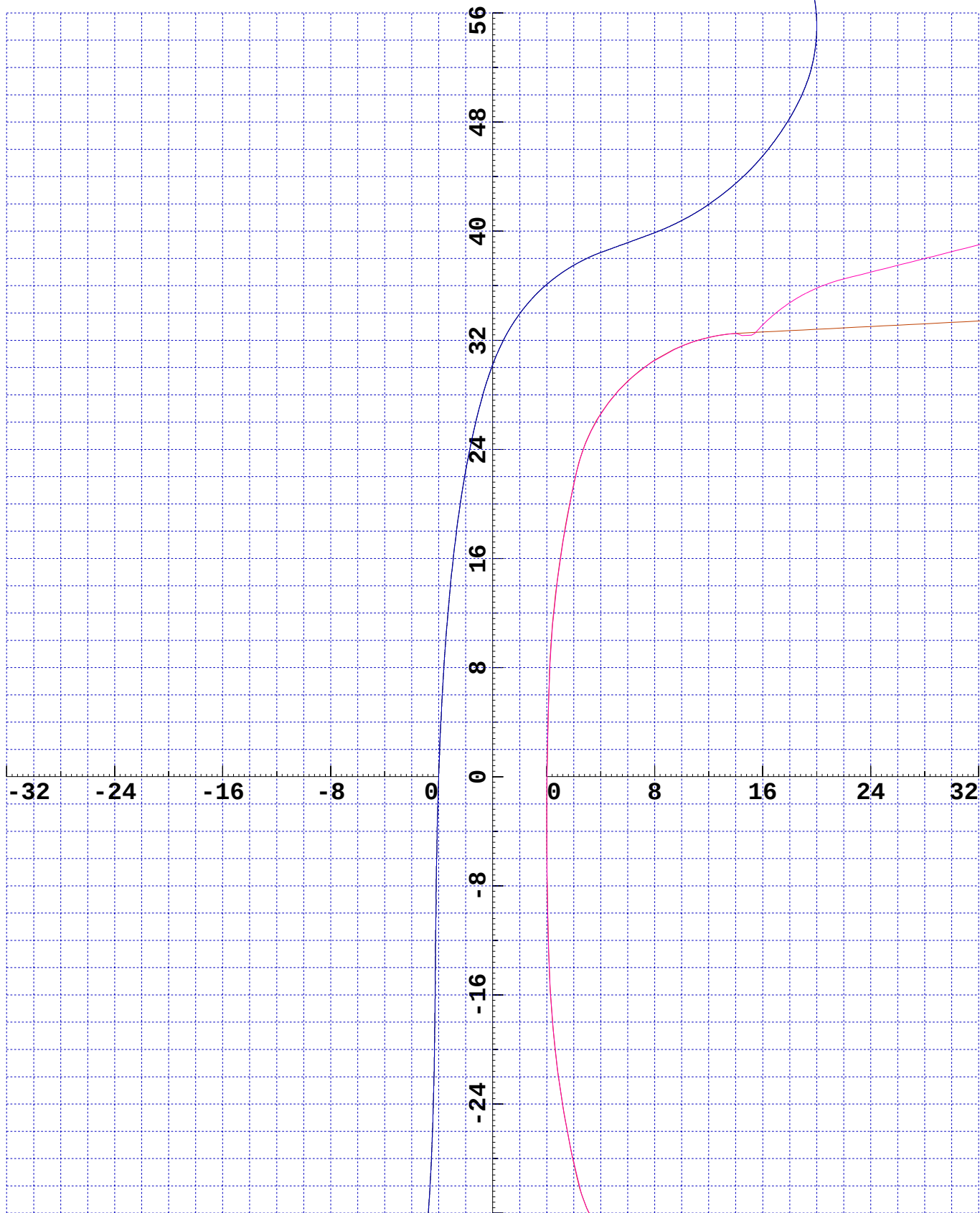
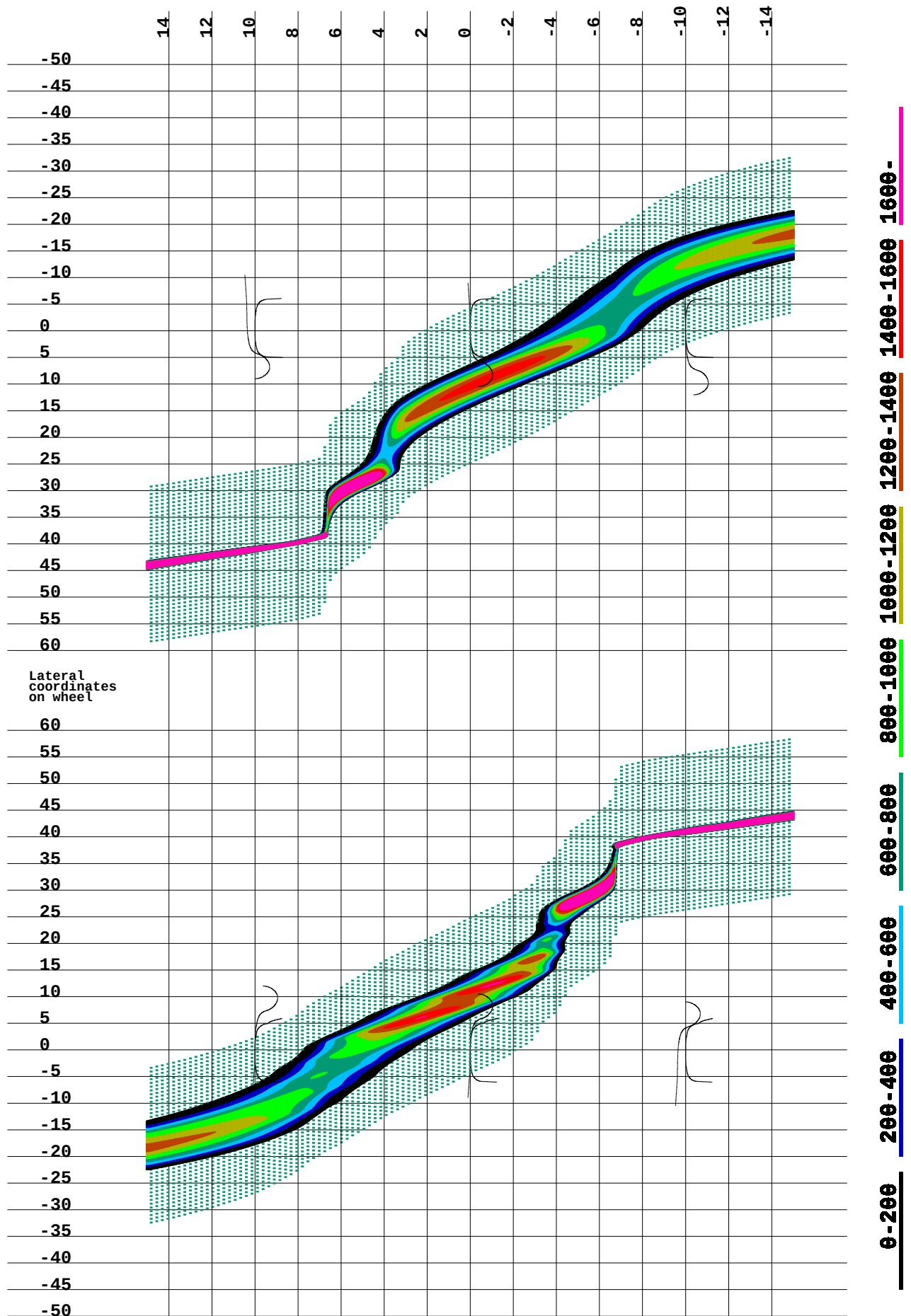


- Right wheel
- Left wheel
- Right rail
- Left rail



Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel WRGEOM
Left rail: r_prof/SEC003_l.short.rail Right rail: r_prof/SEC003_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

Ident: kpfr_003

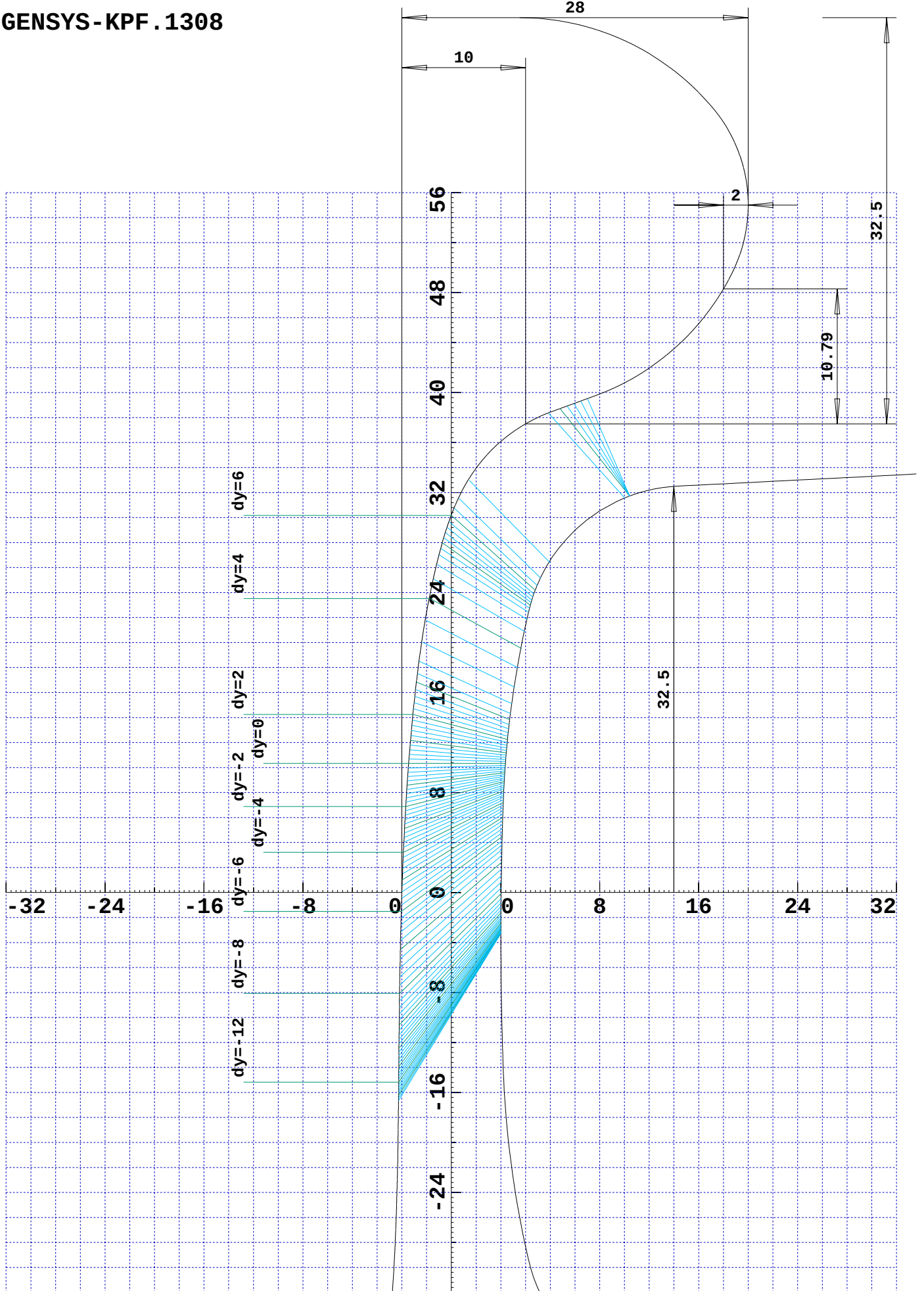


Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel

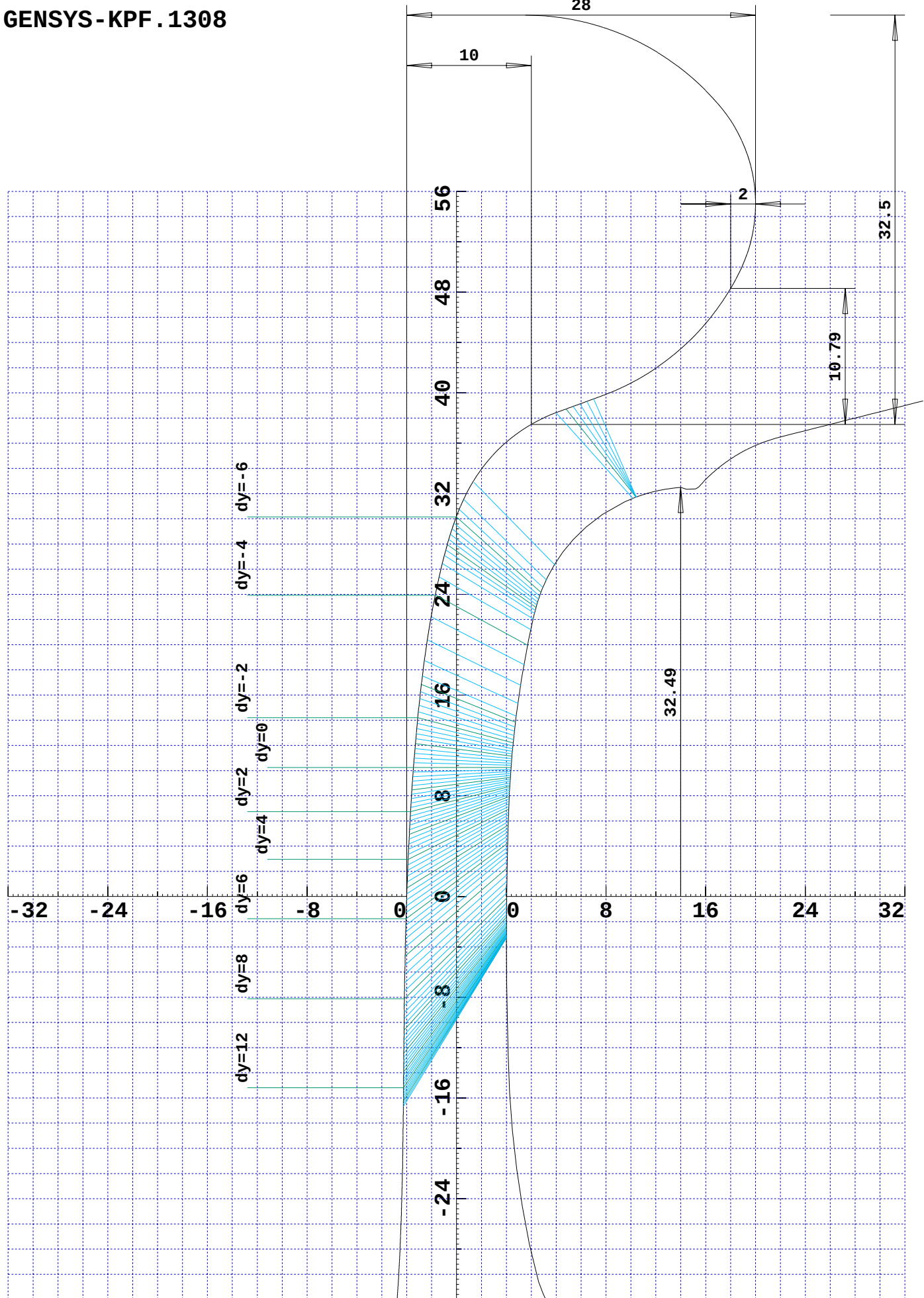
Left rail: r_prof/SEC003_l.short.rail Right rail: r_prof/SEC003_r.sho

Wprof_lat_shift= 0 Gauge= 1425-1441

Contact Pressure

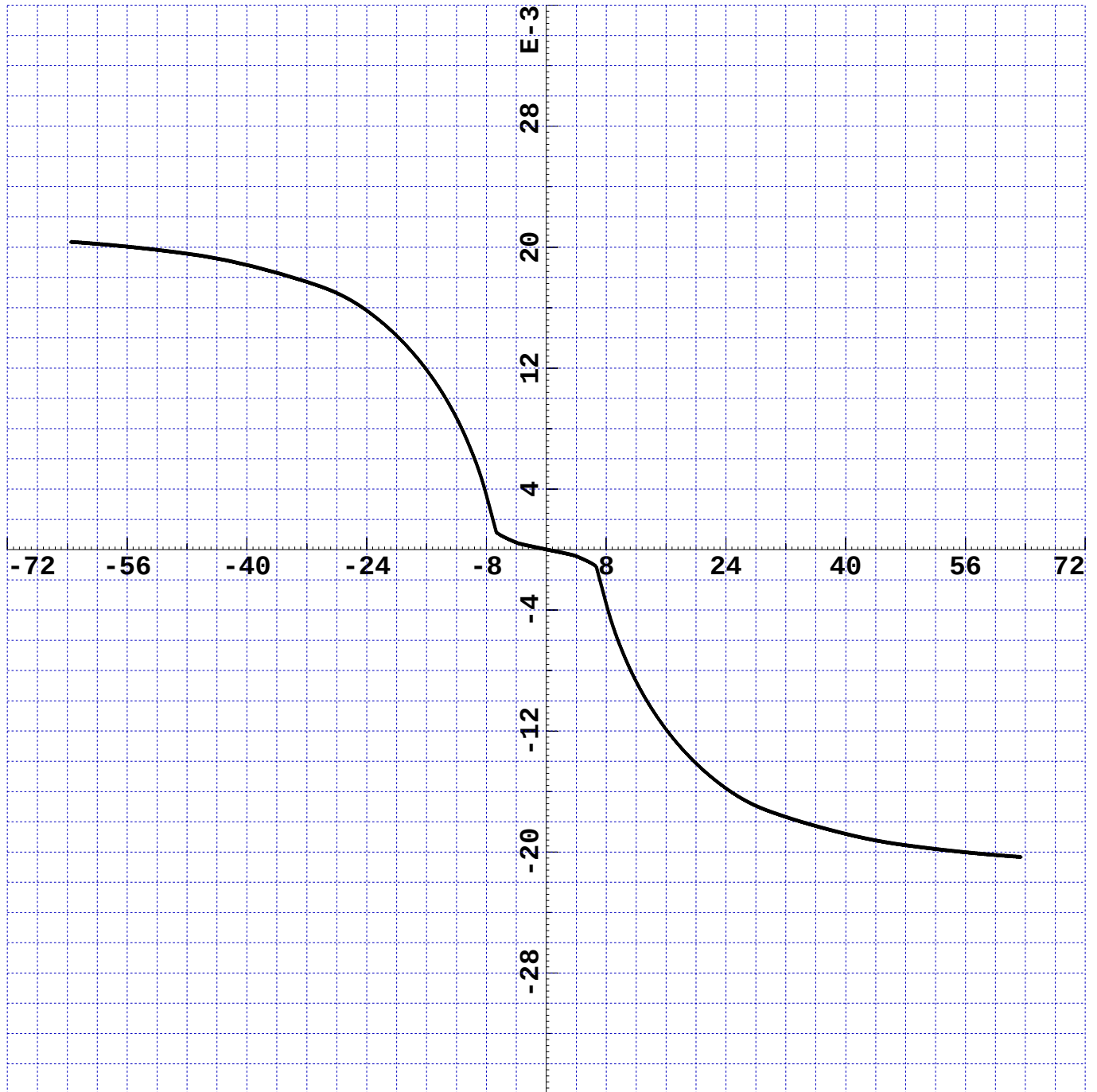
**CONNr**

Ident: kpfr_003



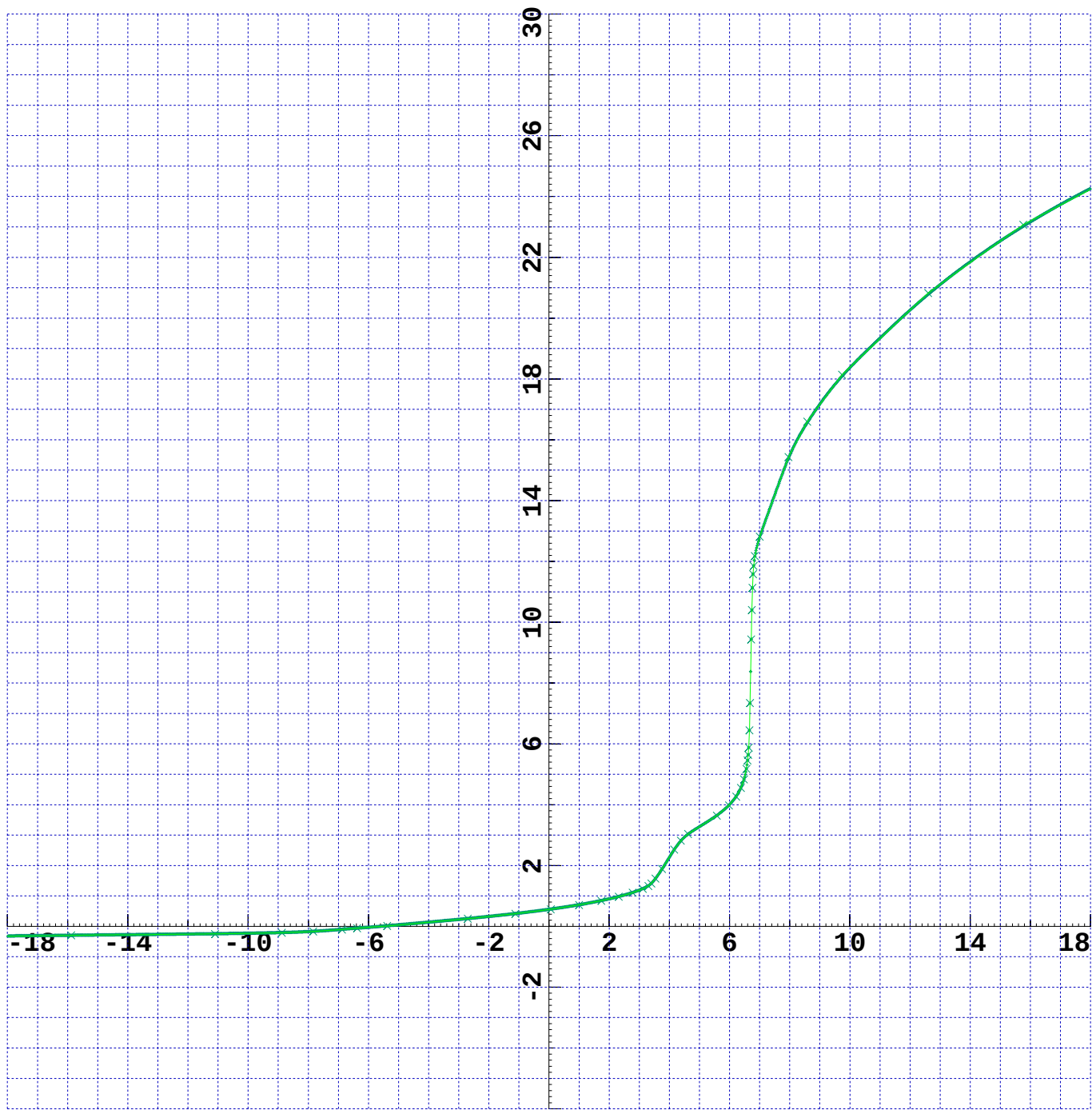
CONN1

Ident: kpfr_003



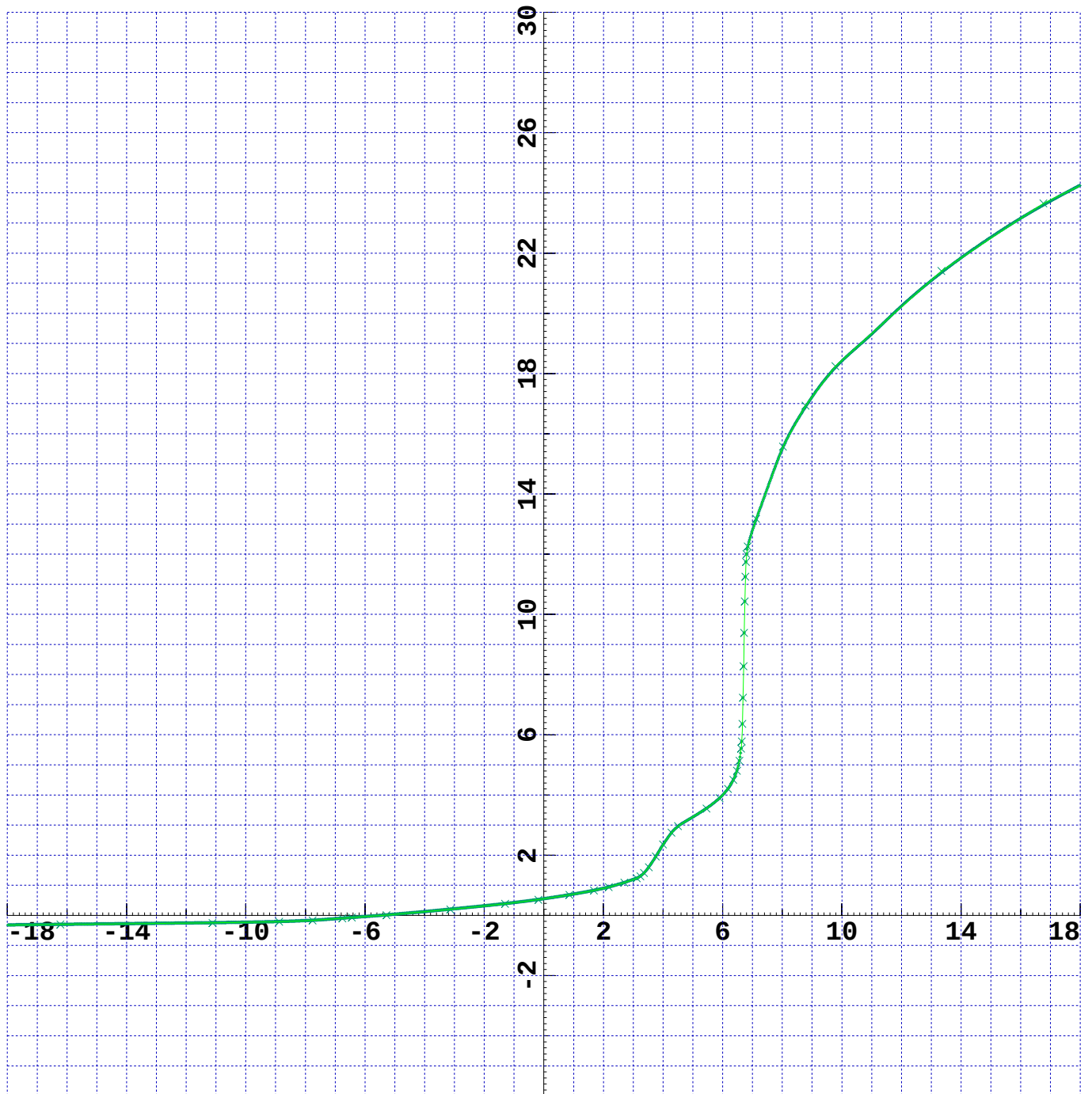
Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel **Flaxl**
Left rail: r_prof/SEC003_l.short.rail Right rail: r_prof/SEC003_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

Ident: kpfr_003



Left wheel:S1002t32.5.wheel Right wheel:S1002t32.5.wheel DRFNr
Left rail: r_prof/SEC003_l.short.rail Right rail: r_prof/SEC003_r.short.rail
Wprof_lat_shift= 0 Gauge= 1425-1441

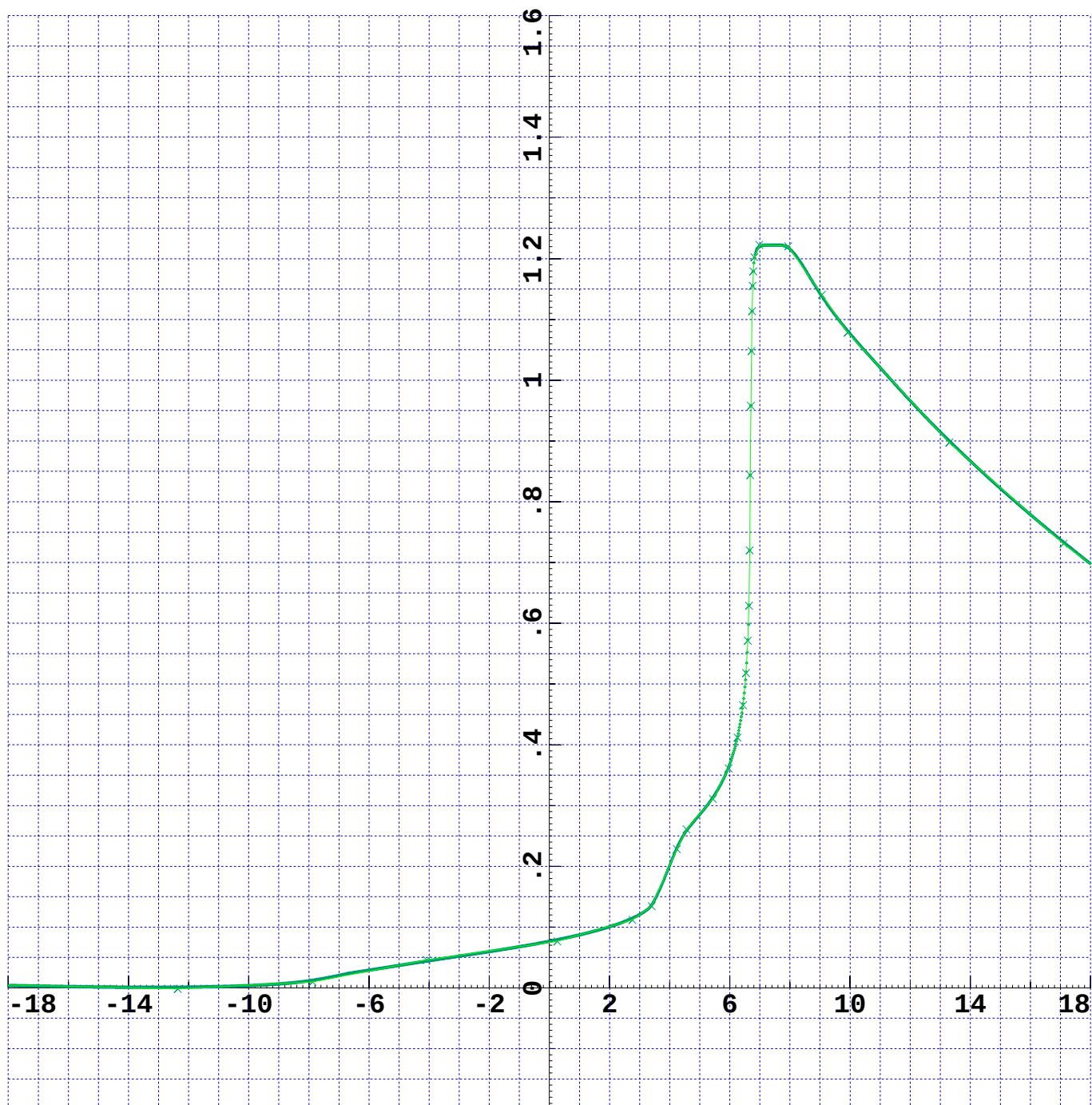
Ident: kpfr_003



Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel
Left rail: r_prof/SEC003_l.short.rail Right rail: r_prof/SEC003_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

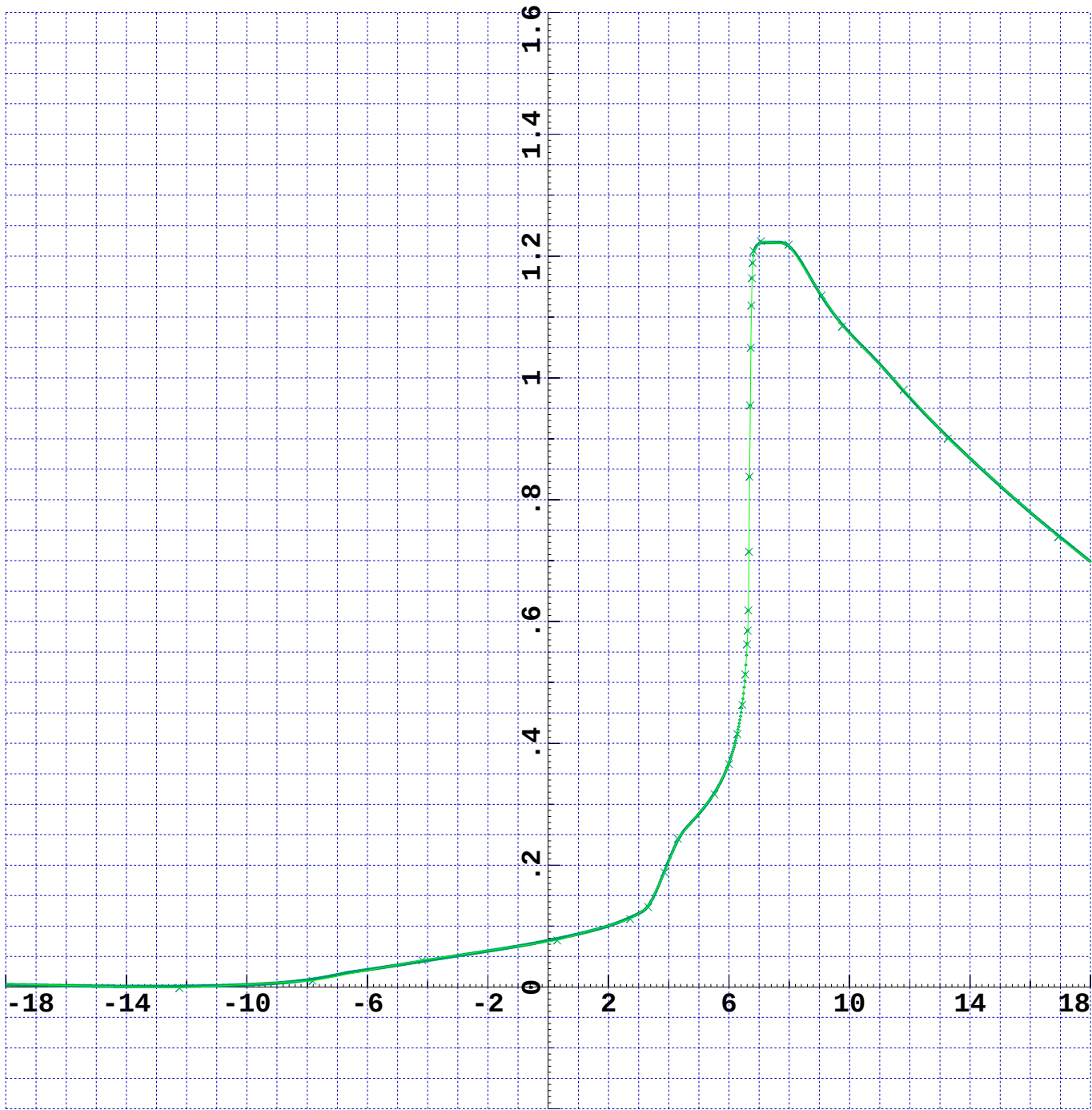
DRFN1

Ident: kpfr_003



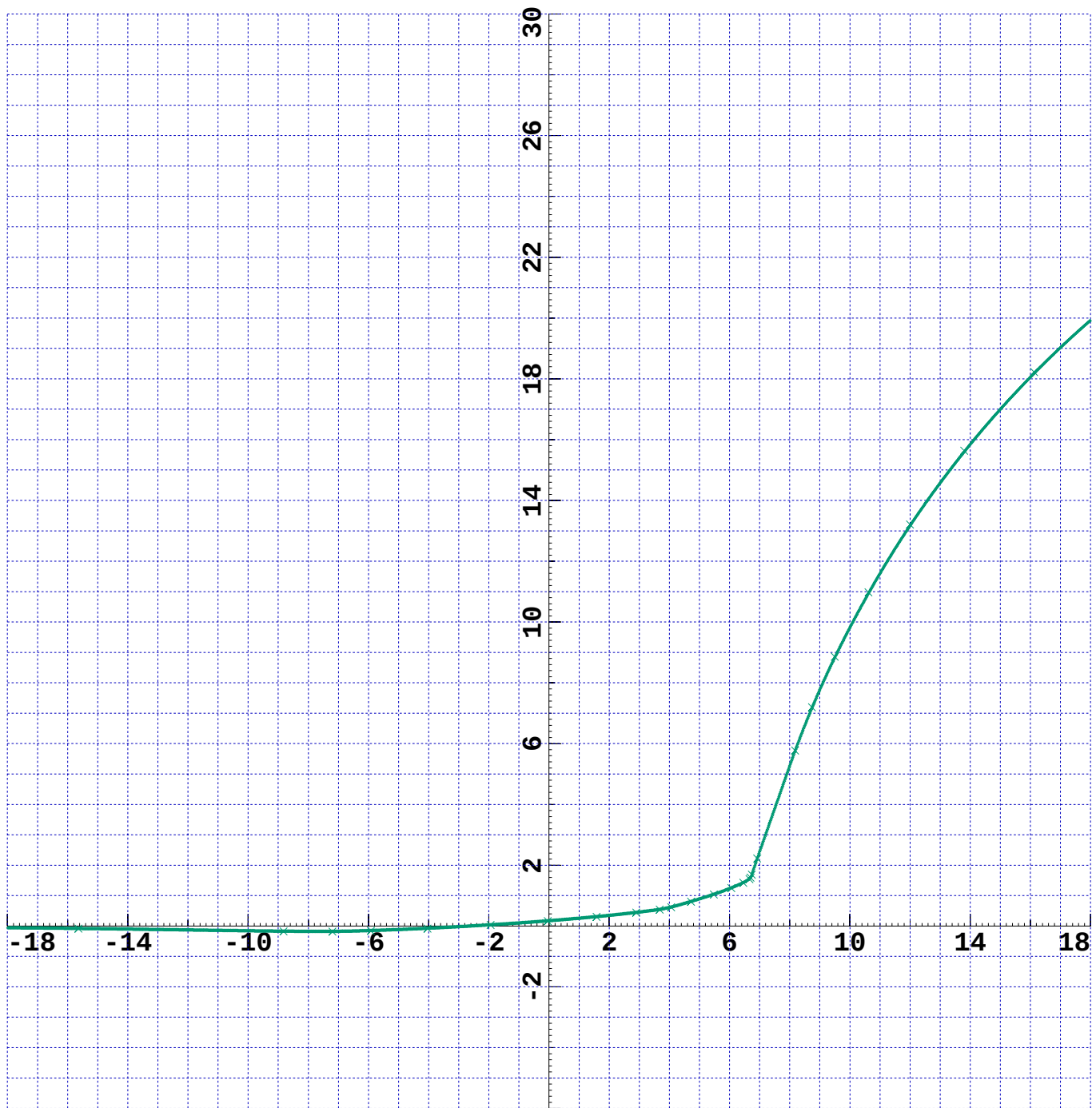
Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel **GAMFNr**
Left rail: r_prof/SEC003_l.short.rail Right rail: r_prof/SEC003_r.short.rail
Wprof_lat_shift= 0 Gauge= 1425-1441

Ident: kpfr_003



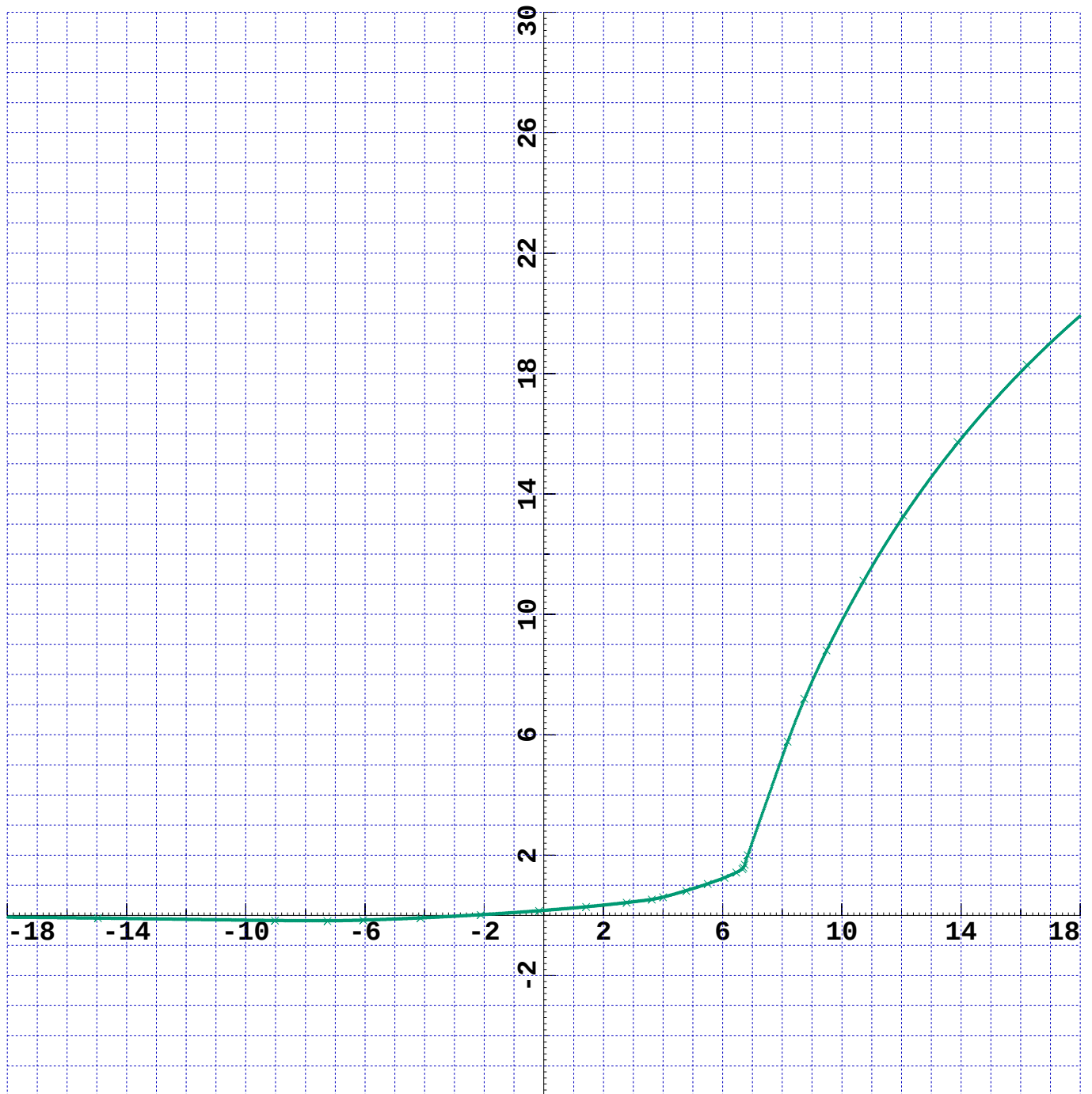
Left wheel:S1002t32.5.wheel Right wheel:S1002t32.5.wheel GAMFN1
Left rail: r_prof/SEC003_l.short.rail Right rail: r_prof/SEC003_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

Ident: kpfr_003



Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel ZFNr
Left rail: r_prof/SEC003_l.short.rail Right rail: r_prof/SEC003_r.short.rail
Wprof_lat_shift= 0 Gauge= 1425-1441

Ident: kpfr_003



Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel
Left rail: r_prof/SEC003_l.short.rail Right rail: r_prof/SEC003_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

ZFN1

Ident: kpfr_003



Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel ROFNR
 Left rail: r_prof/SEC003_l.short.rail Right rail: r_prof/SEC003_r.short.rail
 Wprof_lat_shift= 0 Gauge= 1425-1441

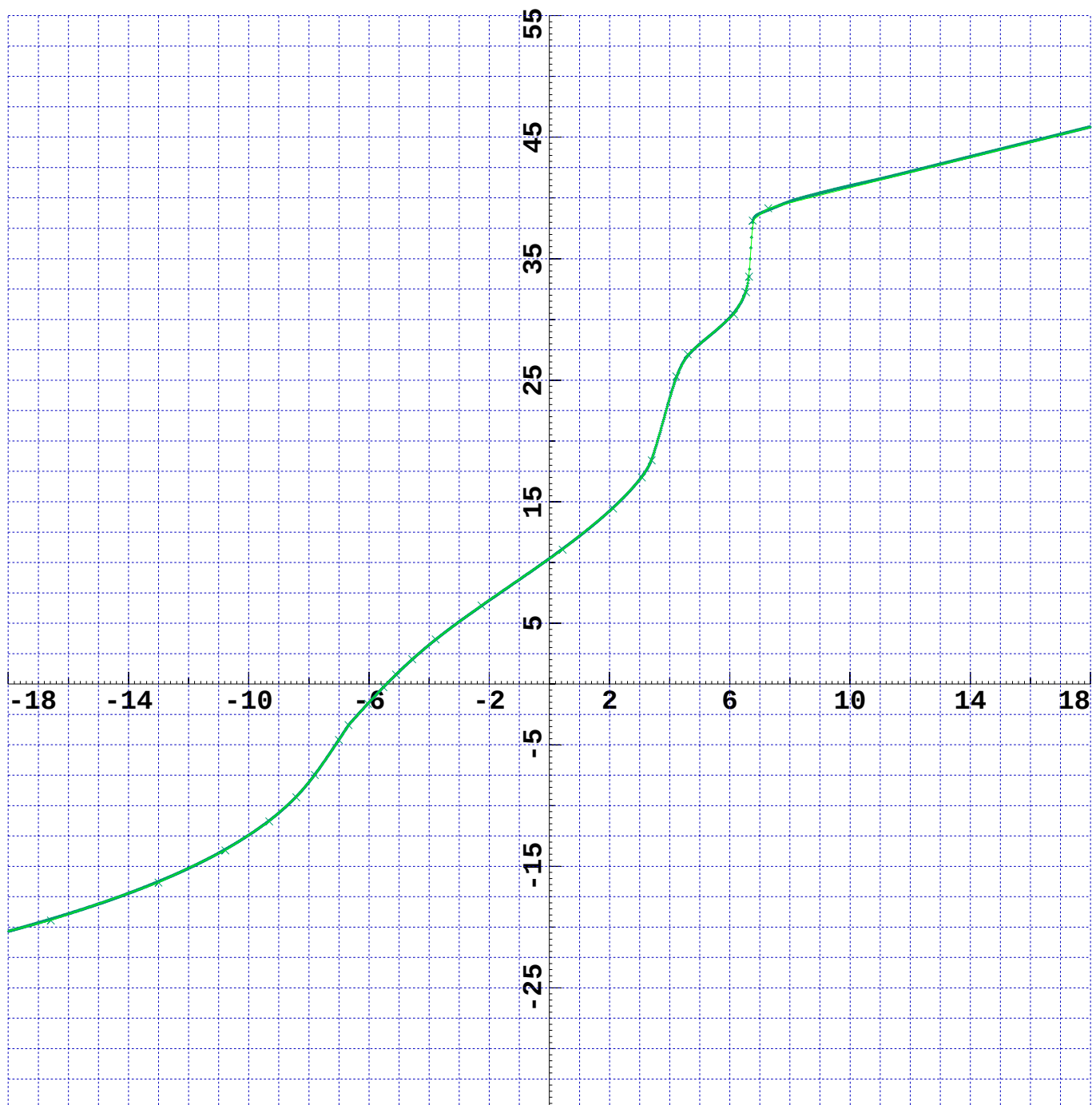
Ident: kpfr_003



Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel
Left rail: r_prof/SEC003_l.short.rail Right rail: r_prof/SEC003_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

ROFN1

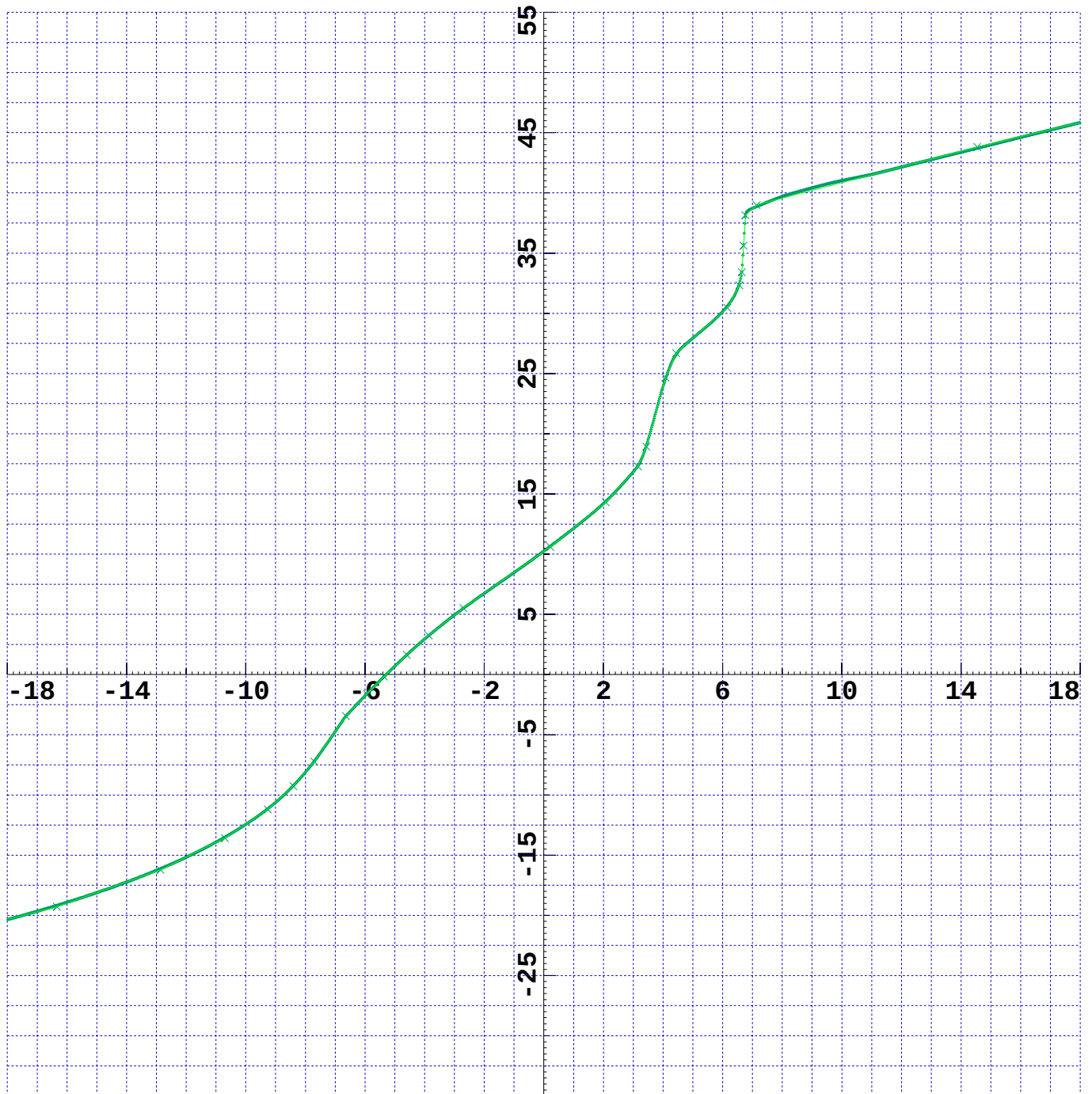
Ident: kpfr_003



Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel
Left rail: r_prof/SEC003_l.short.rail Right rail: r_prof/SEC003_r.short.rail
Wprof_lat_shift= 0 Gauge= 1425-1441

POSWr

Ident: kpfr_003



Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel
Left rail: r_prof/SEC003_l.short.rail Right rail: r_prof/SEC003_r.short.rail
Wprof_lat_shift= 0 Gauge= 1425-1441

POSW1

Ident: kpfr_003



Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel
Left rail: r_prof/SEC003_l.short.rail Right rail: r_prof/SEC003_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

POSRR

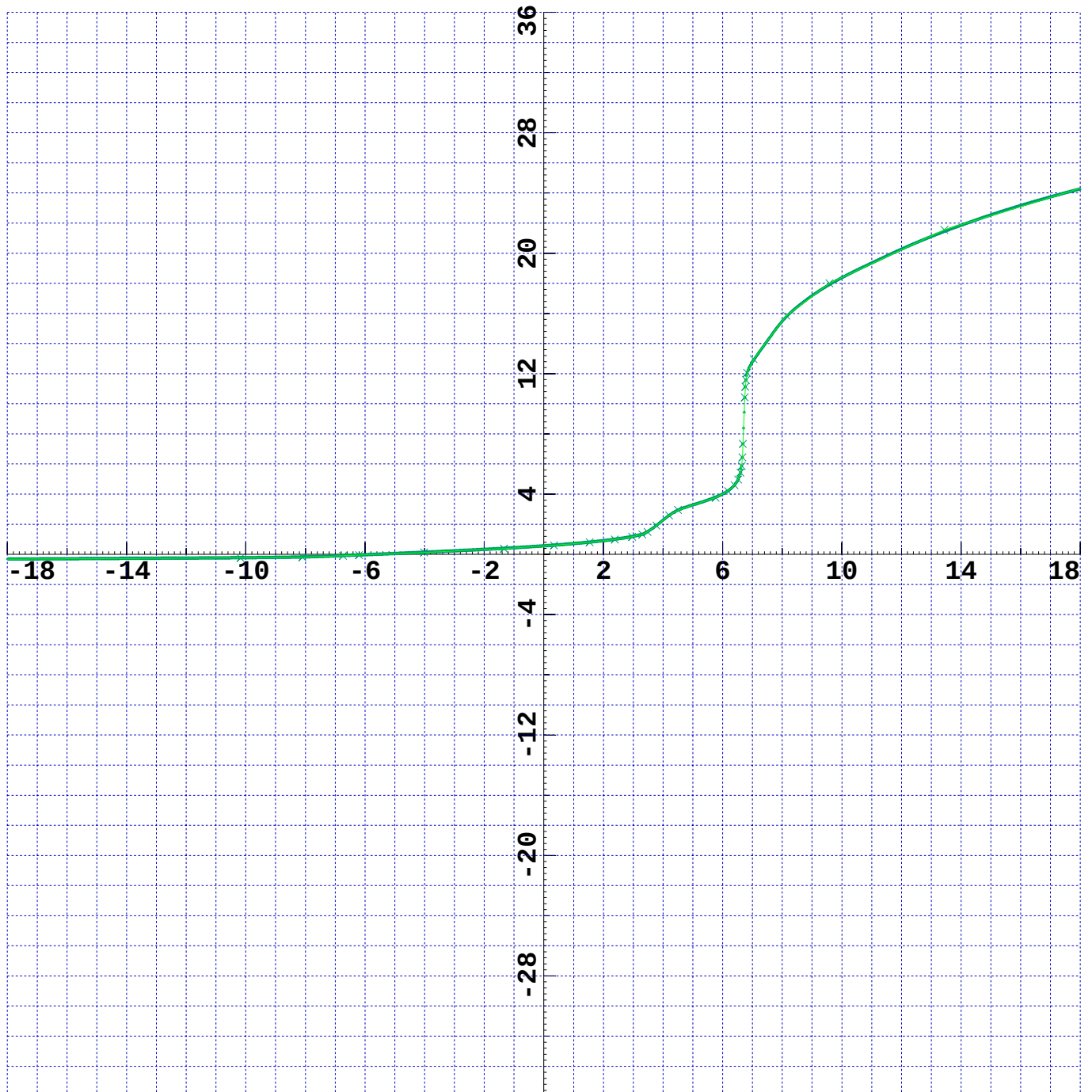
Ident: kpfr_003



Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel
Left rail: r_prof/SEC003_l.short.rail Right rail: r_prof/SEC003_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

POSR1

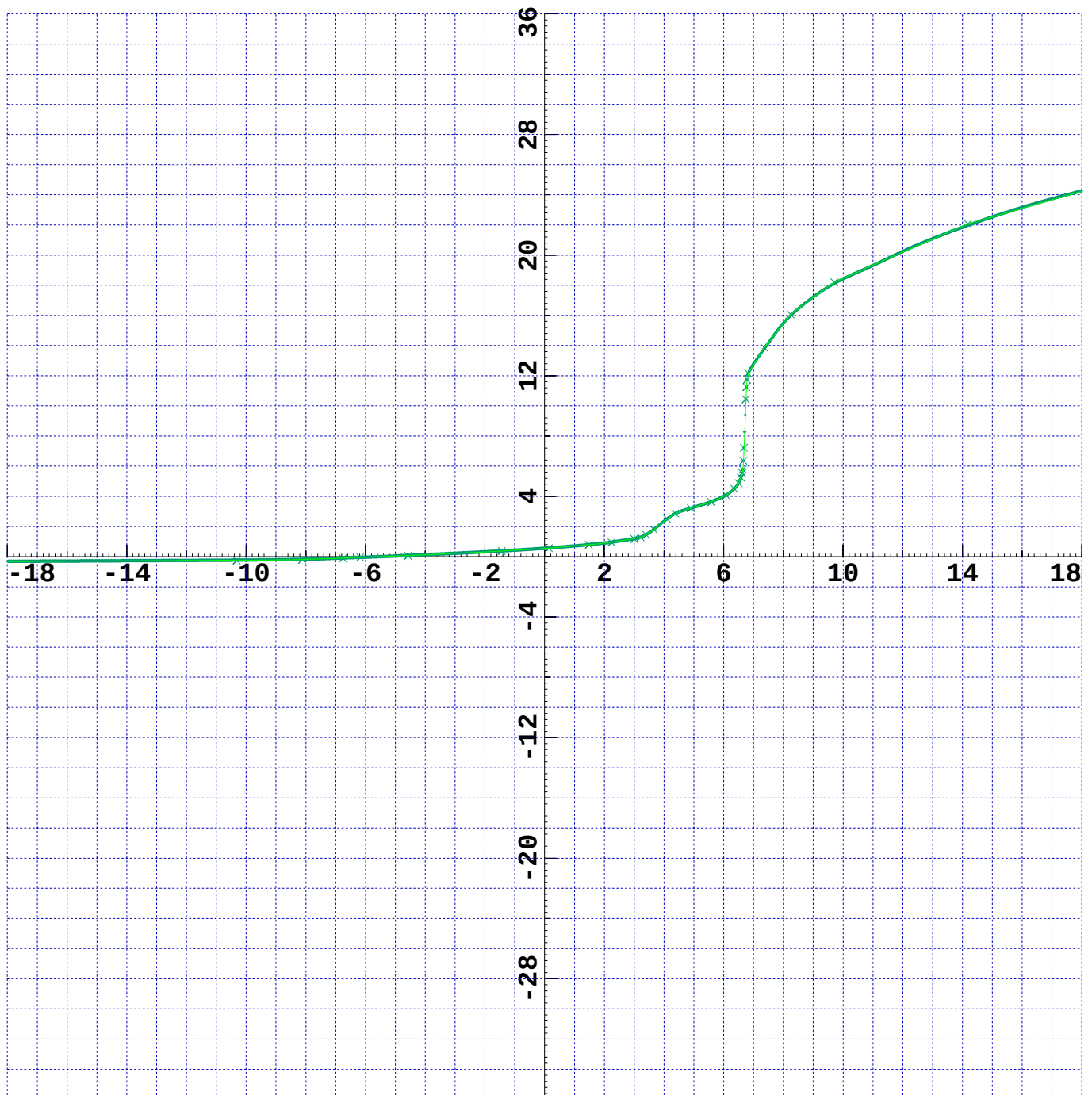
Ident: kpfr_003



Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel
Left rail: r_prof/SEC003_l.short.rail Right rail: r_prof/SEC003_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

ZWr

Ident: kpfr_003



Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel
Left rail: r_prof/SEC003_l.short.rail Right rail: r_prof/SEC003_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

ZW1

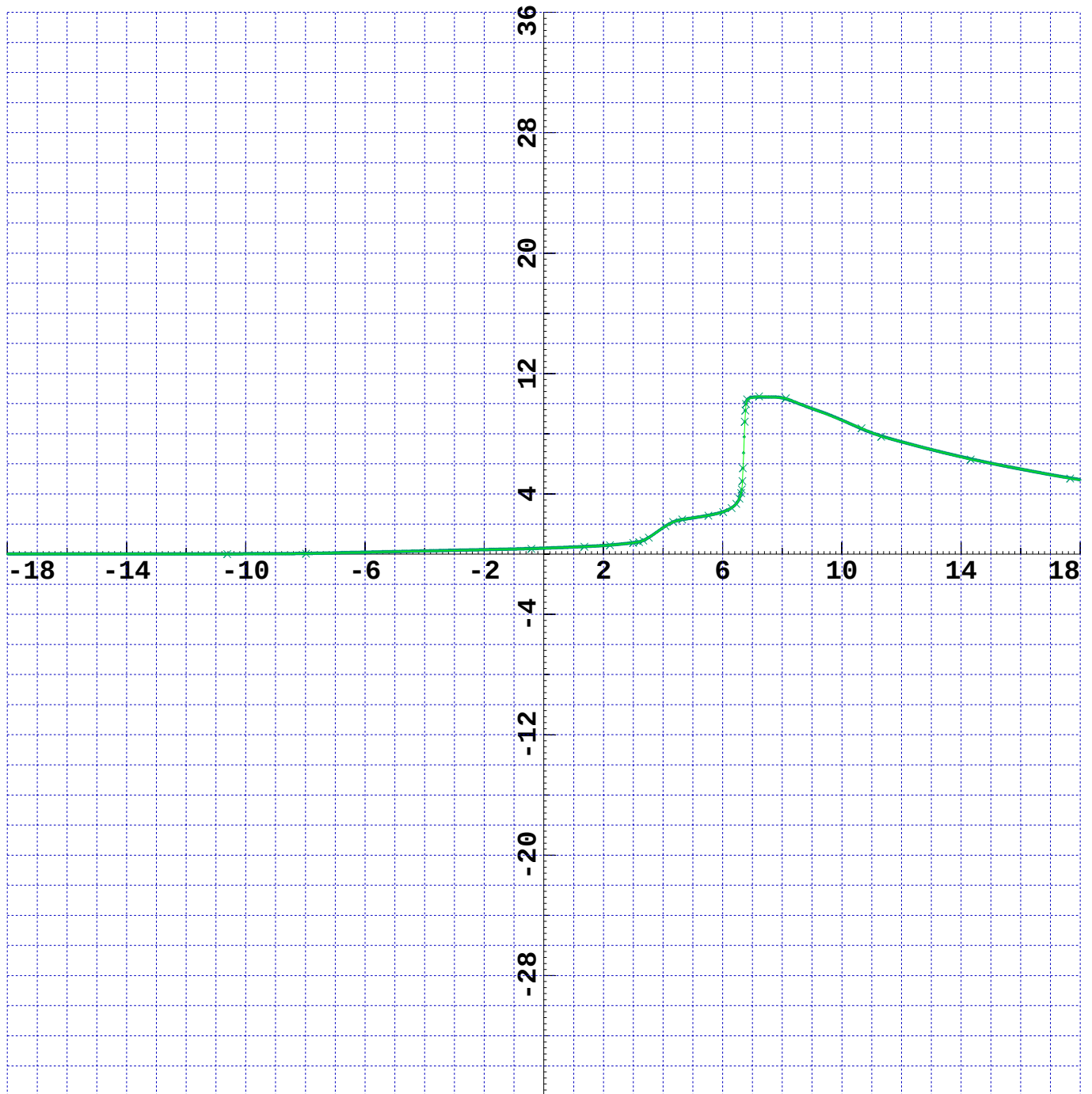
Ident: kpfr_003



Left wheel:S1002t32.5.wheel Right wheel:S1002t32.5.wheel
Left rail: r_prof/SEC003_l.short.rail Right rail: r_prof/SEC003_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

ZRr

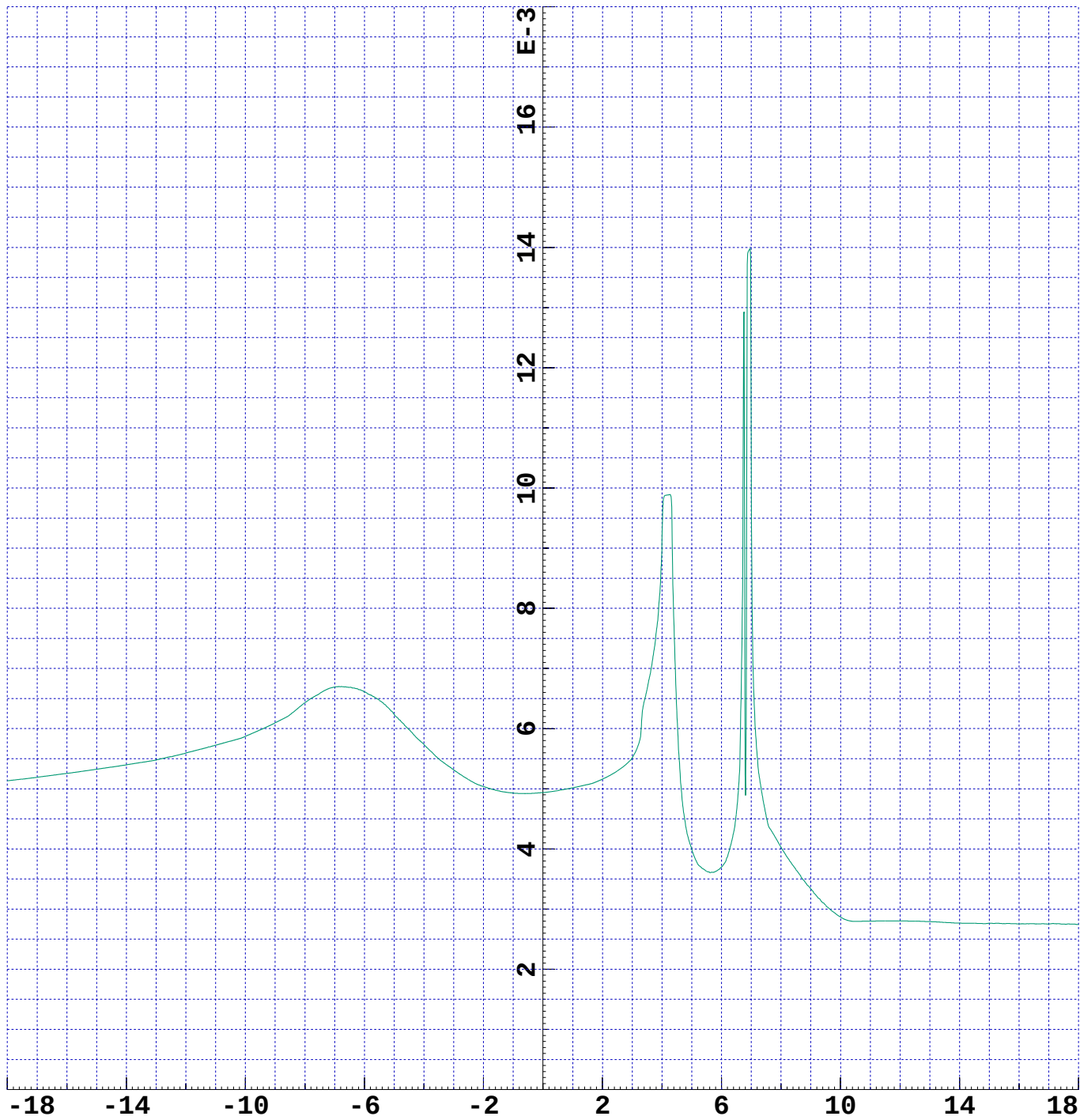
Ident: kpfr_003



Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel
Left rail: r_prof/SEC003_l.short.rail Right rail: r_prof/SEC003_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

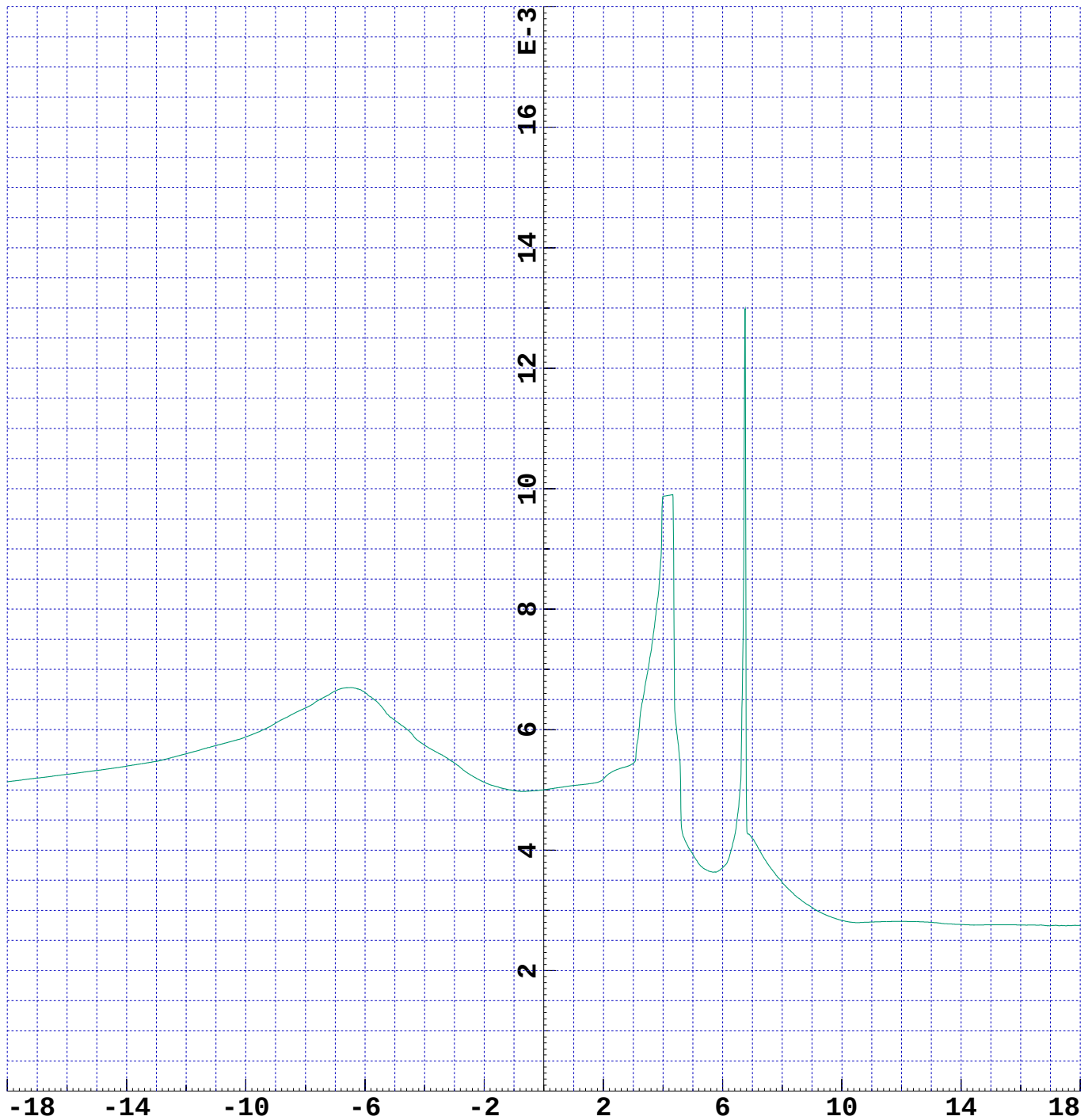
ZR1

Ident: kpfr_003



Left wheel:S1002t32.5.wheel Right wheel:S1002t32.5.wheel C_r
Left rail: r_prof/SEC003_l.short.rail Right rail: r_prof/SEC003_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

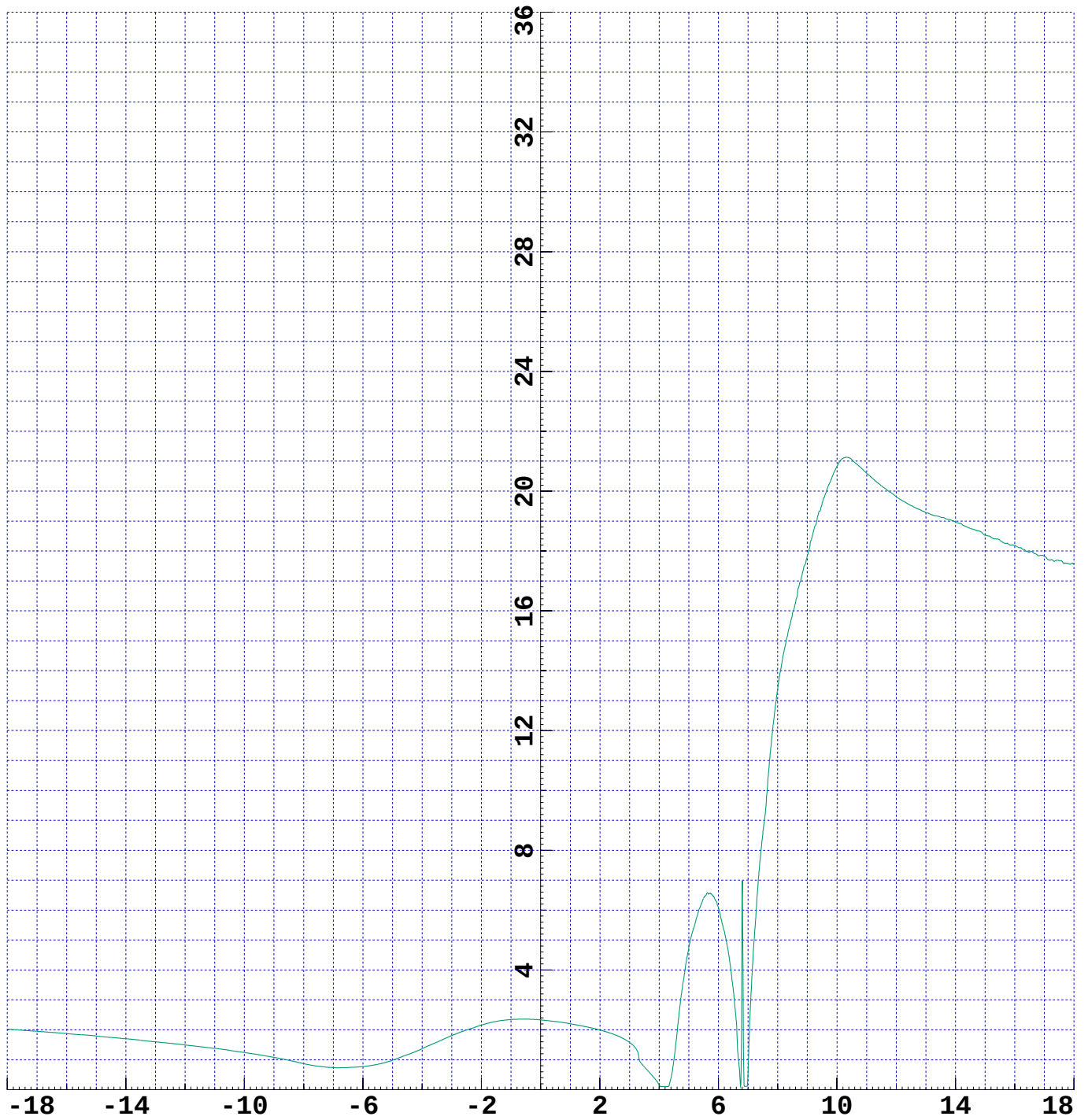
Ident: kpfr_003



Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel
Left rail: r_prof/SEC003_l.short.rail Right rail: r_prof/SEC003_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

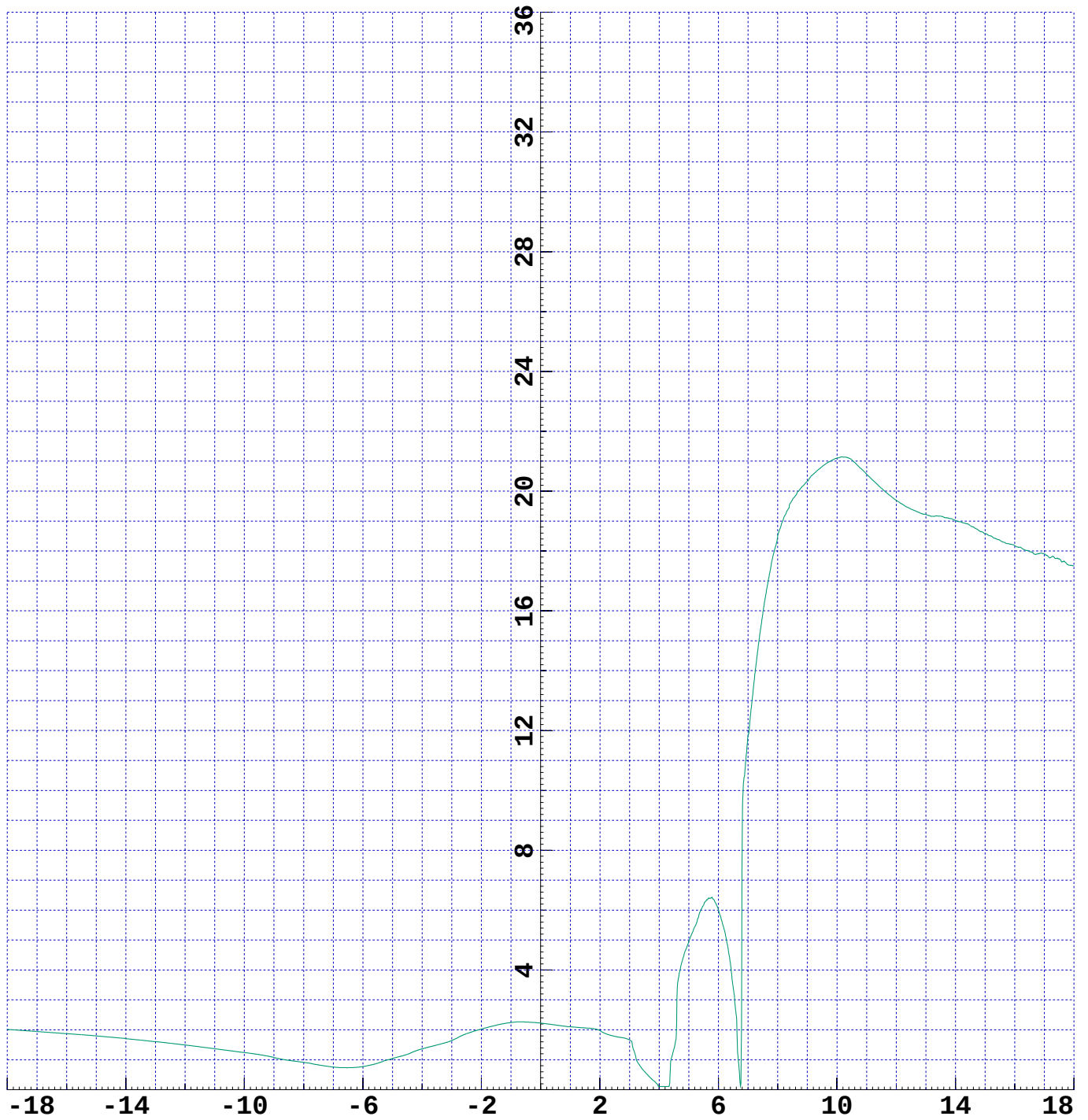
C_1

Ident: kpfr_003



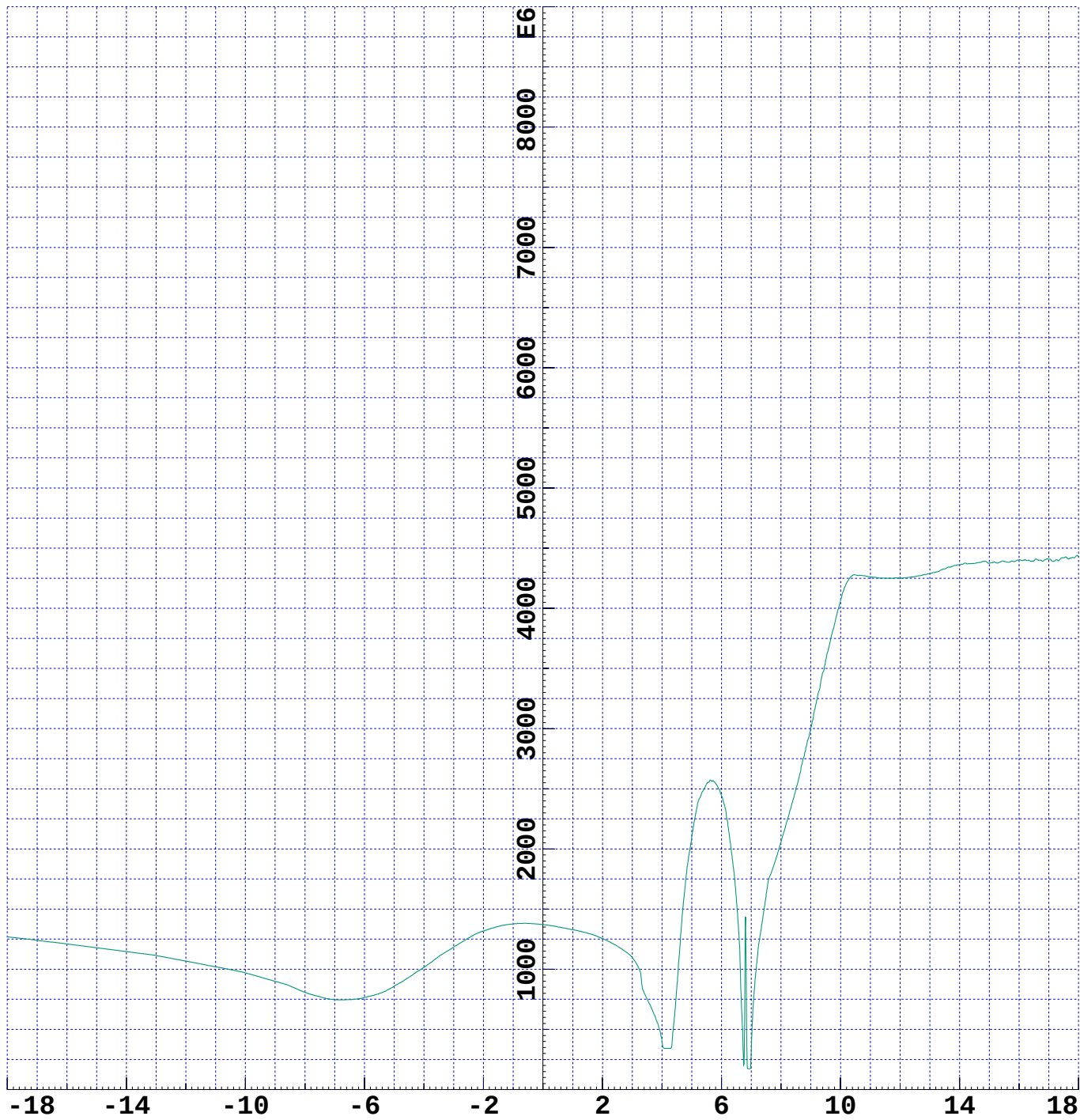
Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel A/B_r
Left rail: r_prof/SEC003_l.short.rail Right rail: r_prof/SEC003_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

Ident: kpfr_003



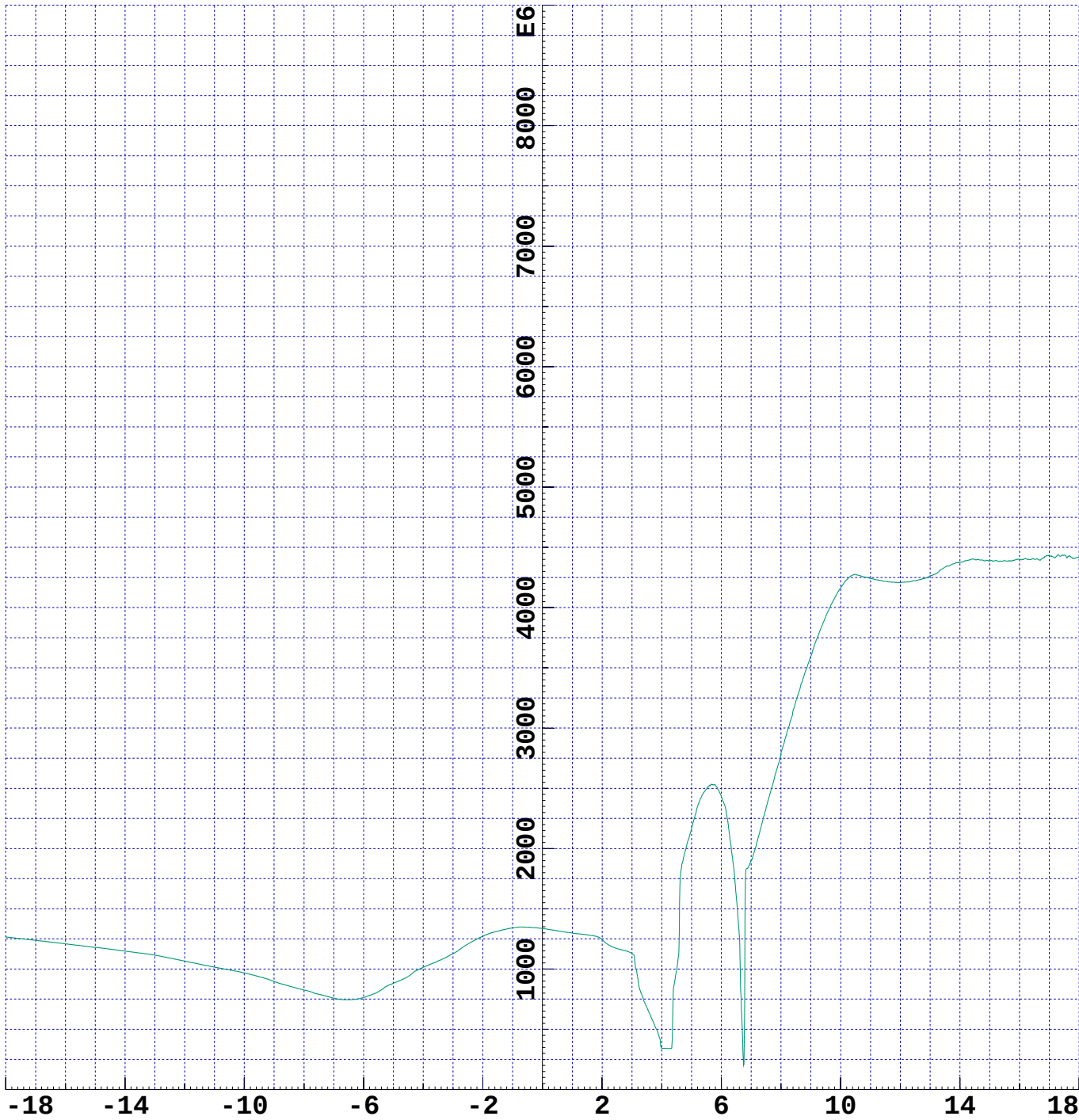
Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel A/B_1
Left rail: r_prof/SEC003_l.short.rail Right rail: r_prof/SEC003_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

Ident: kpfr_003



Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel **SIGMAR**
Left rail: r_prof/SEC003_l.short.rail Right rail: r_prof/SEC003_r.short.rail
Wprof_lat_shift= 0 Gauge= 1425-1441

Ident: kpfr_003



Left wheel:S1002t32.5.wheel Right wheel:S1002t32.5.wheel **SIGMA1**
Left rail: r_prof/SEC003_l.short.rail Right rail: r_prof/SEC003_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

Ident: kpfr_003

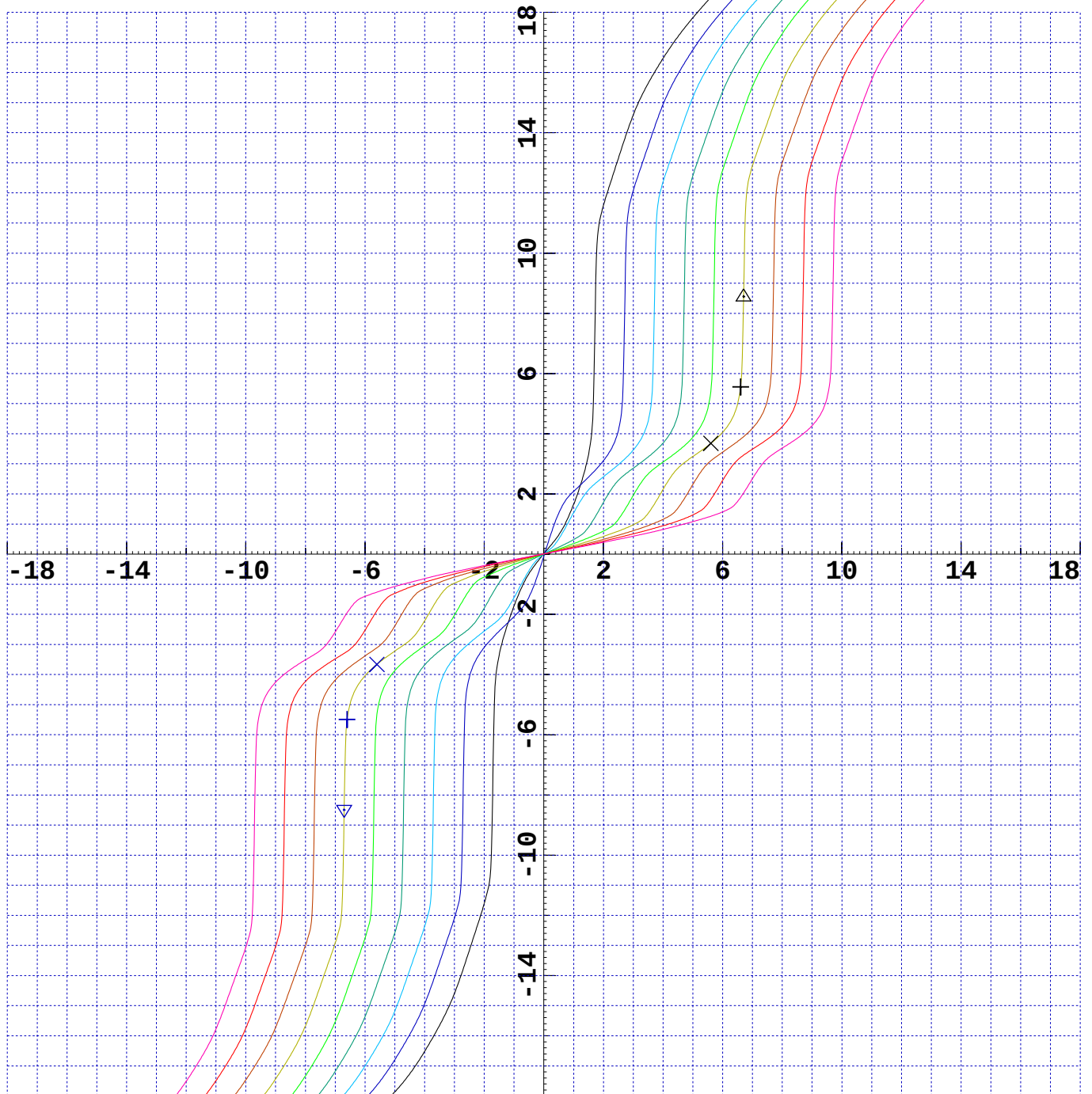
Gauge= 1425 —
 1427 —
 1429 —
 1431 —
 1433 —
 1435 —
 1437 —
 1439 —
 1441 —

Radial Steering Index

× = $\Delta r_E = 3.68$ left curve
 × = $\Delta r_E = 3.66$ right curve
 + = $A0r = 6.60$ 5.56
 + = $A0l = -6.60$ -5.49

possibility of
rolling without
slip

discontinuity
point



△ = 0.1mm right of +discontinuity
 ▽ = 0.1mm left of -discontinuity

Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel
 Left rail: r_prof/SEC003_l.short.rail Right rail: r_prof/SEC003_r.short.rail
 wprof_lat_shift=0 Gauge= 1425-1441

rr-rl

Ident: kpfr_003

GENSYS-KPF.1308

Delta_Y=

.1

.5

2

3

4

6

Gauge= 1425

—

.596

.620

1.271

1.315

1.284

1.202

1427

—

1.149

1.111

.803

1.096

1.194

1.161

1429

—

.374

.479

.655

.589

.913

1.086

1431

—

.228

.231

.365

.453

.452

.939

1433

—

.169

.170

.185

.263

.342

.578

1435

—

.139

.139

.143

.154

.209

.303

1437

—

.116

.116

.120

.125

.135

.232

1439

—

.102

.102

.105

.109

.113

.154

1441

—

.095

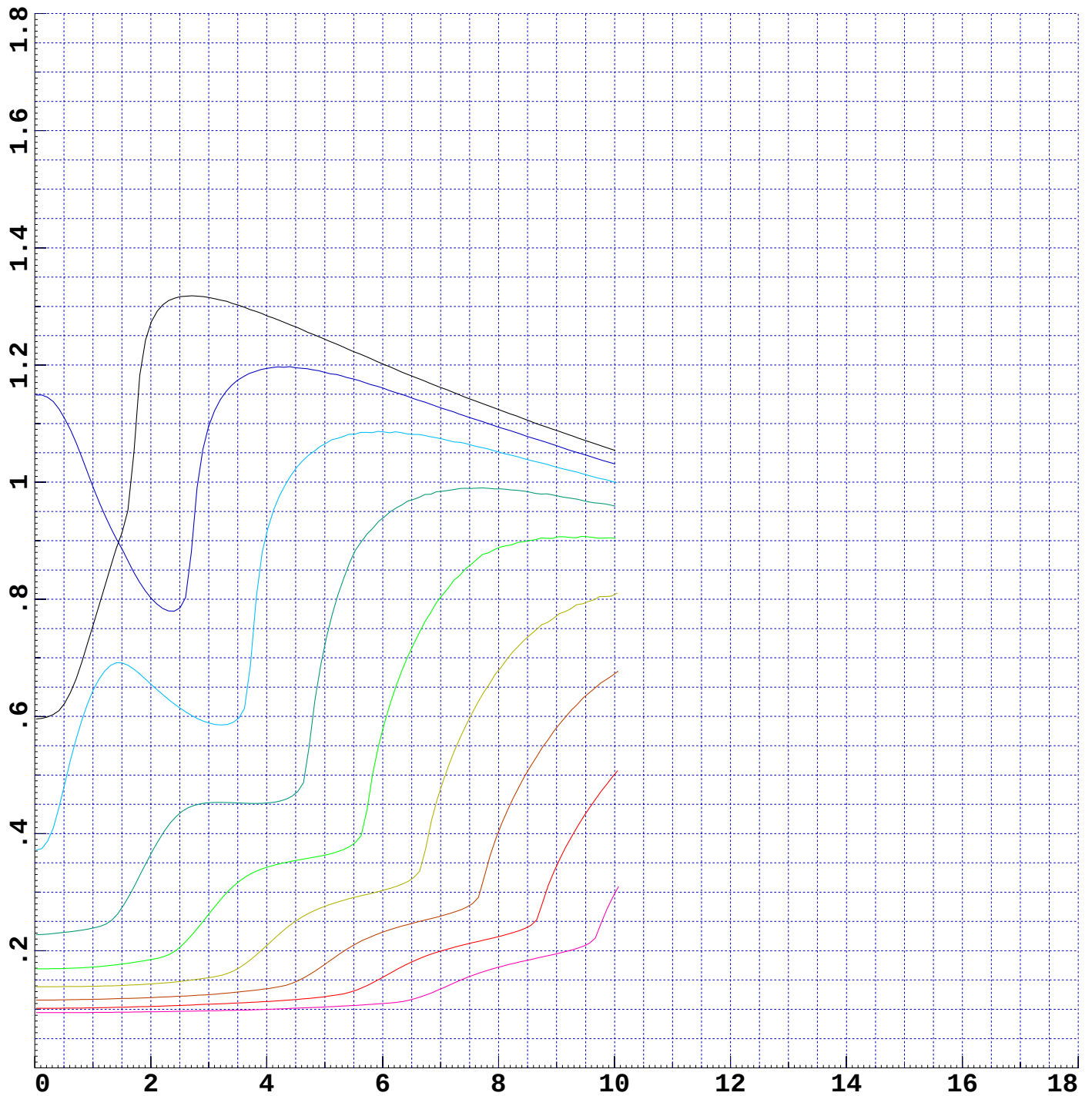
.095

.096

.098

.100

.110



Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel

Left rail: r_prof/SEC003_l.short.rail

Right rail: r_prof/SEC003_r.short.rail

UIC519

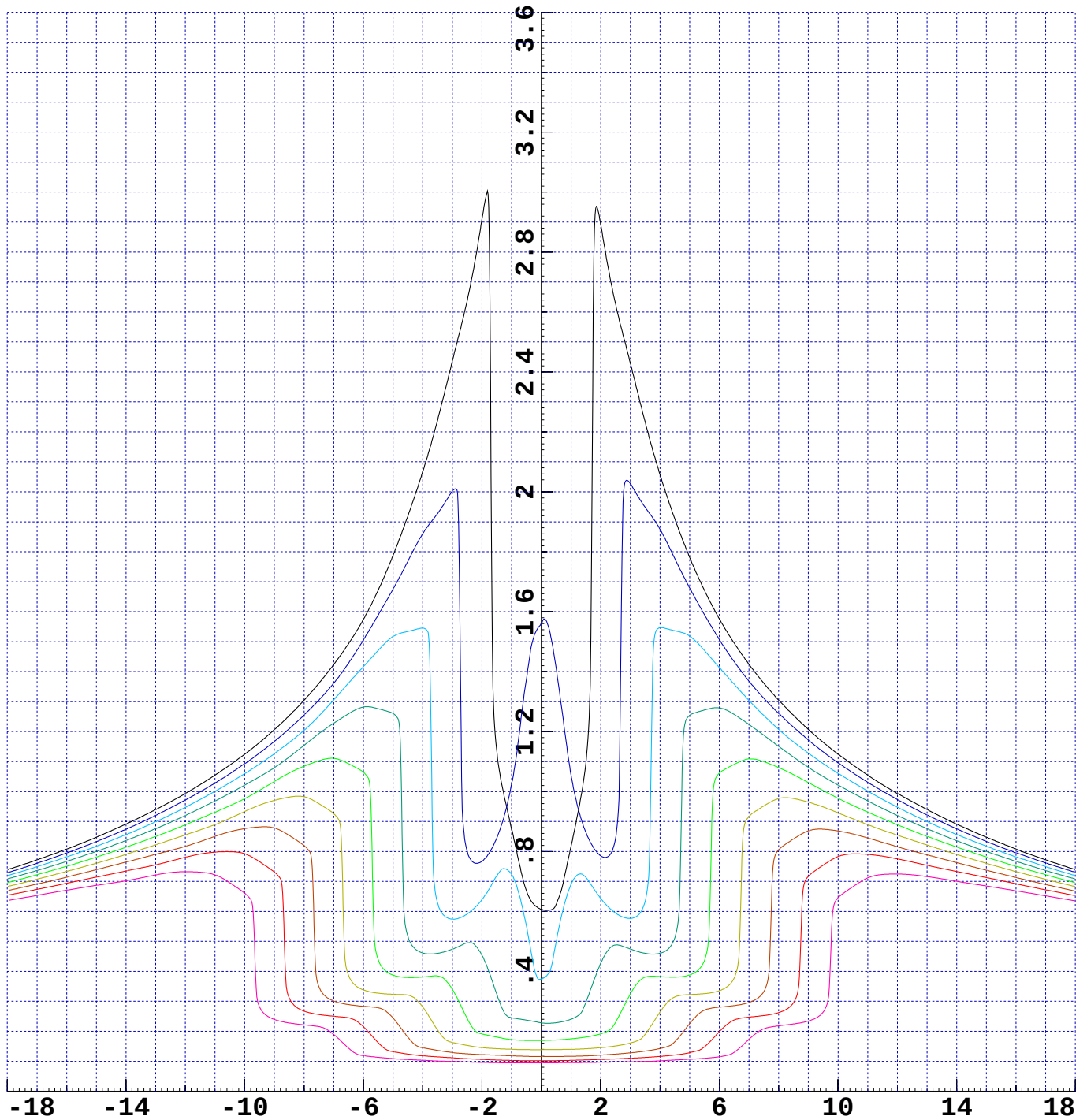
wprof_lat_shift= 0 Gauge= 1425-1441

Ident: kpfr_003

GENSYS-KPF.1308

Delta_Y=

		.1	.5	2	3	4	6
Gauge=	1425	.604	.625	2.892	2.429	2.057	1.576
	1427	1.576	1.408	.785	2.027	1.875	1.507
	1429	.379	.499	.643	.576	1.547	1.414
	1431	.227	.228	.427	.475	.460	1.279
	1433	.170	.171	.191	.325	.382	1.061
	1435	.139	.139	.145	.161	.265	.336
	1437	.116	.116	.120	.128	.142	.281
	1439	.102	.102	.106	.110	.116	.199
	1441	.095	.095	.097	.098	.101	.115



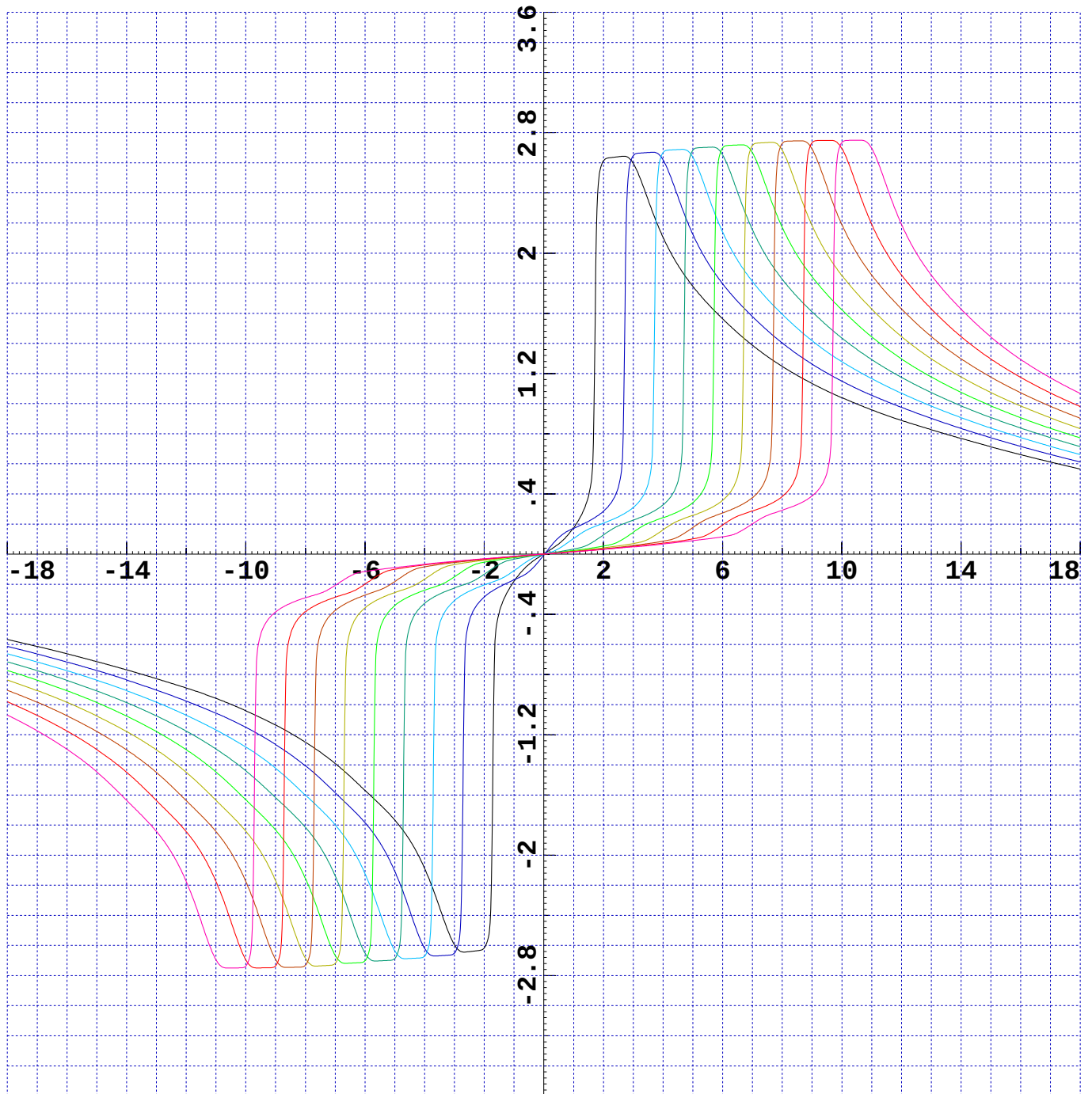
Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel
 Left rail: r_prof/SEC003_l.short.rail Right rail: r_prof/SEC003_r.short.rail
 wprof_lat_shift= 0 Gauge= 1425-1441

lambda

Ident: kpfr_003

GENSYS-KPF.1308

Gauge= 1425 —
 1427 —
 1429 —
 1431 —
 1433 —
 1435 —
 1437 —
 1439 —
 1441 —



Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel $\tan_{Ga}$
 Left rail: r_prof/SEC003_l.short.rail Right rail: r_prof/SEC003_r.short.rail
 Wprof_lat_shift= 0 Gauge= 1425-1441

Ident: kpfr_003

GENSYS-KPF.1308

Delta_Y=

.1

.5

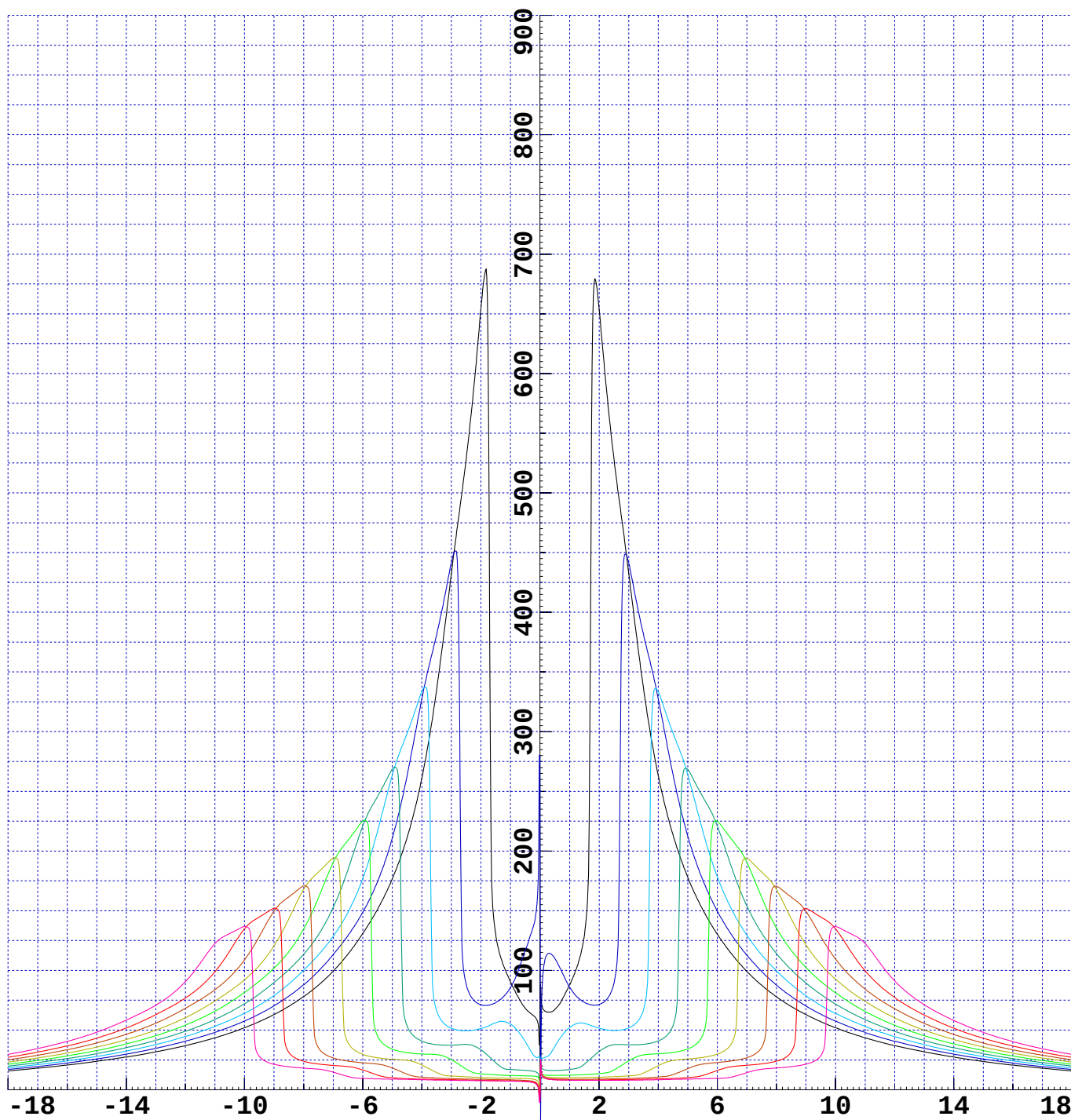
2

3

4

6

Gauge=	1425	—	67.99	67.23	653.48	432.58	263.03	130.26
	1427	—	96.48	110.16	71.52	441.33	327.47	149.69
	1429	—	26.59	36.15	51.53	51.73	333.51	178.34
	1431	—	17.34	16.24	32.11	37.70	40.96	221.03
	1433	—	12.62	12.11	13.52	24.29	30.24	224.95
	1435	—	11.84	10.27	10.47	11.63	20.14	29.87
	1437	—	11.52	9.08	8.99	9.54	10.67	22.78
	1439	—	10.90	8.40	8.26	8.59	9.08	16.11
	1441	—	11.22	8.32	7.98	8.07	8.42	9.57



Left wheel:S1002t32.5.wheel Right wheel:S1002t32.5.wheel

Left rail: r_prof/SEC003_l.short.rail Right rail: r_prof/SEC003_r.short.rail

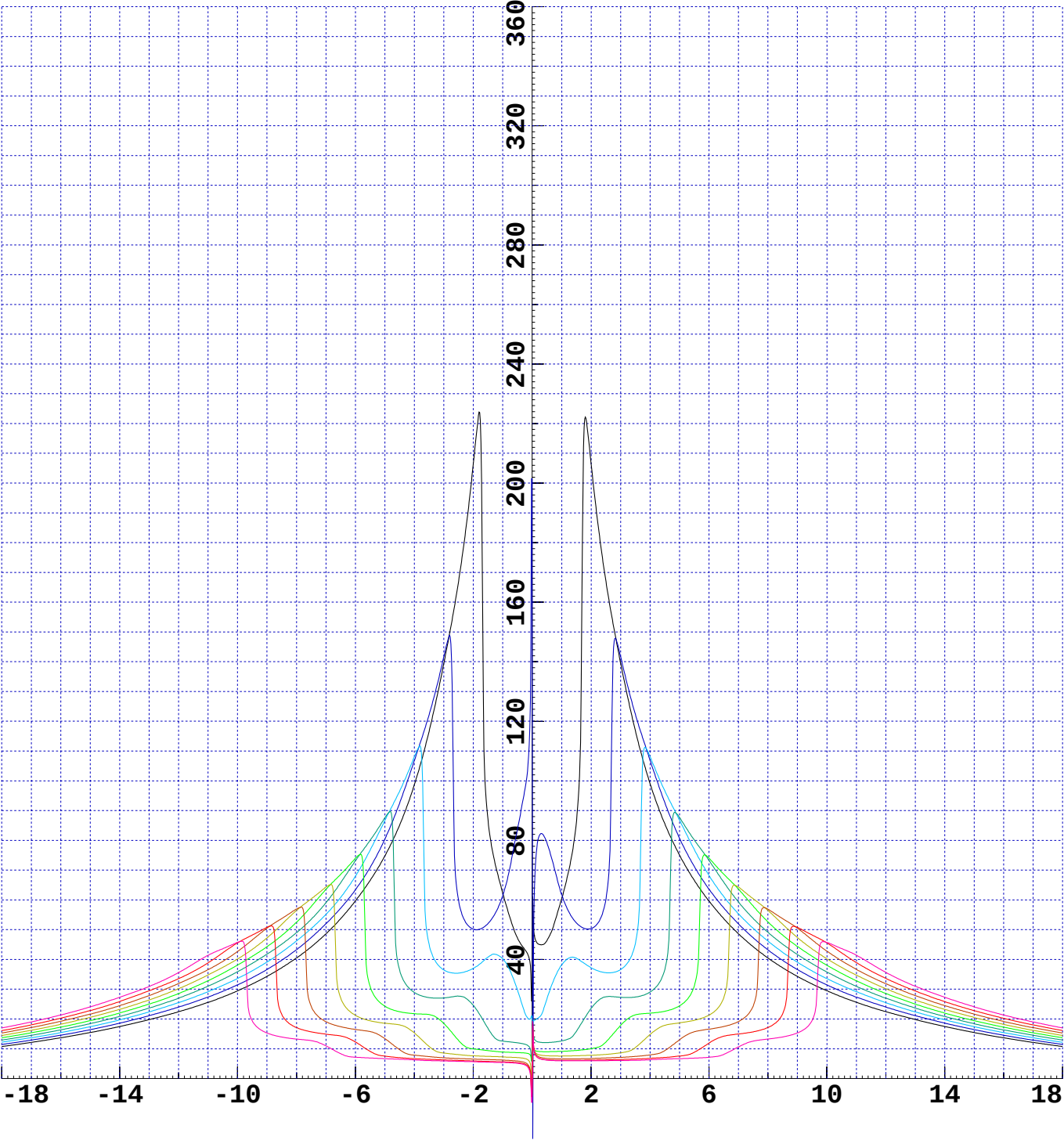
wprof_lat_shift= 0 Gauge= 1425-1441

KAPPA

Ident: kpfr_003

GENSYS-KPF.1308

Delta_Y=		.1	.5	2	3	4	6
Gauge= 1425	—	46.96	46.35	206.20	139.44	98.99	59.60
1427	—	69.36	79.23	50.39	141.68	106.84	63.60
1429	—	19.65	26.67	37.19	36.60	108.13	68.22
1431	—	12.87	12.05	23.59	27.29	29.06	73.26
1433	—	9.39	9.01	10.05	17.88	21.94	74.04
1435	—	8.83	7.66	7.80	8.66	14.84	21.30
1437	—	8.60	6.78	6.71	7.12	7.95	16.58
1439	—	8.15	6.28	6.17	6.42	6.78	11.91
1441	—	8.39	6.22	5.97	6.04	6.30	7.14



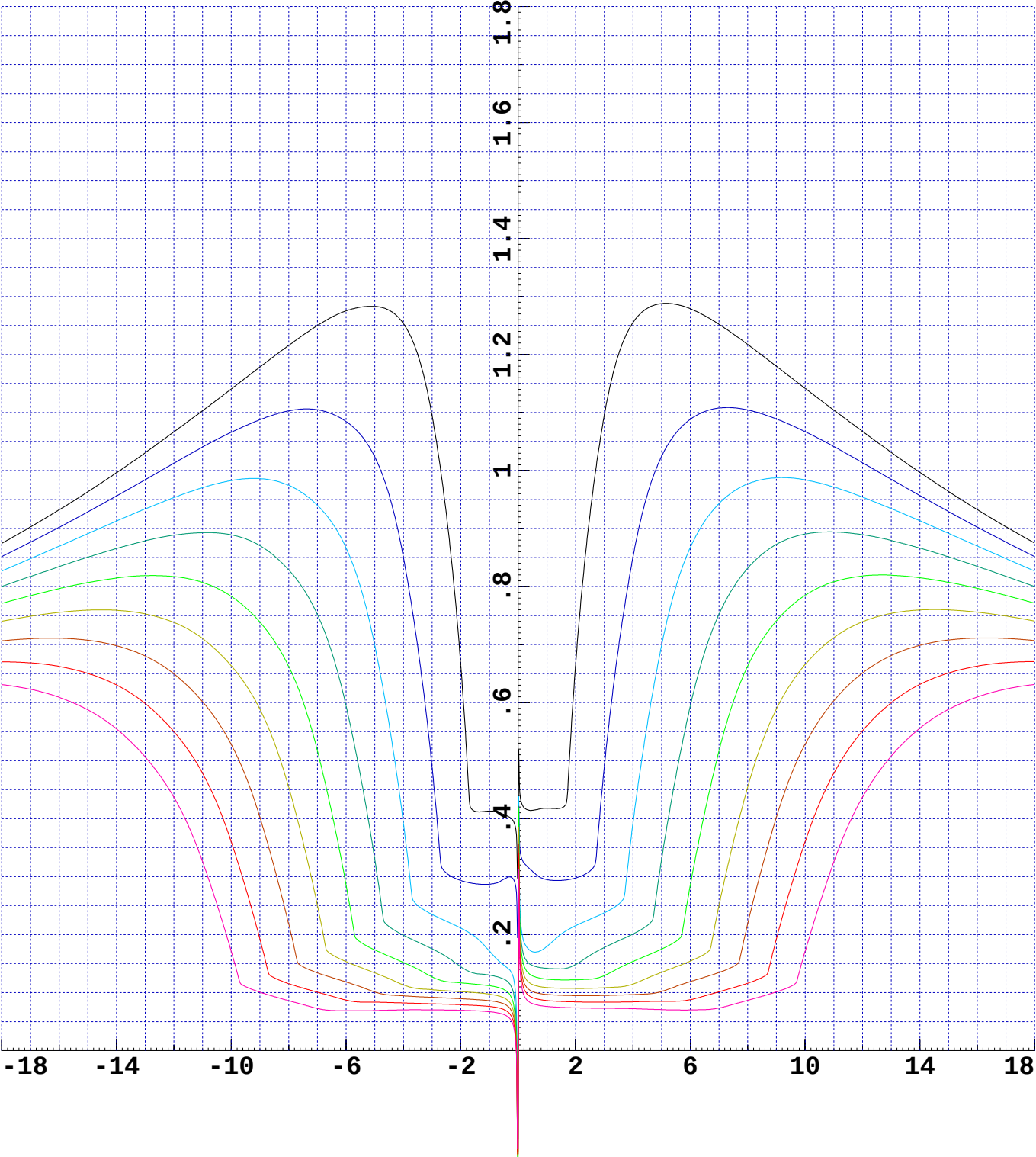
Left wheel:S1002t32.5.wheel Right wheel:S1002t32.5.wheel
Left rail: r_prof/SEC003_l.short.rail Right rail: r_prof/SEC003_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

EPS

Ident: kpfr_003

GENSYS-KPF.1308

Delta_Y=		.1	.5	2	3	4	6
Gauge= 1425	—	.43	.41	.67	1.10	1.26	1.28
1427	—	.34	.31	.30	.49	.85	1.09
1429	—	.22	.17	.22	.24	.39	.87
1431	—	.19	.15	.15	.18	.20	.59
1433	—	.18	.13	.12	.13	.15	.29
1435	—	.16	.11	.11	.11	.11	.15
1437	—	.14	.10	.09	.10	.10	.12
1439	—	.13	.09	.08	.08	.08	.09
1441	—	.12	.08	.07	.07	.07	.07



Left wheel:S1002t32.5.wheel Right wheel:S1002t32.5.wheel RollAC
Left rail: r_prof/SEC003_l.short.rail Right rail: r_prof/SEC003_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

Ident: kpfr_003