





AMF-Bruns has been developing and manufacturing retractor systems for many years before all the other suppliers of restraint systems entered the market. The first 4 point system for wheelchairs and occupants was sold in the 1970's. At that time AMF-Bruns invented a wheelchair retractor to tighten the wheelchair, it was 20 years later, that others followed AMF-Bruns idea. Meanwhile the PROTEKTOR® system sets the standard worldwide - often copied, but never equalled! Of course, this knowledge and know how is still reflected in our actual restraint system.

New developments like the wheelchair adapter PROSAFE®, the monosystem, are subsequent developments of our actual system and, of course, totally compatible.

Like these, the PROTEKTOR® system gets even more easy, faster and safer to use, than any other product on the market.



To ensure ultimate safety AMF-Bruns goes further. - Good is not good enough for us!

AMF-Bruns is the world's leading company for webbing safety systems for wheelchairs and occupants. Production follows the strict rules of the ISO 9001 standard.

On top of this AMF-Bruns works permanently in different national & international meetings, has their own testing facilities and, also test at organisations like TÜV, BAST, DTC, UTAC.

The result is a proven, ultimately safe system, which meets all the requirements of its users, the PROTEKTOR® system.

#### STANDARDS

The AMF-Bruns PROTEKTOR® System fulfills, for example, ISO 10542-1 + 2, DIN 75078-2, CSA Z 605, FMSS/CNVSS, AS 2596, SAE J 49, 2001/85/EC.

#### SAFE DIVERSITY

The PROTEKTOR® occupant and wheelchair restraint system offers a number of variations.

For the installation to the vehicle floor the PROTEKTOR® System offers 4 stud fitting and mono fitting.

For the fortification on the wheelchair the system offers loops, hooks or carabiners.

Whether you use the manual **BLACKSERIES**, the automatic **SILVERSERIES** or the heavy duty **PLATINUMSERIES**, the PROTEKTOR® System offers proven safety according to ISO 10542, regardless of what variations you choose.

Simply choose the System that best suits your needs.



## BLACKSERIES

- manual pull-out and semi automatic self-tensioning system
- lightweight ABS-Cover





PROTEKTOR-System

BLACKSERIES

RETRACTOR SYSTEM WITH LOOP

4 STUD FITTING AT 40°, FLEXIBLE



Protektor®-System  
Pro 2 B LV with loop and 4 stud fitting at 40°, flexible

- 2 x retractor belt LV
- 2 x static belt LV
- 1 x pelvis belt

Item-No. H 350 502 LV



Protektor®-System  
Pro 4 B LV with loop and 4 stud fitting at 40°, flexible

- 4 x retractor belt LV
- 1 x pelvis belt

Item-No. H 350 504 LV

4 STUD FITTING TWISTED 40/90°, FLEXIBLE



Protektor®-System  
Pro 2 B LG with loop and 4 stud fitting twisted 40/90°, flexible

- 2 x retractor belt LG
- 2 x static belt LV
- 1 x pelvis belt

Item-No. H 350 502 LG



Protektor®-System  
Pro 4 B LG with loop and 4 stud fitting twisted 40/90°, flexible

- 4 x retractor belt LG
- 1 x pelvis belt

Item-No. H 350 504 LG

4 STUD FITTING FLAT FLEXIBLE



Protektor®-System  
Pro 2 B LF with loop and 4 stud fitting, flat flexible

- 2 x retractor belt LF
- 2 x static belt LV
- 1 x pelvis belt

Item-No. H 350 502 LF



Protektor®-System  
Pro 4 B LF with loop and 4 stud fitting, flat flexible

- 4 x retractor belt LF
- 1 x pelvis belt

Item-No. H 350 504 LF

MONO FITTING AT 40°



Protektor®-System  
Pro 2 B LM with loop and Mono fitting at 40°

- 2 x retractor belt LM
- 2 x static belt LM
- 1 x pelvis belt

Item-No. H 350 502 LM



Protektor®-System  
Pro 4 B LM with loop and Mono fitting at 40°

- 4 x retractor belt LM
- 1 x pelvis belt

Item-No. H 350 504 LM

RETRACTOR SYSTEM WITH HOOK

4 STUD FITTING AT 40°, FLEXIBLE



Protektor®-System  
Pro 2 B HV with hook and 4 stud fitting at 40°, flexible

- 2 x retractor belt HV
- 2 x static belt HV
- 1 x pelvis belt

Item-No. H 350 522 HV

**4 STUD FITTING AT 40°, FLEXIBLE**


Protektor®-System  
Pro 4 B HV with hook and  
4 stud fitting at 40°, flexible

- 4 x retractor belt HV
- 1 x pelvis belt

Item-No. H 350 524 HV

**4 STUD FITTING TWISTED AT 40/90°, FLEXIBLE**


Protektor®-System  
Pro 2 B HG with hook and  
4 stud fitting twisted 40/90°, flexible

- 2 x retractor belt HG
- 2 x static belt HV
- 1 x pelvis belt

Item-No. H 350 522 HG



Protektor®-System  
Pro 4 B HG with hook and  
4 stud fitting twisted 40/90°, flexible

- 4 x retractor belt HG
- 1 x pelvis belt

Item-No. H 350 524 HG



Protektor®-System  
Pro 2 B HF with hook and  
4 stud fitting, flat flexible

- 2 x retractor belt HF
- 2 x static belt HV
- 1 x pelvis belt

Item-No. H 350 522 HF



Protektor®-System  
Pro 4 B HF with hook and  
4 stud fitting, flat flexible

- 4 x retractor belt HF
- 1 x pelvis belt

Item-No. H 350 524 HF

**4 STUD FITTING FLAT FLEXIBLE**


Protektor®-System  
Pro 2 B HM with hook and  
Mono fitting at 40°

- 2 x retractor belt HM
- 2 x static belt HM
- 1 x pelvis belt

Item-No. H 350 522 HM



Protektor®-System  
Pro 4 B HM with hook and  
Mono fitting at 40°

- 4 x retractor belt HM
- 1 x pelvis belt

Item-No. H 350 524 HM

**RETRACTOR SYSTEM WITH CARABINER**
**4 STUD FITTING FLAT FLEXIBLE**


Protektor®-System  
Pro 2 B CV with carabiner  
and 4 stud fitting at 40°, flexible

- 2 x retractor belt CV
- 2 x static belt CV
- 1 x pelvis belt

Item-No. H 350 552 CV



Protektor®-System  
Pro 4 B CV with carabiner  
and 4 stud fitting at 40°, flexible

- 4 x retractor belt CV
- 1 x pelvis belt

Item-No. H 350 554 CV

**4 STUD FITTING 40/90°, FLEXIBLE**


Protektor®-System  
Pro 2 B CG with carabiner and  
4 stud fitting twisted 40/90°, flexible

- 2 x retractor belt CG
- 2 x static belt CV
- 1 x pelvis belt

Item-No. H 350 552 CG

4 STUD FITTING TWISTED AT 40/90°, FLEXIBLE



Protektor®-System  
Pro 4 B CG with carabiner  
and 4 stud fitting twisted 40/90°,  
flexible

- 2 x retractor belt CG
- 2 x static belt CV

Item-No. H 350 554 CG

4 STUD FITTING FLAT FLEXIBLE



Protektor®-System  
Pro 2 B CF with carabiner  
and 4 stud fitting, flat flexible

- 2 x retractor belt CF
- 2 x static belt CV
- 1 x pelvis belt

Item-No. H 350 552 CF



Protektor®-System  
Pro 4 B CF with carabiner  
and 4 stud fitting, flat flexible

- 4 x retractor belt CF
- 1 x pelvis belt

Item-No. H 350 554 CF

MONO FITTING 40°



Protektor®-System  
Pro 2 B CM with carabiner  
and Mono fitting at 40°

- 2 x retractor belt CM
- 2 x static belt CM
- 1 x pelvis belt

Item-No. H 350 552 CM



Protektor®-System  
Pro 4 B CM with carabiner  
and Mono fitting at 40°

- 4 x retractor belt CM
- 1 x pelvis belt

Item-No. H 350 554 CM

RETRACTOR WITH LOOP



Retractor B LV  
with loop and  
4 stud fitting at 40°,  
flexible

Item-No.  
H 350 509 LV



Retractor B LG  
with loop and  
4 stud fitting  
twisted 40/90°,  
flexible

Item-No.  
H 350 509 LG



Retractor B LF  
with loop and  
4 stud fitting,  
flat flexible

Item-No.  
H 350 509 LF



Retractor B LM  
with loop and  
Mono fitting at 40°

Item-No.  
H 350 509 LM

RETRACTOR WITH HOOK



Retractor B HV  
with hook and  
4 stud fitting  
at 40°, flexible

Item-No.  
H 350 534 HV



Retractor B HG  
with hook and  
4 stud fitting  
twisted 40/90°, flexible

Item-No.  
H 350 534 HG



Retractor B HF  
with hook and  
4 stud fitting  
flat flexible

Item-No.  
H 350 534 HF



Retractor B HM  
with hook and  
Mono fitting at 40°

Item-No.  
H 350 534 HM

RETRACTOR WITH CARABINER



Retractor B CV  
with carabiner and  
4 stud fitting  
at 40°, flexible

Item-No.  
H 350 564 CV



Retractor B CG  
with carabiner and  
4 stud fitting twisted  
40/90°, flexible

Item-No.  
H 350 564 CG



Retractor B CF  
with carabiner and  
4 stud fitting,  
flat flexible

Item-No.  
H 350 564 CF



Retractor B CM  
with carabiner and  
Mono fitting at 40°

Item-No.  
H 350 564 CM



STATIC BELTS



Static belt LV  
with loop  
and 4 stud fitting  
(front attachment)

Item-No.  
H 350 510 LV



Static belt CV  
with carabiner  
and 4 stud fitting  
(front attachment)

Item-No.  
H 350 565 CV

STATIC BELT WITH 4 STUD FITTING



Static belt HV  
with hook  
and 4 stud fitting  
(front attachment)

Item-No.  
H 350 535 HV

STATIC BELTS



Static belt LM  
with loop  
and Mono fitting  
(front attachment)

Item-No.  
H 350 510 LM



Static belt CM  
with carabiner  
and Mono fitting  
(front attachment)

Item-No.  
H 350 565 CM

STATIC BELT WITH MONO FITTING



Static belt HM  
with hook  
and Mono fitting  
(front attachment)

Item-No.  
H 350 535 HM

ELECTRIC BELTS



Electric belt L  
with loop,  
length 3,6 m  
(front attachment)

Item-No.  
H 350 240 L



Electric belt H  
with hook,  
length 3,6 m  
(front attachment)

Item-No.  
H 350 240 H



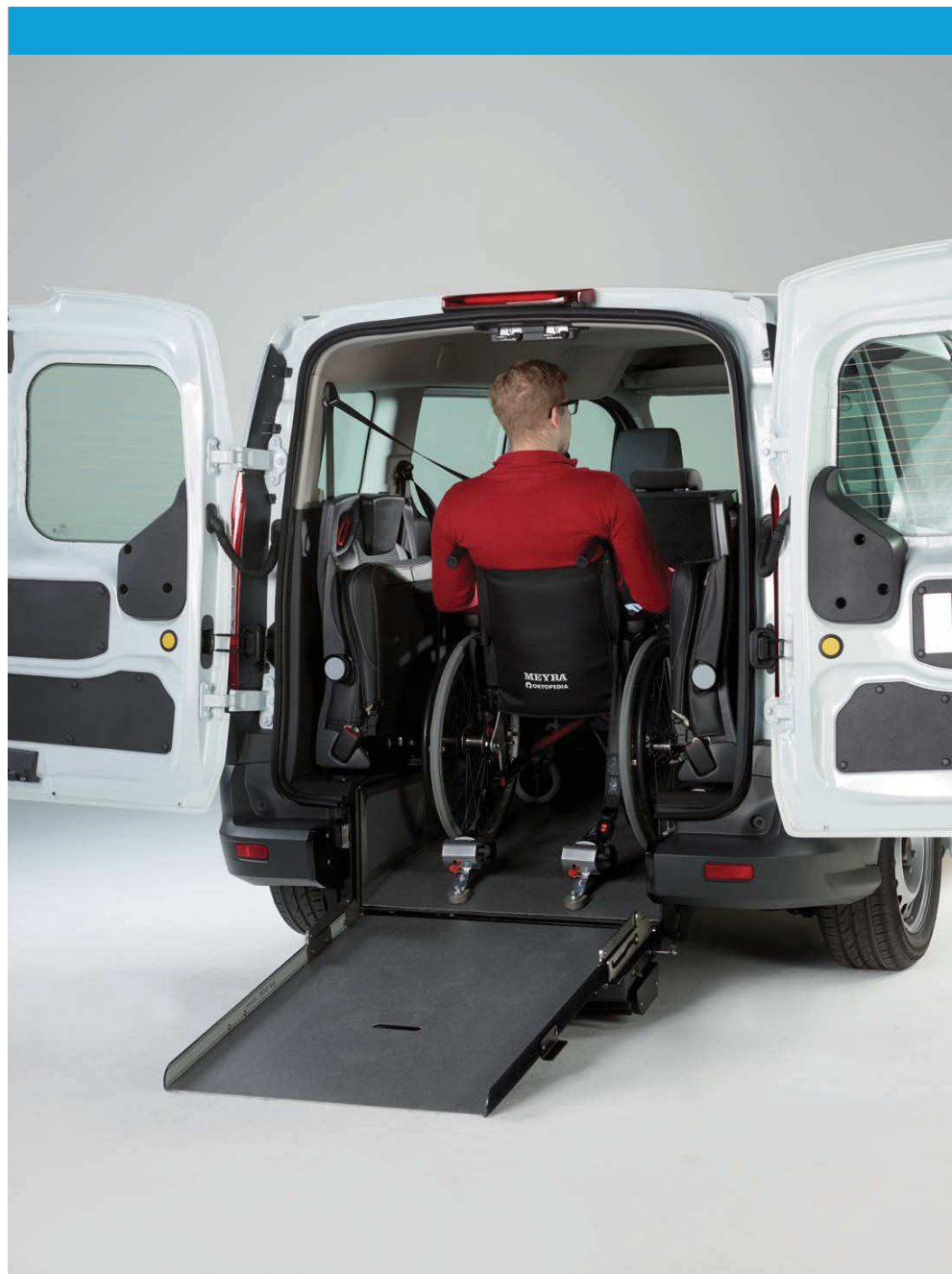
Electric belt C  
with carabiner,  
length 3,6 m  
(front attachment)

Item-No.  
H 350 240 C

Zinc high pressure die casting  
cover for electric belt complete  
cover (front attachment)

Item-No.  
H 350 257





## SILVERSERIES

The ISO 10542 tested **SILVERSERIES** has a fully automatic pull-out and self-tensioning system. Its robust zinc diecasting cover is suitable for daily use in the vehicle.



PROTEKTOR-System

SILVERSERIES

WHEELCHAIR RESTRAINT SYSTEM

General note!  
Static belt only for front attachment.

RETRACTOR SYSTEM WITH LOOP

4 STUD FITTING AT 40°, FLEXIBLE



Protektor®-System  
Pro 2 S LV with loop  
and 4 stud fitting  
at 40°, flexible

- 2 x retractor belt LV
- 2 x static belt LV
- 1 x pelvis belt

Item-No. H 350 501 LV



Protektor®-System  
Pro 4 S LV with loop  
and 4 stud fitting  
at 40°, flexible

- 4 x retractor belt LV
- 1 x pelvis belt

Item-No. H 350 503 LV

4 STUD FITTING TWISTED 40/90°, FLEXIBLE



Protektor®-System  
Pro 2 S LG with loop  
and 4 stud fitting twisted  
40/90°, flexible

- 2 x retractor belt LG
- 2 x static belt LV
- 1 x pelvis belt

Item-No. H 350 501 LG



Protektor®-System  
Pro 4 S LG with loop  
and 4 stud fitting twisted  
40/90°, flexible

- 4 x retractor belt LG
- 1 x pelvis belt

Item-No. H 350 503 LG

4 STUD FITTING, FLAT FLEXIBLE



Protektor®-System  
Pro 2 S LF with loop  
and 4 stud fitting,  
flat flexible

- 2 x retractor belt LF
- 2 x static belt LV
- 1 x pelvis belt

Item-No. H 350 501 LF



Protektor®-System  
Pro 4 S LF with loop  
and 4 stud fitting,  
flat flexible

- 4 x retractor belt LF
- 1 x pelvis belt

Item-No. H 350 503 LF

MONO FITTING AT 40°



Protektor®-System  
Pro 2 S LM with loop  
and Mono fitting at 40°

- 2 x retractor belt LM
- 2 x static belt LM
- 1 x pelvis belt

Item-No. H350 501 LM



Protektor®-System  
Pro 4 S LM with loop  
and Mono fitting at 40°

- 4 x retractor belt LM
- 1 x pelvis belt

Item-No. H 350 503 LM

RETRACTOR SYSTEM WITH HOOK

4 STUD FITTING 40°, FLEXIBLE



Protektor®-System  
Pro 2 S HV with hook  
and 4 stud fitting  
at 40°, flexible

- 2 x retractor belt HV
- 2 x static belt HV
- 1 x pelvis belt

Item-No. H 350 520 HV



4 STUD FITTING 40°, FLEXIBLE



Protektor®-System  
Pro 4 S HV with hook  
and 4 stud fitting  
at 40°, flexible

- 4 x retractor belt HV
- 1 x pelvis belt

Item-No. H350 525 HV

4 STUD FITTING TWISTED 40/90°, FLEXIBLE



Protektor®-System  
Pro 2 S HG with hook  
and 4 stud fitting twisted  
40/90°, flexible

- 2 x retractor belt HG
- 2 x static belt HV
- 1 x pelvis belt

Item-No. H 350 520 HG



Protektor®-System  
Pro 4 S HG with hook  
and 4 stud fitting twisted  
40/90°, flexible

- 4 x retractor belt HG
- 1 x pelvis belt

Item-No. H 350 525 HG

4 STUD FITTING, FLAT FLEXIBLE



Protektor®-System  
Pro 2 S HF with hook  
and 4 stud fitting,  
flat flexible

- 2 x retractor belt HF
- 2 x static belt HV
- 1 x pelvis belt

Item-No. H 350 520 HF



Protektor®-System  
Pro 4 S HF with hook  
and 4 stud fitting,  
flat flexible

- 4 x retractor belt
- 1 x pelvis belt

Item-No. H 350 525 HF

MONO FITTING AT 40°



Protektor®-System  
Pro 2 S HM with hook  
and Mono fitting at 40°

- 2 x retractor belt HM
- 2 x static belt HM
- 1 x pelvis belt

Item-No. H 350 520 HM



Protektor®-System  
Pro 4 S HM with hook  
and Mono fitting at 40°

- 4 x retractor belt HM
- 1 x pelvis belt

Item-No. H 350 525 HM

RETRACTOR SYSTEM WITH CARABINER

4 STUD FITTING 40°, FLEXIBLE



Protektor®-System  
Pro 2 S CV with carabiner  
and 4 stud fitting at 40°, flexible

- 2 x retractor belt CV
- 2 x static belt CV
- 1 x pelvis belt

Item-No. H 350 550 CV



Protektor®-System  
Pro 4 S CV with carabiner  
and 4 stud fitting at 40°, flexible

- 4 x retractor belt CV
- 1 x pelvis belt

Item-No. H350 555 CV

4 STUD FITTING TWISTED 40/90°, FLEXIBLE



Protektor®-System  
Pro 2 S CG with carabiner  
and 4 stud fitting twisted  
40/90°, flexible

- 2 x retractor belt CG
- 2 x static belt CV
- 1 x pelvis belt

Item-No. H 350 550 CG

4 STUD FITTING TWISTED 40/90°, FLEXIBLE



Protektor®-System  
Pro 4 S CG with carabiner  
and 4 stud fitting twisted  
40/90°, flexible

- 4 x retractor belt CG
- 1 x pelvis belt

Item-No. H 350 555 CG

4 STUD FITTING, FLAT FLEXIBLE



Protektor®-System  
Pro 2 S CF with carabiner  
and 4 stud fitting,  
flat flexible

- 2 x retractor belt CF
- 2 x static belt CV
- 1 x pelvis belt

Item-No. H 350 550 CF

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Protektor®-System  
Pro 4 S CF with carabiner  
and 4 stud fitting,  
flat flexible

- 4 x retractor belt CF
- 1 x pelvis belt

Item-No. H 350 555 CF

MONO FITTING AT 40°



Protektor®-System  
Pro 2 S CM with carabiner  
and Mono fitting at 40°

- 2 x retractor belt CM
- 2 x static belt CM
- 1 x pelvis belt

Item-No. H 350 550 CM

Protektor®-System  
Pro 4 CM with carabiner  
and Mono fitting at 40°

- 4 x retractor belt CM
- 1 x pelvis belt

Item-No. H 350 555 CM

RETRACTOR WITH LOOP



Retractor S LV  
with loop and  
4 stud fitting  
at 40°, flexible

Item-No.  
H 350 505 LV



Retractor S LG  
with loop and  
4 stud fitting  
twisted 40/90°, flexible

Item-No.  
H 350 505 LG



Retractor S LF  
with loop and  
4 stud fitting,  
flat flexible

Item-No.  
H 350 505 LF



Retractor S LM  
with loop  
and Mono fitting  
at 40°

Item-No.  
H 350 505 LM

RETRACTOR WITH HOOK



Retractor S HV  
with hook and  
4 stud fitting  
flexible at 40°

Item-No.  
H 350 530 HV



Retractor S HG  
with hook and  
4 stud fitting  
twisted, 40/90°, flexible

Item-No.  
H 350 530 HG



Retractor S HF  
with hook and  
4 stud fitting,  
flat flexible

Item-No.  
H 350 530 HF



Retractor S HM  
with hook  
and Mono fitting  
at 40°

Item-No.  
H 350 530 HM

RETRACTOR WITH CARABINER



Retractor S CV  
with carabiner and  
4 stud fitting  
flexible at 40°

Item-No.  
H 350 560 CV



Retractor S CG  
with carabiner and  
4 stud fitting  
twisted 40/90°, flexible

Item-No.  
H 350 560 CG



Retractor S CF  
with carabiner and  
4 stud fitting,  
flat flexible

Item-No.  
H 350 560 CF



Retractor S CM  
with carabiner  
and Mono fitting  
at 40°

Item-No.  
H 350 560 CM

STATIC BELTS

STATIC BELT WITH 4 STUD FITTING



Static belt LV  
with loop  
and 4 stud fitting  
(front attachment)

Item-No.  
H 350 510 LV



Static belt HV  
with hook  
and 4 stud fitting  
(front attachment)

Item-No.  
H 350 535 HV



Static belt CV  
with carabiner  
and 4 stud fitting  
(front attachment)

Item-No.  
H 350 565 CV

STATIC BELTS

STATIC BELT WITH MONO FITTING



Static belt LM  
with loop  
and Mono fitting  
(front attachment)

Item-No.  
H 350 510 LM



Static belt HM  
with hook  
and Mono fitting  
(front attachment)

Item-No.  
H 350 535 HM



Static belt CM  
with carabiner  
and Mono fitting  
(front attachment)

Item-No.  
H 350 565 CM

ELECTRIC BELTS



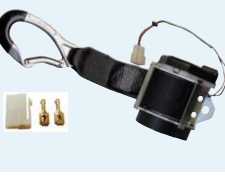
Electric belt L  
with loop,  
length 3,6 m  
(front attachment)

Item-No.  
H 350 240 L



Electric belt H  
with hook,  
length 3,6 m  
(front attachment)

Item-No.  
H 350 240 H



Electric belt C  
with carabiner,  
length 3,6 m  
(front attachment)

Item-No.  
H 350 240 C

Zinc high pressure die casting  
cover for electric belt complete  
cover (front attachment)

Item-No.  
H 350 257







# PLATINUMSERIES HEAVY DUTY HD160





## Wheelchair Restraint System

Increased weight requirements for electric wheelchairs and wheelchair users have created the need for a new wheelchair restraint system for heavier loads. AMF-Bruns developed the new Protektor Platinum Series after intensive crash tests indicated the need for more durable retractors. The Platinum Series is a heavy duty 4 point wheelchair retractor system for wheelchairs and occupants. This wheelchair restraint system can support loads up to 160 kgs (also for wheelchairs with integrated lap belt) – creating a new level of security!



### These facts make all the difference

- Applicable up to 160 kg – also for wheelchairs with integrated lap belt.
- 4 point securement system
- Easy to use
- Robust design
- Fulfills ISO 10542, WC18 and DIN 75078 with integrated lap belt
- The **PLATINUMSERIES** is compatible with all wheelchairs and vehicles
- The **PLATINUMSERIES** is equipped with carabiners, which ensure a safe connection between wheel-chair and vehicle, even if the wheelchair deforms during an accident.

## PLATINUMSERIES

### WHEELCHAIR RESTRAINT SYSTEM

#### RETRACTOR SYSTEM WITH LOOP

4 STUD FITTING AT 40°, FLEXIBLE



Protektor® System  
Pro 4 P LV with loop and  
4 stud fitting at 40°, flexible

- 4 x retractor belt LV
- 1 x pelvis belt

Item no. H 350 815 LV

#### MONO FITTING AT 40°



Protektor® System  
Pro 4 P LM with loop and  
Mono fitting at 40°

- 4 x retractor belt LM
- 1 x pelvis belt

Item no. H 350 815 LM

#### RETRACTOR SYSTEM WITH HOOK

4 STUD FITTING AT 40°, FLEXIBLE



Protektor® System  
Pro 4 P HV with hook and 4  
stud fitting at 40°, flexible

- 4 x retractor belt HV
- 1 x pelvis belt

Item no. H 350 815 HV

#### MONO FITTING AT 40°



Protektor® System  
Pro 4 P HM with hook and  
Mono fitting at 40°

- 4 x retractor belt HM
- 1 x pelvis belt

Item no. H 350 815 HM



#### RETRACTOR SYSTEM WITH CARABINER

4 STUD FITTING 40°, FLEXIBLE

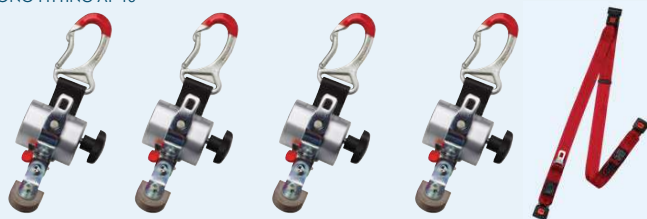


**Protektor® System  
Pro 4 P CV with carabiner  
and 4 stud fitting at 40°,  
flexible**

- 4 x retractor belt CV
- 1 x pelvis belt

Item no. H 350 815 CV

MONO FITTING AT 40°



**Protektor® System  
Pro 4 P CM with carabiner  
and Mono fitting at 40°**

- 4 x retractor belt CM
- 1 x pelvis belt

Item no. H 350 815 CM

#### RETRACTORS

RETRACTOR WITH LOOP



**Retractor P LV with  
loop and 4 stud fitting  
flexible at 40°**

Item no.  
H 350 800 LV



**Retractor P LM with loop  
and mono fitting at 40°**

Item no.  
H 350 800 LM

RETRACTOR WITH HOOK



**Retractor P HV with hook and 4  
stud fitting flexible at 40°**

Item no.  
H 350 800 HV



**Retractor P HM with hook and  
mono fitting at 40°**

Item no.  
H 350 800 HM

RETRACTOR WITH CARABINER



**Retractor P CV with carabiner and 4  
stud fitting at 40°, flexible**

Item no.  
H 350 800 CV



**Retractor P CM with carabiner  
and Mono fitting at 40°**

Item no.  
H 350 800 CM



## Occupant restraints





OCCUPANT RESTRAINT SYSTEM



Static  
shoulder belt  
with buckle,  
two part

Item-No.  
H 350 227



Pelvis belt

Standard length  
Item-No.  
H 350 200

XL Version  
Item-No.  
H 350 198



Automatic  
pelvis belt with  
flexible buckle

Item-No.  
H 350 205



Automatic  
pelvis belt

Item-No.  
H 350 207



Flexible buckle  
length 300 mm

Item-No.  
H 350 210



Automatic  
shoulder belt  
without height  
adjustment

Item-No.  
H 350 225



Automatic  
shoulder belt  
(height adjustable)

Item-No.  
H 350 235



Automatic shoulder belt  
without height adjust-  
ment incl. two 4 stud  
fittings

Item-No.  
H 350 250



Automatic shoulder belt  
with height  
adjustment  
incl. two 4 stud  
fittings

Item-No.  
H 350 239



Static  
shoulder belt

Item-No.  
H 350 226

OCCUPANT RESTRAINT SYSTEM



Automatic 3 point  
shoulder belt  
with retractor height-  
adjustment

Item no.  
H 350 255



Automatic  
3-Point-Belt  
with height  
adjustment  
incl. tongue

Item-No.  
H 350 231



Automatic  
3 point belt  
without height adjustment

Item-No.  
H 350 230



Automatic  
3-Point-Belt  
without height  
adjustment incl.  
two 4 stud fittings

Item-No.  
H 350 251



Automatic  
3-Point-Belt  
with height  
adjustment incl.  
two 4 stud fittings

Item-No.  
H 350 252



WAV Automatic 3-Point-  
Belt  
with height  
adjustment and  
two flexible  
buckles, 300 mm

Item-No.  
H 350 233



WAV Automatic 3-Point-  
Belt  
without height  
adjustment and  
two flexible  
buckles, 300 mm  
Item-No.  
H 350 232



Harness belt  
(only in combination  
with shoulder belt)

Item-No. 350 222

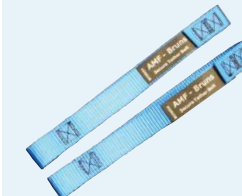
ACCESSORIES



Headrest

W 330 - 410 mm  
Item-No.  
H 150 259

W 400 - 480 mm  
Item-No.  
H 150 258



Secure belt  
300 mm

Item-No.  
H 350 238

FLOOR SYSTEMS

Protektor® Surface  
track

not predrilled

1000 mm length Item-No. H 150 132

1500 mm length Item-No. H 150 134

1750 mm length Item-No. H 150 135

3000 mm length Item-No. H 150 136

predrilled

3000 mm length Item-No. H 150 385

Protektor® Insert track

not predrilled

1750 mm length Item-No. H 150 120

3500 mm length Item-No. H 150 130

predrilled

3500 mm length Item-No. H 150 375



Mono fitting  
(complete)

Item-No.  
H 150 915  
with Bolt M12  
50 mm



Mono fitting  
(head piece)

Item-No.  
H 150 916  
with Bolt M12  
50 mm



Mono fitting with 40°

Item-No.  
H 150 619



Monodisc (floor)  
Chassis reinforcement  
kits available, please  
ask for details.

Item-No.  
H 150 917  
with Bolt M12  
50 mm

ACCESSORIES



Easy-Bag  
for restraint system

Item-No.  
10019363



Storage box  
167.5 x 690 x 383.5 mm

Item-No.  
10012744



Breast belt  
180 cm length  
160 cm length  
110 cm length

Item-No. H 150 222  
Item-No. H 150 223  
Item-No. H 150 224



Storage box  
180 x 840 x 480 mm

Item-No.  
10012270



Floor pocket  
Chassis reinforcement  
kits available, please  
ask for details.

Item no.  
200269390



4 stud fitting

Item-No.  
2002 11247



4 stud fitting  
with bolt

Item-No.  
H 150 615



4 stud fitting 40° bracket

Item-No.  
H 150 616



Black grab handle

Item-No.  
10008015



Yellow grab handle

Item-No.  
10008016



4 stud fitting  
twisted 40°/90°

Item-No.  
H 150 617



4 stud fitting  
flat

Item-No.  
H 150 618



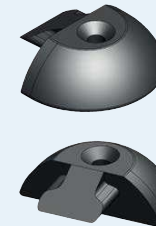
Interior paneling back  
and side loading door  
VW Crafter/  
MAN TGE

Item-No.  
10023062



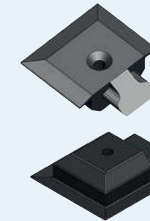
Rubber plugs  
VW Crafter/  
MAN TGE

Item-No.  
(L2) 10023061  
(L3) 10022913



End cap for  
surface track

Item-No.  
200 261 878



End cap for  
insert track

Item-No.  
200 261 840



Duct system Ford  
Transit Custom

Item-No.  
10019740

20001126  
Lugagehook



Mono disc Back  
(incl. U-profile)

Item-No.  
200309251



Floor pocket Back  
(incl. U-profile)

Item-No.  
200309340





#### Back and head support

Smartfloor includes two special back and head support constructions to provide the best possible protection of the back and head of a wheelchair occupant in the event of an accident during transport. Both constructions are suitable for mounting to the floor in an airline rail and flexible in their application at any desired location in the vehicle.

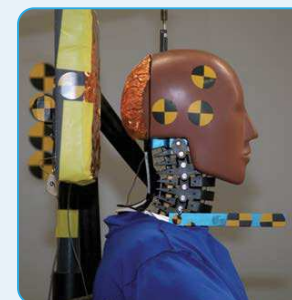


#### Fixed third belt point

Smartfloor delivers a special 3-point shoulder belt for vehicles that are fitted with an airline guide rail mounted in the top side of the vehicle. By means of this rail, a third belt point can be easily created throughout the interior of the vehicle. The advantage is that the vehicle, in combination with a Smartfloor, meets ISO 10542 standards. Delivery options include either a fixed belt or an auto-retractable belt.

#### Standard sets

Smartfloor supplies the AMF Protektor in standard sets inclusive of a red, static hip belt. Depending on the options selected, the sets are fitted with either 2 or 4 retractors, safety belt lock or stainless steel open hooks for attachment to the wheelchair. Options further include a static 3-point shoulder belt or a 3-point auto-retractable shoulder belt. For a complete list of all available sets, see the table on the next page.





## EASYPULL Winch & Front Restraint System

**SMART FLOOR**  
Flexibility inside

The fully integrated wheelchair restraint system acc. ISO 10542 and DIN 75078-2 Standards with automatic winch function. Compatible with EMC (electro magnetic compatibility) in accordance with the European legislation.



**SMART FLOOR**  
Flexibility inside

## EASYPULL Winch & Front Restraint System

### Specification

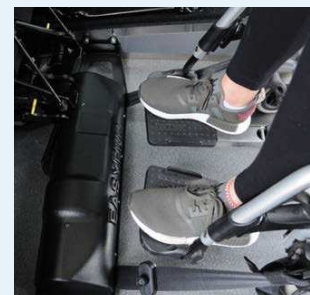
- Easy operation
- Wireless remote control
- Audible signal when belt straps are securely locked
- 4 m belt length
- Easy installation
- Compact design
- 2 speed levels
- 20 G crash tested
- ISO 10542 tested
- Individually adjustable end position of the wheelchair inside the vehicle

### TECHNICAL DATA

Load Capacity (SWL):	160 kg
Control:	via push buttons
Power:	electrical, 12 V
Installation:	retrofittable

### ITEM CODE      ITEM NAME

H350300L	EasyPull with Loop
H350300H	EasyPull with Hook



## RAIL SOLUTION

**VEHICLE APPROVED ANCHORAGE POINTS FOR OCCUPANT RESTRAINTS**

According to EU directive 2007/46/EG (214/2014 Annex XI, 3) – mandatory in European countries

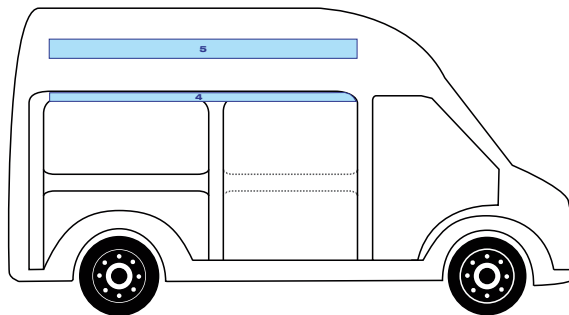
**UPPER ANCHORAGE POINTS**

All AMF-Bruns occupant restraint systems – whether static or automatic shoulder belts in combination with a separate pelvis belt or integrated 3 point belt – have been tested with 24.5 kN forwards and 8.2 kN backwards. AMF-Bruns has developed and produces special assembly kits for each vehicle. The pull tests are carried out in our own test centre in cooperation with TÜV. The assembly kits are compatible with all AMF-Bruns restraint systems.

AMF-BRUNS PROTEKTOR® WHEELCHAIR AND OCCUPANT RESTRAINT SYSTEM FULFILLS THE EU DIRECTIVE 2007/46/EG WHICH CAME INTO FORCE ON 1ST NOVEMBER 2014.

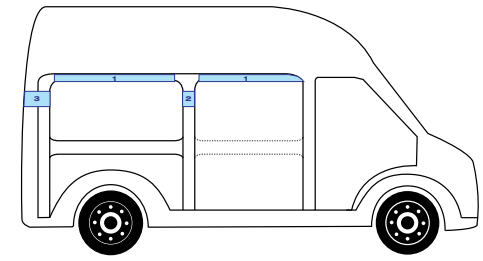
**ATTENTION!**

The vehicle manufacturer's body fitting guidelines must be adhered to and AMF-Bruns original parts need to be used for the installation!



Vehicle Model without Trim	Area	Assembly material Mounting rail 1 m	Assembly material Mounting rail 3 m	Mounting rail 1 m	Mounting rail 3 m
Peugeot Boxer / Fiat Ducato	4	1001 9571	1001 9572	H150 132	H150 136
Citroen Jumper					
Ford Transit	4	1001 9578	1001 9579	H150 132	H150 136
Nissan NV400 / Opel Movano	4	1001 9578	1001 9579	H150 132	H150 136
Renault Master	5	1001 9578	1001 9579	H150 132	H150 136
Volkswagen Crafter (old)	4	1001 9680	1001 9681	H150 132	H150 385
Mercedes-Benz Sprinter	4	1001 9680	1001 9681	H150 132	H150 385
Volkswagen T5 / T6	4	1001 9578	1001 9579	H150 132	H150 136

## SINGLE POINT SOLUTION



Vehicle Model	Area	Part No. with Trim	Part No. without Trim
Peugeot Boxer/ Fiat Ducato	1	1001 9565	1001 9564
Citroen Jumper	2	1001 9564	1001 9564
	3	1001 9563	1001 9562
Citroen Spacetourer, Peugeot Traveller, Toyota Proace	2	-	10023562
	2	-	10023562
Ford Transit F7 (V363)	1	1001 9665	1001 9665
	2	1001 9574	1001 9574
	3	1001 9564	1001 9564
Ford Transit Custom	1	1001 9564	1001 9564
	2	1001 9573	1001 9573
	3	1001 9574	1001 9574
Volkswagen Crafter (new) / MAN TGE	1	1001 9564	1001 9564
	2	1001 9573	1001 9573
	3	1001 9574	1001 9574
Mercedes-Benz Vito	2	1001 9679	1001 9679
	3	1001 9678	1001 9679
Volkswagen Crafter (old)	1	1001 9676	1001 9676
Mercedes-Benz Sprinter	1	1001 9676	1001 9676
Nissan NV300 / Opel Vivaro	1	1001 9564	1001 9564
Renault Trafic / Fiat Talento	2	1001 9564	1001 9564
	3	1001 9574	1001 9574
Nissan NV400 / Opel Movano	1	1001 9577	1001 9576
Master	2	1001 9564	1001 9564
	3	1001 9562	1001 9562
Volkswagen T6	1*	1001 9574	1001 9574
	2	1001 9574	1001 9574
Volkswagen Crafter (new)	1	1002 3278	1002 3278
MAN TGE	1	1002 3278	1002 3278

\* Only Transporter and Kombi



## FOR PASSIVE DRIVERS



AMF-Bruns provides tested head and backrest for wheelchair users. Only AMF-Bruns possesses patented 20 G front impacted and 10 G rear impacted head & back supports.

- Maximum confidence
- Reliable, space-saving and comfortable
- Complies with dynamic crash tests (Euro-NCAP 10 G rear-end collision)
- Suitable for minibuses and cut floor vehicles
- Includes approved integrated 2-point shoulder belt
- Height-adjustable – fits different wheelchairs
- Easy to handle in the vehicle
- Separate, 180° rotatable head- and back support
- Optional: On lockable for Smartfloor application (easy removable)
- The FutureSafe floor mounted i.c.w. Smartfloor is a TÜV tested solution for shoulderbelt use.



Floor mounted

With the easy to use head- and backrest FUTURESAFE®, AMF-Bruns is setting a new standard of safety.

- Various crashtests show clearly: FUTURESAFE® ensures the highest level of safety in case of a rear impact.
- On the top of this the integrated shoulderbelt ensures the essential safety in case of a front impact.
- FUTURESAFE® - The only incorporated safety system with head- and backrest.

Item code	Item name
10019544	FutureSafe Floor mounted left, Shoulder belt without height adjustable
10019543	FutureSafe Floor mounted left, Shoulder belt with height adjustable
10019546	FutureSafe Floor mounted right, Shoulder belt without height adjustable
10019545	FutureSafe Floor mounted right, Shoulder belt with height adjustable
10011173	FutureSafe Quick lock AMF lockable for Smartfloor application

## FOR ACTIVE DRIVERS

### Specification

- Maximum assurance, 15 G crash tested
- Height-adjustable – fits different wheelchairs
- 90° rotatable head and back support
- Single solution for active drivers on market according to ISO 10542, Part M
- Easy to operate in the vehicle via a switch on the dashboard
- Compatible with EMC in accordance with the European legislation
- Available for Volkswagen T6 and Mercedes-Benz V-Class



Item code	Item name
200406060	eFutureSafe Head & Backrest for LHD

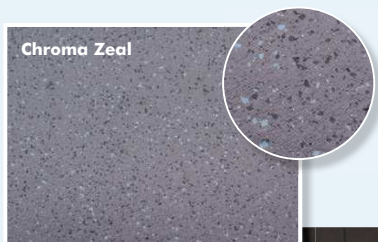
Meta Storm



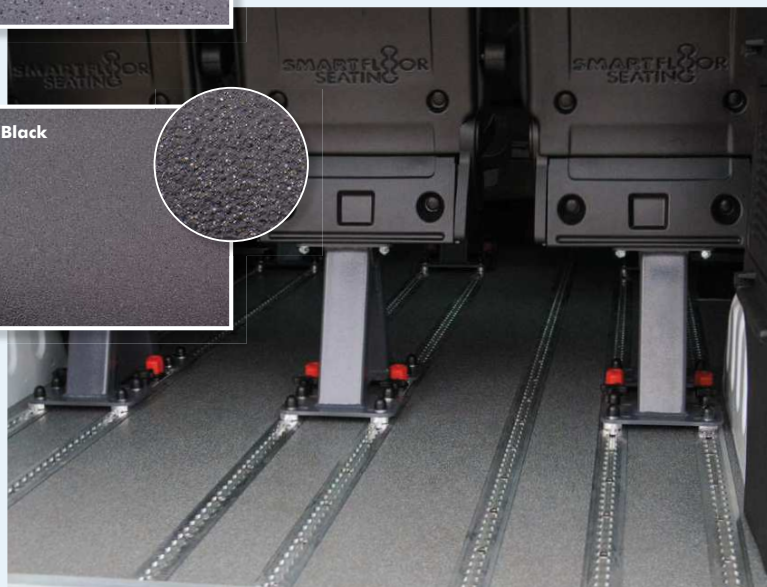
Smartfloor floor covering is especially designed for intensive use in the transport sector. The anti-skid surface makes this wear-resistant floor covering a perfect and durable solution for use in vehicles and for the conveyance of passengers.

- Safe anti-skid principle, even in wet conditions
- Durable and hard-wearing
- Colour fast throughout the active service life
- Flexible to install near wheel housing and boarding structures
- Dirt-resistant and easy to clean
- Saves fuel thanks to low weight

Chroma Zeal



Meta Black



#### Composition

Matrix	High-quality vinyl
Ingredients	Aluminium oxide pellets, silicium carbide in the wearing course, quartz basic colour in the surface layer with additional coloured chips for the Altro Transflor Chroma series
Structure support	Polyester cellulose reinforced with glass fibre
Backing	Polyester cellulose
Optional backing	Backing with polyester-like structure (see Altro supplier)

#### Recommended cleaning method

Thanks to the technical development of Altro safety floors, the floors are considerably easier to clean. Visit [www.altrotransflor.com](http://www.altrotransflor.com) for extensive cleaning advice from Altro Transflor.

#### Installation and maintenance

All fitting must be carried out in accordance with the local standards and the Altro Transflor installation manual.

Sub-floor and adhesives In accordance with the recommendations in the Altro Transflor installation manual (see also [www.altrotransflor.com](http://www.altrotransflor.com))

Note: failure to comply with the Altro Transflor installation instructions can lead to reduced performance and slip resistance of the floor. The floor must be thoroughly cleaned before delivery and protected during other work.

Altro Transflor Meta and Chroma are not suited for spaces in which it is allowed to smoke, as the risk of burning cigarettes compromising the floor is too high.

#### Choice of colour

When choosing the colour of the Altro Transflor floor, the volume of traffic in the room must be taken into account. When in doubt, please contact Smartfloor.

Item code	Item name	Measurement
10003965	Altro Transflor Chroma Zeal	20 x 2 Mtr
10003962	Altro Transflor Meta Black	20 x 2 Mtr
10008057	Altro Transflor Meta Storm	20 x 2 Mtr

