

SAF INTRADISC *plus* - from 08/2000



SAF INTRAAX *plus* - from 01/2001



SAF 

GENERAL INFORMATION

- Type codes for air suspensions
- Overview of ride heights and weights for INTRADISC *plus*
- Overview of ride heights and weights for INTRADISC *plus* with self-steering axle
- Overview of track width / spring centre combinations INTRADISC *plus* with self-steering axle
- Overview of ride heights and weights for INTRAAX *plus*
- Permitted centre of gravity heights series IU / IO

AIR SUSPENSION SERIES – INTRAAX *plus*

Rigid axles with drum brakes for 22.5" tyres, SK RS 9042 - SK 500

- Air suspension series IU / 33
- Air suspension series IU / 41
- Air suspension series IO / 33
- Air suspension series IO / 41

Rigid axles with drum brakes for 22.5" tyres, SK RS 9042 - SK 500 OFF ROAD

- Air suspension series IU / 27
- Air suspension series IU / 31
- Air suspension series IO / 27
- Air suspension series IO / 31

AIR SUSPENSION SERIES – INTRADISC *plus*

Rigid axles with disc brakes for 19.5"/22.5" tyres, SK RB 9019-10

- Air suspension series IU / 33
- Air suspension series IU / 41
- Air suspension series IO / 33
- Air suspension series IO / 41

Rigid axles with disc brakes for 22.5" tyres, SK RB 9022

- Air suspension series IU / 33
- Air suspension series IU / 41
- Air suspension series IO / 33
- Air suspension series IO / 41

Self-steering axles with disc brakes for 19.5"/22.5" tyres, SK RLB 9019-10

- Air suspension series IU / 33 with hanger bracket
- Air suspension series IU / 41 with hanger bracket
- Air suspension series IO / 33 with hanger bracket
- Air suspension series IO / 41 with hanger bracket
- Air suspension series IU / 33 with cross member
- Air suspension series IU / 41 with cross member
- Air suspension series IO / 33 with cross member
- Air suspension series IO / 41 with cross member

Self-steering axles with disc brakes for 22.5" tyres, SK RLB 9022

- Air suspension series IU / 33 with hanger bracket
- Air suspension series IU / 41 with hanger bracket
- Air suspension series IO / 33 with hanger bracket
- Air suspension series IO / 41 with hanger bracket
- Air suspension series IU / 33 with cross member
- Air suspension series IU / 41 with cross member
- Air suspension series IO / 33 with cross member
- Air suspension series IO / 41 with cross member

Rigid axles with disc brakes for 19.5"/22.5" tyres, SK RB 9019-10 OFF ROAD

- Air suspension series IU / 27
- Air suspension series IU / 31
- Air suspension series IO / 27
- Air suspension series IO / 31

Rigid axles with disc brakes for 22.5" tyres, SK RB 9022 OFF ROAD

- Air suspension series IU / 27
- Air suspension series IU / 31
- Air suspension series IO / 27
- Air suspension series IO / 31

AIR BAGS

- Air bag fixing / Trailing arm – Air suspension series IO
- Air bag fixing / Trailing arm – Air suspension series IU
- Calculation of the air bag pressure

AIR BAG PARTS

- Air bag parts – Air bag code 27
- Air bag parts – Air bag code 27
- Air bag parts – Air bag code 31
- Air bag parts – Air bag code 31
- Air bag parts – Air bag code 33
- Air bag parts – Air bag code 41

HANGER BRACKETS

- Adjustable pivot bolt – Steel hanger bracket
- Adjustable pivot bolt – Alu hanger bracket
- Technical information of steel hanger bracket – series IU / IO
- Technical information of alu hanger bracket – series IU / IO

CROSS MEMBERS

- 200 high – series IU / IO
- 250 high – series IU / IO
- 300 high – series IU / IO

AIR BAG BRACKETS

- Air bag brackets

SHOCK ABSORBERS

- Technical details
- Ride height / shock absorber allocation

AXLE LIFTS

- Two-side lift – series IU / IO for steel hanger brackets
- Two-side lift – series IU / IO for cross members
- Two-side lift – series IU / IO for alu hanger brackets
- Two-side lift – installation instructions
- Two-side lift – circuit diagram
- Two-side lift – circuit diagram – parts list
- Two-side lift – circuit diagram for retrofit

- One-side lift – series IU / IO
- One-side lift – installation instructions
- One-side lift – circuit diagram
- One-side lift – circuit diagram – parts list

RECOMMENDATIONS FOR REINFORCEMENTS AND WELDING INSTRUCTIONS

- Recommendation for steel hanger bracket lateral reinforcement (version 1)
- Recommendation for steel hanger bracket lateral reinforcement (version 2)
- Welding instructions for steel hanger bracket – series IU / IO
- Welding instructions for alu hanger bracket – series IU / IO
- Welding recommendation – air bag bracket

INSTALLATION RECOMMENDATIONS AND TIGHTENING TORQUES

- Tightening torques – steel hanger brackets / pivot bolt / shock absorbers / air bags
- Tightening torques – alu hanger brackets / pivot bolt / shock absorbers / air bags
- Tightening instructions for adjustable pivot bolt
- Installation instructions for shock absorbers – series IU / IO
steel hanger bracket / cross member and trailing arm

- Installation instructions for shock absorbers – series IU / IO
alu hanger bracket and trailing arm
- Installation instructions for shock absorbers – series IU / IO
trailing arm and cross member for steering axles

MISCELLANEOUS

- Trailing arm in pavers INTRADISC *plus* – series IO
- Information on surface coating of SAF components
- Installation instructions for ABS cable – INTRADISC *plus* – series IU / IO
- Installation instructions for ABS cable – INTRAAX *plus* – series IU / IO
- Classification of exciter ring teeth to axle types
- Wear sensing – WABCO EBS
- Cable kit for WABCO electric wear indicator
- Cable kit for Knorr electric wear indicator
- Cable with socket for WABCO disc brakes
- Wheel mounting – SK RB 9019 / 9022 – steel- and alu wheels – stud length 68 mm
- Wheel mounting – SK RB 9019 / 9022 – steel- and alu wheels – stud length 78 mm
- Wheel mounting – SK RS 9042 - SK 500 – steel- and alu wheels – stud length 83 mm
- SAF-O-Meter
- Wheel caps
- SAF self-steering axle with stabilising damper
- SAF self-steering axle with stabilising damper
Installation instructions
- SAF self-steering axle with stabilising damper
Installation drawing for locking cylinder
- Brake chambers overview INTRADISC *plus*
- Mounting of brake chambers and spring brake chambers on SAF axles

GENERAL INFORMATION

Type codes for air suspensions from mid 2000



Example: I O 27 / 29 04 S 31 A Letters are marked with "X", numbers with "O".
 40 / 25 05 33 Q

| | | | | | | | | |
|---|----------|-------------------|---|-----------------------------|------------------------------|-------------------|-------------------|---------------------|
| X | X | OO | / | OO | OO | X | OO | X |
| Type | Series | Ride height in cm | | Hanger bracket height in cm | Air bag bracket height in cm | Trailing arm type | Air bag type code | Hanger bracket type |
| <p>E = single-leaf spring S = reinforced trailing arm 43/43 N = trailing arm 38/38 without specification = with functional trailing arm (INTRA...)</p> <hr/> <p>27 = SAF 2918V Ø 350 steel 29 = SAF 2618V Ø 300 plastic 30 = SAF 2926V Ø 350 steel 31 = SAF 2923V Ø 350 steel 33 = SAF 2619V Ø 300 plastic Only in connection with INTRA 41 = SAF 2924V Ø 350 plastic</p> <hr/> <p>Q = cross member A = aluminium hanger bracket without specification = steel hanger bracket</p> <hr/> <p>U = low ride height (Modular series – underslung trailing arm) M = medium ride height (only with Modular series) O = high ride height (Modular series – overslung trailing arm)</p> <hr/> <p>I = INTRA series with trailing arm E = Modular series trailing arm with LA = 340 mm only with overslung H = Modular series with greater total travel L = Modular series with front trailing arm length of 550 mm</p> | | | | | | | | |

Trailing arm length: Distance from axle centre to pivot bolt centre
 LA: Distance from axle centre to air bag centre

Overview of ride heights and weights for INTRADISC *plus*



Air bag type 2619 V (Code 33), LA = 385 mm Axle SK RB 9022 K/W

| Series | Ride height (mm) | Hanger bracket (mm) | Air bag bracket (mm) | Lift / Lower (mm) | Weight ¹⁾ (kg) |
|---------------|------------------|---------------------|----------------------|-------------------|---------------------------|
| IU 25/2000 33 | 250 | 200 | 0 | 90/90 | 439 |
| IU 28/2005 33 | 280 | 200 | 50 | 90/90 | 444 |
| IU 30/2505 33 | 300 | 250 | 50 | 90/90 | 449 |
| IU 33/2510 33 | 330 | 250 | 100 | 90/90 | 451 |
| IU 35/3010 33 | 350 | 300 | 100 | 90/90 | 454 |
| IO 35/2000 33 | 355 | 200 | 0 | 90/90 | 439 |
| IO 37/2500 33 | 375 | 250 | 0 | 90/90 | 443 |
| IO 40/2505 33 | 405 | 250 | 50 | 90/90 | 448 |
| IO 42/3005 33 | 425 | 300 | 50 | 90/90 | 451 |
| IO 45/3010 33 | 455 | 300 | 100 | 90/90 | 453 |
| IO 47/3510 33 | 475 | 350 | 100 | 90/90 | 456 |
| IO 50/3515 33 | 505 | 350 | 150 | 90/90 | 458 |

Air bag type 2924 V (Code 41), LA = 385 mm Axle SK RB 9022 K/W

| Series | Ride height (mm) | Hanger bracket (mm) | Air bag bracket (mm) | Lift / Lower (mm) | Weight ¹⁾ (kg) |
|---------------|------------------|---------------------|----------------------|-------------------|---------------------------|
| IU 29/2000 41 | 290 | 200 | 0 | 95/105 | 447 |
| IU 31/2500 41 | 310 | 250 | 0 | 95/105 | 450 |
| IU 34/2505 41 | 340 | 250 | 50 | 95/105 | 455 |
| IU 36/3005 41 | 360 | 300 | 50 | 95/105 | 459 |
| IU 39/3010 41 | 390 | 300 | 100 | 95/105 | 461 |
| IU 42/3015 41 | 420 | 300 | 150 | 95/105 | 463 |
| IO 44/3000 41 | 440 | 300 | 0 | 95/105 | 453 |
| IO 49/3505 41 | 490 | 350 | 50 | 95/105 | 461 |

Air bag type 2619 V (Code 33), LA = 385 mm Axle SK RB 9019 K/W

| Series | Ride height (mm) | Hanger bracket (mm) | Air bag bracket (mm) | Lift / Lower (mm) | Weight ¹⁾ (kg) |
|---------------|------------------|---------------------|----------------------|-------------------|---------------------------|
| IU 25/2000 33 | 250 | 200 | 0 | 90/90 | 391 |
| IU 28/2005 33 | 280 | 200 | 50 | 90/90 | 396 |
| IU 30/2505 33 | 300 | 250 | 50 | 90/90 | 401 |
| IU 33/2510 33 | 330 | 250 | 100 | 90/90 | 403 |
| IU 35/3010 33 | 350 | 300 | 100 | 90/90 | 406 |
| IO 35/2000 33 | 355 | 200 | 0 | 90/90 | 391 |
| IO 37/2500 33 | 375 | 250 | 0 | 90/90 | 395 |
| IO 40/2505 33 | 405 | 250 | 50 | 90/90 | 400 |
| IO 42/3005 33 | 425 | 300 | 50 | 90/90 | 403 |
| IO 45/3010 33 | 455 | 300 | 100 | 90/90 | 405 |
| IO 47/3510 33 | 475 | 350 | 100 | 90/90 | 408 |
| IO 50/3515 33 | 505 | 350 | 150 | 90/90 | 410 |

Overview of ride heights and weights for INTRADISC *plus*



Air bag type 2924 V (Code 41), LA = 385 mm
Axle SK RB 9019 K/W

| Series | Ride height (mm) | Hanger bracket (mm) | Air bag bracket (mm) | Lift / Lower (mm) | Weight ¹⁾ (kg) |
|---------------|------------------|---------------------|----------------------|-------------------|---------------------------|
| IU 29/2000 41 | 290 | 200 | 0 | 95/105 | 399 |
| IU 31/2500 41 | 310 | 250 | 0 | 95/105 | 402 |
| IU 34/2505 41 | 340 | 250 | 50 | 95/105 | 407 |
| IU 36/3005 41 | 360 | 300 | 50 | 95/105 | 411 |
| IU 39/3010 41 | 390 | 300 | 100 | 95/105 | 413 |
| IU 42/3015 41 | 420 | 300 | 150 | 95/105 | 415 |
| IO 44/3000 41 | 440 | 300 | 0 | 95/105 | 405 |
| IO 49/3505 41 | 490 | 350 | 50 | 95/105 | 413 |

1) Weight deviations lie within the permitted DIN tolerances for the respective manufacturing process.
Weight when track/spring centre 2040/1300 with steel hanger brackets and automatic slack adjusters without wheel nuts.

LA = distance from axle beam centre to air bag centre

LA = 385 mm for IO / IU

= 340 mm for IO

Further variants on request!

Overview of ride heights and weights for INTRADISC *plus* with self-steering axle



Air bag type 2619 V (Code 33), LA = 385 mm Axle SK RLB 9022 K/W

| Series | Ride height (mm) | Hanger bracket (mm) | Air bag bracket (mm) | Lift / Lower (mm) | Weight ¹⁾ (kg) |
|---------------|------------------|---------------------|----------------------|-------------------|---------------------------|
| IU 25/2000 33 | 250 | 200 | 0 | 90/90 | 651 |
| IU 28/2005 33 | 280 | 200 | 50 | 90/90 | 656 |
| IU 30/2505 33 | 300 | 250 | 50 | 90/90 | 661 |
| IU 33/2510 33 | 330 | 250 | 100 | 90/90 | 663 |
| IU 35/3010 33 | 350 | 300 | 100 | 90/90 | 666 |
| IO 35/2000 33 | 355 | 200 | 0 | 90/90 | 651 |
| IO 37/2500 33 | 375 | 250 | 0 | 90/90 | 655 |
| IO 40/2505 33 | 405 | 250 | 50 | 90/90 | 660 |
| IO 42/3005 33 | 425 | 300 | 50 | 90/90 | 662 |
| IO 45/3010 33 | 455 | 300 | 100 | 90/90 | 664 |
| IO 47/3510 33 | 475 | 350 | 100 | 90/90 | 667 |
| IO 50/3515 33 | 505 | 350 | 150 | 90/90 | 669 |

Air bag type 2924 V (Code 41), LA = 385 mm Axle SK RLB 9022 K/W

| Series | Ride height (mm) | Hanger bracket (mm) | Air bag bracket (mm) | Lift / Lower (mm) | Weight ¹⁾ (kg) |
|---------------|------------------|---------------------|----------------------|-------------------|---------------------------|
| IU 29/2000 41 | 290 | 200 | 0 | 95/105 | 659 |
| IU 31/2500 41 | 310 | 250 | 0 | 95/105 | 662 |
| IU 34/2505 41 | 340 | 250 | 50 | 95/105 | 667 |
| IU 36/3005 41 | 360 | 300 | 50 | 95/105 | 671 |
| IU 39/3010 41 | 390 | 300 | 100 | 95/105 | 673 |
| IU 42/3015 41 | 420 | 300 | 150 | 95/105 | 678 |
| IO 44/3000 41 | 440 | 300 | 0 | 95/105 | 665 |
| IO 49/3505 41 | 490 | 350 | 50 | 95/105 | 673 |

Air bag type 2619 V (Code 33), LA = 385 mm Axle SK RLB 9019 K/W

| Series | Ride height (mm) | Hanger bracket (mm) | Air bag bracket (mm) | Lift / Lower (mm) | Weight ¹⁾ (kg) |
|---------------|------------------|---------------------|----------------------|-------------------|---------------------------|
| IU 25/2000 33 | 250 | 200 | 0 | 90/90 | 606 |
| IU 28/2005 33 | 280 | 200 | 50 | 90/90 | 611 |
| IU 30/2505 33 | 300 | 250 | 50 | 90/90 | 616 |
| IU 33/2510 33 | 330 | 250 | 100 | 90/90 | 618 |
| IU 35/3010 33 | 350 | 300 | 100 | 90/90 | 621 |
| IO 35/2000 33 | 355 | 200 | 0 | 90/90 | 606 |
| IO 37/2500 33 | 375 | 250 | 0 | 90/90 | 610 |
| IO 40/2505 33 | 405 | 250 | 50 | 90/90 | 615 |
| IO 42/3005 33 | 425 | 300 | 50 | 90/90 | 618 |
| IO 45/3010 33 | 455 | 300 | 100 | 90/90 | 620 |
| IO 47/3510 33 | 475 | 350 | 100 | 90/90 | 623 |
| IO 50/3515 33 | 505 | 350 | 150 | 90/90 | 625 |

Overview of ride heights and weights for INTRADISC *plus* with self-steering axle



Air bag type 2924 V (Code 41), LA = 385 mm
Axle SK RLB 9019 K/W

| Series | Ride height (mm) | Hanger bracket (mm) | Air bag bracket (mm) | Lift / Lower (mm) | Weight ¹⁾ (kg) |
|---------------|------------------|---------------------|----------------------|-------------------|---------------------------|
| IU 29/2000 41 | 290 | 200 | 0 | 95/105 | 614 |
| IU 31/2500 41 | 310 | 250 | 0 | 95/105 | 617 |
| IU 34/2505 41 | 340 | 250 | 50 | 95/105 | 623 |
| IU 36/3005 41 | 360 | 300 | 50 | 95/105 | 626 |
| IU 39/3010 41 | 390 | 300 | 100 | 95/105 | 628 |
| IU 42/3015 41 | 420 | 300 | 150 | 95/105 | 633 |
| IO 44/3000 41 | 440 | 300 | 0 | 95/105 | 620 |
| IO 49/3505 41 | 490 | 350 | 50 | 95/105 | 628 |

1) Weight deviations lie within the permitted DIN tolerances for the respective manufacturing process. Weight when track/spring centre 2040/980 with steel hanger brackets and automatic slack adjusters without wheel nuts.

LA = distance from axle beam centre to air bag centre

LA = 385 mm for IO / IU

= 340 mm for IO

Further variants on request!

– with hanger brackets for 9 t axle load

| Track (mm) | Spring centre (mm) | Frame centre (mm) |
|------------|--------------------|-------------------|
| 2040 | 980 | 980 |
| 2090 | 980 | 980 |
| 2090 | 1030 | 1030 |
| 2140 | 1080 | 1080 |

– with cross member

(110 mm offset and heights 200 mm / 250 mm / 300 mm) for 9 t axle load

| Track (mm) | Spring centre (mm) | Frame centre (mm) |
|------------|--------------------|-------------------|
| 2040 | 980 | 1200 |
| 2090 | 980 | 1200 |
| 2140 | 1080 | 1300 |

– with cross member

(160 mm offset and heights 200 mm / 250 mm / 300 mm) for 9 t axle load

| Track (mm) | Spring centre (mm) | Frame centre (mm) |
|------------|--------------------|-------------------|
| 2040 | 980 | 1300 |
| 2090 | 980 | 1300 |
| 2140 | 1080 | 1400 |

Further variants on request!

Overview of ride heights and weights for INTRAAX *plus*



Air bag type 2619 V (Code 33), LA = 385 mm Axle SK RS 9042 – SK 500 *plus*

| Series | Ride height (mm) | Hanger bracket (mm) | Air bag bracket (mm) | Lift / Lower (mm) | Weight ¹⁾ (kg) |
|---------------|------------------|---------------------|----------------------|-------------------|---------------------------|
| IU 25/2000 33 | 250 | 200 | 0 | 90/90 | 408 |
| IU 28/2005 33 | 280 | 200 | 50 | 90/90 | 413 |
| IU 30/2505 33 | 300 | 250 | 50 | 90/90 | 418 |
| IU 33/2510 33 | 330 | 250 | 100 | 90/90 | 420 |
| IU 35/3010 33 | 350 | 300 | 100 | 90/90 | 423 |
| IO 35/2000 33 | 355 | 200 | 0 | 90/90 | 409 |
| IO 37/2500 33 | 375 | 250 | 0 | 90/90 | 413 |
| IO 40/2505 33 | 405 | 250 | 50 | 90/90 | 418 |
| IO 42/3005 33 | 425 | 300 | 50 | 90/90 | 421 |
| IO 45/3010 33 | 455 | 300 | 100 | 90/90 | 423 |
| IO 47/3510 33 | 475 | 350 | 100 | 90/90 | 427 |
| IO 50/3515 33 | 505 | 350 | 150 | 90/90 | 429 |

Air bag type 2924 V (Code 41), LA = 385 mm Axle SK RS 9042 – SK 500 *plus*

| Series | Ride height (mm) | Hanger bracket (mm) | Air bag bracket (mm) | Lift / Lower (mm) | Weight ¹⁾ (kg) |
|---------------|------------------|---------------------|----------------------|-------------------|---------------------------|
| IU 29/2000 41 | 290 | 200 | 0 | 95/105 | 415 |
| IU 31/2500 41 | 310 | 250 | 0 | 95/105 | 420 |
| IU 34/2505 41 | 340 | 250 | 50 | 95/105 | 425 |
| IU 36/3005 41 | 360 | 300 | 50 | 95/105 | 428 |
| IU 39/3010 41 | 390 | 300 | 100 | 95/105 | 430 |
| IU 42/3015 41 | 420 | 300 | 150 | 95/105 | 432 |
| IO 44/3000 41 | 440 | 300 | 0 | 95/105 | 423 |
| IO 49/3505 41 | 490 | 350 | 50 | 95/105 | 432 |

1) Weight deviations lie within the permitted DIN tolerances for the respective manufacturing process.
Weight when track/spring centre 2040/1300 with steel hanger brackets and automatic slack adjusters without wheel nuts.

LA = distance from axle beam centre to air bag centre
LA = 385 mm for IO / IU
= 340 mm for IO

Further variants on request!

| Axle load | Air suspension type | Centre of gravity height with spring centre | | |
|-----------|---------------------|---|------|------|
| | | ● 980 | 1200 | 1300 |
| 8000 kg | U | 2150 | 3400 | 3950 |
| | O | 2250 | 3500 | 4050 |
| 9000 kg | U | 2050 | 3050 | 3500 |
| | O | 2150 | 3150 | 3600 |

Note: All dimensions in mm

● Self-steering axle

Centre of gravity height = Distance between road and centre of gravity of sprung mass

The centre of gravity heights shown are based on the following data:

- Standard track widths and axle cross-sections refer to the relevant functional trailing arm centerline and axle load
- 0.34 g lateral acceleration
- Body roll approx. 3.5°, not allowing for the body tilt and tyre deflection
- Tyre sizes with static radius of approx. 500 mm (with smaller tyres, the permissible centre of gravity height will be reduced accordingly)
- Stationary load

For vehicles with suspended loads or tank vehicles (in particular vehicles for hazardous goods transport) we recommend a suspension assembly for an approx. 20 % larger centre of gravity height than the calculated vehicle centre of gravity height.

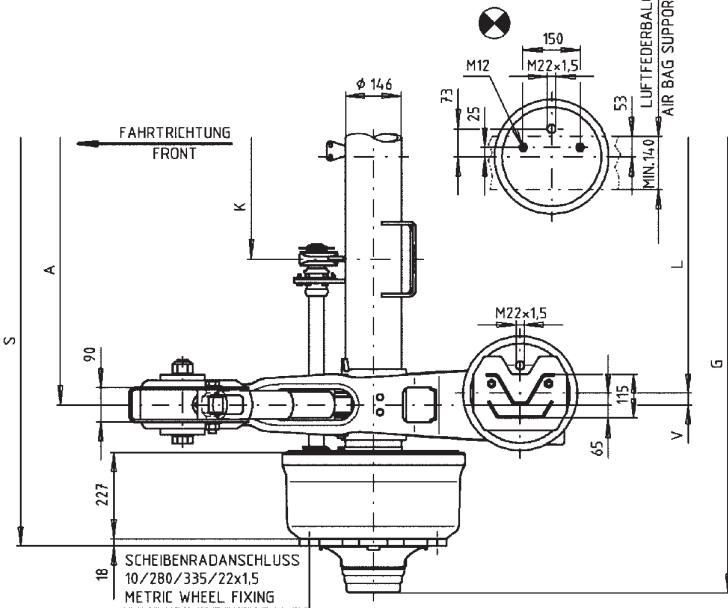
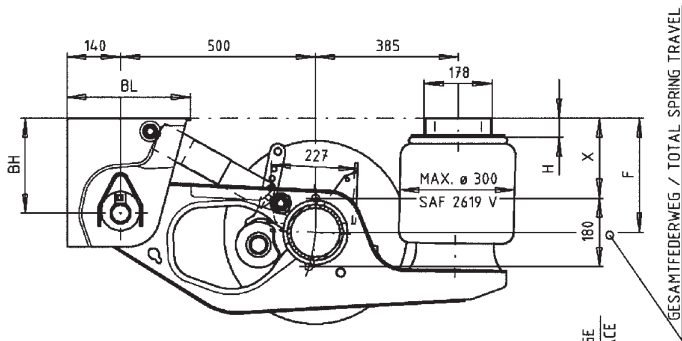
AIR SUSPENSION SERIES **INTRAAX *plus***

RIGID AXLES
WITH DRUM BRAKES
22.5" TYRES
SK RS 9042-SK 500

Air suspension series INTRAAX plus IU/33



Nominal ride height 250 - 350 mm – Air bag SAF 2619 V



| Air suspension type | F Nominal ride height | Ride height range | | | X (ride height) | | BH hanger bracket | BL hanger bracket | H air bag bracket | Weight approx. ¹⁾ |
|---------------------|--------------------------|-------------------|---------------------|-------------------------------|---------------------|-------------------|----------------------|----------------------|----------------------|------------------------------|
| | | for single axles | for axle assemblies | for axle assemblies with lift | unladen without air | laden without air | | | | |
| IU 25/2000 33 | 250 | 220-270 | 230-270 | 260-270 | 160 | 145 | 200 | 310 | 0 | 408 |
| IU 28/2005 33 | 280 | 250-300 | 260-300 | 290-300 | 190 | 175 | 200 | 310 | 50 | 413 |
| IU 30/2505 33 | 300 | 270-320 | 280-320 | 310-320 | 210 | 195 | 250 | 323 | 50 | 418 |
| IU 33/2510 33 | 330 | 300-350 | 310-350 | 340-350 | 240 | 225 | 250 | 323 | 100 | 420 |
| IU 35/3010 33 | 350 | 320-370 | 330-370 | 360-370 | 260 | 245 | 300 | 337 | 100 | 423 |

| Axle type/axle load/brakes Tyres (example) | S/A Track width/spring centre | G Axle width | K Brake chamber centre | V Offset | L Air bag centre | Weight approx. ¹⁾ |
|---|----------------------------------|-------------------|---------------------------|--------------------|---------------------|------------------------------|
| SK RS 9042-SK500 9000 kg SNK 420 x 180 385/65 R 22.5 | 2040/1200 | 2287 | 478 ³⁾ | 0 | 1200 | see assembly weight |
| | | | | 30 | 1140 | |
| | | | | 60 | 1080 | |
| | 2040/1300 | 2287 | 536 ³⁾ | 30 | 1240 | |
| | | | | 60 | 1180 | |
| | | | | | | |
| 2090/1300 | 2337 | 586 ³⁾ | 0 | 1300 ²⁾ | | |
| | | | 30 | 1240 | | |
| | | | 60 | 1180 | | |

Lengths in mm, weights in kg

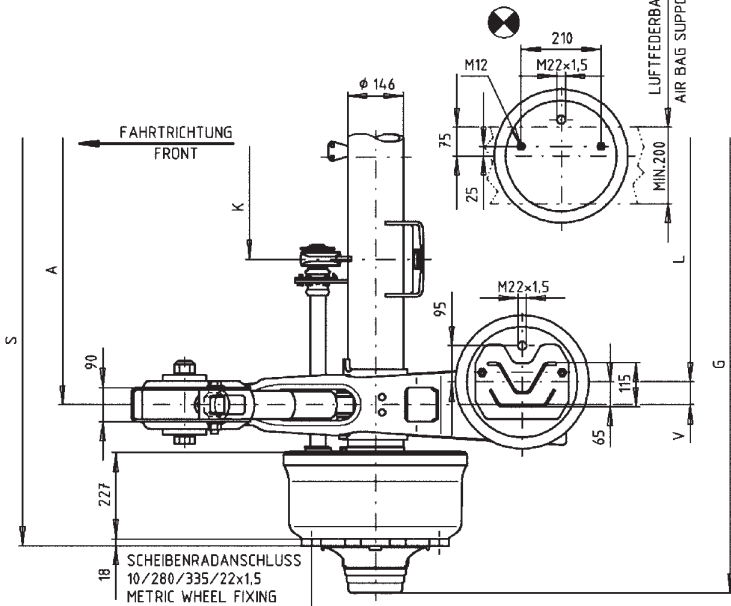
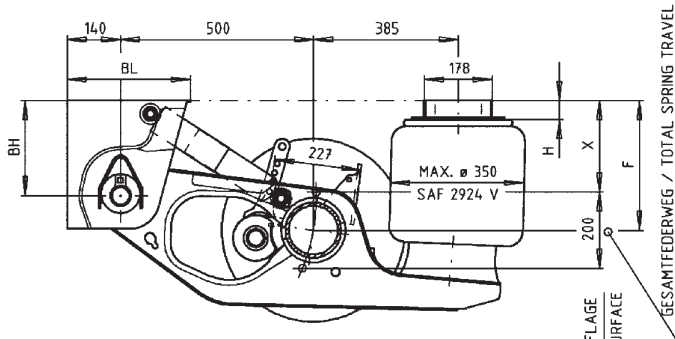
- 1) = without wheel nuts and slack adjusters
Weight deviations lie within the permitted DIN tolerances for the respective manufacturing process.
- 2) = Max. possible tyre size 385/65 R 22.5 (clearance between tyre and air bag!)
- 3) = Spring brake chambers can be fitted

Ref. No.: IU-33-SKRS9042

Air suspension series INTRAAX plus IU/41



Nominal ride height 290 - 420 mm – Air bag SAF 2924 V



| Air suspension type | F Nominal ride height | Ride height range | | | X (ride height) | | BH hanger bracket | BL hanger bracket | H air bag bracket | Weight approx. ¹⁾ |
|---------------------|--------------------------|-------------------|---------------------|-------------------------------|---------------------|-------------------|----------------------|----------------------|----------------------|------------------------------|
| | | for single axles | for axle assemblies | for axle assemblies with lift | unladen without air | laden without air | | | | |
| IU 29/2000 41 | 290 | 240-310 | 250-310 | 280-310 | 180 | 165 | 200 | 310 | 0 | 415 |
| IU 31/2500 41 | 310 | 260-330 | 270-330 | 300-330 | 200 | 185 | 250 | 323 | 0 | 420 |
| IU 34/2505 41 | 340 | 290-360 | 300-360 | 330-360 | 230 | 215 | 250 | 323 | 50 | 425 |
| IU 36/3005 41 | 360 | 310-380 | 320-380 | 350-380 | 250 | 235 | 300 | 337 | 50 | 428 |
| IU 39/3010 41 | 390 | 340-410 | 350-410 | 380-410 | 280 | 265 | 300 | 337 | 100 | 430 |
| IU 42/3015 41 | 420 | 370-440 | 380-440 | 410-440 | 310 | 295 | 300 | 337 | 150 | 432 |

| Axle type/axle load/brakes Tyres (example) | S/A Track width/spring centre | G Axle width | K Brake chamber centre | V Offset | L Air bag centre | Weight approx. ¹⁾ |
|---|----------------------------------|-----------------|---------------------------|-------------|---------------------|------------------------------|
| SK RS 9042-SK500 9000 kg SNK 420 x 180 385/65 R 22.5 | 2040/1200 | 2287 | 478 | 0 | 1200 ²⁾ | see assembly weight |
| | | | | 30 | 1140 | |
| | | | | 60 | 1080 | |
| | 2040/1300 | 2287 | 536 | 60 | 1180 | |
| | | | | | | |
| | | | | | | |
| 2090/1300 | 2337 | 586 | 30 | 1240 | | |
| | | | 60 | 1180 | | |

Lengths in mm, weights in kg

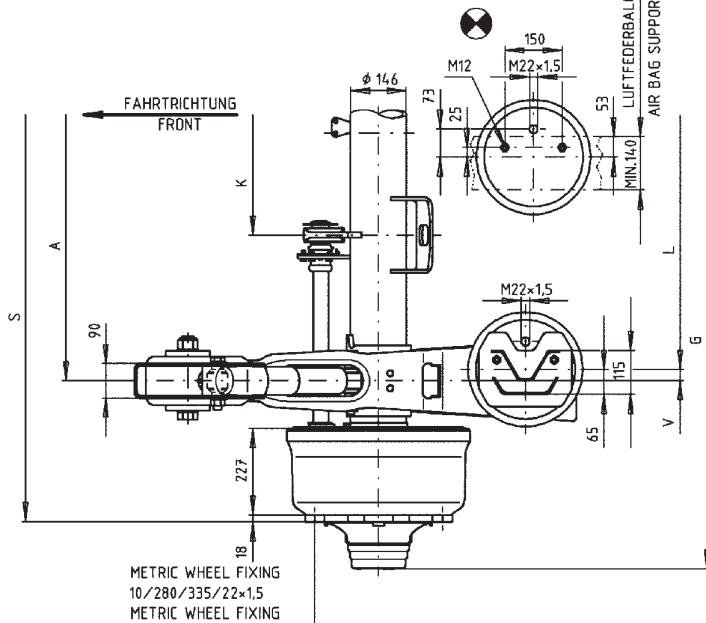
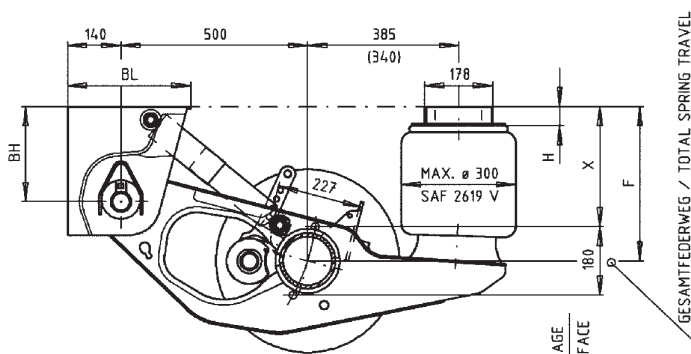
- 1) = without wheel nuts and slack adjusters
Weight deviations lie within the permitted DIN tolerances for the respective manufacturing process.
2) = Max. possible tyre size 385/65 R 22.5 (clearance between tyre and air bag!)

Ref. No.: IU-41-SKRS9042

Air suspension series INTRAAX plus IO/33



Nominal ride height 355 - 505 mm – Air bag SAF 2619 V



| Air suspension type | F Nominal ride height | Ride height range | | | X (ride height) | | BH hanger bracket | BL hanger bracket | H air bag bracket | Weight approx. ¹⁾ |
|---------------------|--------------------------|-------------------|---------------------|-------------------------------|---------------------|-------------------|----------------------|----------------------|----------------------|------------------------------|
| | | for single axles | for axle assemblies | for axle assemblies with lift | unladen without air | laden without air | | | | |
| IO 35/2000 33 | 355 | 325-375 | 335-375 | 365-375 | 265 | 250 | 200 | 310 | 0 | 409 |
| IO 37/2500 33 | 375 | 345-395 | 355-395 | 385-395 | 285 | 270 | 250 | 323 | 0 | 413 |
| IO 40/2505 33 | 405 | 375-425 | 385-425 | 415-425 | 315 | 300 | 250 | 323 | 50 | 418 |
| IO 42/3005 33 | 425 | 395-445 | 405-445 | 435-445 | 335 | 320 | 300 | 337 | 50 | 421 |
| IO 45/3010 33 | 455 | 425-475 | 435-475 | 465-475 | 365 | 350 | 300 | 337 | 100 | 423 |
| IO 47/3510 33 | 475 | 445-495 | 455-495 | 485-495 | 385 | 370 | 350 | 350 | 100 | 427 |
| IO 50/3515 33 | 505 | 475-525 | 485-525 | 515-525 | 415 | 400 | 350 | 350 | 150 | 429 |

| Axle type/axle load/brakes Tyres (example) | S/A Track width/spring centre | G Axle width | K Brake chamber centre | V Offset | L Air bag centre | Weight approx. ¹⁾ |
|---|----------------------------------|-------------------|---------------------------|--------------------|---------------------|------------------------------|
| SK RS 9042-SK500 9000 kg SNK 420 x 180 385/65 R 22.5 | 2040/1200 | 2287 | 478 ³⁾ | 0 | 1200 | see assembly weight |
| | | | | 30 | 1140 | |
| | | | | 60 | 1080 | |
| | 2040/1300 | 2287 | 536 ³⁾ | 30 | 1240 | |
| | | | | 60 | 1180 | |
| | | | | | | |
| 2090/1300 | 2337 | 586 ³⁾ | 0 | 1300 ²⁾ | | |
| | | | 30 | 1240 | | |
| | | | 60 | 1180 | | |

Lengths in mm, weights in kg

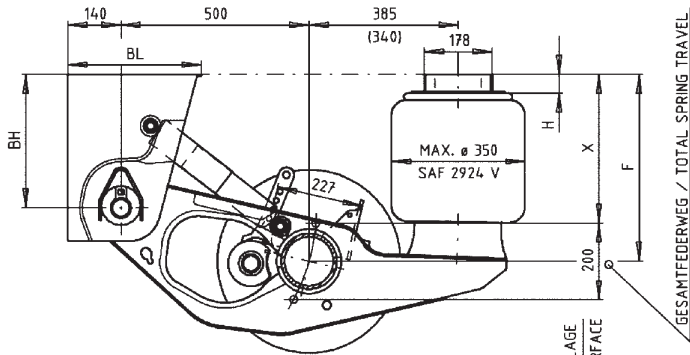
- 1) = without wheel nuts and slack adjusters
Weight deviations lie within the permitted DIN tolerances for the respective manufacturing process.
- 2) = Max. possible tyre size 385/65 R 22.5 (clearance between tyre and air bag!)
- 3) = Spring brake chambers can be fitted

Ref. No.: IO-33-SKRS9042

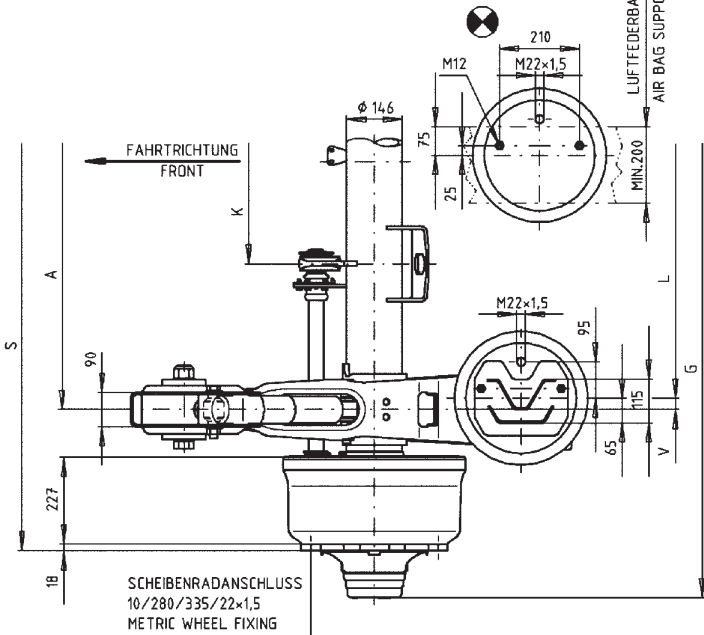
Air suspension series INTRAAX plus IO/41



Nominal ride height 440 + 490 mm – Air bag SAF 2924 V



| Air suspension type | F Nominal ride height | Ride height range | | | X (ride height) | | BH hanger bracket | BL hanger bracket | H air bag bracket | Weight approx. ¹⁾ |
|---------------------|--------------------------|-------------------|---------------------|-------------------------------|---------------------|-------------------|----------------------|----------------------|----------------------|------------------------------|
| | | for single axles | for axle assemblies | for axle assemblies with lift | unladen without air | laden without air | | | | |
| IO 44/3000 41 | 440 | 385-455 | 395-455 | 425-455 | 325 | 310 | 300 | 337 | 0 | 423 |
| IO 49/3505 41 | 490 | 435-505 | 445-505 | 475-505 | 375 | 360 | 350 | 350 | 50 | 432 |



| Axle type/axle load/brakes Tyres (example) | S/A Track width/spring centre | G Axle width | K Brake chamber centre | V Offset | L Air bag centre | Weight approx. ¹⁾ |
|---|----------------------------------|-----------------|---------------------------|-------------|---------------------|------------------------------|
| SK RS 9042-SK500 9000 kg SNK 420 x 180 385/65 R 22.5 | 2040/1200 | 2287 | 478 | 0 | 1200 ²⁾ | see assembly weight |
| | | | | 30 | 1140 | |
| | | | | 60 | 1080 | |
| | 2040/1300 | 2287 | 536 | 60 | 1180 | |
| | | | | | | |
| | | | | | | |
| 2090/1300 | 2337 | 586 | 30 | 1240 | | |
| | | | 60 | 1180 | | |

Lengths in mm, weights in kg

1) = without wheel nuts and slack adjusters

Weight deviations lie within the permitted DIN tolerances for the respective manufacturing process.

2) = Max. possible tyre size 385/65 R 22.5 (clearance between tyre and air bag!)

AIR SUSPENSION SERIES **INTRAAX *plus***

RIGID AXLES
WITH DRUM BRAKES
22.5" TYRES
SK RS 9042-SK 500

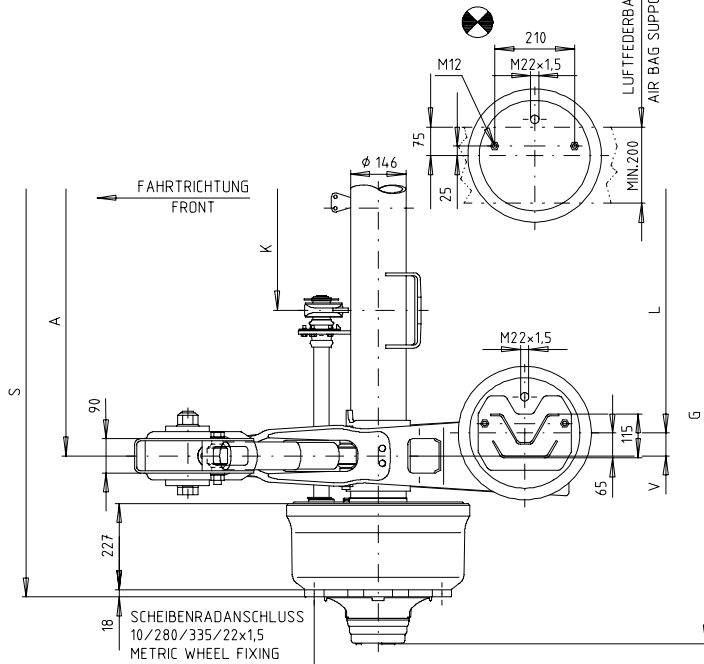
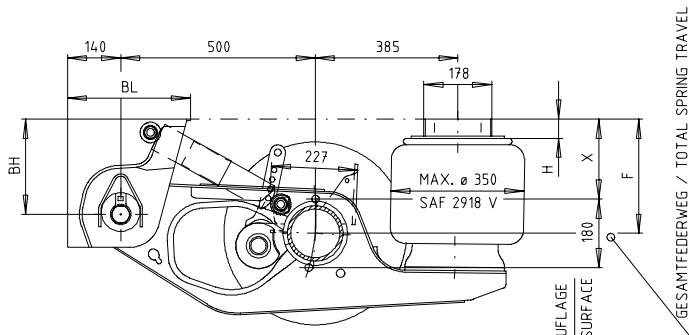
OFF ROAD

Air suspension series INTRAAX plus IU/27



Nominal ride height 250 - 350 mm – Air bag SAF 2918 V

OFF ROAD



| Air suspension type | F Nominal ride height | Ride height range | | | X (ride height) | | BH hanger bracket | BL hanger bracket | H air bag bracket | Weight approx. ¹⁾ |
|---------------------|--------------------------|-------------------|---------------------|-------------------------------|---------------------|-------------------|----------------------|----------------------|----------------------|------------------------------|
| | | for single axles | for axle assemblies | for axle assemblies with lift | unladen without air | laden without air | | | | |
| IU 25/2000 27 | 250 | 220-270 | 230-270 | 260-270 | 160 | 145 | 200 | 310 | 0 | 442 |
| IU 28/2005 27 | 280 | 250-300 | 260-300 | 290-300 | 190 | 175 | 200 | 310 | 50 | 447 |
| IU 30/2505 27 | 300 | 270-320 | 280-320 | 310-320 | 210 | 195 | 250 | 323 | 50 | 452 |
| IU 33/2510 27 | 330 | 300-350 | 310-350 | 340-350 | 240 | 225 | 250 | 323 | 100 | 454 |
| IU 35/3010 27 | 350 | 320-370 | 330-370 | 360-370 | 260 | 245 | 300 | 337 | 100 | 457 |

| Axle type/axle load/brakes Tyres (example) | S/A Track width/ spring centre | G Axle width | K Brake chamber centre | V Offset | L Air bag centre | Weight approx. ¹⁾ |
|---|--------------------------------------|--------------------|------------------------------|-------------|---------------------|---------------------------------|
| SK RS 9042-SK500 9000 kg SNK 420 x 180 385/65 R 22.5 | 2040/1200 | 2287 | 478 ³⁾ | 0 | 1200 ²⁾ | see assembly weight |
| | | | | 30 | 1140 | |
| | | | | 60 | 1080 | |
| | 2040/1300 | 2287 | 536 ³⁾ | 60 | 1180 | |
| | | | | | | |
| | | | | | | |
| 2090/1300 | 2337 | 586 ³⁾ | 30 | 1240 | | |
| | | | 60 | 1180 | | |

Lengths in mm, weights in kg

1) = without wheel nuts and slack adjusters

Weight deviations lie within the permitted DIN tolerances for the respective manufacturing process.

2) = Max. possible tyre size 385/65 R 22.5 (clearance between tyre and air bag!)

3) = Spring brake chambers can be fitted

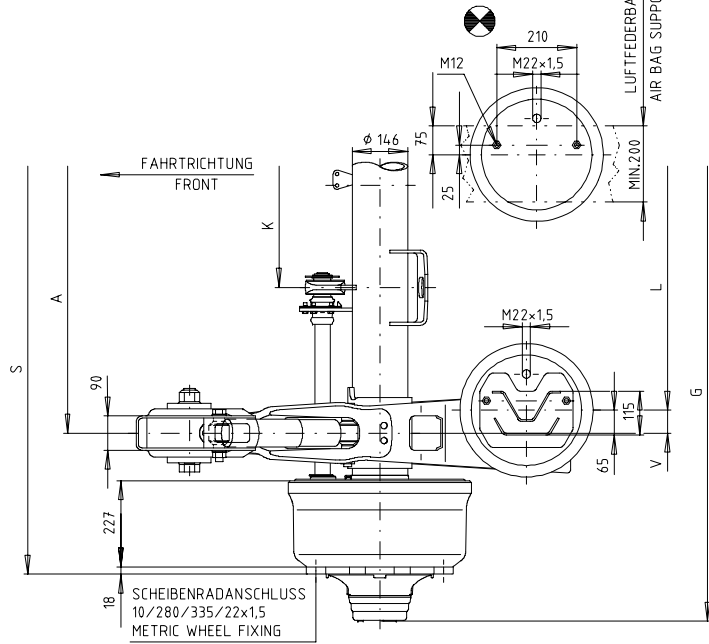
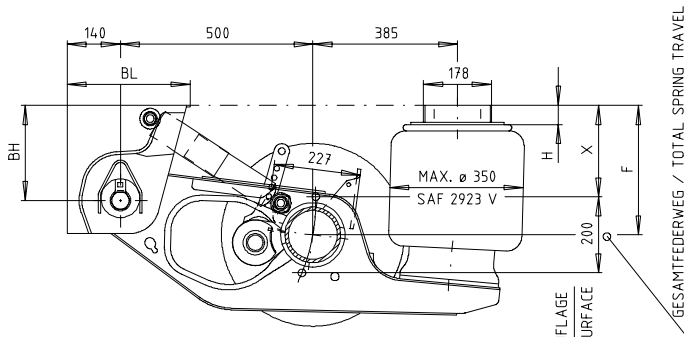
Ref. No.: IU-27-SKRS9042

Air suspension series INTRAAX plus IU/31



Nominal ride height 290 - 420 mm – Air bag SAF 2923 V

OFF ROAD



| Air suspension type | F Nominal ride height | Ride height range | | | X (ride height) | | BH hanger bracket | BL hanger bracket | H air bag bracket | Weight approx. ¹⁾ |
|---------------------|--------------------------|-------------------|---------------------|-------------------------------|---------------------|-------------------|----------------------|----------------------|----------------------|------------------------------|
| | | for single axles | for axle assemblies | for axle assemblies with lift | unladen without air | laden without air | | | | |
| IU 29/2000 31 | 290 | 245-315 | 255-315 | 285-315 | 185 | 170 | 200 | 310 | 0 | 444 |
| IU 31/2500 31 | 310 | 265-335 | 275-335 | 305-335 | 205 | 190 | 250 | 323 | 0 | 449 |
| IU 34/2505 31 | 340 | 295-365 | 305-365 | 335-365 | 235 | 220 | 250 | 323 | 50 | 454 |
| IU 36/3005 31 | 360 | 315-385 | 325-385 | 355-385 | 255 | 240 | 300 | 337 | 50 | 457 |
| IU 39/3010 31 | 390 | 345-415 | 355-415 | 385-415 | 285 | 270 | 300 | 337 | 100 | 459 |
| IU 42/3015 31 | 420 | 375-445 | 385-445 | 415-445 | 315 | 300 | 300 | 337 | 150 | 461 |

| Axle type/axle load/brakes Tyres (example) | S / A Track width/ spring centre | G Axle width | K Brake chamber centre | V Offset | L Air bag centre | Weight approx. ¹⁾ |
|---|--|-------------------|---------------------------|-------------|---------------------|------------------------------|
| SK RS 9042-SK500 9000 kg SNK 420 x 180 385 / 65 R 22.5 | 2040/1200 | 2287 | 478 ³⁾ | 0 | 1200 ²⁾ | see assembly weight |
| | | | | 30 | 1140 | |
| | | | | 60 | 1080 | |
| | 2040/1300 | 2287 | 536 ³⁾ | 60 | 1180 | |
| | | | | | | |
| | | | | | | |
| 2090/1300 | 2337 | 586 ³⁾ | 30 | 1240 | | |
| | | | 60 | 1180 | | |

Lengths in mm, weights in kg

1) = without wheel nuts and slack adjusters

Weight deviations lie within the permitted DIN tolerances for the respective manufacturing process.

2) = Max. possible tyre size 385/65 R 22.5 (clearance between tyre and air bag!)

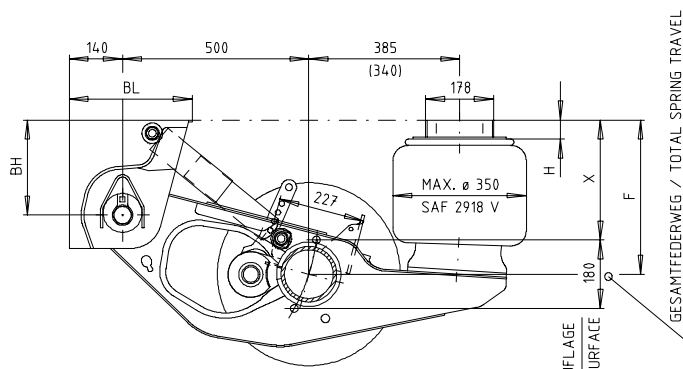
3) = Spring brake chambers can be fitted

Air suspension series INTRAAX plus IO/27

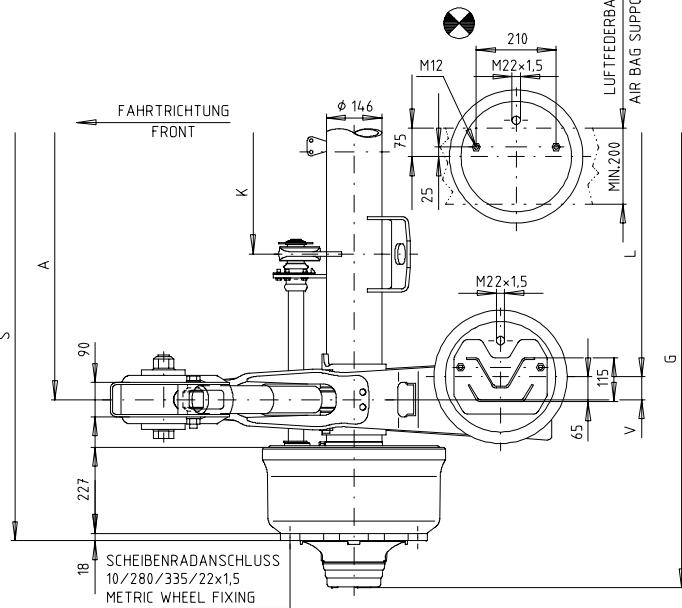


Nominal ride height 355 - 505 mm – Air bag SAF 2918 V

OFF ROAD



| Air suspension type | F Nominal ride height | Ride height range | | | X (ride height) | | BH hanger bracket | BL hanger bracket | H air bag bracket | Weight approx. ¹⁾ |
|---------------------|--------------------------|-------------------|---------------------|-------------------------------|---------------------|-------------------|----------------------|----------------------|----------------------|------------------------------|
| | | for single axles | for axle assemblies | for axle assemblies with lift | unladen without air | laden without air | | | | |
| IO 35/2000 27 | 355 | 325-375 | 335-375 | 365-375 | 265 | 250 | 200 | 310 | 0 | 443 |
| IO 37/2500 27 | 375 | 345-395 | 355-395 | 385-395 | 285 | 270 | 250 | 323 | 0 | 447 |
| IO 40/2505 27 | 405 | 375-425 | 385-425 | 415-425 | 315 | 300 | 250 | 323 | 50 | 452 |
| IO 42/3005 27 | 425 | 395-445 | 405-445 | 435-445 | 335 | 320 | 300 | 337 | 50 | 455 |
| IO 45/3010 27 | 455 | 425-475 | 435-475 | 465-475 | 365 | 350 | 300 | 337 | 100 | 457 |
| IO 47/3510 27 | 475 | 445-495 | 455-495 | 485-495 | 385 | 370 | 350 | 350 | 100 | 461 |
| IO 50/3515 27 | 505 | 475-525 | 485-525 | 515-525 | 415 | 400 | 350 | 350 | 150 | 463 |



| Axle type/axle load/brakes Tyres (example) | S/A Track width/ spring centre | G Axle width | K Brake chamber centre | V Offset | L Air bag centre | Weight approx. ¹⁾ |
|---|--------------------------------------|--------------------|------------------------------|-------------|---------------------|---------------------------------|
| SK RS 9042-SK500 9000 kg SNK 420 x 180 385 / 65 R 22.5 | 2040/1200 | 2287 | 478 ³⁾ | 0 | 1200 ²⁾ | see assembly weight |
| | | | | 30 | 1140 | |
| | | | | 60 | 1080 | |
| | 2040/1300 | 2287 | 536 ³⁾ | 60 | 1180 | |
| | | | | | | |
| | | | | | | |
| 2090/1300 | 2337 | 586 ³⁾ | 30 | 1240 | | |
| | | | 60 | 1180 | | |

Lengths in mm, weights in kg

1) = without wheel nuts and slack adjusters

Weight deviations lie within the permitted DIN tolerances for the respective manufacturing process.

2) = Max. possible tyre size 385/65 R 22.5 (clearance between tyre and air bag!)

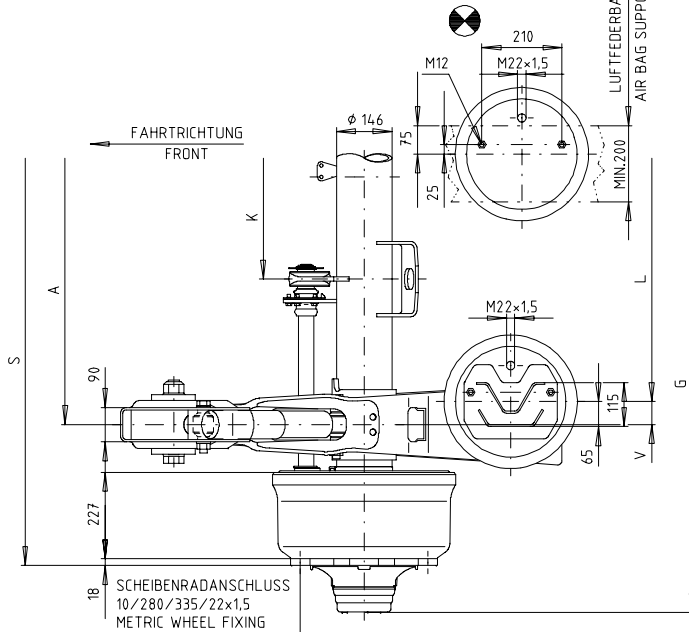
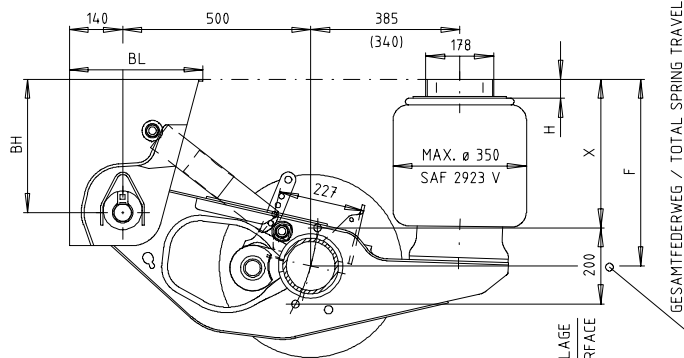
3) = Spring brake chambers can be fitted

Air suspension series INTRAAX plus IO/31



Nominal ride height 440 + 490 mm – Air bag SAF 2923 V

OFF ROAD



| Air suspension type | F Nominal ride height | Ride height range | | | X (ride height) | | BH hanger bracket | BL hanger bracket | H air bag bracket | Weight approx. ¹⁾ |
|---------------------|--------------------------|-------------------|---------------------|-------------------------------|---------------------|-------------------|----------------------|----------------------|----------------------|------------------------------|
| | | for single axles | for axle assemblies | for axle assemblies with lift | unladen without air | laden without air | | | | |
| IO 44/3000 31 | 440 | 390-460 | 400-460 | 430-460 | 330 | 315 | 300 | 337 | 0 | 452 |
| IO 49/3505 31 | 490 | 440-510 | 450-510 | 480-510 | 380 | 365 | 350 | 350 | 50 | 461 |

| Axle type/axle load/brakes Tyres (example) | S/A Track width/ spring centre | G Axle width | K Brake chamber centre | V Offset | L Air bag centre | Weight approx. ¹⁾ |
|---|--------------------------------------|-------------------|---------------------------|-------------|---------------------|------------------------------|
| SK RS 9042-SK500 9000 kg SNK 420 x 180 385 / 65 R 22.5 | 2040/1200 | 2287 | 478 ³⁾ | 0 | 1200 ²⁾ | see assembly weight |
| | | | | 30 | 1140 | |
| | | | | 60 | 1080 | |
| | 2040/1300 | 2287 | 536 ³⁾ | 60 | 1180 | |
| | | | | 30 | 1240 | |
| | | | | 60 | 1180 | |
| 2090/1300 | 2337 | 586 ³⁾ | | | | |

Lengths in mm, weights in kg

- 1) = without wheel nuts and slack adjusters
Weight deviations lie within the permitted DIN tolerances for the respective manufacturing process.
- 2) = Max. possible tyre size 385/65 R 22.5 (clearance between tyre and air bag!)
- 3) = Spring brake chambers can be fitted

Ref. No.: IO-31-SKRS9042

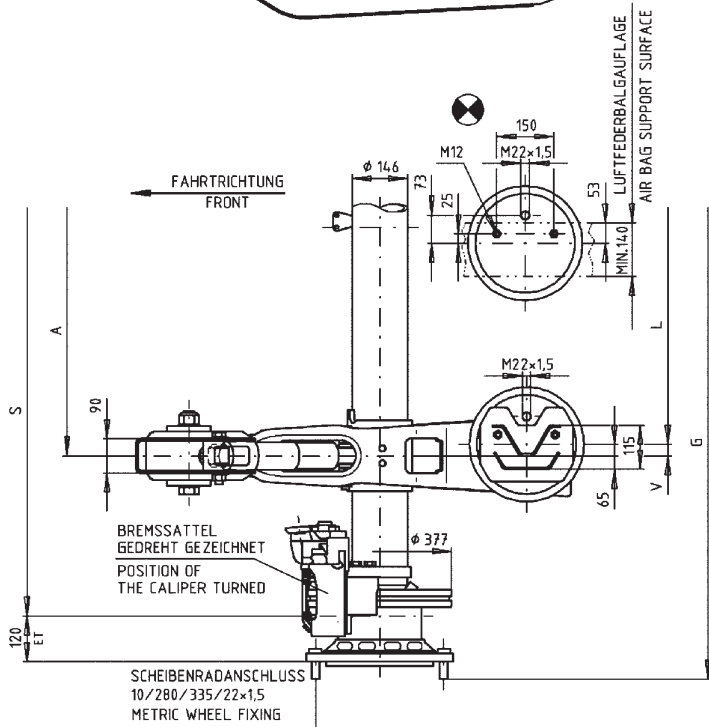
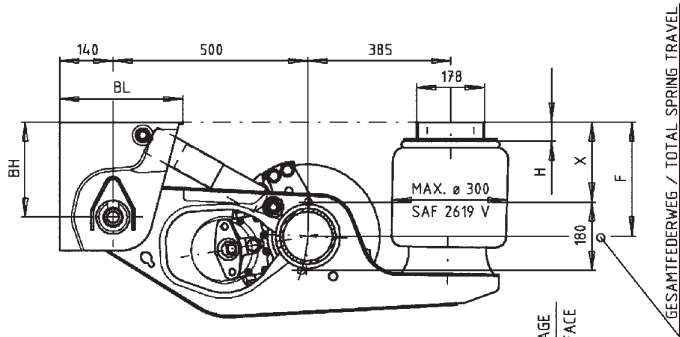
AIR SUSPENSION SERIES **INTRADISC *plus***

RIGID AXLES
WITH DISC BRAKES
19.5" / 22.5" TYRES
SK RB 9019-10

Air suspension series INTRADISC *plus* IU/33



Nominal ride height 250 - 350 mm – Air bag SAF 2619 V



| Air suspension type | F Nominal ride height | Ride height range | | | X (ride height) | | BH hanger bracket | BL hanger bracket | H air bag bracket | Weight approx. ¹⁾ |
|---------------------|--------------------------|-------------------|---------------------|-------------------------------|---------------------|-------------------|----------------------|----------------------|----------------------|------------------------------|
| | | for single axles | for axle assemblies | for axle assemblies with lift | unladen without air | laden without air | | | | |
| IU 25/2000 33 | 250 | 220-270 | 230-270 | 260-270 | 160 | 145 | 200 | 310 | 0 | 391 |
| IU 28/2005 33 | 280 | 250-300 | 260-300 | 290-300 | 190 | 175 | 200 | 310 | 50 | 396 |
| IU 30/2505 33 | 300 | 270-320 | 280-320 | 310-320 | 210 | 195 | 250 | 323 | 50 | 401 |
| IU 33/2510 33 | 330 | 300-350 | 310-350 | 340-350 | 240 | 225 | 250 | 323 | 100 | 403 |
| IU 35/3010 33 | 350 | 320-370 | 330-370 | 360-370 | 260 | 245 | 300 | 337 | 100 | 406 |

| Axle type/axle load/brakes Tyres (example) | S / A Track width/ spring centre | G Axle width | Tyres | | | | Weight approx. ¹⁾ |
|--|--|-----------------|------------------------------|------------------------|------------------------------|------------------------|------------------------------|
| | | | 385/65 R 22.5 V Offset | L Air bag centre | 425/55 R 19.5 V Offset | L Air bag centre | |
| SK RB 9019-10 ET = 120 mm 9000 kg SB 1937-11S 385 / 65 R 22.5 425/55 R 19.5 | 2040/1200 | 2372 | 0 | 1200 | 0 | 1200 | see assembly weight |
| | | | 30 | 1140 | 30 | 1140 | |
| | | | 60 | 1080 | 60 | 1080 | |
| | 2040/1300 | 2372 | 30 | 1240 | 30 | 1240 ³⁾ | |
| | | | 60 | 1180 | 60 | 1180 | |
| | | | | | | | |
| 2090/1300 | 2422 | 0 | 1300 ²⁾ | 0 | 1300 ³⁾ | | |
| | | 30 | 1240 | 30 | 1240 | | |
| | | 60 | 1180 | 60 | 1180 | | |

Lengths in mm, weights in kg

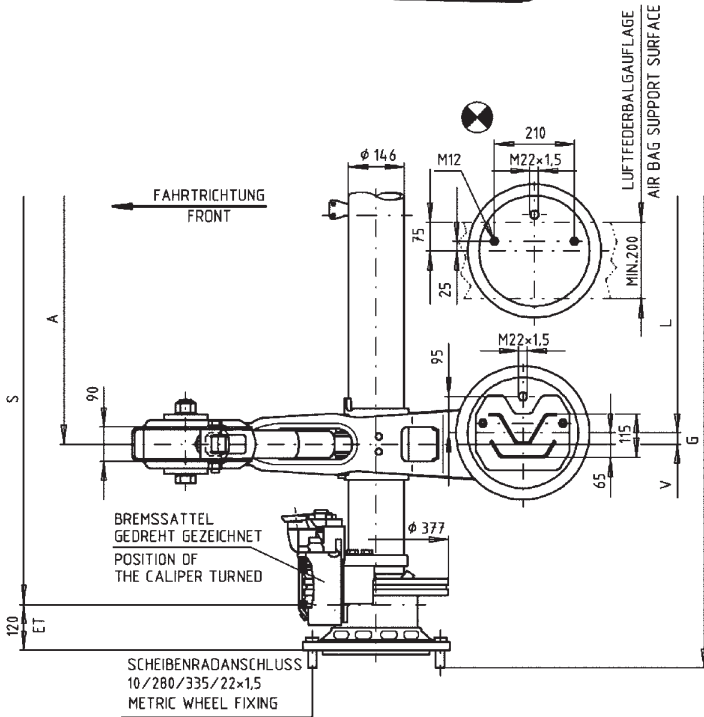
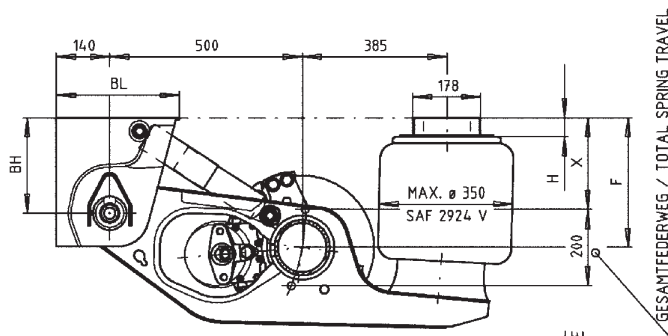
- 1) = without wheel nuts
Weight deviations lie within the permitted DIN tolerances for the respective manufacturing process.
- 2) = Max. possible tyre size 385/65 R 22.5 (clearance between tyre and air bag!)
- 3) = Max. possible tyre size 425/55 R 19.5 (clearance between tyre and air bag!)
Further tyre sizes on request

Ref. No.: IU-33-SKRB9019

Air suspension series INTRADISC *plus* IU/41



Nominal ride height 290 - 420 mm – Air bag SAF 2924 V



| Air suspension type | F Nominal ride height | Ride height range | | | X (ride height) | | BH hanger bracket | BL hanger bracket | H air bag bracket | Weight approx. ¹⁾ |
|---------------------|--------------------------|-------------------|---------------------|-------------------------------|---------------------|-------------------|----------------------|----------------------|----------------------|------------------------------|
| | | for single axles | for axle assemblies | for axle assemblies with lift | unladen without air | laden without air | | | | |
| IU 29/2000 41 | 290 | 240-310 | 250-310 | 280-310 | 180 | 165 | 200 | 310 | 0 | 399 |
| IU 31/2500 41 | 310 | 260-330 | 270-330 | 300-330 | 200 | 185 | 250 | 323 | 0 | 402 |
| IU 34/2505 41 | 340 | 290-360 | 300-360 | 330-360 | 230 | 215 | 250 | 323 | 50 | 407 |
| IU 36/3005 41 | 360 | 310-380 | 320-380 | 350-380 | 250 | 235 | 300 | 337 | 50 | 411 |
| IU 39/3010 41 | 390 | 340-410 | 350-410 | 380-410 | 280 | 265 | 300 | 337 | 100 | 413 |
| IU 42/3015 41 | 420 | 370-440 | 380-440 | 410-440 | 310 | 295 | 300 | 337 | 150 | 415 |

| Axle type/axle load/brakes Tyres (example) | S / A Track width/ spring centre | G Axle width | Tyres | | | | Weight approx. ¹⁾ |
|--|--|-----------------|------------------------------|------------------------|------------------------------|------------------------|------------------------------|
| | | | 385/65 R 22.5 V Offset | L Air bag centre | 425/55 R 19.5 V Offset | L Air bag centre | |
| SK RB 9019-10 ET = 120 mm 9000 kg SB 1937-11S 385 / 65 R 22.5 425 / 55 R 19.5 | 2040/1200 | 2372 | 0 | 1200 ²⁾ | 0 | 1200 ³⁾ | see assembly weight |
| | | | 30 | 1140 | 30 | 1140 | |
| | | | 60 | 1080 | 60 | 1080 | |
| | 2040/1300 | 2372 | 60 | 1180 | 60 | 1180 ³⁾ | |
| | | | | | | | |
| | | | | | | | |
| 2090/1300 | 2422 | 30 | 1240 | 30 | 1240 ³⁾ | | |
| | | 60 | 1180 | 60 | 1180 | | |

Lengths in mm, weights in kg

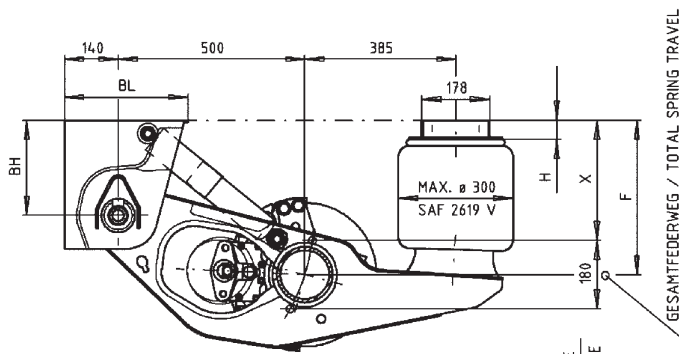
- 1) = without wheel nuts
Weight deviations lie within the permitted DIN tolerances for the respective manufacturing process.
- 2) = Max. possible tyre size 385/65 R 22.5 (clearance between tyre and air bag!)
- 3) = Max. possible tyre size 425/55 R 19.5 (clearance between tyre and air bag!)
Further tyre sizes on request

Ref. No.: IU-41-SKRB9019

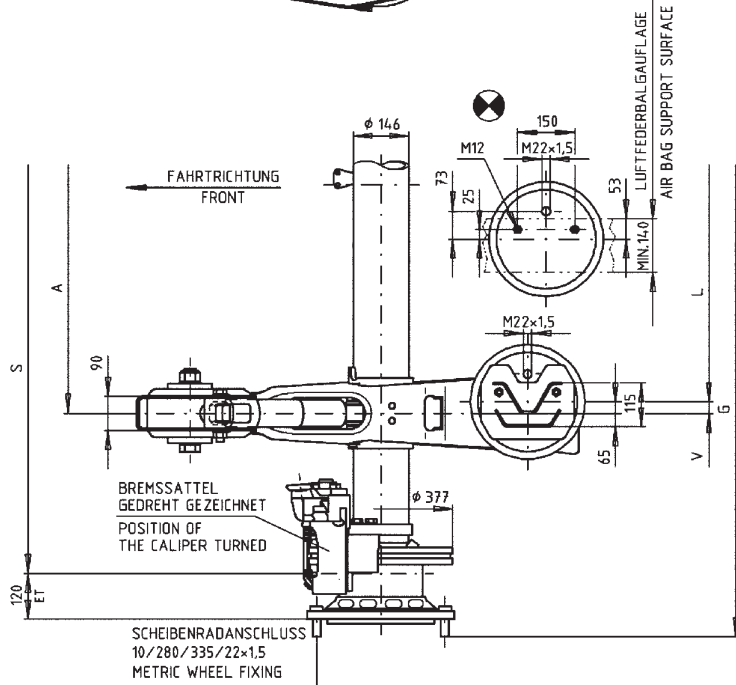
Air suspension series INTRADISC *plus* IO/33



Nominal ride height 355 - 505 mm – Air bag SAF 2619 V



GESAMTFEDERWEG / TOTAL SPRING TRAVEL



| Air suspension type | F Nominal ride height | Ride height range | | | X (ride height) | | BH hanger bracket | BL hanger bracket | H air bag bracket | Weight approx. ¹⁾ |
|---------------------|--------------------------|-------------------|---------------------|-------------------------------|---------------------|-------------------|----------------------|----------------------|----------------------|------------------------------|
| | | for single axles | for axle assemblies | for axle assemblies with lift | unladen without air | laden without air | | | | |
| IO 35/2000 33 | 355 | 325-375 | 335-375 | 365-375 | 265 | 250 | 200 | 310 | 0 | 391 |
| IO 37/2500 33 | 375 | 345-395 | 355-395 | 385-395 | 285 | 270 | 250 | 323 | 0 | 395 |
| IO 40/2505 33 | 405 | 375-425 | 385-425 | 415-425 | 315 | 300 | 250 | 323 | 50 | 400 |
| IO 42/3005 33 | 425 | 395-445 | 405-445 | 435-445 | 335 | 320 | 300 | 337 | 50 | 403 |
| IO 45/3010 33 | 455 | 425-475 | 435-475 | 465-475 | 365 | 350 | 300 | 337 | 100 | 405 |
| IO 47/3510 33 | 475 | 445-495 | 455-495 | 485-495 | 385 | 370 | 350 | 350 | 100 | 408 |
| IO 50/3515 33 | 505 | 475-525 | 485-525 | 515-525 | 415 | 400 | 350 | 350 | 150 | 410 |

| Axle type/axle load/brakes Tyres (example) | S/A Track width/ spring centre | G Axle width | Tyres | | | | Weight approx. ¹⁾ |
|--|--------------------------------------|-----------------|------------------------------|------------------------|------------------------------|------------------------|------------------------------|
| | | | 385/65 R 22.5 V Offset | L Air bag centre | 425/55 R 19.5 V Offset | L Air bag centre | |
| SK RB 9019-10 ET = 120 mm 9000 kg SB 1937-115 385/65 R 22.5 425/55 R 19.5 | 2040/1200 | 2372 | 0 | 1200 | 0 | 1200 | see assembly weight |
| | | | 30 | 1140 | 30 | 1140 | |
| | | | 60 | 1080 | 60 | 1080 | |
| | 2040/1300 | 2372 | 30 | 1240 | 30 | 1240 ³⁾ | |
| | | | 60 | 1180 | 60 | 1180 | |
| | | | | | | | |
| 2090/1300 | 2422 | 0 | 1300 ²⁾ | 0 | 1300 ³⁾ | | |
| | | 30 | 1240 | 30 | 1240 | | |
| | | 60 | 1180 | 60 | 1180 | | |

Lengths in mm, weights in kg

1) = without wheel nuts

Weight deviations lie within the permitted DIN tolerances for the respective manufacturing process.

2) = Max. possible tyre size 385/65 R 22.5 (clearance between tyre and air bag!)

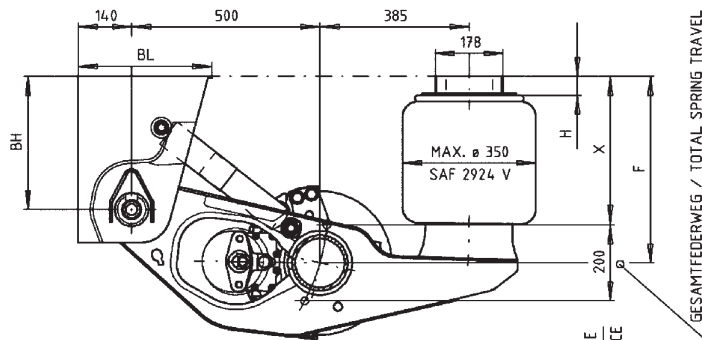
3) = Max. possible tyre size 425/55 R 19.5 (clearance between tyre and air bag!)

Further tyre sizes on request

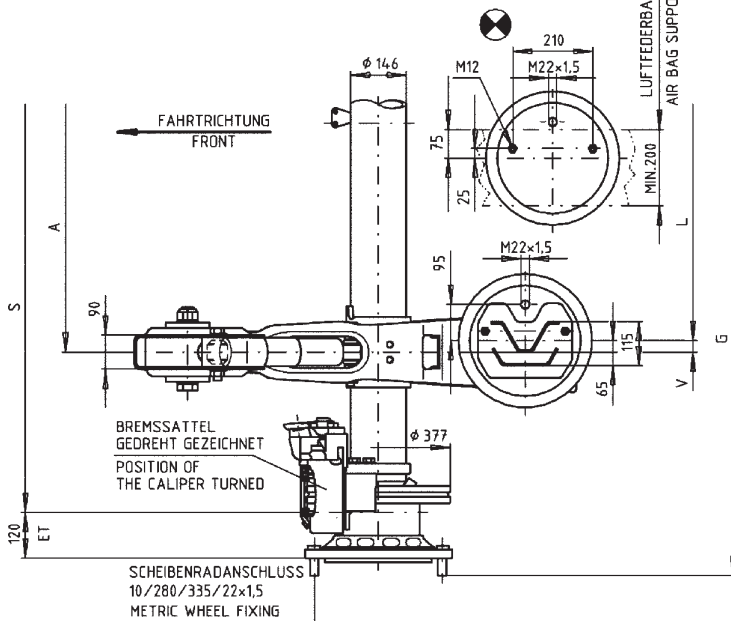
Air suspension series INTRADISC *plus* IO/41



Nominal ride height 440 + 490 mm – Air bag SAF 2924 V



| Air suspension type | F Nominal ride height | Ride height range | | | X (ride height) | | BH hanger bracket | BL hanger bracket | H air bag bracket | Weight approx. ¹⁾ |
|---------------------|--------------------------|-------------------|---------------------|-------------------------------|---------------------|-------------------|----------------------|----------------------|----------------------|------------------------------|
| | | for single axles | for axle assemblies | for axle assemblies with lift | unladen without air | laden without air | | | | |
| IO 44/3000 41 | 440 | 385-455 | 395-455 | 425-455 | 325 | 310 | 300 | 337 | 0 | 405 |
| IO 49/3505 41 | 490 | 435-505 | 445-505 | 475-505 | 375 | 360 | 350 | 350 | 50 | 413 |



| Axle type/axle load/brakes Tyres (example) | S/A Track width/ spring centre | G Axle width | Tyres | | | | Weight approx. ¹⁾ |
|---|--------------------------------------|-----------------|------------------------------|------------------------|------------------------------|------------------------|------------------------------|
| | | | 385/65 R 22.5 V Offset | L Air bag centre | 425/55 R 19.5 V Offset | L Air bag centre | |
| SK RB 9019-10 ET = 120 mm 9000 kg | 2040/1200 | 2372 | 0 | 1200 ²⁾ | 0 | 1200 ³⁾ | see assembly weight |
| | | | 30 | 1140 | 30 | 1140 | |
| | | | 60 | 1080 | 60 | 1080 | |
| SB 1937-11S | 2040/1300 | 2372 | 60 | 1180 | 60 | 1180 ³⁾ | |
| | | | | | | | |
| 385/65 R 22.5 425/55 R 19.5 | 2090/1300 | 2422 | 30 | 1240 | 30 | 1240 ³⁾ | |
| | | | 60 | 1180 | 60 | 1180 | |

Lengths in mm, weights in kg

- 1) = without wheel nuts
Weight deviations lie within the permitted DIN tolerances for the respective manufacturing process.
 - 2) = Max. possible tyre size 385/65 R 22.5 (clearance between tyre and air bag!)
 - 3) = Max. possible tyre size 425/55 R 19.5 (clearance between tyre and air bag!)
- Further tyre sizes on request

Ref. No.: IO-41-SKRB9019

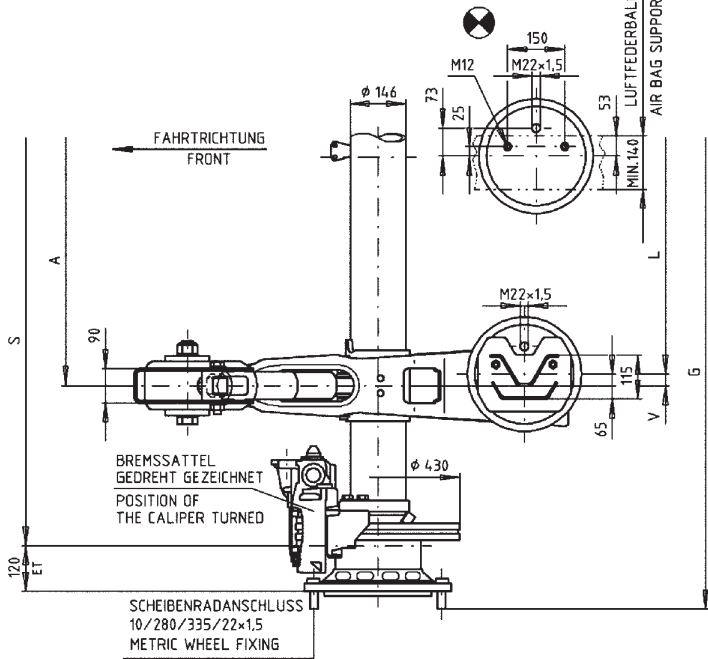
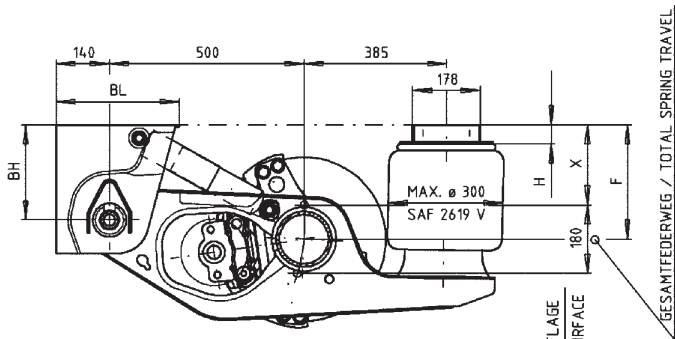
AIR SUSPENSION SERIES **INTRADISC *plus***

RIGID AXLES
WITH DISC BRAKES
22.5" TYRES
SK RB 9022

Air suspension series INTRADISC *plus* IU/33



Nominal ride height 250 - 350 mm – Air bag SAF 2619 V



| Air suspension type | F Nominal ride height | Ride height range | | | X (ride height) | | BH hanger bracket | BL hanger bracket | H air bag bracket | Weight approx. ¹⁾ |
|---------------------|--------------------------|-------------------|---------------------|-------------------------------|---------------------|-------------------|----------------------|----------------------|----------------------|------------------------------|
| | | for single axles | for axle assemblies | for axle assemblies with lift | unladen without air | laden without air | | | | |
| IU 25/2000 33 | 250 | 220-270 | 230-270 | 260-270 | 160 | 145 | 200 | 310 | 0 | 439 |
| IU 28/2005 33 | 280 | 250-300 | 260-300 | 290-300 | 190 | 175 | 200 | 310 | 50 | 444 |
| IU 30/2505 33 | 300 | 270-320 | 280-320 | 310-320 | 210 | 195 | 250 | 323 | 50 | 449 |
| IU 33/2510 33 | 330 | 300-350 | 310-350 | 340-350 | 240 | 225 | 250 | 323 | 100 | 451 |
| IU 35/3010 33 | 350 | 320-370 | 330-370 | 360-370 | 260 | 245 | 300 | 337 | 100 | 454 |

| Axle type/axle load/brakes Tyres (example) | S/A Track width/spring centre | G Axle width | V Offset | L Air bag centre | Weight approx. ¹⁾ |
|--|----------------------------------|-----------------|--------------------|---------------------|------------------------------|
| SK RB 9022 ET = 120 mm 9000 kg SB 2243-115 385/65 R 22.5 | 2040/1200 | 2372 | 0 | 1200 | see assembly weight |
| | | | 30 | 1080 | |
| | | | 60 | 1090 | |
| | 2040/1300 | 2372 | 30 | 1240 | |
| | | | 60 | 1180 | |
| | | | | | |
| 2090/1300 | 2422 | 0 | 1300 ²⁾ | | |
| | | 30 | 1240 | | |
| | | 60 | 1180 | | |

Lengths in mm, weights in kg

1) = without wheel nuts

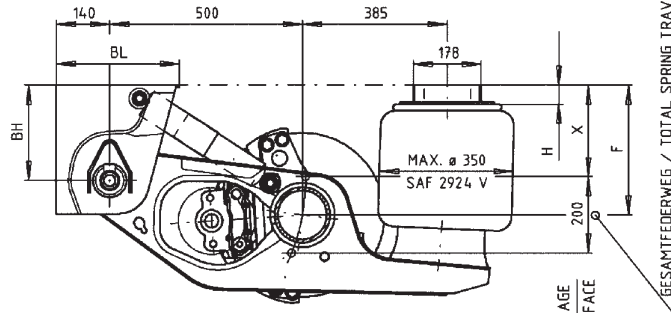
Weight deviations lie within the permitted DIN tolerances for the respective manufacturing process.

2) = Max. possible tyre size 385/65 R 22.5 (clearance between tyre and air bag!)

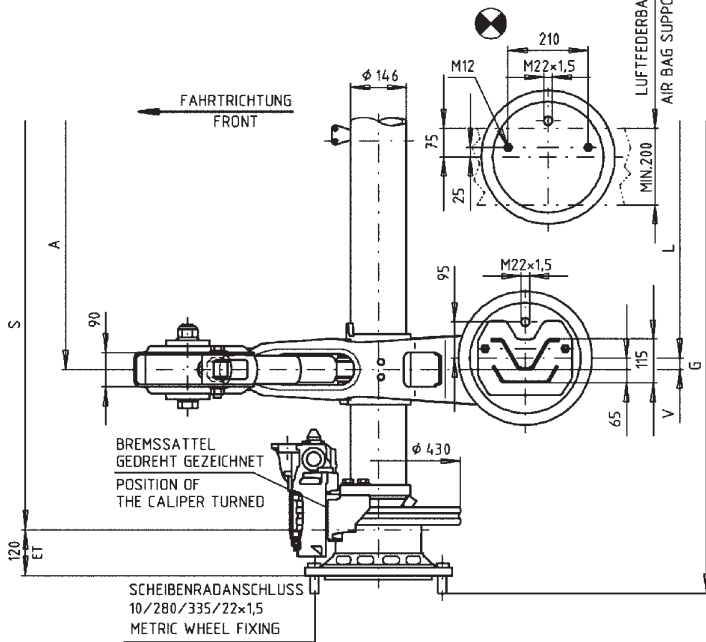
Air suspension series INTRADISC *plus* IU/41



Nominal ride height 290 - 420 mm – Air bag SAF 2924 V



GESAMTFEDERWEG / TOTAL SPRING TRAVEL



| Air suspension type | F Nominal ride height | Ride height range | | | X (ride height) | | BH hanger bracket | BL hanger bracket | H air bag bracket | Weight approx. ¹⁾ |
|---------------------|--------------------------|-------------------|---------------------|-------------------------------|---------------------|-------------------|----------------------|----------------------|----------------------|------------------------------|
| | | for single axles | for axle assemblies | for axle assemblies with lift | unladen without air | laden without air | | | | |
| IU 29/2000 41 | 290 | 240-310 | 250-310 | 280-310 | 180 | 165 | 200 | 310 | 0 | 447 |
| IU 31/2500 41 | 310 | 260-330 | 270-330 | 300-330 | 200 | 185 | 250 | 323 | 0 | 450 |
| IU 34/2505 41 | 340 | 290-360 | 300-360 | 330-360 | 230 | 215 | 250 | 323 | 50 | 455 |
| IU 36/3005 41 | 360 | 310-380 | 320-380 | 350-380 | 250 | 235 | 300 | 337 | 50 | 459 |
| IU 39/3010 41 | 390 | 340-410 | 350-410 | 380-410 | 280 | 265 | 300 | 337 | 100 | 461 |
| IU 42/3015 41 | 420 | 370-440 | 380-440 | 410-440 | 310 | 295 | 300 | 337 | 150 | 463 |

| Axle type/axle load/brakes Tyres (example) | S/A Track width/spring centre | G Axle width | V Offset | L Air bag centre | Weight approx. ¹⁾ |
|---|----------------------------------|-----------------|-------------|---------------------|------------------------------|
| SK RB 9022 ET = 120 mm 9000 kg SB 2243-11S 385/65 R 22.5 | 2040/1200 | 2372 | 0 | 1200 ²⁾ | see assembly weight |
| | | | 30 | 1140 | |
| | | | 60 | 1080 | |
| | 2040/1300 | 2372 | 60 | 1180 | |
| | | | | | |
| | 2090/1300 | 2422 | 30 | 1240 | |
| 60 | | | 1180 | | |

Lengths in mm, weights in kg

1) = without wheel nuts

Weight deviations lie within the permitted DIN tolerances for the respective manufacturing process.

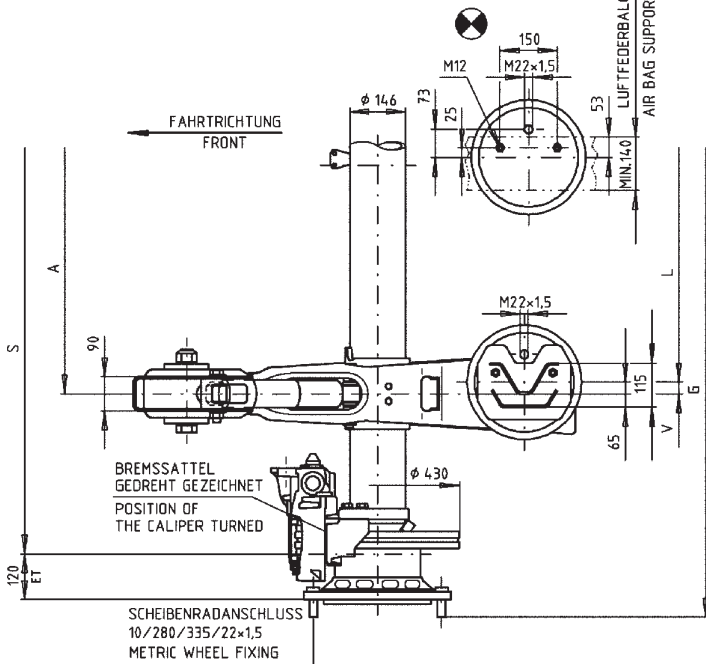
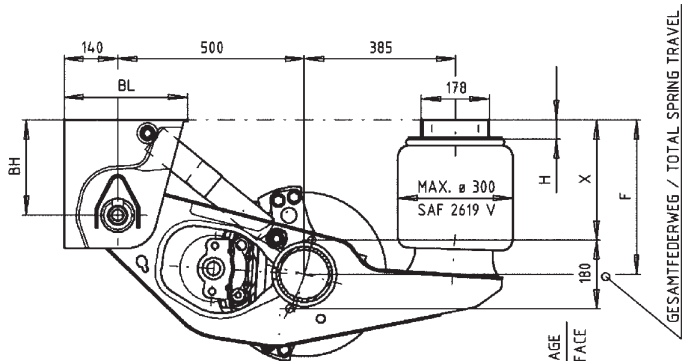
2) = Max. possible tyre size 385/65 R 22.5 (clearance between tyre and air bag!)

Ref. No.: IU-41-SKRB9022

Air suspension series INTRADISC^{plus} IO/33



Nominal ride height 355 - 505 mm – Air bag SAF 2619 V



| Air suspension type | F Nominal ride height | Ride height range | | | X (ride height) | | BH hanger bracket | BL hanger bracket | H air bag bracket | Weight approx. ¹⁾ |
|---------------------|--------------------------|-------------------|---------------------|-------------------------------|---------------------|-------------------|----------------------|----------------------|----------------------|------------------------------|
| | | for single axles | for axle assemblies | for axle assemblies with lift | unladen without air | laden without air | | | | |
| IO 35/2000 33 | 355 | 325-375 | 335-375 | 365-375 | 265 | 250 | 200 | 310 | 0 | 439 |
| IO 37/2500 33 | 375 | 345-395 | 355-395 | 385-395 | 285 | 270 | 250 | 323 | 0 | 443 |
| IO 40/2505 33 | 405 | 375-425 | 385-425 | 415-425 | 315 | 300 | 250 | 323 | 50 | 448 |
| IO 42/3005 33 | 425 | 395-445 | 405-445 | 435-445 | 335 | 320 | 300 | 337 | 50 | 451 |
| IO 45/3010 33 | 455 | 425-475 | 435-475 | 465-475 | 365 | 350 | 300 | 337 | 100 | 453 |
| IO 47/3510 33 | 475 | 445-495 | 455-495 | 485-495 | 385 | 370 | 350 | 350 | 100 | 456 |
| IO 50/3515 33 | 505 | 475-525 | 485-525 | 515-525 | 415 | 400 | 350 | 350 | 150 | 458 |

| Axle type/axle load/brakes Tyres (example) | S/A Track width/spring centre | G Axle width | V Offset | L Air bag centre | Weight approx. ¹⁾ |
|--|----------------------------------|-----------------|-------------|---------------------|------------------------------|
| SK RB 9022 ET = 120 mm 9000 kg SB 2243-11S 385/65 R 22.5 | 2040/1200 | 2372 | 0 | 1200 | see assembly weight |
| | | | 30 | 1080 | |
| | | | 60 | 1090 | |
| | 2040/1300 | 2372 | 30 | 1240 | |
| | | | 60 | 1180 | |
| | 2090/1300 | 2422 | 0 | 1300 ²⁾ | |
| 30 | | | 1240 | | |
| 60 | 1180 | | | | |

Lengths in mm, weights in kg

1) = without wheel nuts

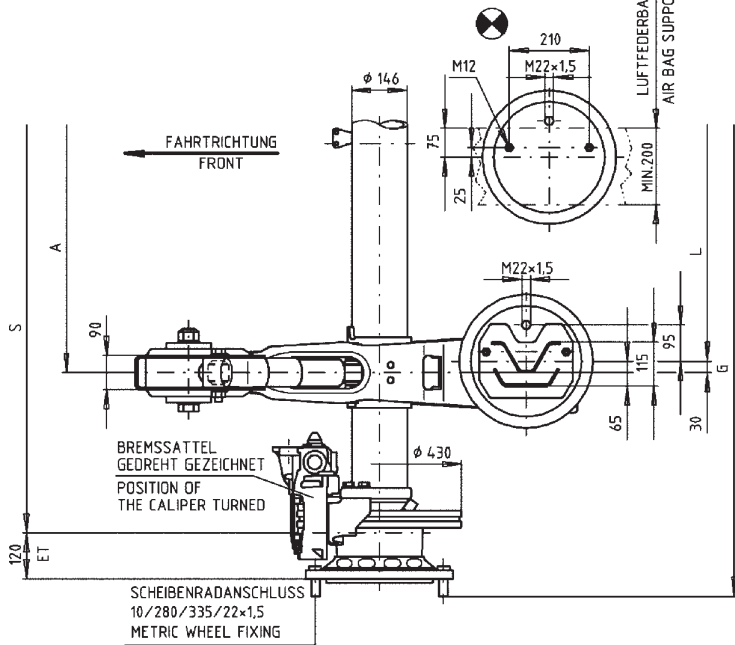
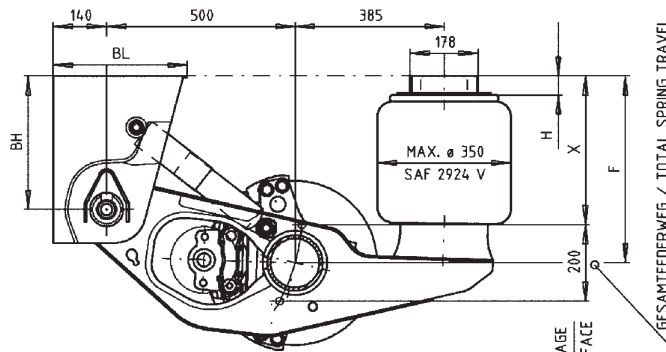
Weight deviations lie within the permitted DIN tolerances for the respective manufacturing process.

2) = Max. possible tyre size 385/65 R 22.5 (clearance between tyre and air bag!)

Air suspension series INTRADISC^{plus} IO/41



Nominal ride height 440 + 490 mm – Air bag SAF 2924 V



| Air suspension type | F Nominal ride height | Ride height range | | | X (ride height) | | BH hanger bracket | BL hanger bracket | H air bag bracket | Weight approx. ¹⁾ |
|---------------------|--------------------------|-------------------|---------------------|-------------------------------|---------------------|-------------------|----------------------|----------------------|----------------------|------------------------------|
| | | for single axles | for axle assemblies | for axle assemblies with lift | unladen without air | laden without air | | | | |
| IO 44/3000 41 | 440 | 385-455 | 395-455 | 425-455 | 325 | 310 | 300 | 337 | 0 | 453 |
| IO 49/3505 41 | 490 | 435-505 | 445-505 | 475-505 | 375 | 360 | 350 | 350 | 50 | 461 |

| Axle type/axle load/brakes Tyres (example) | S/A Track width/spring centre | G Axle width | V Offset | L Air bag centre | Weight approx. ¹⁾ |
|---|----------------------------------|-----------------|-------------|---------------------|------------------------------|
| SK RB 9022 ET = 120 mm 9000 kg SB 2243-115 385/65 R 22.5 | 2040/1200 | 2372 | 0 | 1200 ²⁾ | see assembly weight |
| | | | 30 | 1140 | |
| | | | 60 | 1080 | |
| | 2040/1300 | 2372 | 60 | 1180 | |
| | | | 30 | 1240 | |
| | 2090/1300 | 2422 | 60 | 1180 | |

Lengths in mm, weights in kg

1) = without wheel nuts

Weight deviations lie within the permitted DIN tolerances for the respective manufacturing process.

2) = Max. possible tyre size 385/65 R 22.5 (clearance between tyre and air bag!)

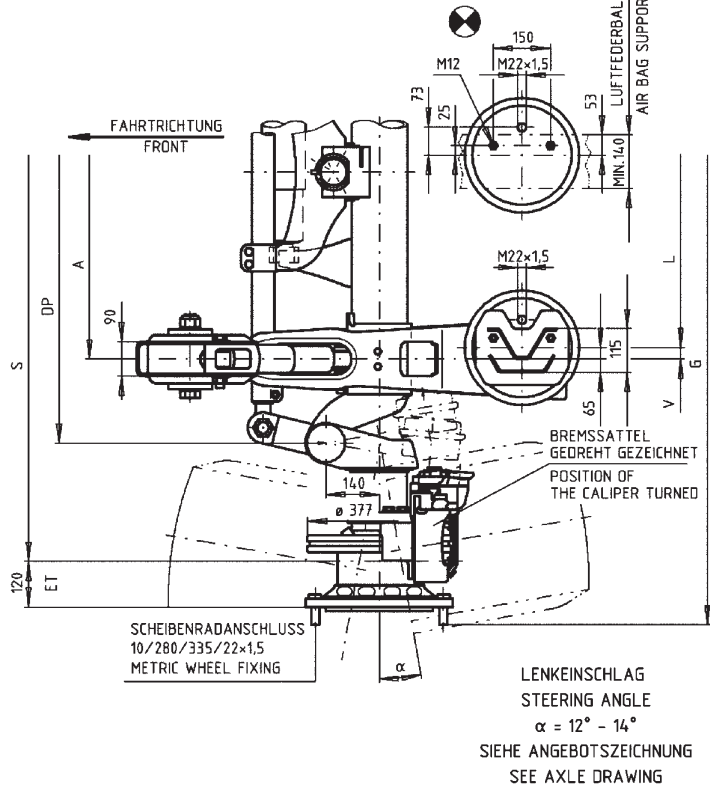
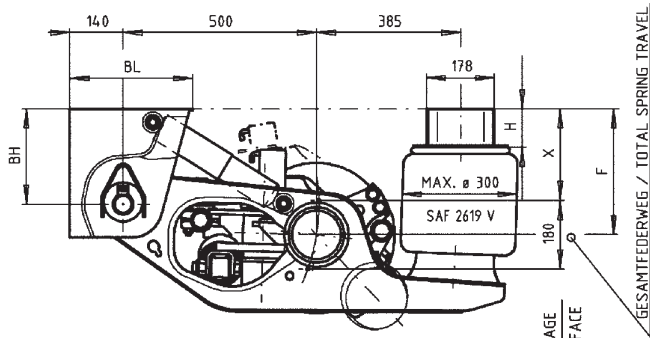
AIR SUSPENSION SERIES INTRADISC *plus*

SELF-STEERING AXLES WITH DISC BRAKES 19.5" / 22.5" TYRES SK RLB 9019-10

Air suspension series INTRADISC*plus* IU/33



Nominal ride height 250 - 350 mm – Air bag SAF 2619 V



| Air suspension type | F Nominal ride height | Ride height range | | | X (ride height) | | BH hanger bracket | BL hanger bracket | H air bag bracket | Weight approx. ¹⁾ |
|---------------------|--------------------------|-------------------|---------------------|-------------------------------|---------------------|-------------------|----------------------|----------------------|----------------------|------------------------------|
| | | for single axles | for axle assemblies | for axle assemblies with lift | unladen without air | laden without air | | | | |
| IU 25/2000 33 | 250 | --- | 230-270 | 260-270 | 160 | 145 | 200 | 310 | 0 | 606 |
| IU 28/2005 33 | 280 | --- | 260-300 | 290-300 | 190 | 175 | 200 | 310 | 50 | 611 |
| IU 30/2505 33 | 300 | --- | 280-320 | 310-320 | 210 | 195 | 250 | 323 | 50 | 616 |
| IU 33/2510 33 | 330 | --- | 310-350 | 340-350 | 240 | 225 | 250 | 323 | 100 | 618 |
| IU 35/3010 33 | 350 | --- | 330-370 | 360-370 | 260 | 245 | 300 | 337 | 100 | 621 |

| Axle type/axle load/brakes Tyres (example) | S / A Track width spring centre | G Axle width | DP Pivot point centre | Tyres | | | | Weight approx. ¹⁾ |
|--|---------------------------------------|--------------------|-----------------------------|------------------------------|------------------------|------------------------------|------------------------|---------------------------------|
| | | | | 385/65 R 22.5 V Offset | L Air bag centre | 425/55 R 19.5 V Offset | L Air bag centre | |
| SK RLB 9019-10 ET = 120 mm 9000 kg | 2040/980 | 2372 | 1420 | 0 | 980 | 0 | 980 | see assembly weight |
| | | | | 30 | 920 | 30 | 920 | |
| | | | | 60 | 860 | 60 | 860 | |
| SB 1937-11S | 2090/980 | 2422 | 1470 | 0 | 980 | 0 | 980 | |
| | | | | 30 | 920 | 30 | 920 | |
| | | | | 60 | 860 | 60 | 860 | |
| 385 / 65 R 22.5 | 2090/1030 | 2422 | 1470 | 0 | 1030 | 0 | 1030 | |
| | | | | 30 | 970 | 30 | 970 | |
| | | | | 60 | 910 | 60 | 910 | |
| 425 / 55 R 19.5 | 2140/1080 | 2472 | 1520 | 0 | 1080 | 0 | 1080 | |
| | | | | 30 | 1020 | 30 | 1020 | |
| | | | | 60 | 960 | 60 | 960 | |

Lengths in mm, weights in kg

1) = without wheel nuts

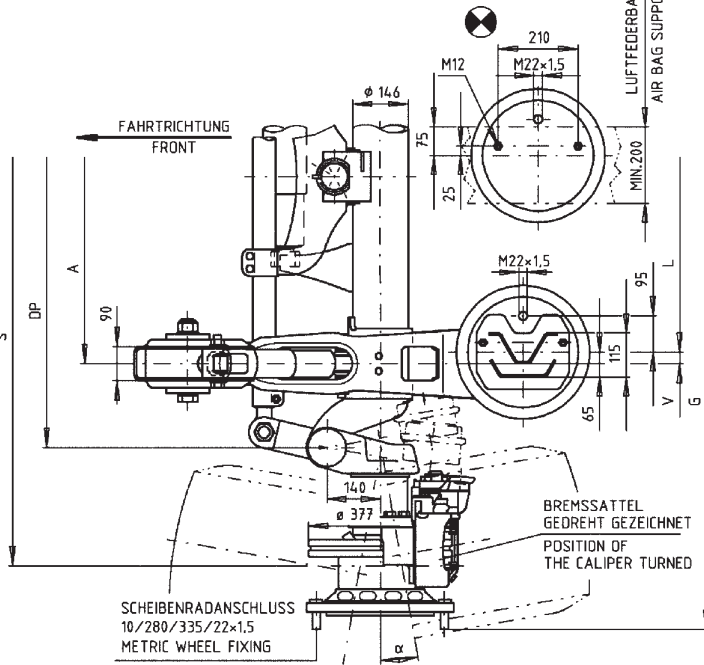
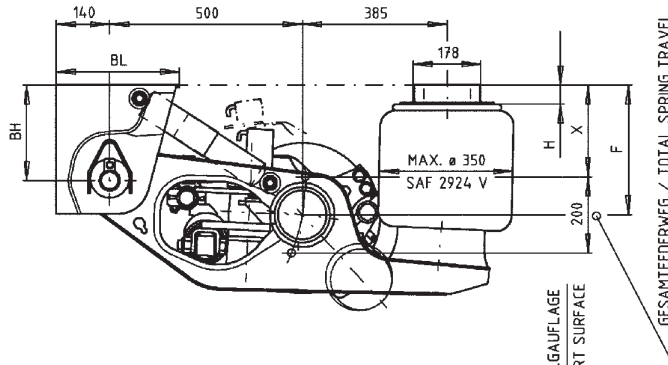
Weight deviations lie within the permitted DIN tolerances for the respective manufacturing process.

Ref. No.: IU-33-SKRLB9019

Air suspension series INTRADISC*plus* IU/41



Nominal ride height 290 - 420 mm – Air bag SAF 2924 V



LENKEINSCHLAG
STEERING ANGLE
 $\alpha = 12^\circ - 14^\circ$
SIEHE ANGEBOTSZEICHNUNG
SEE AXLE DRAWING

| Air suspension type | F Nominal ride height | Ride height range | | | X (ride height) | | BH hanger bracket | BL hanger bracket | H air bag bracket | Weight approx. ¹⁾ |
|---------------------|--------------------------|-------------------|---------------------|-------------------------------|---------------------|-------------------|----------------------|----------------------|----------------------|------------------------------|
| | | for single axles | for axle assemblies | for axle assemblies with lift | unladen without air | laden without air | | | | |
| IU 29/2000 41 | 290 | --- | 250-310 | 280-310 | 180 | 165 | 200 | 310 | 0 | 614 |
| IU 31/2500 41 | 310 | --- | 270-330 | 300-330 | 200 | 185 | 250 | 323 | 0 | 617 |
| IU 34/2505 41 | 340 | --- | 300-360 | 330-360 | 230 | 215 | 250 | 323 | 50 | 623 |
| IU 36/3005 41 | 360 | --- | 320-380 | 350-380 | 250 | 235 | 300 | 337 | 50 | 626 |
| IU 39/3010 41 | 390 | --- | 350-410 | 380-410 | 280 | 265 | 300 | 337 | 100 | 628 |
| IU 42/3015 41 | 420 | --- | 380-440 | 410-440 | 310 | 295 | 300 | 337 | 150 | 633 |

| Axle type/axle load/brakes Tyres (example) | S / A Track width spring centre | G Axle width | DP Pivot point centre | Tyres | | | | Weight approx. ¹⁾ |
|---|---------------------------------------|--------------------|-----------------------------|------------------------------|------------------------|------------------------------|------------------------|---------------------------------|
| | | | | 385/65 R 22.5 V Offset | L Air bag centre | 425/55 R 19.5 V Offset | L Air bag centre | |
| SK RLB 9019-10 ET = 120 mm 9000 kg SB 1937-11S 385 / 65 R 22.5 425 / 55 R 19.5 | 2040/980 | 2372 | 1420 | 0 | 980 | 0 | 980 | see assembly weight |
| | | | | 30 | 920 | 30 | 920 | |
| | | | | 60 | 860 | 60 | 860 | |
| | 2090/980 | 2422 | 1470 | 0 | 980 | 0 | 980 | |
| | | | | 30 | 920 | 30 | 920 | |
| | | | | 60 | 860 | 60 | 860 | |
| | 2090/1030 | 2422 | 1470 | 0 | 1030 | 0 | 1030 | |
| | | | | 30 | 970 | 30 | 970 | |
| | | | | 60 | 910 | 60 | 910 | |
| | 2140/1080 | 2472 | 1520 | 0 | 1080 | 0 | 1080 | |
| | | | | 30 | 1020 | 30 | 1020 | |
| | | | | 60 | 960 | 60 | 960 | |

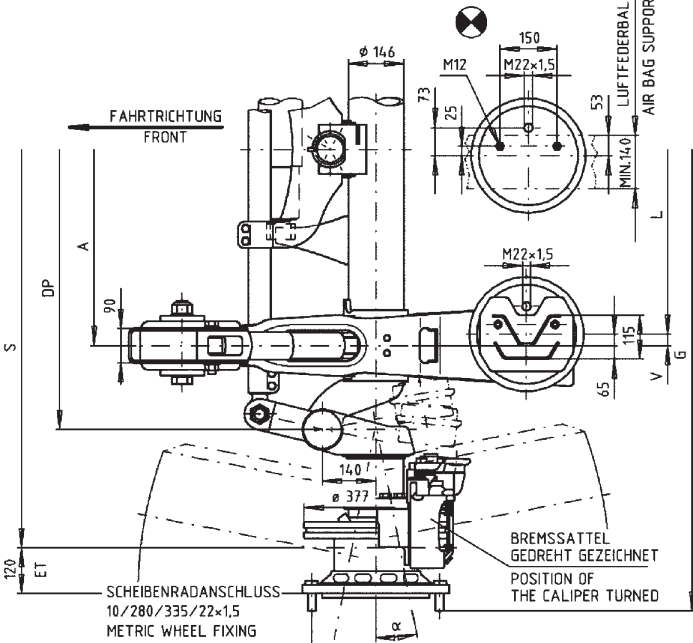
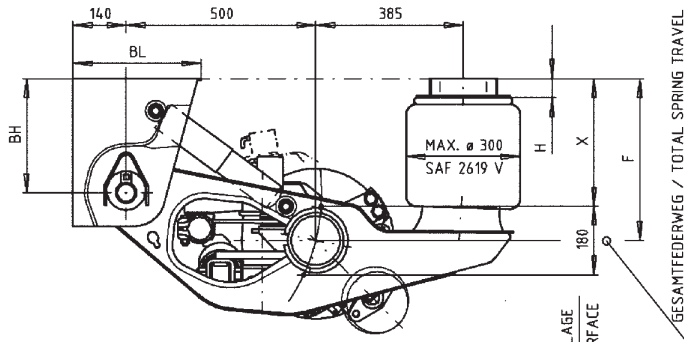
Lengths in mm, weights in kg

1) = without wheel nuts
Weight deviations lie within the permitted DIN tolerances for the respective manufacturing process.

Air suspension series INTRADISC^{plus} IO/33



Nominal ride height 355 - 505 mm – Air bag SAF 2619 V



LENKEINSCHLAG
STEERING ANGLE
 $\alpha = 12^\circ - 14^\circ$
SIEHE ANGEBOOTSZEICHNUNG
SEE AXLE DRAWING

| Air suspension type | F Nominal ride height | Ride height range | | | X (ride height) | | BH hanger bracket | BL hanger bracket | H air bag bracket | Weight approx. ¹⁾ |
|---------------------|--------------------------|-------------------|---------------------|-------------------------------|---------------------|-------------------|----------------------|----------------------|----------------------|------------------------------|
| | | for single axles | for axle assemblies | for axle assemblies with lift | unladen without air | laden without air | | | | |
| IO 35/2000 33 | 355 | --- | 335-375 | 365-375 | 265 | 250 | 200 | 310 | 0 | 606 |
| IO 37/2500 33 | 375 | --- | 355-395 | 385-395 | 285 | 270 | 250 | 323 | 0 | 610 |
| IO 40/2505 33 | 405 | --- | 385-425 | 415-425 | 315 | 300 | 250 | 323 | 50 | 615 |
| IO 42/3005 33 | 425 | --- | 405-445 | 435-445 | 335 | 320 | 300 | 337 | 50 | 618 |
| IO 45/3010 33 | 455 | --- | 435-475 | 465-475 | 365 | 350 | 300 | 337 | 100 | 620 |
| IO 47/3510 33 | 475 | --- | 455-495 | 485-495 | 385 | 370 | 350 | 350 | 100 | 623 |
| IO 50/3515 33 | 505 | --- | 485-525 | 515-525 | 415 | 400 | 350 | 350 | 150 | 625 |

| Axle type/axle load/brakes Tyres (example) | S / A Track width spring centre | G Axle width | DP Pivot point centre | Tyres | | | | Weight approx. ¹⁾ |
|---|---------------------------------------|--------------------|-----------------------------|------------------------------|--------------------------------|------------------------------|--------------------------------|---------------------------------|
| | | | | 385/65 R 22.5 V Offset | 22.5 L Air bag centre | 425/55 R 19.5 V Offset | 19.5 L Air bag centre | |
| SK RLB 9019-10 ET = 120 mm 9000 kg SB 1937-11S 385 / 65 R 22.5 425 / 55 R 19.5 | 2040/980 | 2372 | 1420 | 0 | 980 | 0 | 980 | see assembly weight |
| | | | | 30 | 920 | 30 | 920 | |
| | | | | 60 | 860 | 60 | 860 | |
| | 2090/980 | 2422 | 1470 | 0 | 980 | 0 | 980 | |
| | | | | 30 | 920 | 30 | 920 | |
| | | | | 60 | 860 | 60 | 860 | |
| 2090/1030 | 2422 | 1470 | 0 | 1030 | 0 | 1030 | | |
| | | | 30 | 970 | 30 | 970 | | |
| | | | 60 | 910 | 60 | 910 | | |
| 2140/1080 | 2472 | 1520 | 0 | 1080 | 0 | 1080 | | |
| | | | 30 | 1020 | 30 | 1020 | | |
| | | | 60 | 960 | 60 | 960 | | |

Lengths in mm, weights in kg

1) = without wheel nuts

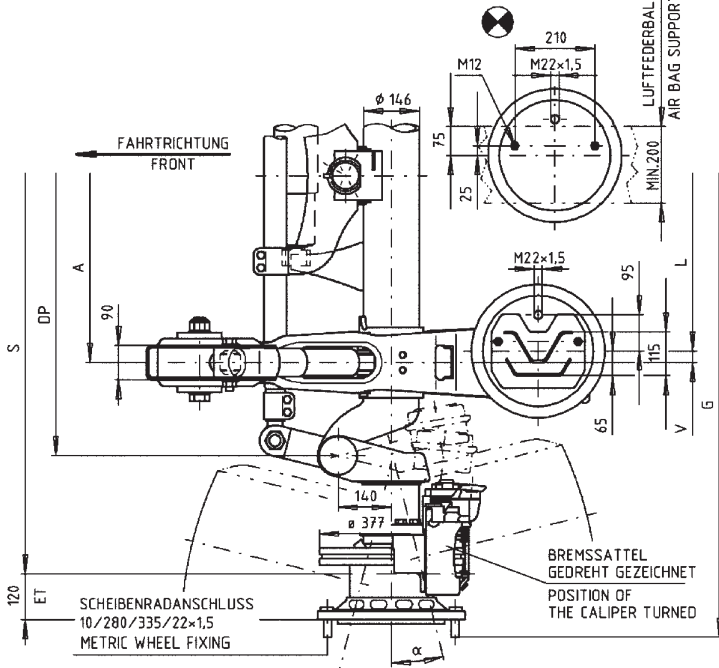
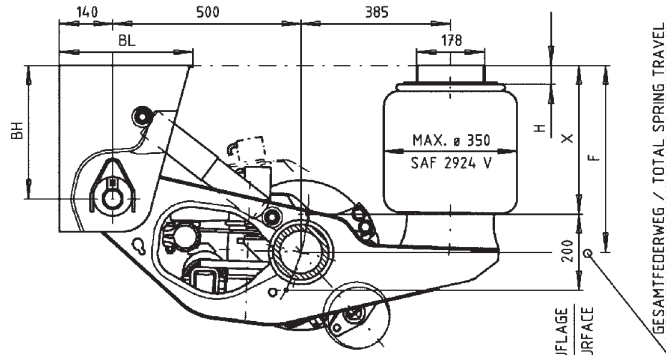
Weight deviations lie within the permitted DIN tolerances for the respective manufacturing process.

Ref. No.: IO-33-SKRLB9019

Air suspension series INTRADISC *plus* IO/41



Nominal ride height 440 + 490 mm – Air bag SAF 2924 V



LENKEINSCHLAG
STEERING ANGLE
 $\alpha = 12^\circ - 14^\circ$
SIEHE ANGEBOTSZEICHNUNG
SEE AXLE DRAWING

| Air suspension type | F Nominal ride height | Ride height range | | | X (ride height) | | BH hanger bracket | BL hanger bracket | H air bag bracket | Weight approx. ¹⁾ |
|---------------------|--------------------------|-------------------|---------------------|-------------------------------|---------------------|-------------------|----------------------|----------------------|----------------------|------------------------------|
| | | for single axles | for axle assemblies | for axle assemblies with lift | unladen without air | laden without air | | | | |
| IO 44/3000 41 | 440 | --- | 395-455 | 425-455 | 325 | 310 | 300 | 337 | 0 | 620 |
| IO 49/3505 41 | 490 | --- | 445-505 | 475-505 | 375 | 360 | 350 | 350 | 50 | 628 |

| Axle type/axle load/brakes Tyres (example) | S / A Track width spring centre | G Axle width | DP Pivot point centre | Tyres | | | | Weight approx. ¹⁾ |
|---|---------------------------------------|-----------------|-----------------------------|------------------------------|------------------------|------------------------------|------------------------|------------------------------|
| | | | | 385/65 R 22.5 V Offset | L Air bag centre | 425/55 R 19.5 V Offset | L Air bag centre | |
| SK RLB 9019-10 ET = 120 mm 9000 kg SB 1937-11S 385 / 65 R 22.5 425 / 55 R 19.5 | 2040/980 | 2372 | 1420 | 0 | 980 | 0 | 980 | see assembly weight |
| | | | | 30 | 920 | 30 | 920 | |
| | | | | 60 | 860 | 60 | 860 | |
| | 2090/980 | 2422 | 1470 | 0 | 980 | 0 | 980 | |
| | | | | 30 | 920 | 30 | 920 | |
| | | | | 60 | 860 | 60 | 860 | |
| | 2090/1030 | 2422 | 1470 | 0 | 1030 | 0 | 1030 | |
| | | | | 30 | 970 | 30 | 970 | |
| | | | | 60 | 910 | 60 | 910 | |
| | 2140/1080 | 2472 | 1520 | 0 | 1080 | 0 | 1080 | |
| | | | | 30 | 1020 | 30 | 1020 | |
| | | | | 60 | 960 | 60 | 960 | |

Lengths in mm, weights in kg

1) = without wheel nuts

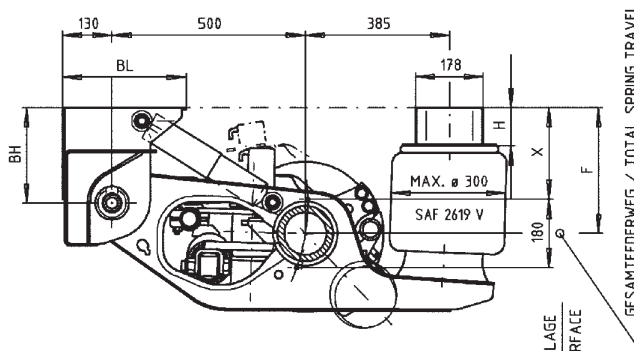
Weight deviations lie within the permitted DIN tolerances for the respective manufacturing process.

Ref. No.: IO-41-SKRLB9019

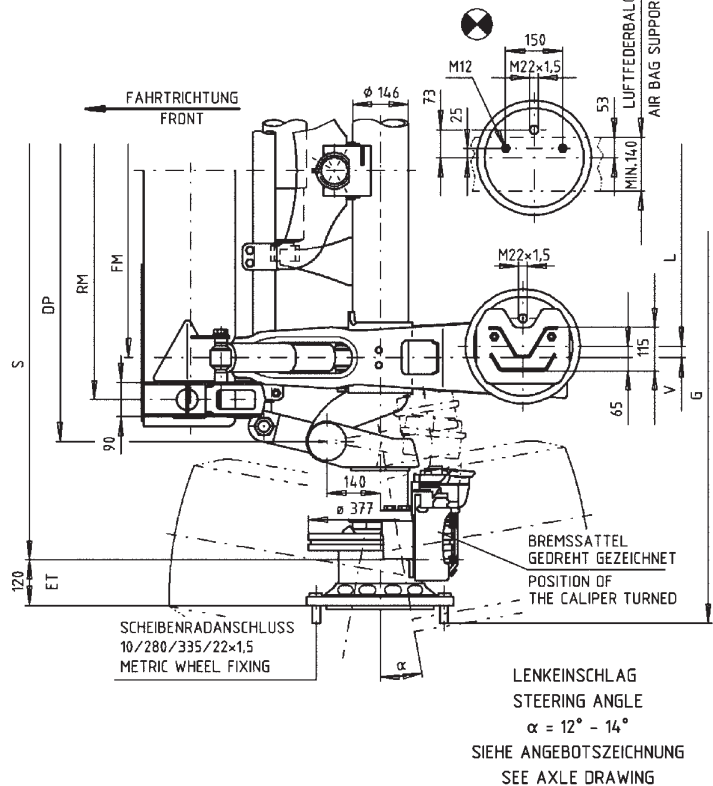
Air suspension series INTRADISC^{plus} IU/33



Nominal ride height 250 - 350 mm – Air bag SAF 2619 V



| Air suspension type | F Nominal ride height | Ride height range | | | X (ride height) | | BH cross-member | BL cross-member | H air bag bracket | Weight approx. ¹⁾ |
|---------------------|--------------------------|-------------------|---------------------|-------------------------------|---------------------|-------------------|--------------------|--------------------|----------------------|------------------------------|
| | | for single axles | for axle assemblies | for axle assemblies with lift | unladen without air | laden without air | | | | |
| IU 25/2000 33 Q | 250 | --- | 230-270 | 260-270 | 160 | 145 | 200 | 324 | 0 | --- |
| IU 28/2005 33 Q | 280 | --- | 260-300 | 290-300 | 190 | 175 | 200 | 324 | 50 | --- |
| IU 30/2505 33 Q | 300 | --- | 280-320 | 310-320 | 210 | 195 | 250 | 324 | 50 | --- |
| IU 33/2510 33 Q | 330 | --- | 310-350 | 340-350 | 240 | 225 | 250 | 324 | 100 | --- |
| IU 35/3010 33 Q | 350 | --- | 330-370 | 360-370 | 260 | 245 | 300 | 335 | 100 | --- |



| Axle type/axle load/brakes Tyres (example) | S / FM / RM Track width / spring centre / frame centre | G Axle width | DP Pivot point centre | Tyres | | | | Weight approx. ¹⁾ |
|--|---|--------------------|-----------------------------|------------------------------|------------------------|------------------------------|------------------------|------------------------------|
| | | | | 385/65 R 22.5 V Offset | L Air bag centre | 425/55 R 19.5 V Offset | L Air bag centre | |
| SK RLB 9019-10 ET = 120 mm 9000 kg SB 1937-11S 385/65 R 22.5 425/55 R 19.5 | 2040/980/1200 | 2372 | 1420 | 0 | 980 | 0 | 980 | see assembly weight |
| | | | | 30 | 920 | 30 | 920 | |
| | | | | 60 | 860 | 60 | 860 | |
| | 2040/980/1300 | 2372 | 1420 | 0 | 980 | 0 | 980 | |
| | | | | 30 | 920 | 30 | 920 | |
| | | | | 60 | 860 | 60 | 860 | |
| 2140/1080/1300 | 2472 | 1520 | 0 | 1080 | 0 | 1080 | | |
| | | | 30 | 1020 | 30 | 1020 | | |
| | | | 60 | 960 | 60 | 960 | | |
| 2140/1080/1400 | 2472 | 1520 | 0 | 1080 | 0 | 1080 | | |
| | | | 30 | 1020 | 30 | 1020 | | |
| | | | 60 | 960 | 60 | 960 | | |

Lengths in mm, weights in kg

1) = without wheel nuts

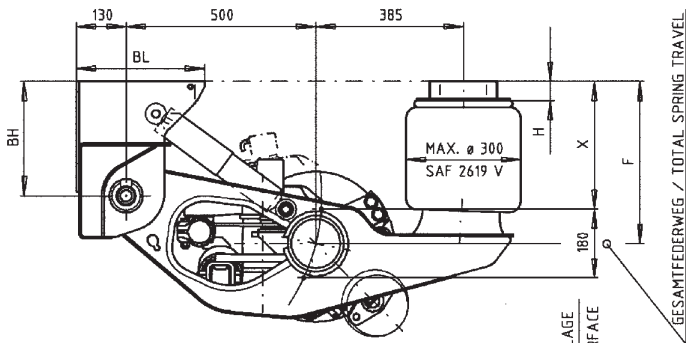
Weight deviations lie within the permitted DIN tolerances for the respective manufacturing process.

Ref. No.: IU-33-SKRLB9019-Q

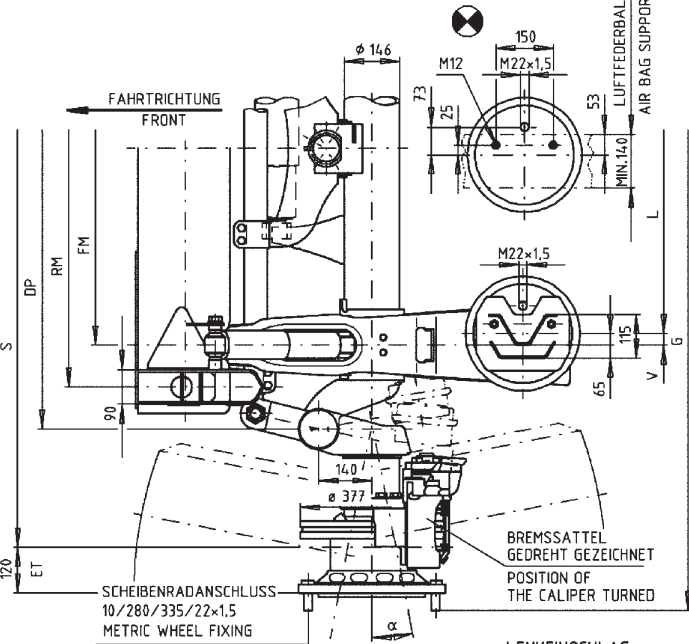
Air suspension series INTRADISC *plus* IO/33



Nominal ride height 355 - 455 mm – Air bag SAF 2619 V



| Air suspension type | F Nominal ride height | Ride height range | | | X (ride height) | | BH cross-member | BL cross-member | H air bag bracket | Weight approx. ¹⁾ |
|---------------------|--------------------------|-------------------|---------------------|-------------------------------|---------------------|-------------------|--------------------|--------------------|----------------------|------------------------------|
| | | for single axles | for axle assemblies | for axle assemblies with lift | unladen without air | laden without air | | | | |
| IO 35/2000 33 Q | 355 | --- | 335-375 | 365-375 | 265 | 250 | 200 | 324 | 0 | --- |
| IO 37/2500 33 Q | 375 | --- | 355-395 | 385-395 | 285 | 270 | 250 | 324 | 0 | --- |
| IO 40/2505 33 Q | 405 | --- | 385-425 | 415-425 | 315 | 300 | 250 | 324 | 50 | --- |
| IO 42/3005 33 Q | 425 | --- | 405-445 | 435-445 | 335 | 320 | 300 | 335 | 50 | --- |
| IO 45/3010 33 Q | 455 | --- | 435-475 | 465-475 | 365 | 350 | 300 | 335 | 100 | --- |



| Axle type/axle load/brakes Tyres (example) | S / FM / RM Track width / spring centre / frame centre | G Axle width | DP Pivot point centre | Tyres | | | | Weight approx. ¹⁾ |
|---|---|--------------------|-----------------------------|------------------------------|------------------------|------------------------------|------------------------|------------------------------|
| | | | | 385/65 R 22.5 V Offset | L Air bag centre | 425/55 R 19.5 V Offset | L Air bag centre | |
| SK RLB 9019-10 ET = 120 mm 9000 kg SB 1937-11S 385 / 65 R 22.5 425 / 55 R 19.5 | 2040/980/1200 | 2372 | 1420 | 0 | 980 | 0 | 980 | see assembly weight |
| | | | | 30 | 920 | 30 | 920 | |
| | | | | 60 | 860 | 60 | 860 | |
| | 2040/980/1300 | 2372 | 1420 | 0 | 980 | 0 | 980 | |
| | | | | 30 | 920 | 30 | 920 | |
| | | | | 60 | 860 | 60 | 860 | |
| | 2140/1080/1300 | 2472 | 1520 | 0 | 1080 | 0 | 1080 | |
| | | | | 30 | 1020 | 30 | 1020 | |
| | | | | 60 | 960 | 60 | 960 | |
| | 2140/1080/1400 | 2472 | 1520 | 0 | 1080 | 0 | 1080 | |
| | | | | 30 | 1020 | 30 | 1020 | |
| | | | | 60 | 960 | 60 | 960 | |

Lengths in mm, weights in kg

1) = without wheel nuts

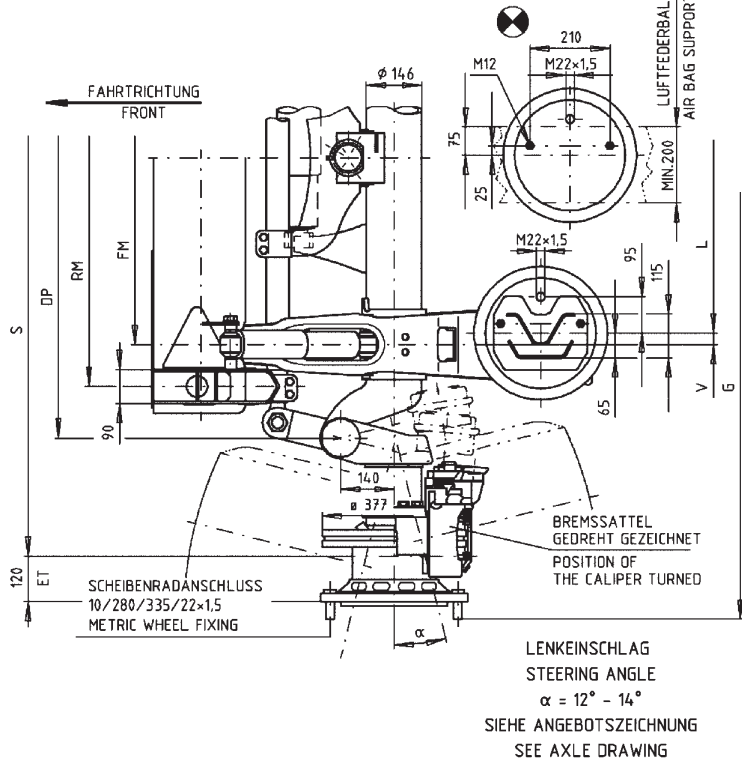
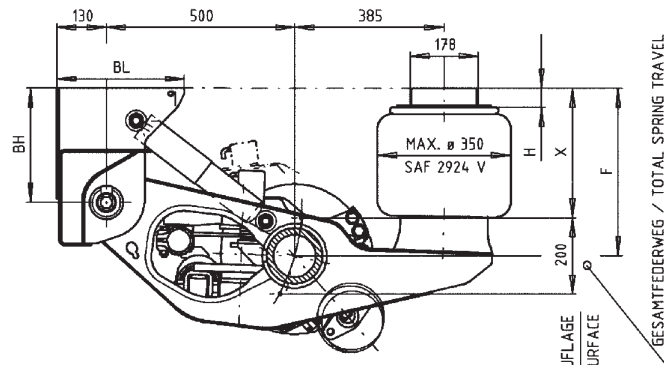
Weight deviations lie within the permitted DIN tolerances for the respective manufacturing process.

Ref. No.: IO-33-SKRLB9019-Q

Air suspension series INTRADISC^{plus} IO/41



Nominal ride height 440 + 490 mm – Air bag SAF 2924 V



| Air suspension type | F Nominal ride height | Ride height range | | | X (ride height) | | BH cross-member | BL cross-member | H air bag bracket | Weight approx. ¹⁾ |
|---------------------|--------------------------|-------------------|---------------------|-------------------------------|---------------------|-------------------|--------------------|--------------------|----------------------|------------------------------|
| | | for single axles | for axle assemblies | for axle assemblies with lift | unladen without air | laden without air | | | | |
| IO 44/3000 41 Q | 440 | --- | 395-455 | 425-455 | 325 | 310 | 300 | 335 | 0 | --- |
| IO 49/3505 41 Q | 490 | --- | 445-505 | 475-505 | 375 | 360 | 350 | 385 | 50 | --- |

| Axle type/axle load/brakes Tyres (example) | S / FM / RM Track width / spring centre / frame centre | G Axle width | DP Pivot point centre | Tyres | | | | Weight approx. ¹⁾ |
|---|---|-----------------|--------------------------|------------------------------|---------------------|------------------------------|---------------------|------------------------------|
| | | | | 385/65 R 22.5 V Offset | L Air bag centre | 425/55 R 19.5 V Offset | L Air bag centre | |
| SK RLB 9019-10 ET = 120 mm 9000 kg SB 1937-11S 385 / 65 R 22.5 425 / 55 R 19.5 | 2040/980/1200 | 2372 | 1420 | 0 | 980 | 0 | 980 | see assembly weight |
| | | | | 30 | 920 | 30 | 920 | |
| | | | | 60 | 860 | 60 | 860 | |
| | 2040/980/1300 | 2372 | 1420 | 0 | 980 | 0 | 980 | |
| | | | | 30 | 920 | 30 | 920 | |
| | | | | 60 | 860 | 60 | 860 | |
| 2140/1080/1300 | 2472 | 1520 | 0 | 1080 | 0 | 1080 | | |
| | | | 30 | 1020 | 30 | 1020 | | |
| | | | 60 | 960 | 60 | 960 | | |
| 2140/1080/1400 | 2472 | 1520 | 0 | 1080 | 0 | 1080 | | |
| | | | 30 | 1020 | 30 | 1020 | | |
| | | | 60 | 960 | 60 | 960 | | |

Lengths in mm, weights in kg

1) = without wheel nuts

Weight deviations lie within the permitted DIN tolerances for the respective manufacturing process.

Ref. No.: IO-41-SKRLB9019-Q

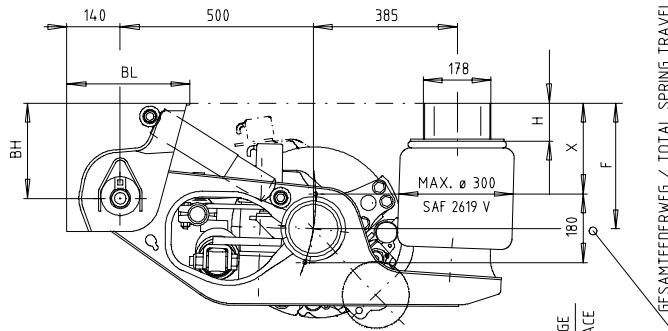
AIR SUSPENSION SERIES INTRADISC *plus*

SELF-STEERING AXLES WITH DISC BRAKES 22.5" TYRES SK RLB 9022

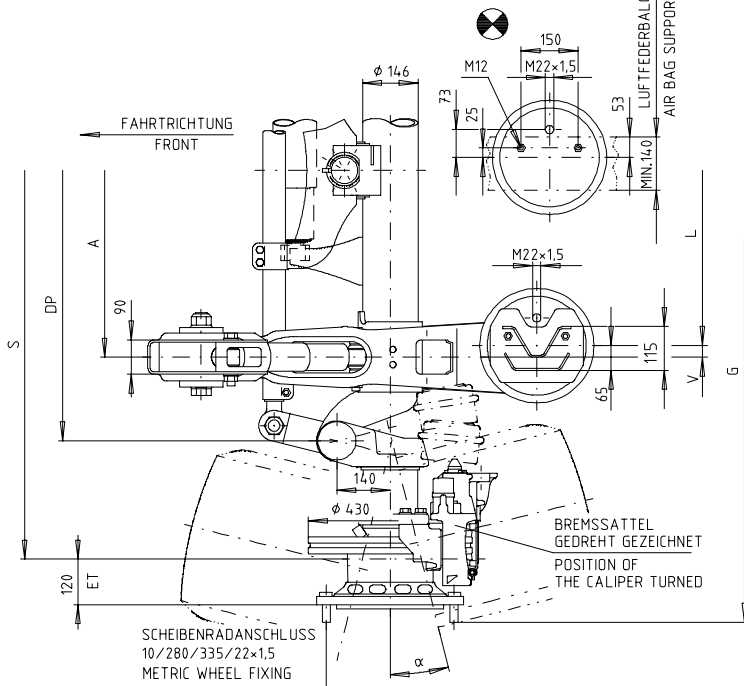
Air suspension series INTRADISC *plus* IU/33



Nominal ride height 250 - 350 mm – Air bag SAF 2619 V



GESAMTFEDERWEG / TOTAL SPRING TRAVEL



LENKEINSCHLAG
STEERING ANGLE
 $\alpha = 12^\circ - 14^\circ$
SIEHE ANGEBOTSZEICHNUNG
SEE AXLE DRAWING

| Air suspension type | F Nominal ride height | Ride height range | | | X (ride height) | | BH hanger bracket | BL hanger bracket | H air bag bracket | Weight approx. ¹⁾ |
|---------------------|--------------------------|-------------------|---------------------|-------------------------------|---------------------|-------------------|----------------------|----------------------|----------------------|------------------------------|
| | | for single axles | for axle assemblies | for axle assemblies with lift | unladen without air | laden without air | | | | |
| IU 25/2000 33 | 250 | --- | 230-270 | 260-270 | 160 | 145 | 200 | 310 | 0 | 651 |
| IU 28/2005 33 | 280 | --- | 260-300 | 290-300 | 190 | 175 | 200 | 310 | 50 | 656 |
| IU 30/2505 33 | 300 | --- | 280-320 | 310-320 | 210 | 195 | 250 | 323 | 50 | 661 |
| IU 33/2510 33 | 330 | --- | 310-350 | 340-350 | 240 | 225 | 250 | 323 | 100 | 663 |
| IU 35/3010 33 | 350 | --- | 330-370 | 360-370 | 260 | 245 | 300 | 337 | 100 | 666 |

| Axle type/axle load/brakes Tyres (example) | S/ A Track width/ spring centre | G Axle width | DP Pivot point centre | Tyres 385/65 R 22.5 | | Weight approx. ¹⁾ | |
|---|---------------------------------------|-----------------|--------------------------|------------------------|---------------------|------------------------------|------|
| | | | | V Offset | L Air bag centre | | |
| SK RLB 9022 ET = 120 mm 9000 kg SB 2243-11S 385 / 65 R 22.5 | 2040/980 | 2372 | 1420 | 0 | 980 | see assembly weight | |
| | | | | 30 | 920 | | |
| | | | | 60 | 860 | | |
| | 2090/980 | 2422 | 1470 | 1470 | 0 | | 980 |
| | | | | | 30 | | 920 |
| | | | | | 60 | | 860 |
| | 2090/1030 | 2422 | 1470 | 1470 | 0 | | 1030 |
| | | | | | 30 | | 970 |
| | | | | | 60 | | 910 |
| | 2140/1080 | 2472 | 1520 | 1520 | 0 | | 1080 |
| | | | | | 30 | | 1020 |
| | | | | | 60 | | 960 |

Lengths in mm, weights in kg

1) = without wheel nuts

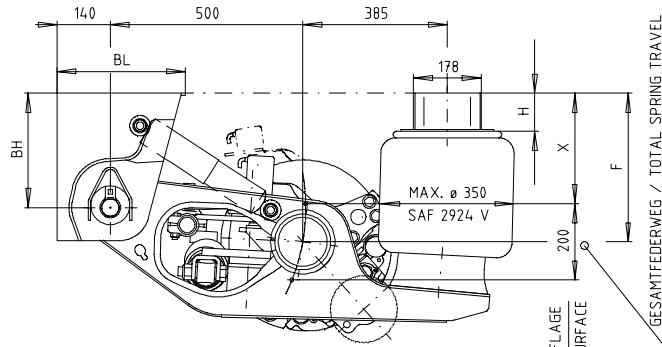
Weight deviations lie within the permitted DIN tolerances for the respective manufacturing process.

Ref. No.: IU-33-SKRLB9022

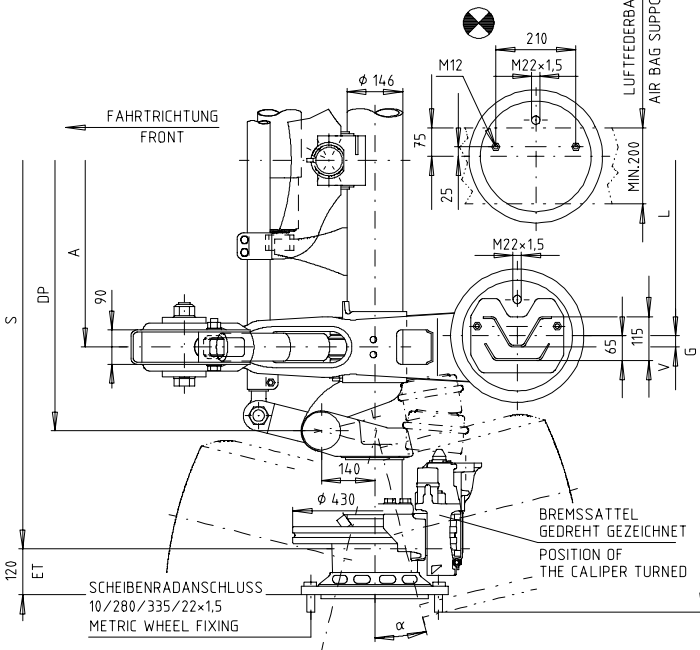
Air suspension series INTRADISC *plus* IU/41



Nominal ride height 290 - 420 mm – Air bag SAF 2924 V



| Air suspension type | F Nominal ride height | Ride height range | | | X (ride height) | | BH hanger bracket | BL hanger bracket | H air bag bracket | Weight approx. ¹⁾ |
|---------------------|--------------------------|-------------------|---------------------|-------------------------------|---------------------|-------------------|----------------------|----------------------|----------------------|------------------------------|
| | | for single axles | for axle assemblies | for axle assemblies with lift | unladen without air | laden without air | | | | |
| IU 29/2000 41 | 290 | --- | 250-310 | 280-310 | 180 | 165 | 200 | 310 | 0 | 659 |
| IU 31/2500 41 | 310 | --- | 270-330 | 300-330 | 200 | 185 | 250 | 323 | 0 | 662 |
| IU 34/2505 41 | 340 | --- | 300-360 | 330-360 | 230 | 215 | 250 | 323 | 50 | 667 |
| IU 36/3005 41 | 360 | --- | 320-380 | 350-380 | 250 | 235 | 300 | 337 | 50 | 671 |
| IU 39/3010 41 | 390 | --- | 350-410 | 380-410 | 280 | 265 | 300 | 337 | 100 | 673 |
| IU 42/3015 41 | 420 | --- | 380-440 | 410-440 | 310 | 295 | 300 | 337 | 150 | 678 |



| Axle type/axle load/brakes Tyres (example) | S / A Track width/ spring centre | G Axle width | DP Pivot point centre | Tyres 385/65 R 22.5 | | Weight approx. ¹⁾ |
|--|--|--------------------|-----------------------------|------------------------|---------------------|---------------------------------|
| | | | | V Offset | L Air bag centre | |
| SK RLB 9022 ET = 120 mm 9000 kg SB 2243-11S 385/65 R 22.5 | 2040/980 | 2372 | 1420 | 0 | 980 | see assembly weight |
| | | | | 30 | 920 | |
| | | | | 60 | 860 | |
| | 2090/980 | 2422 | 1470 | 0 | 980 | |
| | | | | 30 | 920 | |
| | | | | 60 | 860 | |
| | 2090/1030 | 2422 | 1470 | 0 | 1030 | |
| | | | | 30 | 970 | |
| | | | | 60 | 910 | |
| | 2140/1080 | 2472 | 1520 | 0 | 1080 | |
| | | | | 30 | 1020 | |
| | | | | 60 | 960 | |

Lengths in mm, weights in kg

1) = without wheel nuts

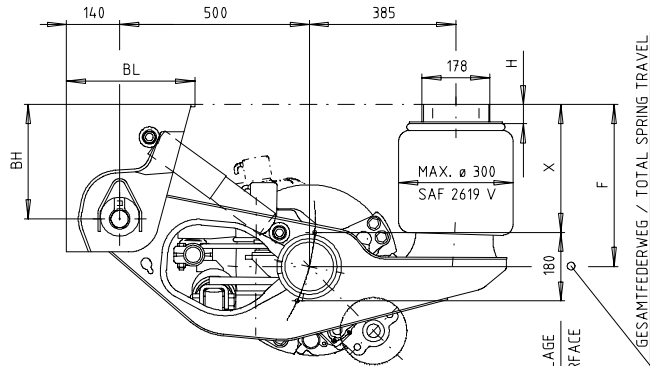
Weight deviations lie within the permitted DIN tolerances for the respective manufacturing process.

Ref. No.: IU-41-SKRLB9022

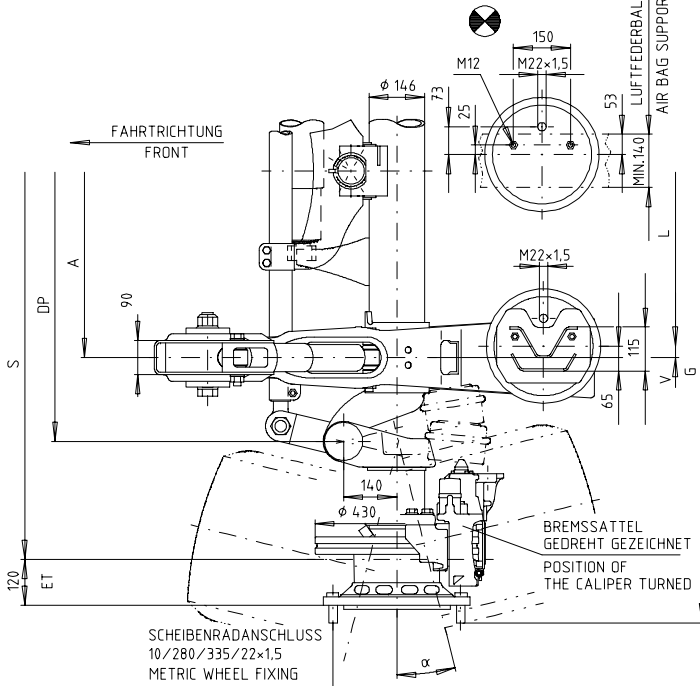
Air suspension series INTRADISC *plus* IO/33



Nominal ride height 355 - 505 mm – Air bag SAF 2619 V



| Air suspension type | F Nominal ride height | Ride height range | | | X (ride height) | | BH hanger bracket | BL hanger bracket | H air bag bracket | Weight approx. ¹⁾ |
|---------------------|--------------------------|-------------------|---------------------|-------------------------------|---------------------|-------------------|----------------------|----------------------|----------------------|------------------------------|
| | | for single axles | for axle assemblies | for axle assemblies with lift | unladen without air | laden without air | | | | |
| IO 35/2000 33 | 355 | --- | 335-375 | 365-375 | 265 | 250 | 200 | 310 | 0 | 651 |
| IO 37/2500 33 | 375 | --- | 355-395 | 385-395 | 285 | 270 | 250 | 323 | 0 | 655 |
| IO 40/2505 33 | 405 | --- | 385-425 | 415-425 | 315 | 300 | 250 | 323 | 50 | 660 |
| IO 42/3005 33 | 425 | --- | 405-445 | 435-445 | 335 | 320 | 300 | 337 | 50 | 662 |
| IO 45/3010 33 | 455 | --- | 435-475 | 465-475 | 365 | 350 | 300 | 337 | 100 | 664 |
| IO 47/3510 33 | 475 | --- | 455-495 | 485-495 | 385 | 370 | 350 | 350 | 100 | 667 |
| IO 50/3515 33 | 505 | --- | 485-525 | 515-525 | 415 | 400 | 350 | 350 | 150 | 669 |



LENKEINSCHLAG
STEERING ANGLE
 $\alpha = 12^\circ - 14^\circ$
SIEHE ANGEBOTSSZEICHNUNG
SEE AXLE DRAWING

| Axle type/axle load/brakes Tyres (example) | S / A Track width/ spring centre | G Axle width | DP Pivot point centre | Tyres 385/65 R 22.5 | | Weight approx. ¹⁾ |
|--|--|--------------------|-----------------------------|------------------------|---------------------|------------------------------|
| | | | | V Offset | L Air bag centre | |
| SK RLB 9022 ET = 120 mm 9000 kg SB 2243-11S 385 / 65 R 22.5 | 2040/980 | 2372 | 1420 | 0 | 980 | see assembly weight |
| | | | | 30 | 920 | |
| | | | | 60 | 860 | |
| | 2090/980 | 2422 | 1470 | 0 | 980 | |
| | | | | 30 | 920 | |
| | | | | 60 | 860 | |
| | 2090/1030 | 2422 | 1470 | 0 | 1030 | |
| | | | | 30 | 970 | |
| | | | | 60 | 910 | |
| | 2140/1080 | 2472 | 1520 | 0 | 1080 | |
| | | | | 30 | 1020 | |
| | | | | 60 | 960 | |

Lengths in mm, weights in kg

1) = without wheel nuts

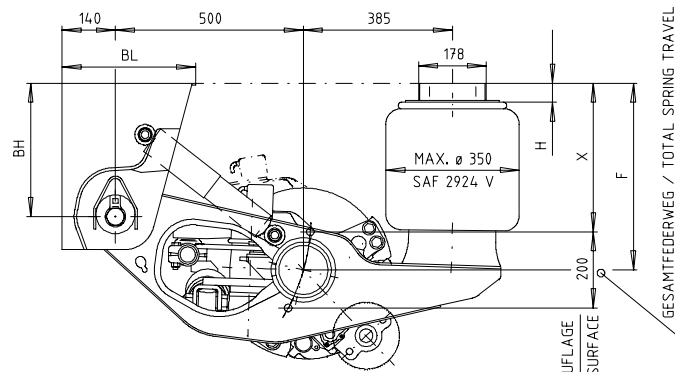
Weight deviations lie within the permitted DIN tolerances for the respective manufacturing process.

Ref. No.: IO-33-SKRLB9022

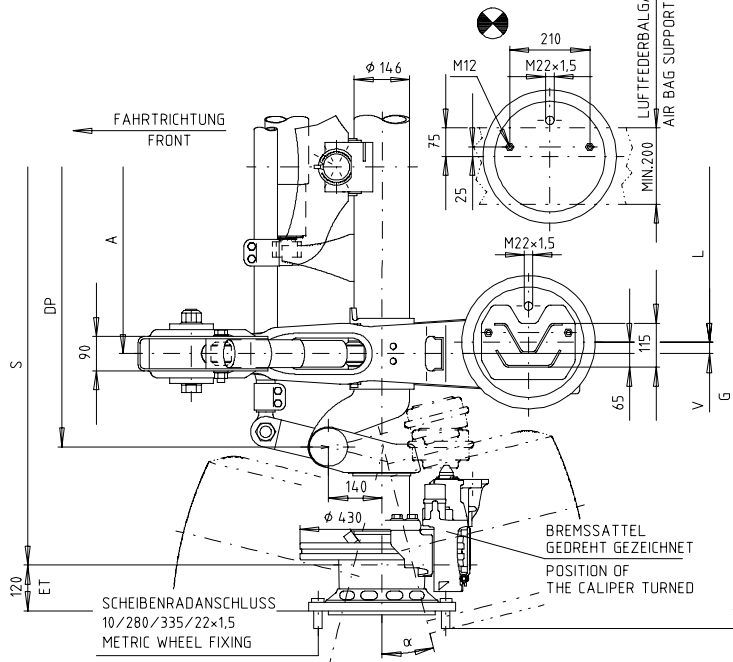
Air suspension series INTRADISC *plus* IO/41



Nominal ride height 440 + 490 mm – Air bag SAF 2924 V



| Air suspension type | F Nominal ride height | Ride height range | | | X (ride height) | | BH hanger bracket | BL hanger bracket | H air bag bracket | Weight approx. ¹⁾ |
|---------------------|--------------------------|-------------------|---------------------|-------------------------------|---------------------|-------------------|----------------------|----------------------|----------------------|------------------------------|
| | | for single axles | for axle assemblies | for axle assemblies with lift | unladen without air | laden without air | | | | |
| IO 44/3000 41 | 440 | --- | 395-455 | 425-455 | 325 | 310 | 300 | 337 | 0 | 665 |
| IO 49/3505 41 | 490 | --- | 445-505 | 475-505 | 375 | 360 | 350 | 350 | 50 | 673 |



LENKEINSCHLAG
STEERING ANGLE
 $\alpha = 12^\circ - 14^\circ$
SIEHE ANGEBOTSSZEICHNUNG
SEE AXLE DRAWING

| Axle type/axle load/brakes Tyres (example) | S / A Track width/ spring centre | G Axle width | DP Pivot point centre | Tyres 385/65 R 22.5 | | Weight approx. ¹⁾ |
|---|--|--------------------|-----------------------------|------------------------|---------------------|---------------------------------|
| | | | | V Offset | L Air bag centre | |
| SK RLB 9022 ET = 120 mm 9000 kg SB 2243-11S 385 / 65 R 22.5 | 2040/980 | 2372 | 1420 | 0 | 980 | see assembly weight |
| | | | | 30 | 920 | |
| | | | | 60 | 860 | |
| | 2090/980 | 2422 | 1470 | 0 | 980 | |
| | | | | 30 | 920 | |
| | | | | 60 | 860 | |
| | 2090/1030 | 2422 | 1470 | 0 | 1030 | |
| | | | | 30 | 970 | |
| | | | | 60 | 910 | |
| | 2140/1080 | 2472 | 1520 | 0 | 1080 | |
| | | | | 30 | 1020 | |
| | | | | 60 | 960 | |

Lengths in mm, weights in kg

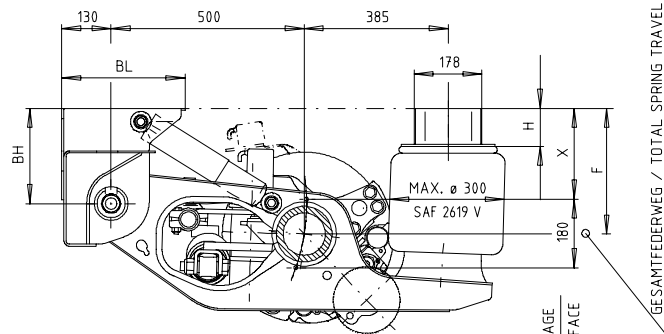
1) = without wheel nuts
Weight deviations lie within the permitted DIN tolerances for the respective manufacturing process.

Ref. No.: IO-41-SKRLB9022

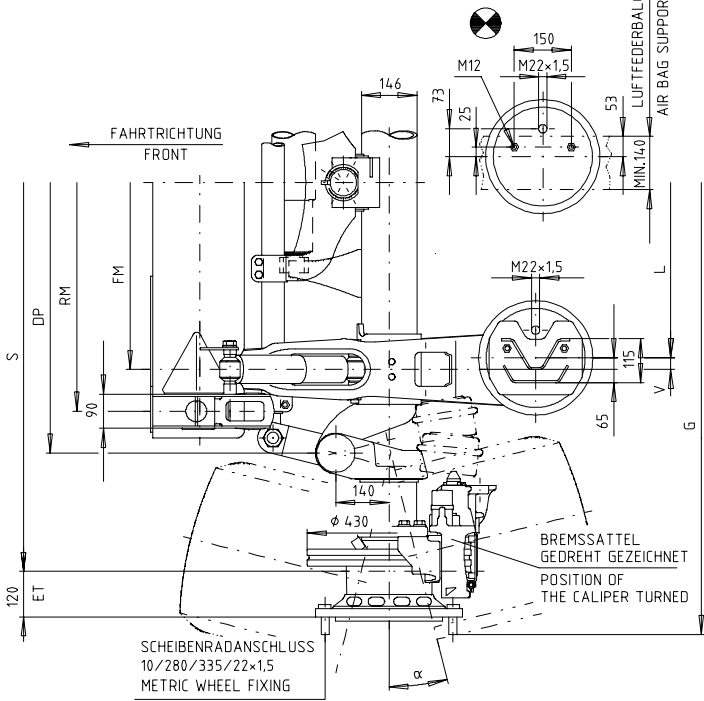
Air suspension series INTRADISC*plus* IU/33



Nominal ride height 250 - 350 mm – Air bag SAF 2619 V



GESAMTFEDERWEG / TOTAL SPRING TRAVEL



LENKEINSCHLAG
STEERING ANGLE
 $\alpha = 12^\circ - 14^\circ$
SIEHE ANGEBOTSZEICHNUNG
SEE AXLE DRAWING

| Air suspension type | F Nominal ride height | Ride height range | | | X (ride height) | | BH cross-member | BL cross-member | H air bag bracket | Weight approx. ¹⁾ |
|---------------------|--------------------------|-------------------|---------------------|-------------------------------|---------------------|-------------------|--------------------|--------------------|----------------------|------------------------------|
| | | for single axles | for axle assemblies | for axle assemblies with lift | unladen without air | laden without air | | | | |
| IU 25/2000 33 Q | 250 | --- | 230-270 | 260-270 | 160 | 145 | 200 | 324 | 0 | --- |
| IU 28/2005 33 Q | 280 | --- | 260-300 | 290-300 | 190 | 175 | 200 | 324 | 50 | --- |
| IU 30/2505 33 Q | 300 | --- | 280-320 | 310-320 | 210 | 195 | 250 | 324 | 50 | --- |
| IU 33/2510 33 Q | 330 | --- | 310-350 | 340-350 | 240 | 225 | 250 | 324 | 100 | --- |
| IU 35/3010 33 Q | 350 | --- | 330-370 | 360-370 | 260 | 245 | 300 | 335 | 100 | --- |

| Axle type/axle load/brakes Tyres (example) | S/ FM /RM Track width/ spring centre/ frame centre | G Axle width | DP Pivot point centre | Tyres 385/65 R 22.5 | | Weight approx. ¹⁾ |
|--|---|-----------------|--------------------------|------------------------|---------------------|------------------------------|
| | | | | V Offset | L Air bag centre | |
| SK RLB 9022 ET = 120 mm 9000 kg | 2040/980/1200 | 2372 | 1420 | 0 | 980 | see assembly weight |
| | | | | 30 | 920 | |
| | | | | 60 | 860 | |
| SB 2243-11S 385/65 R 22.5 | 2140/1080/1300 | 2472 | 1520 | 0 | 980 | |
| | | | | 30 | 920 | |
| | | | | 60 | 860 | |
| | 2140/1080/1400 | 2472 | 1520 | 0 | 1080 | |
| | | | | 30 | 1020 | |
| | | | | 60 | 960 | |

Lengths in mm, weights in kg

1) = without wheel nuts

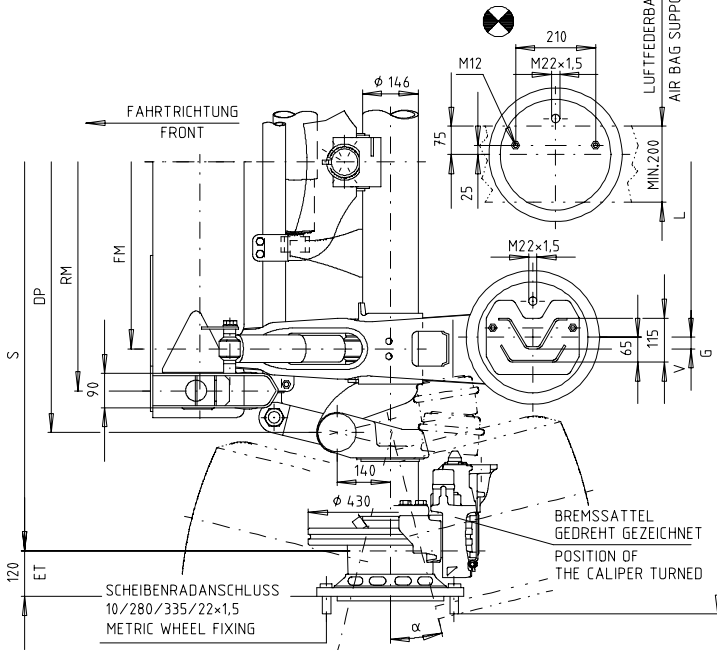
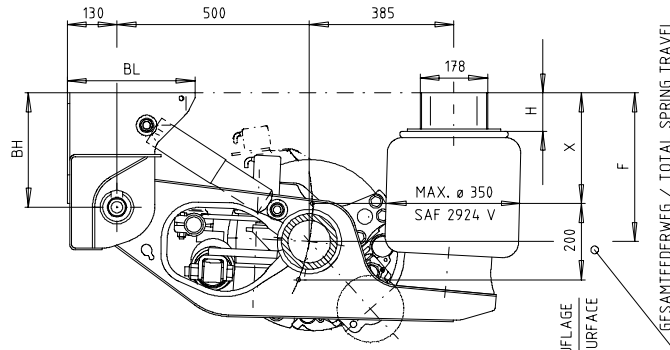
Weight deviations lie within the permitted DIN tolerances for the respective manufacturing process.

Ref. No.: IU-33-SKRLB9022-Q

Air suspension series INTRADISC^{plus} IU/41



Nominal ride height 290 - 420 mm – Air bag SAF 2924 V



LENKEINSCHLAG
STEERING ANGLE
 $\alpha = 12^\circ - 14^\circ$
SIEHE ANGEBOTSZEICHNUNG
SEE AXLE DRAWING

| Air suspension type | F Nominal ride height | Ride height range | | | X (ride height) | | BH cross-member | BL cross-member | H air bag bracket | Weight approx. ¹⁾ |
|---------------------|--------------------------|-------------------|---------------------|-------------------------------|---------------------|-------------------|--------------------|--------------------|----------------------|------------------------------|
| | | for single axles | for axle assemblies | for axle assemblies with lift | unladen without air | laden without air | | | | |
| IU 29/2000 41 Q | 290 | --- | 250-310 | 280-310 | 180 | 165 | 200 | 324 | 0 | --- |
| IU 31/2500 41 Q | 310 | --- | 270-330 | 300-330 | 200 | 185 | 250 | 324 | 0 | --- |
| IU 34/2505 41 Q | 340 | --- | 300-360 | 330-360 | 230 | 215 | 250 | 324 | 50 | --- |
| IU 36/3005 41 Q | 360 | --- | 320-380 | 350-380 | 250 | 235 | 300 | 335 | 50 | --- |
| IU 39/3010 41 Q | 390 | --- | 350-410 | 380-410 | 280 | 265 | 300 | 335 | 100 | --- |
| IU 42/3015 41 Q | 420 | --- | 380-440 | 410-440 | 310 | 295 | 300 | 335 | 150 | --- |

| Axle type/axle load/brakes Tyres (example) | S / FM / RM Track width / spring centre / frame centre | G Axle width | DP Pivot point centre | Tyres 385/65 R 22.5 | | Weight approx. ¹⁾ |
|--|---|--------------------|-----------------------------|------------------------|---------------------|---------------------------------|
| | | | | V Offset | L Air bag centre | |
| SK RLB 9022 ET = 120 mm 9000 kg SB 2243-11S 385 / 65 R 22.5 | 2040/980/1200 | 2372 | 1420 | 0 | 980 | see assembly weight |
| | | | | 30 | 920 | |
| | | | | 60 | 860 | |
| | 2040/980/1300 | 2372 | 1420 | 0 | 980 | |
| | | | | 30 | 920 | |
| | | | | 60 | 860 | |
| | 2140/1080/1300 | 2472 | 1520 | 0 | 1080 | |
| | | | | 30 | 1020 | |
| | | | | 60 | 960 | |
| | 2140/1080/1400 | 2472 | 1520 | 0 | 1080 | |
| | | | | 30 | 1020 | |
| | | | | 60 | 960 | |

Lengths in mm, weights in kg

1) = without wheel nuts

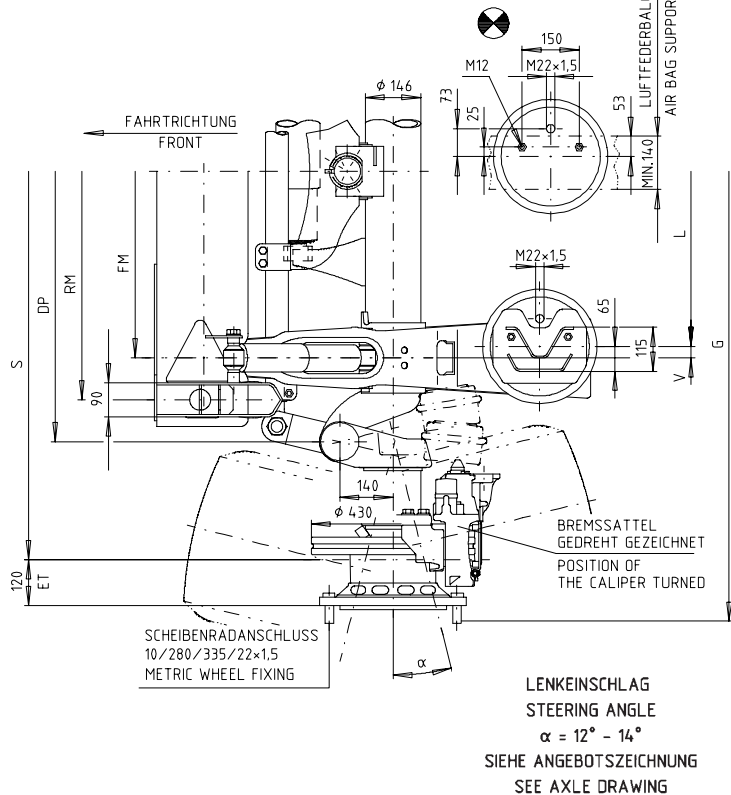
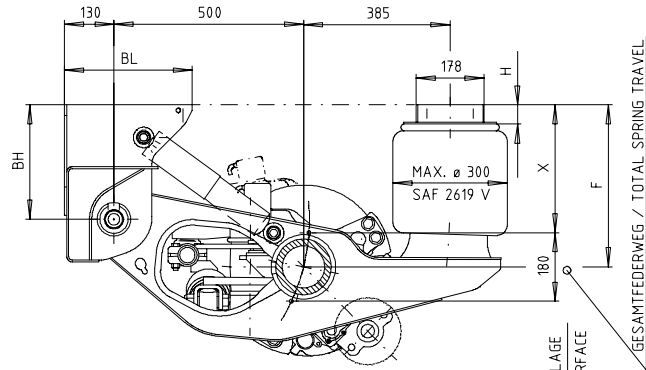
Weight deviations lie within the permitted DIN tolerances for the respective manufacturing process.

Ref. No.: IU-41-SKRLB9022-Q

Air suspension series INTRADISC^{plus} IO/33



Nominal ride height 355 - 455 mm – Air bag SAF 2619 V



| Air suspension type | F Nominal ride height | Ride height range | | | X (ride height) | | BH cross-member | BL cross-member | H air bag bracket | Weight approx. ¹⁾ |
|---------------------|--------------------------|-------------------|---------------------|-------------------------------|---------------------|-------------------|--------------------|--------------------|----------------------|------------------------------|
| | | for single axles | for axle assemblies | for axle assemblies with lift | unladen without air | laden without air | | | | |
| IO 35/2000 33 Q | 355 | --- | 335-375 | 365-375 | 265 | 250 | 200 | 324 | 0 | --- |
| IO 37/2500 33 Q | 375 | --- | 355-395 | 385-395 | 285 | 270 | 250 | 324 | 0 | --- |
| IO 40/2505 33 Q | 405 | --- | 385-425 | 415-425 | 315 | 300 | 250 | 324 | 50 | --- |
| IO 42/3005 33 Q | 425 | --- | 405-445 | 435-445 | 335 | 320 | 300 | 335 | 50 | --- |
| IO 45/3010 33 Q | 455 | --- | 435-475 | 465-475 | 365 | 350 | 300 | 335 | 100 | --- |

| Axle type/axle load/brakes Tyres (example) | S / FM / RM Track width / spring centre / frame centre | G Axle width | DP Pivot point centre | Tyres 385/65 R 22.5 | | Weight approx. ¹⁾ |
|--|---|--------------------|-----------------------------|------------------------|---------------------|---------------------------------|
| | | | | V Offset | L Air bag centre | |
| SK RLB 9022 ET = 120 mm 9000 kg SB 2243-11S 385 / 65 R 22.5 | 2040/980/1200 | 2372 | 1420 | 0 | 980 | see assembly weight |
| | | | | 30 | 920 | |
| | | | | 60 | 860 | |
| | 2040/980/1300 | 2372 | 1420 | 0 | 980 | |
| | | | | 30 | 920 | |
| | | | | 60 | 860 | |
| | 2140/1080/1300 | 2472 | 1520 | 0 | 1080 | |
| | | | | 30 | 1020 | |
| | | | | 60 | 960 | |
| | 2140/1080/1400 | 2472 | 1520 | 0 | 1080 | |
| | | | | 30 | 1020 | |
| | | | | 60 | 960 | |

Lengths in mm, weights in kg

1) = without wheel nuts

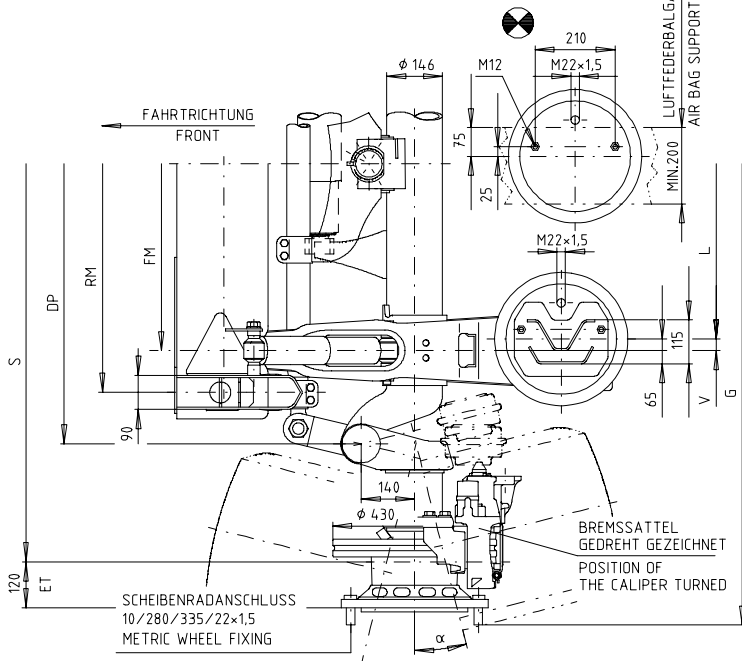
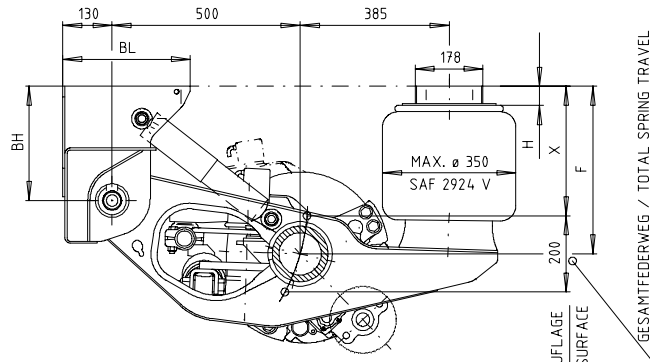
Weight deviations lie within the permitted DIN tolerances for the respective manufacturing process.

Ref. No.: IO-33-SKRLB9022-Q

Air suspension series INTRADISC^{plus} IO/41



Nominal ride height 440 + 490 mm – Air bag SAF 2924 V



LENKEINSCHLAG
STEERING ANGLE
 $\alpha = 12^\circ - 14^\circ$
SIEHE ANGEBOTSSZEICHNUNG
SEE AXLE DRAWING

| Air suspension type | F Nominal ride height | Ride height range | | | X (ride height) | | BH cross-member | BL cross-member | H air bag bracket | Weight approx. ¹⁾ |
|---------------------|--------------------------|-------------------|---------------------|-------------------------------|---------------------|-------------------|--------------------|--------------------|----------------------|------------------------------|
| | | for single axles | for axle assemblies | for axle assemblies with lift | unladen without air | laden without air | | | | |
| IO 44/3000 41 Q | 440 | --- | 395-455 | 425-455 | 325 | 310 | 300 | 335 | 0 | --- |
| IO 49/3505 41 Q | 490 | --- | 445-505 | 475-505 | 375 | 360 | 350 | 385 | 50 | --- |

| Axle type/axle load/brakes Tyres (example) | S / FM / RM Track width / spring centre / frame centre | G Axle width | DP Pivot point centre | Tyres 385/65 R 22.5 | | Weight approx. ¹⁾ |
|---|---|--------------------|-----------------------------|------------------------|---------------------|---------------------------------|
| | | | | V Offset | L Air bag centre | |
| SK RLB 9022 ET = 120 mm 9000 kg SB 2243-11S 385 / 65 R 22.5 | 2040/980/1200 | 2372 | 1420 | 0 | 980 | see assembly weight |
| | | | | 30 | 920 | |
| | | | | 60 | 860 | |
| | 2040/980/1300 | 2372 | 1420 | 0 | 980 | |
| | | | | 30 | 920 | |
| | | | | 60 | 860 | |
| | 2140/1080/1300 | 2472 | 1520 | 0 | 1080 | |
| | | | | 30 | 1020 | |
| | | | | 60 | 960 | |
| | 2140/1080/1400 | 2472 | 1520 | 0 | 1080 | |
| | | | | 30 | 1020 | |
| | | | | 60 | 960 | |

Lengths in mm, weights in kg

1) = without wheel nuts
Weight deviations lie within the permitted DIN tolerances for the respective manufacturing process.

Ref. No.: IO-41-SKRLB9022-Q

AIR SUSPENSION SERIES

INTRADISC *plus*

RIGID AXLES
WITH DISC BRAKES
19.5" / 22.5" TYRES
SK RB 9019-10

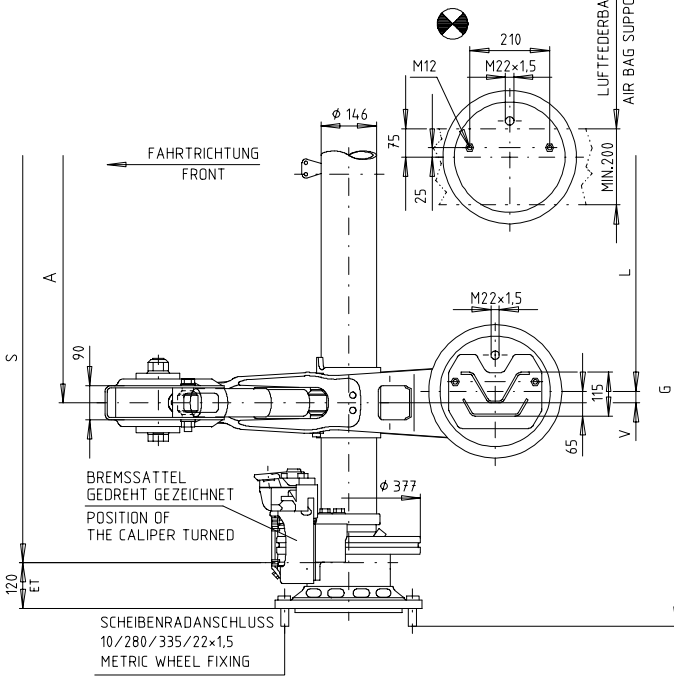
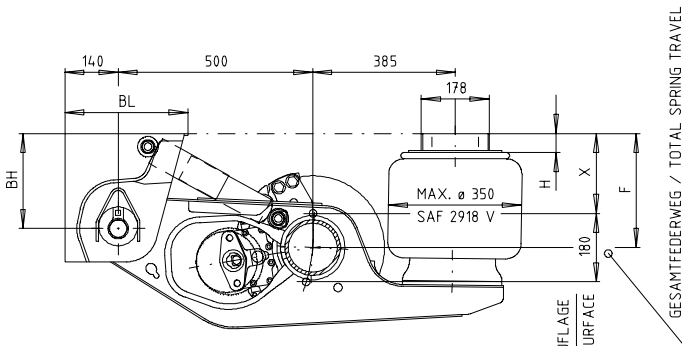
OFF ROAD

Air suspension series INTRADISC^{plus} IU/27



Nominal ride height 250 - 350 mm – Air bag SAF 2918 V

OFF ROAD



| Air suspension type | F Nominal ride height | Ride height range | | | X (ride height) | | BH hanger bracket | BL hanger bracket | H air bag bracket | Weight approx. ¹⁾ |
|---------------------|--------------------------|-------------------|---------------------|-------------------------------|---------------------|-------------------|----------------------|----------------------|----------------------|------------------------------|
| | | for single axles | for axle assemblies | for axle assemblies with lift | unladen without air | laden without air | | | | |
| IU 25/2000 27 | 250 | 220-270 | 230-270 | 260-270 | 160 | 145 | 200 | 310 | 0 | 425 |
| IU 28/2005 27 | 280 | 250-300 | 260-300 | 290-300 | 190 | 175 | 200 | 310 | 50 | 430 |
| IU 30/2505 27 | 300 | 270-320 | 280-320 | 310-320 | 210 | 195 | 250 | 323 | 50 | 435 |
| IU 33/2510 27 | 330 | 300-350 | 310-350 | 340-350 | 240 | 225 | 250 | 323 | 100 | 437 |
| IU 35/3010 27 | 350 | 320-370 | 330-370 | 360-370 | 260 | 245 | 300 | 337 | 100 | 440 |

| Axle type/axle load/brakes Tyres (example) | S / A Track width/ spring centre | G Axle width | Tyres | | | | Weight approx. ¹⁾ |
|--|--|-----------------|------------------------------|------------------------|------------------------------|------------------------|------------------------------|
| | | | 385/65 R 22.5 V Offset | L Air bag centre | 425/55 R 19.5 V Offset | L Air bag centre | |
| SK RB 9019-10 ET = 120 mm 9000 kg SB 1937-11S | 2040/1200 | 2372 | 0 | 1200 ²⁾ | 0 | 1200 ³⁾ | see assembly weight |
| | | | 30 | 1140 | 30 | 1140 | |
| | | | 60 | 1080 | 60 | 1080 | |
| 385/65 R 22.5 | 2040/1300 | 2372 | 60 | 1180 | 60 | 1180 ³⁾ | |
| | | | | | | | |
| 425/55 R 19.5 | 2090/1300 | 2422 | 30 | 1240 | 30 | 1240 ³⁾ | |
| | | | 60 | 1180 | 60 | 1180 | |

Lengths in mm, weights in kg

1) = without wheel nuts

Weight deviations lie within the permitted DIN tolerances for the respective manufacturing process.

2) = Max. possible tyre size 385/65 R 22.5 (clearance between tyre and air bag!)

3) = Max. possible tyre size 425/55 R 19.5 (clearance between tyre and air bag!)

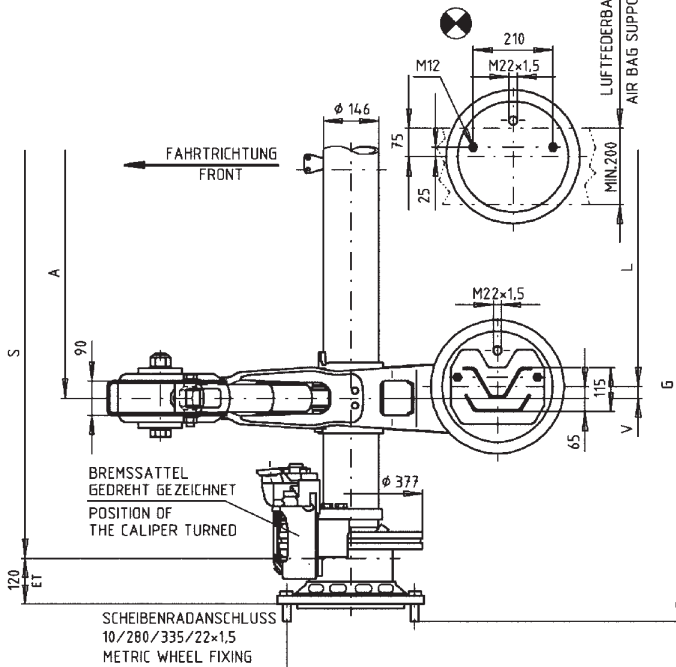
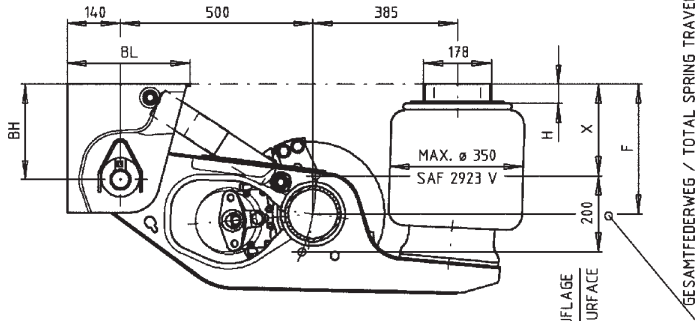
Further tyre sizes on request

Air suspension series INTRADISC^{plus} IU/31



Nominal ride height 290 - 420 mm – Air bag SAF 2923 V

OFF ROAD



| Air suspension type | F Nominal ride height | Ride height range | | | X (ride height) | | BH hanger bracket | BL hanger bracket | H air bag bracket | Weight approx. ¹⁾ |
|---------------------|--------------------------|-------------------|---------------------|-------------------------------|---------------------|-------------------|----------------------|----------------------|----------------------|------------------------------|
| | | for single axles | for axle assemblies | for axle assemblies with lift | unladen without air | laden without air | | | | |
| IU 29/2000 31 | 290 | 245-315 | 255-315 | 285-315 | 185 | 170 | 200 | 310 | 0 | 427 |
| IU 31/2500 31 | 310 | 265-335 | 275-335 | 305-335 | 205 | 190 | 250 | 323 | 0 | 432 |
| IU 34/2505 31 | 340 | 295-365 | 305-365 | 335-365 | 235 | 220 | 250 | 323 | 50 | 437 |
| IU 36/3005 31 | 360 | 315-385 | 325-385 | 355-385 | 255 | 240 | 300 | 337 | 50 | 440 |
| IU 39/3010 31 | 390 | 345-415 | 355-415 | 385-415 | 285 | 270 | 300 | 337 | 100 | 442 |
| IU 42/3015 31 | 420 | 375-445 | 385-445 | 415-445 | 315 | 300 | 300 | 337 | 150 | 444 |

| Axle type/axle load/brakes Tyres (example) | S/A Track width/ spring centre | G Axle width | Tyres | | | | Weight approx. ¹⁾ |
|---|--------------------------------------|-----------------|------------------------------|------------------------|------------------------------|------------------------|------------------------------|
| | | | 385/65 R 22.5 V Offset | L Air bag centre | 425/55 R 19.5 V Offset | L Air bag centre | |
| SK RB 9019-10 ET = 120 mm 9000 kg | 2040/1200 | 2372 | 0 | 1200 ²⁾ | 0 | 1200 ³⁾ | see assembly weight |
| | | | 30 | 1140 | 30 | 1140 | |
| SB 1937-11S | 2040/1300 | 2372 | 60 | 1080 | 60 | 1080 ³⁾ | |
| | | | 60 | 1180 | 60 | 1180 ³⁾ | |
| 385/65 R 22.5 | 2090/1300 | 2422 | 30 | 1240 | 30 | 1240 ³⁾ | |
| | | | 60 | 1180 | 60 | 1180 | |
| 425/55 R 19.5 | | | | | | | |

Lengths in mm, weights in kg

- 1) = without wheel nuts
Weight deviations lie within the permitted DIN tolerances for the respective manufacturing process.
 - 2) = Max. possible tyre size 385/65 R 22.5 (clearance between tyre and air bag!)
 - 3) = Max. possible tyre size 425/55 R 19.5 (clearance between tyre and air bag!)
- Further tyre sizes on request

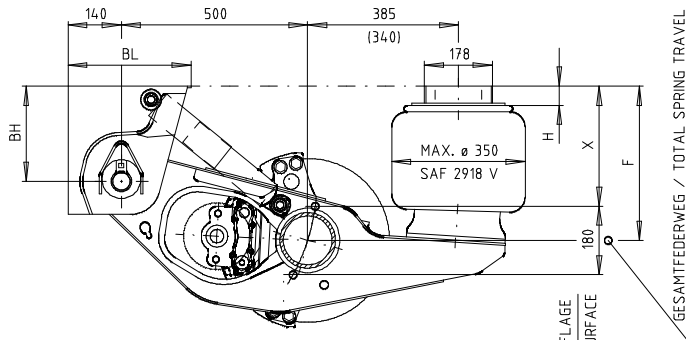
Ref. No.: IU-31-SKRB9019-10

Air suspension series INTRADISC^{plus} IO/27



Nominal ride height 355 - 505 mm – Air bag SAF 2918 V

OFF ROAD

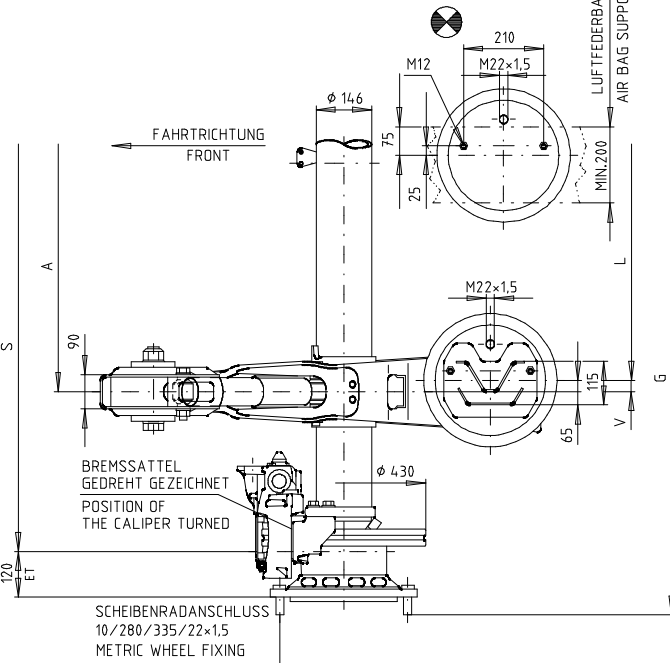


| Air suspension type | F Nominal ride height | Ride height range | | | X (ride height) | | BH hanger bracket | BL hanger bracket | H air bag bracket | Weight approx. ¹⁾ |
|---------------------|--------------------------|-------------------|---------------------|-------------------------------|---------------------|-------------------|----------------------|----------------------|----------------------|------------------------------|
| | | for single axles | for axle assemblies | for axle assemblies with lift | unladen without air | laden without air | | | | |
| IO 35/2000 27 | 355 | 325-375 | 335-375 | 365-375 | 265 | 250 | 200 | 310 | 0 | 426 |
| IO 37/2500 27 | 375 | 345-395 | 355-395 | 385-395 | 285 | 270 | 250 | 323 | 0 | 430 |
| IO 40/2505 27 | 405 | 375-425 | 385-425 | 415-425 | 315 | 300 | 250 | 323 | 50 | 435 |
| IO 42/3005 27 | 425 | 395-445 | 405-445 | 435-445 | 335 | 320 | 300 | 337 | 50 | 438 |
| IO 45/3010 27 | 455 | 425-475 | 435-475 | 465-475 | 365 | 350 | 300 | 337 | 100 | 440 |
| IO 47/3510 27 | 475 | 445-495 | 455-495 | 485-495 | 385 | 370 | 350 | 350 | 100 | 444 |
| IO 50/3515 27 | 505 | 475-525 | 485-525 | 515-525 | 415 | 400 | 350 | 350 | 150 | 446 |

| Axle type/axle load/brakes Tyres (example) | S/A Track width/ spring centre | G Axle width | Tyres | | | | Weight approx. ¹⁾ |
|--|--------------------------------------|-----------------|------------------------------|------------------------|------------------------------|------------------------|------------------------------|
| | | | 385/65 R 22.5 V Offset | L Air bag centre | 425/55 R 19.5 V Offset | L Air bag centre | |
| SK RB 9019-10 ET = 120 mm 9000 kg SB 1937-11S 385 / 65 R 22.5 425 / 55 R 19.5 | 2040/1200 | 2372 | 0 | 1200 ²⁾ | 0 | 1200 ³⁾ | see assembly weight |
| | | | 30 | 1140 | 30 | 1140 | |
| | | | 60 | 1080 | 60 | 1080 | |
| | 2040/1300 | 2372 | | | | | |
| | | | | | | | |
| | | | | | | | |
| 2090/1300 | 2422 | 30 | 1240 | 30 | 1240 ³⁾ | | |
| | | 60 | 1180 | 60 | 1180 | | |

Lengths in mm, weights in kg

- 1) = without wheel nuts
Weight deviations lie within the permitted DIN tolerances for the respective manufacturing process.
 - 2) = Max. possible tyre size 385/65 R 22.5 (clearance between tyre and air bag!)
 - 3) = Max. possible tyre size 425/55 R 19.5 (clearance between tyre and air bag!)
- Further tyre sizes on request



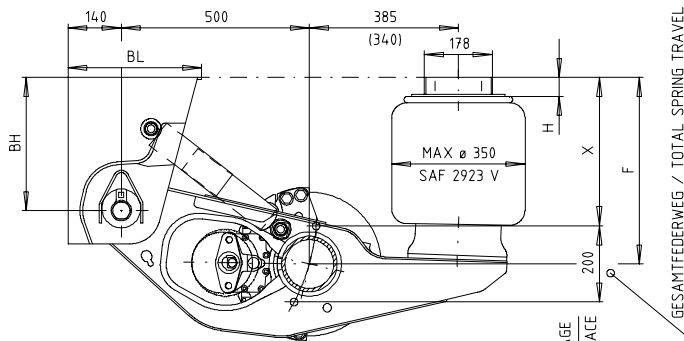
Ref. No.: IO-27-SKRB9019-10

Air suspension series INTRADISC^{plus} IO/31

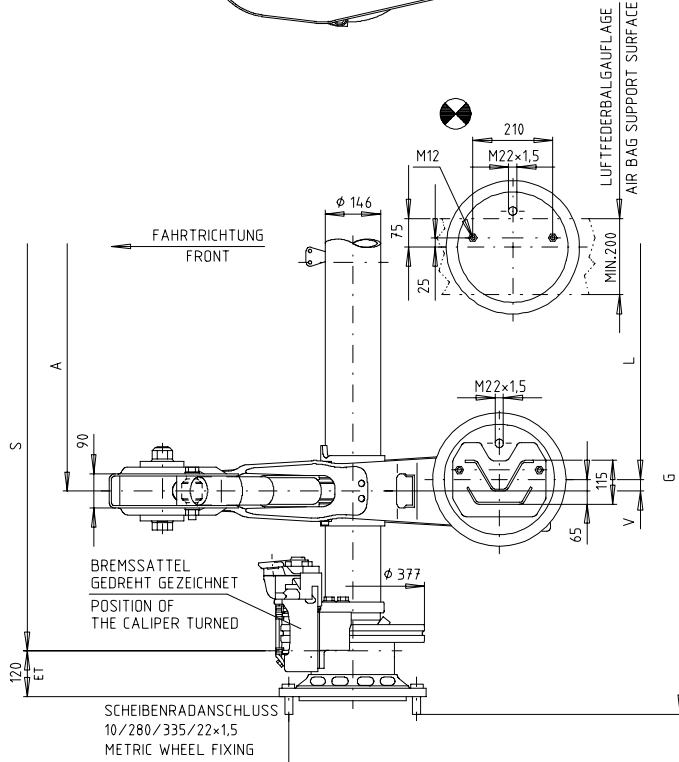


Nominal ride height 440 + 490 mm – Air bag SAF 2923 V

OFF ROAD



| Air suspension type | F Nominal ride height | Ride height range | | | X (ride height) | | BH hanger bracket | BL hanger bracket | H air bag bracket | Weight approx. ¹⁾ |
|---------------------|--------------------------|-------------------|---------------------|-------------------------------|---------------------|-------------------|----------------------|----------------------|----------------------|------------------------------|
| | | for single axles | for axle assemblies | for axle assemblies with lift | unladen without air | laden without air | | | | |
| IO 44/3000 31 | 440 | 390-460 | 400-460 | --- | 330 | 315 | 300 | 337 | 0 | 435 |
| IO 49/3505 31 | 490 | 440-510 | 450-510 | --- | 380 | 365 | 350 | 350 | 50 | 444 |



| Axle type/axle load/brakes Tyres (example) | S / A Track width/ spring centre | G Axle width | Tyres | | | | Weight approx. ¹⁾ |
|--|--|-----------------|------------------------------|------------------------|------------------------------|------------------------|------------------------------|
| | | | 385/65 R 22.5 V Offset | L Air bag centre | 425/55 R 19.5 V Offset | L Air bag centre | |
| SK RB 9019-10 ET = 120 mm 9000 kg SB 1937-115 385/65 R 22.5 425/55 R 19.5 | 2040/1200 | 2372 | 0 | 1200 ²⁾ | 0 | 1200 ³⁾ | see assembly weight |
| | | | 30 | 1140 | 30 | 1140 | |
| | | | 60 | 1080 | 60 | 1080 | |
| | 2040/1300 | 2372 | 60 | 1180 | 60 | 1180 ³⁾ | |
| | | | | | | | |
| | 2090/1300 | 2422 | 30 | 1240 | 30 | 1240 ³⁾ | |
| 60 | | | 1180 | 60 | 1180 | | |

Lengths in mm, weights in kg

- 1) = without wheel nuts
Weight deviations lie within the permitted DIN tolerances for the respective manufacturing process.
 - 2) = Max. possible tyre size 385/65 R 22.5 (clearance between tyre and air bag!)
 - 3) = Max. possible tyre size 425/55 R 19.5 (clearance between tyre and air bag!)
- Further tyre sizes on request

Ref. No.: IO-31-SKRB9019-10

AIR SUSPENSION SERIES **INTRADISC *plus***

RIGID AXLES
WITH DISC BRAKES
22.5" TYRES
SK RB 9022

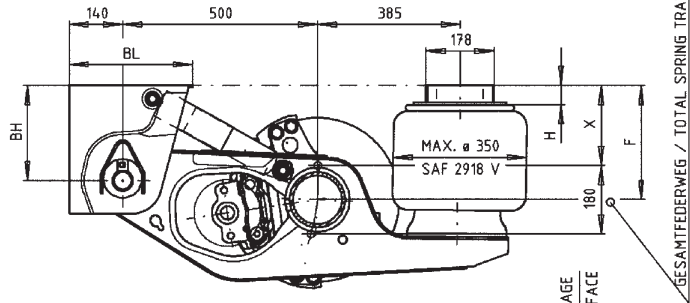
OFF ROAD

Air suspension series INTRADISC *plus* IU/27

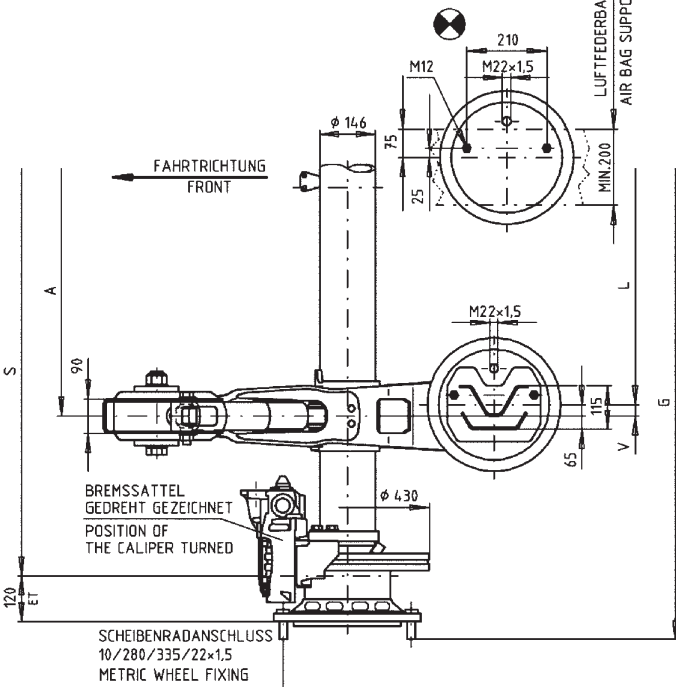


Nominal ride height 250 - 350 mm – Air bag SAF 2918 V

OFF ROAD



| Air suspension type | F Nominal ride height | Ride height range | | | X (ride height) | | BH hanger bracket | BL hanger bracket | H air bag bracket | Weight approx. ¹⁾ |
|---------------------|--------------------------|-------------------|---------------------|-------------------------------|---------------------|-------------------|----------------------|----------------------|----------------------|------------------------------|
| | | for single axles | for axle assemblies | for axle assemblies with lift | unladen without air | laden without air | | | | |
| IU 25/2000 27 | 250 | 220-270 | 230-270 | 260-270 | 160 | 145 | 200 | 310 | 0 | 473 |
| IU 28/2005 27 | 280 | 250-300 | 260-300 | 290-300 | 190 | 175 | 200 | 310 | 50 | 478 |
| IU 30/2505 27 | 300 | 270-320 | 280-320 | 310-320 | 210 | 195 | 250 | 323 | 50 | 483 |
| IU 33/2510 27 | 330 | 300-350 | 310-350 | 340-350 | 240 | 225 | 250 | 323 | 100 | 485 |
| IU 35/3010 27 | 350 | 320-370 | 330-370 | 360-370 | 260 | 245 | 300 | 337 | 100 | 488 |



| Axle type/axle load/brakes Tyres (example) | S/A Track width/spring centre | G Axle width | V Offset | L Air bag centre | Weight approx. ¹⁾ |
|--|----------------------------------|-----------------|-------------|---------------------|------------------------------|
| SK RB 9022 ET = 120 mm 9000 kg SB 2243-11S 385/65 R 22.5 | 2040/1200 | 2372 | 0 | 1200 ²⁾ | see assembly weight |
| | | | 30 | 1140 | |
| | | | 60 | 1080 | |
| | 2040/1300 | 2372 | 60 | 1180 | |
| | | | 30 | 1240 | |
| | | | 60 | 1180 | |
| 2090/1300 | 2422 | | | | |

Lengths in mm, weights in kg

1) = without wheel nuts

Weight deviations lie within the permitted DIN tolerances for the respective manufacturing process.

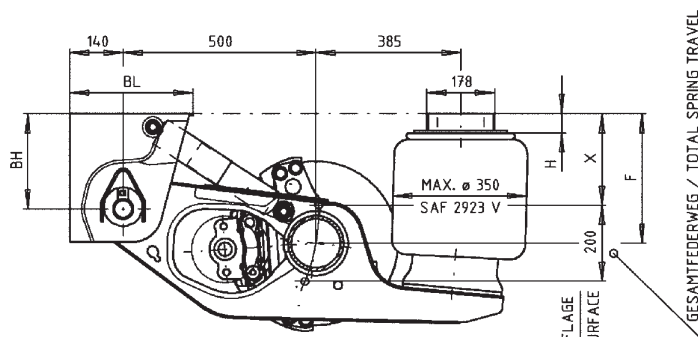
2) = Max. possible tyre size 385/65 R 22.5 (clearance between tyre and air bag!)

Air suspension series INTRADISC *plus* IU/31

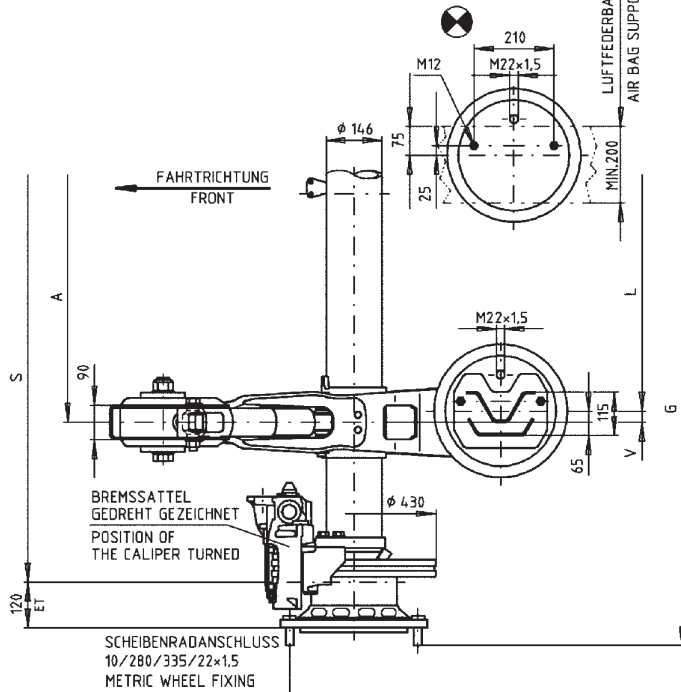


Nominal ride height 290 - 420 mm – Air bag SAF 2923 V

OFF ROAD



| Air suspension type | F Nominal ride height | Ride height range | | | X (ride height) | | BH hanger bracket | BL hanger bracket | H air bag bracket | Weight approx. ¹⁾ |
|---------------------|--------------------------|-------------------|---------------------|-------------------------------|---------------------|-------------------|----------------------|----------------------|----------------------|------------------------------|
| | | for single axles | for axle assemblies | for axle assemblies with lift | unladen without air | laden without air | | | | |
| IU 29/2000 31 | 290 | 245-315 | 255-315 | 285-315 | 185 | 170 | 200 | 310 | 0 | 475 |
| IU 31/2500 31 | 310 | 265-335 | 275-335 | 305-335 | 205 | 190 | 250 | 323 | 0 | 480 |
| IU 34/2505 31 | 340 | 295-365 | 305-365 | 335-365 | 235 | 220 | 250 | 323 | 50 | 484 |
| IU 36/3005 31 | 360 | 315-385 | 325-385 | 355-385 | 255 | 240 | 300 | 337 | 50 | 488 |
| IU 39/3010 31 | 390 | 345-415 | 355-415 | 385-415 | 285 | 270 | 300 | 337 | 100 | 490 |
| IU 42/3015 31 | 420 | 375-445 | 385-445 | 415-445 | 315 | 300 | 300 | 337 | 150 | 492 |



| Axle type/axle load/brakes Tyres (example) | S/A Track width/spring centre | G Axle width | V Offset | L Air bag centre | Weight approx. ¹⁾ |
|--|----------------------------------|-----------------|-------------|---------------------|------------------------------|
| SK RB 9022 ET = 120 mm 9000 kg SB 2243-11S 385/65 R 22.5 | 2040/1200 | 2372 | 0 | 1200 ²⁾ | see assembly weight |
| | | | 30 | 1140 | |
| | 2040/1300 | 2372 | 60 | 1080 | |
| | | | 60 | 1180 | |
| 2090/1300 | 2422 | 30 | 1240 | | |
| | | 60 | 1180 | | |

Lengths in mm, weights in kg

1) = without wheel nuts

Weight deviations lie within the permitted DIN tolerances for the respective manufacturing process.

2) = Max. possible tyre size 385/65 R 22.5 (clearance between tyre and air bag!)

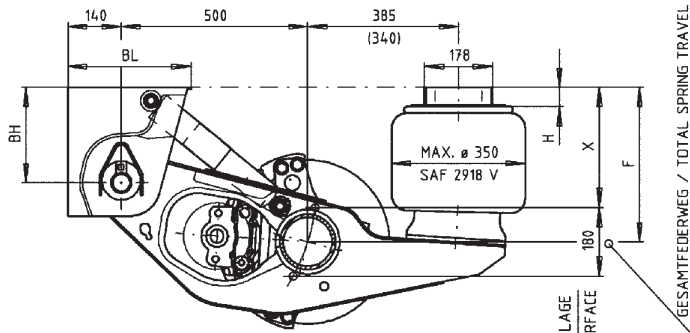
Ref. No.: IU-31-SKRB9022

Air suspension series INTRADISC *plus* IO/27

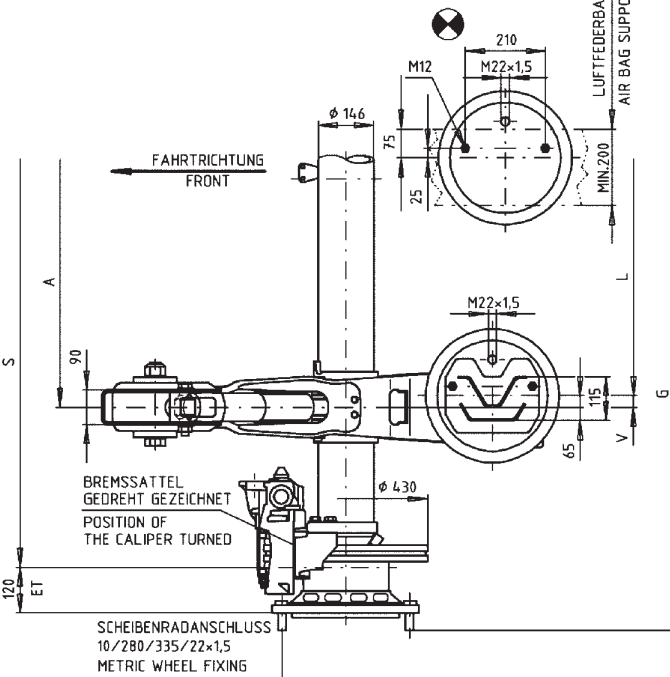


Nominal ride height 355 - 505 mm – Air bag SAF 2918 V

OFF ROAD



| Air suspension type | F Nominal ride height | Ride height range | | | X (ride height) | | BH hanger bracket | BL hanger bracket | H air bag bracket | Weight approx. ¹⁾ |
|---------------------|--------------------------|-------------------|---------------------|-------------------------------|---------------------|-------------------|----------------------|----------------------|----------------------|------------------------------|
| | | for single axles | for axle assemblies | for axle assemblies with lift | unladen without air | laden without air | | | | |
| IO 35/2000 27 | 355 | 325-375 | 335-375 | 365-375 | 265 | 250 | 200 | 310 | 0 | 474 |
| IO 37/2500 27 | 375 | 345-395 | 355-395 | 385-395 | 285 | 270 | 250 | 323 | 0 | 478 |
| IO 40/2505 27 | 405 | 375-425 | 385-425 | 415-425 | 315 | 300 | 250 | 323 | 50 | 483 |
| IO 42/3005 27 | 425 | 395-445 | 405-445 | 435-445 | 335 | 320 | 300 | 337 | 50 | 486 |
| IO 45/3010 27 | 455 | 425-475 | 435-475 | 465-475 | 365 | 350 | 300 | 337 | 100 | 488 |
| IO 47/3510 27 | 475 | 445-495 | 455-495 | 485-495 | 385 | 370 | 350 | 350 | 100 | 492 |
| IO 50/3515 27 | 505 | 475-525 | 485-525 | 515-525 | 415 | 400 | 350 | 350 | 150 | 494 |



| Axle type/axle load/brakes Tyres (example) | S/A Track width/spring centre | G Axle width | V Offset | L Air bag centre | Weight approx. ¹⁾ |
|--|----------------------------------|-----------------|-------------|---------------------|------------------------------|
| SK RB 9022 ET = 120 mm 9000 kg SB 2243-115 385/65 R 22.5 | 2040/1200 | 2372 | 0 | 1200 ²⁾ | see assembly weight |
| | | | 30 | 1140 | |
| | | | 60 | 1080 | |
| | 2040/1300 | 2372 | 60 | 1180 | |
| | | | 30 | 1240 | |
| | | | 60 | 1180 | |
| 2090/1300 | 2422 | | | | |

Lengths in mm, weights in kg

1) = without wheel nuts
Weight deviations lie within the permitted DIN tolerances for the respective manufacturing process.
2) = Max. possible tyre size 385/65 R 22.5 (clearance between tyre and air bag!)

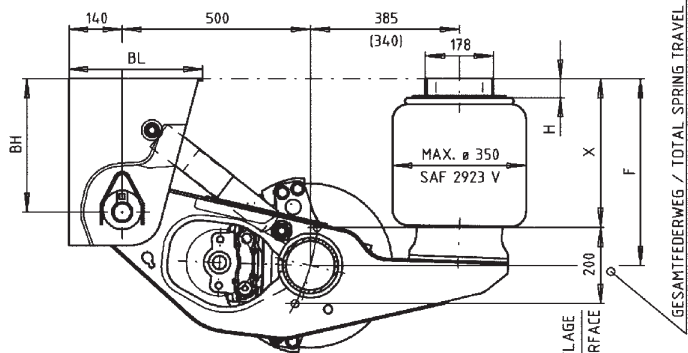
Ref. No.: IO-27-SKRB9022

Air suspension series INTRADISC *plus* IO/31

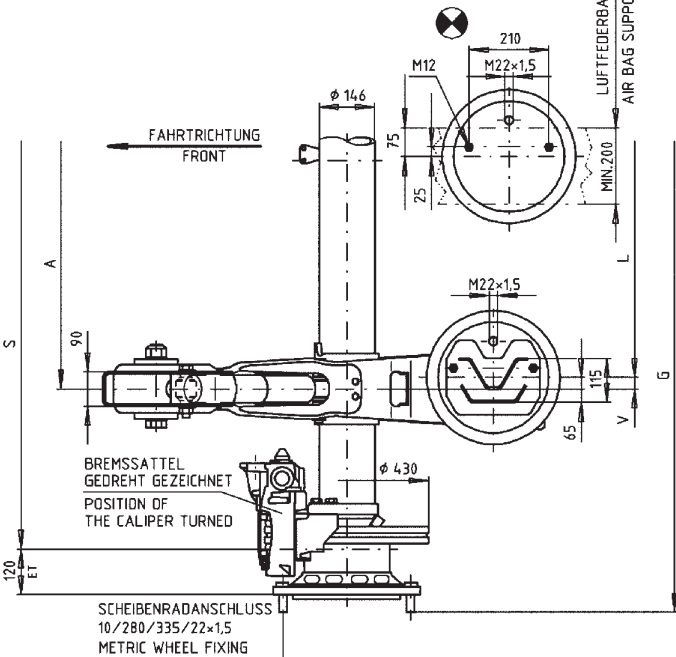


Nominal ride height 440 + 490 mm – Air bag SAF 2923 V

OFF ROAD



| Air suspension type | F Nominal ride height | Ride height range | | | X (ride height) | | BH hanger bracket | BL hanger bracket | H air bag bracket | Weight approx. ¹⁾ |
|---------------------|--------------------------|-------------------|---------------------|-------------------------------|---------------------|-------------------|----------------------|----------------------|----------------------|------------------------------|
| | | for single axles | for axle assemblies | for axle assemblies with lift | unladen without air | laden without air | | | | |
| IO 44/3000 31 | 440 | 390-460 | 400-460 | --- | 330 | 315 | 300 | 337 | 0 | 483 |
| IO 49/3505 31 | 490 | 440-510 | 450-510 | --- | 380 | 365 | 350 | 350 | 50 | 492 |



| Axle type/axle load/brakes Tyres (example) | S/A Track width/spring centre | G Axle width | V Offset | L Air bag centre | Weight approx. ¹⁾ |
|---|----------------------------------|-----------------|-------------|---------------------|------------------------------|
| SK RB 9022 ET = 120 mm 9000 kg | 2040/1200 | 2372 | 0 | 1200 ²⁾ | see assembly weight |
| | | | 30 | 1140 | |
| | | | 60 | 1080 | |
| SB 2243-11S 385/65 R 22.5 | 2040/1300 | 2372 | 60 | 1180 | |
| | | | 30 | 1240 | |
| | | | 60 | 1180 | |
| | 2090/1300 | 2422 | 30 | 1240 | |
| | | | 60 | 1180 | |
| | | | | | |

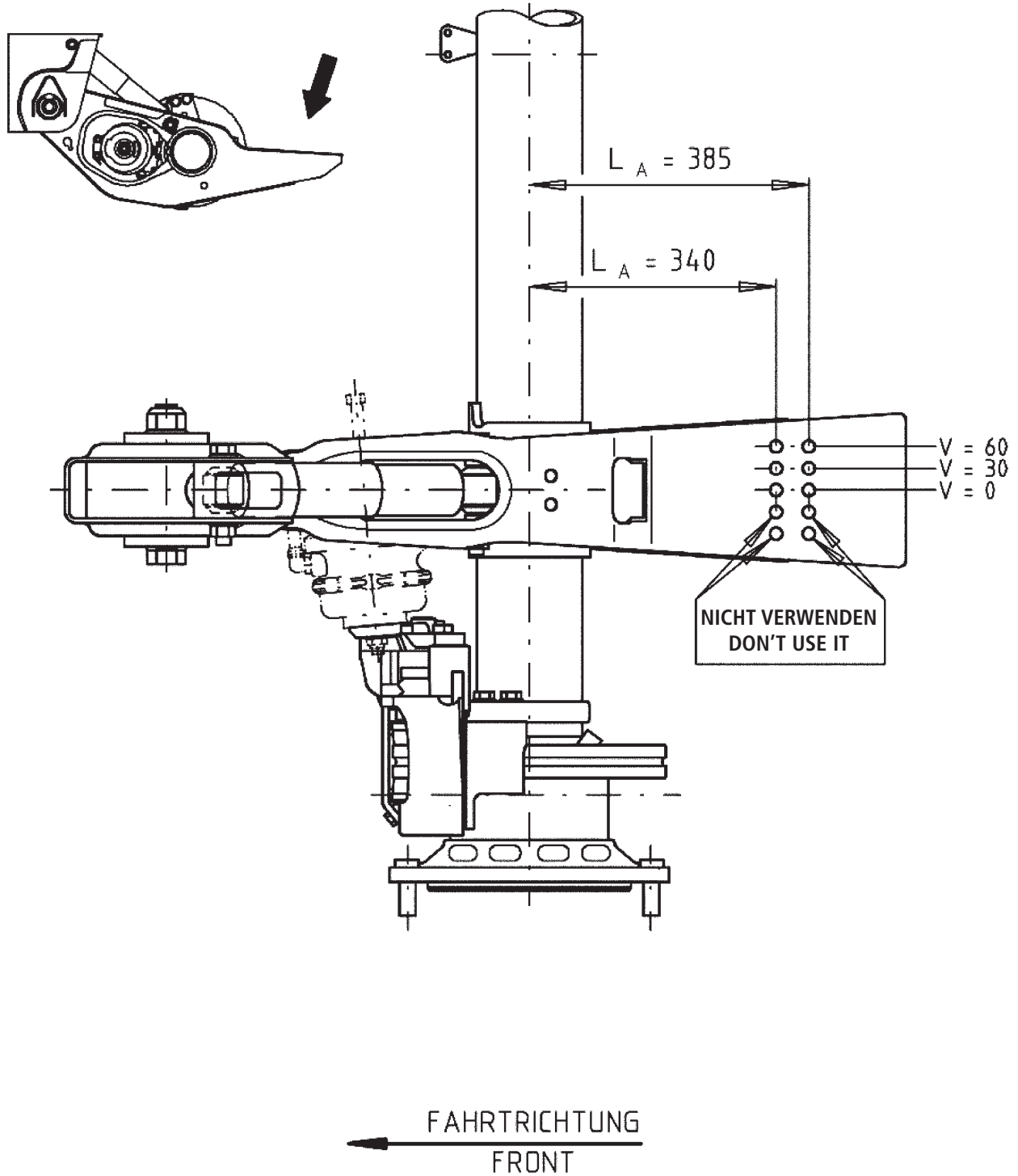
Lengths in mm, weights in kg

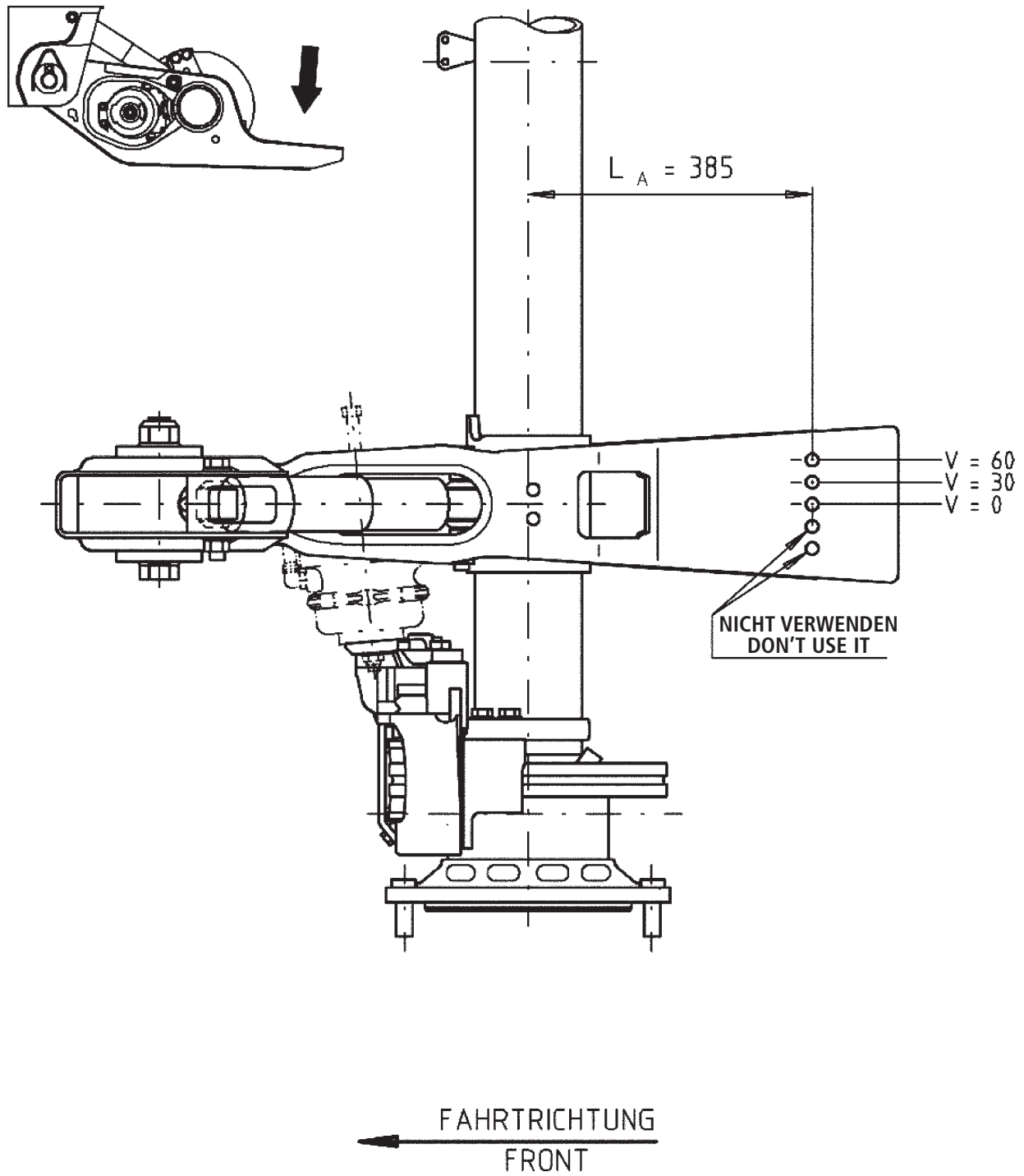
1) = without wheel nuts

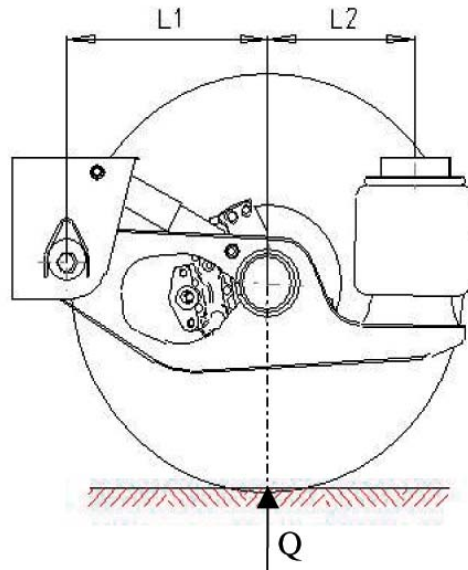
Weight deviations lie within the permitted DIN tolerances for the respective manufacturing process.

2) = Max. possible tyre size 385/65 R 22.5 (clearance between tyre and air bag!)

AIR BAGS







Formula to calculate the air pressure when fully loaded: $P \text{ (bar)} = \frac{(Q - A) \times i \times p}{2}$

P = air pressure in the air bags (bar)

Q = permissible axle load on the ground (kg)

A = unsprung mass (kg) / mean value for $A = Q \times 0.1$

i = ratio $i = \frac{L1}{L1 + L2}$

p = air pressure in the air bags per kg load

air bag Ø 300 mm (SAF 2618 V / 2619 V)

$p = 0.00227$ bar/kg

air bag Ø 350 mm (SAF 2918 V / 2923 V / 2926 V)

$p = 0.0018$ bar/kg

Example:

Air suspension IU 30/2505 33 (with air bag SAF 2619 V)

$Q = 9000$ kg $A = Q \times 0.1 = 900$ kg

$L1 = 500$ mm $i = \frac{500}{500 + 385} = 0.565$

$L2 = 385$ mm

$p = 0.00227$ bar/kg $P \text{ (bar)} = \frac{(9000 - 900) \times 0.565 \times 0.00227}{2}$

$P = 5.2$ bar

Formula to calculate the air pressure when partially loaded $P_t \text{ (bar)} = \frac{(Q_t - A) \times i \times p}{2}$

Q_t = axle load on the ground partially loaded

Example:

Air suspension IU 30/2505 33 (with air bag SAF 2619 V)

$Q = 9000$ kg $A = Q \times 0.1 = 900$ kg

$Q_t = 2100$ kg

$L1 = 500$ mm $i = \frac{500}{500 + 385} = 0.565$

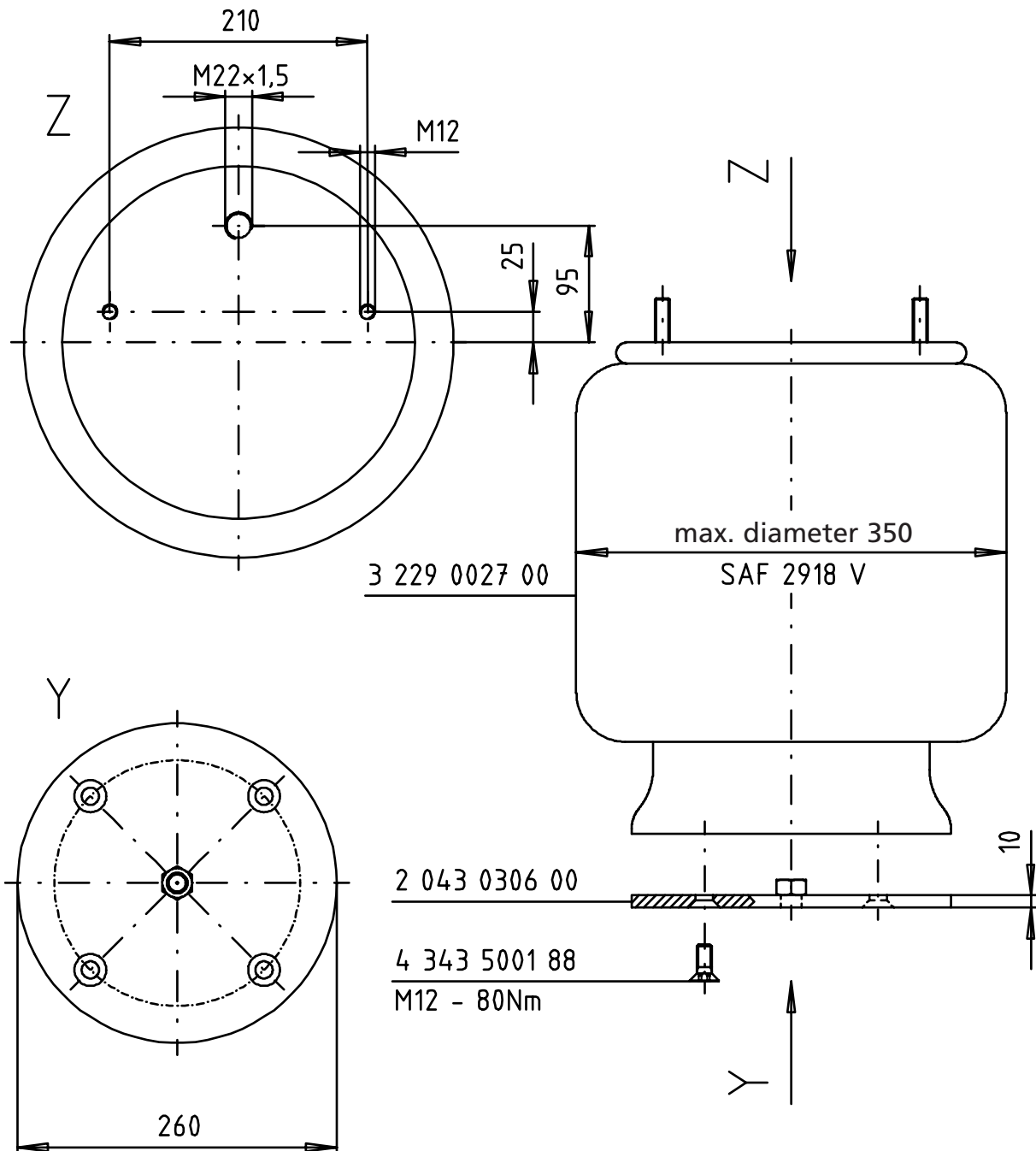
$L2 = 385$ mm

$p = 0.00227$ bar/kg $P_t \text{ (bar)} = \frac{(2100 - 900) \times 0.565 \times 0.00227}{2}$

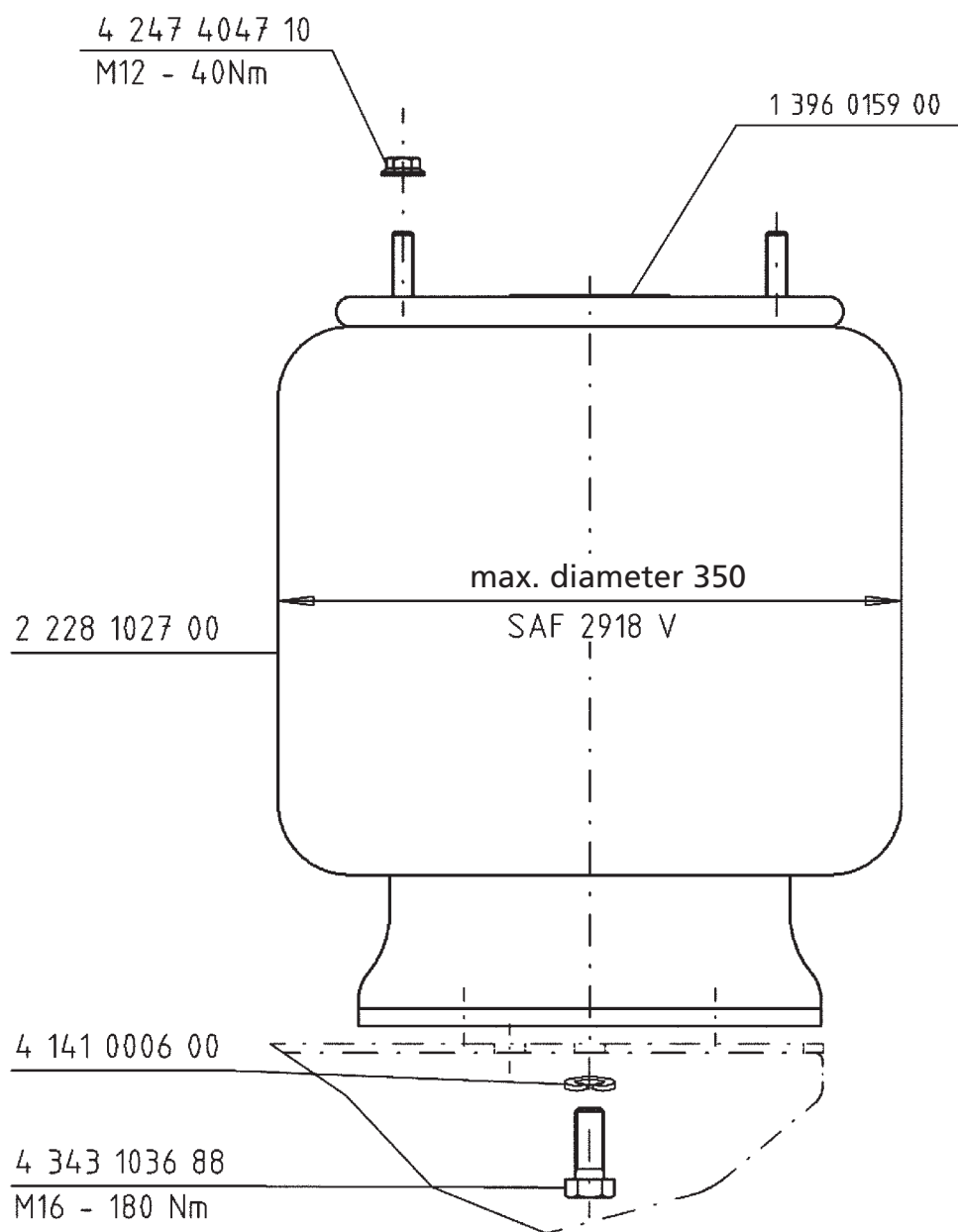
$P_t = 0.77$ bar

AIR BAG PARTS

Air bag code 27

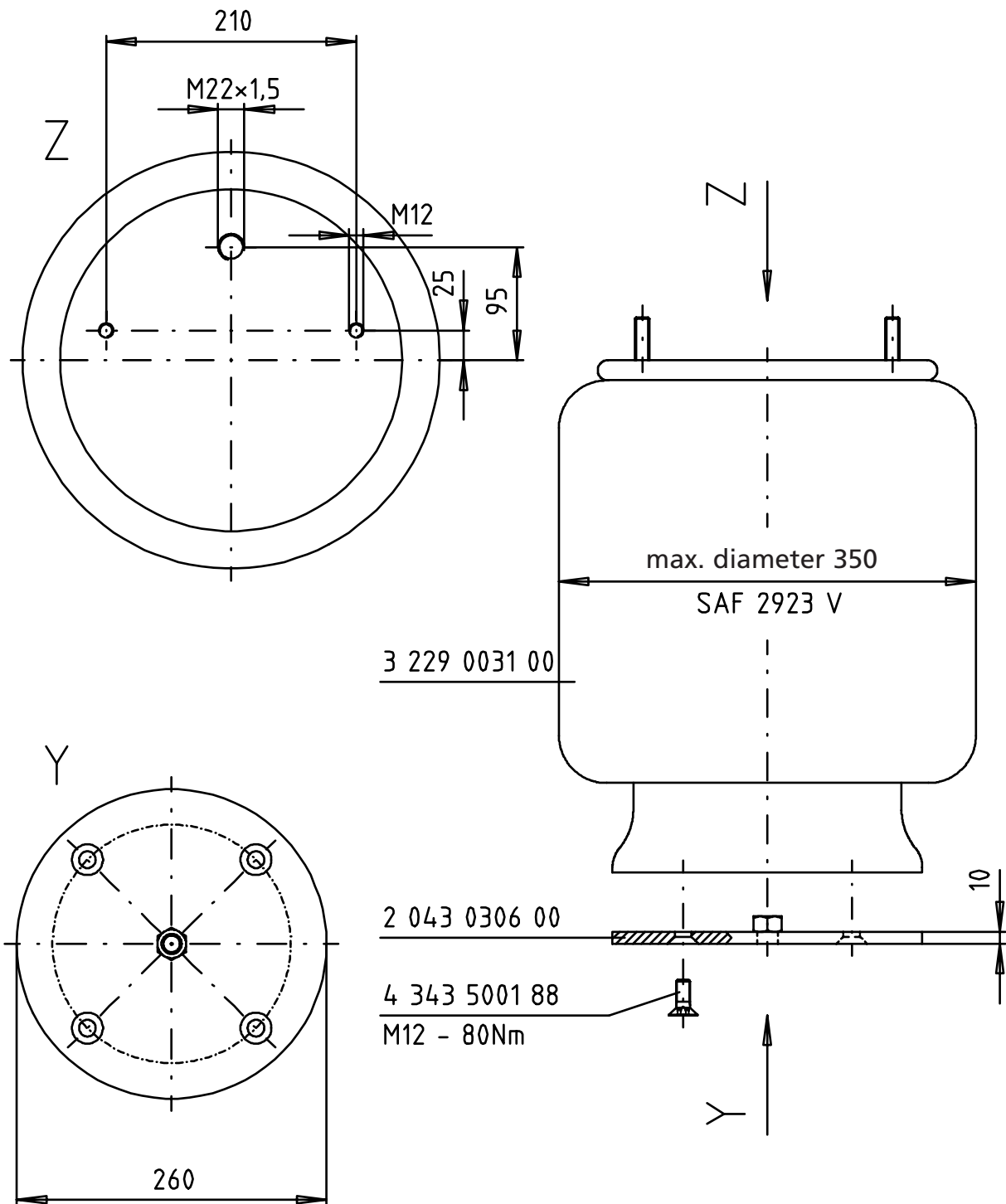


Air bag code 27

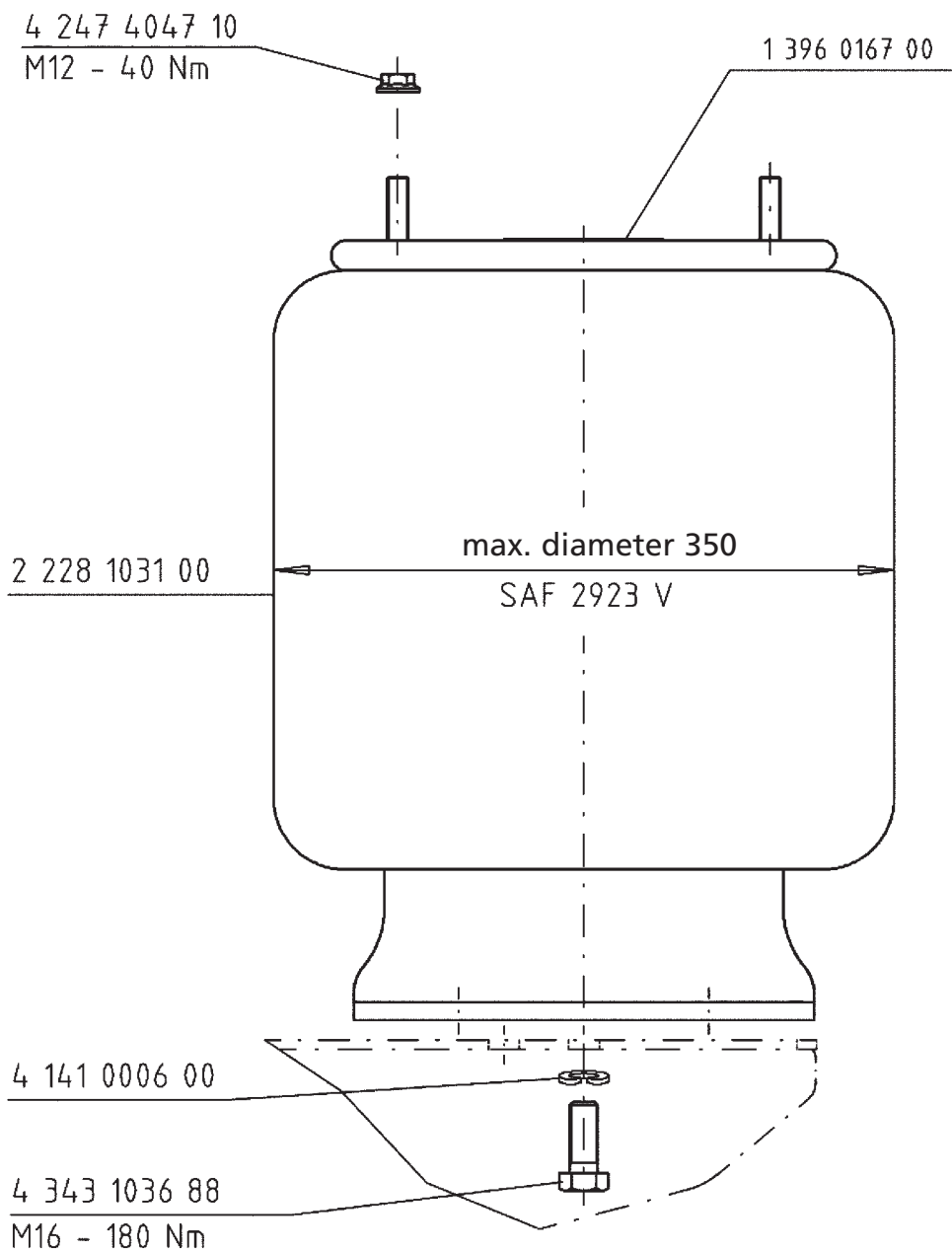


| Designation | Drawing No.: | Format | Material | Dimensions | Quantity |
|---------------|---------------|--------|--------------|-------------------------------|----------|
| Air bag | 2 228 1027 00 | 4 | | SAF 2918 V with 2 043 0306 00 | 1 |
| Hex. nut | 4 247 4047 10 | | 10.9 | M12 with flange | 2 |
| Spring washer | 4 141 0006 00 | | Spring steel | DIN 128 A16 | 1 |
| Hex. bolt | 4 343 1036 88 | | 8.8 | DIN 933 M16 x 40 | 1 |
| Type plate | 1 396 0159 00 | 4 | | 40 x 90 | 1 |

Air bag code 31

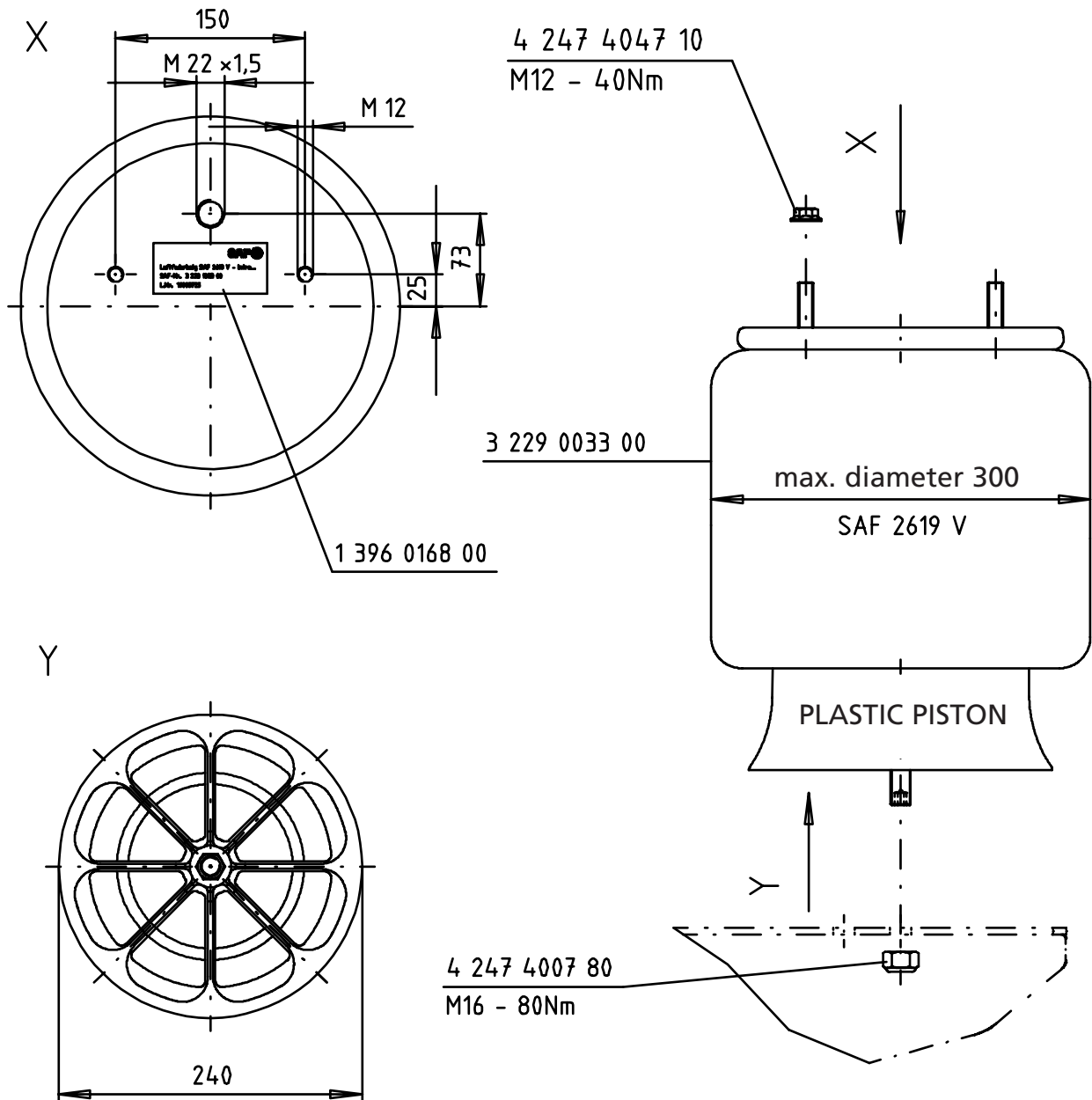


Air bag code 31



| Designation | Drawing No. | Format | Material | Dimensions | Quantity |
|---------------|---------------|--------|--------------|-------------------------------|----------|
| Air bag | 2 228 1031 00 | 3 | | SAF 2923 V with 2 043 0306 00 | 1 |
| Hex. nut | 4 247 4047 10 | | 10.9 | M12 with flange | 2 |
| Spring washer | 4 141 0006 00 | | Spring steel | DIN 128 A16 | 1 |
| Hex. bolt | 4 343 1036 88 | | 8.8 | DIN 933 M16x40 | 1 |
| Type plate | 1 396 0167 00 | 4 | | 40 x 90 | 1 |

Air bag code 33

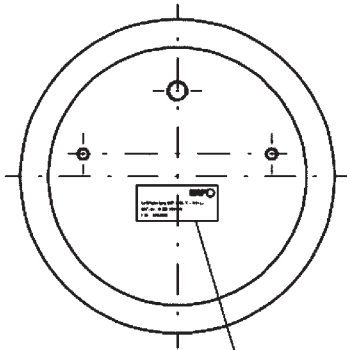


| Designation | Drawing No. | Format | Material | Dimensions | Quantity |
|-------------|---------------|--------|----------|-----------------|----------|
| Air bag | 3 229 0033 00 | 3 | | SAF 2619 V | 1 |
| Hex. nut | 4 247 4047 10 | | 10.9 | M12 with flange | 2 |
| Lock nut | 4 247 4007 80 | | 8 | DIN 985 M16 | 1 |
| Type plate | 1 396 0168 00 | 4 | | 40 x 90 | 1 |

Air bag code 41

X 1:2

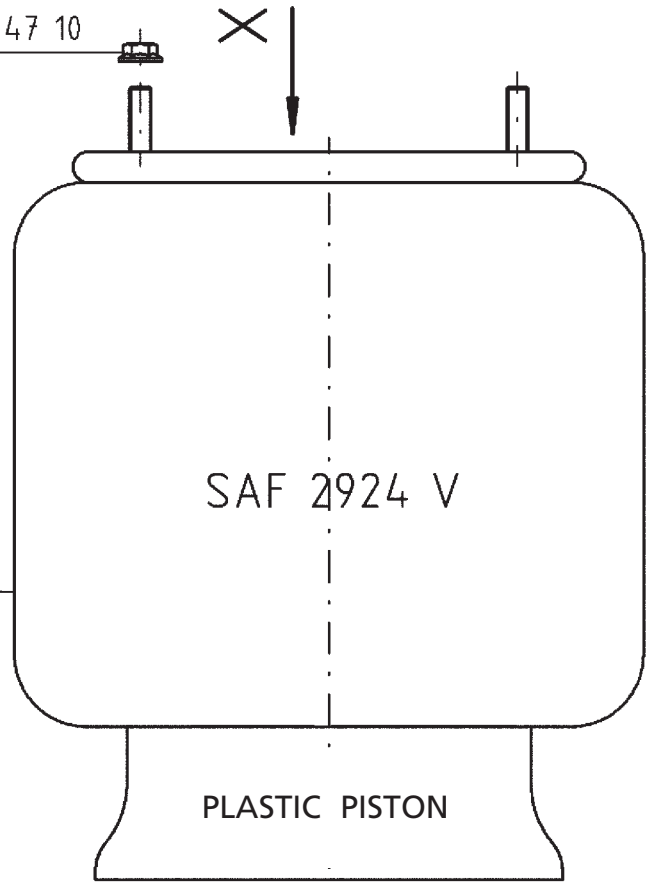
4 247 4047 10



1 396 0177 00

AFFIXED

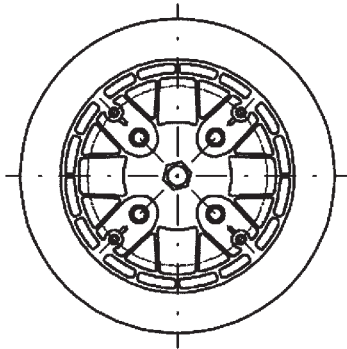
3 229 0041 00



SAF 2924 V

PLASTIC PISTON

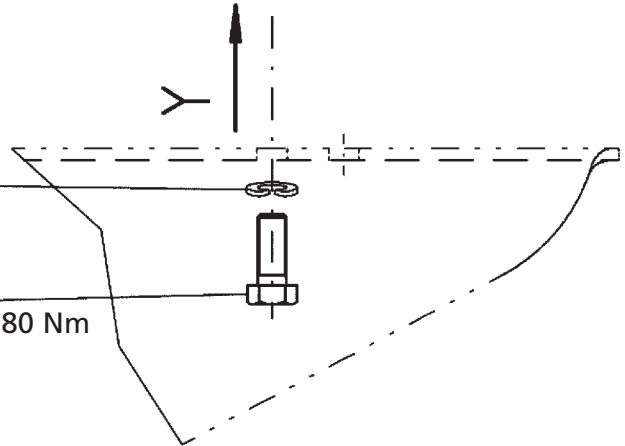
Y 1:2



4 141 0006 00

4 343 1036 88

TIGHTENING TORQUE 80 Nm



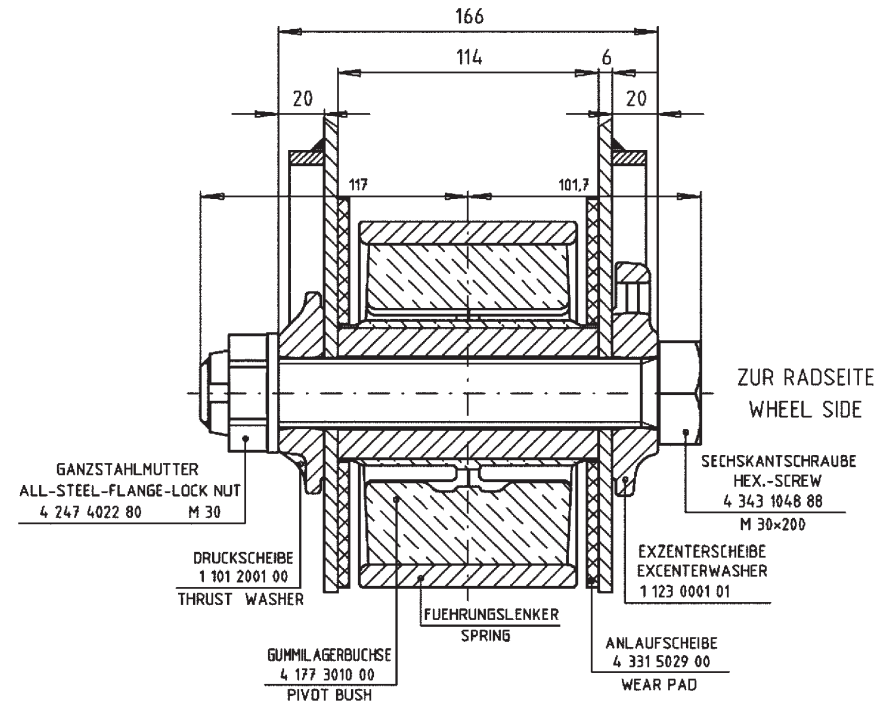
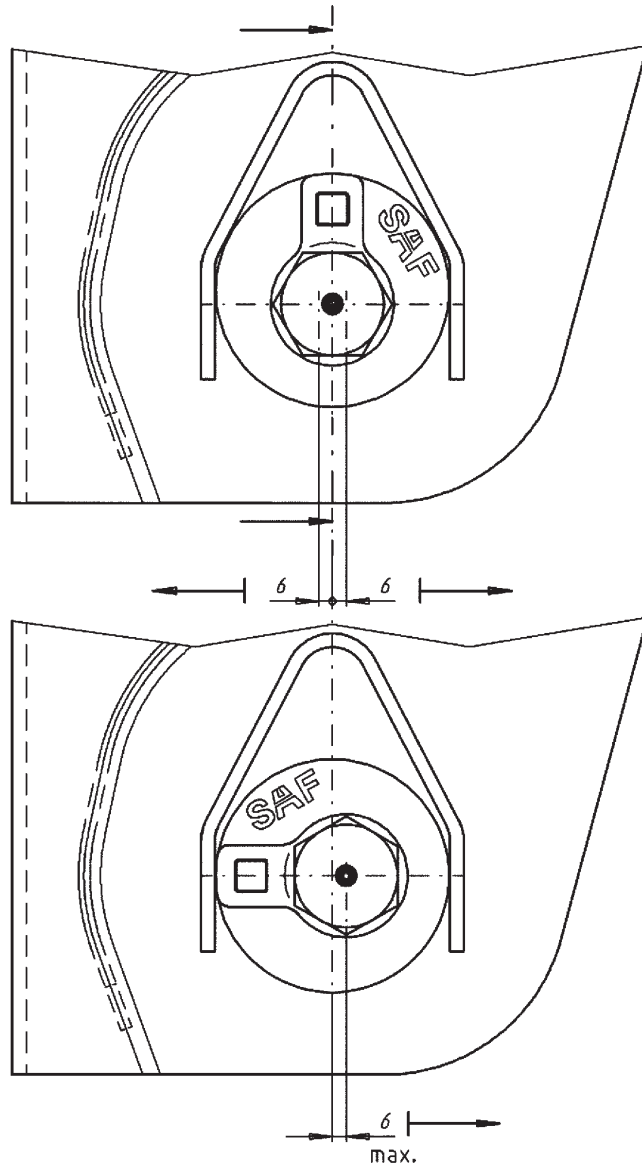
| Designation | Drawing No. | Format | Material | Dimensions | Quantity |
|----------------------|---------------|--------|--------------|------------------|----------|
| Air bag | 3 229 0041 00 | 3 | | SAF 2924 V | 1 |
| Hex. nut | 4 247 4047 10 | | 10.9 | M12 with flange | 2 |
| Spring washer | 4 141 0006 00 | | Spring steel | DIN 128 A16 | 1 |
| Hex. bolt | 4 343 1036 88 | | 8.8 | DIN 933 M16 x 40 | 1 |
| Type plate (sticker) | 1 396 0177 00 | 4 | | 40 x 90 | 1 |

HANGER BRACKETS

Adjustable pivot bolt



Steel hanger bracket



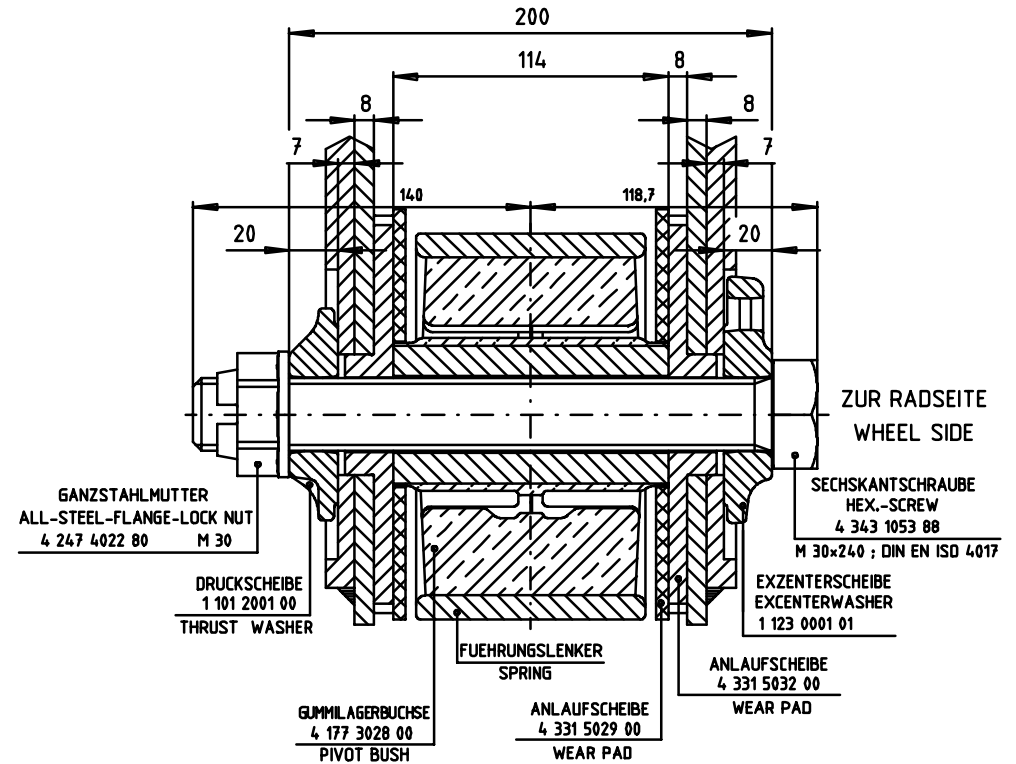
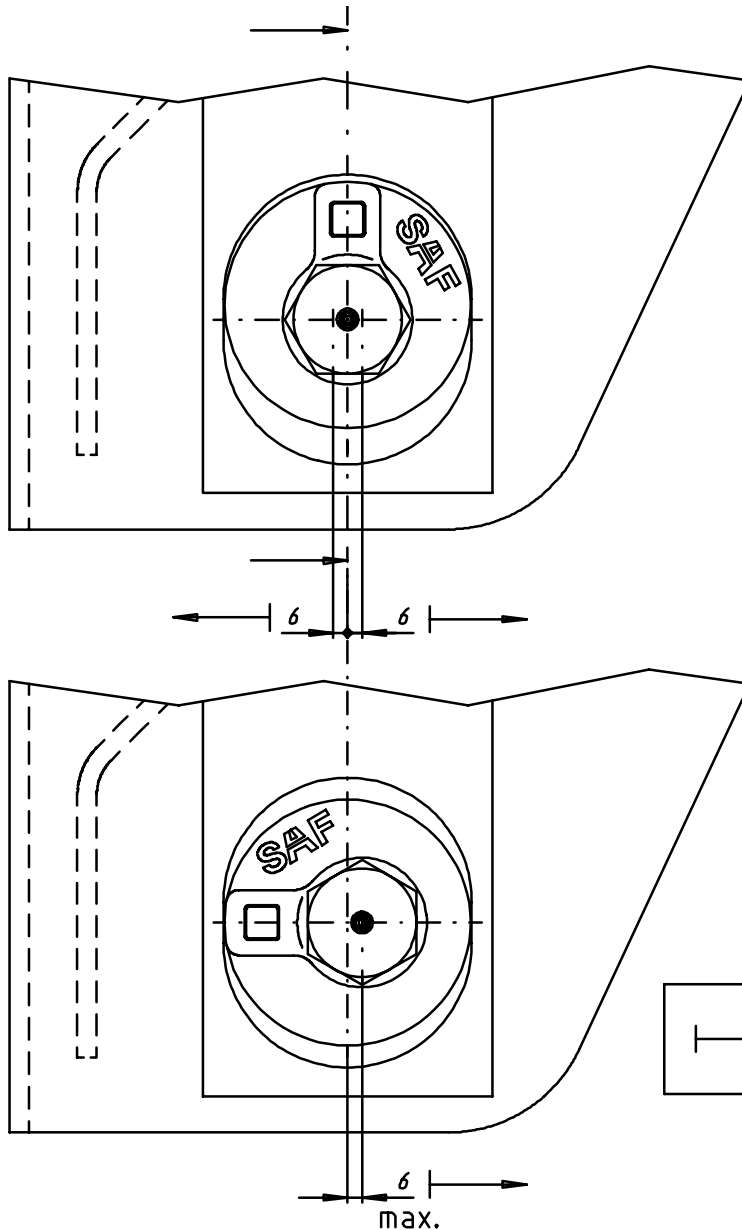
ANZUGSMOMENT : 400 Nm + 120°
 TIGHTENING MOMENT : 400Nm + 120°
 ANZUGSVRFahren SIEHE TD0000400300
 TIGHTENING PRCDURE SEE TD 00004.00300

→ Verstellrichtung der Achse
 Adjustment direction of the axle

Adjustable pivot bolt



Alu hanger bracket

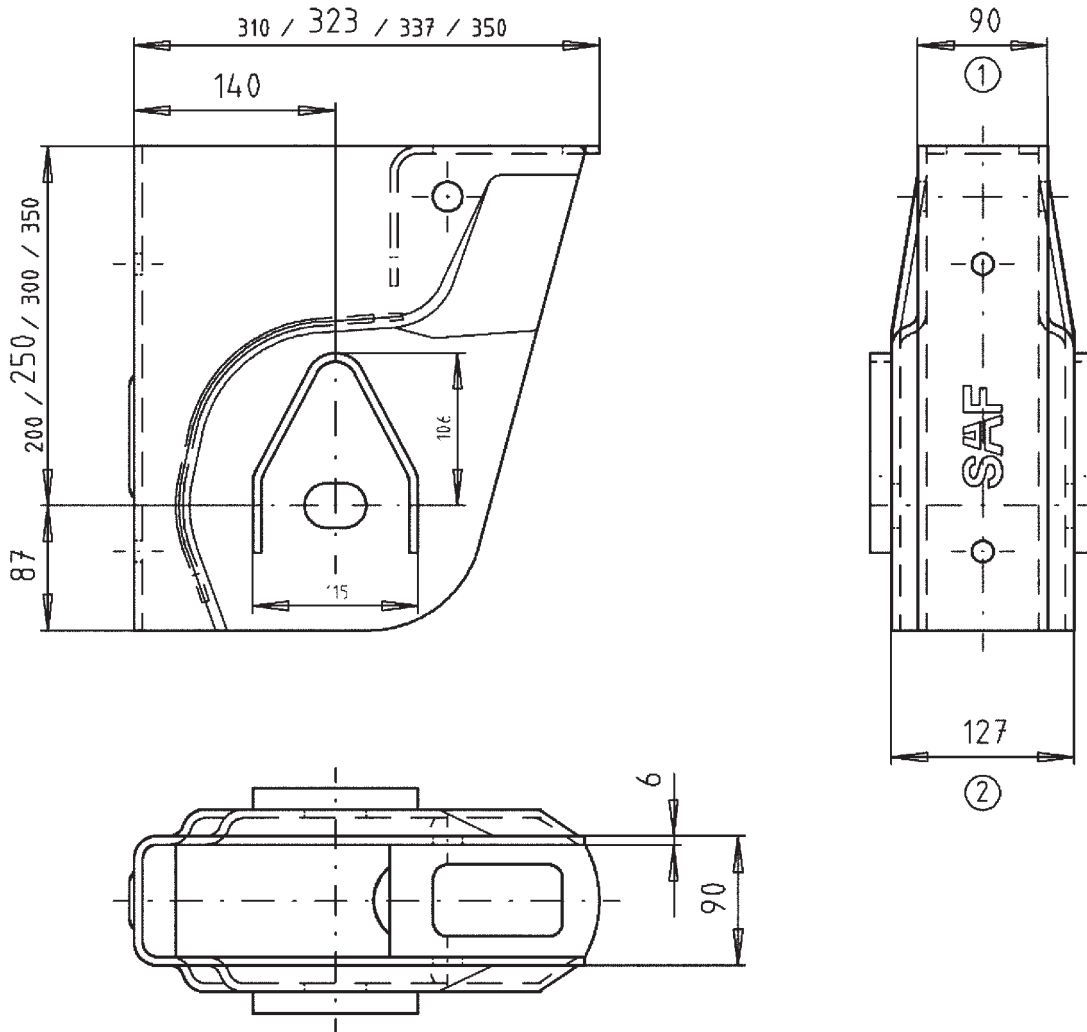


NOT MAINTENANCE-FREE

ANZUGSMOMENT : 400 Nm + 120°
 TIGHTENING MOMENT : 400Nm + 120°
 ANZUGSVRFahren SIEHE TD0000400400
 TIGHTENING PROCEDURE SEE TD 0000400400

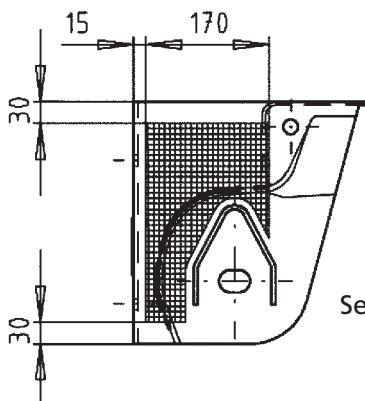
→ Verstellrichtung der Achse
 Adjustment direction of the axle

- ▶ 90 mm hanger bracket width (frame connection width)
- ▶ Symmetrical hanger brackets (no left and right version)
- ▶ Shock absorber position in hanger bracket (shock absorber centre = spring centre)

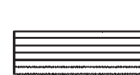


Hanger bracket side view

Recommended welding zone for hanger bracket reinforcement



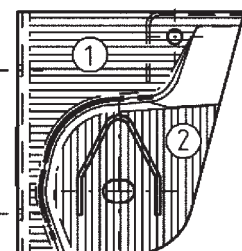
See SAF reinforcement suggestions



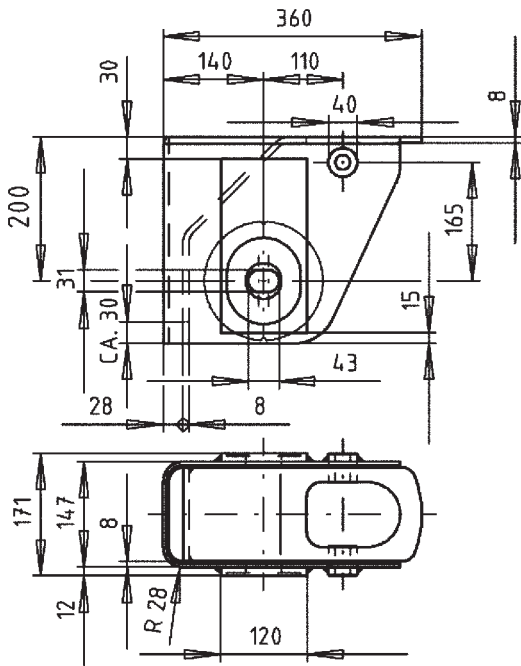
① In area of bracket width 90 mm



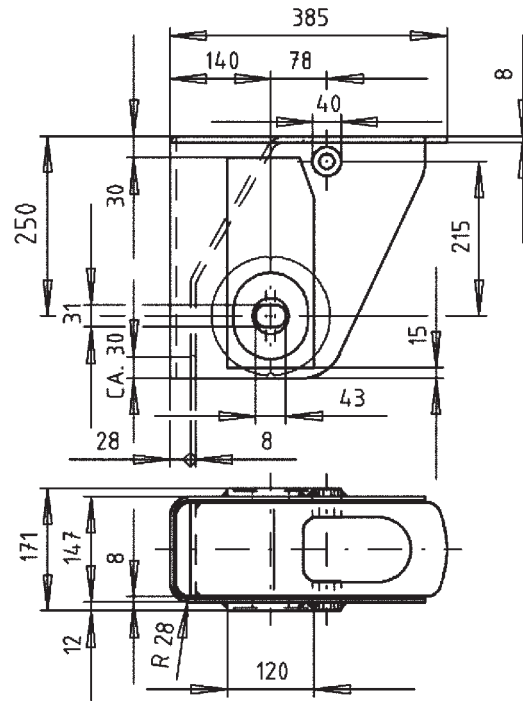
② In area of bracket width 127 mm



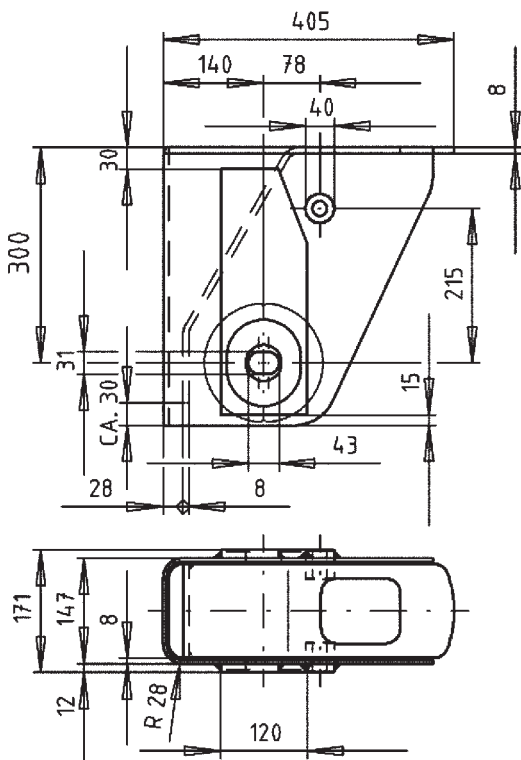
Technical information of alu hanger bracket – series IU / IO



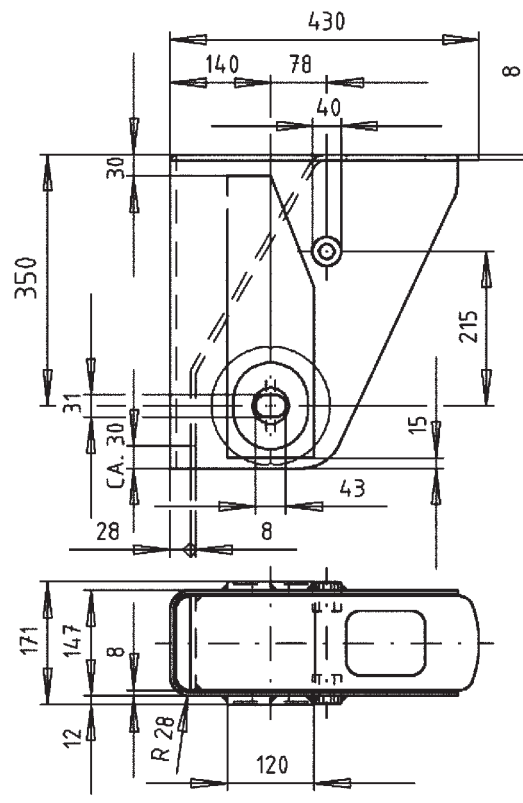
BEST.-NR. / ORDER NO.: 2 183 0829 00



BEST.-NR. / ORDER NO.: 2 183 0830 00



BEST.-NR. / ORDER NO.: 2 183 0831 00

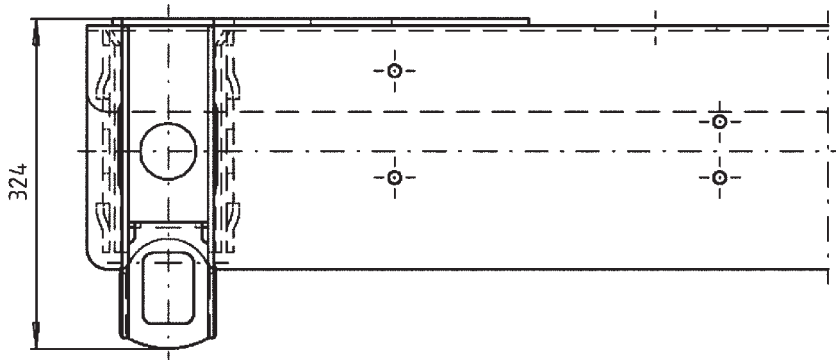
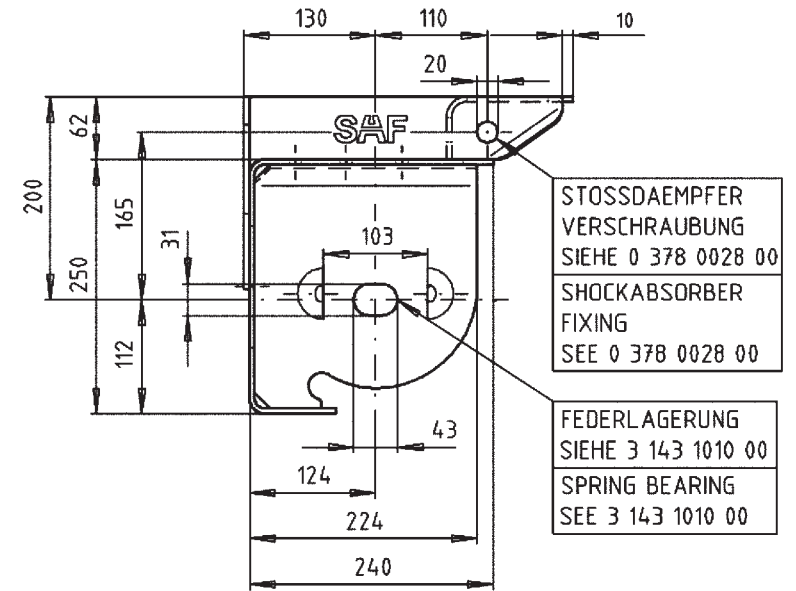
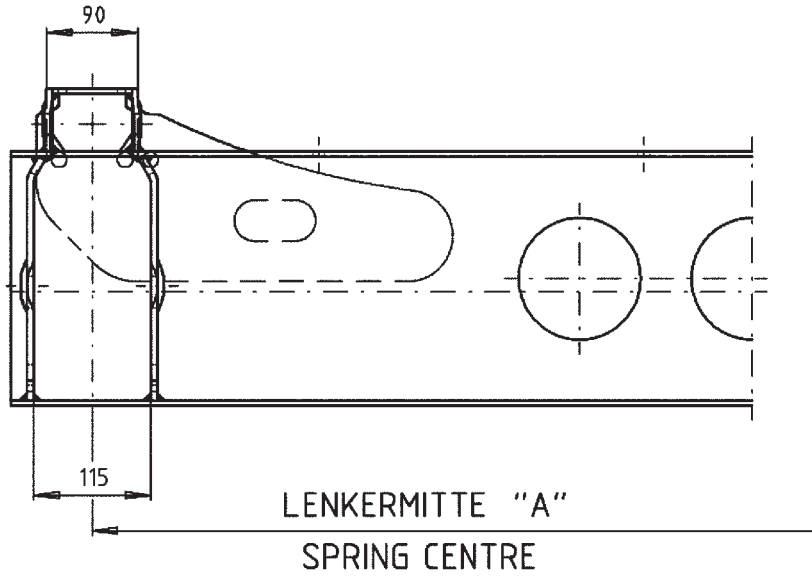


BEST.-NR. / ORDER NO.: 2 183 0832 00

CROSS MEMBERS

Cross member

200 high – series IU / IO

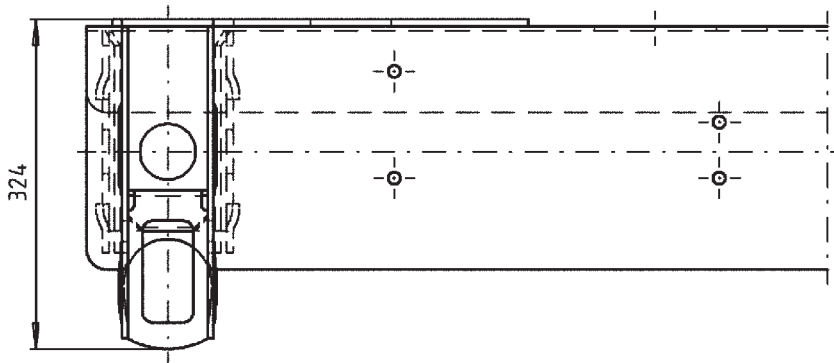
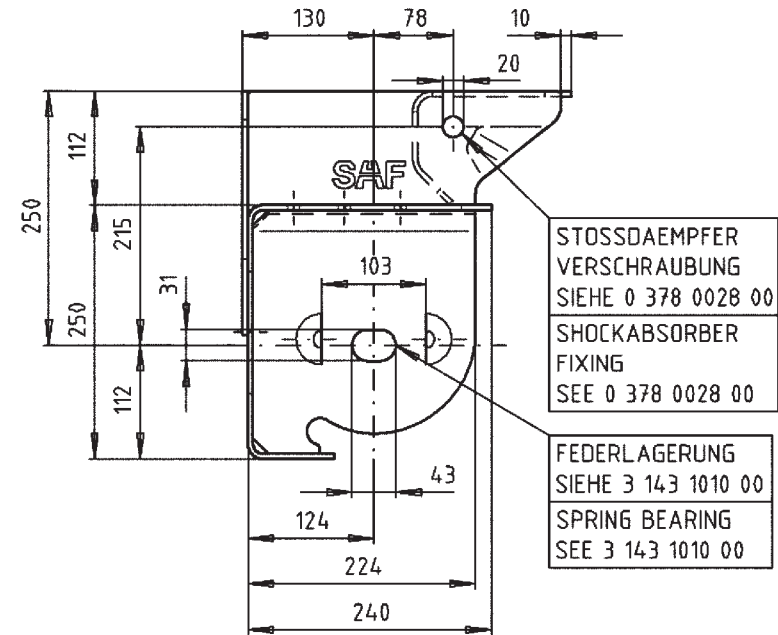
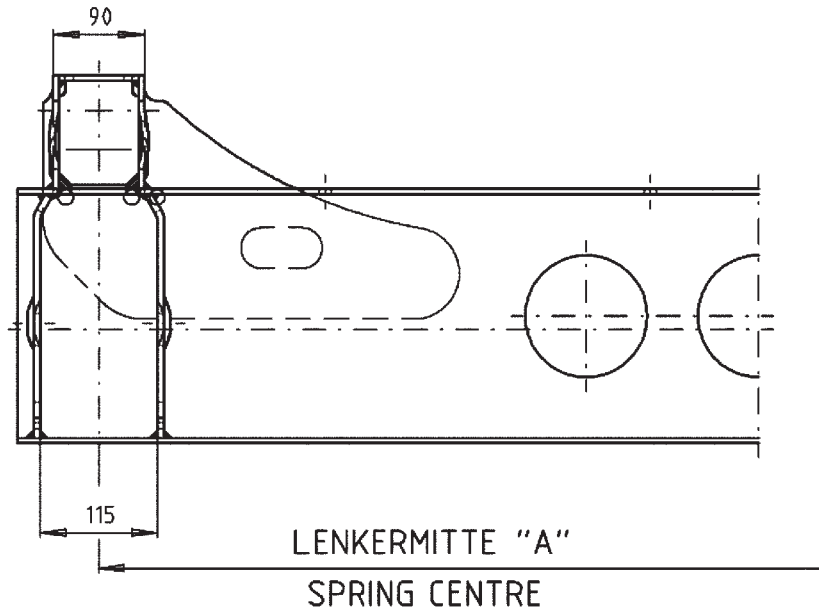


| | |
|------|-------------------|
| 1400 | 2 291 0427 00 |
| 1300 | 2 291 0400 00 |
| 1200 | 2 291 0426 00 |
| "A" | ORDER-NO.: |

Cross member



250 high – series IU / IO

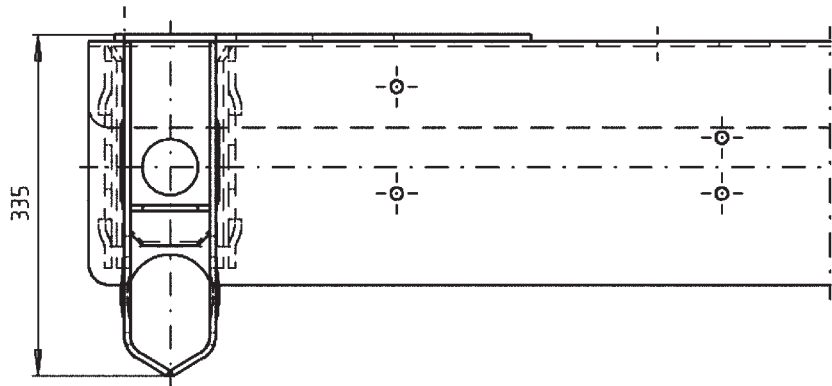
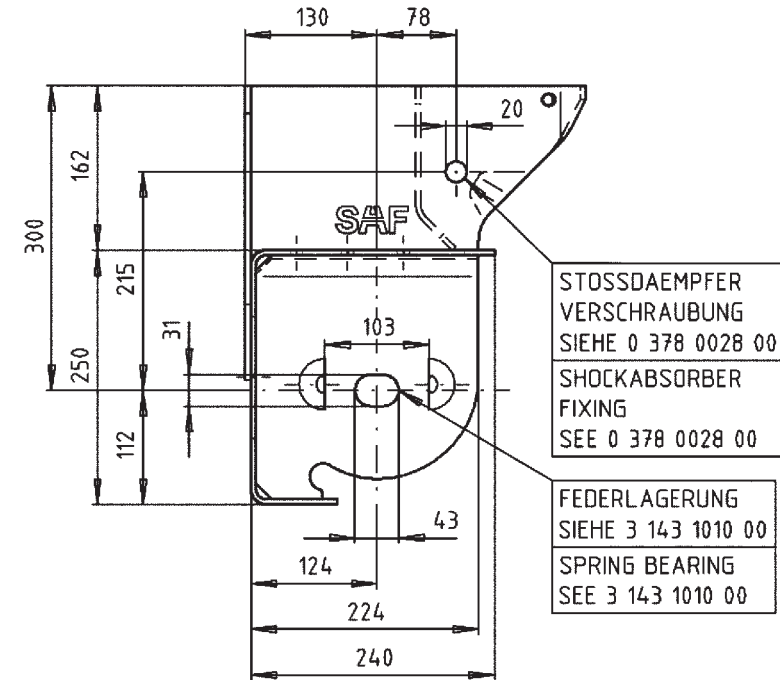
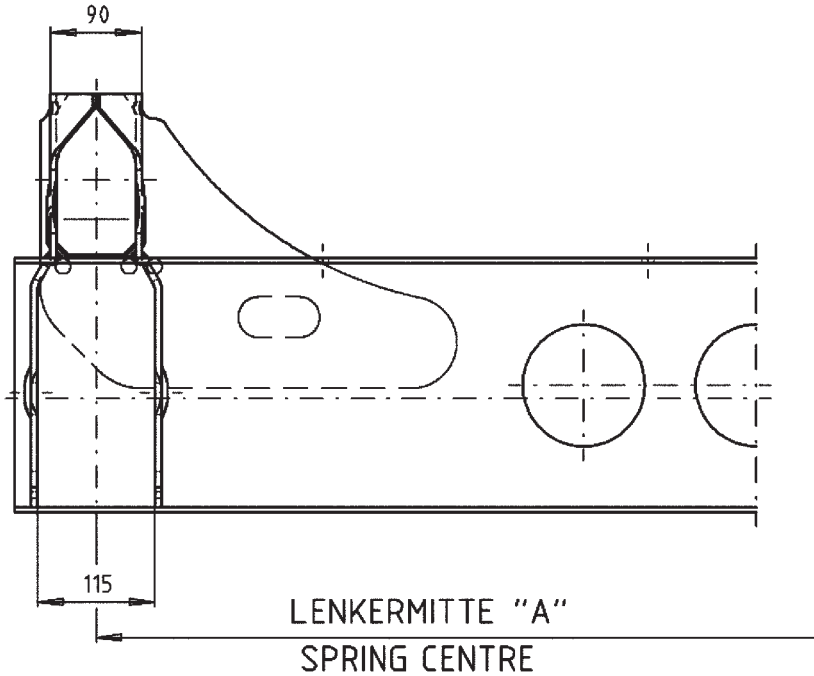


| | |
|------|-------------------|
| 1400 | 2 291 0424 00 |
| 1300 | 2 291 0401 00 |
| 1200 | 2 291 0423 00 |
| "A" | ORDER-NO.: |

Cross member

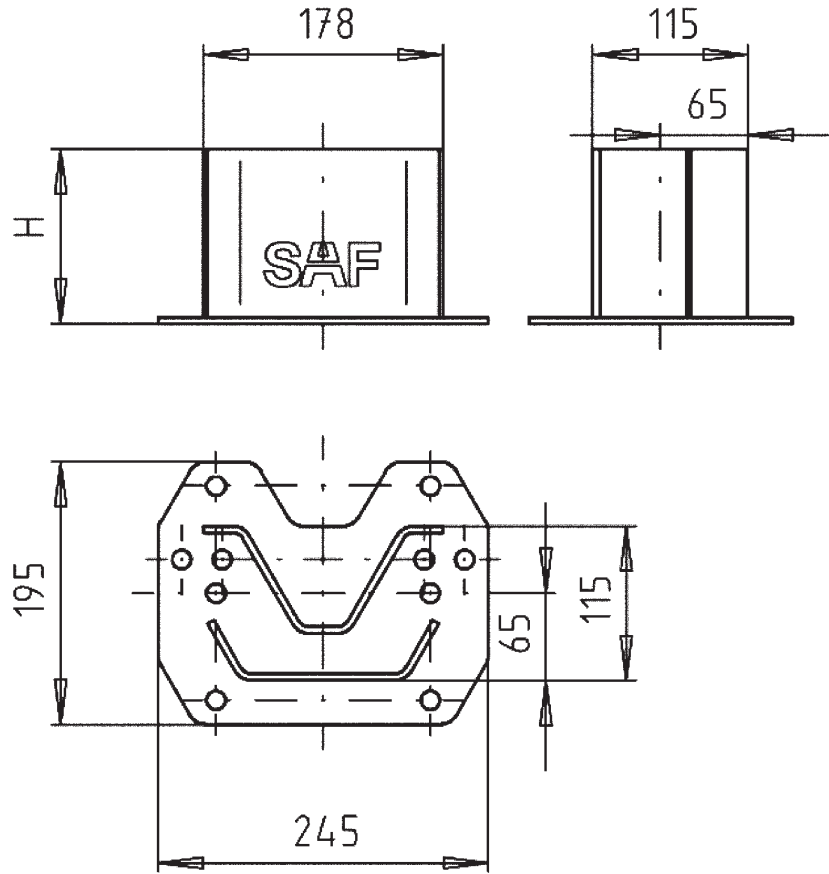


300 high – series IU / IO



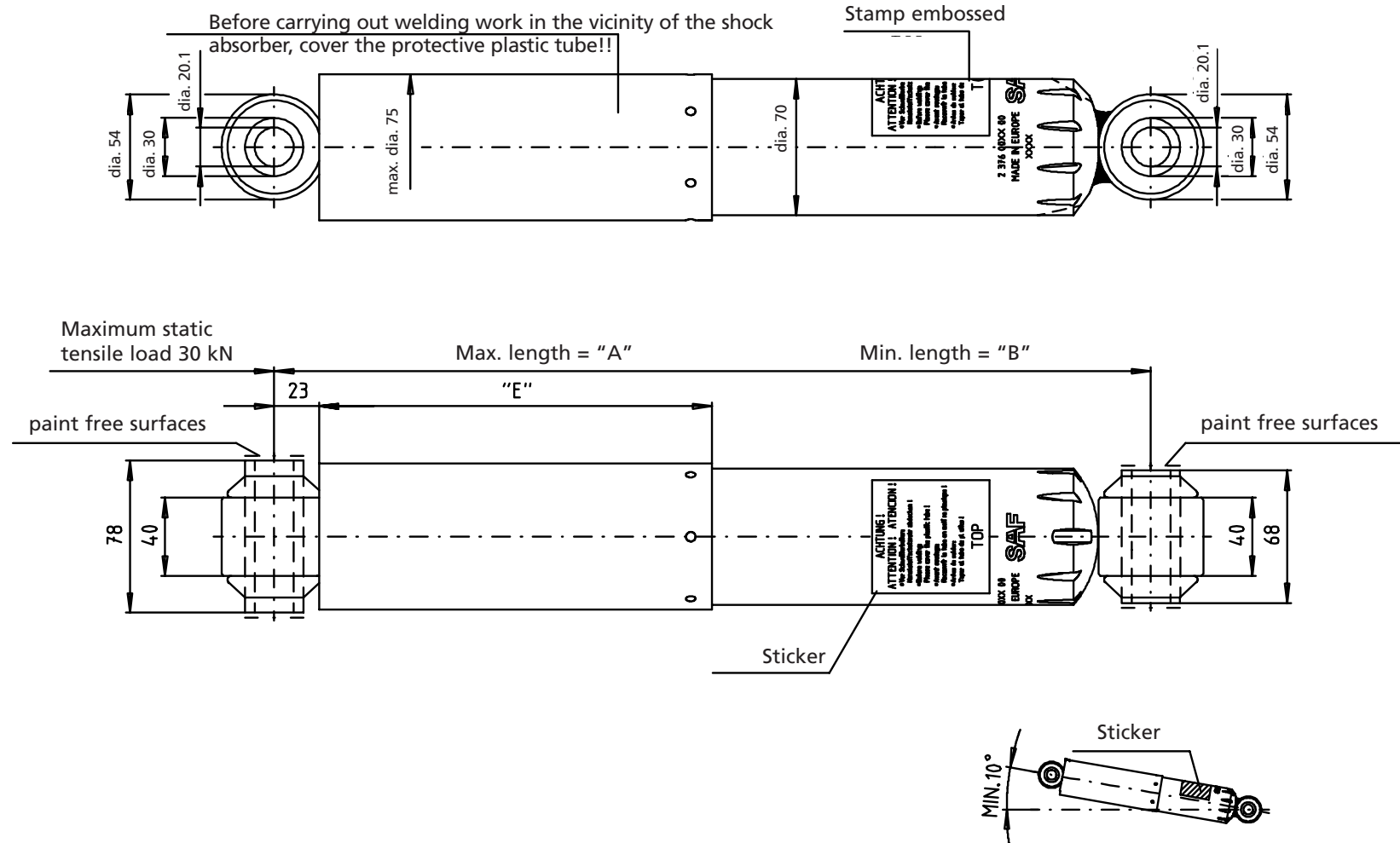
| | |
|------|-------------------|
| | |
| 1400 | 2 291 0421 00 |
| 1300 | 2 291 0402 00 |
| 1200 | 2 291 0428 00 |
| "A" | ORDER-NO.: |

AIR BAG BRACKETS



| Designation / Remark | H (mm) | Order No.: |
|-----------------------------|--------|---------------|
| Air bag brackets „steel“ | 50 | 2 237 0081 01 |
| | 100 | 2 237 0080 01 |
| | 150 | 2 237 0082 01 |

SHOCK ABSORBERS



| Drawing No. | A | B | Stroke | E |
|---------------|-----|-----|--------|-----|
| 2 376 0070 01 | 413 | 278 | 135 | 202 |
| 2 376 0071 01 | 491 | 315 | 176 | 202 |
| 2 376 0072 01 | 532 | 335 | 197 | 220 |

ATTENTION: ONLY INSTALL SHOCK ABSORBERS FROM THE SAME MANUFACTURER PER AXLE

Ride height / shock absorber allocation



| Series / Standard | Ride height (mm) | Hanger bracket (mm) | Air bag bracket (mm) | Lift / Lower (mm) | Length of shock absorber (mm) | | | Type of shock absorber |
|-------------------|------------------|---------------------|----------------------|-------------------|-------------------------------|-------------|------|------------------------|
| | | | | | min. | Ride height | max. | |
| IU 25/2000 33/27 | 250 | 200 | 0 | 90 / 90 | 306 | 340 | 380 | 2 376 0070 01 |
| IU 28/2005 33/27 | 280 | 200 | 50 | 90 / 90 | 316 | 351 | 390 | 2 376 0070 01 |
| IU 30/2505 33/27 | 300 | 250 | 50 | 90 / 90 | 350 | 391 | 437 | 2 376 0071 01 |
| IU 33/2510 33/27 | 330 | 250 | 100 | 90 / 90 | 363 | 404 | 447 | 2 376 0071 01 |
| IU 35/3010 33/27 | 350 | 300 | 100 | 90 / 90 | 350 | 391 | 437 | 2 376 0071 01 |

| | | | | | | | | |
|------------------|-----|-----|-----|-------|-----|-----|-----|---------------|
| IO 35/2000 33/27 | 355 | 200 | 0 | 90/90 | 343 | 381 | 421 | 2 376 0071 01 |
| IO 37/2500 33/27 | 375 | 250 | 0 | 90/90 | 382 | 424 | 470 | 2 376 0071 01 |
| IO 40/2505 33/27 | 405 | 250 | 50 | 90/90 | 395 | 437 | 482 | 2 376 0072 01 |
| IO 42/3005 33/27 | 425 | 300 | 50 | 90/90 | 382 | 424 | 470 | 2 376 0071 01 |
| IO 45/3010 33/27 | 455 | 300 | 100 | 90/90 | 395 | 437 | 482 | 2 376 0072 01 |
| IO 47/3510 33/27 | 475 | 350 | 100 | 90/90 | 382 | 424 | 470 | 2 376 0071 01 |
| IO 50/3515 33/27 | 505 | 350 | 150 | 90/90 | 395 | 437 | 482 | 2 376 0072 01 |

| | | | | | | | | |
|------------------|-----|-----|-----|--------|-----|-----|-----|---------------|
| IU 29/2000 31/41 | 290 | 200 | 0 | 95/105 | 316 | 355 | 408 | 2 376 0070 01 |
| IU 31/2500 31/41 | 310 | 250 | 0 | 95/105 | 349 | 395 | 455 | 2 376 0071 01 |
| IU 34/2505 31/41 | 340 | 250 | 50 | 95/105 | 362 | 408 | 466 | 2 376 0071 01 |
| IU 36/3005 31/41 | 360 | 300 | 50 | 95/105 | 349 | 395 | 455 | 2 376 0071 01 |
| IU 39/3010 31/41 | 390 | 300 | 100 | 95/105 | 362 | 408 | 466 | 2 376 0071 01 |
| IU 42/3015 31/41 | 420 | 300 | 150 | 95/105 | 375 | 422 | 476 | 2 376 0072 01 |

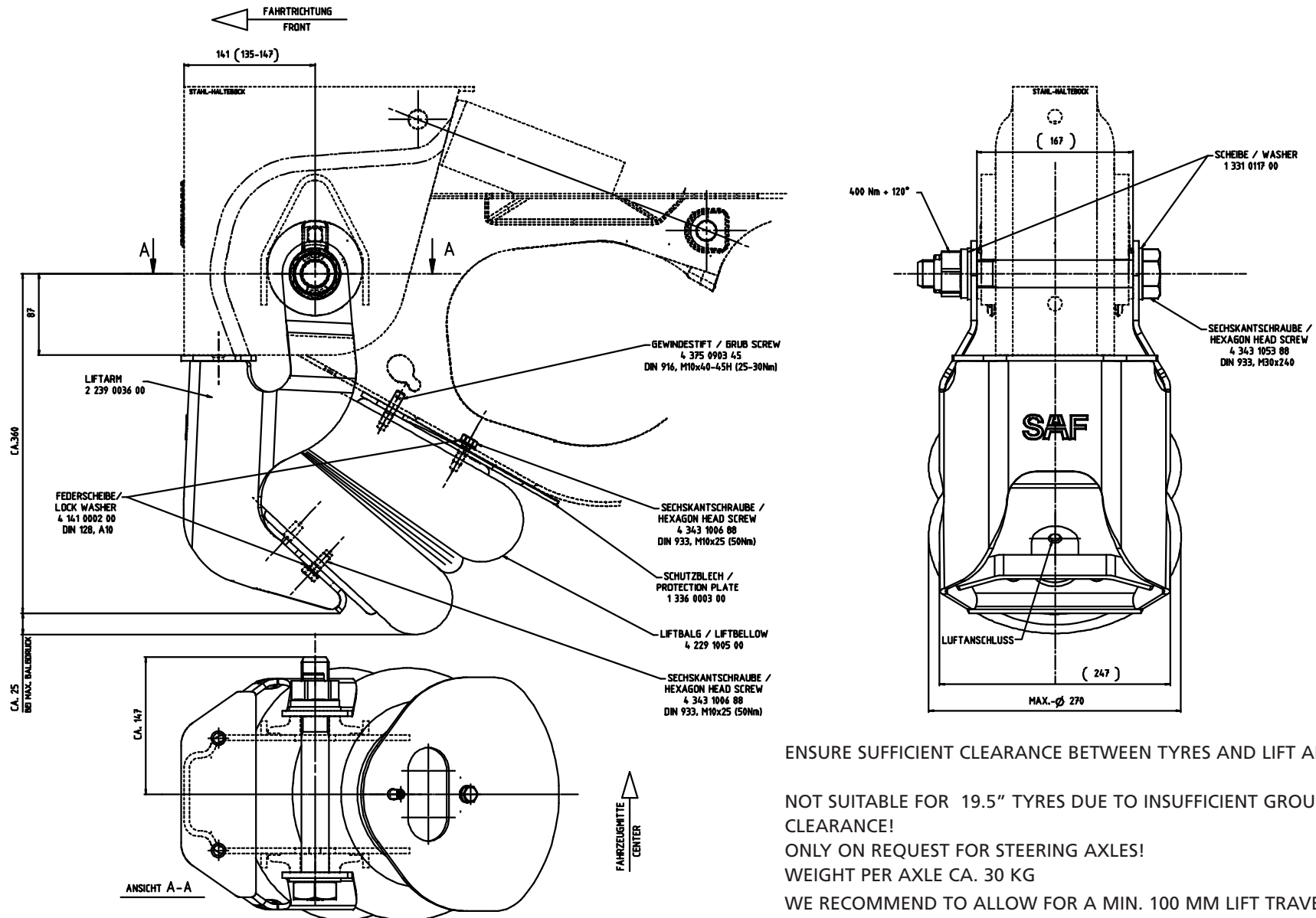
| | | | | | | | | |
|------------------|-----|-----|----|--------|-----|-----|-----|---------------|
| IO 44/3000 31/41 | 440 | 300 | 0 | 85/115 | 380 | 430 | 486 | 2 376 0072 01 |
| IO 49/3505 31/41 | 490 | 350 | 50 | 85/115 | 380 | 430 | 486 | 2 376 0072 01 |

AXLE LIFTS

Two-side lift – series IU / IO



for steel hanger brackets



ENSURE SUFFICIENT CLEARANCE BETWEEN TYRES AND LIFT ARM!

NOT SUITABLE FOR 19.5" TYRES DUE TO INSUFFICIENT GROUND CLEARANCE!

ONLY ON REQUEST FOR STEERING AXLES!

WEIGHT PER AXLE CA. 30 KG

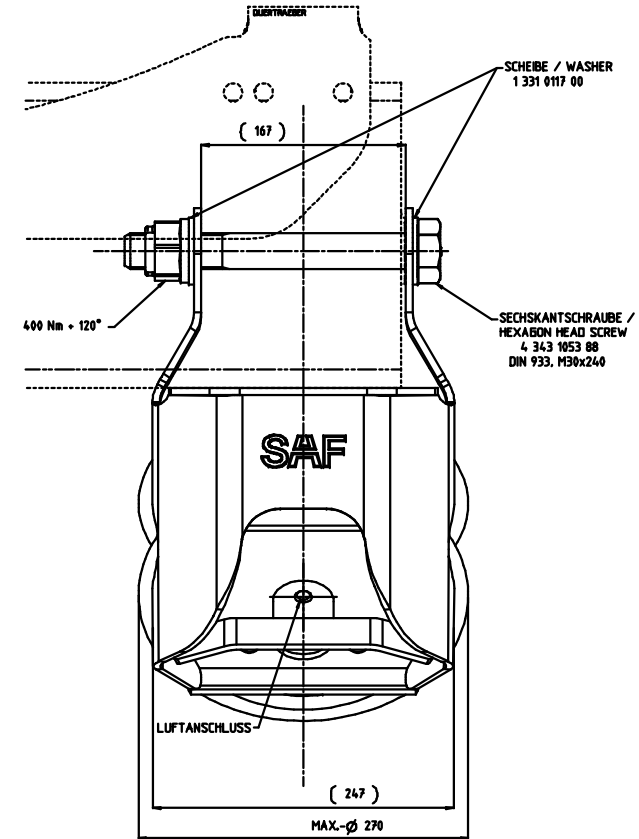
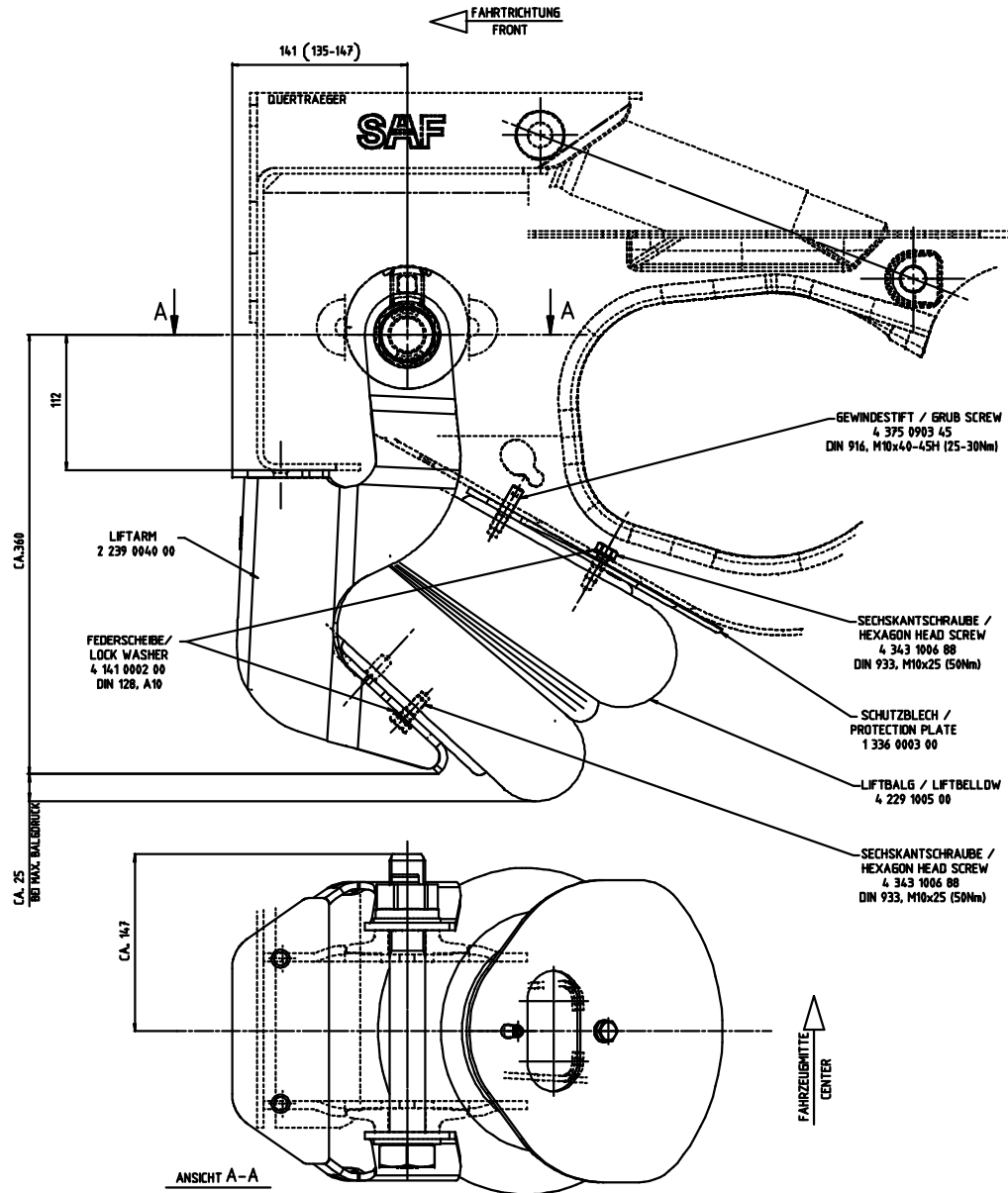
WE RECOMMEND TO ALLOW FOR A MIN. 100 MM LIFT TRAVEL WHEN SETTING THE RIDE HEIGHT.

Ref. No.: 03027124201

Two-side lift – series IU / IO



for cross members



ENSURE SUFFICIENT CLEARANCE BETWEEN TYRES AND LIFT ARM!

NOT SUITABLE FOR 19.5" TYRES DUE TO INSUFFICIENT GROUND CLEARANCE!

ONLY ON REQUEST FOR STEERING AXLES!

WEIGHT PER AXLE CA. 30 KG

WE RECOMMEND TO ALLOW FOR A MIN. 100 MM LIFT TRAVEL WHEN SETTING THE RIDE HEIGHT.

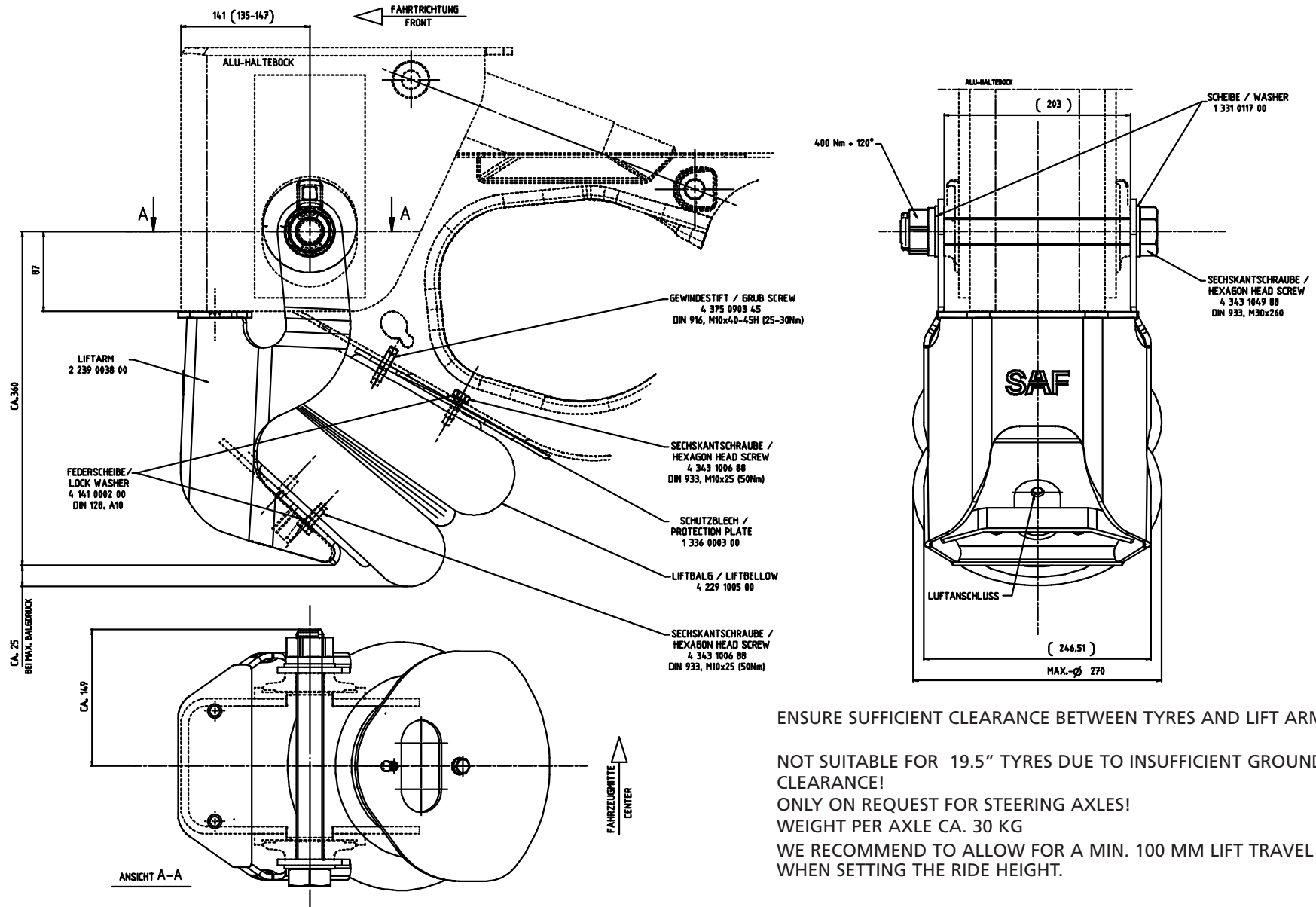
Ref. No.: 03027124301

CONTENTS

Two-side lift – series IU / IO



for alu hanger brackets



ENSURE SUFFICIENT CLEARANCE BETWEEN TYRES AND LIFT ARM!

NOT SUITABLE FOR 19.5" TYRES DUE TO INSUFFICIENT GROUND CLEARANCE!

ONLY ON REQUEST FOR STEERING AXLES!

WEIGHT PER AXLE CA. 30 KG

WE RECOMMEND TO ALLOW FOR A MIN. 100 MM LIFT TRAVEL WHEN SETTING THE RIDE HEIGHT.

Two-side lift – installation instructions



Following types are available:

| | |
|-----------------|-------------------------------|
| Kit-No.: | Application: |
| 3 027 1242 01 | for steel hanger brackets |
| 3 027 1243 01 | for cross member |
| 3 027 1244 01 | for aluminium hanger brackets |

| | | |
|----------------------|---|---------|
| Kit Contents: | SAF Part No. | |
| 1 x lift arm | 2 236 0036 00 (for steel hanger brackets) | item 6 |
| | 2 236 0038 00 (for aluminium hanger brackets) | |
| | 2 236 0040 00 (for cross member) | |
| 1 x lift bag | 4 229 1005 00 | item 7 |
| 1 x protection plate | 1 336 0003 00 | item 11 |
| 1 x hex bolt | 4 343 1053 88 (for steel hanger brackets) | item 1 |
| | 4 343 1049 88 (for aluminium hanger brackets) | |
| | 4 343 1053 88 (for cross member) | |
| 2 x disc | 1 331 0117 00 | item 2 |
| 3 x hex bolt | 4 343 1006 88 | item 9 |
| 3 x spring washer | 4 141 0002 00 | item 10 |
| 1 x threaded bolt | 4 375 0903 45 | item 8 |

Two kits are required for each lift axle

Installation Instruction

Installation of the lift arm:

- Remove the existing suspension mounting bolts (**pos. 3-5** re-use).
- Position the lift arm (**6**) over the hanger bracket or cross member.
- Mount the spring bearing according to the illustration, **pos. 1+2** new from the kit, re-use **pos. 3, 4, 5**.

Important:

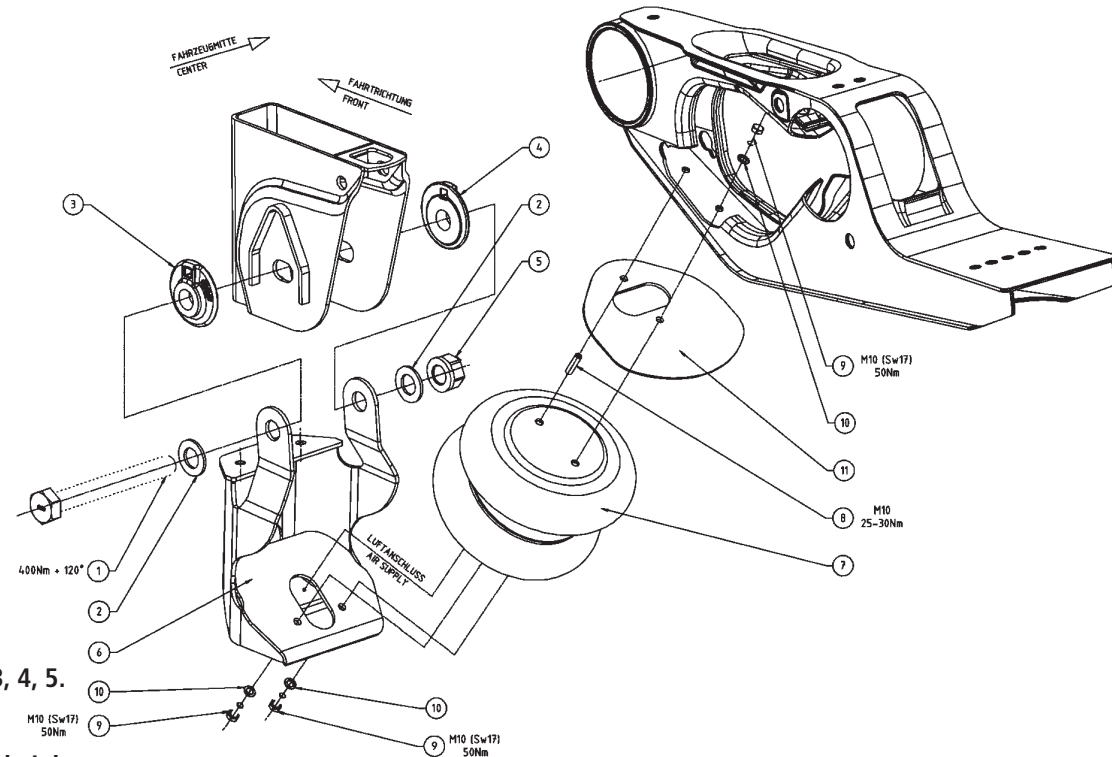
The spring bearing must be tightened according to the SAF torque regulations in the ride height (see reverse: 400 Nm + 120°).

Installation of the lift bag:

- Fix lift bag **pos. 7** from underneath with two bolts enclosed **pos. 9** and washers **pos. 10** to the lift arm (torque moment 50 Nm).
- The air connection of the lift bag **must** point down to the lift arm **pos. 6**, as illustrated.
- Screw the threaded bolt **pos. 8** to the upper bag plate as illustrated (torque moment 25 - 30 Nm).
- Air bag **pos. 7** and protection plate **pos. 11** are locked by the threaded bolt **pos. 8** and fixed with bolt **pos. 9** as well as the washer **pos. 10** from the inner side of the arm (torque moment 50 Nm).

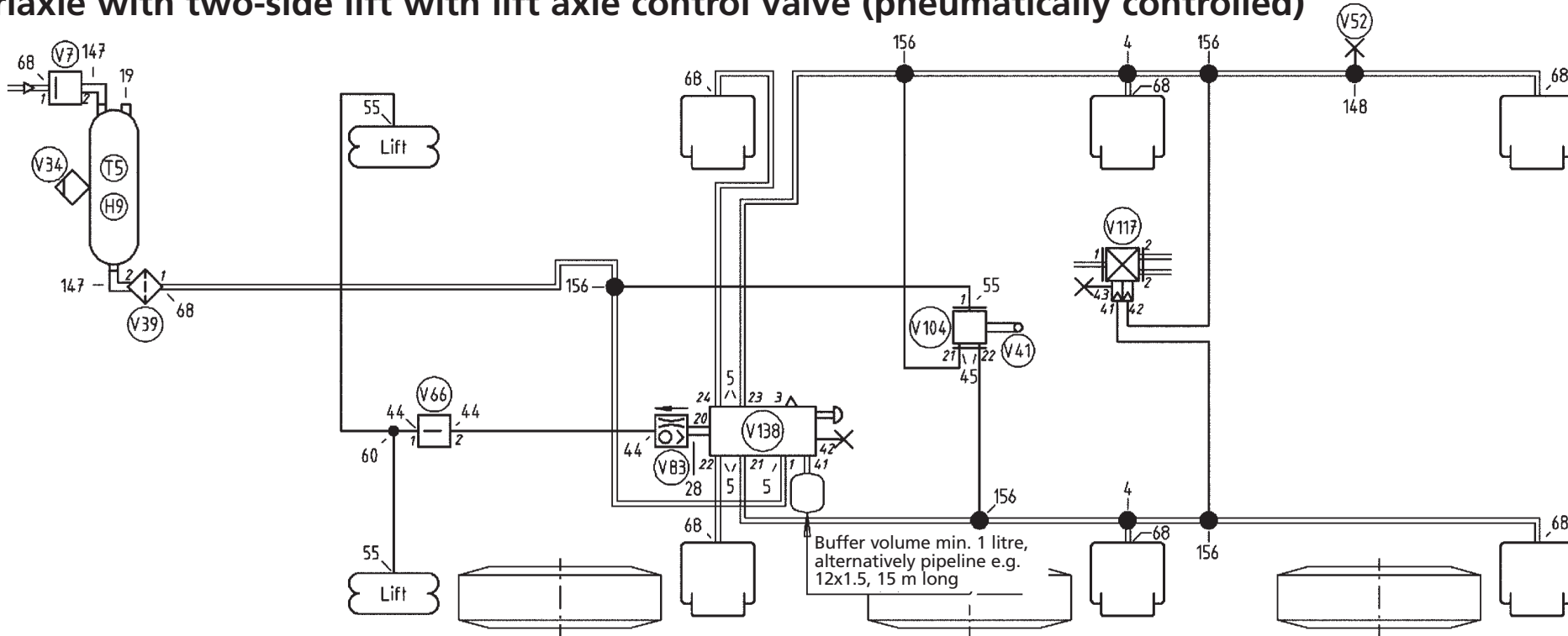
Please note:

- Circuit diagrams for axle lift control system, see separate information sheets.



Two-side lift – circuit diagram

Triaxle with two-side lift with lift axle control valve (pneumatically controlled)



| SAF Part No. Item No. | Qty. | Index | SAF Part No. Item No. | Qty. | Index | SAF Part No. Item No. | Qty. | Index | SAF Part No. Item No. | Qty. | Index |
|--------------------------|------|-------|--------------------------|------|-------|--------------------------|------|-------|--------------------------|------|-------|
| T 4 105 0005 00 | 1 | | 4 424 0004 00 | 2 | | 4 424 1001 00 | 4 | b | V 4 425 1007 00 | 1 | |
| | | | 5 | 5 | | 1002 | 1 | b | 34 | 1 | |
| | | | 19 | 1 | | 1007 | 1 | b | 39 | 1 | |
| H 4 405 0009 00 | 2 | | 28 | 1 | | | | | 41 | 1 | c |
| | | | 44 | 3 | | | | | 52 | 1 | |
| | | | 45 | 2 | | | | | 66 | 1 | |
| | | | 55 | 3 | | | | | 83 | 1 | |
| | | | 60 | 1 | | | | | 104 | 1 | c |
| | | | 68 | 8 | | | | | 117 99 | 1 | a |
| | | | 147 | 2 | | | | | 138 | 1 | d |
| | | | 148 | 1 | | | | | | | |
| | | | 156 | 5 | | | | | | | |

Legends to index:

- a = not our scope of supply (.99)
- b = seal kit (not shown)
- c = installed on middle axle
- d = setting range 2.5 - 7 bar, set to air bag pressure at nominal axle load (tolerance + 0.3 bar)

- = pipe 8 x 1
- == = pipe 12 x 1,5
- - - = hose 13 x 6
- = electric cable

- (T5) (H9) (V7) = devices
- 42— = screws
- 22 = port designations

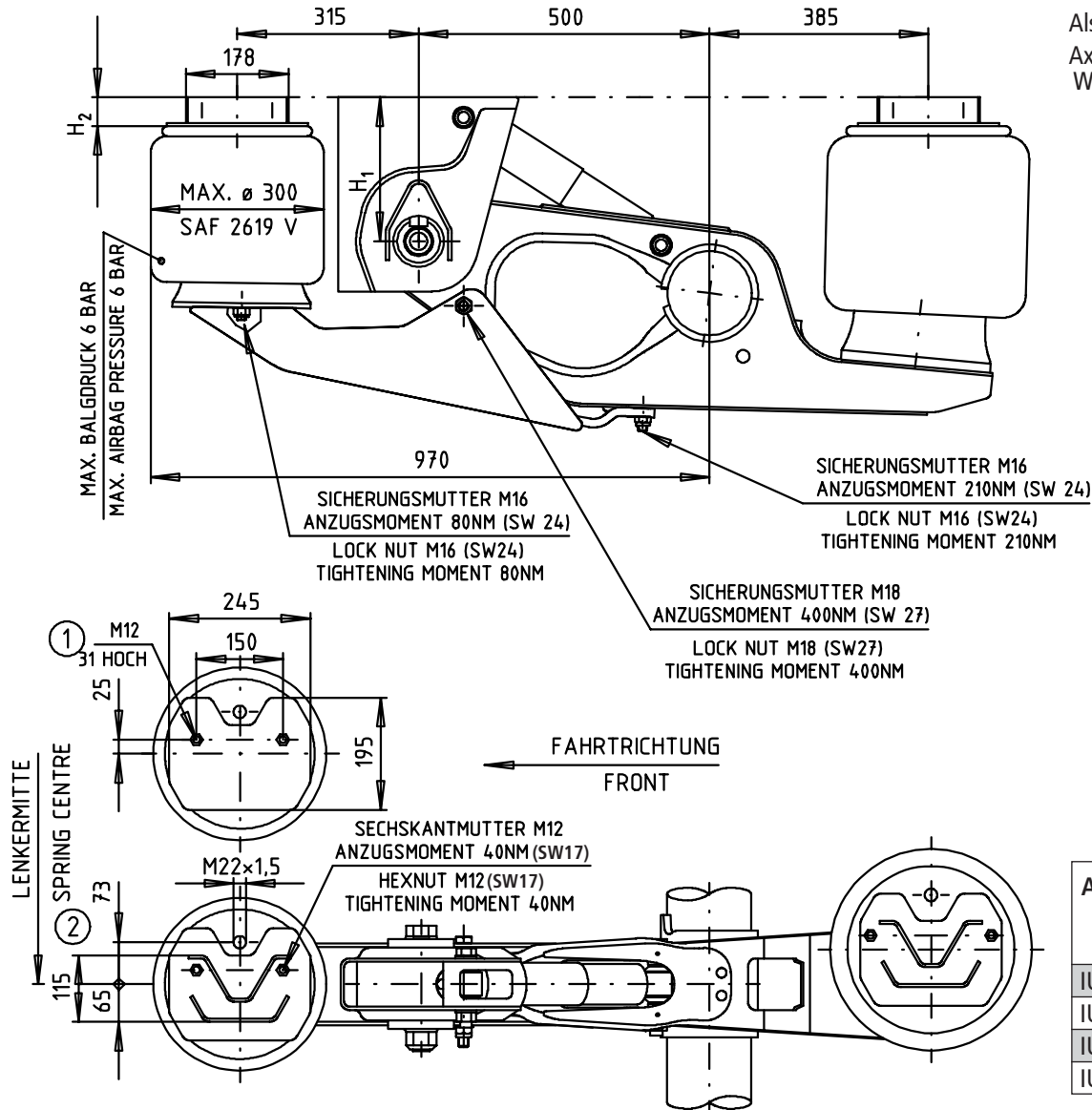
Two-side lift – circuit diagram – parts list



Triaxle with two-side lift with lift axle control valve (pneumatically controlled)

| Part No. | Quantity | Designation | WABCO | Grau | Knorr | Further | Number |
|-----------------|----------|-------------------------------------|------------|-----------|---------------|-----------|------------|
| T 4 105 0005 00 | 1 | Air reservoir 60 lt. | 9507600020 | 30001619 | VB 3306 / 276 | Kleusberg | 10.1060.03 |
| H 4 405 0009 00 | 2 | Reservoir holder. 40 / 60 lt. | 4519992762 | 30200309 | VB 1276 | WIHAG | F125500276 |
| 4 424 0004 40 | 2 | Equal T Coupling AD12 | | | | WIRA-No. | 311 1212 2 |
| 4 424 0005 40 | 5 | Straight male stud coupling f.D12 | | | | WIRA-No. | 301 1216 2 |
| 4 424 0019 40 | 1 | Plug M22x1.5 | | | | WIRA-No. | 362 0522 2 |
| 4 424 0028 40 | 1 | Double connector M22x1.5 / D15 | | | | | |
| 4 424 0044 40 | 3 | Straight male stud coupling M22x1.5 | | | | WIRA-No. | 301 0822 2 |
| 4 424 0045 40 | 2 | Straight male stud coupling M22x1.5 | | | | WIRA-No. | 301 0812 2 |
| 4 424 0055 40 | 3 | Male stud elbow coupling M12 | | | | WIRA-No. | 305 0812 2 |
| 4 424 0060 40 | 1 | Equal T coupling E8 / F8 / G8 | | | | WIRA-No. | 311 0808 2 |
| 4 424 0068 40 | 8 | Straight male stud coupling M22x1.5 | | | | WIRA-No. | 301 1222 2 |
| 4 424 0147 40 | 2 | Elbow with lock nut M22x1.5 | | | | WIRA-No. | 305 2224 2 |
| 4 424 0148 40 | 1 | Male stud T coupling D12 / M22x1.5 | | | | WIRA-No. | 310 1222 2 |
| 4 424 0156 40 | 5 | Equal T coupling D12 / 8 / 12 | | | | WIRA-No. | 311 1208 2 |
| V 4 425 0007 00 | 1 | Charging valve (overflow) 6.0 bar | 4341001250 | 314012004 | 490434100 | | |
| V 4 425 0034 40 | 1 | Drain valve M22x1.5 | | | | WIRA-No. | 366 1122 5 |
| V 4 425 0039 00 | 1 | Pipe filter 8 bar / NW12 | 4325000200 | | | DEWE-No. | 2210400002 |
| V 4 425 0041 00 | 1 | Link connection NW6 | 4334010030 | 612025001 | 2520002560 | | |
| V 4 425 0052 00 | 1 | Test connection M22x1.5 / SW27 | 4637031170 | 318059001 | | WIRA-No. | 465 1722 5 |
| V 4 425 0066 00 | 1 | Charging valve (overflow) 0.5 bar | 4341000270 | 314013012 | | | |
| V 4 425 0083 00 | 1 | Check valve max. 8 bar | 4340140010 | | 1505102000 | | |
| V 4 425 0104 00 | 1 | Levelling valve M12x1.5 | 4640060020 | | 2501395000 | | |
| V 4 425 0117 99 | (1) | Automatic load sensing valve | 4757145000 | | 2905522000 | | |
| V 4 425 0138 00 | 1 | Pneumatic lift axle control valve | 4630840000 | | 3201010000 | | |

Items in brackets are not included in the delivery



Also suitable for steering axles.

Axle lift may be mounted on the left or right hand side.

We recommend to allow for a min. 100mm lift travel when setting the ride height.

| Air suspension type | | Dimension H ₁ | Dimension H ₂ | Order No. Axle lift Assy. | Lift weight with air bag and fixing |
|---------------------|--------------|--------------------------|--------------------------|---------------------------|-------------------------------------|
| IUXX/20XX XX | IOXX/20XX XX | 200 | 5 ① | 3 027 1257 00 | approx. 30.5 kg |
| IUXX/25XX XX | IOXX/25XX XX | 250 | 50 ② | 3 027 1258 00 | approx. 31.4 kg |
| IUXX/30XX XX | IOXX/30XX XX | 300 | 100 ② | 3 027 1259 00 | approx. 32.3 kg |
| IUXX/35XX XX | IOXX/35XX XX | 350 | 150 ② | 3 027 1260 00 | approx. 33.2 kg |

One-side lift – installation instructions



Following kits are available:

Kit-No.:

3 027 1257 00
3 027 1258 00
3 027 1259 00
3 027 1260 00

Application:

for hanger bracket / cross member height H1=200 mm
for hanger bracket / cross member height H1=250 mm
for hanger bracket / cross member height H1=300 mm
for hanger bracket / cross member height H1=350 mm

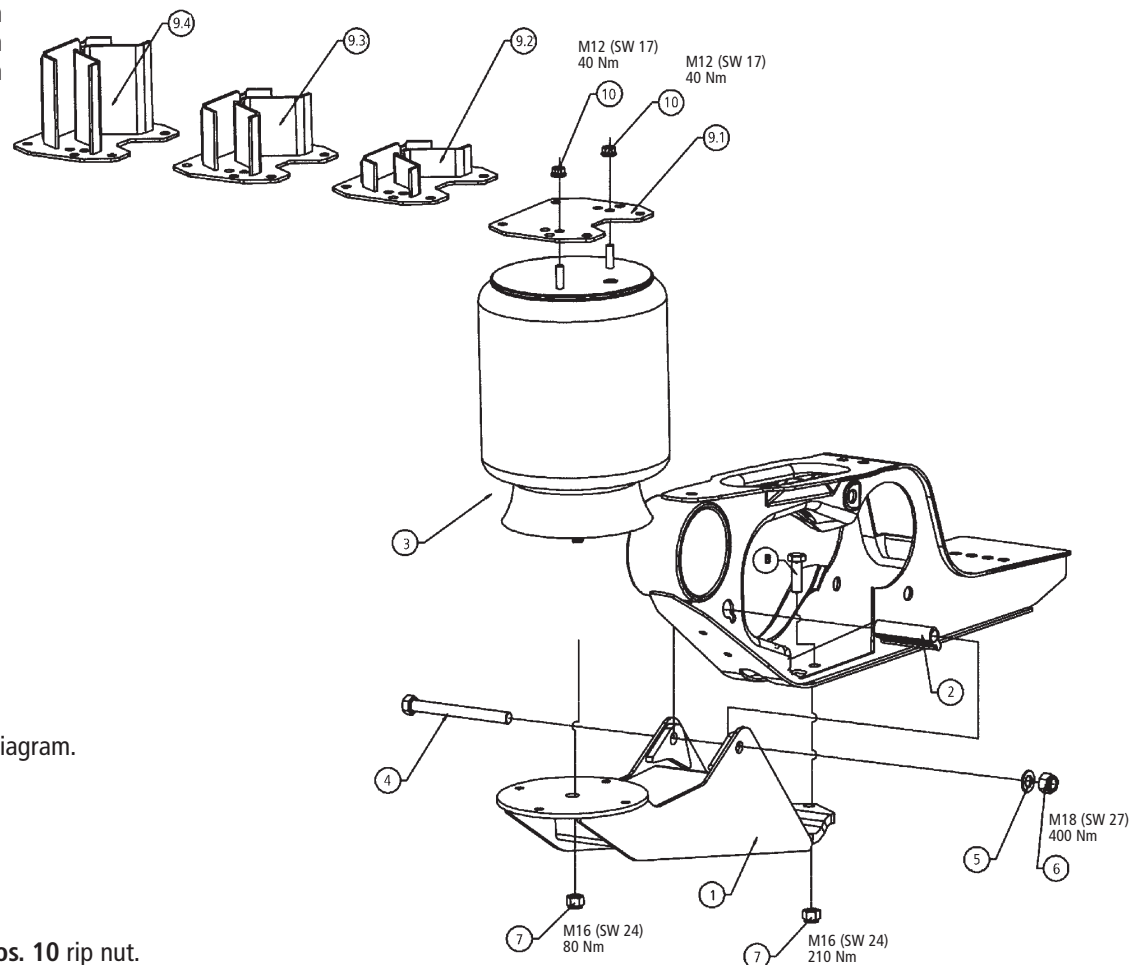
Kit-Contents:

1 x lift arm
1 x guide
1 x air bag
1 x hex bolt
1 x ring
1 x lock nut
2 x lock nut
1 x hex bolt
1 x air spring plate
1 x air spring support
1 x air spring support
1 x air spring support
2 x rip nut

SAF Part No.

2 239 0042 00
1 148 0010 00
3 229 0033 00
4 343 0151 10
4 348 1021 00
4 247 4026 10
4 247 4007 80
4 343 1010 88
1 043 0261 01 (H1 = 200 mm)
2 237 0081 01 (H1 = 250 mm)
2 237 0080 01 (H1 = 300 mm)
2 237 0082 01 (H1 = 350 mm)
4 247 4047 10

item 1
item 2
item 3
item 4
item 5
item 6
item 7
item 8
item 9.1
item 9.2
item 9.3
item 9.4
item 10



Installation Instructions

Lift arm installation

- Position **pos. 2** guide in the gap in the suspension arm.
- Place **pos.1** lift arm in **pos. 2** guide using **pos. 4** bolt, **pos. 5** ring and **pos. 6** nut as per the diagram.
- Fix **pos. 1** lift arm to the underside of the arm with **pos. 8** bolt and **pos. 7** nut.
- Tighten according to the torque in the diagram.

Lift bag installation:

- Fix **pos. 9.1/9.4** air spring support/plate to the chassis as per diagram 6 027 1257 00.
- Screw **pos. 3** air bag to **pos. 1** lift arm with **pos. 7** nut.
- Screw the dowel pins of the air bag plate to the **pos. 9.1/9.4** air spring support/plate using **pos. 10** rip nut.
- The **pos. 3** air bag supply **must** lie in the cut-out of **pos. 9.1/9.4** air spring support/plate as shown in the diagram.
- Tighten according to the torque in the diagram.

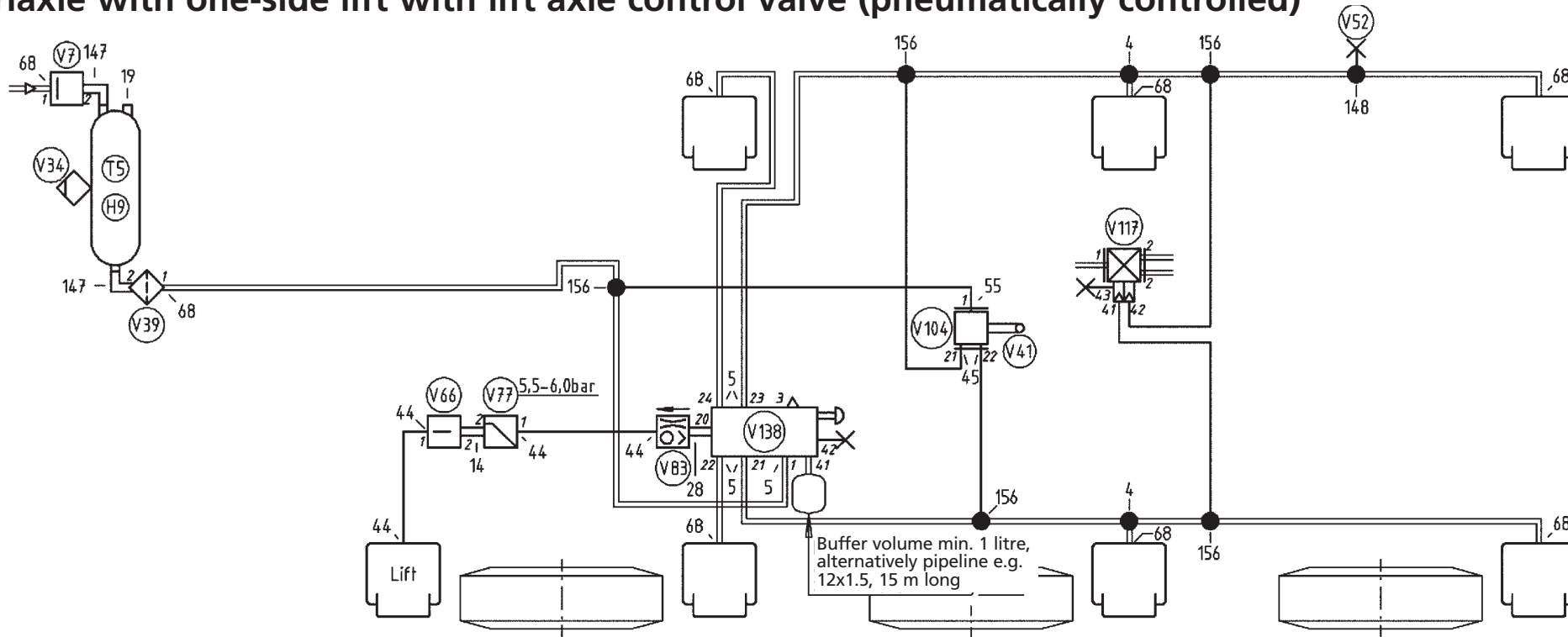
Please note:

- See separate information sheets for axle lift circuit diagrams

One-side lift – circuit diagram



Triaxle with one-side lift with lift axle control valve (pneumatically controlled)



| SAF Part No. Item No. | Qty. | Index | SAF Part No. Item No. | Qty. | Index | SAF Part No. Item No. | Qty. | Index | SAF Part No. Item No. | Qty. | Index |
|--------------------------|------|-------|--------------------------|------|-------|--------------------------|------|-------|--------------------------|------|-------|
| T 4 105 0005 00 | 1 | | 4 424 0004 00 | 2 | | 4 424 1001 00 | 5 | b | V 4 425 1007 00 | 1 | |
| | | | 5 | 5 | | 1002 | 1 | b | 34 | 1 | |
| | | | 14 | 1 | | 1007 | 1 | b | 39 | 1 | |
| H 4 405 0009 00 | 2 | | 19 | 1 | | | | | 41 | 1 | c |
| | | | 28 | 1 | | | | | 52 | 1 | |
| | | | 44 | 4 | | | | | 66 | 1 | |
| | | | 45 | 2 | | | | | 77 | 1 | |
| | | | 55 | 1 | | | | | 83 | 1 | |
| | | | 68 | 8 | | | | | 104 | 1 | c |
| | | | 147 | 2 | | | | | 117 99 | 1 | a |
| | | | 148 | 1 | | | | | 138 | 1 | d |
| | | | 156 | 5 | | | | | | | |

Legends to index:

- a = not our scope of supply (.99)
- b = seal kit (not shown)
- c = installed on middle axle
- d = setting range 2.5 - 7 bar, set to air bag pressure at nominal axle load (tolerance + 0.3 bar)

- = pipe 8 x 1
- == = pipe 12 x 1,5
- - - = hose 13 x 6
- = electric cable

- ⊗ T5 ⊗ H9 ⊗ V7 = devices
- 42 = screws
- 22 = port designations

One-side lift – circuit diagram – parts list

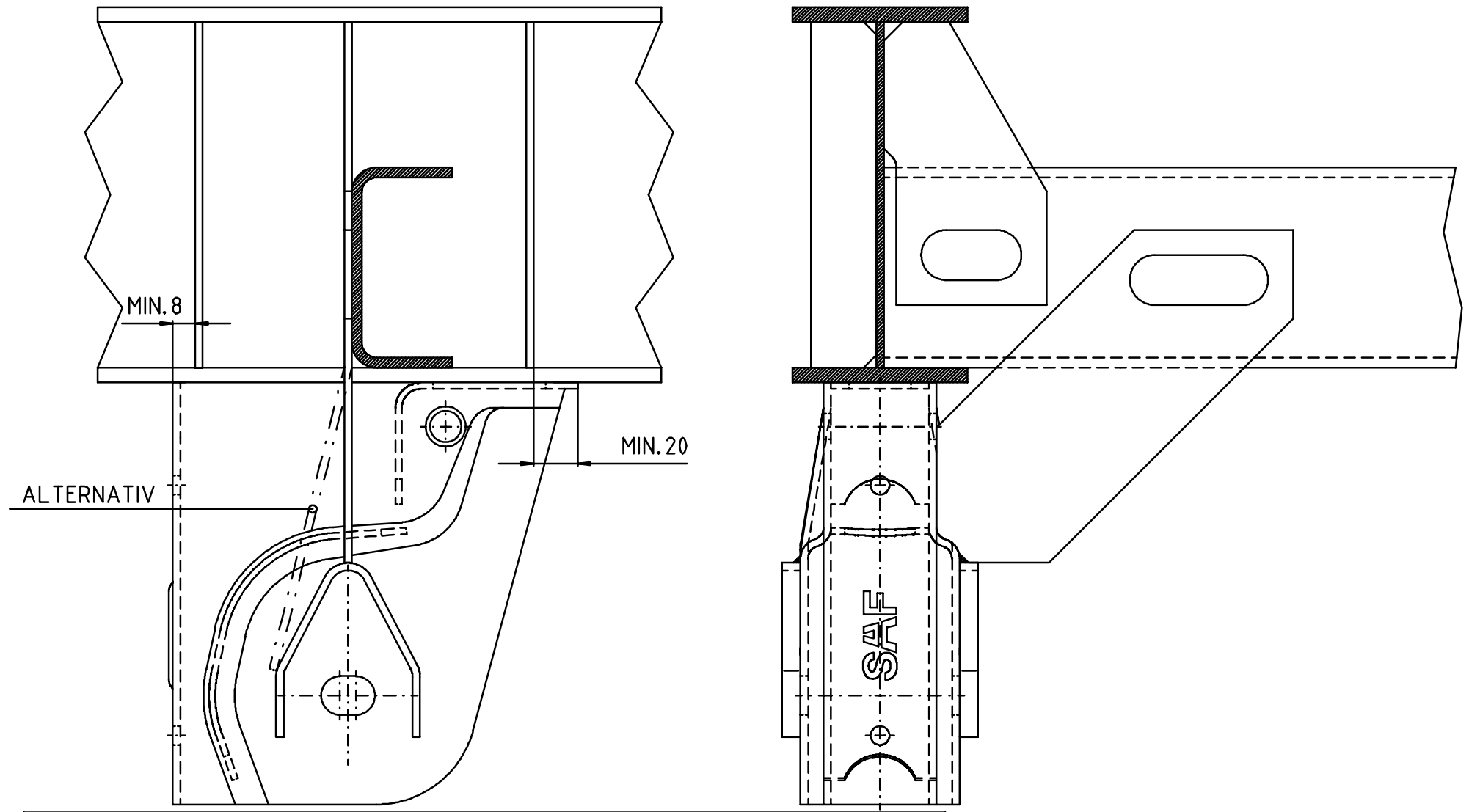


Triaxle with one-side lift with lift axle control valve (pneumatically controlled)

| Part No. | Quantity | Designation | WABCO | Grau | Knorr | Further | Number |
|-----------------|----------|-------------------------------------|------------|-----------|---------------|-----------|------------|
| T 4 105 0005 00 | 1 | Air reservoir 60 lit. | 9507600020 | 30001619 | VB 3306 / 276 | Kleusberg | 10.1060.03 |
| H 4 405 0009 00 | 2 | Reservoir holder. 40 / 60 lit. | 4519992762 | 30200309 | VB 1276 | WIHAG | F125500276 |
| 4 424 0004 40 | 2 | Equal T Coupling AD12 | | | | WIRA-No. | 311 1212 2 |
| 4 424 0005 40 | 5 | Straight male stud coupling f.D12 | | | | WIRA-No. | 301 1216 2 |
| 4 424 0014 40 | 1 | Double connector with lock nut M22 | | | | WIRA-No. | 314 6523 2 |
| 4 424 0019 40 | 1 | Plug M22x1.5 | | | | WIRA-No. | 362 0522 2 |
| 4 424 0028 40 | 1 | Double connector M22x1.5 / D15 | | | | | |
| 4 424 0044 40 | 4 | Straight male stud coupling M22x1.5 | | | | WIRA-No. | 301 0822 2 |
| 4 424 0045 40 | 2 | Straight male stud coupling M22x1.5 | | | | WIRA-No. | 301 0812 2 |
| 4 424 0055 40 | 1 | Male stud elbow coupling M12 | | | | WIRA-No. | 305 0812 2 |
| 4 424 0068 40 | 8 | Straight male stud coupling M22x1.5 | | | | WIRA-No. | 301 1222 2 |
| 4 424 0147 40 | 2 | Elbow with lock nut M22x1.5 | | | | WIRA-No. | 305 2224 2 |
| 4 424 0148 40 | 1 | Male stud T coupling D12 / M22x1.5 | | | | WIRA-No. | 310 1222 2 |
| 4 424 0156 40 | 5 | Equal T coupling D12 / 8 / 12 | | | | WIRA-No. | 311 1208 2 |
| V 4 425 0007 00 | 1 | Charging valve (overflow) 6.0 bar | 4341001250 | 314012004 | DR 4341 | | |
| V 4 425 0034 40 | 1 | Drain valve M22x1.5 | | | | WIRA-No. | 366 1122 5 |
| V 4 425 0039 00 | 1 | Pipe filter 8 bar / NW12 | 4325000200 | | | DEWE-No. | 2210400002 |
| V 4 425 0041 00 | 1 | Link connection NW6 | 4334010030 | 612025001 | SEB 00256 | | |
| V 4 425 0052 00 | 1 | Test connection M22x1.5 / SW27 | 4637031170 | 318059001 | | WIRA-No. | 465 1722 5 |
| V 4 425 0066 00 | 1 | Charging valve (overflow) 0.5 bar | 4341000270 | 314013012 | | | |
| V 4 425 0077 00 | 1 | Pressure control valve 1.8 bar | 4750103070 | 357012031 | | | |
| V 4 425 0083 00 | 1 | Check valve max. 8 bar | 4340140010 | | AE 5102 | | |
| V 4 425 0104 00 | 1 | Levelling valve | 4640060020 | | SV 1395 | | |
| V 4 425 0117 99 | (1) | Automatic load sensing valve | 4757145000 | | BR 5522 | | |
| V 4 425 0138 00 | 1 | Pneumatic lift axle control valve | 4630840000 | | LS 1010 | | |

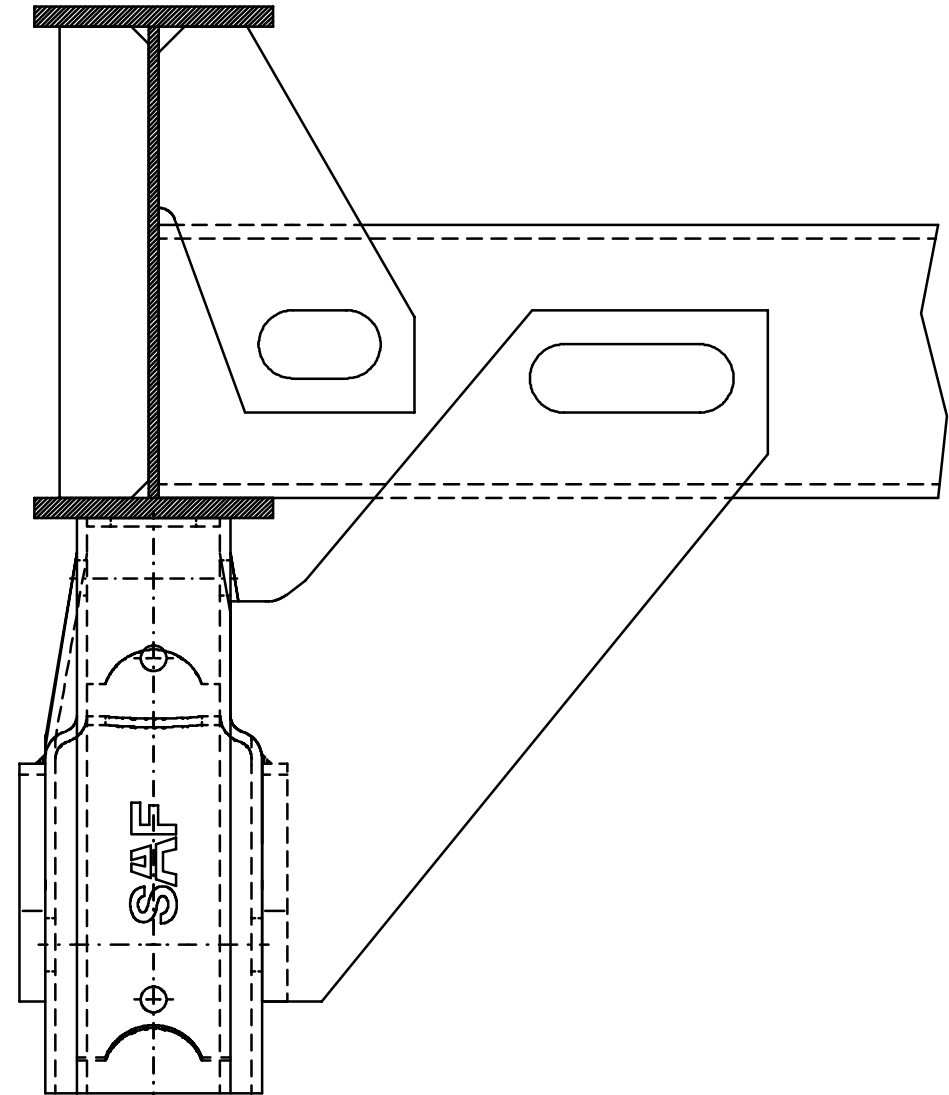
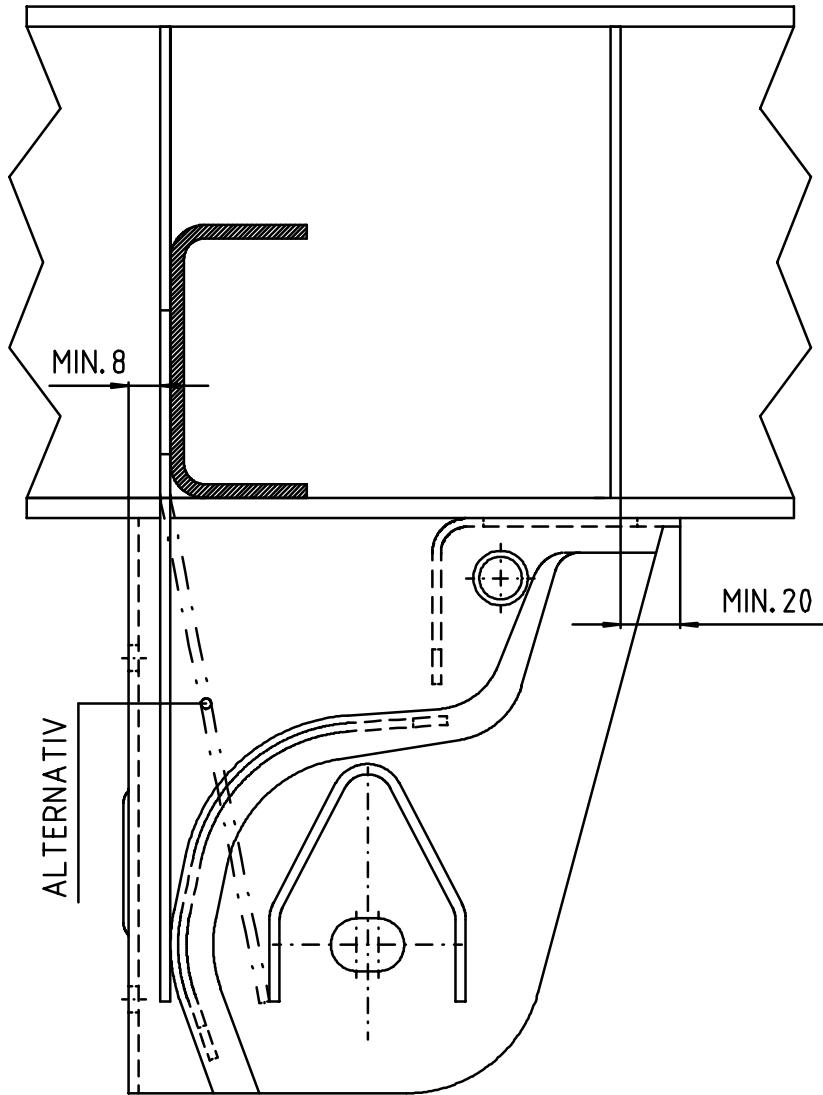
Items in brackets are not included in the delivery

RECOMMENDATIONS FOR REINFORCEMENTS AND WELDING INSTRUCTIONS



Welding instructions for hanger bracket see sheet 0 183 0004 00.

The design and dimensioning of the hanger bracket reinforcement is the responsibility of the vehicle manufacturer, allowing for the type and operating conditions of the vehicle.



Welding instructions for hanger bracket see sheet 0 183 0004 00.

The design and dimensioning of the hanger bracket reinforcement is the responsibility of the vehicle manufacturer, allowing for the type and operating conditions of the vehicle.

Welding instructions for steel hanger bracket series IU / IO



Welding recommendation

The high-tensile steel used for the hanger brackets with a carbon content C of max. 0.2 % can be easily welded. Special welding electrodes are therefore not required.

Cover the trailing arm to protect it from flying sparks. In order to avoid bearing damage, the welding equipment ground cable must not be connected either to the wheel or to the wheel hub with brake drum.

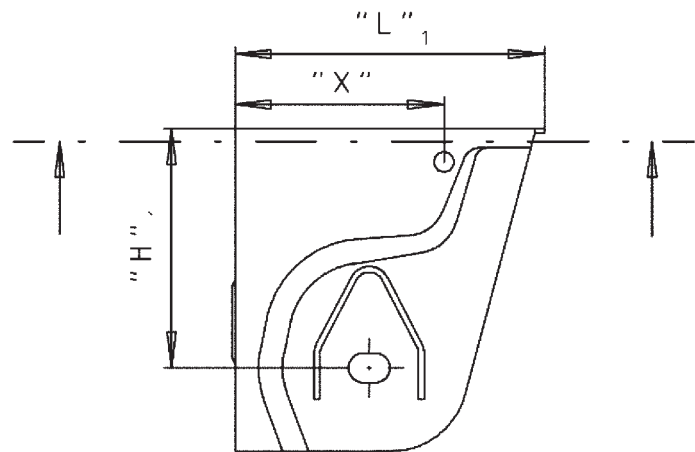
Design information

The vehicle frame must be reinforced so that it can absorb the forces to which it is exposed.

Important note

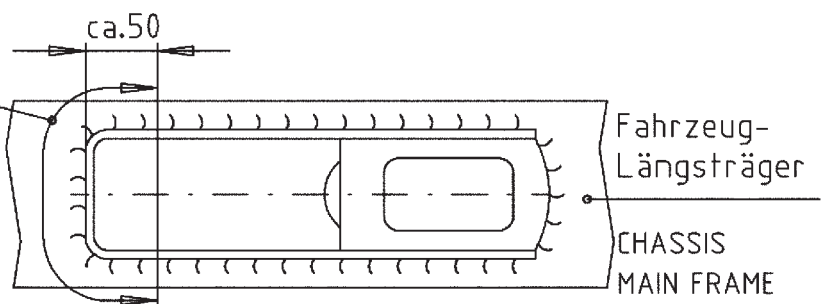
Ensure that the gap between the hanger bracket and chassis in the area "X" is kept small!

| Dimension „H“ | Dimension „L“ |
|---------------|---------------|
| 200 | 310 |
| 250 | 323 |
| 300 | 337 |
| 350 | 350 |



In diesem Bereich
keine Heftnähte,
kein Schweißnahtbeginn,
Einbrandkerben und
Endkrater nicht zulässig.

IN THIS SECTION
TACK WELD,
WELDING START,
END AND UNDERCUT
NOT PERMISSIBLE



Schweißnähte 5 
WELD SEAM

Material:

Al Mg 4.5 Mn W 28 (W = soft; 28 = tensile strength Rm min. 275 N/mm max. 350 N/mm)

Welding Recommendations

Pre-treat welding edges with steel brush. They should not be polished (Misguides the arc).

The welding seam should be kept as narrow as possible (SAF recommends a = 7 mm, champfer 5 x 30°) to minimise the heat-induced distortion and tension.

SAF uses the MIG – welding process with the additive material SG – Al Mg 4.5 Mn according to DIN 1732-T1 with the inert gas Argon according to DIN EN 439-I1.

Design information

The vehicle frame must be reinforced so that it can absorb the forces to which it is exposed.

Important note

Ensure that the gap between the hanger bracket and chassis in the area "X" is kept small!

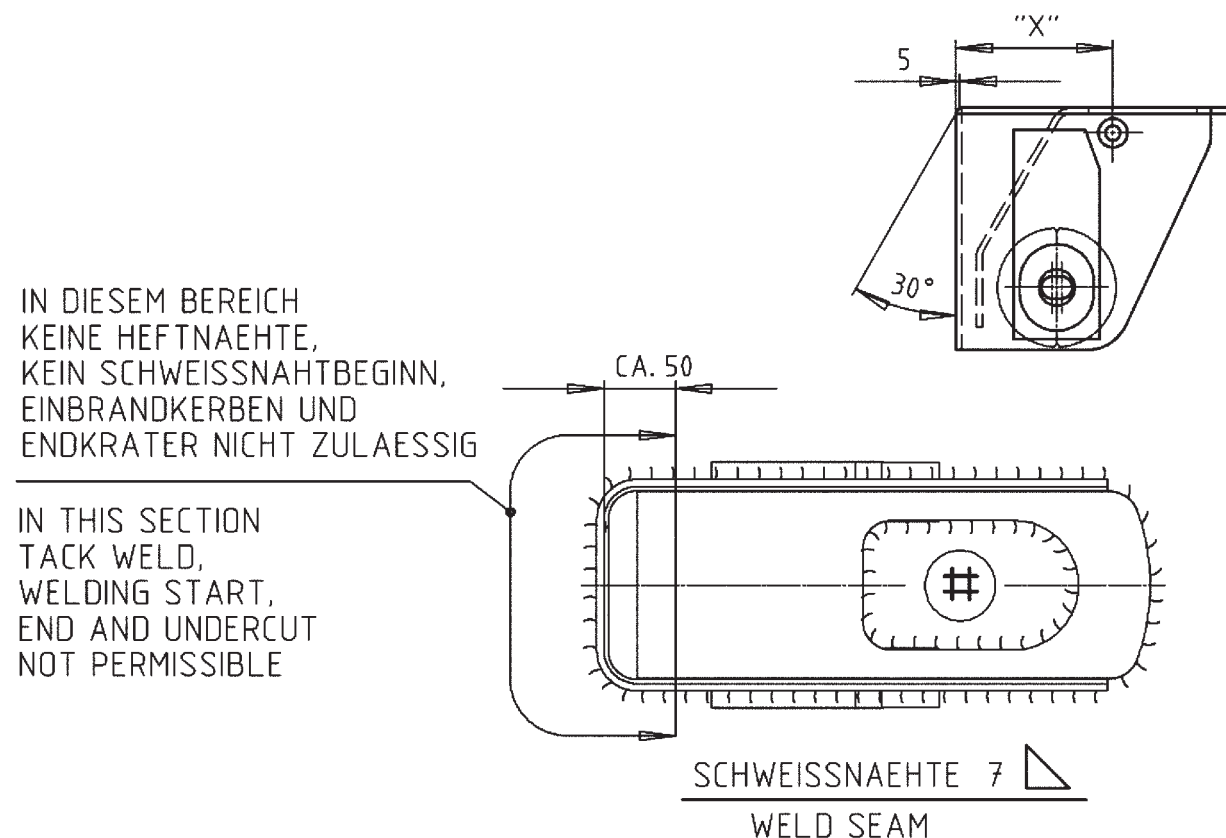
If possible slot weld in the reinforcement (⊕).

General Welding Instructions

Neither welding on nor connecting the ground cable to the suspension arm is permitted .

Cover the suspension/ trailing arm to protect from flying sparks.

To avoid damage to the bearing, the ground cable must not be connected to the wheel, hub or brake drum.



Welding recommendation – air bag bracket

Air bag offset V



Weld seam course, and bracing are SAF recommendation.

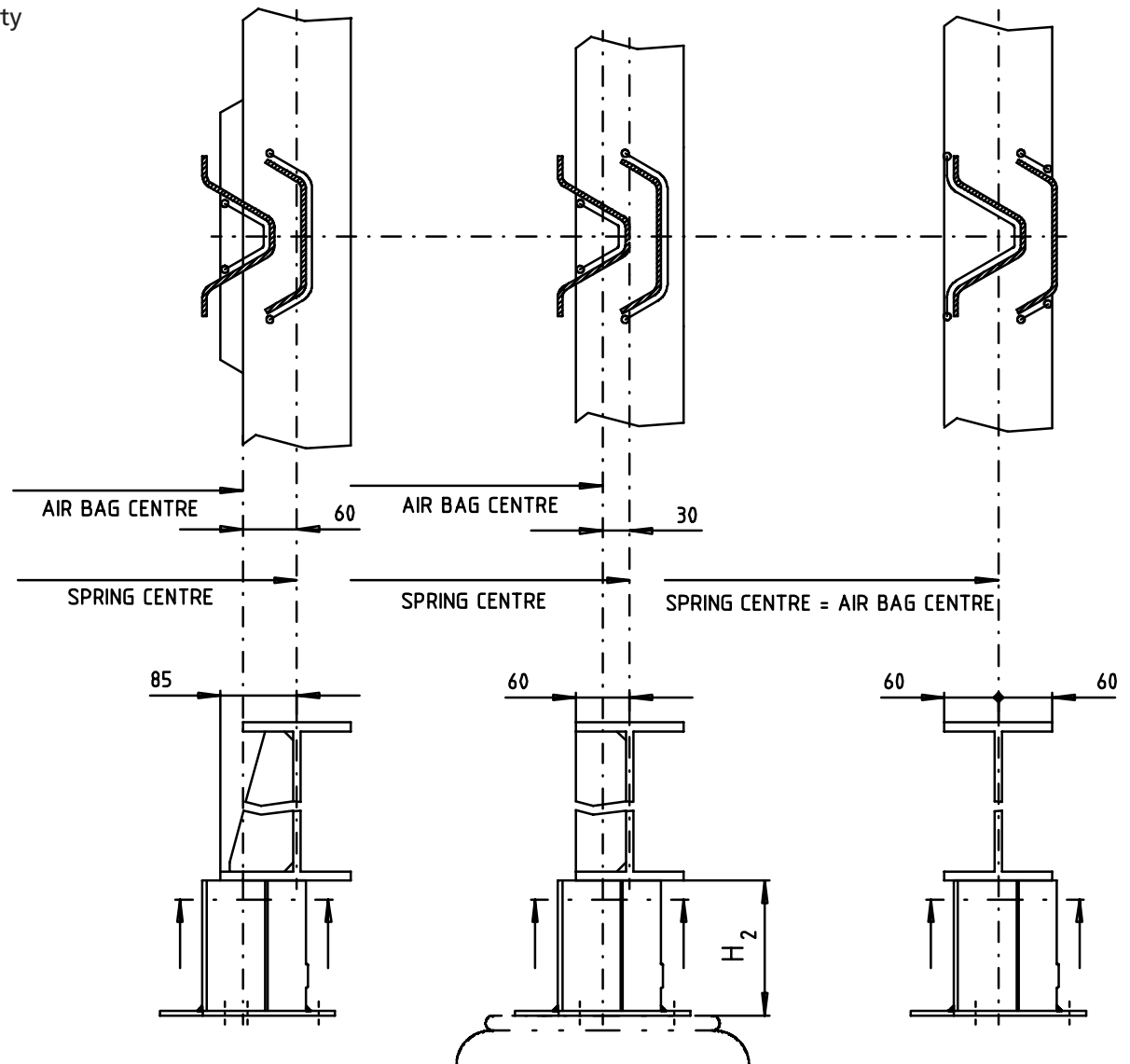
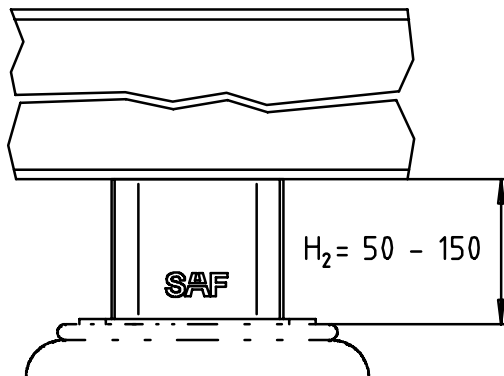
Dimension, design and implementation are under the responsibility of the vehicle manufacturer.

V = 60 mm

V = 30 mm

V = 0 mm

WELD SEAM COURSE



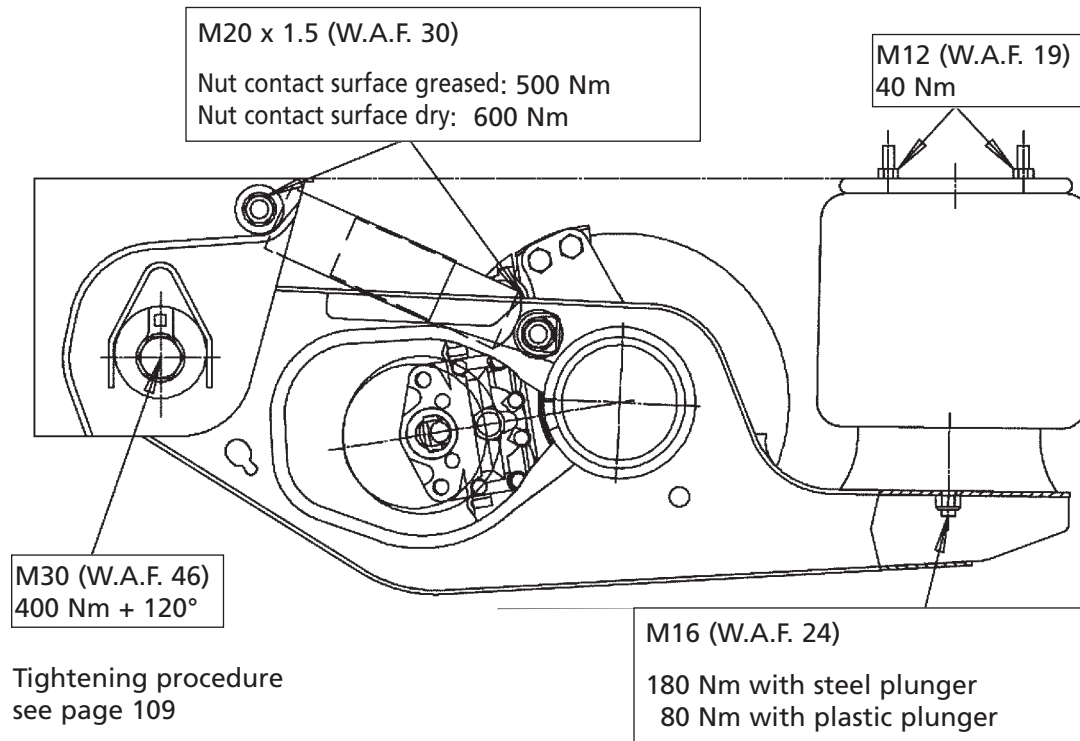
INSTALLATION RECOMMENDATIONS AND TIGHTENING TORQUES

Tightening torques

steel hanger brackets – pivot bolt – shock absorbers – air bags



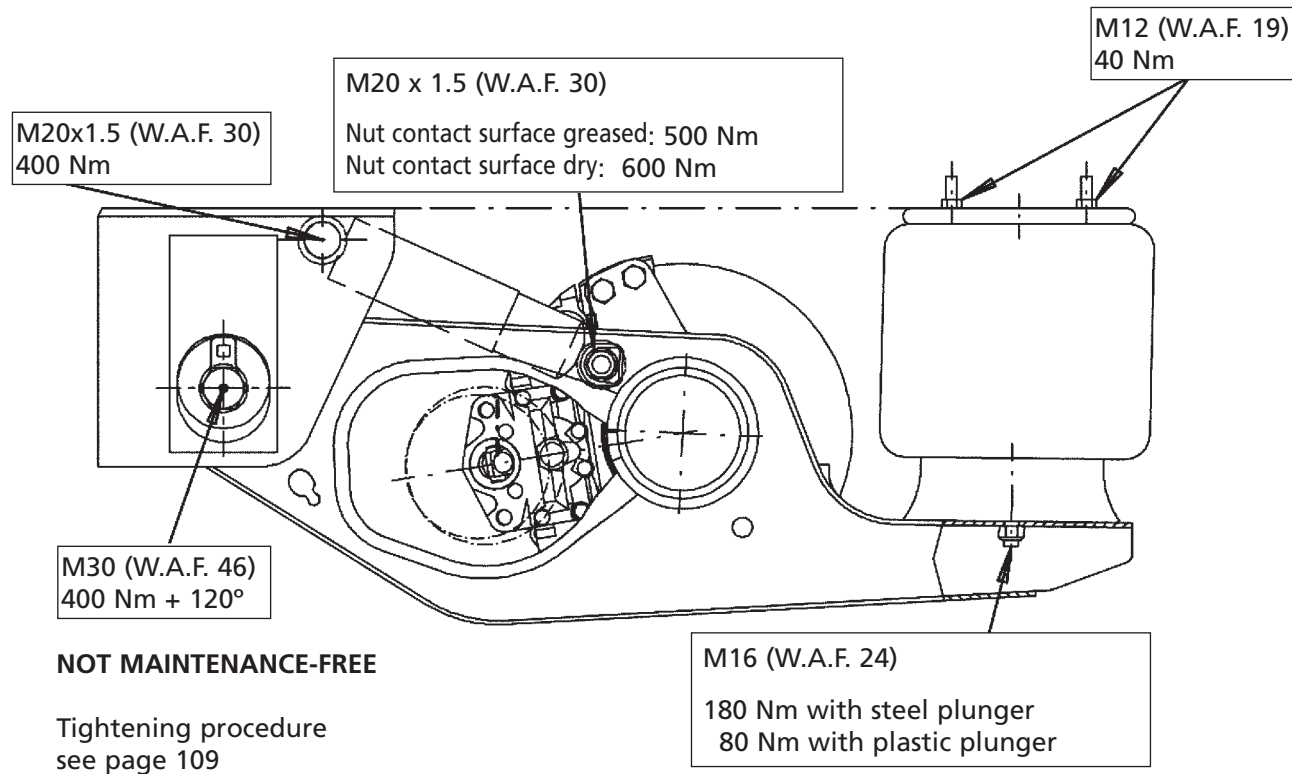
The max. coating thickness on the contact surfaces (interfaces) of the trailing arm and shock absorber bolts must not surpass 45 µm!



Tightening torques

alu hanger brackets – pivot bolt – shock absorbers – air bags

The max. coating thickness on the contact surfaces (interfaces) of the trailing arm and shock absorber bolts must not surpass 45 µm!



Anziehverfahren für verstellbare Federlagerverschraubung Tightening instructions for adjustable pivot bolt

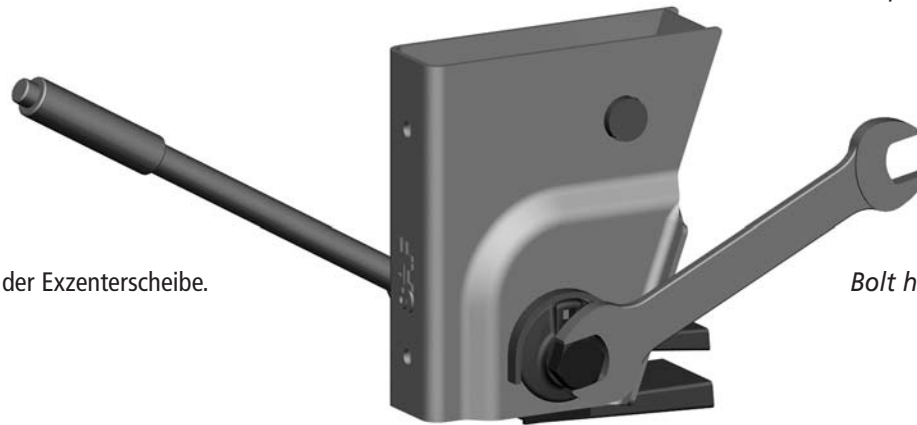


Achtung:

Verschraubung immer im vorgeschriebenen Fahrhöhenbereich!
Keine Farbrückstände zwischen Exzenter/Druckscheibe und Haltebock!

Attention:

Tightening always within the specified ride height range!
No paint residues between eccentric/thrust washer and hanger!



Schraubenkopf immer auf Seite der Exzenter-scheibe.

Bolt head always on the eccentric washer side.

Voranzug 400 Nm
Drehmomentschlüssel verwenden

*Pretightening: 400 Nm
Use Torque wrench*



Markierung für Winkelanzug

Marking for angle tightening



Winkelanzug 120°

Schlagschrauber verwenden oder Hebel auf 2,5 m verlängern.

Angle tightening: 120°

Use impact wrench or extend lever to 2.5 m



Sichtprüfung

Visual inspection



steel hanger bracket / cross member and trailing arm

Bolt kit 3 341 2803 10

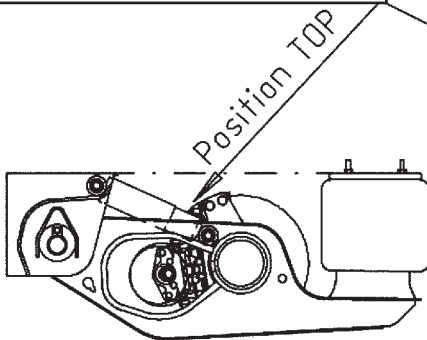
Collared bolt M20 x 1.5 x 125 – 10.9
4 343 2803 10 - dacromet coated -

Collared nut M20 x 1.5 – 10
4 247 4044 10 - dacromet coated -

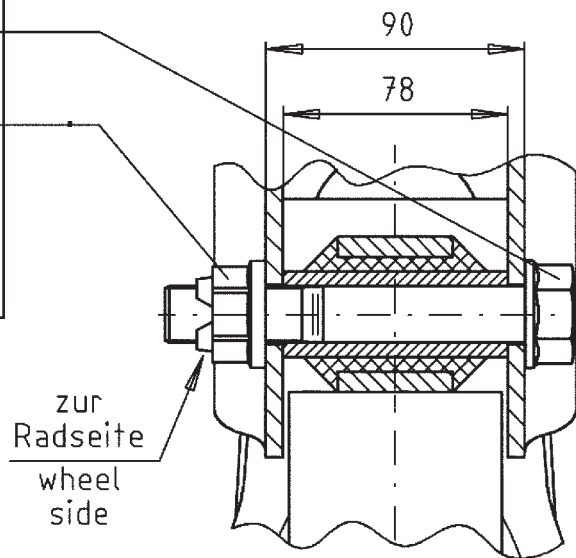
Tightening torque:
Contact surfaces greased: 500 Nm
Contact surfaces dry: 600 Nm

ATTENTION:

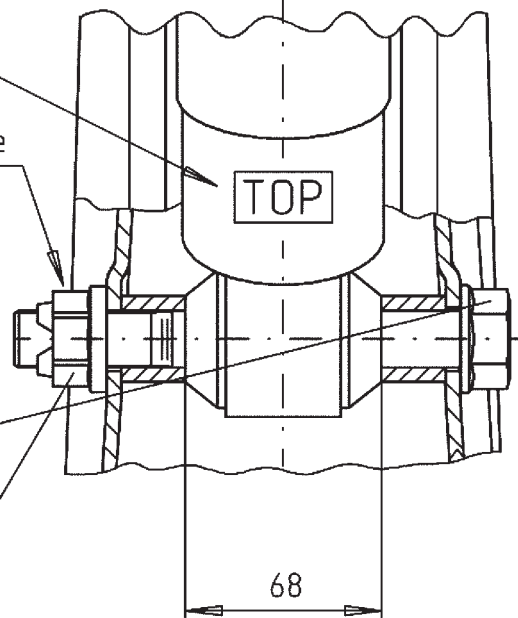
TOP mark facing upwards in working position



Hanger bracket, cross member



zur Radseite
wheel side



Trailing arm

Bolt kit 3 341 2802 10

Collared bolt M20 x 1.5 x 155 – 10.9
4 343 2802 10 - dacromet coated -

Collared nut M20 x 1.5 – 10
4 247 4044 10 - dacromet coated -

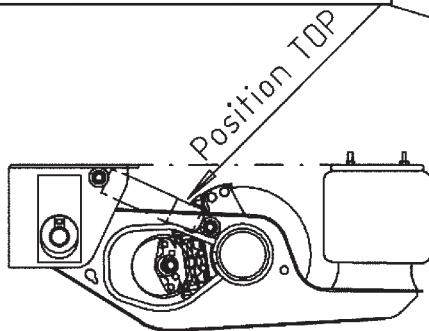
Tightening torque:
Contact surfaces greased: 500 Nm
Contact surfaces dry: 600 Nm

alu hanger bracket and trailing arm

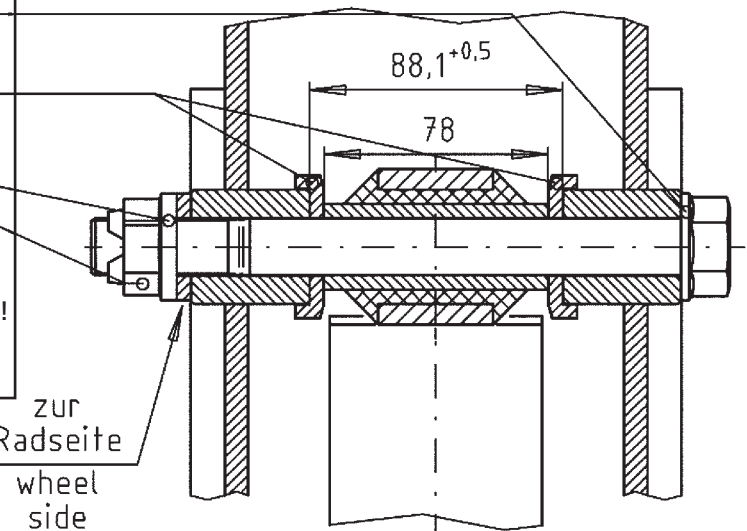
Aluminium hanger bracket

Mounting parts kit
3 044 1054 00
 Collared bolt M20 x 1.5 x 205 – 10.9
 4 343 2804 10 - dacromet coated -
 Spacer washer (2x) 1 097 0008 00
 Washer 1 331 0136 00
 Collared nut M20 x 1.5 – 10
 4 247 4044 10 - dacromet coated -
 Tightening torque:
 Contact surfaces dry: 400 Nm
 Caution: Mounting bolt not maintenance-free!
 See SAF maintenance and operating manuals
 for the service schedules.

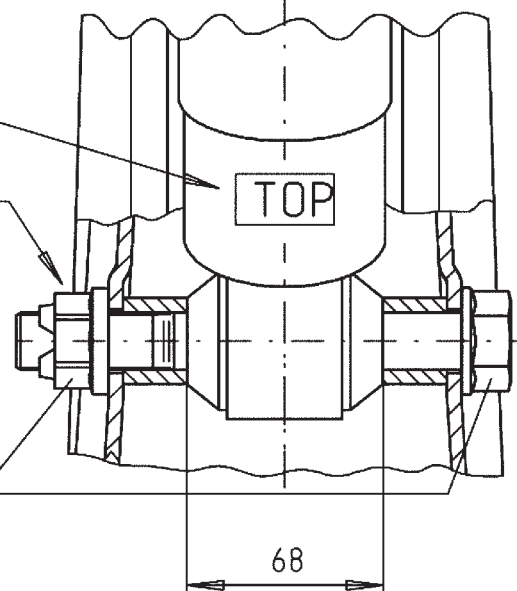
ATTENTION:
**TOP mark facing
 upwards in working
 position**



zur
Radseite
wheel
side



zur
Radseite
wheel
side



Trailing arm

Bolt kit **3 341 2802 10**
 Collared bolt M20 x 1.5 x 155 – 10.9
 4 343 2802 10 - dacromet coated -
 Collared nut M20 x 1.5 – 10
 4 247 4044 10 - dacromet coated -
 Tightening torque:
 Contact surfaces greased: 500 Nm
 Contact surfaces dry: 600 Nm

trailing arm and cross member for steering axles

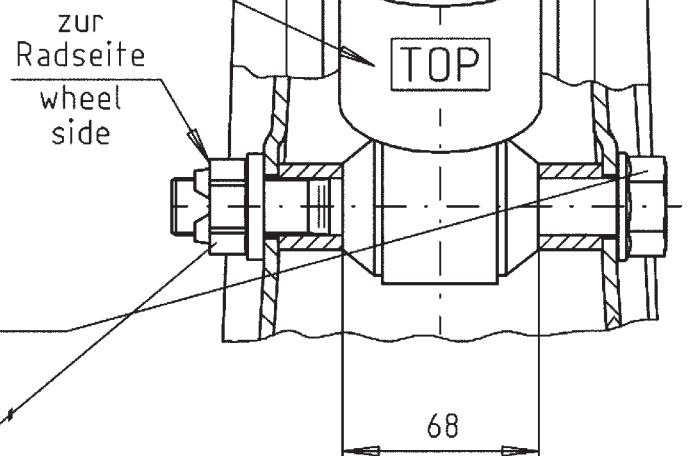
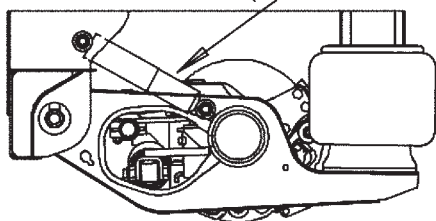
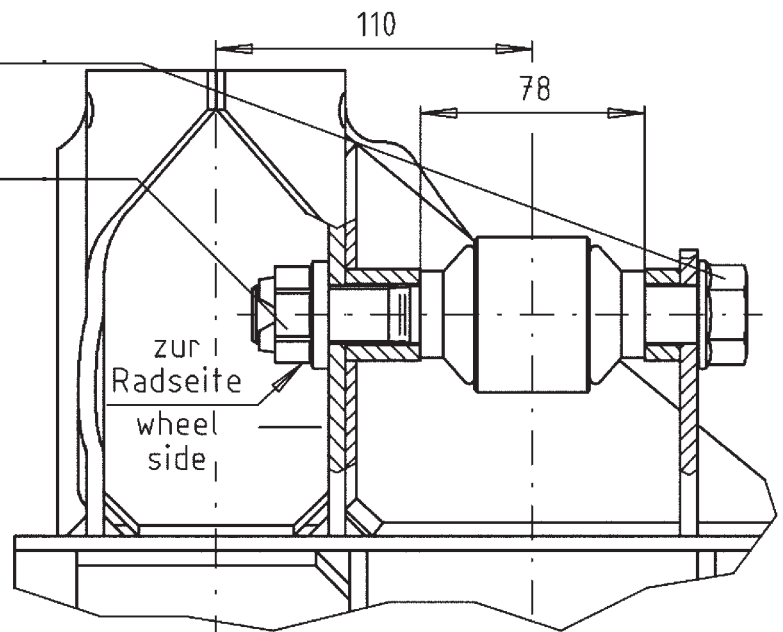
Cross member

Bolt kit **3 341 2802 10**
 Collared bolt M20 x 1.5 x 155 – 10.9
 4 343 2802 10 - dacromet coated -

 Collared nut M20 x 1.5 – 10
 4 247 4044 10 - dacromet coated -

 Tightening torque:
 Contact surfaces greased: 500 Nm
 Contact surfaces dry: 600 Nm

ATTENTION:
TOP mark facing upwards in working position



Trailing arm

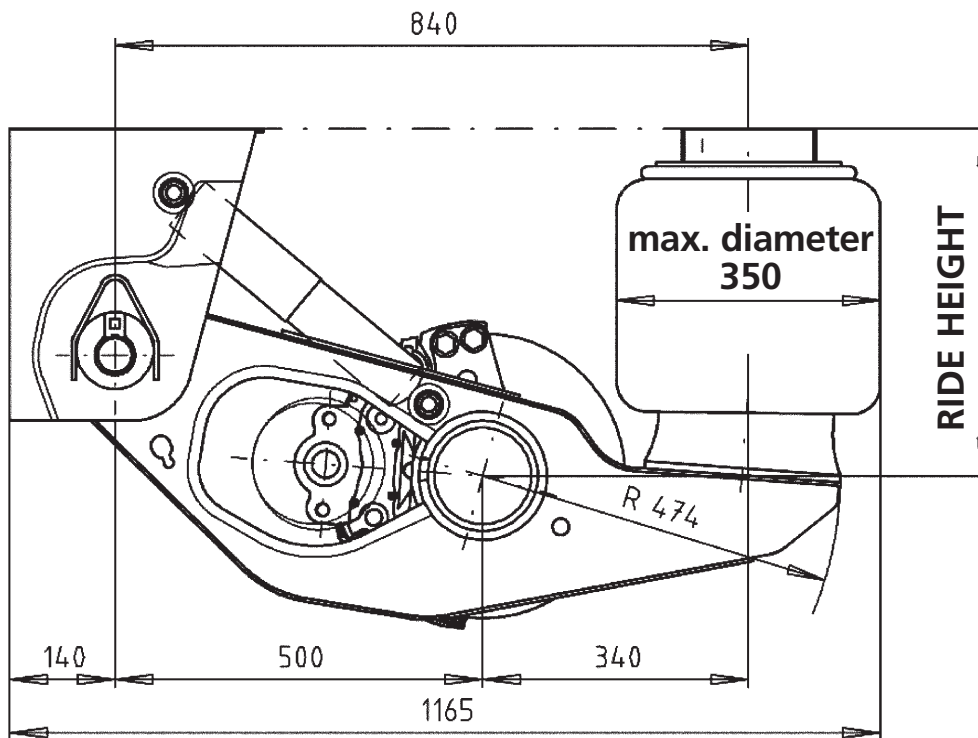
Bolt kit **3 341 2802 10**
 Collared bolt M20 x 1.5 x 155 – 10.9
 4 343 2802 10 - dacromet coated -

 Collared nut M20 x 1.5 – 10
 4 247 4044 10 - dacromet coated -

 Tightening torque:
 Contact surfaces greased: 500 Nm
 Contact surfaces dry: 600 Nm

MISCELLANEOUS

Design for pavers on the rear axle (optional)



Recommendation for pavers:

Air bags with steel plunger
Air bag diameter 350 mm
OFF ROAD!

Corrosion protection of SAF products

- Axle beams and trailing arms with cathodic hot-dip coating, alternatively 2 component coating, colour black RAL 9005.
- All bolts and fittings with dacromet coating, colour grey metallic.
- Front hanger brackets with 2-component coating, colour black RAL 9005.
- Wheel contact surface: Thin cathodic hot-dip coating, coat thickness max. 30 µm, colour black RAL 9005, alternatively transparent temporary corrosion protection (not removed before mounting of wheel).

Cathodic dip coating (KTL)

The coat thickness is max. 45 µm.

Features:

- Complete corrosion protection in all areas of the component.
- High surface hardness with uniform coat thickness.
- Can be painted over with all single-component or 2-component top coats.
- Top coat not necessary if gloss is not of paramount importance.

2-component priming

Primer coat for additional top coat
Coat thickness is max. 45 µm.

Dacromet coating

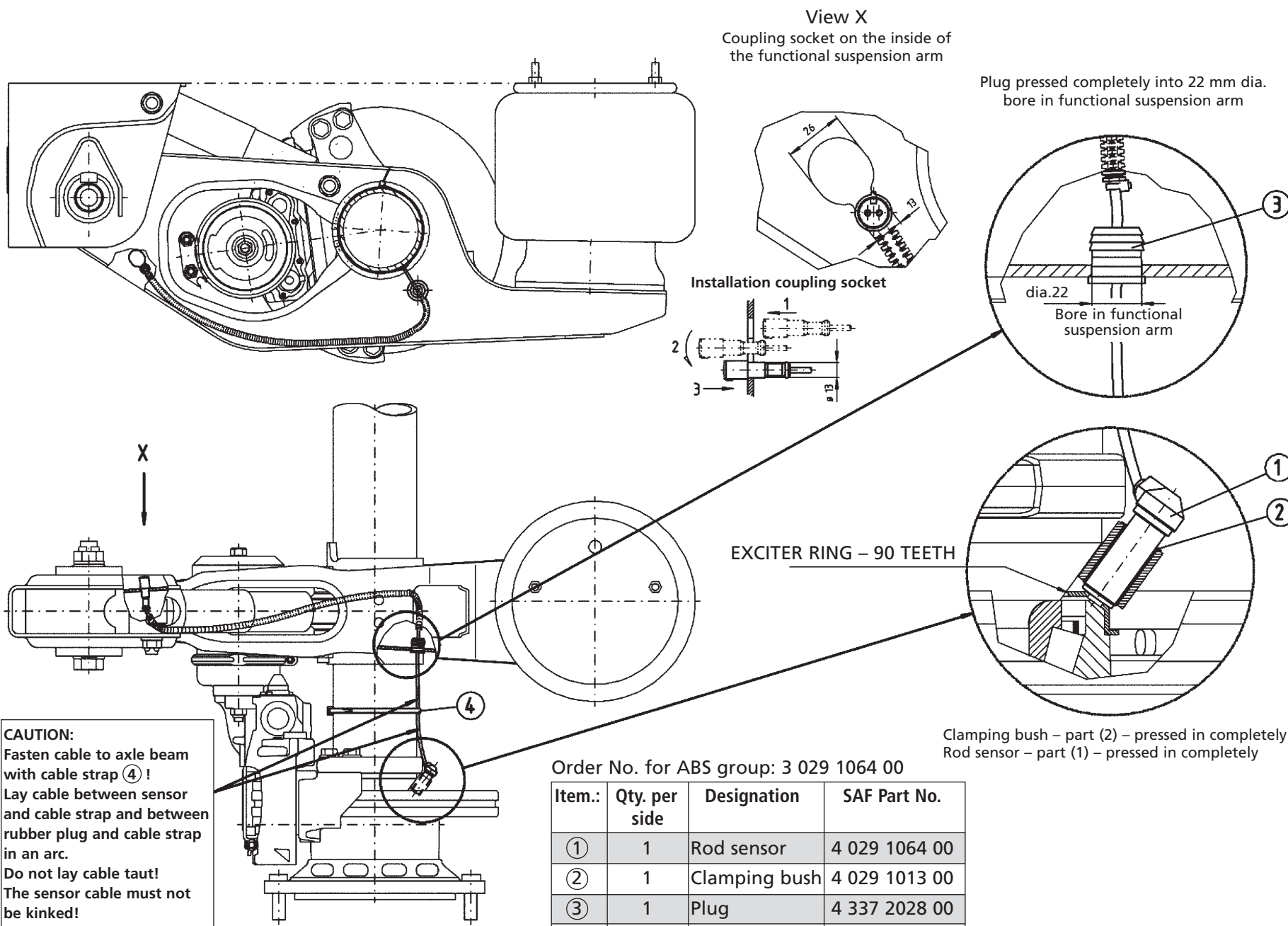
Corrosion protection with sliding properties.
Protection min. 480 hours in salt spray test to DIN 50021.

Treatment during axle and suspension installation

- In principle, dip coating and 2-component primers can be welded.
SAF recommends, however, that these coats be removed in the area of weld seams.
- All contact surfaces of the pivot bolts and shock absorber bolts must not have additional primer or paint coatings.
- Wheel contact surfaces must not be painted.

Installation instructions for ABS cable

INTRADISC plus – series IU / IO

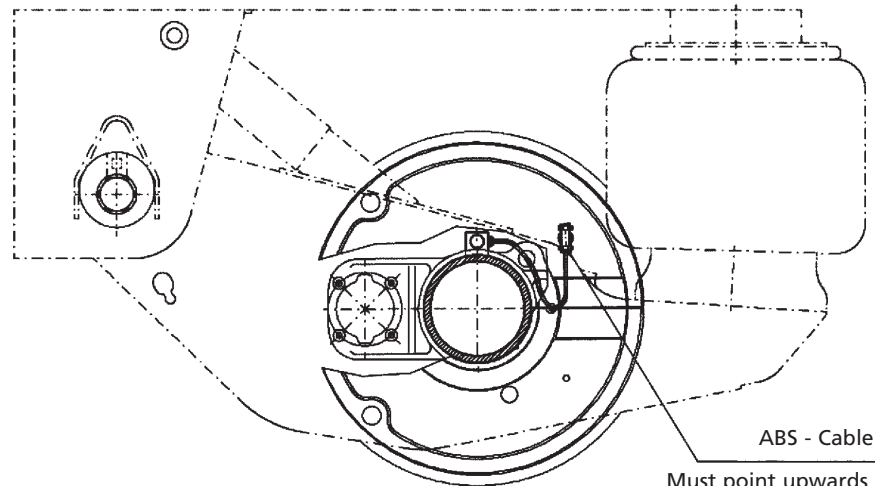


Order No. for ABS group: 3 029 1064 00

| Item.: | Qty. per side | Designation | SAF Part No. |
|--------|---------------|---------------|---------------|
| ① | 1 | Rod sensor | 4 029 1064 00 |
| ② | 1 | Clamping bush | 4 029 1013 00 |
| ③ | 1 | Plug | 4 337 2028 00 |
| ④ | 1 | Cable strap | 4 194 2030 00 |

Installation instructions for ABS cable

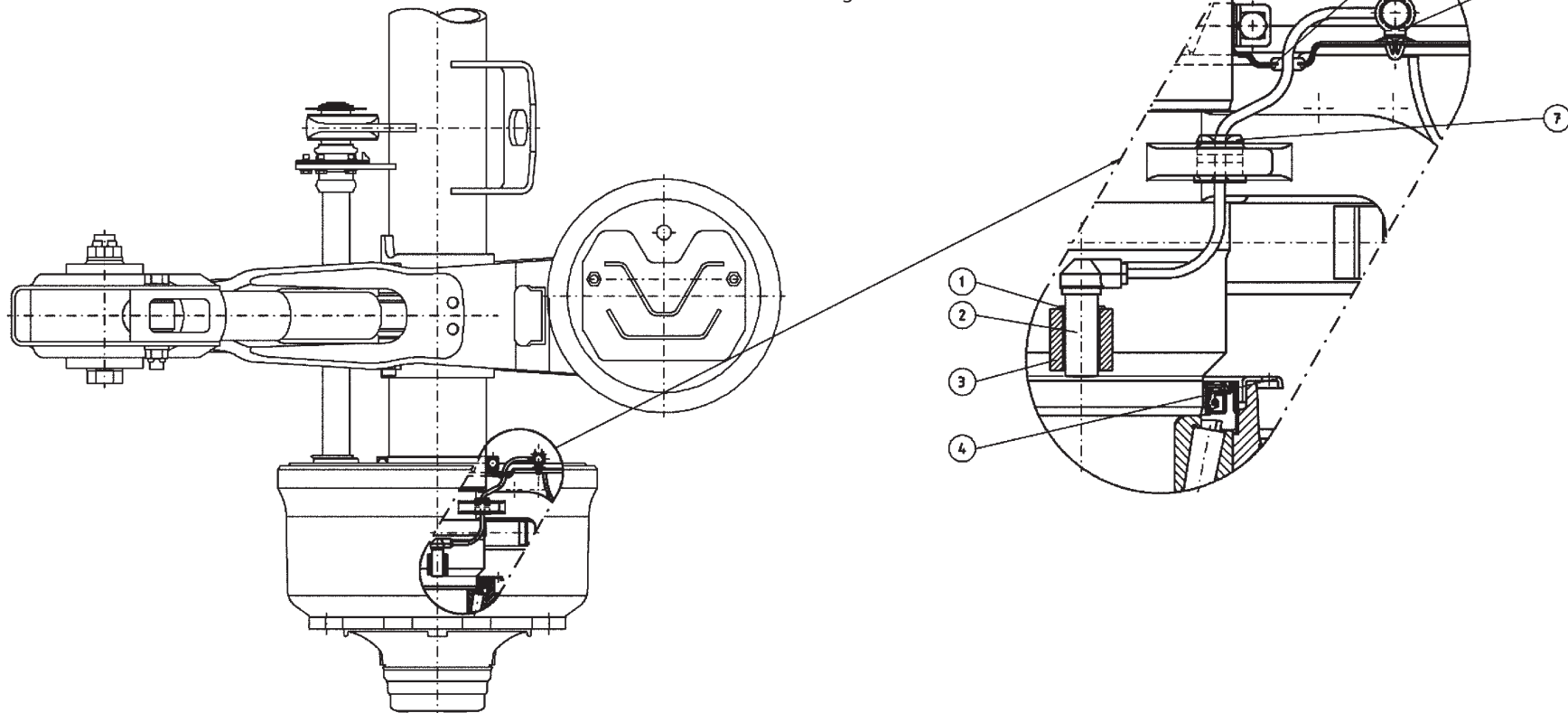
INTRAAX plus – series IU / IO



ABS - Cable - Plug

Must point upwards after installation
as shown in the diagram

- ① Sensor adapter (bush)
- ② Sensor with cable
- ③ Bracket sensor
- ④ Exciter
- ⑤ Rubber grommet
- ⑥ Cable clamp
- ⑦ Plug



With the availability of the disc brake with disc diameter 377 mm for 19.5" and 22.5" tyres, the number of teeth on the exciter ring must permit the use of both tyre sizes.

For these axle version, SAF has chosen 90 as the standard number of teeth. This number of teeth covers the tyre size range from 245 / 70 R 19.5" twin to 425 / 65 R 22.5" single.

Classification of axle types to exciter ring teeth:

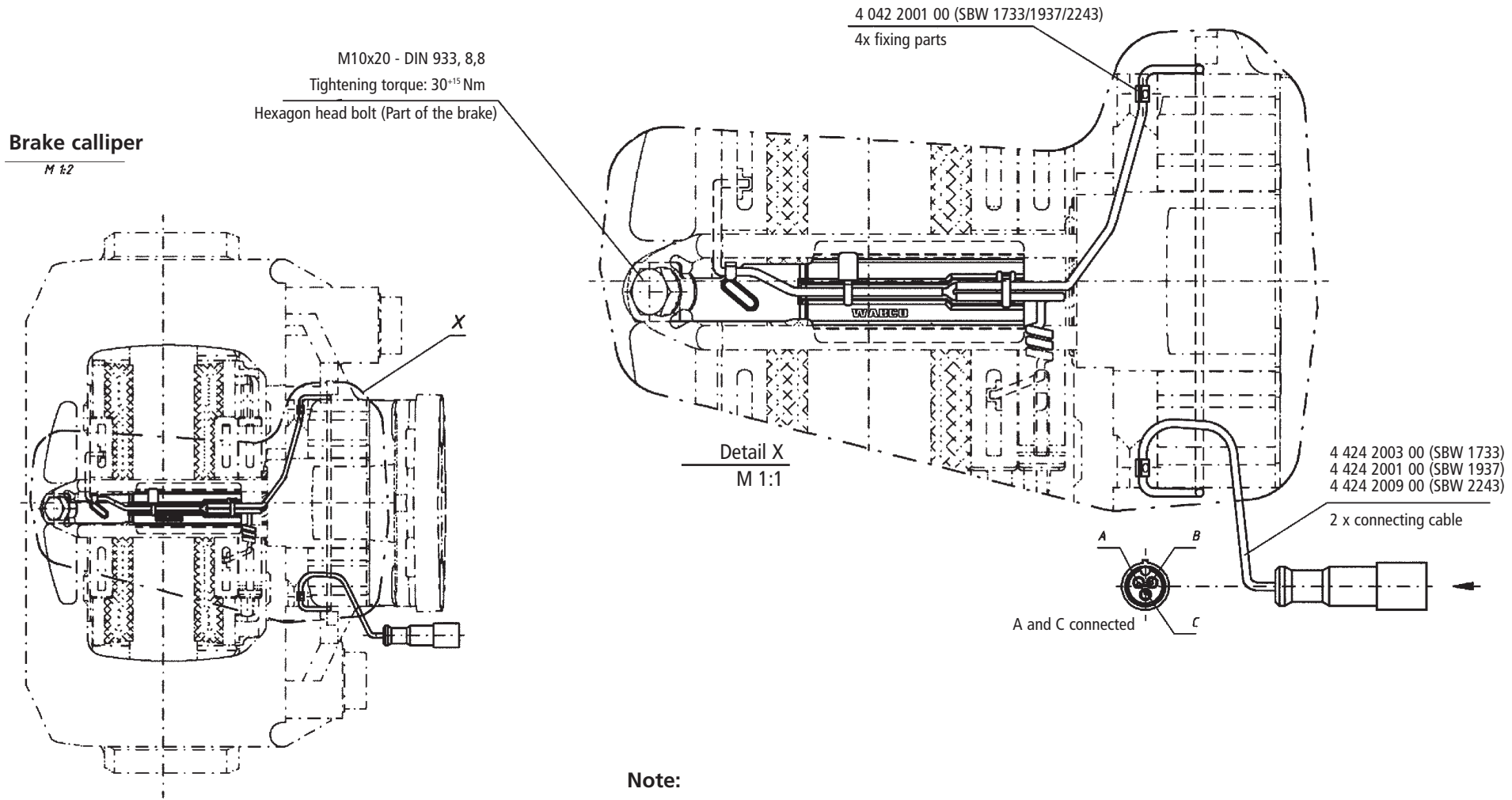
| Number of teeth | Axle type | Tyres |
|-----------------|---------------------------|-------------------|
| 90 | SK RS 9019 / SK RZ 9019 | 19.5" |
| | SK RS 11019 / SK RZ 11019 | 19.5" |
| | SK RS 9037 / SK RZ 9037 | 19.5" |
| | SK RS 11037 / SK RZ 11037 | 19.5" |
| | SK RB 9019 | 19.5" / 22.5" |
| | SK RB 9022 | 22.5" |
| 100 | SK RS 9022 / SK RZ 9022 | 22.5" |
| | SK RS 11222 / SK RZ 11222 | 22.5" |
| | SK RS 9042 / SK RZ 9042 | 22.5" |
| | SK RS 11242 / SK RZ 11242 | 22.5" |
| | SK RS 12242 / SK RZ 12242 | 20" / 22.5" / 24" |
| 80 | SK RZ 9030 | 17.5" |
| | SK RZ 11030 | 17.5" |
| | SK RZ 12030 | 17.5" |

electric wear indicator

| Brake | | Component | Part No. | No. of axles | | | |
|------------|------------------------------|-------------------------------|---------------|-------------------|---|---|---|
| | | | | 1 | 2 | 3 | 4 |
| | | | | No. of components | | | |
| 19.5" | SBK 1937 (Knorr SB6...) | Connecting cable kit | 3 424 2005 00 | 1 | 2 | 3 | 4 |
| | SBK 1937 (Knorr SN6...) | | 3 424 2008 00 | 1 | 2 | 3 | 4 |
| | SBW 1937 (WABCO PAN19-1) | | 3 424 2001 00 | 1 | 2 | 3 | 4 |
| 22.5" | SBK 2243 (Knorr SB7...) | | 3 424 2004 00 | 1 | 2 | 3 | 4 |
| | SBK 2243 (Knorr SN/SK...) | | 3 424 2008 00 | 1 | 2 | 3 | 4 |
| | SBW 2243 (WABCO PAN 22-1) | | 3 424 2009 00 | 1 | 2 | 3 | 4 |
| all brakes | | Connecting cable WABCO EBS | 4 424 2007 00 | | | | |

See kit for installation instructions

Cable kit for WABCO electric wear indicator

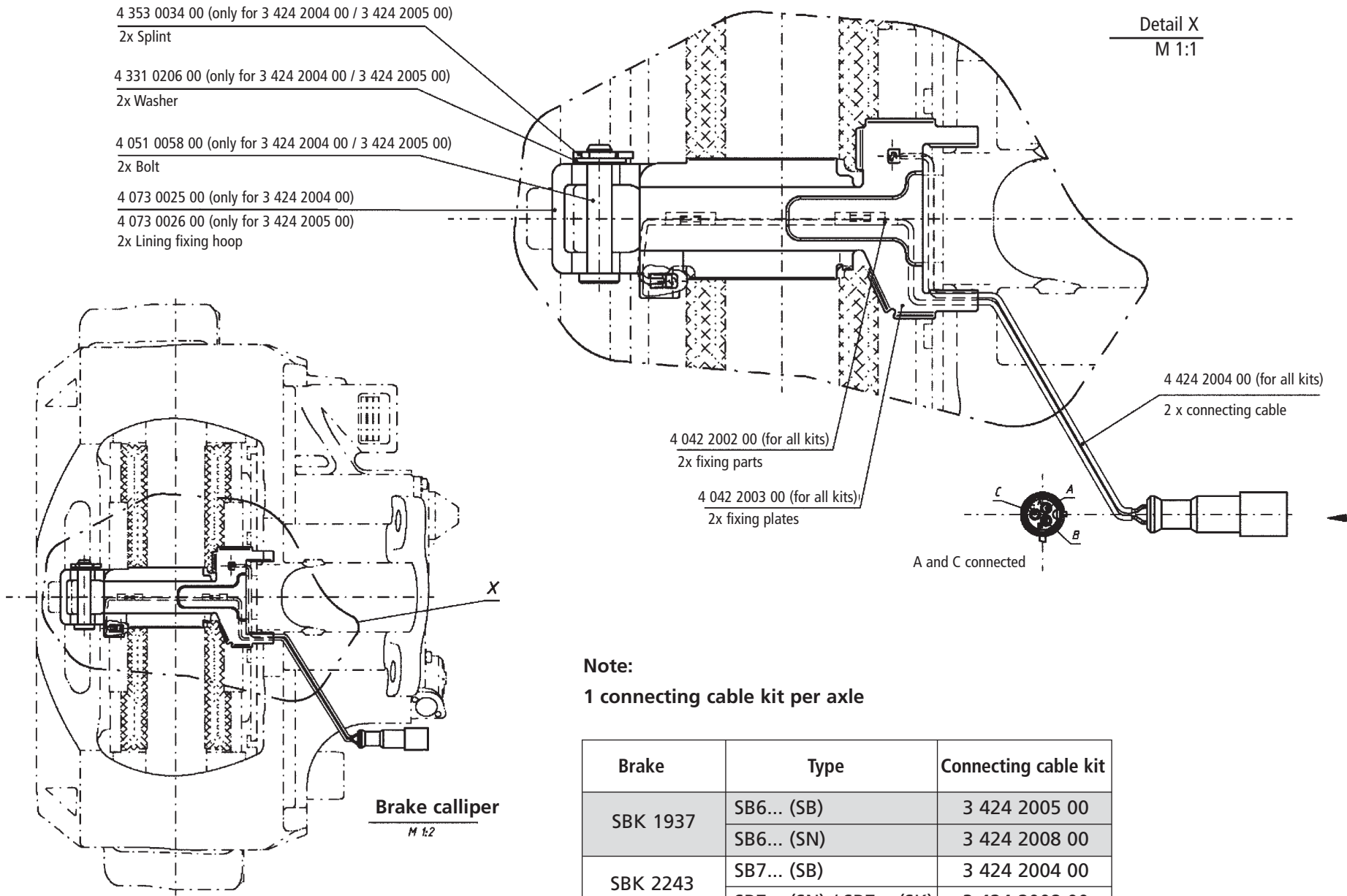


Note:

1 connecting cable kit per axle

| Brake | Type | Connecting cable kit |
|----------|----------------------|----------------------|
| SBW 1733 | PAN 17 | 3 424 2003 00 |
| SBW 1937 | PAN 19-1 / PAN 19-1+ | 3 424 2001 00 |
| SBW 2243 | PN 22-1 | 3 424 2009 00 |

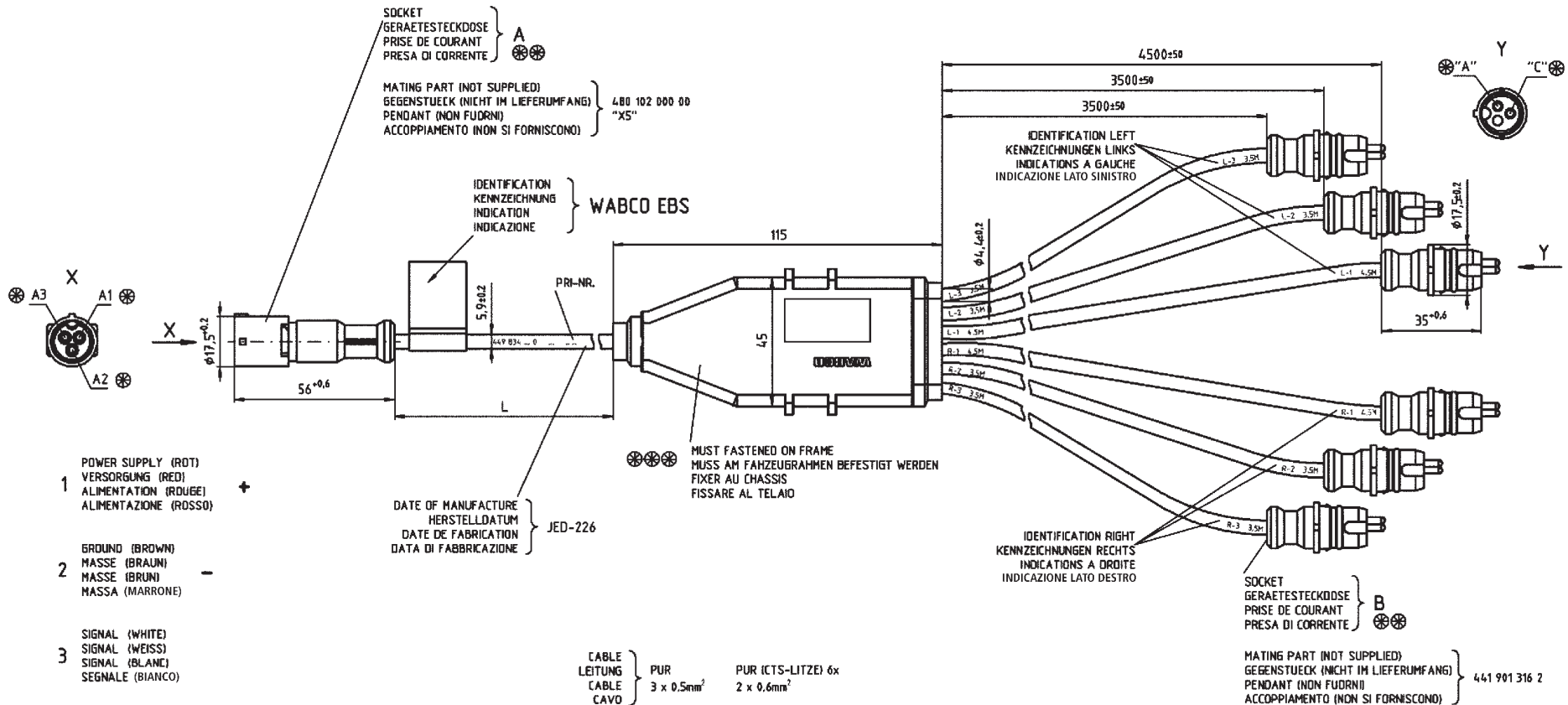
Cable kit for Knorr electric wear indicator



Note:
1 connecting cable kit per axle

| Brake | Type | Connecting cable kit |
|----------|---------------------------|----------------------|
| SBK 1937 | SB6... (SB) | 3 424 2005 00 |
| | SB6... (SN) | 3 424 2008 00 |
| SBK 2243 | SB7... (SB) | 3 424 2004 00 |
| | SB7... (SN) / SB7... (SK) | 3 424 2008 00 |

Cable with socket for WABCO disc brakes



- 1 POWER SUPPLY (RED)
VERSORGUNG (ROTI)
ALIMENTATION (ROUGE)
ALIMENTAZIONE (ROSSO) +
- 2 GROUND (BROWN)
MASSE (BRAUN)
MASSE (BRUN)
MASSA (MARRONE) -
- 3 SIGNAL (WHITE)
SIGNAL (WEISS)
SIGNAL (BLANC)
SEGNALE (BIANCO)

DEGREE OF PROTECTION (IN CONNECTION WITH PLUG)
SCHUTZART (IN VERBINDUNG MIT STECKER)
DEGRE DE PROTECTION (DANS CONNECTION AVEC FICHE)
GRADO DI PROTEZIONE (IN RELAZIONE CON SPINA) } A: IP 6K 9K / IP 67
B: IP 6B / IP 69K

THERMAL RANGE OF APPLICATION
THERMISCHER ANWENDUNGSBEREICH
GAMME D'APPLICATION THERMIQUE
CAMPO TERMICO D'APPLICAZIONE } -40°C...+80°C

SURFACE PROTECTION
OBERFLÄCHENSCHUTZ
PROTECTION DE SURFACE
PROTEZIONE SUPERFICI } Ag

COLOR
FARBE } ORANGE
COULEUR } ORANGE
COLORE } ARANCIONE

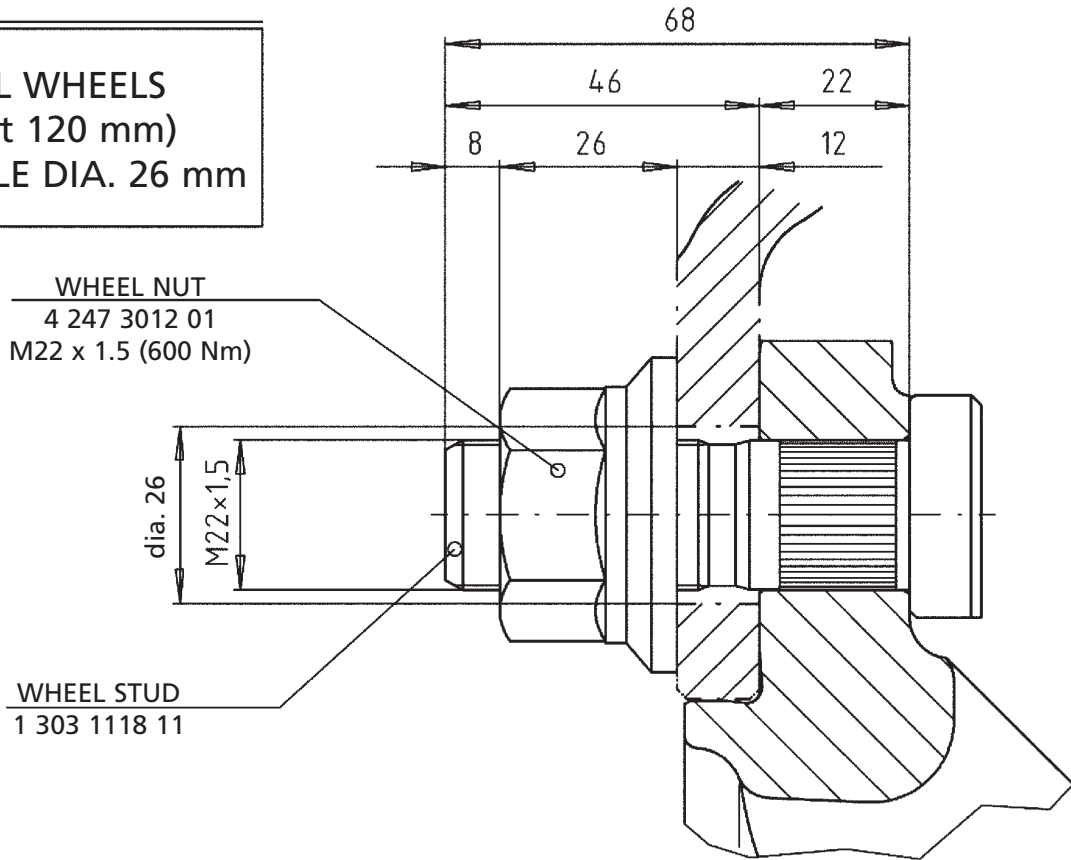
INSTALLATION INSTRUCTION
EINBAUINWEIS
INDICATION POUR L'INSTALLATION
INDICAZIONE DI MONTAGGIO

CABLE
LEITUNG } PUR
CABLE } 3 x 0.5mm²
CAVO } PUR (CTS-LITZE) 6x
2 x 0.6mm²

| CODE OF LENGTH LAENGENCODIERUNG CODE DE LA LONGUEUR CODICE LUNGHEZZA | |
|---|---|
| PART NO TEILE NR. NO DE PIECE CODICE | L [m] 449 834 [] [] . [] 0 |
| EXAMPLE BEISPIEL EXEMPLE ESEMPIO | L = 1,3m 449 834 013 0 |
| MIN/MAX LENGTH MIN/MAX LAENGE MIN/MAX LONGUEUR MIN/MAX LUNGHEZZA | L _{min} = 0,1m L _{max} = 20m |
| TOLERANCES TOLERANZEN TOLERANCES TOLLERANZA | L < 10m ±0,050m L > 10m ±0,075m |

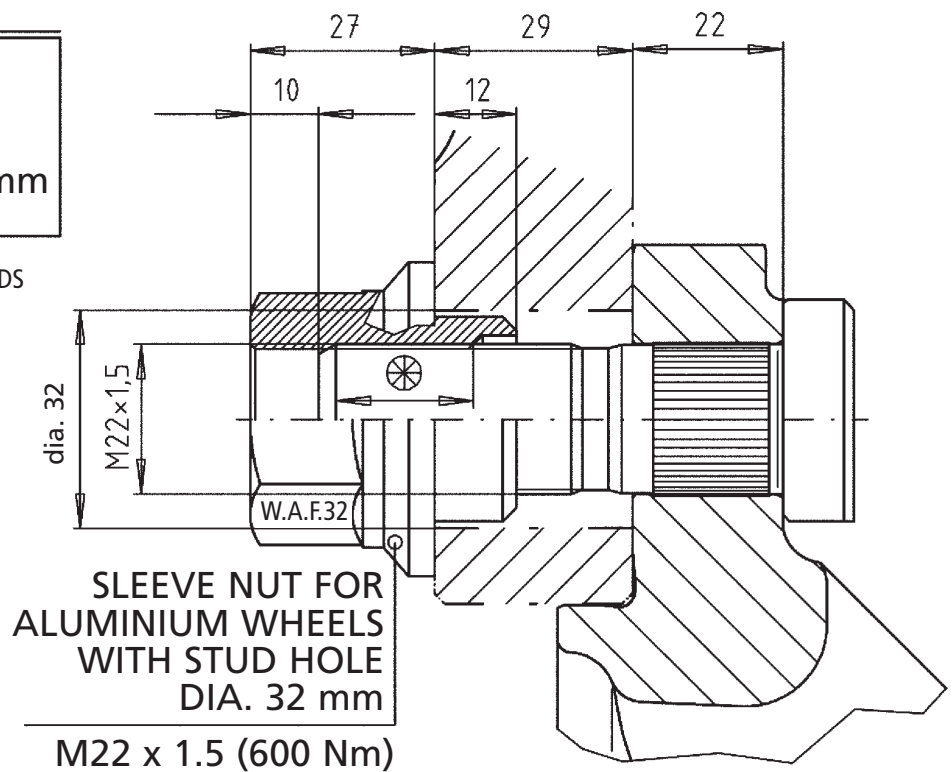
Steel- and aluminium wheels with offset 120 Stud length 68 mm; wheel mounting code 48

STEEL WHEELS
(offset 120 mm)
STUD HOLE DIA. 26 mm

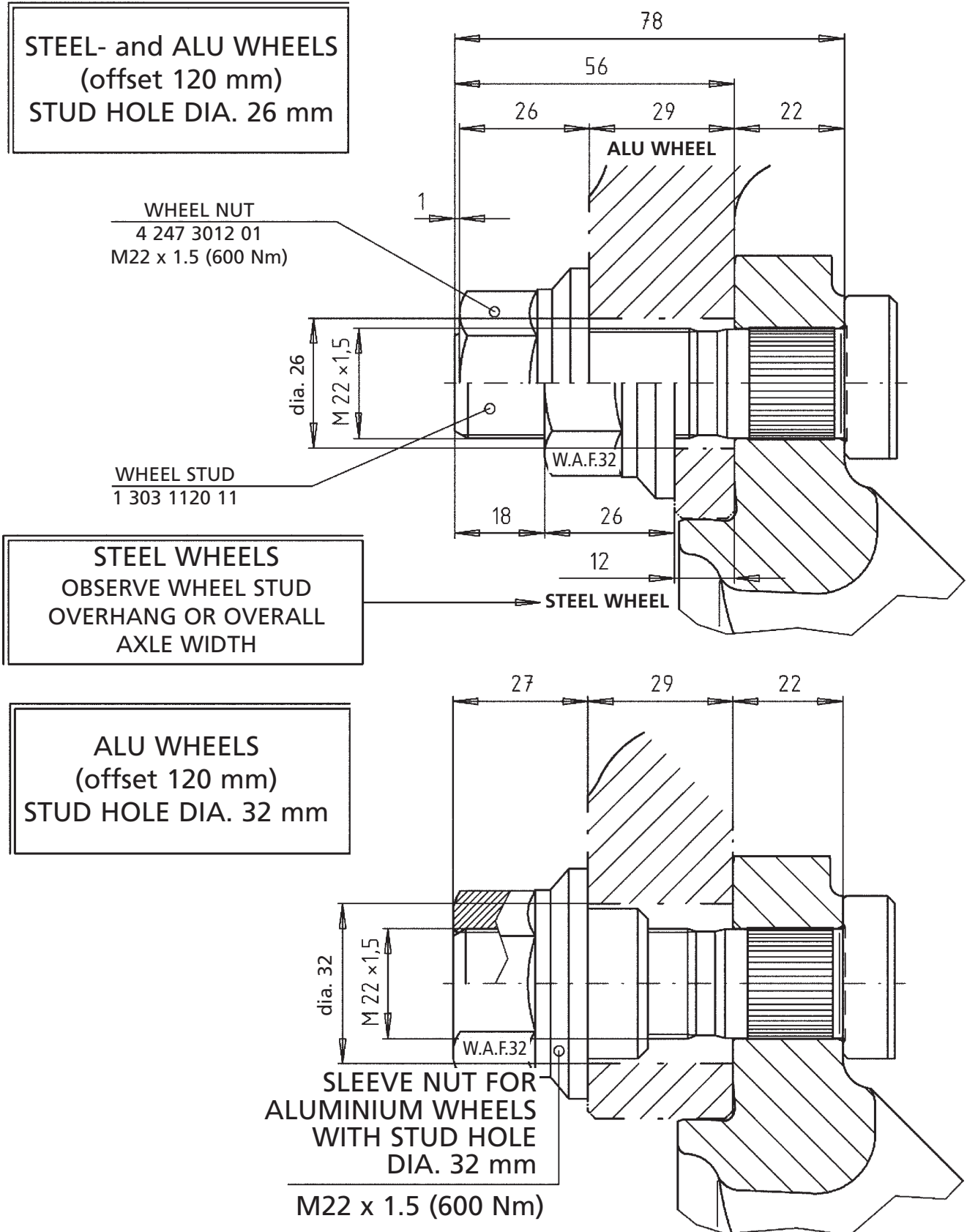


ALU WHEELS
(offset 120 mm)
STUD HOLE DIA. 32 mm

= MIN. 13 SUPPORTING THREADS



Steel- and aluminium wheels with offset 120 Stud length 78 mm; wheel mounting code 49

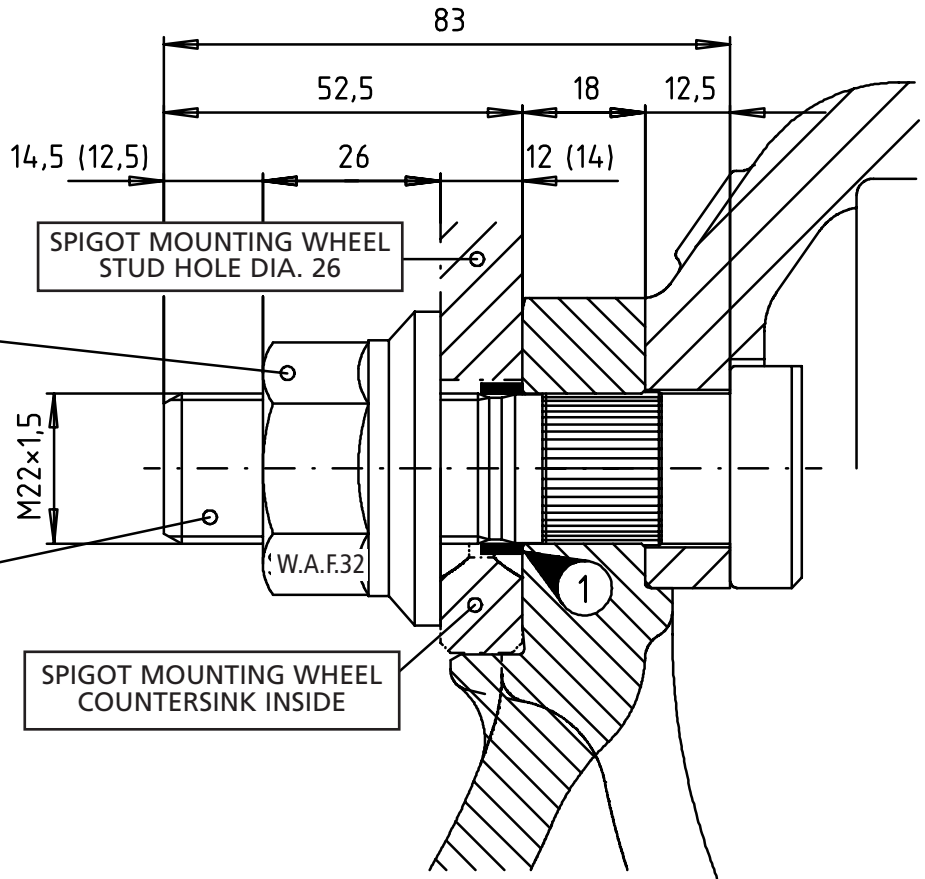


Steel- and aluminium wheels with offset 0 Stud length 83 mm; wheel mounting code 58

STEEL WHEELS
(offset 0 mm)
STUD HOLE DIA. 26 mm

WHEEL NUT
4 247 3012 01
M22 x 1.5 (600 Nm)

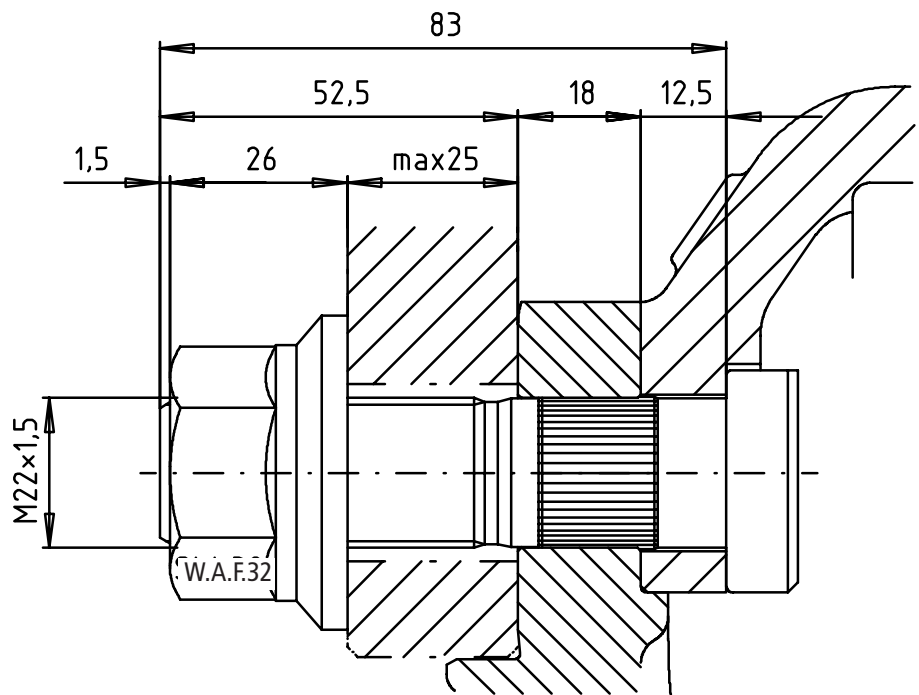
WHEEL STUD
1 303 1074 13



SLEEVE NUTS – SEE POS. 1
PART NO. 1 095 1040 01
ABSOLUTELY NECESSARY
FOR WHEELS WITH
SPIGOT MOUNTING

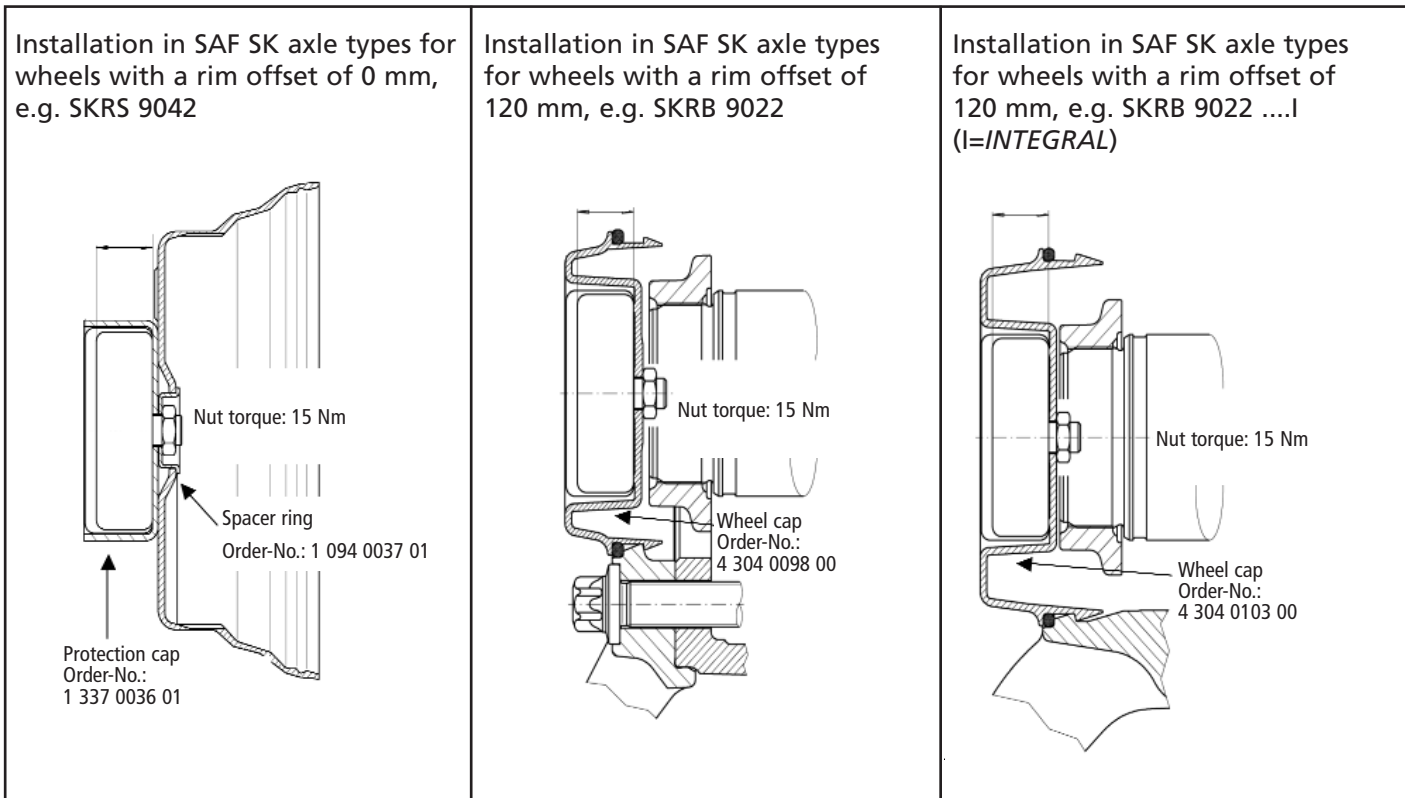
MOUNTING: 2 SLEEVE NUTS PER
HUB IN OPPOSITION

ALU WHEELS
(offset 0 mm)
STUD HOLE DIA. 26 mm
Dish thickness max. 25 mm



Fitting instructions

Please check before fitting whether you have received the SAF-O-Meter suitable to your tyre size!



The three sketches show, irrelevant of the axle types, how the SAF-O-Meter is fitted in the wheel caps. It is not important on which side of the vehicle it is fitted as the counter functions independently of the direction of the covered distance.

Designation:

| rolling circumference | 3420 - 3560 | 3185 - 3315 | 3125 - 3250 | 2980 - 3060 | 2850 - 2970 | 2655 - 2765 | 2590 - 2690 | 2360 - 2455 |
|-----------------------|---------------|---------------|----------------------------|---------------|---------------|---------------|---------------|--------------------------------|
| tyre size | 425/65 R 22.5 | 385/65 R 22.5 | 11 R 22.5 295/80 R 22.5 | 385/55 R 22.5 | 425/55 R 19.5 | 445/45 R 19.5 | 265/70 R 19.5 | 245/70 R 17.5 235/75 R 17.5 |
| axle load | 10,000 kg | 9,000 kg | 10,000 kg / 11,000 kg | 9,000 kg | 9,000 kg | 8,000 kg | 10,000 kg | 10,000 kg / 11,000 kg |
| SAF-O-meter order no. | 4 388 0349 00 | 4 388 0325 00 | 4 388 0319 00 | 4 388 0304 00 | 4 388 0291 00 | 4 388 0271 00 | 4 388 0264 00 | 4 388 0241 00 |

for axle series:

SK RB 9019 / 9022 cupped disc

SK RB 9019 I / 9022 I (*INTEGRAL* disc)

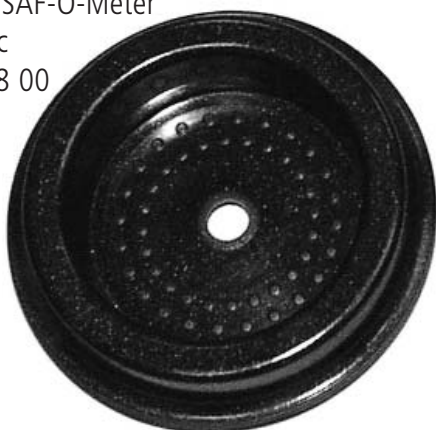
Wheel cap standard
cupped disc
4 304 0093 00



Wheel cap standard
INTEGRAL disc
4 304 0102 00



Wheel cap SAF-O-Meter
cupped disc
4 304 0098 00

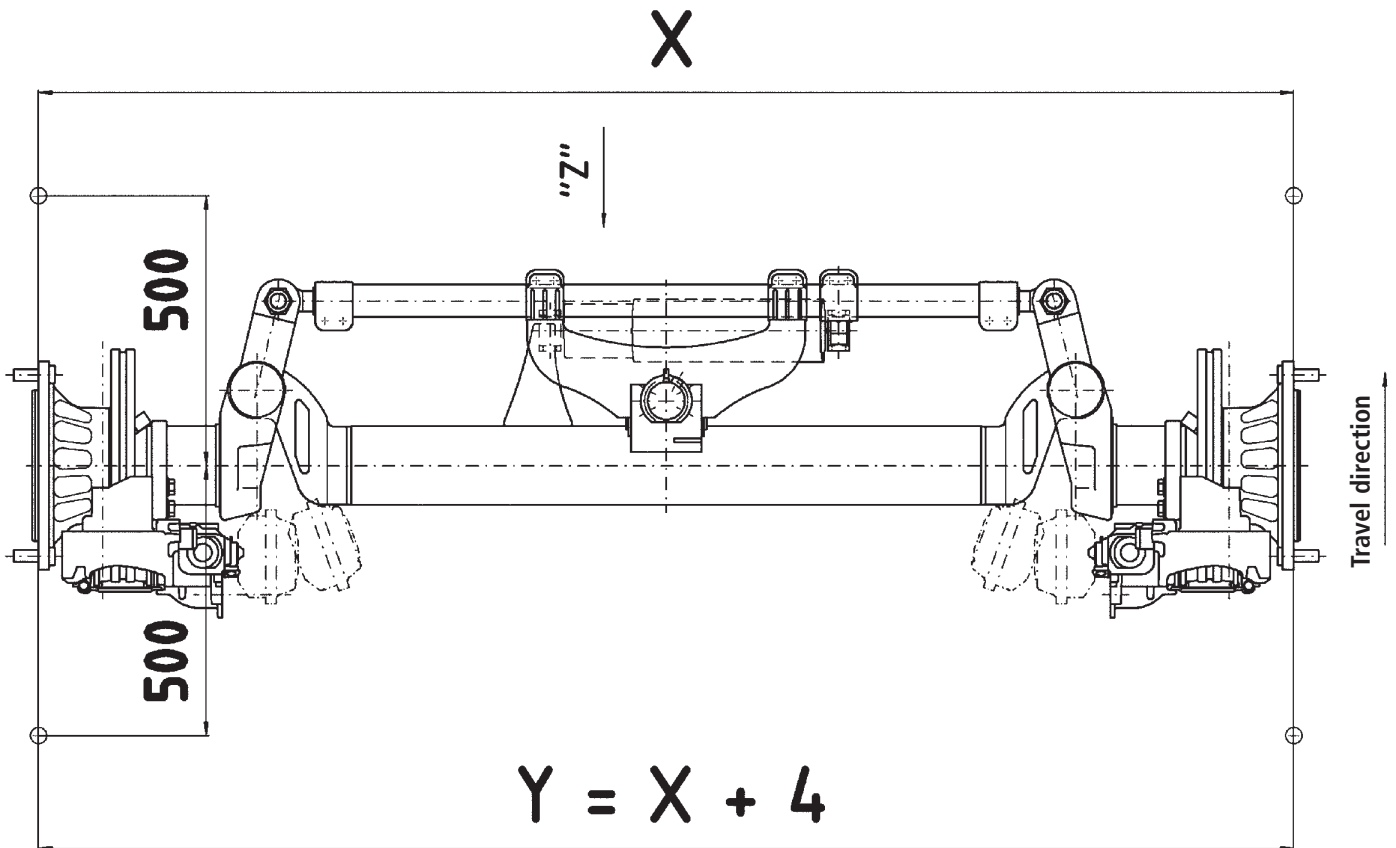


Wheel cap SAF-O-Meter
INTEGRAL disc
4 304 0103 00



Depiction: Wheel cap 4 304 0103 00
INTEGRAL disc
with SAF-O-Meter





Design and Functional features

- **Design Features**

The self-steering function is particular to this axle design.

The self-steering effect is triggered by the pivot point located at the front of the axle. When driving around a curve, the required steering moment comes from the lateral force and the lever arm of the displaced (to the front) pivot point. The integrated spiral springs of the stabilising damper ensure the wheels return to the "straight ahead" position.

A tie rod connects the left-hand to the right-hand side of the axle to translate the turning movement to both sides.

The track of the steering axle is guided by the path of the fixed axles installed either in front or behind.

A steering (reverse) lock ensures that, when reversing, the steering movement is prevented and keeps the axle in the "straight ahead" position (fixed).

- **Functional Features**

The stabilising damper

- takes the function of both stabilising and damping when driving straight ahead and around curves.
- when negotiating curves, the integrated spiral springs compensate the lateral forces and guarantee jerk-free steering while assisting the return of the wheels to the "straight ahead" position.
- suppresses high-frequency vibrations and prevents fluttering of the steering.
- both spring and damper forces guarantee uniform steering in the "straight ahead" position.

The tie rod ensures that the left and right wheel synchronously steer.

The reversing lock is deactivated by a spring chamber which, when pressure drops in the system, blocks the steering movement and leads to the steering axle being in a fixed position.

Installation instructions

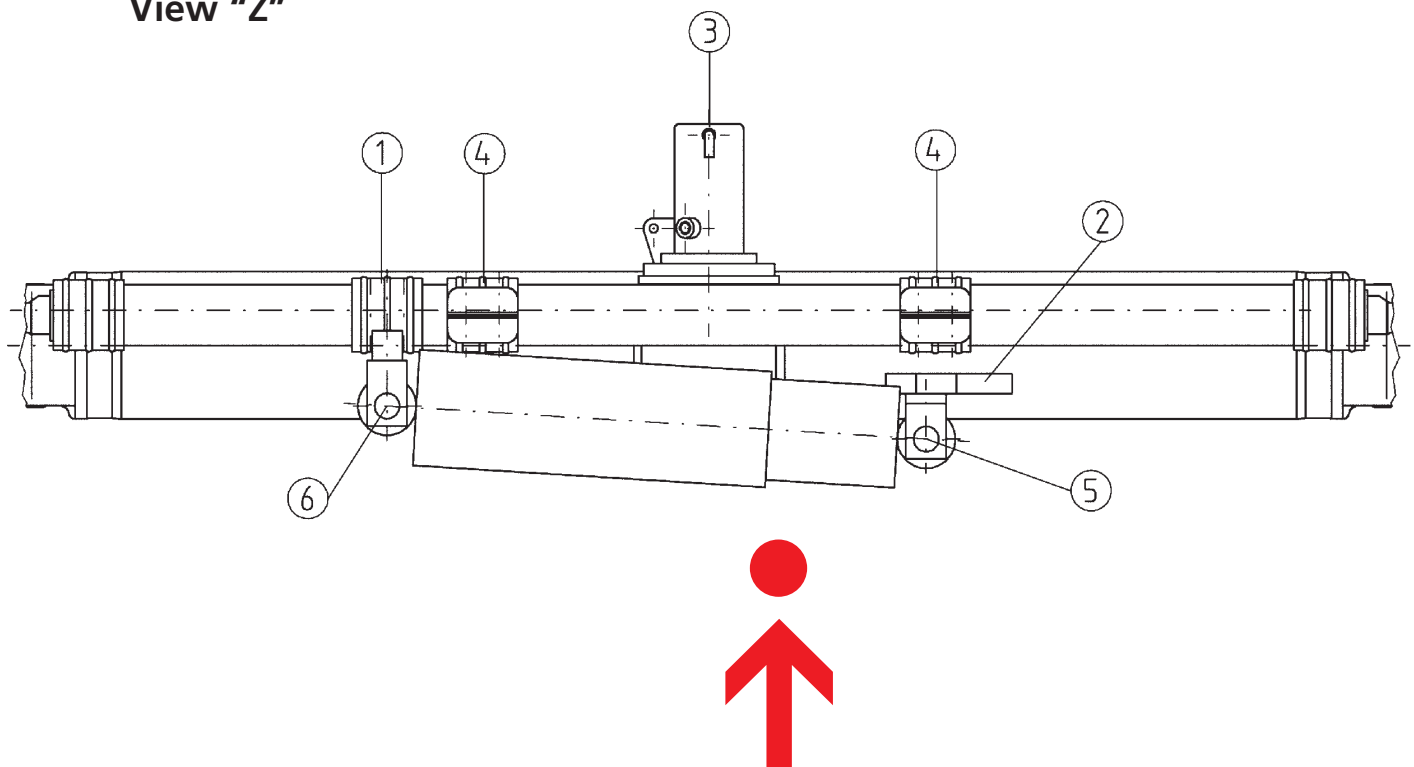
Important:

The length of the stabilising damper is preset for the "straight ahead" position for the wheels. It is not permitted to change the length set.

Installation procedure

- Set the air suspension to the correct ride height
- Set the wheels of the axle in the exact "straight ahead" position, if necessary measure the alignment and adjust, the reverse lock must be able to engage (3), if necessary adjust the check plate using the clamps (4).
- Install stabilising damper on the axle side (2), put on bolt (5), do not tighten.
- Install stabilising damper on clamp (1), the M24 (6) bolt should slide on easily, if necessary, adjust the clamp (1) on the tie rod.
- Tighten the bolts with a torque wrench:
 - a) Bolts M12 (WAF 19) on the clamp (1 + 4) Torque setting 90 Nm
 - b) Pos. 5 + 6, M 24 (WAF 36) of the stabilising damper Torque setting 660 Nm
- Test drive and check function
After negotiating curves the wheels of the self-steering axle must return to the "straight ahead" position without delay, if necessary check ride height.

View "Z"



The red dot must be facing to the ground after installation!

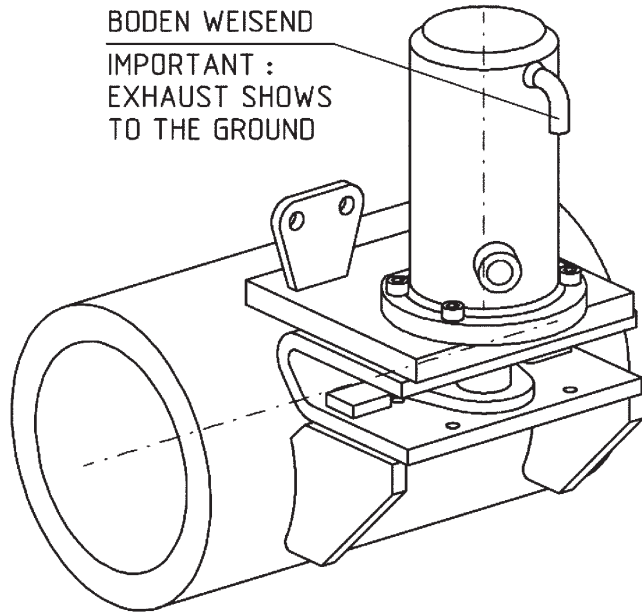
SAF self-steering axle with stabilising damper Installation drawing for locking cylinder



For reverse lock in SK RLB axles (valid from 09.06.04)

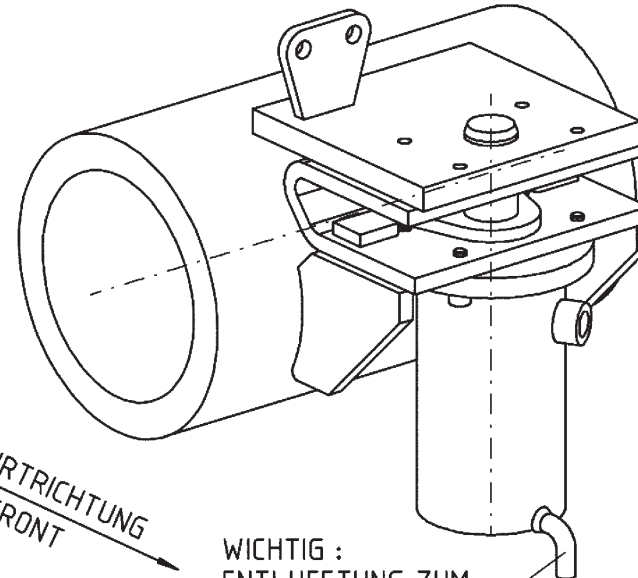
STANDARD: REVERSE
LOCK CYLINDER UPRIGHT

WICHTIG :
ENTLUEFTUNG ZUM
BODEN WEISEND
IMPORTANT :
EXHAUST SHOWS
TO THE GROUND



OPTIONAL: REVERSE
LOCK CYLINDER HANGING

WICHTIG :
ENTLUEFTUNG ZUM
BODEN WEISEND
IMPORTANT :
EXHAUST SHOWS
TO THE GROUND



| Type | Manufacturer | Size | SAF-Order-No. incl. nuts |
|--------------------------------|--------------|------------------------|-----------------------------|
| Brake chamber | SAF | 16" self-steering axle | 3 454 1081 60 |
| | | 20" self-steering axle | 3 454 1082 60 |
| | | 16" | 3 454 1065 60 |
| | | 20" | 3 454 1067 60 |
| | | 24" | 3 454 1069 60 |
| Double diaphragm brake chamber | SAF | 16/24" | 3 454 1077 64 |
| | | 20/24" | 3 454 1079 64 |

| | | | |
|--------------------------------|-------|------------------------|---------------------|
| Brake chamber | KNORR | 16" self-steering axle | 3 454 1081 30 |
| | | 20" self-steering axle | 3 454 1082 30 |
| | | 14" | 3 454 1064 30 |
| | | 16" | 3 454 1065 30 |
| | | 18" | 3 454 1066 30 |
| | | 20" | 3 454 1067 30 |
| | | 22" | 3 454 1068 30 |
| | | 24" | 3 454 1069 30 |
| Brake chamber | WABCO | 16" self-steering axle | 3 454 1081 00 |
| | | 20" self-steering axle | 3 454 1082 00 |
| | | 16" | 3 454 1065 00 |
| | | 20" | 3 454 1067 00 |
| | | 24" | 3 454 1069 00 |
| Spring brake chamber | KNORR | 14/16" | 3 454 1070 31 |
| | | 16/16" | 3 454 1047 31 |
| | | 16/24" | 3 454 1048 31 |
| | | 18/16" | 3 454 1049 31 |
| | | 20/24" | 3 454 1051 31 |
| | | 24/24" | 3 454 1056 31 |
| | WABCO | 16/16" | 3 454 1047 01 |
| | | 20/24" | 3 454 1051 01 |
| Double diaphragm brake chamber | KNORR | 16/24" | 3 454 1077 31 |
| | | 20/24" | 3 454 1079 31 * |
| | | | * not yet available |

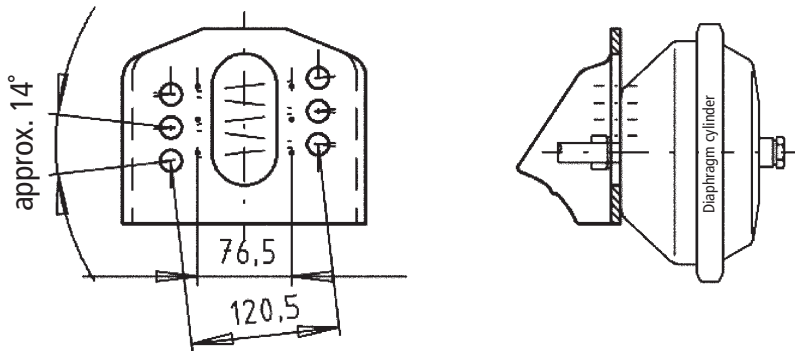
INTRADISC *plus* are delivered with brake chambers installed.

Spring and double diaphragm brake chambers are equipped with air connections.

Connection: M 16 x 1.5 inside thread

Specification of the brake chamber should be specified when placing the order!

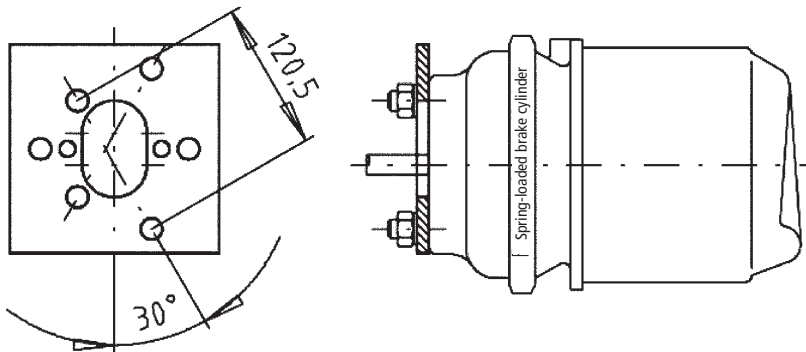
Connection of brake chambers to standard plates



Position of the mounting bolts:

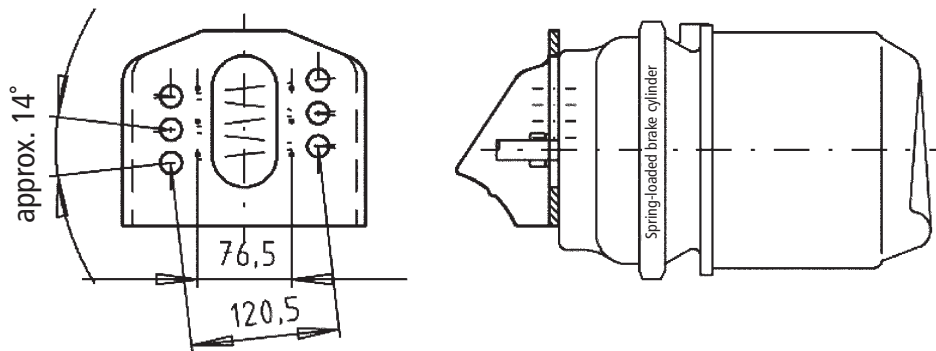
- Distance between hole lines 120.5 mm at an angle of approx. 7° from the horizontal
- Distance between hole lines 76.5 mm not required on axles with axle load > 6,000 kg

Connection of spring brake chambers to special plates



Position of the mounting bolts at an angle of 30° to the vertical!

Connection of spring brake chambers to standard plates



Position of the mounting bolts:

- Distance between hole lines 120.5 mm at an angle of approx. 7° from the horizontal
- Distance between hole lines 76.5 mm not required on axles with axle load > 6,000 kg

The SAF plates are sufficiently well dimensioned to take spring brake chambers where the manufacturer permits installation with the mounting bolts horizontal.

The flatness of the plates when new complies with the specifications of the brake chamber manufacturers, a reinforcing plate to strengthen the plate is not necessary.

Observe the installation instructions of the brake chamber manufacturers.

A major factor for the serviceability of the brake chambers and plates is compliance with the specified tightening torques and regular checking of the torque.

In conjunction with axle suspensions, please contact SAF to obtain approval for installation due to the larger space requirement of spring brake chambers where approval is not automatically given.