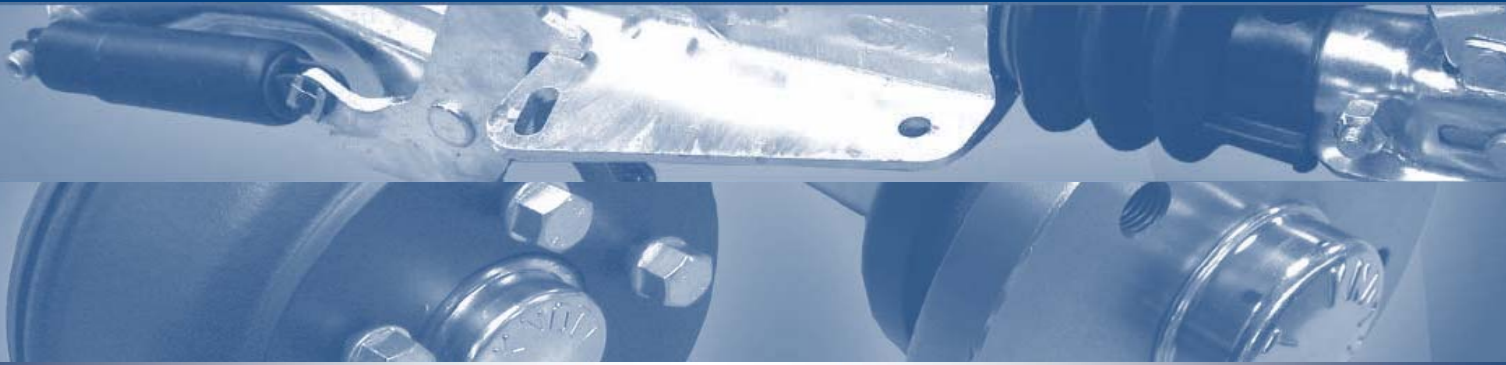


TECHNOLOGY • PRODUCTS • SERVICE...

KNOTT-AVONRIDE
LIMITED 



Trailer Components & Accessories

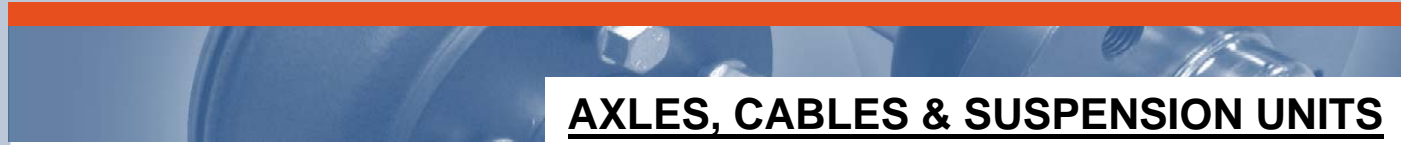


...THE COMPLETE PACKAGE!



COUPLINGS

Coupling Assemblies	1	Coupling Spares KF7—KFGL35	4
Coupling Heads & Eyes	2	Coupling Spares KRV7,5—KRV35	5
Coupling Spares KFG13—KFG35	3	Coupling Components	6



AXLES, CABLES & SUSPENSION UNITS

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Axle Assemblies Braked 1000kg—1500kg	8-9	Spreadlever Auto Reverse Brake	16
Axle Assemblies Braked 1800kg	10-11	Spreadlever Automatic Adjusting Brake	17
Suspension Units	12	Hubs	18-19
Brake Cables	13-14		



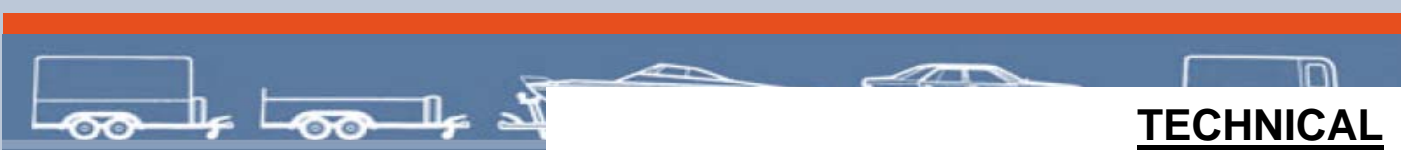
JOCKEYS, PROPS & BRACKETS

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ANCILLARIES

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TECHNOLOGY • PRODUCTS • SERVICE...



KNOTT-AVONRIDE LIMITED

JOCKEY WHEELS, PROPSTANDS & BRACKETS

ANCILLARIES

...THE COMPLETE PACKAGE!

Company Profile



Knott-Avonride Ltd was established in the UK in 1983, for the manufacture and supply of brakes, couplings, brake cables and jockey wheels for trailers, caravans and off-road vehicles. Since then we have expanded our range of products and services to suit individual customer requirements.

We take pride in being reliable and friendly in day-to-day dealings; we know that it is important to develop a good working relationship with our customers in order to discuss and develop their requirements.

The company is ISO 9001:2008 certified and committed to the introduction of new technology and techniques that will enable us to be more efficient, develop the product range, and address legislative requirements in Europe and Worldwide.



Quality Policy

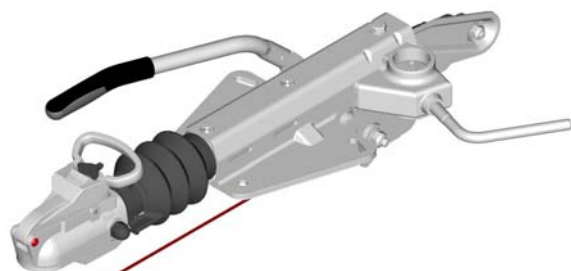
It is the policy of Knott-Avonride Ltd to provide its customers with high quality products, complying with regulations, on time delivery, and ever improving levels of satisfaction. Knott-Avonride Ltd is committed to comply with requirements of its QMS through the continual improvement of its products, services, and the company itself, by process control, employee involvement and management commitment.

If you have any thoughts, recommendations or suggestions as to how we can improve our products and services, please do not hesitate to contact us.





Pressed Steel Delta



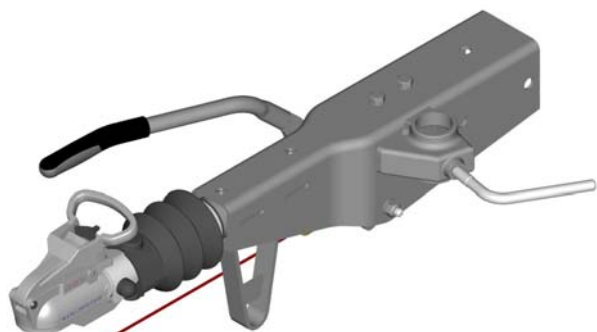
Type	Capacity (kg)	Part Number*	Centres (mm)
KF7,5	375 - 750	KPB7AOD	110/120
KF13	750 - 1300	KPB13AOD	110/120
KF17	1100 - 1700	KPB17AOD	110/120
KF20	1100 - 2000	KPB20AOD	110/120
KF27	1400 - 2700	KPB27AO110/120D	110/120
KFGL35	2700 - 3500	204509.002	120/140

Cast Delta



Type	Capacity (kg)	Part Number*	Centres (mm)
KFG13	750 - 1300	KCB13AOD	100
KFG13	750 - 1300	KCB13AO120D	120
KFG20	1100 - 2000	KCB20AOD	100
KFG20	1100 - 2000	KCB20AO120D	120
KFG27	1400 - 2700	KCB27AOD	100
KFG27	1400 - 2700	KCB27AO120D	120
KFG30	1600 - 3000	KCB30AOD	100
KFG30	1600 - 3000	KCB30AO120D	120
KFG35	2700 - 3500	KCB35AOD	120

Pressed Steel Square Tube



Type	Capacity (kg)	Part Number*	Size
KRV7,5	375 - 750	KSB7AO6D	□ 60
KRV7,5	375 - 750	KSB7AO7D	□ 70
KRV13	750 - 1300	KSB13AO6D	□ 60
KRV13	750 - 1300	KSB13AO7D	□ 70
KRV17	1100 - 1700	KSB17AO7D	□ 70
KRV20	1100 - 2000	KSB20AO8D	□ 80
KRV20	1100 - 2000	KSB20AO10D	□ 100
KRV30	1600 - 3000	KSB30AO8D	□ 80
KRV30	1600 - 3000	KSB30AO10D	□ 100
KRV35	2700 - 3500	501084.007	□ 120

* Fitted with Avonride Cast Locking Head



All of these couplings can alternatively be supplied & fitted with:-

- ✓ Knott 50mm Pressed Steel Head (to 2T)
- ✓ Knott 50mm Head (Cast Lockable to 3,5T)
- ✓ Albe Berndes 50mm Head (Cast to 3,5T)
- ✓ 30mm UK BS EYE
- ✓ 40mm UK BS EYE
- ✓ 50.8mm UK BS EYE
- ✓ 76mm NATO EYE

And to special order for export trailers Ø68 French & Ø40 DIN Eyes.



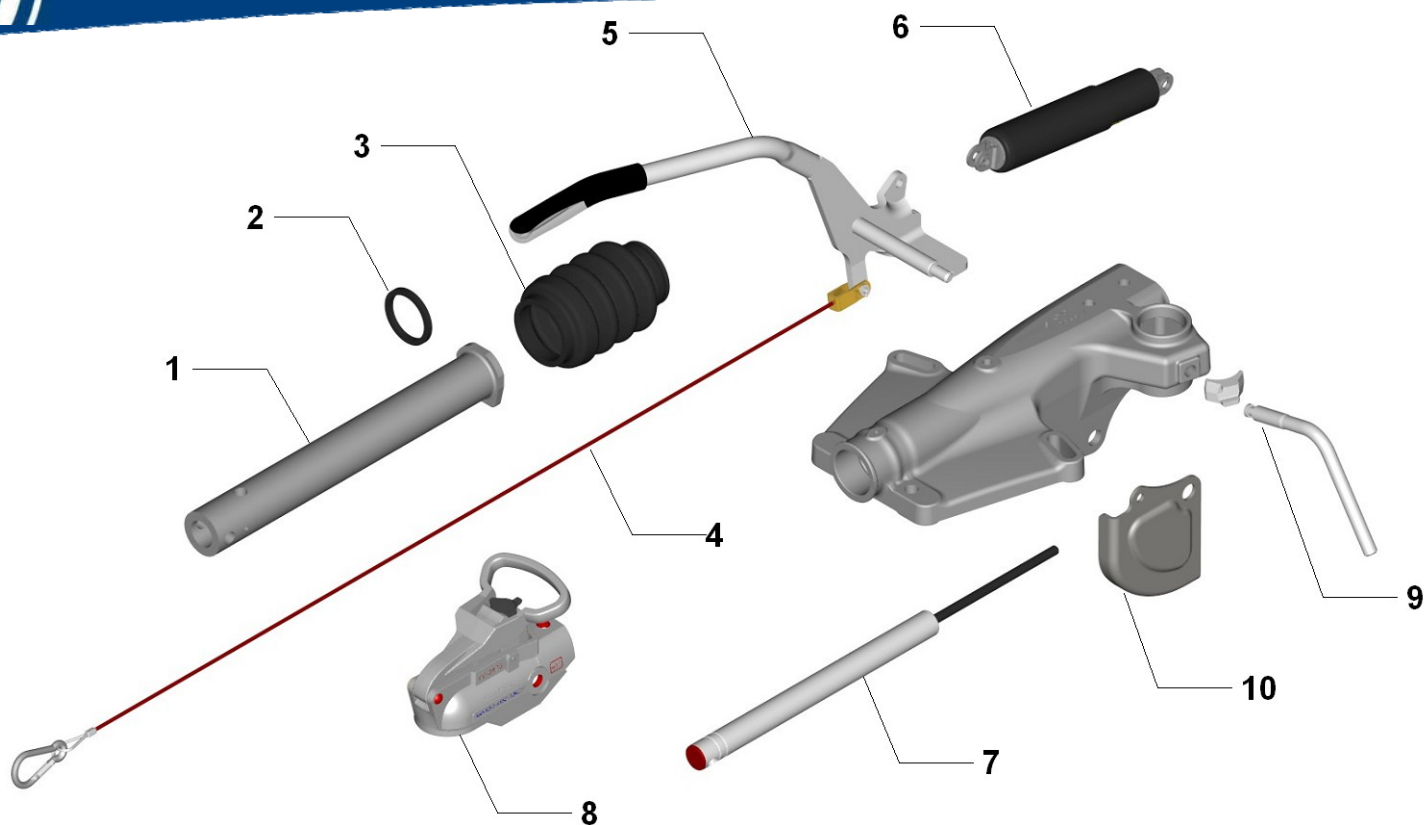


Type	Fitting	Part Number	Applications
	Ø 45, M12/M12	575003	KF7,5 - 20, KFG13 - 20 & KRV7 - 20
	Ø 50, M12/M12	575003	KF27A & KFG27
	Ø 50, M12/M14	575005	KFG30 & KRV30
	Ø 50, M14/M14	575008	KF27B, KFG30 & KRV30
	Ø 60, M14/M14	575004	KFG35, KFGL35 & KRV35
	□ 50 2xM12 Vertical	KQ7KVL	750kg Unbraked
	□ 60 2xM12 Vertical	KQ7LVL	750kg Unbraked
	□ 50 4xM12 Vert/Horiz	KQ14AVN2L	1400kg Unbraked
	□ 60 4 x M12 Vert/Horiz	KQ14BHN2L	1400kg Unbraked
	Ø 45 2xM12 Cross Holes	575001	KF7,5 - 13, KRV7 - 13 & KFG13
	Ø 45 2xM12 Cross Holes	575002	KF13 - 20, KRV20 & KFG20
	Ø 50, M12/M12	575023	KF27A & KFG27
	Ø 50, M14/M14	575021	KF27B, KFG30 & KRV30
	Ø 60, M14/M14	575020	KFG35, KFGL35 & KRV35
	Ø 45, M12/M12	575030.001	KF7,5 - 20, KFG13 - 20 & KRV7 - 20
	Ø 50, M12/M12	575030.004	KF27A & KFG27
	Ø 50, M12/M14	575030.002	KFG30 & KRV30
	Ø 50, M14/M14	575030.005	KF27B, KFG30 & KRV30
	Ø 60, M14/M14	575030.003	KFG35, KFGL35 & KRV35
	Ø 45, M12/M12	575040.001	KF7,5 - 20, KFG13 - 20 & KRV7 - 20
	Ø 50, M12/M12	575040.004	KF27A & KFG27
	Ø 50, M12/M14	575040.002	KFG30 & KRV30
	Ø 50, M14/M14	575040.005	KF27B, KFG30 & KRV30
	Ø 60, M14/M14	575040.003	KFG35, KFGL35 & KRV35
	Ø 45, M12/M12	575050.001	KF7,5 - 20, KFG13 - 20 & KRV7 - 20
	Ø 50, M12/M12	575050.004	KF27A & KFG27
	Ø 50, M12/M14	575050.002	KFG30 & KRV30
	Ø 50, M14/M14	575050.005	KF27B, KFG30 & KRV30
	Ø 60, M14/M14	575050.003	KFG35, KFGL35 & KRV35
	Ø 45, M12/M12	506005	KF7,5 - 20, KFG13 - 20 & KRV7 - 20
	Ø 50, M12/M12	506006	KF27A & KFG27
	Ø 50, M12/M14	506007	KFG30 & KRV30
	Ø 50, M14/M14	506014	KF27B, KFG30 & KRV30
	Ø 60, M14/M14	506008	KFG35, KFGL35 & KRV35



- ✓ 68mm "French" & 40mm DIN eyes available.
- ✓ Kits comprise of Head or Eye, Bolts, Nuts, Shaped Washer(s) & Black Cap(s). See also "Bellows" on separate sheet.

- ✓ □ For unbraked drawbars, unbraked trailers O₁. Classification limited to 750kg gross mass.
- ✓ Secondary coupling is available for use with unbraked drawbars - Part No 577007.

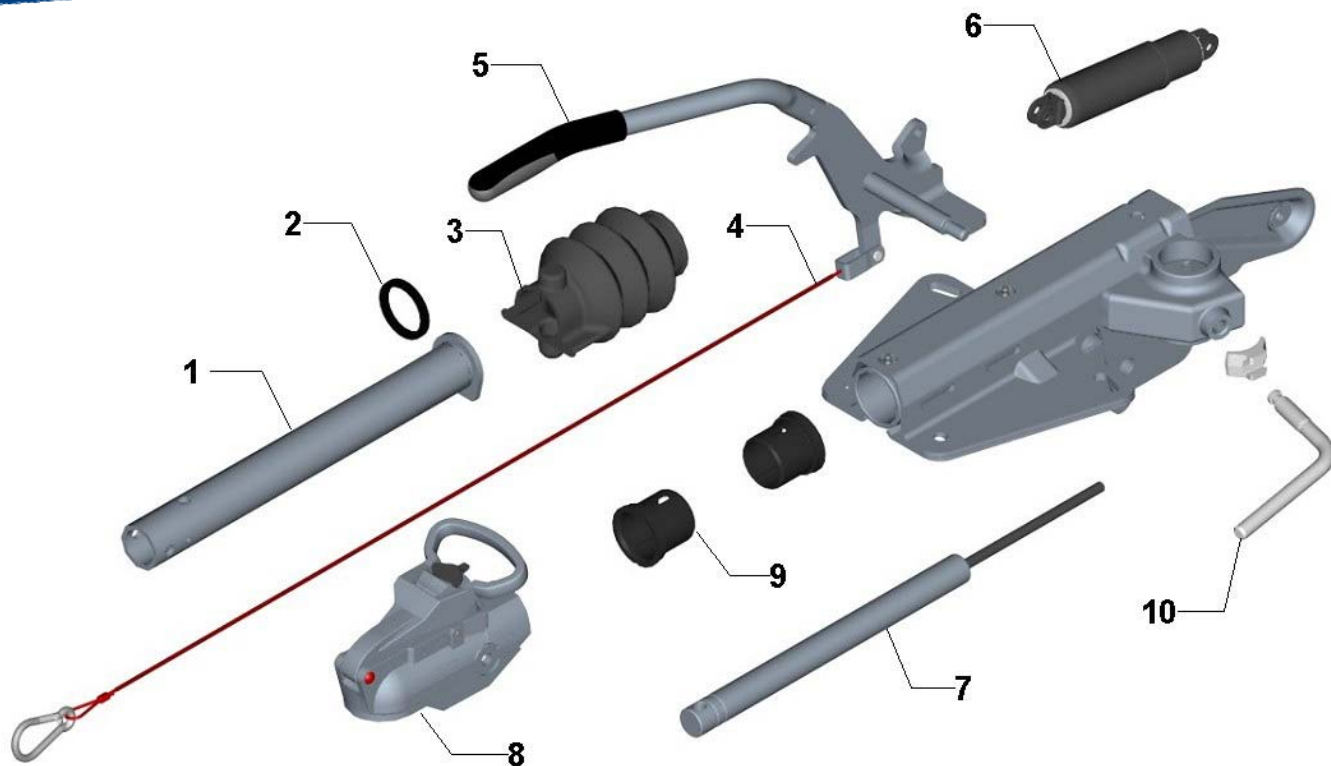


Description	To Suit	Part Number
① Drawtube	KFG13-20	9810309402
	KFG27-30 (Ø14)	202041.002
	KFG27 (Ø12)	9810389402
	KFG30 (Ø12 & Ø14)	9885759302
	KFG35	9870004402 (cross bolts)
	KFG35	203146.002 (2x horizontal bolts)
② Stopping	KFG13 - KFG30*	69001494
	KFG13 - KFG20**	206596.001 Ø45
	KFG27 - KFG30**	206596.002 Ø50
	KFG35*	69004394
	KFG35**	206596.003
③ Bellows	KFG13 - KFG30	577002 (eye)
	KFG13 - KFG30	577004 (head)
	KFG35	577005 (head)
	KFG35	577006 (eye)
④ Breakaway Cable		577001 **
		577012 *
⑤ Handbrake Assembly		6J1309.001 *
		6J1389.001 **

Description	To Suit	Part Number
⑥ Handbrake Energy Store	KFG13-20	202453.001 **
	KFG13-20	98702594 *
	KFG27-30	202453.001 **
	KFG27-30	98702694 *
	KFG35	202453.001 **
	KFG35	98702694 *
⑦ Damper	KFG13	576000
	KFG20	576001
	KFG27 (Ø12)	576002
	KFG27 (Ø14)	576005
	KFG30 (Ø12)	576006 *
⑧ Head / Eye	KFG30 (Ø14)	576007 **
	KFG35	576003
		See Page 2
⑨ Jockey Handle & Pad		577000 (short 100x130mm)
		577011 (long 150x130mm)
⑩ Skid		206593.001

* Old

** Current (as shown)

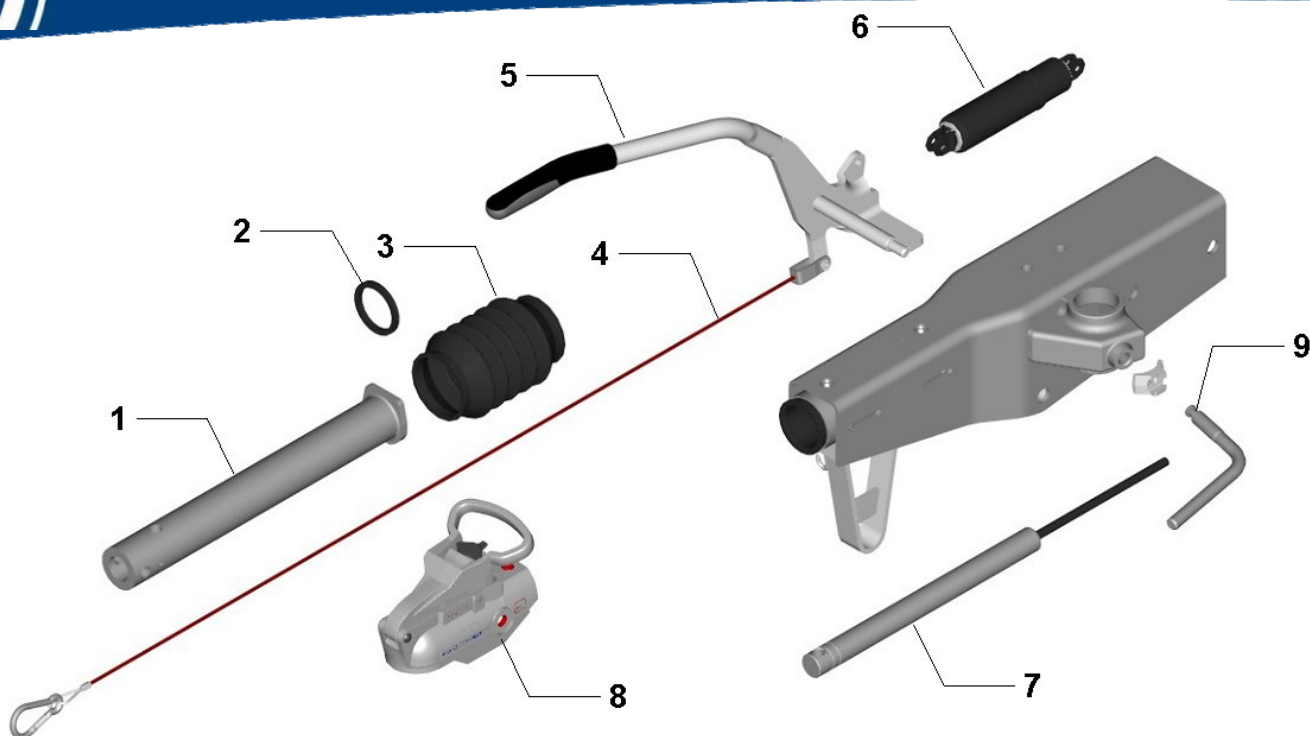


Description	To Suit	Part Number
① Drawtube	KF7-20	9810309402
	KF27 (Ø12)	9810389402
	KF27 (Ø14)	202041.002
	KFGL35	203146.002
② Stopping	KF7,5 – 27*	69001494
	KF7,5 - 20**	206596.001 Ø45
	KFGL35*	69004394
③ Bellows	KF7,5 - 27	577002
	KFGL35	577006
④ Breakaway Cable	KF7,5 – 27 & KFGL35	577001 **
		577012 *
⑤ Handbrake Assembly	KF7,5 - 20	6J1309.001 *
	KF7,5 - 20	6J1349.001 **
	KF27	6J1309.001 *
	KF27	6J1595.003 **
	KFGL35	204098.001

Description	To Suit	Part Number
⑥ Handbrake Energy Store	KF7-20	201856.001 **
	KF7-20	98702594 *
	KF27	201856.001 **
	KF27	98702694 *
	KFGL35	990029.02
⑦ Damper	KF7,5	576004
	KF13	576000
	KF20	576001
	KF27 (Ø12)	576002 *
⑧ Head / Eye	KF27 (Ø14)	576005 **
	KFGL35	576003
	See Page 2	
⑨ Clip in Bush (Started Mid '09)	KF7-20 (Ø45mm)	577009
	KF27 (Ø50mm)	577010
⑩ Jockey Handle & Pad		577000 (short 100x130mm)
		577011 (long 150x130mm)
		577015
		(XL 200x130mm)

* Old

** Current (as shown)



Description	To Suit	Part Number
① Drawtube	KRV7,5 - 20 KRV30 (Ø12 & Ø14) KRV30 (2 x Ø14) KRV35	9810309402 9885759302 202041.002 203146.002
② Stopring	KRV7,5 - 30* KRV7,5 - 20** KRV30** KRV35* KRV35**	69001494 206596.001 Ø45 206596.002 Ø50 69004394 206596.003 Ø60
③ Bellows	KRV7,5 - 30 KRV35	577002 577006
④ Breakaway Cable	KRV7,5 - 30	577001 ** 577012 *
⑤ Handbrake Assembly	KRV7,5 - 20 (60, 70 & 80 Sq) KRV20 - 30 (100 Sq) KRV35	6J1595.001 ** 6J1339.001 * 6J1595.002 ** 6J1339.001 * 204149.001
⑥ Handbrake Energy Store	KRV7 - 20 KRV7 - 20 KRV30 KRV30 KRV35	201856.001 ** 98702594 * 202453.001 ** 98702694 * 202453.001
⑦ Damper	KRV7,5 KRV13 KRV20 KRV30 (Ø12) KRV30 (Ø14) KRV35	576004 576000 576001 576006 * 576007 ** 576003
⑧ Head / Eye	See Page 2	
⑨ Jockey Handle & Pad	All	577000 (short 100x130mm) 577011 (long 150x130mm) 577015 (XL 200x130mm)

* Old

** Current (as shown)

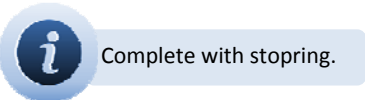


Overrun Dampers



Range (kg)	Part Number (Marking)	Applications
375 – 750	576004 (87000309)	KRV7,5, KF7,5
750 – 1400	576000 (87000709)	KRV13, KFG13 & KF13
1100 – 2000	576001 (87001109)	KRV20, KFG20 & KF20
1400 - 2700	576002 (87003109)	KFG27 & KF27A with Ø12 Hole
1400 - 2700	576005 (8700310914)	KF27B with Ø14 Hole
1600 - 3000	576006 (87003909)	KRV30 & KFG30 with Ø12 Hole
1600 - 3000	576007 (87001409-K)	KRV30 & KFG30 with Ø14 Hole
2700 - 3500	576003 (87003609)	KFG35

Drawtubes



Complete with stopring.

Fitting	Part Number	Applications
Ø45 M12/M12	9810309402	KF7,5-KF20, KRV7,5-KRV20, KFG13 & KFG20
Ø50 M12/M12	9810389402	KF27A & KFG27
Ø50 M12/M14	9885759302	KRV30 & KFG30
Ø50 M14/M14	202041.002	KF27B & KFG30
Ø60 M14/M14	9870004402	KFG35
Ø60 M14/M14	203146.002	KFG35 Horizontal Holes

Bellows



Part Number	Applications
577002	KF7,5 - KF27 & KRV13 - KRV30
577003	KF7,5 - KF27 & KRV13 - KRV30
577004	KFG13 - KFG30
577005	KFG35 Heads Only
577006	KFG35 Eyes Only

Handbrake Energy Store

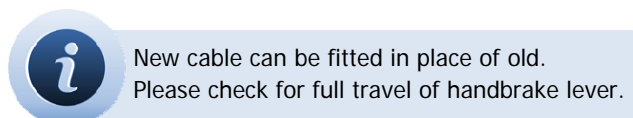


To Suit Type	Part Number	Capacity (kg)
Spring Pack Energy Store (Metal Casing)	98702594	750 - 2000
Oil Damped Energy Store (Black Plastic Casing)	98702694	2700 - 3500
Oil Damped Energy Store (Black Plastic Casing)	201856.001	KF7,5-KF27, & KRV13-KRV20
Oil Damped Energy Store (Black Plastic Casing)	202453.001	KRV30-35, KFGL35 & All KFG

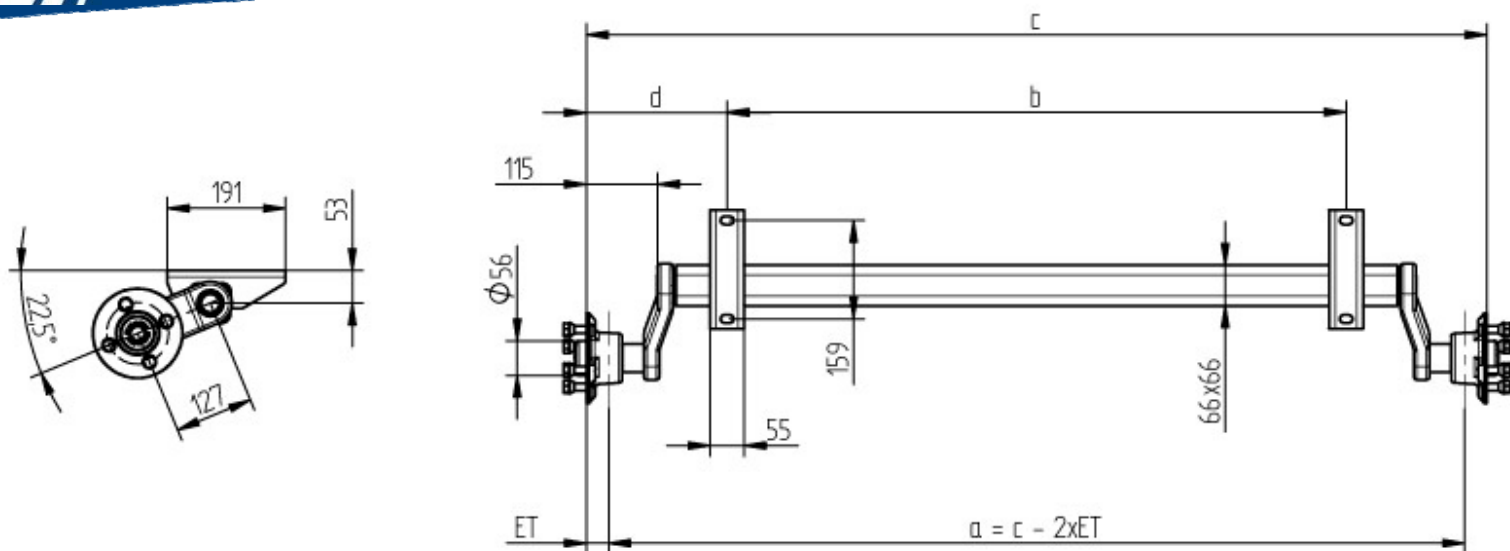
Breakaway Cable



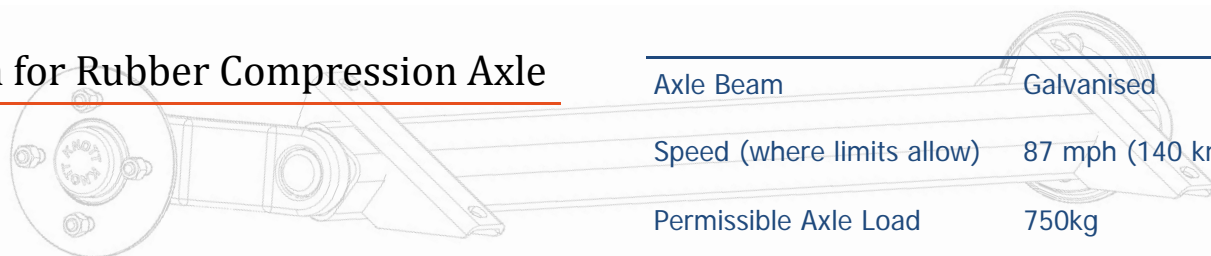
To Suit Type	Part Number
Current Oil Damped Energy Store	577001
Old Style Spring Pack	577012



New cable can be fitted in place of old. Please check for full travel of handbrake lever.



Data for Rubber Compression Axle



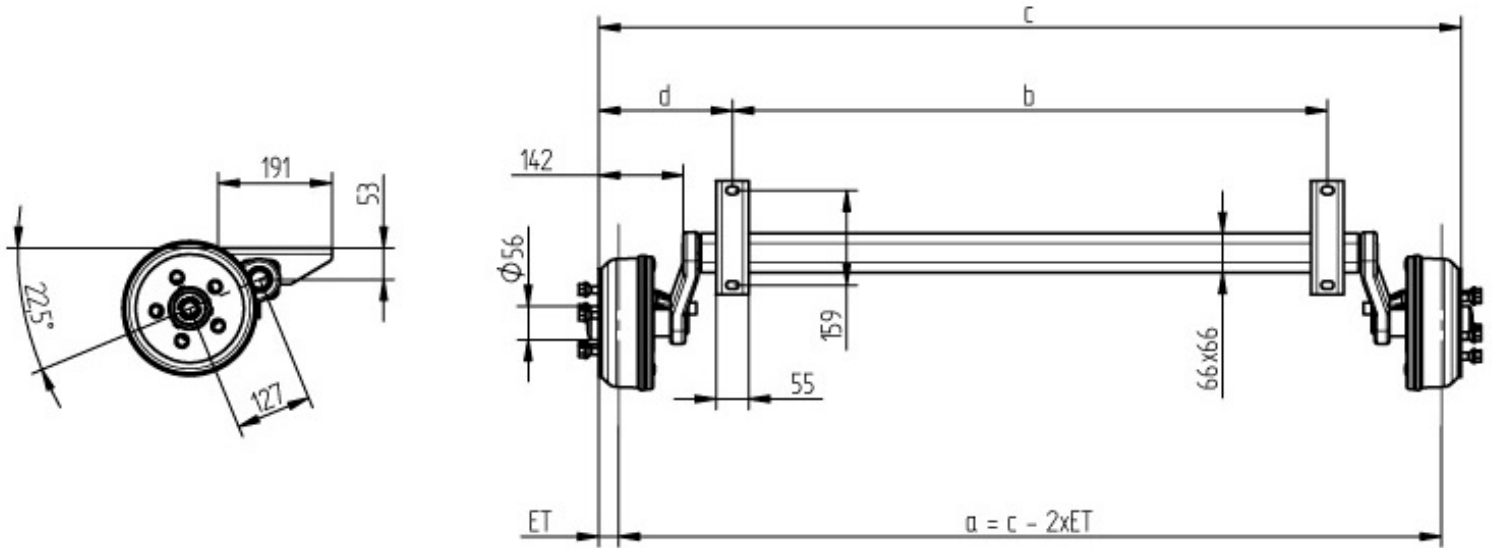
Axle Beam	Galvanised
Speed (where limits allow)	87 mph (140 kmph)
Permissible Axle Load	750kg

Type	Capacity (kg)	b	c	d ①	ET ②	PCD ③	Weight (kg)	Part Number
QB07Z	750	1000	1450	225	25 – 35	4/100 4/101.6	31	C63320.001 C63321.001
		1100	1550	225	25 – 35	4/100 4/101.6	32	C63320.002 C63321.002
		1200	1650	225	25 – 35	4/100 4/101.6	32	C63320.003 C63321.003
		1300	1750	225	25 – 35	4/100 4/101.6	33	C63320.004 C63321.004
		1400	1850	225	25 – 35	4/100 4/101.6	34	C63320.005 C63321.005
		1500	1950	225	25 – 35	4/100 4/101.6	35	C63320.006 C63321.006

① "d" minimum = 175mm

② Offset zero also available

③ Other fixing patterns available



Data for Rubber Compression Axle

Axle Beam

Galvanised

Permissible Axle Load

1000kg—1500kg

Brake Type

20-2425/1

Speed (where limits allow)

87 mph (140 kmph)

Type of Brake

200x50

Type	Capacity (kg)	b	c	d ①	ET ②	PCD ③	Weight (kg)	Part Number
QB10C	1000	1000	1450	225	25 – 35	4/100 5/112	47	C68366.001 C68367.001
		1100	1550	225	25 – 35	4/100 5/112	48	C68366.002 C68367.002
		1200	1650	225	25 – 35	4/100 5/112	49	C68366.002 C68367.002
		1300	1750	225	25 – 35	4/100 5/112	50	C68366.003 C68367.003
		1400	1850	225	25 – 35	4/100 5/112	50	C68366.004 C68367.004
		1500	1950	225	25 – 35	4/100 5/112	51	C68366.005 C68367.005
		1600	2050	225	25 – 35	4/100 5/112	52	C68366.006 C68367.006
		1700	2150	225	25 – 35	4/100 5/112	52	C68366.007 C68367.007
		1800	2250	225	25 – 35	4/100 5/112	53	C68366.008 C68367.008
		1900	2350	225	25 – 35	4/100 5/112	54	C68366.009 C68367.009

① "d" minimum = 175mm

② Offset zero also available

③ Other fixing patterns available



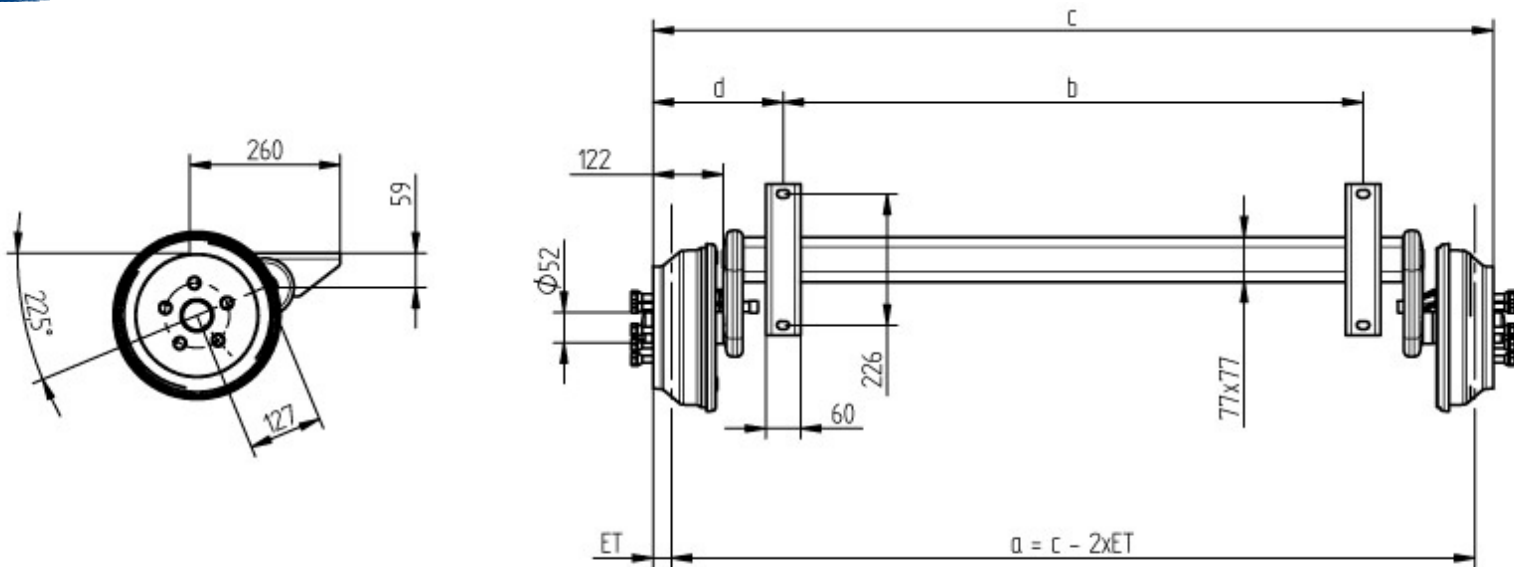
Type	Capacity (kg)	b	c	d ①	ET ②	PCD ③	Weight (kg)	Part Number
QB13C	1350	1000	1450	225	25 – 35	4/100 5/112	52	C68321.001 C68348.002
		1100	1550	225	25 – 35	4/100 5/112	53	C68321.003 C68348.004
		1200	1650	225	25 – 35	4/100 5/112	54	C68321.005 C68348.006
		1300	1750	225	25 – 35	4/100 5/112	55	C68321.007 C68348.008
		1400	1850	225	25 – 35	4/100 5/112	56	C68321.009 C68348.010
		1500	1950	225	25 – 35	4/100 5/112	57	C68321.011 C68348.012
		1600	2050	225	25 – 35	4/100 5/112	58	C68321.013 C68348.014
		1700	2150	225	25 – 35	4/100 5/112	59	C68321.015 C68348.016
		1800	2250	225	25 – 35	4/100 5/112	60	C68321.017 C68348.018
		1900	2350	225	25 – 35	4/100 5/112	61	C68321.019 C68348.020

Type	Capacity (kg)	b	c	d ①	ET ②	PCD ③	Weight (kg)	Part Number
QB15C	1500	1000	1450	225	25 – 35	4/100 5/112	55	C68321.002 C68348.003
		1100	1550	225	25 – 35	4/100 5/112	56	C68321.004 C68348.005
		1200	1650	225	25 – 35	4/100 5/112	57	C68321.006 C68348.007
		1300	1750	225	25 – 35	4/100 5/112	58	C68321.008 C68348.009
		1400	1850	225	25 – 35	4/100 5/112	59	C68321.010 C68348.011
		1500	1950	225	25 – 35	4/100 5/112	60	C68321.012 C68348.013
		1600	2050	225	25 – 35	4/100 5/112	61	C68321.014 C68348.015
		1700	2150	225	25 – 35	4/100 5/112	62	C68321.016 C68348.017
		1800	2250	225	25 – 35	4/100 5/112	63	C68321.018 C68348.019
		1900	2350	225	25 – 35	4/100 5/112	64	C68321.020 C68348.021

① "d" minimum = 175mm

② Offset zero also available

③ Other fixing patterns available



Data for Rubber Compression Axle

Axle Beam

Galvanised

Permissible Axle Load

1800kg

Brake Type

25-2025

Speed (where limits allow)

87 mph (140 kmph)

Type of Brake

250x40

Type	Capacity (kg)	b	c	d ①	ET ②	PCD ③	Weight (kg)	Part Number
QC18D	1800	1000	1450	225	25 – 35	5/112 5/165	78	C69310.003 C69324.001
		1100	1550	225	25 – 35	5/112 5/165	79	C69310.004 C69324.002
		1200	1650	225	25 – 35	5/112 5/165	80	C69310.005 C69324.003
		1300	1750	225	25 – 35	5/112 5/165	81	C69310.006 C69324.004
		1400	1850	225	25 – 35	5/112 5/165	82	C69310.007 C69324.005
		1500	1950	225	25 – 35	5/112 5/165	83	C69310.008 C69324.006
		1600	2050	225	25 – 35	5/112 5/165	84	C69310.009 C69324.007
		1700	2150	225	25 – 35	5/112 5/165	85	C69310.010 C69324.008
		1800	2250	225	25 – 35	5/112 5/165	86	C69310.011 C69324.009
		1900	2350	225	25 – 35	5/112 5/165	87	C69310.012 C69324.010

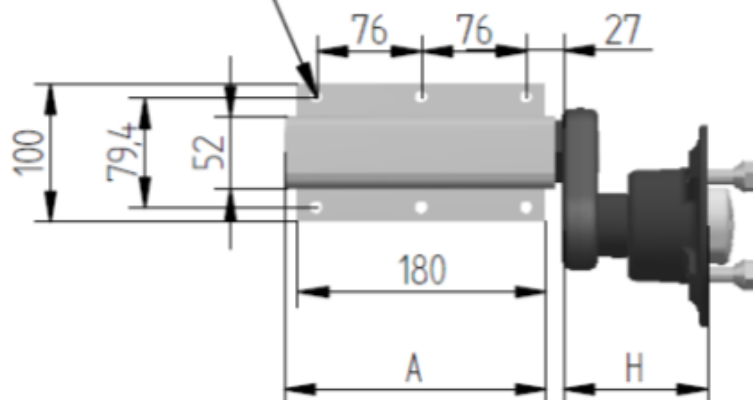
① "d" minimum = 175mm

② Offset zero also available

③ Other fixing patterns available



Holes for M8 Bolts x6



Fixing plate pattern for 350kg to 550kg Units

Capacity (kg)	Brake Size	A (mm)	H (mm)	PCD ①	Hub Family	Part Number	Comments
350	Unbraked	176	86	4/101.6	N	C77101.001	L/H
		176	86	4/101.6	N	C77101.002	R/H
		176	110	4/101.6	N	C77101.003	L/H
		176	110	4/101.6	N	C77101.004	R/H
		176	122	4/101.6	N	C77101.005	L/H
		176	122	4/101.6	N	C77101.006	R/H
550	Unbraked	176	86	4/101.6	N	C77104.001	L/H
	Unbraked	176	86	4/101.6	N	C77104.002	R/H
	Unbraked	176	110	4/101.6	N	C77104.003	L/H
	Unbraked	176	110	4/101.6	N	C77104.004	R/H
	Unbraked	176	122	4/101.6	N	C77104.005	L/H
	Unbraked	176	122	4/101.6	N	C77104.006	R/H
	160x35	176	132	4/101.6	C	C76301.001	L/H
	160x35	176	132	4/101.6	C	C76301.002	R/H
	160x35	176	132	4/100	C	C76300.001	L/H
	160x35	176	132	4/100	C	C76300.002	R/H
750	Unbraked	287	86	4/101.6	N	C77107.001	L/H
	Unbraked	287	86	4/101.6	N	C77107.002	R/H
	Unbraked	287	110	4/101.6	N	C77107.003	L/H
	Unbraked	287	110	4/101.6	N	C77107.004	R/H
	Unbraked	287	122	4/101.6	N	C77107.005	L/H
	Unbraked	287	122	4/101.6	N	C77107.006	R/H
	Unbraked	287	117	4/100	P	C78003.001	L/H
	Unbraked	287	117	4/100	P	C78003.002	R/H
	Unbraked	287	117	4/139.7	P	C78004.001	L/H
	Unbraked	287	117	4/139.7	P	C78004.002	R/H
	160x35	287	132	4/101.6	C	C76304.001	L/H
	160x35	287	132	4/101.6	C	C76304.002	R/H
	160x35	287	132	4/100	C	C76302.001	L/H
	160x35	287	132	4/100	C	C76302.002	R/H

① Other fixing patterns are available



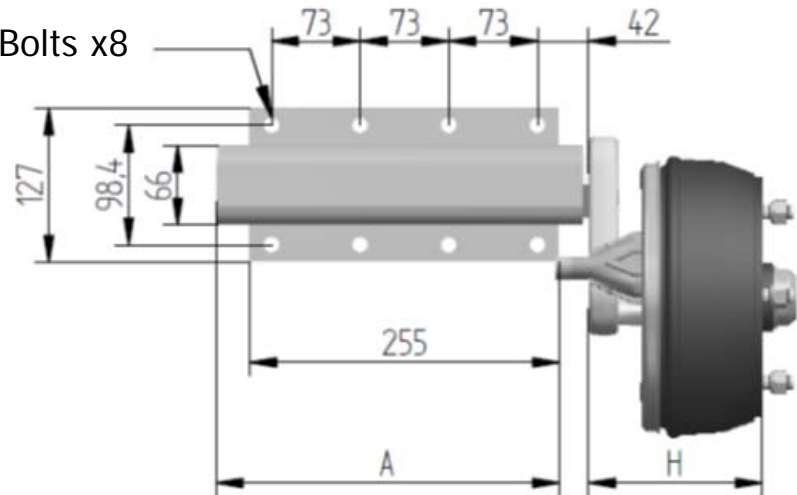
Matching fixing plates also available!

C10939—180x100mm (6 x M8 Holes)

C10940—255x127mm (8 x M12 Holes)



Holes for M12 Bolts x8



**Fixing plate pattern for
750kg to 1550kg Units**

Capacity (kg)	Brake Size	A (mm)	H (mm)	PCD ①	Hub Family	Part Number	Comments
1100	200x50	287	148	4/100	A	C75306.001	L/H
				4/100	A	C75306.002	R/H
				4/139.7	A	C75308.001	L/H
				4/139.7	A	C75308.002	R/H
				5/152.4	A	C75309.001	L/H
				5/152.4	A	C75309.002	R/H
1300	200x50	350	148	4/100	A	C75310.001	L/H
				4/100	A	C75310.002	R/H
				4/139.7	A	C75311.001	L/H
				4/139.7	A	C75311.002	R/H
				5/152.4	A	C75313.001	L/H
				5/152.4	A	C75313.002	R/H
				5/165.1	A	C75314.001	L/H
				5/165.1	A	C75314.002	R/H
1500	200x50	465	148	4/139.7	A	C75315.001	L/H
				4/139.7	A	C75315.002	R/H
				5/152.4	A	C73616.001	L/H
				5/152.4	A	C73616.002	R/H
				5/165.1	A	C73617.001	L/H
				5/165.1	A	C73617.002	R/H
1550	250x40	465	138	4/139.7	T	C78500.001	L/H
				4/139.7	T	C78500.002	R/H
				5/140	T	C78501.001	L/H
				5/140	T	C78501.002	R/H
				5/140	V	C78601.001	L/H
				5/140	V	C78601.002	R/H
				5/165.1	T	C78502.001	L/H
				5/165.1	T	C78502.002	R/H
				5/165.1	V	C78602.001	L/H
				5/165.1	V	C78602.002	R/H

① Other fixing patterns are available



Matching fixing plates also available!

C10939—180x100mm (6 x M8 Holes)

C10940—255x127mm (8 x M12 Holes)



**NEW
PRODUCT**

Auto Adjusting Brake

200x50, 250x40 & the latest addition to our range, the 250x50 brake for axles to 2500kg capacity. Spreadlever brakes with automatic adjustment!

Cast Lockable Head with Wear Indication

AV30 - 3000kg
AV35 - 3500kg (as shown)



**NEW
PRODUCT**

Rotating Telescopic Jockey Wheel

Suitable for all trailers
up to 3500kg



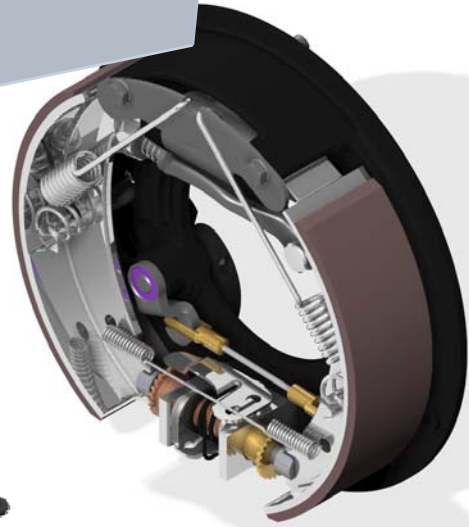
**NEW
PRODUCT**



Did You Know That We Also Supply...?

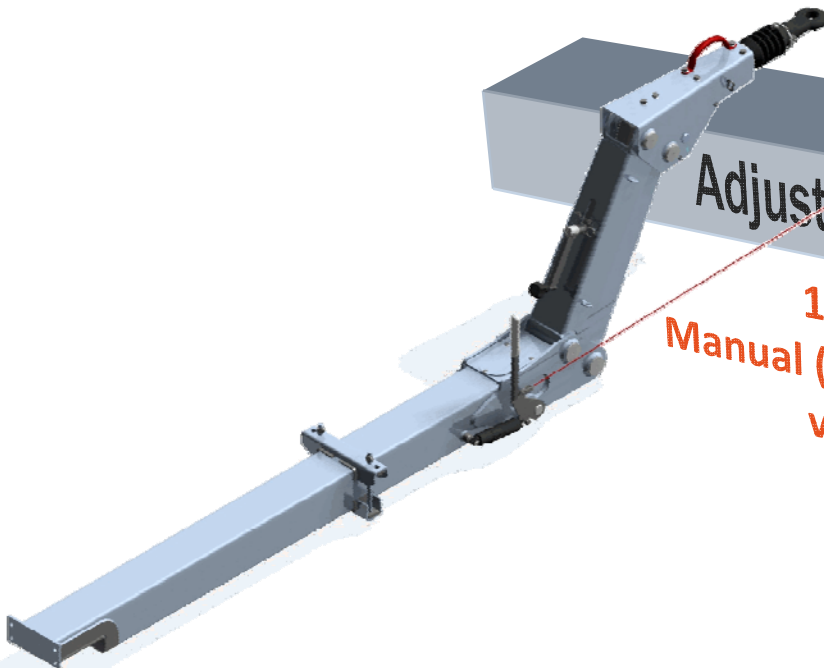
Power Brakes

Customised solutions for a wide range of applications. Disc brakes, cam brakes & drum brakes available



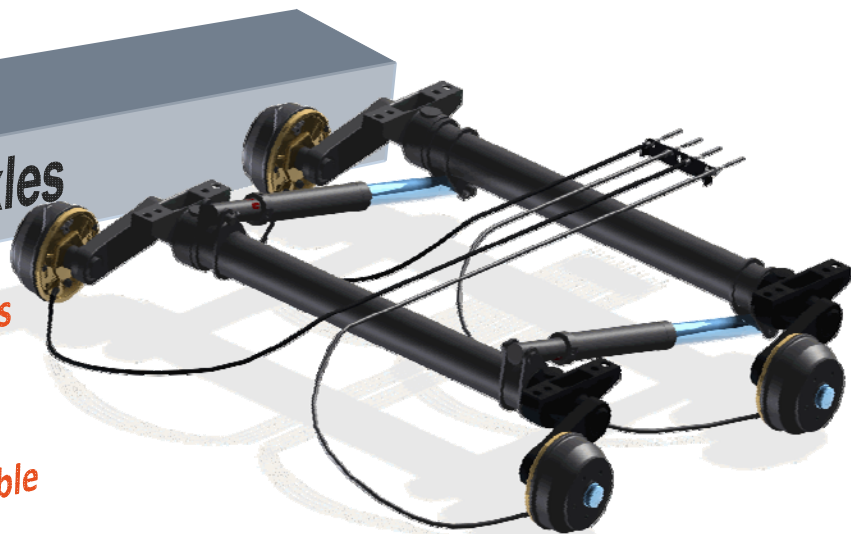
Adjustable Height Drawbars

1300Kg to 3500Kg
Manual (KHA) and winding (KHD)
versions available



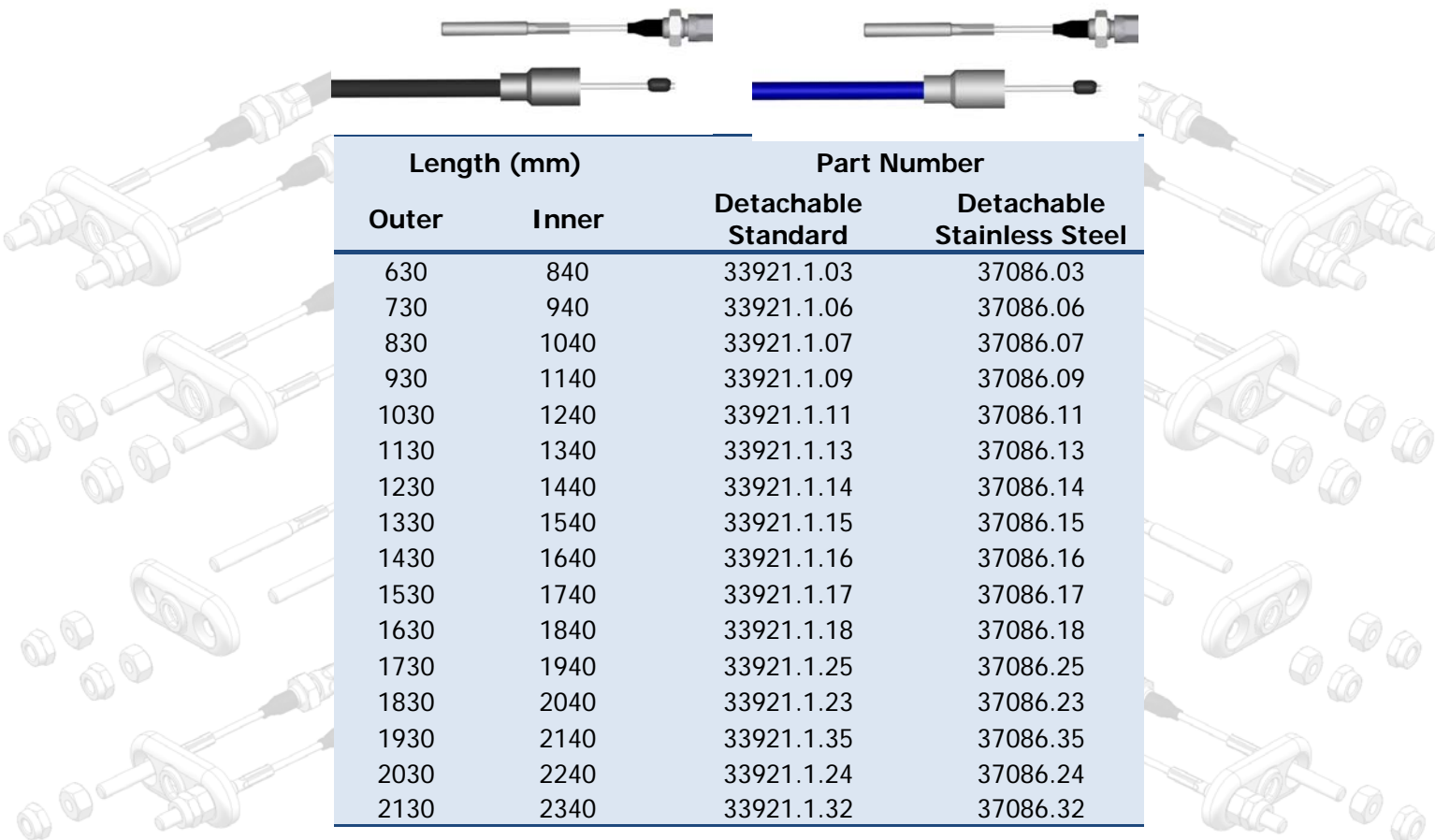
Lowering Axles

Single & tandem applications
Single to 4500Kg
Tandem to 9000Kg
Electric or manual pump available





Knott Detachable - Ø3.5mm Ø18.5mm Bell



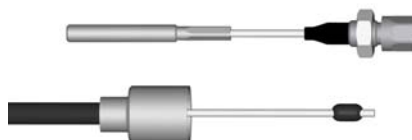
Length (mm)		Part Number	
Outer	Inner	Detachable Standard	Detachable Stainless Steel
630	840	33921.1.03	37086.03
730	940	33921.1.06	37086.06
830	1040	33921.1.07	37086.07
930	1140	33921.1.09	37086.09
1030	1240	33921.1.11	37086.11
1130	1340	33921.1.13	37086.13
1230	1440	33921.1.14	37086.14
1330	1540	33921.1.15	37086.15
1430	1640	33921.1.16	37086.16
1530	1740	33921.1.17	37086.17
1630	1840	33921.1.18	37086.18
1730	1940	33921.1.25	37086.25
1830	2040	33921.1.23	37086.23
1930	2140	33921.1.35	37086.35
2030	2240	33921.1.24	37086.24
2130	2340	33921.1.32	37086.32

Non Detachable



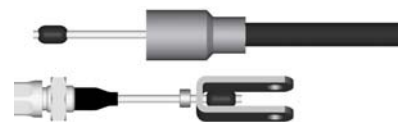
Length (mm)		Part Number
Outer	Inner	
600	875	35006.04
700	1000	35006.06
800	1100	35006.10
900	1200	35006.14
1000	1300	35006.16
1100	1400	35006.20
1200	1500	35006.24
1300	1575	35006.32
1400	1700	35006.28
1500	1800	35006.30
1600	1900	35006.33
1700	2000	35006.37

Detachable Ø23.5mm Bell



Length (mm)		Part Number
Outer	Inner	
350	560	35122.01
530	740	35122.02
770	980	35122.03
890	1100	35122.04
1020	1230	35122.05
1130	1340	35122.06
1320	1530	35122.07
1430	1640	35122.08
1620	1830	35122.09
1790	2000	35122.10
1920	2200	35122.11

Knott Detachable c/w Clevis Ø18.5mm Bell



Length (mm)		Part Number	
Outer	Inner	Standard	S/Steel
650	890	35902.01	980153.01
1086	1326	35902.02	980153.02
1240	1480	35902.03	980153.03
1600	1840	35902.04	980153.04
1030	1240	35902.05	980153.05



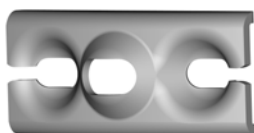
Other sizes & b
available on



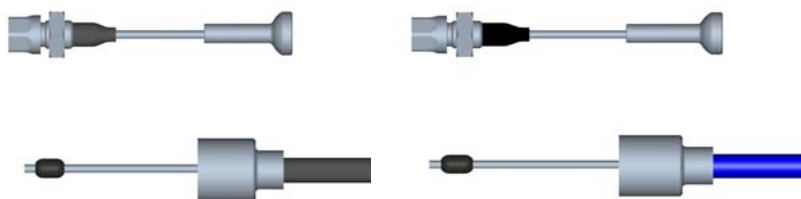
Knott Pronto Fit - Ø3.5mm Ø18.5mm Bell



Length (mm)		Part Number	
Outer	Inner	Detachable Standard	Detachable Stainless Steel
430	620	980202.01	980207.01
530	720	980202.02	980207.02
630	820	980202.03	980207.03
730	920	980202.06	980207.06
830	1020	980202.07	980207.07
930	1120	980202.09	980207.09
1030	1220	980202.11	980207.11
1130	1320	980202.13	980207.13
1230	1420	980202.14	980207.14
1330	1520	980202.15	980207.15
1430	1620	980202.16	980207.16
1530	1720	980202.17	980207.17
1630	1820	980202.18	980207.18
1730	1920	980202.25	980207.25



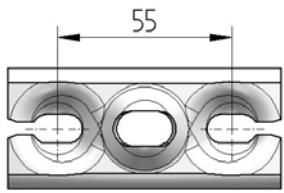
Knott Pronto Fit - Ø3.5mm Ø23.5mm Bell



Length (mm)		Part Number	
Outer	Inner	Detachable Standard	Detachable Stainless
520	726	980203.01	980206.01
770	966	980203.02	980206.02
890	1086	980203.03	980206.03
1020	1216	980203.04	980206.04
1130	1326	980203.05	980206.05
1320	1516	980203.06	980206.06
1430	1626	980203.07	980206.07
1620	1816	980203.08	980206.08
1790	1986	980203.09	980206.09



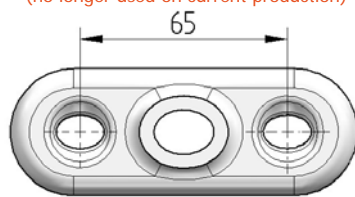
Current Knott Group Balance Bar



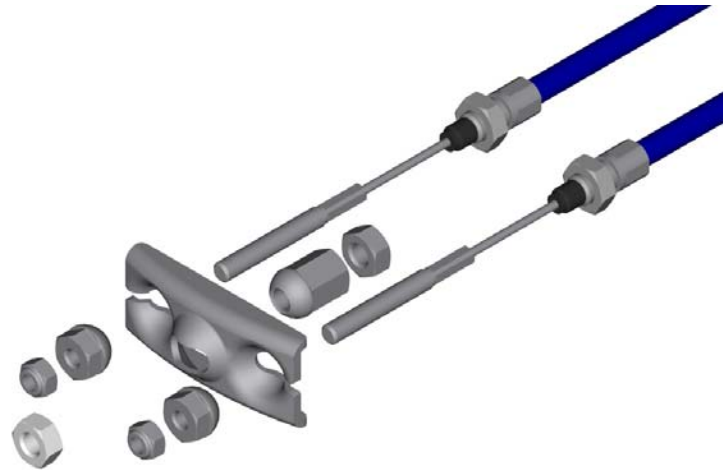
For use with threaded
& pronto fit cables.

Old Avonride Balance Bar

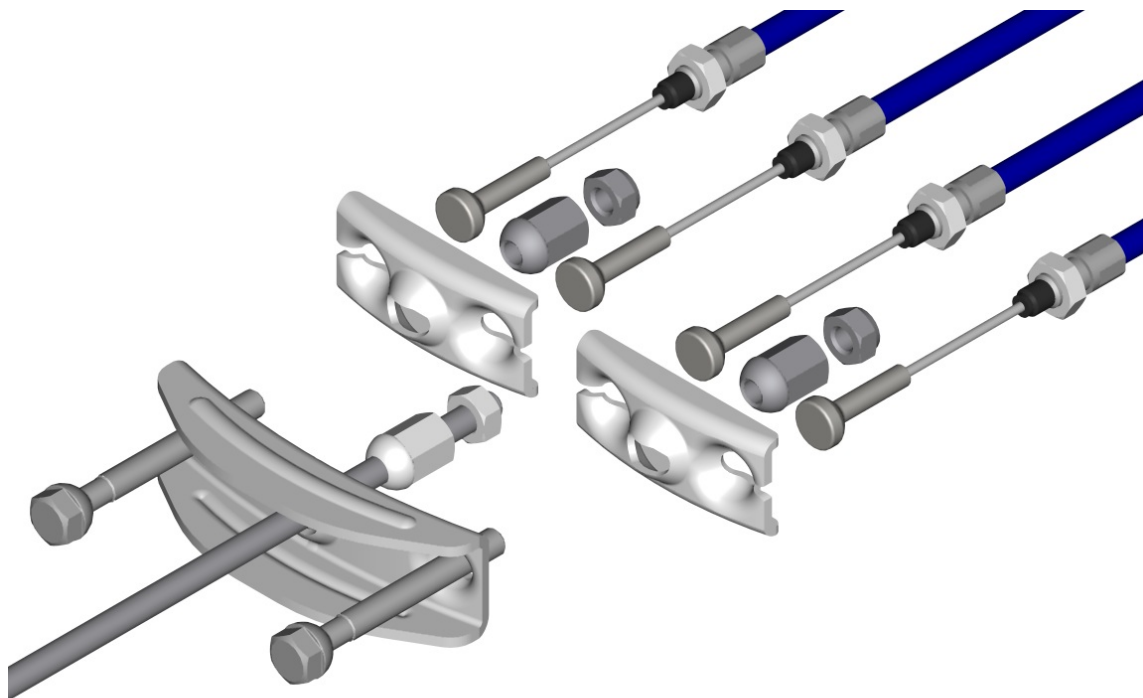
(no longer used on current production)



For use with threaded
cables only.



Description	Comprising	Part Number
Tandem Axle Compensator Kit (Avonride – 65 Centres)	Equaliser Bar Balance Bar (x2) & Fasteners	572002
Single Axle Compensator Kit (Avonride – 65 Centres)	Balance Bar & Fasteners	572001



Description	Comprising	Part Number
Pronto-Fit Tandem Axle Compensator Kit (Knott – 55 Centres)	Equaliser Bar Balance Bar (x2) & Fasteners	572012
Pronto-Fit Single Axle Compensator Kit (Knott – 55 Centres)	Balance Bar & Fasteners	572013

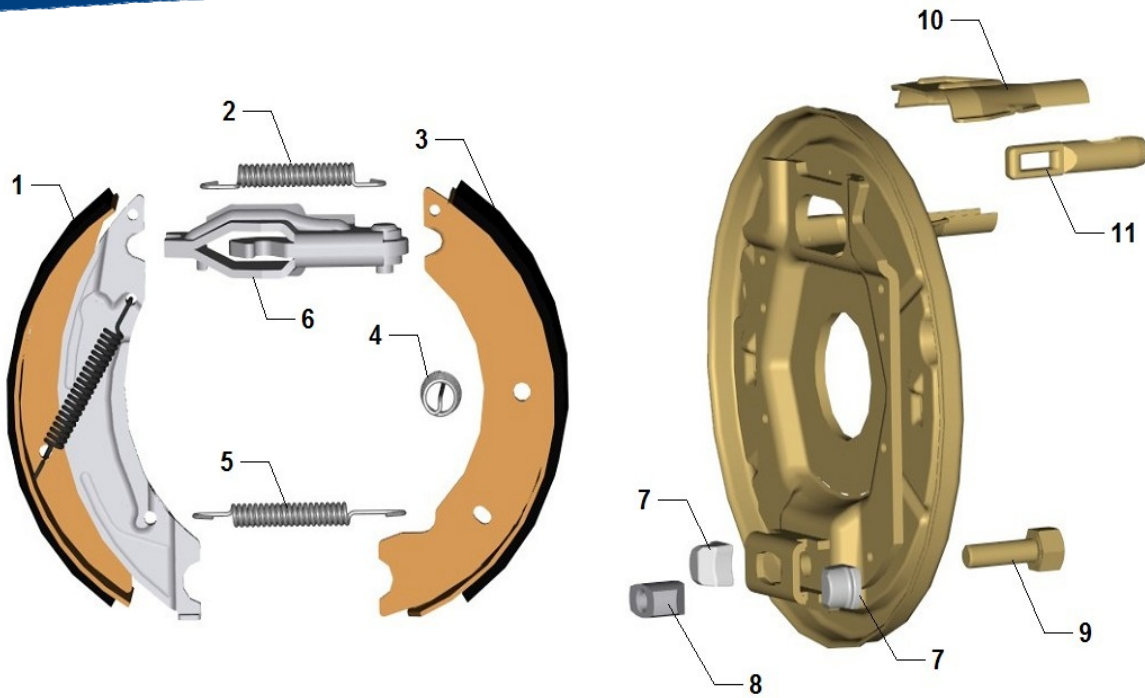


The KNOTT Group is represented in every EU country and beyond. This assures users that support is readily available locally no matter where the trailer is used.





Spreadlever Auto-Reverse Brake



	Description	To Suit	Part Number
1 to 5	Brake Shoe Axle Set (2 fixed shoes, 2 sliding shoes & spring set)	160x35 MKI	520064.002
		160x35 MKII	520064.003
		160x35 MKIII	520064.001
		203x40	520065.003
		200x50	520066.004
		250x40	520067.004
6	Expander	300x60	520089.001
		160x35 MKI / MKII / MKIII	406415.001
		203x40, 200x50, 250x40	45309
		300x60	43123-1
7	Adjuster Shoe Post	160x35 MKI/ MKII	43673
		160x35 MKIII, 203x40, 200x50	Part of 572007
		250x40	Part of 572008
		300x60	35212
		160x35 MKI & II Includes Bolt	42902
8	Re-Adjustment Wedge	160x35 MKIII, 203x40, 200x50	Part of 572007
		250x40	Part of 572008
		300x60	45439
		300x60	45439

	Description	To Suit	Part Number
9	Bolt	160x35 MKIII, 203x40, 200x50	Part of 572007
		250x40	Part of 572008
		300x60	45802
10	Half Shell	160x35 MKI / MKII	44656
		160x35 MKIII, 203x40, 200x50, 250x40	572000
		300x60	33623
		160x35 MKIII, 203x40, 200x50, 250x40	572014
11	Eyelet (current detachable cables)	300x60	44856
		160x35 MKI	520091
	<u>Spring Kits</u> Shoe Steady Carrier Tension **Buckle	160x35 MKII**	520090
		160x35 MKIII	520076
		200x50	520077
		203x40	520049
		250x40	520050
		300x60**	520078
		**Washer	160x35 MKI & MKII
**Nut	160x35 MKI & MKII	D985.001	

** Not Shown



Spreadlever Automatic Adjusting Brake

Vehicle "UP" Time Increased ▪ Service Intervals Extended ▪ Servicing Time Reduced

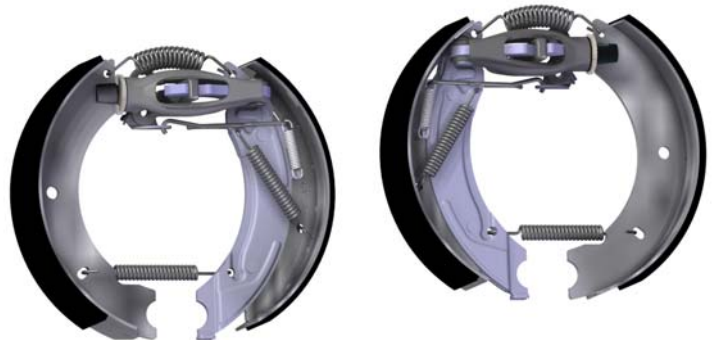


We have developed and Type Approved a trailer brake that automatically adjusts, ensuring that the brakes are always at their optimal setting. This means:-

- ✓ Quick and simple installation
- ✓ With UNECE Regulation 13 and EU EC 71/320 approval
- ✓ Braking response is always immediate, equal and smooth on all wheels
- ✓ Braking distance is reduced to its shortest
- ✓ Reversing is trouble free
- ✓ Handbrake application and release is effortless
- ✓ Reduced wear and tear on trailer, damper, cables, rods, linkages
- ✓ Reduced wear and tear on towing vehicle and driver
- ✓ Roadworthiness is maintained = peace of mind for the fleet operator
- ✓ Servicing is quicker; emphasis on brake inspection, not brake adjustment
- ✓ Trailer brake related accidents and incidents are avoided
- ✓ Health and Safety improved

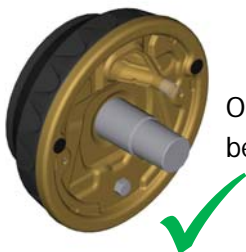
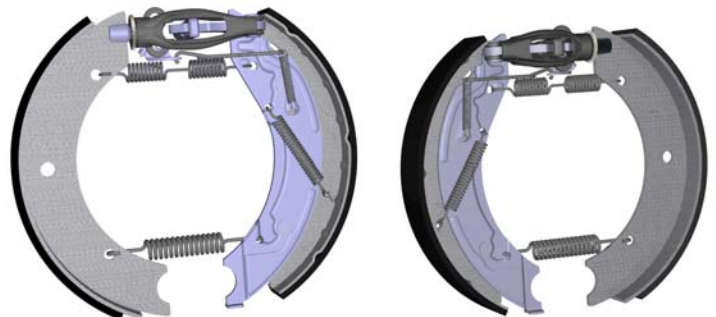
For 200x50 with auto reverse

Description	Weight (kg)	Part Number
Axle Set—200x50 Auto Adjusting Brake for KNOTT Brake Types 20-2425/1	3,30	409930.001



For 250x40 with auto reverse

Description	Weight (kg)	Part Number
Axle Set—250x40 Auto Adjusting Brake for KNOTT Brake Types 25-2025	4,70	409931.001



Only backplates with this form can be retro-fitted with Auto-adjust



Backplates with this form **cannot** be retro-fitted



Braked 160x35



AVONRIDE
C SERIES



KNOTT SFL



KNOTT
TPR BEARING

Brake Size / Type	Casting N°	Description	Kit Prefix	Bearing	Bearing Kit Inc. Seal	Grease Cap	Hub Nut
160x35 / 16-1365	23815	Knott TRB	5201xx	30204A 30206A	571012	42191 (48mm)	574008 (M20)
160x35 / 16-1365	24725	Knott SFL	409699	Ø34 x Ø64 x 37mm	571005	573005 (52mm)	574014 (M24)
160x35 / 16-1365	400464	Knott SFL	409699	Ø34 x Ø64 x 37mm	571005	573005 (52mm)	574014 (M24)
160x35 / 16-1365	12345	Avonride "C" Series	C24001	NTN 32004X L44649/L44610	571001	573002 (47mm)	574008 (M20)

Braked 200x50 / 203x40



AVONRIDE
A SERIES



AVONRIDE
R SERIES



KNOTT SFL
BEARING HD



KNOTT & AVONRIDE
SFL X SERIES

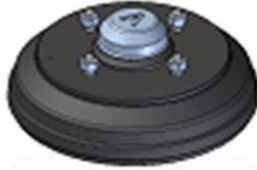


KNOTT TPR
BEARING

Brake Size / Type	Casting N°	Description	Kit Prefix	Bearing	Bearing Kit Inc. Seal	Grease Cap	Hub Nut
200x50 / 20-2425	21240-2	Knott TRB	52012x	30205A 30206A	571013	573005 (52mm)	574006 (M20)
200x50 / 20-2425	26979	Knott SFL	C24014	Ø34 x Ø64 x 37mm	571005	573004 (64mm)	574014 (M24)
200x50 / 20-2425	25955	Knott SFL	28744	Ø39 x Ø72 x 37mm	571006	573005 (52mm)	574014 (M24)
200x50 / 20-2425 203x40 / 20,32-1647	11890	Avonride "A" Series	C24000	NTN 32004X LM67048/LM67010	571002	573002 (47mm)	574008 (M20)
200x50 / 20-2425 203x40 / 20,32-1647	13856	Avonride "R" Series	C24011	L44649/L44610 LM67048/LM67010	571002	573001 (60mm)	574008 (M20)
200x50 / 20-2425 203x40 / 20,32-1647	26979	Avonride "X" Series	C24014	Ø34 x Ø64 x 37mm	571005	573004 (64mm)	574014 (M24)



Braked 250x40



AVONRIDE
T SERIES



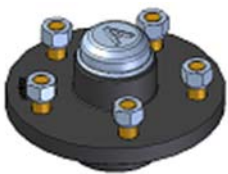
AVONRIDE
V SERIES



AVONRIDE &
Y SERIES KNOTT
SFL BEARING

Brake Size / Type	Casting N°	Description	Kit Prefix	Bearing	Bearing Kit Inc. Seal	Grease Cap	Hub Nut
250x40 / 25-2025	25449	Knott SFL	C24015	Ø39 x Ø72 x 37mm	571006	573005 (52mm)	574014 (M24)
250x40 / 25-2025	14475	Avonride "T" Series	C24012	LM67048/LM67010 LM48548/LM48510	571000	573003 (74.5mm)	574006 (M24)
250x40 / 25-2025	14368	Avonride "V" Series	C24013	LM67048/LM67010 LM48548/LM48510	571000	573003 (74.5mm)	574006 (M24)
250x40 / 25-2025	25449	Avonride "Y" Series	C24015	Ø39 x Ø72 x 37mm	571006	573005 (52mm)	574014 (M24)

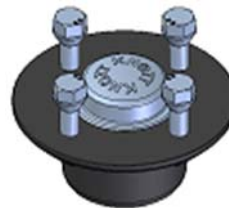
Unbraked



AVONRIDE
E SERIES



AVONRIDE
N SERIES



AVONRIDE &
P SERIES KNOTT
SFL BEARING



KNOTT
TPR BEARING

Brake Size / Type	Casting N°	Description	Kit Prefix	Bearing	Bearing Kit Inc. Seal	Grease Cap	Hub Nut
Unbraked	4H2145 6A2145	Knott SFL	C24010	Ø34 x Ø64 x 37mm	571005	573002 (47mm)	574014 (M24)
Unbraked	4H1229 6B1229	Knott TRB	52013x	30204A 30206A	571012	573002 (47mm)	6X0935.01 5 (M18)
Unbraked	12716	Avonride "E" Series	C24002	NTN 32004X L44649/L44610	571001	573002 (47mm)	574008 (M20)
Unbraked	15106	Avonride "N" Series	C24009	L44643/L44610 L44643L/L44610	571003	573006 (50mm)	574008 (5/8 UNF)
Unbraked	6A2145	Avonride "P" Series	C24010	Ø34 x Ø64 x 37mm	571005	573002 (47mm)	574014 (M24)



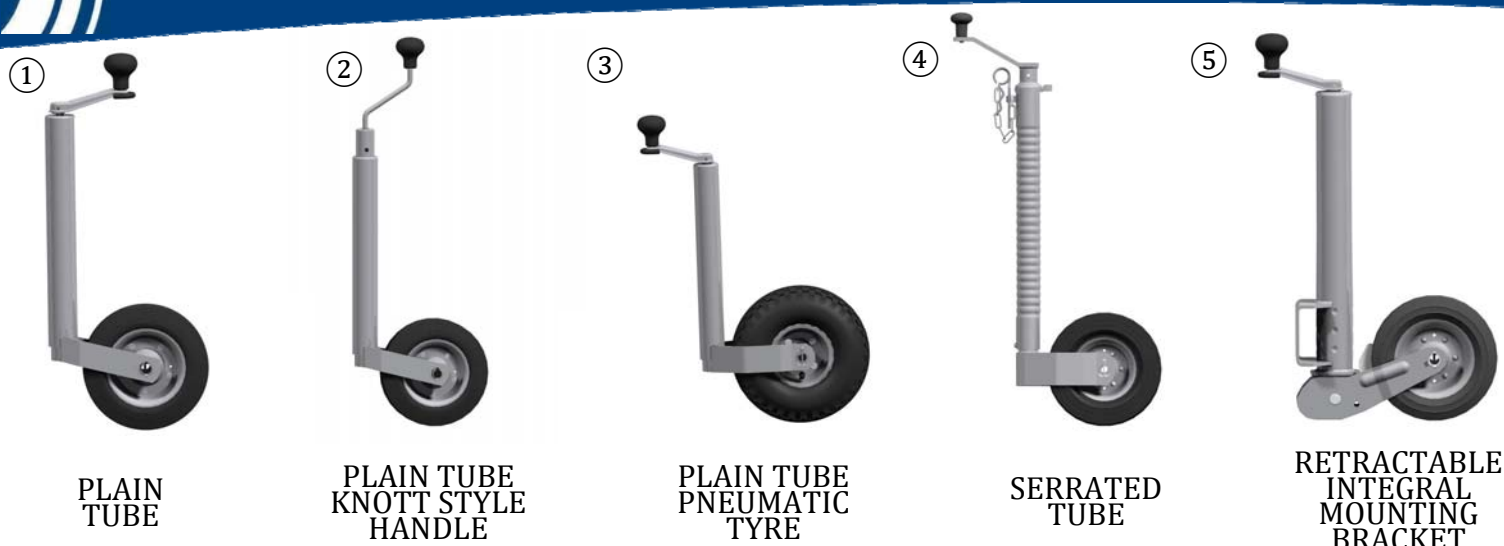
PCD Options:-

- ✓ 4/98.0
- ✓ 4/100
- ✓ 4/101.6
- ✓ 4/139.7
- ✓ 5/112
- ✓ 5/140
- ✓ 5/165.1
- ✓ 5/152.4
- ✓ 6/205

TPR = Taper Roller / SFL = Sealed For Life



✓ Studs or Tapped Holes?
✓ Conical or Spherical Fixings?
Please specify



PLAIN TUBE

PLAIN TUBE
KNOTT STYLE
HANDLE

PLAIN TUBE
PNEUMATIC
TYRE

SERRATED
TUBE

RETRACTABLE
INTEGRAL
MOUNTING
BRACKET

Plain Tube Jockey Wheels

Diameter	Tyre	Height w/o handle (mm) + extension	Part Number
Ø 35	200 x 40	550 - 750	J135M
Ø 35	200 x 40	546 - 765	J135K
Ø 42	200 x 40	600 - 825	J142K
Ø 48	200 x 40	525 - 720	J148
Ø 48	200 x 40	592 - 800	J148K
Ø 48	205 x 50	710 - 930	J348P205
Ø 48	220 x 70	520 - 702	J248BLACK
Ø 48	260 x 85	400 - 580	J248PT

①
②
③

Serrated Tube Jockey Wheels

Diameter	Tyre	Height w/o handle (mm) + extension	Part Number
Ø 48	205 x 50	710 - 930	J348S205
Ø 48	230 x 65	720 - 940	J348S
Ø 60	280 x 66	865 - 1150	J360B

④

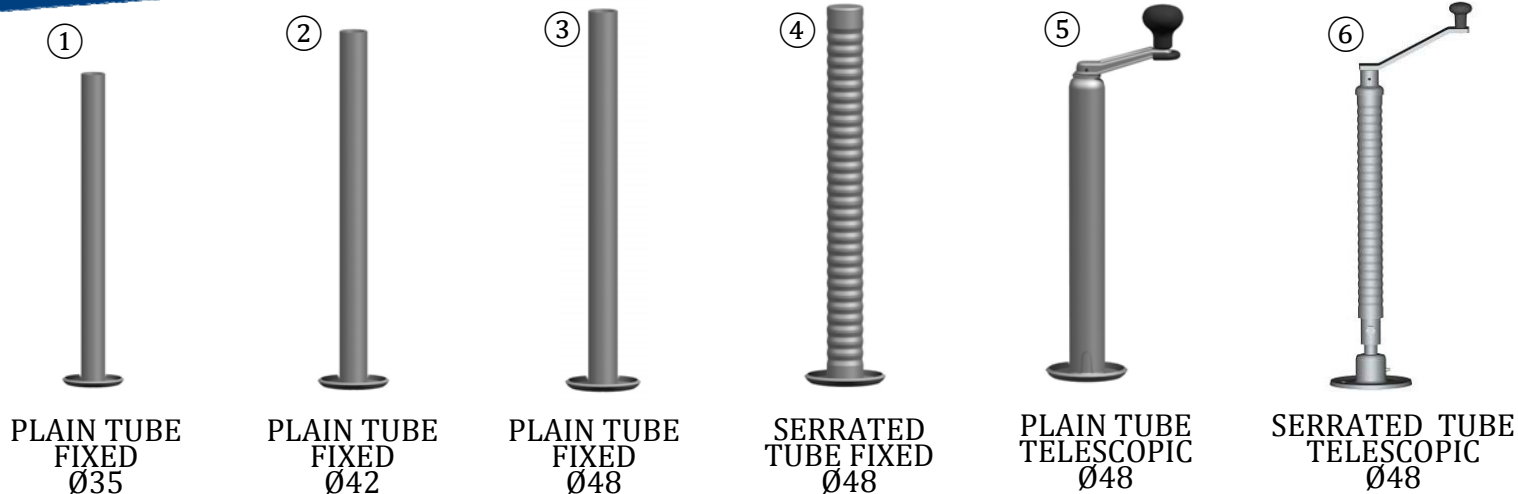
Integral Mounting Bracket

Diameter	Tyre	Height w/o handle (mm) + extension	Part Number
Ø 60	205 x 50	850 - 1115	J360R

⑤

Spares

Tyre	Rim / Tyre	Part Number	
		Wheel Part No.	Axle & Split Pin Kit
200 x 40	Steel/Solid Rubber	200/40B	578004
205 x 50	Steel/Solid Rubber	205/50	578004
220 x 70	Steel/Solid Rubber	230/65	578005
260 x 85	Steel/Pneumatic	260/85	578006
280 x 66	Steel/Solid Rubber	280/66	578007



Plain Tube Fixed Propstands

Diameter	Length (mm)	Part Number
Ø 35	450	P345PL ①
Ø 35	600	P346PL
Ø 42	600	P426PL ②
Ø 42	750	P428PL
Ø 48	600	P486PL ③
Ø 48	750	P488PL
Ø 48	900	P489PL

Serrated Tube Propstands

Diameter	Length (mm)	Part Number
Ø 48	385	P48S385 ④
Ø 48	510	P48S508
Ø 48	585	P48S585
Ø 48	720	P48S720

i Other lengths available

Telescopic Propstands

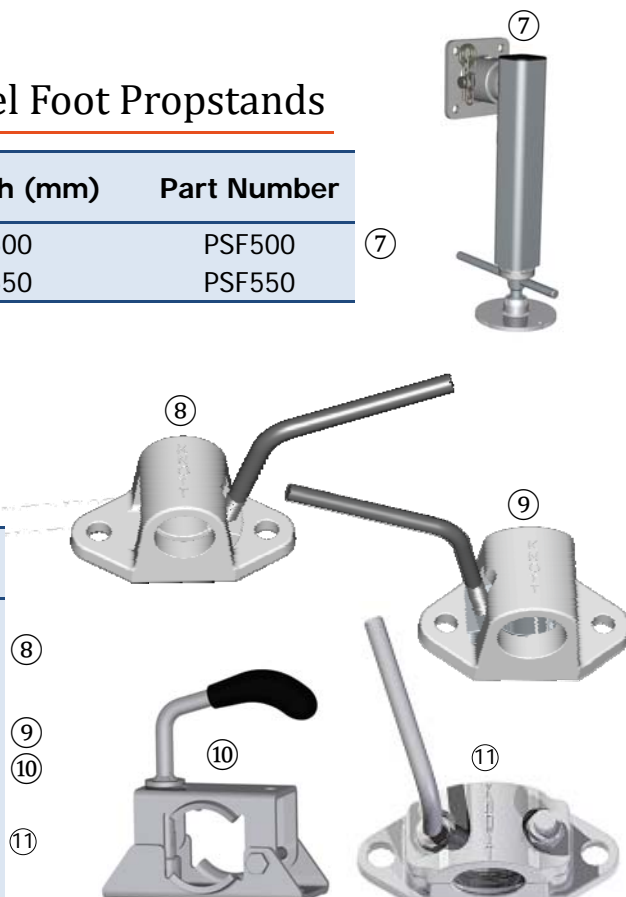
Diameter	Height w/o handle (mm) + extension	Part Number
Ø 42	402 - 617	TP42
Ø 48	406 - 646	TP48 ⑤
Ø 48 Serrated	547 - 800	3TTL060 ⑥

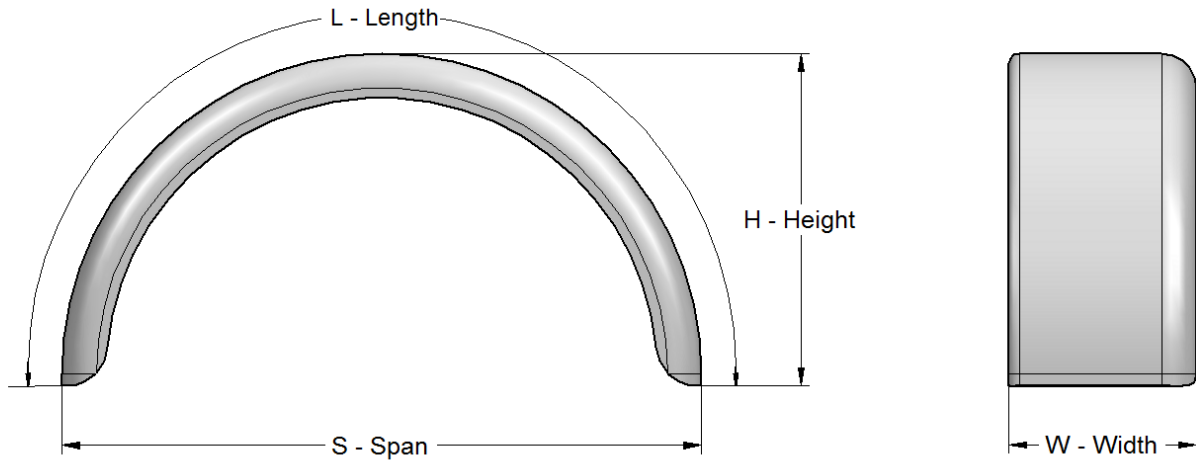
Swivel Foot Propstands

Length (mm)	Part Number
500	PSF500 ⑦
550	PSF550

Brackets

Diameter (mm)	Style	Mounting Hole Centres (mm)	Part Number
35	Pressed	105 x Ø11(x2)	B35P3
35	Cast	101 x Ø14.5(x2)	B35C3
42	Pressed	105 x Ø11(x2)	B42P3
42	Cast	101 x Ø14.5(x2)	B42C3
48	Pressed	105 x Ø11(x2)	B48P3
48	Pressed	112/120 x 50 x Ø11(x4)	3LB022
48	Cast	150 x Ø14.5(x2)	B48C6
60	Pressed	171 x 50 x Ø14.5(x4)	B60P





Single Axle—Steel / Round

Tyre Size	Profile	Width 'W'	Length 'L'	Span 'S'	Height 'H'	Part Number
10/12"	40/40	195	1060	680	345	530223.001
12"	40/40	200	1065	660	345	402252.001
13"	40/40	220	1210	750	390	402505.001
13"	40/40	220	1210	750	390	4803419X
14"	40/40	240	1285	800	415	401532.001
16"	40/40	270	1160	1000	545	400353.001

Single Axle—Steel / Angular

Tyre Size	Profile	Width 'W'	Length 'L'	Span 'S'	Height 'H'	Part Number
8"	12/40	150	800	550	250	530204.001
10"	12/40	160	900	600	280	530203.001
10"	12/40	190	1060	660	310	403455.001
12/13"	12/40	220	1150	750	350	402510.001
13"	12/40	220	1200	800	370	400349.001
13"	12/40	240	1240	800	370	402511.001
14"	12/40	240	1300	860	395	401851.001



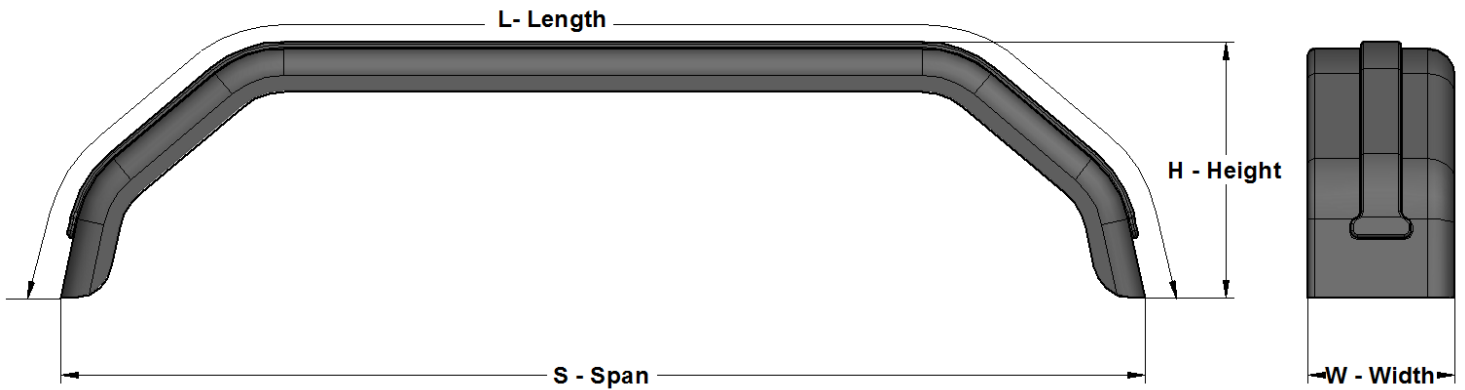
- ✓ Available for single & tandem wheel applications
- ✓ Galvanised Steel or Polymer options
- ✓ Vast range to suit majority of trailer wheel sizes
- ✓ Variable mounting profiles
- ✓ Separate mounting brackets available
- ✓ Half mudguard / wheel flap available

Profile 40/40



Profile 12/40





Tandem Axle—Steel / Round or Angular

Tyre Size	Profile	Width 'W'	Length 'L'	Span 'S'	Height 'H'	Part Number
10"	12/40	200	1610	1250	300	530193.001
12/13"	12/40	220	1800	1400	350	530194.001
13"	12/40	220	2040	1550	375	400344.001
13"	12/40	220	2040	1550	390	401989.001
13"	12/40	230	1980	1520	400	402499.001
14"	12/40	230	2050	1580	400	407331.001
14"	12/40	240	2000	1500	410	400346.001
14"	12/40	240	2200	1700	445	400356.001

Polymer Single / Tandem Mudguards

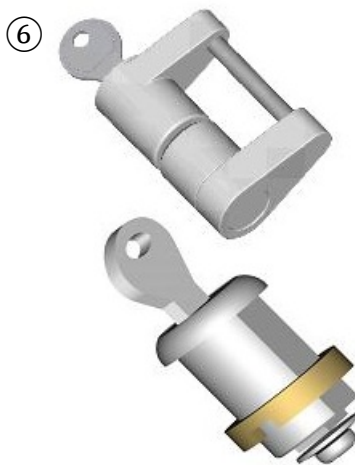
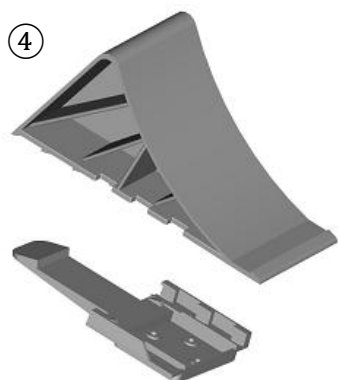
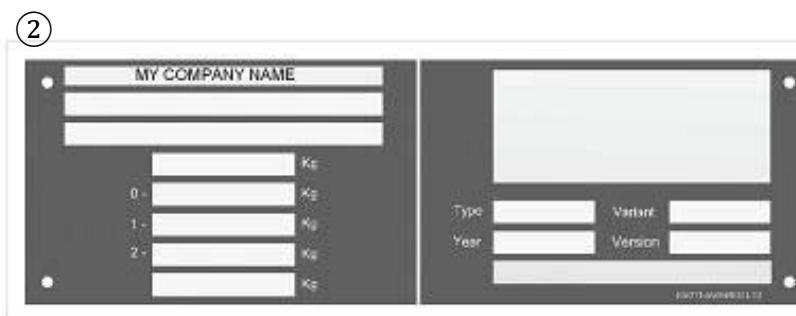
Tyre Size	Profile	Width 'W'	Length 'L'	Span 'S'	Height 'H'	Part Number
8"	12/40	120	770	520	230	404449.001
10"	12/40	180	1040	660	330	404450.001
12"	12/40	200	1040	660	330	404451.001
13"	12/40	220	1120	750	330	404452.001
13"	12/40	220	1200	750	390	400340.001
14" *	12/40	260	1300	800	415	400342.001
14"	12/40	220	1300	800	415	400341.001
14"	12/40	240	1300	800	415	4804279X
14" **	12/20	220	-	1550	380	4804299X

* Low Profile

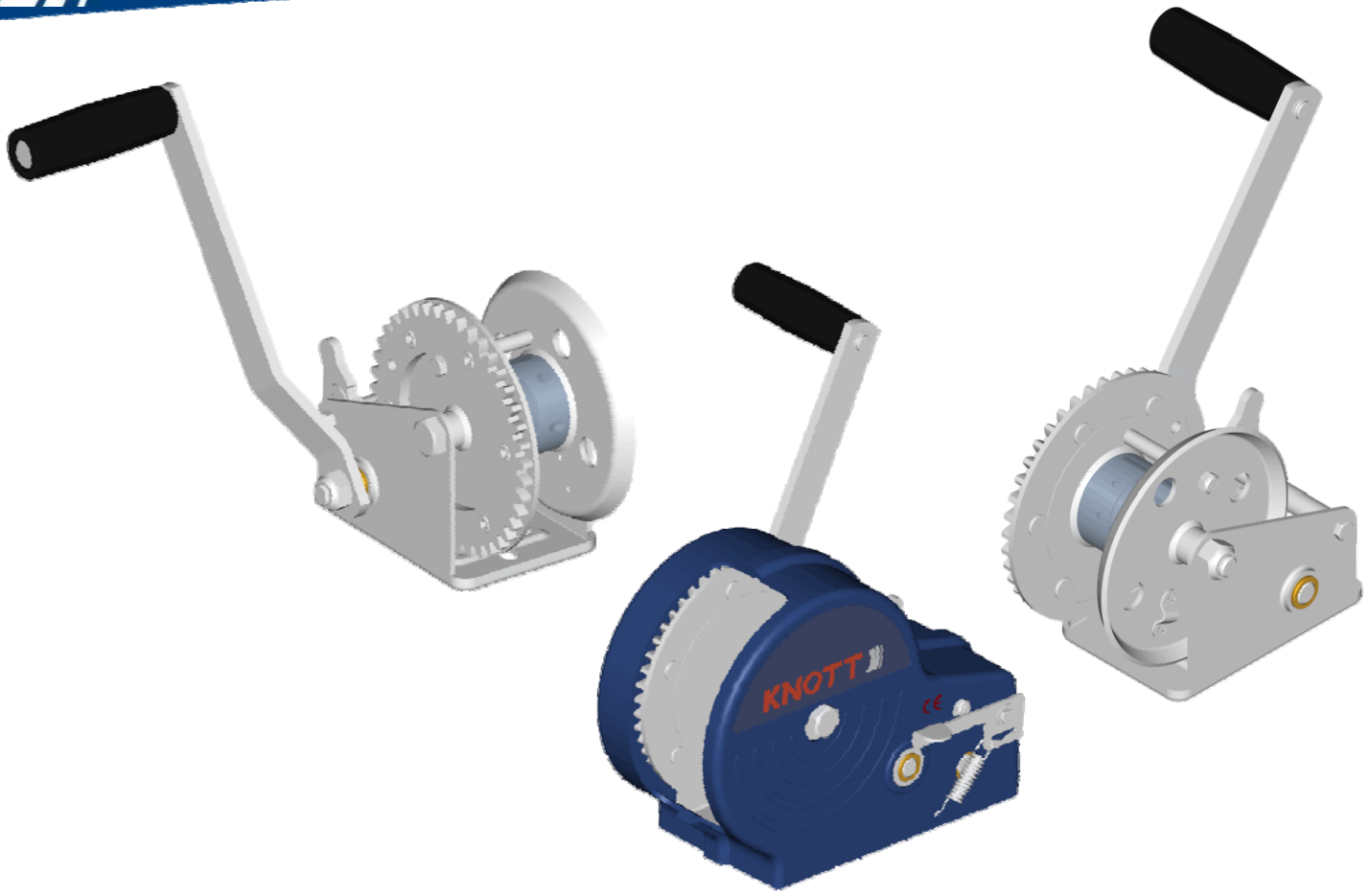
** Tandem



Other sizes available on request!



	Part Number	Description
①	400086.001	Mud Flap - with Knott Logo
	400086.011	Mud Flap - without Knott Logo
②	530244.001	Personalised Chassis Vin Plate
③	550014.001	7 or 13 Pin Plug Holder
	4803309X	Wheel Chock 220x100x90 (1600kg)
④	4803319X	Wheel Chock Holder
⑤	206593.001	Bolt-on Skid Kit
	6X0002.007	Lock for Knott Pressed Heads
⑥	575000	Replacement Lock Avonride Heads
⑦	575006	Blue Security Ball



	Part Number	Description
EC Approved Winches	6X0017.004	450Kg Capacity*
	6X0017.005	900Kg Capacity*
	6X0017.006	1100Kg Capacity*
Covers	6X1238.001	For 6X0017.004
	6X1238.002	For 6X0017.005 & .006
Cables	6X1522.001	Ø4mm (7m long)
	6X1522.002	Ø5mm (10.1m long)
	6X1522.003	Ø5.3mm (10.1m long)
Straps	6X1407.001	48mm (9.8m long)
	6X1407.002	52mm (9.8m long)

* Cable / Strap supplied separately.



A-Frame Drawbars (ZHL)



Type	Length (mm)	Description	Drawing Number	Max. Weight (kg)
ZHL7,5-A	2000-2500	Bolt-On A-Frame	206061	750
ZHL15-A	2000-2500	Bolt-On A-Frame	201022	1800
ZHL20-A	2000-2500	Bolt-On A-Frame	201024	2400
ZHL27-A	2000-2500	Bolt-On A-Frame	201026	3000
ZHL35-A	2000-2500	Bolt-On A-Frame	201028	3500
402777.001	Connector Kit 80mm Round Axle			
29531.01	Connector Kit 80mm Square Axle			

Square Drawbars (KDV)



Type	Length (mm)	Description	Drawing Number	Max. Weight (kg)
KDV60	1500-2500	60mm Straight	204602	1000
KDV70	1500-2500	70mm Straight	204603	1400
KDV80	1500-2500	80mm Straight	204791	2000
KDV100	1500-2500	100mm Straight	204605	3000
KDV120	1500-2500	120mm Straight	204606	3500





Datatag is world renowned for its electronic theft deterrent systems. Its products have helped to drastically reduce the rates of stolen property and are fitted on many assets such as motorcycles, jet skis, golf equipment and marine components. Benefits include:-



- ✓ Peace of mind and security to any trailer application / caravan fitted with the kit.
- ✓ Proven deterrent against theft. The UK Crown Prosecution Service has a 100% successful prosecution record where Datatag has been used as evidence in court.
- ✓ Powerful aid to identification and recovery supported by a 24/7/365 Home Office and ACPO Approved call centre.
- ✓ Immediate & ongoing payback - can result in up to 20% discount on insurance premiums with certain insurance companies.

Trailer Kit

- 2 x Highly Visible Trailer ID Plates
- 2 x Button Transponders
- 1 x Glass Transponder
- 1 x Tube of Datadots with Forensic DNA
- 1 x Epoxy Resin and Applicator
- 1 x Fitting Instructions
- 1 x Datatag Registration Form



Caravan / Motorhome Kit

- 2 x Highly Visible ID Plates
- 2 x Self Adhesive Tags
- 2 x Button Transponders
- 1 x Glass Transponder
- 1 x Tube of Datadots with Forensic DNA
- 1 x Epoxy Resin and Applicator
- 1 x Fitting Instructions
- 1 x Datatag Registration Form



Part Number	Description
590000	Trailer Kit
590001	Caravan / Motorhome Kit



Part Number	Description	Reverse	Fog	Reg Plate Lamp
401511.001	Multipoint V Rear Lamp Cluster LHS	✓	✓	✓
401511.002	Multipoint V Rear Lamp Cluster RHS	✓	✓	✓
404485.001	Earpoint III Rear Lamp Cluster LHS	-	✓	-
409012.001	Earpoint III Rear Lamp Cluster RHS	-	✓	-



Part Number	Description	Stick On	Screw Fixing	Size (mm)
4803799X	Reflector Amber Round	-	✓	Ø60
402653.001	Reflector Amber Rectangular	✓	-	90 x 40
4803819X	Reflector White Round	-	✓	Ø60
402654.001	Reflector White Rectangular	✓	-	90 x 40
4803759X	Red Warning Triangle	-	✓	157(x3)



Part Number	Description	Cable	Colour	Size (mm)
406650.001	Reg Plate Lamp - Large	1.5m DC	White	100 x 60
406648.001	Reg Plate Lamp - Small	1.5m DC	White	85 x 49
404513.001	Superpoint II End Outline Marker LHS	0.75m DC	Red/White	170 x 100
404514.001	Superpoint II End Outline Marker RHS	0.75m DC	Red/White	170 x 100
406734.001	Flexipoint I Position Lamp	0.5m DC	White	65 x 44
406738.001	Flexipoint I Position Lamp	1.0m DC	White	65 x 44



Part Number	Description	Length	DC Length	13 or 7 pin
510309	Wiring Harness	3.5m	2 x 3.5m	13 Pin
530310	Wiring Harness	4.5m	2 x 4.5m	13 Pin
510311	Wiring Harness	5.5m	2 x 5.5m	13 Pin
510312	Wiring Harness	6.5m	2 x 6.5m	13 Pin



Part Number	Description
510195	DC Connecting Kit
401404.001	7 Pin to 13 Pin Adaptor
401405.001	13 Pin to 7 Pin Adaptor



Other lighting accessories available on request!



We supply certificates, test reports and documentation that can be used for all Type Approval Applications.

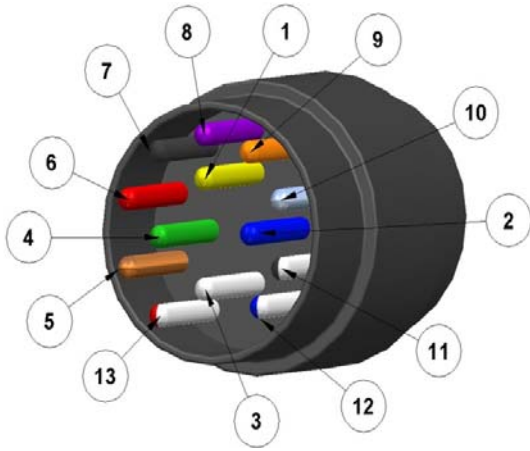
Whether you are a volume manufacturer seeking EC Whole Vehicle Type Approval, National Approval or an Individual Approval for a one off trailer, our documentation will satisfy all your needs.

Kraftfahrt-
Bundesamt





13 Pin Wiring

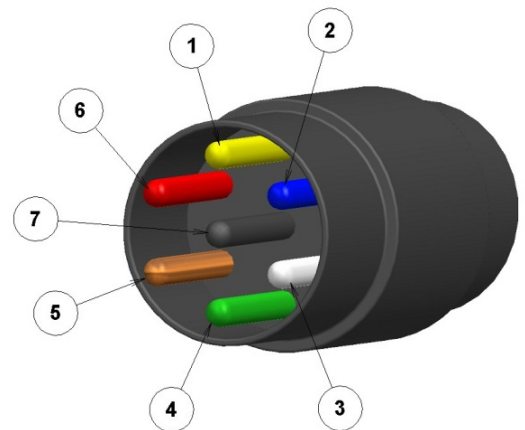


	Colour	Description
1	Yellow	LH Indicator
2	Blue	Rear Fog Lamp
3	White	Earth for Pins 1 to 8
4	Green	RH Indicator
5	Brown	RH Tail Lamp, End Outline, No Plate Lamp
6	Red	Stop Lamps
7	Black	LH Tail Lamp, End Outline, No Plate Lamp
8	Pink	Reversing Lamp
9	Orange	12V Power Feed
10	Grey	Fridge (IGN Switched Live)
11	White/Black	Earth for Pin 10
12	White/Blue	Spare (Signal)
13	White/Red	Earth Return for Pin 9

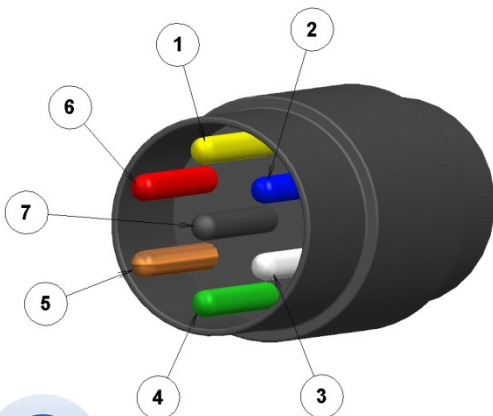
12N 7 Pin 12 Volt (Normal)

	Colour	Description
--	--------	-------------

1 (L)	Yellow	LH Indicator
2 (54G)	Blue	Rear Fog Lamp
3 (31)	White	Earth
4 (R)	Green	RH Indicator
5 (58R)	Brown	RH Tail, End Outline, No Plate Lamp
6 (54)	Red	Stop Lamps
7 (58L)	Black	LH Tail, End Outline, No Plate Lamp



12S 7 Pin 12 Volt (Supplementary)



	Colour	Description
--	--------	-------------

1 (L)	Yellow	Reversing Lamp
2 (54G)	Blue	Spare
3 (31)	White	Earth
4 (R)	Green	12V Power Feed
5 (58R)	Brown	Spare
6 (54)	Red	Fridge (IGN Switched Live)
7 (58L)	Black	Spare or Earth for Pin 6



Converters are available to enable attachment of 13 pin, 7 pin and 7S connectors for both tow vehicle and trailer.

A 13 pin equipped trailer with reversing lights will need an adaptor when coupled to a 7 pin equipped tow vehicle and reversing lamp will not be functional.

Type approved trailers will need to be equipped with reversing lights:-

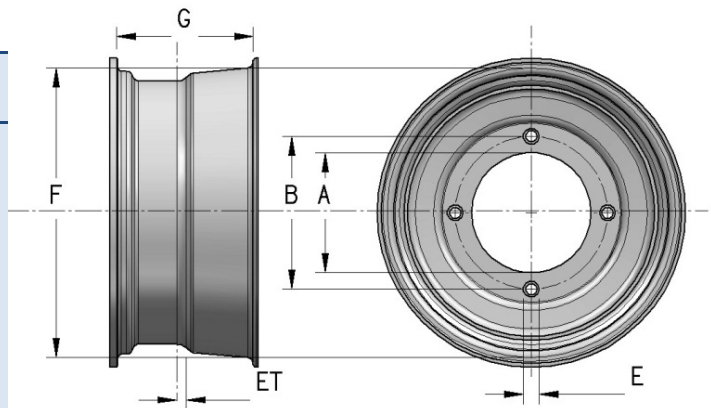
O₁ optional **** O₂ mandatory (one lamp up to 6m long, two lamps over 6m long)

We also supply lighting equipment - see previous pages or contact us for further details



Centre Wheel Studding

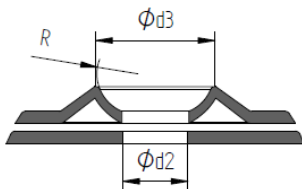
No of Bolts	Bore (A)	PCD (B)	Bolt
4	58	98	M12
4	57-60	100	M12
4	66.7	(4") 101.6	3/8"
5	63-67	112	M12/M14
5	80	(4½") 115	M12
4	95.25	(5½") 139.7	M12
5	94	140	M12/M16
5	115	(6½") 165.1	M12/M16
6	161	205	M14



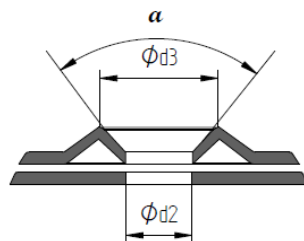
- A = Bore (mm)
- B = Pitch circle diameter (PCD) (mm)
- ET = Offset (mm)
- E = Bolt hole diameter (mm)
- F = Rim diameter (inches)
- G = Rim width (inches)

The correct nut or bolt must be used to suit the wheel seating i.e. conical or spherical.

Spherical Countersink



Conical Countersink

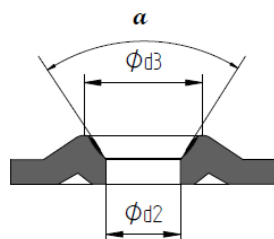
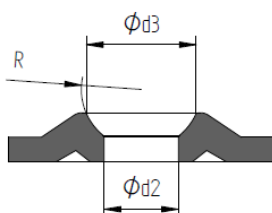
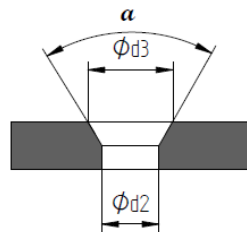
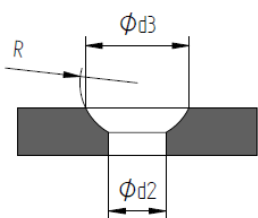


Spherical Countersink Sizes

Internal Thread	R	Ød2	Ød3
3/8"	12.7	10.5	20
M12 x M1,5	12	16	20
M14 x 1,5	14	16	23

Conical Countersink Sizes

Internal Thread	a	Ød2	Ød3
M10	60°	11	-
M10	90°	11	-
M12 x 1,5	60°	14	-
M12 x 1,5	90°	16	-
M14 x 1,5	60°	16.8	-





Tyre Speed Symbols

Speed Symbol	Max. car speed for which tyre is suitable	
	Km/h	mph
J	100	60
K	110	69
L	120	75
M	130	81
N	140	87
P	150	93

Speed Symbol	Max. car speed for which tyre is suitable	
	Km/h	mph
R	170	106
S	180	113
T	190	118
U	200	124
H	210	130
V	240	150



Tyre Load Index

LI	Kg	LI	Kg	LI	Kg	LI	Kg	LI	Kg	LI	Kg
60	250	71	345	82	475	93	650	104	900	115	1215
61	257	72	355	83	487	94	670	105	925	116	1250
62	265	73	365	84	500	95	690	106	950	117	1285
63	272	74	375	85	515	96	710	107	975	118	1320
64	280	75	387	86	530	97	730	108	1000	119	1360
65	290	76	400	87	545	98	750	109	1030	120	1400
66	300	77	412	88	560	99	775	110	1060	121	1450
67	307	78	425	89	580	100	800	111	1090	122	1500
68	315	79	437	90	600	101	825	112	1120	123	1550
69	325	80	450	91	615	102	850	113	1150	124	1600
70	335	81	462	92	630	103	875	114	1180	125	1650

LI = Load Index

Kg = Load (Kg)



The LOAD INDEX is a numerical code associated with the maximum load a tyre can carry at the speed indicated by the SPEED SYMBOL under service conditions, specified by the E.T.R.T.O Standards Manual – published annually.

A bonus load of 10% over the load capacity quoted in the table is permitted when passenger car tyres are fitted to caravans and light trailers operated within the UK with a maximum operating speed up to 100Km/h.

Commercial vehicle tyres attracted a smaller bonus load of 5% under the same conditions.

Dedicated trailer tyres classed as “Free Rolling Tyres” do not attract a bonus load.

The bonus load does not apply in territories where the speed limit for trailers is higher than in the UK, hence for export trailers or ones likely to be used in continental Europe bonus load should not be used.

As higher rated tyres become more readily available the use of bonus load is reducing and in all cases we recommend seeking advice from the tyre manufacturer if bonus loads are to be used, including suitable inflation pressure.

It is important to ensure that the wheel is suitable for the trailer mass and suits the tyre manufacturers fitment requirements.

New tyre regulations EC1222/2009 came into force on 1 November 2012 covering rolling resistance, wet grip, and noise which must be declared on a label conforming to a laid down format. The regulation does not apply to all tyres but covers most highway tyres for passenger cars, commercial vehicles, 4x4's etc whose nominal rim diameter exceeds 254mm or is less than 635mm. The intention of the regulation is to enable buyers to make a more informed choice when specifying tyres, however it is important to note that it does not cover tyre life (wear rate), handling or dry braking performance.

We also supply wheels & tyres - contact us for further details



Hub Nut

Manufacturer	One Piece Bearing	Taper Roller Bearing
Knott-Avonride Ltd	280 Nm (207 lb/ft)	70 Nm (Rotate Hub) then back off. Retighten finger tight then fit split pin.
Ifor Williams Trailers	350 Nm (258 lb/ft)	
Al-Ko	280 Nm (207 lb/ft)	

NOTE: Manufacturers specific recommendations for torque settings and for replacement of hub nut and split pin.

Wheel Bolts / Nuts

Thread Type	Torque Value
M10 x 1.25 Bolt	55 Nm (41 lb/ft)
M12 x 1.5 Bolt*	90 Nm (66 lb/ft)
M14 x 1.75 Bolt	145 Nm (107 lb/ft)
3/8" UNF Nut	60 Nm (44 lb/ft)
7/16" UNF Nut	70 Nm (52 lb/ft)
M12 x 1.5 Nut	100 Nm (74 lb/ft)
1/2" UNF Nut	90 Nm (66 lb/ft)
5/8" UNF Nut	110 Nm (81 lb/ft)
M16 x 1.5 Nut	195 Nm (144 lb/ft)

* Steel wheels (grade 8.8 or 10.9). For alloy wheels please contact our Technical department.

Fasteners - General

Bolt	Torque Value
M10 Grade 8.8	45 Nm (33 lb/ft)
M12 Grade 8.8	70 Nm (52 lb/ft)
M12 Grade 10.9	125 Nm (92 lb/ft)
M14 Grade 10.9	170 Nm (125 lb/ft)
M16 Grade 8.8	195 Nm (144 lb/ft)

Head Securing Bolts

Bolt	Torque Value
M12 Grade 10.9	100 Nm (74 lb/ft)
M14 Grade 10.9	125 Nm (92 lb/ft)

Lubrication

	Oil	Grease
Coupling head cup	-	Yes (Morris K2EP Longlife Grease)
Coupling pivots	Yes	-
Coupling drawtube	-	Yes (Morris K2EP Longlife Grease)
Handbrake	Yes	-
Jockey wheel thread	-	Yes (Morris K2EP Longlife Grease)
Exposed cables, rod ends, threads, pivots	-	Yes (Shell Albeida RL1)
Compensator	Yes	Yes (Shell Albeida RL1)



**We also supply hardware, fixings, adapters etc
Contact us for further details**



BREAKAWAY CABLES & SECONDARY COUPLINGS (EXTRACT FROM UNECE REGULATION 13)

- 5.2.2.1 Trailers of category O₁ need not be equipped with a service braking system; however, if a trailer of this category is equipped with a service braking system, it shall satisfy the same requirements as a trailer of category O₂.
- 5.2.2.2 Trailers of category O₂ shall be equipped with a service braking system either of the continuous or semi-continuous or of the inertia (overrun) type. The latter type shall be permitted only for centre axle trailers.
- 5.2.2.9 The braking systems shall be such that the trailer is stopped automatically if the coupling separates while the trailer is in motion. However, this provision shall not apply to trailers with a maximum mass not exceeding 1.5 tonnes, on the condition that the trailers are equipped with, in addition to the coupling device, a secondary coupling (chain, wire rope, etc) capable, in the event of separation of the main coupling, of preventing the drawbar from touching the ground and providing some residual steering action on the trailer.

These paragraphs are closely mirrored in EC Directive 98/12/EC paragraphs 2.2.2, 2.2.2.1 and 2.2.2.9 with the exception that paragraph 2.2.2.1 authorises the specified braking system for all trailers other than semi-trailers.

Knott-Avonride Ltd unbraked couplings for use on trailers up to 750kg gross weight (O₁) must be fitted with a compliant secondary coupling.

Use only  original replacement parts

Trailer Weights

Classification	Gross (kg)	Braking
O ₁	0 – 750	Unbraked with secondary coupling (or optionally braked with secondary coupling or breakaway cable)
O ₂	750 – 3500	Overrun couplings with breakaway cable (or secondary coupling to maximum mass of 1500kg)
O ₃	3500 – 10000	Power brakes, self adjusting brake mechanism and ABS
O ₄	Over 10000	Power brakes, self adjusting brake mechanism and ABS

NOTE: The maximum Mass considered for classifying a trailer corresponds to the static vertical load transmitted to the ground by the axle(s) (Annex II, paragraph 3, 2007/46/EC).

Trailer Dimensions

	Tow Vehicle	Length	Width	Height
The Road Vehicles (Construction & Use) Regulations 1986	< 3500 GVW	7.0m excl. drawbar	2.55m (was 2.3m)	Practical maximum 4.2m
	> 3500 GVW	12.0m excl. drawbar (Min 4 wheels, max combination length 18m)	2.55m	
EC Directive 2007/46/EEC Dimensions from 96/53/EC as amended by 2002/7/EC		12.0m incl. drawbar	2.55m (2.60m refrigerated)	4.0m
	M ₁ , M ₂ , M ₃ , N ₁ , N ₂ , N ₃	Max articulated vehicle length 16.5m		
		Max roadtrain (wagon & drag) 18.75m		

The information here is intended as a guide. It is as accurate as we can make it at the time of printing; however, Knott-Avonride Ltd does not accept any responsibility for any inaccuracies which may be in the text. Any person wishing to depend on the information contained here must check for themselves with the original documentation including any revision or additions to regulations, instruments or the law.



Timetable for the Enforcement of Directive 2007/46/EC

O ₁ , O ₂ , O ₃ , O ₄	Enforcement Dates		
	New Types of Vehicles Optional	New Types of Vehicles Obligatory	Existing Types of Vehicles Obligatory
Incomplete and complete vehicles	Since 29 April 2009	29 October 2010	29 October 2012
Completed vehicles	Since 29 April 2009	29 October 2011	29 October 2013
Special-purpose vehicles	Since 29 April 2009	29 October 2012	29 October 2014

KNOTT-AVONRIDE LIMITED

European Community
Whole Vehicle Type Approval (ECWVTA) - 2007/46/EC

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R48
Installation of Lighting
76/756/EEC
(Filament Lamps R37)

1003/2010
Rear Reg. Plate Space
70/222/EEC

1230/2012
Masses and Dimensions
97/27/EC

19/2011
Statutory Plates
76/114/EEC

R34 & R58
Fuel Tanks R.U.P.D
70/221/EEC

R73
Side Guards (03, 04 only)
89/297/EEC

109/2011
Spray Control
91/226/EEC

R13
Braking (where fitted)
71/320/EEC

R30 & R54
Tyres
92/23/EEC
(Installation 458/2011)
(Sound/Adhesion R117)

R55
Couplings
94/20/EC

R79
Steering Effort
70/311/EEC

R3
Reflectors and Markers
76/757/EEC

R7 & R91
Position and Outline Lamps
76/758/EEC

R6
Direction Indicators
76/759/EEC

R4
Rear Reg. Plate Lamps
76/760/EEC

R38
Rear Fog Lamps
77/538/EEC

R23
Reversing Lamps
77/539/EEC

R43
Safety Glass
92/22/EEC

R105
Dangerous Goods
98/91/EC

R122
Heating
2004/56/EC

Coupling

Foundation Brake

Compatibility

Head/Eyes

Coupling Assembly

Drawbar (bolt-on)



GENERAL SAFETY REGULATION EC 661/2009

The General Safety Regulation (GSR) amends Directive 2007/46/EC by substituting the equivalent UNECE Regulations in place of the EC Directives. It makes compliance with the UNECE regulations for type approval submissions compulsory from 1 November 2012 and compulsory for vehicles entering into service from 1 November 2014.

All of the old EC Directives will be repealed and will be replaced by the UNECE regulations. UNECE Regulations are also recognised in a wider range of countries than the European Directives.

We are already amending approvals to give dual compliance to both sets of regulations—well in advance of any mandatory dates.



Contacts

British Standards Institution	www.bsigroup.com
Business Link (select transport)	www.businesslink.gov.uk
Department for Transport	www.dft.gov.uk
Department of the Environment Northern Ireland	www.doeni.gov.uk
Driver & Vehicle Agency Northern Ireland	www.dvani.gov.uk
Driver & Vehicle Licensing Agency	www.dvla.gov.uk
European Tyre & Rim Technical Organisation	www.etrto.org
Freight Transport Association	www.fta.co.uk
Highways Agency	www.highways.gov.uk
Knott-Avonride Ltd, Burton Upon Trent, Staffordshire	www.knottuk.com
Knott-Avonride Ltd, Maesteg, South Wales	www.knottuk.com
Motor Industry Research Association	www.mira.co.uk
National Trailer & Towing Association	www.ntta.co.uk
Public Services (including transport)	www.direct.gov.uk
Road Haulage Association	www.rha.uk.net
The European Union on-line	www.europa.eu
The Institute of Road Transport Engineers	www.soe.org.uk
The Society of Motor Manufacturers and Traders Ltd	www.smmt.co.uk
Transport Engineer (magazine)	www.transportengineer.org.uk
Transport Research Laboratory	www.trl.co.uk
United Nations Economic Commission for Europe	www.unece.org
Vehicle & Operator Services Agency	www.vosa.gov.uk
Vehicle Certification Agency	www.vca.gov.uk

Knott-Avonride Ltd Publications

KF082	Trailer, Service, Maintenance & Repair Handbook
KF085	Spreadlever Brakes
KF087	Oil Damped Energy Store
KF088	Maintenance & Servicing Info for Coupling Heads, Towing Eyes, Dampers, Spreadlever Brakes, Prop stand, Jockey Bracket, Bowden Cable & Breakaway Cable
KF089	Maintenance & Servicing Information for Spreadlever Brakes, Drawtube, Head Lock, Jockey Clamp, Hubs & Bearings



Please also visit our website for publications and further information



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