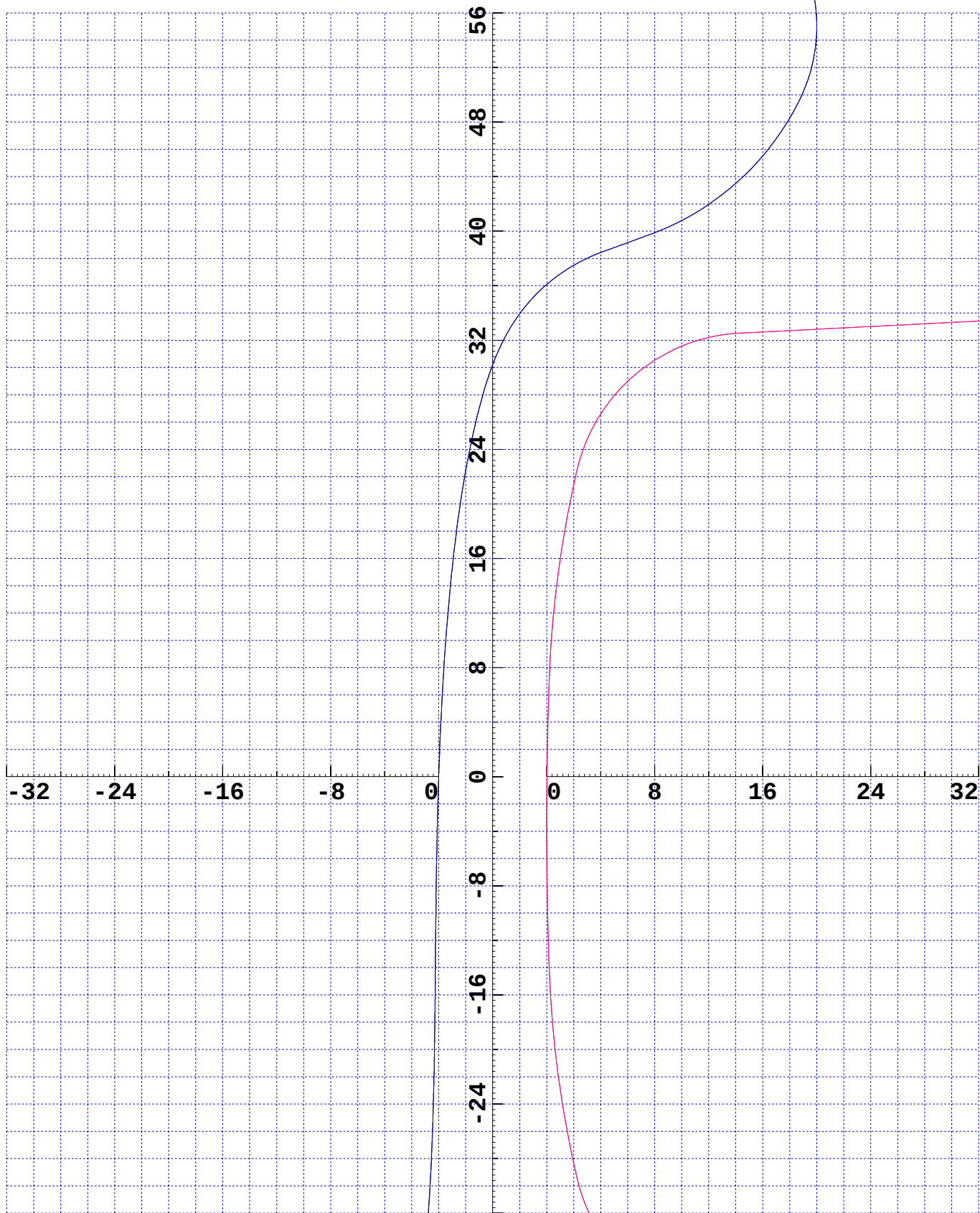
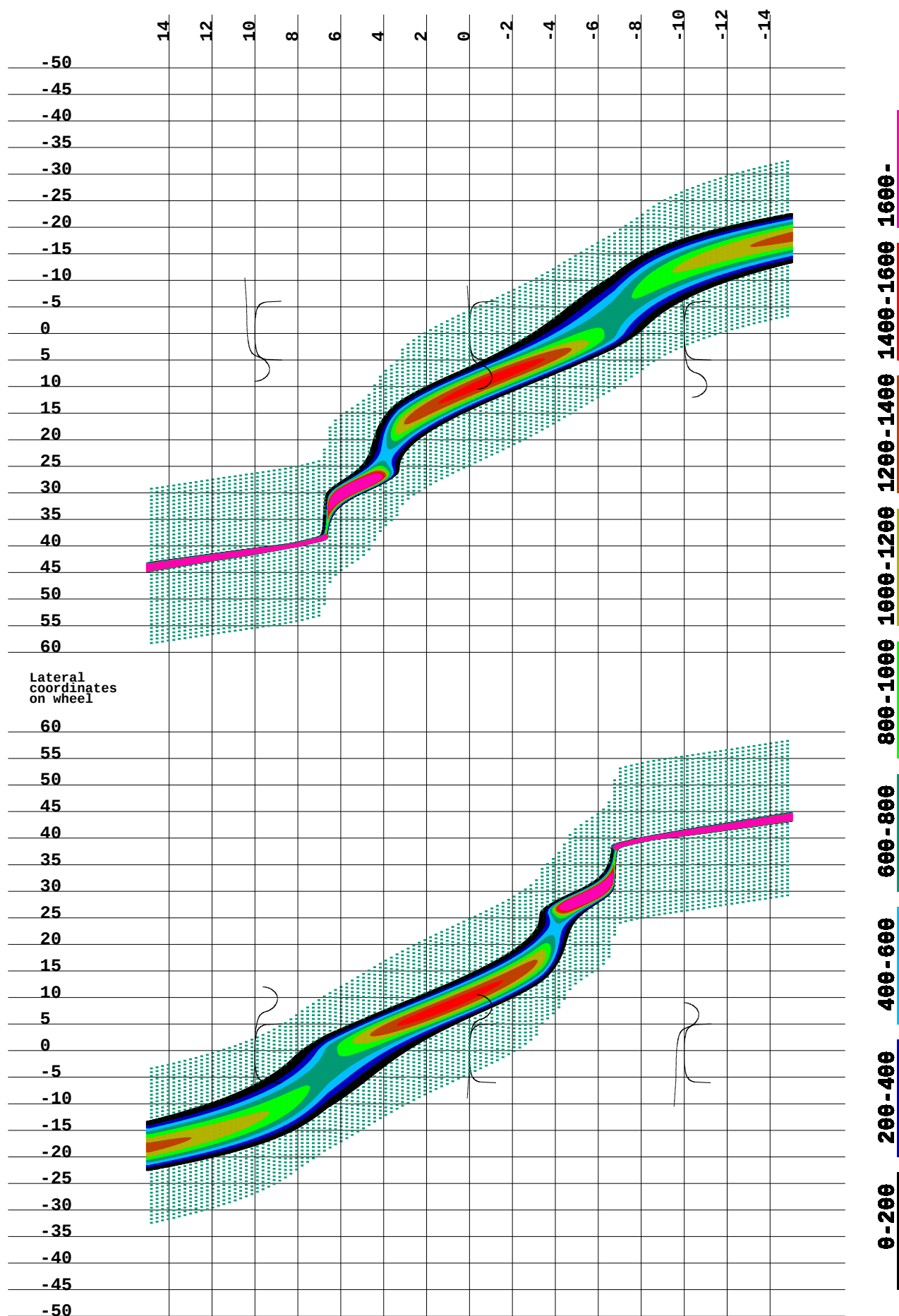


- Right wheel
- Left wheel
- Right rail
- Left rail



Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel WRGEOM
Left rail: r_prof/SEC030_l.short.rail Right rail: r_prof/SEC030_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

Ident: kpfr_030

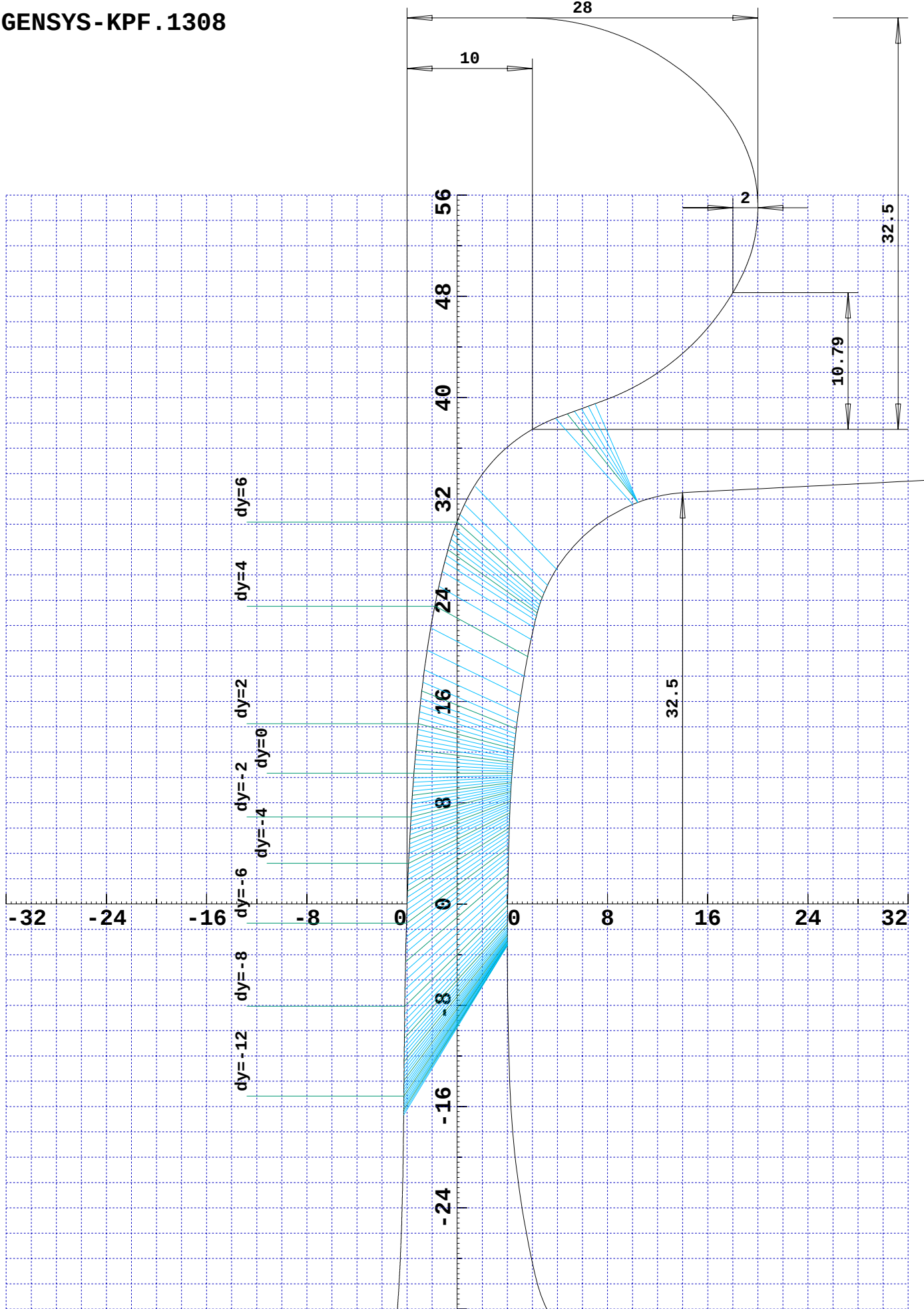


Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel

Left rail: r_prof/SEC030_l.short.rail Right rail: r_prof/SEC030_r.sho

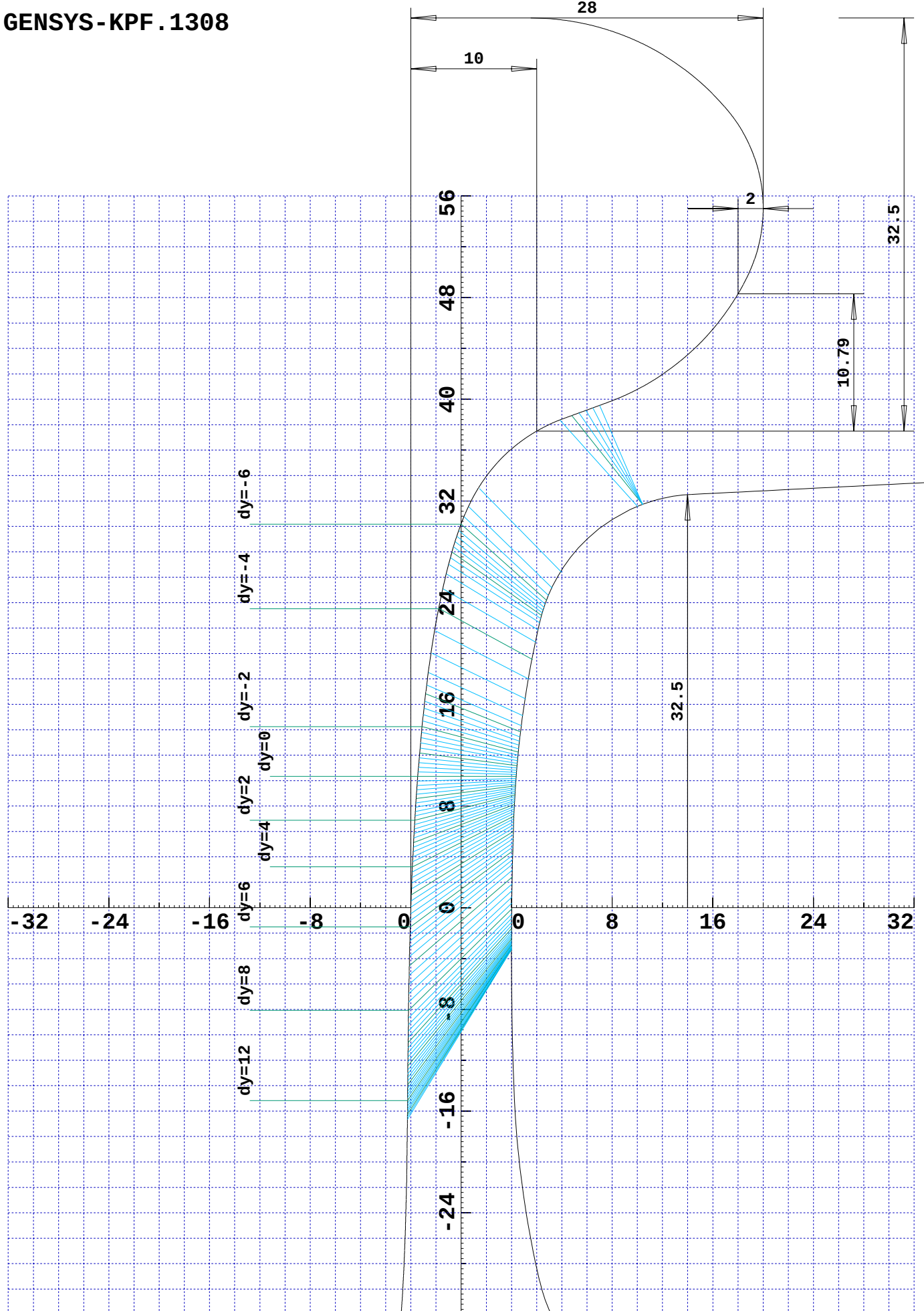
Wprof_lat_shift= 0 Gauge= 1425-1441

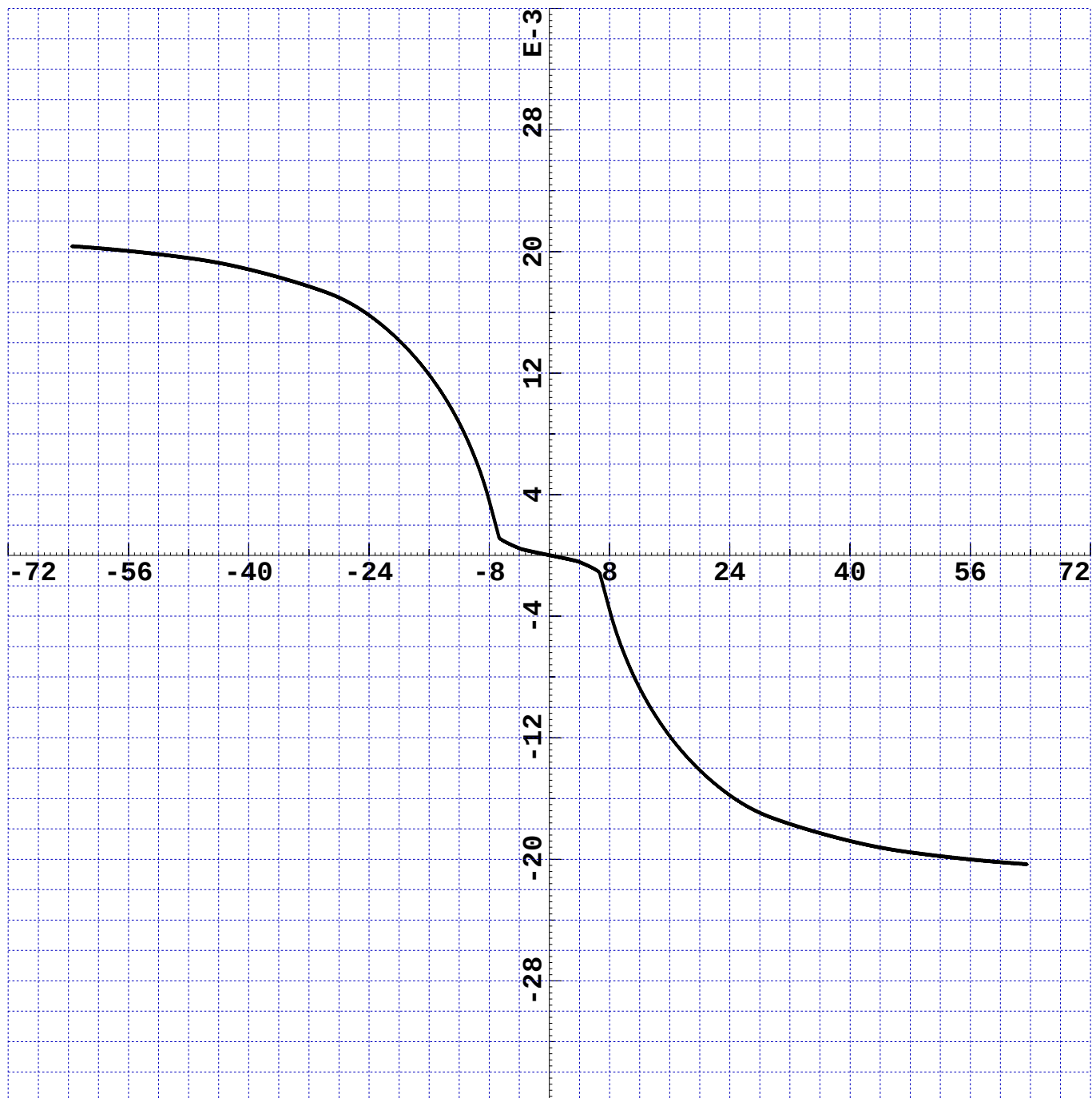
Contact Pressure



Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel CONNr
Left rail: r_prof/SEC030_l.short.rail Right rail: r_prof/SEC030_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

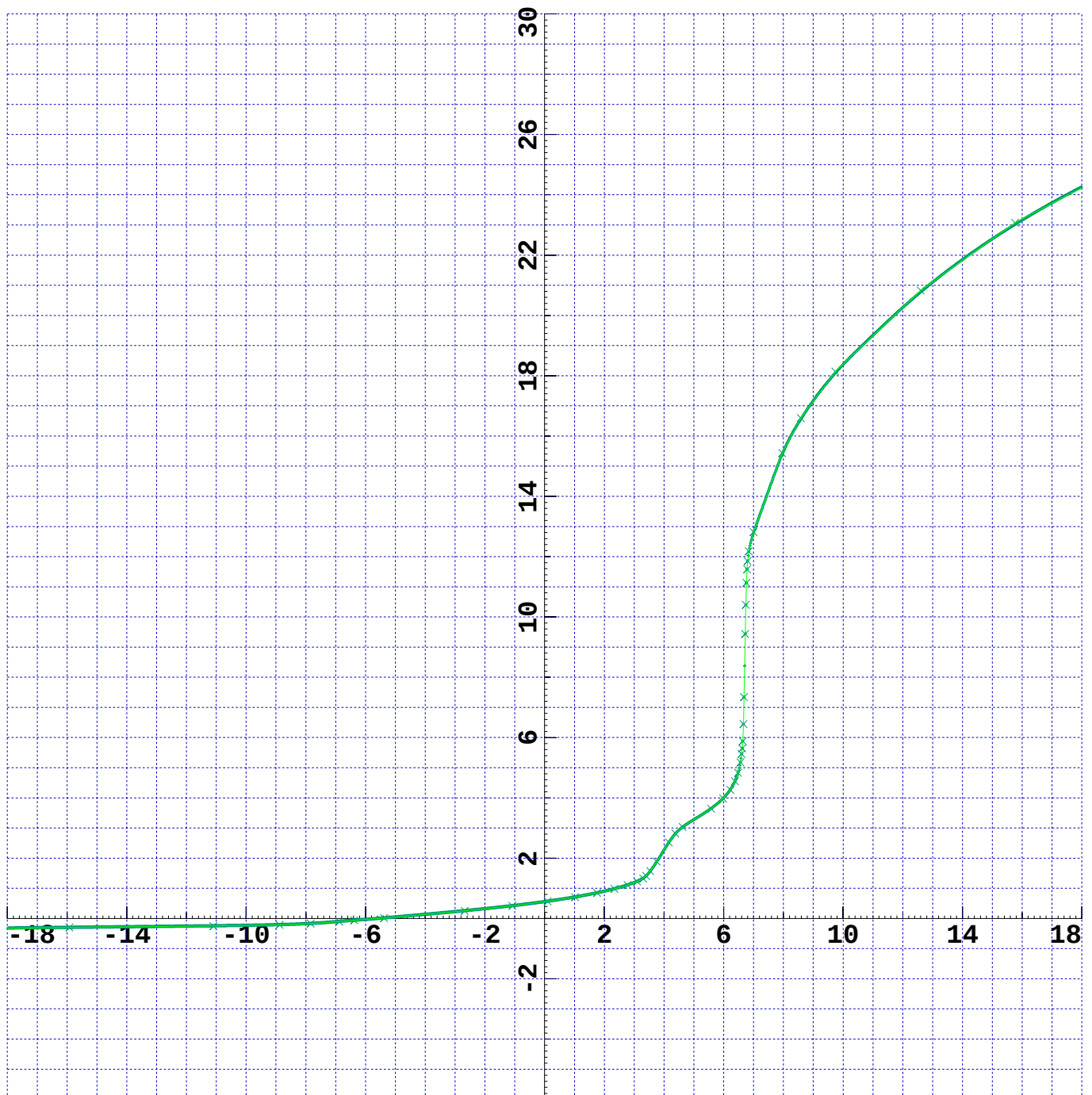
Ident: kpfr_030





Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel **Flax1**
Left rail: r_prof/SEC030_l.short.rail Right rail: r_prof/SEC030_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

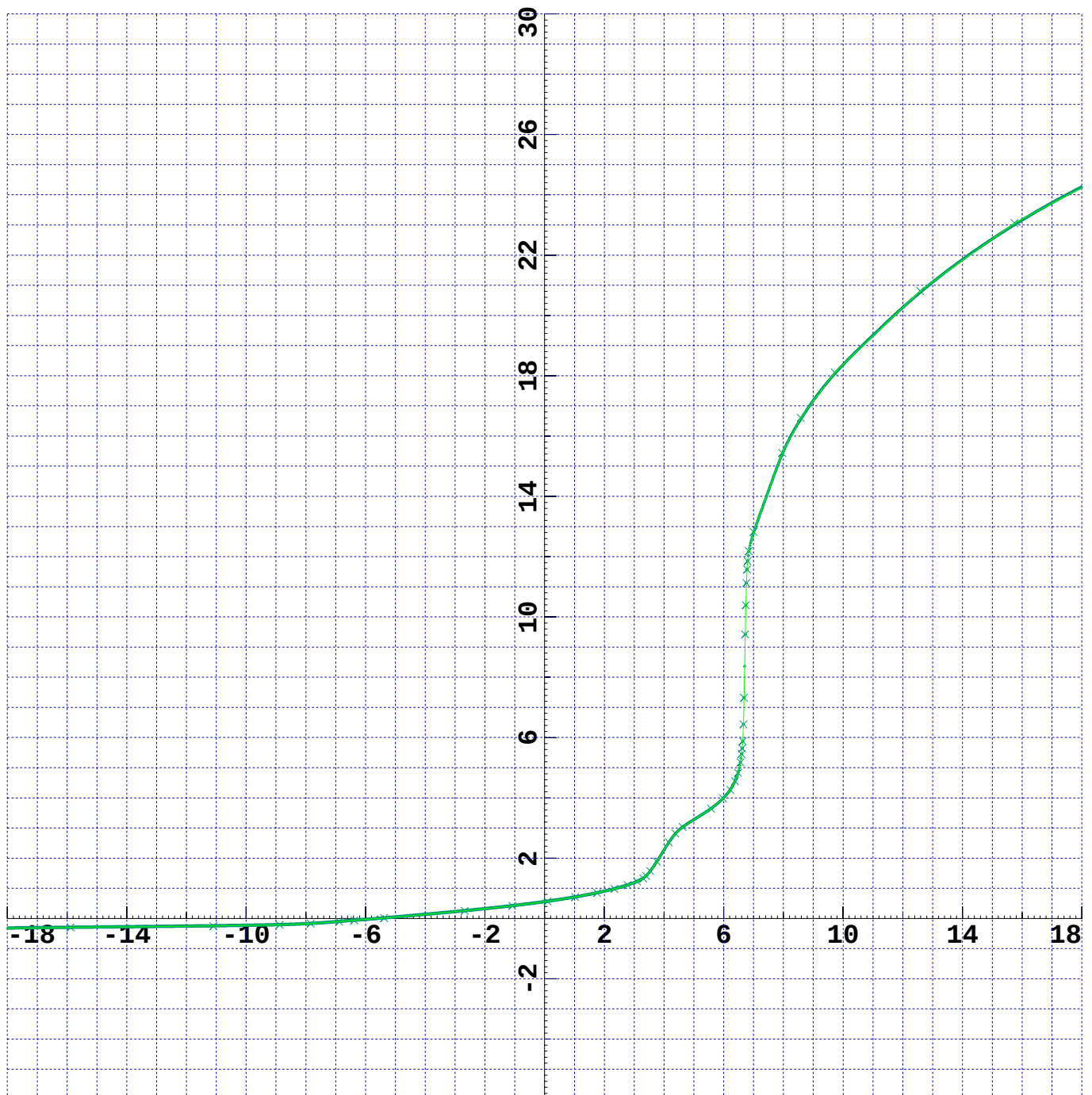
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Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel
Left rail: r_prof/SEC030_l.short.rail Right rail: r_prof/SEC030_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

DRFNr

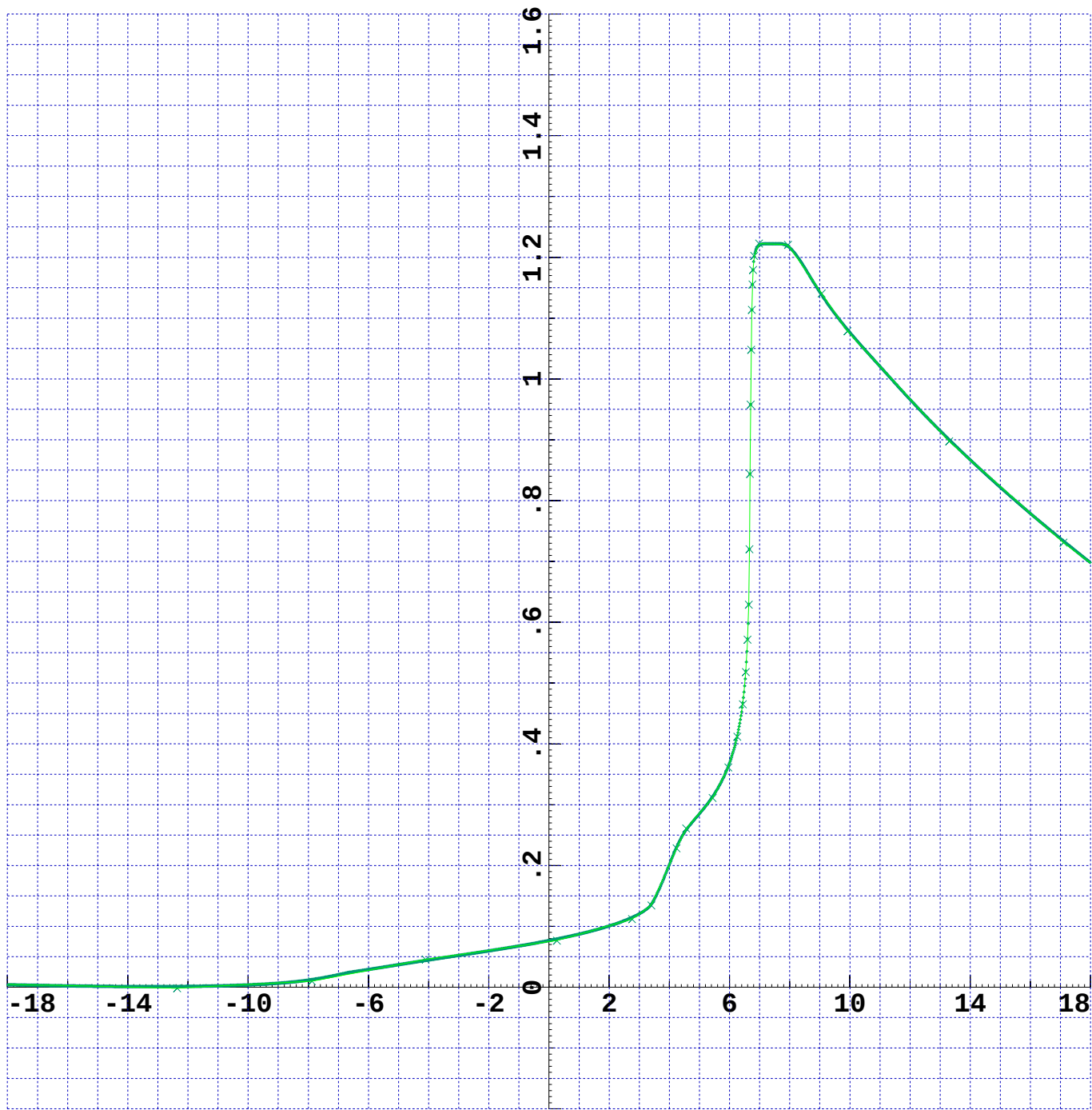
Ident: kpfr_030



Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel
Left rail: r_prof/SEC030_l.short.rail Right rail: r_prof/SEC030_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

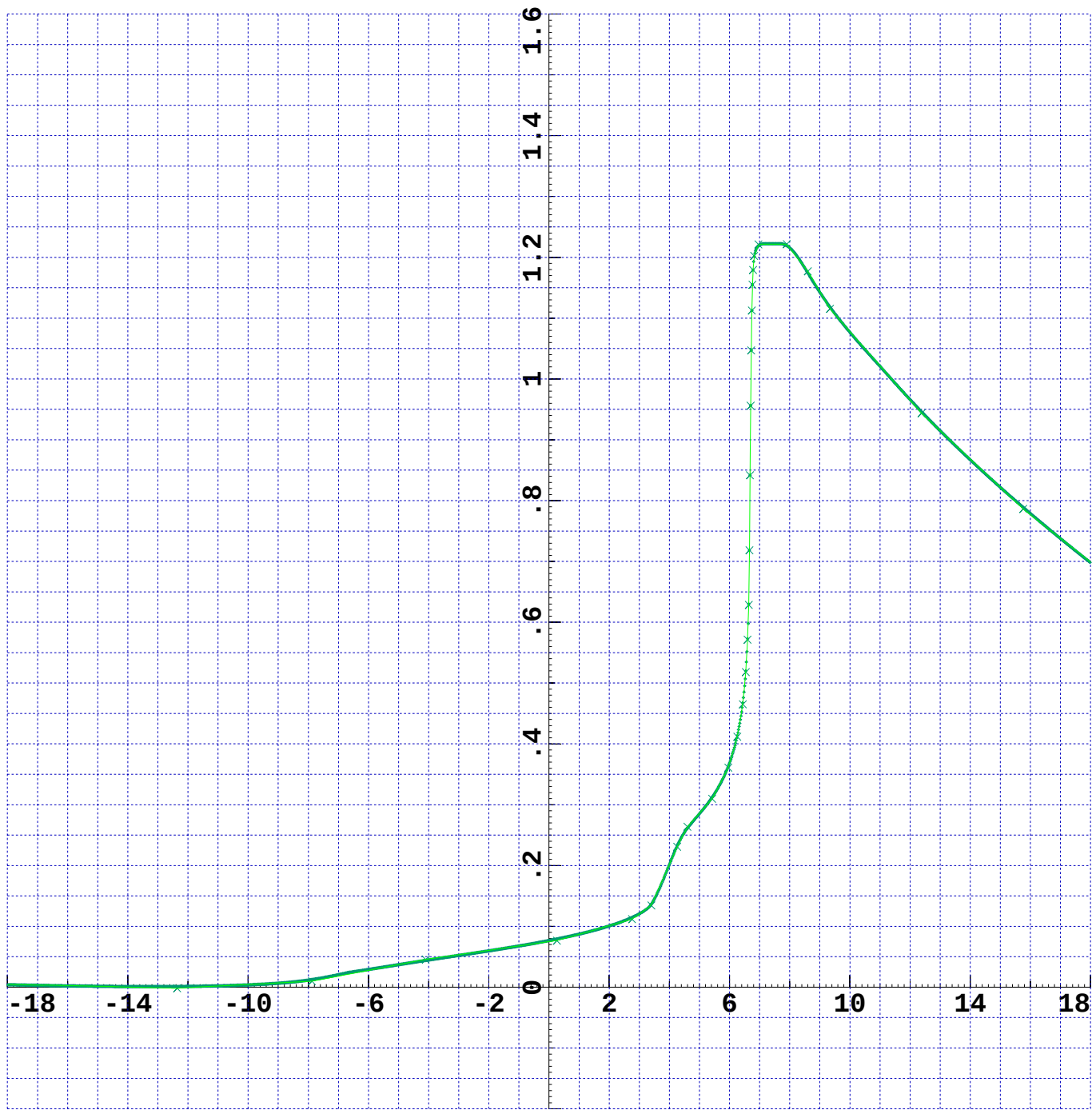
DRFN1

Ident: kpfr_030



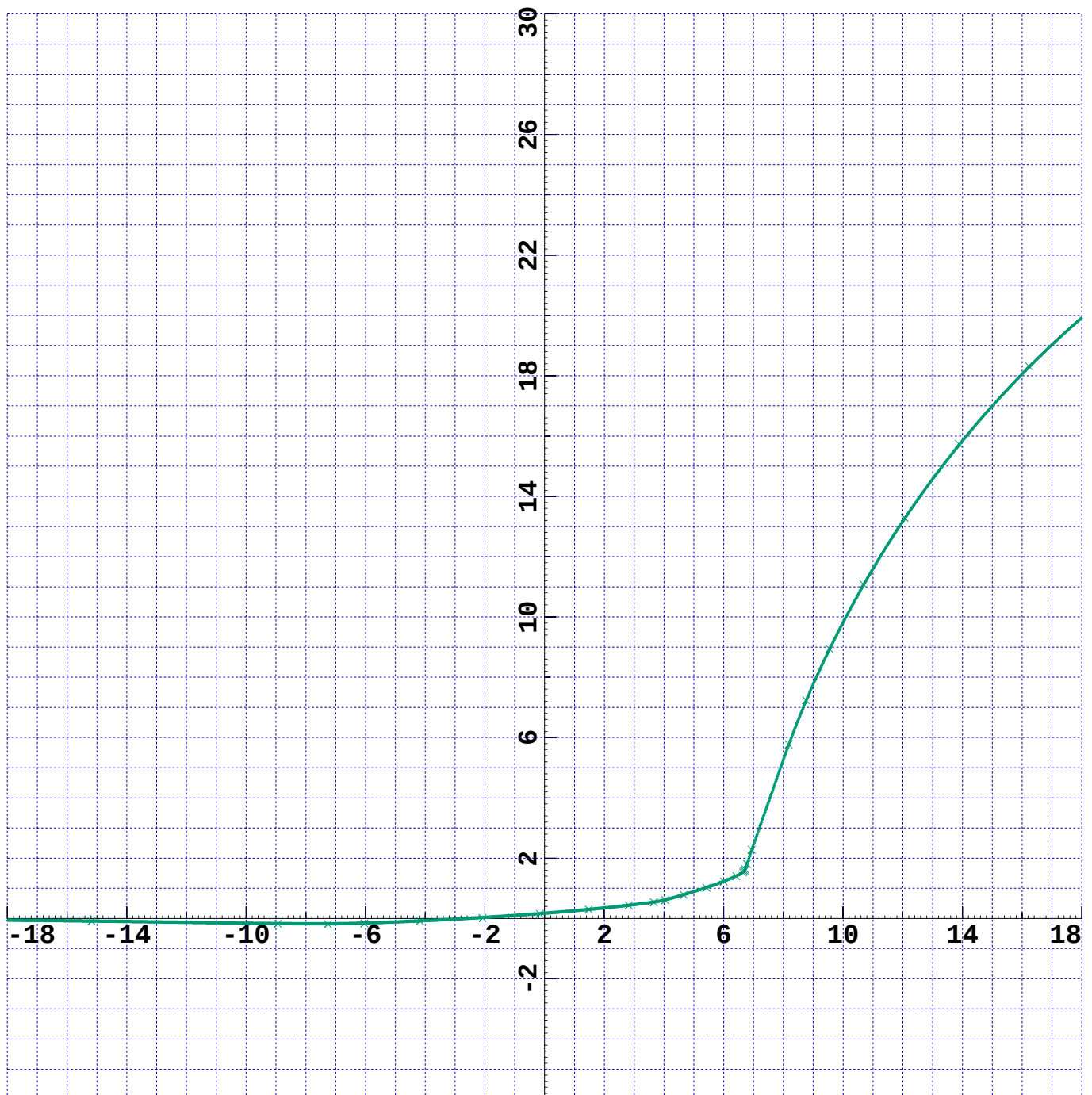
Left wheel:S1002t32.5.wheel Right wheel:S1002t32.5.wheel GAMFNr
Left rail: r_prof/SEC030_l.short.rail Right rail: r_prof/SEC030_r.short.rail
Wprof_lat_shift= 0 Gauge= 1425-1441

Ident: kpfr_030



Left wheel:S1002t32.5.wheel Right wheel:S1002t32.5.wheel GAMFN1
Left rail: r_prof/SEC030_l.short.rail Right rail: r_prof/SEC030_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

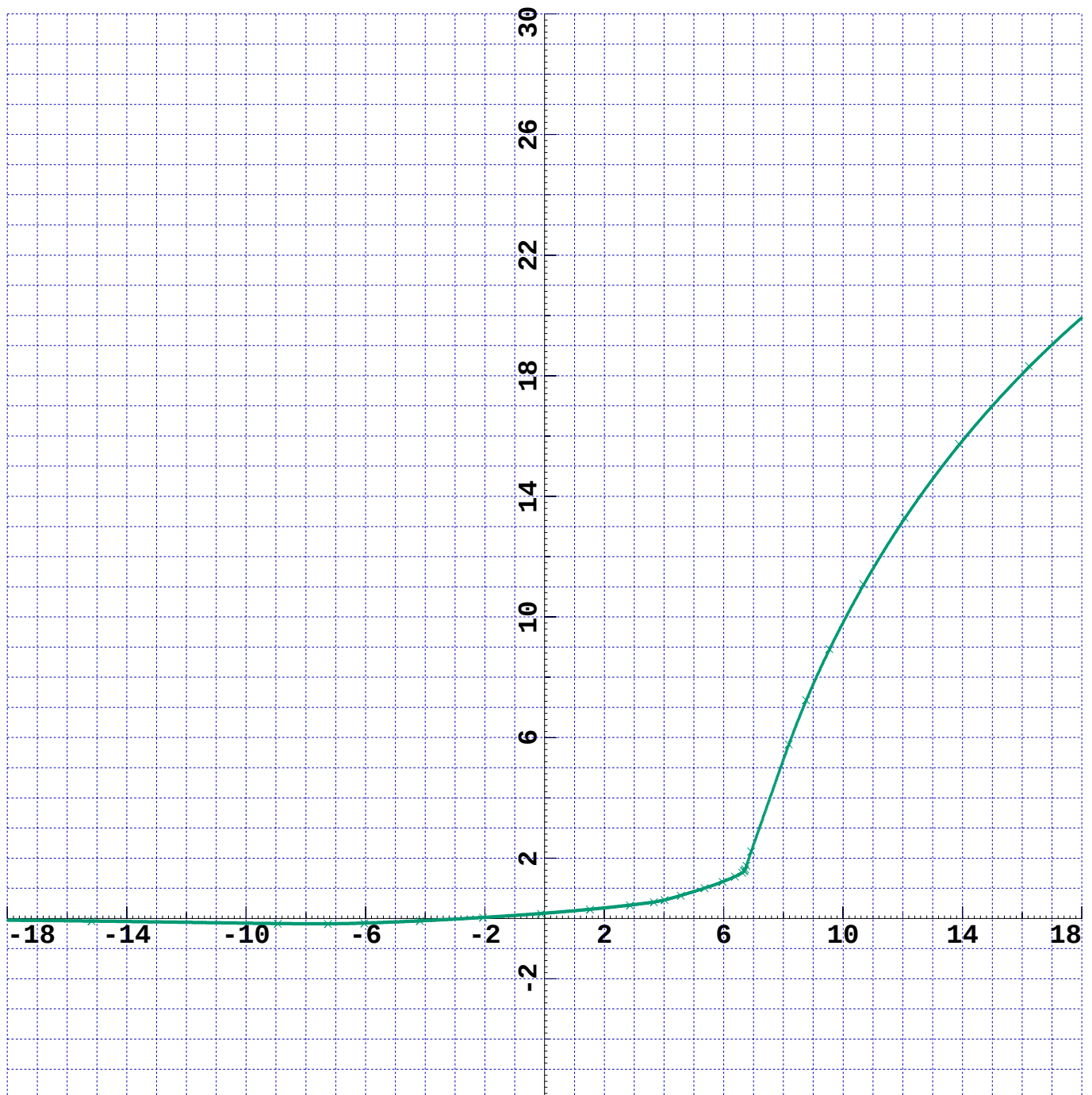
Ident: kpfr_030



Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel
Left rail: r_prof/SEC030_l.short.rail Right rail: r_prof/SEC030_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

ZFNr

Ident: kpfr_030



Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel
 Left rail: r_prof/SEC030_l.short.rail Right rail: r_prof/SEC030_r.short.rail
 Wprof_lat_shift= 0 Gauge= 1425-1441

ZFN1

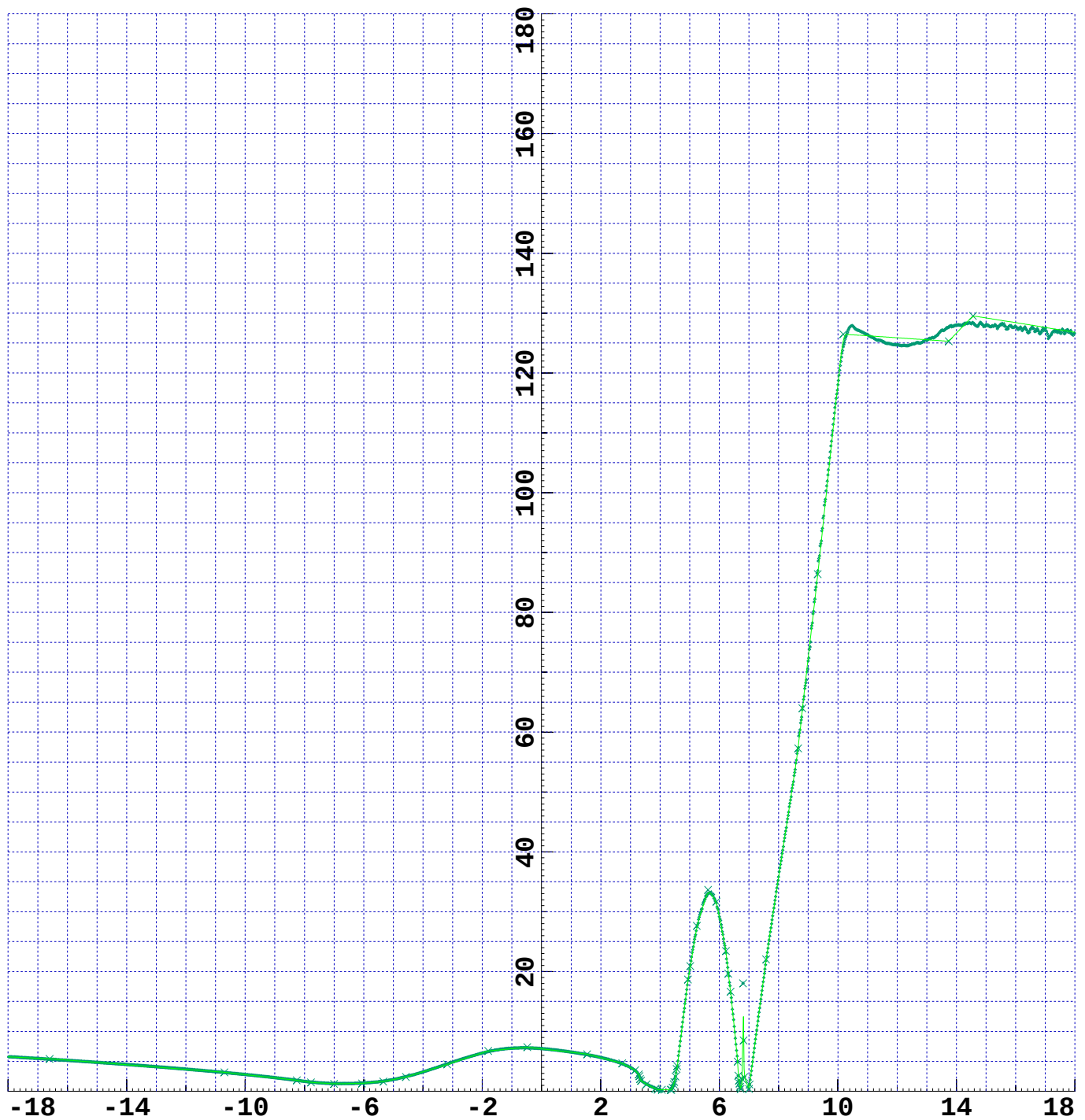
Ident: kpfr_030



Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel
Left rail: r_prof/SEC030_l.short.rail Right rail: r_prof/SEC030_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

ROFNr

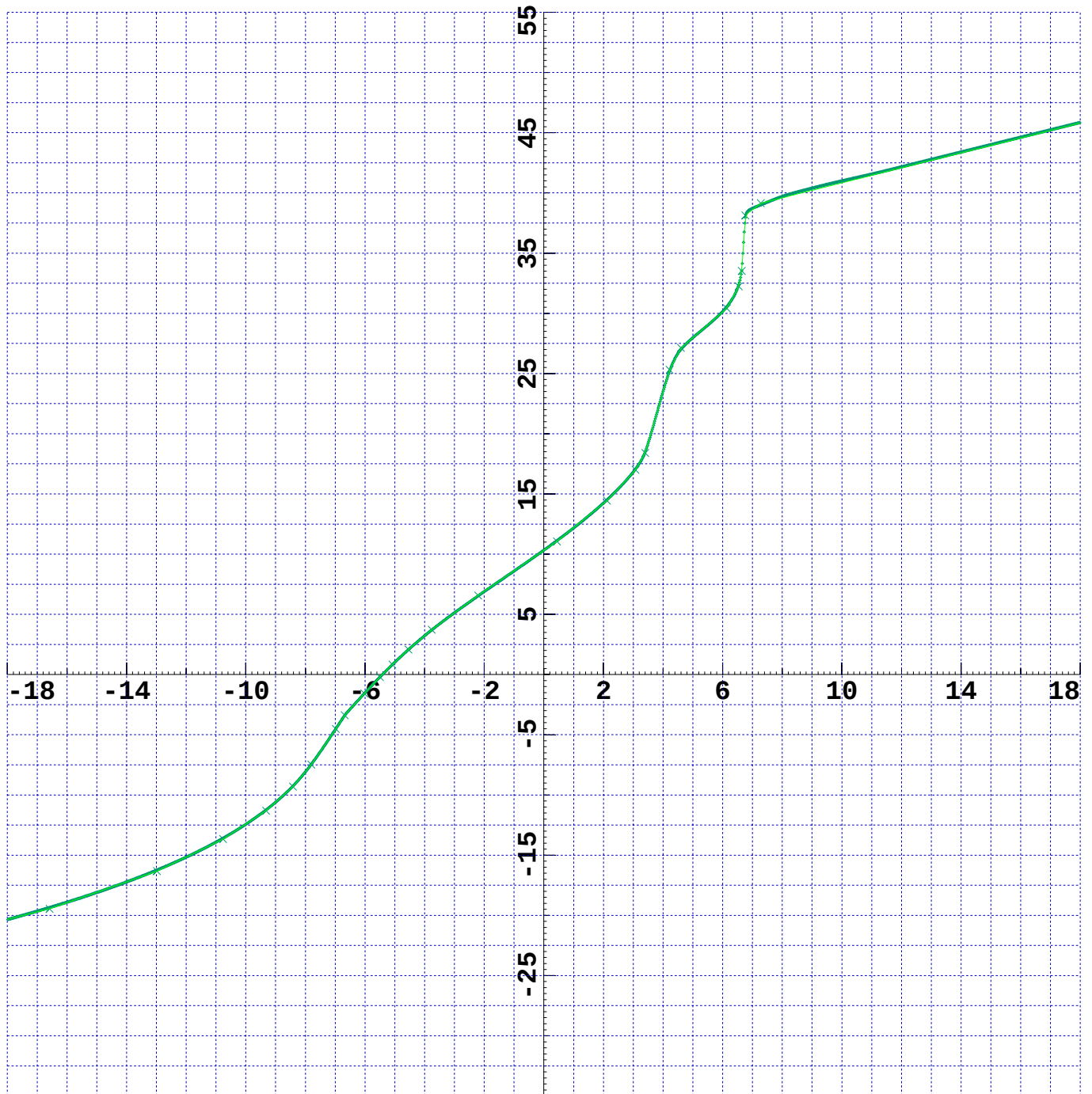
Ident: kpfr_030



Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel
Left rail: r_prof/SEC030_l.short.rail Right rail: r_prof/SEC030_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

ROFN1

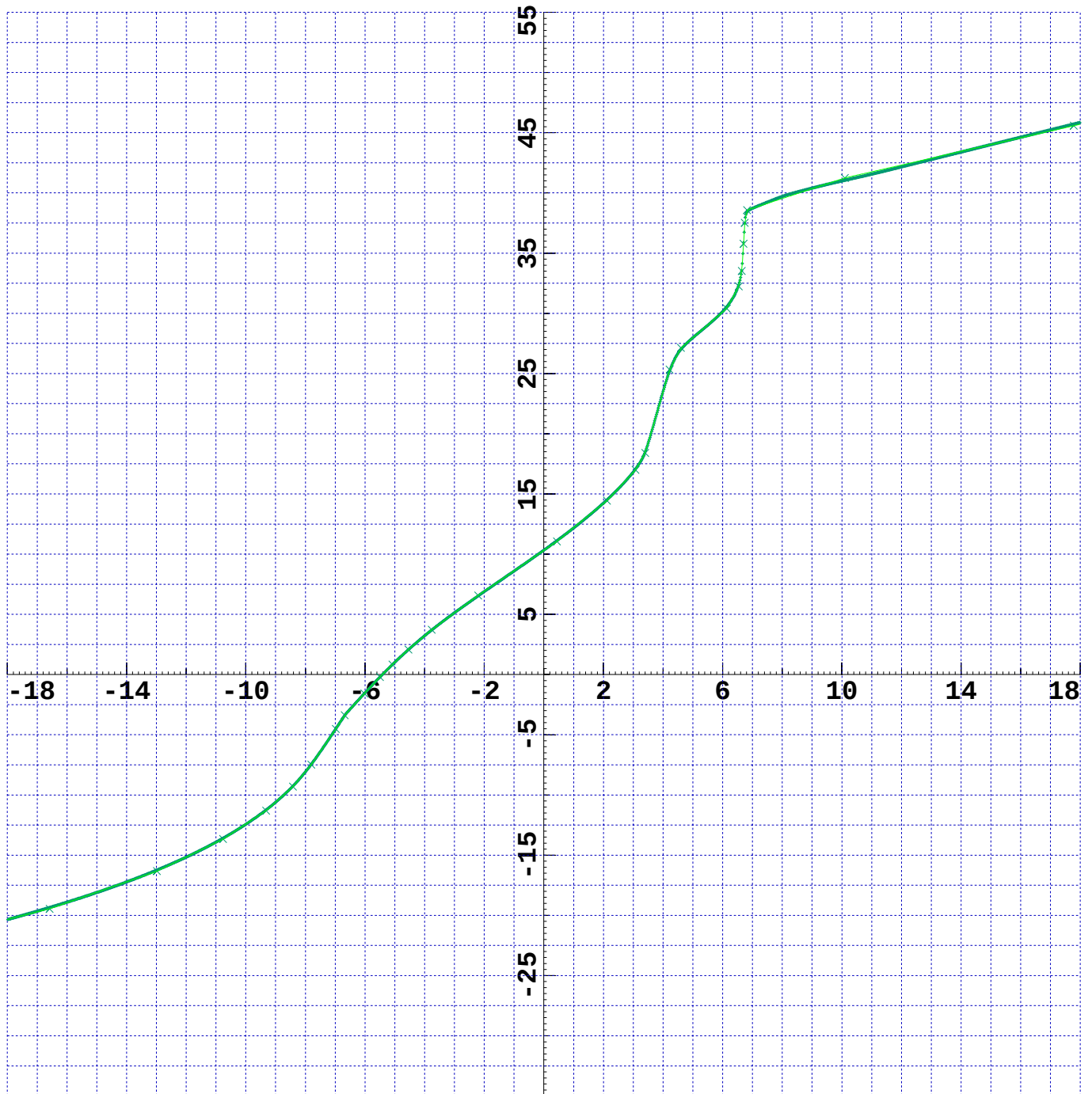
Ident: kpfr_030



Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel
Left rail: r_prof/SEC030_l.short.rail Right rail: r_prof/SEC030_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

POSWr

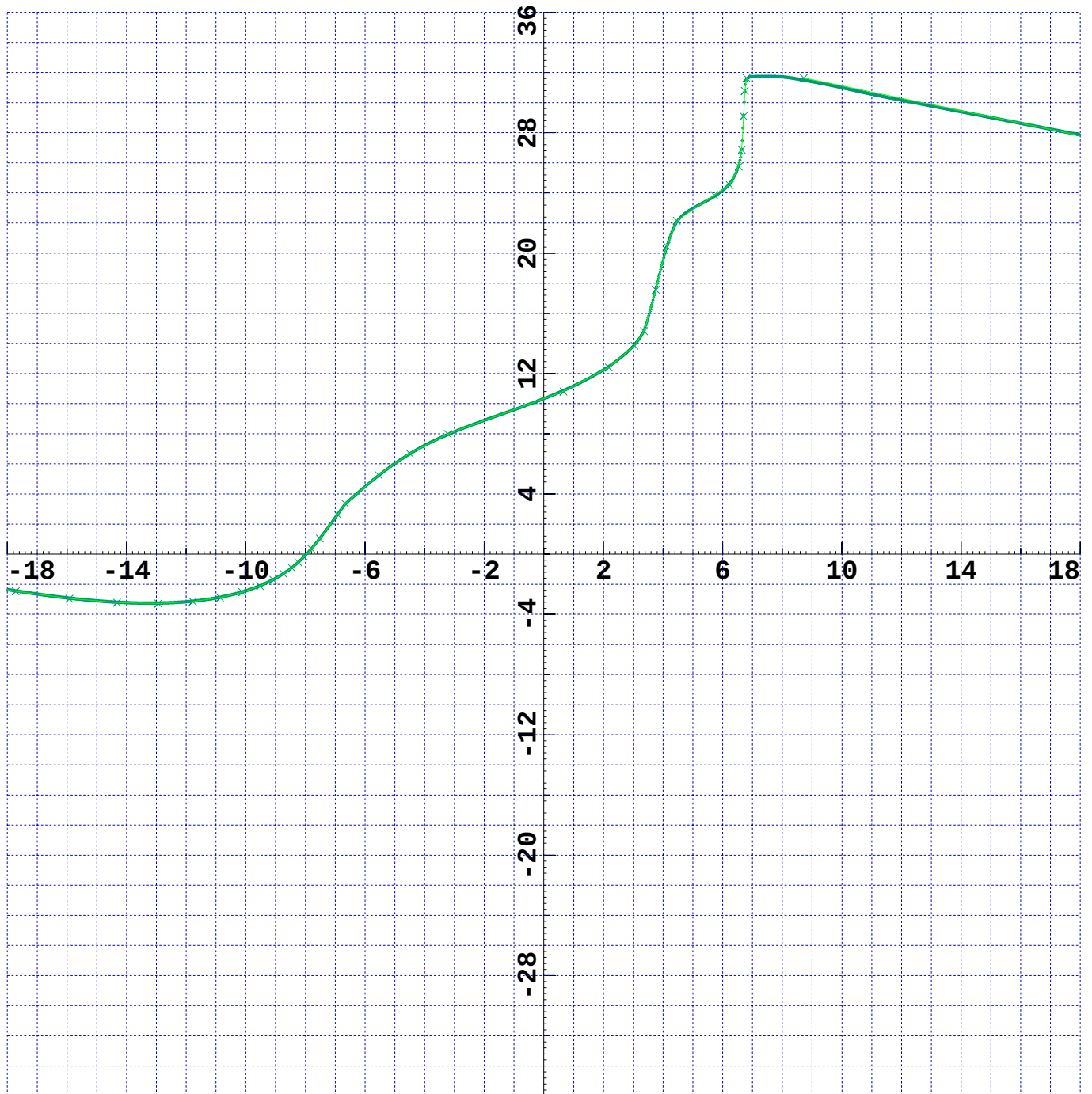
Ident: kpfr_030



Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel
Left rail: r_prof/SEC030_l.short.rail Right rail: r_prof/SEC030_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

POSW1

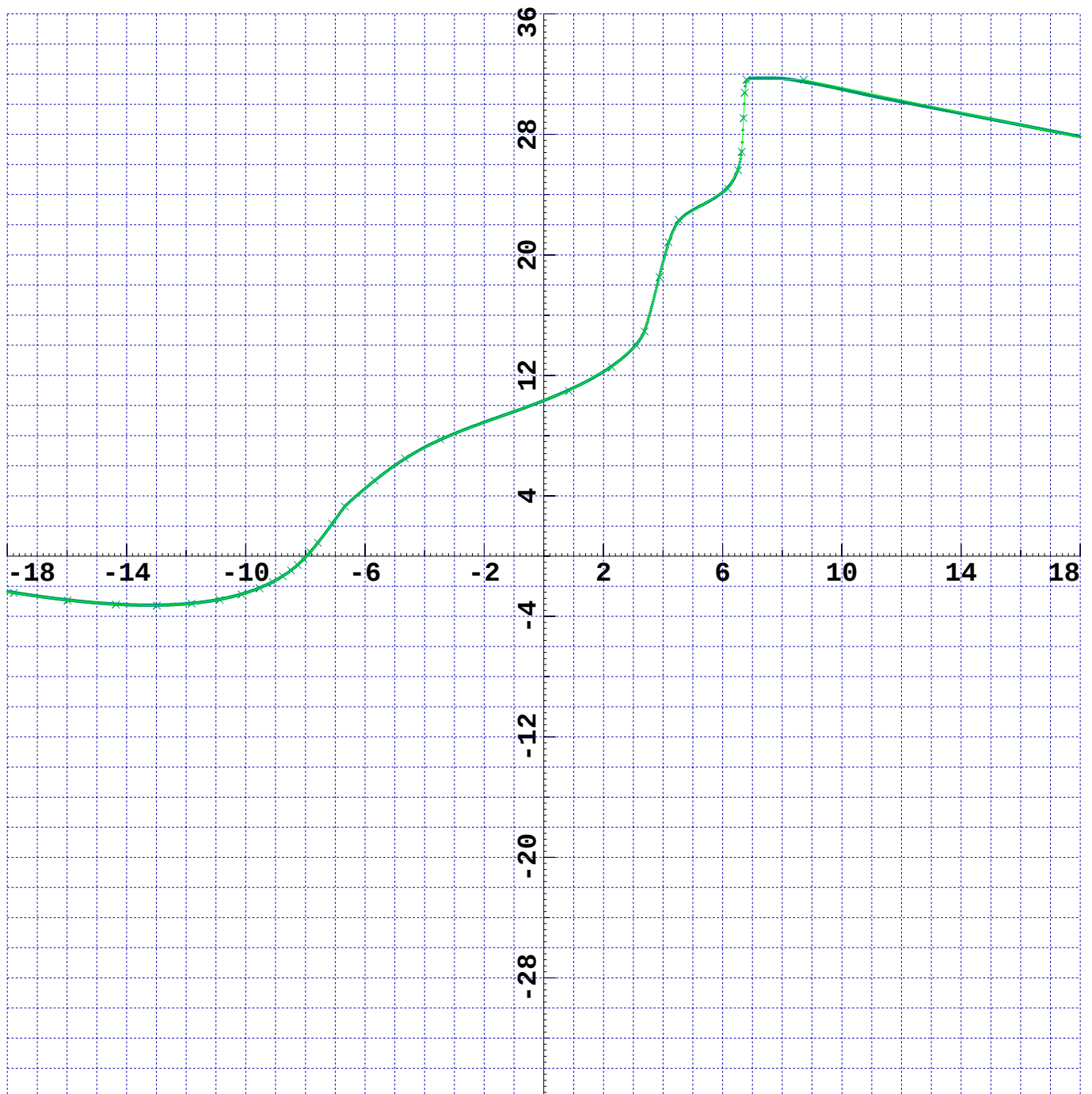
Ident: kpfr_030



Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel
Left rail: r_prof/SEC030_l.short.rail Right rail: r_prof/SEC030_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

POSRR

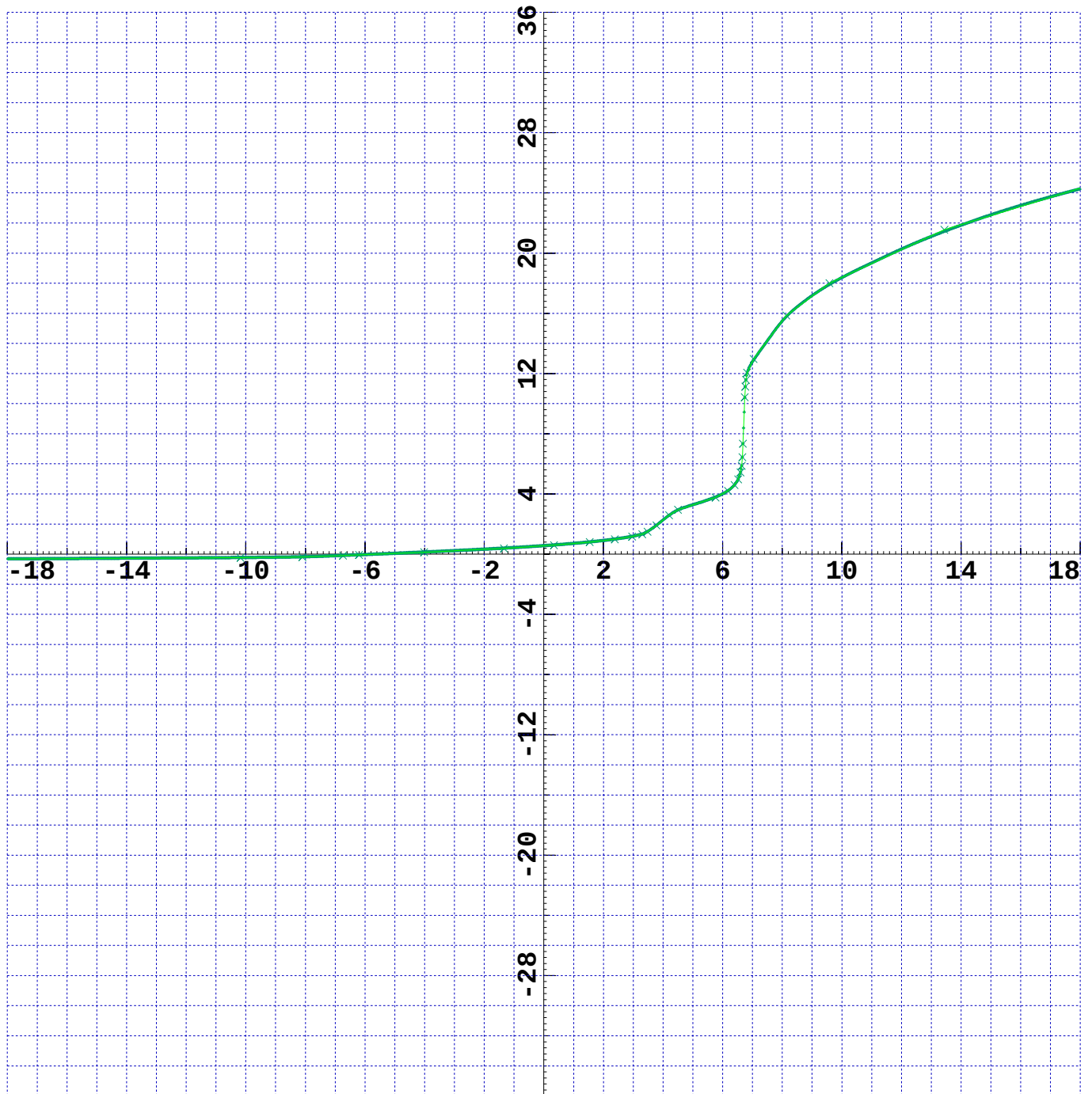
Ident: kpfr_030



Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel
Left rail: r_prof/SEC030_l.short.rail Right rail: r_prof/SEC030_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

POSR1

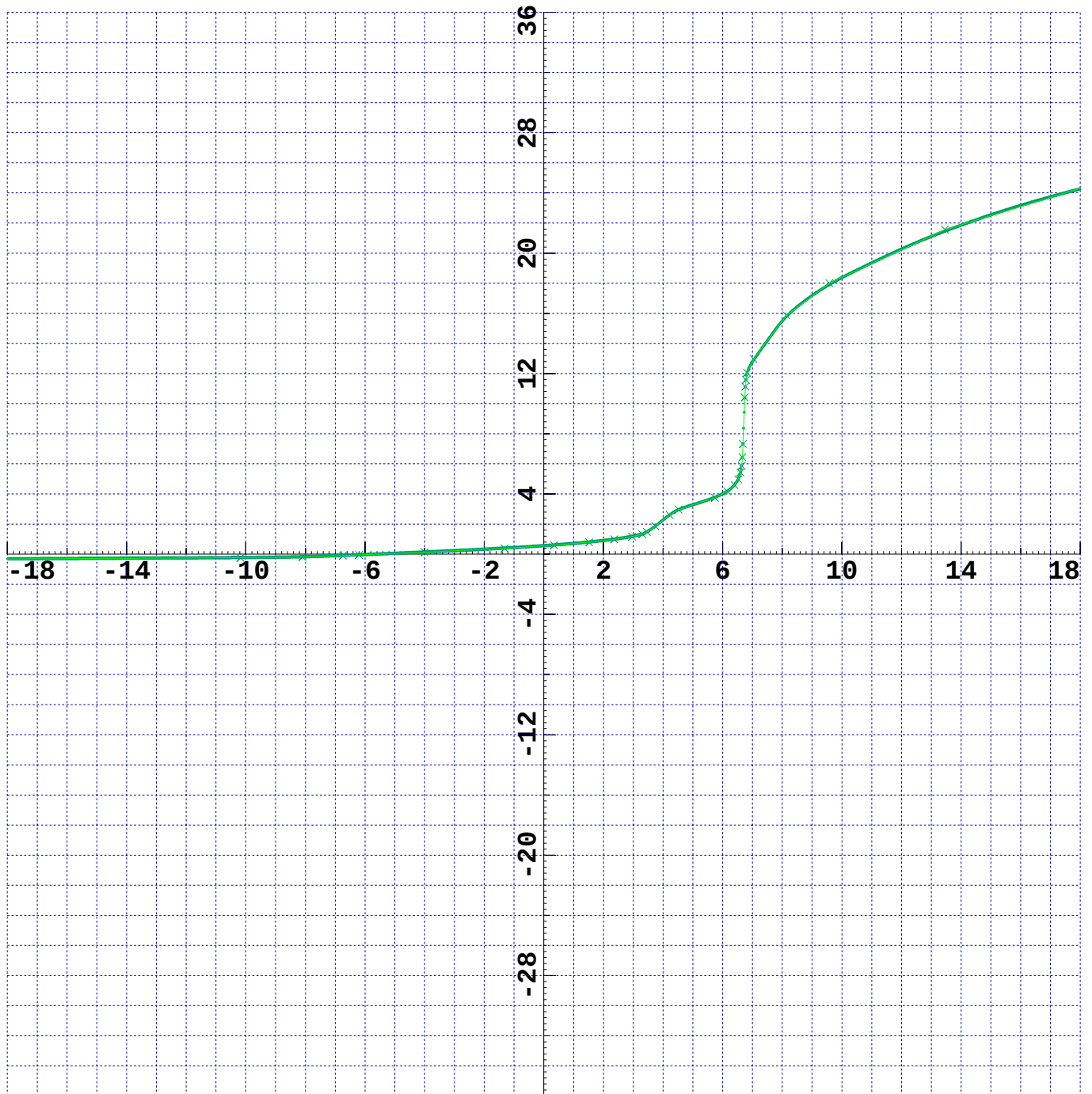
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Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel
Left rail: r_prof/SEC030_l.short.rail Right rail: r_prof/SEC030_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

ZWr

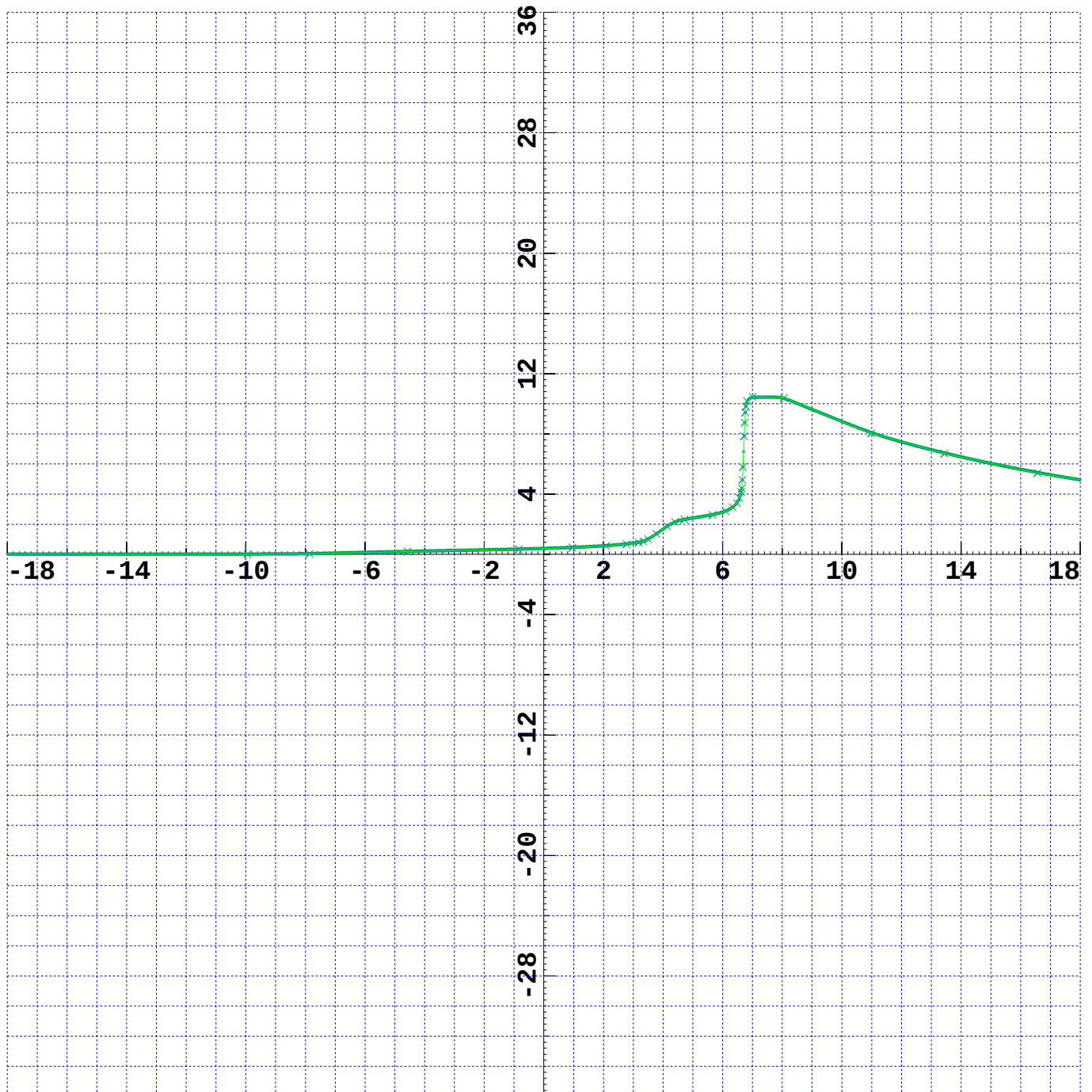
Ident: kpfr_030



Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel
Left rail: r_prof/SEC030_l.short.rail Right rail: r_prof/SEC030_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

ZW1

Ident: kpfr_030

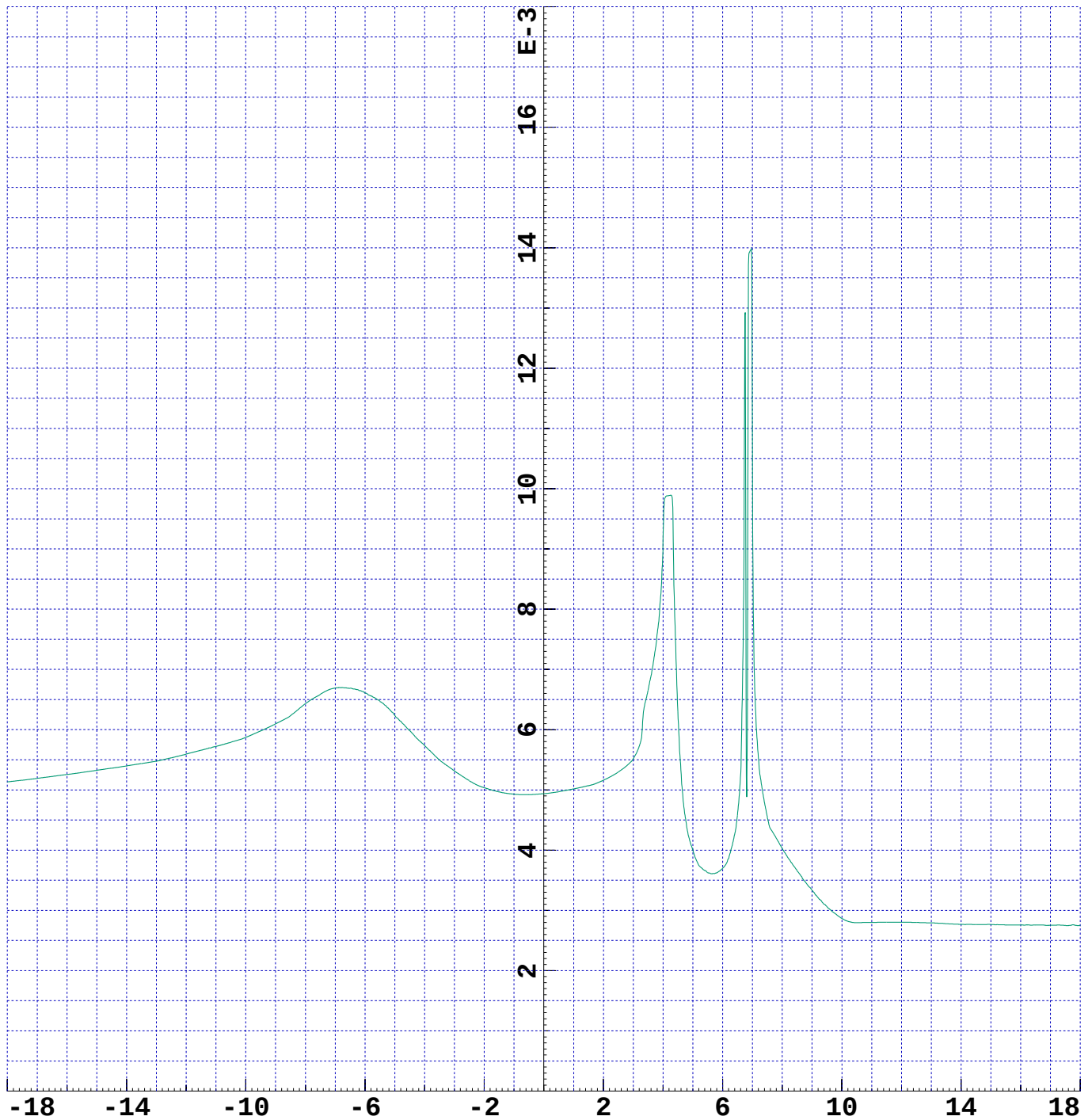


Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel
Left rail: r_prof/SEC030_l.short.rail Right rail: r_prof/SEC030_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

ZRr

Ident: kpfr_030

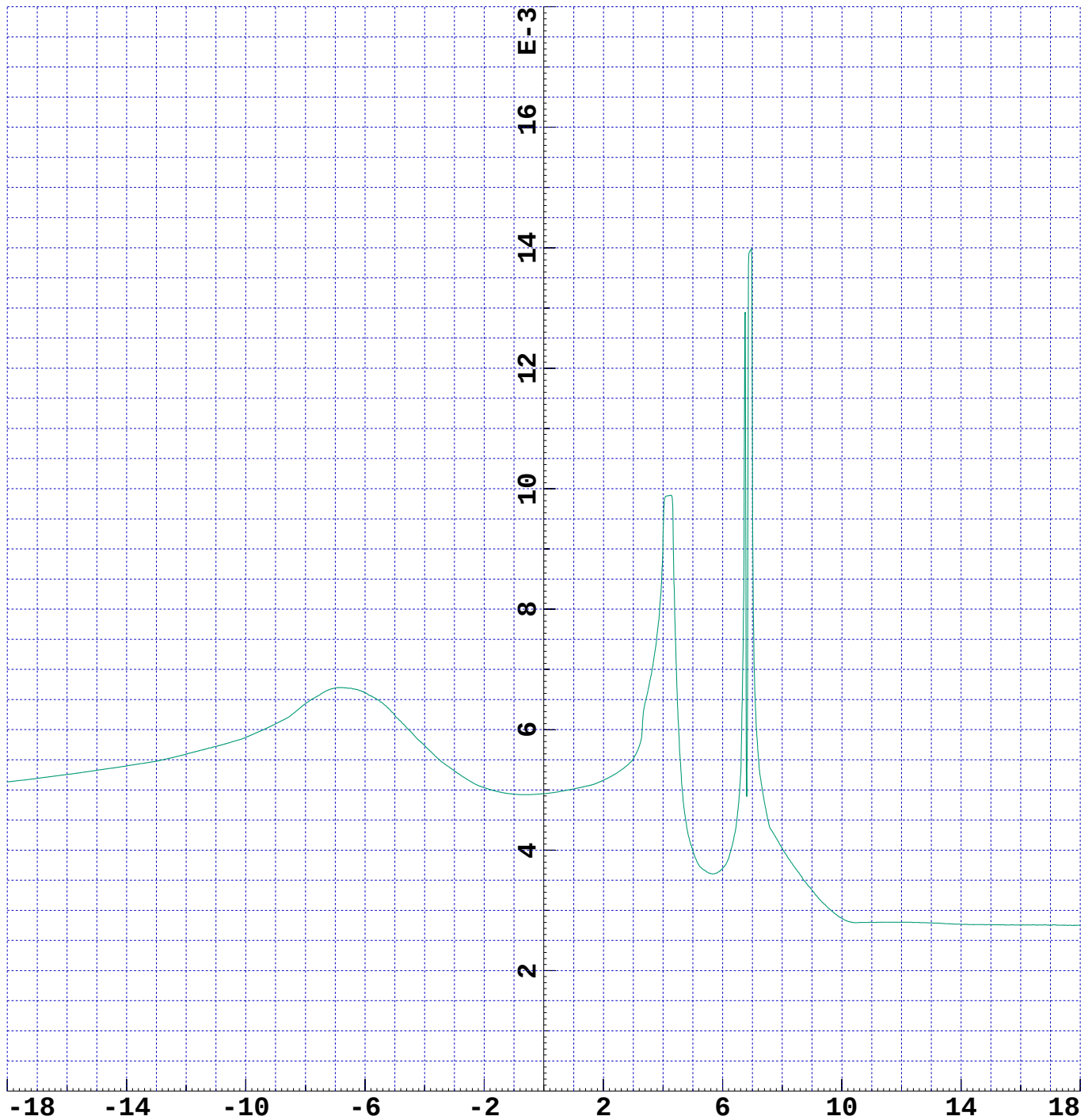




Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel
Left rail: r_prof/SEC030_l.short.rail Right rail: r_prof/SEC030_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

C_r

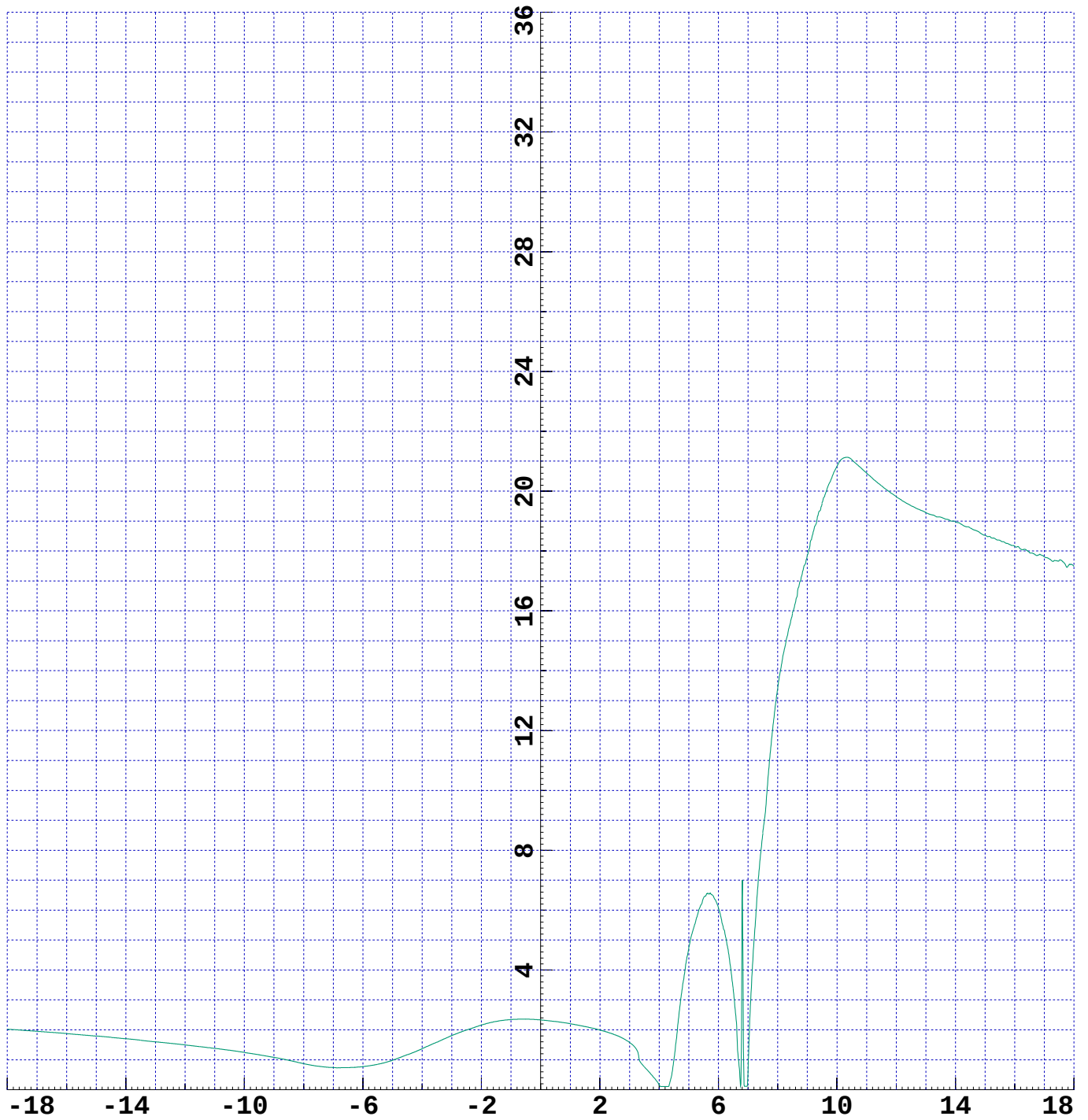
Ident: kpfr_030



Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel
Left rail: r_prof/SEC030_l.short.rail Right rail: r_prof/SEC030_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

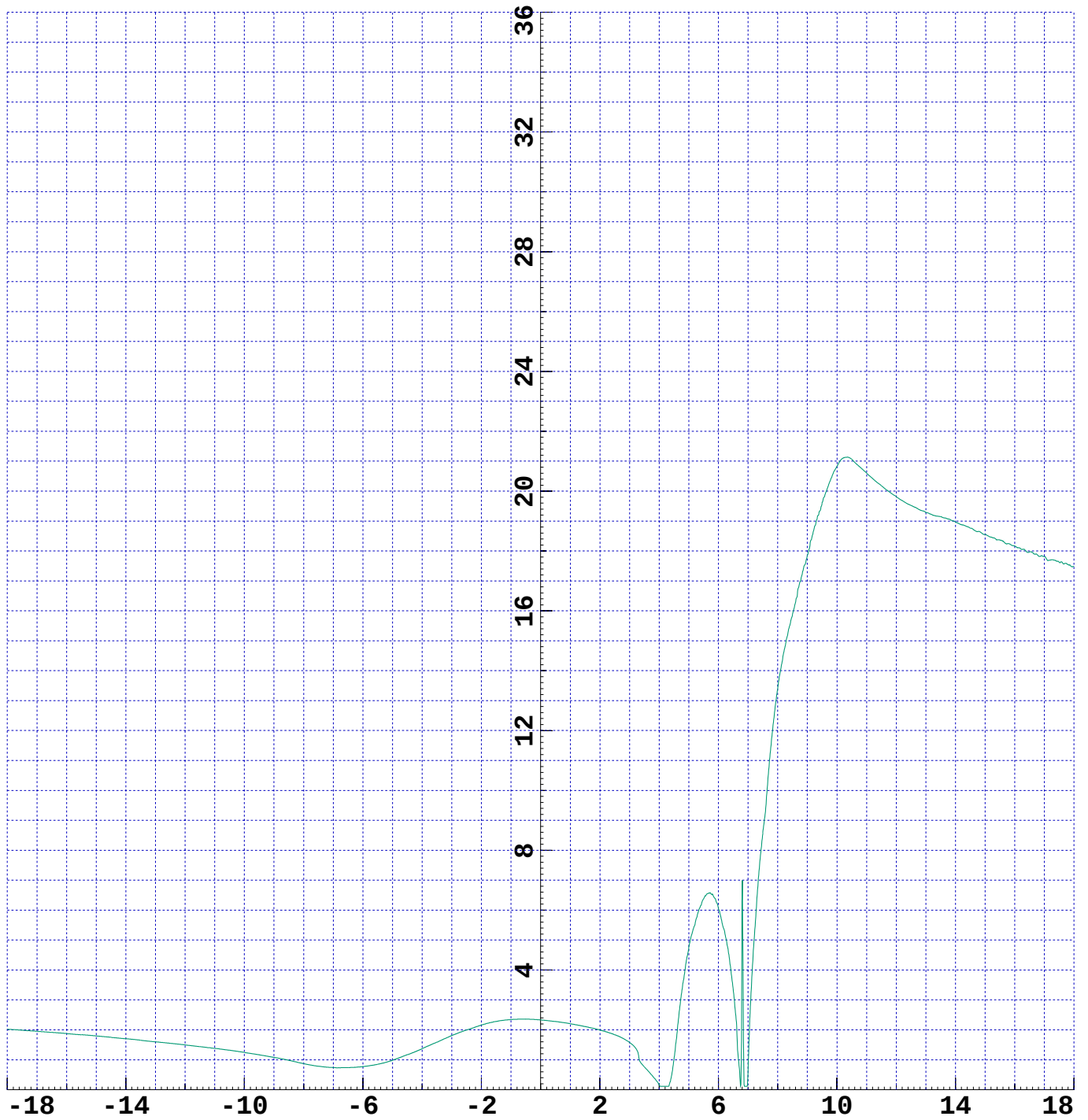
C_1

Ident: kpfr_030



Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel A/B_r
Left rail: r_prof/SEC030_l.short.rail Right rail: r_prof/SEC030_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

Ident: kpfr_030



Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel
Left rail: r_prof/SEC030_l.short.rail Right rail: r_prof/SEC030_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

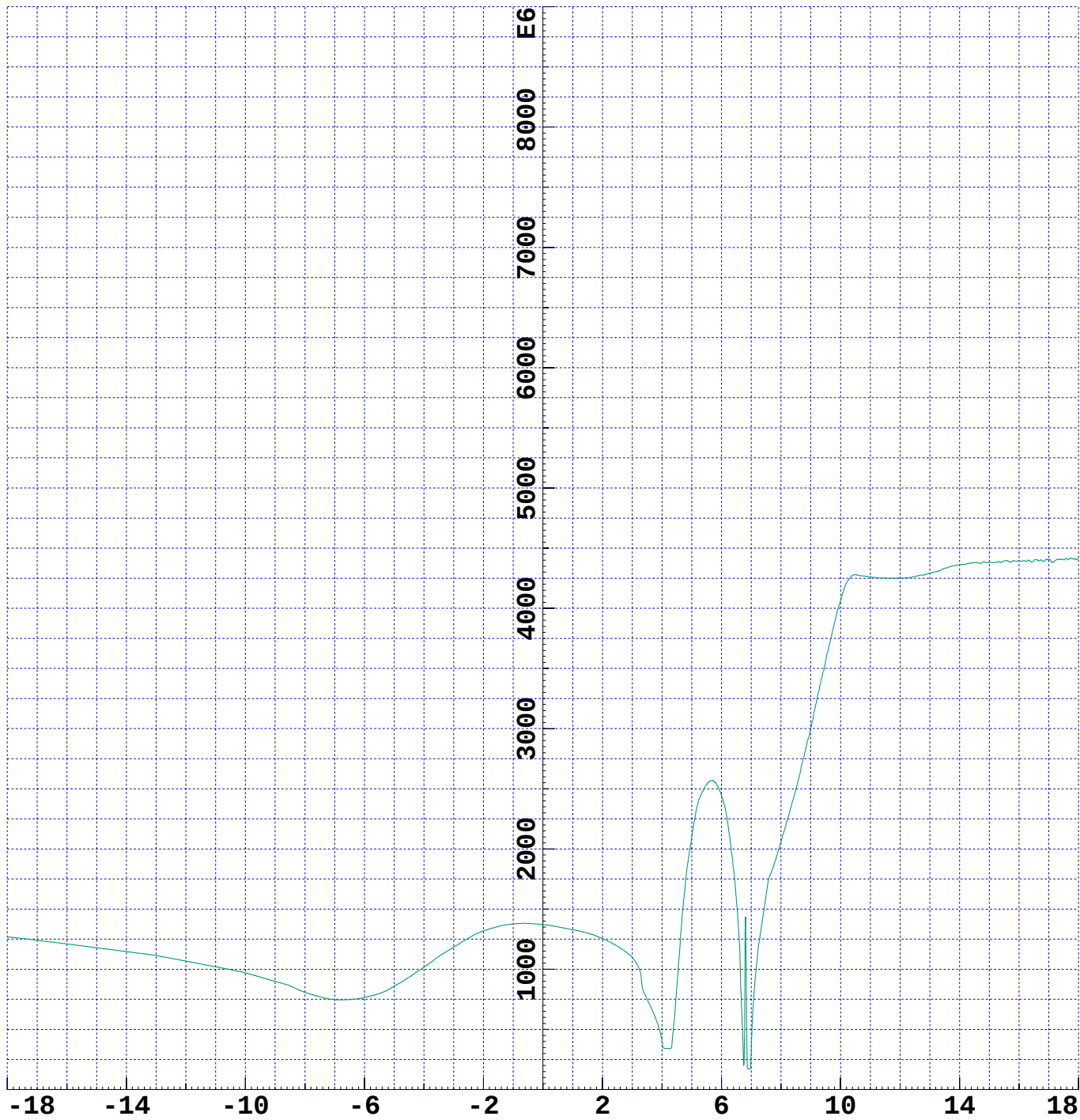
A/B_1

Ident: kpfr_030



Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel **SIGMAR**
Left rail: r_prof/SEC030_l.short.rail Right rail: r_prof/SEC030_r.short.rail
Wprof_lat_shift= 0 Gauge= 1425-1441

Ident: kpfr_030



Left wheel:S1002t32.5.wheel Right wheel:S1002t32.5.wheel **SIGMA1**
Left rail: r_prof/SEC030_l.short.rail Right rail: r_prof/SEC030_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441
Ident: kpfr_030

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

Radial Steering Index

× = $\Delta r_E = 3.67$ left curve

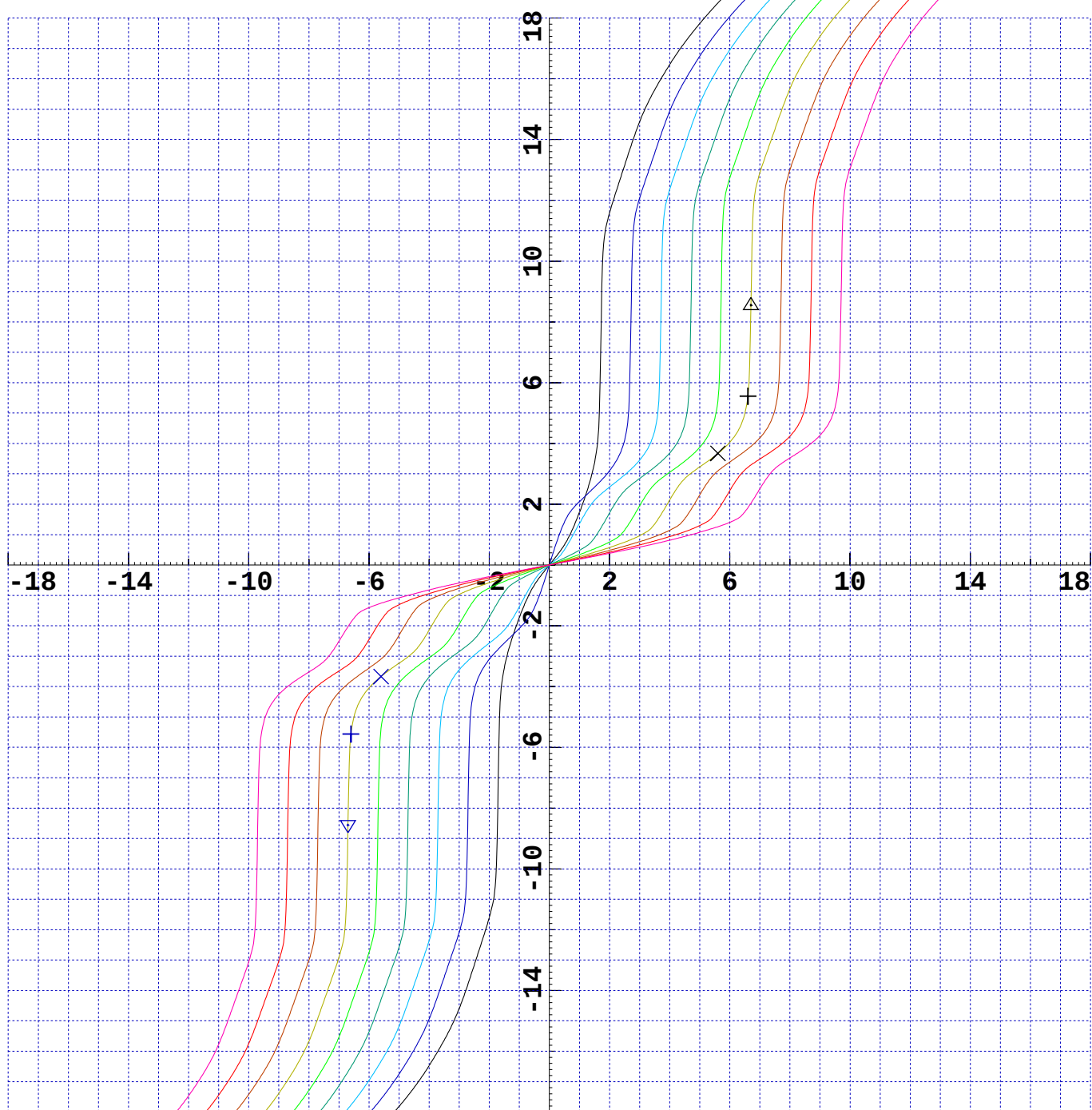
× = $\Delta r_E = 3.67$ right curve

+ = $A0r = 6.60$ 5.55

+ = $A0l = -6.60$ -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/SEC030_l.short.rail Right rail: r_prof/SEC030_r.short.rail

wprof_lat_shift=0 Gauge= 1425-1441

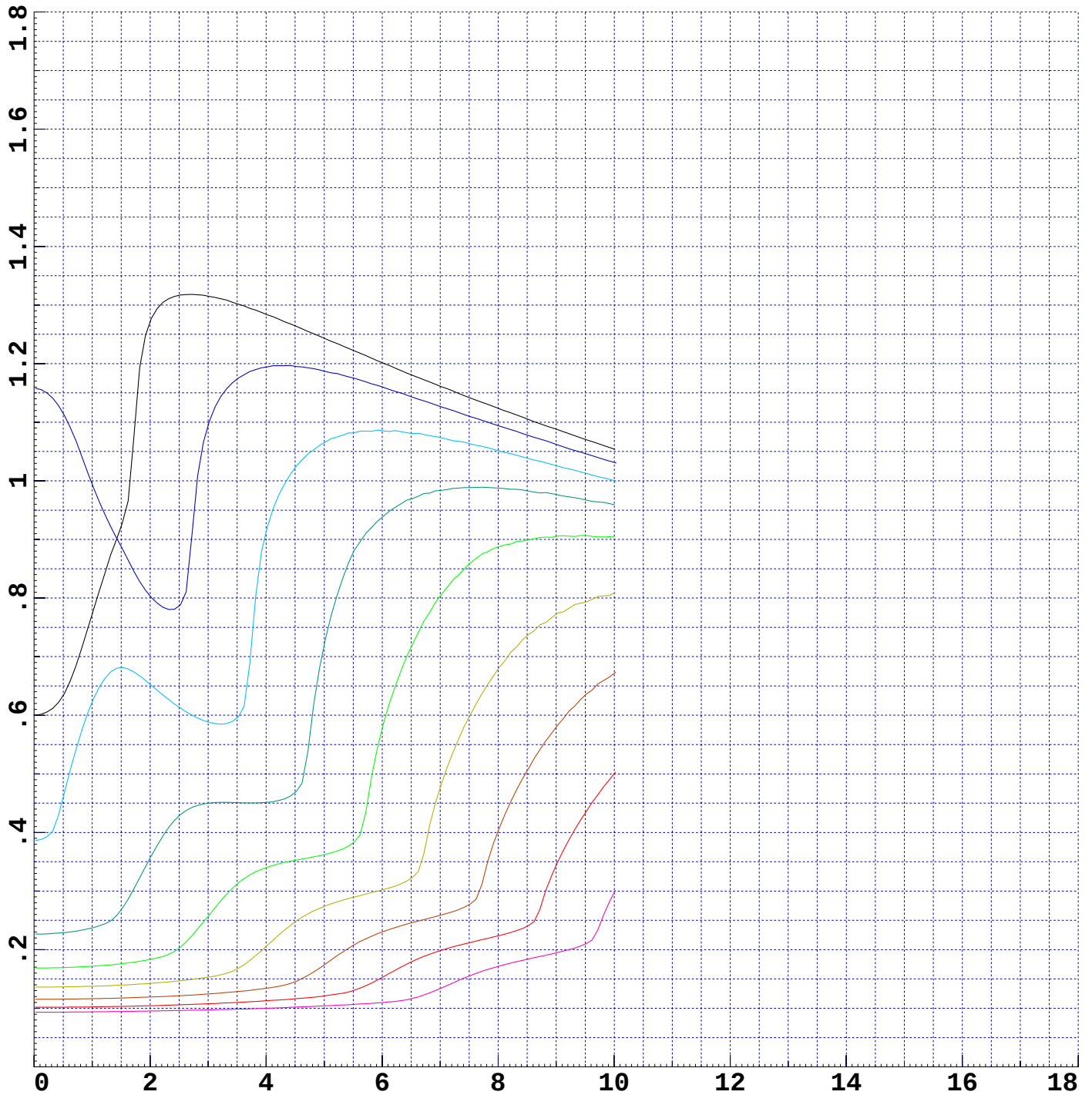
rr-rl

Ident: kpfr_030

GENSYS-KPF.1308

Delta_Y=

		.1	.5	2	3	4	6
Gauge= 1425	—	.602	.634	1.271	1.315	1.284	1.202
1427	—	1.156	1.115	.804	1.094	1.194	1.160
1429	—	.388	.460	.653	.588	.913	1.086
1431	—	.227	.229	.356	.450	.451	.938
1433	—	.169	.170	.184	.257	.340	.577
1435	—	.136	.137	.143	.153	.205	.302
1437	—	.116	.116	.119	.124	.134	.230
1439	—	.102	.102	.104	.108	.113	.153
1441	—	.093	.093	.095	.097	.100	.110



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

Left rail: r_prof/SEC030_l.short.rail Right rail: r_prof/SEC030_r.short.rail

wprof_lat_shift= 0 Gauge= 1425-1441

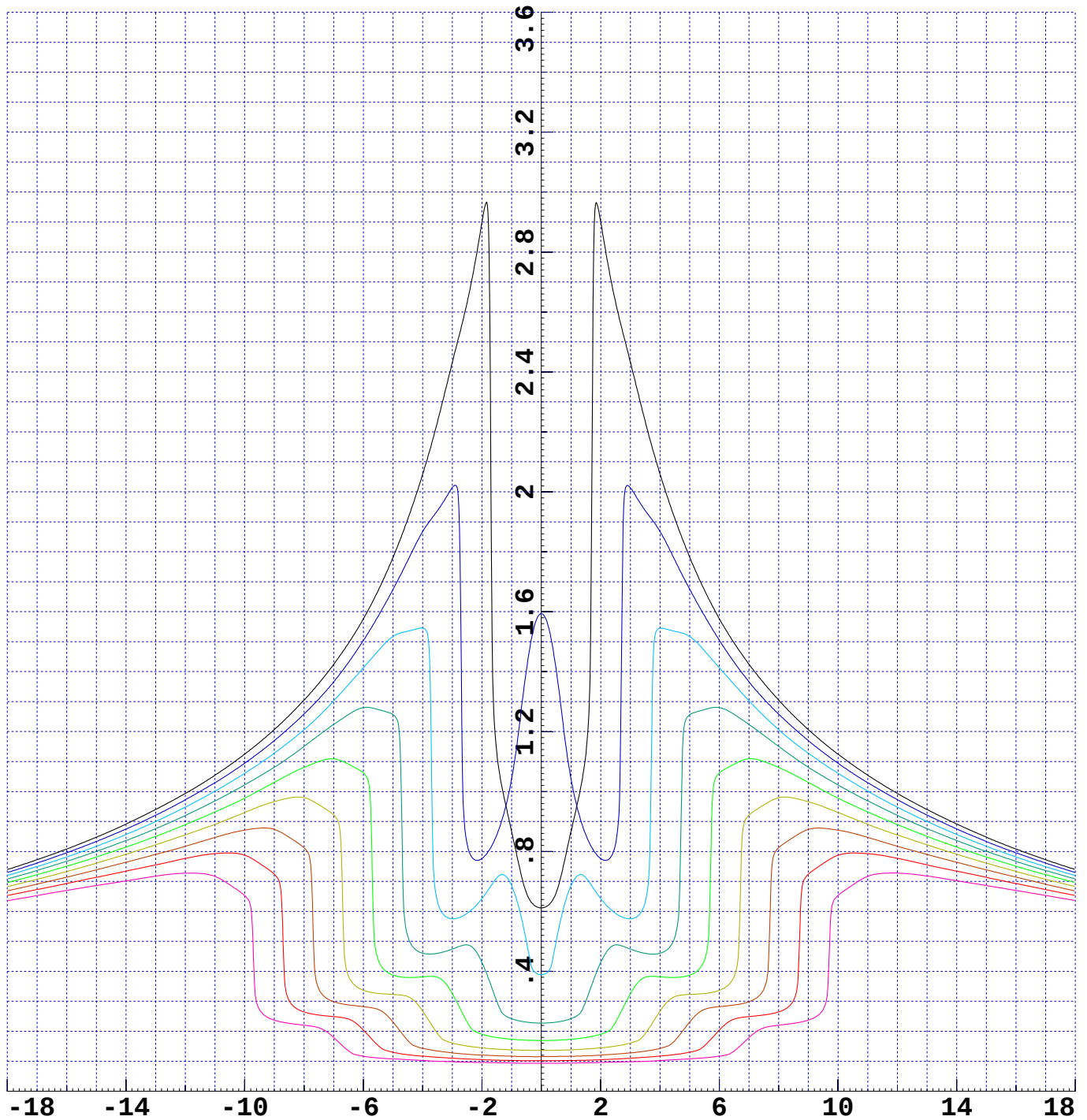
UIC519

Ident: kpfr_030

GENSYS-KPF.1308

Delta_Y=

		.1	.5	2	3	4	6
Gauge=	1425	.613	.661	2.900	2.432	2.059	1.576
	1427	1.586	1.407	.776	2.014	1.867	1.504
	1429	.390	.499	.643	.575	1.545	1.413
	1431	.227	.230	.430	.474	.461	1.280
	1433	.169	.170	.190	.325	.382	1.062
	1435	.136	.137	.145	.161	.267	.337
	1437	.116	.116	.121	.128	.143	.282
	1439	.102	.102	.105	.110	.117	.204
	1441	.093	.093	.096	.098	.102	.117



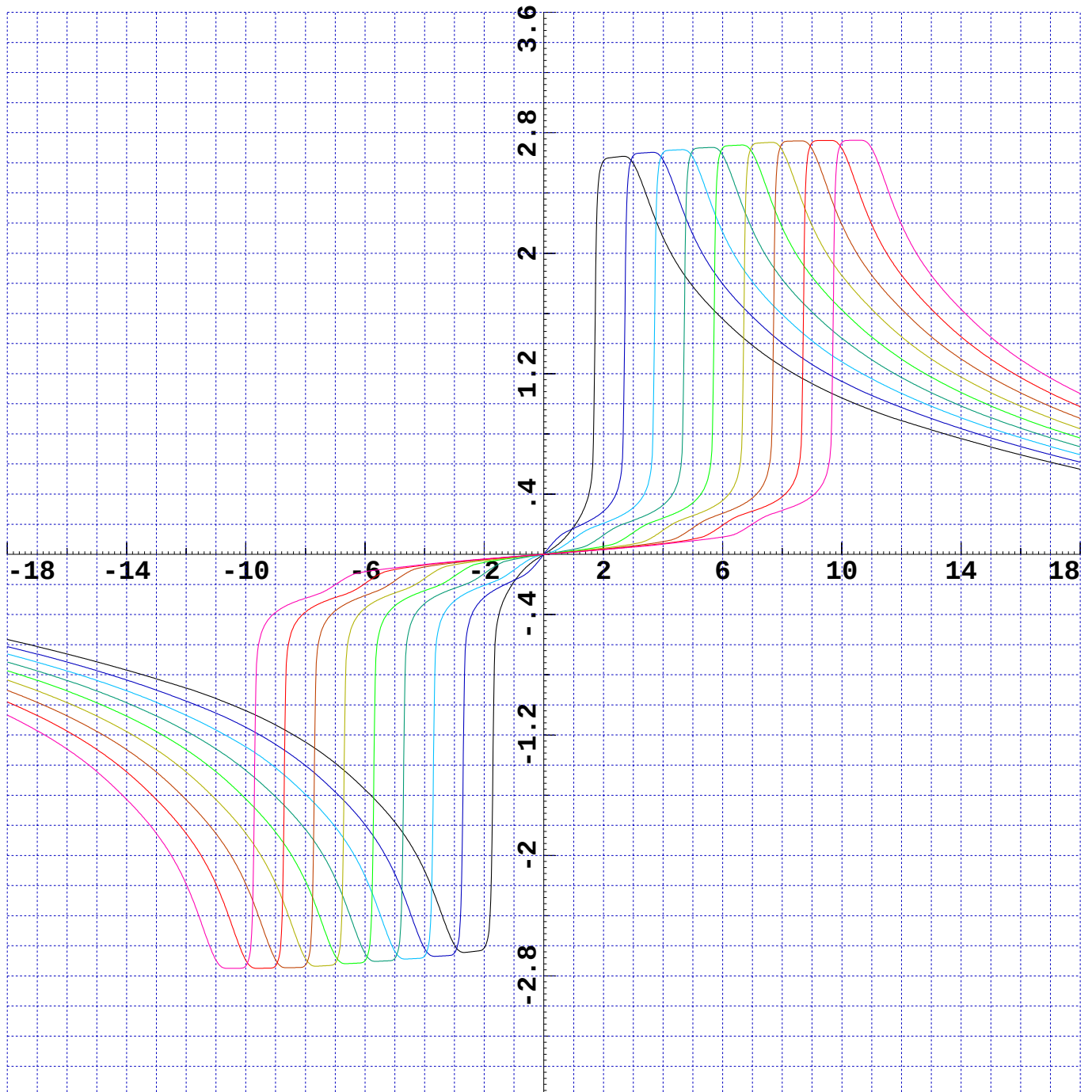
Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel
 Left rail: r_prof/SEC030_l.short.rail Right rail: r_prof/SEC030_r.short.rail
 wprof_lat_shift= 0 Gauge= 1425-1441

lambda

Ident: kpfr_030

GENSYS-KPF.1308

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

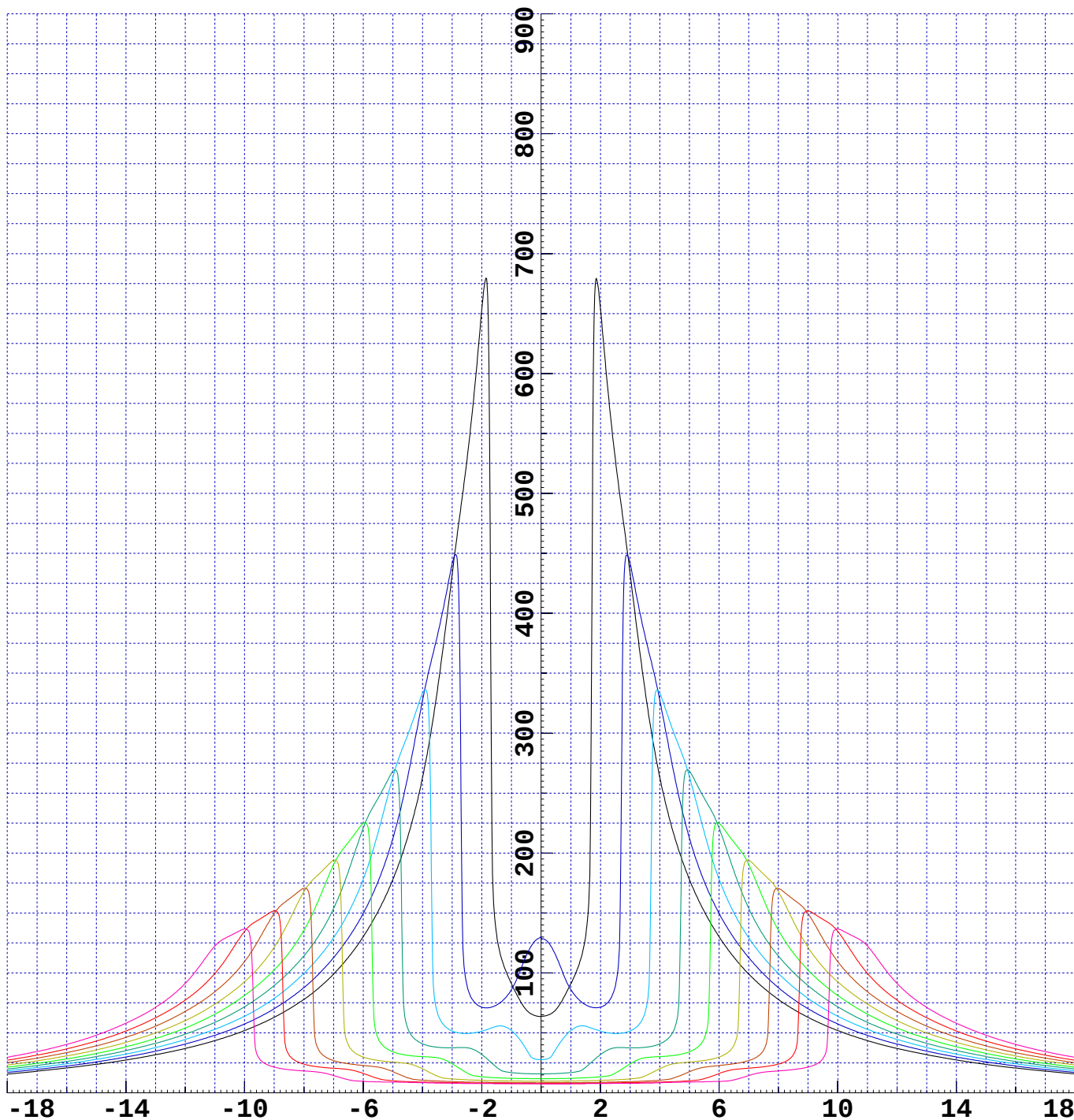


Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel tan_Ga
 Left rail: r_prof/SEC030_l.short.rail Right rail: r_prof/SEC030_r.short.rail
 Wprof_lat_shift= 0 Gauge= 1425-1441

Ident: kpfr_030

GENSYS-KPF.1308

Delta_Y=		.1	.5	2	3	4	6
Gauge= 1425	—	63.89	69.28	653.50	432.53	263.01	130.21
1427	—	128.17	114.24	71.44	441.31	327.42	149.64
1429	—	27.79	36.28	51.49	51.66	333.44	178.28
1431	—	15.81	16.04	32.01	37.60	40.88	220.95
1433	—	11.81	11.88	13.37	24.18	30.15	224.86
1435	—	9.69	9.72	10.31	11.51	20.01	29.81
1437	—	8.44	8.46	8.81	9.38	10.54	22.75
1439	—	7.73	7.75	8.01	8.41	8.99	16.11
1441	—	7.43	7.44	7.71	7.95	8.37	9.57



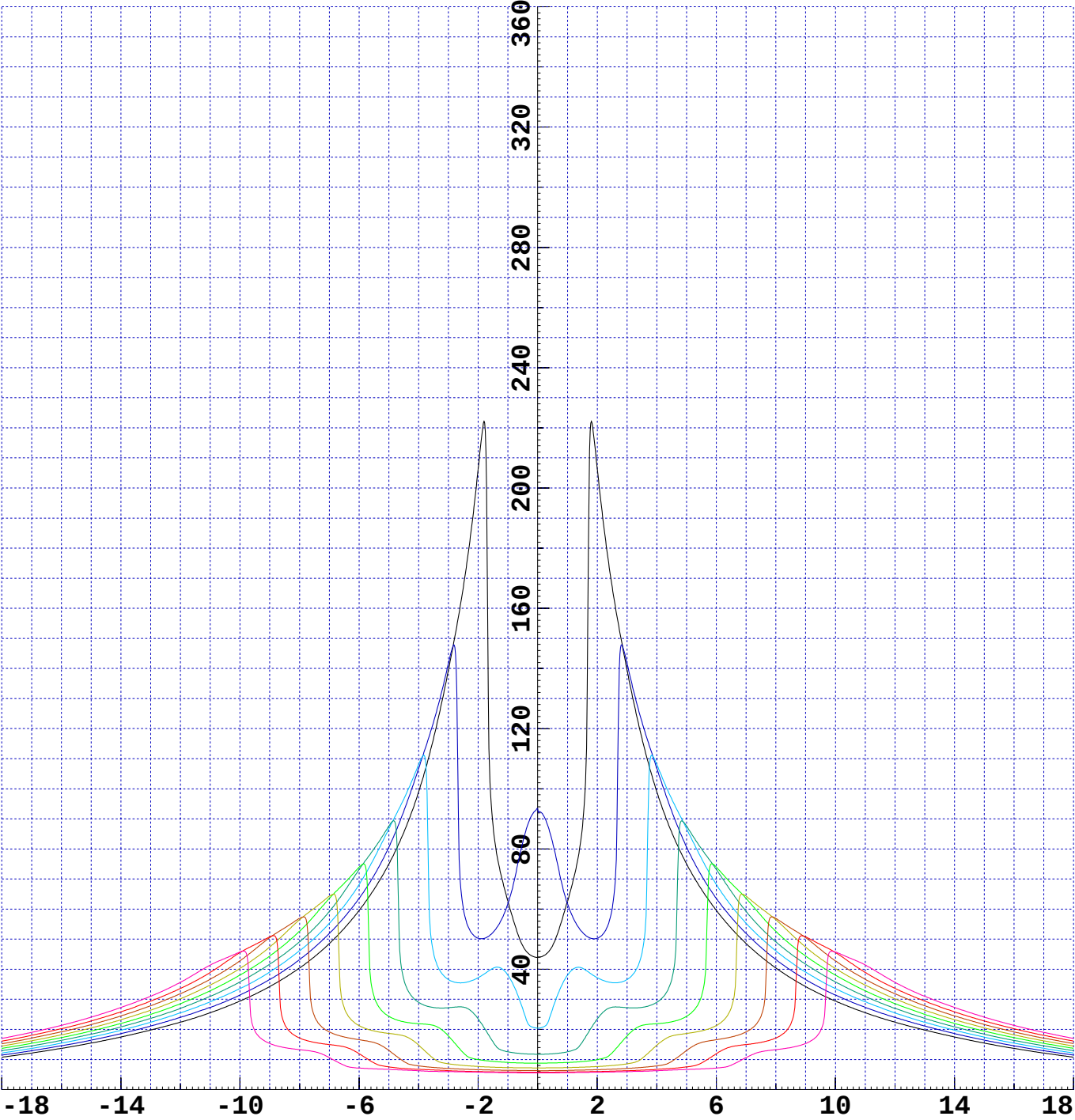
Left wheel: S1002t32.5.wheel Right wheel: S1002t32.5.wheel
 Left rail: r_prof/SEC030_l.short.rail Right rail: r_prof/SEC030_r.short.rail
 wprof_lat_shift= 0 Gauge= 1425-1441

KAPPA

Ident: kpfr_030

GENSYS-KPF.1308

Delta_Y=		.1	.5	2	3	4	6
Gauge= 1425	—	44.12	47.79	206.22	139.40	98.97	59.57
1427	—	92.26	82.22	50.33	141.66	106.80	63.56
1429	—	20.54	26.77	37.16	36.55	108.08	68.17
1431	—	11.74	11.91	23.52	27.22	29.01	73.20
1433	—	8.79	8.84	9.94	17.80	21.87	73.97
1435	—	7.22	7.24	7.68	8.57	14.75	21.25
1437	—	6.30	6.32	6.58	6.99	7.85	16.56
1439	—	5.78	5.79	5.99	6.28	6.71	11.91
1441	—	5.56	5.57	5.76	5.95	6.26	7.14



Left wheel:S1002t32.5.wheel Right wheel:S1002t32.5.wheel
Left rail: r_prof/SEC030_l.short.rail Right rail: r_prof/SEC030_r.short.rail
wprof_lat_shift= 0 Gauge= 1425-1441

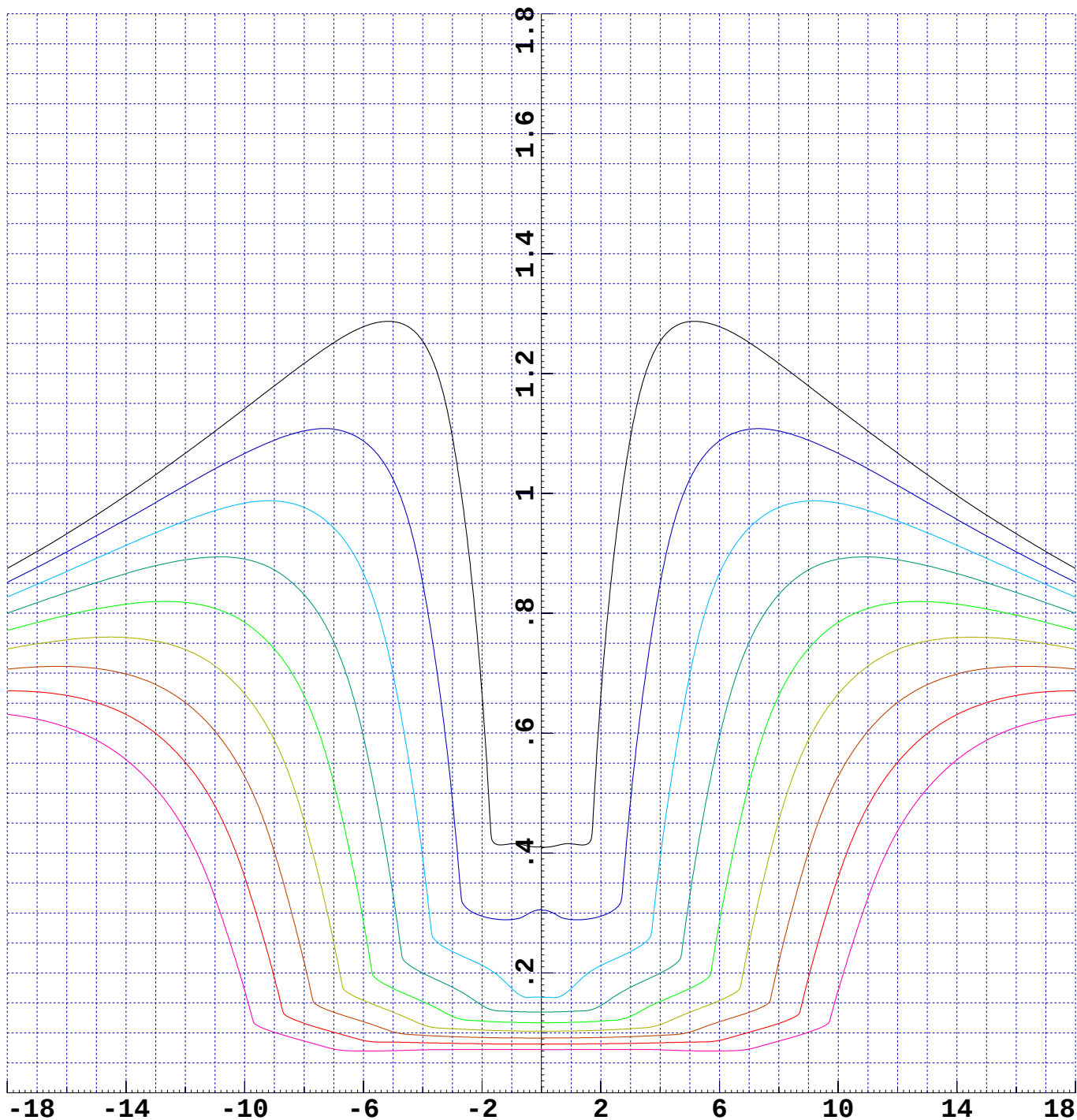
EPS

Ident: kpfr_030

GENSYS-KPF.1308

Delta_Y=

		.1	.5	2	3	4	6
Gauge=	1425	.41	.41	.66	1.09	1.25	1.28
	1427	.30	.30	.29	.49	.85	1.09
	1429	.16	.16	.21	.24	.39	.87
	1431	.13	.13	.15	.18	.20	.59
	1433	.12	.12	.12	.13	.15	.29
	1435	.10	.10	.10	.11	.11	.15
	1437	.09	.09	.09	.09	.10	.12
	1439	.08	.08	.08	.08	.08	.09
	1441	.07	.07	.07	.07	.07	.07



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

Left rail: r_prof/SEC030_l.short.rail Right rail: r_prof/SEC030_r.short.rail

wprof_lat_shift= 0 Gauge= 1425-1441

RollAC

Ident: kpfr_030