



Underpinning Your Progress.

The range of running gear for towable machinery, car and light truck trailers, caravans and cab & engine vehicles.



For reliable transportation,

The transport business is extremely varied. No one job is the same as another. Each application has its own requirements. There are typical jobs and there are special ones. The demands on the running gear are as varied as the needs of vehicle manufacturers and their end users. Nevertheless, the transport business does have one common denominator: the absolute need for reliable transportation. For BPW, this represents both a challenge and an obligation.



place your trust in BPW's experience.

With more than a century of experience in running gear technology, we develop and produce reliable running gear to meet all requirements. Whatever the parameters may be: load profiles, driving behaviour, payload, mileage or flexibility of body design, we can come up with the right running gear for almost every application. Our detailed solutions mark us out as a specialist in more than just towed vehicles. From individual components to an easy-to-install complete system, BPW supplies the solutions so you can make reliable progress.

[Industrial and towed equipment]



When the going gets tough,
BPW running gear is in its element.





Whether on the building site or on the piste, in a muddy quagmire or the deepest snow. Towed equipment is only worthwhile if it keeps running. These applications place great demands on operators and machinery alike. In an emergency, work goes on around the clock – downtime would be fatal. Because manufacturers need to know that their machinery will stay mobile, they rely on the experience and expertise of BPW.

In mobile compressors and generators, in cranes, hoists, cement mixers and pumps, in piste preparation vehicles, wood shredders and water purification systems. BPW running gear is robust, with a long service life and developed to meet each of your individual requirements. Wherever you need the solution: on a building site, a skiing piste, in the timber business or with municipal and emergency services. You can count on us.



[Commercial trailers]



We keep just about everyone moving.
From the DIY enthusiast to trades people.





Whatever you want to move, whether to the equestrian centre, to the yacht marina or to your local DIY superstore, BPW running gear keeps a trailer running safely. With driving stability, optimised weight, height adjustment, air suspension, braked or unbraked and as a T or V-chassis, we supply the right running gear for every transport requirement.

We individually adapt our systems to every application. Our experience means we know about the typical applications and the effects of the bodywork on driving behaviour. And what assembly parts will be required to connect the running gear optimally to the body. Talking to you helps us to work in an even more targeted manner. From this perspective, you can be sure that you'll get an economically optimum solution.



[Caravans]



Wherever you may be headed.
With BPW, your holiday starts the
moment you set off.





People driving on holiday in their caravan want one thing above all else: to get to their destination safely. BPW running gear is something that can be relied upon in this respect. It guarantees your car and caravan will offer dynamic, safe and comfortable driving so you arrive more relaxed. Your caravan will stay safely on course through corners, when overtaking and in treacherous cross winds. There certainly won't be any unpleasant surprises. Vehicle manufacturers don't have to worry about anything apart from the bodywork. Drivers and passengers will arrive relaxed and in safety.

BPW does more than worry about the driving properties. We also develop new ideas. We co-operate with well known manufacturers, we are members of the main associations and we are involved in successful development partnerships. We know what counts: Flexibility in product design, a wide range of models, low weight, increased payload and easy-to-install components. We help to optimise production costs and we support this with our parts logistics and our unbeatable delivery performance. Together, we'll go further.



[Chassis conversions – front-wheel drive vehicles]



Because nothing is too specialised for us:
BPW running gear technology for front-wheel drive chassis conversions.





Armoured vans, light platform trucks, box vans and refrigerated trucks, car transporters, ambulances, market vehicles and motor homes. With criteria such as driving comfort, safety and maximum payload, maximum headroom, optimum loading and unloading options and freedom of movement combined with comfort-orientated driving and absolute road safety. If you want optimum creativity, you need BPW running gear.

Our running gear technology for chassis conversions for front-wheel drive vehicles represents another of our fields of excellence in running gear systems. BPW special axles for these chassis conversions keep the overall height of the vehicle low and ensure that the centre of gravity is optimally positioned. Air suspension with a raise and lower function as standard offers comfort and driving stability in all situations. It goes without saying that the reliability and long service life you have come to expect from BPW are all included. As a result, BPW pays off.



[Overview of complete chassis]



Whatever you want to move. We've got the means to do it.

For any job, in any industry, right up to the highest standard. We supply complete systems you can build on. From the simplest to the most complex running gear requirements. Chassis, connection and transmission devices, axles, brakes and assembly parts form a package that is a ready-to-go solution. And topped off with the decisive bonus of an economic advantage.



BPW safety chassis with Swing V^{tec} axles



Tandem chassis with adjustable height connection assembly



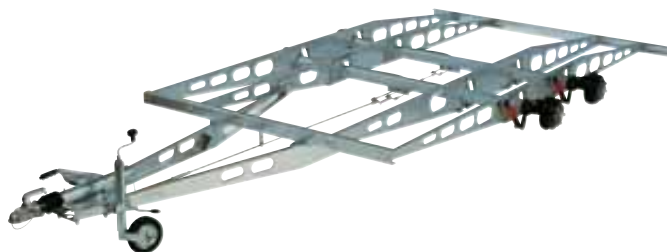
V-chassis



Single-axle chassis with adjustable height connection assembly



Running gear technology for hydraulic raise and lower



Tandem chassis for a car transporter



T-chassis



Running gear technology for turntable drawbar trailers



Axles for front-wheel drive chassis conversions



Running gear technology for twin-axle vehicles

The more questions we ask, the quicker you get to your destination.

BPW doesn't just make running gear systems. We first ask what they are going to be used for. In this way, we develop technical solutions that are precisely tailored to the application. In partnership and co-operation with our customers, the vehicle manufacturers, we lay the foundations for the best possible specifications.

- What vehicle do you want to build?
- What should the gross vehicle weight rating be?
- What axle and trailer drawbar loads do you want?
- What are the operating conditions?
E.g. on-road, off-road, use within company premises, etc.
- What tractor vehicle do you want to combine it with?
- What brake system do you want to use? Overrun brakes or power-operated brakes?
- What track width, support centre, wheel connection or special equipment do you want?
- What tyre size are you going to use?
- How should the connection assembly be designed?
Flange, straight, offset, height adjustable, removable and with what type of hitch
(Ball hitch, DIN towing eye, NATO towing eye or other?)
- What should the hitch height be?
- What regulations will the vehicle be registered under? E.g. EU or national motor vehicle construction and use regulations?
- Do you need any accessories? E.g. jockey wheels, etc.
- Do you require any services from BPW, e.g. road tests, demonstrations of properties, brake calculations or categorisation calculation?

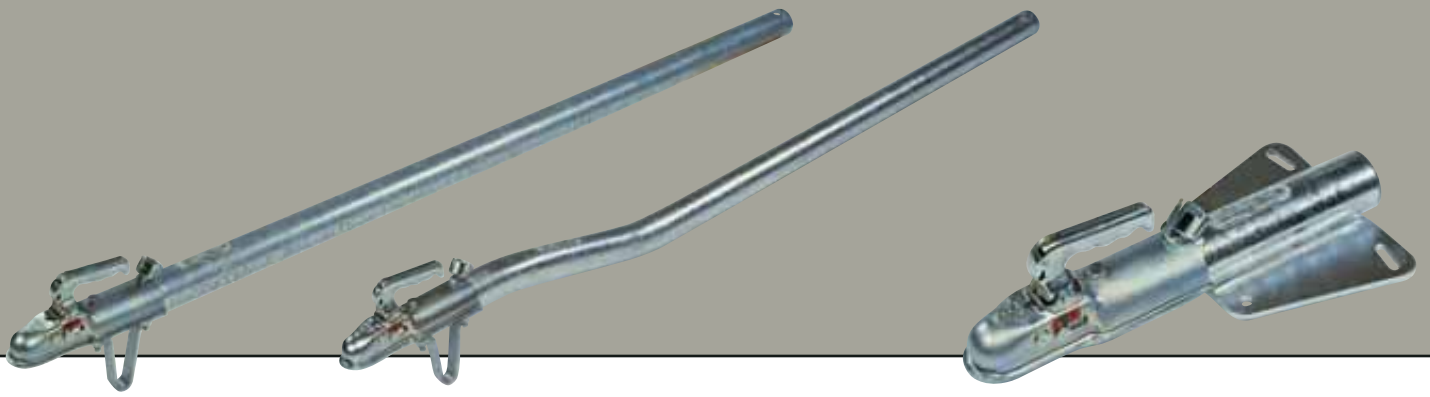
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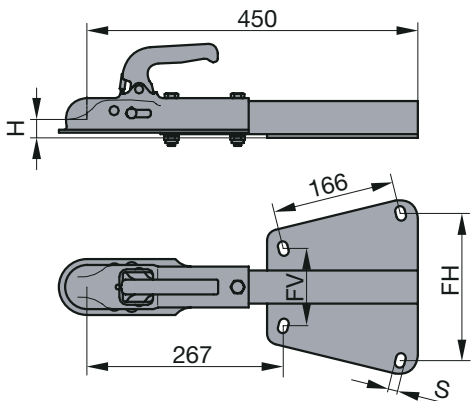
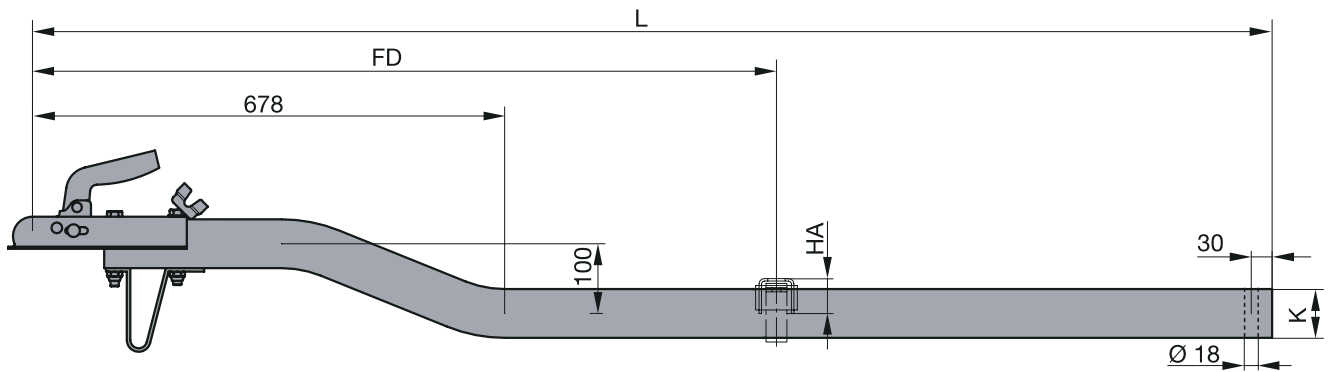
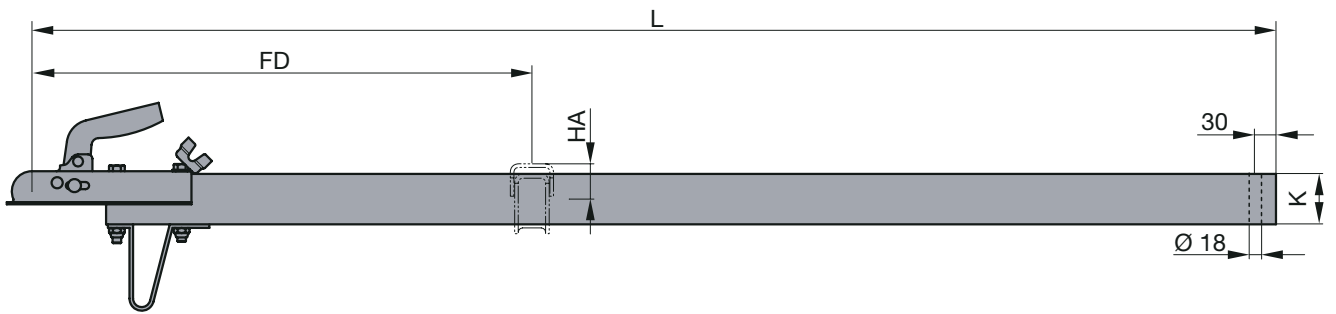
[Connection assemblies] Everything you need for a secure connection is available from BPW. Perfectly attuned and prepared for all conditions thanks to hot-dip galvanising and priming. No matter what the application. BPW gives you the connection for a secure hitch.







1.1 ZOR straight, offset / ZOF drawbars, unbraked, gross vehicle weight rating 750 kg



The economical solution for anyone who is looking for a reliable, unbraked drawbar installation. Offset, straight or flanged versions, hot-dip galvanised for long-lasting surface protection.

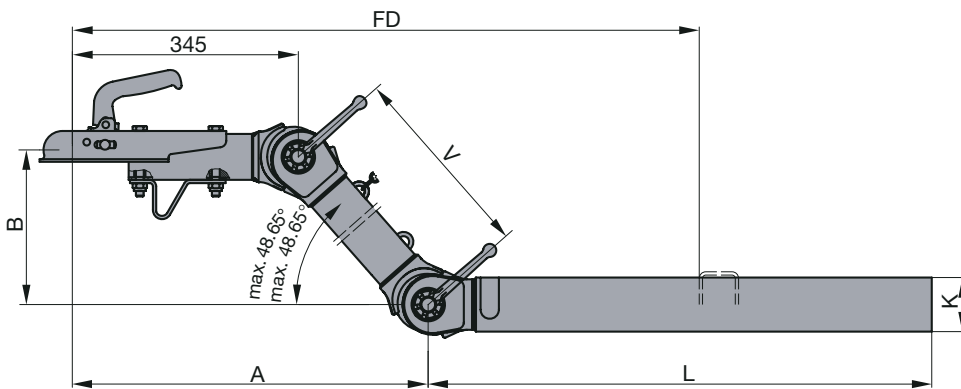
Gross vehicle weight rating [kg]	Marketed under	Order no.	Dimensions [mm]				Permitted drawbar load [kg]	EC test symbol	Weight [kg]
			K	HA	L				
straight									
750	ZOR 0.75-1 A	48.14.101.010	Ø 70 x 4	50	2000	75	e1*0871*94/20	14.5	
		48.14.101.011	Ø 70 x 4	50	2200	75	e1*0871*94/20	15.8	
		48.14.101.012	Ø 70 x 4	50	2400	75	e1*0871*94/20	17.1	
		48.14.101.013	Ø 70 x 4	50	2600	75	e1*0871*94/20	18.4	
offset									
750	ZOR 0.75-1 A	48.14.301.010	Ø 70 x 4	50	2000	75	e1*0871*94/20	14.9	
		48.14.301.011	Ø 70 x 4	50	2200	75	e1*0871*94/20	16.2	
		48.14.301.012	Ø 70 x 4	50	2400	75	e1*0871*94/20	17.5	
		48.14.301.013	Ø 70 x 4	50	2600	75	e1*0871*94/20	18.8	

incl. plug support
FD see pages 142/143

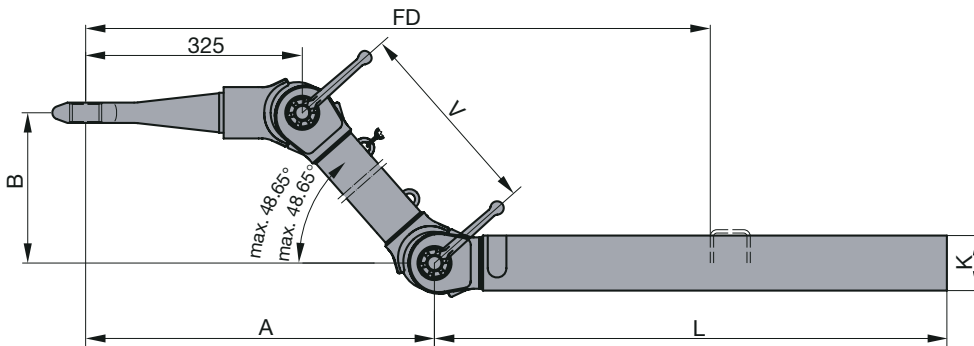
Gross vehicle weight rating [kg]	Marketed under	Order no.	Dimensions [mm]				Permitted drawbar load [kg]	EC test symbol	Weight [kg]
			FH	FV	H	S			
750	ZOF 0.75-1	48.14.501.001	190-210	100-110	25	13	75	e1*1023*94/20	4.9



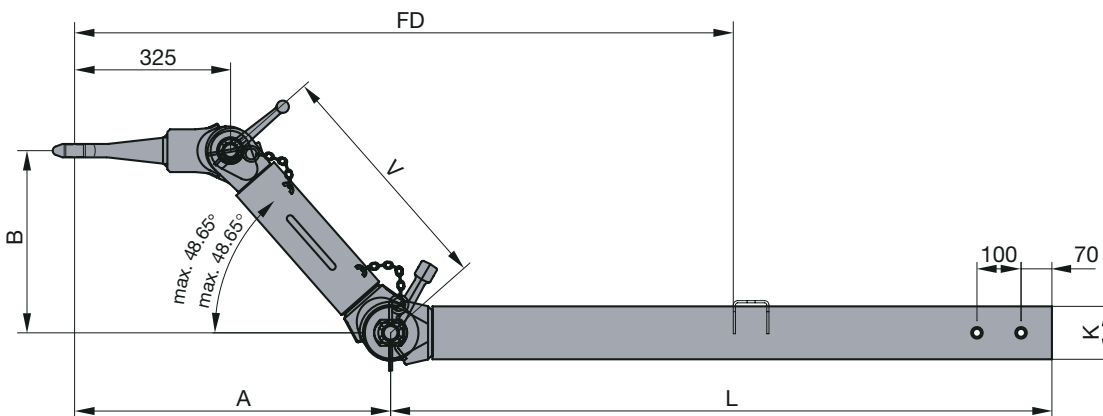
1.1 ZOV drawbars, unbraked, adjustable height, gross vehicle weight rating up to 6500 kg



ZOV 0.75-1; 1.2-1



ZOV 0.75-1; 1.2-1; 2.5-1



ZOV 5.0-1; 6.5-1

This adjustable height hitch offers a wide range of flexibility with its adjustable coupling height. The ball hitch and towing eye are easily interchanged.

Conversion kits for other front parts

Gross vehicle weight rating [kg]	Order no. ball hitch	Order no. of DIN towing eye
to 750	09.117.30.02.0	09.117.30.03.0
to 1200	05.117.30.08.0	05.117.30.07.0
to 2500	05.117.30.09.0	-

Other conversion kits available on request

Gross vehicle weight rating [kg]	Marketed under	Order no. incl. ball hitch	Dimensions [mm]					Permitted drawbar load [kg]	EC test symbol	Weight [kg]
			K	A	L	B	V			
to 750	ZOV 0.75-1 B	47.14.401.002	Ø 70	675	1075	0-375	500	75	e1*0841*94/20	31.0
		47.14.401.003	Ø 70	675	1575	0-375	500	75	e1*0841*94/20	34.0
		47.14.401.004	Ø 70	675	2075	0-375	500	75	e1*0841*94/20	37.0
to 1200	ZOV 1.2-1 B	47.23.401.010	Ø 82.5	543	1070	0-225	300	100	e1*1132*94/20	31.0
		47.23.401.011	Ø 82.5	576	1070	0-263	350	100	e1*1132*94/20	32.0
		47.23.401.012	Ø 82.5	609	1070	0-300	400	100	e1*1132*94/20	33.0
		47.23.401.013	Ø 82.5	642	1070	0-338	450	100	e1*1132*94/20	34.0
		47.23.401.014	Ø 82.5	675	1070	0-375	500	100	e1*1132*94/20	35.0
		47.23.401.015	Ø 82.5	543	1570	0-225	300	100	e1*1132*94/20	37.0
		47.23.401.016	Ø 82.5	576	1570	0-263	350	100	e1*1132*94/20	38.0
		47.23.401.017	Ø 82.5	609	1570	0-300	400	100	e1*1132*94/20	39.0
		47.23.401.018	Ø 82.5	642	1570	0-338	450	100	e1*1132*94/20	40.0
		47.23.401.019	Ø 82.5	675	1570	0-375	500	100	e1*1132*94/20	41.0
		47.23.401.020	Ø 82.5	543	2070	0-225	300	100	e1*1132*94/20	43.0
		47.23.401.021	Ø 82.5	576	2070	0-263	350	100	e1*1132*94/20	44.0
		47.23.401.022	Ø 82.5	609	2070	0-300	400	100	e1*1132*94/20	45.0
		47.23.401.023	Ø 82.5	642	2070	0-338	450	100	e1*1132*94/20	46.0
47.23.401.024	Ø 82.5	675	2070	0-375	500	100	e1*1132*94/20	47.0		

FD see pages 144/147



1.1 ZOV drawbars, unbraked, adjustable height, gross vehicle weight rating up to 6500 kg

Gross vehicle weight rating [kg]	Marketed under	Order no. incl. DIN towing eye	K	Dimensions [mm]					Permitted drawbar load [kg]	EC test symbol	Weight [kg]
				A	L	B	V				
to 750	ZOV 0.75-1 B	47.14.403.032	Ø 70	655	1075	0-375	500	75	e1*0841*94/20	32.0	
		47.14.403.033	Ø 70	655	1575	0-375	500	75	e1*0841*94/20	35.0	
		47.14.403.034	Ø 70	655	2075	0-375	500	75	e1*0841*94/20	38.0	
to 1200	ZOV 1.2-1 B	47.23.403.010	Ø 82.5	523	1070	0-225	300	100	e1*1132*94/20	32.0	
		47.23.403.011	Ø 82.5	556	1070	0-263	350	100	e1*1132*94/20	33.0	
		47.23.403.012	Ø 82.5	589	1070	0-300	400	100	e1*1132*94/20	34.0	
		47.23.403.013	Ø 82.5	622	1070	0-338	450	100	e1*1132*94/20	35.0	
		47.23.403.014	Ø 82.5	655	1070	0-375	500	100	e1*1132*94/20	36.0	
		47.23.403.015	Ø 82.5	523	1570	0-225	300	100	e1*1132*94/20	38.0	
		47.23.403.016	Ø 82.5	556	1570	0-263	350	100	e1*1132*94/20	39.0	
		47.23.403.017	Ø 82.5	589	1570	0-300	400	100	e1*1132*94/20	40.0	
		47.23.403.018	Ø 82.5	622	1570	0-338	450	100	e1*1132*94/20	41.0	
		47.23.403.019	Ø 82.5	655	1570	0-375	500	100	e1*1132*94/20	42.0	
		47.23.403.020	Ø 82.5	523	2070	0-225	300	100	e1*1132*94/20	44.0	
		47.23.403.021	Ø 82.5	556	2070	0-263	350	100	e1*1132*94/20	45.0	
		47.23.403.022	Ø 82.5	589	2070	0-300	400	100	e1*1132*94/20	46.0	
		47.23.403.023	Ø 82.5	622	2070	0-338	450	100	e1*1132*94/20	47.0	
		47.23.403.024	Ø 82.5	655	2070	0-375	500	100	e1*1132*94/20	48.0	

This adjustable height hitch offers a wide range of flexibility with its adjustable coupling height. The ball hitch and towing eye are easily interchanged.

Gross vehicle weight rating [kg]	Marketed under	Order no. incl. DIN towing eye	K	Dimensions [mm]				Permitted drawbar load [kg]	EC test symbol	Weight [kg]
				A	L	B	V			
to 2500	ZOV 2.5-1	47.41.403.001	Ø 108/90	501	1090	0-225	300	150	e1*1334*94/20	63.0
		47.41.403.002	Ø 108/90	534	1090	0-263	350	150	e1*1334*94/20	64.0
		47.41.403.003	Ø 108/90	568	1090	0-300	400	150	e1*1334*94/20	65.0
		47.41.403.004	Ø 108/90	601	1090	0-338	450	150	e1*1334*94/20	66.0
		47.41.403.005	Ø 108/90	635	1090	0-375	500	150	e1*1334*94/20	67.0
		47.41.403.006	Ø 108/90	501	1590	0-225	300	150	e1*1334*94/20	76.0
		47.41.403.007	Ø 108/90	534	1590	0-263	350	150	e1*1334*94/20	77.0
		47.41.403.008	Ø 108/90	568	1590	0-300	400	150	e1*1334*94/20	78.0
		47.41.403.009	Ø 108/90	601	1590	0-338	450	150	e1*1334*94/20	79.0
		47.41.403.010	Ø 108/90	635	1590	0-375	500	150	e1*1334*94/20	80.0
		47.41.403.011	Ø 108/90	501	2090	0-225	300	150	e1*1334*94/20	89.0
		47.41.403.012	Ø 108/90	534	2090	0-263	350	150	e1*1334*94/20	90.0
		47.41.403.013	Ø 108/90	568	2090	0-300	400	150	e1*1334*94/20	91.0
		47.41.403.014	Ø 108/90	601	2090	0-338	450	150	e1*1334*94/20	92.0
		47.41.403.015	Ø 108/90	635	2090	0-375	500	150	e1*1334*94/20	93.0
to 5000	ZOV 5.0-1*	47.62.403.001	Ø 127	716	2300	0-413	550	400	e1*1345*94/20	160.0
		47.62.403.002	Ø 127	716	2500	0-413	550	400	e1*1345*94/20	168.0
		47.62.403.003	Ø 127	716	3000	0-413	550	400	e1*1345*94/20	188.0
to 6500	ZOV 6.5-1**	47.65.403.001	Ø 140	713	2300	0-375	500	400		178.0
		47.65.403.002	Ø 140	713	2500	0-375	500	400		186.0
		47.65.403.003	Ø 140	713	3000	0-375	500	400		209.0

* Free drawbar lengths on request

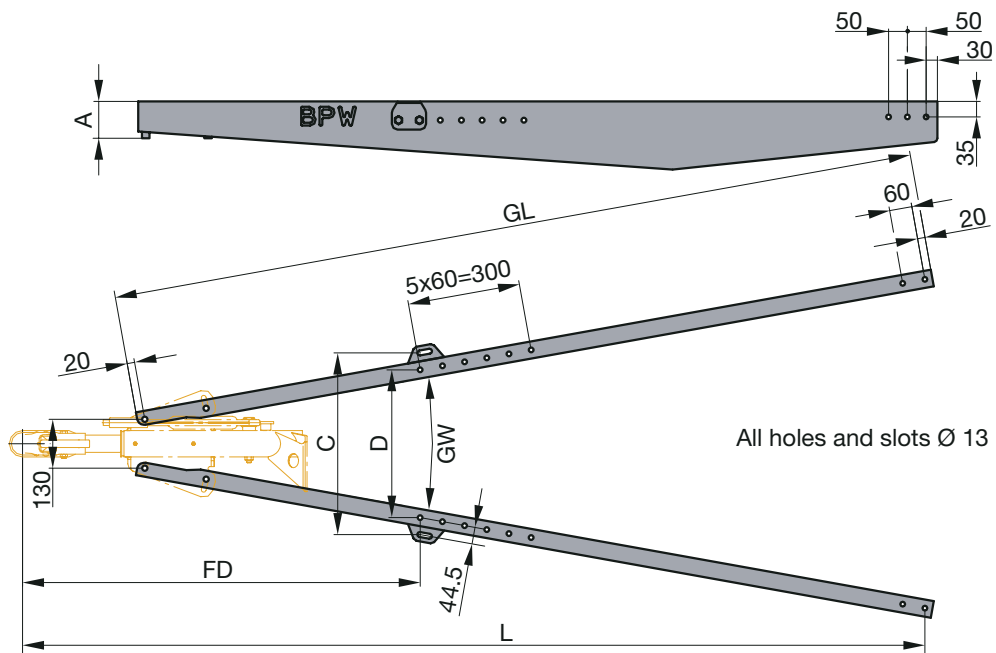
** EC-approved version; free drawbar lengths on request

FD see pages 144/147

Greater flexibility in the design of vehicle bodywork: That's the result of using BPW drawbars with adjustable supports. Bolted construction instead of welding is just one of the advantages: The corresponding assembly components are included in the package. Hot-dip galvanised for long-lasting surface protection.



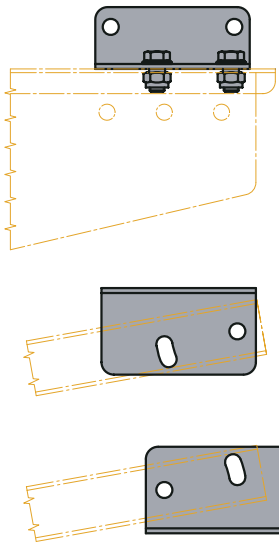
1.2 ZEA drawbars, gross vehicle weight rating up to 3500 kg



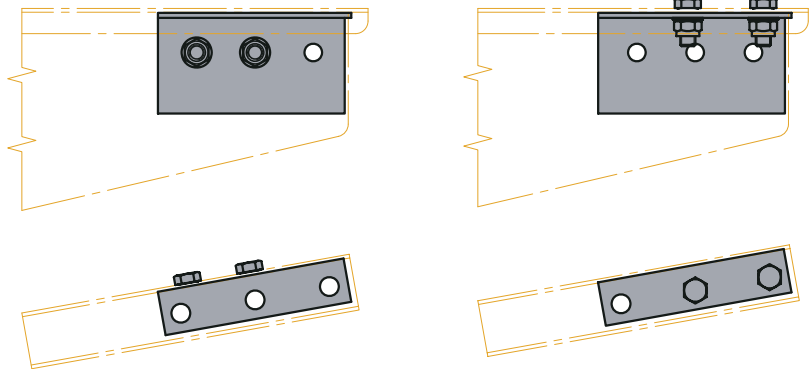
Gross vehicle weight rating [kg]	Marketed under	Order no.	GW	Dimensions [mm]							Permitted drawbar load [kg]	EC test symbol	Weight [kg]
				A	C	D	FD	GL	L				
2000	ZEA 2.0-1	05.447.26.23.1	30°	80	605	516	1045	1800	2025	150	e1*0986*94/20	16.4	
		05.447.26.24.1	30°	80	605	516	1045	2150	2364	150	e1*0986*94/20	20.7	
		05.447.26.25.1	30°	80	772	653	1301	2500	2702	150	e1*0986*94/20	25.0	
2800	ZEA 2.8-1	05.447.26.17.1	30°	98	605	516	1045	1800	2025	150	e1*0891*94/20	20.1	
		05.447.26.18.1	30°	98	605	516	1045	2150	2364	150	e1*0891*94/20	23.4	
		05.447.26.19.1	30°	98	772	653	1301	2500	2702	150	e1*0891*94/20	26.6	
3500	ZEA 3.5-1	05.447.26.20.1	30°	104	605	516	1039	1800	2050	150	e1*0975*94/20	27.2	
		05.447.26.21.1	30°	104	605	516	1039	2150	2388	150	e1*0975*94/20	31.5	
		05.447.26.22.1	30°	104	772	653	1326	2500	2726	150	e1*0975*94/20	38.6	



1.2 Assembly component kits for ZEA drawbars

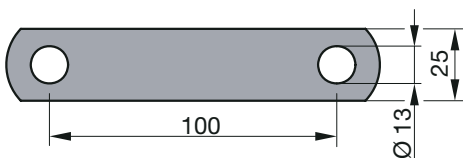


Vertical screw connection
05.803.02.25.0

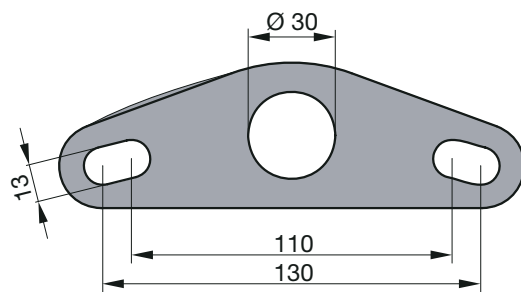


Horizontal screw connection
05.803.02.26.0

1.2 Drawbar tube shackles for ZEA drawbars for mounting towing attachments (ZAF, ZOF)



03.232.25.05.0



03.232.25.06.0



Not available any more:
1.3 ZAF towing attachment

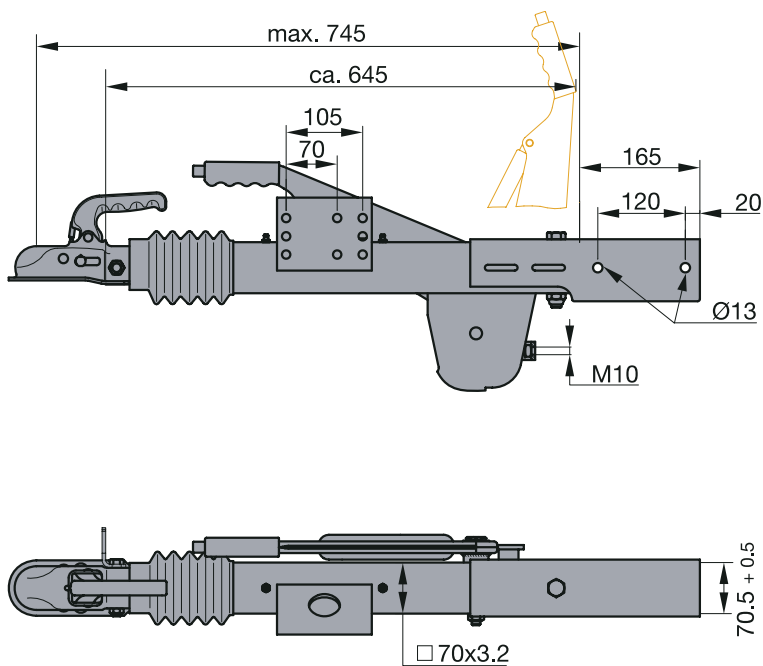
New System available at BPW Fahrzeugtechnik:
ZAF-2 für PKW, Leicht-LKW-Anhänger und Caravans.



Greater flexibility thanks to direct mounting to the trailer subframe. This permits independent frame designs and allows for greater freedom of vehicle design. Also, the hot-dip galvanised surface means that corrosion is prevented.

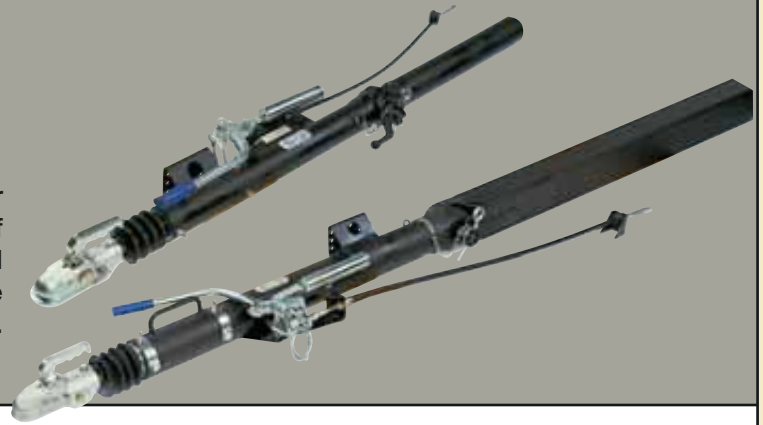


1.4 ZAAQ connection towing attachments, gross vehicle weight rating up to 1600 kg

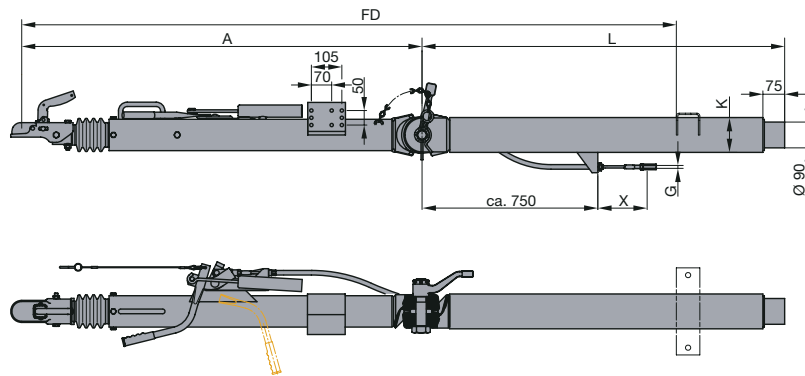


Gross vehicle weight rating [kg]	Marketed under	Type	Order no.	Can be connected to sq. tube [mm]	Permitted drawbar load [kg]	EC test symbol	Weight [kg]
700-1350	ZAAQ 1.6-1	PAV/SR 1.3X	48.25.181.067	70	100	e1*0720*94/20	16.4
850-1600	ZAAQ 1.6-1	PAV/SR 1.3X	48.29.181.030	70	100	e1*0720*94/20	16.4

A towing attachment which puts money back into your pocket. The removable front part shortens the length of the trailer and therefore reduces the space required (and therefore cost) for market trailers. At the same time, the mobile stalls can be approached from all sides.



1.4 ZAA drawbars with removable connection assembly, gross vehicle weight rating up to 3500 kg

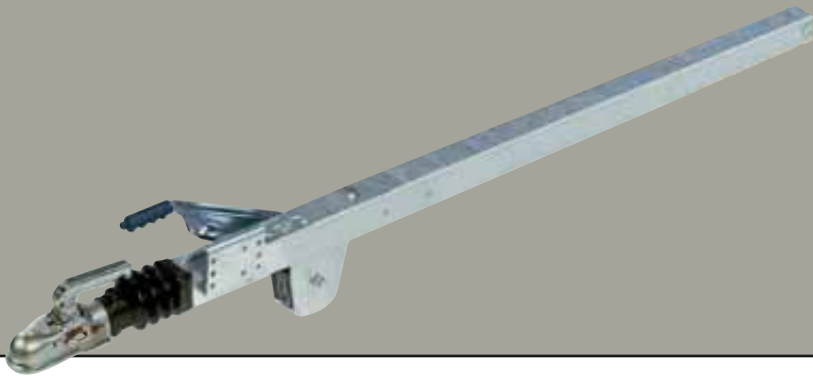


Gross vehicle weight rating [kg]	Designation	Overrun hitch	Order no. incl. DIN towing eye	K	Dimensions [mm]					Permitted drawbar load [kg]	EC test symbol	Weight [kg]
					A	L	G	X				
650-1300	ZAA 1.3-1	AK 1308	47.24.181.001	Ø 88.9 x 5.6	1100	1500	M10	160	100	e1*1268*94/20	48.9	
			47.24.181.002	Ø 88.9 x 5.6	1100	1700	M10	160	100	e1*1268*94/20	51.2	
			47.24.181.003	Ø 88.9 x 5.6	1100	1900	M10	160	100	e1*1268*94/20	53.5	
			47.24.181.004	Ø 88.9 x 5.6	1100	2500	M10	160	100	e1*1268*94/20	60.4	
1300-2000	ZAA 2.0-1	AK 2008	47.36.181.001	Ø 88.9 x 8.8	1100	1500	M10	160	100	e1*1269*94/20	66.4	
			47.36.181.002	Ø 88.9 x 8.8	1100	1900	M10	160	100	e1*1269*94/20	73.4	
			47.36.181.003	Ø 88.9 x 8.8	1100	2500	M10	160	100	e1*1269*94/20	83.8	
			47.36.181.004	Ø 88.9 x 8.8	1100	2800	M10	160	100	e1*1269*94/20	89.0	
2500-3500	ZAA 3.5-1	AK 3510 A	47.51.181.001	vkt. 120 x 6.3	1380	1500	M12	160	150	e1*1256*94/20	112.6	
			47.51.181.002	vkt. 120 x 6.3	1380	1900	M12	160	150	e1*1256*94/20	121.5	
			47.51.181.003	vkt. 120 x 6.3	1380	2500	M12	160	150	e1*1256*94/20	134.8	
			47.51.181.004	vkt. 120 x 6.3	1380	2800	M12	160	150	e1*1256*94/20	141.5	

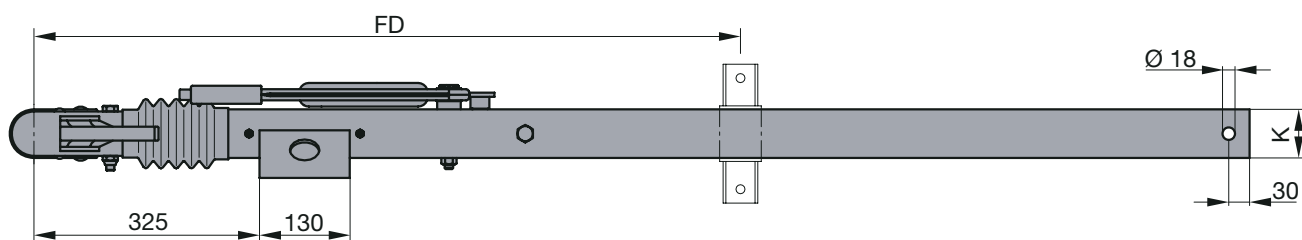
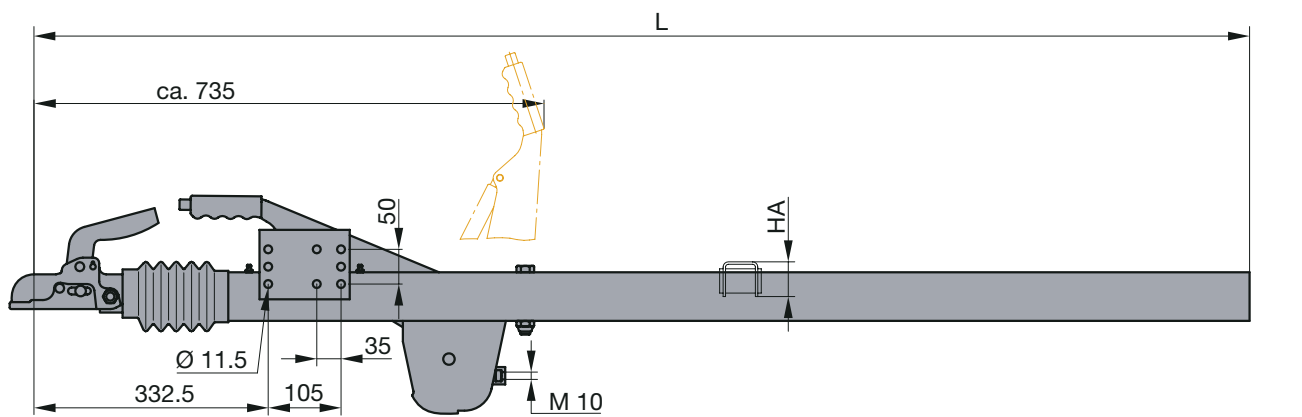
Conversion kits from ball hitch to towing eyes

Gross vehicle weight rating [kg]	Marketed under	DIN towing eye (d=40 mm)	NATO towing eye (d = 76.2 mm)	Towing eye for Italy (d = 45 mm)	Towing eye for France (d = 76.2 mm)
650-2000	ZAA 1.3-1 + ZAA 2.0-1	05.801.90.37.0	09.870.00.32.0	05.801.90.74.0	05.801.90.77.0
2500-3500	ZAA 3.5-1	05.870.00.06.0	05.801.90.46.0	05.801.90.82.0	-

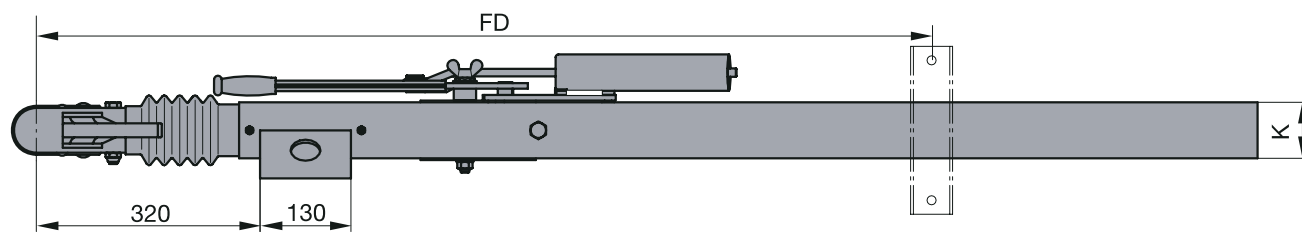
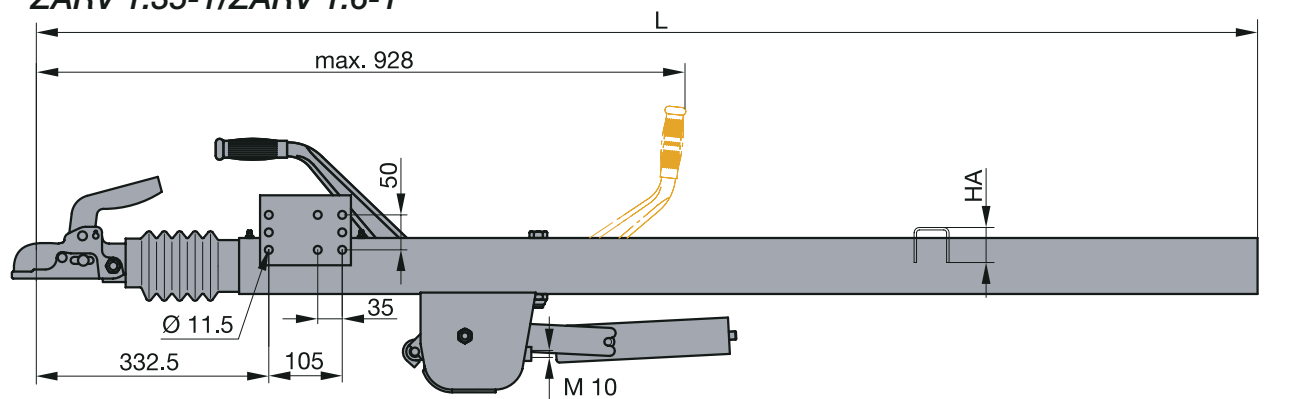
FD see pages 144/147



1.4 ZARV drawbars with towing attachment, square type, gross vehicle weight rating up to 2800 kg



ZARV 1.35-1/ZARV 1.6-1



ZARV 2.0-1/ZARV 2.8-1

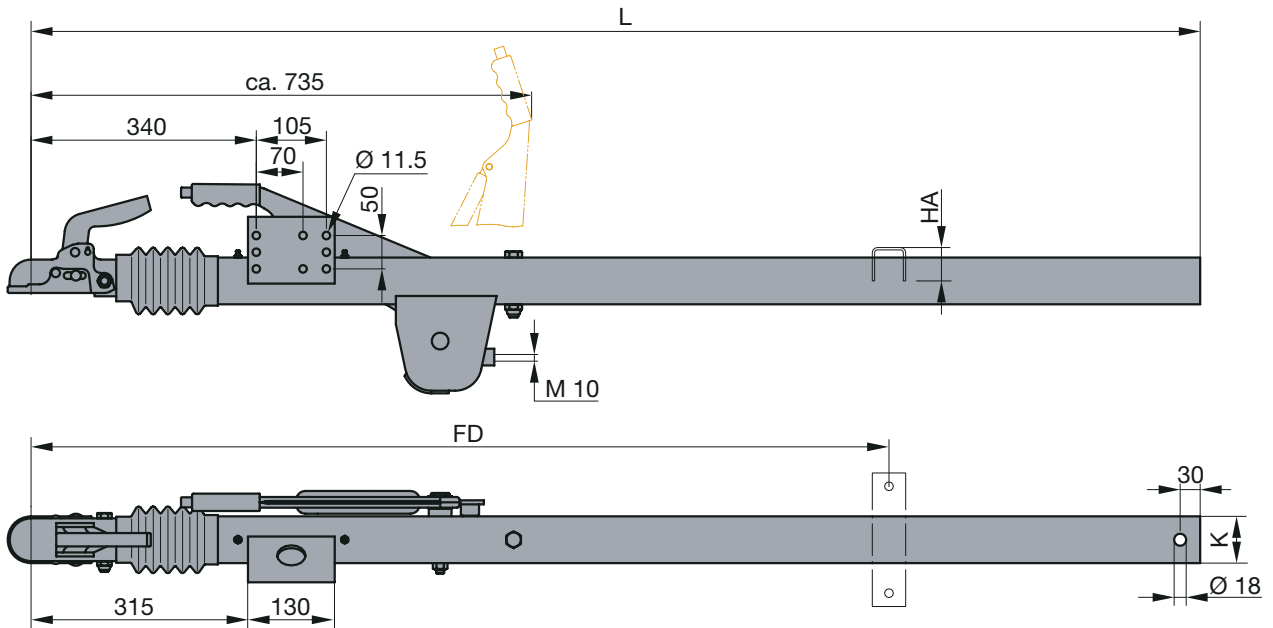
The square profile provides a high level of stability in all applications, giving a secure connection. The hot-dip galvanised surface ensures long-lasting corrosion protection.

Gross vehicle weight rating [kg]	Marketed under	Type	Order no.	K	Dimensions [mm]			Permitted drawbar load [kg]	EC test symbol	Weight [kg]
					HA	L				
700-1350	ZARV 1.35-1	PAV/SR 1.3 X	48.25.181.055	sq. 70 x 3.2	50	2100	100	e1*0594*94/20	22.5	
			48.25.181.056	sq. 70 x 3,2	50	2300	100	e1*0594*94/20	24.5	
			48.25.181.057	sq. 70 x 3.2	50	2500	100	e1*0594*94/20	25.2	
			48.25.181.058	sq. 70 x 3.2	50	3000	100	e1*0594*94/20	28.5	
			48.25.181.059	sq. 70 x 3.2	50	3500	100	e1*0594*94/20	31.8	
850-1600	ZARV 1.6-1	PAV/SR 1.3 X1	48.29.181.015	sq. 70 x 4.5	50	2100	100	e1*0886*94/20	26.9	
			48.29.181.016	sq. 70 x 4.5	50	2300	100	e1*0886*94/20	28.7	
			48.29.181.017	sq. 70 x 4.5	50	2500	100	e1*0886*94/20	30.4	
			48.29.181.018	sq. 70 x 4.5	50	3000	100	e1*0886*94/20	34.9	
			48.29.181.019	sq. 70 x 4.5	50	3500	100	e1*0886*94/20	39.3	
1089-2000	ZARV 2.0-1	PAV/SR 2.0 X	48.36.181.055	sq. 80 x 5	55	2100	100	e1*0583*94/20	35.0	
			48.36.181.056	sq. 80 x 5	55	2300	100	e1*0583*94/20	37.3	
			48.36.181.057	sq. 80 x 5	55	2500	100	e1*0583*94/20	39.6	
			48.36.181.058	sq. 80 x 5	55	3000	100	e1*0583*94/20	45.4	
1785-2800	ZARV 2.8-1	PAV/SR 2.7 X	48.44.181.031	sq. 100 x 6.3	65	2100	100	e1*0576*94/20	49.6	
			48.44.181.032	sq. 100 x 6.3	65	2300	100	e1*0576*94/20	53.2	
			48.44.181.033	sq. 100 x 6.3	65	2500	100	e1*0576*94/20	56.9	
			48.44.181.034	sq. 100 x 6.3	65	3000	100	e1*0576*94/20	66.0	
			48.44.181.035	sq. 100 x 6.3	65	3500	100	e1*0576*94/20	75.1	

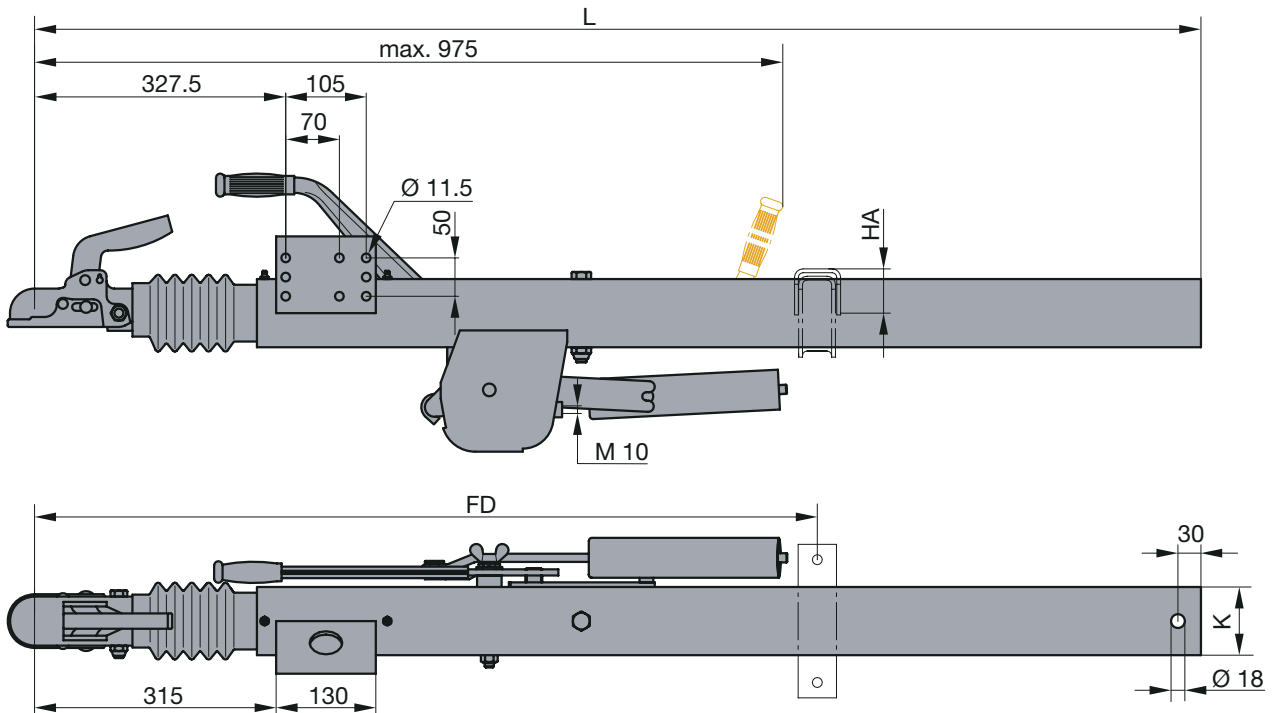
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**1.4 ZAR drawbars with towing attachment, round type, in-line,
gross vehicle weight rating up to 2800 kg**



ZAR 1.35-1

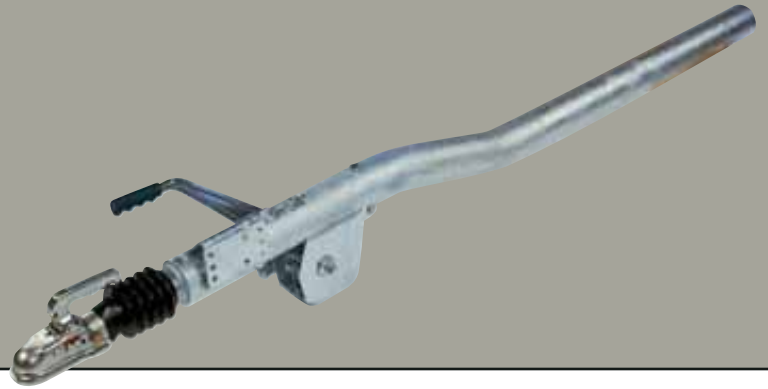


ZAR 2.0-1/ZAR 2.8-1

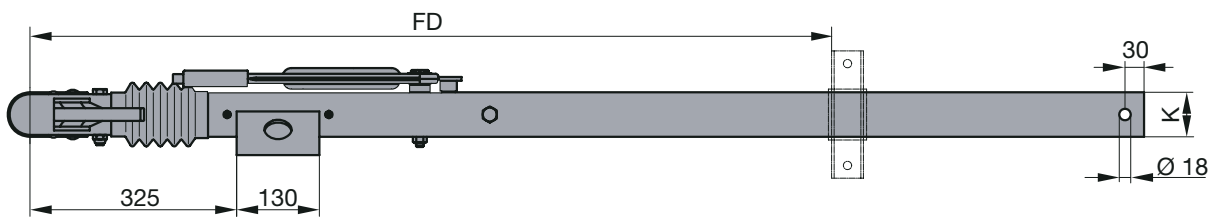
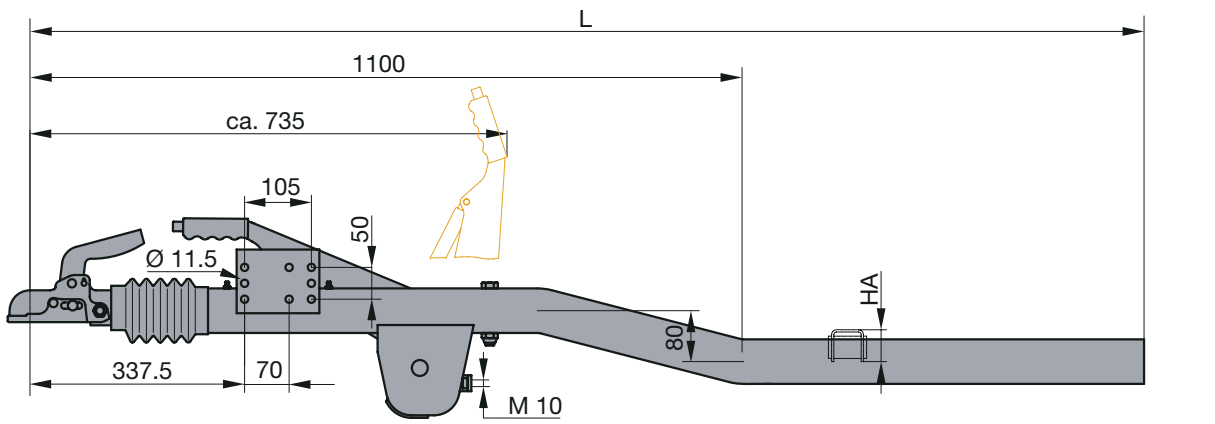
The classic round profile provides a secure connection between the trailer and the towing vehicle even in the most exacting applications. With a hot-dip galvanised surface for long-lasting corrosion protection.

Gross vehicle weight rating [kg]	Marketed under	Type	Order no.	K	Dimensions [mm]				Weight [kg]
					HA	L	Permitted drawbar load [kg]	EC test symbol	
700-1350	ZAR 1.35-1 A	PAV/SR 1.3 X	48.25.181.040	Ø 70 x 4	50	2100	100	e1*0595*94/20	29.8
			48.25.181.041	Ø 70 x 4	50	2300	100	e1*0595*94/20	31.1
			48.25.181.042	Ø 70 x 4	50	2500	100	e1*0595*94/20	32.4
			48.25.181.043	Ø 70 x 4	50	3000	100	e1*0595*94/20	35.7
			48.25.181.044	Ø 70 x 4	50	3500	100	e1*0595*94/20	38.9
1089-2000	ZAR 2.0-1 A	PAV/SR 2.0 X	48.36.181.040	Ø 88.9 x 6.3	58	2100	100	e1*0582*94/20	40.0
			48.36.181.041	Ø 88.9 x 6.3	58	2300	100	e1*0582*94/20	42.6
			48.36.181.042	Ø 88.9 x 6.3	58	2500	100	e1*0582*94/20	45.1
			48.36.181.043	Ø 88.9 x 6.3	58	3000	100	e1*0582*94/20	51.6
			48.36.181.044	Ø 88.9 x 6.3	58	3500	100	e1*0582*94/20	58.0
1785-2800	ZAR 2.8-1	PAV/SR 2.7 X	48.44.181.020	Ø 88.9 x 8.8	58	2100	150	e1*0574*94/20	48.2
			48.44.181.021	Ø 88.9 x 8.8	58	2300	150	e1*0574*94/20	51.7
			48.44.181.022	Ø 88.9 x 8.8	58	2500	150	e1*0574*94/20	55.2
			48.44.181.023	Ø 88.9 x 8.8	58	3000	150	e1*0574*94/20	63.9
			48.44.181.024	Ø 88.9 x 8.8	58	3500	150	e1*0574*94/20	72.6

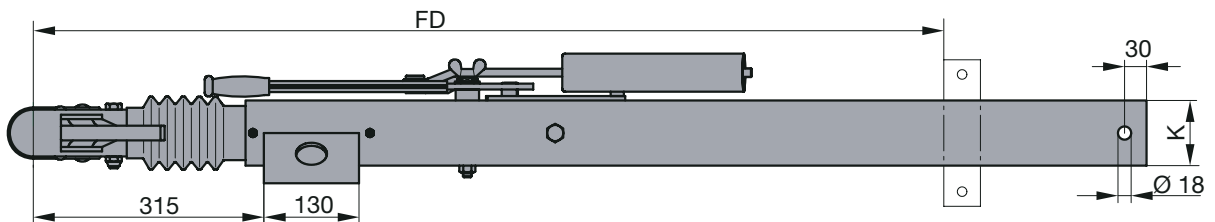
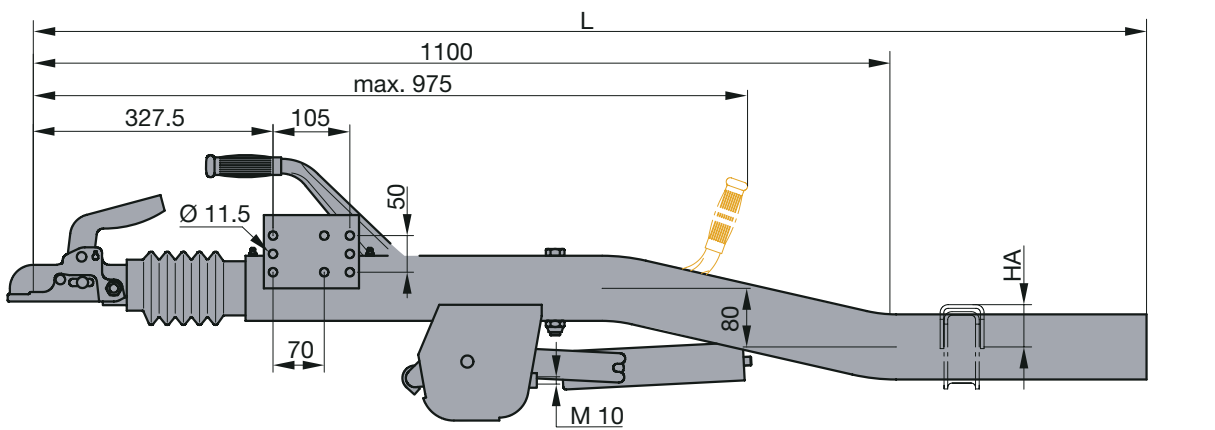
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**1.4 ZAR drawbars with towing attachment, round type, offset,
gross vehicle weight rating up to 2000 kg**



ZAR 1.35-1

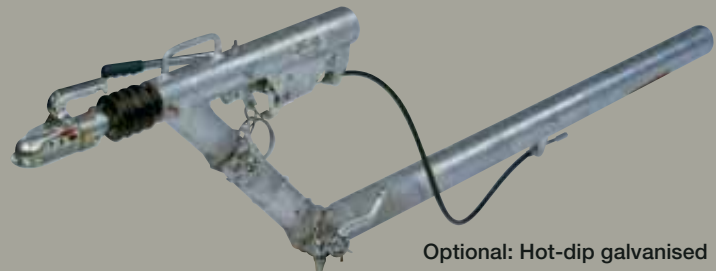


ZAR 2.0-1

In the offset version too, this drawbar reliably connects the trailer to the towing vehicle, no matter what the conditions of use. The hot-dip galvanised surface means full corrosion protection.

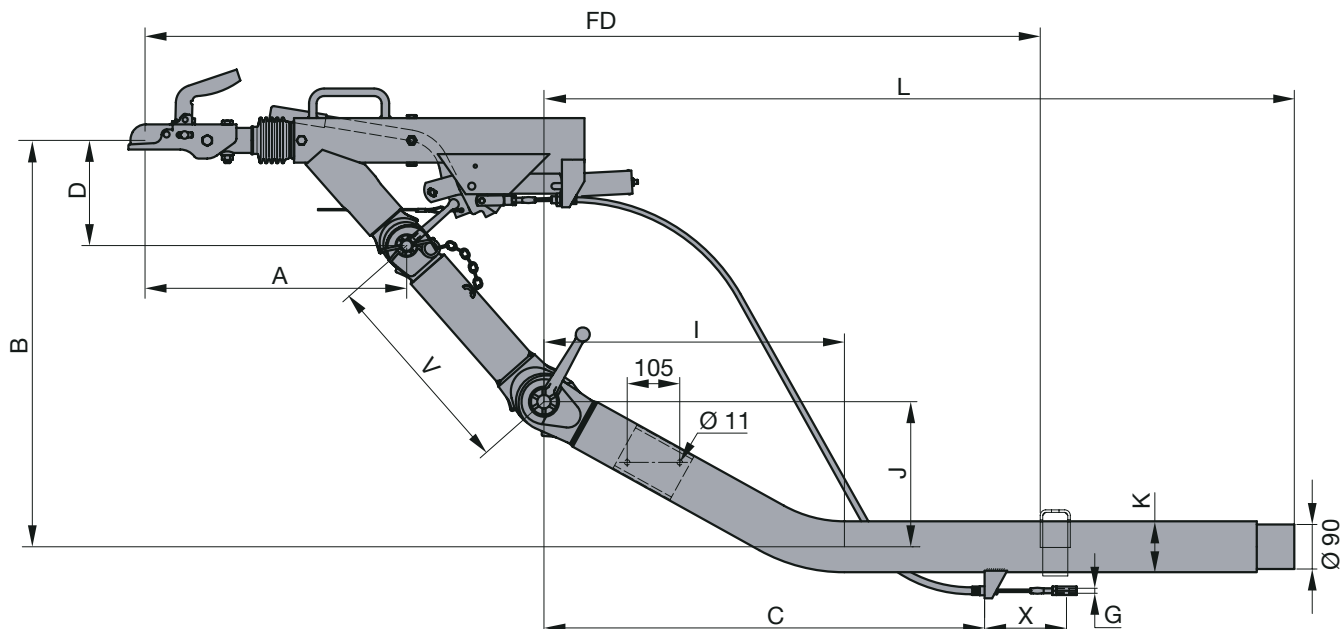
Gross vehicle weight rating [kg]	Marketed under	Type	Order no.	K	Dimensions [mm]			Permitted drawbar load [kg]	EC test symbol	Weight [kg]
					HA	L				
700-1350	ZAR 1.35-1	PAV/SR 1.3 X	48.25.381.040	Ø 70 x 6.3	50	2100	100	e1*0595*94/20	28.0	
			48.25.381.041	Ø 70 x 6.3	50	2300	100	e1*0595*94/20	30.0	
			48.25.381.042	Ø 70 x 6.3	50	2500	100	e1*0595*94/20	32.0	
			48.25.381.043	Ø 70 x 6.3	50	3000	100	e1*0595*94/20	37.0	
			48.25.381.044	Ø 70 x 6.3	50	3500	100	e1*0595*94/20	41.9	
1089-2000	ZAR 2.0-1	PAV/SR 2.0 X	48.36.381.040	Ø 88.9 x 8.8	58	2100	100	e1*0582*94/20	54.1	
			48.36.381.041	Ø 88.9 x 8.8	58	2300	100	e1*0582*94/20	56.1	
			48.36.381.042	Ø 88.9 x 8.8	58	2500	100	e1*0582*94/20	58.0	
			48.36.381.043	Ø 88.9 x 8.8	58	3000	100	e1*0582*94/20	63.0	
			48.36.381.044	Ø 88.9 x 8.8	58	3500	100	e1*0582*94/20	68.0	

FD see pages 142/143



Optional: Hot-dip galvanised

1.4 ZKV drawbars with towing attachment, adjustable height, with ball hitch, gross vehicle weight rating up to 3500 kg

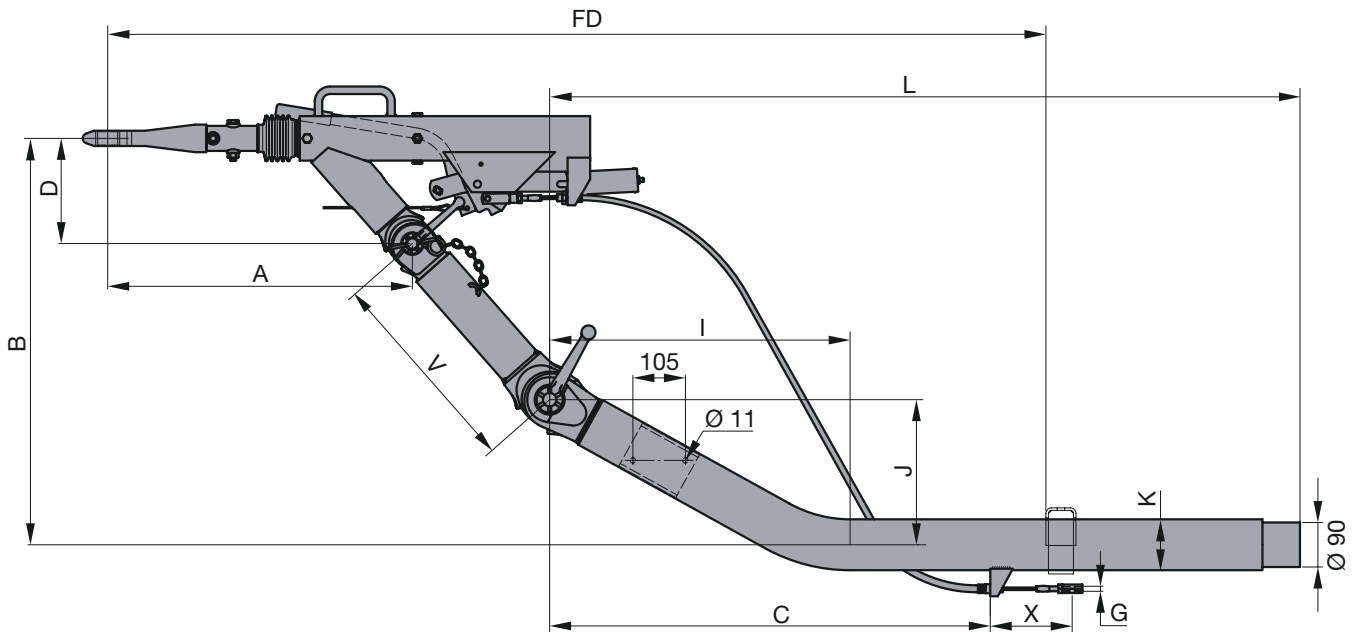


Conversion kits from ball hitch to towing eyes

Gross vehicle weight rating [kg]	Marketed under	DIN towing eye	NATO towing eye	Towing eye for Italy	Towing eye for France
650-2000	ZKV 13 A - ZKV 20 B	05.801.90.37.0	09.870.00.32.0	05.801.90.74.0	05.801.90.77.0
1910-2700	ZKV 25 B + ZKV 25 D	05.870.00.06.0	05.801.90.46.0	05.801.90.82.0	-
2500-3500	ZKV 35 B	05.870.00.06.0	05.801.90.46.0	05.801.90.82.0	-

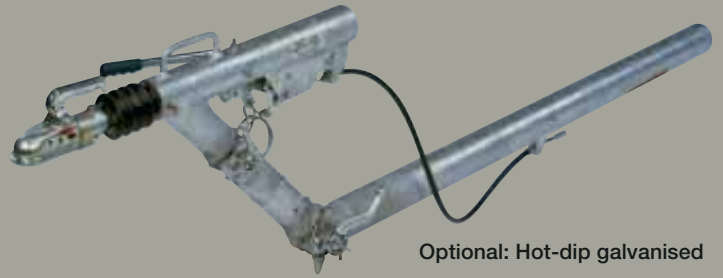
Convenient and flexible: This drawbar can easily be converted from a ball hitch to a towing eye, and offers an adjustable hitch height. This makes it a universal connection for cars, off-road vehicles and light trucks. A handle on the housing can be used to assist in manoeuvring. The surface is primed and can even be hot-dip galvanised as an option, giving long-term protection against corrosion.

1.4 ZKV drawbars with towing attachment, adjustable height, with DIN towing eye, gross vehicle weight rating up to 3500 kg



Conversion kits for other front parts

Gross vehicle weight rating [kg]	Marketed under	Ball hitch	NATO towing eye	Towing eye for Italy	Towing eye for France
650-1300	ZKV 13 A	09.870.00.04.0	09.870.00.32.0	05.801.90.74.0	05.801.90.77.0
1300-2000	ZKV 20 B	09.870.00.01.0	09.870.00.32.0	05.801.90.74.0	05.801.90.77.0
1910-3500	ZKV 25 B - ZKV 35 B	05.801.90.38.0	05.801.90.46.0	05.801.90.82.0	-



Optional: Hot-dip galvanised

1.4 ZKV drawbars with towing attachment, adjustable height, with ball hitch, gross vehicle weight rating up to 3500 kg

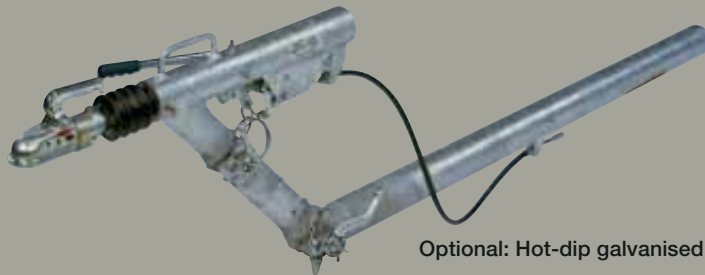
Gross vehicle weight rating [kg]	Marketed under	Overrun hitch	Order no. incl. ball hitch	Dimensions [mm]				
				K	A	D	L	B
650-1300	ZKV 13 B	AK 1308	47.24.471.086	Ø 88.9 x 8.8	513	210	1500	210-521
			47.24.471.087	Ø 88.9 x 8.8	513	210	1700	210-521
			47.24.471.088	Ø 88.9 x 8.8	513	210	2100	210-521
650-1300	ZKV 13 A	AK 1308	47.24.471.081	Ø 88.9 x 8.8	513	210	1500	470-781
			47.24.471.082	Ø 88.9 x 8.8	513	210	1700	470-781
			47.24.471.083	Ø 88.9 x 8.8	513	210	2100	470-781
1300-2000	ZKV 20 A	AK 2008	47.36.471.031	Ø 101.6 x 8.8	513	210	1900	210-521
			47.36.471.032	Ø 101.6 x 8.8	513	210	2500	210-521
			47.36.471.033	Ø 101.6 x 8.8	513	210	2800	210-521
1300-2000	ZKV 20 B	AK 2008	47.36.471.021	Ø 101.6 x 10	513	210	1900	500-811
			47.36.471.022	Ø 101.6 x 10	513	210	2500	500-811
			47.36.471.023	Ø 101.6 x 10	513	210	2800	500-811
1910-2700	ZKV 25 B	AK 3510 B	47.43.471.001	sq.120 x 6.3	541	225	1900	225-600
			47.43.471.002	sq.120 x 6.3	541	225	2500	225-600
			47.43.471.003	sq.120 x 6.3	541	225	2800	225-600
1910-2700	ZKV 25 D	AK 3510 B	47.43.471.011	sq.120 x 6.3	541	225	1900	225-735
			47.43.471.012	sq.120 x 6.3	541	225	2500	225-735
			47.43.471.013	sq.120 x 6.3	541	225	2800	225-735
2500-3500	ZKV 35 B	AK 3510 A	47.51.471.010	sq. 120 x 10	541	230	1900	230-643
			47.51.471.011	sq. 120 x 10	541	230	2500	230-643
			47.51.471.012	sq. 120 x 10	541	230	2800	230-643

FD see pages 144/147



Dimensions [mm]

G	V	I	J	C	X	Permitted drawbar load [kg]	EC test symbol	Weight [kg]
M 10	415	-	-	900	160	100	e1*0205*94/20	74
M 10	415	-	-	900	160	100	e1*0205*94/20	77
M 10	415	-	-	900	160	100	e1*0205*94/20	84
M 10	415	534	260	880	160	100	e1*0205*94/20	75
M 10	415	534	260	880	160	100	e1*0205*94/20	78
M 10	415	534	260	880	160	100	e1*0205*94/20	85
M 10	415	-	-	900	160	100	e1*0256*94/20	88
M 10	415	-	-	900	160	100	e1*0256*94/20	100
M 10	415	-	-	900	160	100	e1*0256*94/20	106
M 10	415	600	290	880	160	100	e1*0256*94/20	96
M 10	415	600	290	880	160	100	e1*0256*94/20	109
M 10	415	600	290	880	160	100	e1*0256*94/20	116
M 10	500	-	-	890	185	150	e1*0307*94/20	124
M 10	500	-	-	890	185	150	e1*0307*94/20	137
M 10	500	-	-	890	185	150	e1*0307*94/20	144
M 10	680	-	-	890	185	150	e1*0307*94/20	128
M 10	680	-	-	890	185	150	e1*0307*94/20	141
M 10	680	-	-	890	185	150	e1*0307*94/20	148
M 12	550	-	-	840	185	150	e1*0527*94/20	141
M 12	550	-	-	840	185	150	e1*0527*94/20	155
M 12	550	-	-	840	185	150	e1*0527*94/20	163



Optional: Hot-dip galvanised

1.4 ZKV drawbars with towing attachment, adjustable height, with DIN towing eye, gross vehicle weight rating up to 3500 kg

Gross vehicle weight rating [kg]	Marketed under	Overrun hitch	Order no. incl. DIN towing eye	Dimensions [mm]				
				K	A	D	L	B
650-1300	ZKV 13 B	AK 1308	47.24.473.116	Ø 88,9 x 8,8	617	210	1500	210-521
			47.24.473.117	Ø 88,9 x 8,8	617	210	1700	210-521
			47.24.473.118	Ø 88,9 x 8,8	617	210	2100	210-521
650-1300	ZKV 13 A	AK 1308	47.24.473.111	Ø 88,9 x 8,8	617	210	1500	470-781
			47.24.473.112	Ø 88,9 x 8,8	617	210	1700	470-781
			47.24.473.113	Ø 88,9 x 8,8	617	210	2100	470-781
1300-2000	ZKV 20 A	AK 2008	47.36.473.041	Ø 101,6 x 8,8	617	210	1900	210-521
			47.36.473.042	Ø 101,6 x 8,8	617	210	2500	210-521
			47.36.473.043	Ø 101,6 x 8,8	617	210	2800	210-521
1300-2000	ZKV 20 B	AK 2008	47.36.473.031	Ø 101,6 x 10	617	210	1900	500-811
			47.36.473.032	Ø 101,6 x 10	617	210	2500	500-811
			47.36.473.033	Ø 101,6 x 10	617	210	2800	500-811
1910-2700	ZKV 25 B	AK 3510 B	47.43.473.001	sq.120 x 6,3	635	225	1900	225-600
			47.43.473.002	sq.120 x 6,3	635	225	2500	225-600
			47.43.473.003	sq.120 x 6,3	635	225	2800	225-600
1910-2700	ZKV 25 D	AK 3510 B	47.43.473.011	sq.120 x 6,3	635	225	1900	225-735
			47.43.473.012	sq.120 x 6,3	635	225	2500	225-735
			47.43.473.013	sq.120 x 6,3	635	225	2800	225-735
2500-3500	ZKV 35 B	AK 3510 A	47.51.473.034	sq.120 x 10	635	230	1900	230-643
			47.51.473.035	sq.120 x 10	635	230	2500	230-643
			47.51.473.036	sq.120 x 10	635	230	2800	230-643

FD see pages 144/147

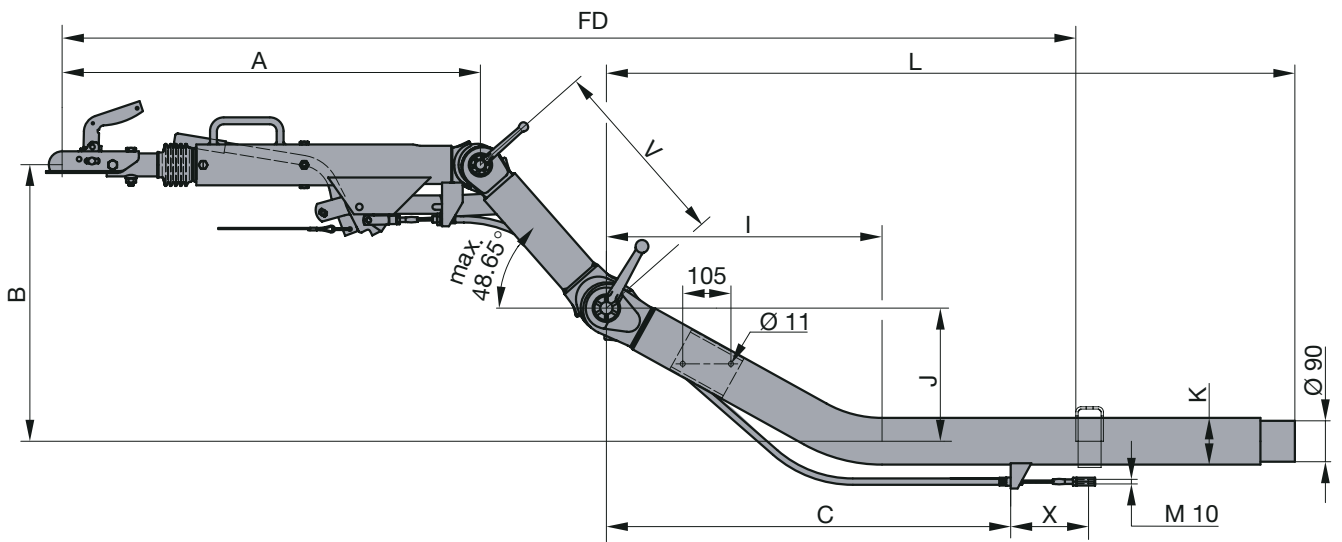


Dimensions [mm]

G	V	I	J	C	X	Permitted drawbar load [kg]	EC test symbol	Weight [kg]
M 10	415	-	-	900	160	100	e1*0205*94/20	75
M 10	415	-	-	900	160	100	e1*0205*94/20	78
M 10	415	-	-	900	160	100	e1*0205*94/20	85
M 10	415	534	260	880	160	100	e1*0205*94/20	76
M 10	415	534	260	880	160	100	e1*0205*94/20	79
M 10	415	534	260	880	160	100	e1*0205*94/20	86
M 10	415	-	-	900	160	100	e1*0256*94/20	89
M 10	415	-	-	900	160	100	e1*0256*94/20	101
M 10	415	-	-	900	160	100	e1*0256*94/20	107
M 10	415	600	290	880	160	100	e1*0256*94/20	97
M 10	415	600	290	880	160	100	e1*0256*94/20	110
M 10	415	600	290	880	160	100	e1*0256*94/20	117
M 10	500	-	-	890	185	150	e1*0307*94/20	125
M 10	500	-	-	890	185	150	e1*0307*94/20	139
M 10	500	-	-	890	185	150	e1*0307*94/20	146
M 10	680	-	-	890	185	150	e1*0307*94/20	130
M 10	680	-	-	890	185	150	e1*0307*94/20	143
M 10	680	-	-	890	185	150	e1*0307*94/20	150
M 12	550	-	-	840	185	150	e1*0527*94/20	143
M 12	550	-	-	840	185	150	e1*0527*94/20	157
M 12	550	-	-	840	185	150	e1*0527*94/20	165



1.4 ZRV drawbars with towing attachment, adjustable height, with ball hitch, gross vehicle weight rating up to 2000 kg

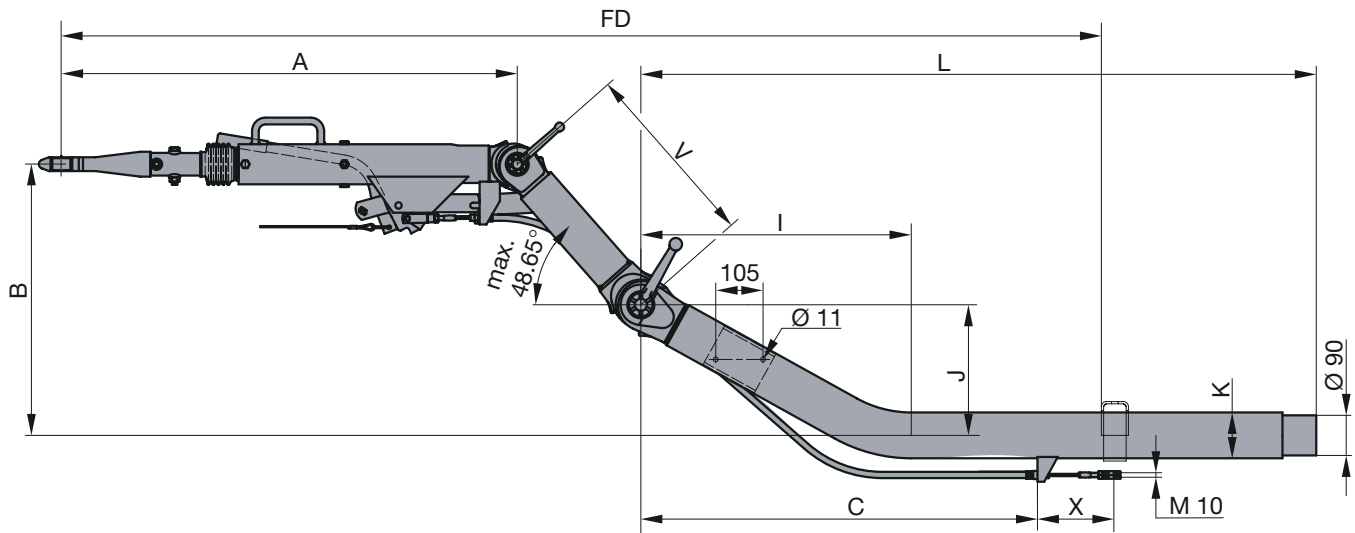


Conversion kits from ball hitch to towing eyes

Gross vehicle weight rating [kg]	Marketed under	DIN towing eye	NATO towing eye	Towing eye for Italy	Towing eye for France
650-2000	ZRV 13 + ZRV 20 B	05.801.90.37.0	09.870.00.32.0	05.801.90.74.0	05.801.90.77.0

Convenient and flexible: This drawbar can easily be converted from a ball hitch to a towing eye, and offers an adjustable hitch height. This makes it a universal connection for cars, off-road vehicles and light trucks. A handle on the housing can be used to assist in manoeuvring. The surface is primed and can even be hot-dip galvanised as an option, giving long-term protection against corrosion.

1.4 ZRV drawbars with towing attachment, adjustable height, with DIN towing eye, gross vehicle weight rating up to 2000 kg



Conversion kits from din towing eyes to other front parts

Gross vehicle weight rating [kg]	Marketed under	Ball hitch	NATO towing eye	Towing eye for Italy	Towing eye for France
650-1300	ZRV 13	09.870.00.04.0	09.870.00.32.0	05.801.90.74.0	05.801.90.77.0
1300-2000	ZRV 20 B	09.870.00.01.0	09.870.00.32.0	05.801.90.74.0	05.801.90.77.0



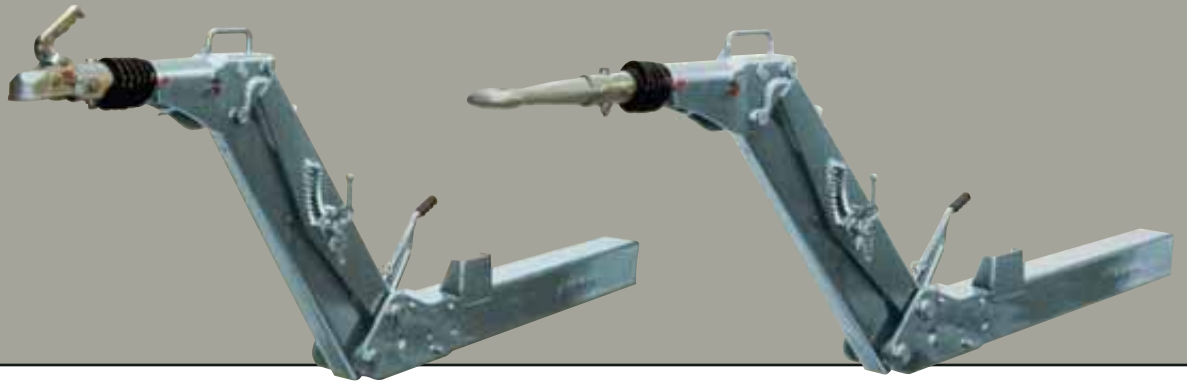
1.4 ZRV drawbars with towing attachment, adjustable height, gross vehicle weight rating up to 2000 kg

Gross vehicle weight rating [kg]	Marketed under	Overrun hitch	Order no. incl. ball hitch incl. DIN towing eyes *	K	Dimensions [mm]		
					A	L	B
650-1300	ZRV 13	AK 1308	47.24.471.111	Ø 88.9 x 8.8	906	1500	0-338
			47.24.471.112	Ø 88.9 x 8.8	906	1700	0-338
			47.24.471.113	Ø 88.9 x 8.8	906	1900	0-338
680-1300	ZRV 13	AK 1308	47.24.471.114	Ø 88.9 x 8.8	906	1500	110-598
			47.24.471.115	Ø 88.9 x 8.8	906	1700	110-598
			47.24.471.116	Ø 88.9 x 8.8	906	1900	110-598
1300-2000	ZRV 20 B	AK 2008	47.36.471.056	Ø 101.6 x 10	912	1900	0-311
			47.36.471.057	Ø 101.6 x 10	912	2500	0-311
			47.36.471.058	Ø 101.6 x 10	912	2800	0-311
1300-2000	ZRV 20 B	AK 2008	47.36.471.053	Ø 101.6 x 10	912	1900	152-601
			47.36.471.054	Ø 101.6 x 10	912	2500	152-601
			47.36.471.055	Ø 101.6 x 10	912	2800	152-601
650-1300	ZRV 13	AK 1308	47.24.473.137*	Ø 88.9 x 8.8	1011	1500	0-338
			47.24.473.138*	Ø 88.9 x 8.8	1011	1700	0-338
			47.24.473.139*	Ø 88.9 x 8.8	1011	1900	0-338
680-1300	ZRV 13	AK 1308	47.24.473.140*	Ø 88.9 x 8.8	1011	1500	110-598
			47.24.473.141*	Ø 88.9 x 8.8	1011	1700	110-598
			47.24.473.142*	Ø 88.9 x 8.8	1011	1900	110-598
1300-2000	ZRV 20 B	AK 2008	47.36.473.067*	Ø 101.6 x 10	1011	1900	0-311
			47.36.473.068*	Ø 101.6 x 10	1011	2500	0-311
			47.36.473.069*	Ø 101.6 x 10	1011	2800	0-311
1300-2000	ZRV 20 B	AK 2008	47.36.473.070*	Ø 101.6 x 10	1011	1900	152-601
			47.36.473.071*	Ø 101.6 x 10	1011	2500	152-601
			47.36.473.072*	Ø 101.6 x 10	1011	2800	152-601

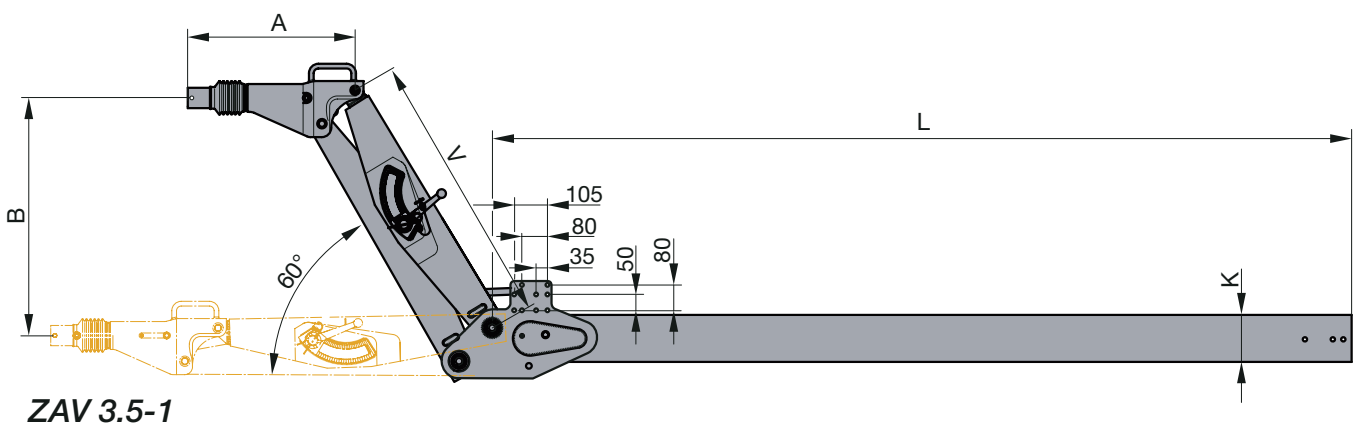
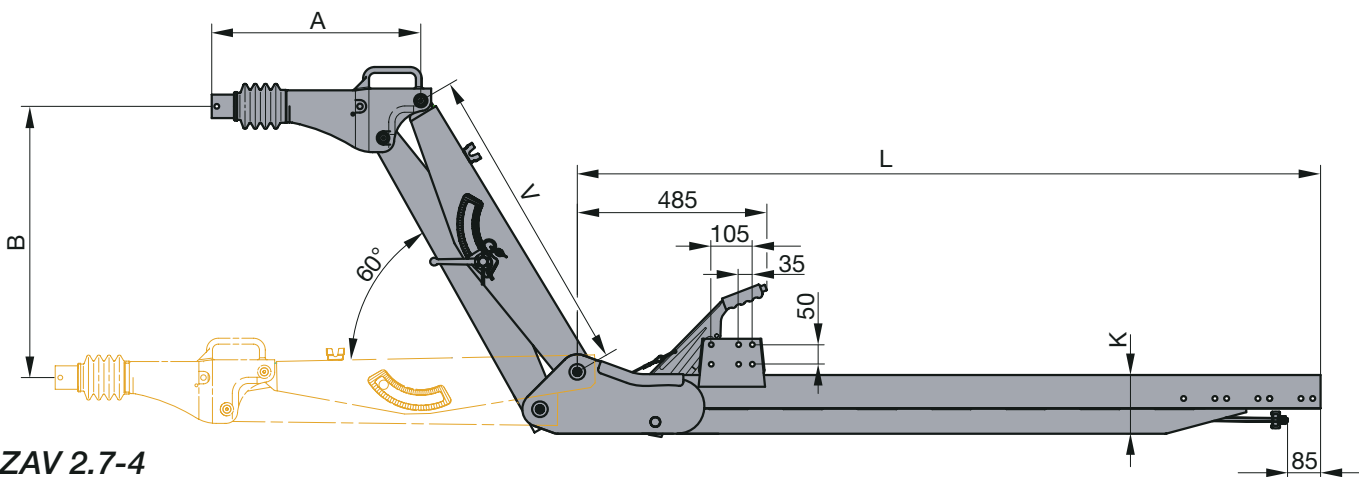
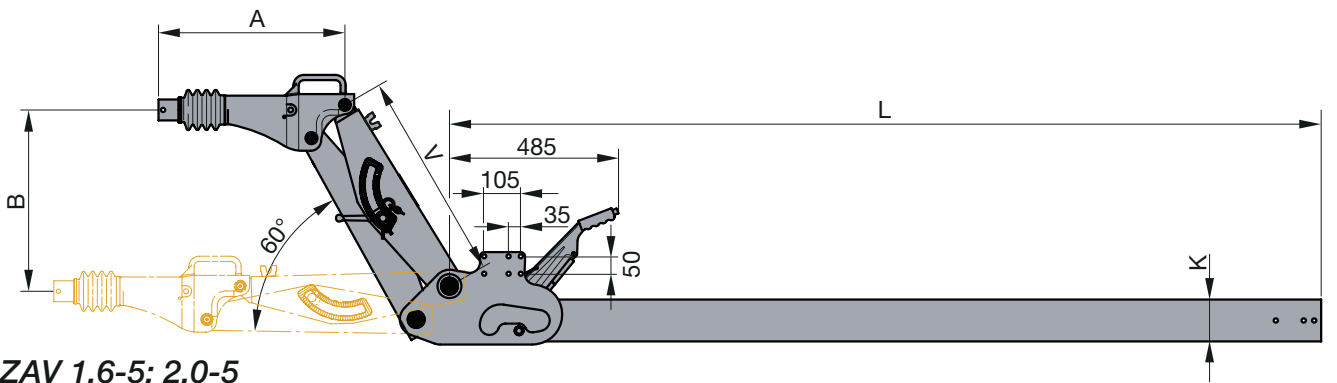
FD see pages 144/147



Dimensions [mm]					Permitted drawbar load [kg]	EC test symbol	Weight [kg]
V	I	J	C	X			
450	-	-	685	160	100	e1*0066*94/20	74
450	-	-	685	160	100	e1*0066*94/20	77
450	-	-	685	160	100	e1*0066*94/20	84
450	534	260	745	160	100	e1*0066*94/20	75
450	534	260	745	160	100	e1*0066*94/20	78
450	534	260	745	160	100	e1*0066*94/20	85
415	-	-	720	160	100	e1*0167*94/20	88
415	-	-	720	160	100	e1*0167*94/20	100
415	-	-	720	160	100	e1*0167*94/20	106
415	600	290	880	160	100	e1*0167*94/20	96
415	600	290	880	160	100	e1*0167*94/20	109
415	600	290	880	160	100	e1*0167*94/20	116
450	-	-	685	160	100	e1*0066*94/20	75
450	-	-	685	160	100	e1*0066*94/20	78
450	-	-	685	160	100	e1*0066*94/20	85
450	534	260	745	160	100	e1*0066*94/20	76
450	534	260	745	160	100	e1*0066*94/20	79
450	534	260	745	160	100	e1*0066*94/20	86
415	-	-	720	160	100	e1*0167*94/20	89
415	-	-	720	160	100	e1*0167*94/20	101
415	-	-	720	160	100	e1*0167*94/20	107
415	600	290	880	160	100	e1*0167*94/20	97
415	600	290	880	160	100	e1*0167*94/20	110
415	600	290	880	160	100	e1*0167*94/20	117



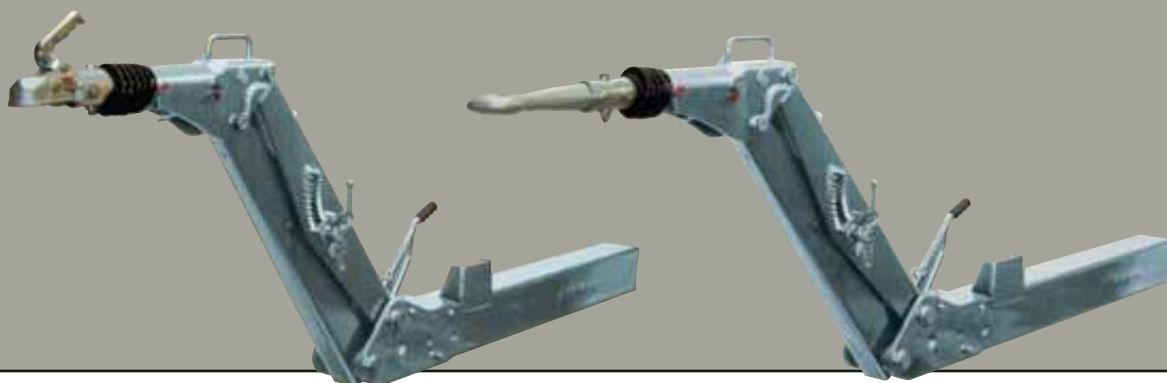
1.4 ZAV drawbars with towing attachment, adjustable height, gross vehicle weight rating up to 3500 kg



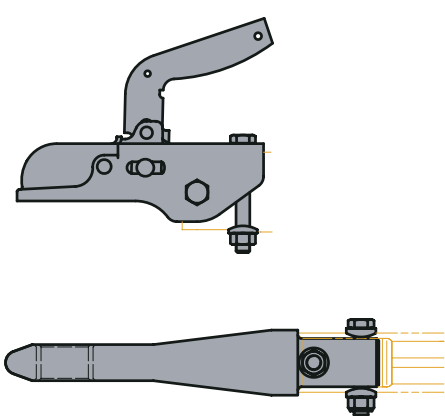
The towing attachment for the professionals: Features include a protected, internal transmission device with a straightforward and fast height adjustment function up to 1,100 mm hitching height (even with the handbrake applied) and integrated jockey wheel holder, as well as the hot-dip galvanised surface. The whole unit is supplied ready-to-install – a product that satisfies all requirements.

Gross vehicle weight rating [kg]	Marketed under	Overrun hitch	Order no.	K	Dimensions [mm]					Permitted drawbar load [kg]	EC test symbol	Weight [kg]
					A	L	B	V				
1200-1600	ZAV 1.6-5	AE 2.7-1 D	47.29.470.048	sq.120	535	1900	0-693	800	150	e1*1284*94/20	95.0	
			47.29.470.049	sq.120	535	2300	0-693	800	150	e1*1284*94/20	103.0	
			47.29.470.050	sq.120	535	2500	0-693	800	150	e1*1284*94/20	106.0	
			47.29.470.051	sq.120	535	2800	0-693	800	150	e1*1284*94/20	113.0	
			47.29.470.052	sq.120	535	1900	0-520	600	150	e1*1284*94/20	88.0	
			47.29.470.053	sq.120	535	2300	0-520	600	150	e1*1284*94/20	96.0	
			47.29.470.054	sq.120	535	2500	0-520	600	150	e1*1284*94/20	99.0	
			47.29.470.055	sq.120	535	2800	0-520	600	150	e1*1284*94/20	106.0	
1500-2000	ZAV 2.0-5	AE 2.7-1 C	47.36.470.077	sq.120	535	1900	0-693	800	150	e1*1284*94/20	95.0	
			47.36.470.078	sq.120	535	2300	0-693	800	150	e1*1284*94/20	103.0	
			47.36.470.079	sq.120	535	2500	0-693	800	150	e1*1284*94/20	106.0	
			47.36.470.080	sq.120	535	2800	0-693	800	150	e1*1284*94/20	113.0	
			47.36.470.081	sq.120	535	1900	0-520	600	150	e1*1284*94/20	88.0	
			47.36.470.082	sq.120	535	2300	0-520	600	150	e1*1284*94/20	96.0	
			47.36.470.083	sq.120	535	2500	0-520	600	150	e1*1284*94/20	99.0	
			47.36.470.084	sq.120	535	2800	0-520	600	150	e1*1284*94/20	106.0	
1860-2700	ZAV 2.7-4	AE 2.7-1 A	47.43.470.035	150x132	535	1900	0-693	800	150	e1*1171*94/20	103.0	
			47.43.470.041	150x132	535	2280	0-693	800	150	e1*1171*94/20	111.0	
			47.43.470.036	150x132	535	2500	0-693	800	150	e1*1171*94/20	117.0	
			47.43.470.037	150x132	535	2800	0-693	800	150	e1*1171*94/20	125.0	
			47.43.470.047	150x132	535	1900	0-520	600	150	e1*1171*94/20	96.0	
			47.43.470.053	150x132	535	2280	0-520	600	150	e1*1171*94/20	104.0	
			47.43.470.048	150x132	535	2500	0-520	600	150	e1*1171*94/20	110.0	
			47.43.470.049	150x132	535	2800	0-520	600	150	e1*1171*94/20	118.0	
2500-3500	ZAV 3.5-1	AE 3.5-1 A	47.51.470.039	sq.150	535	1900	0-767	875	150	e1*0798*94/20	137.0	
			47.51.470.040	sq.150	535	2300	0-767	875	150	e1*0798*94/20	148.0	
			47.51.470.041	sq.150	535	2500	0-767	875	150	e1*0798*94/20	153.0	
			47.51.470.042	sq.150	535	2800	0-767	875	150	e1*0798*94/20	162.0	

FD see pages 144/147

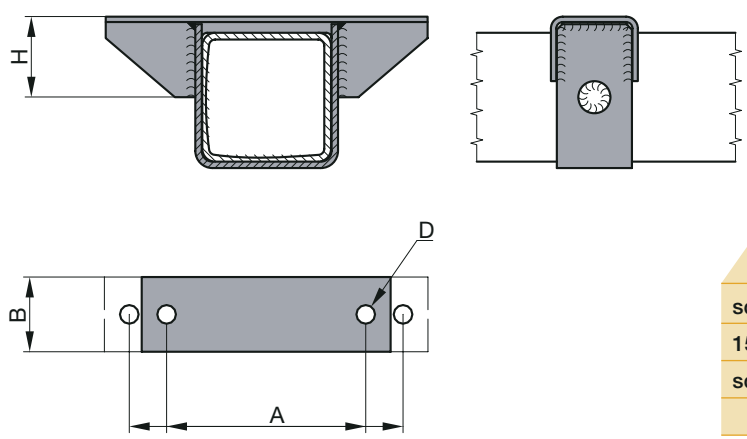


1.4 ZAV drawbars with towing attachment, adjustable height, gross vehicle weight rating up to 3500 kg



	ZAV 1.6-5; 2.0-5; 2.7-4	ZAV 3.5-1
Ball hitch	05.803.11.15.0	05.801.90.38.0
DIN towing eye 40.0	05.803.11.12.0	05.870.00.06.0
NATO towing eye 76.0	05.801.90.86.0	05.801.90.46.0
Towing eye for Italy 45.0	05.801.90.90.0	05.801.90.82.0

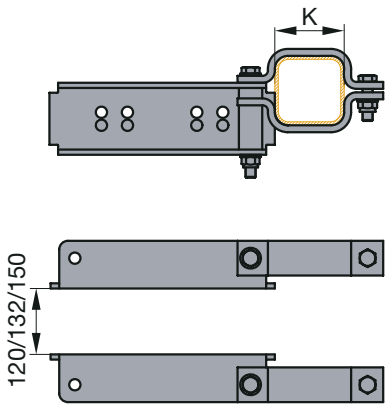
Support



for drawbar tube [mm]	Dimensions [mm]				Assembly parts group clamped connection Order no.
	H	D	A	B	
sq. 120	80	18	220	82	05.801.90.92.0
150x132	95	18	200	82	05.801.90.91.0
sq. 150	95	18	220	82	05.801.90.45.0

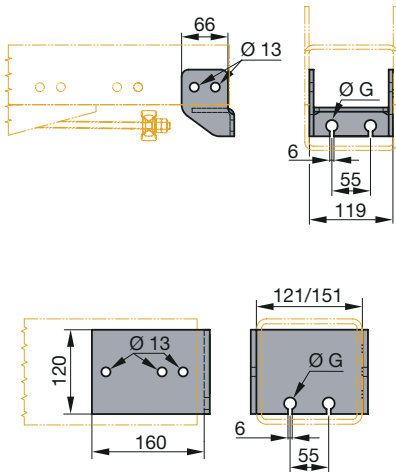


Axle connection

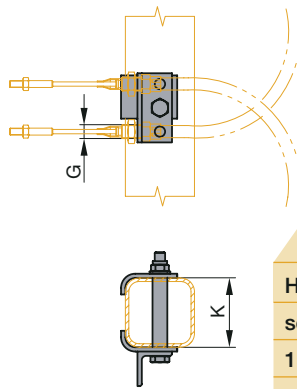


Axle tube k [mm]	Order no.
sq. 80	05.803.11.17.0
sq. 95	05.803.11.18.0
sq. 110	05.803.11.29.0

Cable support tube



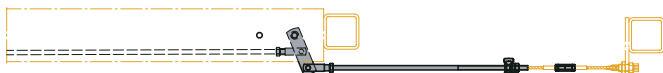
Single axle



Tandem

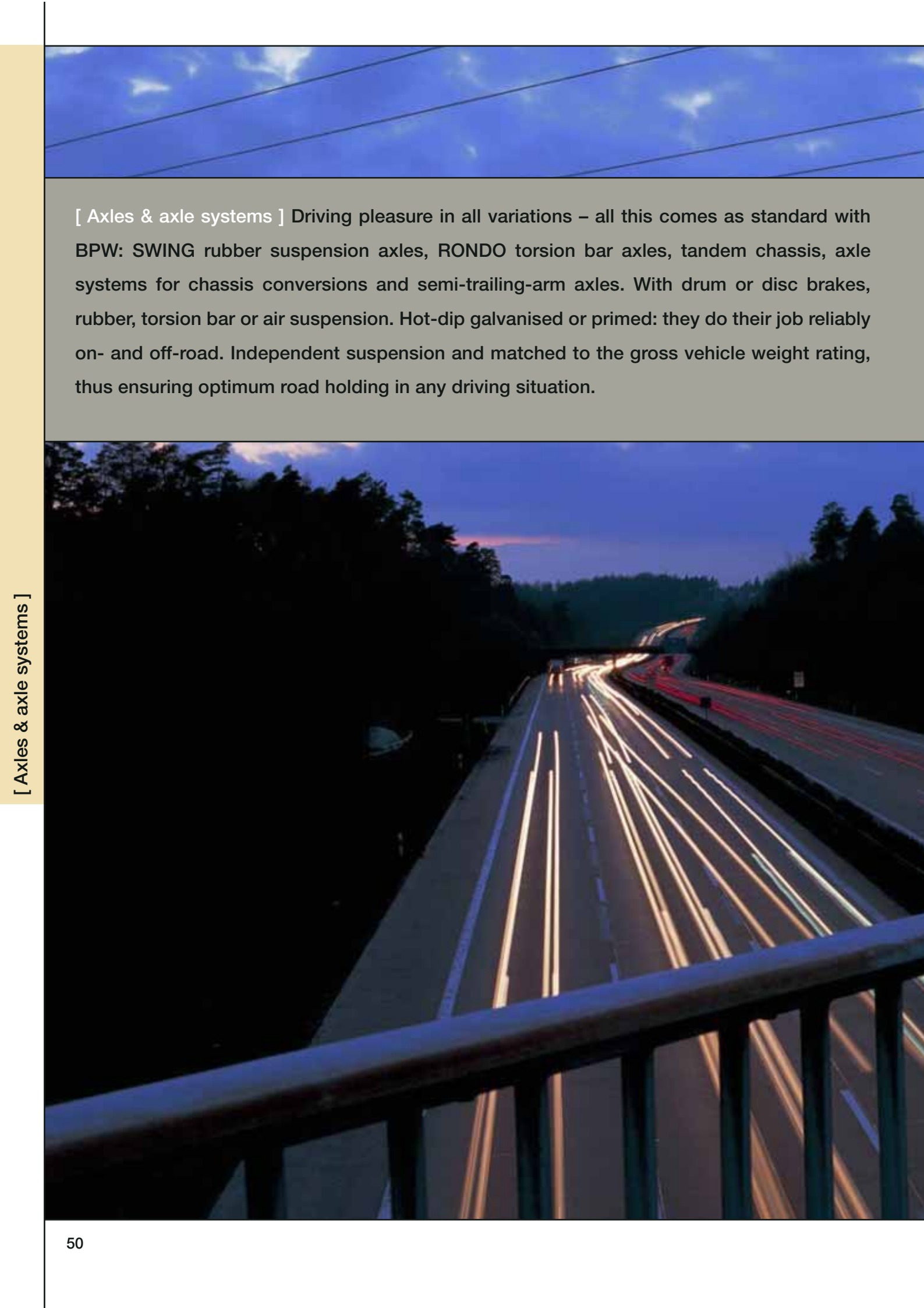
For drawbar tube [mm]	Dimensions [mm]		
	Axle tube K	G	Order no.
Hose cable support single axle			
sq. 120 (ZAV 1.6-5; 2.0-5)	12.5		03.168.01.06.0
150x132 (ZAV 2.7-4)	17		03.160.10.99.0
sq. 150 (ZAV 3.5-1)	17		03.168.01.05.0
Hose cable support tandem			
	sq. 80	12.5	05.820.50.31.0
	sq. 95	12.5	05.820.50.32.0

Tandem diagonal compensation



ZAV 1.6-5; 2.0-5; 2.7-4	ZAV 3.5-1
05.085.55.01.0	05.085.55.02.0
	05.085.55.08.0*

*For axle tube sq. 110

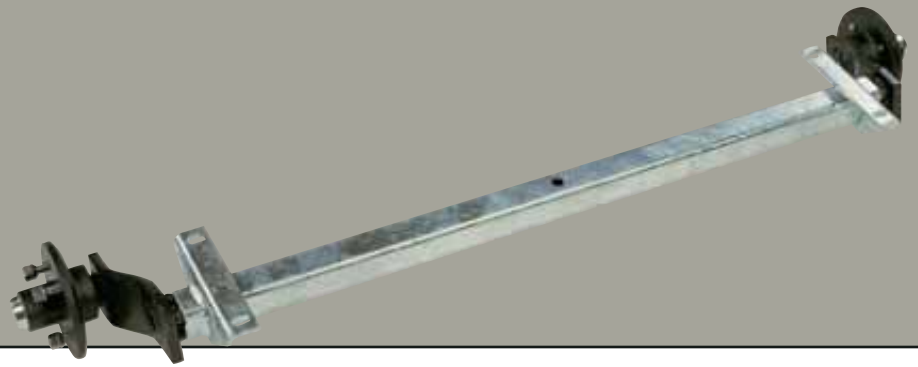


[Axles & axle systems] Driving pleasure in all variations – all this comes as standard with BPW: SWING rubber suspension axles, RONDO torsion bar axles, tandem chassis, axle systems for chassis conversions and semi-trailing-arm axles. With drum or disc brakes, rubber, torsion bar or air suspension. Hot-dip galvanised or primed: they do their job reliably on- and off-road. Independent suspension and matched to the gross vehicle weight rating, thus ensuring optimum road holding in any driving situation.

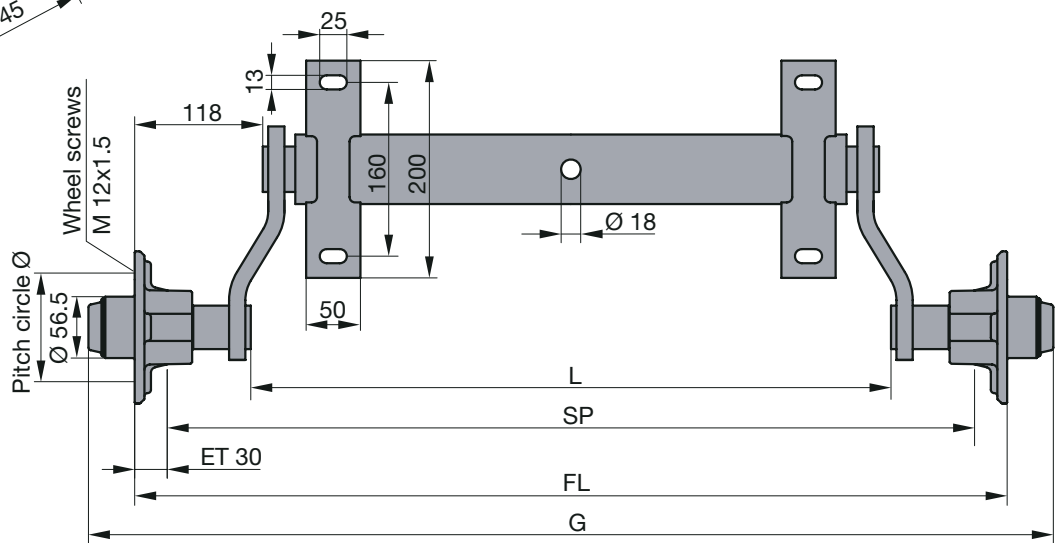
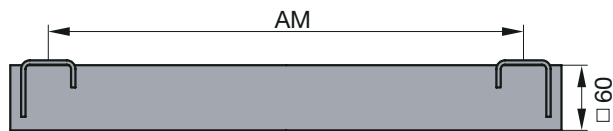
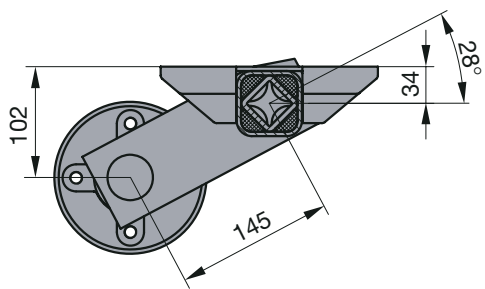
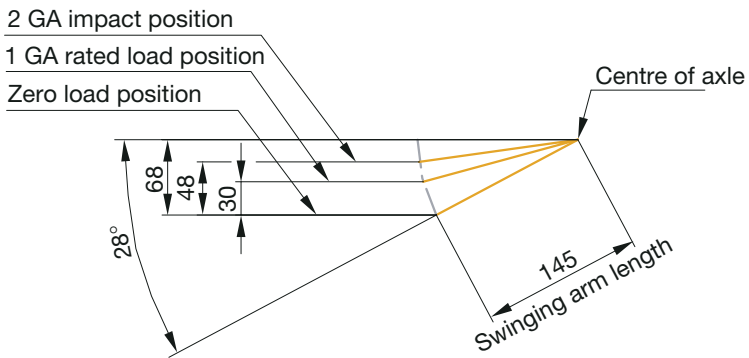


BPW braked axles are extremely easy to fit and are ready for anything. For example, brake cables can also be replaced without having to dismantle the brake drum or the brakes. They can easily be adjusted for wear from the outside. From the basic version through to tandem units with a raise and lower function. With BPW axles and axle systems, both vehicle manufacturers and end users can quickly get down to business.





2.1 SWING rubber suspension axles, unbraked, axle load 550 kg



Axle beam fully hot-dip galvanised: Long-term surface protection • Independent suspension: Optimum compensation for uneven road surfaces • Zero-maintenance suspension: Reduced maintenance costs • Robust axle structure: Suitable for extreme terrain such as when driving off-road or on building sites

CB 554		Dimensions [mm]					Weight [kg]
A/ø100/R12	FL	SP	AM	L	G		
46.09.000.160	1220	1160	850	1005	1305	21.6	
46.09.000.161	1270	1210	900	1055	1355	21.9	
46.09.000.162	1320	1260	950	1105	1405	22.2	
46.09.000.163	1370	1310	1000	1155	1455	22.5	
46.09.000.164	1420	1360	1050	1205	1505	22.9	
46.09.000.165	1470	1410	1100	1255	1555	23.2	
46.09.000.166	1520	1460	1150	1305	1605	23.5	
46.09.000.167	1570	1510	1200	1355	1655	23.8	
46.09.000.168	1620	1560	1250	1405	1705	24.1	
46.09.000.169	1670	1610	1300	1455	1755	24.5	
46.09.000.170	1720	1660	1350	1505	1805	24.8	
46.09.000.171	1770	1710	1400	1555	1855	25.1	
46.09.000.172	1820	1760	1450	1605	1905	25.4	
46.09.000.173	1870	1810	1500	1655	1955	25.7	
46.09.000.174	1920	1860	1550	1705	2005	26.1	
46.09.000.175	1970	1910	1600	1755	2055	26.4	
46.09.000.176	2020	1960	1650	1805	2105	26.7	
46.09.000.177	2070	2010	1700	1855	2155	27.0	
46.09.000.178	2120	2060	1750	1905	2205	27.3	
46.09.000.179	2170	2110	1800	1955	2255	27.7	

Speed up to 140 km/h

Drawbar connection: Clamping shells, see accessories on page 120

Recommended wheel size: 4 J x 12 H2

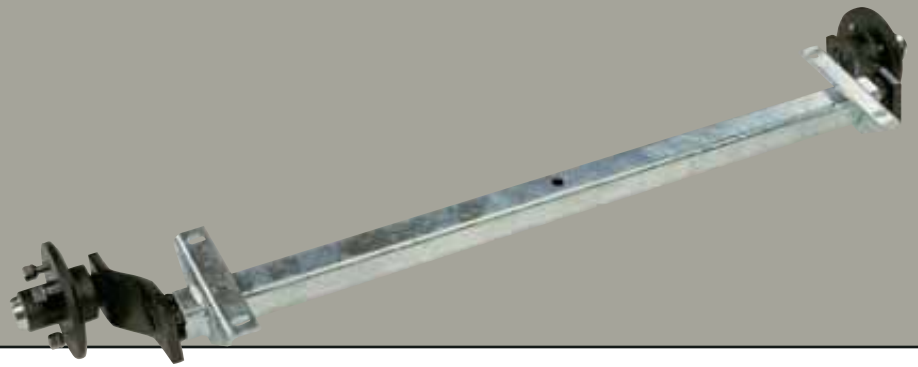
Wheel connections: 4x98 on request

Tyres: 135 R 12

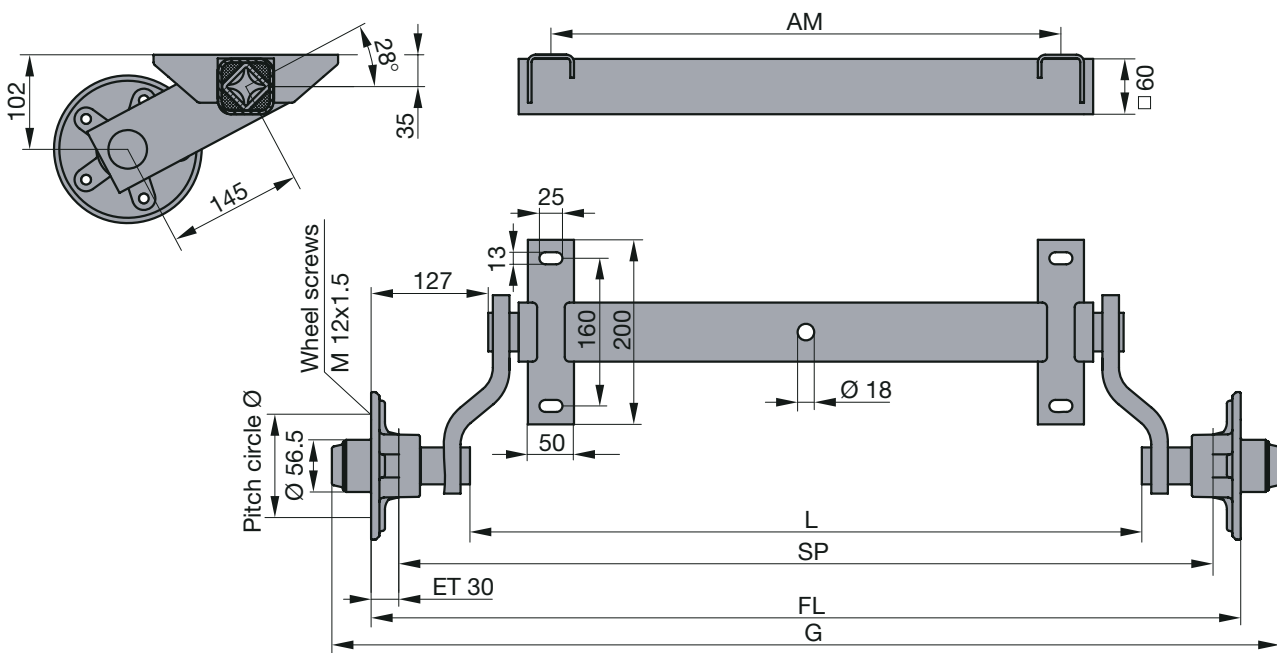
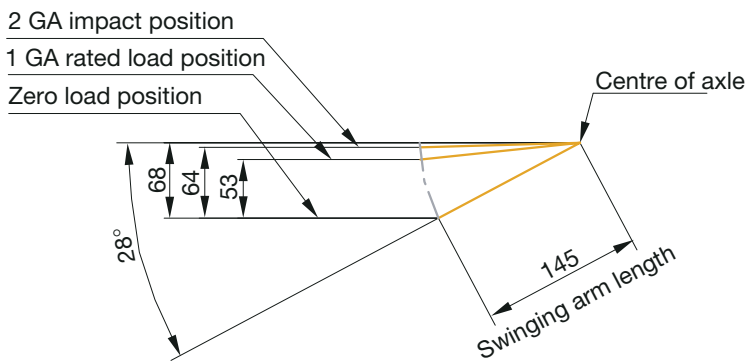
Other possible tyre and wheel sizes, see page 140

Special axle supports on request

Also available with watertight bearings



2.1 SWING rubber suspension axles, unbraked, axle load 750 kg



Axle beam fully hot-dip galvanised: Long-term surface protection • Independent suspension: Optimum compensation for uneven road surfaces • Zero-maintenance suspension: Reduced maintenance costs • Robust axle structure: Suitable for extreme terrain such as when driving off-road or on building sites

Marketed under Order no. acc. to wheel connection		Dimensions [mm]					
CB 754	CB 755	FL	SP	AM	L	G	Weight [kg]
4/ø100/60°	5/ø112/R12						
46.14.000.200	46.14.000.220	1240	1180	850	1025	1325	22.4
46.14.000.201	46.14.000.221	1290	1230	900	1075	1375	22.7
46.14.000.202	46.14.000.222	1340	1280	950	1125	1425	23.0
46.14.000.203	46.14.000.223	1390	1330	1000	1175	1475	23.3
46.14.000.204	46.14.000.224	1440	1380	1050	1225	1525	23.6
46.14.000.205	46.14.000.225	1490	1430	1100	1275	1575	24.0
46.14.000.206	46.14.000.226	1540	1480	1150	1325	1625	24.3
46.14.000.207	46.14.000.227	1590	1530	1200	1375	1675	24.6
46.14.000.208	46.14.000.228	1640	1580	1250	1425	1725	24.9
46.14.000.209	46.14.000.229	1690	1630	1300	1475	1775	25.2
46.14.000.210	46.14.000.230	1740	1680	1350	1525	1825	25.6
46.14.000.211	46.14.000.231	1790	1730	1400	1575	1875	25.9
46.14.000.212	46.14.000.232	1840	1780	1450	1625	1925	26.2
46.14.000.213	46.14.000.233	1890	1830	1500	1675	1975	26.5
46.14.000.214	46.14.000.234	1940	1880	1550	1725	2025	26.8
46.14.000.215	46.14.000.235	1990	1930	1600	1775	2075	27.2
46.14.000.216	46.14.000.236	2040	1980	1650	1825	2125	27.5
46.14.000.217	46.14.000.237	2090	2030	1700	1875	2175	27.8
46.14.000.218	46.14.000.238	2140	2080	1750	1925	2225	28.1
46.14.000.219	46.14.000.239	2190	2130	1800	1975	2275	28.4

Speed up to 140 km/h

Drawbar connection: Clamping components, see accessories on page 120

Recommended wheel size: 4 J x 12 H2

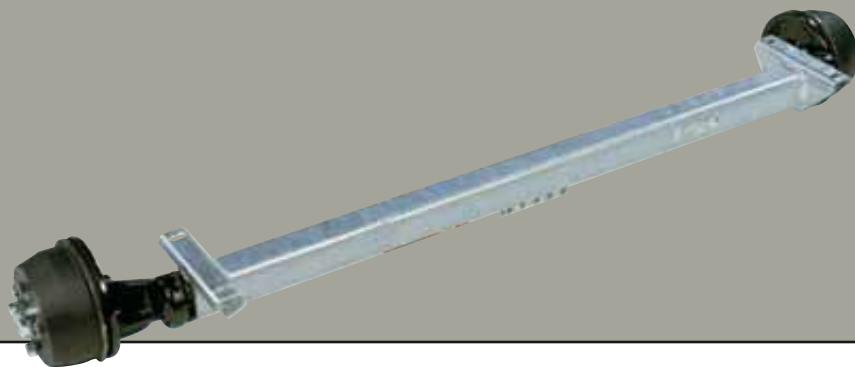
Wheel connections: 4x98; 4x130 on request

Tyres: 155 R 12

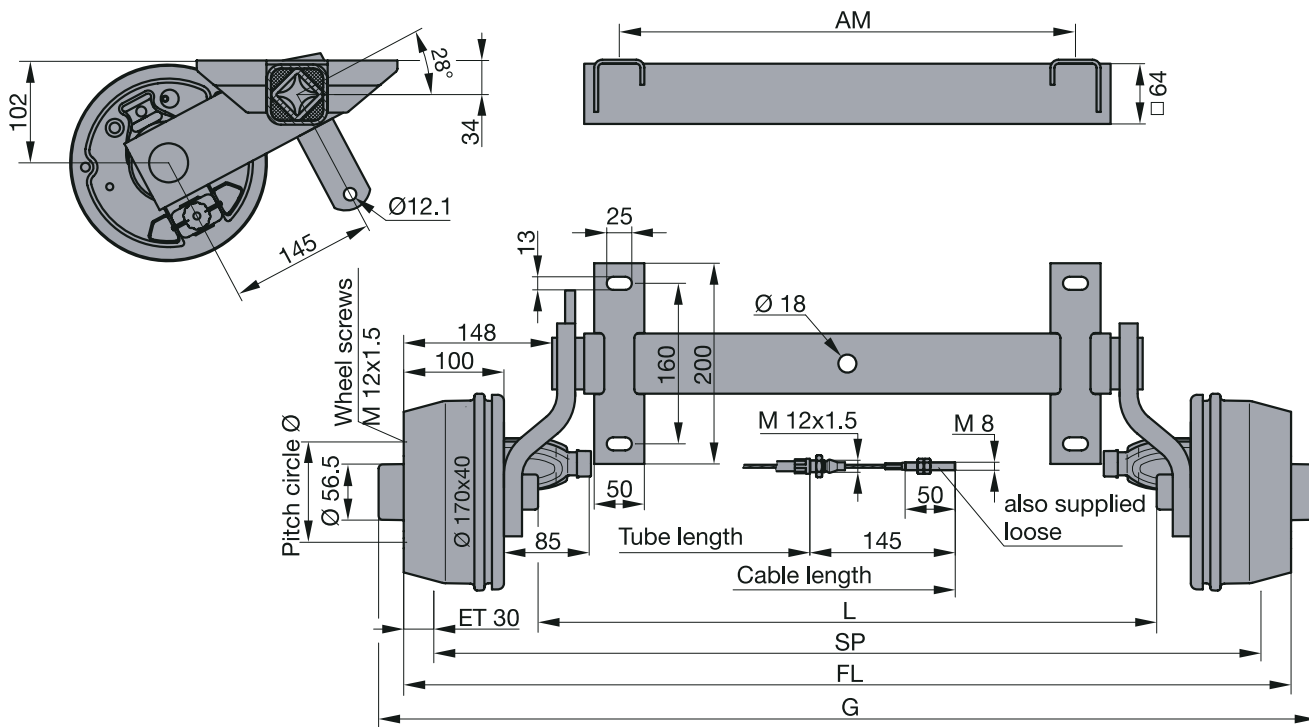
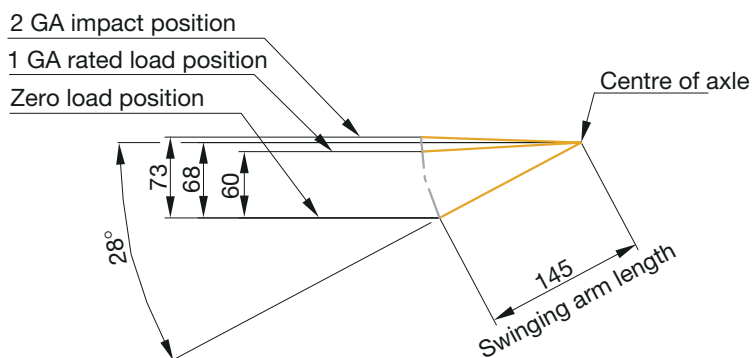
Other possible tyre and wheel sizes, see page 140

Special axle supports on request

Also available with waterproof bearings



2.2 SWING rubber suspension axles, braked, axle load 850 kg, wheel brake S 1704-7 RASK



Axle beam fully hot-dip galvanised: Long-term surface protection • Independent suspension: Optimum compensation for uneven road surfaces • Zero-maintenance suspension: Reduced maintenance costs • Robust axle structure: Suitable for extreme conditions such as when driving off-road or on building sites • Robust, easy-to-maintain wedge-type brakes with automatic reversing operation: Straightforward adjustment from outside the brake, brake cables can be connected subsequently without removing the brake drums • Compact bearings (standard in the automotive industry): Zero-maintenance, long service life, protected against dirt and water, lifetime lubrication with special grease • Incl. wheel shock absorber mounting

Axle incl. brake cables loose Order no. acc. to wheel connection		Second axle for tandem incl. counter bearing welded (without brake cables)* Order no. acc. to wheel connection		Dimensions [mm]					
CB 854 CB 855		CB 854 CB 855		FL	SP	AM	L	G	Weight [kg]
4/ø100/60°	5/ø112/R12	4/ø100/60°	5/ø112/R12						
46.16.382.010	46.16.382.030	46.16.382.050	46.16.382.070	1430	1370	1000	1162	1480	39.0
46.16.382.011	46.16.382.031	46.16.382.051	46.16.382.071	1480	1420	1050	1212	1530	39.3
46.16.382.012	46.16.382.032	46.16.382.052	46.16.382.072	1530	1470	1100	1262	1580	39.6
46.16.382.013	46.16.382.033	46.16.382.053	46.16.382.073	1580	1520	1150	1312	1630	40.0
46.16.382.014	46.16.382.034	46.16.382.054	46.16.382.074	1630	1570	1200	1362	1680	40.3
46.16.382.015	46.16.382.035	46.16.382.055	46.16.382.075	1680	1620	1250	1412	1730	40.6
46.16.382.016	46.16.382.036	46.16.382.056	46.16.382.076	1730	1670	1300	1462	1780	40.9
46.16.382.017	46.16.382.037	46.16.382.057	46.16.382.077	1780	1720	1350	1512	1830	41.2
46.16.382.018	46.16.382.038	46.16.382.058	46.16.382.078	1830	1770	1400	1562	1880	41.6
46.16.382.019	46.16.382.039	46.16.382.059	46.16.382.079	1880	1820	1450	1612	1930	41.9
46.16.382.020	46.16.382.040	46.16.382.060	46.16.382.080	1930	1870	1500	1662	1980	42.2
46.16.382.021	46.16.382.041	46.16.382.061	46.16.382.081	1980	1920	1550	1712	2030	42.5
46.16.382.022	46.16.382.042	46.16.382.062	46.16.382.082	2030	1970	1600	1762	2080	42.8
46.16.382.023	46.16.382.043	46.16.382.063	46.16.382.083	2080	2020	1650	1812	2130	43.2
46.16.382.024	46.16.382.044	46.16.382.064	46.16.382.084	2130	2070	1700	1862	2180	43.5
46.16.382.025	46.16.382.045	46.16.382.065	46.16.382.085	2180	2120	1750	1912	2230	43.8
46.16.382.026	46.16.382.046	46.16.382.066	46.16.382.086	2230	2170	1800	1962	2280	44.1
46.16.382.027	46.16.382.047	46.16.382.067	46.16.382.087	2280	2220	1850	2012	2330	44.4
46.16.382.028	46.16.382.048	46.16.382.068	46.16.382.088	2330	2270	1900	2062	2380	44.8

* Brake cables for tandem operation depending on the axle centre distance and flange dimension of the axle. *Brake cables incl. tandem compensation, see page 117*
Brake linkage assembly components for single axle, see page 116
Shock absorbers see page 128

Speed up to 140 km/h

Drawbar connection: Clamping components, see accessories on page 120

Recommended wheel size: 4 J x 13 H2

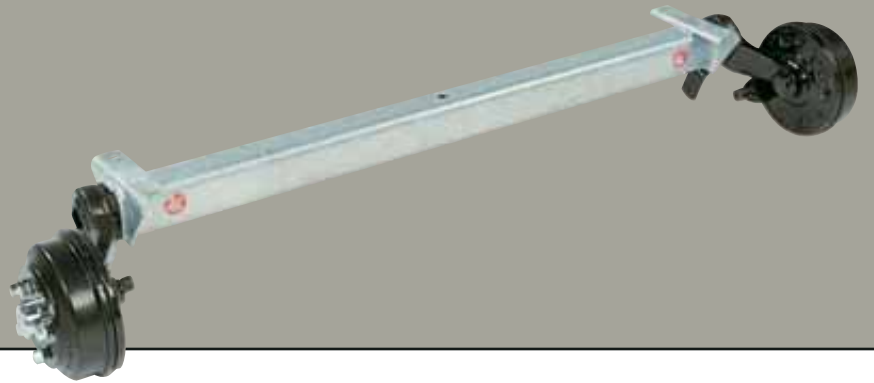
Wheel connections: 4x98; 4x130 on request

Tyres: 145 R 13

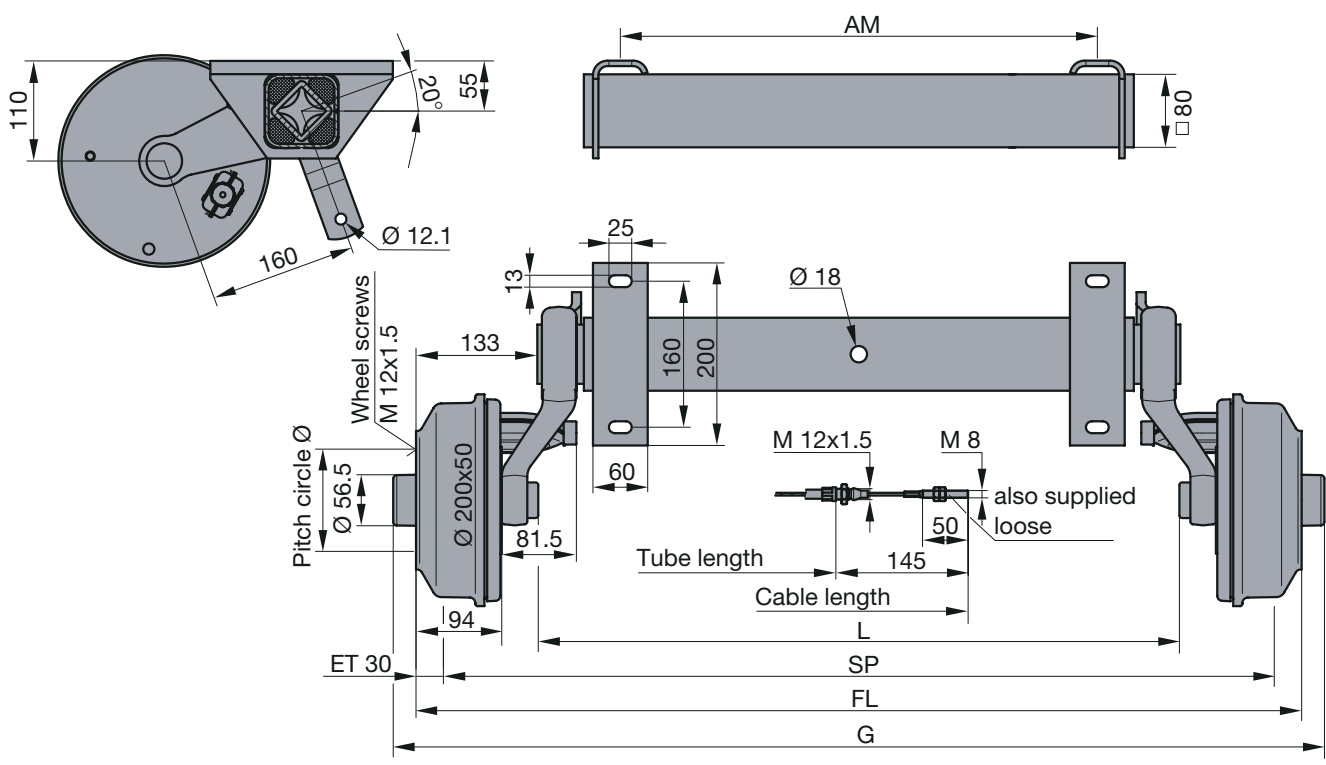
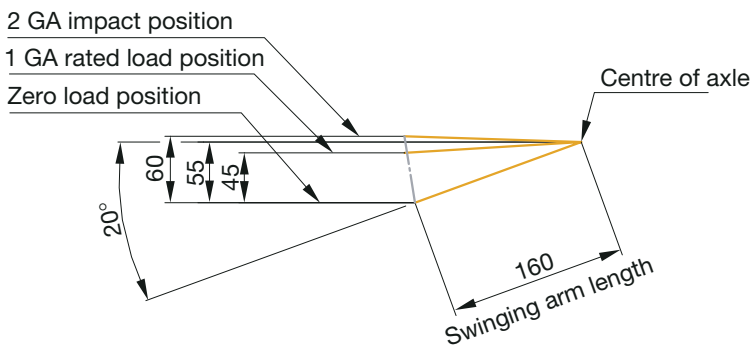
Other possible tyre and wheel sizes see page 140

Special axle supports and drawbar connections on request

Also available with waterproof bearings



2.2 SWING rubber suspension axles, braked, axle load 1050 kg, wheel brake S 2005-7 RASK



Axle beam fully hot-dip galvanised: Long-term surface protection • Independent suspension: Optimum compensation for uneven road surfaces • Zero-maintenance suspension: Reduced maintenance costs • Robust axle structure: Suitable for extreme conditions such as when driving off-road or on building sites • Robust, easy-to-maintain wedge-type brakes with automatic reversing operation: Straightforward adjustment from outside the brake, brake cables can be connected subsequently without removing the brake drums • Compact bearings (standard in the automotive industry): Zero-maintenance, long service life, protected against dirt and water, lifetime lubrication with special grease • Incl. wheel shock absorber mounting

Axle incl. brake cables loose Order no. acc. to wheel connection			Second axle for tandem incl. counter bearing welded (without brake cables)* Order no. acc. to wheel connection			Dimensions [mm]					
CB 1054	CB 1055	CB 1055	CB 1054	CB 1055	CB 1055	FL	SP	AM	L	G	Weight [kg]
4/ø100/60°	5/ø112/R12	5/ø112/60°	4/ø100/60°	5/ø112/R12	5/ø112/60°						
46.21.379.600	46.21.379.620	46.21.379.640	46.21.379.660	46.21.379.680	46.21.379.700	1450	1390	1000	1182	1500	50.8
46.21.379.601	46.21.379.621	46.21.379.641	46.21.379.661	46.21.379.681	46.21.379.701	1500	1440	1050	1232	1550	51.3
46.21.379.602	46.21.379.622	46.21.379.642	46.21.379.662	46.21.379.682	46.21.379.702	1550	1490	1100	1282	1600	51.7
46.21.379.603	46.21.379.623	46.21.379.643	46.21.379.663	46.21.379.683	46.21.379.703	1600	1540	1150	1332	1650	52.2
46.21.379.604	46.21.379.624	46.21.379.644	46.21.379.664	46.21.379.684	46.21.379.704	1650	1590	1200	1382	1700	52.6
46.21.379.605	46.21.379.625	46.21.379.645	46.21.379.665	46.21.379.685	46.21.379.705	1700	1640	1250	1432	1750	53.1
46.21.379.606	46.21.379.626	46.21.379.646	46.21.379.666	46.21.379.686	46.21.379.706	1750	1690	1300	1482	1800	53.5
46.21.379.607	46.21.379.627	46.21.379.647	46.21.379.667	46.21.379.687	46.21.379.707	1800	1740	1350	1532	1850	54.0
46.21.379.608	46.21.379.628	46.21.379.648	46.21.379.668	46.21.379.688	46.21.379.708	1850	1790	1400	1582	1900	54.4
46.21.379.609	46.21.379.629	46.21.379.649	46.21.379.669	46.21.379.689	46.21.379.709	1900	1840	1450	1632	1950	54.9
46.21.379.610	46.21.379.630	46.21.379.650	46.21.379.670	46.21.379.690	46.21.379.710	1950	1890	1500	1682	2000	55.3
46.21.379.611	46.21.379.631	46.21.379.651	46.21.379.671	46.21.379.691	46.21.379.711	2000	1940	1550	1732	2050	55.8
46.21.379.612	46.21.379.632	46.21.379.652	46.21.379.672	46.21.379.692	46.21.379.712	2050	1990	1600	1782	2100	56.2
46.21.379.613	46.21.379.633	46.21.379.653	46.21.379.673	46.21.379.693	46.21.379.713	2100	2040	1650	1832	2150	56.7
46.21.379.614	46.21.379.634	46.21.379.654	46.21.379.674	46.21.379.694	46.21.379.714	2150	2090	1700	1882	2200	57.1
46.21.379.615	46.21.379.635	46.21.379.655	46.21.379.675	46.21.379.695	46.21.379.715	2200	2140	1750	1932	2250	57.6
46.21.379.616	46.21.379.636	46.21.379.656	46.21.379.676	46.21.379.696	46.21.379.716	2250	2190	1800	1982	2300	58.0
46.21.379.617	46.21.379.637	46.21.379.657	46.21.379.677	46.21.379.697	46.21.379.717	2300	2240	1850	2032	2350	58.5
46.21.379.618	46.21.379.638	46.21.379.658	46.21.379.678	46.21.379.698	46.21.379.718	2350	2290	1900	2082	2400	58.9

* Brake cables for tandem operation depending on the axle centre distance and flange dimension of the axle. *Brake cables incl. tandem compensation, see page 117*
Brake linkage components for single axle, see page 116
Shock absorbers, see page 128

Speed up to 140 km/h

Drawbar connection: Clamping components, see accessories on page 120

Recommended wheel size: 4 1/2 J x 13 H2

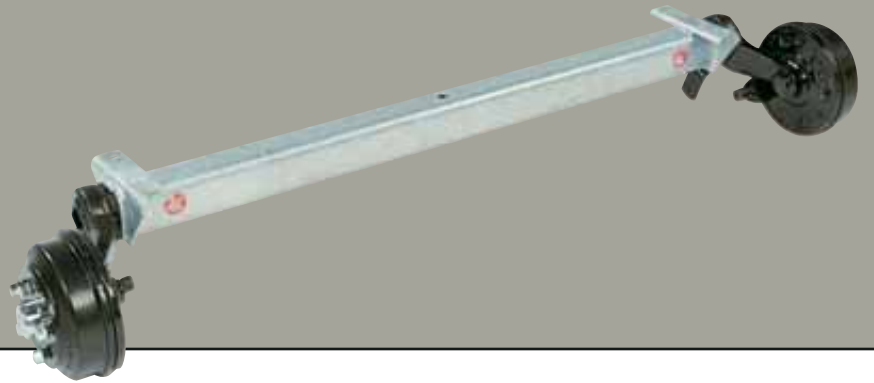
Special wheel connections: on request

Tyres: 155 R 13

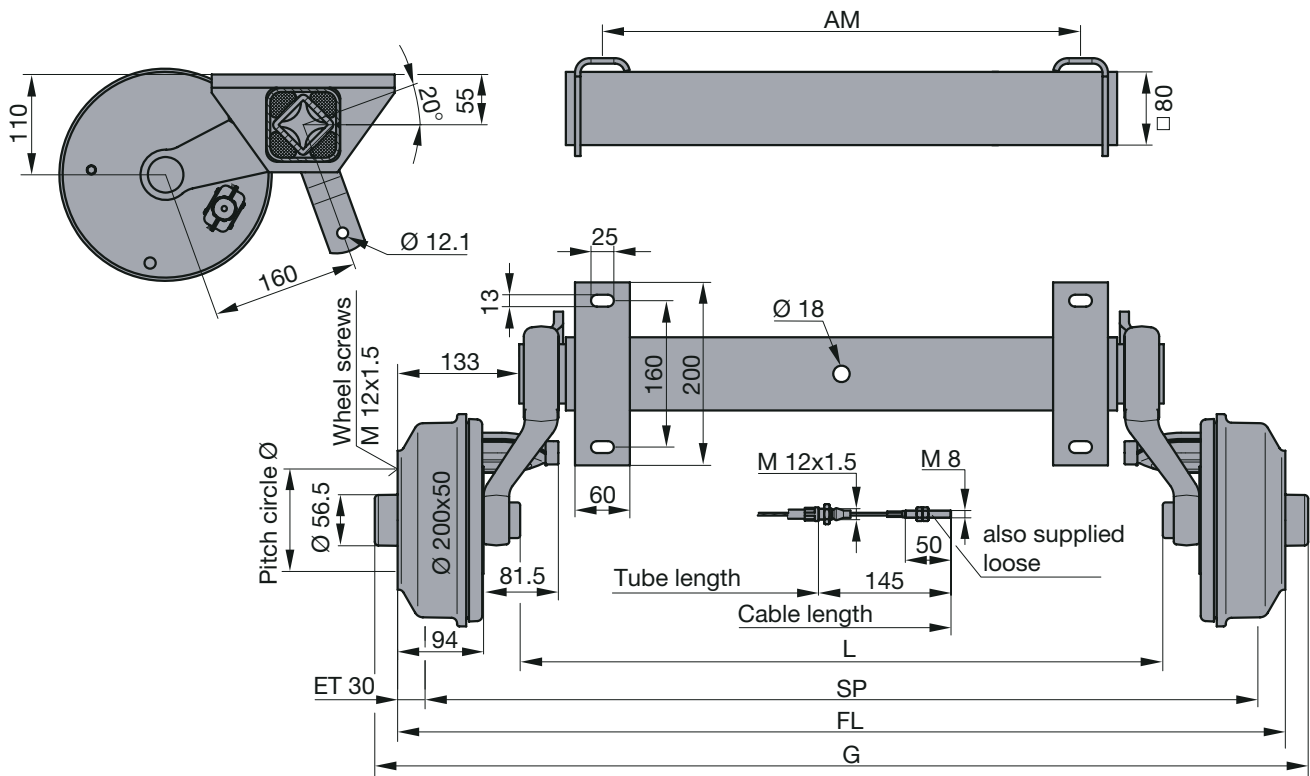
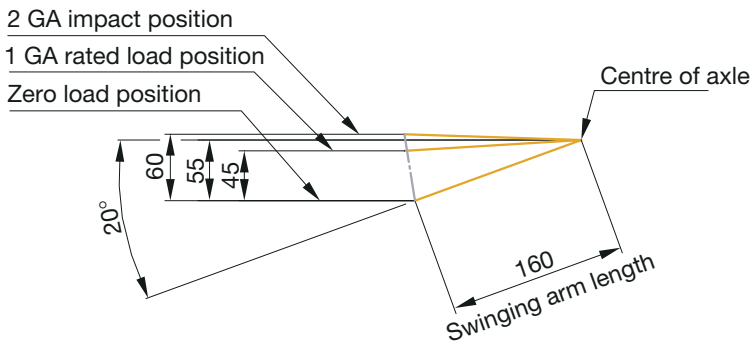
Other possible tyre and wheel sizes, see page 140

Special axle supports and drawbar connections on request

Also available with waterproof bearings



2.2 SWING rubber suspension axles, braked, axle load 1350 kg, wheel brake S 2005-7 RASK



[Axles & axle systems]

Axle beam fully hot-dip galvanised: Long-term surface protection • Independent suspension: Optimum compensation for uneven road surfaces • Zero-maintenance suspension: Reduced maintenance costs • Robust axle structure: Suitable for extreme conditions such as when driving off-road or on building sites • Robust, easy-to-maintain wedge-type brakes with automatic reversing operation: Straightforward adjustment from outside the brake, brake cables can be connected subsequently without removing the brake drums • Compact bearings (standard in the automotive industry): Zero-maintenance, long service life, protected against dirt and water, lifetime lubrication with special grease • Incl. wheel shock absorber mounting

Axle incl. brake cables loose Order no. acc. to wheel connection			Second axle for tandem incl. counter bearing welded (without brake cables)* Order no. acc. to wheel connection			Dimensions [mm]					
CB 1354	CB 1355	CB 1355	CB 1354	CB 1355	CB 1355	FL	SP	AM	L	G	Weight [kg]
4/ø100/60°	5/ø112/R12	5/ø112/60°	4/ø100/60°	5/ø112/R12	5/ø112/60°						
46.25.379.720	46.25.379.740	46.25.379.760	46.25.379.780	46.25.379.800	46.25.379.820	1450	1390	1000	1182	1500	56.6
46.25.379.721	46.25.379.741	46.25.379.761	46.25.379.781	46.25.379.801	46.25.379.821	1500	1440	1050	1232	1550	57.1
46.25.379.722	46.25.379.742	46.25.379.762	46.25.379.782	46.25.379.802	46.25.379.822	1550	1490	1100	1282	1600	57.5
46.25.379.723	46.25.379.743	46.25.379.763	46.25.379.783	46.25.379.803	46.25.379.823	1600	1540	1150	1332	1650	58.0
46.25.379.724	46.25.379.744	46.25.379.764	46.25.379.784	46.25.379.804	46.25.379.824	1650	1590	1200	1382	1700	58.4
46.25.379.725	46.25.379.745	46.25.379.765	46.25.379.785	46.25.379.805	46.25.379.825	1700	1640	1250	1432	1750	58.9
46.25.379.726	46.25.379.746	46.25.379.766	46.25.379.786	46.25.379.806	46.25.379.826	1750	1690	1300	1482	1800	59.3
46.25.379.727	46.25.379.747	46.25.379.767	46.25.379.787	46.25.379.807	46.25.379.827	1800	1740	1350	1532	1850	59.8
46.25.379.728	46.25.379.748	46.25.379.768	46.25.379.788	46.25.379.808	46.25.379.828	1850	1790	1400	1582	1900	60.2
46.25.379.729	46.25.379.749	46.25.379.769	46.25.379.789	46.25.379.809	46.25.379.829	1900	1840	1450	1632	1950	60.7
46.25.379.730	46.25.379.750	46.25.379.770	46.25.379.790	46.25.379.810	46.25.379.830	1950	1890	1500	1682	2000	61.1
46.25.379.731	46.25.379.751	46.25.379.771	46.25.379.791	46.25.379.811	46.25.379.831	2000	1940	1550	1732	2050	61.6
46.25.379.732	46.25.379.752	46.25.379.772	46.25.379.792	46.25.379.812	46.25.379.832	2050	1990	1600	1782	2100	62.0
46.25.379.733	46.25.379.753	46.25.379.773	46.25.379.793	46.25.379.813	46.25.379.833	2100	2040	1650	1832	2150	62.5
46.25.379.734	46.25.379.754	46.25.379.774	46.25.379.794	46.25.379.814	46.25.379.834	2150	2090	1700	1882	2200	62.9
46.25.379.735	46.25.379.755	46.25.379.775	46.25.379.795	46.25.379.815	46.25.379.835	2200	2140	1750	1932	2250	63.4
46.25.379.736	46.25.379.756	46.25.379.776	46.25.379.796	46.25.379.816	46.25.379.836	2250	2190	1800	1982	2300	63.8
46.25.379.737	46.25.379.757	46.25.379.777	46.25.379.797	46.25.379.817	46.25.379.837	2300	2240	1850	2032	2350	64.3
46.25.379.738	46.25.379.758	46.25.379.778	46.25.379.798	46.25.379.818	46.25.379.838	2350	2290	1900	2082	2400	64.7

* Brake cables for tandem operation depending on the axle centre distance and flange dimension of the axle. *Brake cables incl. tandem compensation, see page 117*
Brake linkage components for single axle, see page 116
Shock absorbers, see page 128

Speed up to 140 km/h

Drawbar connection: Clamping components, see accessories on page 120

Recommended wheel size: 5 1/2 J x 14 H2

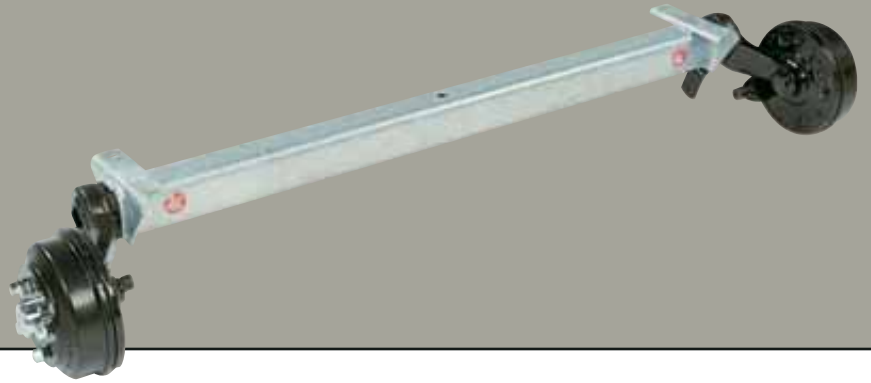
Wheel connections: 4x98; 4x130; 5x140 on request

Tyres: 185/70 R 14

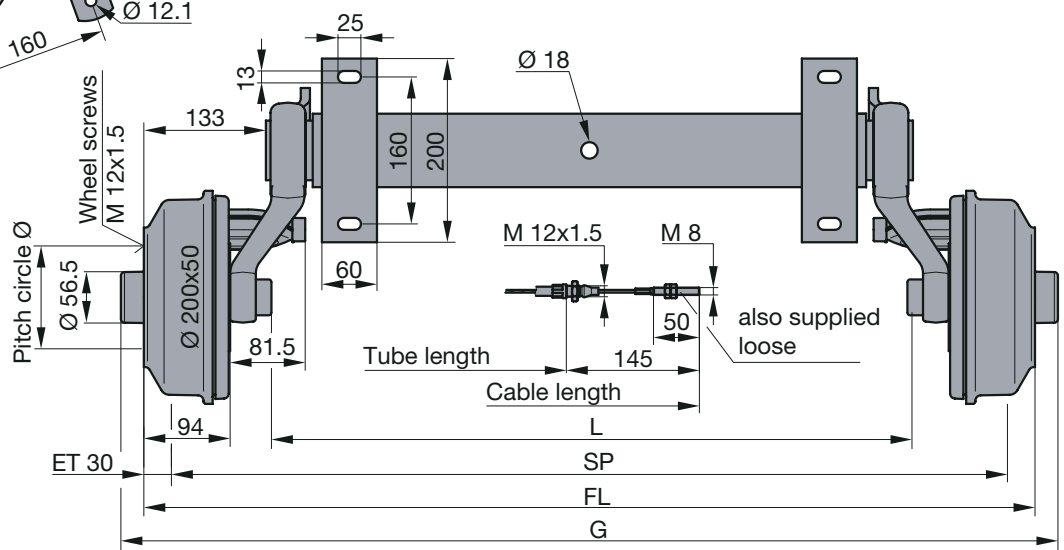
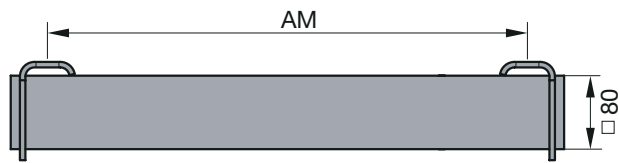
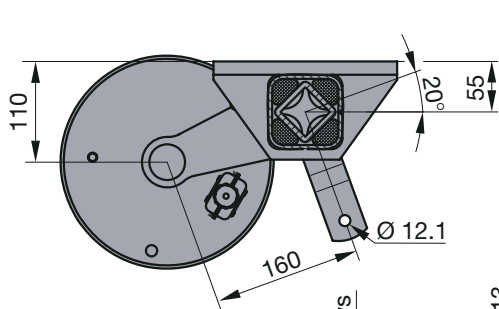
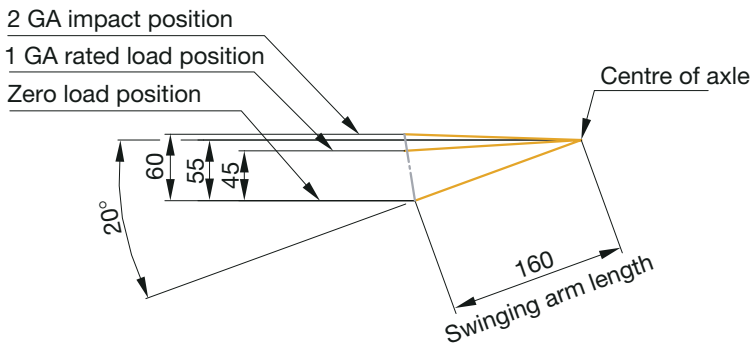
Other possible tyre and wheel sizes, see page 140

Special axle supports and drawbar connections on request

Also available with waterproof bearings



2.2 SWING rubber suspension axles, braked, axle load 1500 kg, wheel brake S 2005-7 RASK



[Axles & axle systems]

Axle beam fully hot-dip galvanised: Long-term surface protection • Independent suspension: Optimum compensation for uneven road surfaces • Zero-maintenance suspension: Reduced maintenance costs • Robust axle structure: Suitable for extreme conditions such as when driving off-road or on building sites • Robust, easy-to-maintain wedge-type brakes with automatic reversing operation: Straightforward adjustment from outside the brake, brake cables can be connected subsequently without removing the brake drums • Compact bearings (standard in the automotive industry): Zero-maintenance, long service life, protected against dirt and water, lifetime lubrication with special grease • Incl. wheel shock absorber mounting

Axle incl. brake cables loose Order no. acc. to wheel connection		Second axle for tandem incl. counter bearing welded (without brake cables)* Order no. acc. to wheel connection		Dimensions [mm]					
CB 1505	CB 1505	CB 1505	CB 1505	FL	SP	AM	L	G	Weight [kg]
5/ø112/R12	5/ø112/60°	5/ø112/R12	5/ø112/60°						
46.27.379.500	46.27.379.520	46.27.379.540	46.27.379.560	1450	1390	1000	1172	1500	57.0
46.27.379.501	46.27.379.521	46.27.379.541	46.27.379.561	1500	1440	1050	1222	1550	57.5
46.27.379.502	46.27.379.522	46.27.379.542	46.27.379.562	1550	1490	1100	1272	1600	58.0
46.27.379.503	46.27.379.523	46.27.379.543	46.27.379.563	1600	1540	1150	1322	1650	58.5
46.27.379.504	46.27.379.524	46.27.379.544	46.27.379.564	1650	1590	1200	1372	1700	59.0
46.27.379.505	46.27.379.525	46.27.379.545	46.27.379.565	1700	1640	1250	1422	1750	59.5
46.27.379.506	46.27.379.526	46.27.379.546	46.27.379.566	1750	1690	1300	1472	1800	60.0
46.27.379.507	46.27.379.527	46.27.379.547	46.27.379.567	1800	1740	1350	1522	1850	60.5
46.27.379.508	46.27.379.528	46.27.379.548	46.27.379.568	1850	1790	1400	1572	1900	61.0
46.27.379.509	46.27.379.529	46.27.379.549	46.27.379.569	1900	1840	1450	1622	1950	61.5
46.27.379.510	46.27.379.530	46.27.379.550	46.27.379.570	1950	1890	1500	1672	2000	62.0
46.27.379.511	46.27.379.531	46.27.379.551	46.27.379.571	2000	1940	1550	1722	2050	62.5
46.27.379.512	46.27.379.532	46.27.379.552	46.27.379.572	2050	1990	1600	1772	2100	63.0
46.27.379.513	46.27.379.533	46.27.379.553	46.27.379.573	2100	2040	1650	1822	2150	63.5
46.27.379.514	46.27.379.534	46.27.379.554	46.27.379.574	2150	2090	1700	1872	2200	64.0
46.27.379.515	46.27.379.535	46.27.379.555	46.27.379.575	2200	2140	1750	1922	2250	64.5
46.27.379.516	46.27.379.536	46.27.379.556	46.27.379.576	2250	2190	1800	1972	2300	65.0
46.27.379.517	46.27.379.537	46.27.379.557	46.27.379.577	2300	2240	1850	2022	2350	65.5
46.27.379.518	46.27.379.538	46.27.379.558	46.27.379.578	2350	2290	1900	2072	2400	66.0

* Brake cables for tandem operation depending on the axle centre distance and flange dimension of the axle. *Brake cables incl. tandem compensation, see page 117*
Brake linkage components for single axle, see page 116
Shock absorbers, see page 128

Speed up to 140 km/h

Drawbar connection: Clamping components, see accessories on page 120

Recommended wheel size: 6 J x 14 H2

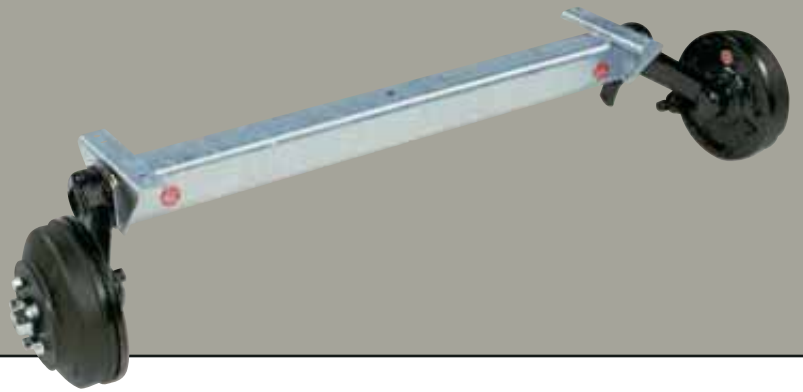
Wheel connections: 5x140 on request

Tyres: 205 R 14 C

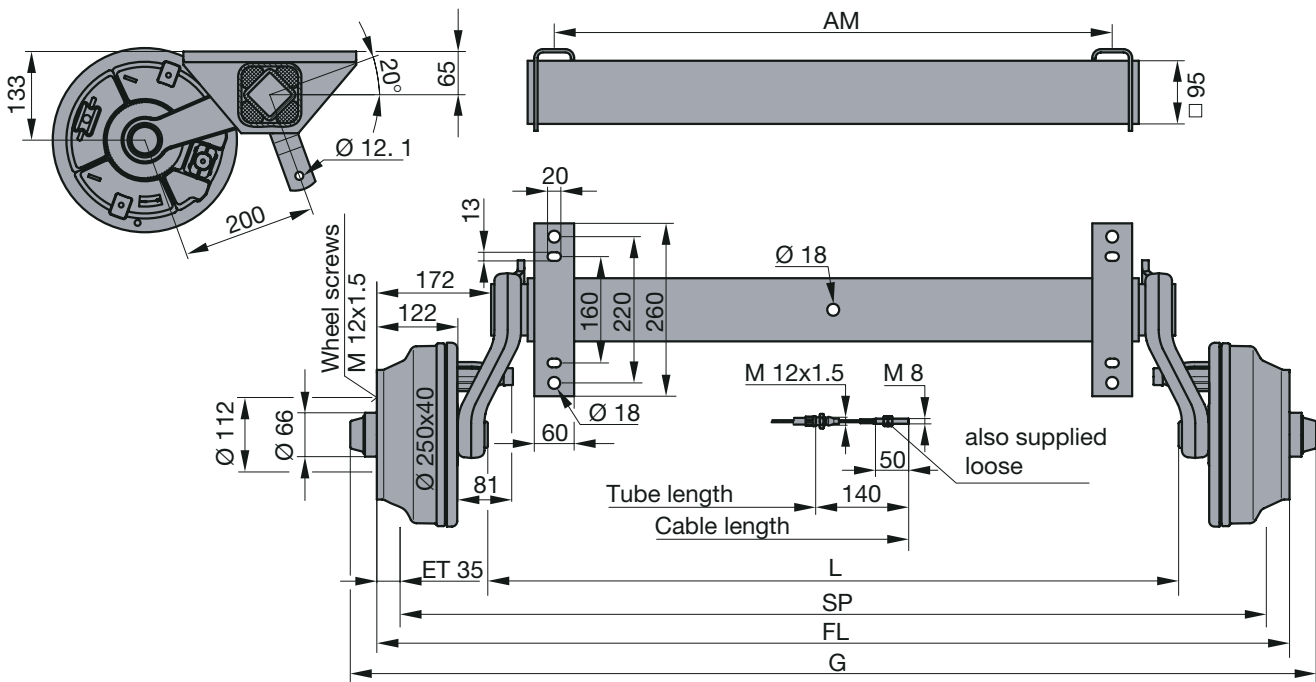
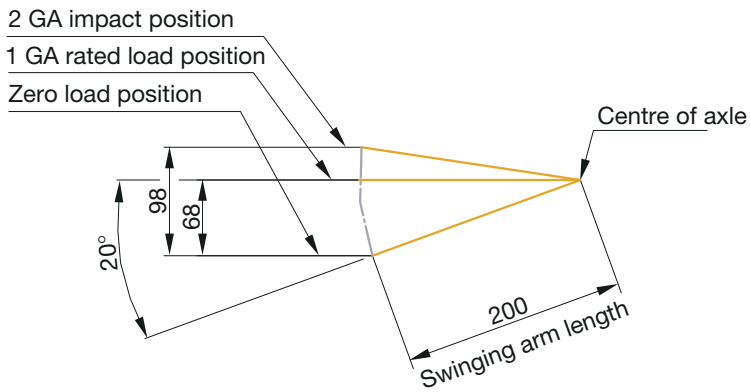
Other possible tyre and wheel sizes, see page 140

Special axle supports and drawbar connections on request

Also available with waterproof bearings



2.2 SWING rubber suspension axles, braked, axle load 1800 kg, wheel brake S 2504-7 RASK



Axle beam fully hot-dip galvanised: Long-term surface protection • Independent suspension: Optimum compensation for uneven road surfaces • Zero-maintenance suspension: Reduced maintenance costs • Robust axle structure: Suitable for extreme conditions such as when driving off-road or on building sites • Robust, easy-to-maintain wedge-type brakes with automatic reversing operation: Straightforward adjustment from outside the brake, brake cables can be connected subsequently without removing the brake drums • Incl. wheel shock absorber mounting

Axle incl. brake cables loose Order no.		Second axle for tandem incl. counter bearing welded (without brake cables)* Order no.		Dimensions [mm]				Weight [kg]
CB 1805		CB 1805		FL	SP	AM	L	
5/ø112/R12	5/ø112/R12							
46.32.368.400	46.32.368.420	1535	1465	1000	1200	1620	78.0	
46.32.368.401	46.32.368.421	1585	1515	1050	1250	1670	78.5	
46.32.368.402	46.32.368.422	1635	1565	1100	1300	1720	79.0	
46.32.368.403	46.32.368.423	1685	1615	1150	1350	1770	79.5	
46.32.368.404	46.32.368.424	1735	1665	1200	1400	1820	80.0	
46.32.368.405	46.32.368.425	1785	1715	1250	1450	1870	80.5	
46.32.368.406	46.32.368.426	1835	1765	1300	1500	1920	81.0	
46.32.368.407	46.32.368.427	1885	1815	1350	1550	1970	81.5	
46.32.368.408	46.32.368.428	1935	1865	1400	1600	2020	82.0	
46.32.368.409	46.32.368.429	1985	1915	1450	1650	2070	82.5	
46.32.368.410	46.32.368.430	2035	1965	1500	1700	2120	83.0	
46.32.368.411	46.32.368.431	2085	2015	1550	1750	2170	83.5	
46.32.368.412	46.32.368.432	2135	2065	1600	1800	2220	84.0	
46.32.368.413	46.32.368.433	2185	2115	1650	1850	2270	84.5	
46.32.368.414	46.32.368.434	2235	2165	1700	1900	2320	85.0	
46.32.368.415	46.32.368.435	2285	2215	1750	1950	2370	85.5	
46.32.368.416	46.32.368.436	2335	2265	1800	2000	2420	86.0	
46.32.368.417	46.32.368.437	2385	2315	1850	2050	2470	86.5	

* Brake cables for tandem operation depending on the axle centre distance and flange dimension of the axle. *Brake cables incl. tandem compensation, see page 117*
Brake linkage components for single axle, see page 116
Shock absorbers, see page 128

Speed up to 140 km/h

Drawbar connection: Clamping components, see accessories on page 120

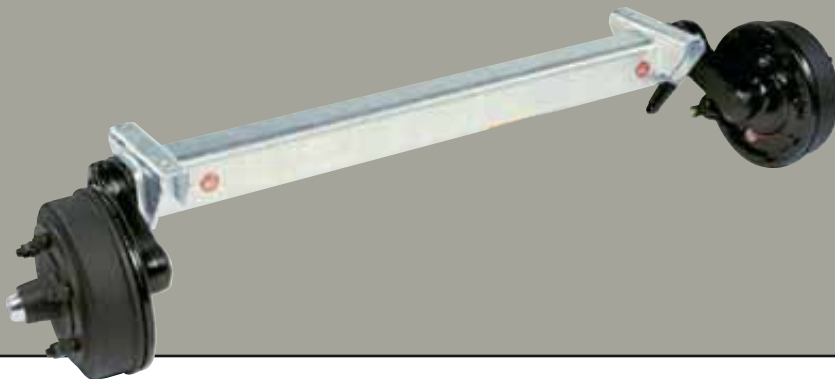
Recommended wheel size: 6 J x 14 H2

Wheel connections: 5x140 on request

Tyres: 205 R 14 C

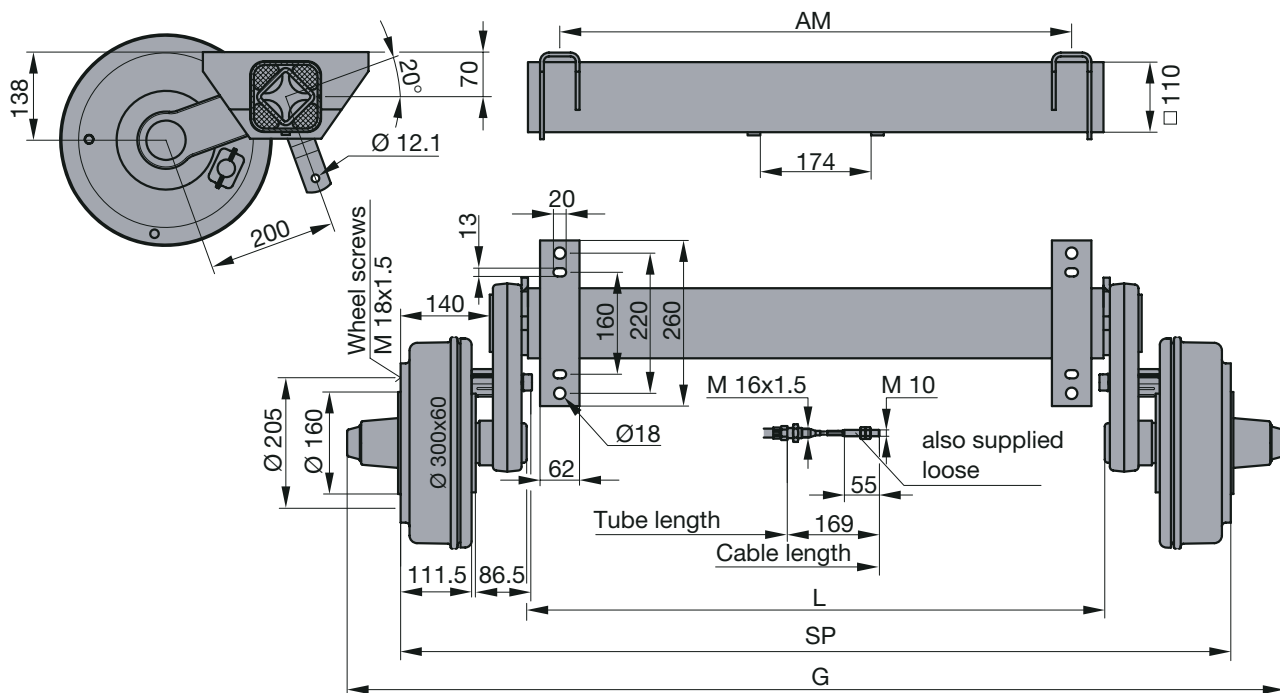
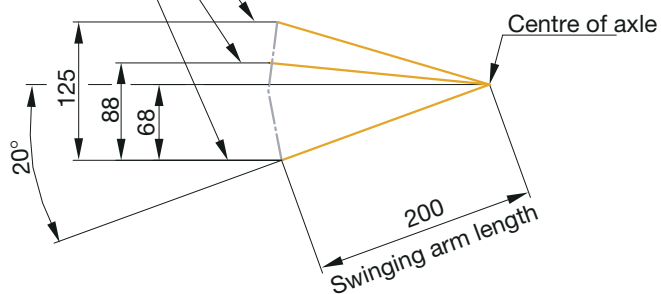
Other possible tyre and wheel sizes, see page 140

Special axle supports and drawbar connections on request



2.2 SWING rubber suspension axles, braked, axle load 2100 kg, wheel brake S 3006-7 RASK

- 2 GA impact position
- 1 GA rated load position
- Zero load position



Axle beam fully hot-dip galvanised: Long-term surface protection • Independent suspension: Optimum compensation for uneven road surfaces • Zero-maintenance suspension: Reduced maintenance costs • Robust axle structure: Suitable for extreme conditions such as when driving off-road or on building sites • Robust, easy-to-maintain wedge-type brakes with automatic reversing operation: Straightforward adjustment from outside the brake, brake cables can be connected subsequently without removing the brake drums • Incl. wheel shock absorber mounting

Marketed under Order no.	Dimensions [mm]					Weight [kg]
	CS 2106	SP	AM	L	G	
ø160/ø205						
46.37.373.100	1500	1000	1104	1668	101.0	
46.37.373.101	1600	1100	1204	1768	103.0	
46.37.373.102	1700	1200	1304	1868	105.0	
46.37.373.103	1800	1300	1404	1968	107.0	
46.37.373.104	1900	1400	1504	2068	109.0	
46.37.373.105	2000	1500	1604	2168	111.0	
46.37.373.106	2100	1600	1704	2268	113.0	
46.37.373.107	2200	1700	1804	2368	115.0	
46.37.373.108	2300	1800	1904	2468	117.0	

Brake linkage components for single axle, see page 116
Shock absorbers, see page 128

Speed up to 140 km/h

Drawbar connection: Clamping components, see accessories on page 120

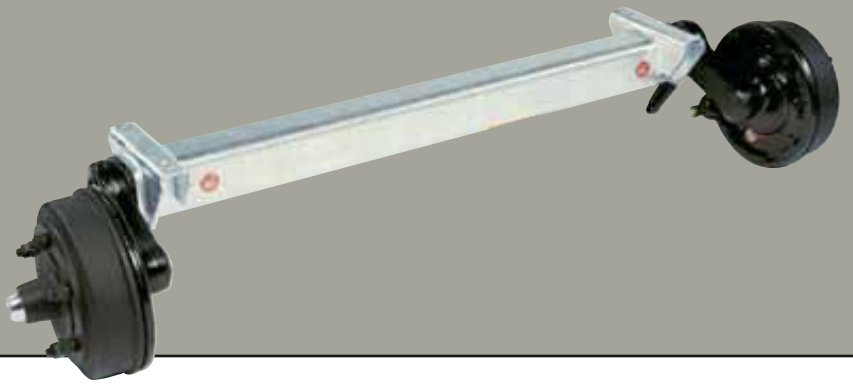
Recommended wheel size: 6 J x 14 H2

Wheel connections: 5x140 on request

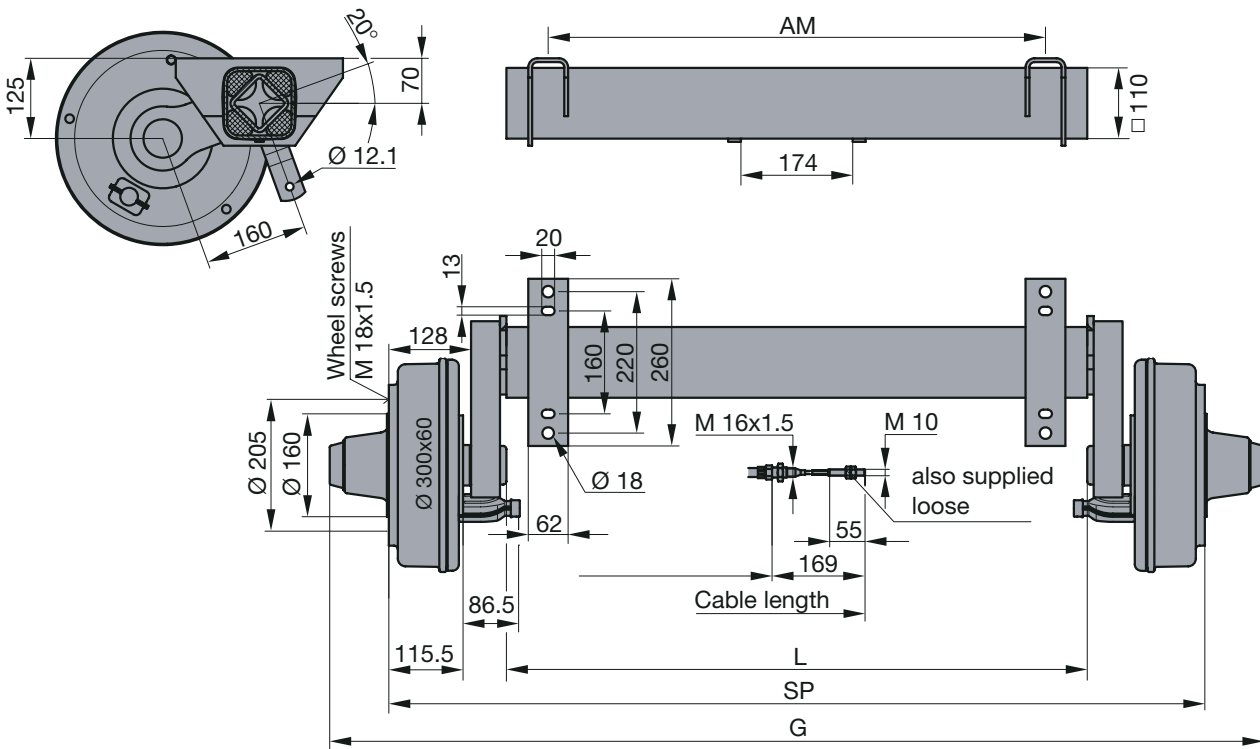
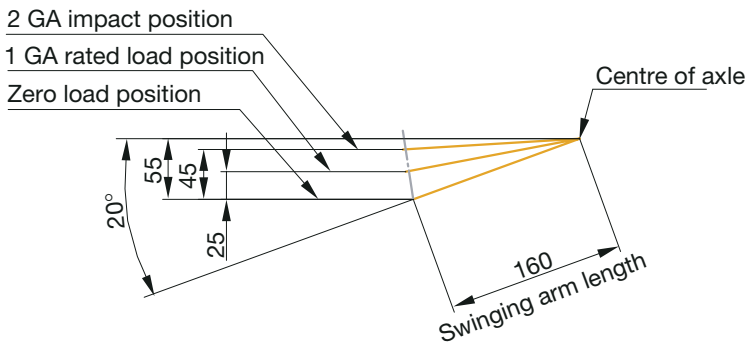
Tyres: 205 R 14 C

Other possible tyre and wheel sizes, see page 140

Special axle supports and drawbar connections on request



2.2 SWING rubber suspension axles, braked, axle load 2500 kg, wheel brake S 3006-7 RASK



Axle beam fully hot-dip galvanised: Long-term surface protection • Independent suspension: Optimum compensation for uneven road surfaces • Zero-maintenance suspension: Reduced maintenance costs • Robust axle structure: Suitable for extreme conditions such as when driving off-road or on building sites • Robust, easy-to-maintain wedge-type brakes with automatic reversing operation: Straightforward adjustment from outside the brake, brake cables can be connected subsequently without removing the brake drums • Incl. wheel shock absorber mounting

Marketed under Order no.	Dimensions [mm]					Weight [kg]
	CS 2506	SP	AM	L	G	
46.41.373.100	1500	1000	1130	1684	118.0	
46.41.373.101	1600	1100	1230	1784	120.0	
46.41.373.102	1700	1200	1330	1884	122.0	
46.41.373.103	1800	1300	1430	1984	124.0	
46.41.373.104	1900	1400	1530	2084	126.0	
46.41.373.105	2000	1500	1630	2184	128.0	
46.41.373.106	2100	1600	1730	2284	130.0	
46.41.373.107	2200	1700	1830	2384	132.0	
46.41.373.108	2300	1800	1930	2484	134.0	

Brake linkage components for single axle, see page 116
Shock absorbers, see page 128

Speed up to 140 km/h

Drawbar connection: Clamping components, see accessories on page 120

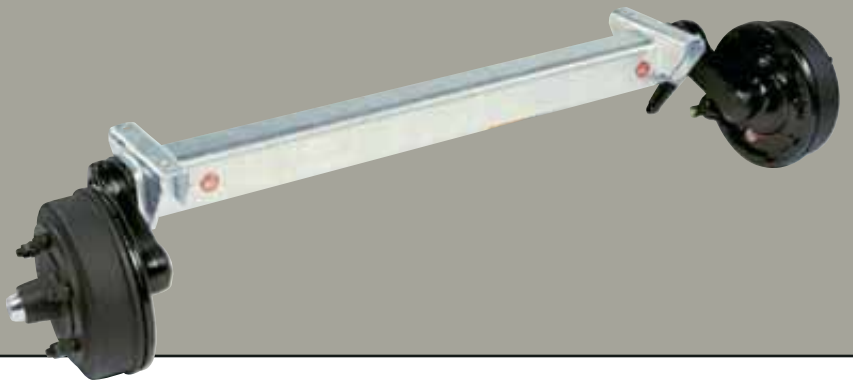
Recommended wheel size: 6 1/2 J x 15 H2

Wheel connections: on request

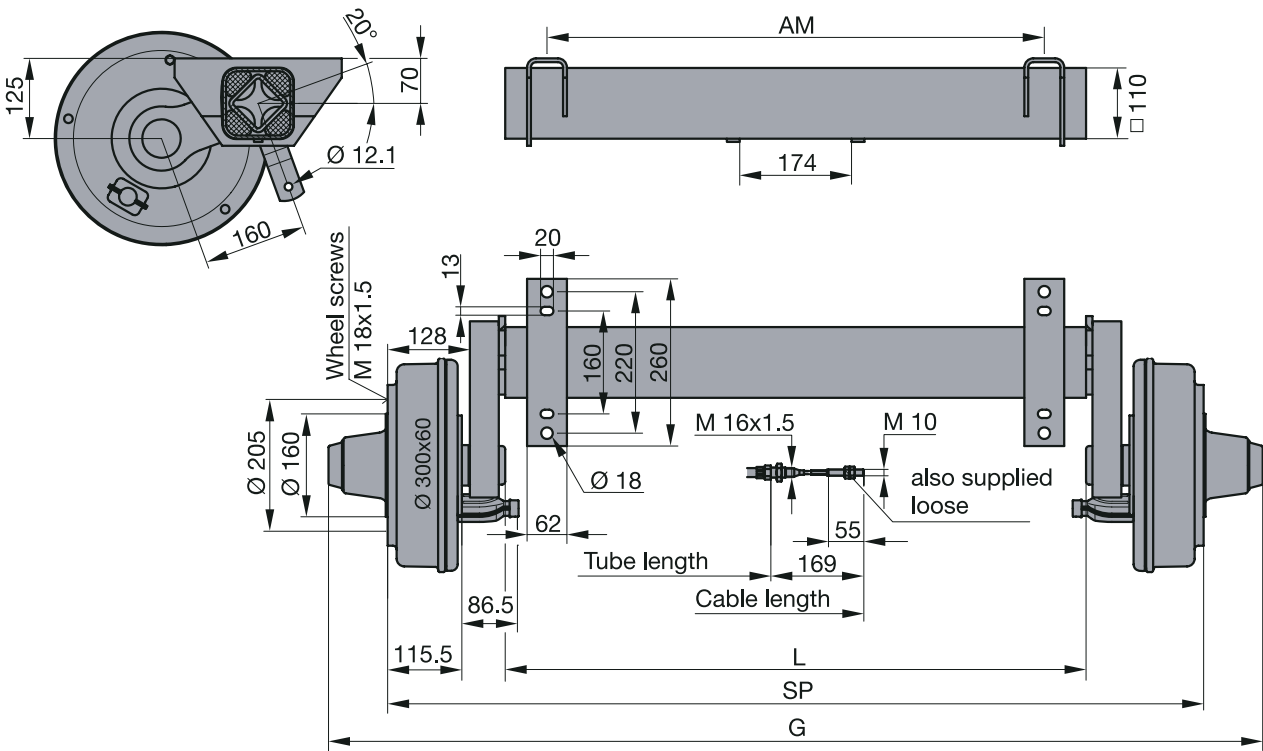
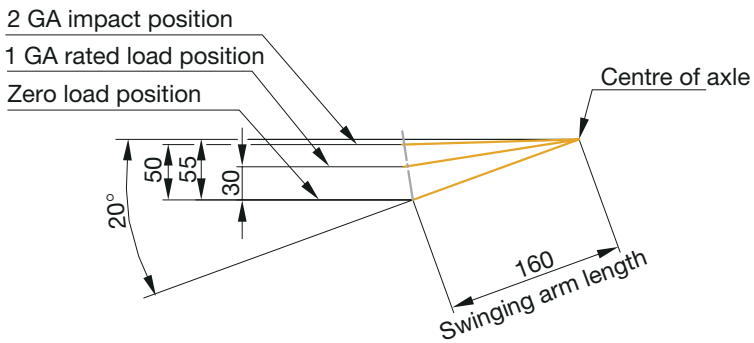
Tyres: 225x70 R 15 C

Other possible tyre and wheel sizes, see page 140

Special axle supports and drawbar connections on request



2.2 SWING rubber suspension axles, braked, axle load 3000 kg, wheel brake S 3006-7 RASK



Axle beam fully hot-dip galvanised: Long-term surface protection • Independent suspension: Optimum compensation for uneven road surfaces • Zero-maintenance suspension: Reduced maintenance costs • Robust axle structure: Suitable for extreme conditions such as when driving off-road or on building sites • Robust, easy-to-maintain wedge-type brakes with automatic reversing operation: Straightforward adjustment from outside the brake, brake cables can be connected subsequently without removing the brake drums • Incl. wheel shock absorber mounting

Marketed under Order no.	Dimensions [mm]					Weight [kg]
	CS 3006	SP	AM	L	G	
ø160/ø205						
46.46.373.100	1500	1000	1130	1684	120.0	
46.46.373.101	1600	1100	1230	1784	122.0	
46.46.373.102	1700	1200	1330	1884	124.0	
46.46.373.103	1800	1300	1430	1984	126.0	
46.46.373.104	1900	1400	1530	2084	128.0	
46.46.373.105	2000	1500	1630	2184	130.0	
46.46.373.106	2100	1600	1730	2284	132.0	
46.46.373.107	2200	1700	1830	2384	134.0	
46.46.373.108	2300	1800	1930	2484	136.0	

Brake linkage components for single axle, see page 116
Shock absorbers, see page 128

Drawbar connection: Clamping shells, see accessories on page 120

Recommended wheel size: 6 J x 16 H2

Wheel connections: on request

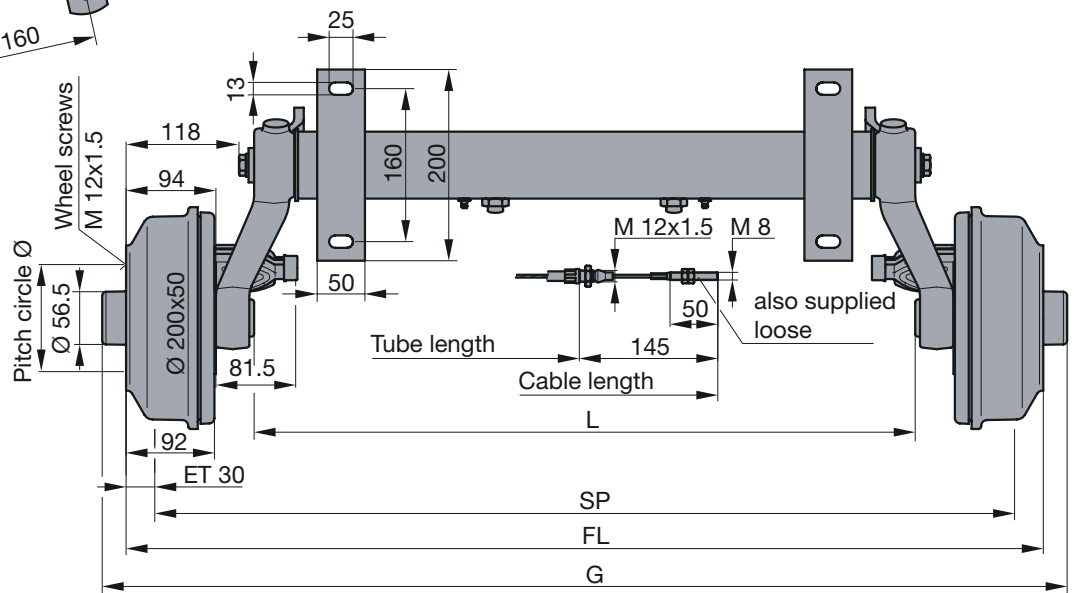
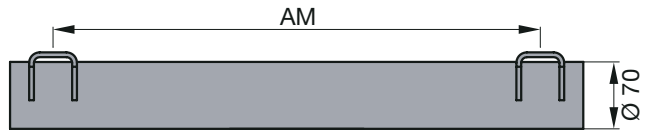
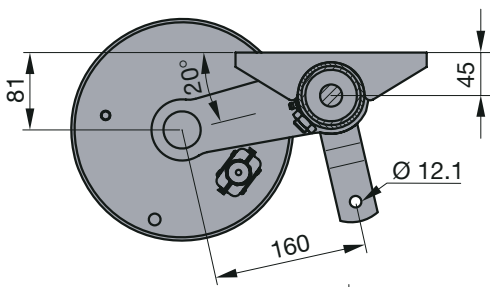
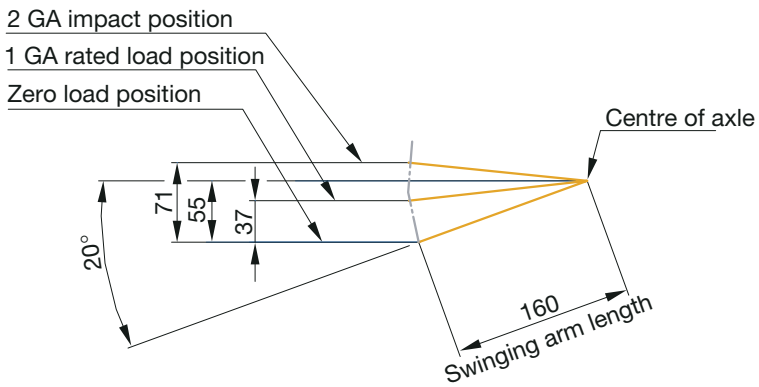
Tyres: 225x75 R 16

Other possible tyre and wheel sizes, see page 140

Special axle supports and drawbar connections on request



2.3 RONDO torsion bar axles, braked, axle load 1050 kg, wheel brake S 2005-7 RASK



Axle beam fully hot-dip galvanised: Long-term surface protection • Independent suspension: Optimum compensation for uneven road surfaces • Zero-maintenance suspension: Reduced maintenance costs • Robust axle structure: Suitable for extreme conditions such as when driving off-road or on building sites • Robust, easy-to-maintain wedge-type brakes with automatic reversing operation: Straightforward adjustment from outside the brake, brake cables can be connected subsequently without removing the brake drums • Compact bearings (standard in the automotive industry): Zero-maintenance, long service life, protected against dirt and water, life-time lubrication with special grease • Incl. wheel shock absorber mounting

Axle incl. brake cables loose Order no. acc. to wheel connection			Second axle for tandem incl. counter bearing welded (without brake cables)* Order no. acc. to wheel connection			Dimensions [mm]					
DB 1054	DB 1055	DB 1055	DB 1054	DB 1055	DB 1055	FL	SP	AM	L	G	Weight [kg]
4/ø100/60°	5/ø112/R12	5/ø112/60°	4/ø100/60°	5/ø112/R12	5/ø112/60°						
45.21.379.510	45.21.379.530	45.21.379.550	45.21.379.570	45.21.379.590	45.21.379.610	1450	1390	1000	1182	1500	48.5
45.21.379.511	45.21.379.531	45.21.379.551	45.21.379.571	45.21.379.591	45.21.379.611	1500	1440	1050	1232	1550	48.9
45.21.379.512	45.21.379.532	45.21.379.552	45.21.379.572	45.21.379.592	45.21.379.612	1550	1490	1100	1282	1600	49.2
45.21.379.513	45.21.379.533	45.21.379.553	45.21.379.573	45.21.379.593	45.21.379.613	1600	1540	1150	1332	1650	49.6
45.21.379.514	45.21.379.534	45.21.379.554	45.21.379.574	45.21.379.594	45.21.379.614	1650	1590	1200	1382	1700	50.0
45.21.379.515	45.21.379.535	45.21.379.555	45.21.379.575	45.21.379.595	45.21.379.615	1700	1640	1250	1432	1750	50.3
45.21.379.516	45.21.379.536	45.21.379.556	45.21.379.576	45.21.379.596	45.21.379.616	1750	1690	1300	1482	1800	50.7
45.21.379.517	45.21.379.537	45.21.379.557	45.21.379.577	45.21.379.597	45.21.379.617	1800	1740	1350	1532	1850	51.0
45.21.379.518	45.21.379.538	45.21.379.558	45.21.379.578	45.21.379.598	45.21.379.618	1850	1790	1400	1582	1900	51.4
45.21.379.519	45.21.379.539	45.21.379.559	45.21.379.579	45.21.379.599	45.21.379.619	1900	1840	1450	1632	1950	51.7
45.21.379.520	45.21.379.540	45.21.379.560	45.21.379.580	45.21.379.600	45.21.379.620	1950	1890	1500	1682	2000	52.1
45.21.379.521	45.21.379.541	45.21.379.561	45.21.379.581	45.21.379.601	45.21.379.621	2000	1940	1550	1732	2050	52.5
45.21.379.522	45.21.379.542	45.21.379.562	45.21.379.582	45.21.379.602	45.21.379.622	2050	1990	1600	1782	2100	52.8
45.21.379.523	45.21.379.543	45.21.379.563	45.21.379.583	45.21.379.603	45.21.379.623	2100	2040	1650	1832	2150	53.2
45.21.379.524	45.21.379.544	45.21.379.564	45.21.379.584	45.21.379.604	45.21.379.624	2150	2090	1700	1882	2200	53.5
45.21.379.525	45.21.379.545	45.21.379.565	45.21.379.585	45.21.379.605	45.21.379.625	2200	2140	1750	1932	2250	53.9
45.21.379.526	45.21.379.546	45.21.379.566	45.21.379.586	45.21.379.606	45.21.379.626	2250	2190	1800	1982	2300	54.3
45.21.379.527	45.21.379.547	45.21.379.567	45.21.379.587	45.21.379.607	45.21.379.627	2300	2240	1850	2032	2350	54.6
45.21.379.528	45.21.379.548	45.21.379.568	45.21.379.588	45.21.379.608	45.21.379.628	2350	2290	1900	2082	2400	55.0

* Brake cables for tandem operation depending on the axle centre distance and flange dimension of the axle. *Brake cables incl. tandem compensation, see page 117*
Brake linkage components for single axle, see page 116
Shock absorbers, see page 128

Speed up to 140 km/h

Drawbar connection: Clamping components, see accessories on page 120

Recommended wheel size: 4 1/2 J x 13 H2

Special wheel connections: on request

Tyres: 155 R 13

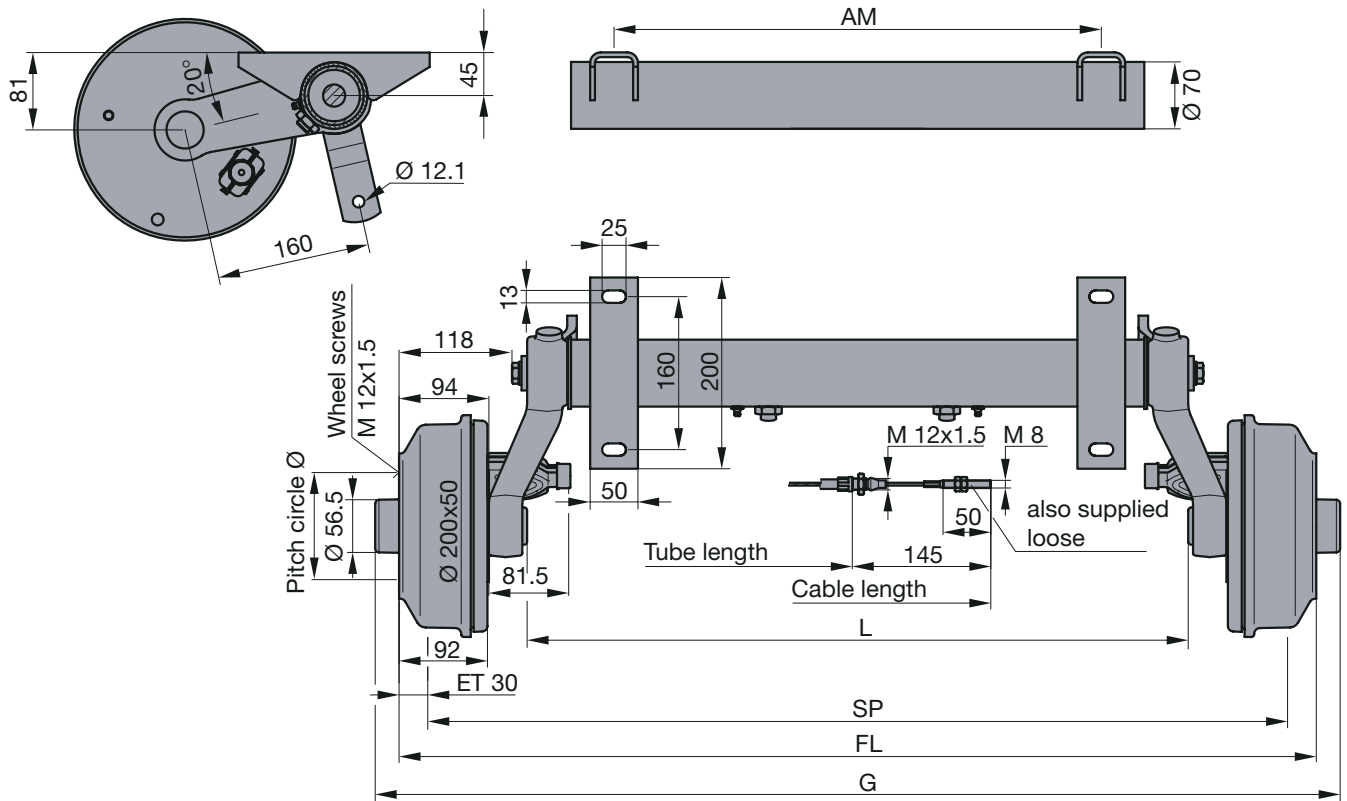
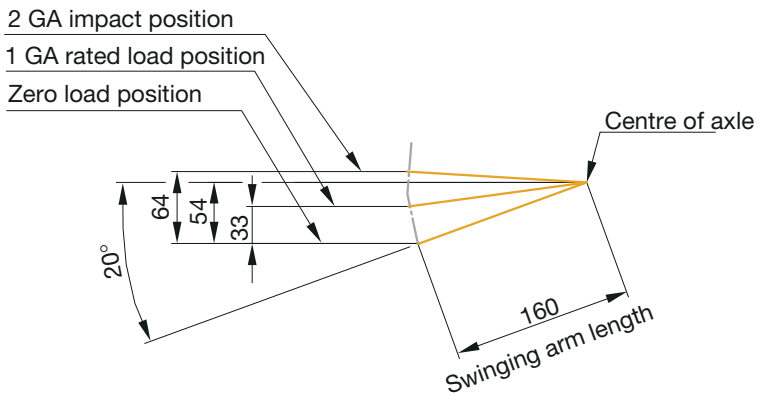
Other possible tyre and wheel sizes, see page 140

Special axle supports and drawbar connections on request

Also available with waterproof bearings



2.3 RONDO torsion bar axles, braked, axle load 1350 kg, wheel brake S 2005-7 RASK



[Axles & axle systems]

Axle beam fully hot-dip galvanised: Long-term surface protection • Independent suspension: Optimum compensation for uneven road surfaces • Zero-maintenance suspension: Reduced maintenance costs • Robust axle structure: Suitable for extreme conditions such as when driving off-road or on building sites • Robust, easy-to-maintain wedge-type brakes with automatic reversing operation: Straightforward adjustment from outside the brake, brake cables can be connected subsequently without removing the brake drums • Compact bearings (standard in the automotive industry): Zero-maintenance, long service life, protected against dirt and water, lifetime lubrication with special grease • Incl. wheel shock absorber mounting

Axle incl. brake cables loose Order no. acc. to wheel connection			Second axle for tandem incl. counter bearing welded (without brake cables)* Order no. acc. to wheel connection			Dimensions [mm]					
DB 1354	DB 1355	DB 1355	DB 1354	DB 1355	DB 1355	FL	SP	AM	L	G	Weight [kg]
4/ø100/60°	5/ø112/R12	5/ø112/60°	4/ø100/60°	5/ø112/R12	5/ø112/60°						
45.25.379.560	45.25.379.580	45.25.379.600	45.25.379.620	45.25.379.640	45.25.379.660	1450	1390	1000	1182	1500	48.5
45.25.379.561	45.25.379.581	45.25.379.601	45.25.379.621	45.25.379.641	45.25.379.661	1500	1440	1050	1232	1550	48.9
45.25.379.562	45.25.379.582	45.25.379.602	45.25.379.622	45.25.379.642	45.25.379.662	1550	1490	1100	1282	1600	49.2
45.25.379.563	45.25.379.583	45.25.379.603	45.25.379.623	45.25.379.643	45.25.379.663	1600	1540	1150	1332	1650	49.6
45.25.379.564	45.25.379.584	45.25.379.604	45.25.379.624	45.25.379.644	45.25.379.664	1650	1590	1200	1382	1700	50.0
45.25.379.565	45.25.379.585	45.25.379.605	45.25.379.625	45.25.379.645	45.25.379.665	1700	1640	1250	1432	1750	50.3
45.25.379.566	45.25.379.586	45.25.379.606	45.25.379.626	45.25.379.646	45.25.379.666	1750	1690	1300	1482	1800	50.7
45.25.379.567	45.25.379.587	45.25.379.607	45.25.379.627	45.25.379.647	45.25.379.667	1800	1740	1350	1532	1850	51.0
45.25.379.568	45.25.379.588	45.25.379.608	45.25.379.628	45.25.379.648	45.25.379.668	1850	1790	1400	1582	1900	51.4
45.25.379.569	45.25.379.589	45.25.379.609	45.25.379.629	45.25.379.649	45.25.379.669	1900	1840	1450	1632	1950	51.7
45.25.379.570	45.25.379.590	45.25.379.610	45.25.379.630	45.25.379.650	45.25.379.670	1950	1890	1500	1682	2000	52.1
45.25.379.571	45.25.379.591	45.25.379.611	45.25.379.631	45.25.379.651	45.25.379.671	2000	1940	1550	1732	2050	52.5
45.25.379.572	45.25.379.592	45.25.379.612	45.25.379.632	45.25.379.652	45.25.379.672	2050	1990	1600	1782	2100	52.8
45.25.379.573	45.25.379.593	45.25.379.613	45.25.379.633	45.25.379.653	45.25.379.673	2100	2040	1650	1832	2150	53.2
45.25.379.574	45.25.379.594	45.25.379.614	45.25.379.634	45.25.379.654	45.25.379.674	2150	2090	1700	1882	2200	53.5
45.25.379.575	45.25.379.595	45.25.379.615	45.25.379.635	45.25.379.655	45.25.379.675	2200	2140	1750	1932	2250	53.9
45.25.379.576	45.25.379.596	45.25.379.616	45.25.379.636	45.25.379.656	45.25.379.676	2250	2190	1800	1982	2300	54.3
45.25.379.577	45.25.379.597	45.25.379.617	45.25.379.637	45.25.379.657	45.25.379.677	2300	2240	1850	2032	2350	54.6
45.25.379.578	45.25.379.598	45.25.379.618	45.25.379.638	45.25.379.658	45.25.379.678	2350	2290	1900	2082	2400	55.0

* Brake cables for tandem operation depending on the axle centre distance and flange dimension of the axle. *Brake cables incl. tandem compensation, see page 117*
Brake linkage components for single axle, see page 116
Shock absorbers, see page 128

Speed up to 140 km/h

Drawbar connection: Clamping components, see accessories on page 120

Recommended wheel size: 5 1/2 J x 14 H2

Special wheel connections: on request

Tyres: 185x70 R 14

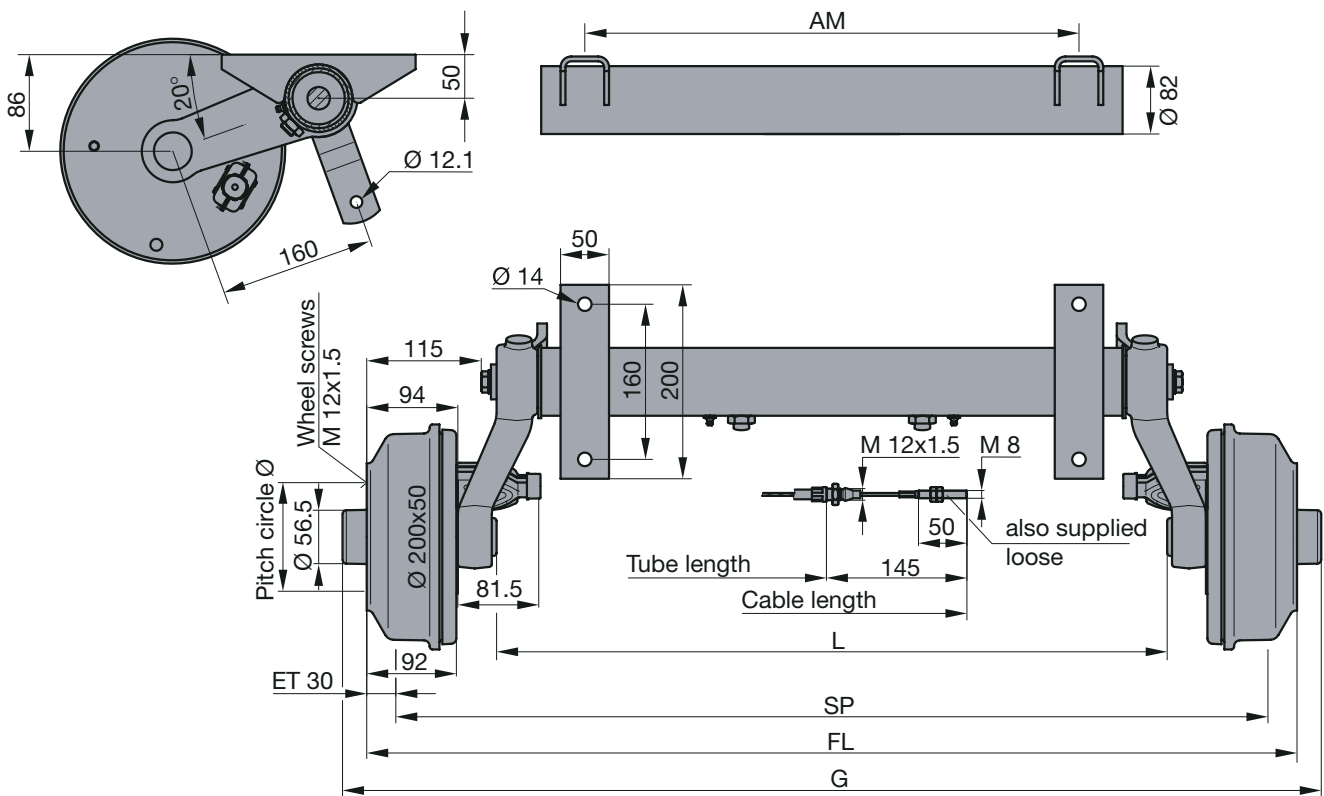
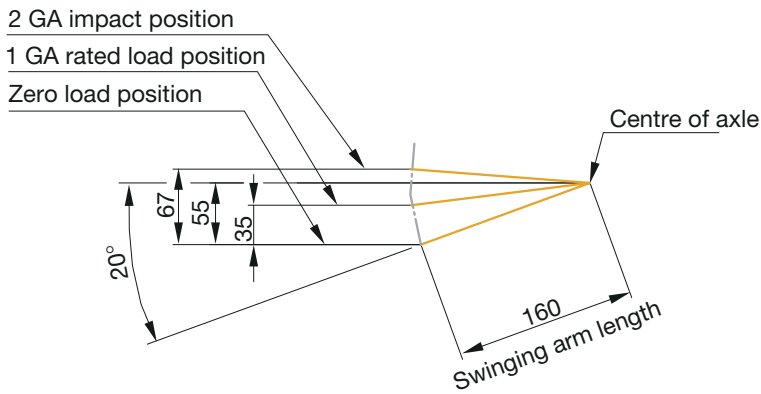
Other possible tyre and wheel sizes, see page 140

Special axle supports and drawbar connections on request

Also available with waterproof bearings



2.3 RONDO torsion bar axles, braked, axle load 1500 kg, wheel brake S 2005-7 RASK



Axle beam fully hot-dip galvanised: Long-term surface protection • Independent suspension: Optimum compensation for uneven road surfaces • Zero-maintenance suspension: Reduced maintenance costs • Robust axle structure: Suitable for extreme conditions such as when driving off-road or on building sites • Robust, easy-to-maintain wedge-type brakes with automatic reversing operation: Straightforward adjustment from outside the brake, brake cables can be connected subsequently without removing the brake drums • Compact bearings (standard in the automotive industry): Zero-maintenance, long service life, protected against dirt and water, lifetime lubrication with special grease • Incl. wheel shock absorber mounting

Axle incl. brake cables loose Order no. acc. to wheel connection		Second axle for tandem incl. counter bearing welded (without brake cables)* Order no. acc. to wheel connection		Dimensions [mm]					
DB 1505	DB 1505	DB 1505	DB 1505	FL	SP	AM	L	G	Weight [kg]
5/ø112/R12	5/ø112/60°	5/ø112/R12	5/ø112/60°						
45.27.379.500	45.27.379.520	45.27.379.540	45.27.379.560	1550	1490	1100	1272	1600	54.6
45.27.379.501	45.27.379.521	45.27.379.541	45.27.379.561	1600	1540	1150	1322	1650	55.0
45.27.379.502	45.27.379.522	45.27.379.542	45.27.379.562	1650	1590	1200	1372	1700	55.5
45.27.379.503	45.27.379.523	45.27.379.543	45.27.379.563	1700	1640	1250	1422	1750	55.9
45.27.379.504	45.27.379.524	45.27.379.544	45.27.379.564	1750	1690	1300	1472	1800	56.3
45.27.379.505	45.27.379.525	45.27.379.545	45.27.379.565	1800	1740	1350	1522	1850	56.7
45.27.379.506	45.27.379.526	45.27.379.546	45.27.379.566	1850	1790	1400	1572	1900	57.2
45.27.379.507	45.27.379.527	45.27.379.547	45.27.379.567	1900	1840	1450	1622	1950	57.6
45.27.379.508	45.27.379.528	45.27.379.548	45.27.379.568	1950	1890	1500	1672	2000	58.0
45.27.379.509	45.27.379.529	45.27.379.549	45.27.379.569	2000	1940	1550	1722	2050	58.4
45.27.379.510	45.27.379.530	45.27.379.550	45.27.379.570	2050	1990	1600	1772	2100	58.9
45.27.379.511	45.27.379.531	45.27.379.551	45.27.379.571	2100	2040	1650	1822	2150	59.3
45.27.379.512	45.27.379.532	45.27.379.552	45.27.379.572	2150	2090	1700	1872	2200	59.7
45.27.379.513	45.27.379.533	45.27.379.553	45.27.379.573	2200	2140	1750	1922	2250	60.1
45.27.379.514	45.27.379.534	45.27.379.554	45.27.379.574	2250	2190	1800	1972	2300	60.6
45.27.379.515	45.27.379.535	45.27.379.555	45.27.379.575	2300	2240	1850	2022	2350	61.0
45.27.379.516	45.27.379.536	45.27.379.556	45.27.379.576	2350	2290	1900	2072	2400	61.4

* Brake cables for tandem operation depending on the axle centre distance and flange dimension of the axle. *Brake cables incl. tandem compensation, see page 117*
Brake linkage components for single axle, see page 116
Shock absorbers, see page 128

Speed up to 140 km/h

Drawbar connection: Clamping components, see accessories on page 120

Recommended wheel size: 6 J x 14 H2

Wheel connections: 5x140 on request

Tyres: 205 R 14 C

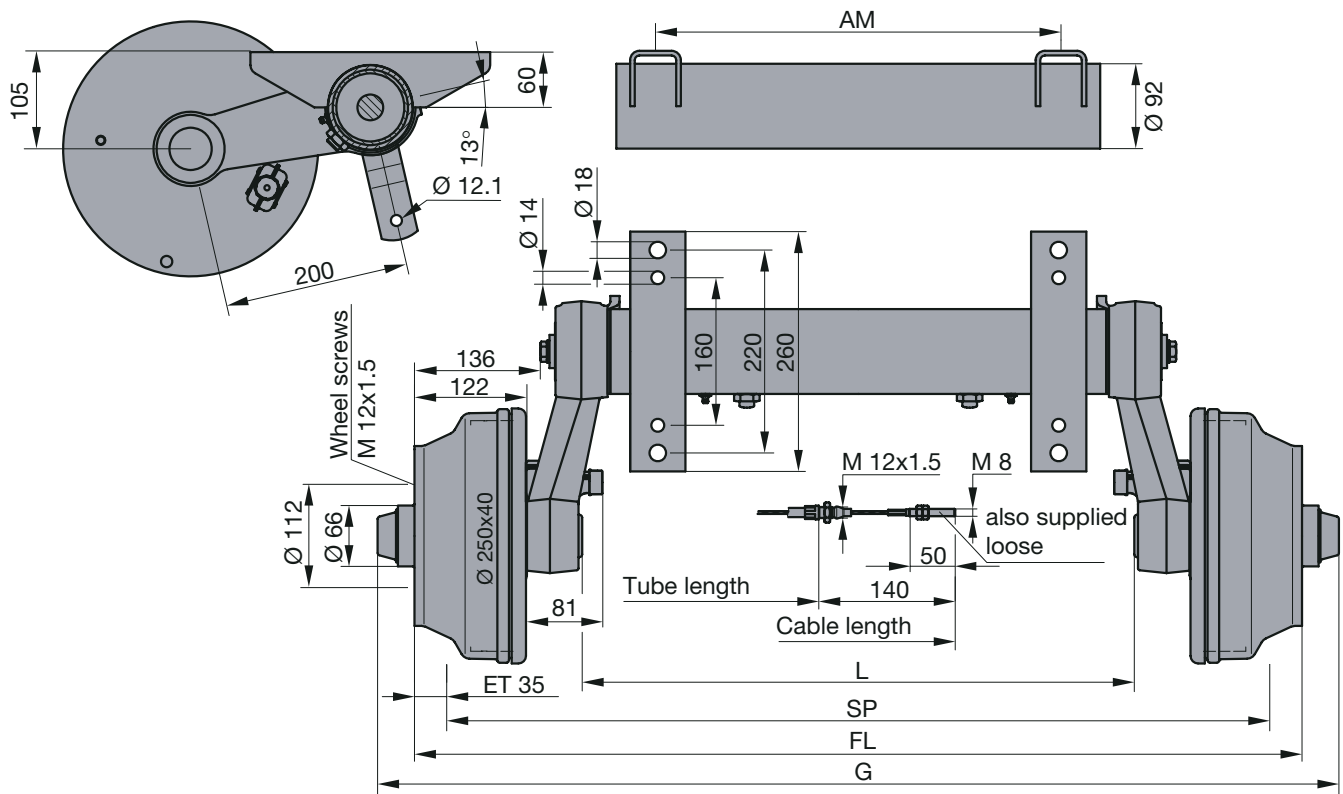
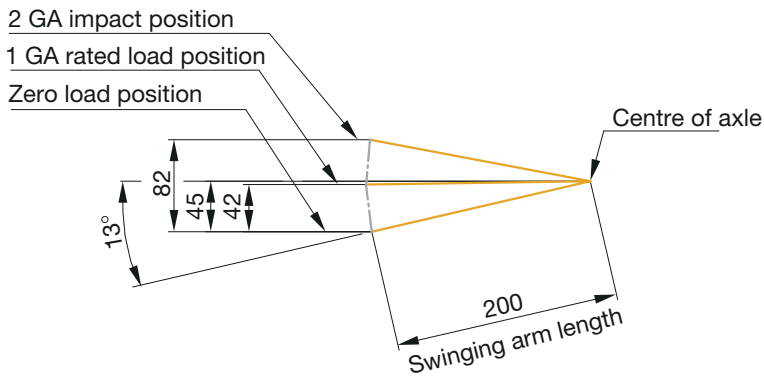
Other possible tyre and wheel sizes, see page 140

Special axle supports and drawbar connections on request

Also available with waterproof bearings



2.3 RONDO torsion bar axles, braked, axle load 1800 kg, wheel brake S 2504-7 RASK



Axle beam fully hot-dip galvanised: Long-term surface protection • Independent suspension: Optimum compensation for uneven road surfaces • Zero-maintenance suspension: Reduced maintenance costs • Robust axle structure: Suitable for extreme conditions such as when driving off-road or on building sites • Robust, easy-to-maintain wedge-type brakes with automatic reversing operation: Straightforward adjustment from outside the brake, brake cables can be connected subsequently without removing the brake drums • Incl. wheel shock absorber mounting

Axle incl. brake cables loose Order no.		Second axle for tandem incl. counter bearing welded (without brake cables)* Order no.		Dimensions [mm]				Weight [kg]
DB 1805		DB 1805		FL	SP	AM	L	
5/ø112/R12	5/ø112/R12							
45.32.368.600	45.32.368.620	1500	1430	1000	1136	1585	69.0	
45.32.368.601	45.32.368.621	1550	1480	1050	1186	1635	69.5	
45.32.368.602	45.32.368.622	1600	1530	1100	1236	1685	70.1	
45.32.368.603	45.32.368.623	1650	1580	1150	1286	1735	70.6	
45.32.368.604	45.32.368.624	1700	1630	1200	1336	1785	71.1	
45.32.368.605	45.32.368.625	1750	1680	1250	1386	1835	71.7	
45.32.368.606	45.32.368.626	1800	1730	1300	1436	1885	72.2	
45.32.368.607	45.32.368.627	1850	1780	1350	1486	1935	72.8	
45.32.368.608	45.32.368.628	1900	1830	1400	1536	1985	73.3	
45.32.368.609	45.32.368.629	1950	1880	1450	1586	2035	73.8	
45.32.368.610	45.32.368.630	2000	1930	1500	1636	2085	74.4	
45.32.368.611	45.32.368.631	2050	1980	1550	1686	2135	74.9	
45.32.368.612	45.32.368.632	2100	2030	1600	1736	2185	75.4	
45.32.368.613	45.32.368.633	2150	2080	1650	1786	2235	76.0	
45.32.368.614	45.32.368.634	2200	2130	1700	1836	2285	76.5	
45.32.368.615	45.32.368.635	2250	2180	1750	1886	2335	77.1	
45.32.368.616	45.32.368.636	2300	2230	1800	1936	2385	77.6	
45.32.368.617	45.32.368.637	2350	2280	1850	1986	2435	78.1	

* Brake cables for tandem operation depending on the axle centre distance and flange dimension of the axle. *Brake cables incl. tandem compensation, see page 117*
Brake linkage components for single axle, see page 116
Shock absorbers, see page 128

Speed up to 140 km/h

Drawbar connection: Clamping components, see accessories on page 120

Recommended wheel size: 5 1/2 J x 15 H2

Wheel connections: 5x140 on request

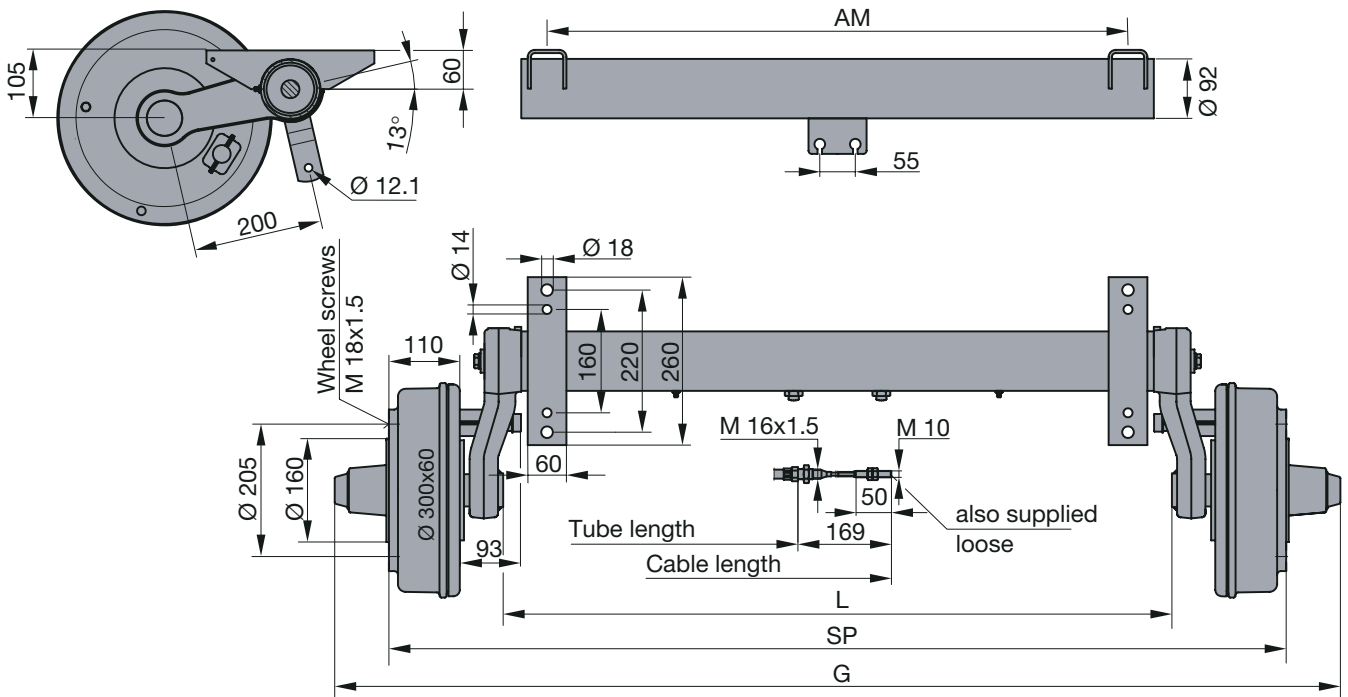
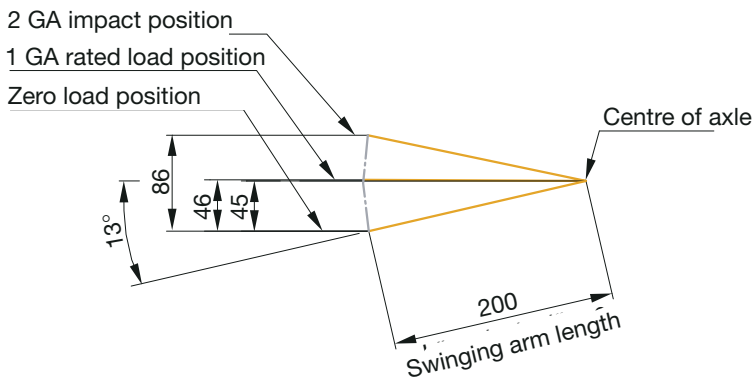
Tyres: 185 R 15 C

Other possible tyre and wheel sizes, see page 140

Special axle supports and drawbar connections on request



2.3 RONDO torsion bar axles, braked, axle load 2100 kg, wheel brake S 3006-7 RASK



Axle beam fully hot-dip galvanised: Long-term surface protection • Independent suspension: Optimum compensation for uneven road surfaces • Zero-maintenance suspension: Reduced maintenance costs • Robust axle structure: Suitable for extreme conditions such as when driving off-road or on building sites • Robust, easy-to-maintain wedge-type brakes with automatic reversing operation: Straightforward adjustment from outside the brake, brake cables can be connected subsequently without removing the brake drums • Incl. wheel shock absorber mounting

ø160/ø205	Marketed under Order no.	Dimensions [mm]				Weight [kg]
	DS 2106	SP	AM	L	G	
45.37.373.410	1500	1000	1146	1668	92.0	
45.37.373.411	1600	1100	1246	1768	93.1	
45.37.373.412	1700	1200	1346	1868	94.2	
45.37.373.413	1800	1300	1446	1968	95.3	
45.37.373.414	1900	1400	1546	2068	96.4	
45.37.373.415	2000	1500	1646	2168	97.5	
45.37.373.416	2100	1600	1746	2268	98.6	
45.37.373.417	2200	1700	1846	2368	99.7	
45.37.373.418	2300	1800	1946	2468	100.8	

Brake linkage components for single axle, see page 116
Shock absorbers, see page 128

Speed up to 140 km/h

Drawbar connection: Clamping components, see accessories on page 120

Recommended wheel size: 6 1/2 J x 15 H2

Wheel connections: 5x140 on request

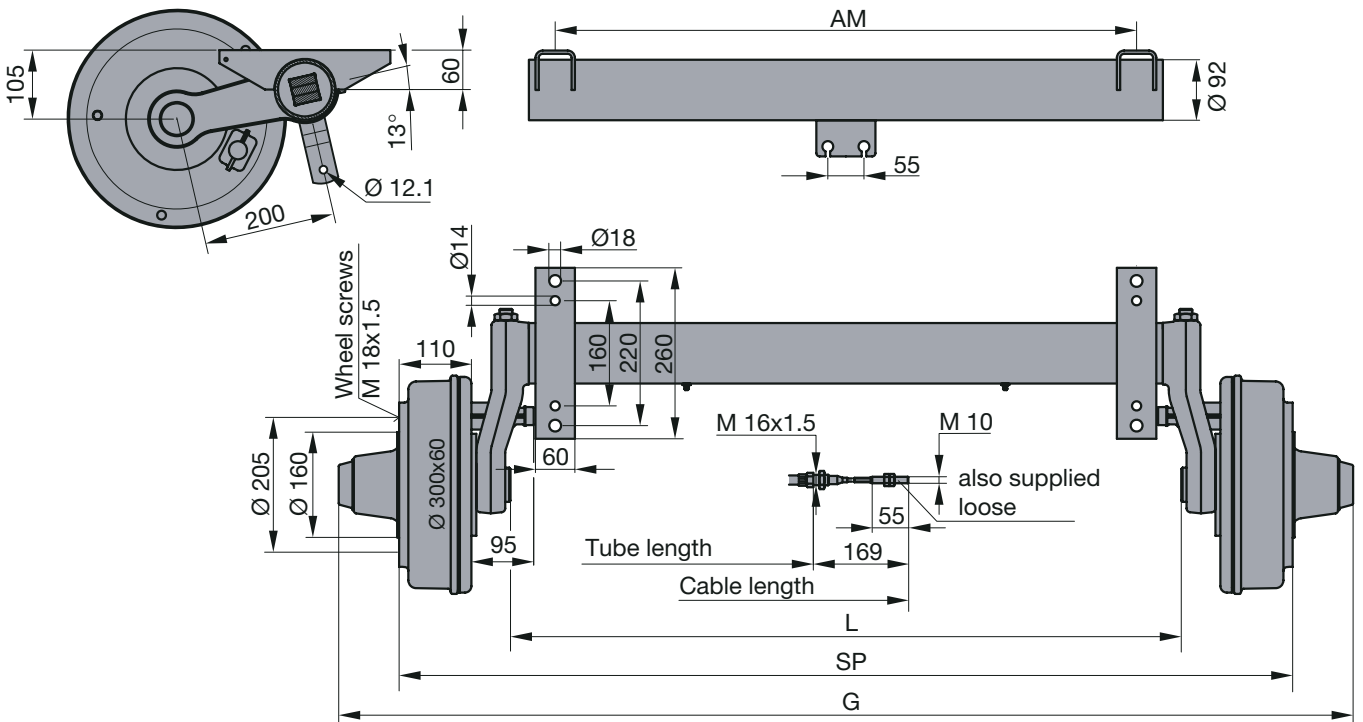
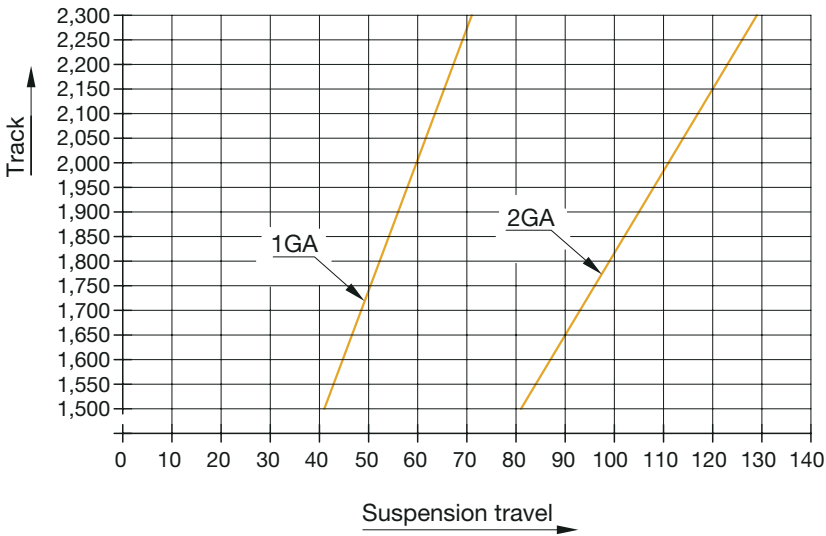
Tyres: 215x70 R 15 C

Other possible tyre and wheel sizes, see page 140

Special axle supports and drawbar connections on request



2.3 RONDO torsion bar axles, braked, axle load 2500 kg, wheel brake S3006-7 RASK



Axle beam fully hot-dip galvanised: Long-term surface protection • Independent suspension: Optimum compensation for uneven road surface • Zero-maintenance suspension: Reduced maintenance costs • Robust axle structure: Suitable for extreme conditions such as when driving off-road or on building sites • Robust, easy-to-maintain wedge-type brakes with automatic reversing operation: Straightforward adjustment from outside the brake, brake cables can be connected subsequently without removing the brake drums • Incl. wheel shock absorber mounting

ø160/ø205	Marketed under Order no.	Dimensions [mm]				Weight [kg]
	DS 2506	SP	AM	L	G	
45.41.373.030	1500	1000	1161	1684	112.0	
45.41.373.031	1600	1100	1261	1784	113.1	
45.41.373.032	1700	1200	1361	1884	114.1	
45.41.373.033	1800	1300	1461	1984	115.2	
45.41.373.034	1900	1400	1561	2084	116.3	
45.41.373.035	2000	1500	1661	2184	117.4	
45.41.373.036	2100	1600	1761	2284	118.4	
45.41.373.037	2200	1700	1861	2384	119.5	
45.41.373.038	2300	1800	1961	2484	120.6	

Brake linkage components for single axle, see page 116
Shock absorbers, see page 128

Speed up to 140 km/h

Drawbar connection: Clamping components, see accessories on page 120

Recommended wheel size: 6 1/2 J x 15 H2

Special wheel connections: on request

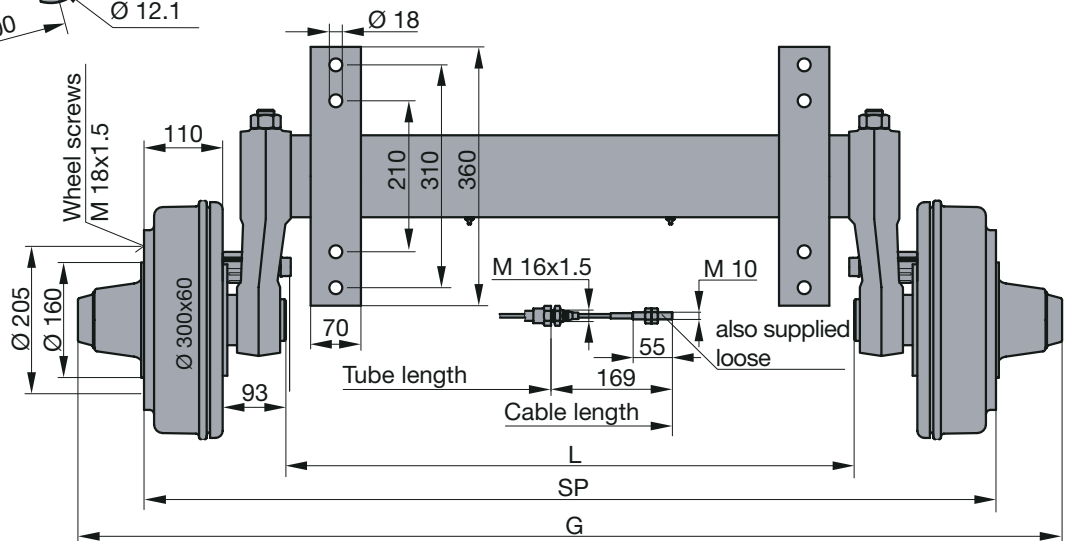
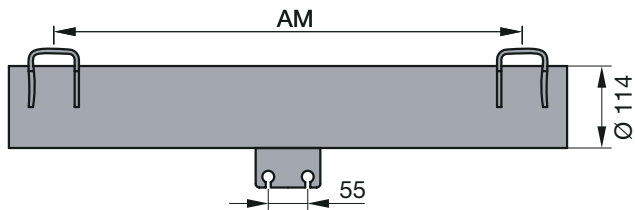
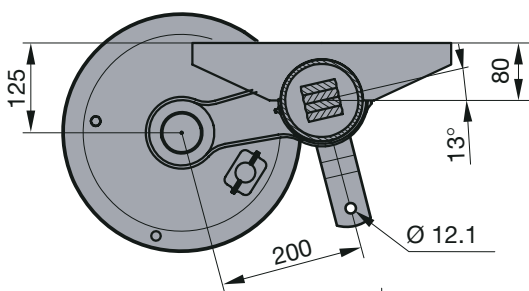
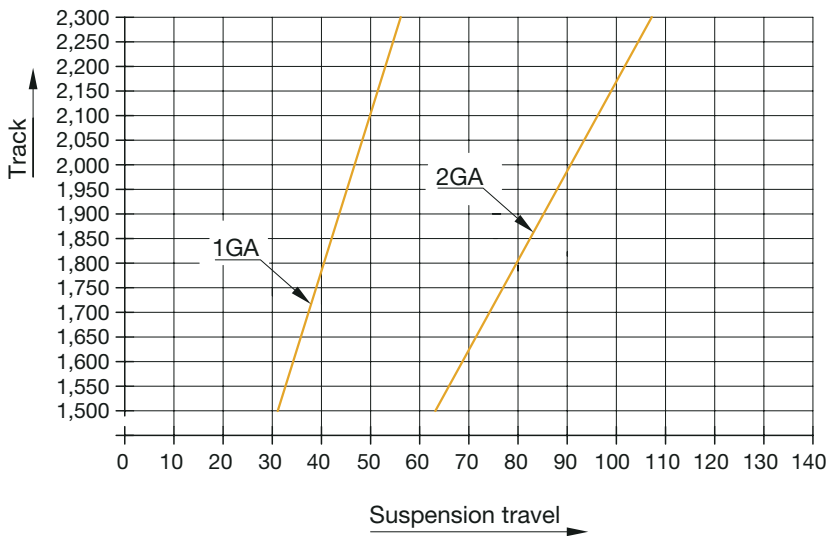
Tyres: 225x70 R 15 C

Other possible tyre and wheel sizes, see page 140

Special axle supports and drawbar connections on request



2.3 RONDO torsion bar axles, braked, axle load 3000 kg, wheel brake S 3006-7 RASK



Axle beam fully hot-dip galvanised: Long-term surface protection • Independent suspension: Optimum compensation for uneven road surfaces • Zero-maintenance suspension: Reduced maintenance costs • Robust axle structure: Suitable for extreme conditions such as when driving off-road or on building sites • Robust, easy-to-maintain wedge-type brakes with automatic reversing operation: Straightforward adjustment from outside the brake, brake cables can be connected subsequently without removing the brake drums • Incl. wheel shock absorber mounting

ø160/ø205	Marketed under Order no.	Dimensions [mm]				Weight [kg]
	DS 3006	SP	AM	L	G	
45.46.373.220	1500	1000	1104	1684	119.0	
45.46.373.221	1600	1100	1204	1784	120.6	
45.46.373.222	1700	1200	1304	1884	122.2	
45.46.373.223	1800	1300	1404	1984	123.8	
45.46.373.224	1900	1400	1504	2084	125.4	
45.46.373.225	2000	1500	1604	2184	127.0	
45.46.373.226	2100	1600	1704	2284	128.6	
45.46.373.227	2200	1700	1804	2384	130.2	
45.46.373.228	2300	1800	1904	2484	131.8	

Brake linkage components for single axle, see page 116
Shock absorbers, see page 128

Speed up to 140 km/h

Drawbar connection: Clamping components, see accessories on page 120

Recommended wheel size: 6 J x 16 H2

Special wheel connections: on request

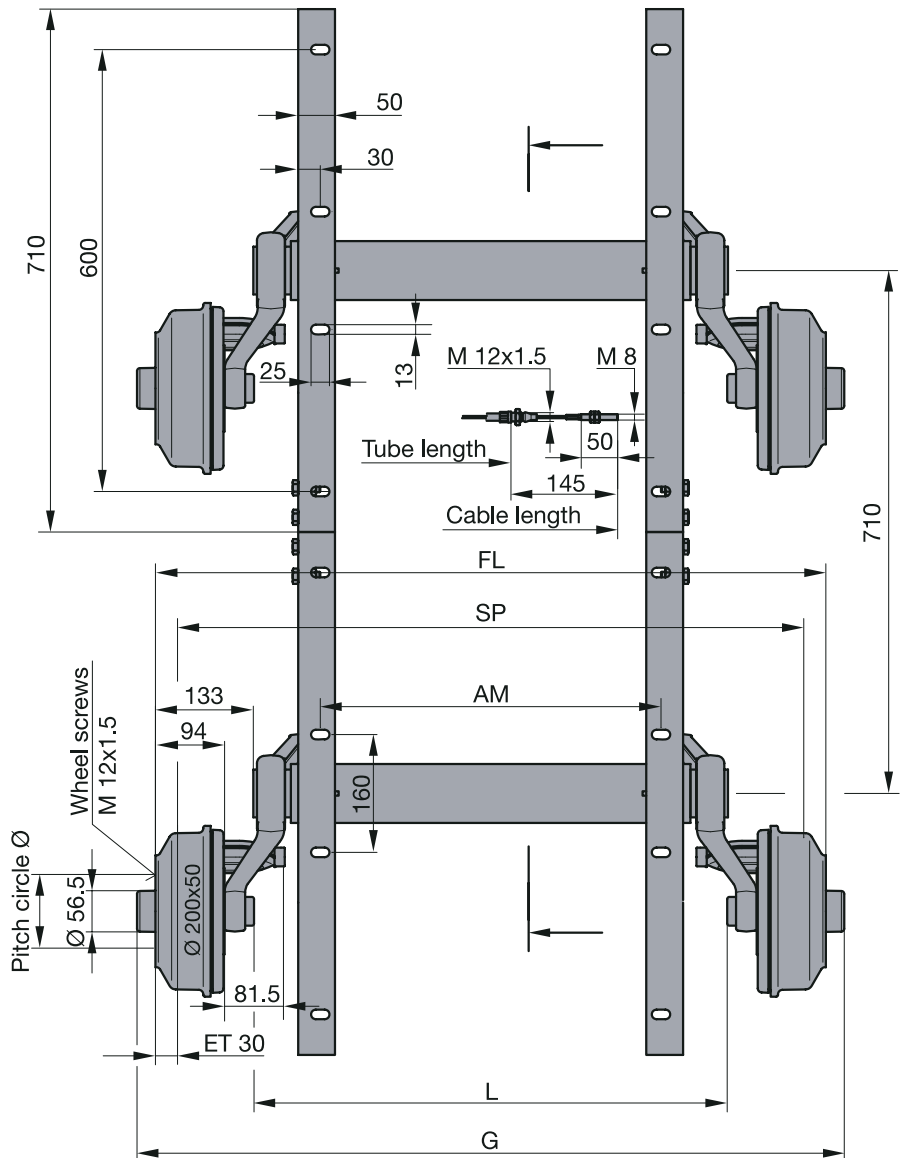
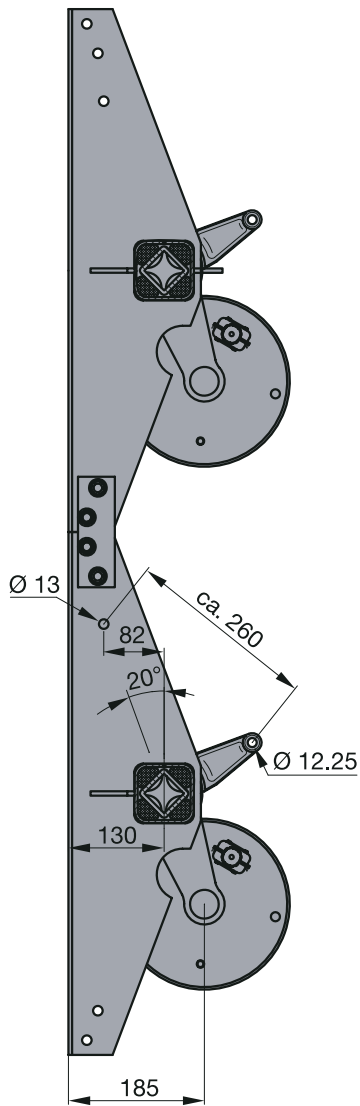
Tyres: 225x75 R 16

Other possible tyre and wheel sizes, see page 140

Special axle supports and drawbar connections on request



2.4 SWING rubber suspension tandem units with composite supports, gross vehicle weight rating 2100 kg, wheel brake S 2005-7 RASK



Axle beam fully hot-dip galvanised: Long-term surface protection • Independent suspension: Optimum compensation for uneven road surfaces • Zero-maintenance suspension: Reduced maintenance costs • Robust axle structure: Suitable for extreme conditions such as when driving off-road or on building sites • Robust, easy-to-maintain wedge-type brakes with automatic reversing operation: Straightforward adjustment from outside the brake, brake cables can be connected subsequently without removing the brake drums • Incl. wheel shock absorber mounting

Marketed under Order no. acc. to wheel connection			Dimensions [mm]					
CB 2/1054	CB 2/1055	CB 2/1055	FL	SP	AM	L	G	Weight [kg]
4/ø100/60°	5/ø112/R12	5/ø112/60°						
49.21.379.130	49.21.379.150	49.21.379.170	1450	1390	1000	1172	1500	120.0
49.21.379.131	49.21.379.151	49.21.379.171	1500	1440	1050	1222	1550	121.0
49.21.379.132	49.21.379.152	49.21.379.172	1550	1490	1100	1272	1600	122.0
49.21.379.133	49.21.379.153	49.21.379.173	1600	1540	1150	1322	1650	123.0
49.21.379.134	49.21.379.154	49.21.379.174	1650	1590	1200	1372	1700	124.0
49.21.379.135	49.21.379.155	49.21.379.175	1700	1640	1250	1422	1750	125.0
49.21.379.136	49.21.379.156	49.21.379.176	1750	1690	1300	1472	1800	126.0
49.21.379.137	49.21.379.157	49.21.379.177	1800	1740	1350	1522	1850	127.0
49.21.379.138	49.21.379.158	49.21.379.178	1850	1790	1400	1572	1900	128.0
49.21.379.139	49.21.379.159	49.21.379.179	1900	1840	1450	1622	1950	129.0
49.21.379.140	49.21.379.160	49.21.379.180	1950	1890	1500	1672	2000	130.0
49.21.379.141	49.21.379.161	49.21.379.181	2000	1940	1550	1722	2050	131.0
49.21.379.142	49.21.379.162	49.21.379.182	2050	1990	1600	1772	2100	132.0
49.21.379.143	49.21.379.163	49.21.379.183	2100	2040	1650	1822	2150	133.0
49.21.379.144	49.21.379.164	49.21.379.184	2150	2090	1700	1872	2200	134.0
49.21.379.145	49.21.379.165	49.21.379.185	2200	2140	1750	1922	2250	135.0
49.21.379.146	49.21.379.166	49.21.379.186	2250	2190	1800	1972	2300	136.0
49.21.379.147	49.21.379.167	49.21.379.187	2300	2240	1850	2022	2350	137.0
49.21.379.148	49.21.379.168	49.21.379.188	2350	2290	1900	2072	2400	138.0

Brake linkage components for single axle, see page 116
Shock absorbers, see page 128

Speed up to 140 km/h

Drawbar connection: Clamping components, see accessories on page 120

Recommended wheel size: 6 J x 16 H2

Special wheel connections: on request

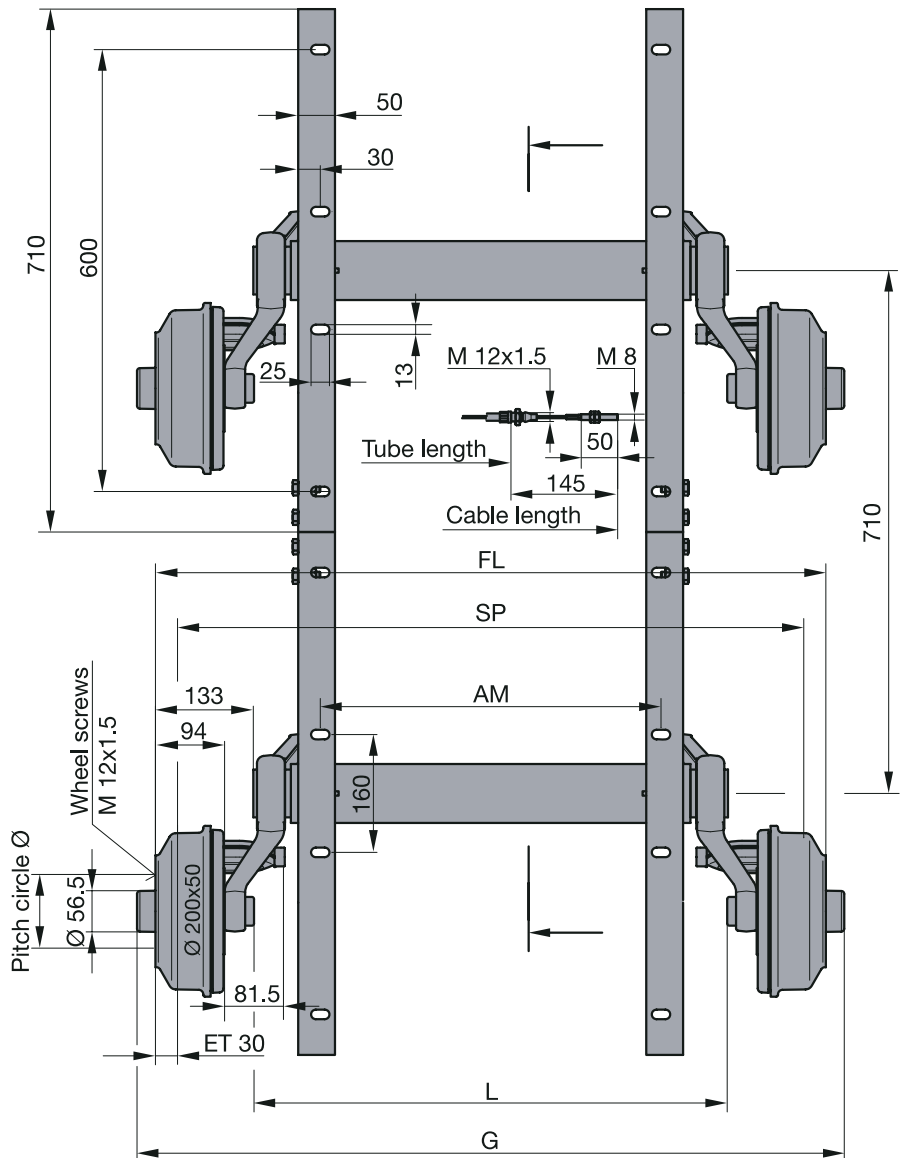
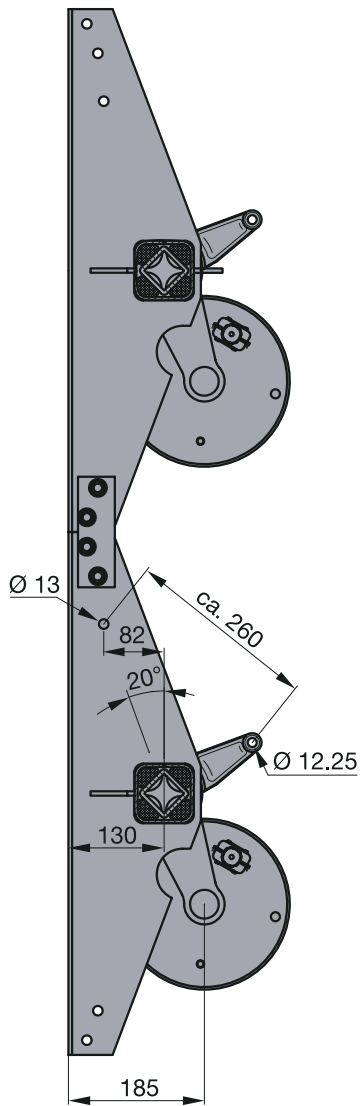
Tyres: 225x75 R 16

Other possible tyre and wheel sizes, see page 140

Special axle supports and drawbar connections on request



2.4 SWING rubber suspension tandem units with composite supports, gross vehicle weight rating 2700 kg, wheel brake S 2005-7 RASK



Axle beam fully hot-dip galvanised: Long-term surface protection • Independent suspension: Optimum compensation for uneven road surfaces • Zero-maintenance suspension: Reduced maintenance costs • Robust axle structure: Suitable for extreme conditions such as when driving off-road or on building sites • Robust, easy-to-maintain wedge-type brakes with automatic reversing operation: Straightforward adjustment from outside the brake, brake cables can be connected subsequently without removing the brake drums • Compact bearings (standard in the automotive industry): Zero-maintenance, long service life, protected against dirt and water, life-time lubrication with special grease • Incl. wheel shock absorber mounting

Marketed under Order no. acc. to wheel connection			Dimensions [mm]					
CB 2/1354	CB 2/1355	CB 2/1355	FL	SP	AM	L	G	Weight [kg]
4/ø100/60°	5/ø112/R12	5/ø112/60°						
49.25.379.120	49.25.379.140	49.25.379.160	1450	1390	1000	1172	1500	120.0
49.25.379.121	49.25.379.141	49.25.379.161	1500	1440	1050	1222	1550	121.0
49.25.379.122	49.25.379.142	49.25.379.162	1550	1490	1100	1272	1600	122.0
49.25.379.123	49.25.379.143	49.25.379.163	1600	1540	1150	1322	1650	123.0
49.25.379.124	49.25.379.144	49.25.379.164	1650	1590	1200	1372	1700	124.0
49.25.379.125	49.25.379.145	49.25.379.165	1700	1640	1250	1422	1750	125.0
49.25.379.126	49.25.379.146	49.25.379.166	1750	1690	1300	1472	1800	126.0
49.25.379.127	49.25.379.147	49.25.379.167	1800	1740	1350	1522	1850	127.0
49.25.379.128	49.25.379.148	49.25.379.168	1850	1790	1400	1572	1900	128.0
49.25.379.129	49.25.379.149	49.25.379.169	1900	1840	1450	1622	1950	129.0
49.25.379.130	49.25.379.150	49.25.379.170	1950	1890	1500	1672	2000	130.0
49.25.379.131	49.25.379.151	49.25.379.171	2000	1940	1550	1722	2050	131.0
49.25.379.132	49.25.379.152	49.25.379.172	2050	1990	1600	1772	2100	132.0
49.25.379.133	49.25.379.153	49.25.379.173	2100	2040	1650	1822	2150	133.0
49.25.379.134	49.25.379.154	49.25.379.174	2150	2090	1700	1872	2200	134.0
49.25.379.135	49.25.379.155	49.25.379.175	2200	2140	1750	1922	2250	135.0
49.25.379.136	49.25.379.156	49.25.379.176	2250	2190	1800	1972	2300	136.0
49.25.379.137	49.25.379.157	49.25.379.177	2300	2240	1850	2022	2350	137.0
49.25.379.138	49.25.379.158	49.25.379.178	2350	2290	1900	2072	2400	138.0

Brake cables for rear axle incl. tandem compensation, see page 117
Shock absorbers, see page 128

Speed up to 140 km/h

Drawbar connection: Clamping components, see accessories on page 120

Recommended wheel size: 5 1/2 J x 14 H2

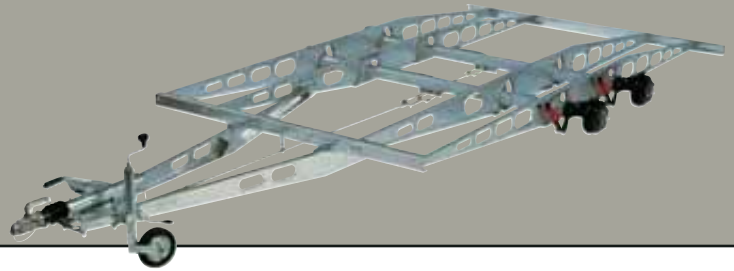
Special wheel connections: on request

Tyres: 185x70 R 14

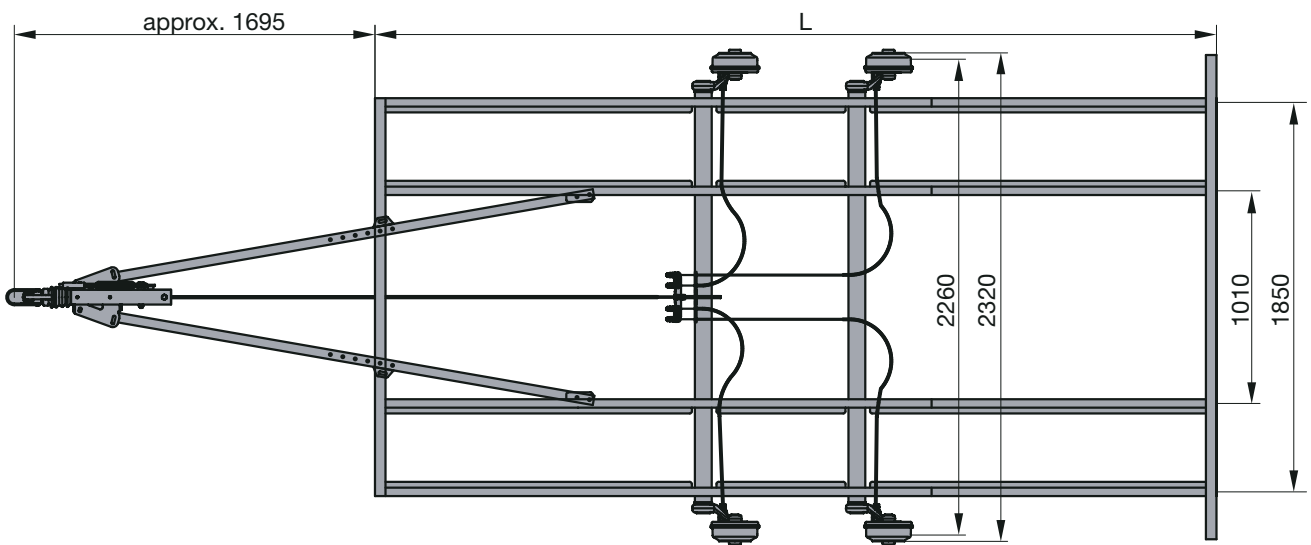
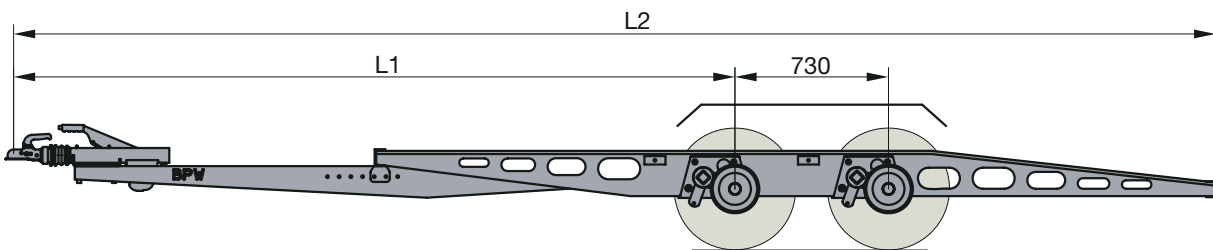
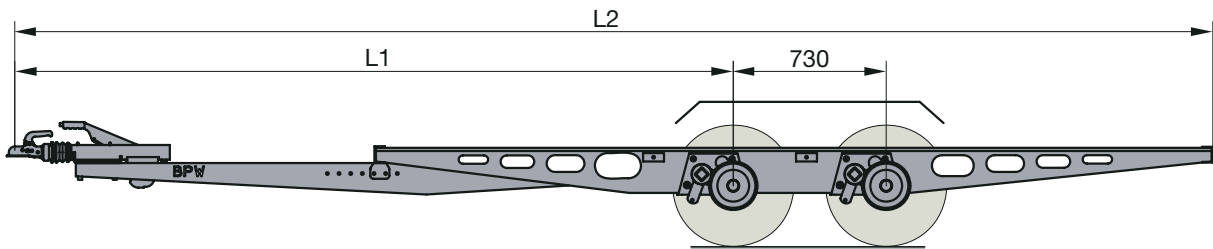
Other possible tyre and wheel sizes, see page 140

Special axle supports and drawbar connections on request

Fully equipped as standard, these chassis allow the vehicle manufacturer to concentrate exclusively on the bodywork. Suitable for a wide range of bodies, fully equipped with chassis, axles and overrun hitch.



2.5 Universal UFT/car transporter ATT tandem chassis



System solution with fully hot-dip galvanised axle beams: Long-term surface protection • Independent suspension: Optimum compensation for uneven road surfaces • Zero-maintenance suspension: Reduced maintenance costs • Robust, easy-to-maintain wedge-type brakes with automatic reversing operation: Straightforward adjustment from outside the brake, brake cables can be connected subsequently without removing the brake drums • Compact bearings (standard in the automotive industry): Zero-maintenance, long service life, protected against dirt and water, lifetime lubrication with special grease • Incl. wheel shock absorber mounting

Type:	UFT 401	UFT 402	UFT 501	UFT 502
Permitted GA [kg]	2000	2700	2000	2700
L [mm]	4000	4000	5000	5000
L1 [mm]	3415	3415	3915	3915
L2 [mm]	5695	5695	6695	6695
Towing attachment	ZAF 2.0-1	ZAF 2.8-1	ZAF 2.0-1	ZAF 2.8-1
Axle	CB 2/1055	CB 2/1355	CB 2/1055	CB 2/1355
Wheel brake	S 2005-7 RASK	S 2005-7 RASK	S 2005-7 RASK	S 2005-7 RASK
Wheel connection	LK 112x5	LK 112x5	LK 112x5	LK 112x5
Wheel screws	M 12 x 1.5 ball R12	M 12 x 1.5 ball R12	M 12 x 1.5 ball R12	M 12 x 1.5 ball R12
Wheel (recommendation)	5 1/2 J x 14 H2	5 1/2 J x 14 H2	5 1/2 J x 14 H2	5 1/2 J x 14 H2
Tyre (recommendation)	175 R 14	175 R 14	175 R 14	175 R 14
Weight approx. [kg]	295	305	320	330
BPW order no.	44.21.379.194	44.25.379.378	44.21.379.196	44.25.379.380

Shock absorbers, see page 128

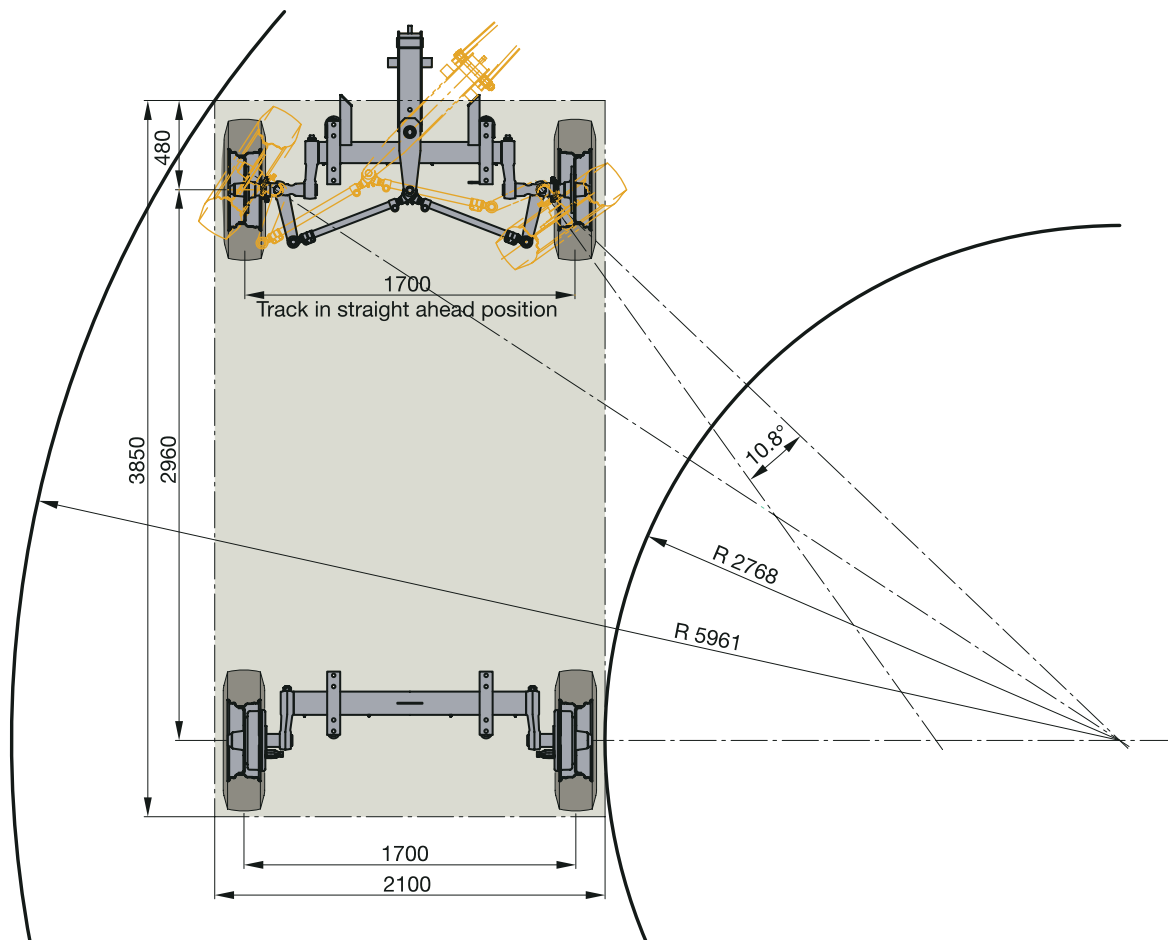
Type:	ATT 401	ATT 402	ATT 501	ATT 502
Permitted GA [kg]	2000	2700	2000	2700
L [mm]	4000	4000	5000	5000
L1 [mm]	3415	3415	3915	3915
L2 [mm]	5695	5695	6695	6695
Towing attachment	ZAF 2.0-1	ZAF 2.8-1	ZAF 2.0-1	ZAF 2.8-1
Axle	CB 2/1055	CB 2/1355	CB 2/1055	CB 2/1355
Wheel brake	S 2005-7 RASK	S 2005-7 RASK	S 2005-7 RASK	S 2005-7 RASK
Wheel connection	LK 112x5	LK 112x5	LK 112x5	LK 112x5
Wheel screws	M 12 x 1.5 ball R12	M 12 x 1.5 ball R12	M 12 x 1.5 ball R12	M 12 x 1.5 ball R12
Wheel (recommendation)	5 1/2 J x 14 H2	5 1/2 J x 14 H2	5 1/2 J x 14 H2	5 1/2 J x 14 H2
Tyre (recommendation)	175 R 14	175 R 14	175 R 14	175 R 14
Weight approx. [kg]	295	305	320	330
BPW order no.	44.21.379.195	44.25.379.379	44.21.379.197	44.25.379.381

Shock absorbers, see page 128

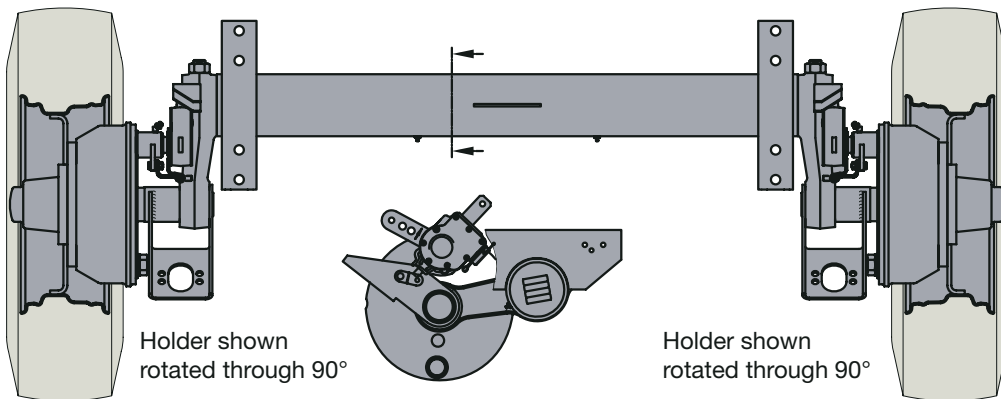
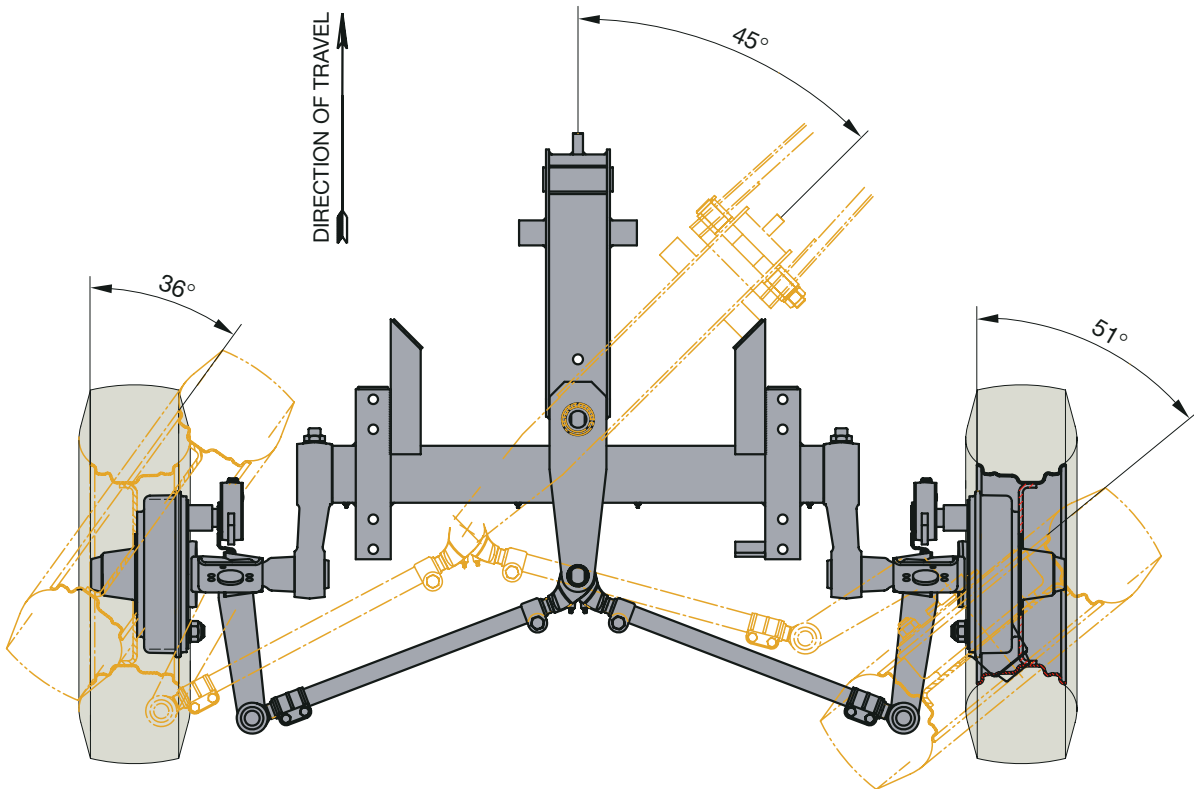


2.6 Running gear technology for twin-axle vehicles, gross vehicle weight rating up to 6800 kg

- Torsion bar axles with king pin steering (4-point bearings with limit stop); track varies only slightly when cornering: Long service life with wide steering angles, even in off-road applications, and with high manoeuvrability
- Torsion bar suspension: High level of comfort and road safety combined with good body protection
- Air cylinder bracket system including automatic slack adjuster (AGS) mounted on steering housing: Highly efficient brake operation, with ABS
- Drawbars with parking brake and optional Klemmfix: Variable hitch height
- Running gear technology for twin-axle vehicles also available for internal factory transport



Example: Cornering calculation

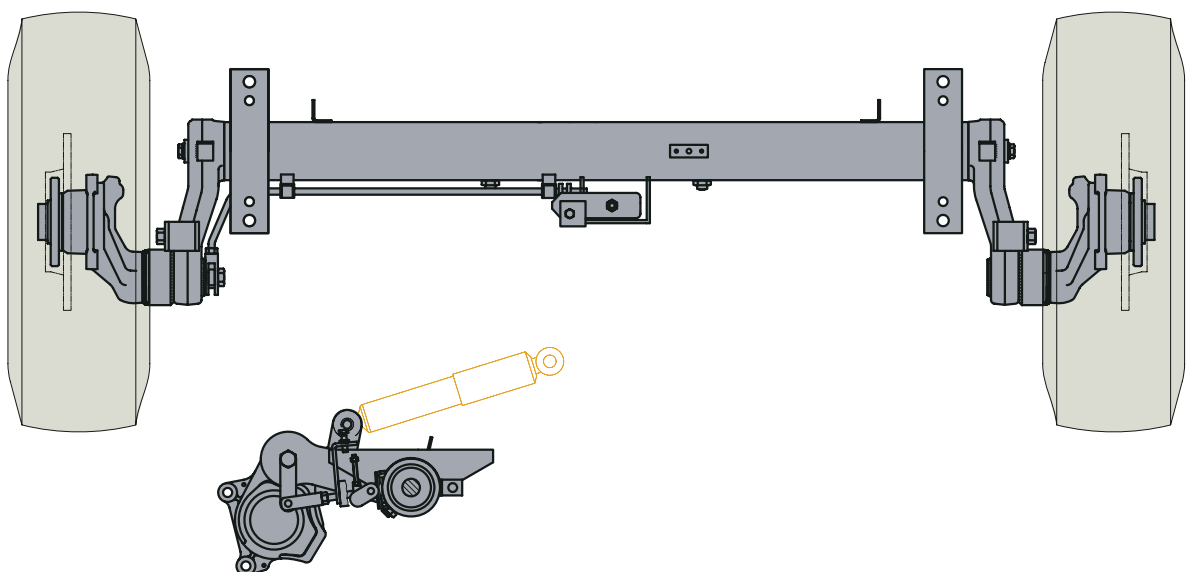


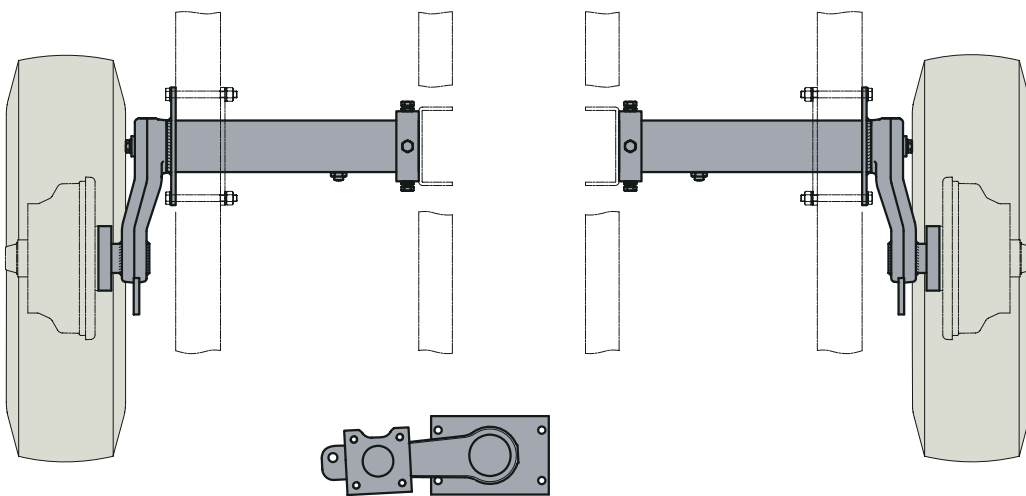
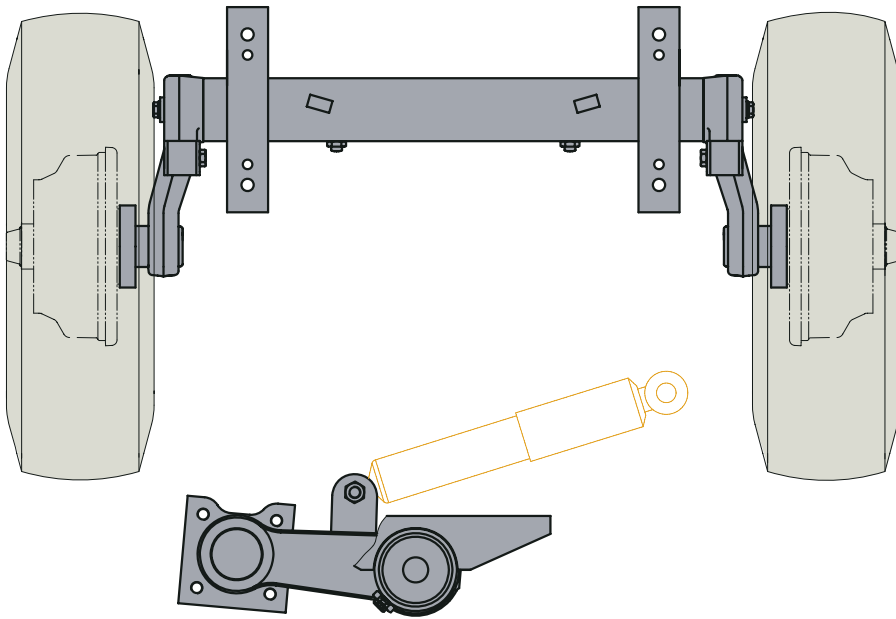


2.7 Axle systems for chassis conversions (Front-Wheel Drive Vehicles)

Armoured vans, light platform trucks, box vans and refrigerated trucks, car transporters, ambulances and market vehicles. BPW supplies solutions with outstanding characteristics for the most popular chassis conversion vehicles such as Fiat Ducato, Renault Master, Opel Movano, VW Transporter, Citroen Jumper and Peugeot Boxer:

- Reduction in overall height: Optimum entry options, maximum headroom, optimum loading and unloading options, high level of road safety due to low centre of gravity
- Variable body dimensions due to a wide selection of wheelbases and track widths
- Delivered ready to install: Reduced assembly times
- Almost infinitely variable swinging arm setting: Variable ride height setting to suit vehicle construction

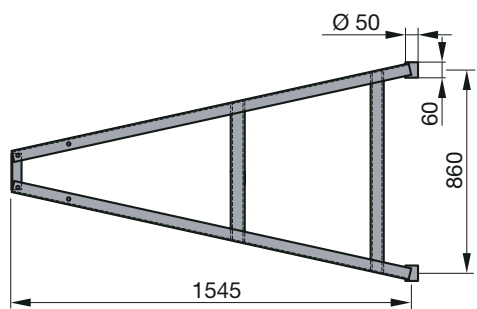
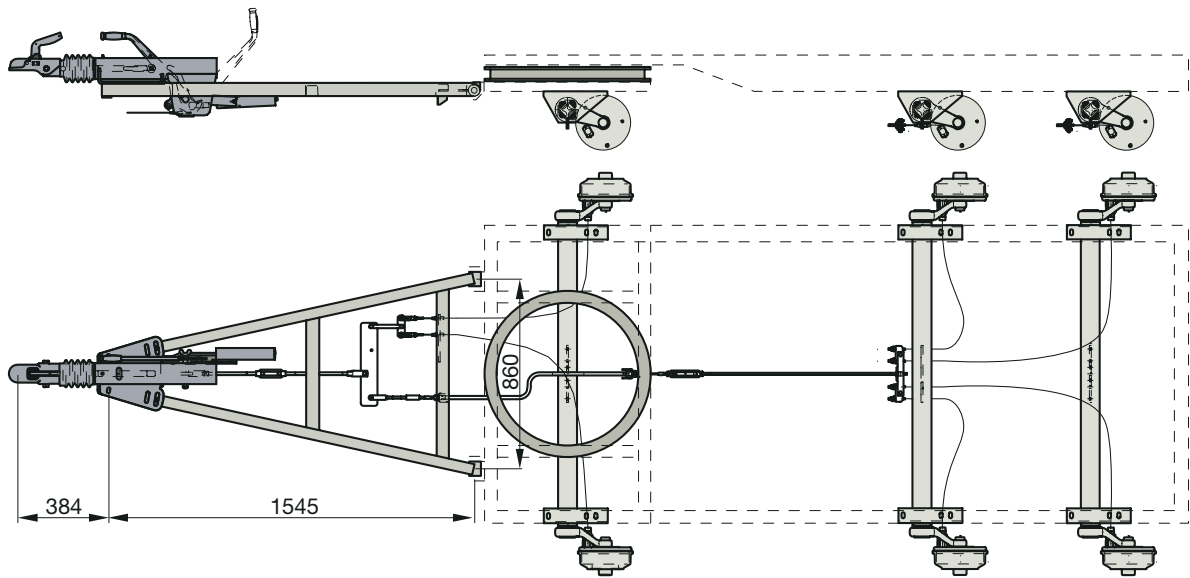




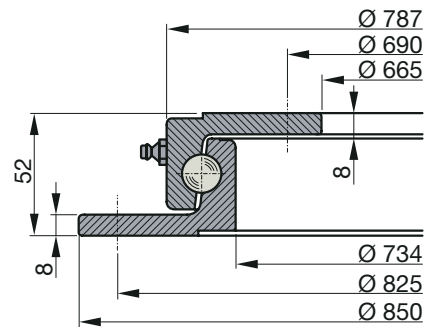
BPW supplies the complete undergear with fifth wheel for special requirements. Available as either 2 or 3-axle configuration.



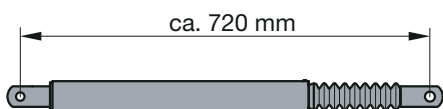
2.8 Running gear technology for turntable drawbar trailers



05.447.09.13.0 (Drawbar)

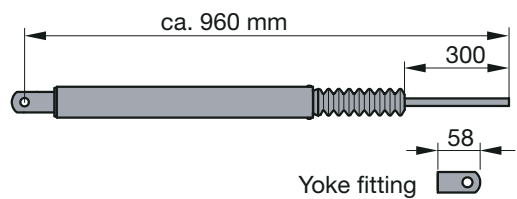


05.002.02.04.0 (Turntable)



51.98.01.0013 Klemmfix 72/Z (Tension)

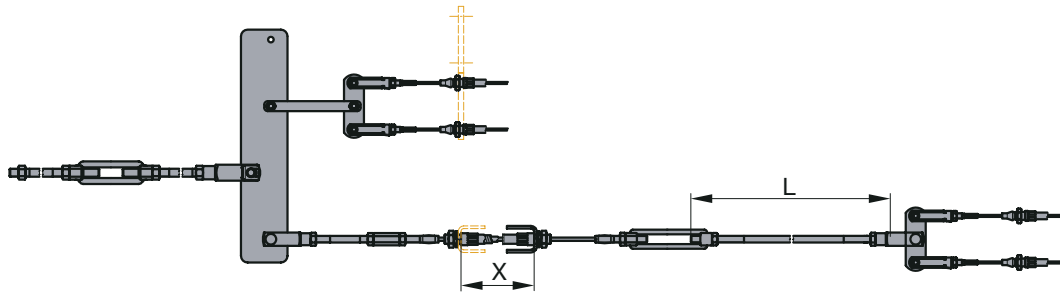
51.98.01.0015 Klemmfix 72/D-PAL (Compression)



51.98.01.0014 Klemmfix 72/D (Compression)

Following the introduction of the EU driving licence, the restriction on the axle centre distance and the number of axles for car and light truck trailers has been lifted. This means it is now possible to use turntable drawbar trailers with overrun brakes for both cars and light trucks. Multiple axle trailers have the following advantages over twin or single-axle trailers: • Simple load distribution due to variable wheelbase • Long vehicle bodies can be accommodated • Safe driving characteristics as the effects of drawbar load and load distribution no longer apply • Drawbar remains at the required height due to the BPW Klemmfix height setting and retaining fixture • Accessories such as a jockey wheel and support legs are not required.

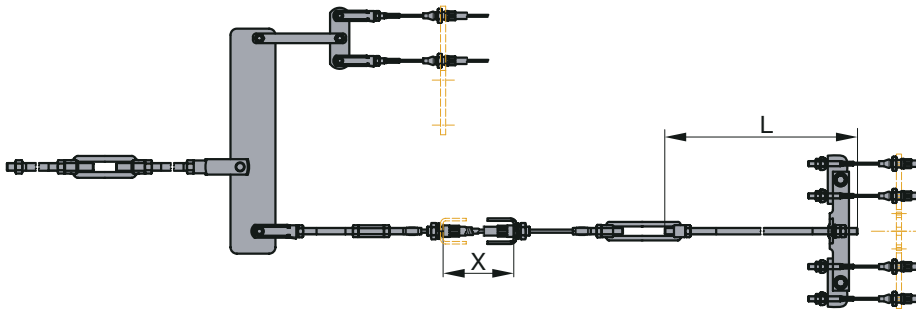
Connection of brake linkage in twin-axle turntable drawbar trailer



Pull rod group 05.439.44.14.0

Axle load	Towing attachment	Wheel brake
2650 – 3000 kg	ZAF 3.5 – 1 (48.51.581.010)	Standard axle 1500 kg, CB1505 with wheel brake S 2005 – 7 RASK
2400 – 3500 kg	ZAF 3.5 – 1 (48.51.581.012)	Standard axle 1800 kg, CB1805 with wheel brake S 2504 – 7 RASK

Connection of brake linkage in three-axle turntable drawbar trailer



Pull rod group 05.439.40.88.0

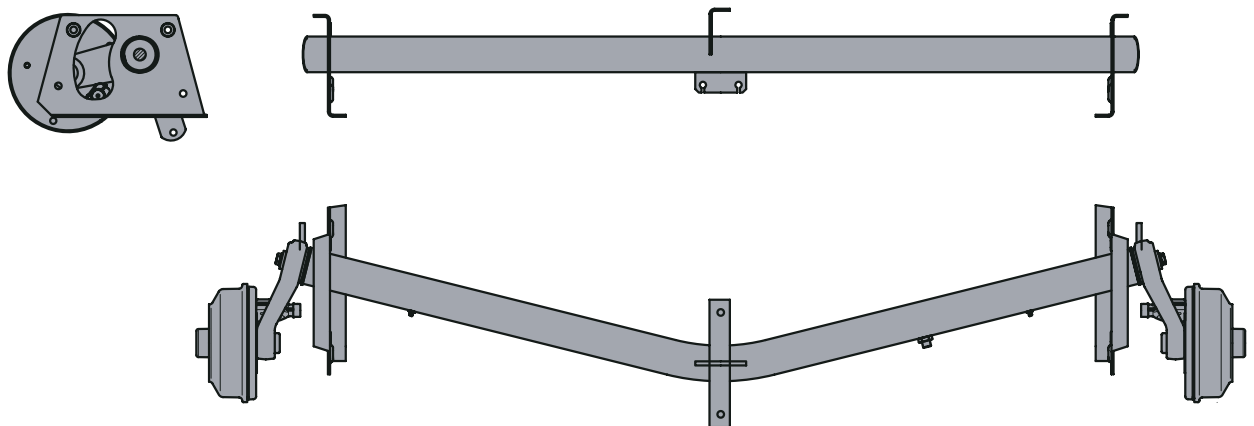
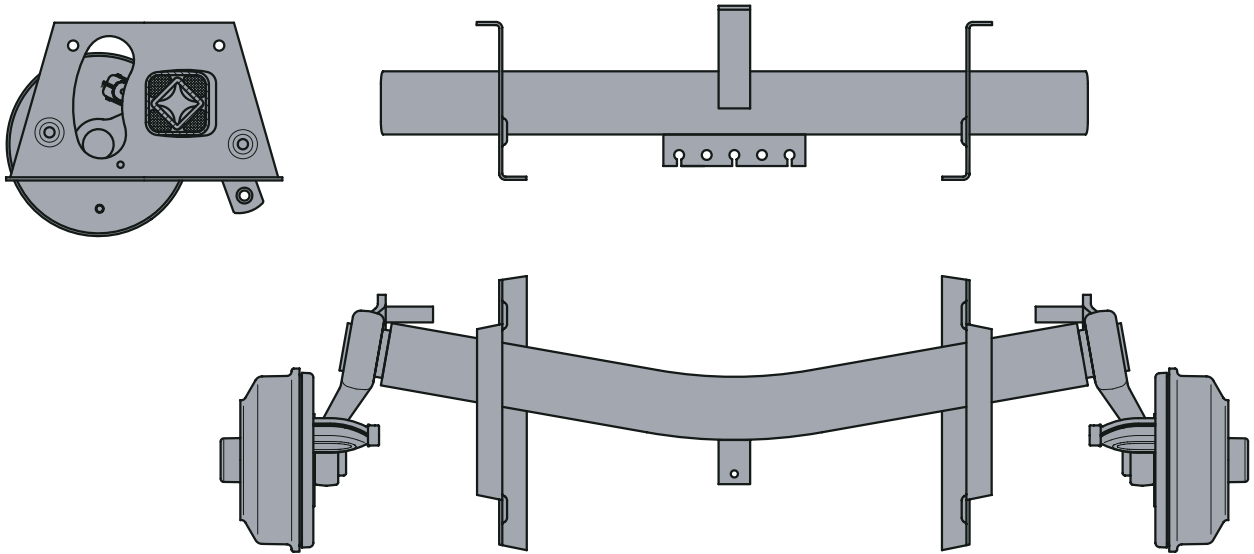
Axle load	Towing attachment	Wheel brake
2650 – 3000 kg	ZAF 3.5 – 1 (48.51.581.010)	Standard axle 1350 kg, CB1305 with wheel brake S 2005 – 7 RASK

Brake cables for two and three-axle turntable drawbar trailers

Brake cable	Envelope X	Cable	Pull rod	Length L
05.089.00.59.0	2030 mm	2330 mm	03.399.59.49.0	2000 mm
05.089.00.61.0	1630 mm	1930 mm	03.399.59.50.0	2500 mm
05.089.00.63.0	1250 mm	1550 mm	03.399.59.51.0	3000 mm

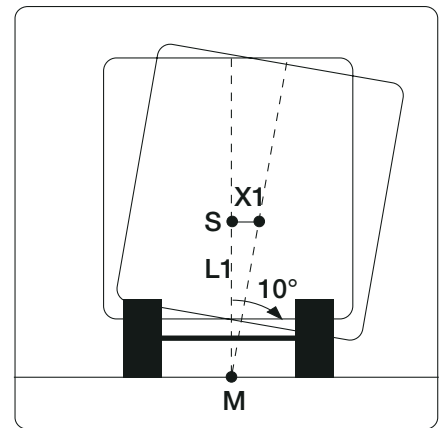


2.9 SWING V^{tec}/RONDO V^{tec} semi-trailing-arm axles

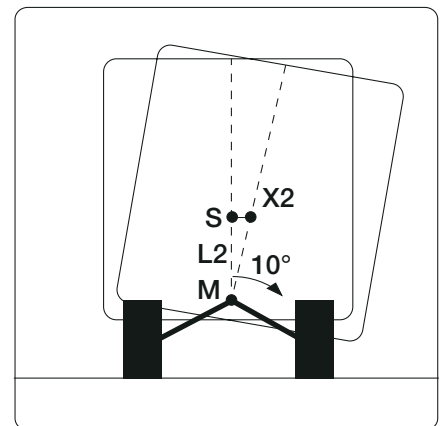


A BPW speciality for caravans with unique levels of driving stability and anti-roll properties. Camber and track dynamically adapt to the particular driving situation. Instability is significantly reduced in driving situations such as cross-winds and overtaking. The greater safety margins are really apparent if sudden evasive manoeuvres are required.

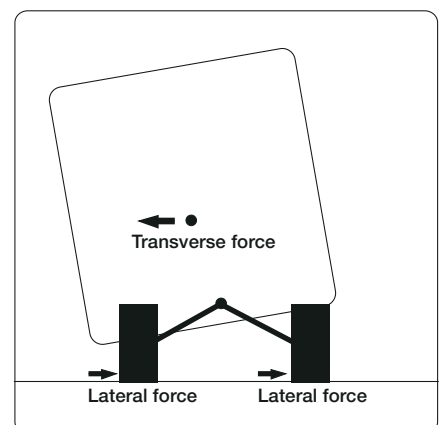
Conventional axles react to a 10° swerve with a roll travel (X_1) which leads to severe swaying.



The semi-trailing-arm axle transfers the roll axis area upwards closer to the centre of gravity. The reduced roll travel (X_2) and the shortened lever arm mean that swaying movements are also reduced.

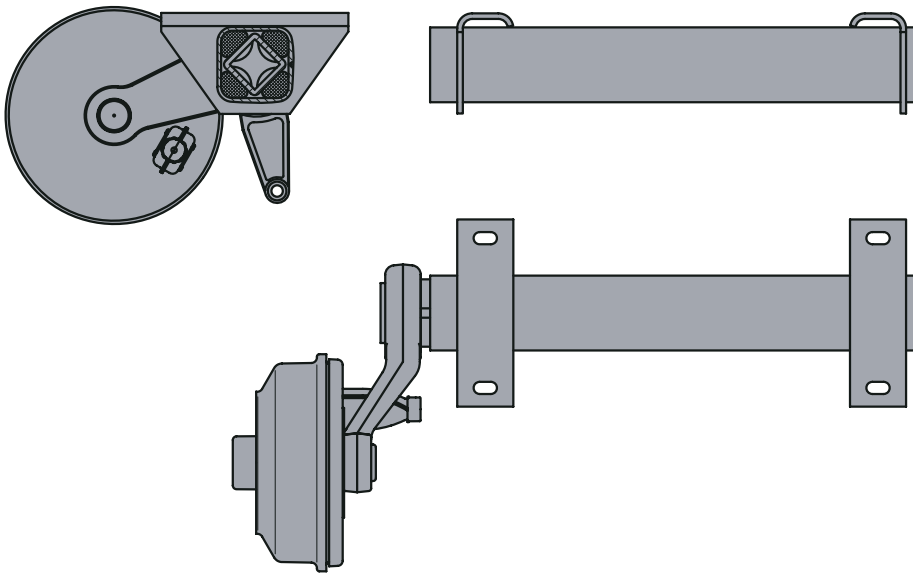


Whenever transverse force arises, pendulum movements are cushioned better and the wheels set themselves against the lateral forces. This supports tracking stability and improves cornering properties.

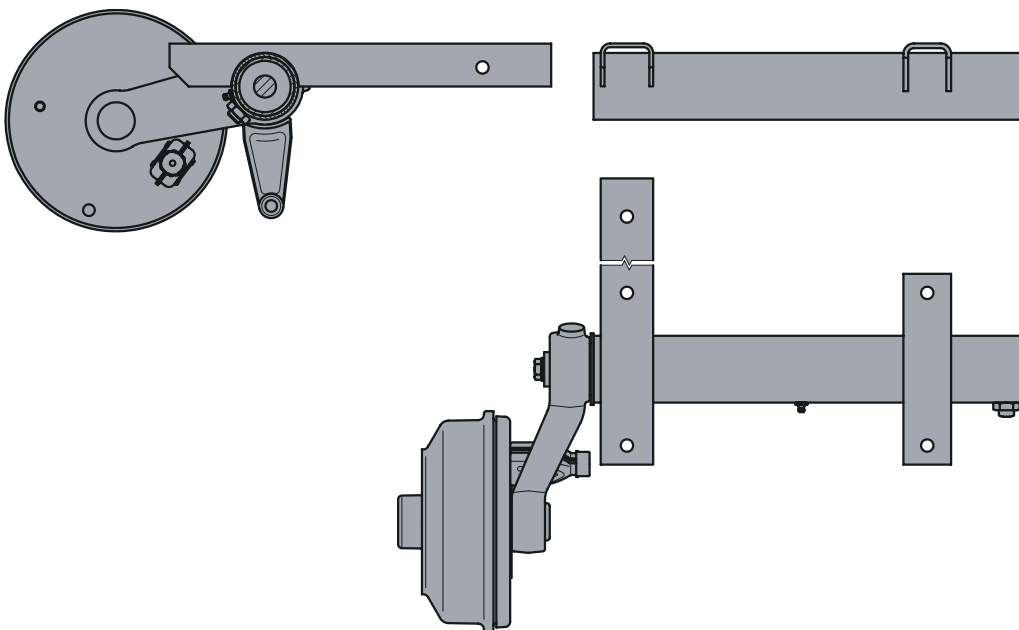




2.10 SWING rubber suspension half axles, braked



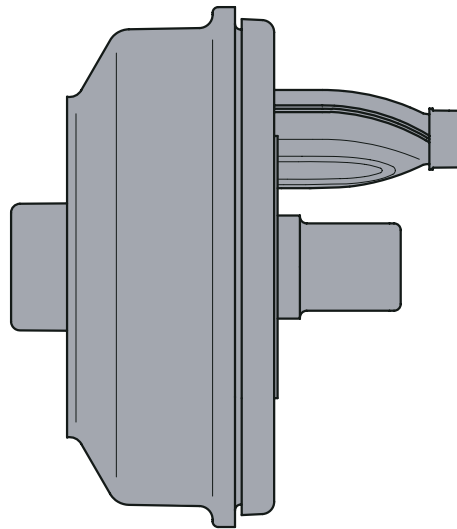
2.10 RONDO torsion bar half axles, braked



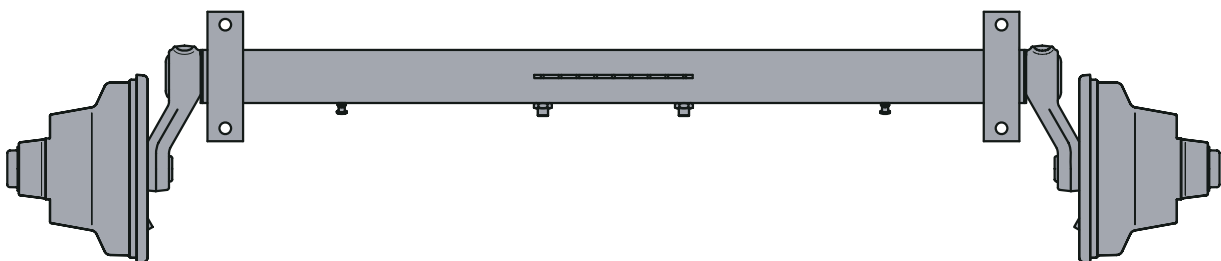


BPW axle stubs and half axles give vehicle manufacturers the highest levels of flexibility in selecting the required support clearance.

2.11 Axle stubs



2.12 RONDO torsion bar axles, braked for 8" tyres



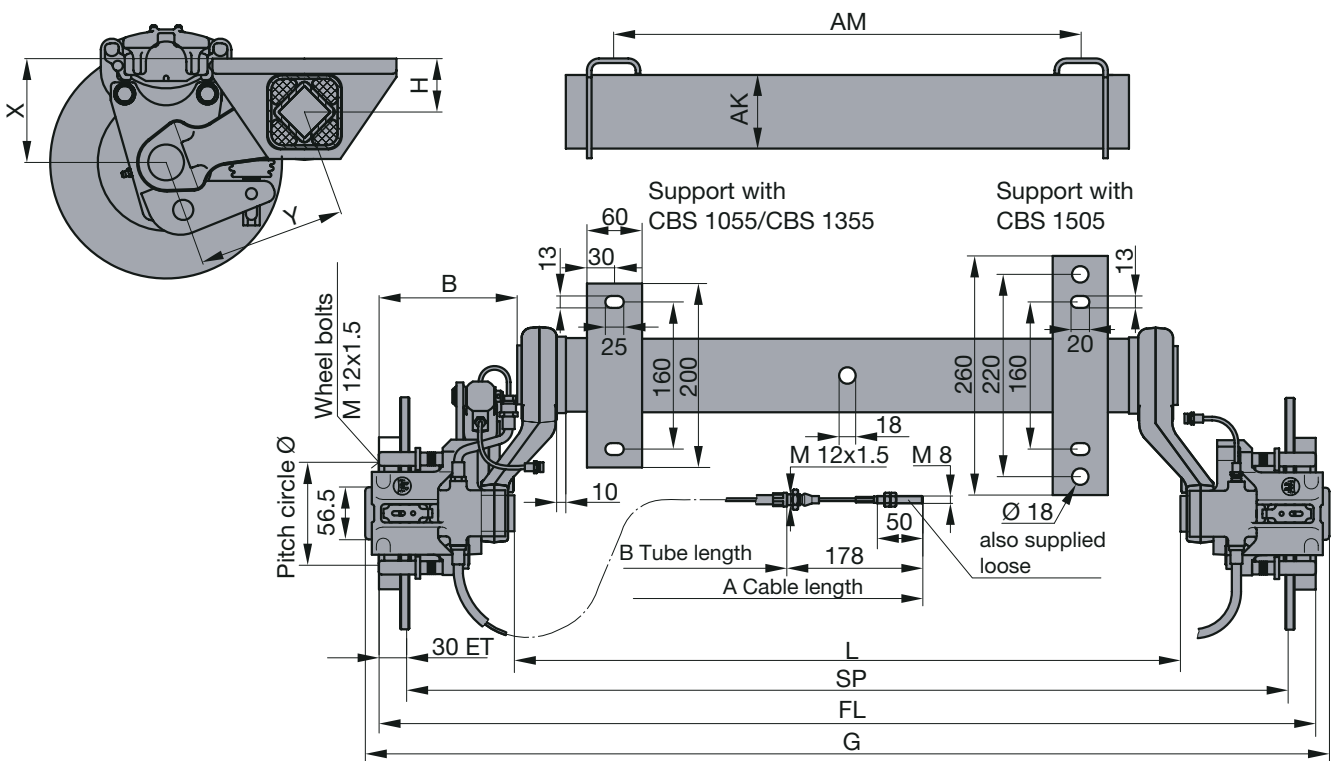


2.13 SWING rubber suspension axle, with disc brake SB 2510 RA, axle load up to 1500 kg

Dimensions [mm]

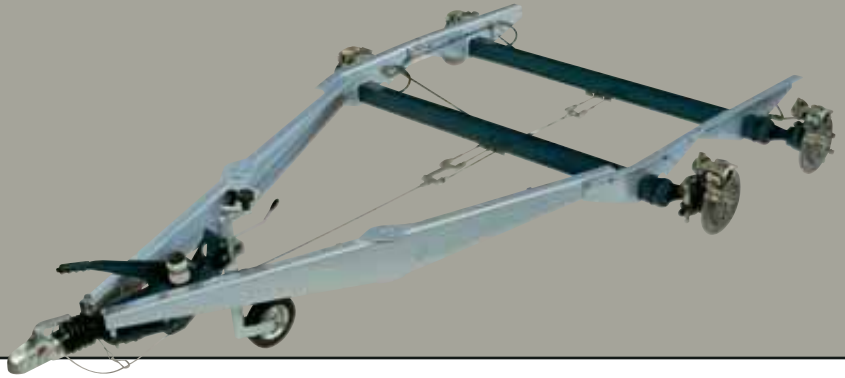
	Zero load (X)	Rated load	100 % loading	H	B	Y	AK
CBS 1055/CBS 1355	112	54	32	55	150	160	80
CBS 1505	133	74	44	65	162	200	95

Tyres: 5 1/2 J x 14



A first-class product with quality levels only available from BPW. This system solution combines outstandingly robust and easy-to-maintain rubber suspension with the latest brake technology. The advantages of the disc brake at a glance: • Optimum brake harmonisation • Smoother brake response • Braking comfort and response similar to that of a car • Shorter braking distance • Automatic brake adjustment • Low thermal fading • Simple to maintain as the brake pads are easy to check and replaced

BPW rubber suspension axle				Dimensions [mm]							
Gross vehicle weight rating [kg]	Marketed under	Wheel connection 5/112/R12 BPW Order no.	Wheel connection 5/112/60° BPW Order no.	FL	SP	AM	L	G	A	B	Weight [kg]
1050	CBS 1055	46.21.620.000	46.21.620.009	1510	1450	1000	1215	1560	1175	900	50.5
		46.21.620.001	46.21.620.010	1610	1550	1100	1315	1660	1175	900	51.4
		46.21.620.002	46.21.620.011	1710	1650	1200	1415	1760	1275	1000	52.4
		46.21.620.003	46.21.620.012	1810	1750	1300	1515	1860	1275	1000	53.4
		46.21.620.004	46.21.620.013	1910	1850	1400	1615	1960	1375	1100	54.3
		46.21.620.005	46.21.620.014	2010	1950	1500	1715	2060	1375	1100	55.3
		46.21.620.006	46.21.620.015	2110	2050	1600	1815	2160	1450	1175	56.3
		46.21.620.007	46.21.620.016	2210	2150	1700	1915	2260	1450	1175	57.2
		46.21.620.008	46.21.620.017	2310	2250	1800	2015	2360	1575	1300	58.2
1350	CBS 1355	46.25.620.000	46.25.620.009	1510	1450	1000	1215	1560	1175	900	56.3
		46.25.620.001	46.25.620.010	1610	1550	1100	1315	1660	1175	900	57.2
		46.25.620.002	46.25.620.011	1710	1650	1200	1415	1760	1275	1000	58.2
		46.25.620.003	46.25.620.012	1810	1750	1300	1515	1860	1275	1000	59.2
		46.25.620.004	46.25.620.013	1910	1850	1400	1615	1960	1375	1100	60.1
		46.25.620.005	46.25.620.014	2010	1950	1500	1715	2060	1375	1100	61.2
		46.25.620.006	46.25.620.015	2110	2050	1600	1815	2160	1450	1175	62.2
		46.25.620.007	46.25.620.016	2210	2150	1700	1915	2260	1450	1175	64.0
		46.25.620.008	46.25.620.017	2310	2250	1800	2015	2360	1575	1300	65.0
1500	CBS 1505	46.27.620.000	46.27.620.009	1510	1450	1000	1215	1560	1175	900	66.9
		46.27.620.001	46.27.620.010	1610	1550	1100	1315	1660	1175	900	68.3
		46.27.620.002	46.27.620.011	1710	1650	1200	1415	1760	1275	1000	69.7
		46.27.620.003	46.27.620.012	1810	1750	1300	1515	1860	1275	1000	71.1
		46.27.620.004	46.27.620.013	1910	1850	1400	1615	1960	1375	1100	72.5
		46.27.620.005	46.27.620.014	2010	1950	1500	1715	2060	1375	1100	73.9
		46.27.620.006	46.27.620.015	2110	2050	1600	1815	2160	1450	1175	75.3
		46.27.620.007	46.27.620.016	2210	2150	1700	1915	2260	1450	1175	76.7
		46.27.620.008	46.27.620.017	2310	2250	1800	2015	2360	1575	1300	78.1

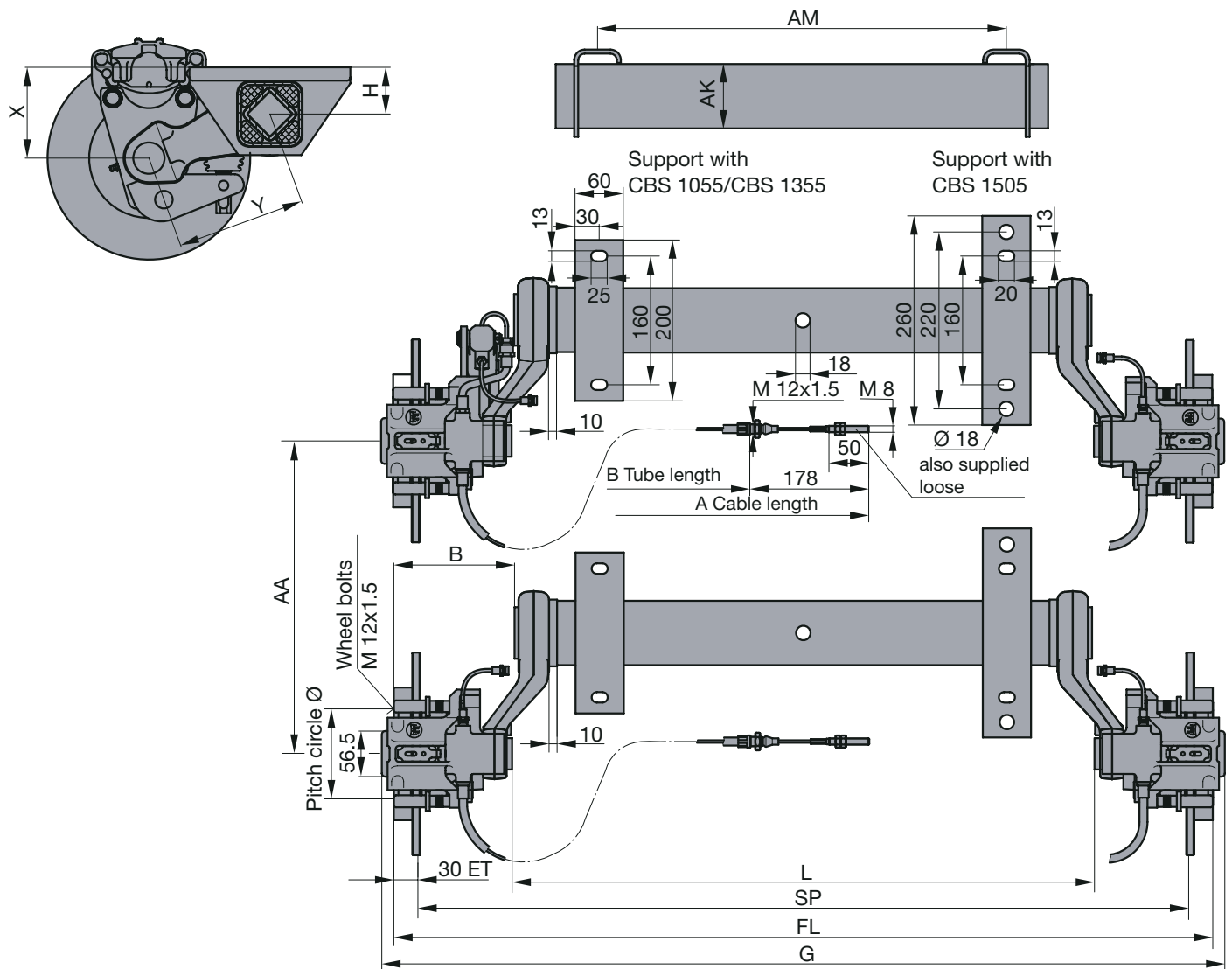


2.13 SWING rubber suspension tandem unit, with disc brake SB 2510 RA, gross vehicle weight rating up to 3000 kg

Dimensions [mm]

	Zero load (X)	Rated load	100 % loading	H	B	Y	AK
CBS 2/1055/CBS 2/1355	112	54	32	55	150	160	80
CBS 2/1505	133	74	44	65	162	200	95

Tyres: 5 1/2 J x 14



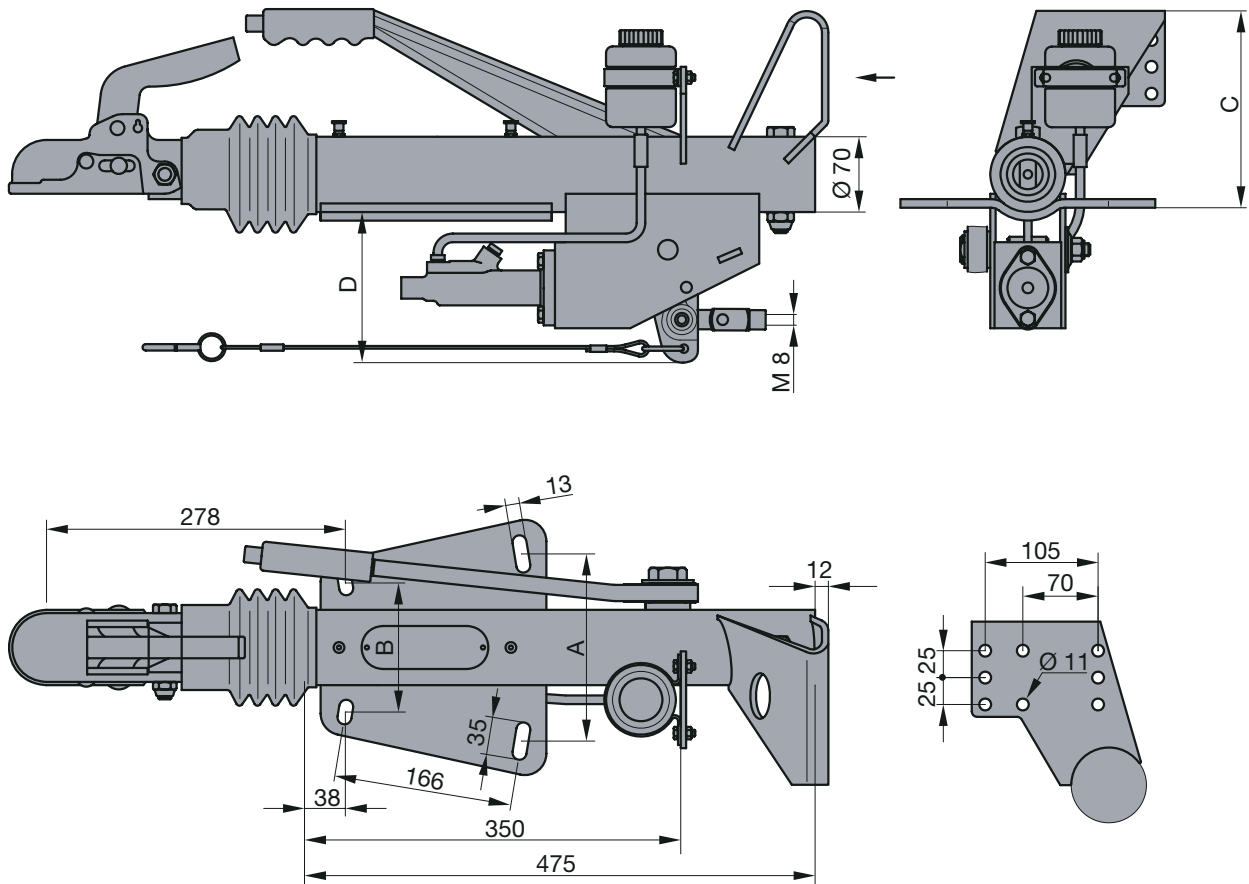
A first-class product with quality levels only available from BPW. This system solution combines outstandingly robust and easy-to-maintain rubber suspension with the latest brake technology. The advantages of the disc brake at a glance: • Optimum brake harmonisation • Smoother brake response • Braking comfort and response similar to that of a car • Shorter braking distance • Automatic brake adjustment • Low thermal fading • Simple to maintain as the brake pads are easy to check and replace.

BPW rubber suspension axle				Dimensions [mm]							
Gross vehicle weight rating [kg]	Marketed under	Wheel connection 5/1 1/2/R12 BPW Order no.	Wheel connection 5/1 1/2/60° BPW Order no.	FL	SP	AM	L	G	A	B	Weight [kg]
2100	CBS 2/1055	49.21.620.000	49.21.620.009	1510	1450	1000	1215	1560	1175	900	100.0
		49.21.620.001	49.21.620.010	1610	1550	1100	1315	1660	1175	900	100.8
		49.21.620.002	49.21.620.011	1710	1650	1200	1415	1760	1275	1000	102.8
		49.21.620.003	49.21.620.012	1810	1750	1300	1515	1860	1275	1000	104.8
		49.21.620.004	49.21.620.013	1910	1850	1400	1615	1960	1375	1100	106.8
		49.21.620.005	49.21.620.014	2010	1950	1500	1715	2060	1375	1100	108.8
		49.21.620.006	49.21.620.015	2110	2050	1600	1815	2160	1450	1175	110.8
		49.21.620.007	49.21.620.016	2210	2150	1700	1915	2260	1450	1175	112.4
		49.21.620.008	49.21.620.017	2310	2250	1800	2015	2360	1575	1300	114.4
2700	CBS 2/1355	49.25.620.000	49.25.620.009	1510	1450	1000	1215	1560	1175	900	110.6
		49.25.620.001	49.25.620.010	1610	1550	1100	1315	1660	1175	900	112.4
		49.25.620.002	49.25.620.011	1710	1650	1200	1415	1760	1275	1000	114.4
		49.25.620.003	49.25.620.012	1810	1750	1300	1515	1860	1275	1000	116.4
		49.25.620.004	49.25.620.013	1910	1850	1400	1615	1960	1375	1100	118.4
		49.25.620.005	49.25.620.014	2010	1950	1500	1715	2060	1375	1100	120.4
		49.25.620.006	49.25.620.015	2110	2050	1600	1815	2160	1450	1175	122.4
		49.25.620.007	49.25.620.016	2210	2150	1700	1915	2260	1450	1175	126.0
		49.25.620.008	49.25.620.017	2310	2250	1800	2015	2360	1575	1300	128.0
3000	CBS 2/1505	49.27.620.000	49.27.620.009	1510	1450	1000	1215	1560	1175	900	131.8
		49.27.620.001	49.27.620.010	1610	1550	1100	1315	1660	1175	900	134.6
		49.27.620.002	49.27.620.011	1710	1650	1200	1415	1760	1275	1000	137.4
		49.27.620.003	49.27.620.012	1810	1750	1300	1515	1860	1275	1000	140.2
		49.27.620.004	49.27.620.013	1910	1850	1400	1615	1960	1375	1100	143.0
		49.27.620.005	49.27.620.014	2010	1950	1500	1715	2060	1375	1100	145.8
		49.27.620.006	49.27.620.015	2110	2050	1600	1815	2160	1450	1175	148.6
		49.27.620.007	49.27.620.016	2210	2150	1700	1915	2260	1450	1175	151.4
		49.27.620.008	49.27.620.017	2310	2250	1800	2015	2360	1575	1300	154.2

Permitted wheelbase (AA), see page 135



2.13 ZAF towing attachments for SB 2510 RA, gross vehicle weight rating up to 2700 kg



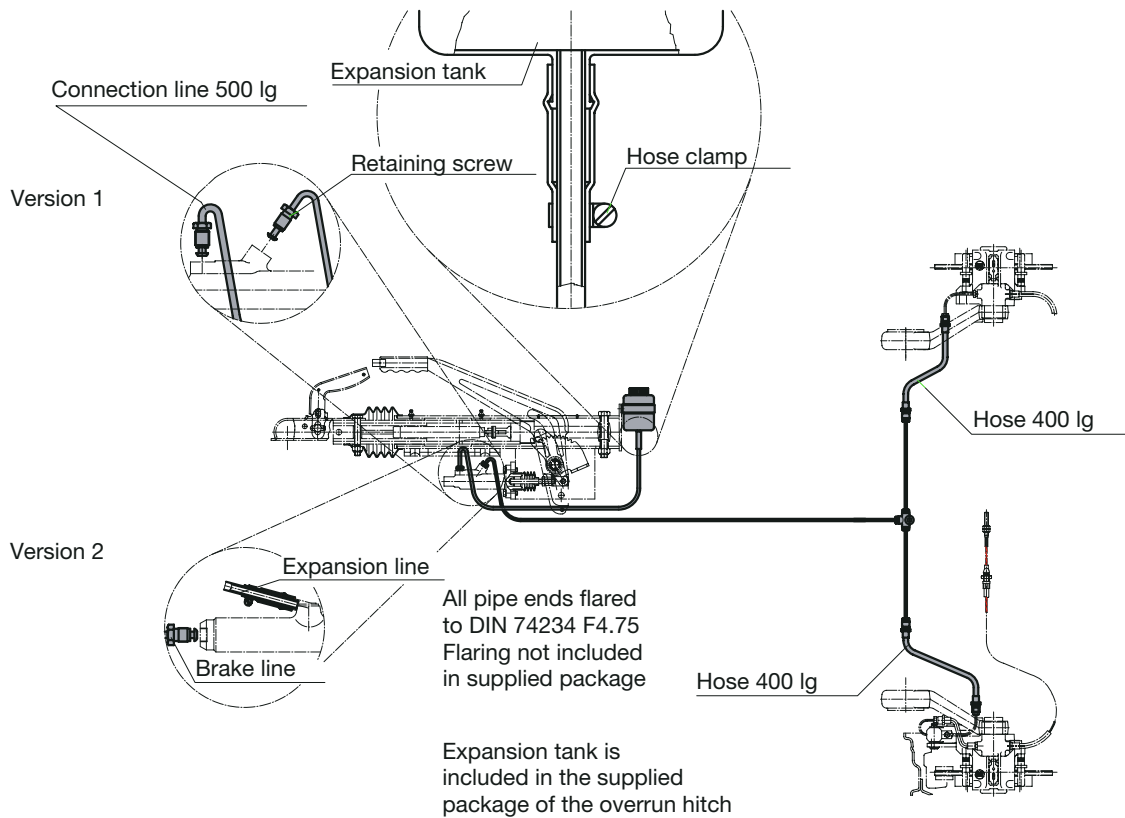
BPW connecting assembly

Dimensions [mm]

Gross vehicle weight rating [kg]	Marketed under	Type	Test symbol	Dimensions [mm]				Permitted drawbar load [kg]	BPW Order no.
				A	B	C	D		
1326-1500	ZAF 1.5-1	BAS 1.5	AR 1020	174	120	183	140	100	48.27.581.002
1600-2000	ZAF 2.0-1	BAS 2.0	AR 1022	174	120	185	138	100	48.36.581.017
1735-2700	ZAF 2.7-1	BAS 2.7	AR 1015	200	125	191	136	100	48.43.581.003



2.13 Assembly parts kits for brake-operating device for single-axle trailer with disc brake SB 2510 RA

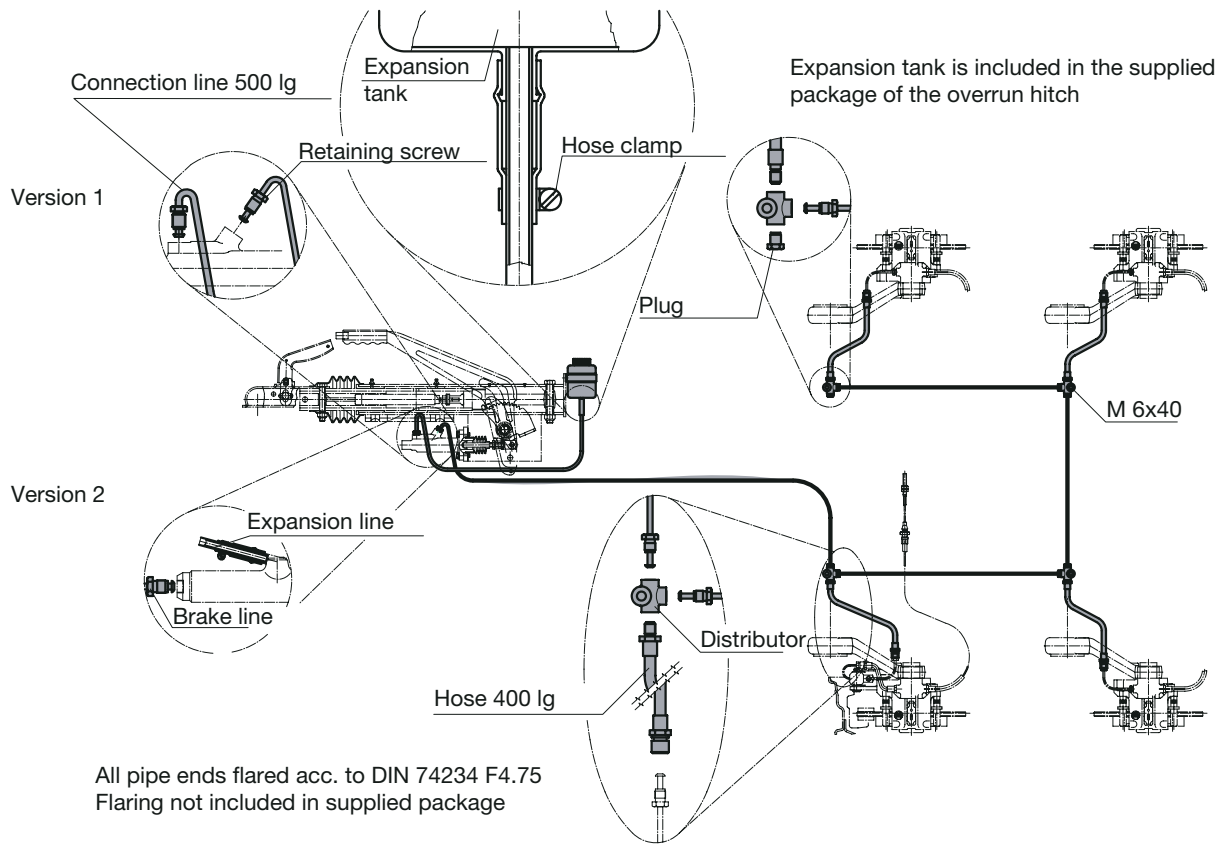


BPW order no.	05.803.02.05.0	05.803.02.06.0	05.803.02.07.0	05.803.02.08.0	05.803.02.09.0	05.803.02.10.0	05.803.02.18.0
Brake line ø 4.75 mm	Without	3000 mm long	4000 mm long	5000 mm long	6000 mm long	7000 mm long	10,000 mm long

Brake linkage assembly components for single-axle trailer parking brake system must be adapted accordingly.



2.13 Assembly parts kits for brake-operating device for tandem-axle trailer with disc brake SB 2510 RA



Brake line ø 4.75 mm	without	3000 mm long	4000 mm long	5000 mm long	6000 mm long	7000 mm long	10,000 mm long
BPW order no.	05.803.02.11.0	05.803.02.12.0	05.803.02.13.0	05.803.02.14.0	05.803.02.15.0	05.803.02.16.0	05.803.02.17.0

Brake linkage assembly components for tandem axle trailers, incl. tandem compensation for parking brake system must be adapted accordingly.



2.14 Tandem units with hydraulic raise and lower

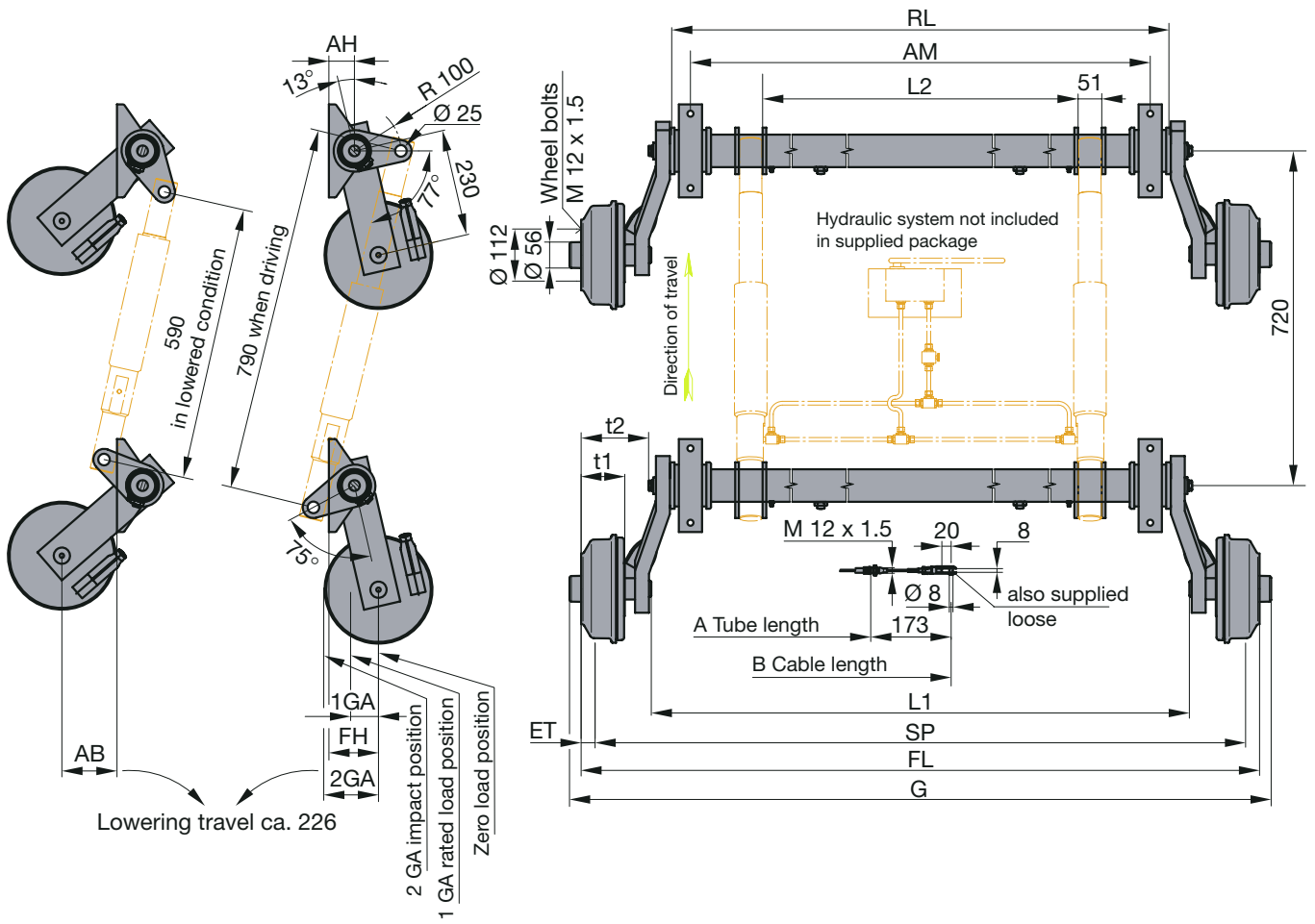
- Torsion bar axles with independent suspension: Optimum compensation for uneven road surfaces and high levels of driving stability
- Almost infinitely variable swinging arm setting: Variable ride height setting to suit vehicle construction
- Raise and lower function uses easy-to-operate hydraulic lift ram with hard chromium-plated piston rods, either electrically (12 V) or manually controlled
- Locked ride height using non-return valve which can be released: High safety levels, even if the hydraulic system fails
- Vehicle is lowered by releasing the hydraulic pressure
- Lowers by up to 200 mm: Simple loading and unloading, low counter heights for market vehicles

Application:

- Chassis conversions (hydraulic brake system, optionally with ABS)
- Semi-trailers (hydro-pneumatic brake system)
- Drawbar trailers (mechanical brake system with overrun brakes)



2.14 Tandem units with hydraulic raise and lower, gross vehicle weight rating up to 3500 kg, wheel brake S 2005-7 RASK/S 2504-7 RASK

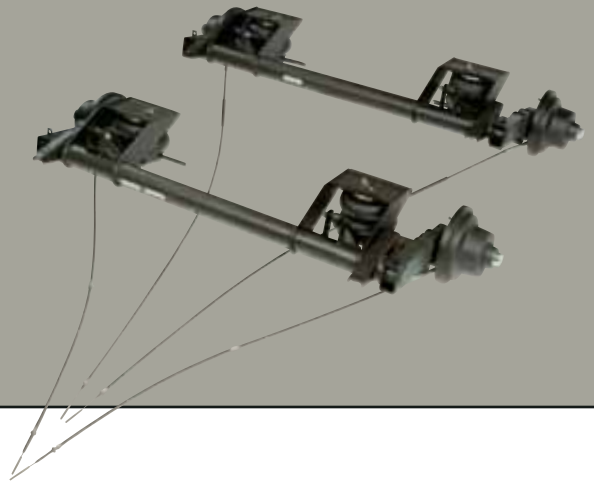


Accessories

Order no.	Designation
02.0130.44.00	Hydraulic unit complete with control unit and cylinder (12 V electric motor)
02.0130.43.00	Hydraulic unit complete with control unit and cylinder (hand pump)
02.4905.31.00	Cylinder: 200 mm stroke/centre distance 720 mm
05.803.02.22.0	Assembly parts group for cylinder (mounting kit)
05.803.00.46.0	Assembly parts group shock absorber kit



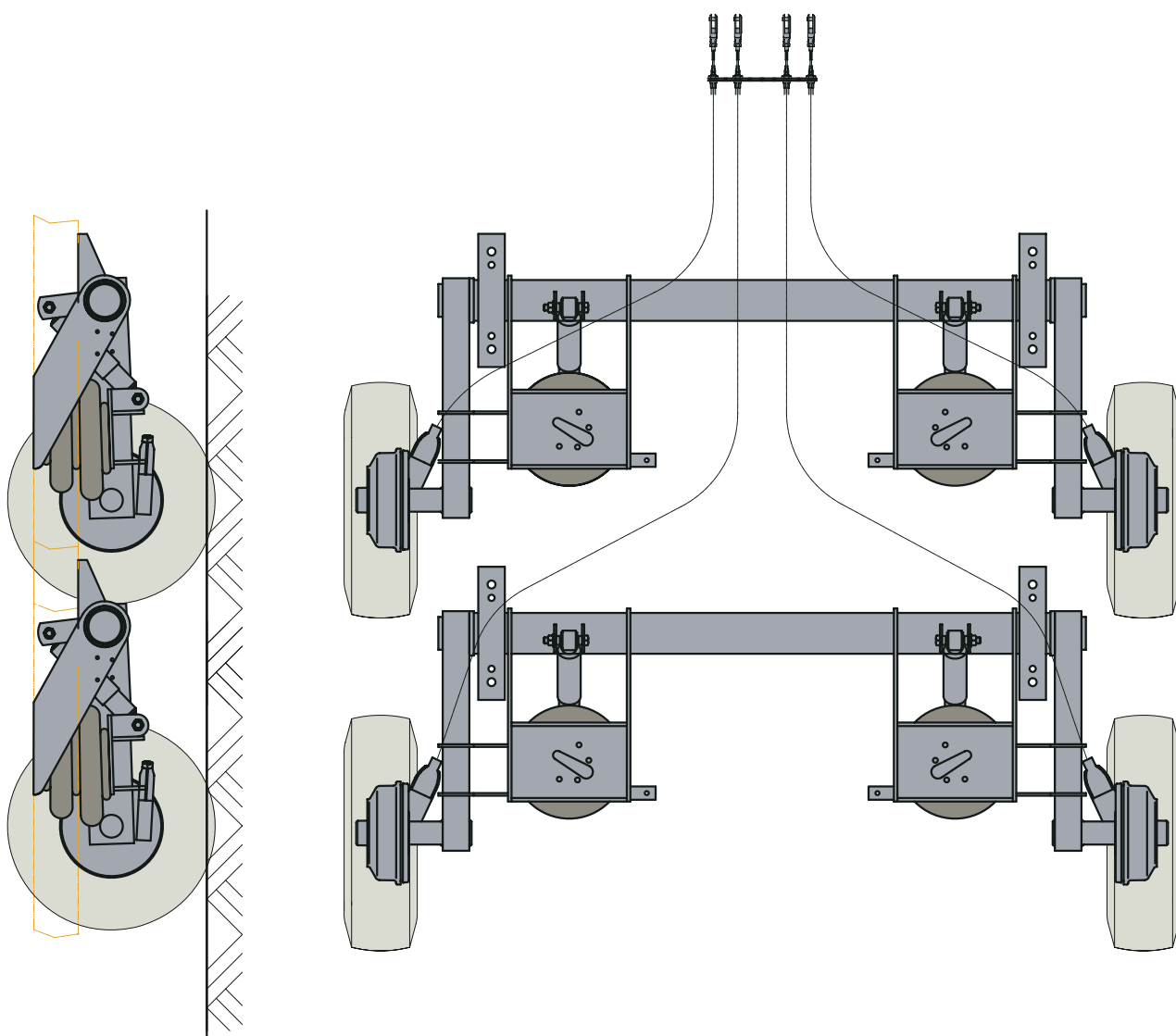
Gross vehicle weight rating [kg]	Order no.	Dimensions [mm]								Dimensions [mm]						
		FL	SP	AM	RL	G	L1	L2	A	B	front axle		rear axle			
											A	B	A			B
Axle unit RONDO DB2/1355, wheel brake S2005-7 RASK (tyres: 185 R14 C, rims: 51/2J x 14 H2)																
2700	49.25.379.500	1670	1610	1200	1280	1720	1368	890	1030	1283	1430	1683	t1	94		
	49.25.379.501	1770	1710	1300	1380	1820	1468	990	1030	1283	1430	1683	t2	145		
	49.25.379.502	1870	1810	1400	1480	1920	1568	1090	1130	1383	1530	1783	ET	30		
	49.25.379.503	1970	1910	1500	1580	2020	1668	1190	1130	1383	1530	1783	AH	55		
	49.25.379.504	2070	2010	1600	1680	2120	1768	1290	1230	1483	1630	1883	FH	107		
	49.25.379.505	2170	2110	1700	1780	2220	1868	1390	1230	1483	1630	1883	AB	119		
	49.25.379.506	2270	2210	1800	1880	2320	1968	1490	1330	1583	1730	1983	1GA	60		
	49.25.379.507	2370	2310	1900	1980	2420	2068	1590	1330	1583	1730	1983	2GA	118		
Axle unit RONDO DB2/1505, wheel brake S2005-7 RASK (tyres: 185 R14 C, rims: 51/2J x 14 H2)																
3000	49.27.379.500	1685	1625	1200	1300	1735	1397	921	1030	1283	1430	1683	t1	94		
	49.27.379.501	1785	1725	1300	1400	1835	1497	1021	1030	1283	1430	1683	t2	137		
	49.27.379.502	1885	1825	1400	1500	1935	1597	1121	1130	1383	1530	1783	ET	30		
	49.27.379.503	1985	1925	1500	1600	2035	1697	1221	1130	1383	1530	1783	AH	66		
	49.27.379.504	2085	2025	1600	1700	2135	1797	1321	1230	1483	1630	1883	FH	117		
	49.27.379.505	2185	2125	1700	1800	2235	1897	1421	1230	1483	1630	1883	AB	108		
	49.27.379.506	2285	2225	1800	1900	2335	1997	1521	1330	1583	1730	1983	1GA	44		
	49.27.379.507	2385	2325	1900	2000	2435	2097	1621	1330	1583	1730	1983	2GA	87		
Axle unit RONDO DB2/1805, wheel brake S2504-7 RASK (tyres: 195 R14 C, rims: 51/2J x 14 H2)																
3500	49.32.368.500	1740	1670	1200	1300	1820	1306	890	1030	1283	1430	1683	t1	122		
	49.32.368.501	1840	1770	1300	1400	1920	1406	990	1030	1283	1430	1683	t2	155		
	49.32.368.502	1940	1870	1400	1500	2020	1506	1090	1130	1383	1530	1783	ET	35		
	49.32.368.503	2040	1970	1500	1600	2120	1606	1190	1130	1383	1530	1783	AH	73		
	49.32.368.504	2140	2070	1600	1700	2220	1706	1290	1230	1483	1630	1883	FH	125		
	49.32.368.505	2240	2170	1700	1800	2320	1806	1390	1230	1483	1630	1883	AB	101		
	49.32.368.506	2340	2270	1800	1900	2420	1906	1490	1330	1583	1730	1983	1GA	37		
	49.32.368.507	2440	2370	1900	2000	2520	2006	1590	1330	1583	1730	1983	2GA	77		



2.15 Tandem units with air suspension

- 100 percent air suspension: Payload protection when transporting fragile goods, high levels of road safety and the greatest possible driving comfort
- Independent suspension: Optimum compensation for uneven road surfaces
- Additional stabiliser as mechanical link for the air suspension: High levels of road safety when cornering and under extreme driving conditions, reduced tyre wear due to uninterrupted road contact
- High-performance shock absorbers with lengthened rebound travel: Dampened rebound reduces the stress on the cargo
- Fully automatic level control using an electronically controlled air suspension valve, ECAS control electronics (Electronically Controlled Air Suspension): Constant trailer ride height, independent of loading condition
- Raise and lower function (lowering max. 85 mm / raising max. 45 mm) Low loading surfaces and loading heights, low counter heights in market vehicles, loading ramp adjustment, lowering on one side only is also possible
- ALB control by the operating pressure in the air bags (pressure-dependent control)

If you are looking for a reliable advantage in terms of function and performance, you cannot afford to overlook this tandem unit. It offers particular benefits in transport trailers for fragile goods, in market vehicles, boat trailers and for chassis conversions for front-wheel drive vehicles





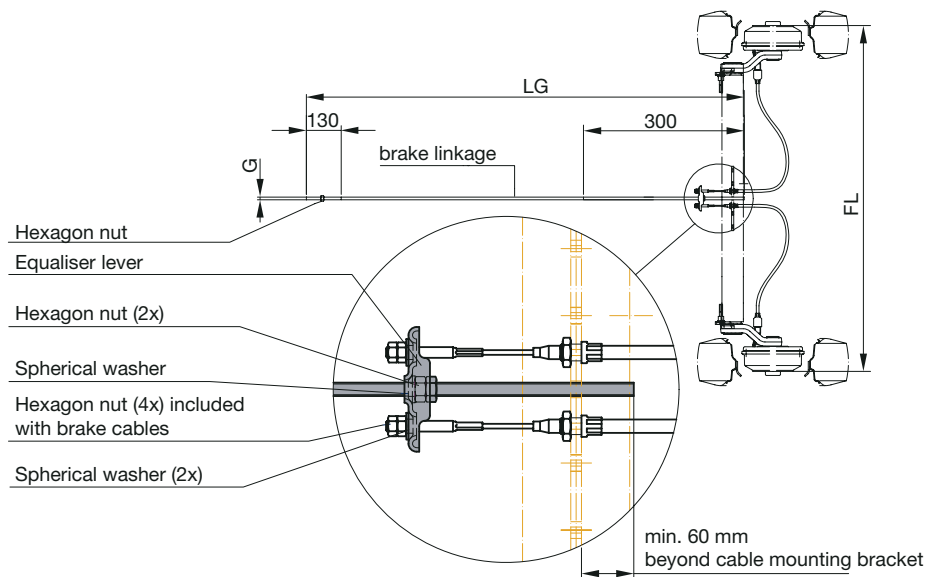
The BPW range of accessories:

For towed machinery, car and light truck trailers, caravans and chassis conversions for front-wheel drive vehicles





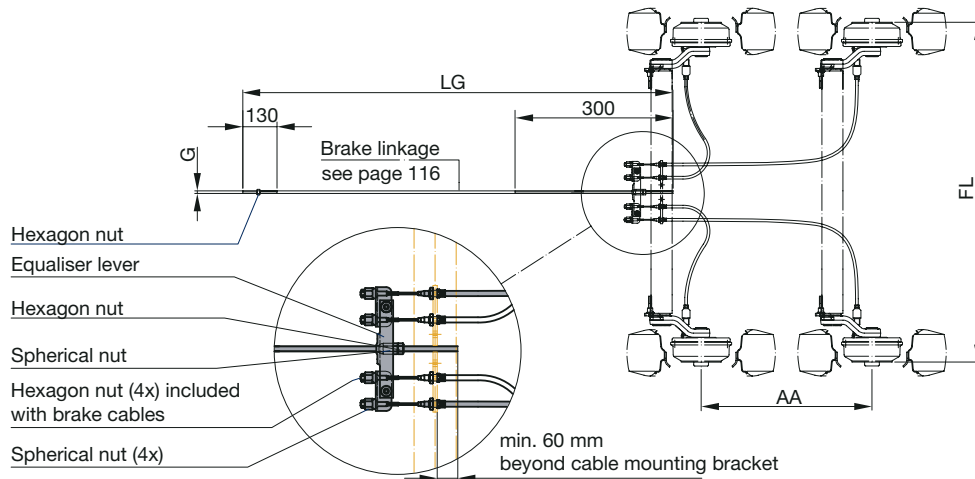
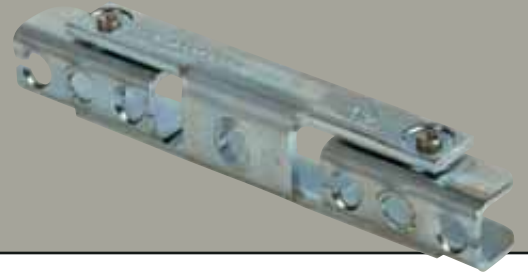
3.1 Brake cables, linkages and equaliser assemblies



Assembly parts group equaliser lever single-axle trailer for brake linkage M 10, order no. 05.803.18.38.0

Assembly parts group equaliser lever single-axle trailer for brake linkage M 12, order no. 05.803.18.39.0

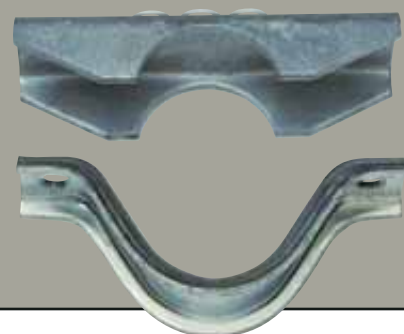
LG [mm]	Brake linkage M 10 (Connection acc. to connecting assembly)		Brake linkage M 12 (Connection acc. to connecting assembly)	
	Order no.	Weight [kg]	Order no.	Weight [kg]
1600	03.399.58.80.0	0.8	03.399.55.20.0	1.2
1800	03.399.58.81.0	0.9	03.399.55.21.0	1.3
2000	03.399.58.82.0	1.0	03.399.55.22.0	1.4
2200	03.399.58.83.0	1.1	03.399.55.23.0	1.5
2400	03.399.58.84.0	1.2	03.399.55.24.0	1.6
2600	03.399.58.85.0	1.3	03.399.55.25.0	1.7
2800	03.399.58.86.0	1.4	03.399.55.26.0	1.8
3000	03.399.58.87.0	1.5	03.399.55.27.0	1.9
3200	03.399.58.88.0	1.6	03.399.55.28.0	2.0
3400	03.399.58.89.0	1.7	03.399.55.29.0	2.1
3600	03.399.58.90.0	1.8	03.399.55.30.0	2.2
3800	03.399.58.91.0	1.9	03.399.55.31.0	2.3
4000	03.399.58.92.0	2.0	03.399.55.32.0	2.4



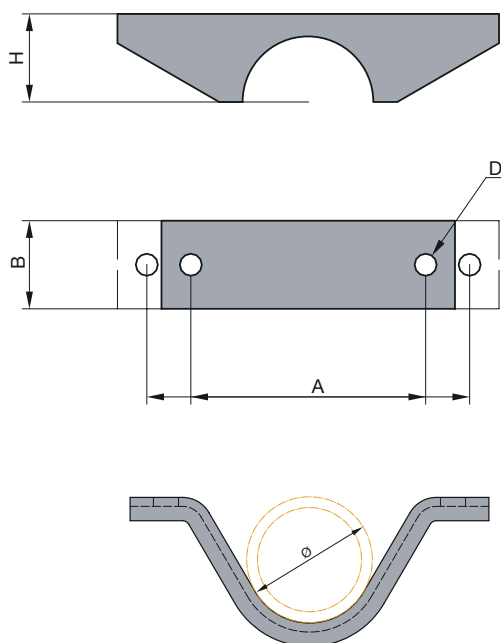
Assembly parts group tandem compensation incl. brake cables for rear axle
Order no. acc. to axle centre distance AA

FL [mm]	for brake linkage M 10 (Connection acc. to connecting assembly)			for brake linkage M 12 (Connection acc. to connecting assembly)		
	<700 mm	700-850 mm	>850-1000 mm	<700 mm	700-850 mm	>850-1000 mm
	1400-1500	05.803.18.40.0	05.803.18.50.0	05.803.18.60.0	05.803.18.70.0	05.803.18.80.0
1500-1600	05.803.18.41.0	05.803.18.51.0	05.803.18.61.0	05.803.18.71.0	05.803.18.81.0	05.803.18.91.0
1600-1700	05.803.18.42.0	05.803.18.52.0	05.803.18.62.0	05.803.18.72.0	05.803.18.82.0	05.803.18.92.0
1700-1800	05.803.18.43.0	05.803.18.53.0	05.803.18.63.0	05.803.18.73.0	05.803.18.83.0	05.803.18.93.0
1800-1900	05.803.18.44.0	05.803.18.54.0	05.803.18.64.0	05.803.18.74.0	05.803.18.84.0	05.803.18.94.0
1900-2000	05.803.18.45.0	05.803.18.55.0	05.803.18.65.0	05.803.18.75.0	05.803.18.85.0	05.803.18.95.0
2000-2100	05.803.18.46.0	05.803.18.56.0	05.803.18.66.0	05.803.18.76.0	05.803.18.86.0	05.803.18.96.0
2100-2200	05.803.18.47.0	05.803.18.57.0	05.803.18.67.0	05.803.18.77.0	05.803.18.87.0	05.803.18.97.0
2200-2300	05.803.18.48.0	05.803.18.58.0	05.803.18.68.0	05.803.18.78.0	05.803.18.88.0	05.803.18.98.0
2300-2400	05.803.18.49.0	05.803.18.59.0	05.803.18.69.0	05.803.18.79.0	05.803.18.89.0	05.803.18.99.0

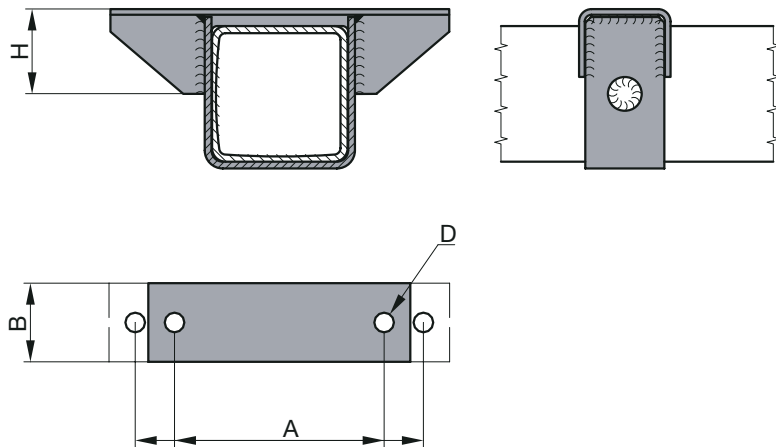
These assembly parts ensure that connection assemblies are securely attached to the vehicle frame.



3.2 Supports (clamped and welded type)

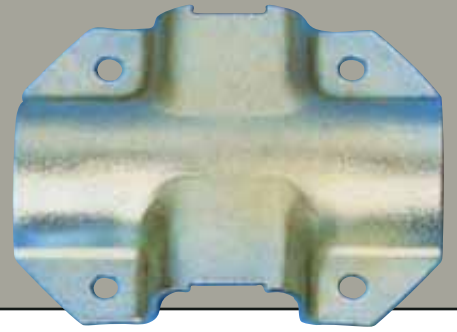


for tube	Dimensions [mm]				Assembly parts Group clamped connection order no.	Weld connection order no.
	H	D	A	B		
Ø 70	49.5	14	160	60	05.803.02.55.0	05.075.03.15.0
Ø 82.5	50	14.5	160	60	05.803.02.60.0	05.075.04.16.0
Ø 88.9	60	14/18	160/220	60	05.803.02.56.0	05.075.05.13.0
Ø 101.6	75	15	160	60	05.803.02.61.0	05.075.06.08.0
Ø 108	60	14/18	160/220	60		05.075.06.07.0
Ø 127	60	18	220	70		05.075.08.20.0
Ø 140		18	220			05.075.08.44.0



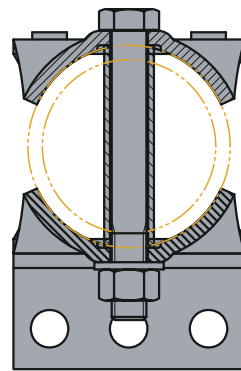
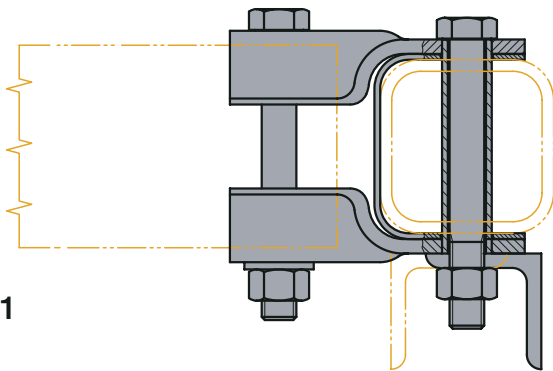
for tube	Dimensions [mm]				Assembly parts group clamped connection order no.	Weld connection order no.
	H	D	A	B		
sq. 70	50	13	160	50	05.803.02.57.0	
sq. 80	55	13	160	58	05.803.02.58.0	
sq. 100	65	13	160/200	60	05.803.02.59.0	
sq. 120	75	18	250	81		05.803.02.62.0*
sq. 120	80	18	220	82	05.801.90.92.0	
150x132	95	18	200	82	05.801.90.91.0	
sq. 150	95	18	220	82	05.801.90.45.0	

* Not for ZAV

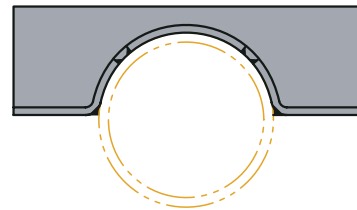
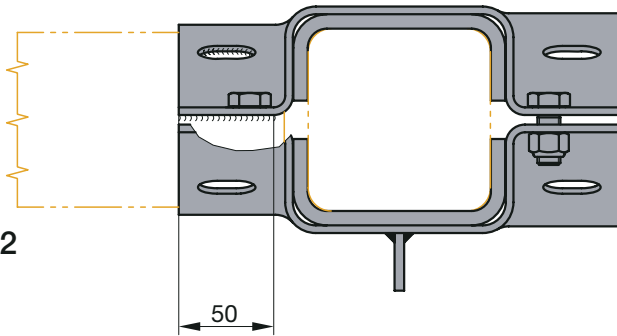


3.3 Clamping components

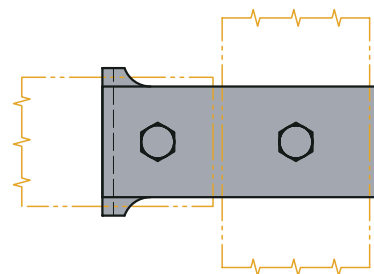
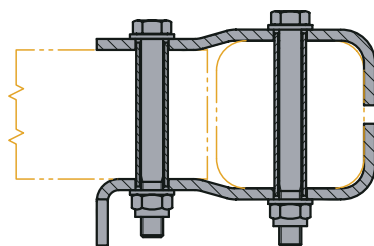
Design 1



Design 2



Design 3





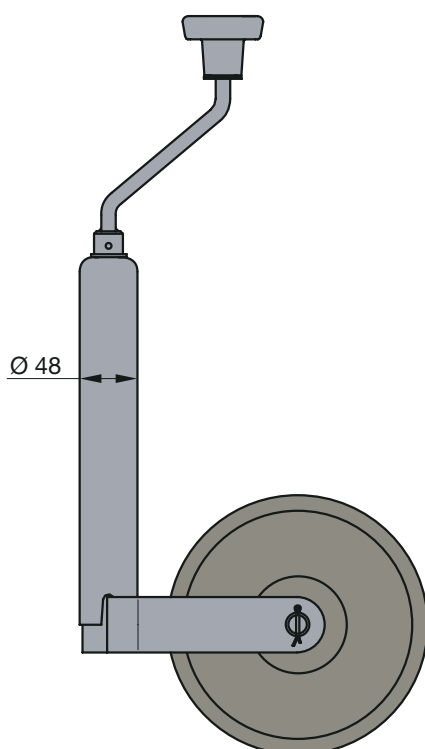
Dimensions [mm]			Order no.	
Drawbar tube	Axle tube	Design	Single-axle trailer	Tandem
Ø 70	sq. 60	1	05.820.50.55.0*	-
Ø 70	sq. 64	1	05.820.50.04.0	05.820.50.19.0
Ø 70	sq. 80	1	05.820.50.10.0	-
Ø 70	Ø 70	2	05.803.11.31.0	-
Ø 90	sq. 64	1	-	05.820.50.21.0
Ø 90	sq. 80	1	05.820.50.12.0	05.820.50.60.0
Ø 90	sq. 95	1	05.820.50.18.0	05.820.50.61.0
Ø 90	sq. 110	2	05.820.18.05.0	-
Ø 90	Ø 70	2	-	05.803.11.46.0
Ø 90	Ø 82	2	05.803.11.32.0	05.803.11.47.0
Ø 90	Ø 92	2	05.803.11.33.0	05.803.11.48.0
Ø 90	Ø 114	2	05.803.11.34.0	-
sq. 70	sq. 64	2	05.803.11.35.0	05.803.11.49.0
sq. 70	sq. 80	3	05.803.11.16.0	-
sq. 70	Ø 70	2	05.803.11.36.0	-
sq. 70	Ø 82	2	05.803.11.37.0	-
sq. 80	sq. 64	2	-	05.803.11.50.0
sq. 80	sq. 80	2	05.803.11.38.0	05.803.11.51.0
sq. 80	sq. 95	2	05.803.11.39.0	-
sq. 80	sq. 110	2	05.803.11.40.0	-
sq. 80	Ø 70	2	-	05.803.11.52.0
sq. 80	Ø 82	2	05.803.11.41.0	-
sq. 80	Ø 92	2	05.803.11.42.0	-
sq. 100	sq. 80	2	-	05.803.11.53.0
sq. 100	sq. 95	2	-	05.803.11.57.0
sq. 100	sq. 110	2	05.803.11.43.0	-
sq. 100	Ø 70	2	-	05.803.11.54.0
sq. 100	Ø 82	2	-	05.803.11.55.0
sq. 100	Ø 92	2	05.803.11.44.0	05.803.11.56.0
sq. 100	Ø 114	2	05.803.11.45.0	-
Clamping shells for height adjustable connecting assemblies				
Ø 82,5	sq. 80	2	05.801.90.96.0	-
Ø 70	sq. 80	2	05.801.90.96.0	-
Ø 90	sq. 80	2	05.820.16.08.0	05.820.16.07.0
Ø 90	sq. 95	2	05.820.17.06.0	05.820.17.05.0
Ø 90	sq. 110	2	05.820.18.05.0	-

* For unbraked single-axle trailers

Surface fully hot-dip galvanised for long-lasting surface protection • Secure positioning thanks to high stability • Long crank handle and thrust bearing ensure that the jockey wheel can be moved easily and conveniently



3.4 Jockey wheels with thrust bearing. Static load up to 150 kg



[Accessories]

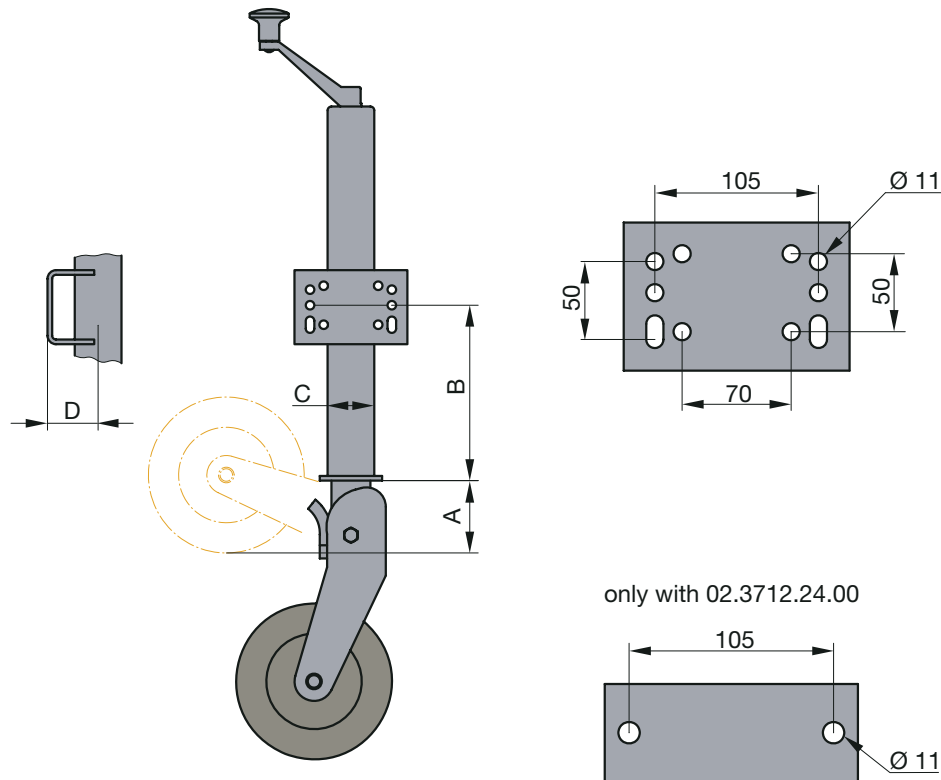
Rim	Tyres	Wheel size	Unscrewed length [mm]	Static load [kg]	Order no.	Weight [kg]
Steel	Solid rubber	Ø 200x50	220	150	02.3712.19.00	4.6
Plastic	Solid rubber	Ø 200x50	220	150	02.3712.05.00	4.4

Clamping holder, see page 125

Fully galvanised surface for long-lasting surface protection • Easy to operate thanks to fully automatic folding wheel



3.4 Fully automatic folding jockey wheels with reinforced inner tube. Static load up to 250 kg

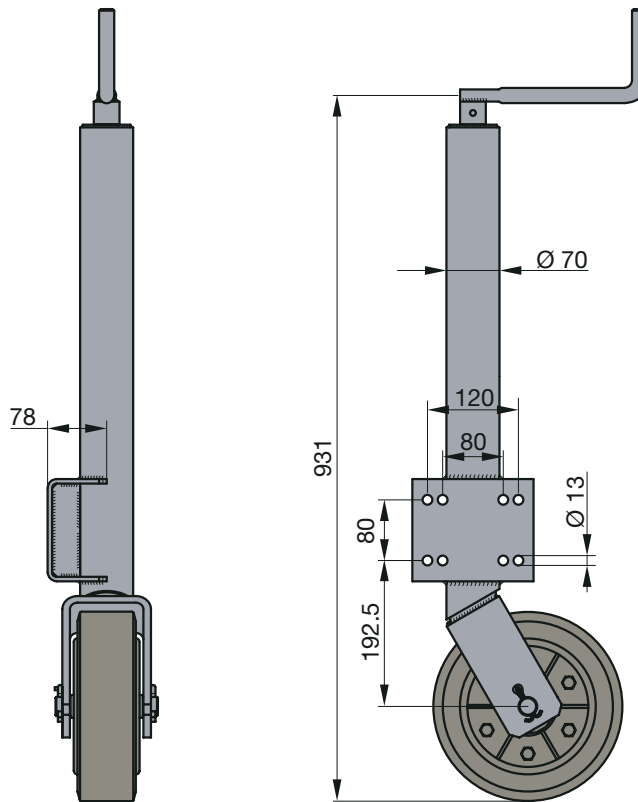


Rim	Tyres	Wheel size	Unscrewed length [mm]	Static load [kg]	BPW order no.	Dimensions [mm]				Weight [kg]
						A	B	C	D	
Steel	Solid rubber	Ø 200x50	470	250	02.3712.21.00	75	75	sq. 60	65	7.0
Steel	Solid rubber	Ø 200x50	460	250	02.3712.23.00	75	180	sq. 60	60	10.7
Steel	Solid rubber	Ø 200x50	470	250	02.3712.24.00	75	75	sq. 60	40	9.2
Steel	Pneumatic tyres	Ø 260x85	470	250	02.3712.26.00	85	225	Ø 60	65	10.0
Steel	Solid rubber	Ø 200x50	470	250	05.375.48.05.0	85	75	Ø 60	47	10.4

Fully galvanised surface for long-lasting surface protection •
 Able to cope with the most exacting requirements



3.4 Jockey wheels (heavy-duty jockey wheel). Load at standstill up to 500 kg

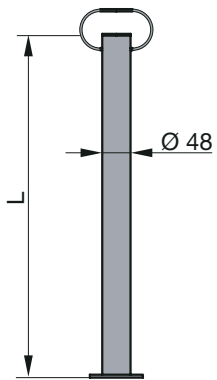


[Accessories]

Rim	Tyres	Wheel size	Unscrewed length [mm]	Static load [kg]	Order no.	Weight [kg]
Aluminium	Solid rubber	Ø 250x70	380	500	05.375.48.11.0	20.5

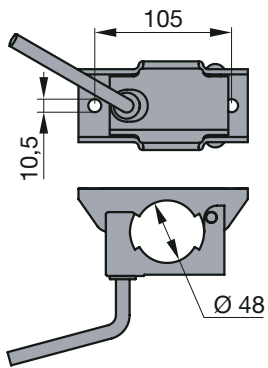


3.5 Quick-lift supports up to 2000 kg



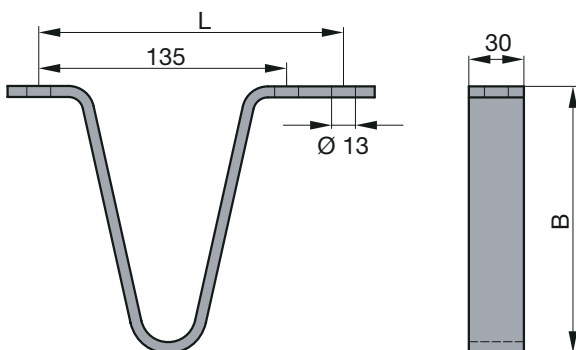
Order no.	Dimensions [mm]	
	L	Weight [kg]
02.3708.19.00	600	2.1
02.3708.32.00	700	2.2

3.5 Clamping holders for jockey wheel and quick-lift supports up to 2000 kg



Order no.	Dimensions [mm]	
	L	Weight [kg]
05.189.41.44.0		0.8

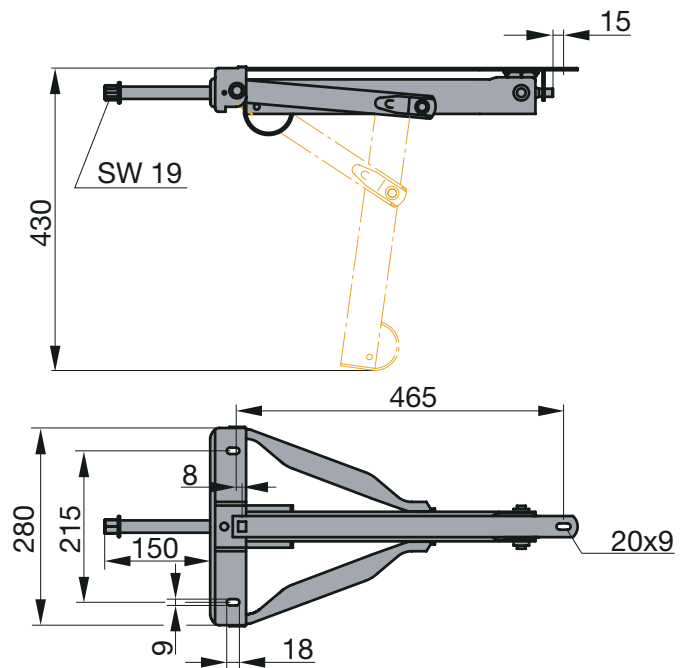
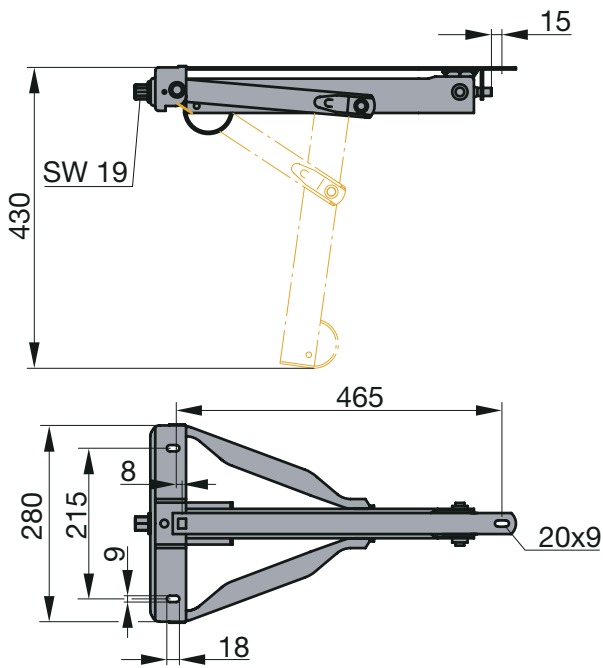
3.5 Drawbar support



Order no.	Dimensions [mm]	
	B	L
02.3708.23.00	120	166
02.3708.34.00	150	166
02.3708.35.00	180	160



3.6 Cranked supports



Cranked support up to 500 kg

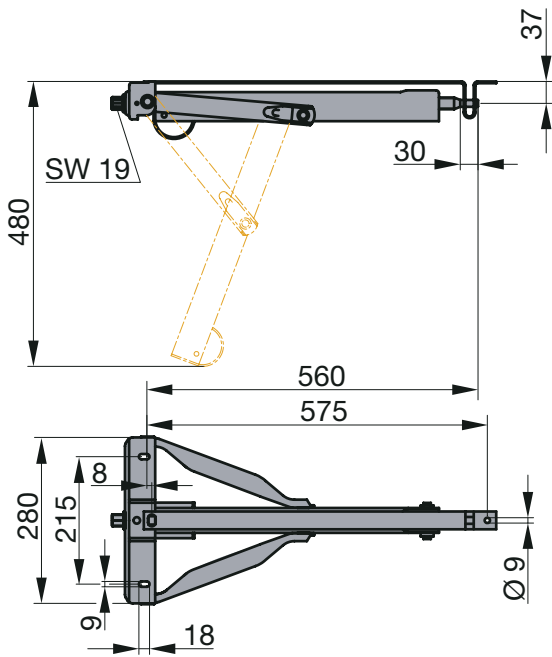
Order no. 02.3708.42.00

Weight 4.2 kg

Cranked support up to 500 kg with extended spindle

Order no. 02.3708.43.00

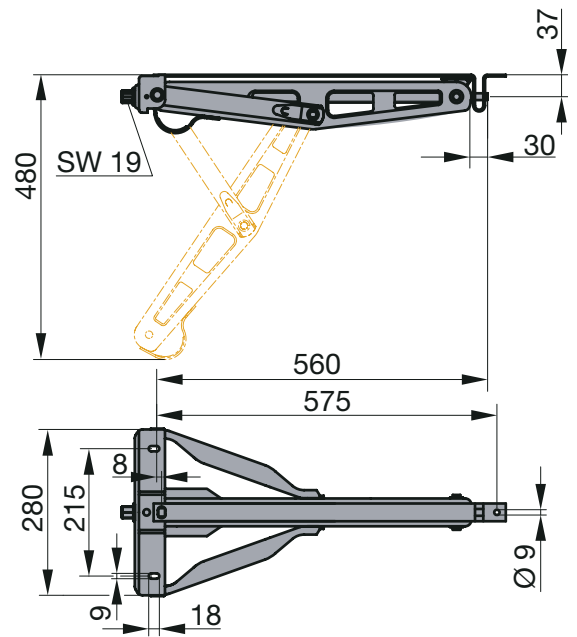
Weight 4.5 kg



Cranked support up to 500 kg with extended unscrewing length

Order no. 05.803.02.39.0

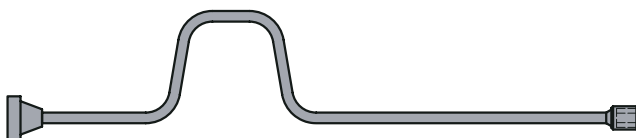
Weight 4.3 kg



Heavy duty cranked support up to 750 kg

Order no. 05.803.02.37.0

Weight 5.6 kg



Crank handle for cranked support

Order no.	Weight [kg]
02.1404.06.00	0.6

For maximum safety and even greater ride comfort – shock absorbers optimally adapted to the weight ranges, to protect both vehicle and load.



3.7 Shock absorbers

BPW comfort shock absorbers:

Shock absorbers that are specifically adapted to the individual weight ranges – for a noticeable difference in driving comfort and road safety.

Safety:

Damping is optimally adapted to the weight ranges.

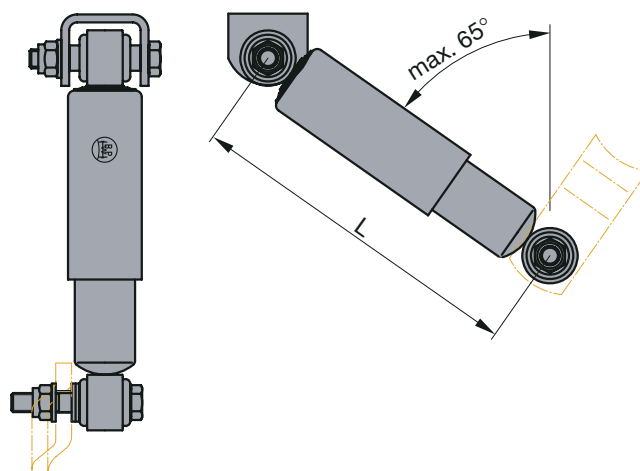
Driving comfort:

Better shock absorption in all loading conditions.

Road safety:

Optimum contact with the road surface by minimising body vibrations

- Greater braking stability
- Shorter braking distance



Comfort shock absorber parts kit SWING rubber suspension axles (incl. shock absorbers, attachment for vehicle frame and assembly parts kit)

BPW order no.	Identification	Weight ranges	Dimensions [mm]		
05.803.00.60.0	red	550 kg – 1050 kg Axle load	L min = 237	L max = 337	Installation dimension approx. 245
05.803.00.61.0	blue	1050 kg – 1350 kg Axle load	L min = 237	L max = 337	Installation dimension approx. 245
05.803.00.62.0	black	1350 kg – 1800 kg Axle load	L min = 237	L max = 337	Installation dimension approx. 245
05.803.00.63.0	black	1800 kg – 3000 kg Axle load	L min = 270	L max = 412	Installation dimension approx. 280

Comfort shock absorber parts kit RONDO torsion bar axles (incl. shock absorbers, attachment for vehicle frame and assembly parts kit)

BPW order no.	Identification	Weight ranges	Dimensions [mm]		
05.803.00.62.0	black	1050 kg – 1800 kg Axle load	L min = 237	L max = 337	Installation dimension approx. 245
05.803.00.63.0	black	1800 kg – 3000 kg Axle load	L min = 270	L max = 412	Installation dimension approx. 280

The universal shock absorber: For weight ranges up to 1500 kg axle load

Universal shock absorber parts kit (incl. shock absorbers, attachment for vehicle frame and assembly parts kit)

BPW order no.	Identification	Weight ranges	Dimensions [mm]		
05.803.00.58.0	black	550 kg – 1500 kg Axle load	L min = 257	L max = 385	Installation dimension approx. 270

The safety hitch with track stabilisation and a single-lever system, in a class of its own.



3.8 WS 3000 safety hitch

Allows all operations to be carried out using only one hand:

- Hitching up
- Unhitching
- Deploying stabilisers
- Retracting stabilisers
- Locking and unlocking
- Short design
- Low service weight
- Replaceable friction pads
- Anti-theft protection can be retrofitted



More clearance at the rear of the vehicle

Designation	Order no.	Test symbol	Permitted drawbar load [kg]	Gross vehicle weight rating [kg]	Weight [kg]
WS 3000	02.1801.19.10	e1 00-0065	150	to 3000	4.3

Anti-theft protection

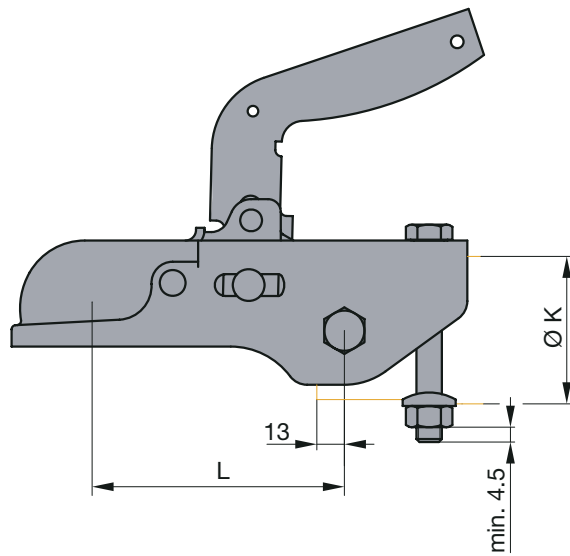
Order no.
05.803.02.64.0



Anti-theft protection

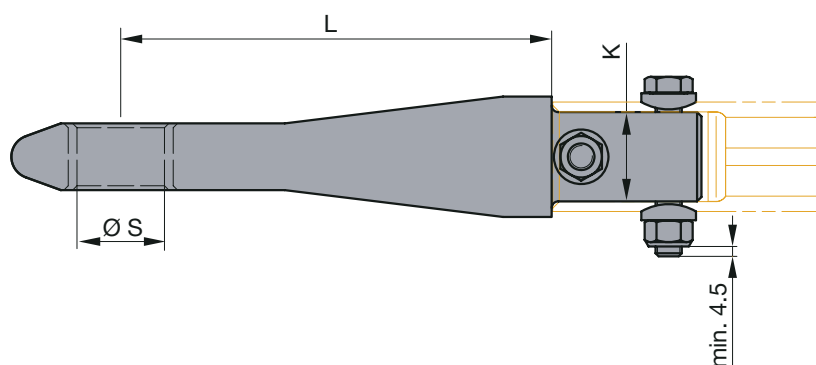


3.9 Conversion kits for connecting assemblies



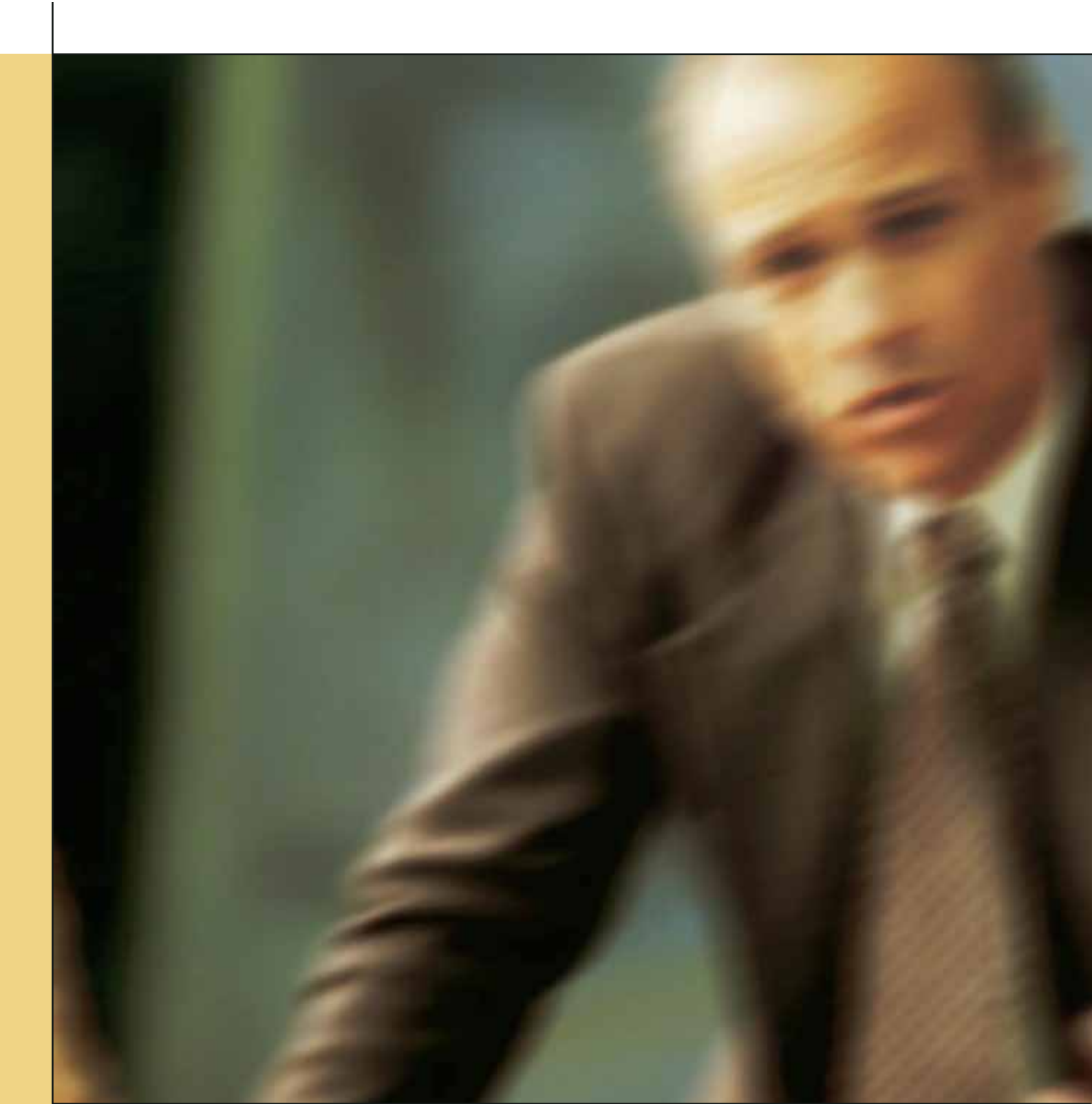
Designation	Ball hitch	K	Dimensions [mm]		Drawbar load [kg]	Gross vehicle weight rating [kg]	End device
			L	EC test symbol			
EM 150R-B	09.870.00.04.0	50/51	110	e1* 0376*94/20	100	1500	ZAA 1.3-1; ZKV 13; ZRV 13
EM 220R-B	09.870.00.01.0	50/51	110	e1* 0376*94/20	100	2200	ZAA 2.0-1; ZKV 20; ZRV 20
WW 30-D6	05.803.11.15.0	60	110	e1* 0640*94/20	150	3000	ZAV 1.6-5/2.0-5/2.7-4
EM 350R-D	05.801.90.38.0	65	119	e1* 0376*94/20	200	3500	ZAA 3.5-1; ZKV 25/35; ZAV 3.5-1

More flexibility when selecting the towing vehicle – the BPW conversion kit makes it possible. With this, BPW connecting assemblies can be operated with a ball hitch and a towing eye.

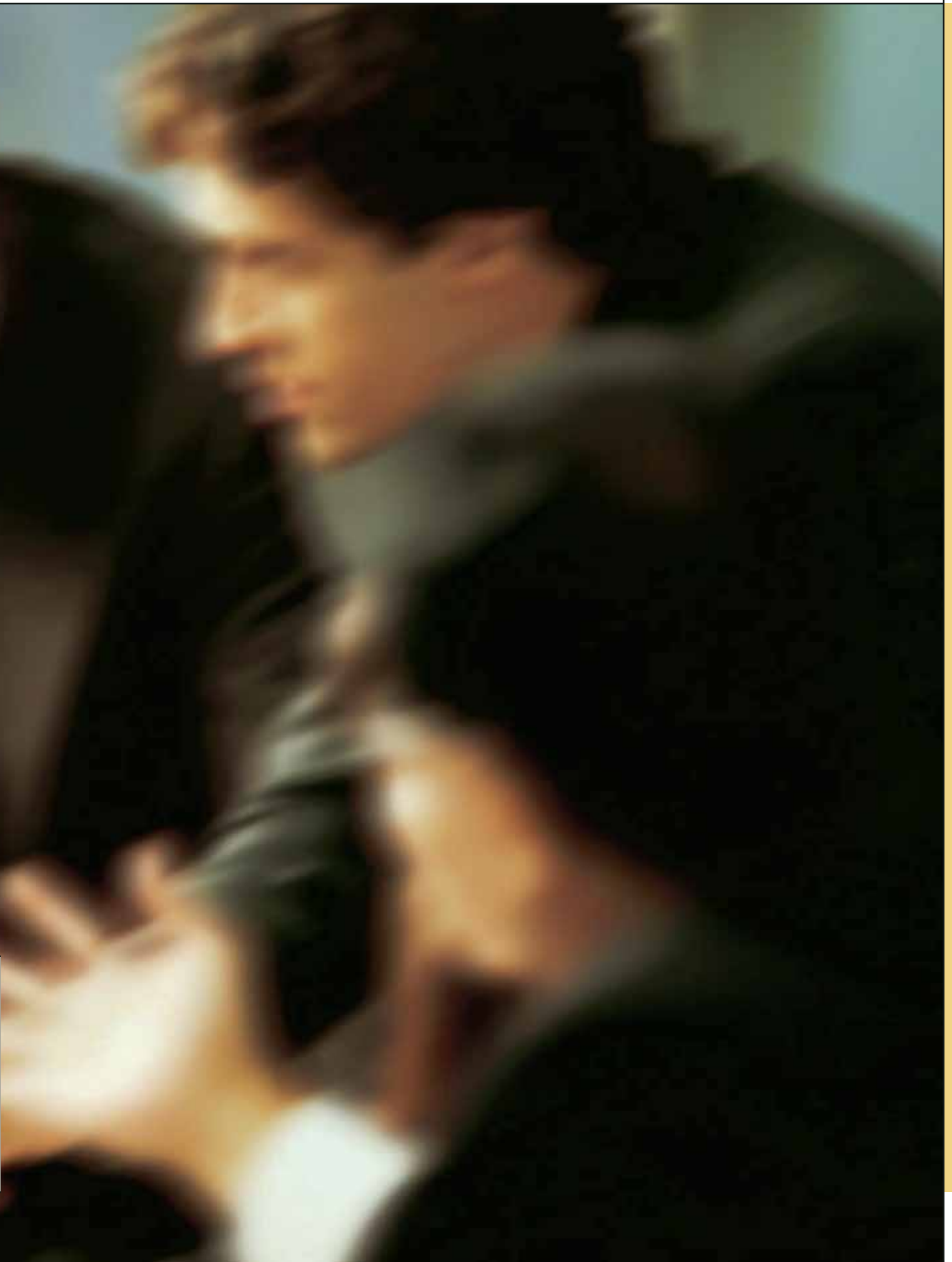


Designation	Drawbar	Dimensions [mm]			EC test symbol	Drawbar load [kg]	Gross vehicle weight rating [kg]	End device
		K	S	L				
DIN 40.0-01*	05.801.90.37.0	40.8	40	200	e1* 0347*94/20	100	2000	ZAA 1.3-1/2.0-1; ZKV 13/20; ZRV 13/20
DIN 40.0-04	05.803.11.12.0	45.8	40	200	e1* 1147*94/20	150	2900	ZAV 1.6-5/2.0-5/2.7-4
DIN 40.0-02	05.870.00.06.0	51.8	40	200	e1* 0346*94/20	150	3500	ZAA 3.5-1; ZKV 25/35; ZAV 3.5-1
DIN 40.0-02	05.803.11.30.0	51.8	40	200	e1* 0346*94/20	150	3500	ZAF 3.5-1
NATO 76.0-01	09.870.00.32.0	40.8	76	95	e1* 0641*94/20	100	2000	ZAA 1.3-1/2.0-1; ZKV 13/20; ZRV 13/20
NATO 76.0-04	05.801.90.86.0	45.8	76	95	e1* 1195*94/20	150	2900	ZAV 1.6-5/2.0-5/2.7-4
NATO 76.0-02	05.801.90.46.0	51.8	76	95	e1* 0642*94/20	150	3500	ZAA 3.5-1; ZKV 25/35; ZAV 3.5-1
Italy 45.0-01	05.801.90.74.0	40.8	45	109,5	e1* 0966*94/20	100	2000	ZAA 1.3-1/2.0-1; ZKV 13/20; ZRV 13/201
Italy 45.0-04	05.801.90.90.0	45.8	45	115	e1* 1194*94/20	150	2900	ZAV 1.6-5/2.0-5/2.7-4
Italy 45.0-02	05.801.90.82.0	51.8	45	115	e1* 1149*94/20	150	3500	ZAA 3.5-1; ZKV 25/35; ZAV 3.5-1
France 77.0-01	05.801.90.77.0	40.8	77	94	e1* 0889*94/20	100	2,000	ZAA 1.3-1/2.0-1; ZKV 13/20; ZRV 13/201

* Not for ZAV



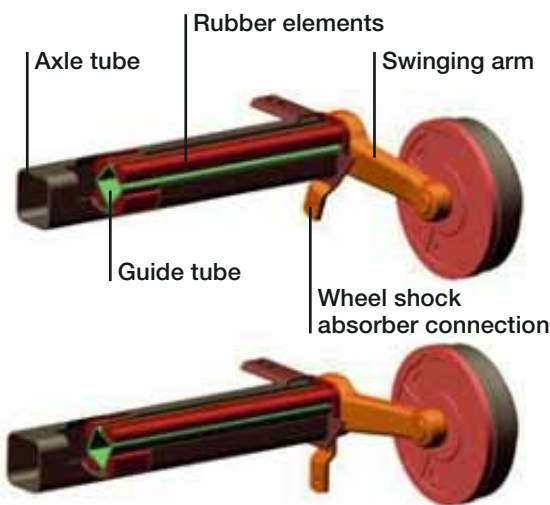
[Technical information] Expertise in running gear systems is not just expressed in terms of products, variety and quality. The method of co-operation is just as decisive for achieving outstanding results and reliable success. Which is why BPW is the right partner for vehicle manufacturers. In addition to our products, they can find the right contacts and the information they need. The most important information is presented on the following pages. As always: If you have any questions, just ask BPW.



Rubber suspension axles and torsion bar axles offer the highest levels of suspension comfort. They can be adapted to a wide range of vehicle weights. Vibrations caused by uneven road surfaces are absorbed to an optimum extent. The functional principles vary according to which type is used, and this depends on the customer's requirements and the application.

4.1 SWING rubber suspension axles/RONDO torsion bar axles

SWING rubber suspension axle

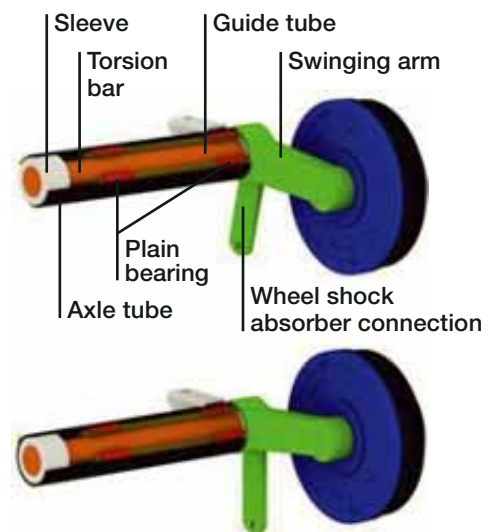


Mode of operation

Suspension is provided by four rubber elements which are pressed in between the square tubes offset at 45°.

As soon as load is applied to the swinging arms, the rubber elements next to the inner tube guide provide the suspension effect.

RONDO torsion bar axle



Mode of operation

In this case, the suspension element is a torsion bar made from spring steel. This is mounted inside the axle tube where it is fully protected.

Almost infinitely variable setting of the swinging arms is possible using the involute tooth profile on the torsion bar.

Advantage: Ride height setting can be adjusted during vehicle construction.

For spring deflection, see the spring deflection diagrams in the Axles & Axle Systems section.

Please note:

The axles must be suitably adapted for use in trailers having special operational conditions, e.g. hazchem trailers (wheelbase above 1000 mm), trailers for movable loads, trailers towed by coaches and light trucks.



4.2 Installing axles in tandem axle vehicles

Axle load [kg]	Gross vehicle weight rating with wheelbase (AA)		
	≤ 750 mm [kg]	≤ 850 mm [kg]	≤ 1000 mm [kg]
2 x 750	1500	1400	1300
2 x 850	1700	1550	1400
2 x 1050	2100	2000	1850
2 x 1350	2700	2500	2300
2 x 1500	3000	2800	2700
2 x 1800	<3500	3300	3100



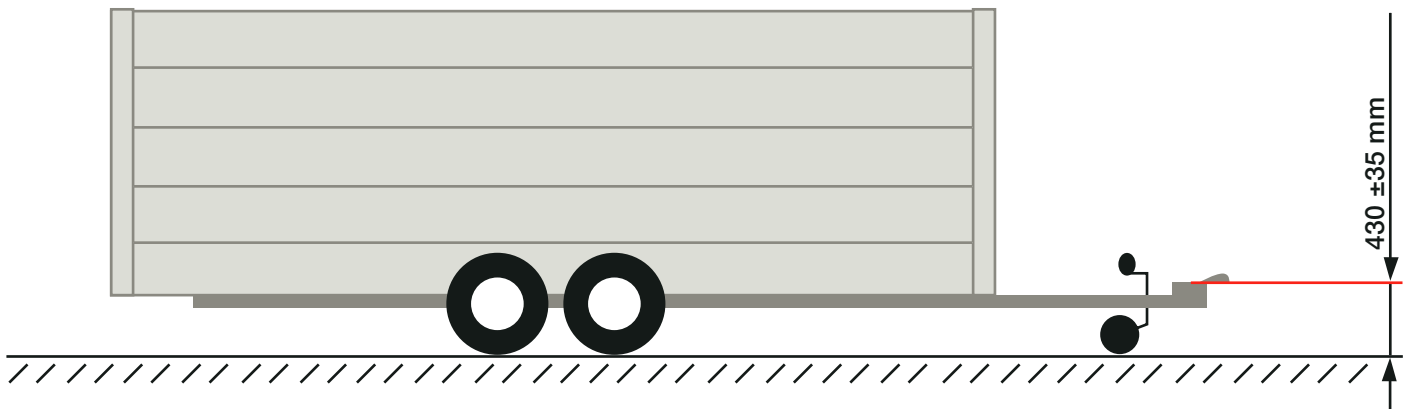
4.3 Technical data on BPW wheel brakes

Brake type	S 1704-7 RASK	S 2005-7 RASK	S 2504-7 RASK	S 3006-7 RASK
Certificate type	S 1704-7	S 2005-7	S 2504-7	S 3006-7
Size [mm]	Ø 170x40	Ø 200x50	Ø 250x40	Ø 300x60
EC inspection report no.	AR 2011	AR 2008	AR 2006	AR 2007
Technically permitted load per wheel GB0 [kg]	500	750	900	1500
Maximum braking torque Mmax [Nm]	1350	2400	2800	5700
Tyre diameter under load				
Rdyn min. [m]	0.21	0.26/0.215*	0.27/0.25*	0.31
Rdyn max. [m]	0.30	0.35/0.259*	0.36/0.269*	0.44
Characteristic ρ [m]	0.63	0.86/0.74*	0.97/0.92*	0.94
Return force P0 [N]	20	42/9*	121/0*	140
Application travel SB* [mm]	1.54	1.6	1.7	1.8
Reduction ratio ig	13.93	14.11	14.2	13.78
Reduction ratio ia	3.44	3.55	3.55	3.57
Permitted application travel SPR on brake cable [mm] when reversing	27	27	28	30

* In conjunction with drum hub/special version



4.4 Connecting Equipment



Connection to Towing Vehicle

In order to ensure a safe connection between the trailer and the towing vehicle the hitch must be attached correctly. The connection point of the trailer must be about 430 mm above the road surface when the trailer body is horizontal and the axle subject to its maximum load. A tolerance of 35 millimetres above or below is acceptable. Caravans and trailers are horizontal as soon as their floor or cargo bed is aligned horizontally.

Please note:

The connecting assembly must be adapted to suit trailers with special operational conditions, e.g. towed by coaches or light trucks, or vehicles with variable loading at the connection point.



4.5 BPW EC categorisation calculation according to 71/320/EEC (98/12/EC), (example)

1. Overrun hitch:

Type: AE3.5-2 /A

EC inspection report no. AR 1027

Selected reduction ratio $i_{HO} = 100 : 33 = 3030$

2. Brakes:

Type: S 2005-7 EC inspection report no.: AR 2008

3. Transmission device on trailer:

3.1. Brief description (see block diagram)

3.2. Reduction ratio and efficiency of the transmission device:

$i_{H1} = 1000$ $\eta_{H1} = 1000$

4. Trailer:

4.1. Manufacturer:

4.2. Factory brand:

4.3. Type:

4.4. Number of axles: 2

4.5. Number of brakes n: 4

4.6. Technically permitted total weight G_a :

2500	2600	2700	2800	2900	3000	3100	3200	3300	3400	3500
------	------	------	------	------	------	------	------	------	------	------

4.7. Permitted tyre radius under load [m] : ($R_{min} = 0.260$ m, $R_{max} = 0.350$ m)

0.350	0.350	0.350	0.350	0.350	0.350	0.000	0.000	0.000	0.000	0.000
-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------

4.8. Permitted thrust on coupling: $D^* = 0.1 \cdot G_a \cdot g$ [N]

2453	2551	2649	2747	2845	2943	3041	3139	3237	3335	3434
------	------	------	------	------	------	------	------	------	------	------

4.9. Braking force required: $B^* = 0.5 \cdot G_a \cdot g$ [N]

12263	12753	13244	13734	14225	14715	15206	15696	16187	16677	17168
-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------

4.10. Required braking force taking account of rolling resistance: $B = 0.49 \cdot G_a \cdot g$ [N]

12017	12498	12979	13459	13940	14421	14901	15382	15863	16343	16824
-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------

We require the following information in order to produce an EC categorisation calculation:

- Type of overrun hitch, e.g. AE3.5-2
- Type of wheel brake, e.g. S 2005-7
- Single or tandem axle trailer (= number of wheel brakes)
- Gross vehicle weight rating of the trailer, e.g. 3500 kg
- Tyres used, e.g. 175 R 14

5.	Compatibility– test results:										
5.1.	Response threshold $100 \cdot Ka / (Ga \cdot g)$: (must be between 2 and 4)										
	4.0	3.8	3.7	3.5	3.4	3.3	3.2	3.1	3.0	2.9	2.8
5.2.	Maximum force (retardation) $100 \cdot D1 / (Ga \cdot g)$: (single-axle: <10, multiple-axle: <6.7)										
	10.0	9.6	9.2	8.9	8.6	8.3	8.1	7.8	7.6	7.3	7.1
5.3.	Maximum force (in forward direction) $100 \cdot D2 / (Ga \cdot g)$: (must be between 10 and 50)										
	26.3	25.2	24.3	23.4	22.6	21.9	21.2	20.5	19.9	19.3	18.8
5.4.	Technically permitted total weight for the overrun hitch: $G_{max} = 3500 \text{ kg } (>= Ga!)$										
5.5.	Technically permitted total weight for all brakes of the trailer: $G_b = n \cdot G_{bo} = 3000 \text{ kg } (>= Ga!)$										
5.6.	Maximum braking torque $n \cdot M_{max} / (B \cdot R)$: ($>= 1.2!$)										
	2.3	2.2	2.1	2.0	2.0	1.9	-	-	-	-	-
5.7.	Mechanical transmission device:										
5.7.1.	$i_H = i_{HO} \cdot i_{H1} = 3030 \cdot 1000 = 3030$										
5.7.2.	$\eta_H = \eta_{Ho} \cdot \eta_{H1} = 0.850 \cdot 1000 = 0.850$										
5.7.3.	$(B \cdot R / \rho + n \cdot P_o) / ((D^* - K) \cdot \eta_H)$: (must not be greater than i_H)										
	2.91	2.89	2.86	2.84	2.82	2.80	-	-	-	-	-
5.7.4.	$s' / (s_B^* \cdot i_g) = 3546$ (must not be less than i_H)										
6.	Testing authority:										
7.	The brake system described above complies with the regulations of sections 3 to 9 of the inspection conditions for vehicles with overrun brakes.										



4.6 Table of tyres and wheels

Tyre size	Tyre load rating (kg) per axle				Radius		Wheel connection	BPW axle type for wheels	
	100 km/h	140 km/h	r _{stat} mm	r _{dyn} mm	Wheel size	With offset		Zero offset	
180/70 R 8 X CX	1500	–	209	221	5.00 F - 8	Ø 94/5/Ø 140/R14	Spez.	CS/DS 1505	
145 R10	650	–	220	239	3,50 B x 10H2	Ø 60/4/Ø 100/R12		CS 654	
195/50 B 10	1500	–	215	219	6.00 J x 10 H2	Ø 67/5/Ø 112/R12		CS/DS 1505	
						Ø 94/5/Ø 140/R14		CS/DS 1505	
135 R12	610	580	237	253	4 J x 12 H2	Ø 57/4/Ø 100/R12	CB 554	CS 554	
145 R12	750	710	245	263			CB 754	CS 754	
155 R12	840	800	248	267		Ø 67/5/Ø 112/R12	CB 755	CS 755	
155/70 R12	1800	1600	245	253	4 1/2 J x 12 H2	Ø 67/5/Ø 112/R12	DB/CB 1805		
145 R13	790	750	257	275	4 J x 13 H2	Ø 57/4/Ø 100/R13	CB 654/854		
145/70 R13	725	690	245	259		Ø 67/5/Ø 112/R12	CB 655/855		
155 R13	895	850	262	280					
155/70 R13	814	775	250	266	4 1/2 J x 13 H2	Ø 57/4/Ø 100/60°	DB/CB 1054		
165 R13	1000	950	269	289		Ø 67/5/Ø 112/R12	DB/CB 1055	CS 1055	
165/70 R13	920	875	256	272		Ø 67/5/Ø 112/60°			
175 R13	1220	1160	273	295	5 1/2 J x 13 H2				
175/70 R13	1000	950	261	279					
185/70 R13	1115	1060	266	286	6 J x 13 H2				
195/70 R13	1220	1160	276	292					
165 R14	1050	1000	302	282	5 J x 14 H2				
175 R14	1180	1120	286	307		Ø 57/4/Ø 100/60°	DB/CB 1054		
175/65 R14	1000	950	267	283		Ø 66.5/5/Ø 112/R12	DB/CB 1055	CS 1055	
175/70 R14	1050	1000	274	292		Ø 66.5/5/Ø 112/60°			
185 R14	1260	1200	315	293					
185 R14 C	1785	1700	296	313					
185/65 R14	1115	1060	272	289	5 1/2 J x 14 H2				



Tyre size	Tyre load rating (kg) per axle				Radius		Wheel connection	BPW axle type for wheels	
	100 km/h	140 km/h	rstat mm	rdyn mm	Wheel size	With offset		Zero offset	
185/70 R14	1180	1120	279	299		Ø 57/4/Ø 100/60°	DB/CB 1354	CS 1355	
195 R14 C	1995	1900	302	321		Ø 66.5/5/Ø 112/R12	DB/CB 1355		
195/65 R14	1220	1160	277	296		Ø 66.5/5/Ø 112/60°			
195/70 R14	1295	1230	285	306					
205 R14 C	2170	2060	310	330	6 J x 14 H2	Ø 66.5/5/Ø 112/R12	DB/CB 1505	CS 1505	
205/70 R14	1450	1380	312	290		Ø 66.5/5/Ø 112/60°			
215 R14 C	2360	2240	316	337					
215/70 R14	1450	1380	302	323					
185 R15 C	1840	1750	308	325	5 1/2 J x 15 H2	Ø 66.5/5/Ø 112/R12	DB/CB 1805		
195/70 R15 C	1840	1750	302	316	6 J x 15 H2	Ø 66.5/5/Ø 112/R12	DB/CB 1805		
205/65 R15 C	1790	1700	294	312	6 J x 15 H2		DB/CB 1805		
215/70 R15 C	2170	2060	311	329	6 1/2 J x 15 H2	Ø 161/6/Ø 205		CS/DS 2106	
225/70 R15 C	2360	2240	336	317				CS/DS 2506	
205/75 R16 C	2420	2300	344	326	6 J x 16 H2	Ø 161/6/Ø 205			
215/75 R16 C	2420	2300	332	351					
225/75 R16 C	3150	3000	338	358		Ø 161/6/Ø 205		CS 3006	



4.7 Free drawbar lengths (FD) – Flange tube

Dimensions [mm]										
GA [kg]	ZOR 0.75-1 A	ZAR 1.35-1 A	ZAR 1.35-1 B	ZAR 2.0-1 A	ZAR 2.0-1 B	ZAR 2.8-1	ZARV 1.35-1	ZARV 1.6-1	ZARV 2.0-1	ZARV 2.8-1
300	3210									
350	3030									
400	2870									
450	2720									
500	2590									
550	2470									
600	2360									
650	2260									
700	2170	1790				2170	1840			
750	2090	1710				2070	1760			
800		1635				1980	1680			
850		1570				1900	1610			
900		1510	1940			1830	1550			
950		1450	1860			1760	1490			
1000		1400	1790			1690	1430			
1050		1350	1730			1630	1380			
1100		1350	1670			1580	1340			
1150		1250	1600			1510	1280			
1200		1195	1540			1450	1230			
1250		1150	1470			1390	1180			
1300		1105	1420			1340	1135			
1350		1065	1365	2055		1290	1095	1870	2400	
1400			1320	1980				1805	2320	
1450			1275	1910				1745	2240	
1500			1230	1845				1685	2160	
1550			1190	1785				1630	2090	
1600			1155	1730				1580	2030	
1650				1680				1535	1960	
1700				1630				1490	1910	
1750				1585				1445	1850	
1800				1540	3020			1405	1800	1800
1850				1495	2940			1365	1750	1750
1900				1460	2860			1330	1700	1700



4.7 Free drawbar lengths (FD) – height adjustable

Dimensions [mm]

GA [kg]	ZOV 0.75-B	ZOV 1.2-B	ZAA 1.3-1	ZAA 2.0-1	ZAA 3.5-1	ZKV 13-A	ZKV 13-B	ZKV 20-A	ZKV 20-B	ZKV 25-B
300	3210									
350	3030									
400	2807									
450	2620									
500	2346									
550	2170									
600	1930	2770				4400	4400			
650	1740	2630	3010			4200	4200			
700	1570	2490	2870			4000	4000			
750	1410	2380	2740			3830	3860			
800		2270	2625			3570	3700			
850		2170	2520			3330	3540			
900		2070	2420			3120	3400			
950		1990	2330			2910	3280			
1000		1900	2245			2730	3160			
1050		1845	2165			2550	3040			
1100		1770	2090			2395	2900			
1150		1690	2005			2225	2740			
1200		1610	1920			2065	2580			
1250			1845			1920	2430			
1300			1775	2495		1780	2300	3250	3400	
1350				2405				3130	3220	
1400				2320				3010	3050	
1450				2240				2900	2890	
1500				2165				2800	2740	
1550				2095				2700	2560	
1600				2030				2620	2410	4840
1650				1965				2530	2290	4680
1700				1910				2420	2175	4540
1750				1855				2325	2065	4410
1800				1800				2230	1960	4280
1850				1755				2140	1865	4160
1900				1705	4200			2055	1775	4050

[Technical information]



4.8 Free drawbar lengths (FD) – height adjustable

Dimensions [mm]										
GA [kg]	ZOV 0.75-B	ZOV 1.2-B	ZAA 1.3-1	ZAA 2.0-1	ZAA 3.5-1	ZKV 13-A	ZKV 13-B	ZKV 20-A	ZKV 20-B	ZKV 25-B
1950				1665	4100			1975	1685	3940
2000				1620	4000			1900	1605	3830
2050					3900					3740
2100					3810					3640
2150					3720					3550
2200					3640					3470
2250					3560					3390
2300					3480					3310
2350					3410					3240
2400					3340					3170
2450					3270					3100
2500					3200					3030
2550					3140					2970
2600					3080					2910
2650					3020					2850
2700					2960					2820
2750					2910					
2800					2860					
2850					2810					
2900					2760					
2950					2710					
3000					2670					
3050					2620					
3100					2580					
3150					2540					
3200					2500					
3250					2460					
3300					2420					
3350					2390					
3400					2350					
3450					2320					
3500					2290					

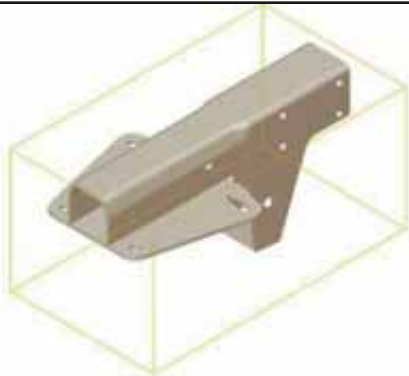
[Technical information]



ZKV 25-D	ZKV 35-B	ZRV 13 Drawbar tube offset up to 188 mm	ZRV 13 Drawbar tube offset up to 262 mm	ZRV 20-B Straight drawbar tube	ZRV 20-B Offset drawbar tube	ZAV 1.6-5	ZAV 2.0-5	ZAV 2.7-4	ZAV 3.5-1
3880				2335	2105		3200	3500	
3770				2275	2020		3100	3500	
3680								3500	
3580								3500	
3490								3500	
3390								3500	
3280								3500	
3180								3500	
3080								3500	
2990								3500	
2900								3500	
2810	4340							3500	3500
2730	4260							3500	3500
2650	4170							3500	3500
2570	4090							3500	3500
2520	4010							3500	3500
	3930								3500
	3860								3500
	3790								3500
	3720								3500
	3650								3500
	3590								3500
	3530								3500
	3470								3500
	3410								3500
	3350								3500
	3300								3500
	3240								3500
	3190								3500
	3140								3500
	3100								3500
	3050								3500

5. Development partnerships/services

Successful development partnerships are nothing new to us at BPW. To ensure that running gear designs are created for specific models with the highest levels of driving comfort and safety, we sit down with the vehicle manufacturer first and define the specifications. Only then do we start the design. If you like, we can test each chassis until it is ready for series production. We can draw up a load profile for new developments on request. We drive across off-road terrain to establish the limits of the static and alternating loads. We ascertain the yaw moment of inertia, which means the moment of inertia of the trailer about its vertical axis. And we drive on individual routes to test how well the running gear and the body are harmonised. We optimise and document everything down to the last detail. The result: Chassis and performance characteristics which comply with all national regulations and laws. With BPW, everyone plays it safe.



BPW engineering



BPW measuring instruments



BPW laboratory tests



BPW road tests



**Together, we're better.
We've been living this philosophy for
more than a century.**

Each and every chassis from BPW benefits from more than a century of experience. And it is suitable for an extremely wide range of applications. You can take this as read. And you can be equally confident that we will come up with solutions for unusual requirements as well. For every situation, we can offer optimum driving characteristics.

It is the expert staff at BPW and their co-operation with customers that make partnerships between vehicle manufacturers and BPW so valuable. Relations are characterised by an open dialog with the objective of meeting all the criteria, demands and requirements in the specifications to an optimum degree. That also means thinking about economic efficiency, subsequent servicing and serviceability. And that's where BPW really comes into its own – both in terms of specifics and generalities.



The best starting point for an optimum chassis: BPW consultants know their technology, the industry and their customers.





[Rolf Ehrenguber, CEO of Gelber Blitz Furniture Movers]: "In my furniture delivery business, I use an inclined conveyor which can be deployed up to 20 metres – and that's no mean feat for the chassis. For driving, the lift transforms into a long vehicle, which I've got to be able to tow safely – and I can. In my work too, the BPW chassis forms a mobile base which is equal to any challenge."



[Wolfgang Koch, building contractor]: "As a building contractor, I've often got to have a machine available at several sites. That's when mobility really pays off. As a result, we need reliable trailers for our construction machinery. They've got to be especially robust and they also need to take cope with some rough ground from time to time."



[Dirk Scholz, CEO of Scholz Automotive Repairs]: "For me, getting a job is very dependent on how quickly I can carry out the service or a repair. With BPW, I've got a partner who enables me to provide assistance quickly at all times. As well as the quality of their products, the excellent availability of spare parts is a particular strength of BPW."



[Volker Koch, Technical Director of Johanniter Emergency Services]: "Johanniter are renowned for acting quickly. When we get a call out, we transport our heavy rescue equipment on the trailer. We have to work fast, so vehicles are often swapped around. That's where BPW's adjustable height connecting assembly comes into its own. It's just as fast as our team."

A company that builds running gear systems for the world market must be available to its customers worldwide.



BPW Service keeps you moving wherever you may be. It's available worldwide.



For running gear technology without any weakness – Always fit genuine BPW spare parts and be on the safe side.

Our products are driven all over the world. As a result, it's natural for us to be represented globally through our production facilities, sales subsidiaries, branches and dealerships. Wherever you see BPW running gear in service, there's a BPW agent close at hand who speaks your language and is ready to help you. You can find out where your local contact is by visiting www.bpw.de on the Internet.

Service starts at BPW even before our products reach their customers. Product training courses, analyses of global and local market trends and development of products to set new standards – BPW will keep you out in front. This also applies to our delivery performance: With our modern Logistics Centre we deliver products precisely in line with our customers' production requirements. And parts logistics ensures levels of availability which are unparalleled anywhere else in the industry.



To ensure high levels of availability, we use the latest technology in the BPW Logistics Centre and we're constantly optimising our processes in line with the latest developments.



There's one thing that's understood everywhere. **BPW** quality.

Where does quality begin? It begins with targeted development and design, which includes the setting of quality standards. The next link in the quality chain is the production operation itself. Here, BPW employs the very latest methods, such as, for example, laser-cutting technology. This precision is something you simply have to experience – with running gear engineering from BPW.



The home of well thought-out system solutions: The parent plant in Wiehl, Bergische Land, with its research and development centre.

The plant in Paderborn: A fully owned subsidiary producing 100% BPW quality – to internationally acknowledged standards.





Where does quality stop? According to us certainly not at international audits. The recent certification to ISO/TS 16949, standards from the automotive industry, are the worlds hardest to attain. This singular attitude to quality by BPW continues by way of an “After Sales Service” that offers product training for those whose work it is to provide the customer with the highest service quality worldwide.



The production by BPW has evolved with over 100 years experience in chassis technology.

WAG Büren Production facility with ultra-modern sheet metal processing facility.





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