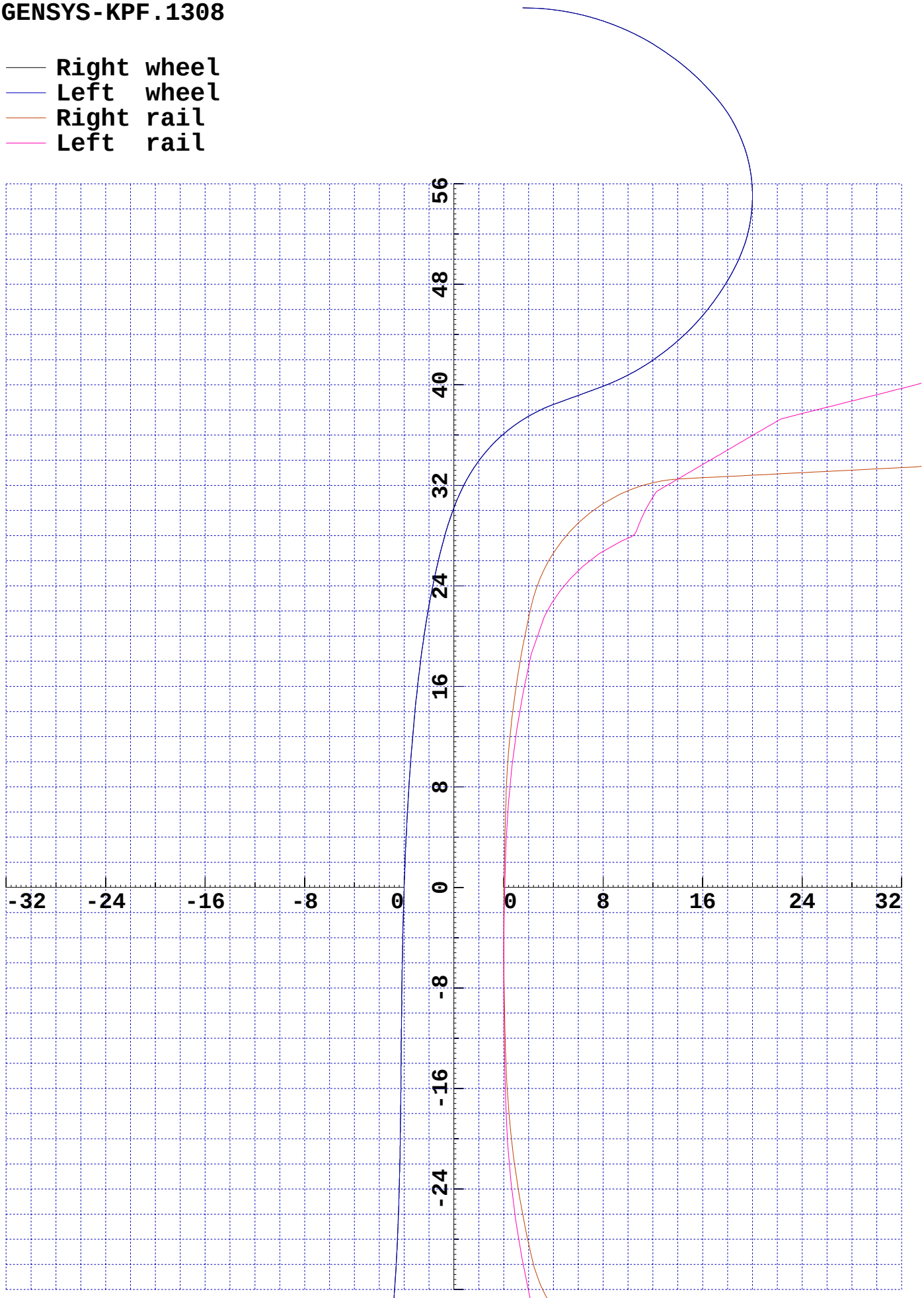
# GENSYS-KPF.1308

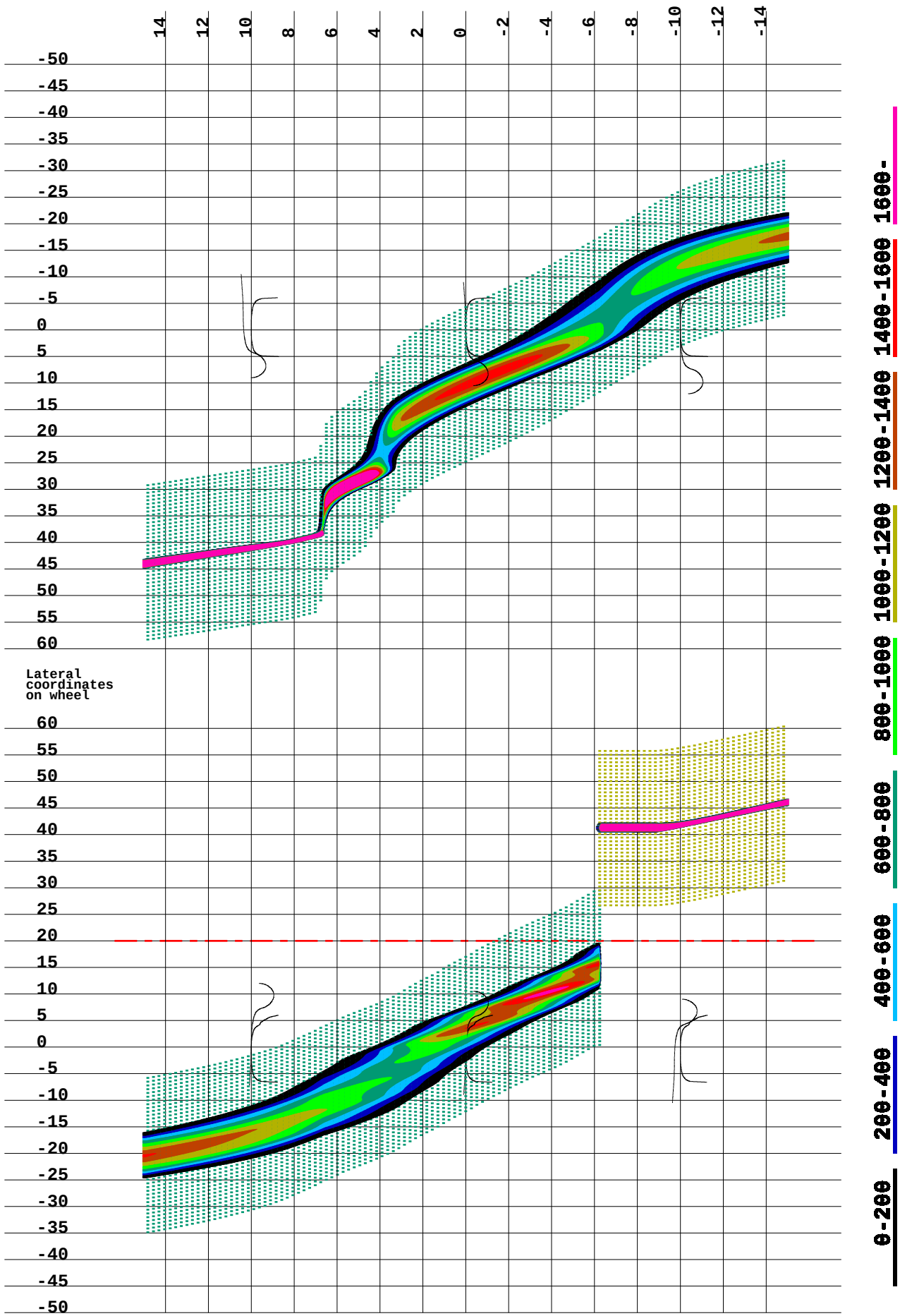



Left wheel:S1002t32.5.wheel  Right wheel:S1002t32.5.wheel
Left rail: r_prof/SEC004_l.short.rail  Right rail: r_prof/SEC004_r.short.rail
Wprof_lat_shift= 0  Gauge= 1425-1441

WRGEOM

Ident: kpfr_004

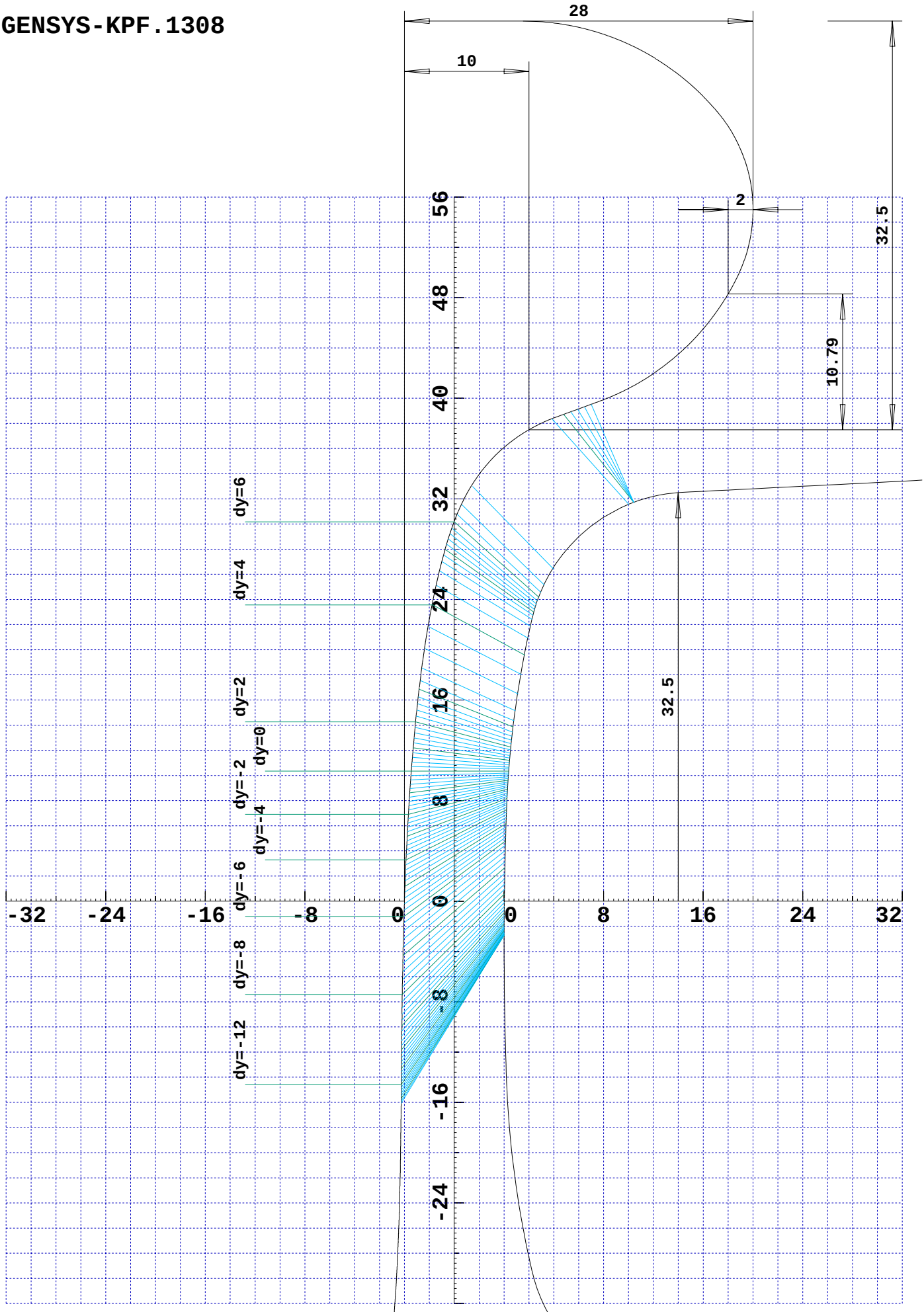
# GENSYS-KPF.1308




Left wheel:S1002t32.5.wheel  Right wheel:S1002t32.5.wheel
Left rail: r_prof/SEC004_l.short.rail  Right rail: r_prof/SEC004_r.sho
Wprof_lat_shift= 0  Gauge= 1425-1441

**Contact Pressure**

# GENSYS-KPF.1308

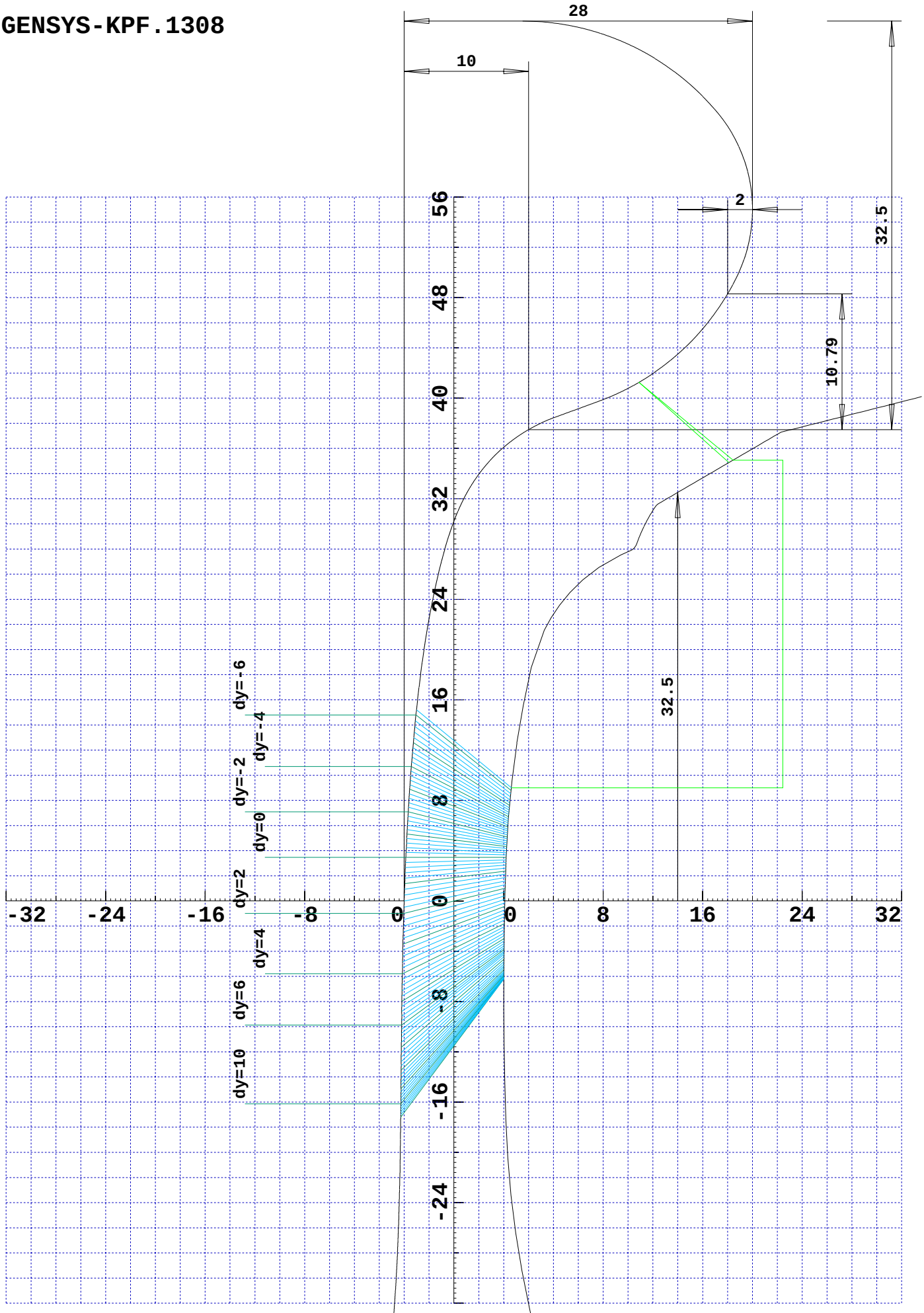



Left wheel:S1002t32.5.wheel  Right wheel:S1002t32.5.wheel
Left rail: r_prof/SEC004_l.short.rail  Right rail: r_prof/SEC004_r.short.rail
Wprof_lat_shift= 0  Gauge= 1425-1441

**CONNr**

Ident: kpfr_004

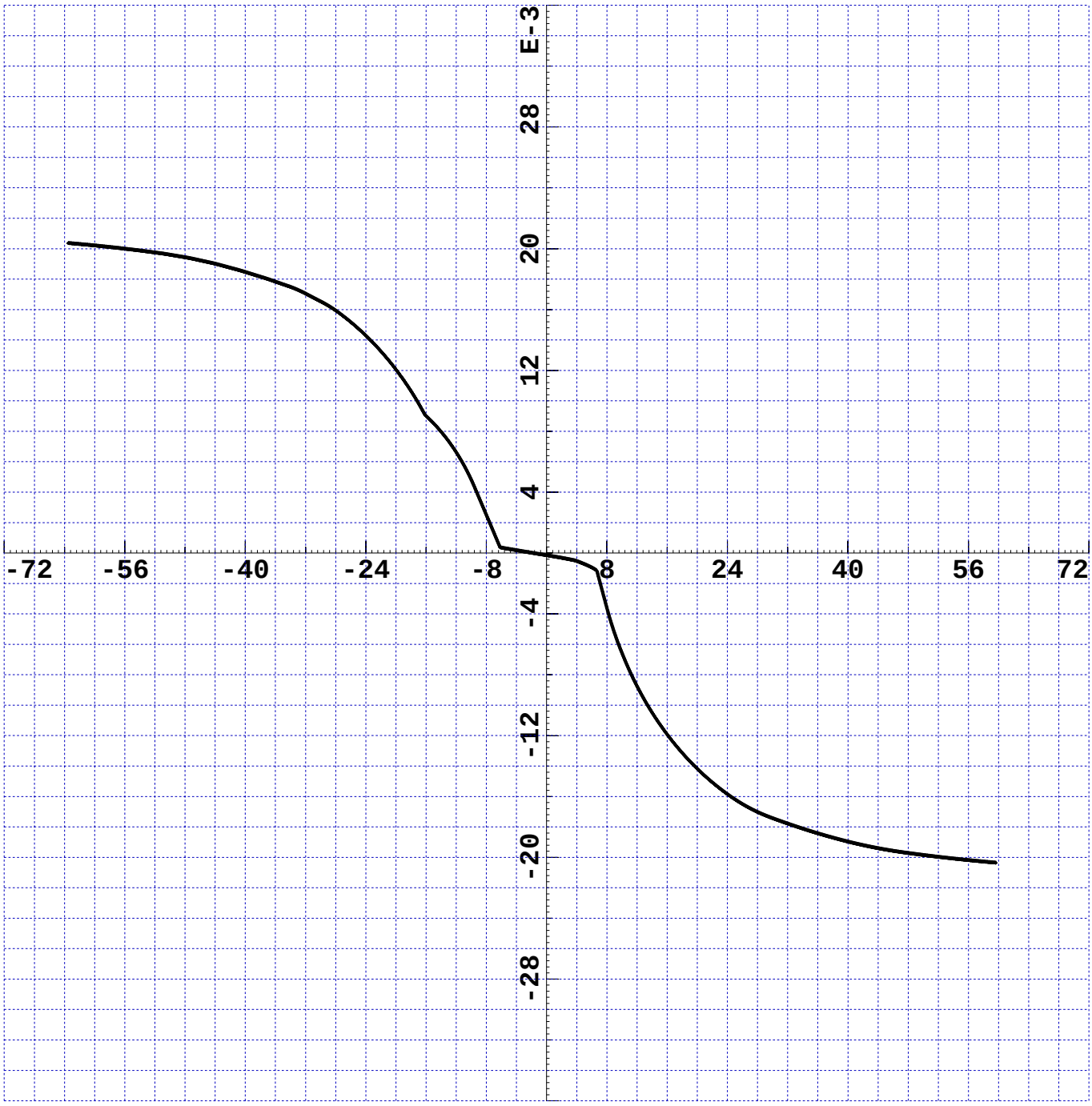
# GENSYS-KPF.1308




Left wheel:S1002t32.5.wheel  Right wheel:S1002t32.5.wheel
Left rail: r_prof/SEC004_l.short.rail  Right rail: r_prof/SEC004_r.short.rail
Wprof_lat_shift= 0  Gauge= 1425-1441

**CONNl**

**Ident: kpfr_004**

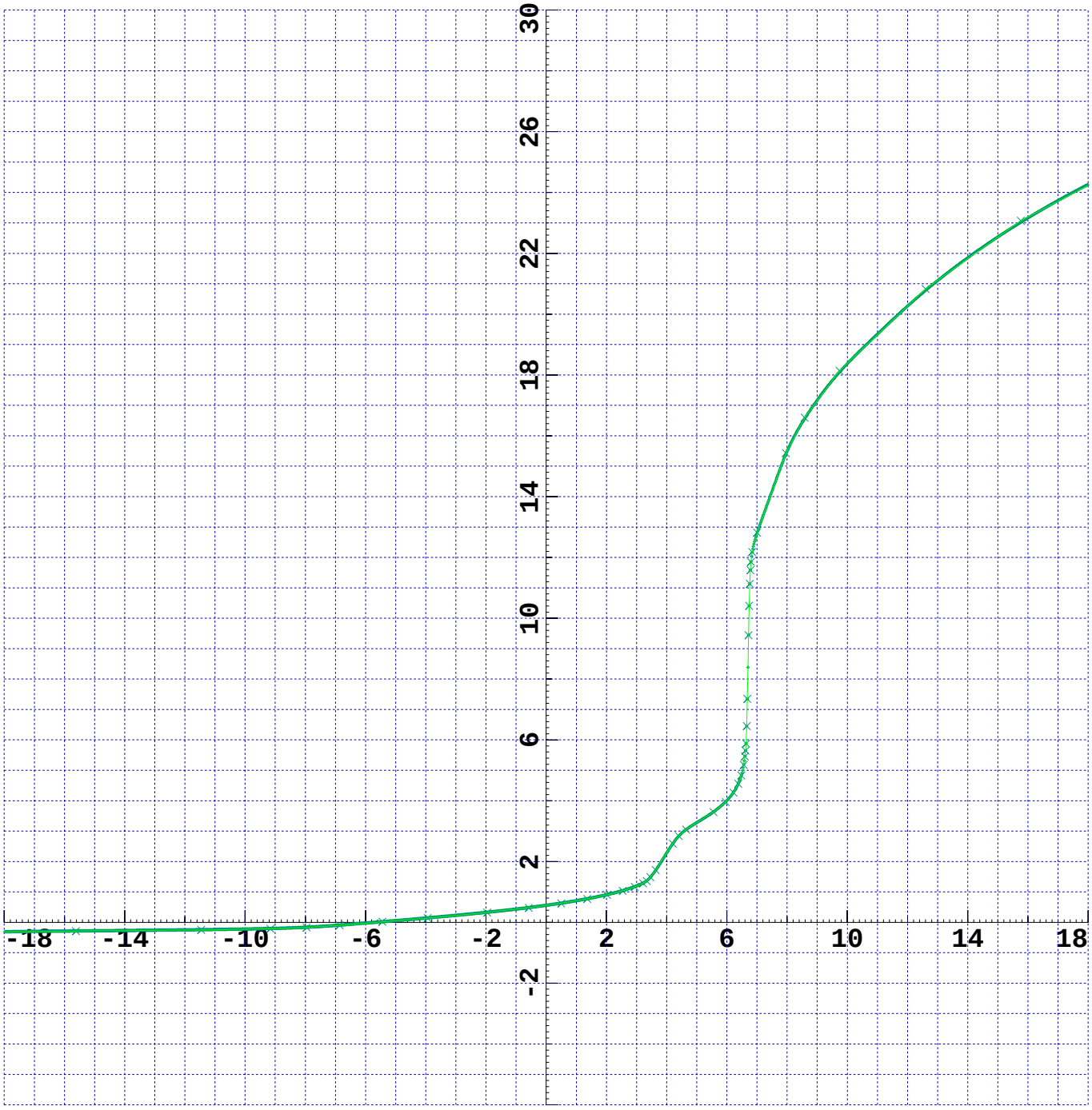



Left wheel:S1002t32.5.wheel  Right wheel:S1002t32.5.wheel
Left rail: r_prof/SEC004_l.short.rail  Right rail: r_prof/SEC004_r.short.rail
Wprof_lat_shift= 0  Gauge= 1425-1441

**FIaxl**

**Ident: kpfr_004**

# GENSYS-KPF.1308

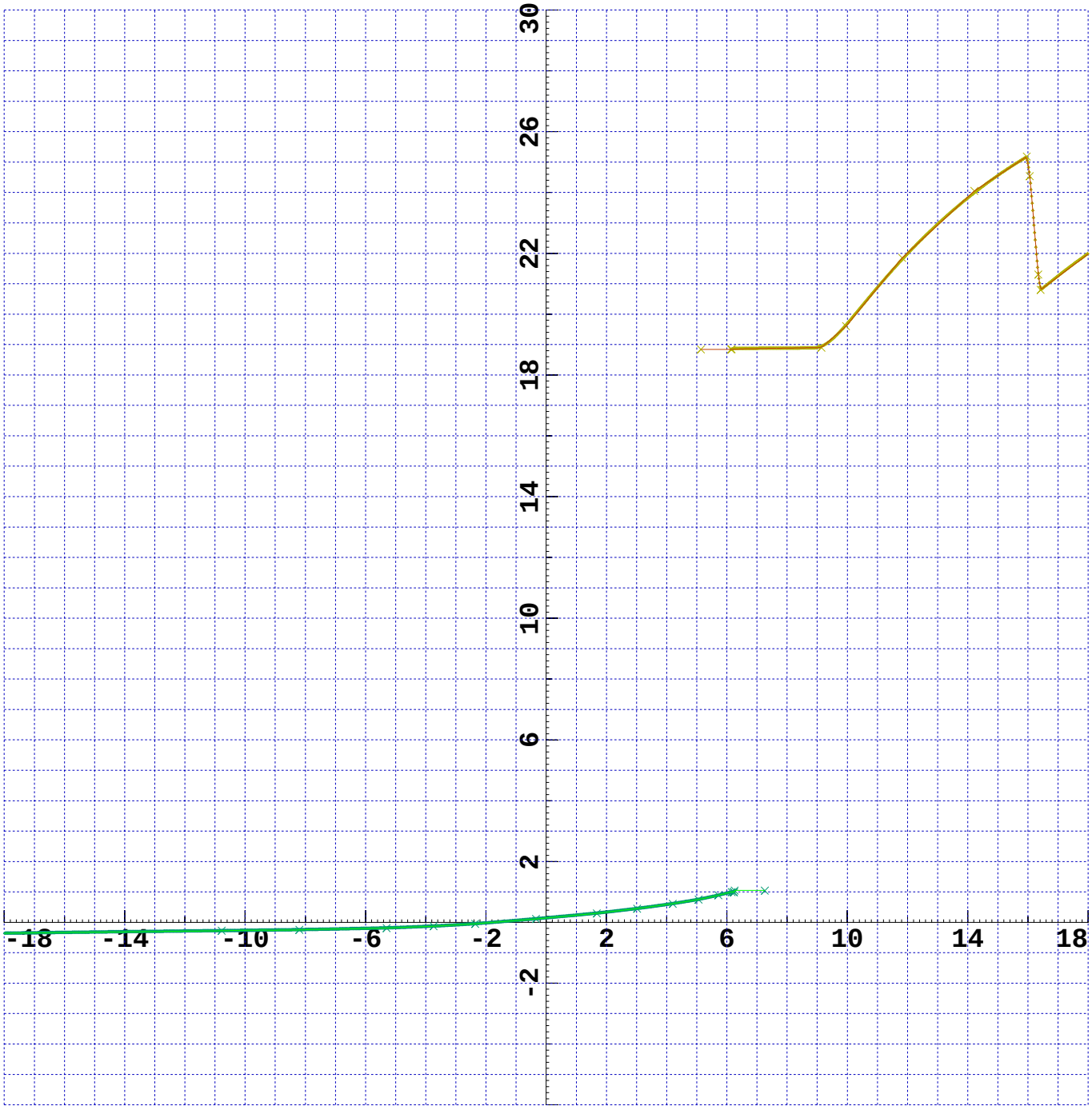



Left wheel:S1002t32.5.wheel  Right wheel:S1002t32.5.wheel
Left rail: r_prof/SEC004_l.short.rail  Right rail: r_prof/SEC004_r.short.rail
Wprof_lat_shift= 0  Gauge= 1425-1441

**DRFNr**

**Ident: kpfr_004**

# GENSYS-KPF.1308

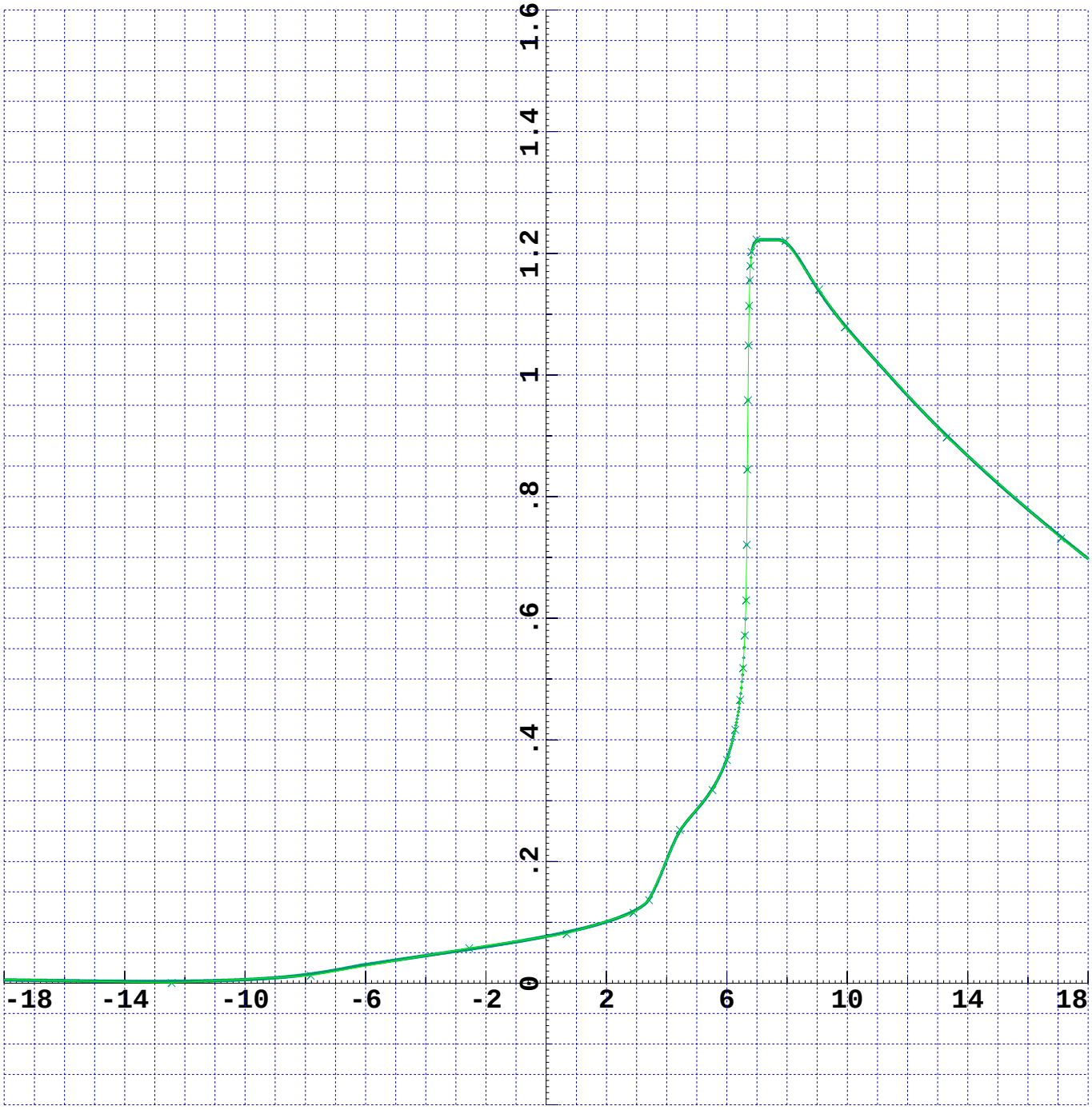



Left wheel:S1002t32.5.wheel  Right wheel:S1002t32.5.wheel
Left rail: r_prof/SEC004_l.short.rail  Right rail: r_prof/SEC004_r.short.rail
Wprof_lat_shift= 0  Gauge= 1425-1441

**DRFNl**

**Ident: kpfr_004**

# GENSYS-KPF.1308

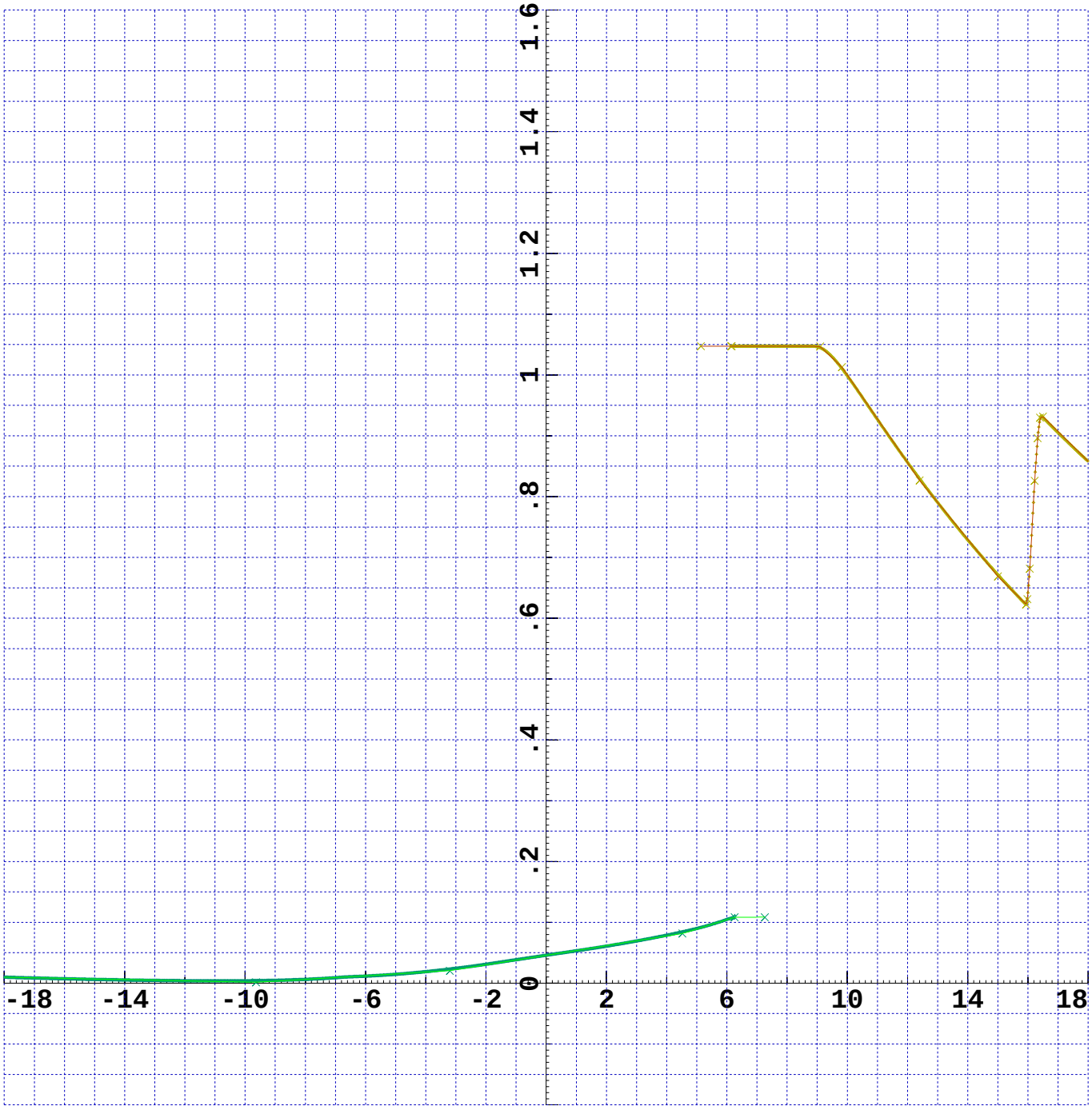



Left wheel:S1002t32.5.wheel  Right wheel:S1002t32.5.wheel
Left rail: r_prof/SEC004_l.short.rail  Right rail: r_prof/SEC004_r.short.rail
Wprof_lat_shift= 0  Gauge= 1425-1441

**GAMFNr**

**Ident: kpfr_004**

# GENSYS-KPF.1308

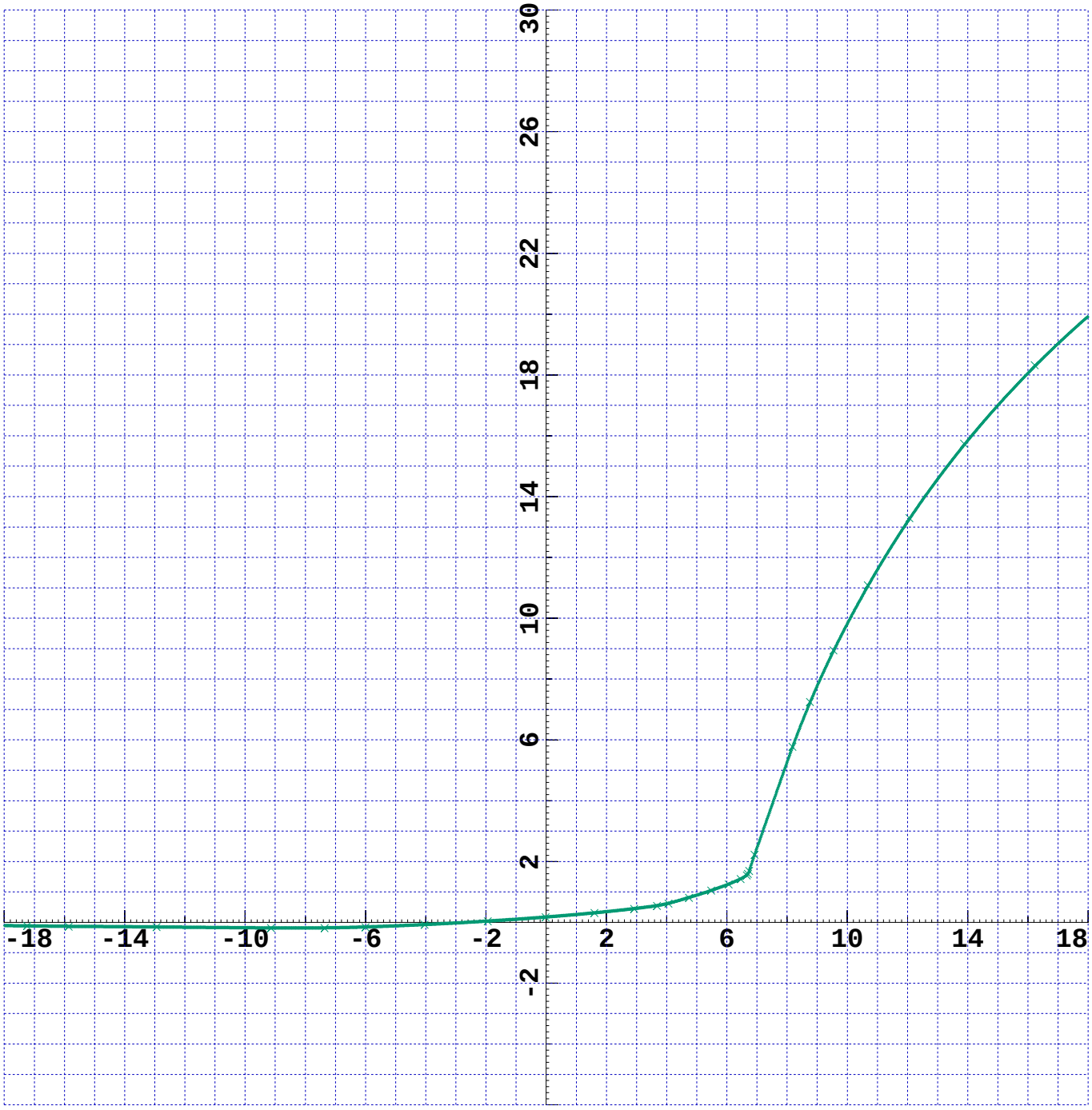



Left wheel:S1002t32.5.wheel  Right wheel:S1002t32.5.wheel
Left rail: r_prof/SEC004_l.short.rail  Right rail: r_prof/SEC004_r.short.rail
Wprof_lat_shift= 0  Gauge= 1425-1441

**GAMFNl**

**Ident: kpfr_004**

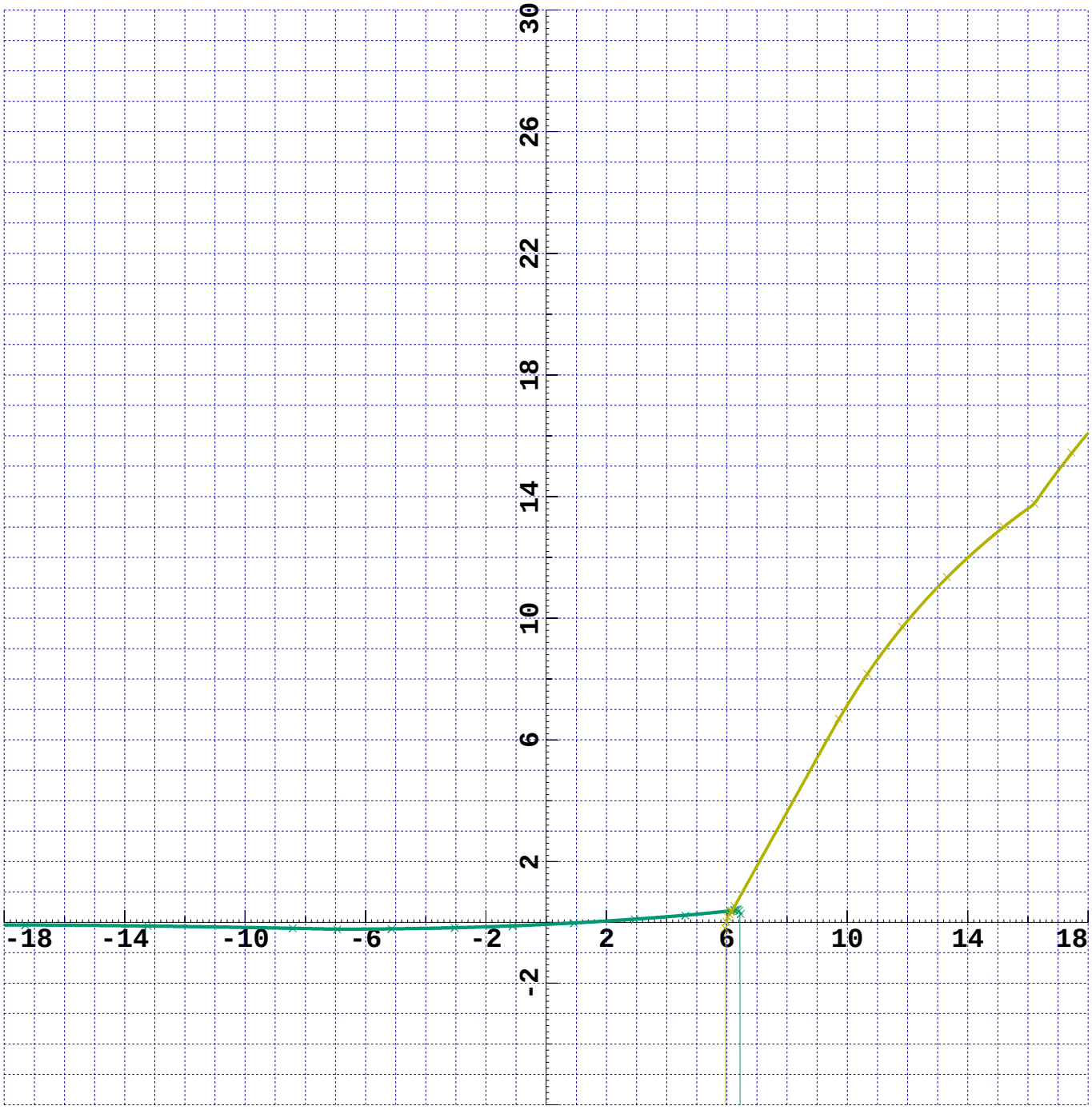
**GENSYS-KPF.1308**




Left wheel:S1002t32.5.wheel  Right wheel:S1002t32.5.wheel
Left rail: r_prof/SEC004_l.short.rail  Right rail: r_prof/SEC004_r.short.rail
Wprof_lat_shift= 0  Gauge= 1425-1441

**ZFNr**

**Ident: kpfr_004**




Left wheel:S1002t32.5.wheel  Right wheel:S1002t32.5.wheel
Left rail: r_prof/SEC004_l.short.rail  Right rail: r_prof/SEC004_r.short.rail
Wprof_lat_shift= 0  Gauge= 1425-1441

**ZFNl**

**Ident: kpfr_004**

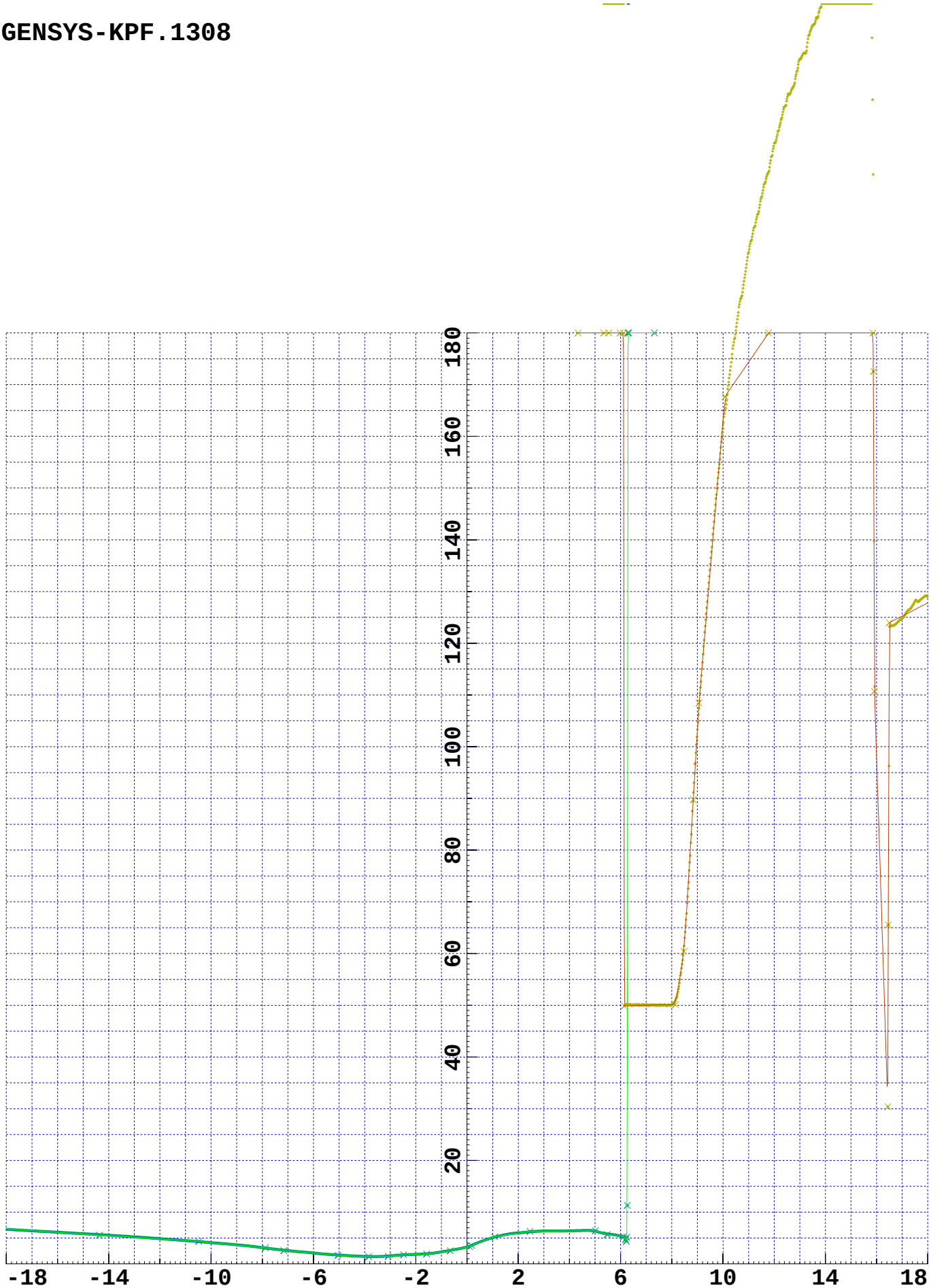
**GENSYS-KPF.1308**


Left wheel:S1002t32.5.wheel  Right wheel:S1002t32.5.wheel
Left rail: r_prof/SEC004_l.short.rail  Right rail: r_prof/SEC004_r.short.rail
Wprof_lat_shift= 0  Gauge= 1425-1441

**ROFNr**

**Ident: kpfr_004**

GENSYS-KPF.1308

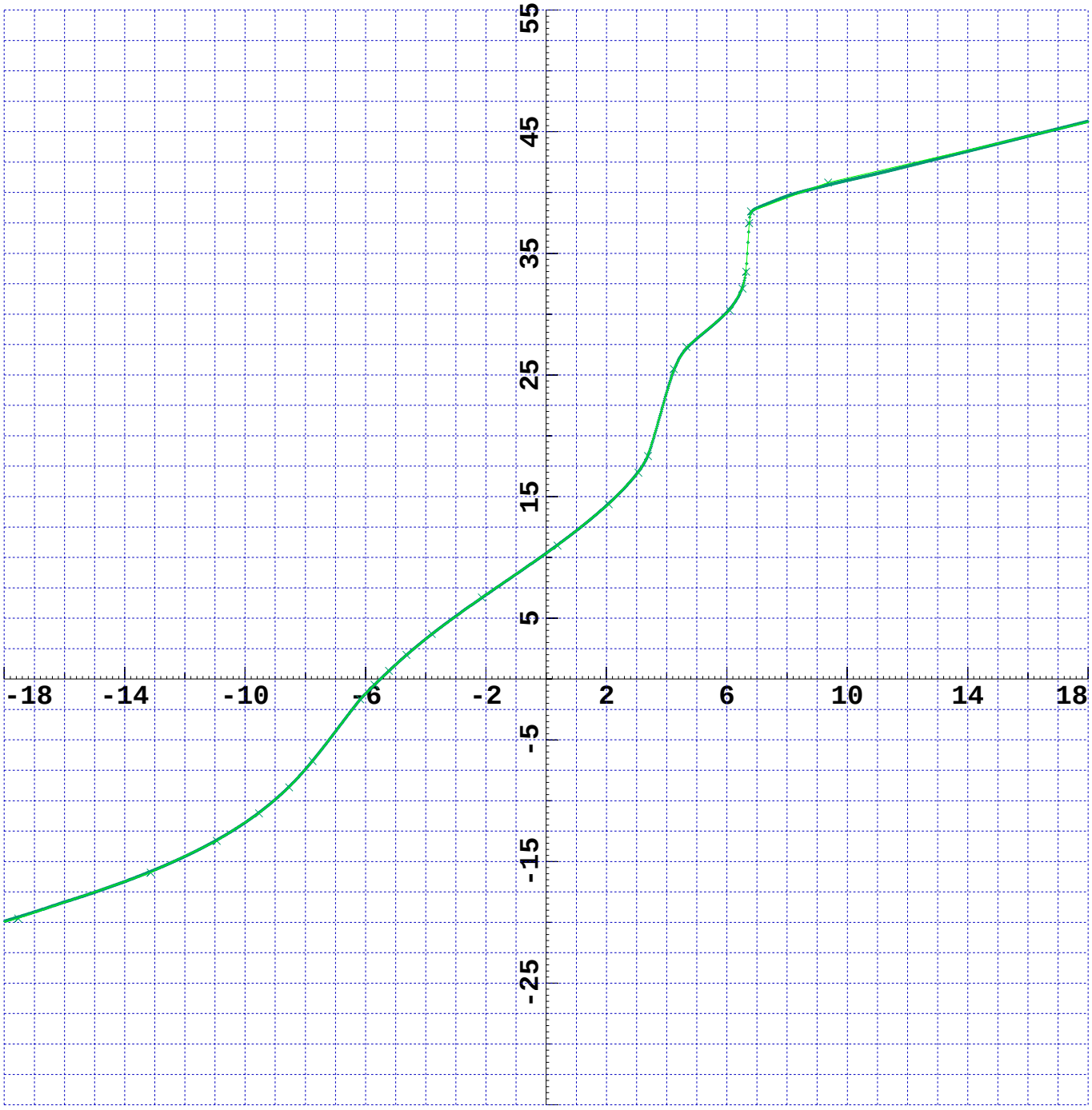



Left wheel:S1002t32.5.wheel  Right wheel:S1002t32.5.wheel
Left rail: r_prof/SEC004_l.short.rail  Right rail: r_prof/SEC004_r.short.rail
Wprof_lat_shift= 0  Gauge= 1425-1441

ROFNl

Ident: kpfr_004

# GENSYS-KPF.1308

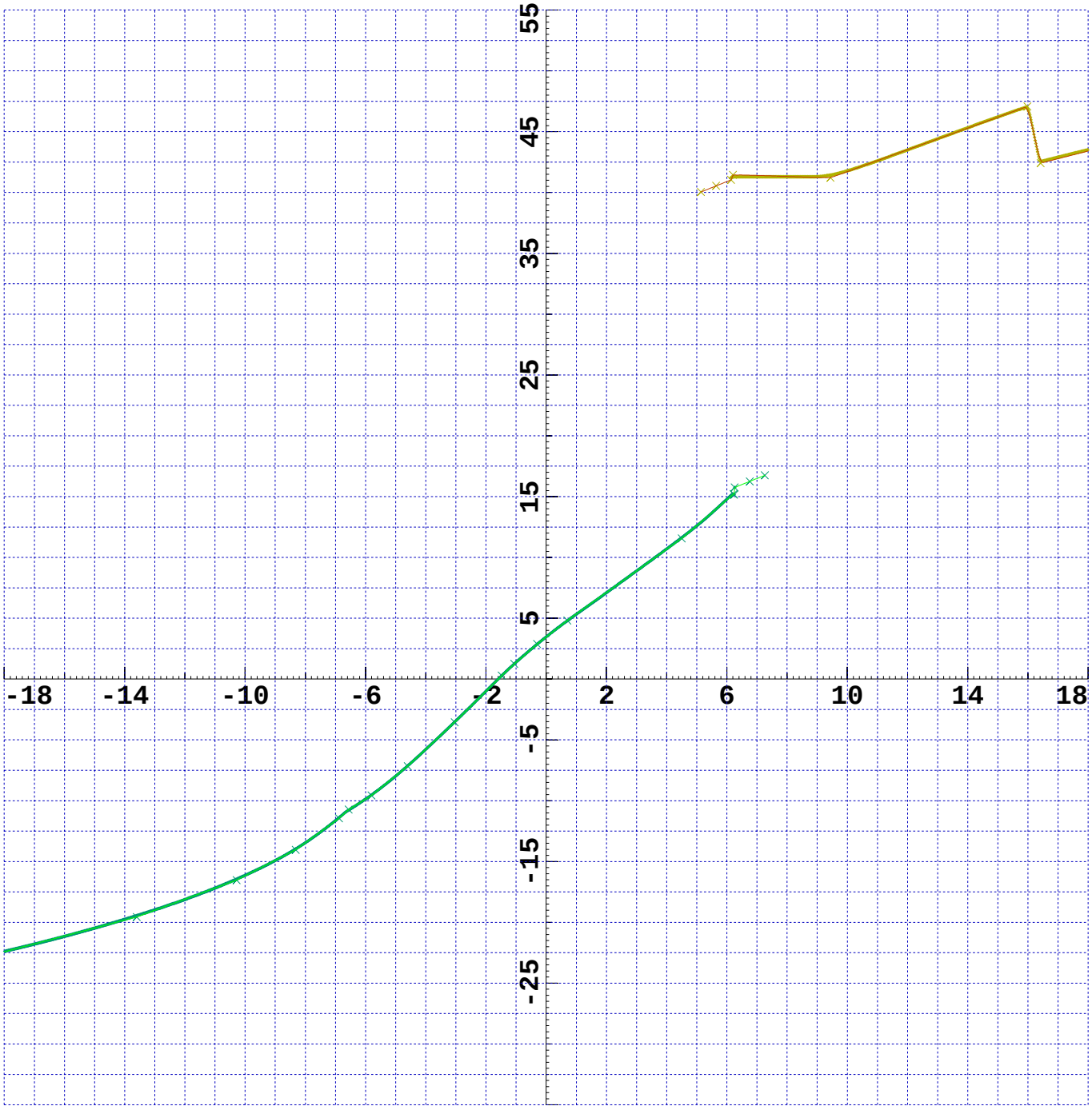



Left wheel:S1002t32.5.wheel  Right wheel:S1002t32.5.wheel
Left rail: r_prof/SEC004_l.short.rail  Right rail: r_prof/SEC004_r.short.rail
Wprof_lat_shift= 0  Gauge= 1425-1441

**POSWr**

**Ident: kpfr_004**

# GENSYS-KPF.1308

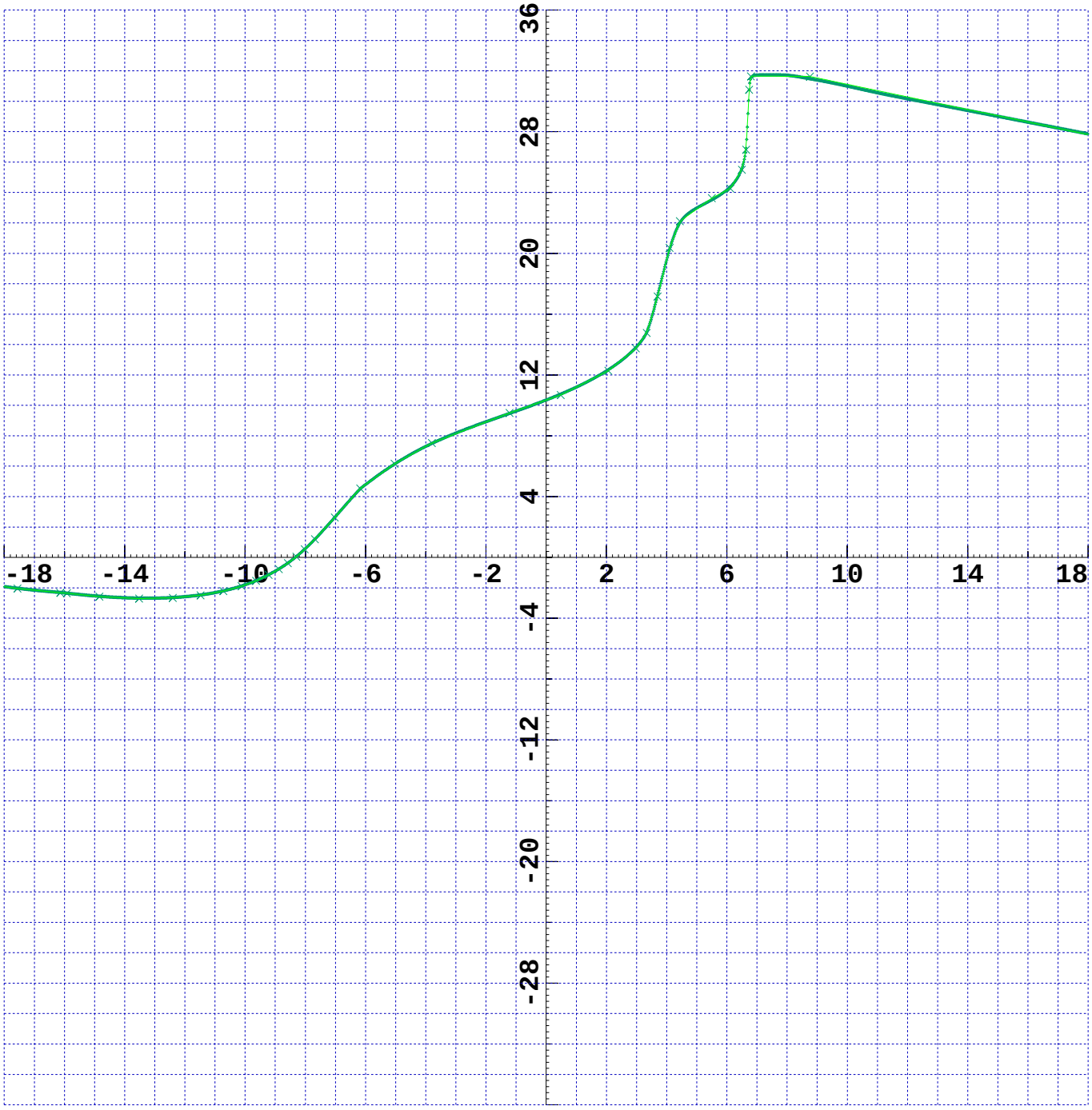



Left wheel:S1002t32.5.wheel  Right wheel:S1002t32.5.wheel
Left rail: r_prof/SEC004_l.short.rail  Right rail: r_prof/SEC004_r.short.rail
Wprof_lat_shift= 0  Gauge= 1425-1441

**POSWl**

**Ident: kpfr_004**

# GENSYS-KPF.1308




Left wheel:S1002t32.5.wheel  Right wheel:S1002t32.5.wheel
Left rail: r_prof/SEC004_l.short.rail  Right rail: r_prof/SEC004_r.short.rail
Wprof_lat_shift= 0  Gauge= 1425-1441

**POSRr**

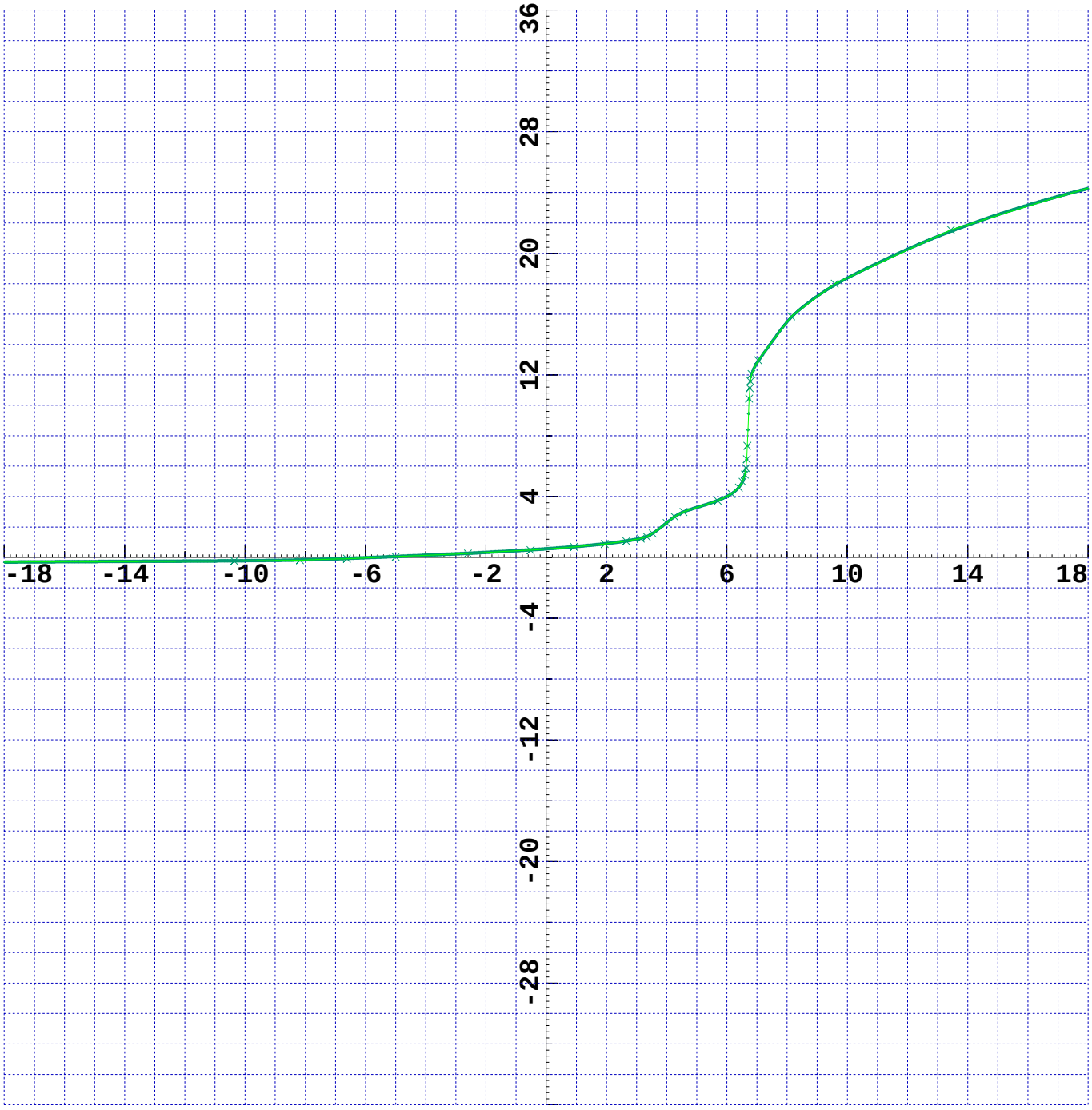
**Ident: kpfr_004**


Left wheel:S1002t32.5.wheel  Right wheel:S1002t32.5.wheel
Left rail: r_prof/SEC004_l.short.rail  Right rail: r_prof/SEC004_r.short.rail
Wprof_lat_shift= 0  Gauge= 1425-1441

**POSRl**

**Ident: kpfr_004**

# GENSYS-KPF.1308

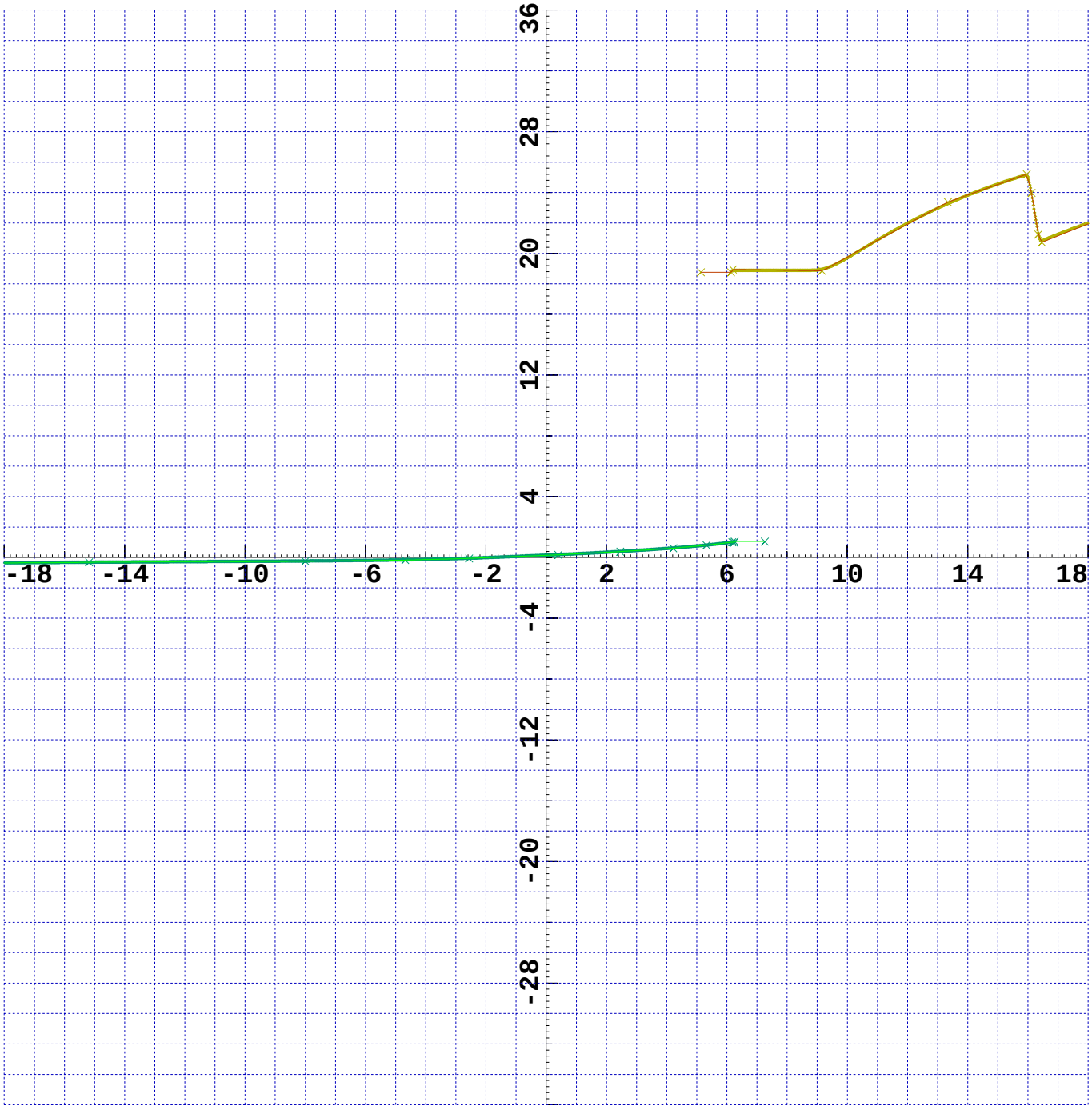



Left wheel:S1002t32.5.wheel  Right wheel:S1002t32.5.wheel
Left rail: r_prof/SEC004_l.short.rail  Right rail: r_prof/SEC004_r.short.rail
Wprof_lat_shift= 0  Gauge= 1425-1441

**ZWr**

**Ident: kpfr_004**

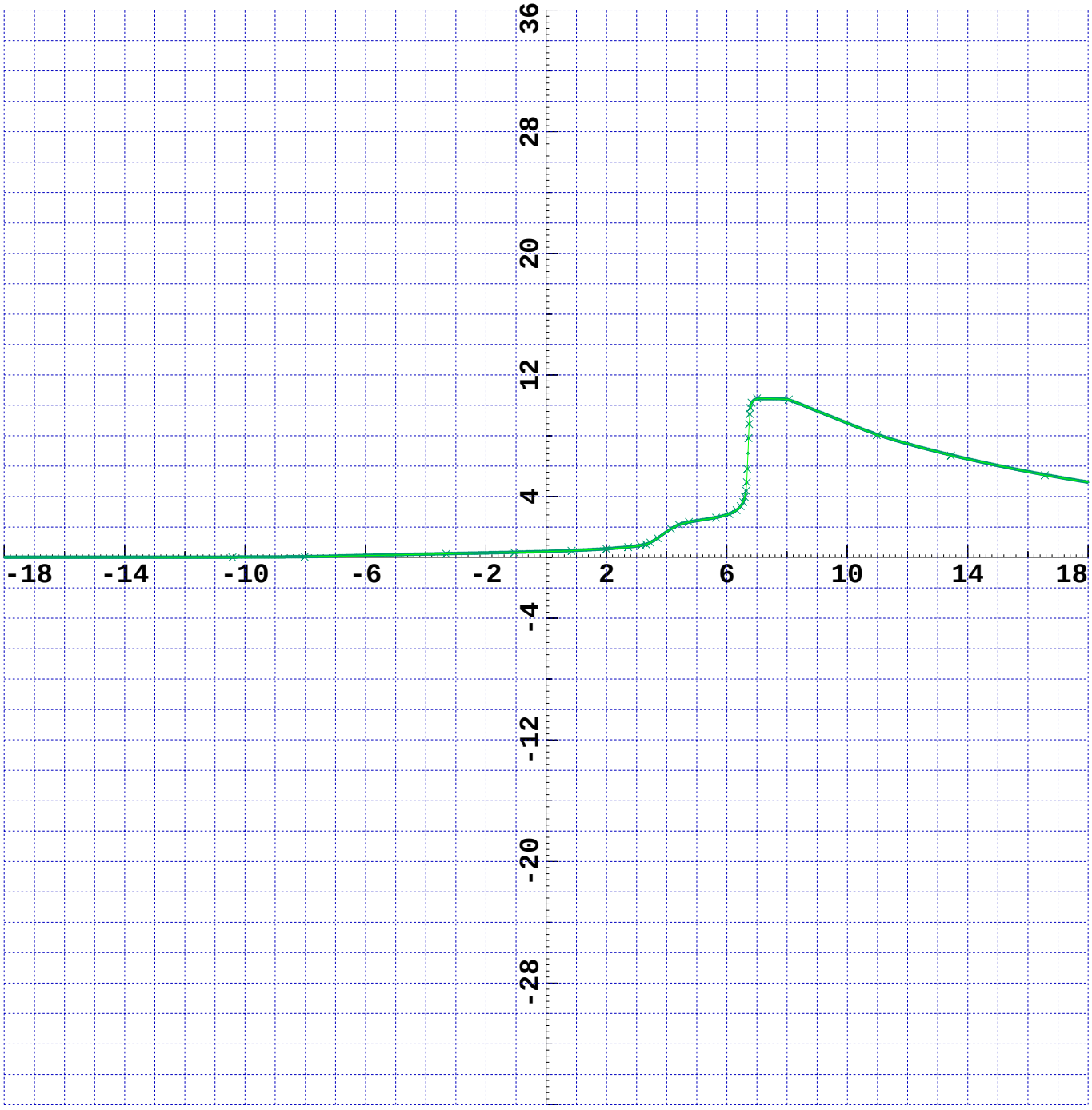
# GENSYS-KPF.1308




Left wheel:S1002t32.5.wheel  Right wheel:S1002t32.5.wheel
Left rail: r_prof/SEC004_l.short.rail  Right rail: r_prof/SEC004_r.short.rail
Wprof_lat_shift= 0  Gauge= 1425-1441

**ZWl**

**Ident: kpfr_004**




Left wheel:S1002t32.5.wheel  Right wheel:S1002t32.5.wheel
Left rail: r_prof/SEC004_l.short.rail  Right rail: r_prof/SEC004_r.short.rail
Wprof_lat_shift= 0  Gauge= 1425-1441

**ZRr**

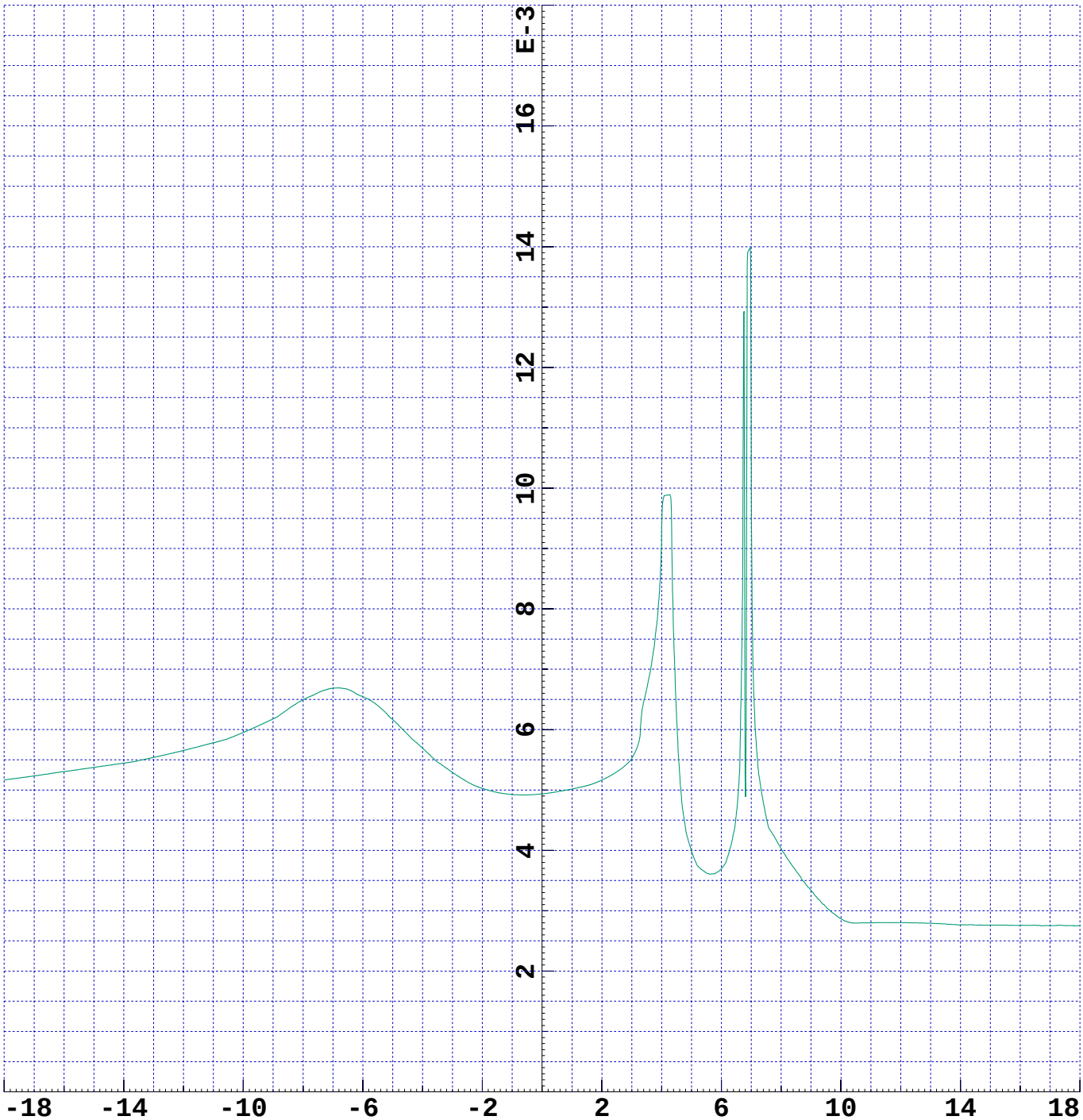
**Ident: kpfr_004**

# GENSYS-KPF.1308


Left wheel:S1002t32.5.wheel  Right wheel:S1002t32.5.wheel
Left rail: r_prof/SEC004_l.short.rail  Right rail: r_prof/SEC004_r.short.rail
Wprof_lat_shift= 0  Gauge= 1425-1441

**ZRl**

**Ident: kpfr_004**

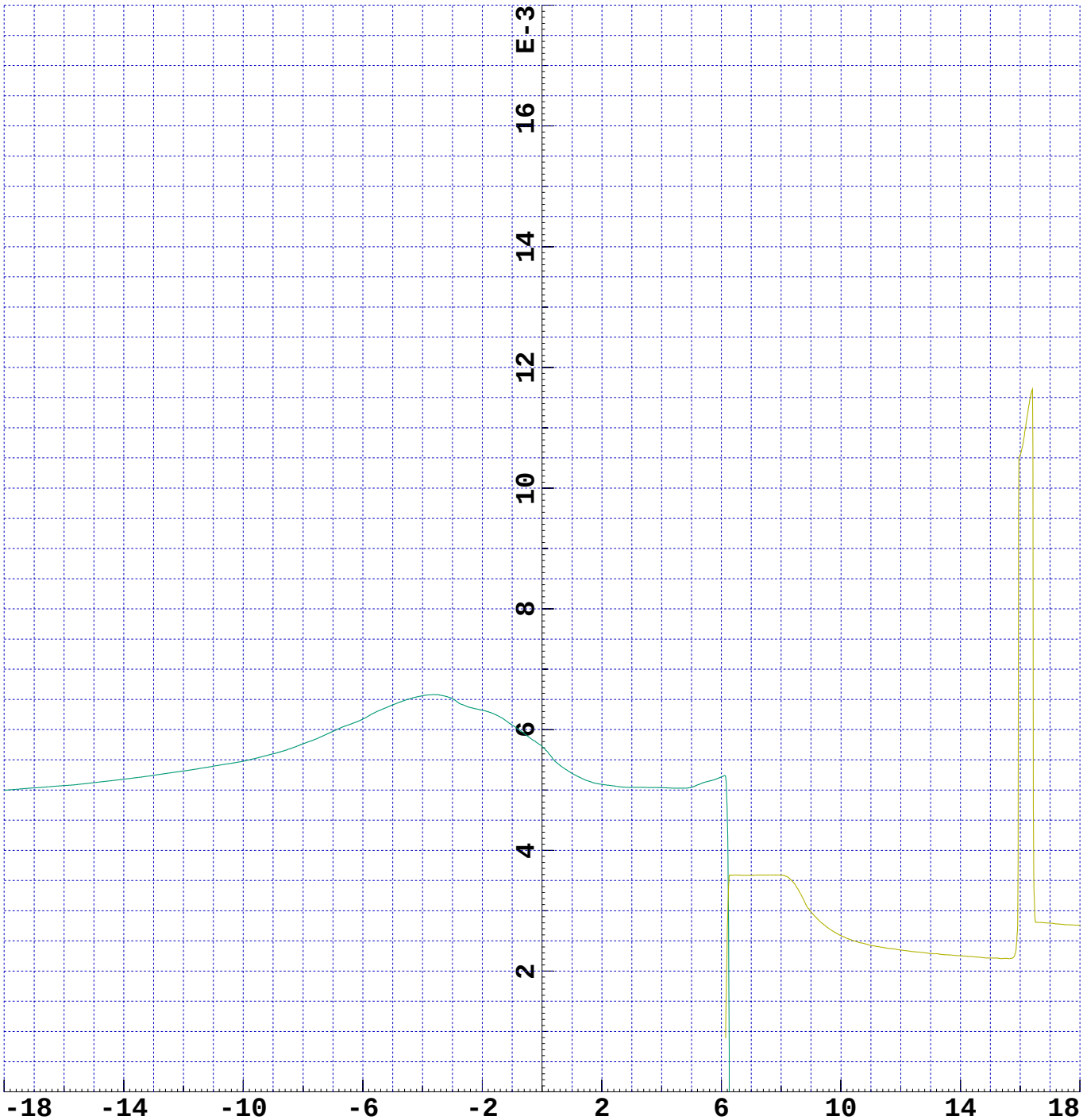



Left wheel:S1002t32.5.wheel  Right wheel:S1002t32.5.wheel
Left rail: r_prof/SEC004_l.short.rail  Right rail: r_prof/SEC004_r.short.rail
Wprof_lat_shift= 0  Gauge= 1425-1441

C_r

Ident: kpfr_004

# GENSYS-KPF.1308

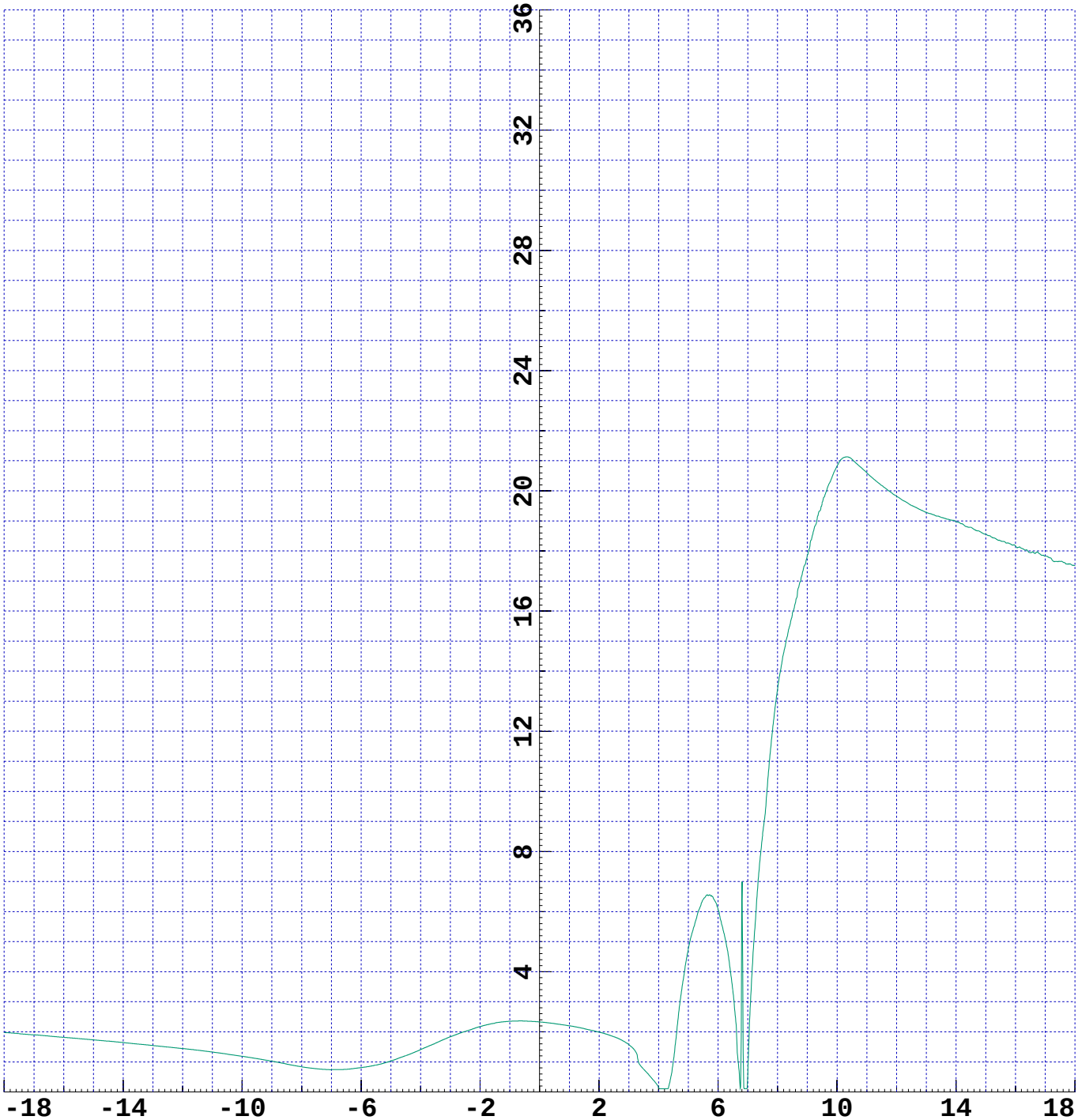



Left wheel:S1002t32.5.wheel  Right wheel:S1002t32.5.wheel
Left rail: r_prof/SEC004_l.short.rail  Right rail: r_prof/SEC004_r.short.rail
Wprof_lat_shift= 0  Gauge= 1425-1441

C_l

Ident: kpfr_004

# GENSYS-KPF.1308

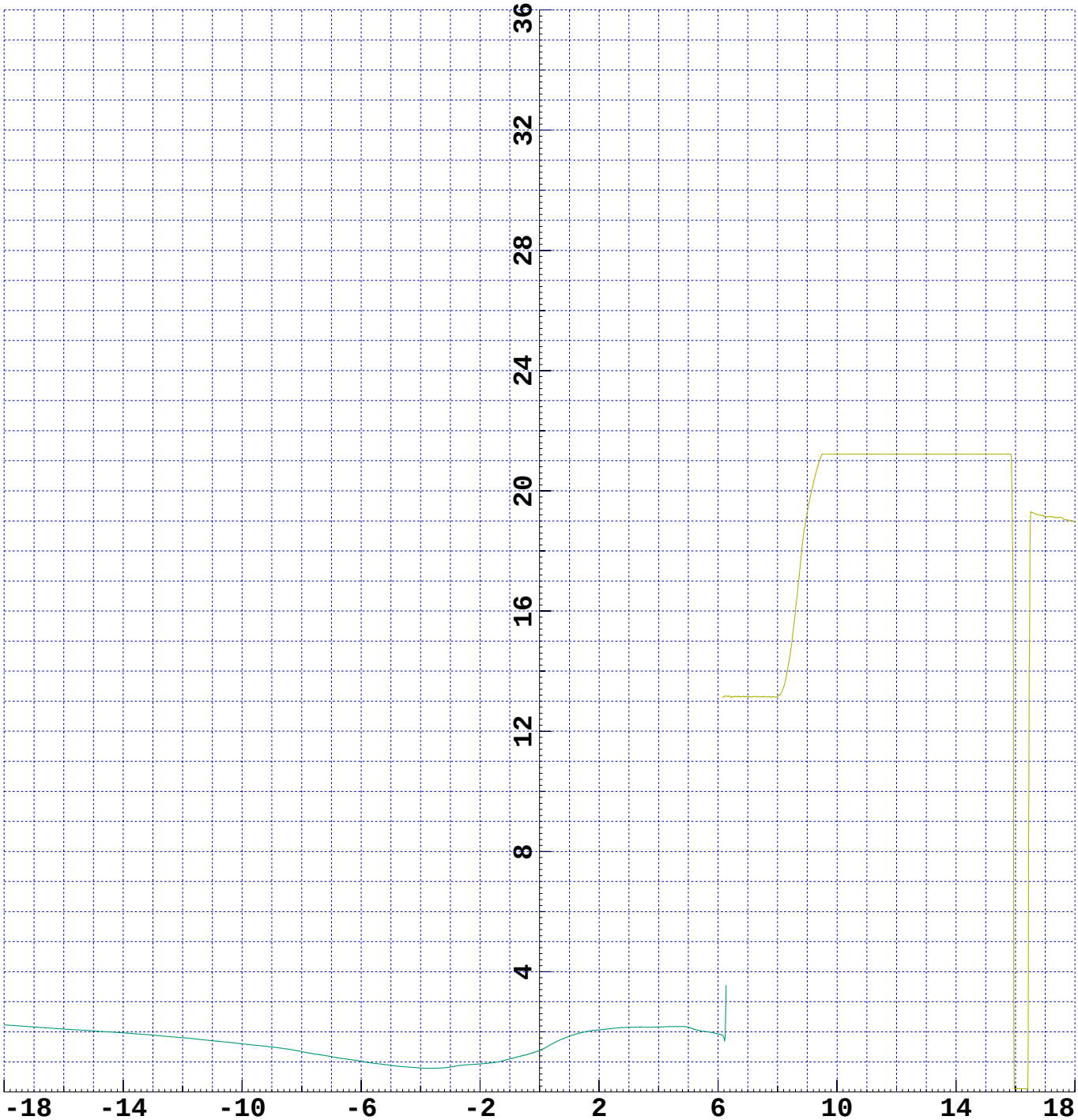



Left wheel:S1002t32.5.wheel  Right wheel:S1002t32.5.wheel
Left rail: r_prof/SEC004_l.short.rail  Right rail: r_prof/SEC004_r.short.rail
Wprof_lat_shift= 0  Gauge= 1425-1441

**A/B_r**

**Ident: kpfr_004**

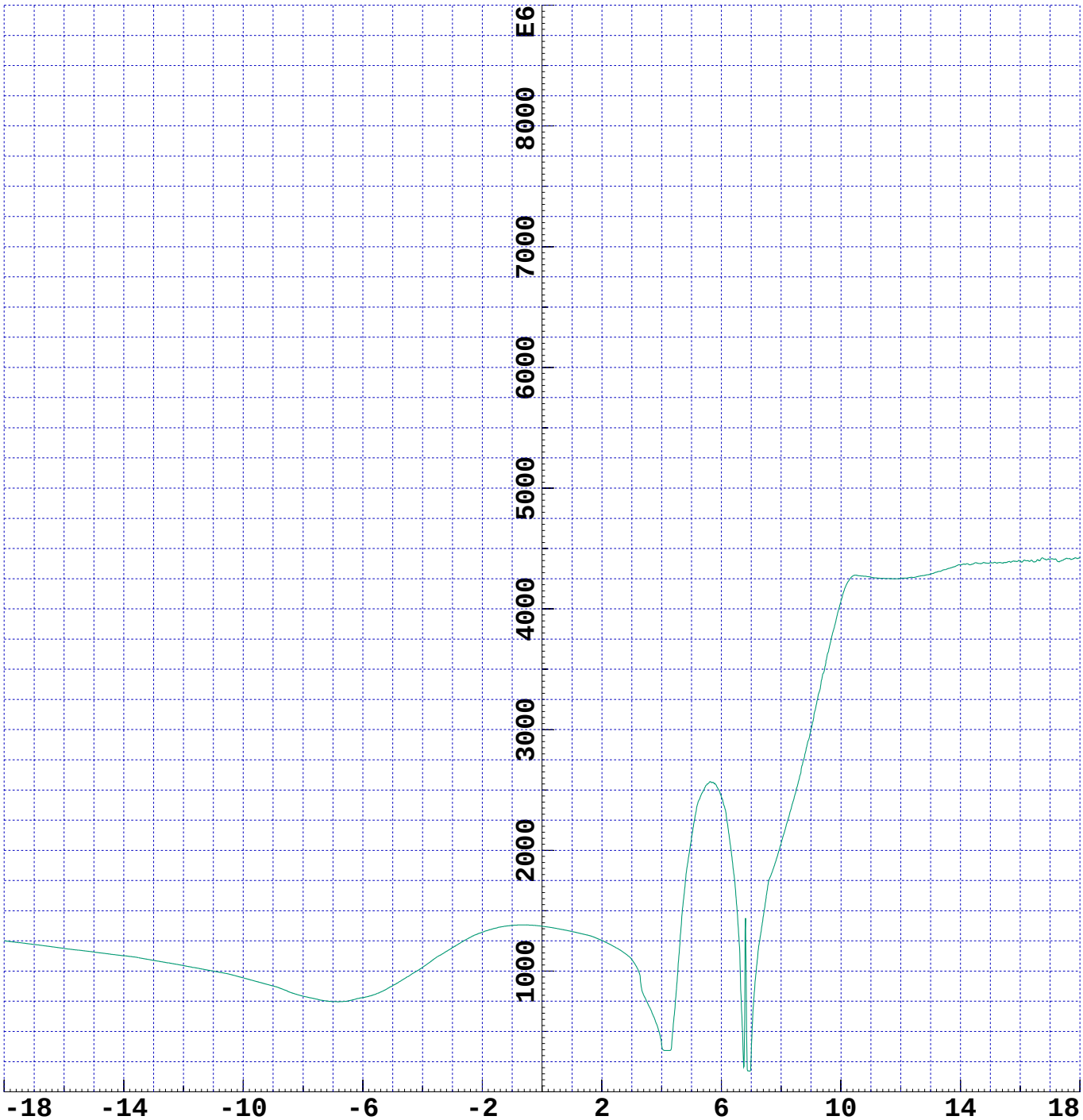
# GENSYS-KPF.1308




Left wheel:S1002t32.5.wheel  Right wheel:S1002t32.5.wheel
Left rail: r_prof/SEC004_l.short.rail  Right rail: r_prof/SEC004_r.short.rail
Wprof_lat_shift= 0  Gauge= 1425-1441

**A/B_l**

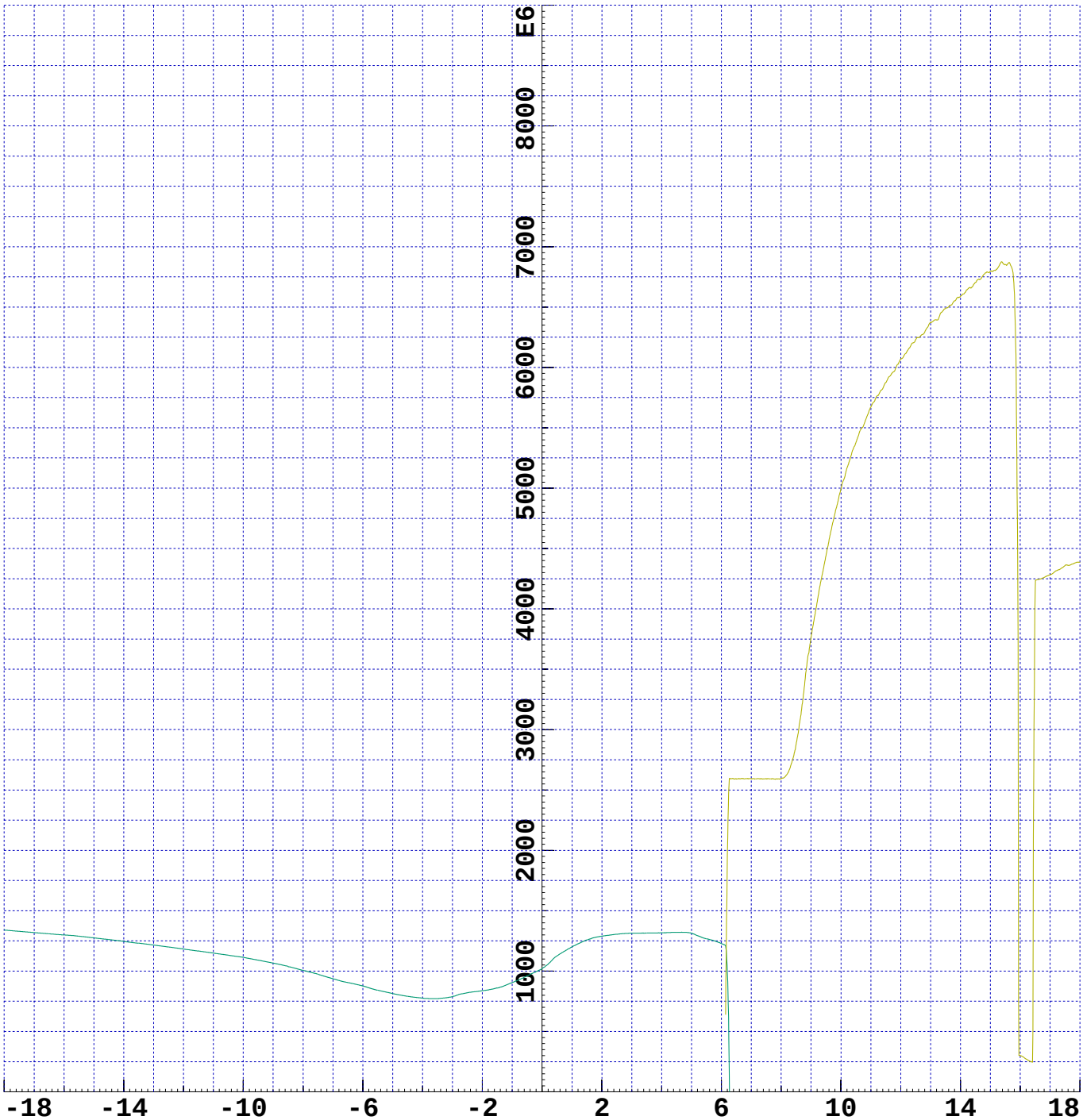
**Ident: kpfr_004**




Left wheel:S1002t32.5.wheel  Right wheel:S1002t32.5.wheel
Left rail: r_prof/SEC004_l.short.rail  Right rail: r_prof/SEC004_r.short.rail
Wprof_lat_shift= 0  Gauge= 1425-1441

SIGMAr

Ident: kpfr_004




Left wheel:S1002t32.5.wheel  Right wheel:S1002t32.5.wheel
Left rail: r_prof/SEC004_l.short.rail  Right rail: r_prof/SEC004_r.short.rail
Wprof_lat_shift= 0  Gauge= 1425-1441

**SIGMAl**

**Ident: kpfr_004**

GENSYS-KPF.1308

# Radial Steering Index

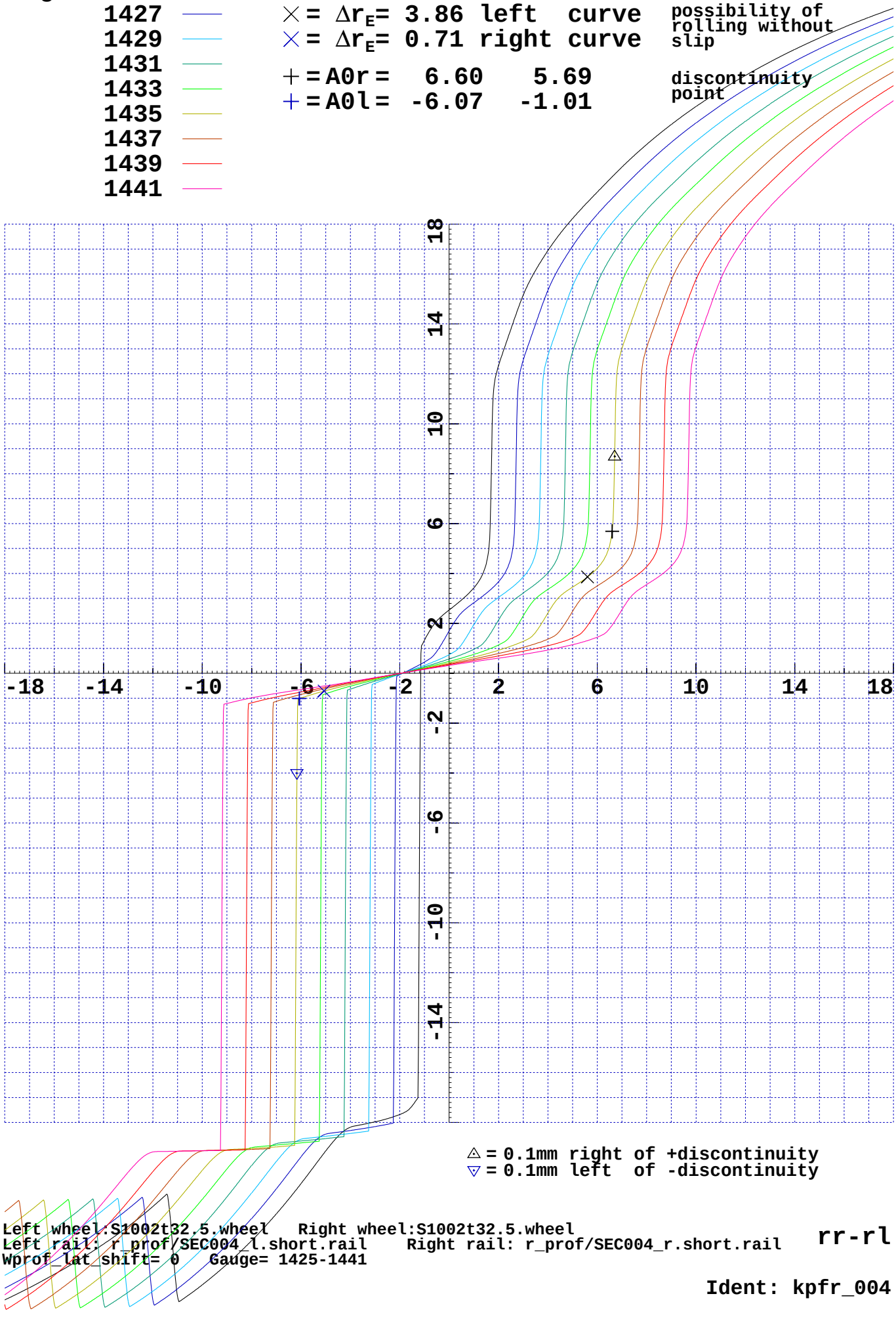
Gauge= 1425
1427
1429
1431
1433
1435
1437
1439
1441

× = $\Delta r_E$= 3.86 left curve
× = $\Delta r_E$= 0.71 right curve

+ = A0r = 6.60 5.69
+ = A0l = -6.07 -1.01

possibility of rolling without slip

discontinuity point




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

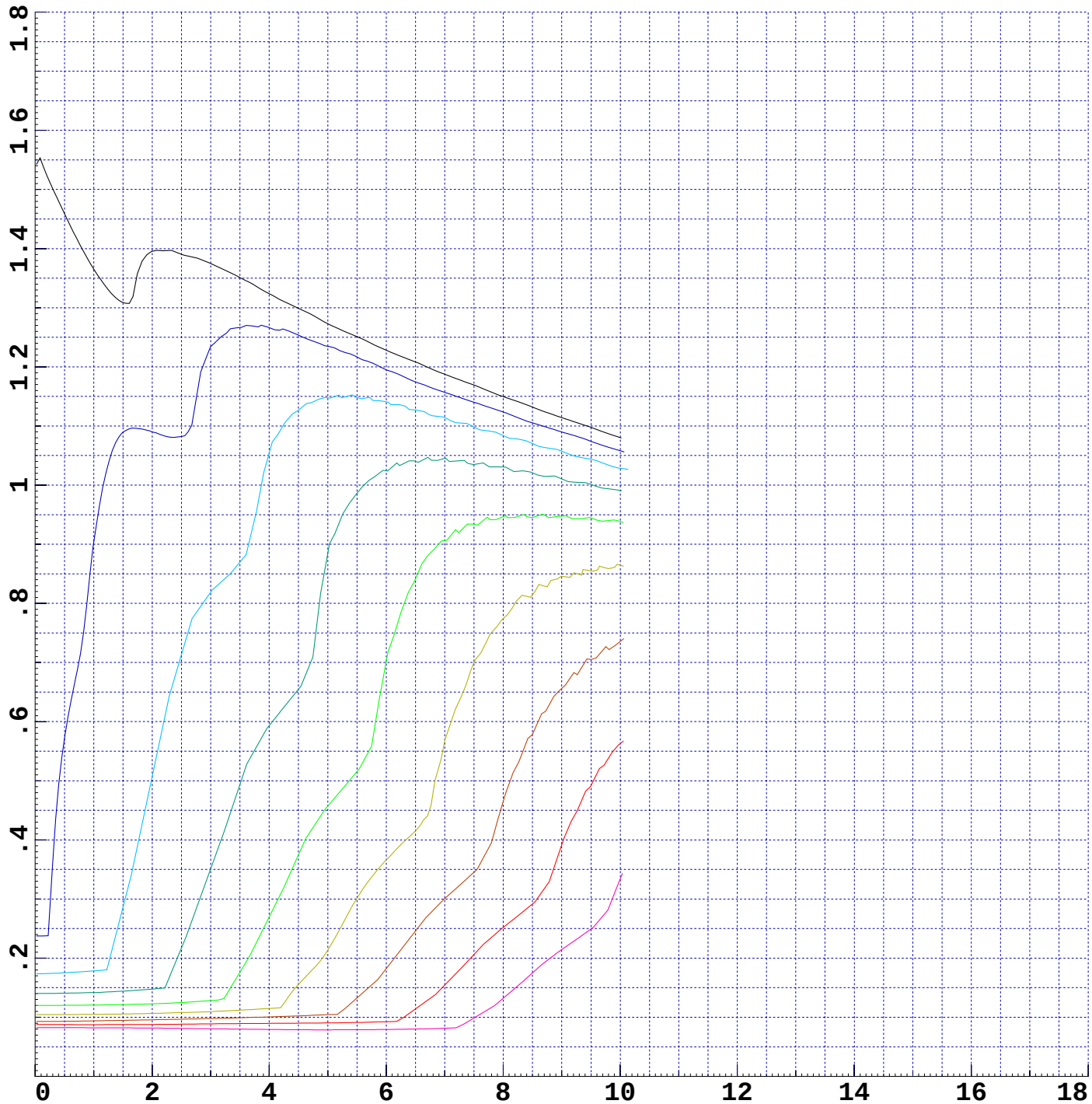
Left wheel:S1002t32.5.wheel Right wheel:S1002t32.5.wheel
Left rail: r_prof/SEC004_l.short.rail Right rail: r_prof/SEC004_r.short.rail
Wprof_lat_shift= 0 Gauge= 1425-1441

rr-rl

Ident: kpfr_004

GENSYS-KPF.1308

| Delta_Y= | | .1 | .5 | 2 | 3 | 4 | 6 |
|---|---|---|---|---|---|---|---|
| Gauge= | 1425 | 1.549 | 1.459 | 1.396 | 1.375 | 1.324 | 1.228 |
| | 1427 | .238 | .570 | 1.090 | 1.234 | 1.266 | 1.195 |
| | 1429 | .174 | .175 | .507 | .819 | 1.055 | 1.141 |
| | 1431 | .140 | .141 | .148 | .351 | .593 | 1.024 |
| | 1433 | .120 | .120 | .123 | .128 | .270 | .702 |
| | 1435 | .105 | .105 | .107 | .110 | .115 | .366 |
| | 1437 | .093 | .093 | .096 | .098 | .101 | .183 |
| | 1439 | .088 | .088 | .088 | .089 | .090 | .093 |
| | 1441 | .083 | .083 | .082 | .081 | .080 | .079 |



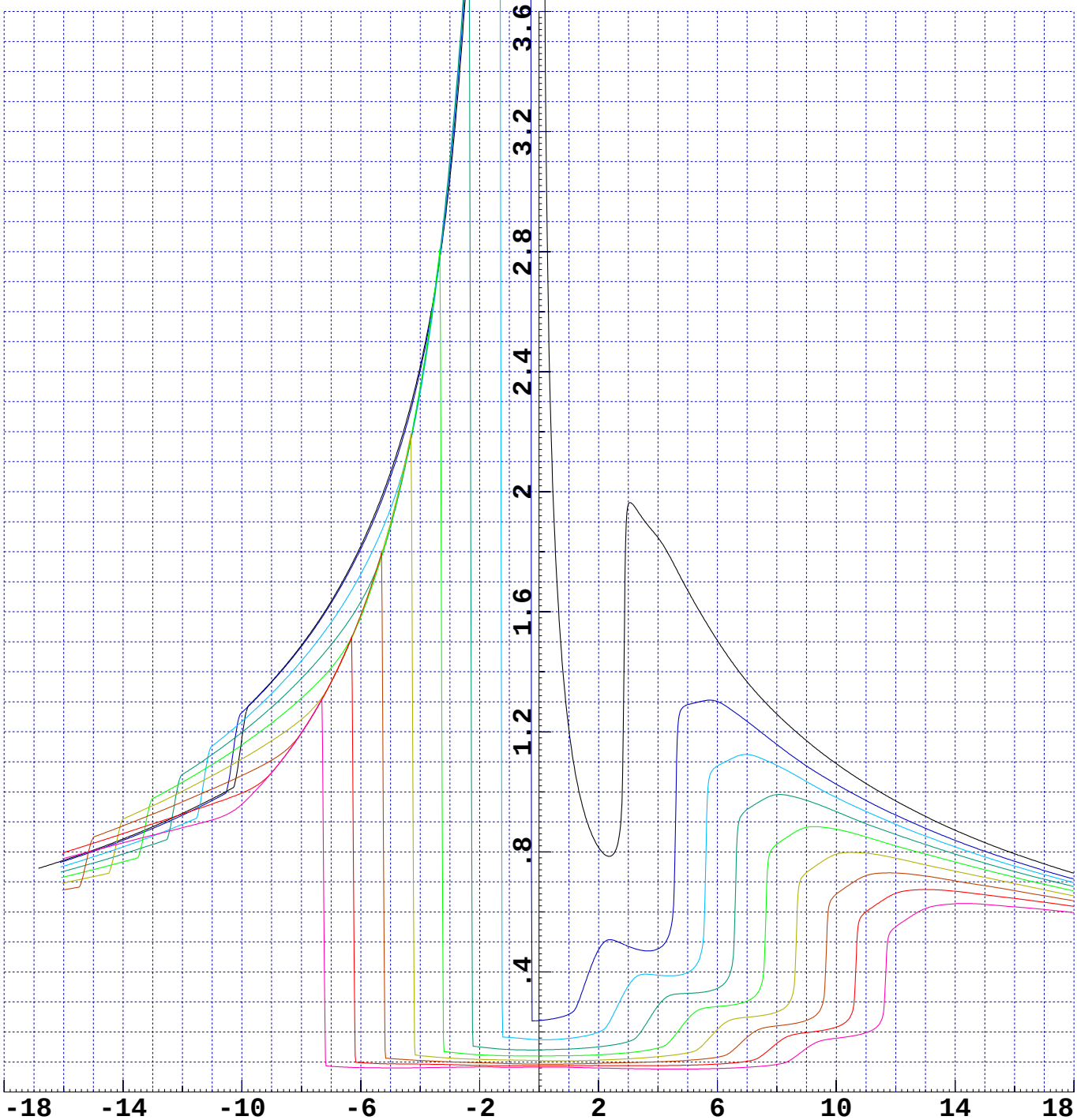

Left wheel:S1002t32.5.wheel  Right wheel:S1002t32.5.wheel
Left rail: r_prof/SEC004_l.short.rail  Right rail: r_prof/SEC004_r.short.rail
Wprof_lat_shift= 0  Gauge= 1425-1441

**UIC519**

Ident: kpfr_004

GENSYS-KPF.1308

| Delta_Y= | .1 | .5 | 2 | 3 | 4 | 6 |
|---|---|---|---|---|---|---|
| Gauge= 1425 | 6.204 | 1.905 | .814 | 1.958 | 1.847 | 1.505 |
| 1427 | .239 | .245 | .473 | .485 | .477 | 1.301 |
| 1429 | .174 | .175 | .199 | .353 | .389 | 1.086 |
| 1431 | .140 | .141 | .151 | .168 | .287 | .345 |
| 1433 | .120 | .120 | .124 | .131 | .147 | .285 |
| 1435 | .104 | .104 | .106 | .110 | .118 | .209 |
| 1437 | .093 | .093 | .095 | .098 | .101 | .116 |
| 1439 | .088 | .088 | .088 | .088 | .088 | .093 |
| 1441 | .083 | .083 | .080 | .078 | .077 | .078 |



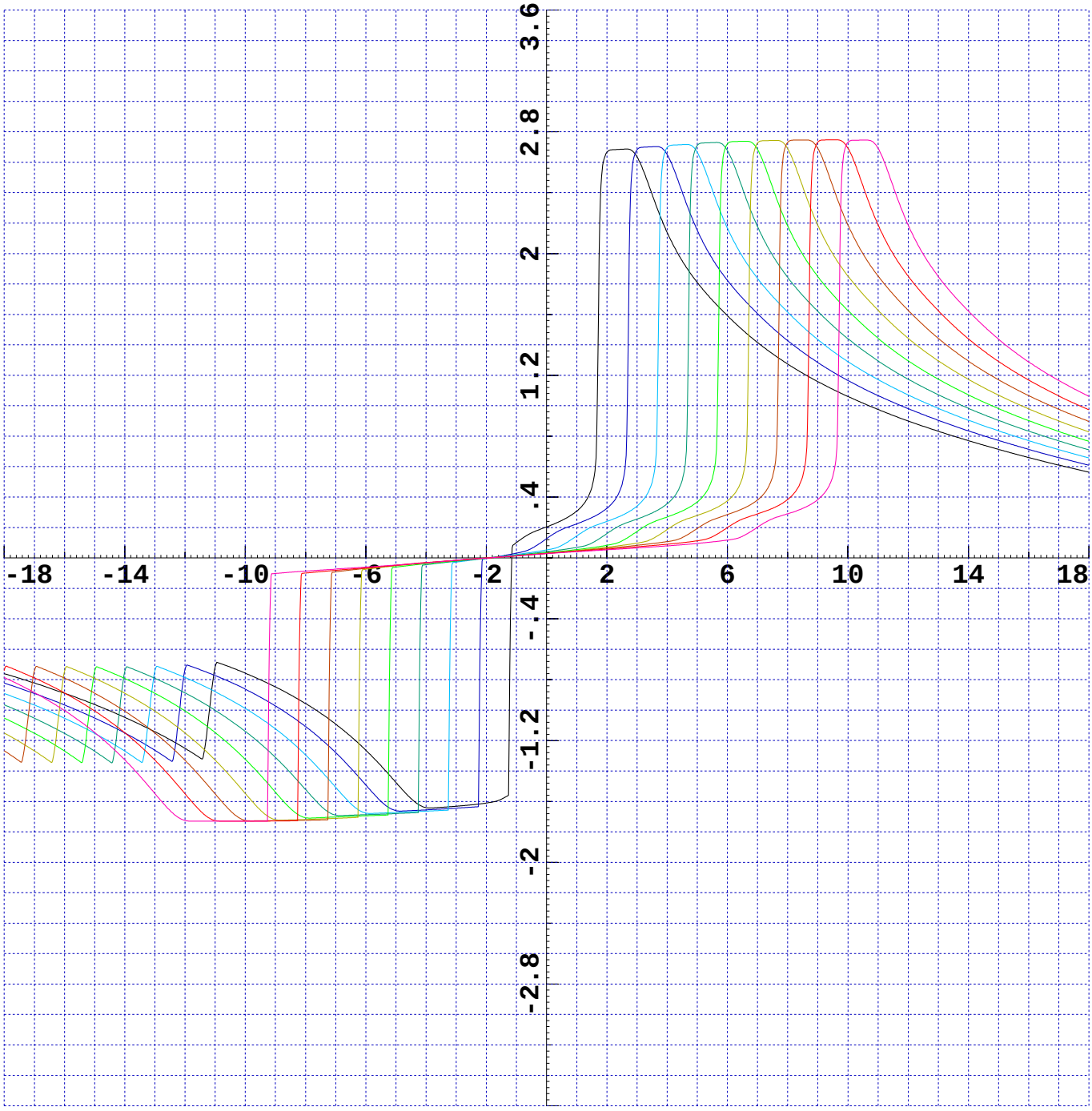

Left wheel:S1002t32.5.wheel  Right wheel:S1002t32.5.wheel
Left rail: r_prof/SEC004_l.short.rail  Right rail: r_prof/SEC004_r.short.rail
Wprof_lat_shift= 0  Gauge= 1425-1441

lambda

Ident: kpfr_004

# GENSYS-KPF.1308

Gauge= 1425
1427
1429
1431
1433
1435
1437
1439
1441



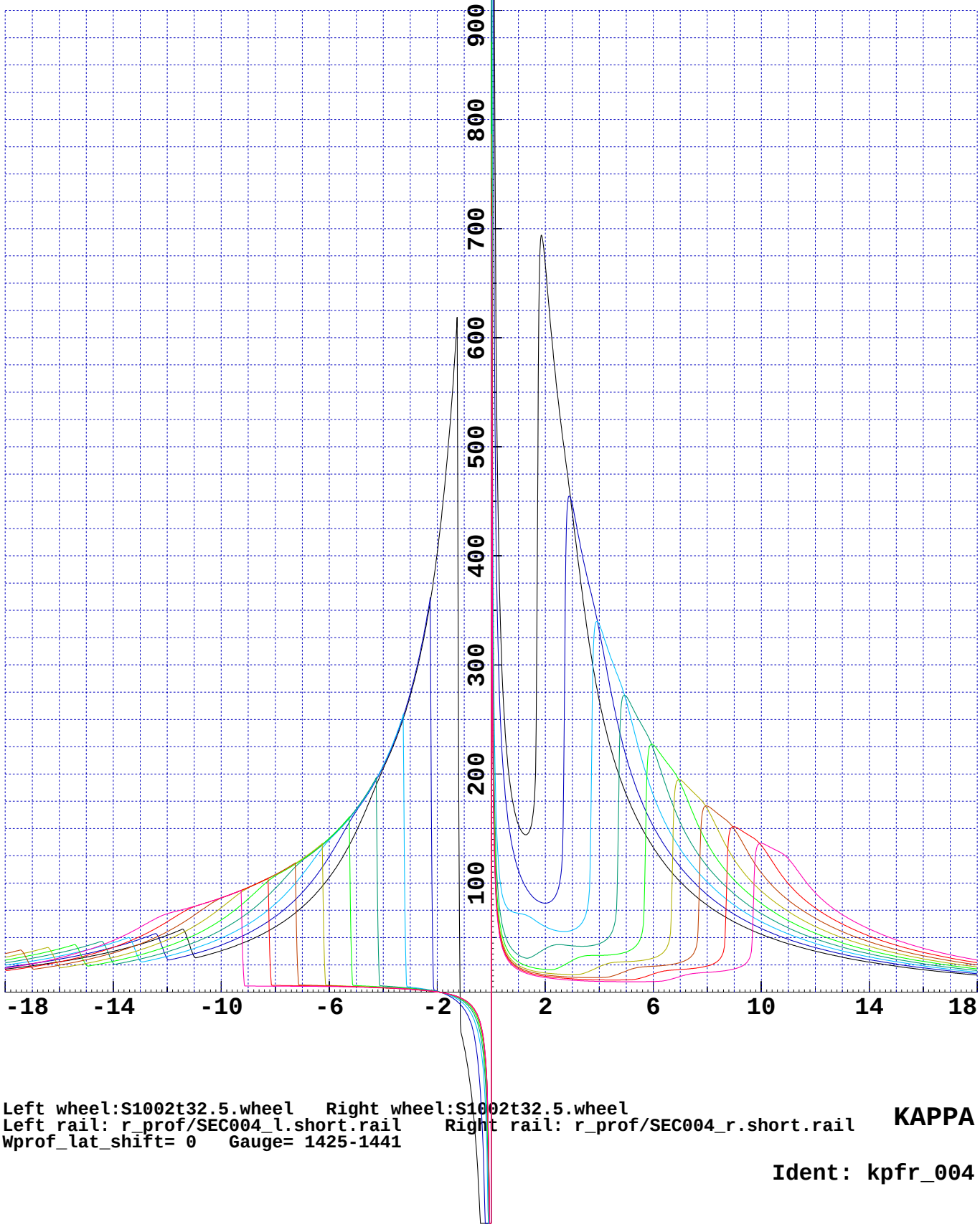

Left wheel:S1002t32.5.wheel  Right wheel:S1002t32.5.wheel
Left rail: r_prof/SEC004_l.short.rail  Right rail: r_prof/SEC004_r.short.rail
Wprof_lat_shift= 0  Gauge= 1425-1441

tan_Ga

Ident: kpfr_004

GENSYS-KPF.1308

| Delta_Y= | .1 | .5 | 2 | 3 | 4 | 6 |
|---|---|---|---|---|---|---|
| Gauge= 1425 | 1055.43 | 245.43 | 666.47 | 439.22 | 267.29 | 132.64 |
| 1427 | 701.53 | 186.51 | 81.50 | 447.01 | 331.28 | 152.03 |
| 1429 | 279.86 | 81.74 | 60.08 | 56.82 | 337.10 | 180.59 |
| 1431 | 213.94 | 53.09 | 39.91 | 42.50 | 44.48 | 223.11 |
| 1433 | 181.92 | 44.38 | 20.77 | 29.08 | 33.64 | 226.73 |
| 1435 | 164.15 | 39.87 | 17.55 | 16.20 | 23.34 | 31.28 |
| 1437 | 155.65 | 37.62 | 15.83 | 13.73 | 13.38 | 23.72 |
| 1439 | 152.47 | 36.42 | 14.54 | 12.19 | 11.22 | 16.61 |
| 1441 | 147.67 | 34.78 | 13.38 | 10.92 | 9.84 | 9.75 |



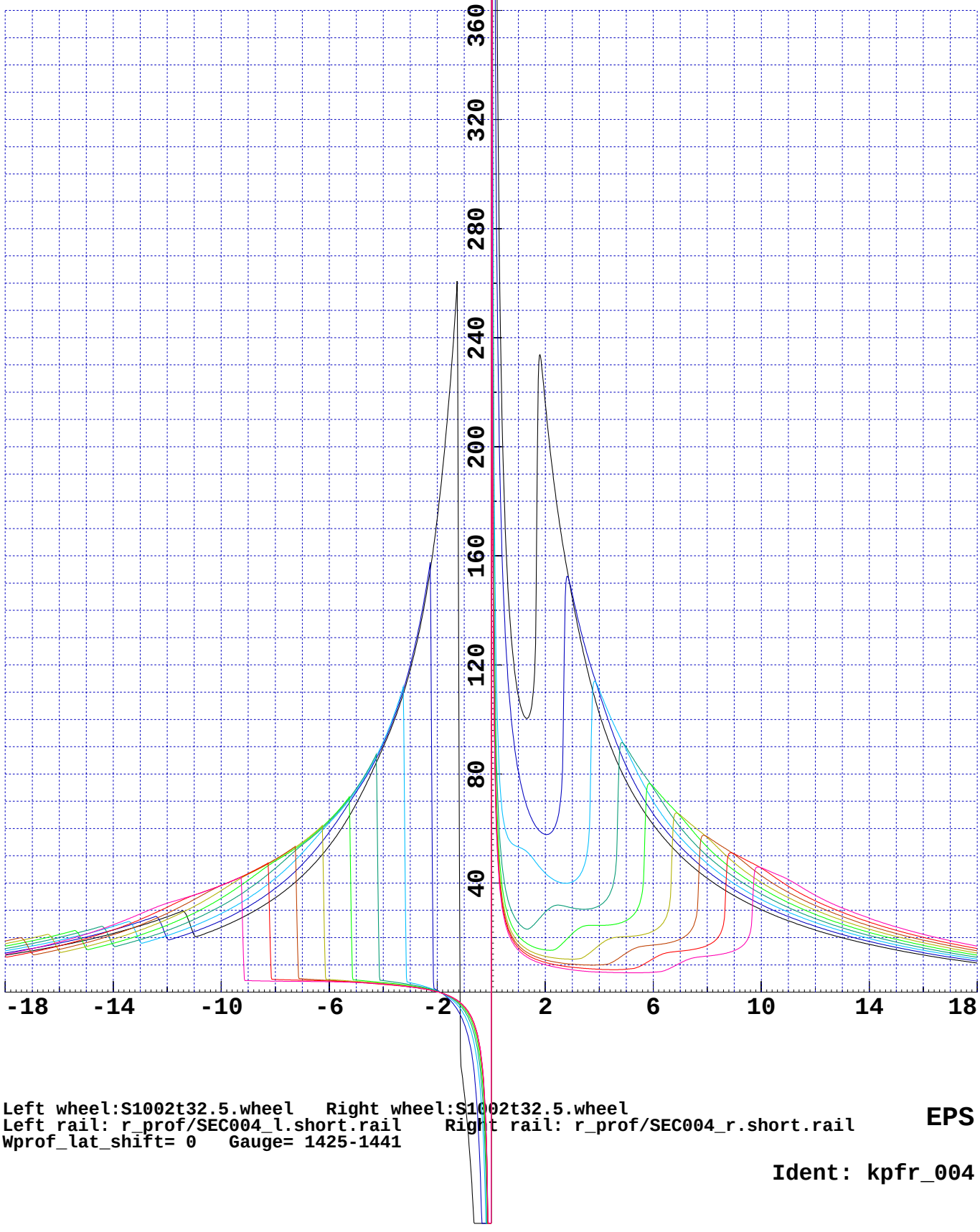

Left wheel:S1002t32.5.wheel  Right wheel:S1002t32.5.wheel
Left rail: r_prof/SEC004_l.short.rail  Right rail: r_prof/SEC004_r.short.rail
Wprof_lat_shift= 0  Gauge= 1425-1441

KAPPA

Ident: kpfr_004

GENSYS-KPF.1308

| Delta_Y= | | .1 | .5 | 2 | 3 | 4 | 6 |
|---|---|---|---|---|---|---|---|
| Gauge= | 1425 | 760.48 | 175.82 | 215.84 | 144.38 | 102.16 | 61.39 |
| | 1427 | 514.13 | 135.74 | 57.82 | 145.92 | 109.68 | 65.35 |
| | 1429 | 207.92 | 60.60 | 43.57 | 40.41 | 110.81 | 69.91 |
| | 1431 | 159.38 | 39.53 | 29.41 | 30.88 | 31.70 | 74.81 |
| | 1433 | 135.75 | 33.11 | 15.47 | 21.46 | 24.48 | 75.37 |
| | 1435 | 122.64 | 29.78 | 13.10 | 12.08 | 17.24 | 22.35 |
| | 1437 | 116.40 | 28.13 | 11.83 | 10.25 | 9.98 | 17.29 |
| | 1439 | 114.11 | 27.26 | 10.88 | 9.11 | 8.38 | 12.28 |
| | 1441 | 110.58 | 26.04 | 10.02 | 8.17 | 7.36 | 7.27 |



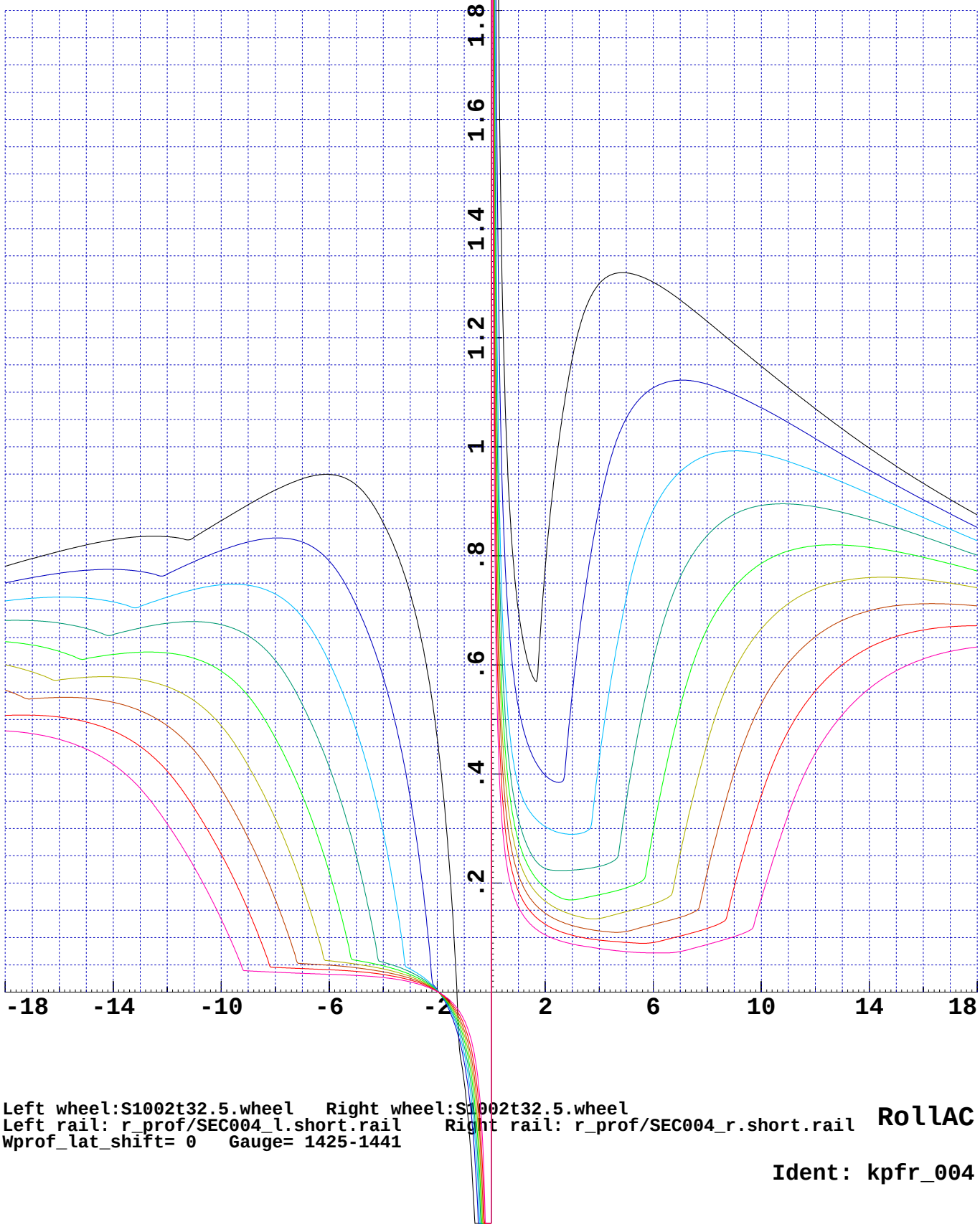

Left wheel:S1002t32.5.wheel  Right wheel:S1002t32.5.wheel
Left rail: r_prof/SEC004_l.short.rail  Right rail: r_prof/SEC004_r.short.rail
Wprof_lat_shift= 0  Gauge= 1425-1441

EPS

Ident: kpfr_004

GENSYS-KPF.1308

| Delta_Y= | .1 | .5 | 2 | 3 | 4 | 6 |
|---|---|---|---|---|---|---|
| Gauge= 1425 | 4.44 | 1.11 | .78 | 1.16 | 1.30 | 1.30 |
| 1427 | 3.08 | .80 | .40 | .55 | .89 | 1.11 |
| 1429 | 2.48 | .60 | .30 | .29 | .43 | .88 |
| 1431 | 2.17 | .52 | .23 | .22 | .23 | .61 |
| 1433 | 1.92 | .46 | .19 | .17 | .18 | .30 |
| 1435 | 1.70 | .41 | .17 | .14 | .14 | .16 |
| 1437 | 1.50 | .36 | .14 | .12 | .11 | .12 |
| 1439 | 1.30 | .31 | .12 | .10 | .10 | .09 |
| 1441 | 1.09 | .26 | .10 | .09 | .08 | .07 |




Left wheel:S1002t32.5.wheel  Right wheel:S1002t32.5.wheel
Left rail: r_prof/SEC004_l.short.rail  Right rail: r_prof/SEC004_r.short.rail
Wprof_lat_shift= 0  Gauge= 1425-1441

RollAC

Ident: kpfr_004