

Test Report

No. KO 232.0**according to Annex XII of Directive 71/320/EEC**

- 1 Applicant:** TMD Friction GmbH
D-51375 Leverkusen
- 2 Technical characteristics of the brake**
- Manufacturer: BPW Bergische Achsen
Kommanditgesellschaft
D-51674 Wiehl
- Type: SB 4345
- Method of construction: Floating caliper brake (pneumatic)
with internally ventilated brake disc
- Technically permissible input
torque at brake lever $C_{max,e}$: 1550 Nm
- Brake disc -Outside diameter: 430 mm
-Effective radius r_e : 171.5 mm
-Thickness: 45 mm
- Brake pad -Make, -Type: JURID, JURID 539
Textar, T 3030
-Width: 247.6 mm (back plate)
-Thickness: 30 mm (incl. 9 mm back plate)
-Surface area: 2 x 206 cm²
- Scope of application: Vehicles with power-braking-system
(compressed air) and pneumatic mechanical
transmission
- 2 Tests performed:** According to Annex XII of Directive
71/320/EEC in the version of Directive
98/12/EC respectively taking account of
vehicle category O.
- 4 Technical details of test**
- 4.1 Brake**
- Type: SB 4345
- Brake load: 7100 daN ¹⁾ (see 4.3)
- Type of brake pad: See appendix 1 (footnote)

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



Applicant : TMD Friction GmbH
Type of brake : SB 4345

4.2 Actuation

Brake actuator -Make: KNORR-BREMSE
-Type: Diaphragm brake actuator
-Model: 30 (BS 3603)
Brake lever -Ratio: 88 mm/5.75 mm

4.3 Reference axle

Make: BPW
Type: D 142
Axle load: 14200 daN¹⁾
Maximum speed: > 25 km/h
Rolling radius of tyre: 558 mm
Category: O4

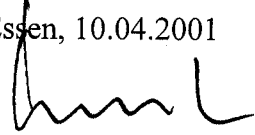
4.4 Inertia dynamometer

Inertia applied: 2210 kgm²
Inertia considered: 2210.6844 kgm²

5 Test results: See appendix 1

6 Overall result: Brake pads type JURID 539 and T 3030 are equivalent in terms of Annex XII of Directive 71/320/EEC in the version of Directive 98/12/EC.

Essen, 10.04.2001


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

Appendix (1 sheet)

Applicant : TMD Friction GmbH
Type of brake : SB 4345

5 Test results

Test No.	Braking test							
	Type 0				Type I		Type III	
	40 km/h		60 km/h		40 km/h		60 km/h	
	Nm ¹⁾	bar ²⁾	Nm	bar	Nm	bar	Nm	bar
1	25584	6.5	23529	6.5	22002	6.5	19606	6.5
2	24576	6.5	22830	6.5	20344	6.5	18562	6.5
3	25689	6.5	23653	6.5	21697	6.5	19408	6.5
4	24185	6.5	22188	6.5	20784	6.5	18504	6.5
5	24480	6.5	22620	6.5	21335	6.5	18832	6.5
MW ³⁾	24903	6.5	22964	6.5	21232	6.5	18982	6.5
6	25349	6.5	20613	6.5	19221	6.5	17194	6.5
7	27654	6.5	21563	6.5	19334	6.5	16968	6.5
8	25984	6.5	21112	6.5	20463	6.5	18099	6.5
9	26082	6.5	20767	6.5	19571	6.5	18011	6.5
10	24292	6.5	20697	6.5	19809	6.5	18177	6.5
MW ⁴⁾	25872	6.5	20950	6.5	19680	6.5	17690	6.5

X ⁵⁾	1.039	0.912	0.927	0.932
Y ⁶⁾	0.963	1.096	1.079	1.073

- 1) Brake torque
- 2) Brake actuator pressure
- 3) Mean value from tests 1 - 5 with brake pads type JURID 539
- 4) Mean value from tests 6 - 10 with brake pads type T 3030
- 5) Nm/bar of mean value ⁴⁾ divided by Nm/bar of mean value ³⁾
- 6) Nm/bar of mean value ³⁾ divided by Nm/bar of mean value ⁴⁾

