

RESEARCH RABBIT (MIV) Modified Integrated Vehicle

Phase 1



VOLKSWAGENWERK
Aktiengesellschaft
WOLFSBURG

Contract No. DTNH 22-81-C-17085
June 1982
Final Report
Volume III/3 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. 3 - Crabbed Barrier/1981 Production 4 door Rabbit at 60° impact angle and v = 35 mph impact speed are summarized in this report.			
17. Key Words		18. Distribution Statement	
19. Security Classif. (of this report) m		20. Security Classif. (of this page)	21. No. of Pages 143
		22. Price	

Volume III/3

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/ 3

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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

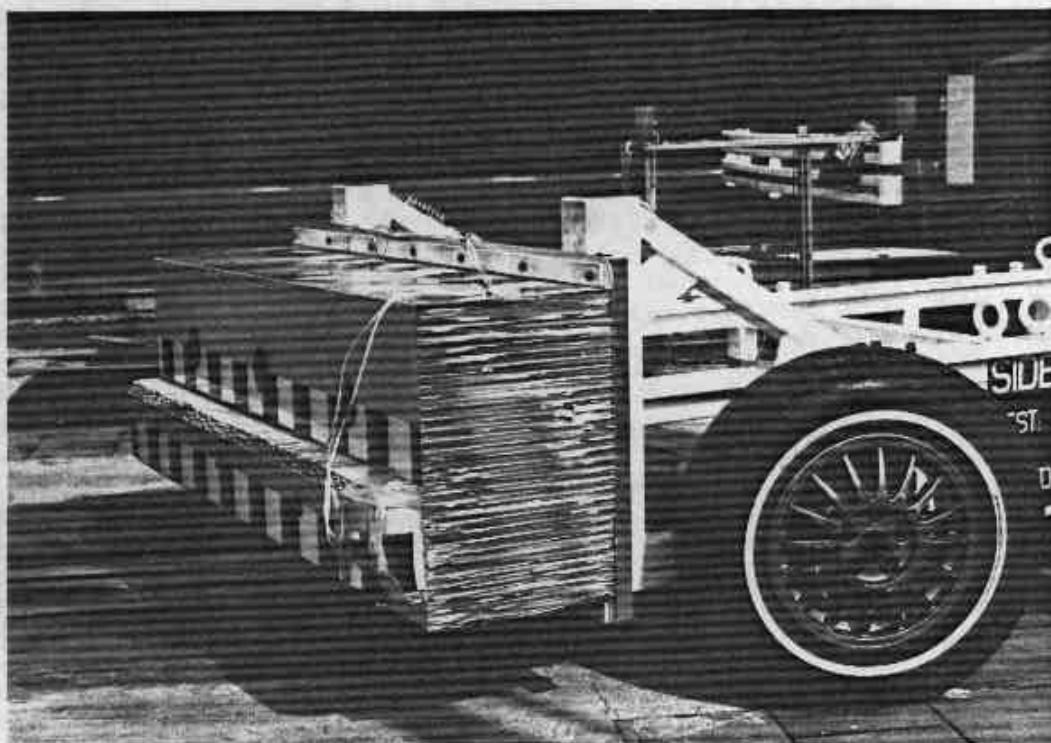
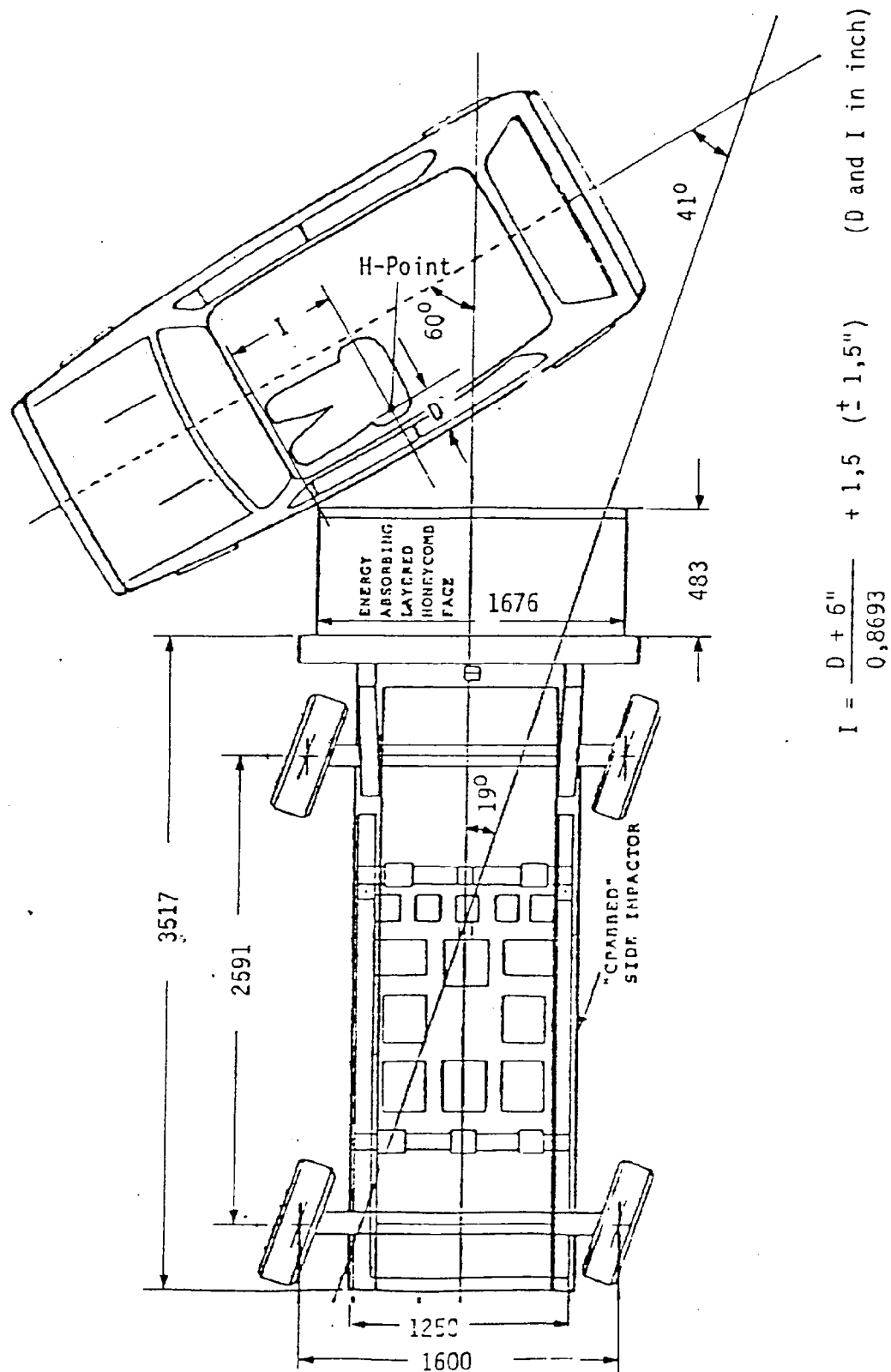


FIGURE 1 : 19° CRABBED BARRIER TEST DEVICE



FIGURE 2 : HSRI SIDE IMPACT DUMMY



Remarks: I = Impact-Point

D = Distance H-Point - Door Exterior

Figure 3: Test Configuration

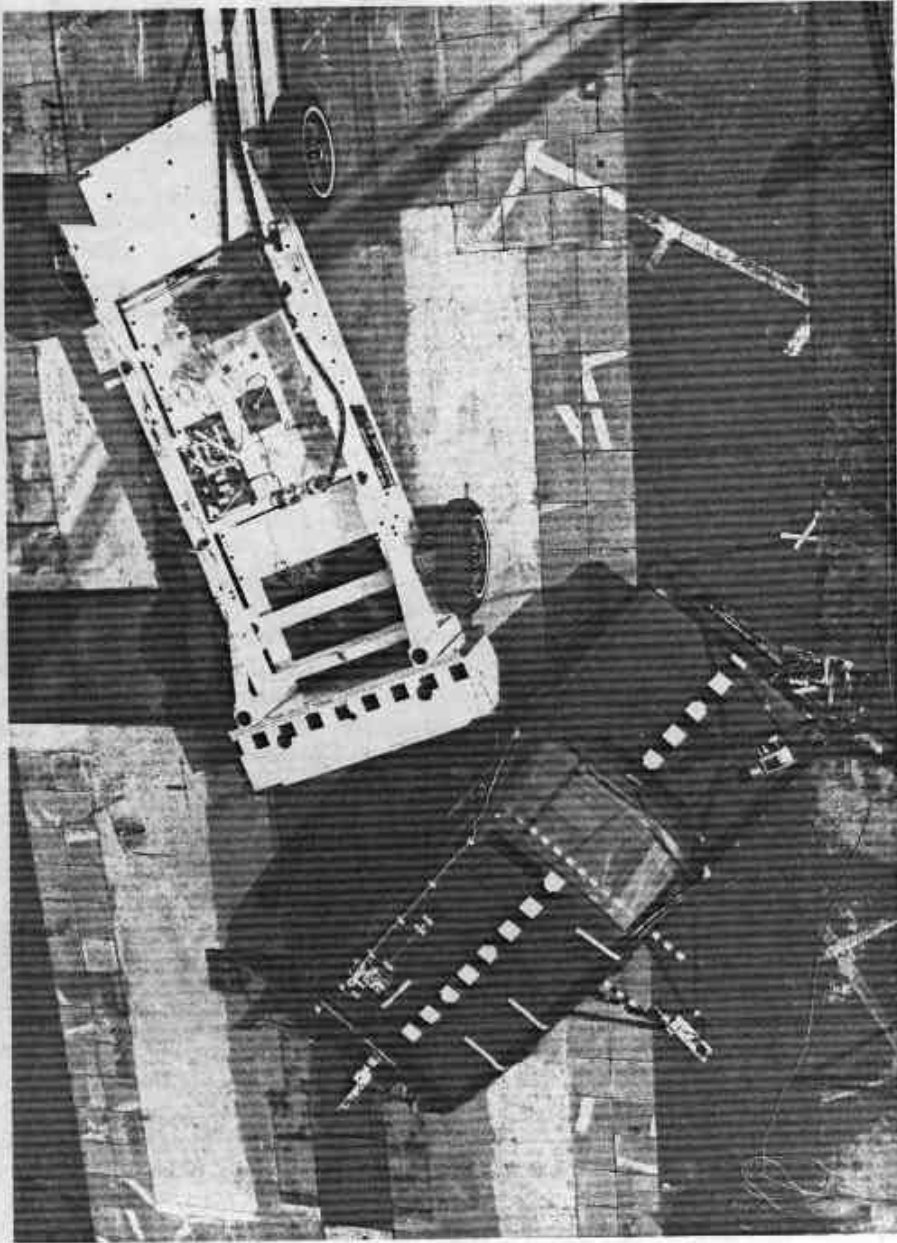


FIGURE 4 : SIDE IMPACT TEST CONFIGURATION
CRABBED BARRIER / VW RABBIT

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

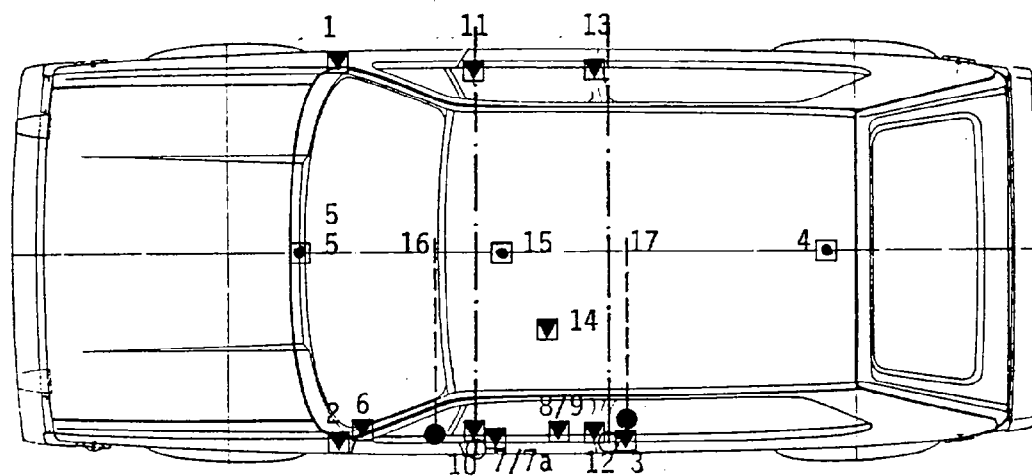
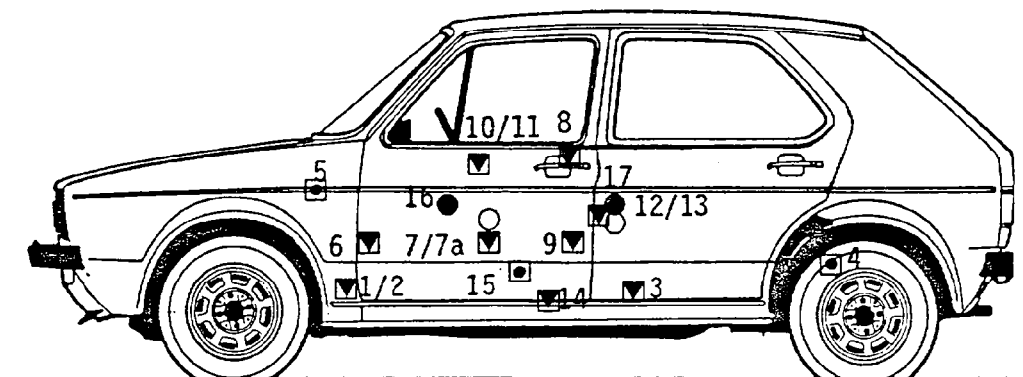
Declaration: X = Longitudinal
Y = Lateral
Z = Vertikal

Location of Accelerometer for the HSRI Side Impact Dummies

Location	Shortened Form	Direction
<u>D R I V E R</u>		
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

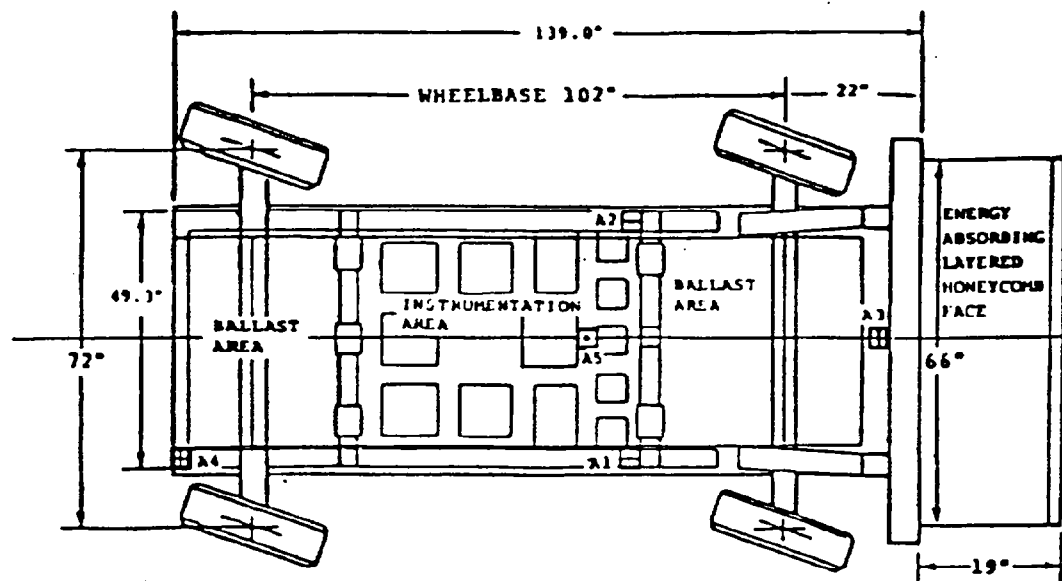
Figure 5 : Target Vehicle Instrumentation

Accelerometer -		Coordinates [mm]			Results [g _{max}]		
No.	Location	X *	Y *	Z *	X	Y	Z
1	Occupant Compartment, right Front-Doorsill	2630	620	300	--	15.2	--
2	Occupant Compartment, left Front-Doorsill	2630	-620	300	--	57.5	--
3	Occupant Compartment, left Rear-Doorsill	1410	-560	290	--	155.8	--
4	Rear Deck over Vehicle Centerline	910	0	440	15.0	23.2	13.8
5	Front Firewall over Vehicle Centerline	2890	0	650	15.6	16.6	12.4
6	Mid-front Edge of Left Front Door	2550	-620	457	--	--	--
7	Middle of left Front Door	2060	-620	630	--	65.3	--
8	Shoulder Contact Front Door	1775	-665	850	not available		
9	Pelvis Contact Front Door	1840	-660	480	--	--	--
10	Left Front Door on Windowsill, slightly forward of surrogate's	2050	-650	850	--	125.7	--
11	Right Front Door on Windowsill, directly across from Nr. 10	2050	650	850	--	28.8	--
12	Left B-Pillar near Door Lock	1480	-650	670	--	110.9	--
13	Right B-Pillar across from Nr. 12	1480	650	670	--	25.5	--
14	Underneath left Front Seat attached to Seat	1960	325	285	--	116.2	--
15	Vehicle Center of Gravity				17.1	39.7	15.7
16	Displacement Transducer Front Door	2235	-	670	--	--	--
17	Displacement Transducer B-Pillar	1415	-	850	--	--	--

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

Table 2 : Summary of Target Vehicle Instrumentation

TEST NO : 3



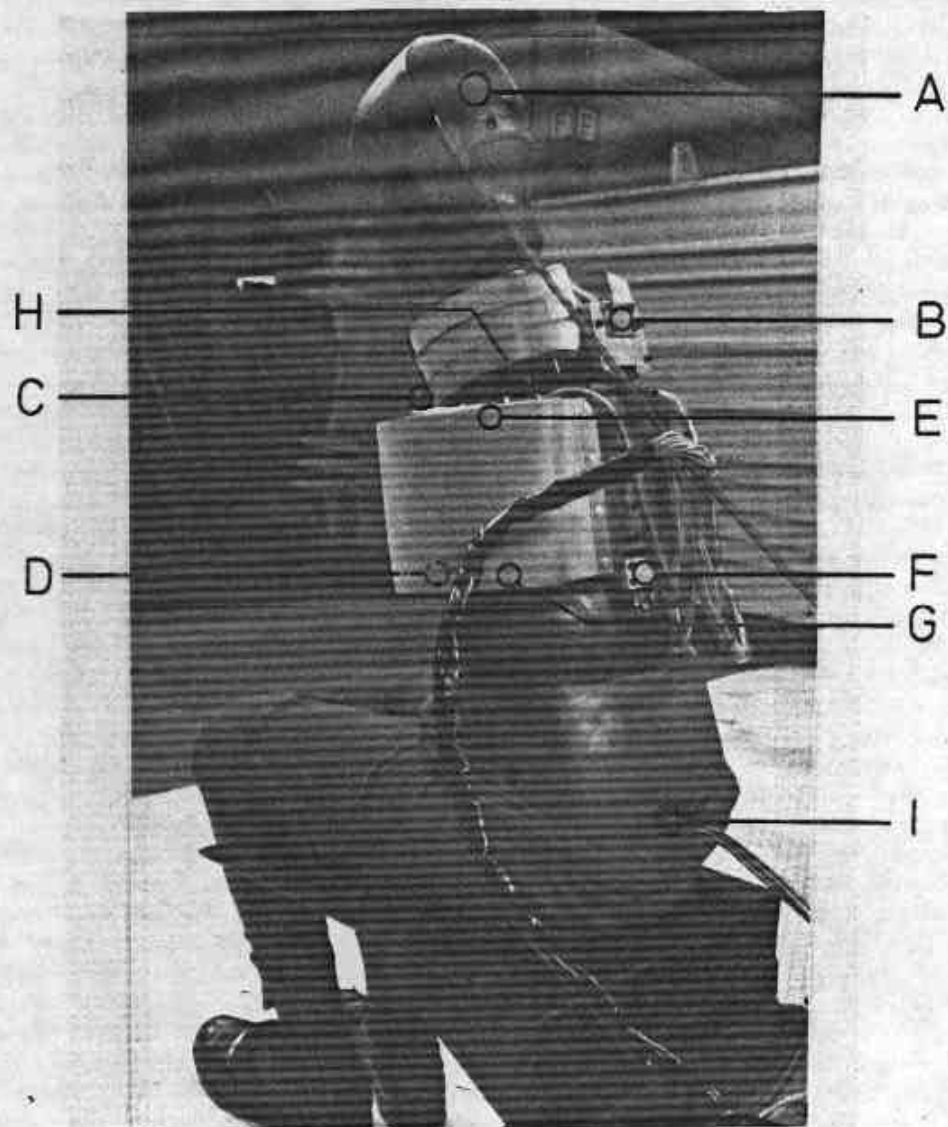
-  Axial Accelerometer, Longitudinal
-  Biaxial Accelerometer, Long., Lat.
-  Triaxial Accelerometer, Long., Lat., Vert.

No.	Accelerometer - Location	Coordinates [mm]			Results [G]		
		X	Y	Z	Long	Lat	Vert
A 1	Right Frame Rail	2134	584	508	8.4	--	--
A 2	Left Frame Rail	2134	-584	508	13.2	--	--
A 3	Front Crossmember at Centerline	3300	0	610	11.2	--	--
A 4	Right rear vertical Frame Rail	228	560	407	8.5	5.2	--
A 5	Side Impactor Center of Gravity	1727	0	305	8.8	3.3	6.8

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

FIGURE 6 : SIDE IMPACTOR INSTRUMENTATION

TEST NO : 3



- | | |
|---------------------------------|----------------------------------|
| 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: 3 Test Date: 09.18.1981

Test Type: 60° Side Impact Simulation

Vehicle A : Side Impactor

Vehicle B: VW-Rabbit

Comments: Side Impactor "Crabbed" 19°

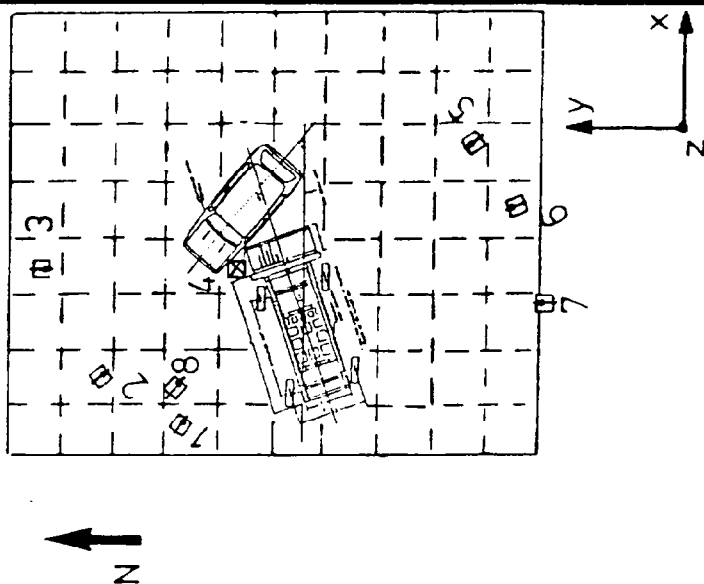
Camera	Yes
Still	
Movie	
Slides	
Polaroid	

Camera Symbols

- ☐ Pit
☐ Ground
☐ Barrier

Timing Light, Speed

1. 100 Hz (10 msec/light)
 2. Other



Loc. No.	Location	Field of View	Lens Size	Frm Rate	Tmng Spd	Real Fr.R.	Impact Dist-X	C. L. Dist-Y	Cam[m] Dist-Z
1	North Side -Parallel To Bullet	Overall of Both Vehicles (Locam)	16	3	10	367	-7.0	4.0	1.3
2	North Side -Parallel to Target	Close-up of Both Vehicles at Impact (Locam)	10	3	10	360	-3.0	4.5	2.2
3	North Side-Perpendicular to Bullet	Overall of Both Vehicles (Locam)	26	3	10	407	8.0	4.0	1.3
4	Overhead	Elevated - Looking Down at Impact Point (Locam)	10	3	10	387	-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 (GSMO)	16	2	-	---	5.0	-12.0	1.0
7	South Side	Overall of Both Vehicles (Locam)	16	3	10	360	2.0	-12.0	1.3
8	North Side	Overall of Both Vehicles (Mitchel)	50	2	-	---	-4.5	4.0	1.4

Figure 8 :Camera Location - Ground based

Test No.: 3 Test Date: 09.18.1981

Test Type: 600 Side Impact Simulation

Vehicle A: Side Impactor

Vehicle B: VW-Rabbit

Comments: Side Impactor "Crabbed" 190

Camera Symbols

☐ on-Board

☐ Ground

☐ Overhead

Frame Rate

1. 1000 fr/sec

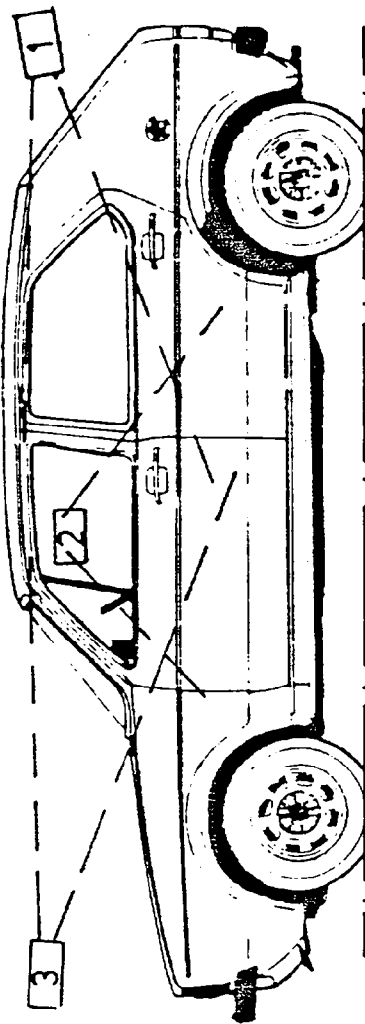
2. 400 fr/sec

3. Other _____ fr/sec

Timing Light, Speed

1. 100 Hz (10msec/light)

2. Other _____



Loc. No.	Location	Field of View	Lens Size	Frm Rate	Tmng Spd	Real Fr.R.	Impact Dist-X	C. L. Dist-Y	CAM Dist-Z [m]
1	Vehicle Rear Hatch-back Door	Front and Rear Occupant Compartment (Photosonics)	8	1	1	1026			
2	Vehicle Right Front Door	Front Occupant Compartment (Photosonics)	8	1	1	1053			
3	Vehicle Front Right Side	Front and Rear Occupant Compartment (Photosonics)	8	1	1	1000			

Figure 9: Camera Locations - on Board

- 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 3	
Test Vehicle		VW Rabbit 4-Door	
Overall Length/Width (mm)		3923 / 1611	
Test Weight by Wheel (kp)		LR 272	RR 252
		LF 332	RF 315
Total Weight (kp)		1171	
Wheelbase (mm)		2405	
Longitudinal C.G. (from Center of Front Axle) (mm)		1076,19	
Impact Angle (deg) *		60	
Impact Speed (mph)		0 (stationary)	
Maximum C.G. Resultant Velocity Change (mph / msec)			
Maximum C.G. Resultant Acceleration (G / msec)			
Maximum Door Acceleration (G msec)**			
Maximum Exterior Static Crush (mm)			
• Level 4 (32.0")		383	
• Level 3 (26.0")		397	
• Level 2 (20.0")		439	
• Level 1 (12.0")		272	
Maximum Post-test Intrusion (mm)		366	
OCCUPANTS			
Type		SID	SID
Location		Driver	Left Rear Passenger
Restraints		RA	Pelvis Belt
INSTRUMENTATION			
Number of Data Channels		66	
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

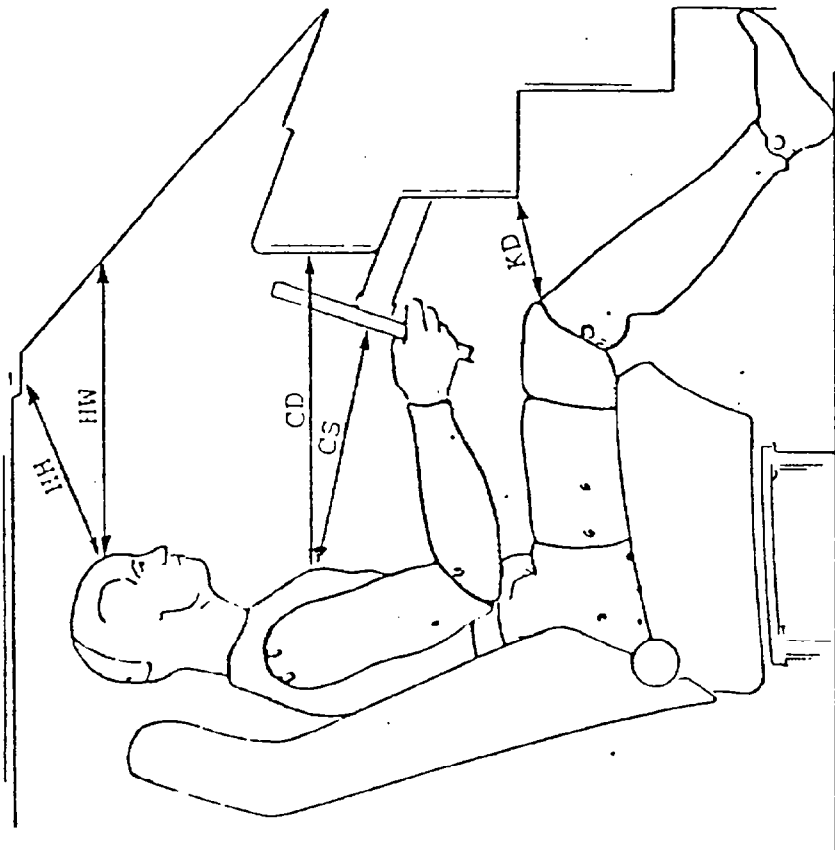
VEHICLE DATA	TEST 3
Test Vehicle	19° Crabbed Side Impactor
Overall Length/Width (mm)	4000 / 2155
Test Weight by Axle (kp)	LR 398 RR 383
Total Weight (kp)	LF 390 RF 401
Wheelbase (mm)	1572
Longitudinal C.G. (from Center of Front Axle) (mm)	2591
Impact Angle (deg)	1266
Impact Speed (mph)	60
Maximum C.G. Resultant Velocity Change (mph / msec)	34,66
Maximum C.G. Average Resultant Compartment Acceleration (G / msec)	
Maximum Static Crush (mm)	
• Row C (Top of Stack Level)	133
• Row B (Mod-Stack Level)	94
• Row A (Bumper Level)	92
<u>OCCUPANTS</u>	
Type	-
Location	-
Restraints	-
<u>INSTRUMENTATION</u>	
Number of Data Channels	10
Number of Cameras (Ground Based)	7

Test No.: 3 Vehicle: 3 LF 332 (kp) RF 315 (kp)
 Test Date: 09.18.81 Total Test Wt. 1171 (kp) LR 272 (kp) RR 252 (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 (right)
 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

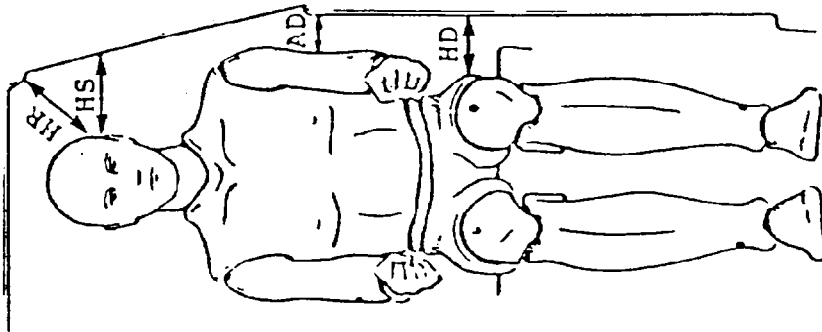
Table 5 : Pre-Test Conditions

TEST NO : 3



HH=	405
HW=	530
CD=	535
CS=	345
KD=	100

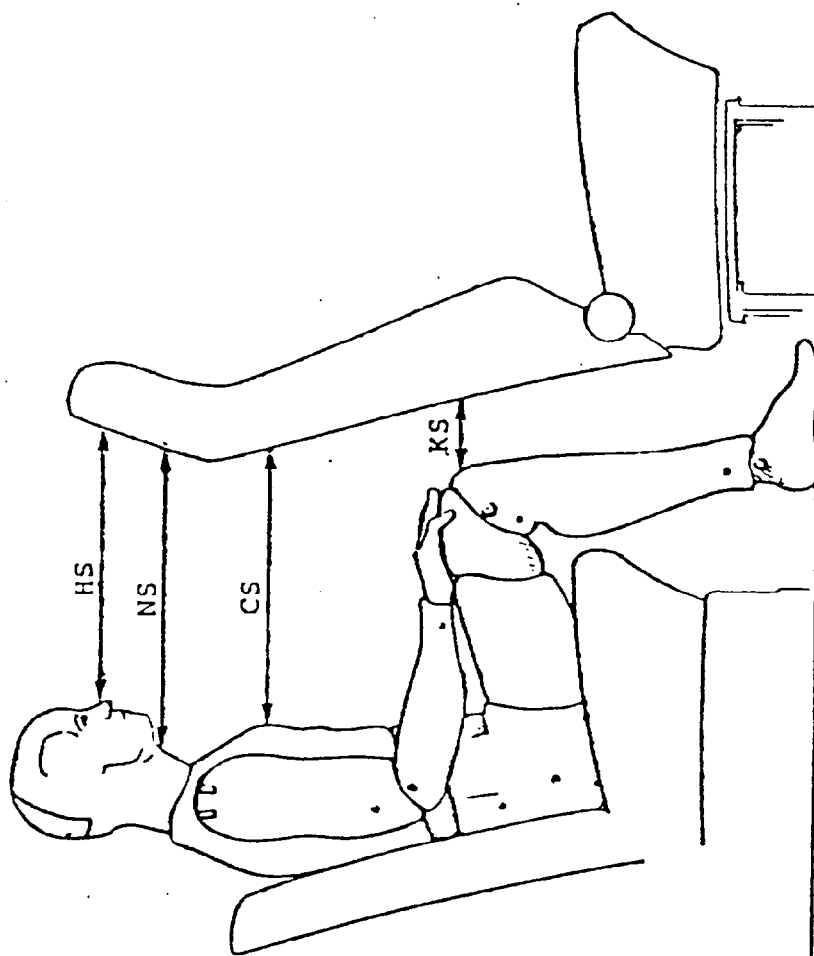
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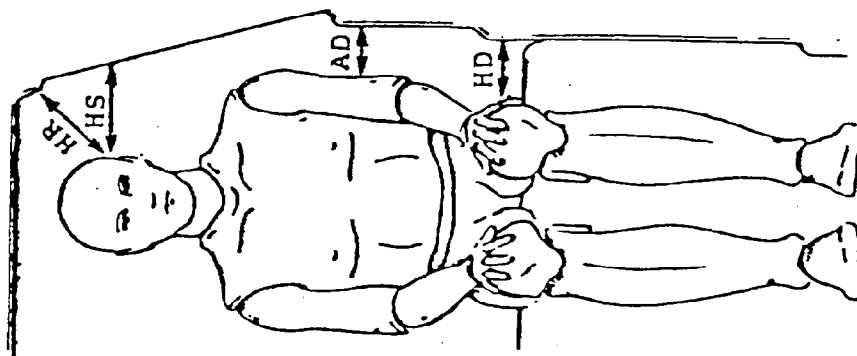
HR=	140
HS=	185
AD=	7.28
HD=	95
	3.74
	150
	560

Table 6 : Driver Pre-Test Position

TEST NO : 3



HS	470
NS	500
CS	400
KS	80



HR	105
HS	210 8.57
AD	150 5.90
HD	190 7.48

Table 7 : Rear Passenger Pre-Test Position

**Table 8 : Vehicle Pre- and Post-
Test Position**

TEST NO : 3

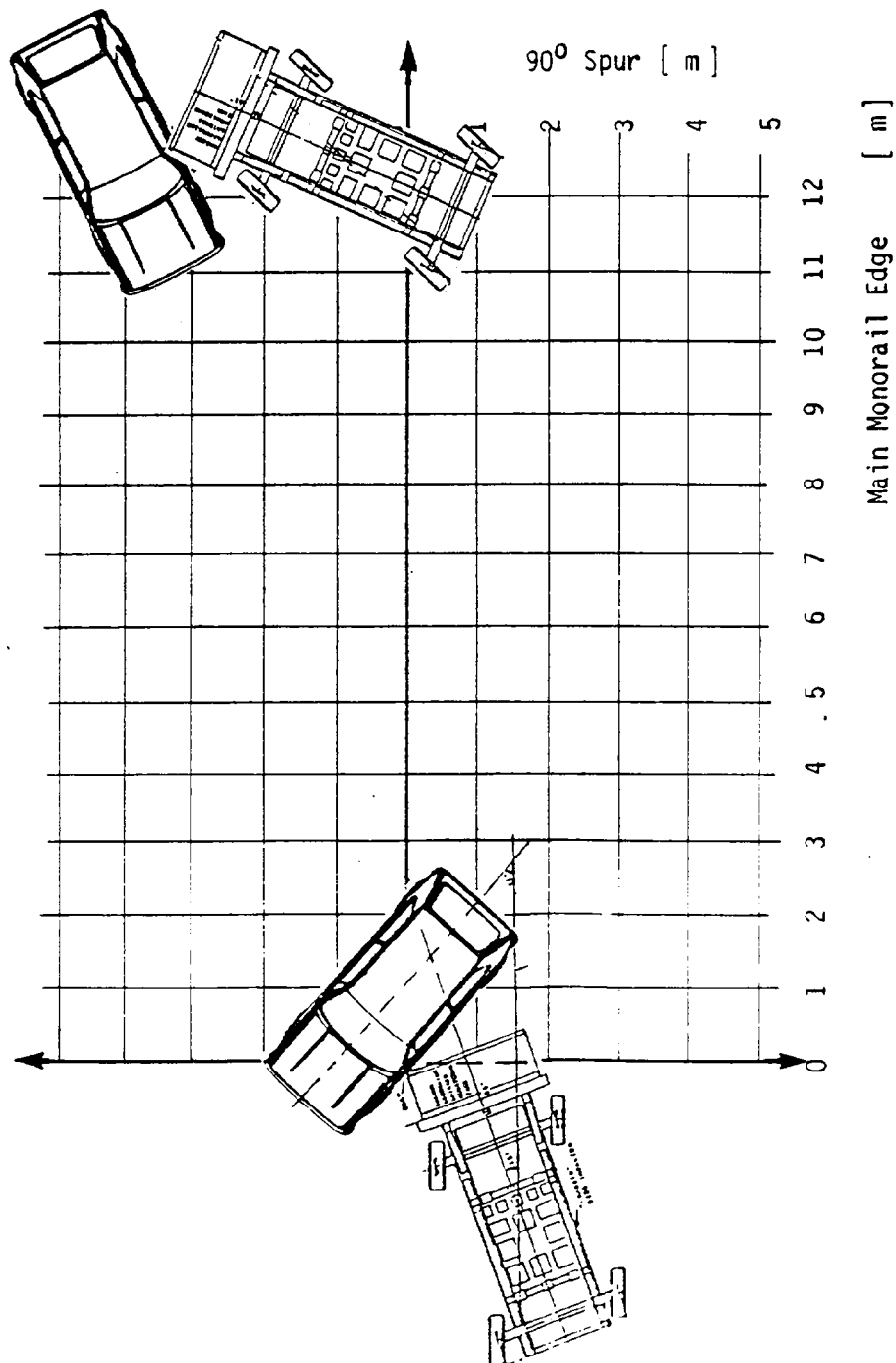


Table 9 : Summary of Post-Test Observations

VEHICLE: VW Rabbit 3

Test No. (Moving Test Device) 3

Dummy Contact Points:	<u>Left Front</u>	<u>Left Rear</u>
Head	<u>no Contact</u>	<u>Contact at Roofline</u>
Chest	<u>Upper Door Panel and lower Window-Sill</u>	<u>Upper Door Panel and lower Window-Sill</u>
Knees/Hip	<u>Lower Front-Door Panel</u>	<u>Lower Rear-Door Panel</u>

Glazing: Left Front- and Rear Side-Window shattered. Windshield cracked.

Doors: Left Front- and Rear Door damaged, would not open. Hinge Reinforce-
tore out from Door.

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

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

Fuel Leakage: None

General Observations: Impact Point 650 mm from Front Axle.

Side Impactor Bumper impacted under the Door Beams. Buckling on the Area of
the B-Pillar. B-Pillar damaged and bended on the Level of the Window-Sill.

Left Front-Door separated from lower Sill. Knee-Bolster supported the
A-Pillar. A-Pillar turned. Upper Hinge Reinforcement tore out from
A-Pillar.

Driver-Dummy - Knee broken, Leather was torn up from Spine on the left
Side.

Left Rear - no damage

TEST NO. 3TEST DATE 09.18.1981TEST CONFIGURATION:

Target Vehicle VW Rabbit 4-Door Speed 0 [mph]
 Bullet Vehicle 19⁰ Crabbed Side Impactor Speed 34.66 [mph]
 Impact Location behind Front Axle 650 [mm] Angle 60 [deg]

PASSENGER: D R I V E RHEAD RESPONSE:

Peak a_R 84.8 [g] Impacted Objekt none
 HIC 576.8 Time T1 52 [ms] T2 96 [ms]

CHEST RESPONSE:

Location	[g]	$\geq 3ms$ [g]	SI	Δv_y [mph]	Imp. Time [ms]	Time a-max [ms]
Upper Sternum (X)	92.64	64	--	---	38	70.5
Lower Sternum (X)	79.53	60	---	---	38	70.5
LUR (Y)	100.77	77	--	25.29	34	48
LLR (Y)	109.67	81	--	27.02	33	46
RUR (Y)	103.82	92	--	23.96	38	53
RLR (Y)	127.65	105	--	27.92	35	51

CHEST DEFLECTION: Damper - DY 48.5 [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)	92.11	101.17	88	903	25.04	35	53
Lower Thorax (T12)	111.13	115.32	105	1121	28.73	30	48

PELVIS RESPONSE:Pk a_R [g] 132.50 SI 1469 $\geq 3 ms$ [g] 106.86 Impact Time [ms] 33IMPACT TIME:Shoulder 30 msec ; Pelvis 33 msec**Table 10: Side Impact Dummy Test Response Summary**

TEST NO. 3TEST DATE 09.18.1981TEST CONFIGURATION:

Target Vehicle VW Rabbit 4-Door Speed 0 [mph]
 Bullet Vehicle 19⁰ Crabbed Side Impactor Speed 34.66 [mph]
 Impact Location behind Front Axle 650 [mm] Angle 60 [deg]

PASSENGER: R E A R L E F THEAD RESPONSE:Peak a_R 116.80 [g]Impacted Objekt C-PillarHIC 566.89Time T 1 83 [ms] T 2 107 [ms]CHEST RESPONSE:

Location	[g]	≥ 3ms [g]	SI	Δ v _y [mph]	Imp. Time [ms]	Time a-max [ms]
Upper Sternum (X)	41.31	38.5	---	---	58	90
Lower Sternum (X)	38.21	33.0	---	---	55	92
LUR (Y)	70.22	61.5	---	25.31	66	87
LLR (Y)	74.17	70.0	---	20.52	58	85
RUR (Y)		defect				
RLR (Y)	64.32	58.0	---	27.83	67	88

CHEST DEFLECTION: Damper - DY 34.8 [mm]VERTEBRAL COLUMN RESPONSE:

Location	Pk a _y [g]	Pk a _R [g]	> 3 ms [g]	SI	Δ v _y [mph]	Imp. Time [ms]	Time a-max [ms]
Upper Thorax (T1)	73.25	80.01	73.5	406	13.08	51	92
Lower Thorax (T12)	56.40	81.91	54.5	313	16.43	50	83

PELVIS RESPONSE:Pk a_R [g] 83.29 SI 641 > 3 ms [g] 76.57 Impact Time [ms] 43IMPACT TIME:Shoulder 64 msec ; Pelvis 66 msec**Table 11: Side Impact Dummy Test Response Summary**

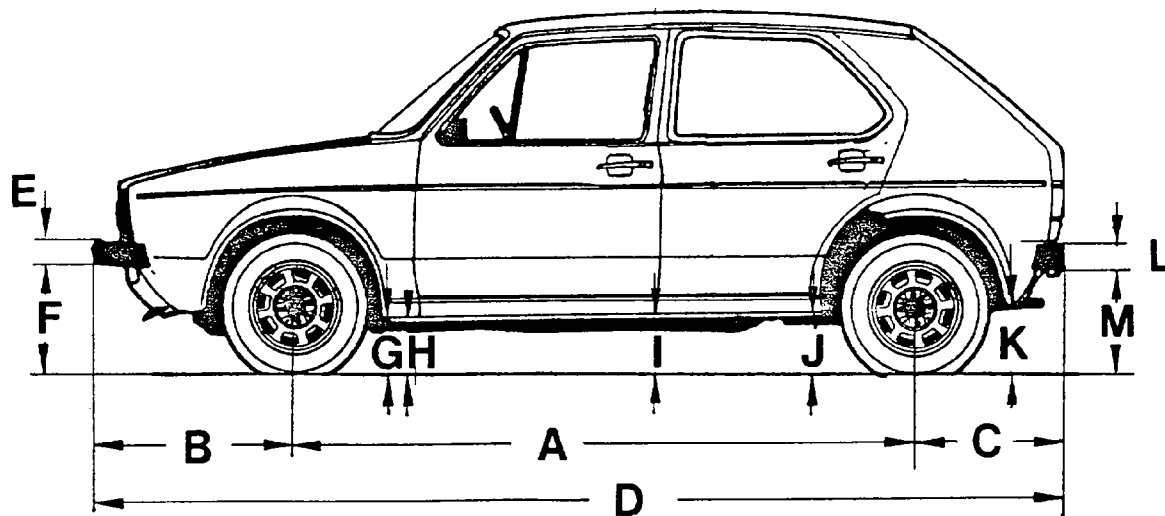
TEST NO. 3 TEST DATE 09.18.1981

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	3.79	3.89	2459 88.1/ 103.8	7.0265	1073.0	5.00	15.00	3.000
Left Lower Rib LLR	3.96	4.18	3180 86.9/ 106.9	7.1423	1225.6	5.63	15.63	2.7778
Upper Thorax T 1 Y	3.91	4.19	3030 93.1/ 108.8	7.1066	1127.2	5.63	13.13	2.3333
Lower Thorax T 12 Y	4.15	4.62	4030 90.0/ 105.6	7.2652	1341.2	6.87	14.37	2.0909

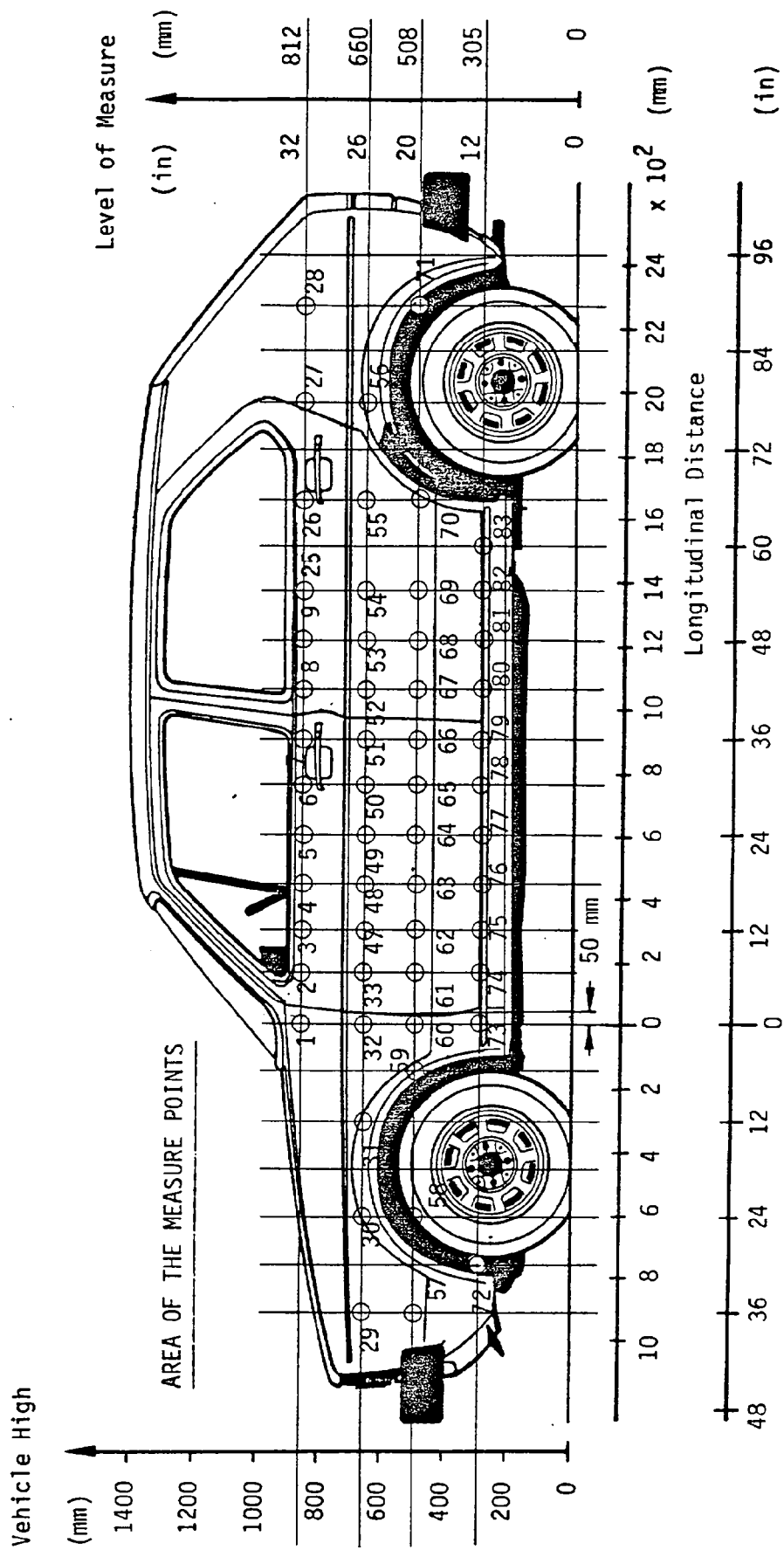
TABLE 12 : AIS AND COEFFICIENTS

TEST NO : 3



	PRE - TEST	POST - TEST	Δ CHANGE
A	2405	2325	-80
B	820	820	0
C	700	705	5
D	3923	3850	-77
E	125	125	0
F	365	400	35
G	166	220	54
H	164	228	54
I	157	250	93
J	157	245	88
K	182	270	88
L	126	126	0
M	291	372	81

Table 13: Pre - and Post - Test Measurements



TEST NO : 3

* All heights measured above ground level.

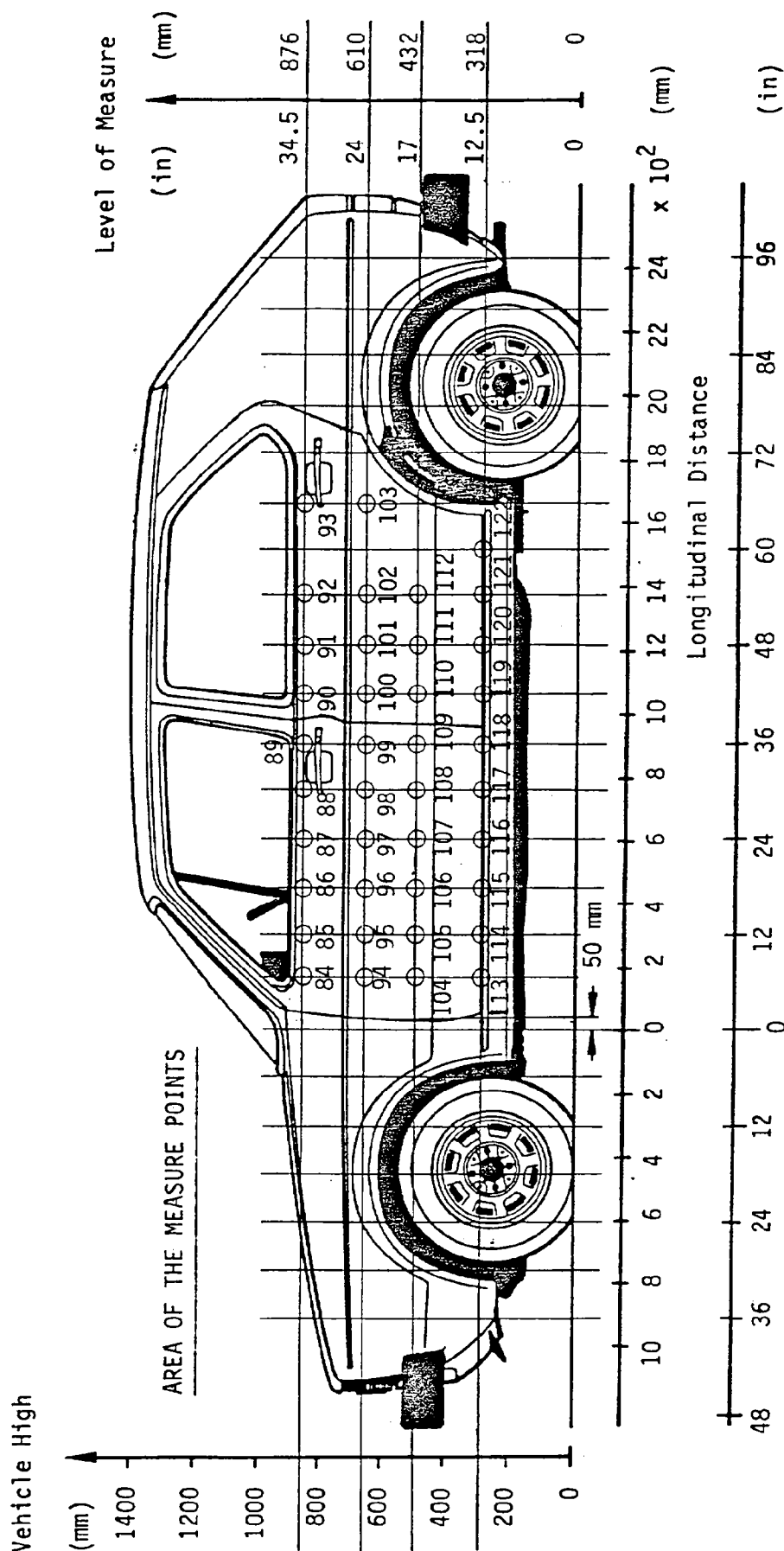


Table 15: Interior Static Intrusion for VW - Rabbit

TEST NO : 3

Zero Distance Starting at Door [mm]

Location	Height [mm] *	0	152	305	457	610	762	914	1067	1220	1372	1524	1676
Windowsill Level	876	-	55	151	227	297	319	342	333	250	164	-	8
Mid-door Level	610	-	96	211	272	314	348	366	314	224	162	-	42
Bullet Vehicle Bumper Level	432	-	160	249	315	336	344	335	280	181	-	-	-
Doorsill Level	318	-	53	117	134	170	194	229	179	88	-	-	-

* Heights measured above ground level.

Pre Test : _____
 Post Test : _____
 Test No: _____
 Test No:3
 Test No: _____
 Test No:
 Test No:

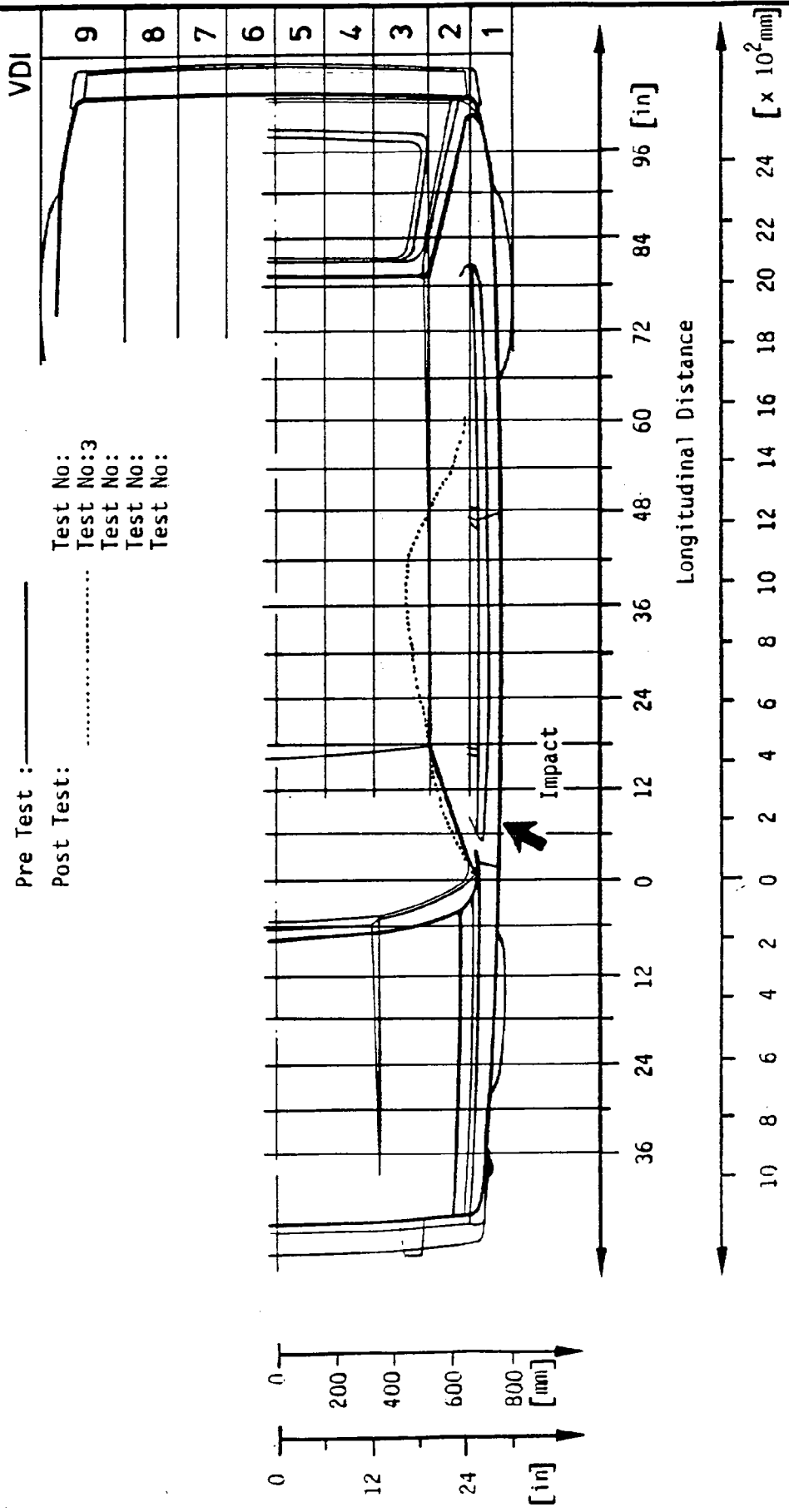


Table 16: Pre - and Post - Test Exterior Profiles at 305 mm above Ground Level

Pre Test : _____

Post Test:
 Test No: 3
 Test No:
 Test No:
 Test No:

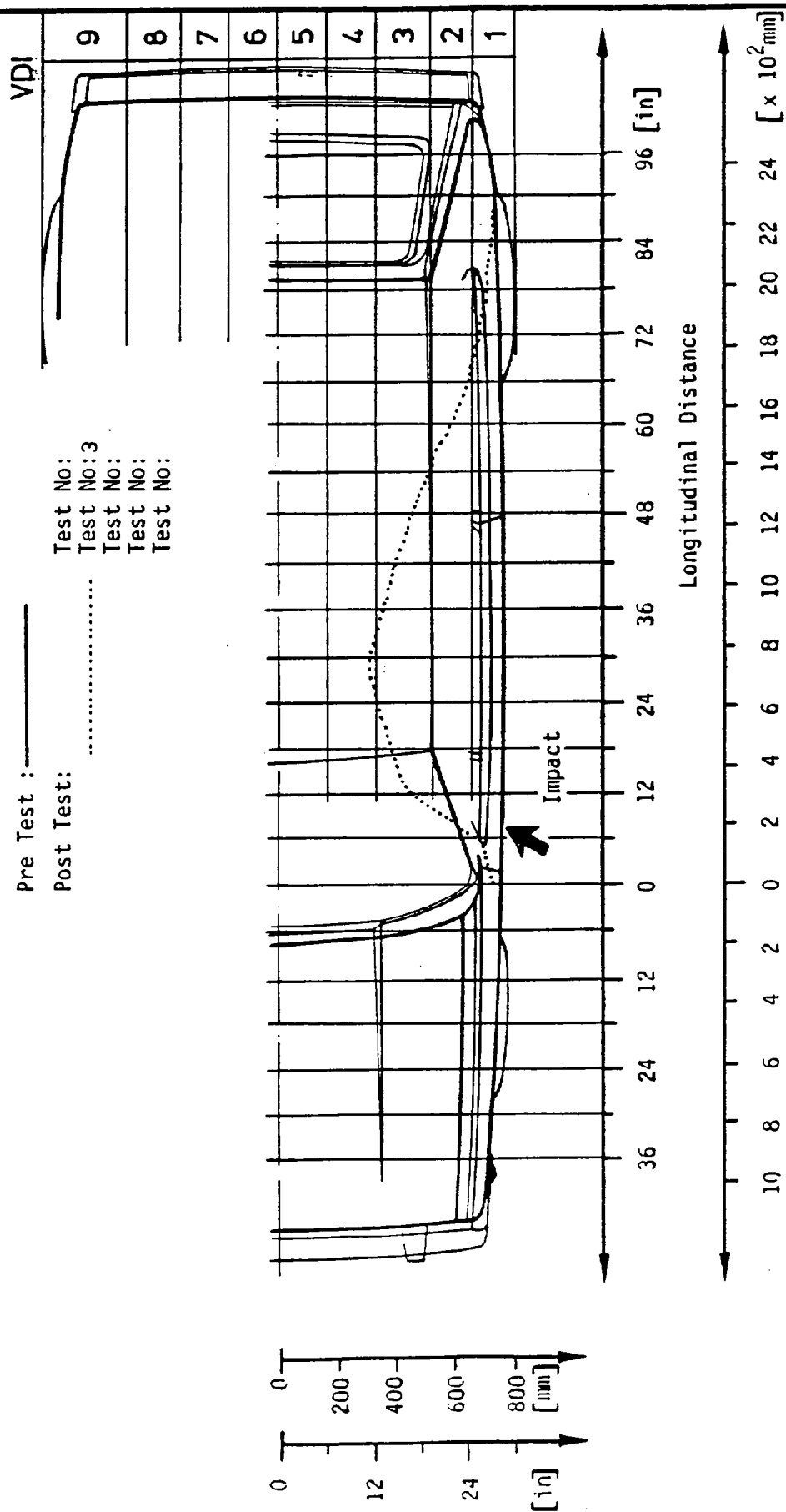


Table 17: Pre - and Post - Test Exterior Profiles at 508 mm above Ground Level

Pre Test : _____

Post Test :
 Test No:
 Test No: 3
 Test No:
 Test No:
 Test No:

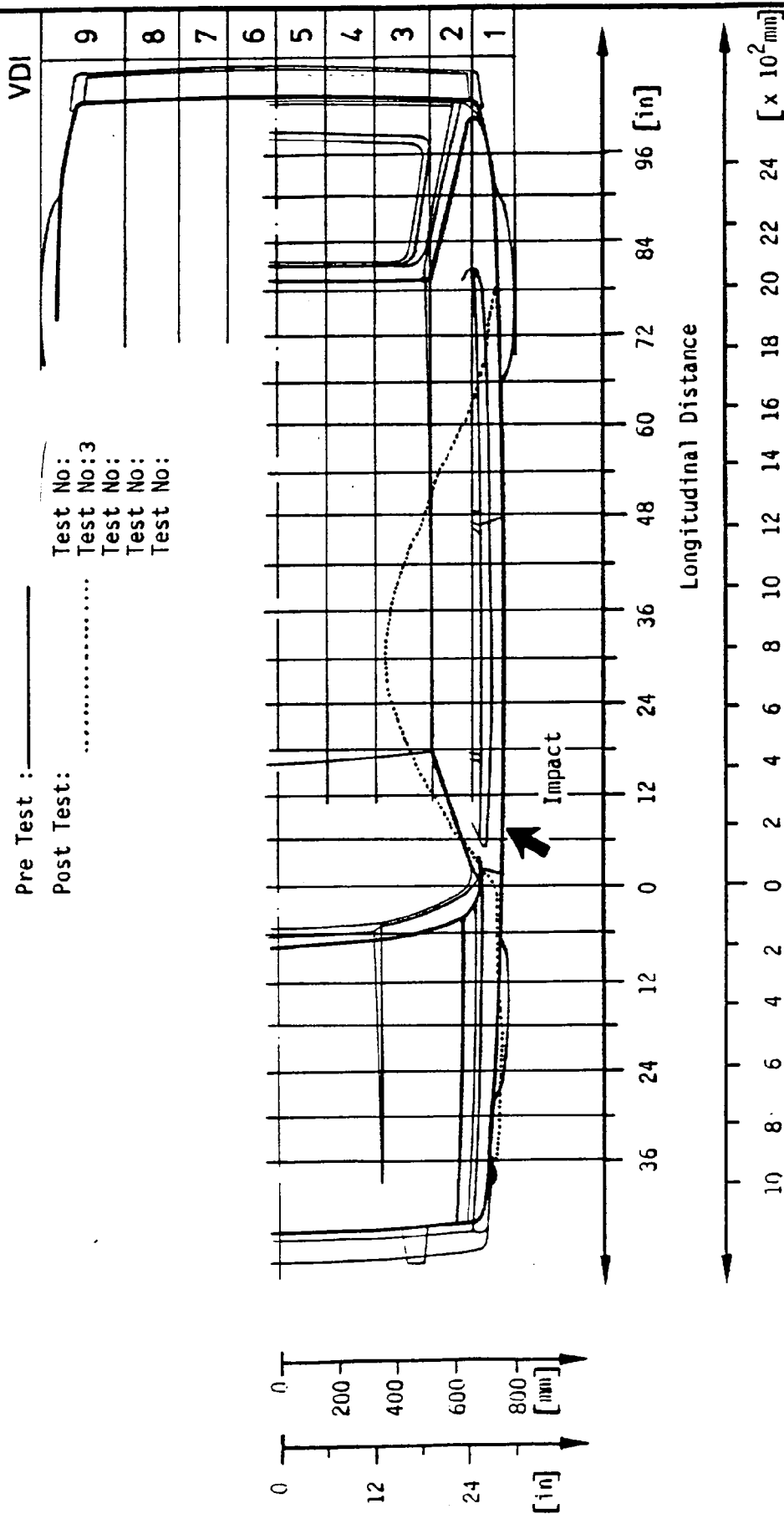
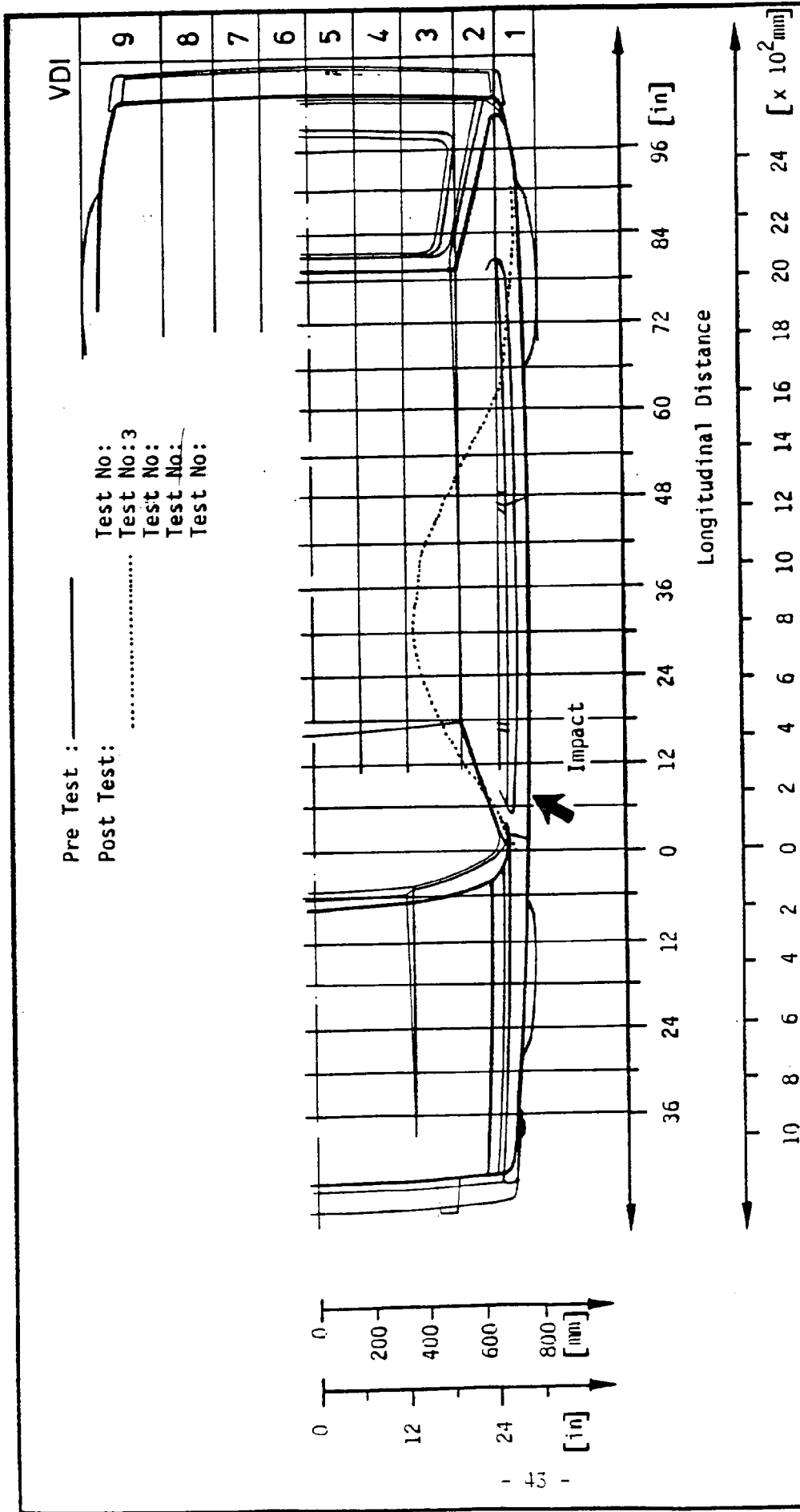


Table 18: Pre - and Post - Test Exterior Profiles at 660 mm above Ground Level



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

Pre Test : _____
 Post Test:
 Test No: _____
 Test No: 3
 Test No: _____
 Test No: _____
 Test No: _____

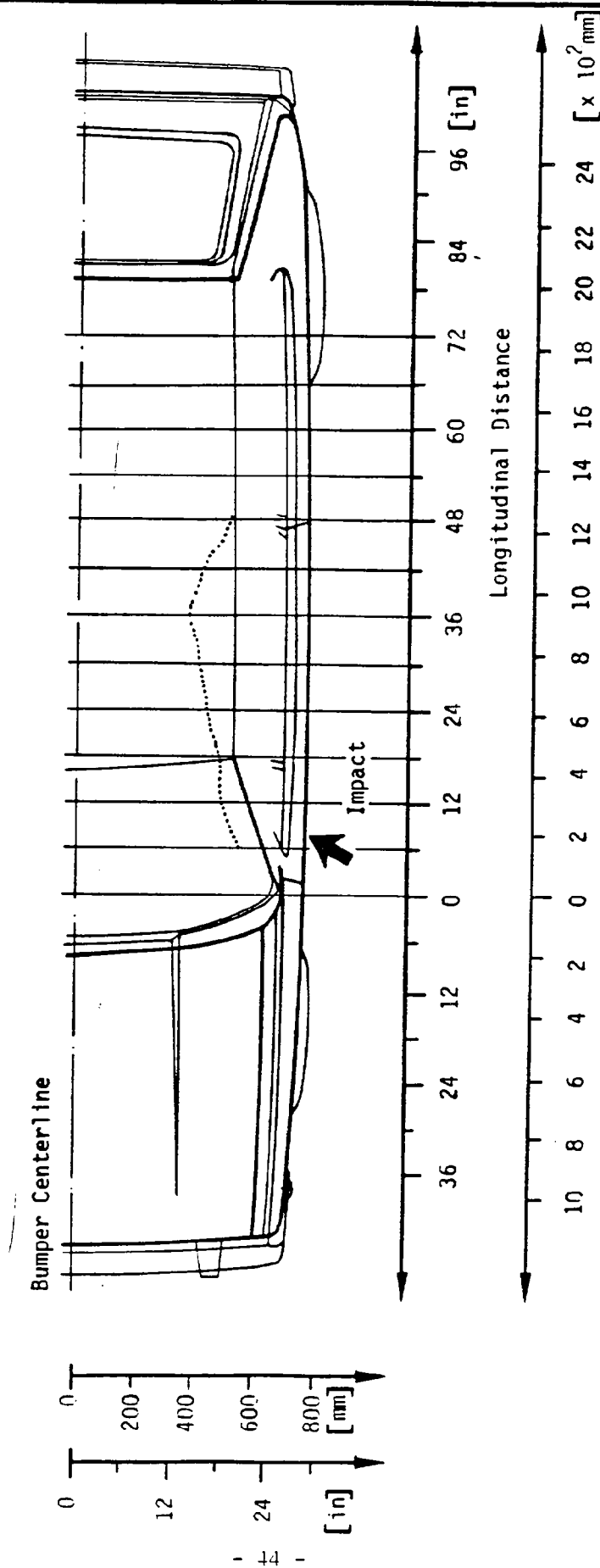
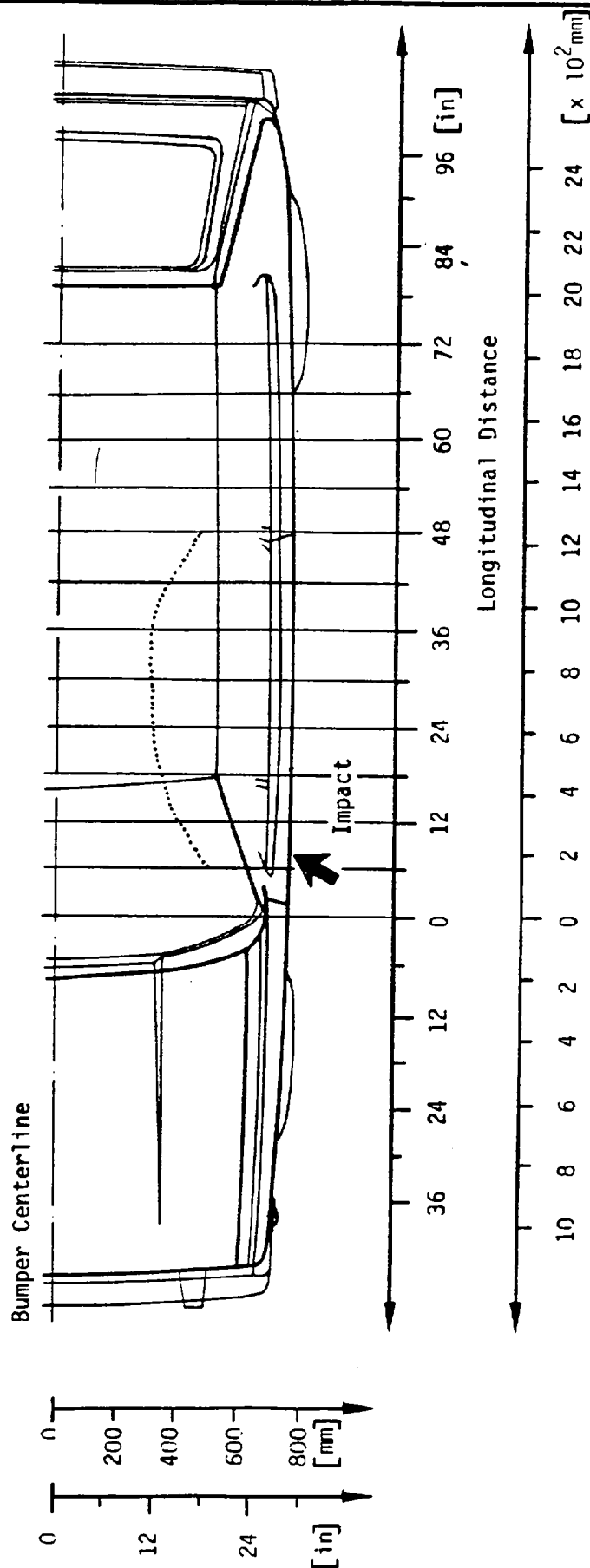


Table 20: Pre - and Post - Test Interior Profiles at 318 mm above Ground Level

Pre Test : _____
 Post Test :
 Test No: _____
 Test No:3 _____
 Test No: _____
 Test No: _____
 Test No: _____



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

Pre Test : _____
 Post Test:
 Test No: _____
 Test No: 3
 Test No: _____
 Test No: _____
 Test No: _____

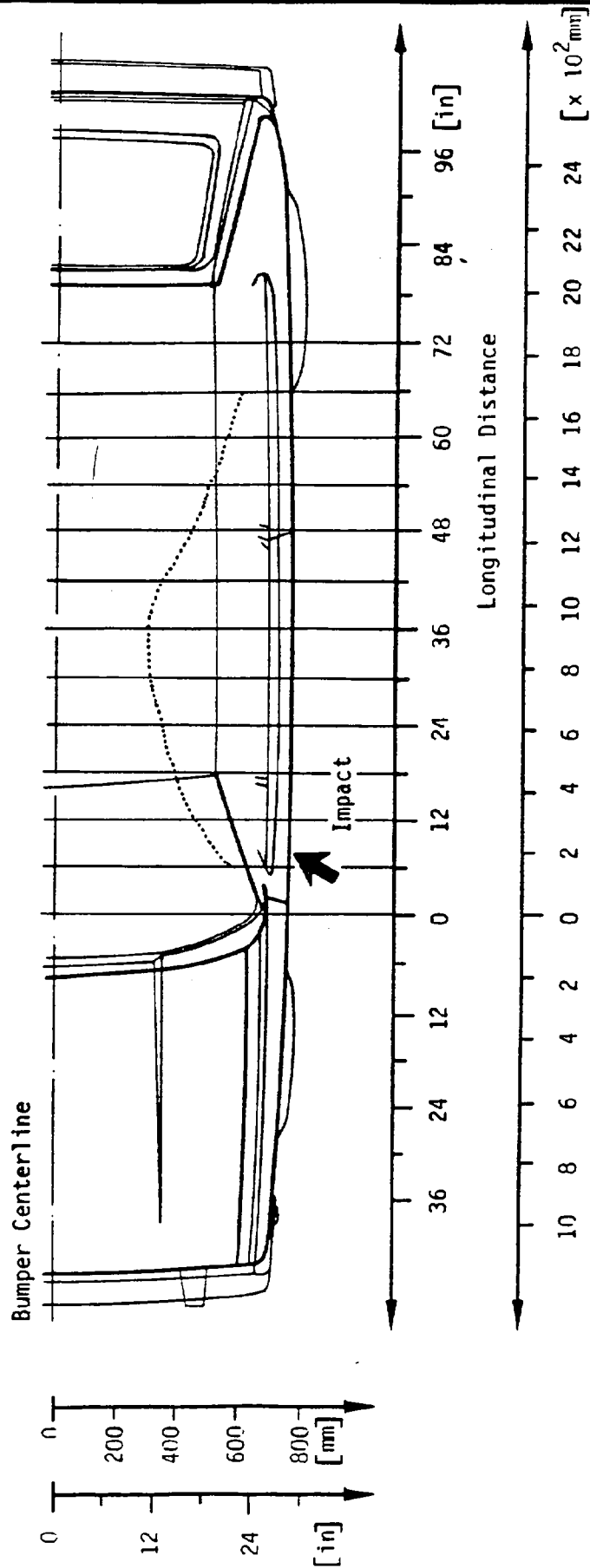


Table 22: Pre - and Post - Test Interior Profiles at 610 mm above Ground Level

Pre Test : _____
 Post Test: _____
 Test No: _____
 Test No: 3
 Test No: _____
 Test No: _____
 Test No: _____

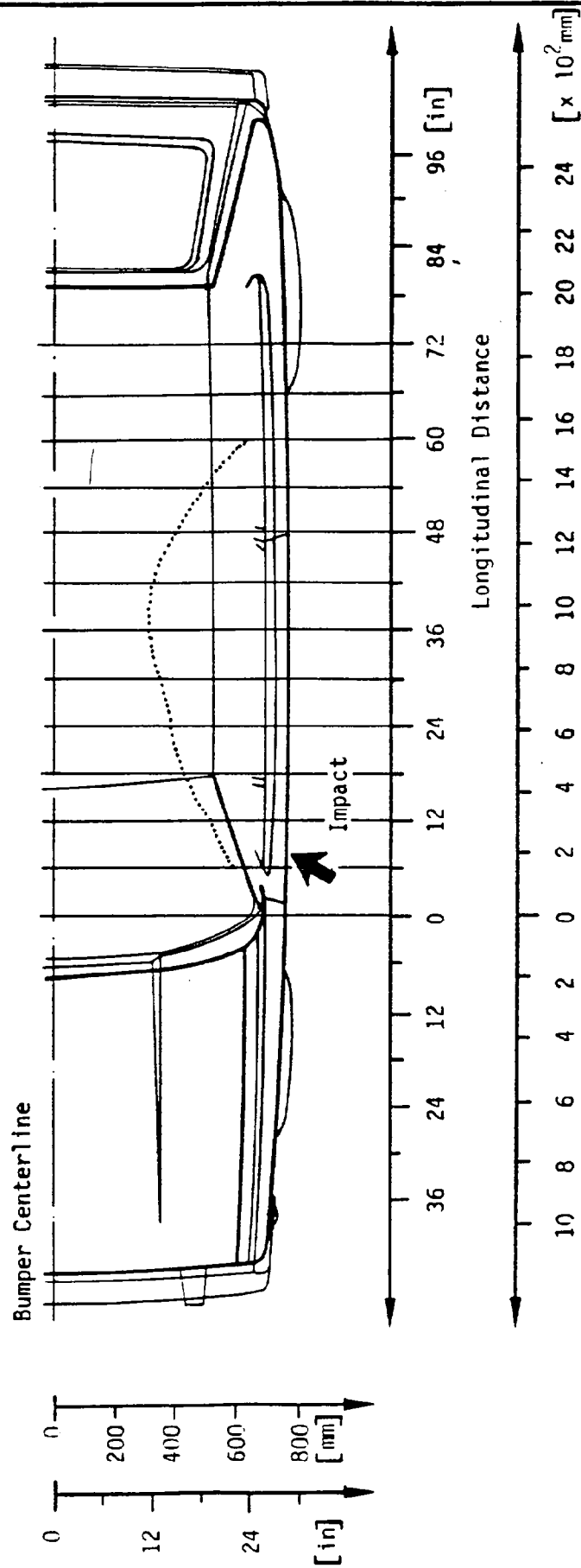


Table 23: Pre - and Post - Test Interior Profiles at 876 mm above Ground Level

TEST NO : 3

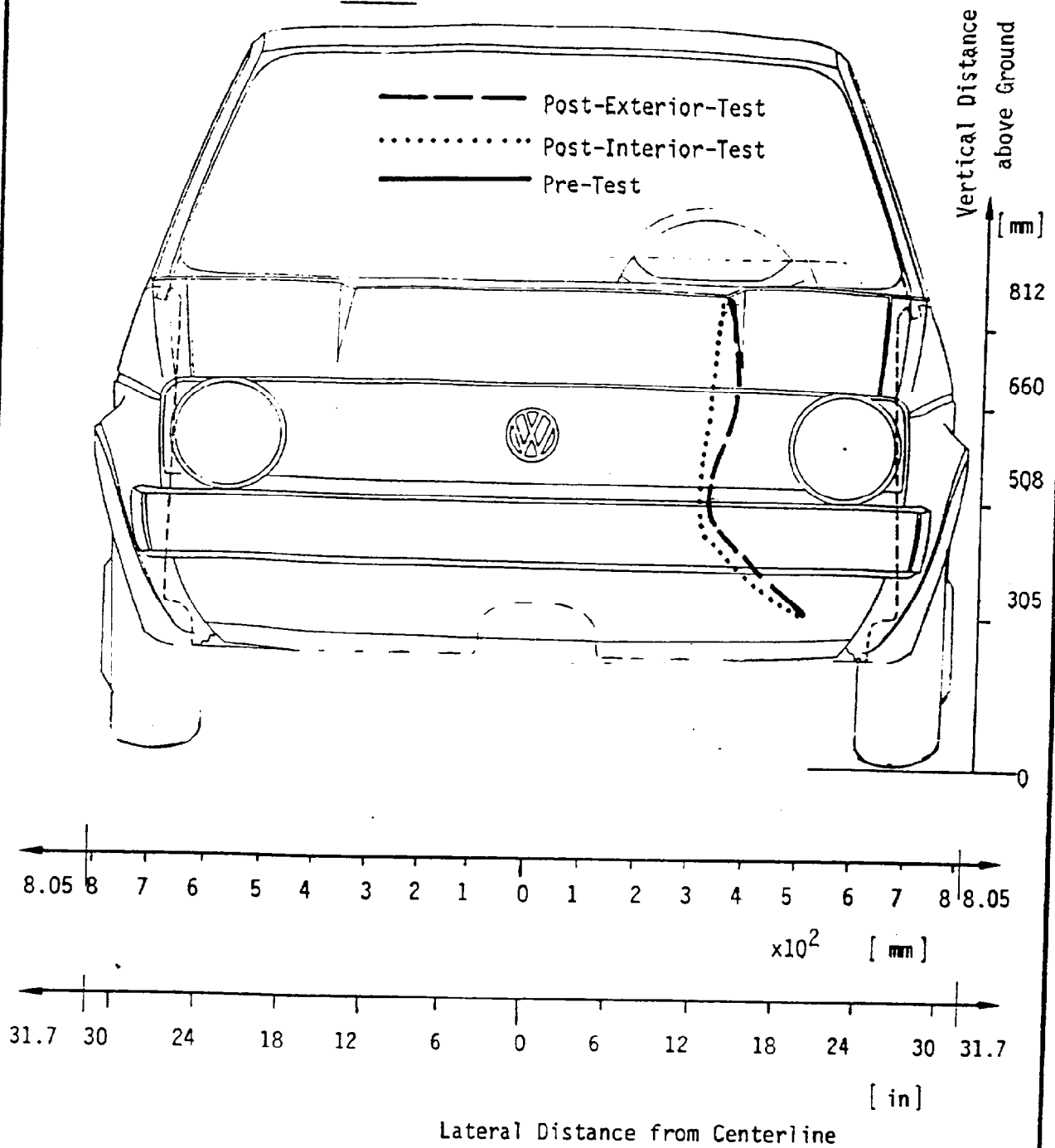


FIGURE 12 : EXTERIOR AND INTERIOR STATIC PROFILES AT THE
LONGITUDINAL DISTANCE 610 MM FROM DOOR

TEST NO : 3

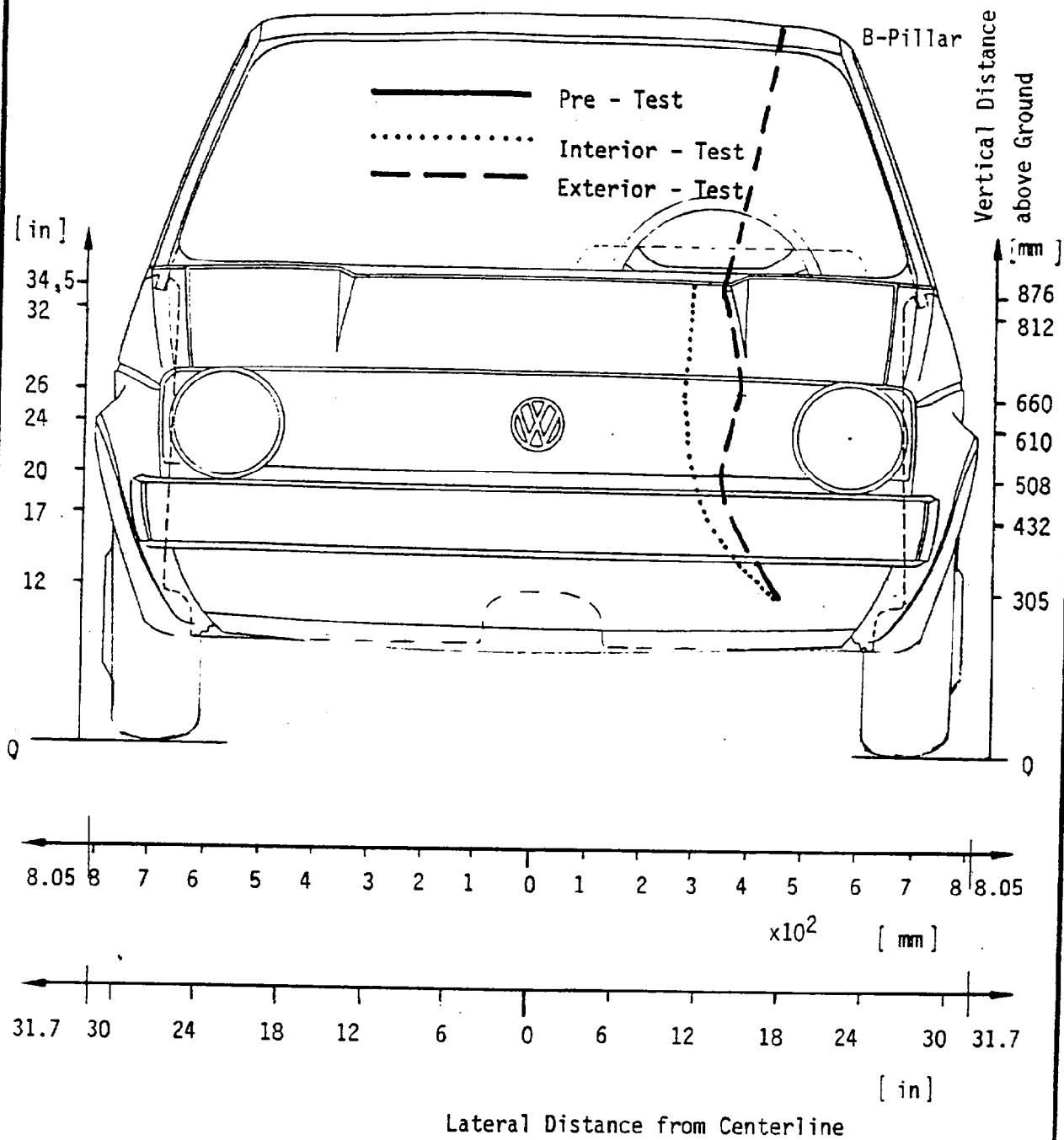


FIGURE 13 : EXTERIOR AND INTERIOR STATIC PROFILES AT THE
LONGITUDINAL DISTANCE 914 MM FROM DOOR

Table 24: Exterior Static Crush for Side Impactor

TEST NO : 3

Location	Height at C _L *	Distance right of Center [mm]								Distance left of Center [mm]**								
		835	700	600	500	400	300	200	100	0	100	200	300	400	500	600	700	835
Top of Stack Level	813	-	-	-	-	-	-	-	-	-	1	1	2	3,5	6	10	44	133
Mid - Stack Level	554	-	-	-	1,5	3,5	7	9	11	13	16	24	33	43,5	56	94		
Bumper Level	432	+8	+4	-	3	7	14	20	24	28,5	26	28,5	36	46,5	54,5	62	72	92

* Heights measured above ground level.

** Impact side.

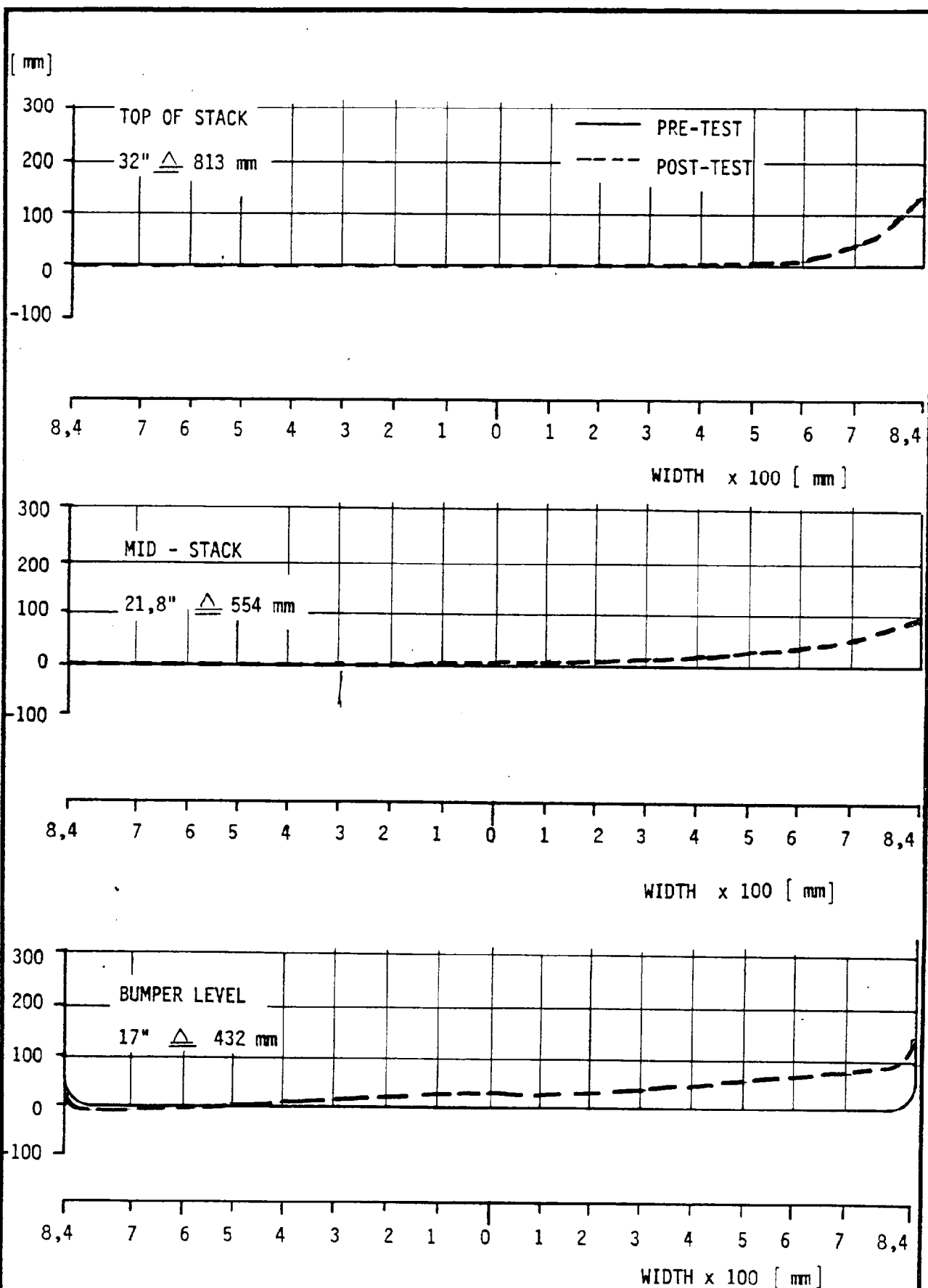


Table 25 : Pre- and Post-Test Frontal Profiles for Side Impactor (Test 3)

A P P E N D I X A

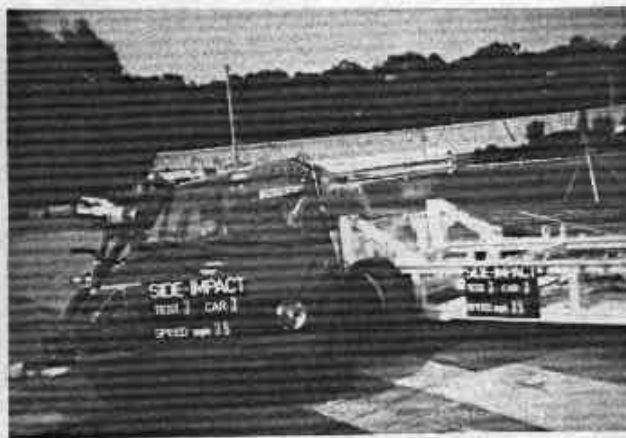
Photographs

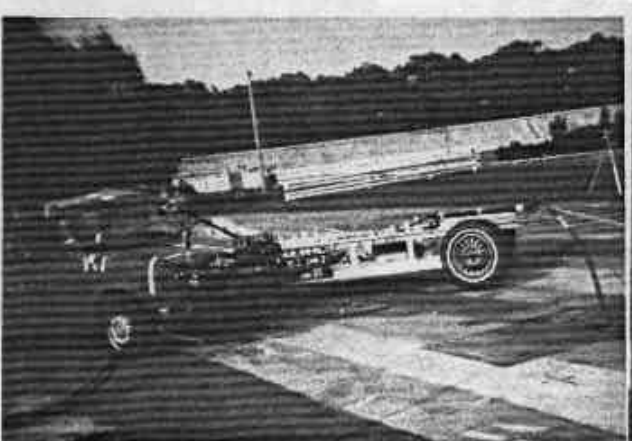
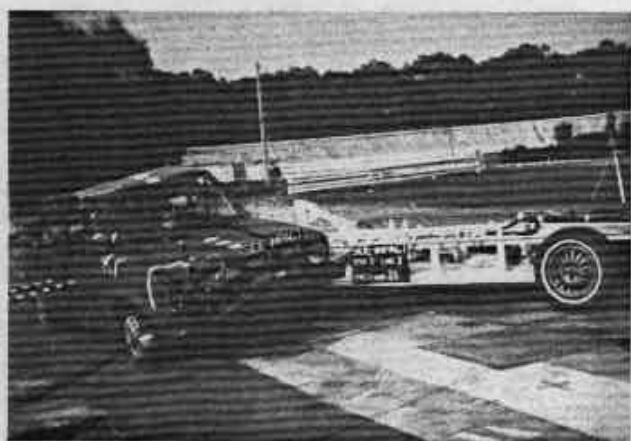
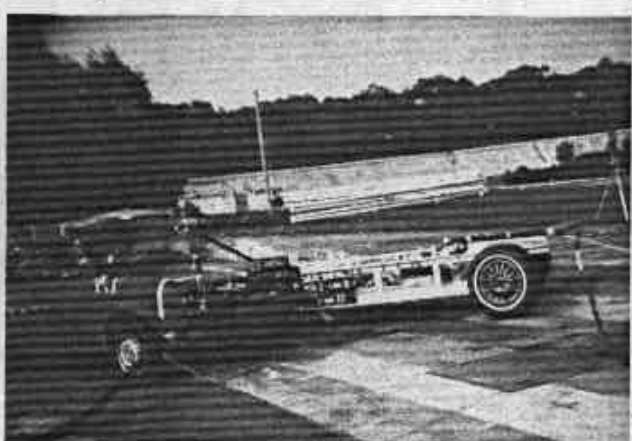
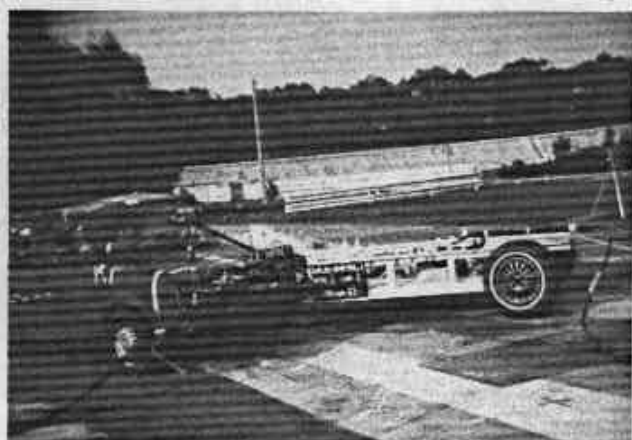
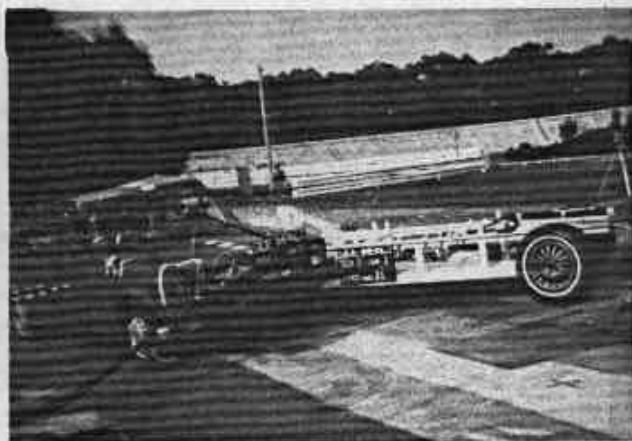
List of Illustrations

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A 4	VW Rabbit Left Side Post Test View	A - 5
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A 6	Crabbed Barrier Post Test View	A - 7

Figure A1 : Crash Sequence Figures

TEST 3 - 35 mph





A - 2A



FIGURE A 2 : POST TEST 'POSITION'
CRABBED BARRIER AND VW RABBIT

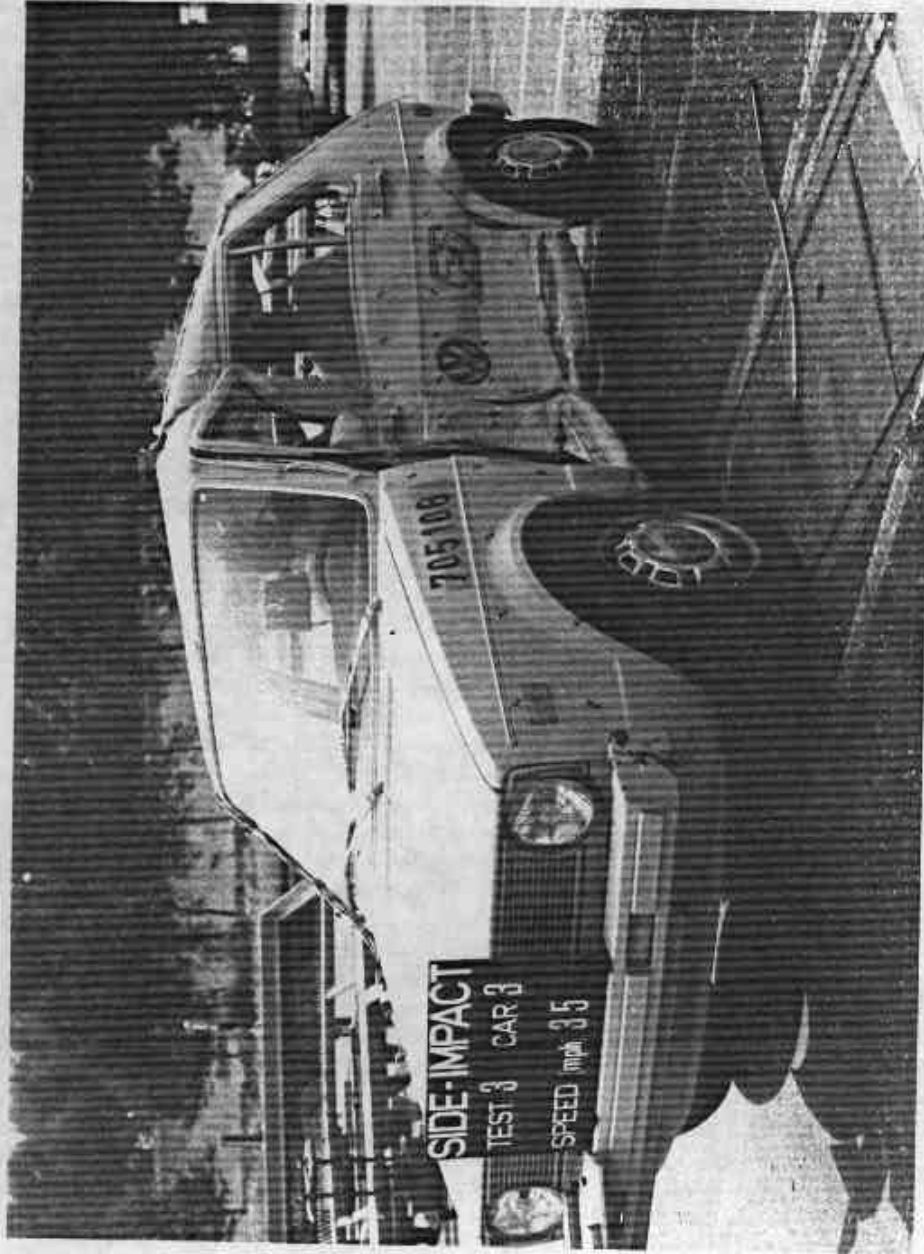


FIGURE A 3 : VW RABBIT LEFT SIDE
POST TEST VIEW (FRONT-SIDE DIRECTION)

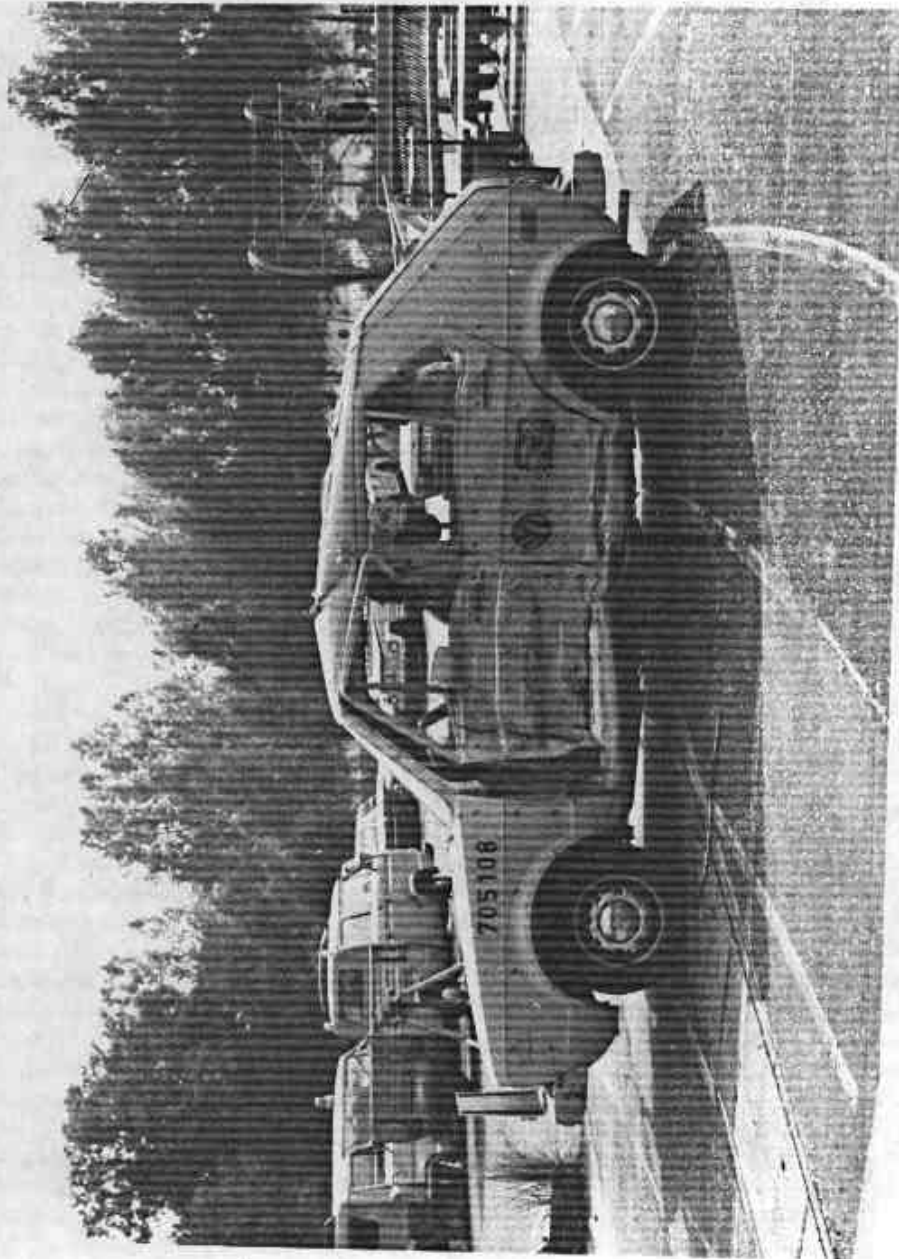


FIGURE A 4 : VW RABBIT LEFT SIDE
POST TEST VIEW



FIGURE A 5 : VW RABBIT LEFT SIDE
POST TEST VIEW (REAR-SIDE DIRECTION)

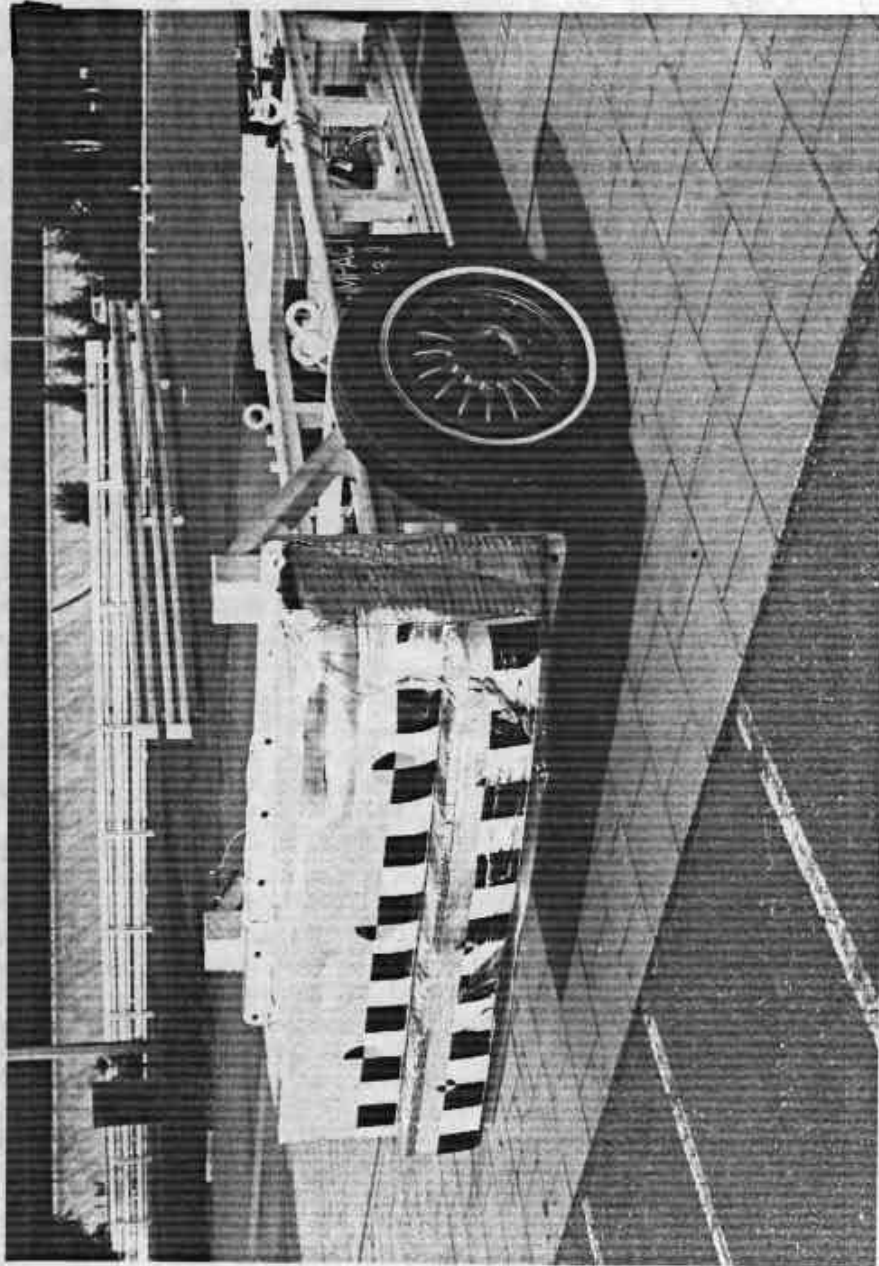


FIGURE A 6 : CRABBED BARRIER POST TEST VIEW

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

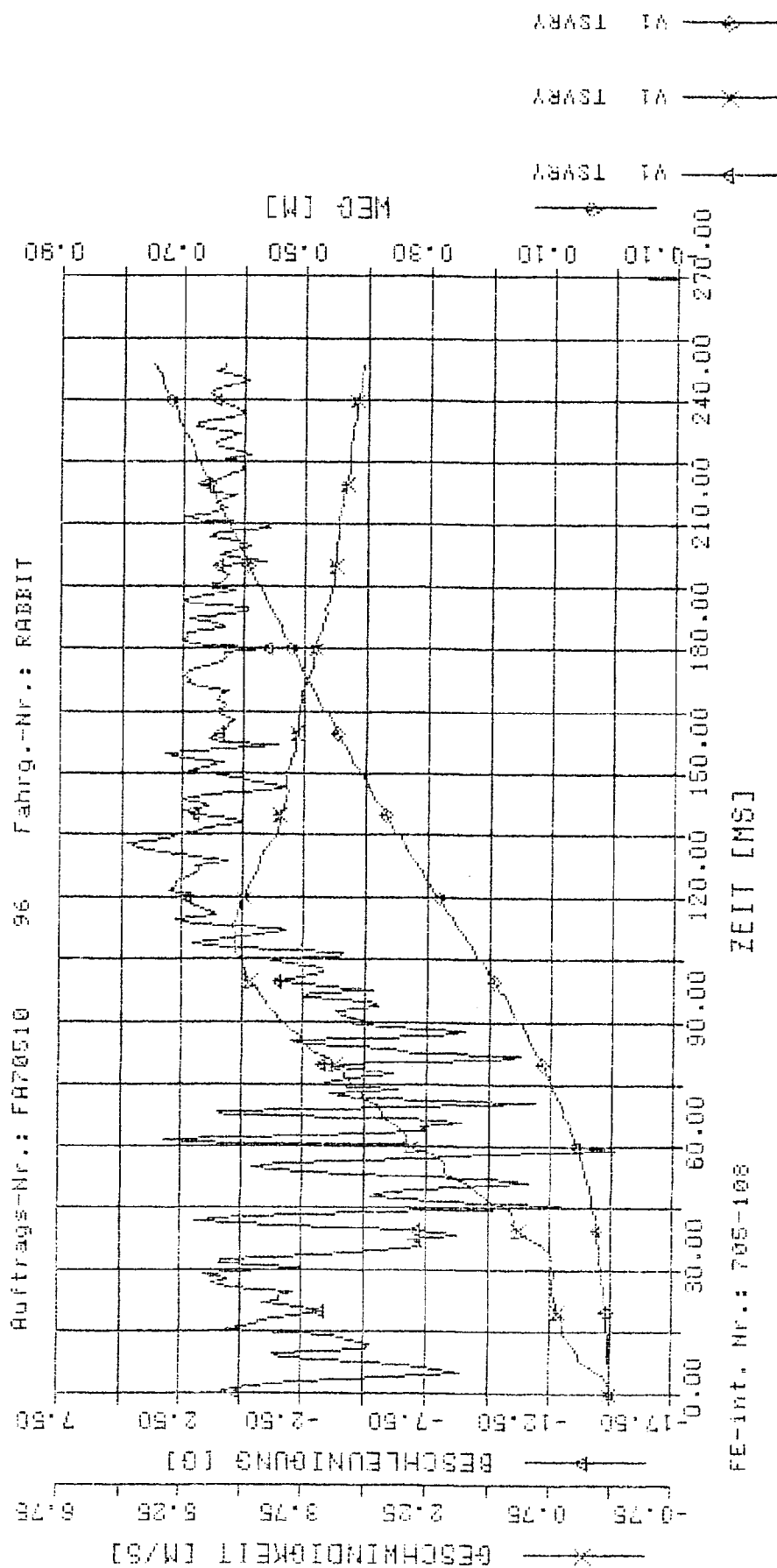
 B.2.1 Driver

 B.2.2 Rear Passenger

B.1.1 Target Vehicle

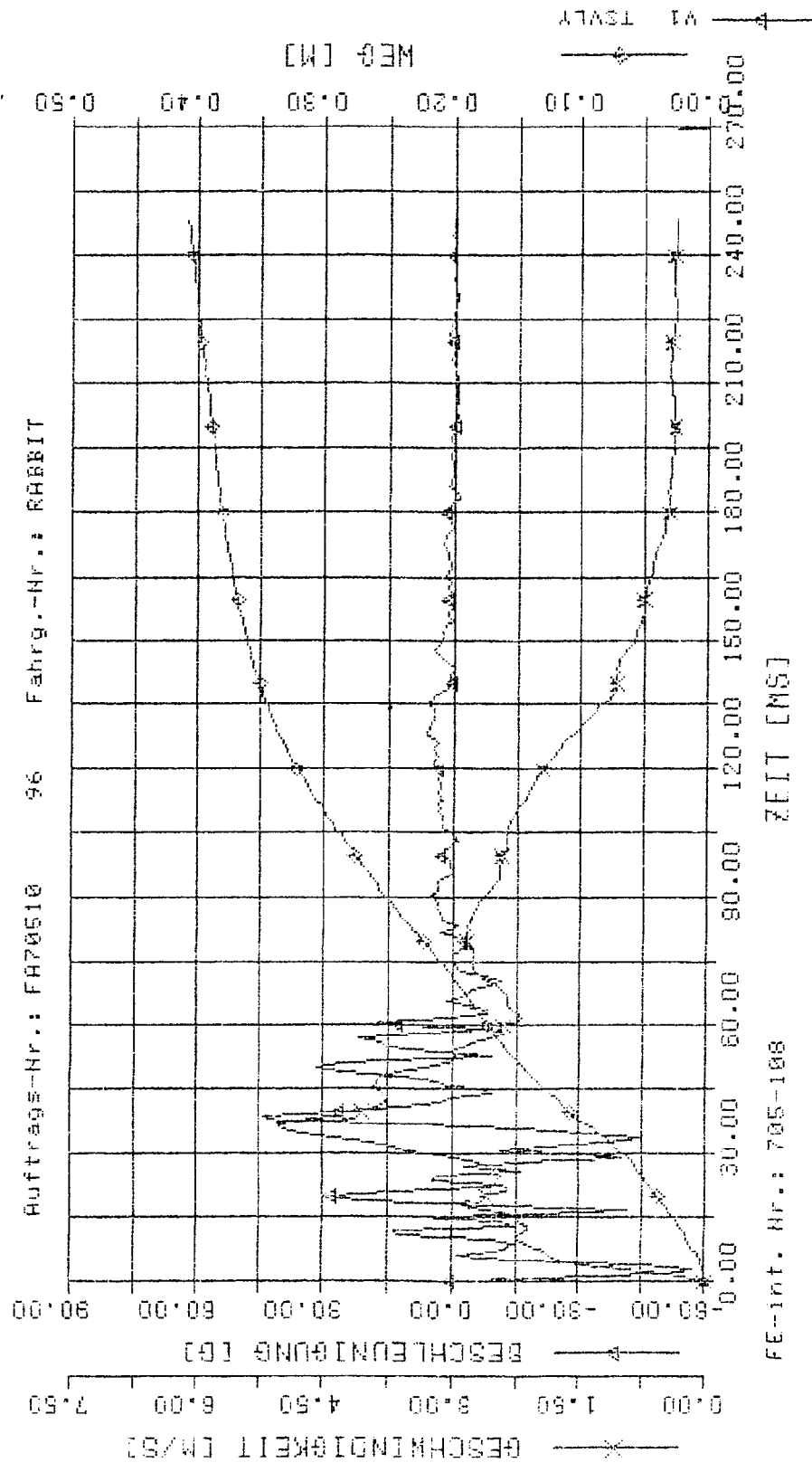
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 96

Mess-Stelle	UP	ber.	Groesse	Extrema	t	Ext.	3MS
TSURY	V1	BE	g	-15.214	59.00	0.00	
TSURY	V1	GE	m/s	4.590	113.00	0.00	
TSURY	V1	WE	m	.757	252.00	0.00	



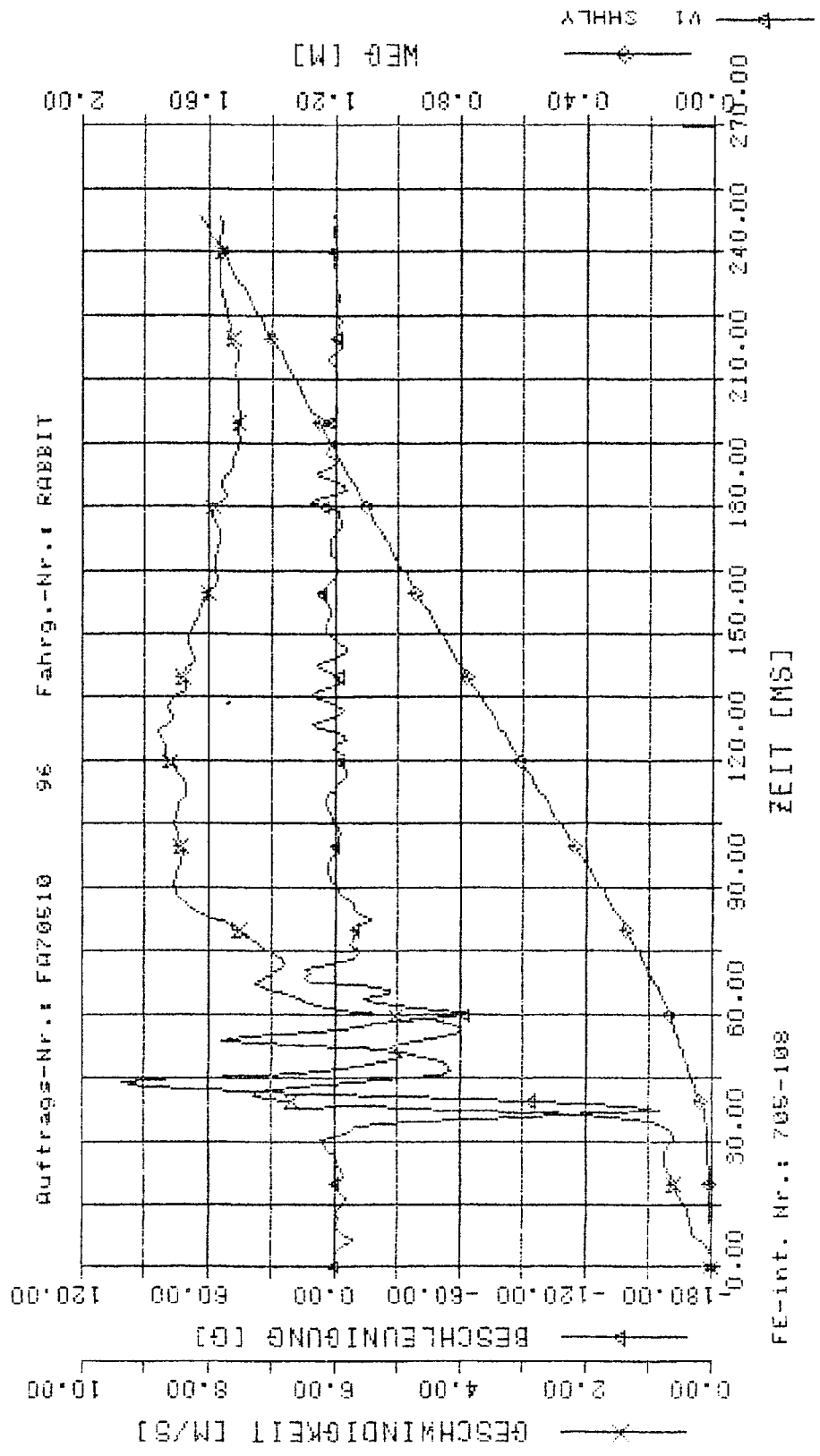
Kenn-Ident.: Auftrags-Nr.: FA70510 Versuchs-Nr.: 96

Mess-Stelle	UP	ber. Grösse	Extremum	Extr.	AMS
TSVLY	V1	BE 9	-57.456	3.00	0.00
TSVLY	V1	GE m/s	5.015	37.00	0.00
TSVLY	V1	WE m	1.402	252.00	0.00



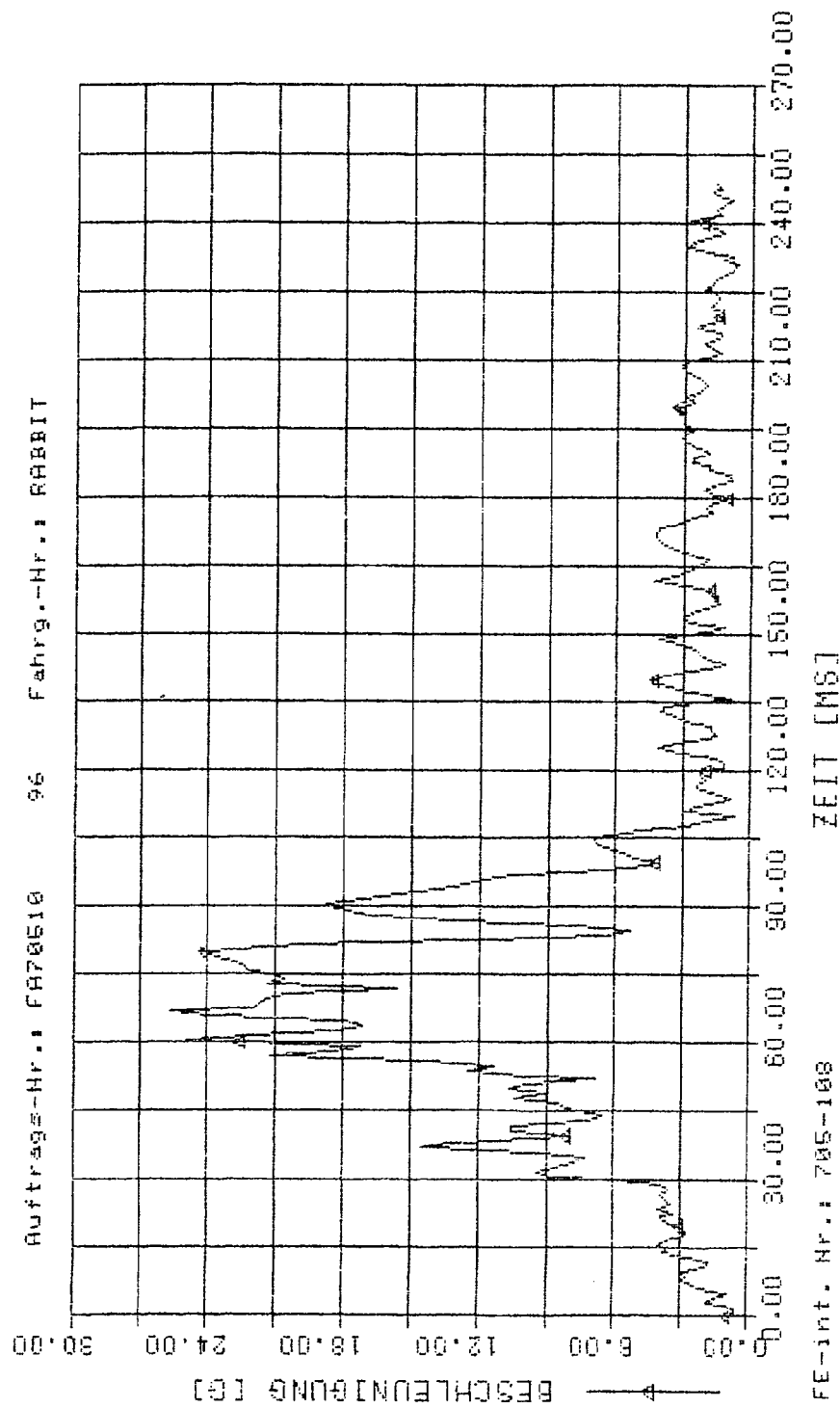
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 96

Mess-Stelle	UP	ber.	Grösse	Extremum	t	ΔMS
SHHLY	V1	BE	g	-155.827	33.00	0.00
SHHLY	V1	GE	m/s	8.771	127.00	0.00
SHHLY	V1	WE	m	1.650	252.00	0.00



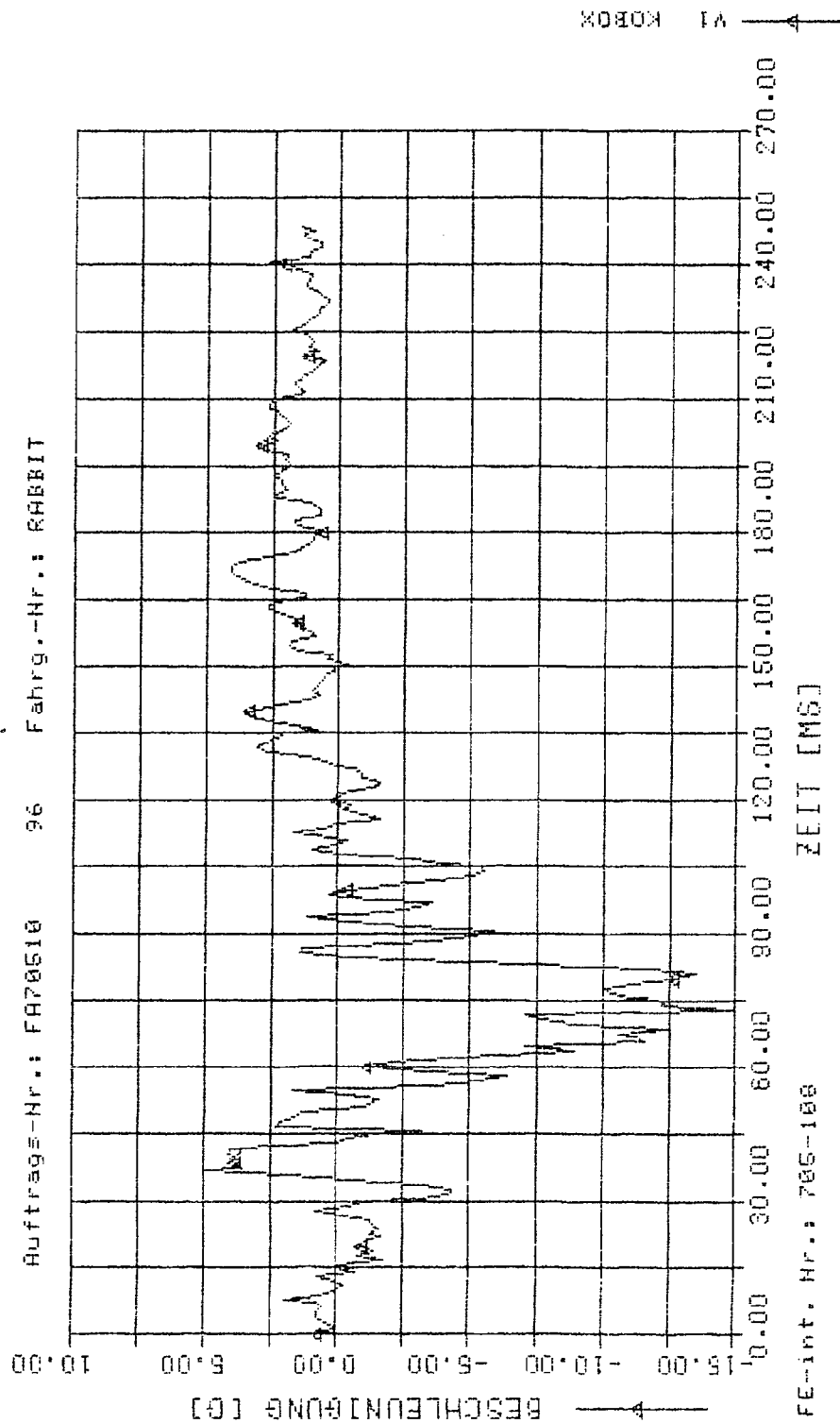
FE-int. Nr.: 705-108

Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 96
 Mess-Stelle UP ber. Extremum t 3MS
 K000 V1 BE g 25.725 Extr. 67.00 24.02



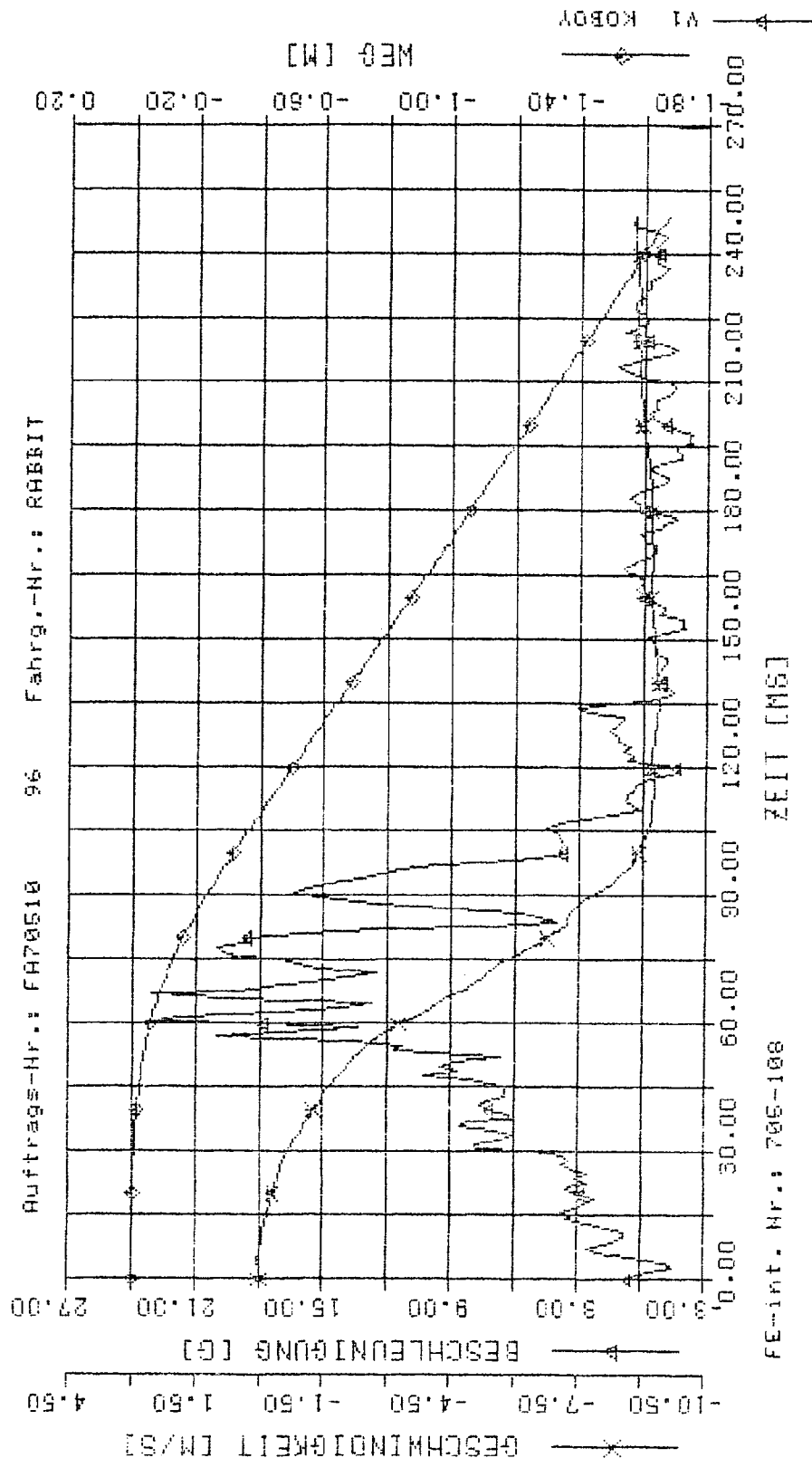
V1 K000 V 2

Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 96
 Mess-Stelle UP ber. Extremum t SMS
 Groesse Extr.
 V1 BE g -14.977 73.00 4.04
 KODOX

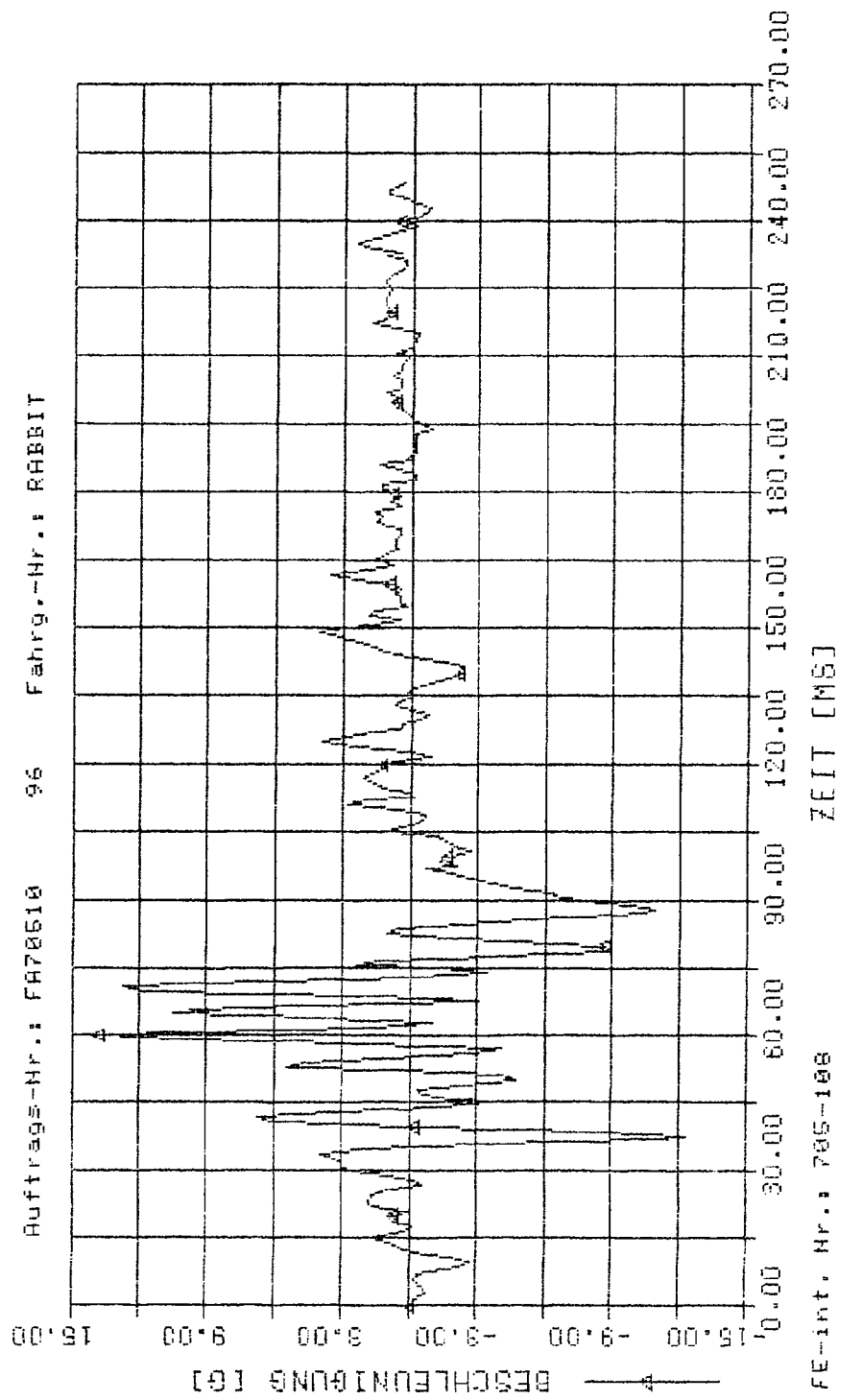


Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 96

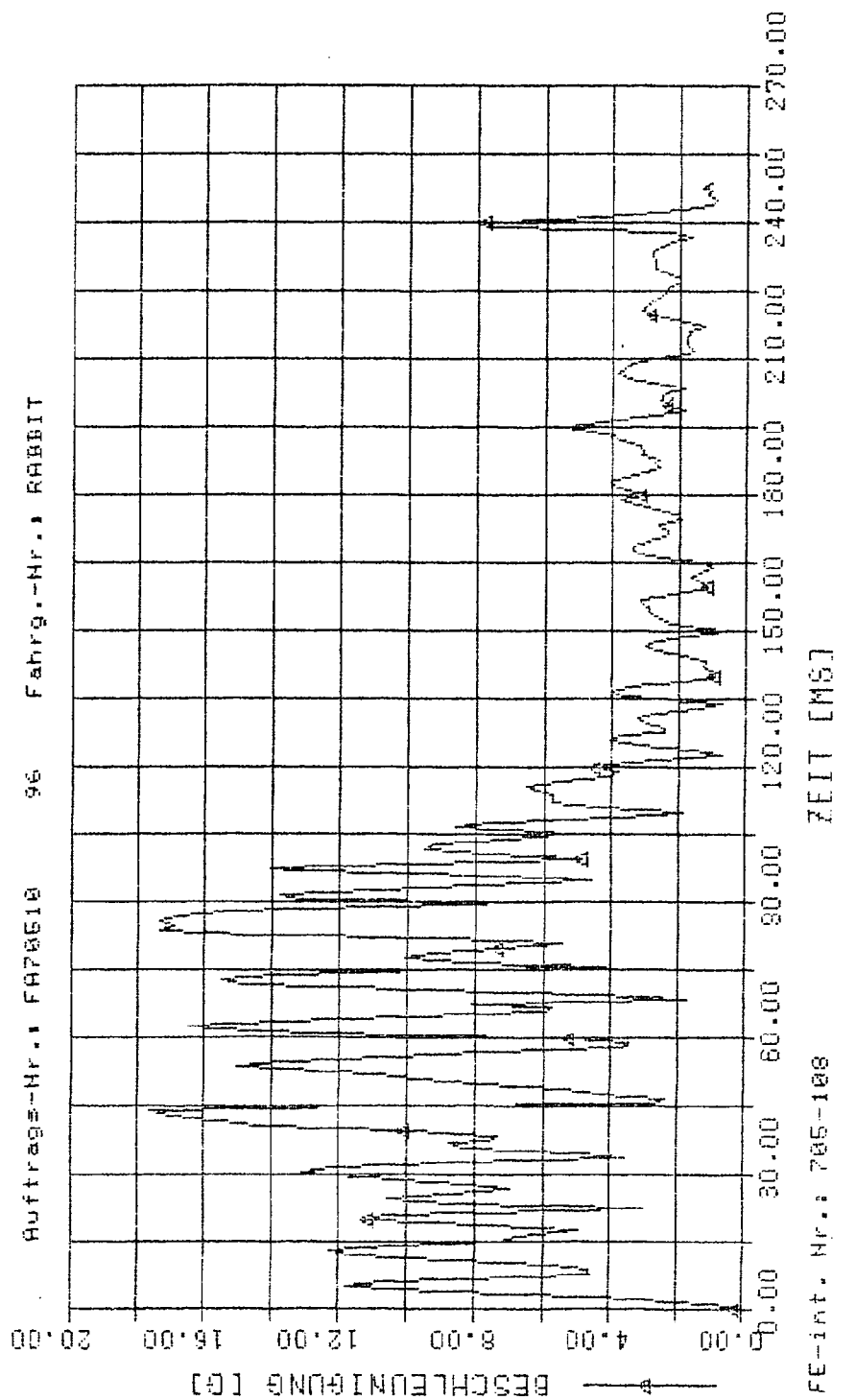
Mess-Stelle	UP	ber.	Grösse	Extremum	t	Extr.	SMS
K080Y	V1	RE	g	23.135	67.00	20.03	
K080Y	V1	GE	m/s	-9.405	136.00	0.00	
K080Y	V1	WE	m	-1.700	252.00	0.00	



Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 96
 Mess-Stelle
 K03GZ
 UP ber. Extremum t SMS
 Groesse Extr.
 V1 DE g 13.774 60.00 10.47

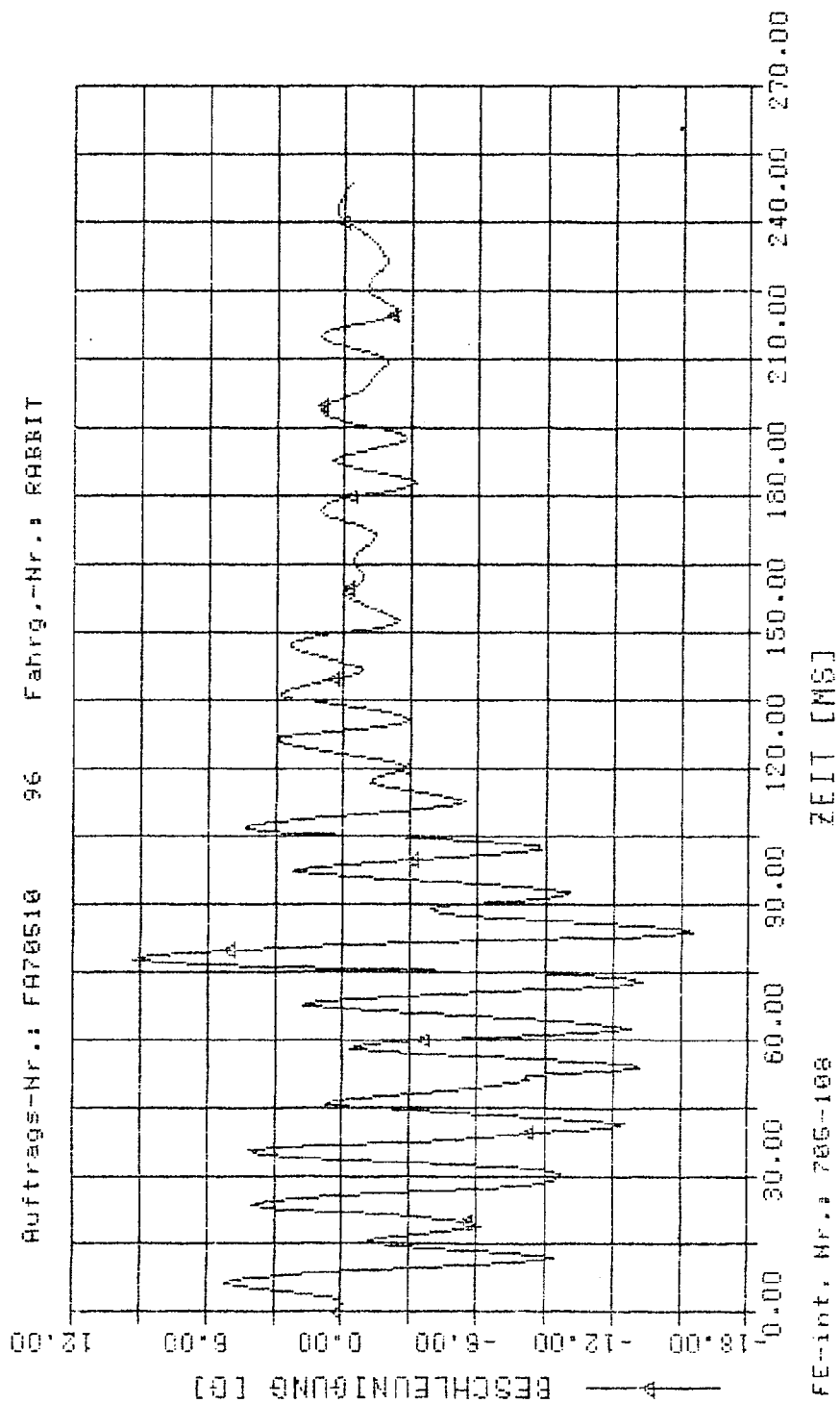


Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 96
 Mess-Stelle UP ber. Extremum t SMS
 Groesse Extr.
 V1 DE g 17.628 44.00 0.00
 SUMMI



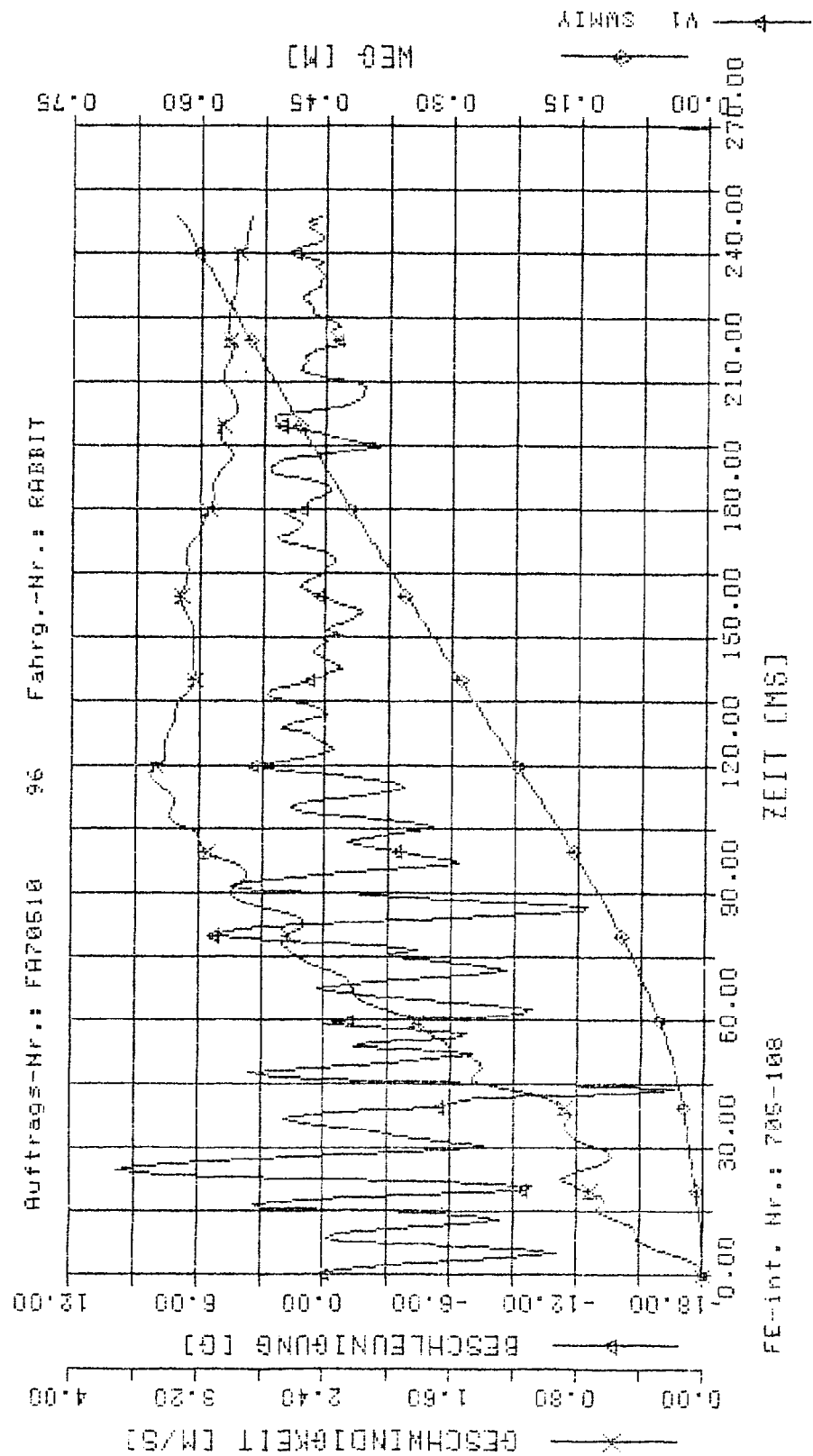
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 96

Mess-Stelle UP ber. Extremum t 3MS
SWMIX Groesse Extr. 34.00 0.00
V1 BE g -15.567

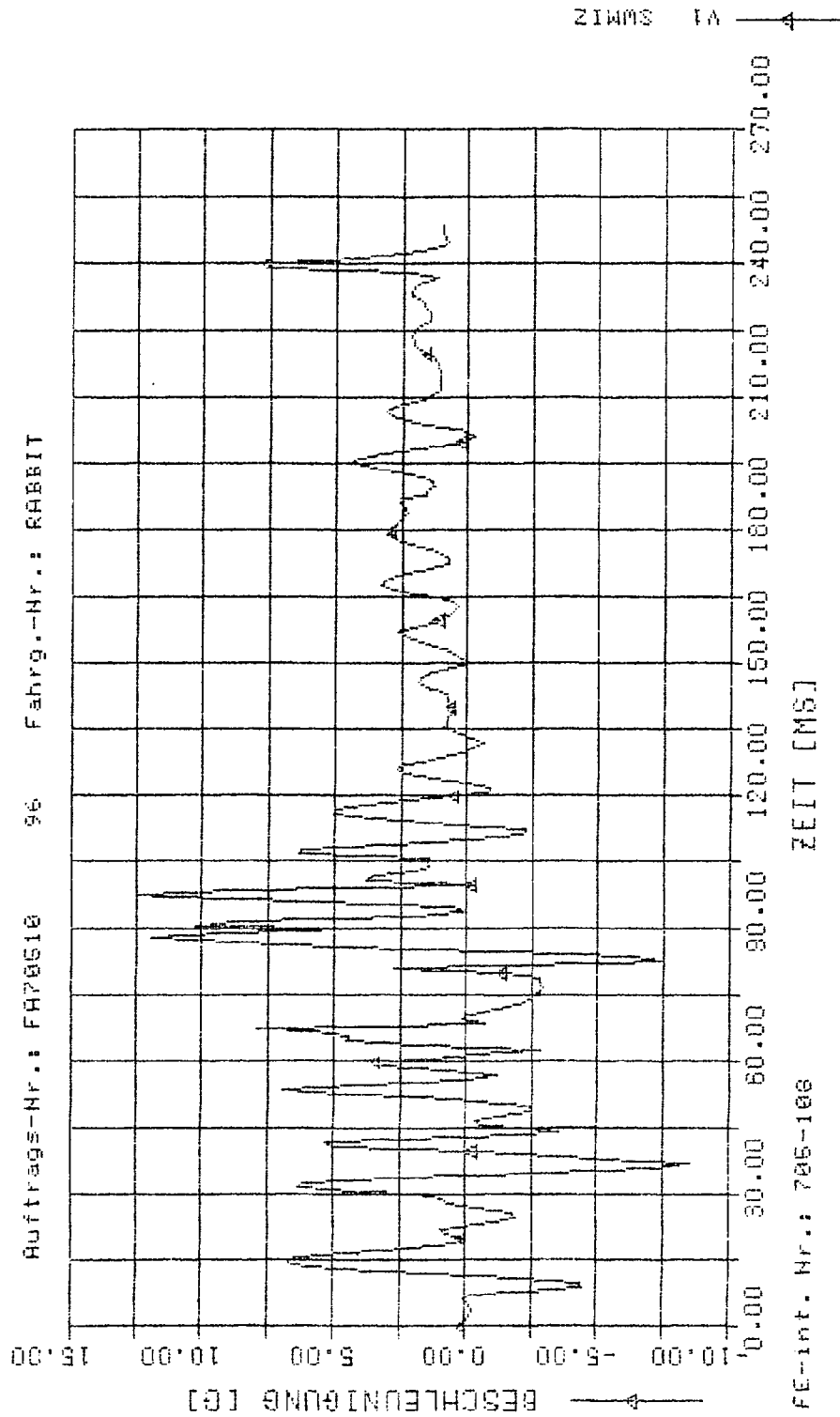


Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 96

Mess-Stelle	UP	ber.	Groesse	Extremum	t	3MS
SUMIY	V1	BE	g	-16.538	44.00	0.00
SUMIY	V1	GE	m/s	3.496	110.00	0.00
SUMIY	V1	WE	m	.636	252.00	0.00

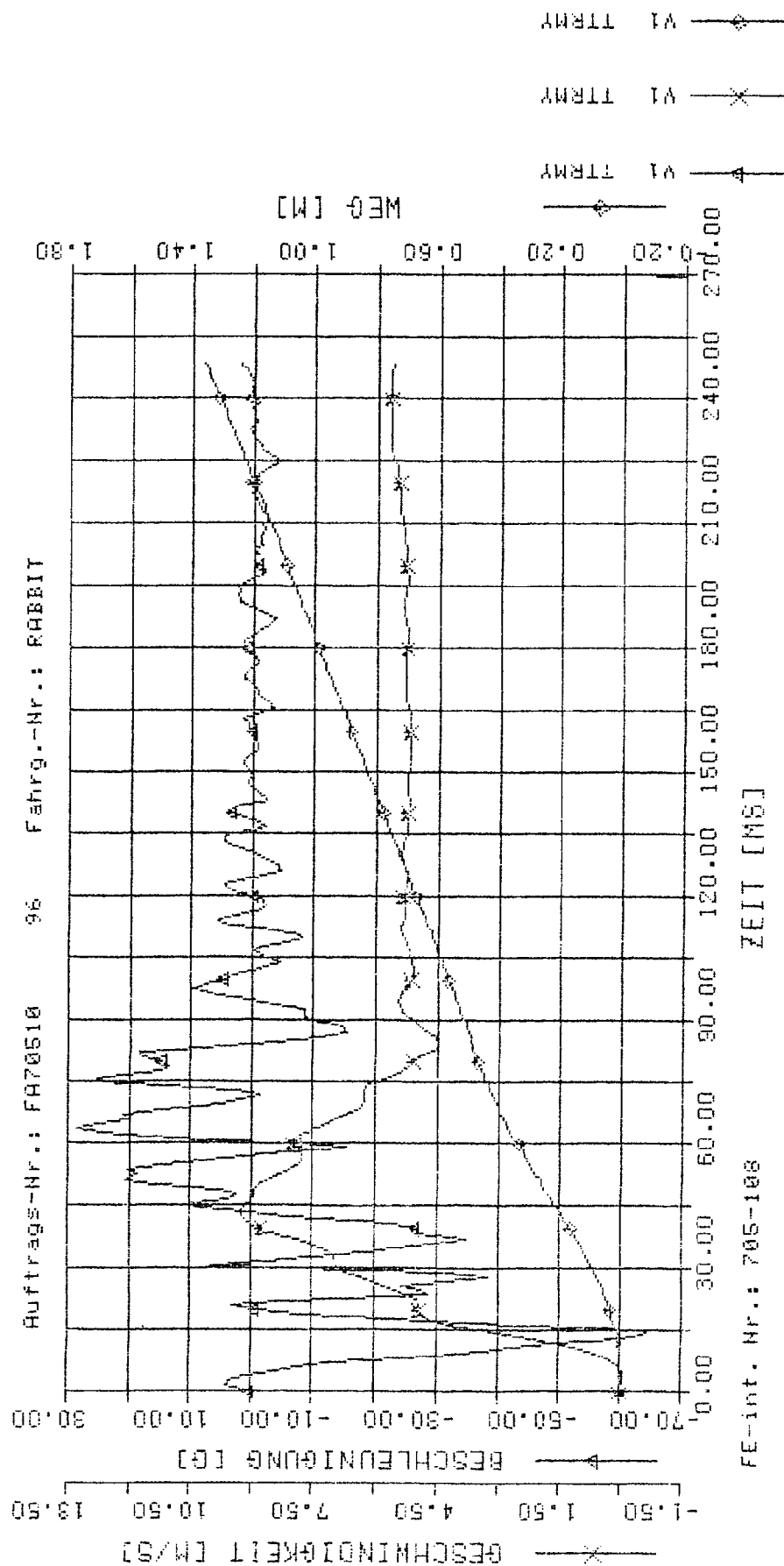


Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 96
 Mess-Stelle UP ber. Extremum t 3MS
 Groesse Extr.
 94 BE 9 12.383 90.00 0.00
 SWMIZ



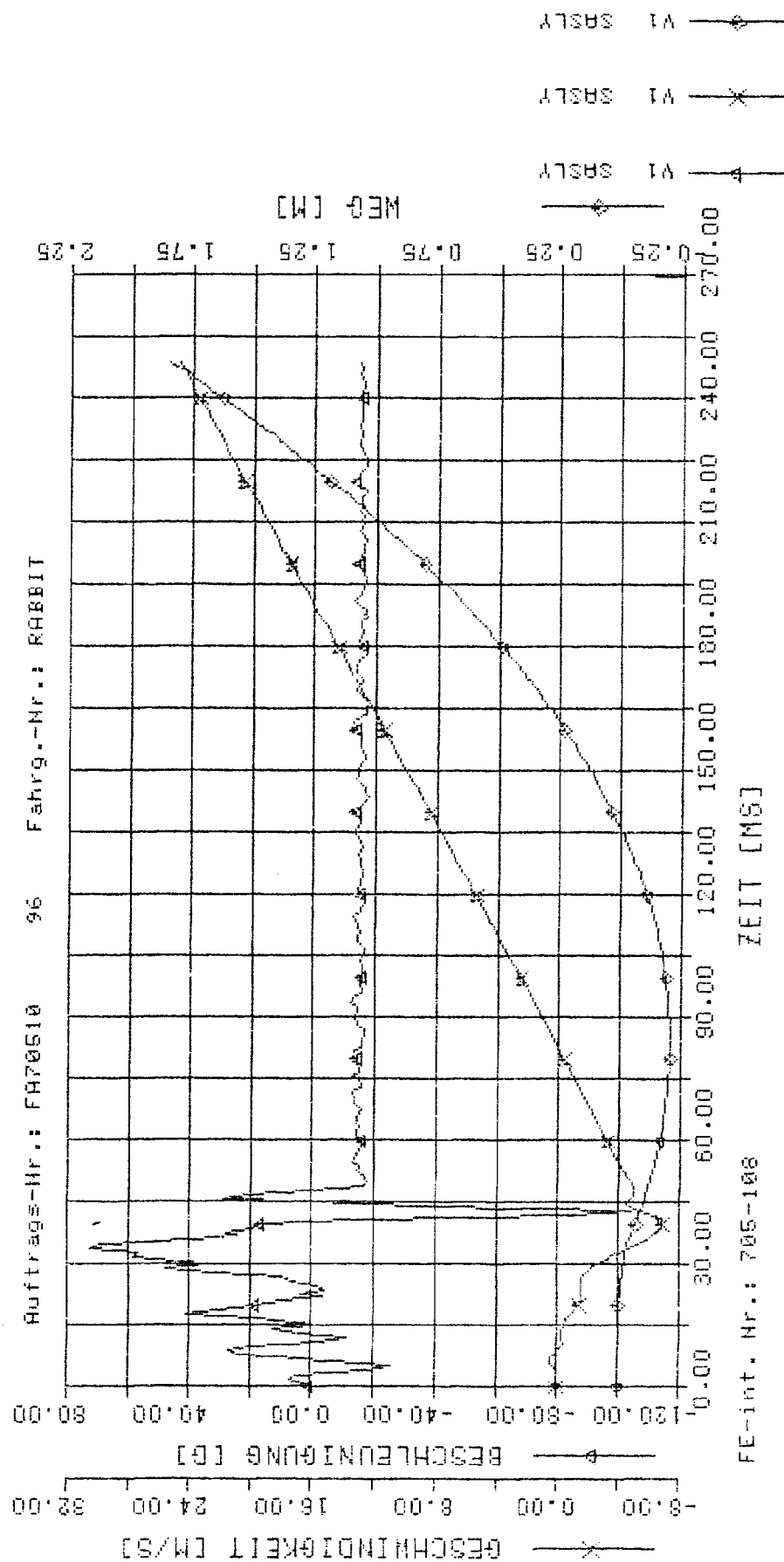
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 96

Mess-Stelle		UP	ber.	Groesse	Extremum	t	AMS
TTRMY	V1	BE	g	-65.270	15.00	0.00	
TTRMY	V1	GE	m/s	9.219	43.00	0.00	
TTRMY	V1	WE	m	1.378	252.00	0.00	



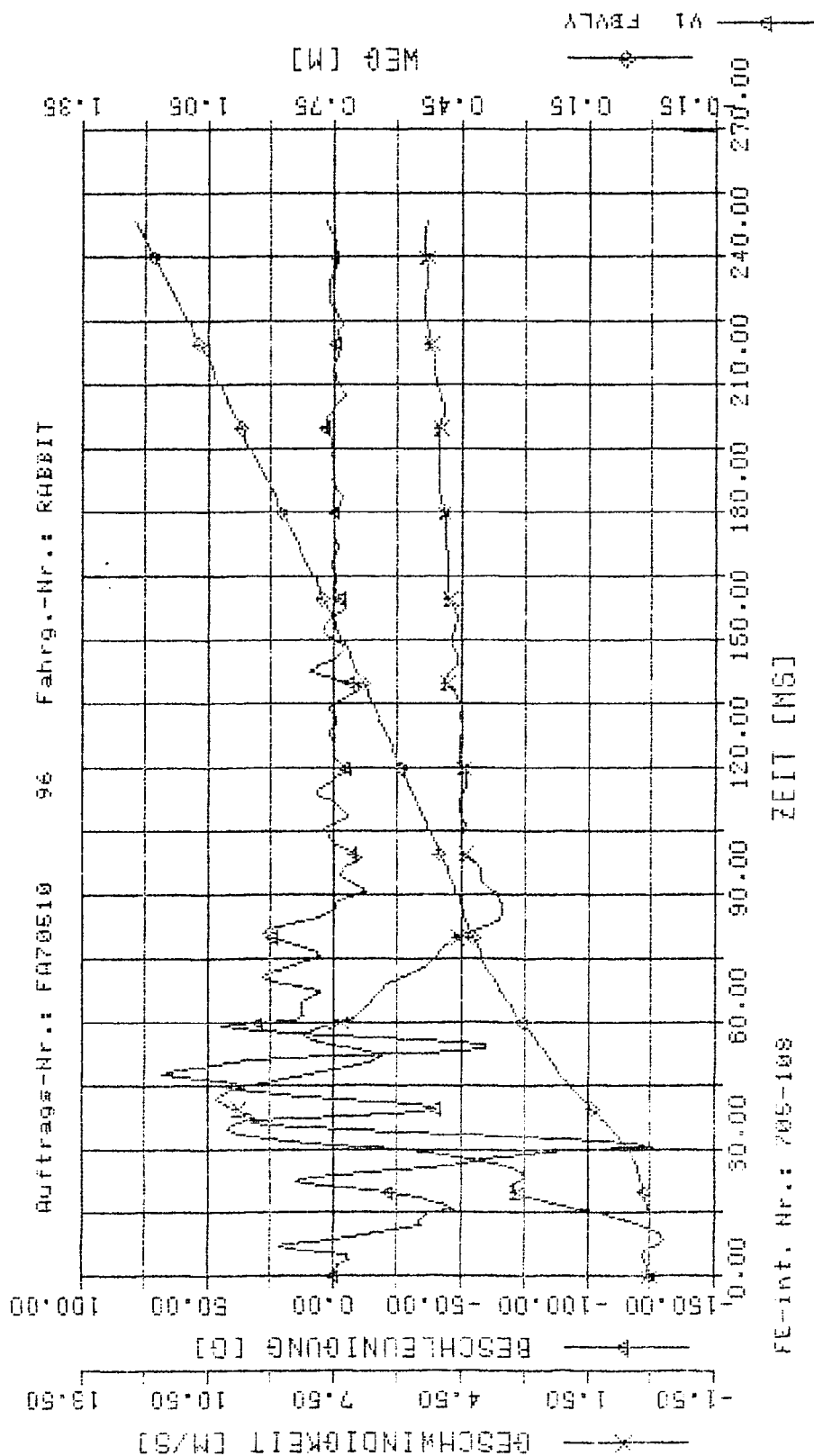
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 96

Mess-Stelle	UP	ber.	Groesse	Extremum	t	Ext.	MS
SASLY	V1	BE	g	-104.665	43.00	0.00	
SASLY	V1	GE	m/s	25.271	252.00	0.00	
SASLY	V1	WE	m	1.917	252.00	0.00	



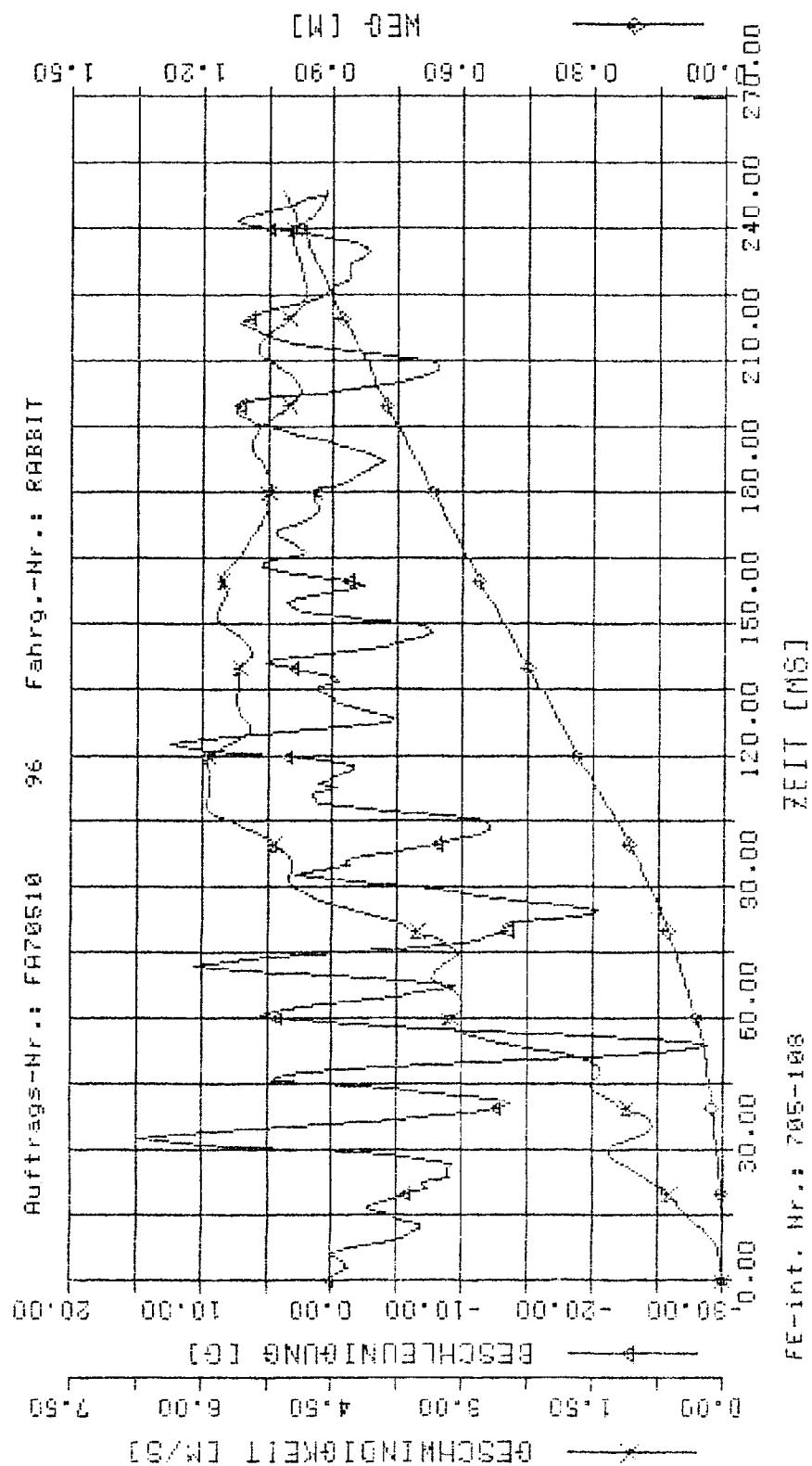
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 96

Mess-Stelle	UP	ber.	Extremum	t	3MS
FBVLY	V1	BE g	-125.727	31.00	0.00
FBVLY	V1	GE m/s	10.276	42.00	0.00
FBVLY	V1	WE m	1.240	252.00	0.00



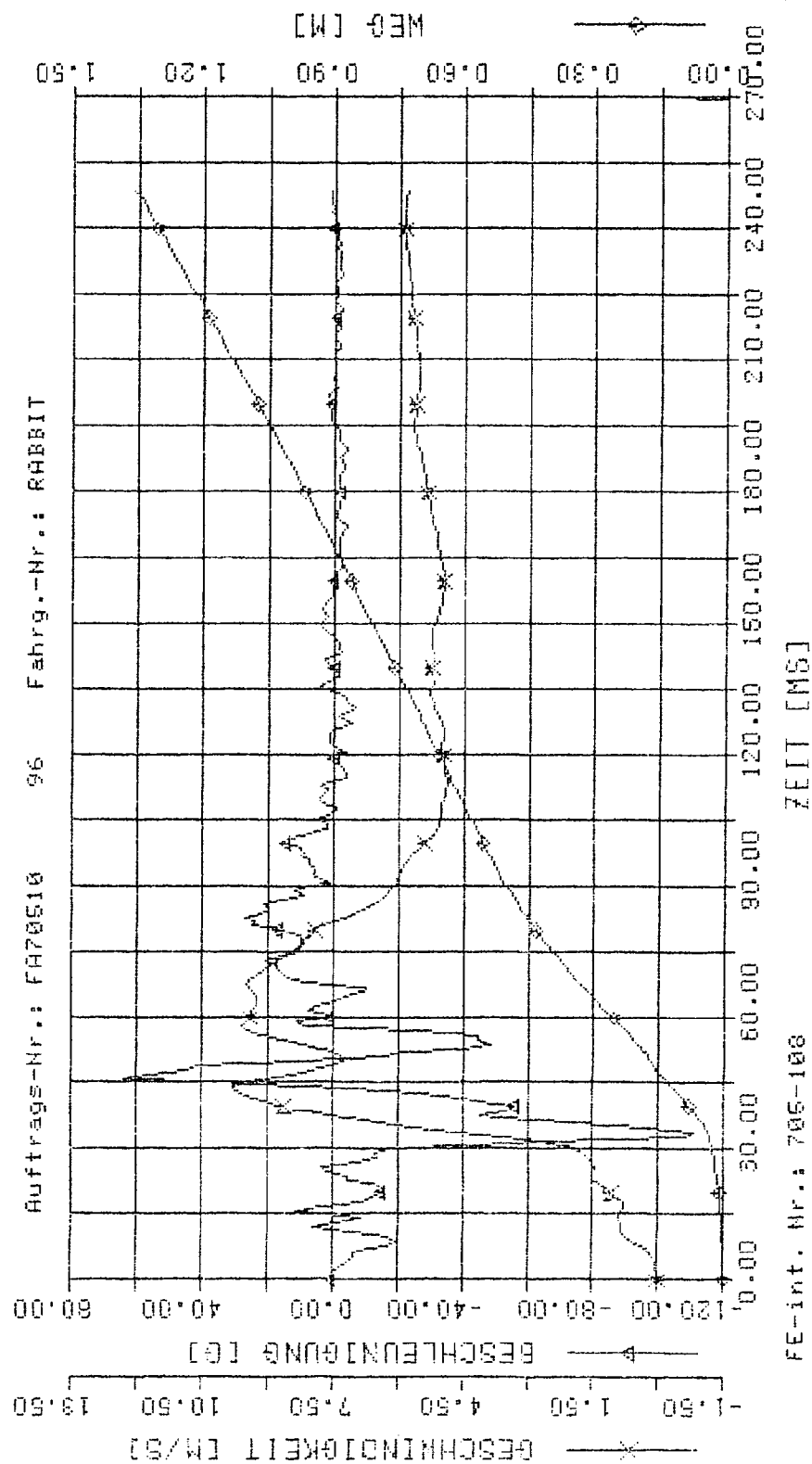
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 96

Mess-Stelle	UP	ber.	Extremum	t	3MS
FBVRY	V1	GE g	-23.788	54.00	0.00
FBVRY	V1	GE a/s	5.947	109.00	0.00
FBVRY	V1	WE m	1.031	252.00	0.00



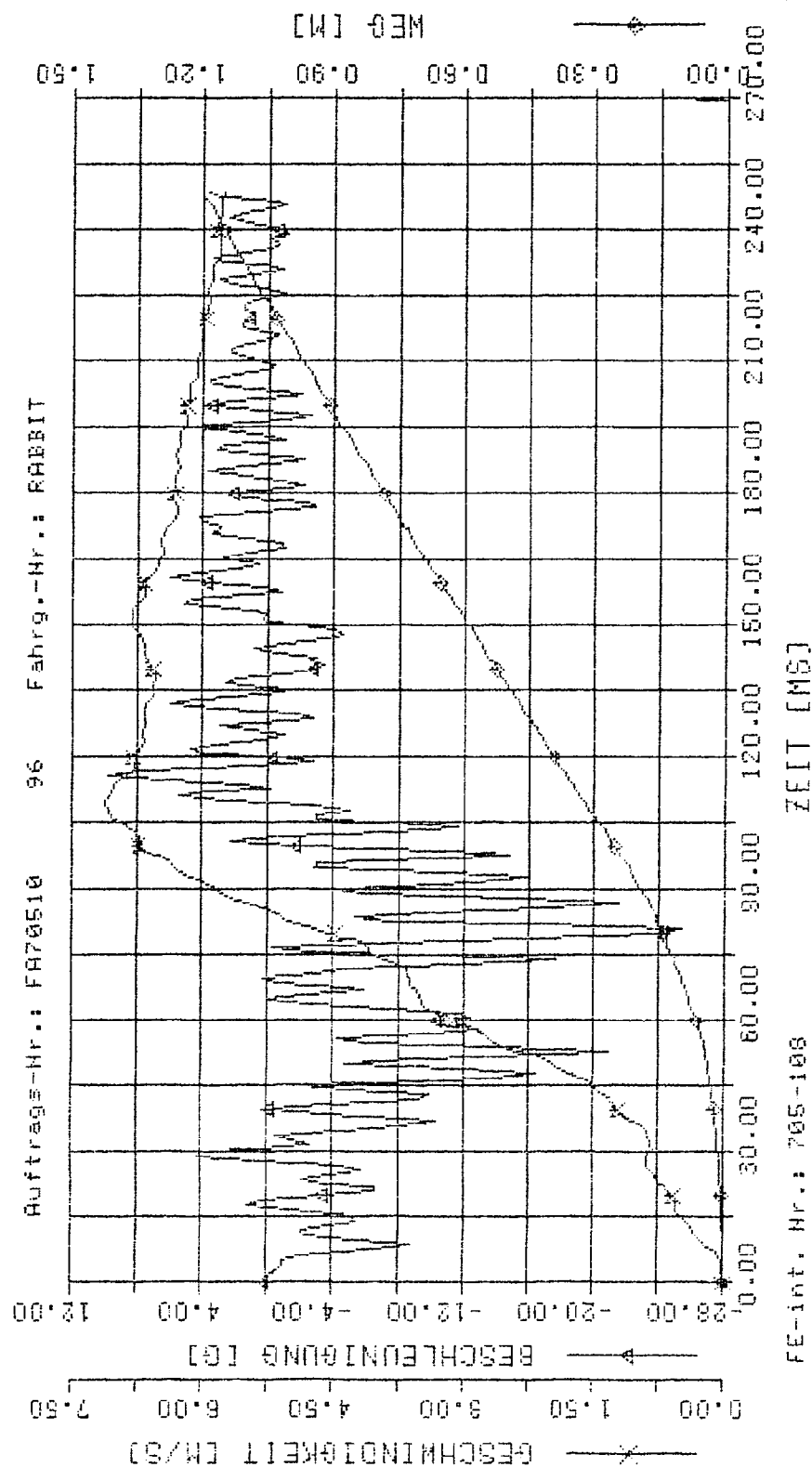
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 96

Mess-Stelle	UP	ber.	Extremum	t	3MS
BLLY	V1	GE g	-110.930	34.00	0.00
BLLY	V1	GE m/s	9.766	44.00	0.00
BLLY	V1	GE m	1.374	252.00	0.00



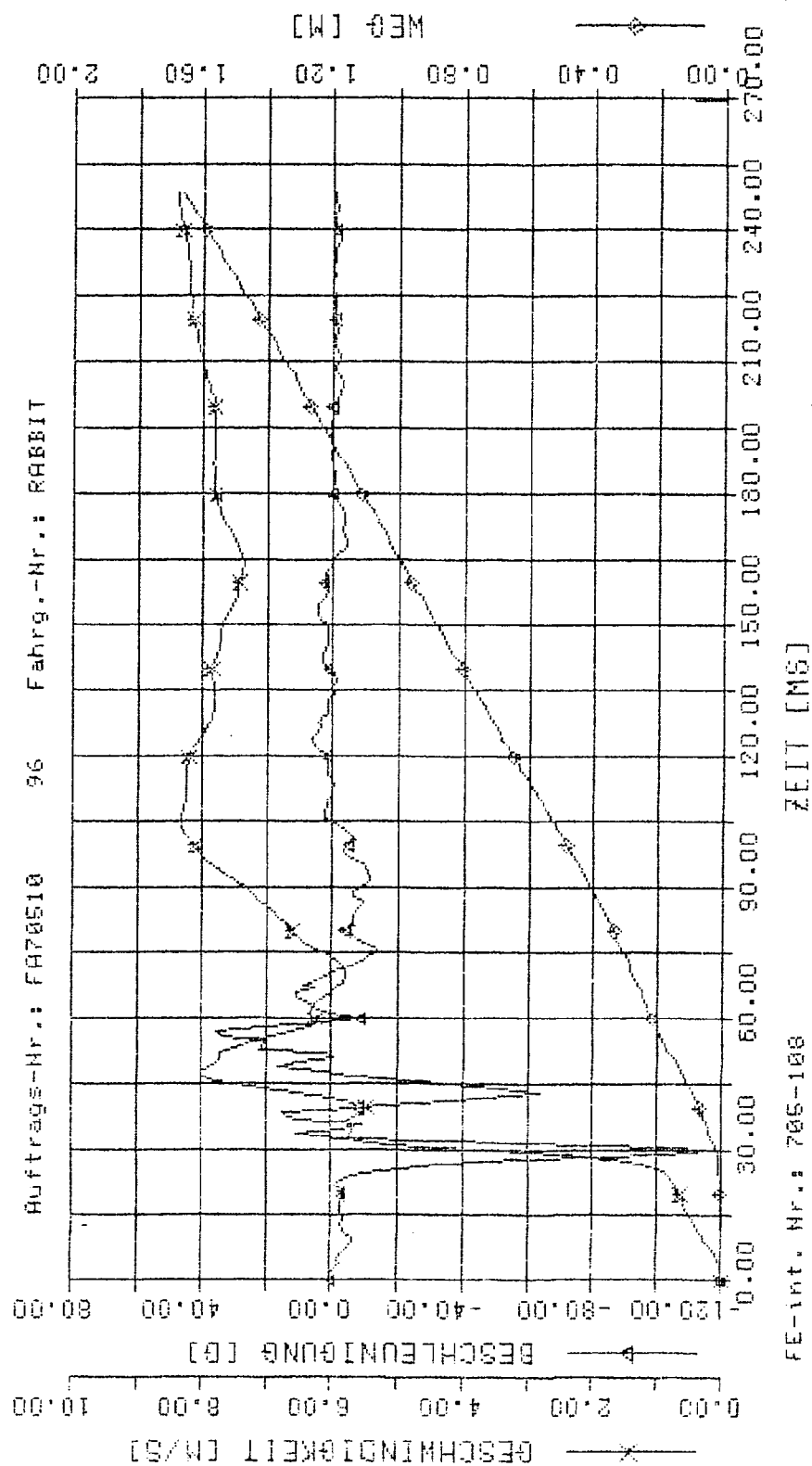
Kenn-Nr.: Auftrags-Nr.: FA70510 Versuchs-Nr.: 96

Mess-Stelle	UP	ber.	Extremum	Extr.	RMS
BSLRY	V1	BE g	-25.533	31.00	0.00
BSLRY	V1	CE g/s	7.108	110.00	0.00
BSLRY	V1	WE m	1.217	252.00	0.00



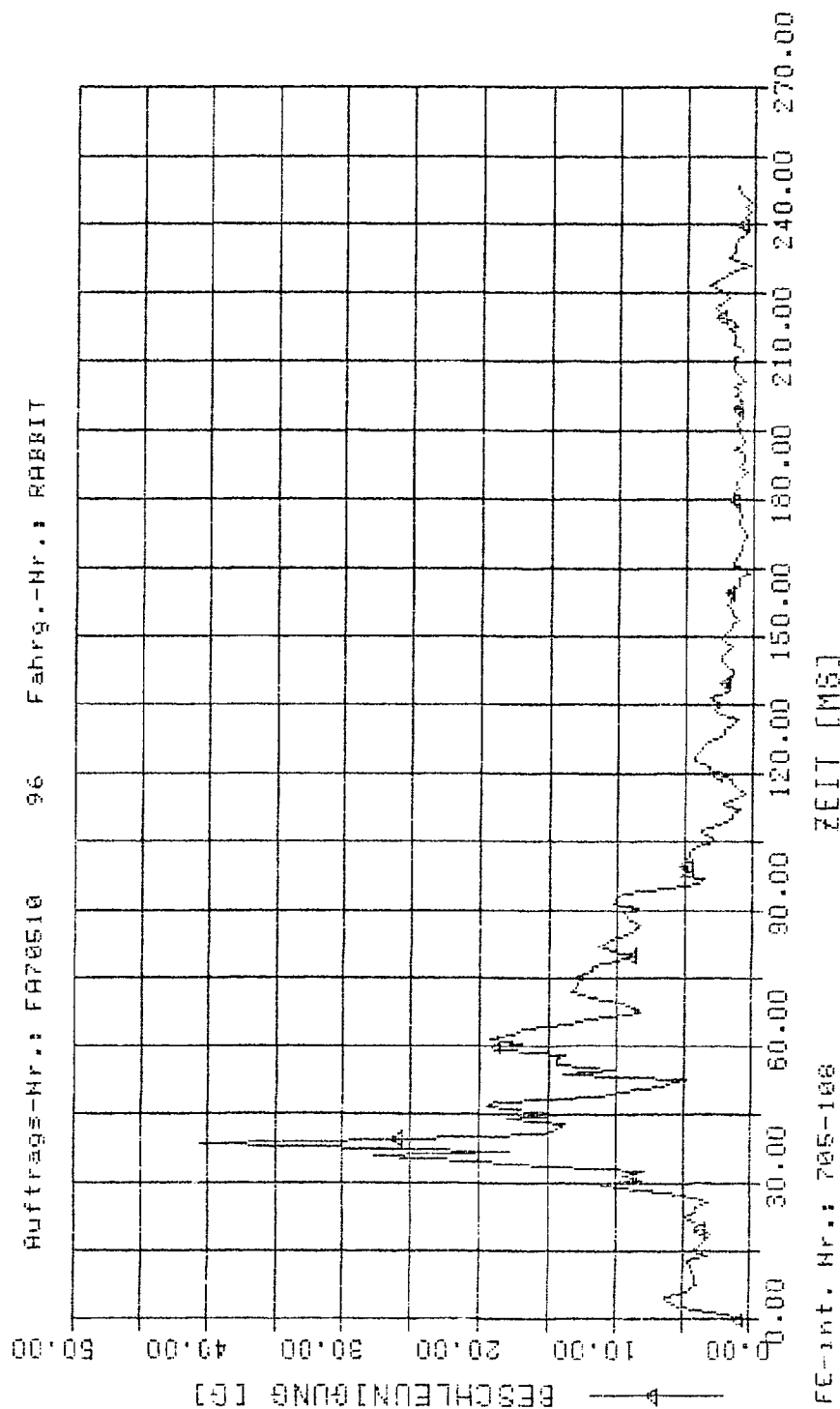
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 96

Mess-Stelle	UP	ber.	Groesse	Extremum	t	Ext.	MS
SGFAY	V1	BE	g	-116.175	30.00	0.00	
SGFAY	V1	GE	m/s	8.411	252.00	0.00	
SGFAY	V1	WE	m	1.670	252.00	0.00	



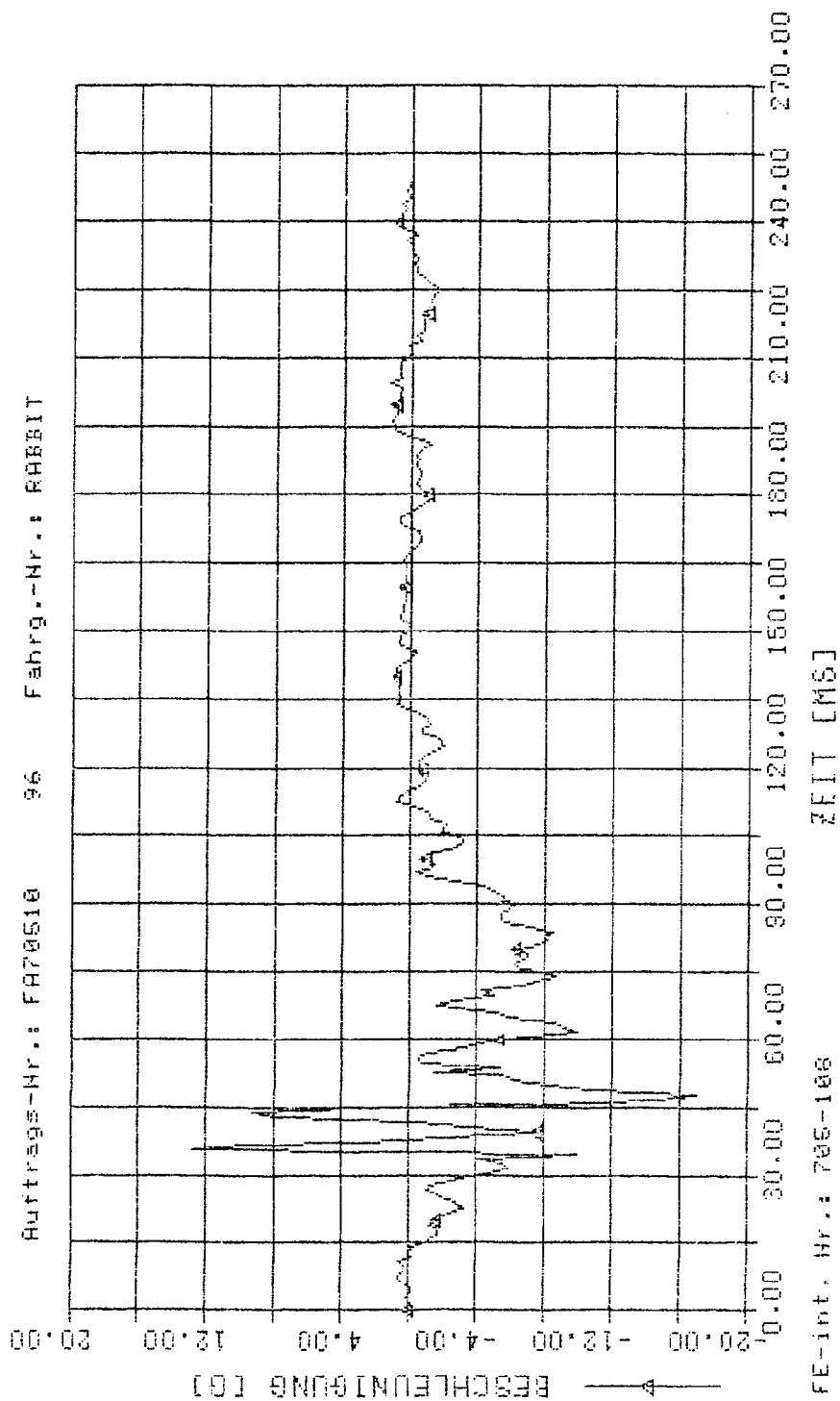
Kennwerte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 96

Mess-Stelle UP ber. Extremum t 3MS
RTMI 01 BE q 40.590 Extr. 39.00 0.00



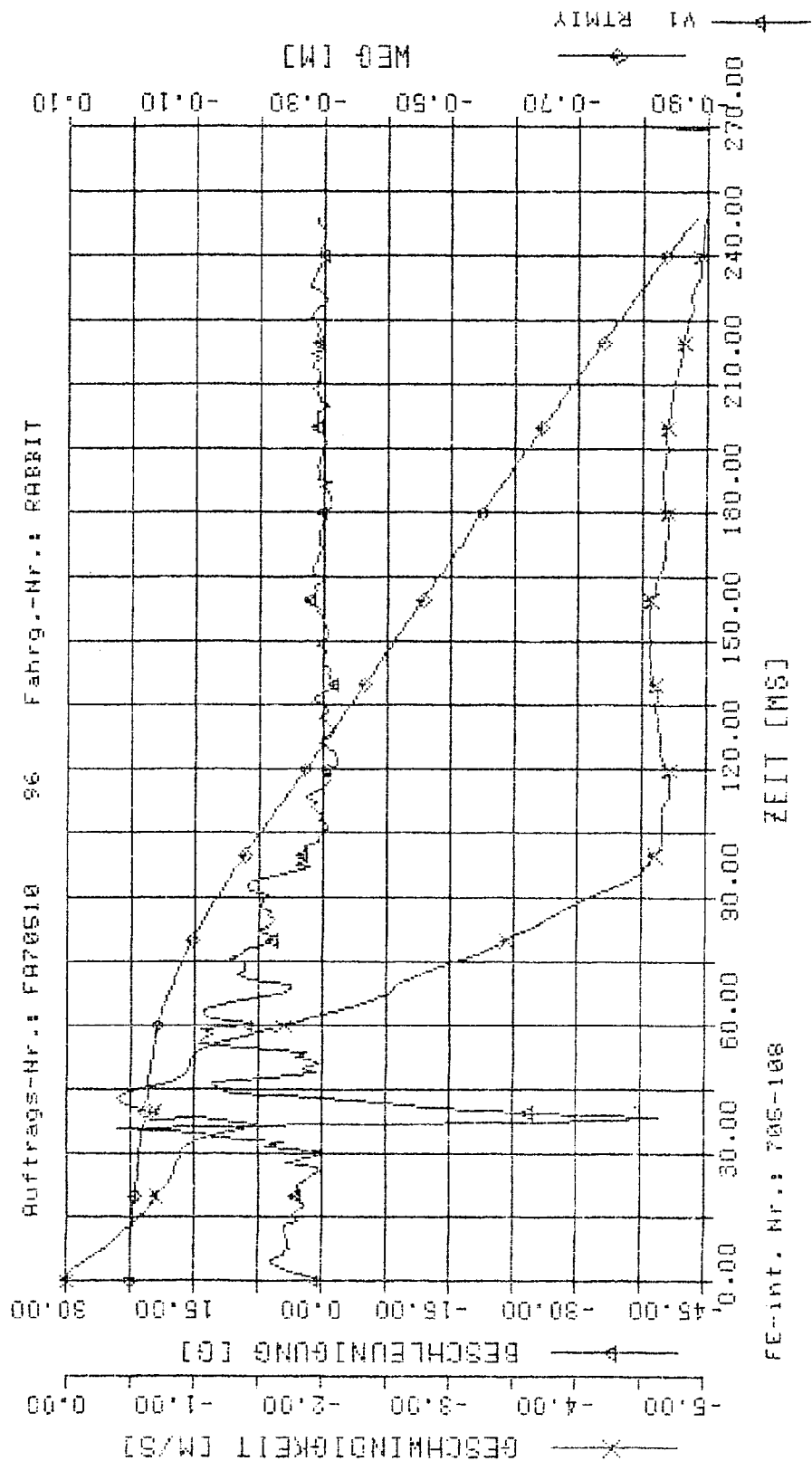
Kenn-Merke: Auftrags-Nr.: FA70510 Versuchs-Nr.: 96

Mess-Quelle
RTMIX
UP ber. Extr. t 3MS
V1 BE g -17.062 48.00 0.00



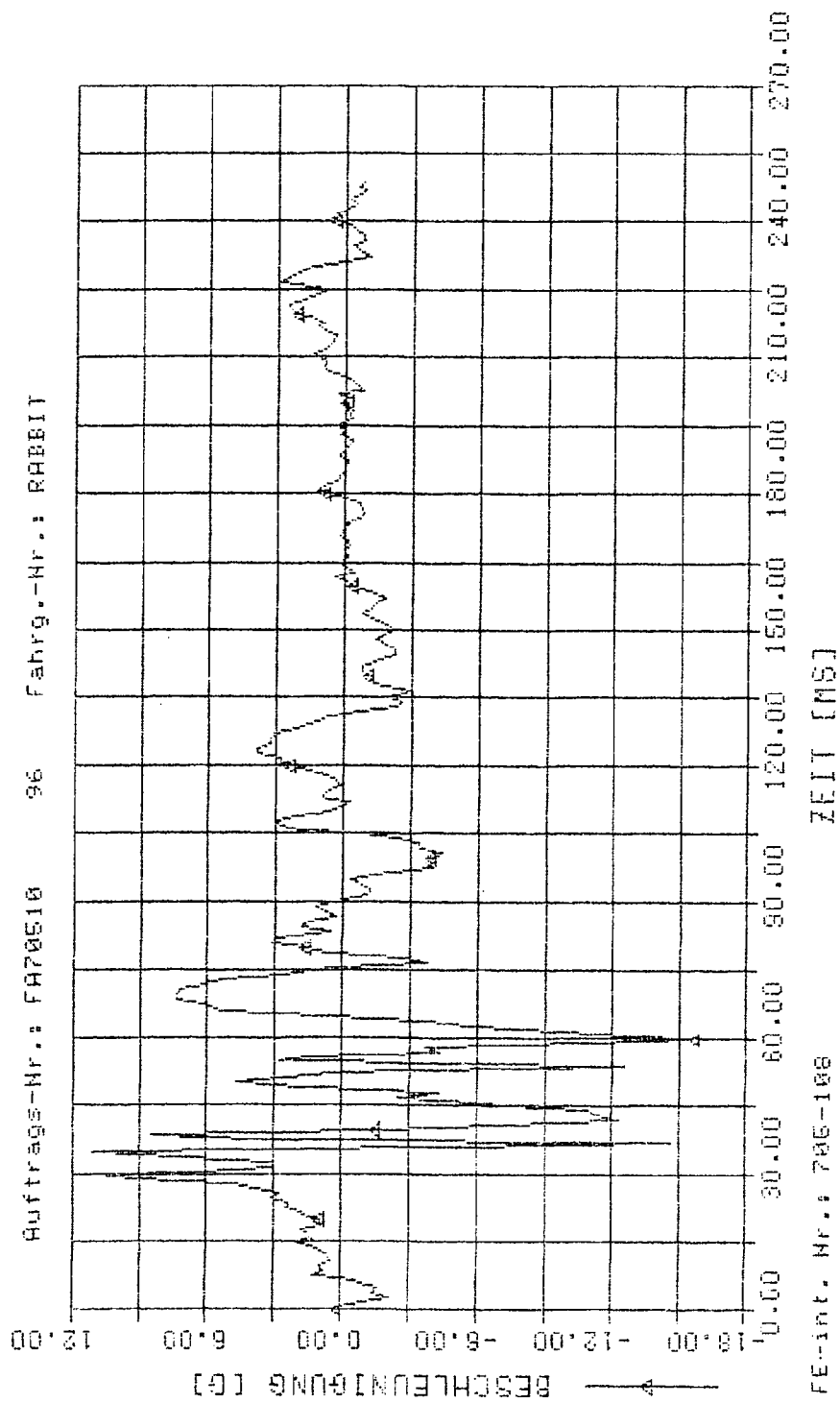
Kennwerte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 96

Meas-Stelle	UP	ber.	Extremum	t	SNS
RTMIY	V1	BE g	-39.650	39.00	0.00
RTMIY	V1	GE m/s	-4.996	252.00	0.00
RTMIY	V1	WE m	-1.897	252.00	0.00



Kenn-Merkmale: Auftrags-Nr.: FA70510 Versuchs-Nr.: 96

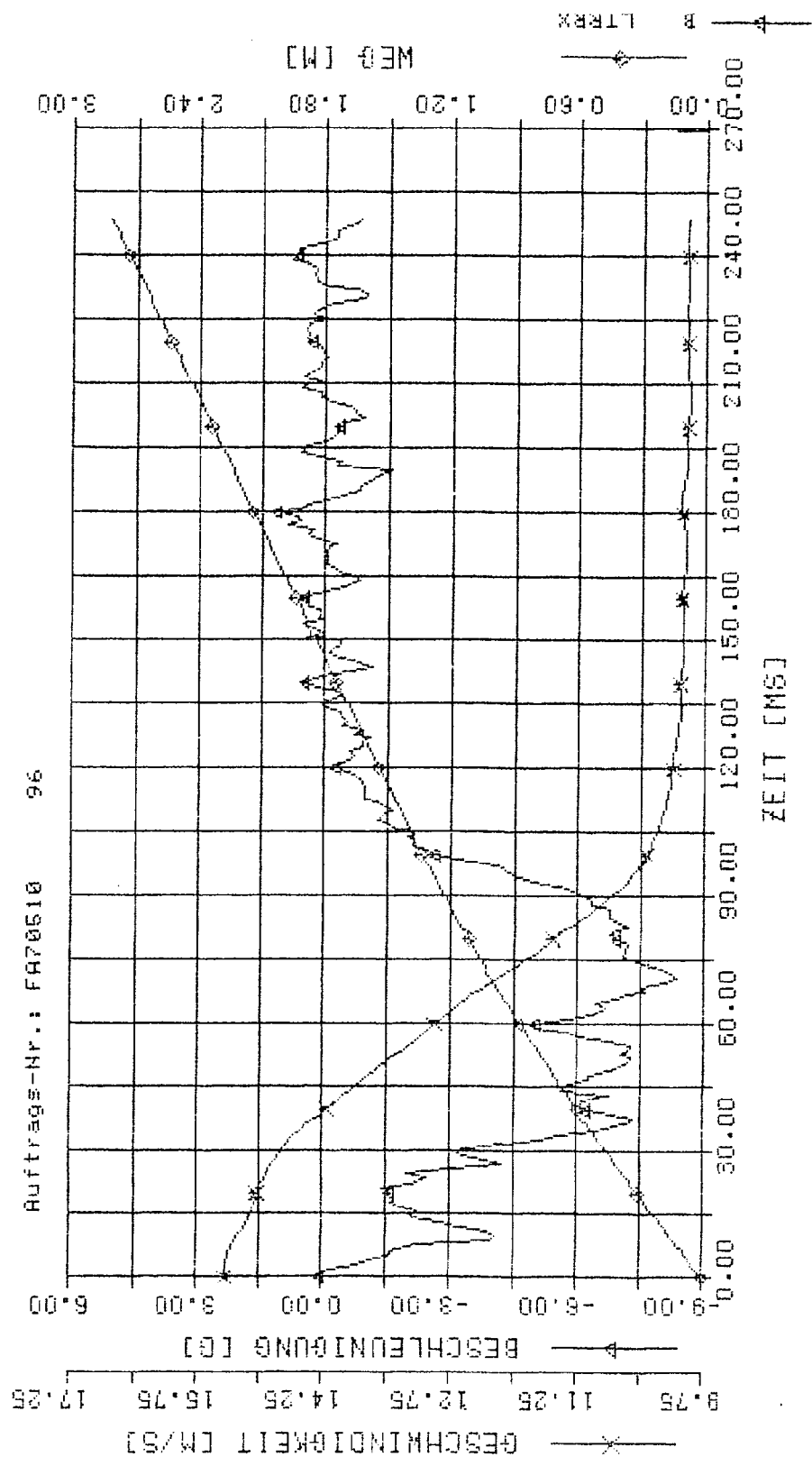
Mess-Stelle
RMIZ
UP ber. Extremum t 3MS
Grösse Extr.
V1 BE g -15.725 60.00 0.00



B.1.2 Crabbed Barrier

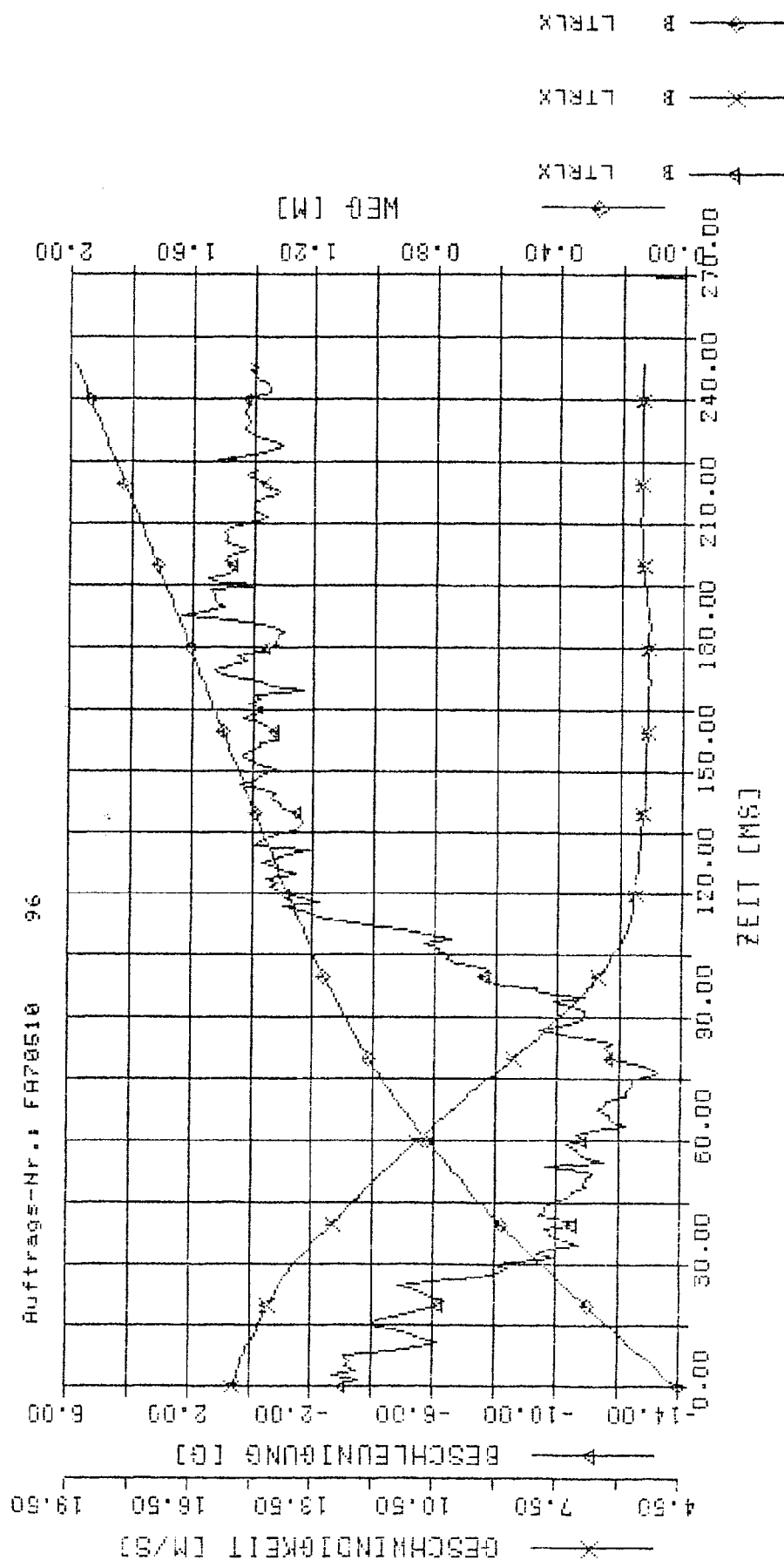
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 96

Mess-Stelle	UP	ber.	Extremum	t	MS
LTRRX	B	Groesse		Extr.	
LTRRX	B	BE g	-8.398	71.00	0.00
LTRRX	B	GE m/s	15.406	1.00	0.00
LTRRX	B	WE m	2.857	252.00	0.00



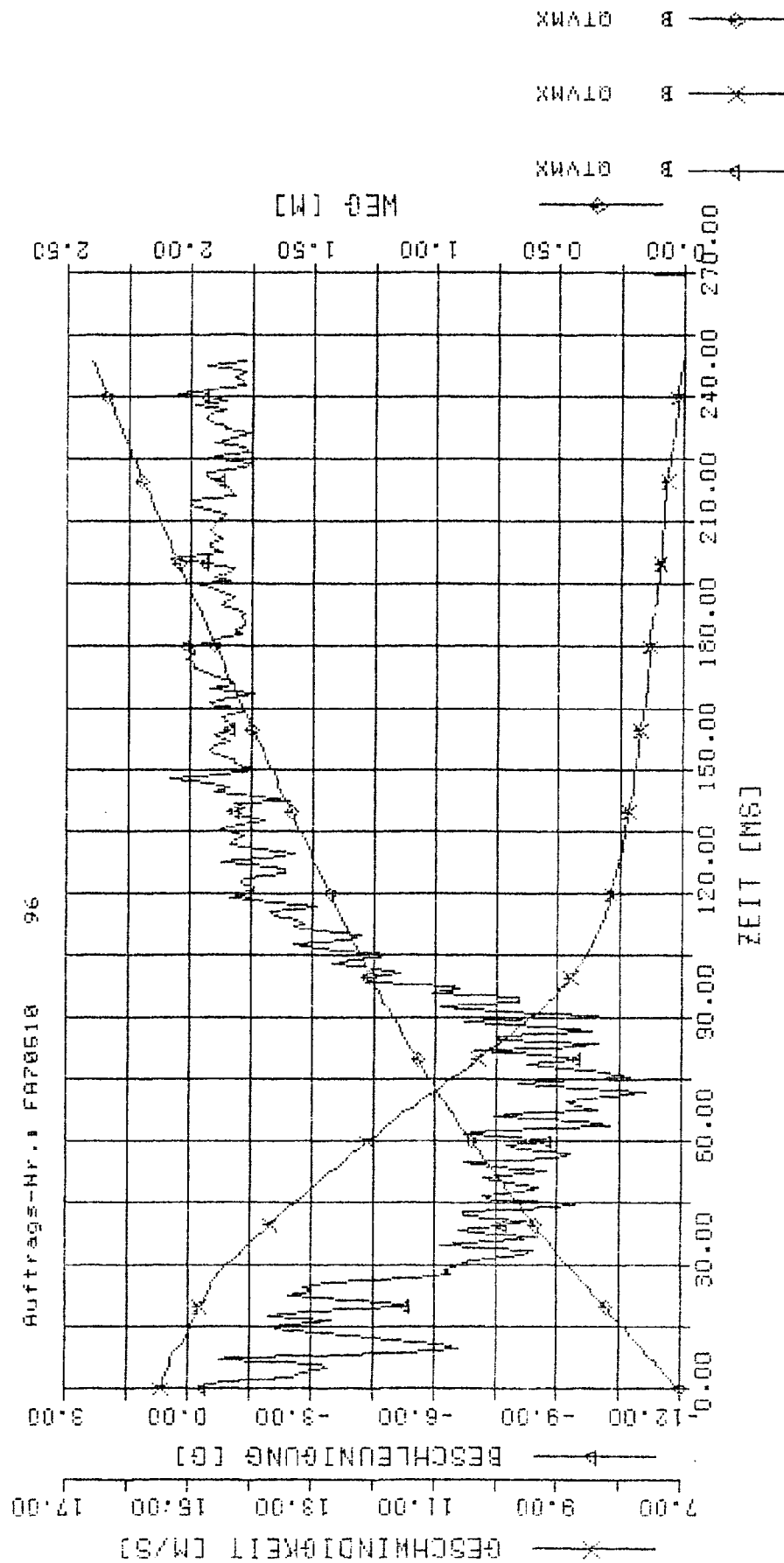
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 96

Mess-Stelle	UP	ber.	Extremum	t	3MS
LTRLX	B	BE g	-13.220	77.00	0.00
LTRLX	B	GE m/s	15.406	0.00	0.00
LTRLX	B	WE m	2.000	252.00	0.00



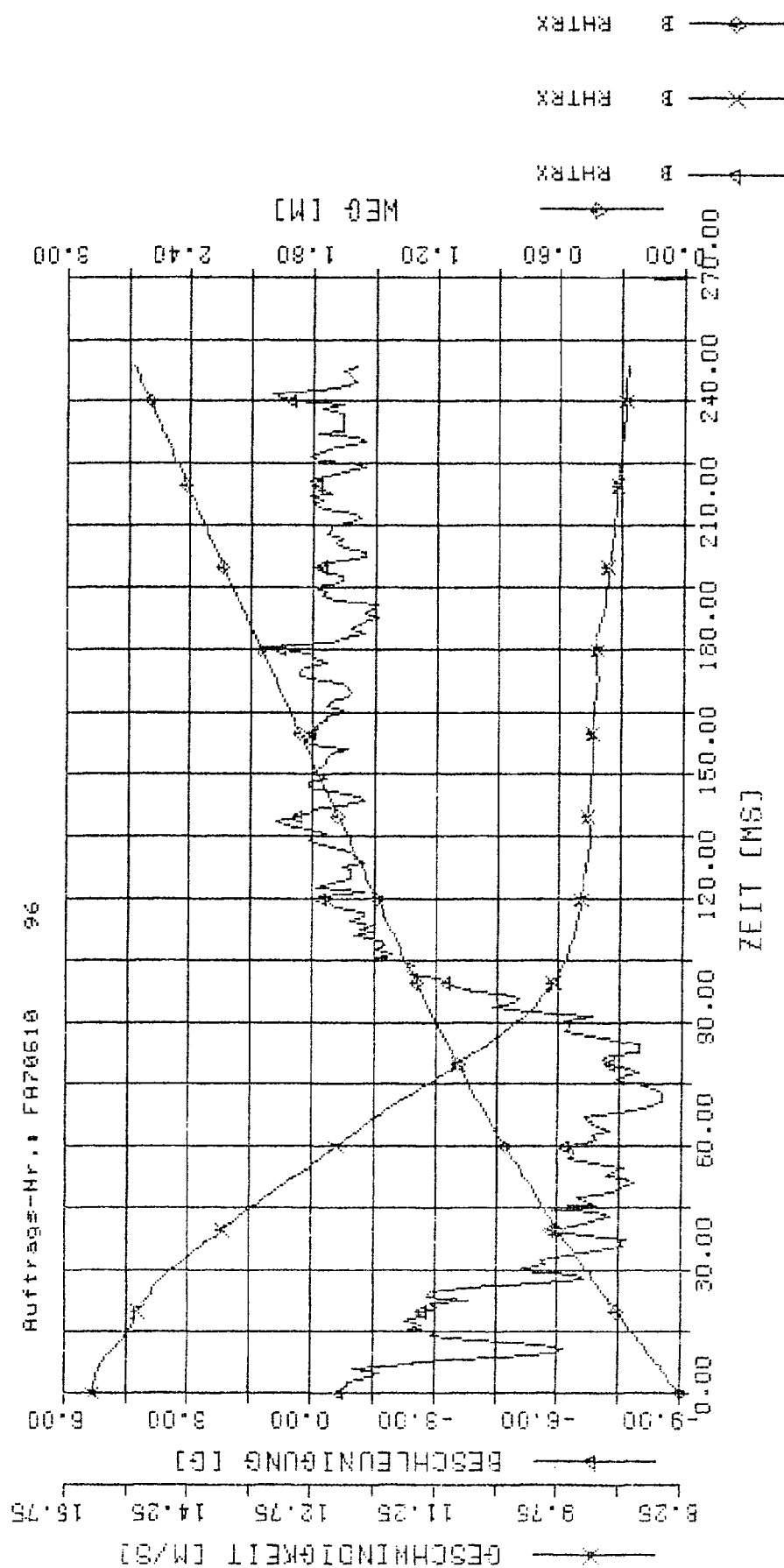
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 96

Mess-Stelle	UP	ber.	Extremum	t	3MS
QTVMX	B	Grösse	-11.160	Extr.	0.00
QTVMX	B	BE q	15.406	0.00	0.00
QTVMX	B	WE m	2.419	252.00	0.00



Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 96

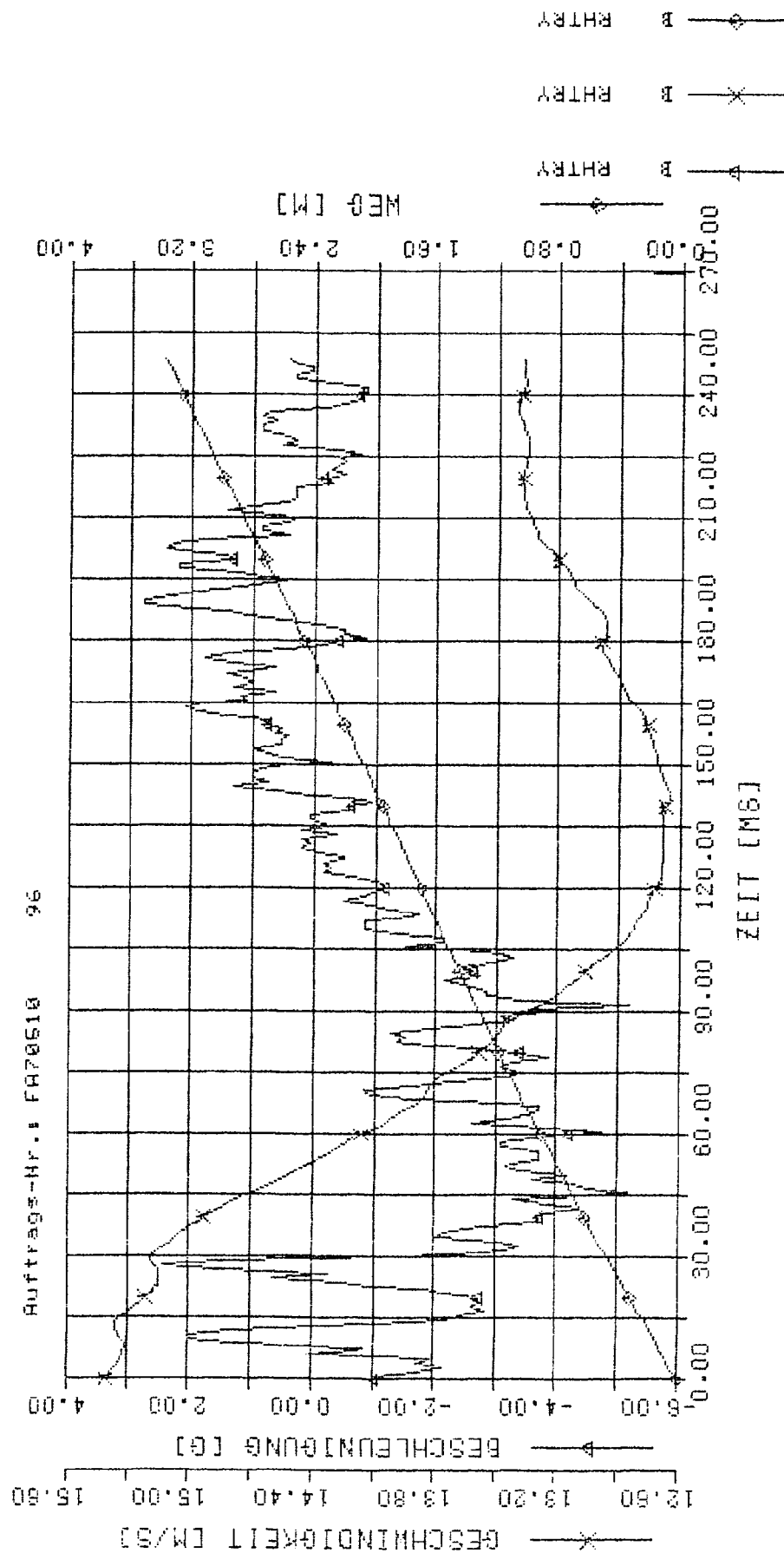
Mess-Stelle	UP	ber.	Extremum	t	3MS
RHTRX	B	Groesse	-8.540	73.00	0.00
RHTRX	B	BE g	15.406	0.00	0.00
RHTRX	B	GE a/s	2.701	252.00	0.00
RHTRX	B	WE m			



Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 96

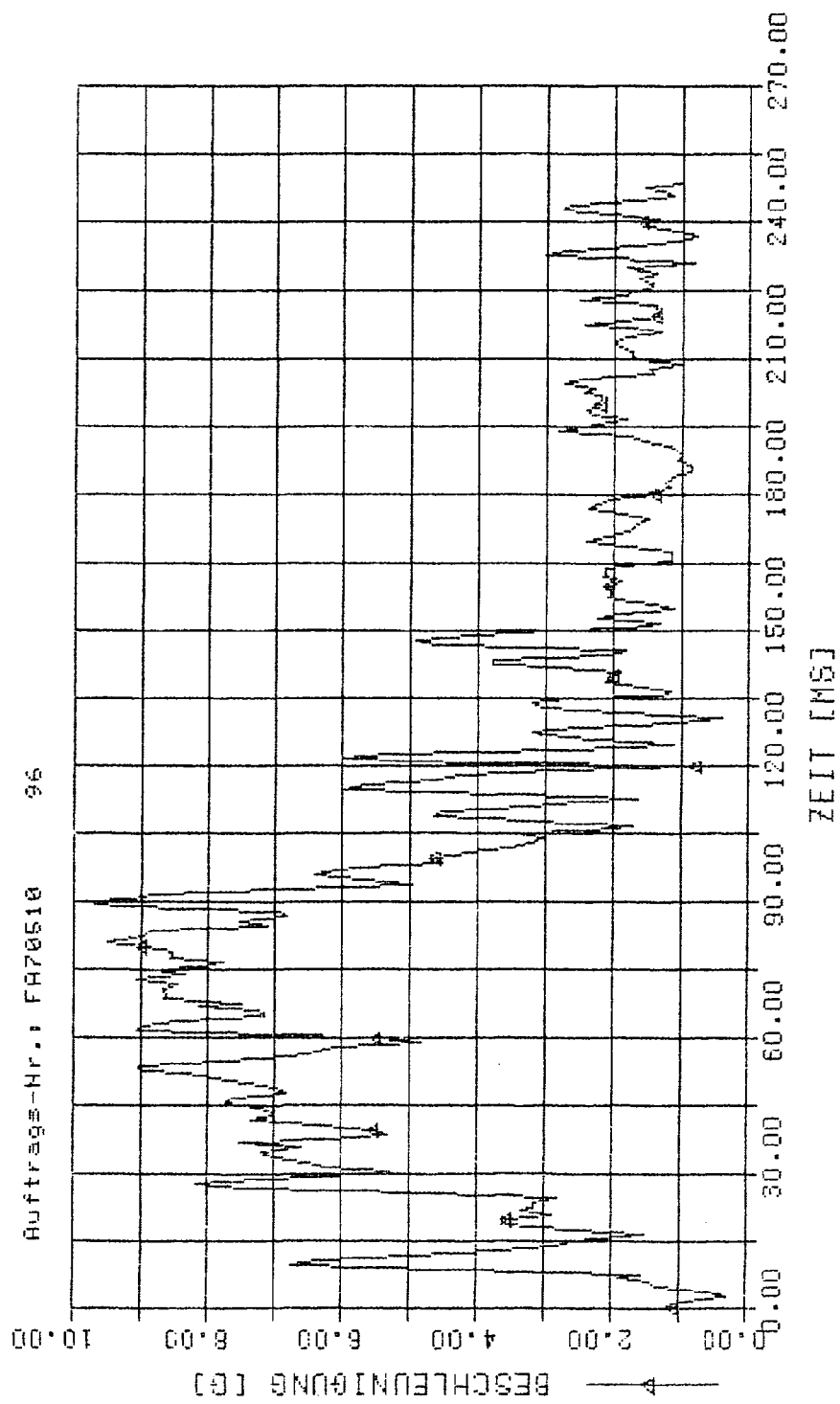
Mess-Stelle	UP	ber.	Extremum	t	MS
		Grösse		Extr.	
RHTR	B	BE g	-5.201	92.00	0.00
RHTR	B	CE m/s	15.406	0.00	0.00
RHTR	B	WE m	3.421	252.00	0.00

Auftrags-Nr.: FA70510 96



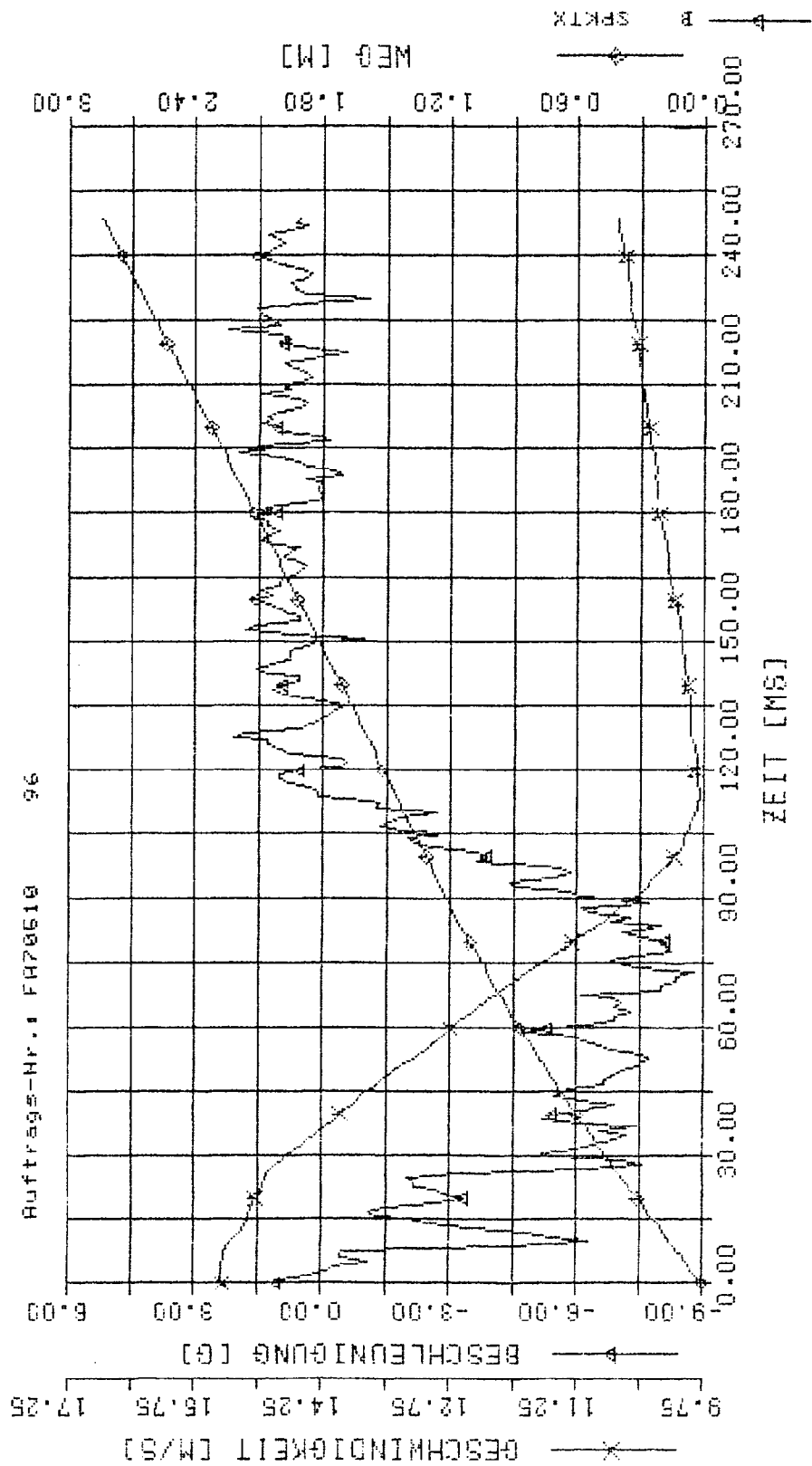
Kennwerte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 96

Mess-Stelle UP ber. Extremum t 3MS
SPKT B DE 9 9.819 90.00 0.00



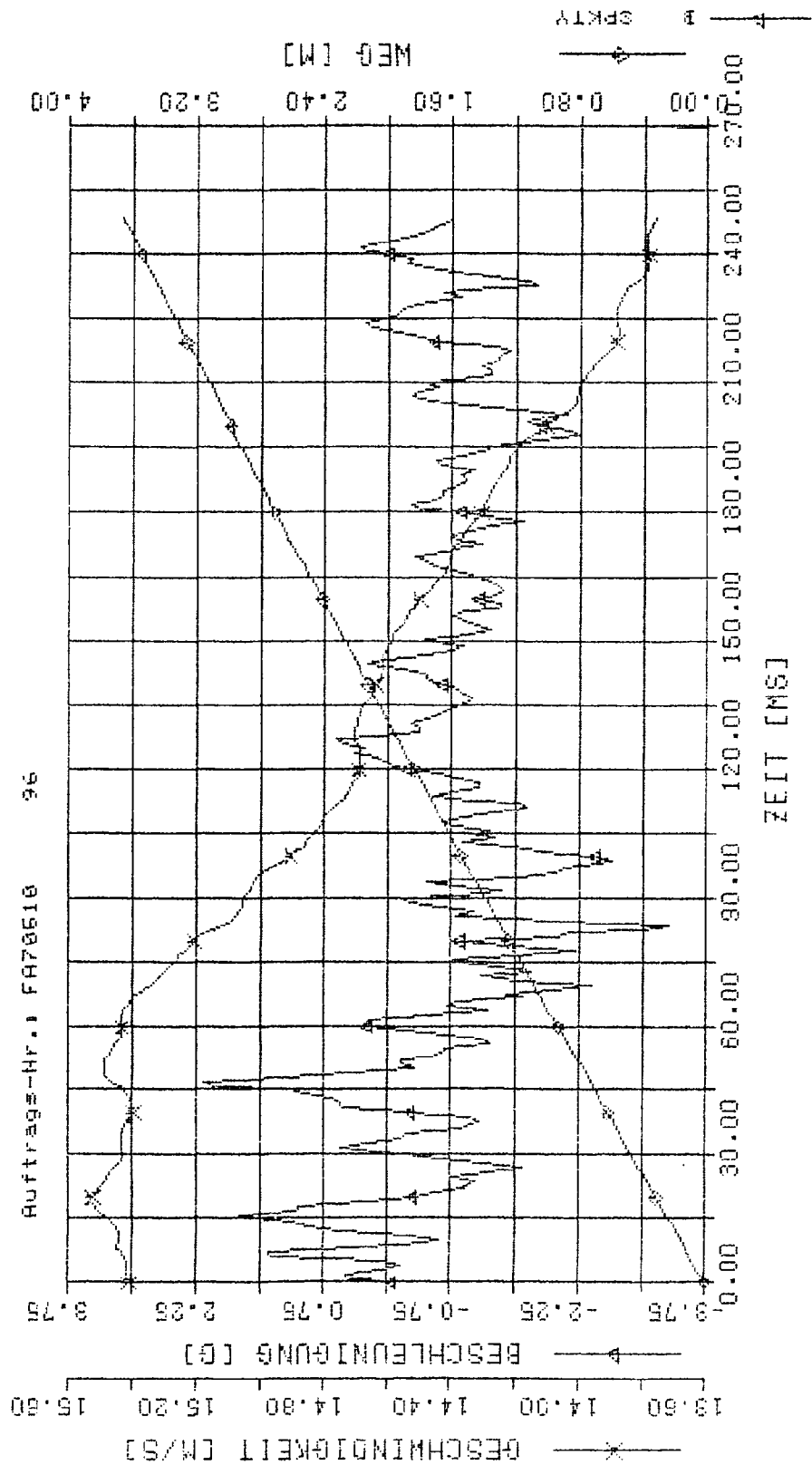
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 96

Mess-Stelle	UP	ber.	Groesse	Extremum	t	SMS
SPKTX	B	BE	g	-8.787	73.00	0.00
SPKTX	B	GE	m/s	15.424	3.00	0.00
SPKTX	B	WE	m	2.875	252.00	0.00



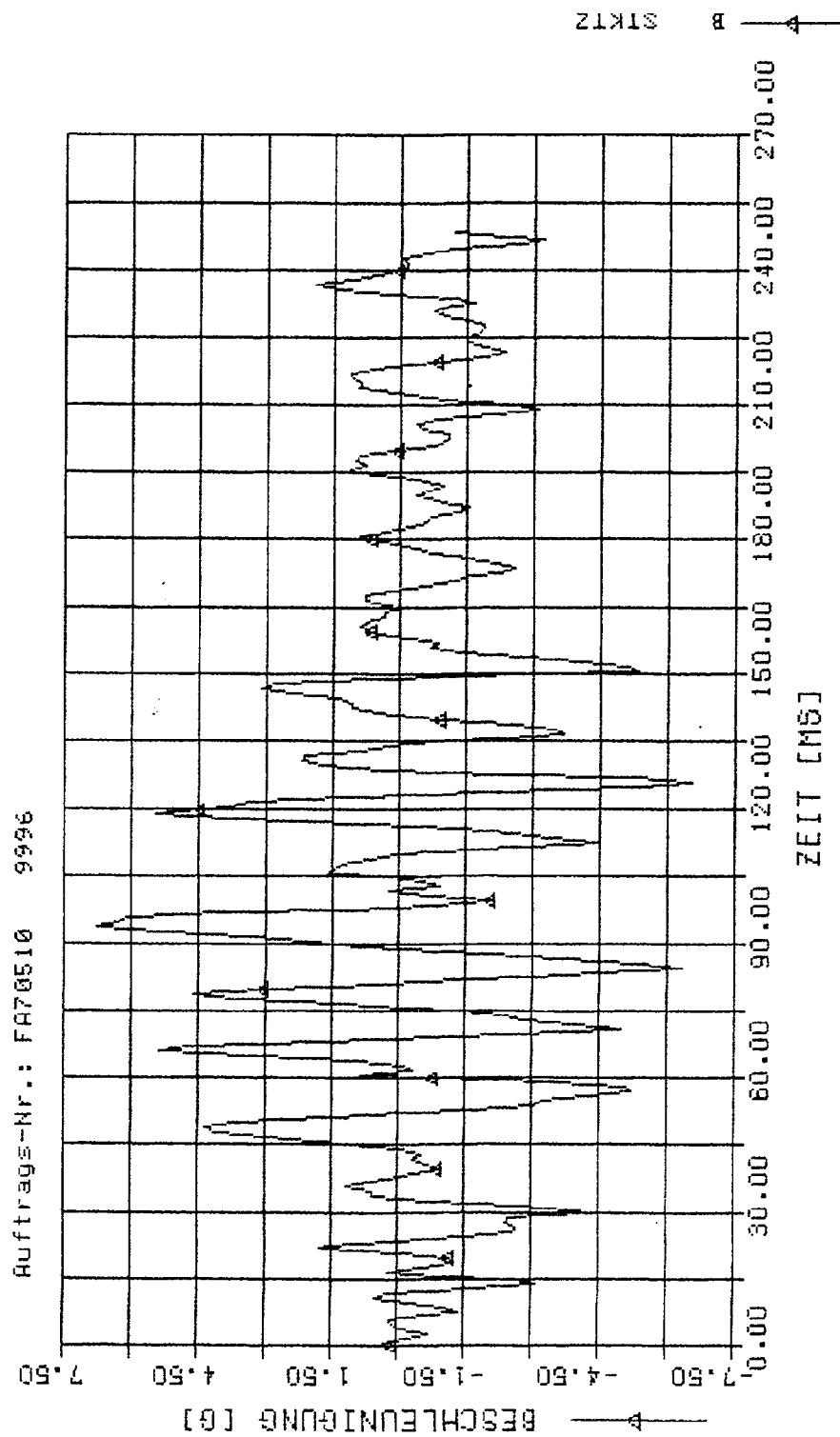
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 96

Mess-Stelle	UP	ber.	Extremum	t	3MS
SPKTY	B	Groesse			
SPKTY	B	BE g	-3.314	34.00	0.00
SPKTY	B	GE m/s	15.518	19.00	0.00
SPKTY	B	WE m	3.710	252.00	0.00



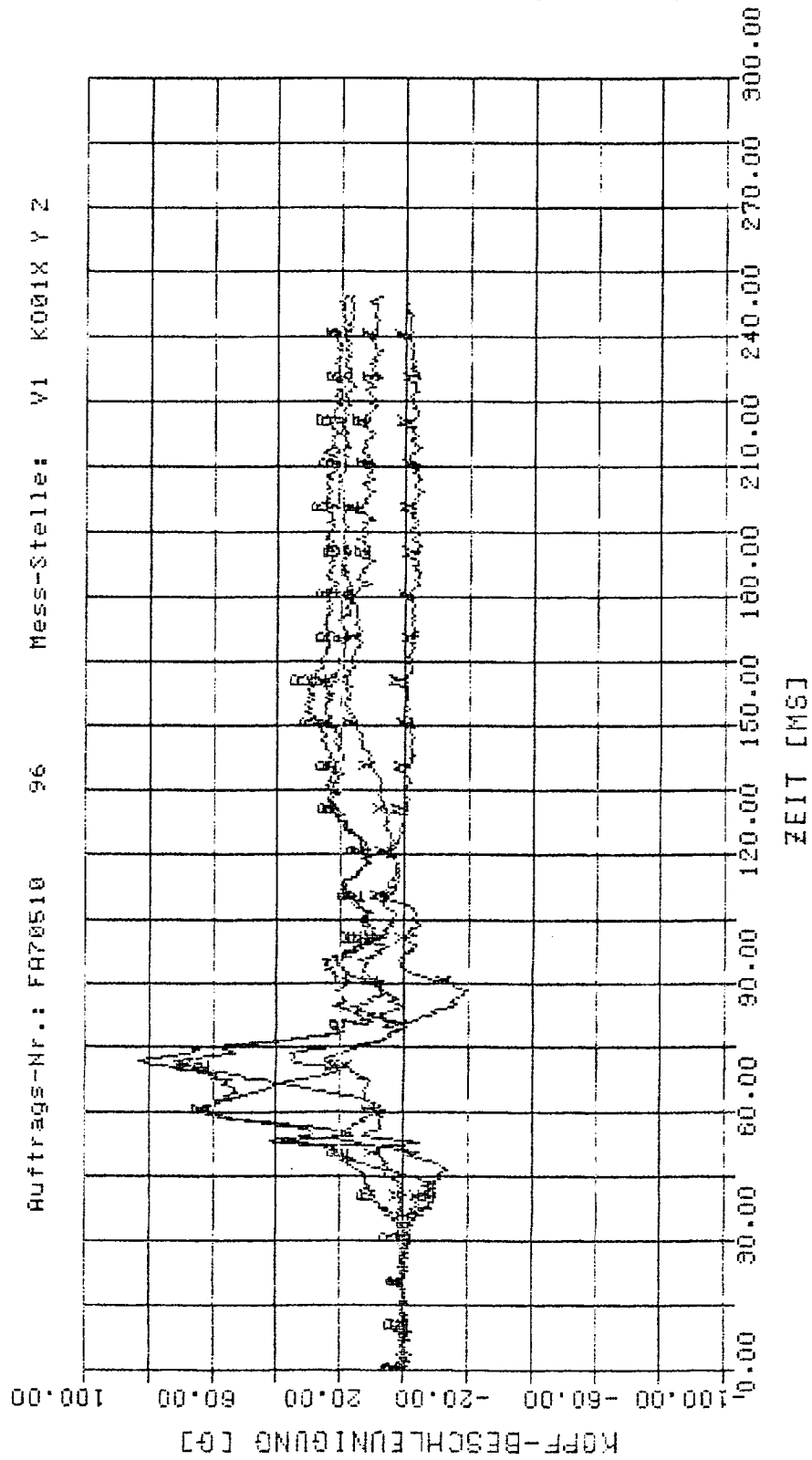
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 96

Mess-Stelle UP ber. Extremum t SMS
STK1Z B BE g 6.777 94.00 0.00



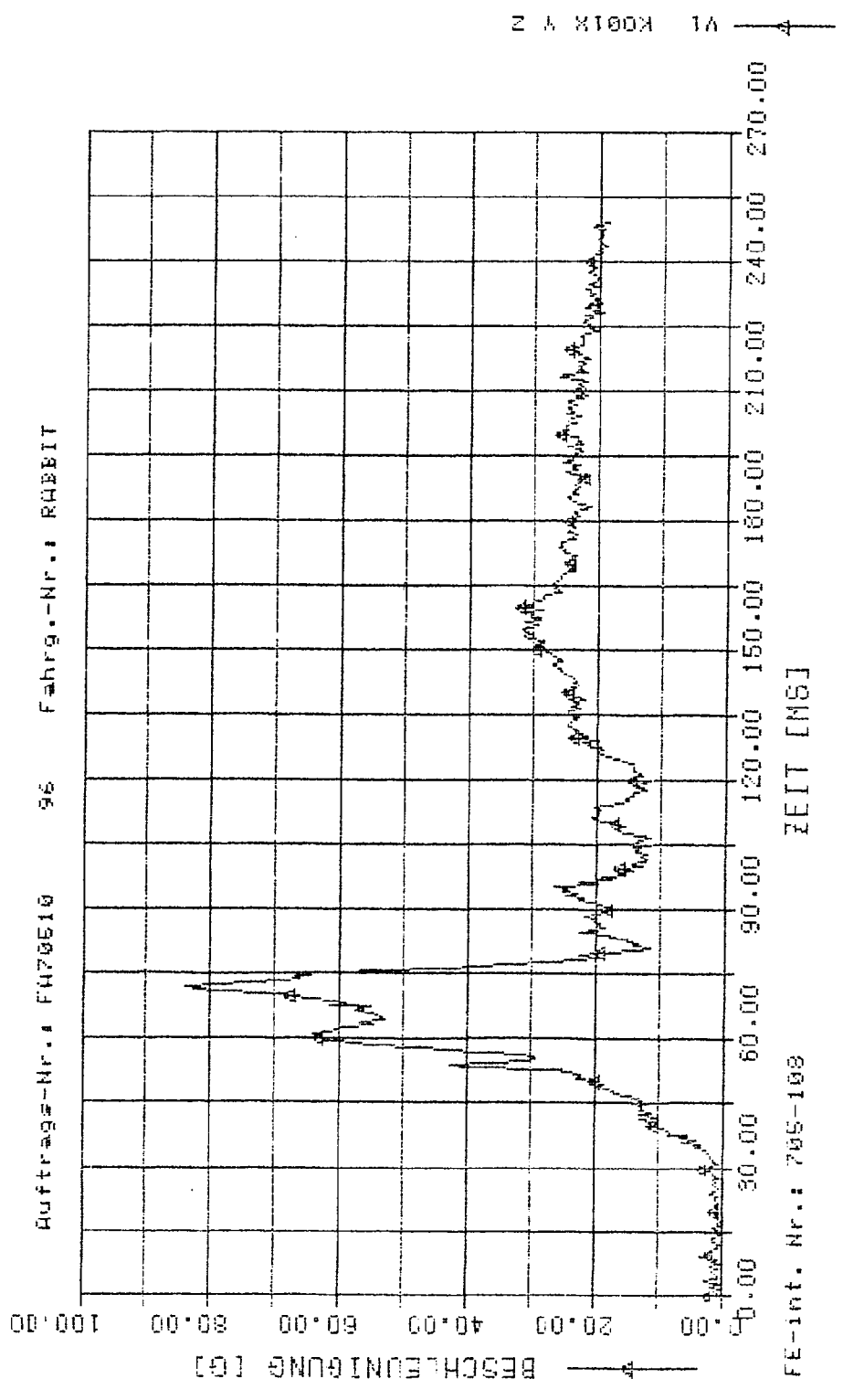
B.2 Dummy Test Response
B.2.1 Driver

Fahrgestell-Nr.: RABBIT

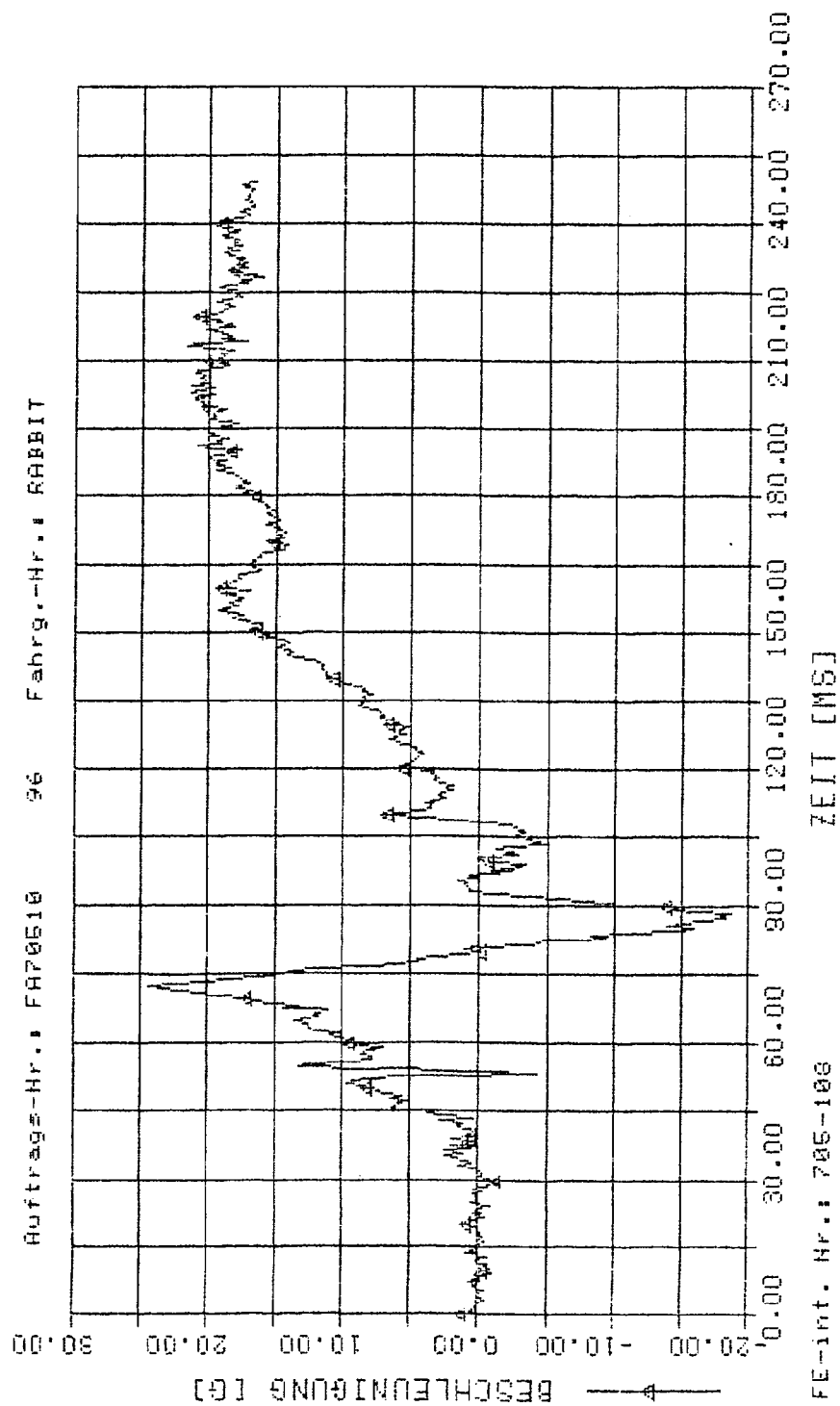


- HIC-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 96
 Mess-Stelle: V1 HIC T0 T1 t0 t1
 Kopf -01 V1 576.81 30.00 120.00 51.92 95.67

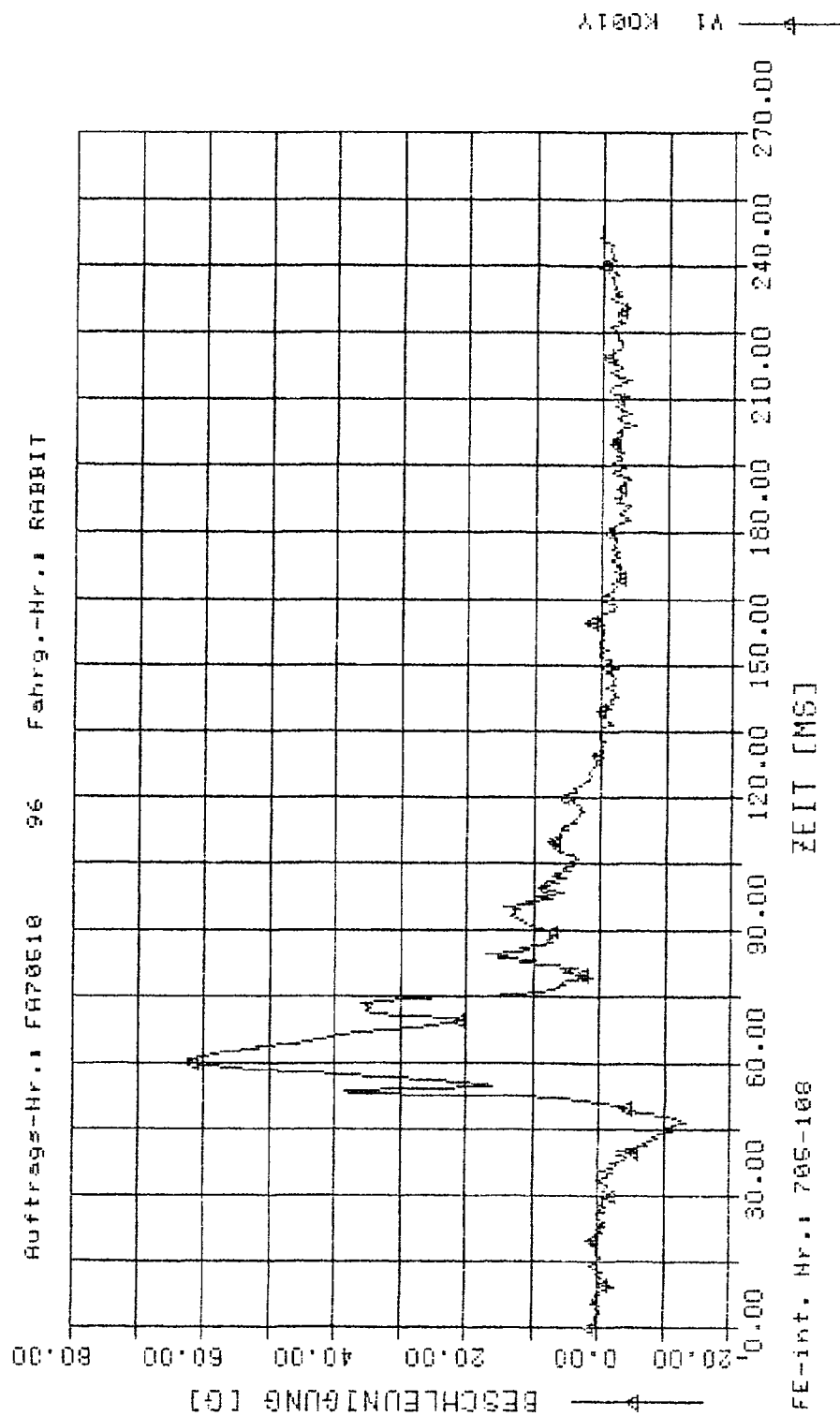
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 96
 Mess-Stelle UP ber. Extremum t 3MS
 KO01 V1 BE g 84.919 71.30 69.04



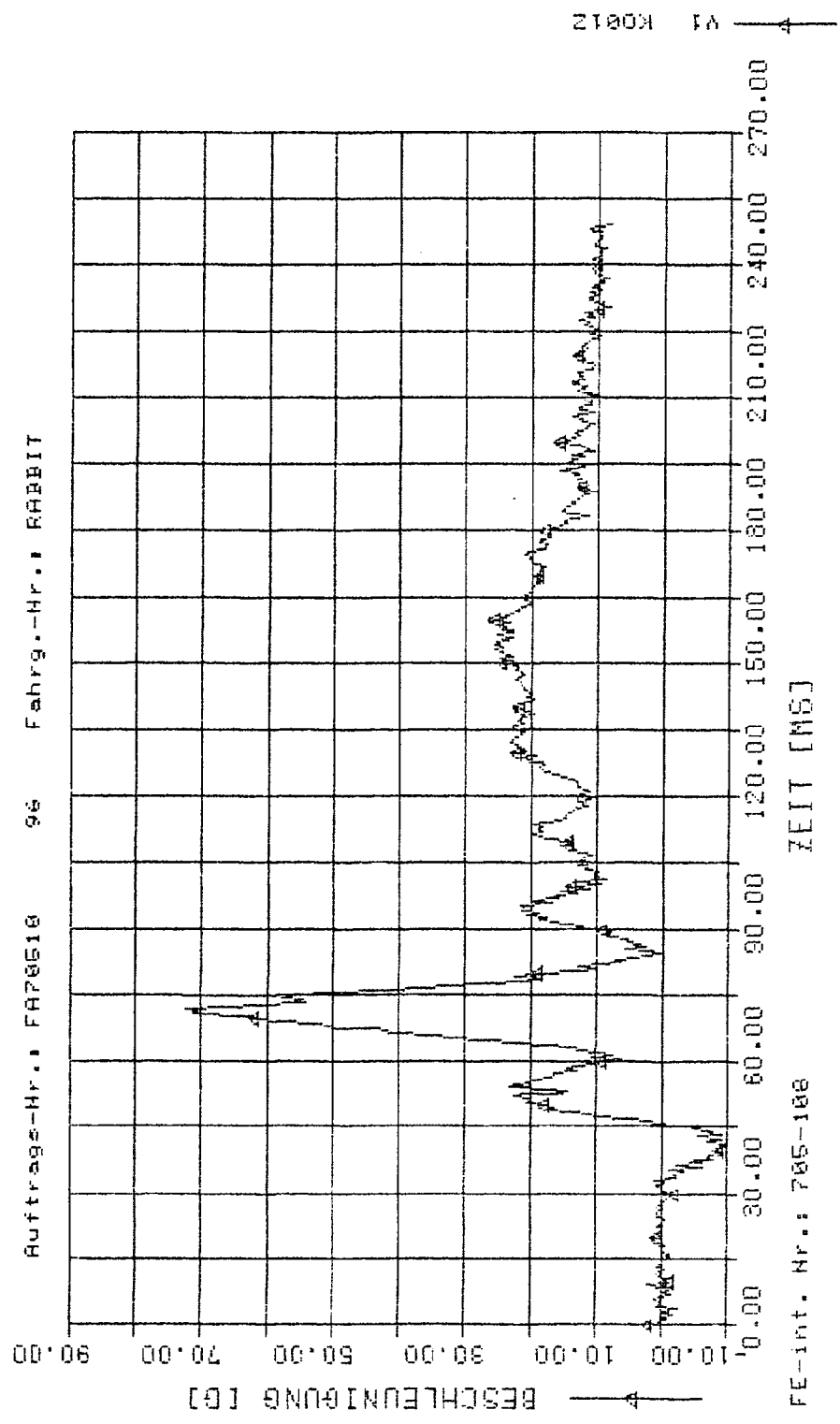
Kenn-Werte: Auftrags-Nr.: FA70510 ' Versuchs-Nr.: 96
 Mess-Stelle UP ber. Extr. t 3MS
 Groesse V1 BE g 25.087 72.30 21.36
 K001X



Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 96
 Mess-Stelle UP ber. Extrema t 3MS
 K001Y Groesse Extr. 60.89 57.74
 V1 BE g 64.217

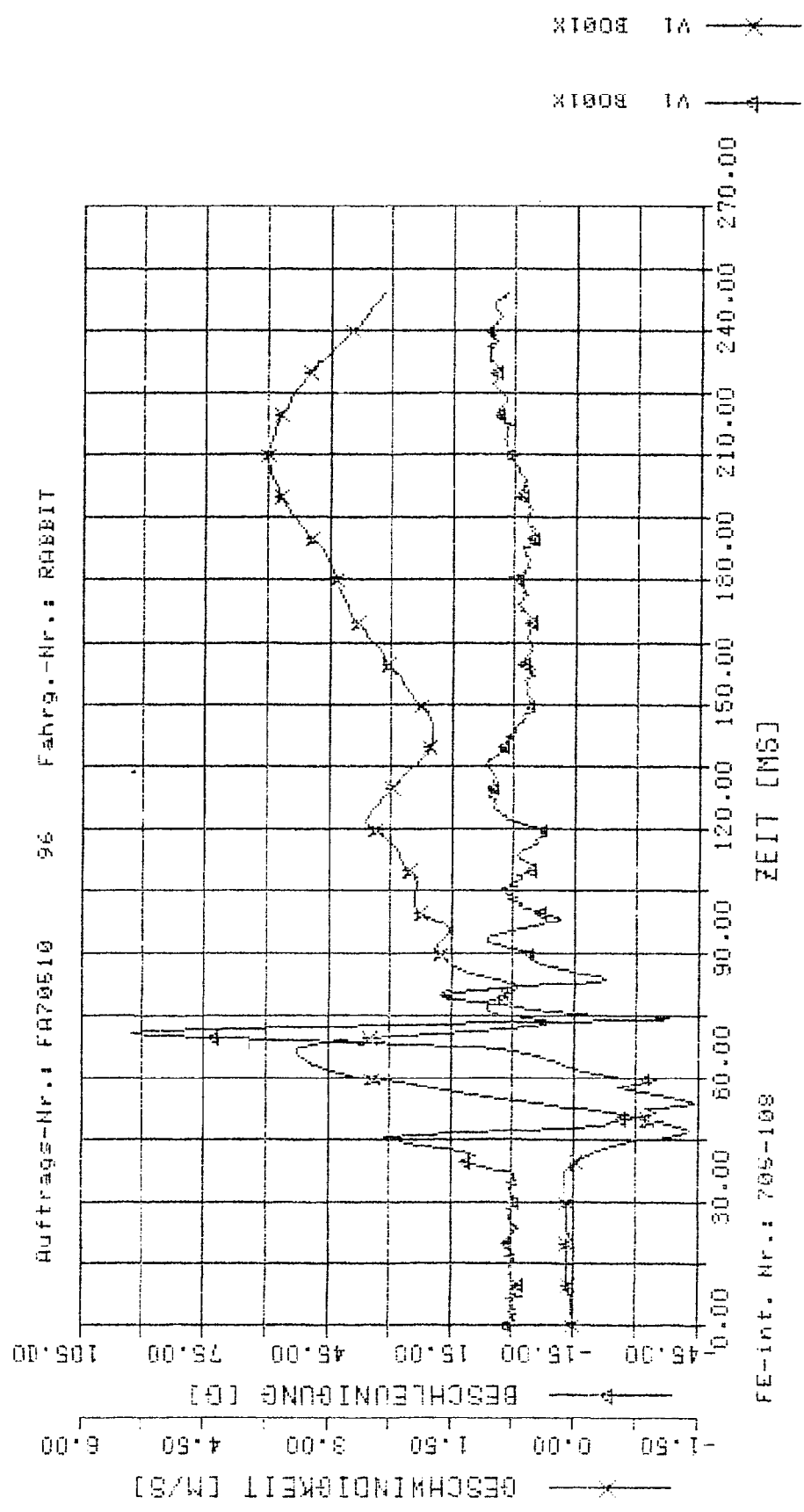


Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 96
 Mess-Stelle UP ber. Extremum r SMS
 V1 BE g 73.792 Extr. 71.80 61.67
 K001Z



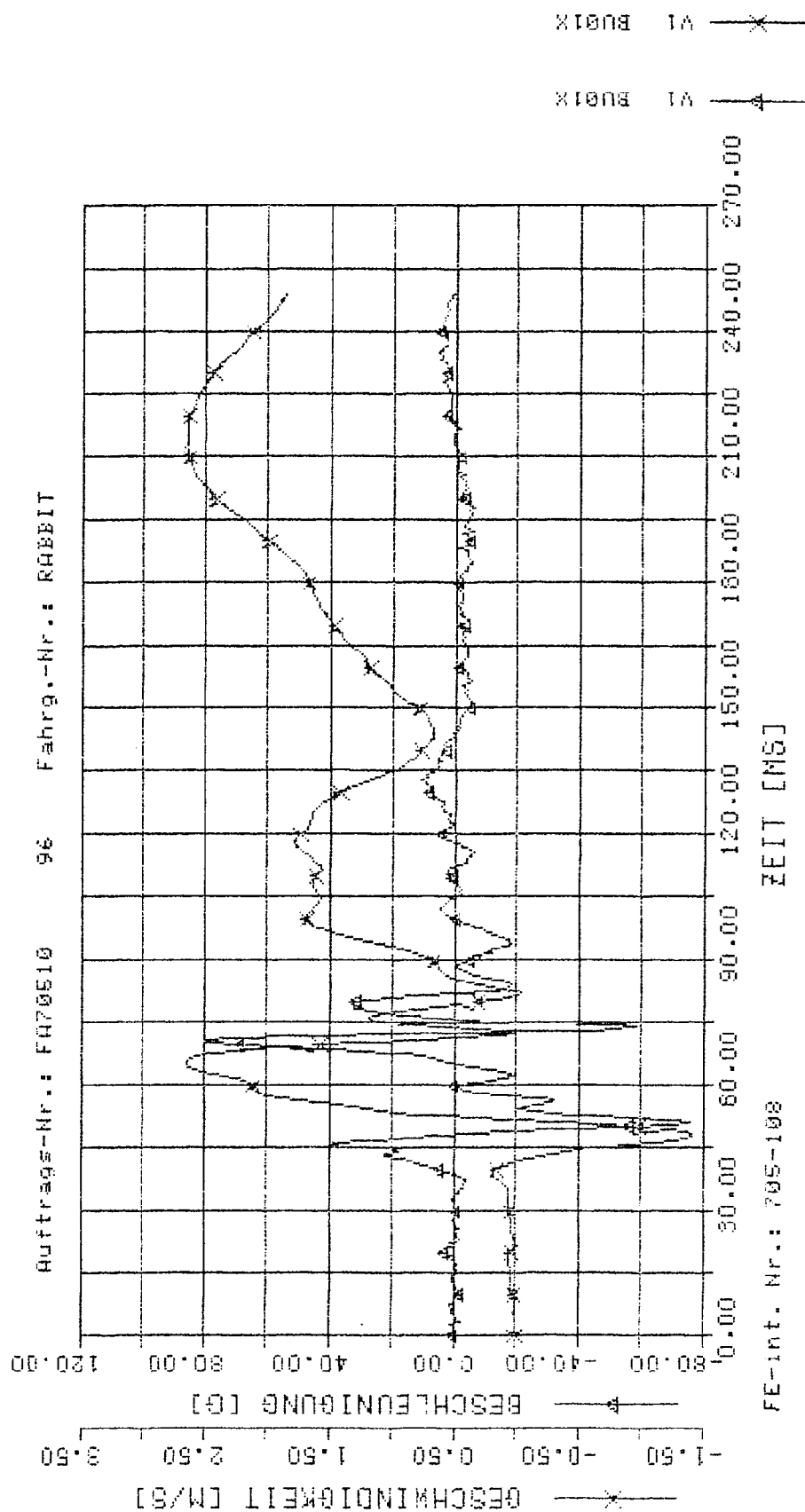
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 96

Mess-Stelle	UP	ber.	Extremum	t	3MS
B001X	V1	BE	92.638	71.00	0.00
B004X	V1	GE	3.733	209.50	0.00



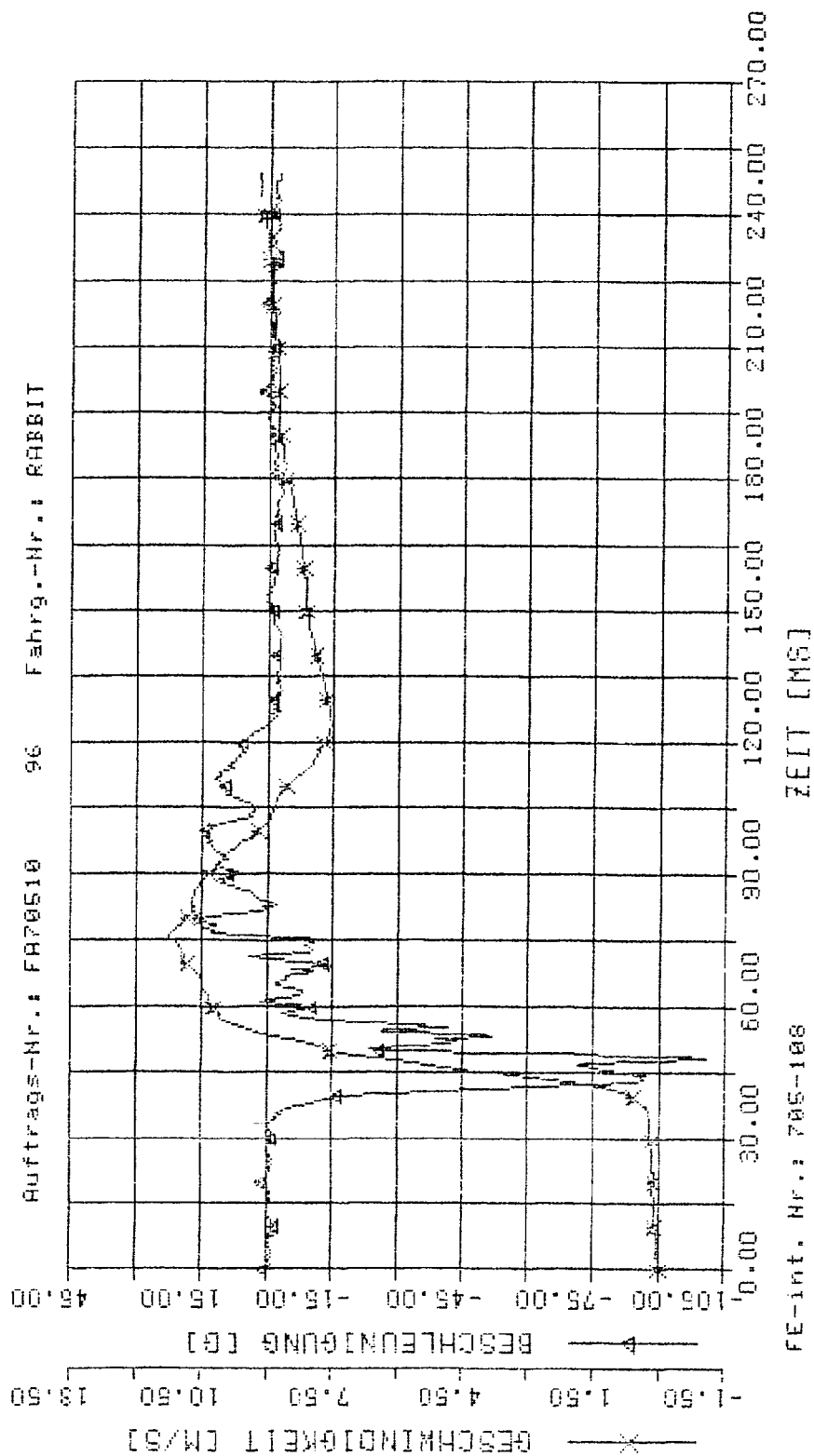
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 96

Mess-Stelle	UP	ber.	Extremum	t	3MS
BU01X	V1	BE	g	79.525	71.00
BU01X	V1	GE	m/s	2.647	212.50
					0.00



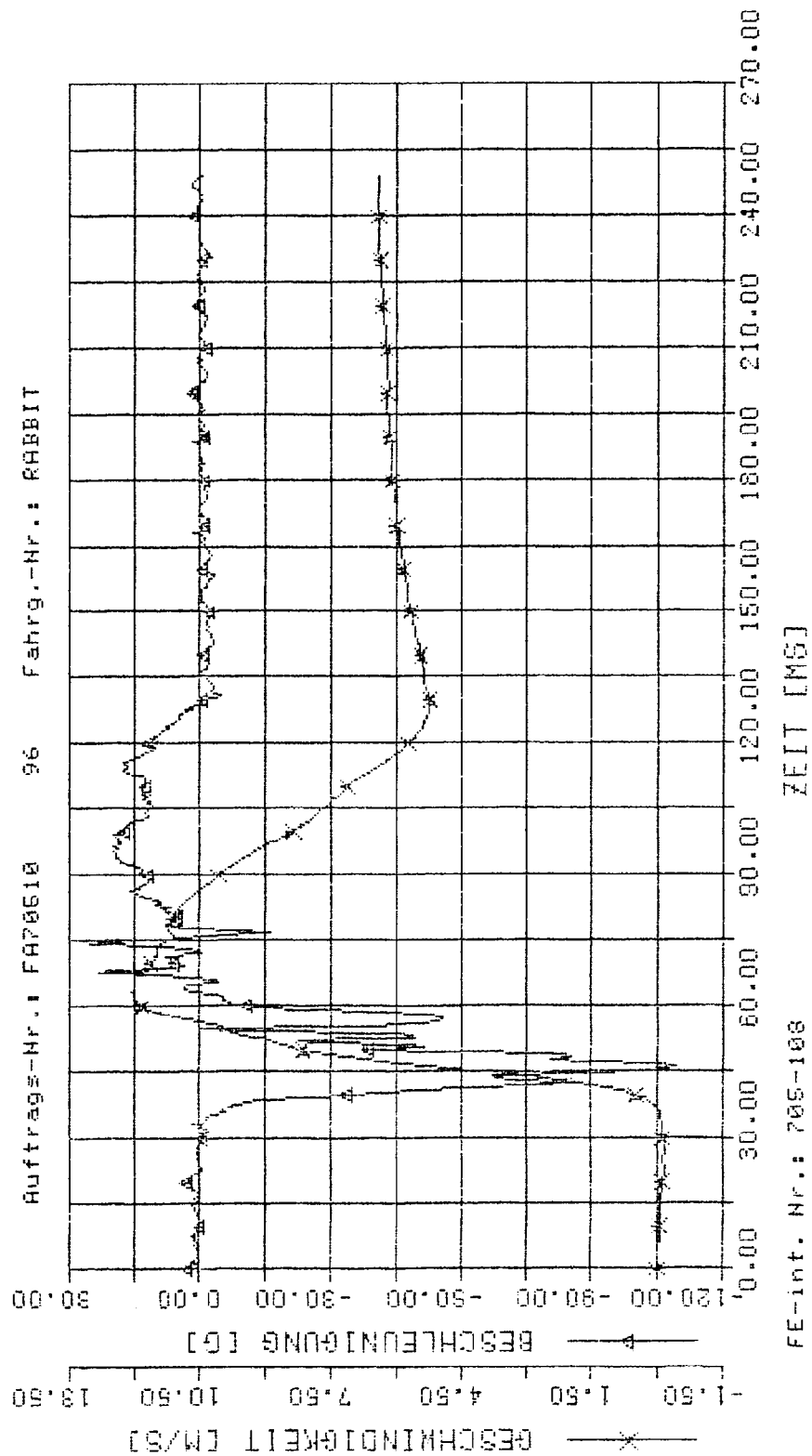
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 96

Mess-Stelle	UP	ber.	Extremum	t	Ext.	ONS
L001Y	V1	GE g	-400.771		40.50	0.00
L001Y	V1	GE m/s	11.242		76.50	0.00



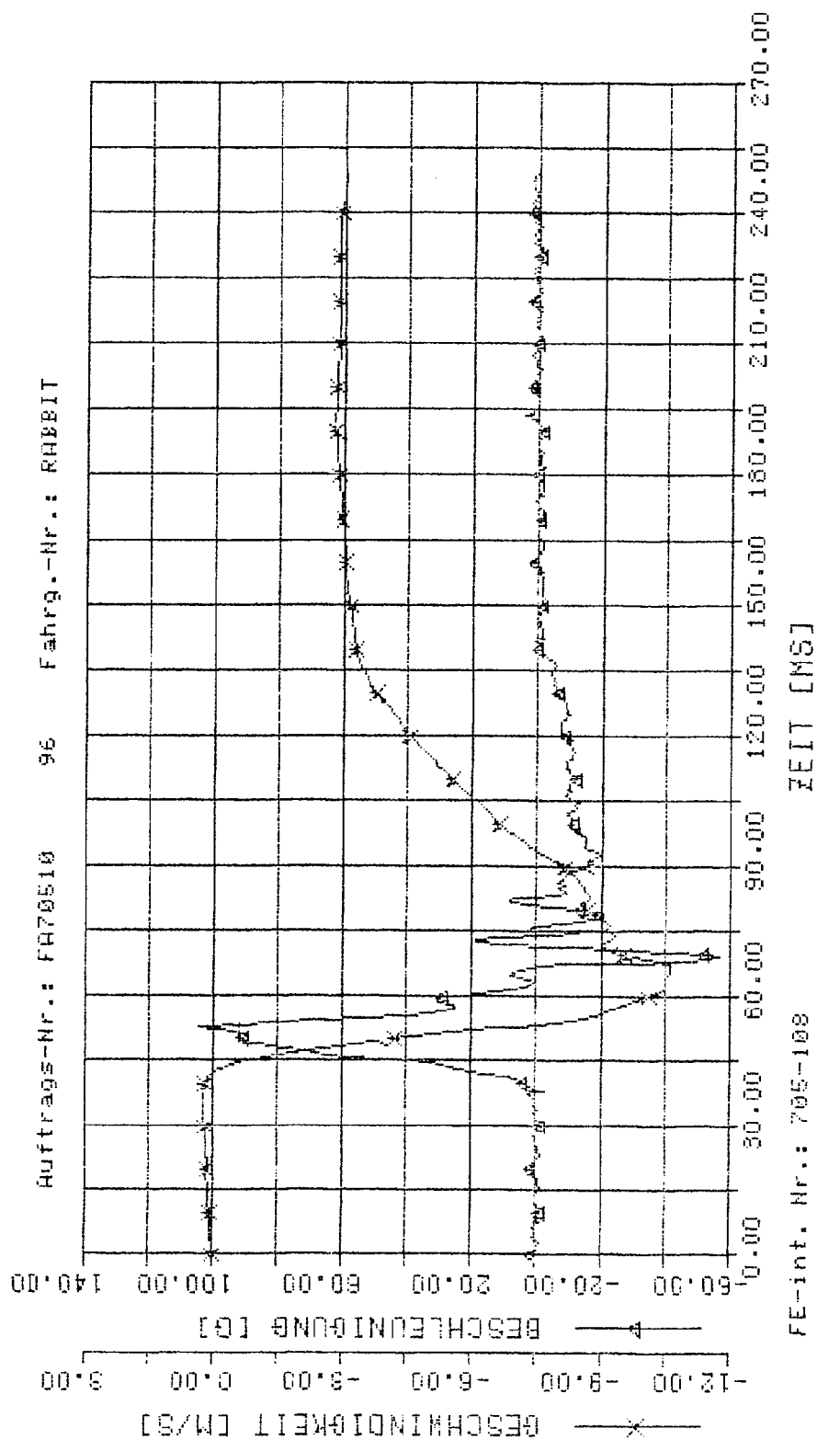
Kennwerte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 96

Mess-Stelle	UP	ber.	Extremum	t	3MS
LU01Y	V1	GE	-109.669	46.50	0.00
LU01Y	V1	GE	12.012	63.50	0.00



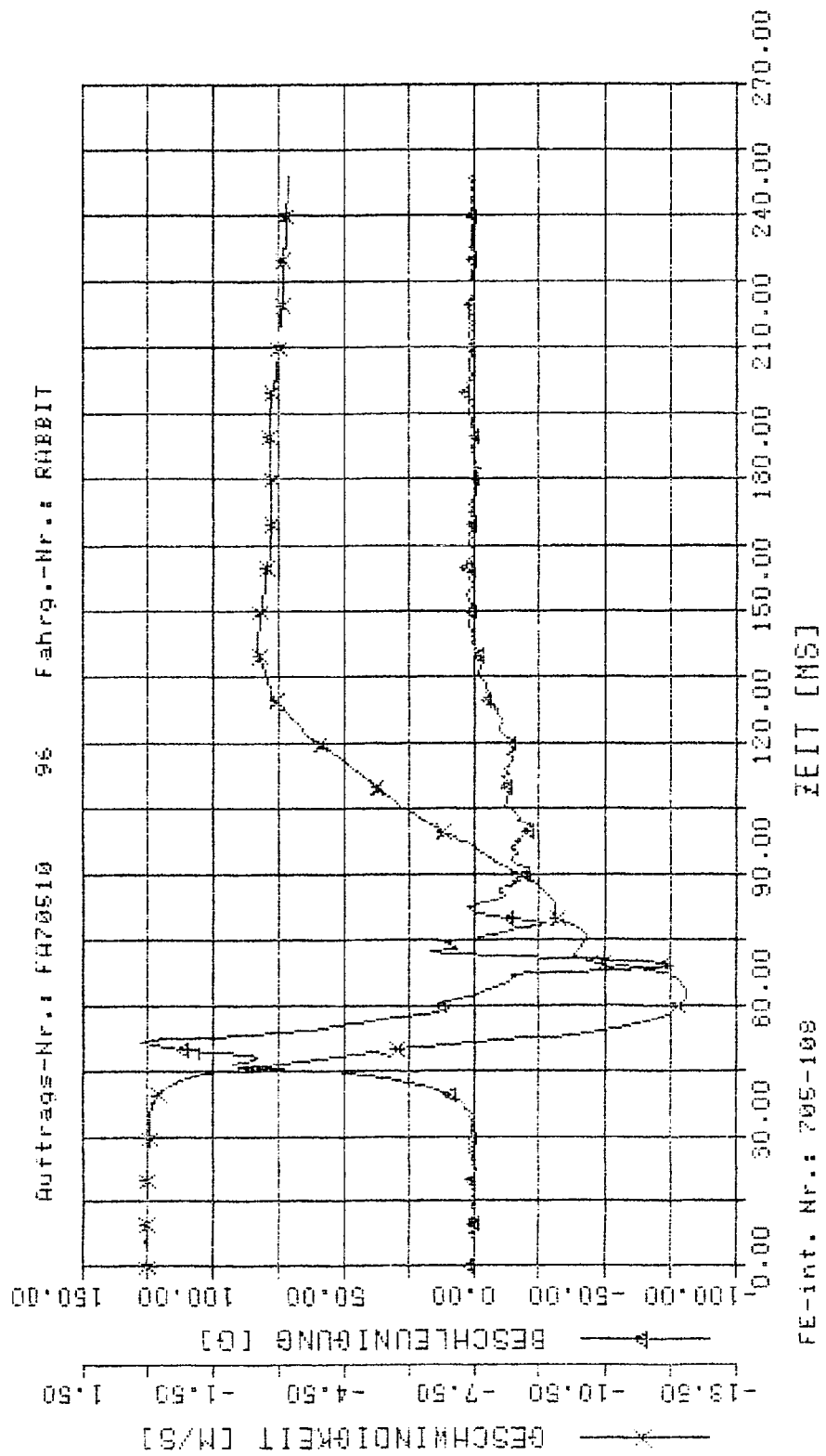
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 96

Mess-Stelle	UP	ber.	Extremum	t	MS
R001Y	V1	GE	103.822	52.50	0.00
R001Y	V1	GE	110.647	66.50	0.00



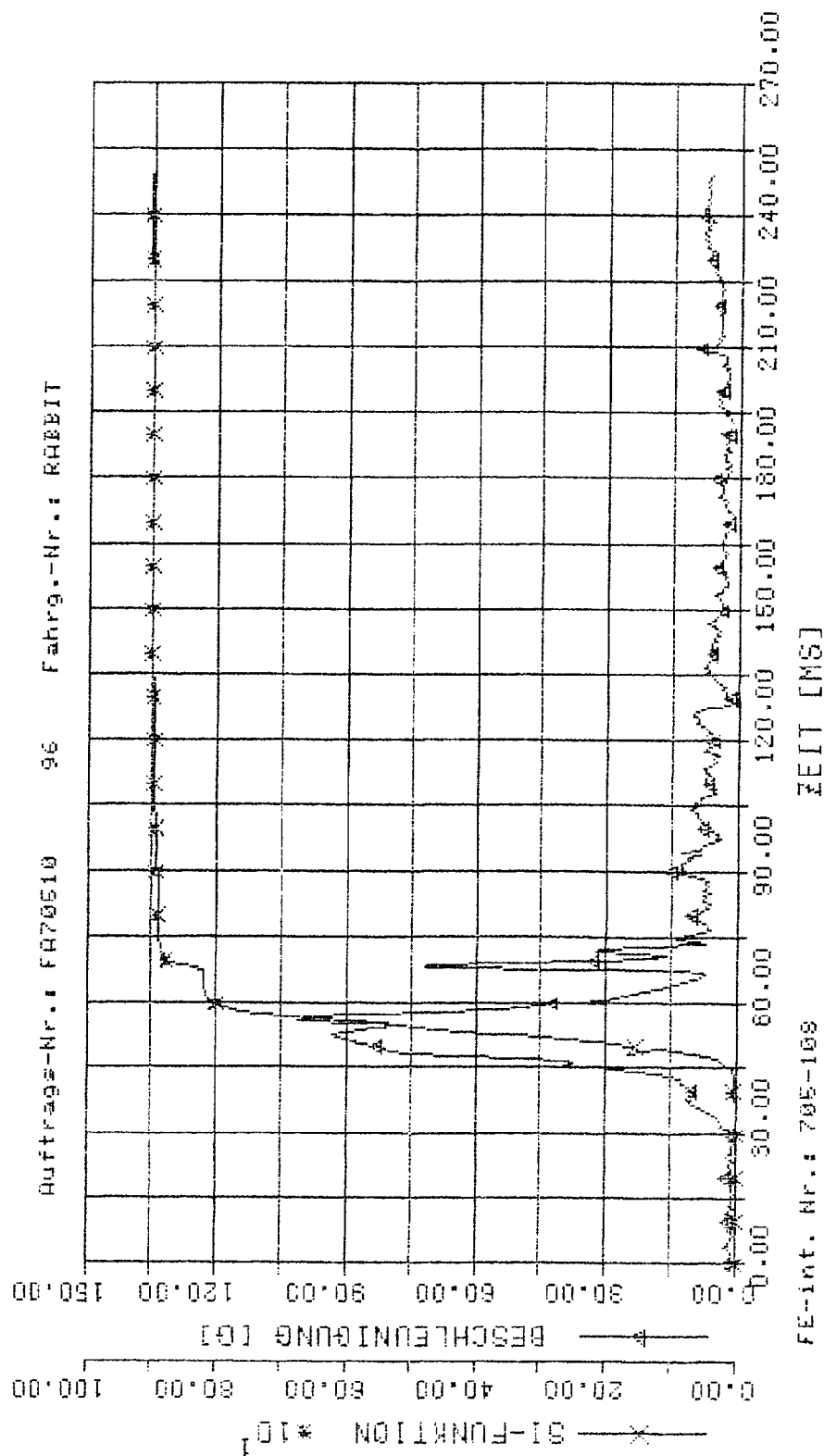
Kenn-Werte: Auftrags-Nr.: FH70510 Versuchs-Nr.: 96

Mess-Stelle	UP	ber.	Extremum	Extr.	3MS
RU01Y	V1	BE	127.648	51.50	0.00
RU01Y	V1	CE	12.403	62.50	0.00



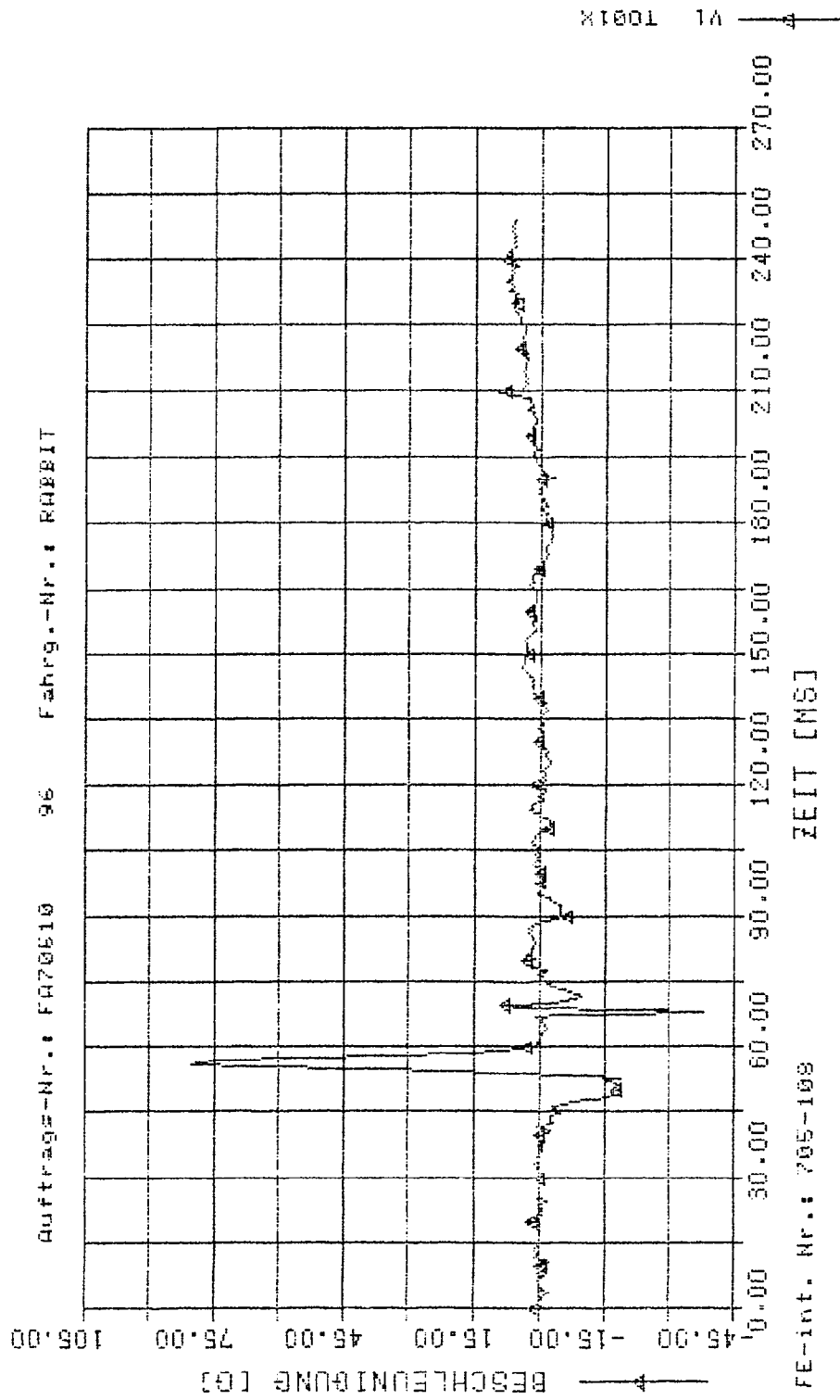
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 96

Mess-Stelle	UP	ber.	Extremum	t	ONS
T001	V1	BE g	101.165	56.00	0.00
T001	V1	SI	903.206	250.00	0.00



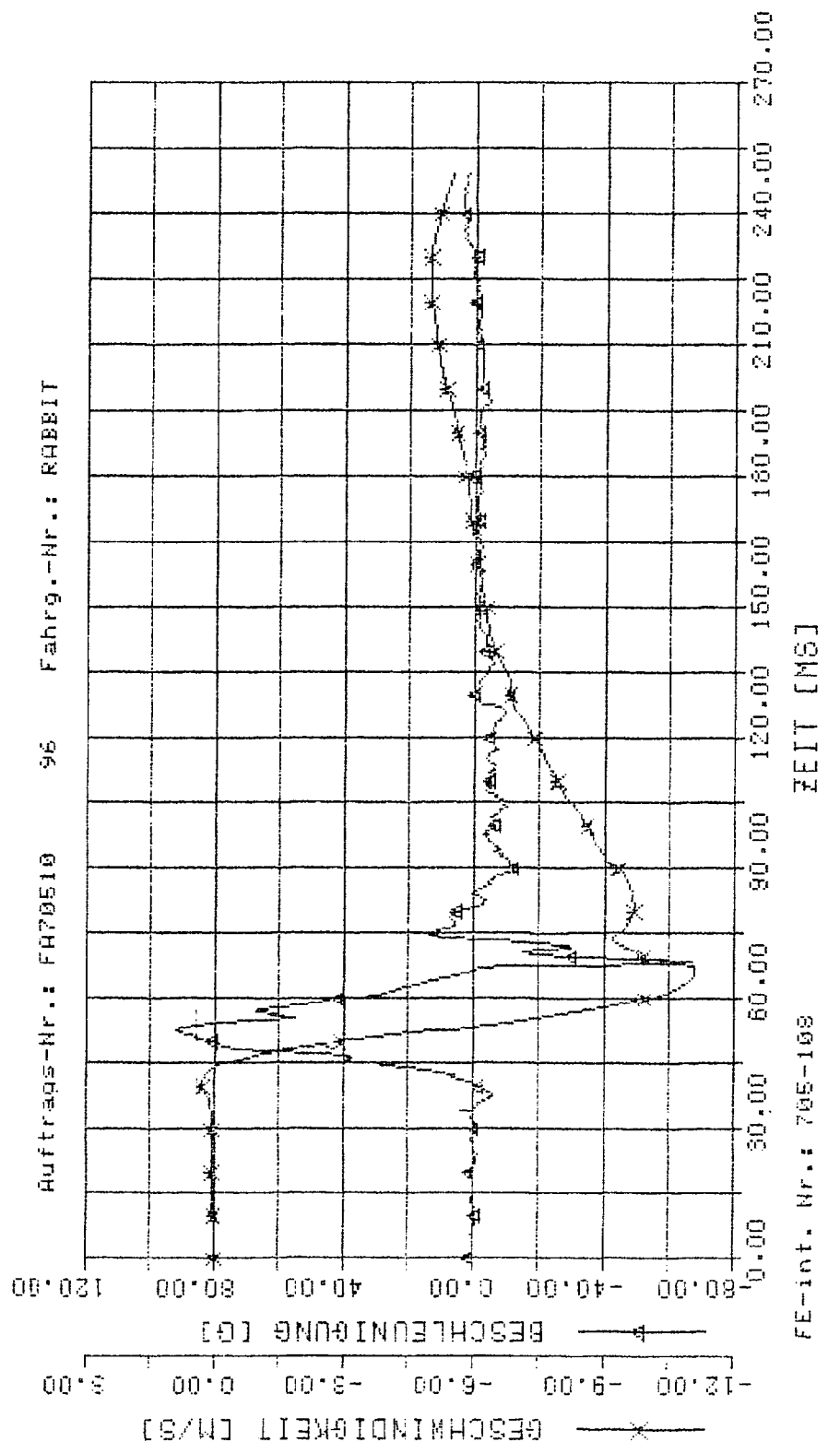
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 96

Mess-Stelle UP ber. Extremum t JMS
T001X Groesse Extr.
V1 BE 9 79.981 56.00 0.00

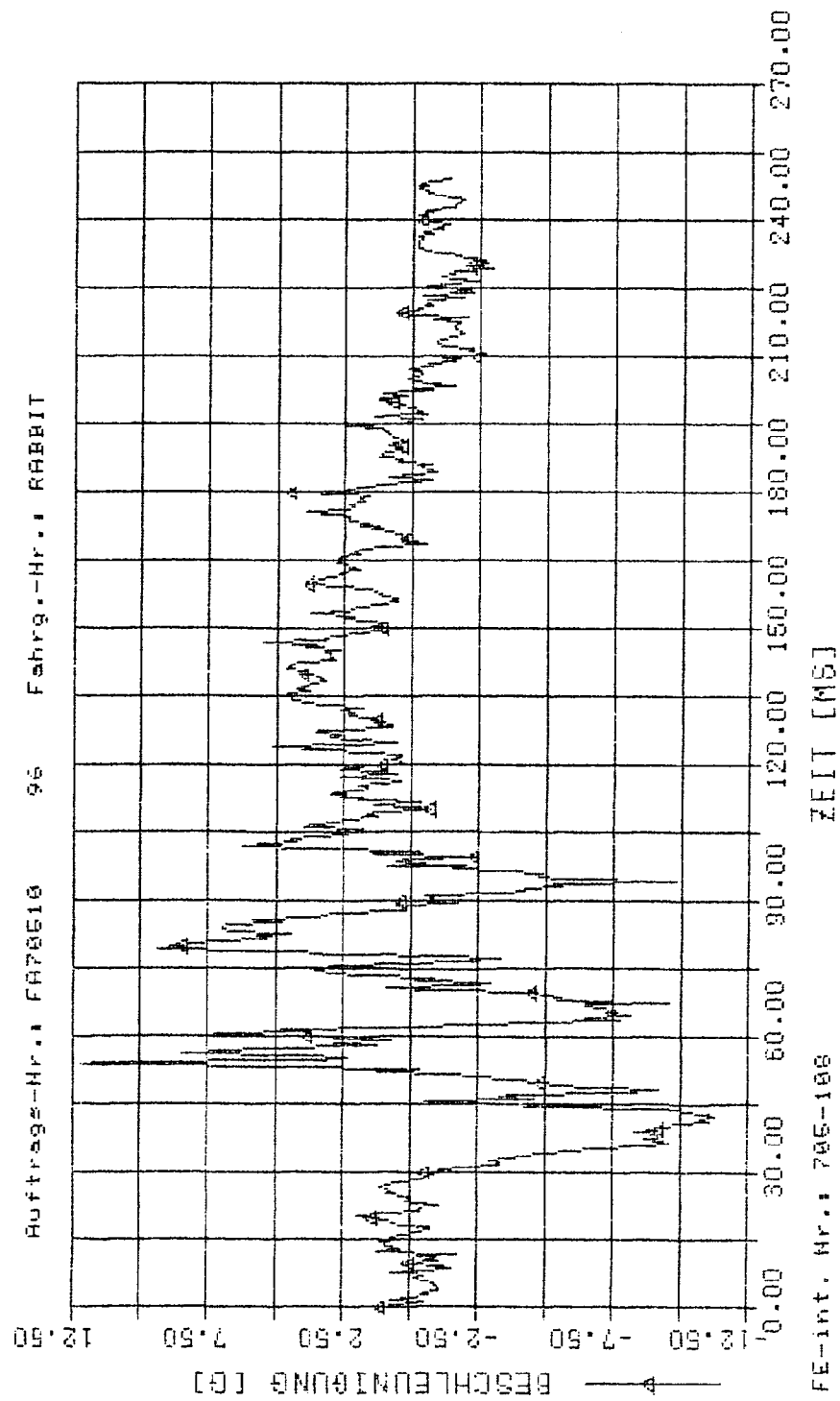


Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 96

Mess-Stelle	UP	ber.	Extrema	t	MS
T001Y	V1	Grösse	92.106	Extr.	0.00
T001Y	V1	GE m/s	-11.128	66.50	0.00



Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 96
 Mess-Stelle: UP ber. Extr. SMS
 TO01Z Größe: 12.215 0.00
 V1 BE g

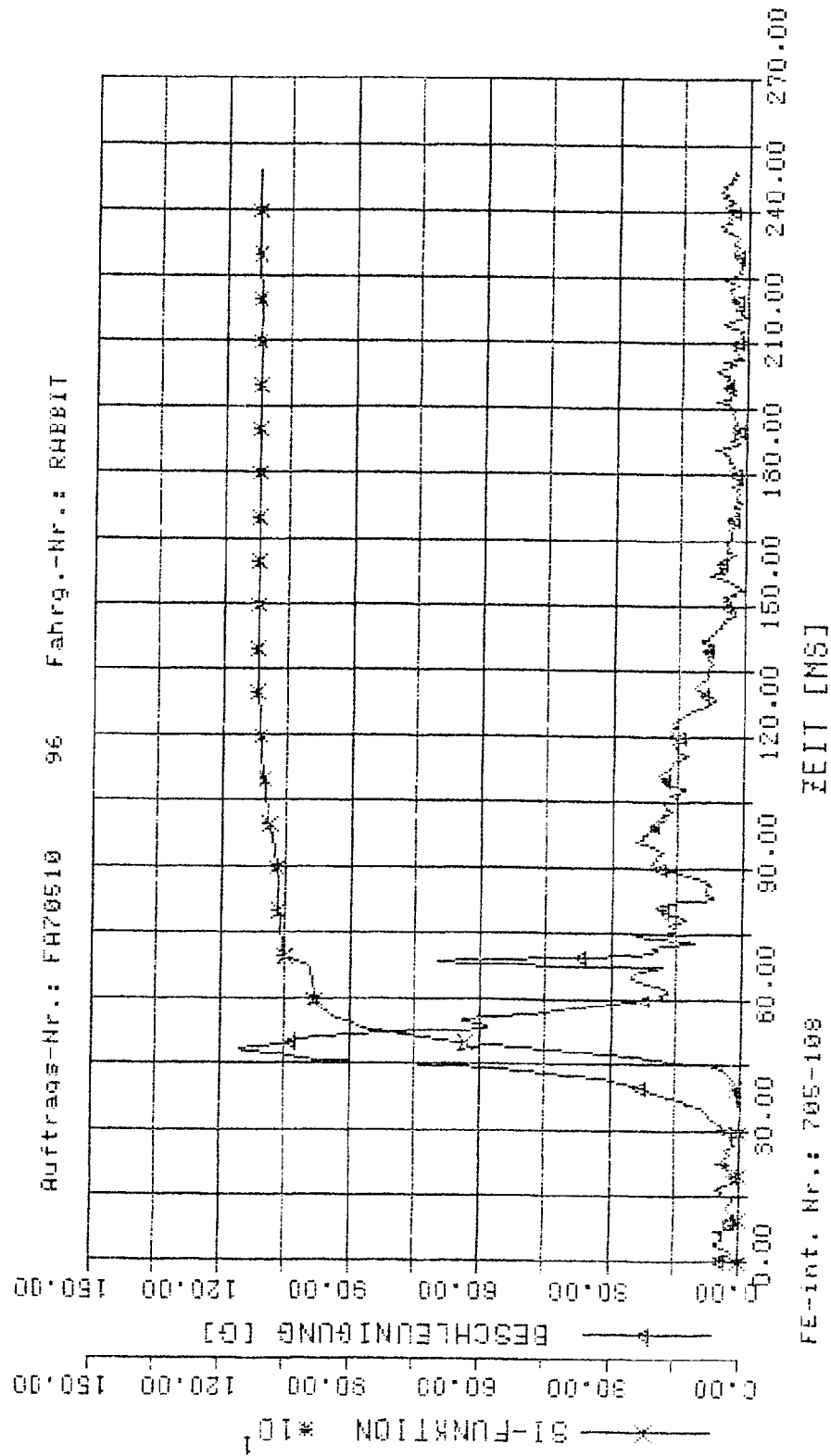


FE-int. Nr.: 705-108

10012 V1

Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 96

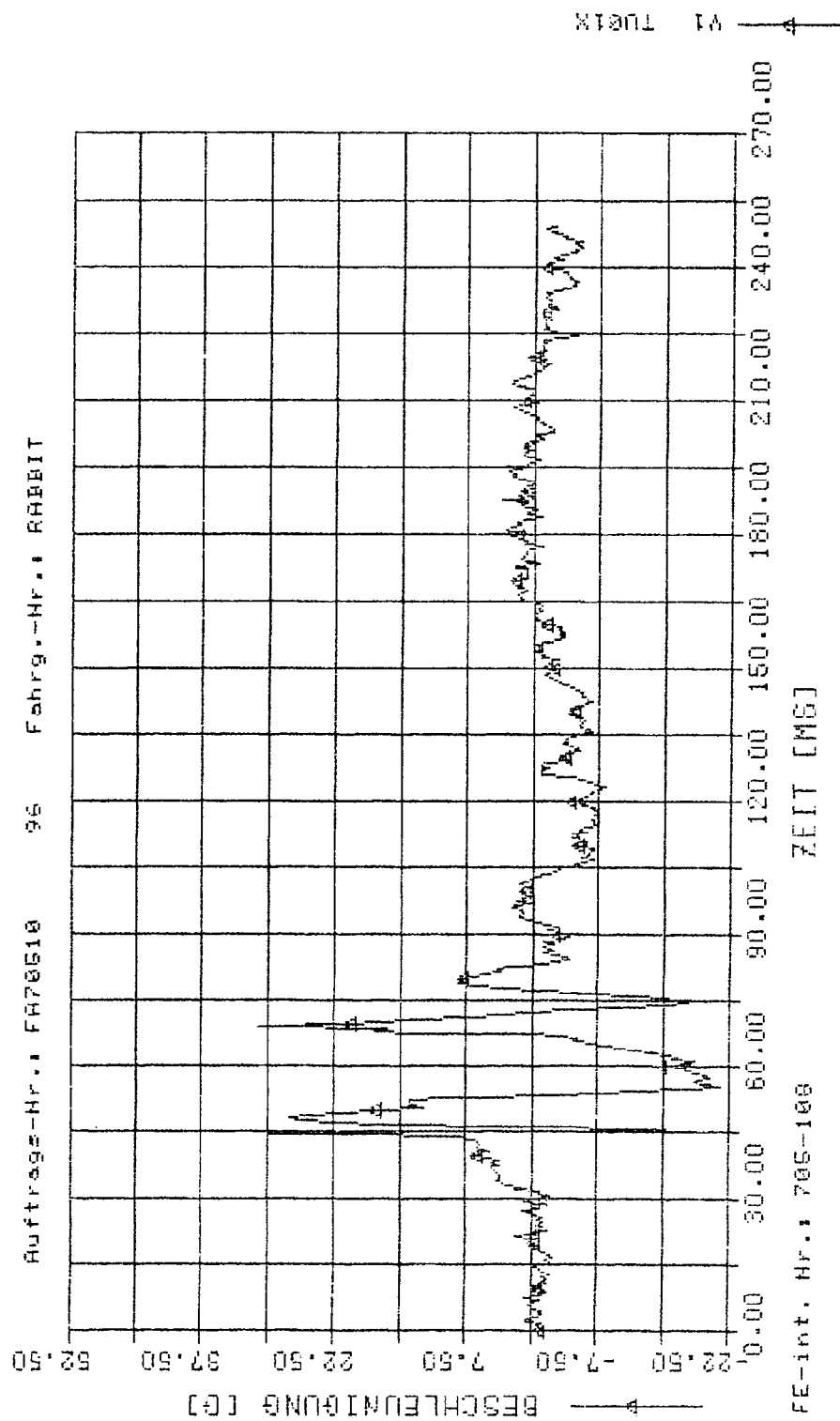
Mess-Stelle	UP	ber.	Extremum	t	3MS
TU01	V1	BE	115.317	48.50	0.00
TU01	V1	CI	1121.481	250.00	0.00



VI TU01X Y Z

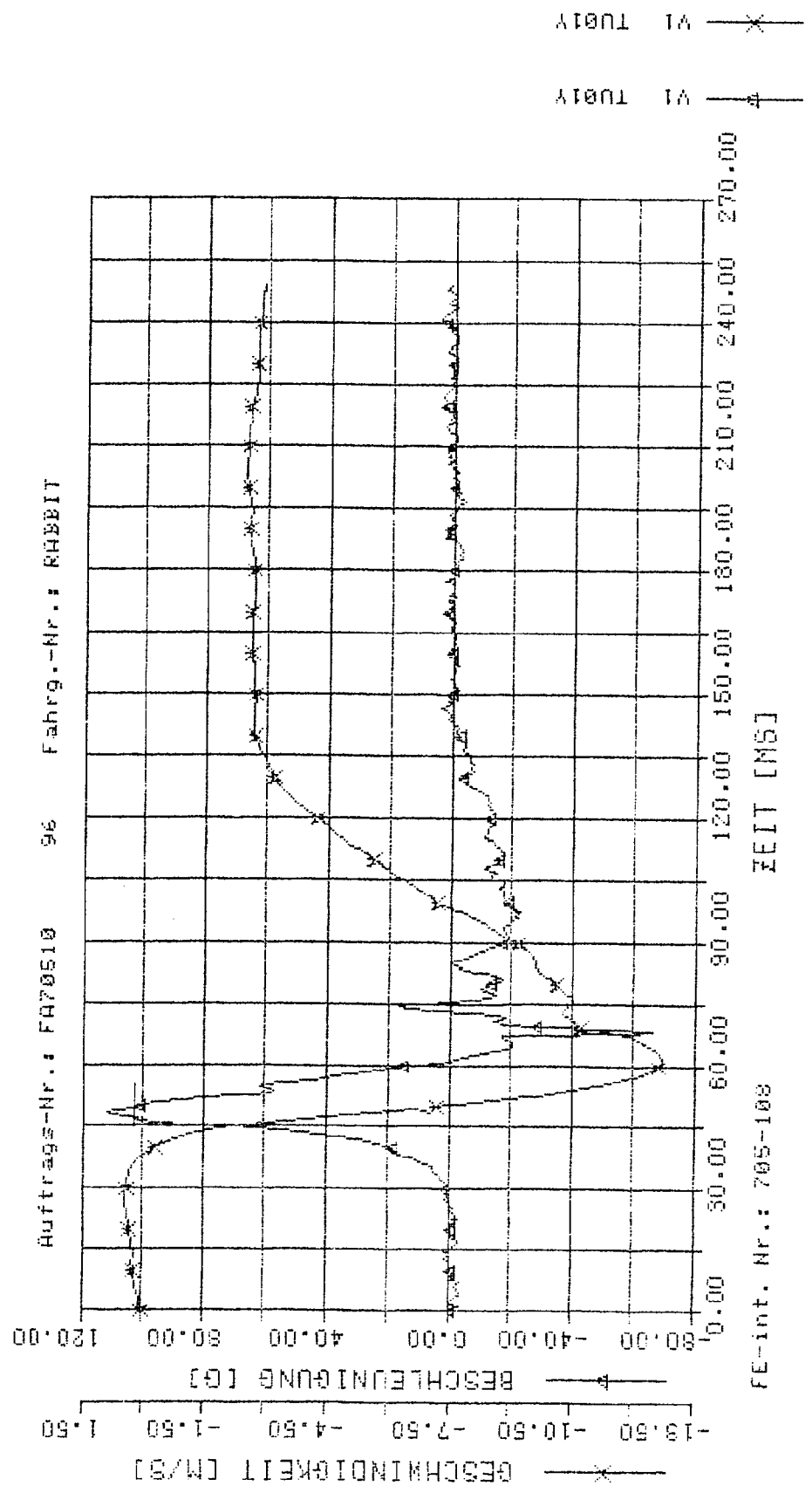
VI TU01X Y Z

Kenn-Merte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 96
 Mess-Stelle UP ber. Extremum t 3MS
 TU01X Groesse Extr. 45.00 0.00
 V1 RE g



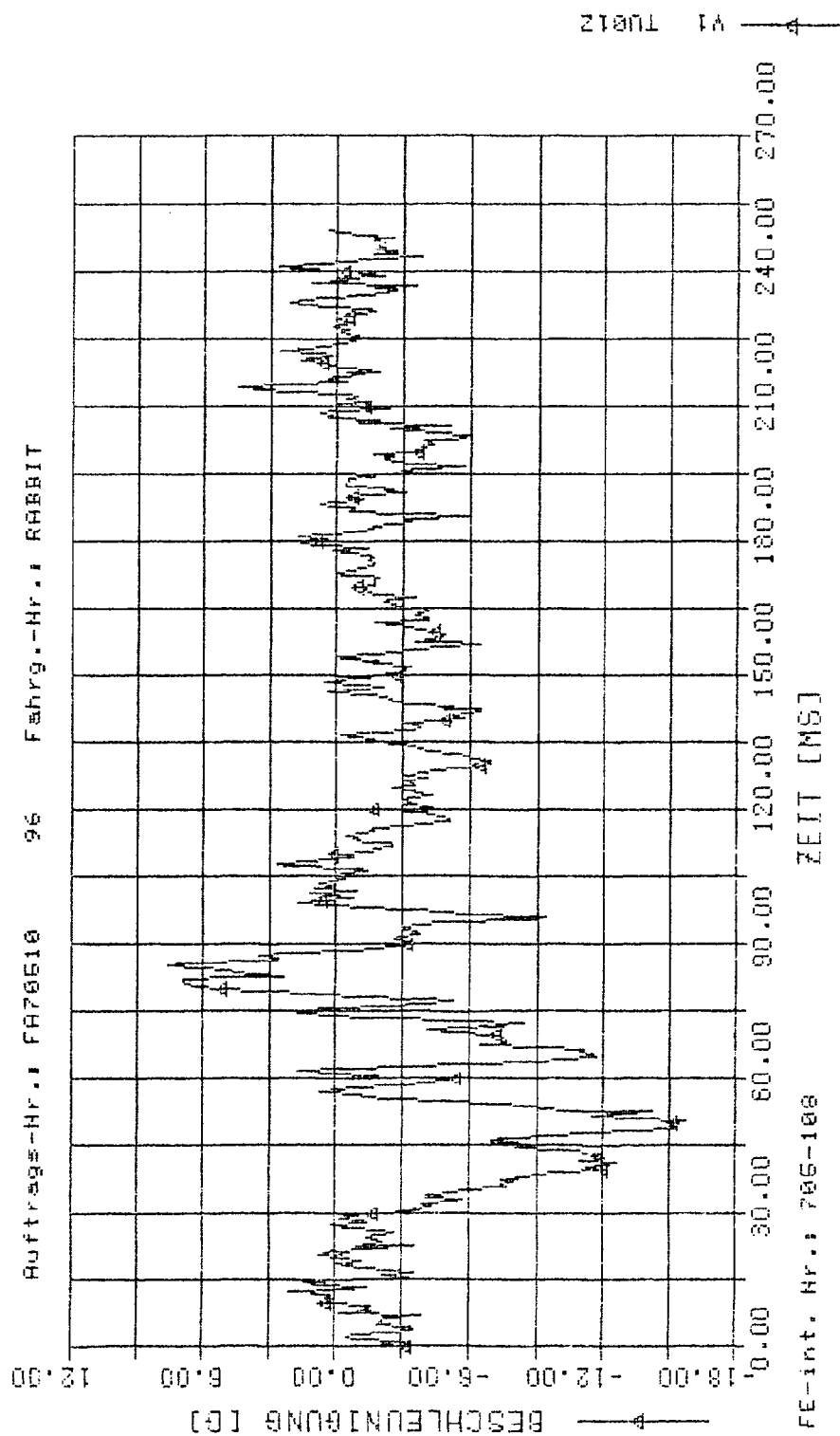
Kennwerte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 96

Mess-Stelle	UP	ber.	Grösse	Extremum	t	SMS
TU01Y	V1	BE	g	111.130	43.50	0.00
TU01Y	V1	GE	m/s	-12.770	61.50	0.00



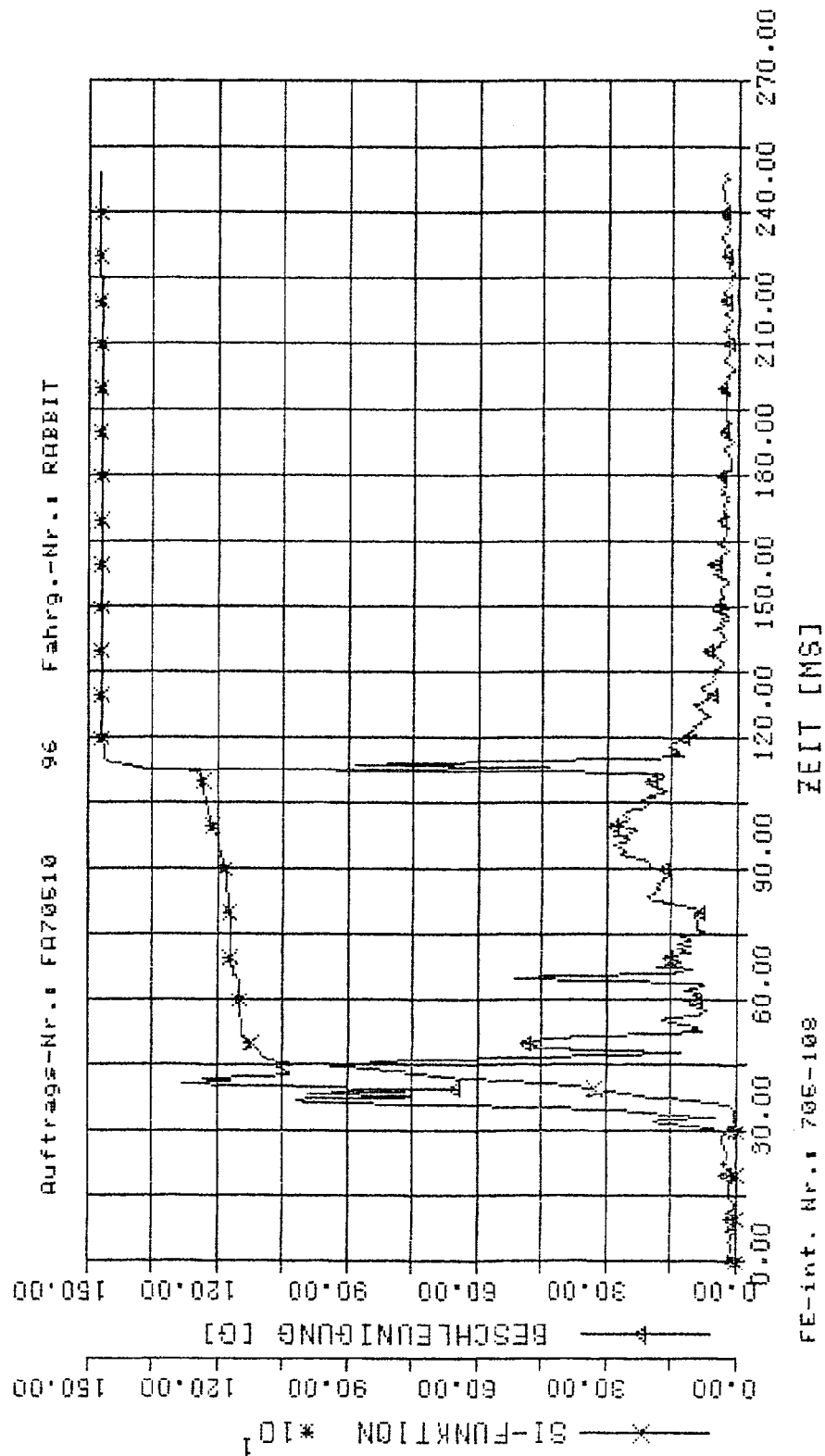
FE-int. Nr.: 705-108

Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 96
 Mess-Stelle UP ber. Extrapol. t 3MS
 TU01Z Groesse Extr. 50.50 0.00
 V1 BE g -15.315



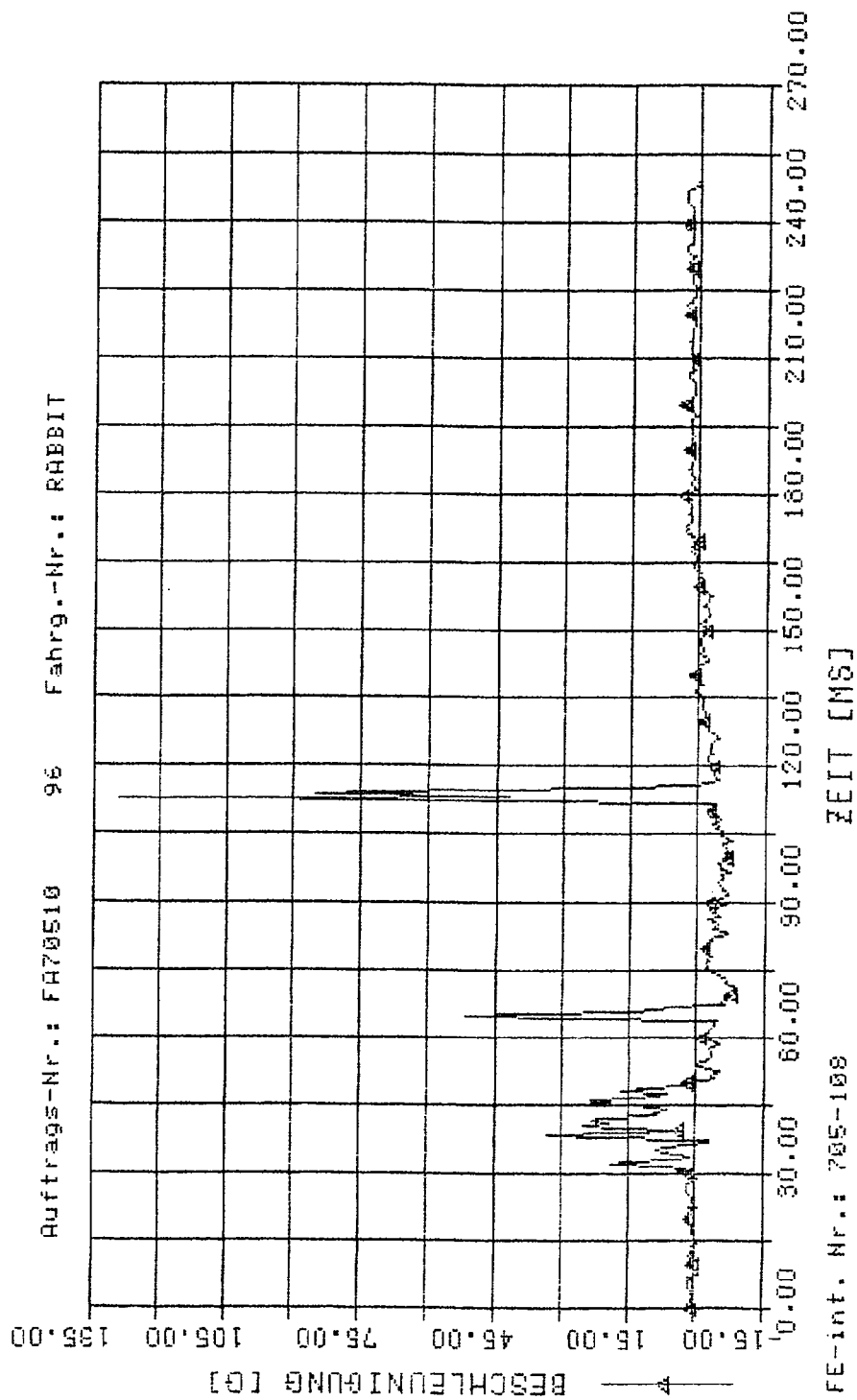
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 96

Mess-Stelle	UP	ber.	Extremum	t	3MS
BE01	V1	Groesse	132.478	Extr.	106.36
BE01	V1	BE g	1469.209	250.00	0.00



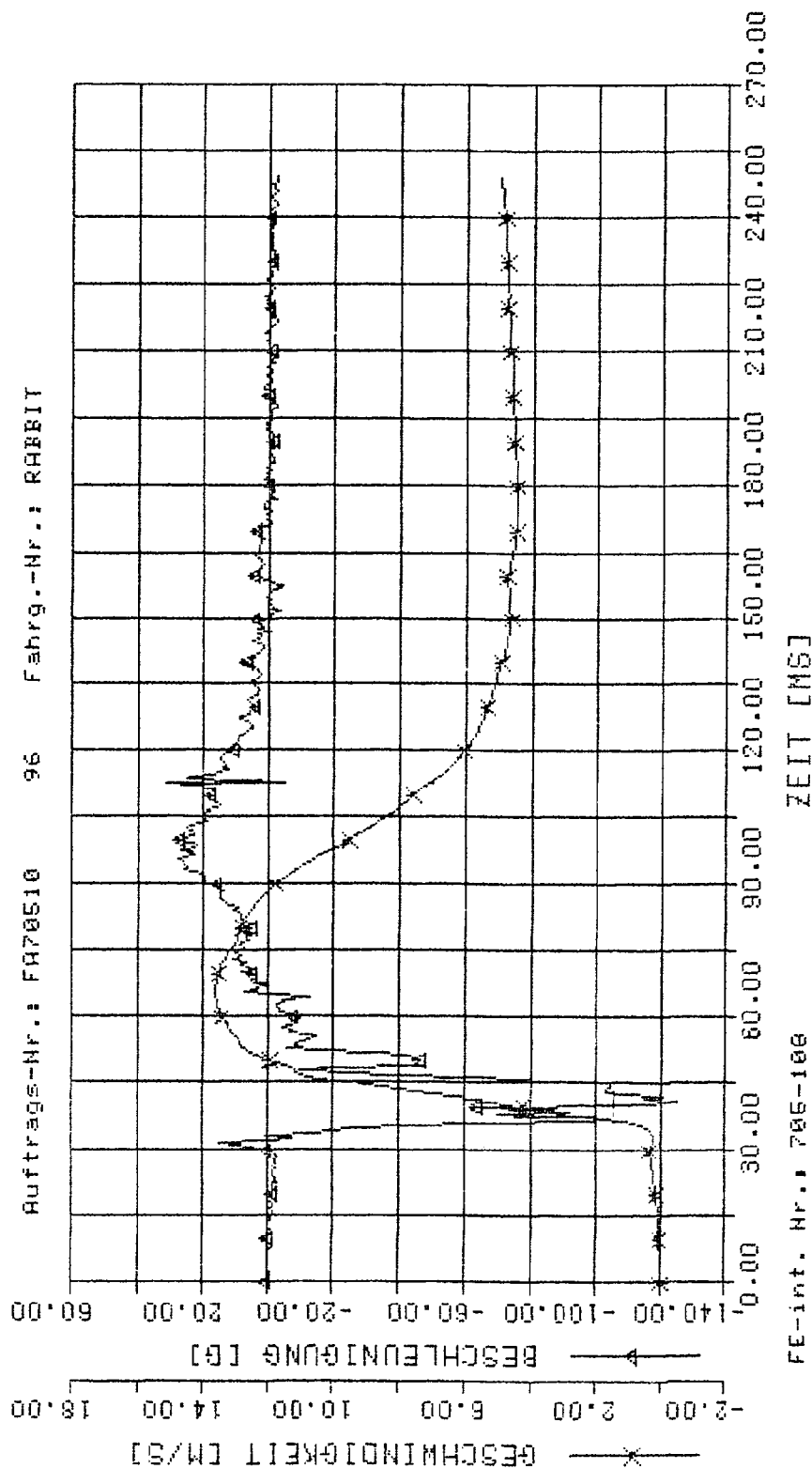
- Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 96

Mess-Stelle UP ber. Extremum t 3MS
BE01X 01 BE g 128.712 112.50 48.26



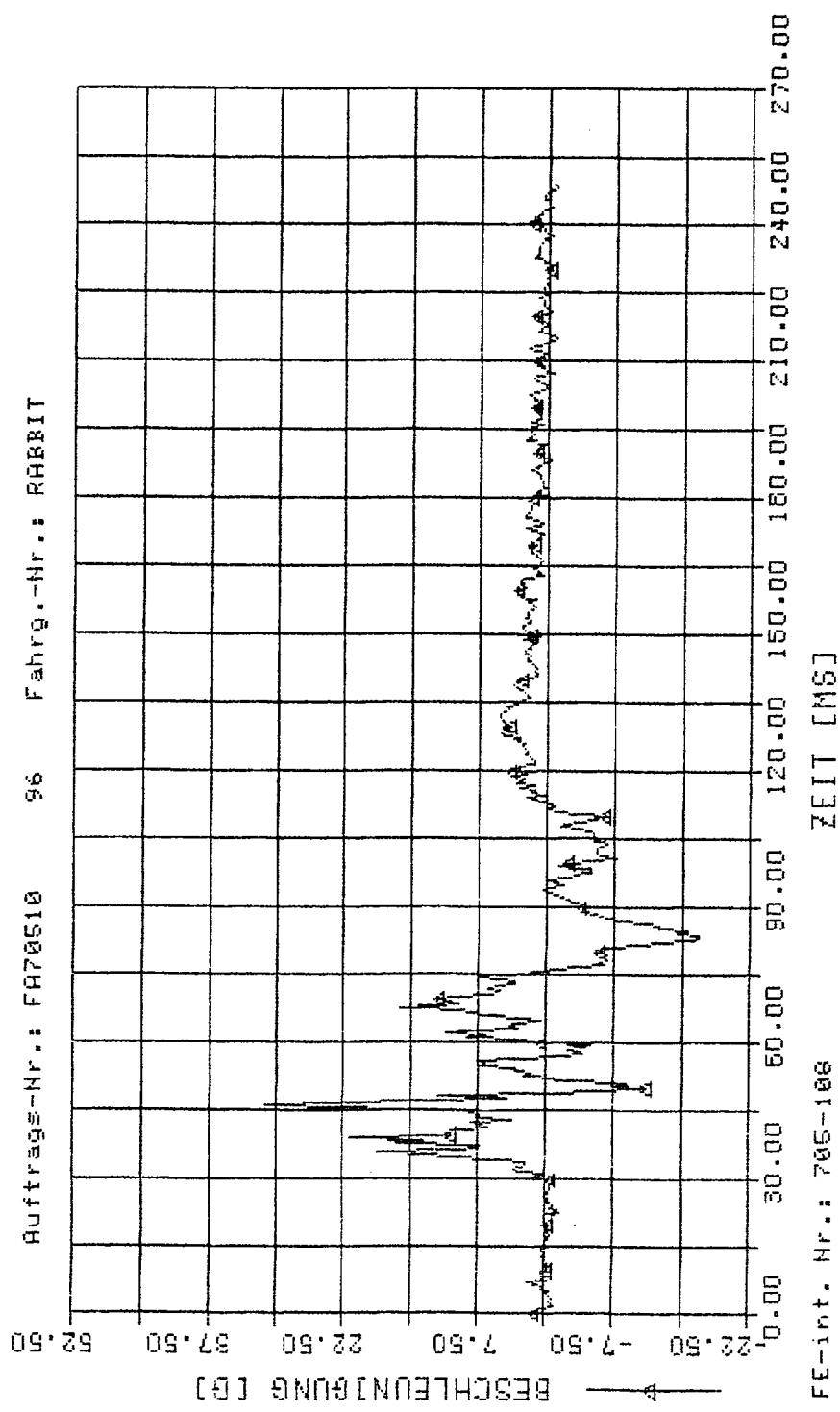
- Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 96

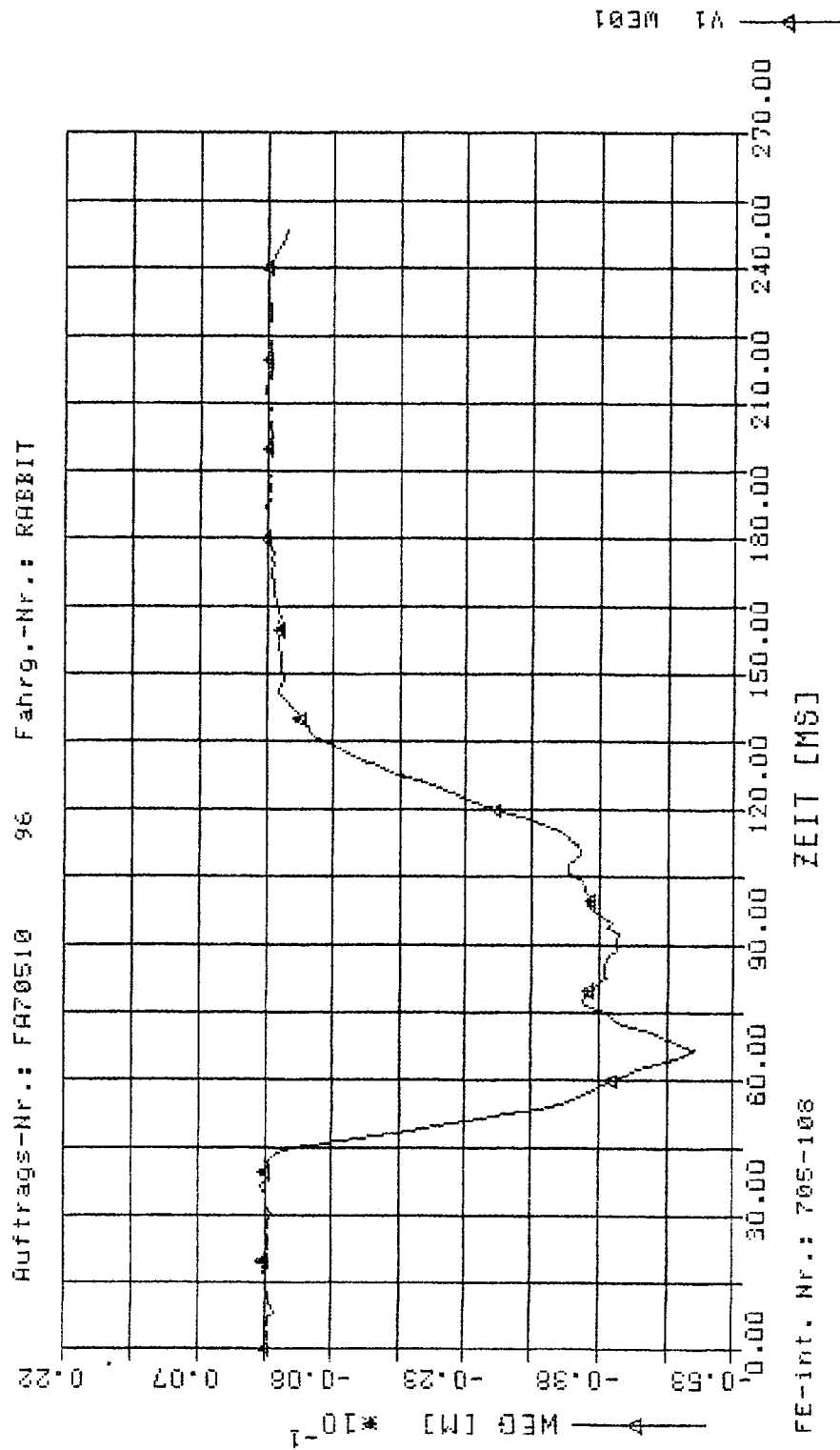
Mess-Stelle	UP	ber.	Extremum	t	3MS
BE01Y	V1	Grösse	-125.337	Extr.	25.63
BE01Y	V1	BE g	13.652	65.00	0.00



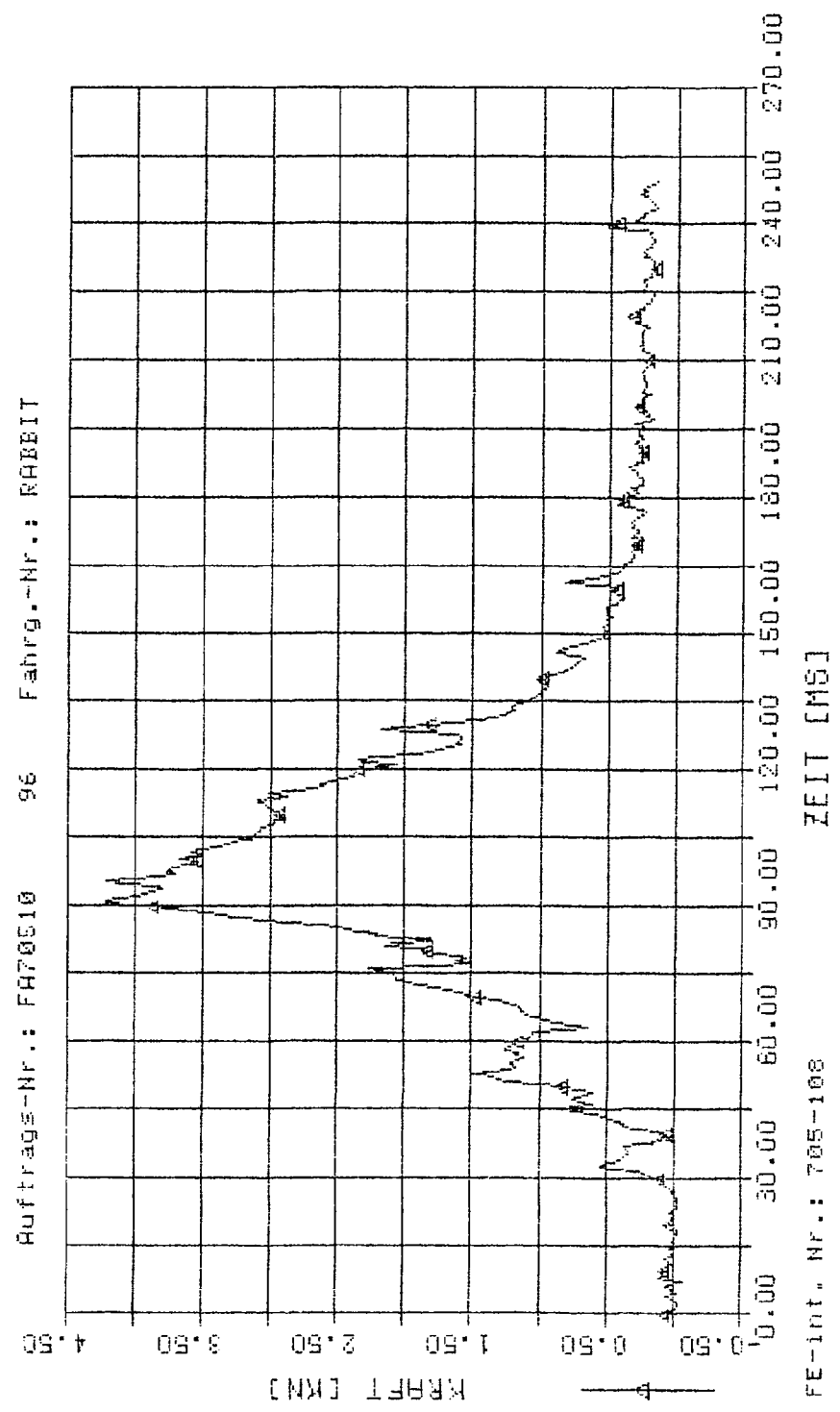
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 96

Mess-Stelle UP ber. Extremum t 3MS
BE01Z Groesse V1 BE g 31.181 46.50 16.65



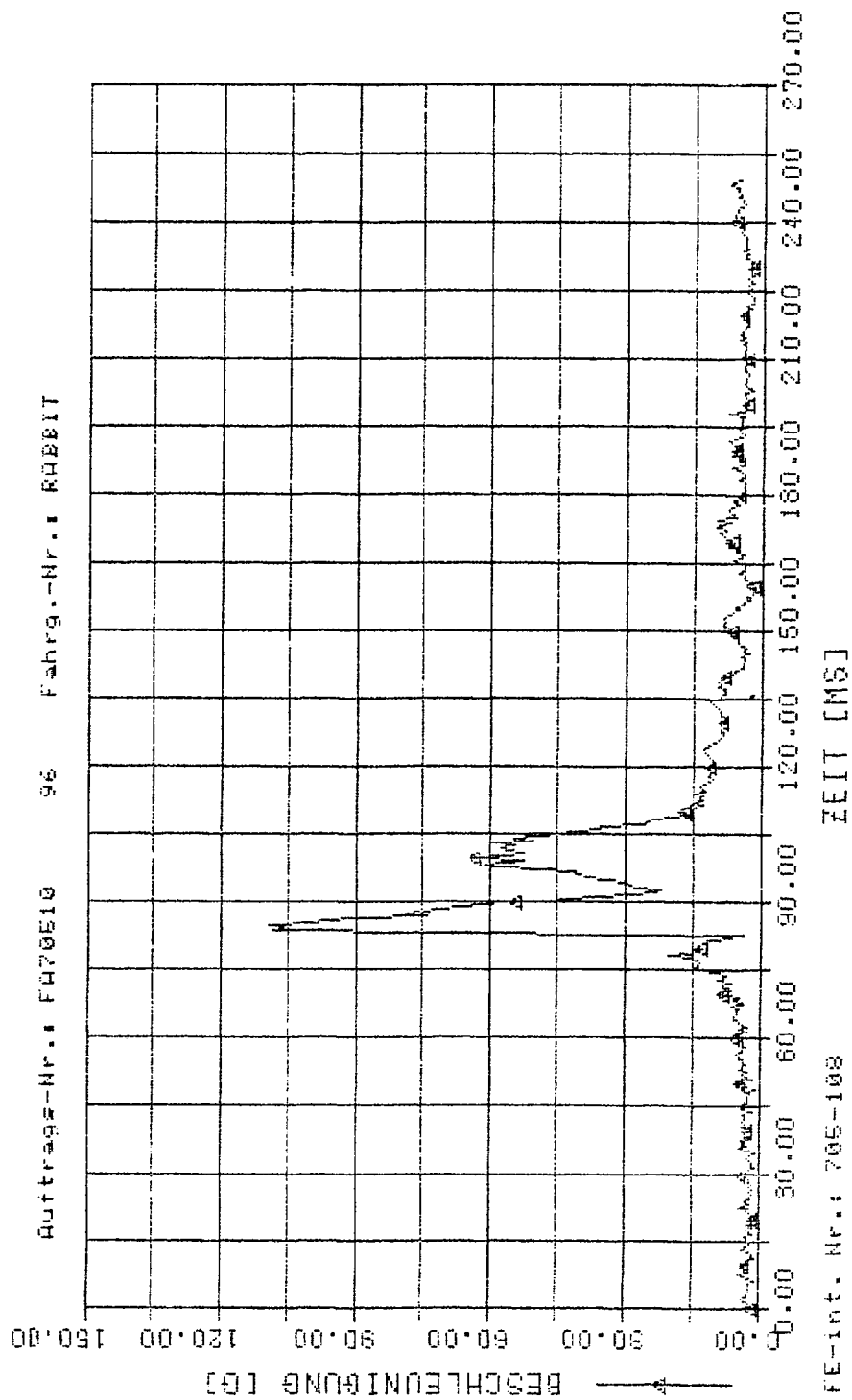


Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 96
 Mess-Stelle UP ber. Extremum t 3MS
 GU015A V1 KR kN 4.210 75.50 0.00



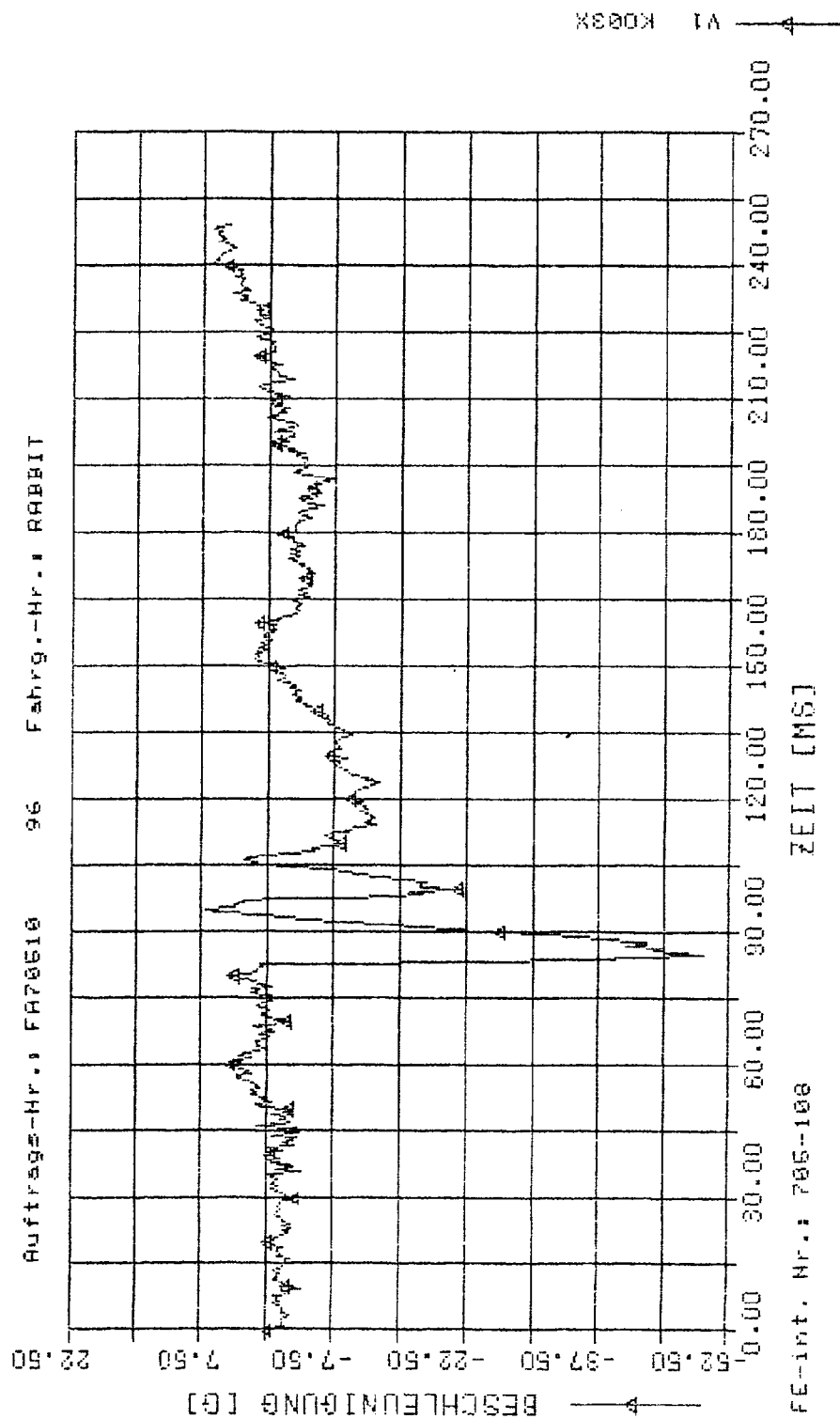
B.2.2 Rear Passenger

Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 96
 Mess-Stelle UP ber. Extr. t 3MS
 K003 V1 BE g 116.300 34.70 86.52

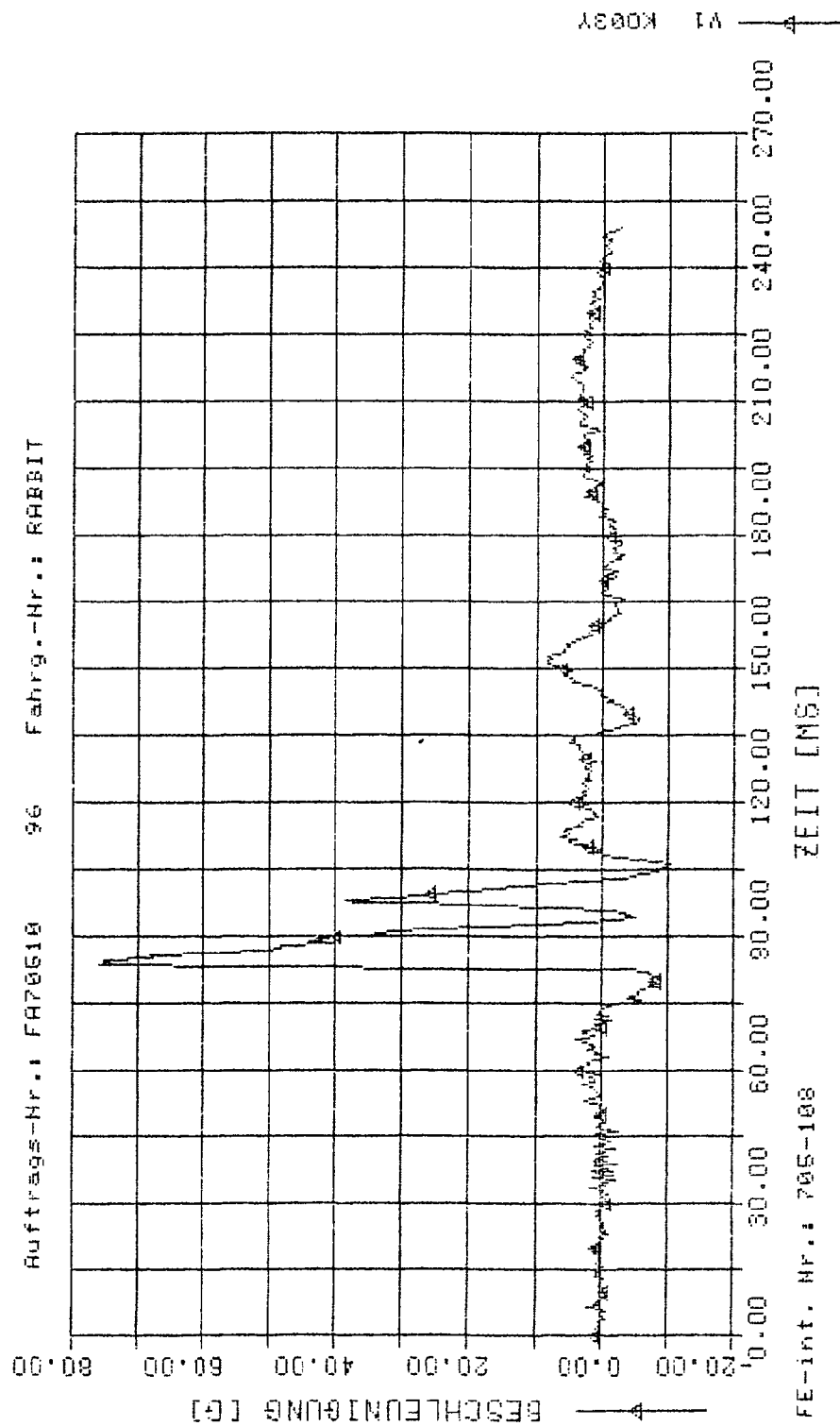


Z A X800X V 2

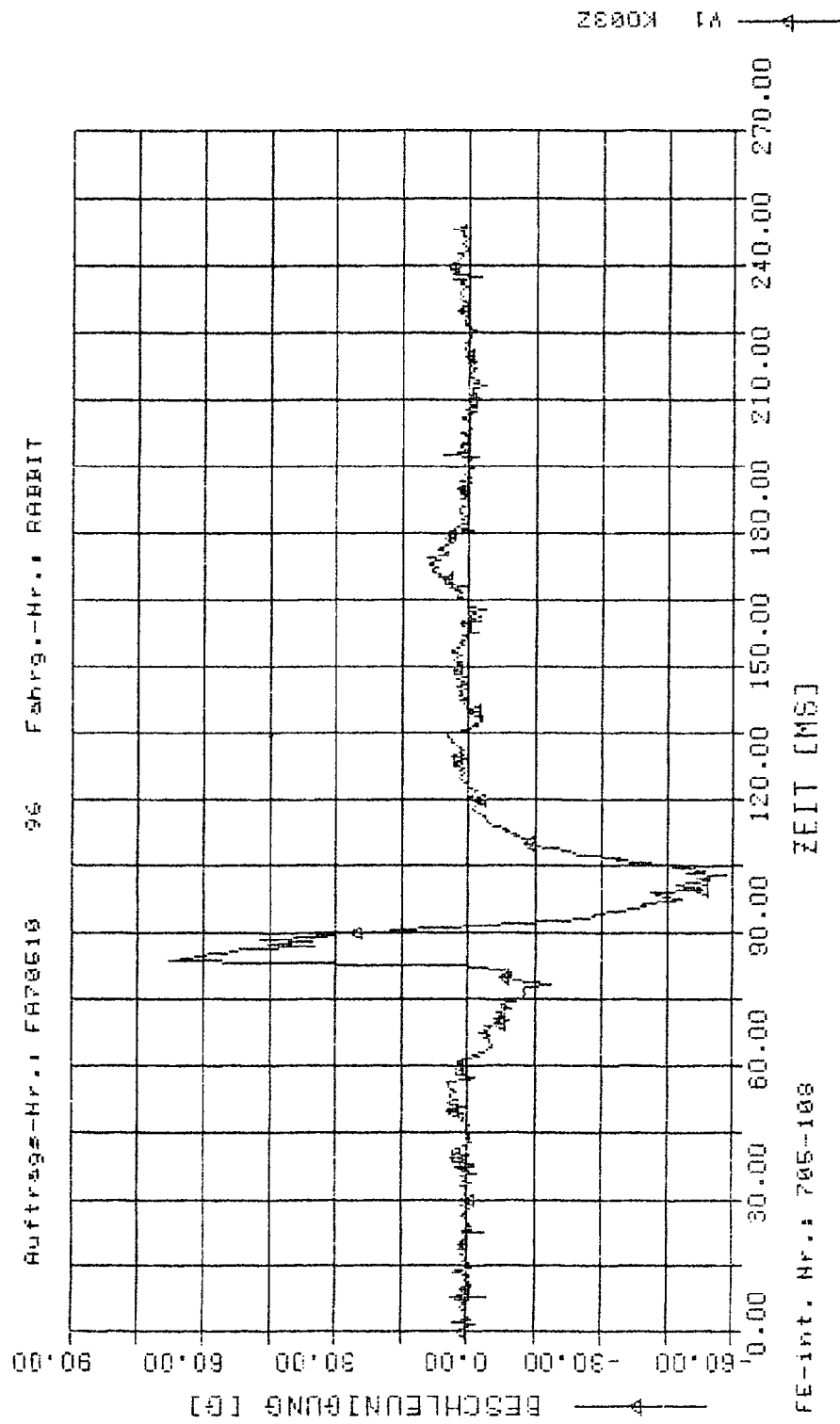
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 96
 Mess-Stelle UP ber. Extremum t SMS
 K003X V1 BE q -49.507 Extr. 85.00 5.72



Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 96
 Mess-Stelle UP ber. Extremum t 3MS
 K003Y Groesse Extr. 04.00 58.20
 V1 BE g 02.073

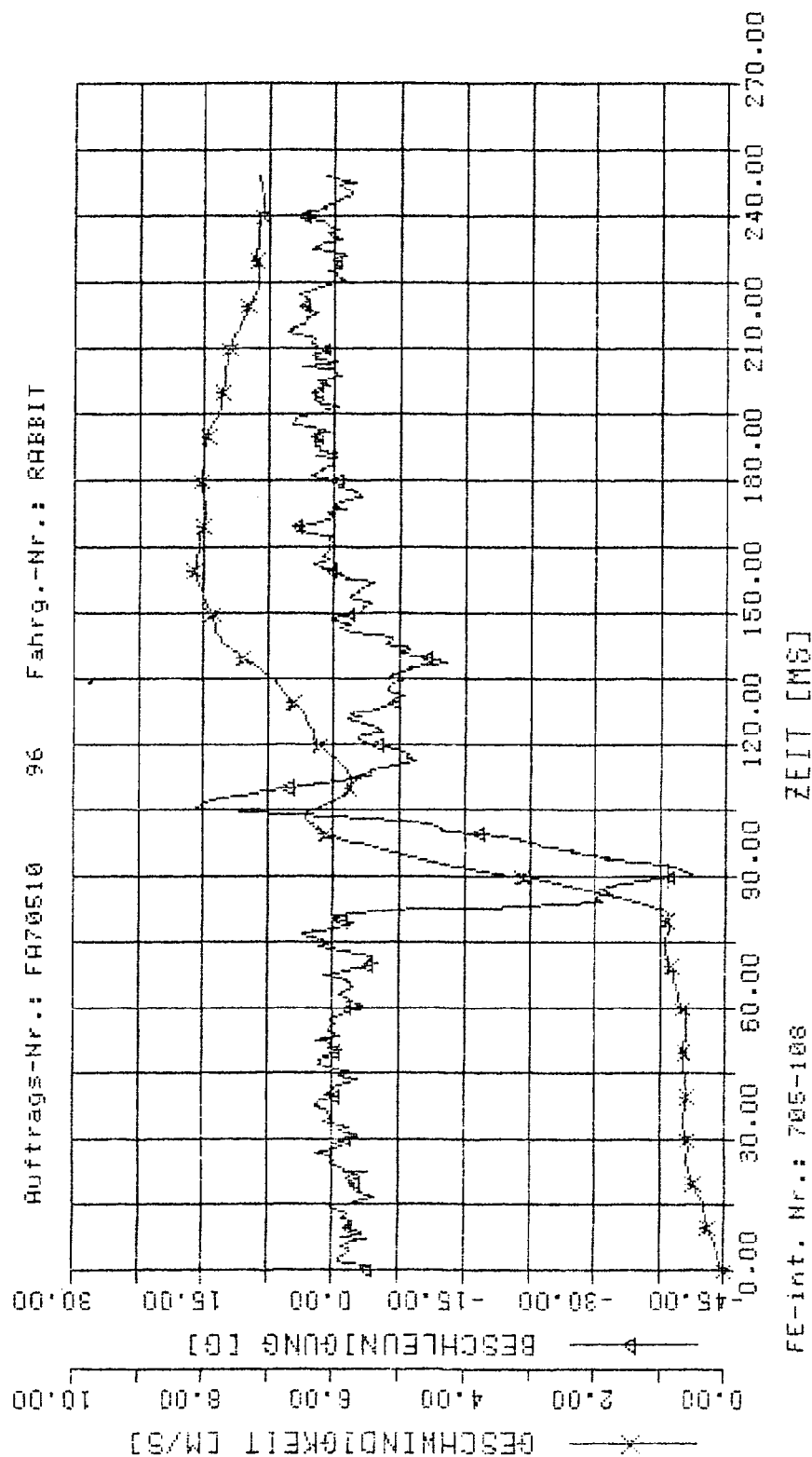


Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 96
 Mess-Stelle UP ber. Extrema t SMS
 K003Z V1 BE g 70.198 84.70 45.97



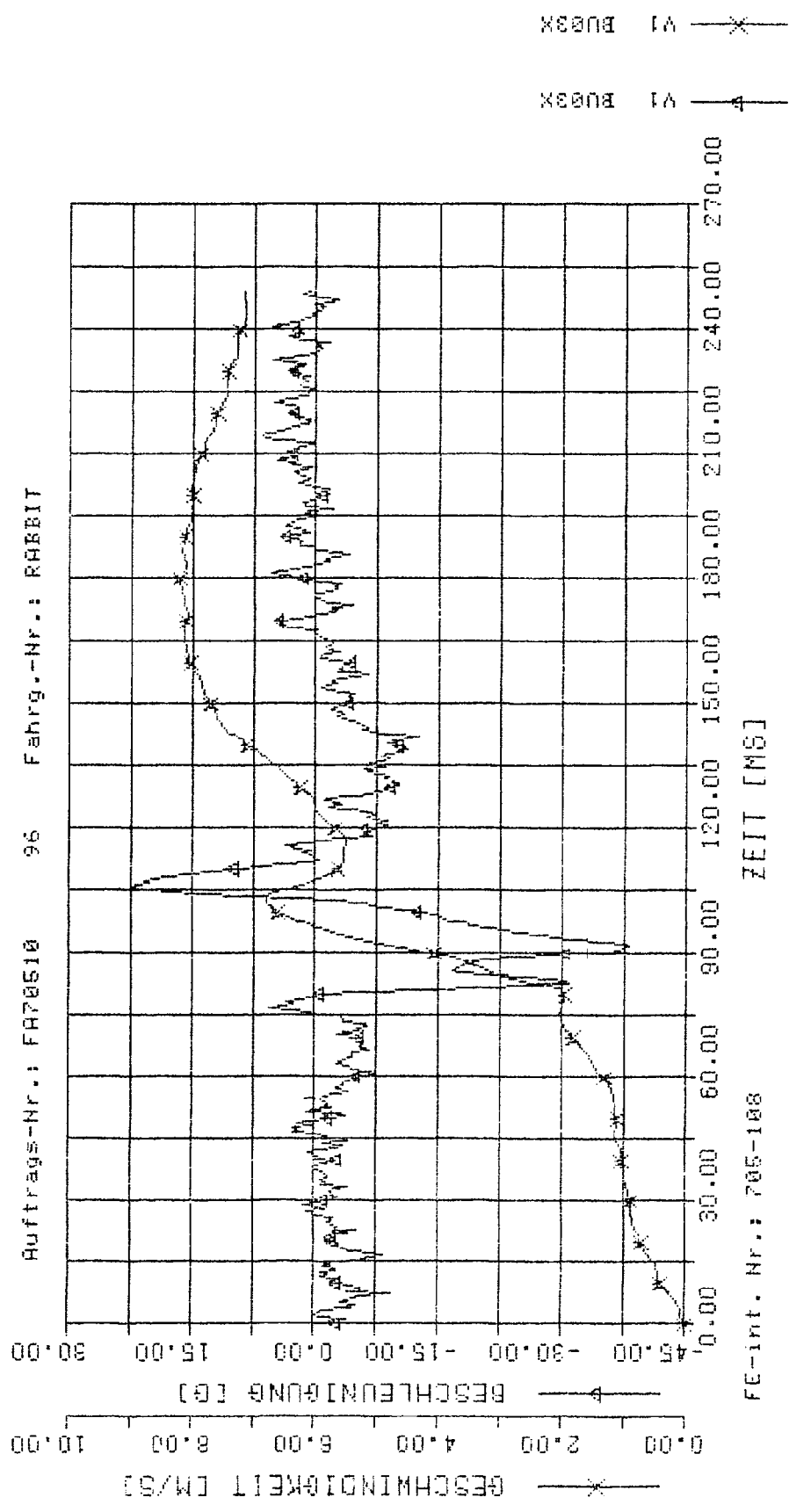
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 96

Mess-Stelle	UP	ber.	Extremum	t	SMS
R003X	V1	BE 9	-41.306	71.00	0.00
R003X	V1	GE m/s	8.120	160.00	0.00



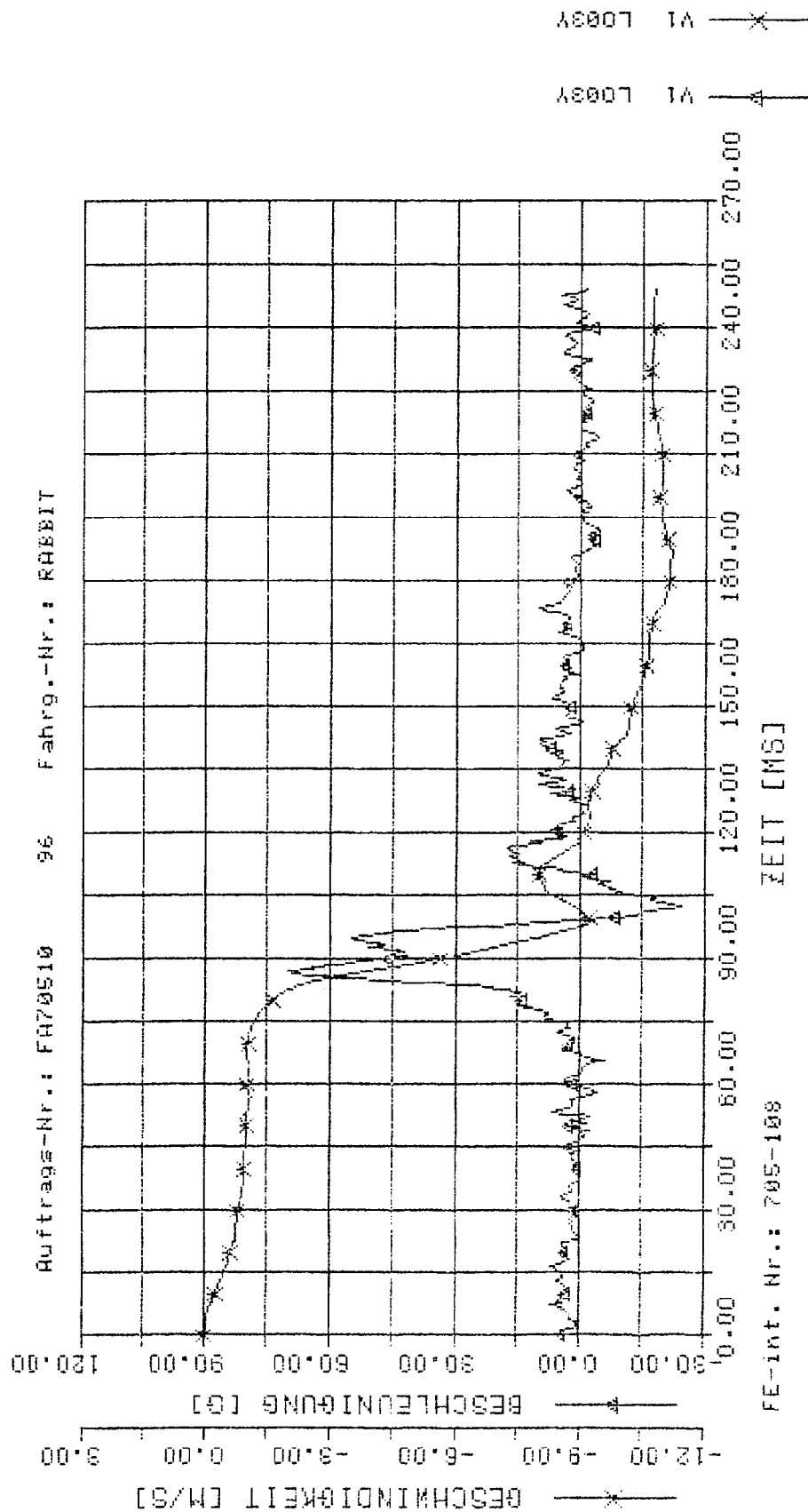
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 96

Mess-Stelle	UP	ber.	Extremum	t	3MS
BU03X	V1	DE g	33.210	92.00	0.00
BU03X	V1	GE m/s	0.208	179.00	0.00



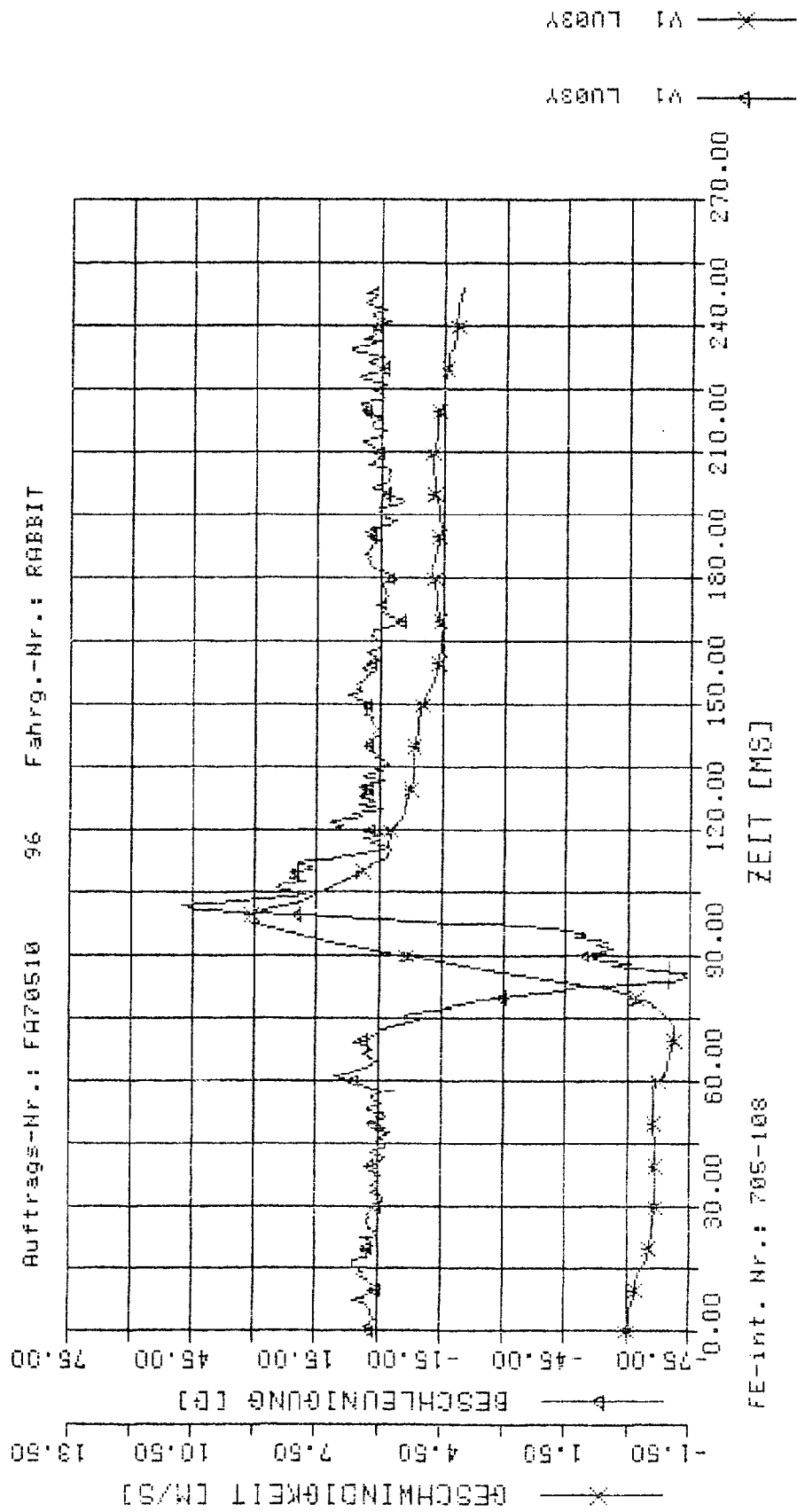
- Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 96

Mess-Stelle	UP	ber.	Extremum	Extr.	AMS
L003Y	V1	DE g	70.216	87.00	0.00
L003Y	V1	GE m/s	-11.250	106.00	0.00



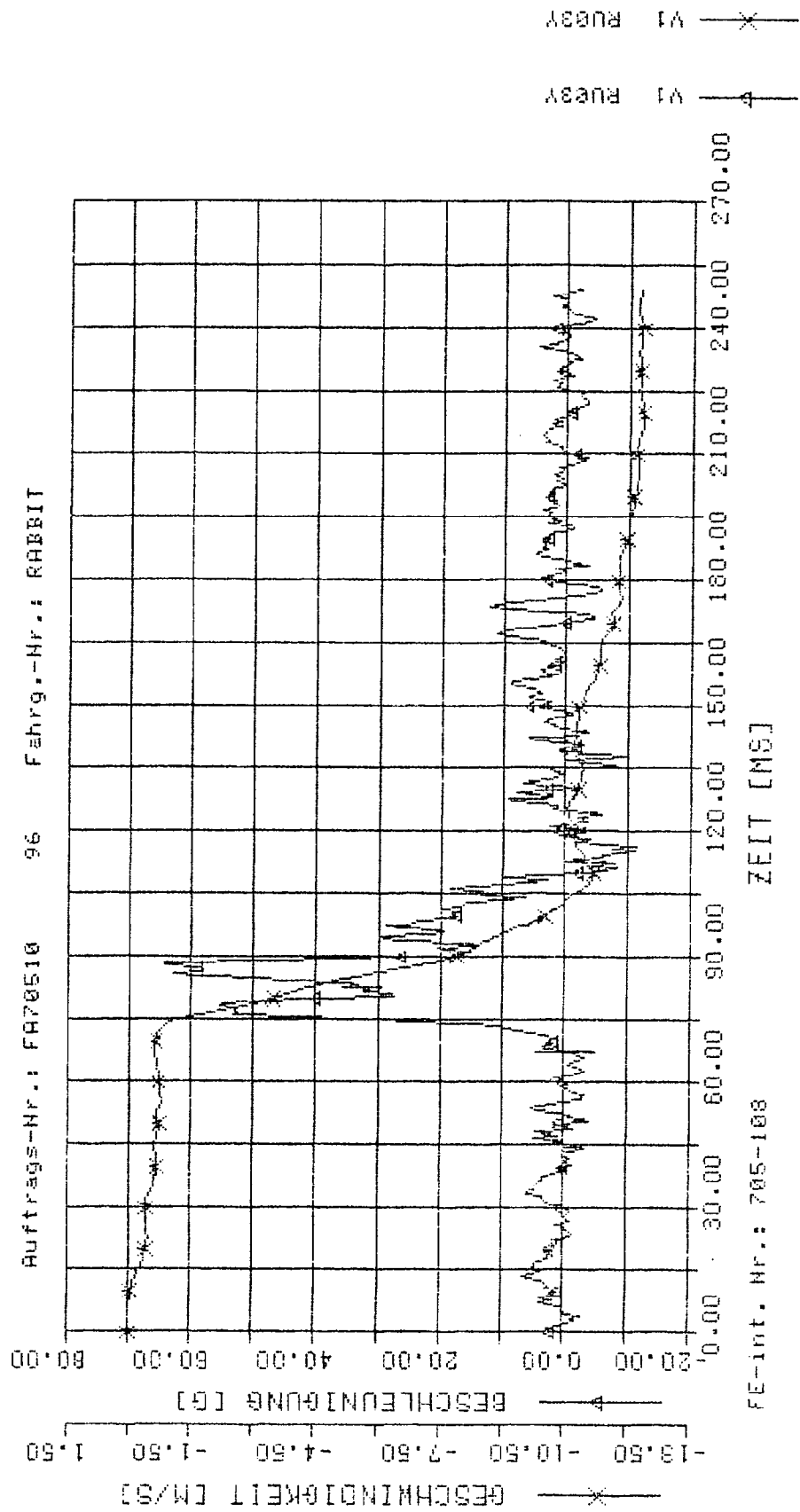
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 96

Mess-Stelle	UP	ber.	Extremum	t	MS
LU03Y	V1	BE	-74.170	86.00	0.00
LU02Y	V1	GE	9.120	99.00	0.00



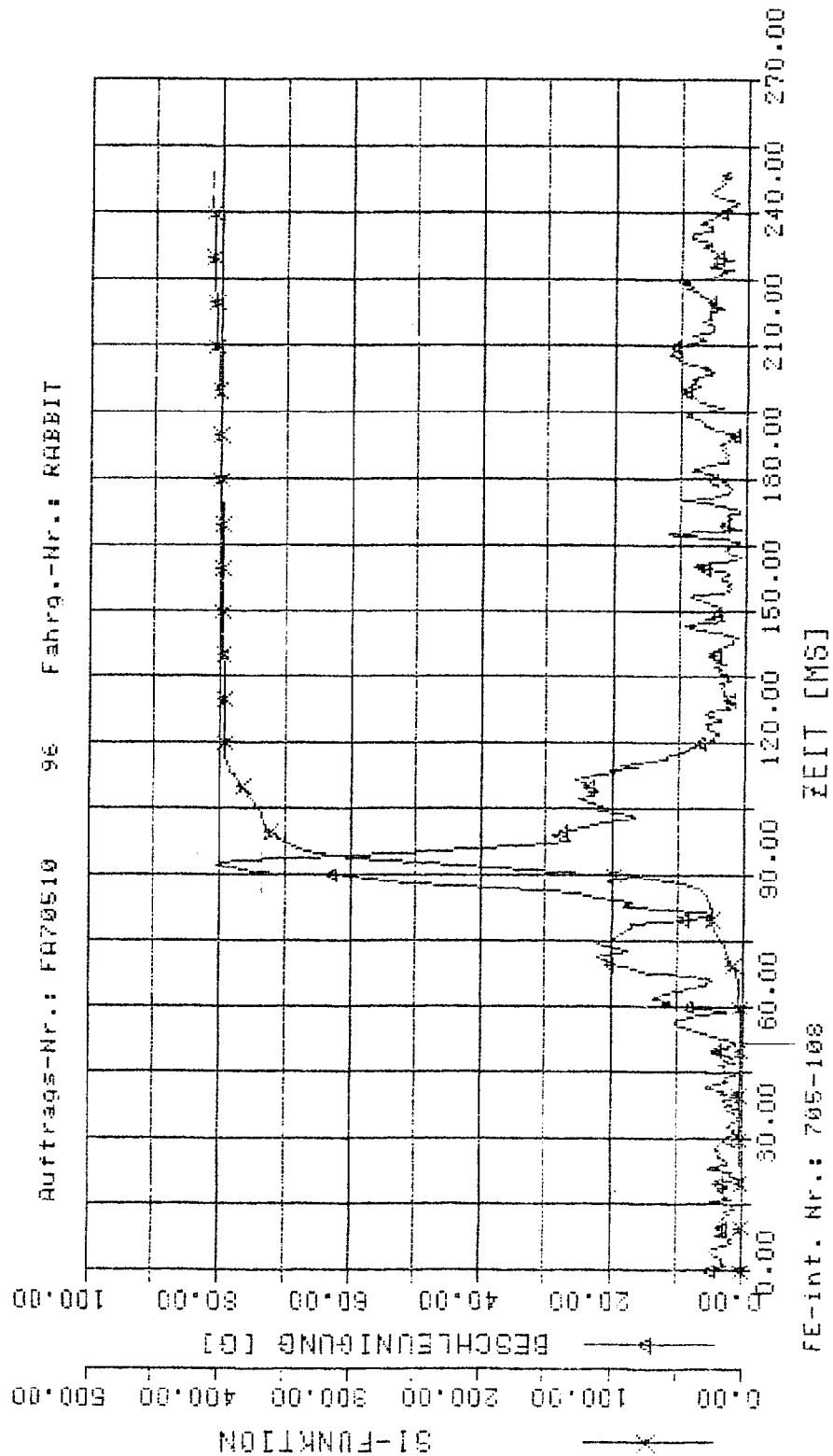
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 96

Mess-Stelle	UP	ber.	Extremum	t	AMS
RU03Y	V1	BE g	64.323	88.50	0.00
RU03Y	V1	GE m/s	-12.367	219.50	0.00



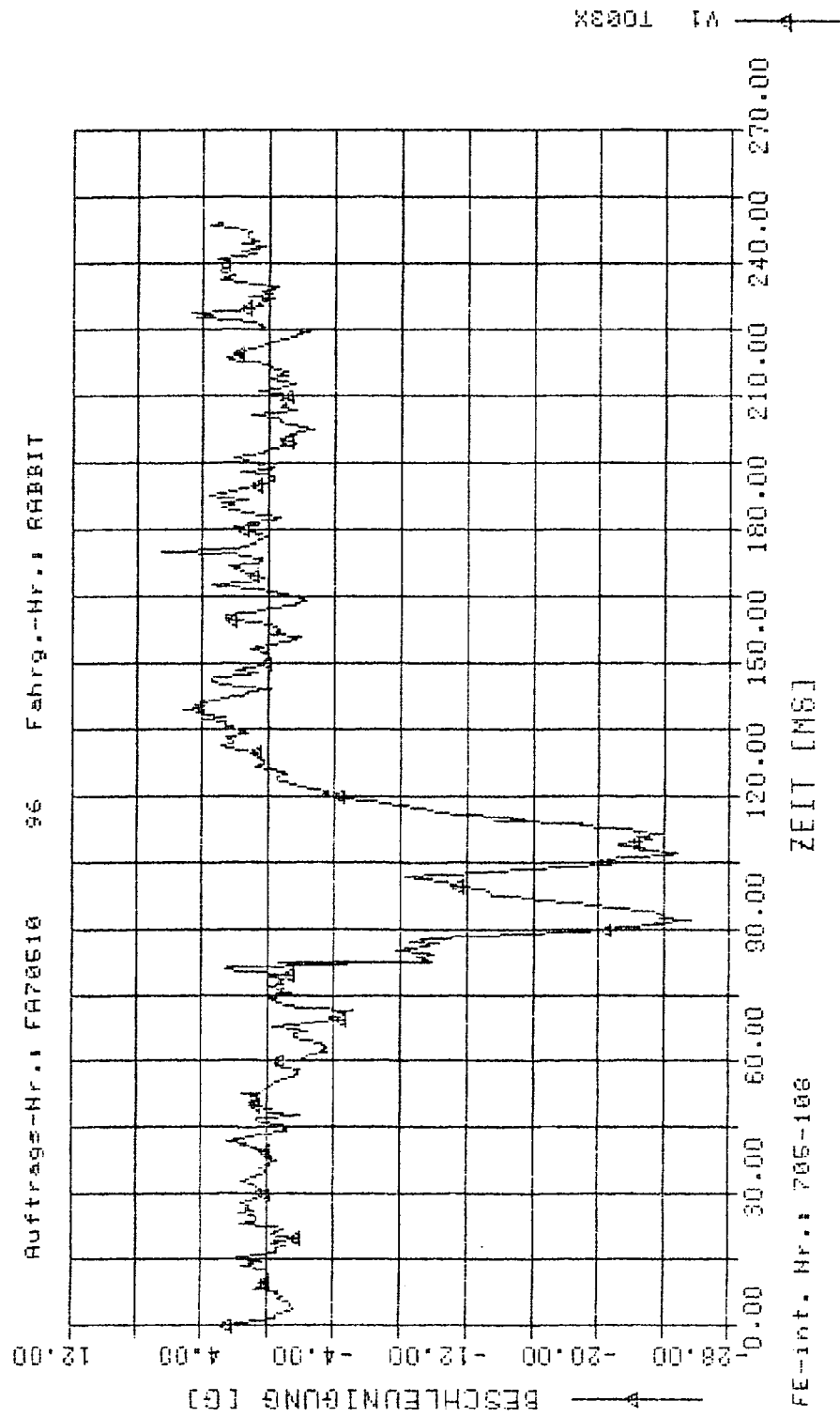
- Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 96

Mess-Stelle	UP	ber.	Extremum	t	3MS
T003	V1	BE	9	80.203	92.50
T003	V1	SI	405.956	250.00	0.00



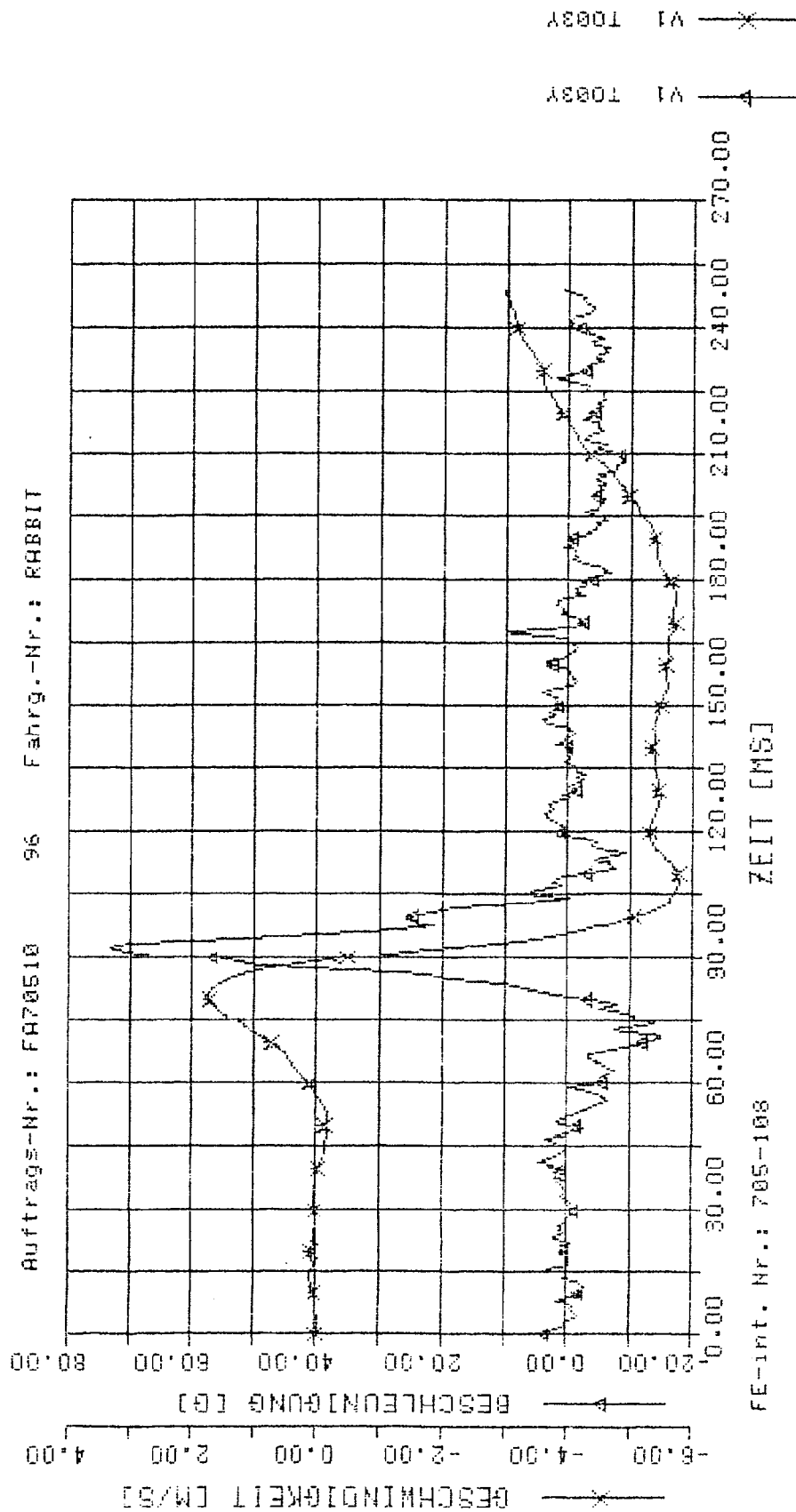
- Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 96

Mess-Stelle DP ber. Extremum t 3MS
T003X V1 BE g -25.581 Extr. 92.50 0.00



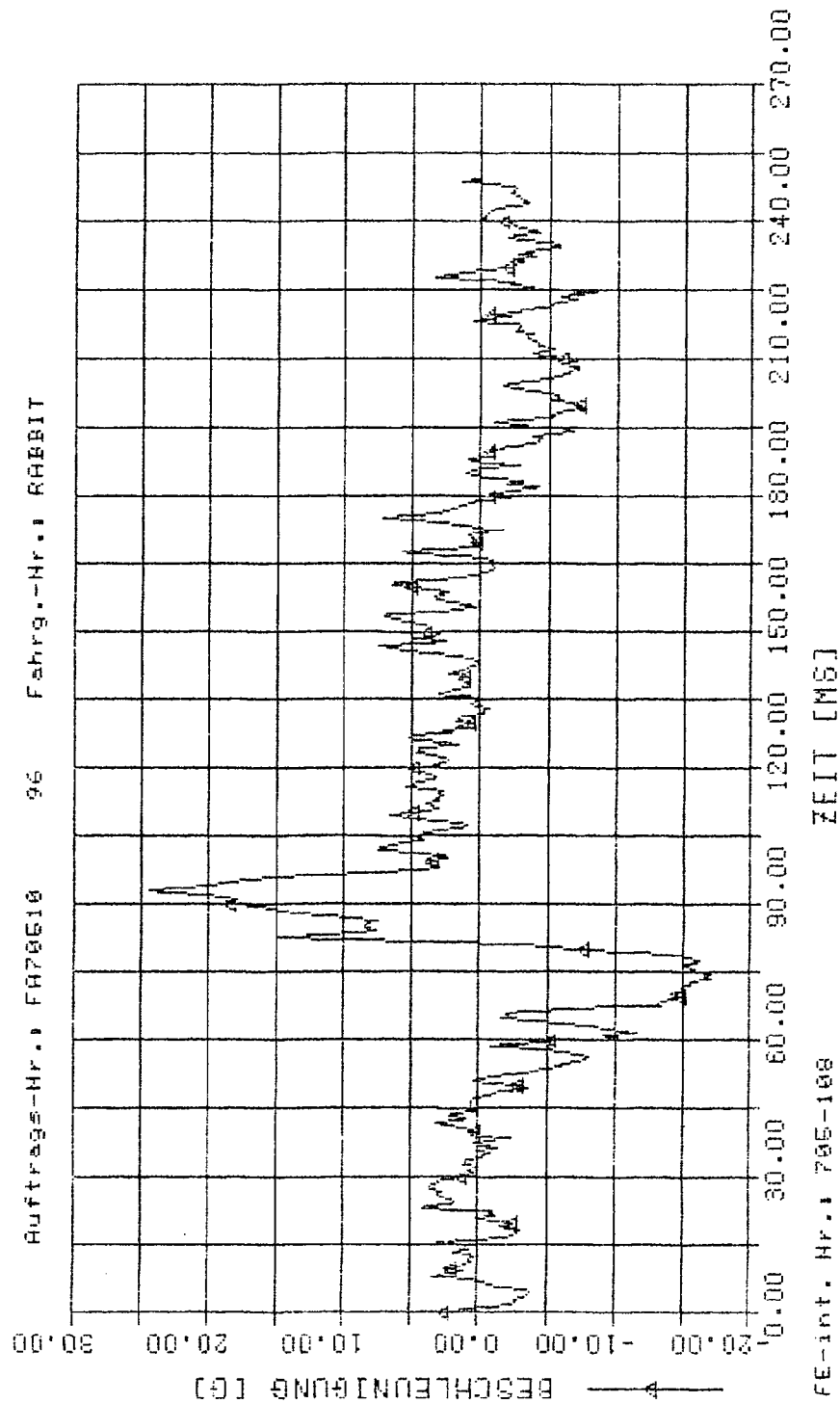
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 76

Mess-Stelle	UP	ber.	Extremum	t	3MS
T003Y	V1	BE g	73.254	92.50	0.00
T002Y	V1	GE m/s	5.815	109.50	0.00



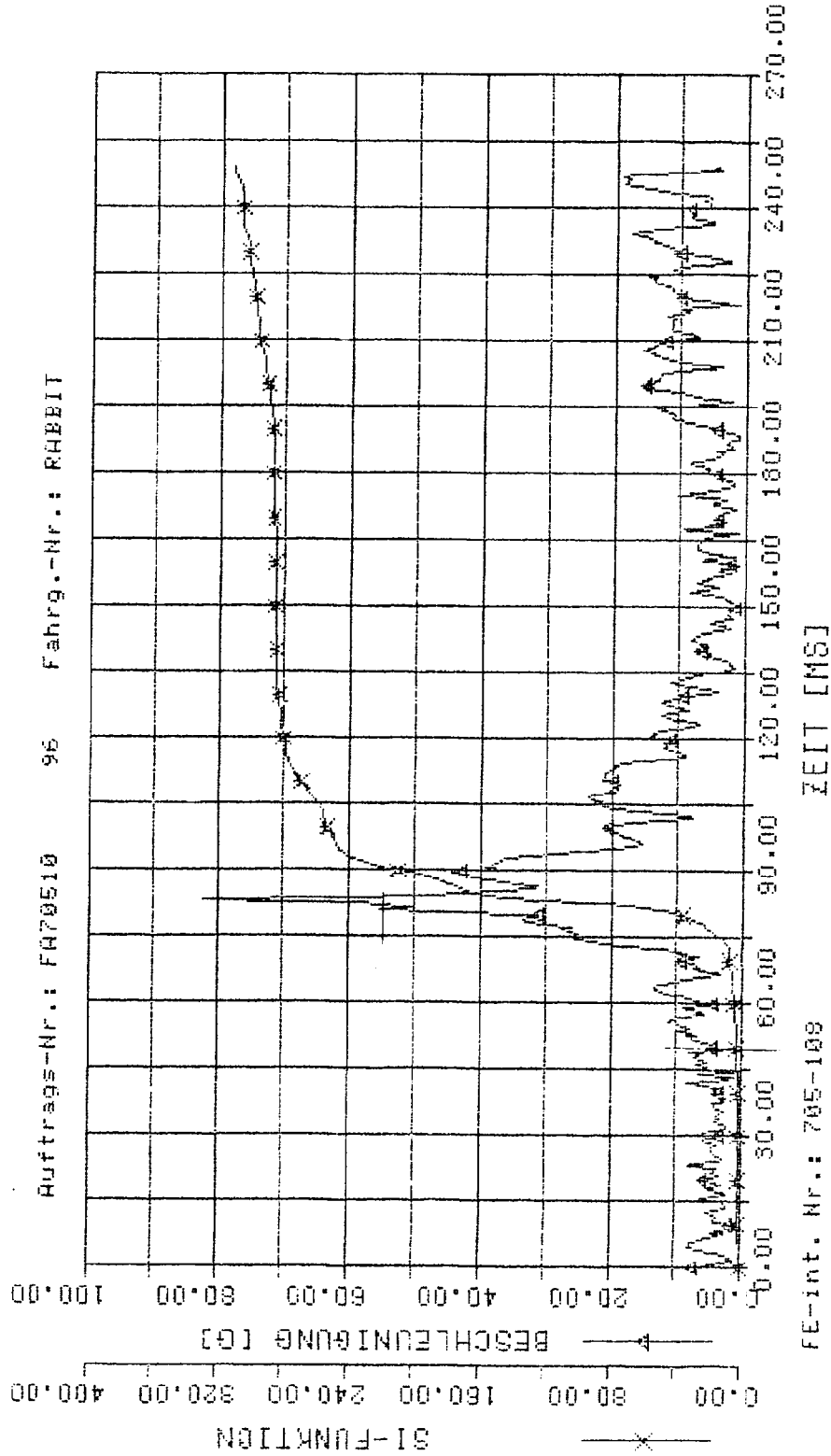
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 96

Mess-Stelle
T003Z
UP ber. Extr.
V1 BE g 24.365 93.50 0.00

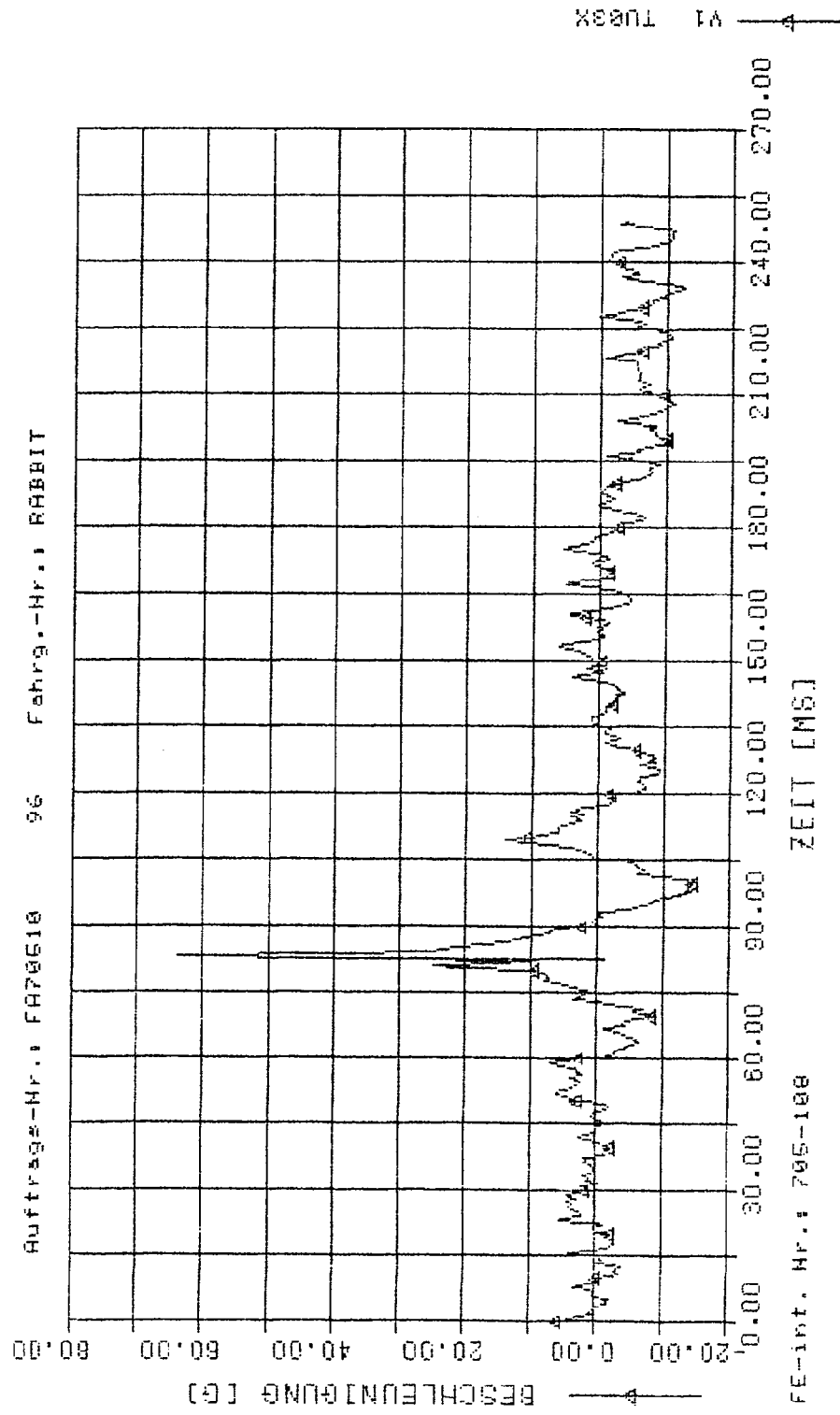


Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 96

Mess-Stelle	UP	ber.	Groesse	Extremum	t	3MS
TU03	V1	DE	9	81.913	33.50	0.00
TU03	V1	CI		312.865	250.00	0.00

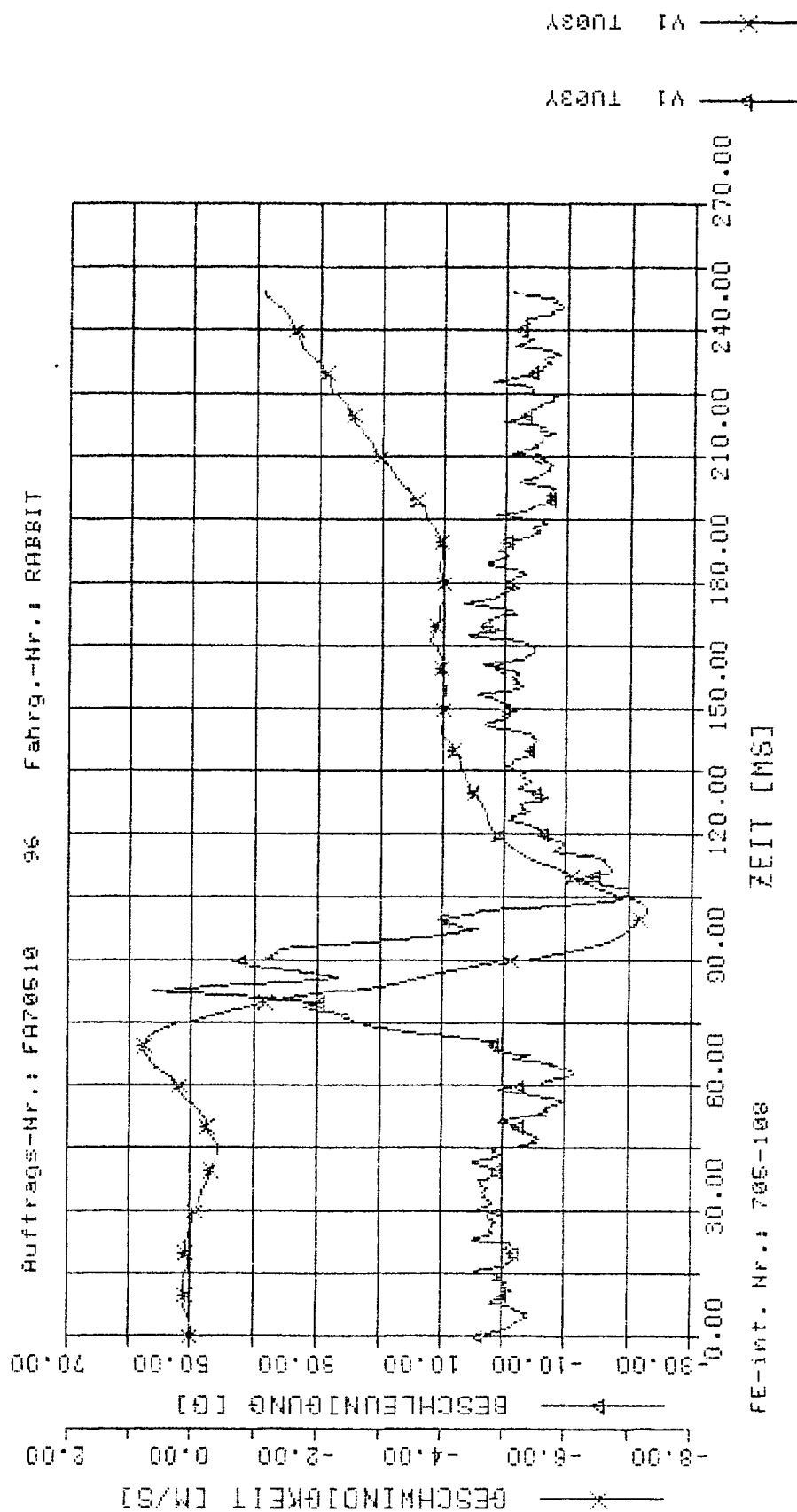


Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 96
 Mess-Stelle UP ber. Extremum t 3MS
 TU03X V1 DE g 63.775 Extr.: 0.00



Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 96

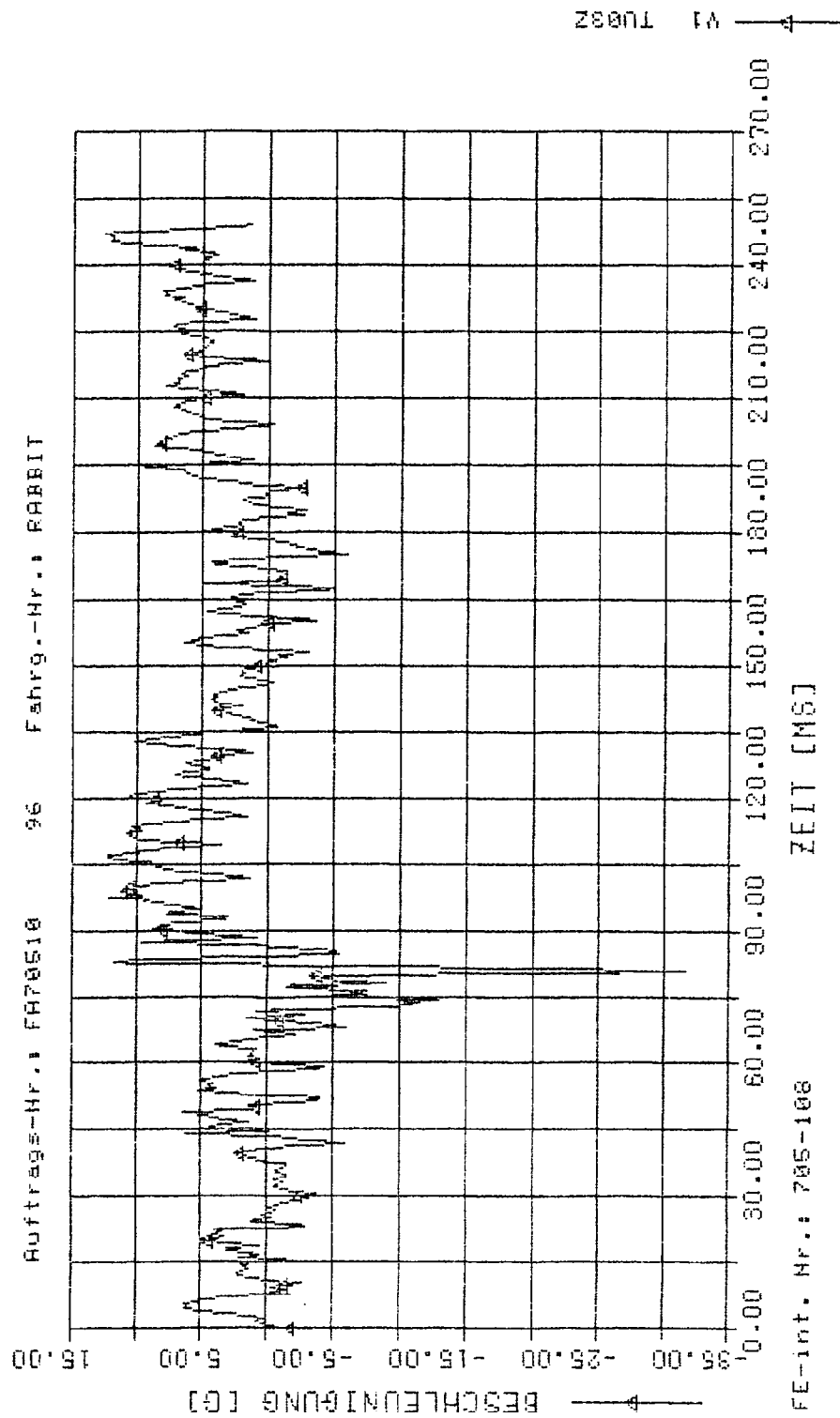
Mess-Stelle	UP	ber.	Extremum	t	3MS
TU03Y	V1	BE g	56.404	82.50	0.00
TU03Y	V1	GE m/s	7.302	102.50	0.00



Kennwerte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 96

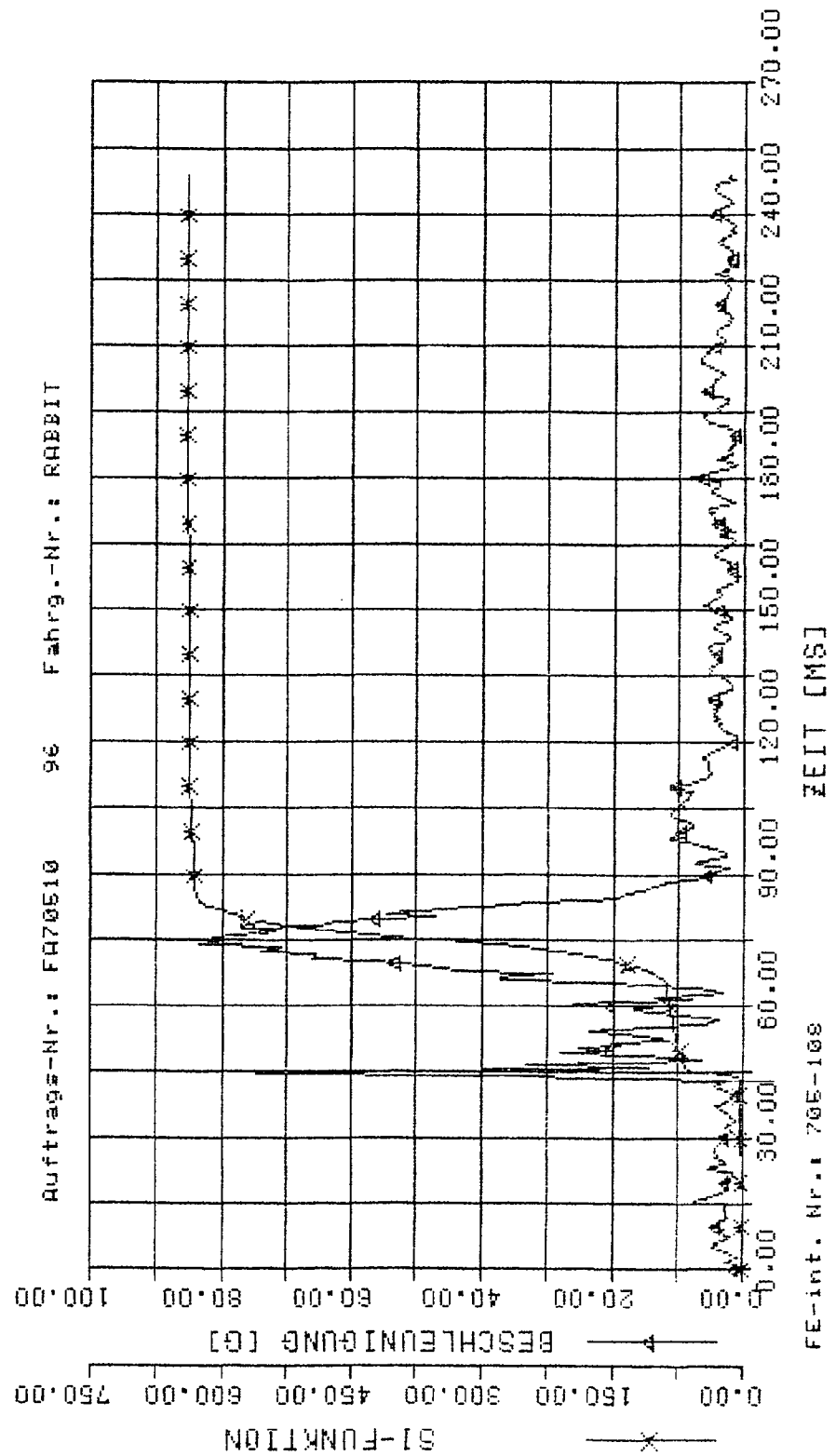
Mess-Stelle UP ber. Extremum t 3MS

TU03Z V1 BE g -31.640 Extr. 31.00 0.00



Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 96

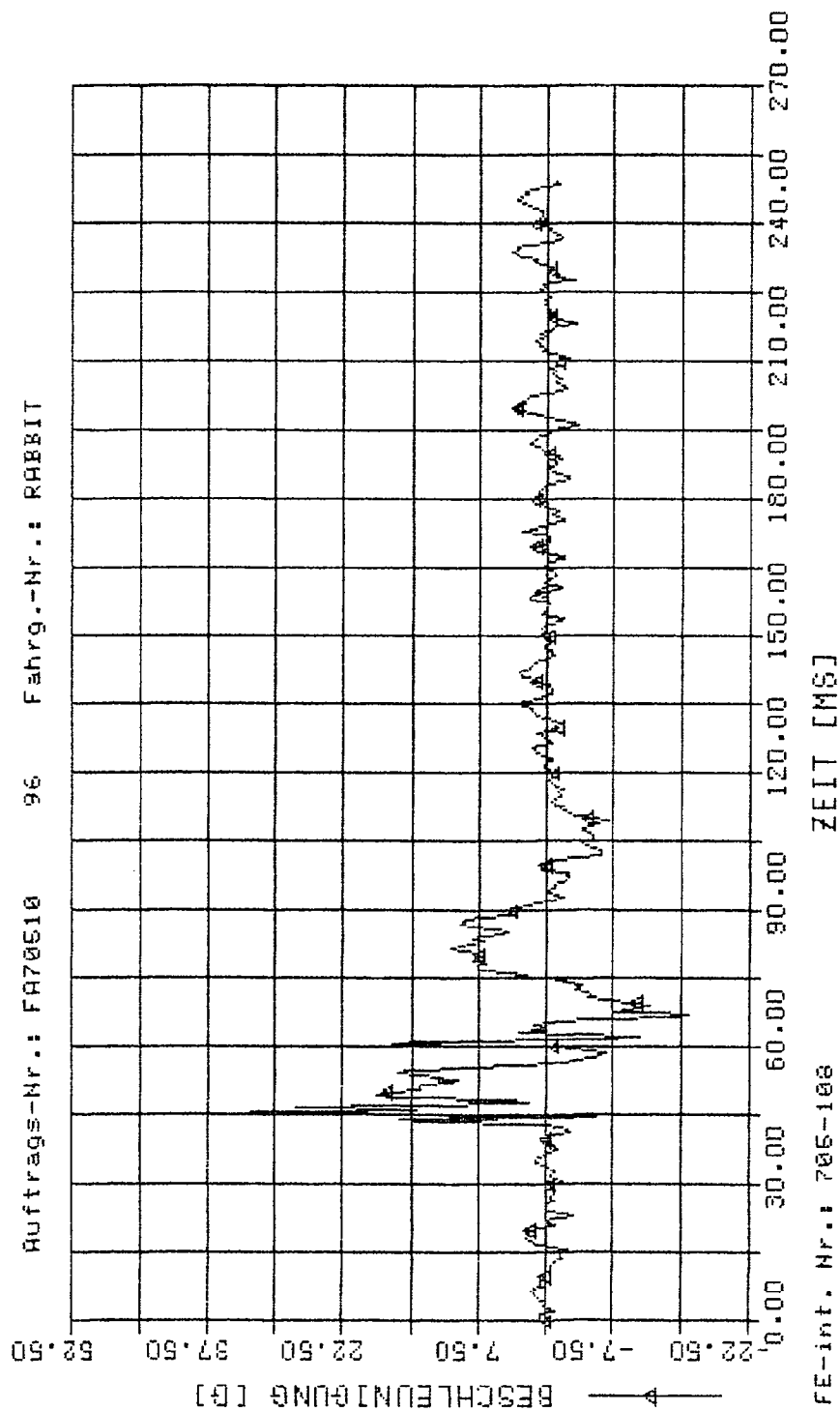
Mess-Stelle	UP	ber.	Groesse	Extremum	t	3MS
BE03	V1	BE	g	83.286	74.00	76.57
BE03	V1	SI		640.512	250.00	0.00



Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 96

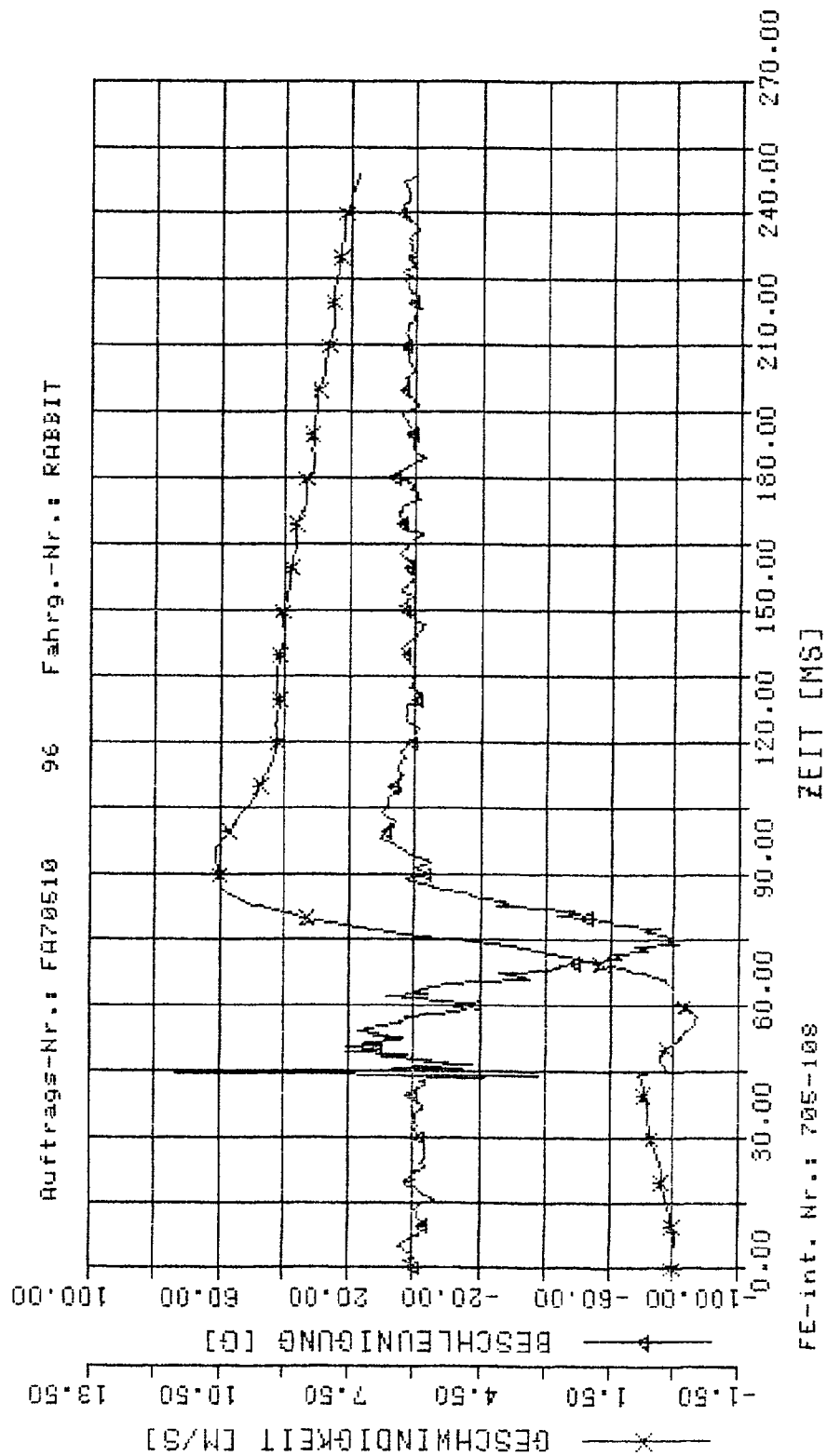
Mess-Stelle
BE03X

UP	ber.	Extremum	t	3MS
V1	BE g	41.005	Extr.	45.50
				17.03

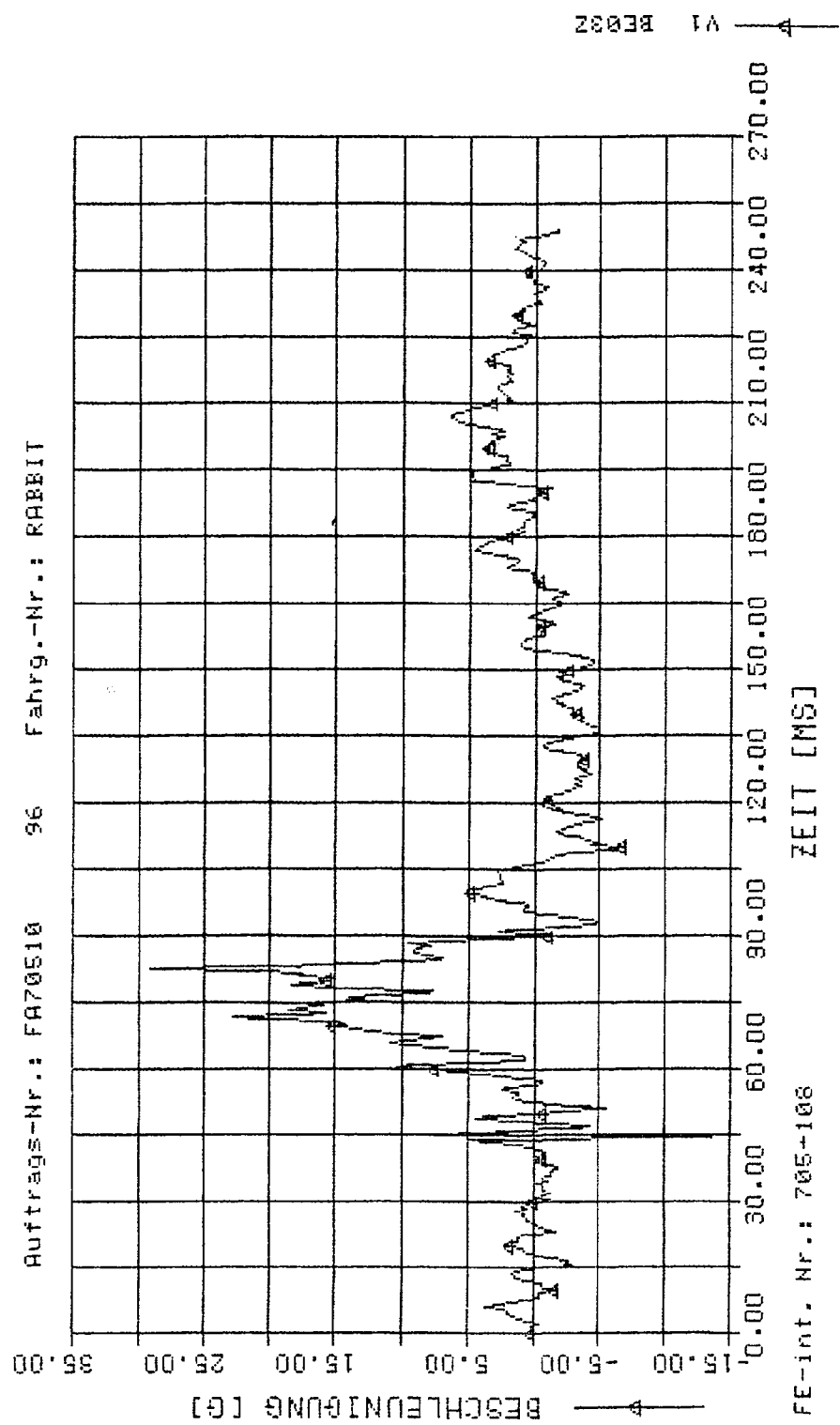


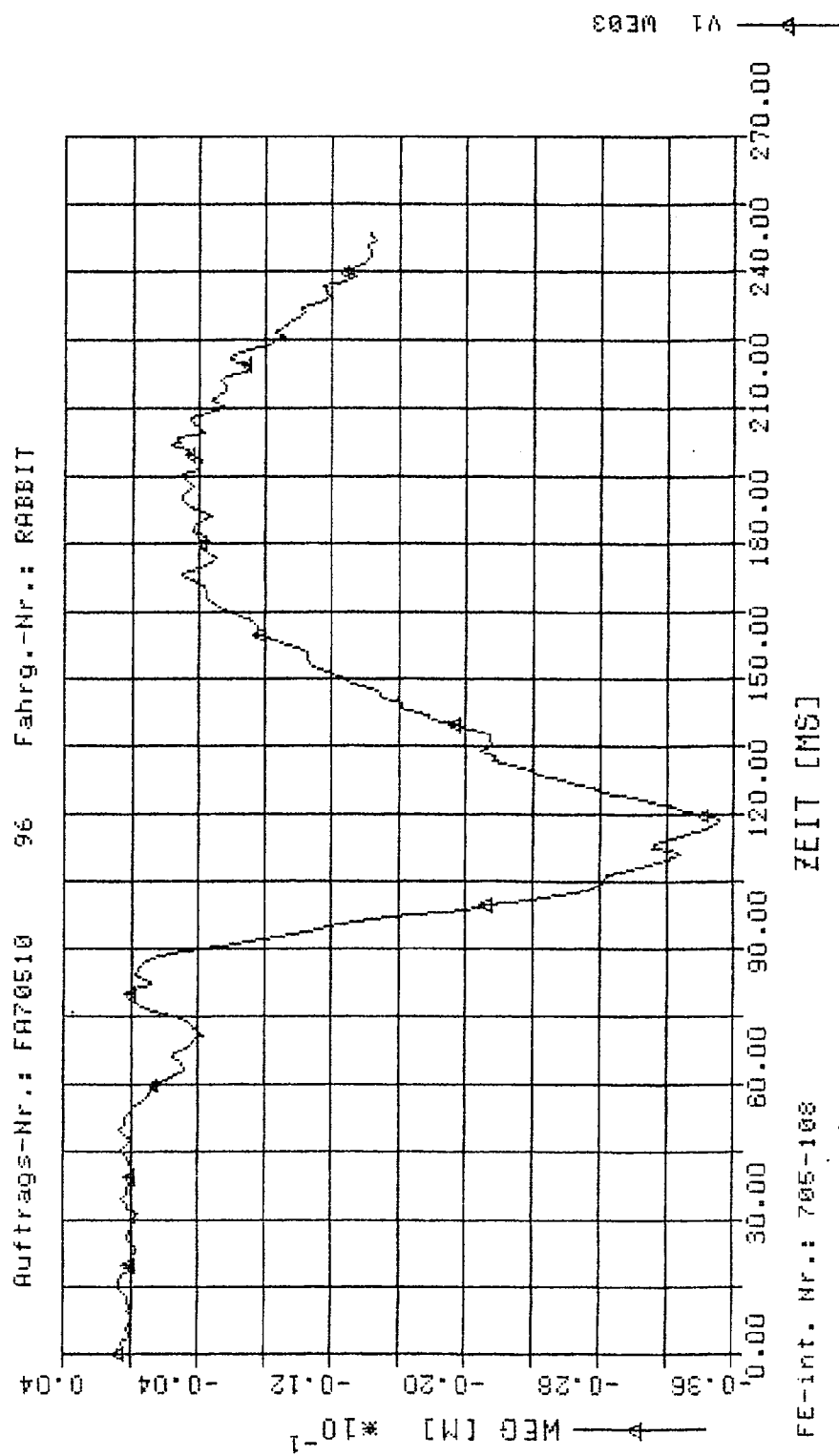
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 96

Mess-Stelle	UP	ber. Grösse	Extremum	t	3MS
BE03Y	V1	BE g	-81.444	74.00	14.79
BE03Y	V1	GE m/s	10.605	94.00	0.00

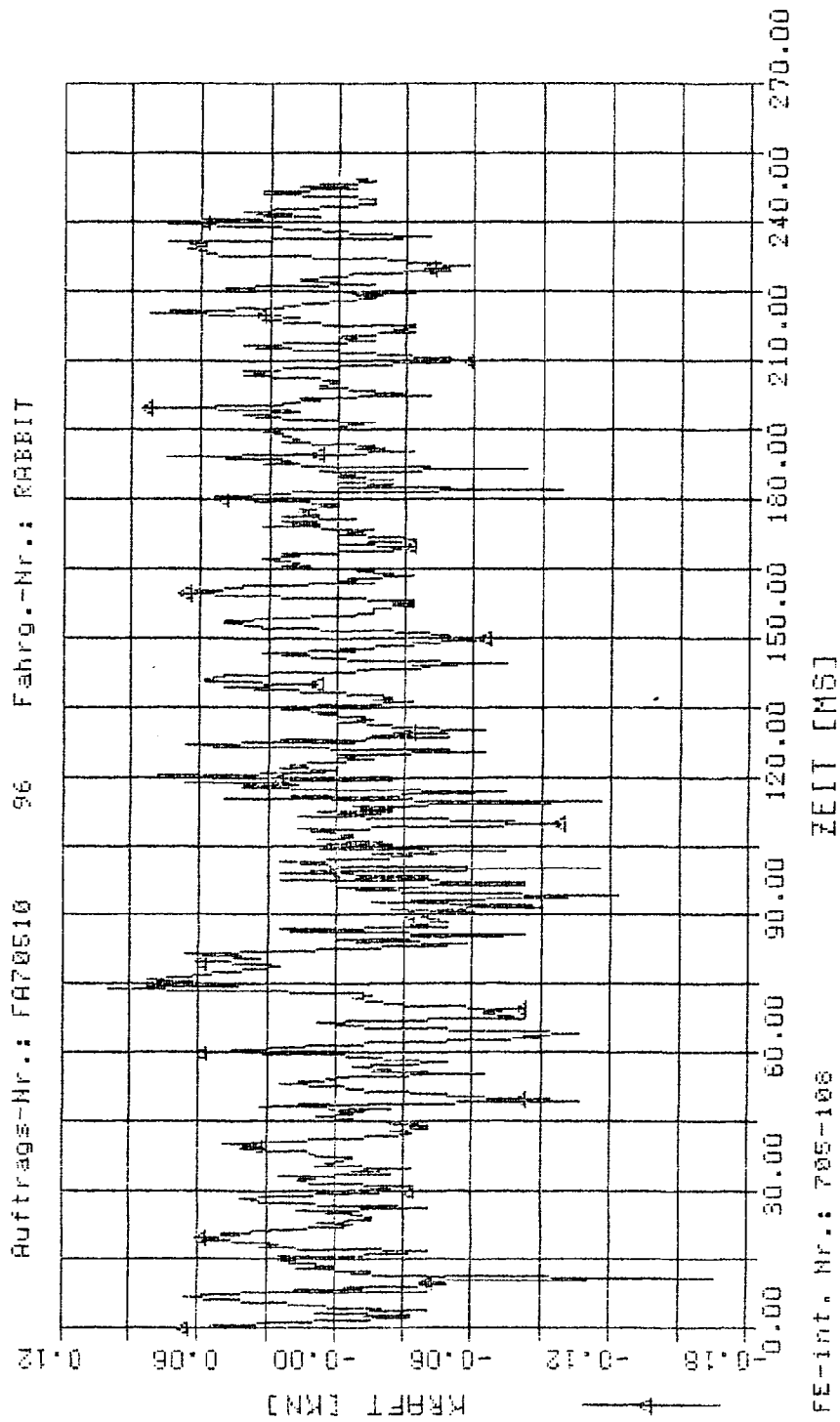


Mass-Stelle	UP	ber.	Extremum	t	3MS
		Groesse		Extr.	
BE03Z	V1	BE	g	29.034	82.50
					18.55





Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 96
 Mess-Stelle UP ber. Extremum t 3MS
 GU03BA Groesse Extr. 11.00 0.00
 V1 KR KN -1.65



VI GU03BA