

Test Report

No. KO 231.0**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 3745
- Method of construction: Floating caliper brake (pneumatic)
with internally ventilated brake disc
- Technically permissible input
torque at brake lever $C_{max,e}$: 1220 Nm
- Brake disc -Outside diameter: 377 mm
-Effective radius r_e : 149 mm
-Thickness: 45 mm
- Brake pad -Make, -Type: JURID, JURID 539
Textar, T 3030
-Width: 210.7 mm (back plate)
-Thickness: 30 mm (incl. 9 mm back plate)
-Surface area: 2 x 148 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 3745
- Brake load: 5775 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 3745

4.2 Actuation

Brake actuator -Make: KNORR-BREMSE
-Type: Diaphragm brake actuator
-Model: 30 (BS 3603)
Brake lever -Ratio: 76 mm/4.9 mm

4.3 Reference axle

Make: BPW
Type: D 115-1
Axle load: 11550 daN¹⁾
Maximum speed: > 25 km/h
Rolling radius of tyre: 600 mm
Category: O4

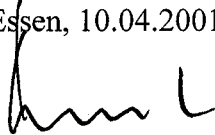
4.4 Inertia dynamometer

Inertia applied: 2080 kgm²
Inertia considered: 2079 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


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

Appendix (1 sheet)

Test Report No. : KO 231.0
 Appendix : 1
 Sheet : 1 / 1



Applicant : TMD Friction GmbH
 Type of brake : SB 3745

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	20522	6.5	18630	6.5	18576	6.5	16135	6.5
2	20161	6.5	18535	6.5	18464	6.5	16067	6.5
3	20671	6.5	19321	6.5	18863	6.5	16281	6.5
4	19471	6.5	17437	6.5	18522	6.5	14846	6.5
5	20161	6.5	19053	6.5	18222	6.5	15484	6.5
MW ³⁾	20197	6.5	18595	6.5	18529	6.5	15763	6.5
6	20547	6.5	18072	6.5	17946	6.5	15750	6.5
7	18359	6.5	17213	6.5	16377	6.5	16397	6.5
8	20155	6.5	16201	6.5	18525	6.5	15352	6.5
9	19982	6.5	16366	6.5	18747	6.5	16371	6.5
10	18172	6.5	16801	6.5	16786	6.5	14997	6.5
MW ⁴⁾	19443	6.5	16931	6.5	17676	6.5	15773	6.5

X ⁵⁾	0.963	0.911	0.954	1.001
Y ⁶⁾	1.039	1.098	1.048	0.999

- 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⁾

