

Berghaus-News

Traffic Technology · Mobile Crash Barriers

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Wishing Karl-Heinz all the best for his retirement!



Mellingen: Karl-Heinz Methfessel takes his well-deserved retirement

On his last day at work for AVS Mellingen, Karl-Heinz Methfessel received the best wishes of his colleagues for the next phase in his life, a large gift hamper and many thanks for 20 loyal years from Managing Director Steffen Weidner (right).

Karl-Heinz is one of the veterans at AVS Mellingen. His employment with AVS began in August 1992, where right up to the end he was the specialist for mobile traffic-light systems.

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Peter Berghaus GmbH is part of AVS Holding GmbH.

LED flashlight now also BAST-tested

As one of the first manufacturers in Germany, we can now offer a BAST-tested LED flashlight in 340 mm from our own development and production - made in Germany.

Following the successful testing of our 340 mm LED advance warning lights by the BAST (Federal Highway Research Institute), we have now also had LED flashlights tested in Bergisch Gladbach.

And the same conclusions reached for the LED advance blinking light also apply to our 340 mm LED advance flashlight (type PB 340 Flash): Berghaus LED technology once again leads the field. While others need many light-emitting diodes, Berghaus technicians create exactly the same effect with just one high-power LED.

Compared to our proven halogen or flashlight technology, the reduced power consumption means that a far longer operating period is now possible with just one battery charge. The luminous intensity is adapted continuously to the

ambient brightness by the integrated automatic photocell so that road users are not dazzled; power consumption can be reduced even further in the dark.

Furthermore, the maintenance-free high-power LED also has a far longer service life than flash tubes and is insensitive to vibrations, so that servicing is further reduced while enhancing operational reliability.

Other advantages of the electronic development by Berghaus include for example electronic reverse polarity protection and low voltage protection as a standard feature. In addition, all lights can be operated with either 12V or 24V DC without needing any modification. Already during the development phase, Berghaus ruled out the possibility of any electric damage to the lights from reverse polarity, incorrect operating voltage and possible total discharge and damage to the vehicle battery. Berghaus advantages that soon pay off in the practical conditions prevailing in roadwork situations.

BAST-TESTED



LED advance warning flashlight "PB 340 Flash", one of the first 340 mm LED flashlights to be successfully tested by the BAST (Federal Highway Research Institute).

The outside gives no clue that high-power Berghaus LED technology is concealed in the standard housing.

Technical data LED flash

Operating voltage	12 V or 24 V DC (automatically detected)
Lamp	1 high-power LED
Lens	340 mm Ø, yellow
Power consumption	approx. 0.045 A on average (24V)
Flashing frequency	40-45 flashes / min

BAST test number V-4-73-2011

tested as per TL Warning Lights 90 type WL 5
DIN EN 12352: L9M (day) / L9L (night)

Technical data LED blinker

Operating voltage	12 V or 24 V DC (automatically detected)
Lamp	1 high-power LED
Lens	340 mm Ø, yellow
Power consumption	approx. 0.26 A on average (24V)
Flashing frequency	40-45 blinking pulses / min

BAST test number V-4-69-2011

tested as per TL Warning Lights 90 type WL 7
DIN EN 12352: L9H (day) / L9M (night)

Warning trailers straight from the manufacturer

Mobile warning trailers give road users an early warning of (one-day) roadworks, major accidents and short-term changes to the traffic situation. Their warning effect also protects the workers in the danger zone.

For more than 45 years, Berghaus has been producing professional traffic technology products, developed and made by Berghaus. This naturally also includes mobile warning trailers for use on motorways, national and country roads (type AM) and also in urban areas (type SM). Our warning trailers comply with the requirements of the RSA 95 and the StVO (German Road Traffic Regulations) (road sign 615 or 616), together with the Technical Delivery Conditions TL 97 for Warning Trailers. In the "AM" version, all mobile warning trailers are equipped with retroreflecting RA2 foil for an optimum warning effect as a standard feature.



A mobile warning trailer AM 3 TL by Berghaus safeguards an AVS PeelJet while removing road markings. At the customer's request, illuminated arrow and flashlights are already completely equipped with the new BAST-tested LED technology - naturally from Berghaus's own development.

The scope of delivery for all trailers supplied by Berghaus ex works also includes the height-adjustable drawbar with replaceable DIN eye and ball-type towing device. This means that our warning trailers can be towed either by

trucks or cars. Whichever towing device is not needed is simply stored in easy reach in the battery compartment in the loading area.

On request, all 200 mm warning lights and also the two 340 mm flashlights on the warning trailer are already fitted with our new LED technology, developed and made by Berghaus.

The lighting features of all Berghaus LED lights have been tested by the BAST (Federal Highway Research Institute) as per type WL5 or WL6 for TL Warning Lights 90 and comply with DIN EN 12352.

Another standard feature for our AM and SM models also includes the possibility of motor adjustment for the arrow in road sign 222 - at low cost with cable remote control or also on request with all the convenience of wireless radio control.

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Warning trailers straight from the manufacturer

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The mobile warning trailer type AM 3 TL that we produce on our own premises is the popular low-cost standard version for use on motorways and expressways without oncoming traffic (road sign 616). AM 3 TL is already equipped with an electrically adjusted blue arrow ex works. An electrical device for raising and lowering the upper part of the warning board is also available as an option. The standard cable remote control for aligning the warning board from inside the driver's cab of the towing vehicle can also be supplemented by a handy radio remote control on request.

Model AM 4 TL is also designed for motorways and expressways without oncoming traffic. This mobile warning trailer has a high payload and large loading area measuring 3530 x 1855 x 400 mm L x W x H, equipped with a drive-on ramp.

The battery compartment (1695 x 440 x 395 mm) is not on the drive-on loading area but is kept separately. This means that the whole loading area of the AM 4 TL is available in its full length and width to take a payload without any restrictions. When using the optional winch, it is thus possible to keep an advance warning device at the ready here as well.

The standard AM 4 TL is already equipped with electromechanical lifting and lowering of the upper part of the board, with radio remote control available as a separate accessory.

In the "AM" version, all mobile warning trailers are equipped with retroreflecting RA2 foil for an optimum warning effect as a standard feature.

We also produce mobile warning trailers for use on roads with oncoming traffic: these are the SM models (road sign 615 and 616, small).

SM 10 is equipped with a triple warning light system, rotating blue arrow and a roadworks sign drawing attention to the roadworks ahead. But the best-selling version in this class is the SM 40 with electric illuminated arrow: this is a smaller version of road sign 616 respectively motorway warning signs. Road users have been used to heeding this signal pattern for years.



Type AM 3 TL for roads without oncoming traffic: standard design for motorways and federal roads.

As described on page 1, we are one of the first manufacturers in Germany to supply all warning and flashlights in the BAST-tested LED version on request!

So you see, mobile warning trailers by Berghaus help you ensure that attention is always paid as necessary on our roads and motorways



Large loading area of AM 4 TL, e.g. for transporting an advance warning device.



Small mobile warning trailers SM 10 (left) and SM 40 for roads with oncoming traffic (e.g. for urban use). Also available with larger, drive-on loading area on request.



For roads without oncoming traffic: AM 4 TL with large drive-on loading area.

Knowing how to do it - with Berghaus training



Participants at traffic light training course 2 at the end of January in our training room in Kürten, where theory was put to the test on real traffic lights, under the supervision of course instructor Alfred Wurth (right).

For more than 19 years now, we as manufacturer have been holding traffic light training courses of still unabated popularity on our premises. Once again, the places on this year's seminars were fully booked in just a few days.

Around 100 employees from contractors for traffic safety and signalling technology took up our offer of further training in early 2013. The courses were held at the end of January at company headquarters in Kürten (near Cologne) and at the end of February on the premises of our AVS service provider in Mellingen near Weimar.

Once again, two different, consecutively structured two-day seminars were on offer on the basic and advanced level. The contents included necessary German guidelines and technical specifications for mobile traffic light systems (e.g. RiLSA, TL-LSA), as well as how to calculate and compile signal timetables correctly. Attention naturally focused on operating and programming the traffic light controllers, together with practical

implementation of compiled signal timetables as well as effective troubleshooting on site.

This year, course participants showed great interest in the practical application of our new hardware and software solution "Remote control/Remote maintenance" for the traffic light controllers EPB 12/48. The practical explanations for using our new pedestrian controller FG 2 with its many possibilities were also received with interest.

As manufacturer, we gladly give a comprehensive insight into mobile traffic light technology at these seminars, welcoming the opportunity to respond to questions and suggestions made by course participants and offering solutions.

Our course instructors and mobile traffic technology professionals, Operations Manager Alfred Wurth and technician Uwe Banischewski, led the participants through the various topics, providing them with tips and tricks from their many years of professional experience with mobile traffic light technology.

Also stand-alone: pedestrian controller FG 2-R

Professional traffic light technology for temporary pedestrian crossings with changed traffic situations at roadworks and for fast school road safety – that is a brief description of the mobile pedestrian traffic light system FG 2.

This is a low-cost, mobile complete system that is installed ready for use in next-to-no time. It can be operated on site either with 230V mains voltage or with 12V batteries to be independent of the grid. Controller FG 2 controls pedestrian and bottleneck traffic pursuant to VDE 0832, RiLSA, it is tested pursuant to the Technical Delivery Conditions for Portable Traffic Light Systems TL-LSA 97 and complies with type class D.

Our mobile pedestrian system is very popular with road maintenance depots and contractors particularly because of its modular structure. One particularly practical aspect for these customers is that all signal heads, cables and holders find space for storage and transport all together in the two large orange casings. Only the four 3m mast sections are transported separately. These are then simply put together on site to two 6m lengths.

For traffic safety contractors keen to use their own masts and traffic light stands to mount the signal heads and overhead cables, we now offer our traffic light controller in the FG 2R version in a separate compact switchgear cabinet. The dimensions of the controller are approx. 100 x 62 x 38 cm (H x W x D). The new switchgear cabinet version is also ideal if there is not much space available at the required site for installation of the pedestrian system with the standard orange casings under



Mobile pedestrian controller FG 2 - now also available in a separate switchgear cabinet.

the traffic lights.

Needless to say that even customers of the new controller will not have to dispense with any of the usual functions. The standard FG 2-R is equipped to run on 12V batteries or 230V mains voltage, it has overvoltage and undervoltage protection and is also capable of actuating LED signalling technology. A request counter for pedestrian use is already fitted ex works.

On request, several systems can be linked together to permit simultaneous green lights for all pedestrians on request. Options include radio clock control (DCF 77) for progressive signalling, SMS remote control, illuminated waiting signals, pedestrian request button with visual feedback, acoustic system for the visually impaired, operating logbook, and much more besides.

New TL mounting device 2xK9 by Berghaus

Peter Berghaus GmbH makes a wide range of different mounting devices for fast, stable mounting of road signs and warning signs, also for overhead road cabling units, as stand masts and high signals for mobile traffic light systems, and much more besides. We offer base plate holders (also called sign stands) made of steel or aluminium from our own production – made in Germany – for practically every application.

We have now made an appropriate addition to our product range of mobile TL mounting devices with two new aluminium sign stands. As with all our mobile sign stands, the two new products have also been tested by an IfS-certified expert according to the German

Technical Delivery Conditions for Mounting Devices for Signs and Traffic Devices at Construction Sites (TL Mounting Devices 97).

Both sign stands have an enlarged capacity to take not only standard K1 base plates but also all previously known K1 base plates with sufficient space in the TL stand to hold them securely.

Thanks to the large contact surface, we can now produce an aluminium sign stand (order no. EE 0725) that fulfils the highest stability class 2xK9 pursuant to TL Mounting Devices. The sign stand itself remains comparatively light, weighing just 34.5 kg, compared to the weight of 59 kg for our steel stand in stability class 2xK9.

In each particular case, the right TL mounting device has to be used according to the required installation site (inside or outside built-up areas), installation height, size and number of road signs (see ZTV-SA Annex 3 for the corresponding classification).

The stability classes (K) allocated to each TL product are clearly stated on the Berghaus nameplate in each case. This makes it easy to find the right TL base plate holder and the necessary quantity of base plates needed for the specific stability. This ensures that road signs are mounted to be "clearly visible, stable and prevented from twisting", as stated in the guidelines.

Our new "Mounting Devices" brochure

provides a list of all Berghaus products for temporary mounting of road signs. Coloured dots are used to show our customers the classification of the Berghaus mounting devices pursuant to Annex 3 of the ZTV-SA. This shows at a glance which sign stand is the right choice for stable, secure mounting for the required road sign size and mounting height, for use inside or outside built-up areas.

Simply download this practical list from our website or send us a request for the new brochure featuring our TL mounting devices (unfortunately only available in German).



K8

TL sign stand (order no. EE 0735) made of aluminium for 60x60 mm pole

Outer dimensions: 1020x916x1000 mm (LxWxH) fits all known K1 base plates weight: approx. 24.5 kg

Safety bar (order no. EE 0731) required to secure the base plates pursuant to the TL weight: approx. 2.5 kg

2xK9

TL sign stand (order no. EE 0725) made of aluminium for 60x60 mm pole

Outer dimensions: 1890x916x1000 mm (LxWxH) fits all known K1 base plates weight: approx. 34.5 kg

Safety bar (order no. EE 0721) required to secure the base plates pursuant to the TL weight: approx. 2.8 kg

Tested pursuant to TL Mounting Devices 97 up to K5 mit 4 K1 base plates up to K6 mit 6 K1 base plates up to K8 mit 10 K1 base plates



Tested pursuant to TL Mounting Devices 97 up to K9 with 8 K1 base plates up to 2xK8 with 12 K1 base plates up to 2xK9 with 16 K1 base plates



Berghaus TL sign stands for secure, stable mounting of temporary road signs in the stability classes stipulated according to ZTV-SA 97 and TL Mounting Devices.

New homepage: mobile-schutzwaende.de

Our crash barriers website has been completely revised in March and now stands out with its new, clear design. We have been developing mobile crash barriers for more than 20 years here on our own premises; during this time, we have built up an impressive range of tested products.

"mobile-Schutzwaende.de" provides you with important information about our current ProTec product family. For example, every crash barrier model is accompanied by a brief description of the system together with an explanation of the test conditions as well as the test results and test numbers; videos of the impact tests are also available, and product brochures with further information are available for downloading.

The archive section features our somewhat older crash barrier models, which together with the current ProTec systems naturally also fulfil the requirements of DIN EN 1317 (Part 1 and 2).

The information provided in this way will surely make it easier to decide in favour of the right mobile crash barrier system. Needless to say that we will gladly provide you with any additional help and advice when required.

And if you want to find a local contractor to mount mobile crash barriers for you, including a 24-h full service on request, together with other construction site



equipment, the services section offers a link to our service provider, the AVS Traffic Safety Professionals Group.

To take a look at our new website, just go to:

www.mobile-schutzwaende.de

New road sign holder for crash barriers

Wherever crash barriers line our roads, it is particularly quick and easy to fit temporary road signs. As a rule, the crash barrier can be used for this purpose without needing any sign stands or base plate holders.

Our crash barrier holders can be used for securely fastening square tubes or poles measuring 40x40 or 60x60 to the crash barrier posts.

We make galvanised stainless steel crash barrier holders with and without side arms for the various different systems, e.g. Sigma, Super-Rail and IPE 100.

To supplement our existing portfolio, we now also offer a new universal crash barrier holder (order no. VZ5111SM).

Similarly, this is also ideal for fastening to Sigma, Super-Rail and IPE 100 crash barriers; furthermore, thanks to its special bracket it can also be fitted securely to crash barriers with a so-called middle or upper rail, as is the case for example with the Super-Rail ECO.



Crash barrier holder (order no. VZ 5101S)

Crash barrier holder made of galvanised steel, for 40x40 mm and 60x60 mm pole. With U-bolt to fasten the holder to the crash barrier post (Super-Rail, Sigma, IPE 100). Tested as per TL Mounting Devices 97. Weight approx. 5.4 kg

Crash barrier holder (VZ 5111SM)

as above for Super-Rail, Sigma and IPE 100, but also for use at crash barriers with middle or upper rail, e.g. Super-Rail Eco. Weight approx. 5.5 kg.

Crash barrier holder (VZ 510SA)

as above but with side arm, approx. 800 mm long, for mounting signs outside the traffic area. Tested as per TL Mounting Devices 97. Weight approx. 13 kg



Swift safeguarding with ProTec after accident



Things could have been worse for the driver of this truck, given the 30 m drop behind the crash barrier.

Picture: Feuerwehr-Overath.de

In mid January, ice and snow caused a serious accident to happen on the A4 motorway at 4 a.m. in the morning.

A truck driver lost control of his vehicle on the snowy sloping road surface and skidded into the right noise barrier in the middle of Holzbachtal bridge. The cab was torn off the trailer and fortunately came to a halt just centimetres before the edge of the bridge, after which there was a drop of a good 30 m.

Overath fire brigade were on the spot quickly, secured the accident site and rescued the driver from his precarious position over the precipice before handing him over to the ambulance team.

The carriageway of the A4 heading for Cologne had to be closed down completely between Overath and Untereschbach.

After the rescue, accident investigation and site clearance, in order to get traffic moving again, at around 9.30 a.m. AVS Overath was instructed by Landesbetrieb Straßen NRW (North Rhine Westphalia highway agency) to promptly implement reliable road safety

measures to prevent any further accidents.

Without further ado, an AVS service team got the loading crane truck ready and put the mobile crash barrier system ProTec on board. The largest crash barrier in the ProTec family has a deadweight of 300 kg/m, fulfils containment level H1 of DIN EN 1317-2 and bears the BAST test number 2010 7E 54 (issued by the Federal Highway Research Institute).

Within just 90 minutes, at 11 a.m. AVS started to install the mobile crash barrier on the hard shoulder of the closed-off carriageway heading for Cologne. Thanks to the modular structure of the system and the easy connection between the ProTec elements (only two screws need to be fastened every 10 metres), about 130 metres of mobile crash barrier were installed on site in just under one hour.

At around midday, the police were then able to open up the A4 motorway so that traffic could head for Cologne again, at least for the time being.



During the morning, AVS staff install the ProTec 160 mobile crash barrier over a length of around 130 m as a safeguard to replace the damaged crash and noise barrier.

AVS Overath supports TUS Marialinden

The sports club TUS Marialinden 1946 e.V. has gratefully received a new sign for the football ground.

Two years ago, AVS Overath started to support the club by providing a set of AVS jerseys in the club colours. TUS Marialinden 1946 e.V. plays in the "Mittelrhein" district class and at the moment is doing well in the top third of the table during the 12/13 season.

Actually, the plans had originally been to wait until the weather improves in the spring before installing a stationary club sign as a permanent feature at the sports ground in the Marialinden district of Overath. But our mobile, modular aluminium installation system with ready-made concrete foundations has now made it possible to install signs with a surface area of 6 to 16.2 m² in a stable solution with statics test, without needing



any excavation work at all. What's more, the individual components can be reused time and again. And so we decided to go ahead with the temporary installation of this system in Marialinden already during the winter. To everyone's delight, the sponsored club sign was installed by AVS Overath already in December.

Further training at AVS in Overath



Multipliers: in mid January, site supervisors from all 10 AVS branches received training at AVS Overath entitled "Portable road restraint systems in practice".

Once again the site supervisors of all AVS branches came together at AVS Overath in mid January to attend a multiplier training course.

With a service network of around 270 well trained specialist staff, the colleagues at AVS Traffic Safety are involved everyday in taking care of our safety at construction sites on roads and motorways. Throughout Germany, the AVS staff at altogether ten branches of our service partner are available as expert contact partners for all aspects of traffic safety.

During the two-day seminar, the focus for the site supervisors responsible for mobile crash barriers concentrated on the correct storage, loading, transport and installation of mobile crash barriers. A lively lecture gave detailed explanations for the important basic principles together with the terminology used in the TL Road Restraint Systems, such as application area, containment level, effective range and minimum installation length, clearly illustrated by photographs of practical examples.

All site supervisors received well organised folders for each of their service vehicles, containing the mandatory safety regulations together with clear

standards for the handling, transport, installation, modification, dismantling and storage of mobile crash barriers with simple explanations in each case. The uniform handouts and work instructions apply to all site supervisors and employees working on the AVS service gangs. This guarantees meticulous top quality working practices at every AVS site and with every service team, for constant top quality, professional installation of traffic safety solutions with mobile crash barriers from Hamburg to Bühl or from Overath to Berlin and beyond.

Given the focus on (traffic) safety, it's clear that AVS always pays special attention to providing standard initial and advanced training, as the staff of the various branches often work hand-in-hand throughout the country. It is therefore extremely important that they all speak the same language and know the necessary procedures.

Needless to say, the site supervisor seminars also offer plenty of scope for the "traffic safety professionals" to share their experiences and know-how - after all, this is in aid of greater safety for us all at construction sites on roads and motorways.

Advertisement

High containment levels
– low effective ranges

Mobile crash barrier system
ProTec

The mobile crash barrier system for all application areas of ZTV-SA 97:

Planning-relevant width just 12 cm for ProTec 100 (containment level T3/W2) and only 18 cm for ProTec 160 (containment level H1/W4).

Your traffic safety professionals recommend ProTec - particularly in constricted situations!

TRAFFIC SAFETY • TRAFFIC LIGHT SYSTEMS • MOBILE CRASH BARRIERS

AVS-Verkehrssicherung.de



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Traffic Technology • Mobile Crash Barriers

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