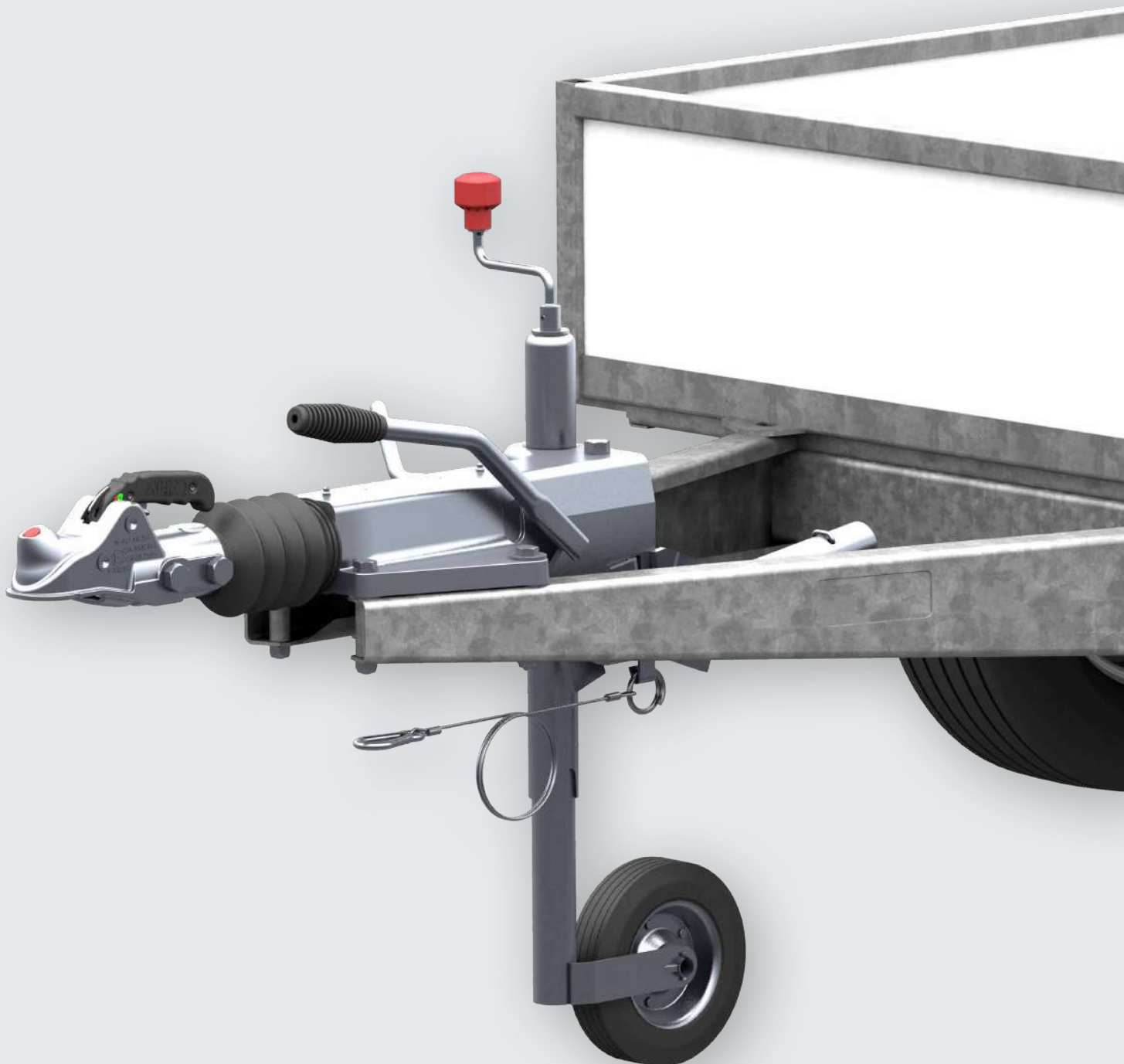


## CAST OVERRUN DEVICES





# MERGER TO FORM DEXKO GLOBAL INC.

MERGER OF DEXTER AND AL-KO VEHICLE TECHNOLOGY:  
TOGETHER IS BETTER!

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**DE><KO**  
G L O B A L



With DexKo Global Inc., we are on an expansion course around the world. We are a global market leader in our core business fields.

Last but not least, the merger with Dexter Axle shows that we think in long-term cycles and are actively shaping our commercial future with healthy growth.

The image that we have built for ourselves over a period of decades makes us the primary contact in all our business fields today.

With our strong brands, we are one of the designers of the mobile future.



# THE AL-KO BRAND



## BRAND IDENTITY

Safety, comfort and joy are the aims of our work. Factors that are reflected in the brand itself as well as in all of our products. We love quality, we live quality. Ultimately, we have dedicated ourselves to a highly emotional message: to improve our customers' quality of life a little bit every day. This is what we at AL-KO Vehicle Technology mean by QUALITY FOR LIFE.

# AL-KO VEHICLE TECHNOLOGY AND ITS BRANDS



The Bradley brand stands for the highest levels of quality and safety, and thus slots seamlessly into the AL-KO brand promise. Outstanding constructions, extreme robustness, high longevity. And more than 90 years of experience in towing hitches and coupling components.

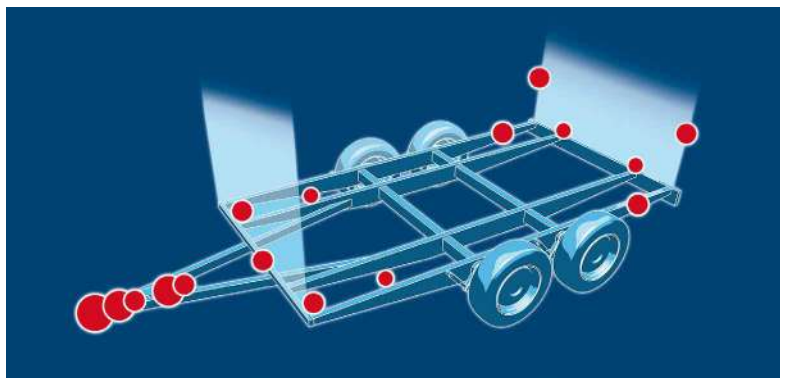


The name Sawiko is well-known in the motorhome market. It stands for expertise, innovative power, premium service and mobility for virtually every caravan and/or every lightweight commercial vehicle. The specialist in carrier systems for carrying bicycles, scooters, motorcycles, etc. delivers quality products that are produced in Germany as far as possible. "Made in Germany" at its best.



**WINTERHOFF**  
QUALITY TRAILER SYSTEMS

For decades, the name has been a constant on the market and fits perfectly into the AL-KO Vehicle Technology portfolio with its main focus on hitches, jockey wheels and fittings. The high Winterhoff quality is based on many years of experience, reliable employees, modern manufacture and perfect quality management, and guarantees exceptional value for money.



The E & P Hydraulics brand develops, manufactures and sells hydraulic leveling systems for motorhomes, caravans and commercial vehicles. Quality, reliability, durability and performance is at the forefront of everything they do. The high-precision technology offers a solution for almost every recreational vehicle.

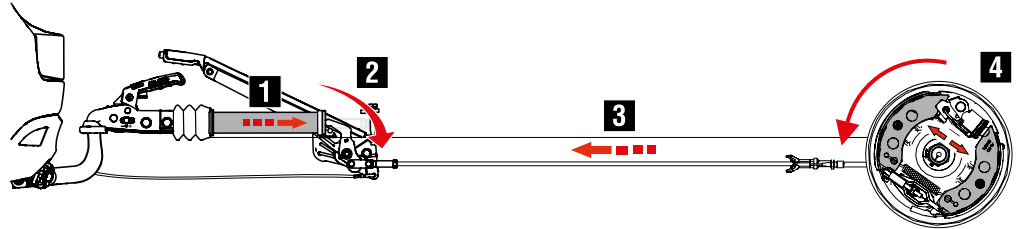


# OVERRUN DEVICES

## AL-KO brake system

### TECHNOLOGY

- 1 Pull bar (pushing force)
- 2 Reversal
- 3 Tensile force
- 4 Wheel brake



### Function of the overrun device

The overrun device can be designated as the control unit of the overrun brake system. Braking the towing vehicle generates a drawbar force at the coupling point. Once the response threshold has been exceeded, the pull bar is pushed in and the relay lever is actuated at the same time; this means the wheel brake is clamped by means of the transmission device.

### Record values that go way beyond the legally prescribed limits.



#### Handbrake forwards

Regulation: The brake value must be greater than 18% (of the permitted gross weight).

**AL-KO achieves up to 30%.**



#### Breakaway brake (emergency brake)

Regulation: The brake value must be greater than 18% (of the permitted gross weight).

**AL-KO achieves up to 20%.**



#### Handbrake backwards

Regulation: The brake value must be greater than 18% (of the permitted gross weight).

**AL-KO achieves up to 60%.**

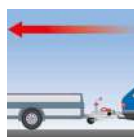


#### Backwards roll stop by the integrated servo stop in the wheel brake.

The handbrake lever is automatically clamped further with the trailer on an up-slope, thereby compensating for an incompletely applied handbrake.

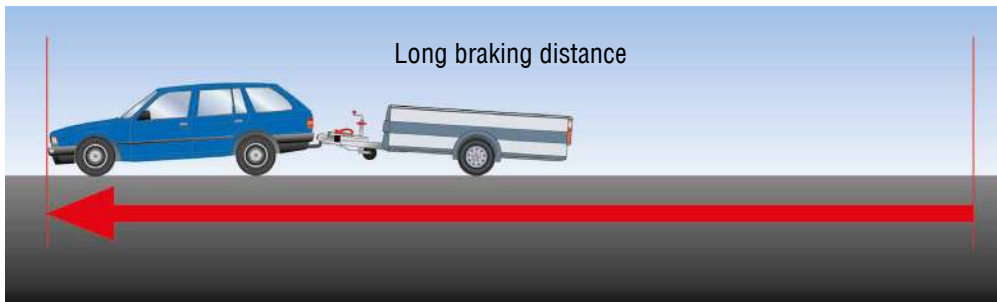


**Automatic reverse with minimum residual braking force.** The maximum permitted residual braking force backwards is 8% (of the permitted gross weight).  
**The AL-KO brake system has a minimum residual braking force of approx. 1%.**



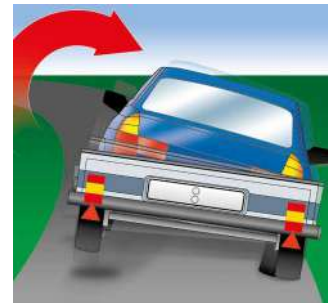
## AL-KO brake systems for trailers – the comparison reveals the difference!

### Test unbraked



#### What does unbraked mean?

The trailer does not have its own brakes, i.e. the necessary braking effort for the trailer must be provided by the towing vehicle in full.



The test vehicle combination with an unbraked trailer loses traction during emergency braking on a corner, skids and cannot be controlled.

### Test braked



The test vehicle combination with a braked trailer remains **precisely in the track on a bend, even during emergency braking.**

Vehicle combination unbraked	Vehicle combination braked	Result
<b>Braking distance</b>		
53.50 m	45.50 m	The test vehicle combination with a braked trailer would thus have a braked distance shorter by <b>approx. 8 m (17%) at 90 km/h!</b>
<b>Braking deceleration</b>		
6.46 m/s <sup>2</sup>	8.52 m/s <sup>2</sup>	The test vehicle combination with a braked trailer decelerates more, i.e. it comes to a halt <b>approx. 25% sooner!</b>

**These braking values are achieved with completely run-in linings with a 100% contact area.**

### CONCLUSION

Safety for everyone using public roads has to take top priority. No compromises are allowed here. Consequently, AL-KO recommends **braked** trailers.

# EUROPEAN HYDRATOW (EH)

## Cast overrun device EH 09



**NET weight**



**Small packaging**



**Large packaging**



**Delivery time in working days**

**SAP:** AE KPL V EH09 AK301 DREHB

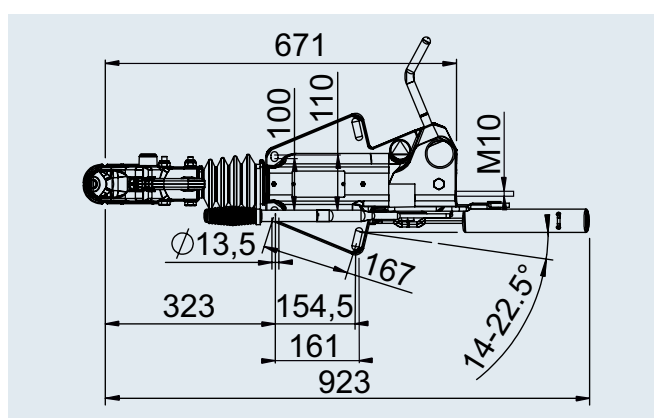
Order no.	Type	Total weight in kg	Imposed load in kg	Drawbar installation version	Changeover relay lever	Can be combined with wheel brake	For jockey wheel	Hitch mounted				
1 731 477	EH09	450 – 900	100	top / bottom	no	Bradley / Knott	Ø 48	AK 301	21	–	16	20
1 732 322	EH09	450 – 900	100	top / bottom	no	1637 / 2051	Ø 48	AK 301	21	–	16	20

**ECE test report no.**

Overrun device: R13: CD97/001

**ECE type approval no.**

Drawbar installation: R55: 55R-01 10349



**SAP:** AE KPL V EH09 DREHB

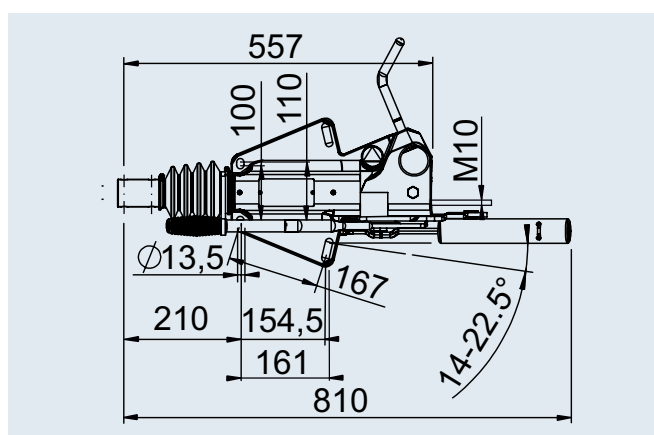
Order no.	Type	Total weight in kg	Imposed load in kg	Drawbar installation version	Changeover relay lever	Can be combined with wheel brake	For jockey wheel	Drawbar eye mounted				
1 732 321	EH09	450 – 900	100	top / bottom	no	Bradley / Knott	Ø 48	–	20	–	16	20
1 732 320	EH09	450 – 900	100	top / bottom	no	1637 / 2051	Ø 48	–	20	–	16	20

**ECE test report no.**

Overrun device: R13: CD97/001

**ECE type approval no.**

Drawbar installation: R55: 55R-01 10349



# EUROPEAN HYDRATOW (EH)

## Cast overrun device EH 14

SAP: AE KPL V EH14 AK301 DREHB

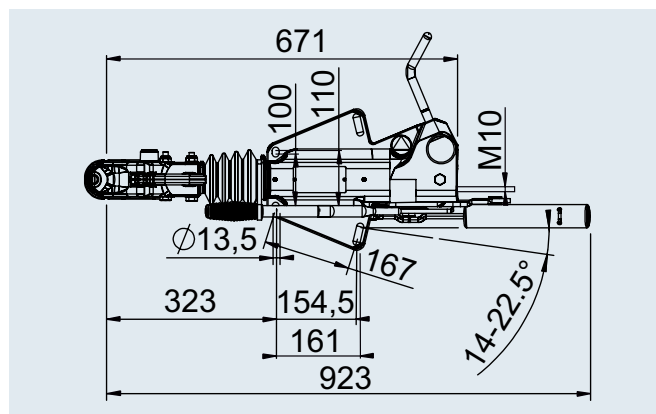
Order no.	Type	Total weight in kg	Imposed load in kg	Drawbar installation version	Changeover relay lever	Can be combined with wheel brake	For jockey wheel	Hitch mounted				
1 731 478	EH 14	700 – 1,400	160	top / bottom	no	Bradley / Knott	Ø 48	AK 301	21	–	16	20
1 732 327	EH 14	700 – 1,400	160	top / bottom	no	1637 / 2051	Ø 48	AK 301	21	–	16	20
1 731 667	EH 14	700 – 1,400	160	top / bottom	no	2361	Ø 48	AK 301	21	–	16	20

ECE test report no.

Overrun device: R13: CD97/002

ECE type approval no.

Drawbar installation: R55: 55R-01 10349



SAP: AE KPL V EH14 DREHB

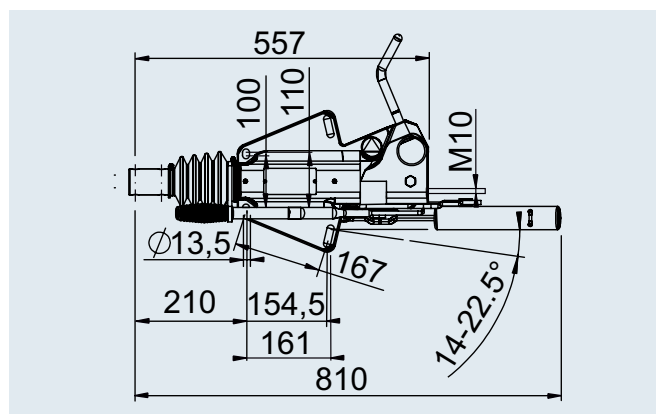
Order no.	Type	Total weight in kg	Imposed load in kg	Drawbar installation version	Changeover relay lever	Can be combined with wheel brake	For jockey wheel	Hitch mounted				
1 732 326	EH 14	700 – 1,400	160	top / bottom	no	Bradley / Knott	Ø 48	–	20	–	16	20
1 732 325	EH 14	700 – 1,400	160	top / bottom	no	1637 / 2051	Ø 48	–	20	–	16	20
1 731 695	EH 14	700 – 1,400	160	top / bottom	no	2361	Ø 48	–	20	–	16	20

ECE test report no.

Overrun device: R13: CD97/002

ECE type approval no.





Drawbar installation: R55: 55R-01 10349



# EUROPEAN HYDRATOW (EH)

## Cast overrun device EH 17

**SAP:** AE KPL V EH17 AK301 DREHB

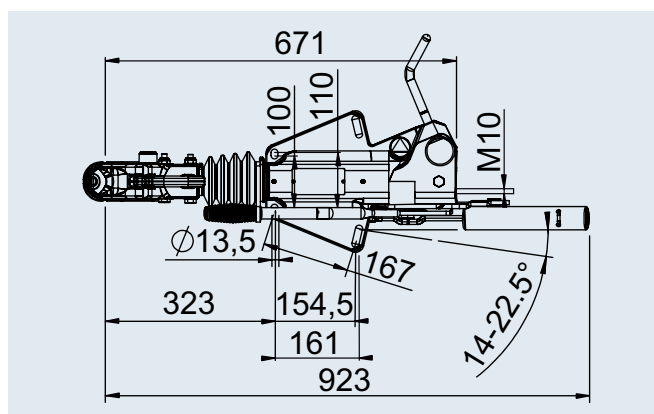
Order no.	Type	Total weight in kg	Imposed load in kg	Drawbar installation version	Changeover relay lever	Can be combined with wheel brake	For jockey wheel	Hitch mounted				
1 731 480	EH 17	850 – 1,700	190	top / bottom	no	Bradley / Knott	Ø 48	AK 301	22	–	16	20
1 732 333	EH 17	850 – 1,700	190	top / bottom	no	1637 / 2051	Ø 48	AK 301	22	–	16	20
1 732 334	EH 17	850 – 1,700	190	top / bottom	no	2361	Ø 48	AK 301	22	–	16	20

**ECE test report no.**





Overrun device: R13: CD97/003

**ECE type approval no.**

Drawbar installation: R55: 55R-01 10349



**SAP:** AE KPL V EH17 DREHB

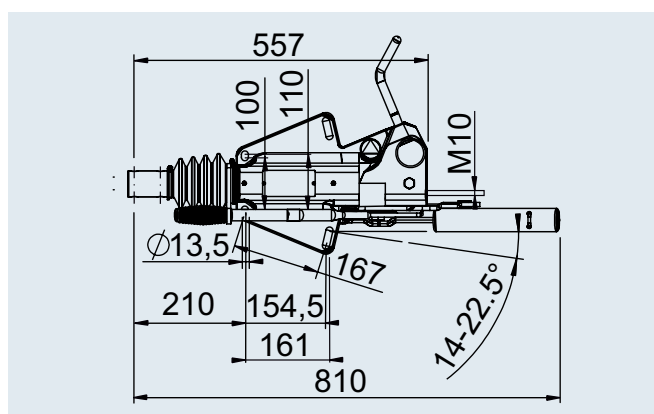
Order no.	Type	Total weight in kg	Imposed load in kg	Drawbar installation version	Changeover relay lever	Can be combined with wheel brake	For jockey wheel	Hitch mounted				
1 732 331	EH 17	850 – 1,700	190	top / bottom	no	Bradley / Knott	Ø 48	–	20	–	16	20
1 732 330	EH 17	850 – 1,700	190	top / bottom	no	1637 / 2051	Ø 48	–	20	–	16	20
1 732 332	EH 17	850 – 1,700	190	top / bottom	no	2361	Ø 48	–	20	–	16	20

**ECE test report no.**

Overrun device: R13: CD97/003

**ECE type approval no.**

Drawbar installation: R55: 55R-01 10349



# EUROPEAN HYDRATOW (EH)

## Cast overrun device EH 20

SAP: AE KPL V EH20 AK301 DREHB

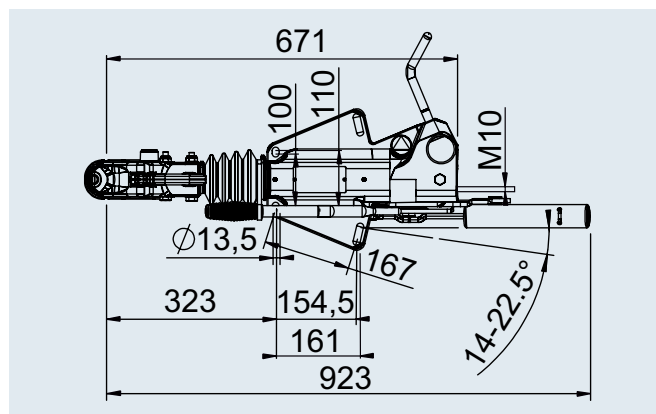
Order no.	Type	Total weight in kg	Imposed load in kg	Drawbar installation version	Changeover relay lever	Can be combined with wheel brake	For jockey wheel	Hitch mounted				
1 731 466	EH20	1,075 – 2,000	225	top / bottom	no	Bradley / Knott	Ø 48	AK 301	22	–	16	20
1 732 341	EH20	1,075 – 2,000	225	top / bottom	no	1637 / 2051	Ø 48	AK 301	22	–	16	20
1 732 342	EH20	1,075 – 2,000	225	top / bottom	no	2361	Ø 48	AK 301	22	–	16	20

ECE test report no.

Overrun device: R13: CD97/004

ECE type approval no.

Drawbar installation: R55: 55R-01 10349



SAP: AE KPL V EH20 DREHB

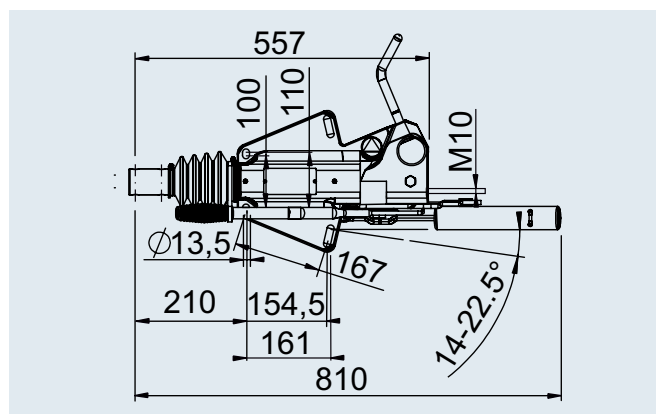
Order no.	Type	Total weight in kg	Imposed load in kg	Drawbar installation version	Changeover relay lever	Can be combined with wheel brake	For jockey wheel	Hitch mounted				
1 732 339	EH20	1,075 – 2,000	225	top / bottom	no	Bradley / Knott	Ø 48	–	20	–	16	20
1 732 338	EH20	1,075 – 2,000	225	top / bottom	no	1637 / 2051	Ø 48	–	20	–	16	20
1 732 340	EH20	1,075 – 2,000	225	top / bottom	no	2361	Ø 48	–	20	–	16	20

ECE test report no.

Overrun device: R13: CD97/004

ECE type approval no.





Drawbar installation: R55: 55R-01 10349



# EUROPEAN HYDRATOW (EH)

## Cast overrun device EH 27

**SAP:** AE KPL V EH27 AK301 DREHB

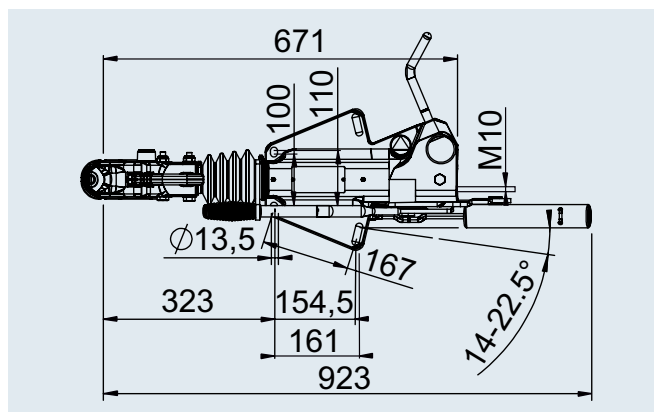
Order no.	Type	Total weight in kg	Imposed load in kg	Drawbar installation version	Changeover relay lever	Can be combined with wheel brake	For jockey wheel	Hitch mounted				
1 731 470	EH27	1,650 – 2,750	300	top / bottom	no	Bradley / Knott	Ø 48	AK 301	22	–	16	20
1 732 349	EH27	1,650 – 2,750	300	top / bottom	no	1637 / 2051	Ø 48	AK 301	22	–	16	20
1 732 350	EH27	1,650 – 2,750	300	top / bottom	no	2361	Ø 48	AK 301	22	–	16	20

**ECE test report no.**





Overrun device: R13: CD97/005

**ECE type approval no.**

Drawbar installation: R55: 55R-01 10349



**SAP:** AE KPL V EH27 DREHB

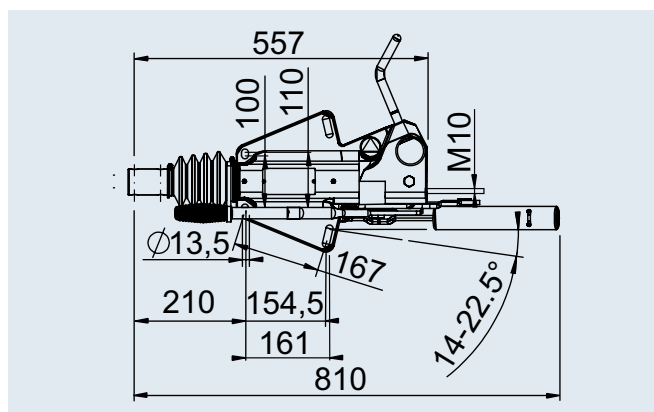
Order no.	Type	Total weight in kg	Imposed load in kg	Drawbar installation version	Changeover relay lever	Can be combined with wheel brake	For jockey wheel	Hitch mounted				
1 732 347	EH27	1,650 – 2,750	300	top / bottom	no	Bradley / Knott	Ø 48	–	20	–	16	20
1 732 346	EH27	1,650 – 2,750	300	top / bottom	no	1637 / 2051	Ø 48	–	20	–	16	20
1 732 348	EH27	1,650 – 2,750	300	top / bottom	no	2361	Ø 48	–	20	–	16	20

**ECE test report no.**

Overrun device: R13: CD97/005

**ECE type approval no.**

Drawbar installation: R55: 55R-01 10349



# EUROPEAN HYDRATOW (EH)

## Cast overrun device EH 35

SAP: AE KPL V EH35 AK351 DREHB

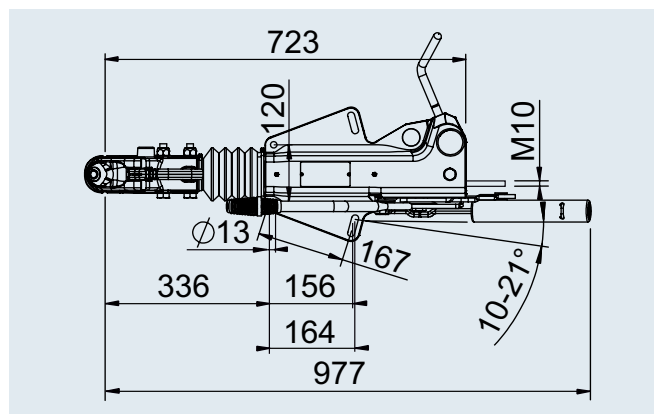
Order no.	Type	Total weight in kg	Imposed load in kg	Drawbar installation version	Changeover relay lever	Can be combined with wheel brake	For jockey wheel	Hitch mounted				
1 731 472	EH35	2,250 – 3,500	350	top / bottom	no	Bradley / Knott	Ø 48	AK 351	28	–	16	20
1 732 357	EH35	2,250 – 3,500	350	top / bottom	no	1637 / 2051	Ø 48	AK 351	28	–	16	20
1 732 358	EH35	2,250 – 3,500	350	top / bottom	no	2361	Ø 48	AK 351	28	–	16	20

ECE test report no.

Overrun device: R13: CD97/006

ECE type approval no.

Drawbar installation: R55: 55R-01 0373



SAP: AE KPL V EH35 DREHB

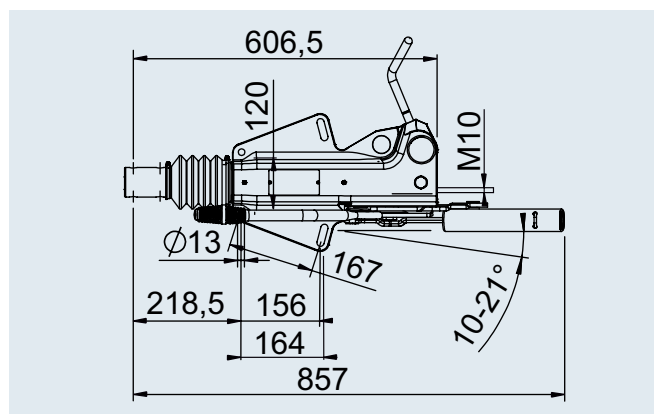
Order no.	Type	Total weight in kg	Imposed load in kg	Drawbar installation version	Changeover relay lever	Can be combined with wheel brake	For jockey wheel	Hitch mounted				
1 732 356	EH35	2,250 – 3,500	350	top / bottom	no	Bradley / Knott	Ø 48	–	20	–	16	20
1 732 354	EH35	2,250 – 3,500	350	top / bottom	no	1637 / 2051	Ø 48	–	20	–	16	20
1 732 355	EH35	2,250 – 3,500	350	top / bottom	no	2361	Ø 48	–	20	–	16	20

ECE test report no.

Overrun device: R13: CD97/006

ECE type approval no.

Drawbar installation: R55: 55R-01 0373





**ALOIS KOBER GMBH**

Ichtenhauser Straße 14  
89359 Kötz

Germany

Phone +49 8221 97-0

[info@alko-tech.com](mailto:info@alko-tech.com)

**[www.alko-tech.com](http://www.alko-tech.com)**

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