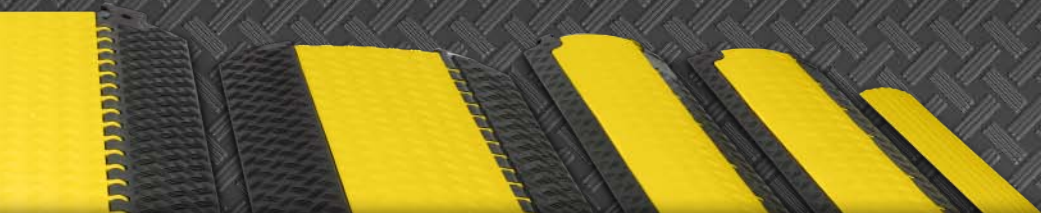


PATENTED WITH SELF CLEANING HINGE

MADE IN **GERMANY**



DEFENDER[®]

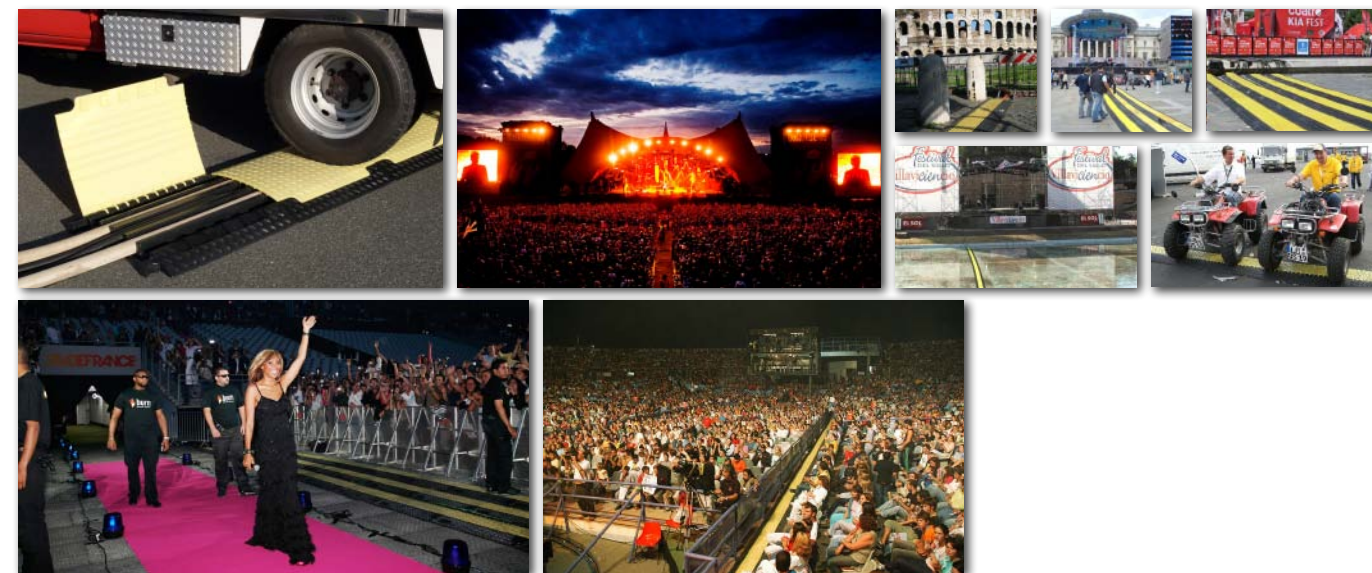
CABLE PROTECTION SYSTEMS

THE INDUSTRY & EVENT STANDARD





DEFENDER[®]
CABLE PROTECTION SYSTEMS
THE INDUSTRY & EVENT STANDARD





THE INDUSTRY & EVENT STANDARD

Adam Hall GmbH has manufactured and distributed the patented Defender series for more than 15 years. Originally developed for quick safety at rock concerts, over the years, these cable protectors have become an established standard at large-scale functions and events and in the industry.

Because these products are designed and manufactured in Germany, we are able to ensure periodic checks of materials and production. Thus our products meet the highest standards and have also been Dekra-certified since July 2011.

With the possibility of running cables and/or lines with a diameter of up to 120 mm safely, the Defender series, which is manufactured from recyclable polyurethane, now includes nine models.

Detailed product information in German, English, French, Spanish and - beginning in mid-2012 - Polish can be found at www.defender-protects.com. Our support team will be glad to put their vast expertise to work for you whenever you need them.

Your Defender team



THE INDUSTRY & EVENT STANDARD

Die patentierten Defender Kabelbrücken werden seit über 15 Jahren von der Adam Hall GmbH hergestellt und -vertrieben. Ursprünglich entwickelt für die schnelle Sicherheit bei Rock n' Roll Konzerten, haben sich die Kabelbrücken im Laufe der Jahre als Standard bei Großveranstaltungen, Events und in der Industrie durchgesetzt.

Durch die Entwicklung und Fertigung in Deutschland ist es uns möglich, regelmäßige Material- bzw. Produktionskontrollen zu gewährleisten. Somit genügen unsere Produkte höchsten Ansprüchen und sind zudem seit Juli 2011 Dekra zertifiziert.

Mit der Möglichkeit Kabel bzw. Leitungen bis zu einer Stärke von 120 mm sicher zu verlegen, umfassen die aus recycelbarem Polyurethan hergestellten Defender Serien mittlerweile 9 Modelle.

Detaillierte Produktinformationen finden Sie auf Deutsch, Englisch, Französisch, Spanisch und ab Mitte 2012 auch auf Polnisch unter www.defender-protects.com. Unser Support hilft Ihnen jederzeit gerne weiter - mit großer Fachkompetenz.

Ihr Defender-Team



EL ESTÁNDAR PARA EVENTOS E INDUSTRIA

Adam Hall GmbH fabrica y comercializa la serie Defender de pasacables patentados desde hace más de 15 años. Desarrollados inicialmente para ofrecer una protección rápida y segura en los conciertos de Rock, los protectores de cable se han convertido a lo largo de los años en un estándar para grandes eventos, conciertos y el sector industrial.

El desarrollo y la fabricación se realizan en Alemania, lo que nos permite garantizar el control periódico tanto de los materiales como de la producción. De este modo, nuestros productos cumplen los más altos estándares y además, desde julio de 2011, llevan el sello „Dekra“.

Con la posibilidad de instalar de forma segura cables o mangueras con un diámetro de hasta 120 mm, la serie Defender incluye ahora 9 modelos de pasacables de poliuretano reciclable.

La información detallada de los productos está disponible en alemán, inglés, francés, español, y a partir de mediados del 2012 también en polaco, en www.defender-protects.com. Nuestro equipo de soporte estará encantado de ayudarle en cualquier momento, con la mayor profesionalidad.

El equipo de Defender



LA REFERENCE POUR L'INDUSTRIE ET L'EVENEMENTIEL

Les passages de câbles Defender sont brevetés, fabriqués et distribués par la société Adam Hall GmbH depuis plus de 15 ans. Développés à la base pour assurer rapidement la sécurité nécessaire sur les concerts rock n' roll, ces passages de câbles sont devenus au fil des années des références sur les grosses manifestations, les événements et dans le domaine de l'industrie.

Le développement et la fabrication sont assurés en Allemagne, ceci nous permet de contrôler les matériaux utilisés ainsi que les méthodes de production de manière optimale. Nos produits répondent aux exigences les plus draconiennes, et sont, à ce titre, certifiés Dekra depuis juillet 2011.

Les passages de câble Defender permettent de faire passer des câbles et des canalisations d'un diamètre total allant jusqu'à 120 mm, en toute sécurité. Ils sont fabriqués en polyuréthane, matériau facilement recyclable, et sont disponibles en 9 modèles.

Vous trouverez des informations détaillées sur ces produits, en allemand, anglais, français, espagnol et, à partir de mi-2012, en polonais à l'adresse : www.defender-protects.com. Notre Support Technique se tient à votre disposition pour toutes questions.

Votre équipe Defender.



STANDARD DLA BRANŻY I EVENTÓW

Opatentowane serie Defender produkowane i sprzedawane są przez firmę Adam Hall GmbH od ponad 15 lat. Początkowo mostki kablowe projektowane były w celu szybkiego zapewniania bezpieczeństwa na koncertach rockandrollowych, ale z biegiem lat stały się w branży synonimem standardu – szczególnie w odniesieniu do dużych imprez i eventów.

Dzięki temu, że nasze produkty projektowane i produkowane są w Niemczech, mamy możliwość zapewnienia regularnych kontroli materiałów potrzebnych do ich produkcji oraz samego procesu produkcji. Tym samym spełniają one najwyższe wymagania, a od lipca 2011 opatrzone są certyfikatem Dekra.

Składająca się obecnie z 9 modeli produkowanych z poliuretanu nadającego się do ponownego przetworzenia, seria Defender oferuje możliwość bezpiecznego układania kabli i przewodów o grubości do 120 mm.

Szczegółowe informacje o produktach w języku niemieckim, angielskim, francuskim i hiszpańskim można znaleźć na stronie www.defender-protects.com. Od połowy 2012 roku informacje te będą dostępne również w języku polskim. Nasi kompetentni pracownicy z działu pomocy technicznej zawsze chętnie udzielą dalszych informacji.

Zespół Defender

RANGE OF APPLICATION

Trade fairs / walkways / marketplaces / Christmas markets / workshops / warehouses / shopping centres / department stores / construction sites, streets, etc.
However, please ensure compliance with road traffic regulations (higher than 75 mm)

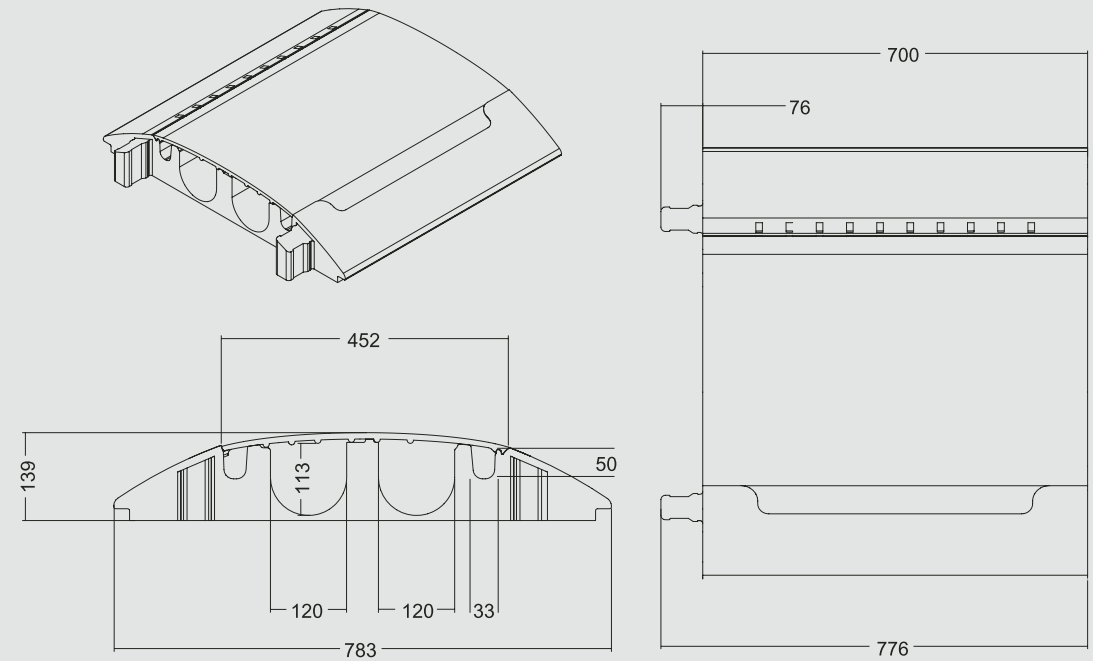
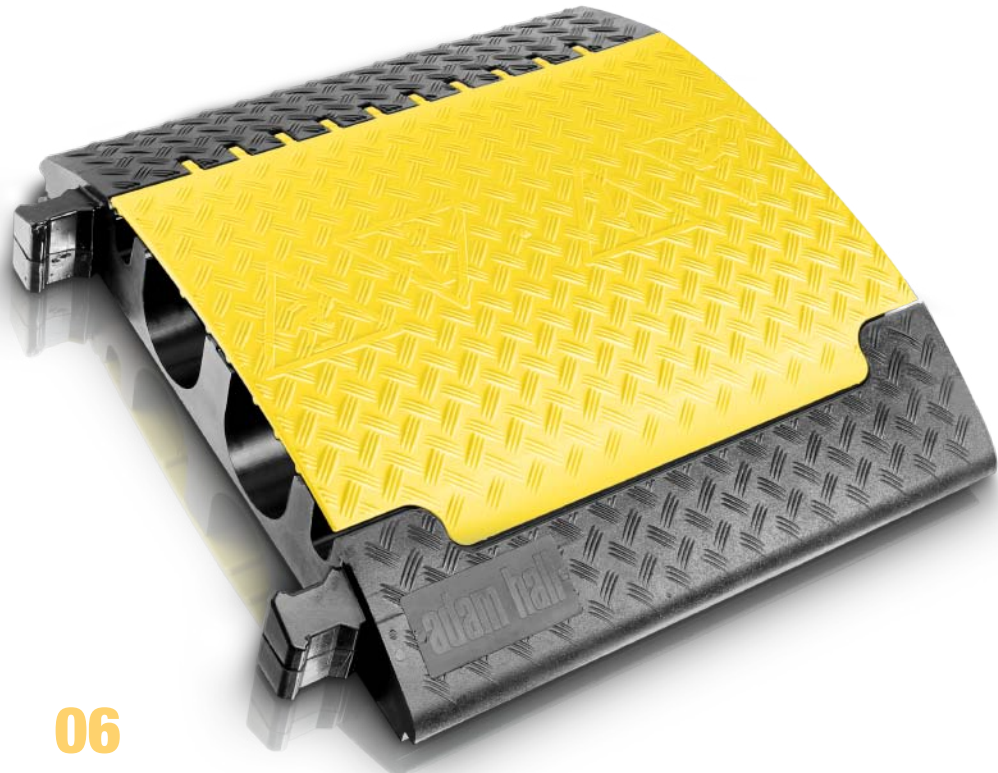
DEFENDER® ULTRA L

2 XXL CHANNELS – THE HEAVY DUTY GIANT

This cable crossover was developed in collaboration with suppliers for major events. The key feature of this heavy-duty crossover is the two oversized cable / hose ducts for lines up to 120 mm, and for fragile connections and connector housings not exceeding 100 mm.

SPECIFICATIONS:

Art. No.:	85600
Product:	cable protector
Type:	2-Channel
Length:	70 cm
Width:	78.3 cm
Height:	13.9 cm
Number of Channels:	2 + 2
Widths Channel 1–4:	3.3 cm / 12 cm / 12 cm / 3.3 cm
Heights Channel 1–4:	5 cm / 11.3 cm / 11.3 cm / 5 cm
Material:	TPU (Thermoplastic Polyurethane)
Load bearing:	Approx 5 tons per typical tyre imprint (20 x 20 cm)
Chemical resistance:	oil, acid & petrol resistant
Degree of hardness:	Shore A hardness: 88 ± 4
Flame class:	B2 (also available in B1 flame resistant)
Operating range:	-30°C up to +60°C
Weight:	30.5 kg



RANGE OF APPLICATION

Trade fairs / walkways / marketplaces / Christmas markets / workshops / warehouses / shopping centres / department stores / construction sites, streets, etc.
However, please ensure compliance with road traffic regulations (higher than 75 mm)

DEFENDER® XXL

5 HUGE CHANNELS – THE HEAVY DUTY ALLROUNDER

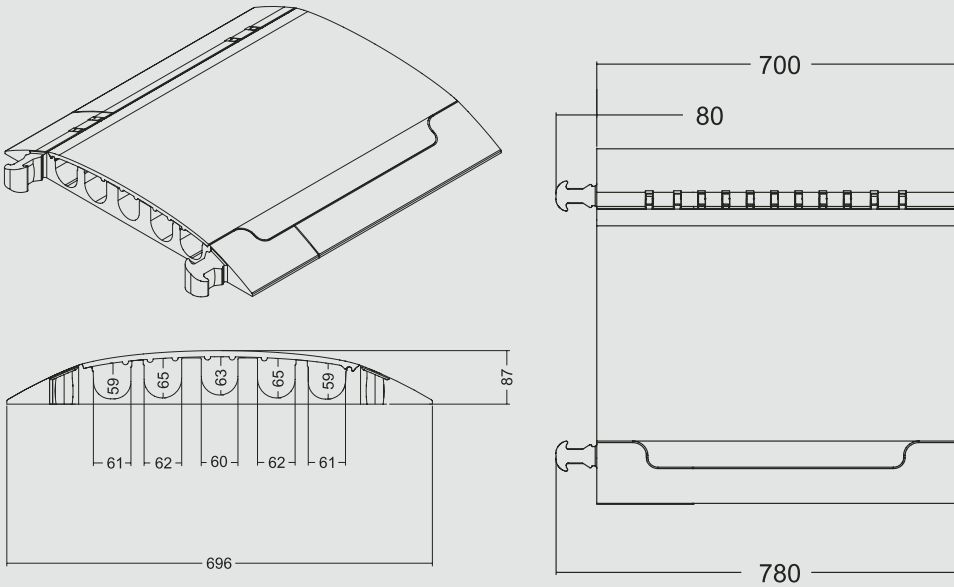
Together with the industry and leading rental companies we have developed our new flagship of the DEFENDER series . 5 huge cable ducts – 3 of them are suitable for C-Tube hose as used by the fire brigade (Ø 62 mm). Power cables also have optimum protection. The load bearing actually surpasses the DEFENDER III at more than 5 tons.

SPECIFICATIONS:	
Art. No.:	85500
Product:	cable protector
Type:	5-Channel
Length:	70 cm
Width:	69.6 cm
Height:	8.7 cm
Number of Channels:	5
Widths Channel 1–5:	6.1 cm / 6.2 cm / 6.0 cm / 6.2 cm / 6.1 cm
Heights Channel 1–5:	5.9 cm / 6.5 cm / 6.3 cm / 6.5 cm / 5.9 cm
Material:	TPU (Thermoplastic Polyurethane)
Load bearing:	Approx 5 tons per typical tyre imprint (20 x 20 cm)
Chemical resistance:	oil, acid & petrol resistant
Degree of hardness:	Shore A hardness: 88 ± 4
Flame class:	B2 (also available in B1 flame resistant)
Operating range:	-30°C up to +60°C
Weight:	21.4 kg

AVAILABLE ACCESSORIES:

Art. No. **85510** – End ramp for DEFENDER XXL

Art. No. **85510**



* dimensions in mm

RANGE OF APPLICATION

Trade fairs / walkways / marketplaces / Christmas markets / workshops / warehouses / shopping centres / department stores / construction sites, streets, etc.

DEFENDER® III

3 BIG CHANNELS – MOST POPULAR

Black polyurethane construction with textured non-slip surface and highly visible yellow polyethylene lid including three cable ducts. Lid load bearing capacity per typical tyre imprint. Crossover lengths are joined by connector plugs, available individually. Each crossover is supplied with one pair of connector plugs. New lid with patented hinge (lid remains attached while cables are laid) and integrated zipper fastener, providing better protection from soiling and tearing than traditional Velcro fasteners. A complete range of accessories expands the DEFENDER III into a flexible system for protecting your valuable cables and multicores.

SPECIFICATIONS:

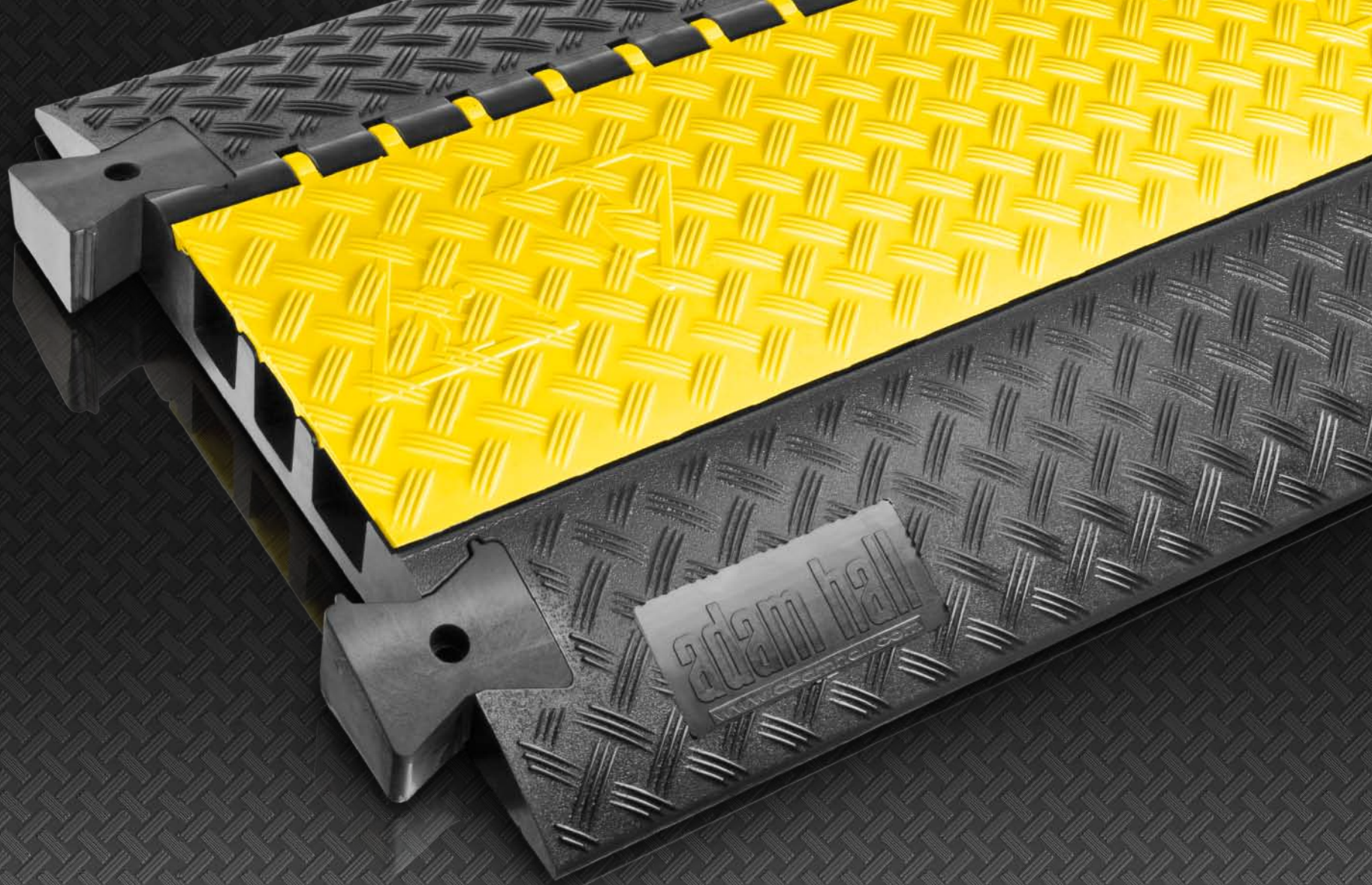
Art. No.:	85002
Product:	cable protector
Type:	3-Channel
Length:	100 cm
Width:	60 cm
Height:	7.3 cm
Number of Channels:	3
Widths Channel 1–3:	5.2 cm / 4.5 cm / 5.6 cm
Heights Channel 1–3:	4.9 cm / 5.0 cm / 4.9 cm
Material:	TPU (Thermoplastic Polyurethane)
Load bearing:	Approx 5 tons per typical tyre imprint (20 x 20 cm)
Chemical resistance:	oil, acid & petrol resistant
Degree of hardness:	Shore A hardness: 88 ± 4
Flame class:	B2 (also available in B1 flame resistant)
Operating range:	- 40° C bis + 70° C
Weight:	22 kg

AVAILABLE ACCESSORIES:

Art. No. **85009** - 45° curve with removable lid. A pair of connector plugs is included.

Art. No. **85004** - Connector plugs are available individually.

Art. No. **85008** - End ramp for cable outlet reduces the risk of tripping.



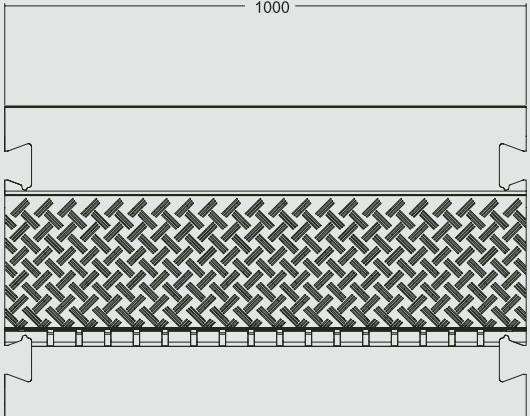
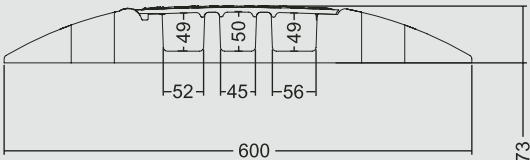
Art. No. **85009**



Art. No. **85004**



Art. No. **85008**



* dimensions in mm

RANGE OF APPLICATION

Trade fairs / walkways / marketplaces / Christmas markets / workshops / warehouses / shopping centres / department stores / construction sites, streets, etc.

DEFENDER® MIDI

5 MEDIUM CHANNELS – THE SOLUTION FOR NEARLY ANYTHING

The latest innovation, in response to numerous customer requests: A system intermediate between the Defender Compact and the Defender III. This cable crossover features 5 cable ducts, moulded connectors, and a lower height and lighter weight than the Defender III. The load bearing capacity is similar to that of the Defender III.

SPECIFICATIONS:	
Art. No.:	85300
Product:	cable protector
Type:	5-Channel
Length:	89 cm
Width:	54.2 cm
Height:	5.2 cm
Number of Channels:	5
Widths Channel 1–5:	3.4 cm / 3.4 cm / 3.4 cm / 3.4 cm / 3.4 cm
Heights Channel 1–5:	3.6 cm / 3.6 cm / 3.6 cm / 3.6 cm / 3.6 cm
Material:	TPU (Thermoplastic Polyurethane)
Load bearing:	Approx 5 tons per typical tyre imprint (20 x 20 cm)
Chemical resistance:	oil, acid & petrol resistant
Degree of hardness:	Shore A hardness: 88 ± 4
Flame class:	B2 (also available in B1 flame resistant)
Operating range:	- 30° C bis + 60° C
Weight:	11.5 kg

AVAILABLE ACCESSORIES:

Art. No. **85009** - 45° curve for DEFENDER MIDI
Art. No. **85308** - End ramp for DEFENDER MIDI

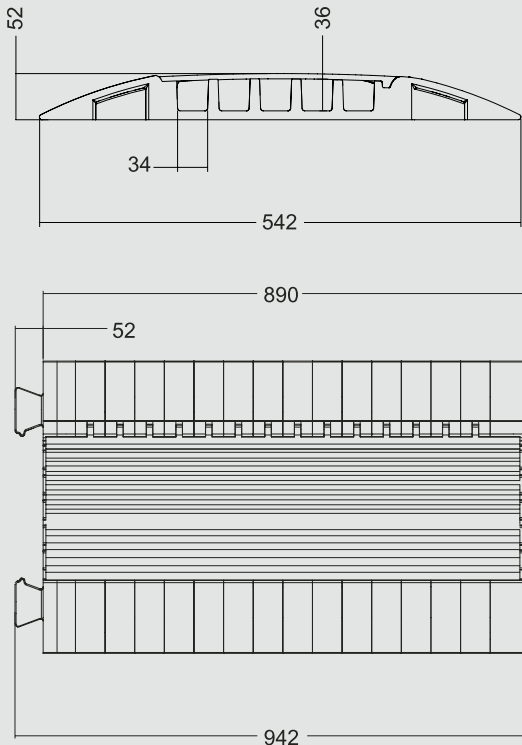
**WHEEL
CHAIR RAMP
AVAILABLE
ON PAGE 24!**
(Art. No. 85305SET)



Art. No. **85009**



Art. No. **85308**



* dimensions in mm

RANGE OF APPLICATION

Trade fairs / walkways / marketplaces / Christmas markets / workshops / warehouses / shopping centres / department stores / construction sites, streets, etc.

DEFENDER® MIDI 4C

4 CHANNELS – 1 CHANNEL FOR FIRE HOSE

The cable protection Midi 4C differs from the previous midi only in the number of channels. Instead of five equal-sized channels, the Midi 4C has 4 channels with one channel twice as wide (6.8 cm). This wider channel allows the insertion of significantly thicker cables than with the standard Midi cable crossover. Even a Fire hose can be carried out by the Midi 4C.

SPECIFICATIONS:

Art. No.:	85301
Product:	cable protector
Type:	4-Channel
Length:	89 cm
Width:	54.2 cm
Height:	5.2 cm
Number of Channels:	4
Widths Channel 1-4:	3.4 cm / 3.4 cm / 3.4 cm / 8.0 cm
Heights Channel 1-4:	3.6 cm / 3.6 cm / 3.6 cm / 3.6 cm
Material:	TPU (Thermoplastic Polyurethane)
Load bearing:	Approx 5 tons per typical tyre imprint (20 x 20 cm)
Chemical resistance:	oil, acid & petrol resistant
Degree of hardness:	Shore A hardness: 88 ± 4
Flame class:	B2 (also available in B1 flame resistant)
Operating range:	- 30° C bis + 60° C
Weight:	11.5 kg

AVAILABLE ACCESSORIES:

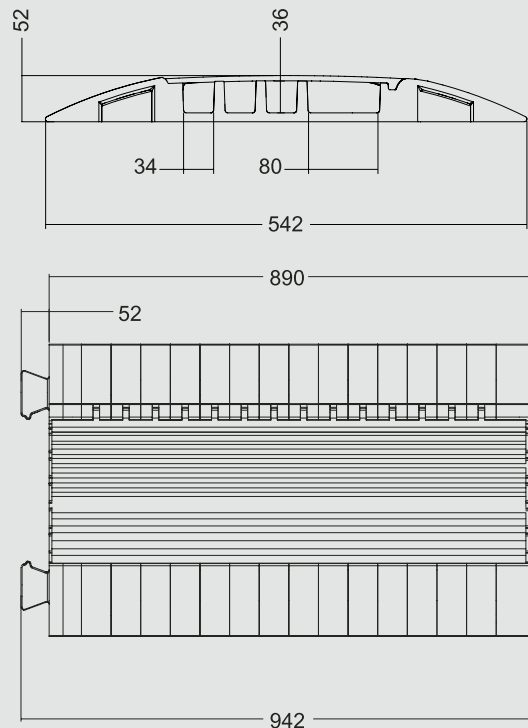
Art. No. **85308** - End ramp for DEFENDER MIDI 4C



NEW!



Art. No. **85308**



* dimensions in mm

RANGE OF APPLICATION

Trade fairs / walkways / marketplaces / Christmas markets / workshops / warehouses / shopping centres / department stores / construction sites, streets, etc.

DEFENDER® MINI

3 SMALL CHANNELS – THE LIGHTWEIGHT CHAMPION

Small but sturdy. Light, professional and universally applicable, with the familiar black and yellow design. The new Defender Mini meets every expectation for professional cable protection, expanding the Defender series with a very light (only 5 kg!), compact cable crossover, capable of supporting vehicle traffic.

Featuring three cable ducts and a cable cross-section of 35 mm, with an overall height of 48 mm, although used primarily indoors, this crossover can readily support car traffic, due to the load-bearing capacity of more than 2 tons. The bottom of the Defender Mini has a non-slip surface, to ensure an optimal grip on the widest variety of surfaces. Like all of the Defender series crossovers, the Defender Mini is resistant to oils, acids, and petrol, and has a patented self-cleaning hinged closure.

SPECIFICATIONS:

Art. No.:	85200
Product:	cable protector
Type:	3-Channel
Length:	100 cm
Width:	29 cm
Height:	4,8 cm
Number of Channels:	3
Widths Channel 1–3:	3,5 cm / 3,5 cm / 3,5 cm
Heights Channel 1–3:	3,0 cm / 3,5 cm / 3,0 cm
Material:	TPU (Thermoplastic Polyurethane)
Load bearing:	Approx 2 tons per typical tyre imprint (20 x 20 cm)
Chemical resistance:	oil, acid & petrol resistant
Degree of hardness:	Shore A hardness: 88 ± 4
Flame class:	B2 (also available in B1 flame resistant)
Operating range:	- 30° C bis + 60° C
Weight:	5 kg

AVAILABLE ACCESSORIES:

Art. No. **85208F** - End Ramp female for 85200/85200BLK Cable Protector 3-channels

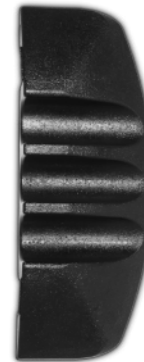
Art. No. **85208M** - End Ramp male for 85200/85200BLK Cable Protector 3-channels



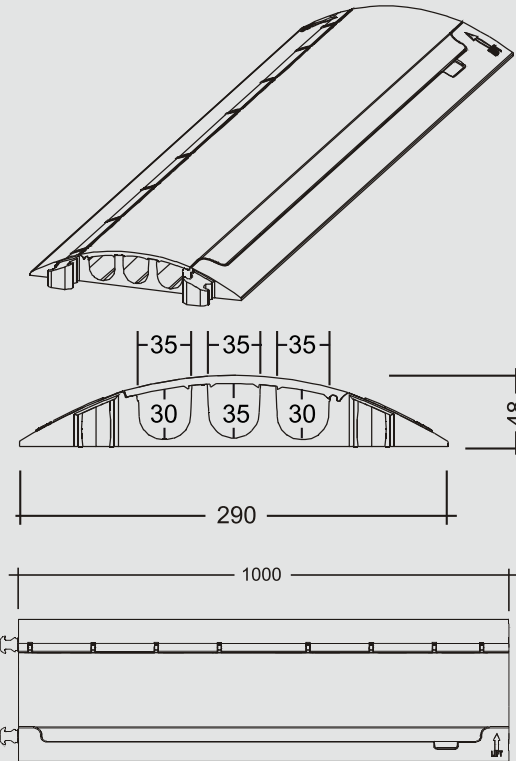
**ALSO
AVAILABLE
WITH BLACK
LID!**
Art. No. 85200BLK



Art. No. **85208F**



Art. No. **85208M**



* dimensions in mm

RANGE OF APPLICATION

Trade fairs / walkways / marketplaces / Christmas markets / workshops / warehouses / shopping centres / department stores / construction sites, streets, etc.

DEFENDER® NANO

6 SLIM CHANNELS – DISCRETE OUTDOOR / INDOOR PROTECTION

The smallest unit, with great potential. Light, professional, wheelchair accessible and universally applicable. With 6 channels the DEFENDER NANO meets all demands for a professional cable crossover in the smallest size.

Thanks to the addition of this compact, extremely light (approx. only 4kg!) and durable (including vehicle traffic) cable crossover, the DEFENDER Series of cable protectors is now complete in the compact sector.

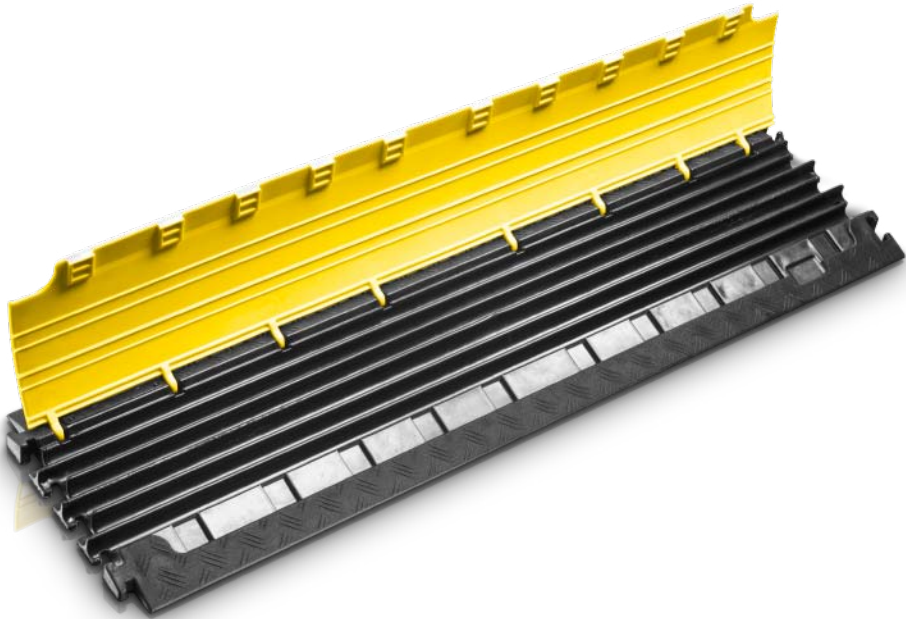
SPECIFICATIONS:	
Art. No.:	85150
Product:	cable protector
Type:	6-Channel
Length:	100 cm
Width:	28 cm
Height:	3.2 cm
Number of Channels:	6
Widths Channel 1–6:	1.7 cm / 1.7 cm / 1.7 cm / 1.7 cm / 1.7 cm / 1.7 cm
Heights Channel 1–6:	1.8 cm / 1.8 cm / 1.9 cm / 1.9 cm / 1.8 cm / 1.8 cm
Material:	TPU (Thermoplastic Polyurethane)
Load bearing:	Approx 2 tons per typical tyre imprint (20 x 20 cm)
Chemical resistance:	oil, acid & petrol resistant
Degree of hardness:	Shore A hardness: 88 ± 4
Flame class:	B2 (also available in B1 flame resistant)
Operating range:	- 30° C bis + 60° C
Weight:	4.37 kg

AVAILABLE ACCESSORIES:

Art. No. **85158F** - End Ramp female for 85150/85150BLK Cable Protector 6-channels
Art. No. **85158M** - End Ramp male for 85150/85150BLK Cable Protector 6-channels



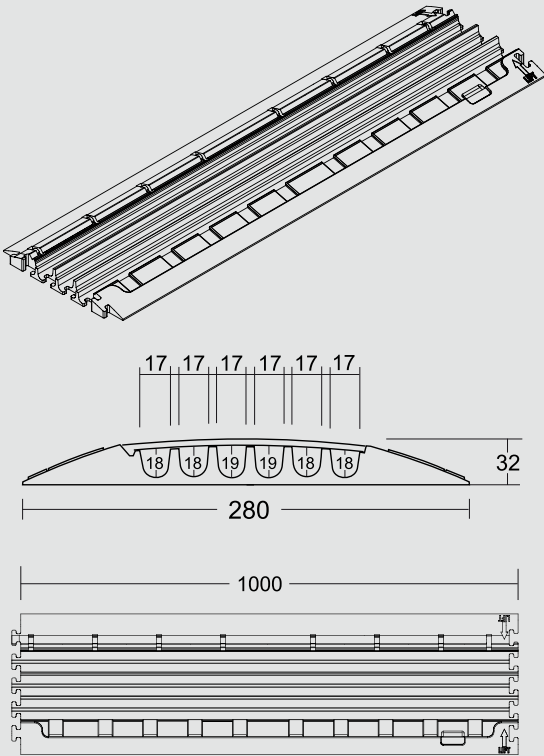
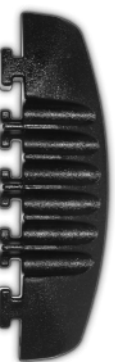
ALSO
AVAILABLE
WITH BLACK
LID!
Art. No. 85150BLK



Art. No. 85158F



Art. No. 85158M



* dimensions in mm

RANGE OF APPLICATION

Mainly in halls, at trade fairs, etc.

DEFENDER® COMPACT

7 SMALL CHANNELS – THE DROP OVER SOLUTION

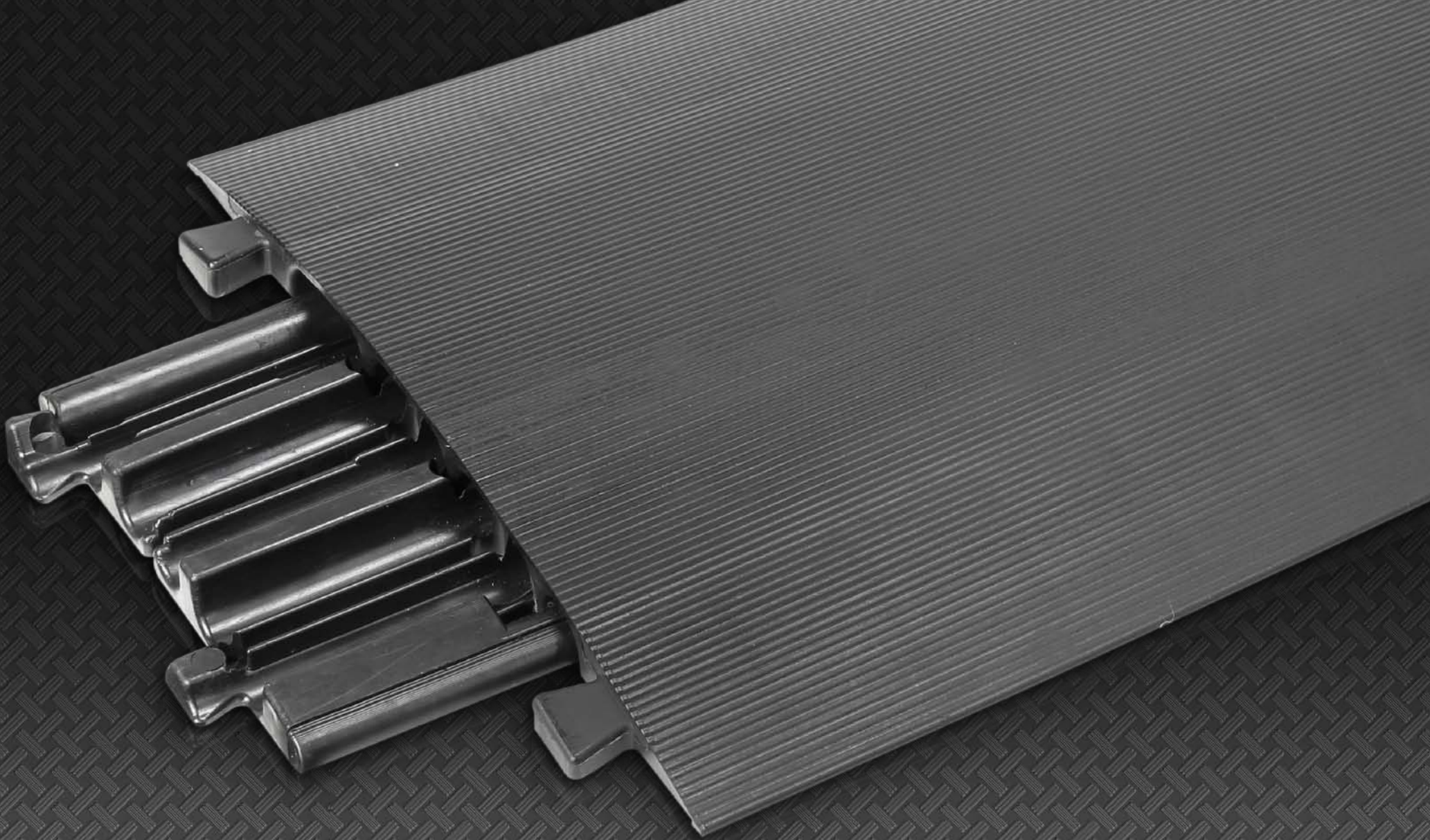
An inexpensive version of the Defender III system. The arrangement of supports moulded into the bottom permits the Defender Compact to be laid over a run of cables, supporting the weight of crossing vehicles. Black polyurethane construction with ribbed non-slip surface. Not suitable for trucks!

SPECIFICATIONS:

Art. No.:	85100
Product:	cable protector
Type:	7-Channel
Length:	80 cm
Width:	43 cm
Height:	4 cm
Number of Channels:	7
Widths Channel 1–7:	2.8 cm / 2.8 cm / 2.8 cm / 2.8 cm / 2.8 cm / 2.8 cm / 2.8 cm
Heights Channel 1–7:	2.3 cm / 2.7 cm / 2.9 cm / 3.0 cm / 2.9 cm / 2.7 cm / 2.3 cm
Material:	TPU (Thermoplastic Polyurethane)
Load bearing:	Pedestrians, bicycle
Chemical resistance:	oil, acid & petrol resistant
Degree of hardness:	Shore A hardness: 88 ± 4
Flame class:	B2 (also available in B1 flame resistant)
Operating range:	- 30° C bis + 60° C
Weight:	3.5 kg

AVAILABLE ACCESSORIES:

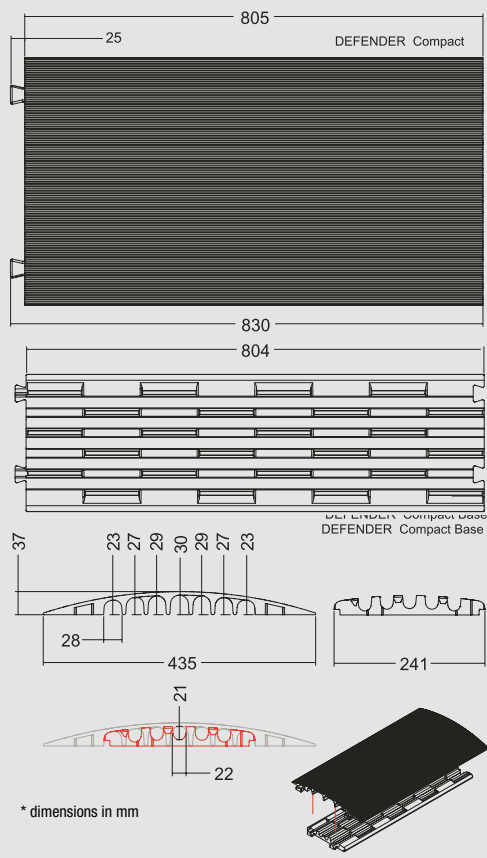
Art. No. **85103** - Defender Compact - Base for 85100 Cable Protector 5-channels
The ultimate enhancement for heavy loads. The unique Compact base with a weight of 3.5 kg is attached to the Compact to form a single unit. Thus reinforced, the Compact can withstand high loads. Even forklifts and lifting trucks can now drive over this crossover with no problem. The 5 cable ducts, each with a diameter of 22 mm, provide ample space for many applications. If a line of several DEFENDER Compact units with base is assembled, the row now remains stable even if a car drives over it.



Art. No. **85100**



Art. No. **85103**



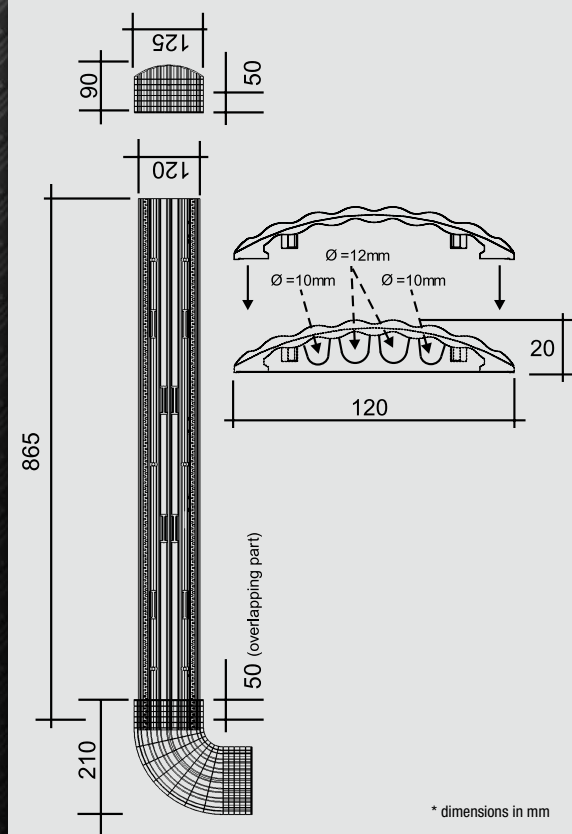
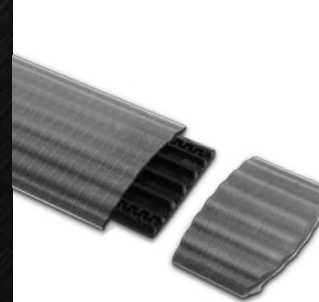
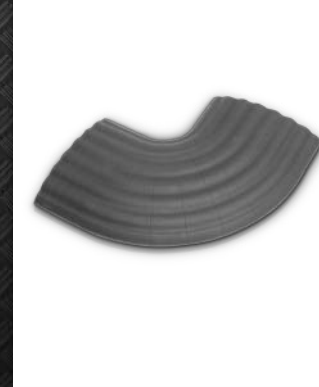
Mainly in offices, halls, at trade fairs, etc.

4 MINI CHANNELS – INDOOR & DESIGN SOLUTION

SPECIFICATIONS:

Art. No.:	85160 (Black) / 85160GREY (Grey) / 85160YEL (Yellow)
Product:	cable protector
Type:	4-Channel
Length:	87 cm
Width:	12 cm
Height:	2 cm
Number of Channels:	4
Widths Channel 1-4:	1.0 cm / 1.2 cm / 1.2 cm / 1.0 cm
Heights Channel 1-4:	1.0 cm / 1.2 cm / 1.2 cm / 1.0 cm
Material:	TPU (Thermoplastic Polyurethane)
Load bearing:	can be driven over by cars / lorries / forklifts and lifting trucks
Chemical resistance:	oil, acid & petrol resistant
Degree of hardness:	Shore A hardness: 92 ± 4
Flame class:	B2
Operating range:	- 30° C bis + 60° C
Weight:	1.24 kg

Art. No. **85161** - 90° Curve for 85160 Cable Crossover 4-channels
 Art. No. **85161GREY** - 90° Curve for 85160 Cable Crossover 4-channels
 Art. No. **85161YEL** - 90° Curve for 85160 Cable Crossover 4-channels
 Art. No. **85168** - End Ramp for 85160 Cable Crossover 4-channels
 Art. No. **85168GREY** - End Ramp for 85160 Cable Crossover 4-channels
 Art. No. **85168YEL** - End Ramp for 85160 Cable Crossover 4-channels



dimensions in mm

RANGE OF APPLICATION

Mainly in halls, at trade fairs, etc.

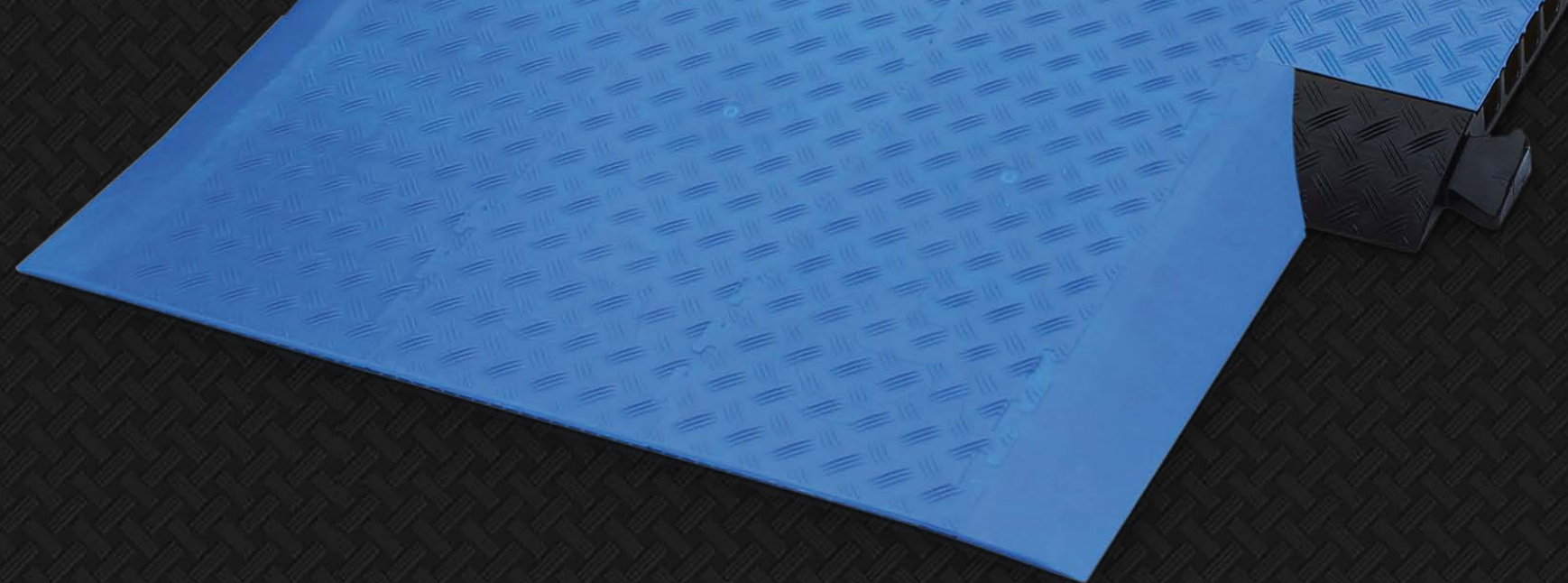
DEFENDER® RILLS MAT

ECONOMY DROP OVER

Art. No. **85900** - Fine-grooved Mat black 1 m x 10 m

Art. No. **85970** - Fine-grooved Mat black 0.7 m x 10 m

- Fine-grooved rubber mat black
- SBR quality
- 3 mm thick
- Width 100 cm / 70 cm
- Length 10 m
- Non-slip
- Resilient covering for all high traffic areas
- Weather proof
- Lies flat
- Coarsely patterned underside
- Ideal for protecting cables of all types
- Matting can be trimmed to the desired size



DEFENDER® WHEELCHAIR RAMP

THE PERFECT ADD ON FOR DEFENDER MIDI

Defender Wheelchair Ramp with 3 Lines (6 ramp pieces), matching extremity pieces and the blue pre-drilled Defender Midi cable crossover.

Professional cable protection combined with a practical solution to make the Defender MIDI cable crossovers suitable for wheelchairs, walking frames and trolleys.

As it is the case with all crossovers of the DEFENDER series, the Defender Wheelchair ramp is oil, acid, and petrol resistant.

We recommend the use of our wheelchair ramp set including 3 Lines (6 ramp pieces) with the matching extremity pieces.

These pieces must be used together with the blue pre-drilled Defender Midi cable crossover.

The drilling ensures that the ramp doesn't slide from the cable crossover. With this configuration the drive across zone is 80 cm wide.

It is of course possible to extend the ramp's width by using more lines.

1 Set is composed of:

- 6 Ramp pieces (3 Lines)
- 4 extremity pieces (2 left extremities / 2 right extremities)
- 1 blue pre-drilled Midi cable crossover (85300BLUE)

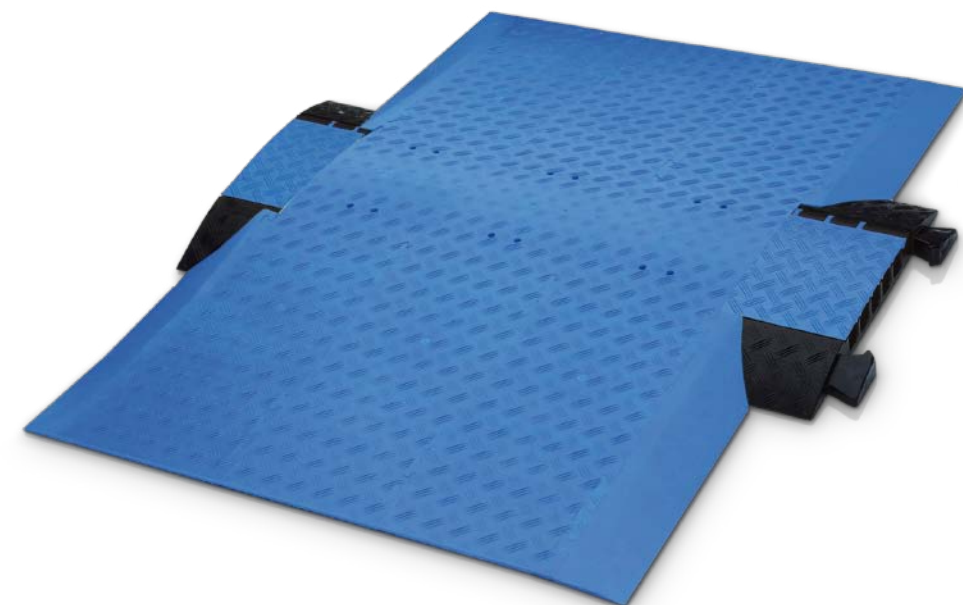
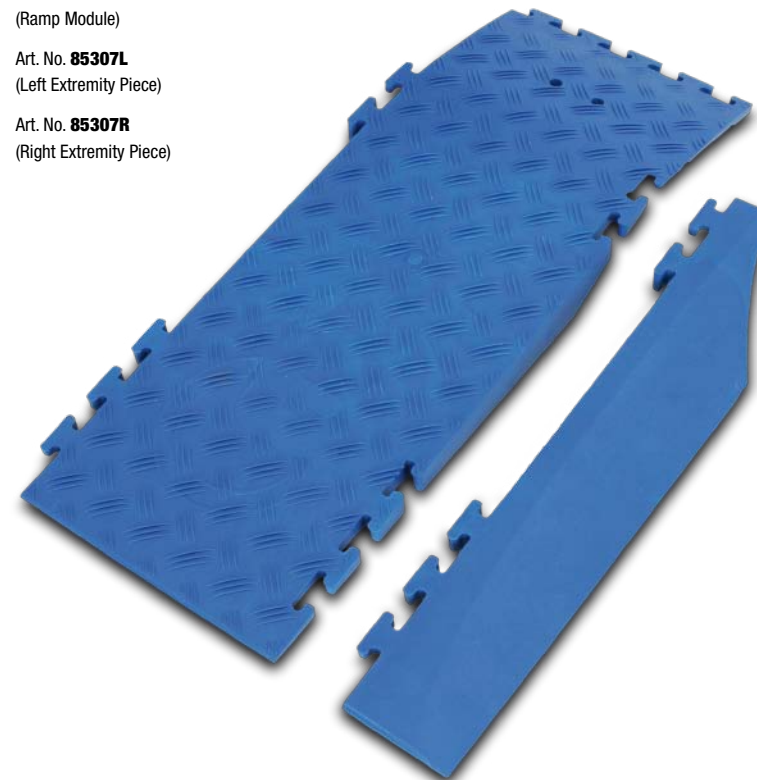
Please note: The Defender Wheelchair Ramp does not support vehicle traffic.



Art. No. **85306**
(Ramp Module)

Art. No. **85307L**
(Left Extremity Piece)

Art. No. **85307R**
(Right Extremity Piece)



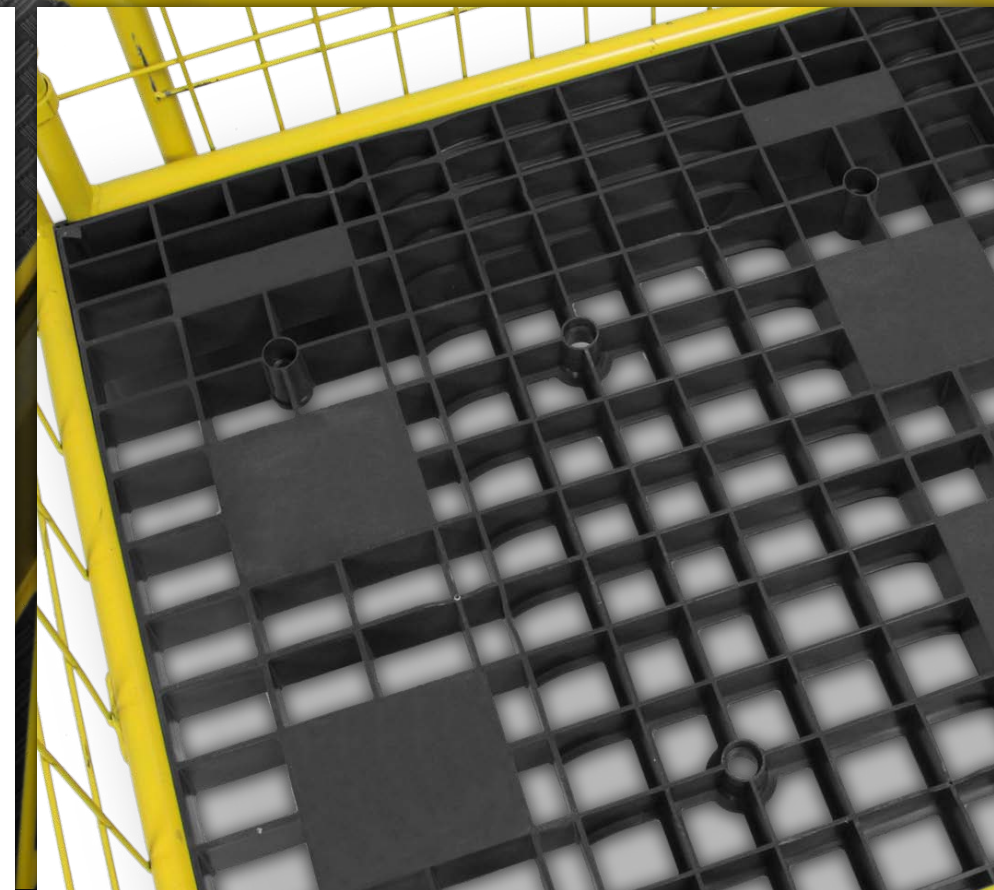
DEFENDER® BOX

THE SMART LOGISTIC STORAGE SOLUTION

Multifunctional transport and storage box in euro-pallet dimensions for all Defender cable crossovers. Easy to load and light weight thanks to a synthetic and steel materials combination.

FEATURES:

- Easy loading thanks to collapsible sides of the pallet cage
- Max. load bearing > 1t
- Stackable
- Foldable
- Easy cleaning of the cable crossovers thanks to integrated water drain in the Defender Box
- Steel structure undercoated and lacquered on weather proof synthetic euro-pallet
- Dimensions (W x H x D): 1250 x 1285 x 840 mm
- Weight: 50,5 kg



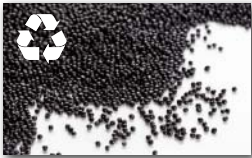


ADVANTAGES



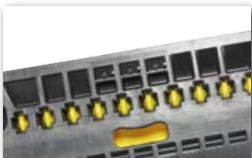
✓ DEKRA CERTIFIED

The DEFENDER cable protection range has been awarded the DEKRA certificate. In accordance with testing standards EN 61537:2001 and DIN 31000:1979 all of the Defender cable crossovers adhere to the highest safety and quality requirements. Thanks to the manufacturing process being completed in Germany, Adam Hall GmbH, exclusive distributor of DEFENDER products, is able to ensure that as part of the certification process, DEKRA can complete the required material and production checks on a regular basis.



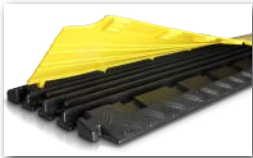
✓ HIGH TECH RAW MATERIAL

All DEFENDER cable crossovers are made of extremely sturdy, unbreakable TPU (thermoplastic polyurethane), produced from recycled plastic materials. They feature a B2 fire resistance rating (also available with a B1 rating - difficult to ignite - in compliance with DIN4102) and are resistant to oil, acids and petrol. The operating temperature range is approximately -30°C to +60°C. The Shore A hardness range is 88 ± 4.



✓ SELF CLEANING HINGE

Our cable protectors are equipped with patented self cleaning hinge. The dirt gathering around the hinges is automatically pushed out when opening and closing the lid of the DEFENDER cable protector. All DEFENDER products are made of extremely sturdy, unbreakable TPU (thermoplastic polyurethane). If needed, the crossovers can be easily cleaned using a steam jet cleaner.



✓ EASY LOCK SYSTEM

The DEFENDER cable protectors feature a very easy and efficient opening and locking system, allowing you to open and close the lid without tooling or special efforts. This exclusive feature also guarantees that the lid remains closed at all times, even when cars or trucks cross it over.



✓ EASY HANDLING

The heaviest DEFENDER cable protection systems are equipped with transport handles (DEFENDER XXL, DEFENDER III and DEFENDER Midi). The DEFENDER Box provides safe and practical storage but also a logistically efficient solution for the transport of many protectors at once (euro-pallet dimensions).



✓ MODULAR SYSTEM

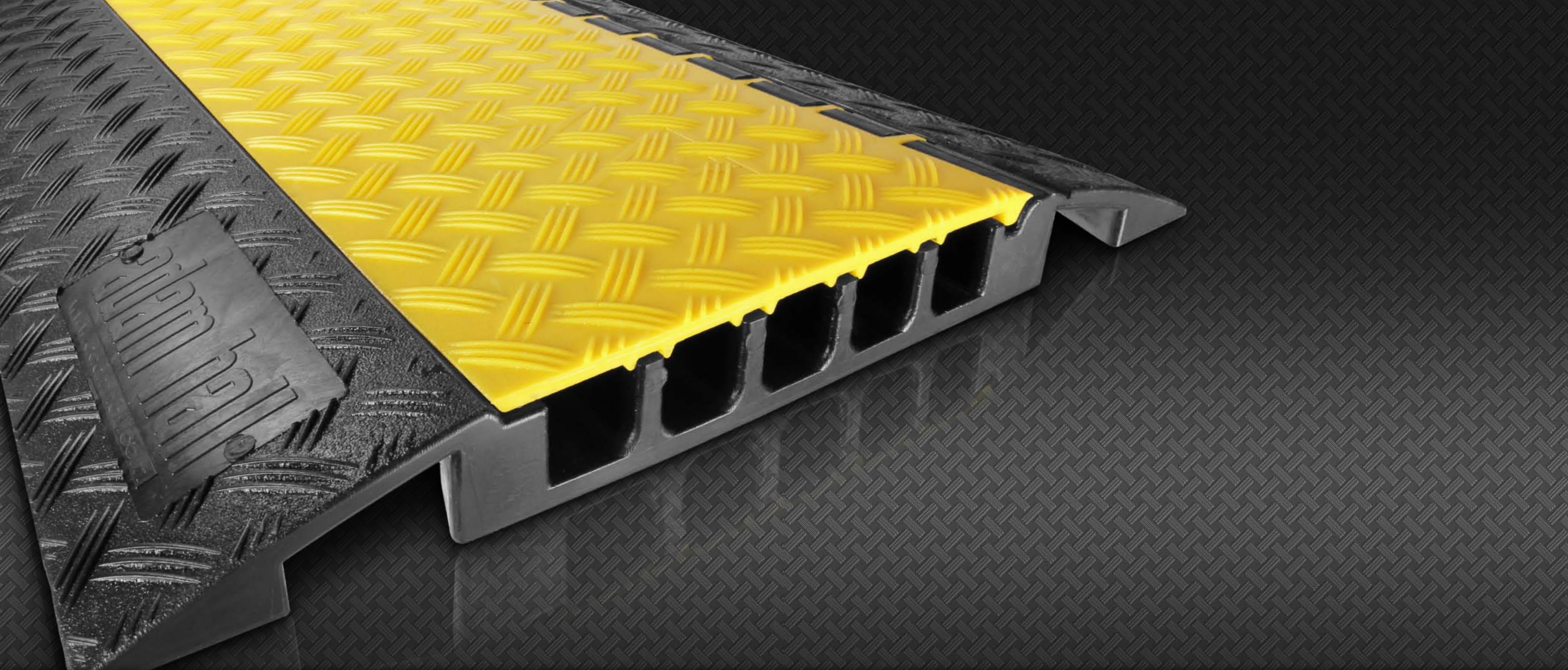
The DEFENDER Cable protection systems also offer high quality accessories to adapt your configuration to each new location, such as end ramps, 90° and 45° bends. Each cable protector has connectors and corresponding sockets that enable you to connect cable protectors in the same series endlessly with one another with maximum stability.



✓ LABEL YOUR CABLE PROTECTORS

Self branding of your cable protectors has 3 main advantages :
Advertisement for your brand / Corporate Identity conformity / Avoid mixing up your equipment with another company on large events

Self branding of the DEFENDER cable protectors with the Logo of your company can be purchased for orders ex 30 pieces. You will find the logo format requirements on our website. Feel free to contact our sales team for more information at sales@adamhall.com



REFERENCES



FIND MORE REFERENCES
AT WWW.DEFENDER-PROTECTS.COM

DEFENDER[®]
CABLE PROTECTION SYSTEMS
THE INDUSTRY & EVENT STANDARD



DEFENDER[®]

CABLE PROTECTION SYSTEMS

THE INDUSTRY & EVENT STANDARD

www.defender-protects.com



Defender is a brand of the Adam Hall group.

Adam Hall GmbH
Headquarters

Daimlerstr. 9
D-61267 Neu-Anspach
Germany
Tel.: (+49) 60 81 / 94 19 0
Fax: (+49) 60 81 / 94 19 1000
e-mail: mail@adamhall.com

Adam Hall UK

Tel.: (+44) 0 17 02 61 39 22
mail@adamhall.co.uk

Adam Hall
Spain/France/Portugal/Italy

Tel. Spain: (+34) 93 363 53 63
Tel. France: (+33) 4 67 66 27 87
Tel. Italy: 0800 87 39 16
mail.sp@adamhall.com
mail.fr@adamhall.com
mail.pt@adamhall.com
mail.it@adamhall.com

Adam Hall Sweden

Tel.: (+46) 709 246 222
mail.se@adamhall.com

Adam Hall Denmark/Norway

Tel.: (+45) 36 70 05 27
mail.dk@adamhall.com

Adam Hall Benelux

Tel.: +31 (0) 611281874
mail.benelux@adamhall.com

Adam Hall Poland

Tel.: + 48 (0) 782 510 410
mail.pl@adamhall.com