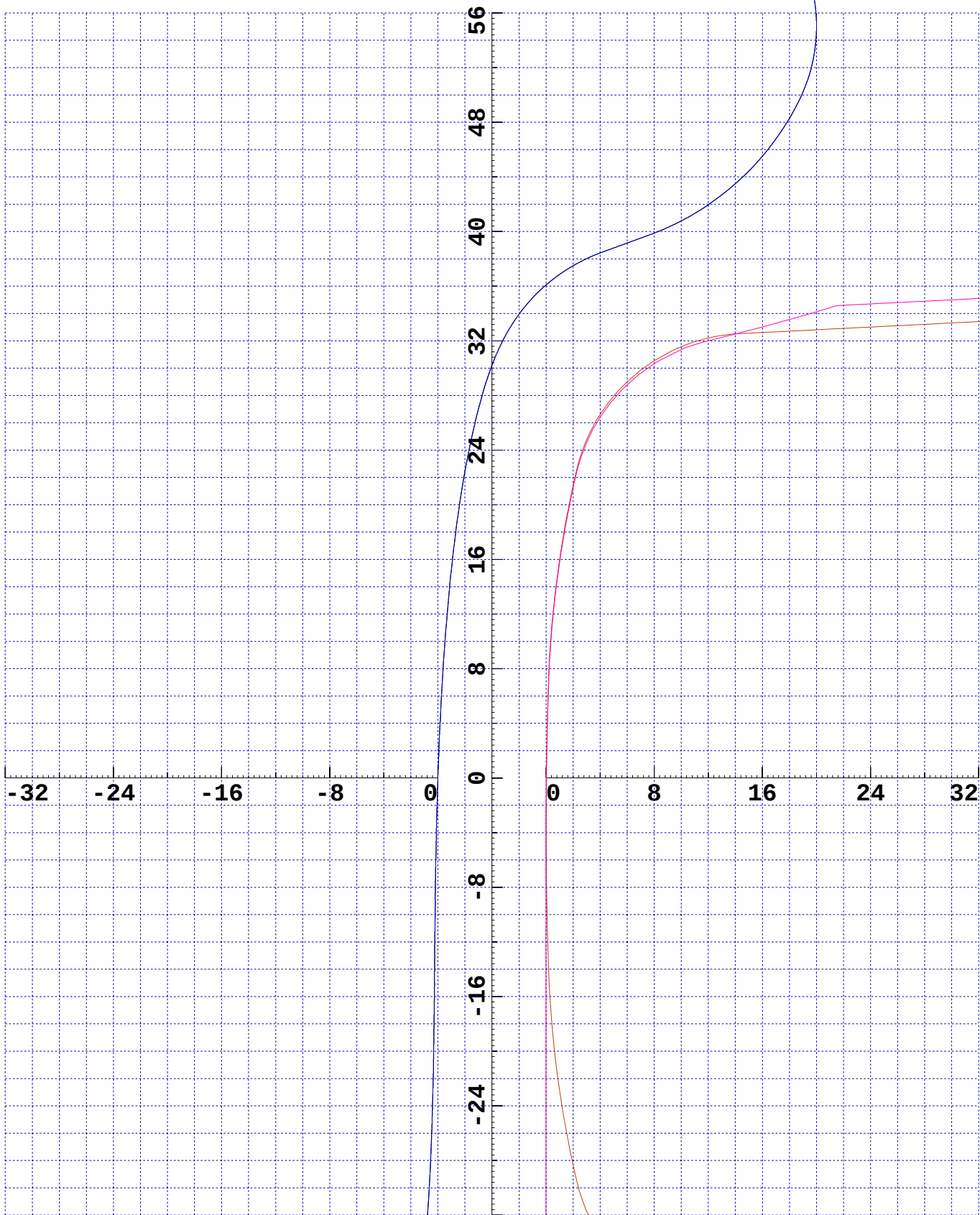
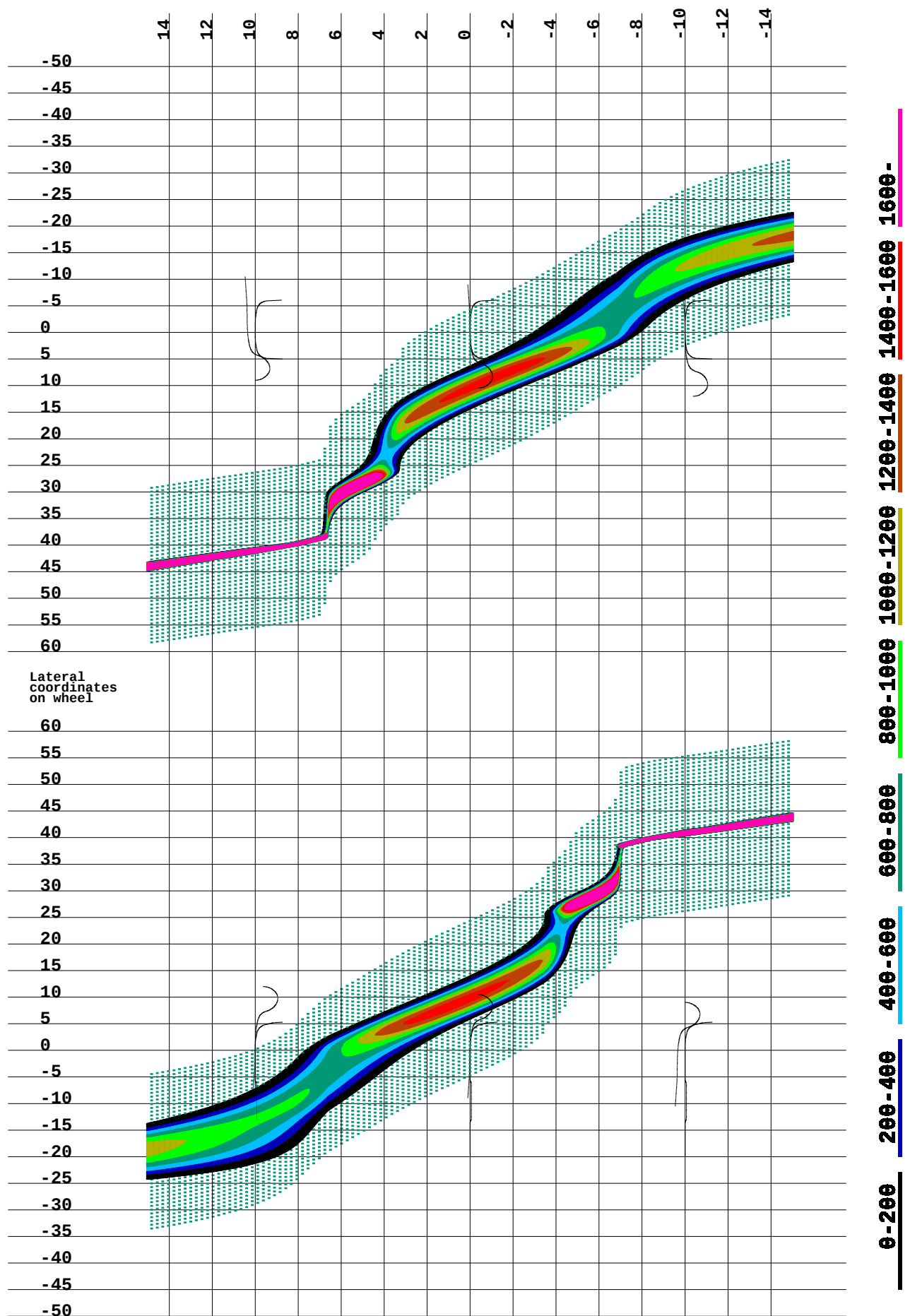


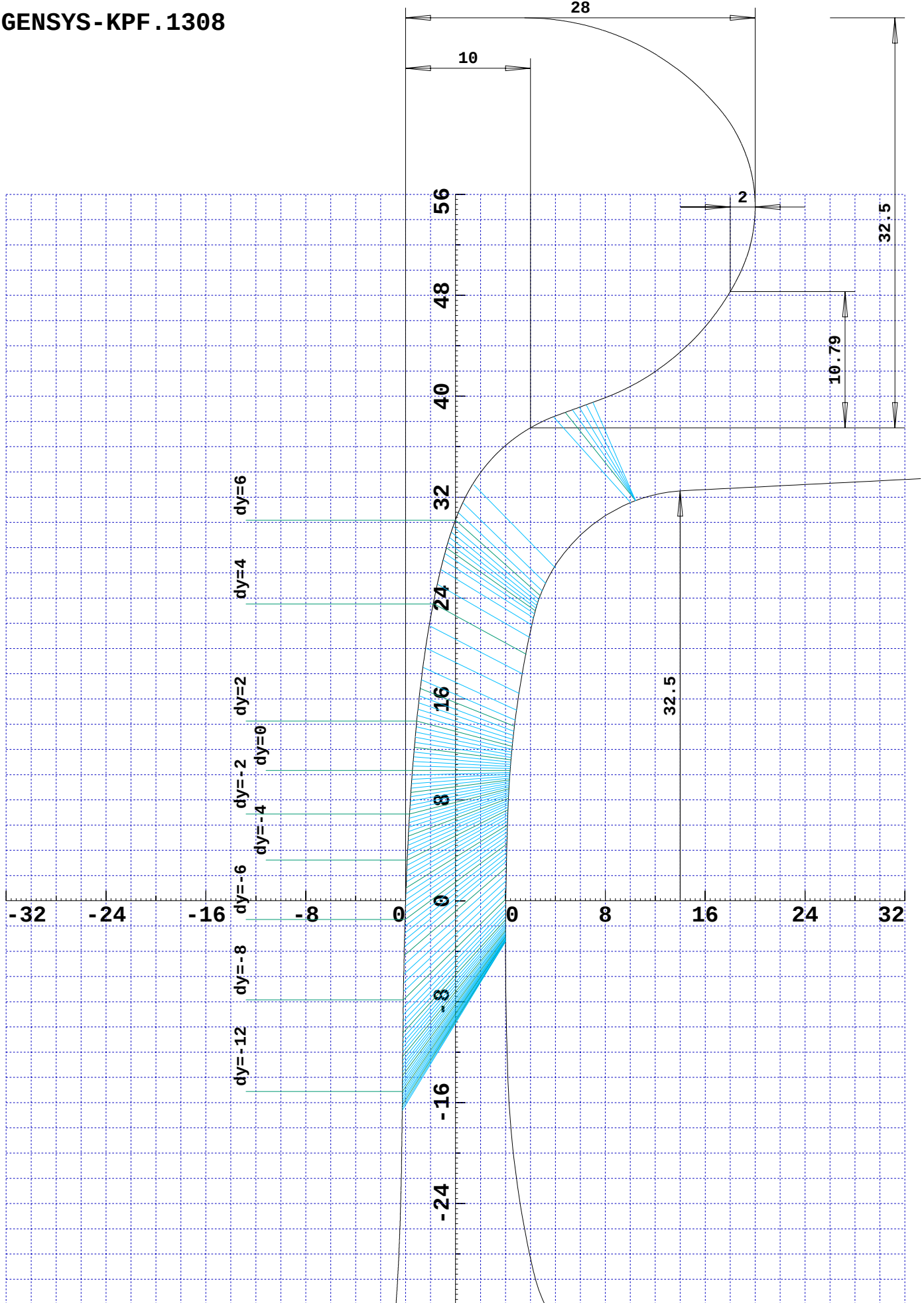
- Right wheel
- Left wheel
- Right rail
- Left rail

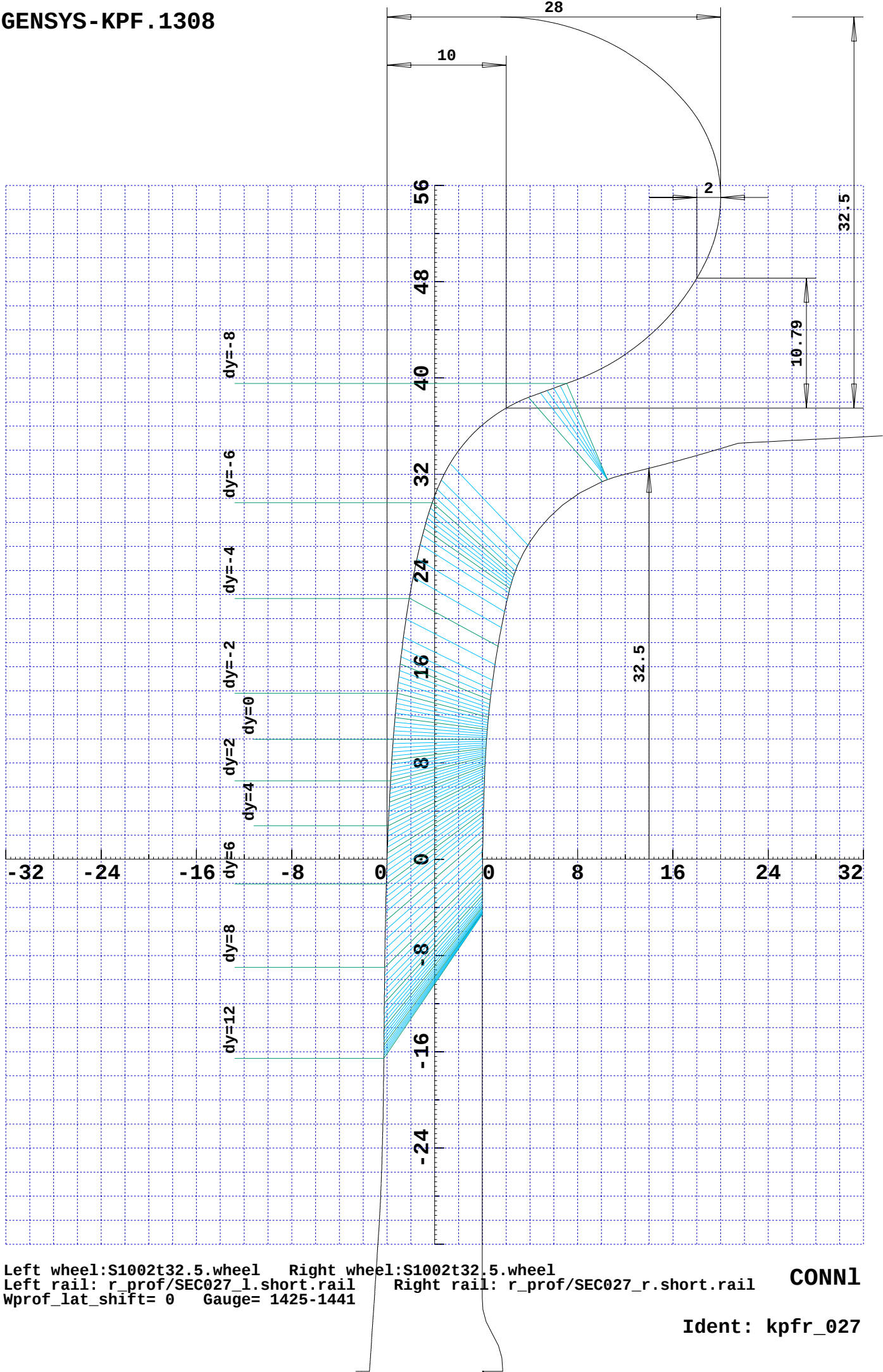


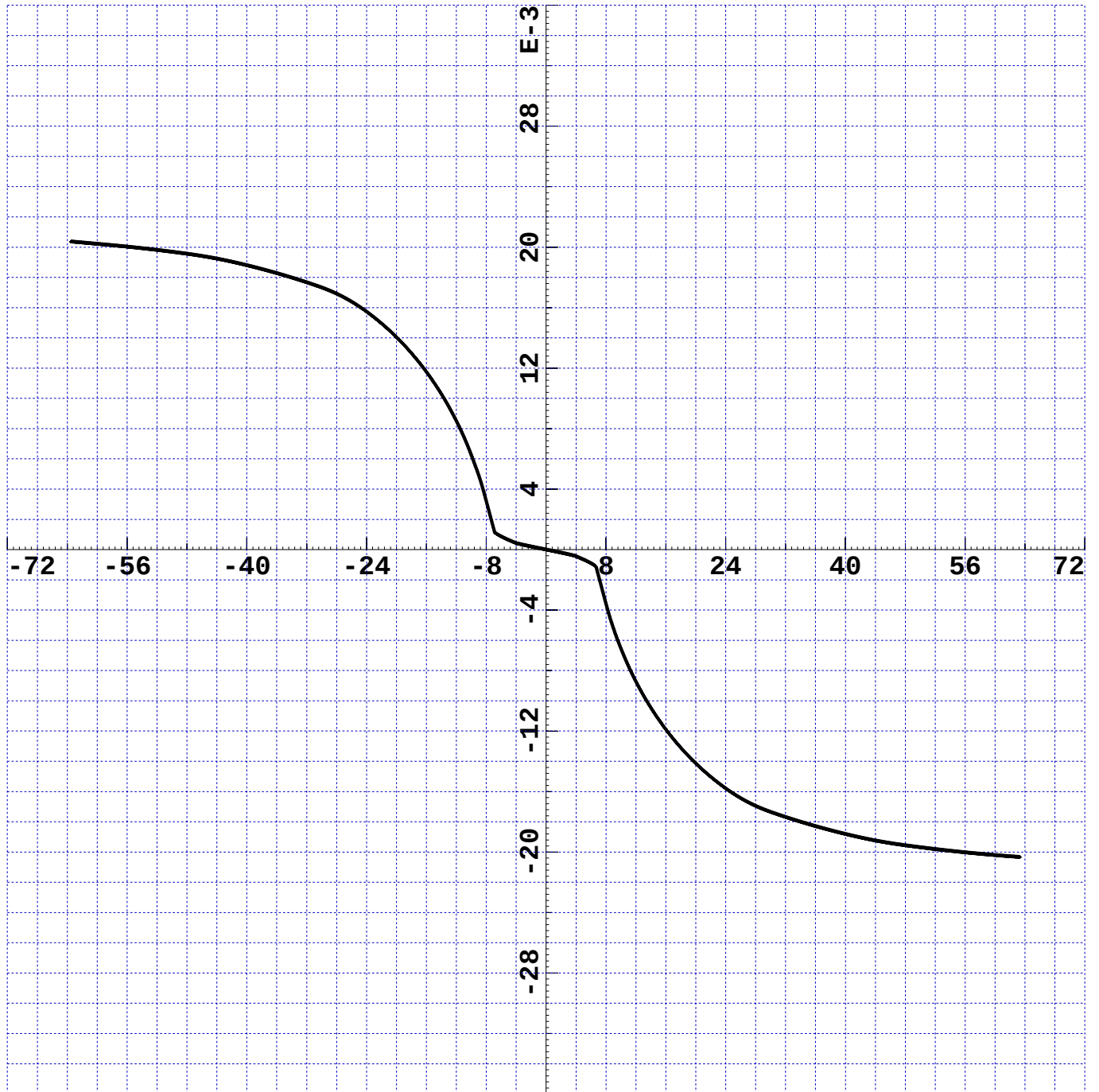
Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel WRGEOM
Left rail: r_prof/SEC027_l.short.rail Right rail: r_prof/SEC027_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

Ident: kpfr_027



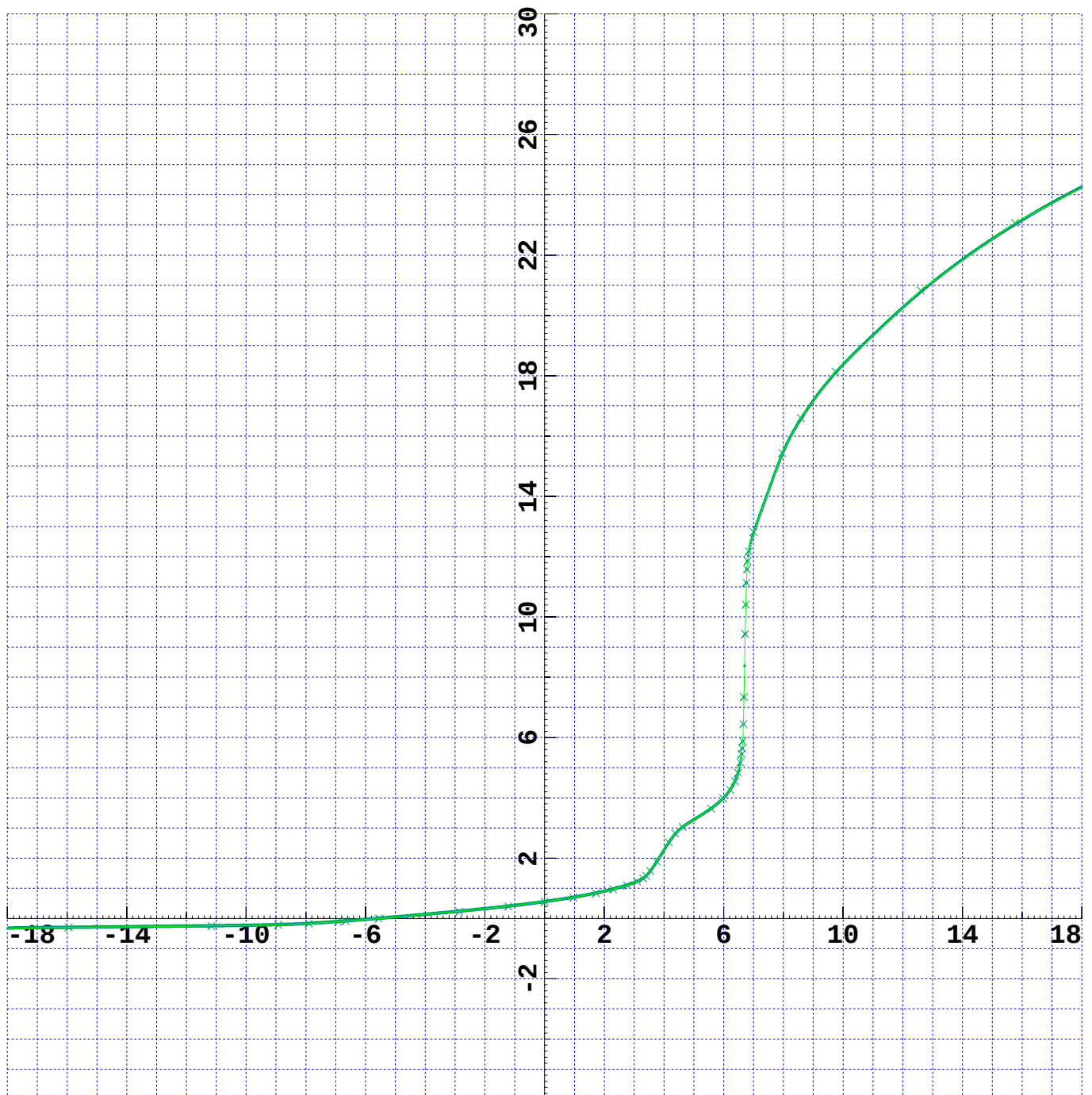
**CONNr**





Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel **Flax1**
Left rail: r_prof/SEC027_l.short.rail Right rail: r_prof/SEC027_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

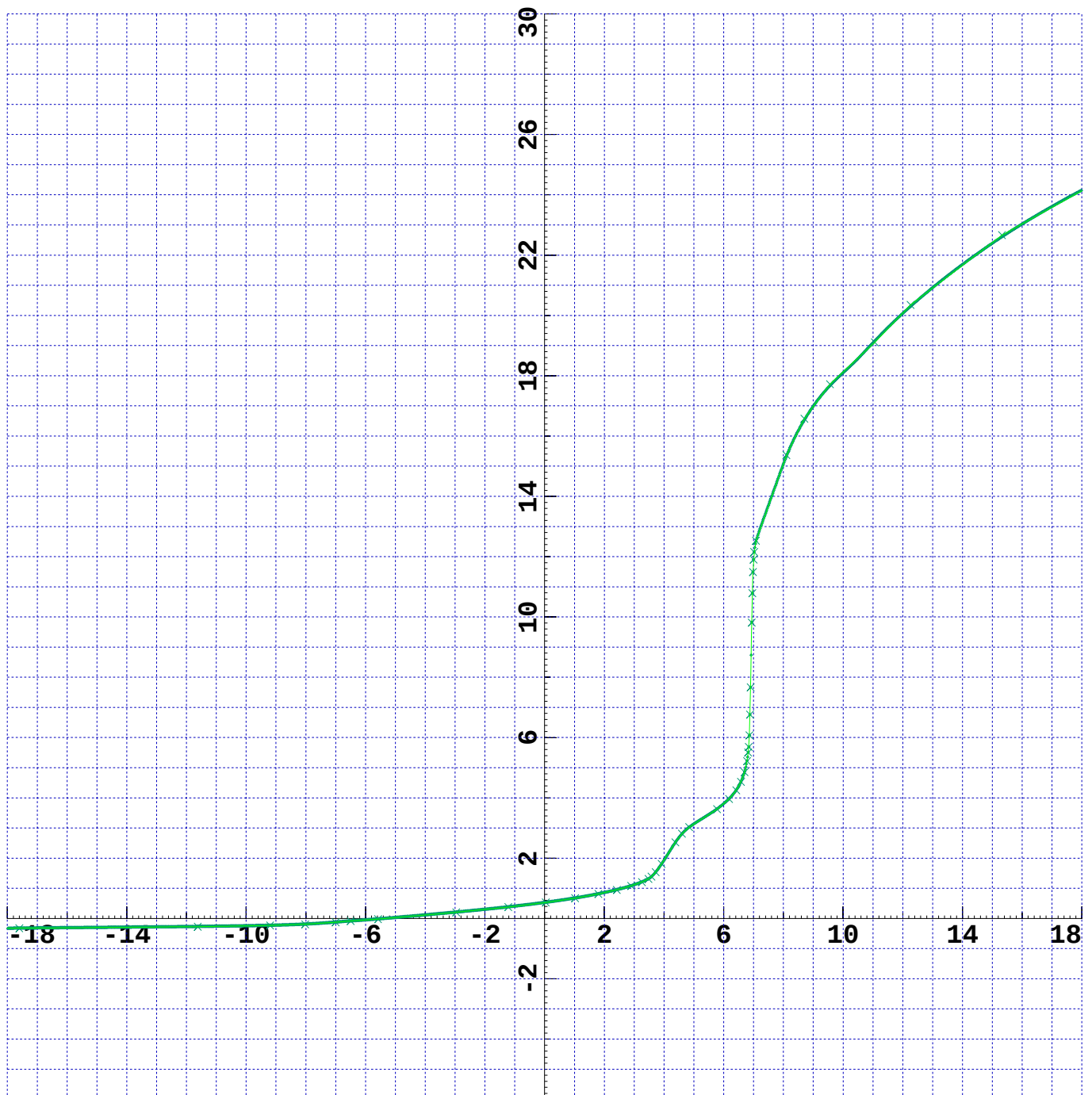
Ident: kpfr_027



Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel
Left rail: r_prof/SEC027_l.short.rail Right rail: r_prof/SEC027_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

DRFNr

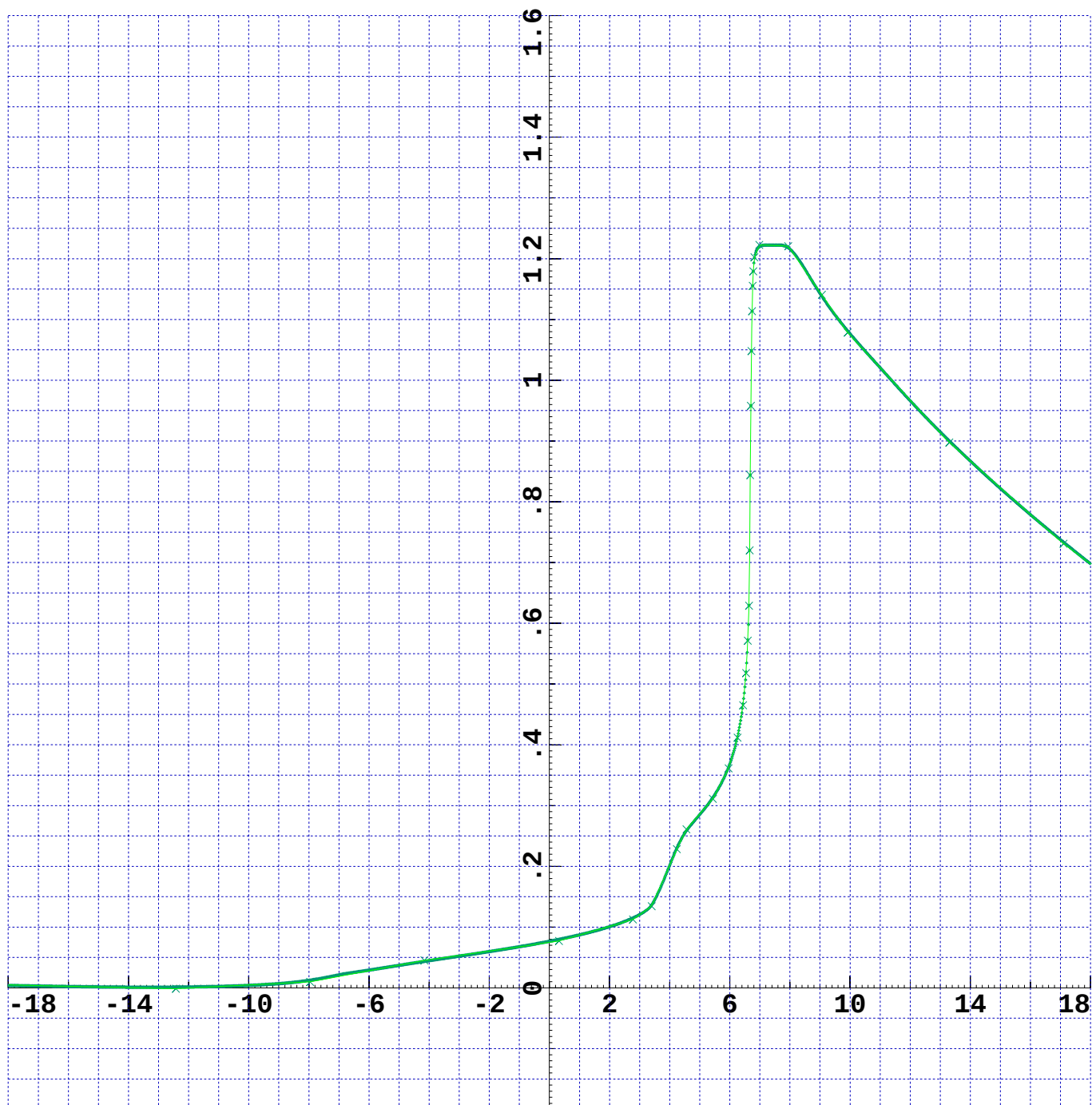
Ident: kpfr_027



Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel
Left rail: r_prof/SEC027_l.short.rail Right rail: r_prof/SEC027_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

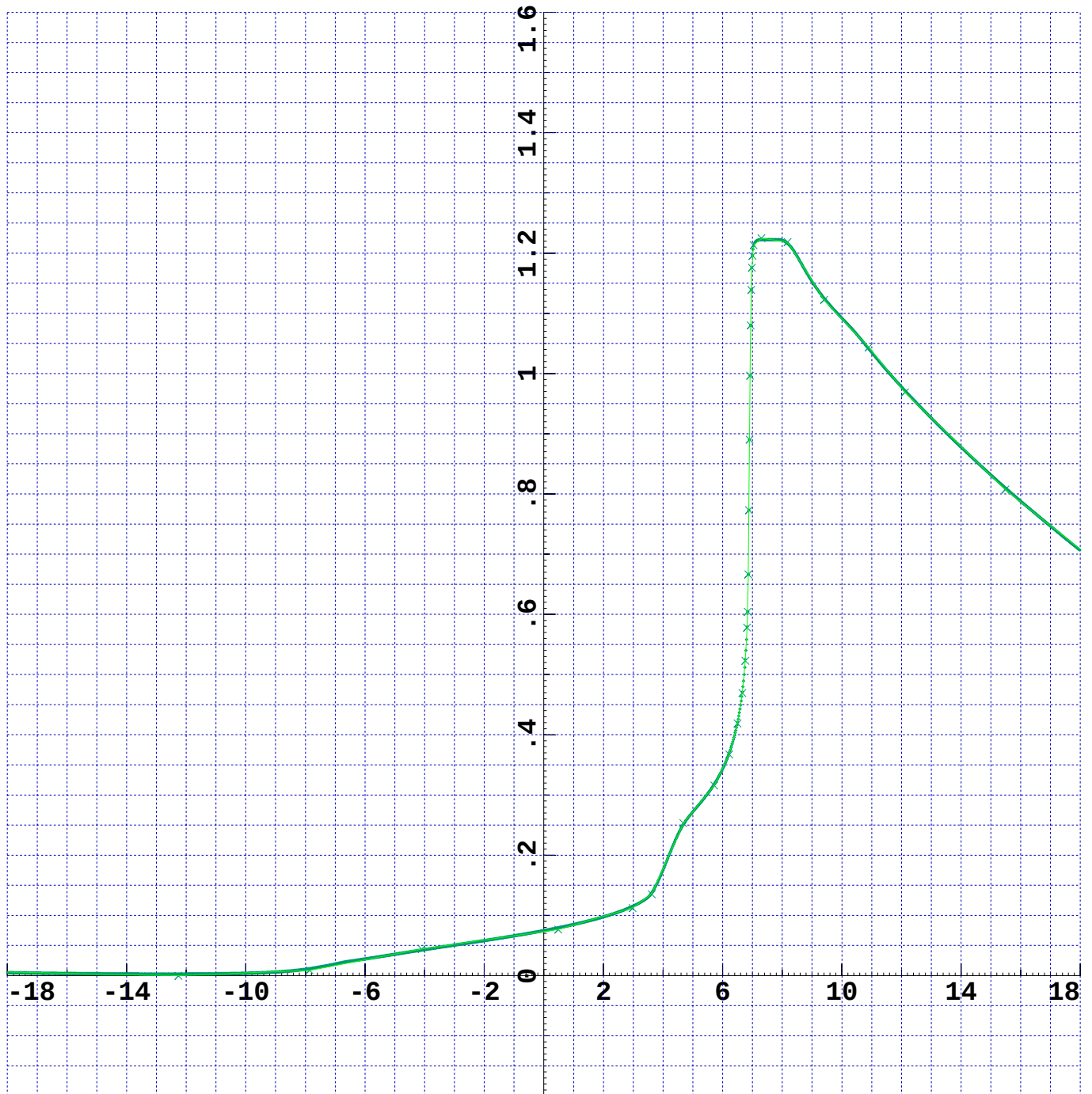
DRFN1

Ident: kpfr_027



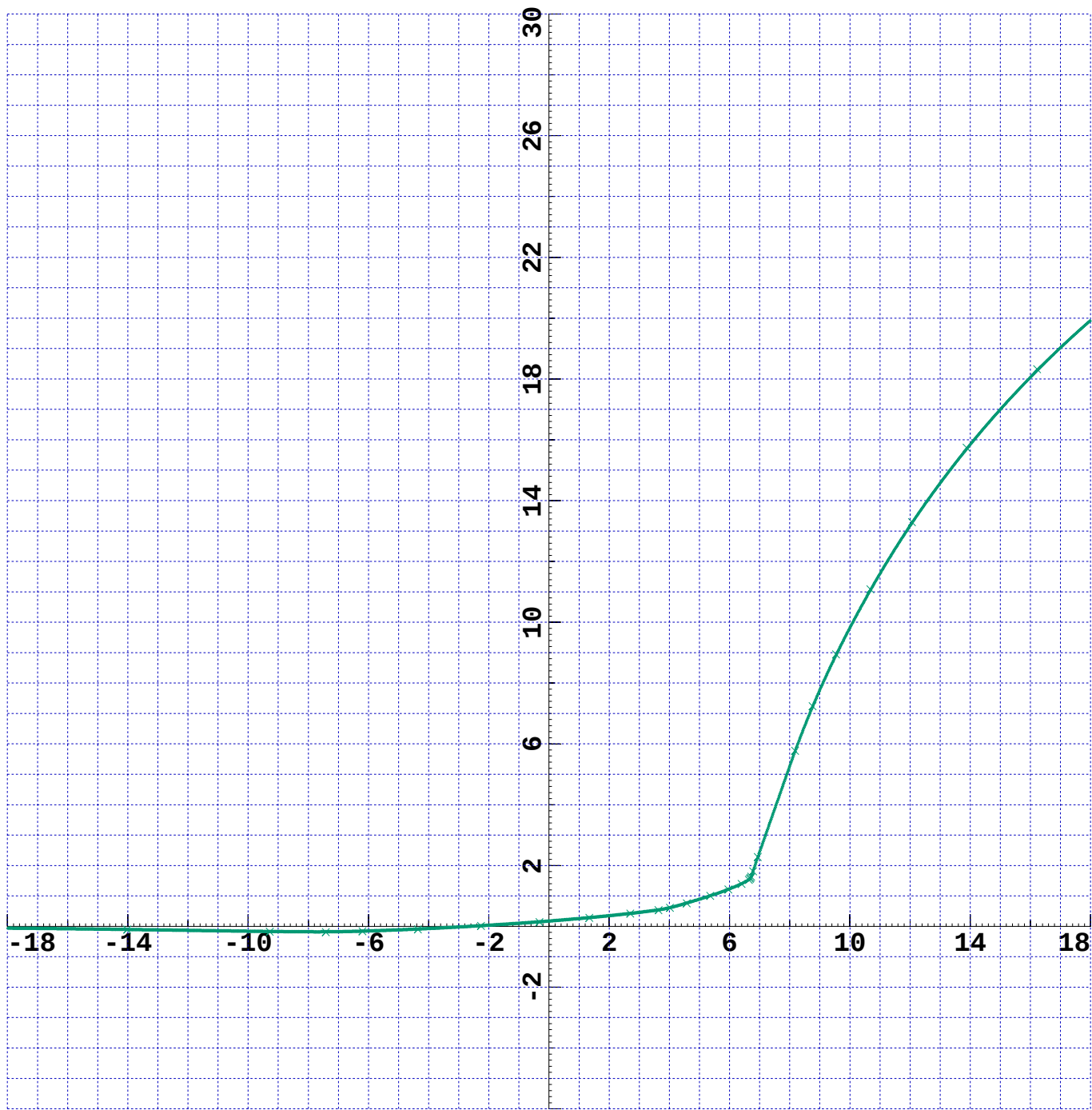
Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel GAMFNr
Left rail: r_prof/SEC027_l.short.rail Right rail: r_prof/SEC027_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

Ident: kpfr_027



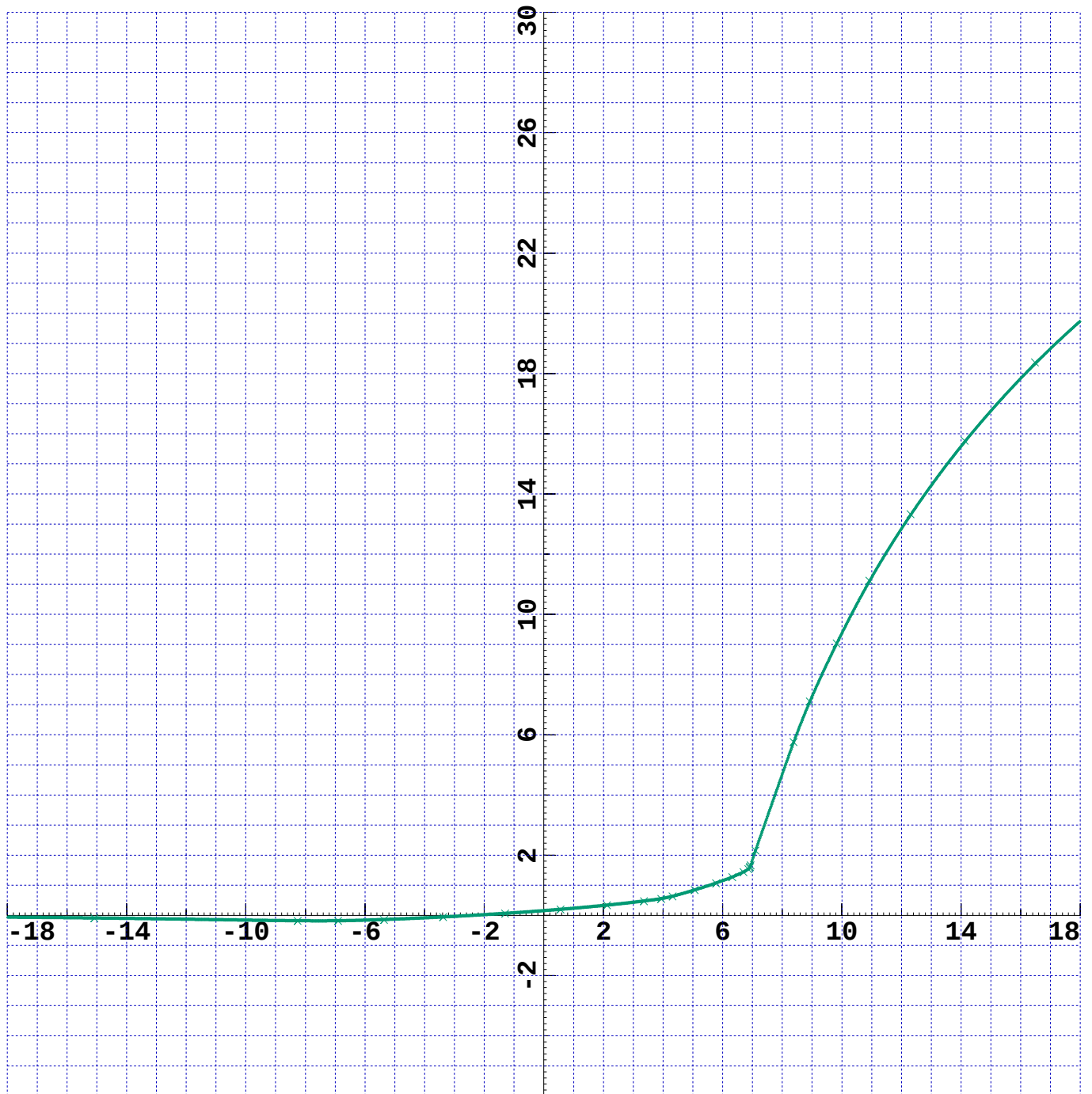
Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel GAMFN1
Left rail: r_prof/SEC027_l.short.rail Right rail: r_prof/SEC027_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

Ident: kpfr_027



Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel ZFNr
Left rail: r_prof/SEC027_l.short.rail Right rail: r_prof/SEC027_r.short.rail
Wprof_lat_shift= 0 Gauge= 1425-1441

Ident: kpfr_027



Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel
Left rail: r_prof/SEC027_l.short.rail Right rail: r_prof/SEC027_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

ZFN1

Ident: kpfr_027



Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel
Left rail: r_prof/SEC027_l.short.rail Right rail: r_prof/SEC027_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

ROFNr

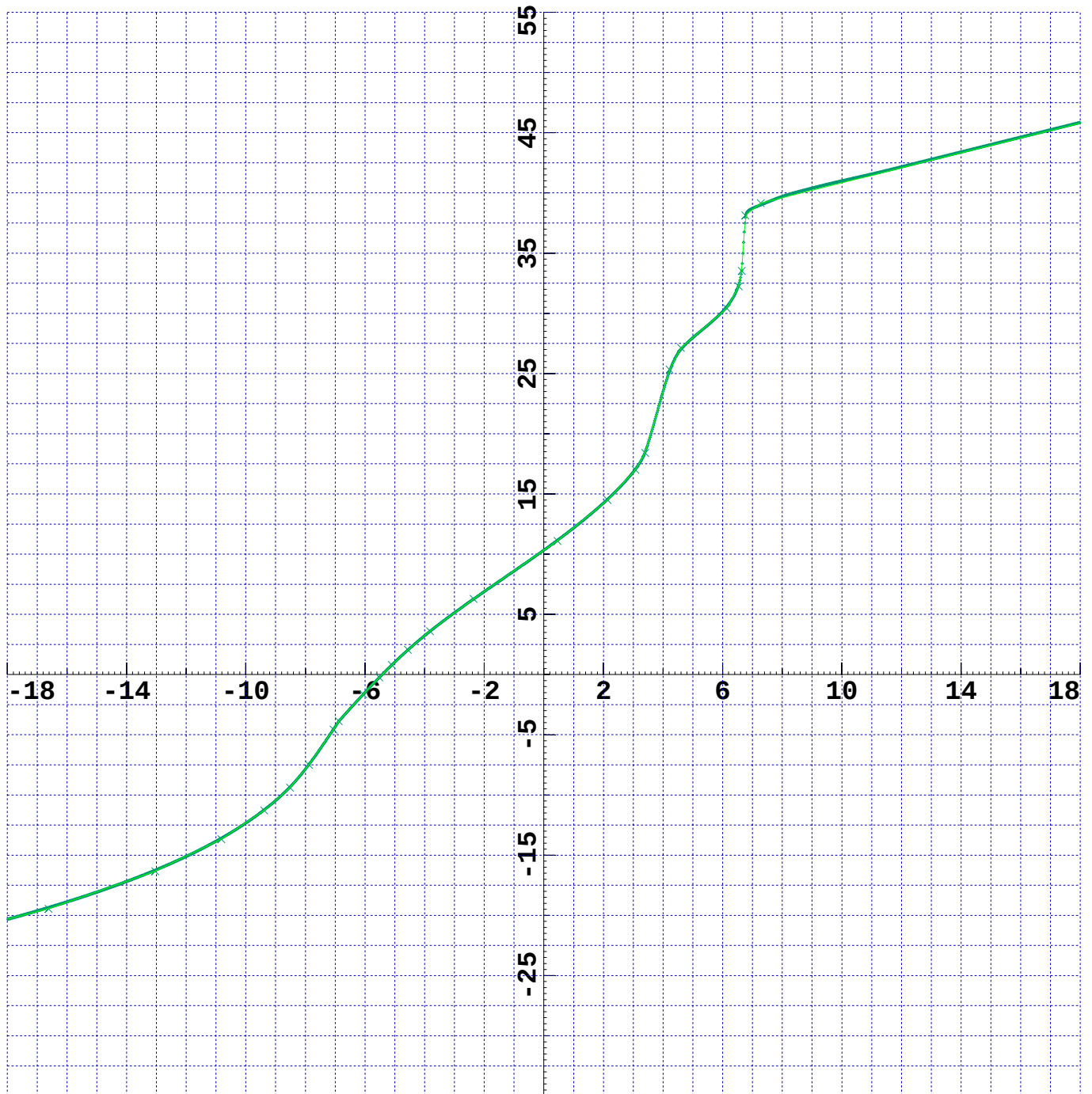
Ident: kpfr_027



Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel
Left rail: r_prof/SEC027_l.short.rail Right rail: r_prof/SEC027_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

ROFN1

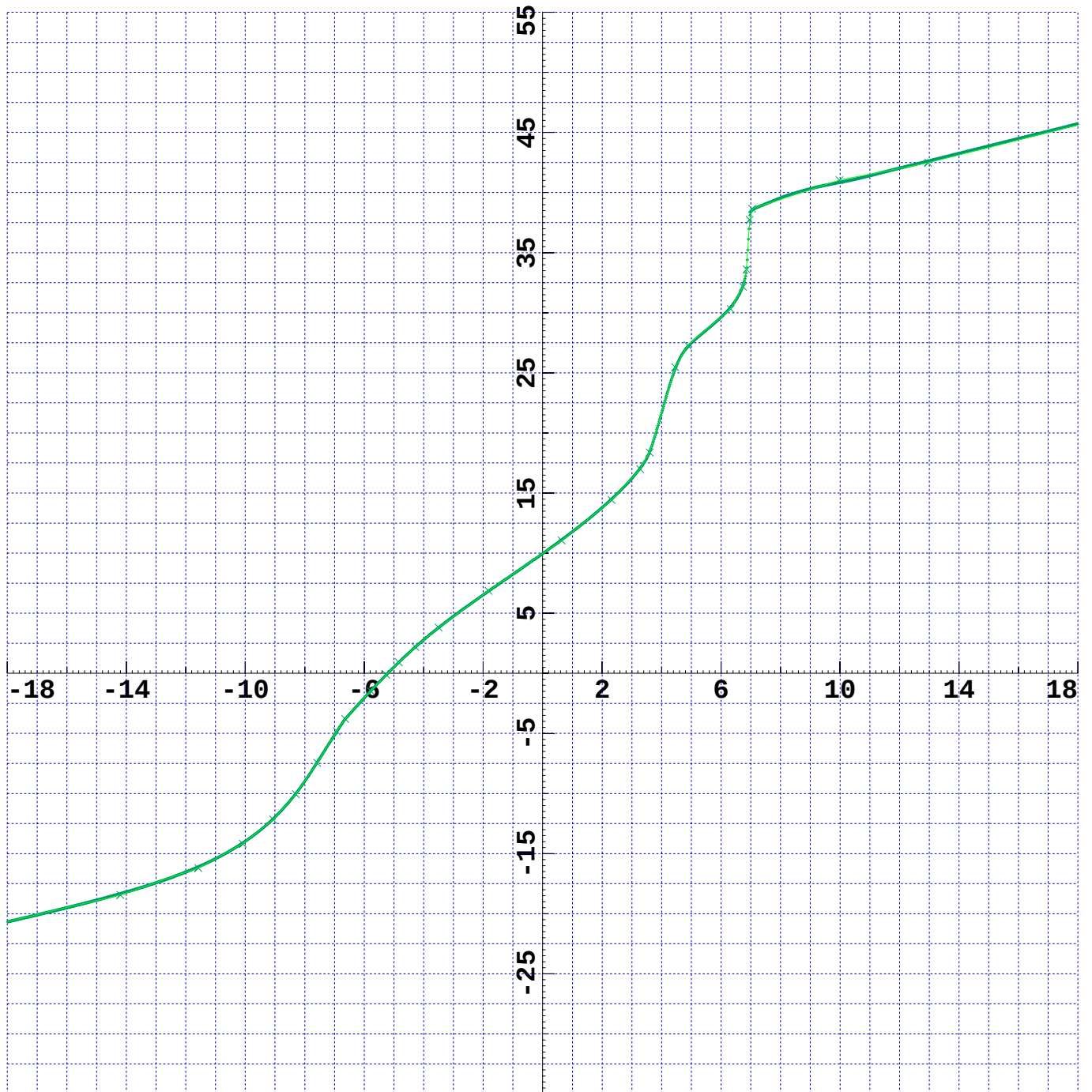
Ident: kpfr_027



Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel
Left rail: r_prof/SEC027_l.short.rail Right rail: r_prof/SEC027_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

POSWr

Ident: kpfr_027



Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel
Left rail: r_prof/SEC027_l.short.rail Right rail: r_prof/SEC027_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

POSW1

Ident: kpfr_027

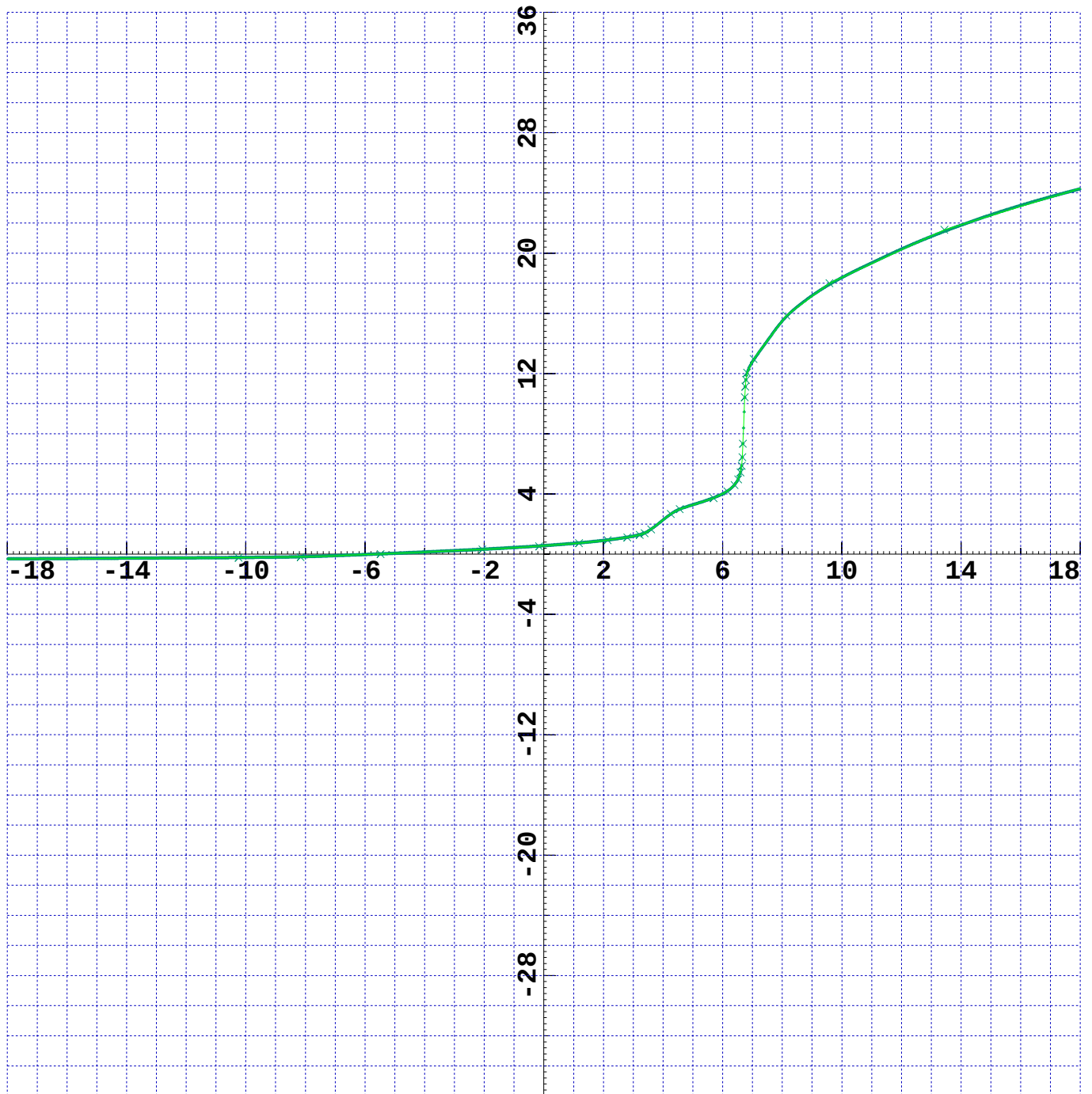


Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel
Left rail: r_prof/SEC027_l.short.rail Right rail: r_prof/SEC027_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

POSRR

Ident: kpfr_027

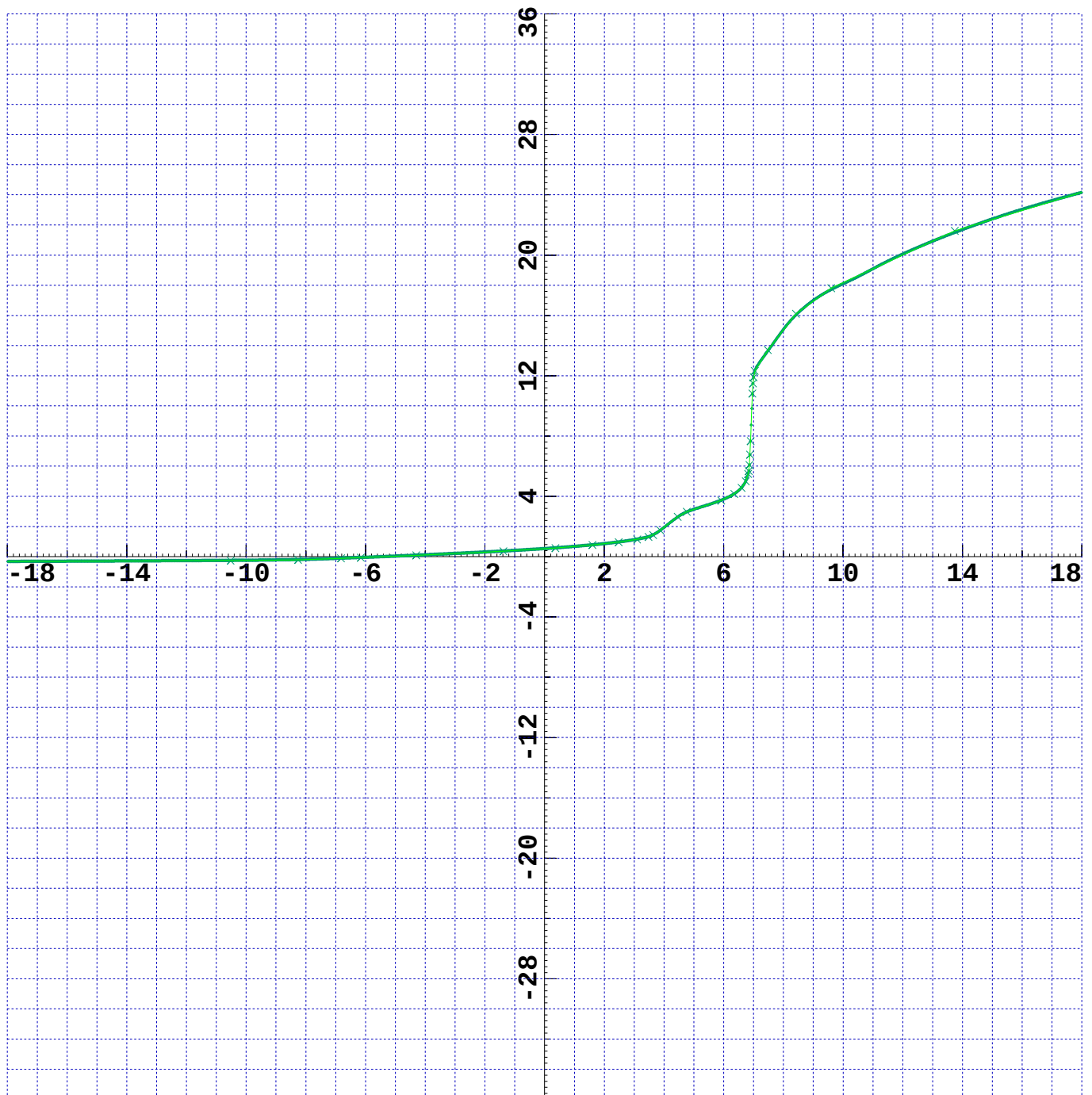




Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel
Left rail: r_prof/SEC027_l.short.rail Right rail: r_prof/SEC027_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

ZWr

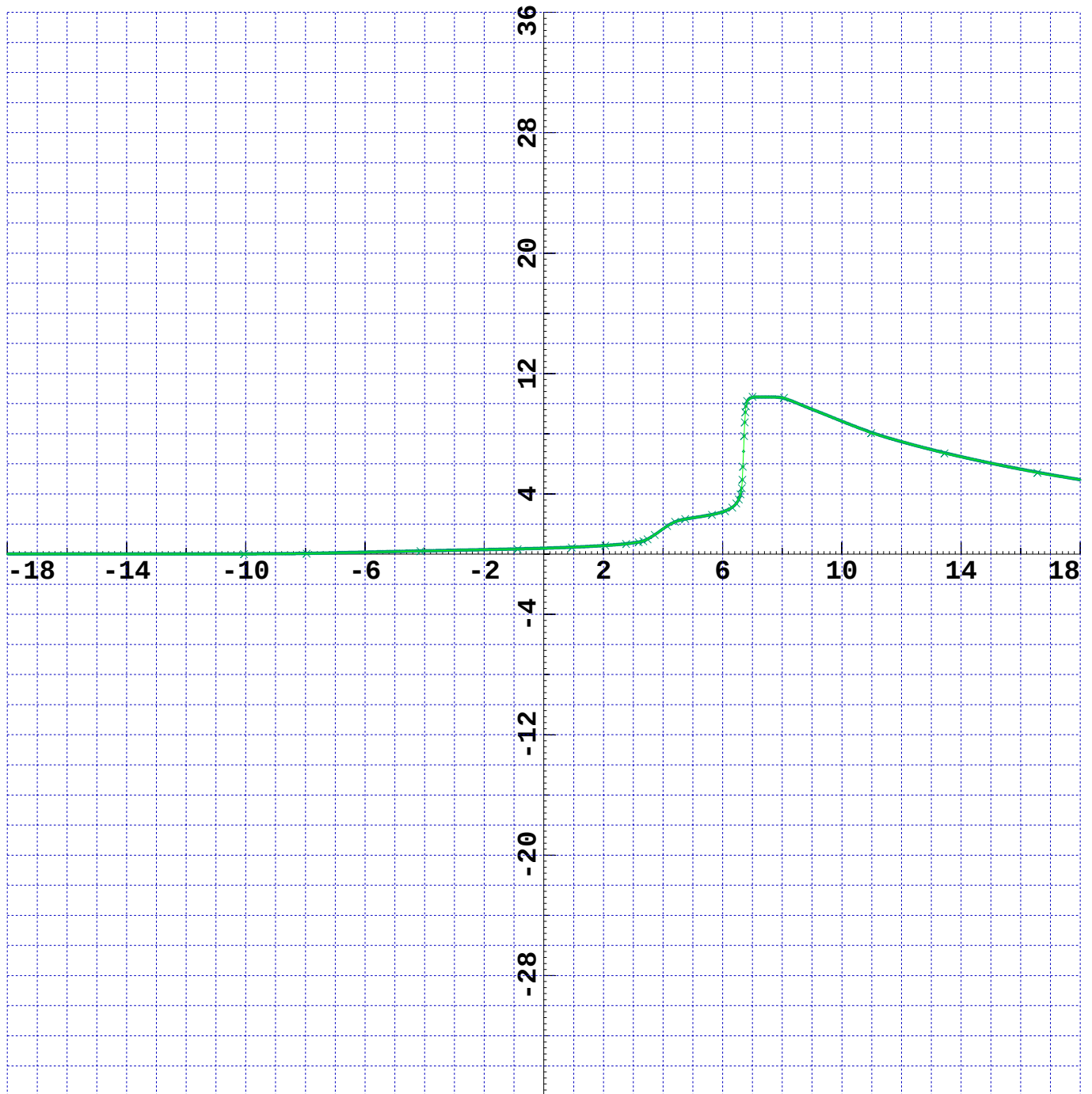
Ident: kpfr_027



Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel
Left rail: r_prof/SEC027_l.short.rail Right rail: r_prof/SEC027_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

ZW1

Ident: kpfr_027



Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel
Left rail: r_prof/SEC027_l.short.rail Right rail: r_prof/SEC027_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

ZRr

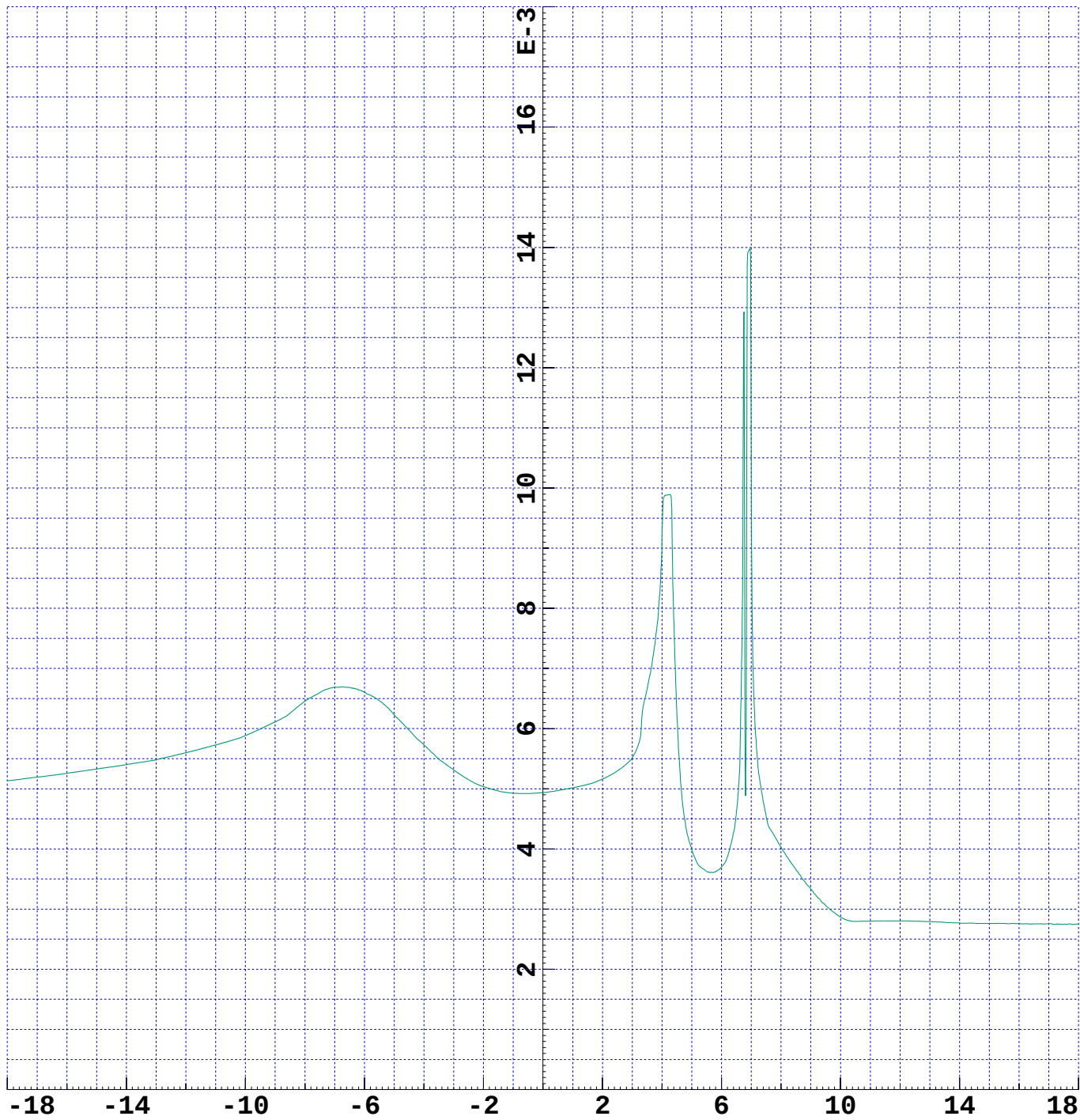
Ident: kpfr_027



Left wheel:S1002t32.5.wheel Right wheel:S1002t32.5.wheel
Left rail: r_prof/SEC027_l.short.rail Right rail: r_prof/SEC027_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

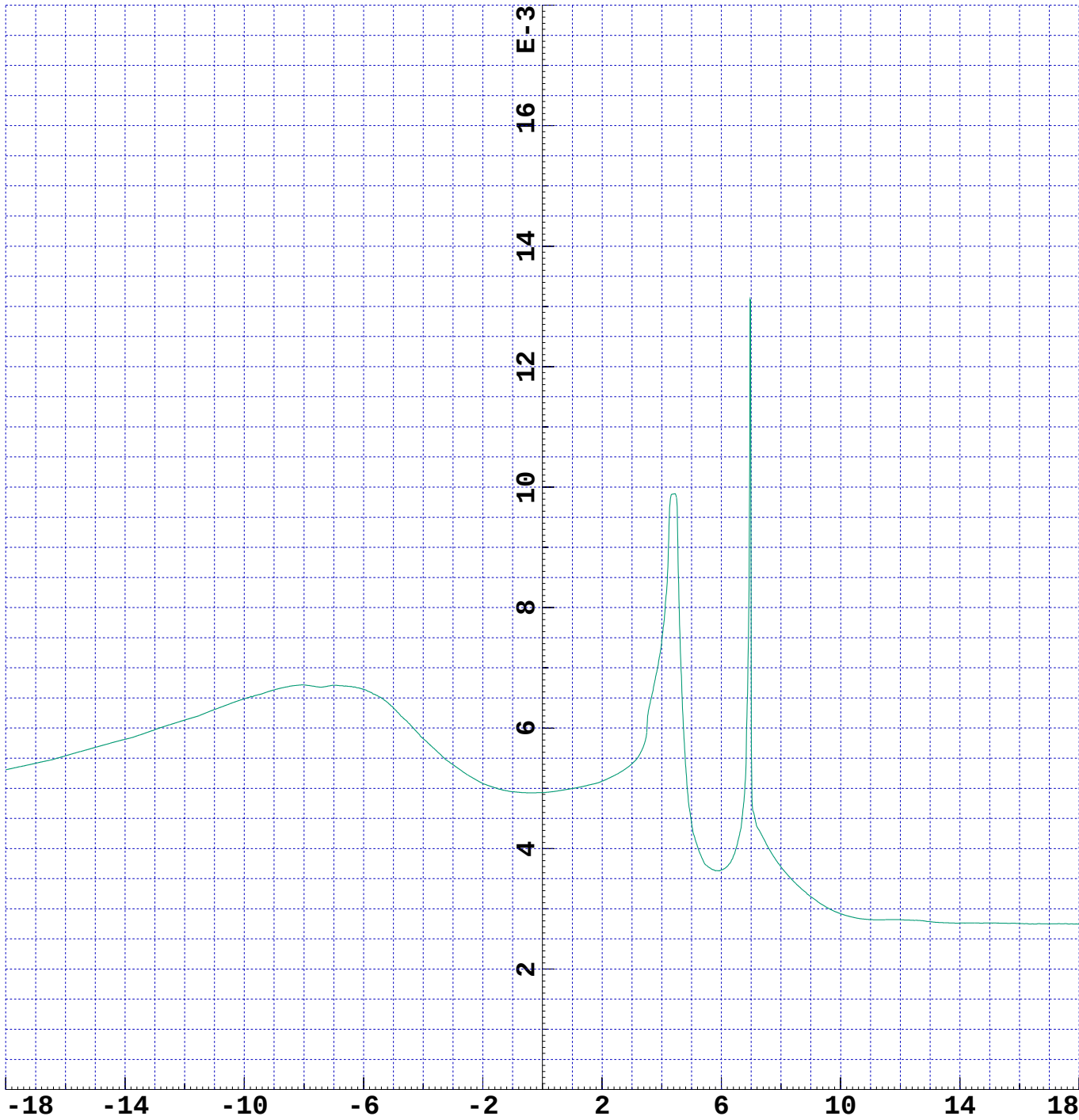
ZR1

Ident: kpfr_027



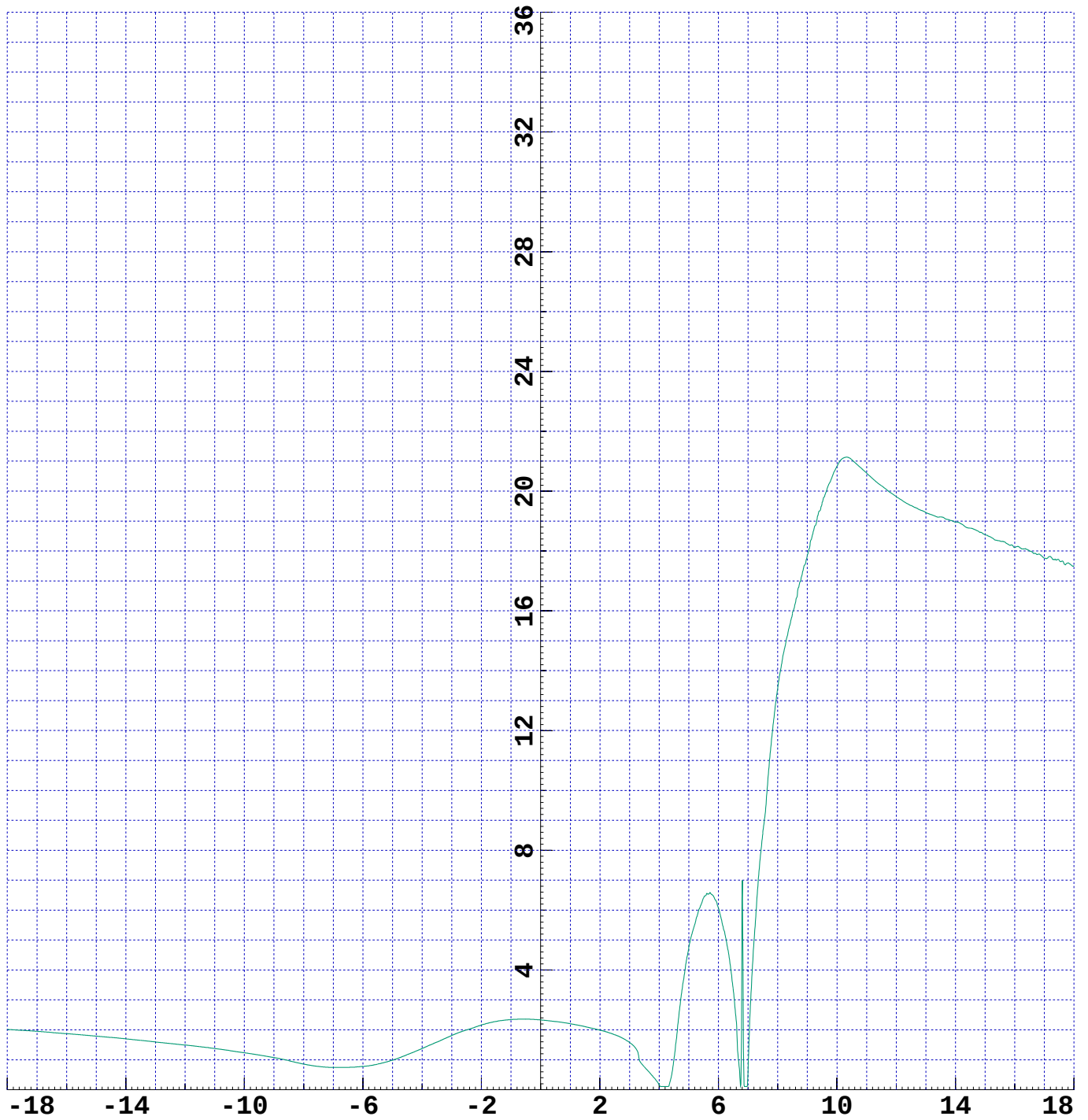
Left wheel:S1002t32.5.wheel Right wheel:S1002t32.5.wheel C_r
Left rail: r_prof/SEC027_l.short.rail Right rail: r_prof/SEC027_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

Ident: kpfr_027



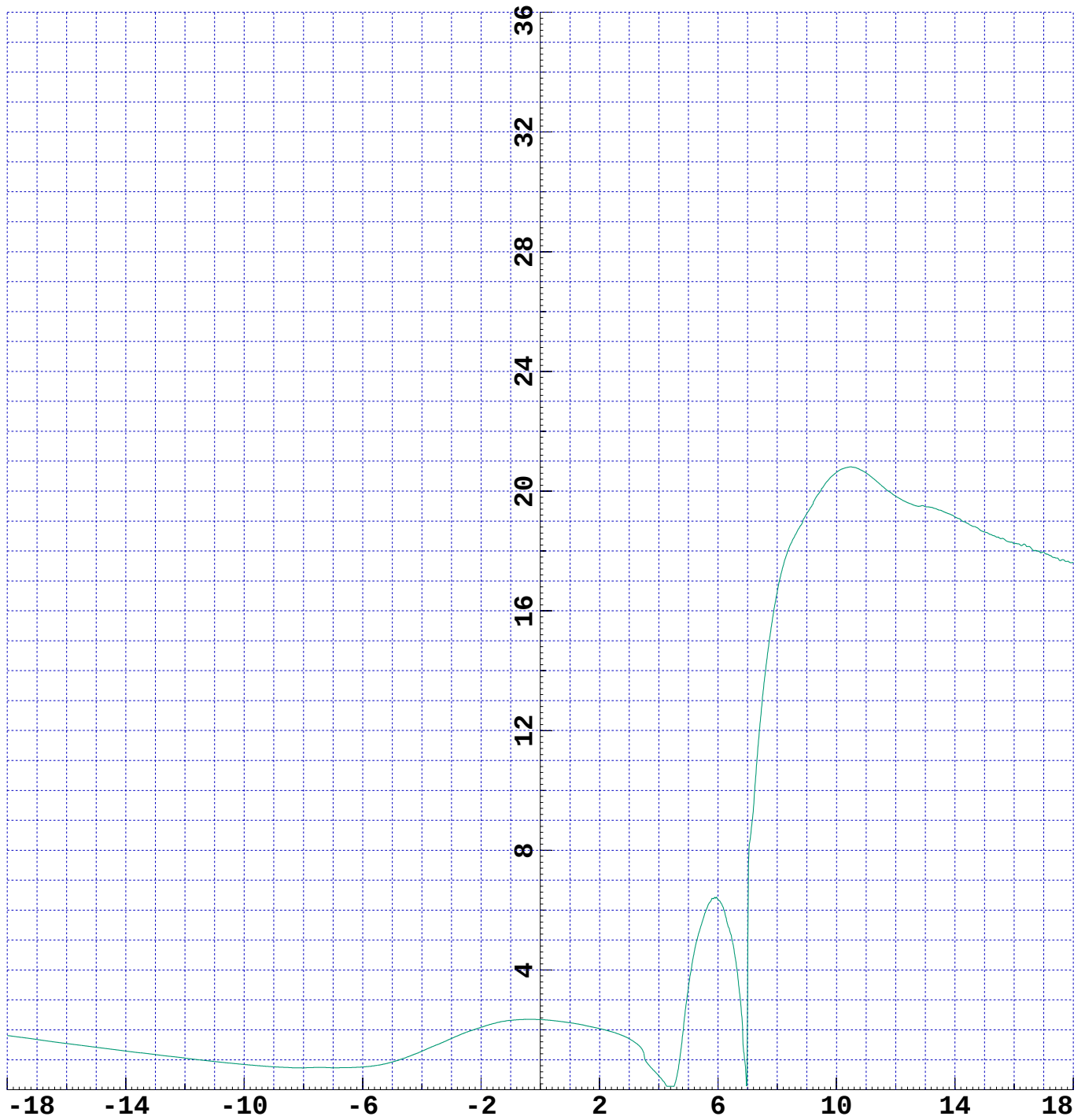
Left wheel:S1002t32.5.wheel Right wheel:S1002t32.5.wheel C_1
Left rail: r_prof/SEC027_l.short.rail Right rail: r_prof/SEC027_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

Ident: kpfr_027



Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel A/B_r
Left rail: r_prof/SEC027_l.short.rail Right rail: r_prof/SEC027_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

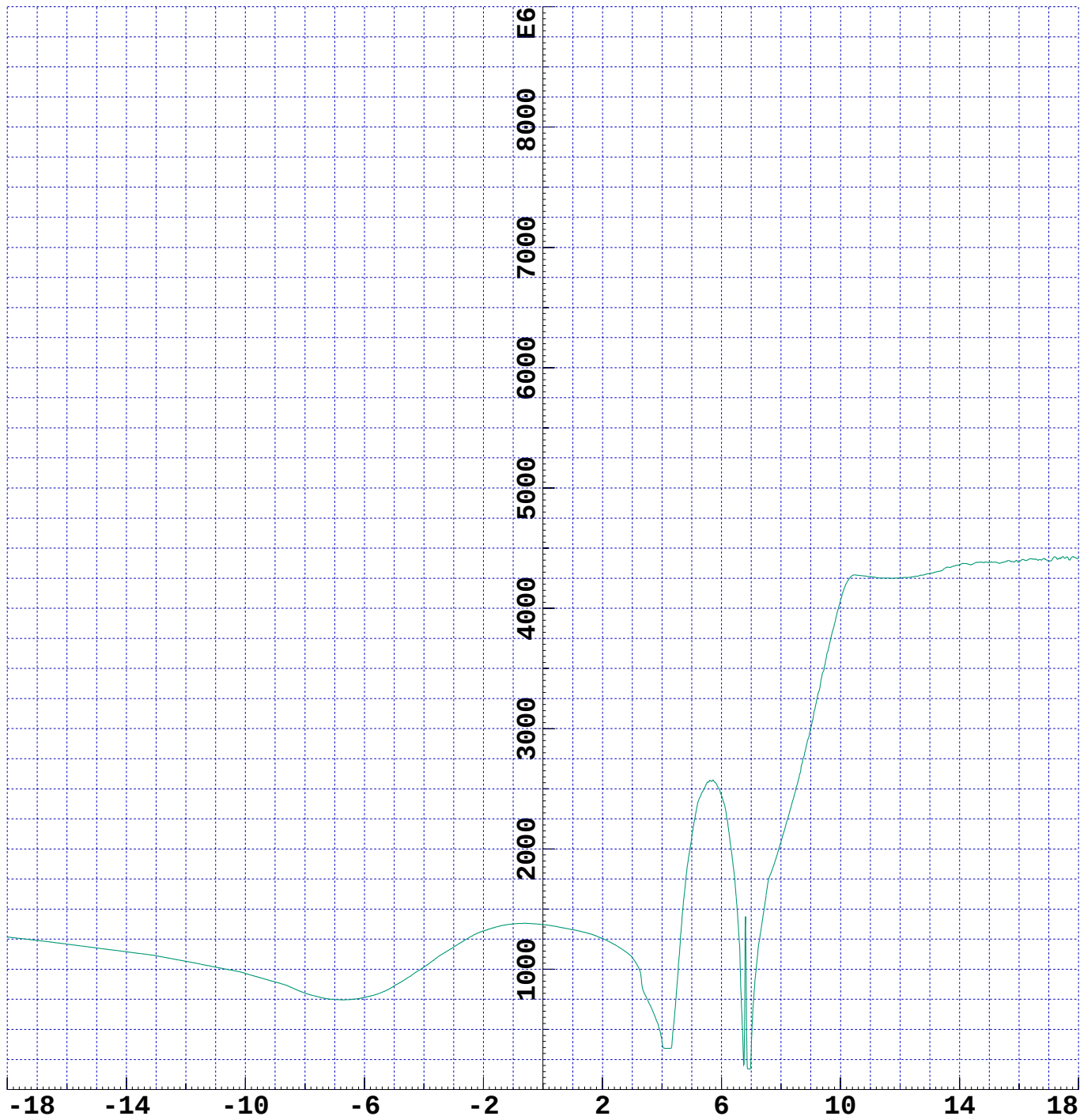
Ident: kpfr_027



Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel
Left rail: r_prof/SEC027_l.short.rail Right rail: r_prof/SEC027_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

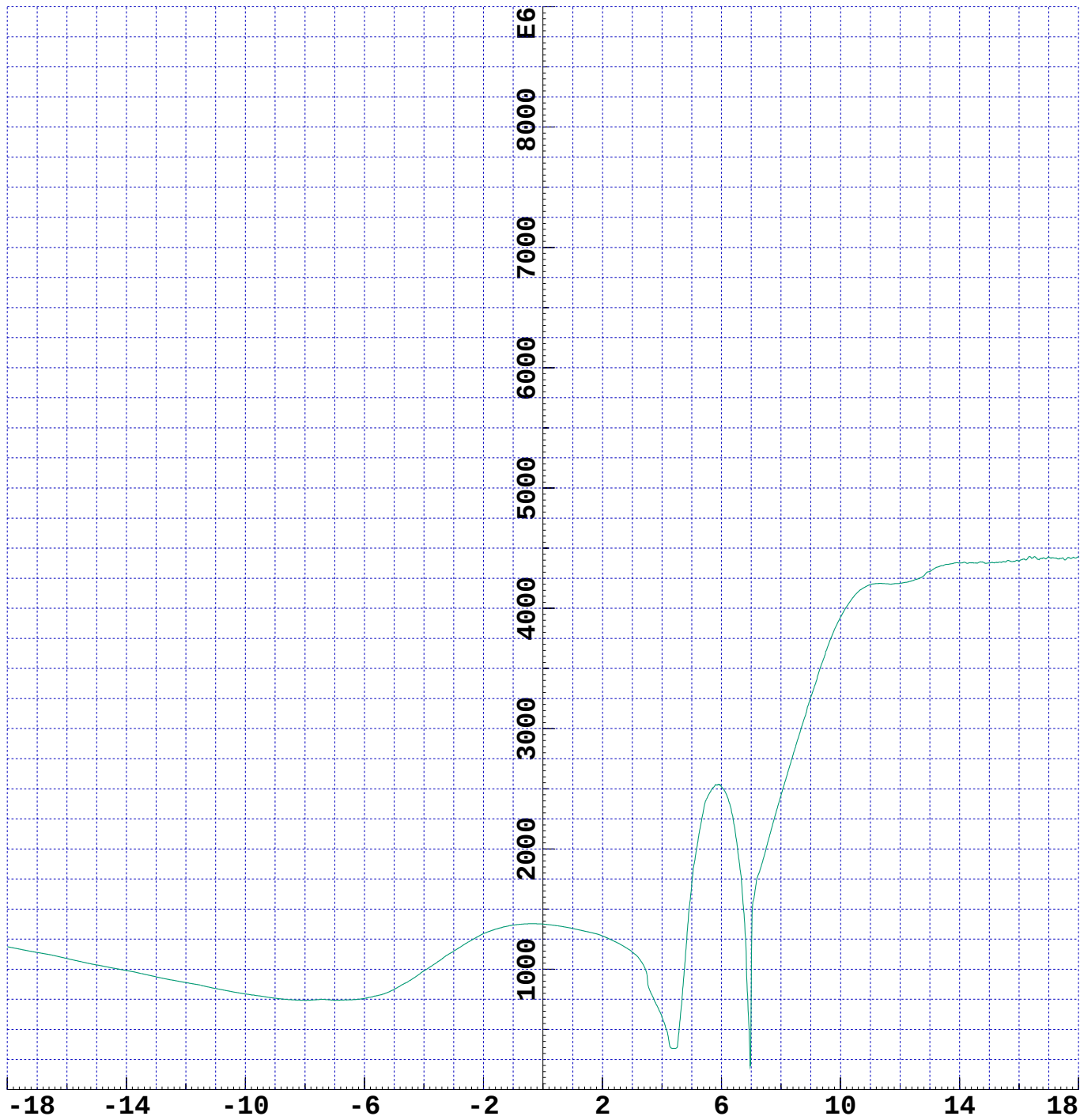
A/B_1

Ident: kpfr_027



Left wheel:S1002t32.5.wheel Right wheel:S1002t32.5.wheel SIGMAR
Left rail: r_prof/SEC027_l.short.rail Right rail: r_prof/SEC027_r.short.rail
Wprof_lat_shift= 0 Gauge= 1425-1441

Ident: kpfr_027



Left wheel:S1002t32.5.wheel Right wheel:S1002t32.5.wheel **SIGMA1**
Left rail: r_prof/SEC027_l.short.rail Right rail: r_prof/SEC027_r.short.rail
Wprof_lat_shift= 0 Gauge= 1425-1441
Ident: kpfr_027

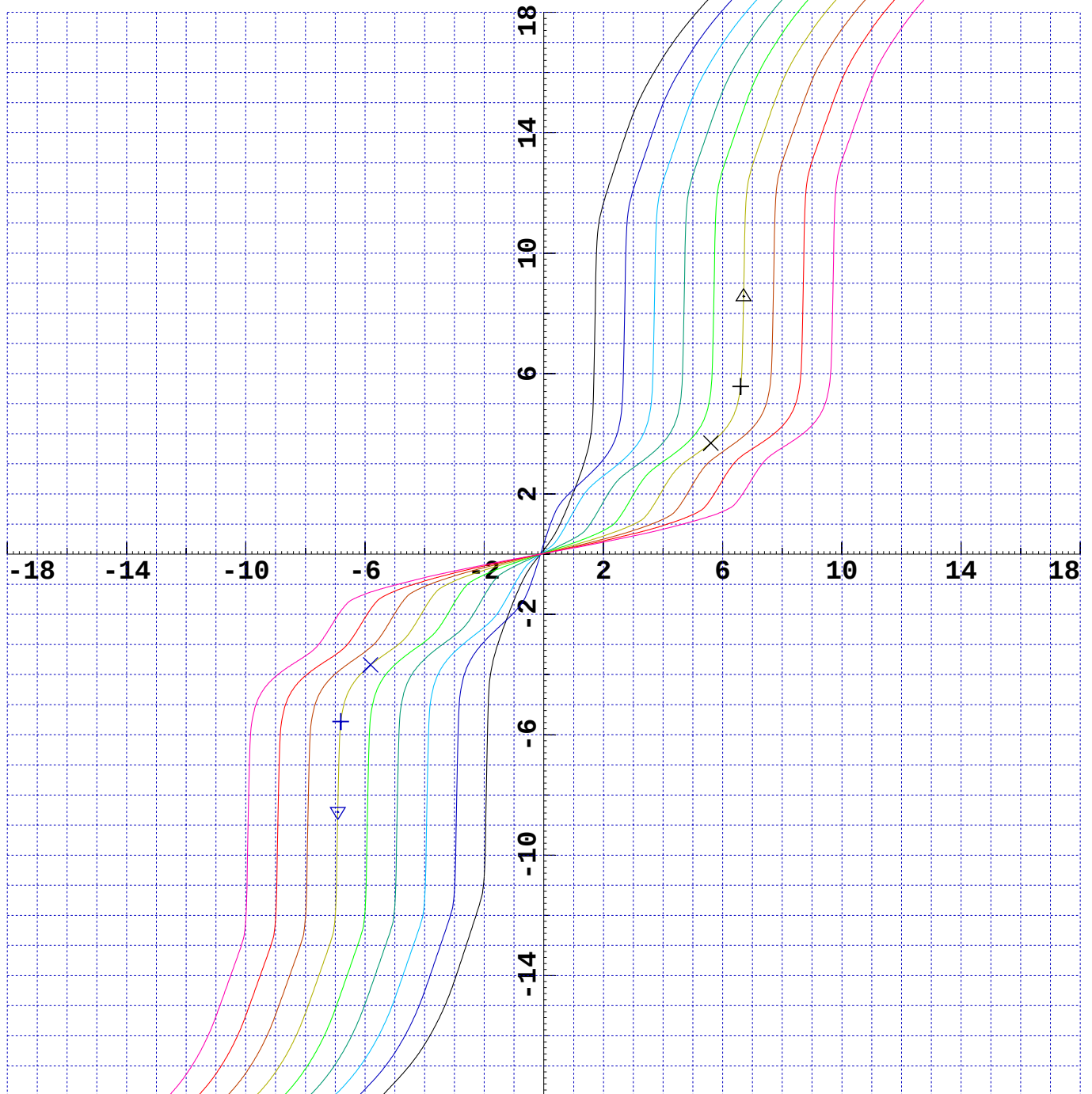
Gauge= 1425 —
 1427 —
 1429 —
 1431 —
 1433 —
 1435 —
 1437 —
 1439 —
 1441 —

Radial Steering Index

× = $\Delta r_E = 3.69$ left curve
 × = $\Delta r_E = 3.68$ right curve
 + = $A0r = 6.60$ 5.57
 + = $A0l = -6.81$ -5.56

possibility of
rolling without
slip

discontinuity
point



Δ = 0.1mm right of +discontinuity
 ∇ = 0.1mm left of -discontinuity

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

Left rail: r_prof/SEC027_l.short.rail Right rail: r_prof/SEC027_r.short.rail

Wprof_lat_shift= 0 Gauge= 1425-1441

rr-rl

Ident: kpfr_027

GENSYS-KPF.1308

Delta_Y=

.1

.5

2

3

4

6

Gauge= 1425

—

.613

.662

1.219

1.306

1.280

1.198

1427

—

1.156

1.116

.788

1.032

1.180

1.155

1429

—

.356

.390

.629

.573

.837

1.076

1431

—

.219

.221

.323

.432

.439

.917

1433

—

.165

.165

.178

.238

.327

.523

1435

—

.134

.134

.140

.149

.192

.294

1437

—

.114

.114

.117

.122

.131

.222

1439

—

.101

.101

.103

.107

.111

.145

1441

—

.093

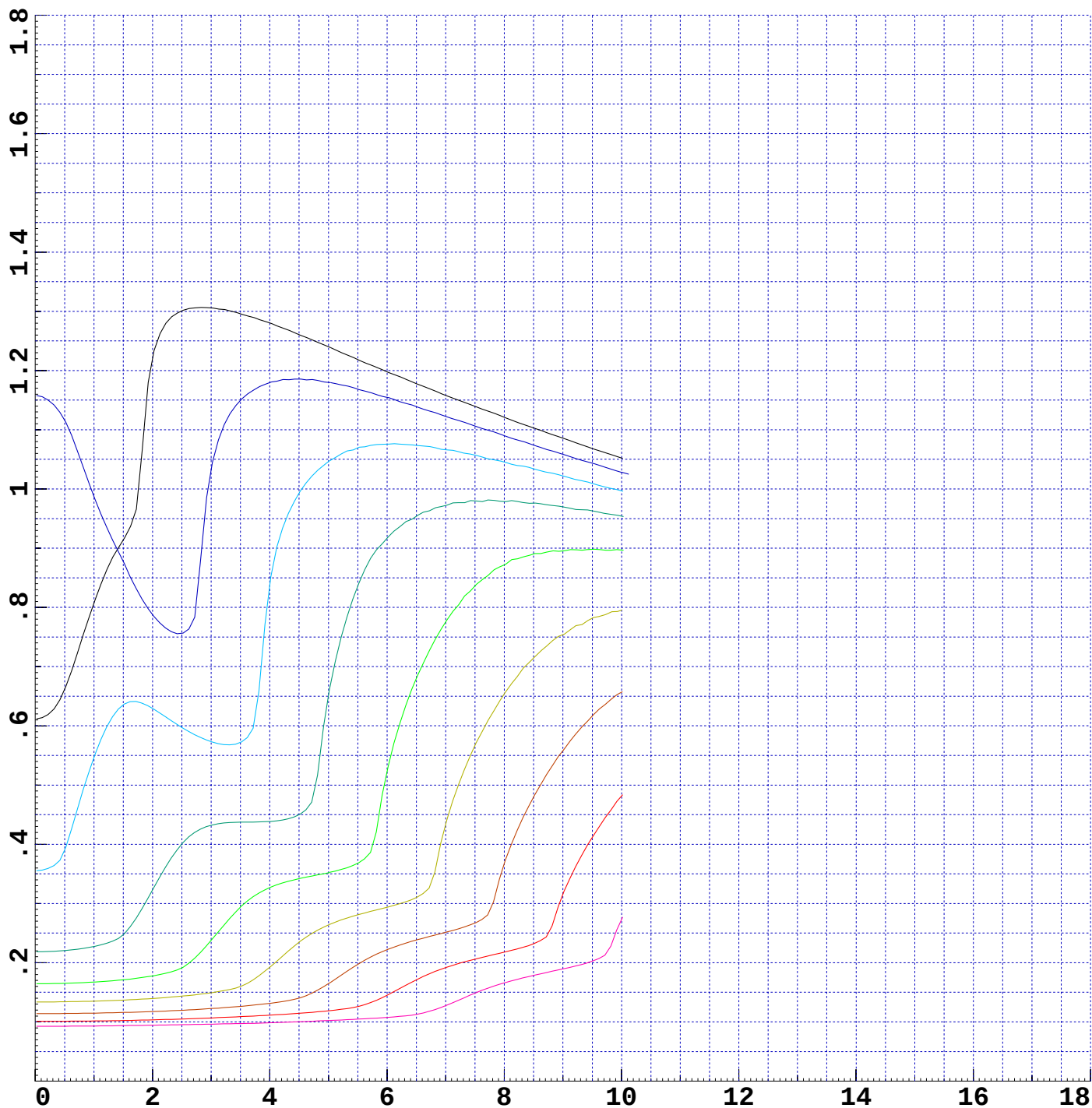
.093

.094

.096

.099

.108



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

Left rail: r_prof/SEC027_l.short.rail

Right rail: r_prof/SEC027_r.short.rail

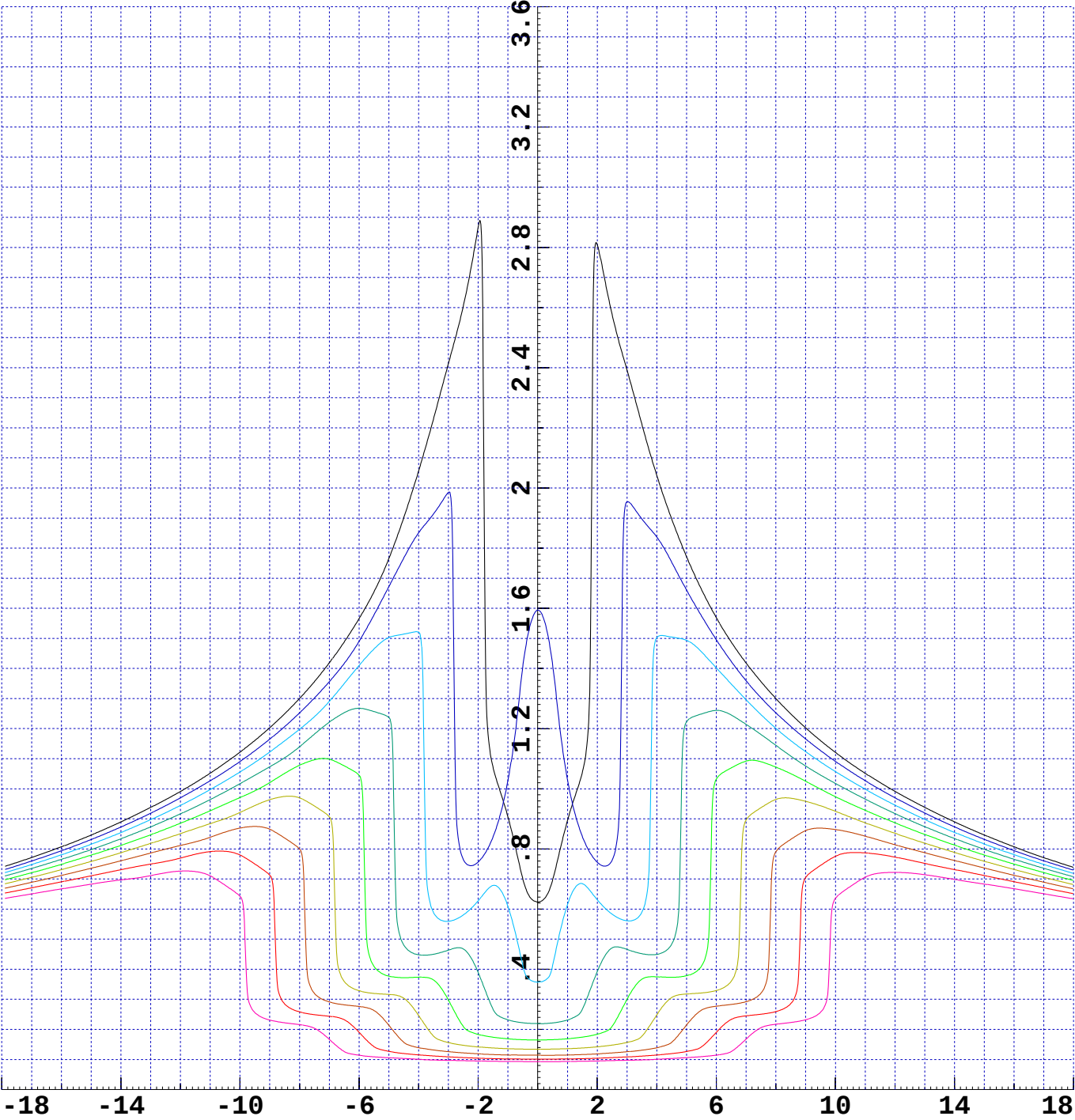
UIC519

wprof_lat_shift= 0 Gauge= 1425-1441

Ident: kpfr_027

GENSYS-KPF.1308

Delta_Y=		.1	.5	2	3	4	6
Gauge= 1425	—	.625	.696	2.810	2.391	2.041	1.568
1427	—	1.587	1.411	.756	1.954	1.837	1.496
1429	—	.358	.413	.631	.561	1.502	1.401
1431	—	.219	.222	.392	.466	.449	1.260
1433	—	.165	.166	.184	.300	.375	1.033
1435	—	.134	.134	.142	.156	.248	.329
1437	—	.114	.114	.119	.126	.139	.277
1439	—	.101	.101	.104	.109	.115	.191
1441	—	.093	.093	.095	.097	.101	.114

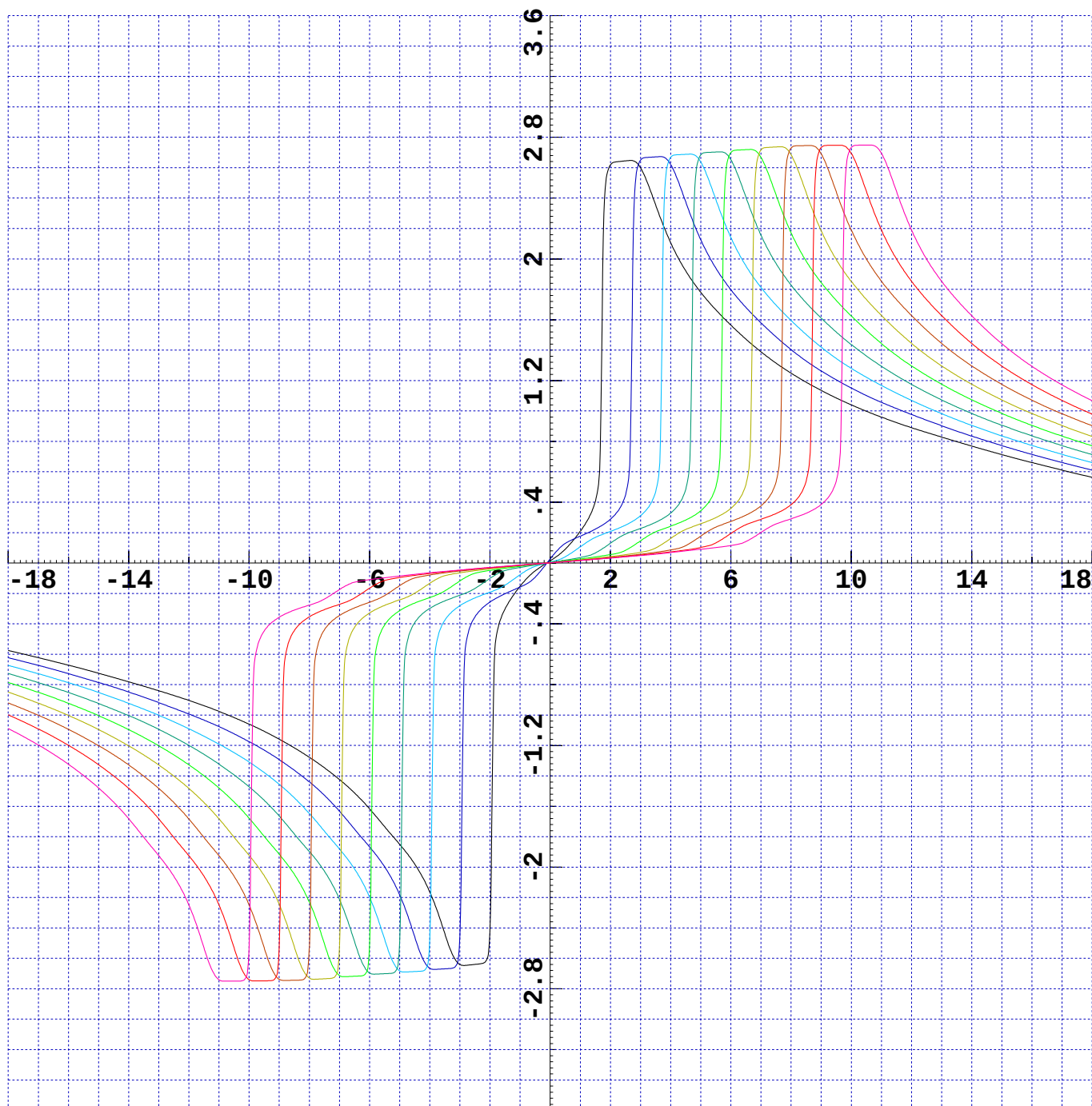


Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel **lambda**
Left rail: r_prof/SEC027_l.short.rail Right rail: r_prof/SEC027_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

Ident: kpfr_027

GENSYS-KPF.1308

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

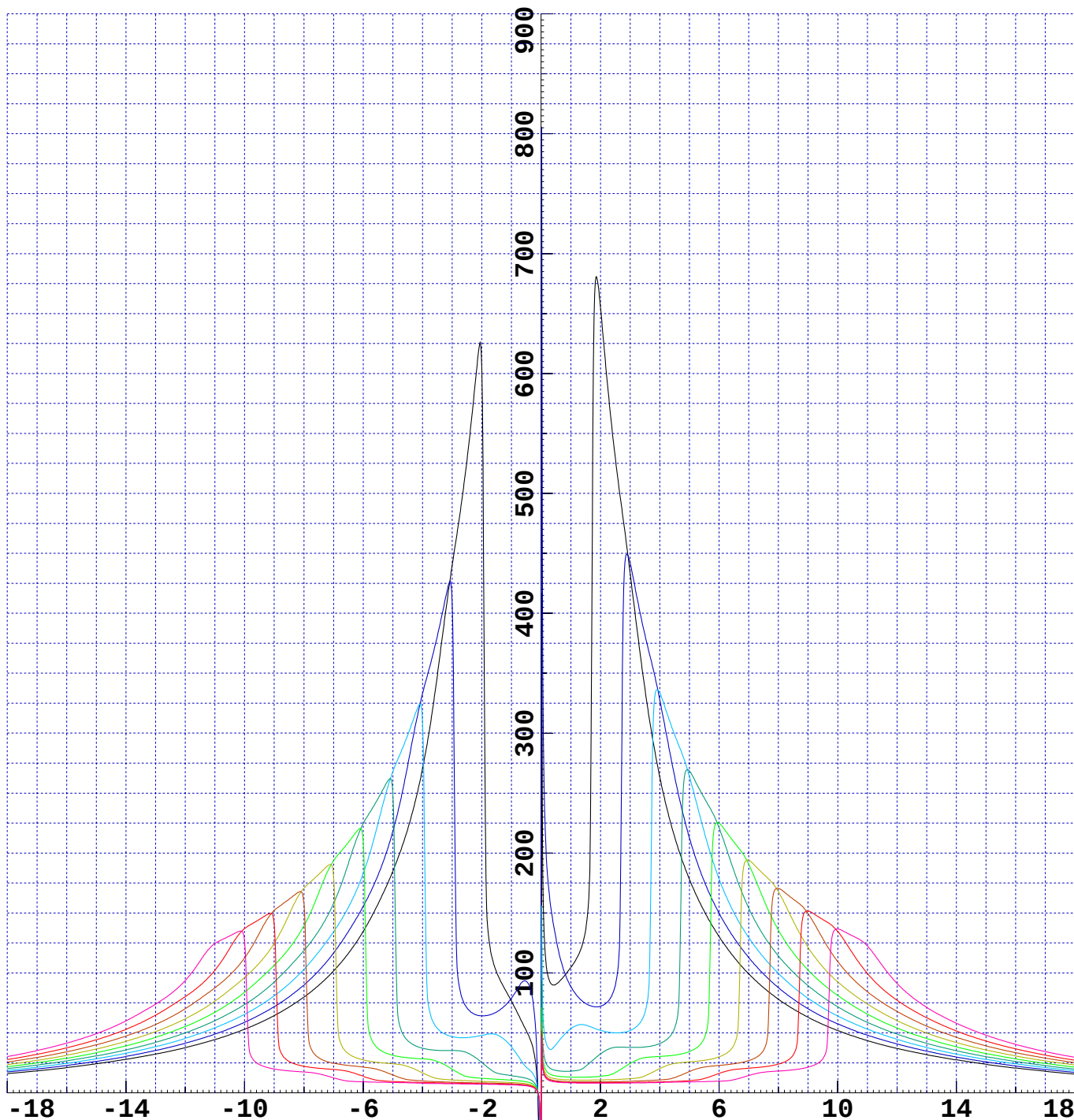


Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel tan_Ga
 Left rail: r_prof/SEC027_l.short.rail Right rail: r_prof/SEC027_r.short.rail
 Wprof_lat_shift= 0 Gauge= 1425-1441

Ident: kpfr_027

GENSYS-KPF.1308

Delta_Y=		.1	.5	2	3	4	6
Gauge= 1425	—	135.27	90.48	654.80	433.05	263.30	130.35
1427	—	259.06	129.14	72.22	441.70	327.67	149.77
1429	—	51.95	40.16	52.08	51.99	333.65	178.41
1431	—	30.95	18.73	32.51	37.89	41.08	221.08
1433	—	23.40	14.02	13.81	24.46	30.34	224.99
1435	—	19.37	11.55	10.72	11.77	20.22	29.93
1437	—	17.05	10.12	9.20	9.64	10.74	22.85
1439	—	15.77	9.33	8.41	8.68	9.18	16.21
1441	—	15.28	9.01	8.11	8.20	8.54	9.62



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

Left rail: r_prof/SEC027_l.short.rail Right rail: r_prof/SEC027_r.short.rail

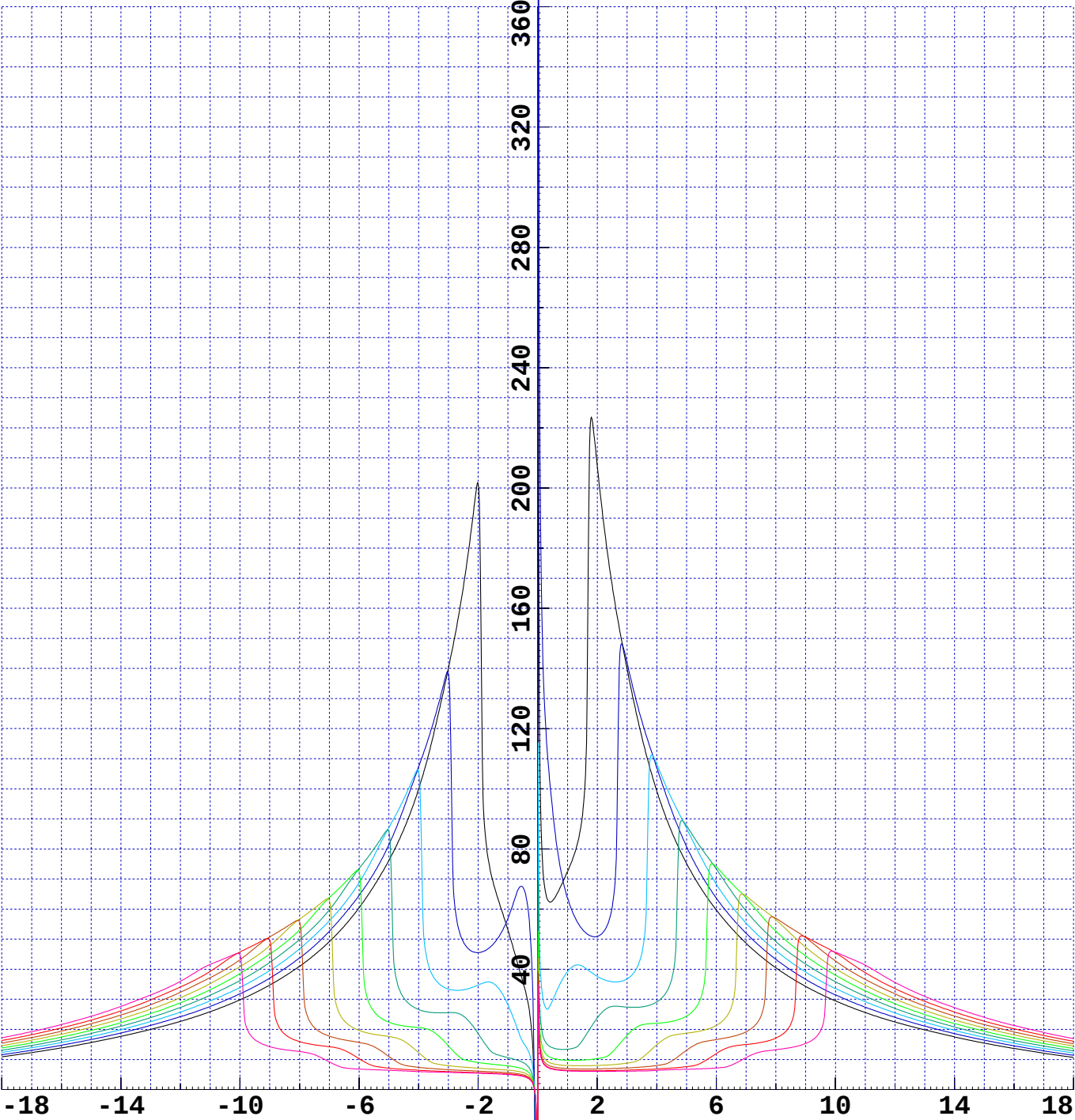
wprof_lat_shift= 0 Gauge= 1425-1441

KAPPA

Ident: kpfr_027

GENSYS-KPF.1308

Delta_Y=		.1	.5	2	3	4	6
Gauge= 1425	—	93.77	62.76	207.18	139.78	99.19	59.67
1427	—	187.39	93.18	50.91	141.95	106.98	63.66
1429	—	38.42	29.64	37.60	36.80	108.24	68.27
1431	—	22.99	13.91	23.89	27.43	29.16	73.29
1433	—	17.42	10.43	10.26	18.00	22.01	74.07
1435	—	14.45	8.61	7.99	8.76	14.90	21.34
1437	—	12.73	7.56	6.87	7.19	8.00	16.64
1439	—	11.79	6.97	6.28	6.48	6.85	11.98
1441	—	11.43	6.74	6.07	6.14	6.38	7.18



Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel
Left rail: r_prof/SEC027_l.short.rail Right rail: r_prof/SEC027_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

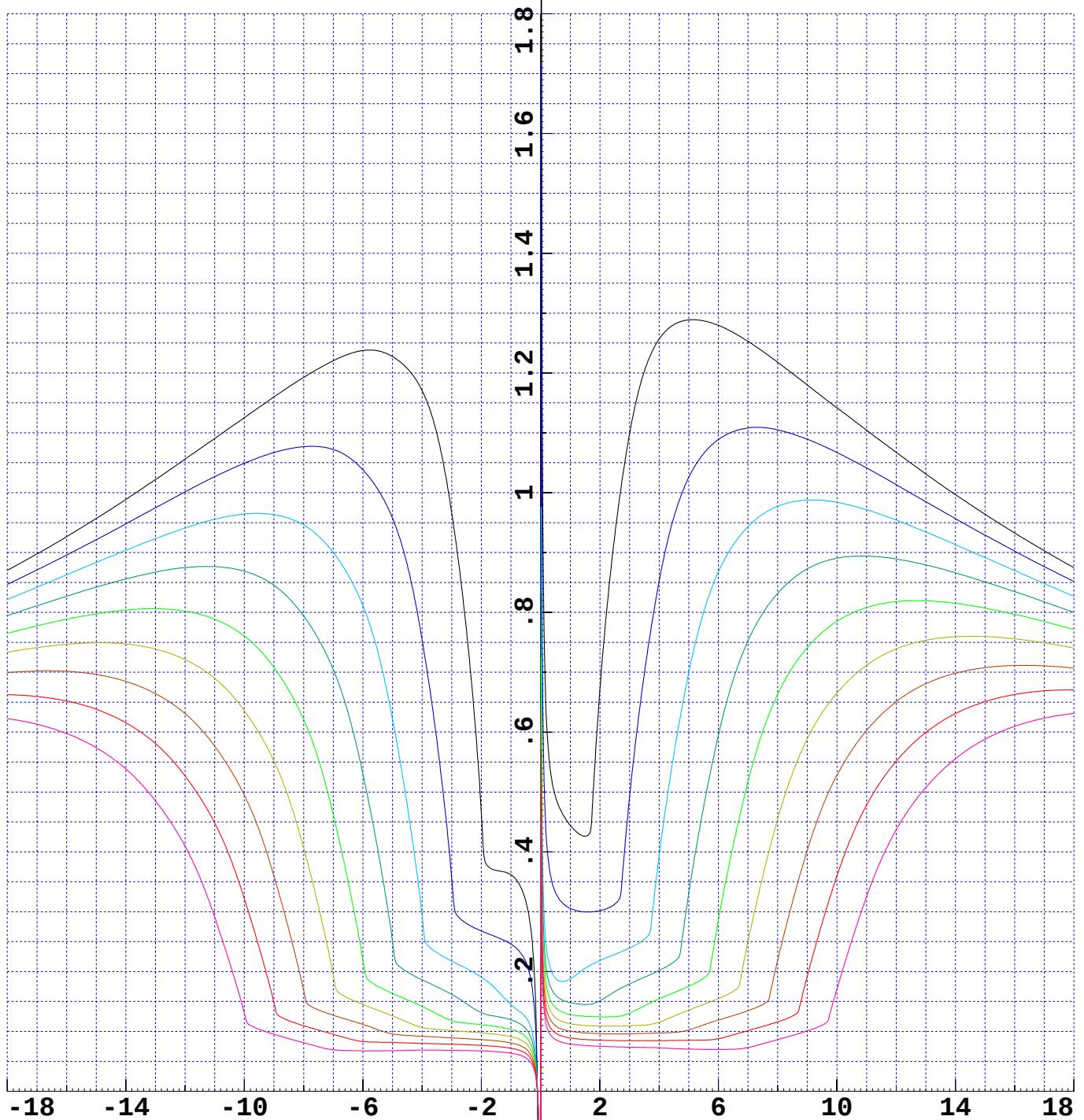
EPS

Ident: kpfr_027

GENSYS-KPF.1308

Delta_Y=

		.1	.5	2	3	4	6
Gauge=	1425	.84	.49	.67	1.10	1.26	1.28
	1427	.56	.33	.30	.49	.85	1.09
	1429	.32	.19	.22	.24	.39	.87
	1431	.27	.16	.15	.18	.20	.59
	1433	.24	.14	.12	.13	.15	.29
	1435	.21	.12	.11	.11	.12	.15
	1437	.19	.11	.10	.10	.10	.12
	1439	.17	.10	.09	.08	.08	.09
	1441	.15	.09	.08	.07	.07	.07



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

Left rail: r_prof/SEC027_l.short.rail Right rail: r_prof/SEC027_r.short.rail

wprof_lat_shift= 0 Gauge= 1425-1441

RollAC

Ident: kpfr_027