

DOT 488

RESEARCH RABBIT (MIV) Modified Integrated Vehicle

Phase 1



VOLKSWAGENWERK
Aktiengesellschaft
WOLFSBURG

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Volume III/4 Side Impact

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Volume III/4

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/4

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 - B.2.1 Driver
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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

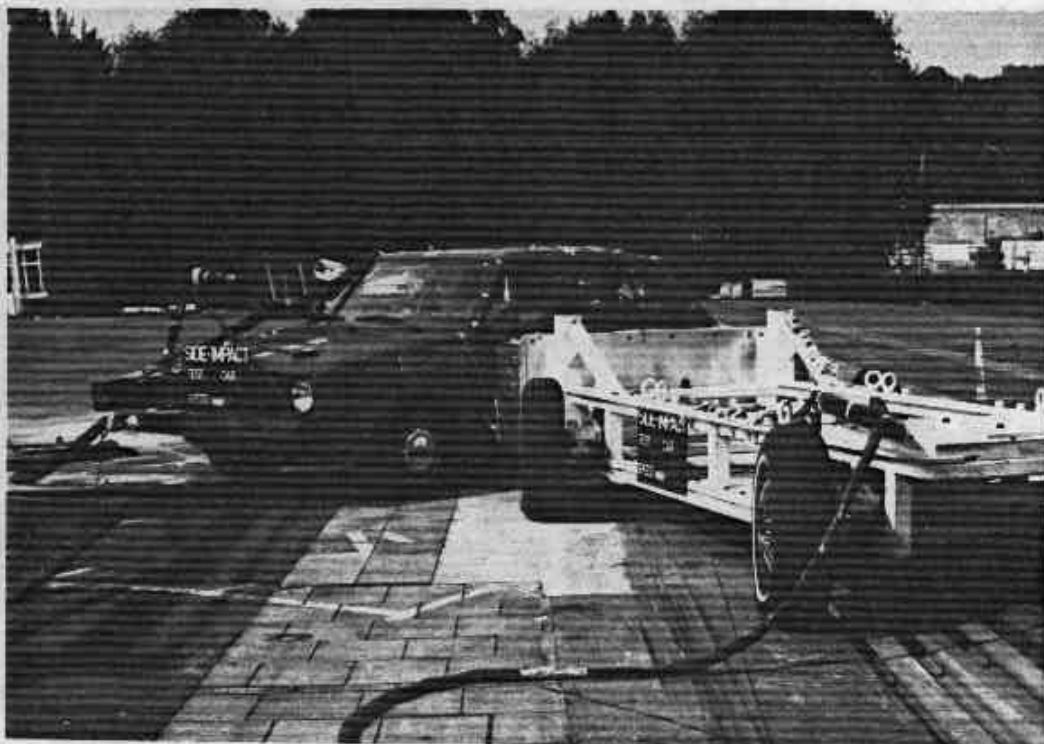
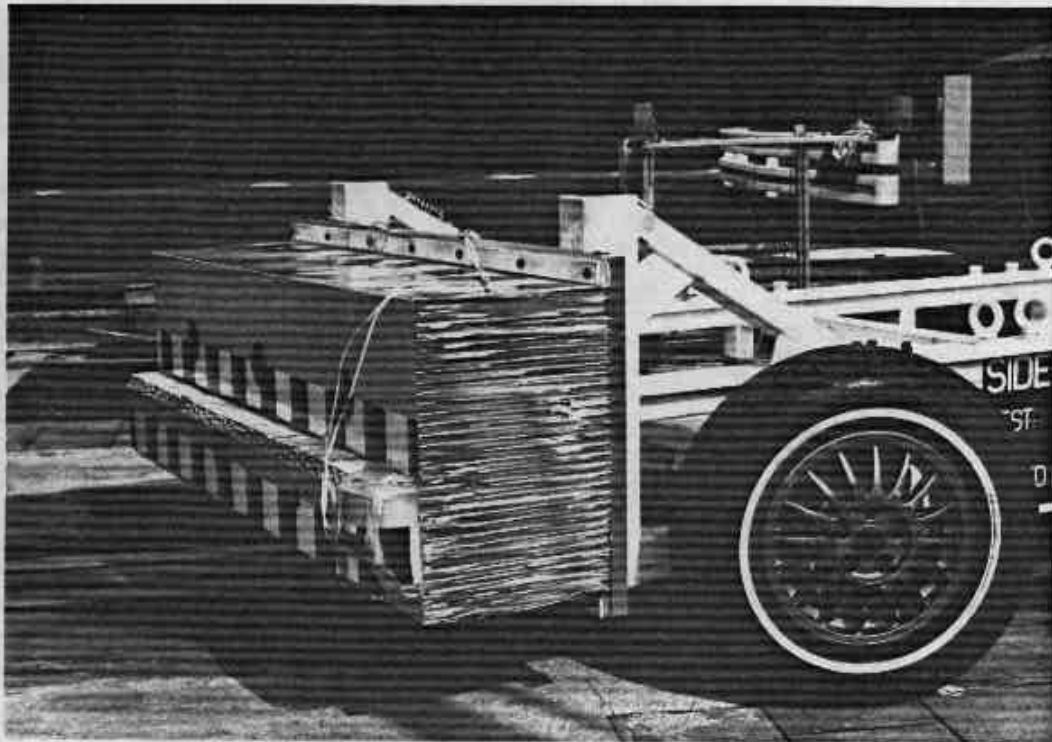
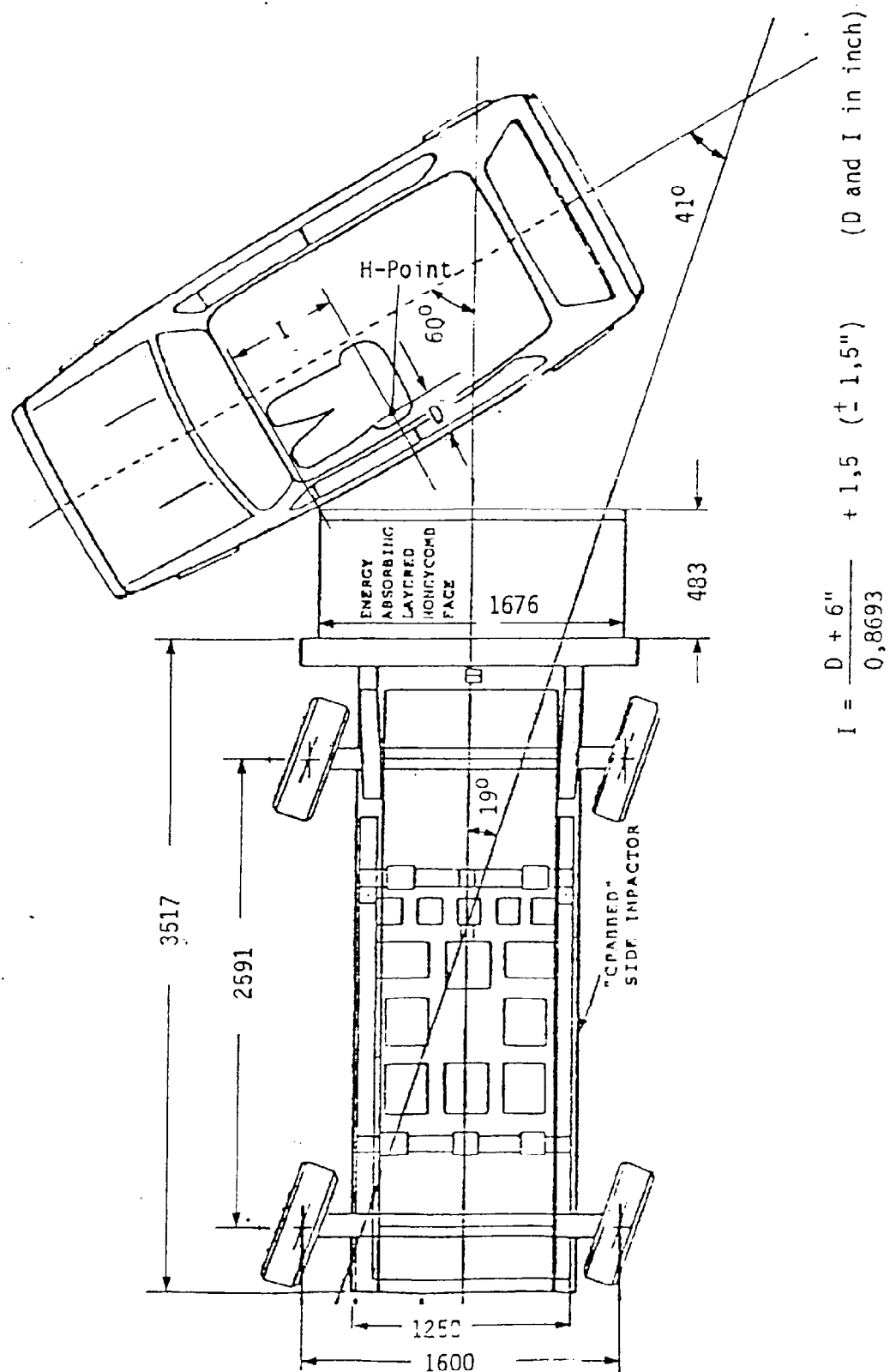


FIGURE 1 : 19° CRABBED BARRIER TEST DEVICE



FIGURE 2 : HSRI SIDE IMPACT DUMMY



Remarks: I = Impact-Point

D = Distance H-Point - Door Exterior

Figure 3: Test Configuration

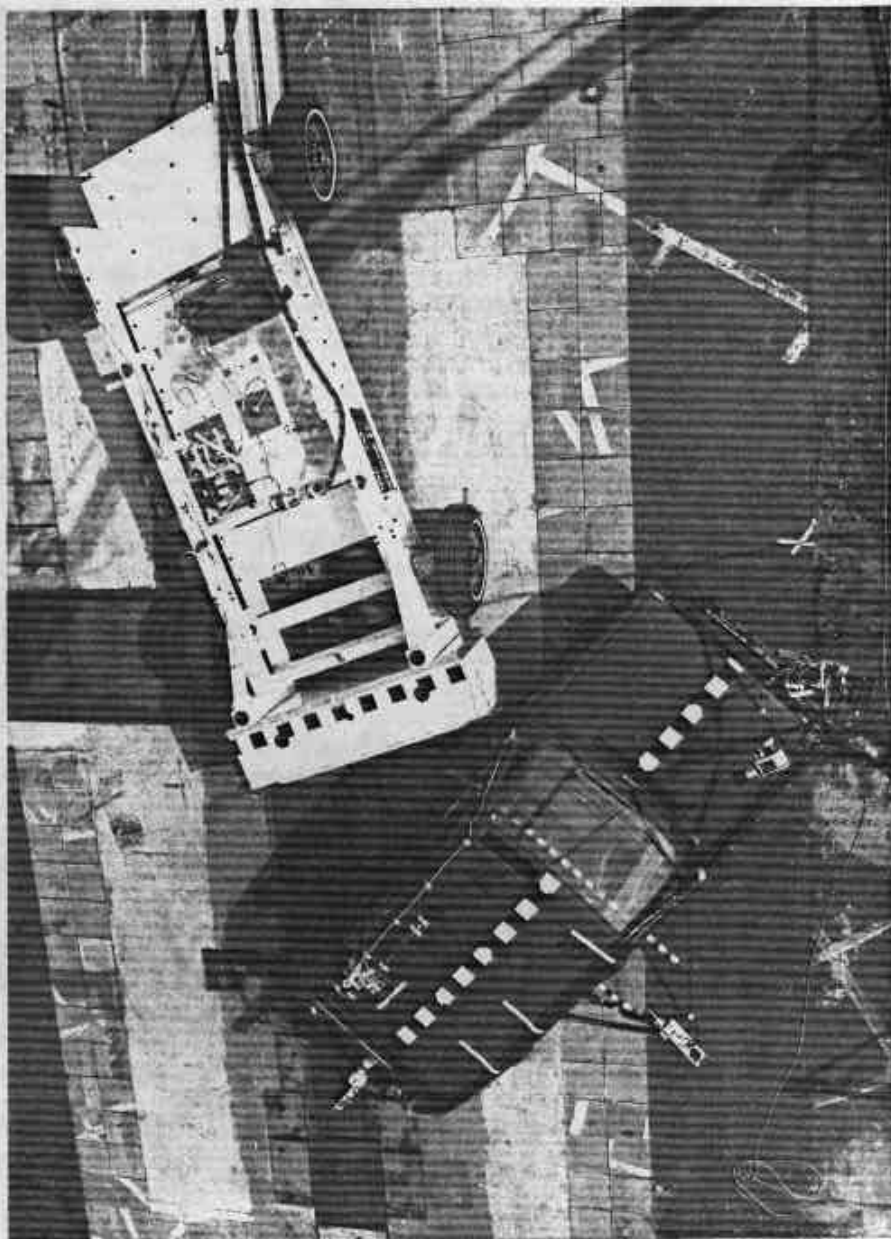


FIGURE 4 : SIDE IMPACT TEST CONFIGURATION
CRABBED BARRIER / VW RABBIT

Table List of Accelerometer - LocationVEHICLE

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 CL	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 CL	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

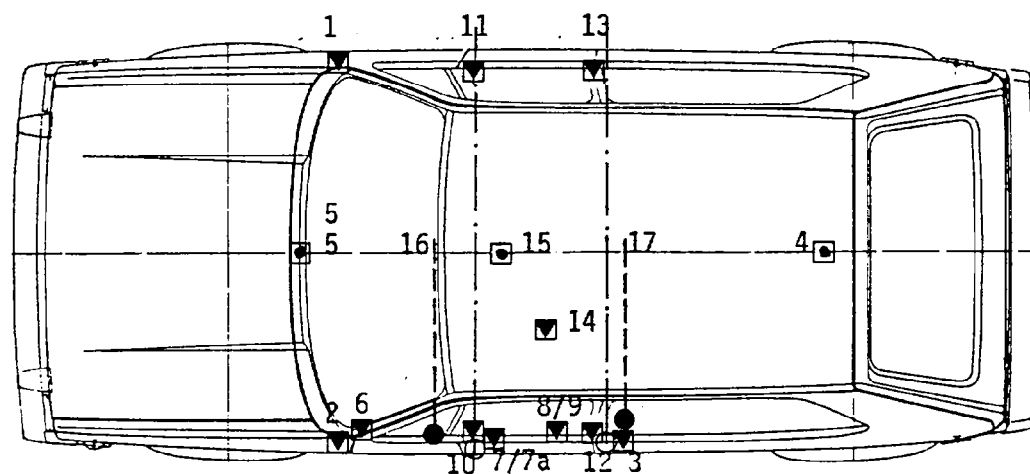
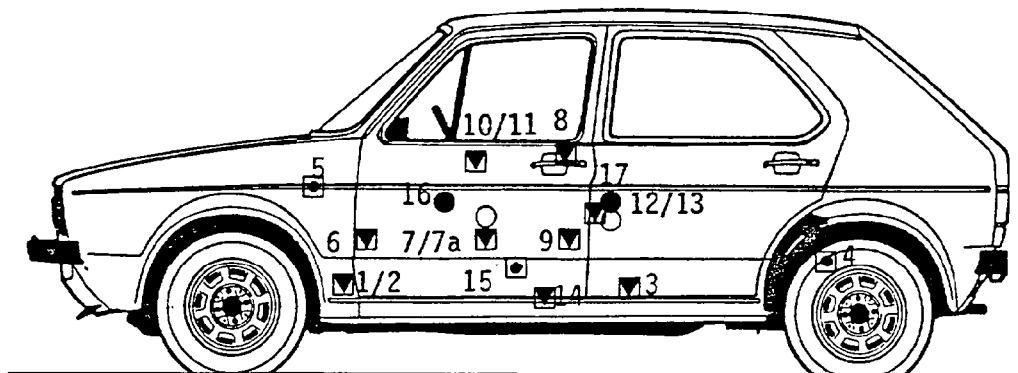
Location	Shortened Form	Direction
----------	----------------	-----------

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 [gmax]		
		X *	Y *	Z *	X	Y	Z
1	Occupant Compartment, right Front-Doorsill	2630	620	300		17.5	
2	Occupant Compartment, left Front-Doorsill	2630	-620	300		106.6	
3	Occupant Compartment, left Rear-Doorsill	1410	-560	290		168.1	
4	Rear Deck over Vehicle Centerline	910	0	440	18.1	25.1	13.2
5	Front Firewall over Vehicle Centerline	2890	0	650	16.8	6.9	7.0
6	Mid-front Edge of Left Front Door	2550	-620	457		-	
7	Middle of left Front Door	2060	-620	630		133.5	
8	Shoulder Contact Front Door	1775	-665	850		210.9	
9	Pelvis Contact Front Door	1840	-660	480		146.2	
10	Left Front Door on Windowsill, slightly forward of surrogate s	2050	-650	850		138.4	
11	Right Front Door on Windowsill, directly across from Nr. 10	2050	650	850		24.3	
12	Left B-Pillar near Door Lock	1480	-650	670		109.3	
13	Right B-Pillar across from Nr. 12	1480	650	670		43.3	
14	Underneath left Front Seat attached to Seat	1960	325	285		131.2	
15	Vehicle Center of Gravity				11.9	62.8	17.0
16	Displacement Transducer Front Door	2235	-	670		0.225m	
17	Displacement Transducer B-Pillar	1415	-	850	not available		

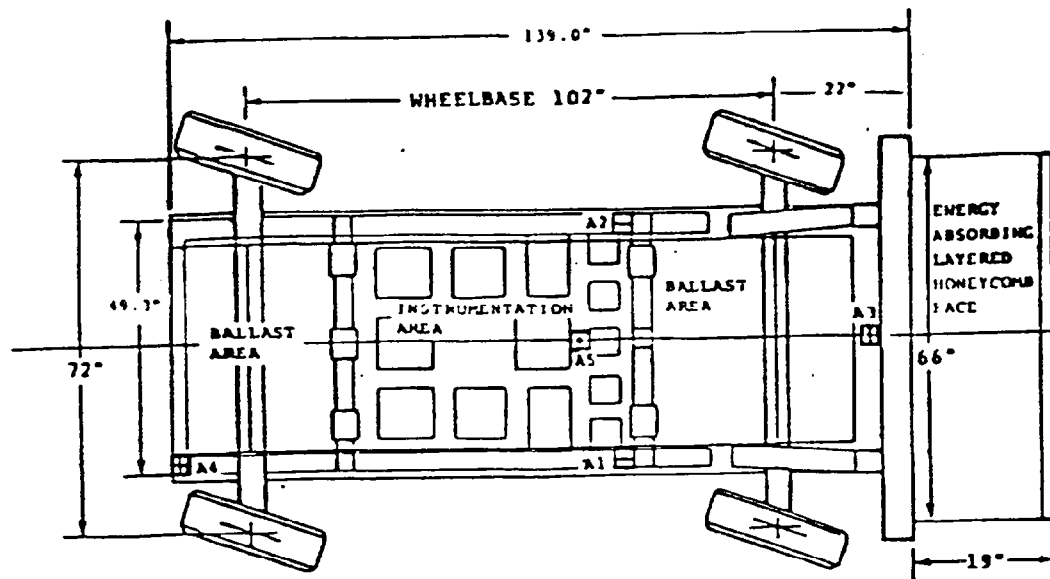
* Reference Points: X - Rear Bumper
Y - Vehicle Centerline
Z - Ground Level

Table 2 : Summary of Target Vehicle Instrumentation

TEST NO : 4

- 19 -

TEST NO : 4

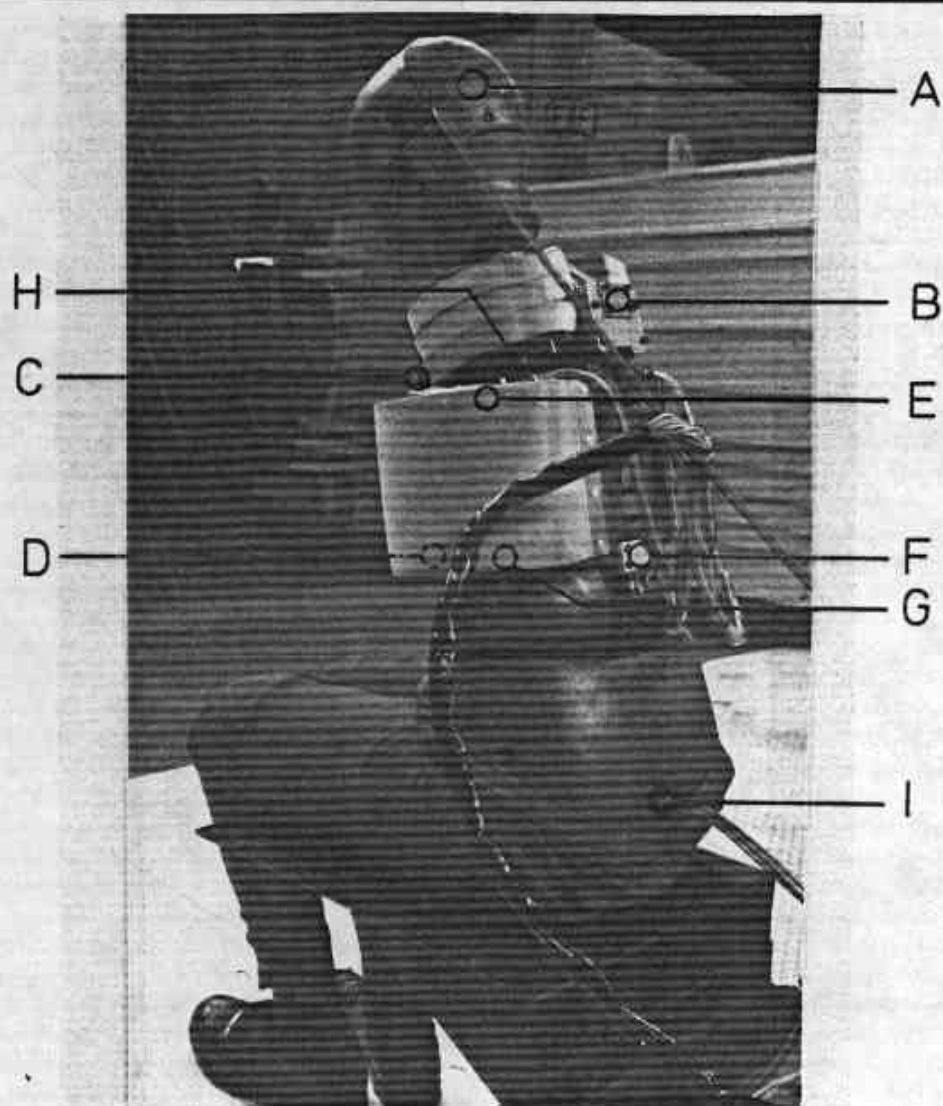


-  Axial Accelerometer, Longitudinal
-  Biaxial Accelerometer, Long., Lat.
-  Triaxial Accelerometer, Long., Lat., Vert.

No.	Accelerometer - Location	Coordinates [mm]			Results [G]		
		X	Y	Z	Long	Lat	Vert
A 1	Right Frame Rail	2134	584	508	15.6		
A 2	Left Frame Rail	2134	-584	508	13.2		
A 3	Front Crossmember at Centerline	3300	0	610	17.2		
A 4	Right rear vertical Frame Rail	228	560	407	18.5	30.2	
A 5	Side Impactor Center of Gravity	1727	0	305	23.3	16.8	18.8

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: 4 Test Date: 11.06.1981

Test Type: 60° Side Impact Simulation

Vehicle A: Side Impactor

Vehicle B: VW-Rabbit

Comments: Side Impactor "Crabbed" 190

Camera Symbols

- ☐ Pit
☐ Ground
☐ Barrier
☒ Overhead
☐ On-Board

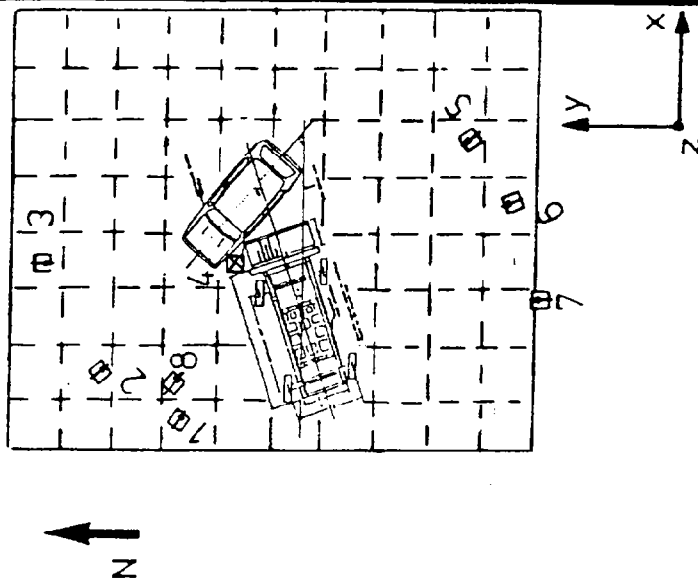
Frame Rate

1. 1000 fr/sec
 2. 25 fr/sec
 3. 400 fr/sec

Timing Light, Speed

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

Camera	Yes
Stills	
Movie	
Slides	
Polaroid	

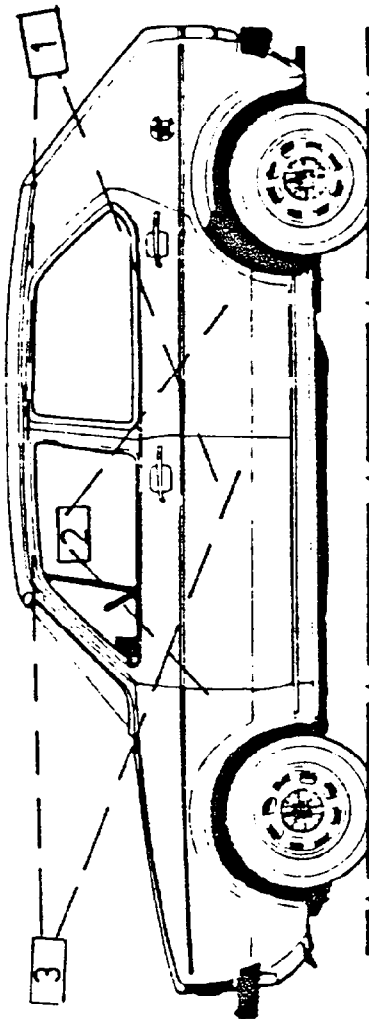


Loc. No.	Location	Field of View	Lens Size	Frm Rate	Tmng Spd	Real Fr.R.	Impact Dist-X	C. L. Dist-Y	Cam [m] Dist-Z
1	North Side -Parallel To Bullet	Overall of Both Vehicles (Locam)	16	3	10	337	-7.0	4.0	1.3
2	North Side -Parallel to Target	Close-up of Both Vehicles at Impact (Locam)	10	3	10	400	-3.0	4.5	2.2
3	North Side-Perpendicular to Bullet	Overall of Both Vehicles (Locam)	26	3	10	413	8.0	4.0	1.3
4	Overhead	Elevated - Looking Down at Impact Point (Photostatics)	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	334	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	340	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.: 4 Test Date: 11.06.1981
 Test Type: 60° Side Impact Simulation
 Vehicle A: Side Impactor
 Vehicle B: VW-Rabbit
 Comments: Side Impactor "Crabbed" 19°

Camera Symbols Frame Rate
☐ on-Board 1. 1000 fr/sec
☐ Ground 2. 400 fr/sec
☐ Overhead 3. Other fr/sec
 Timing Light, Speed
 1. 100 Hz (10msec/light)
 2. Other



Loc. No.	Location	Field of View	Lens Size	Frm Rate	Timng 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	1000			
2	Vehicle Right Front Door	Front Occupant Compartment (Photosonics)	8	1	1	1000			
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 4	
Test Vehicle		VW Rabbit	4-Door
Overall Length/Width (mm)		3923 154.41	1613 63.50
Test Weight by Wheel (kp)		LR 272	RR 259
		LF 341	RF 353
Total Weight (kp)		1225	2700
Wheelbase (mm)		2402	95.6
Longitudinal C.G. (from Center of Front Axle) (mm)		1041.19	
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")		375	
• Level 3 (26.0")		368	
• Level 2 (20.0")		391	
• Level 1 (12.0")		230	
Maximum Post-test Intrusion (mm)		376	829.2
OCCUPANTS			
Type		SID	SID
Location		Driver	Left Rear Pass.
Restraints		RA LAP	Pelvis Belt
INSTRUMENTATION			
Number of Data Channels		68	
Number of cameras (On Board)		3	

* With respect to bullet vehicle.

**At mid-point of left front door.

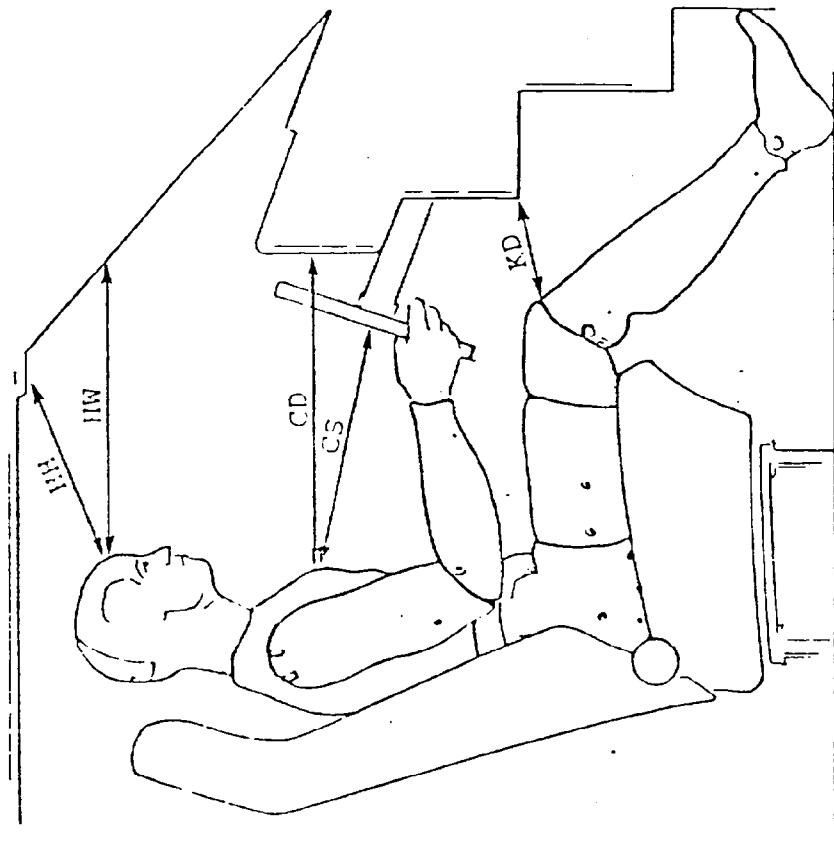
Table 4 : Crash Test Summary for Side Impactor

VEHICLE DATA		TEST 4	
Test Vehicle		19 ⁰ Crabbed Side Impactor	
Overall Length/Width (mm)		4000	/ 2155
Test Weight by Axle (kp)		LR 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)		40.05	
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)		370	
• Row B (Mod-Stack Level)		230	
• Row A (Bumper Level)		285	
<u>OCCUPANTS</u>			
Type		-	
Location		-	
Restraints		-	
<u>INSTRUMENTATION</u>			
Number of Data Channels		10	
Number of Cameras (Ground Based)		7	

Test No.: 4 Vehicle: 4 LF 341 (kp) RF 353 (kp)
 Test Date: 11.06.81 Total Test Wt. 1225 (kp) LR 272 (kp) RR 259 (kp)

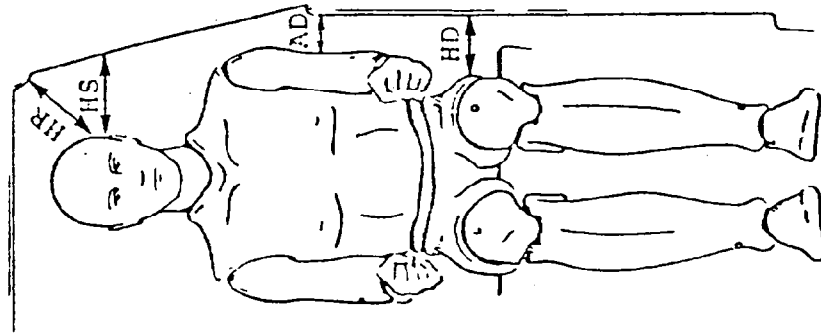
HEAD RESTS - up down other none
 FRONT SEAT - forward midpoint rearward latched welded
 FRONT SEAT TILT - forward midpoint back other 25° none
 REAR SEAT - in place removed
 STEERING WHEEL - up midpoint down not adjustable
 SUN VISORS - up down removed
 GLOVE COMPARTMENT - locked closed none
 SEAT BELT - 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



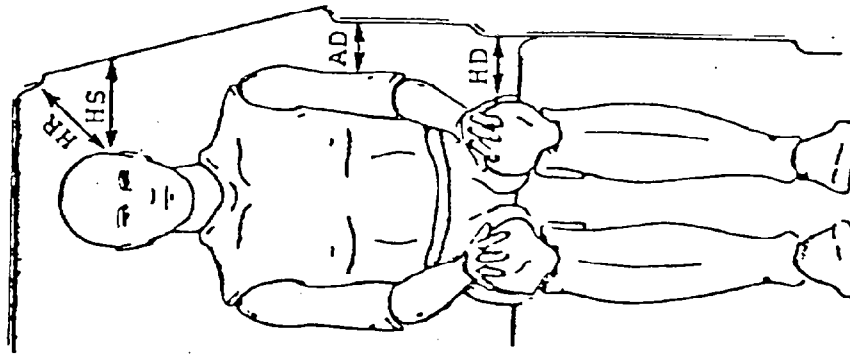
HH-	415	16.3
HW-	545	21.4
CD-	540	21.2
CS-	330	13.0
KD-	90	3.5

(ALL DIMENSION IN MM)

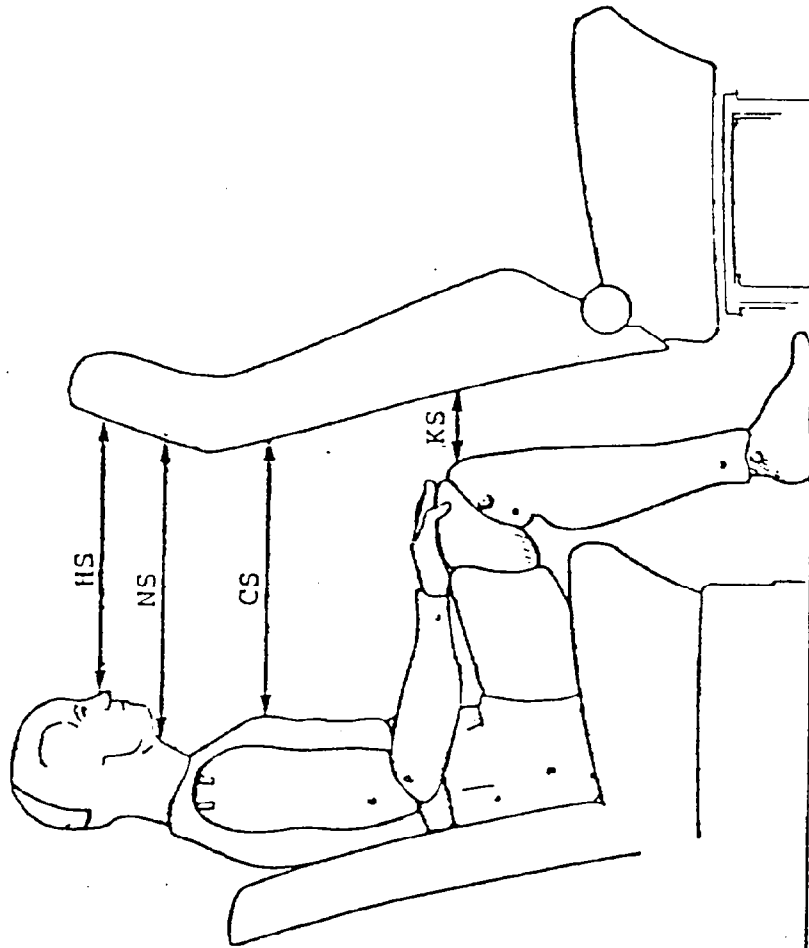


HR-	150	5.9
HS-	190	7.5
AD-	90	3.5
HD-	150	5.9

Table 6: Driver Pre-Test Position



HR	108	4.2
HS	215	8.5
AD	150	5.9
HD	190	7.5



HS	475	18.7
NS	500	19.7
CS	412	16.2
KS	75	2.9

Table 7 : Rear Passenger Pre-Test Position

Table 8 : Vehicle Pre- and Post-
Test Position

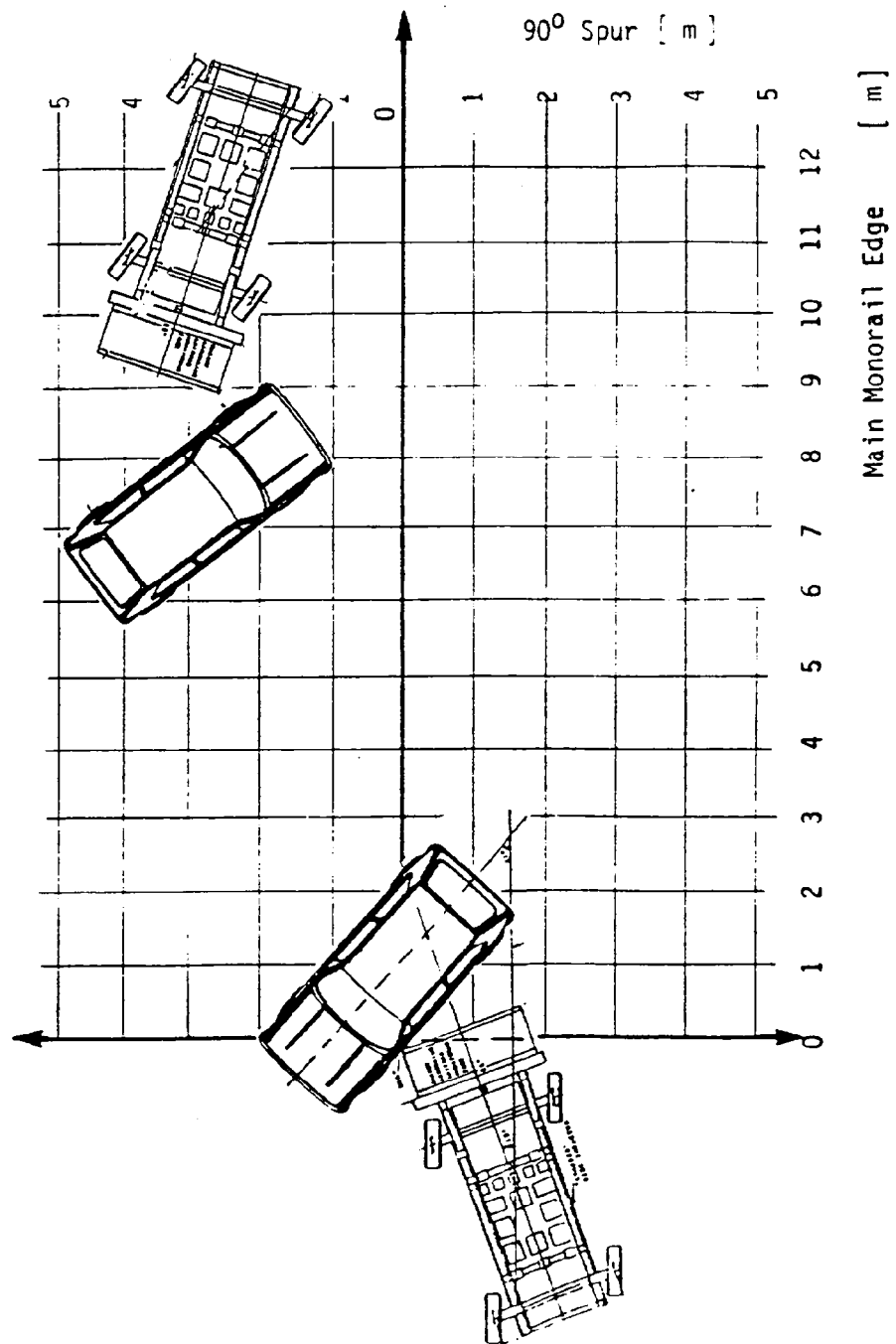


Table 9 : Summary of Post-Test Observations

VEHICLE: VW Rabbit 4

Test No. (Moving Test Device) 4

Dummy Contact Points:	<u>Left Front</u>	<u>Left Rear</u>
Head	<u>no Contact</u>	<u>Contact at C-Pillar and Roof-Line</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. Left Inner-Door tore out from Outer-Door.

Seat Belt Anchorages : Left Seat Frame damaged, but Seat Anchorages remained intact. Seat Legs and - 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.

Driver-Dummy - no damage

Left Rear-Dummy - Damper, Damper-Frame and Potentiometer bended. Leather tore up from Spine on the left Side.

TEST NO. 4TEST DATE 11.06.1981TEST CONFIGURATION:

Target Vehicle VW-Rabbit 4-Door Speed 0 [mph]
 Bullet Vehicle 19⁰ Crabbed Side Impactor Speed 40.05 [mph]
 Impact Location behind Front Axle 650 [mm] Angle 60 [deg]

PASSENGER: D R I V E RHEAD RESPONSE:Peak a_R 112.84 [g]Impacted Objekt noneHIC 593.52Time T1 49 [ms] T2 81 [ms]CHEST RESPONSE:

Location	[g]	$\geq 3ms$ [g]	SI	Δv_y [mph]	Imp. Time [ms]	Time a-max [ms]
Upper Sternum (X)	77.29	54	--	---	33	75
Lower Sternum (X)	48.94	37	--	---	33	74.5
LUR (Y)	114.94	96	--	25.39	30	42
LLR (Y)	112.82	87	--	22.10	28	42
RUR (Y)	68.17	62	--	19.42	35	47
RLR (Y)	107.84	90	--	27.14	37	44.5

CHEST DEFLECTION: Damper - DY 35 [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)	101.41	102.56	84	925	31.61	30	45.5
Lower Thorax (T12)	115.38	115.82	114	1020	27.61	30	42.5

PELVIS RESPONSE:Pk a_R [g] 119.59 SI 776 $\geq 3 ms$ [g] 88.08 Impact Time [ms] 25IMPACT TIME:Shoulder 30 msec ; Pelvis 30 msec

Table 10: Side Impact Dummy Test Response Summary

TEST NO. 4TEST DATE 11.06.1981TEST CONFIGURATION:

Target Vehicle VW Rabbit 4-Door Speed 0 [mph]
 Bullet Vehicle 19⁰ Crabbed Side Impactor Speed 40.05 [mph]
 Impact Location behind Front Axle 650 [mm] Angle 60 [deg]

PASSENGER: L E F T R E A RHEAD RESPONSE:

Peak a_R 160.01 [g] Impacted Objekt C-Pillar and Roof-Line
 HIC 734.72 Time T 1 72 [ms] T 2 101 [ms]

CHEST RESPONSE:

Location	[g]	$\geq 3ms$ [g]	SI	Δv_y [mph]	Imp. Time [ms]	Time a-max [ms]
Upper Sternum (X)	59.22	42	--	---	68	90.5
Lower Sternum (X)	88.57	74	--	---	65	75
LUR (Y)	95.76	70	--	30.35	63	77
LLR (Y)	125.94	85	--	19.43	60	80.5
RUR (Y)	75.28	70	--	23.51	63	77
RLR (Y)	103.61	92	--	25.69	60	77.5

CHEST DEFLECTION: Damper - DY 44.5 [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)	113.67	118.59	104	826	24.75	39	85.5
Lower Thorax (T12)	87.29	92.43	83	712	26.59	39	75

PELVIS RESPONSE:

Pk a_R [g] 123.93 SI 1099.4 $> 3 ms$ [g] 112.4 Impact Time [ms] 37

IMPACT TIME, :

Shoulder 58 msec ; Pelvis 60 msec

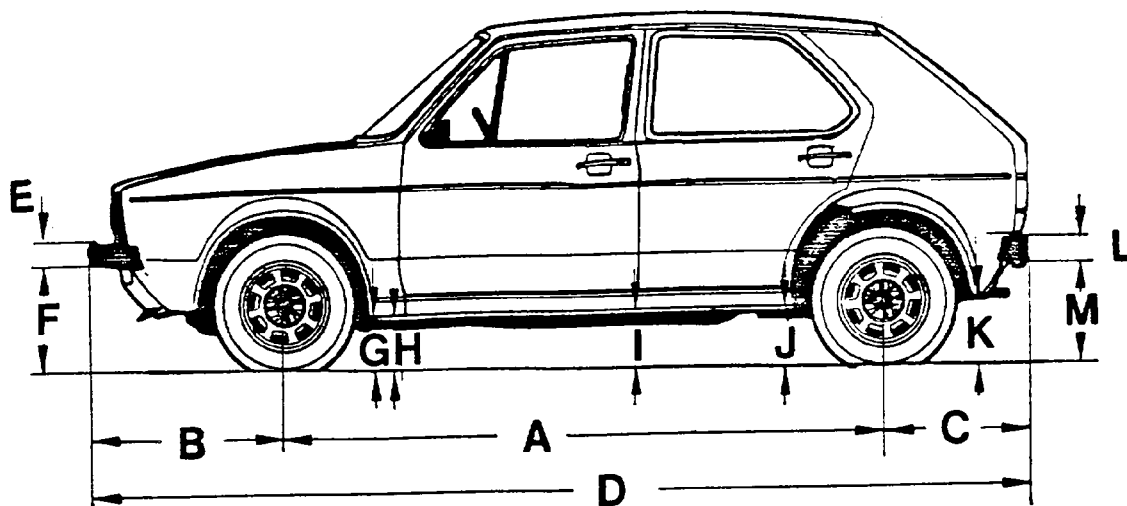
Table 11: Side Impact Dummy Test Response Summary

TEST NO. 4 TEST DATE 11.06.1981

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	3.82	3.86	2390 38.1/ 46.3	7.0470	749.49	3.75	7.50	2.0000
Left Lower Rib LLR	3.68	3.43	1945 37.5/ 46.3	6.9538	869.17	5.00	16.25	3.2500
Upper Thorax T 1 Y	3.90	4.30	3404 41.9/ 59.4	7.0988	1222.0	6.25	14.37	2.3000
Lower Thorax T 12 Y	4.01	4.13	2949 38.1/ 56.9	7.1728	1226.5	5.63	16.25	2.8889

TABLE 12 : AIS AND COEFFICIENTS



Static Measurement Front Door = 238 mm

Rear Door = 343 mm

	PRE - TEST	POST - TEST	Δ CHANGE
A	2402	2367.5	-34.5
B	825	820	- 5
C	700	690	-10
D	3927	3867.5	-49.5
E	125	125	0
F	385	405	20
G	190	135	- 5
H	160	187	27
I	155	173	18
J	153	180	27
K	190	200	10
L	126	126	0
M	295	233	-12

Table 13: Pre - and Post - Test Measurements

Vehicle High

(mm)

AREA OF THE MEASURE POINTS

Level of Measure

(in)

(mm)

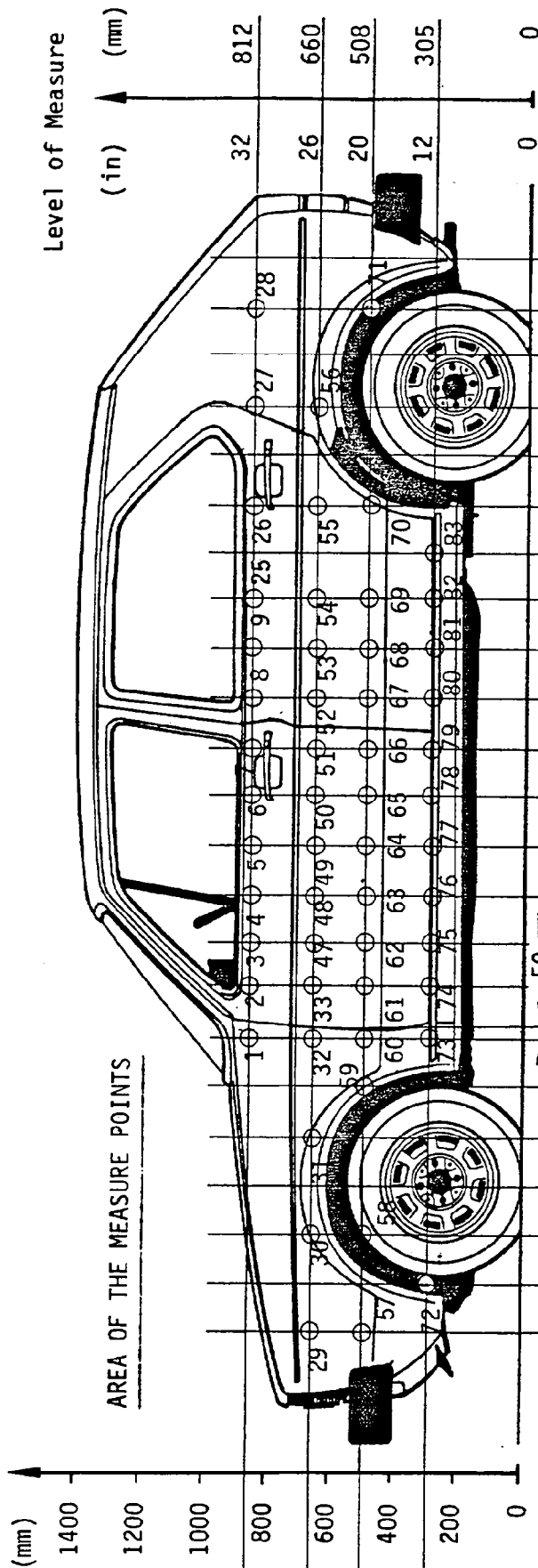
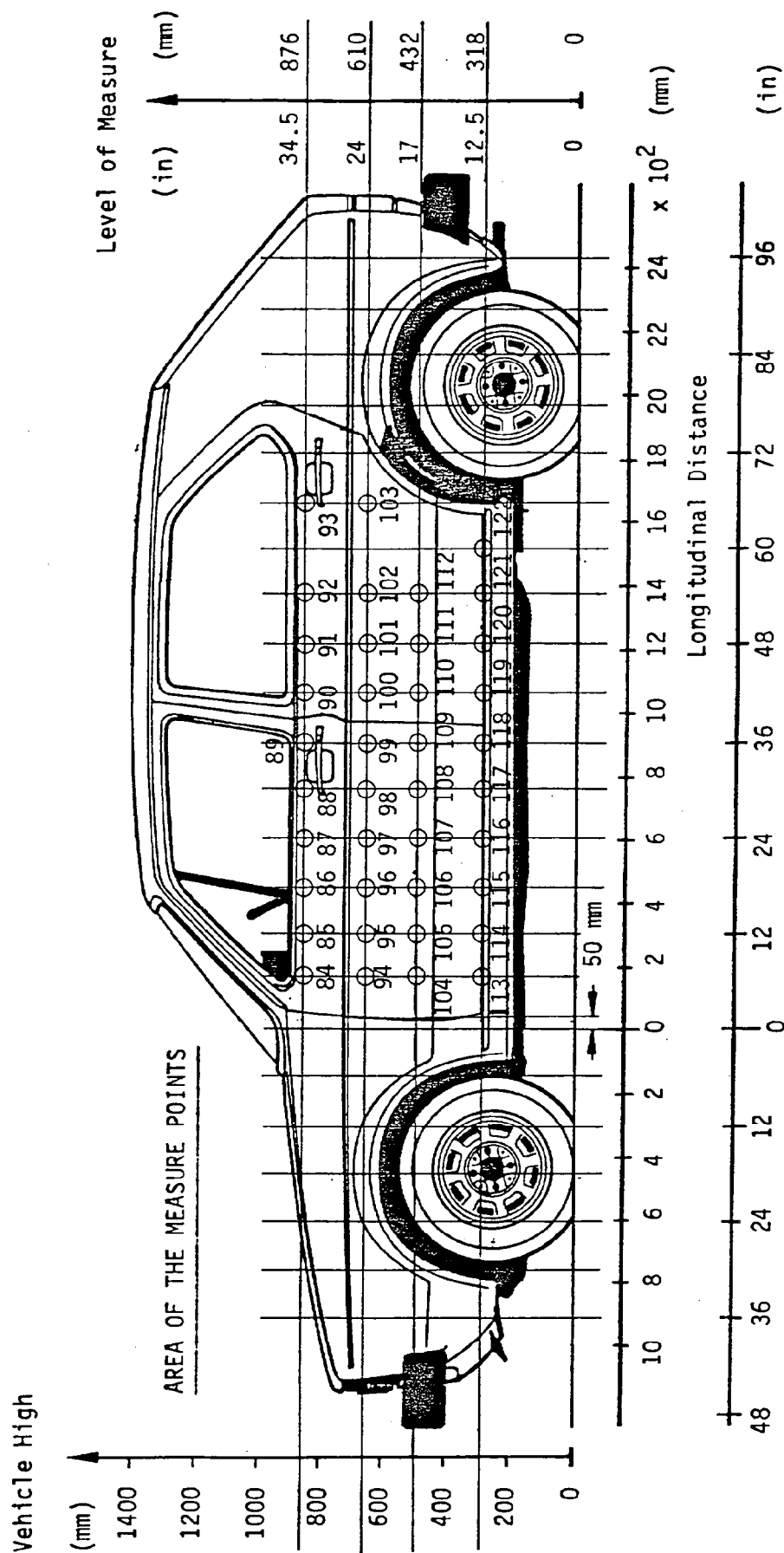


Table 14 : Exterior Static Crush for VW Rabbit

TEST NO : 4

Location	Height [mm]	Zero Distance Located at Door [mm]				
		(Front)	(Rear)			
Window-Still	812	762 (914 x)	762	1981	2286	2286
Bulb- Hood	660	762	1372	1524	1676	1829
Mid-Door	508	762	1220	1524	1676	1829
Rear-Still	305	762	1220	1524	1676	1829

• All heights measured above ground level.



TEST NO : 4 VEHICLE NO : 705 110

Figure 11: Vehicle Measurement Side (Interior)

Table 15: Interior Static Intrusion for VW - Rabbit

TEST NO: 4

Zero Distance Starting at Door [mm]

Location	Height [mm] *	0	152	305	457	610	762	914	1067	1220	1372	1524	1676
Windowsill Level	876	-	47	117	179	236	282	327	376	303	227	-	77
Mid-door Level	610	-	71	154	222	277	322	351	328	273	215	-	105
Bullet Vehicle Bumper Level	432	-	100	172	244	247	280	298	264	178	-	-	-
Doorsill Level	318	-	72	95	132	152	177	200	127	103	-	-	-

* Heights measured above ground level.

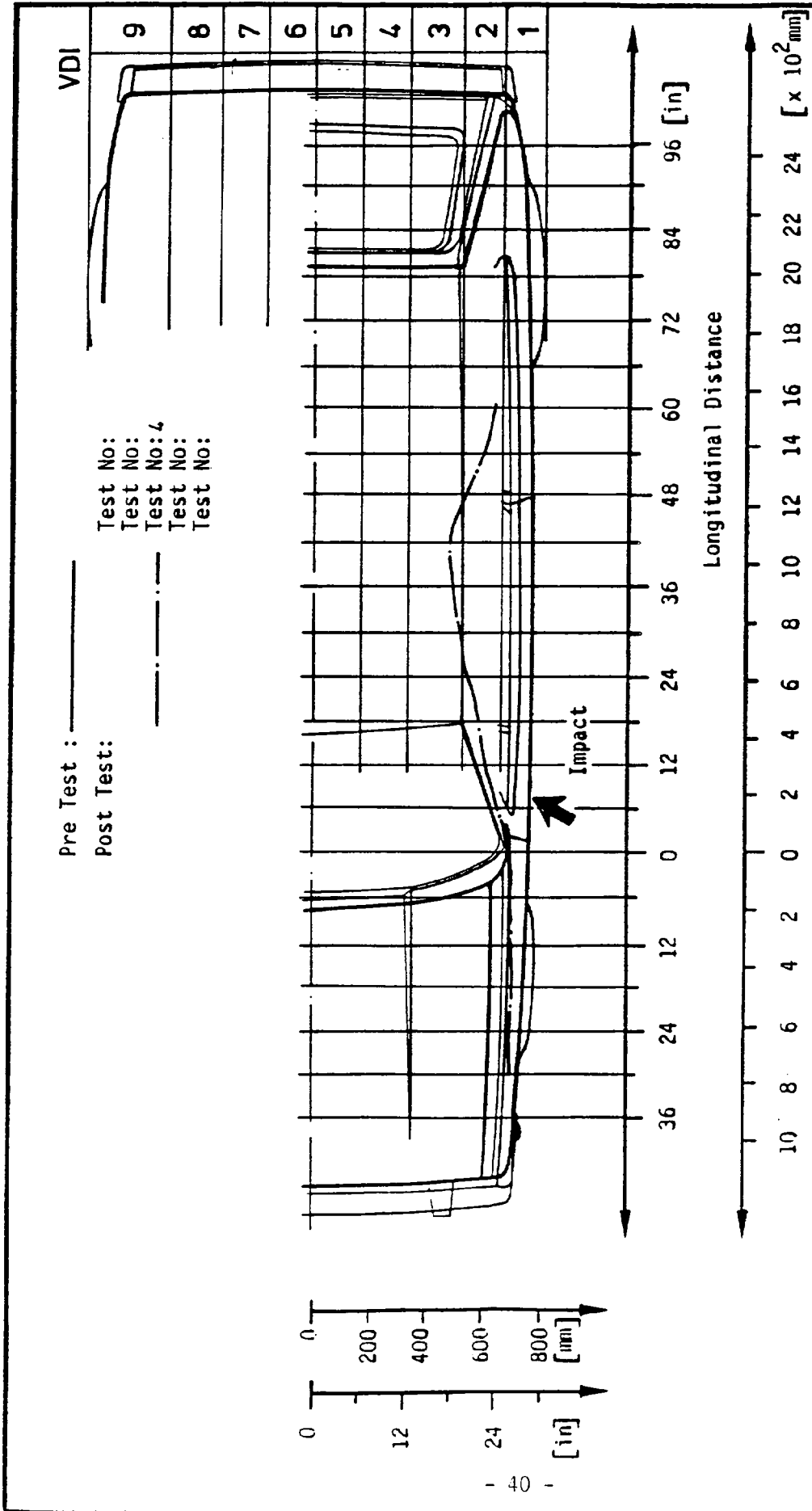


Table 16: Pre - and Post - Test Exterior Profiles at 305 mm above Ground Level

Pre Test : _____

Post Test: _____

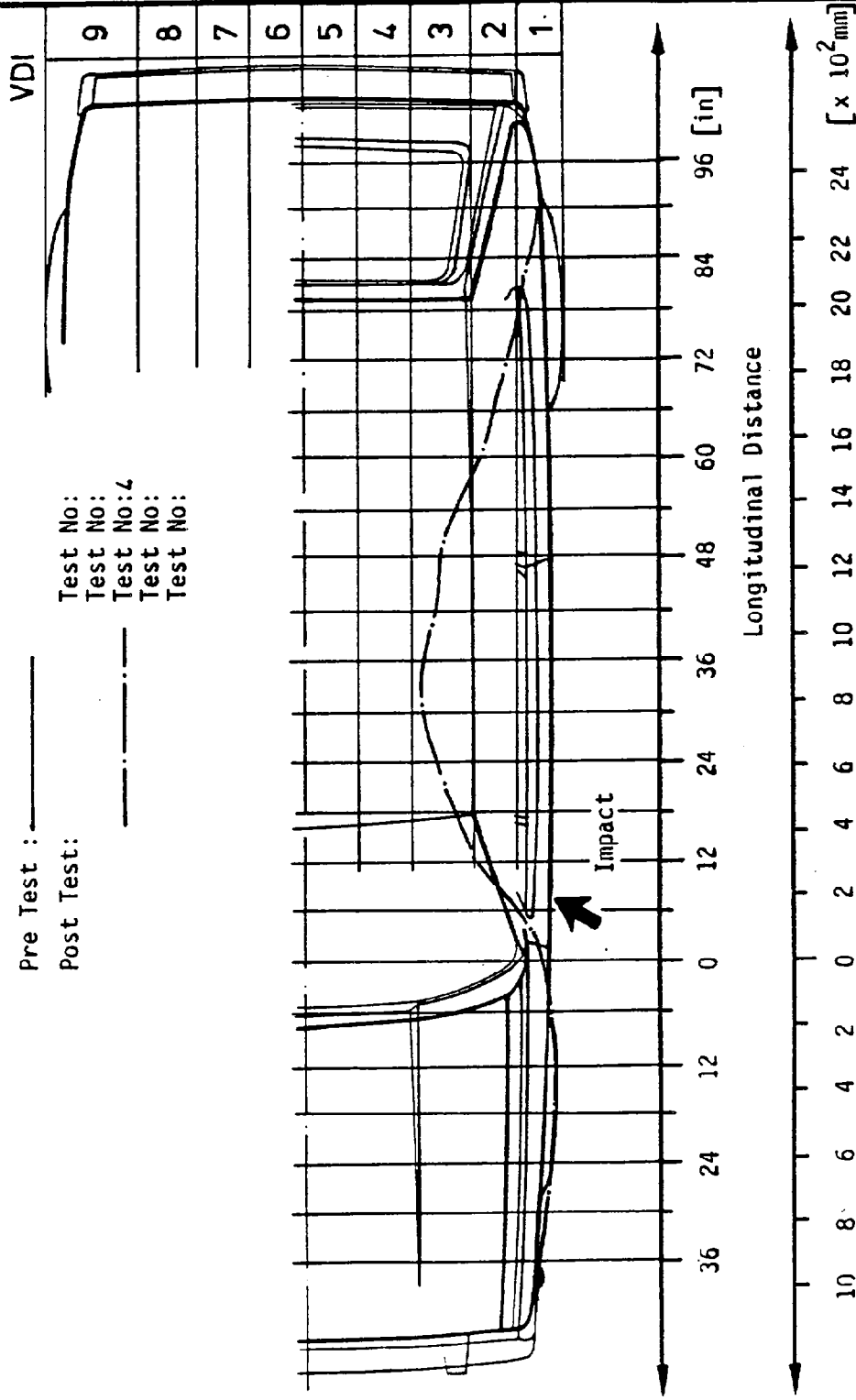
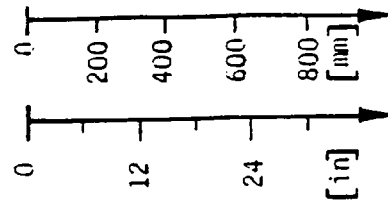
Test No: _____

Test No: _____

Test No: 4

Test No: _____

Test No: _____



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

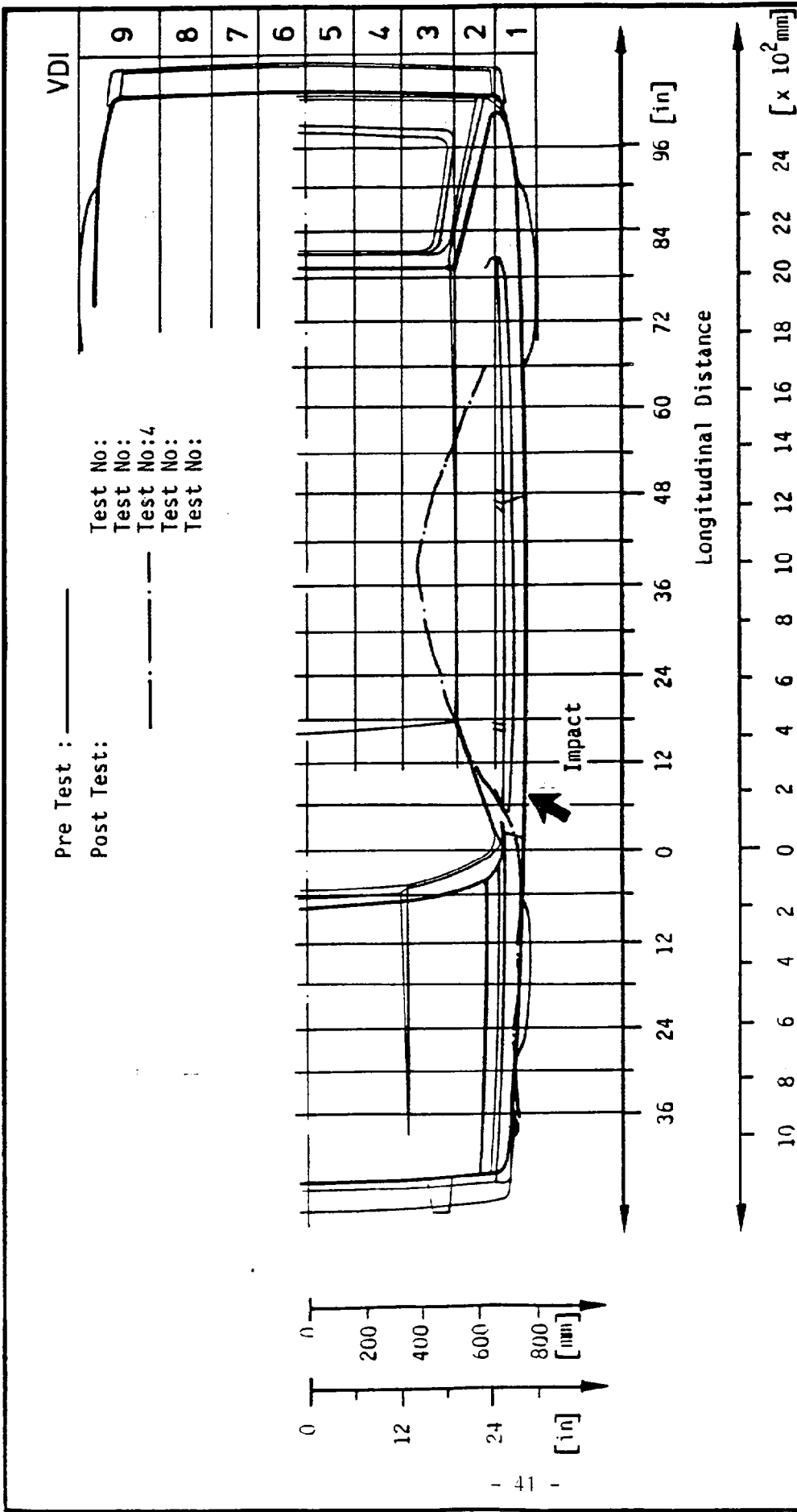


Table 18: Pre - and Post - Test Exterior Profiles at 660 mm above Ground Level

Pre Test : _____
 Test No: _____
 Post Test: _____
 Test No: _____
 Test No: 4
 Test No: _____
 Test No: _____

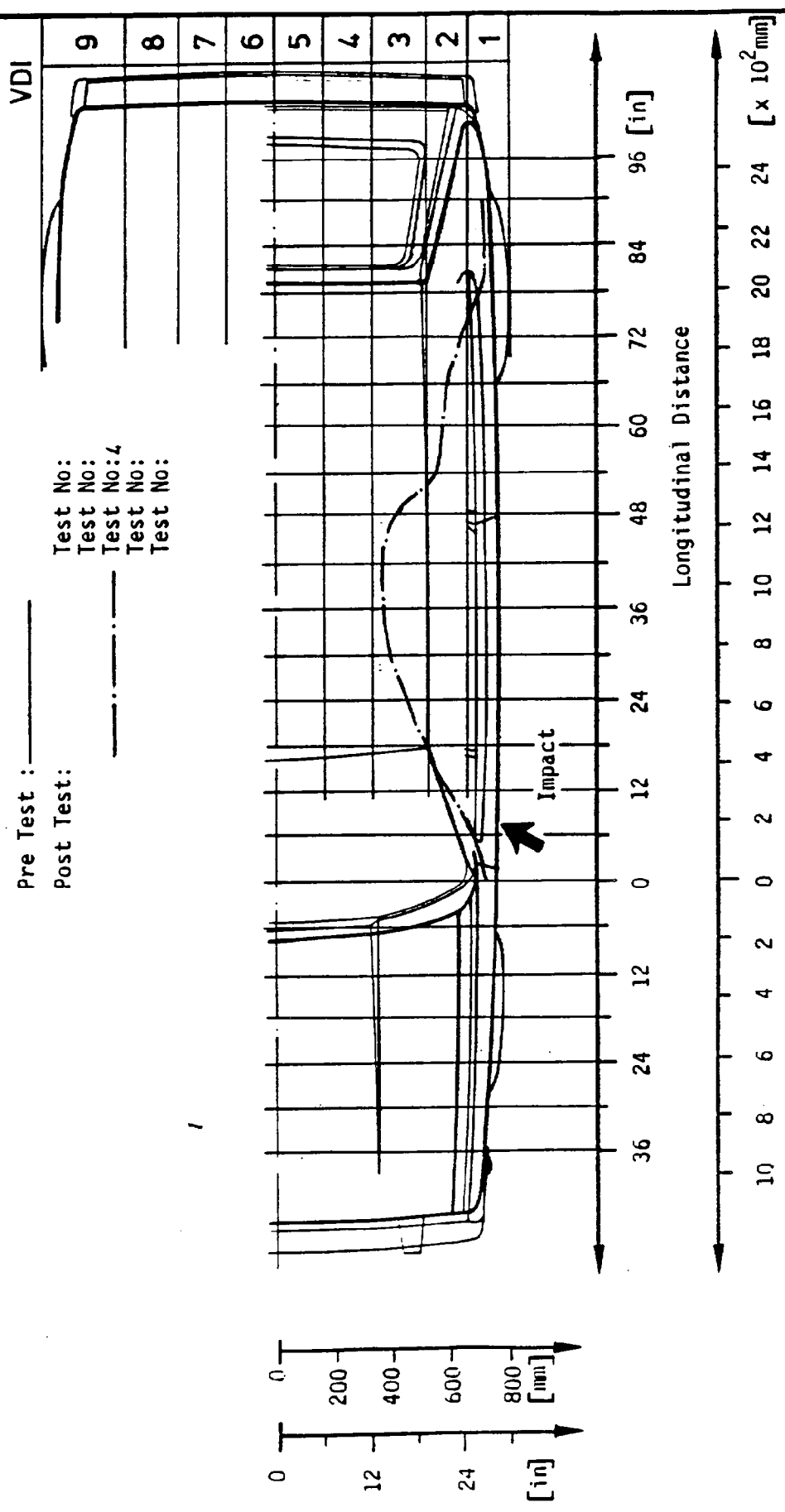


Table 19: Pre - and Post - Test Exterior Profiles at 812 mm above Ground Level

Pre Test : _____
 Post Test: _____
 Test No: _____
 Test No: 4
 Test No: _____
 Test No: _____

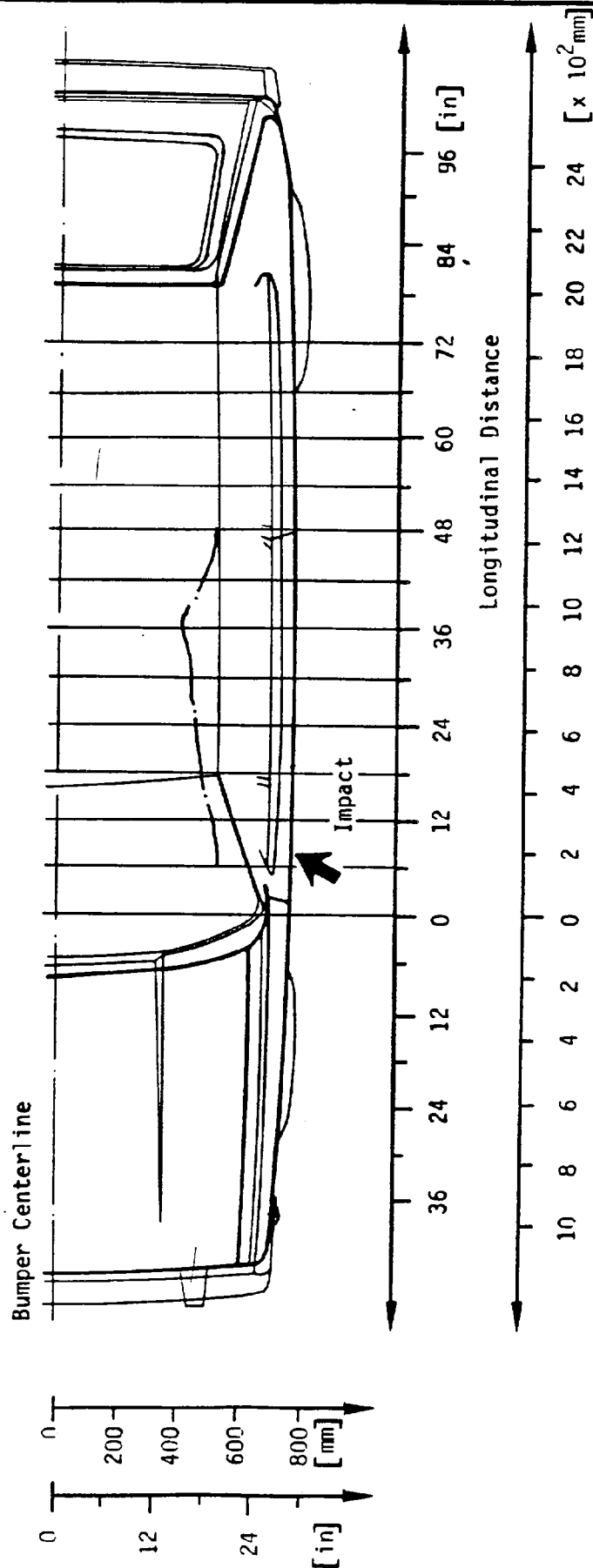


Table 20: Pre - and Post - Test Interior Profiles at 318 mm above Ground Level

Pre Test : _____
 Post Test: _____
 Test No: _____
 Test No: _____
 Test No: 4
 Test No: _____
 Test No: _____

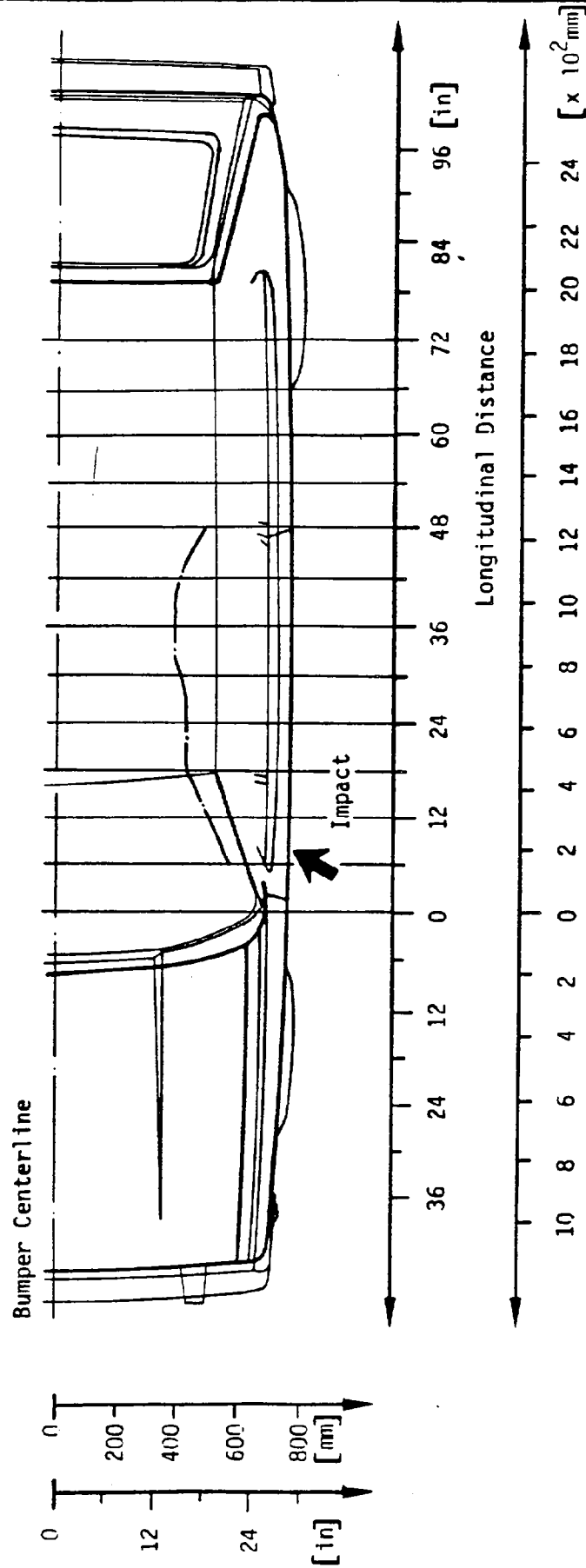


Table 21: Pre - and Post - Test Interior Profiles at 432 mm above Ground Level

Pre Test : _____
 Post Test: _____
 Test No: _____
 Test No: _____
 Test No:4
 Test No: _____
 Test No: _____

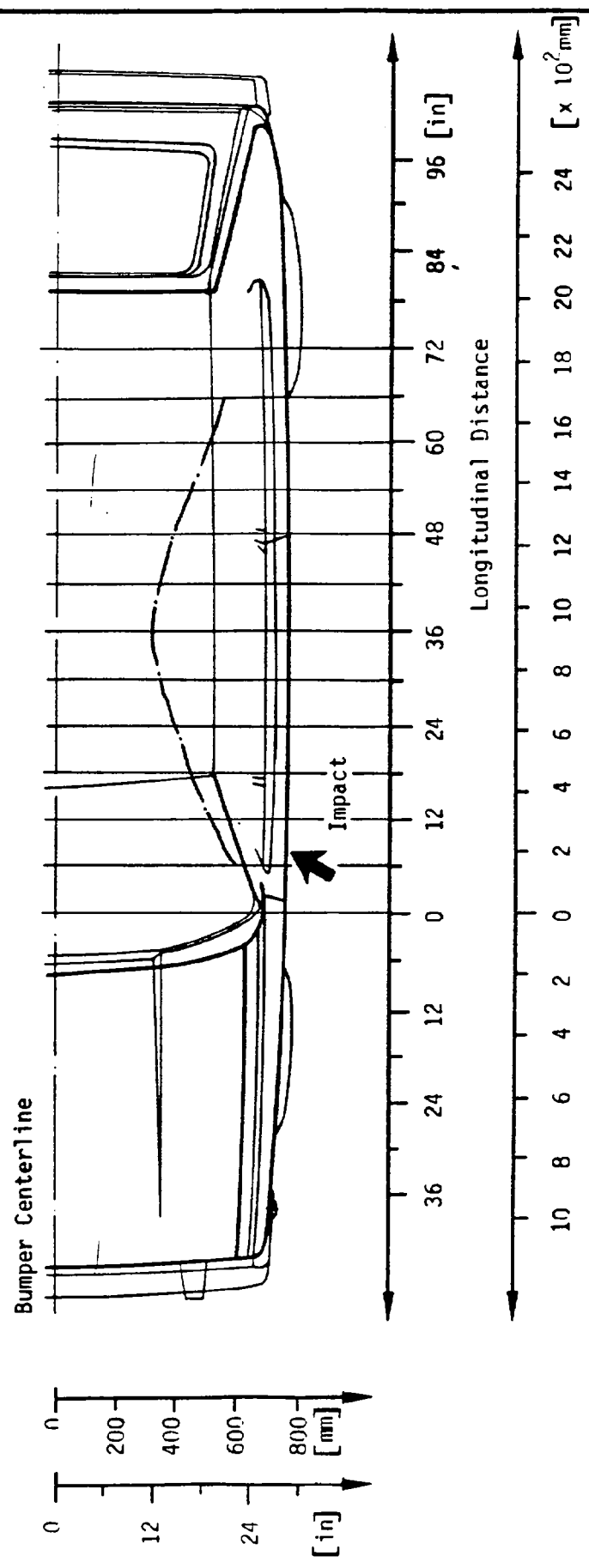


Table 22: Pre - and Post - Test Interior Profiles at 610 mm above Ground Level

Pre Test : _____
 Post Test : _____
 Test No: _____
 Test No: _____
 Test No: 4
 Test No: _____
 Test No: _____

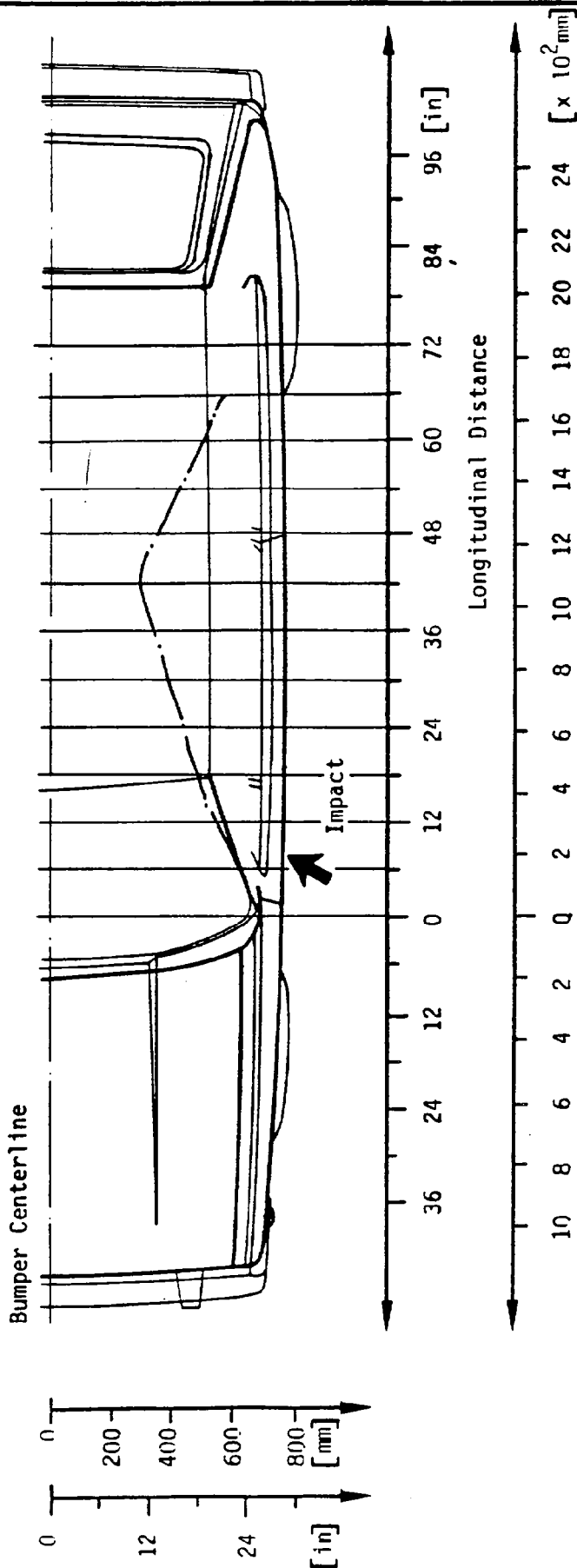


Table 23: Pre - and Post - Test Interior Profiles at 876 mm above Ground Level

TEST NO : 4

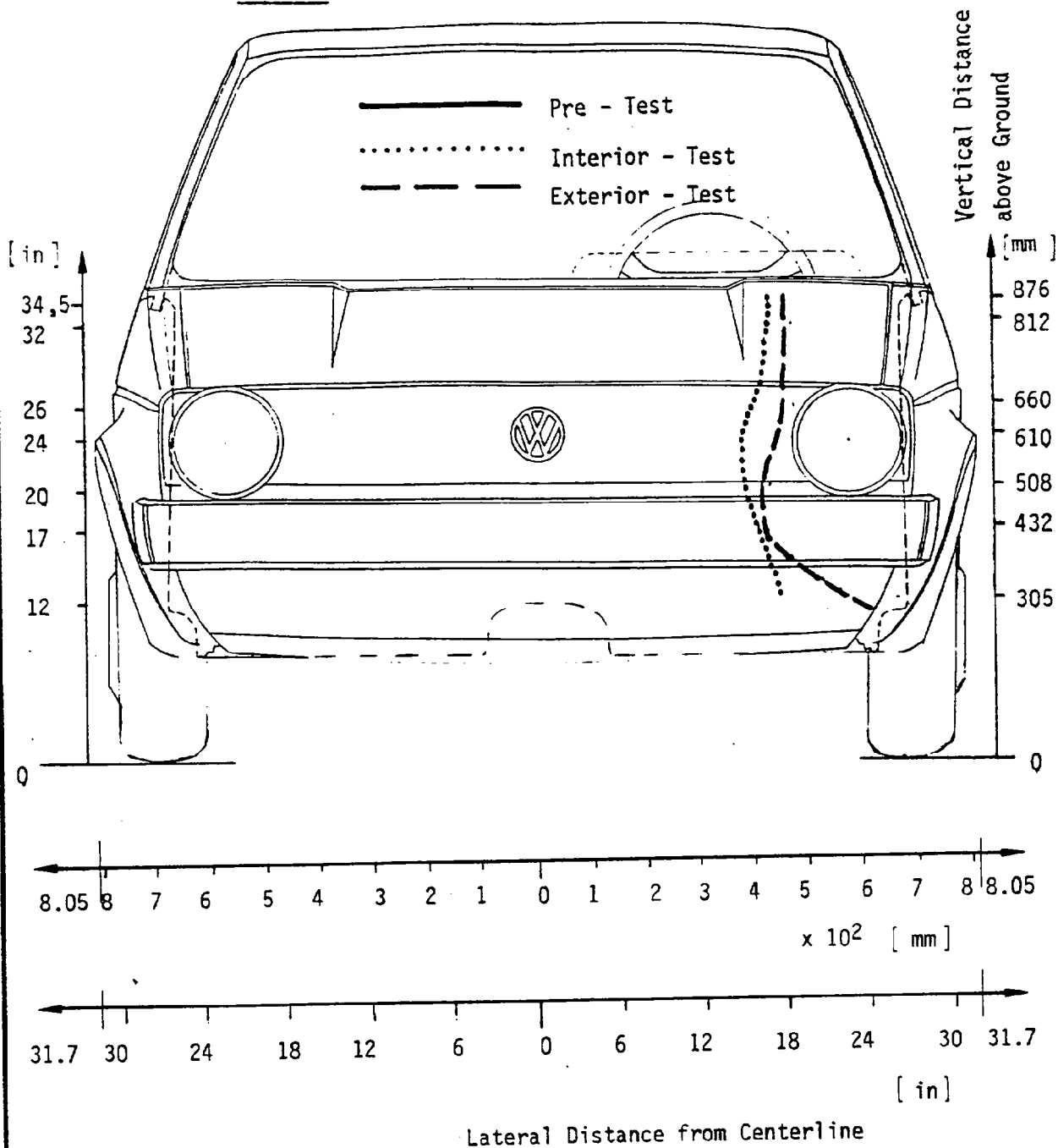


FIGURE 12 : EXTERIOR AND INTERIOR STATIC PROFILES AT THE
LONGITUDINAL DISTANCE 610 MM FROM DOOR

TEST NO: 4

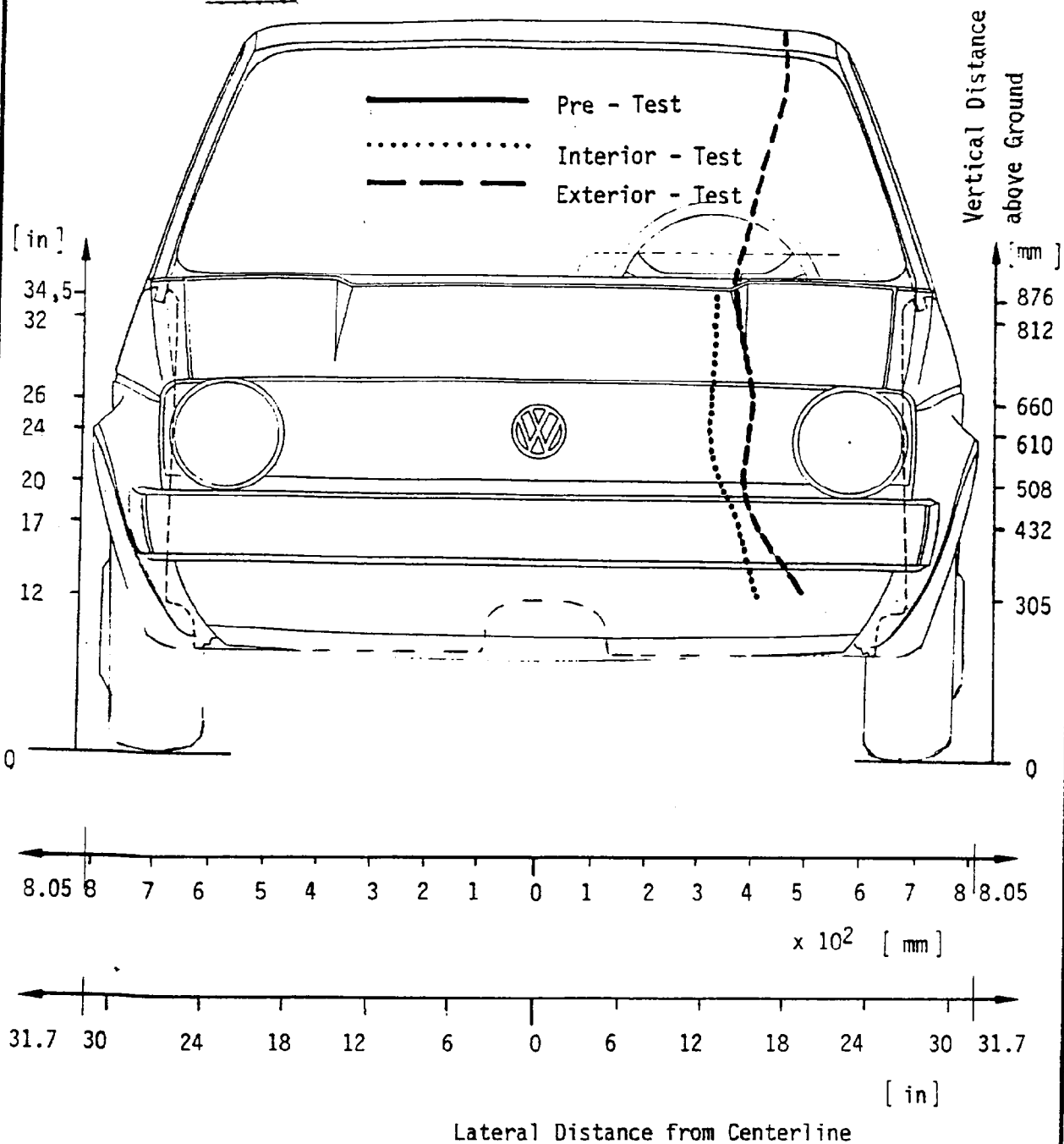


FIGURE 13 : EXTERIOR AND INTERIOR STATIC PROFILES AT THE
LONGITUDINAL DISTANCE 914 MM FROM DOOR

Table 24: Exterior Static Crush for Side Impactor

TEST NO : 4

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	0	0	0	0	2.5	9	18.5	28	35	47.5	53	65	76	85	95	105	115	125
Mid - Stack Level	554	+15	+12	+7.5	+1	9	24.5	36.5	47.5	53	65	76	85	95	105	115	125	135	145
Bumper Level	432	18	16	35	52	79	103	116	134	147	163	179	202	223	247	278	285		

* Heights measured above ground level.

** Impact side.

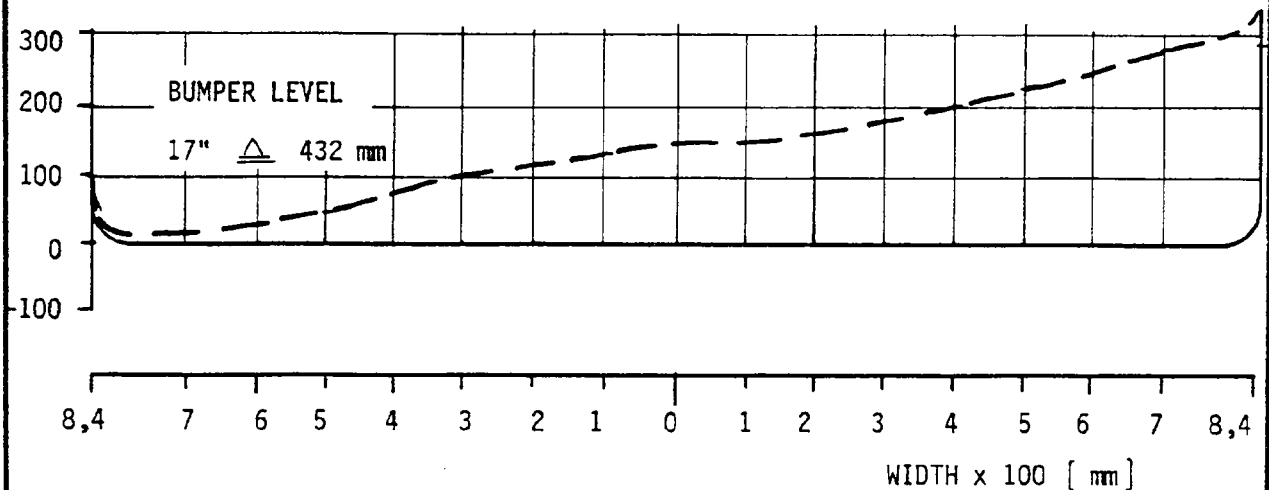
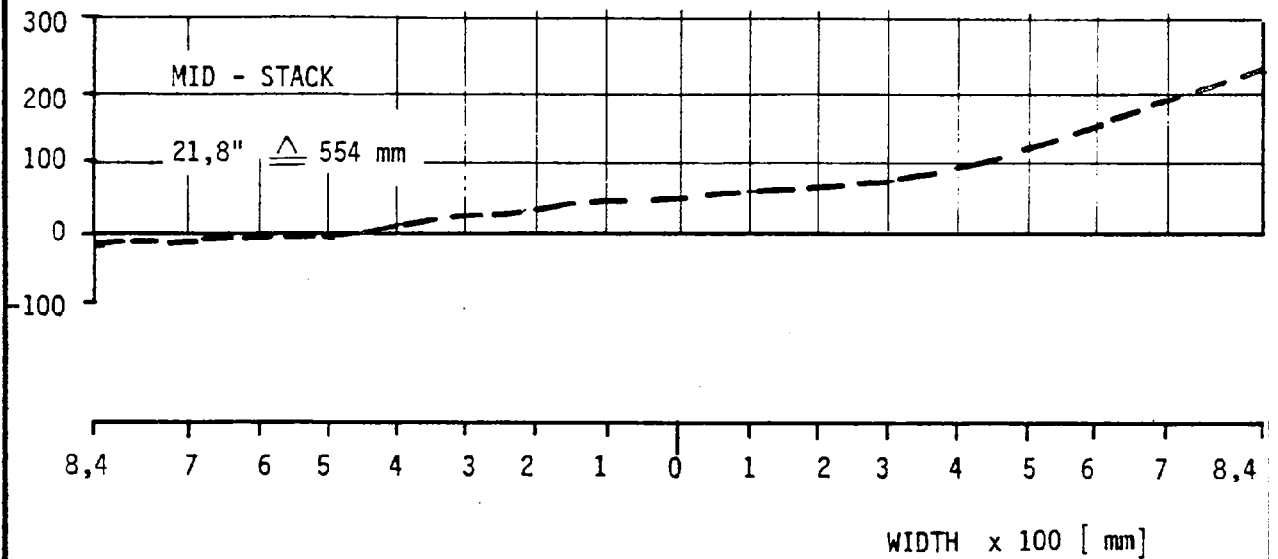
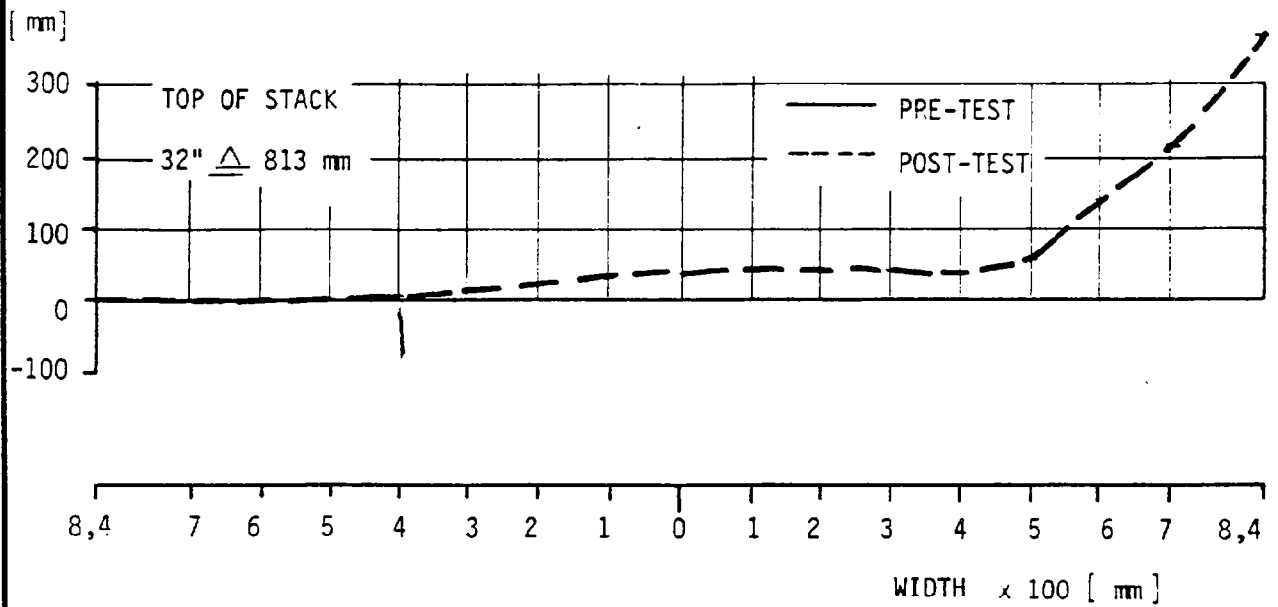


Table 25: Pre- and Post-Test Frontal Profiles for Side Impactor (Test 4)

A P P E N D I X A

Photographs

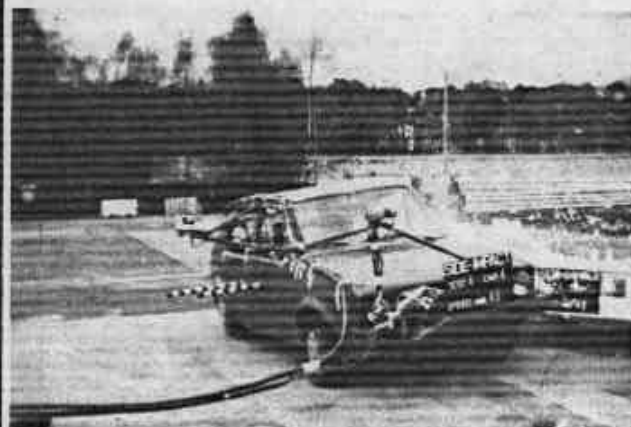
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A 5	VW Rabbit Left Side Post Test View (Rear-Side Direction)	A - 6
A 6	Crabbed Barrier Post Test View	A - 7

Figure A1 : Crash Sequence Figures

TEST 4 - 40 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)

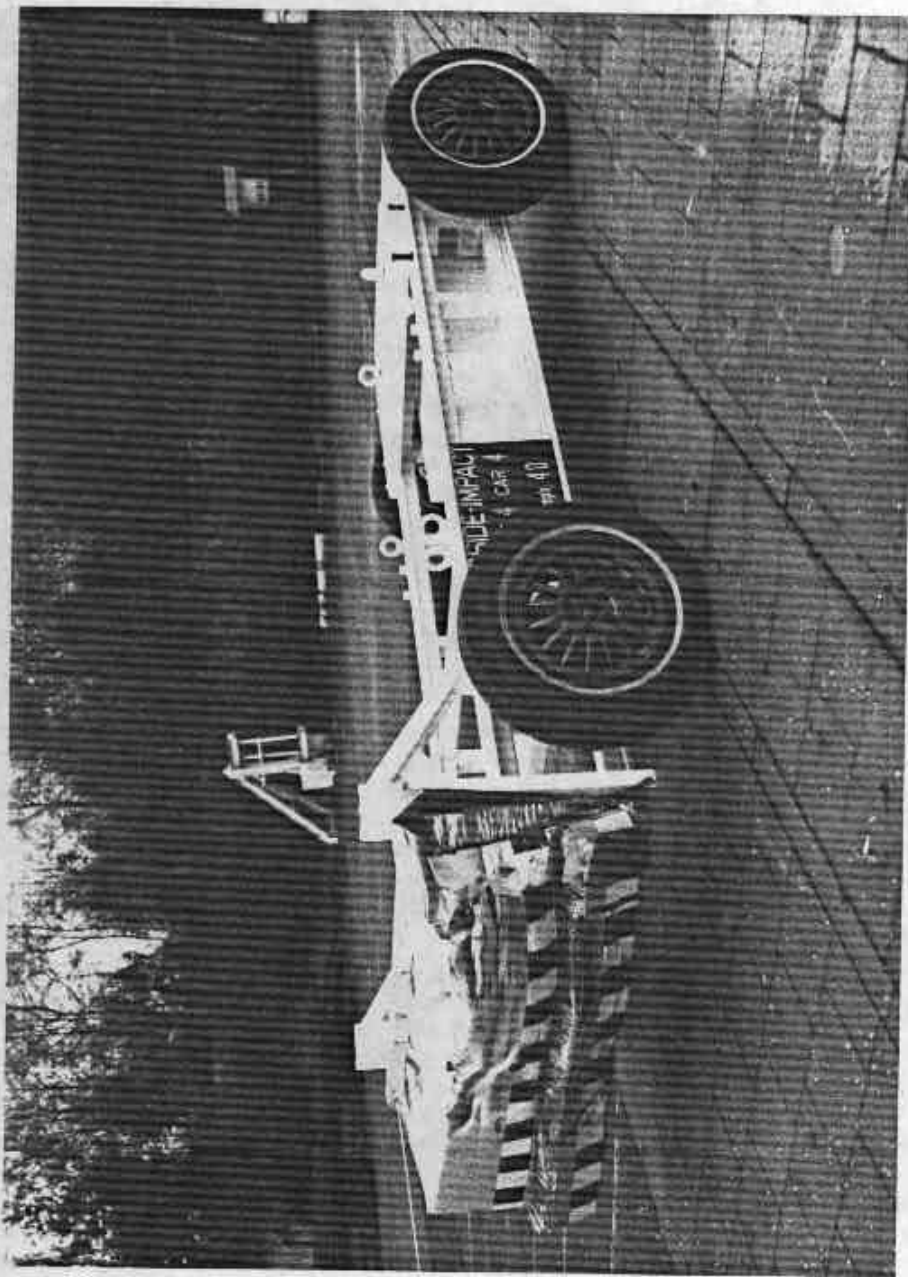


FIGURE A 6 : CRABBED BARRIER POST TEST VIEW

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

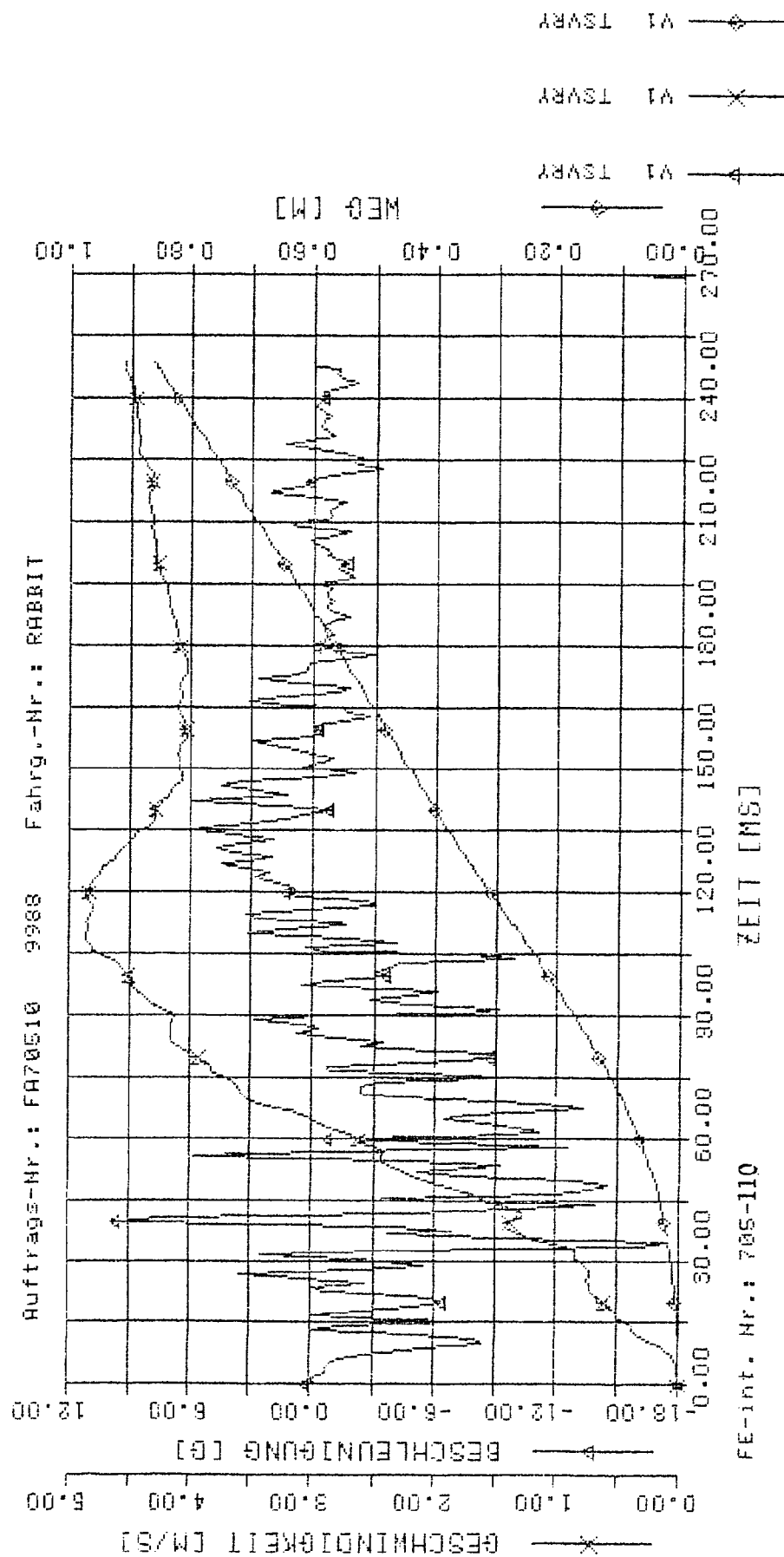
 B.2.1 Driver

 B.2.2 Rear Passenger

B.1.1 Target Vehicle

Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9988

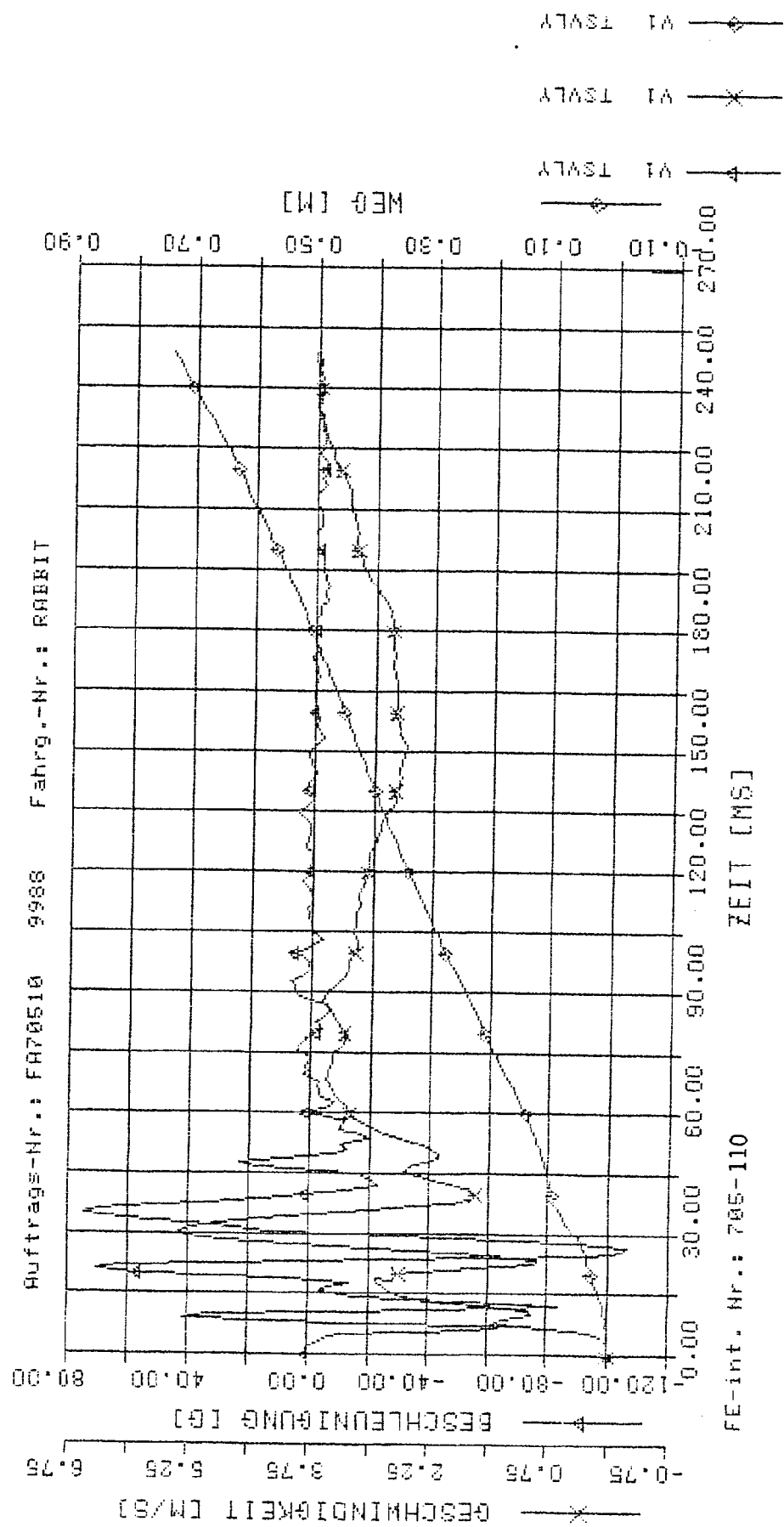
Mess-Stelle	UP	ber.	Extremum	t	MS
TSURY	V1	BE	-17.525	35.00	0.00
TSURY	V1	GE	4.854	109.00	0.00
TSURY	V1	WE	.870	255.00	0.00



FE-int. Nr.: 705-110

Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9980

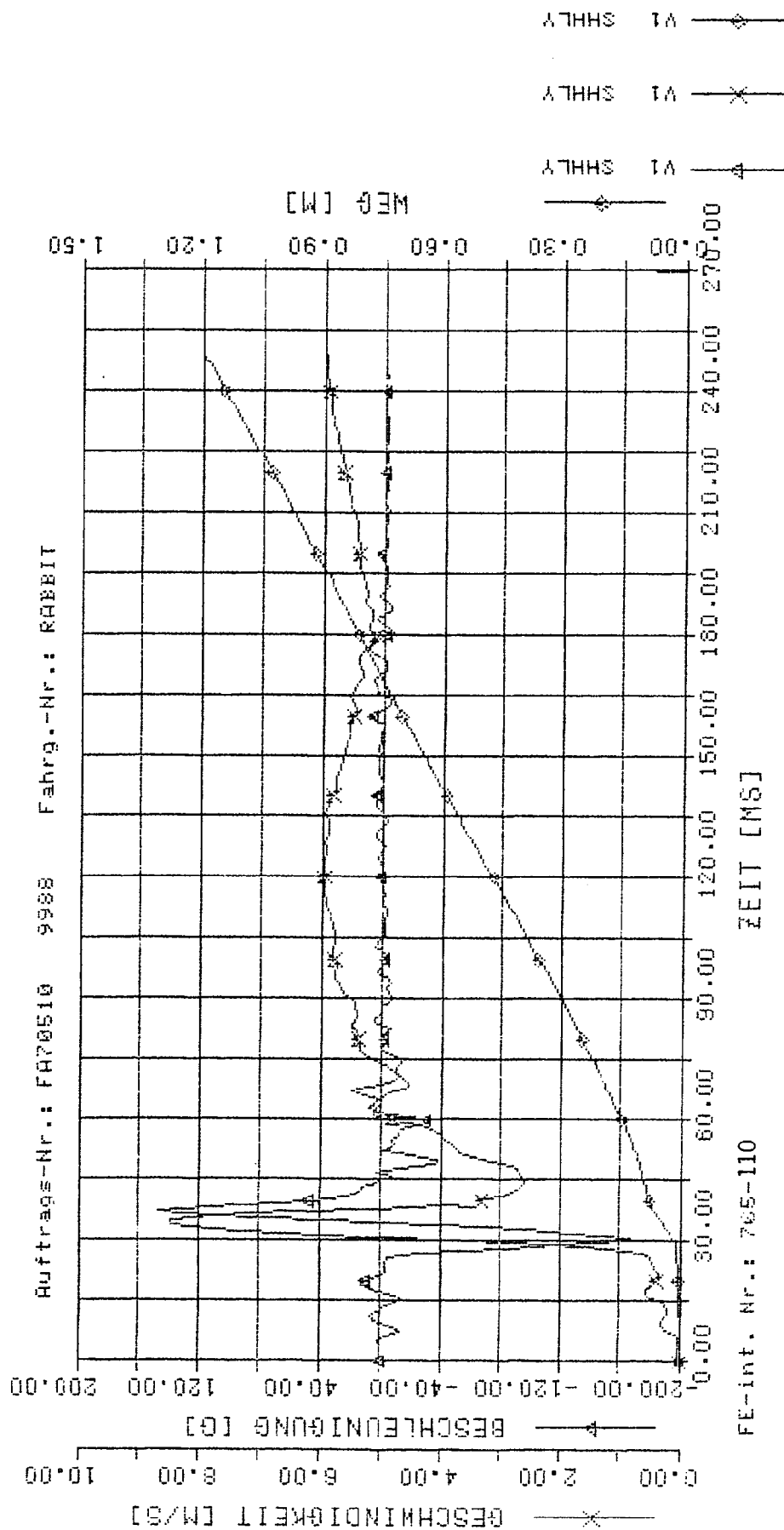
Mess-Stelle	UP	ber.	Grösse	Extremum	τ	3MS
TSVLY	V1	DE	g	-106.637	27.00	0.00
TSVLY	V1	GE	m/s	5.369	30.00	0.00
TSVLY	V1	DE	m	.762	255.00	0.00



Auftrags-Nr.: FA70510 9980 Fahrg.-Nr.: RABBIT

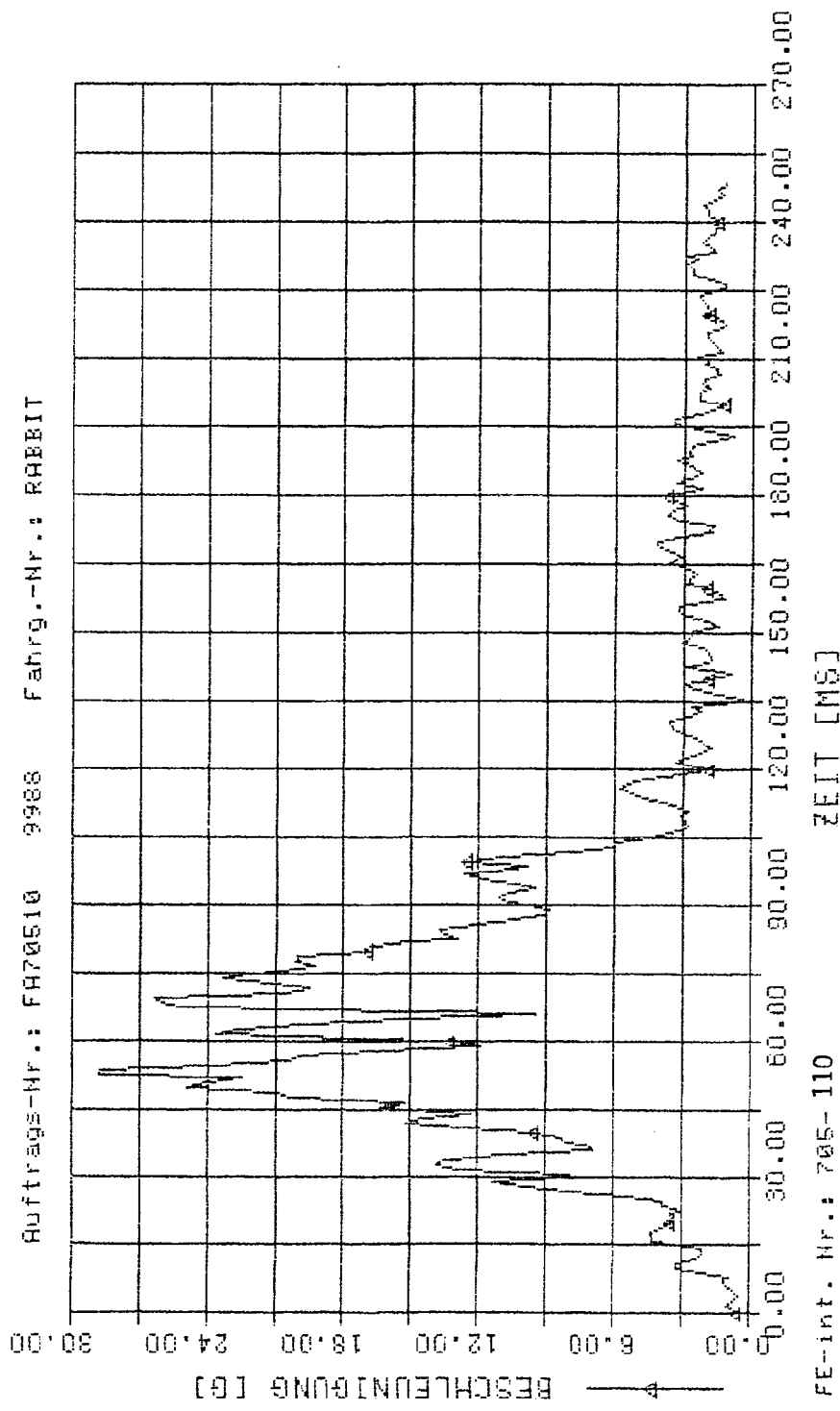
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9988

Mess-Stelle	UP	ber.	Groesse	Extremum	t	AMS
SHHLY	V1	BE	g	-163.105	31.00	0.00
SHHLY	V1	GE	m/s	8.446	34.00	0.00
SHHLY	V1	WE	m	1.233	255.00	0.00



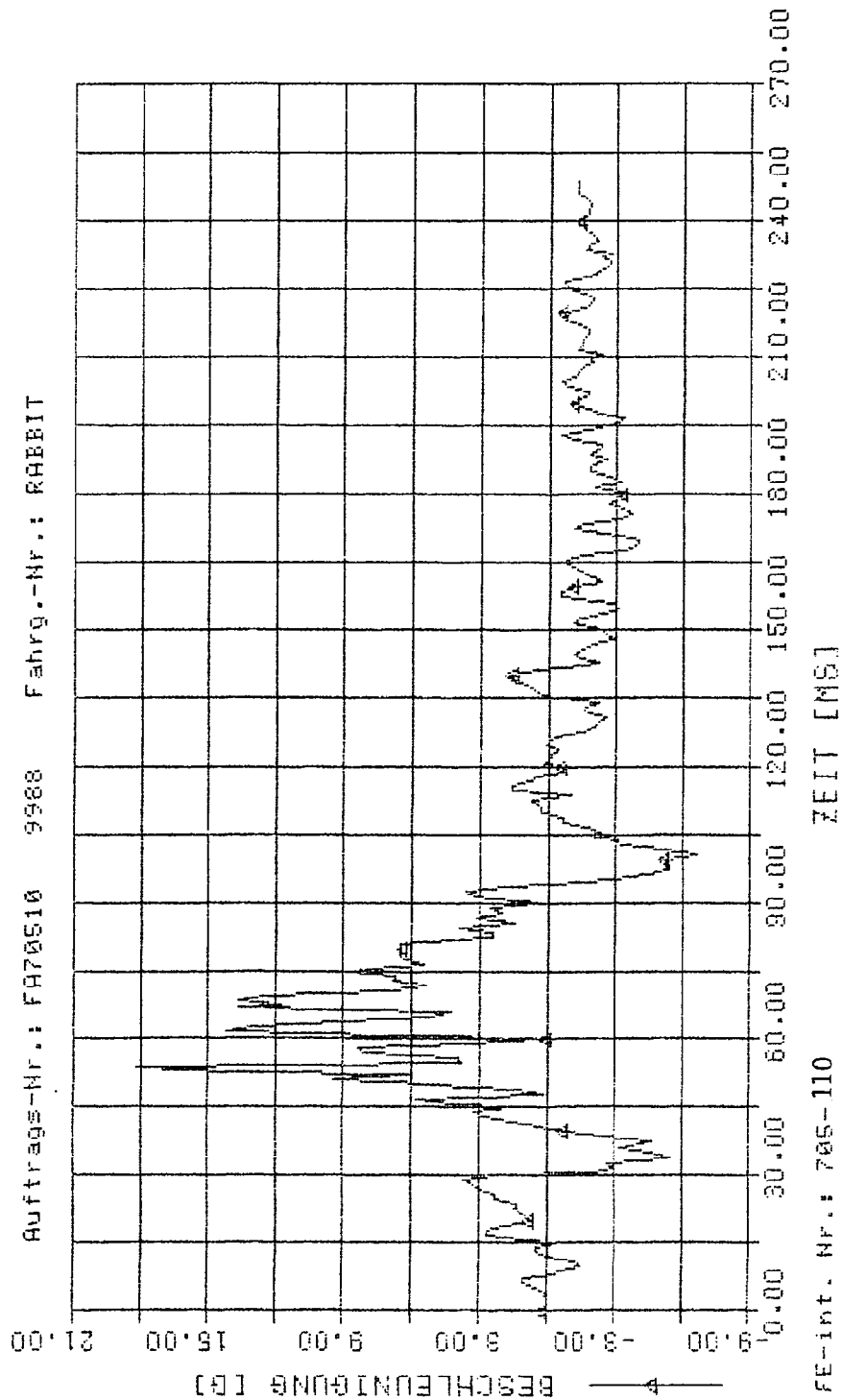
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9988

Mess-Stelle UP ber. Extremum t SMS
K000 V1 BE q Groesse Extr. 28.837 54.00 26.05



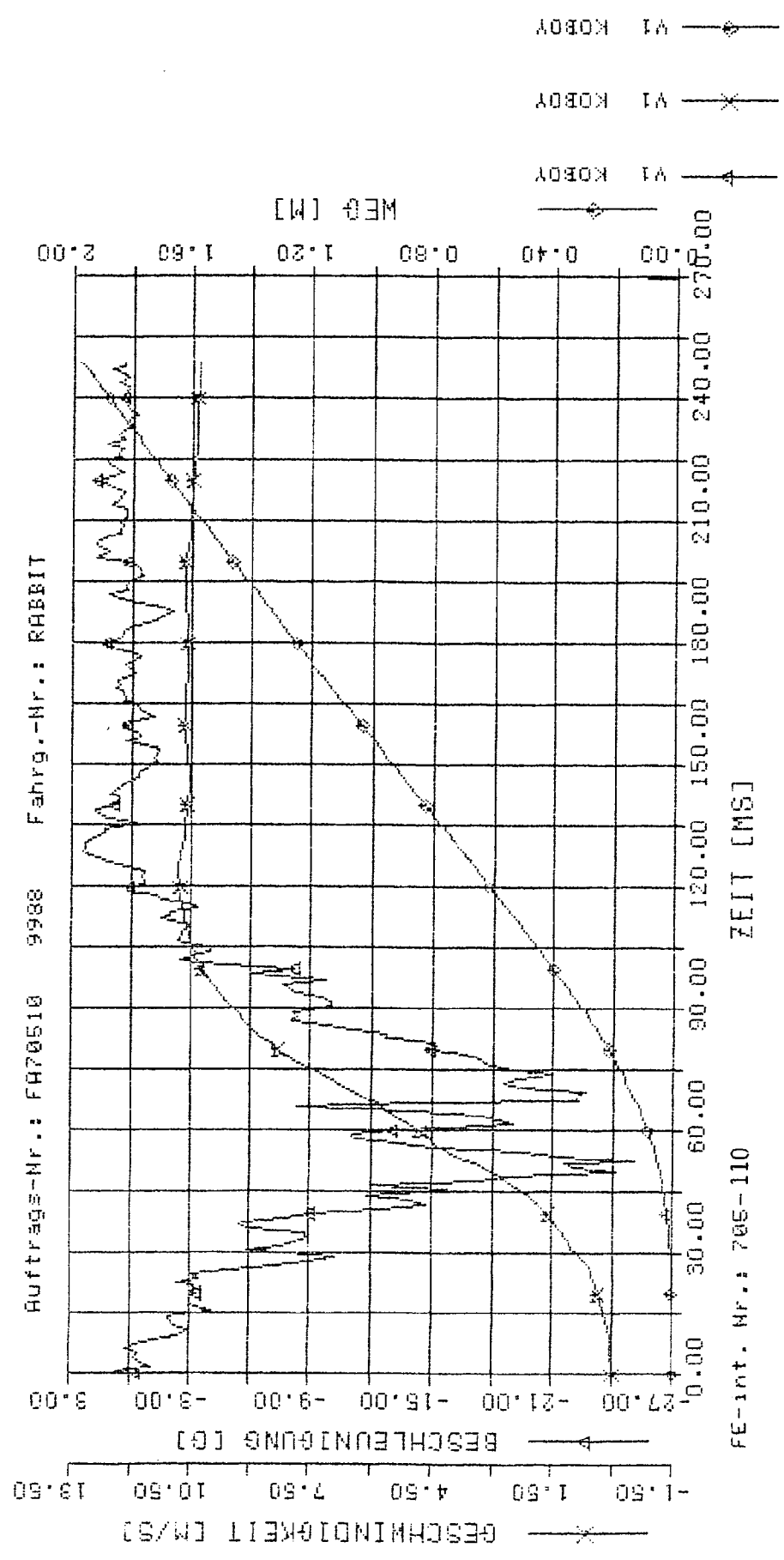
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Mess-Stelle UP ber. Extremum t 3MS
KOBX V1 BE g 13.145 54.00 13.57



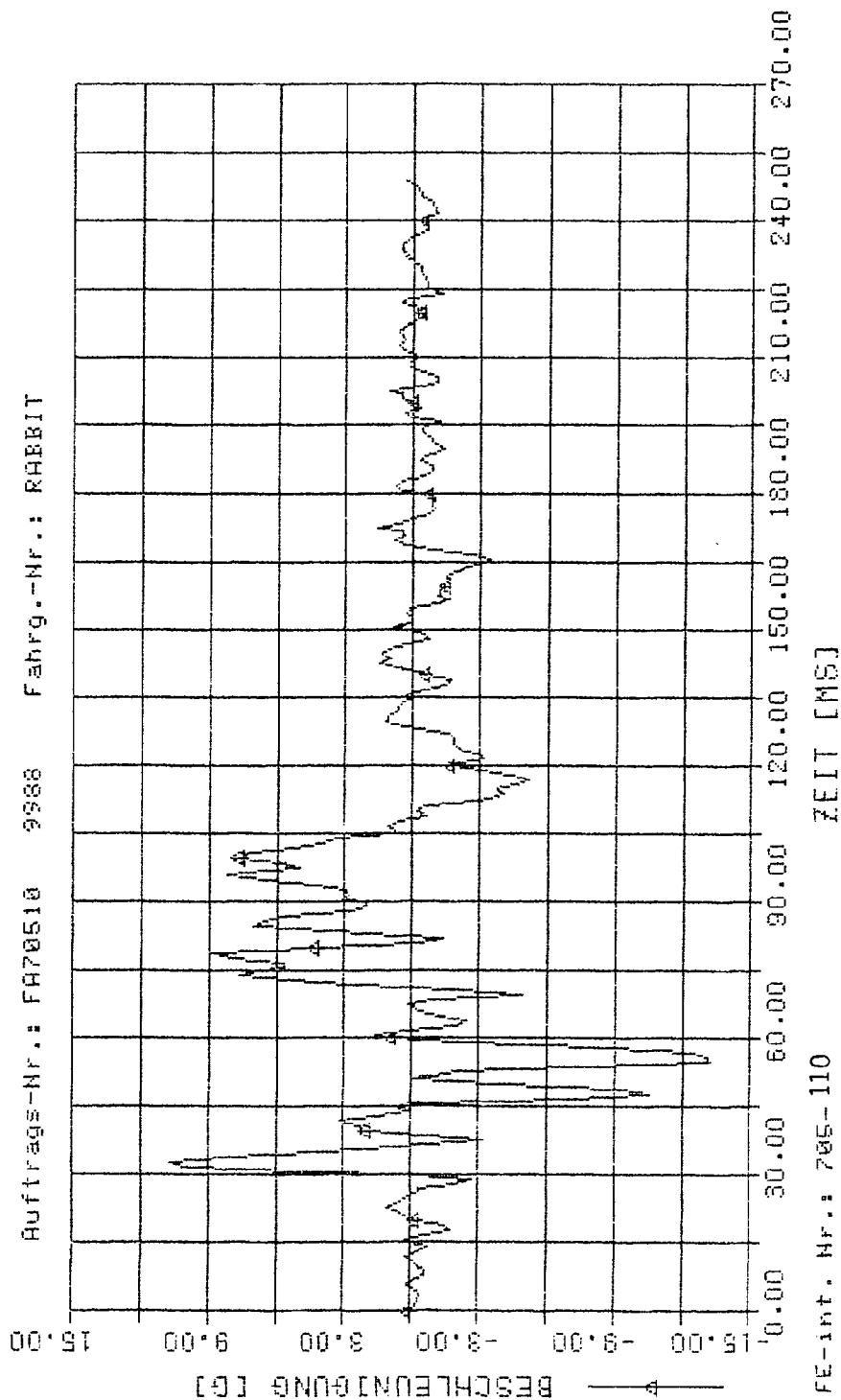
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9988

Mess-Stelle	UP	ber.	Extremum	t	3MS
KOBAY	V1	Grösse		Extr.	
KOBAY	V1	BE g	-25.107	53.00	2.08
KOBAY	V1	GE m/s	40.790	125.00	0.00
KOBAY	V1	WE m	2.035	255.00	0.00



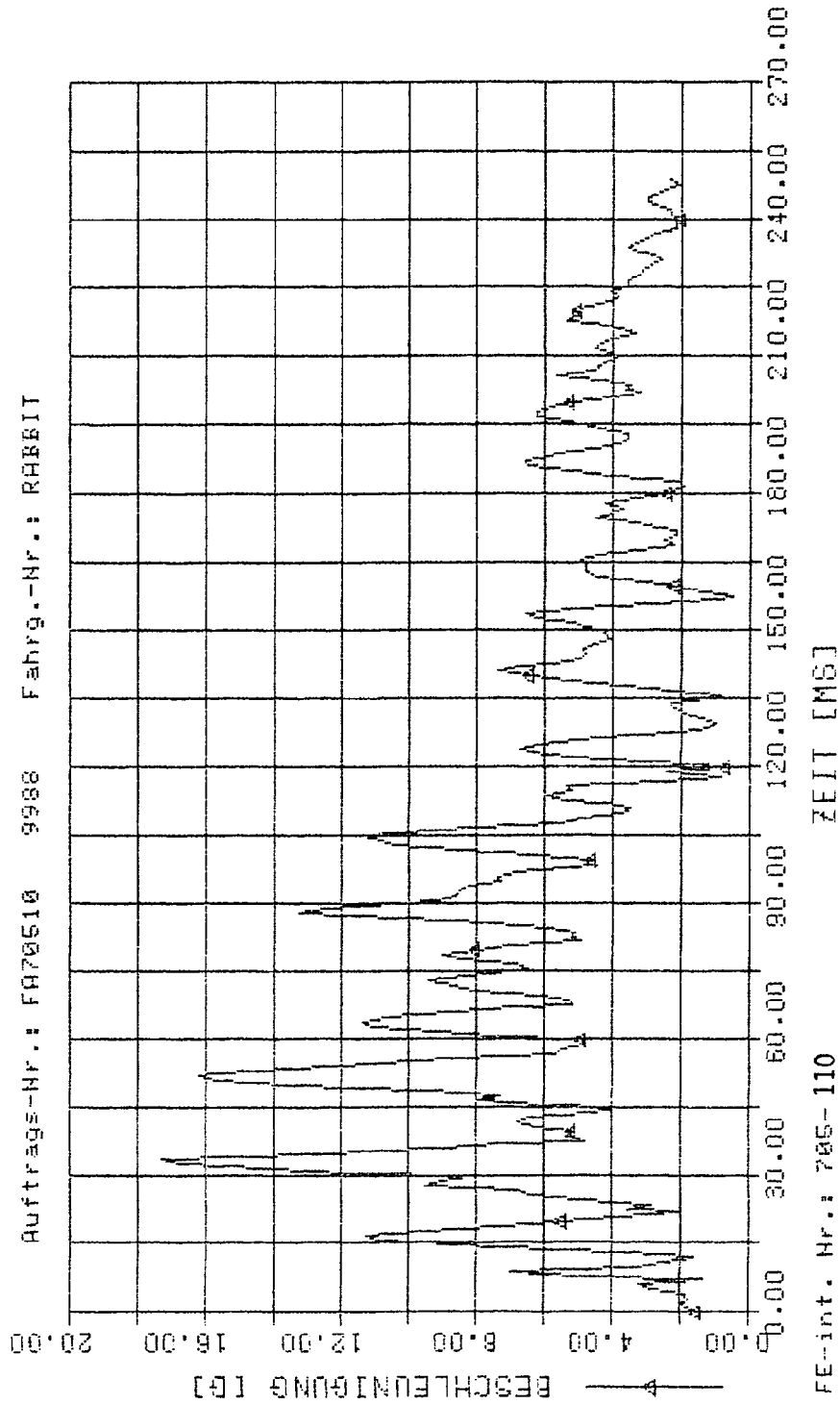
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9988

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KOB02 V1 DE q -13.174 55.00 8.24



Kenn-Merkmale: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9988

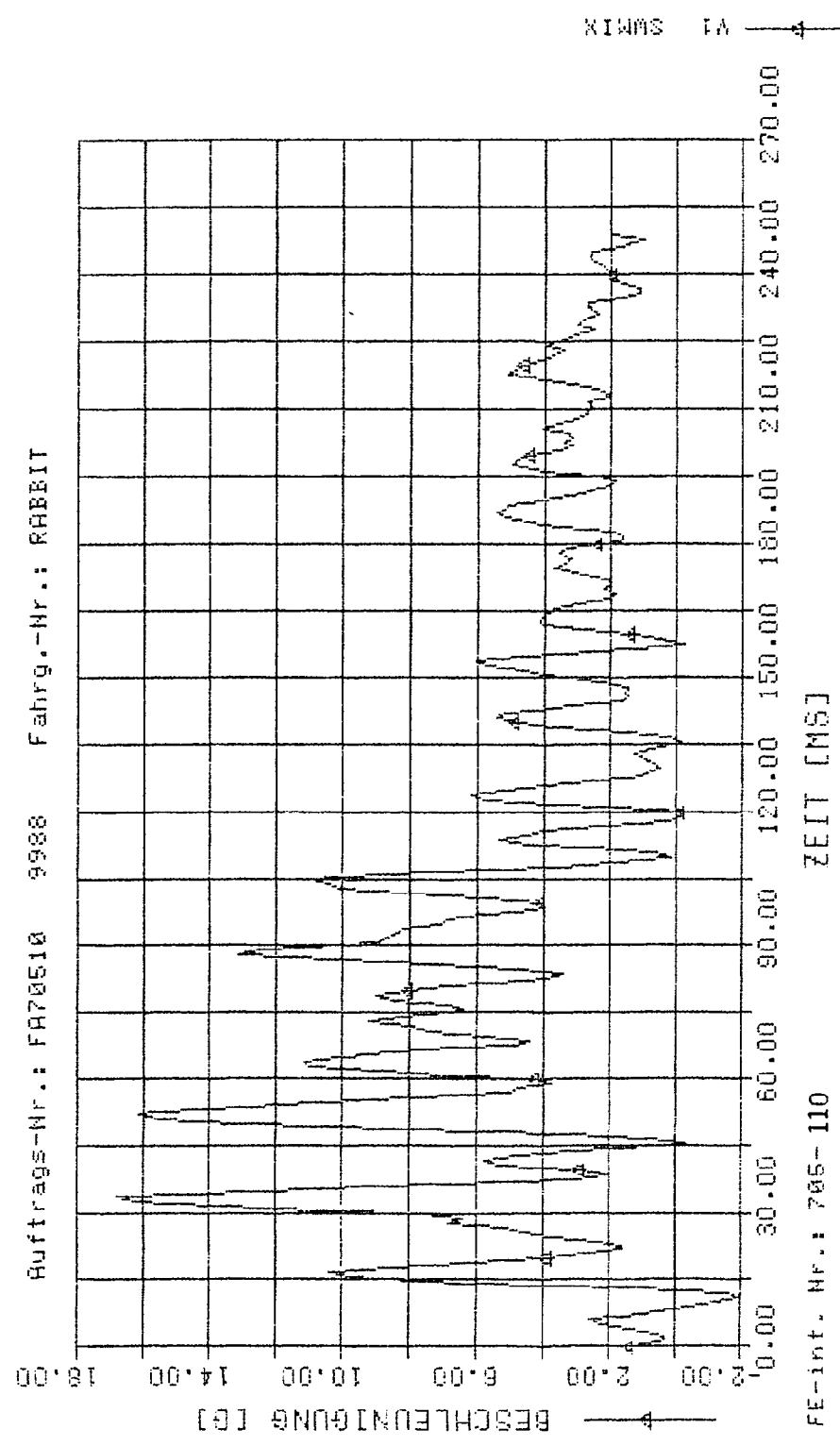
Mess-Stelle UP ber. Extremum t 3MS
V1 GE q 17.230 Extr. 34.00 0.00
SUMI



Kennwerte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9988

Mess-Stelle UP ber. Extremum t SMS
 V1 BE g 16.785 34.00 0.00

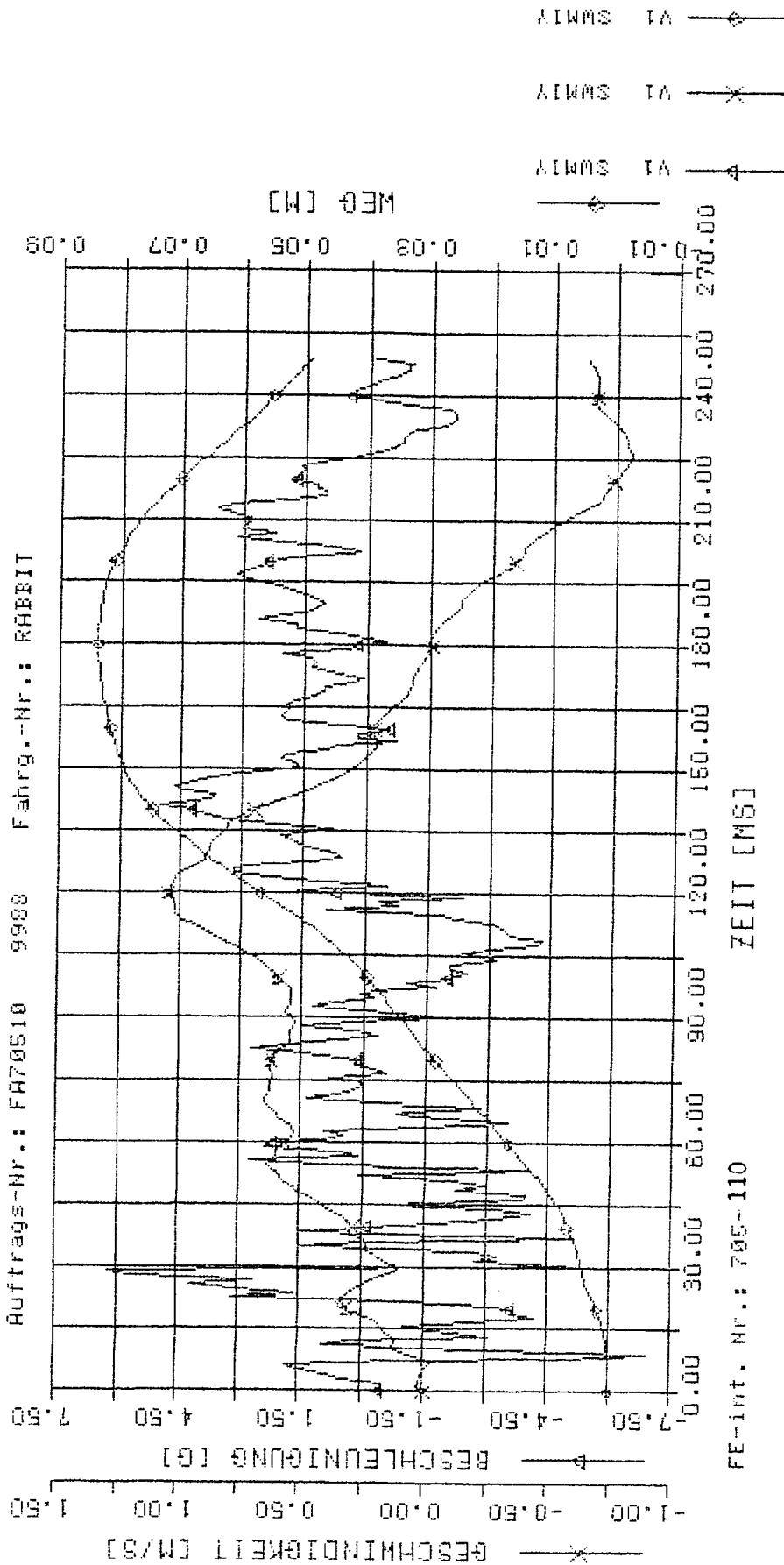
SUMIX



Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9908

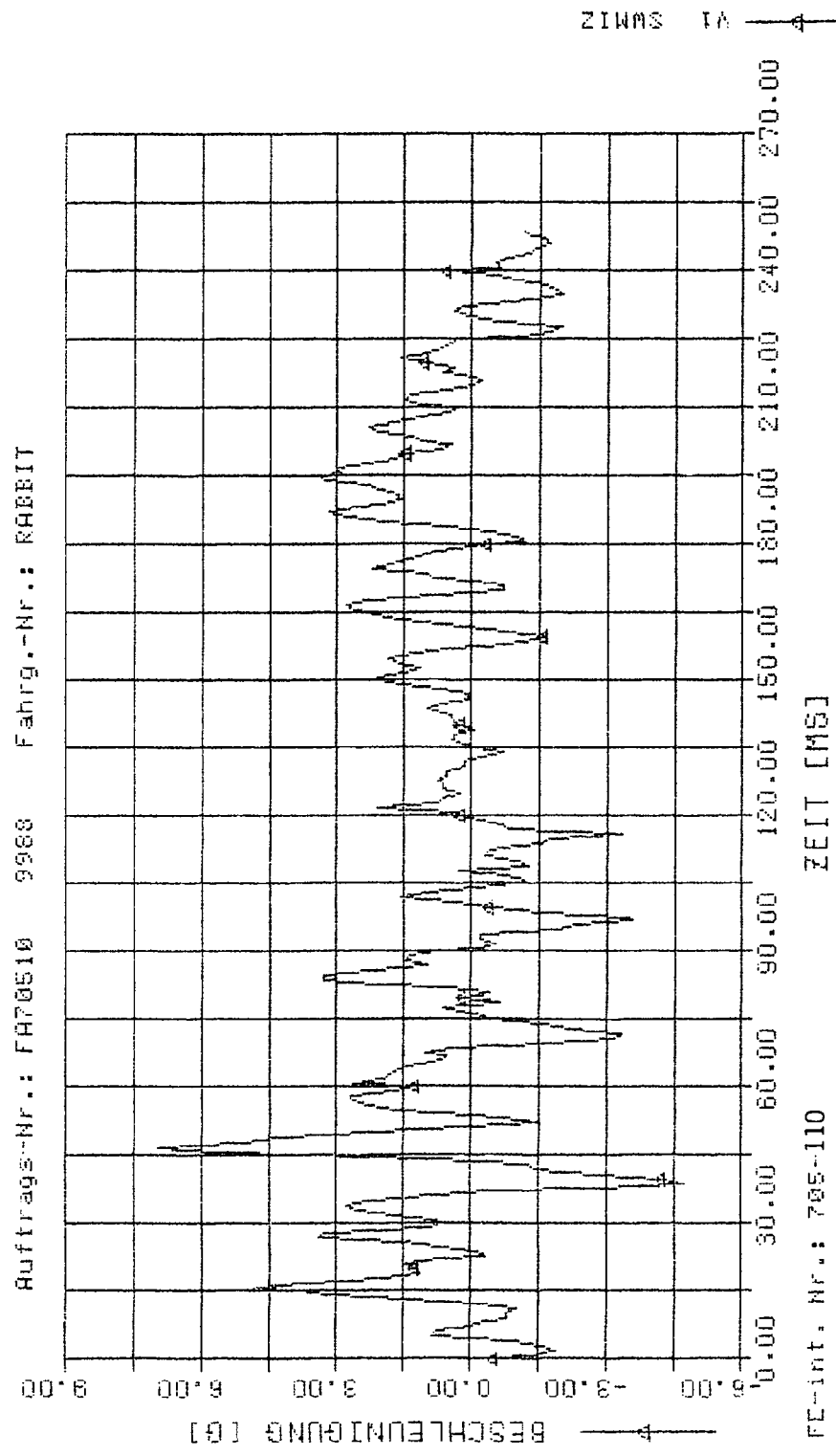
Mess-Stelle	UP	ber.	Extremum	t	MS
SWMTY	V1	Grösse		Extr.	
SWMTY	V1	BE g	6.916	9.00	0.00
SWMTY	V1	GE m/s	1.046	120.00	0.00
SWMTY	V1	WE m	.034	179.00	0.00

Auftrags-Nr.: FA70510 9908 Fahrg.-Nr.: RABBIT



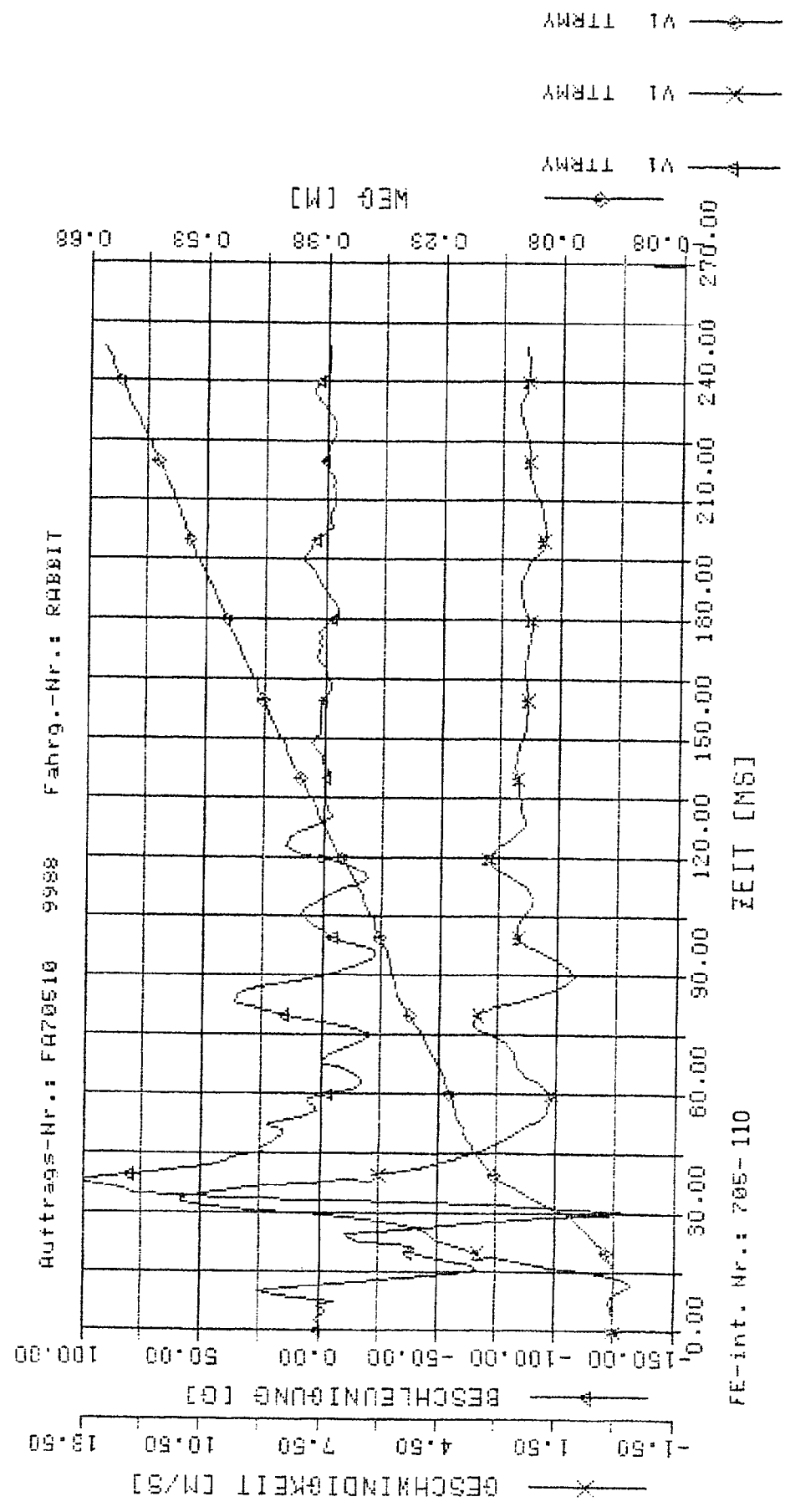
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Mess-Stelle UP ber. Extremum t SMS
V1 DE g 6.968 47.00 0.00
SWMIZ



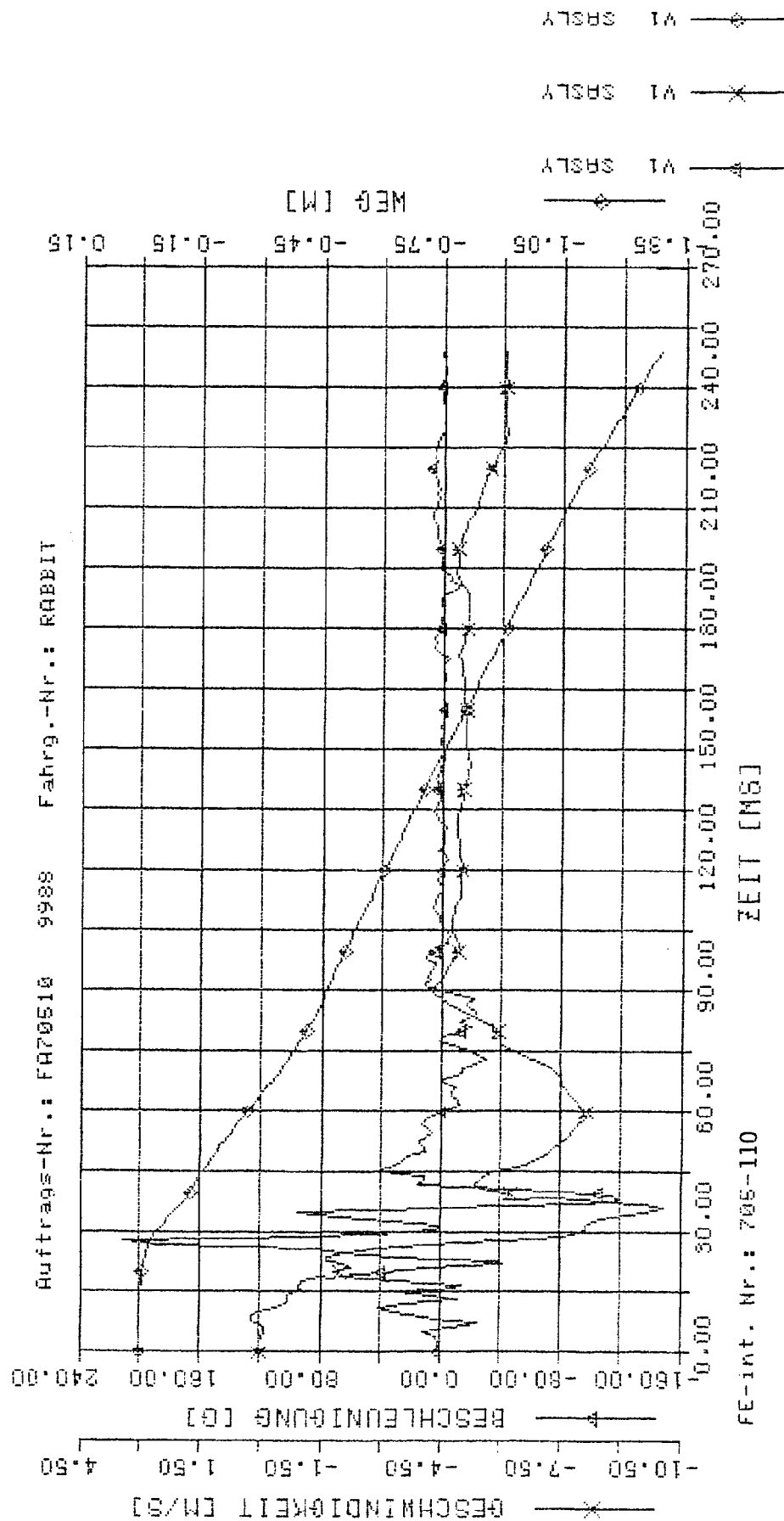
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9988

Mess-Stelle	UP	ber.	Grösse	Extremum	t	SMS
TIRMY	V1	BE	g	133.493	30.00	0.00
TIRMY	V1	GE	m/s	10.979	24.00	0.00
TIRMY	V1	WE	m	.670	255.00	0.00



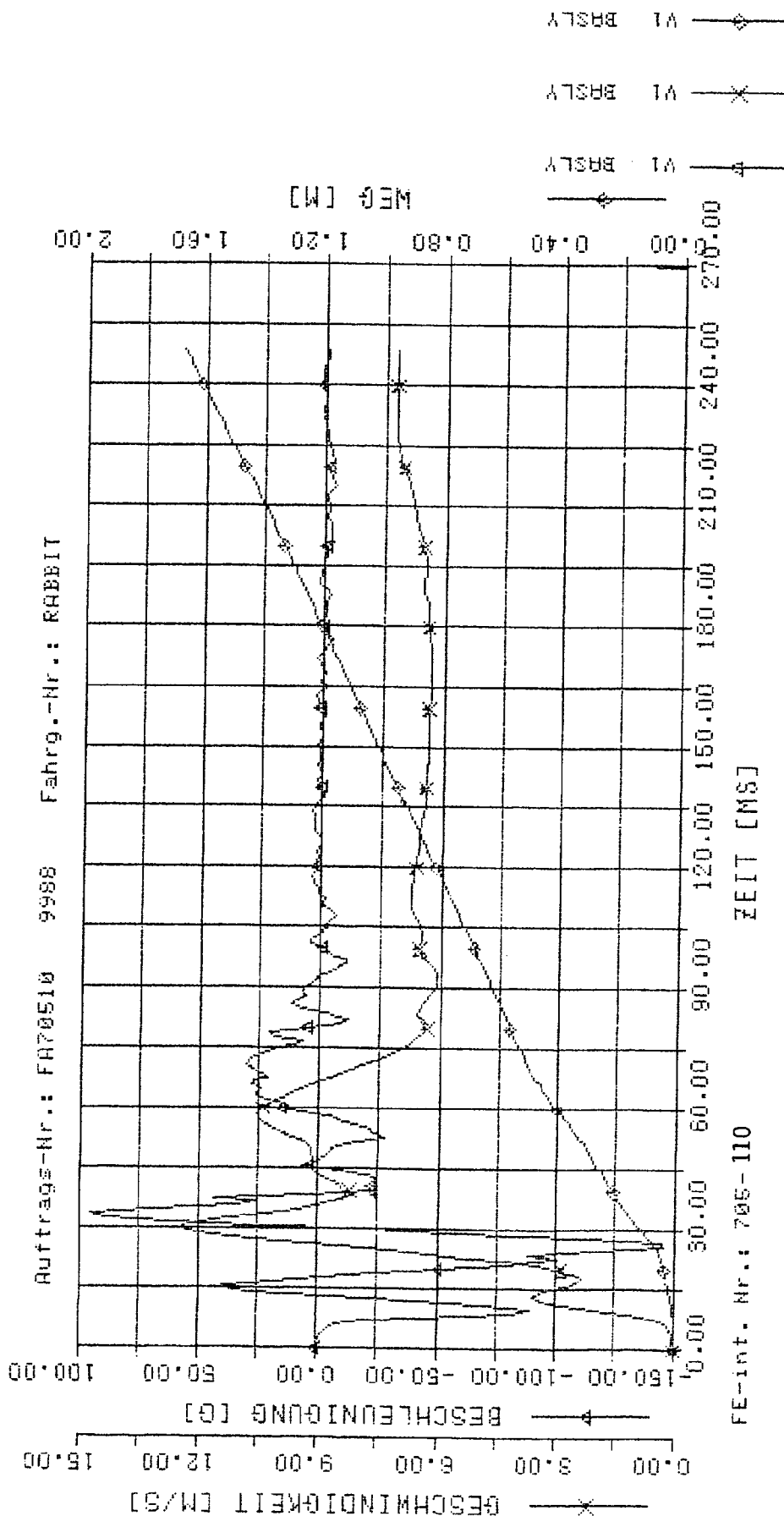
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9988

Mess-Stelle	UP	ber.	Groesse	Extremum	t	MS
SASLY	V1	DE	g	240.878	28.00	0.00
SASLY	V1	DE	m/s	-10.076	36.00	0.00
SASLY	V1	WE	m	-1.328	255.00	0.00



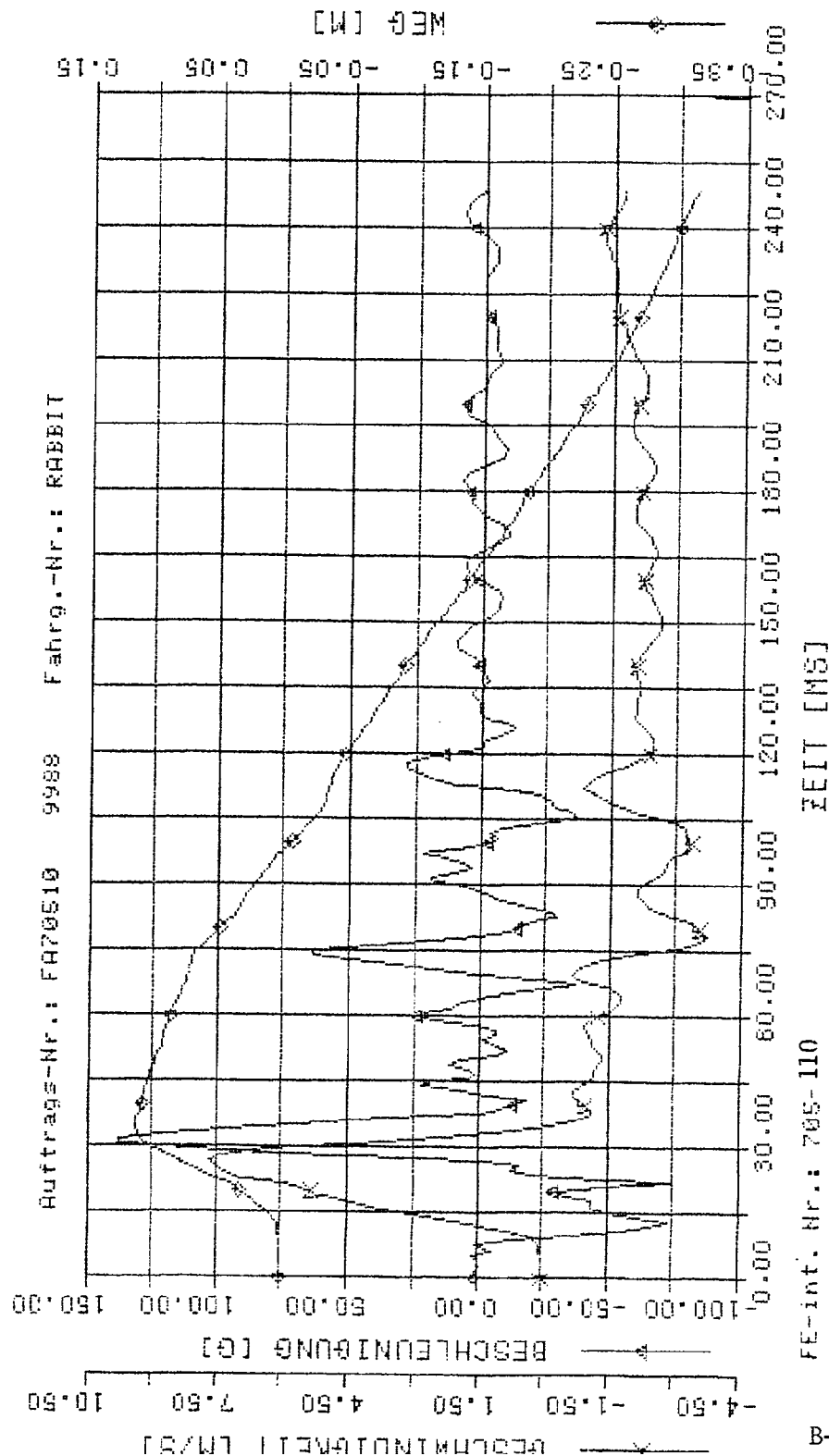
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9988

Mess-Stelle	UP	ber.	Groesse	Extremum	γ	3MS
BASLY	V1	BE	q	-146.233	Extr.	0.00
BASLY	V1	GE	m/s	12.394		0.00
BASLY	V1	WE	m	1.721	255.00	0.00



Kenn-Werte: Auftrags-Nr.: FA7051 Versuchs-Nr.: 9988

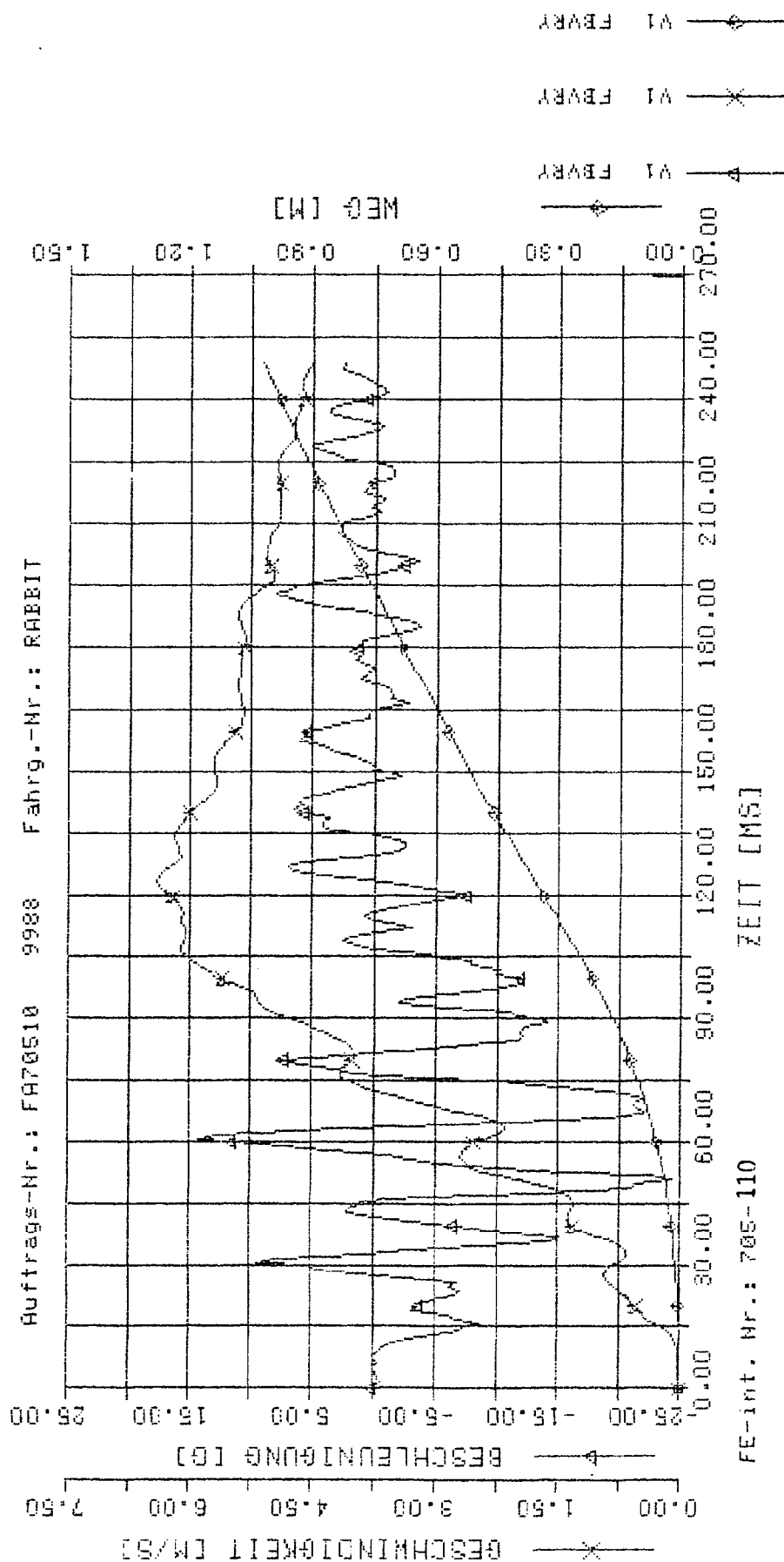
Mess-Stelle	UP	ber.	Groesse	Extremum	t	ΔMS
FBVLY	V1	BE	g	138.372	31.00	0.00
FBVLY	V1	GE	m/s	7.633	27.00	0.00
FBVLY	V1	WE	m	-1.324	255.00	0.00



FE-int. Nr.: 705-110

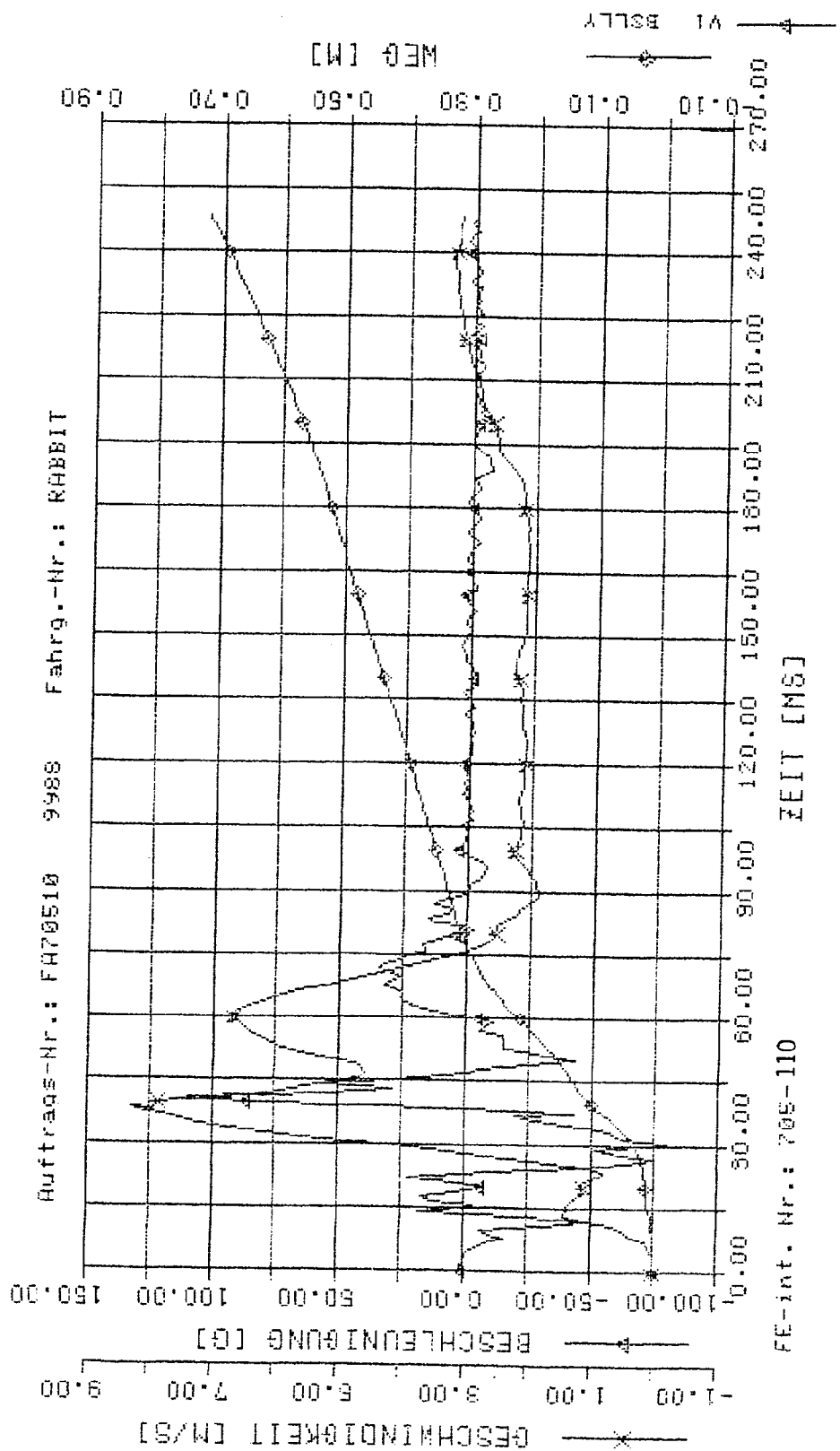
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9988

Mess-Stelle	UP	ber.	Grösse	Extremum		t	sMS
FBURY	V1	BE	g	-24.317	51.00	0.00	
FBURY	V1	GE	m/s	6.386	124.00	0.00	
FBURY	V1	WE	m	1.049	255.00	0.00	



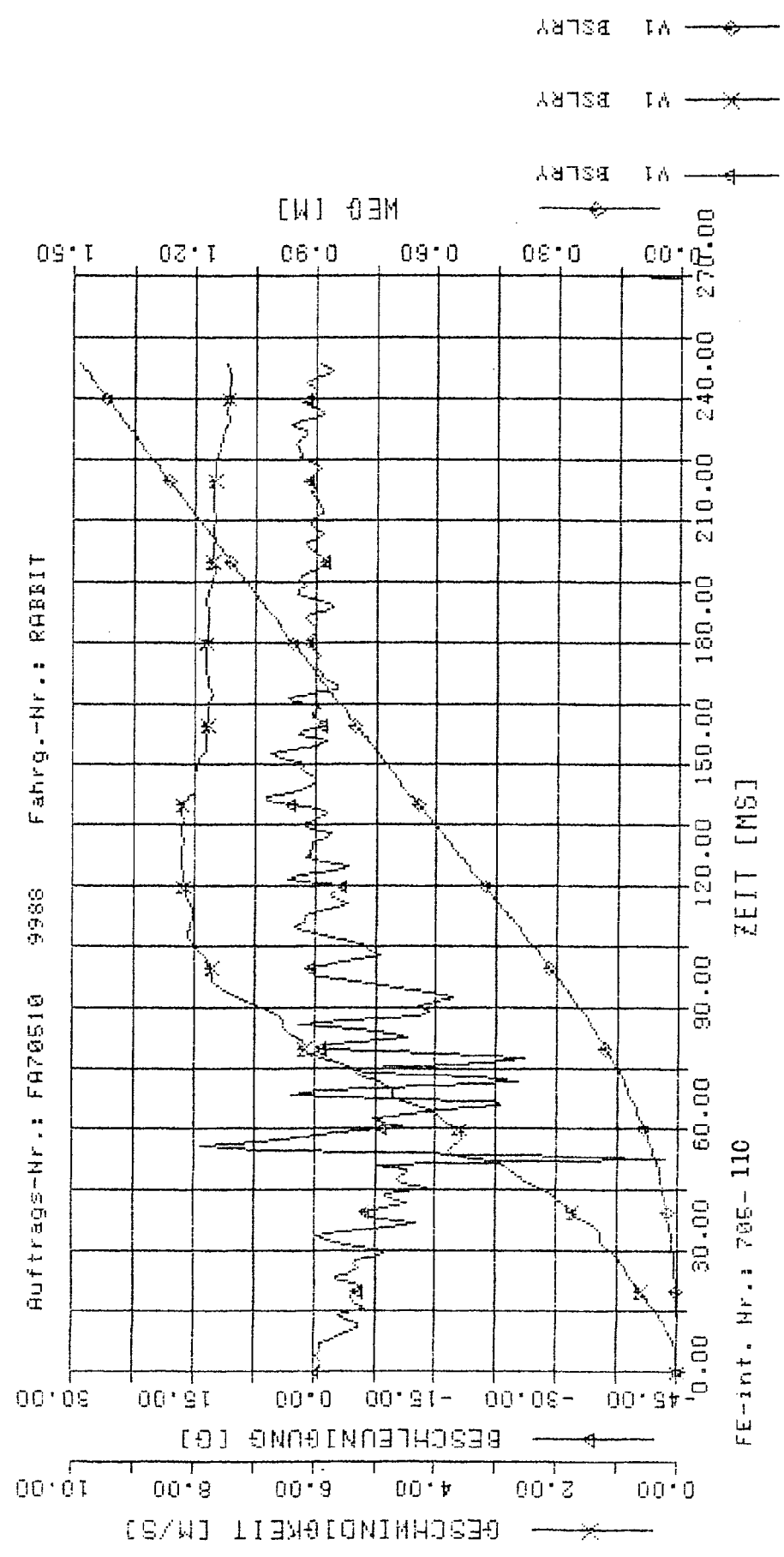
Kennwerte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9988

Mess-Stelle	UP	ber.	Groesse	Extremum	t	MS
BLLY	V1	GE	g	109.328	41.00	0.00
BLLY	V1	GE	m/s	8.269	39.00	0.00
BLLY	V1	WE	m	.741	255.00	0.00



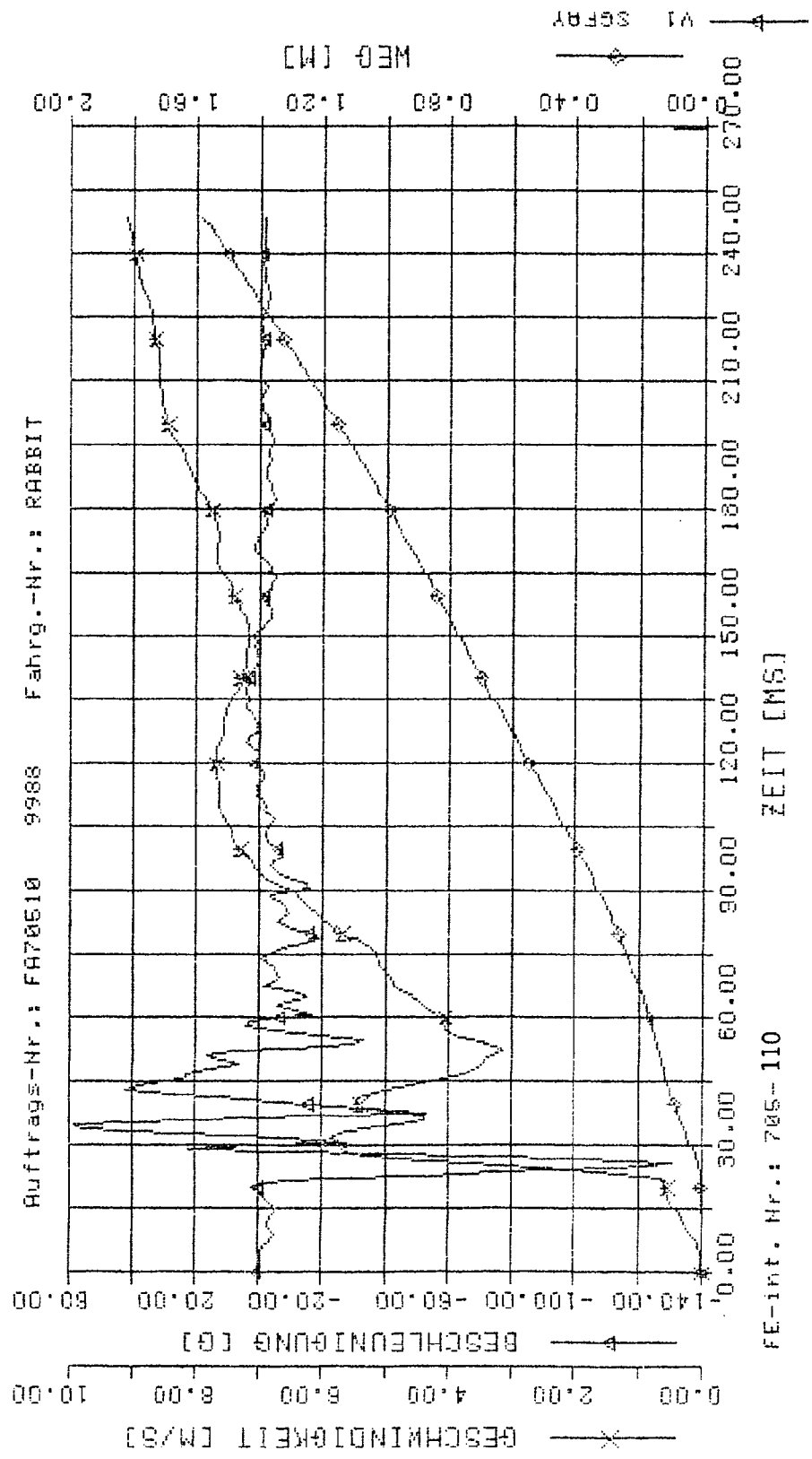
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9988

Mess-Stelle	UP	ber.	Extremum	t	AMS
BSLRY	V1	BE g	-43.347	53.00	0.00
BSLRY	V1	GE m/s	8.214	126.00	0.00
BSLRY	V1	WE m	1.528	255.00	0.00

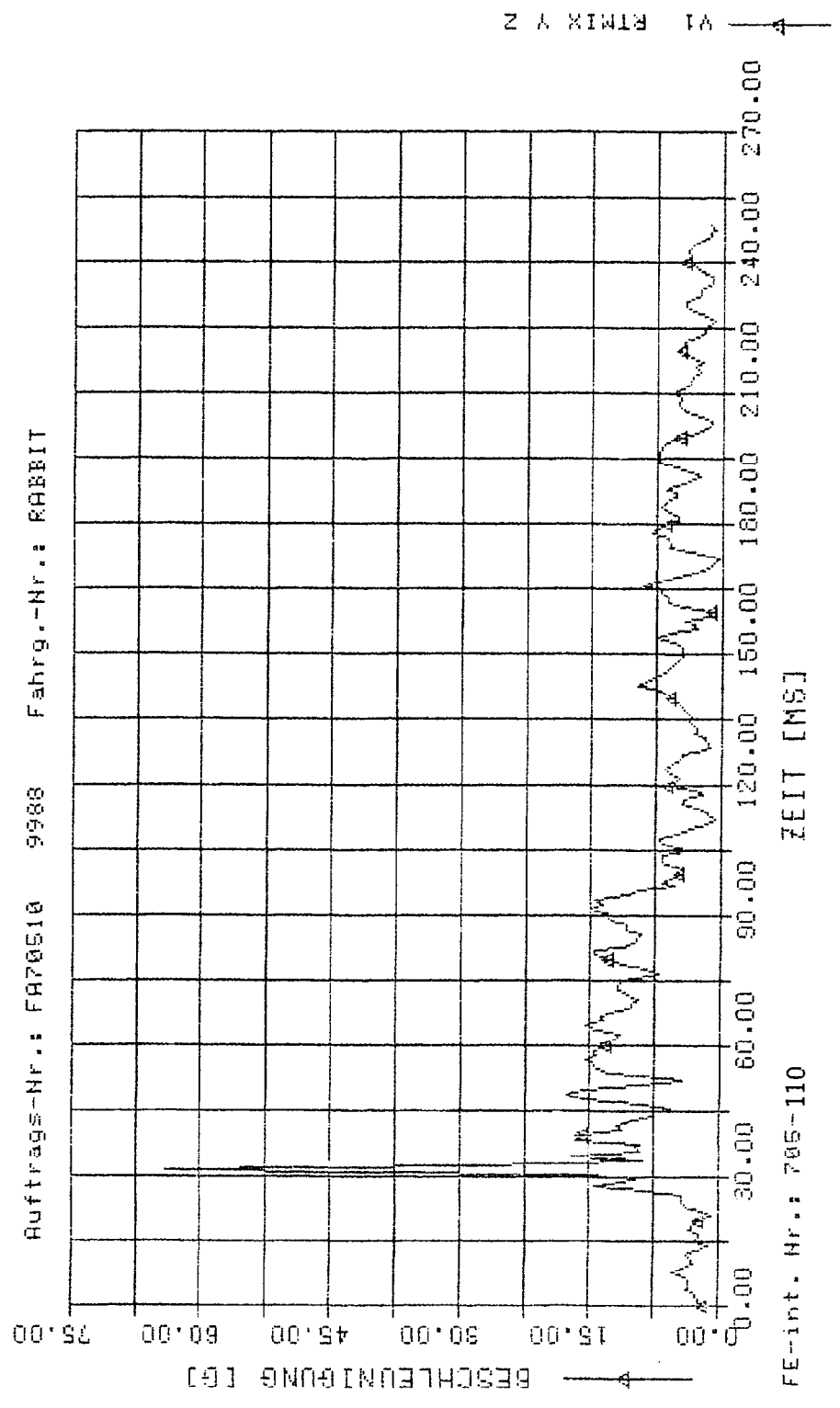


Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9988

Mess-Stelle	UP	ber.	Groesse	Extremum	t	MS
SGFAY	V1	BE	g	-131.149	26.00	0.00
SGFAY	V1	GE	m/s	9.178	255.00	0.00
SGFAY	V1	WE	m	1.637	255.00	0.00

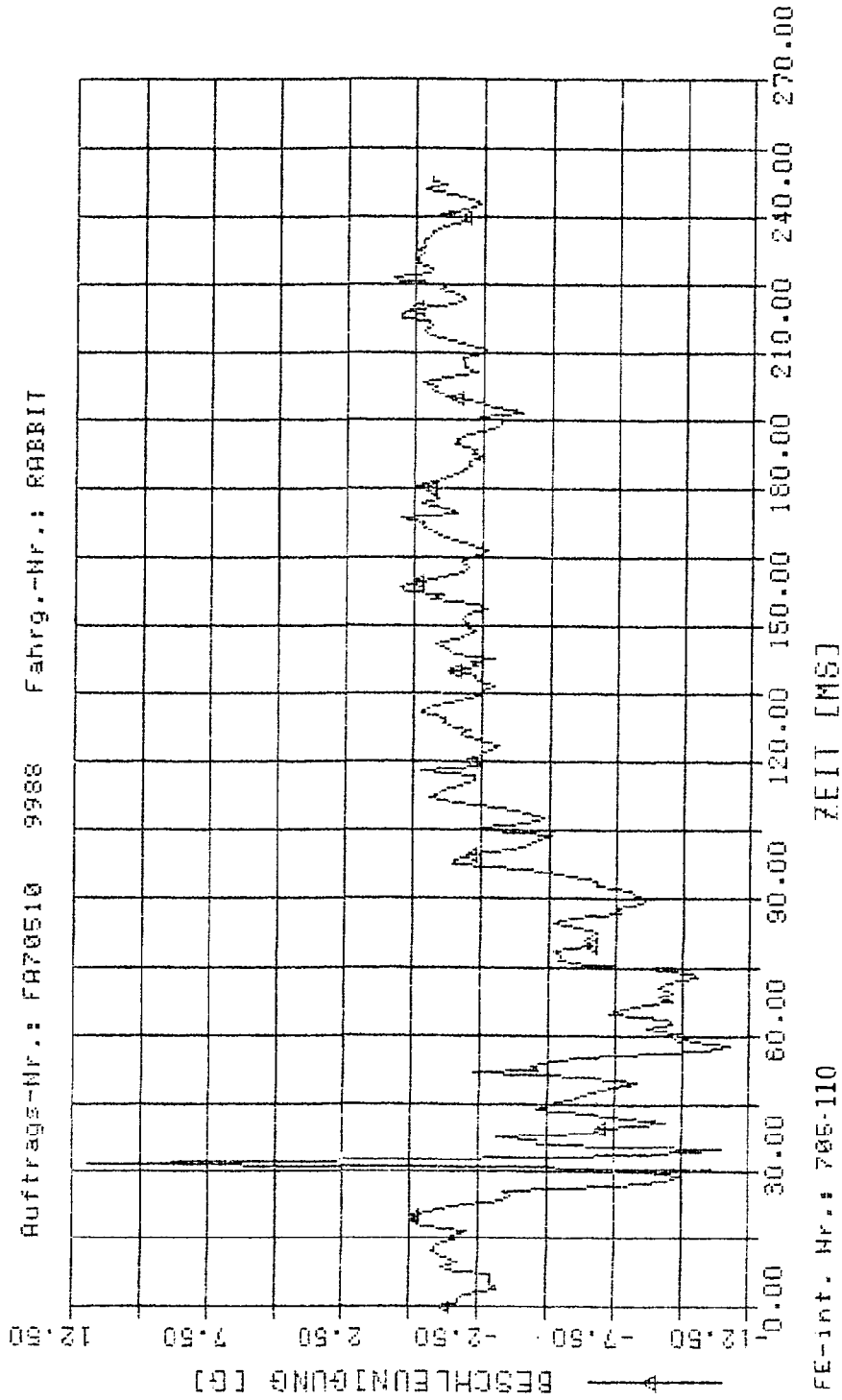


Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9988
 Mess-Stelle UP ber. Extremum t SMS
 RTMI V1 BE q 63.977 32.00 0.00



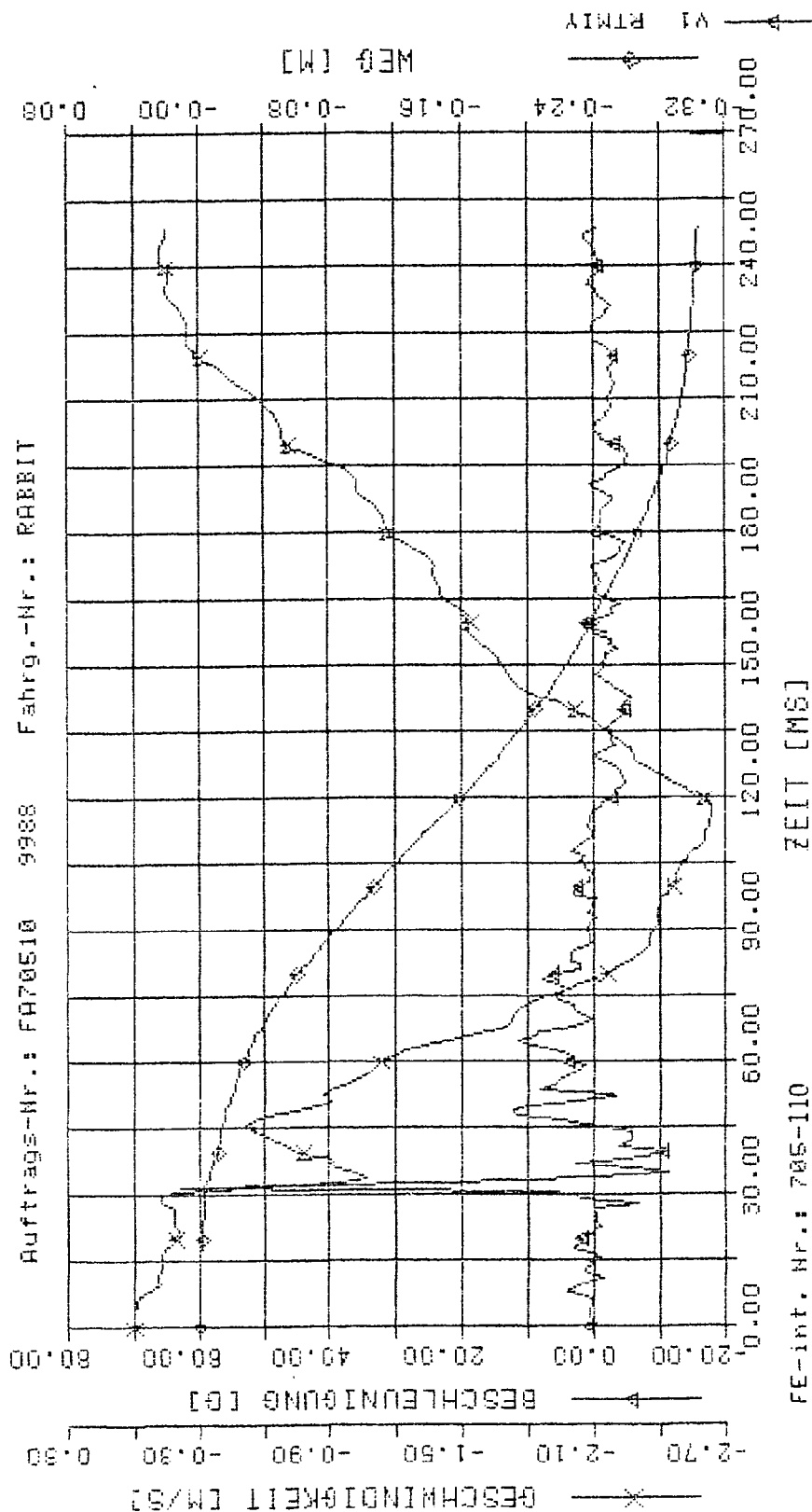
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9988

Mess-Stelle
RTMIX
UP ber. Extremum t
V1 BE 0 11.732 32.00 0.00



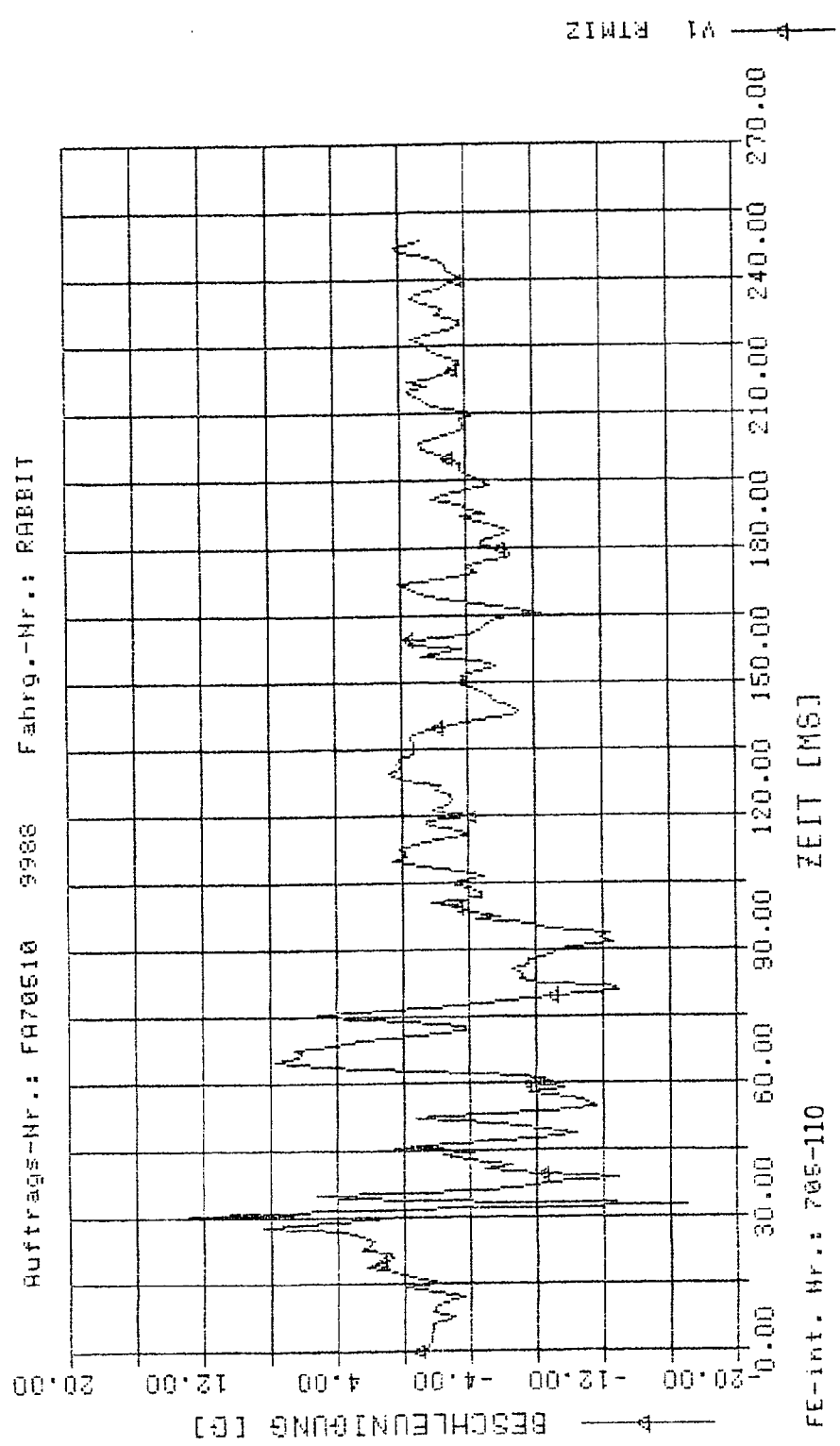
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9988

Mess-Stelle	UP	ber.	Extremum	t	3MS
RTMIY	V1	BE g	62.801	32.00	0.00
RTMIY	V1	GE m/s	-2.642	117.00	0.00
RTMIY	V1	WE m	-1.305	255.00	0.00



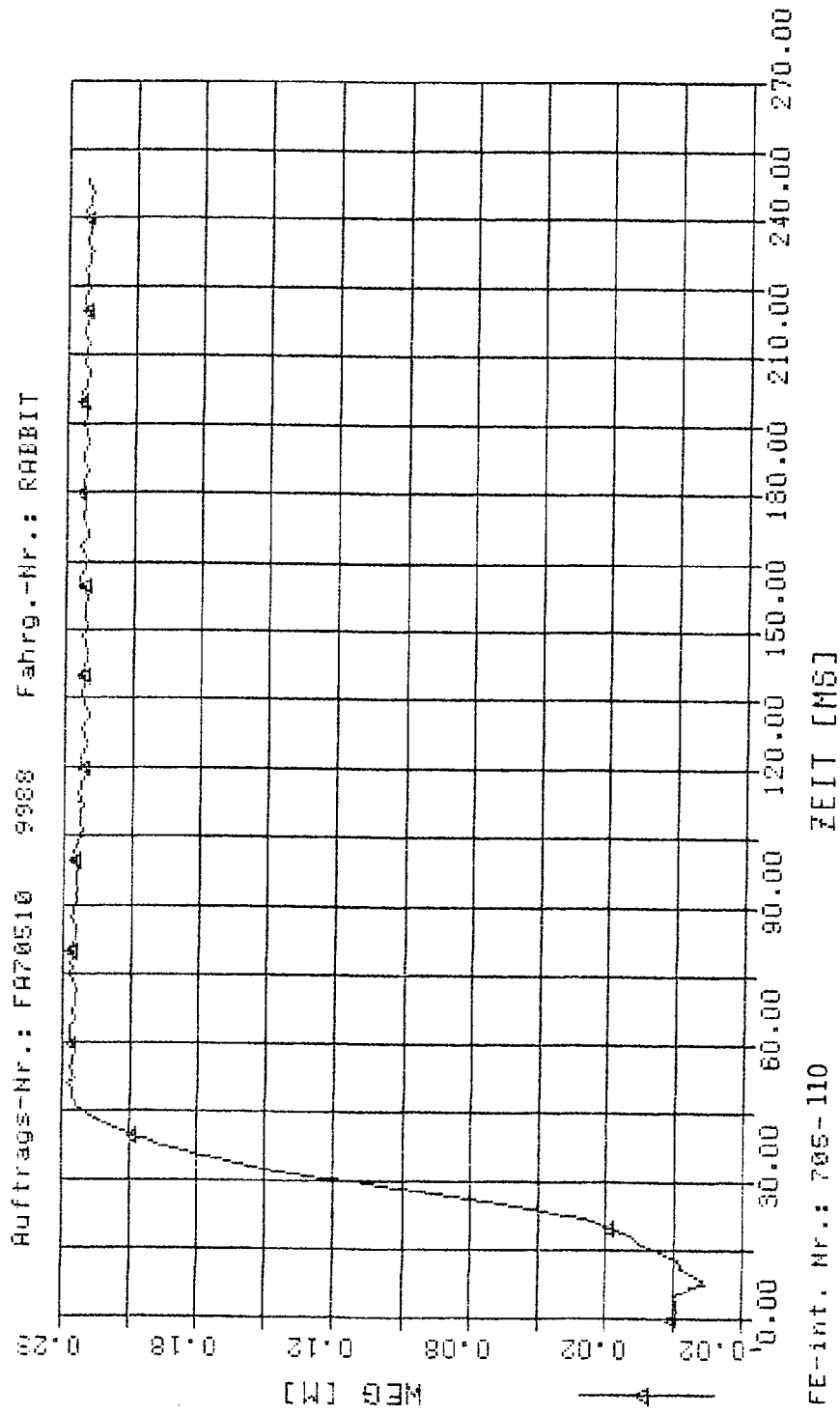
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9988

Mess-Stelle
RTMIZ
UP ber. Extremum t 343
Grösse Extr.
V1 BE g -17.010 33.00 0.00



(Fahrtür) Front Door

Auftrags-Nr.: FA70510 9988 Fahrg.-Nr.: RAEBIT

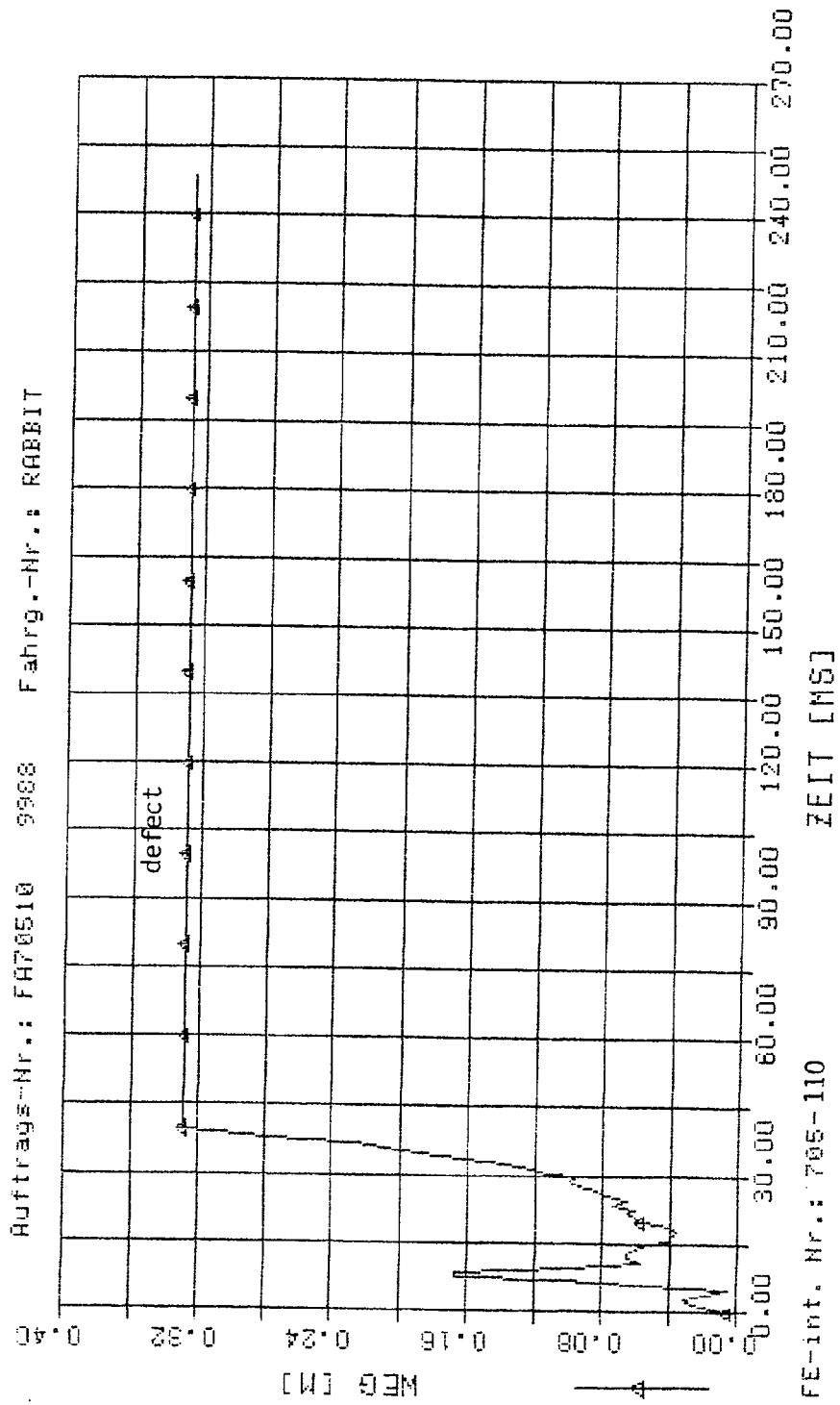


VI FIVE

FE-int. Nr.: 705-110

(Tür hinten) Rear Door

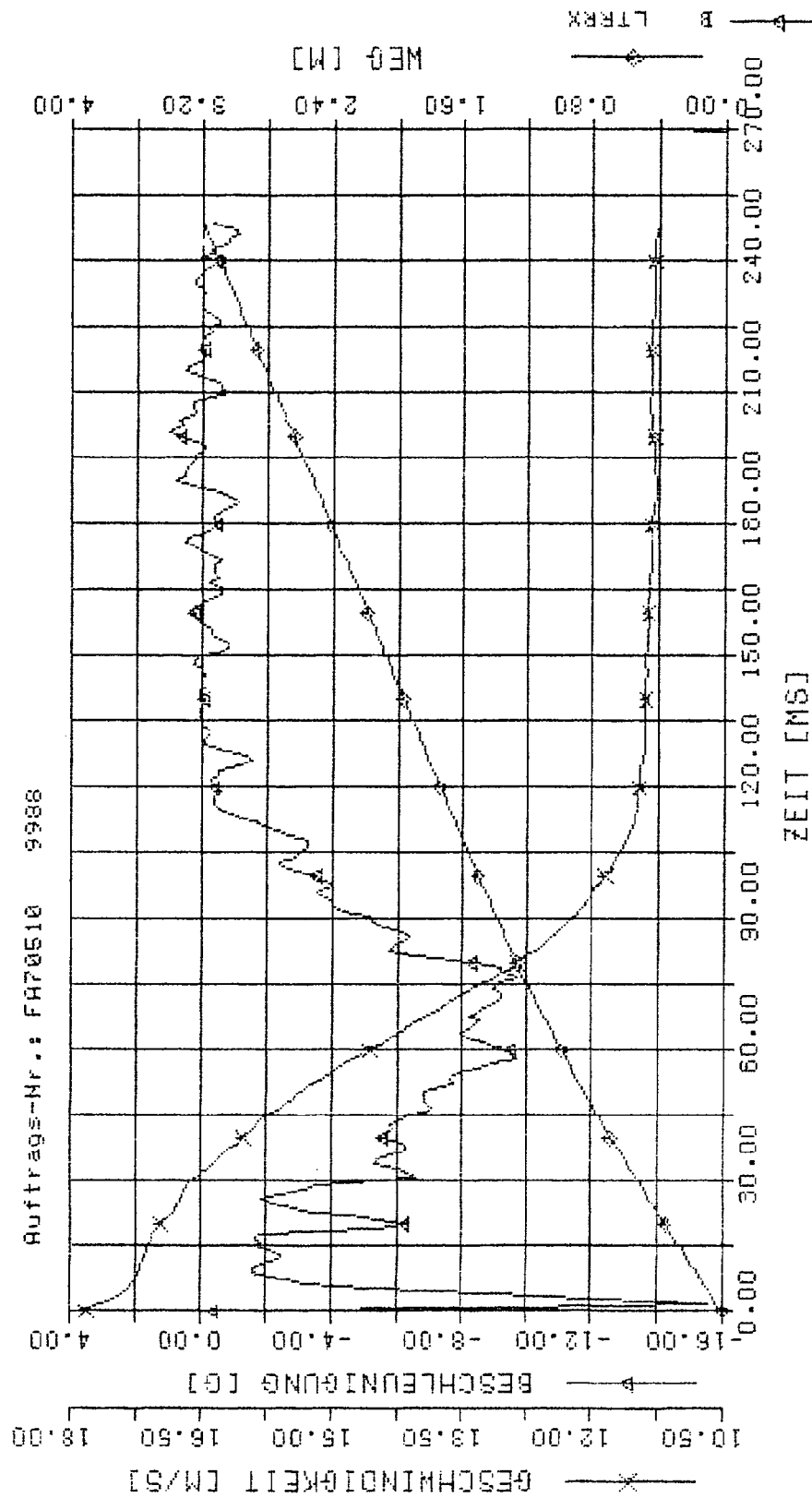
Auftrags-Nr.: FA70510 9908 Fahrg.-Nr.: RABBIT



B.1.2 Crabbed Barrier

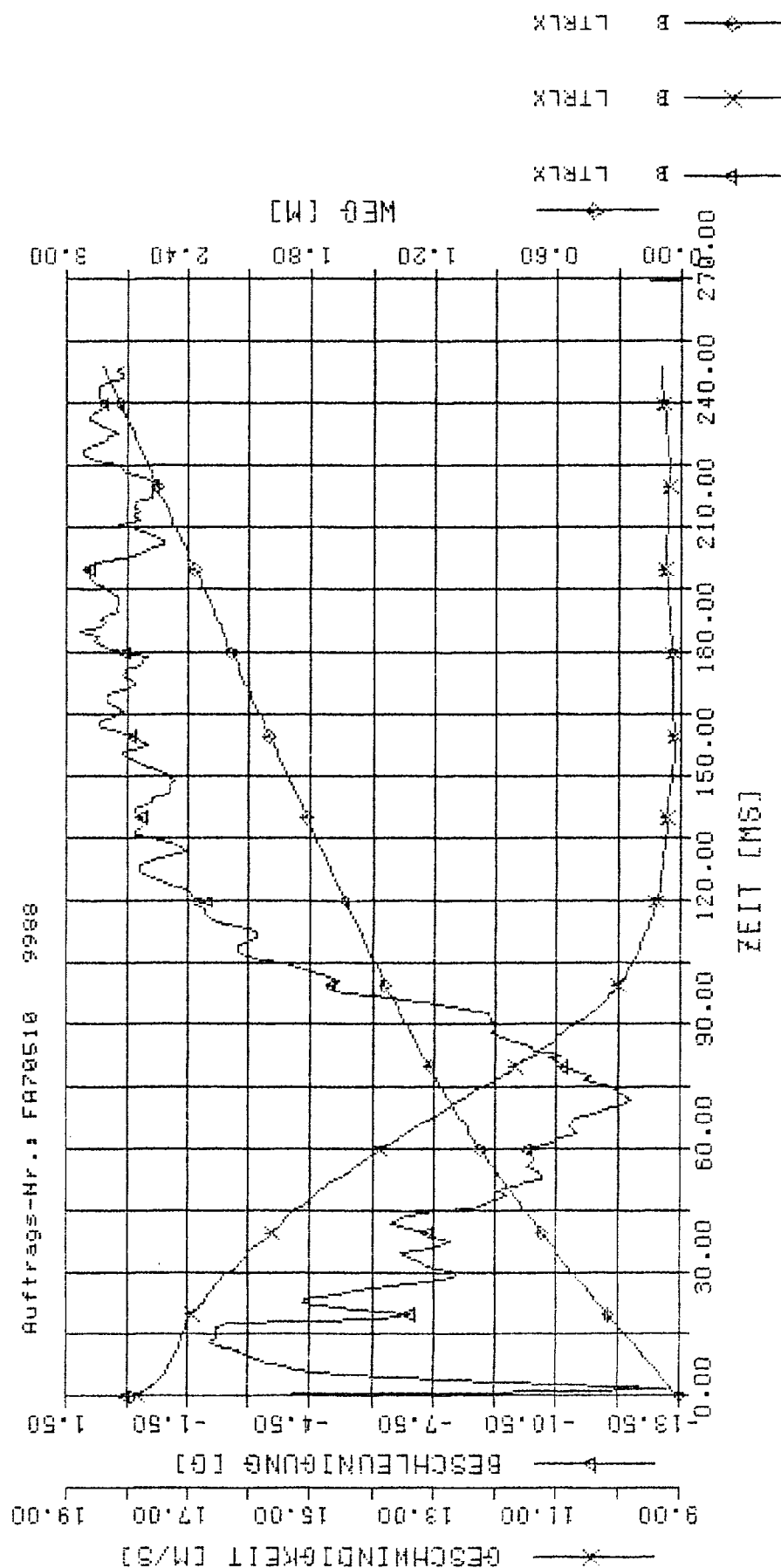
Kennwerte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9988

Mess-Stelle	UP	ber.	Extremum	t	Extr.	AMS
LTRRX	B	BE	-15.605		2.00	0.00
LTRRX	B	GE	17.803		0.00	0.00
LTRRX	B	WE	3.265		255.00	0.00



Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9988

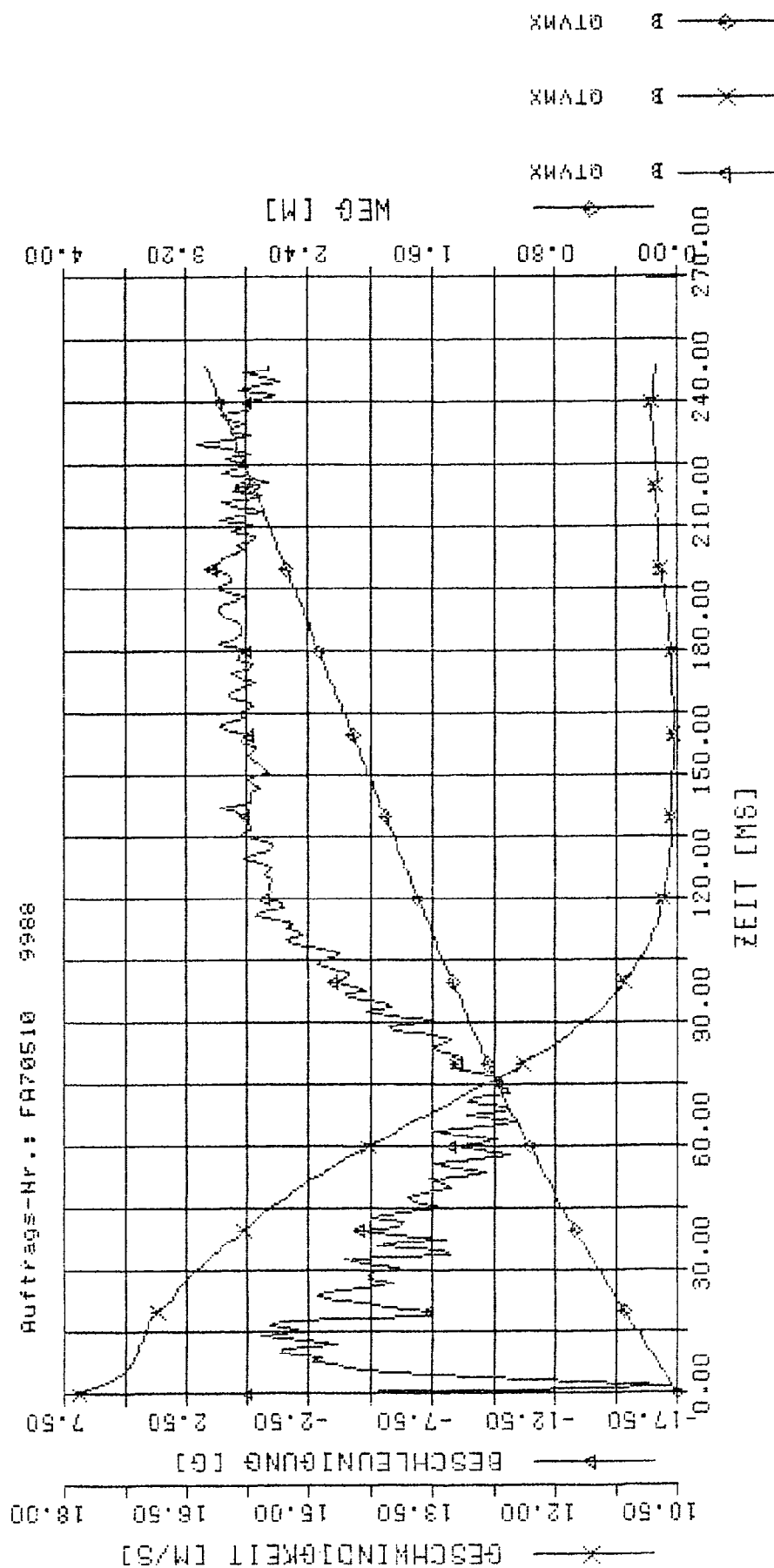
Mess-Stelle	UP	ber.	Extremum	t	3MS
LTRLX	B	Grösse	-13.219	Extr.	0.00
LTRLX	B	RE q	17.803	0.00	0.00
LTRLX	B	GE m/s	2.073	255.00	0.00



Kenn-Nr.: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9988

Mess-Stelle	UP	ber. Grösse	Extremum	t	Extr.	SMS
QTVNX	B	BE g	-17.222	2.00	0.00	
QTVNX	B	GE m/s	17.803	0.00	0.00	
QTVNX	B	UE m	3.127	255.00	0.00	

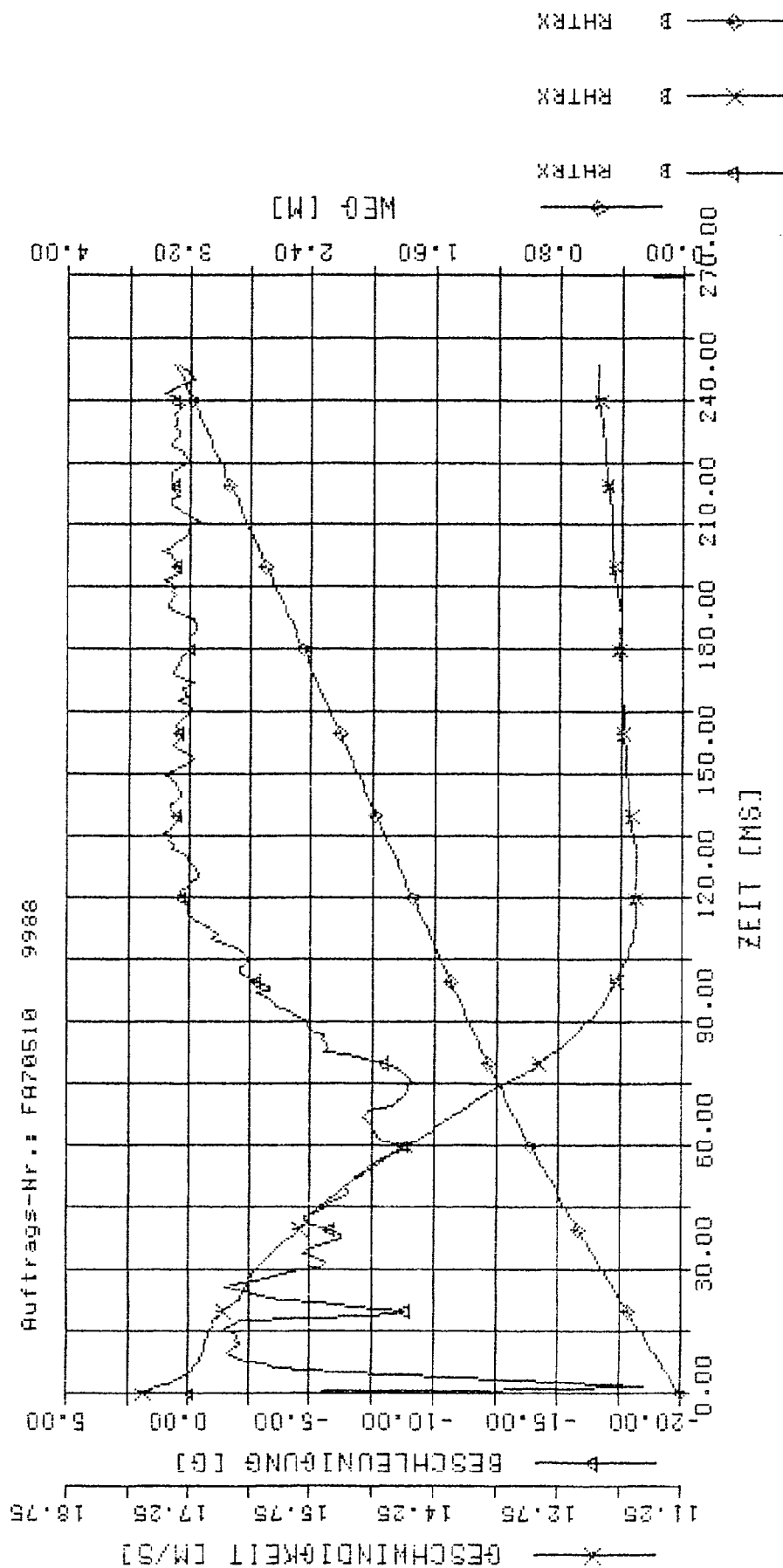
Auftrags-Nr.: FA70510 9988



Kenn-Merkmale: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9988

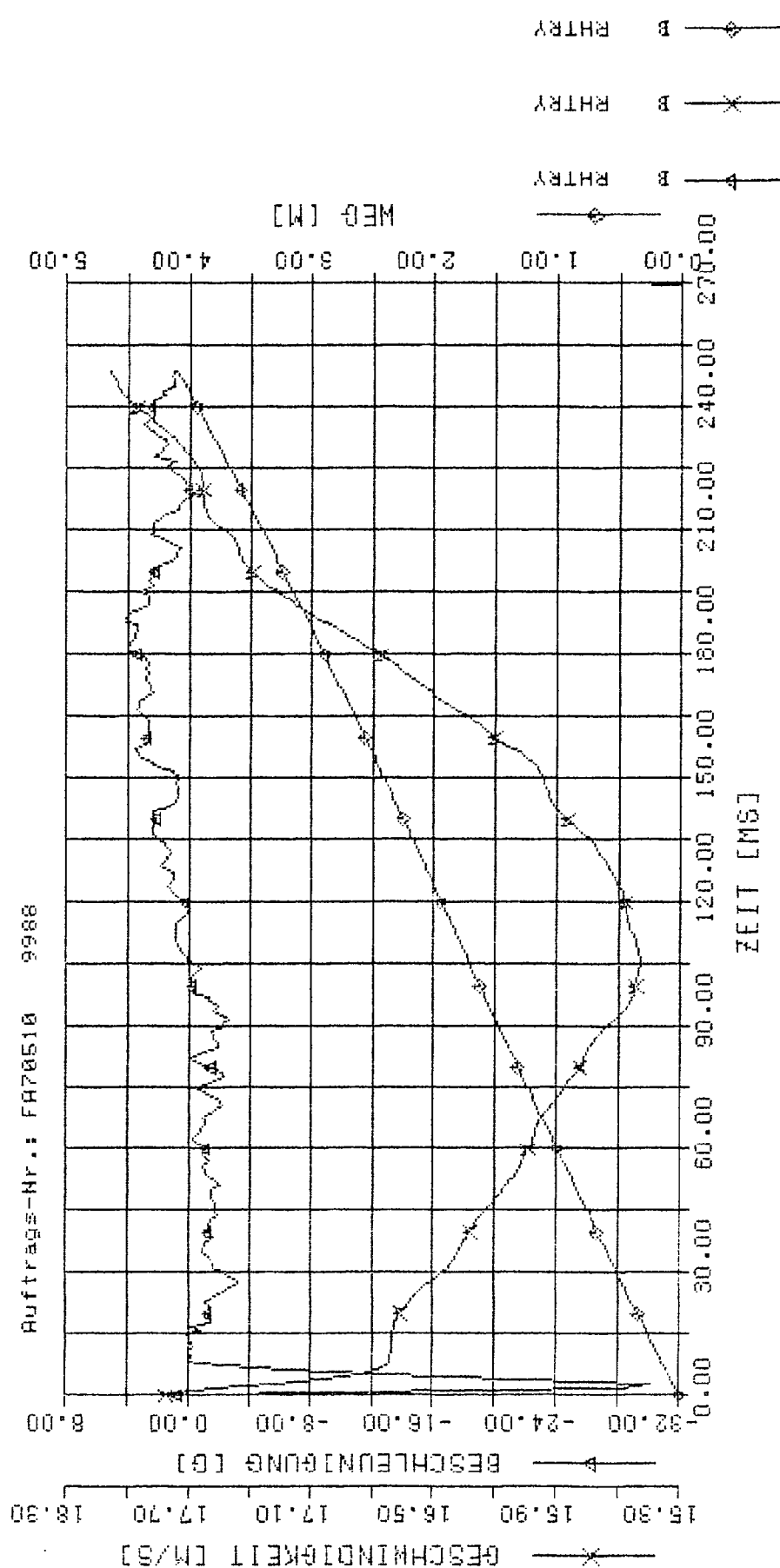
Mess-Stelle	UP	ber.	Extremum	t	SMS
		Groesse		Extr.	
RHTRX	B	BE g	-18.489	2.00	0.00
RHTRX	B	GE m/s	17.803	0.00	0.00
RHTRX	B	WE m	3.366	255.00	0.00

Auftrags-Nr.: FA70510 9988



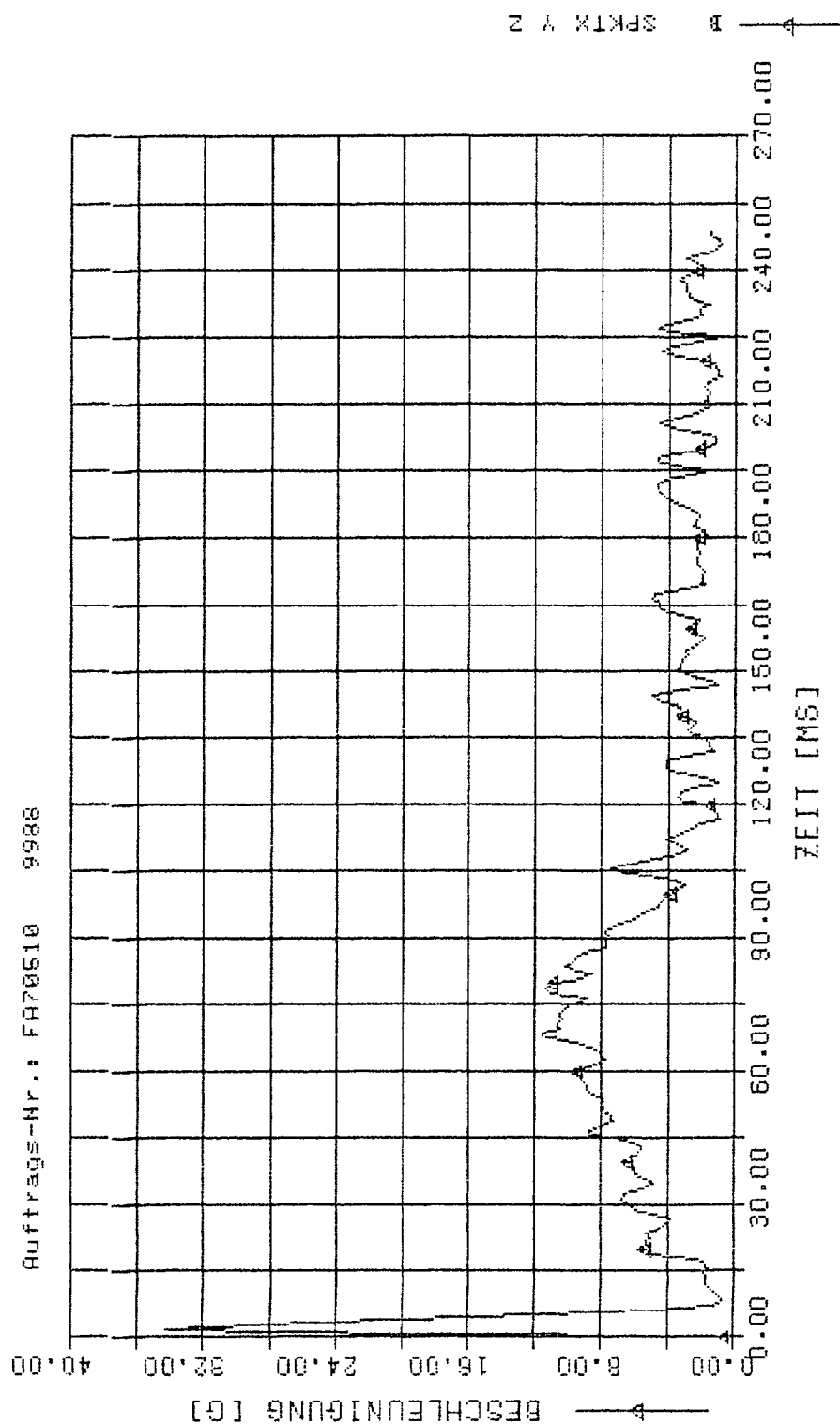
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9988

Mess-Stelle	UP	ber.	Grösse	Extremum	t	Extr.	MS
RHTRY	B	BE	q	-30.164		3.00	0.00
RHTRY	B	GE	m/s	18.127		255.00	0.00
RHTRY	B	WE	m	4.214		255.00	0.00



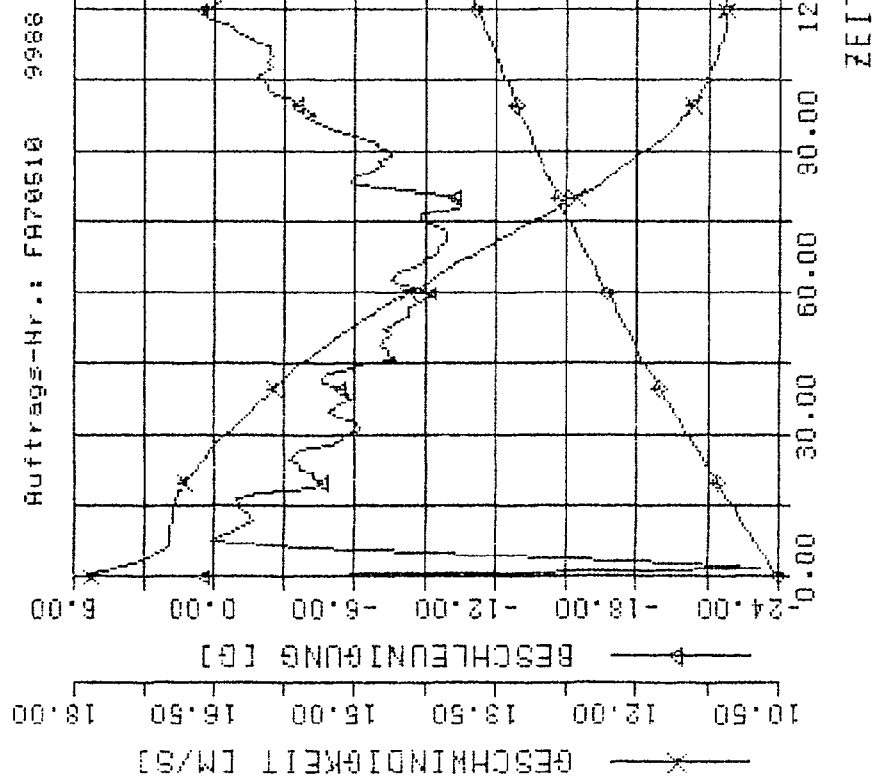
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9988

Mess-Größe: UP ber. Extremum t JMS
SPKT B BE q 34.263 2.00 0.00



Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9988

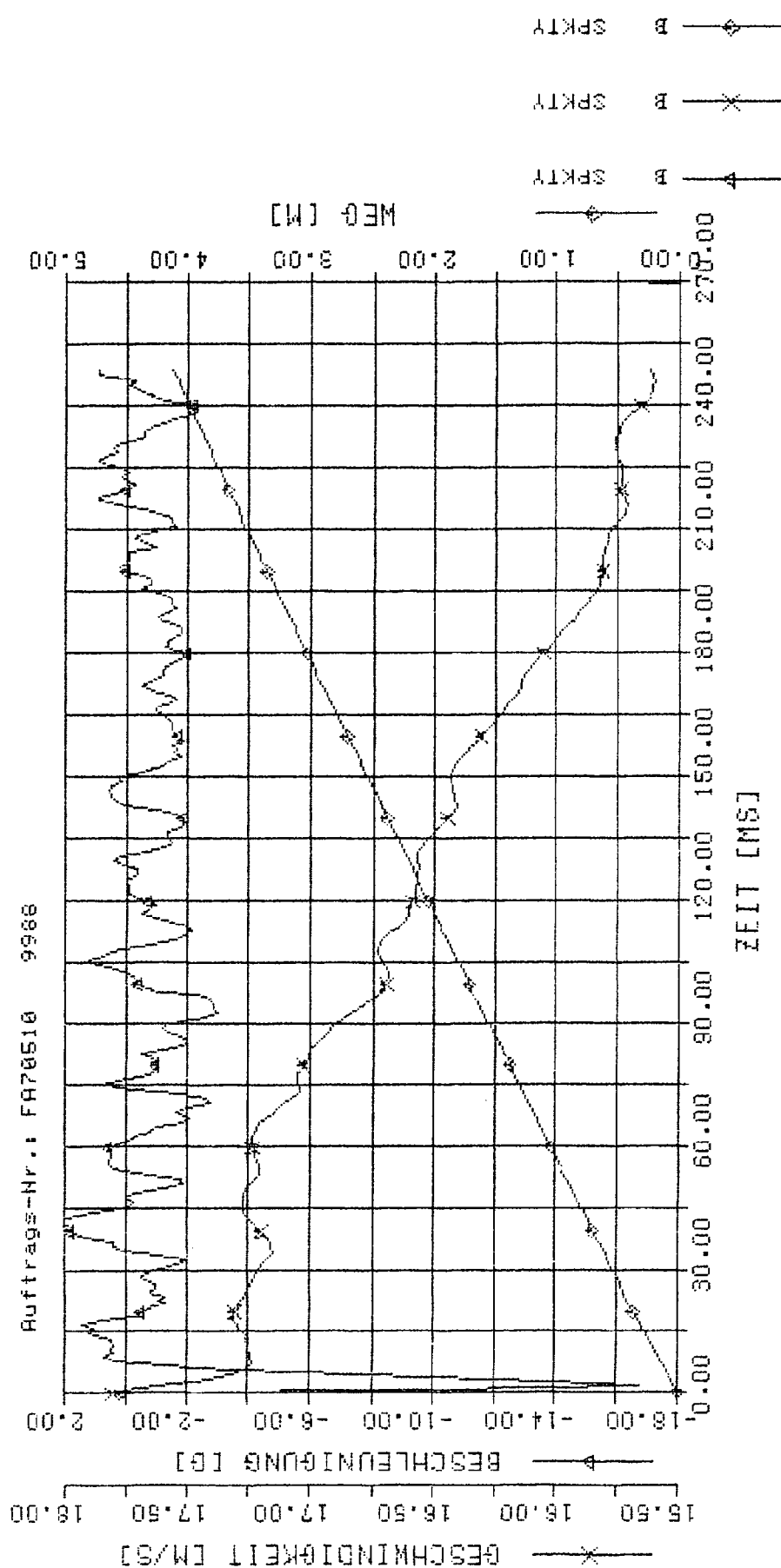
Mess-Stelle	UP	ber.	Extremum	t	ΔMS
SPKTX	B	Groesse		Extr.	
SPKTX	B	RE q	-23.258	2.00	0.00
SPKTX	B	GE m/s	17.803	0.00	0.00
SPKTX	B	WE m	3.239	255.00	0.00



B SPKTX
 B SPKTX
 B SPKTX

Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9988

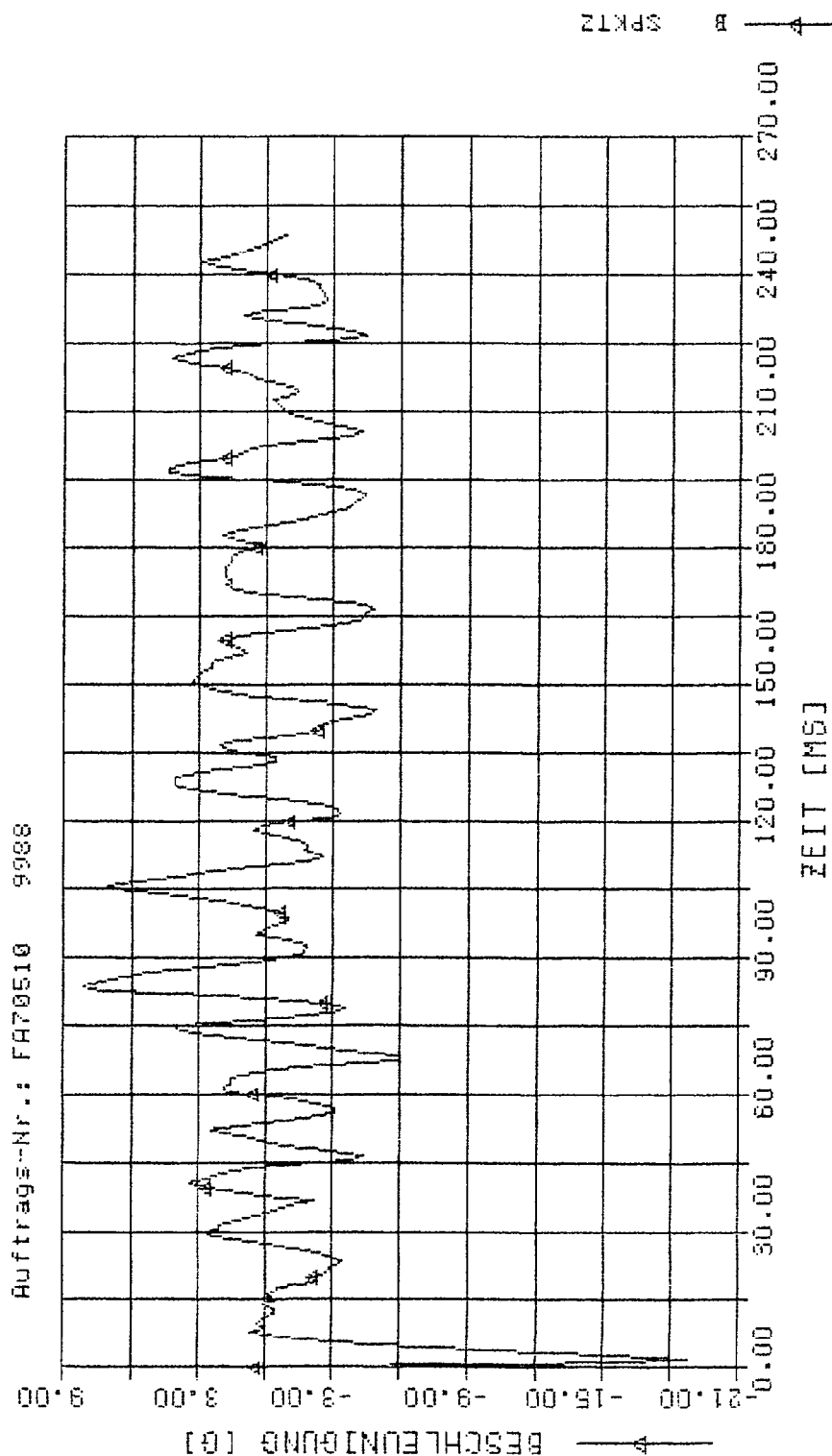
Mess-Stelle	UP	ber.	Extremum	Extr.	AMS
SPKTY	B	Grösse	-16.777	2.00	0.00
SPKTY	B	BE g	17.803	0.00	0.00
SPKTY	B	GE m/s	4.214	255.00	0.00
SPKTY	B	WE m			



Kennwerte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9988

Mess-Stelle UP ber. Extremum t 3MS
Groesse Extr.
B BE q -18.751 2.00 0.00

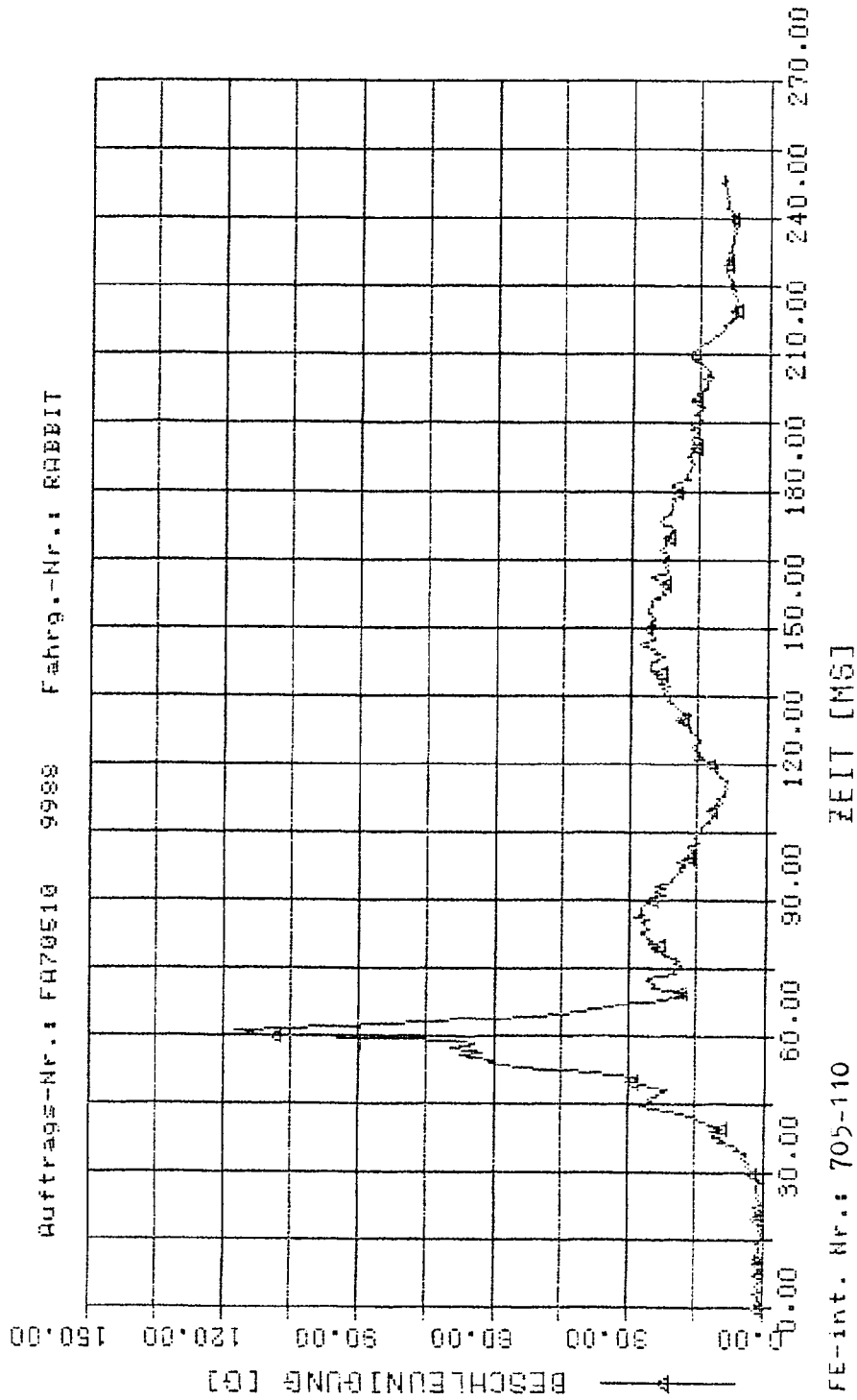
SPKTZ



B.2 Dummy Test Response
B.2.1 Driver

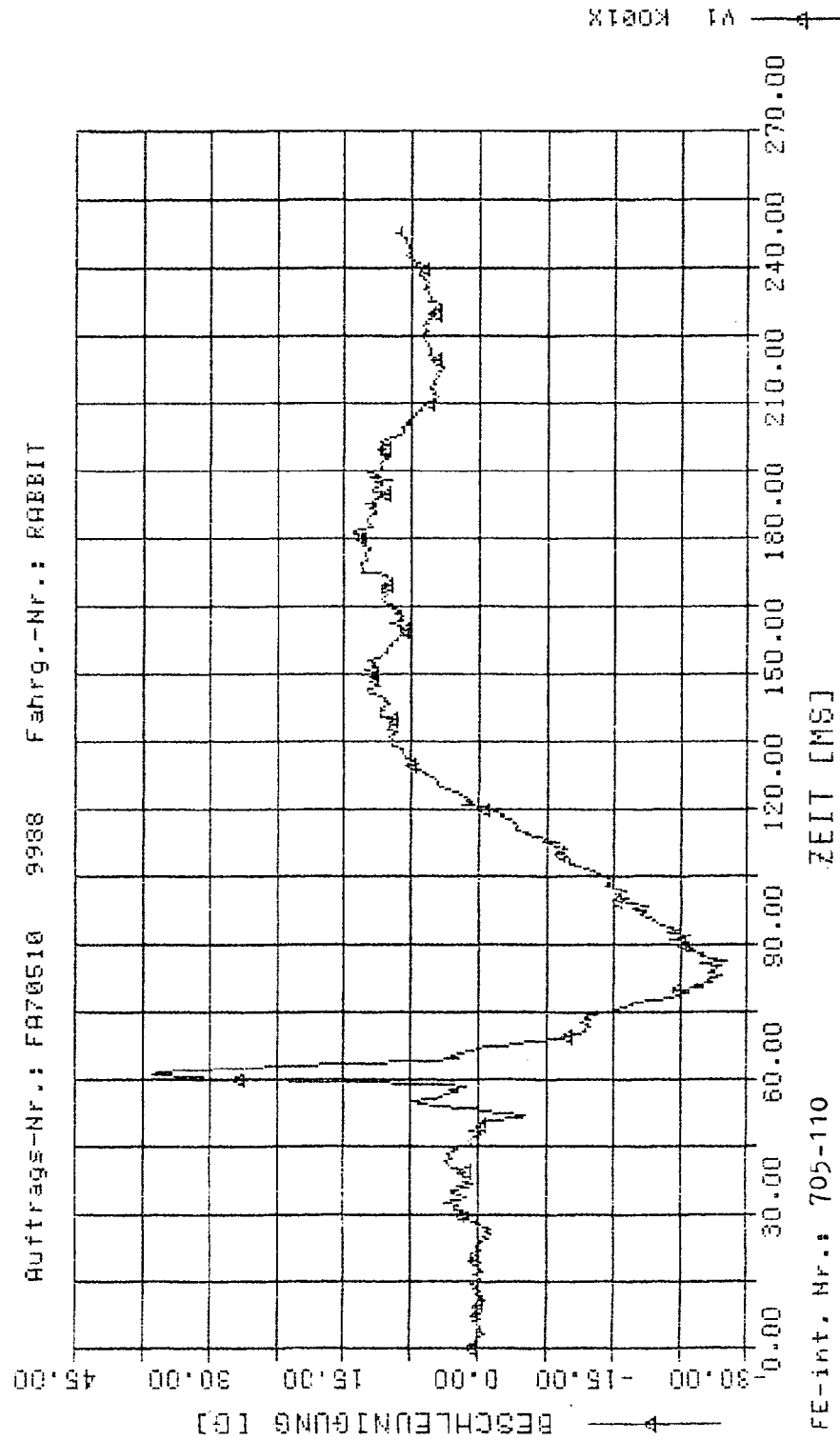
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9988

Mess-Stelle UP ber. Extremum t 3MS
 KO01 Groesse Extr. 61.40 88.66
 V1 BE q 122.837



Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9988

Mess-Stelle UP ber. Extremum t 3MS
K001X V1 BE g Groesse Extr. 36.733 61.40 26.49



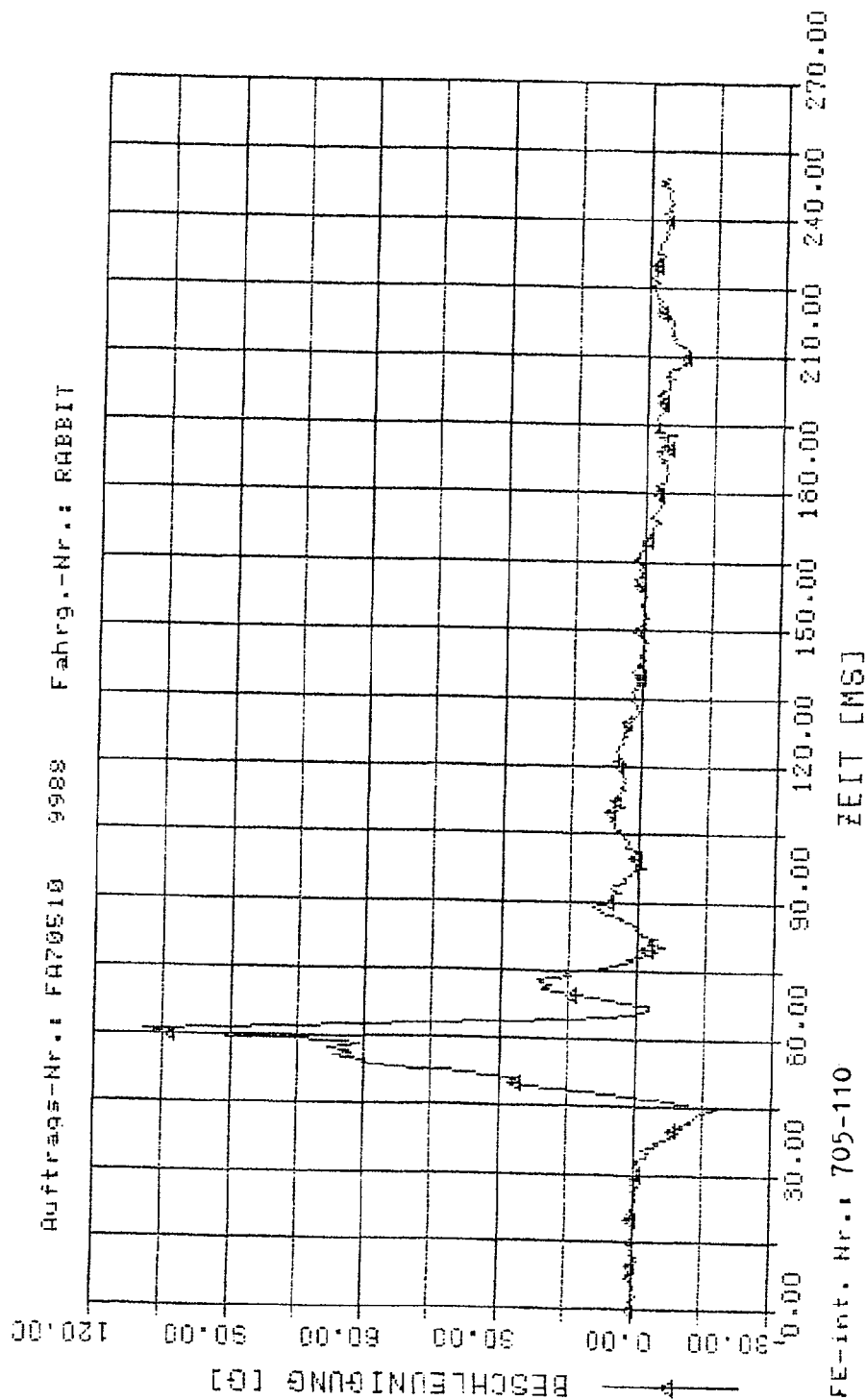
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9988

Mess-Stelle

UP ber. Extremum t SMS

K001Y

V1 BE q 114.702 Extr. 61.40 80.01

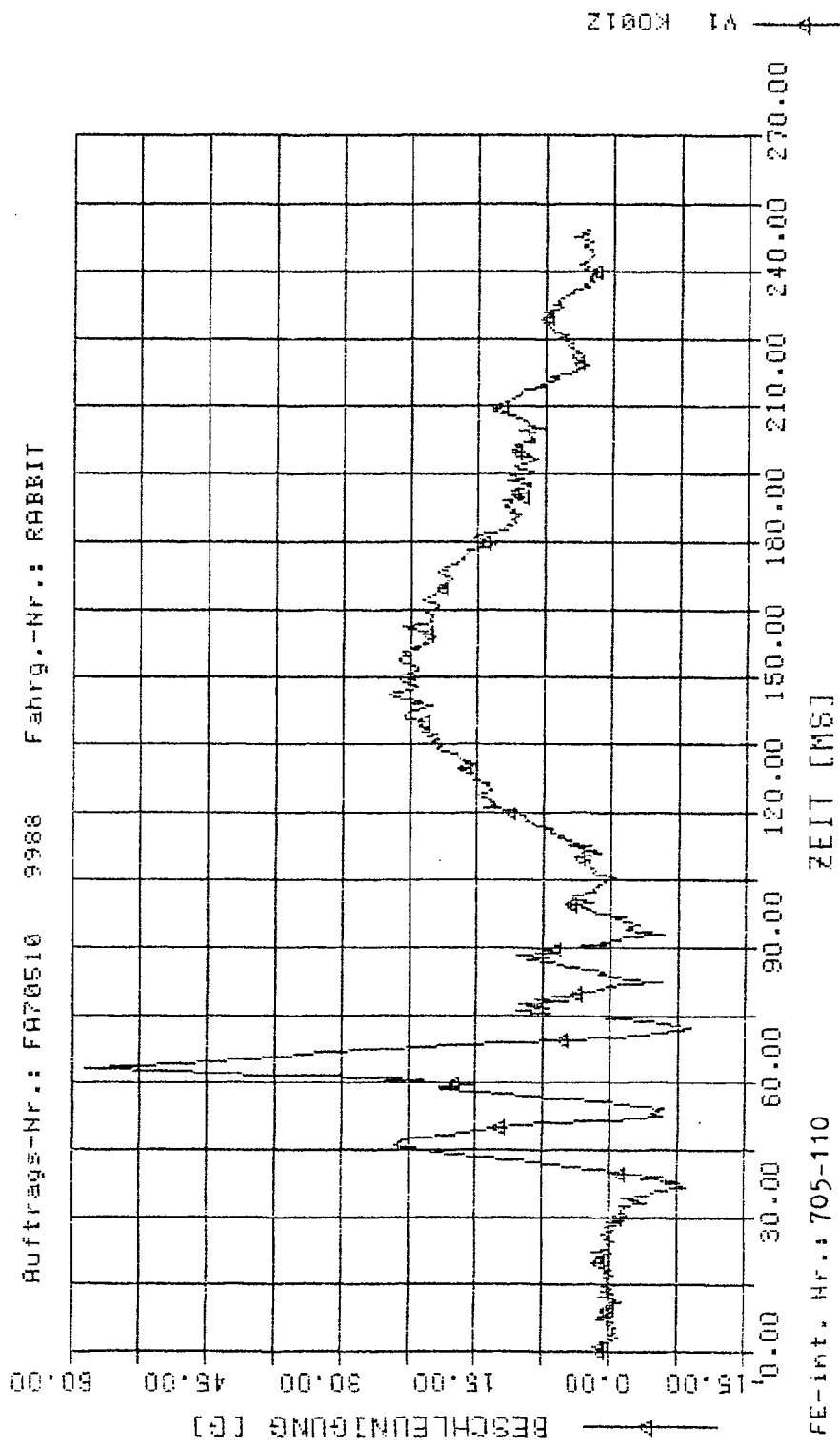


V1 K001Y

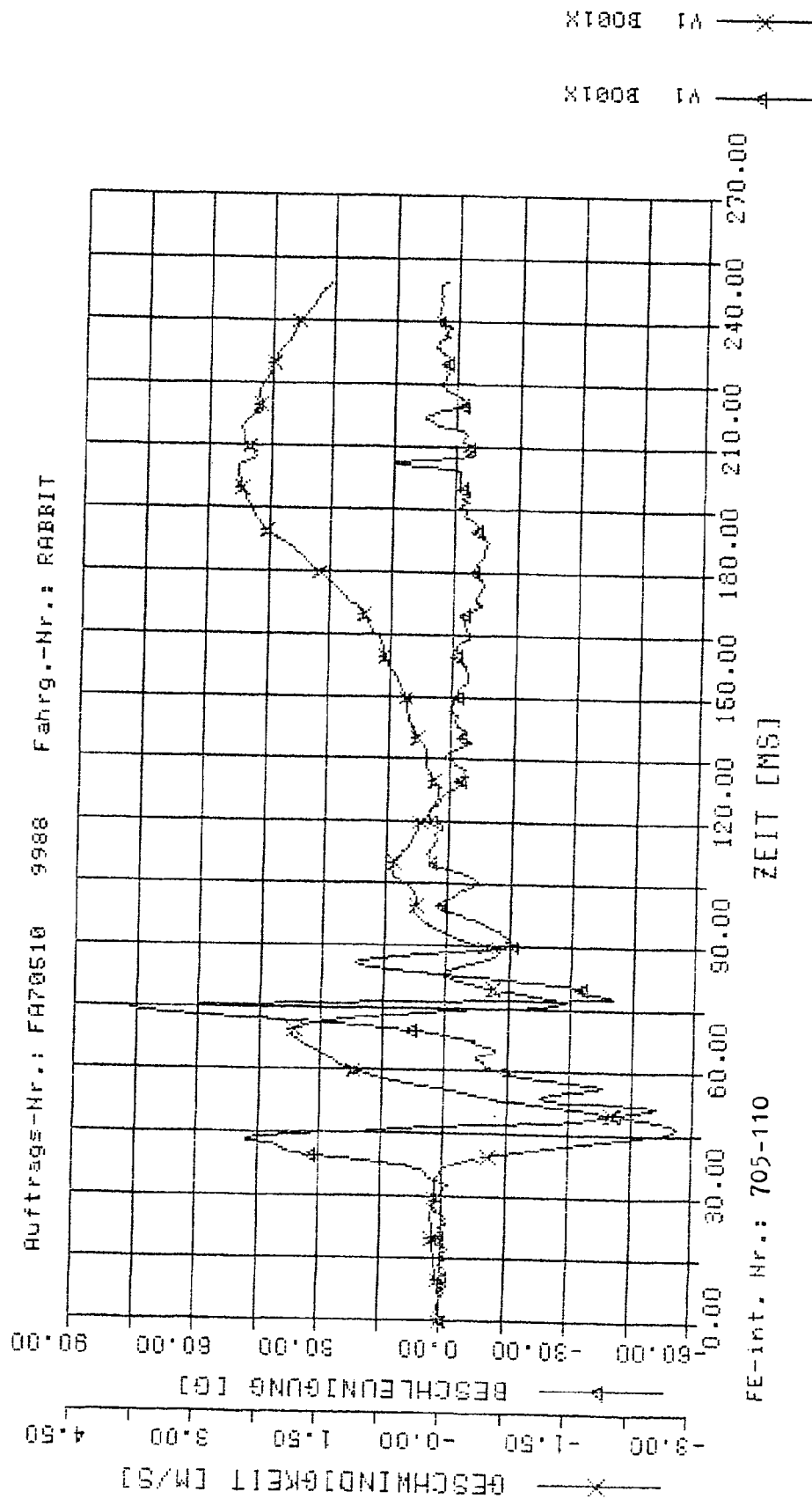
... ..

Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9980

Mess-Stelle UP ber. Extremum t SMS
K001Z V1 BE q 58.456 Extr. 63.50 41.71

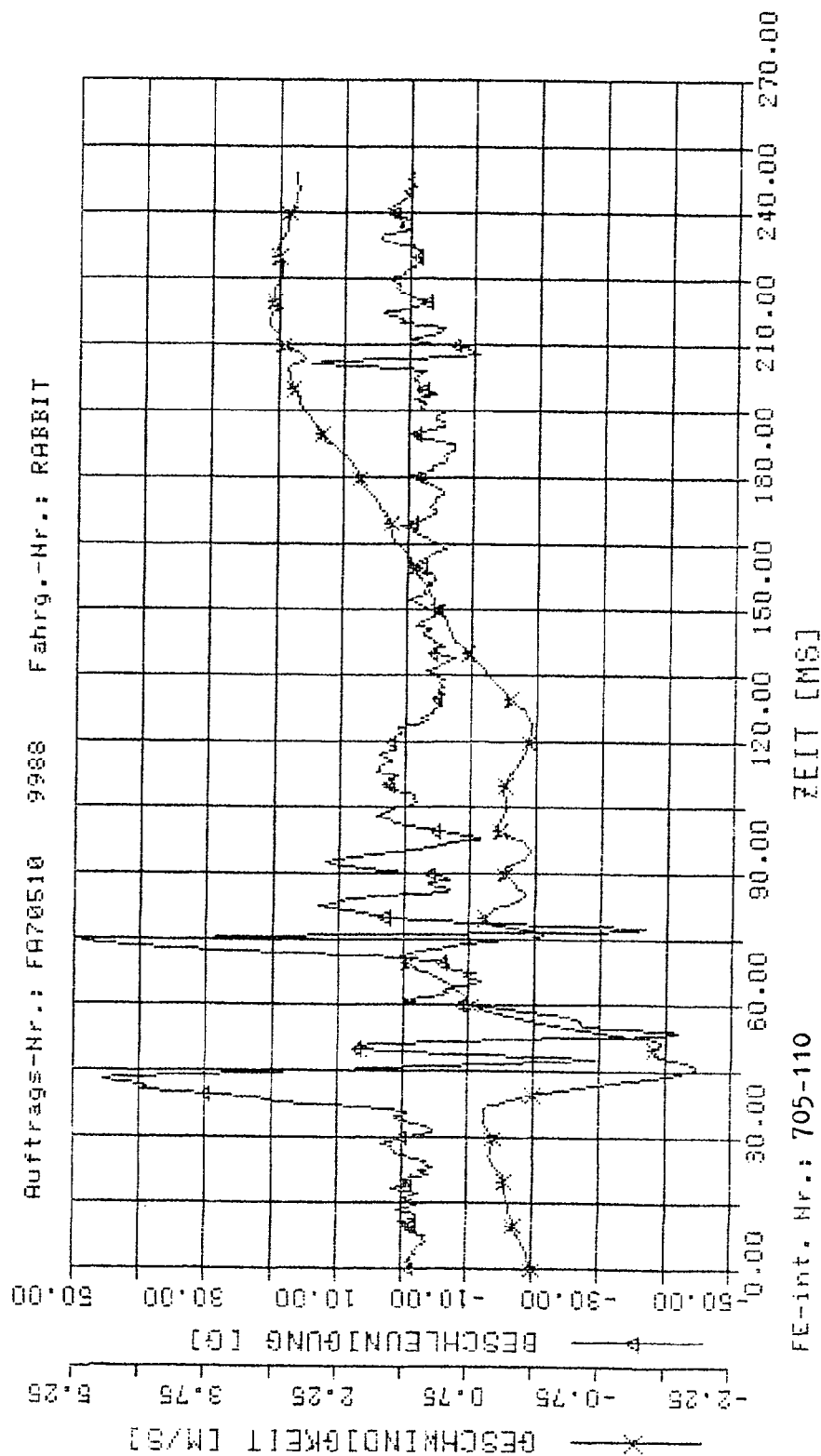


Mess-Stelle	UP	ber. Grösse	Extremum	t	MS
0001X	V1	BE 9	77.272	75.00	0.00
0001X	V1	GE m/s	-2.808	47.00	0.00



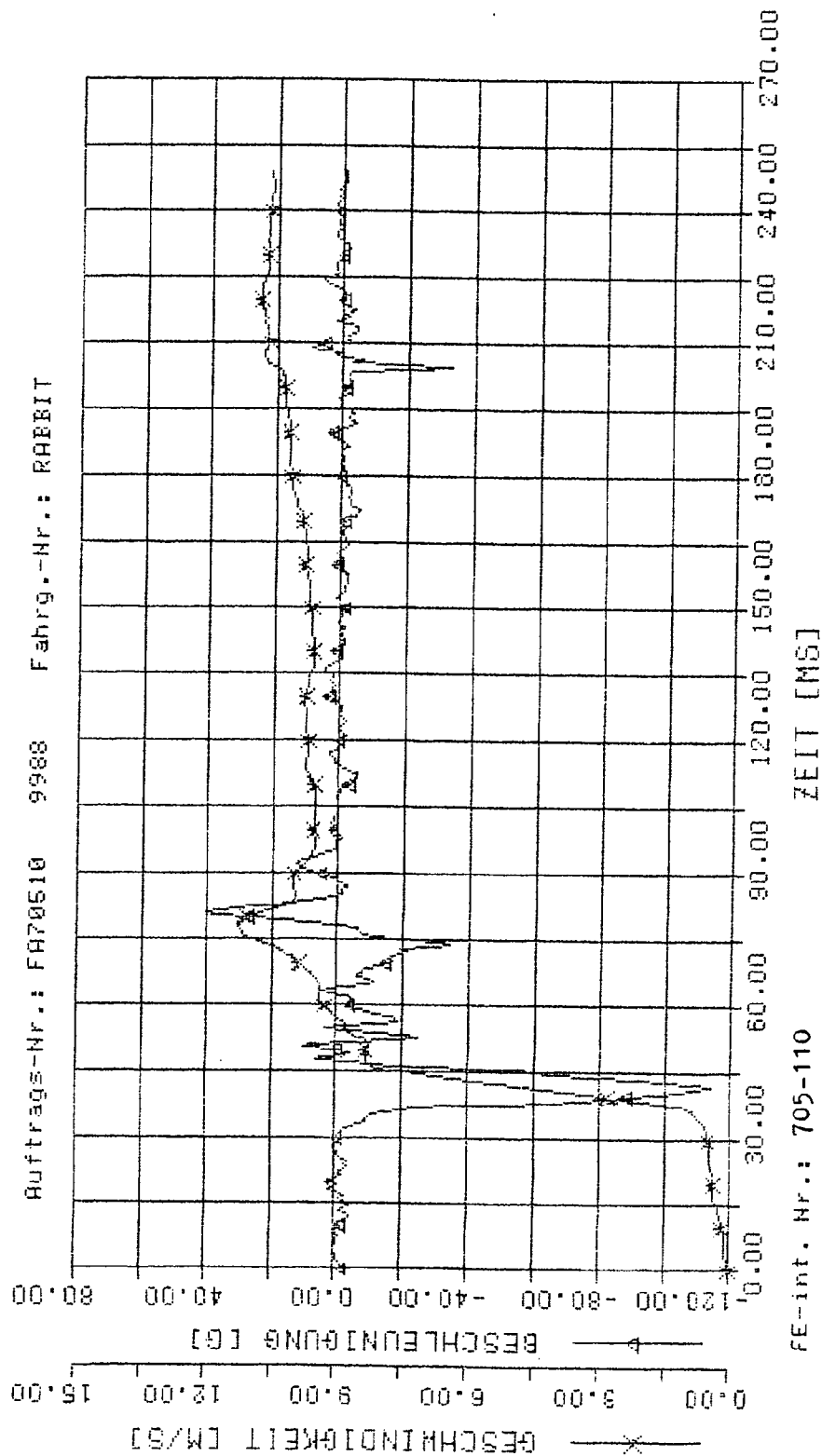
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9988

Mess-Stelle	UP	ber.	Extrema	t	MS
BU01X		Groesse		Extr.	
	V1	BE g	48.744	74.50	0.00
BU01X		V1 GE m/s	3.096	215.00	0.00



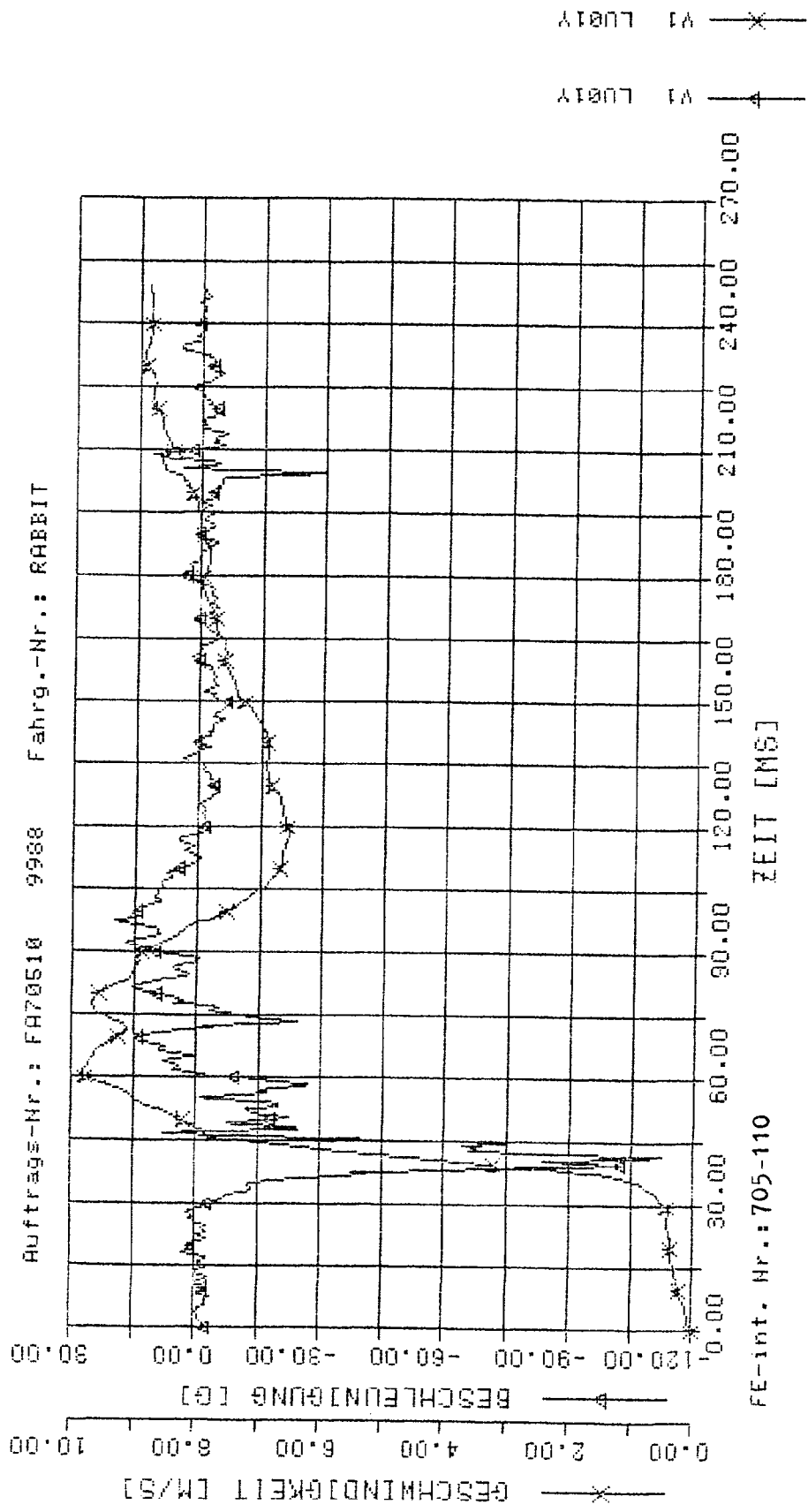
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9988

Mess-Stelle	UP	ber.	Extrema	t	3MS
L001Y		Grösse		Extr.	
	V1	BE q	-114.740	42.00	0.00
L001Y	V1	GE m/s	11.284	78.50	0.00

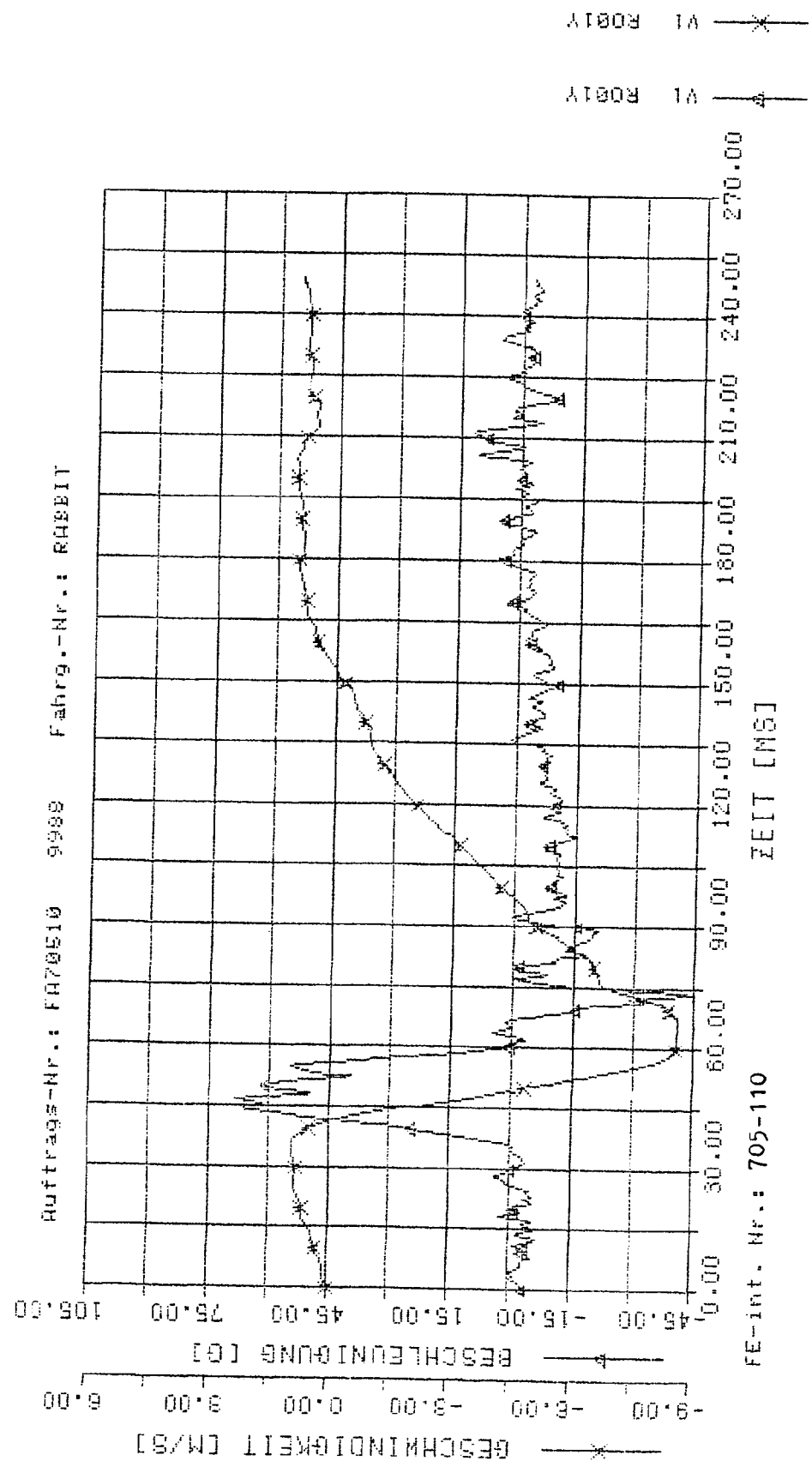


Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9988

Mess-Stelle	UP	ber.	Extremum	t	Extr.
LU01Y	V1	Groesse	112.921	42.00	0.00
LU01Y	V1	GE m/s	9.824	61.00	0.00

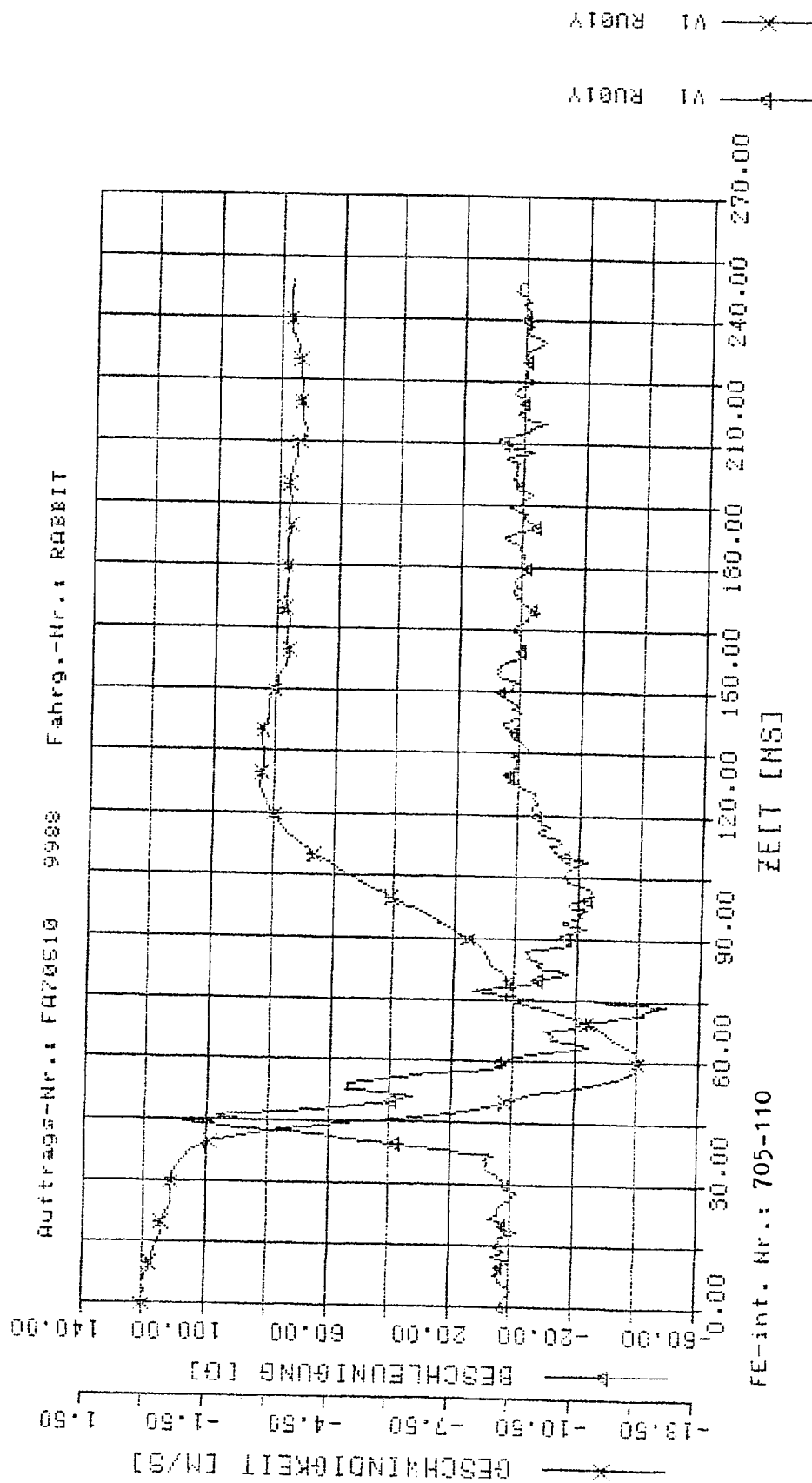


Kennwerte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9988
 Mess-Stelle: UP ber. Extr. t SMS
 R001Y Groesse Extr. 0.00
 R001Y V1 BE q 68.167 47.00
 R001Y V1 GE w/s -8.632 67.00



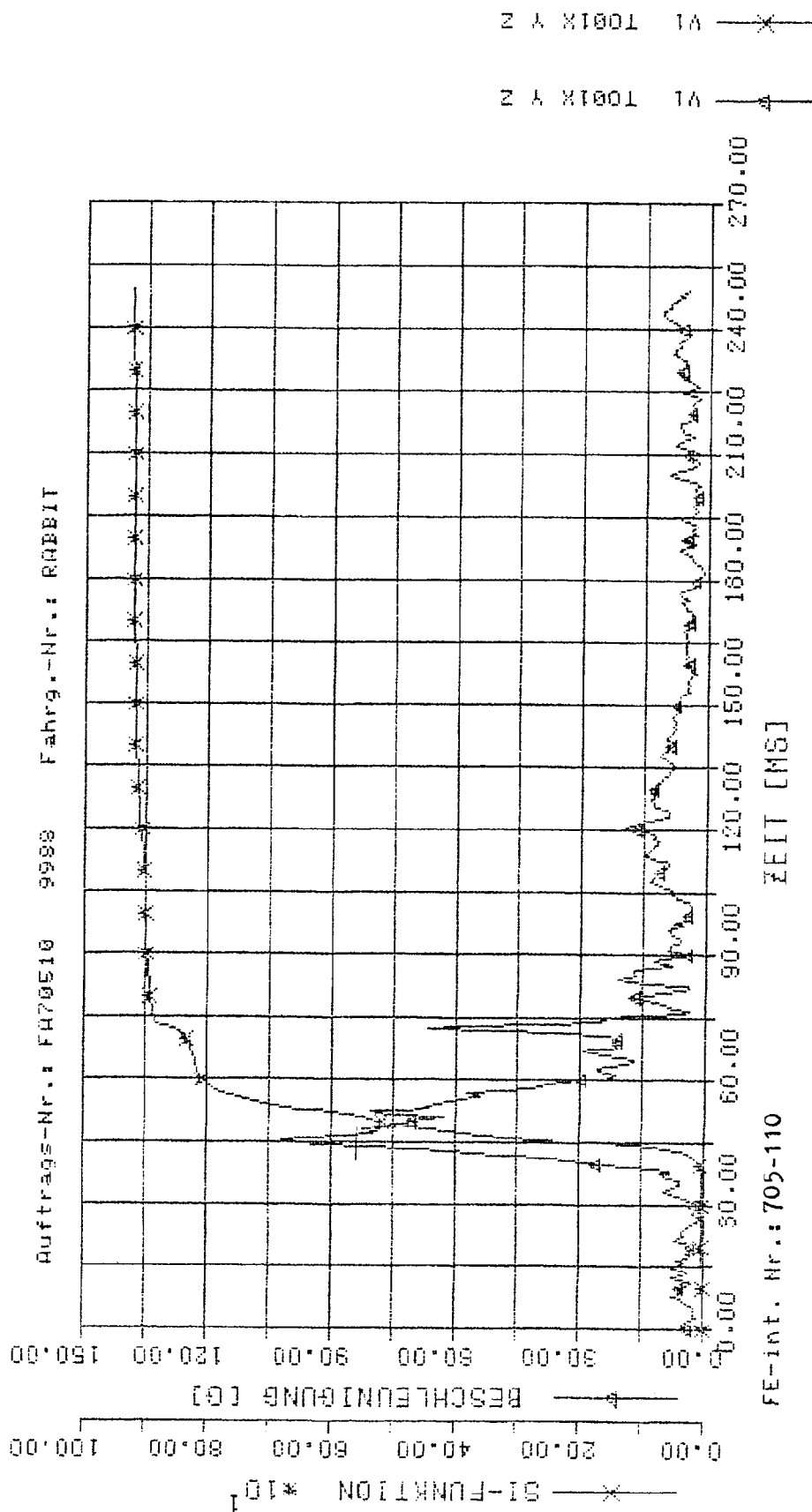
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9988

Mess-Stelle	UP	ber.	Extremum	t	3MS
RU01Y	V1	Grösse			
		BE q	107.838	44.50	0.00
RU01Y	V1	GE m/s	112.064	61.00	0.00

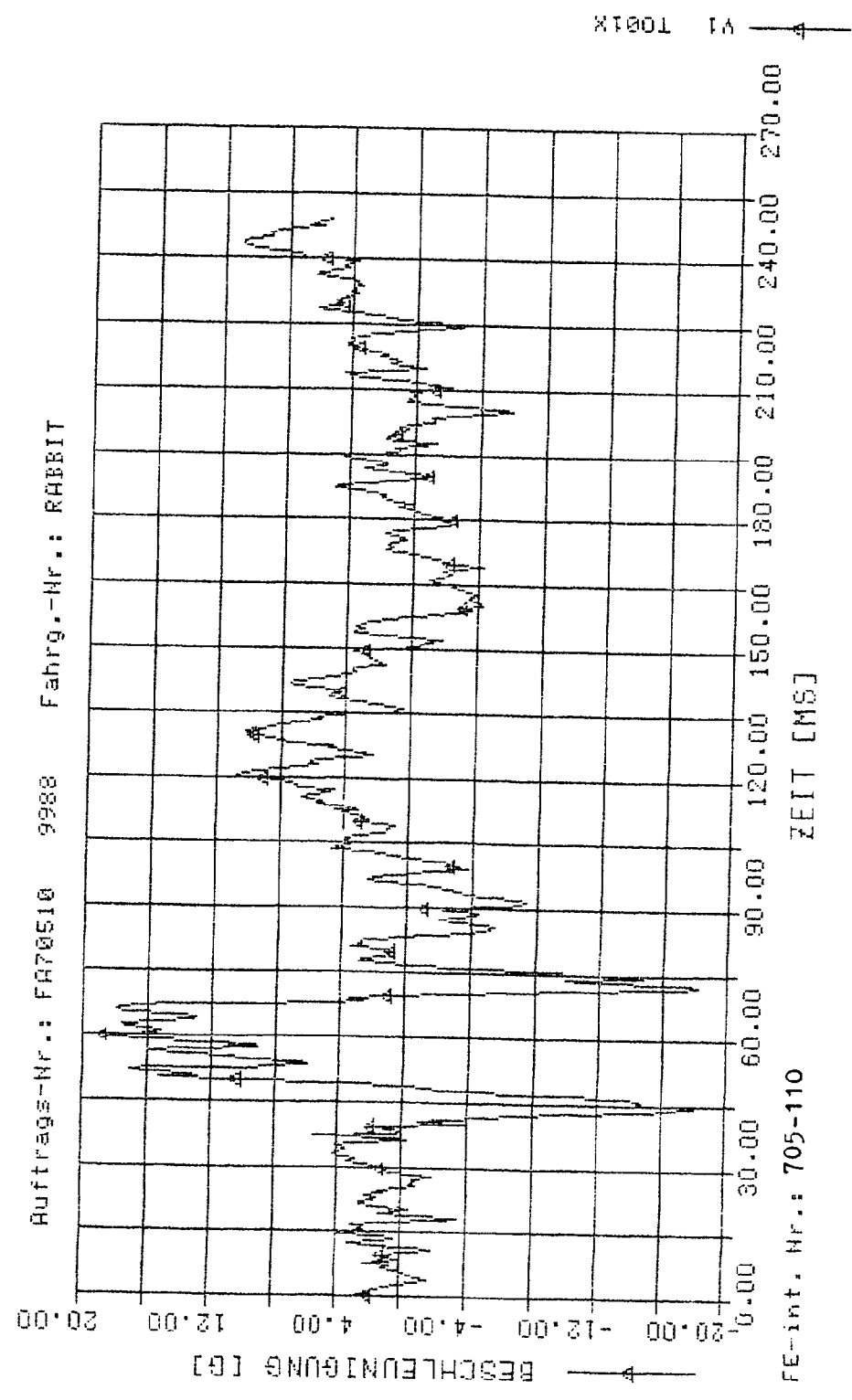


Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9988

Mess-Stelle	UP	ber.	Extremum	t	MS
T001	V1	BE	q	102.555	45.50
T001	V1	SI		925.283	250.00

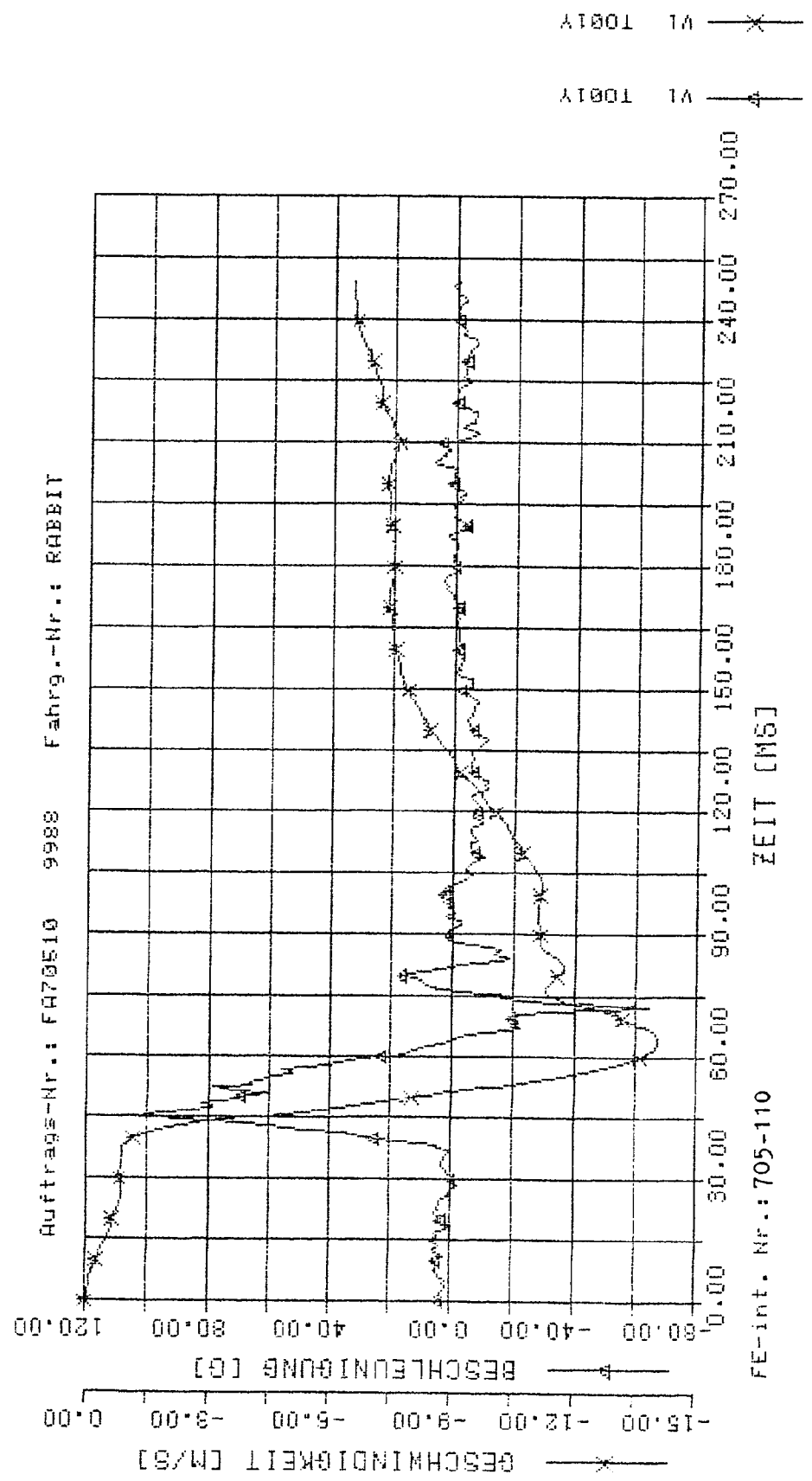


Kennwerte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9988
 Mess-Stelle: UP ber. Extremum 3MS
 T001X Grösse Extr. 0.00
 V1 BE q 18.734 60.00

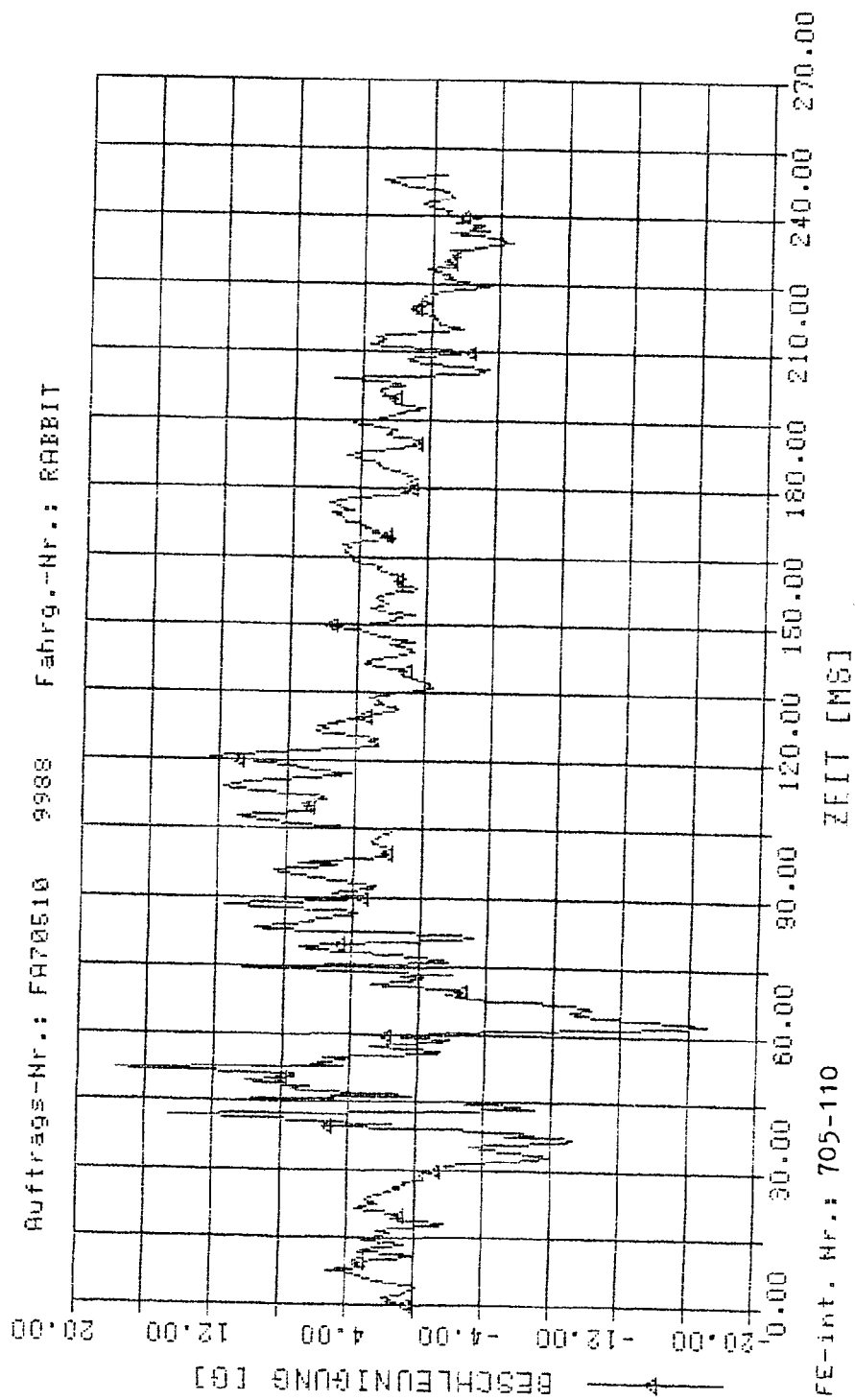


Kennwerte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9988

Mess-Stelle	UP	ber.	Extremum	t	ΔMS
T001Y	V1	Groesse	101.414	Extr.	0.00
T001Y	V1	BE q	-14.049	64.00	0.00
	V1	GE m/s			



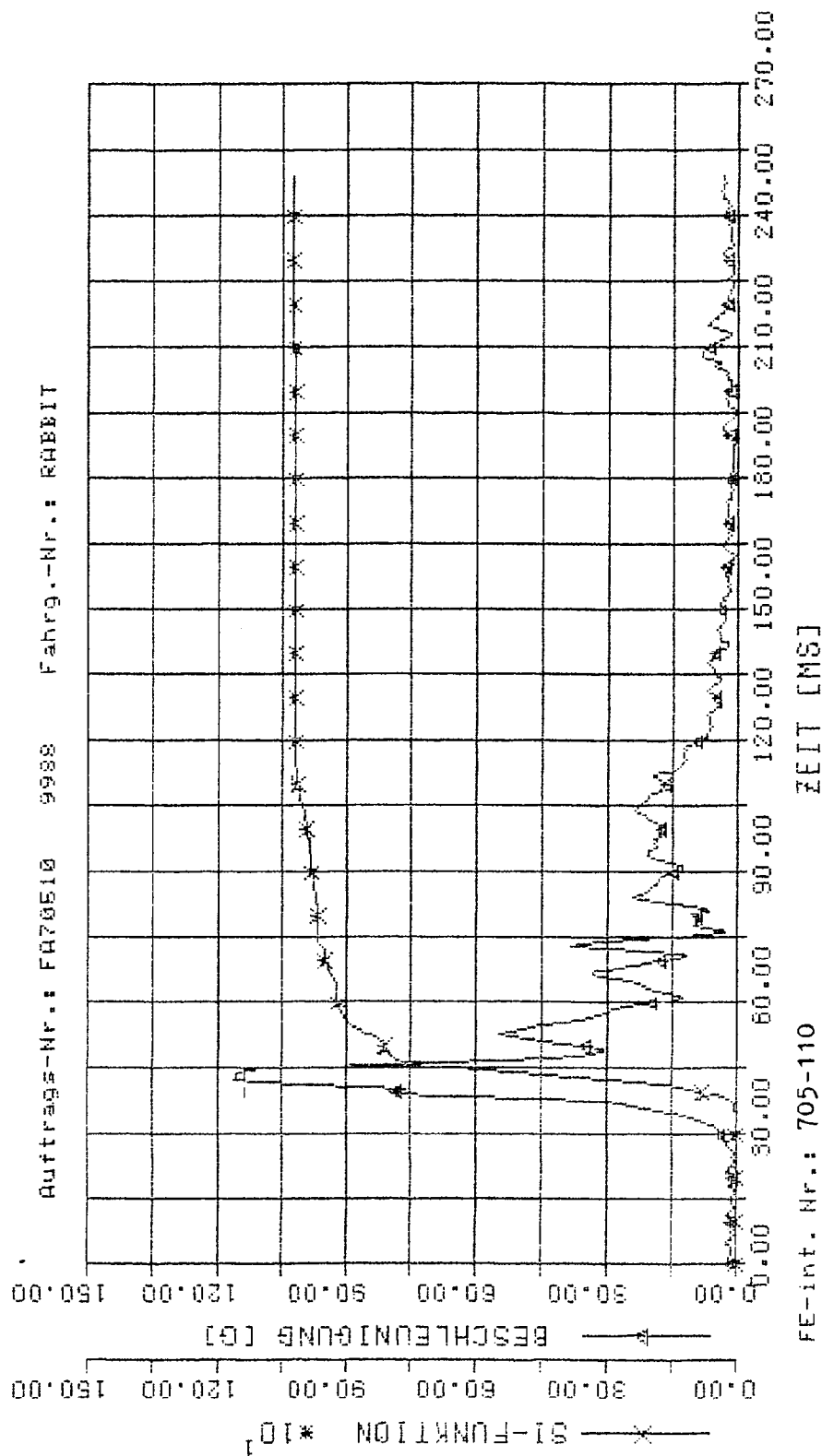
Kennwerte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9908
 Mess-Stelle UP ber. Extremum τ JMS
 T0012 V1 BE q 17.819 52.00 0.00



T0012 V1

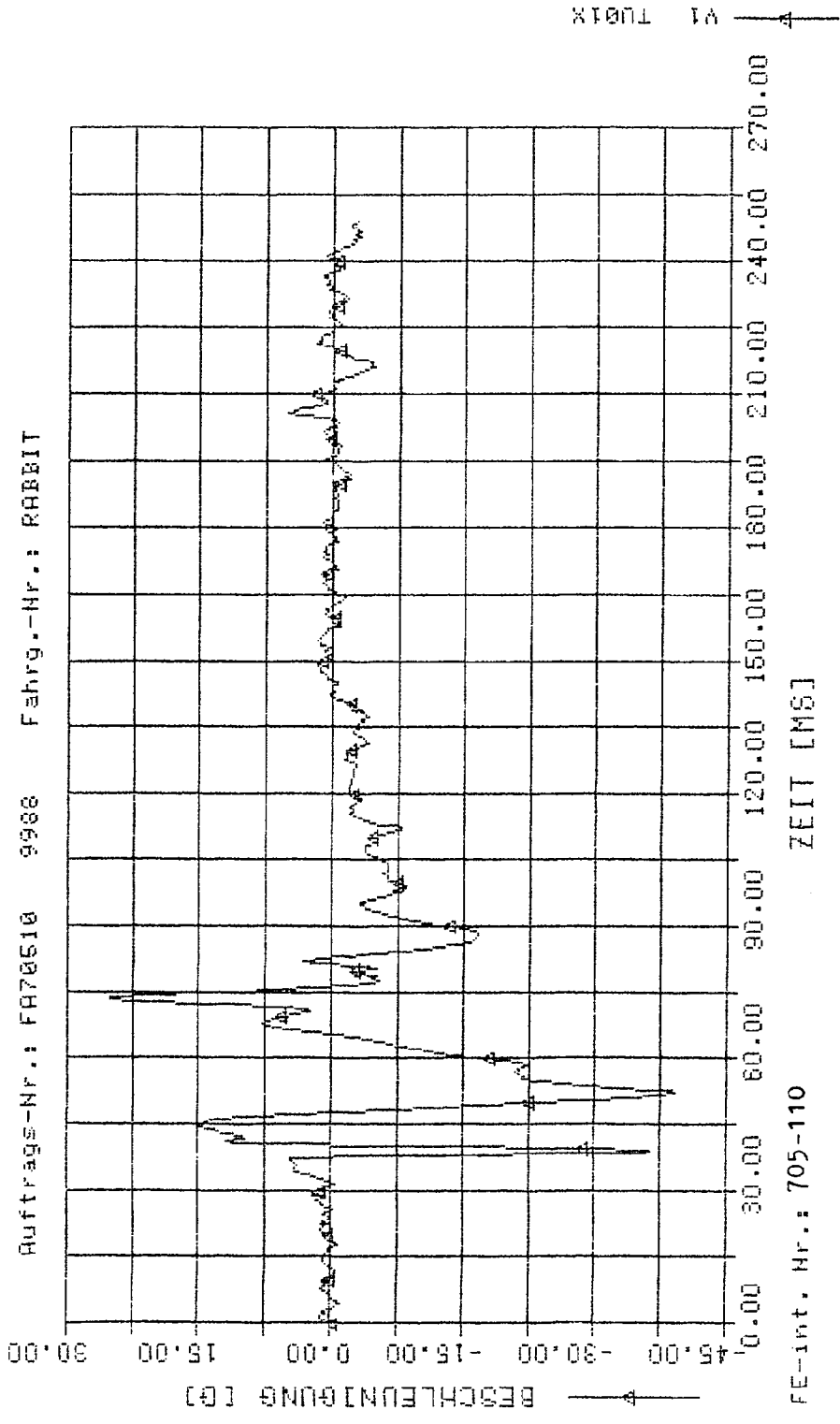
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9988

Mess-Stelle	UP	ber.	Extremum	t	3MS
TU01	V1	BE q	115.923	42.50	0.00
TU01	V1	SI	1019.438	250.00	0.00



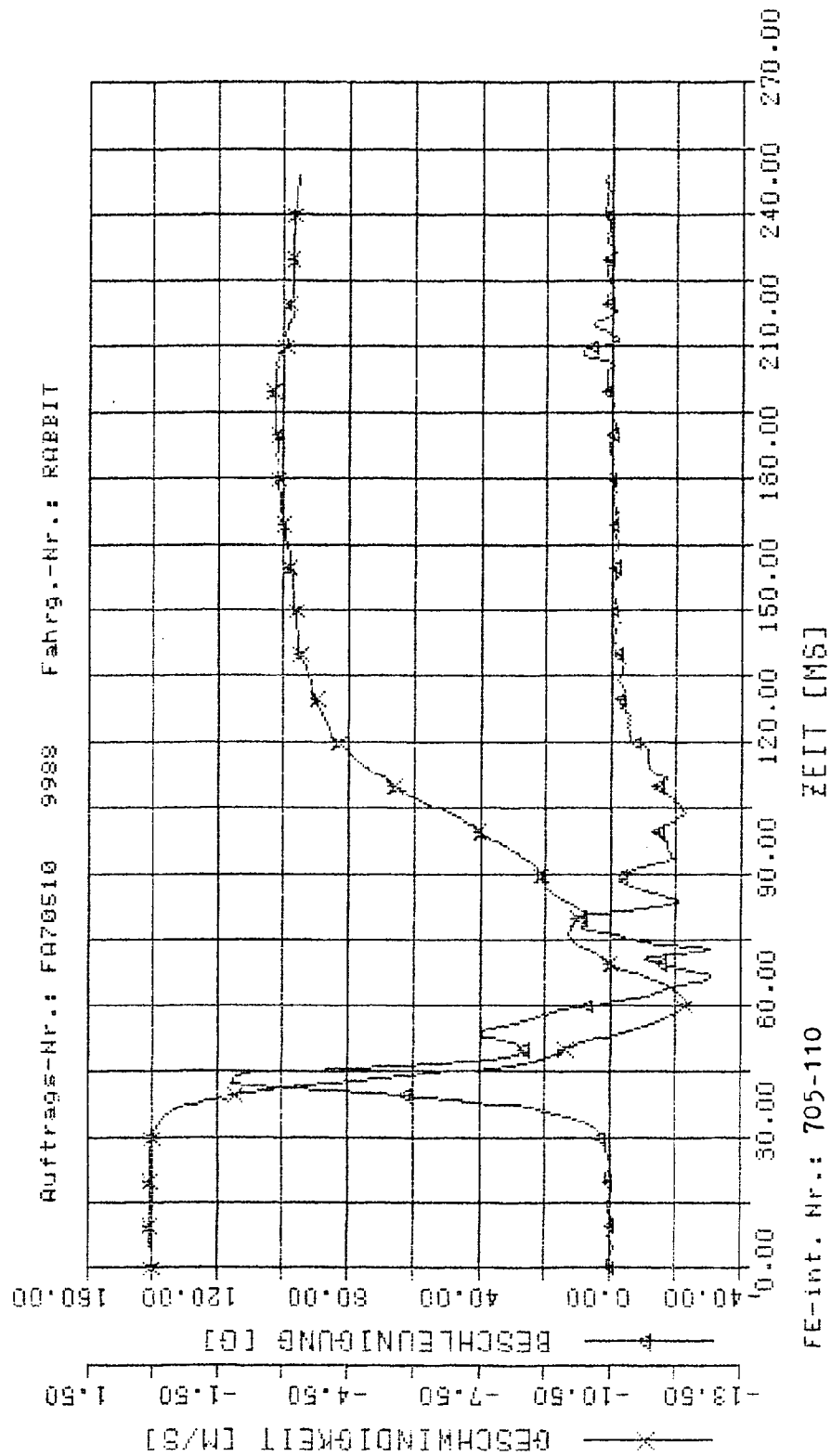
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9988

Mess-Stelle UP ber. Extremum t MS
 TU01X V1 BE g Grösse Extr. 32.00 0.00



Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9988

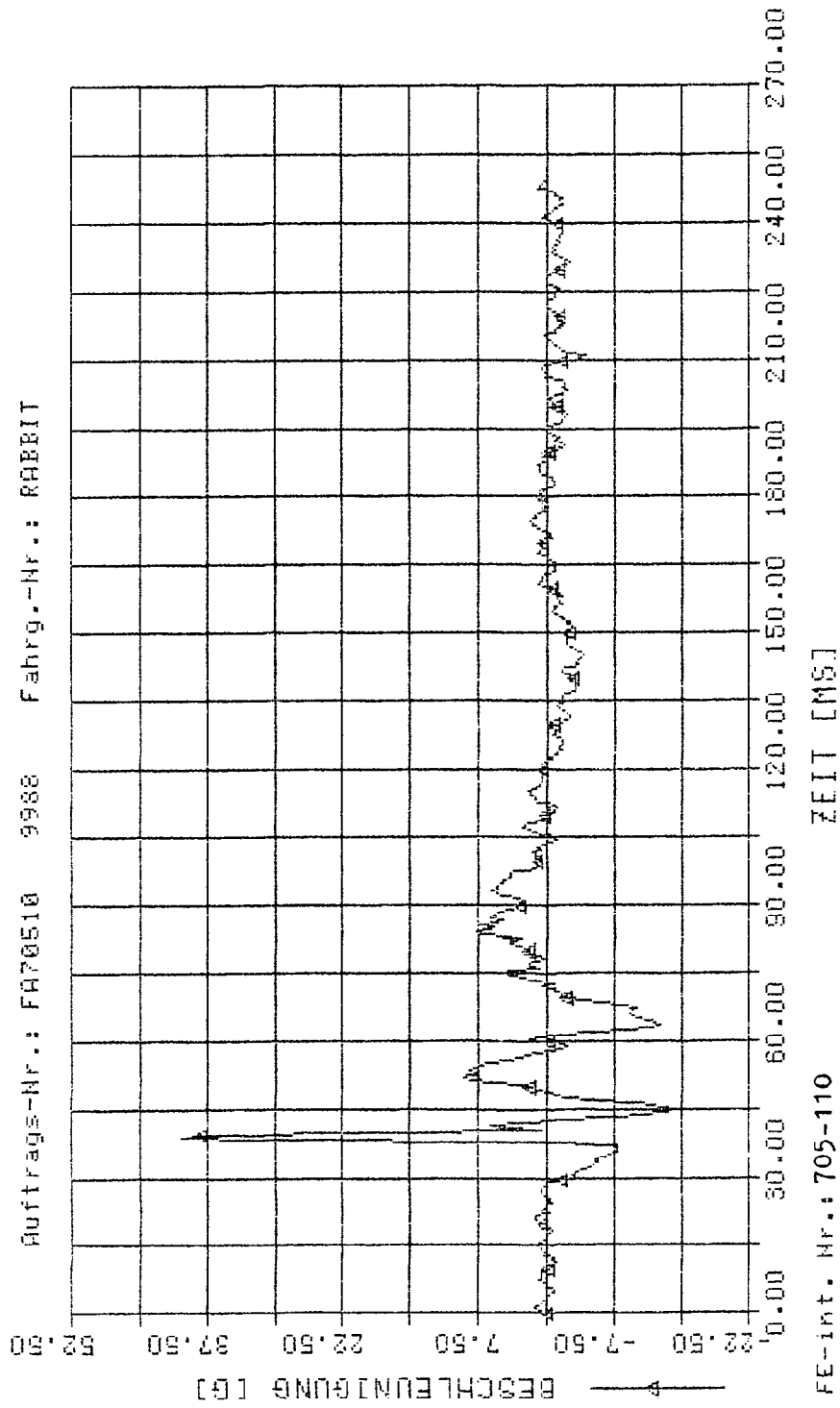
Mess-Stelle	UP	ber.	Extremum	t	SMS
TU01Y	V1	BE q	115.376	42.50	0.00
TU01Y	V1	GE m/s	12.272	61.00	0.00



- Kenn-Merke: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9988

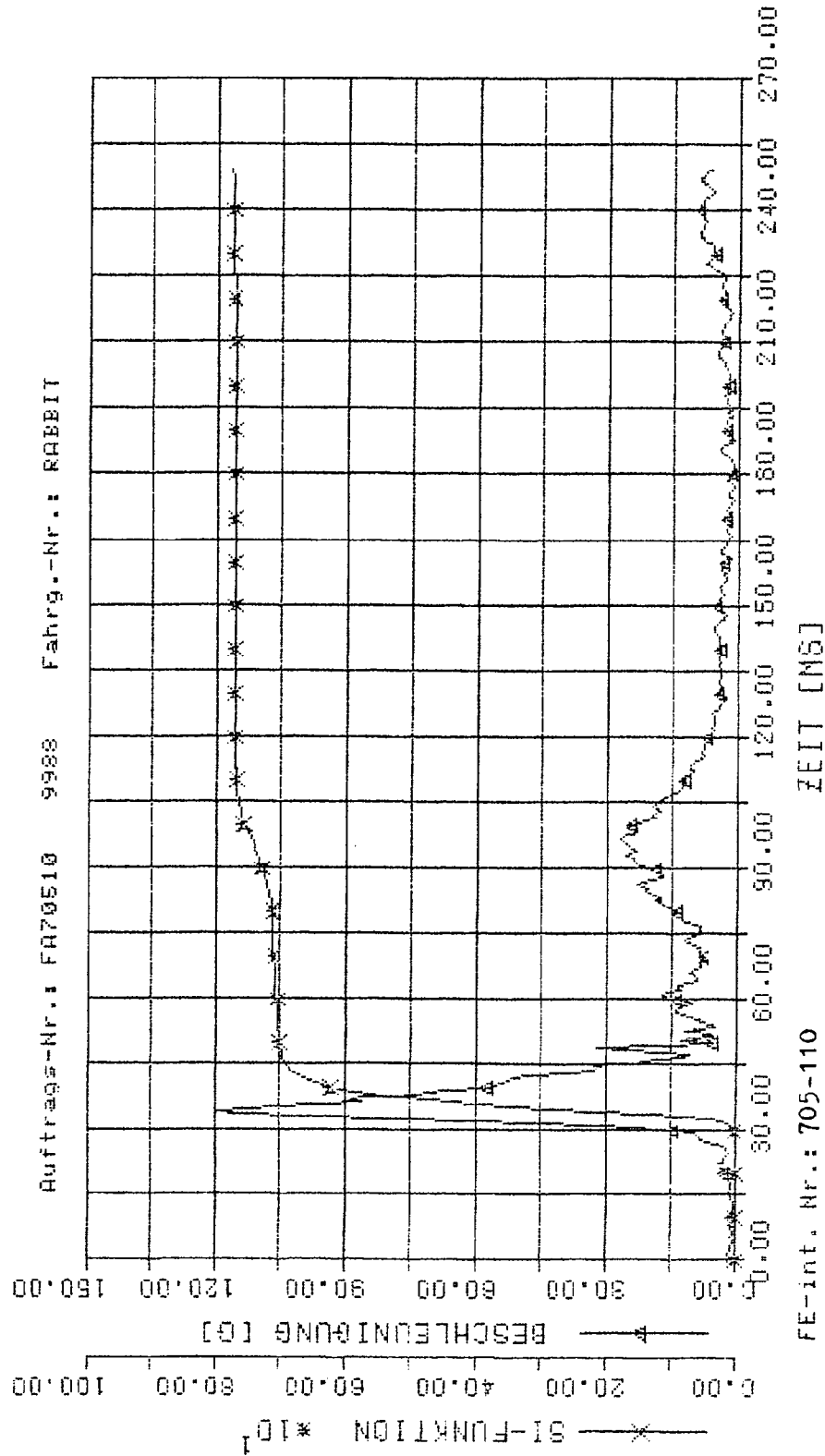
Mess-Stelle
TU01Z

UP	ber.	Extremum	t	3MS
V1	BE q	40.378	39.50	0.00



Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9988

Mess-Stelle	UP	ber.	Extremum	t	3MS
BE01	V1	Grösse	117.537	Extr.	88.08
BE01	V1	q	775.835	250.00	0.00

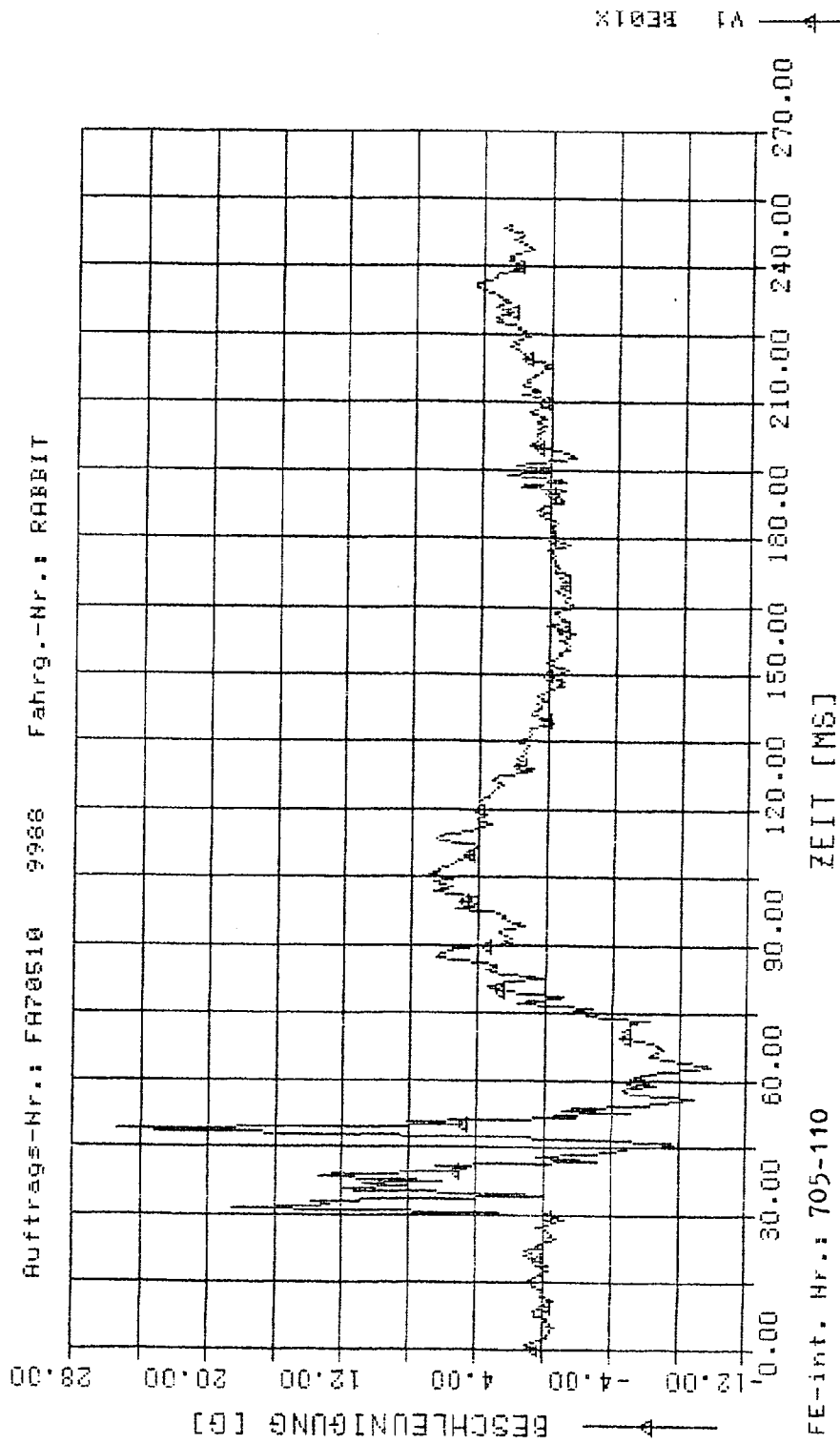


V1 BE01 X Z

V1 BE01 X Z

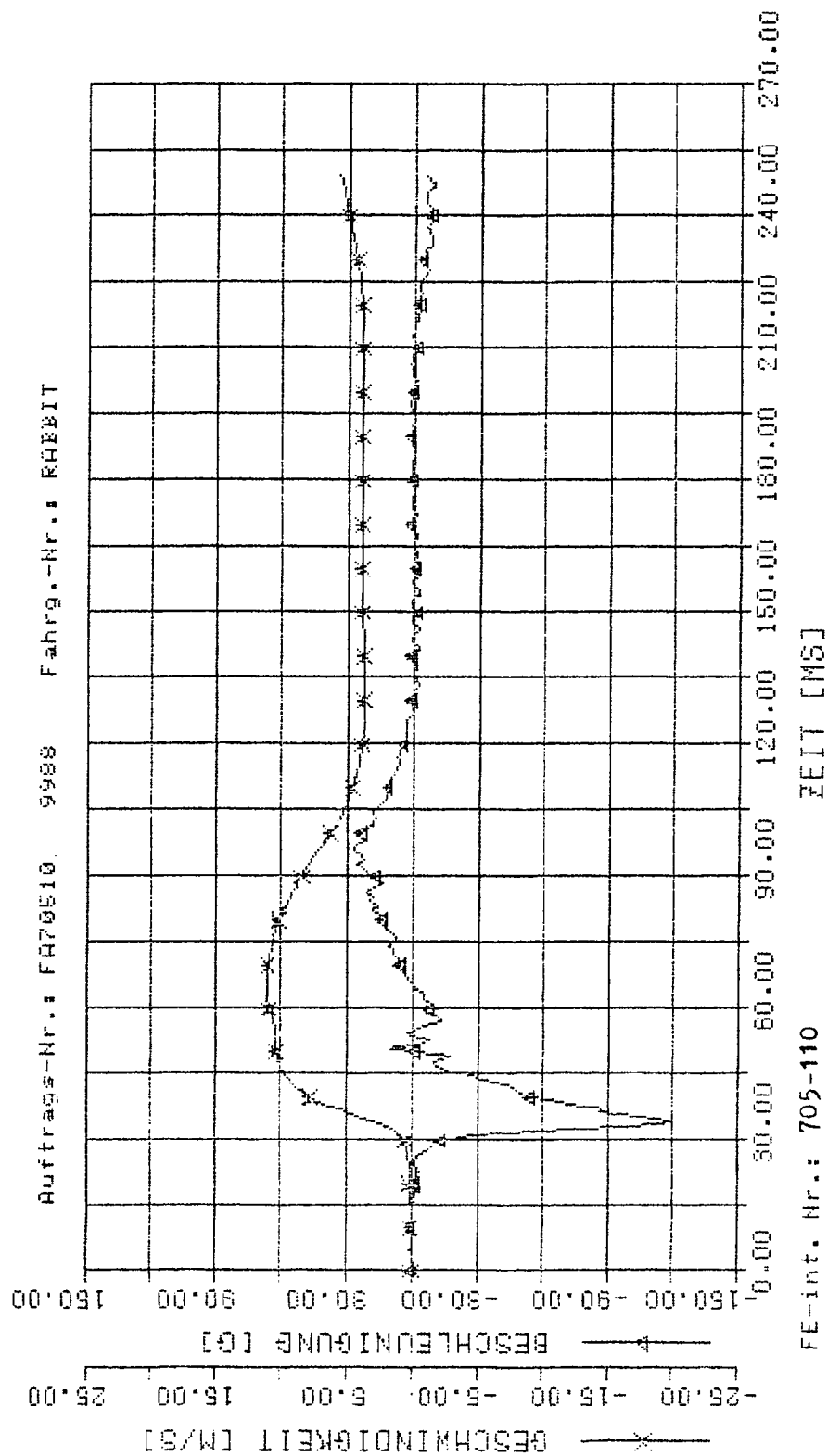
Kennwerte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9980

Mess-Stelle UP ber. Extremum t 3MS
BE01X V1 BE q 25.323 47.00 12.71



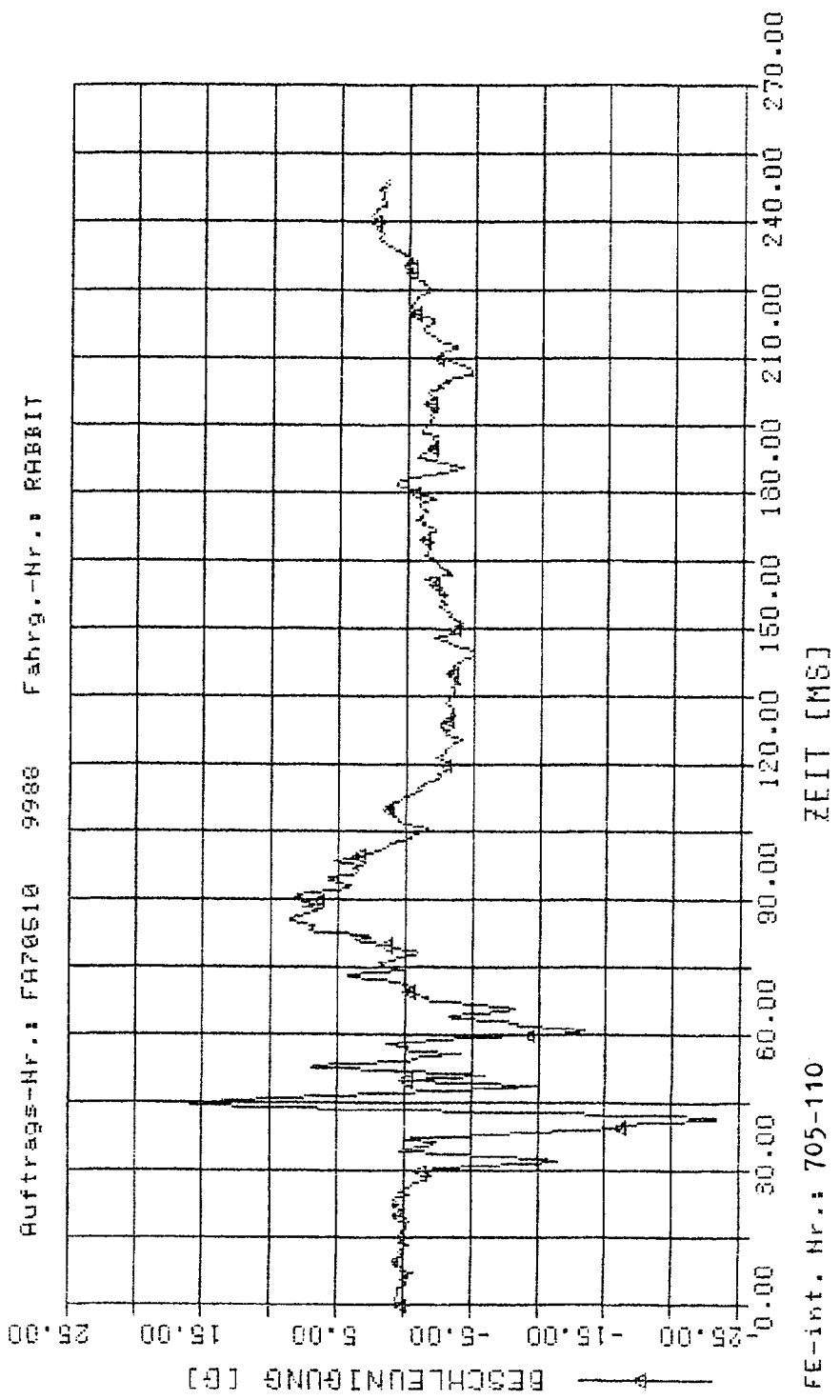
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9988

Mess-Stelle	UP	ber.	Extremum	t	3RS
BE01Y	V1	Grösse	-117.587	Extr.	24.57
BE01Y	V1	BE q	11.058	65.50	0.00



Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9988

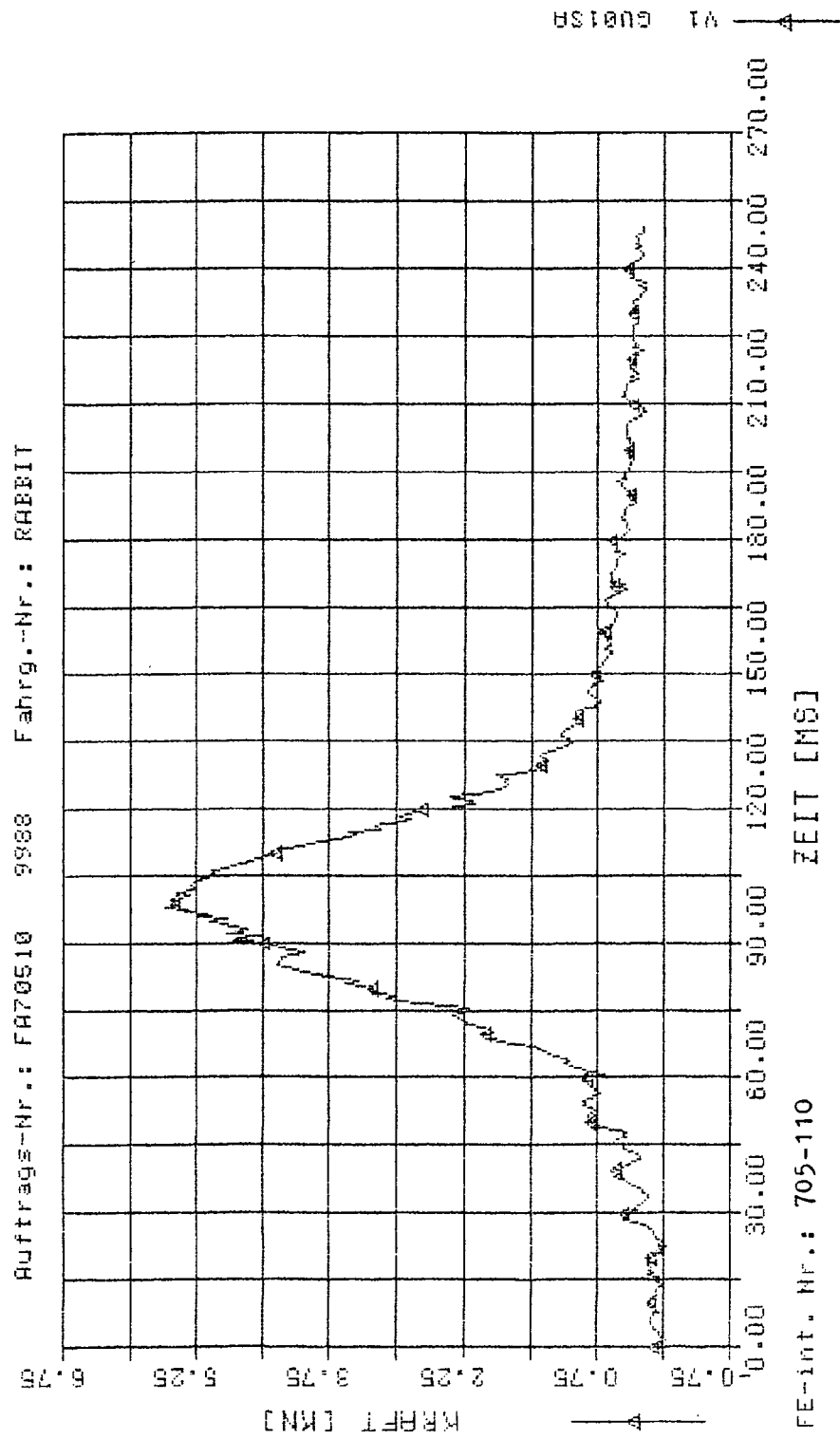
Mess-Stelle UP ber. Extremum t SMS
BE01Z V1 BE q Grösse Extr. 41.50 8.47



Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9988

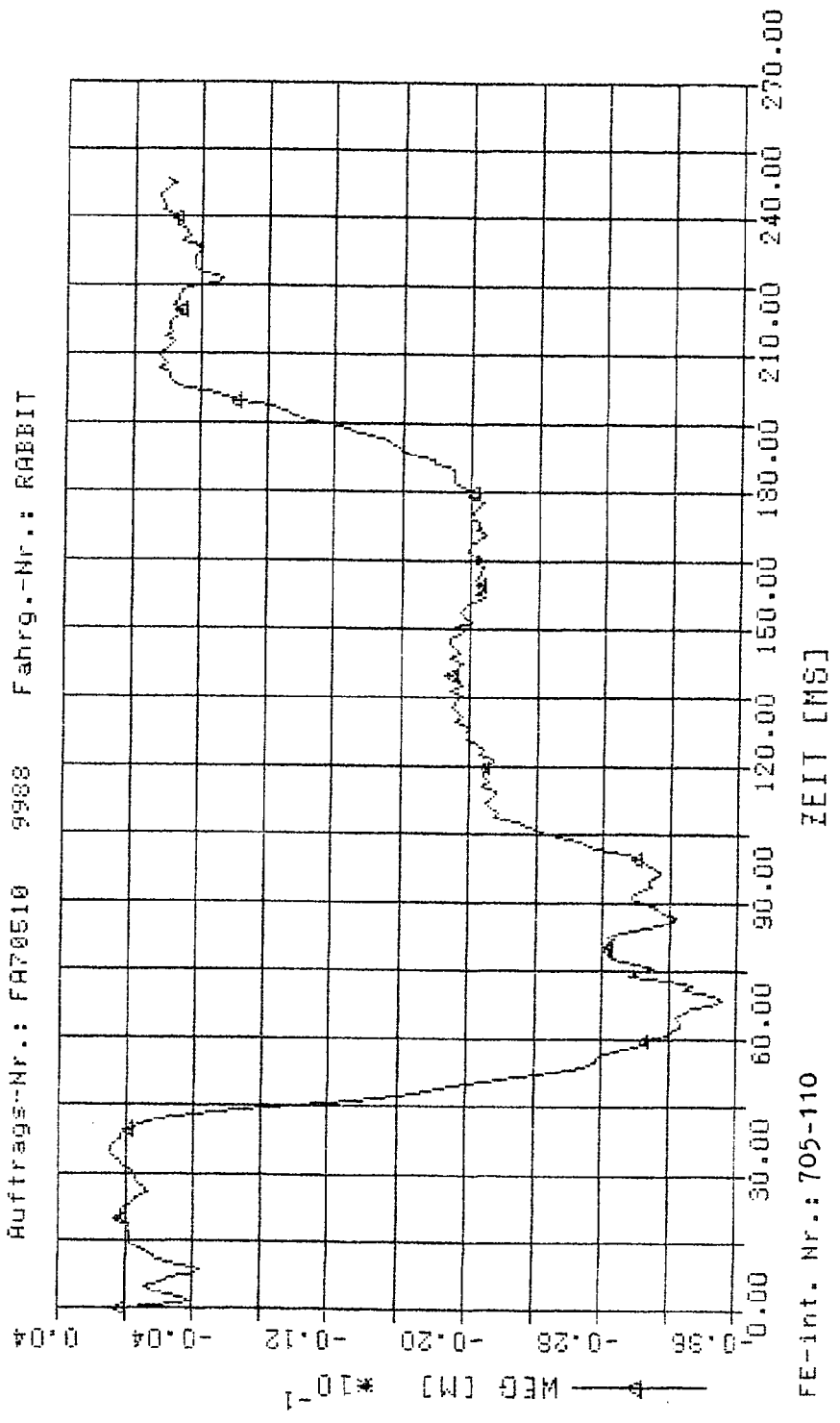
Mess-Stelle
GU01GA

UP	ber.	Extremum	t	3MS
V1	KR KN	5.500	78.50	0.00



Chest Deflection Driver = 35 mm

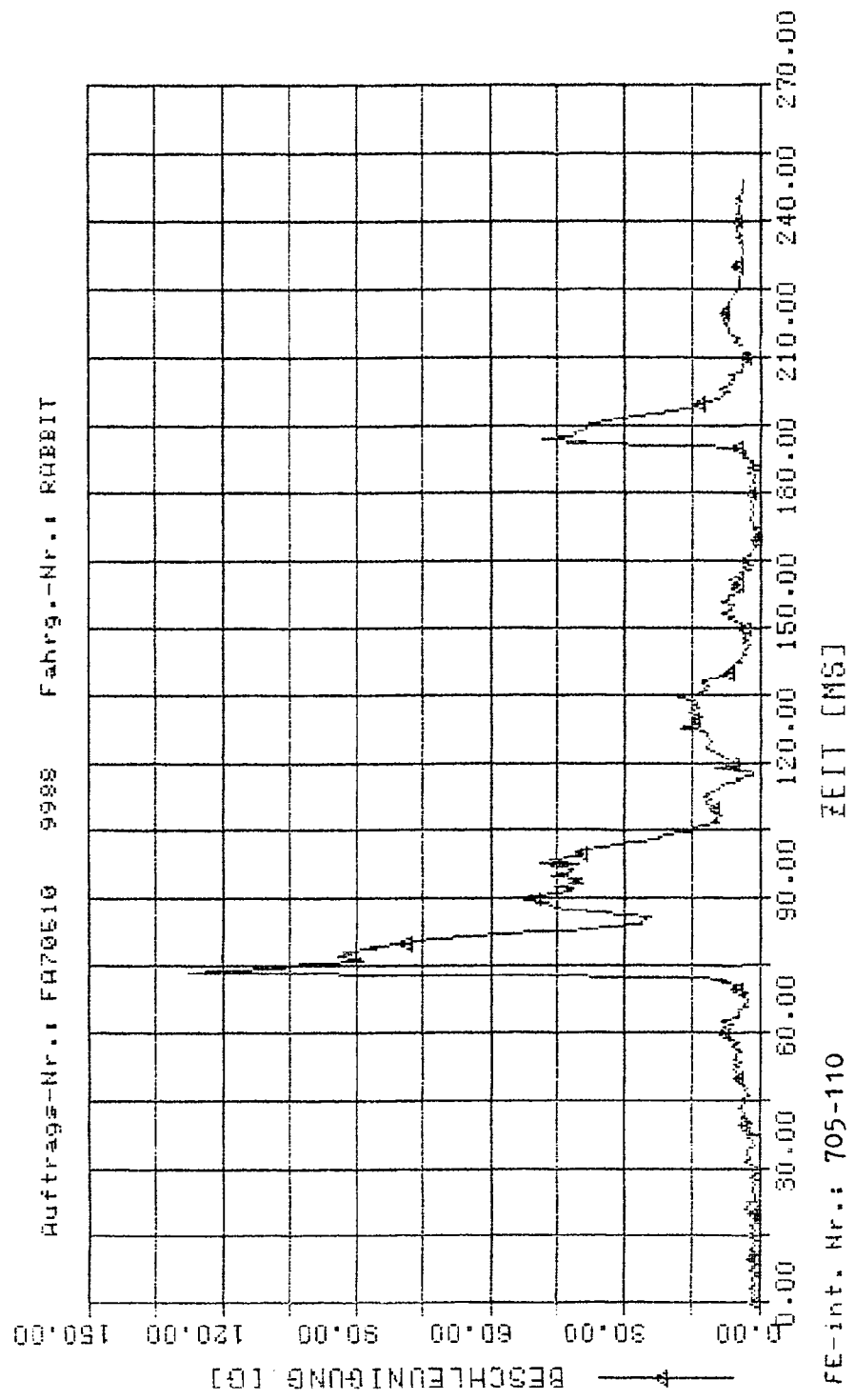
Auftrags-Nr.: FA70510 9988 Fahrg.-Nr.: RABBIT



B.2.2 Rear Passenger

Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9988

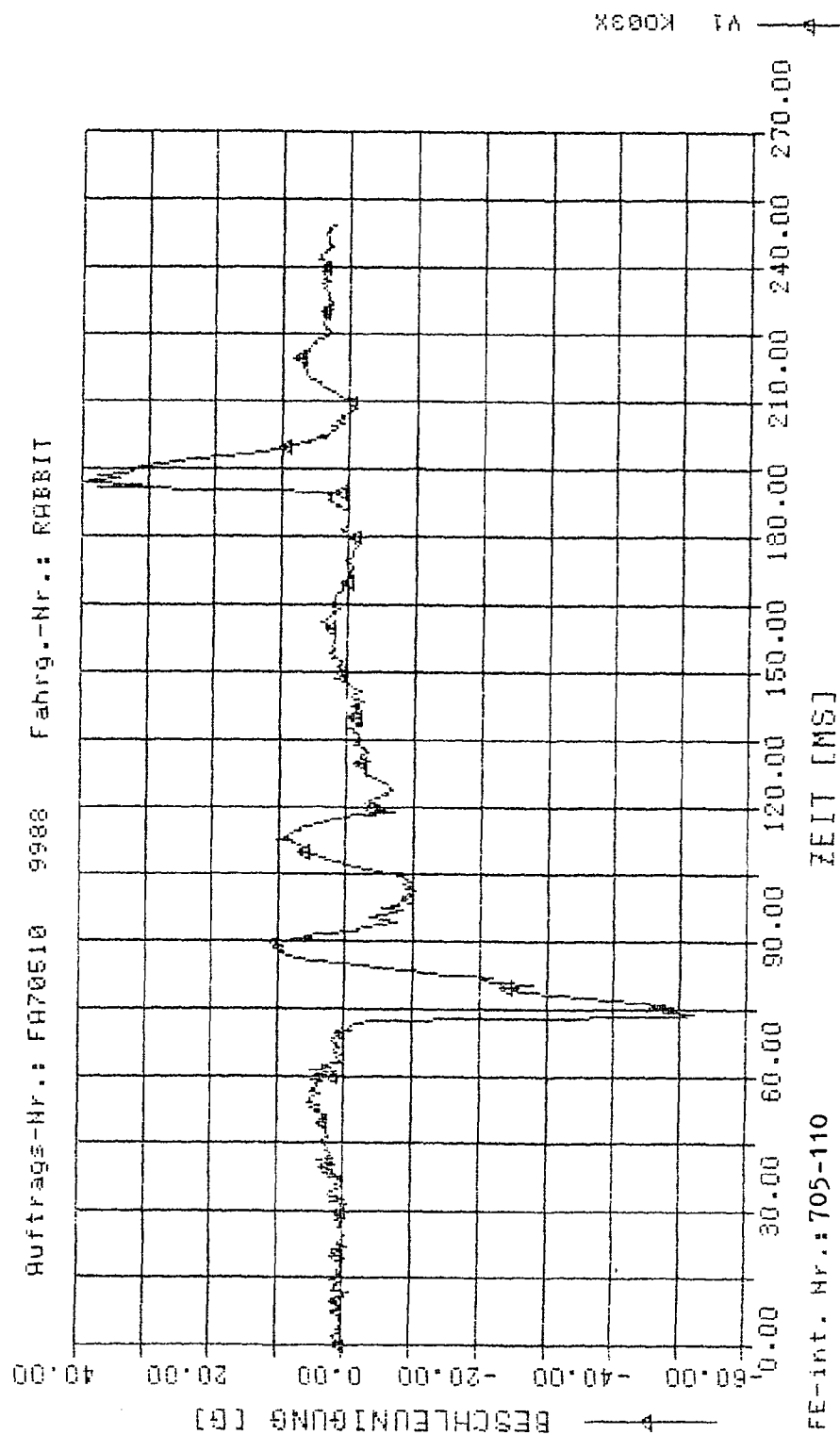
Mess-Stelle UP ber. Extremum t SMS
K003 Groesse Extr. 160.011 94.51
V1 BE g 74.20



V1 K003 X Z

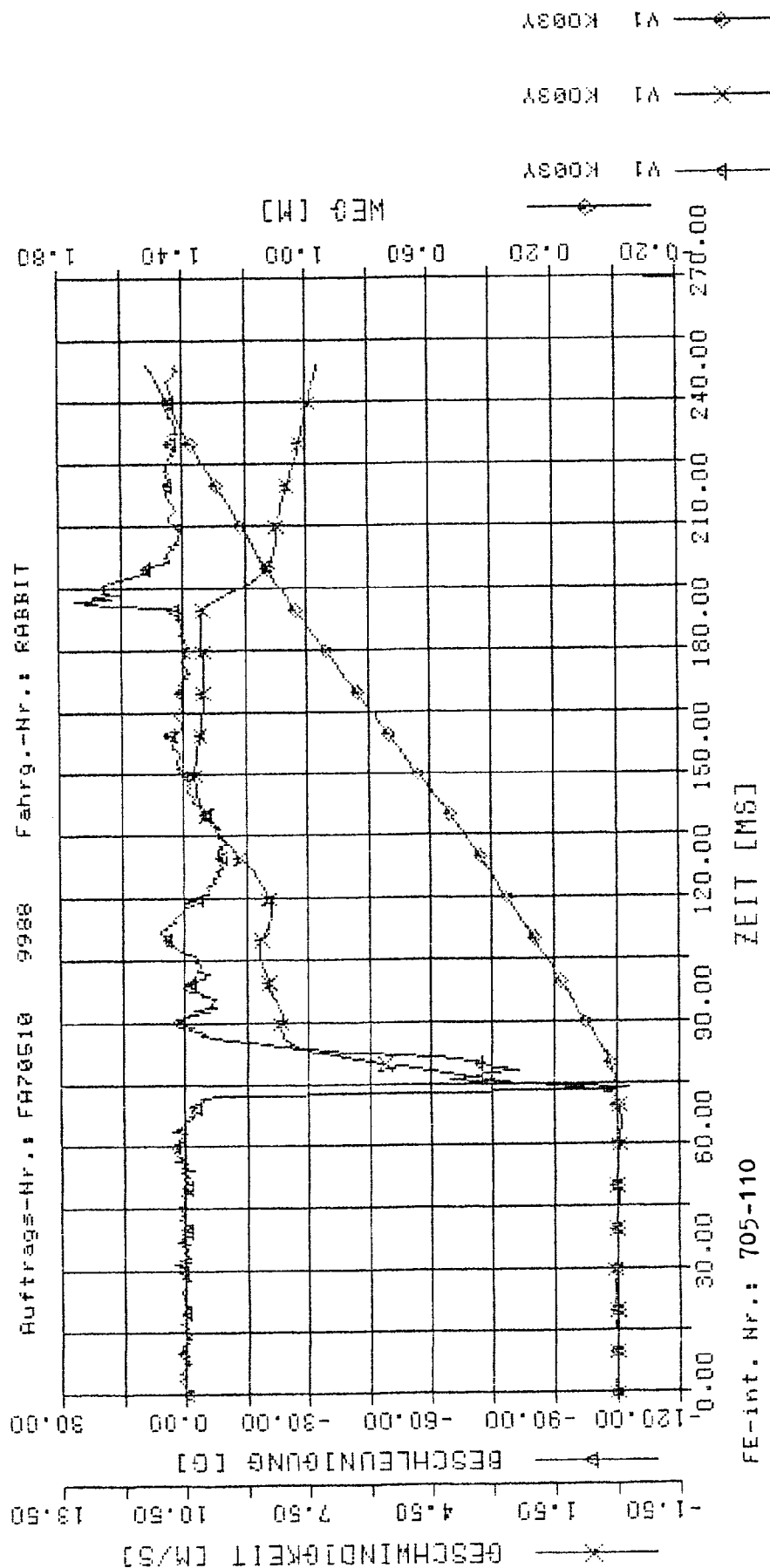
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9988

Mess-Stelle	UP	ber.	Extremum	t	MS
K003X	V1	GE	Grösse	Extr.	
		q	-74.470	74.20	53.48



Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9908

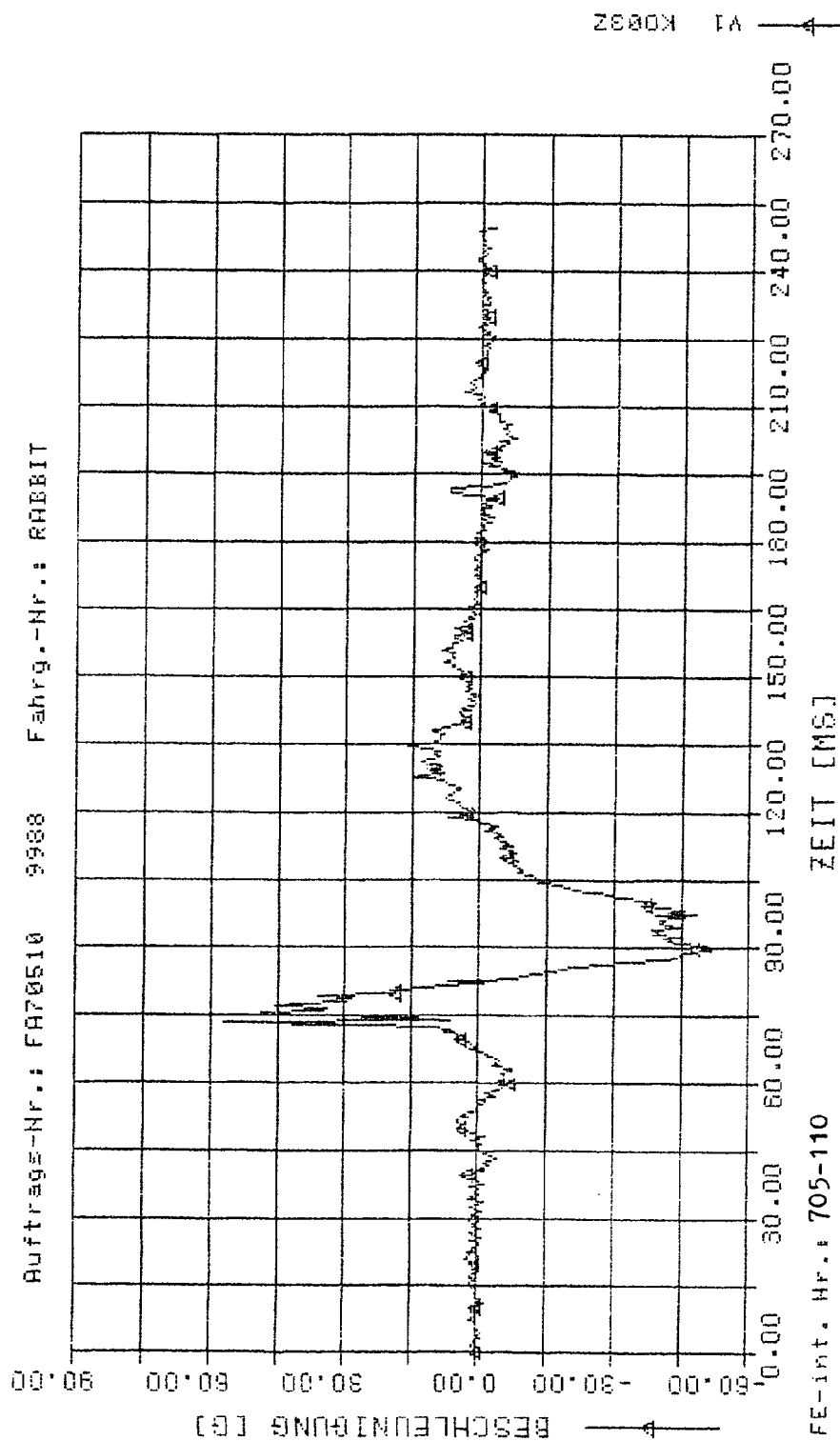
Mess-Stelle	UP	ber.	Extremum	t	SMS
		Grösse		Extr.	
K003Y	V1	DE g	-124.051	74.10	18.79
K003Y	V1	GE m/s	10.213	150.20	0.00
K003Y	V1	DE m	1.560	255.90	0.00



- Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9988

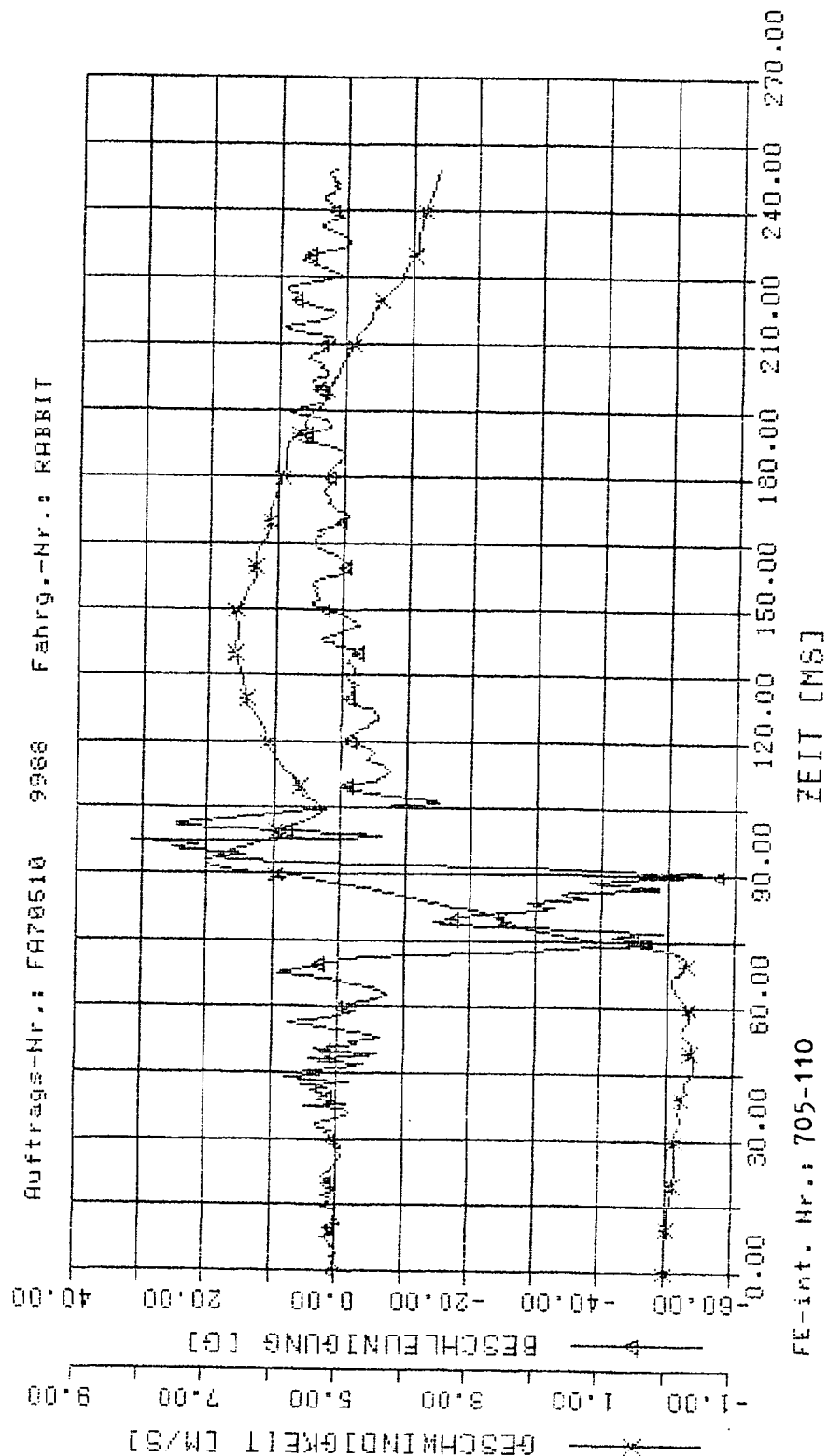
Mess-Stelle
K003Z

UP	ber.	Extremum	t	3MS
V1	BE g	82.400	Extr.	24.20
				39.38



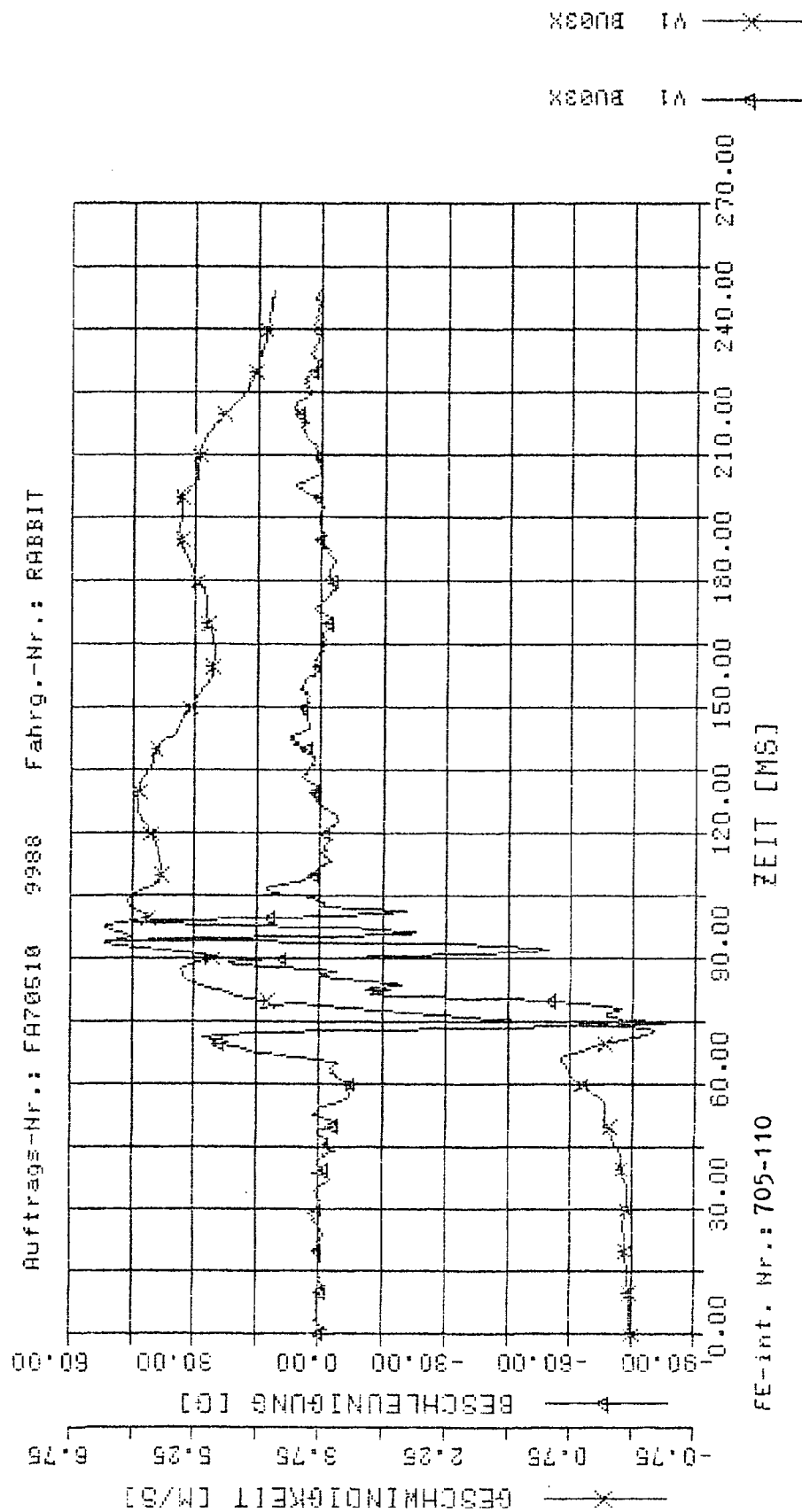
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9980

Mess-Stelle	UP	ber.	Extremum	t	ms
B003X	V1	Grösse	-59.223	Extr.	0.00
B003X	V1	DE q	6.980	90.50	0.00
		GE m/s		93.00	0.00



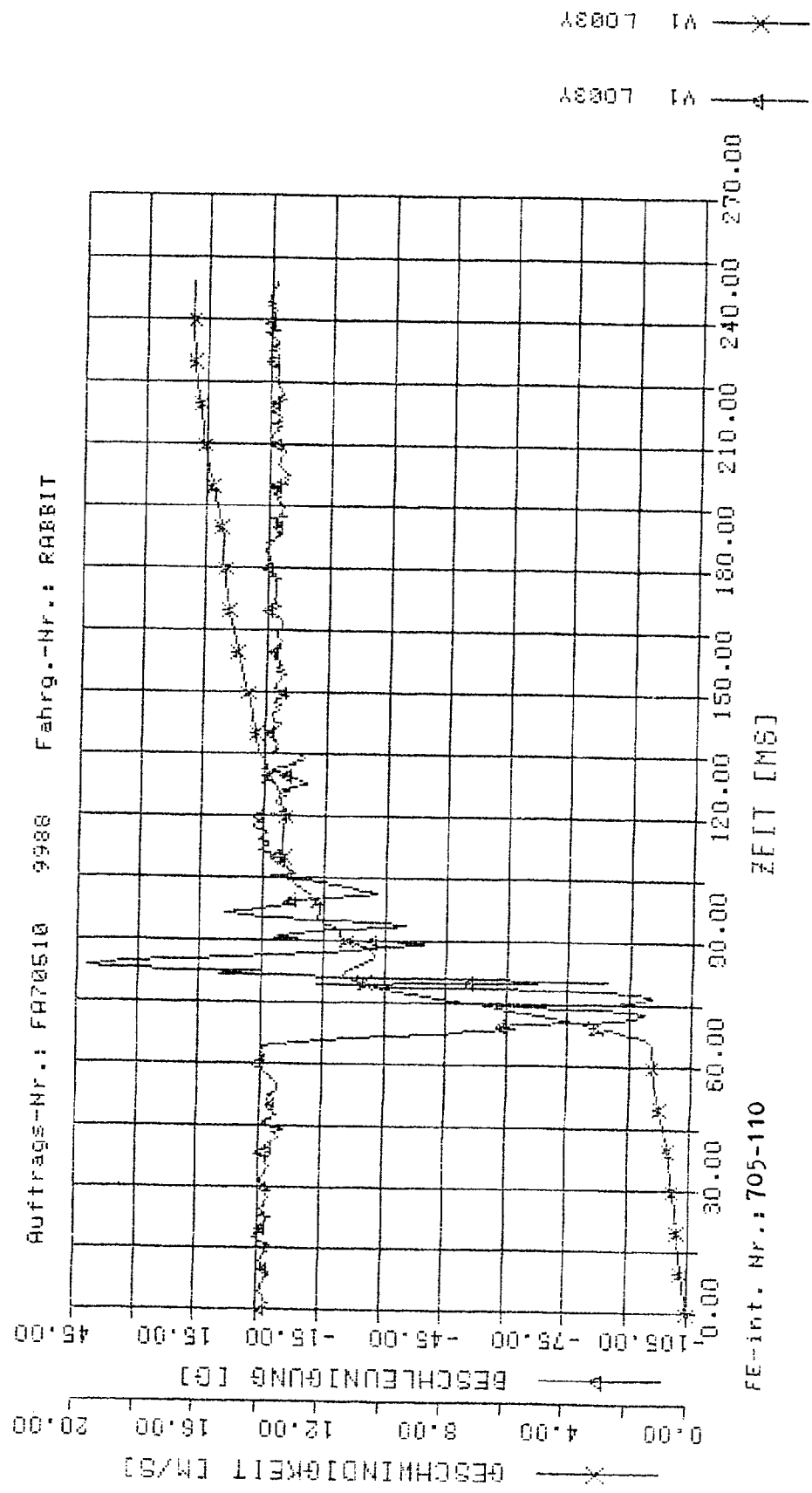
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9988

Mess-Stelle	UP	ber.	Extremum	t	Ext.	ms
BU03X	V1	BE	-88.562	25.00	0.00	
BU03X	V1	GE	6.335	94.00	0.00	



Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9988

Mess-Stelle	UP	ber.	Grösse	Extremum	t	ΔMS
L003Y	V1	BE	q	-95.762	77.00	0.00
L003Y	V1	GE	m/s	13.493	255.50	0.00



FE-int. Nr.: 705-110

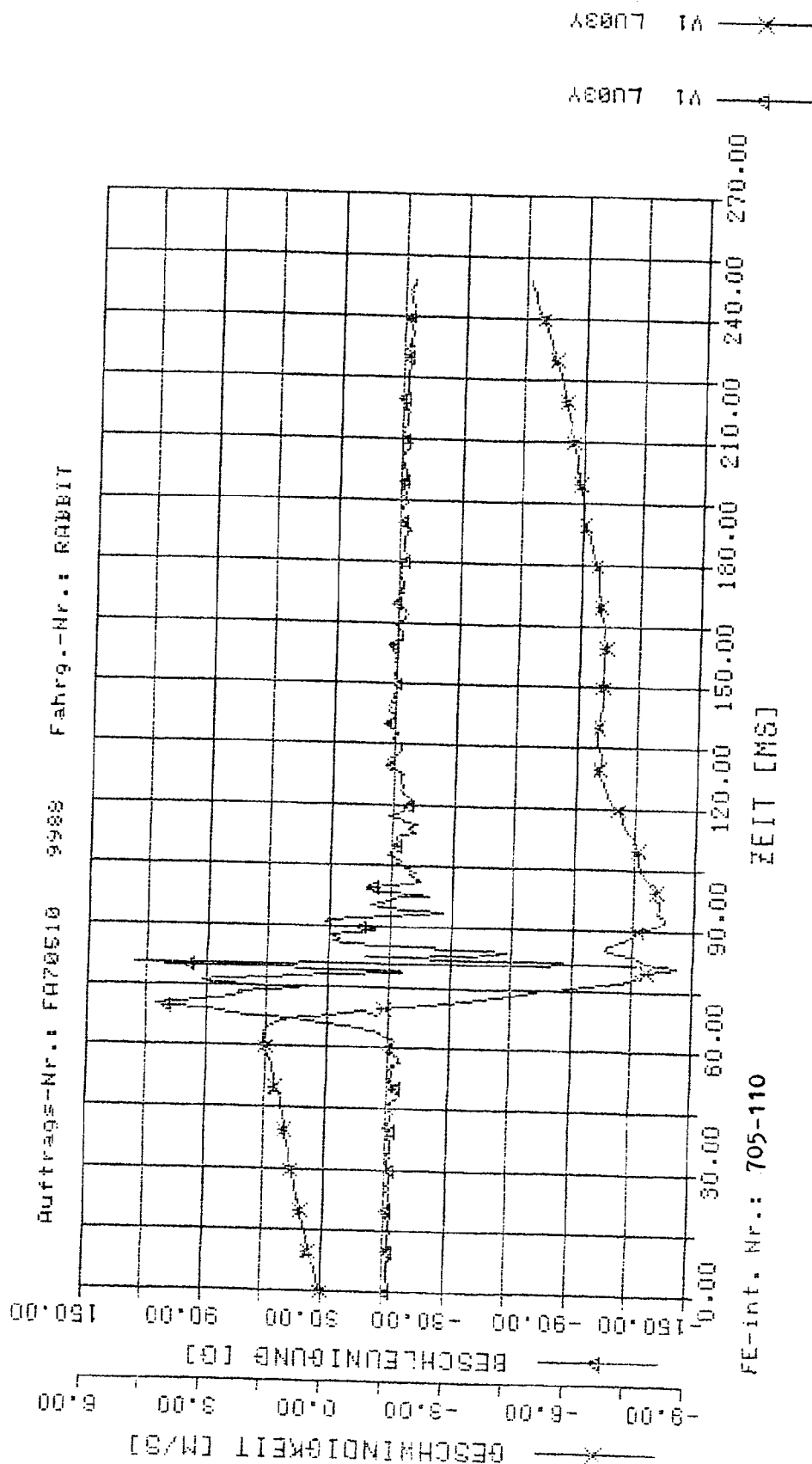
V1 L003Y
V1 L003Y

Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9988

Mess-Stelle

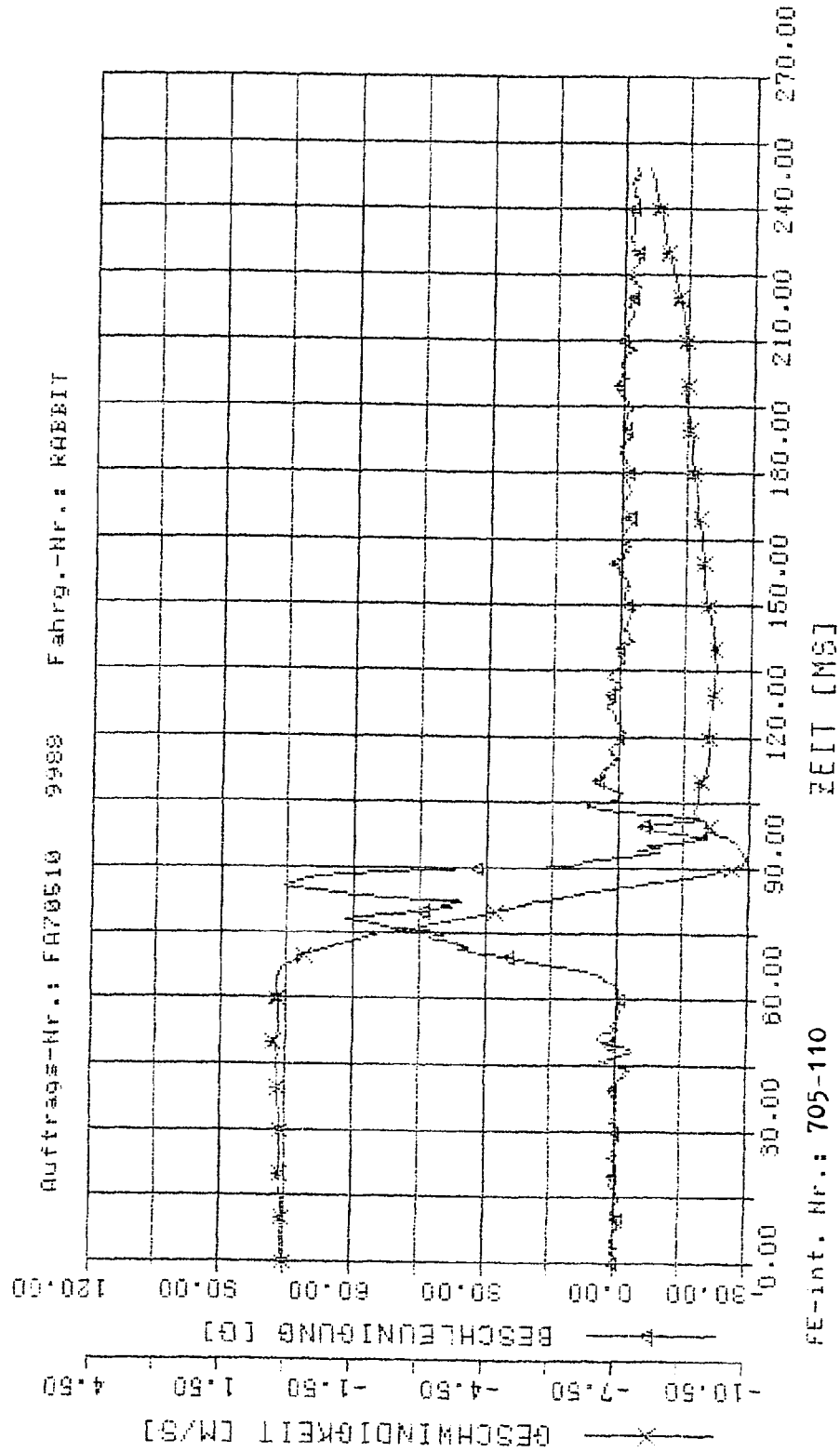
LU03Y
LU03Y

UP	ber.	Extremum	t	Ext.	3MS
V1	BE q	125.943	80.50	0.00	
V1	GE m/s	8.636	81.00	0.00	



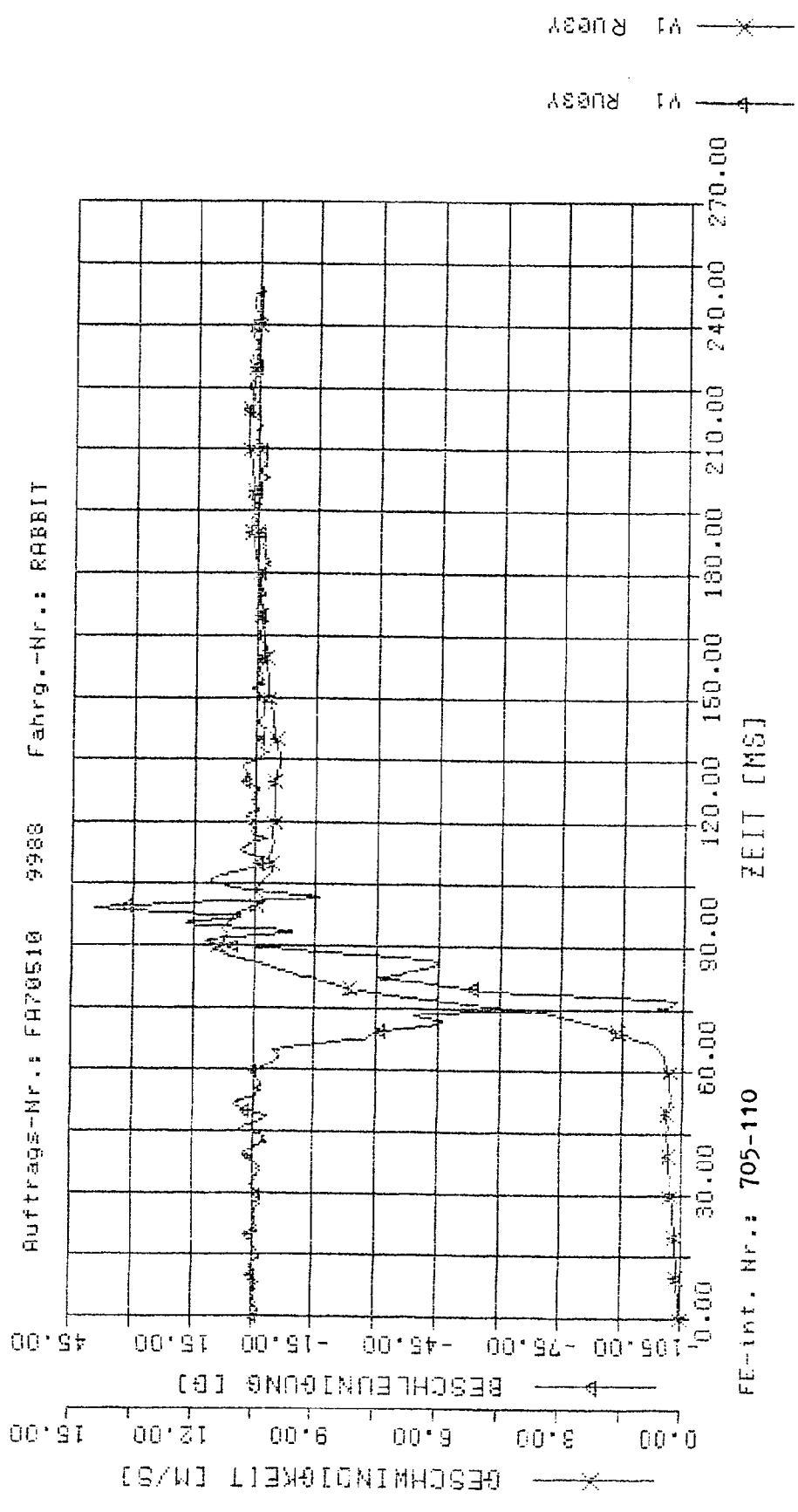
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9988

Mess-Stelle	UP	ber.	Extremum	t	MS
R003Y	V1	BE	25.275	86.00	0.00
R003Y	V1	GE	10.450	93.00	0.00



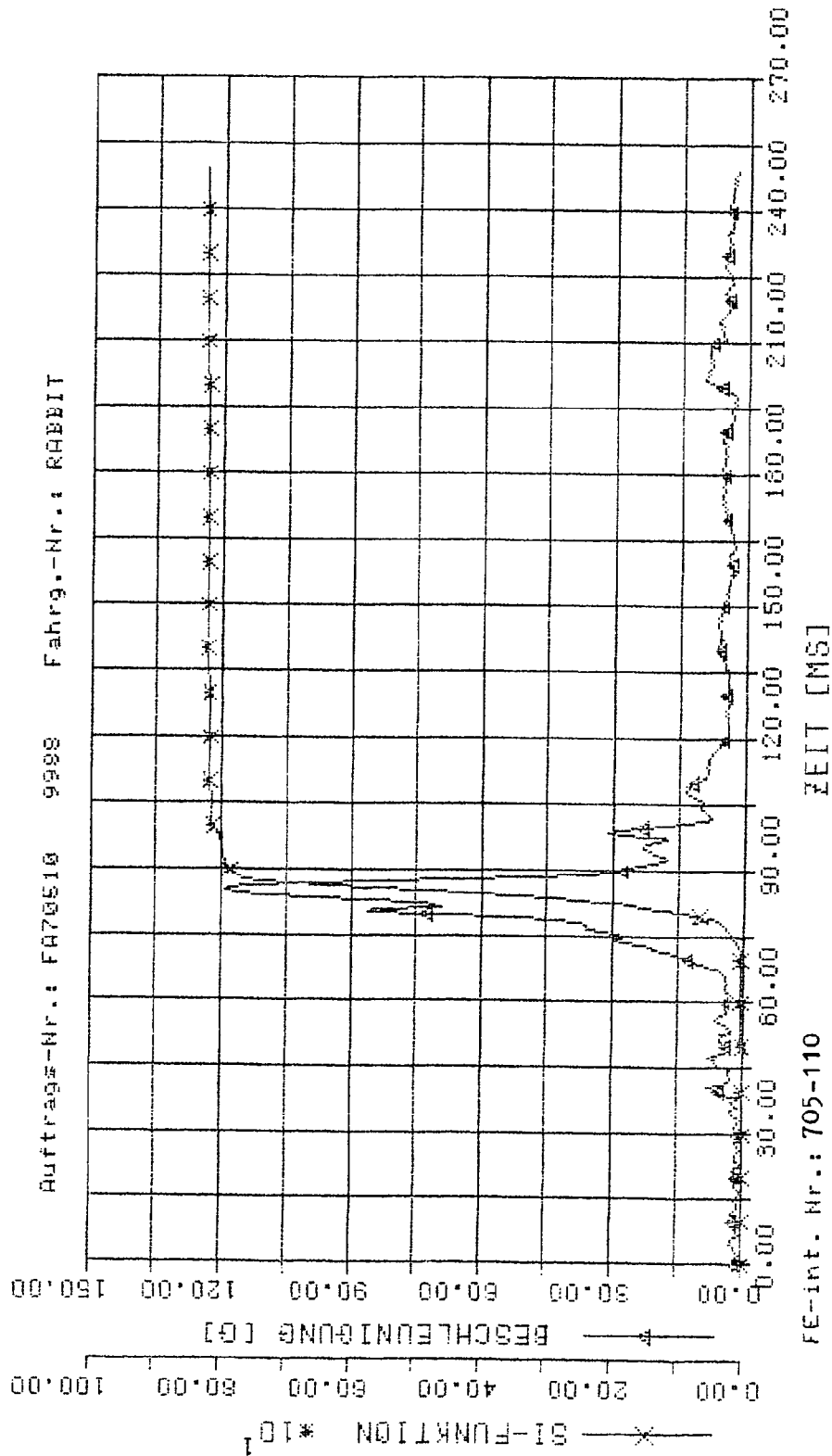
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9988

Mess-Stelle	UP	ber.	Extremum	t	3MS
RU03Y	V1	Grösse		Extr.	
RU03Y	V1	BE q	-103.600	77.50	0.00
RU03Y	V1	CF m/s	11.421	89.50	0.00



Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9988

Mess-Stelle	UP	ber.	Grösse	Extremum	t	JMS
T003	V1	BE	q	118.586	85.50	0.00
T003	V1	ST		825.858	250.00	0.00

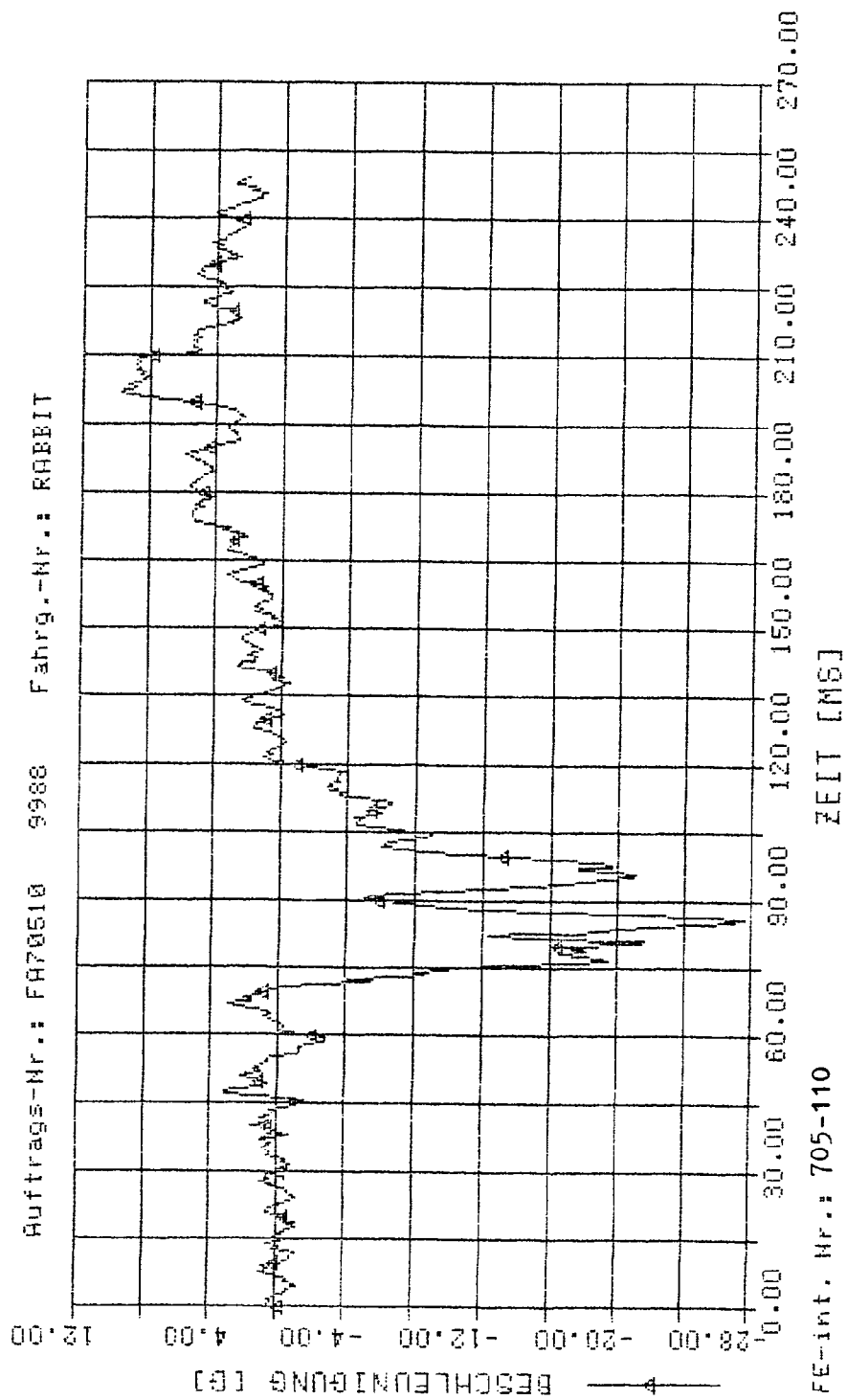


V1 1083X V 2

V1 1083X V 2

Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9988

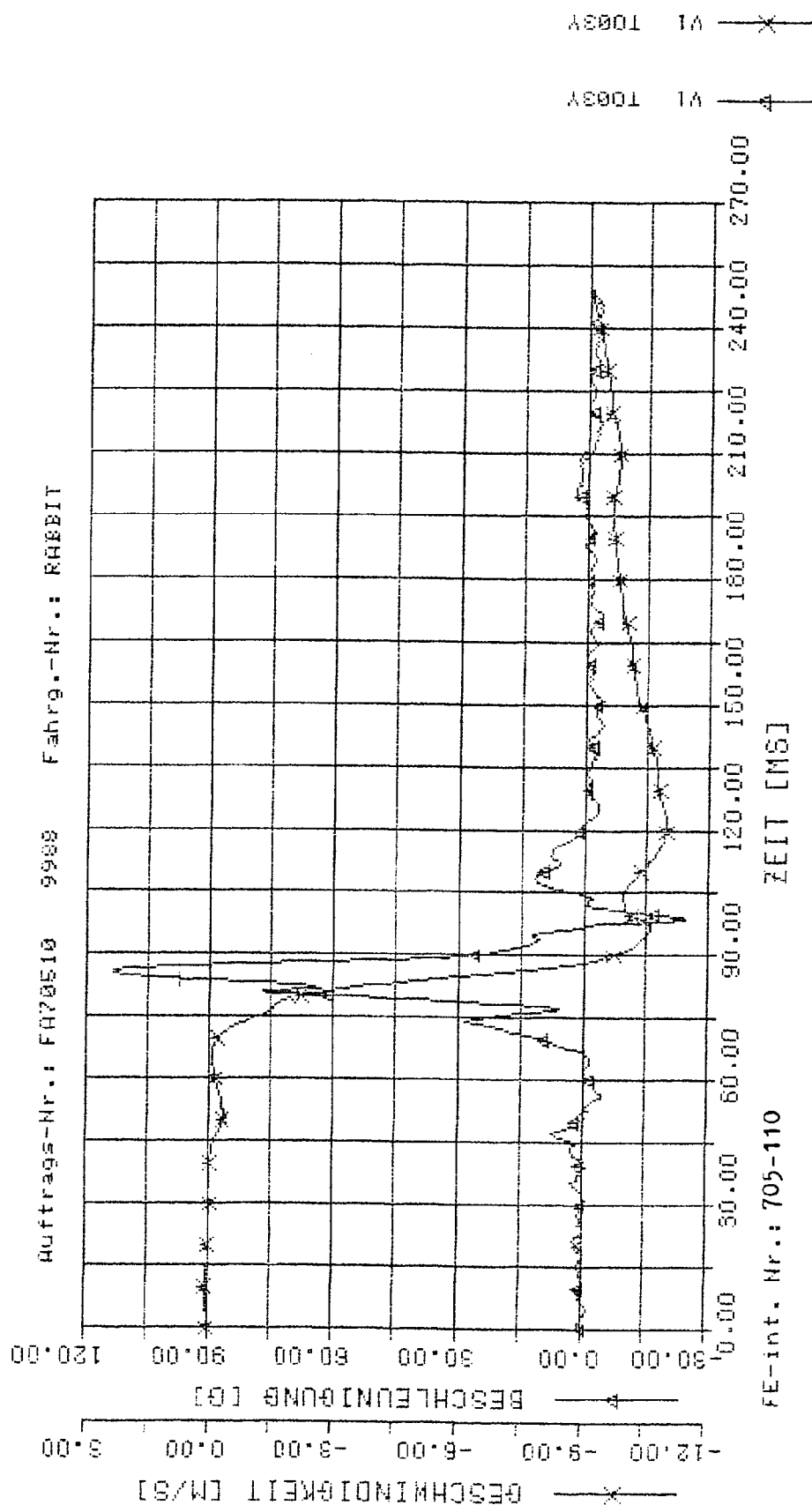
Mess-Stelle
T003X
UP ber. Extremum t SMS
V1 BE g -27.583 Extr. 06.00 0.00



Kenn-Derte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9988

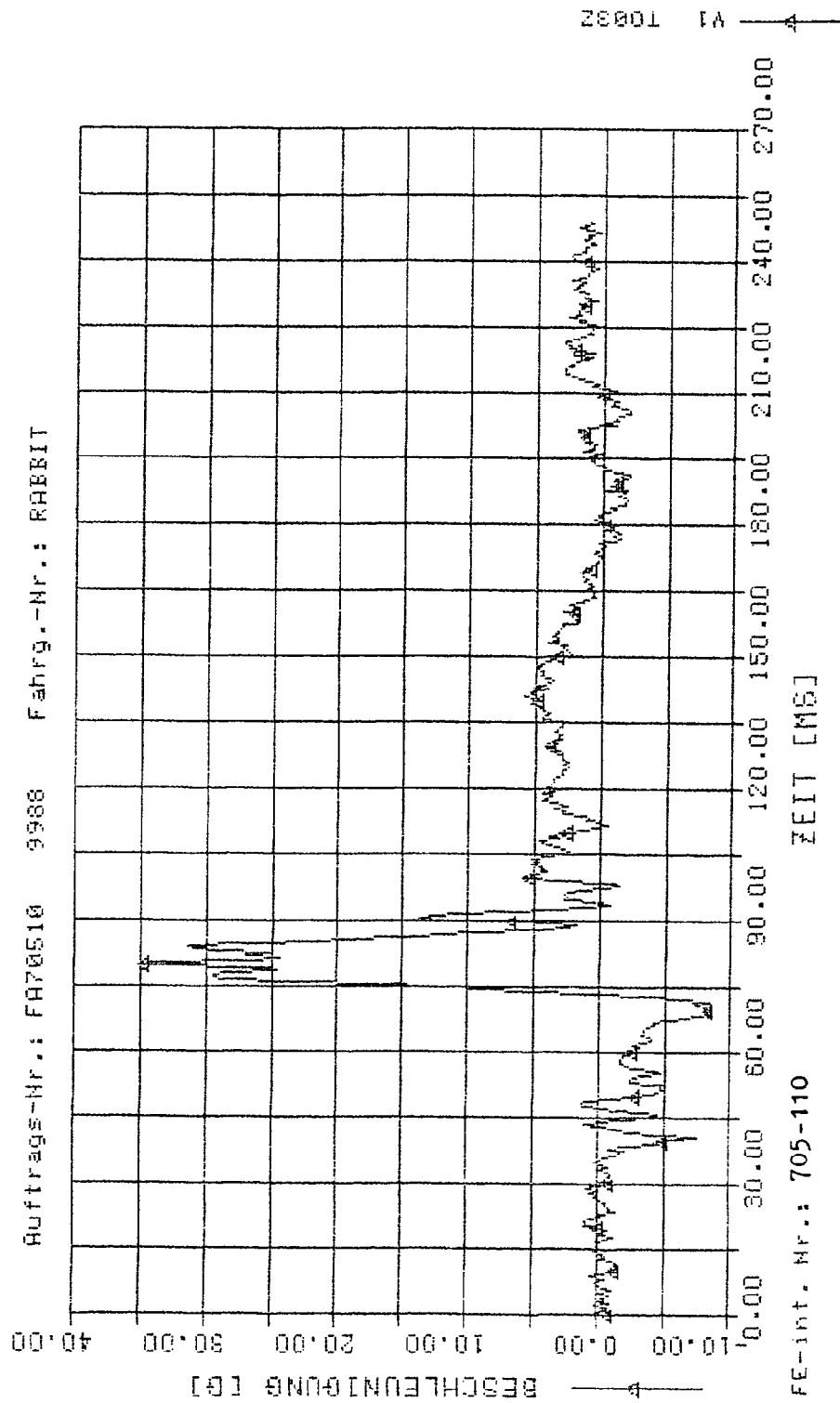
Mess-Stelle

UP	ber.	Extremum	t	Ext.
V1	GE	113.669	05.50	0.00
V1	GE	-11.004	122.00	0.00



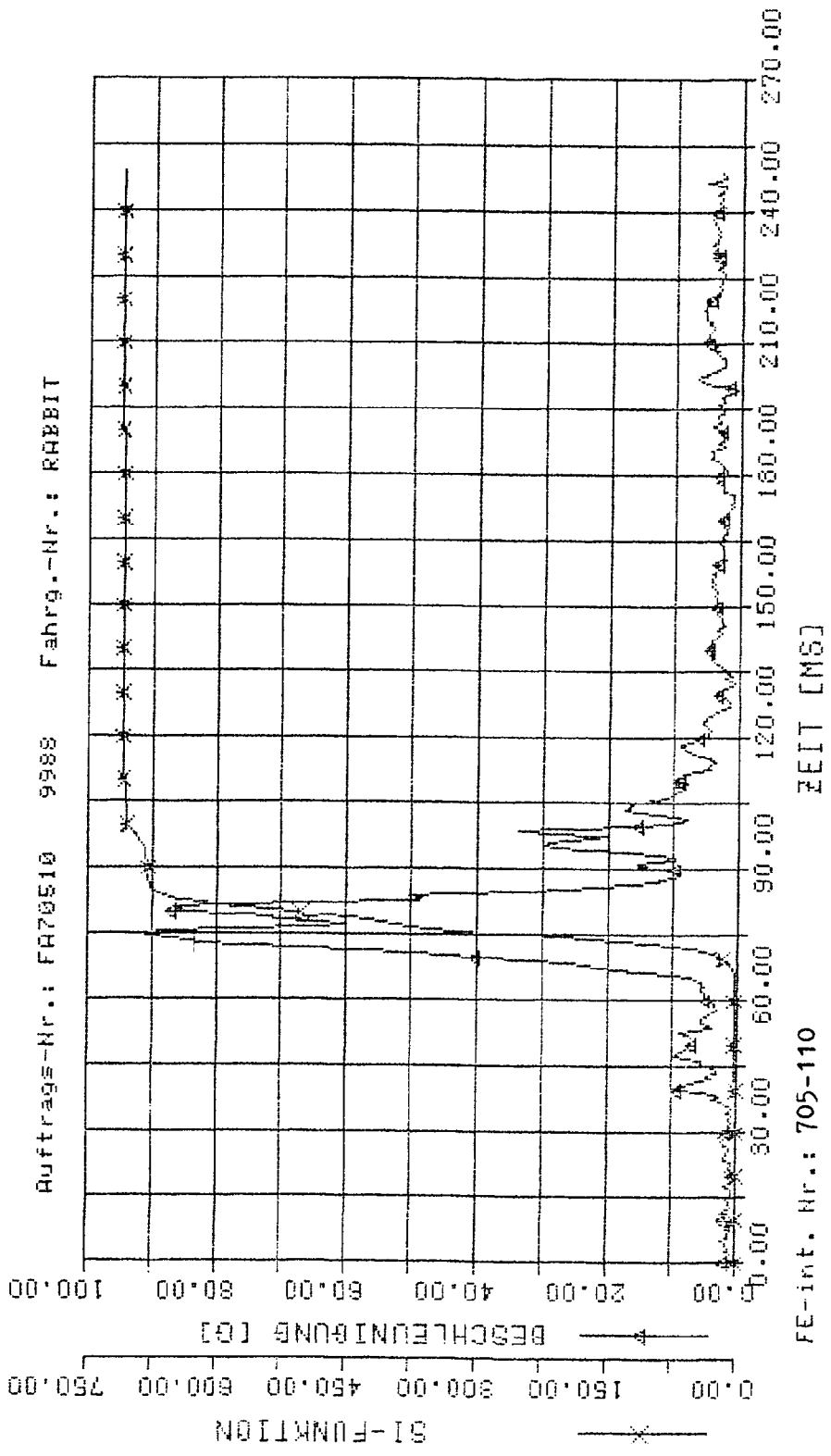
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9988

Mess-Stelle UP ber. Extremum t 3MS
T0032 Groesse Extr.
V1 BE q 34.662 30.00 0.00



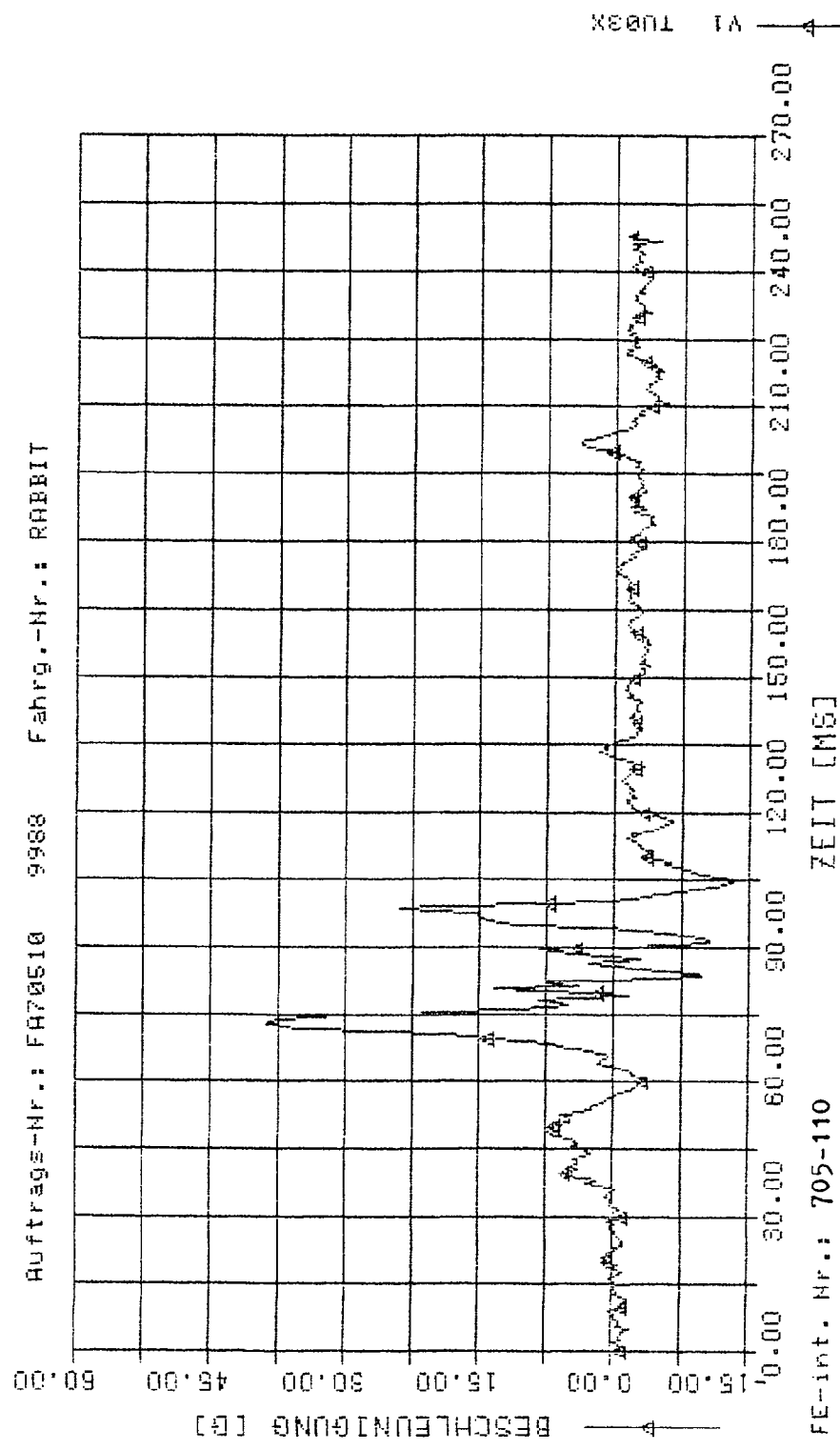
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9988

Mess-Stelle	UP	ber.	Extremum	t	MS
TU03		Groesse		Extr.	
TU03	V1	BE	92.432	75.00	0.00
TU03	V1	SI	712.201	250.00	0.00



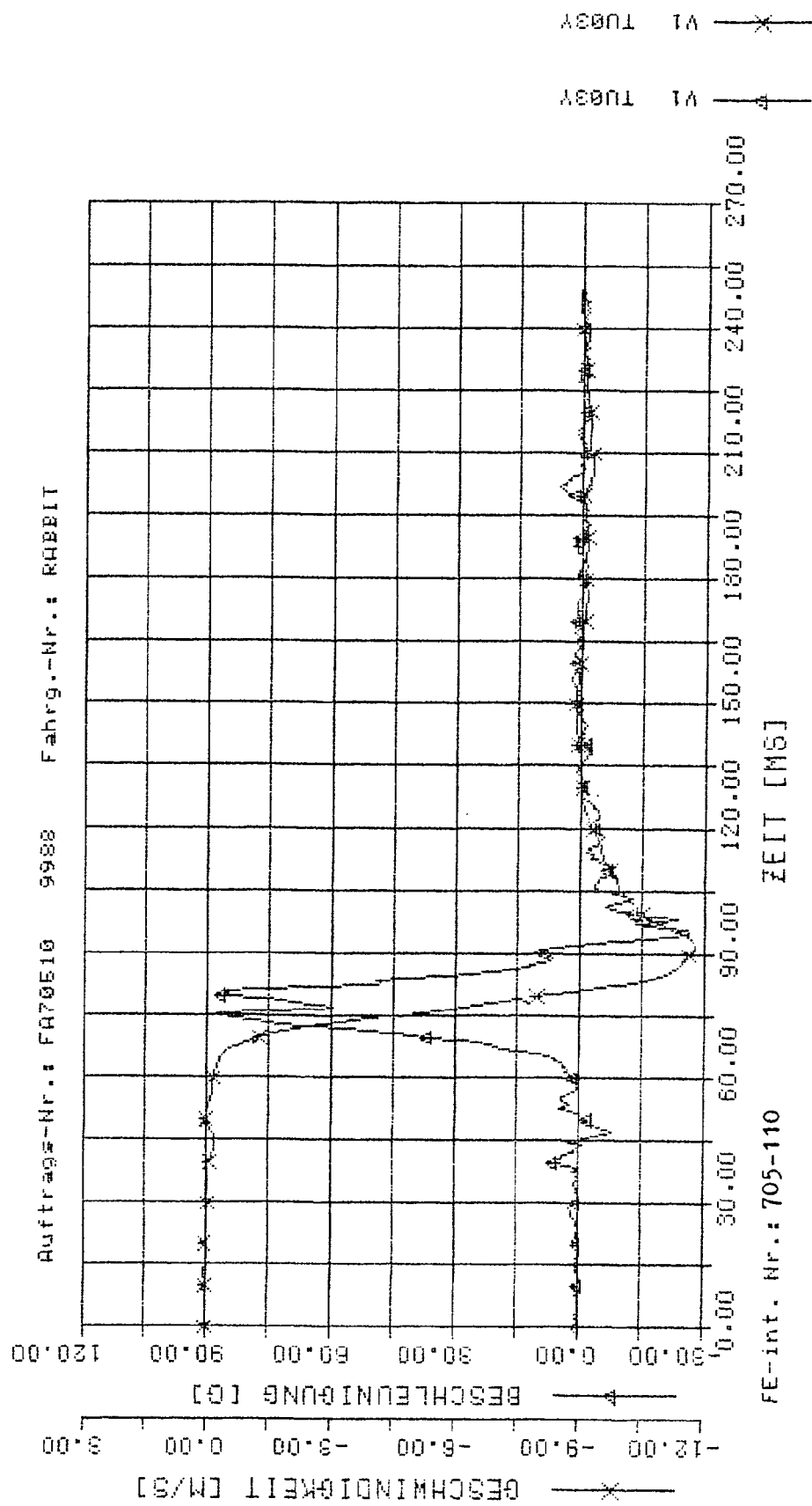
Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9988

Mess-Stelle UP ber. Extremum t SWS
TU03X Groesse Extr.
V1 BE q 38.734 73.00 0.00



Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9988

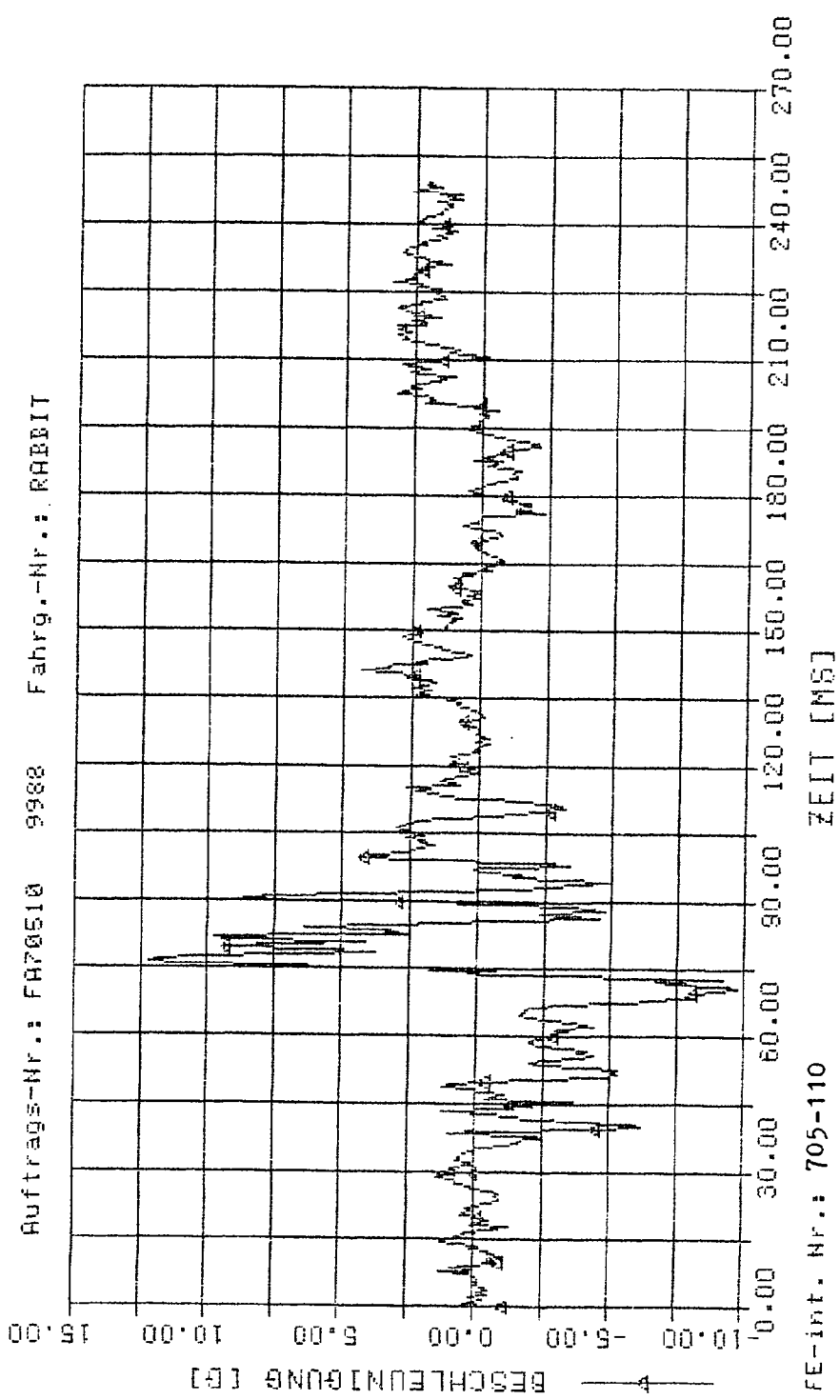
Mess-Stelle	UP	ber.	Extremum	Extr.
TU03Y	V1	BE q	87.292	75.00
TU03Y	V1	GE m/s	-11.819	92.50



FE-int. Nr.: 705-110

Kennwerte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9988

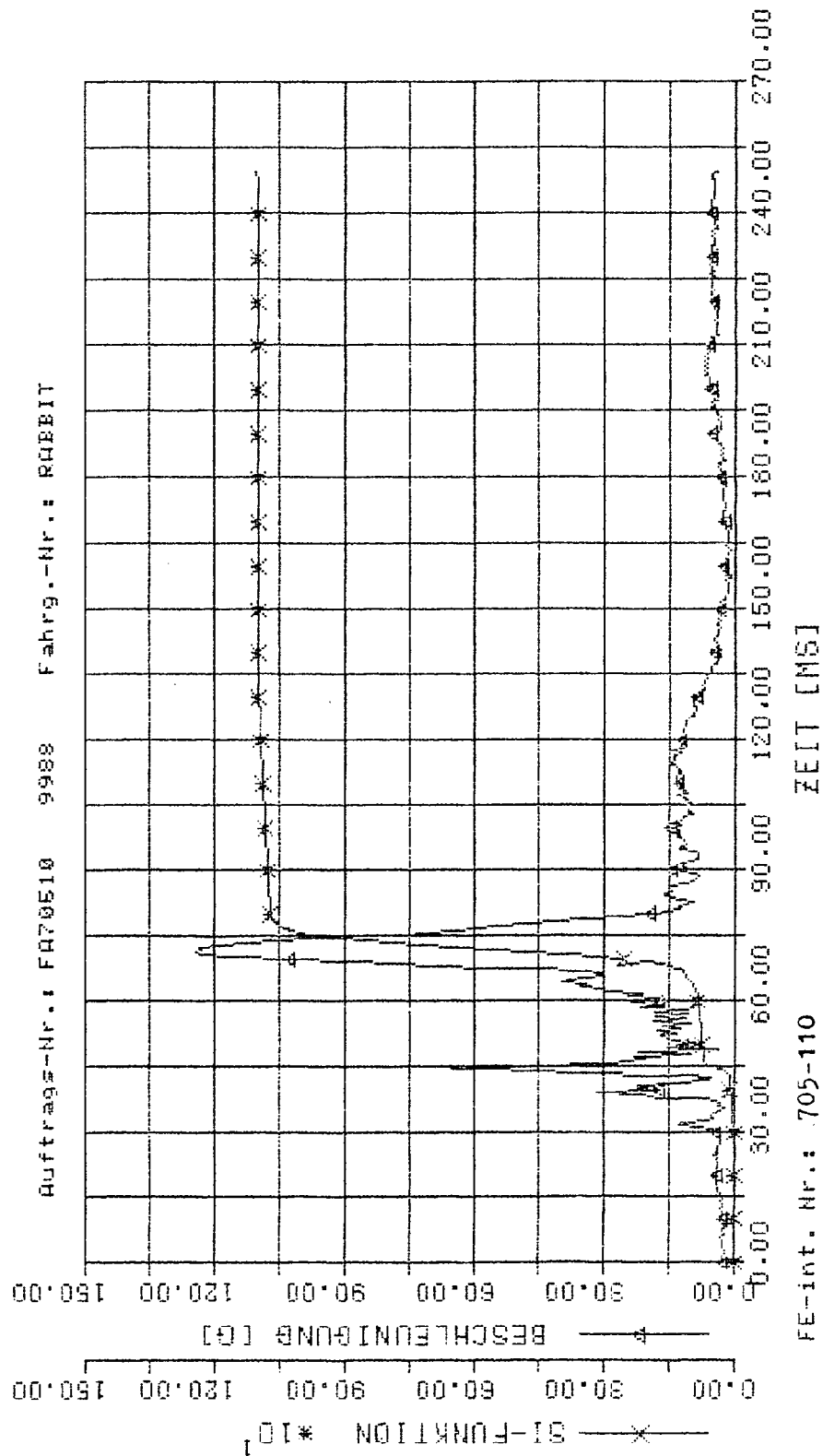
Mess-Stelle UP ber. Extremum t 3MS
TU03Z Groesse Extr.
V1 BE q 12.246 77.00 0.00



V1 TU03Z

Kennwerte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9908

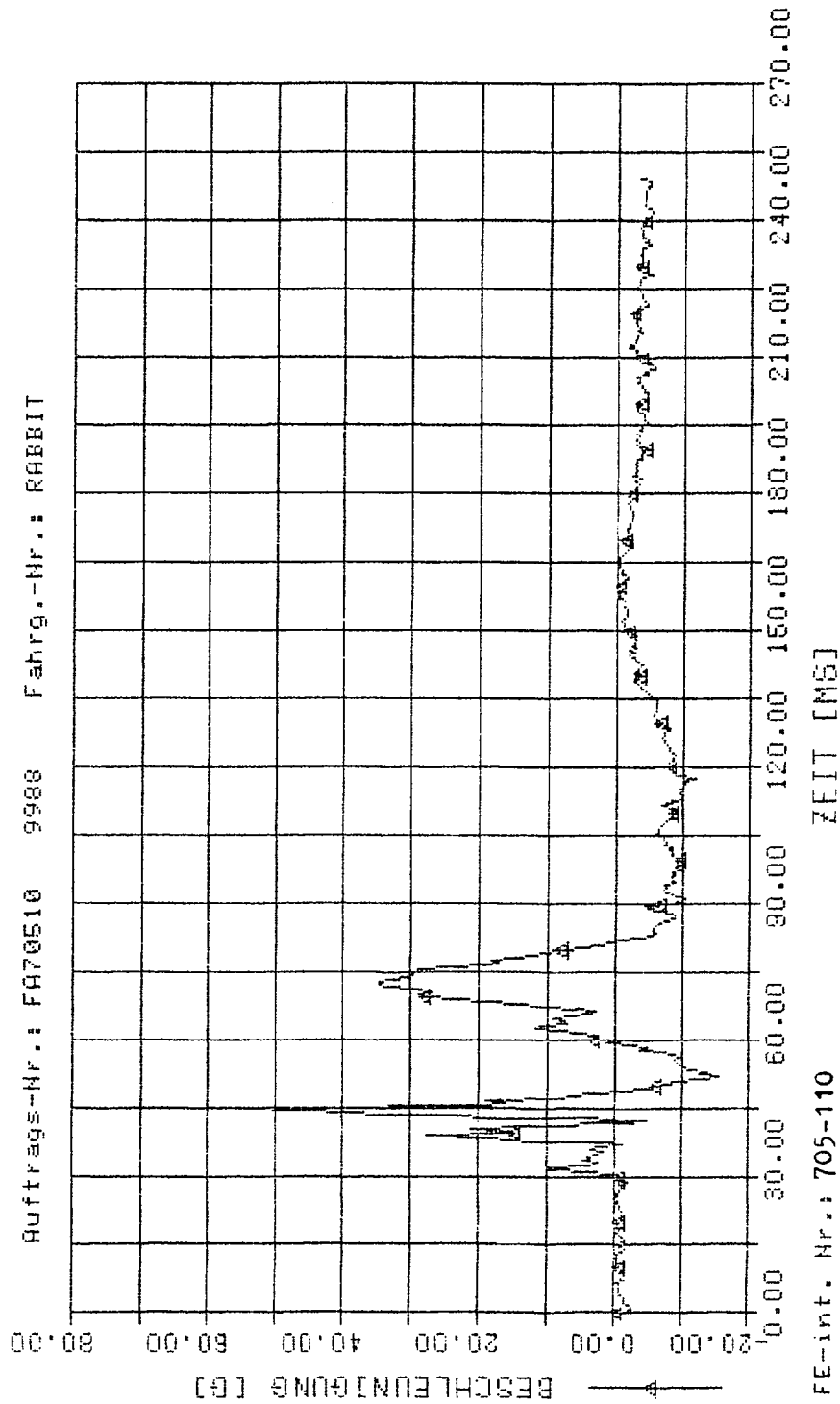
Mess-Stelle	UP	ber.	Extremum	t	MS
WE03	V1	BE q	123.734	71.50	112.40
BE03	V1	SI	1099.345	250.00	0.00



Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9988

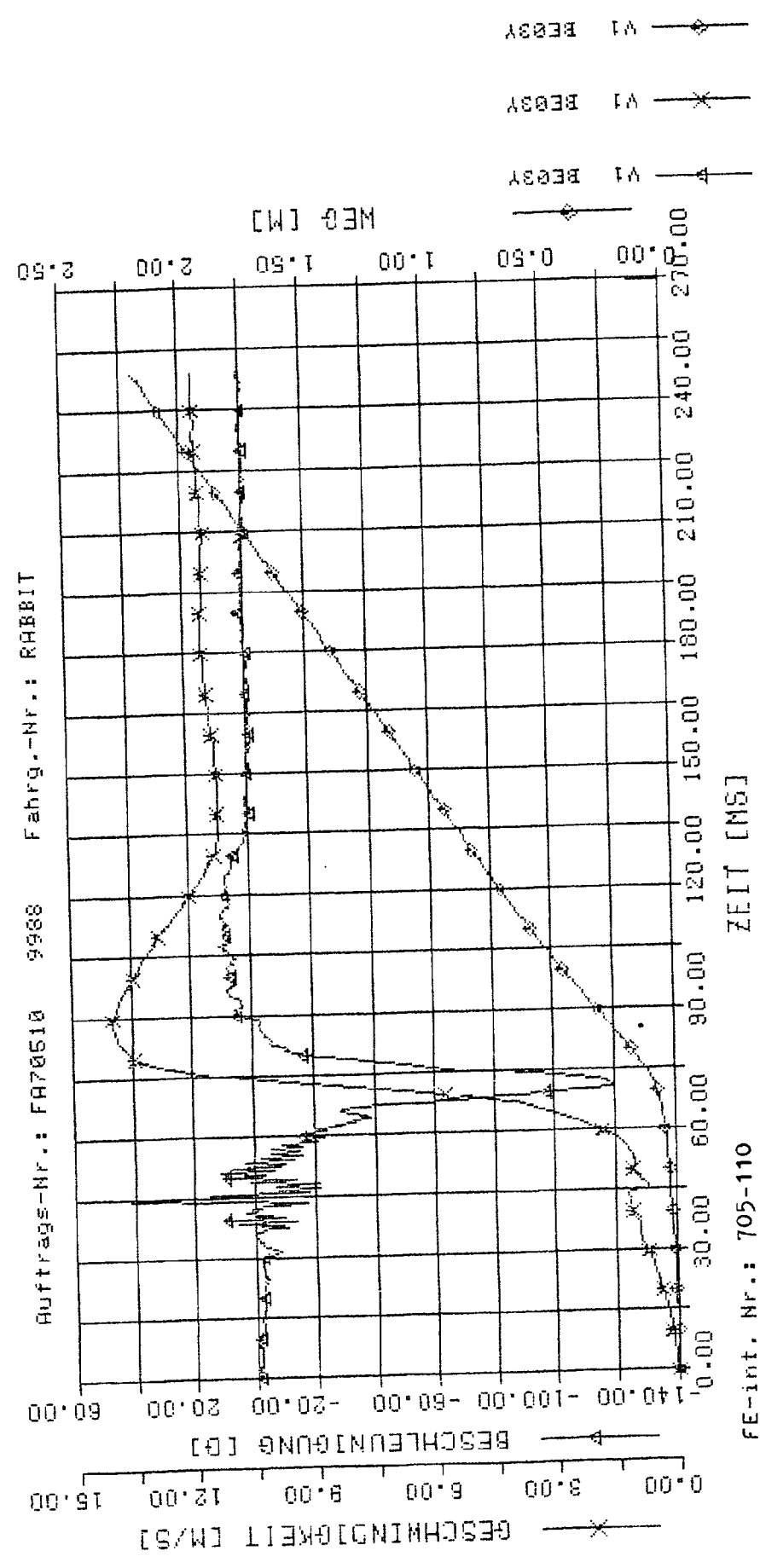
Mess-Stelle
BE03X

UP	ber.	Extrema	t	MS
V1	BE q	57.015	Extr.	45.00
				33.71



Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9988

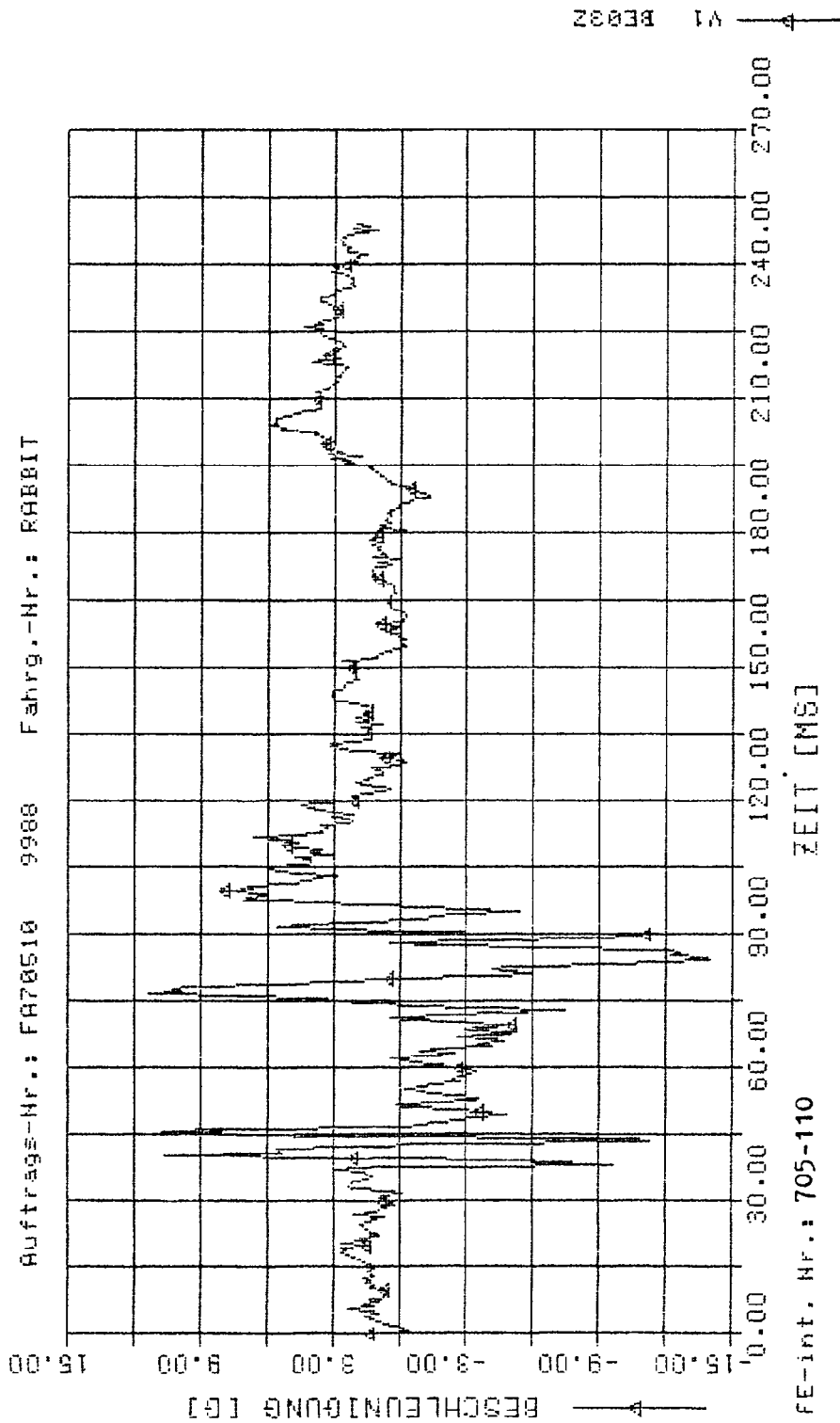
Mess-Stelle	UP	ber.	Extremum	t	Ext.	ΔMS
BE03Y	V1	GE	120.347	74.50	9.66	
BE03Y	V1	GE	13.990	89.50	0.00	
BE03Y	V1	WE	2.263	255.50	0.00	



FE-int. Nr.: 705-110

Kenn-Werte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9988

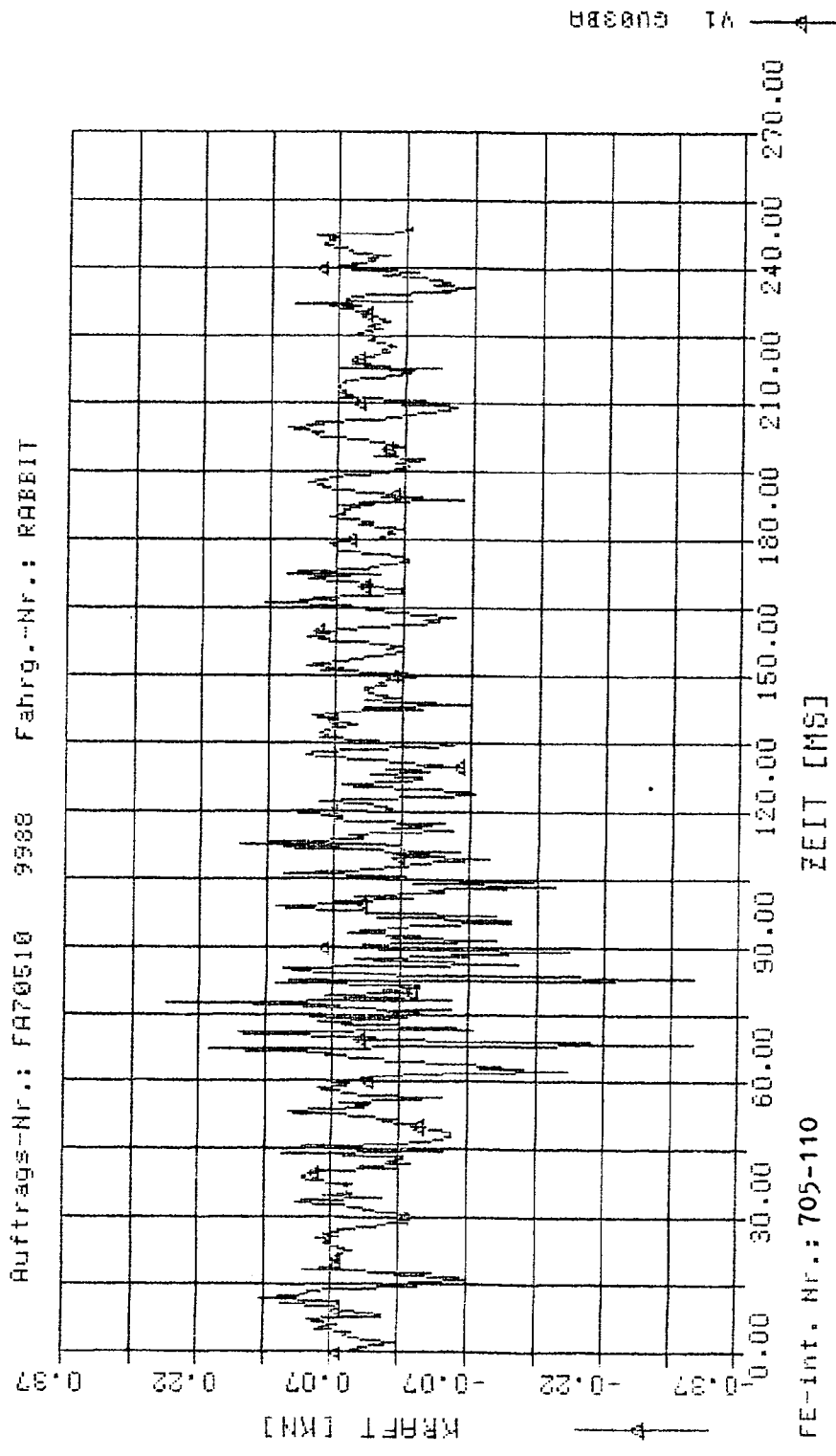
Mess-Stelle UP ber. Extremum t 3MS
 BE03Z V1 BE q Grösse Extr. 84.50 7.01



Kennwerte: Auftrags-Nr.: FA70510 Versuchs-Nr.: 9988

Mess-Stelle
GU03BA

UP	ber.	Extremum	t	MS
V1	KR kN	-0.324	83.50	0.00



Chest Deflection Rear Left = 44.5 mm

Auftrags-Nr.: FA70510 9988 Fahrg.-Nr.: RABBIT

