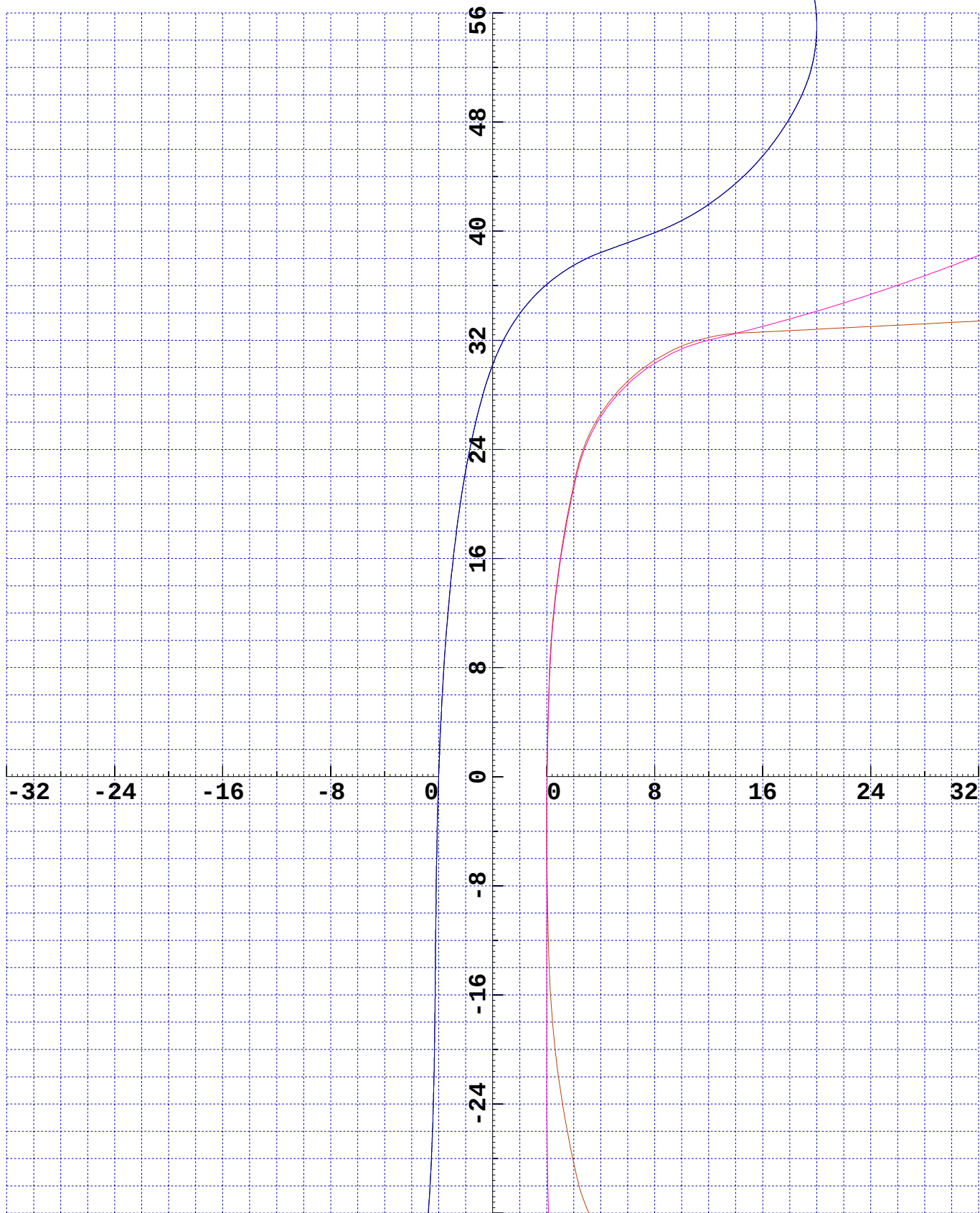
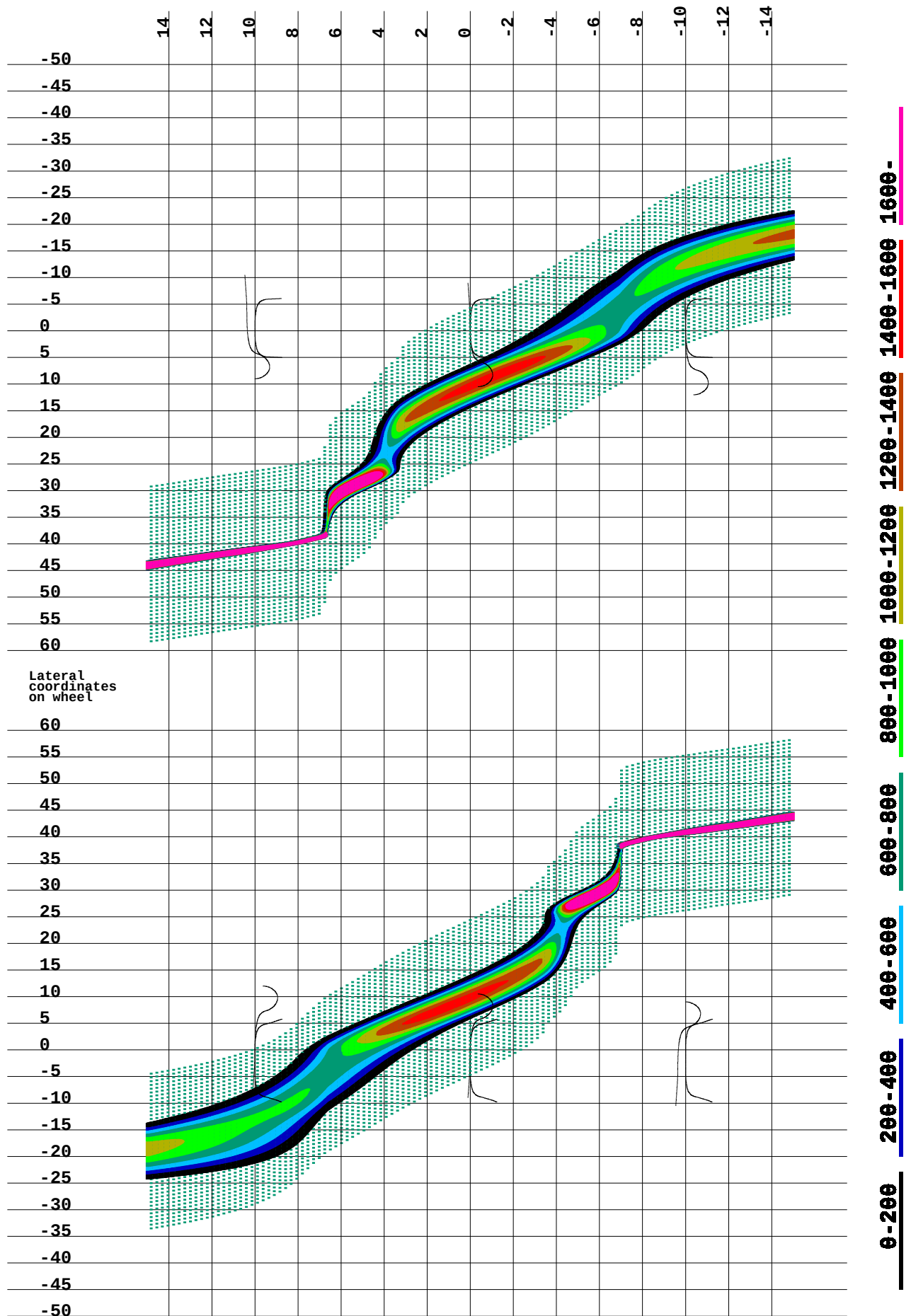


- Right wheel
- Left wheel
- Right rail
- Left rail



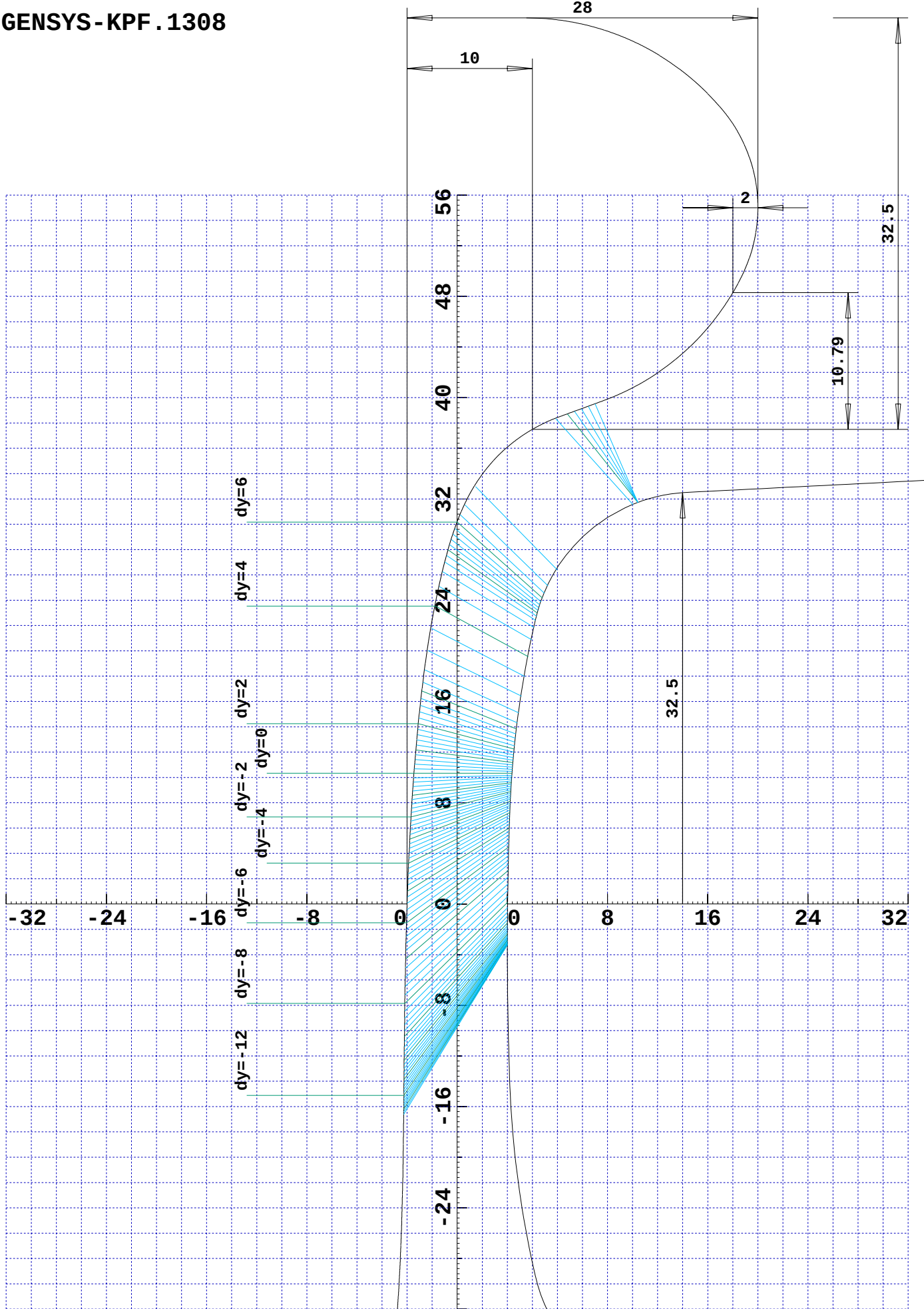
Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel WRGEOM
Left rail: r_prof/SEC025_l.short.rail Right rail: r_prof/SEC025_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

Ident: kpfr_025



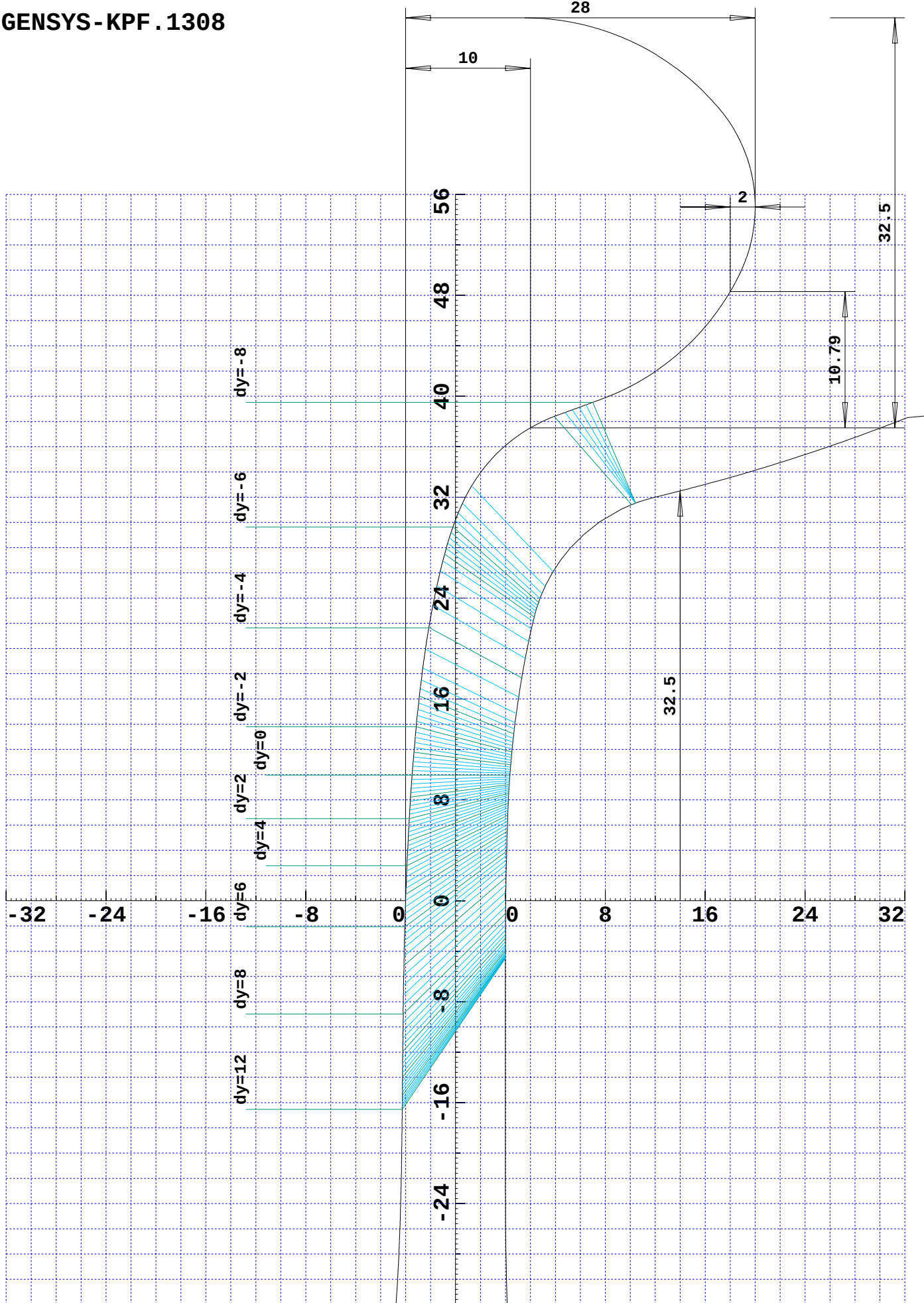
Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel
 Left rail: r_prof/SEC025_l.short.rail Right rail: r_prof/SEC025_r.sho
 Wprof_lat_shift= 0 Gauge= 1425-1441

Contact Pressure



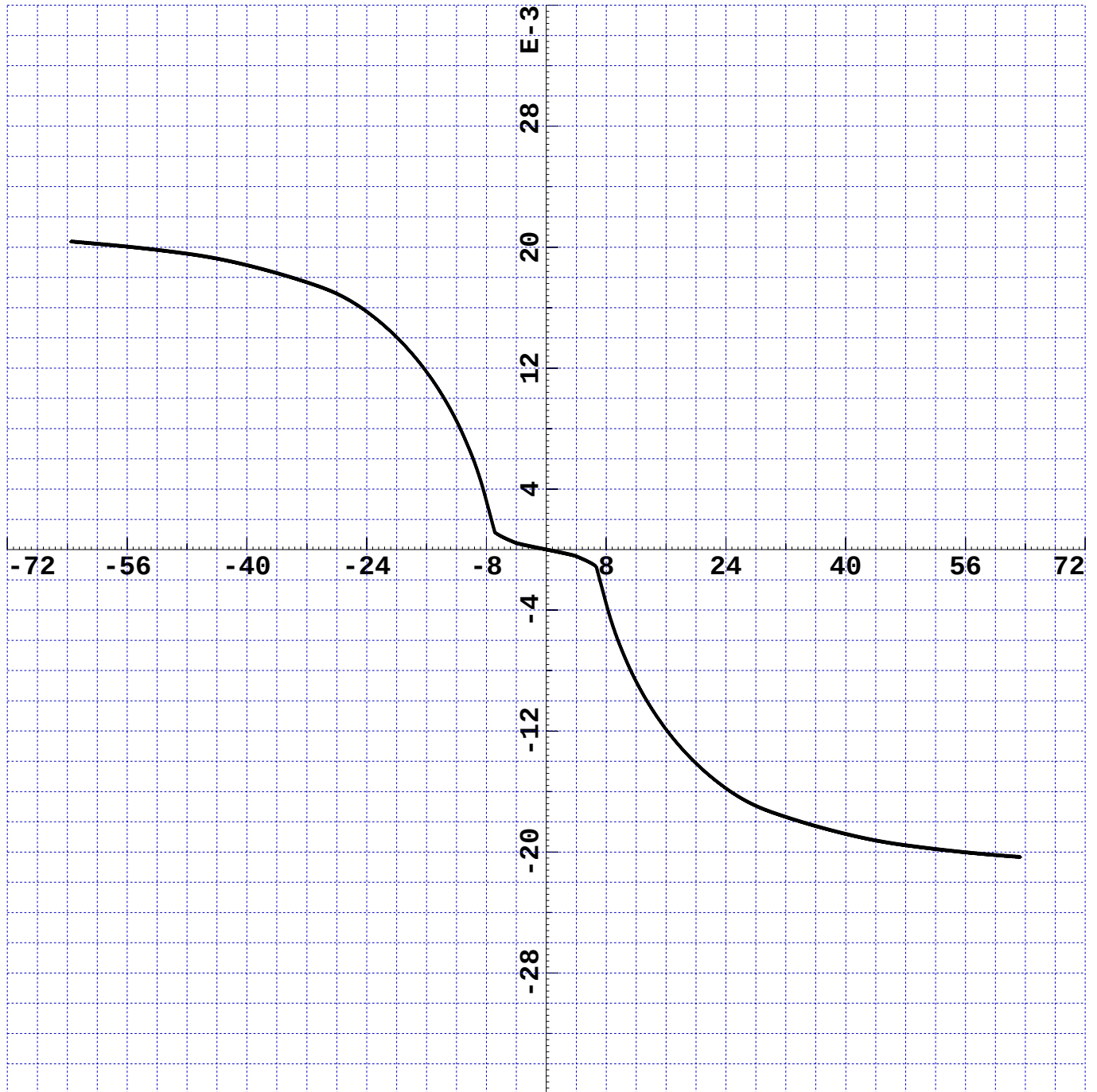
Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel CONNr
Left rail: r_prof/SEC025_l.short.rail Right rail: r_prof/SEC025_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

Ident: kpfr_025



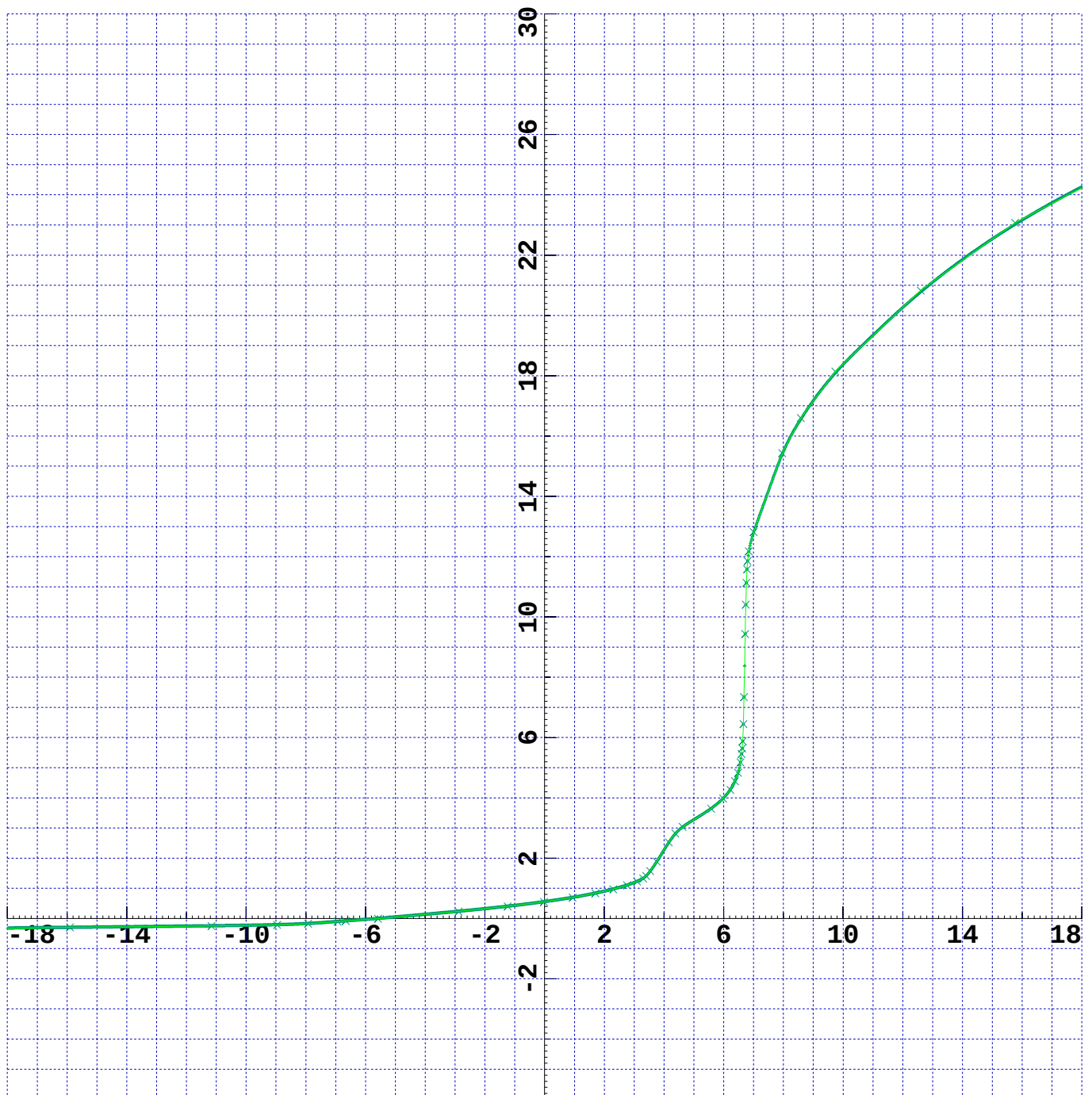
CONN₁

Ident: kpfr_025



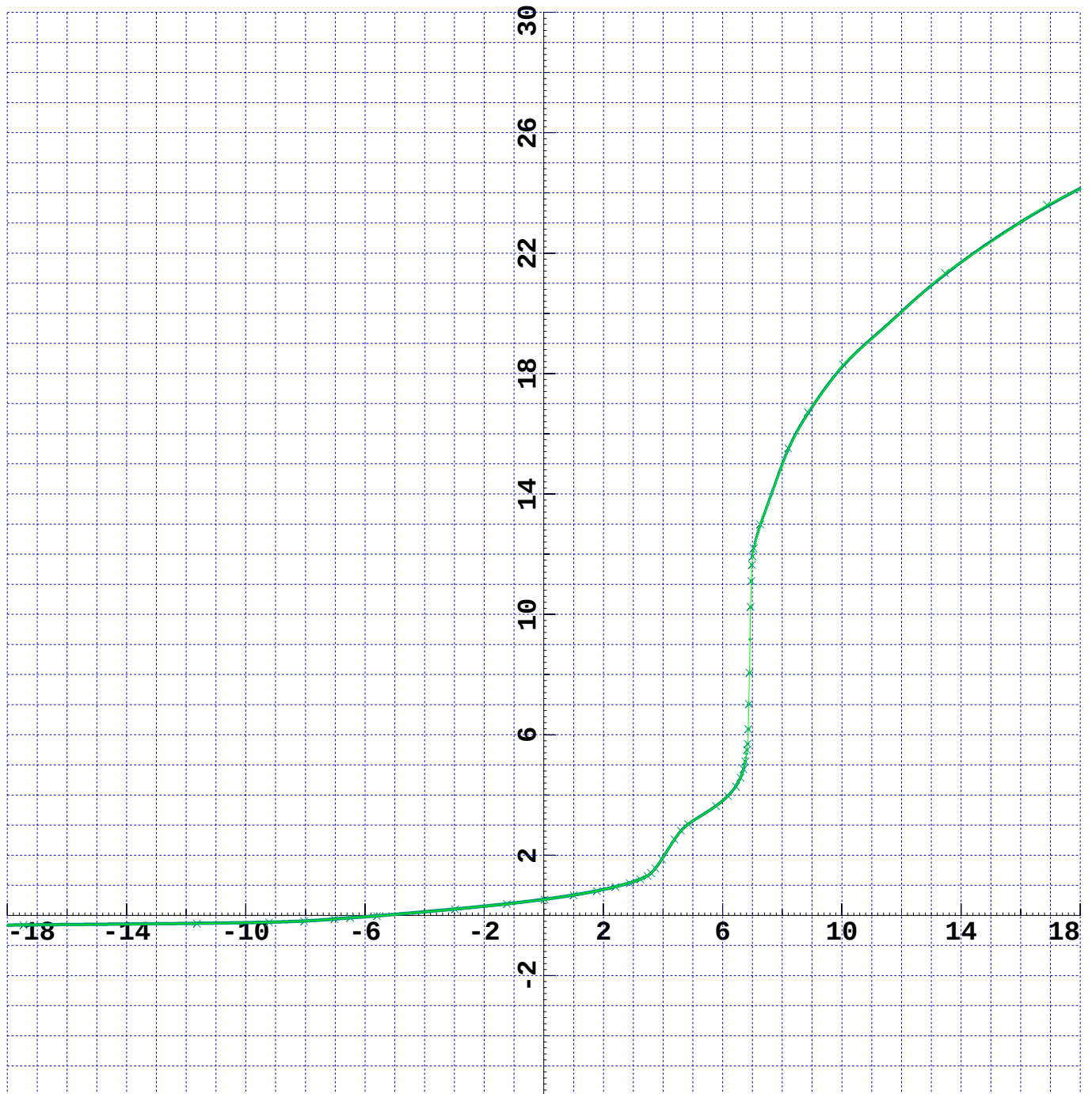
Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel **Flaxl**
Left rail: r_prof/SEC025_l.short.rail Right rail: r_prof/SEC025_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

Ident: kpfr_025



Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel DRFNr
Left rail: r_prof/SEC025_l.short.rail Right rail: r_prof/SEC025_r.short.rail
Wprof_lat_shift= 0 Gauge= 1425-1441

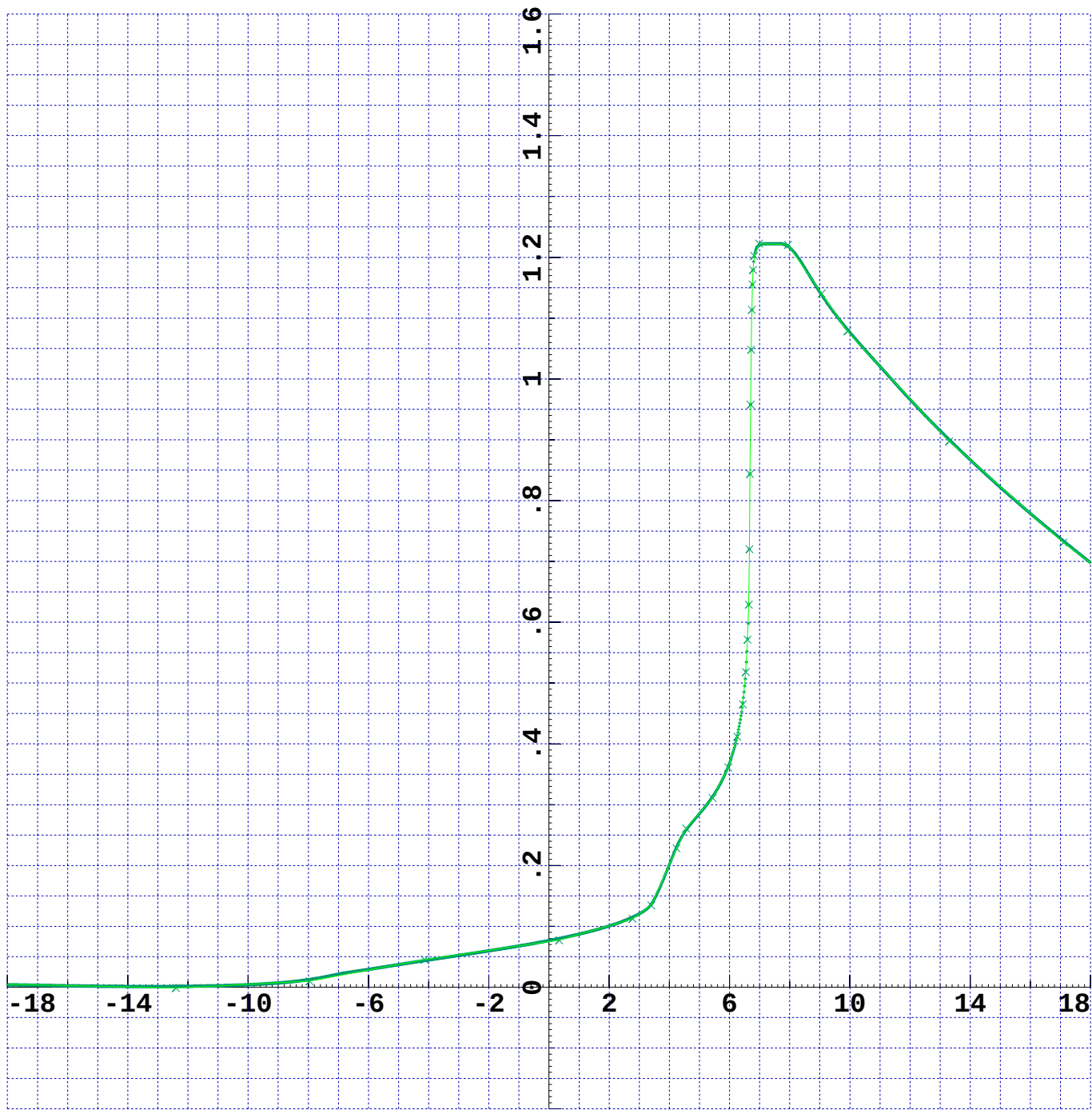
Ident: kpfr_025



Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel
Left rail: r_prof/SEC025_l.short.rail Right rail: r_prof/SEC025_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

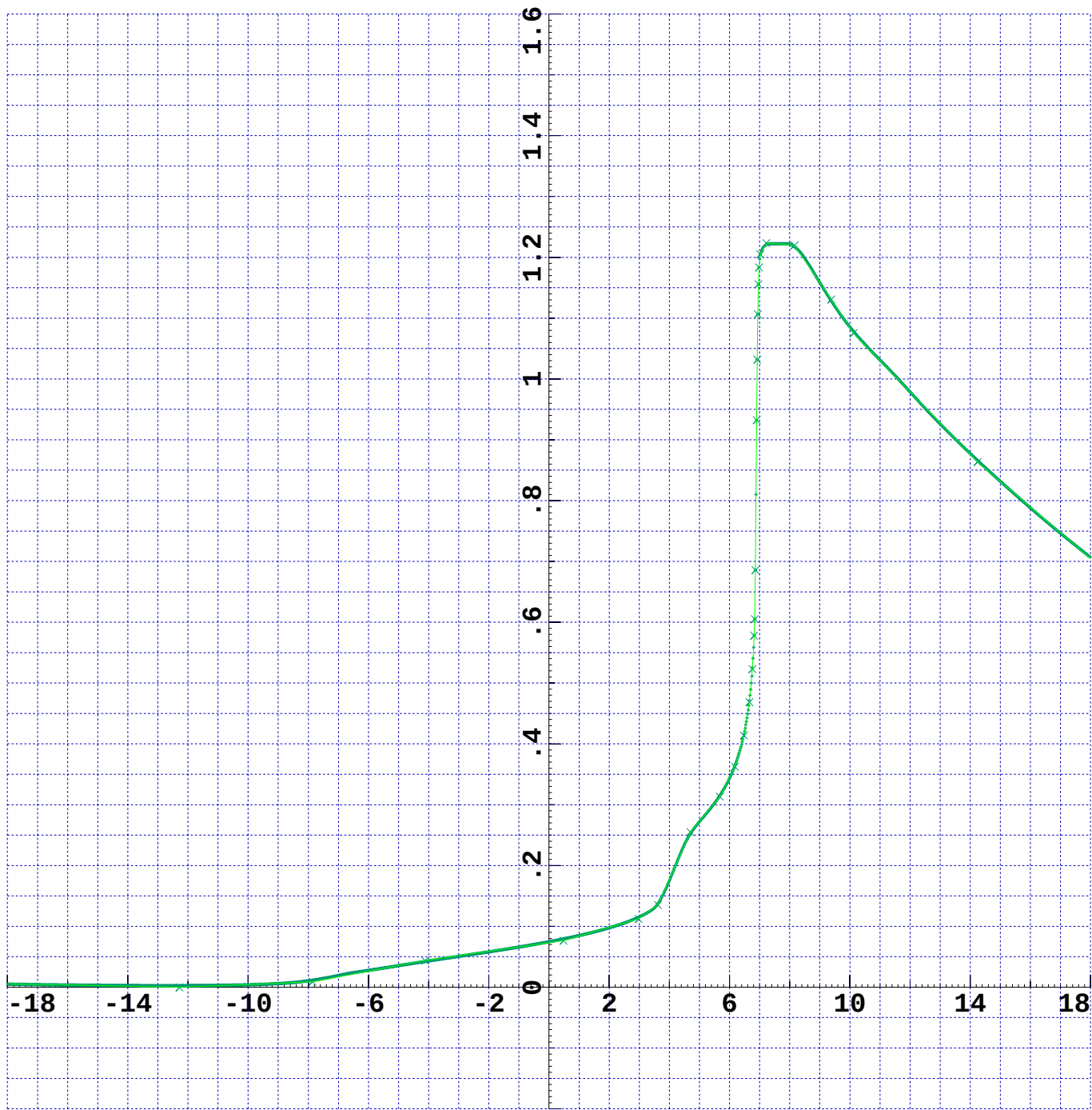
DRFN1

Ident: kpfr_025



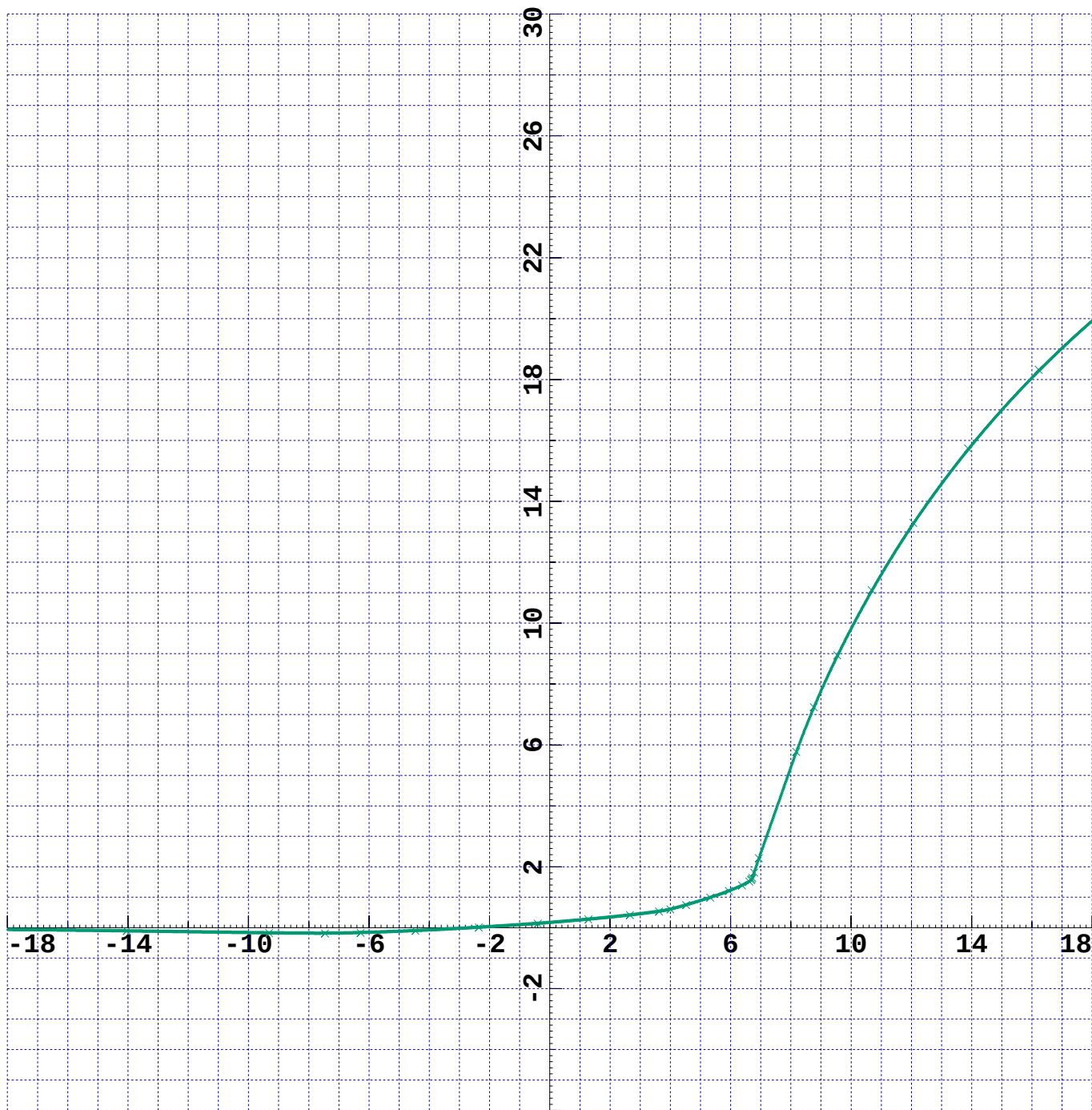
Left wheel:S1002t32.5.wheel Right wheel:S1002t32.5.wheel GAMFNr
Left rail: r_prof/SEC025_l.short.rail Right rail: r_prof/SEC025_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

Ident: kpfr_025



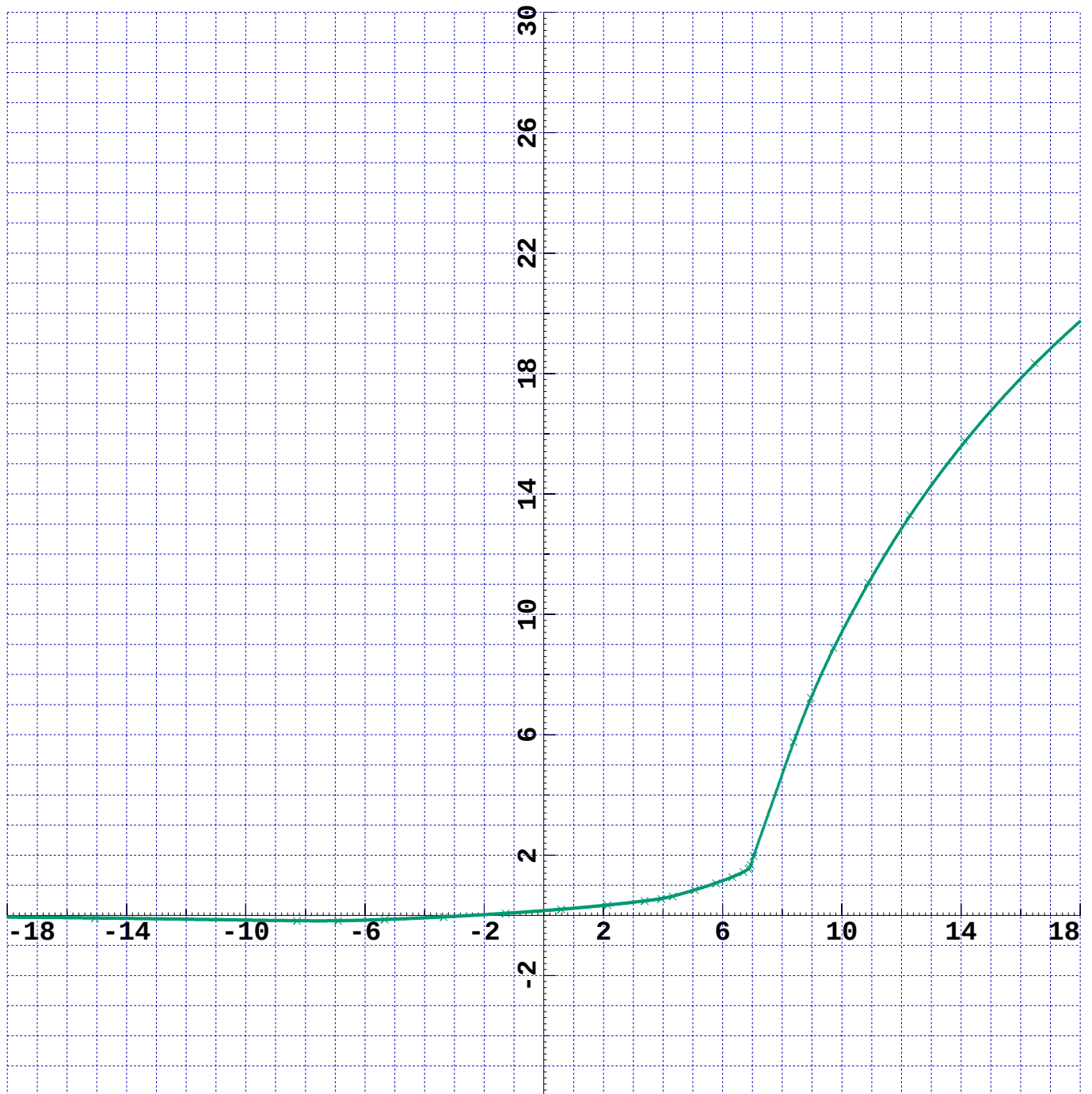
Left wheel:S1002t32.5.wheel Right wheel:S1002t32.5.wheel GAMFN1
Left rail: r_prof/SEC025_l.short.rail Right rail: r_prof/SEC025_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

Ident: kpfr_025



Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel ZFNr
Left rail: r_prof/SEC025_l.short.rail Right rail: r_prof/SEC025_r.short.rail
Wprof_lat_shift= 0 Gauge= 1425-1441

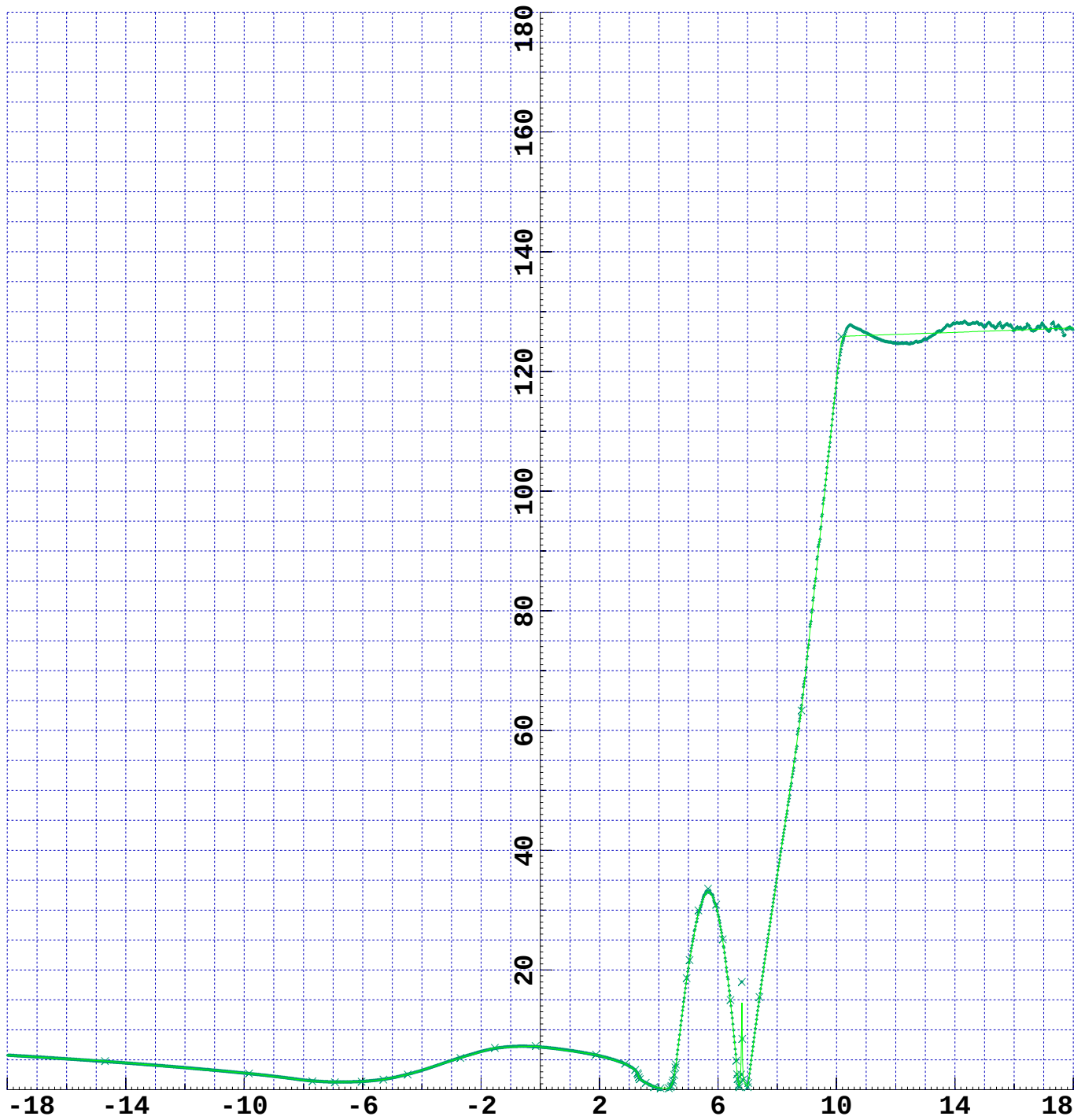
Ident: kpfr_025



Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel
Left rail: r_prof/SEC025_l.short.rail Right rail: r_prof/SEC025_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

ZFN1

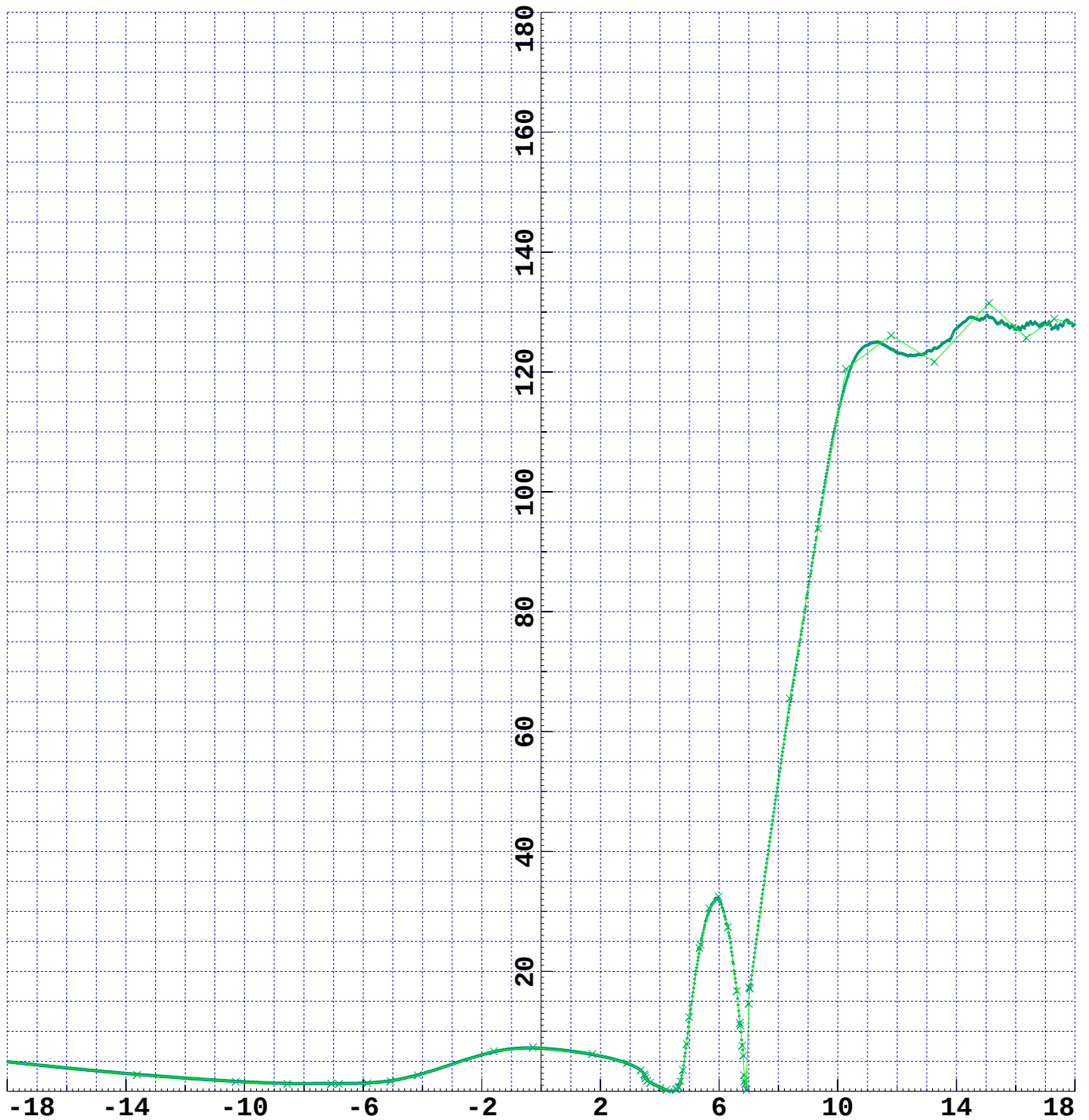
Ident: kpfr_025



Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel
Left rail: r_prof/SEC025_l.short.rail Right rail: r_prof/SEC025_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

ROFNr

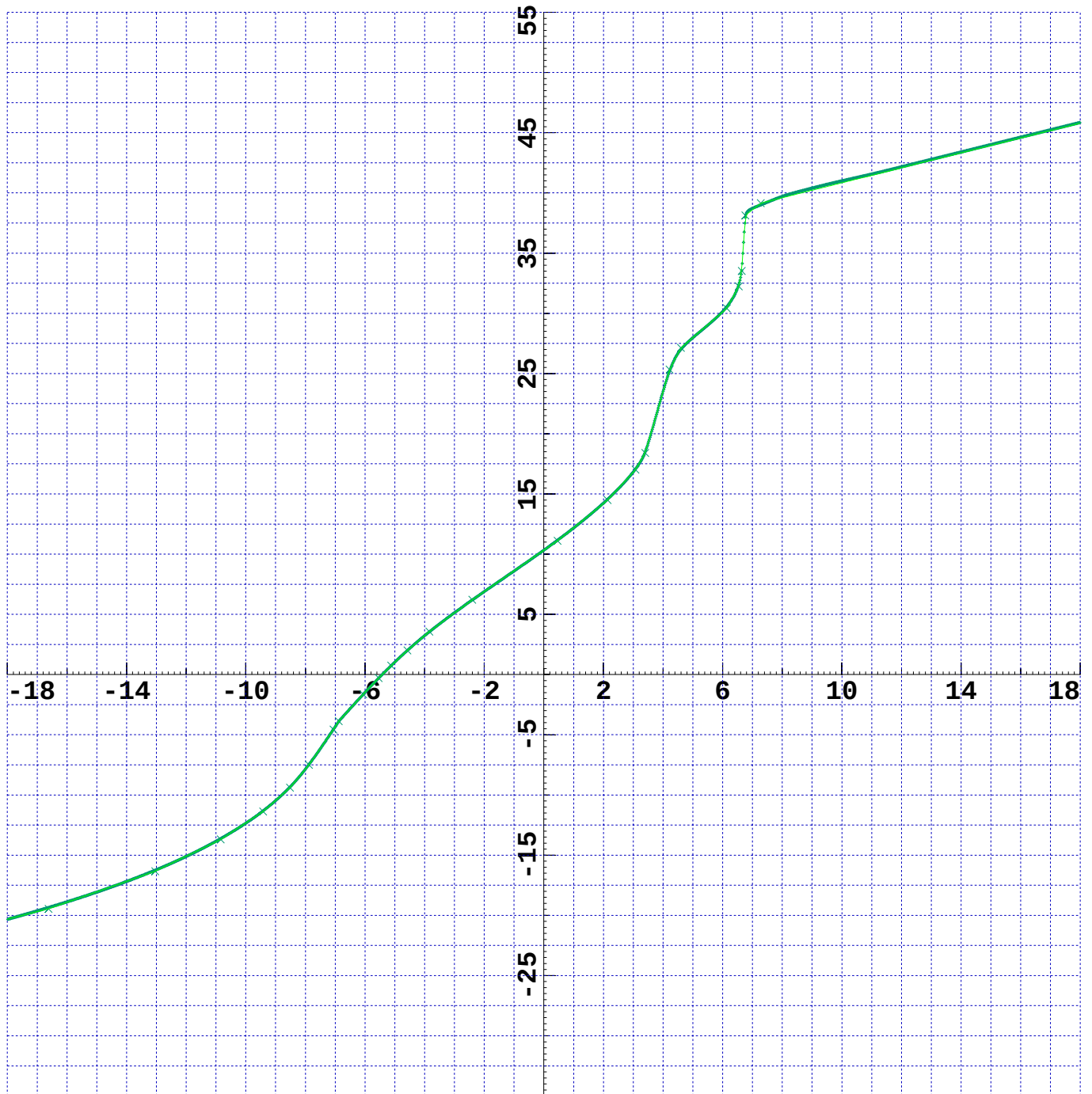
Ident: kpfr_025



Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel
Left rail: r_prof/SEC025_l.short.rail Right rail: r_prof/SEC025_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

ROFN1

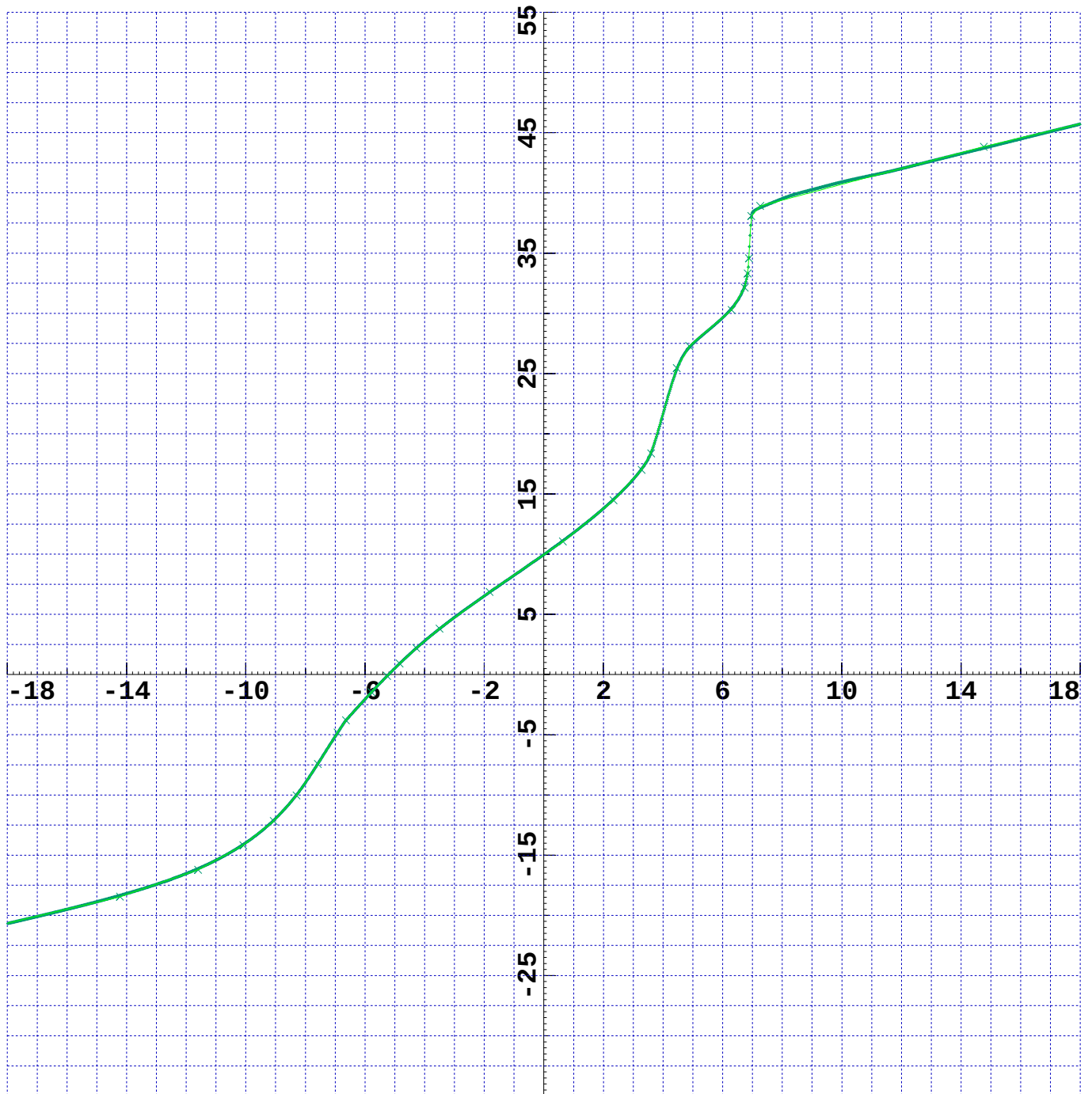
Ident: kpfr_025



Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel
Left rail: r_prof/SEC025_l.short.rail Right rail: r_prof/SEC025_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

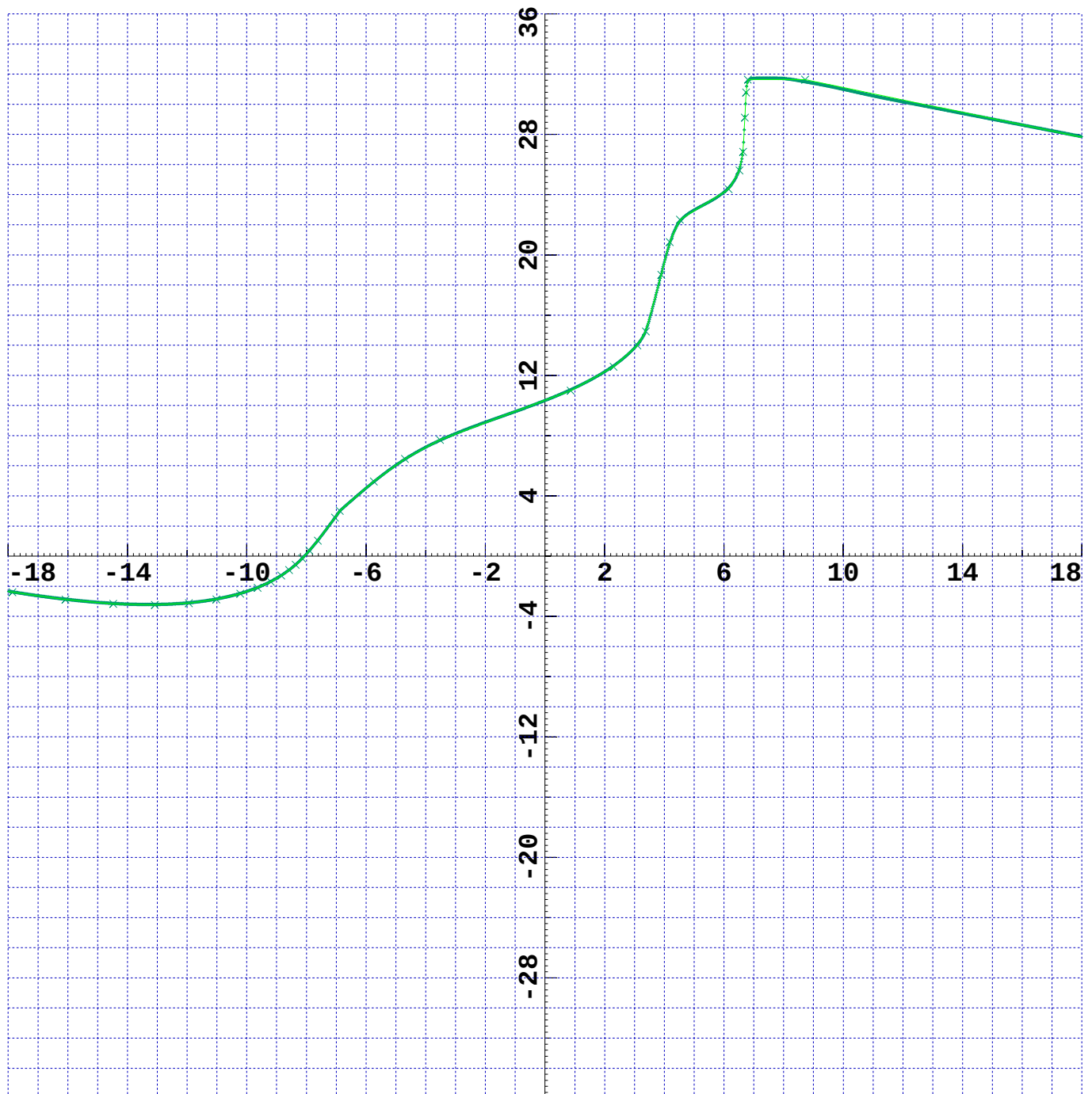
POSWr

Ident: kpfr_025



Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel POSW1
Left rail: r_prof/SEC025_l.short.rail Right rail: r_prof/SEC025_r.short.rail
Wprof_lat_shift= 0 Gauge= 1425-1441

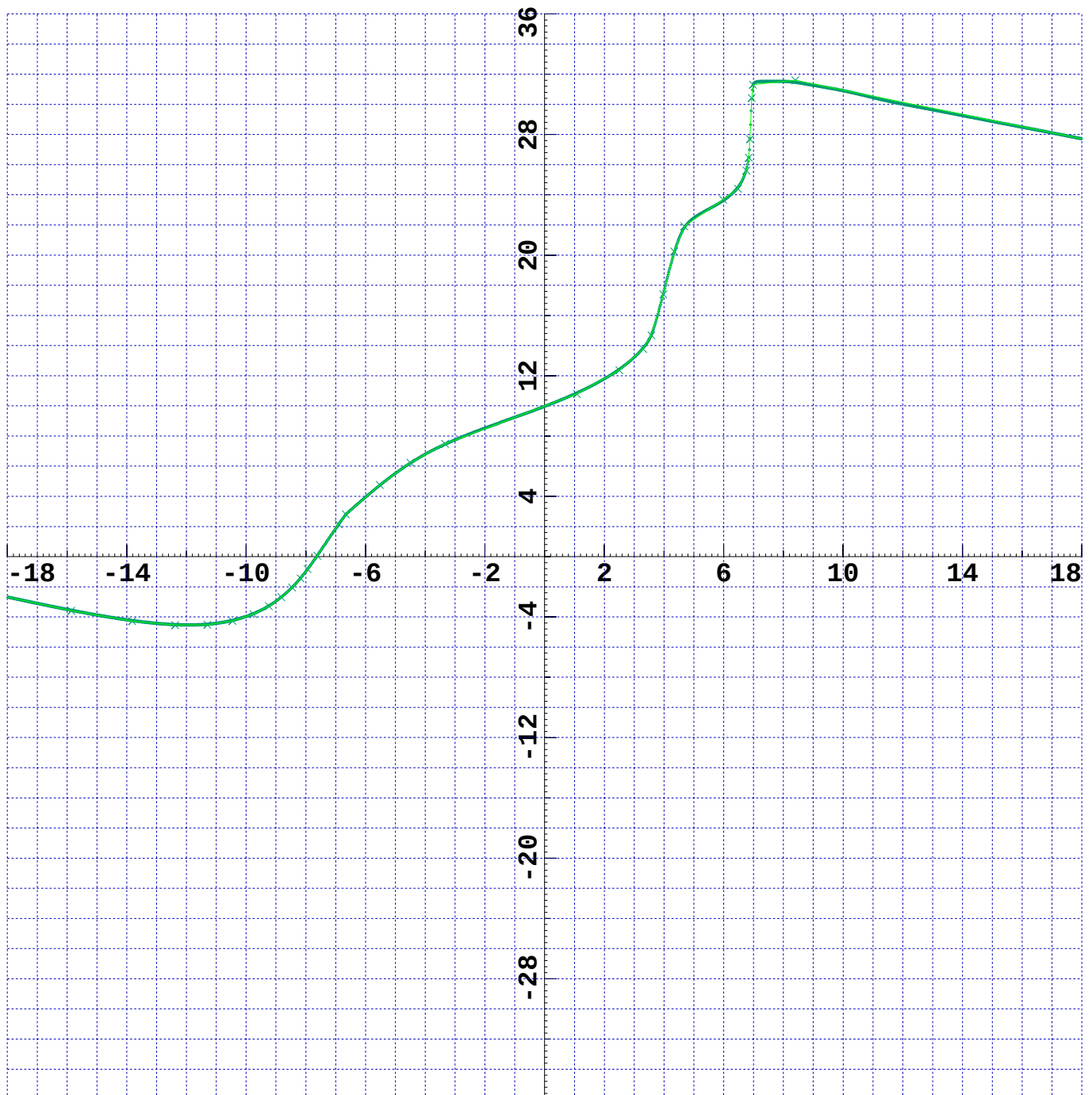
Ident: kpfr_025



Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel
Left rail: r_prof/SEC025_l.short.rail Right rail: r_prof/SEC025_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

POSRR

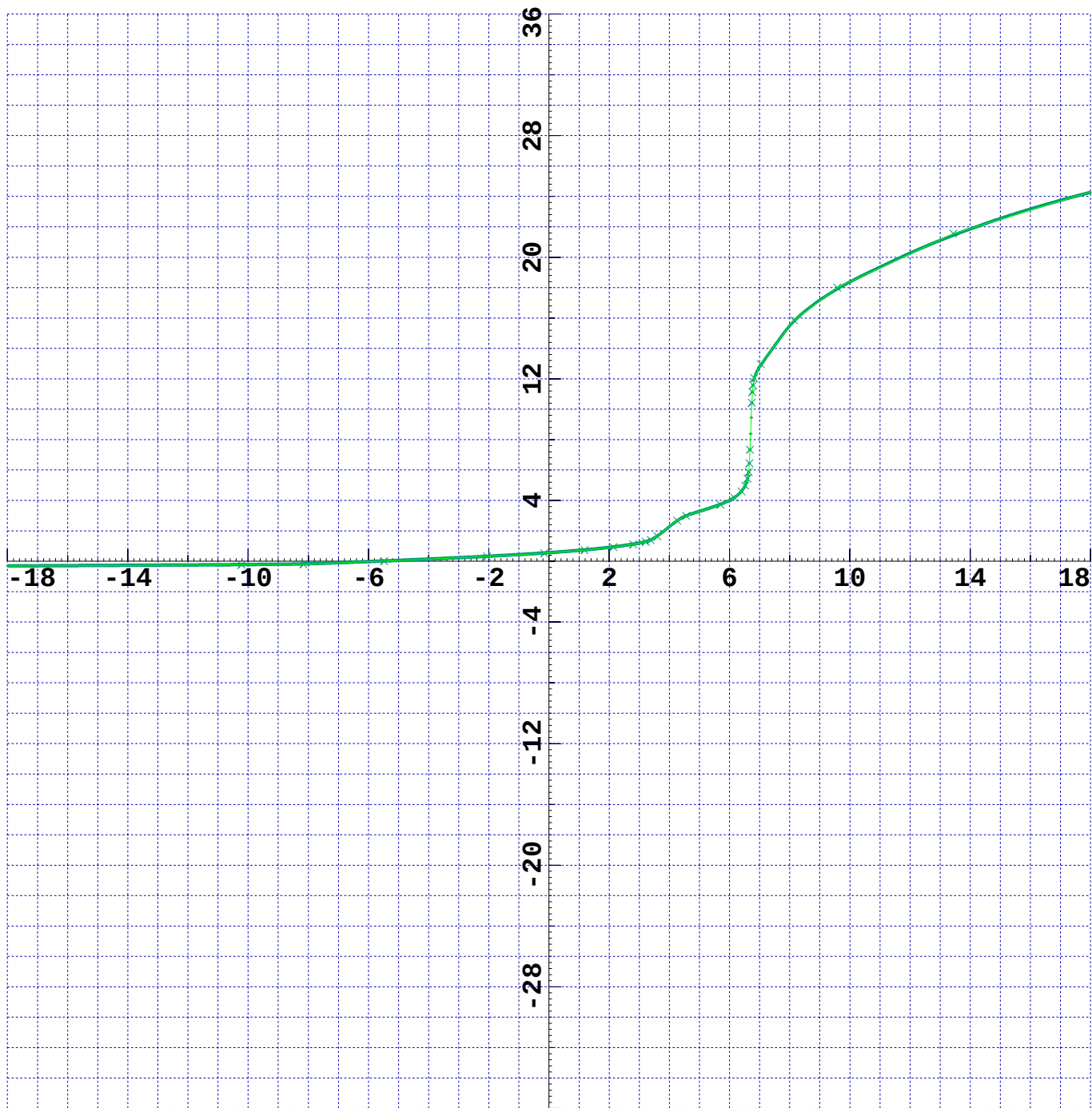
Ident: kpfr_025



Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel
Left rail: r_prof/SEC025_l.short.rail Right rail: r_prof/SEC025_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

POSR1

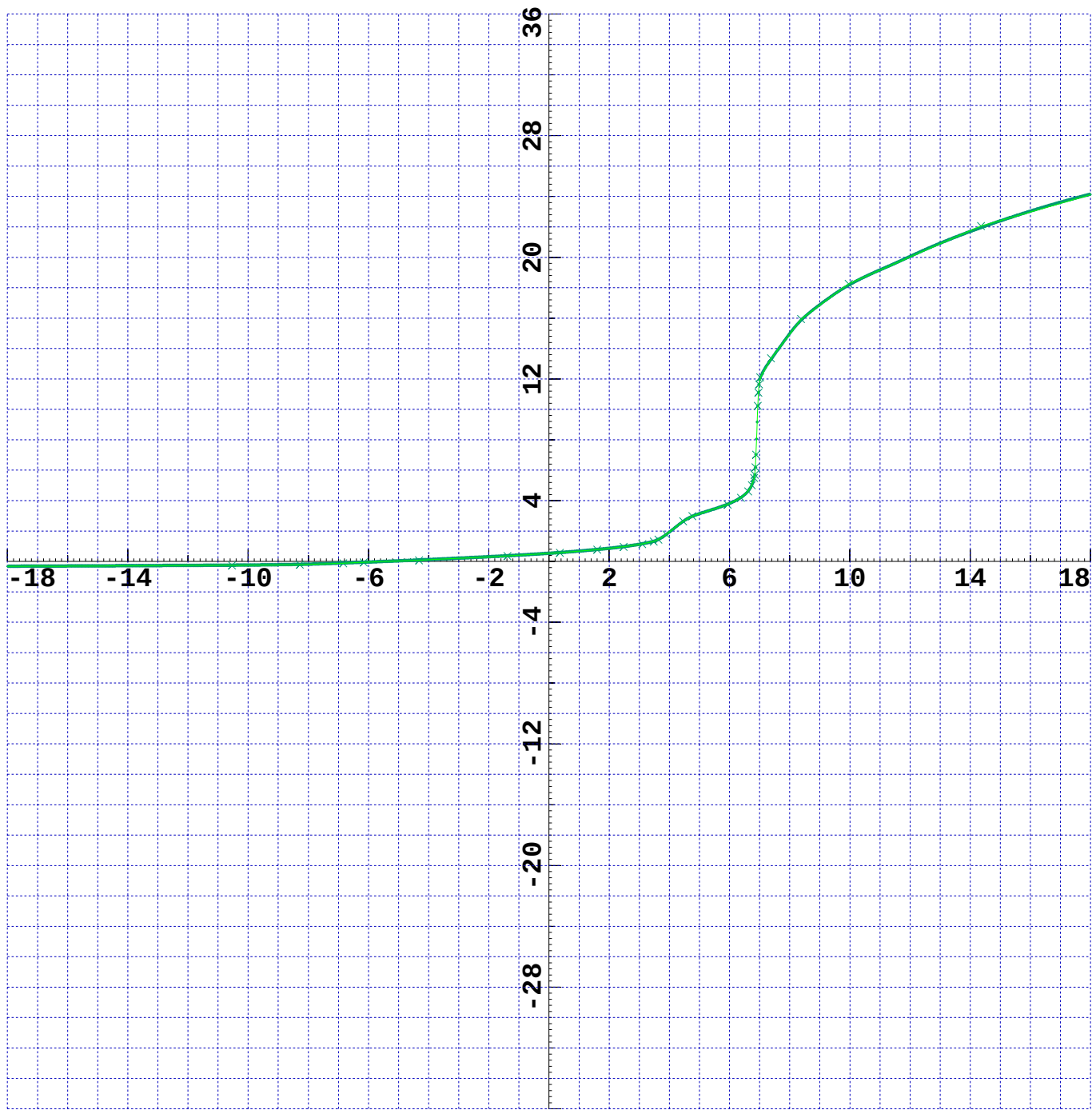
Ident: kpfr_025



Left wheel:S1002t32.5.wheel Right wheel:S1002t32.5.wheel
Left rail: r_prof/SEC025_l.short.rail Right rail: r_prof/SEC025_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

ZWr

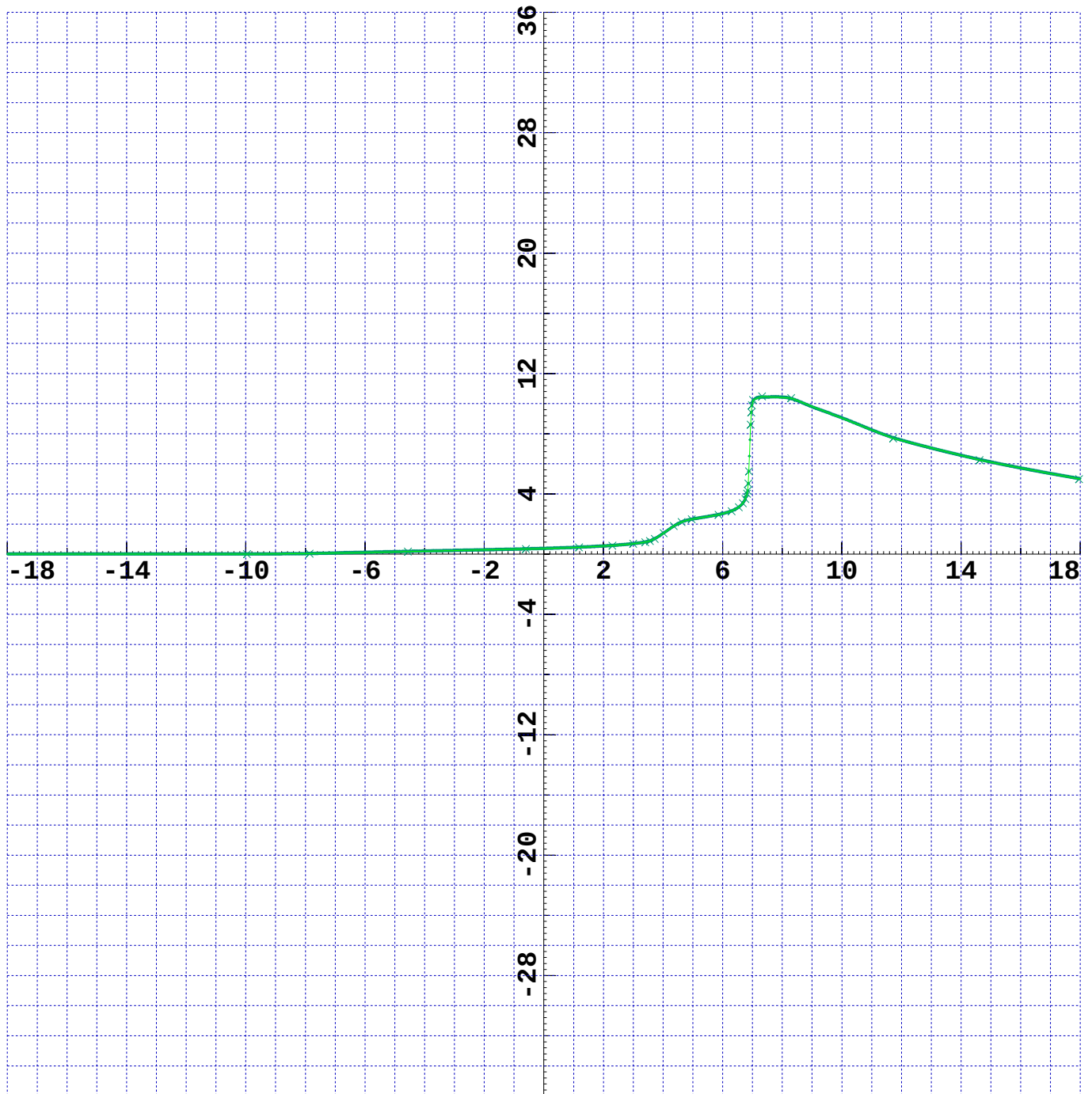
Ident: kpfr_025



Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel ZW1
Left rail: r_prof/SEC025_l.short.rail Right rail: r_prof/SEC025_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

Ident: kpfr_025

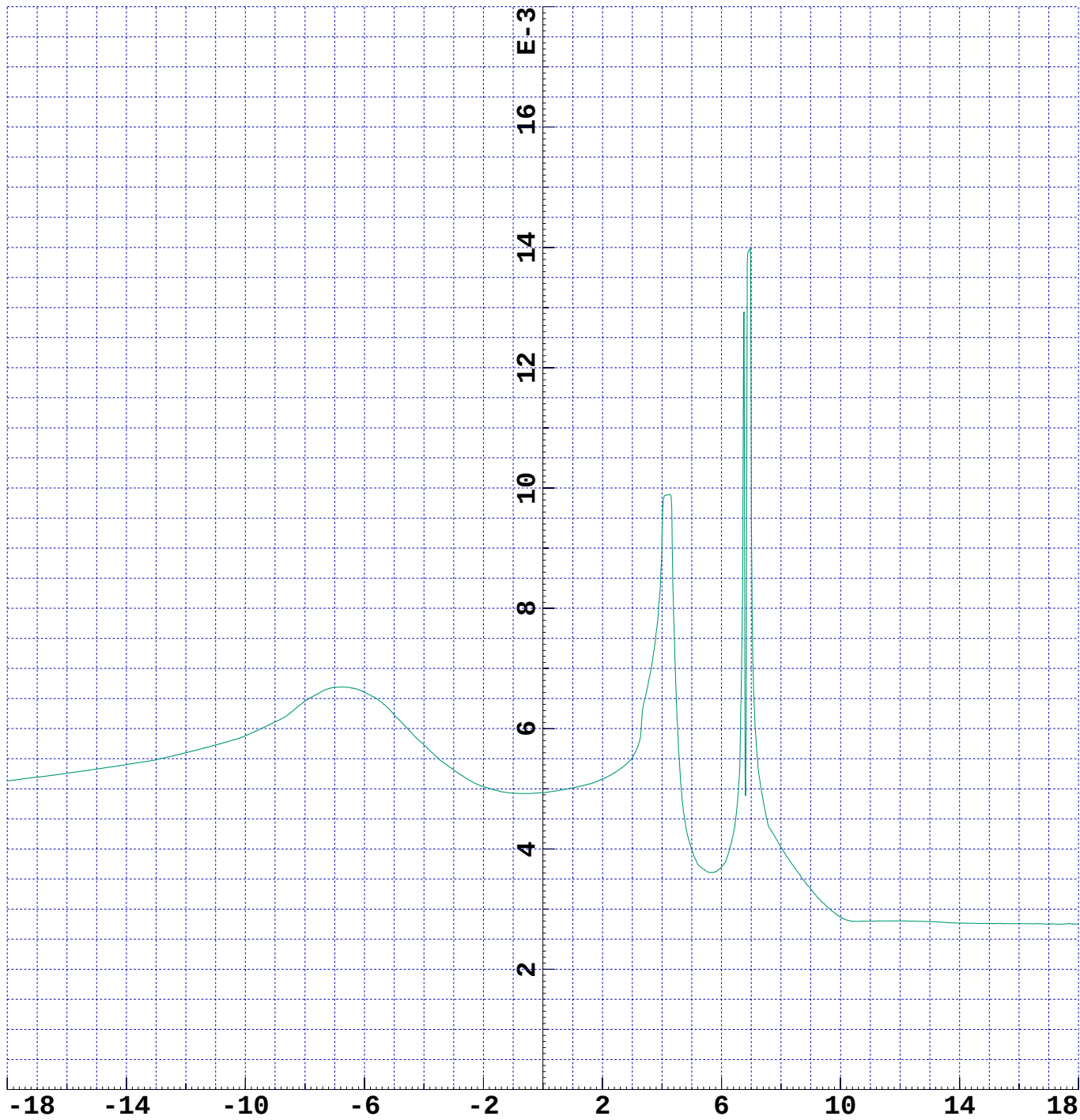




Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel
Left rail: r_prof/SEC025_l.short.rail Right rail: r_prof/SEC025_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

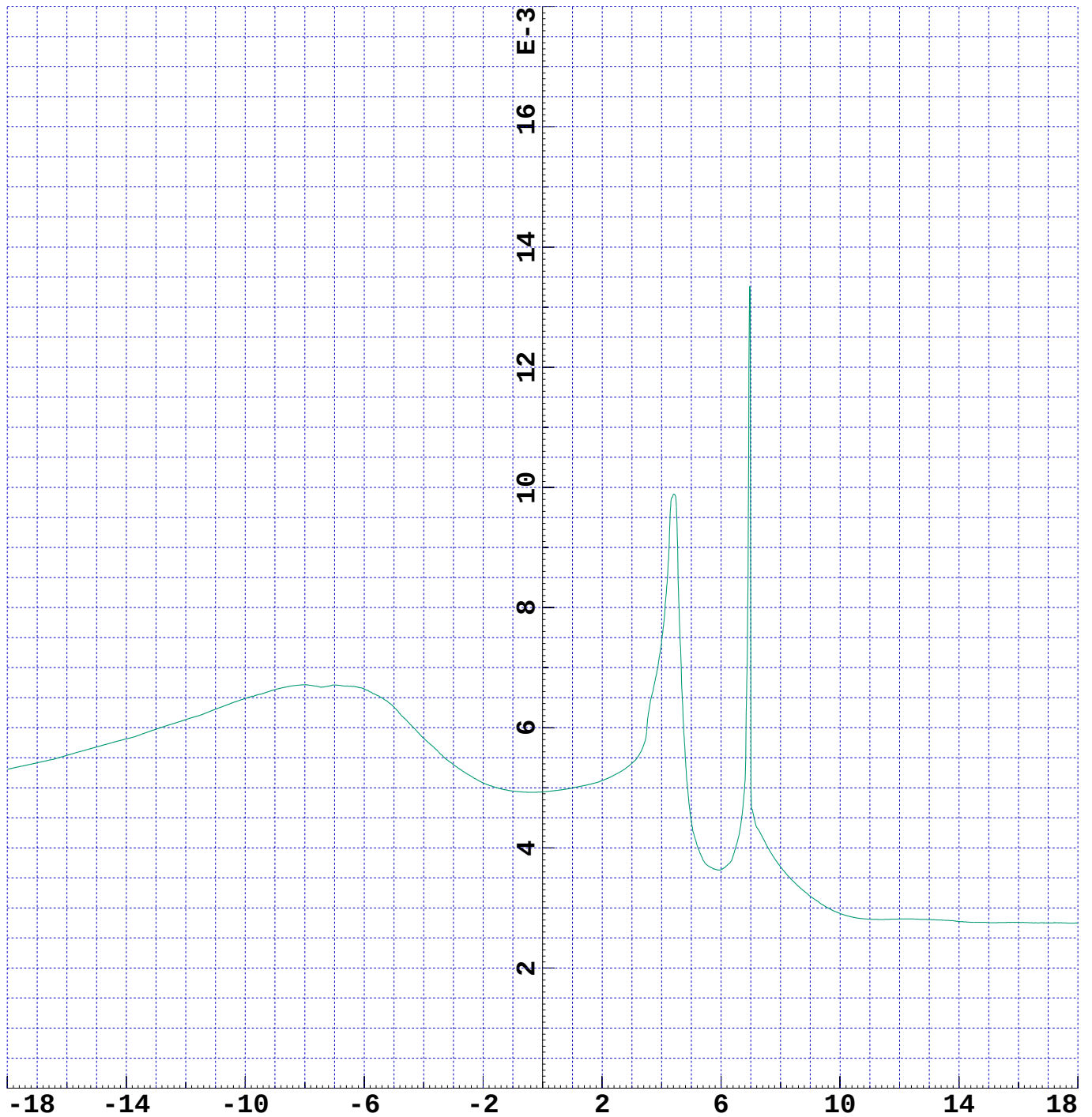
ZR1

Ident: kpfr_025



Left wheel:S1002t32.5.wheel Right wheel:S1002t32.5.wheel C_r
Left rail: r_prof/SEC025_l.short.rail Right rail: r_prof/SEC025_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

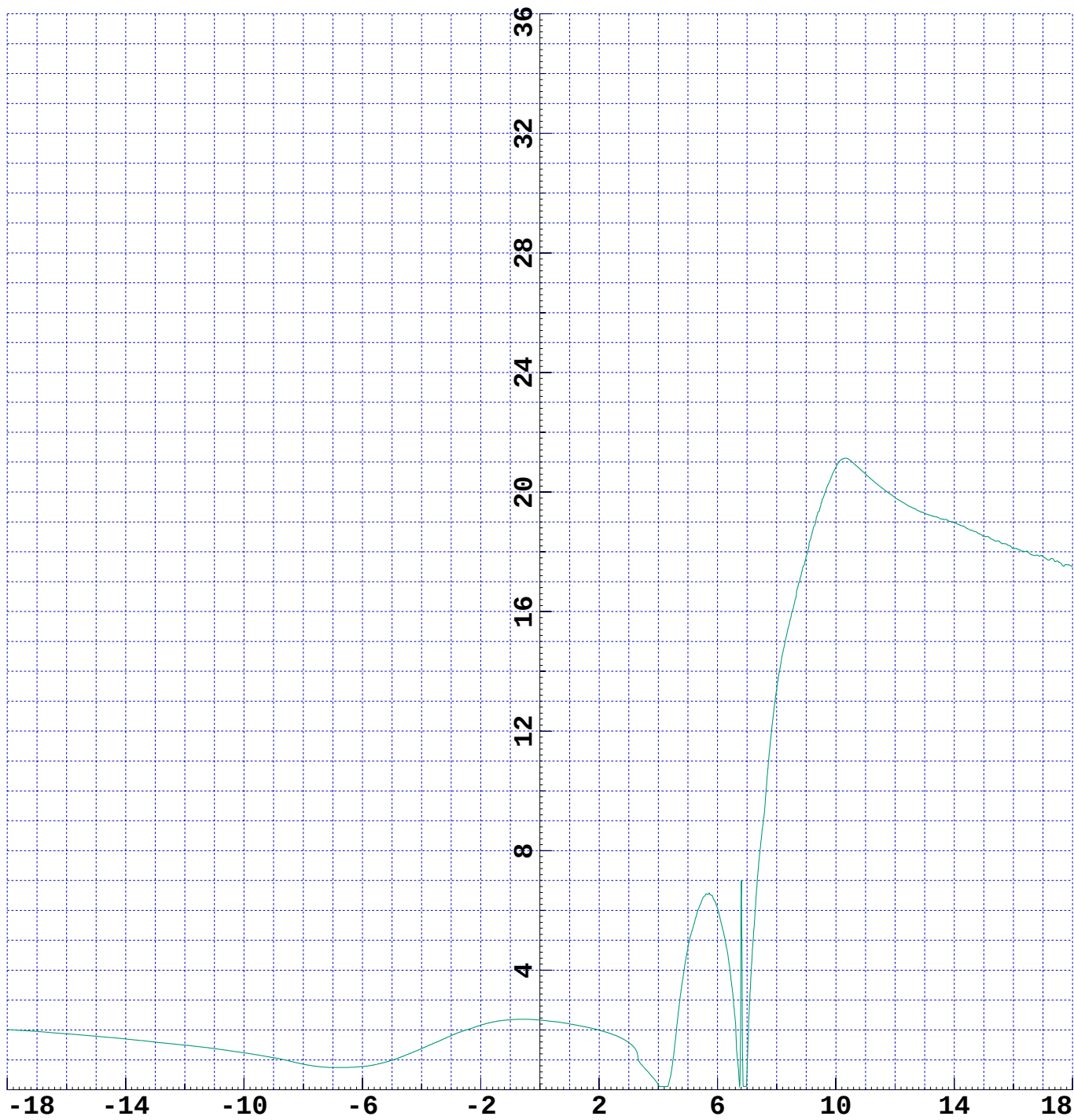
Ident: kpfr_025



Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel
Left rail: r_prof/SEC025_l.short.rail Right rail: r_prof/SEC025_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

C_1

Ident: kpfr_025



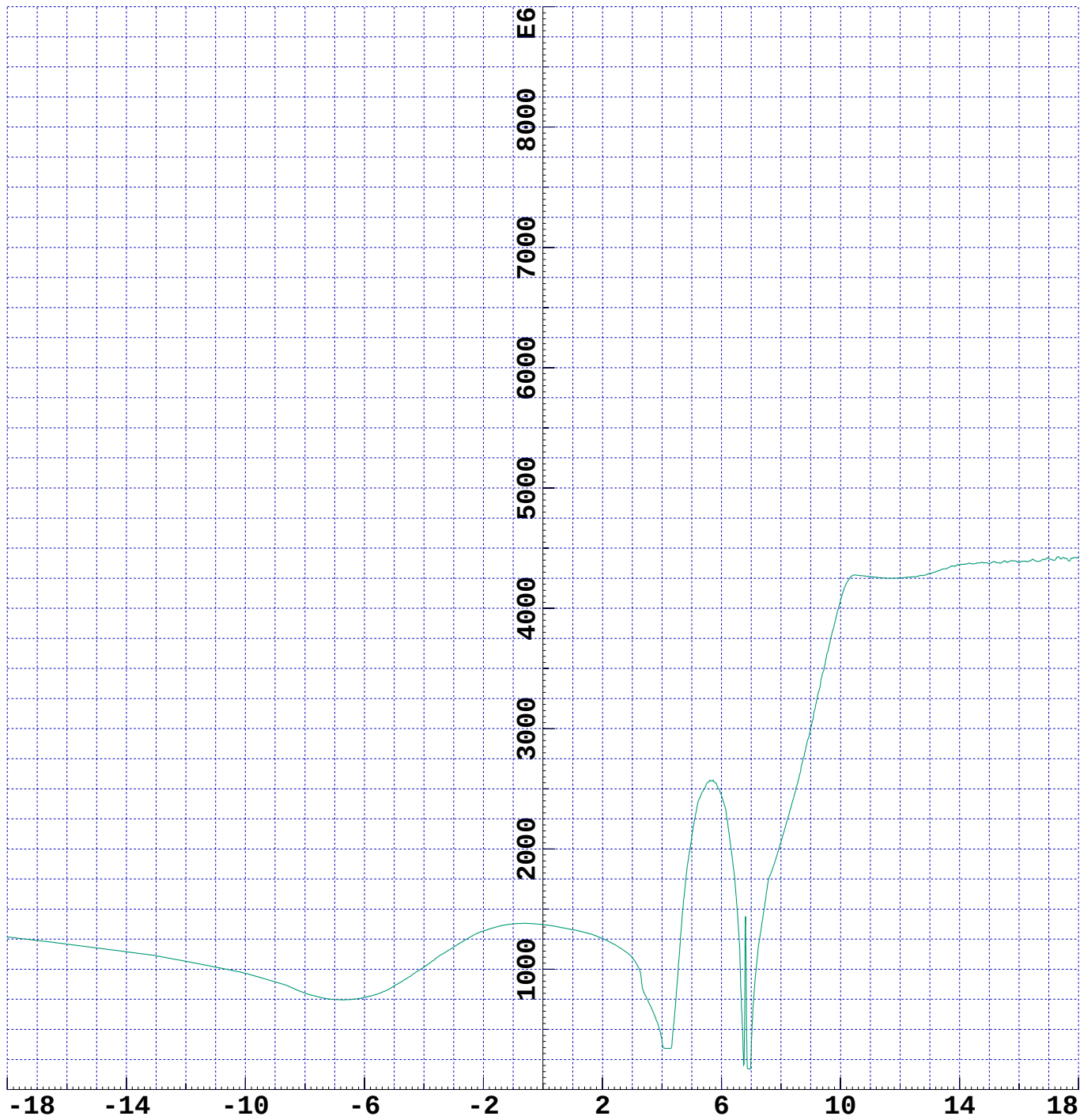
Left wheel:S1002t32.5.wheel Right wheel:S1002t32.5.wheel A/B_r
Left rail: r_prof/SEC025_l.short.rail Right rail: r_prof/SEC025_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

Ident: kpfr_025



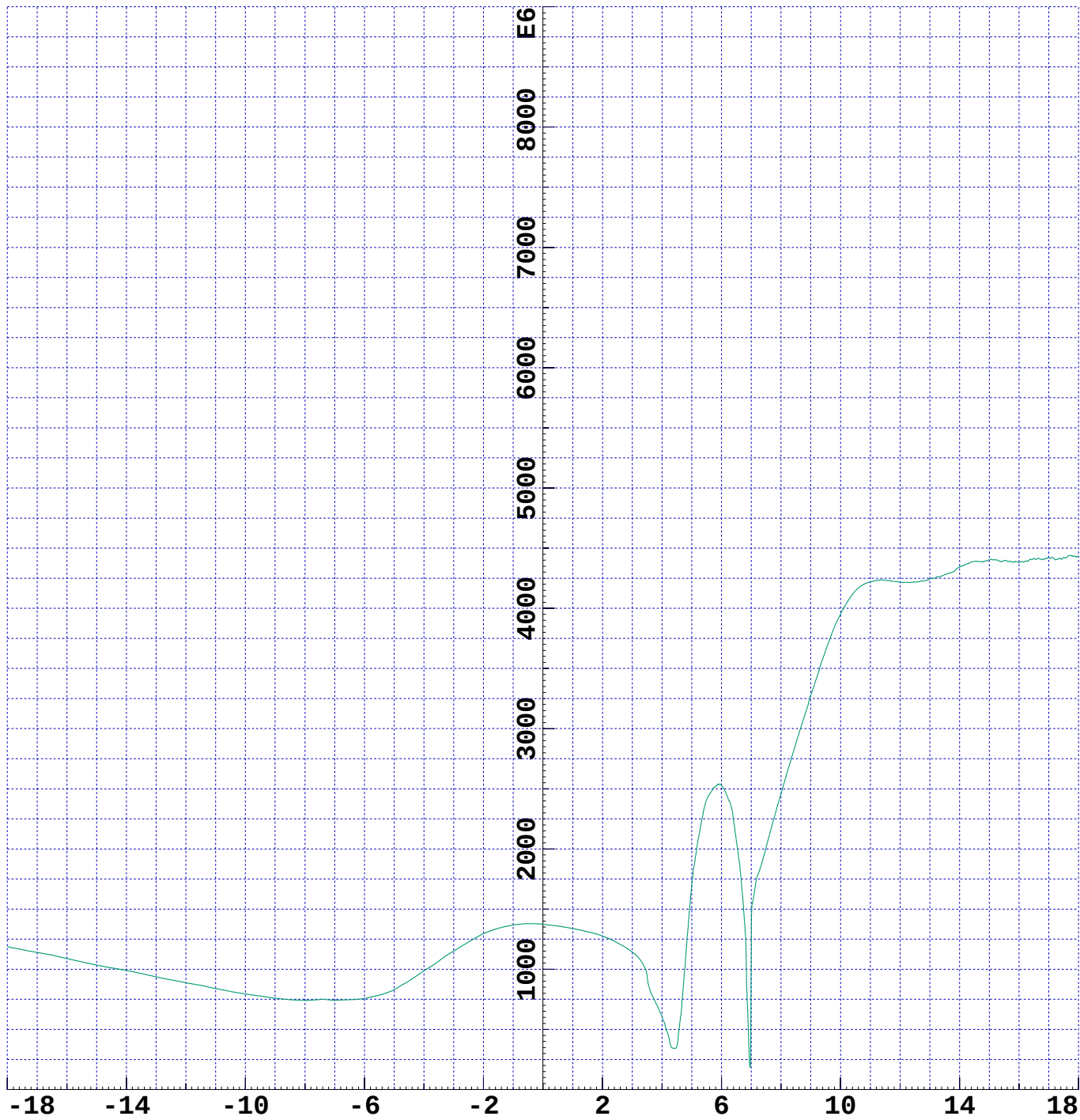
Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel A/B_1
Left rail: r_prof/SEC025_l.short.rail Right rail: r_prof/SEC025_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

Ident: kpfr_025



Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel SIGMAR
Left rail: r_prof/SEC025_l.short.rail Right rail: r_prof/SEC025_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

Ident: kpfr_025



Left wheel:S1002t32.5.wheel Right wheel:S1002t32.5.wheel **SIGMA1**
Left rail: r_prof/SEC025_l.short.rail Right rail: r_prof/SEC025_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

Ident: kpfr_025

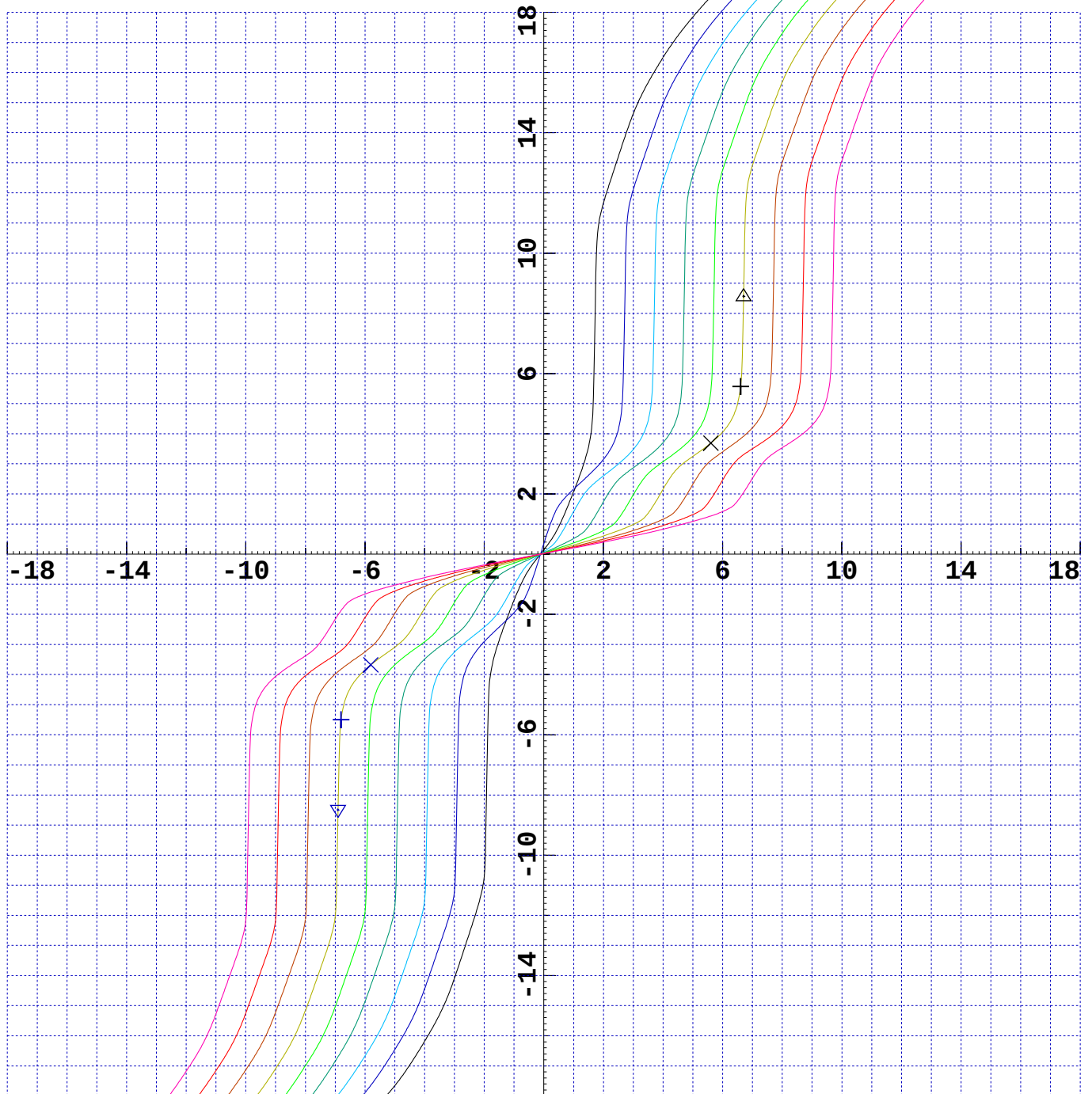
Gauge= 1425 —
 1427 —
 1429 —
 1431 —
 1433 —
 1435 —
 1437 —
 1439 —
 1441 —

Radial Steering Index

× = $\Delta r_E = 3.69$ left curve
 × = $\Delta r_E = 3.68$ right curve
 + = $A0r = 6.60$ 5.57
 + = $A0l = -6.81$ -5.50

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/SEC025_l.short.rail Right rail: r_prof/SEC025_r.short.rail
 Wprof_lat_shift= 0 Gauge= 1425-1441

rr-rl

Ident: kpfr_025

GENSYS-KPF.1308

Delta_Y=

.1

.5

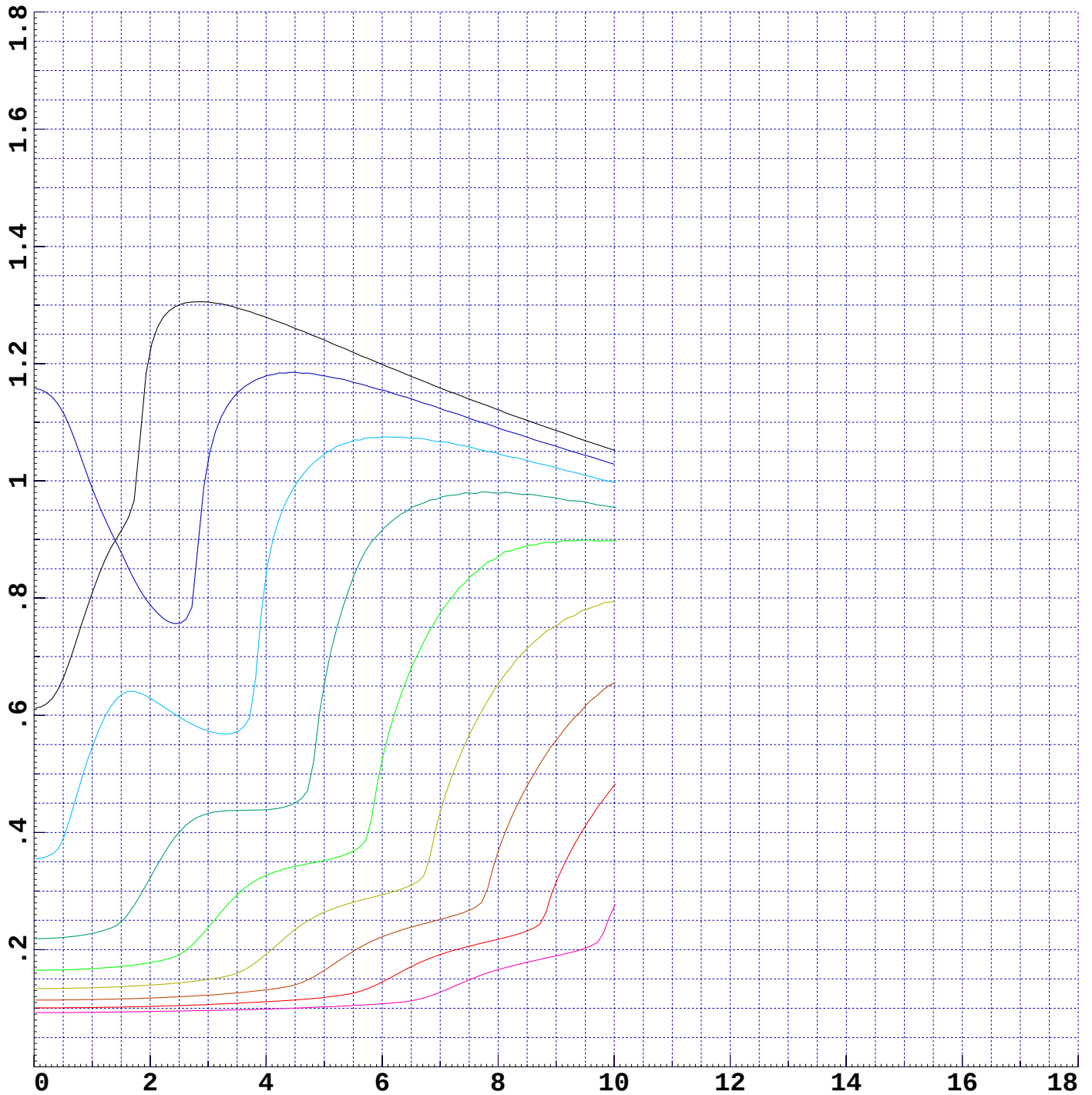
2

3

4

6

Gauge=	1425	—	.614	.663	1.220	1.305	1.279	1.198
	1427	—	1.156	1.117	.788	1.033	1.179	1.155
	1429	—	.356	.389	.629	.573	.839	1.075
	1431	—	.219	.221	.323	.432	.439	.916
	1433	—	.165	.165	.178	.238	.327	.524
	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	.098	.108



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

Left rail: r_prof/SEC025_l.short.rail Right rail: r_prof/SEC025_r.short.rail

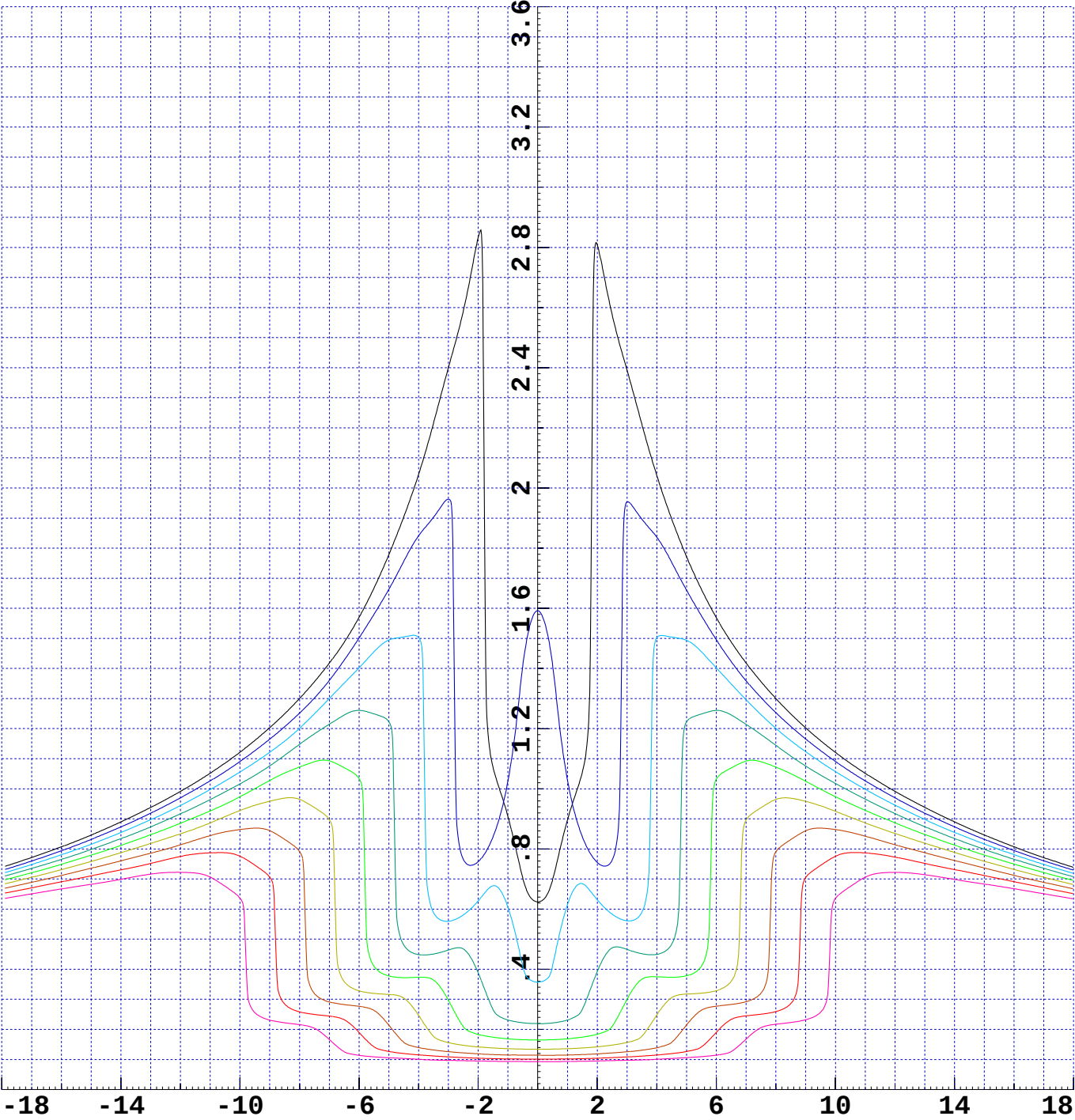
wprof_lat_shift= 0 Gauge= 1425-1441

UIC519

Ident: kpfr_025

GENSYS-KPF.1308

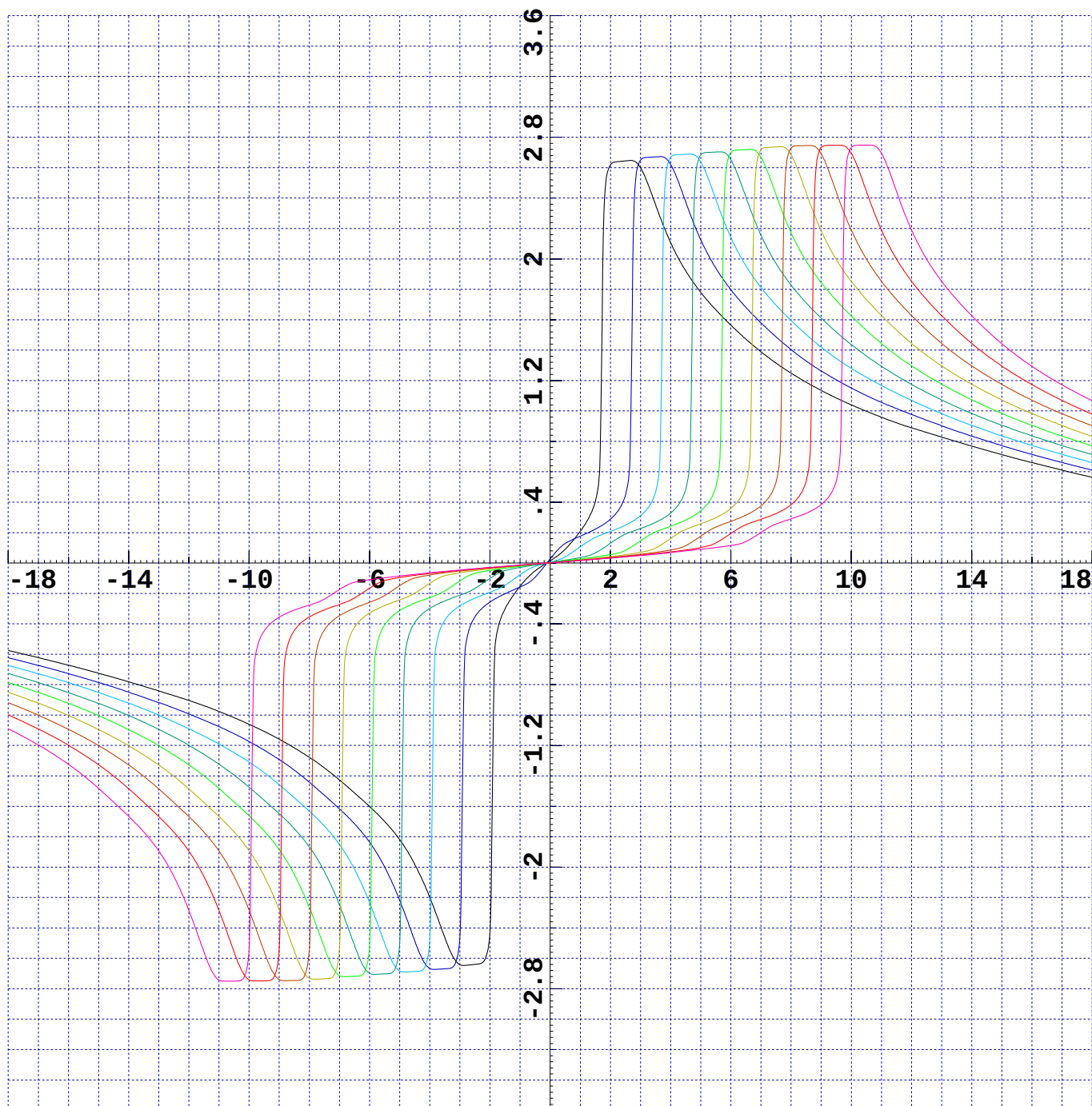
Delta_Y=		.1	.5	2	3	4	6
Gauge= 1425	—	.626	.697	2.810	2.391	2.041	1.568
1427	—	1.584	1.410	.755	1.953	1.837	1.495
1429	—	.358	.413	.631	.561	1.502	1.401
1431	—	.219	.222	.392	.466	.449	1.260
1433	—	.165	.166	.184	.300	.375	1.033
1435	—	.134	.134	.142	.156	.248	.329
1437	—	.114	.114	.119	.126	.139	.277
1439	—	.101	.101	.104	.109	.115	.191
1441	—	.093	.093	.095	.097	.100	.114



Left wheel:S1002t32.5.wheel Right wheel:S1002t32.5.wheel **lambda**
Left rail: r_prof/SEC025_l.short.rail Right rail: r_prof/SEC025_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

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/SEC025_l.short.rail Right rail: r_prof/SEC025_r.short.rail
 Wprof_lat_shift= 0 Gauge= 1425-1441

Ident: kpfr_025

GENSYS-KPF.1308

Delta_Y=

.1

.5

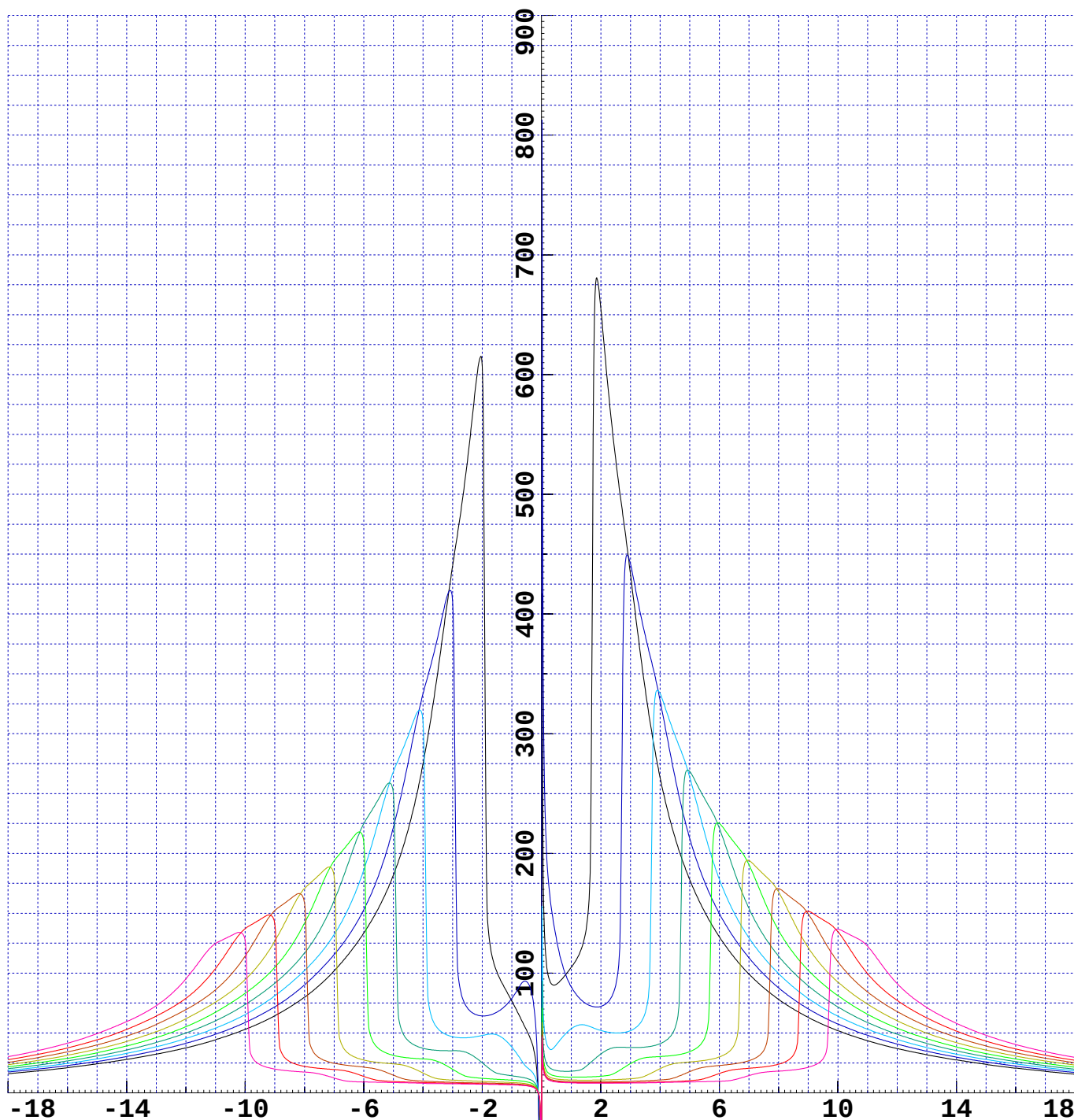
2

3

4

6

Gauge= 1425	—	135.25	90.63	654.80	433.05	263.30	130.35
1427	—	260.28	129.14	72.22	441.70	327.67	149.77
1429	—	51.96	40.15	52.08	51.99	333.65	178.41
1431	—	30.96	18.73	32.52	37.89	41.08	221.08
1433	—	23.42	14.02	13.81	24.46	30.35	224.99
1435	—	19.40	11.56	10.72	11.77	20.22	29.93
1437	—	17.08	10.13	9.20	9.64	10.74	22.85
1439	—	15.78	9.33	8.41	8.68	9.18	16.21
1441	—	15.29	9.01	8.11	8.20	8.53	9.62



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

Left rail: r_prof/SEC025_l.short.rail Right rail: r_prof/SEC025_r.short.rail

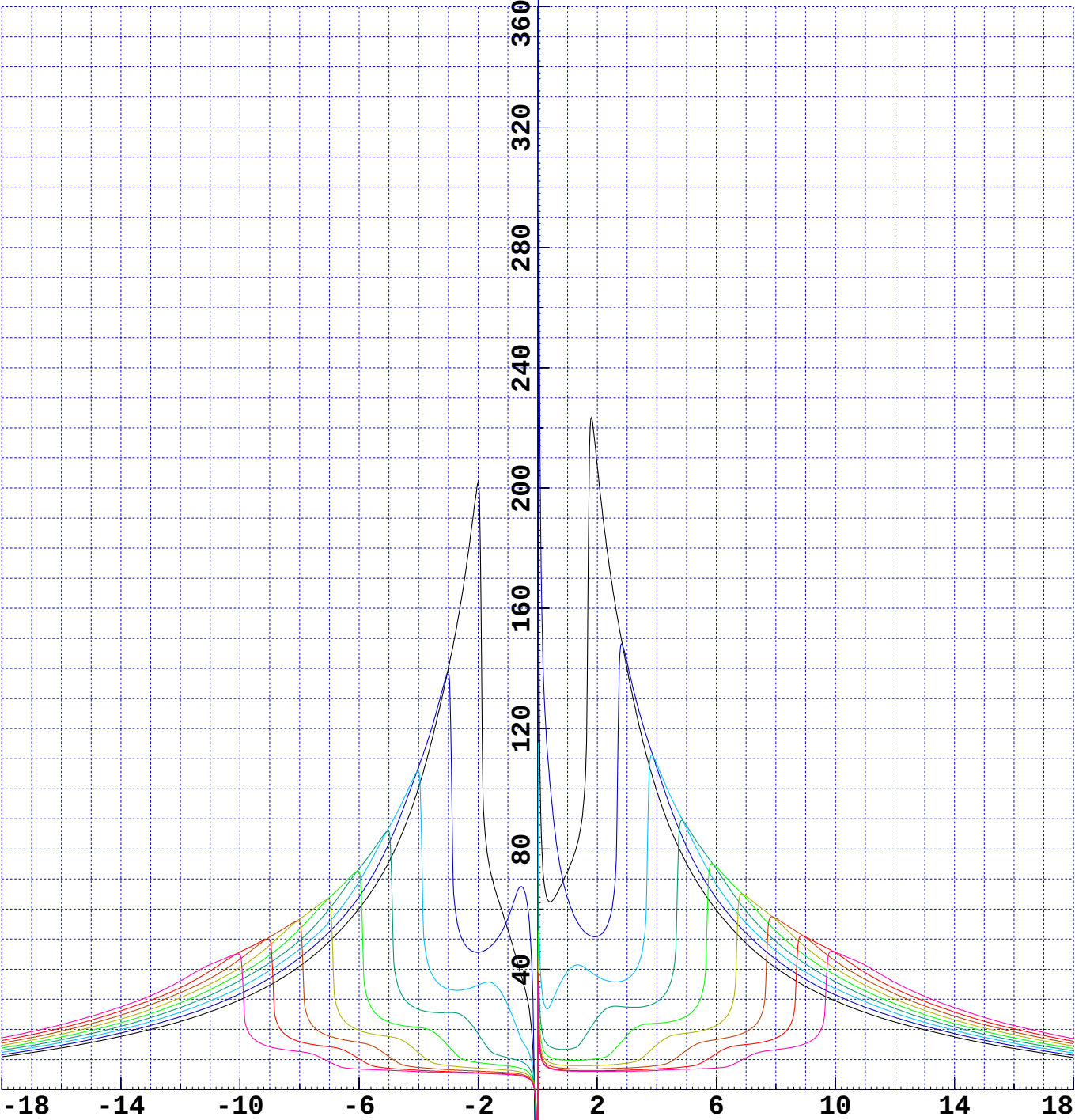
wprof_lat_shift= 0 Gauge= 1425-1441

KAPPA

Ident: kpfr_025

GENSYS-KPF.1308

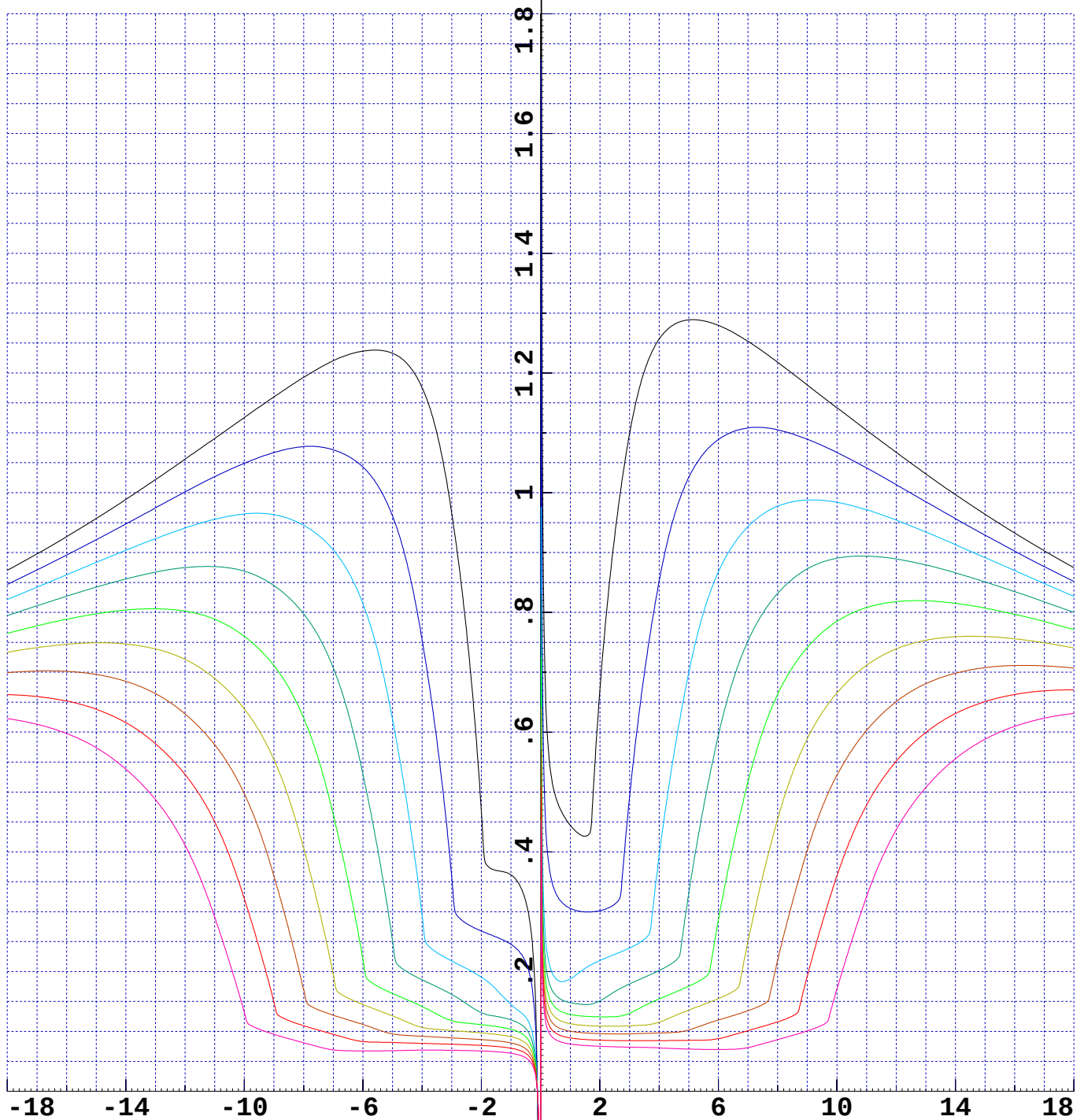
Delta_Y=		.1	.5	2	3	4	6
Gauge= 1425	—	93.76	62.87	207.18	139.78	99.19	59.67
1427	—	188.27	93.18	50.91	141.95	106.98	63.66
1429	—	38.43	29.64	37.60	36.80	108.24	68.27
1431	—	22.99	13.90	23.89	27.43	29.16	73.29
1433	—	17.43	10.43	10.26	18.00	22.01	74.07
1435	—	14.47	8.62	7.99	8.76	14.90	21.34
1437	—	12.75	7.56	6.87	7.19	8.00	16.64
1439	—	11.80	6.97	6.28	6.48	6.85	11.98
1441	—	11.44	6.74	6.06	6.14	6.38	7.18



GENSYS-KPF.1308

Delta_Y=

Gauge=		.1	.5	2	3	4	6
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/SEC025_l.short.rail Right rail: r_prof/SEC025_r.short.rail

wprof_lat_shift= 0 Gauge= 1425-1441

RollAC

Ident: kpfr_025