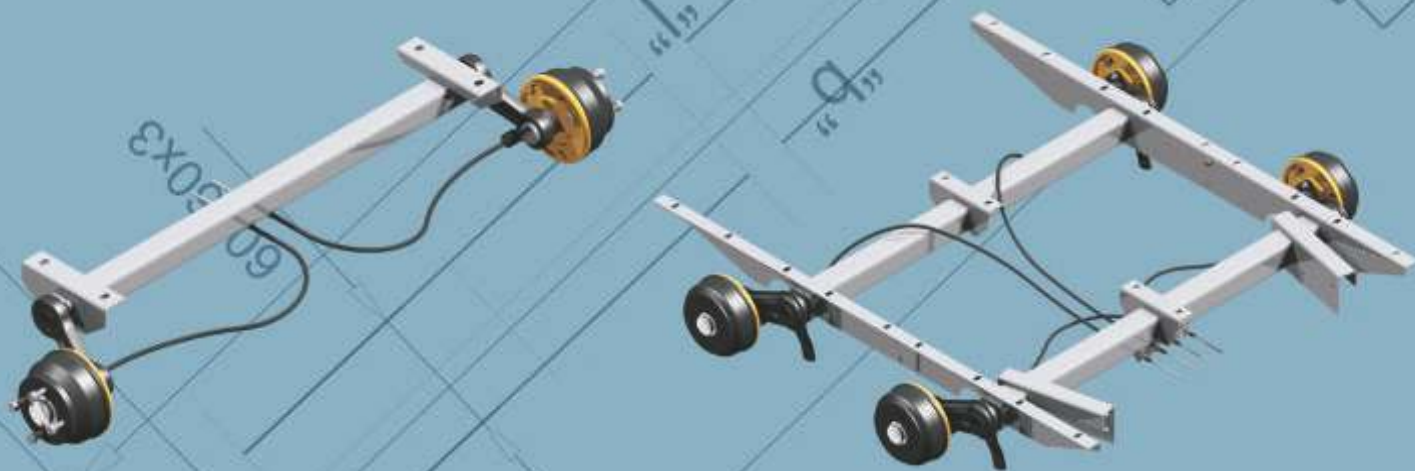


BRAKED AXLE



HUB AND STUB

KNOTT BRAKES

All of our braked axles are fitted with Knott brakes. These are high quality brakes being market leaders for over 70 years. These new generation of brakes include an “automatic adjustment” feature that will need no maintenance. Please indicate it in your order whether you would like to get your axle with a self-adjusting brake.

We offer for our trailer customers:

- Mechanical drum brakes,
- Hydraulic drum brakes,
- Hydraulic disc brakes (innovation),
- Electric brakes.



Brake systems comparison:

Types:	Mechanical Drum Brake	Hydraulic Drum Brake	Hydraulic Disc Brake	Electric Drum Brake
Advantages:	Serial product (lower price level) Automatic reversing, Automatic after adjustment possible, Compact, matured model Easy installation	Precise, Long life time	Maintenance free, Better braking quality, Long life time, Automatic after adjustment	simple construction, automatic reversing rigid drawbar (cheaper)
Supplementary	Overrun device, brake cables, balance	Hydraulic overrun device, hydraulic cables, brake cables, balance	Hydraulic overrun device, electronic reversing control hydraulic cables, brake cables, balance	Coupling, brake cables, balance
Max load capacity	900 kg	900 kg	900 Kg	900 kg
Bearing	life time compact ball bearing, taper roller bearing	compact bearing	compact bearing or taper roller bearing	taper roller bearing
Surface treatment	e-coated	e-coated	powder painted	e-coated
Water resistant	possible	possible	yes	possible
Status	serial product	serial product	under construction Planned termination: end of 2012	under construction Planned termination: 2013

VARIETY OF MECHANICAL DRUM BRAKES

Type	Brake drum	Brake shoe width (mm)	Permissible mass G_{BO} (kg)	Brake Torque M_{max} (Nm)	Tyre \varnothing (m) min. max.	ECE number	EG number
16-1365	F160	35	500	1050	0.368 0.580	361-0035-97	5177/77
20-2425/1	F200	50	750	1700	0.506 0.720	361-006-94	361-311-83
25-2025	F250	40	900	2000	0.506 0.720	361-007-94	361-185-81
30- 2261	F300	60	1500	6500	0.660 0.900	361-1076-97	361-089-81



F160



F200



Type	Offset (mm)	Drawing number
F160	0 - 45	6A0113
F160W	0 - 45	6A2263
F200	0 - 45	6A1121
F200W	0 - 45	6A2265
F200ET0	(-5) - 35	6A1303
F200ET0W	(-5) - 35	6A2578



F200ET0



VARIETY OF DRUM BRAKES



F250



Wheel connection	Brake
98×4	F160
100×4	F160
100×5	F200
108×4	F160, F200
110×4	F200
110×5	F200
112×5	F200, F250
112×3	F200, F250
114,3×5	F200, F250
115×4	F200, F250
120×5	F200, F250
120×6	F200, F250
130×4	F200, F250
130×5x	F200, F250
130×6	F200, F250
139,7×4x	F200, F250
139,7×5	F200, F250
139,7×6	F200, F250
140×5	F200, F250
140×6	F200, F250
150×3	F250
150×5	F250
152,4×5	F250
160×5	F250
165,1×5	F250
205×6	F300
205×5	F300



F250ET10



F300

Type	Offset (mm)	Drawing number
F250	0 - 45	6A0428
F250W	0 - 45	6A2327
F250ET10	0 - 10	6B7714
F300	0 - 45	6A2548

Washing nozzle for waterproof drum brakes

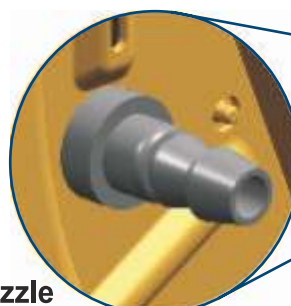
Use the washing nozzle for longer life time. It cleans the drum from inside, so the brake shoe and spring stay clean.

How to use:

Plug the hose to the nozzle and turn on the water. The salt water and dirt will flow out.



Washing nuts
Washing nozzle



SPARE PARTS FOR WHEEL BRAKE with compact bearing

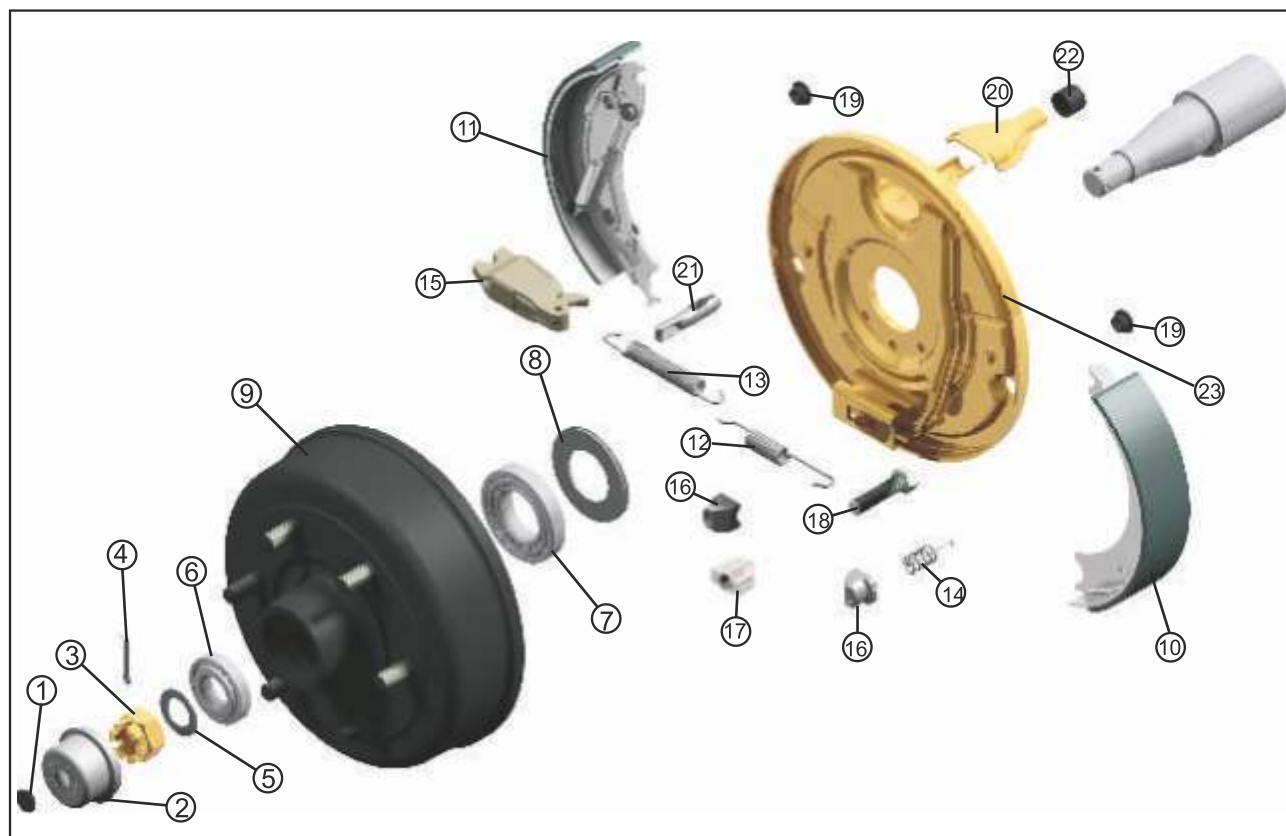
Item nr.	Description	Size	Article nr.
1	Conical wheel bolt	M12x1,5	6X0035.001
1	Spherical wheel bolt	M12x1,5	6X0035.003
1	Spherical wheel bolt	M14x1,5	6X0035.004

WHEEL BOLTS / NUTS

Thread Type	Torque Value
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)

Item No.	Description	Article number			
		F160	F200	F200ET0	F250
1	Conical wheel bolt	6X0035.001	6X0035.001	6X0035.001	6X0035.001
2	Dust cap	6B1832C002	6B1832C002	6B1831C002	6B1831C002
3	O-ring	6X0034.001	6X0034.001	6X0034.003	6X0034.003
4	Flanged nut	6B0053.001	6B0053.001	6B0053.001	6B0053.001
5	Brake drum kpl incl. 5/1 - 5/4	6A2266	6A2265	6A2582	6B0046
5/1	Brake drum	6A2266	6A2267	6A2582	6B0046
5/2	Sealed for life bearing	6X0500.009	6X0500.009	6X0500.007	6X0500.007
5/3	Circlip	6X0472.054	6X0472.054	6X0472.059	6X0472.059
5/4	Simmering	6S0063.001	6S0063.001	6S0064.001	6S0064.001
6	Brake shoe (Backmat) (reversing)	6X0023.001	6X0023.002	6X0023.002	6X0023.006
7	Brake shoe (normal)	6X0022.001	6X0022.002	6X0022.002	6X0022.006
8	Tension spring (lower)	6X0024.001	6X0644.001	6X0644.001	6X0024.003
9	Tension spring (upper)	6X0024.001	6X0644.003	6X0644.003	6X0024.004
10	Compression spring	6X0098.001	6X0644.002	6X0644.002	6X0098.001
11	Complete expander	6X0107.001	6X0107.002	6X0107.002	6X0107.002
12	Adjustment shoe posts	6X0036.001	6X0036.001	6X0036.001	6X0036.002
13	Readjustment wedge	6X0099.001	6X0099.001	6X0099.001	6X0099.002
14	Hexagonal head screw	6X0759.001	6X0759.001	6X0759.001	6X0759.002
15	Releasing cap	6X0866.001	6X0866.001	6X0866.001	6X0866.002
16	Half Shell	6X0046.005	6X0046.005	6X0046.005	6X0046.005
17	Eyelet	6X0041.001	6X0041.001	6X0041.001	6X0041.001
18	Protective sleeve	6X0046.001	6X0046.001	6X0046.001	6X0046.001
19	Brake backplate (left)	6X0083.002	6X0086.003	6X0086.003	6X0679.001
19	Brake backplate (right)	6X0083.001	6X0086.004	6X0086.004	6X0679.002

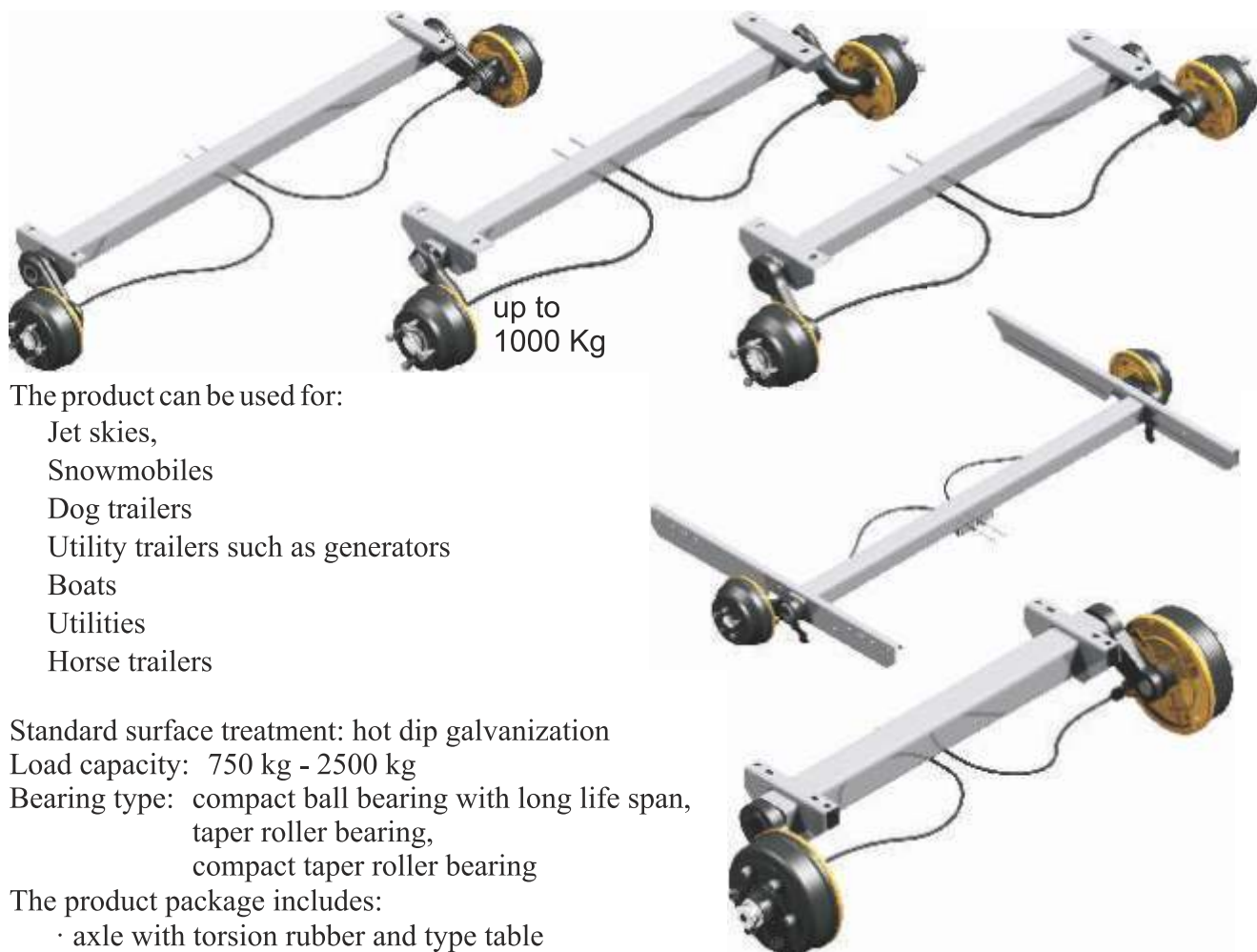
SPARE PARTS FOR WHEEL BRAKE with conical bearing



Item No.	Description	Article number	
		F250ET10	F300
1	Protective plug	---	6B5663.001
2	Dust cap	6B1831C024	6B3446.001
3	Flanged nut	6X0935.019	6X0935.018
4	Cotter pin	6X0094.038	6X0094.050
5	Steel washer	---	6X0032.004
6	Conical bearing	6X0500.011	6X0500.064
7	Conical bearing	6X0500.064	6X0500.065
8	Dust protector ring	41562	6X0927.002
9	Brake drum kpl	6B7714	6A2137
10	Brake shoe (normal)	6X0023.002	6X0023.004
11	Brake shoe (Backmat) (reversing)	6X0022.002	6X0022.004
12	Tension spring (lower)	6X0024.003	6X0644.006
13	Tension spring (upper)	6X0024.004	6X0644.007
14	Compression spring	6X0098.001	6X0098.001
15	Complete expander	6X0107.002	6X0107.002
16	Adjustment shoe posts	6X0036.002	6X0036.002
17	Readjustment wedge	6X0099.002	6X0099.002
18	Hexagonal head screw	6X0759.002	
19	Releasing cap		
20	Half Shell	6X0046.005	6X0046.005
21	Eyelet	6X0041.001	6X0041.001
22	Protective sleeve	6X0769.018	6X0679.001
23	Brake backplate (left)	6X0679.004	6X1081.002
23	Brake backplate (right)	6X0679.005	6X1081.001

RUBBER SUSPENSION AXLE WITH AUTO-REVERSE DRUM BRAKE

Load capacity up to 2500 kg



The product can be used for:

- Jet skis,
- Snowmobiles
- Dog trailers
- Utility trailers such as generators
- Boats
- Utilities
- Horse trailers

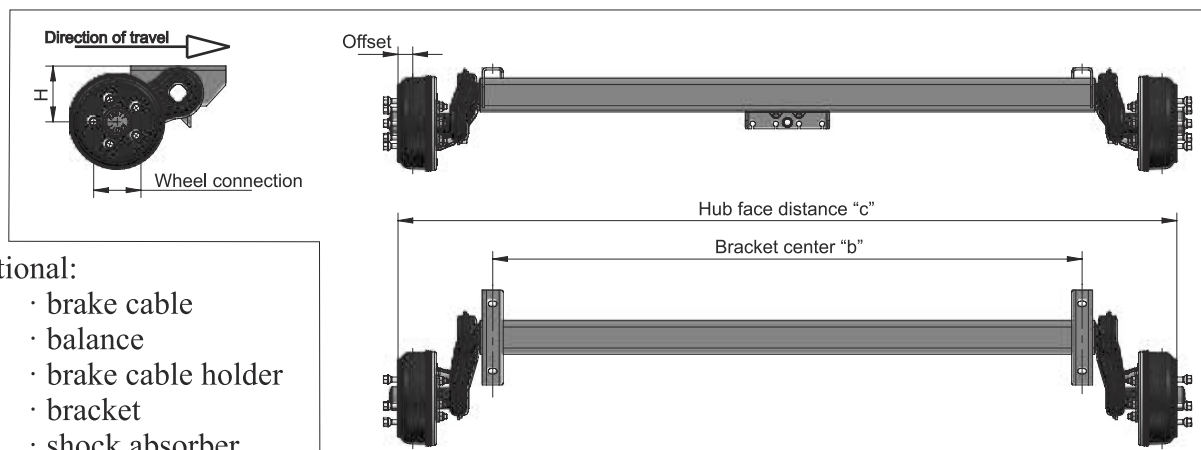
Standard surface treatment: hot dip galvanization

Load capacity: 750 kg - 2500 kg

Bearing type: compact ball bearing with long life span,
taper roller bearing,
compact taper roller bearing

The product package includes:

- axle with torsion rubber and type table
- brake drum
- swing arm



Additional:

- brake cable
- balance
- brake cable holder
- bracket
- shock absorber
- self-adjusting brake for 200, 250 and 300 brakes

If you are interested in our product, please give the following parameters to our sales personnel to enable us to choose the best variant for you suited to your needs:

- H, c, b size,
- Load capacity,
- Wheel connection,
- Offset

RUBBER SUSPENSION CRANKED AXLE WITH AUTO-REVERSE DRUM BRAKE

Load capacity up to 1800 kg

Product can be used for :

- boat trailers

Surface treatment:

- hot dip galvanization

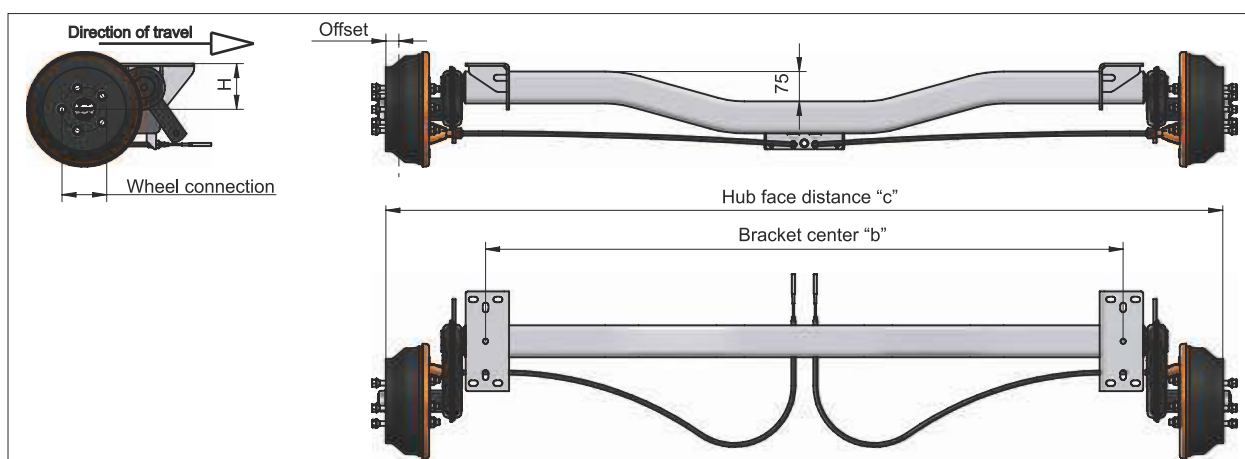
Load capacity: 750 - 1800 kg

Bearing type: compact ball bearing with long life span,
conical bearing, compact taper bearing



Advantages:

The new design makes the transportation of boats and other vehicles easier
The lower centre of gravity makes it more stable.



If you are interested in our product, please give the following parameters to our sales personnel to enable us to choose the best variant for you suited to your needs:

- H, c, b size,
- Load capacity,
- Wheel connection,
- Offset

RUBBER SUSPENSION TANDEM AXLE WITH AUTO-REVERSE DRUM BRAKE

Load capacity up to 3500 kg

Product can be used for:

- utility trailers
- horse trailer.

Standard surface treatment: hot dip galvanization

Load capacity: 1500 kg - 3500 kg

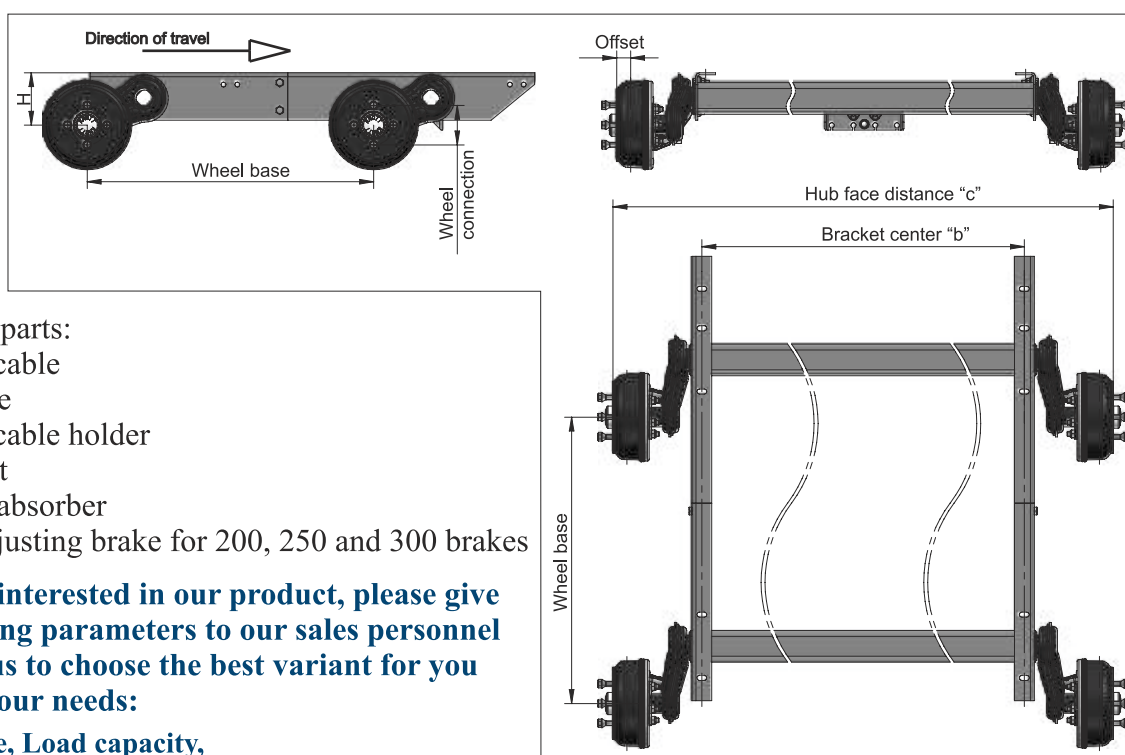
Bearing type: compact ball bearing with long life span,
taper roller bearing,
compact taper roller bearing

Includes:

- axle with torsion rubber and type table
- brake drum
- swing arm

Mounting types:

- welded
- bolted



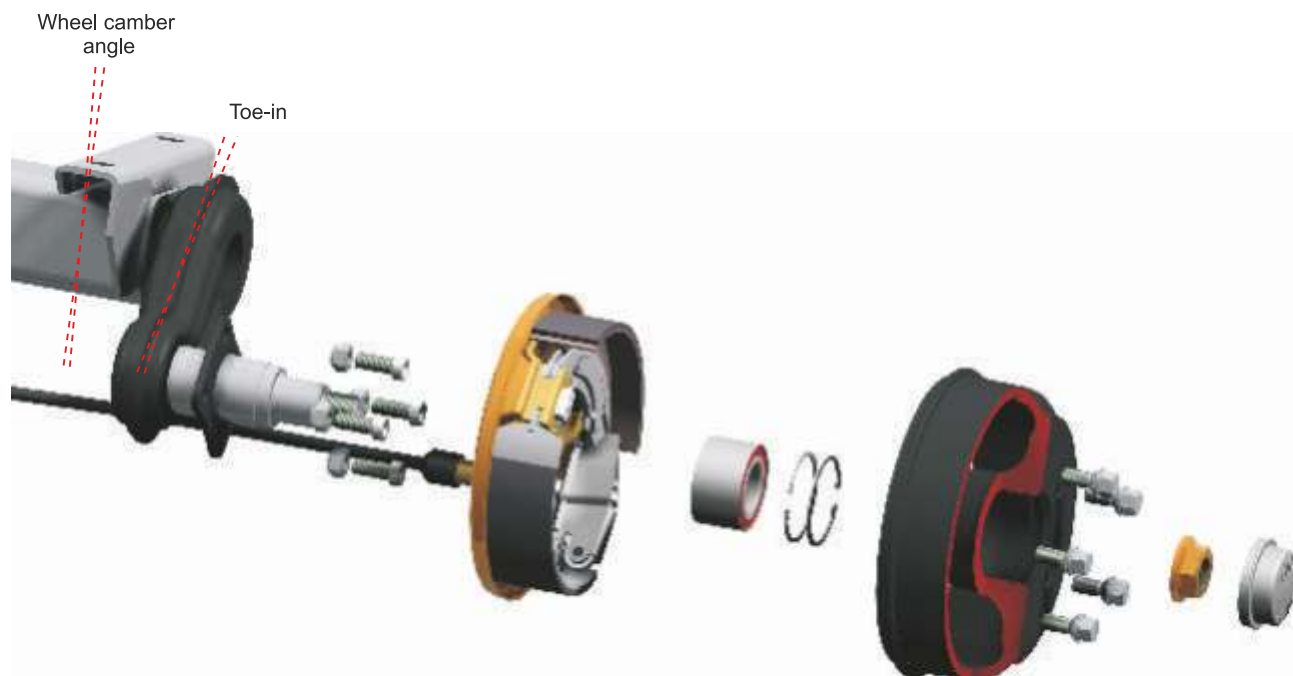
Additional parts:

- brake cable
- balance
- brake cable holder
- bracket
- shock absorber
- self-adjusting brake for 200, 250 and 300 brakes

If you are interested in our product, please give the following parameters to our sales personnel to enable us to choose the best variant for you suited to your needs:

- H, c, b size, Load capacity,
- Wheel connection, Offset, Wheel base

SAFETY, COMFORT, SIMPLE AND EASY TO SERVICE



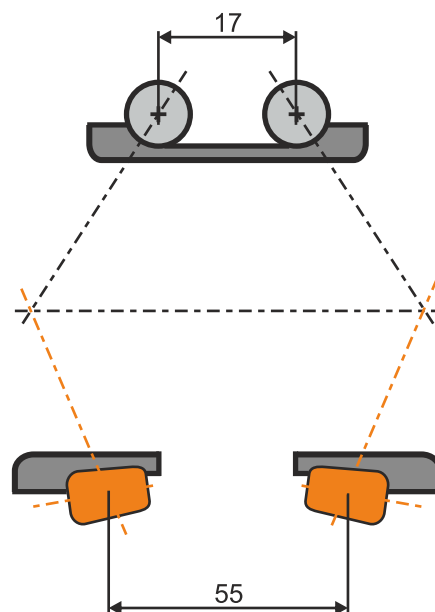
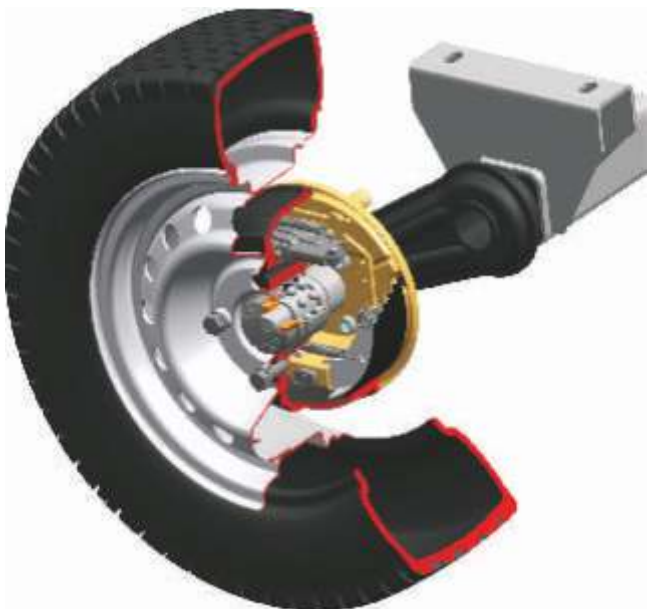
- 1. Replacing the wheel or the brake** can be done within a couple of minutes.
There are only 4 or 5 nuts to be loosened and the whole wheel can be removed together with the brake and the bearing
- 2. Factory set camber and toe-in**
- 3. Protection against corrosion even in extreme circumstances**
 - Fully galvanized brake
 - High endurance
 - Clear visibility of the brake linings
- 4. The bearing of the wheel is protected against contamination and water**
The bearing is treated with special lubricant and is maintenance-free for its entire lifespan.
- 5. Bowden cable connection system**
Without dismantling it, a brake cable is attached to the brake mechanism
- 6. Self-locking axle nut**
A torque of 280 Nm ensures the proper position of the bearing

DOUBLE ROW BEARING WITH SKEW INFLUENCE LINE



Heavy duty, maintenance free, water resistant bearings with double skew influence line are applied in the axle series production.

In connection with the mechanical characteristics, the influence line of skew bearing with ball-row distance of 17mms, is equivalent to two pieces of bevel roller bearings with a roller distance of 55mm.



BALANCE BARS

New balance bar kit for single axle



Mounting kit for
old version of brake cables
with hexagon nut
410335.001

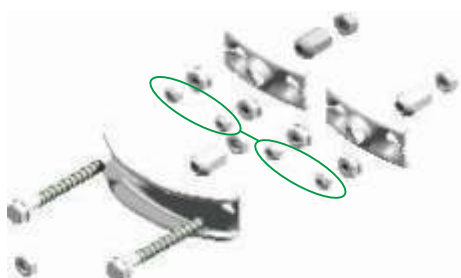


Mounting kit for
old version of brake cables
with self-locking hexagon nut
409905.001



New balance bar mounting kit
for new brake cables
409904.001

New balance bar kit for tandem axle



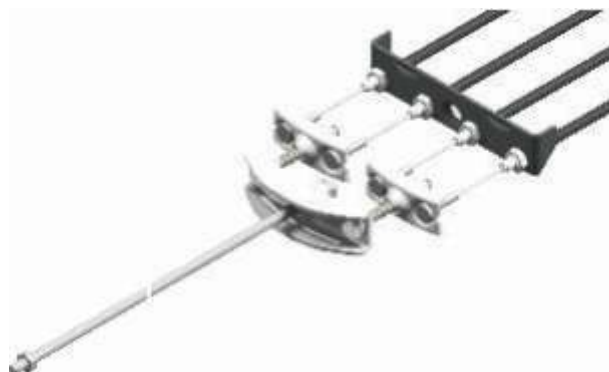
New balance bar kit
for tandem axle
with self-locking hexagon nut
409907.001



New balance bar kit
for tandem axle
409906.001

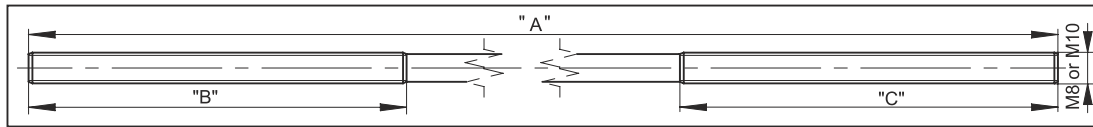


An example for mounting the old version
of brake cables for tandem axle



An example for mounting the new version
of brake cables for tandem axle

BRAKE RODS, BOWDEN CABLES



We offer the brake rods with following dimensions: A= between 400 and 2000 mm, B= 50 mm, C= between 50 and 300 mm length. Drawing number: 6B1842.
For different sizes can be supplied on request.

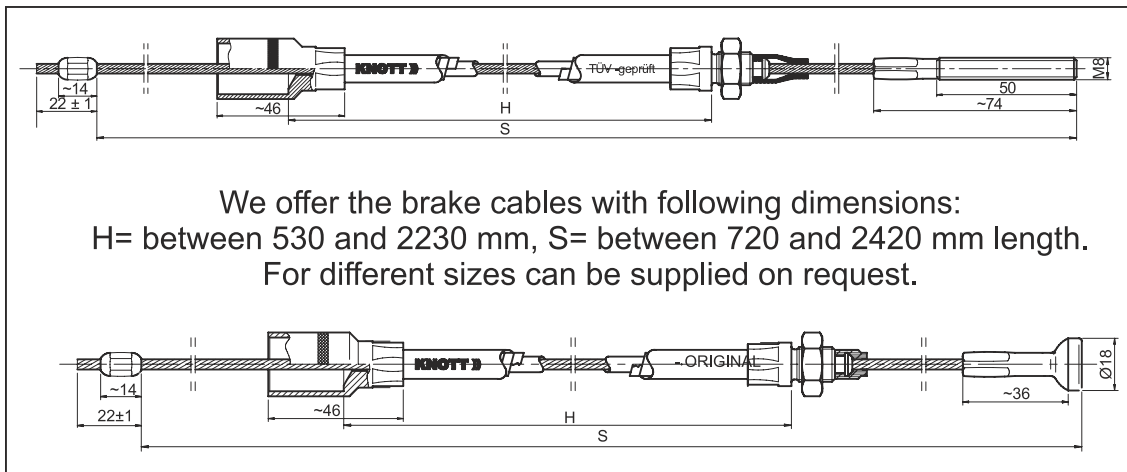


old version
drawing number: 6X0029

Standard trailer brake cables



new version
drawing number:
980202



We offer the brake cables with following dimensions:
H= between 530 and 2230 mm, S= between 720 and 2420 mm length.
For different sizes can be supplied on request.



old version
drawing number: 6X0324

Stainless steel trailer brake cables



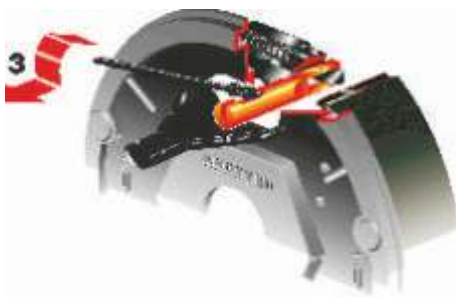
new version
drawing number: 980207

The stainless steel cable made from corrosion resistant steel, threaded end and sleeve are treated with a high corrosion protection for use in extreme condotions.

SIMPLE INSTALLATION OF BRAKE CABLE



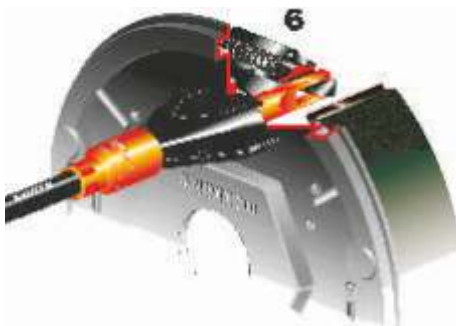
1. Remove the protective cover
2. Lift the upper part of the cable bracket



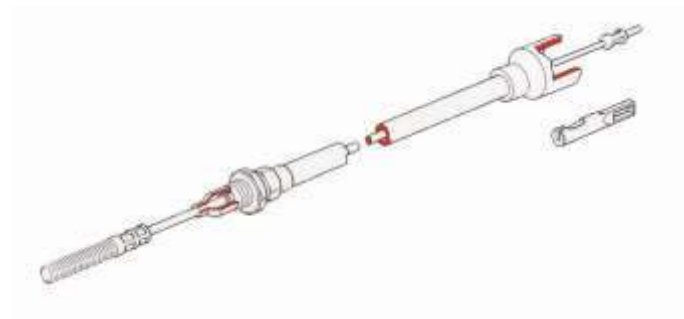
3. Hitch the end of the cable to the groove of the pulley



4. Close the cable bracket cover
5. Move the cover of the cable forward



6. The brake mechanism is ready for use.



MOUNTING OF A SHOCK ABSORBER

Shock absorber can be mounted to the front



6X0072.912



Shock absorber can be mounted centrally



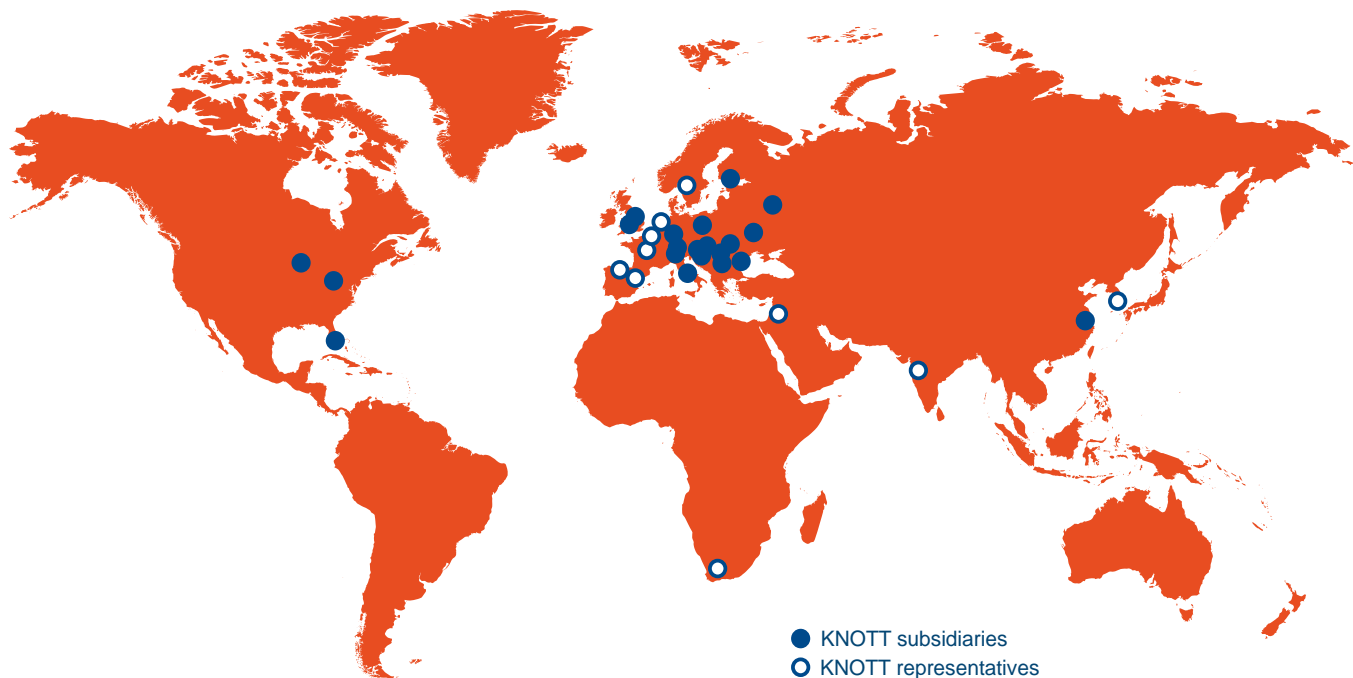
6X0072.910



Shock absorber can be mounted to the back



There is no trailer without us



The Knott Group - global competency

The member companies of the Knott Group design, develop, produce and market braking systems for commercial and off-highway vehicles together with running gear components for trailers.

Competent, one-to-one consulting and outstanding product quality are characteristic of all the companies within the Group.

KNOTT's own production plants and branch offices are supported by a world-wide dealership network.



www.autoflex.ro

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BRAKE AND TRAILER TECHNOLOGY

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