

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

Plate number (optional)	VIN/chassis number
	7 A 9 E 2 5 0 1 0 P 2 0 2 3 3 5 0
Make	Component being certified:
DOMETT	<input type="checkbox"/> Chassis <input type="checkbox"/> Load anchorage
Model (optional)	<input type="checkbox"/> Log bolsters <input type="checkbox"/> Towing connection <input checked="" type="checkbox"/> Brakes
Model (optional)	<input type="checkbox"/> SRT <input type="checkbox"/> PSV stability <input type="checkbox"/> PSV rollover
Model (optional)	<input type="checkbox"/> Swept path <input type="checkbox"/> PBS
Model (optional)	
Model (optional)	
Model (optional)	
Certification category	
HVEK	

Description of work

CERTIFY TO SCHEDULE 5 OF LTR 32015: NZ HEAVY VEHICLE BRAKE SPECIFICATION.
 CARRY OUT BRAKE CALCULATIONS, INSPECTION AND ECU END OF LINE PROTOCOL.
 5AFT LIVESTOCK **RSS ON TYRE: 215 75 R17.5**
 FOR SYSTEM ARCHITECTURE, PLEASE REFER TO PDS WORKSHEET & SCHEMATIC.
REASON FOR CERTIFICATION: NEW TRAILER BUILD

Code/standard/rule certified to	Component load rating(s)
LTR 32015/5	32 Tonnes GVM
General drawing number(s)	16 Tonne (Front brake mass)
N/A	19 Tonne (Rear brake mass)

Supporting documents	
BRAKE RULE CERTIFICATE	JH231029
BRAKE CALCULATION #	TP52742

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)	or	Hubodometer reading (whichever comes first)
N/A [UNLESS MODIFIED]		<input type="text"/>

Declaration

I the undersigned, declare that I am the heavy vehicle specialist inspector identified and I hold a current valid appointment. I certify that the above mentioned vehicle component's design, manufacture and installation, and this certification complies in all respects with the Land Transport Rule: Vehicle Standards Compliance 2002 and my appointment. To the best of my knowledge the information contained in the certificate is true and correct.

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
25-Oct-23	A 02890

CoF vehicle inspector ID (if applicable)	CoF vehicle inspector signature (if applicable)	Date

trailer (full, semi-, centre-axle) with air brake system acc. to 71/320/EEC, last amended by 98/12/EC and 2006/96/EC

distribution: DOMETT TRAILERS
7A9E25010P2023350
SoDC: JH231029
LT400: CJC A02890

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 commend to do a braking harmonisation!
WABCOBrake V6.18.07.12 db 13.10.2020

vehicle manufacturer: DOMETT TRAILERS
trailer model : 5AFT STOCK
trailer type : 5-axle-full-trailer
remarks : air / hydraulic / VA suspension
EC w.o.annexVII
WABCO TRAILER - EBS E
TRISTOP 3+4: T.14/24 [TSE1416HTLD64 ACTUALLY FITTED -
SEE PAGE 6 FOR PERFORMANCE DATA]
215/75 R 17,5

axle 1 + 2 + 3 + 4 + 5 : IMT, WABCO PAN-17, LINK: 121642-1,

		unladen	laden
total mass	P in kg	10300	34900
axle 1	P1 in kg	2450	8000
axle 2	P2 in kg	2450	8000
axle 3	P3 in kg	1800	6300
axle 4	P4 in kg	1800	6300
axle 5	P5 in kg	1800	6300
wheel base	E in mm	6440 - 6540	
centre of gravity height	h in mm	1460	2250

	axle 1	axle 2	axle 3	axle 4	axle 5
no. of combined axles	1	1	1	1	1
no. of brake chambers per axle line	2	2	2	2	2
The power output corresponds to	BZ 122.1	BZ 122.1	BZ 119.6	BZ 119.6	BZ 122.1
brake chamber manufacturer	Meritor	Meritor	Meritor	Meritor	Meritor
chamber size	20.	20.	T.14/24	T.14/24	14.
lever length	lBh in mm	69	69	69	69
brake factor	[-]	17.73	17.73	17.73	17.73
dyn. rolling radius	rdyn min in mm	373	373	373	373
dyn. rolling radius	rdyn max in mm	373	373	373	373
threshold torque	Co Nm	4.2	4.2	4.2	4.2

calculation:

chamber pressure(rdyn min)pH at z=22,5%bar	2.6	2.6	2.2	2.2	2.2
chamber pressure(rdyn max)pH at z=22,5%bar	2.6	2.6	2.2	2.2	2.2
chamber press.(servo)pcha at pm6,5bar bar	6.7	6.7	4.6	4.6	4.6
piston force	ThA at pm6,5bar N	7810	7810	4385	4385
brake force(rdyn min)T lad. at pm6,5bar N	51916	51916	29151	29151	29151
brake force(rdyn max)T lad. at pm6,5bar N	51916	51916	29151	29151	29151
Brake force incl. 1 % rolling resistance proportion	%	22.3	22.3	18.5	18.5

braking rate z laden 0.559 for rdyn min
z = sum (TR)/PRmax 0.559 for rdyn max

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

brake cylinder: Meritor 20HSCLD65

axle 2:

valve 1: 480 207 0.. 0 WABCO or 480 207 2.. 0
 EBS relay valve

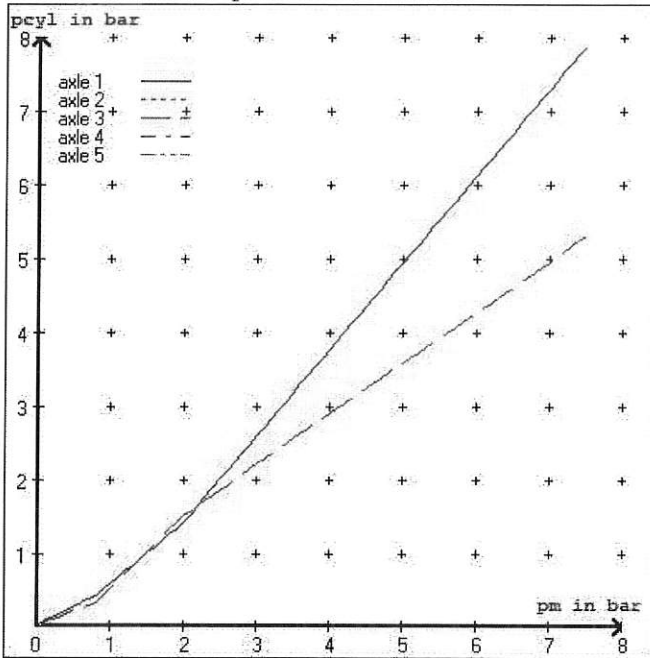
brake cylinder: Meritor 20HSCLD65

axle 3:

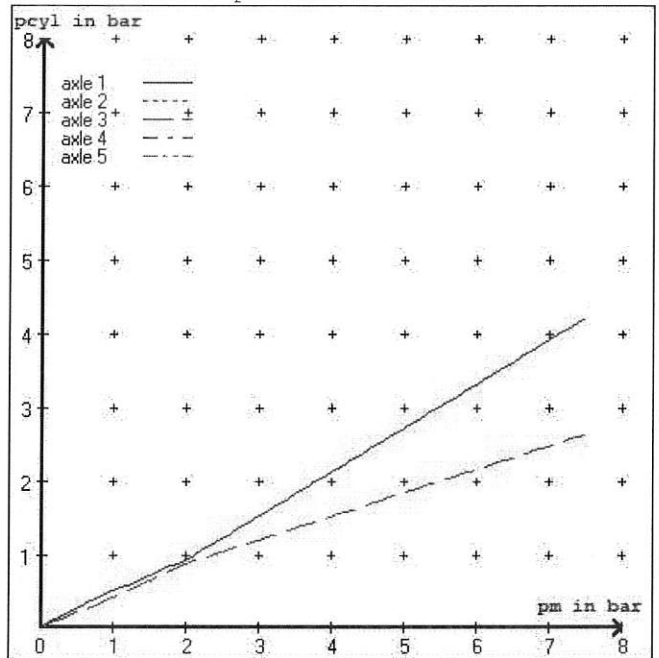
valve 1: 480 102 0.. 0 WABCO
 EBS trailer modulator

brake cylinder: Meritor 1424HTLD64

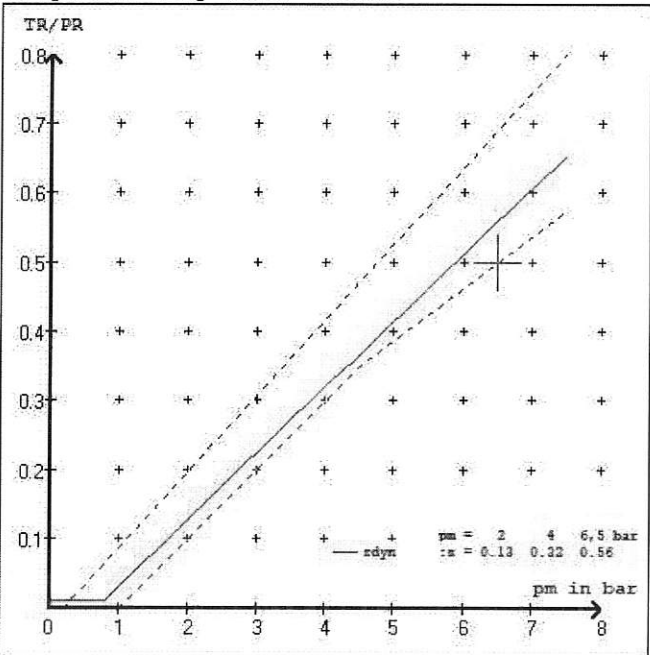
brake chamber pressure laden



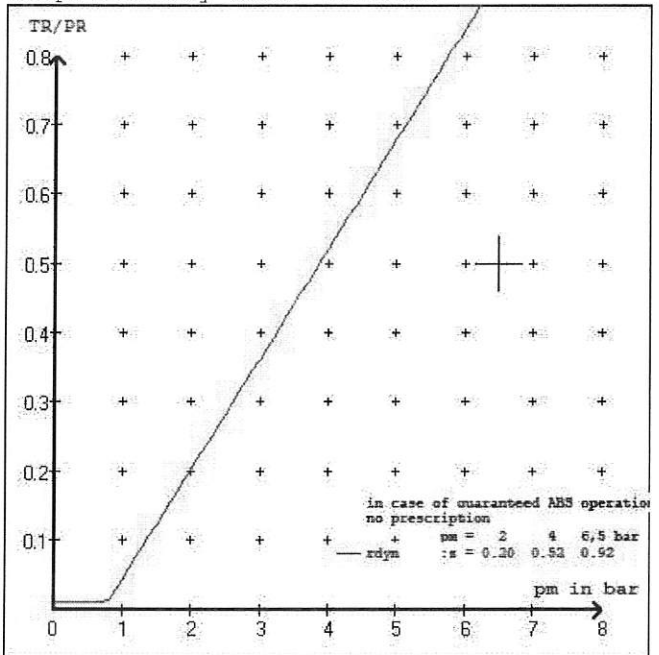
brake chamber pressure unladen



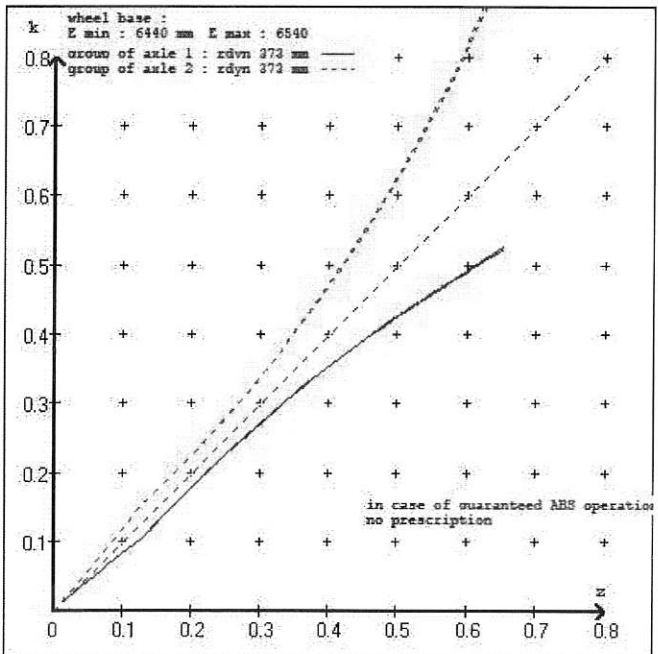
compatibility band laden



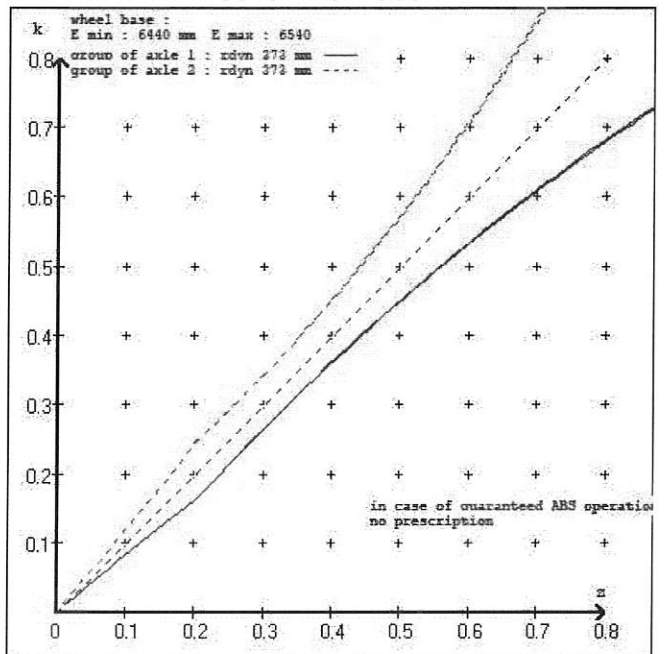
compatibility band unladen



curves of friction laden



curves of friction unladen



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

brake chamber and lever length :

axle 1 : 2 x type/diameter 20. (Meritor) lever length 69 mm
 axle 2 : 2 x type/diameter 20. (Meritor) lever length 69 mm
 axle 3 : 2 x type/diameter T.14/24 (Meritor) lever length 69 mm
 axle 4 : 2 x type/diameter T.14/24 (Meritor) lever length 69 mm
 axle 5 : 2 x type/diameter 14. (Meritor) lever length 69 mm

brake diagram :

valve :

480 207 0.. 0 WABCO EBS relay valve or 480 207 2.. 0
 480 102 0.. 0 WABCO EBS trailer modulator

EBS input data

=====

vehicle manufacturer: DOMETT TRAILERS
 trailer model : 5AFT STOCK
 trailer type : 5-axle-full-trailer
 brake calculation no. : TP 52742A

tire circumference main axle : 2350 for rdyn max
 tire circumference auxiliary axle : 2350 for rdyn max

assignment pm / deceleration z: pm 0.8 bar z = 0.010
 (laden condition) 2.0 bar z = 0.126
 6.5 bar z = 0.560

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	2450	to be	3.6	8000	to be	0.4	1.4	6.7	
2	2450	entered by the vehicle manufact.	3.6	8000	entered by the vehicle manufact.	0.4	1.4	6.7	
3	1800		2.3	6300		0.3	1.5	4.6	
4	1800		2.3	6300		0.3	1.5	4.6	
5	1800		2.3	6300		0.3	1.5	4.6	

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 pcy1	axle load pcy1	axle load pcy1	axle load pcy1	axle load pcy1
2450 3.6	2450 3.6	1800 2.3	1800 2.3	1800 2.3
2950 3.9	2950 3.9	2300 2.6	2300 2.6	2300 2.6
3450 4.2	3450 4.2	2800 2.8	2800 2.8	2800 2.8
3950 4.4	3950 4.4	3300 3.1	3300 3.1	3300 3.1
4450 4.7	4450 4.7	3800 3.3	3800 3.3	3800 3.3
4950 5.0	4950 5.0	4300 3.6	4300 3.6	4300 3.6
5450 5.3	5450 5.3	4800 3.8	4800 3.8	4800 3.8
5950 5.6	5950 5.6	5300 4.1	5300 4.1	5300 4.1
8000 6.7	8000 6.7	6300 4.6	6300 4.6	6300 4.6

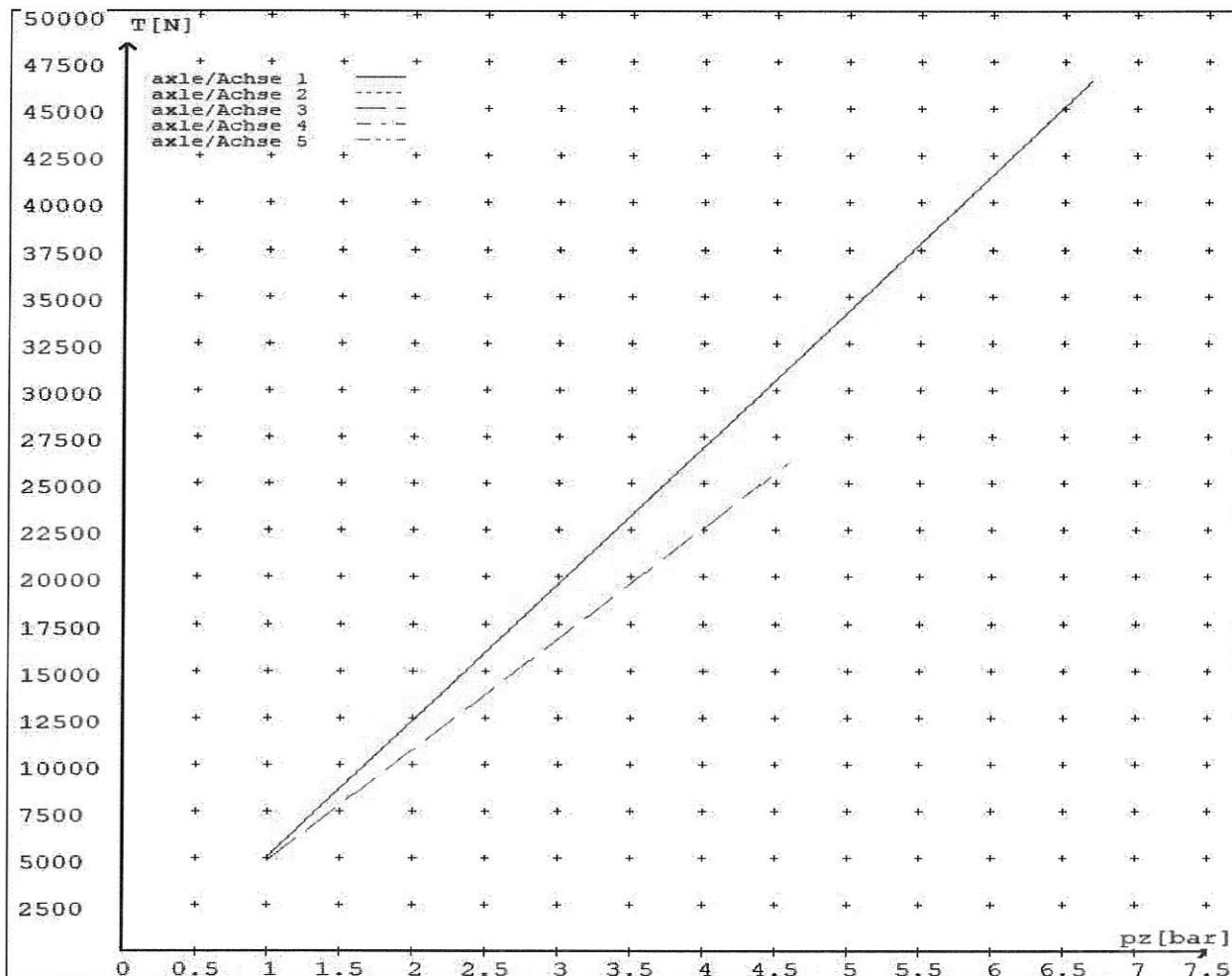
reference values

reference values for z = 50% for max rdyn: 373 mm

	pz [bar]	T [N]	T [N]
axle 1	1.0	4995	
	6.7	46436	
axle 2	1.0	4995	
	6.7	46436	
axle 3	1.0		4787
	4.6		26074
axle 4	1.0		4787
	4.6		26074
axle 5	1.0		4787
	4.6		26074

VIN - no.:

	Axle(s) / Achse(n)				
brake cylinder type (service / parking) Bremszylinder Typ (Betrieb / Fest)	20./	20./	T.14/24	T.14/24	14./
Maximum stroke smax = ...mm maximaler Hub smax =mm	65	65	64	64	64
Lever length =mm Hebellänge =mm	69.4	69.4	69.4	69.4	69.4



reference values for $z = 0.5$

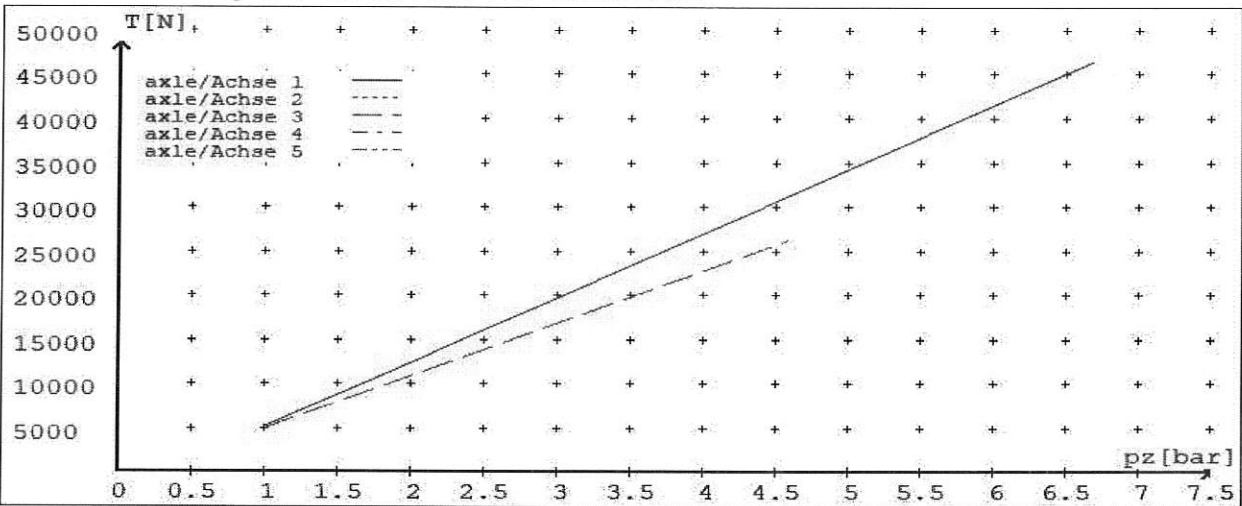
for max rdyn: 373 mm

Angabe der Referenzwerte für $z = 0.5$

für max rdyn: 373 mm

brake calculation no: TP 52742A date 10.10.2023

Bremsberechnung Nr: TP 52742A vom 10.10.2023



	Axle(s) / Achse(n)				
brake cylinder type (service / parking) Bremszylinder Typ (Betrieb / Fest)	20./	20./	T.14/24	T.14/24	14./
Maximum stroke smax = ...mm maximaler Hub smax = ...mm	65	65	64	64	64
Lever length = ...mm Hebellänge = ...mm	69.4	69.4	69.4	69.4	69.4



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.

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

PLEASE REFER TO THE CERTIFIER FOR FURTHER INFORMATION.

EXCERPT FROM NZ HEAVY VEHICLE BRAKE RULE 32015

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; and*
- (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 person or organisation appointed to carry out specialist inspection and certification of heavy vehicle brakes.*

10.5 Responsibilities of manufacturers and retailers

A person may manufacture, stock, or offer for sale a brake or its components. Intended for fitting to a vehicle to be used on New Zealand roads, only if that brake or component:

- (a) Complies with this rule; and*
- (b) Does not prevent a repair to a vehicle, its structure, systems, components and equipment from complying with this rule.*

***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 3 working days and a resolution proposed within 20 working days. Resolution of complaints and Warranty issues is subject to Transpecs Warranty policy.

Customers have the right to appeal to the NZ Transport Agency if dissatisfied with a Compliance issue. (refer NZTA Notice Of Appointment Para 47.4)

NZ Transport Agency Helpdesk 0800 699 000 or a form can be found at

Vehicle certification complaints form (VCCPF01) | Waka Kotahi NZ Transport Agency (nzta.govt.nz)



NOTICE TO VEHICLE OPERATOR

This trailer is equipped with an Electronic Brake System.

To comply with the New Zealand Heavy Vehicle Brake Rule 32015, 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 the 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.

NB:

If this vehicle is fitted with mechanical (spring) suspension, the load sensing has been adjusted to suit the performance of the original springs. In the event of replacement being required, original equipment springs **must** be fitted to ensure correct ongoing operation.

Fitment of non-genuine springs can affect operation and therefore, compliance.

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



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 with Land Transport Rule: Heavy-vehicle Brakes Rule 32015.

When the vehicle is presented for COF the trailer park brake system is tested by pulling the red actuation knob on the PREV, situated midway 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.

J Hirst
(JEH HVEK)



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

CLIENT

MANUFACTURER:	DOMETT TRAILERS
ADDRESS:	TAURIKURA DRIVE, TAURANGA 3110
FLEET:	ELLESMERE TRANSPORT

VEHICLE DETAILS

VEHICLE TYPE:	5AFT LIVESTOCK	CERT #:	JH231029
YEAR:	2023	CALCULATION #:	TP52742
MAKE:	DOMETT	REGO #:	N/A
MODEL:	E2501 H	LT400 #:	A02890
CHASSIS #:	2350	ORDER #:	9727
VIN #:	7A9E25010P2023350		
GVM: t	32	PRIME MOVER:	EBS / EUROPEAN
LOAD CONFIGURATION:	UNIFORM DENSITY		
GROUP RATINGS: t	FRONT	REAR	
	16	19	
WHEEL BASE: m	6.49		
	UNLADEN COG m	MAX HEIGHT m	HEIGHT DECK m
	1.46	4.3	0.96
COG: m	2.250		
	FRONT	REAR	TOTAL
TARE: t	4.9	5.5	10.4
	FRONT	REAR	
TYRE SIZE:	215 75 R17.5	215 75 R17.5	
ROLLING CIRCUMFERENCE: mm	2344	2344	
AXLE SPACING: m	1.31	2.51	

BRAKE & AXLE DETAILS

	MAKE	MODEL	TEST REPORT
AXLE:	IMT	PAN 17 DISC	121642-1
POLE WHEEL FRONT:	80	POLE WHEEL REAR:	80
LINING MATERIAL:	JURID 539	BRAKE FACTOR:	17.73
SENSED AXLES:	2 + 4	NOTES:	
SERIAL NUMBERS:	1	N/A	U24/2904E3
	2	N/A	U24/2904E3
	3	N/A	U24/2504E3
	4	N/A	U24/2504E3
	5	N/A	U24/2504E3

CHAMBER AND VALVING DETAILS

CHAMBERS:	AXLE 1 & 2	AXLE 3 & 4	AXLE 5
BRAND:	TSE_CHAMBERS	TSE_CHAMBERS	TSE_CHAMBERS
SIZE:	20HSCLD	1416HTLD	14HSCLD
STROKE: <i>mm</i>	65	64	64
TEST REPORT #:	BC 0041.0 Jul '07	BC0143.0	BZ 122.1 Sep '00
SPRINGBRAKE FORCE: <i>kN</i>	N/A	6.16	N/A
HOLDOFF PRESSURE: <i>Bar</i>	N/A	4.8	N/A
FOUNDATION BRAKE:	WABCO PAN 17	WABCO PAN 17	WABCO PAN 17
LEVER LENGTH: <i>mm</i>	69	69	69
BRAKE VALVES:	MAKE:	PART NUMBER:	PM PRESS. <i>kPa</i>
ECU PART #:	WABCO	480 102 08. 0 (MV)	80 kPa
3RD MODULATOR #:	WABCO	480 207 202 0 (12V)	80 kPa
ANTI-COMPOUNDING:	YES		
SPRING BRAKE RELAY:	SEALCO_SBR	110701	
YARD RELEASE VALVE:	SEALCO_YR	17600B	
INLINE RELAY FITTED:	N/A	N/A	
ECU DIRECTION:	<input checked="" type="checkbox"/> FRONT <input type="checkbox"/> REAR	FRONT FRICTION: μ	0.465
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

	FRONT	REAR
SUSPENSION TYPE:	ELECTRONIC	ELECTRONIC
MAKE:	SAF_AIRSPRING	SAF_AIRSPRING
MODEL:	SAF_MODULAR	SAF_MODULAR
BELLOW SIZE:	2618, 300mm	2618, 300mm
HEIGHT CONTROL VALVE:	441 050 100 0	441 050 100 0
OTHER VALVES:	463 090 500 0 (eTASC)	463 090 500 0 (eTASC)
RIDE HEIGHT <i>mm</i> :	240	240
HANGER HEIGHT <i>mm</i> :	290	290
PEDESTAL HEIGHT <i>mm</i> :	40	40
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: <i>L</i>	46	46 + 25
AUXILLARY TANK SIZE: <i>L</i>	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		

HEAVY VEHICL BRAKE RULE - 32015 (TRAILER)

SCHEDULE 4

SCHEDULE 5

SECTION 6

APPROVED STD

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:	<input type="text"/>	<input type="text"/>	<input type="text"/>

NOTES, SKETCHES AND SPECIAL CONDITIONS

FILES RECEIVED: 25.07.2023

FILES CREATED: 20.10.2023

FINAL INSPECTION & SIGN OFF (CJC): 25.10.2023

REQUEST A COPY OF THE TARE WEIGHT DOCKET

FILES RETURNED AS COMPLETE:

REASON FOR CERTIFICATION: NEW TRAILER BUILD

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 VECHLE BRAKE RULE 32015, SCHEDULE 5:

DATE: 25/10/2023

SIGNED:

CERTIFIER NAME & ID: CHRIS CLARKE CJC

SODC BY: JOHN HIRST JEH

PHONE (BUS): 09-980-7300

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