



Product Range '09

Product Range Coupling Equipment 08/09

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We make life easier for our users by continuously developing better systems with high operational reliability and a long service-life. Couplings – manual, automatic and power assisted for trailers and centre-axle trailers in all weight classes.

Underrun protection, drawbars, drawbeams and other accessories.

Our products are subjected to multi-stage corrosion treatment, and they all comply with the requisite national and international standards for their markets.



VBG has EU approved couplings for all types of transports, for eye dimensions 57, 50 and 40 mm. The product range includes reliable couplings intended for centre-axle trailers, dollies and trailers, as well as comfort couplings only intended for trailers with articulated drawbars.

Corrosion protection

All the parts in the coupling are designed for simple replacement. The replacement of a complete mechanism ensures safe and easy renovation.

The entire coupling, internally also, is surface-treated with a zinc-manganese phosphatising process and ED finish to ensure the best possible corrosion protection.

The exterior of the coupling has a bright red powder coating to ensure improved resistance to abrasion and a high finish.

Signal and lock pin

All the couplings have a fully automatic signal and lock pin, with explicit indication of locked and open positions. One requirement for remote controlled couplings in accordance with Directive 94/20/EEC is that there must be a signal light in the cab. An easily installed position sensor and VBG's Indicating kit provides the driver with information on whether the coupling is closed or open.

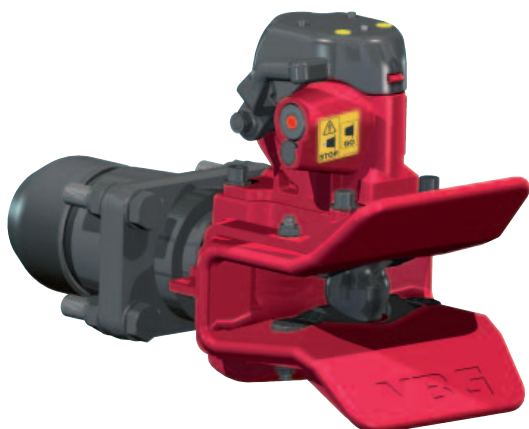
Ergonomics

In addition to the excellent connection and disconnection characteristics, the rotating coupling bolt ensures a higher degree of structural strength and a longer service-life for both the coupling bolt and the bushings. The design incorporates splines on the lifting arm shaft, which enable several different handle angles.



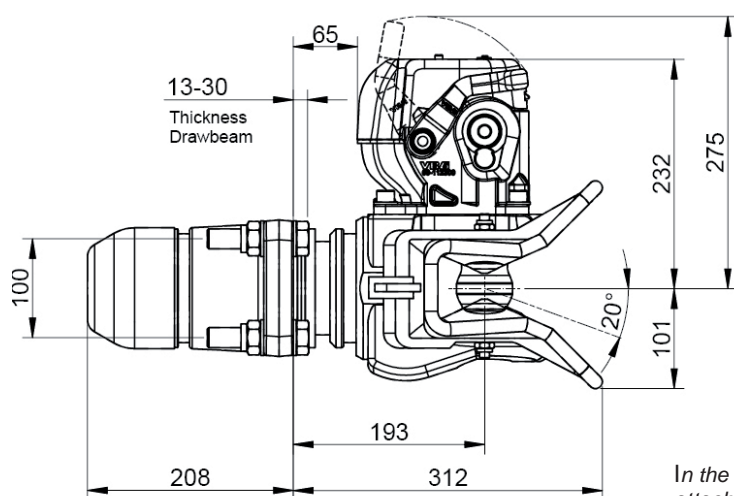
The handle can easily be replaced, and the coupling can also easily be supplemented with the VBG Power actuator or AM unit. A jackknife alarm, coupling mouth extender, overload protection and protective insert are also available as accessories for VBG 750V/795V.

VBG 795V



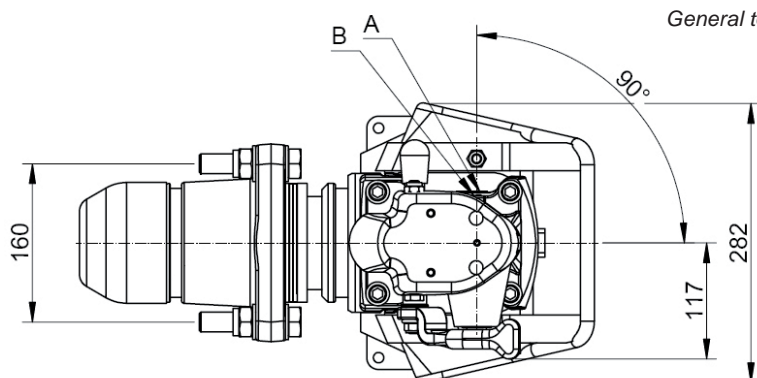
Coupling VBG 795V is intended for heavy centre-axle trailers, twin steering axle trailers and dollies fitted with drawbar eyes in accordance with VBG standard Ø 57 mm.

A well-conceived and user-friendly design guarantees that the coupling is operationally reliable and durable, and ensures low running costs. The well-proven attachment package, with its large bearing surfaces, has been adapted for large vertical tensions.



In the event of an accident, the coupling can rotate 360° in its attachment.

General tolerance +/- 10 mm.



SPECIFICATIONS

Coupling VBG 795V Performance values

Part no. 09-052000

D	290 kN
D _C	145 kN
V	95 kN
S	1000 kg

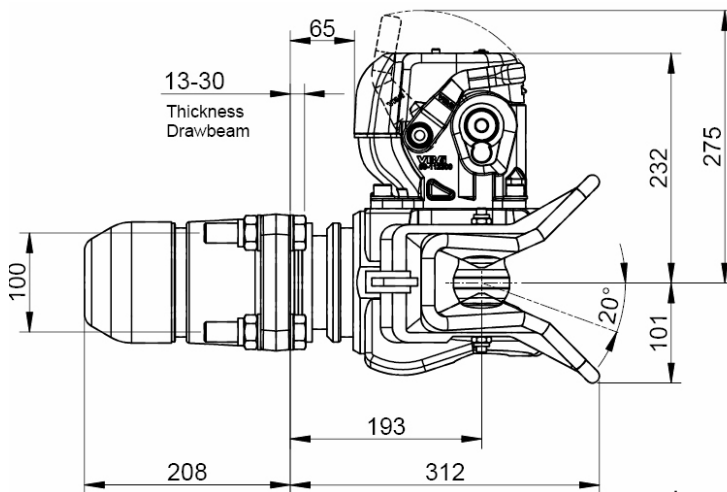
Hole pattern, drawbeam	160 x 100 mm
Intended for eye:	Ø 57 mm VBG Std
Dead weight	60 kg
EU coupling class	S
Type approval no.	e4*94/20*1699

160 x 100 mm
Ø 57 mm VBG Std
60 kg
S
e4*94/20*1699

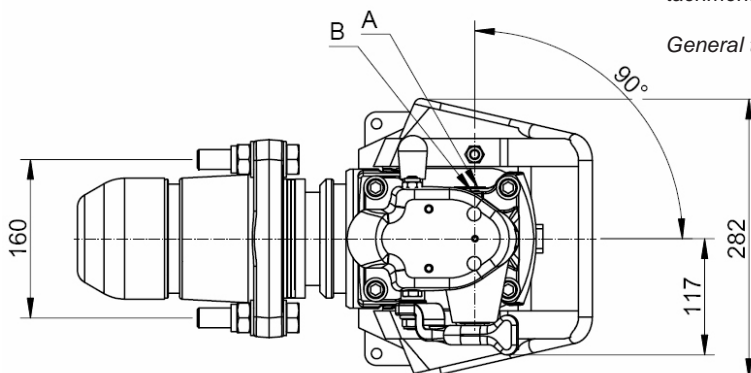


Coupling VBG 795VR is intended for heavy centre-axle trailers, twin steering axle trailers and dollies fitted with drawbar eyes in accordance with VBG standard Ø 57 mm. VBG 795VR has an enclosed and reinforced attachment package and is ideal for a combination of heavy loads/applications and poor road conditions.

A robust and user-friendly design guarantees that the coupling is operationally reliable and durable.



In the event of an accident, the coupling can rotate 360° in its attachment.



General tolerance +/- 10 mm.

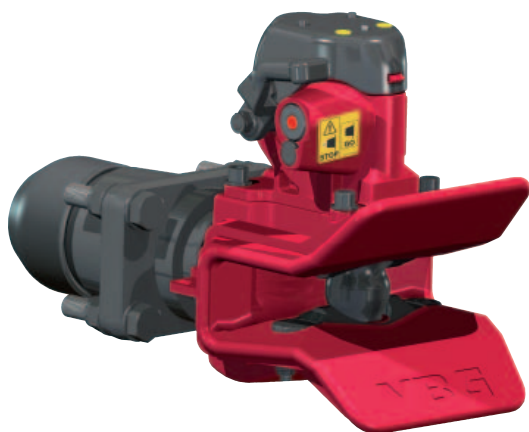
SPECIFICATIONS

Coupling VBG 795VR **Part no. 09-057900**

Performance values
 D 290 kN
 D_C 145 kN
 V 95 kN
 S1000 kg

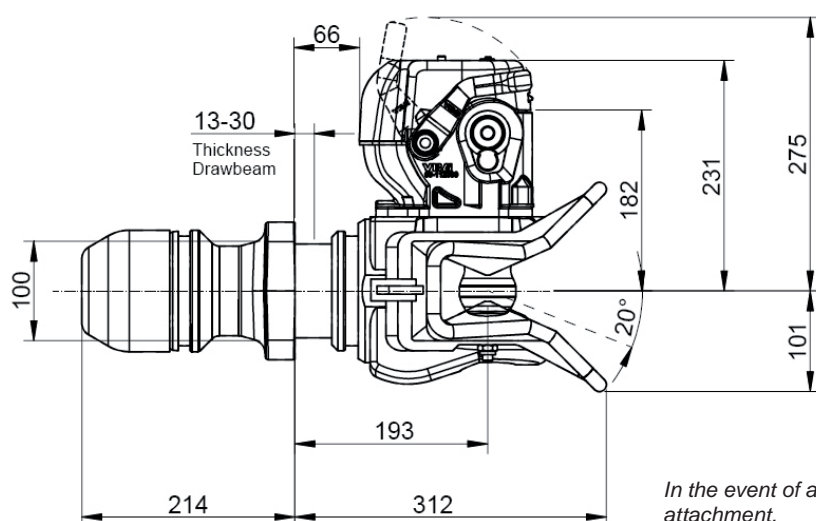
Hole pattern, drawbeam 160 x 100 mm
 Intended for eye: Ø 57 mm VBG Std
 Dead weight 61 kg
 EU coupling class S
 Type approval no. e4*94/20*1699

VBG 750V



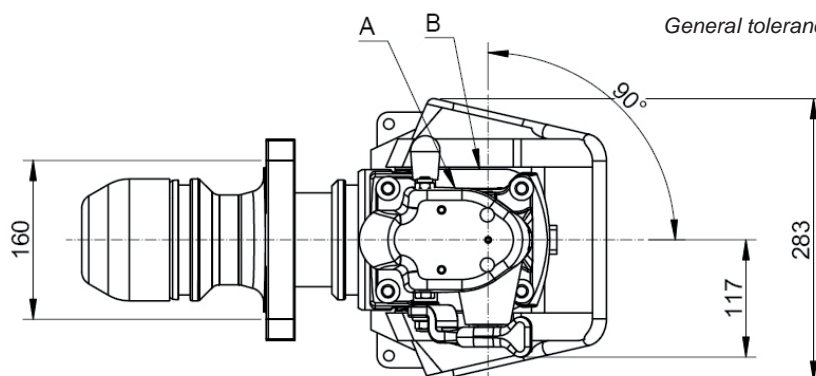
Coupling VBG 750V is intended for centre-axle trailers, twin steering axle trailers and dollies fitted with drawbar eyes in accordance with VBG standard Ø 57 mm.

A well-conceived and user-friendly design guarantees that the coupling is operationally reliable and durable, and ensures low running costs.



In the event of an accident, the coupling can rotate 360° in its attachment.

General tolerance +/- 10 mm.



SPECIFICATIONS

Coupling VBG 750V Performance values

Part no. 09-052500

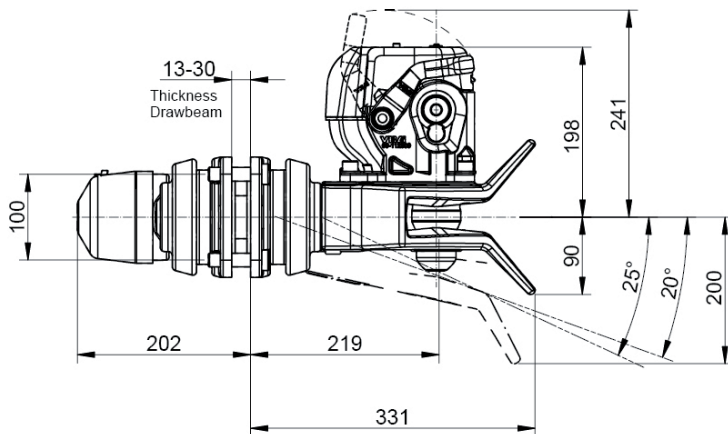
D	190 kN
D _C	120 kN
V	50 kN
S	1000 kg

Hole pattern, drawbeam	160 x 100 mm
Intended for eye	Ø 57 mm VBG Std
Dead weight	55 kg
EU coupling class	S
Type approval no.	e4*94/20*1698

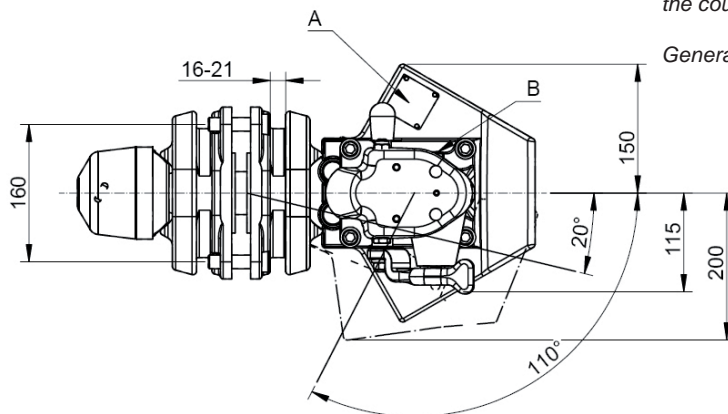
160 x 100 mm
Ø 57 mm VBG Std
55 kg
S
e4*94/20*1698



The comfort coupling for trailers with articulated drawbar and 57 mm drawbar eye. The small number of component parts and robust design ensure low running costs and reliable operation. The well-proven attachment package means first-rate driving comfort, while the automatically functioning lock pin also simplifies handling.



With a rotation of up to 40° the coupling returns to its normal position when the load is released. In the event of an accident, the coupling can rotate 360° in its attachment.



General tolerance +/- 10 mm.

SPECIFICATIONS

Coupling VBG 760

Performance values

Hole pattern, drawbeam
Intended for eye
Dead weight
EU coupling class
EU approval no.

Part no. 05-075500

D 200 kN
160 x 100 mm
Ø 57 mm VBG Std
42 kg
S
e4*94/20*0475

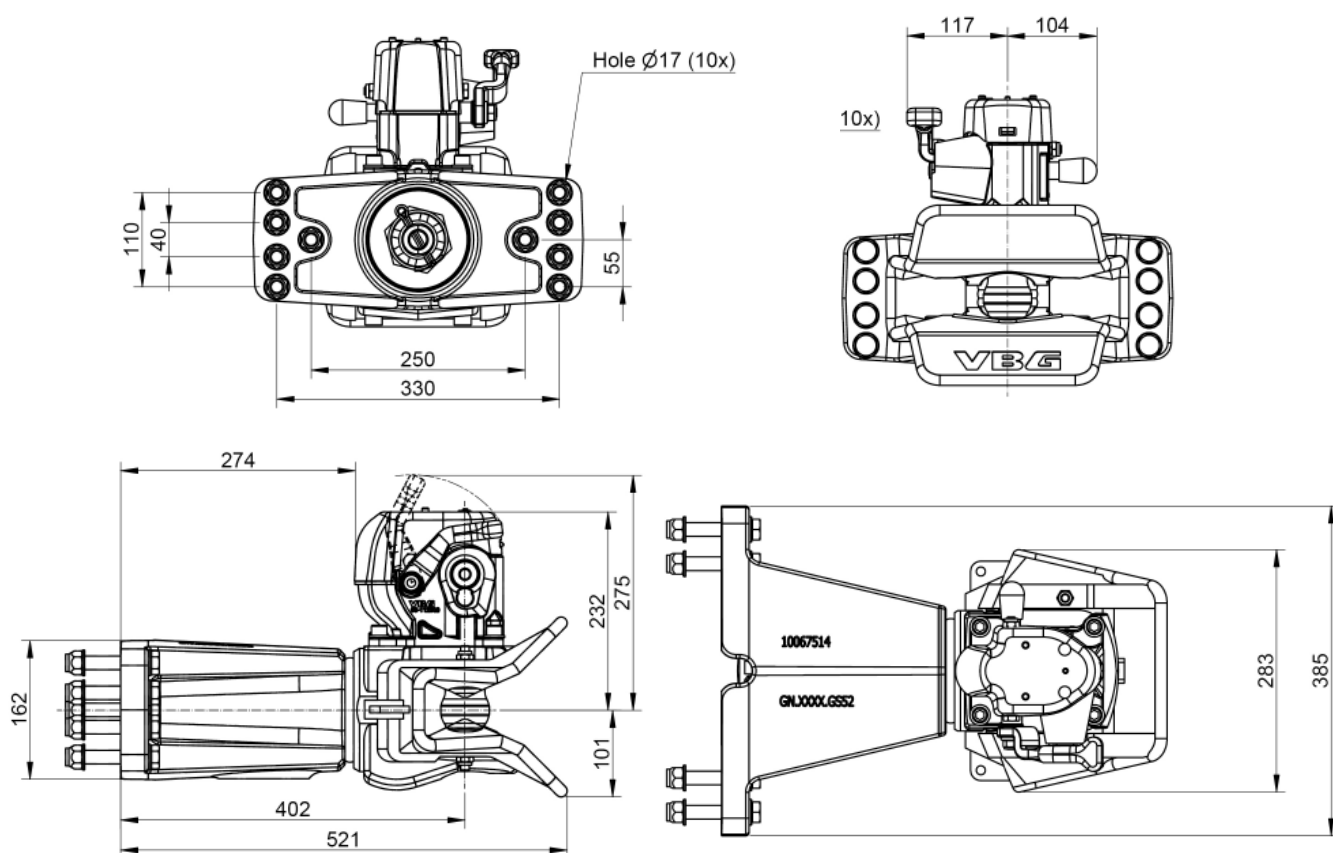
Angular displacement for eye

Horizontally ± 110°
Vertically ± 30°
Axially ± 40°

VBG 7310D



A coupling for trailers with articulated drawbar and 57 mm drawbar eye. VBG 7310D is a robust coupling for very heavy transports. It has a strong and stable attachment with ten bolts mounted in the drawbeam, which means that it can absorb very large tensions.



General tolerance +/- 10 mm.

SPECIFICATIONS

Coupling VBG 7310D Performance values

Hole pattern, drawbeam
Intended for eye
Dead weight
EU coupling class
EU approval no.

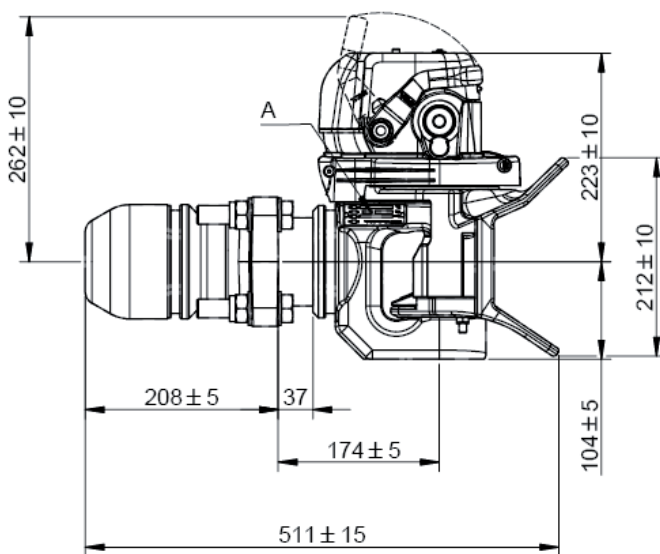
Part no. 09-073100
D 310 kN

10-hole pattern
Ø 57 mm VBG Std
92 kg
S
e11*94/20*6336

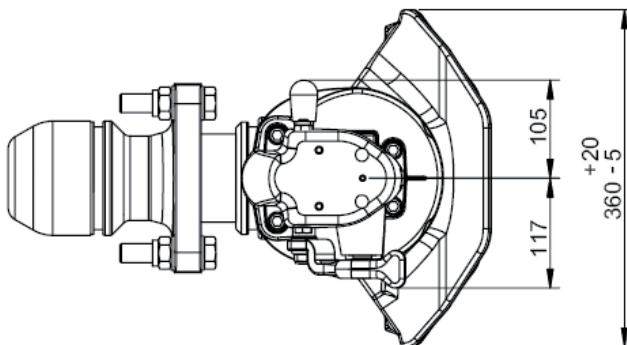
VBG 575V/590V



VBG 575V / 590V are couplings for centre-axle trailers, and trailers and dollies with an ISO 50 mm eye. They are fitted with a rotating coupling bolt that ensures a high degree of structural strength and a long service-life for both the coupling bolt and bushings. The well-proven attachment package, with its large bearing surfaces, has been adapted for large vertical tensions.



In the event of an accident, the coupling can rotate 360° in its attachment.



SPECIFICATIONS

Coupling VBG 575V Performance values

Hole pattern, drawbeam
Intended for eye

Dead weight
EU coupling class
Type approval no.

Part no. 09-057500

D 190 kN, D_C 130 kN,
V 75 kN, S 1000 kg
160 x 100 mm
Ø 50 mm as per ISO
1102/DIN 74053/SMS 996
47 kg
C50-X
e11*94/20*3371

Coupling VBG 590V Performance values

Hole pattern, drawbeam
Intended for eye

Dead weight
EU coupling class
Type approval no.

Part no. 09-059000

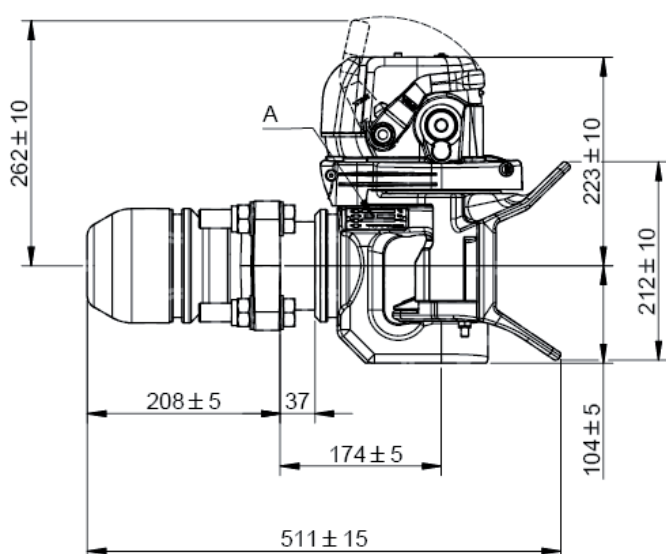
D 285 kN, D_C 140 kN,
V 90 kN, S 1000 kg
160 x 100 mm
Ø 50 mm as per ISO
1102/DIN 74053/SMS 996
53 kg
C50-X
e11*94/20*2799

VBG 590VR

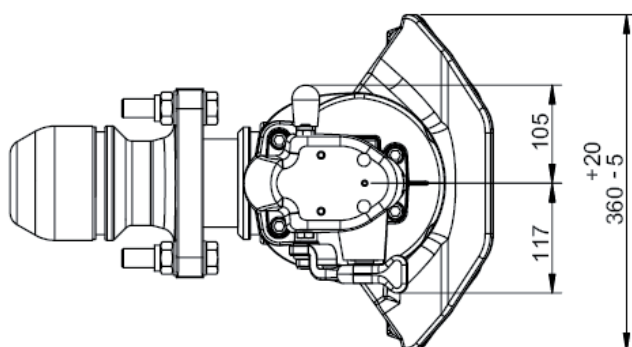


Coupling VBG 590VR is intended for heavy centre-axle trailers, twin steering axle trailers and dollies fitted with drawbar eyes in accordance with ISO 50 mm.

VBG 590VR has an enclosed and reinforced attachment package and is ideal for a combination of heavy loads/applications and poor road conditions. A well-conceived and user-friendly design guarantees that the coupling is operationally reliable and durable.



In the event of an accident, the coupling can rotate 360° in its attachment.



SPECIFICATIONS

Coupling VBG 590VR

Part no. 09-060000

Performance values

D 285 kN
D_C 140 kN
V 90 kN
S 1000 kg

Hole pattern, drawbeam
Intended for eye

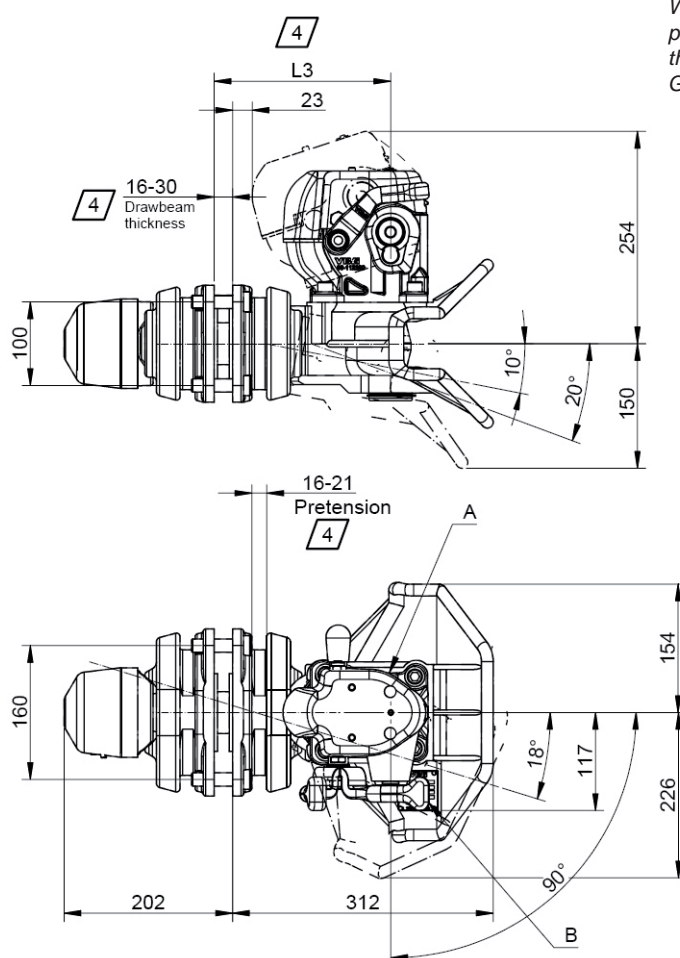
160 x 100 mm
Ø 50 mm as per ISO
1102/DIN 74053/SMS 996

Dead weight
EU coupling class
EU approval no.

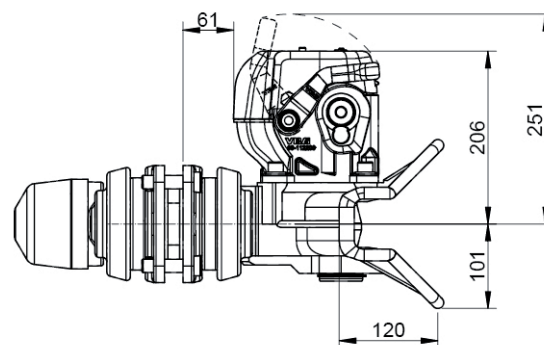
54 kg
C50-X
e11*94/20*2799



The comfort coupling for trailers with articulated drawbar and 50 mm drawbar eye. The small number of component parts and robust design ensure low running costs and reliable operation. The well-proven attachment package means first-rate driving comfort, while the automatically functioning lock pin also simplifies handling.



With a rotation of up to 40° the coupling returns to its normal position when the load is released. In the event of an accident, the coupling can rotate 360° in its attachment. General tolerance +/- 10 mm.



Note 4: Coupling center distance "L3" depend of pretension and drawbeam thickness (See table)

Drawbeam thickness	Pretension	
	16	21
16	204	208
20	208	212
22	210	214
28	216	220
30	218	222

SPECIFICATIONS

Coupling VBG 8500

Performance values

Hole pattern, drawbeam
Intended for eye

Dead weight
EU coupling class
EU approval no.

Part no. 08-009000

D 190 kN
160 x 100 mm
50 mm as per
ISO 1102:2001/
DIN 74053/SMS996
42 kg
C50-X
e4*94/20*0062

Angular displacement for eye

Horizontally ± 90°
Vertically ± 25°
Axially ± 40°

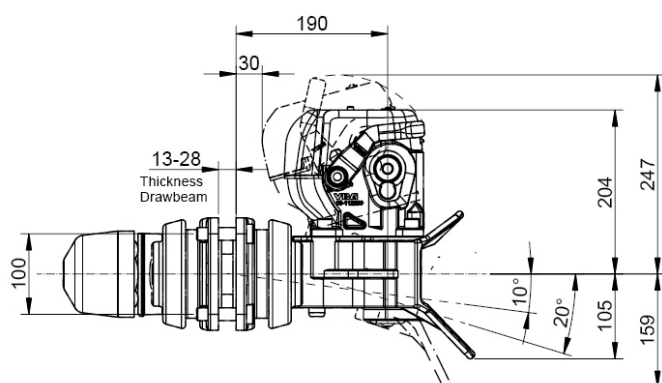
VBG 8040



The comfort coupling for trailers with articulated drawbar and DIN 40 mm eye.

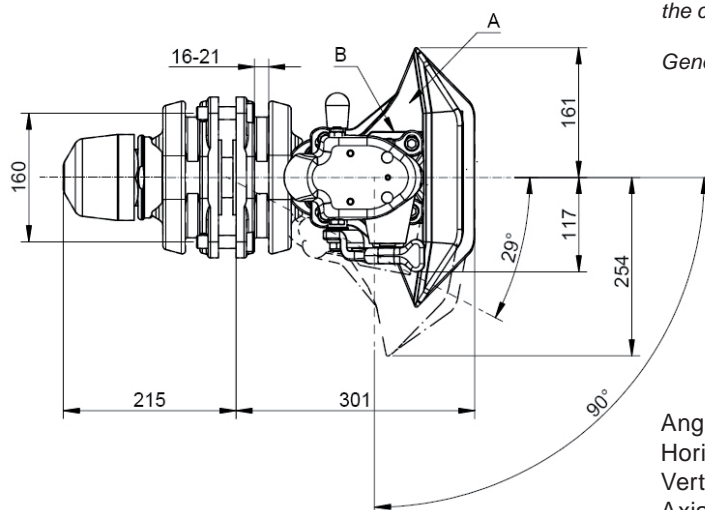
The small number of component parts and robust design ensure low running costs and reliable operation.

The well-proven attachment package means first-rate driving comfort, while the automatically functioning lock pin also simplifies handling.



With a rotation of up to 40° the coupling returns to its normal position when the load is released. In the event of an accident, the coupling can rotate 360° in its attachment.

General tolerance +/- 10 mm.



Angular displacement for eye

Horizontally ± 94°

Vertically ± 45°

Axially ± 40°

SPECIFICATIONS

Coupling VBG 8040, G 160

Performance values

Hole pattern, drawbeam

Intended for eye

Dead weight

EU approval no.

EU coupling class

Part no. 08-020000

D 136 kN

160 x 100

40 mm ISO8755/

DIN74054

39 kg

e4*94/20*0347

S

Coupling VBG 8040, G140

Performance values

Hole pattern, drawbeam

Intended for eye

Dead weight

EU approval no.

EU coupling class

Part no. 08-022000

D 100 kN

140 x 80

40 mm ISO8755/

DIN74054

39 kg

e4* 94/20*0346

S



The air mechanism AM is a flexible, all in one solution that takes up little space – perfect if you need a power assisted coupling for inaccessible and confined spaces. The mechanism has a single-acting diaphragm cylinder with a simple function for opening and closing by means of a powerful spring.

Compact installation

The coupling mechanism with integrated pneumatic operation enables remote controlling even in extremely confined areas, for example during the use of VBG's low under- and front-mounted drawbeam DBI.

Simple operation

When the control valve's handle is moved to the opening position, tension is built up in the air mechanism and the coupling opens. Remote controlling with a control valve considerably simplifies connecting and disconnecting, improves ergonomic handling and reduces the risk of occupational injuries.

Sensor for simple indicating in the cab

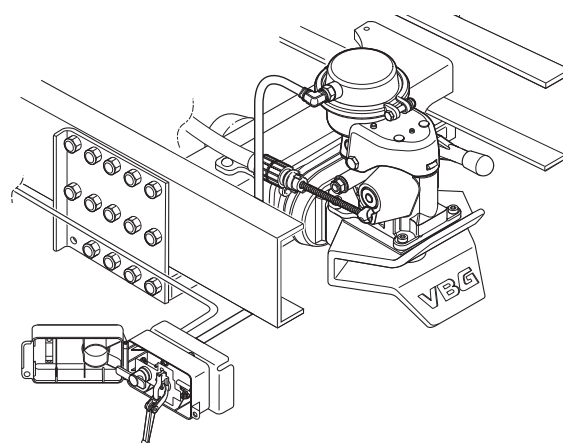
The mechanism is provided with an inductive sensor. In accordance with Directive 94/20/EEC, warning lamps must be fitted in the cab for remote-controlled couplings. When the coupling is closed and secured, a green lamp should go on. When the coupling is open, a red lamp should go on. Connect inductive sensor to the Indicator kit for a signal in the cab (see Accessories, couplings).

Rotating coupling bolt

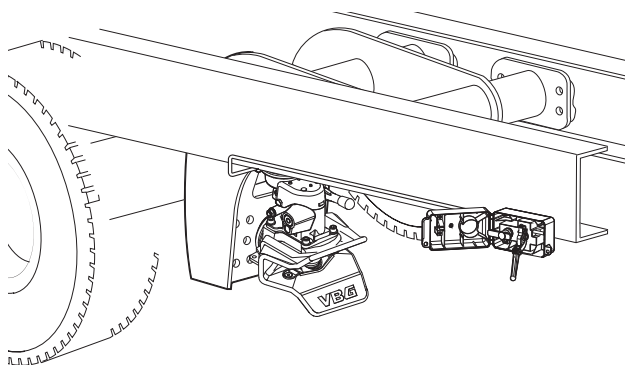
The air mechanism is fitted with a rotating coupling bolt. In addition to the excellent connection and disconnection characteristics, the design ensures a high degree of structural strength and a long service-life for both the coupling bolt and the bushings.

Protective bracket

To protect the mechanism, the signal and lock pin, and the air hoses from possible damage when reversing it can be supplemented with a protective bracket.



Coupling VBG 760 AM installed on drawbeam DB 75V for positioning in confined spaces.



Coupling VBG 795V AM installed on drawbeam DBI 150 for a coupling placed close to the vehicle's rear axle.

SPECIFICATIONS

For conversion of a manual coupling to an AM coupling, the following is required:

	Part no.
AM unit 3.0	09-124000
Valve box	07-108000
Position sensor kit 3.0	09-119800
Indicating kit	09-099200
Cable kit 3.0 12 m	09-124200
Plug	07-108400

Complete coupling with valve box

	Part no.
VBG 750V AM	09-030000
VBG 795V AM	09-030500
VBG 760 AM	09-031400
VBG 575V AM	09-057700
VBG 8500 AM	09-031100
VBG 8040 AM	09-124300

For specifications and performance values, see the original version for each coupling.

Pre-installed power actuator

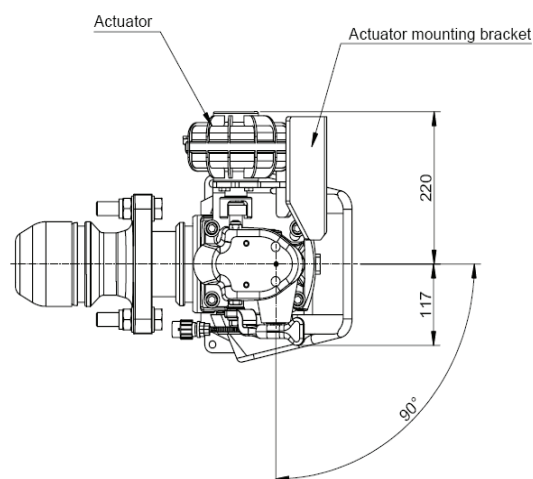
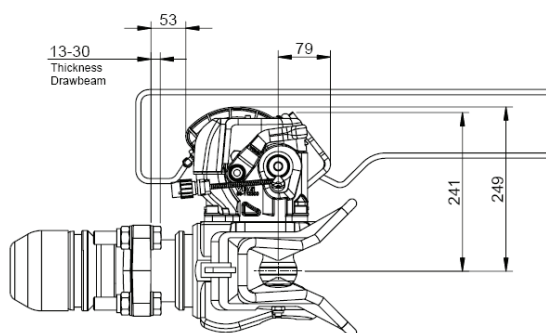


The VBG Power actuator fits all VBG couplings and considerably simplifies connecting and disconnecting. The coupling is opened by means of a double-acting pneumatically controlled torsion device, which is operated by a manual value. A coupling fitted with a power actuator significantly improves the ergonomics and makes work a lot easier.

Simple and convenient operation

VBG Power Actuator fits all VBG couplings.

Connecting vehicles standing on uneven surfaces, twin steering axle trailers or couplings inconveniently placed well under the chassis, leads to unnatural and strenuous working positions when operating the coupling. By using a power actuator the coupling can be operated while standing up and without exertion, which clearly improves the ergonomics and makes the work easier.



795PA

for other coupling models, see www.vbg.se

SPECIFICATIONS

Designation

Part no

Couplings with power actuator and position sensor

VBG 795V PA	09-101600
VBG 750V PA	09-101700
VBG 760 PA	09-101800

For specifications and performance values, see standard version of respective coupling

Designation

Part no

Couplings with power actuator without position sensor

VBG 795V PA	09-101300
VBG 750V PA	09-101400
VBG 575V PA	09-101500
VBG 8500 PA	08-016300
VBG 5190D PA	09-127700

Valve box 07-108000 is ordered separately

Pre-installed power actuator

Pneumatically controlled system

The power actuator consists of a double-acting pneumatically controlled torsion device (1), which is mounted on the right-hand side of the mechanism.

The torsion device is connected to the truck's air system via a manually controlled valve (2). An inductive sensor (3) mounted on the coupling's signal and lock pin sends a signal to warning lamps (4) in the cab.

Robust valve box

The valve is built into a protective and lockable box. The valve has a very robust design, with distinct positions and a small number of components. The valve and its component parts have also been tested and approved for severe environments and large variations in temperature.

Sensor for simple indicating in the cab

In accordance with current EU directives the power actuator is supplied with a sensor that is fitted on the coupling's signal and lock pin. In accordance with Directive 94/20/EEC, warning lamps must be fitted in the cab for remote-controlled couplings. When the coupling is closed and secured, a green lamp should go on.

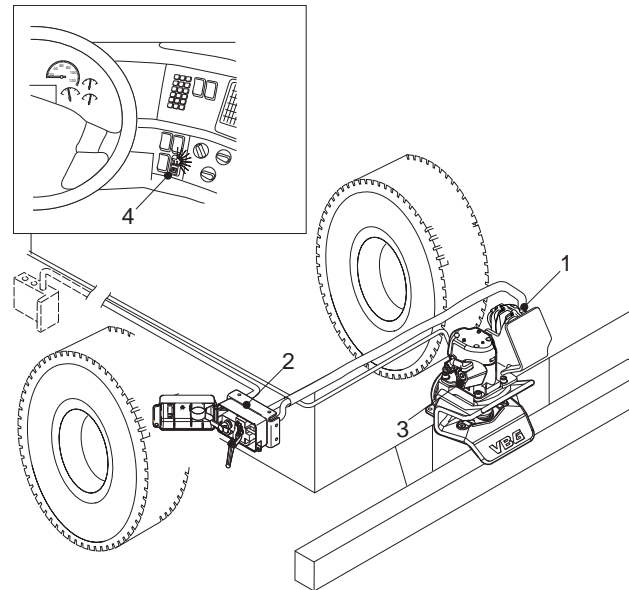
When the coupling is open, a red lamp should go on.

Connect the position sensor to the indicating kit for the signal in the cab (see accessory couplings).

Complete kits

The power actuator is ordered and delivered in three parts:

- Valve kit (same for all coupling models)
- Torsion device kit (Indicator kit are included.)
- Bracket



SPECIFICATIONS

Designation

All couplings:

Valve kit

**VBG 795V/750V, VBG 760, VBG 6000,
VBG 3000 RB, VBG 8500, VBG 8040,
VBG 620/623:**

Torsion device 3.0

Bracket 3.0

Part no.

07-108000

07-110200

09-113573

VBG 575V/590V:

Torsion device 3.0

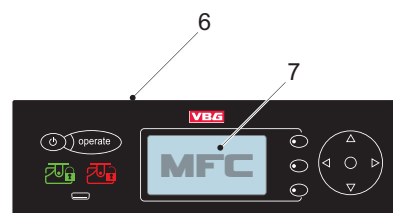
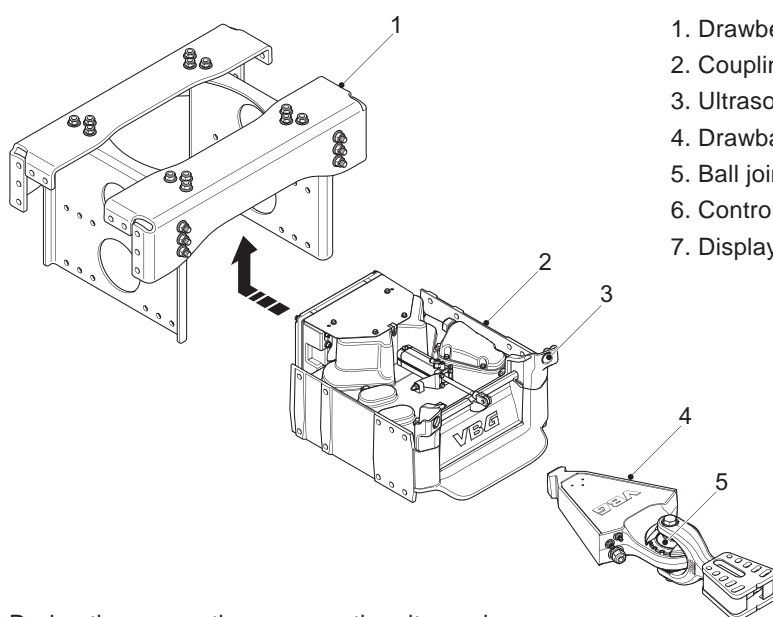
Bracket 3.0

07-110200

09-114073



With MFC you connect the trailer directly from the cab. Even the pneumatics, the power, and soon the hydraulics, can be connected – a lot easier, more conveniently and much safer than before. The MFC system includes a coupling part with integrated drawbeam, a display for integration in the dashboard, a wedge-shaped drawbar head that fits the Optimal and Multi XF drawbars, and a connector for the power and pneumatics.



During the connection process the ultrasonic sensors send signals to the control panel in the cab to show the position of the drawbar head in relation to the coupling within in area that covers a length of 4 metres, a height of 0.9 metres and a width of 1.5 metres. This makes it easy to guide in the wedge-shaped head, without having to rely on rear mirrors that easily get dirty.

The connections for the brake air and electrical system are integrated in the coupling and drawbar head. When the head is in position it is secured with double locking keys. The brake air and electrical system are then connected automatically.

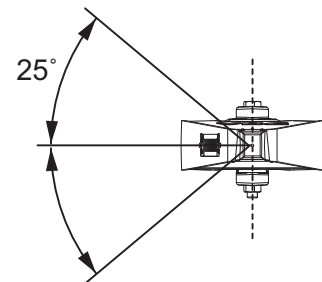
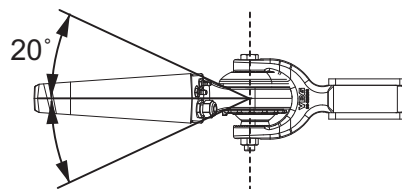
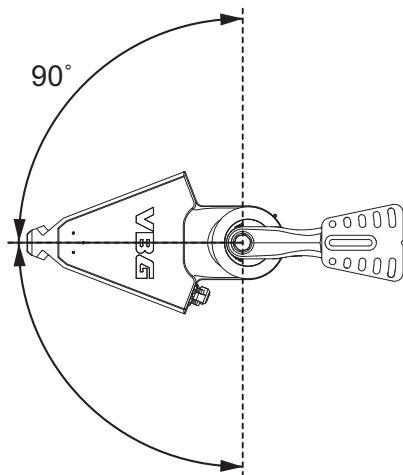
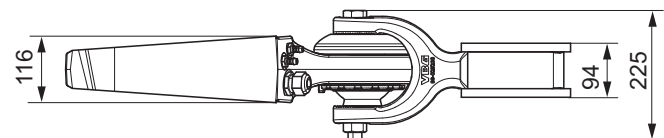
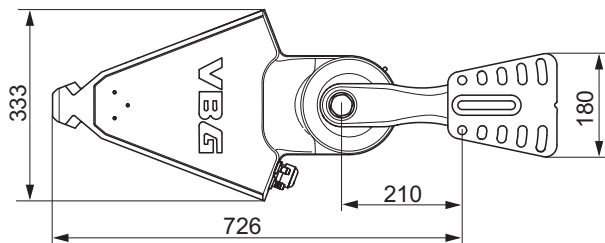
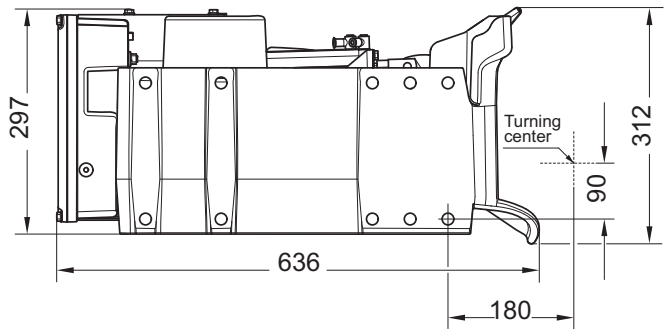
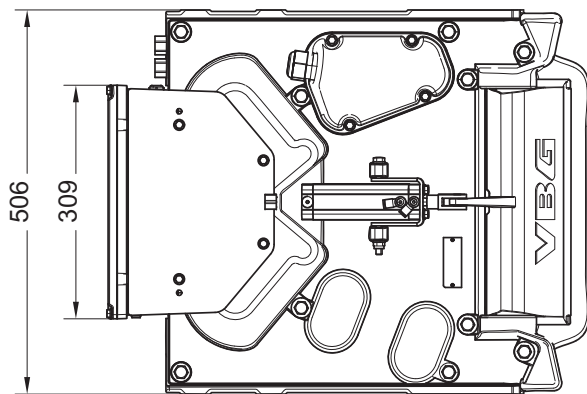
The control panel in the cab makes connecting and disconnecting smooth and easy. The display shows when the connection process is starting, when you can start reversing, and when the connection is ready. When the green coupling symbol goes on the system is connected and locked, and you can start driving.

SPECIFICATIONS

The drawbar head is adapted for VBG drawbars Optimal and Multi XF. Specifications for drawbeam and coupling parts for other truck models, installation alternatives and equipment, are available on request.

Weights

Drawbar head, standard.....	66,0 kg
Coupling part, standard, complete	107,0 kg
Drawbeam, underslung installation Volvo	95,0 kg
Drawbeam, underslung installation Scania	80,0 kg
Drawbeam, underslung installation Mercedes.	80,0 kg
Drawbeam, underslung installation MAN	80,0 kg



Turning capacity of the drawbar head in the ball joint.

SPECIFICATIONS

Performance

D 179 kN

MFC complies with EU directive 94/20 EC, class S.

1. Coupling e24*94/20*0105*00
2. Drawbar head e24*94/20*0106*00
3. Drawbeam CMS e24*94/20*0107*00

System requirements

Connected voltage: 24V

Speed signal accessible via CAN bus and a discrete "zero speed signal" (REQ 15).

Angles

Horizontally	± 90°
Vertically	± 20°
Axially	± 25°

Indicating kit



Signal lights must in accordance with Directive 94/20/EEC be placed in the cab on all vehicles that have remote controlled couplings. VBG's Indicating kit provides the driver with information in the cab on whether the coupling is closed or open.

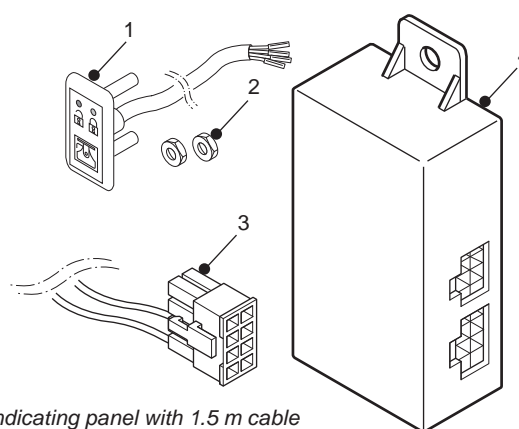
Indicating kit

The kit consists of an indicating panel with cable, a supply cable with connector, and an electronic unit.

Function

The electronic unit transfers the signal from the position sensor to the indicating panel in the cab. When the coupling is closed and secured a green light goes on, and when the coupling is open a red light goes on. Both lights go on to confirm the function when the ignition is switched on. The green light can be turned off by pushing the button so that the driver will not be disturbed when driving.

As an additional function the electronic unit includes a buzzer, which is connected to a jackknife alarm.

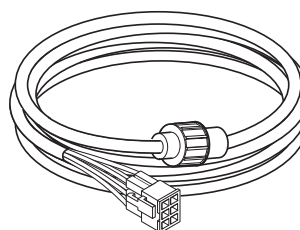


1. Indicating panel with 1.5 m cable
2. Self-threading nuts, 2 pcs
3. Supply cable with connector
4. Electronic unit (with built-in buzzer for jackknife alarm)

Additional accessories

Cable kit

The cable kit consists of a screened cable with an integral DIN connector or 6-terminal plug, clips for connecting the cables, and shrink tubing 0.6 m and 0.2 m. The cabling prevents other functions from interfering with the signals from the inductive sensor to the electronic unit. The shrink tubing holds the cabling properly in place.



Cable 12 m with DIN connector

SPECIFICATIONS

Description
Indicating kit

Part no.
09-099200

Cabling 12 m
(with DIN connector for version 3.0)

09-124200

Cabling 10 m
(recommended for vehicles with a single cab
and locker/platform length of up to 7.5 m)

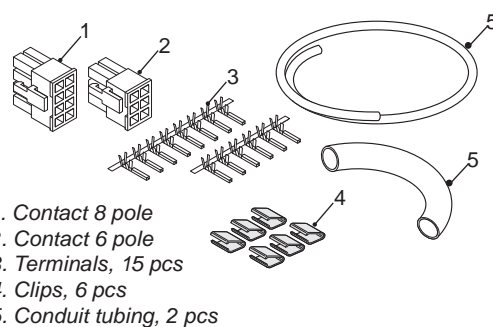
09-099600

Cabling 15 m
(recommended for vehicles with a double cab
and locker/platform length in excess of 7.5 m)

09-099700

Connector

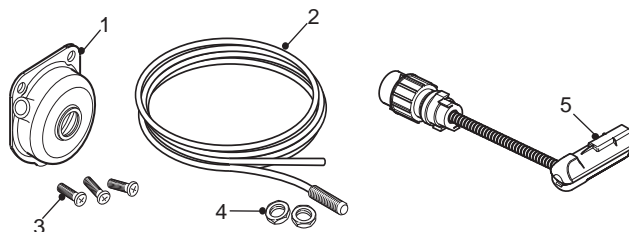
Used to connect the indicating kit when you use your own cables.



1. Contact 8 pole
2. Contact 6 pole
3. Terminals, 15 pcs
4. Clips, 6 pcs
5. Conduit tubing, 2 pcs

Inductive sensor 2.0 and Position sensor 3.0

The sensor, which is fitted on the coupling's signal and lock pin, detects the position of the lock pin. A signal is sent to the electronic unit, which sends information to the indicating panel in the cab.

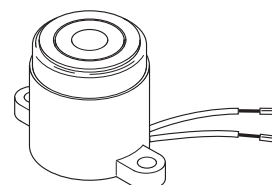


1. Lock signal and lock pin for inductive sensor
2. Inductive sensor 2.0 with cable
3. Screw for fitting lock
4. Adjusting screws, 2 pcs
5. Position sensor 3.0

External buzzer

An external buzzer can be connected to the Indicator kit if an increased warning signal is required.

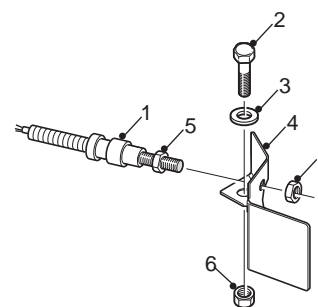
External buzzer



Jackknife alarm

VBG Jackknife alarm is an accessory for VBG 750V/795V och VBG 750V AM/795V AM. The contact between the jackknife alarm and coupling is broken during jackknifing. A buzzer built into the electronic unit warns the driver.

1. Inductive sensor, 2 pcs
2. Screw
3. Washer
4. Spring leaf, 2 pcs
5. Locking nut, 4 pcs
6. Nut



SPECIFICATIONS

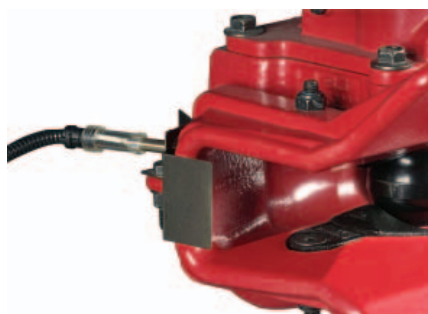
Description	Part no.
Connector with clips	09-099500
Inductive sensor 2.0	09-069900
Position sensor 3.0	09-119800
External buzzer	09-099800
Jackknife alarm	09-036500

SPECIFICATIONS

Part no. 09-036500*

Jackknife alarm
(complete kit)

*Lamp/buzzer not included



Jackknife alarm

The VBG Jackknife alarm is an accessory that warns the driver if there is a risk of jackknifing via a buzzer or lamp in the cab.

For coupling VBG 795V/795V AM and VBG 750V/750V AM, VBG 795VR and VBG 7310D.

SPECIFICATIONS

Part no. 09-013700

Protective insert
VBG 620/623 RB

Part no. 09-013800

Protective insert
VBG 6000

Part no. 09-014500

Protective insert
VBG 795V



Protective insert

A protective insert made of rubber for couplings of the VBG 620 RB, VBG 623 RB and VBG 6000 types.

The insert protects the coupling bolt from dirt, and prolongs the service-life of the mechanism. Resistant to oils and grease.



Protective insert

Protective rubber insert for VBG 795V couplings.

The insert protects the coupling bolt from dirt and prolongs the service-life of the mechanism. Resistant to oils and grease.

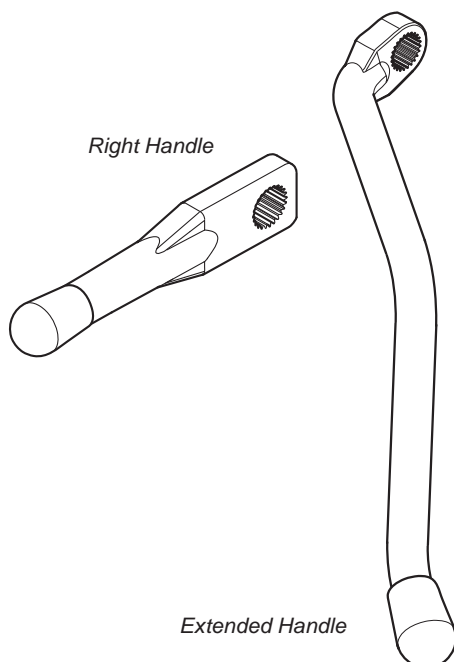
SPECIFICATIONS

Part no. 09-123300

Right Handle
VBG 575V/590V/590VR,
750V/795V/795VR, 760,
8500, 8040, 7310D

Part no. 09-123400

Extended Handle



Right Handle

Right Handle for installation on the right side of the coupling.

Extended Handle

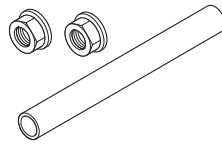
A longer version (Extended Handle) is available as an alternative for installation on the right side. The Extended Handle can be cut if necessary, and can be installed on all coupling models.

Sleeve kit for handle

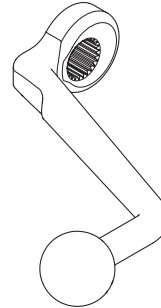
For installation from left to right side.

Ball handle

For installation on right and left side.



Sleeve kit for handle



Ball handle

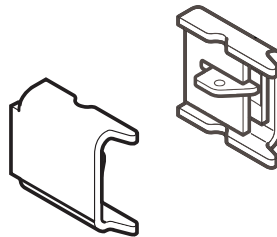
SPECIFICATIONS

	Part no.
Sleeve kit for handle	09-126400
Ball handle	09-126700

Overload protection

The anti-jackknife protection protects the coupling mouth from overloading when coupling.

For coupling VBG 750V and VBG 795V.



SPECIFICATIONS

	Part no.
Overload protection	
for beam size 16 mm	09-036700
for beam size 20-22 mm	09-036800
for beam size 28-30 mm	09-036900

Coupling mouth extender

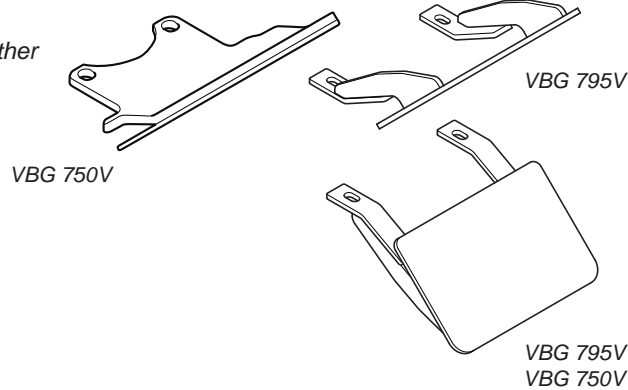
For better guiding of the eye.

For coupling VBG 750V and VBG 795V.

NOTE. Only intended for use together with articulated drawbars.

*Upper for VBG 750V

**Upper and lower VBG 795V
Lower for VBG 750V

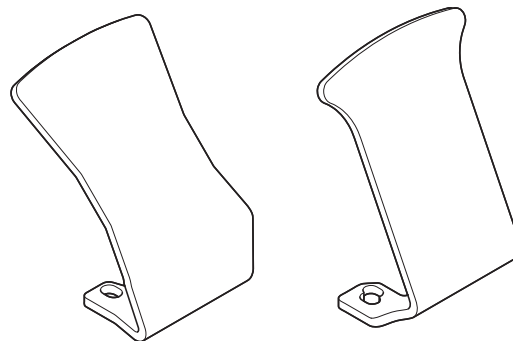


SPECIFICATIONS

	Part no.
Coupling mouth extender, upper*	09-058400
Coupling mouth extender, (1)**	09-101200

Protective bracket AM

Protective bracket for AM unit version 3.0.



SPECIFICATIONS

	Part no.
Protective bracket AM, version 3.0 VBG 750V/795V, VBG760, VBG 8500	09-124973
Protective bracket AM, version 3.0 VBG 8040	09-124773
Protective bracket AM, version 3.0 VBG 575V	09-124873

Service tools

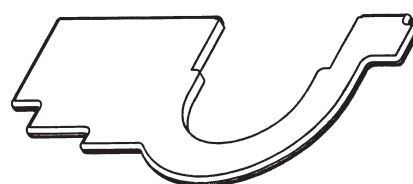
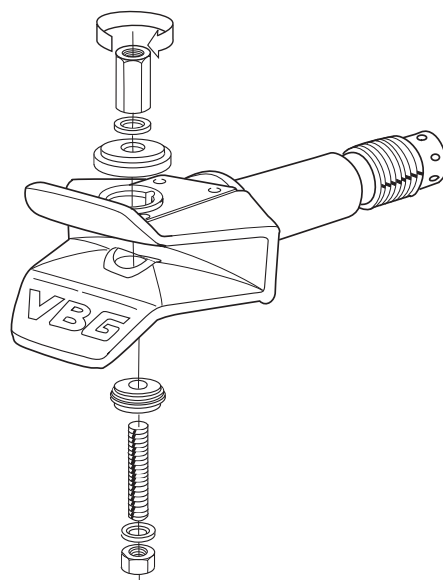


The service tools are used for the simple and correct dismantling and fitting of bushings in VBG's trailer couplings.

The tools can be combined in several different ways and can therefore be used to replace the bushings on all the couplings in VBG's product range. The service tools for couplings also include a wear gauge to check the wear on the coupling bolt and the eye's wear ring.

Full range of service tools

The service tools allow you to check the wear on the couplings and to simply and correctly replace the bushings of all VBG couplings. The press tools can be combined in different ways, and the bushings are pressed in and out of the coupling jaw by means of the threaded bar.



Wear gauge

SPECIFICATIONS

Service tools, couplings

Part no. 39-004000

Contents:

Press tools for replacing the bushing on all VBG couplings.

Stainless steel wear gauge for checking Ø 57 mm and

Ø 50 mm couplings.

Fitting instructions

Manual couplings



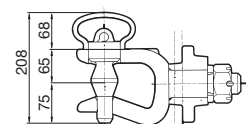
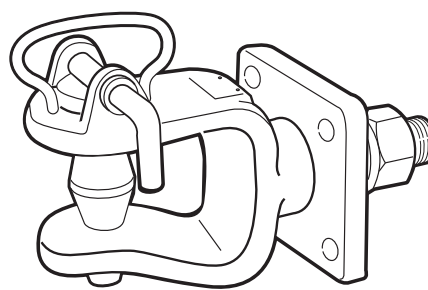
VBG's range of manual couplings can be used for all types of transports. They are adapted to all the eyes available of the market.

Tow couplings 315/330

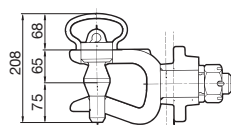
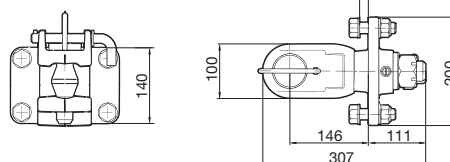
A strong and reliable universal coupling for towing different types of heavy towed vehicles. Available in two versions, with hole pattern 160x100 and 120x55. Supplied with bolt kit, but without coupling bolt. The coupling bolts can easily be replaced and are available for three different eye sizes.



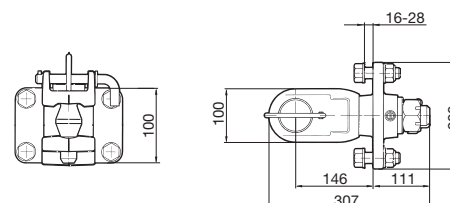
Towing is implemented at reduced speed, and the legal limit varies in different countries. VBG's manufacturing warranties are valid for a maximum of 40 km/h with the specified weights for respective products.



Tow coupling 315



Tow coupling 330



* As per Directive 77/389/EEC

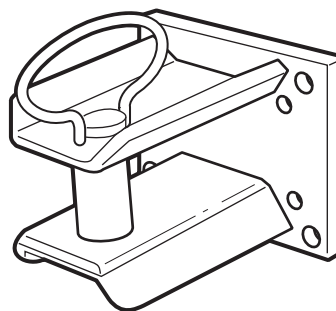
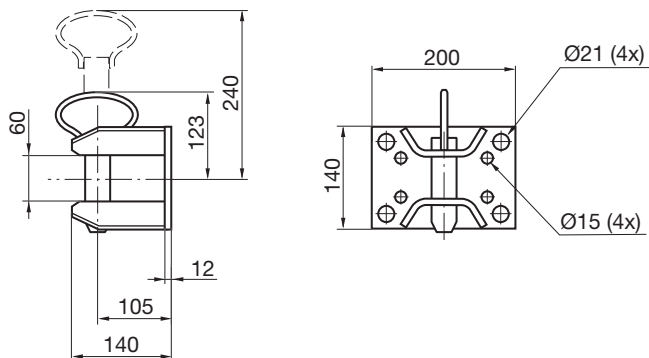
SPECIFICATIONS

Description	Part no.	Dead weight	Max. centre-axle trailer weight:	8 ton
Coupling bolt VBG Ø 57 mm	07-031700	2,4 kg	Max. trailer weight:	32 tons
Coupling bolt ISO Ø 50 mm	07-031800	1,8 kg	Dead weight:	13 kg
Coupling bolt DIN Ø 40 mm	07-031900	1,7 kg		
Tow coupling 315				
Part no. 07-031500			Hole pattern:	160 x 100 mm
Description Tow coupling 330			Max tow vehicle weight*	47.5 tons
Hole pattern:			Max. centre-axle trailer weight:	8 tons
Max tow vehicle weight*			Max. trailer weight:	32 ton
			Dead weight:	14 kg

Manual couplings

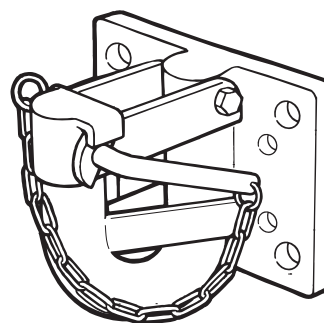
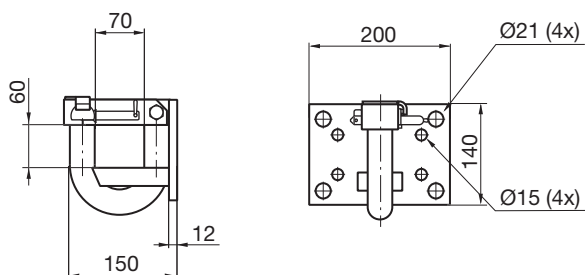
Tow jaw

A simple and robust tow jaw for heavy and medium-weight towing. Fits most of the eyes available on the market. Supplied without bolt kit.



Tow hook

A simple and robust tow hook for light and medium-weight towing. Fits most of the eyes available on the market. Supplied without bolt kit.



* As per Directive 77/389/EEC

SPECIFICATIONS

Tow jaw 190

Hole pattern:	160x100, 120x55 mm
Max tow vehicle weight*	40.7 tons
Max. centre-axle trailer weight:	8 tons
Max. trailer weight:	30 tons
Hook diameter:	35 mm
Dead weight:	5,5 kg

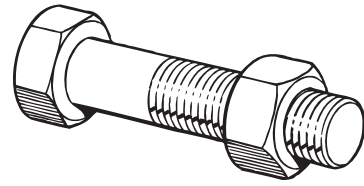
Part no.
07-019000

Tow hook 401

Hole pattern:	160x100, 120x55 mm
Max tow vehicle weight*	25.4 tons
Max. centre-axle trailer weight:	6 tons
Max. trailer weight:	28 ton
Hook diameter:	35 mm
Dead weight:	6,2 kg

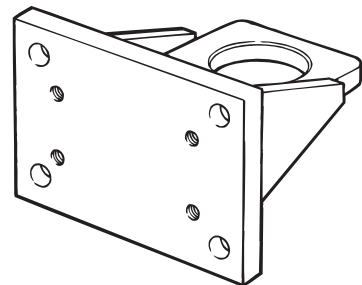
Part no.
07-040100

Bolt kits



Insert adapter

An insert adapter is available as an accessory, and can be used together with a tow jaw or tow hook. The insert adapter enables the use of the VBG 750 V/795 V and VBG 620/623/6000 couplings.



SPECIFICATIONS

Bolt kit M14 for hole pattern 120x55

Part no.

Dead weight

Tightening torque

07-020200

0,5 kg

125-145 Nm

Bolt kit M20 for hole pattern 160x100

Part no.

Dead weight

Tightening torque

07-020600

1,2 kg

370-430 Nm

Insert adapter

VBG 620/623/6000, 750V/795V

Hole pattern:

Max. centre-axle trailer weight:

Max. trailer weight:

Dead weight:

Part no.

07-004000

160x100, 120x55 mm

3 tons

10 tons

6,3 kg

Spare parts

Cotter for Tow jaw 190

Lock pin + chain for Tow hook 401

07-019400

04-039900



Drawbeam DB 35V is adapted for trailers in international traffic and for smaller and lighter centre-axle trailers. The drawbeam can be mounted centrally in the chassis frame, or completely or partially underslung by means of VBG's range of endplate kits.

Drawbeam DB 35V

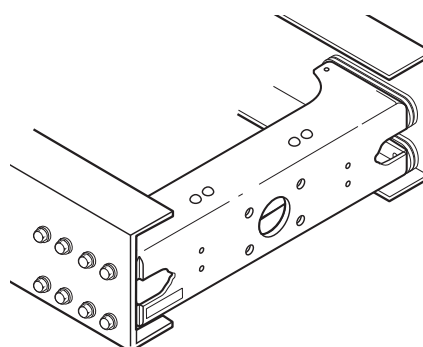
The drawbeam is adapted for central installation internally in the frame, or alternatively completely or partially underslung with one of VBG's endplate kits.

Length	Weight (kg)	Part no.
728	36	20-097278
742	36	20-097178
752	37	20-097078
770	38	20-096778
784	39	20-096670
834	40	20-096570
850	41	20-095570

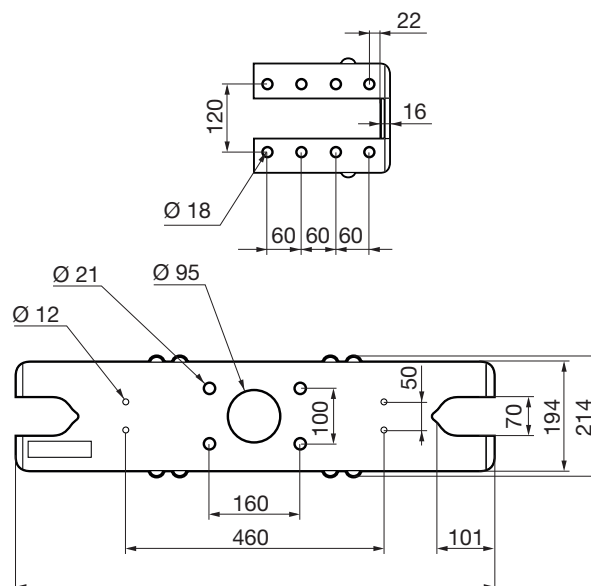
Other lengths of drawbeams can be quoted on request.

Spacer (max 10 mm/side)

Thickness	Part no.
1 mm	21-020700
2 mm	21-019500
3 mm	21-022100
4 mm	21-019600
6 mm	21-019700
8 mm	21-022200
10 mm	21-022300



Centrally installed drawbeam with spacer



SPECIFICATIONS

Hole pattern for coupling:	160 x 100 mm as per ISO 3584:2001
Performance values:	D 138 kN Dc 92 kN S 1000 kg V 35 kN
Type approval no.:	e11*94/20*3746
EU coupling class	F

Bolt kit	Part no.
Drawbeam fitted to vehicle frame or endplate kit:	
total thickness 14-27 mm:	21-148800
total thickness 24-37 mm:	21-149200
Fitted partially underslung, EDS:	21-149300



Drawbeam DB 75V is adapted for Scandinavian trailers with high front axle loads, and for dollies and heavy centre-axle trailers. The drawbeam can be mounted centrally in the chassis frame, or completely or partially underslung by means of VBG's range of endplate kits.

Drawbeam DB 75V

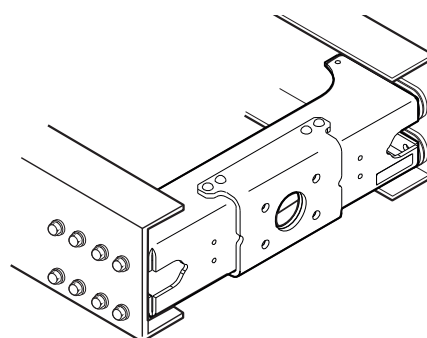
The drawbeam has been certified for three alternative V values as a result of the various requirements set for different combinations of centre-axle trailer and dolly.

The drawbeam is adapted for central, partial or completely underslung installation internally in the frame together with one of VBG's endplate kits.

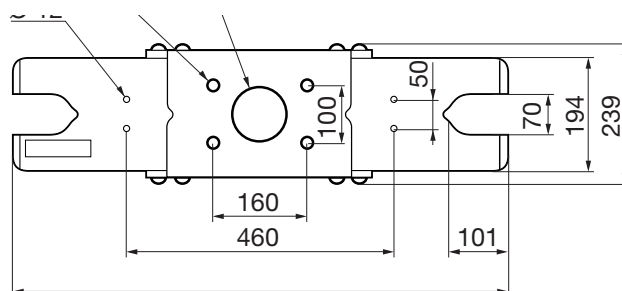
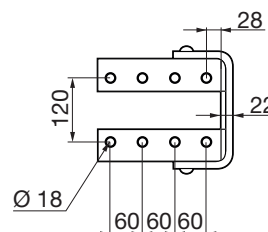
Length	Weight (kg)	Part no.
728	42	20-098178
742	42	20-098078
752	43	20-097978
756	43	20-097878
766	44	20-097778
770	44	20-097678
784	45	20-097570
820, 50 hole spacing	48	20-099470
834	46	20-097470
850	48	20-097370

Other lengths of drawbeams can be quoted on request.

Spacer (max 10 mm/side)	Part no.
Thickness 1 mm	21-020700
Thickness 2 mm	21-019500
Thickness 3 mm	21-022100
Thickness 4 mm	21-019600
Thickness 6 mm	21-019700
Thickness 8 mm	21-022200
Thickness 10 mm	21-022300
Thickness 2 mm, 50 hole spacing	21-160300
Thickness 5 mm, 50 hole spacing	21-160400



Centrally installed drawbeam with spacer



SPECIFICATIONS

Drawbeam DB 75V

Performance values, independent of installation alternative:

	Alt. 1	Alt. 2	Alt. 3	Alt. 4
D: (kN)	190	190	190	190
D _C : (kN)	130	130	150	141
S: (kg)	1000	2000	1000	1000
V: (kN)	75	63	50	63
Hole pattern:	160 x 100 mm as per ISO 3584:2001			

Type approval no.:
EU coupling class

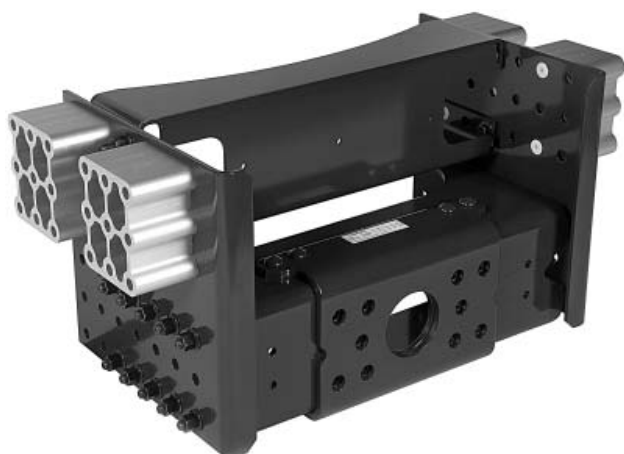
e11*94/20*4041
F

Bolt kit

Part no.

Drawbeam fitted to vehicle frame or endplate kit:

total thickness 14-27 mm:	21-148800
total thickness 24-37 mm:	21-149200
Fitted partially underslung, EDS:	21-149300

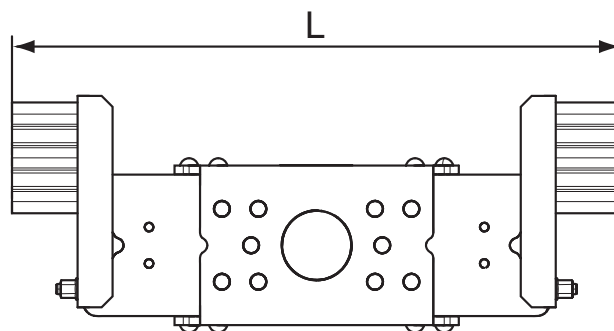


Drawbeam DBS 63V is intended for heavy trailers, dollies and heavy centre-axle trailers. It has been adapted for installation internally in the frame, with a complete or partially underslung position.

Drawbeam DBS 63V

The design of the drawbeam enables it to be installed internally in the frame, even in underslung positions, which frees space on the outside of the frame for other equipment.

The drawbeam is supplied already assembled for different underslung coupling positions.



Version	Length mm (L)	Weight (kg)	Part no.
EDSA/0	836	58	21-107770
EDSA/0	826	58	21-109570
EDSA/-50	836	58	21-107970
EDSA/-50	826	58	21-109770
EDHA/0	836	83	21-108070
EDHA/0	826	83	21-109870
EDHA/-100	836	83	21-108270
EDHA/-100	826	83	21-110070
EDLA/0	836	93	21-110570
EDLA/0	826	93	21-110470

SPECIFICATIONS

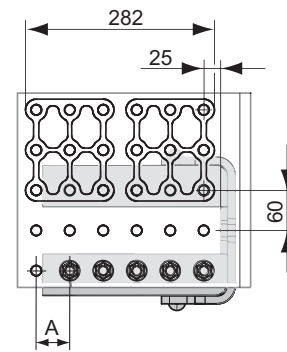
Hole pattern for coupling: 160 x 100 mm and BNA (180/260 x 100 mm)

Type approval no.: e11*94/20*4617
EU coupling class F

Performance values:
D: 190 kN
D_C: 141 kN
V: 63 kN
S: 1000 kg

EDSA:

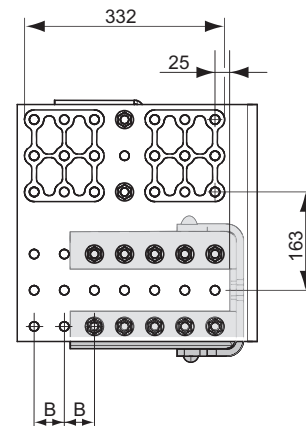
The lengthwise position of the drawbeam to the endplate can be adjusted (A) 50 mm*.



Side view EDSA version installed in 0 position (EDSA/0).

EDHA:

The lengthwise position of the drawbeam to the endplate can be adjusted (B) 2x50 mm*.

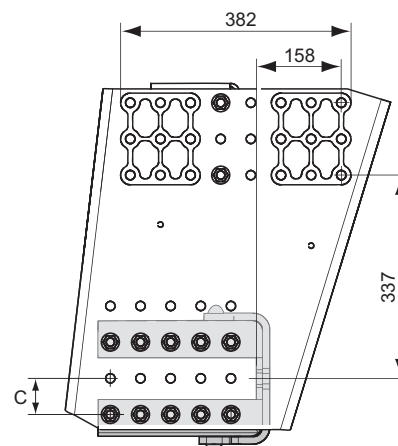


Side view EDHA version installed in 0 position (EDHA/0).

EDLA:

The vertical position of the drawbeam to the endplate can be adjusted (C) 60 mm*.

*The angular displacement of the drawbar can be somewhat limited when the position of the drawbeam to the endplate is moved forward.



Side view EDLA version installed in low position (EDLA/0).

SPECIFICATIONS

Bolt kit

Installation of drawbeam to vehicle frame:

Part no.

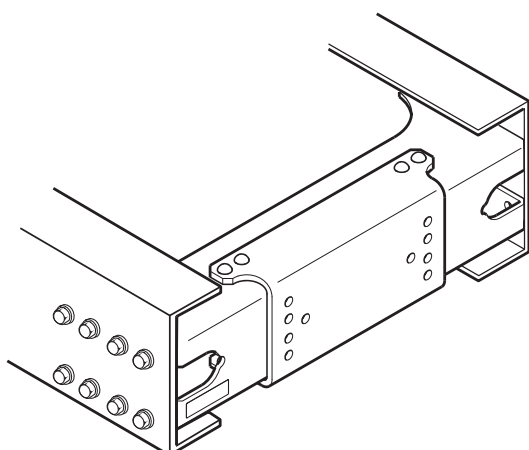
21-168100



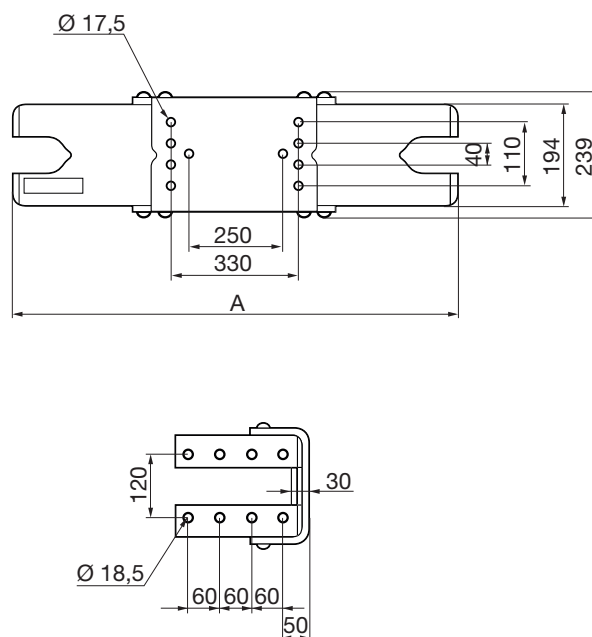
DB 260 is a drawbeam intended for heavy duty operations. The drawbeam has 10 holes for mounting of the coupling, and is fitted centrally in the vehicle frame.

Drawbeam DB 260D

The drawbeam has a certified D value. The drawbeam has been adapted for in-chassis installation on the vehicle.



Centrally installed drawbeam



SPECIFICATIONS

Hole pattern for coupling: 10 hole spacing

Performance values: D: (kN) 260

Type approval no.: e11*94/20*5341

Length mm (A)	Weight (kg)	Part no.
735	58	20-103178
766	59	20-100300
825	60	20-102870
834	61	20-099900

Other lengths of drawbeams can be quoted on request.

Bolt kit

Drawbeam fitted to vehicle frame:

- total thickness 14-27 mm

- total thickness 24-37 mm

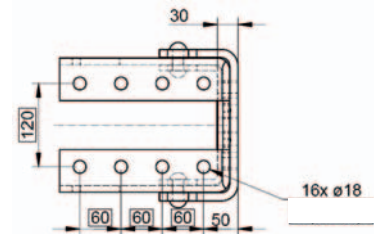
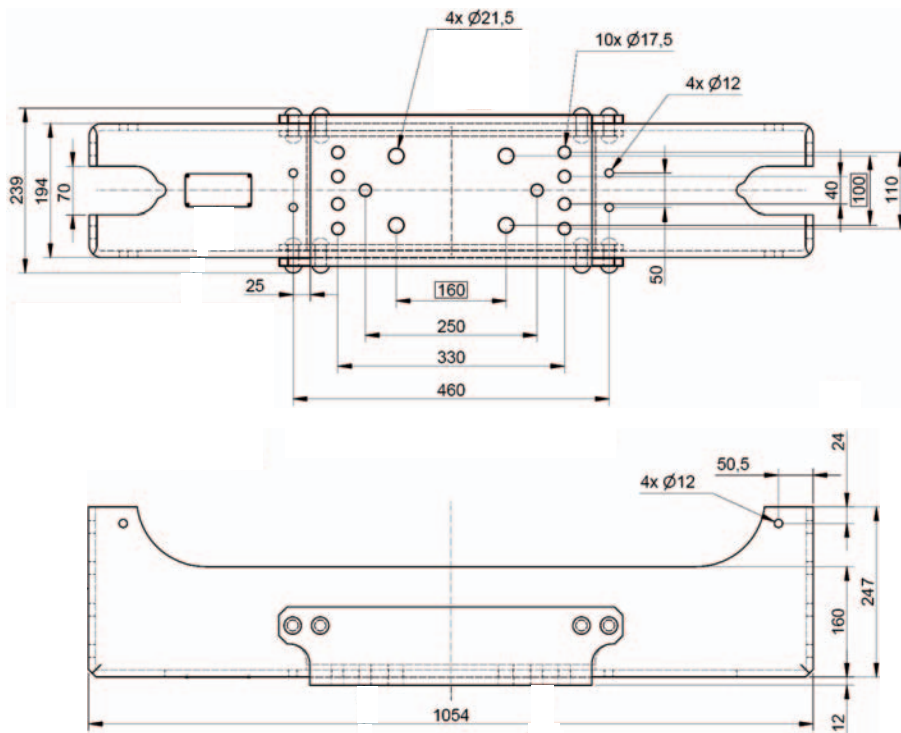
Part no.

21-148800

21-149200



DB 260T is a drawbeam intended for towing and is mounted at the front. The drawbeam has 10 holes for mounting the coupling, and a hole pattern of 160x100 mm for towing accessories. The drawbeam is not type approved in accordance with EU Directive 94/20.



SPECIFICATIONS

Hole pattern for coupling:	10 hole spacing and 160 x 100 mm	
Performance values:	D: (kN) 260	
Length mm (A)	Weight (kg)	Part no.
1054	70	20-102470
Other lengths of drawbeams can be quoted on request.		

Bolt kit

Drawbeam fitted to vehicle frame:

- total thickness 14-27 mm
- total thickness 24-37 mm

Part no.

21-148800
21-149200



TB 30D is a drawbeam intended for ball couplings, alternatively automatic couplings with flat connecting flange. The drawbeam can be installed centrally in the vehicle frame or completely underslung together with endplate kit EDH-2TB.

Drawbeam TB 30D

The drawbeam is certified for a D value of 30 kN. The drawbeam is adapted for central installation internally in the frame or completely underslung together with endplate kit EDH-2TB, EDH-2V or EDH-2. The drawbeam can be reversed, whereby the centre of the coupling is moved vertically 12 mm.

When used for towing together with accessory (hole pattern 120x55) the beam can be fitted without reinforcement kit, but with a reduction of its performance (see below). When used with a ball or automatic coupling, however, one of the two alternative reinforcement kits must always be fitted.

Towing	With reinforcement kit	Without reinforcement kit
Max tow vehicle weight*	47.5 tons	33.6 tons
Max centre-axle trailer weight	8 tons	6 tons
Max trailer weight	32 tons	22 tons

* As per Directive 77/389/EEC.

Drawbeams with other lengths, endplate kits with other heights, or spacers with different thicknesses, can be quoted on request.

Performance values:

Ball coupling

ex factory Thule (D 22.7 kN)

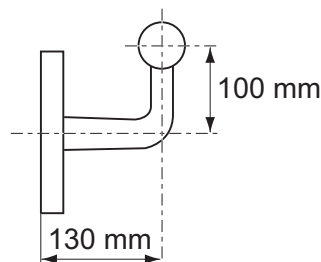
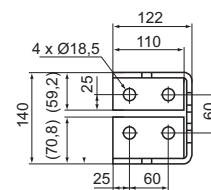
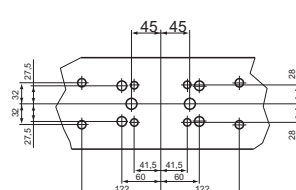
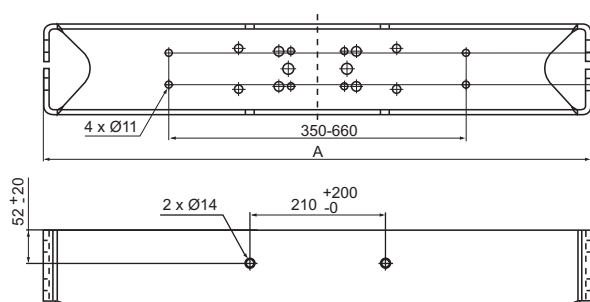
VBG part no: 07-012700

Automatic coupling

Dc: 30 kN

S: 350 kg

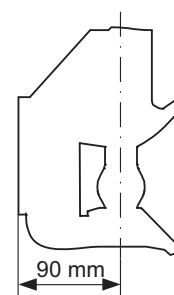
V: 18 kN



Max. dimension of ball coupling:

Length: 130 mm

Height: 100 mm



Max. dimension of automatic coupling

Length: 90 mm

SPECIFICATIONS

Hole pattern:	120x55 mm, 83x56 mm, 90x0 mm	
Performance values:	D 30 kN Support load 367 kg	
Type approval no.:	e11*94/20*5468, is applicable with fitted reinforcement kits.	
Length mm (A)	Weight (kg)	Part no.
752	17,0	21-166078
770	17,5	21-165978
834	18,9	21-165878
850	19,5	21-165278

Description	Weight (kg)	Part no.
Reinforcement kit 120x55, 83x56 mm	6,0	21-165600
Reinforcement kit 90 mm	6,0	21-165500
Bolt kit		Part no.
Drawbeam fitted to vehicle frame:		
- total thickness 14-22 mm		21-165100
- total thickness 23-30 mm		21-165700
Spacers		
Thickness 2 mm		21-166100
Thickness 4 mm		21-166200
Fitting of ball coupling to drawbeam		21-185200

Endplate kits



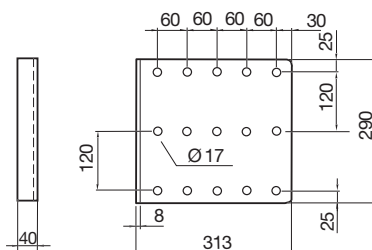
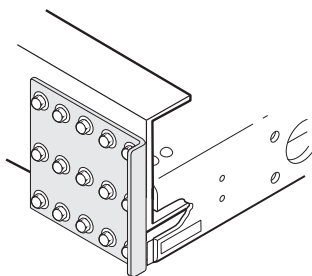
The endplate kits are designed to be partially or completely underslung with VBG's range of drawbeams. See description for respective endplate. Certain endplates are adapted for installation of underrun protection. The endplates are adapted for drawbeams DB35V and DB 75V.

SPECIFICATIONS

Part no.: 21-021478
Performance values:
 See respective drawbeam
Dead weight: 12 kg
Type approval no.:
 See respective drawbeam.
 Bolt kit for fitting endplate kit to vehicle frame:
Part no.: 21-149300

Endplate kit EDS

The endplate kit is intended installation of drawbeams that are partially underslung. The bolt kit is supplied with 3 (1+2+6) shims for each side. The endplates can be inverted, but will not permit displacement of the beam. Supplied in pairs.

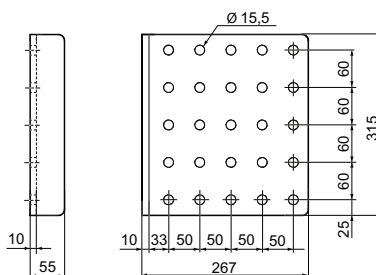
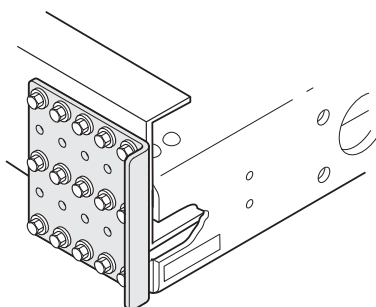


SPECIFICATIONS

Part no.: 21-162000
Performance values:
 See respective drawbeam.
Dead weight: 12 kg
Type approval no.:
 See respective drawbeam.
 Bolt kit for fitting endplate kit to vehicle frame:
Part no.: 21-160900

Endplate kit EDS-V

The endplate kit is intended for installation of drawbeams that are partially underslung, and fit VBG's DB drawbeams with 50 hole spacings. The bolt kit is supplied with 3 spacers for each side. The endplates can be inverted, but will not permit displacement of the beam. Supplied in pairs.



Endplate kits

SPECIFICATIONS

Part no.: 21-134578

Performance values:

see respective drawbeam

Dead weight: 17 kg

Type approval no.:

See respective drawbeam.

Bolt kit for fitting endplate kit to vehicle frame:

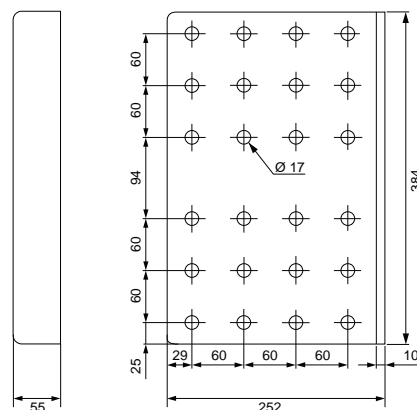
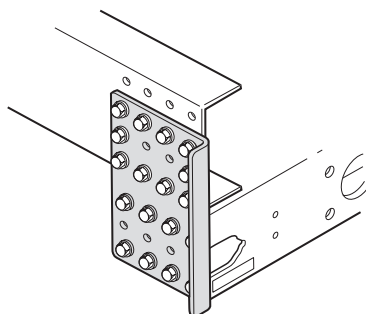
DB 35V: **Part no.**
14-27 mm 21-148800
24-37 mm 21-149200

DB 75V: **Part no.**
14-27 mm 21-148900
24-37 mm 21-166800

Bolt kits for fitting the drawbeams can be found on the page for respective drawbeam.

Endplate kit EDH-2, 60 hole spacing

The endplate kit is intended for installation of drawbeams that are completely underslung. Fits on a smaller surface. EDH-2 is an alternative to EDH, and 74 mm smaller in width. It cannot be inverted! Supplied in pairs.



SPECIFICATIONS

Part no.: 21-134470

Performance values:

see respective drawbeam

Dead weight: 18 kg

Type approval no.:

See respective drawbeam.

Bolt kit (M14) for fitting endplate kit to vehicle frame:

DB D35V: **Part no.**
14-30 mm 21-149400
28-40 mm 21-167000

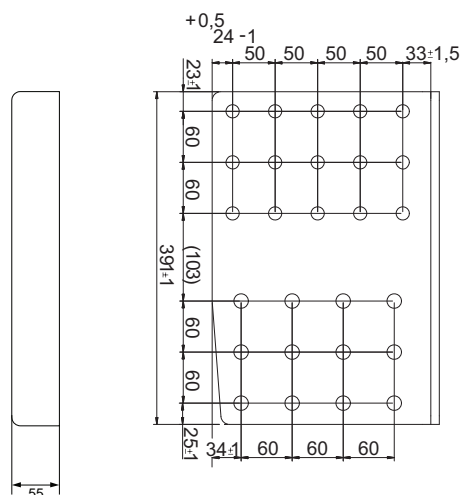
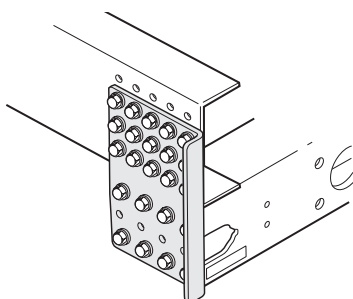
DB 75V: **Part no.**
14-30 mm 21-149500
28-40 mm 21-166900

Bolt kits for fitting the drawbeams can be found on the page for respective drawbeam.

Endplate kit EDH-2V, 50 hole spacing

The endplate kit is intended for installation of drawbeams that are completely underslung. The hole spacing in the vehicle frame is 50 mm, with holes for M14 bolts.

It must not be inverted! Supplied in pairs.



SPECIFICATIONS

Part no.: 21-112378

Performance values:

see drawbeam TB 30D

Dead weight: 30 kg

Type approval no.:

See drawbeam TB 30D

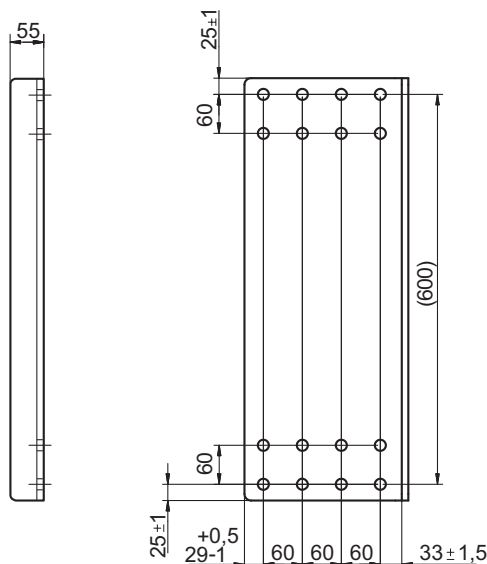
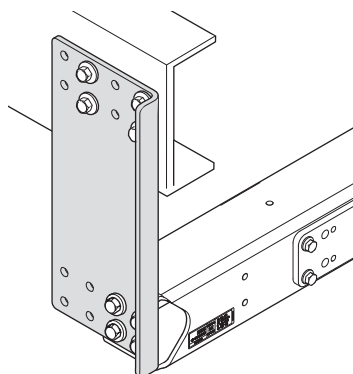
Bolt kit (M16) for fitting endplate kit to vehicle frame:

TB 30D: **Part no.**
14-22 mm 21-165100
23-30 mm 21-165700

Bolt kits for fitting the drawbeams can be found on the page for drawbeam TB 30D.

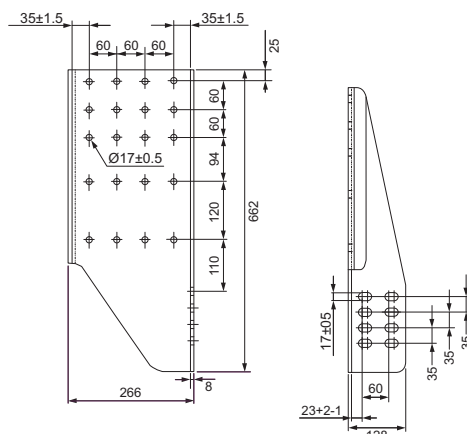
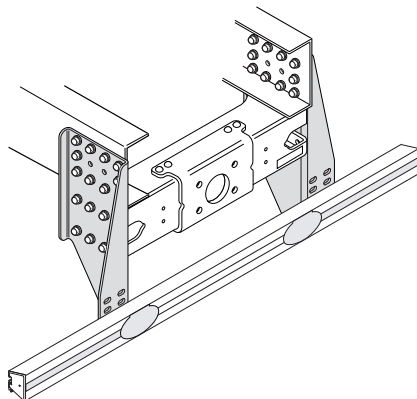
Endplate EDH-2TB

The endplate kit is intended for fully-underslung installation of drawbeam TB 30D. The hole spacing in the vehicle frame is 60 mm, with holes for M16 bolts. Must not be inverted! Supplied in pairs.



Endplate kit EDU-2

The endplate kit is intended for installation of drawbeams that are completely underslung, and for installation of underrun protection. Fits all drawbeams in VBG's DB range. Supplied in pairs.



SPECIFICATIONS

Part no.: 21-134978

Performance values:

see respective drawbeam

Dead weight: 26 kg

Type approval no.:

See respective drawbeam.

There are two variants of bolt kits for fitting to vehicle frame:

DB 35V: **Det. nr**

14-27 mm 21-148800

24-37 mm 21-149200

DB 75V:

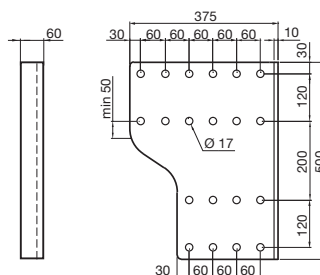
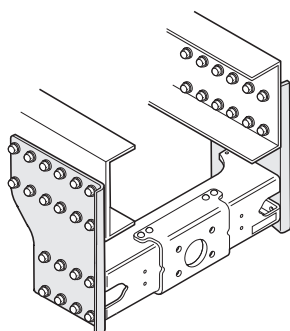
14-27 mm 21-148900

24-37 mm 21-166800

Bolt kits for fitting the drawbeams can be found on the page for respective drawbeam.

Endplate kit EDM

The endplate kit is intended for installation of drawbeams that are completely underslung. The endplates can be inverted, which permits the drawbeam to be moved forwards 120 mm. Supplied in pairs.



SPECIFICATIONS

Part no.: 21-005178

Performance values:

see respective drawbeam

Dead weight: 30 kg

Type approval no.:

See respective drawbeam.

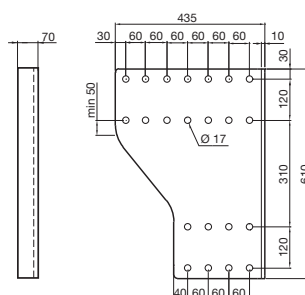
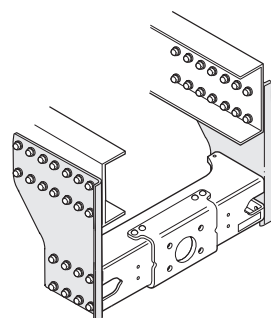
Bolt kit for fitting endplate kit to vehicle frame:

Part no.: 21-149000

Bolt kits for fitting the drawbeams can be found on the page for respective drawbeam.

Endplate kit EDL, 60 hole spacing

The endplate kit is intended for installation of drawbeams that are completely underslung. The endplates can be inverted, which permits the drawbeam to be moved forwards 180 mm. Supplied in pairs.



SPECIFICATIONS

Part no.: 21-005278

Performance values:

see respective drawbeam

Dead weight: 42 kg

Type approval no.:

See respective drawbeam.

Bolt kit for fitting endplate kit to vehicle frame:

Part no.: 21-149100

Bolt kits for fitting the drawbeams can be found on the page for respective drawbeam.

Endplate kits

SPECIFICATIONS

Part no. 21-152578

Performance values:

see respective drawbeam

Dead weight: 19 kg

Type approval no.:

See respective drawbeam

Bolt kit for fitting endplate kit to vehicle frame:

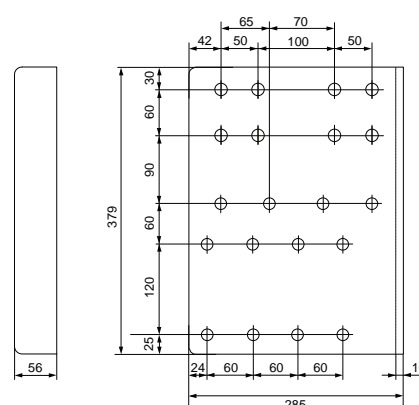
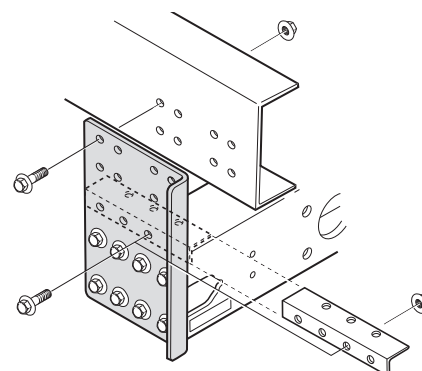
Part no.

DB 35V, DB 75V 21-152800

Bolt kits for fitting the drawbeams can be found on the page for respective drawbeam.

Endplate kit EDH-2SKV

The loose endplates EDH-2SKV are intended to replace loose endplates of the VBG SKUR and VBG SKU types already fitted on vehicles, in order to fit the VBG DB35V and VBG DB75V drawbeams. With this endplate the drawbeam is always "completely underslung". It is assumed in other words that there are always holes drilled in the truck frame (2 x 4 = 8 pcs, diameter 17 mm per side) where the existing endplates are fitted. If the drawbeam has been fitted lower than normal, the angle iron will not reach up to truck frame. In which case a flat iron with a width of 60 mm, the correct thickness and with three 17 mm diameter holes, must then be inserted as a spacer. If there is limited space over the endplate, < 70 mm over the upper row of holes, then EDH-2SKV is fitted, which however requires an angle bracket to be fitted in the truck frame's lower flange. The attachment holes are drilled by using the attendant angle bracket as a template. EDH-2SKV lowers the connection point by 39 mm in comparison with SKU/SKUR. This type of endplate moves the connection point backwards 36 mm. Must not be inverted! Supplied in pairs.



SPECIFICATIONS

Part no.

Endplate kit

EDH-2SKH (lång) **21-152678**

Endplate kit

EDH-2SKH (kort) **21-152778**

Performance values:

see respective drawbeam.

Dead weight:

long 21 kg

short 19 kg

Type approval no.:

See respective drawbeam

Bolt kit for fitting endplate kit to vehicle frame:

Part no.

DB 35V, DB 75V 21-152900

Bolt kits for fitting the drawbeams can be found on the page for respective drawbeam.

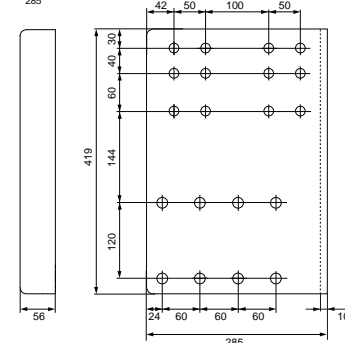
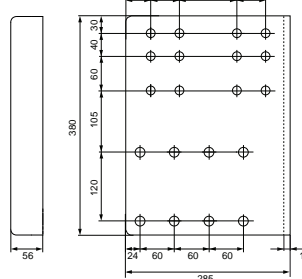
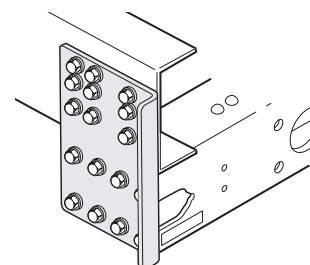
Endplate kit EDH-2SKH

EDH-2SKH (long and short) are intended to replace loose endplates of the VBG SKUR and VBG SKU types already fitted on vehicles, in order to fit the VBG DB35V and VBG DB75V drawbeams. With these endplates the drawbeam is always "completely underslung".

It is assumed in other words that there are always holes drilled in the truck frame (2 x 4 = 8 pcs, diameter 17 mm per side) where the existing endplates are fitted.

If the space over the existing endplate is greater than or equal to 70 mm, EDH-2SKH should be fitted instead, which in turn requires four extra holes in the frame side. These are drilled by using the endplate as a template.

EDH-2SKH (long, with a side = 419 mm) lowers the connection point by 39 mm in comparison with SKU/SKUR. EDH-2SKH (short, with a side = 380 mm) produces the same height. Both types of endplates move the connection point backwards by 36 mm. Must not be inverted! Supplied in pairs.





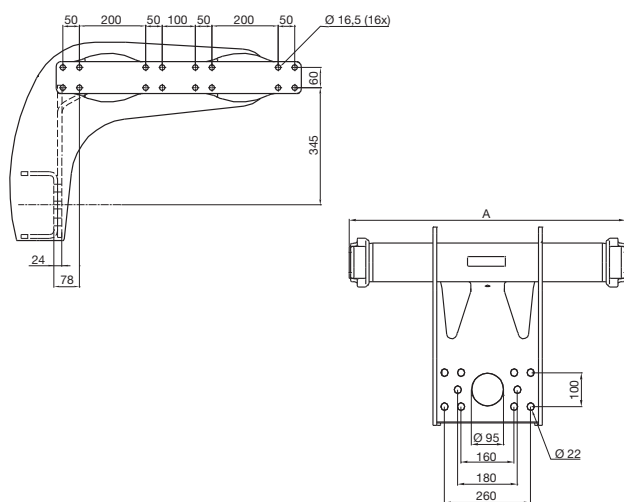
DBI 150 is a drawbeam mainly adapted for bulk centre-axle trailers that require a low underslung coupling moved to the front. This enables a short distance between the truck and towed vehicle.

The drawbeam is fitted inside the frame, and permits a coupling to be placed close to the rear axle of the truck.

Drawbeam for bulk centre-axle trailers

DBI 150 is designed to enable the coupling to be placed at a low level and moved well up front close to the truck's rear axle. It is mainly intended for driving with bulk centre-axle trailers. The drawbeam is fitted inside the truck frame, which means that it does not affect other fittings on the outside of the frame. DBI 150 permits most types of couplings to be fitted and enables full angular displacement of the towed vehicle's drawbar.

Like all other parts in VBG's drawbeam range, DBI 150 has been dynamically tested and approved in accordance with EU directive 94/20/EC.



Complete corrosion protection

The drawbeam is first surface treated with a zinc-manganese phosphatising process that reduces creeping rust if the paint should be damaged. After this a topcoat is applied through electrolytic dipping, a so-called ED finish. This method ensures that the paint penetrates into the tubing and cavities, and further improves resistance to corrosion. The drawbeam is finally given a topcoat with friction-charged powder coating. The result after oven-hardening is a bright, tough surface with very high resistance to abrasion, stone spatter and environments with a high salt content.

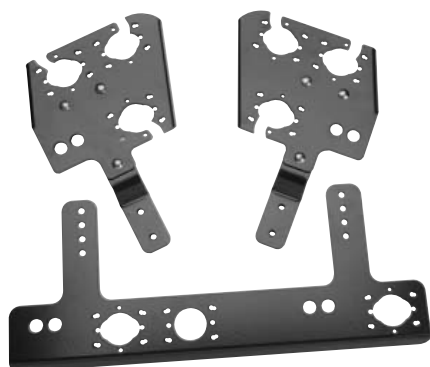
Internal frame width A (mm)	Weight (kg)	Part no. drawbeam	Part no. shims 1: 2x	Part no. shims 2: 2x
742	124	21-163578	21-133500	—
744	125	21-163578	21-161000	—
746	126	21-163578	21-161100	—
750	127	21-163578	21-161200	—
754	125	21-163678	21-133500	—
756	126	21-163678	21-161000	—
764	129	21-163678	21-133500	21-161000
766	126	21-163778	21-133500	—
776	130	21-163778	21-133500	21-161000
778	131	21-163778	21-133500	21-161100
826	133	21-133070	—	—
836	136	21-133070	21-133500	—

Different lengths of drawbeams can be quoted on request.

SPECIFICATIONS

Hole pattern for coupling:	160 x 100 mm 180/260 x 100 mm		
Performance values:	Alt. 1 D 147 kN D _c 128 kN V 67 kN S 1000 kg	Alt. 2	D 147 kN D _c 121,5 kN V 75 kN S 1000 kg
Type approval no.:	e11*94/20*3140		

Brackets for power and air



VBG's system of brackets is adapted to most of the power plugs and air connections on the market.

The brackets are mounted on the drawbeams and can be used in several different positions.

Flexible system of brackets

VBG's brackets for fitting power and air connections are intended to be mounted on the drawbeams in VBG's DB range. The brackets are fitted in the pre-drilled hole pattern on the drawbeam.

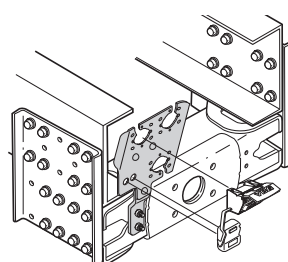
As standard, the brackets are supplied with a surface coating produced from a zinc-manganese phosphatising process, and a topcoat in one colour with a high finish and first-rate resistance to corrosion.

The brackets have hole patterns adapted for fitting:

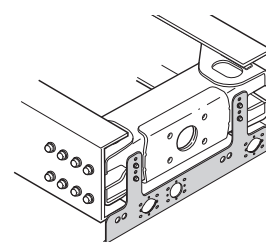
- VBG Power plug 14-17
- VBG Power plug 14-17 ADR
- ABS
- 15 N
- 7 N
- 7 S
- Charger plug
- Duo-matic
- Palm-coupling

The brackets can be mounted on the drawbeam as show in the figures to the right, but can also be inverted in the horizontal or vertical plane.

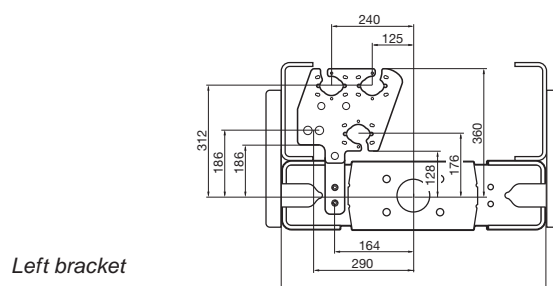
The underlying bracket has double hole patterns for attachment in the drawbeam, which enables it to be vertically adjusted 25 mm.



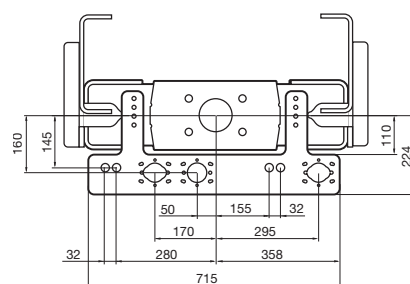
Left bracket



Underlying bracket



Left bracket



Underlying bracket

SPECIFICATIONS

Description	Part no.
Left bracket	28-045778
Dead weight	3,0 kg
Right bracket	28-045878
Dead weight	3,0 kg
Underlying bracket	28-045978
Dead weight:	3,2 kg

Underrun protection



VBG has a complete range of underrun protection for trucks and trailers. The system of safety beams and endplate kits is adapted to most of the types of vehicles, frame widths and installation requirements to be found on the market.

All units are well-proven and comply with international regulations.

Protective beams

VBG supplies protective beams made of either aluminium or steel. The aluminium beams are anodized and fitted with attachments for splash protection, they are also available in versions with fitted reflector strips. The steel beams are supplied as standard with basic zinc manganese phosphatisation and a high-finish top coat and good corrosion resistance.

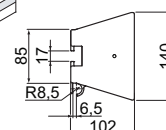
The beams are available in various lengths for a variety of vehicles and frame widths.

All combinations of VBG's underrun protection comply with the dimensions and strength requirements in EU Directive 70/221/EEC, including the supplement 2006/20/EC. *

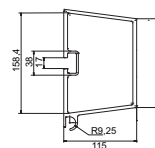
*Not applicable for protective beam UHAP-1

Aluminium beams

UHAP-1

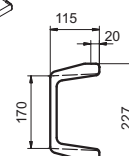


UHAP-2



Steel beams

UOSP



UCSP



SPECIFICATIONS

Aluminium beam UHAP-1

Type approval no.: e11*70/221*2000/8*5001

UHAP-2

Type approval no.: e11*70/221*2006/20*5001

Steel beam UOSP

Type approval no.: e11*70/221*2006/20*010002

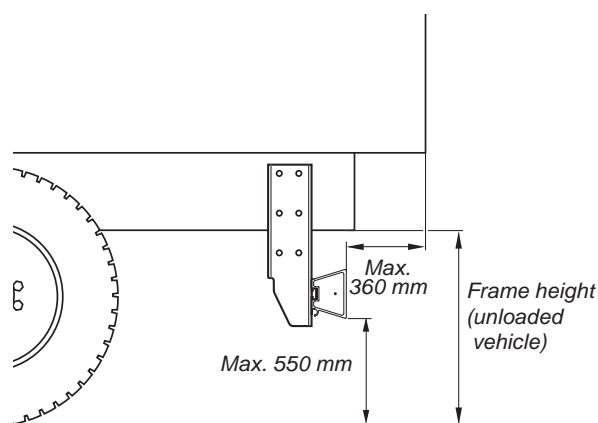
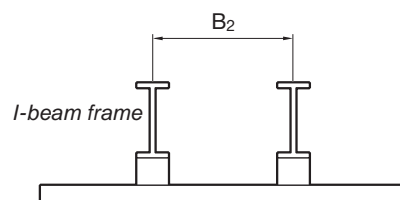
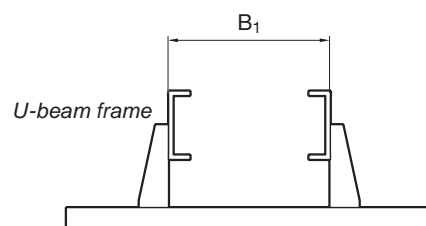
UCSP

Type approval no. : e11*70/221*2006/20*010003

Underrun protection

Selection of protective beam

Protective beam	Type	Intended for frame width		Length	Weight
		B1 (mm)	B2 (mm)	(mm)	(kg)
21-164400	UHAP-1	600–1300	600–1300	2400	13
21-164500	UHAP-1 with reflex	600-1300	600-1300	2400	13
21-164600	UHAP-1 with reflex	600-1300	600-1300	1900	11
21-174600	UHAP-2	760-1300	760-1300	2350	20
21-174700	UHAP-2 with reflex	760-1300	760-1300	2350	20
21-174800	UHAP-2 with reflex	760-1300	760-1300	1900	16
21-176978	UOSP	760-850	760-850	2358	25,5
21-177270	UCSP	760-1300	760-1300	2314	18
21-177278	UCSP	760-1300	760-1300	2314	18
21-177578	UCSP	760-1300	760-1300	1914	15



Endplate kits for underrun protection

VBG has a range of different endplate kits for alternative installations of underrun protection. The hole configurations at the ends are adapted to the standard VBG drilling plan and can be combined with all our protection beam types.

The securing brackets are supplied finished as standard in basic manganese phosphate and a high-finish top coat giving good corrosion resistance.

Selection of endplate kit, bolt kit and bracket for protective beam

End-plate	Frame height (mm)	Type of installation	Bolt kit	Bracket for protective beam		
				UHAP-1, UHAP-2	UOSP	UCSP
EUH	max. 800	Separate u-beam installation	21-148800	21-175000	----	-----
		With centrally fitted drawbeam	21-149200			
		With half underslung drawbeam	21-149300			
EUM	max. 920	Separate u-beam installation	21-148800	21-175000	----	----
		With centrally fitted drawbeam	21-149200			
		With half underslung drawbeam	21-149300			
EUS		Fitted together with drawbeam and endplate	see resp. drawbeam	21-175000	21-178378	21-183478
EUT	max. 950	Separate u-beam installation	21-148800	21-175000	21-178378	21-183478
EUP		Fitted together with drawbeam and endplate.	see resp. drawbeam	21-175000+ 21-175178	21-178378+ 21-175178	21-178478
EUR-3		Fitted together with drawbeam and endplate	see resp. drawbeam	21-175000+ 21-175178	21-178378+ 21-175178	21-178478

Underrun protection

Endplate kit EUH

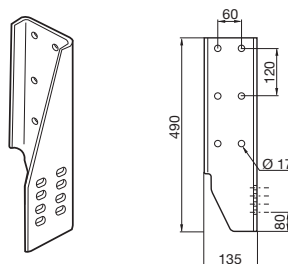
For installation of underrun protection on low frames.

Supplied in pairs.

Bracket for protective beam:

Aluminium beam
UHAP-1, UHAP-2

21-175000



SPECIFICATIONS

Part no.: 21-006078
Weight: 13 kg

Endplate kit EUM

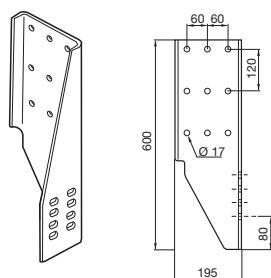
For installation of underrun protection on high frames.

Supplied in pairs.

Bracket for protective beam:

Aluminium beam
UHAP-1, UHAP-2

21-175000



SPECIFICATIONS

Part no.: 21-005078
Weight: 20 kg

Endplate kit EUS, 50 hole spacing

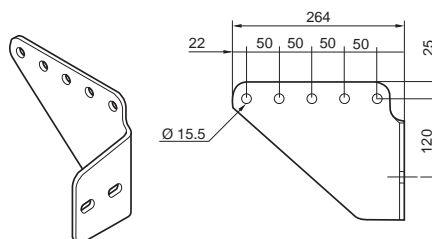
For installation of underrun protection in direct connection with drawbeam.

Supplied in pairs.

Bracket for protective beam:

Aluminium beam
UHAP-1

21-175000



SPECIFICATIONS

Part no.: 21-084070
Weight: 6 kg

Endplate kit EUS, 60 hole spacing

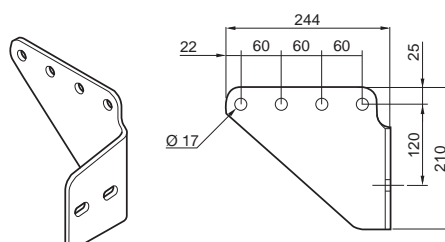
For installation of underrun protection in direct connection with drawbeam.

Supplied in pairs.

Bracket for protective beam:

Aluminium beam
UHAP-1

21-175000



SPECIFICATIONS

Part no.: 21-083170
Weight: 6 kg

Endplate kit EUT

For installation of underrun protection on towed vehicles with I-beam frame.

Supplied in pairs.

Bracket for protective beam:

Aluminium beam
UHAP-1, UHAP-2

21-175000

Steel beam

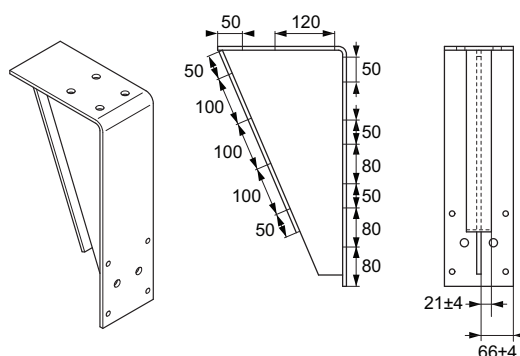
UOSP

21-178378

Steel beam

UCSP

21-183478



SPECIFICATIONS

Part no.: 21-086078
Weight: 23 kg

Underrun protection

SPECIFICATIONS

Part no. 21-178170
Weight: 4,2 kg

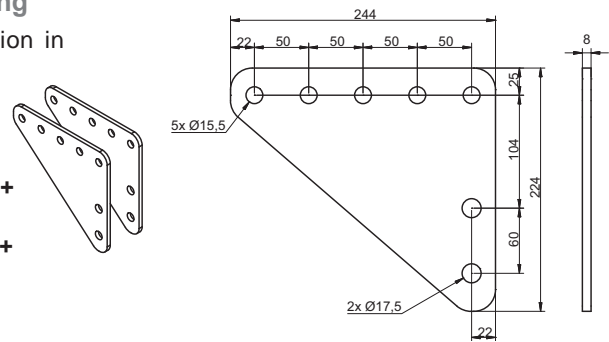
Endplate kit EUP, 50 hole spacing

For installation of underrun protection in direct connection with drawbeam.

Supplied in pairs.

Bracket for protective beam:

Aluminium beam	21-175000+
UHAP-1, UHAP-2	21-175178
Steel beam	21-178378+
UOSP	21-175178
Steel beam	
UCSP	21-178478



SPECIFICATIONS

Part no. 21-178278
Weight: 3,9 kg

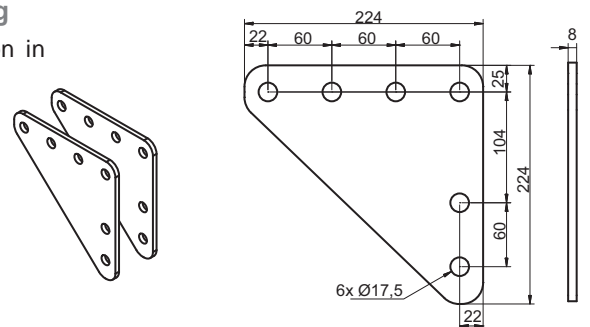
Endplate kit EUP, 60 hole spacing

For installation of underrun protection in direct connection with drawbeam.

Supplied in pairs.

Bracket for protective beam:

Aluminium beam	21-175000+
UHAP-1, UHAP-2	21-175178
Steel beam	21-178378+
UOSP	21-175178
Steel beam	
UCSP	21-178478



SPECIFICATIONS

Part no.: 21-181278
Weight: 8,5 kg

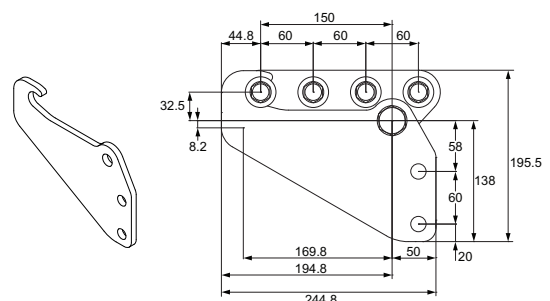
Endplate kit EUR-3

Removable underrun protection.

Supplied in pairs.

Bracket for protective beam:

Aluminium beam	21-175000+
UHAP-1, UHAP-2	21-175178
Steel beam	21-178378+
UOSP	21-175178
Steel beam	
UCSP	21-178478



SPECIFICATIONS

Part no. 21-175000
Weight: 0,7 kg

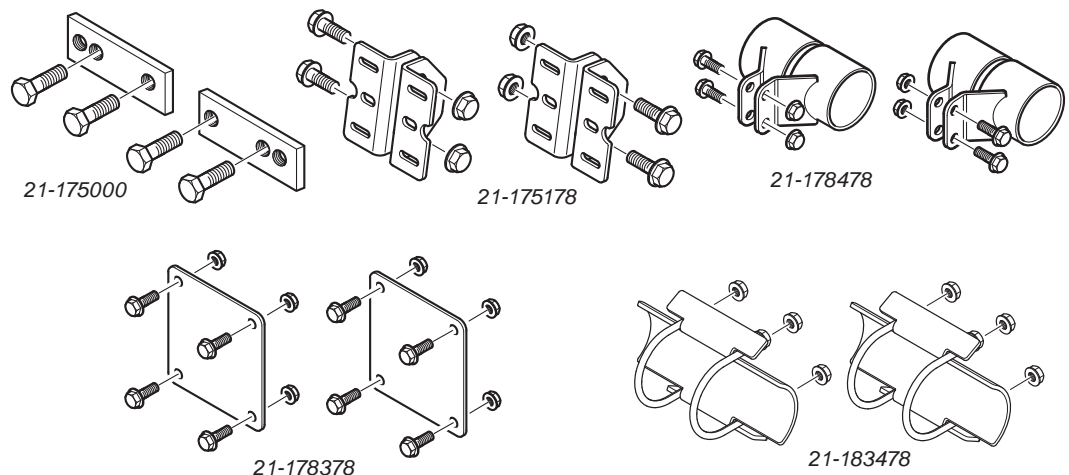
Part no. 21-175178
Weight: 7,5 kg

Part no. 21-178478
Weight: 10,6 kg

Part no. 21-178378
Weight: 1,7 kg

Part no. 21-183478
Weight: 6,5 kg

Bracket for protective beam



Hinged underrun protection



VBG's hinged underrun protection makes it easy and convenient to lift up and down the protective beam when necessary.

Flexible underrun protection EUF-2

VBG's hinged underrun protection makes it easy and convenient to lift the protective beam up and down when necessary, for example, to reach a low, inset underslung coupling.

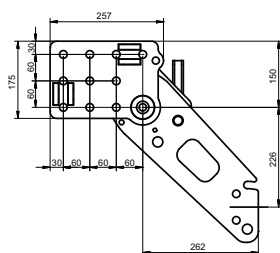
The user-friendly design does away with difficult and dangerous work procedures. The underrun protection can be included as part of a flexible system adapted for driving large bulk centre-axle trailers, and can be installed together with a drawbeam from VBG's DB range.

The component parts are surface-treated with a zinc-manganese phosphatising process, plus ED treatment and topcoat to ensure the best possible corrosion protection.

By using parallel brackets this creates more space for a centrally installed coupling when the protective beam is lifted up.

All combinations of VBG's underrun protection comply with the dimensions and strength requirements in EU directive 70/221/EEC, including supplement 2006/20/EC. *

*Not applicable for protective beam UHAP-1



Bracket for protective beam EUF-2

Fixed protective beam

Aluminium beam UHAP-1, UHAP-2 **21-175000+**
21-175178

Steel beam UOSP **21-178378+**
21-175178

Steel beam UCSP **21-178478**

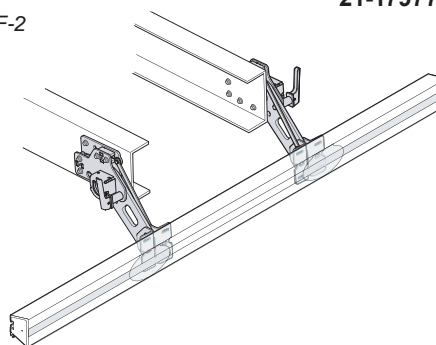
Parallel displaced protective beam

Aluminium beam UHAP-1, UHAP-2 **21-175000+**
21-175178+
21-179778

Steel beam UOSP **21-178378+**
21-175178+
21-179778

Steel beam UCSP **21-183478+**
21-179778

EUF-2



SPECIFICATIONS

Hinged underrun protection

Left

Right

Dead weight/pair

Type approval no.

See respective protective beam

Part no.

21-176578

21-176678

31 kg

Accessories

Parallel bracket

Bolt kit for truck frame

Part no.

21-179778

21-182400

Multi XF Drawbar



VBG Multi XF Drawbar is made from a small number of parts, is light-weight and yet strong, and fits trailers with c/c dimensions of between 700 mm – 1,300 mm. Potential drawbar lengths vary between 1,269 – 4,358 mm in steps of approx. 62 mm.

The installation procedure is simple and no welding or drilling is necessary – installation is done by means of bolted joints.

Easy to install

The complete drawbar is assembled with bolted joints. No welding is necessary. To simplify installation there is a special centring device, which is fixed in the drawbar eye.

Flexible

The drawbar can be adapted to most vehicle combinations. With only a small number of standard units it is possible to achieve drawbar lengths from 1,269 – 4,358 mm (see table) and c/c dimensions of 700 mm – 1,300 mm.

Surface treated

The drawbar is treated with a basic zinc-manganese phosphatising process, ED primer and a powder coating with a high finish and first-rate resistance to corrosion.

Several alternatives

The drawbar can be fitted with either Vibra blocks or Briab brackets for attachment to the trailer. Four different drawbar eyes are available: VBG Ø 57 mm, VBG Ø 57 mm angled 5°, ISO Ø 50 mm and DIN Ø 40 mm. VBG Ø 57 mm, angled 5°, is used where there is a low attachment point on the trailer.



SPECIFICATIONS

VBG Multi XF Drawbar

The drawbar consists of:

- 4 Sidemembers
- 1 Eye
- 1-2 Crossmembers
- 2 Rear brackets with fitted Vibra blocks (Ø 32 mm) or Briab brackets
- 2 Pivot bolts or Briab installation kit
- 6 Screw kits, sidemember
- 1-2 Screw sets, crossmember

Multi XF Drawbar

Drawbar eye VBG ø 57

c/c dimension:	700	900	980	1100	1200	1300
Drawbar length (mm) *1:	1269-1925	1388-2044	1498-2158	1613-2143	1727-2128	
Part no.:	25-080678			25-081478		
Weight (kg):	86 kg			87 kg		
	1990-2818 (1601-2818)	2109-2811 (1719-2811)	2222-2799 (1897-2799)	2208-2789 (2078-2789)	2193-2777	
	25-079078			25-079878		
	98 kg			99 kg		
	2881-3575 (1990-3575)	2874-3570 (2173-3570)	2863-3561 (2415-3561)	2853-3553 (2661-3553)	2841-3544	
	25-077478			25-078278		
	126 kg			127 kg		
1564-4338	3638-4330 (1990-4330)	3633-4325 (2173-4325)	3624-4318 (2415-4318)	3616-4312 (2661-4312)	3608-4304 (2841-4304)	
25-075078	25-075878			25-076678		
142 kg	143 kg			144 kg		

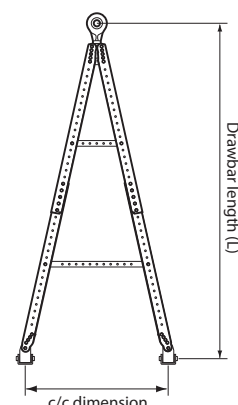
Rear bracket
Vibra block

Performance value D 179 kN
D value: 179 kN
Twin steering axle (Av): 18 tons
Type approval no.:
e11*94/20*4637
L = 3,500 mm

Performance value D 162 kN
D value: 162 kN
Twin steering axle (Av): 18 tons
Type approval no.:
e11*94/20*4636
L > 3500 mm

c/c dimension:	700	900	980	1100	1200	1300
Drawbar length (mm) *1:	1269-1925	1388-2044	1498-2158	1613-2143	1727-2128	
Part no.:	25-080778			25-081578		
Weight (kg):	84 kg			85 kg		
	1990-2818 (1601-2818)	2109-2811 (1719-2811)	2222-2799 (1897-2799)	2208-2789 (2078-2789)	2193-2777	
	25-079178			25-079978		
	96 kg			97 kg		
	2881-3575 (1990-3575)	2874-3570 (2173-3570)	2863-3561 (2415-3561)	2853-3553 (2661-3553)	2841-3544	
	25-077578			25-078378		
	125 kg			126 kg		
1564-4338	3638-4330 (1990-4330)	3633-4325 (2173-4325)	3624-4318 (2415-4318)	3616-4312 (2661-4312)	3608-4304 (2841-4304)	
25-075178	25-075978			25-076778		
140 kg	141 kg			142 kg		

Rear bracket
Briab



Drawbar eye VBG ø 57, angled 5°

c/c dimension:	700	900	980	1100	1200	1300
Drawbar length (mm) *1:	1269-1925	1388-2044	1498-2158	1613-2143	1727-2128	
Part no.:	25-080878			25-081678		
Weight (kg):	86 kg			87 kg		
	1990-2818 (1601-2818)	2109-2811 (1719-2811)	2222-2799 (1897-2799)	2208-2789 (2078-2789)	2193-2777	
	25-079278			25-080078		
	98 kg			99 kg		
	2881-3575 (1990-3575)	2874-3570 (2173-3570)	2863-3561 (2415-3561)	2853-3553 (2661-3553)	2841-3544	
	25-077678			25-078478		
	126 kg			127 kg		
1564-4338	3638-4330 (1990-4330)	3633-4325 (2173-4325)	3624-4318 (2415-4318)	3616-4312 (2661-4312)	3608-4304 (2841-4304)	
25-075278	25-076078			25-076878		
142 kg	143 kg			144 kg		

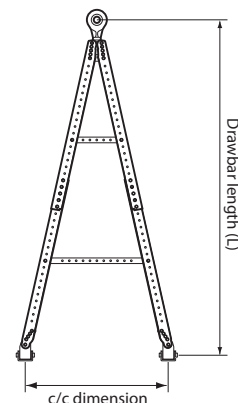
Rear bracket
Vibra block

Performance value D 179 kN
D value: 179 kN
Twin steering axle (Av): 18 tons
Type approval no.:
e11*94/20*4637
L = 3,500 mm

Performance value D 162 kN
D value: 162 kN
Twin steering axle (Av): 18 tons
Type approval no.:
e11*94/20*4636
L > 3500 mm

c/c dimension:	700	900	980	1100	1200	1300
Drawbar length (mm) *1:	1269-1925	1388-2044	1498-2158	1613-2143	1727-2128	
Part no.:	25-080978			25-081778		
Weight (kg):	84 kg			85 kg		
	1990-2818 (1601-2818)	2109-2811 (1719-2811)	2222-2799 (1897-2799)	2208-2789 (2078-2789)	2193-2777	
	25-079378			25-080178		
	96 kg			97 kg		
	2881-3575 (1990-3575)	2874-3570 (2173-3570)	2863-3561 (2415-3561)	2853-3553 (2661-3553)	2841-3544	
	25-077778			25-078578		
	125 kg			126 kg		
1564-4338	3638-4330 (1990-4330)	3633-4325 (2173-4325)	3624-4318 (2415-4318)	3616-4312 (2661-4312)	3608-4304 (2841-4304)	
25-075378	25-076178			25-076978		
140 kg	141 kg			142 kg		

Rear bracket
Briab



*1 Recommended lengths. Lengths in brackets indicate the possible length intervals for the drawbar. It may be necessary to cut the sidemembers to adjust to specific lengths.

Multi XF Drawbar

Drawbar eye ISO ø 50

c/c dimension:	700	900	980	1100	1200	1300
Drawbar length (mm) *1:		1289-1945	1408-2064	1518-2178	1633-2163	1747-2148
Part no.:		25-081078			25-081878	
Weight (kg):		84 kg			86 kg	
		2010-2838 (1621-2838)	2129-2831 (1739-2831)	2242-2819 (1917-2819)	2228-2809 (2098-2809)	2213-2797
		25-079478			25-080278	
		98 kg			98 kg	
		2901-3595 (2010-3595)	2894-3590 (2193-3590)	2883-3581 (2435-3581)	2873-3573 (2681-3573)	2861-3564
		25-077878			25-078678	
		126 kg			127 kg	
1584-4358	3658-4350 (2010-4350)	3653-4345 (2193-4345)	3644-4338 (2435-4338)	3636-4332 (2681-4332)	3628-4324 (2661-4324)	
25-075478	25-076278			25-077078		
142 kg	142 kg			143 kg		

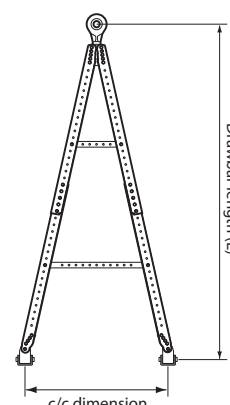
Rear bracket
Vibra block

Performance value D 179 kN
D value: 179 kN
Twin steering axle (Av): 18 tons
Type approval no.:
e11*94/20*4637
L = 3,500 mm

Performance value D 162 kN
D value: 162 kN
Twin steering axle (Av): 18 tons
Type approval no.:
e11*94/20*4636
L > 3500 mm

c/c dimension:	700	900	980	1100	1200	1300
Drawbar length (mm) *1:		1289-1945	1408-2064	1518-2178	1633-2163	1747-2148
Part no.:		25-081178			25-081978	
Weight (kg):		84 kg			85 kg	
		2010-2838 (1621-2838)	2129-2831 (1739-2831)	2242-2819 (1917-2819)	2228-2809 (2098-2809)	2213-2797
		25-079578			25-080378	
		96 kg			97 kg	
		2901-3595 (2010-3595)	2894-3590 (2193-3590)	2883-3581 (2435-3581)	2873-3573 (2681-3573)	2861-3564
		25-077978			25-078778	
		124 kg			125 kg	
1584-4358	3658-4350 (2010-4350)	3653-4345 (2193-4345)	3644-4338 (2435-4338)	3636-4332 (2681-4332)	3628-4324 (2661-4324)	
25-075578	25-076378			25-077178		
140 kg	140 kg			141 kg		

Rear bracket
Briab



Drawbar eye DIN ø 40

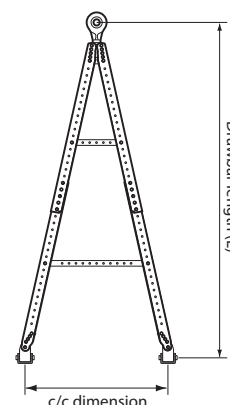
c/c dimension:	700	900	980	1100	1200	1300
Drawbar length (mm) *1:		1289-1945	1408-2064	1518-2178	1633-2163	1747-2148
Part no.:		25-081278			25-082078	
Weight (kg):		85 kg			87 kg	
		2010-2838 (1621-2838)	2129-2831 (1739-2831)	2242-2819 (1917-2819)	2228-2809 (2098-2809)	2213-2797
		25-079678			25-080478	
		97 kg			98 kg	
		2901-3595 (2010-3595)	2894-3590 (2193-3590)	2883-3581 (2435-3581)	2873-3573 (2681-3573)	2861-3564
		25-078078			25-078878	
		126 kg			127 kg	
1584-4358	3658-4350 (2010-4350)	3653-4345 (2193-4345)	3644-4338 (2435-4338)	3636-4332 (2681-4332)	3628-4324 (2661-4324)	
25-075678	25-076478			25-077278		
141 kg	142 kg			143 kg		

Rear bracket
Vibra block

Performance value D 130 kN
D value: 130 kN
Twin steering axle (Av): 12 tons
Type approval no.:
e11*94/20*4978

c/c dimension:	700	900	980	1100	1200	1300
Drawbar length (mm) *1:		1289-1945	1408-2064	1518-2178	1633-2163	1747-2148
Part no.:		25-081378			25-082178	
Weight (kg):		84 kg			86 kg	
		2010-2838 (1621-2838)	2129-2831 (1739-2831)	2242-2819 (1917-2819)	2228-2809 (2098-2809)	2213-2797
		25-079778			25-080578	
		96 kg			96 kg	
		2901-3595 (2010-3595)	2894-3590 (2193-3590)	2883-3581 (2435-3581)	2873-3573 (2681-3573)	2861-3564
		25-078178			25-078978	
		124 kg			125 kg	
1584-4358	3658-4350 (2010-4350)	3653-4345 (2193-4345)	3644-4338 (2435-4338)	3636-4332 (2681-4332)	3628-4324 (2661-4324)	
25-075778	25-076578			25-077378		
139 kg	140 kg			141 kg		

Rear bracket
Briab



*1 Recommended lengths. Lengths in brackets indicate the possible length intervals for the drawbar. It may be necessary to cut the sidemembers to adjust to specific lengths.

Multi Drawbar



The VBG Multi Drawbar is made from a small number of parts, is light-weight and yet strong, and fits trailers with c/c dimensions of between 980 /1100/1200/1300 mm.

Potential drawbar lengths vary between 1,200 – 3,000 mm in steps of 50 mm.

The installation procedure is simple and no welding is necessary – installation is done by means of bolted joints.

Easy to install

The complete drawbar is assembled with bolted joints. No welding is necessary. To simplify installation there is a special centring device, which is fixed in the drawbar eye.

Flexible

The drawbar can be adapted to most vehicle combinations. With only a small number of standard units it is possible to achieve drawbar lengths from 1,200 – 3,000 mm (see table) and c/c dimensions of 980/1100/1200/1300 mm.

Surface treated

The drawbar is treated with a basic zinc-manganese phosphatising process and has a topcoat with a high finish and first-rate resistance to corrosion.

Several alternatives

The drawbar can be fitted with either Vibra blocks or Briab brackets for attachment to the trailer. Three different dimensions of drawbar eyes are available: VBG Ø 57 mm, ISO Ø 50 mm and DIN Ø 40 mm.



*The drawbar is assembled by means of bolted joints.
(The rear crossmember is only used on drawbars with performance value D: 179 kN.)*



SPECIFICATIONS

VBG Multi Drawbar

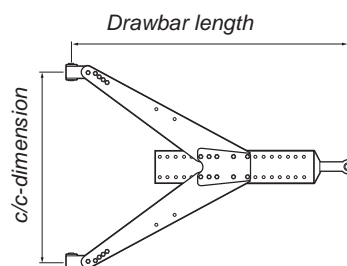
The drawbar consists of:

- 1 Front slider incl. bolt kit
- 2 Sidemembers
- 1 Rear crossmember incl. bolt kit
(only performance D: 179 kN)
- 2 Rear brackets with fitted Vibra blocks (Ø 32 mm) or Briab brackets
- 2 Pivot bolts or Briab installation kit
- 2 Mounting plates

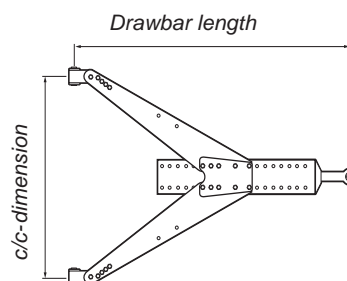
Multi Drawbar

Performance value D: 130 kN

D value 130 kN
Twin steering axle (A_V) 12 ton
Type approval no. e11*94/20*2589



Drawbar length (mm):	c/c=980 mm	c/c=1100 mm	c/c=1200 mm	c/c=1300 mm	Drawbar eye	Rear bracket	Weight (kg)	Part no.
1280-2180	—	—	1220-2120	—	DIN Ø 40	Vibra block	110	25-060278
"	"	"	"	"	"	Briab bracket	110	25-062178
—	1250-2150	—	1185-2085	"	"	Vibra block	110	25-060378
—	"	—	"	"	"	Briab bracket	110	25-062278
1420-2320	—	—	1370-2270	—	"	Vibra block	104	25-056278
"	—	—	"	—	"	Briab bracket	104	25-063578
1710-2610	—	—	1670-2570	—	"	Vibra block	120	25-043578
"	—	—	"	—	"	Briab bracket	120	25-043678
1920-2720	—	—	1885-2685	—	"	Vibra block	117	25-056578
"	—	—	"	—	"	Briab bracket	117	25-063678
2250-3050	—	—	2220-3020	—	"	Vibra block	137	25-043978
"	—	—	"	—	"	Briab bracket	137	25-044078
—	1690-2590	—	1650-2250	"	"	Vibra block	120	25-043778
—	"	—	"	"	"	Briab bracket	120	25-043878
—	2235-3035	—	2205-3005	"	"	Vibra block	137	25-044178
—	"	—	"	"	"	Briab bracket	137	25-044278



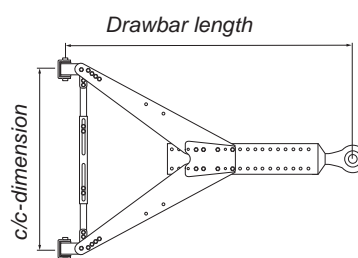
Performance value D: 146 kN

D value 146 kN
Twin steering axle (A_V) 12 ton
Type approval no. e11*94/20*3168

Drawbar length (mm):	c/c=980 mm	c/c=1100 mm	c/c=1200 mm	c/c=1300 mm	Drawbar eye	Rear bracket	Weight (kg)	Part no.
1400-2300	—	—	1350-2250	—	VBG Ø 57	Vibra block	104	25-056078
"	"	"	"	—	"	Briab bracket	104	25-063178
1900-2700	—	—	1865-2665	—	"	Vibra block	117	25-056378
"	—	—	"	—	"	Briab bracket	117	25-063378
1420-2320	—	—	1370-2270	—	ISO Ø 50	Vibra block	104	25-056178
"	—	—	"	—	"	Briab bracket	104	25-063278
1920-2720	—	—	1885-2685	—	"	Vibra block	117	25-056478
"	—	—	"	—	"	Briab bracket	117	25-063478

Performance value D: 179 kN

D value 179 kN
Twin steering axle (A_v) 18 ton
Type approval no. e11*94/20*3425



Drawbar length (mm):	c/c=980 mm	c/c=1100 mm	c/c=1200 mm	c/c=1300 mm	Drawbar eye	Rear bracket	Weight (kg)	Part no.
1260-2160	—	—	1200-2100	—	VBG Ø 57	Vibra block	115	25-059478
"	"	"	"	"	"	Briab bracket	115	25-061378
—	1230-2130	—	1165-2065	"	"	Vibra block	115	25-059678
—	"	—	"	"	"	Briab bracket	115	25-061578
1690-2590	—	1650-2550	—	"	"	Vibra block	125	25-044378
"	—	"	—	"	"	Briab bracket	125	25-044478
—	1670-2570	—	1630-2530	"	"	Vibra block	125	25-044578
—	"	—	"	"	"	Briab bracket	125	25-044678
2230-3030	—	2200-3000	—	"	"	Vibra block	143	25-044778
"	—	"	—	"	"	Briab bracket	143	25-044878
—	2215-3015	—	2185-2985	"	"	Vibra block	143	25-044978
—	"	—	"	"	"	Briab bracket	143	25-045078
1280-2180	—	1220-2120	—	ISO Ø 50	"	Vibra block	115	25-059578
"	—	"	—	"	"	Briab bracket	115	25-061478
—	1250-2150	—	1185-2085	"	"	Vibra block	115	25-059778
—	"	—	"	"	"	Briab bracket	115	25-061678
1710-2610	—	1670-2570	—	"	"	Vibra block	125	25-045178
"	—	"	—	"	"	Briab bracket	125	25-045278
—	1690-2590	—	1650-2550	"	"	Vibra block	125	25-045378
—	"	—	"	"	"	Briab bracket	125	25-045478
2250-3050	—	2220-3020	—	"	"	Vibra block	143	25-045578
"	—	"	—	"	"	Briab bracket	143	25-045678
—	2235-3035	—	2205-3005	"	"	Vibra block	143	25-045778
—	"	—	"	"	"	Briab bracket	143	25-045878

Optimal Drawbar



VBG Optimal is adapted for trailers which need to reverse onto the drawbar. It is based on VBG's unique modular concept with a small number of parts, which ensures great flexibility and a wide range of options. The drawbars are available in lengths from 2,150 mm to 4,500 mm in steps of 50 mm and with c/c dimensions 700, 900, 980, 1,100 and 1,200 mm.

Ready for delivery

The drawbars are already assembled on delivery from the factory. To simplify transportation and the stocking of spare parts the front slider is telescopically inserted in the rear member.

Easy to install

Easy to install on trailers, no welding or drilling is necessary – all the installation, including accessories, is carried out by means of bolted joints.

Flexible

Thanks to their module design and telescopic construction, the drawbars are available in lengths from 2150 mm up to 4500 mm. The C/C dimensions are 700, 900, 980, 1,100 and 1,200 mm.

Surface treated

The drawbars are surface treated with VBG's superb process, basic zinc-manganese phosphatising, ED primer and a powder coating with a high finish, and have a first-rate resistance to corrosion.

Several alternatives

The drawbars can be fitted with either Vibra blocks or Briab brackets for attachment to the trailer.

Four different eyes are available: VBG Ø 57 mm, VBG Ø 57 mm angled 5 degrees, ISO Ø 50 mm and DIN Ø 40 mm.

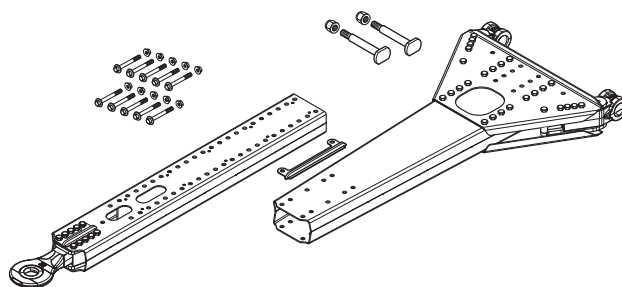
VBG Ø 57 mm, angled 5 degrees, is used where there is a low attachment point on the trailer.

Protection for hoses

The Optimal drawbars have been designed so that hoses and cables can be inserted in the bar for protection, which reduces the risk of hose rupture and breakdowns.

Spare parts

The module design of the drawbar, with a small number of parts, simplifies the stocking of spare parts and contributes towards cost-effective overall economic solutions.



SPECIFICATIONS

VBG Optimal Drawbar

The drawbar consists of:

- 1 rear member, with the fitted Vibra 32 mm rear bracket, including pivot bolt, (alternatively Briab including installation kit.)
- 1 front slider (with fitted eye), including bolt kit.
- 1 Slide bar, short
- 1 Slide bar, long

Optimal Drawbar

Drawbar eye VBG Ø 57

Rear bracket; Briab	c/c dimension (mm)				
Drawbar length (mm)	700	900	980	1100	1200
2150-2900	25-093478 158 kg	25-093278 164 kg	25-093078 164 kg	25-092878 170 kg	25-092678 170 kg
2950-3700	25-095478 176 kg	25-095278 182 kg	25-095078 182 kg	25-094878 189 kg	25-094678 189 kg
3750-4500	25-094478 199 kg	25-094278 205 kg	25-094078 205 kg	25-093878 211 kg	25-093678 211 kg

Rear bracket; Vibra block	c/c dimension (mm)				
Drawbar length (mm)	700	900	980	1100	1200
2150-2900	25-093578 159 kg	25-093378 166 kg	25-093178 166 kg	25-092978 172 kg	25-092778 172 kg
2950-3700	25-095578 178 kg	25-095378 184 kg	25-095178 184 kg	25-094978 190 kg	25-094778 190 kg
3750-4500	25-094578 200 kg	25-094378 207 kg	25-094178 207 kg	25-093978 213 kg	25-093778 213 kg

Drawbar eye VBG Ø 57, angled 5°

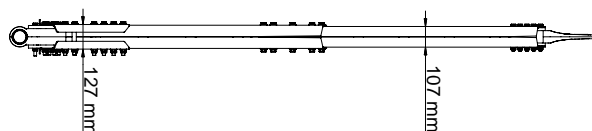
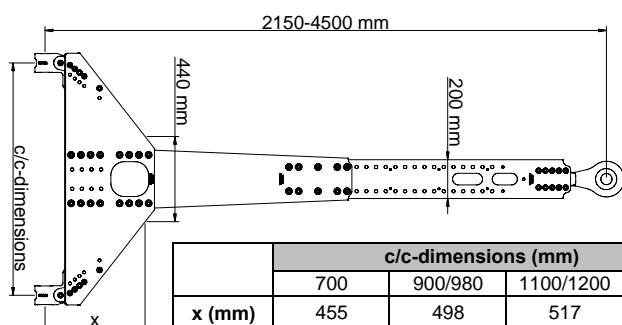
Rear bracket; Briab	c/c dimension (mm)				
Drawbar length (mm)	700	900	980	1100	1200
2150-2900	25-096478 158 kg	25-096278 164 kg	25-096078 164 kg	25-095878 170 kg	25-095678 170 kg
2950-3700	25-098478 176 kg	25-098278 182 kg	25-098078 182 kg	25-097878 189 kg	25-097678 189 kg
3750-4500	25-097478 199 kg	25-097278 205 kg	25-097078 205 kg	25-096878 211 kg	25-096678 211 kg

Rear bracket; Vibra block	c/c dimension (mm)				
Drawbar length (mm)	700	900	980	1100	1200
2150-2900	25-096578 159 kg	25-096378 166 kg	25-096178 166 kg	25-095978 172 kg	25-095778 172 kg
2950-3700	25-098578 178 kg	25-098378 184 kg	25-098178 184 kg	25-097978 190 kg	25-097778 190 kg
3750-4500	25-097578 200 kg	25-097378 207 kg	25-097178 207 kg	25-096978 213 kg	25-096778 213 kg

Drawbar length
≤ 3500 mm
Ø50 D 179 kN
Ø57 D 179 kN
Av 18 tons
Class E
Type approval no.
e11*94/20*6004

Drawbar length
> 3500 mm
Ø50 D 162 kN
Ø57 D 162 kN
Av 18 tons
Class E
Type approval no.
e11*94/20*6279

Ø40 D 130 kN
Av 12 ton
Class E
Type approval no.
e11*94/20*6280



Optimal Drawbar

Drawbar eye ISO Ø 50

Rear bracket; Briab	c/c dimension (mm)				
Drawbar length (mm)	700	900	980	1100	1200
2170-2920	25-099478 157 kg	25-099278 164 kg	25-099078 164 kg	25-098878 170 kg	25-098678 170 kg
2970-3720	25-101478 175 kg	25-101278 182 kg	25-101078 182 kg	25-100878 188 kg	25-100678 188 kg
3770-4520	25-100478 198 kg	25-100278 205 kg	25-100078 205 kg	25-099878 211 kg	25-099678 211 kg

Rear bracket; Vibra block	c/c dimension (mm)				
Drawbar length (mm)	700	900	980	1100	1200
2170-2920	25-099578 159 kg	25-099378 165 kg	25-099178 165 kg	25-098978 172 kg	25-098778 172 kg
2970-3720	25-101578 177 kg	25-101378 184 kg	25-101178 184 kg	25-100978 190 kg	25-100778 190 kg
3770-4520	25-100578 200 kg	25-100378 207 kg	25-100178 207 kg	25-099978 213 kg	25-099778 213 kg

Drawbar length
≤ 3500 mm
Ø50 D 179 kN
Ø57 D 179 kN
Av 18 tons
Class E
Type approval no.
e11*94/20*6004

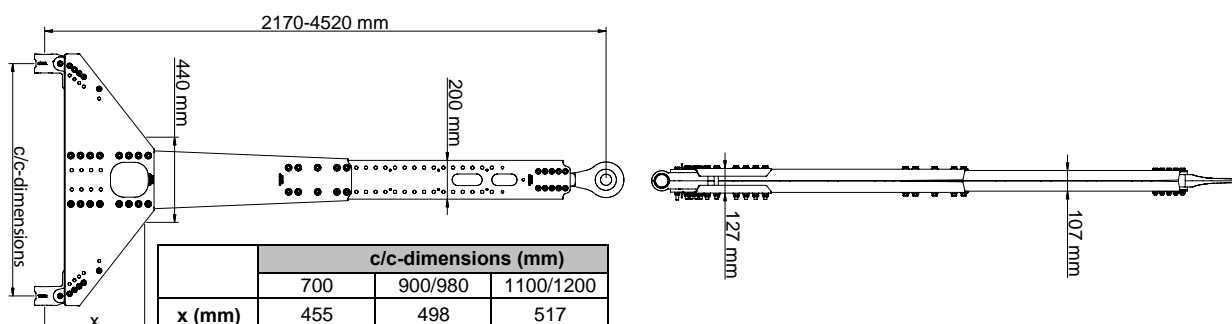
Drawbar length
> 3500 mm
Ø50 D 162 kN
Ø57 D 162 kN
Av 18 tons
Class E
Type approval no.
e11*94/20*6279

Drawbar eye DIN Ø 40

Rear bracket; Briab	c/c dimension (mm)				
Drawbar length (mm)	700	900	980	1100	1200
2170-2920	25-102478 157 kg	25-102278 163 kg	25-102078 163 kg	25-101878 170 kg	25-101678 170 kg
2970-3720	25-104478 175 kg	25-104278 182 kg	25-104078 182 kg	25-103878 188 kg	25-103678 188 kg
3770-4520	25-103478 198 kg	25-103278 204 kg	25-103078 204 kg	25-102878 211 kg	25-102678 211 kg

Ø40 D 130 kN
Av 12 ton
Class E
Type approval no.
e11*94/20*6280

Rear bracket; Vibra block	c/c dimension (mm)				
Drawbar length (mm)	700	900	980	1100	1200
2170-2920	25-102578 159 kg	25-102378 165 kg	25-102178 165 kg	25-101978 171 kg	25-101778 171 kg
2970-3720	25-104578 177 kg	25-104378 183 kg	25-104178 183 kg	25-103978 190 kg	25-103778 190 kg
3770-4520	25-103578 200 kg	25-103378 206 kg	25-103178 206 kg	25-102978 212 kg	25-102778 212 kg



Automatic drawbar 26-100000



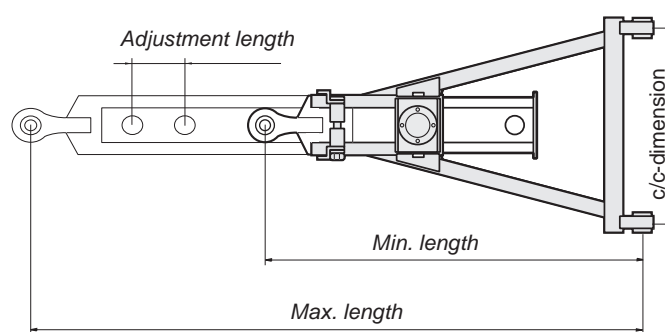
The VBG Automatic drawbar 26-100000 is an extendable drawbar with two or more fixed installation positions with air-operated locking.

Automatic drawbar 26-100000 is EU approved.

The VBG air-operated automatic drawbar has a light-weight and strong design, with a low built-in height. The simple replacement of bushings and complete repair kits ensure a long service-life. It is manufactured to the required dimensions (see adjustment positions) and is available with two or more adjustment lengths with automatic locking.

The front slider is available with a drawbar eye of the VBG or ISO type. The rear part is available for c/c dimensions 980 – 1,200 mm, and is supplied with the rear bracket (Vibra block or Briab) welded to the required c/c dimension. SMS tested and approved for 18 tons twin steering axle trailer.

For further information and order forms, see installation instruction 38-161800.



SPECIFICATIONS

Automatic drawbar

EU-approved

Type approval no.:

Performance values:

Part no.:26-100000

e11*94/20*4456

D: 152 kN

Adjustment positions

Min. length 1300 mm

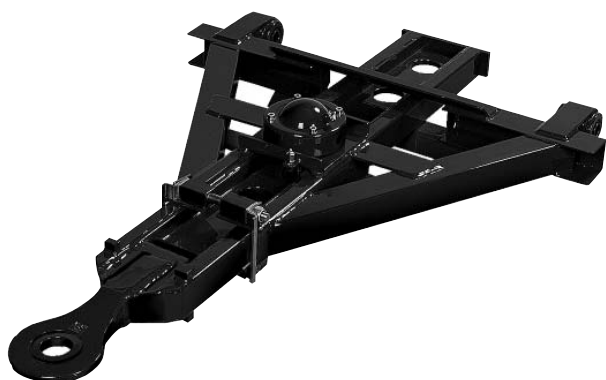
Max. length 3500 mm

Min. adjustment length 150 mm

Max. adjustment length 1250 mm

c/c-dimension 980-1200 mm

Automatic drawbar 26-080000



The VBG Automatic drawbar 26-080000 is an extendable drawbar with two or more fixed installation positions with air-operated locking.

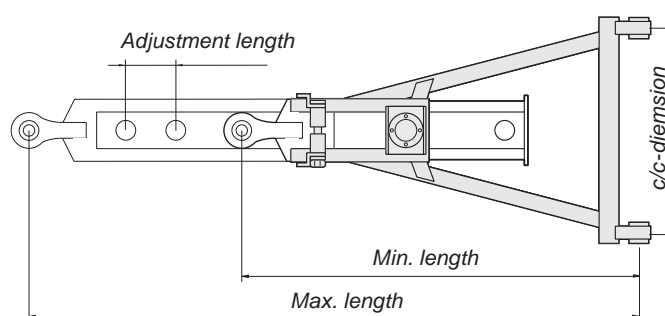
Automatic drawbar 26-080000 is not EU approved.

The VBG air-operated automatic drawbar has a light-weight and strong design, with a low built-in height. The simple replacement of bushings and complete repair kits ensure a long service-life. It is manufactured to the required dimensions and is available with two or more adjustment lengths with automatic locking.

The front slider is available with a drawbar eye of the VBG, ISO or DIN standard type. The rear part is available for c/c dimensions 900 – 1,300 mm, and can be supplied with the rear bracket welded to the required dimension.

SMS tested and approved for 18 tons twin steering axle trailer and 38 tons trailer weight. For information on classifications over 1.80 m, please contact VBG.

For further information and order forms, see installation instruction 38-050300.



Total height 240 mm including air dome.

SPECIFICATIONS

Automatic drawbar

Part no.: 26-080000

Adjustment positions

The drawbar is not EU-approved!

Performance values:

	VBG Ø 57,5 mm	ISO Ø 50 mm	DIN Ø 40 mm
Total weight	76 tons	76 tons	48 tons
Trailer weight (R)	38 tons	38 tons	32 tons
Twin steering axle (A ₁)	18 tons	18 tons	12 tons

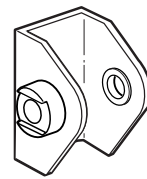
Min. length	1200 mm
Max. length	4500 mm
Min. adjustment length	150 mm
Max. adjustment length	2000 mm
c/c-dimension	900-1300 mm

Joint accessories

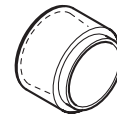
Trailer bracket for Vibra block	Part. no 26-057300
Sleeve for welding of trailer bracket BRIAB	25-064800

Centering tool for drawbar eye DIN Ø 40 mm	25-055000
Centering tool for drawbar eye ISO Ø 50 mm	25-055100
Centering tool for drawbar eye VBG Ø 57 mm	25-055200

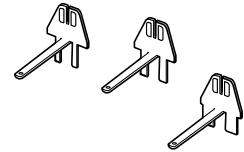
Balancing kit (incl. balance spring, rigging screw and spring retainer)	25-053700
Foot step	25-054100
Spring retainer	25-054900
Holder for power plug	18-030100
Support	25-083700



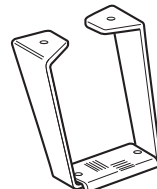
Trailer bracket



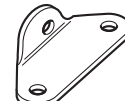
Sleeve



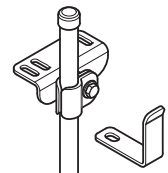
Centering tool



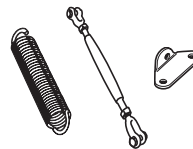
Foot step



Spring retainer



Support



Balancing kit



Holder for power plug

Unique accessories Multi XF

Catwalk	25-074300
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Unique accessories Multi

Catwalk, short	25-054800
Fits following drawbars:	

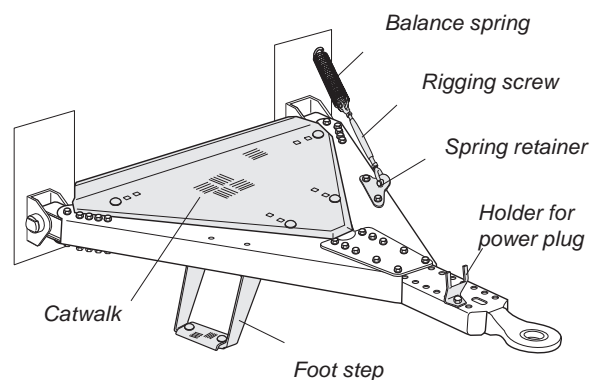
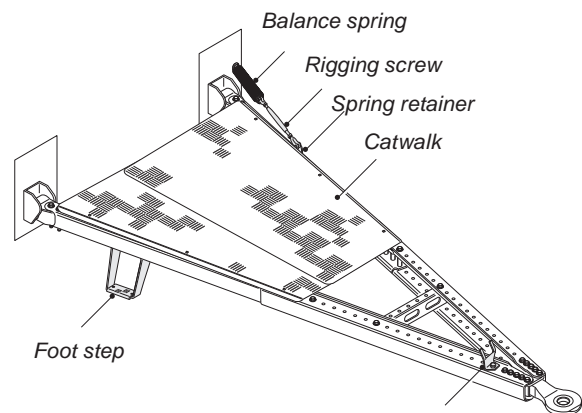
25-056078	25-059778	25-061678
25-056178	25-060278	25-062178
25-056278	25-060378	25-062278
25-059478	25-061378	25-063178
25-059578	25-061478	25-063278
25-059678	25-061578	25-063578

Catwalk, medium	25-054700
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Fits following drawbars:		
25-044378	25-045378	25-060478
25-044478	25-045478	25-062378
25-044578	25-056378	25-063378
25-044678	25-056478	25-063478
25-045178	25-056578	25-063678
25-045278		

Catwalk, long	25-054600
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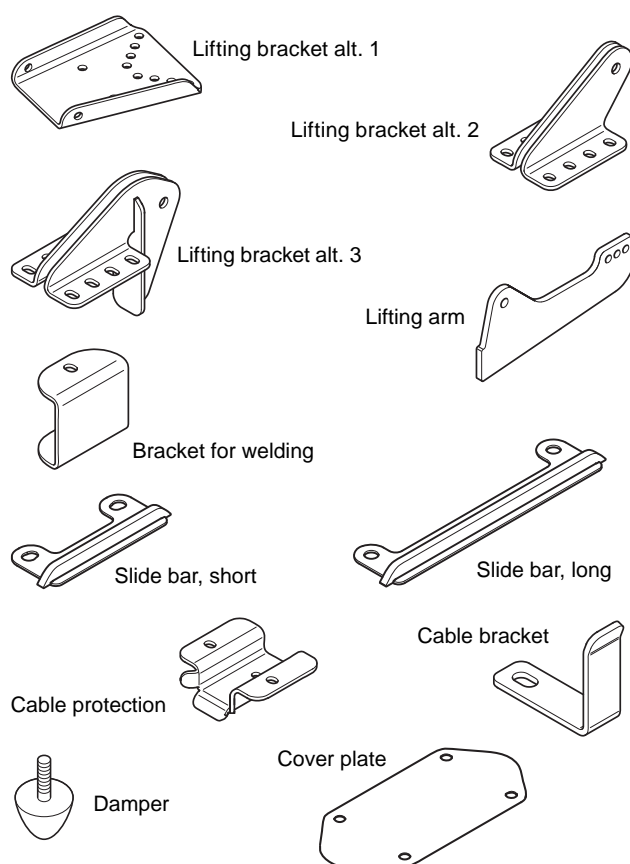
Fits following drawbars:		
25-043978	25-044778	25-045578
25-044078	25-044878	25-045678
25-044178	25-044978	25-045778
25-044278	25-045078	25-045878



Multi Drawbar

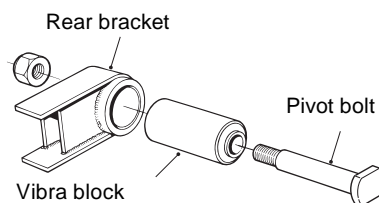
Unique accessories Optimal

Lifting bracket alt. 1	Partno. 25-088278
Lifting bracket alt. 2	25-087878
Lifting bracket alt. 3	25-089478
Lifting arm	25-089378
Damper	25-088700
Cable bracket	25-088678
Cover plate	25-088178
Cable protection	25-088078
Bracket for welding	25-087900
Slide bar, short	25-089978
Slide bar, long	25-092278

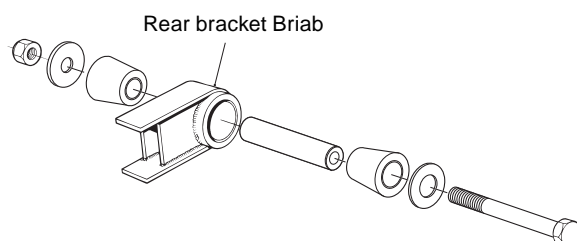


Unique accessories Automatic drawbar

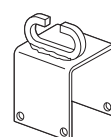
Rear bracket	25-013000
Rear bracket Briab	25-013500
Vibra block	26-050700
Pivot bolt	18-055600
Installation kit	26-058600
Control box	07-108000
Spring retainer	26-071700



Installation kit



Spring retainer



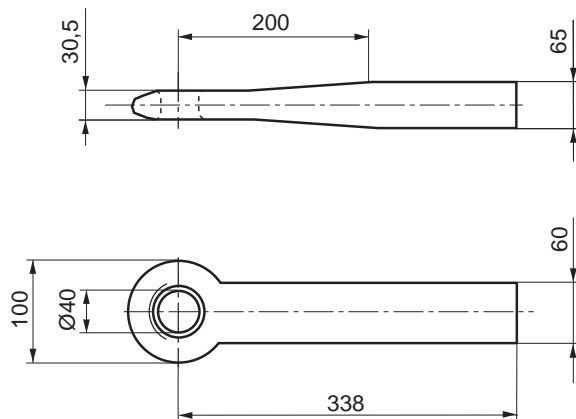
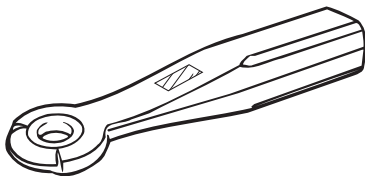
Drawbar eyes



The drawbar eyes are available in screwed, flanged and welded versions, and with replaceable wear rings for best economy and comfort.

Welded drawbar eyes

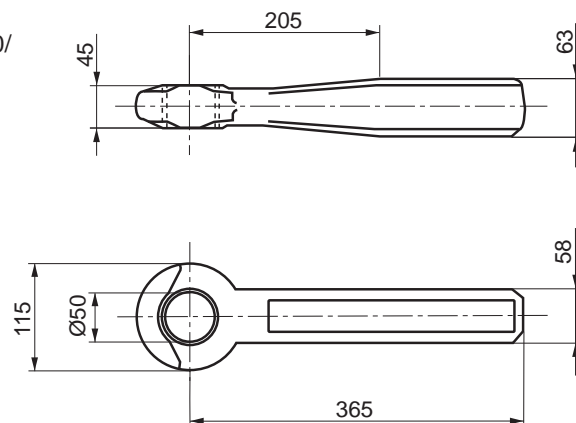
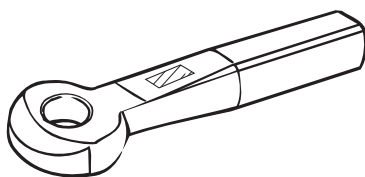
Eye Ø 40 mm as per ISO 8755 and DIN 74054, type A.



SPECIFICATIONS

	Part no.
	17-012900
Total weight	48 Ton
Trailer weight	32 Ton
Pc value*	15 kN
Support load	900 kg

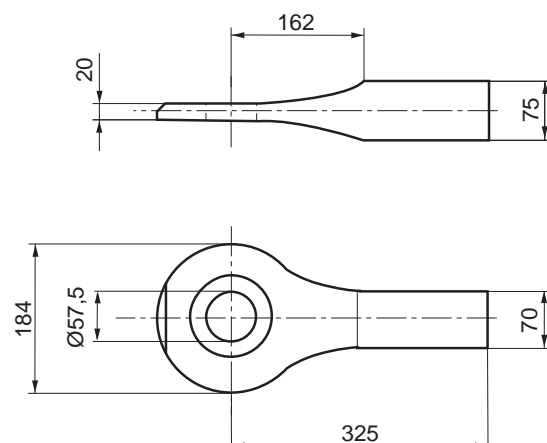
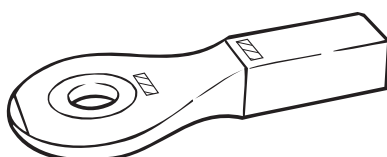
Eye Ø 50 mm as per EU Directive 94/20/EC, class D50-X, equivalent to ISO 1102. Type approval no. e4*94/20*0477.



SPECIFICATIONS

	Part no.
	16-089500
D value	190 kN
Dc value	150 kN
V value	25 kN
Support load	1000 kg

Eye Ø 57 mm VBG original dimension. As per EU Directive 94/20/EC, class S. Type approval no. e4*94/20*0476.



SPECIFICATIONS

	Part no.
	15-017300
D value	200 kN
Dc value	-
V value	-
Support load	-

* Contact VBG for further information.

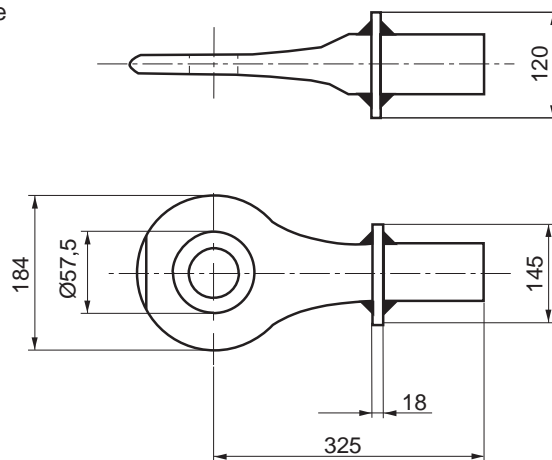
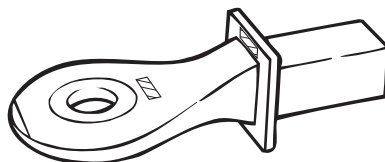
Drawbar eyes

SPECIFICATIONS

Part no.
15-018500

Total weight	190 Tons
Trailer weight	150 Tons
Pc value*	35 kN
Support load	1000 kg

Eye Ø 57 mm VBG original dimension. The eye is not EU approved!

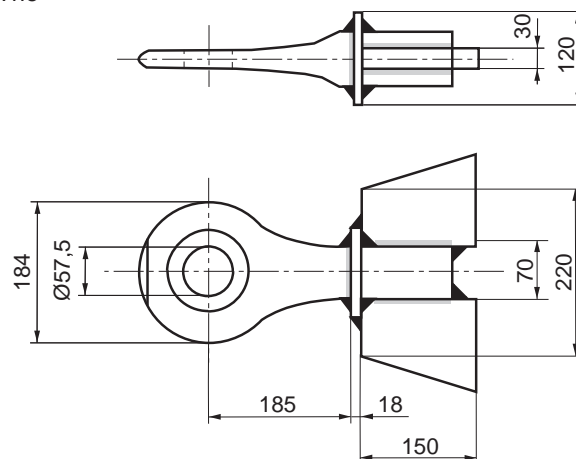
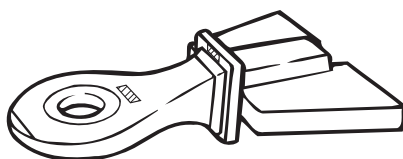


SPECIFICATIONS

Part no.
15-018800

Total weight	190 Tons
Trailer weight	150 Tons
Pc value*	35 kN
Support load	1000 kg

Eye Ø 57 mm VBG original dimension. The eye is not EU approved!

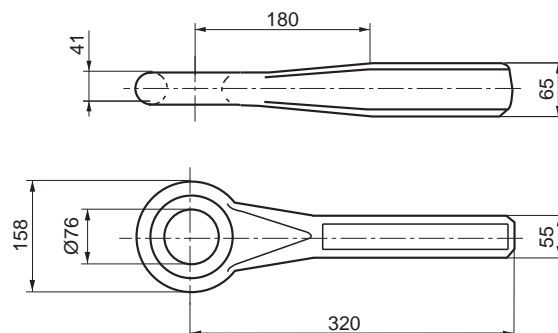
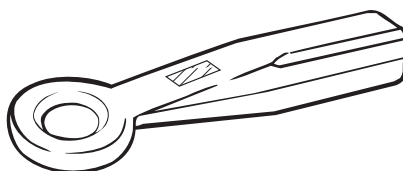


SPECIFICATIONS

Part no.nr
17-013200

Total weight	100 Tons
Trailer weight	70 Tons
Centre-axle trailer weight	-
Support load	1000 kg

Eye Ø 76 mm NATO as per VG 74059.

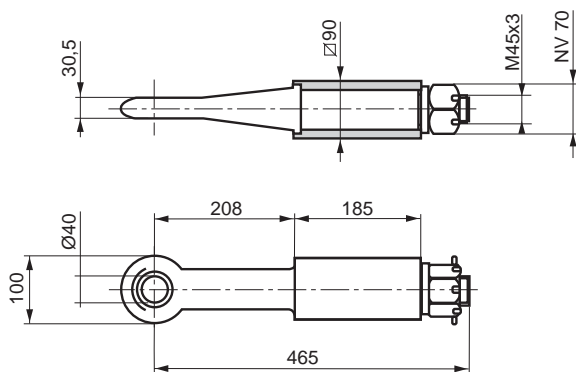
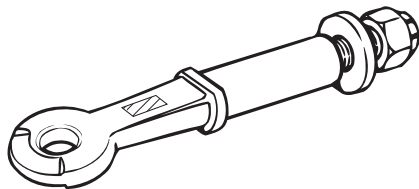


* Contact VBG for further information.

Drawbar eyes

Screwed drawbar eyes

Eye Ø 40 mm as per ISO 8755 and DIN 74054, type B

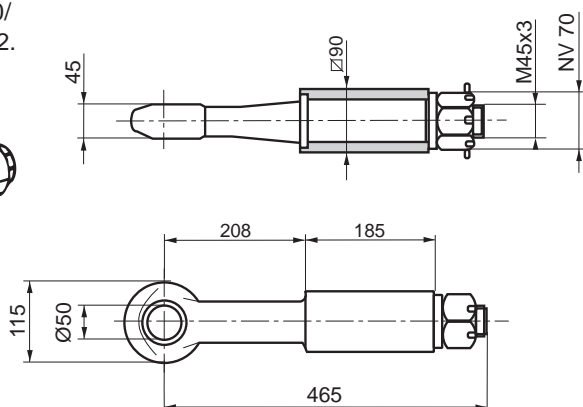
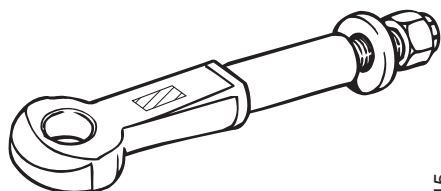


SPECIFICATIONS

Part no.
17-013000
48 Tons
32 Tons
15 kN
1000 kg

Total weight
Trailer weight
Pc value*
Support load

Eye Ø 50 mm as per EU Directive 94/20/EC, class D50-X, equivalent to ISO 1102.
Type approval no. e11*94/20*3731.

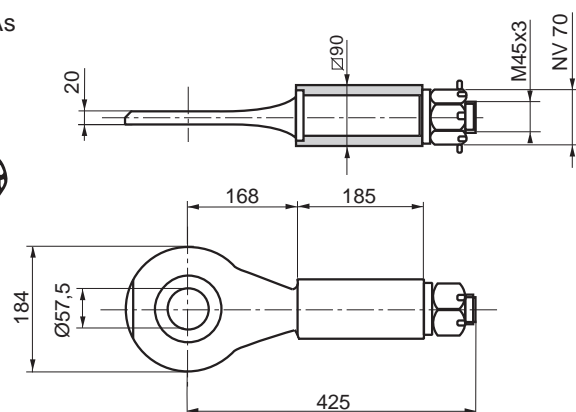
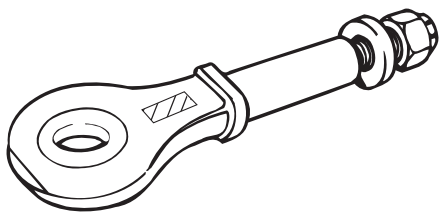


SPECIFICATIONS

Part no.
16-088500

D value
Dc value
V value
Support load

Eye Ø 57 mm VBG original dimension. As
per EU Directive 94/20/EG, class S.
Type approval no. e4*94/20*0472.

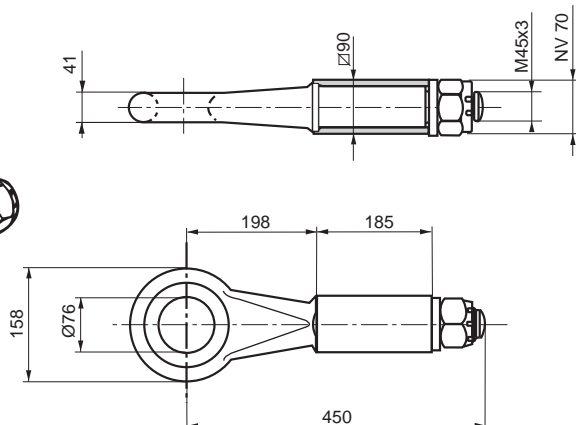
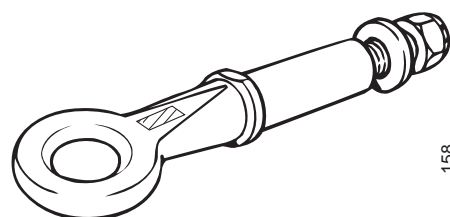


SPECIFICATIONS

Part no.
15-016000

D value
Dc value
V value
Support load

Eye Ø 76 mm NATO as per VG 74059.



SPECIFICATIONS

Part no.
17-017200

Total weight
Trailer weight
Centre-axle trailer
weight
Support load

* Contact VBG for further information.

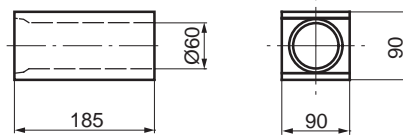
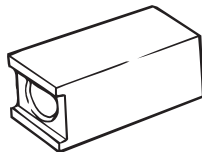
Drawbar eyes

SPECIFICATIONS

Part no.
17-015800

Sleeves

Ø 90 mm for use with all types of screwed drawbar eyes.



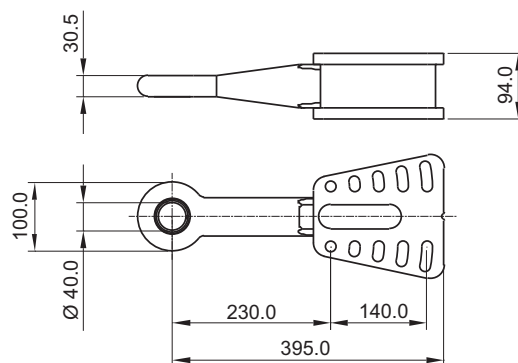
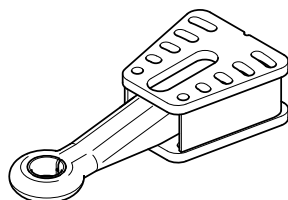
SPECIFICATIONS

Part no.
25-073083

D value 130 kN
Dc value -
V value -
Support load -

Drawbar eyes to Multi XF

Eye Ø 40 mm as per ISO 8755 and DIN 74054.
Type approval no. e11*94/20*4978.

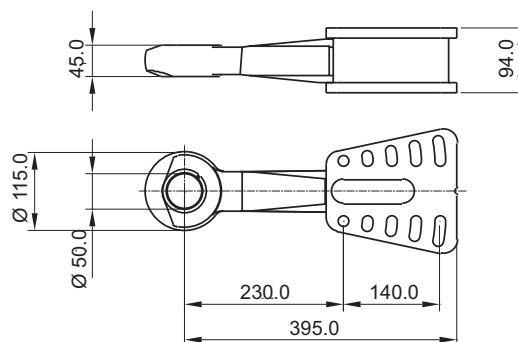
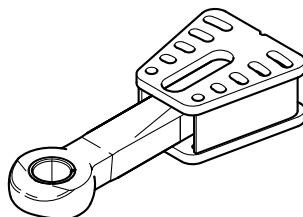


SPECIFICATIONS

Part no.
25-073183

D value 179 kN
Dc value -
V value -
Support load -

Eye Ø 50 mm as per EU Directive 94/20/EG, class D50-X, equivalent to ISO 1102.
Type approval no. e11*94/20*4637.

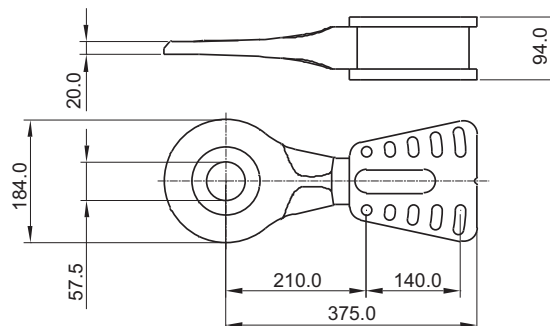
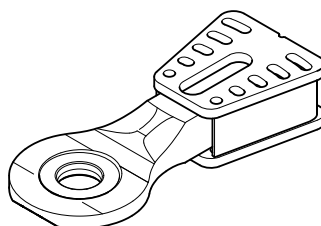


SPECIFICATIONS

Part no.
25-073283

D value 179 kN
Dc value -
V value -
Support load -

Eye Ø 57 mm VBG original dimension. As per EU Directive 94/20/EC, class S.
Type approval no. e11*94/20*4637.

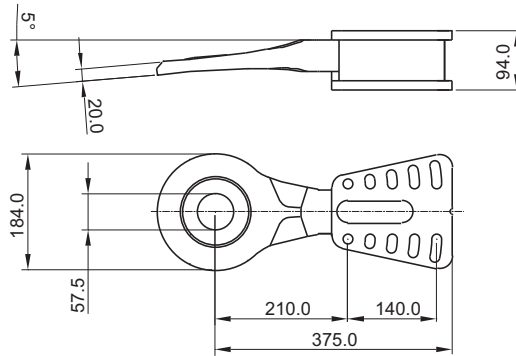
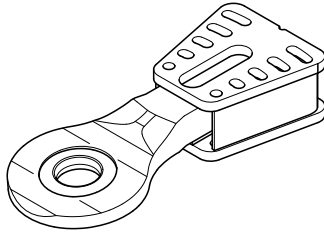


* Contact VBG for further information.

Drawbar eyes

Drawbar eyes to Multi XF cont.

Eye Ø 57 mm 5° VBG original dimension.
As per EU Directive 94/20/EC, class S.
Type approval no. e11*94/20*4637.

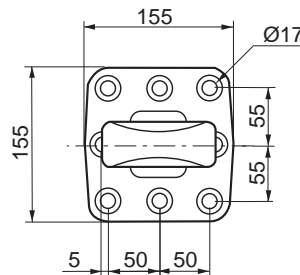
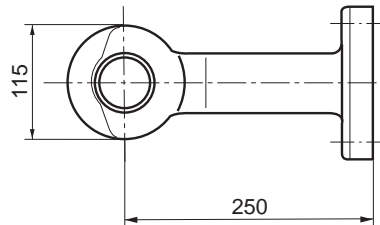
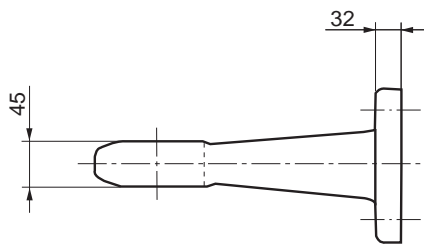
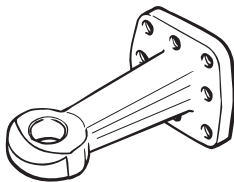


SPECIFICATIONS

	Part no.
	25-073383
D value	179 kN
Trailer weight	-
Centre-axle trailer weight	-
Support load	-

Flanged drawbar eyes

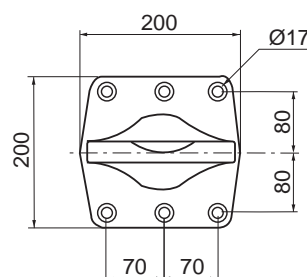
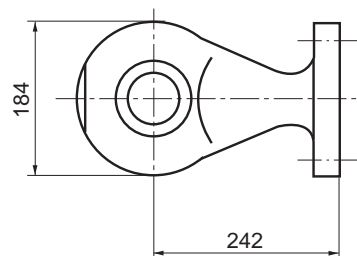
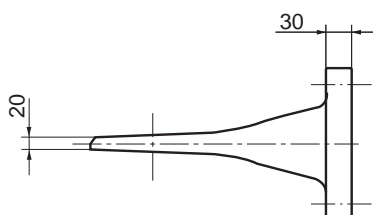
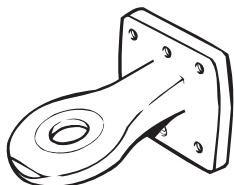
Eye Ø 50 mm as per EU Directive 94/20/EC, class D50-C.
Type approval no. e4*94/20*0344.



SPECIFICATIONS

	Part no.
	16-091700
D value	190 kN
Dc value	120 kN
V value	50 kN
Support load	1000 kg

Eye Ø 57 mm VBG original dimension. As
per EU Directive 94/20/EC, class S.
Type approval no. e4*94/20*0251.



SPECIFICATIONS

	Part no.
	15-019000
D value	290 kN
Dc value	145 kN
V value	95 kN
Support load	1000 kg

Drawbar eyes

SPECIFICATIONS

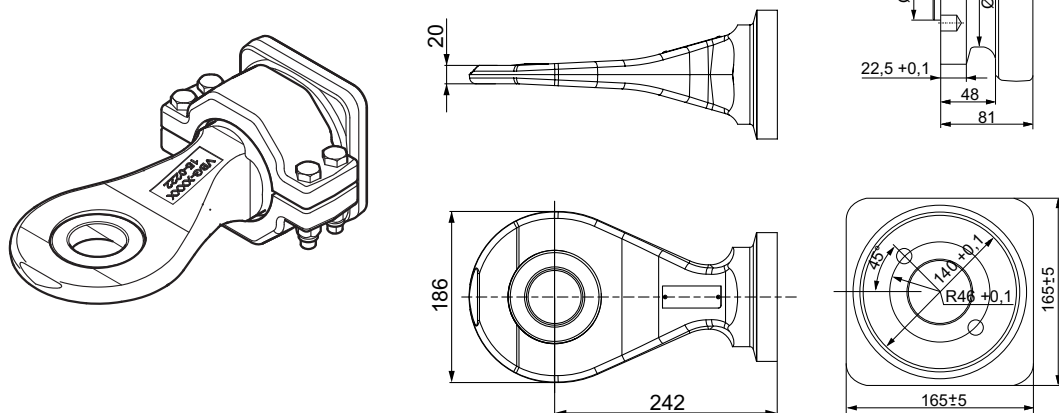
Part no.

15-020500

(kit with mounting plate)

D-value	290 kN
Dc-value	135 kN
V-value	75 kN
Support load	1000 kN

Eye Ø 57 mm VBG original dimension.
As per EU Directive 94/20/EC, class S.
Type approval no e11*94/20*5820.



SPECIFICATIONS

Mounting plates

For drawbar eye

Part no.

16-091700:	16-091000
	15-020200
15-019000:	15-020200
	15-019800
	15-019600

16-091000 (1) - 8 threaded hole

15-020200 (2) - 6+8 threaded hole

15-019800 (3) - 6 threaded hole with welded wing

15-019600 (4) - 6 threaded hole without wing

Bolt kits

For drawbar eye

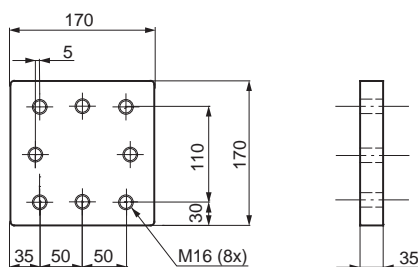
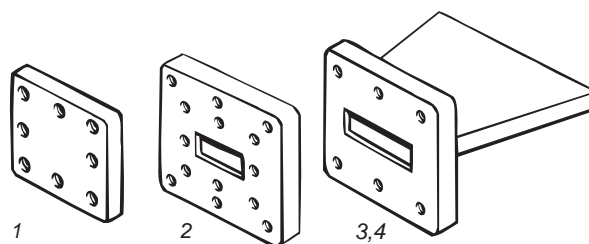
Part no.

15-019000	15-019200
16-091700	15-020600

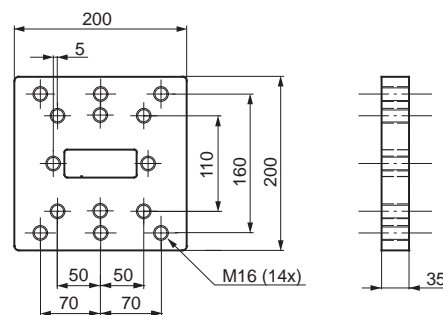
15-019200 6 bolts M16, Quality 12.9

15-020600 8 bolts M16, Quality 12.9

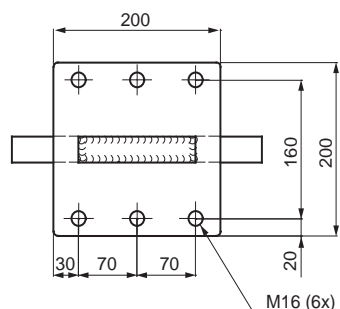
Mounting plates



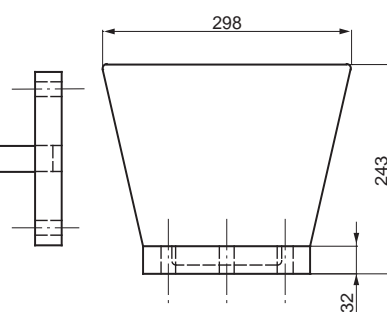
Part no. 16-091000



Part no. 15-020200



Part no. 15-019800



Power plug 14/17 and 14/17 ADR



Moisture, salt, snow, winter cold and oxide are tough factors that affect power plugs in traffic environments.

VBG's power plugs are unique on the market because they are designed for precisely this environment. The new versions of Power plug 14 and Power plug 17 are fully compatible with earlier versions. Power plug 14 ADR and Power plug 17 ADR comply with the requirements as per ADR 99.

Standard and ADR versions

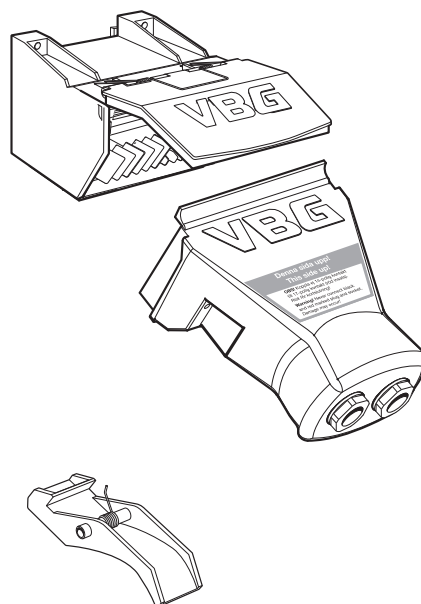
VBG's power plugs are available with 14 or 17 terminals and also include plugs in the ADR version, which are fitted with a lock hook and special seals. The lock hook can also easily be fitted on the standard plug.

The power plugs have different coloured inserts to simply identification:

Standard	14 terminal	Black insert
	17 terminal	Red insert
ADR	14 terminal	White insert
	17 terminal	Yellow insert

Special plug for trucks

The power plugs are provided with large flat terminals with large contact surfaces that are automatically cleaned when connected and disconnected. The terminals are manufactured in brass, which has first-rate resistance to oxide and a very high conductivity. The outer casing of the plug is made of impact resistant polyamide reinforced with glass fibre.



Lock hook

Easy to use

The power plugs are easy to use, and can be connected and disconnected in one simple operation. Power plug 14 and 17 are designed for automatic disconnection if you should happen to forget them when disconnecting the trailer.

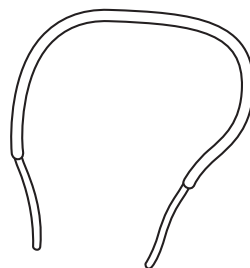
*ADR Ø 9-15 in standard version for Ø 10.5-17 is applicable for installation kit 28-035900.

SPECIFICATIONS

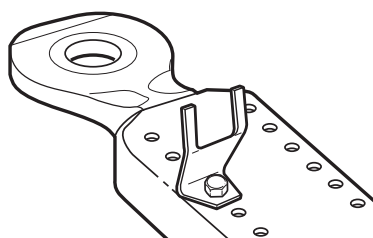
14 or 17 terminals
Standard or ADR version
2 cable inlets, Ø 10.5 mm – 15.0 mm
Terminal 1 and 2 9.5 mm 25 A
Single terminal 6.5 mm 15 A
Double terminal 6.5 mm 10 A
The permitted amperage in VBG's power plugs is limited by the earth connection, i.e. a maximum of 25 A.

Description	Part no.	Part no. 10-pack
Power plug 14, box	28-029000	28-029001
Power plug 14, plug	28-036000	28-036001
Power plug 14 ADR, box	28-034000	28-034001
Power plug 14 ADR, plug	28-036100	28-036101
Power plug 17, box	28-029200	28-029201
Power plug 17, plug	28-036200	28-036201
Power plug 17 ADR, box	28-034500	28-034501
Power plug 17 ADR, plug	28-036300	28-036301

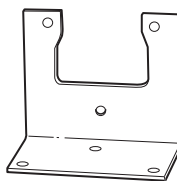
Accessories



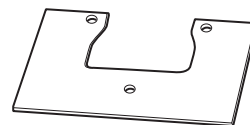
Electric heating coil



Socket for plug



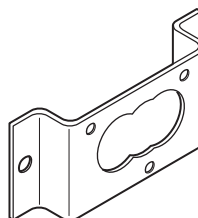
Angle bracket



Straight bracket

Easy to install

When installing the power plugs you can choose between several different brackets. VBG also supplies brackets adapted for the drawbeams in the DB range, see product presentation for "Drawbeams".



Bracket for recessing

SPECIFICATIONS

Accessories

Lock hook for plug
Electric heating coil for
box or plug
Bracket for recessing
Angle bracket
Straight bracket for welding
Socket for plug

Part no.

28-027600
28-029900
18-029700
18-029400
18-029600
18-030100



The 14-poles spirals are used to connect tractor and trailer or semi-trailer with the special VBG connector. With the special ADR approval this spiral cable is also suitable to be used in vehicles aiming to transport hazardous goods.

Description

Spiral cable 14-pole

Working length: 2250 mm

Max. extension length: 4000 mm

Technical requirements acc. ISO 4141 part 1, 2, 4

Protection class IP67 and IP69K acc. to DIN 40050

Part no.

28-033500

Technical data

Conductor: fine wire in acc. to ISO 6722

Make-up: acc. ISO 6722 and ISO 4141

Core insulation: PP based

Core printing: coloured acc. ISO 4141

Outer sheath: Polyurethan special mixture

Outer diameter: 15,3 +/- 0,4 mm

Peak working voltage: 50V

Test voltage: 5000V

Temperature range: -40°C up to +85°C

Testings: acc. ISO 6722 and ISO 4141, TÜ. EGG. 008-94

Colour: black



The 15-poles spirals are used to connect tractor and trailer or semi-trailer with the 15-pole connector system acc. to ISO 12098 and the special VBG 14 pole connector. With the special ADR approval this spiral cable is also suitable to be used in vehicles aiming to transport hazardous goods.

Description

Spiral cable 15-pole

Working length: 2250 mm

Max. extension length: 4000 mm

Technical requirements acc. ISO 4141 part 1, 2, 4

Protection class IP67 and IP69K acc. to DIN 40050

Part no.

28-033600

Technical data

Conductor: fine wire in accordance to ISO 6722

Make-up: acc. ISO 6722 and ISO 4141

Core insulation: PP based

Core printing: coloured acc. ISO 4141

Outer sheath: Polyurethan special mixture

Outer diameter: 15,3 +/- 0,4 mm

Peak working voltage: 50V

Test voltage: 5000V

Temperature range: -40°C up to +85°C

Testings: acc. ISO 6722 and ISO 4141, TÜ. EGG. 008-94

Colour: black



ABS spirals are used to connect tractor and trailer or semi-trailer with the 5-pole ABS connector system acc. to ISO 7638. With the special ADR approval this spiral cable is also suitable to be used in vehicles aiming to transport hazardous goods.

Description

ABS connector 5-pole

Working length: 2250 mm
Max. extension length: 4000 mm
Technical requirements acc. ISO 4141
Tightness IP67 and IP69K acc. DIN 40050

Part no.

28-037500

Technical data

Conductor: fine wire in accordance to ISO 6722
Make-up: acc. ISO 6722 and ISO 4141
Core insulation: PP based
Core printing: coloured acc. ISO 4141
Outer sheath: Polyurethan special mixture
Outer diameter: 11,5 +/- 0,4 mm
Peak working voltage: 50V
Test voltage: 5000V
Temperature range: -40°C up to +85°C
Testings: acc. ISO 6722 and ISO 4141, TÜ. EGG. 008-94
Colour: black, RAL 9005



EBS spirals are used to connect tractor and trailer or semi-trailer with the 7-pole EBS connector system acc. ISO 7638. With the special ADR approval this spiral cable is also suitable to be used in vehicles aiming to transport hazardous goods.

Description

Spiral cable 7-pole EBS

Working length: 2250 mm
Max. extension length: 4000 mm
Technical requirements acc. ISO 4141
Tightness IP67 and IP69K acc. DIN 40050

Part no.

28-037600

Technical data

Conductor: fine wire in acc. to ISO 6722
Make-up: acc. ISO 6722 and ISO 4141
Core insulation: PP based
Core printing: coloured acc. ISO 4141
Outer sheath: Polyurethan special mixture
Outer diameter: 15,3 +/- 0,4 mm
Peak working voltage: 50V
Test voltage: 5000V
Temperature range: -40°C up to +85°C
Testings: acc. ISO 6722 and ISO 4141, TÜ. EGG. 008-94
Colour: black, RAL 9005



The 15-poles spirals are used to connect tractor and trailer or semi-trailer with the 15-pole connector system acc. to ISO 12098. With the special ADR approval this spiral cable is also suitable to be used in vehicles aiming to transport hazardous goods.

Description

Spiral cable 15-pole

Working length: 2250 mm
Max. extension length: 4000 mm
Technical requirements acc. ISO 4141
Tightness IP67 and IP69K acc. DIN 40050

Part no.

28-037700

Technical data

Conductor: fine wire in accordance to ISO 6722
Make-up: acc. ISO 6722 and ISO 4141
Core insulation: PP based
Core printing: coloured acc. ISO 4141
Outer sheath: Polyurethan special mixture
Outer diameter: 13,0 +/- 0,4 mm
Peak working voltage: 50V
Test voltage: 5000V
Temperature range: -40°C up to +85°C
Testings: acc. ISO 6722 and ISO 4141, TÜ. EGG. 008-94
Colour: black, RAL 9005



7-pole Spiral cable are used to connect tractor (truck) and trailer or semi-trailer with the 24N connector system acc. to ISO 1185. With the special ADR approval this spiral cable is also suitable to be used in vehicles aiming to transport hazardous goods.

Description

Spiral cable 7-pole

Working length: 2250 mm
Max. extension length: 4000 mm
Technical requirements acc. ISO 4141
Tightness IP67 and IP69K acc. DIN 40050

Part no.

28-037800

Technical data

Conductor: fine stands of plain copper acc. ISO 6722
Make-up: acc. ISO 6722 and ISO 4141
Core insulation: PP based
Core printing: coloured acc. ISO 4141
Outer sheath: Polyurethan special mixture
Outer diameter: 10,9 +/- 0,4 mm
Peak working voltage: 50V
Test voltage: 5000V
Temperature range: -40°C up to +85°C
Testings: acc. ISO 6722 and ISO 4141, TÜ. EGG. 008-94
Colour: black, RAL 9005



7-pole Spiral cable are used to connect tractor (truck) and trailer or semi-trailer with the 24S connector system acc. to ISO 3731. With the special ADR approval this spiral cable is also suitable to be used in vehicles aiming to transport hazardous goods.

Description

7-pole Spiral cable

Working length: 2250 mm
Max. extension length: 4000 mm
Technical requirements acc. ISO 4141
Tightness IP67 and IP69K acc. DIN 40050

Part no.

28-037900

Technical data

Conductor: fine stands of plain copper acc. to ISO 6722 and ISO 4141
Make-up: acc. ISO 6722 and ISO 4141
Core insulation: PP based
Core printing: coloured acc. ISO 4141
Outer sheath: Polyurethan special mixture
Outer diameter: 10,9 +/- 0,4 mm
Peak working voltage: 50V
Test voltage: 5000V
Temperature range: -40°C up to +85°C
Testings: acc. ISO 6722 and ISO 4141, TÜ. EGG. 008-94
Colour: black, RAL 9005



Adapter 15/7/7 are used to connect tractor (truck) and trailer or semi-trailer when the truck has got a 15-pole connecting system acc. ISO 12098 and the trailer the 24N/24S system acc. ISO 1185/ISO 3731.

Description

Spiral cable adapter 15/7/7-pole

Working length: 2250 mm
Max. extension length: 4000 mm
Technical requirements acc. ISO 4141
Tightness IP67 and IP69K acc. DIN 40050

Part no.

28-038000

Technical data

Conductor: fine stands of plain copper acc. ISO 6722
Make-up: acc. ISO 6722 and ISO 4141
Core insulation: PP based
Core printing: coloured acc. ISO 4141
Outer sheath: Polyurethan special mixture
Outer diameter: 10,9 +/- 0,4 mm
Peak working voltage: 50V
Test voltage: 5000V
Temperature range: -40°C up to +85°C
Testings: acc. ISO 6722 and ISO 4141, TÜ. EGG. 008-94
Colour: black, RAL 9005

Special oils



Coupling mechanisms and power plugs last longer if properly cared for!

VBG has developed two special oils to provide maximum protection from salt, dirt, moisture, frost and oxidation.

VBG MechOil

A special oil for trailer coupling and turntable mechanisms. Specially developed for tough environments. Dissolves dirt and provides effective lubrication. Protects from rust and other corrosion. Provides a high degree of resistance to salt and dirt. Does not congeal at low temperatures. Environment-friendly propellant, butane-propane.

Applications

Trailer couplings, turntable mechanisms and other moving mechanical parts.

Easy to use

Spray well. The plastic tube makes it easy to get everywhere.

Repeat the treatment at especially exposed points.



VBG ElectroOil

A special oil for plugs and electrical systems. Drives out moisture and protects from corrosion. Prevents creeping current and short circuiting. Improves contact and conductivity performance. Has a high degree of resistance to salt and dirt. Does not affect materials such as plastic, metal, paint and rubber. Suitable as winter protection for electrical parts. Environment-friendly propellant, butane-propane.

Applications

All electrical parts.

Easy to use

Spray well. The plastic tube makes it easy to get everywhere.

Repeat the treatment at especially exposed points.



SPECIFICATIONS

Container

Spray can of 400 ml, supplied in 12-pack.
VBG MechOil

Part no.

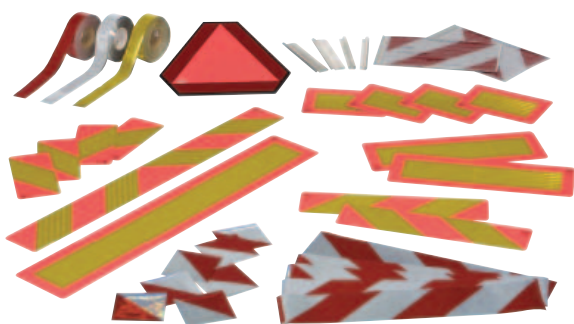
49-000600

Container

Spray can of 400 ml, supplied in 12-pack.
VBG ElectroOil

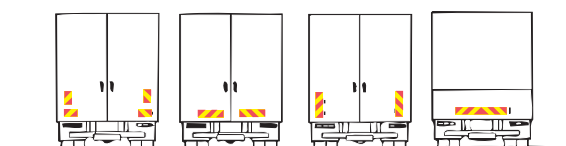
Part no.

49-000700



VBG's reflector products are specially developed for installation on trucks where there are stringent requirements for durability and weather resistance. VBG issues a two-year warranty.

Reflectors for trucks



Size		1 set =	Order no.	10-pack
132 x 283	Self-adhesive	4 pcs	98-016800	98-016801
132 x 283	Aluminium	4 pcs	98-026800	98-026801
132 x 565	Self-adhesive	2 pcs	98-017000	98-017001
132 x 565	Aluminium	2 pcs	98-027000	98-027001
132 x 1130	Self-adhesive	2-part	98-017000	98-017001
132 x 1130	Aluminium	1 pcs	98-027100	98-027001

SPECIFICATIONS

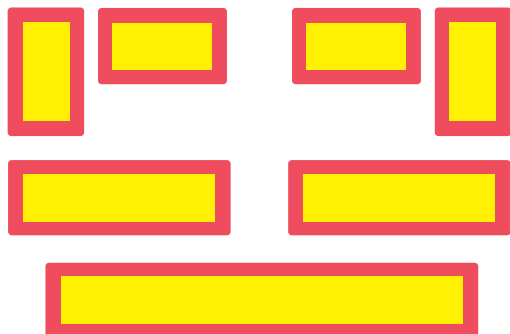
Reflectors for trucks

The rear marker plates comply with all the requirements in ECE directive no. 70 and supplement no. 70.01.

The aluminium plates have rounded corners:
R=15 mm.

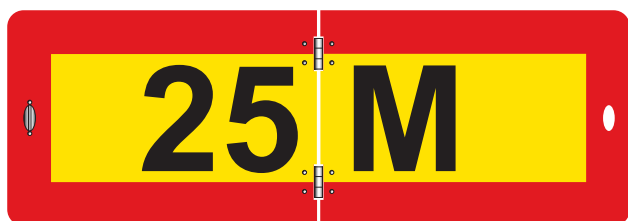
Reflectors

Reflectors for trailers



Size		1 set =	Order no.	10-pack
197 x 283	Self-adhesive	4 pcs	98-017200	98-017201
197 x 283	Aluminium	4 pcs	98-027200	98-027201
197 x 565	Self-adhesive	2 pcs	98-017300	98-017301
197 x 565	Aluminium	2 pcs	98-027300	98-027301
197 x 1130	Self-adhesive	2-part	98-017400	98-017401
197 x 1130	Aluminium	1 pcs	98-027400	98-027401

VBG's rear marker plates are made of high-quality, re-reflecting microprismatic foil that is fused together (not cellular). The foil has a bright, dirt-repellent surface that can withstand moisture and high-pressure washing.



Reflectors for Modular System

The signs can be folded up when not driving with the modular system combination.

Specifications	Quantity	Order no.
Reflector Modular System 1	1	98-418000



Reflectors with text "WIDE LOAD"

Size		Qty	Order no.
1280 x 410	Aluminium 2 mm	1 pcs	98-025000

SPECIFICATIONS

Reflectors for trailers

The rear marker plates comply with all the requirements in ECE directive no. 70 and supplement no. 70.01.

The aluminium plates have rounded corners: R=15 mm.



Outline markers

Approved and marked in accordance with ECE directive no. 104.

Who is affected by ECE 104?

All trucks, trailers and semi-trailers with a permitted total weight of 3.5 tons or more, can be provided with reflecting outline markers and advertising/logo type as of 1 April 2000.

Self-adhesive reflector strips: 50 mm x 45,7 m

Outline markers for hard sides

	Order no.
Red (Rear)	98-011100
Yellow (Side)	98-011200
White (Side)	98-011300

Other types of markers can be quoted on request.

Retail dealer:

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Fax +49 2151 835 200
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