

Test Report

No. TDB 0606 dated 22.05.2001

for application of Annex VII Directive 71/320/EEC

1 IDENTIFICATION

1.1 Axle

Manufacturer: OTTO SAUER Achsenfabrik Keilberg
D-63854 Bessenbach
Make: SAF
Type: SBK 1937-13Z
Model: -
Technically permissible axle load P_e ¹⁾: 13000 daN

1.2 Brake

Manufacturer: See 1.1
Make: SAF
Type: SB 6...
Method of construction: Floating caliper brake (pneumatic)
with internally ventilated brake disc
Technically permissible input
torque at brake lever $C_{max,e}$: 1220 Nm
(for calculation: 930 Nm at 6,5 bar)
Brake disc - Outside diameter: 377 mm
- Effective radius r_e : 149 mm
- Thickness: 45 mm
- Mass: 25 kg
- Material: Cast iron (grey cast iron)
Brake pad - Type: JURID 539
- Identification: Type indication at back plate
- Width: 210,7 mm
- Thickness: 30 mm (incl. 9 mm back plate)
- Surface area: 2 x 148 cm²
- Method of attachment: Friction material pressed on back plate
Brake lever - Ratio l_e/e_e : 76 mm / 4,9 mm
Adjusting device: Integrated, automatic adjustment
Schematic representation: See appendix 2 dated 19.01.1998

1.3 Wheel (Twin)

Rim diameter D_e : See appendix 1 dated 22.05.2001
Dimensions: See appendix 1 dated 22.05.2001

¹⁾ See sheet 3/3

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Manufacturer : SAF
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1.4 Tyres

Dynamic rolling radius R_e
at reference load P_e :

See appendix 1 dated 22.05.2001

1.5 Actuation

Brake actuator - Manufacturer: KNORR-BREMSE
- Type: Diaphragm brake actuator
- Model: 30 (BS 3603)

2 RECORD OF TEST RESULTS ²⁾

(corrected to take account of rolling resistance $\hat{=} 0,01P_e$)

2.1 In the case of vehicles of categories O₂ and O₃

Test type:		0	I	
Annex VII, Appendix 1, point:		3.5.1.2	3.5.2.2/3	3.5.2.4
Test speed	km/h	40	40	40
Brake actuator pressure p_e	bar	5,9	-	5,9
Braking time	min	-	2,55	-
Brake force developed T_e	daN	6899	935	6419
Brake efficiency T_e/P_e	-	0,53	0,07	0,49
Actuator stroke s_e	mm	44	-	40
Input torque at brake lever C_e	Nm	817	-	817
$C_{0,e}$	Nm	10	-	10

2.2 In the case of vehicles of category O₄

Test type:		0	III	
Annex VII, Appendix 1, point:		3.5.1.2	3.5.3.1.2	3.5.3.2
Test speed				
initial	km/h	60	60	60
final	km/h	0	30	0
Brake actuator pressure p_e	bar	6,1	-	6,1
Number of brake applications	-	-	20	-
Duration of braking cycle	s	-	60	-
Brake force developed T_e	daN	7291	4019	5856
Brake efficiency T_e/P_e	-	0,56	0,31	0,45
Actuator stroke s_e	mm	42	-	42
Input torque at brake lever C_e	Nm	845	-	845
$C_{0,e}$	Nm	10	-	10

²⁾ See sheet 3/3

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RWTÜV

Manufacturer : SAF
Type of axle : SBK 1937-13Z

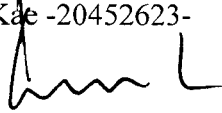
3 NAME OF TECHNICAL SERVICE CONDUCTING THE TEST

RWTÜV Fahrzeug GmbH
Technischer Dienst für Bremsanlagen
D-45307 Essen

4 DATE OF TEST: 25.01.2001

5 This test has been carried out and the result reported in accordance with Directive 71/320/EEC as last amended by Directive 98/12/EC and Annex VII, Appendix 1.

Essen, 22.05.2001
Kae -20452623-


Dipl.-Ing. Kaesler

LABORATORY FOR VEHICLE TECHNOLOGY
Testing Laboratory for Braking Systems
according to Directive 71/320/EEC in the
version of Directive 98/12/EC

6 APPROVAL AUTHORITY, if different from the technical service

Flensburg, 06 JUN 2001

i. A.



7 TEST DOCUMENTS

- / Appendix 1: Representation brake/wheel/tyre
- / Appendix 2: Schematic representation of brake

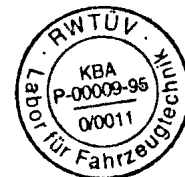
1) Calculation with $g = 10 \text{ m/s}^2$

2) Inertia dynamometer test; brake type SB 6531, $R_e = 507 \text{ mm}$

Allegato 1 al verbale di Omologazione Nr.:

O T T O S A U E R
ACHSENFABRIK KEILBERG
D - 63854 BESENBAACH
G E R M A N Y

Name: Drewes



Gemäß DIN 34 behalten wir uns für diese Unterlage alle Rechte vor!

Anlage 2 zum Prüfprotokoll Nr.TDB 0606

Annex 2 to brake test record

Annexe 2 au procès verbal

Allegato 2 al verbale di Omologazione Nr.

SAF OTTO SAUER
ACHSENFABRIK KEILBERG
D - 63854 BESENBACH
GERMANY

SBK 1937 - 13Z

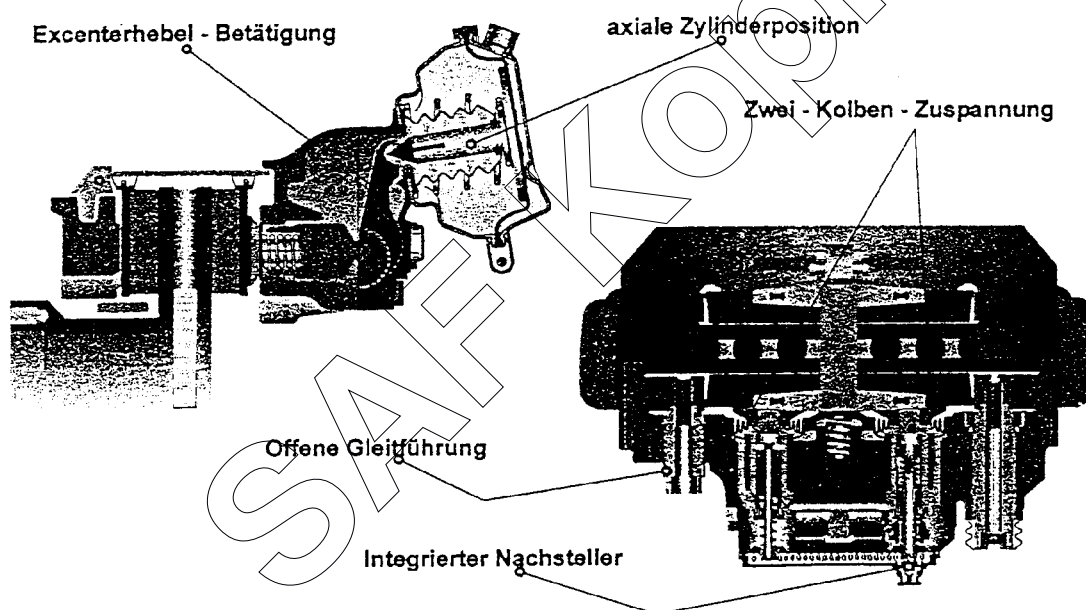
Zeichn. Nr.: 6 077 9149 00

Blatt: 1

Datum: 19.01.98

Name: Drewes

Scheibenbremse SB 6...



53616702.CDR - F/BKA-Berlin - 30.10.97

