONT CHAMBER: | X 1 |
|-----|----------------|-----|

DUOMATIC COLOUR CODED:

| |
|-----|
| YES |
|-----|

ELECTRONIC HEIGHT SENSOR CALIBRATION

| | TIMER TICKS [F/R] | MILLIMETRE [F / R] |
|---------------|--------------------------|---------------------------|
| UPPER LEVEL: | N/A | N/A |
| NORMAL LEVEL: | N/A | N/A |
| LOWER LEVEL: | N/A | N/A |

CHECKS AT COMMISSION OF VEHICLE

CHAMBER BUNGS REMOVED:

VALVE MOUNTING:

ECU BLANKING PLUGS CHECKED:

RESPONSE TIME:

MODULATOR 2.1

MODULATOR 2.2

RELAY VALVE

ms:

220

240

385

NOTES AND SPECIAL CONDITIONS

REASON FOR CERTIFICATION: NEW TRAILER

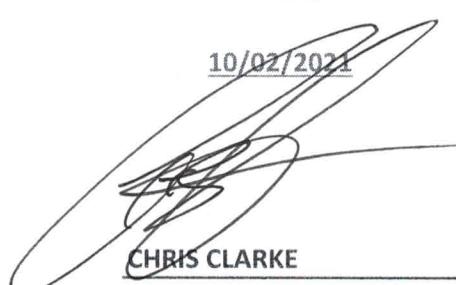
I UNDERSTAND AND DECLARE THAT I AM THE CERTIFIER IDENTIFIED BELOW AND HOLD A CURRENT VALID APPOINTMENT. I CERTIFY THAT AT THE TIME OF INSPECTION THE ABOVE MENTIONED VEHICLE COMPONENT DESIGN AND THIS CERTIFICATION COMPLIES IN ALL RESPECTS WITH THE LAND TRANSPORT RULE VEHICLE STANDARDS COMPLIANCE 2002 AND MY DEED OF APPOINTMENT. TO THE BEST OF MY KNOWLEDGE THE INFORMATION CONTAINED IN THIS CERTIFICATE IS TRUE AND CORRECT.

NEW ZEALAND HEAVY VEHICLE BRAKE RULE 32015/5, SCHEDULE 5.

DATE:

10/02/2021

SIGNED:



CERTIFIER NAME & ID:

CHRIS CLARKE

CJC

SODC BY:

JOHN HIRST

JEH

PHONE (BUS):

09-980-7300

FAX:

POSTAL ADDRESS:

P.O. Box 98-971, Manukau 2241
New Zealand