

DOT 489

RESEARCH RABBIT (MIV) Modified Integrated Vehicle

Phase 1



VOLKSWAGENWERK
Aktiengesellschaft
WOLFSBURG

Contract No. DTNH 22-81-C-17085
June 1982
Final Report
Volume III/5 Side Impact

PREPARED FOR:
U. S. DEPARTMENT OF TRANSPORTATION
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
WASHINGTON, D. C. 20590

Prepared for the Department of Transportation, National
Highway Traffic Safety Administration under Contract No.
DTNH 22-81-C-17085

The opinions, findings, and conclusions expressed in this
publication are not necessarily those of the
National Highway Traffic Safety Administration.

1. Report No.	2. Government Accession No.	3. Recipient's Catalog No.	
4. Title and Subtitle Research Rabbit (MIV) Modified Integrated Vehicle		5. Report Date June 1982	
		6. Performing Organization Code	
		8. Performing Organization Report No.	
7. Author(s) Volkswagenwerk AG - Research & Development Division		10. Work Unit No. (TRAIS)	
9. Performing Organization Name and Address Volkswagenwerk AG Research & Development Division 3180 Wolfsburg/W.Germany		11. Contract or Grant No. DTNH 22-81-C-17085	
		13. Type of Report and Period Covered Final Report January 1981 June 1982	
12. Sponsoring Agency Name and Address U.S. Department of Transportation National Highway Traffic Safety Administration Washington, D.C. 20590		14. Sponsoring Agency Code	
15. Supplementary Notes			
16. Abstract Vehicle and vehicle occupant response data and technical data from side impact test No. 5 - Crabbed Barrier/Modified 4 door Rabbit (MIV) at 60° impact angle and $v = 30$ mph impact speed are summarized in this report.			
17. Key Words		18. Distribution Statement	
19. Security Classif. (of this report)		20. Security Classif. (of this page)	21. No. of Pages 150
			22. Price

Volume III/5

The Test Results belong to the specified NHTSA Test Configuration for Side Impacts with the Crabbed Barrier and HSRI-SID-Dummies both of which are currently under development.

NHTSA Project DTNH 22-81-C-17085

Volume III/5

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1. Introduction

The Objective of the MIV project was to optimize the contradictory design aspects of a high degree of passive safety and low fuel consumption.

The project was arranged in Phase I and II. The results of Phase I are the basis of this report. Phase II was redefined by NHTSA. According to this, the three engine/transmission concepts that were to be newly developed are no longer part of Phase II.

Possibilities were to be found for a 4 door Rabbit for further increasing occupant protection in specified side and frontal impacts. The Rabbit Modifications should be possible to implement on the production line. NHTSA's design goals were the 35 mph frontal fixed barrier impact and the 30, 35 or 40 mph side impact with the new 1.565 kg (3,450 lbs) deformable Crabbed Barrier and the new HSRI Dummy which were specially conceived for the side impact and are presently still under development.

Modifications for the 4 door Rabbit were derived from Crabbed Barrier/Production Rabbit baseline tests.

NHTSA contract specifications called for a maximum weight increase of 20 lbs for the modified 4 door Rabbit.

The NHTSA goal to achieve the greatest possible reduction in dummy loads, in keeping with the objective of lowest possible weight together with the prerequisite that the design be suited to mass production at the lowest possible cost, required the development of a new "Integrated Structure" for the 4 Door Modified Rabbit. This concept requires that the greatest number of components be effective during a frontal and a side impact. The "Integrated Structure" approach, rather than the Budd strategy to use add-on parts, is necessary to achieve the goals established by NHTSA.

2. Method

- 2.1 Test Devices and Test Configuration
- 2.2 List of Accelerometer Location
 - 2.2.1 Target Vehicle Instrumentation
 - 2.2.2 Side Impactor Instrumentation
 - 2.2.3 Dummy Instrumentation
- 2.3 Camera Location and Frame Rate

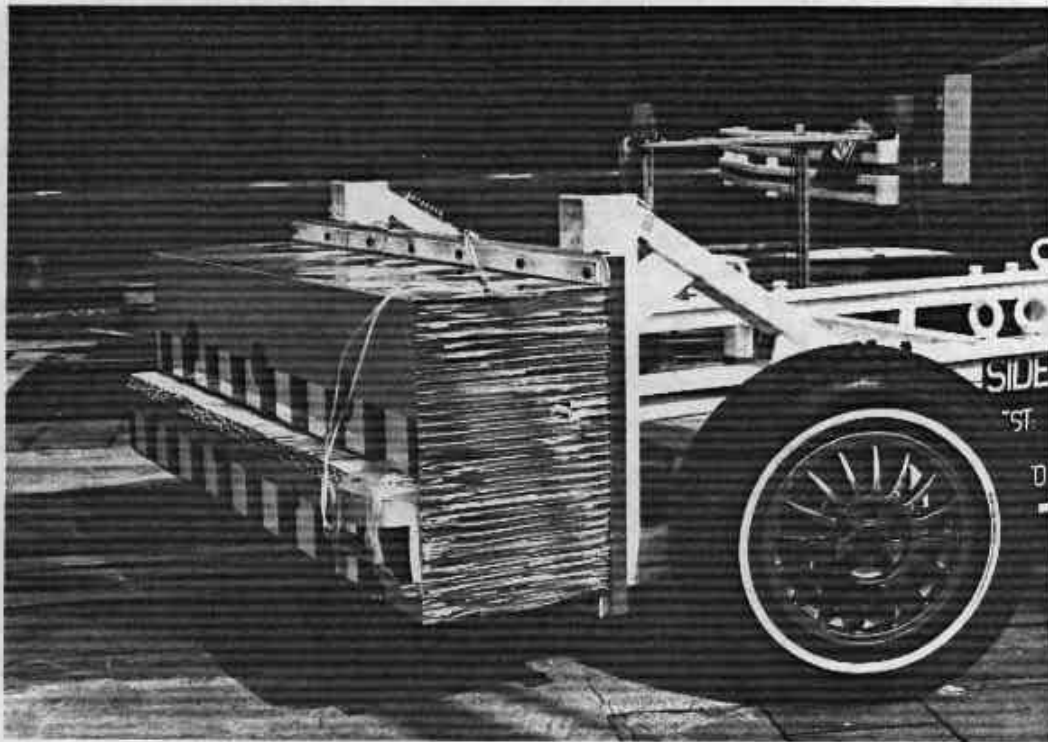


FIGURE 1 : 19° CRABBED BARRIER TEST DEVICE

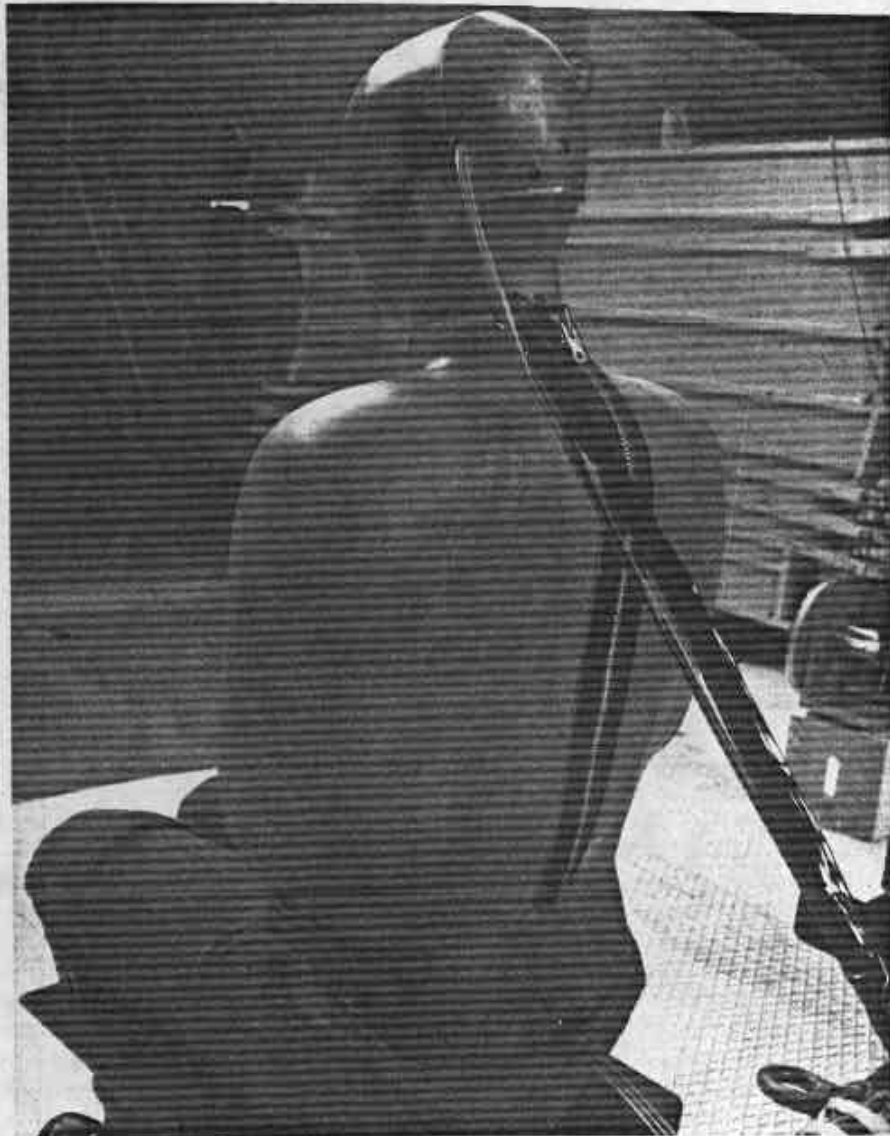
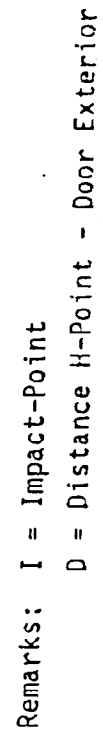


FIGURE 2 : HSRI SIDE IMPACT DUMMY



- 14 -

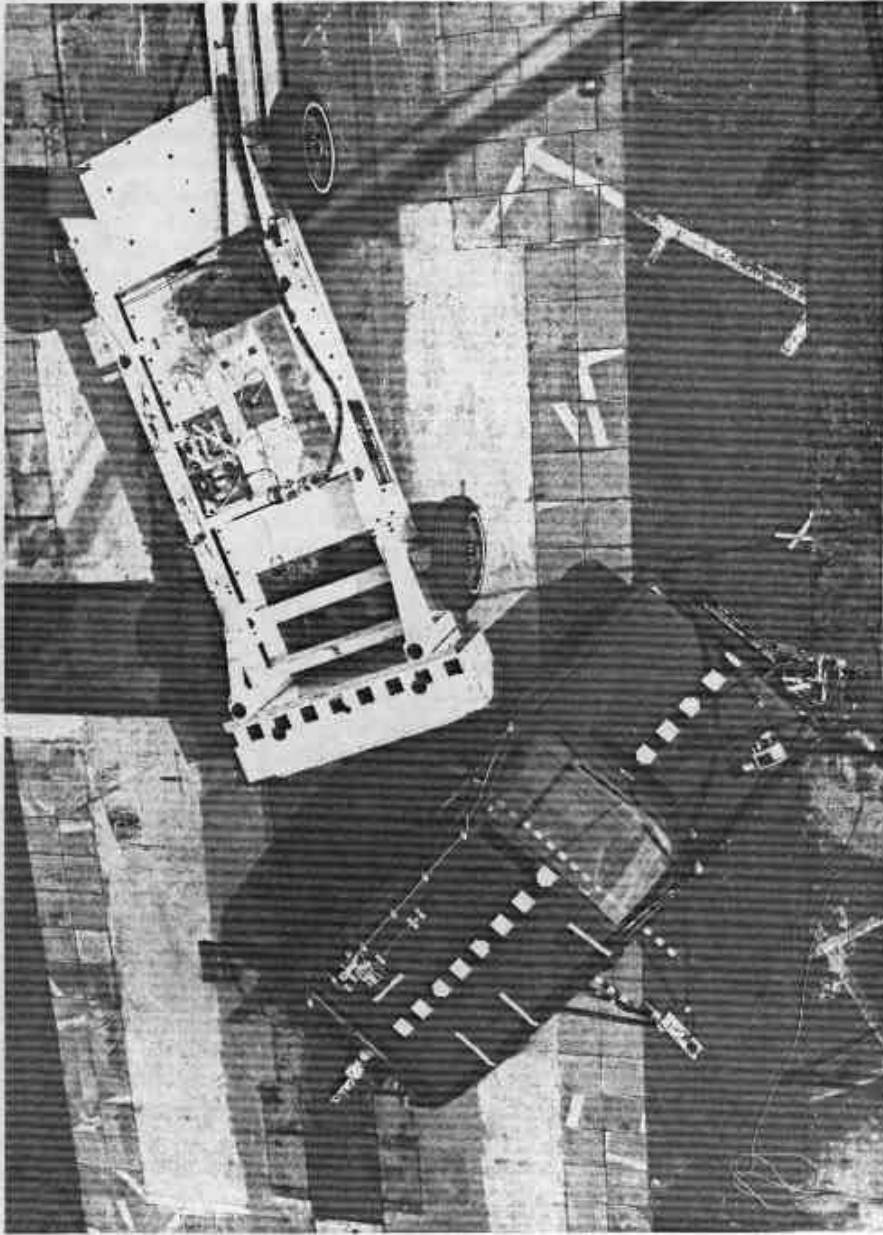


FIGURE 4 : SIDE IMPACT TEST CONFIGURATION
CRABBED BARRIER / VW RABBIT

Table 1: List of Accelerometer - Location

VEHICLE

No.	Location	Shortened Form	Direction
1	Right Front-Doorsill	TSVR	Y
2	Left Front-Doorsill	TSVL	Y
3	Left Rear-Doorsill	SHHL	Y
4	Rear Deck over Centerline	KOBO	X, Y, Z
5	Front Firewall over C _L	SWMI	X, Y, Z
6	Mid-front Edge of left Front-Door	TTRV	Y
7	Middle of left Front-Door	TTRM	Y
8	Shoulder Contact at Front-Door	SASL	Y
9	Pelvis Contact at Front-Door	BASL	Y
10	Left Front-Door on Windowsill	FBVL	Y
11	Right Front-Door on Windowsill, directly across No. 10	FBVR	Y
12	Left B-Pillar near Door Latch	BSLL	Y
13	Right B-Pillar across No. 12	BSLR	Y
14	Underneath left Front Seat attached to Seat	SGFA	Y
15	Vehicle Center of Gravity	RTMI	X, Y, Z
16	Left Front-Door Intrusion	FTWE	Y
17	B-Pillar Intrusion	THWE	Y
18	Shoulder Contact Driver	SK01K	
19	Pelvis Contact Driver	BK01K	
20	Shoulder Contact Left Rear Passenger	SK03K	
21	Pelvis Contact Left Rear Passenger	BK03K	

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1	Right Frame Rail	LTRR	X
2	Left Frame Rail	LTRL	X
3	Front Crossmember at C _L	QTVM	X
4	Right Rear Vertikal Frameraill	RHTR	X, Y
5	Center of Gravity	SPKT	X, Y, Z

Declaration: X = Longitudinal
Y = Lateral
Z = Vertikal

Location of Accelerometer for the HSRI Side Impact Dummies

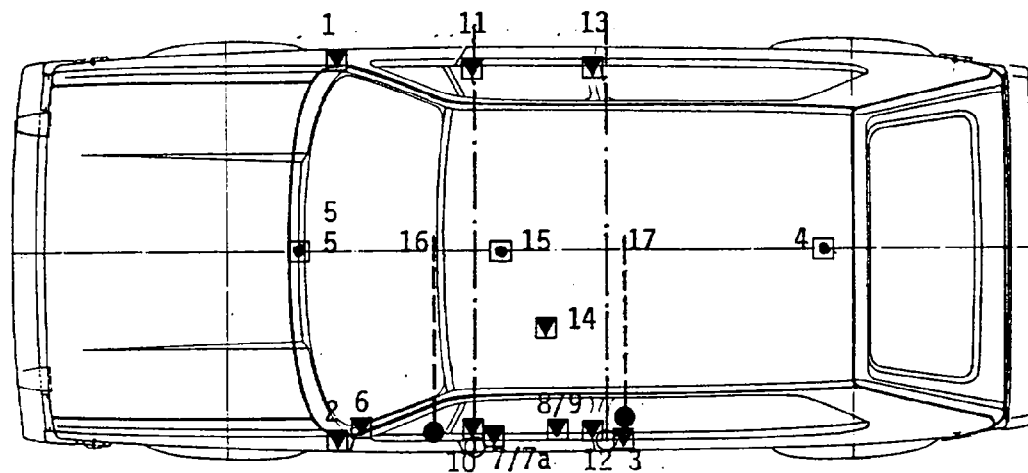
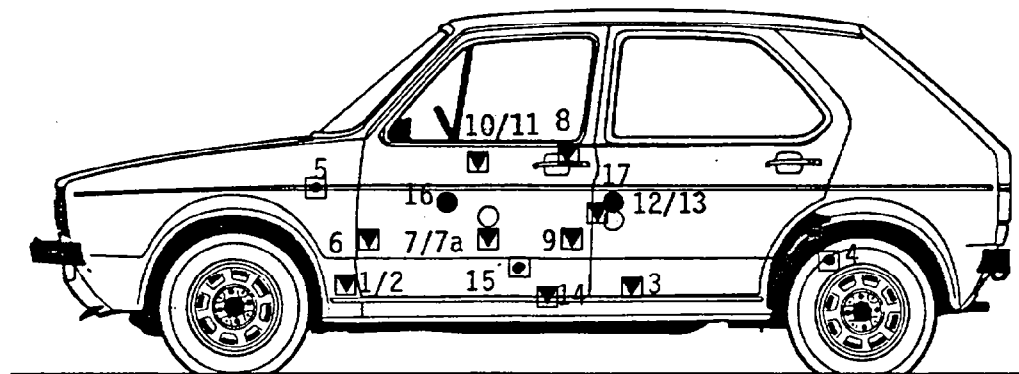
Location	Shortened Form	Direction
----------	----------------	-----------

D R I V E R

Head Triaxial	K001	X, Y, Z
Upper Sternum	B001	X
Lower Sternum	BU01	X
Left upper Rib	L001	Y
Left lower Rib	LU01	Y
Right upper Rib	R001	Y
Right lower Rib	RU01	Y
Upper Thorax (T 1)	T001	X, Y, Z
Lower Thorax (T 12)	TU01	X, Y, Z
Pelvis Triaxial	BE01	X, Y, Z
Chest Deflection	WE01	Y
Shoulder Beltforce	GU01SA	

R E A R L E F T P A S S E N G E R

Head Triaxial	K003	X, Y, Z
Upper Sternum	B003	X
Lower Sternum	BU03	X
Left upper Rib	L003	Y
Left lower Rib	LU03	Y
Right upper Rib	R003	Y
Right lower Rib	RU03	Y
Upper Thorax (T 1)	T003	X, Y, Z
Lower Thorax (T 12)	TU03	X, Y, Z
Pelvis Triaxial	BE03	X, Y, Z
Chest Deflection	WE03	Y
Pelvis Beltforce	GU03BA	



-  Axial Accelerometer (Y - Direction)
-  Biaxial Accelerometer (X, Y - Direction)
-  Triaxial Accelerometer (X, Y, Z -Direction)
-  Displacement Tube
-  Displacement Transducer

Note: See Table for Additional Information

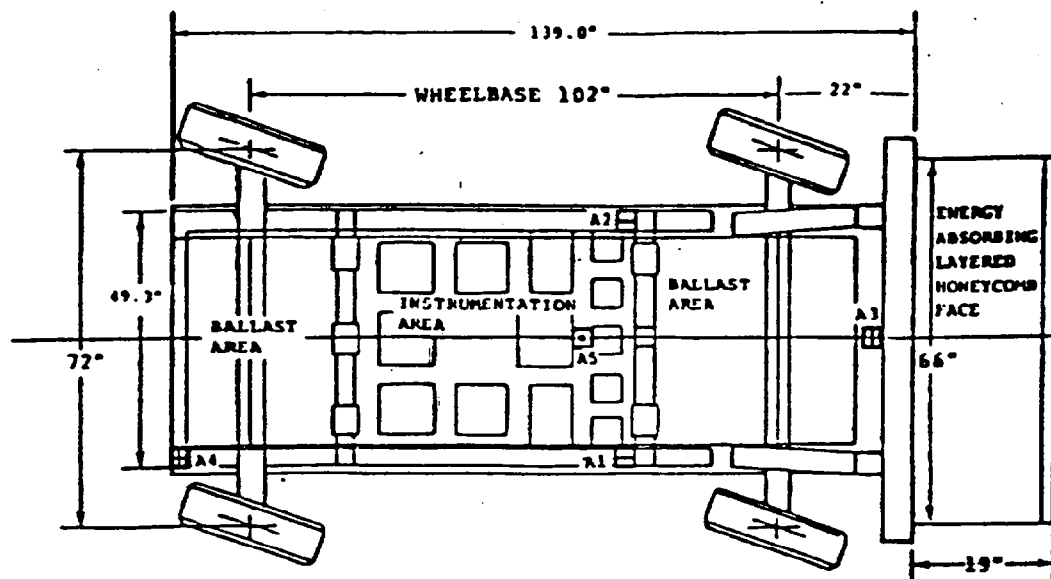
Figure 5 : Target Vehicle Instrumentation

No.	Accelerometer - Location	Coordinates [mm]			Results [g _{max}]		
		X *	Y *	Z *	X	Y	Z
1	Occupant Compartment, right Front-Doorsill	2630	620	300	--	15.0	--
2	Occupant Compartment, left Front-Doorsill	2630	-620	300	--	70.1	--
3	Occupant Compartment, left Rear-Doorsill	1410	-560	290	--	47.2	--
4	Rear Deck over Vehicle Centerline	910	0	440	17.3	18.2	6.3
5	Front Firewall over Vehicle Centerline	2890	0	650	25.0	12.6	8.7
6	Mid-front Edge of Left Front Door	2550	-620	457	--	57.6	--
7	Middle of left Front Door	2060	-620	630	--	122.6	--
8	Shoulder Contact Front Door	1775	-665	850	--	52.6	--
9	Pelvis Contact Front Door	1840	-660	480	--	93.3	--
10	Left Front Door on Windowsill, slightly forward of surrogate's	2050	-650	850	--	98.0	--
11	Right Front Door on Windowsill, directly across from Nr. 10	2050	650	850	--	23.3	--
12	Left B-Pillar near Door Lock	1480	-650	670	--	69.1	--
13	Right B-Pillar across from Nr. 12	1480	650	670	--	49.7	--
14	Underneath left Front Seat attached to Seat	1960	325	285	--	40.8	--
15	Vehicle Center of Gravity				15.2	28.6	22.2
16	Displacement Transducer Front Door	2235	-	670	--	0.17m	--
17	Displacement Transducer B-Pillar	1415	-	850	--	0.29m	--
7a	Middle of Left Front-Door-Beam	2060	-700	457	--	141.1	--

* Reference Points: X - Rear Bumper
Y - Vehicle Centerline
Z - Ground Level

Table 2: Summary of Target Vehicle Instrumentation

TEST NO : 5

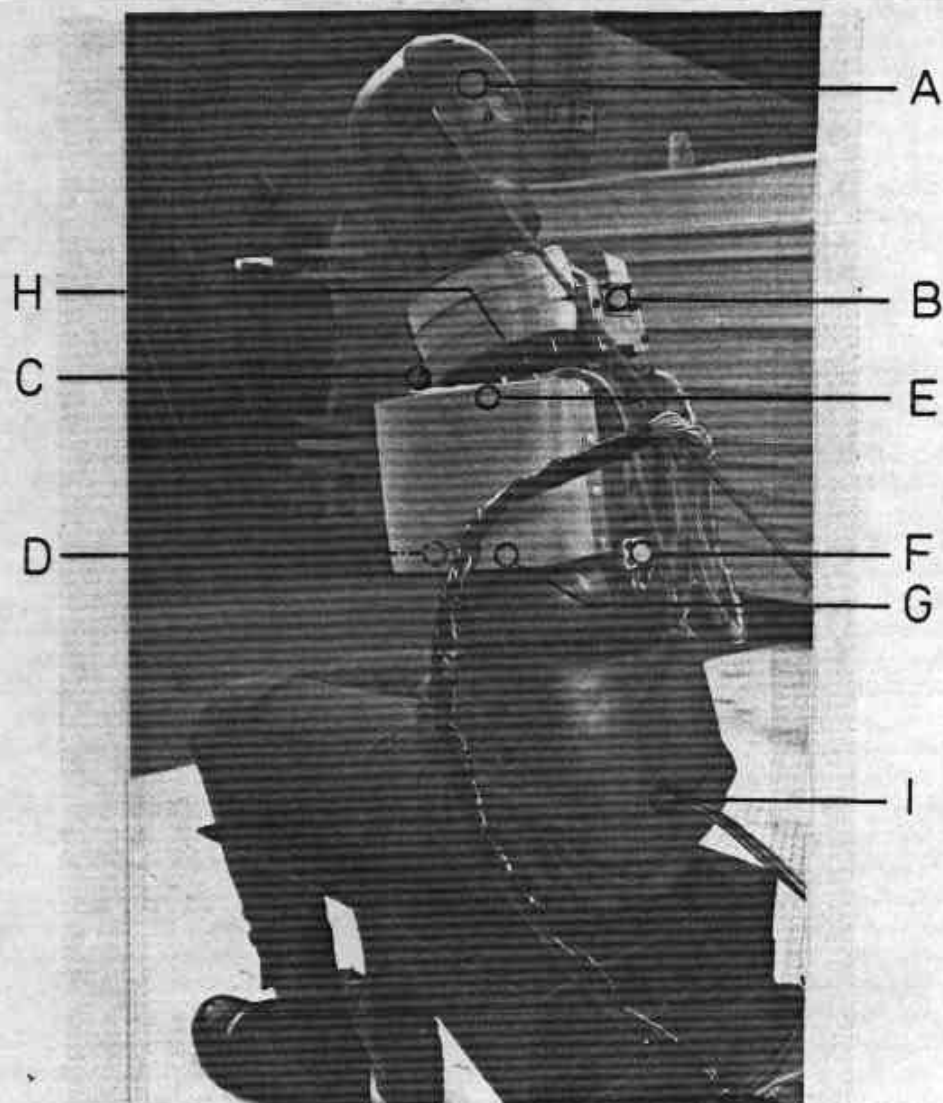


-  Axial Accelerometer, Longitudinal
-  Biaxial Accelerometer, Long., Lat.
-  Triaxial Accelerometer, Long., Lat., Vert.

No.	Accelerometer - Location	Coordinates [mm]			Results [G]		
		X	Y	Z	Long	Lat	Vert
A 1	Right Frame Rail	2134	584	508	28.7	--	--
A 2	Left Frame Rail	2134	-584	508	29.1	--	--
A 3	Front Crossmember at Centerline	3300	0	610	27.6	--	--
A 4	Right rear vertical Frame Rail	228	560	407	15.9	9.7	--
A 5	Side Impactor Center of Gravity	1727	0	305	11.7	3.6	4.8

Reference Plane: X - Rear of Side Impactor
Y - Side Impactor Centerline
Z - Ground

FIGURE 6 : SIDE IMPACTOR INSTRUMENTATION



- | | |
|---------------------------------|----------------------------------|
| A. Head Triaxial | F. Lower Thorax (T 12), Triaxial |
| B. Upper Thorax (T 1), Triaxial | G. Left Lower Rib, Lateral |
| C. Upper Sternum, Longitudinal | (also on right) |
| D. Lower Sternum, Longitudinal | H. Displacement Transducer |
| E. Left Upper Rib, Lateral | I. Pelvis, Triaxial |
| (also on right) | |

Figure 7 : Location of 18 Accelerometer for Side Impact Dummy

Test No: 5 Test Date: 11.23.1981

Test Type: 60° Side Impact Simulation

Vehicle A: Side Impactor

Vehicle B: VW-Rabbit

Comments: Side Impactor "Crabbed" 19°

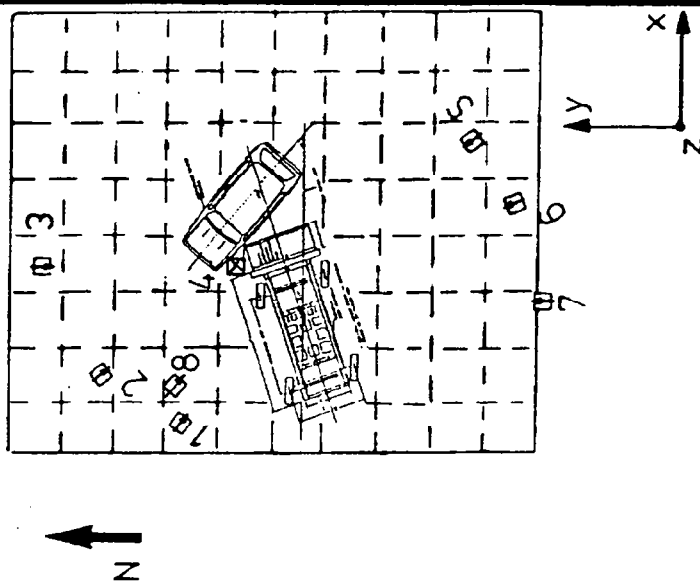
Camera Symbols

- ☐ Pit
☐ Ground
☐ Barrier

Timing Light, Speed

- ☒ Overhead
☐ On-Board

Camera	Yes
Stills	
Movie	
Slides	
Polaroid	



Loc. No.	Location	Field of View	Lens Size	Frm Rate	Trng Spd	Real Fr.R.	Impact Dist-X	C. L. Dist-Y	Cam Dist-Z
1	North Side -Parallel To Bullet	Overall of Both Vehicles (Locam)	16	3	10	427	-7.0	4.0	1.3
2	North Side -Parallel to Target	Close-up of Both Vehicles at Impact (Locam)	10	3	10	380	-3.0	4.5	2.2
3	North Side-Perpendicular to Bullet	Overall of Both Vehicles (Locam)	26	3	10	406	8.0	4.0	1.3
4	Overhead	Elevated - Looking Down at Impact Point (Photosonics)	10	3	10	327	-0.8	2.0	7.0
5	South Side -Parallel to Target	Close-up of Both Vehicles at Impact (Locam)	16	3	10	360	10.0	-12.0	1.3
6	South Side- Perpendicular to Target	Overall of Both Vehicles (Arri 16)	16	2	-	---	5.0	-12.0	1.0
7	South Side	Overall of Both Vehicles (Locam)	16	3	10	---	2.0	-12.0	1.3
8	North Side	Overall of Both Vehicles (Mitchel)	50	2	-	def.	-4.5	4.0	1.4

Figure 8 :Camera Location - Ground based

- 3. Test Parameter and Results
 - 3.1 Crash Test Summary
 - 3.1.1 Target Vehicle
 - 3.1.2 Side Impactor (19° Crabbed Barrier)
 - 3.2 Pre-Test Conditions
 - 3.2.1 Driver Pre-Test Position
 - 3.2.2 Rear Passenger Pre-Test Position
 - 3.3 Vehicle Pre- and Post-Test Position
 - 3.4 Post-Test Observations
 - 3.5 Dummy Test Response
 - 3.5.1 Dummy Test Response Summary - Driver
 - 3.5.2 Dummy Test Response Summary - Rear Passenger
 - 3.5.3 AIS and Coefficients
 - 3.6 Target Vehicle Test Response
 - 3.6.1 Pre- and Post-Test Measurements
 - 3.6.2 Exterior and Interior Vehicle Measurement
 - 3.6.3 Exterior and Interior Static Crush (Top View)
 - 3.6.4 Exterior and Interior Static Crush (Front View)
 - 3.7 Crabbed Barrier Test Response
 - 3.7.1 Pre- and Post-Test Frontal Profile
 - 3.7.2 Exterior Static Crush

Table 3 : Crash Test Summary for Target Vehicle

VEHICLE DATA		TEST	5
Test Vehicle		VW Rabbit 4 Door	
Overall Length/Width (mm)		154.3	3920 / 1610 63.3
Test Weight by Wheel (kp)		LR 267	RR 265
		LF 325	RF 364
Total Weight (kp)		1221	
Wheelbase (mm)		2400	
Longitudinal C.G. (from Center of Front Axle) (mm)		1045.70	
Impact Angle (deg) *		60	
Impact Speed (mph)		0 (stationary)	
Maximum C.G. Resultant Velocity Change (mph // msec)			
Maximum C.G. Resultant Acceleration (G // msec)		39.20 // 43.00	
Maximum Door Acceleration (G // msec)**		93.30 // 23.00	
Maximum Exterior Static Crush (mm)			
• Level 4 (32.0")		367	
• Level 3 (26.0")		367	
• Level 2 (20.0")		346	
• Level 1 (12.0")		239	
Maximum Post-test Intrusion (mm)		333	
OCCUPANTS			
Type		SID	SID
Location		Driver	LeftRear Passenger
Restraints		VW-RA 3PT	Threepoint Belt
INSTRUMENTATION			
Number of Data Channels		68	
Number of cameras (On Board)		3	

* With respect to bullet vehicle.

**At mid-rear edge of left front door.

Table 4 : Crash Test Summary for Side Impactor

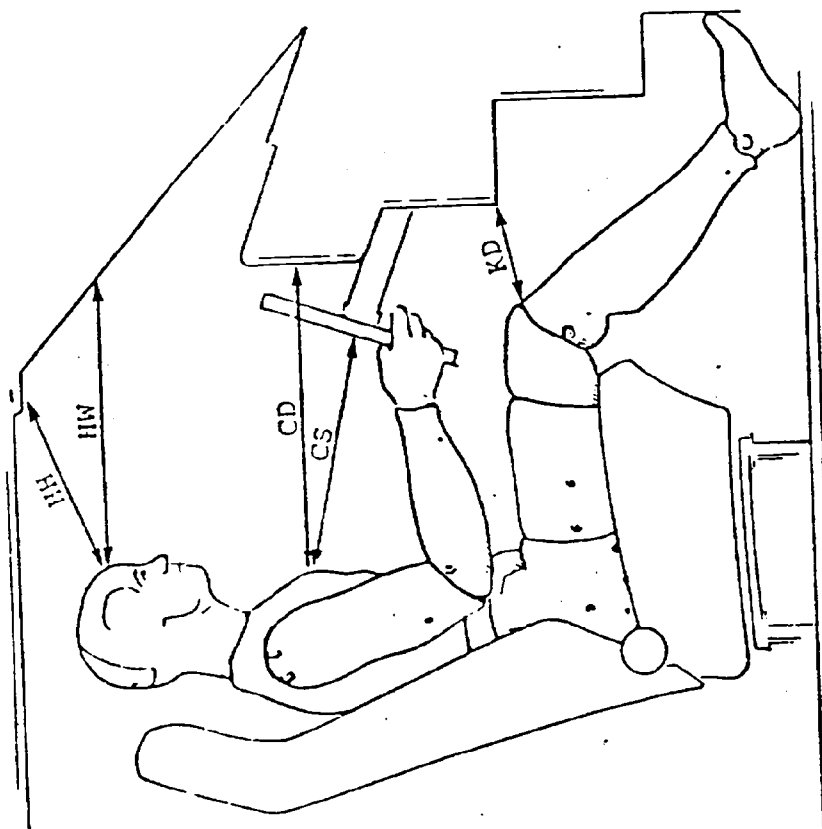
VEHICLE DATA		TEST	5
Test Vehicle	19° Crabbed Side Impactor		
Overall Length/Width (mm)	4000 / 2155		
Test Weight by Axle (kp)	LF	398	RR 383
	LF	390	RF 401
Total Weight (kp)	1572		
Wheelbase (mm)	2591		
Longitudinal C.G. (from Center of Front Axle) (mm)	1266		
Impact Angle (deg)	60		
Impact Speed (mph)	31.09		
Maximum C.G. Resultant Velocity Change (mph//msec)			
Maximum C.G. Average Resultant Compartment Acceleration (G//msec)			
Maximum Static Crush (mm)			
● Row C (Top of Stack Level)	65		
● Row B (Mod-Stack Level)	88		
● Row A (Bumper Level)	140		
OCCUPANTS			
Type	-		
Location	-		
Restraints	-		
INSTRUMENTATION			
Number of Data Channels	10		
Number of Cameras (Ground Based)	7		

Test No.: 5 (mod) Vehicle: 705 111 LF 325 (kp) RF 364 (kp)
 Test Date: 11.23.81 Total Test Wt. 1221 (kp) LR 267 (kp) RR 265 (kp)

HEAD RESTS - up down other none
 FRONT SEAT - forward midpoint rearward latched welded
 FRONT SEAT TILT - forward midpoint back other 25° none
 REAR SEAT - in place removed
 STEERING WHEEL - up midpoint down not adjustable
 SUN VISORS - up down removed
 GLOVE COMPARTMENT - locked closed none
 SEAT BELT - fastened unfastened removed none
 SHOULDER HARNESSSES - fastened unfastened removed
 VENT WINDOW - closed open removed none stationary
 LEFT FRONT WINDOW - up down removed
 RIGHT FRONT WINDOW - up down removed
 LEFT REAR WINDOW - up down removed
 RIGHT REAR WINDOW - up down removed
 BACKLIGHT - in place removed
 LEFT FRONT DOOR - closed locked removed
 RIGHT FRONT DOOR - closed locked removed
 LEFT REAR DOOR - closed locked removed
 RIGHT REAR DOOR - closed locked removed
 ENGINE - in place removed mounts modified
 TRANSMISSION - neutral other removed
 DRIVESHAFT - in place removed
 PARKING BRAKE - off on disconnected
 FRONT BUMPER - in place removed none
 REAR BUMPER - in place removed none
 HOOD - in place removed none
 WINDSHIELD WIPERS - in place removed
 FUEL TANK - 95 Percent full empty other
 RADIATOR - full empty none removed
 BATTERY - in place removed drained
 SPARE TIRE - in place removed none
 JACK - in place removed none
 WHEEL COVERS - in place removed none
 BALLAST - none ---- kg
 DUMMY LOCATION - LF RF LR RR none
 DUMMY POSITIONING CRITERIA - FMVSS 208 side impact criteria other

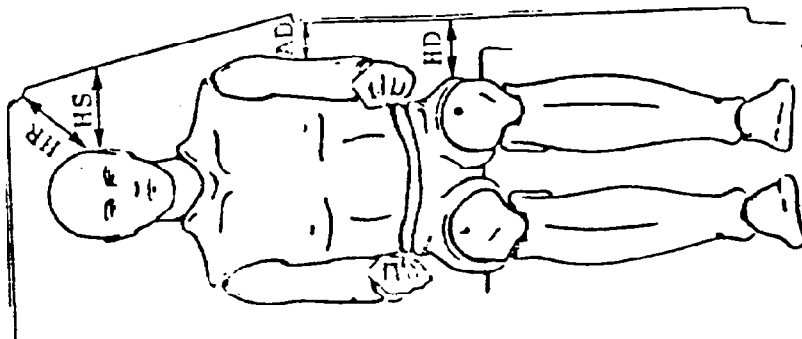
Table 5 : Pre-Test Conditions

TEST NO : 5



HH=	390	15.3
HW=	530	20.9
CD=	510	20.1
CS=	325	12.8
KD=	85	3.3

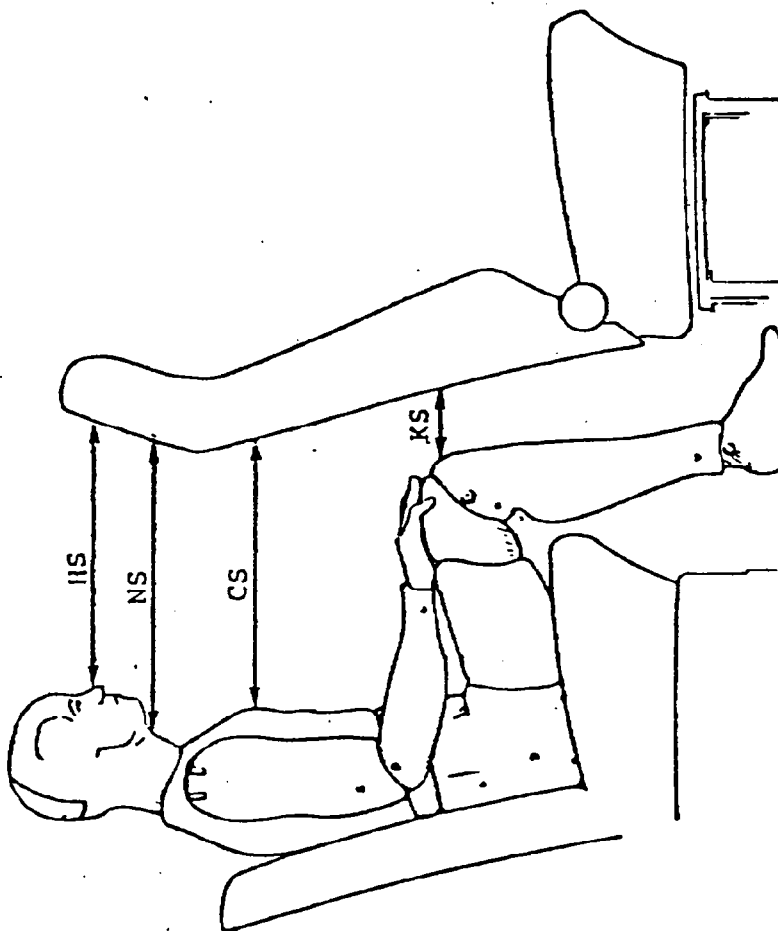
(ALL DIMENSION IN MM)



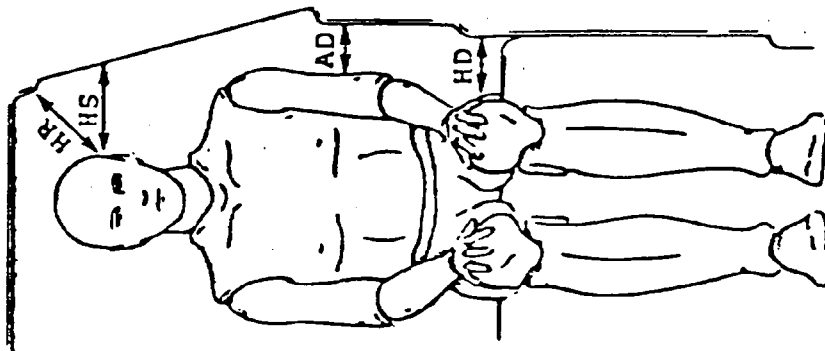
HR=	145	5.7
HS=	150	5.9
AD=	15	0.6
HD=	70	2.7

Table 6 : Driver Pre-Test Position

TEST NO : 5



HS	460	<u>18.1</u>
NS	575	<u>22.6</u>
CS	400	<u>15.7</u>
KS	100	<u>3.9</u>



HR	170	<u>6.7</u>
HS	190	<u>7.5</u>
AD	50	<u>2.0</u>
HD	115	<u>4.5</u>

Table 7: Rear Passenger Pre-Test Position

Table 8 : Vehicle Pre- and Post-
Test Position

TEST NO : 5

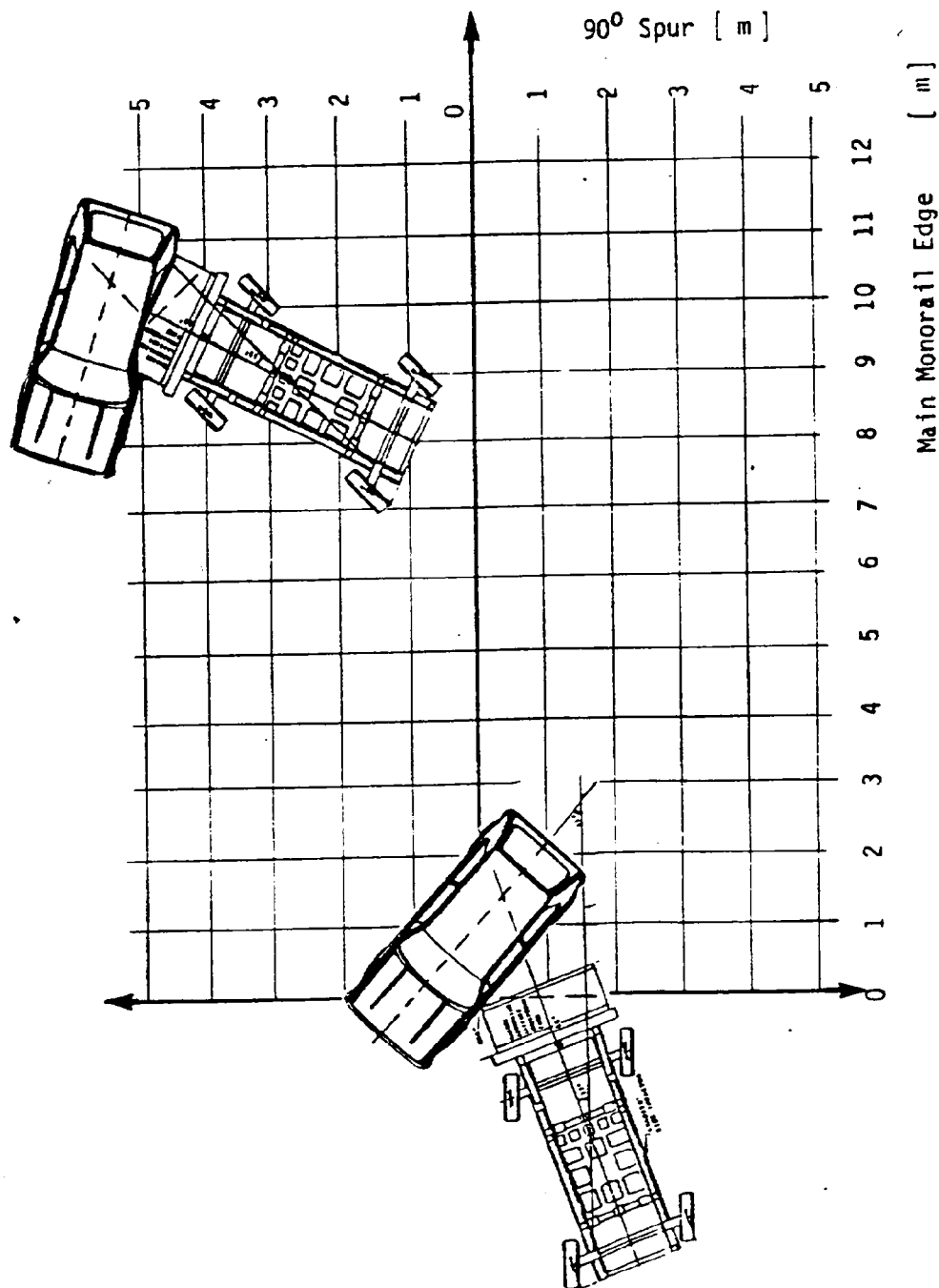


Table 9: Summary of Post-Test Observations

VEHICLE: VW Rabbit 5

Test No. (Moving Test Device) 5

Dummy Contact Points:	<u>Left Front</u>	<u>Left Rear</u>
Head	<u>no Contact</u>	<u>Contact at Roof-Line</u>
Chest	Mod. <u>Padding in the area of: Upper Door Panel and</u>	<u>Upper Door Panel and lower</u>
	<u>lower Window-Sill</u>	<u>Window-Sill</u>
Knees/Hip	Mod. <u>Padding in the area of: Lower Front-Door Panel</u>	<u>Lower Rear-Door Panel</u>

Glazing: Left Front- and Rear-Side-Window shattered. Windshield no damage.

Doors: Left Front- and Rear Door damaged, would not open.

Seat Belt Anchorages : Left Seat Frame damaged, but Seat Anchorages
remained intact. Seat Legs and Seat-Runner-not separated from Floor Rails. Seat
Support slightly bend.

Restraints: Driver (RA) and Left Rear (Threepoint Belt) in use.

Fuel Leakage: none

General Observations: Impact Point 650 mm from Front Axle.

Side Impactor Bumper impacted into the Door-Beams. B-Pillar damaged and
bendet on the Level of the Window -Sill. Interlock of Door Beam-Side Sill
and Door to B-Pillar Attachment remained intact Knee-Bolster supported
the A-Pillar. A-Pillar slightly bend on the Level of the Wheelhouse-Beam.

Dummies - no damage

TEST NO. 5TEST DATE 11.23.1981TEST CONFIGURATION:

Target Vehicle VW Rabbit 4-Door Speed 0 [mph]
 Bullet Vehicle 19⁰ Crabbed Side Impactor Speed 31.09 [mph]
 Impact Location behind Front Axle 650 [mm] Angle 60 [deg]

PASSENGER: D R I V E RHEAD RESPONSE:

Peak a_R 50.2 [g] Impacted Objekt none
 HIC 274.2 Time T 1 55 [ms] T 2 91 [ms]

CHEST RESPONSE:

Location	[g]	$\geq 3ms$ [g]	SI	Δv_y [mph]	Imp. Time [ms]	Time a-max [ms]
Upper Sternum (X)	116.2	42	--	---	28	75.4
Lower Sternum (X)	91.6	40	--	---	28	75.1
LUR (Y)	69.0	39	--	27.81	24	70
LLR (Y)	72.0	48	--	20.52	24	47
RUR (Y)	73.5	42	--	20.43	25	70.9
RLR (Y)	76.2	66	--	24.08	16	44.6

CHEST DEFLECTION: Damper - DY 42 [mm]VERTEBRAL COLUMN RESPONSE:

Location	Pk a_y [g]	Pk a_R [g]	$\geq 3 ms$ [g]	SI	Δv_y [mph]	Imp. Time [ms]	Time a-max [ms]
Upper Thorax (T1)	72.2	73.1	51	393	25.75	30	42.7
Lower Thorax (T12)	85.9	119.3	60	441	23.97	20	74.9

PELVIS RESPONSE:

Pk a_R [g] 51.1 SI 304 $\geq 3 ms$ [g] 42.6 Impact Time [ms] 8

Table 10: Side Impact Dummy Test Response Summary

TEST NO. 5TEST DATE 11.23.1981TEST CONFIGURATION:

Target Vehicle VW Rabbit 4-Door Speed 0 [mph]
 Bullet Vehicle 19⁰ Crabbed Side Impactor Speed 31.09 [mph]
 Impact Location behind Front Axle 650 [mm] Angle 60 [deg]

PASSENGER: L E F T R E A RHEAD RESPONSE:Peak a_R 86.3 [g]Impacted Objekt C-Pillar and Roof-LineF C 323Time T 1 83 [ms] T 2 110 [ms]CHEST RESPONSE:

Location	[g]	$\geq 3ms$ [g]	SI	Δv_y [mph]	Imp. Time [ms]	Time a-max [ms]
Upper Sternum (X)	34.4	32	--	---	52	89
Lower Sternum (X)	21.6	20	--	---	35	93
LUR (Y)	35.0	27	--	28.73	55	65
LLR (Y)	39.0	28	--	11.21	55	77
RUR (Y)	24.9	22	--	15.91	65	94
RLR (Y)	38.3	33	--	14.31	65	79

CHEST DEFLECTION: Damper - DY 42.5 [mm]VERTEBRAL COLUMN RESPONSE:

Location	Pk a_y [g]	Pk a_R [g]	$> 3 ms$ [g]	SI	Δv_y [mph]	Imp. Time [ms]	Time a-max [ms]
Upper Thorax (T1)	25.0	29.8	27.5	98	16.82	64	101
Lower Thorax (T12)	43.1	44.8	41.0	158	18.05	64	82

PELVIS RESPONSE:Pk a_R [g] 71.4 SI 256 $> 3 ms$ [g] 48.5 Impact Time [ms] 50

Table 11: Side Impact Dummy Test Response Summary

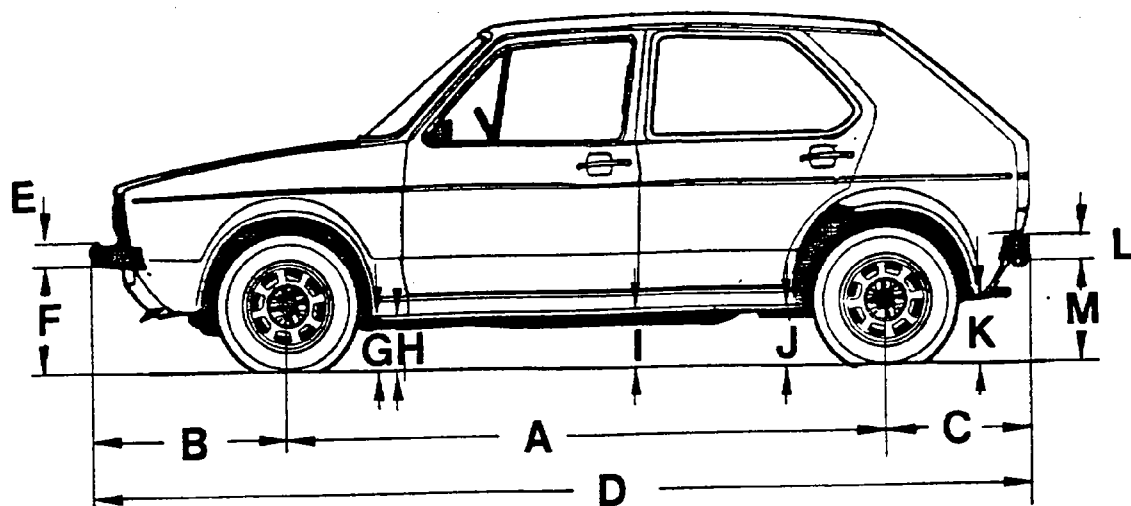
TEST NO. 5 TEST DATE 11.23.1981

COMPUTED COEFFICIENTS:

Location of Accelerometer	AIS B-Param.	AIS Av.Pow.	PAP TB / TE (ms)	B	Q	V ₁₀₅₀	V ₁₀₉₀	RVS
Left Upper Rib LUR	2.74	3.17	1101 30.0/ 54.4	6.3208	992.99	10.62	29.38	2.7647
Left Lower Rib LLR	3.08	3.38	1384 30.6/ 53.8	6.5525	944.03	11.25	20.62	1.8333
Upper Thorax T 1 Y	3.26	3.56	1779 40.0/ 61.3	6.6685	1014.6	9.38	18.75	2.0000
Lower Thorax T 12 Y	3.34	3.56	1801 38.1/ 58.8	6.7264	1031.0	10.62	19.38	1.8235

TABLE 12 : AIS AND COEFFICIENTS

TEST NO : 5



	PRE - TEST	POST - TEST	Δ CHANGE
A	2400	2305	- 95
B	820	820	0
C	700	705	5
D	3920	3830	- 77
E	125	125	0
F	360	375	15
G	155	165	10
H	158	162	4
I	154	147	- 7
J	155	180	35
K	186	190	4
L	125	125	0
M	295	290	- 5

Table 13: Pre - and Post - Test Measurements

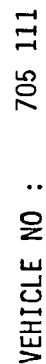


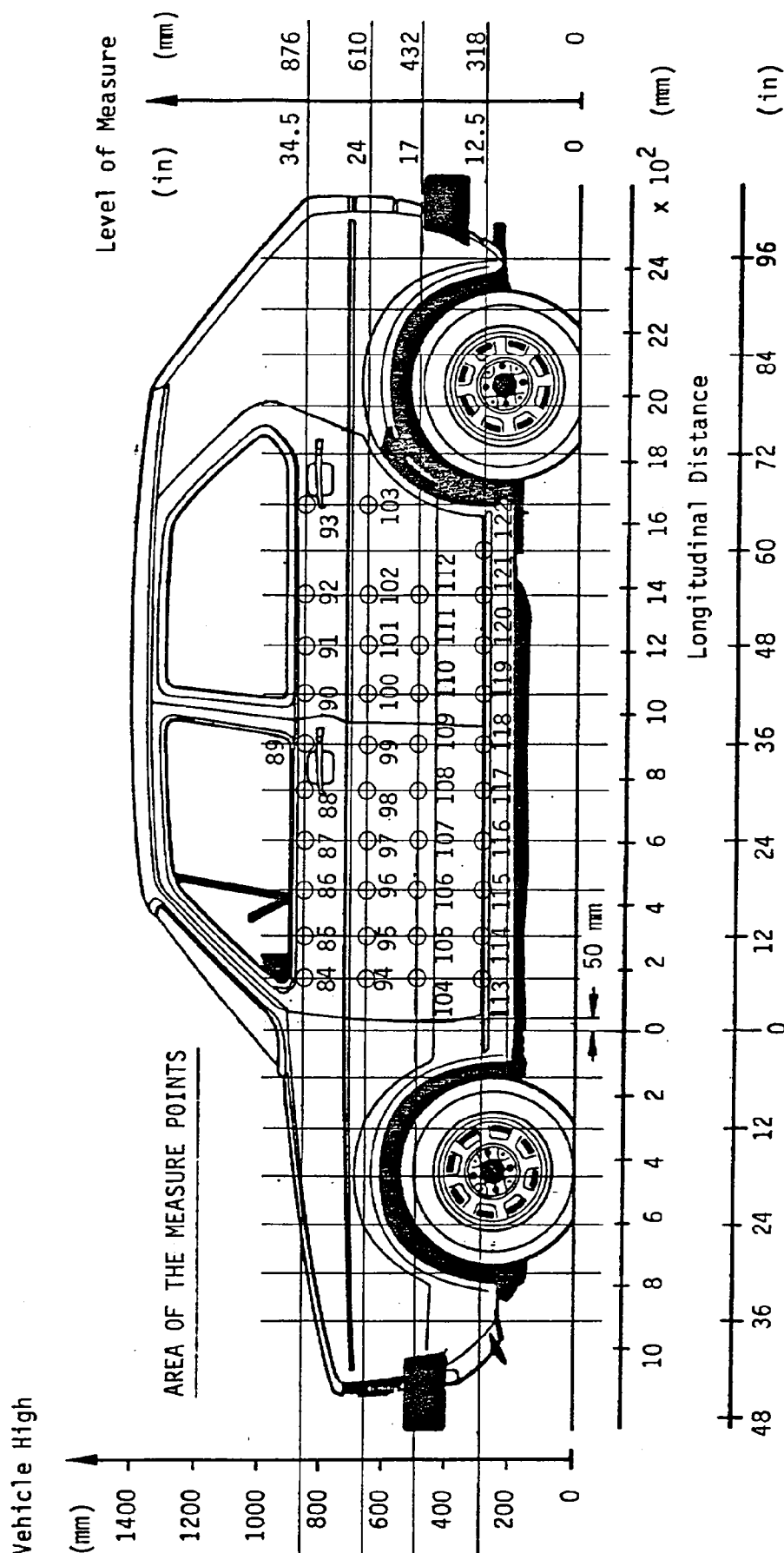
Figure 10: Vehicle Measurement Side (Exterior)

Table 14 :Exterior Static Crush for VW Rabbit

TEST NO : 5

		Zero Distance Located at Door [mm]														(Rear)					
		(Front)																			
Location	Height [mm] *	914	762	610	305	152	0	152	305	457	610	762	914	1067	1220	1372	1524	1676	1829	1981	2286
Window-Sill	812	--	--	--	--	--	3	--	136	215	276	337	367	304	236	165	--	43	--	+ 2	+31
Bullet Vehicle Hood	660	+37	--	+30	+20	--	20	--	164	225	305	367	360	320	324	215	--	64	--	4	--
Mid-Door	508	+51	--	+54	--	15	29	15	205	275	316	346	338	325	284	225	--	96	--	--	+41
Rocker-Sill	305	--	+22	--	--	--	11	--	135	170	202	233	231	239	145	87	41	--	--	--	--

* All heights measured above ground level.



TEST NO : 5

VEHICLE NO : 705 111

Figure 11: Vehicle Measurement Side (Interior)

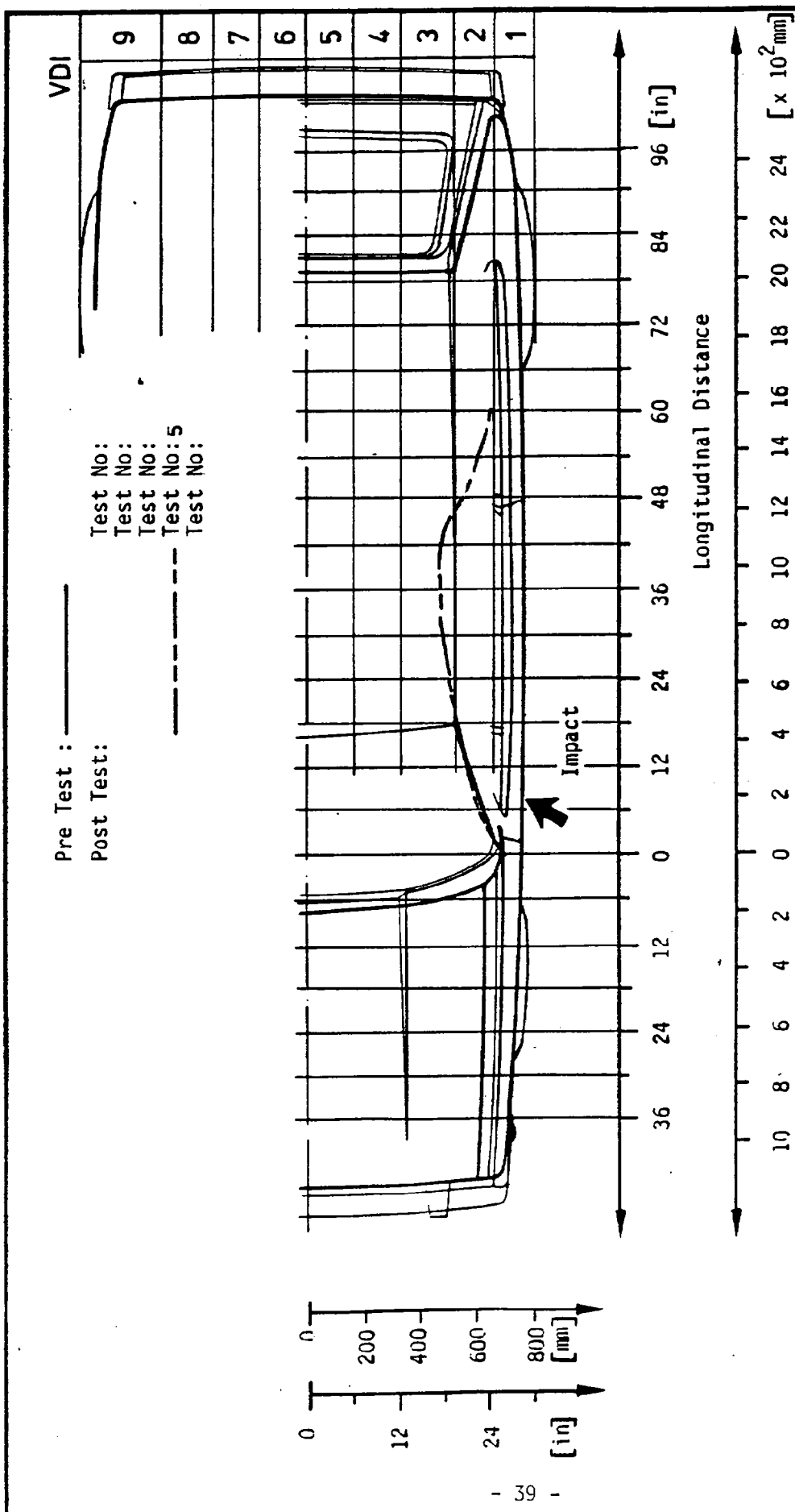
Table 15: Interior Static Intrusion for VW - Rabbit

TEST NO : 5

Zero Distance Starting at Door [mm]

Location	Height [mm] *	0	152	305	457	610	762	914	1067	1220	1372	1524	1676
Windowsill Level	876	--	30	107	174	232	288	333	314	231	158	--	18
Mid-door Level	610	--	47	140	192	236	283	322	286	211	150	--	70
Bullet Vehicle Bumper Level	432	--	108	165	198	212	244	271	244	194	--	--	--
Doorsill Level	318	--	67	85	109	157	167	177	157	61	--	--	--

* Heights measured above ground level.



**Table 16: Pre - and Post - Test Exterior Profiles at 305 mm above
 Ground Level**

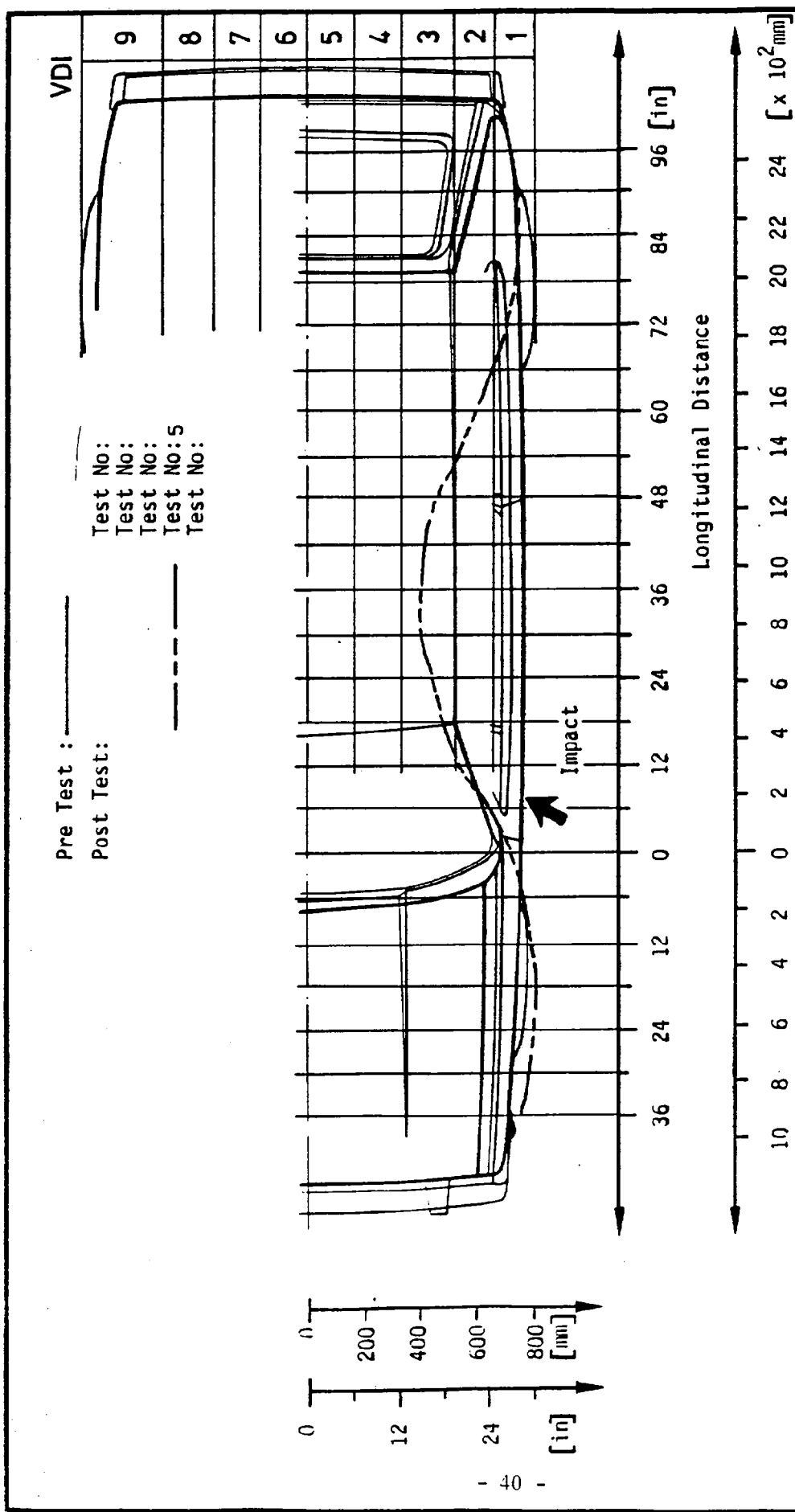


Table 17: Pre - and Post - Test Exterior Profiles at 508 mm above Ground Level

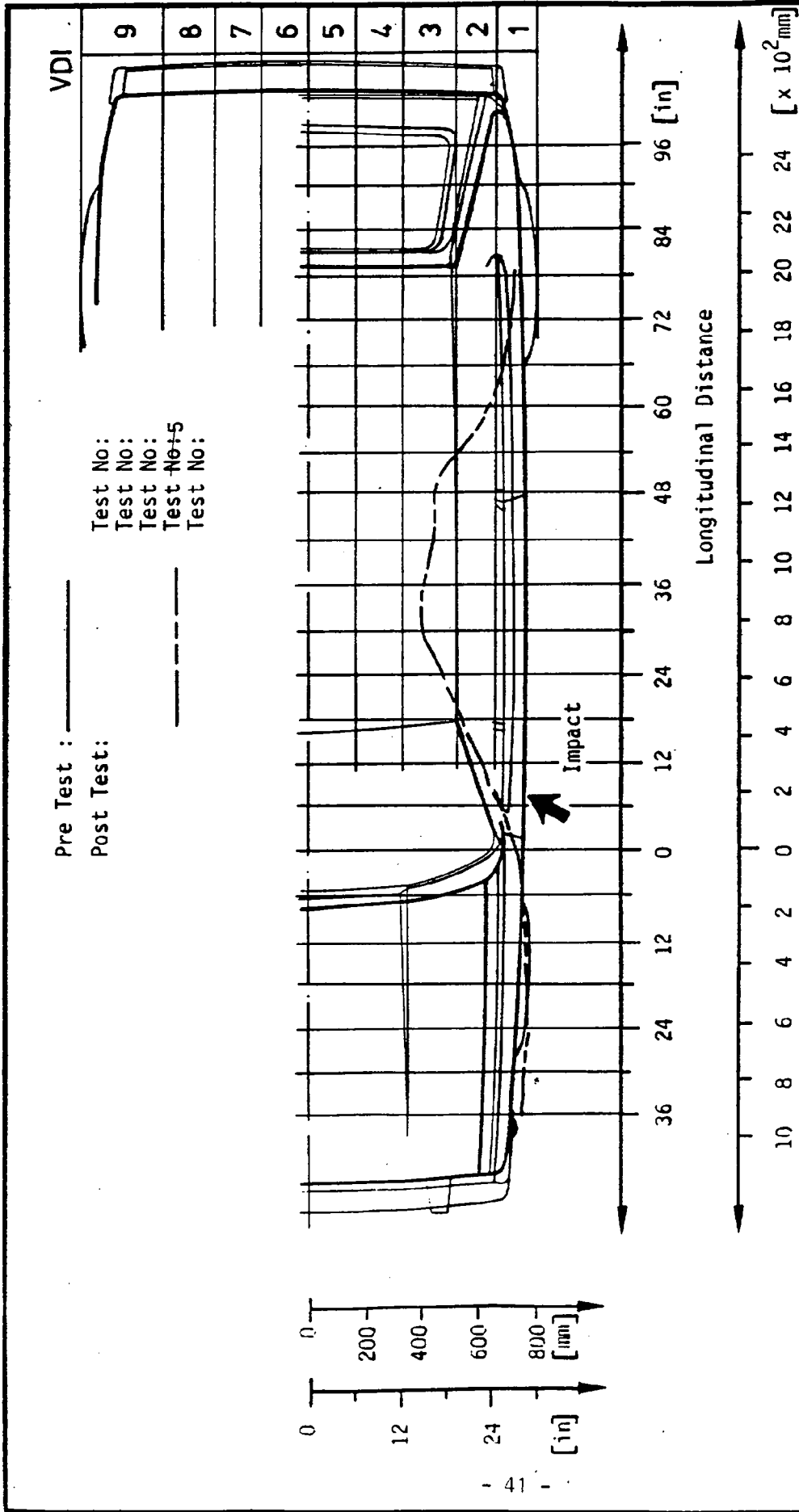


Table 18: Pre - and Post - Test Exterior Profiles at 660 mm above Ground Level

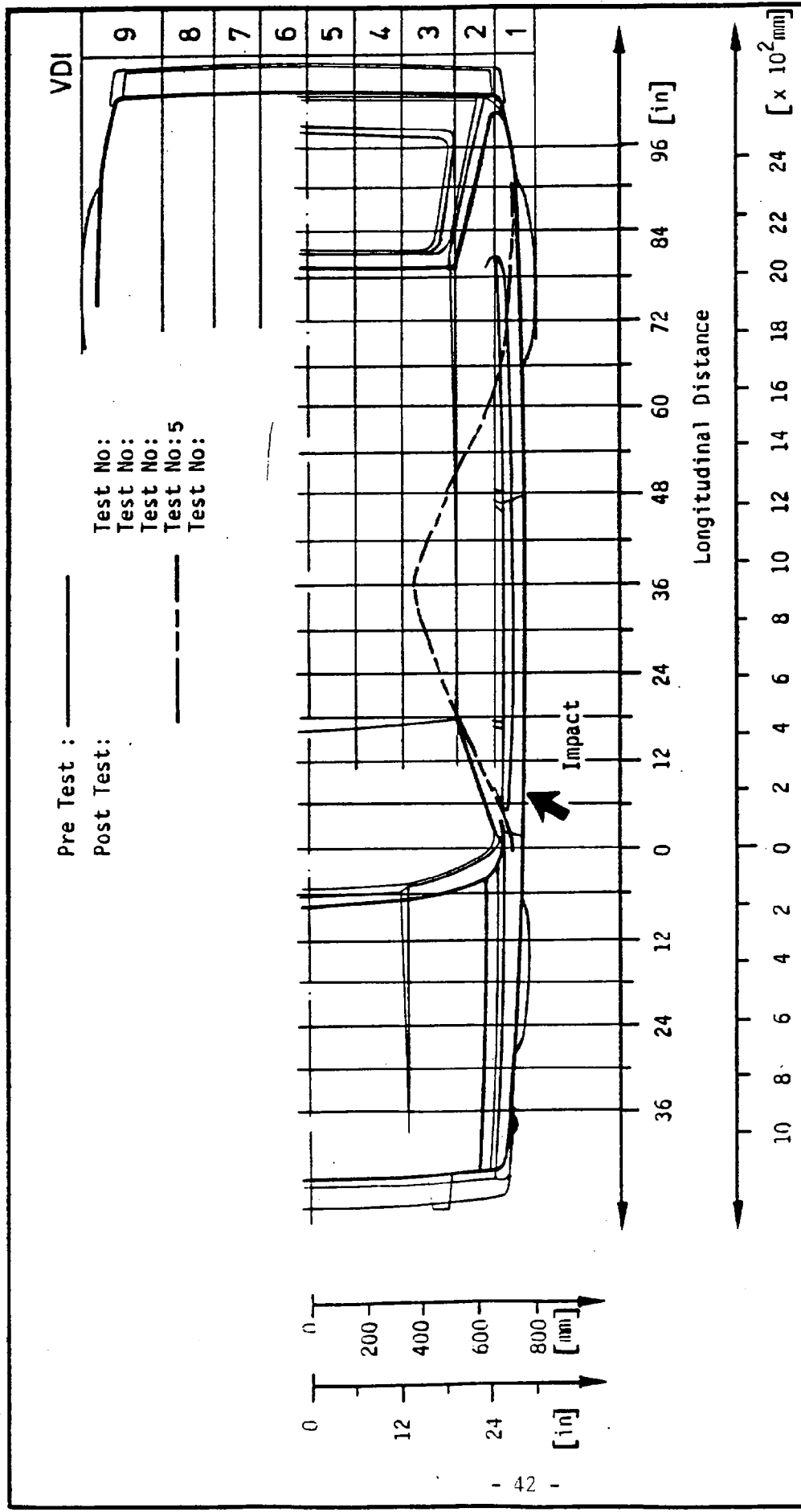


Table 19: Pre - and Post - Test Exterior Profiles at 812 mm above Ground Level

Pre Test : _____
 Post Test: _____
 Test No: _____
 Test No: _____
 Test No: _____
 Test No: 5 _____
 Test No: _____

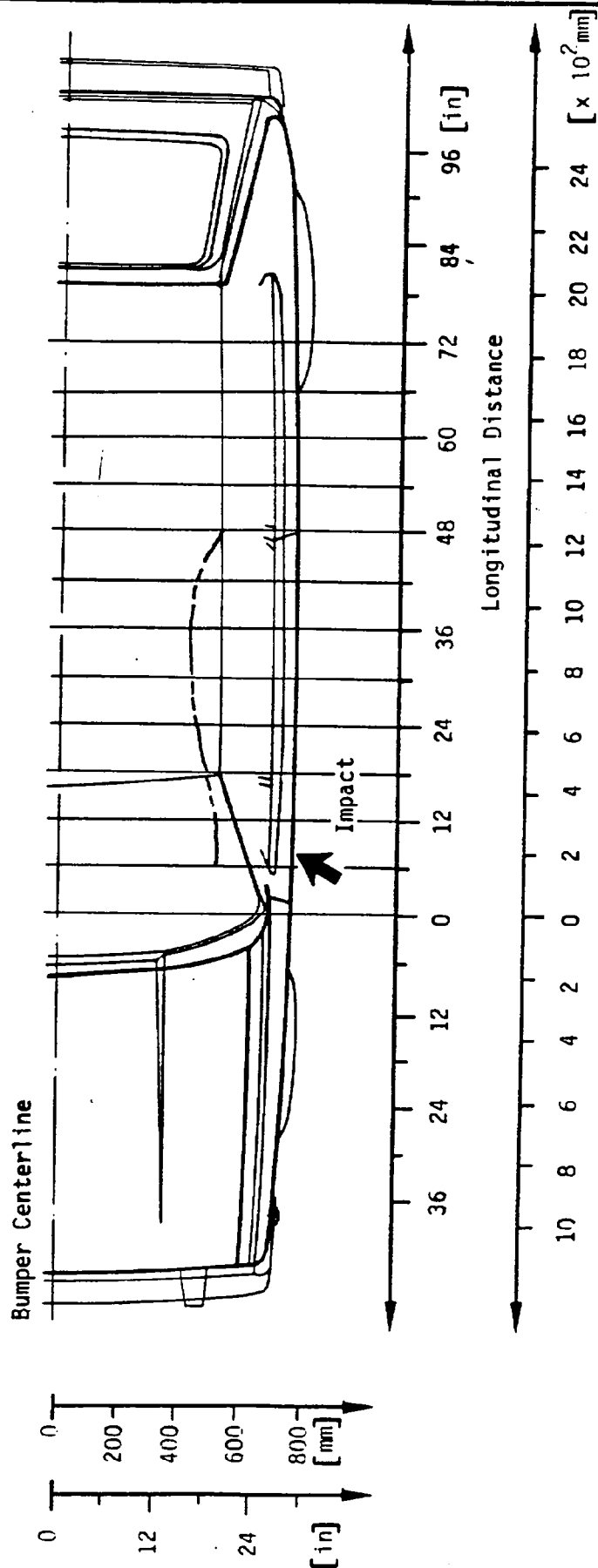


Table 20: Pre - and Post - Test Interior Profiles at 318 mm above Ground Level

Pre Test : _____
 Post Test: _____
 Test No: _____
 Test No: _____
 Test No: _____
 Test No:5 _____
 Test No: _____

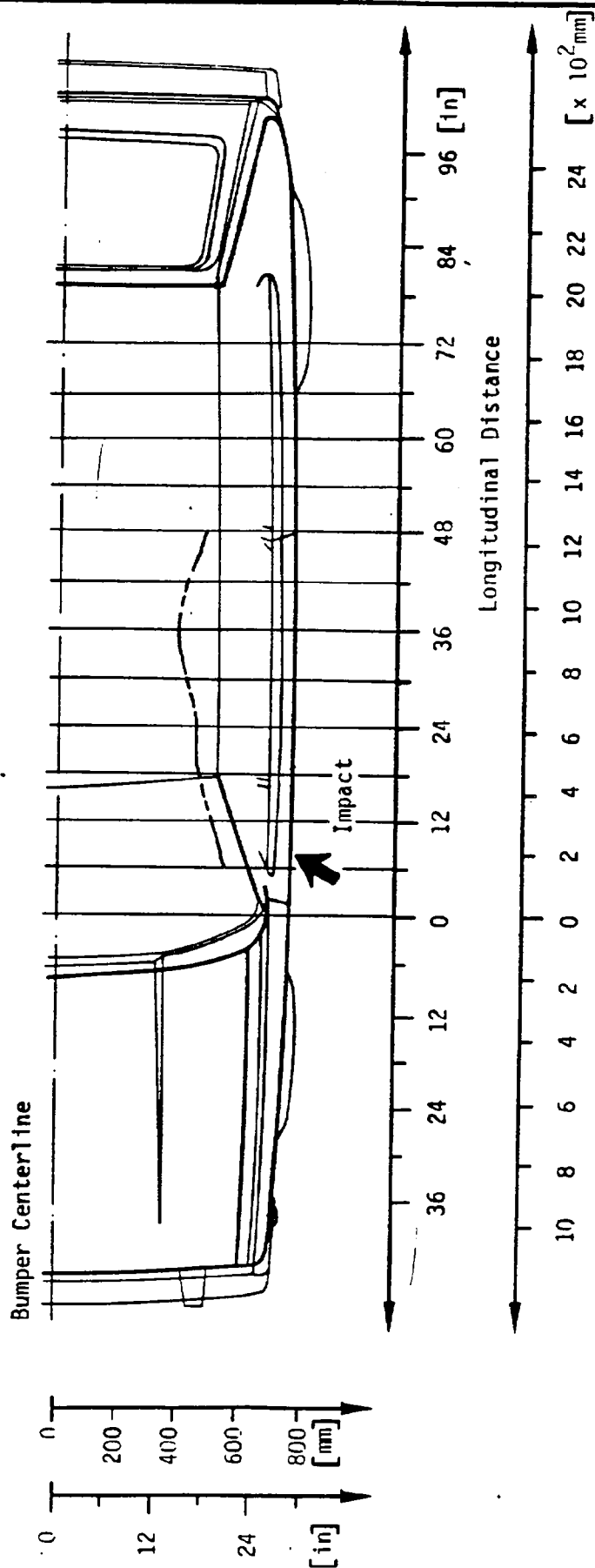


Table 21: Pre - and Post - Test Interior Profiles at 432 mm above Ground Level

Pre Test : _____
 Post Test : _____
 Test No: _____
 Test No: _____
 Test No: _____
 Test No: 5
 Test No: _____

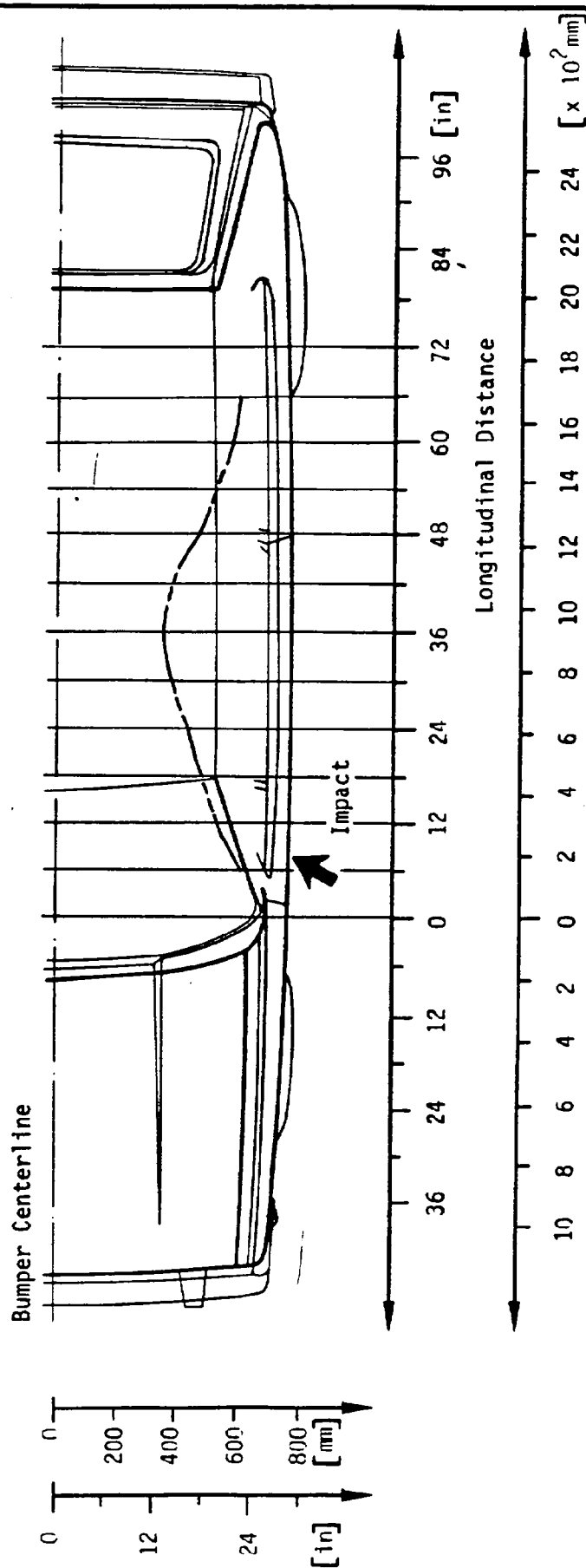


Table 22: Pre - and Post - Test Interior Profiles at 610 mm above Ground Level

Pre Test : _____

Post Test: _____

Test No: _____

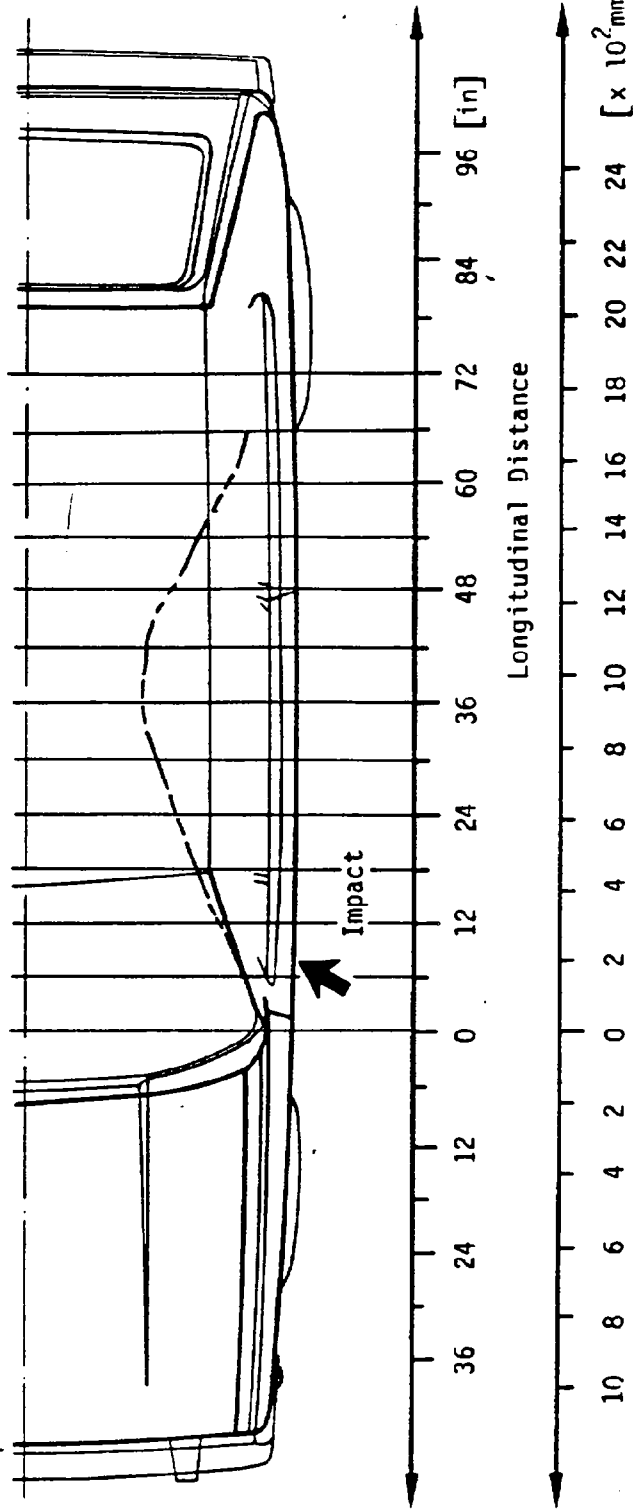
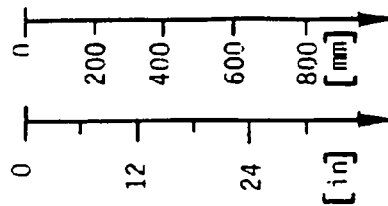
Test No: _____

Test No: _____

Test No: 5

Test No: _____

Bumper Centerline



**Table 23: Pre - and Post - Test Interior Profiles at 876 mm above
Ground Level**

TEST NO : 5

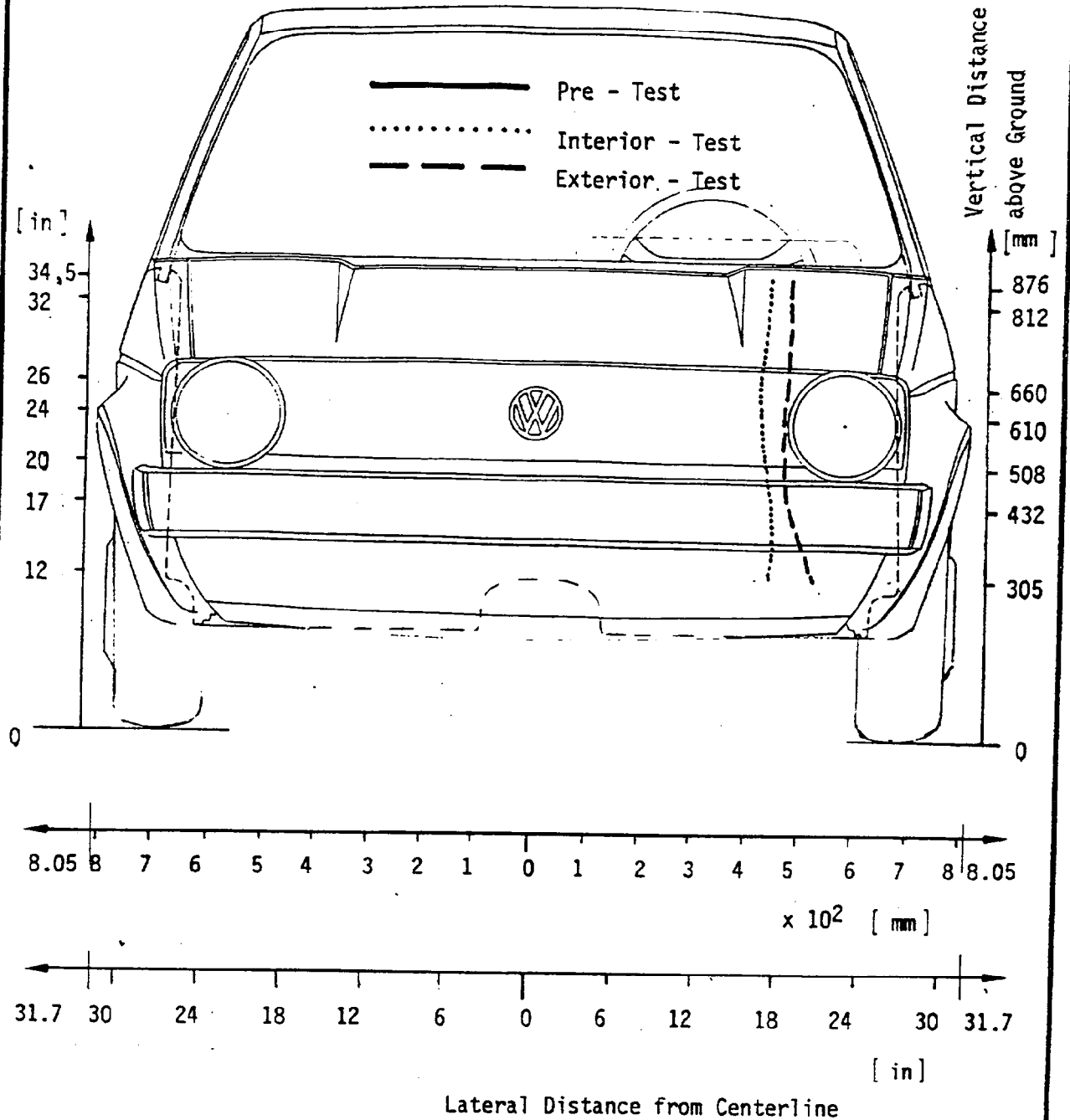


FIGURE 12 : EXTERIOR AND INTERIOR STATIC PROFILES AT THE
LONGITUDINAL DISTANCE 610 MM FROM DOOR

TEST NO : 5

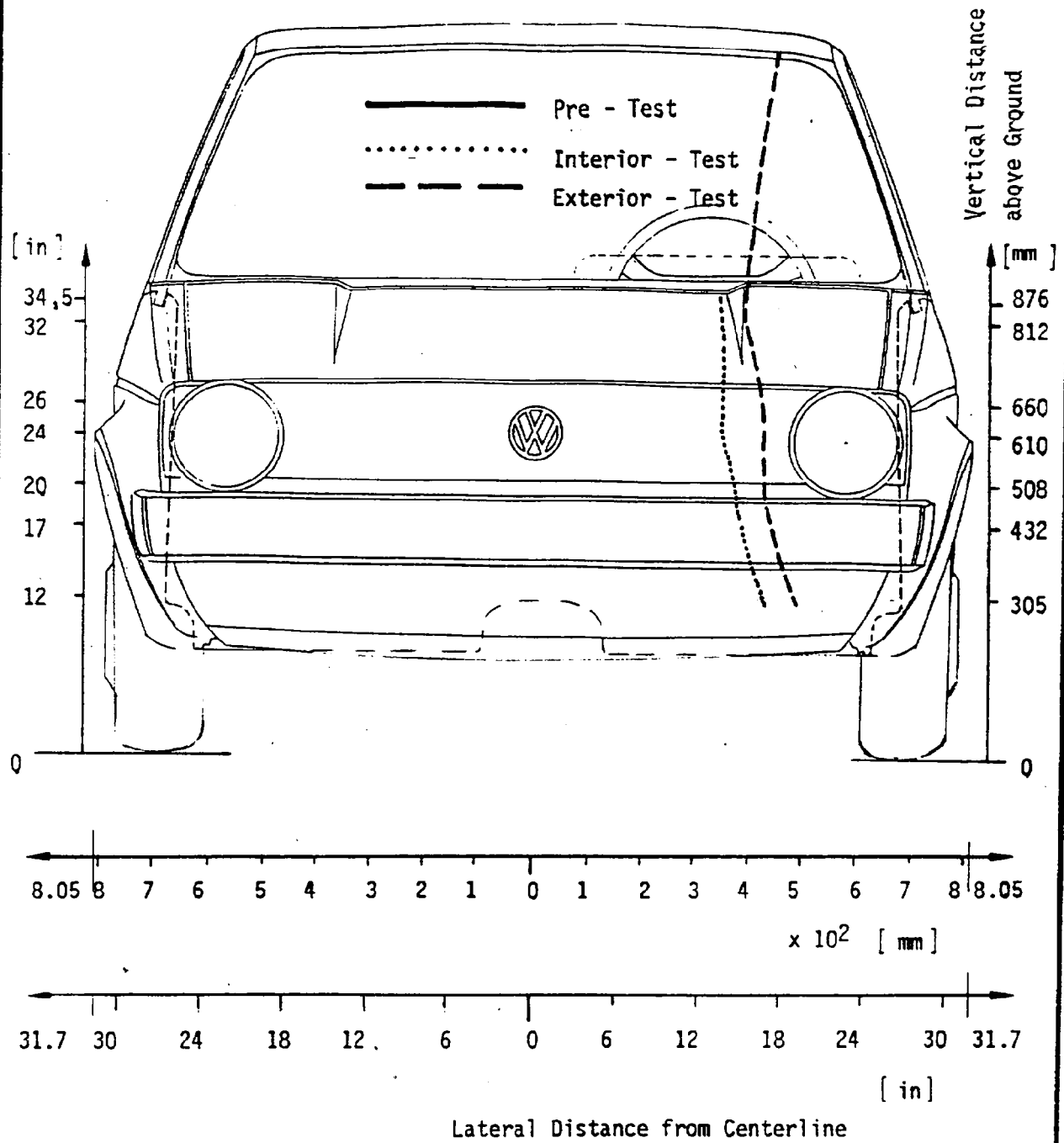


FIGURE 13 : EXTERIOR AND INTERIOR STATIC PROFILES AT THE
LONGITUDINAL DISTANCE 914 MM FROM DOOR

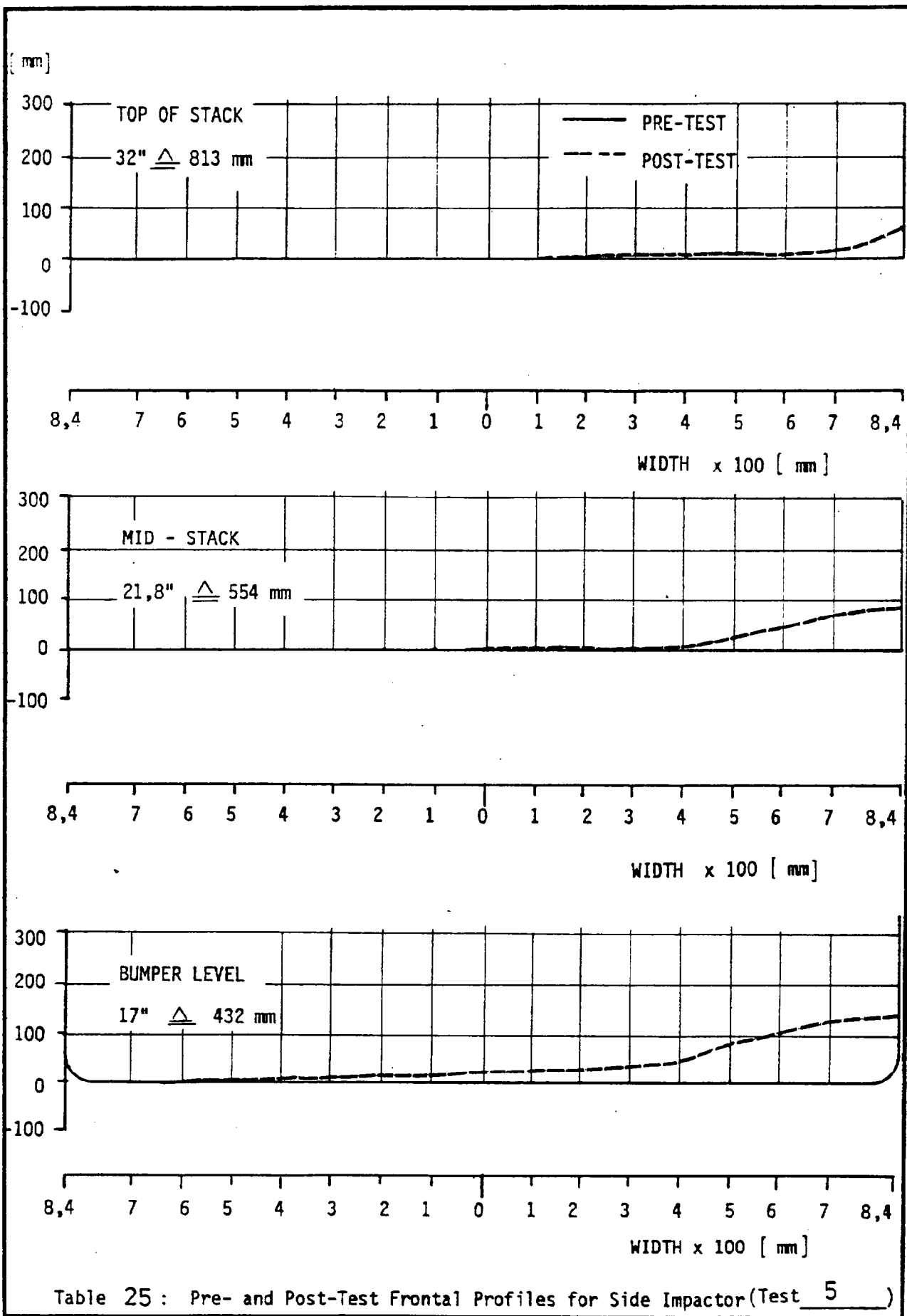
Table 24: Exterior Static Crush for Side Impactor

TEST NO : 5

Distance left of Center [mm]**																		
Distance right of Center [mm]																		
Location	Height at C _L *	835	700	600	500	400	300	200	100	0	100	200	300	400	500	600	700	835
Top of Stack Level	813	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mid - Stack Level	554	0	0	0	0	0	0	0	0	0	2	2	0	10	23	43	70	88
Bumper Level	432	0	0	2	4	6	8	12	16	21	25	28	33	42	78	101	123	140

* Heights measured above ground level.

** Impact side.



A P P E N D I X A

Photographs

List of Illustrations

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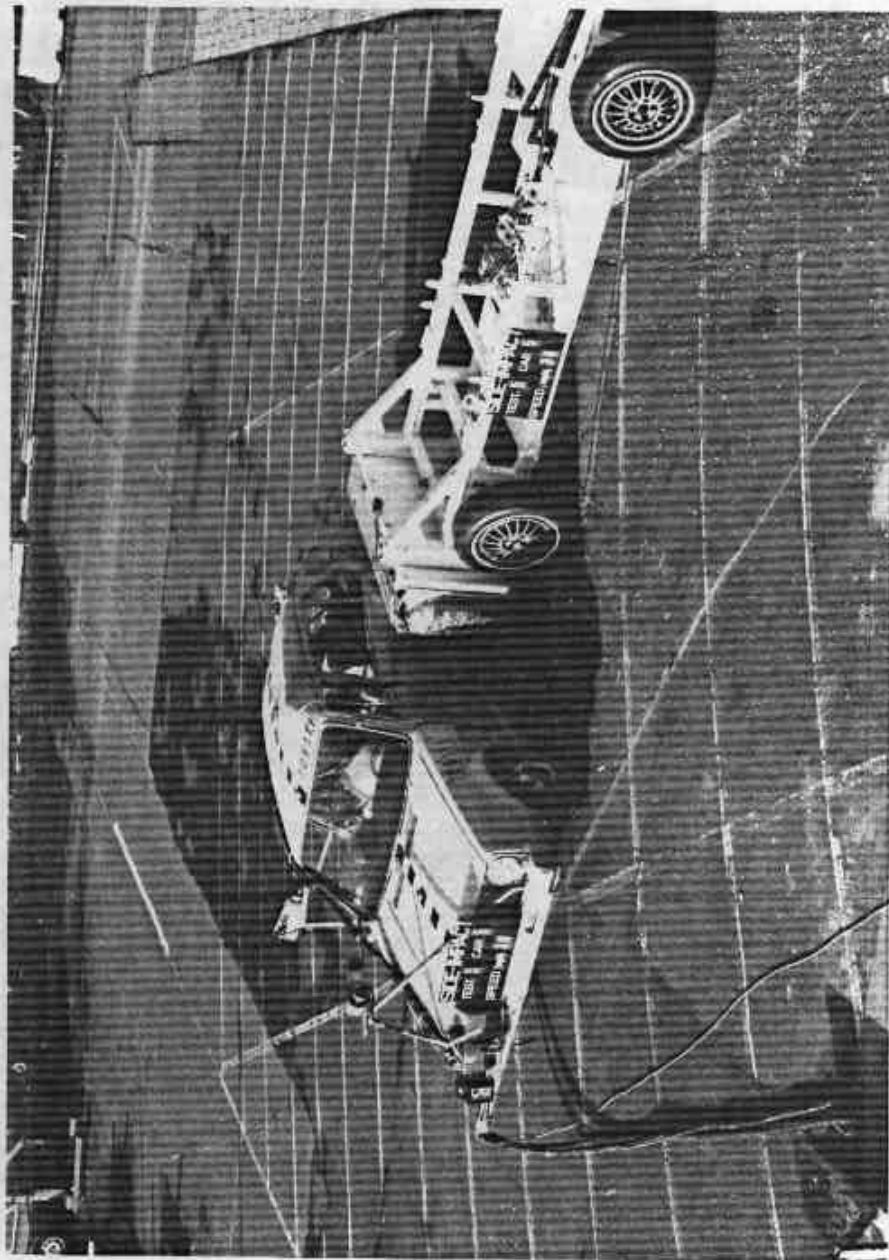


FIGURE A 1 : POST TEST 'POSITION'

CRABBED BARRIER AND VW RABBIT

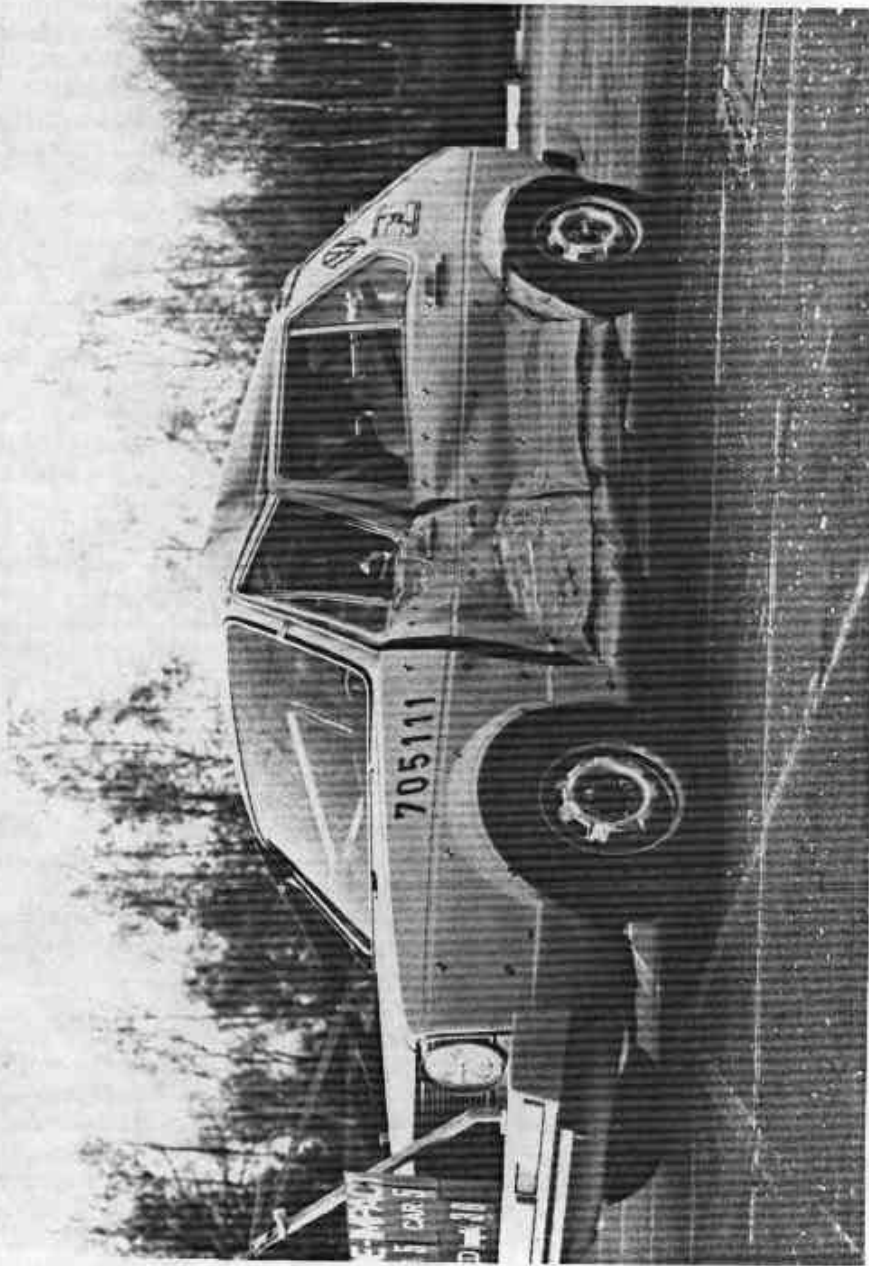


FIGURE A 2 : VW RABBIT LEFT SIDE
POST TEST VIEW (FRONT-SIDE DIRECTION)



FIGURE A 3 : VW RABBIT LEFT SIDE
POST TEST VIEW

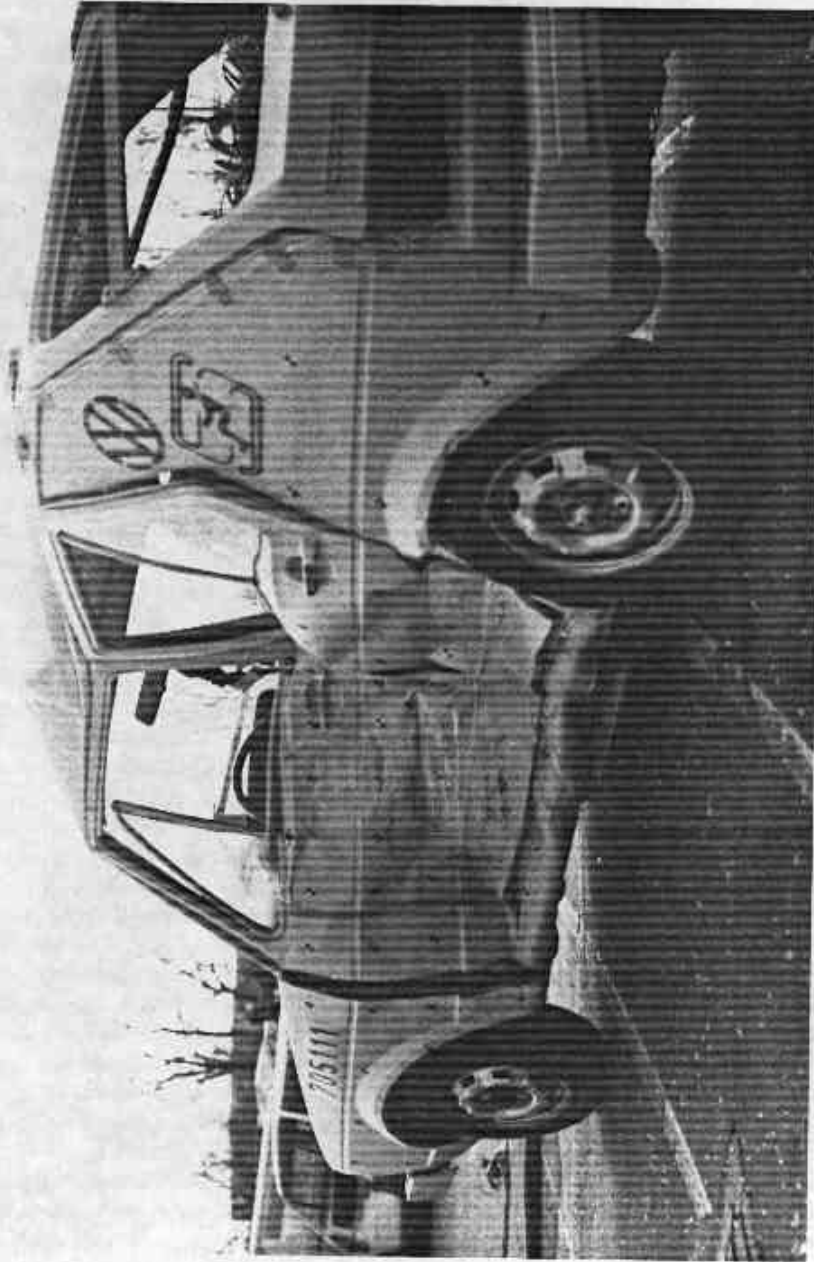


FIGURE A 4 : VW RABBIT LEFT SIDE

POST TEST VIEW (REAR-SIDE DIRECTION)



FIGURE A 5 : CRABBED BARRIER POST TEST VIEW



FIGURE A 6 : FRONT DOOR PADDING

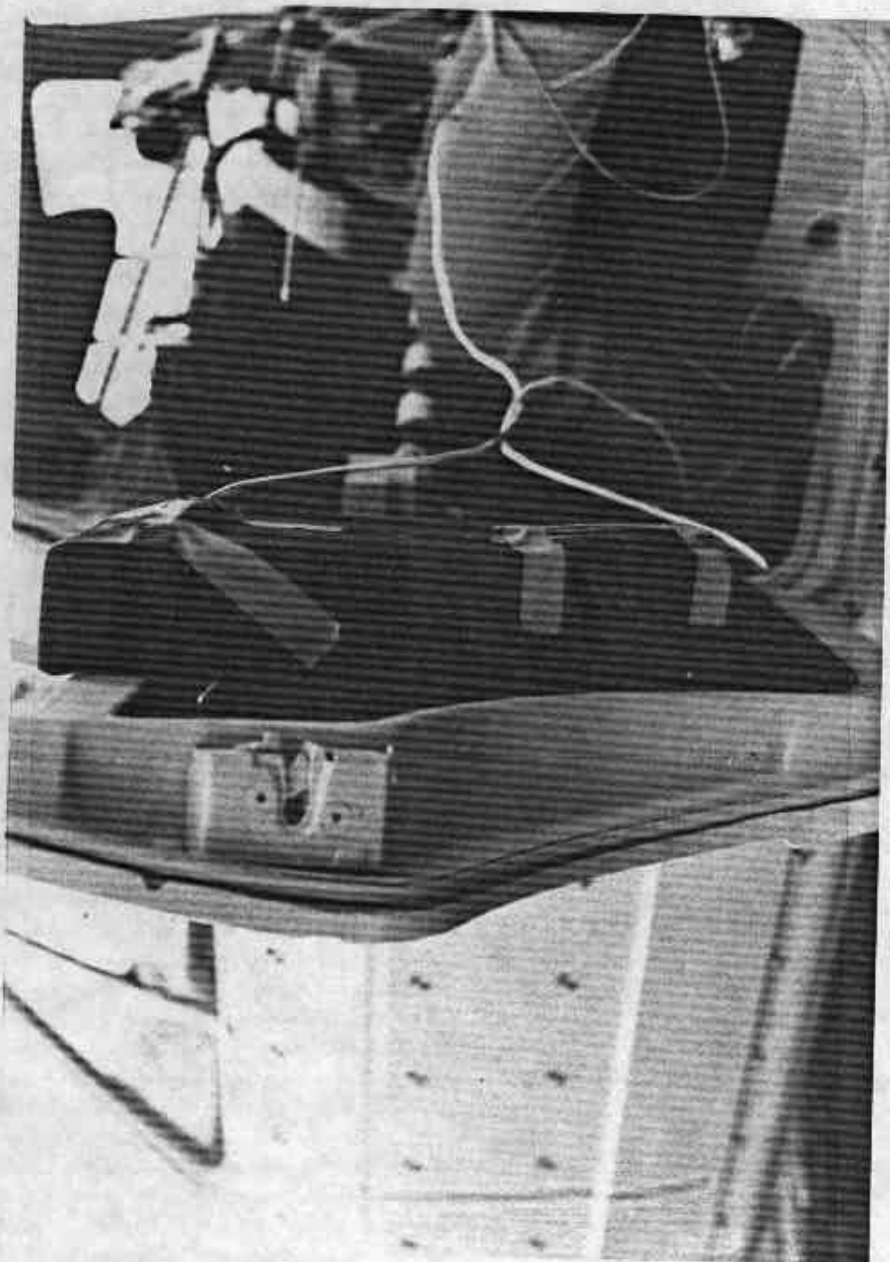


FIGURE A 7 : REAR DOOR PADDING

A P P E N D I X B

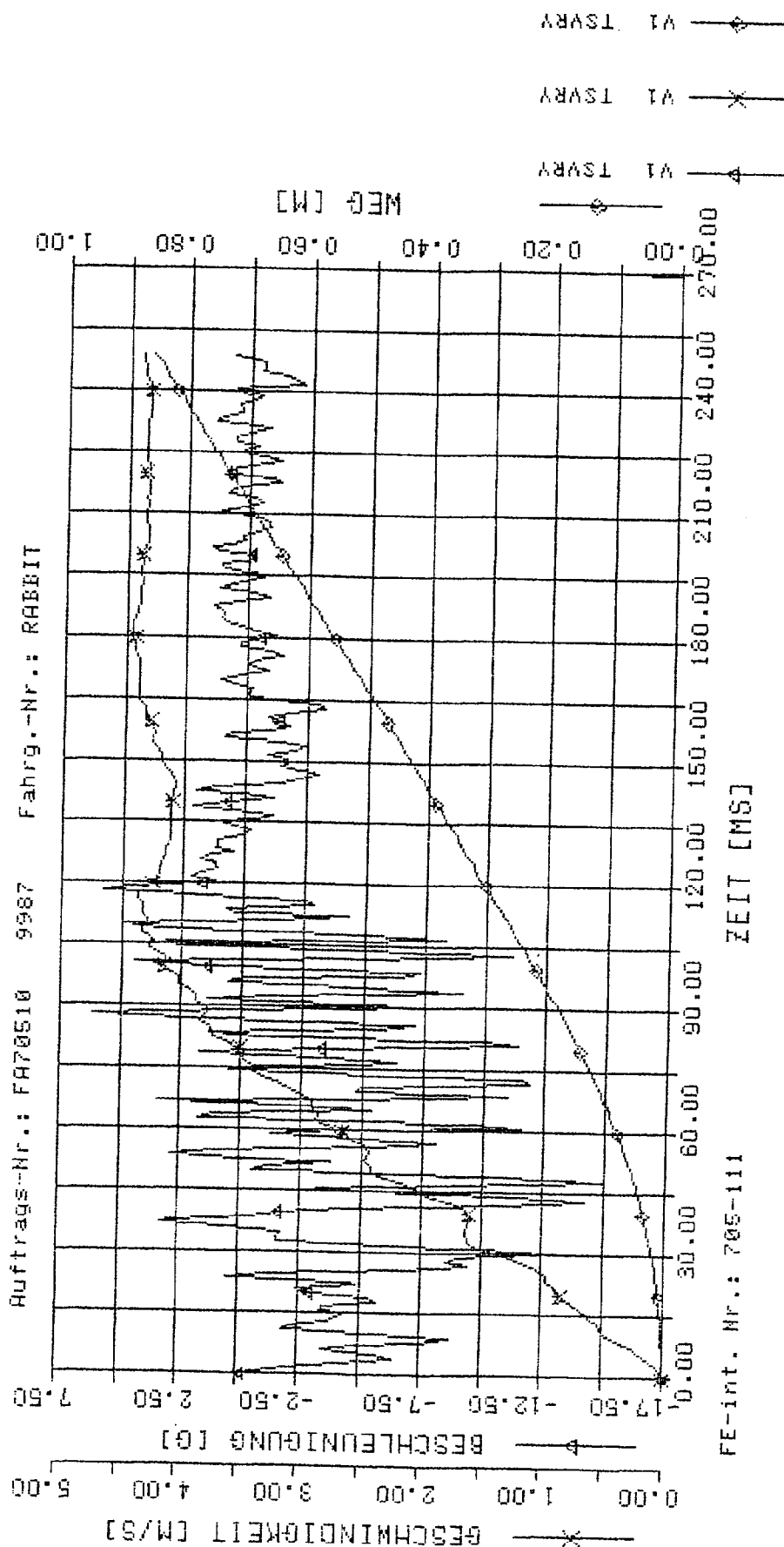
Vehicle and Dummy Test Response Acceleration/ - and Velocity/Time History

- B.1 Vehicle Test Response
 - B.1.1 Target Vehicle
 - B.1.2 Crabbed Barrier
- B.2 Dummy Test Response
 - B.2.1 Driver
 - B.2.2 Rear Passenger

B.1.1 Target Vehicle

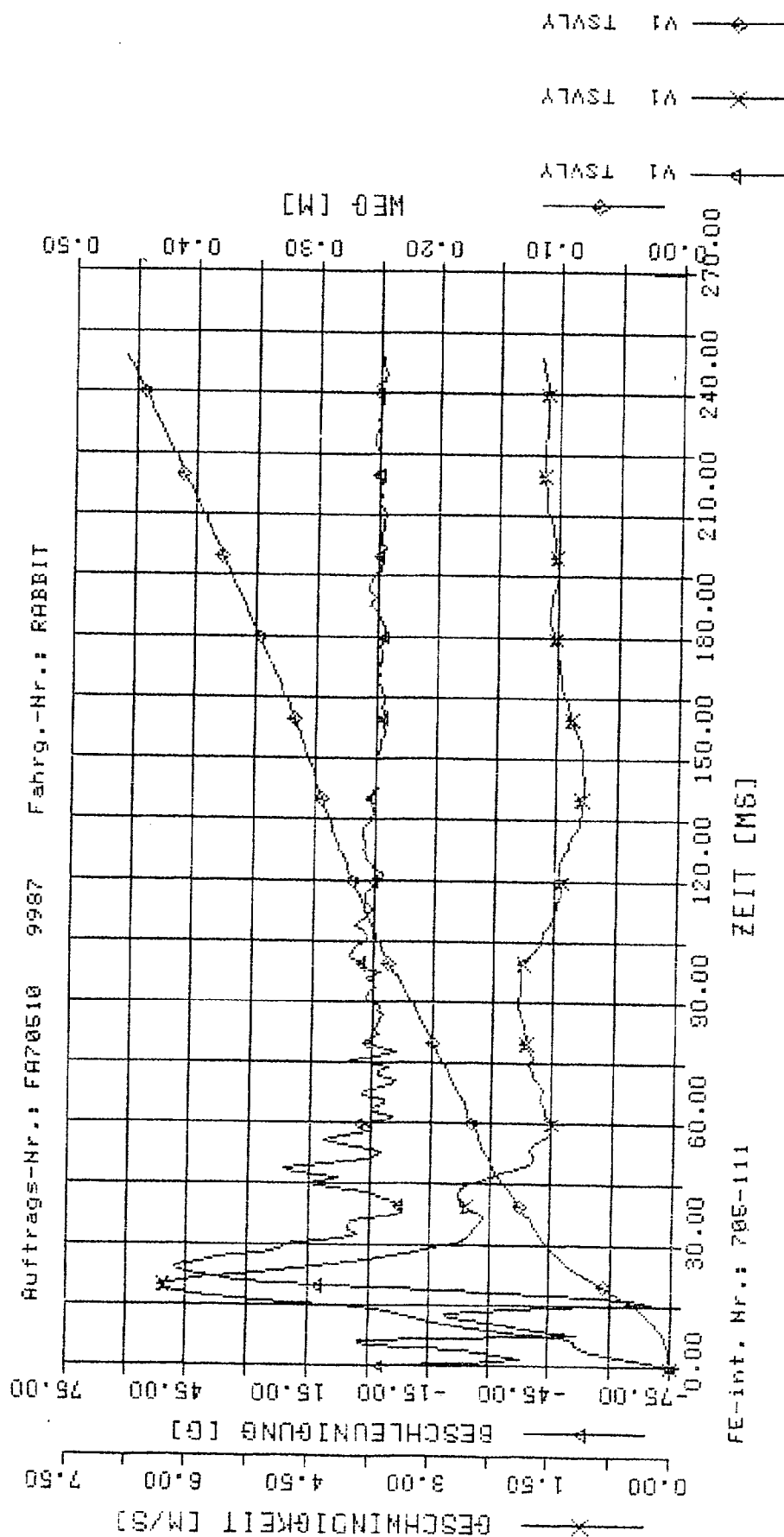
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987

Mess-Stelle	UP	ber.	Extremum	t	MS
TSVRY	V1	BE	-15.003	43.00	0.00
TSVRY	V1	GE	4.437	183.00	0.00
TSVRY	V1	WE	.867	251.00	0.00



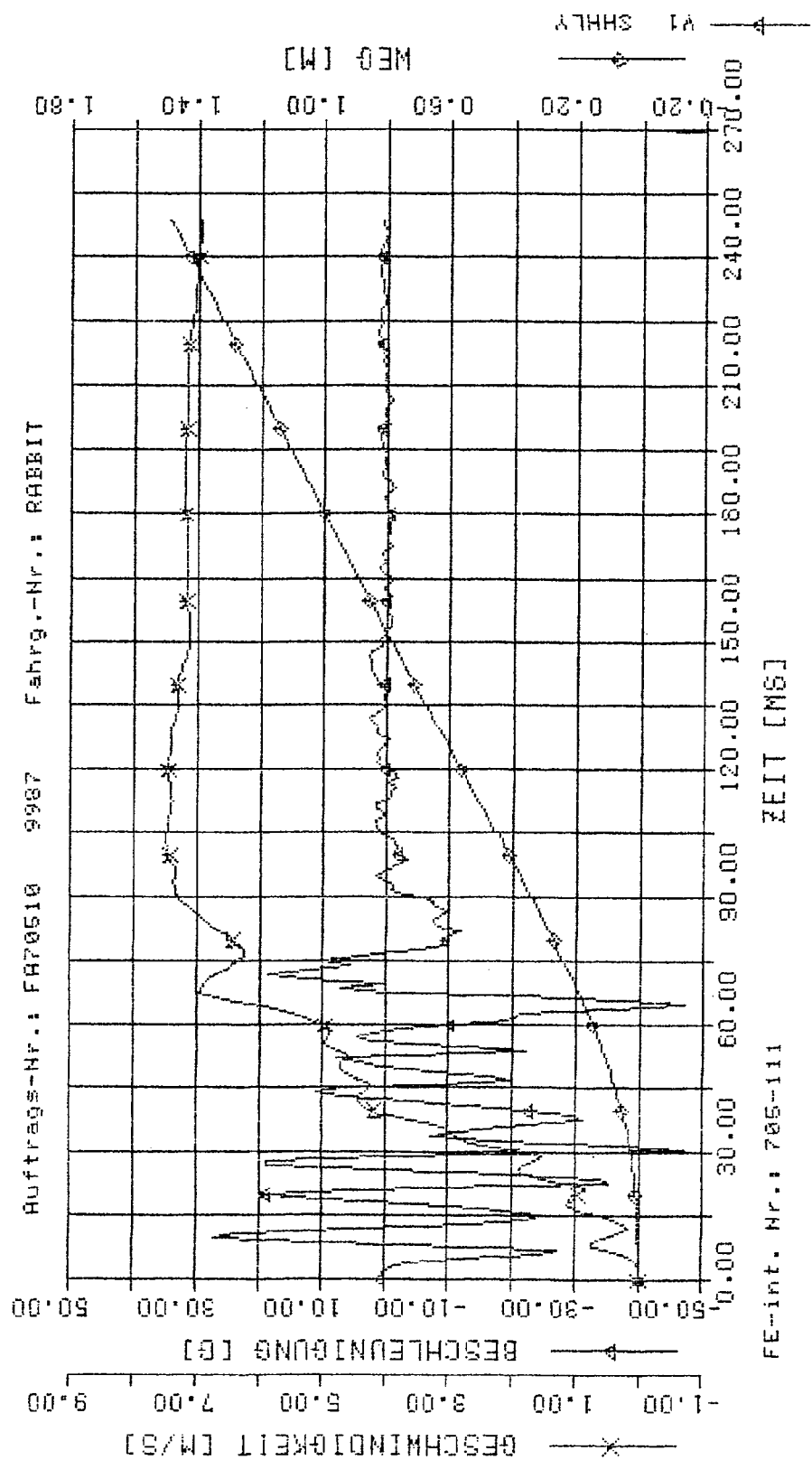
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987

Mess-Stelle		UP	ber.	Groesse	Extreum	t	3MS
TSVLY		V1	BE	g	-70.116	16.00	0.00
TSVLY		V1	GE	m/s	6.274	20.00	0.00
TSVLY		V1	WE	m	.461	251.00	0.00



Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987

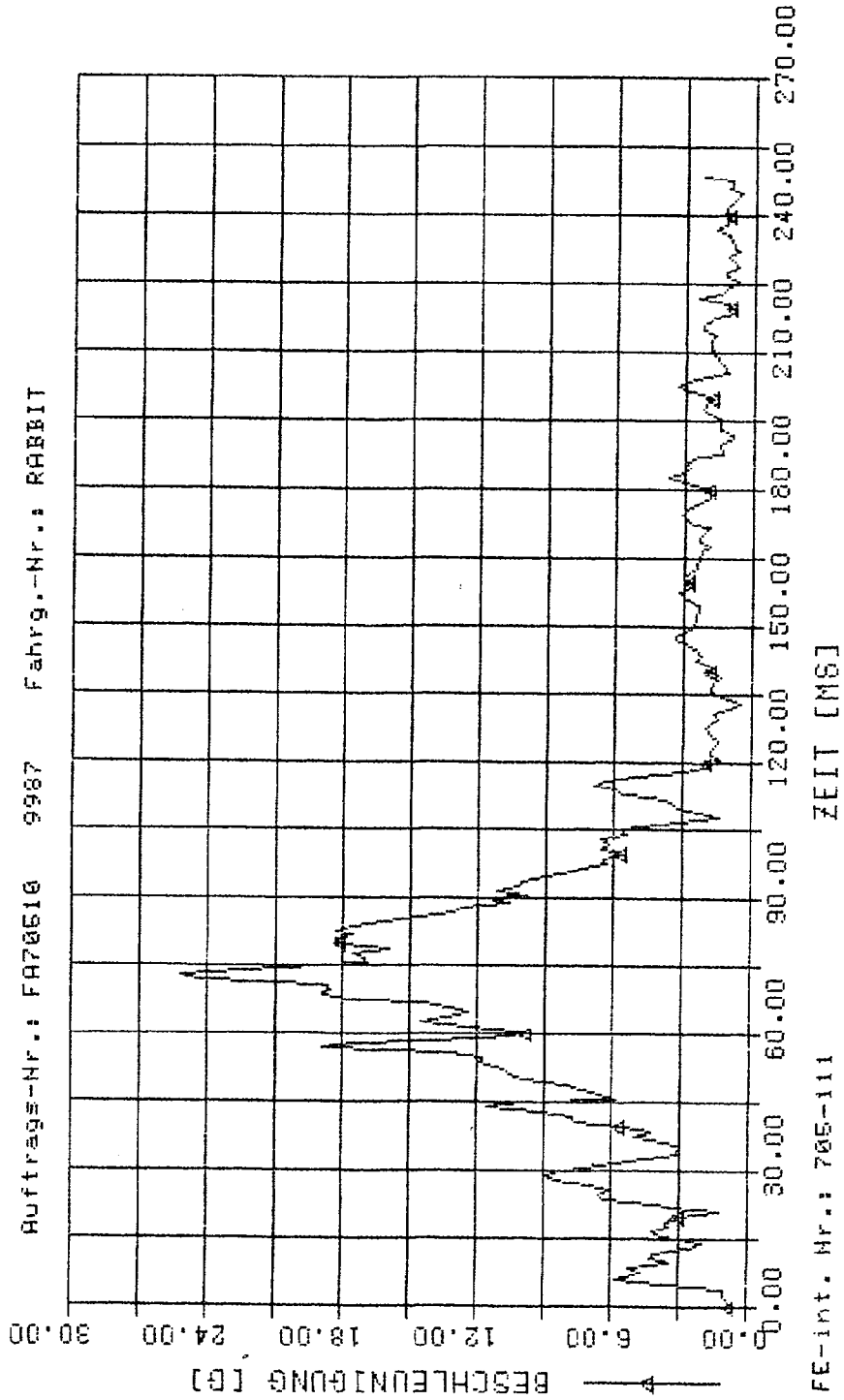
Ness-Stelle	UP	ber.	Extremum	t	3MS
SHHLY	V1	BE g	-47.176	65.00	0.00
SHHLY	V1	GE m/s	7.488	104.00	0.00
SHHLY	V1	WE m	1.503	254.00	0.00



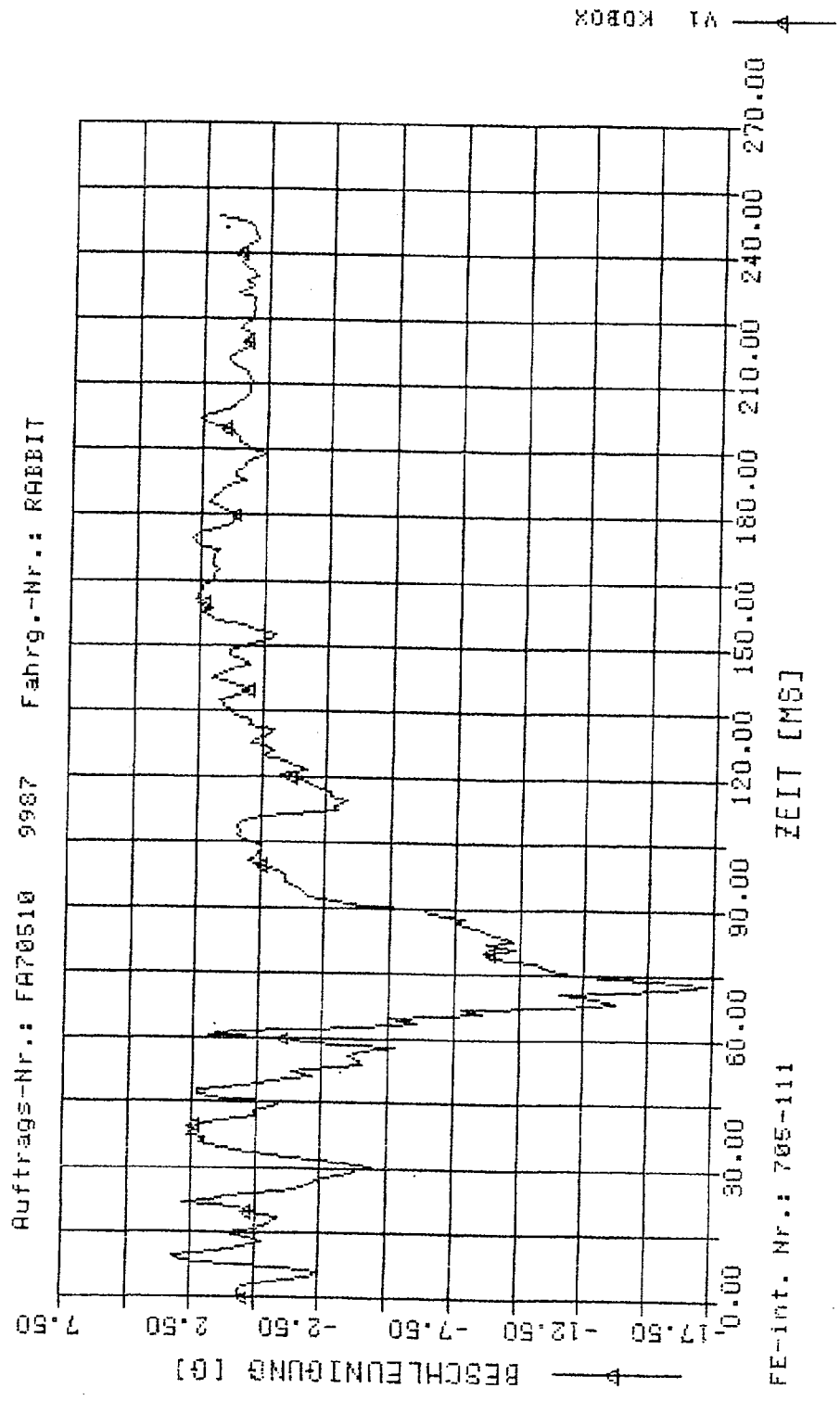
Kenn-Merkmale: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987

Mess-Stelle UP ber. Extremum t SMS
V1 BE 9 25.183 73.00 18.90

KOBO

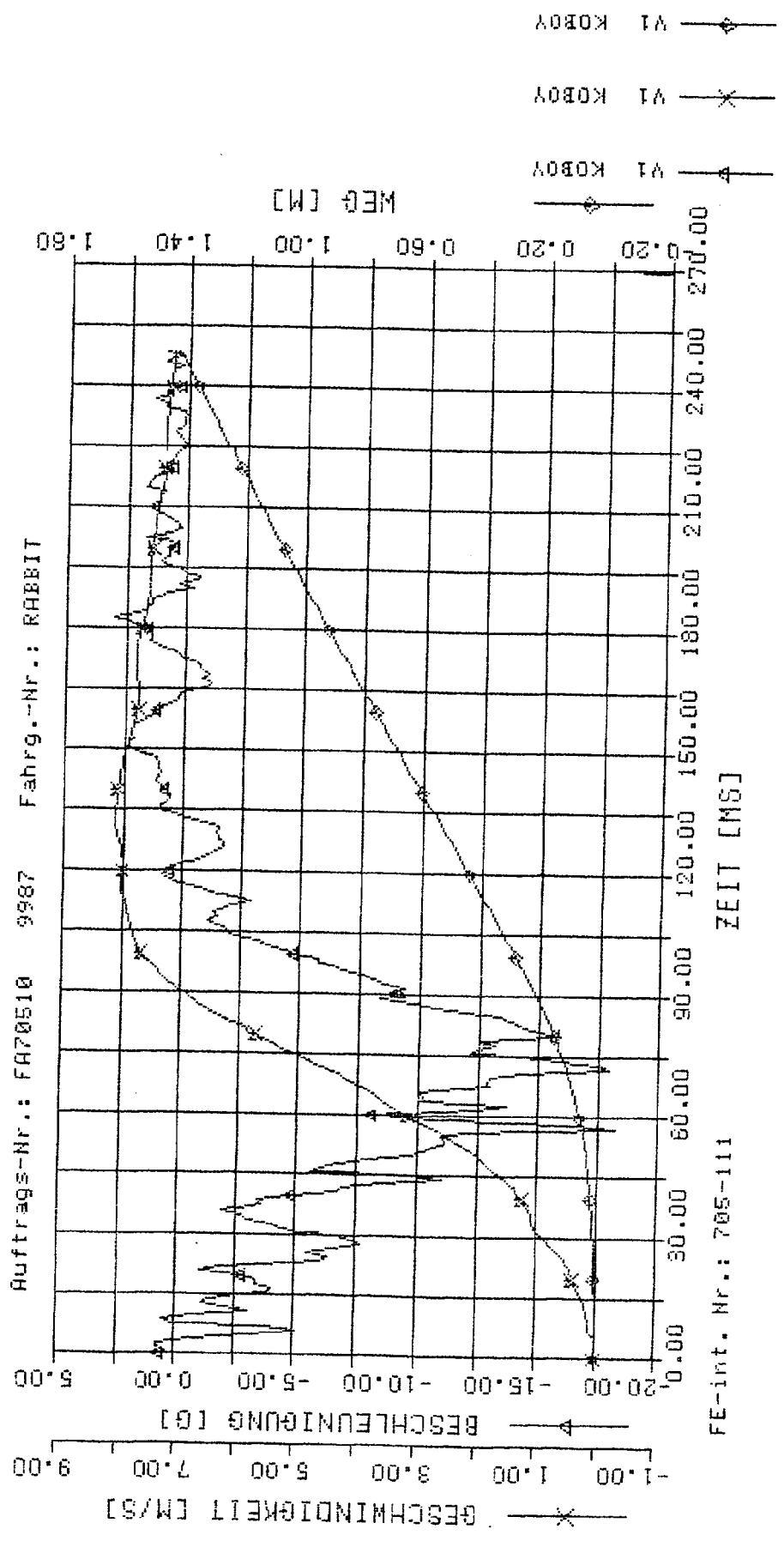


Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987
 Mess-Stelle UP ber. Extremum t SMS
 KOBEX V1 BE g -17.285 Extr. 73.00 2.69



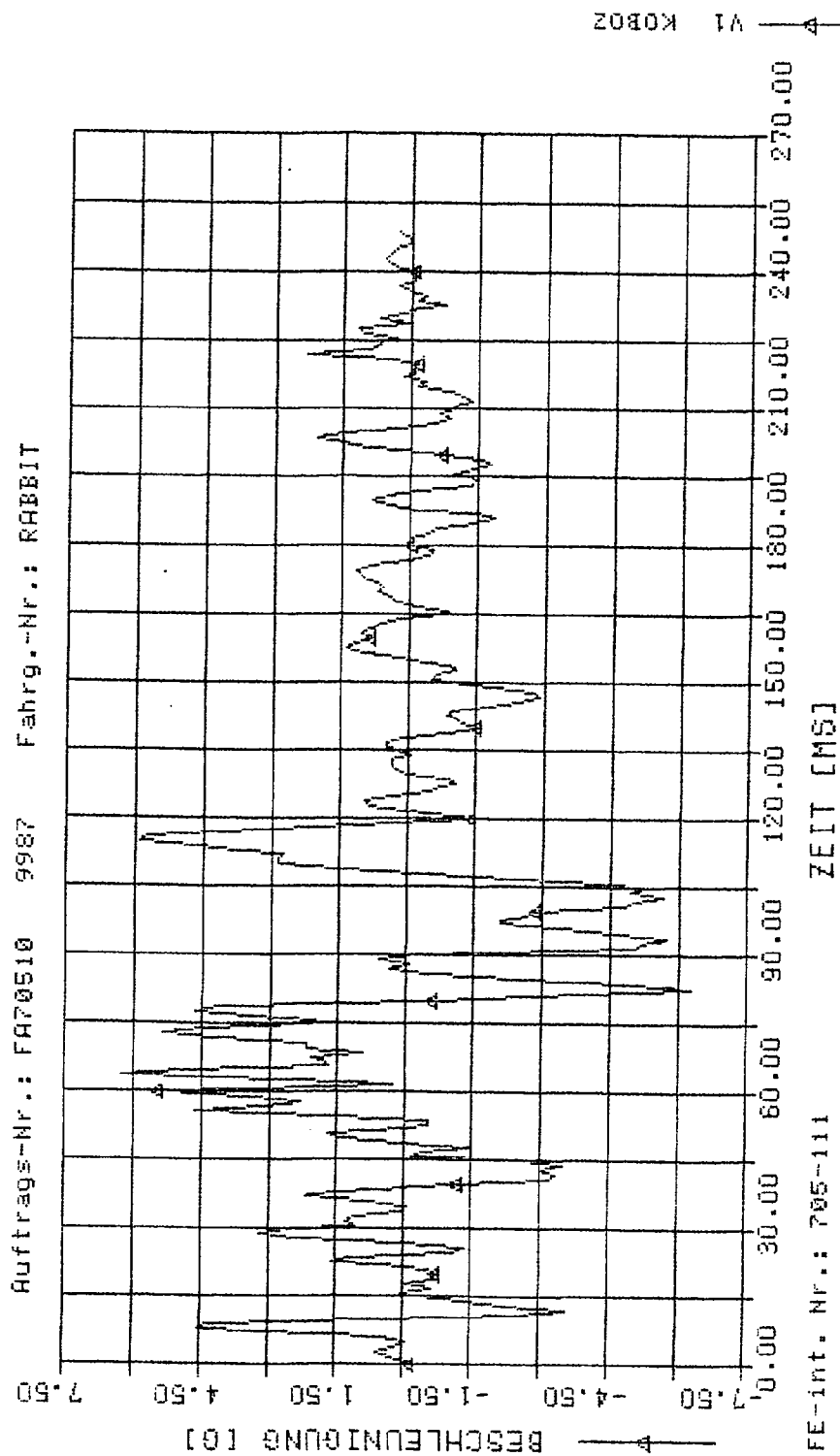
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987

Mess-Stelle	UP	ber.	Grösse	Extremum	t	Ext.	ms
KOBY	V1	BE	g	-18.206		57.00	2.30
KOBY	V1	GE	m/s	8.135		133.00	0.00
KOBY	V1	WE	m	1.448		251.00	0.00



Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987

Mess-Stelle UP ber. Extremum t .ms
KOB0Z V1 BE g -6.294 83.00 5.44



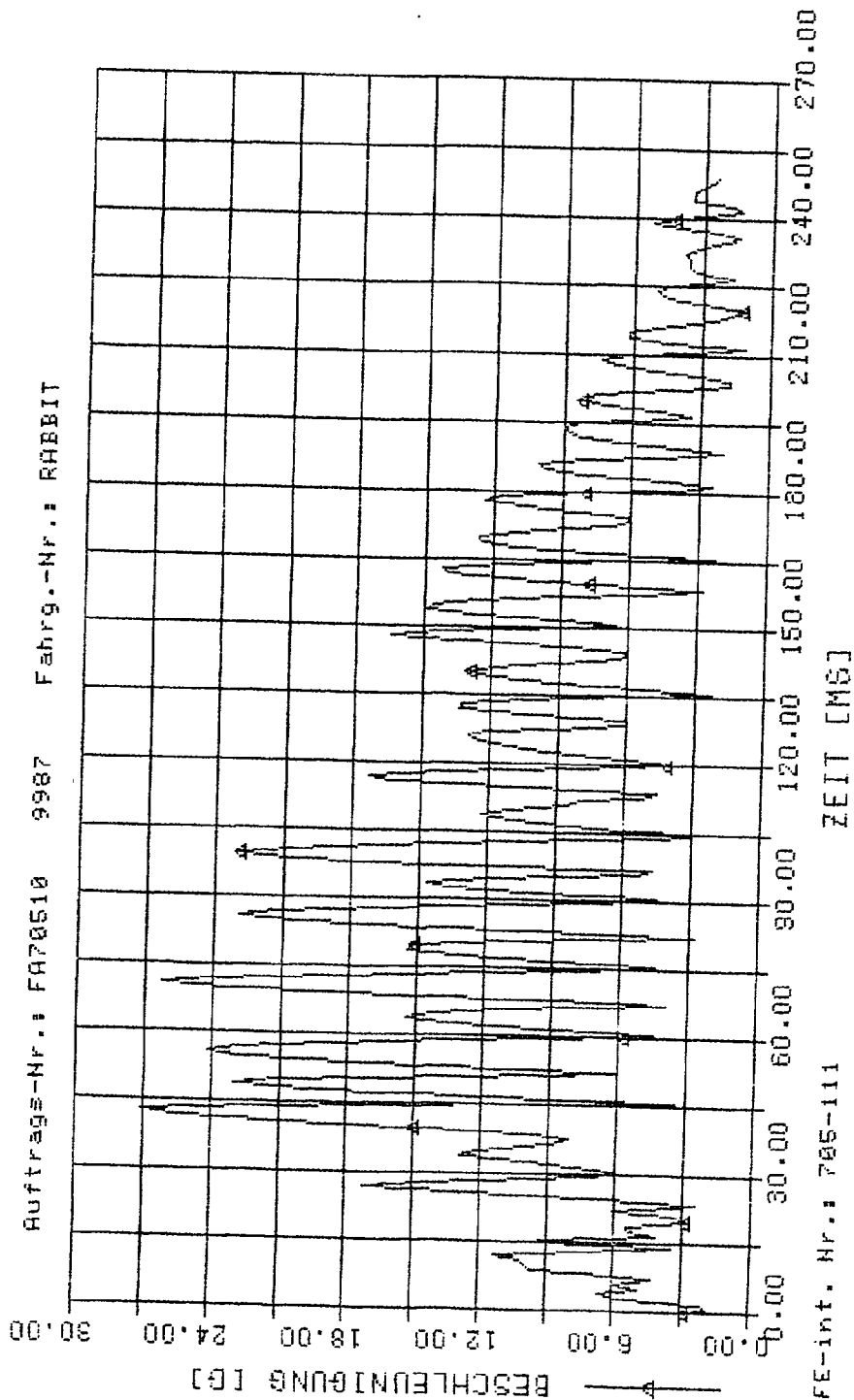
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987

Mess-Stelle

UP ber. Extremum t 3MS

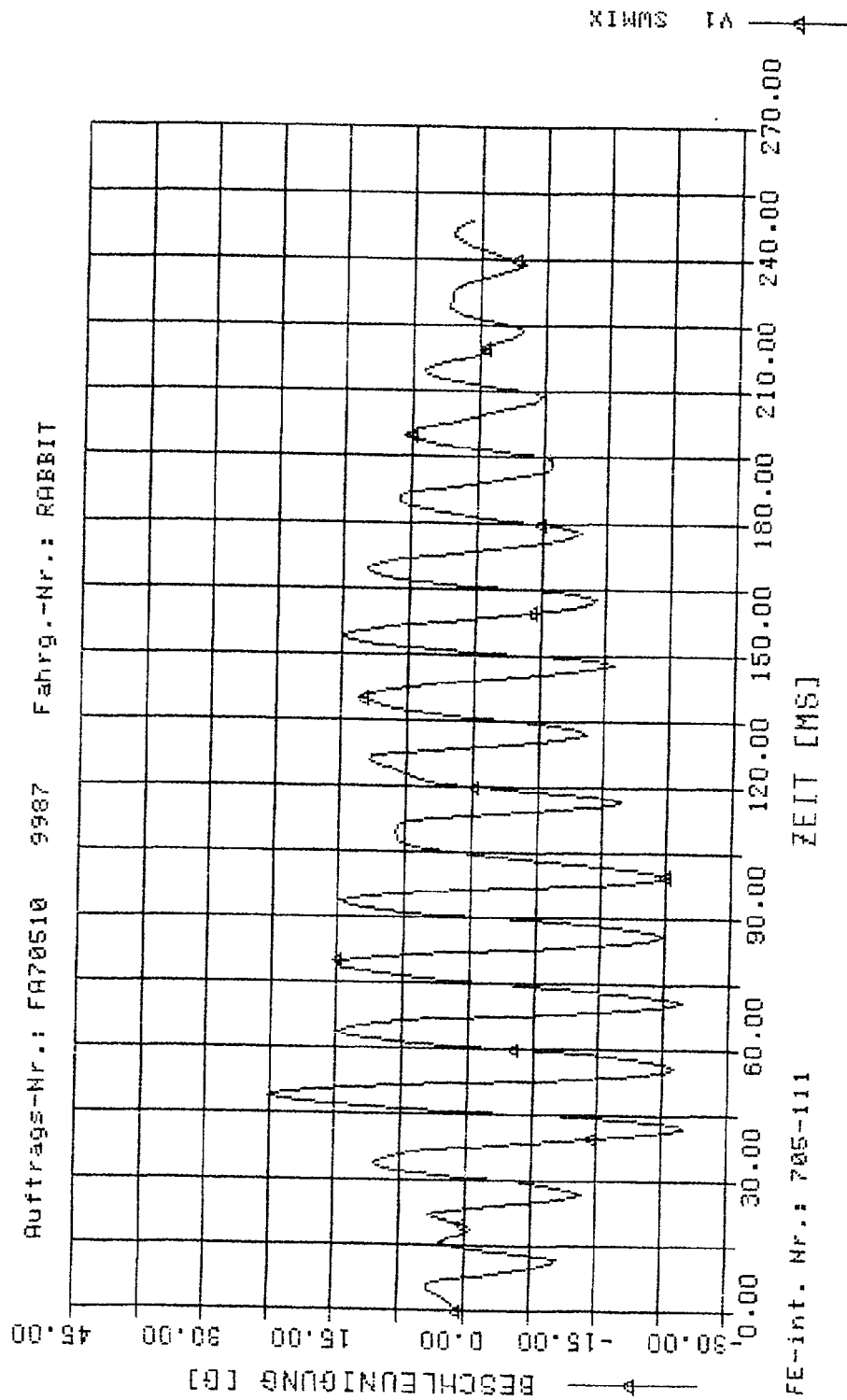
SUMI

V1 BE g 27.007 43.00 0.00



Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987

Mess-Stelle	UP	ber.	Extremum	t	ΔMS
SWMIX	V1	BE 9	-25.022	42.00	0.00

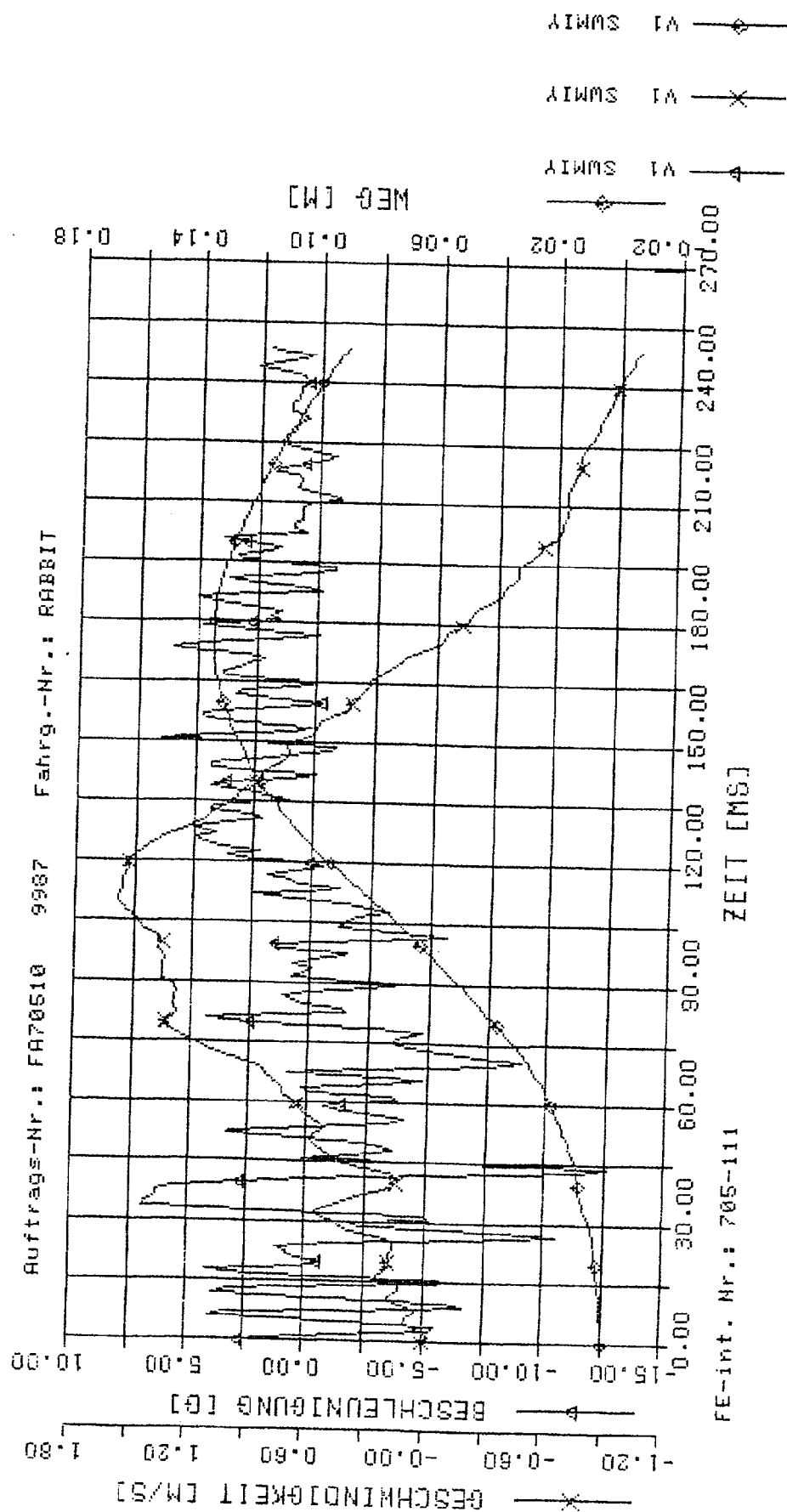


Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987

Mess-Stelle

SWMIY
SWMIY
SWMIY

UP	ber.	Groesse	Extremum	t	Ext.
V1	BE	9	-12.589		44.00
V1	GE	m/s	1.585		111.00
V1	WE	m	.135		175.00
					0.00



Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987

Mess-Stelle

SWMIZ

UP

ber.

Extremum

t

3MS

Groesse

BE

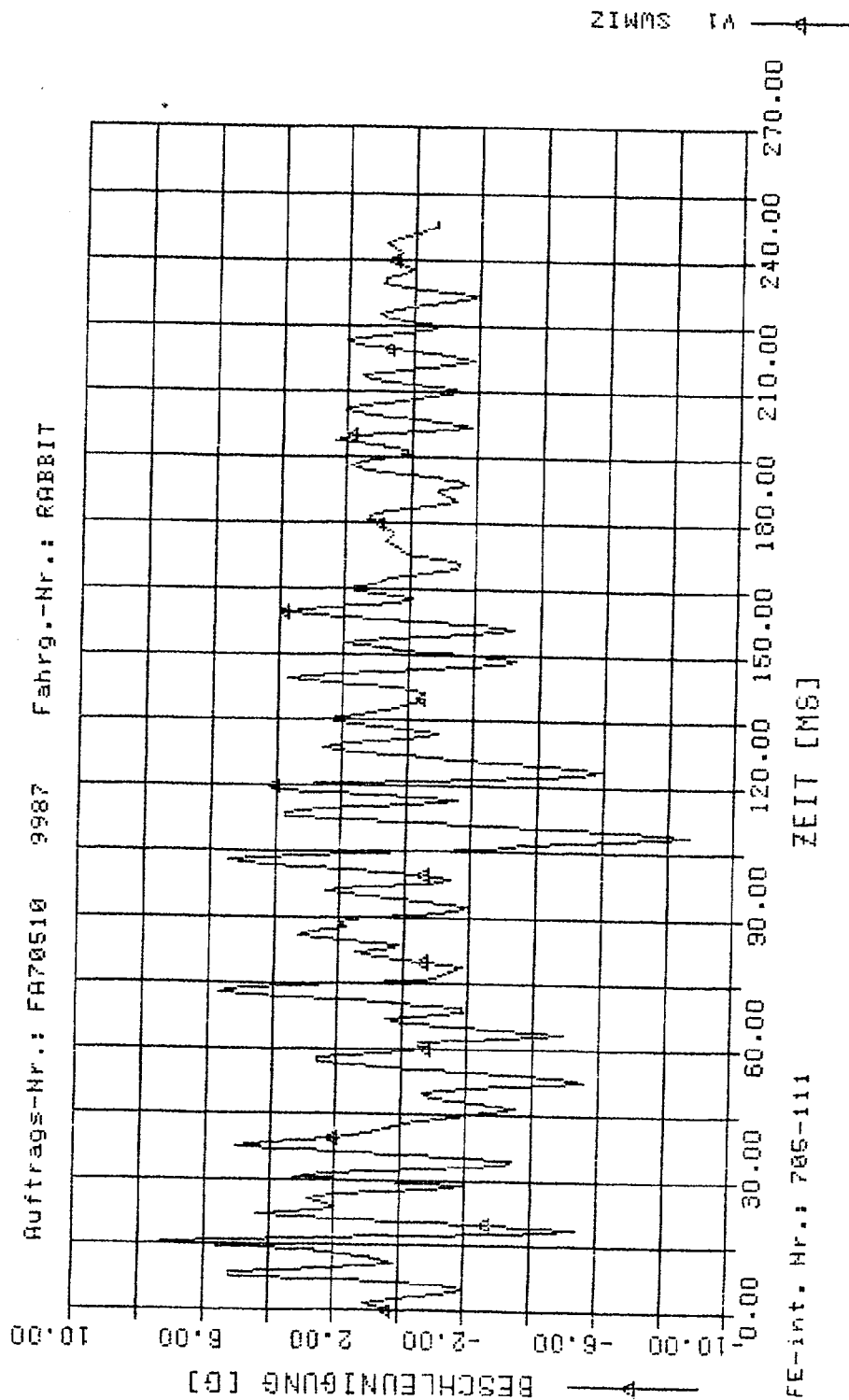
g

-8.693

Extr.

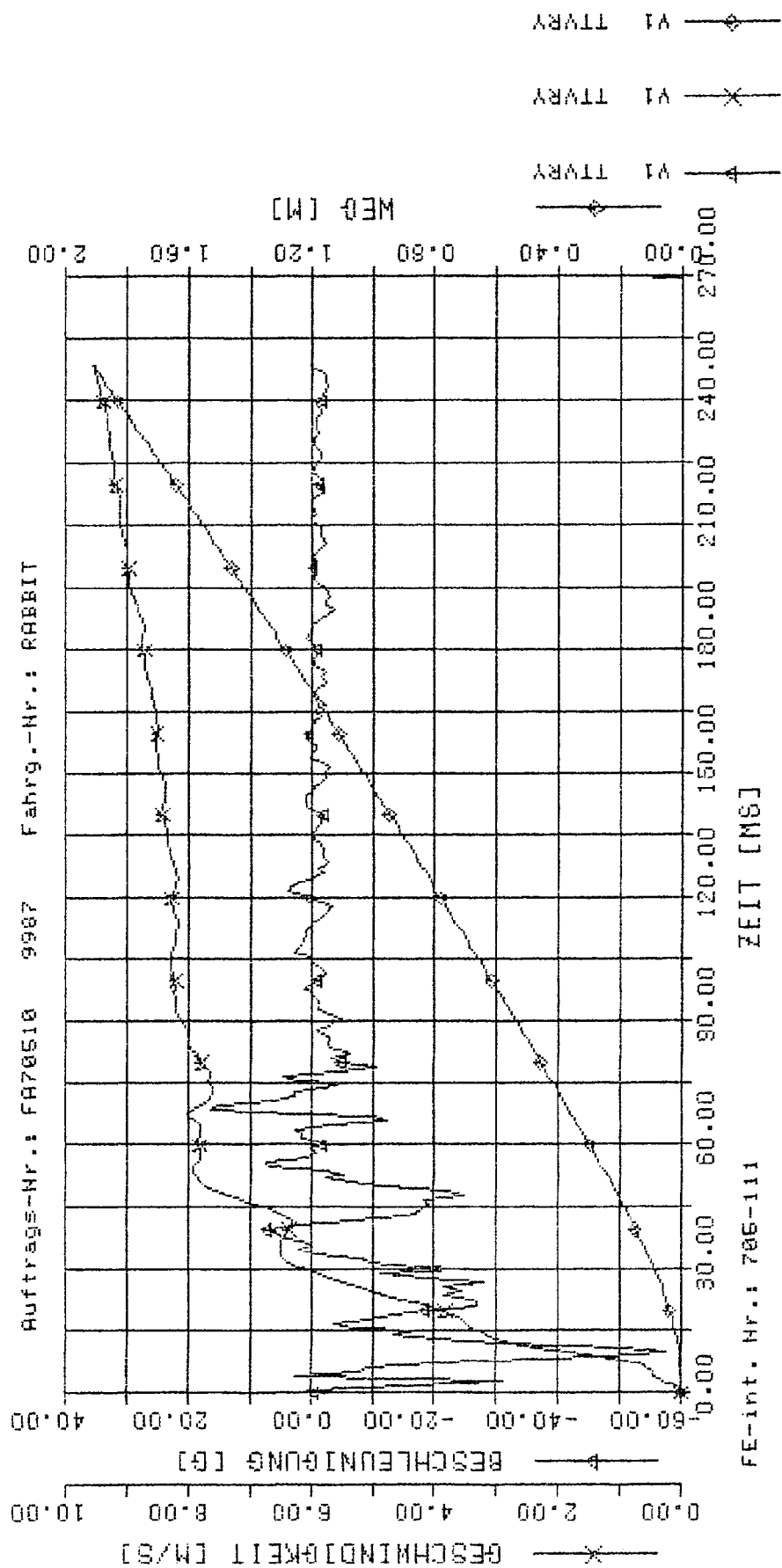
102.00

0.00



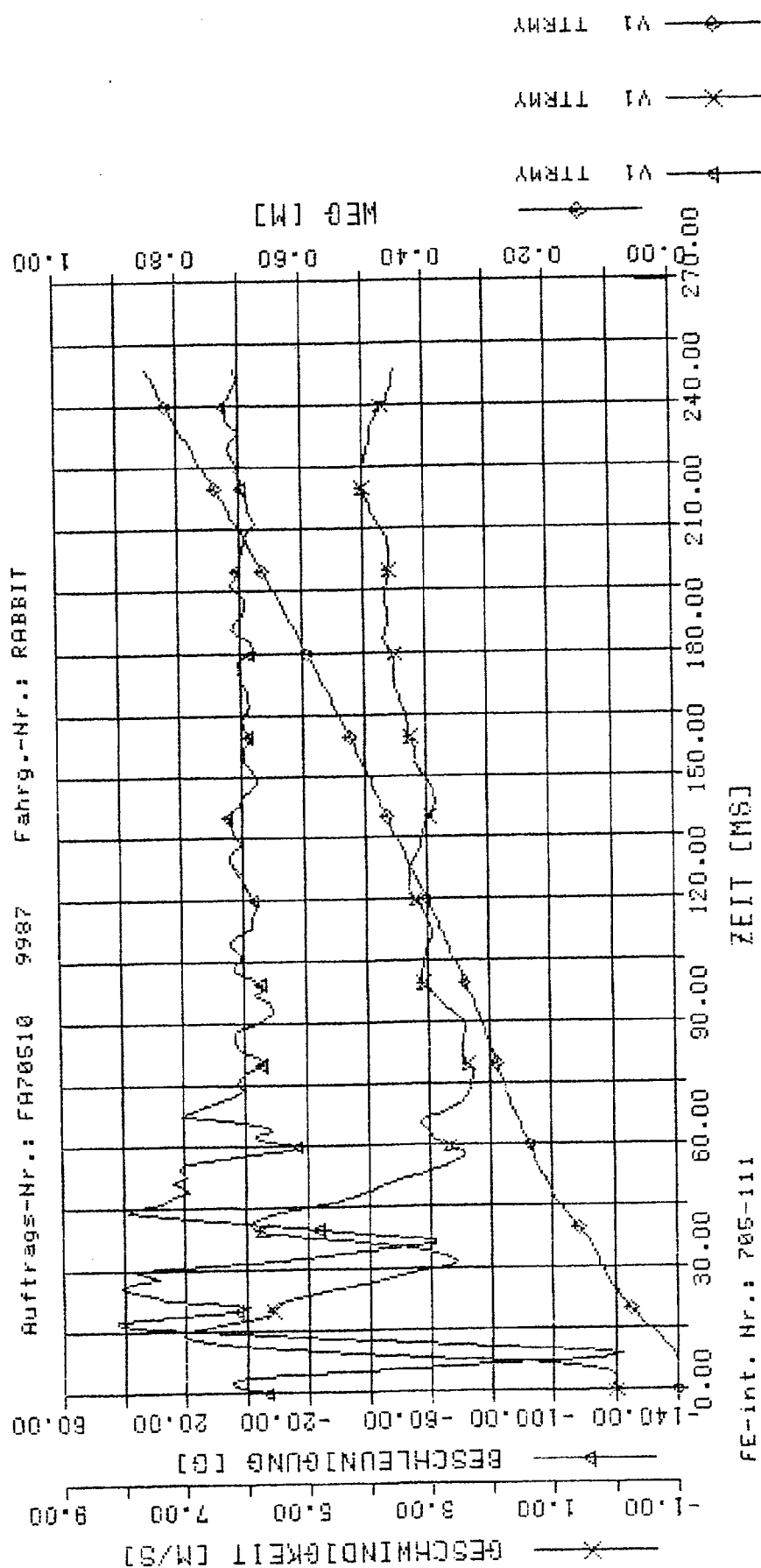
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9907

Mess-Stelle	UP	ber.	Groesse	Extremum	t	3MS
TTVRY	V1	BE	g	-57.565	10.00	0.00
TTVRY	V1	GE	m/s	9.534	254.00	0.00
TTVRY	V1	WE	m	1.933	254.00	0.00



Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987

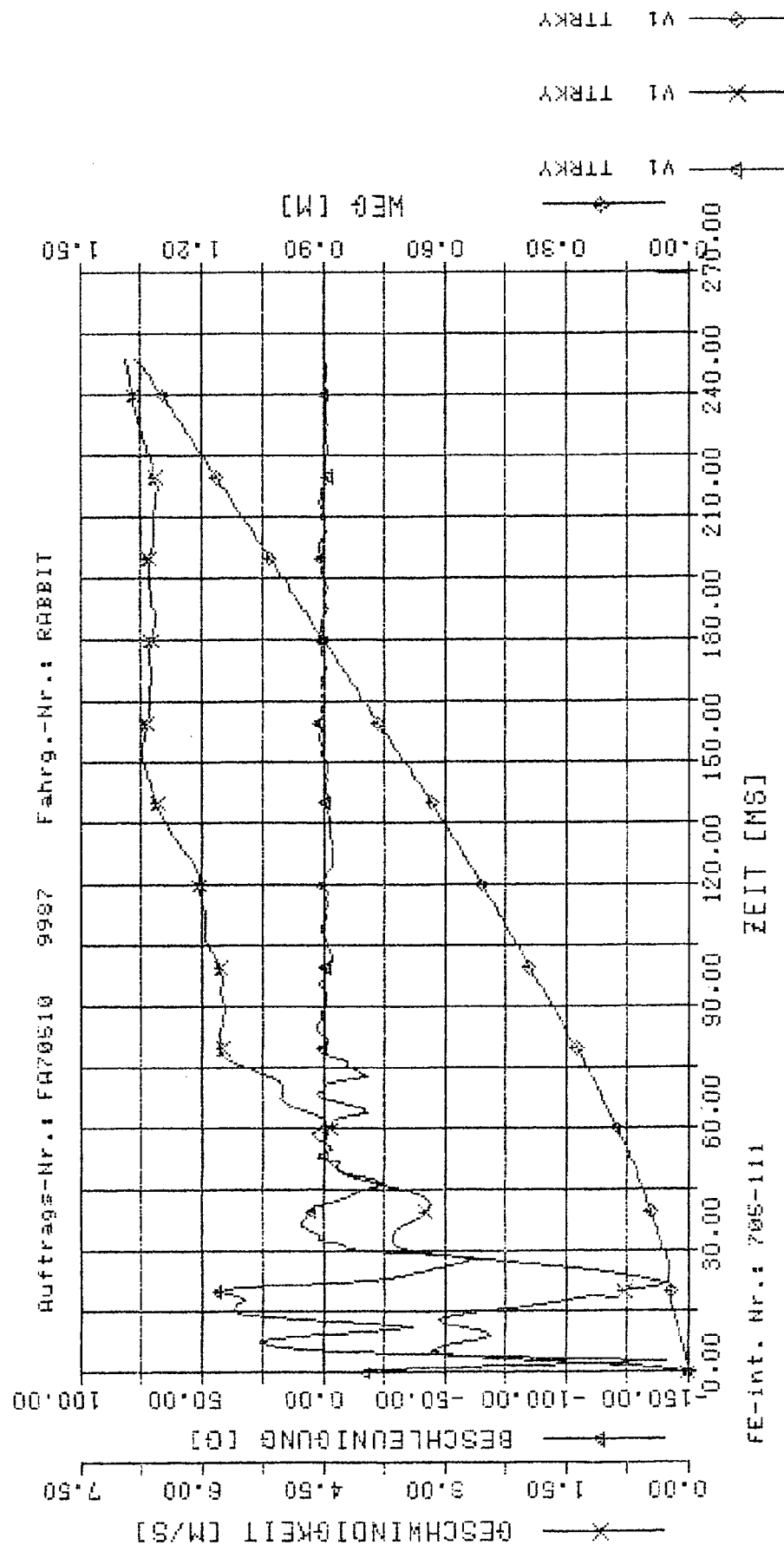
Mess-Stelle	UP	ber.	Extremum	t	δMS
TTRMY	V1	BE	-122.632	7.00	0.00
TTRMY	V1	GE	7.020	14.00	0.00
TTRMY	V1	WE	.855	251.00	0.00



FE-int. Nr.: 705-111

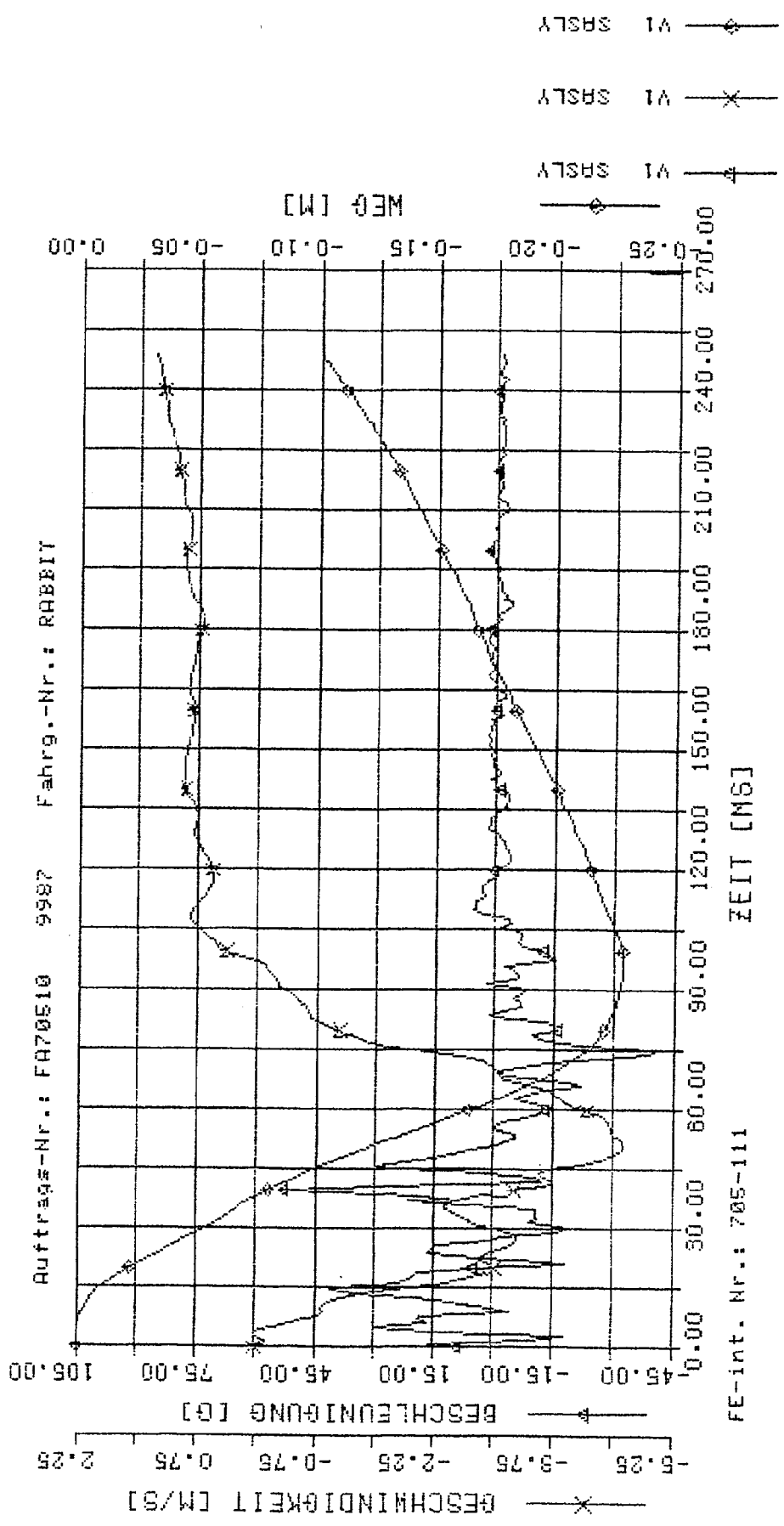
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987

Mess-Stelle	UP	ber.	Extremum	t	3MS
TTRKY	V1	BE	-141.105	3.00	0.00
	V1	GE	6.920	249.00	0.00
	V1	WE	1.371	251.00	0.00



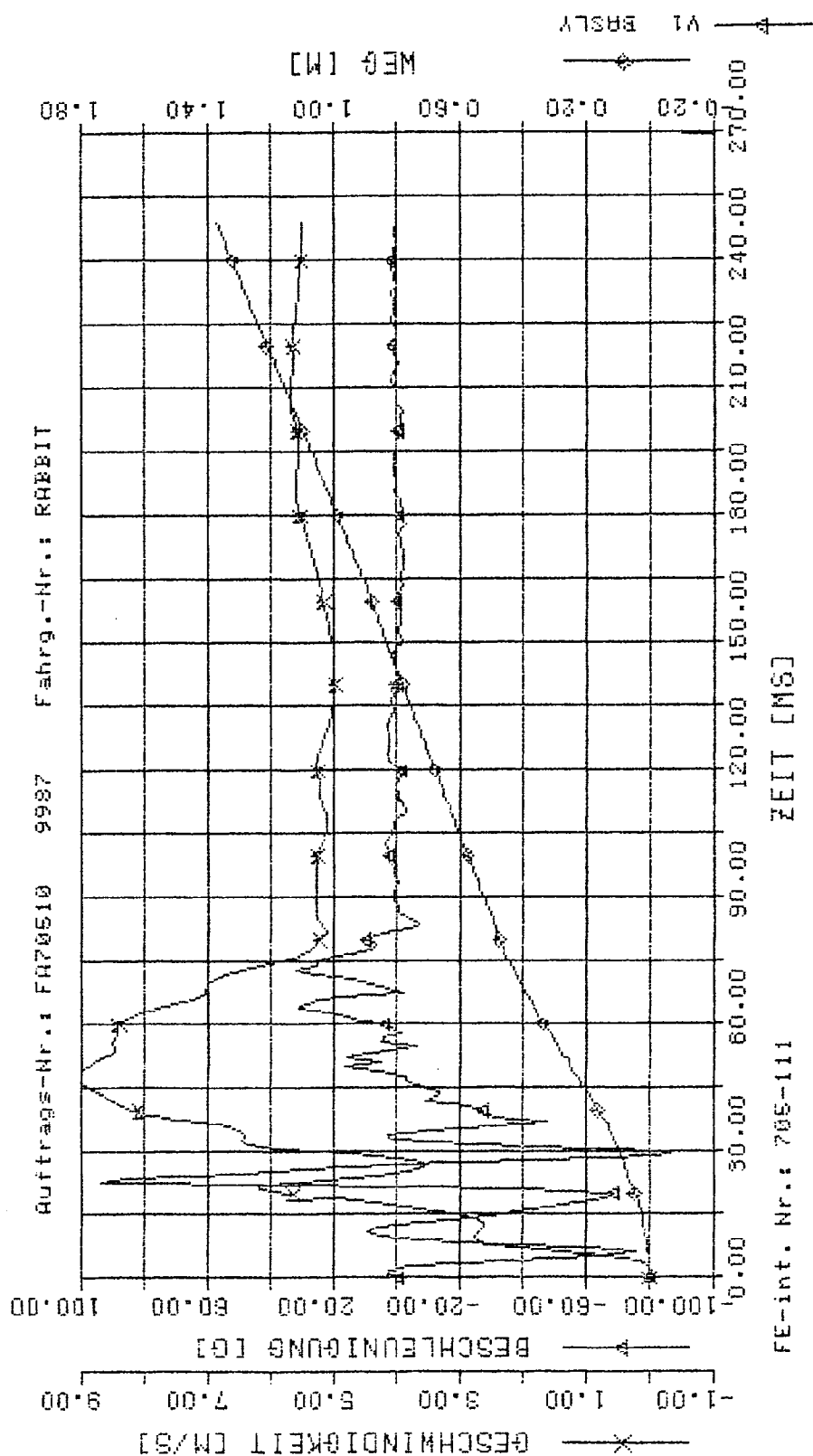
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987

Mess-Stelle	UP	ber.	Grösse	Extremum	t	Ext.	SMS
SASLY	V1	BE	g	52.621		40.00	0.00
SASLY	V1	GE	m/s	-4.646		51.00	0.00
SASLY	V1	WE	m	-1.229		97.00	0.00



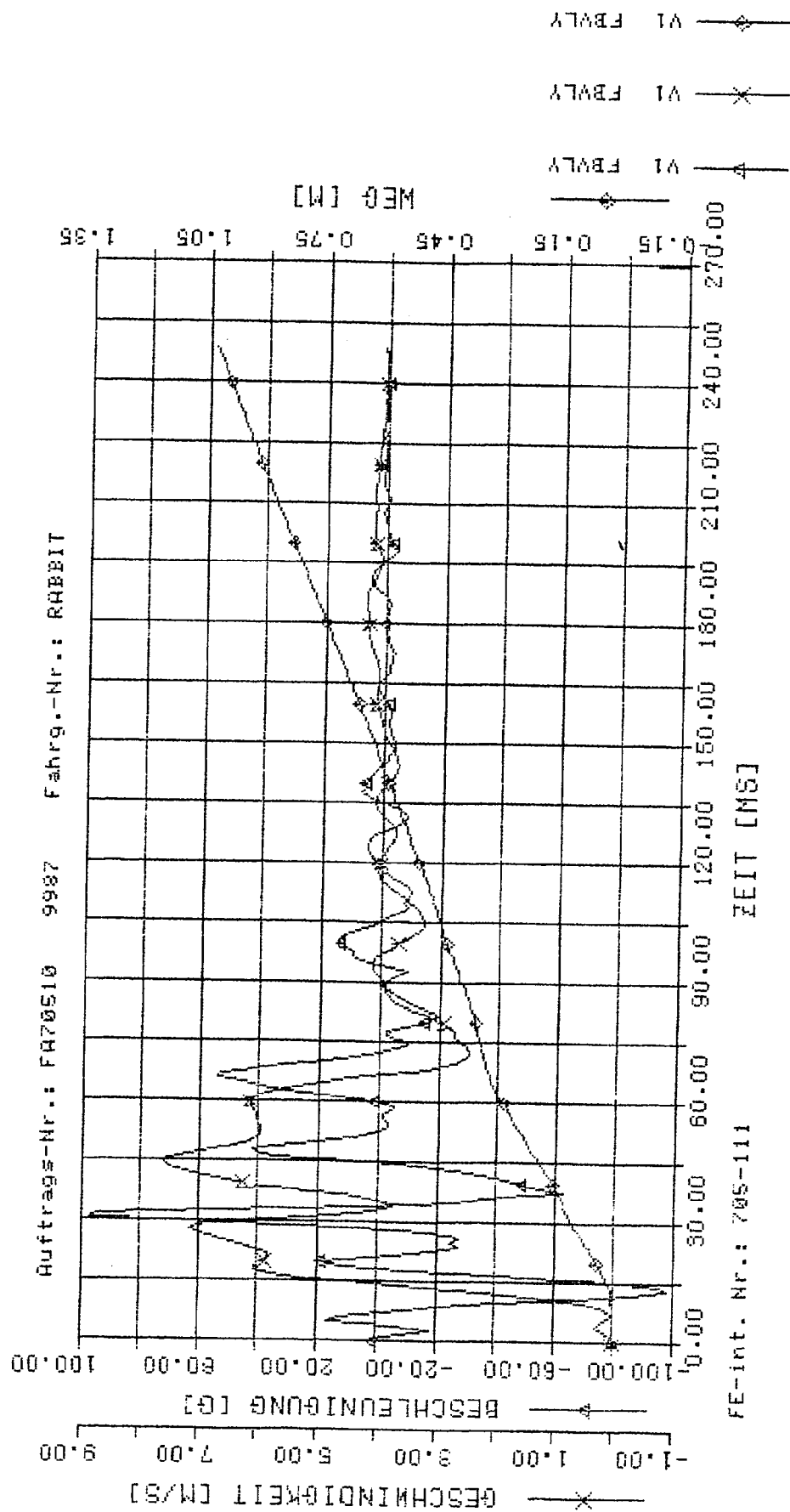
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9907

Mess-Stelle	UP	ber.	Extremum	t	MS
BASLY	V1	BE g	93.296	23.00	0.00
BASLY	V1	GE w/s	8.991	48.00	0.00
BASLY	V1	WE w	1.381	251.00	0.00



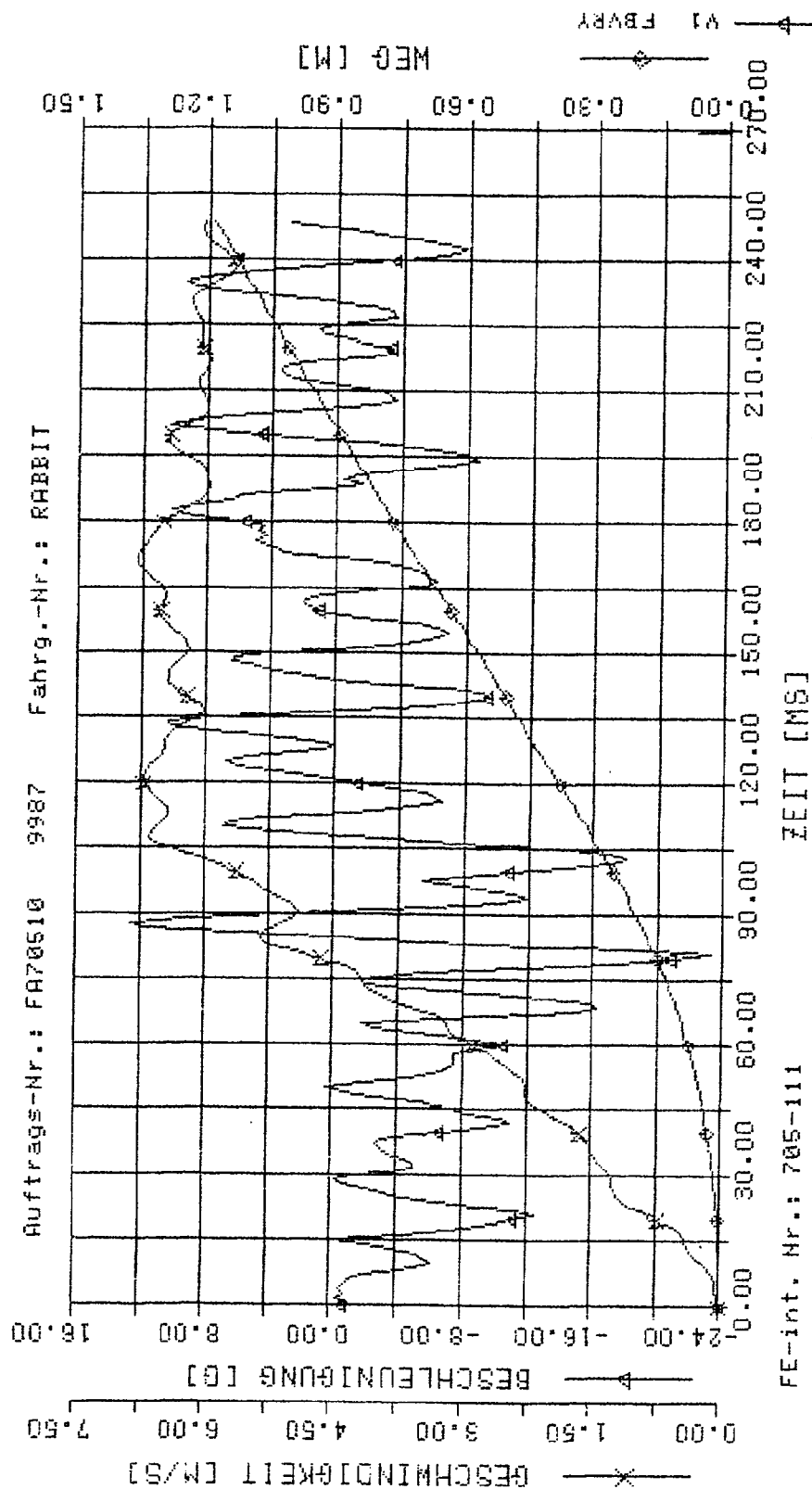
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987

Mess-Stelle	UP	ber.	Extremum	t	SMS
FBVLY	V1	Groesse		Extr.	
FBVLY	V1	RE g	-98.008	13.00	0.00
FBVLY	V1	GE m/s	7.616	45.00	0.00
FBVLY	V1	WE m	1.041	251.00	0.00



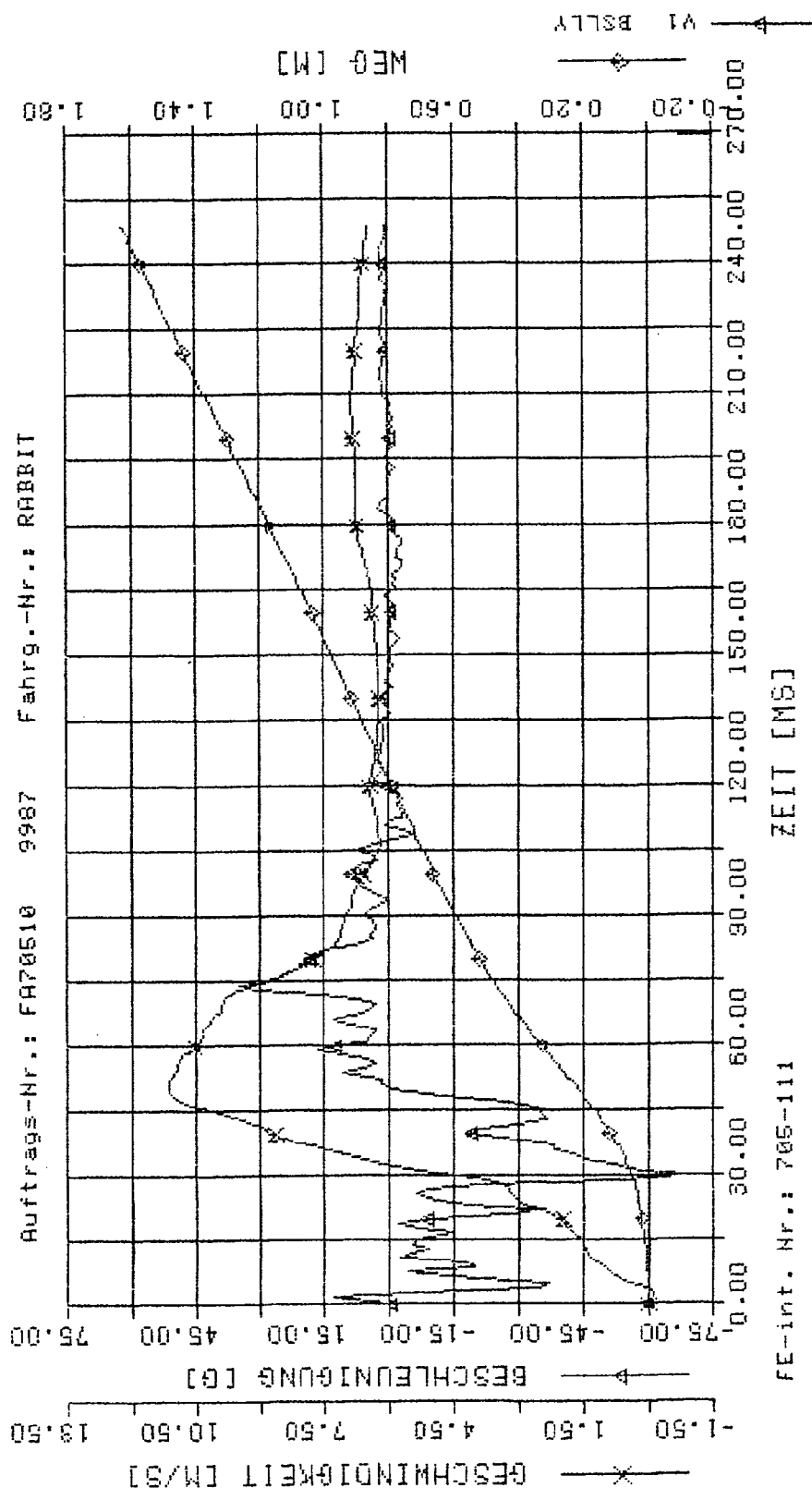
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987

Mess-Stelle	UP	ber.	Grösse	Extremum	t	Ext.	MS
FBVRY	V1	BE	g	-23.264	81.00	0.00	
FBVRY	V1	GE	m/s	6.607	172.00	0.00	
FBVRY	V1	WE	m	1.199	251.00	0.00	



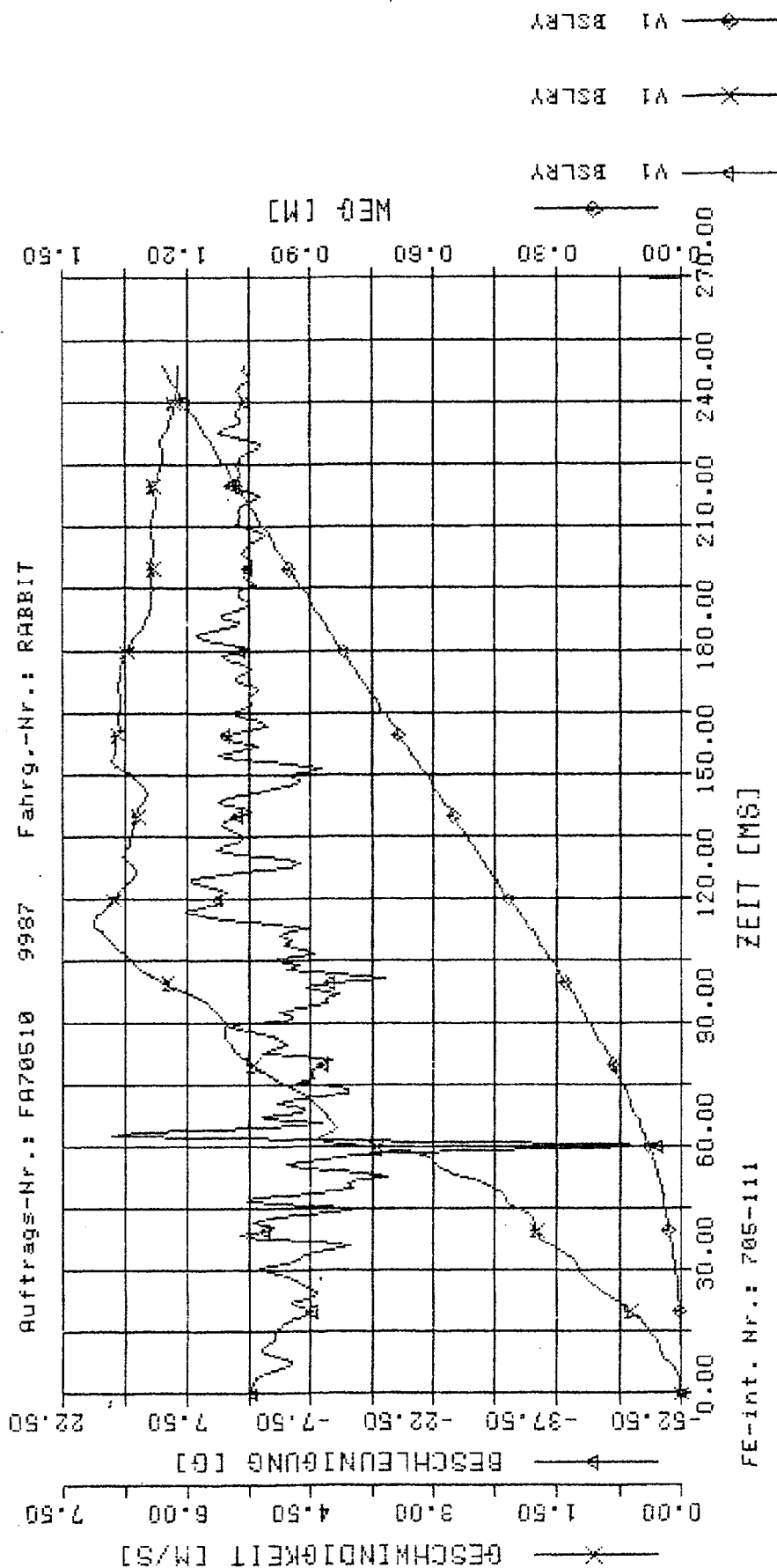
- Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987

Mess-Stelle	UP	ber.	Extremum	t	3MS
BSLLY	V1	BE g	-69.054	30.00	0.00
BSLLY	V1	GE m/s	11.139	50.00	0.00
BSLLY	V1	WE m	1.641	251.00	0.00



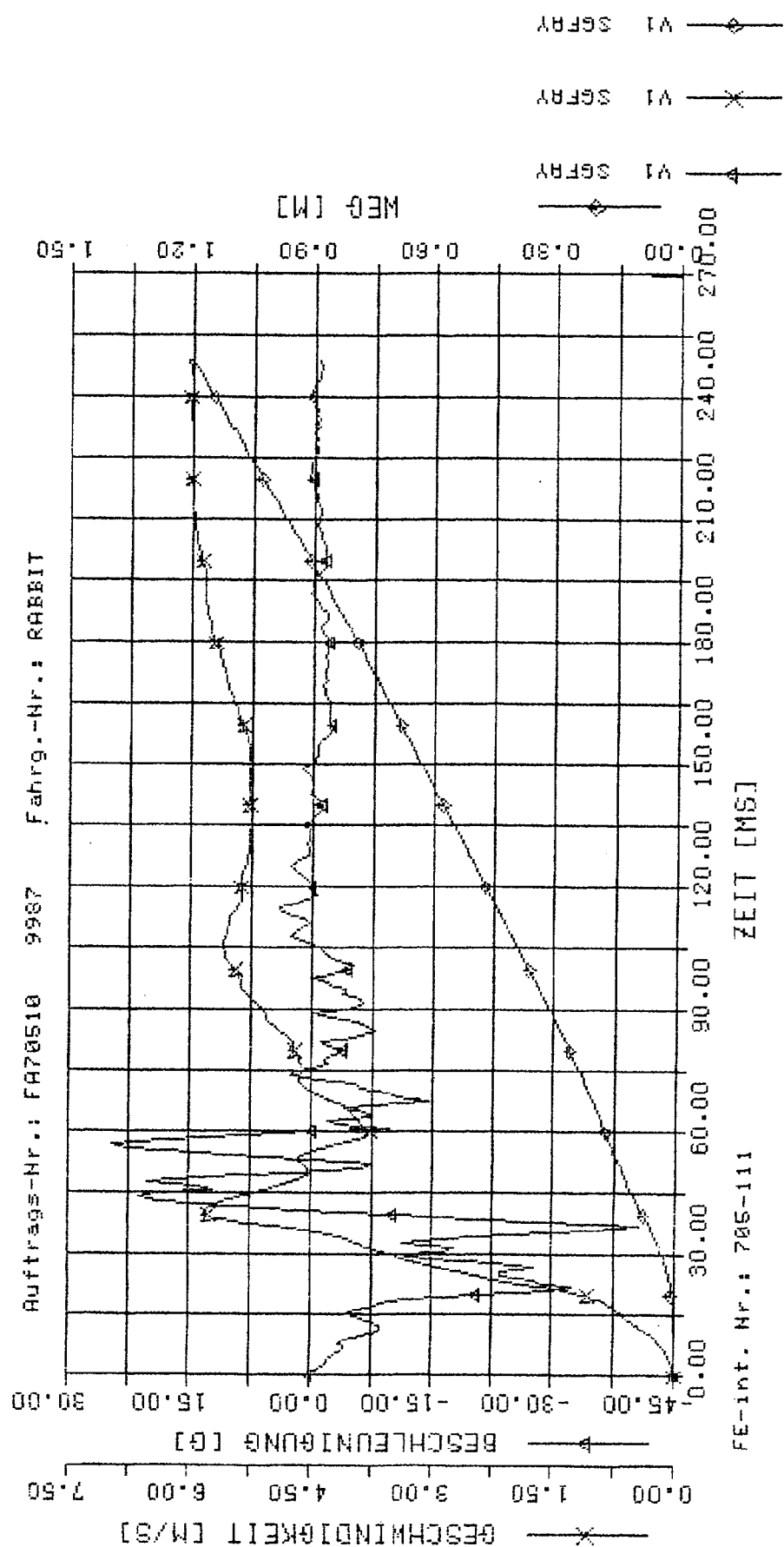
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987

Mess-Stelle	UP	ber.	Extremum	t	Ext.	MS
BSLRY	V1	BE	-49.659	60.00	0.00	
BSLRY	V1	GE	7.129	114.00	0.00	
BSLRY	V1	WE	1.270	251.00	0.00	



Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987

Mess-Stelle	UP	ber.	Grösse	Extremum	t	ΔMS
SGFAY	V1	BE	g	-40.825	37.00	0.00
SGFAY	V1	GE	m/s	6.047	251.00	0.00
SGFAY	V1	WE	m	1.213	251.00	0.00

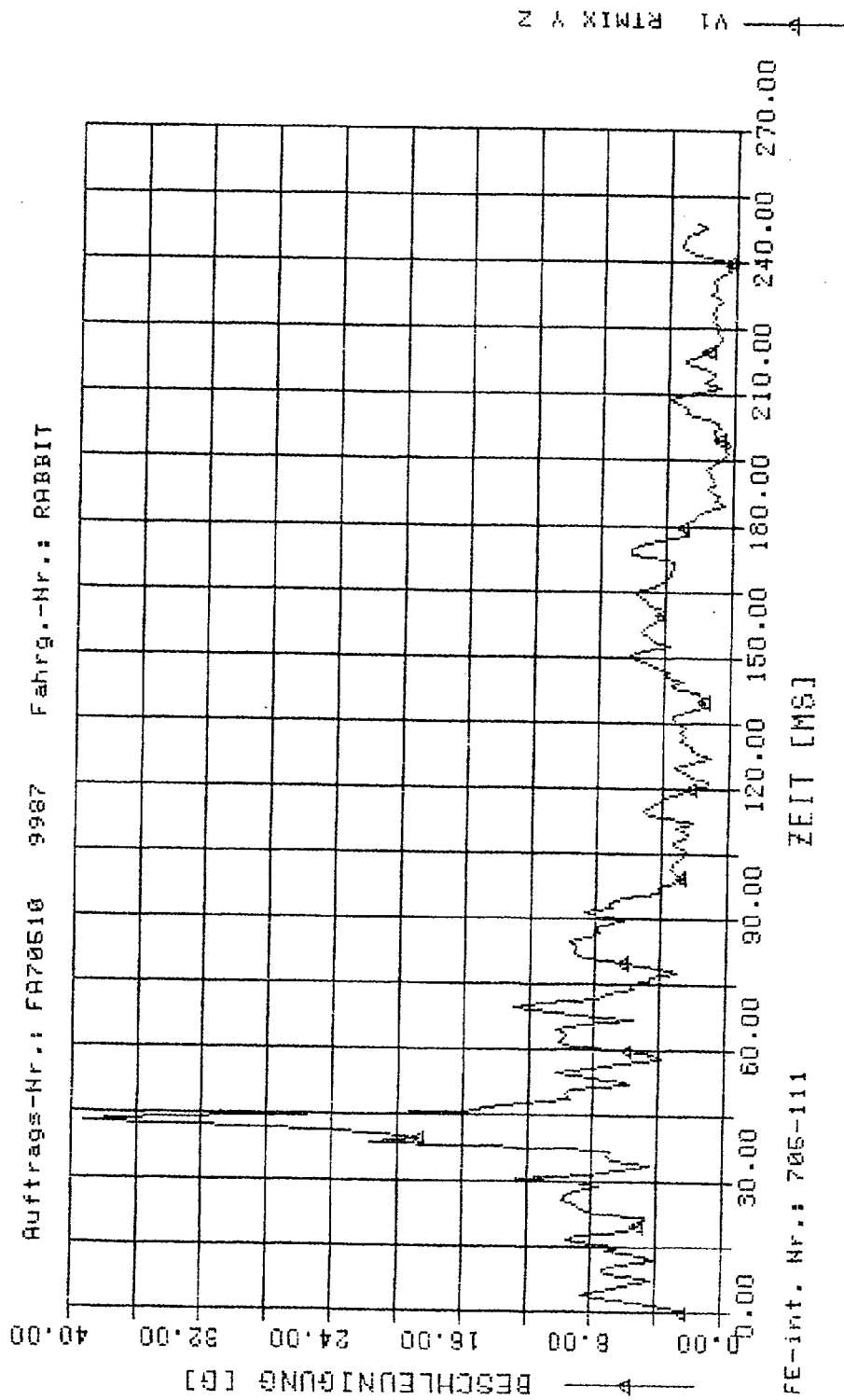


Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987

Mess-Stelle

RTMI

UP	ber.	Extremum	t	3MS
V1	BE	g	39.2/4	43.00
				0.00



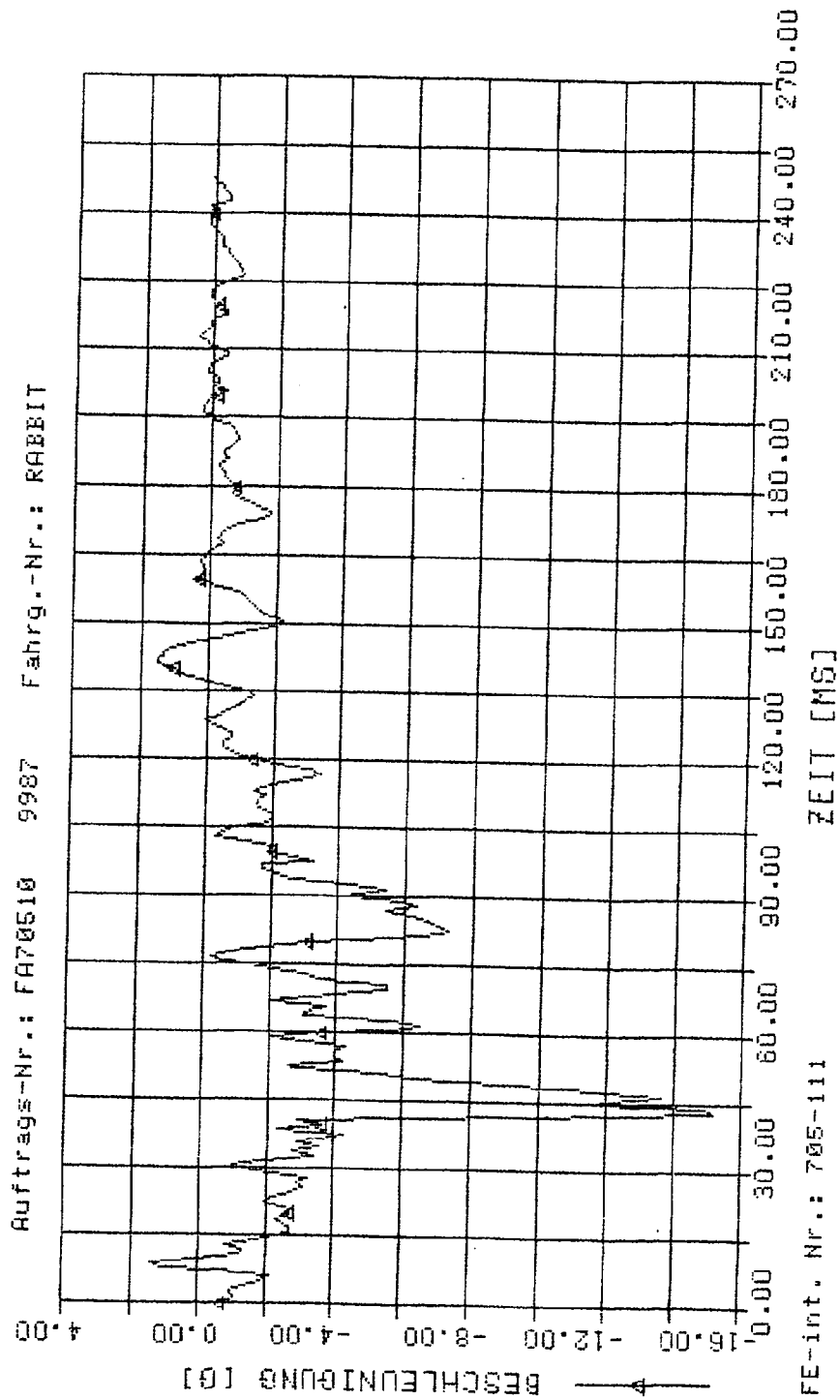
- Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987

Mess-Stelle

UP ber. Extremum t SMS

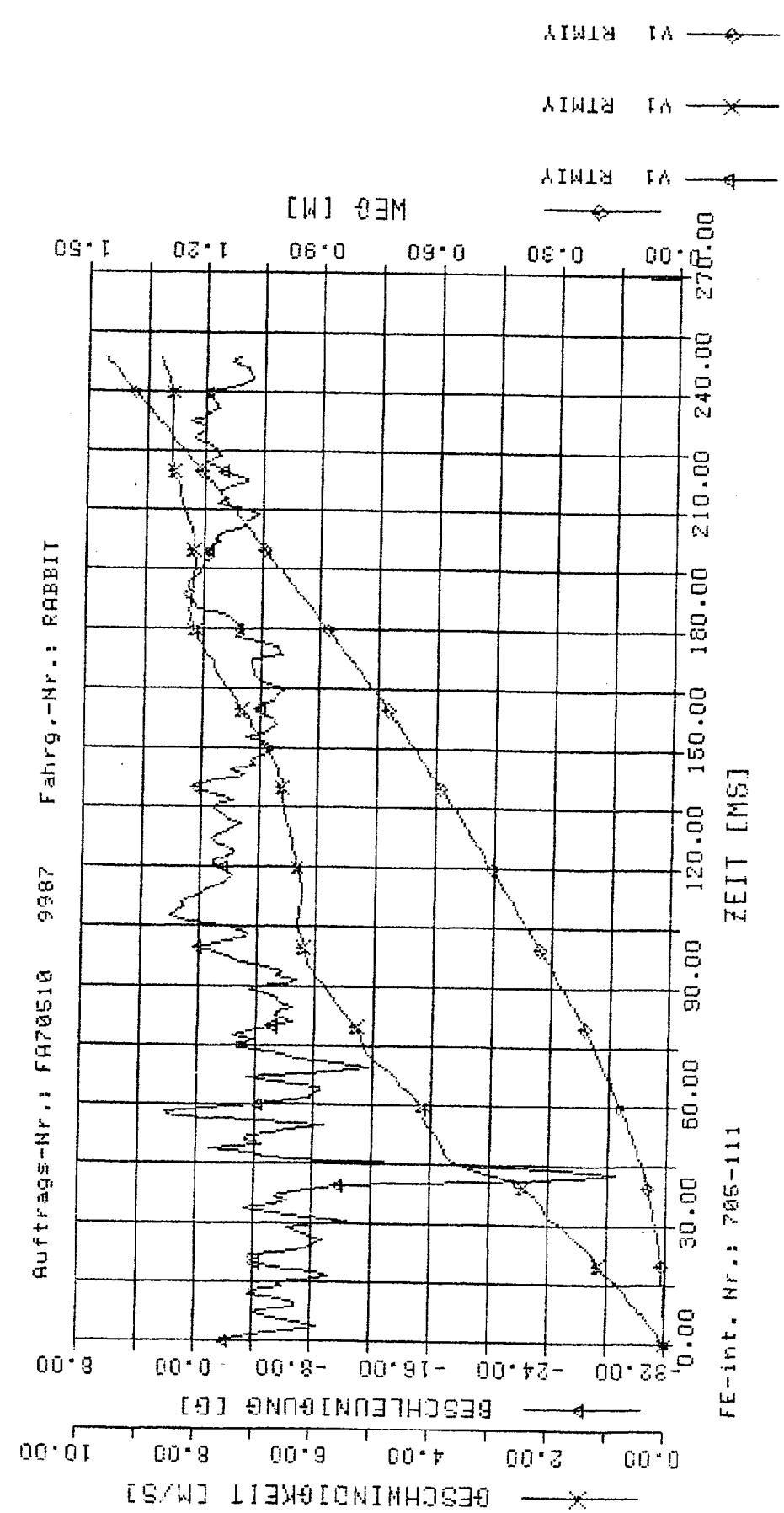
RTMIX

V1 BE g -15.155 Extr. 43.00 0.00



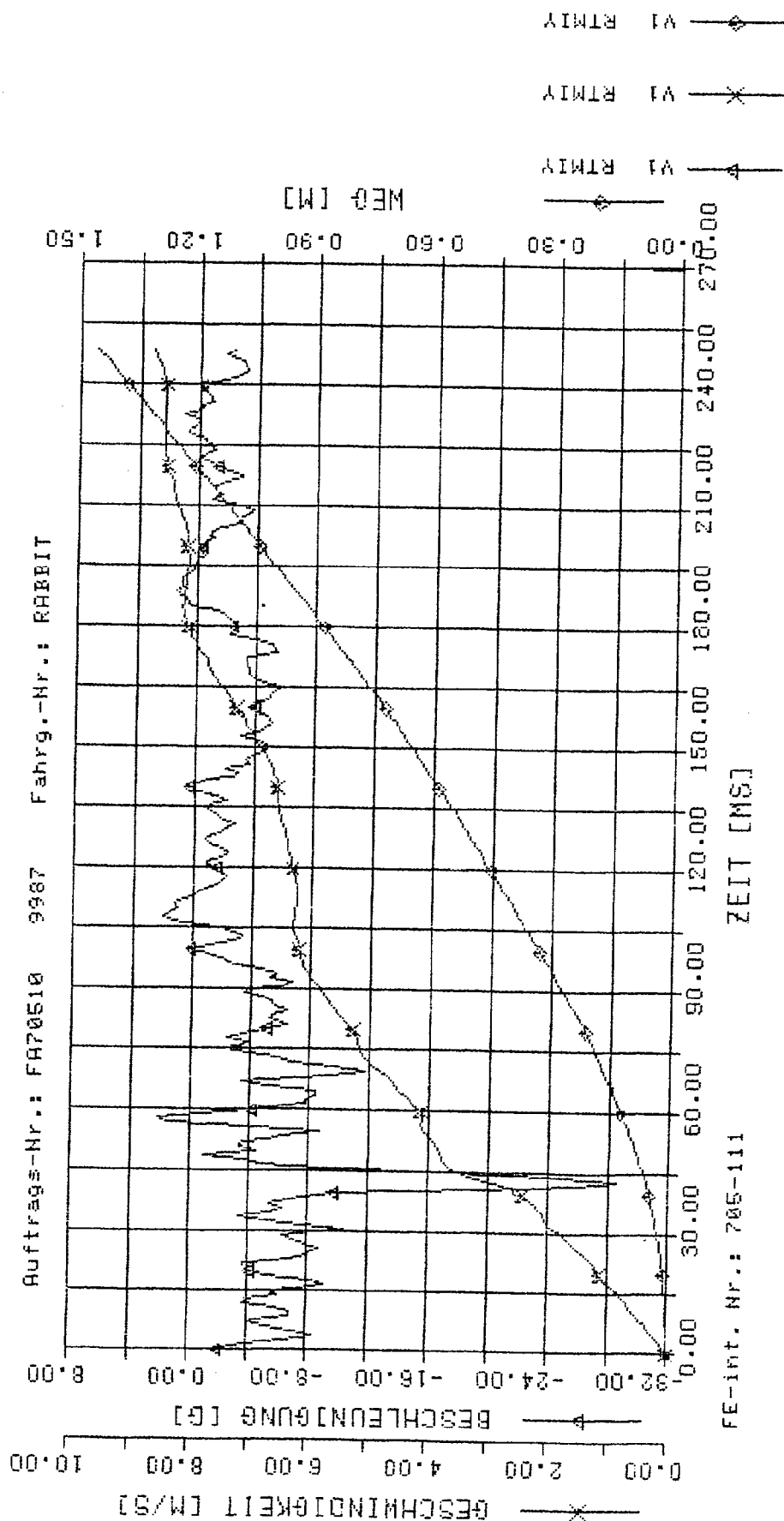
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987

Ness-Stelle	UP	ber.	Extremum	t	AMS
RTMIY	V1	GE g	-28.636	43.00	0.00
RTMIY	V1	GE m/s	8.025	251.00	0.00
RTMIY	V1	WE m	1.475	251.00	0.00



Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987

Mess-Stelle	UP	ber.	Extremum	t	SMS
RTMIY	V1	Grösse		Extr.	
RTMIY	V1	DE g	28.636	43.00	0.00
RTMIY	V1	GE m/s	8.025	251.00	0.00
RTMIY	V1	DE m	1.475	251.00	0.00



Kennwerte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987

Mess-Stelle

UP ber. Extremum t

3MS

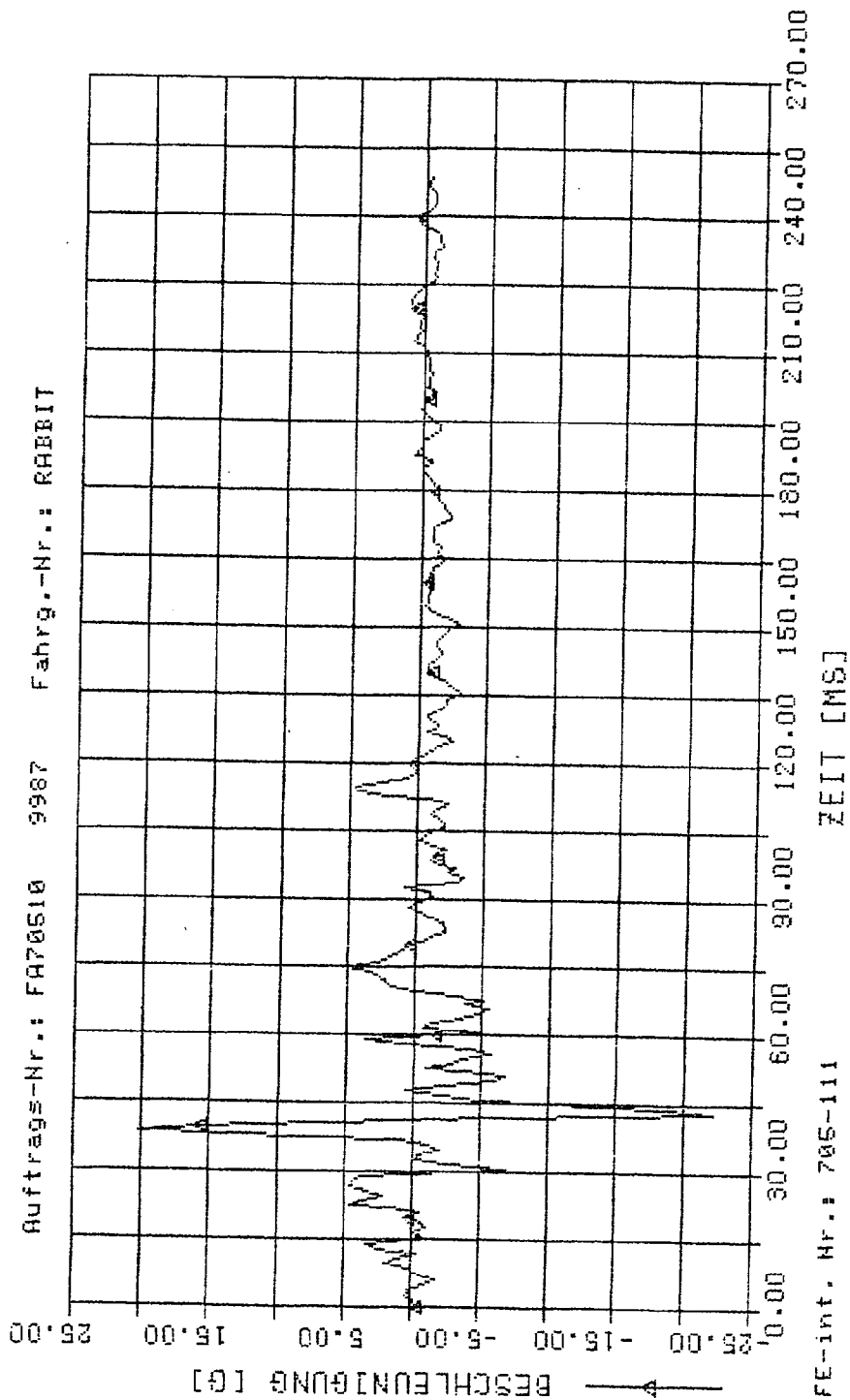
RTMIZ

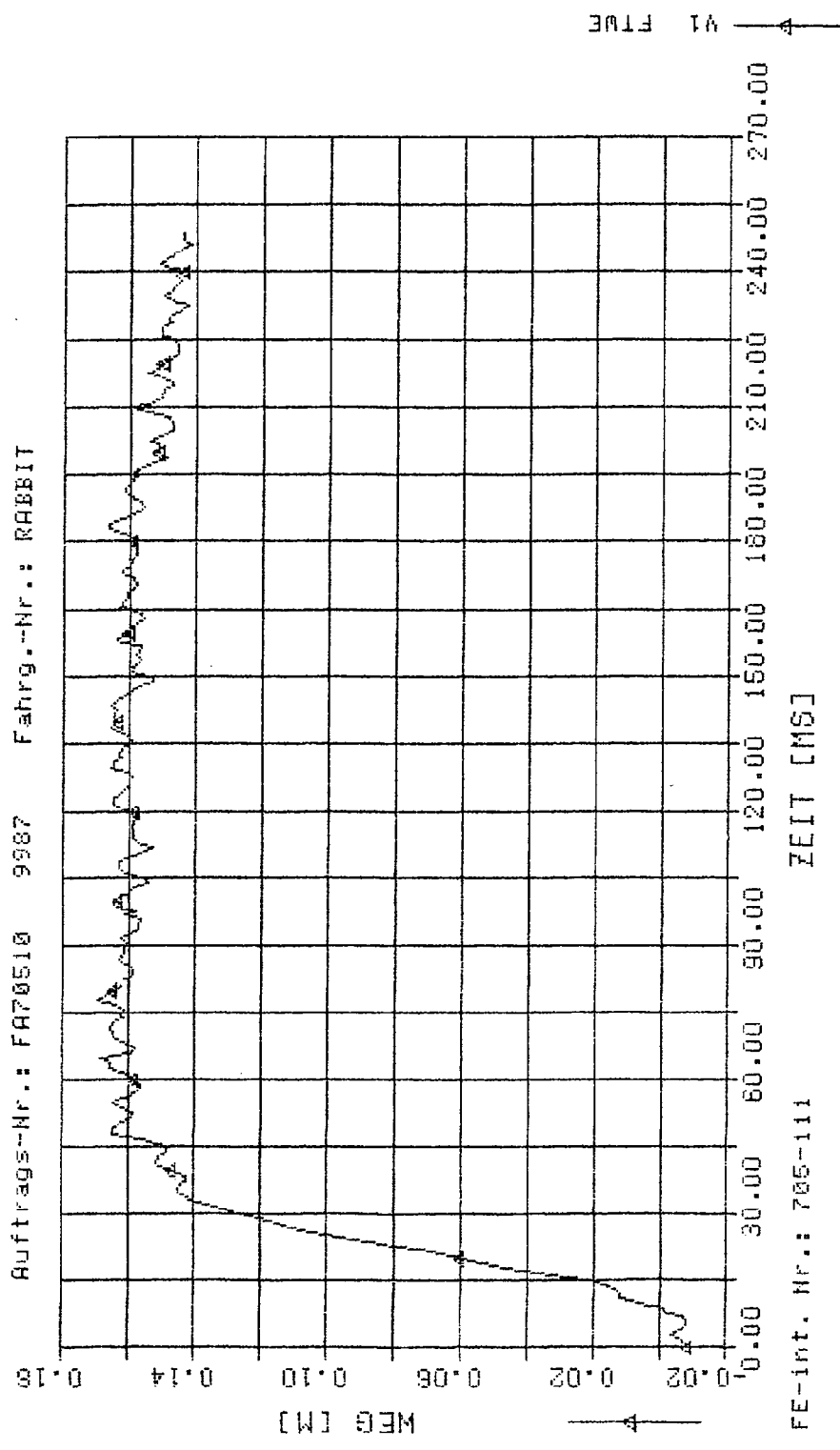
V1 BE g

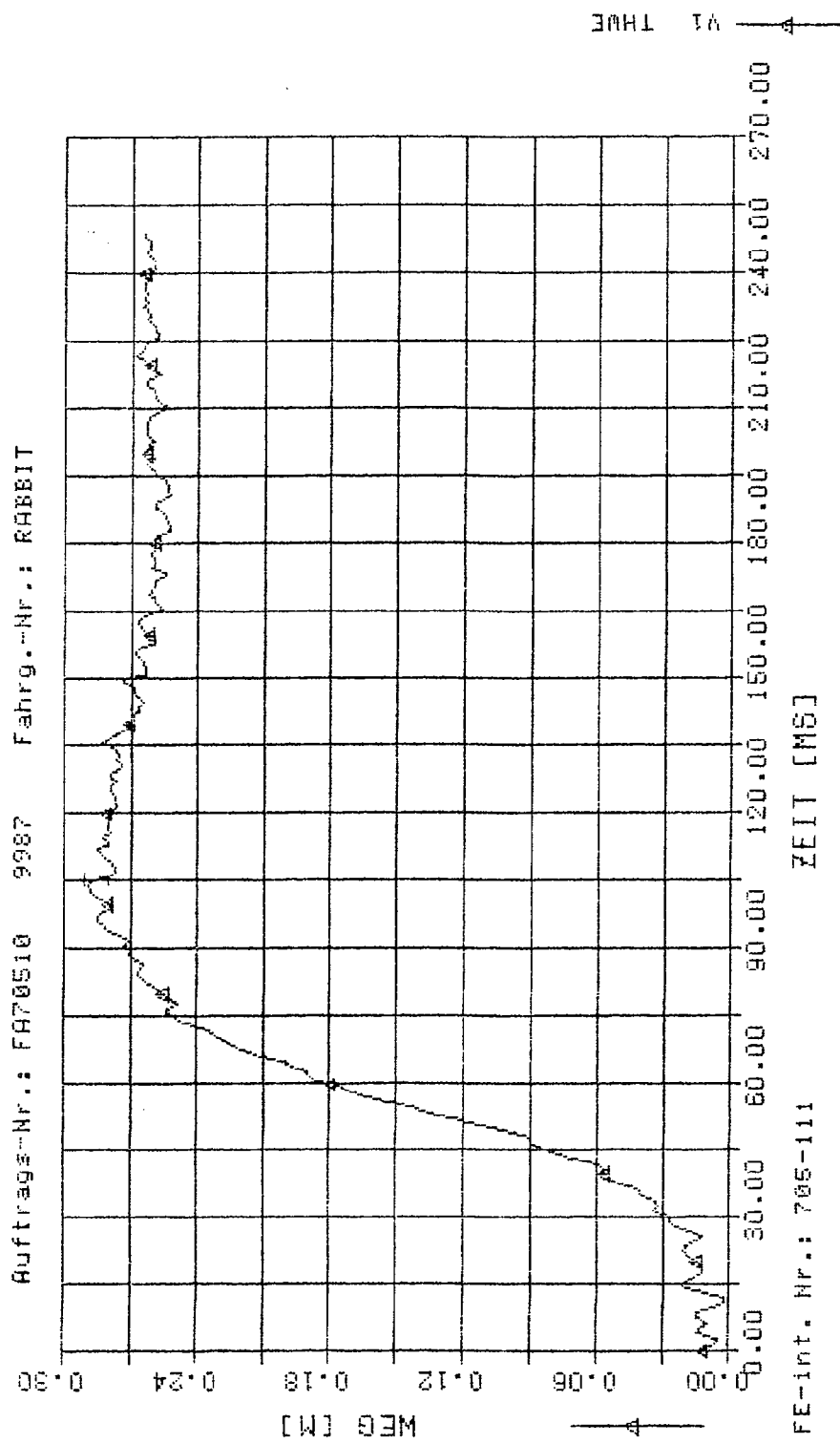
-22.197

Extr. 43.00

0.00



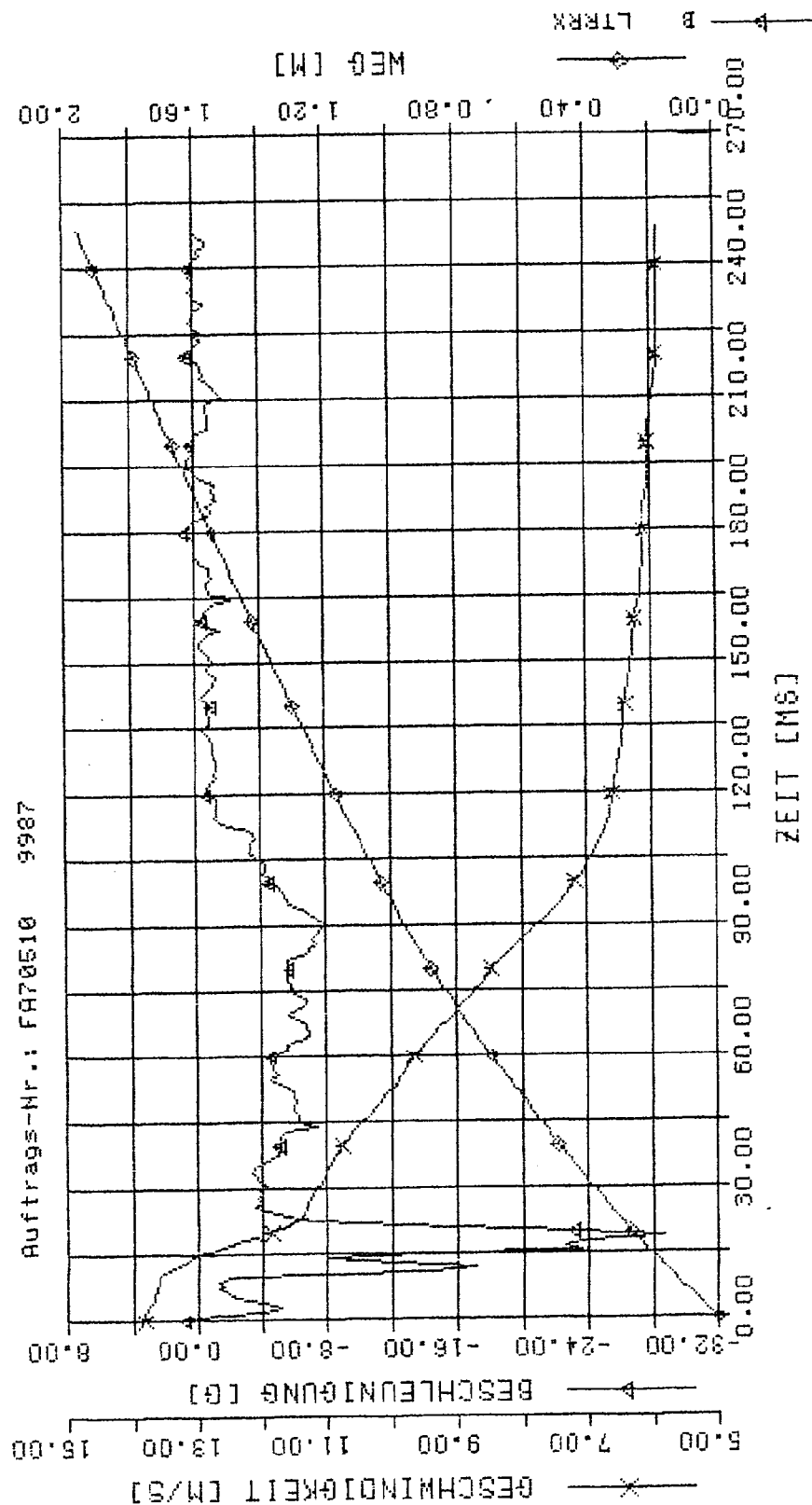




B.1.2 Crabbed Barrier

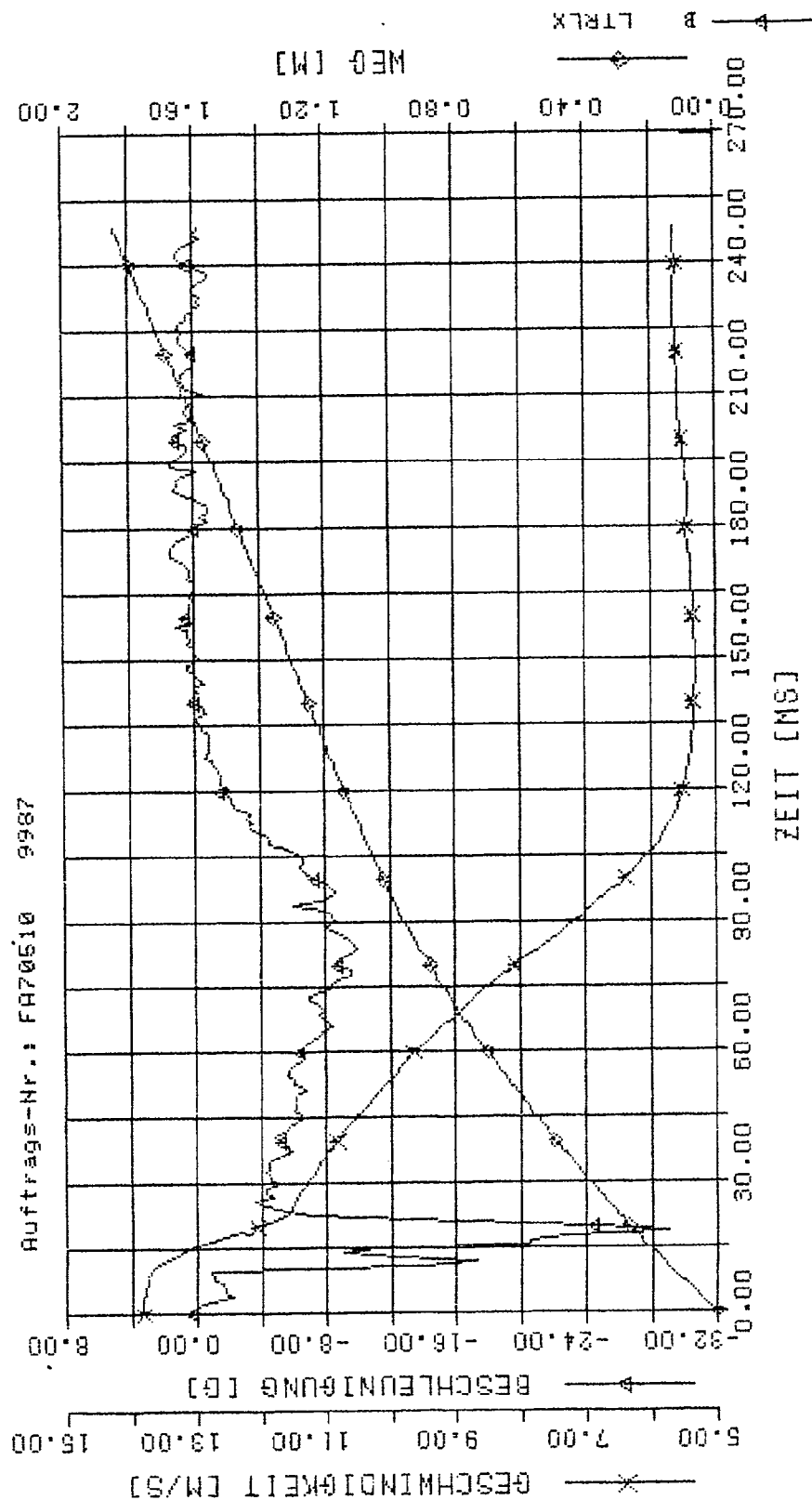
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987

Mess-Stelle	UP	ber.	Extremum	t	Extr.	MS
LTRRX	B	GE g	-28.739	19.00	0.00	
LTRRX	B	GE m/s	13.822	1.00	0.00	
LTRRX	B	WE m	1.967	251.00	0.00	



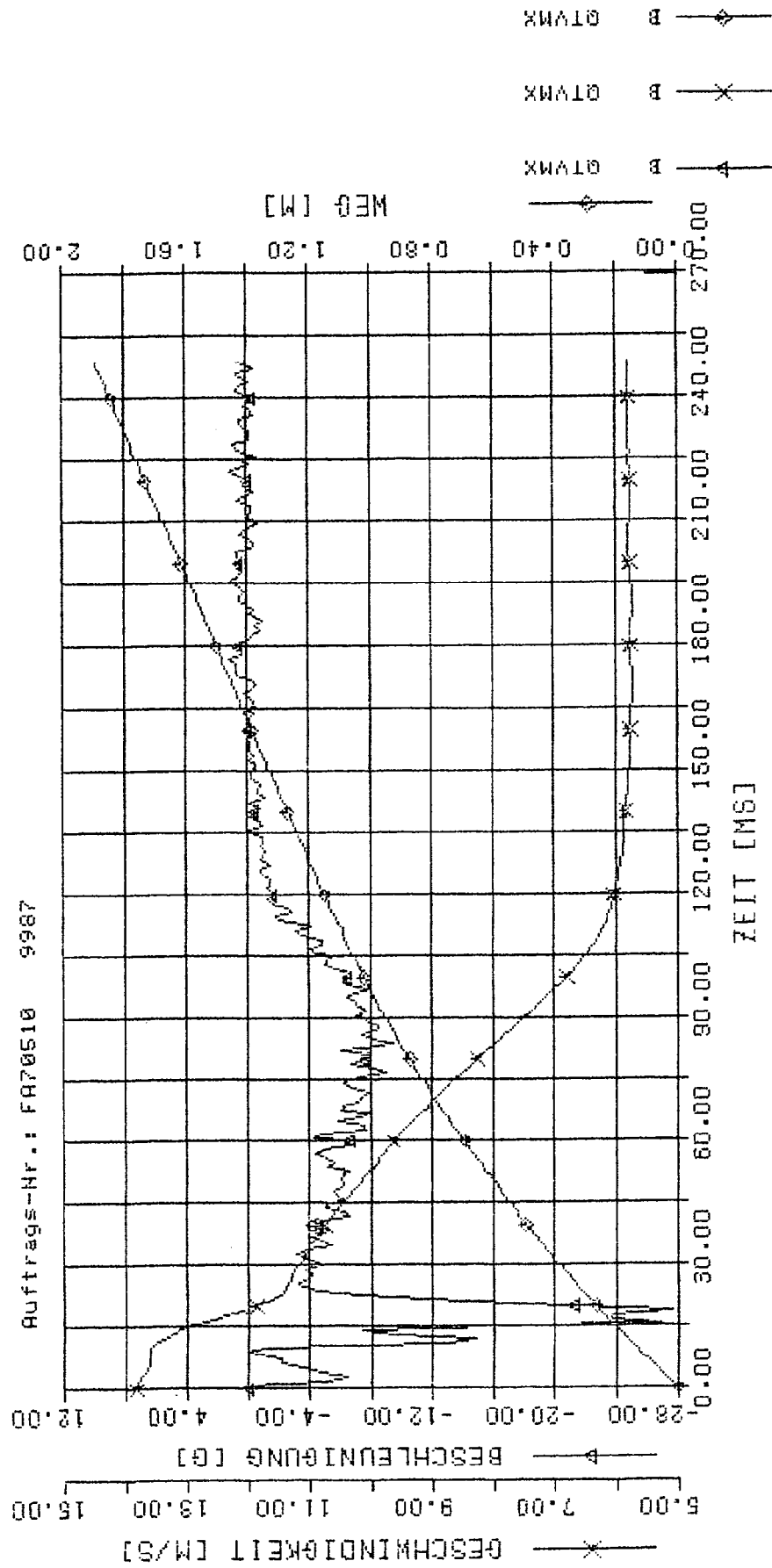
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987

Mess-Stelle	UP	ber.	Extremum	t	ΔMS
LTRLX	B	GE g	-29.112	19.00	0.00
LTRLX	B	GE m/s	13.821	2.00	0.00
LTRLX	B	GE m	1.855	251.00	0.00



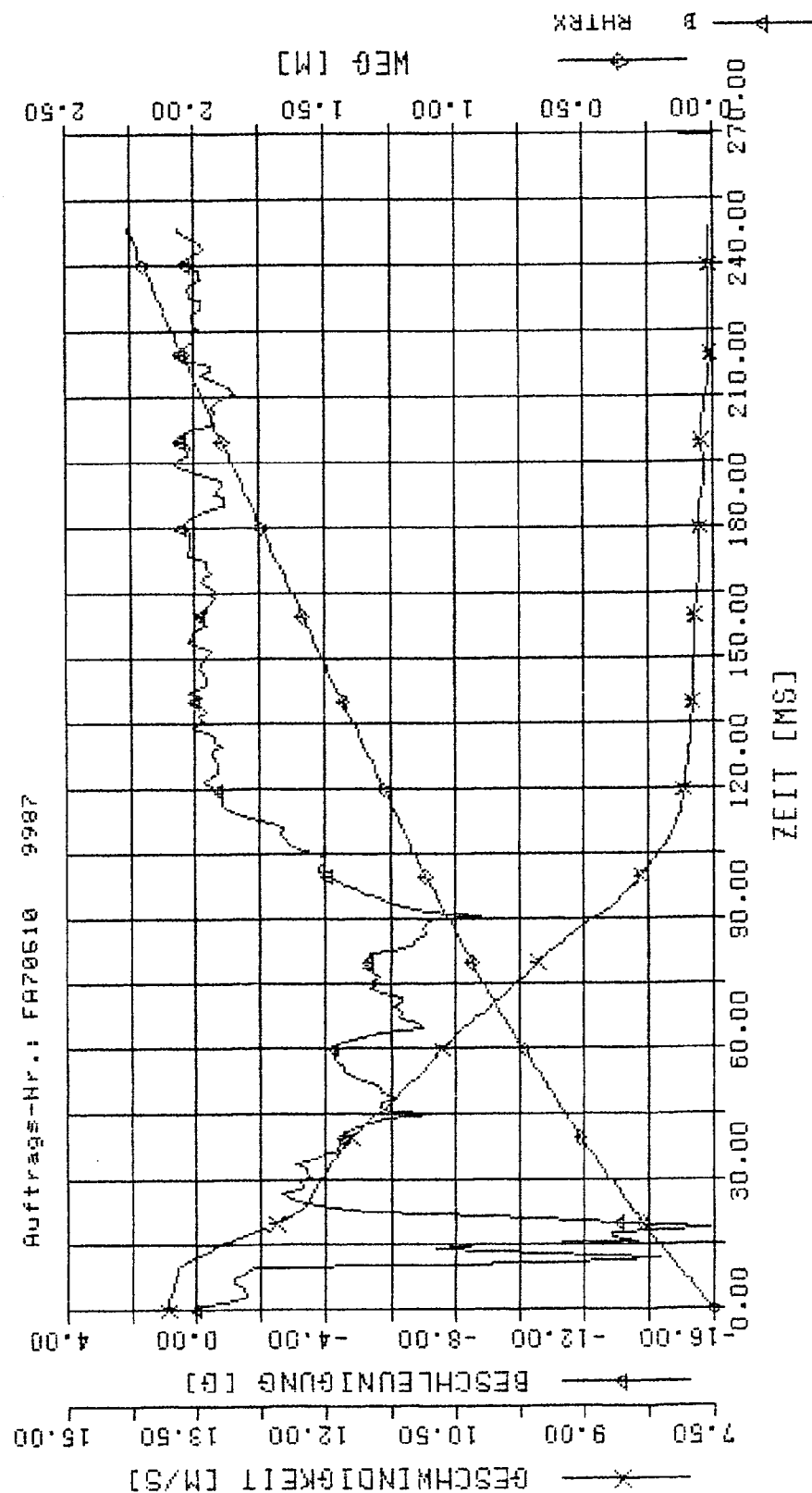
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987

Mess-Stelle	UP	ber.	Extremum	t	ΔMS
QTVMX	B	Grösse	-27.579	19.00	0.00
QTVMX	B	WE g	13.817	1.00	0.00
QTVMX	B	GE m/s	1.705	251.00	0.00



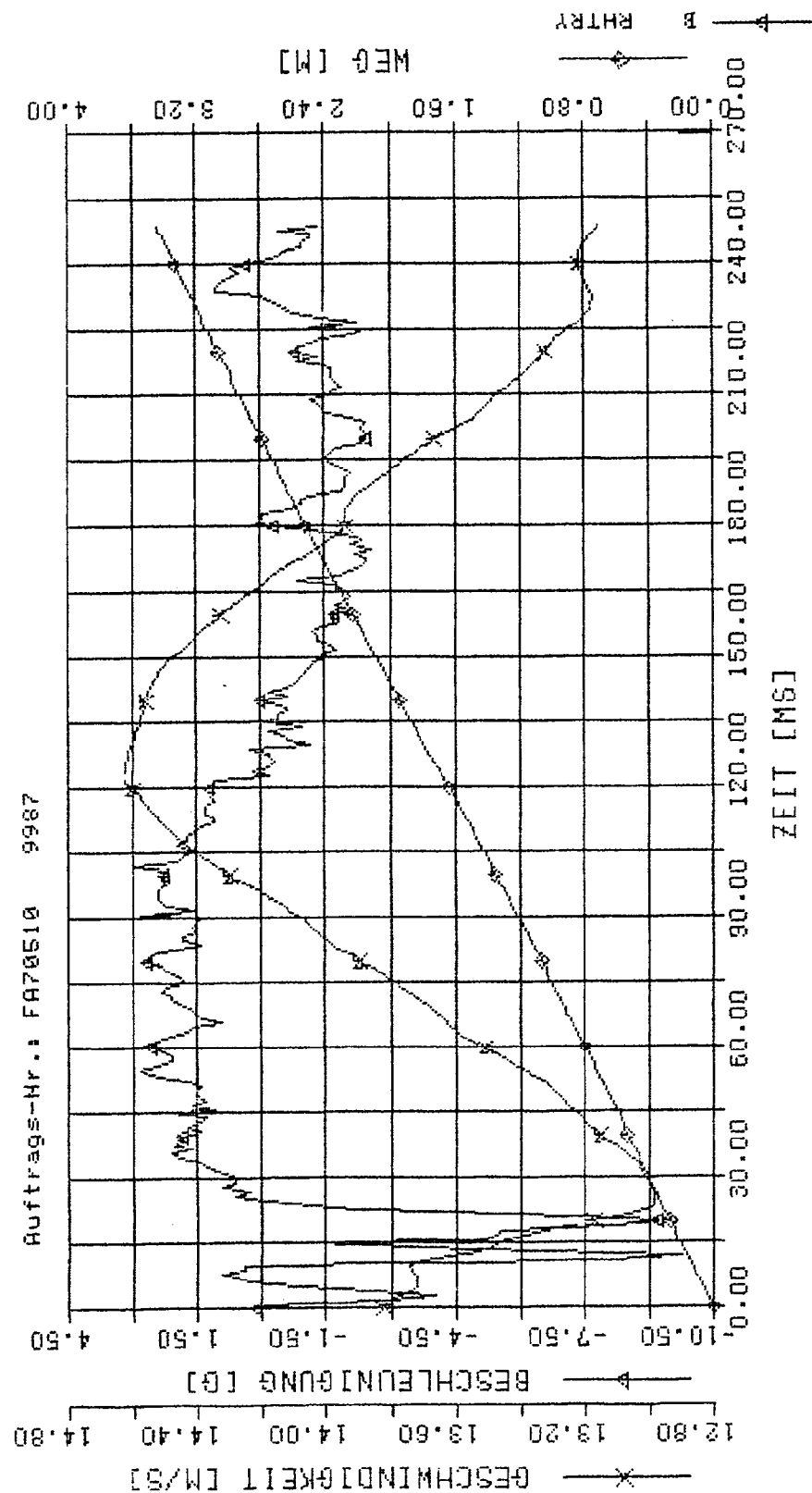
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987

Mess-Stelle	UP	ber.	Extremum	t	ΔMS
RHTRX	B	GE g	-15.858	17.00	0.00
RHTRX	B	GE m/s	13.817	0.00	0.00
RHTRX	B	WE m	2.275	251.00	0.00



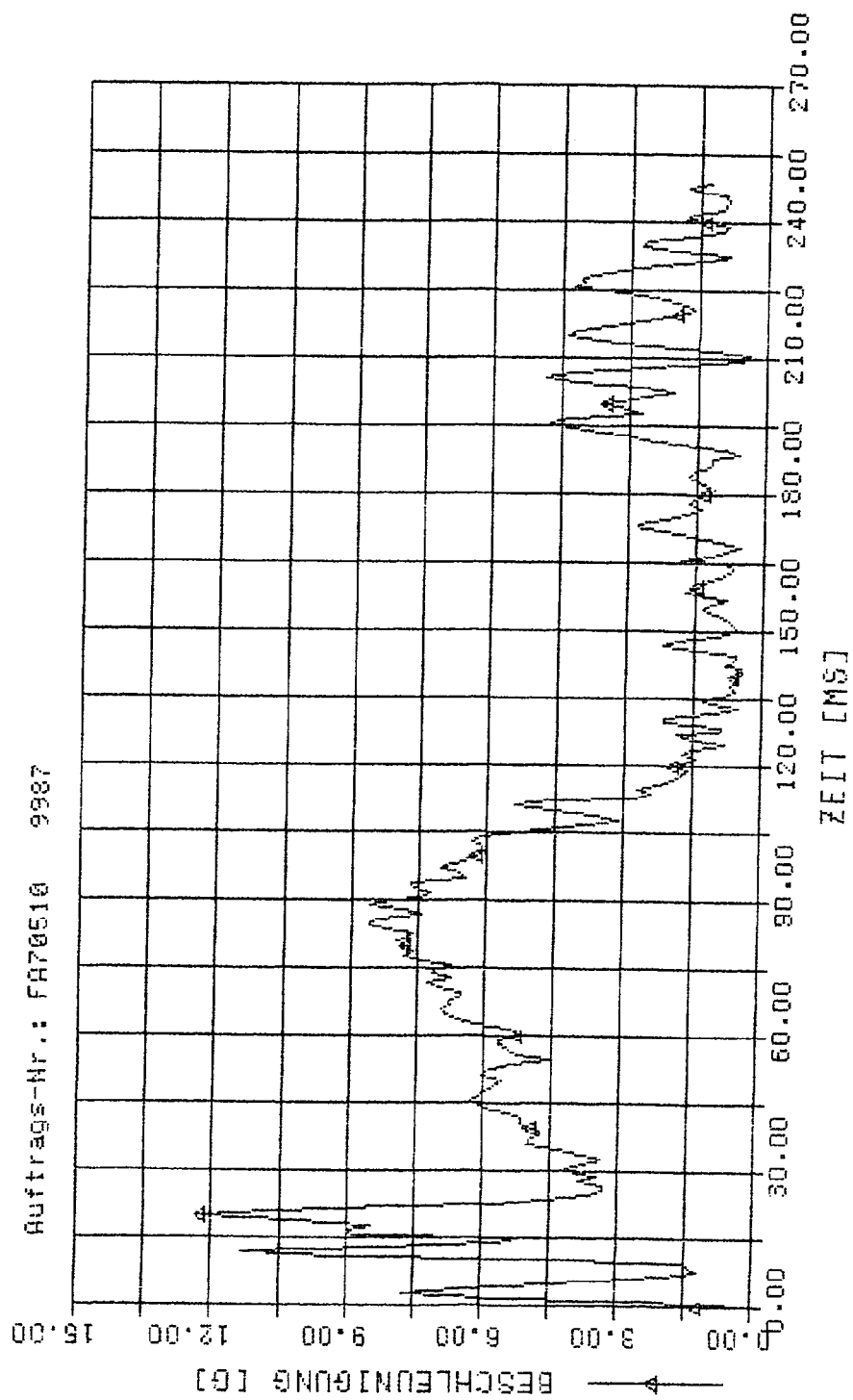
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987

Mess-Stelle	UP	ber.	Grösse	Extremum	t	Extr.	3MS
RHTRY	B	BE	g	-9.746	12.00	12.00	0.00
RHTRY	B	GE	m/s	14.620	123.00	123.00	0.00
RHTRY	B	WE	m	3.463	251.00	251.00	0.00



Kennwerte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987

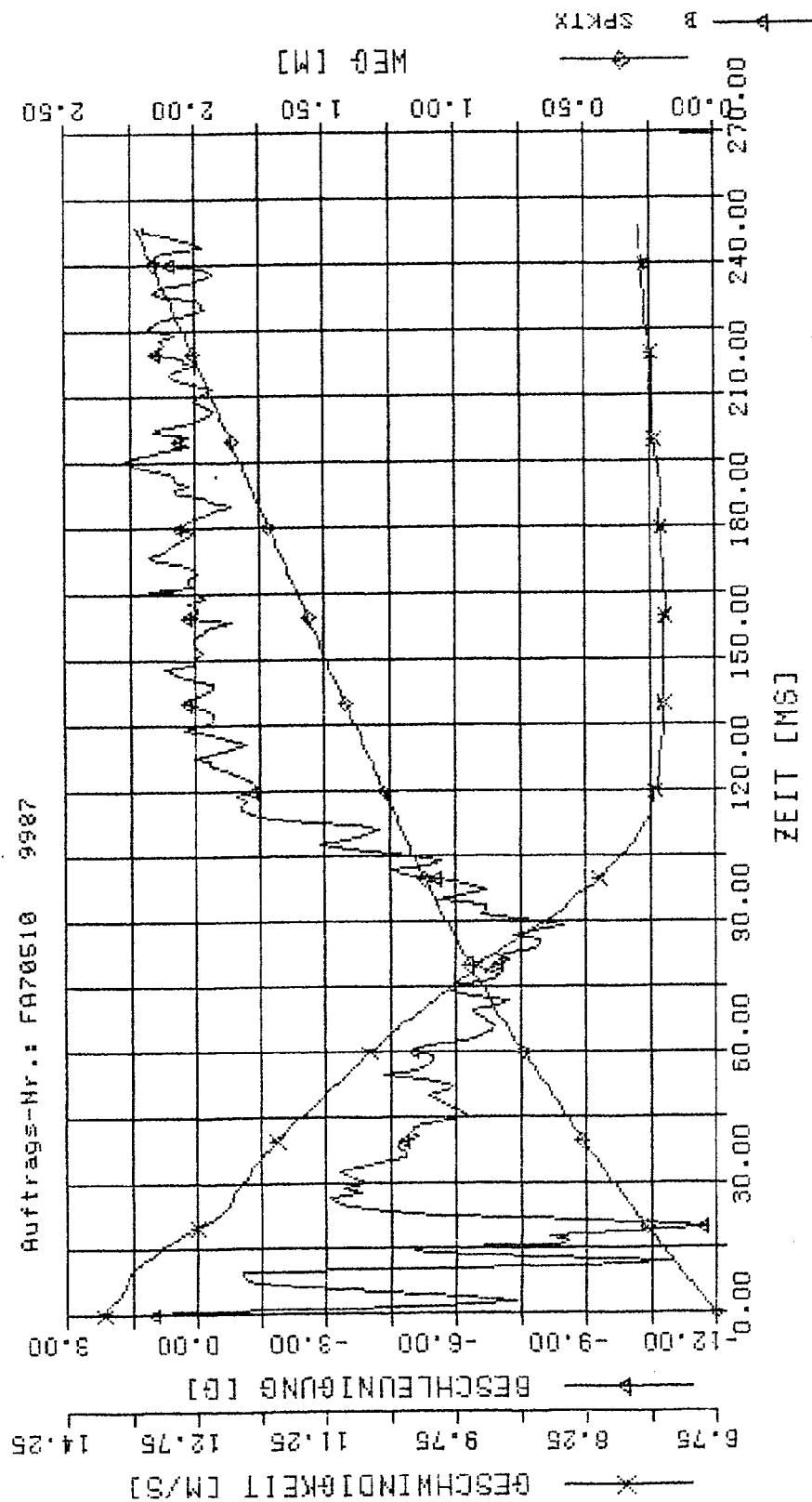
Mess-Stelle
 SPKT
 UP
 B
 ber.
 Groesse
 BE g
 Extremum
 t
 Extr.
 20.00
 0.00



SPKTX Y Z

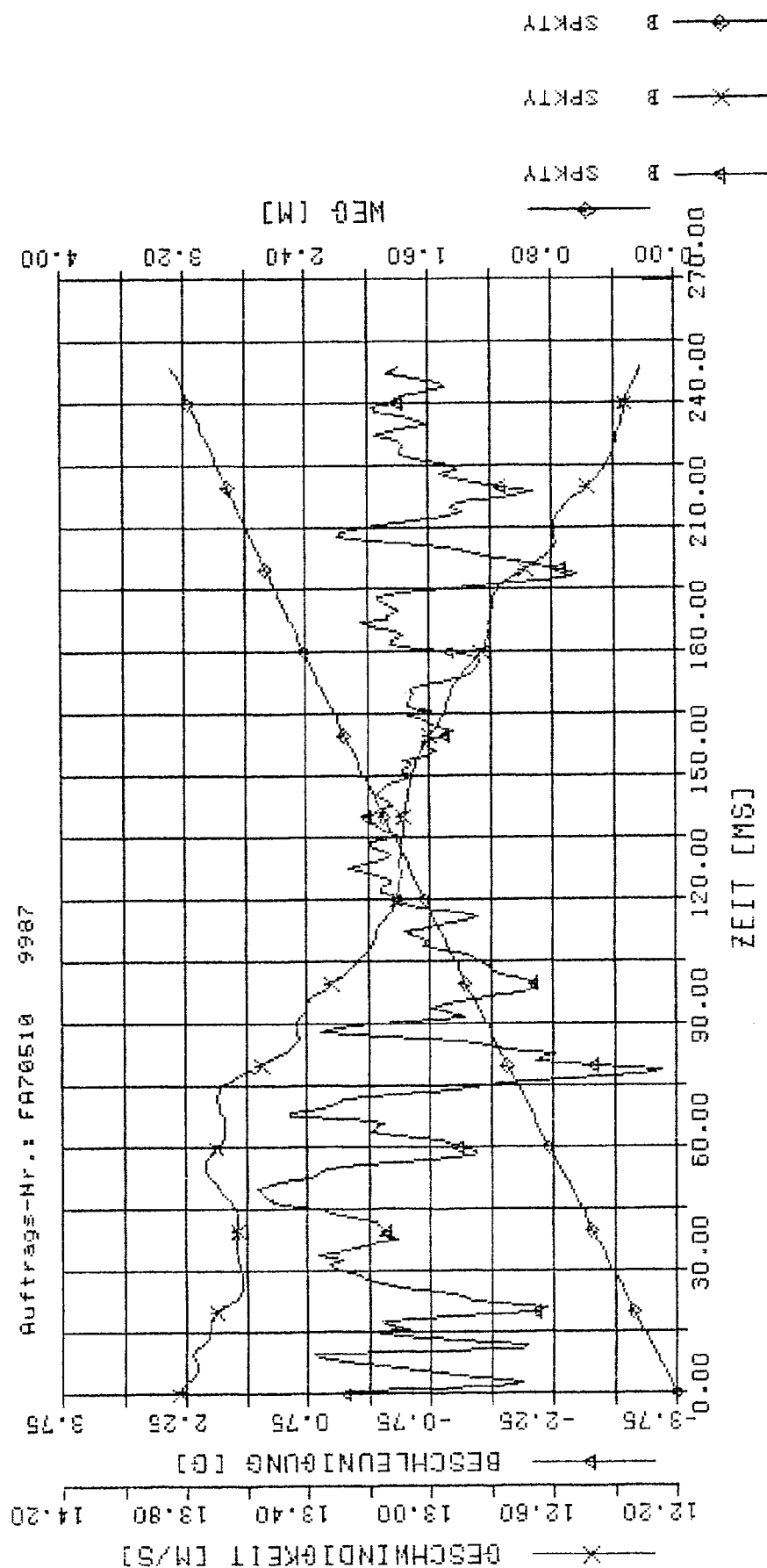
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987

Mess-Stelle	UP	ber.	Grösse	Extremum	t	Extr.	ΔMS
SPKTX	B	BE	g	-11.743	20.00	0.00	0.00
SPKTX	B	GE	m/s	13.823	1.00	0.00	0.00
SPKTX	B	WE	m	2.241	251.00	0.00	0.00



Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987

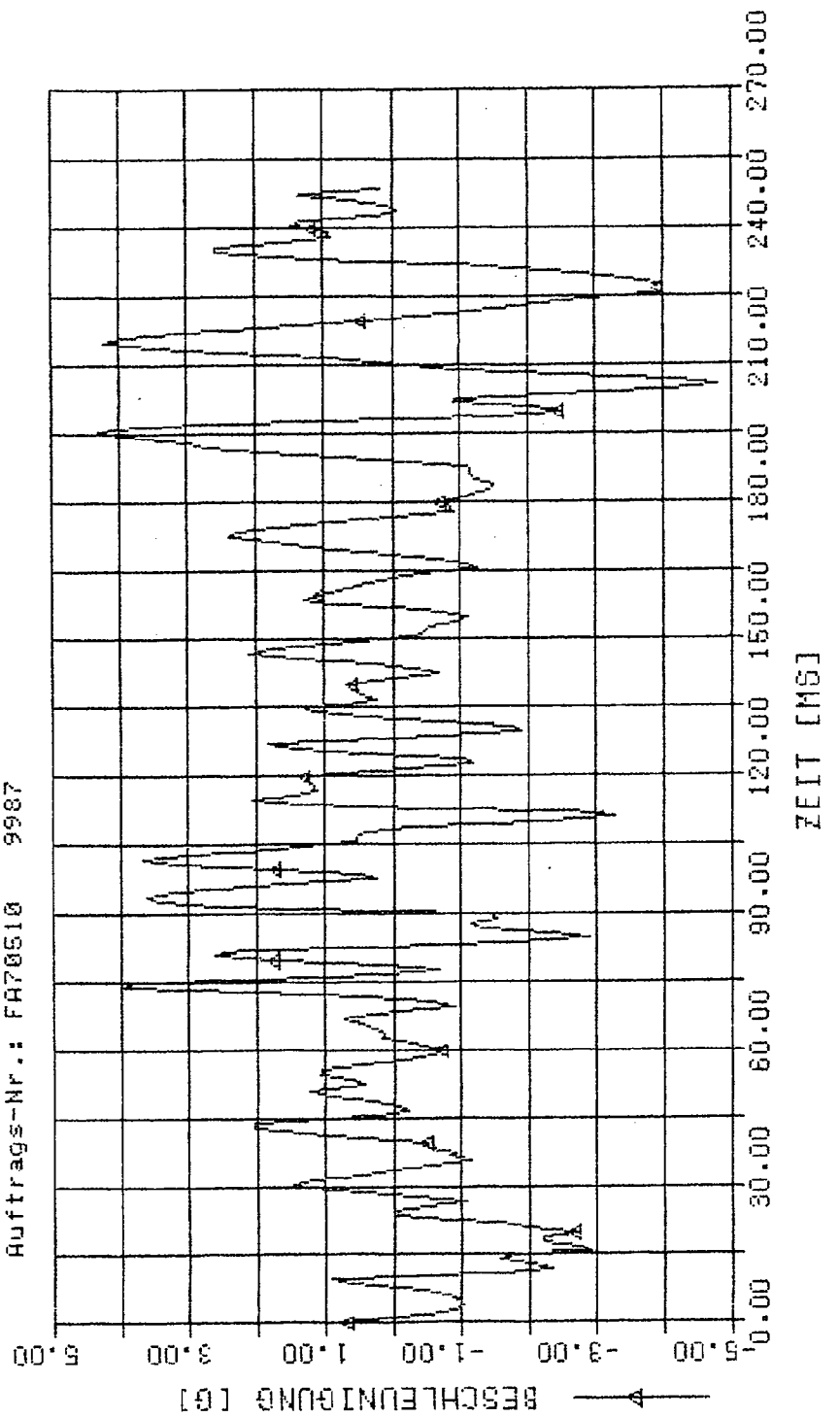
Mess-Stelle	UP	ber.	Extremum	t	3HS
SPKTY	B	Grösse	-3.569	79.00	0.00
SPKTY	B	BE g	13.819	1.00	0.00
SPKTY	B	GE m/s	3.299	251.00	0.00
SPKTY	B	WE m			



Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987

Mess-Stelle UP ber. Extremum t SMS
Grösse Extr.
B RE g -4.809 206.00 0.00
SPKTZ

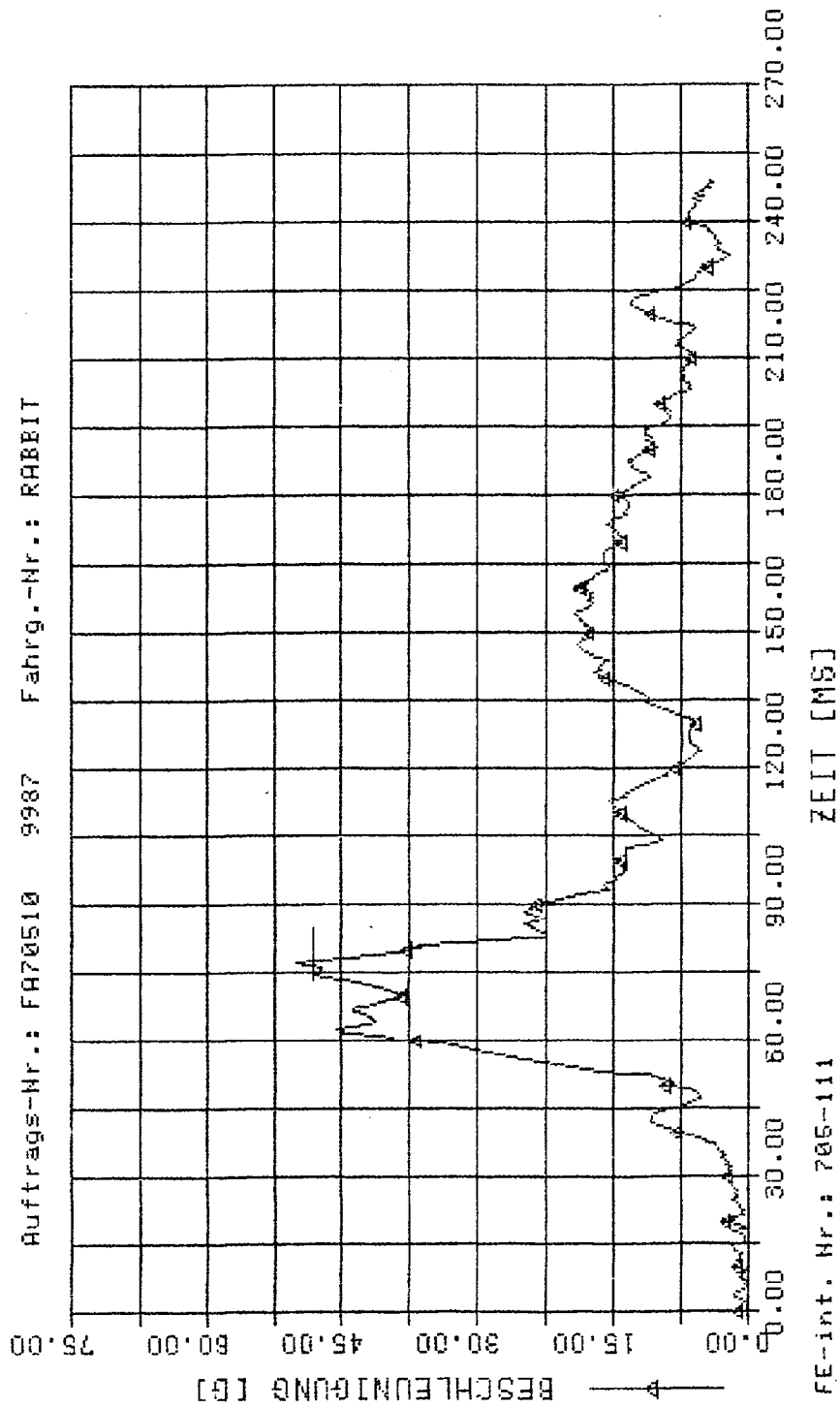
Auftrags-Nr.: FA70510 9987



B.2 Dummy Test Response
B.2.1 Driver

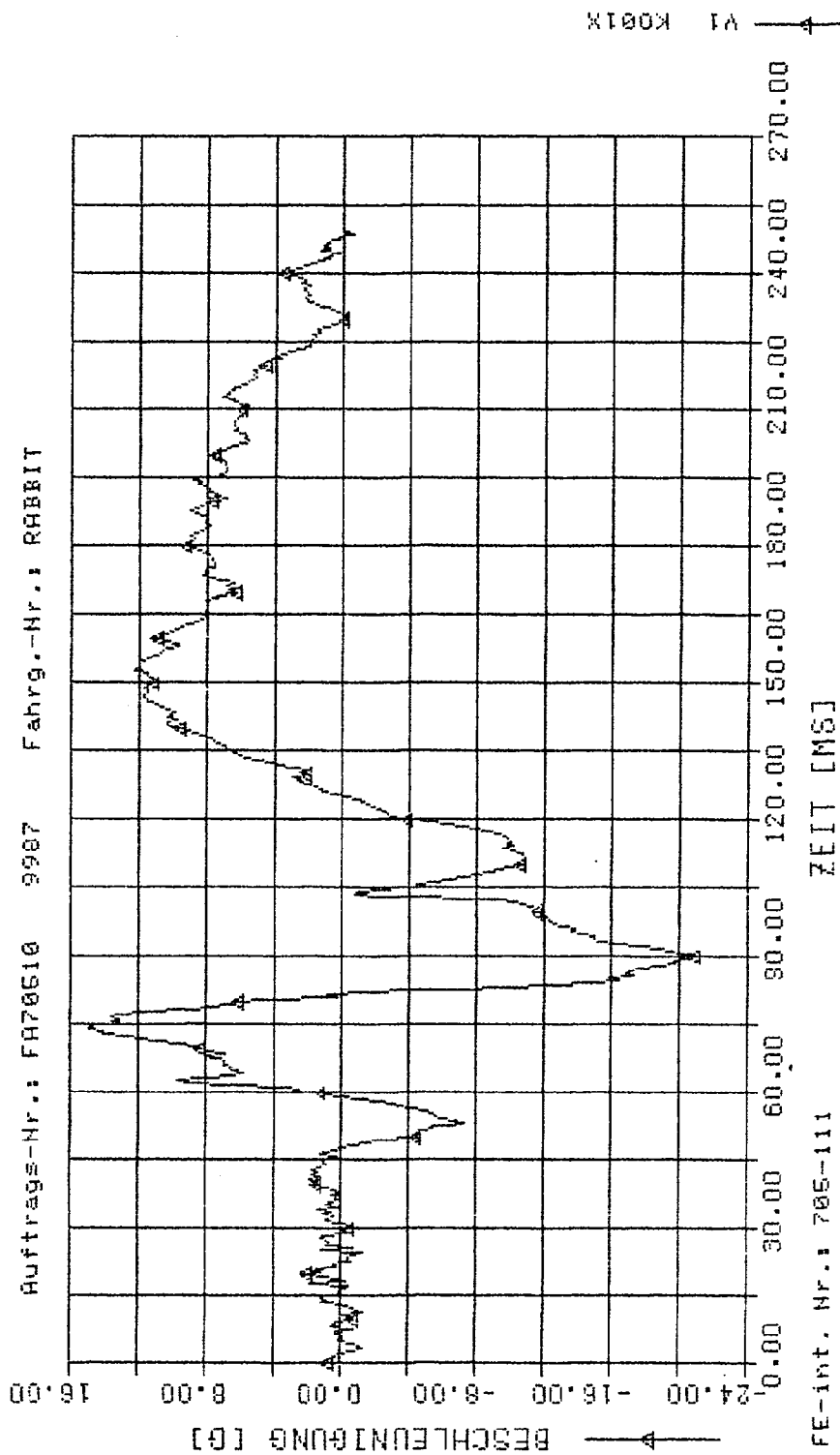
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987

Mess-Stelle UP ber. Extremum t 3MS
V1 BE g Groesse Extr. 77.40 47.38
K001



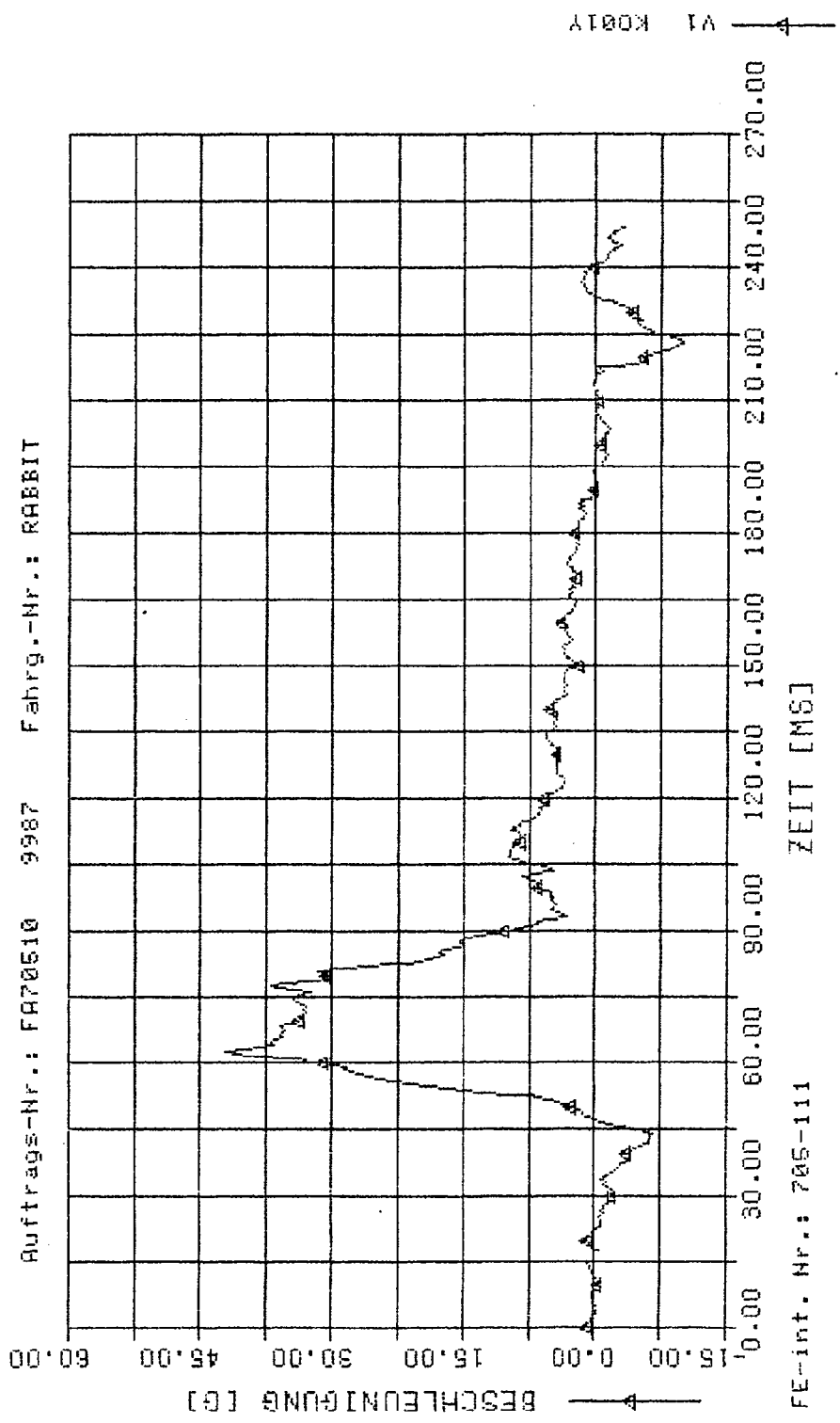
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9907

Mess-Stelle	UP	ber.	Extremum	t	Ext.
K001X	V1	BE	g	-21.480	90.20
					13.59



Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987

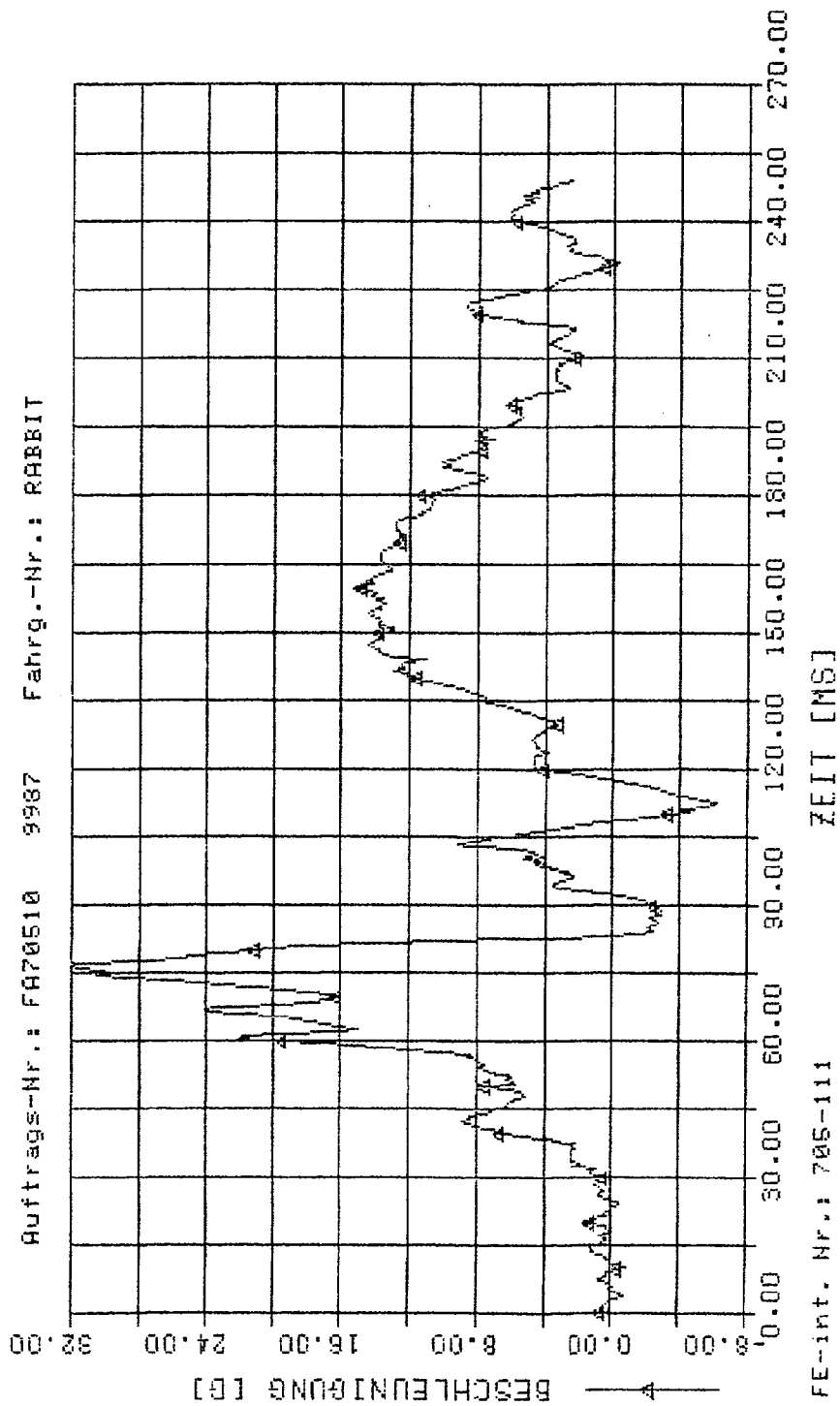
Mess-Stelle	UP	ber.	Extremum	t	3MS
K001Y	V1	BE	Groesse	Extr.	
			g	63.00	36.87



Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987

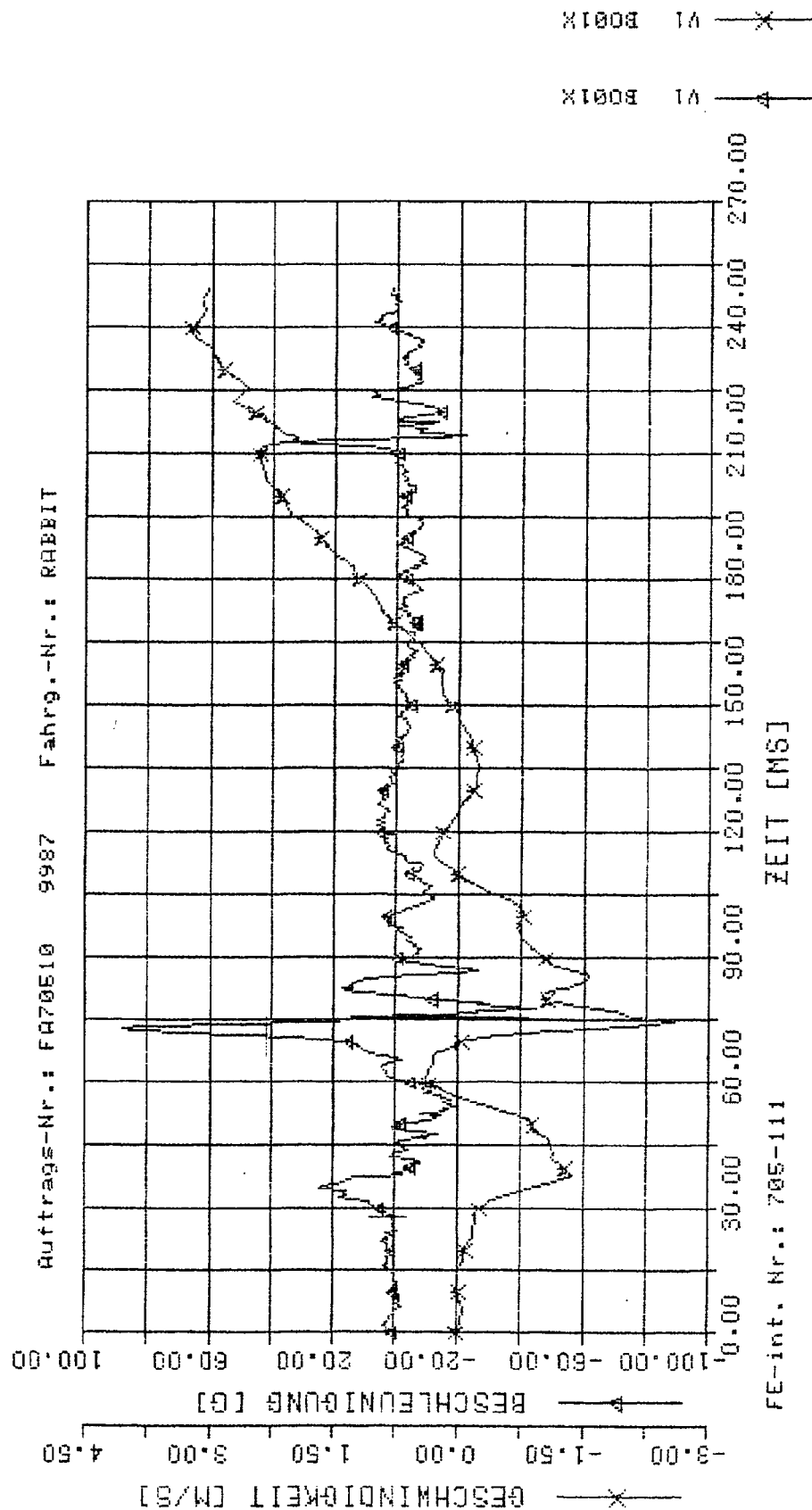
Mess-Stelle
K001Z

UP	ber. Grösse	Extremum	t	ΔMS
V1	BE g	32.491	76.70	29.28



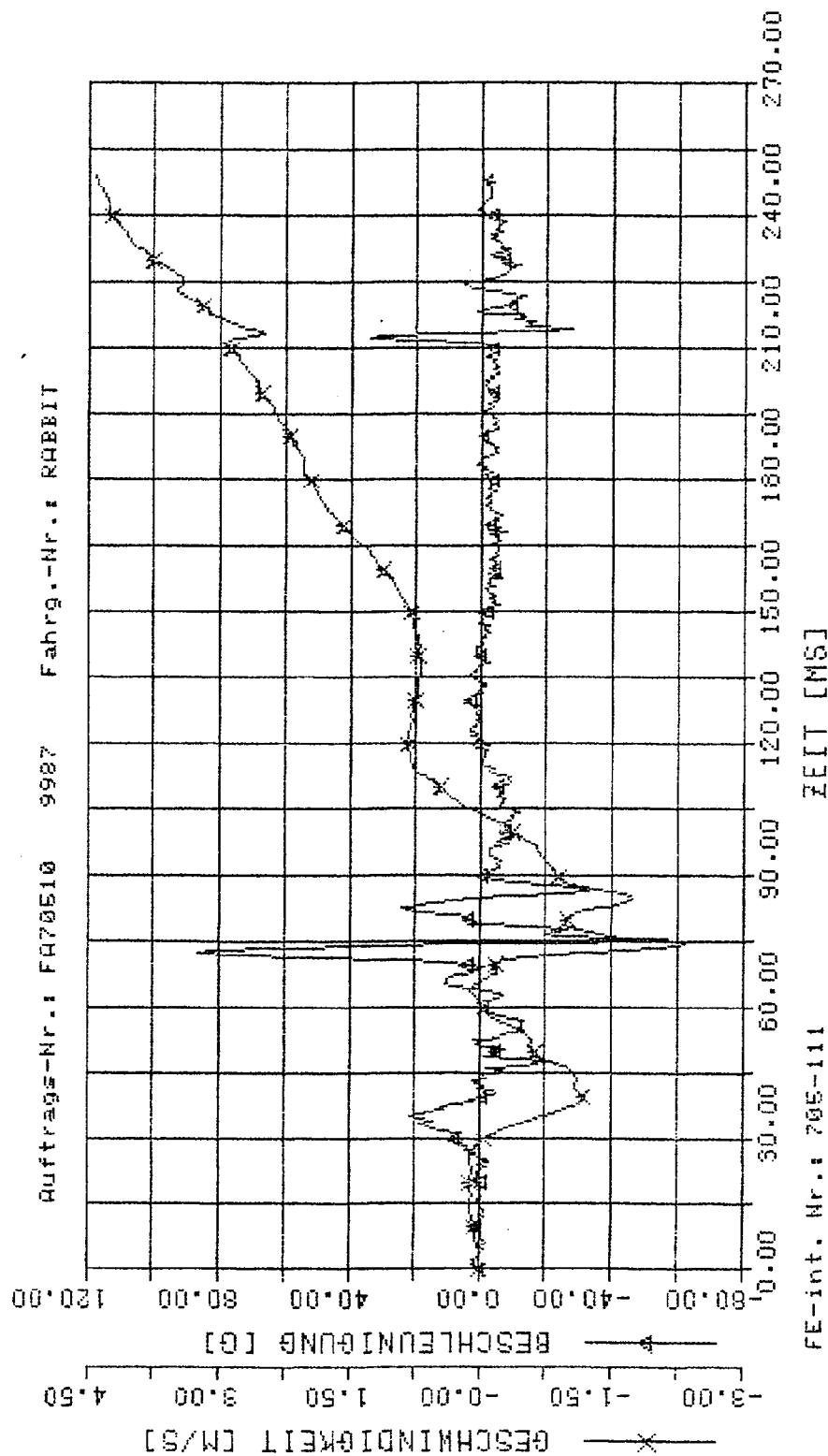
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987

Mess-Stelle	UP	ber.	Extremum	t	δMS
B001X	V1	BE g	-116.240	75.40	0.00
B001X	V1	GE m/s	3.233	239.40	0.00



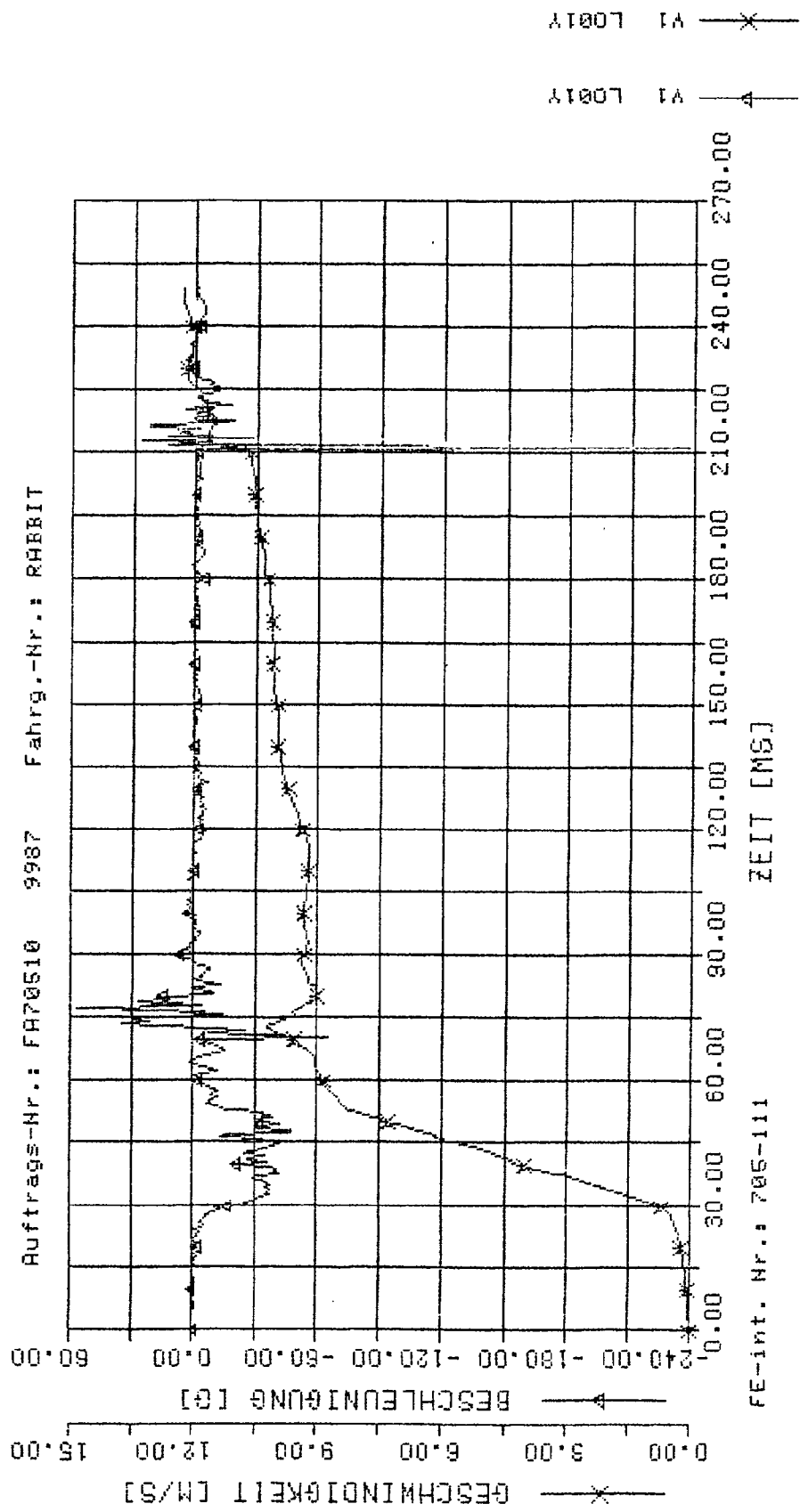
- Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987

Mess-Stelle	UP	ber.	Extremum	t	AMS
BU01X	VI	BE g	-91.611	75.10	0.00
BU01X	VI	GE m/s	4.473	251.90	0.00



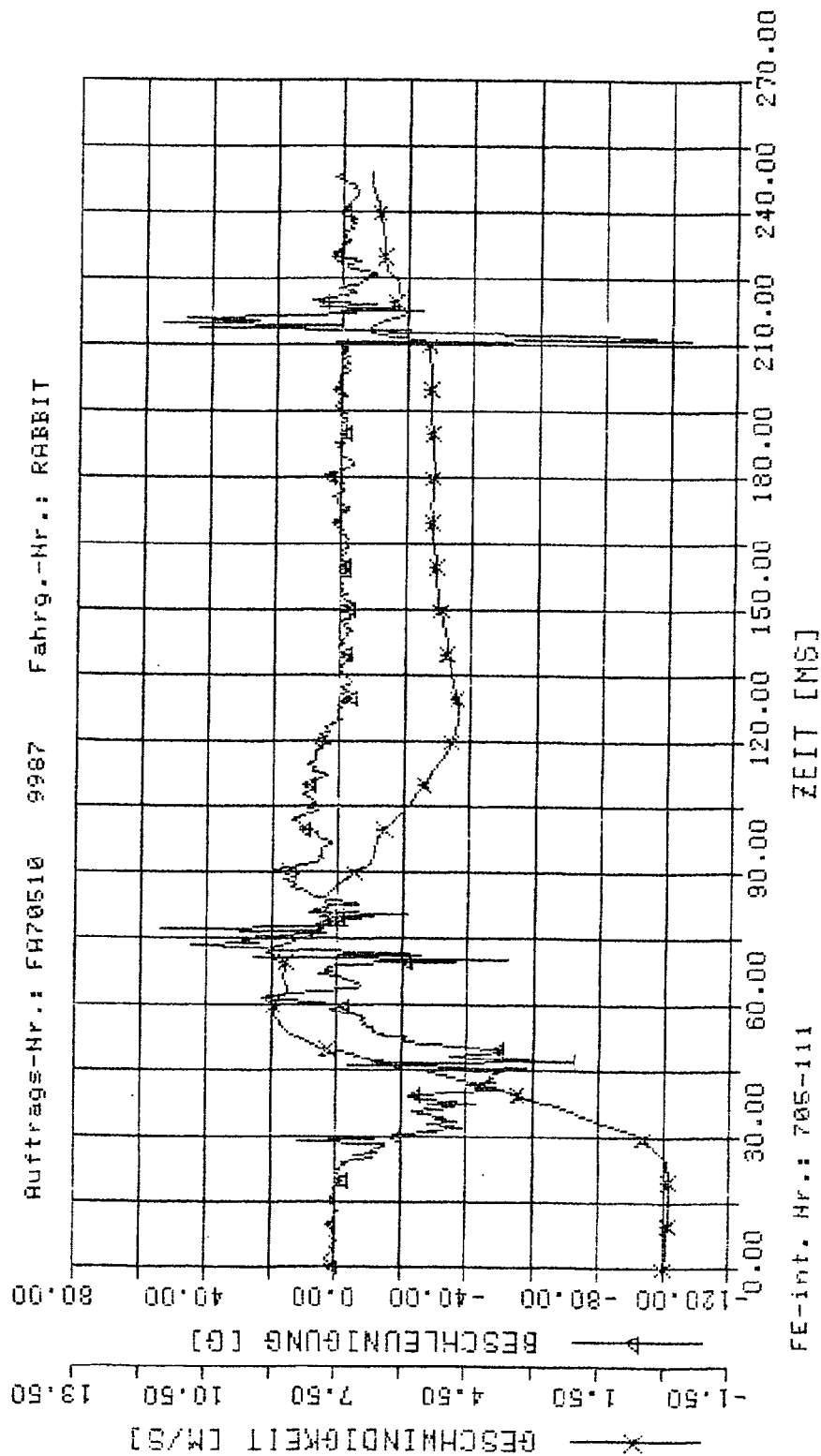
- Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987

Mess-Stelle	UP	ber.	Extremum	1	Extr.
L001Y	V1	BE	9	211.50	0.00
L001Y	V1	GE	N/S	12.362	251.99
				0.00	0.00



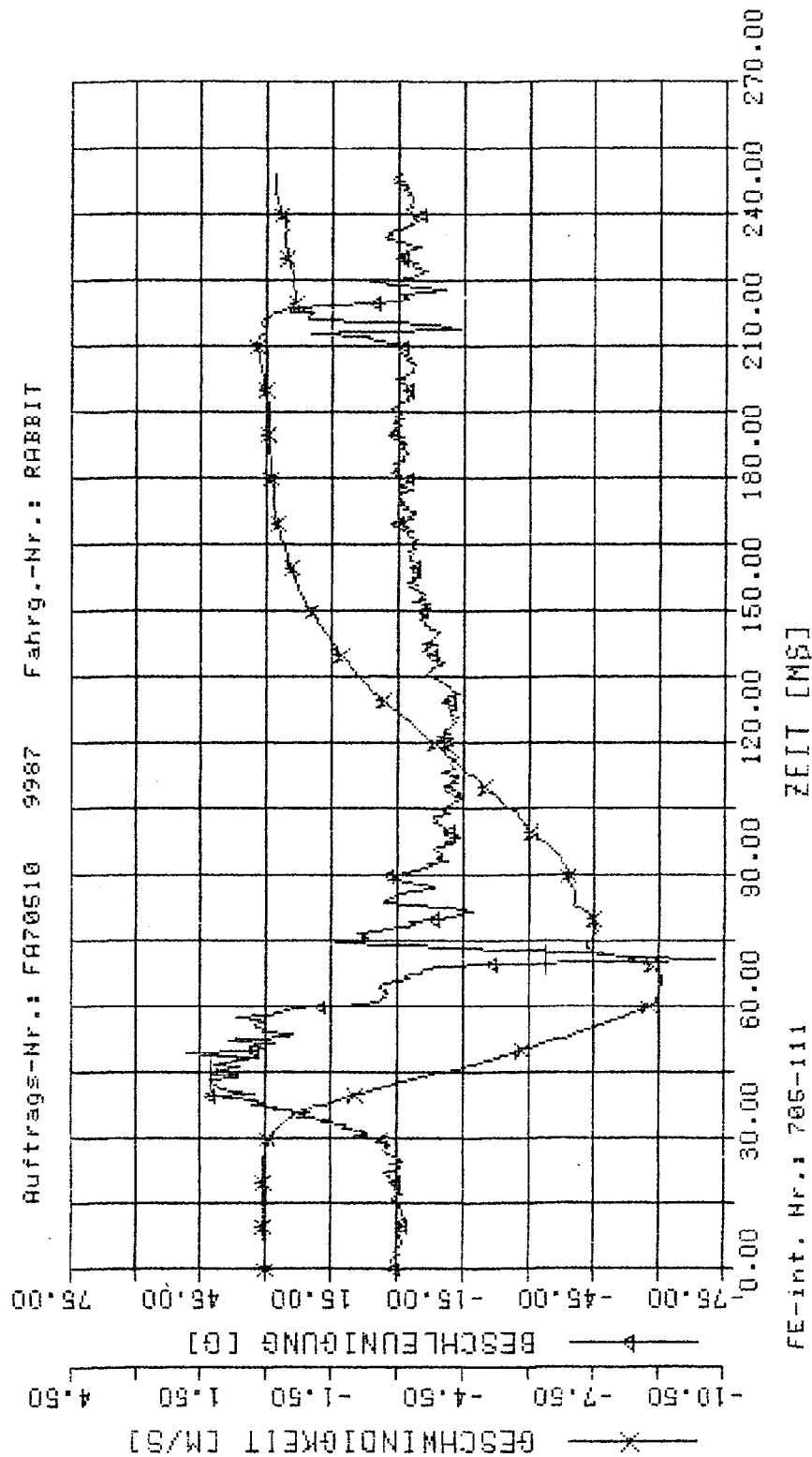
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987

Mess-Stelle	UP	ber.	Extremum	t	Extr.
LU01Y	V1	BE g	-125.086	211.70	0.00
LU01Y	V1	GE m/s	9.118	72.10	0.00



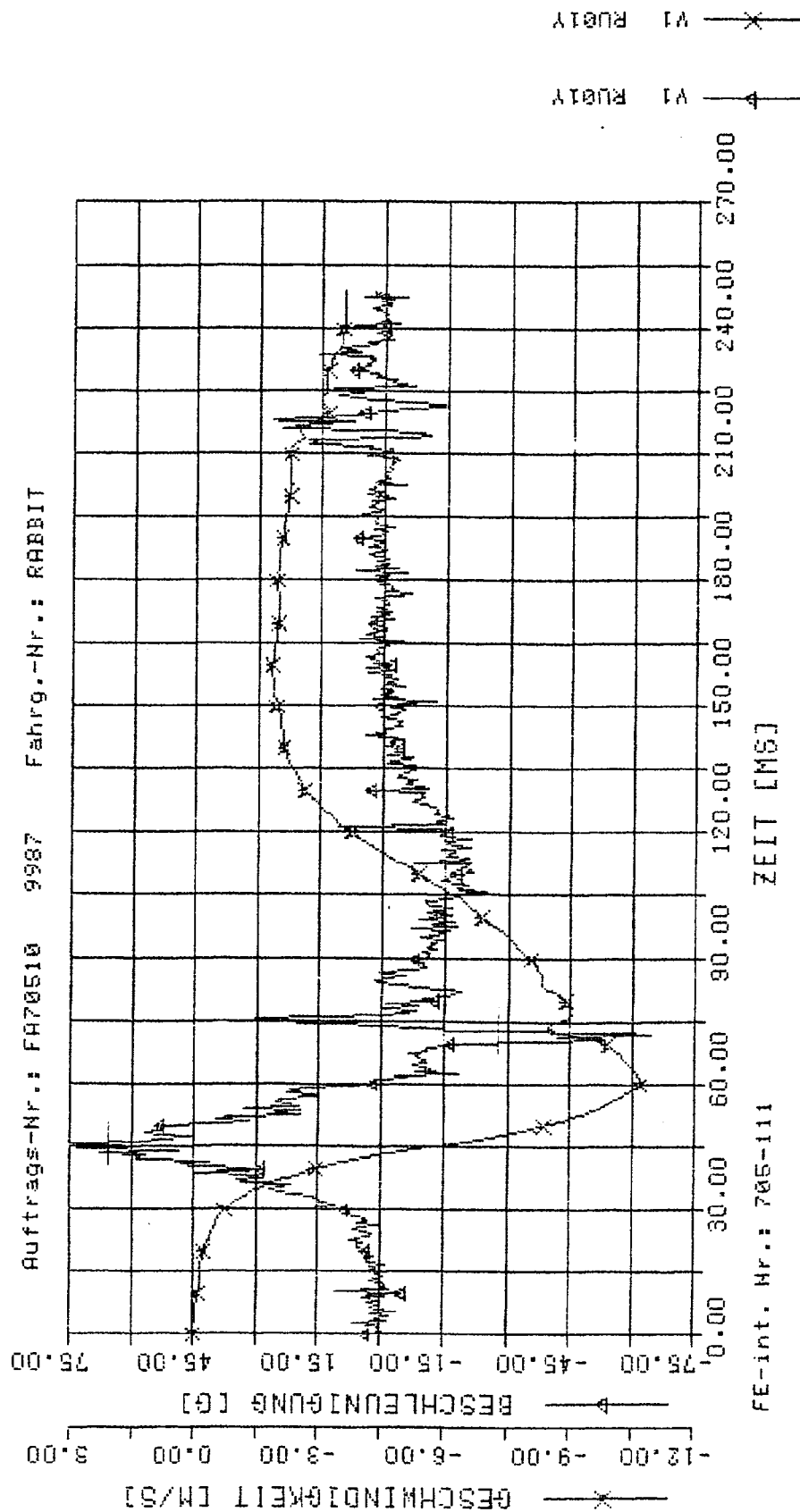
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987

Mess-Stelle	UP	ber.	Grösse	Extremum	t	Ext.	JMS
RO01Y	V1	BE	g	-73.525	20.20	0.00	
RO01Y	V1	GE	m/s	-9.079	65.70	0.00	



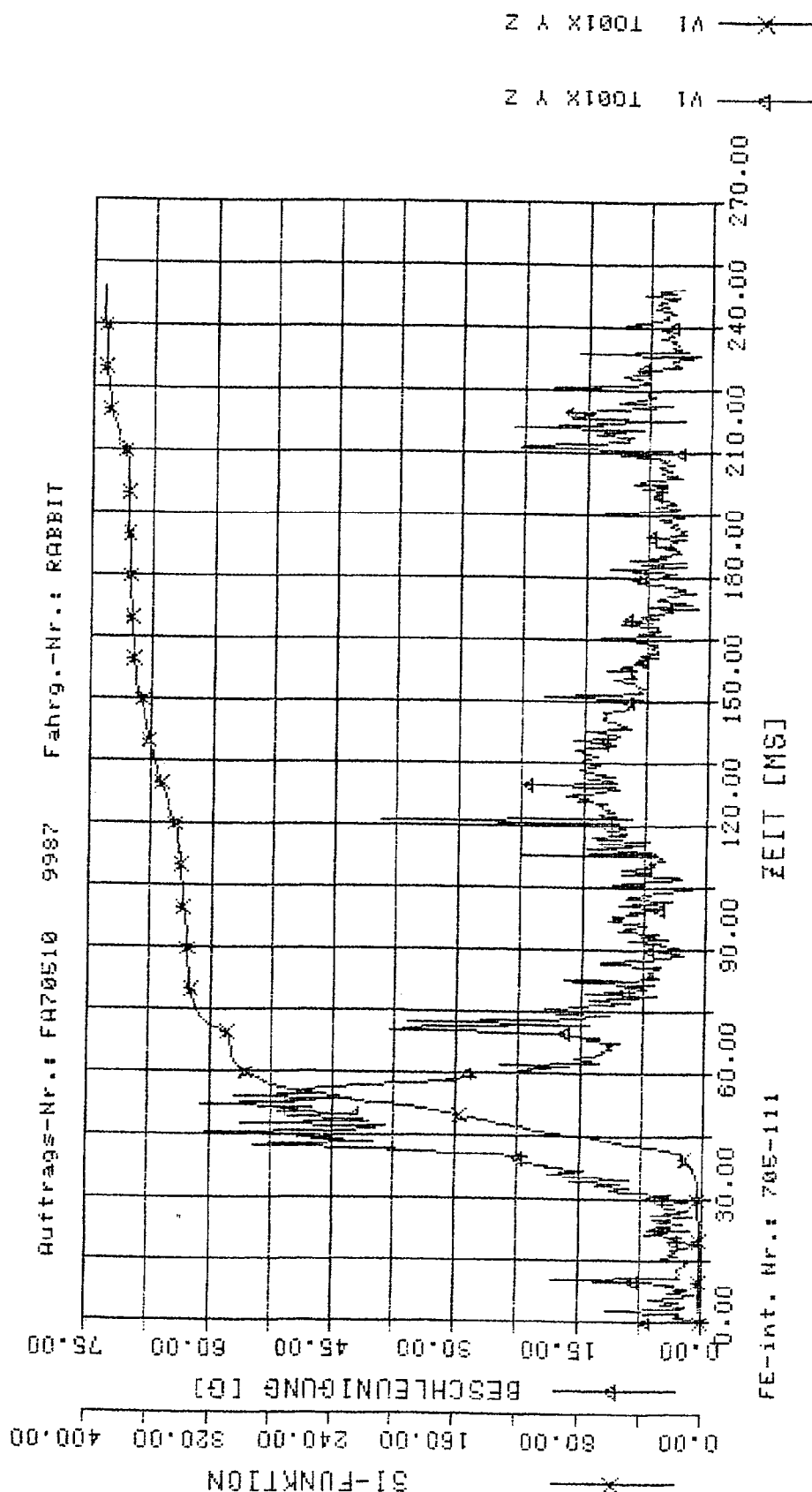
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987

Mess-Stelle	UP	ber.	Extremum	t	SMS
RU01Y		Groesse		Extr.	
RU01Y	V1	GE g	76.187	44.60	0.00
RU01Y	V1	GE m/s	-10.700	61.20	0.00



Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987

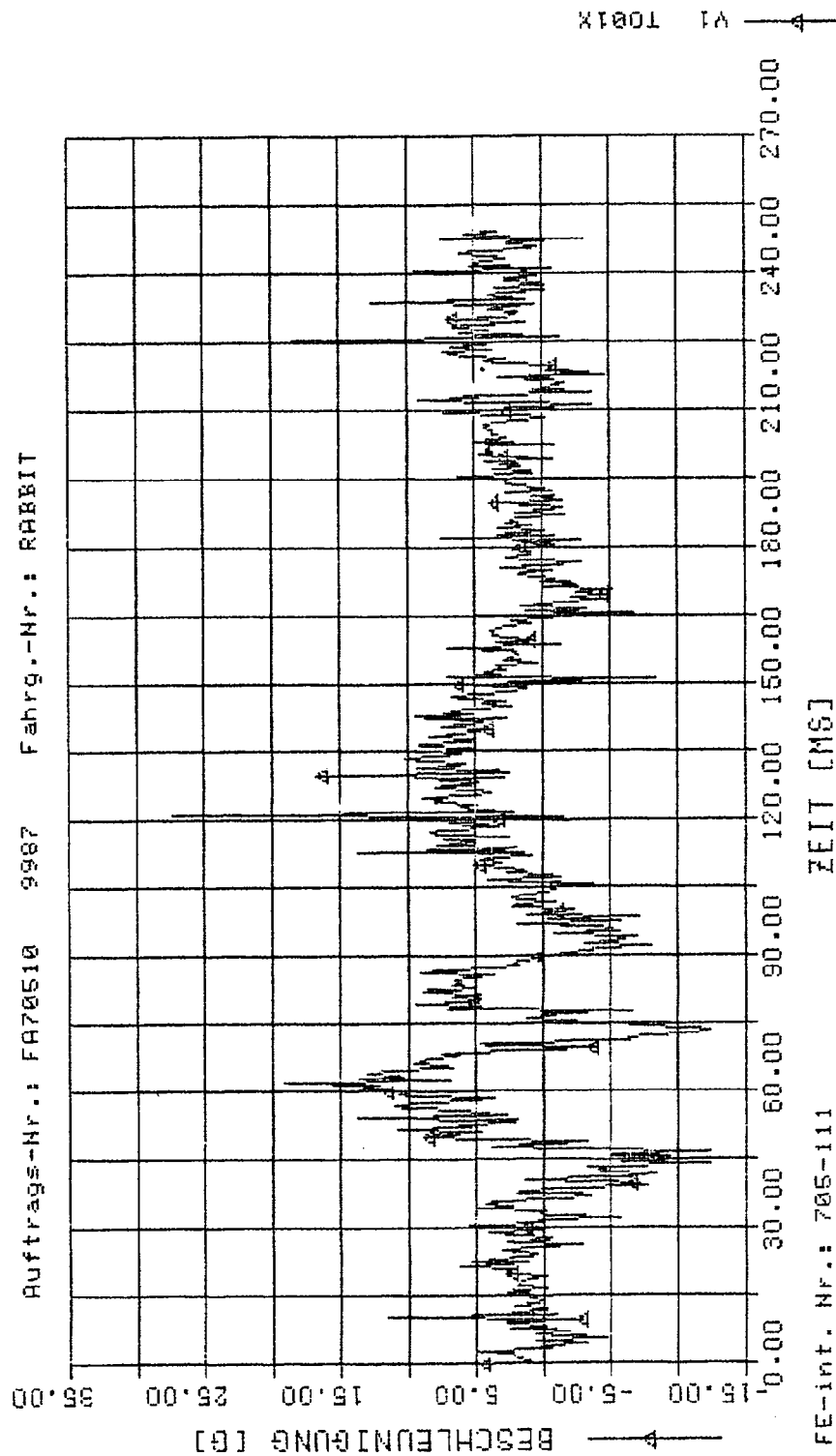
Mess-Stelle UP ber: Extratum t SMS
 T001 Groesse 73.069 Extr. 0.00
 T001 V1 BE q 42.70
 T001 V1 SI 393.062 250.00 0.00



-- Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987

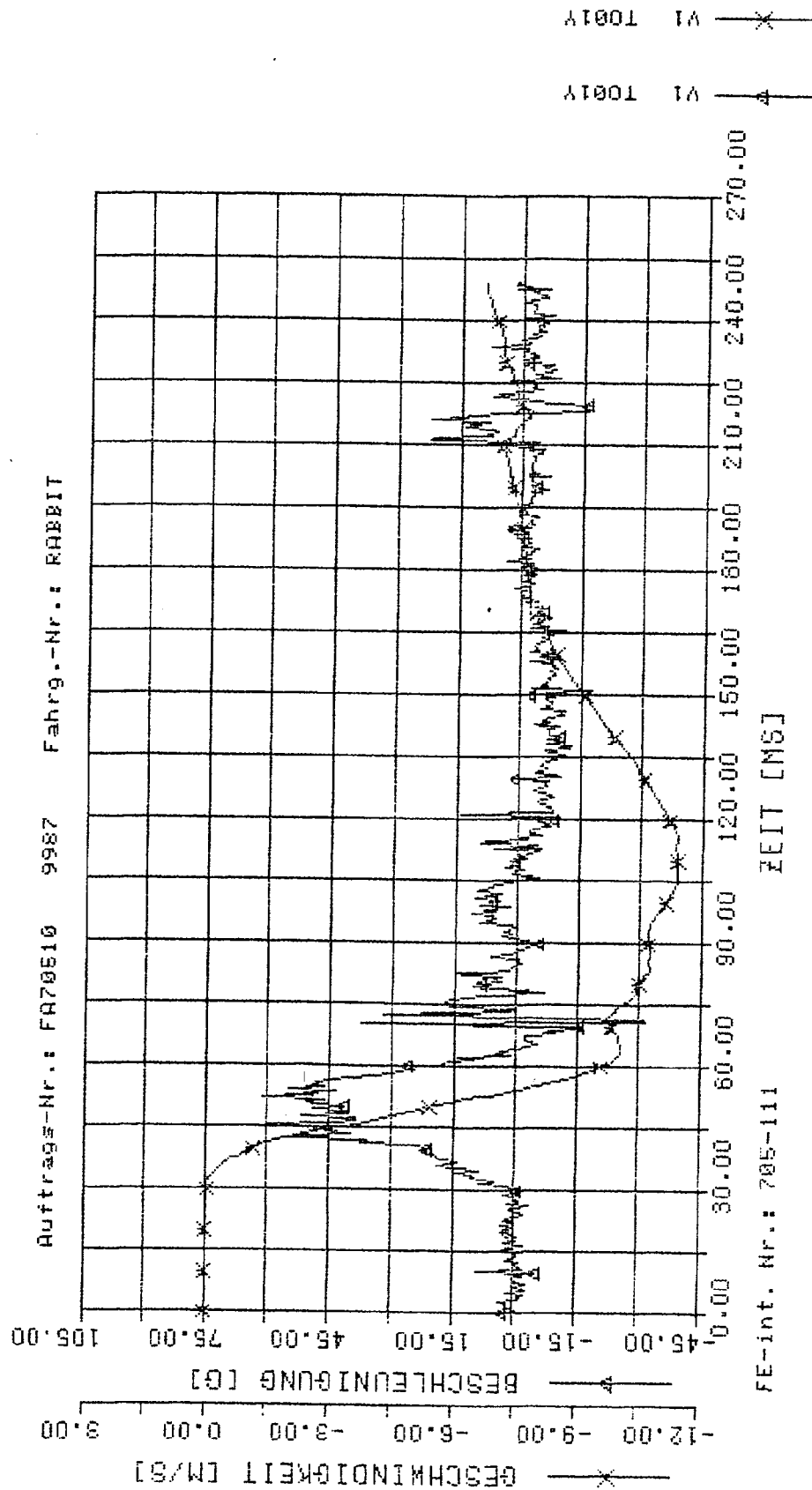
Mess-Stelle
T001X

UP	ber.	Extremum	t	3MS
V1	BE	Groesse	Extr.	
		g	121.50	0.00



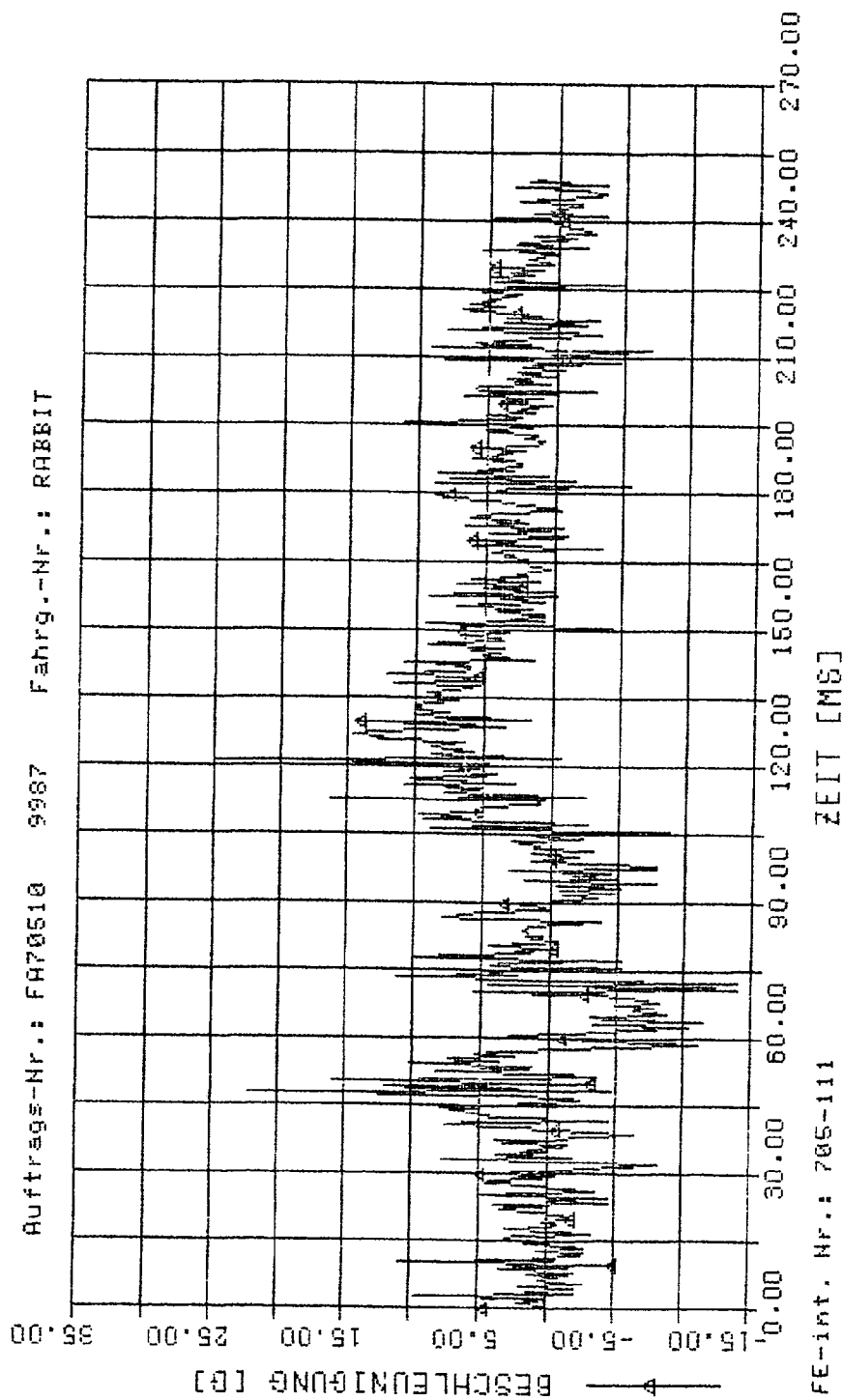
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987

Mess-Stelle	UP	ber.	Extrema	t	ΔMS
T001Y	V1	BE	72.209	42.70	0.00
T001Y	V1	GE	-11.443	109.50	0.00



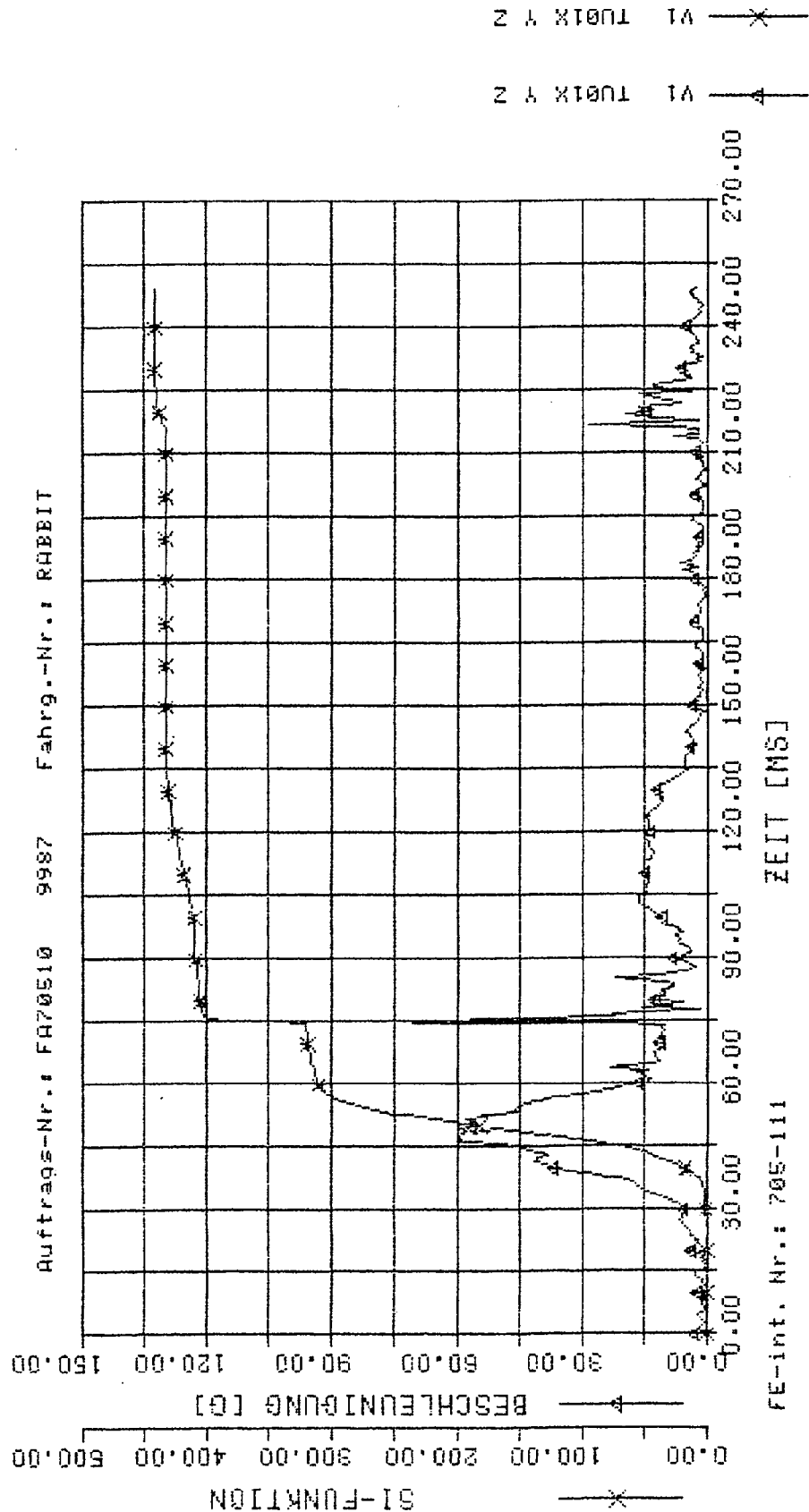
Kennwerte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987

Mess-Stelle UP ber. Extremum t SMS
T001Z V1 BE g 31.269 151.30 0.00



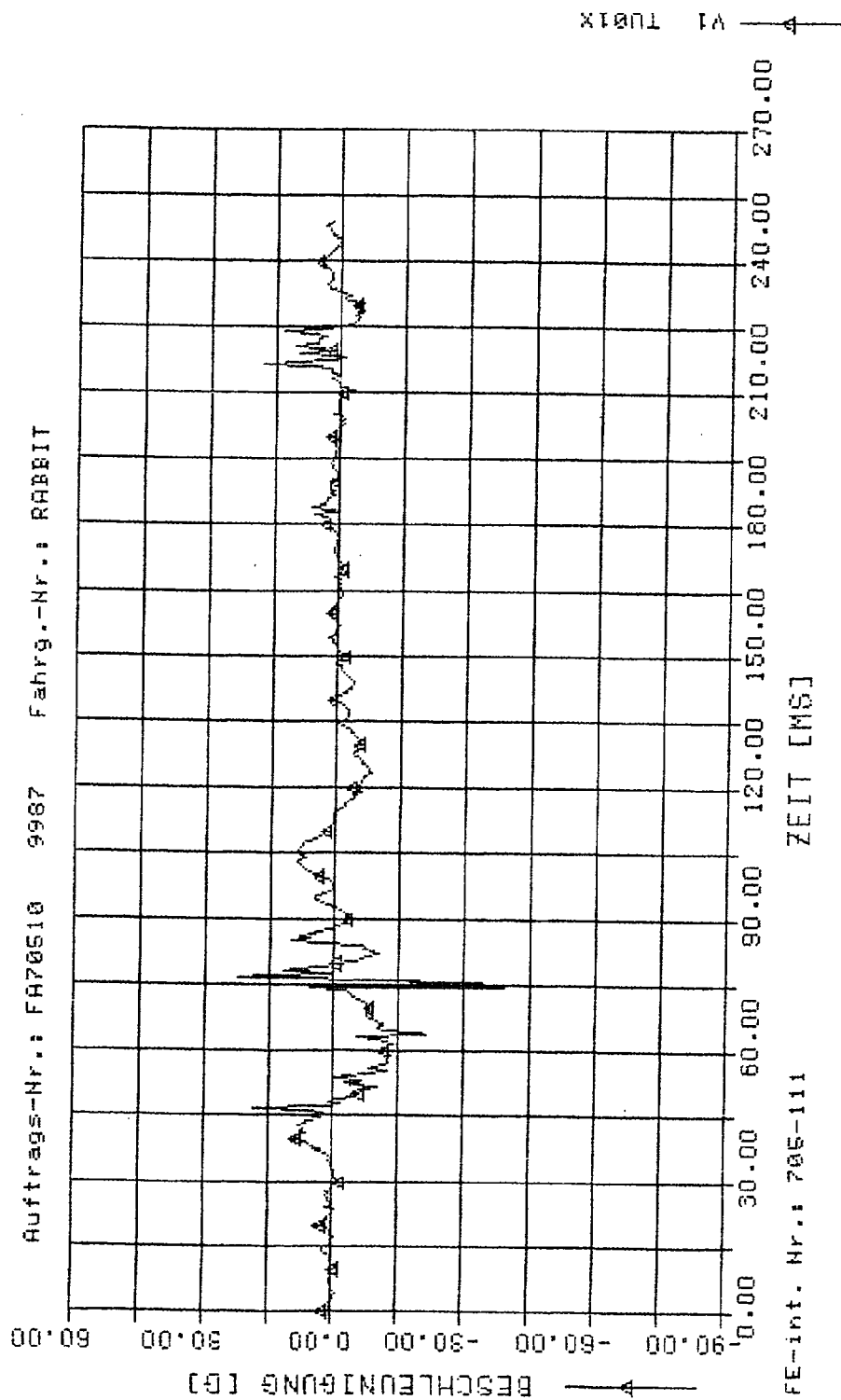
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987

Mess-Stelle	UP	ber.	Grösse	Extremum	t	3MS
TU01	V1	BE	g	119.330	75.00	0.00
TU01	V1	SI		440.702	250.00	0.00



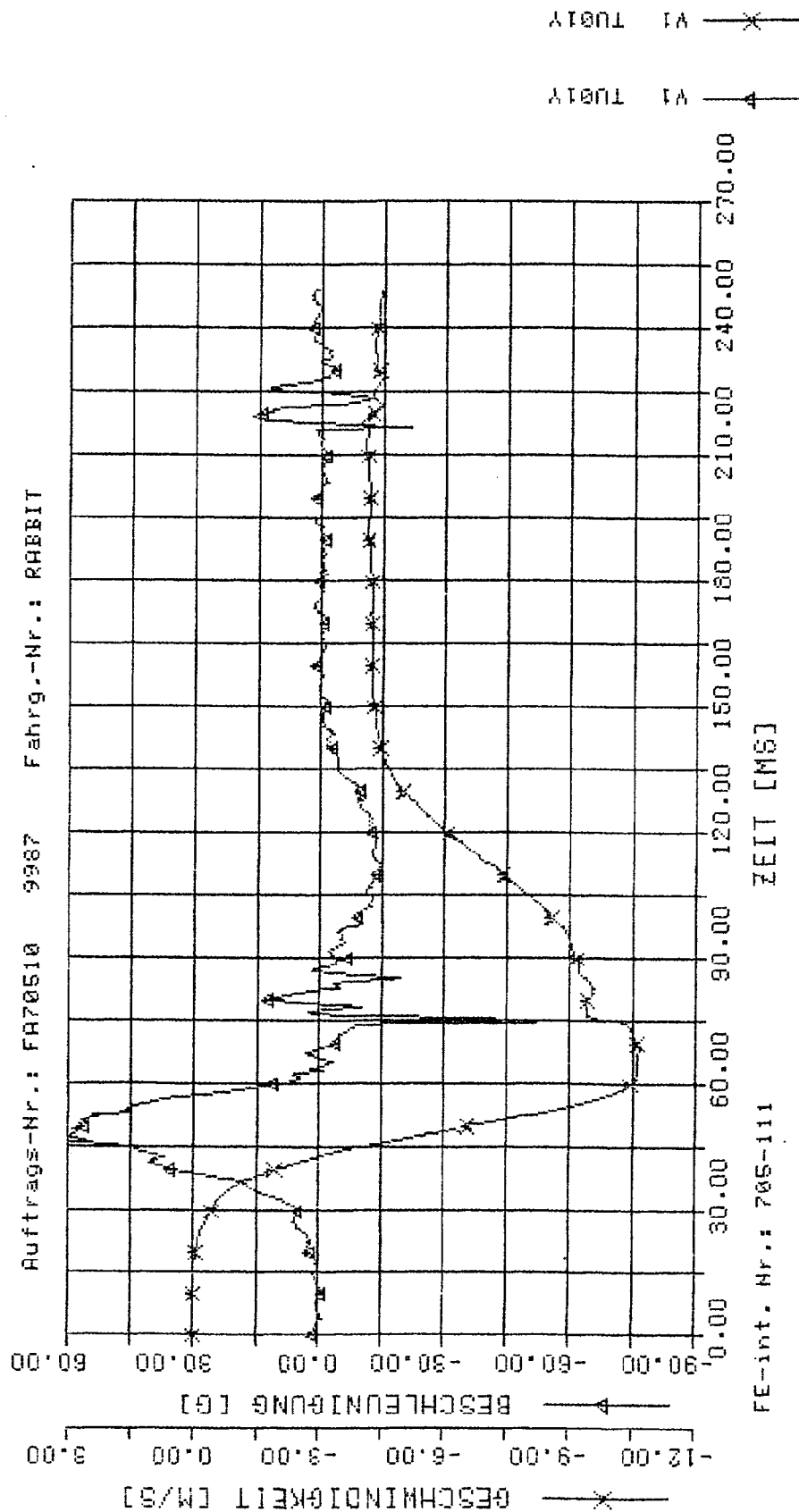
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987

Mess-Stelle
TU01X
Up ber. Extremum t 3MS
Grösse Extr. 75.10
V1 BE g -70.327 0.00



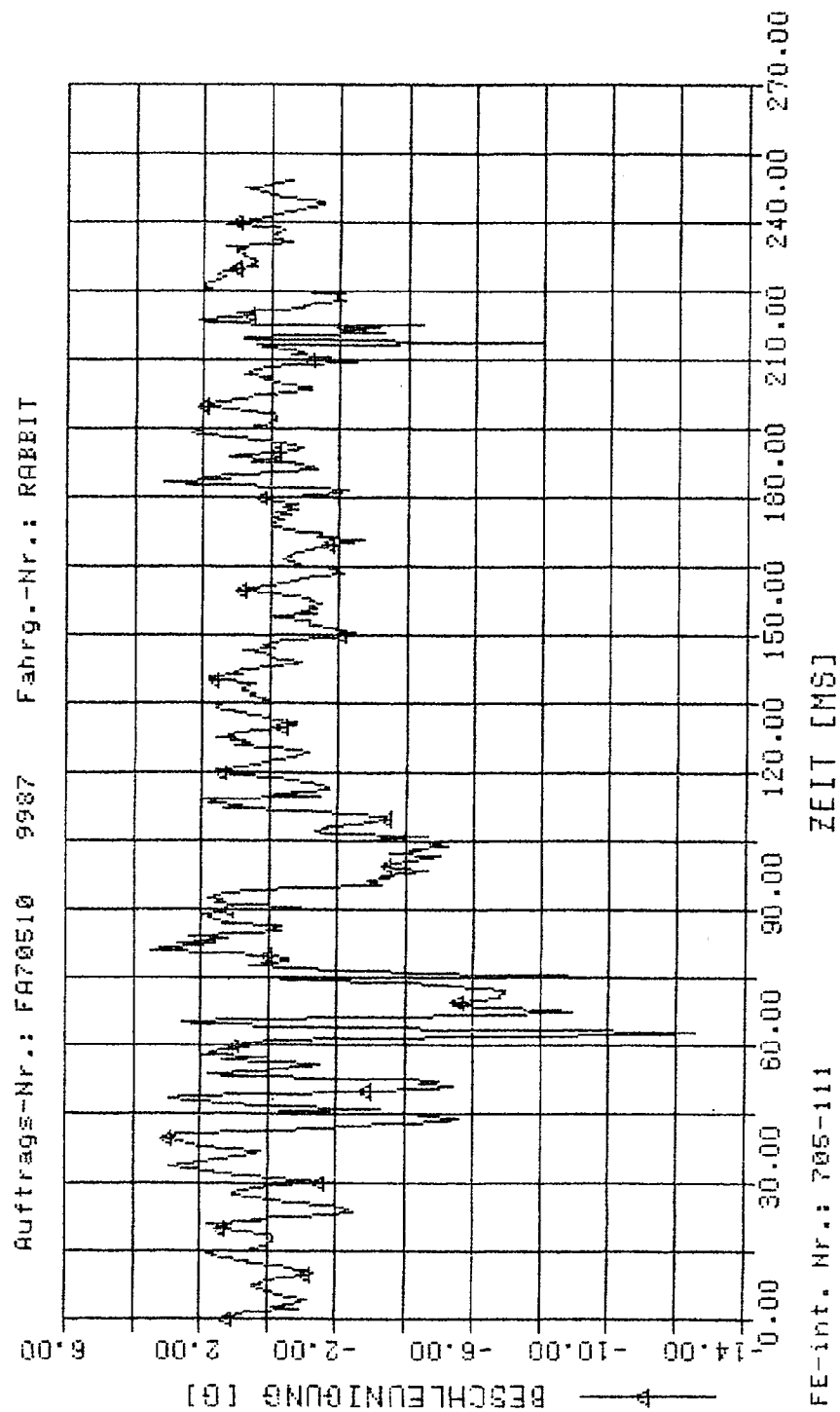
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987

Mess-Stelle	UP	ber.	Extremum	Extr.	SMS
TU01Y	V1	BE g	-85.889	74.90	0.00
TU01Y	V1	GE m/s	-10.654	68.80	0.00



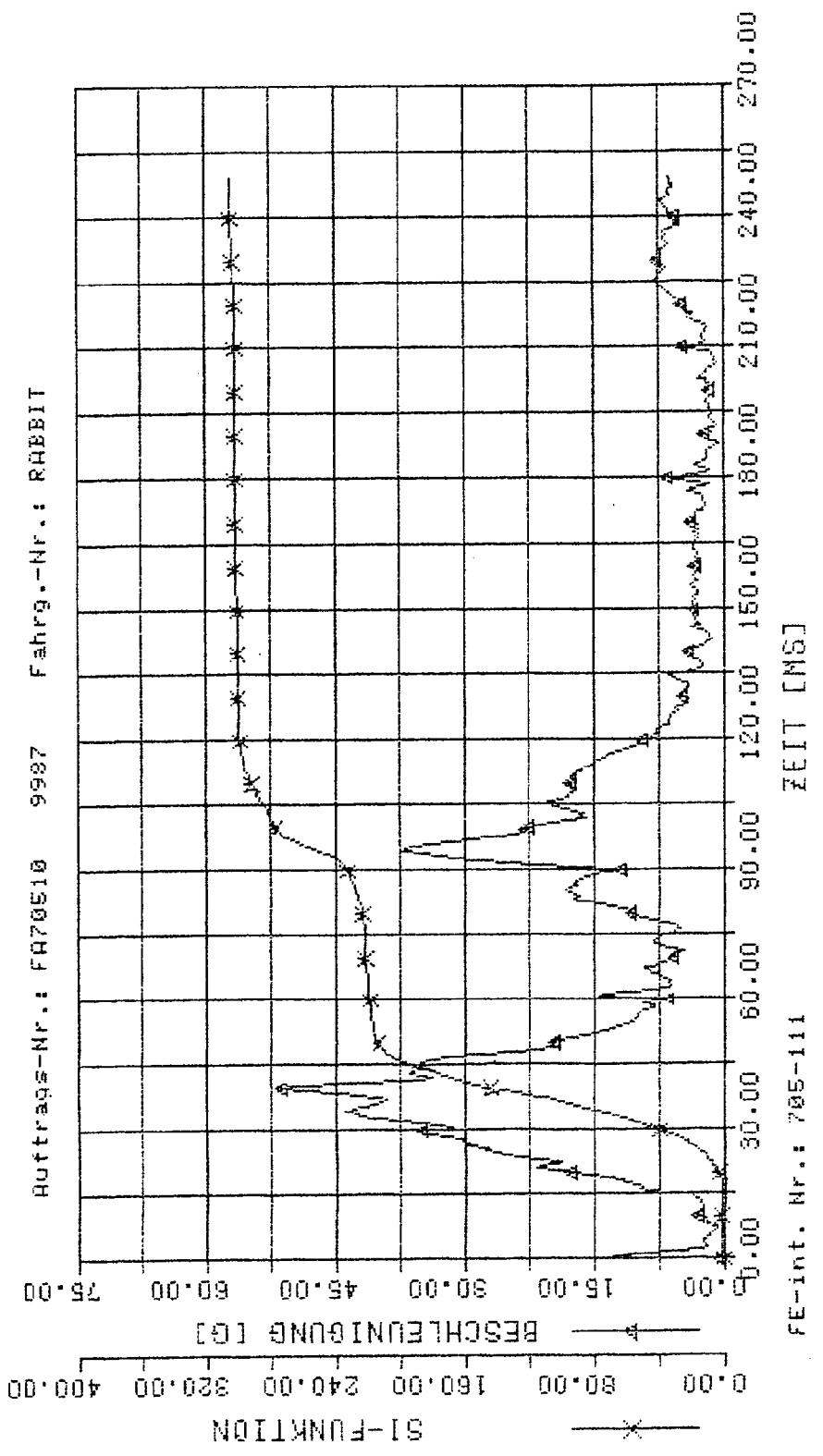
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987

Mess-Stelle
TU01Z
UP ber. Extr. JMS
Grösse Extr.
V1 BE g -17.643 213.90 0.00



Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987

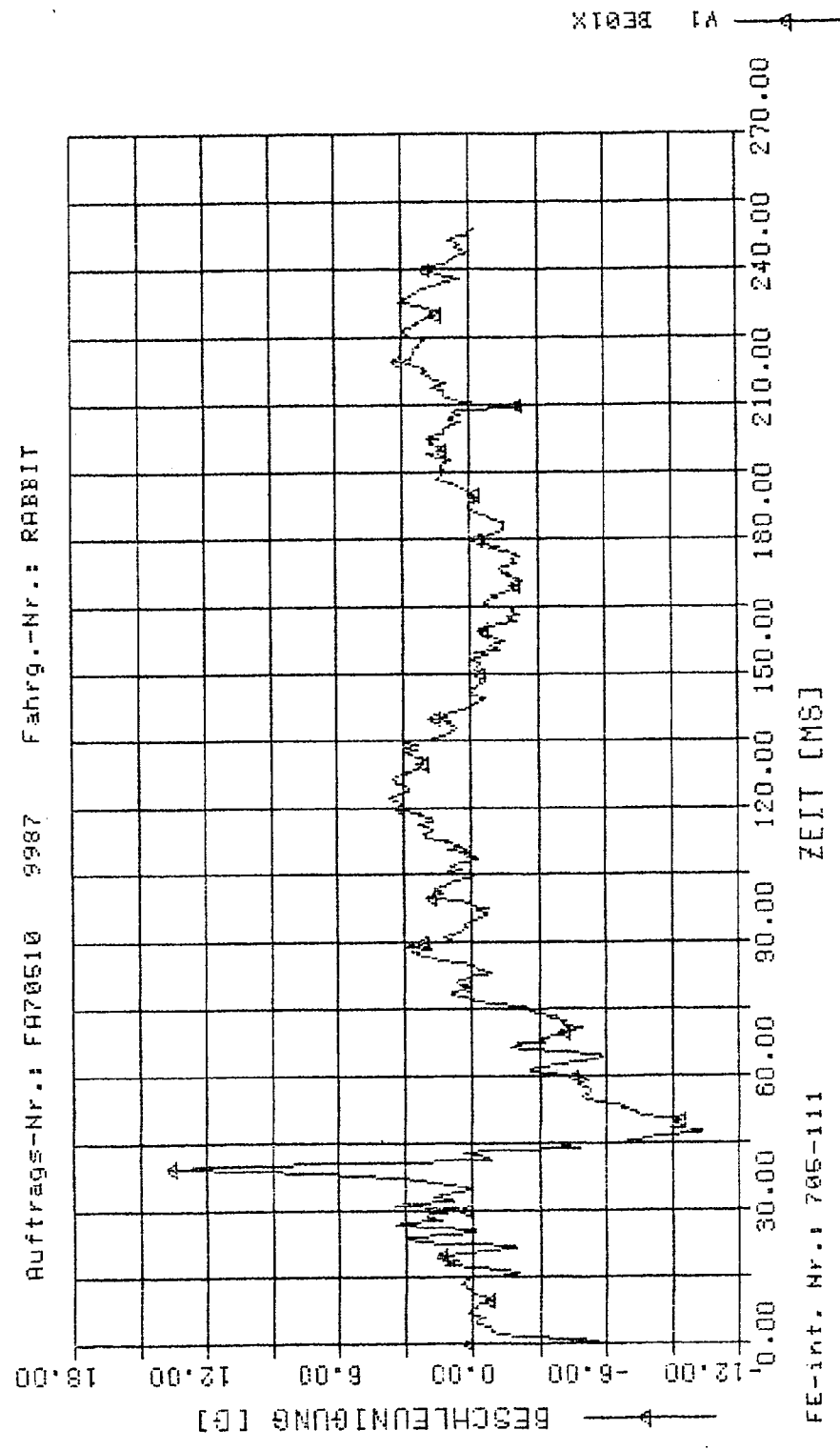
Mess-Stelle	UP	ber.	Extreum	t	δMS
BE01	V1	BE	g	51.070	40.00
BE04	V1	SI		304.497	250.00
					42.56
					0.00



FE-int. Nr.: 705-111

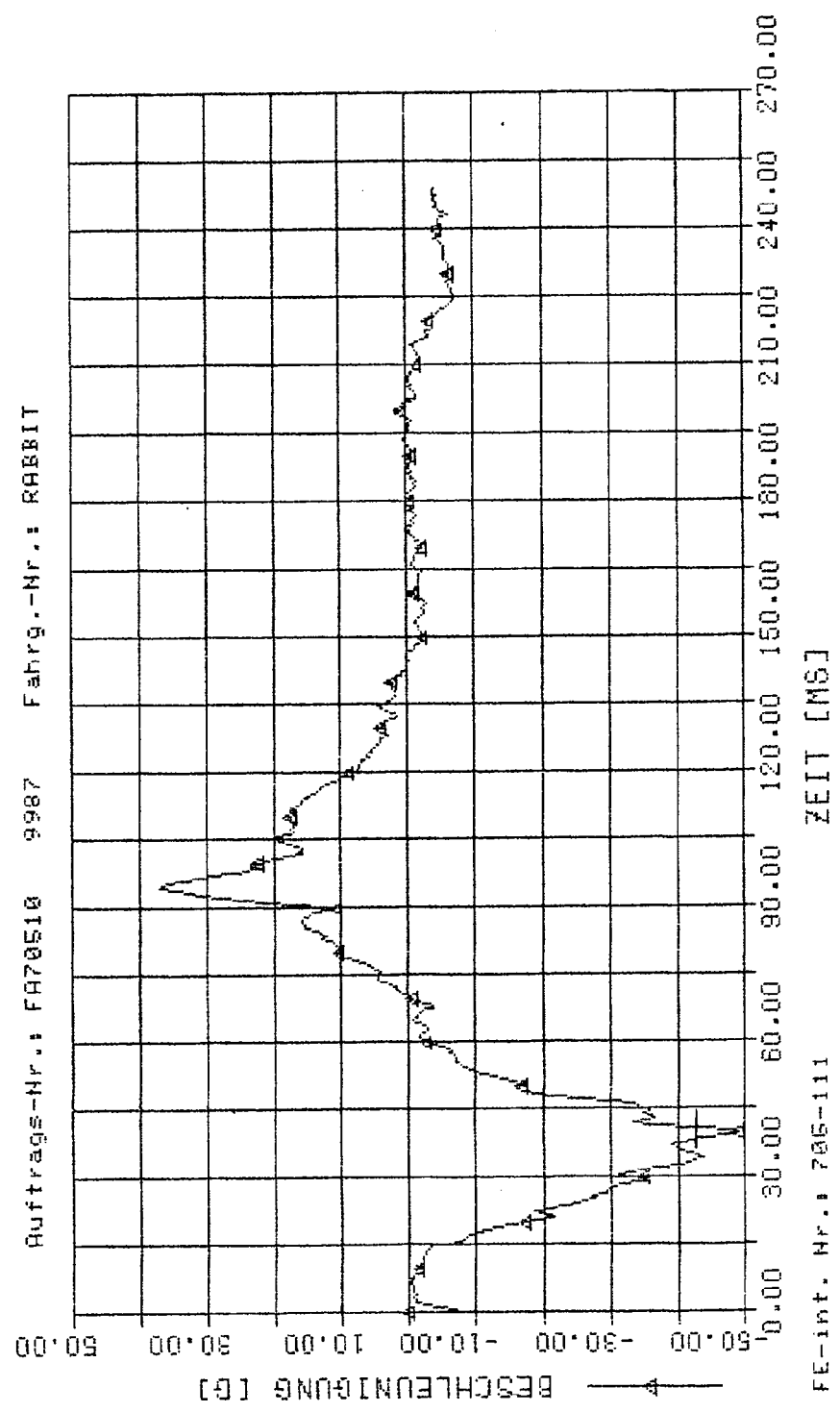
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987

Mess-Stelle UP ber. Extremum t SMS
BE01X Groesse 13.492 Extr. 40.00 3.57
V1 BE g



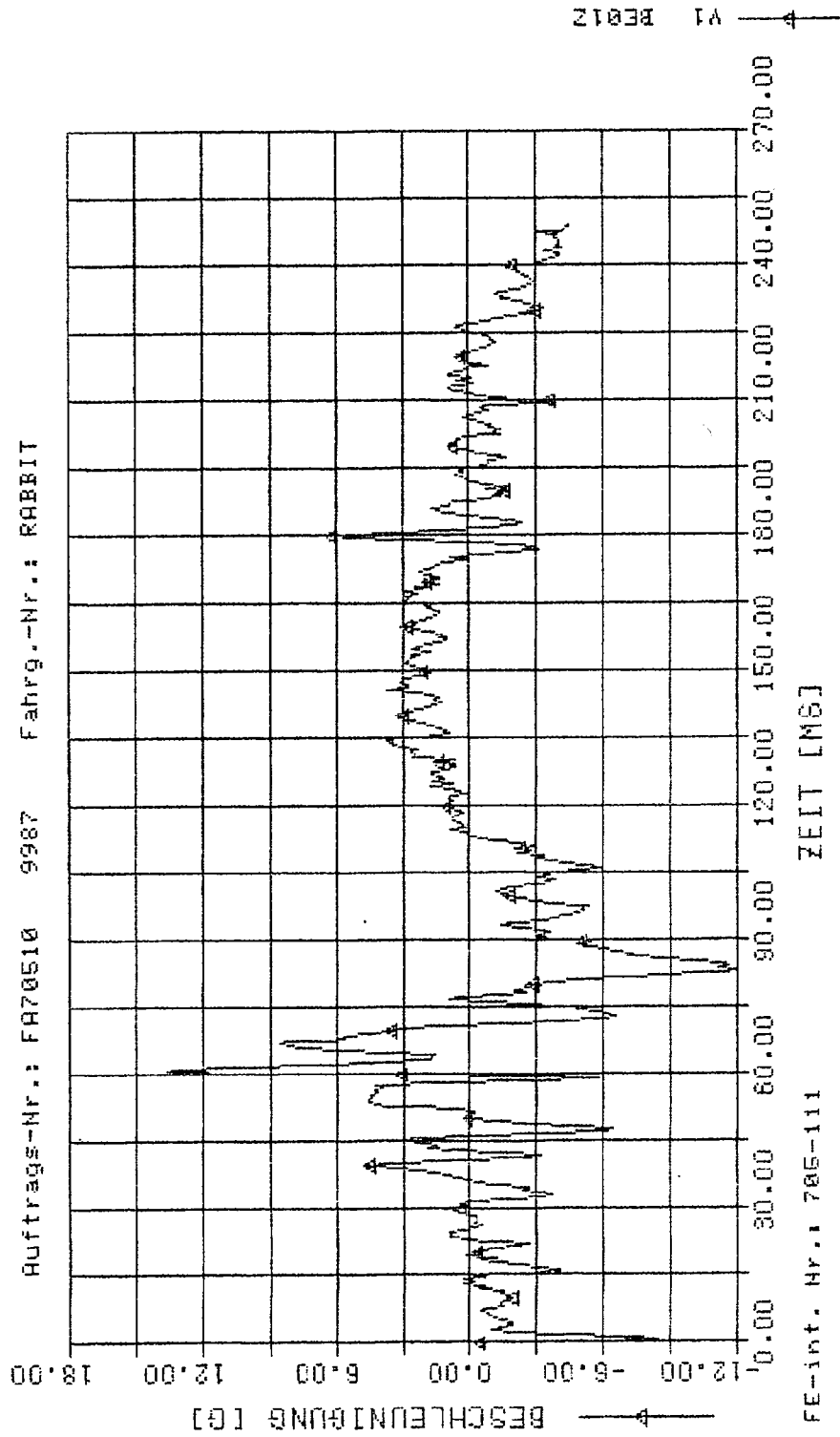
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987

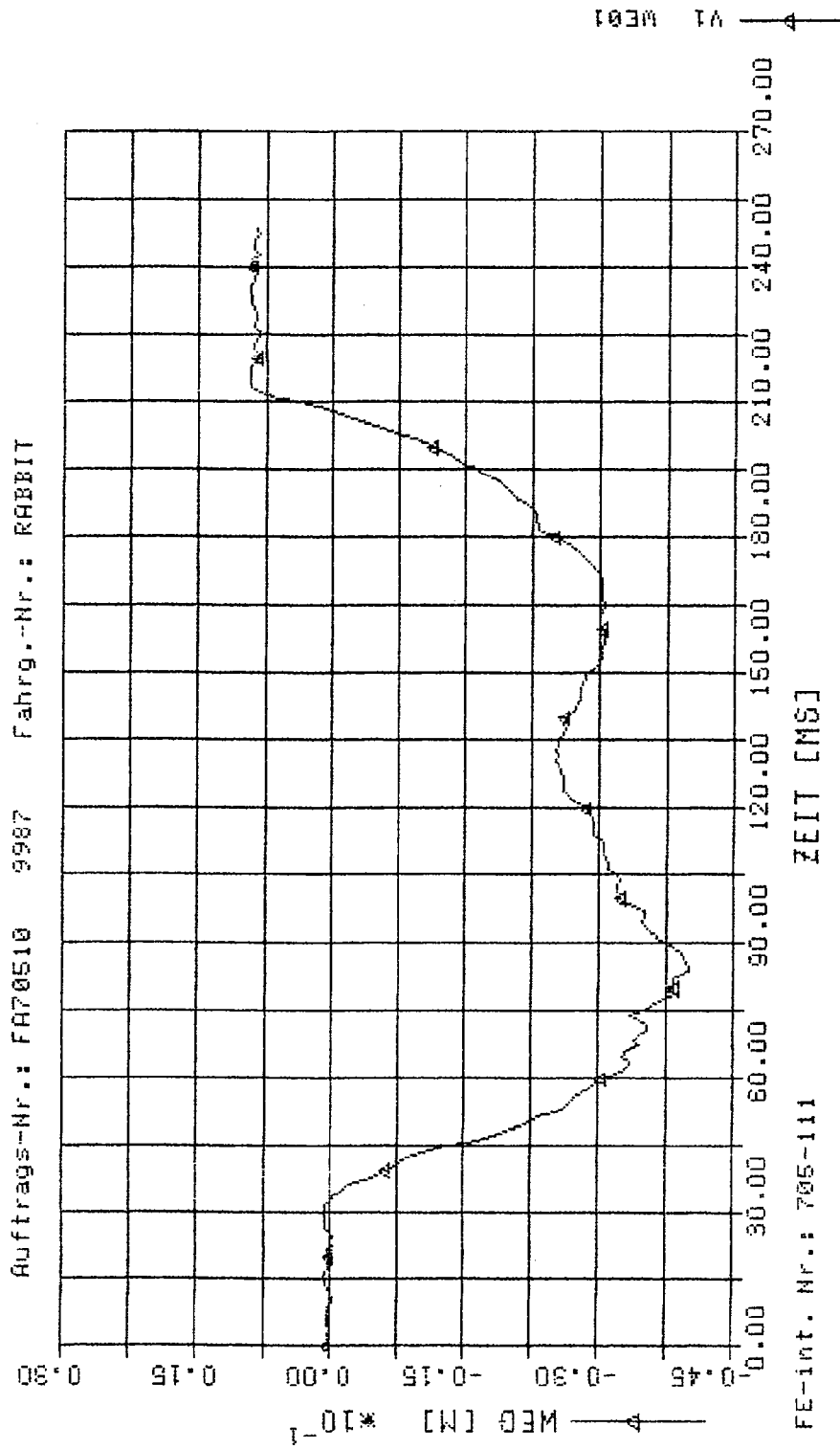
Mess-Stelle
 BE01Y
 UP ber. Extr. 3MS
 Grösse
 V1 BE g -49.054 40.00 31.07



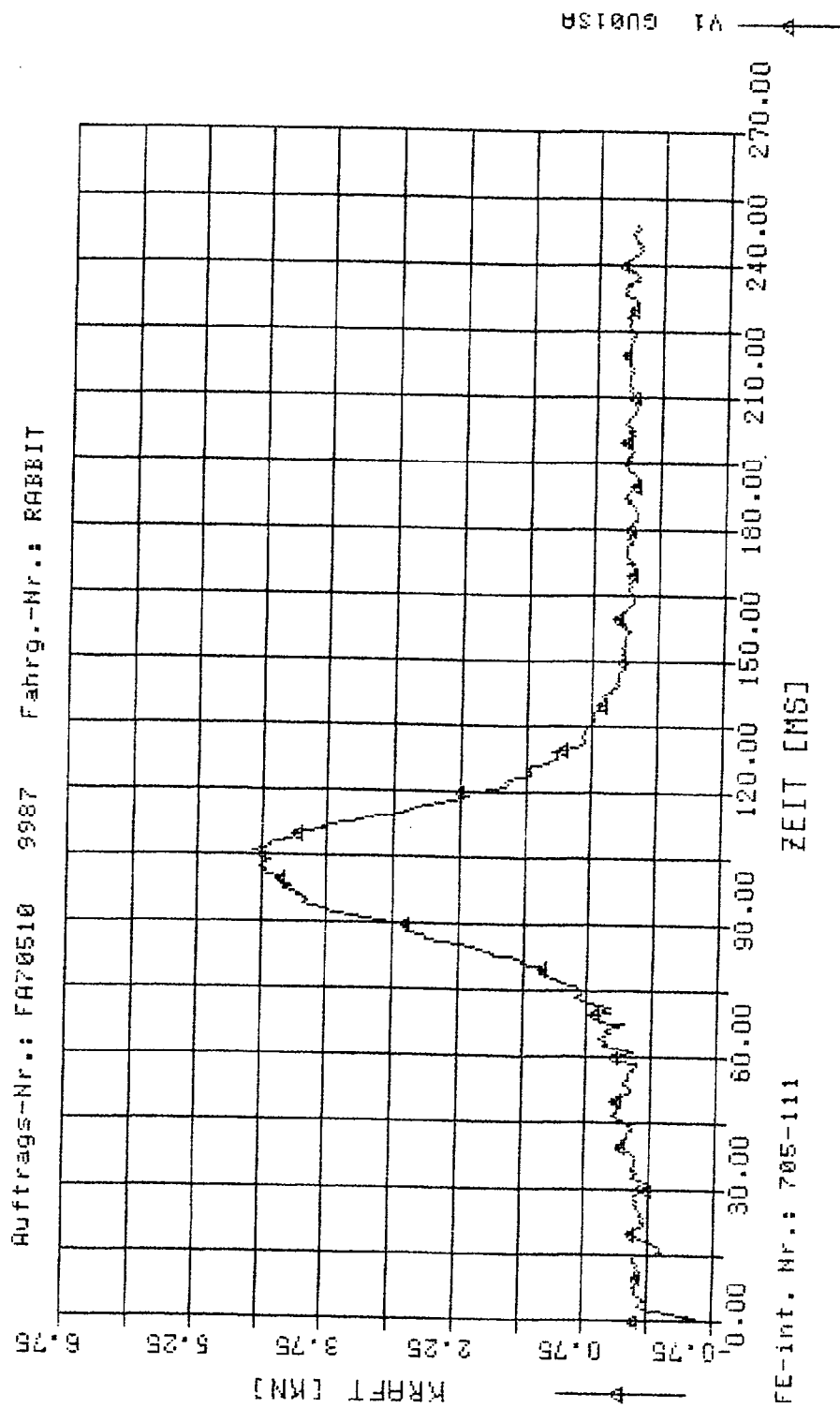
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987

Mess-Stelle	UP	ber.	Extremum	t	MS
BE01Z	V1	BE g	13.592	61.00	8.15



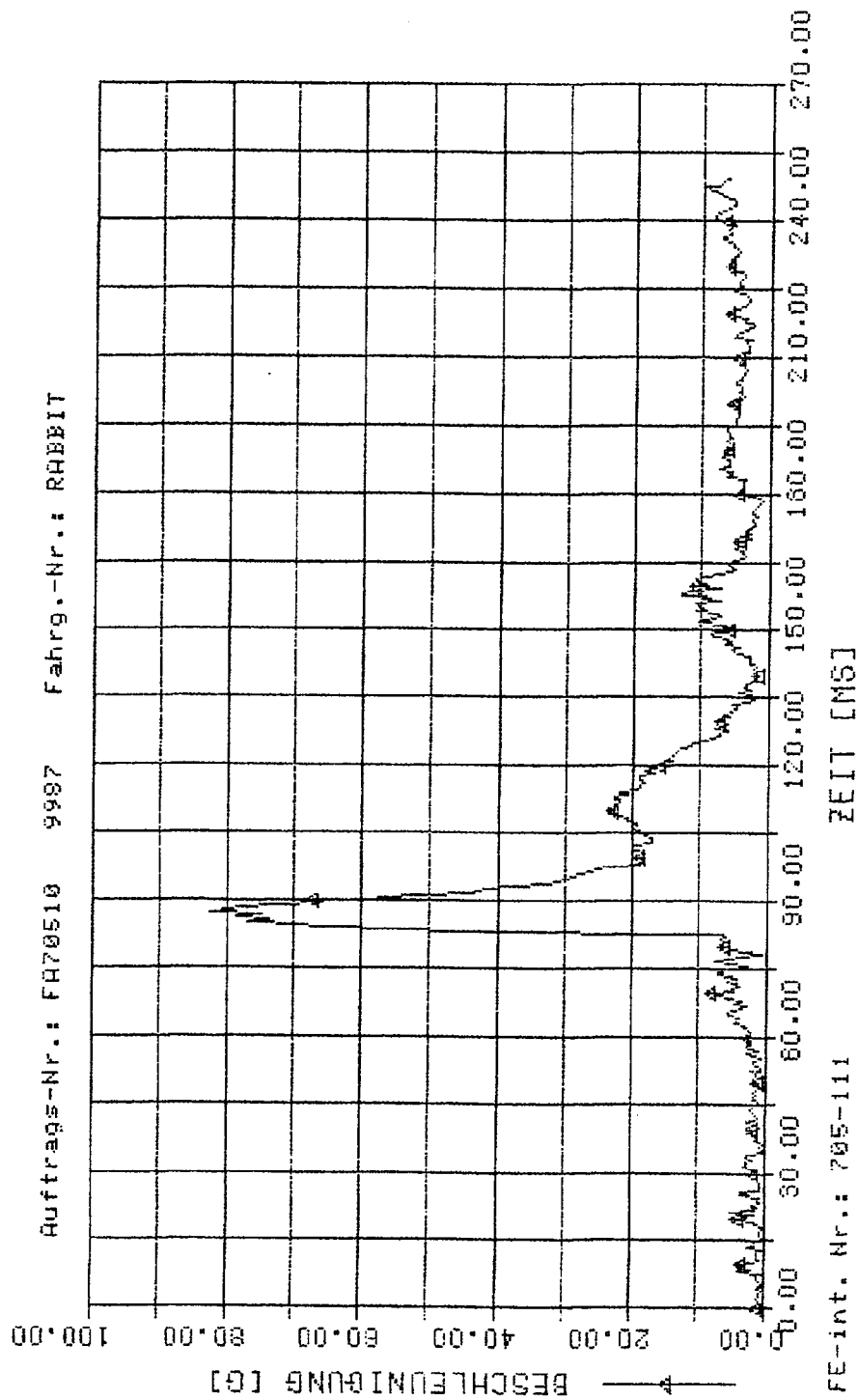


Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987
 Mess-Stelle UP ber. Extremum t SMS
 GU01SA V1 KR kN 4.598 106.50 0.00



B.2.2 Rear Passenger

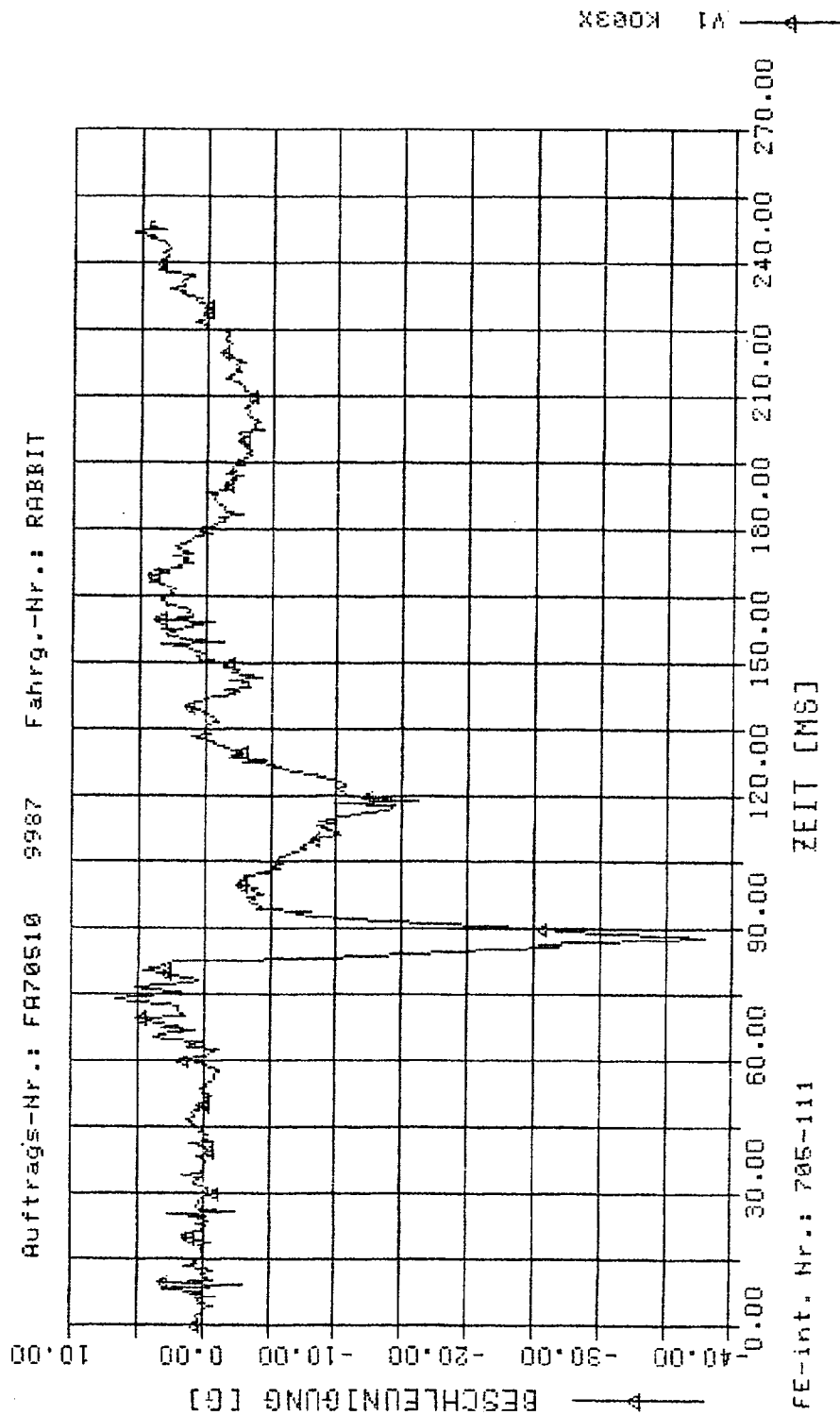
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987
 Mess-Stelle UP ber. Extremum t SMS
 K003 V1 BE g 86.286 87.70 73.39



V1 K003K Y Z 4

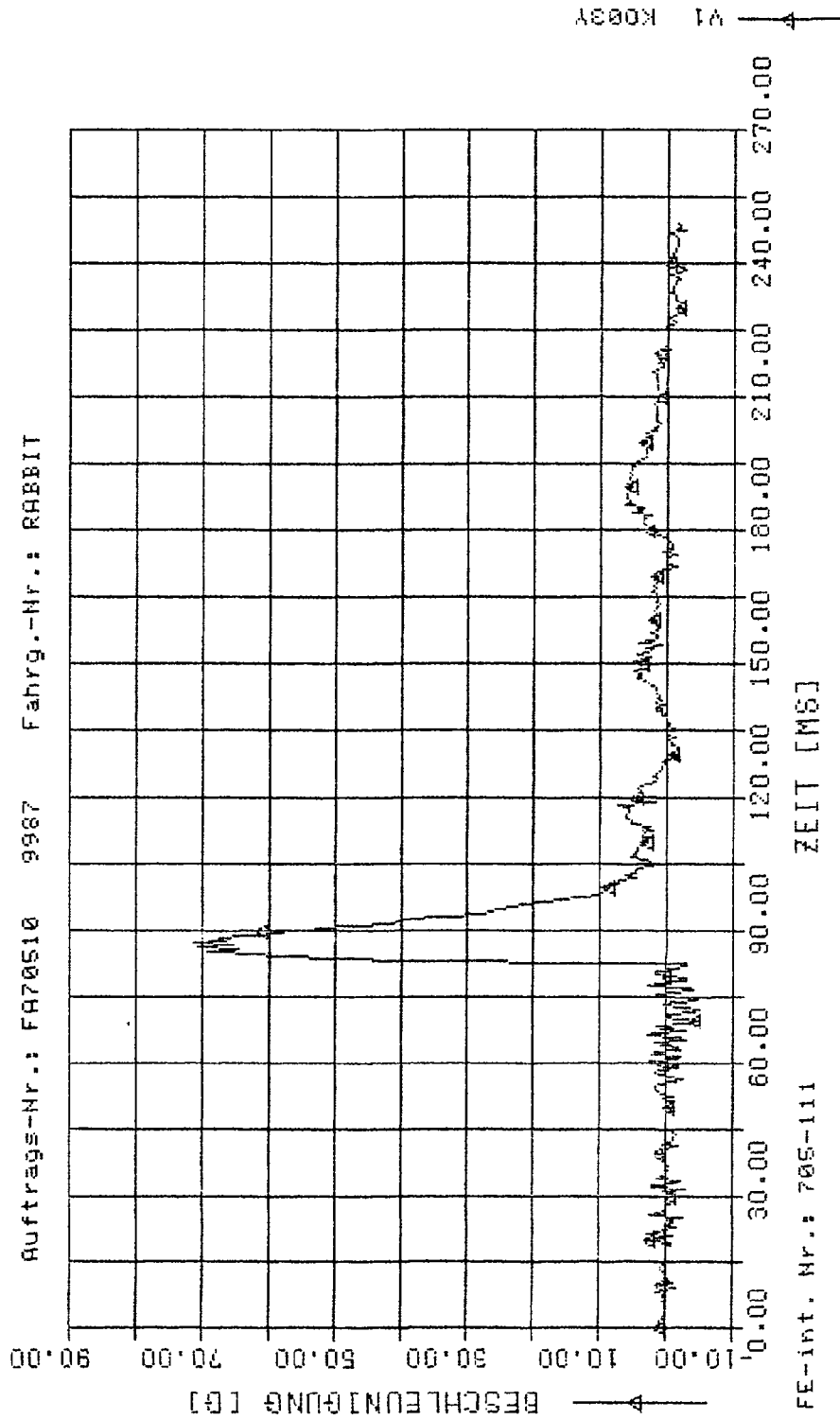
- Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987

Mess-Stelle	UP	ber.	Extremum	t	SMS
K003X	V1	BE	-37.986	88.10	4.97



Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987

Mess-Stelle	UP	ber.	Extremum	t	MS
K003Y	V1	BE	g	75.551	87.70
					64.42



Kennwerte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987

Mess-Stelle

UP

ber.
Grösse

Extremum

t

MS

K003Z

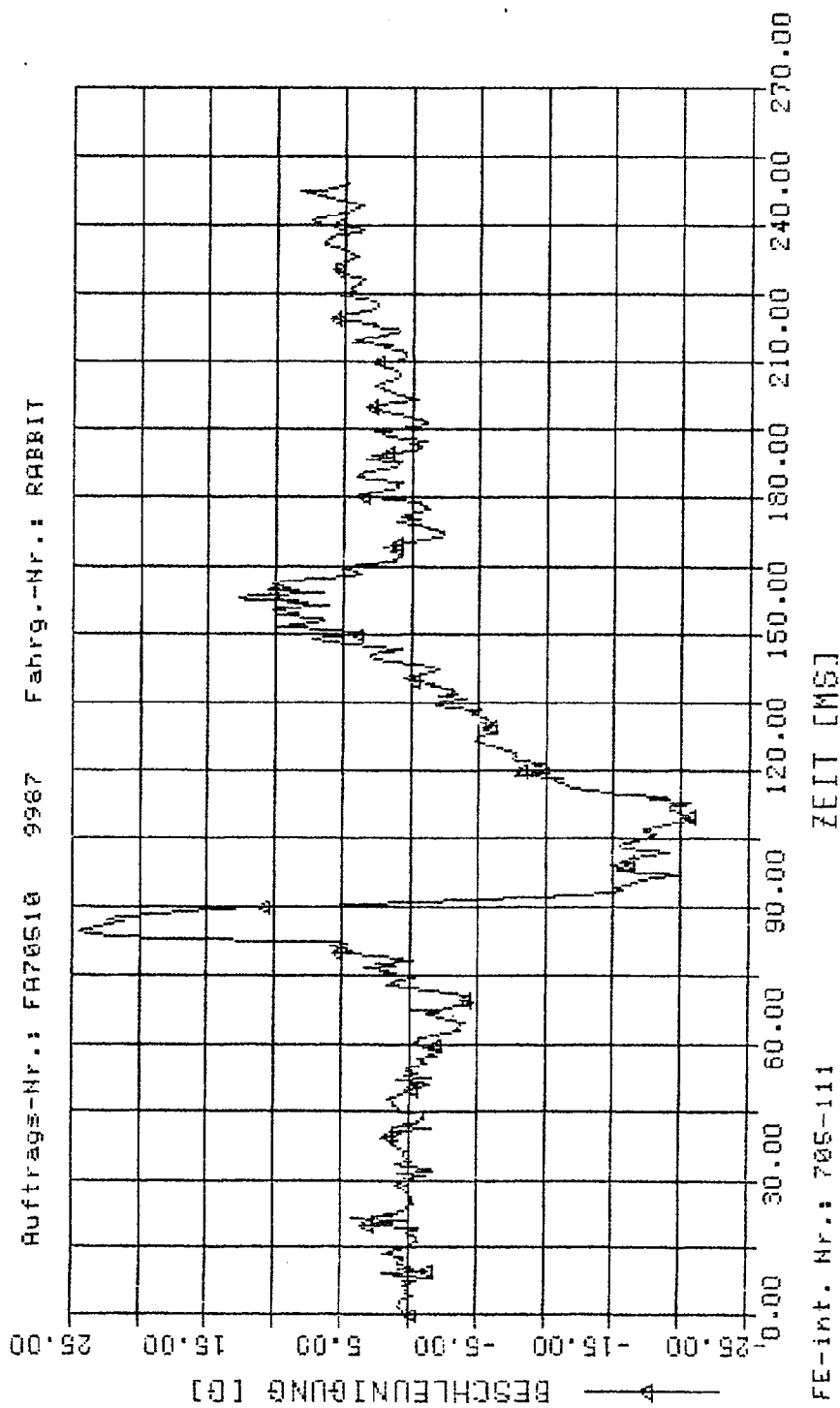
V1

BE g

25.712

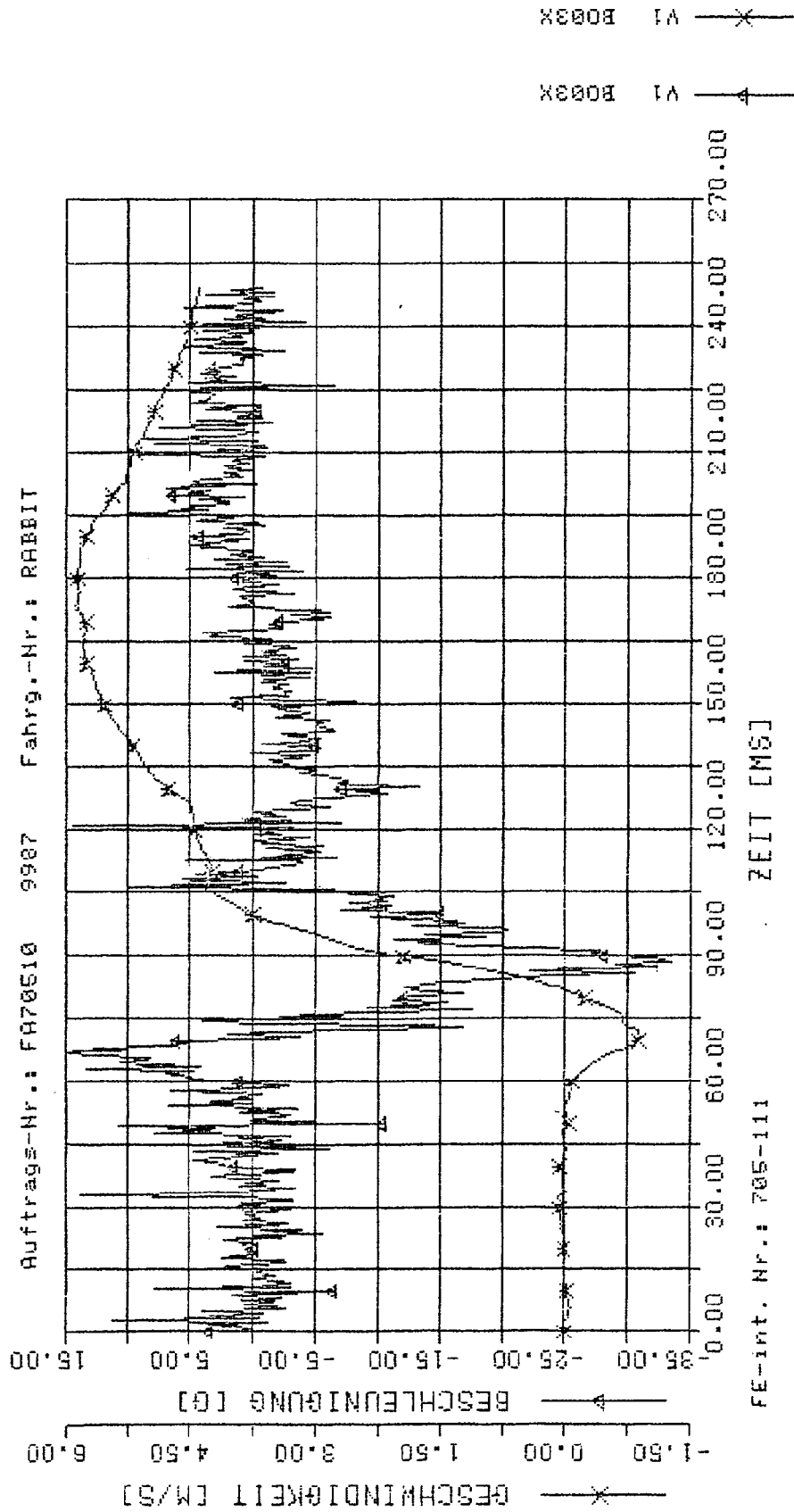
Extr.
84.80

21.58



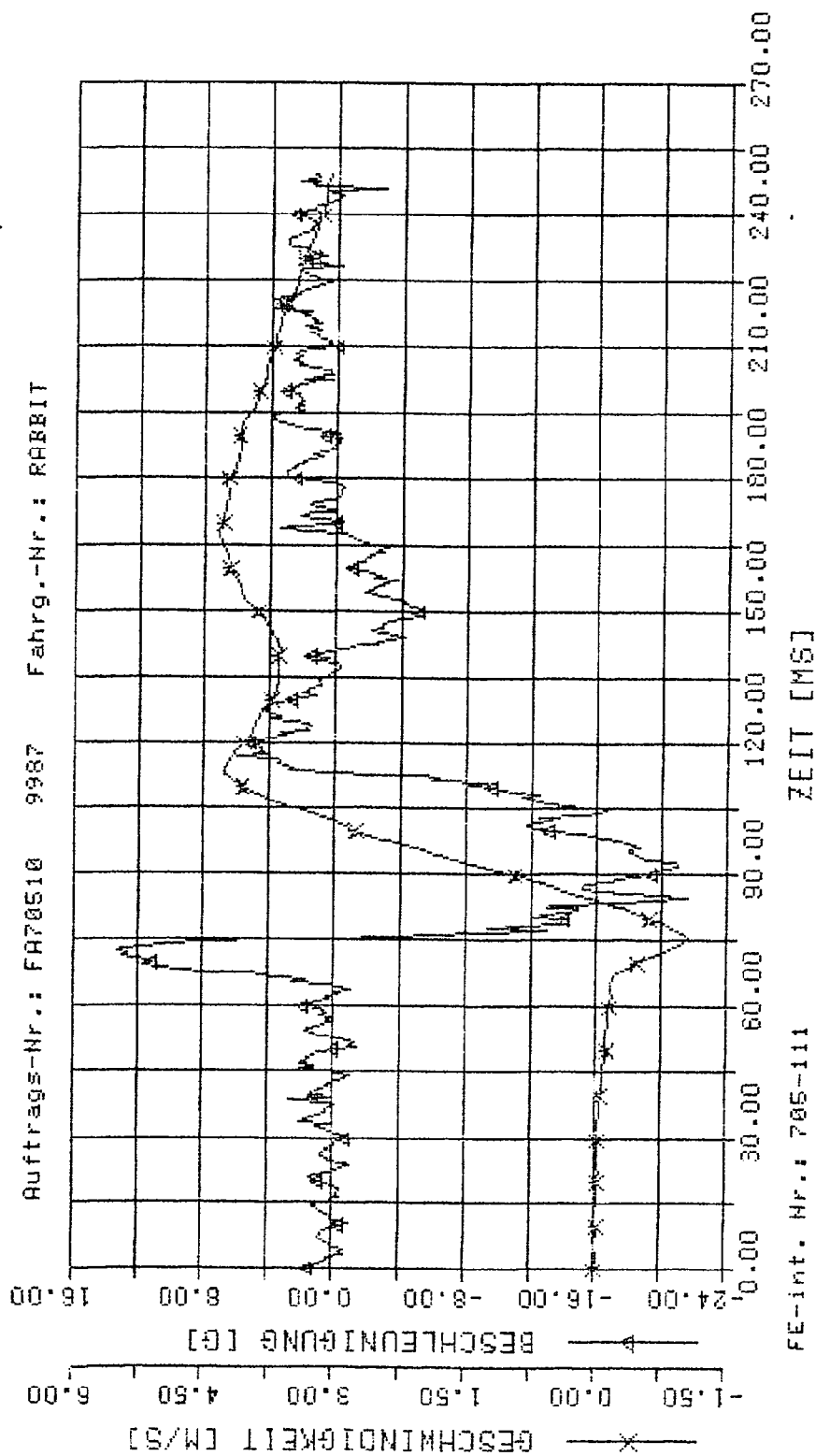
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987

Mess-Stelle	UP	ber.	Extremum	t	3MS
B003X	V1	BE g	-34.414	89.20	0.00
B003X	V1	GE N/s	5.884	173.10	0.00



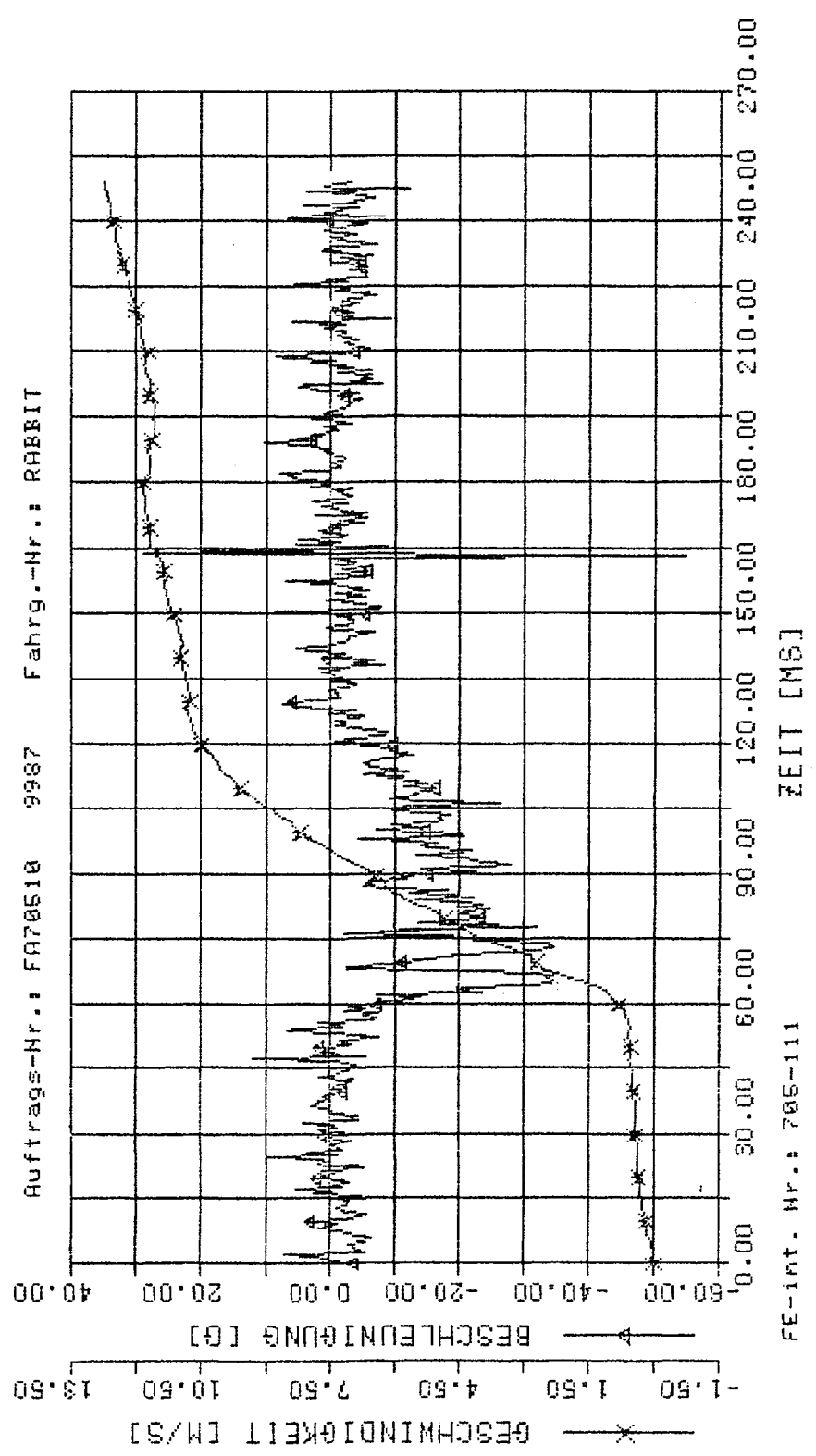
- Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987

Mess-Stelle	UP	ber.	Extremum	t	AMS
BU03X	V1	BE g	-21.585	92.80	0.00
BU03X	V1	GE m/s	4.330	168.10	0.00



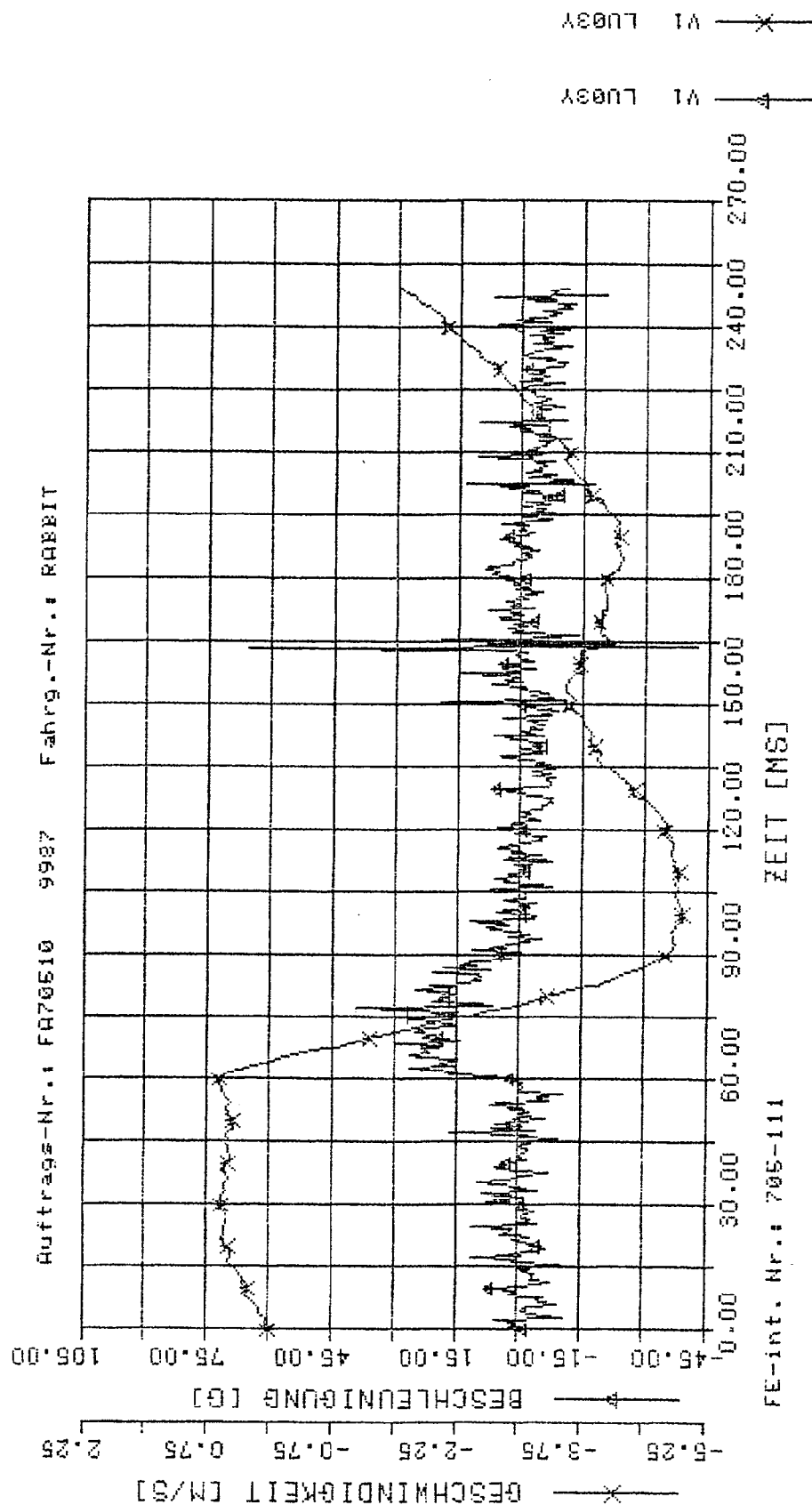
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987

Mess-Stelle	Up	ber.	Grösse	Extremum	t	SMS
L003Y	V1	BE	g	-54.574	163.50	0.00
L003Y	V1	GE	m/s	12.770	251.90	0.00



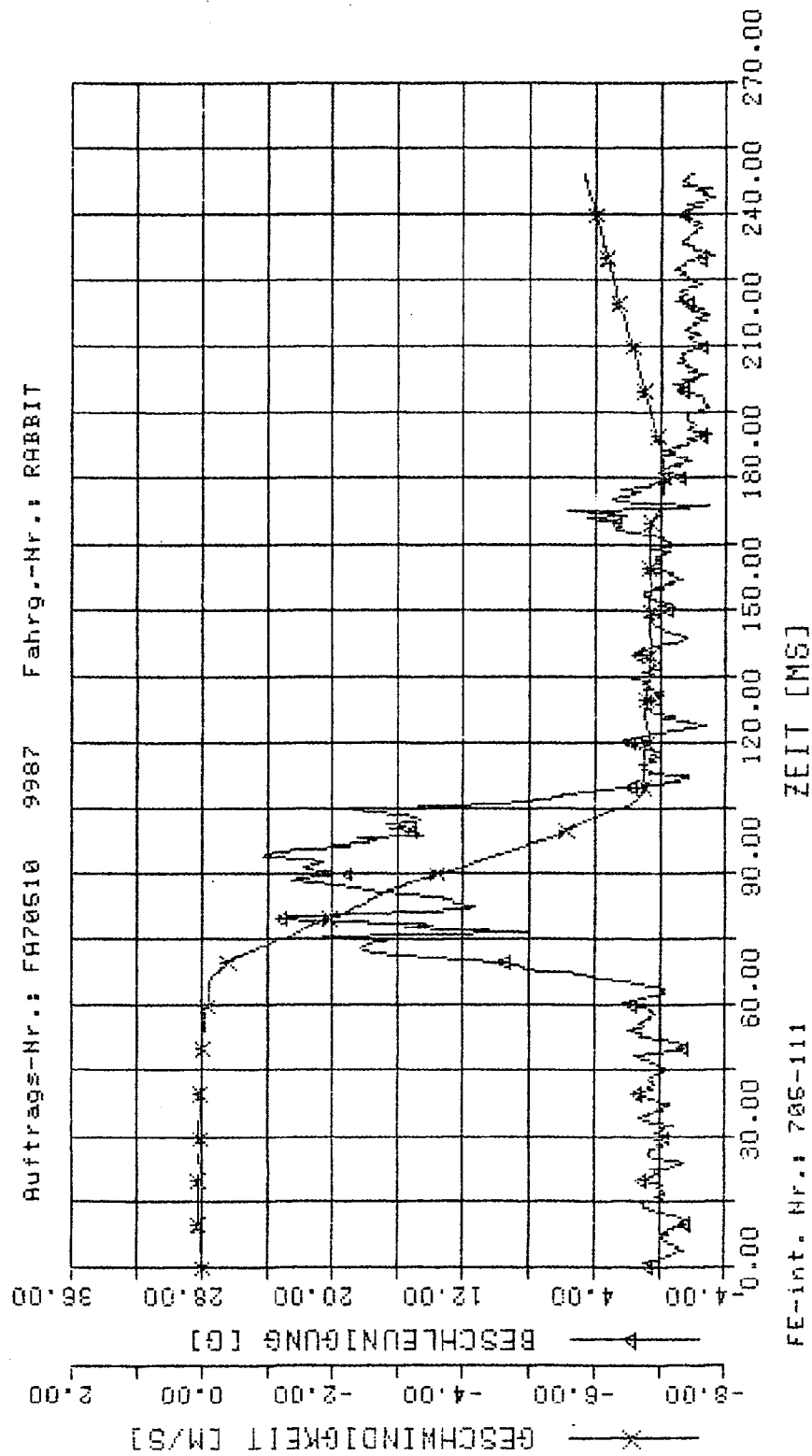
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987

Mess-Stelle	UP	ber.	Groesse	Extremum	t	SMS
LU03Y	V1	BE	g	65.057	163.50	0.00
LU03Y	V1	GE	n/s	-4.982	98.80	0.00



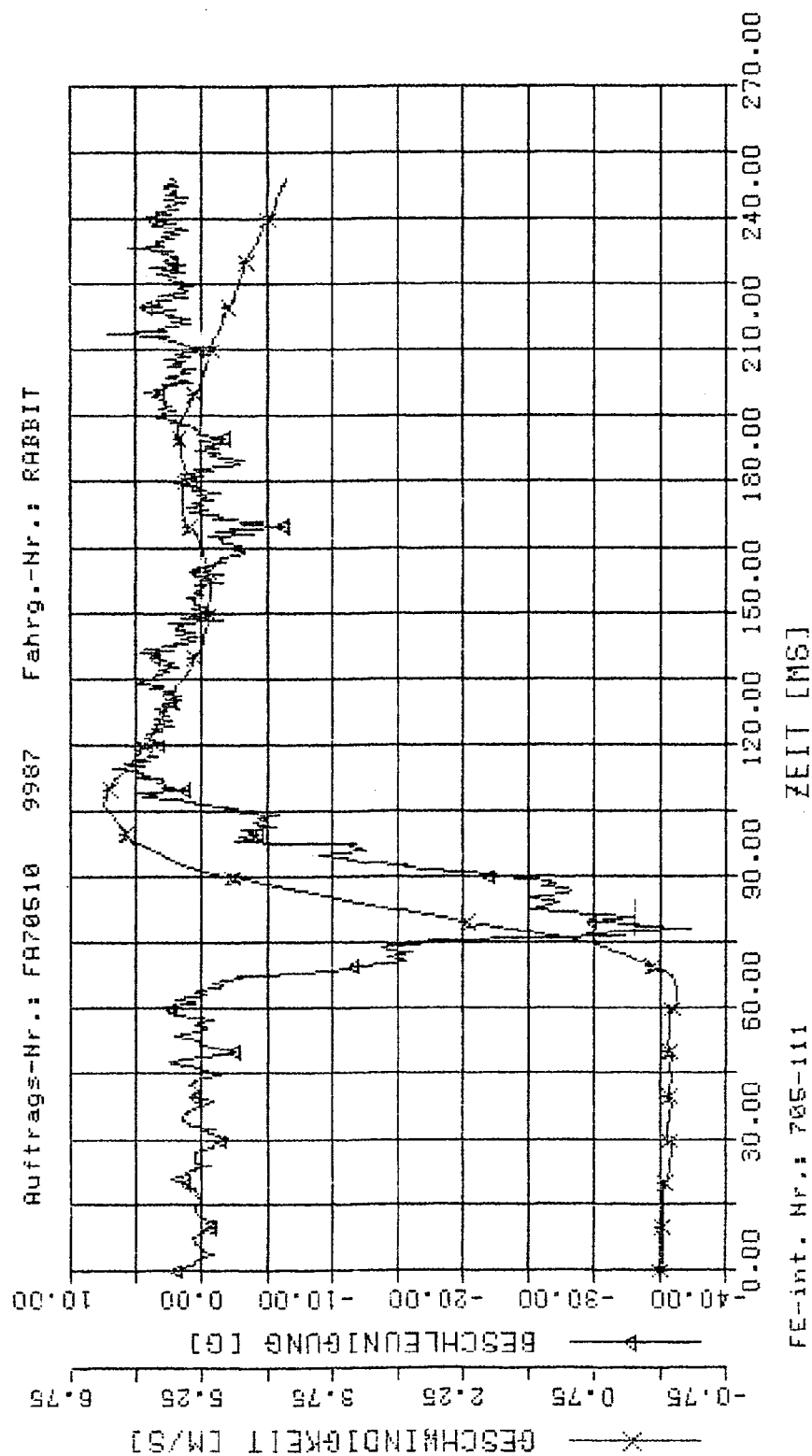
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987

Mess-Stelle	UP	ber.	Extremum	t	SMS
RO03Y	V1	BE	24.895	24.30	0.00
RO03Y	V1	GE	-7.068	179.50	0.00



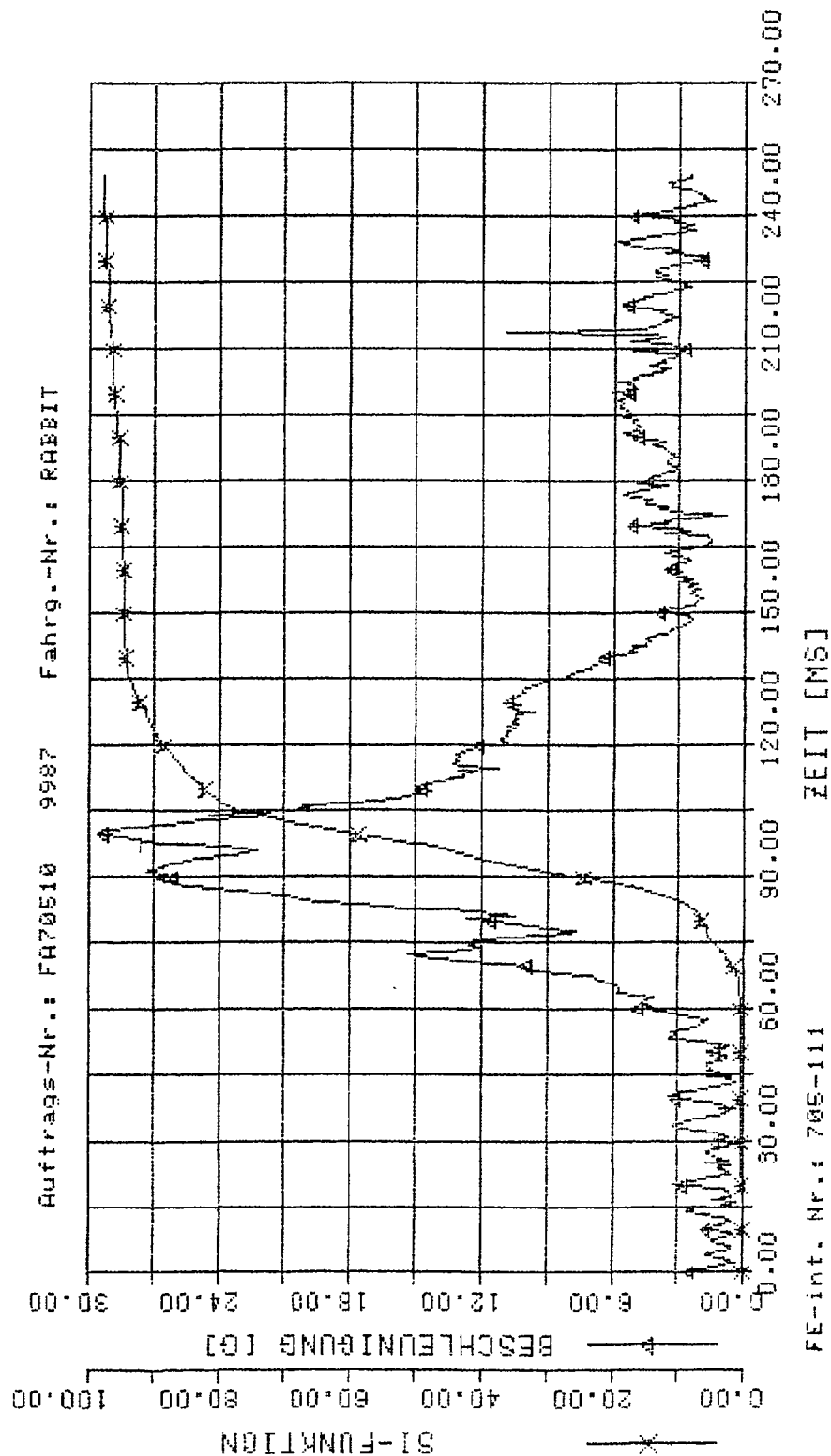
- Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987

Mess-Stelle	UP	ber.	Extremum	t	MS
RU03Y	V1	GE	Groesse	Extr.	
RU03Y	V1	GE	-38.262	78.70	0.00
	V1	GE	6.362	107.00	0.00



Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987

Mess-Stelle	UP	ber.	Groesse	Extremum	t	3MS
T003	V1	EE	g	29.793	100.60	0.00
T003	V1	SI		97.706	250.00	0.00



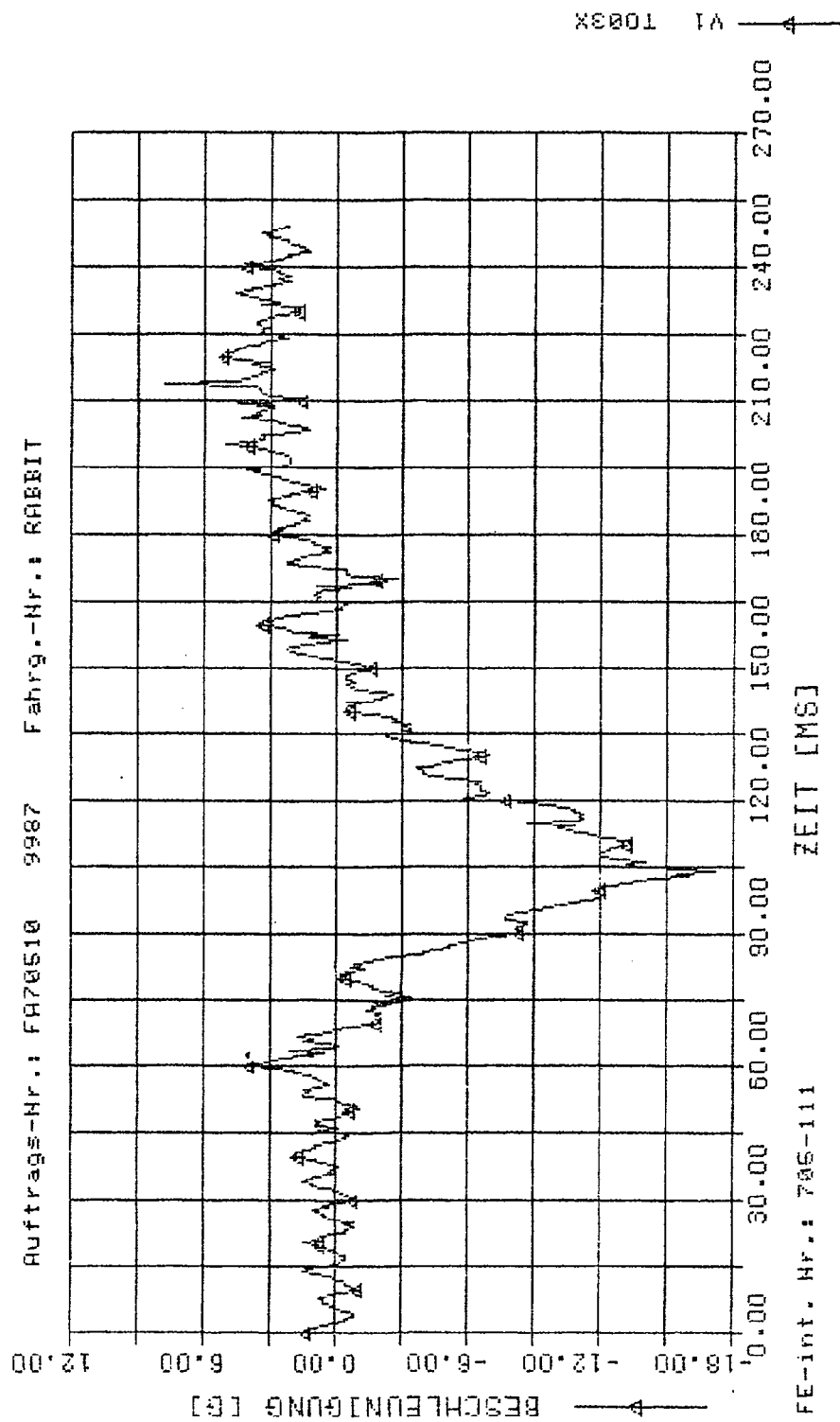
V1 1003X Y Z

V1 1003X Y Z

Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987

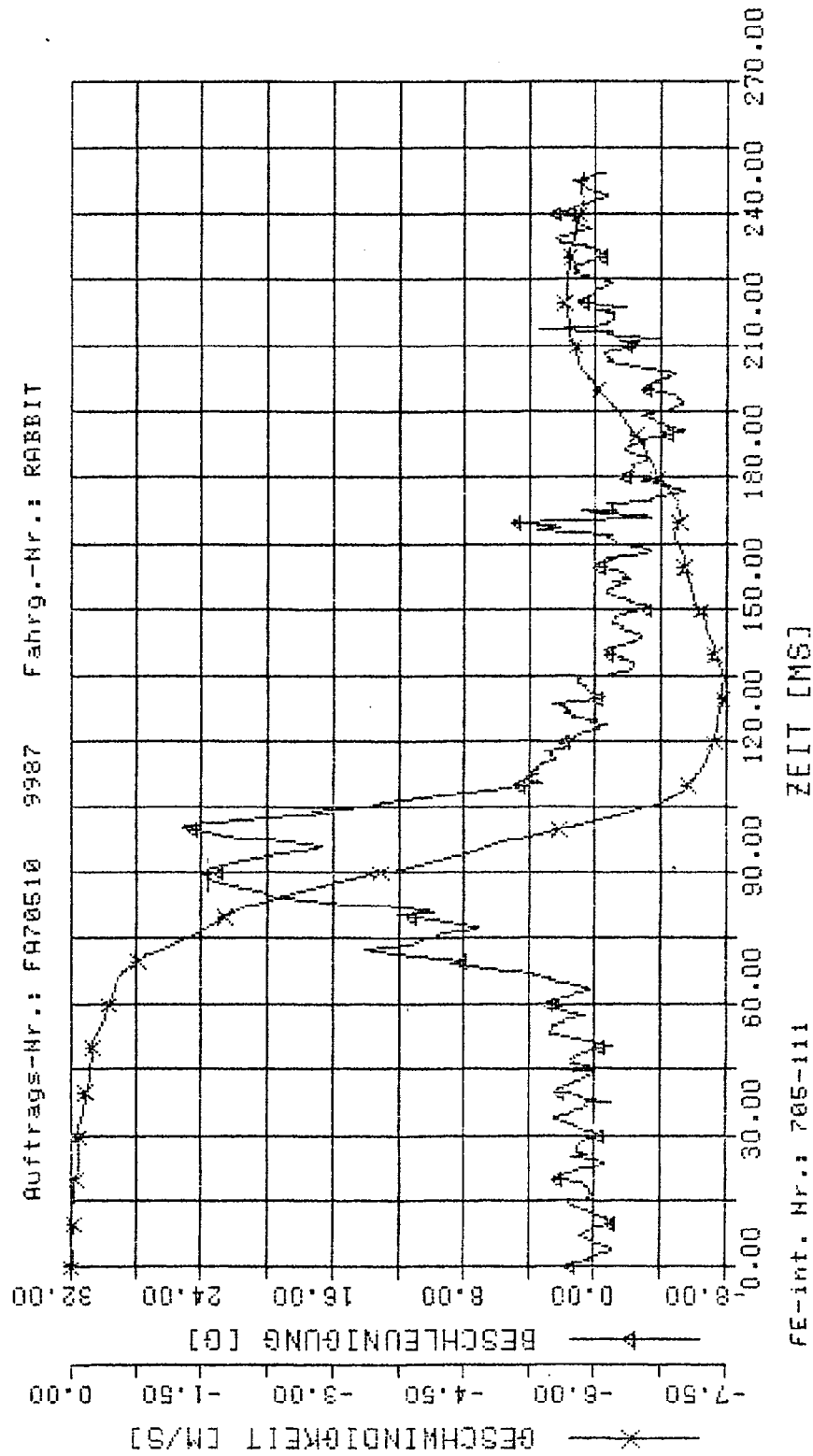
Mess-Stelle
T003X

UP	ber.	Extremum	t	3MS
V1	BE g	-17.377	103.70	0.00



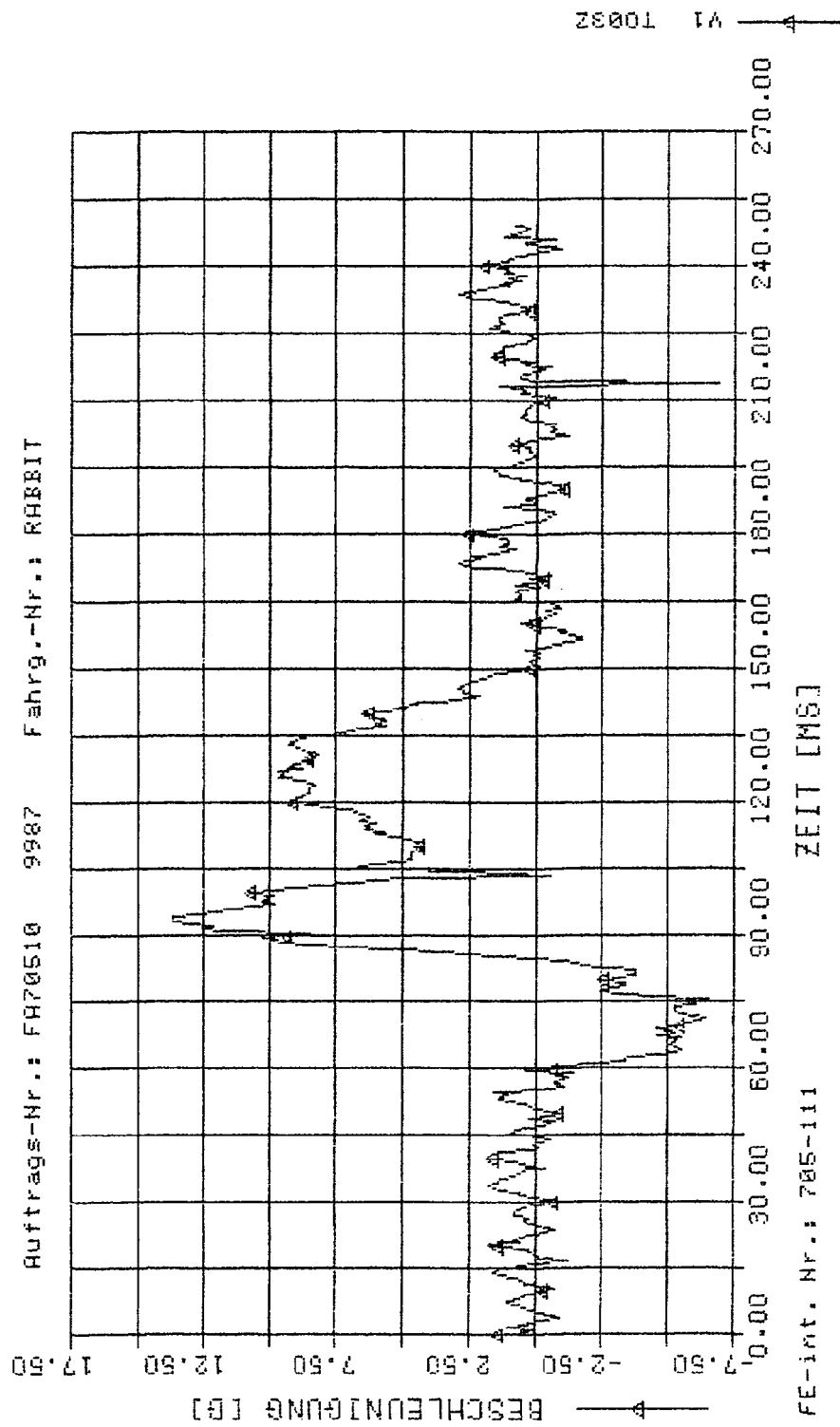
- Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987

Mess-Stelle	UP	ber.	Extremum	t	ΔMS
T003Y	V1	BE g	25.033	Extr. 100.70	0.00
T003Y	V1	GE m/s	-7.474	135.10	0.00



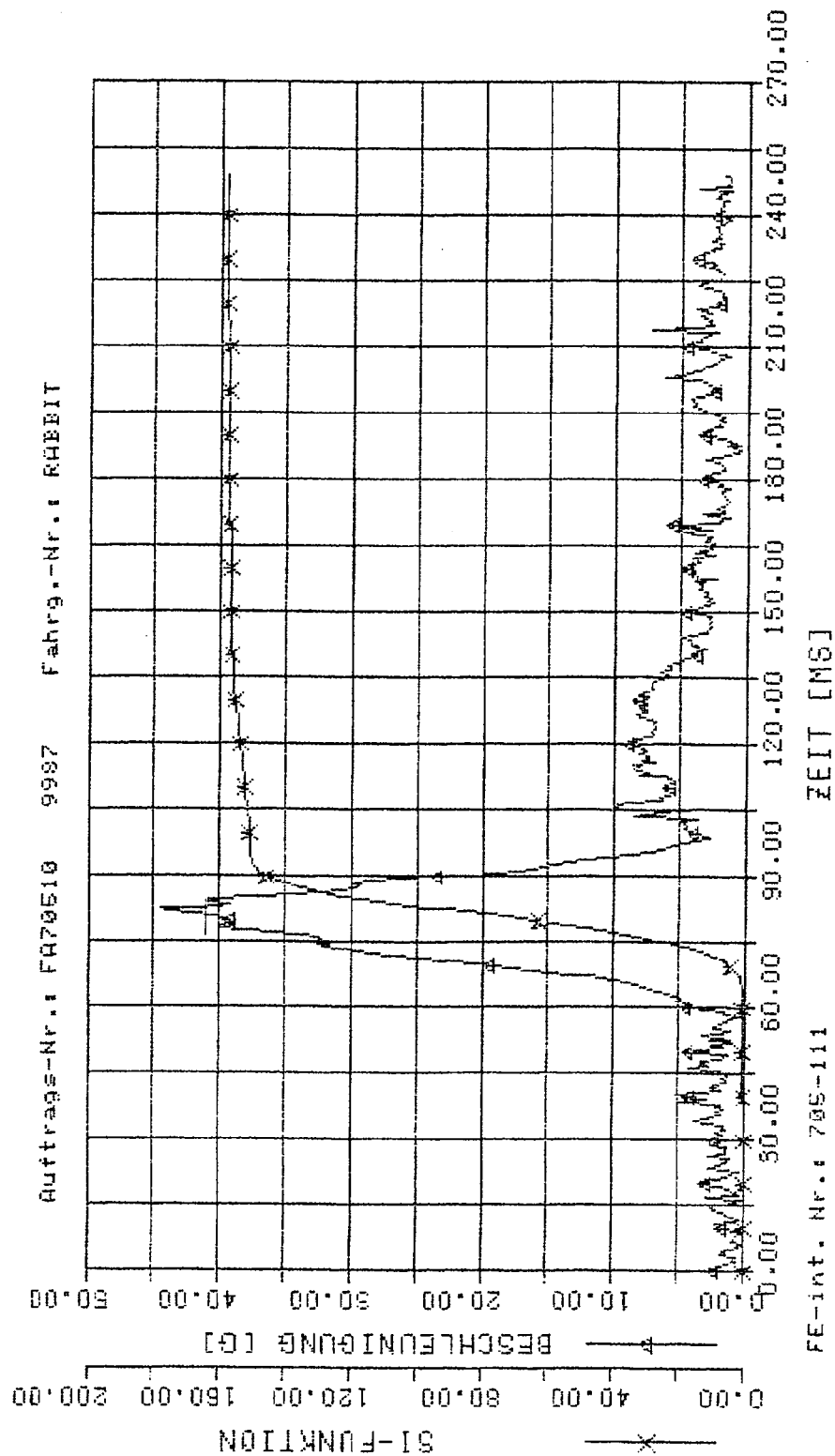
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987

Mess-Stelle UP ber. Extremum t SMS
T003Z Groesse Extr.
V1 BE g 14.062 74.20 0.00



Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987

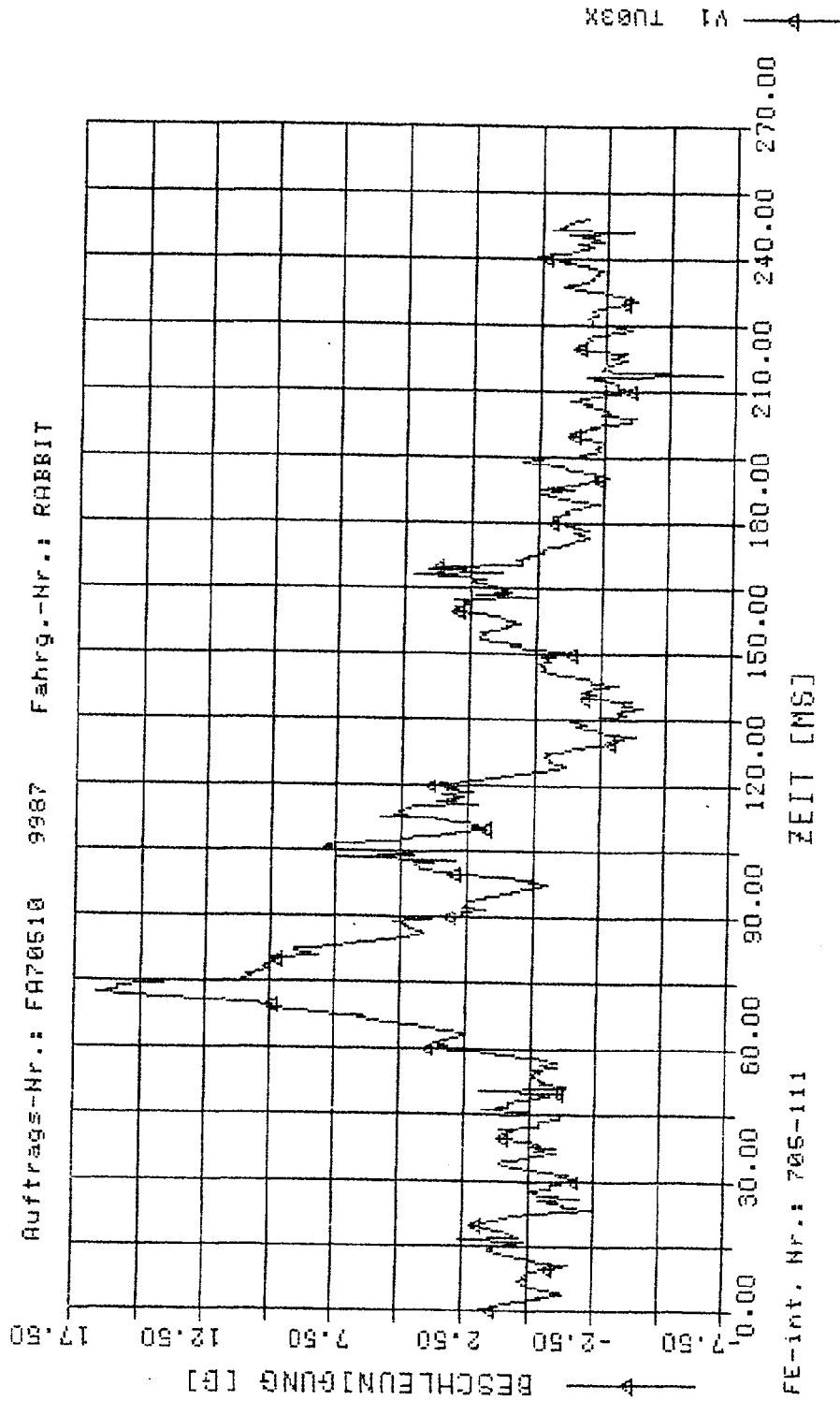
Mess-Stelle	UP	ber.	Extremum	t	MS
TU03		Groesse		Extr.	
TU03	V1	BE 9	44.810	82.20	0.00
TU03	V1	SI	157.632	250.00	0.00



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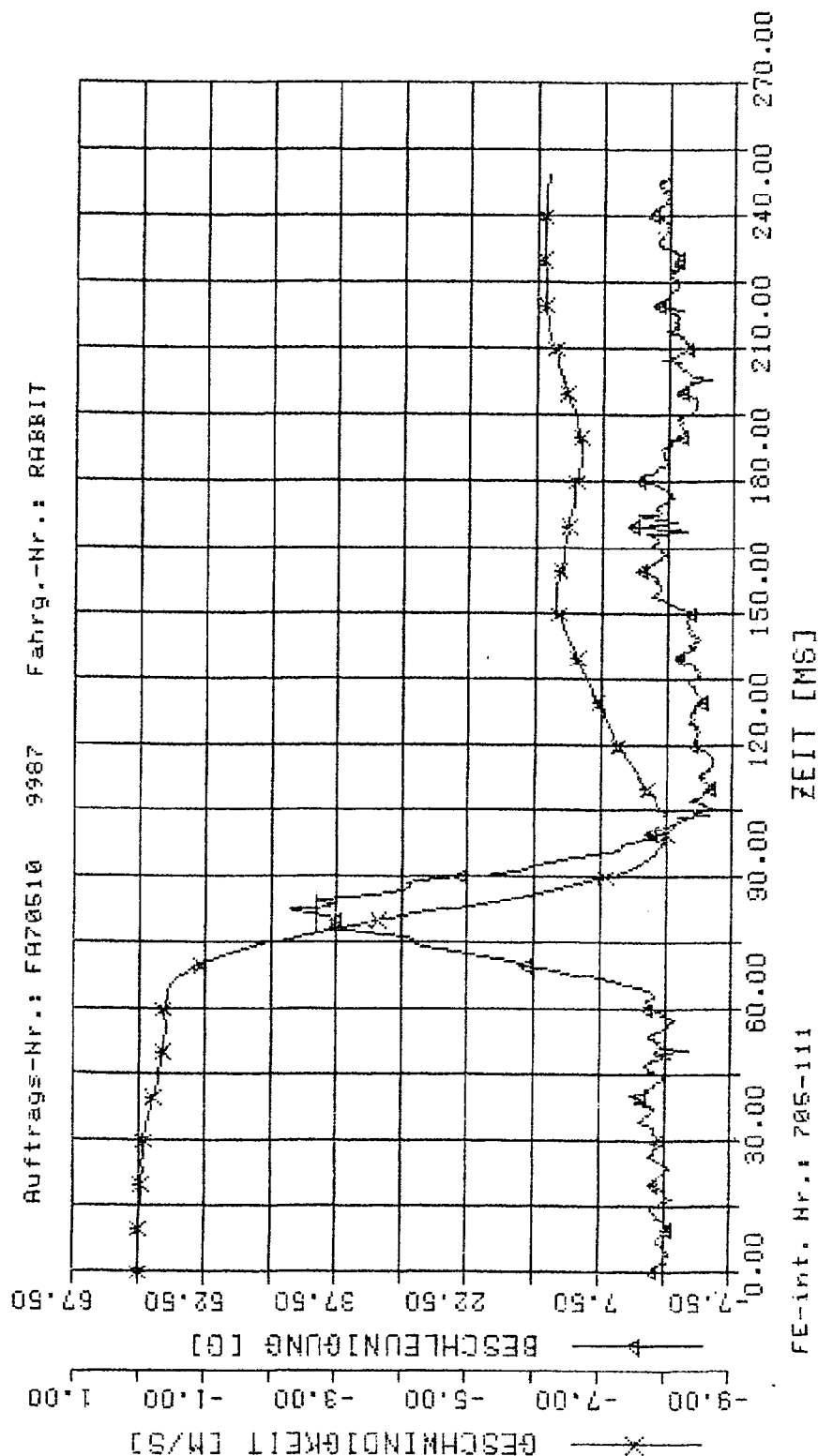
Kennwerte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987

Mess-Stelle UP ber. Extremum t SMS
V1 BE g 16.667 Extr. 72.50 0.00
TU03X



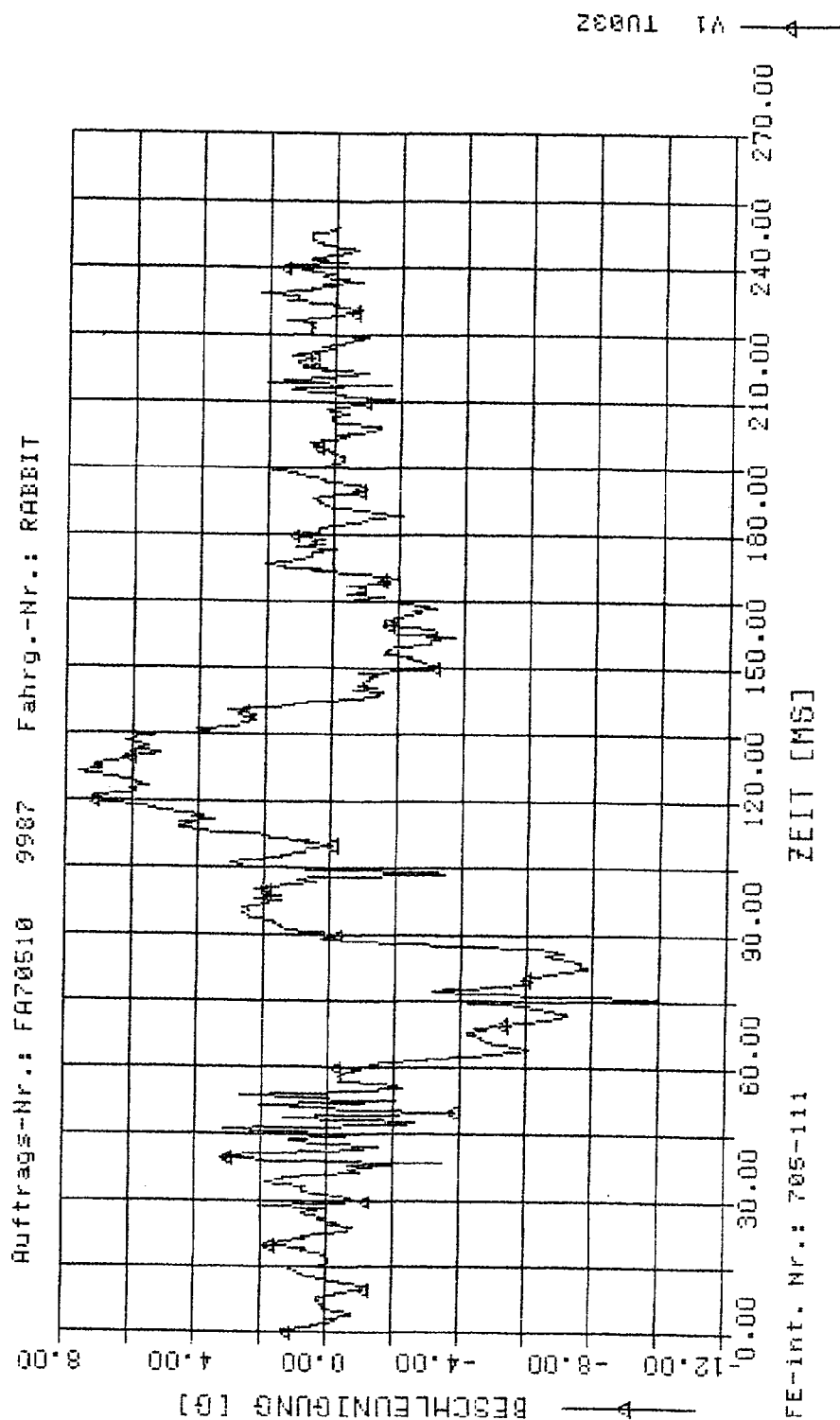
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987

Mess-Stelle	UP	ber.	Extremum	t	ΔMS
TU03Y	V1	BE	43.122	82.30	0.00
TU03Y	V1	GE	-8.024	101.10	0.00



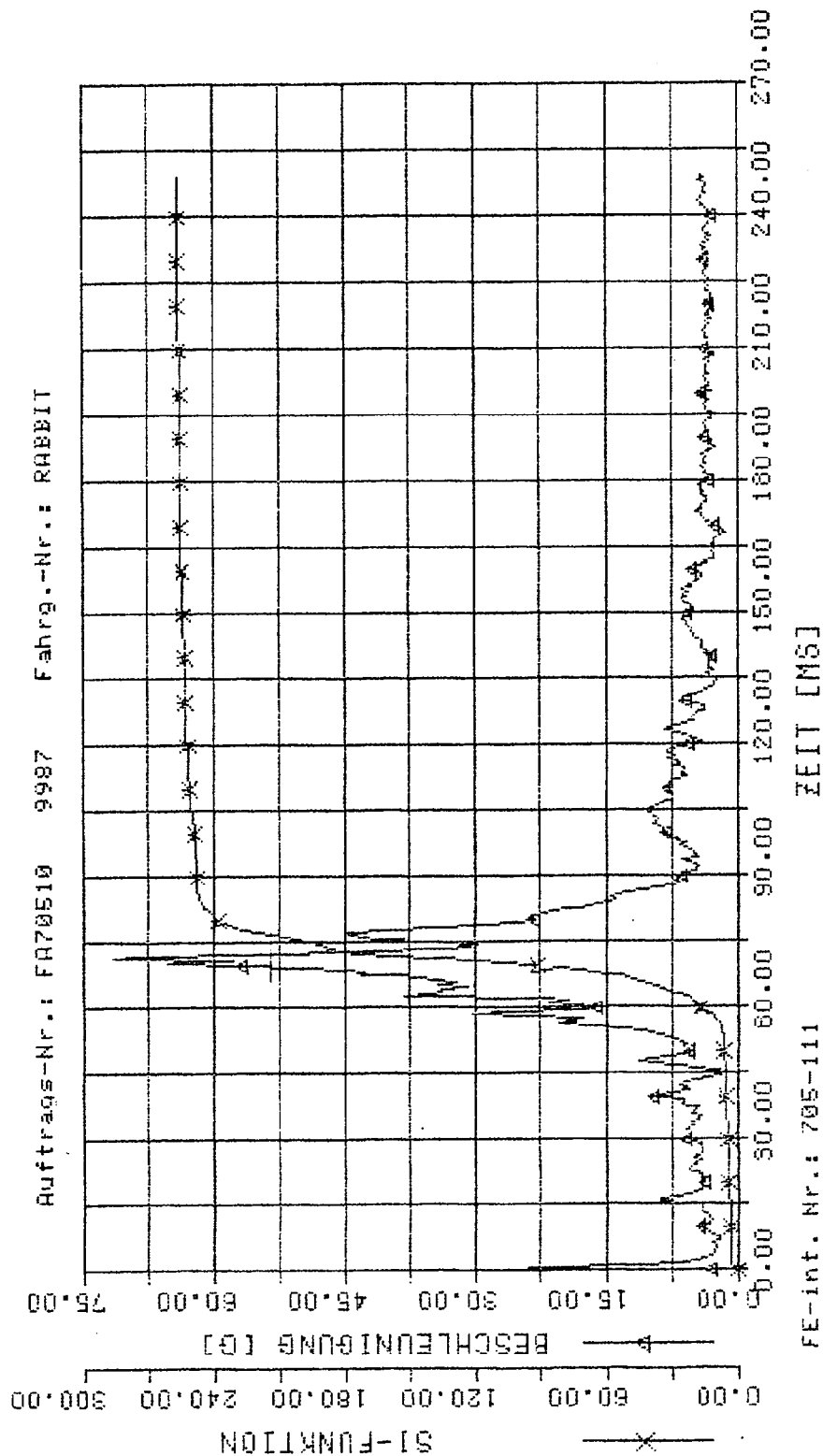
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987

Mess-Stelle	UP	ber.	Extremum	t	3MS
TU03Z	V1	BE g	-10.046	Extr.	75.00
					0.00



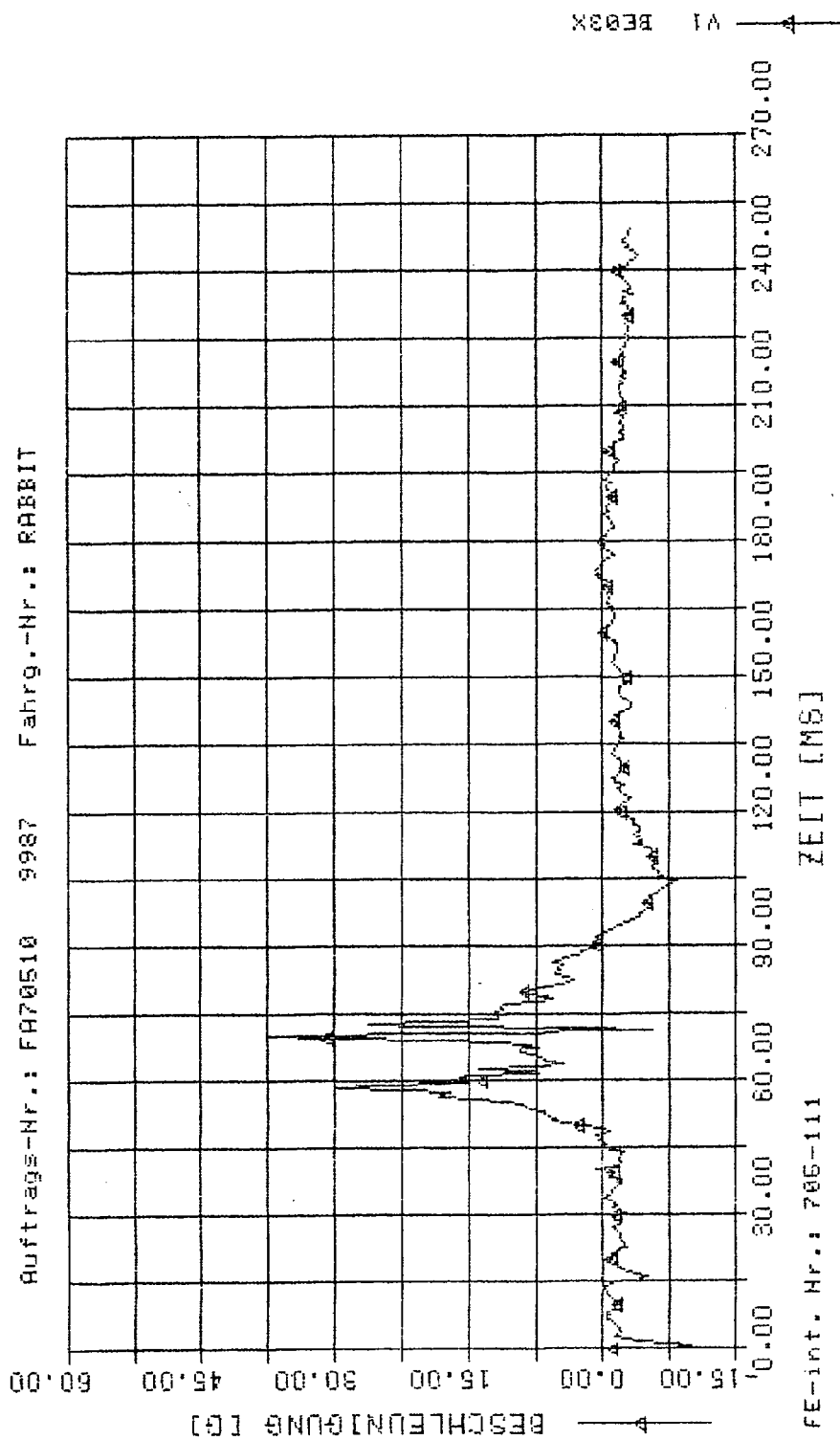
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987

Mess-Stelle	UP	ber.	Extremum	t	3MS
BE03	V1	BE g	71.355	71.50	50.30
BE03	V1	SI	256.037	250.00	0.00



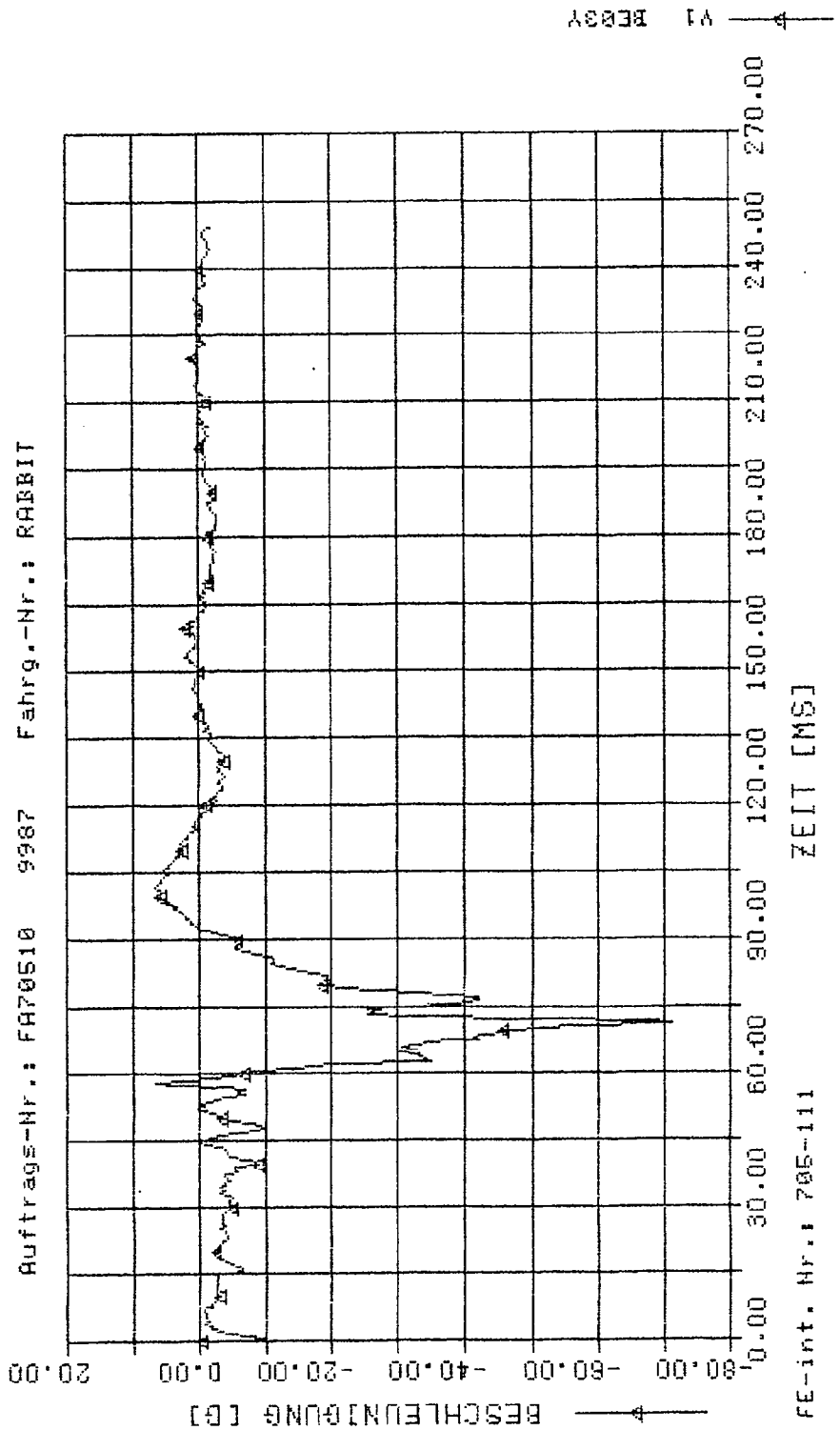
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987

Mess-Stelle	UP	ber.	Extremum	t	3MS
BE03X	V1	BE	Groesse	Extr.	
		g	37.336	70.50	19.73



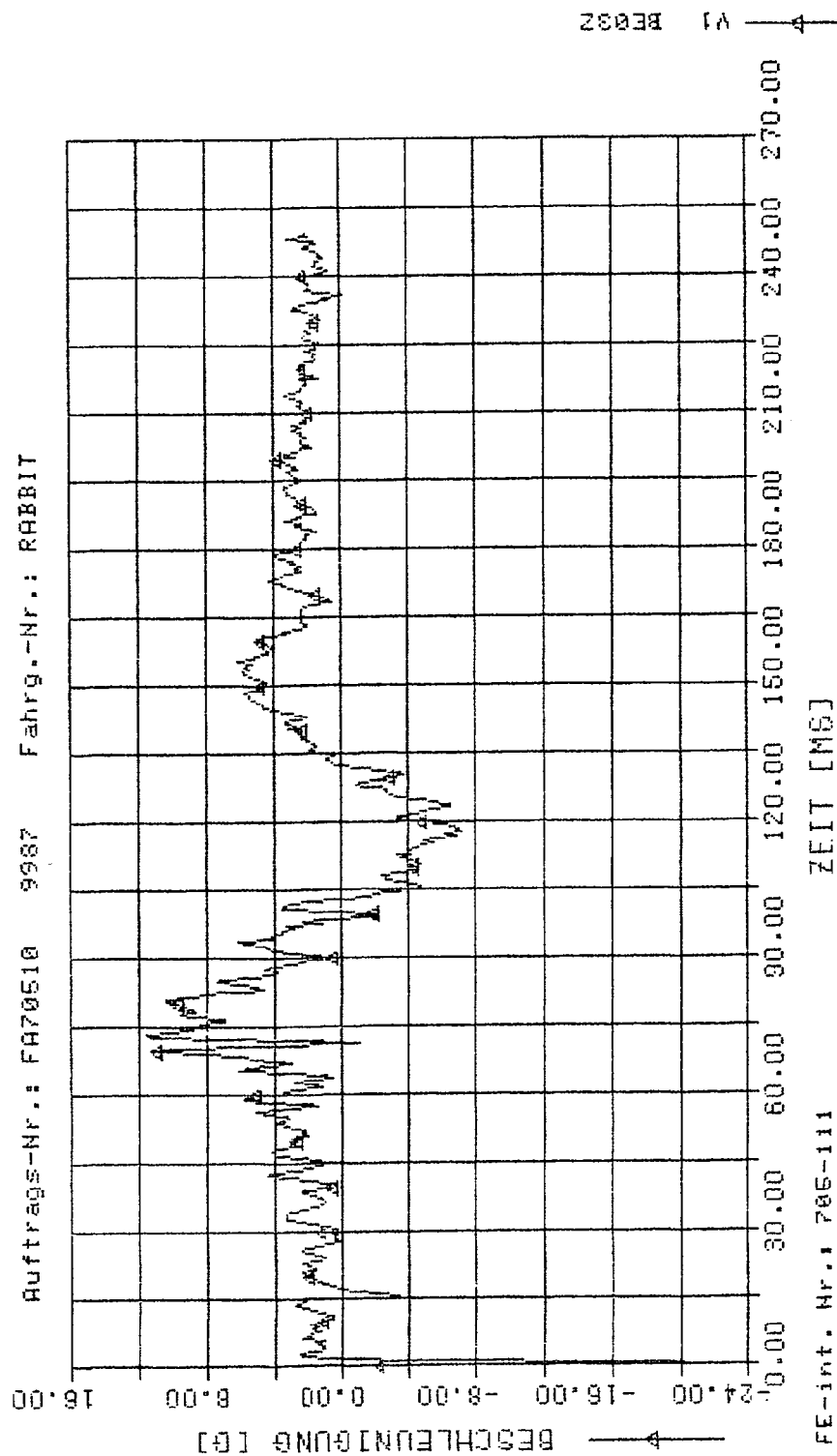
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987

Mess-Stelle UP ber. Extremum t SMS
BE03Y Groesse -71.125 71.50 5.48
V1 BE g

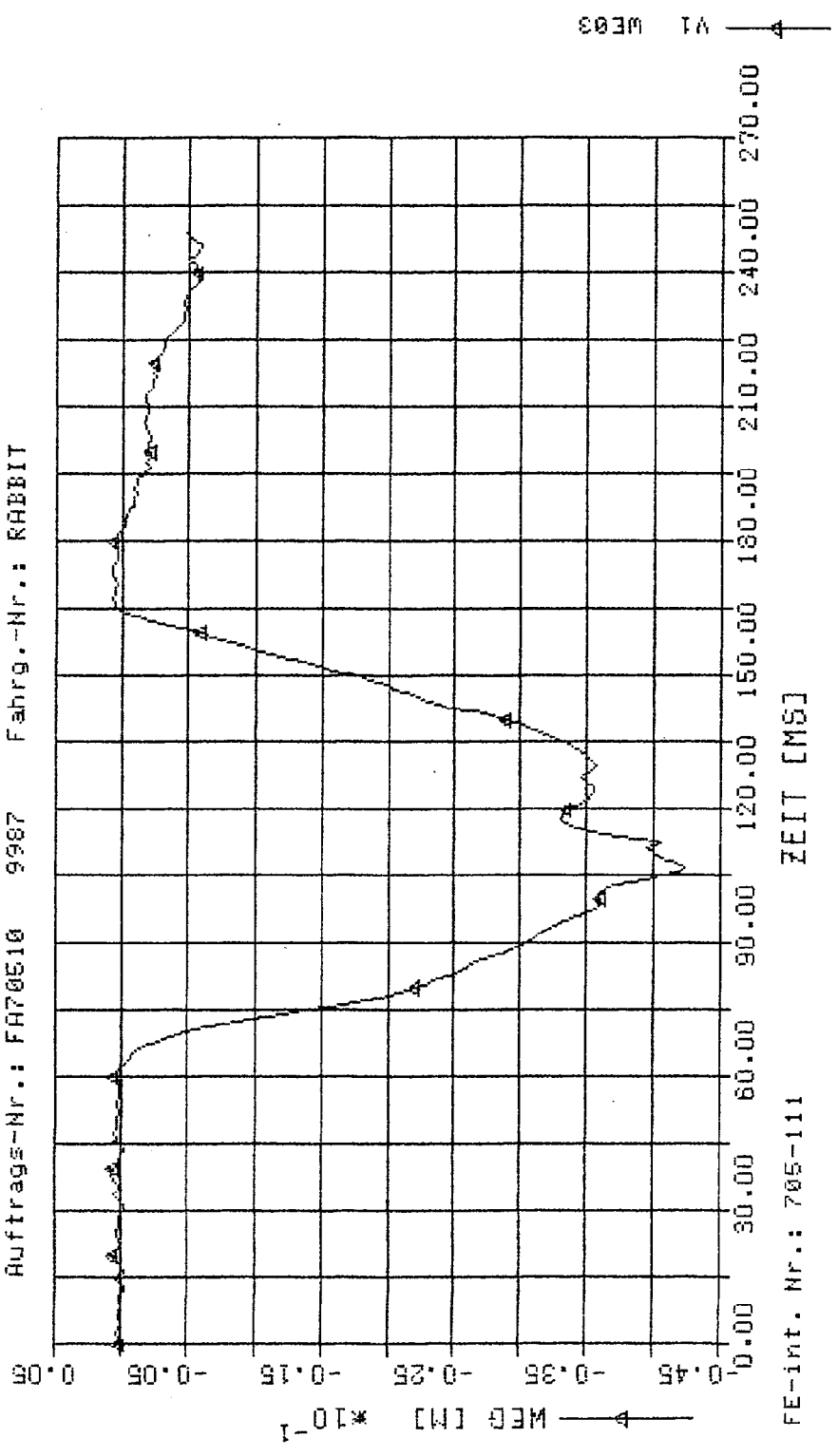


FE-int. Nr.: 705-111

Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987
 Mess-Stelle UP ber. Extremum t SMS
 BE03Z V1 BE 9 -23.863 50 9.75



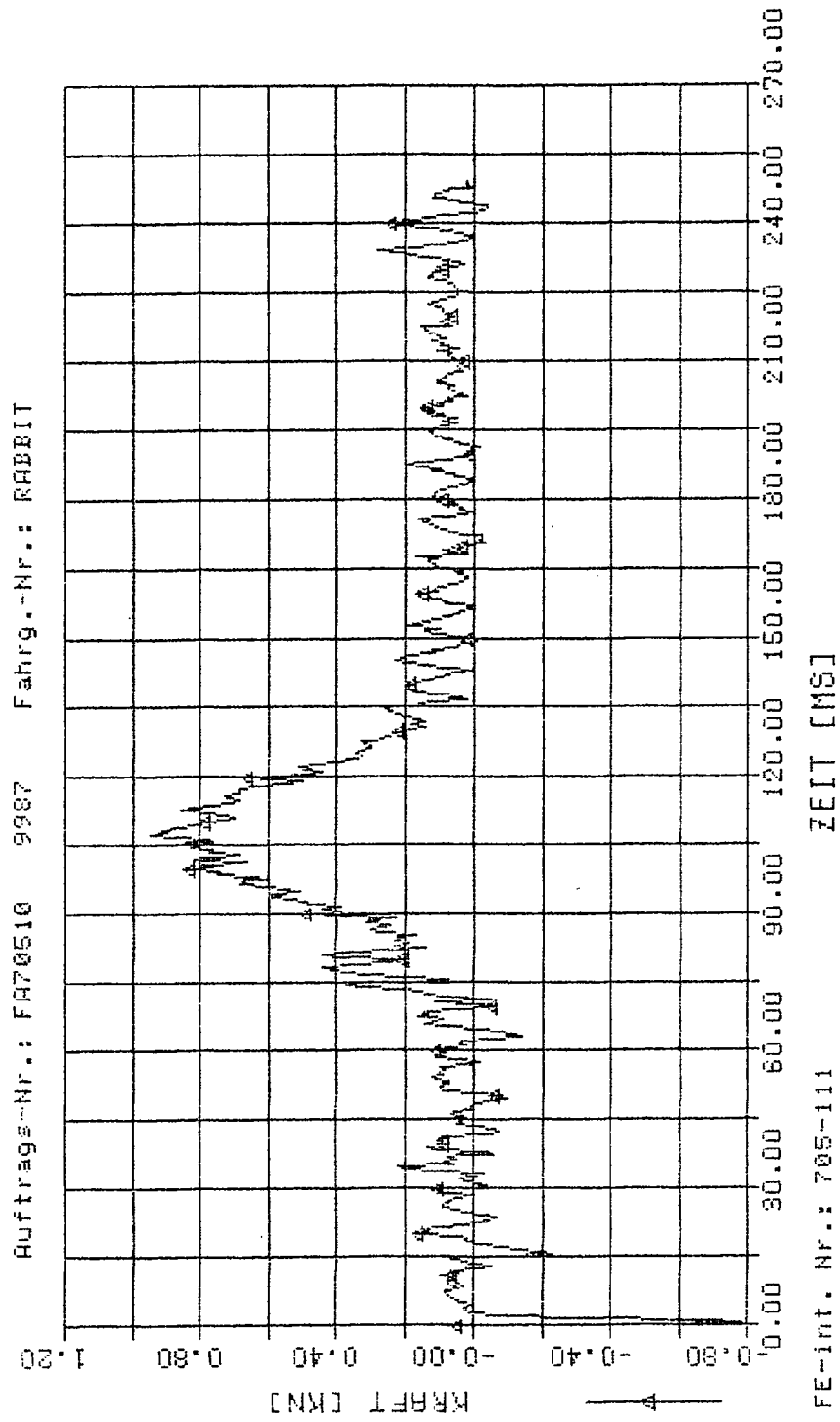
Auftrags-Nr.: FA70510 9987 Fahrg.-Nr.: RABBIT



Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987

Mess-Stelle
GU03SA

UP	ber.	Extremum	t	3MS
V1	KR kN	.950	107.50	0.00



Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9987

Mess-Stelle

UP

ber.
Grösse

Extremum

t

MS

GU03BA

V1

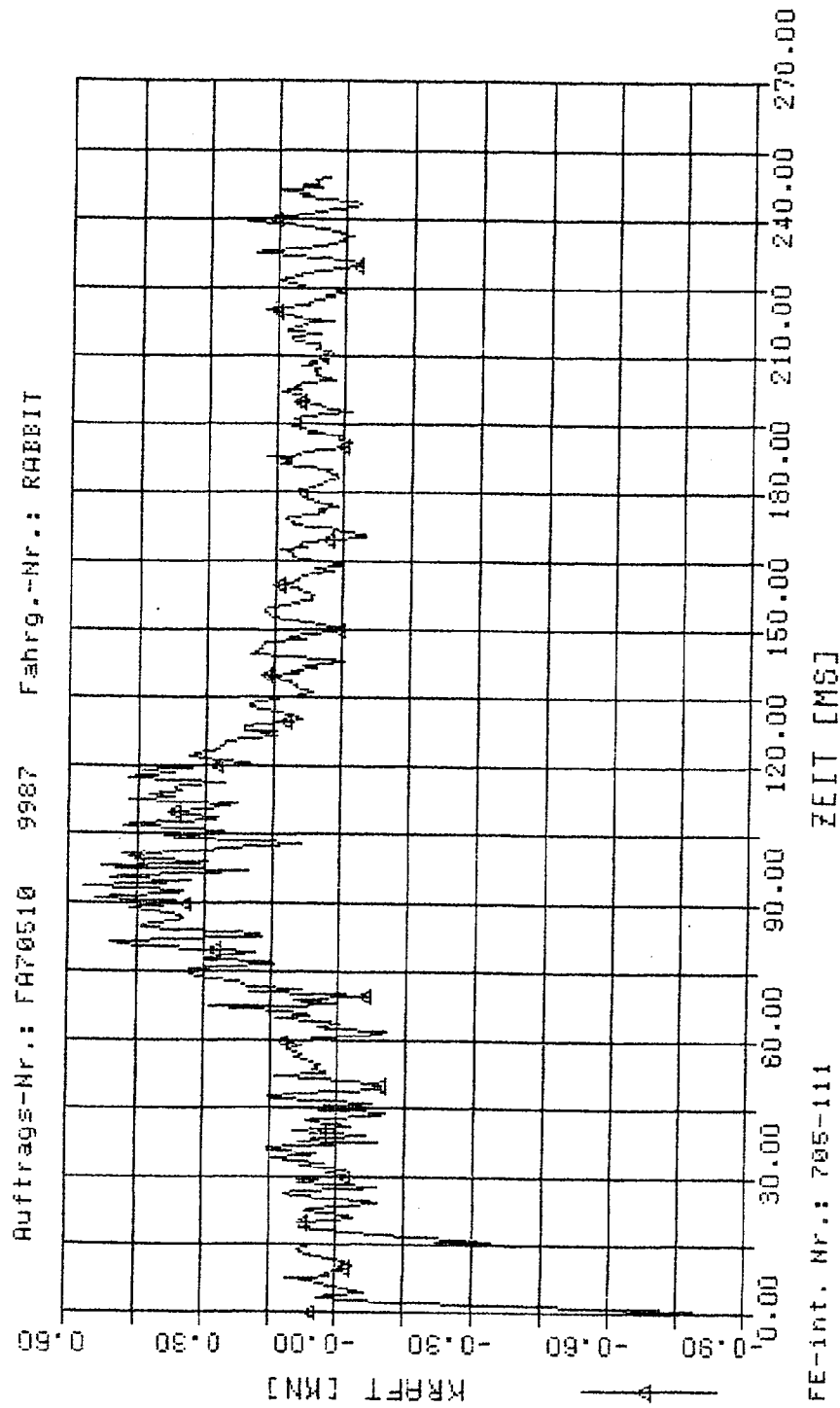
KR kN

-0.288

Extr.
1.00

0.00

Auftrags-Nr.: FA70510 9987 Fahrg.-Nr.: RABBIT



FE-int. Nr.: 795-111

VI GU03BA