1 PROFILE SYSTEM

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PROFILE SERIES 30



23 x 16 20.1115/0



20.0983/0



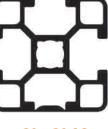
20.1116/0



20.1117/0



20.1068/0





30 x 30 2G



30 x 30

20.1139/0



20.1124/0

30 x 30 3G 20.1085/0

30 x 30 G 20.1141/0



30 R 90° 20.1125/0



20.1136/0

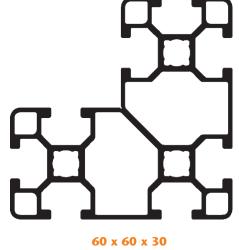
30 R 45° 20.1135/0



30 R 30° 20.1134/0



30 x 60 20.0994/0



20.0982/0

PROFILE SERIES 45



19 x 32

20.1000/0







32 x 32 F 20.1054/0

Clamping profile

32 x 32

20.1070/0



Handle profile 32 20.1088/0



32 x 180 20.1016/0



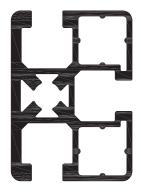
19 x 19 S 20.1073/0



19 x 45 20.1001/0



45 x 19 20.0993/0



45 x 32 UL 20.1065/0



Clamping profile 45 x 32 20.1053/0

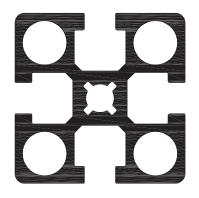


Clamp profile 45 x 45 F 20.1147/0



20.105a5/0

PROFILE SERIES 45



45 X 45 20.1006/0



45 x 45 2GG 20.1099/0



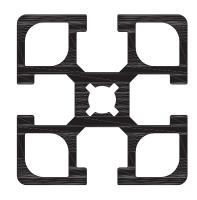
45 x 45 1G 20.1126/0



45 x 45 3G 20.1048/0



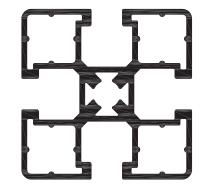
45 x 45 2G 20.1072/0



45 x 45 F 20.1033/0



45 x 45 G 20.1028/0

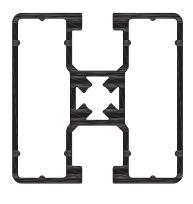


45 x 45 UL 20.1063/0

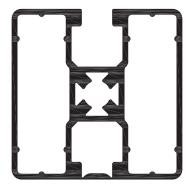


45 x 45 UL 2GG 20.1122/0

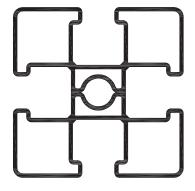
PROFILE SERIES 45



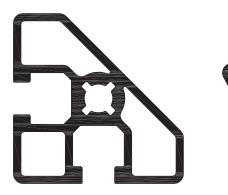
45 x 45 UL 2GG 20.1122/0







45 x 45 VA 20.2000/0

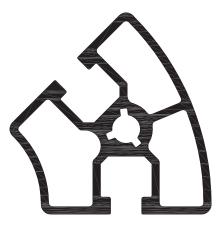


45 / 45°

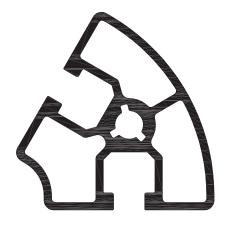
20.1029/0



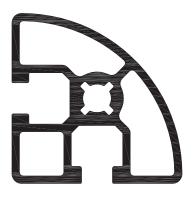
45 R 30° 20.1094/0



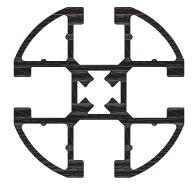
45 R 45° 20.1095/0



45 R 60° 20.1096/0

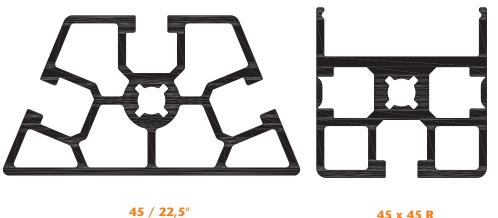


45 R 90° 20.1069/0

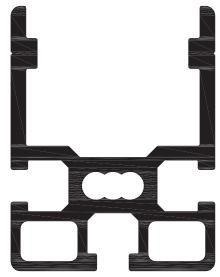


45 R4 20.1120/0

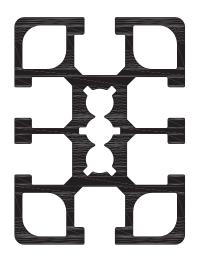
PROFILE SERIES 45



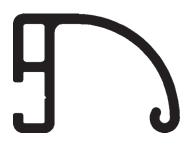
45 / 22,5 20.1030/0 **45 x 45 R** 20.1046/0



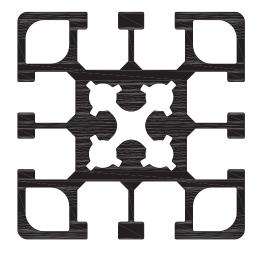
Profile height adjustment 20.1143/0



45 x 60 F 20.1023/0



Handle profile 20.1045/0

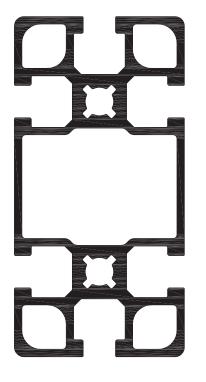


60 x 60 F 20.1049/0

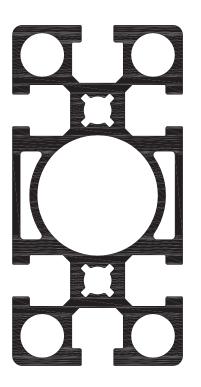


Guide rail profile 20.1038/0

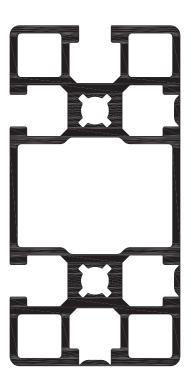
PROFILE SERIES 45



45 x 90 F 20.1032/0



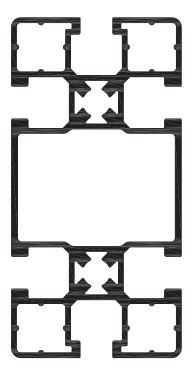
45 x 90 S 20.1017/0



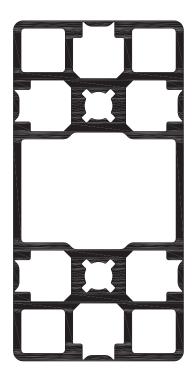
45 x 90

20.1009/0

45 X 90 2G 20.1081/0

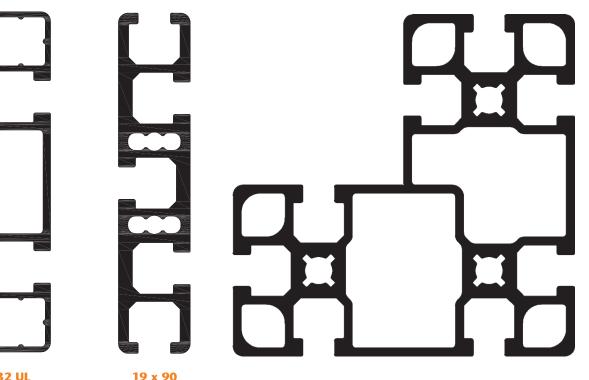


45 x 90 UL 20.1067/0



45 x 90 G 20.1015/0

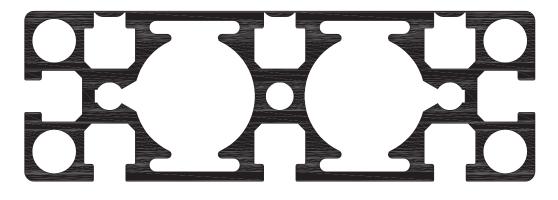
PROFILE SERIES 45



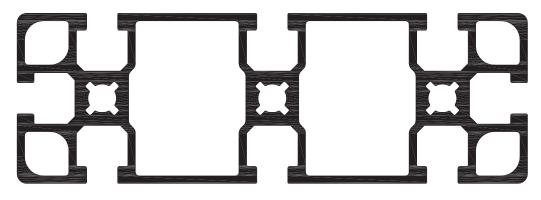
90 x 32 UL 20.1066/0

19 x 90 20.0995/0

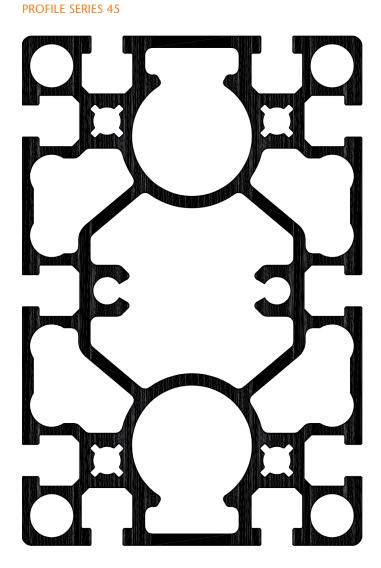
90 x 90 x 45 20.0984/0



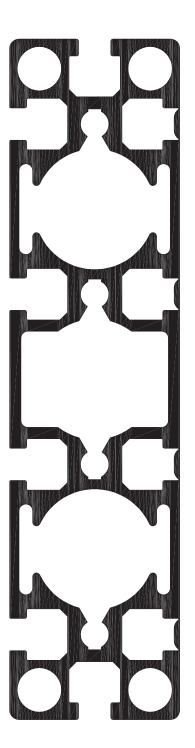
45 x 135 1G 20.1078/0



45 x 135 F 20.1087/0



90 x 135 20.1148/0

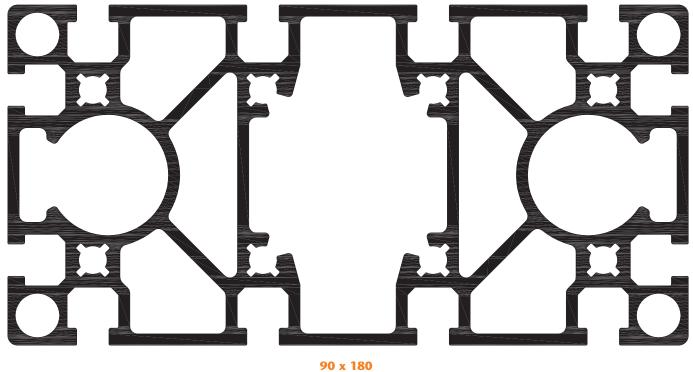


45 x 180 1G 20.1079/0

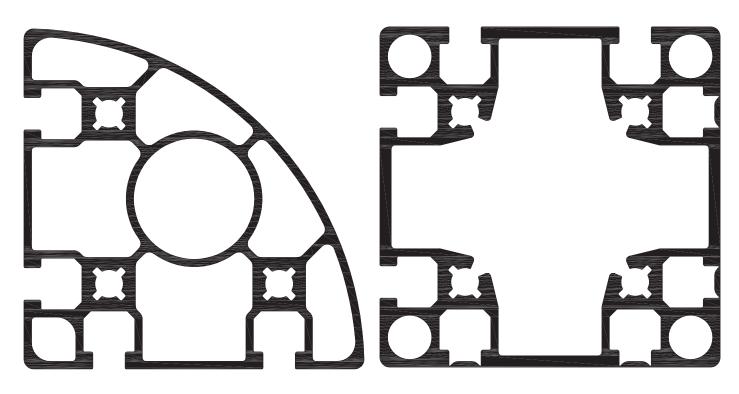


270 x 19 20.1077/0

PROFILE SERIES 45



20.1013/0



90 R 90° 20.1091/0

90 x 90 2G 20.1044/0

90 x 90 G 20.1082/0

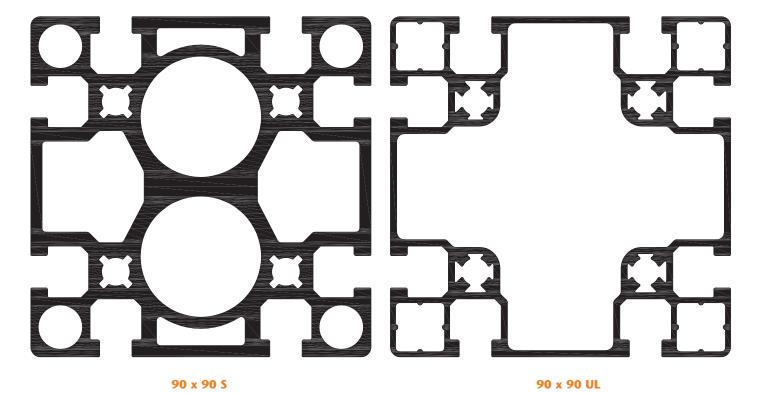
20.1019/0

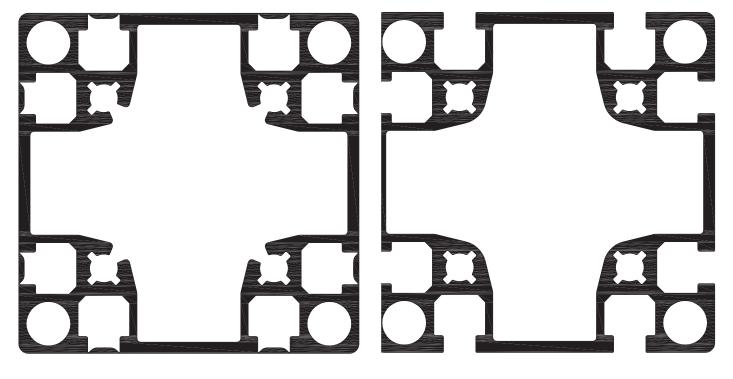
24

MINITEC PROFILE SYSTEM

90 x 90 L 20.1010/0

20.0999/0



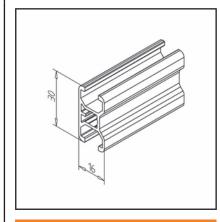


PROFILE SECTIONS - PROFILE SERIES 45

PROFILE SERIES 45



PROFILE 16 X 30



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1

- $-I_x = 1.008 \text{ cm}^4$
- $-I_v = 0.479 \text{ cm}^4$
- $-w_x = 0.672 \text{ cm}^3$
- $-w_v = 0.544 \text{ cm}^3$
- Weight = 0.382 kg/m
- Bar length = 6 m
- Packing unit = 72 m



APPLICATIONS

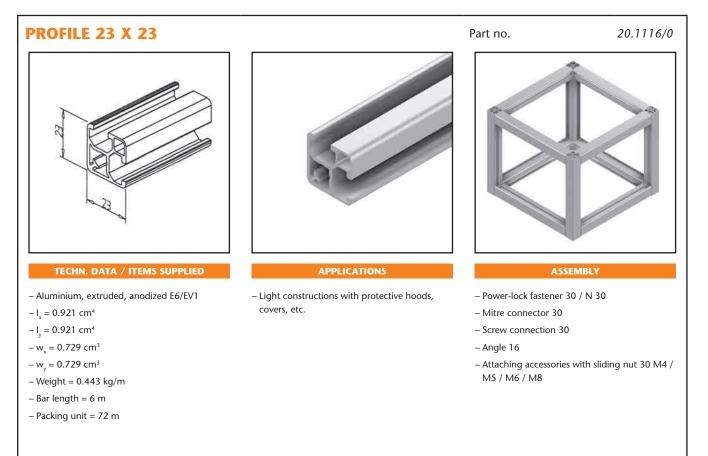
 Light constructions with protective hoods, covers, etc.

Part no.

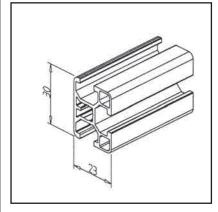
20.0983/0



- Power-lock fastener 30 / N 30
- Mitre connector 30
- Screw connection 30
- Angle 16
- Attaching accessories with sliding nut 30 M4 / M5 / M6 / M8



PROFILE 23 X 30



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $-I_x = 1.565 \text{ cm}^4$
- $-I_v = 1.187 \text{ cm}^4$
- $-w_x = 1.043 \text{ cm}^3$
- $-w_v = 0.975 \text{ cm}^3$
- Weight = 0.524 kg/m
- Bar length = 6 m
- Packing unit = 72 m



APPLICATIONS

- Light constructions with protective hoods, covers, etc.

Part no.

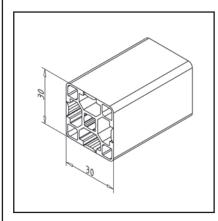




- Power-lock fastener 30 / N 30
- Mitre connector 30
- Screw connection 30
- Angle 16 / 30
- Attaching accessories with sliding nut 30 M4 / M5 / M6 / M8



PROFILE 30 X 30 G



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $-I_x = 2.554 \text{ cm}^4$
- $-I_v = 2.554 \text{ cm}^4$
- $-w_{y} = 1.702 \text{ cm}^{3}$
- $-w_v = 1.702 \text{ cm}^3$
- Weight = 0.749 kg/m
- Bar length = 6 m
- Packing unit = 54 m

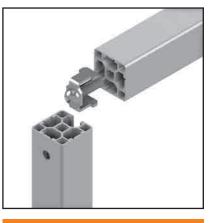


APPLICATIONS

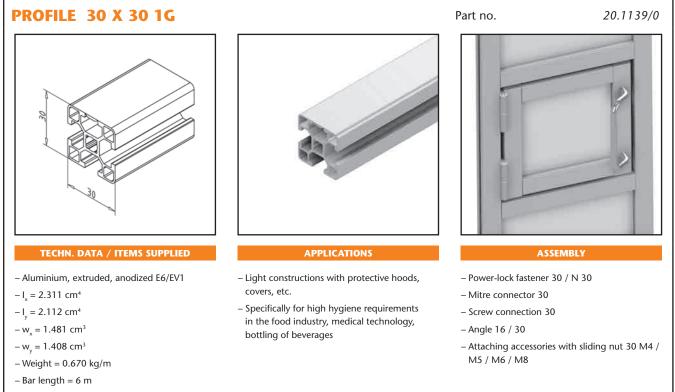
- Light constructions with protective hoods, covers, etc.
- Specifically for high hygiene requirements in the food industry, medical technology, bottling of beverages

Part no.

20.1141/0



- Power-lock fastener 30 / N 30
- Mitre connector 30
- Screw connection 30
- Angle 16 / 30
- Attaching accessories with sliding nut 30 M4 / M5 / M6 / M8



– Packing unit = 54 m

PROFILE 30 X 30 2G

TECHN. DATA / ITEMS SUPPLIED

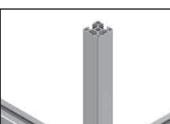
- Aluminium, extruded, anodized E6/EV1
- $-I_x = 2.334 \text{ cm}^4$
- $-I_v = 2.334 \text{ cm}^4$
- $-w_{x} = 1.501 \text{ cm}^{3}$
- $-w_v = 1.501 \text{ cm}^3$
- Weight = 0.695 kg/m
- Bar length = 6 m

```
– Packing unit = 54 m
```



APPLICATIONS

- Light constructions with protective hoods, covers, etc.
- Specifically for high hygiene requirements in the food industry, medical technology, bottling of beverages



20.1124/0

ASSEMBLY

- Power-lock fastener 30 / N 30
- Mitre connector 30
- Screw connection 30
- Angle 16 / 30

Part no.

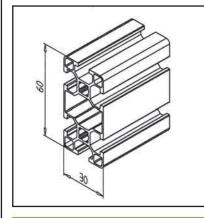
- Attaching accessories with sliding nut 30 M4 / M5 / M6 / M8

MINITEC PROFILE SYSTEM

28

PROFILE 30 X 30 3G 20.1085/0 Part no. **TECHN. DATA / ITEMS SUPPLIED APPLICATIONS** ASSEMBLY - Aluminium, extruded, anodized E6/EV1 - Light constructions with protective hoods, - Power-lock fastener 30 / N 30 covers, etc. $-I_x = 2.321 \text{ cm}^4$ - Mitre connector 30 - Specifically for high hygiene requirements $-I_{v} = 2.537 \text{ cm}^{4}$ - Screw connection 30 in the food industry, medical technology, $-w_x = 1.493 \text{ cm}^3$ – Angle 16 / 30 bottling of beverages $-w_v = 1.691 \text{ cm}^3$ - Attaching accessories with sliding nut 30 M4 / M5 / M6 / M8 – Weight = 0.722 kg/m – Bar length = 6 m – Packing unit = 54 m

PROFILE 30 X 60



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1

- $-I_x = 14.898 \text{ cm}^4$
- $-I_v = 3.792 \text{ cm}^4$
- $-w_{y} = 4.966 \text{ cm}^{3}$
- $-w_v = 2.528 \text{ cm}^3$
- Weight = 1.069 kg/m
- Bar length = 6 m
- Packing unit = 54 m



APPLICATIONS

 Light constructions with protective hoods, covers, etc. Part no.

20.0994/0



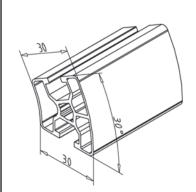
ASSEMBLY

- Power-lock fastener 30 / N 30
- Mitre connector 30
- Screw connection 30
- Angle 16 / 30
- Attaching accessories with sliding nut 30 M4 / M5 / M6 / M8

MINITEC PROFILE SYSTEM 29



PROFILE 30 R 30°



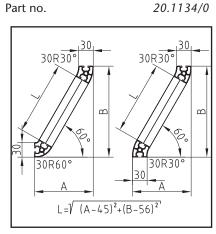
TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $-I_x = 1.939 \text{ cm}^4$
- $-I_v = 1.909 \text{ cm}^4$
- $-w_x = 0.982 \text{ cm}^3$
- $-w_y = 1.006 \text{ cm}^3$
- Weight = 0.601 kg/m
- Bar length = 6 m
- Packing unit = 72 m

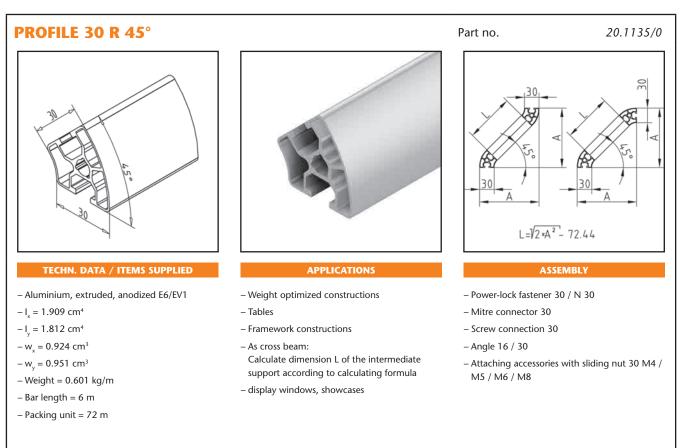


APPLICATIONS

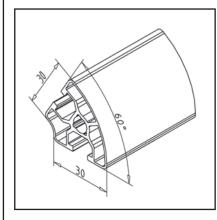
- Weight optimized constructions
- Tables
- Framework constructions
- display windows, showcases
- As cross beam: Calculate dimension L of the intermediate support according to calculating formula



- Power-lock fastener 30 / N 30
- Mitre connector 30
- Screw connection 30
- Angle 16 / 30
- Attaching accessories with sliding nut 30 M4 / M5 / M6 / M8



PROFILE 30 R 60°



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1

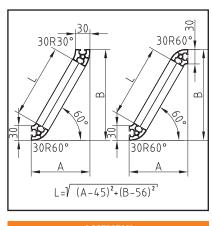
- $-I_{y} = 1.847 \text{ cm}^{4}$
- $-I_v = 1.721 \text{ cm}^4$
- $-w_{y} = 0.904 \text{ cm}^{3}$
- $-w_v = 0.951 \text{ cm}^3$
- Weight = 0.590 kg/m
- Bar length = 6 m

```
– Packing unit = 72 m
```



APPLICATIONS

- Weight optimized constructions
- Tables
- Framework constructions
- display windows, showcases
- As cross beam:
- Calculate dimension L of the intermediate support according to calculating formula



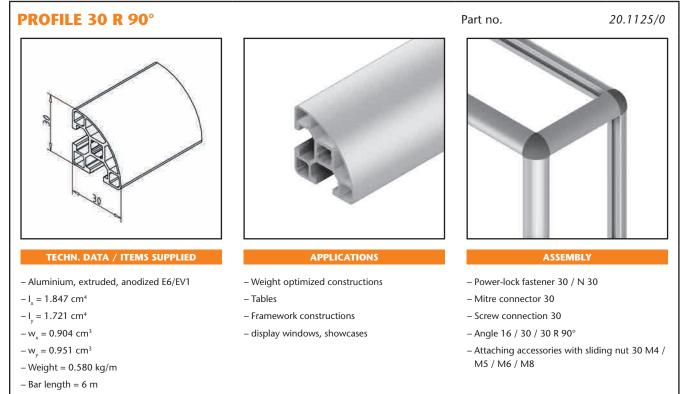
20.1136/0

ASSEMBLY

- Power-lock fastener 30 / N 30
- Mitre connector 30
- Screw connection 30
- Angle 16 / 30

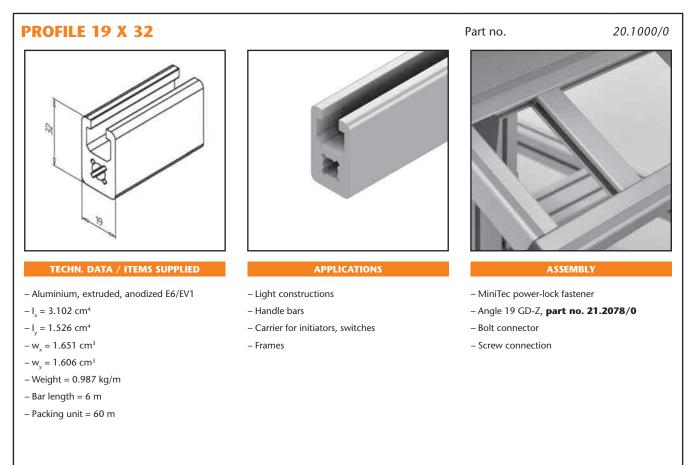
Part no.

Attaching accessories with sliding nut 30 M4 / M5 / M6 / M8

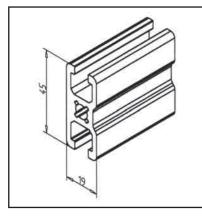


– Packing unit = 54 m

32 MINITEC PROFILE SYSTEM



PROFILE 19 X 45

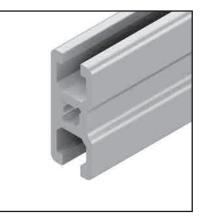


TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1

- $-I_x = 6.173 \text{ cm}^4$
- $-I_v = 1.843 \text{ cm}^4$
- $-w_x = 2.743$ cm³
- $-w_v = 1.836 \text{ cm}^3$
- Weight = 1.101 kg/m
- Bar length = 6 m

```
– Packing unit = 60 m
```



APPLICATIONS

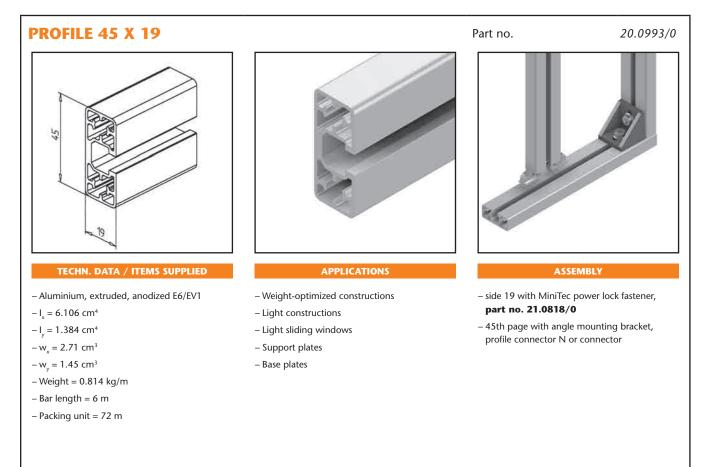
- Bracing, doors
- Guard units
- Weight optimized constructions
- Frames



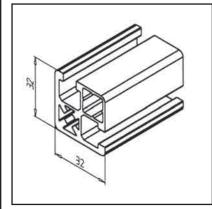
20.1001/0



- MiniTec power-lock fastener
- Angle 19 GD-Z, part no. 21.2078/0
- Bolt connector
- Screw connection

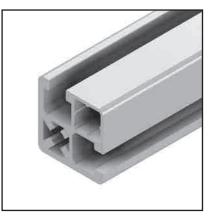


PROFILE 32 X 32 UL



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $-I_x = 4.1 \text{ cm}^4$
- $-I_y = 4.1 \text{ cm}^4$
- $-w_x = 2.267 \text{ cm}^3$
- $-w_y = 2.267 \text{ cm}^3$
- Weight = 1.052 kg/m
- Bar length = 6 m
- Packing unit = 48 m



APPLICATIONS

- Weight-optimized constructions
- End table
- Swivel, lifting and sliding doors
- Bracings

20.1064/0

- MiniTec power-lock fastener
- Angle 19 GD-Z, part no. 21.2078/0
- Bolt connector

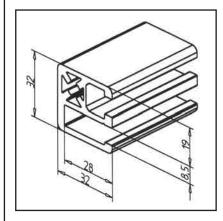
Part no.

- Screw connection

PROFILE 32 X 32 F Part no. 20.1054/0 **TECHN. DATA / ITEMS SUPPLIED APPLICATIONS** ASSEMBLY - Aluminium, extruded, anodized E6/EV1 - Weight optimized constructions - MiniTec power-lock fastener $-I_{y} = 4.825 \text{ cm}^{4}$ - Angle 19 GD-Z, part no. 21.2078/0 - End table $-I_{v} = 4.825 \text{ cm}^{4}$ - Swivel, lifting and sliding doors - Bolt connector $-w_x = 2.703 \text{ cm}^3$ - Bracings - Screw connection $- w_v = 2.703 \text{ cm}^3$ - Weight = 1.288 kg/m – Bar length = 6 m

CLAMPING PROFILE 32 X 32

– Packing unit = 48 m



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $-I_x = 5.024 \text{ cm}^4$
- $-I_v = 4.418 \text{ cm}^4$
- $-w_{y} = 3.041 \text{ cm}^{3}$
- $-w_v = 2.398 \text{ cm}^3$
- Weight = 1.211 kg/m
- Bar length = 6 m
- Packing unit = 48 m

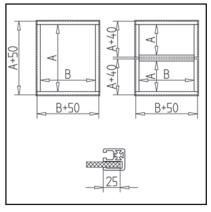


APPLICATIONS

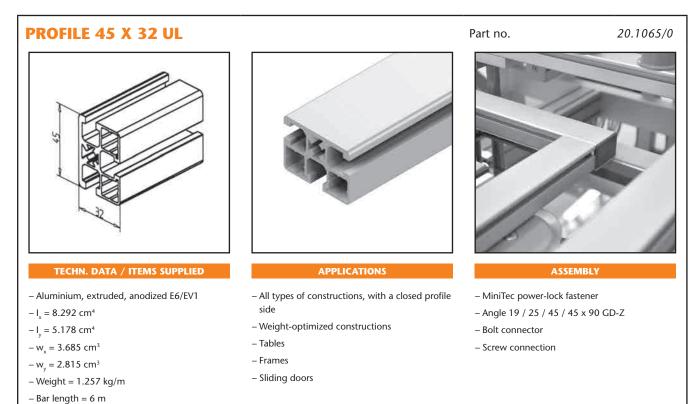
- All types of safety equipment
- For clamping of surface elements, such as woven mesh, panels, plates with a maximum strength of 8 mm
- In the case of larger protective fields, intermediate struts made of clamping profile 45 x 32 must be used in order to ensure adequate safety against pushing out of the surface elements; To do this, remove cover strips on clamping profile 45 x 32 mm
- Cut size of surface elements:
 Dimension A/B 40/50 mm depending on application

Part no.

20.1070/0

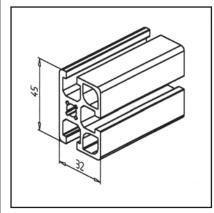


- MiniTec power-lock fastener; no bores required
- No release of panel element corners required
- Pre-assemble tripartite frame
- Insert panel element and install last profile brace
- Press in the distance profile **part no.** 22.1039/0 on the inside or drive in with a flat tool
- For panel elements < Mount 6 mm with matching plug-in seal
- or < Mount 4 mm with spacer profile and additionally suitable plug-in seal on the opposite side



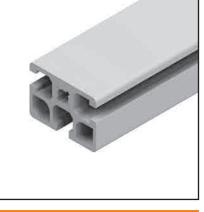
– Packing unit = 48 m

PROFILE 45 X 32 F



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $-I_{y} = 10.189 \text{ cm}^{4}$
- $-I_v = 6.499 \text{ cm}^4$
- $-w_x = 4.528$ cm³
- $-w_v = 3.762 \text{ cm}^3$
- Weight = 1.588 kg/m
- Bar length = 6 m
- Packing unit = 48 m



APPLICATIONS

- All types of constructions, with a closed profile side
- Tables
- Frames
- Sliding doors
- Rails

20.1055/0

ASSEMBLY

- MiniTec power-lock fastener
- Angle 19 / 25 / 45 / 45 x 90 GD-Z
- Bolt connector

Part no.

- Screw connection

CLAMPING PROFILE 45 X 32

TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1

 $-I_{y} = 6.465 \text{ cm}^{4}$

 $-I_{v} = 9.521 \text{ cm}^{4}$

 $-w_x = 3.999 \text{ cm}^3$

 $-w_v = 4.119 \text{ cm}^3$

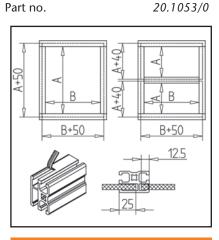
– Bar length = 6 m

– Packing unit = 48 m

- Weight = 1.615 kg/m

APPLICATIONS

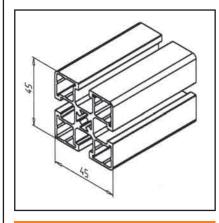
- In the case of larger protective fields, intermediate struts made of clamping profile 45 x 32 must be used in order to ensure adequate safety against pushing out of the surface elements; To do this, remove cover strips on clamping profile 45 x 32 mm
- All types of safety equipment
- For clamping of surface elements, such as woven mesh, panels, plates with a maximum strength of 8 mm
- Cut size of surface elements:
 Dimension A/B 40/50 mm depending on application



ASSEMBLY

- MiniTec power-lock fastener; no bores required
- No release of panel element corners required
- Pre-assemble tripartite frame
- Insert panel element and install last profile brace
- Press in the distance profile **part no. 22.1039/0** on the inside or drive in with a flat tool
- For panel elements < Mount 6 mm with matching plug-in seal or < Mount 4 mm with spacer profile and additionally suitable plug-in seal on the

PROFILE 45 X 45 UL



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $-I_x = 9.953 \text{ cm}^4$
- $-I_v = 9.953 \text{ cm}^4$
- $-w_{y} = 4.423 \text{ cm}^{3}$
- $-w_v = 4.423 \text{ cm}^3$
- Weight = 1.445 kg/m
- Bar length = 6 m
- Packing unit = 54 m



APPLICATIONS

Weight-optimized constructionsAll kinds of constructions

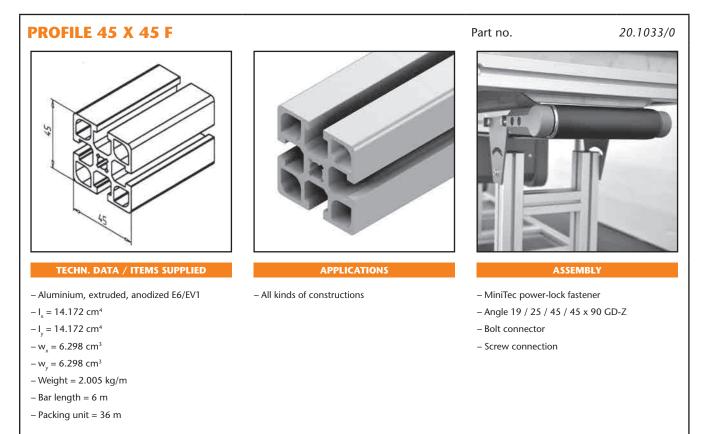
Part no.

opposite side

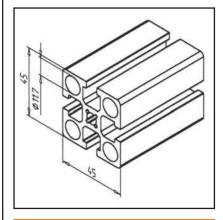
20.1063/0



- MiniTec power-lock fastener
- Angle 19 / 25 / 45 / 45 x 90 GD-Z
- Bolt connector
- Screw connection



PROFILE 45 X 45



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $-I_x = 15.934 \text{ cm}^4$
- $-I_v = 15.934 \text{ cm}^4$
- $-w_x = 7.081 \text{ cm}^3$
- $-w_y = 7.081 \text{ cm}^3$
- Weight = 2.205 kg/m
- Bar length = 6 m
- Packing unit = 36 m



APPLICATIONS

- General constructions
- Compressed air piping
- Linear guides

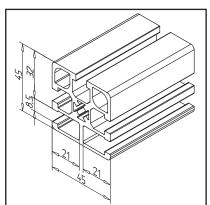
Part no.

20.1006/0



- MiniTec power-lock fastener
- Angle 25 / 45, bolt-fastener, screw connection
- The Ø 11.7 mm holes can be bored with G 1/4 for holding screw plugs or pneumatic connections
- Lateral connections G 1/8" direct into the profile

CLAMPING PROFILE 45 X 45 F



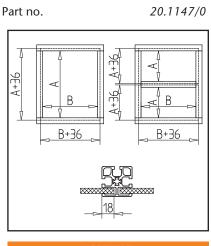
TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $-I_x = 13.521 \text{ cm}^4$
- $-I_y = 12.308 \text{ cm}^4$
- $-w_x = 5.836 \text{ cm}^3$
- $-w_y = 5.470 \text{ cm}^3$
- Weight = 1.850 kg/m
- Bar length = 6 m
- Packing unit = 36 m



APPLICATIONS

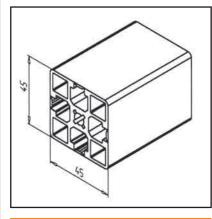
- For clamping of surface elements, such as woven mesh, panels, plates with a maximum strength of 8 mm
- All types of safety equipment
- Cut size of surface elements: Dimension A/B - 36 mm



ASSEMBLY

- MiniTec power-lock fastener; no bores required
- No release of panel element corners required
- Pre-assemble tripartite frame
- Insert panel element and install last profile brace
- Press in the distance profile **part no. 22.1039/0** on the inside or drive in with a flat tool
- For panel elements < Mount 6 mm with matching plug-in seal or < Mount 4 mm with spacer profile and
- or < Mount 4 mm with spacer profile and additionally suitable plug-in seal on the opposite side

PROFILE 45 X 45 G



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $-I_x = 14.087 \text{ cm}^4$
- $-I_v = 14.087 \text{ cm}^4$
- $-w_{y} = 6.261 \text{ cm}^{3}$
- $-w_v = 6.261 \text{ cm}^3$
- Weight = 1.997 kg/m
- Bar length = 6 m

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– Packing unit = 36 m
```

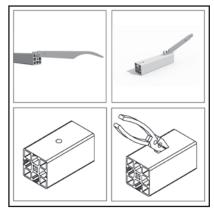


APPLICATIONS

- All types of constructions, specifically for high hygiene requirements in the food industry, medical technology, bottling of beverages
- To close open grooves with the cover profile L part no. 20.1021/0
- Silicon sealings for profile connections on request

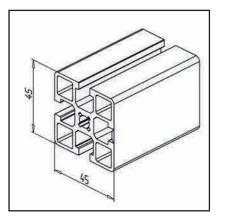
Part no.





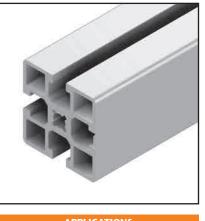
- For tightening the MiniTec power-lock fastener, the groove cover must be opened by tear-off lever **part no. 26.0815/0** at the profile end. Opening can be covered with end cap profile G **part no. 22.1056/1**
- Angle 25 / 45
- closed grooves can be opened with the groove opener **part no. 26.0815/0** to the desired length

PROFILE 45 X 45 1G



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $-I_x = 13.617 \text{ cm}^4$
- $-I_v = 14.091 \text{ cm}^4$
- $-w_x = 6.052 \text{ cm}^3$
- $-w_v = 6.262 \text{ cm}^3$
- Weight = 1.897 kg/m
- Bar length = 6 m
- Packing unit = 36 m



APPLICATIONS

- Grooves expandable
- All types of constructions, specifically for high hygiene requirements in the food industry, medical technology, bottling of beverages
- To close open grooves with the cover profile L part no. 20.1021/0
- Silicon sealings for profile connections on request

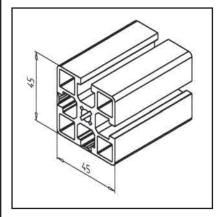


- For tightening the MiniTec power-lock fastener, the groove cover must be opened by tear-off lever **part no. 26.0815/0** at the profile end. Opening can be covered with end cap profile G **part no. 22.1056/1**
- Angle 25 / 45

Part no.

 - closed grooves can be opened with the groove opener **part no. 26.0815/0** to the desired length

PROFILE 45 X 45 2G



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $-I_x = 13.549$ cm⁴
- $-I_{v} = 13.549 \text{ cm}^{4}$
- $-w_{y} = 5.938 \text{ cm}^{3}$
- $-w_v = 5.938 \text{ cm}^3$
- Weight = 1.925 kg/m
- Bar length = 6 m
- Packing unit = 36 m



APPLICATIONS

- All types of constructions, specifically for high hygiene requirements in the food industry, medical technology, bottling of beverages
- To close open grooves with the cover profile L part no. 20.1021/0
- Silicon sealings for profile connections on request

20.1072/0

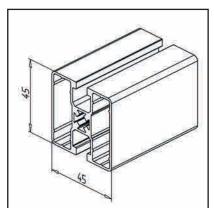
ASSEMBLY

- For tightening the MiniTec power-lock fastener, the groove cover must be opened by tear-off lever **part no. 26.0815/0** at the profile end. Opening can be covered with end cap profile G **part no. 22.1056/1**
- Angle 25 / 45
- closed grooves can be opened with the groove opener **part no. 26.0815/0** to the desired length

Part no.

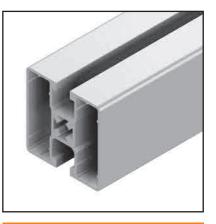
20.1126/0

PROFILE 45 X 45 UL 2GG



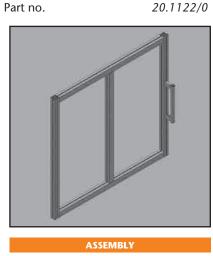
TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $-I_{y} = 9.974 \text{ cm}^{4}$
- $-I_{v} = 8.553 \text{ cm}^{4}$
- $-w_x = 4.432 \text{ cm}^3$
- $-w_v = 3.801 \text{ cm}^3$
- Weight = 1.254 kg/m
- Bar length = 6 m
- Packing unit = 54 m



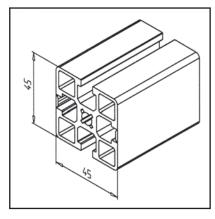
APPLICATIONS

- Weight-optimized constructions
- All types of constructions, specifically for high hygiene requirements in the food industry, medical technology, bottling of beverages
- Silicon sealings for profile connections on request



- MiniTec power-lock fastener
- Angle 19 / 25 / 45 / 45 x 90 GD-Z
- Bolt connector
- Screw connection

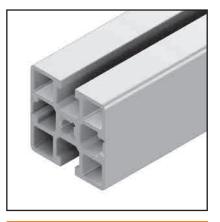
PROFILE 45 X 45 2GG



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $-I_x = 13.069 \text{ cm}^4$
- $-I_v = 14.045 \text{ cm}^4$
- $-w_{x} = 5.808 \text{ cm}^{3}$
- $-w_v = 6.242 \text{ cm}^3$
- Weight = 1.925 kg/m
- Bar length = 6 m

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– Packing unit = 36 m
```



APPLICATIONS

- All types of constructions, specifically for high hygiene requirements in the food industry, medical technology, bottling of beverages
- To close open grooves with the cover profile L part no. 20.1021/0
- Silicon sealings for profile connections on request

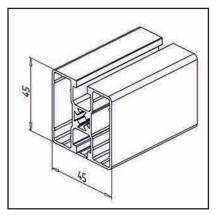
Part no.

20.1099/0



- For tightening the MiniTec power-lock fastener, the groove cover must be opened by tear-off lever **part no. 26.0815/0** at the profile end. Opening can be covered with end cap profile G **part no. 22.1056/1**
- Angle 25 / 45
- closed grooves can be opened with the groove opener **part no. 26.0815/0** to the desired length

PROFILE 45 X 45 UL 3G



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $-I_x = 10.44 \text{ cm}^4$
- $-I_v = 8.557 \text{ cm}^4$
- $-w_x = 4.64 \text{ cm}^3$
- $-w_v = 3.803 \text{ cm}^3$
- Weight = 1.281 kg/m
- Bar length = 6 m
- Packing unit = 54 m



APPLICATIONS

- Grooves expandable
- Weight-optimized constructions
- All types of constructions, specifically for high hygiene requirements in the food industry, medical technology, bottling of beverages
- Silicon sealings for profile connections on request

20.1123/0

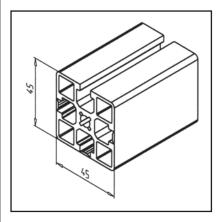
ASSEMBLY

- MiniTec power-lock fastener
- Angle 19 / 25 / 45 / 45 x 90 GD-Z
- Screw connection

Part no.

Part no.

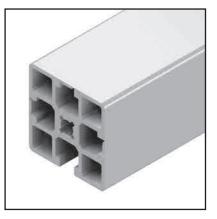
PROFILE 45 X 45 3G



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $-I_x = 13.554$ cm⁴
- $-I_v = 14.049 \text{ cm}^4$
- $-w_{x} = 5.941 \text{ cm}^{3}$
- $-w_v = 6.244 \text{ cm}^3$
- Weight = 1.953 kg/m
- Bar length = 6 m

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– Packing unit = 36 m
```



APPLICATIONS

- All types of constructions, specifically for high hygiene requirements in the food industry, medical technology, bottling of beverages
- To close open grooves with the cover profile L part no. 20.1021/0
- Silicon sealings for profile connections on request

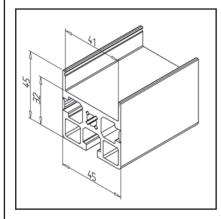
20.1048/0

- For tightening the MiniTec power-lock fastener, the groove cover must be opened by tear-off lever **part no. 26.0815/0** at the profile end. Opening can be covered with end cap profile G **part no. 22.1056/1**
- Angle 25 / 45
- closed grooves can be opened with the groove opener **part no. 26.0815/0** to the desired length

PROFILE 45 X 45 SST 20.2000/0 Part no. TECHN. DATA / ITEMS SUPPLIED **APPLICATIONS** ASSEMBLY - Stainless steel, Rolled, bright - Food and beverage industry - Power-lock fastener H, part no. 21.1018/1 $-I_x = 6.47 \text{ cm}^4$ - Outdoor constructions – Angles - Screws M8, stainless $-I_v = 6.47 \text{ cm}^4$ - Chemical industry $-w_x = 2.88 \text{ cm}^3$ - Pharmaceutical industry $-w_v = 2.88 \text{ cm}^3$ - High temperatures - Material: WN DIN 1.4301(X5 Cr Ni 18-10, SUS 304) – Weight = 2.712 kg/m – Bar length = 6 m

– Packing unit = 24 m

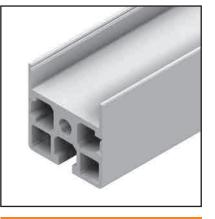
PROFILE 45 X 45 R



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1

- $-I_x = 8.296 \text{ cm}^4$
- $-I_v = 12.997 \text{ cm}^4$
- $-w_{y} = 3.247 \text{ cm}^{3}$
- $-w_v = 5.776 \text{ cm}^3$
- Weight = 1.711 kg/m
- Bar length = 6 m
- Packing unit = 36 m



APPLICATIONS

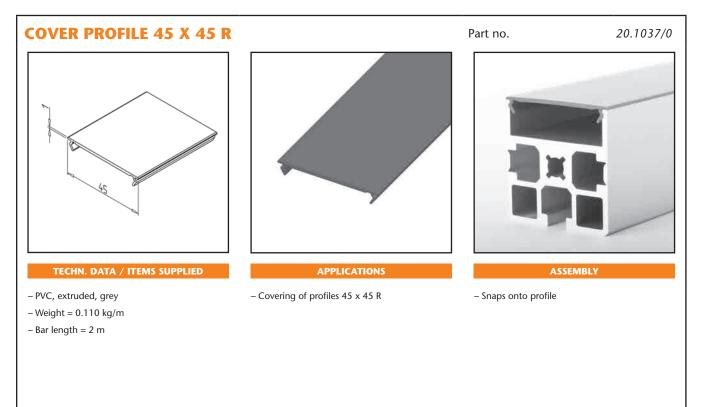
- Combination of construction element and:
- Cable duct
- Guiding groove for belt conveyor
- Storage rail
- Guide for serpentine power chains

Part no.

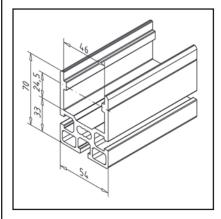
20.1046/0



- MiniTec power-lock fastener
- closed grooves can be opened with the groove opener **part no. 26.0815/0** to the desired length



PROFILE HEIGHT ADJUSTMENT



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $-I_x = 40.251 \text{ cm}^4$
- $-I_y = 39.822 \text{ cm}^4$
- $-w_x = 9.624 \text{ cm}^3$
- $-w_y = 14.749 \text{ cm}^3$
- Weight = 2.940 kg/m
- Bar length = 6 m
- Packing unit = 24 m



APPLICATIONS

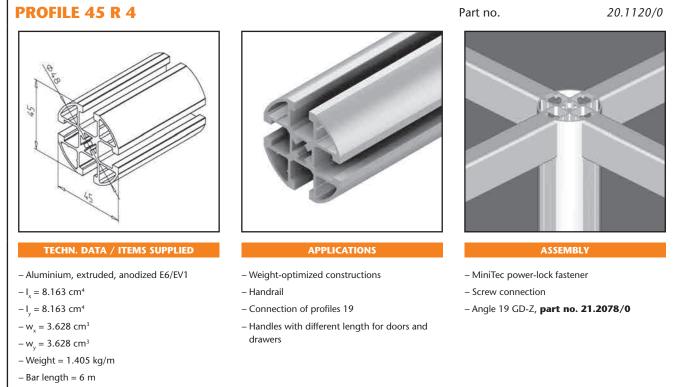
- Height adjustment
- Telescopic applications

20.1143/0

Part no.

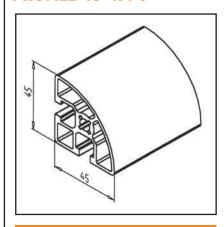
ASSEMBLY

- For clamping or snap-in on the profile in the respective process.



– Packing unit = 48 m

PROFILE 45 R 90°

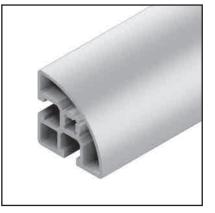


TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1

- $-I_x = 9.138 \text{ cm}^4$
- $-I_v = 9.138 \text{ cm}^4$
- $-w_{y} = 3.581 \text{ cm}^{3}$
- $-w_v = 3.581 \text{ cm}^3$
- Weight = 1.478 kg/m
- Bar length = 6 m

```
– Packing unit = 48 m
```



APPLICATIONS

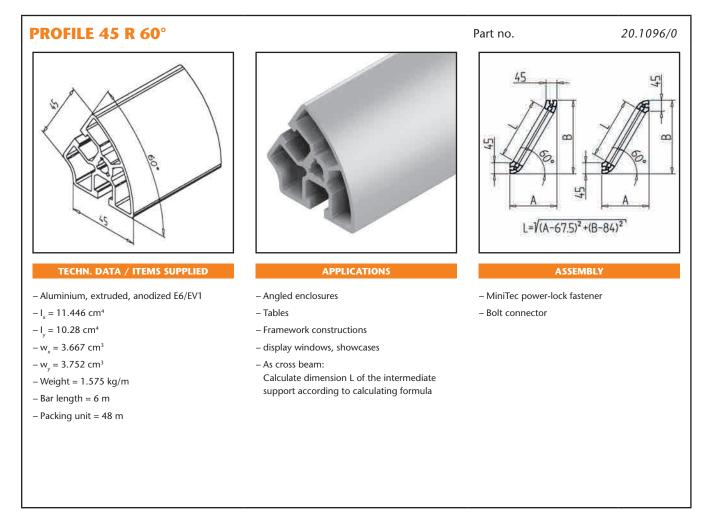
- Weight optimized constructions
- Tables
- Framework constructions
- display windows, showcases



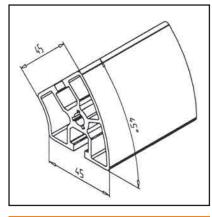
20.1069/0



- MiniTec power-lock fastener
- Angle 45 R 90°
- Bolt connector



PROFILE 45 R 45°



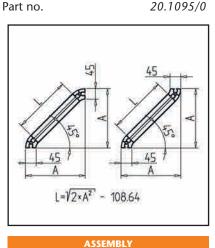
TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $-I_{y} = 12.457 \text{ cm}^{4}$
- $-I_v = 11.296 \text{ cm}^4$
- $-w_{x} = 3.976 \text{ cm}^{3}$
- $-w_v = 3.837 \text{ cm}^3$
- Weight = 1.607 kg/m
- Bar length = 6 m
- Packing unit = 48 m

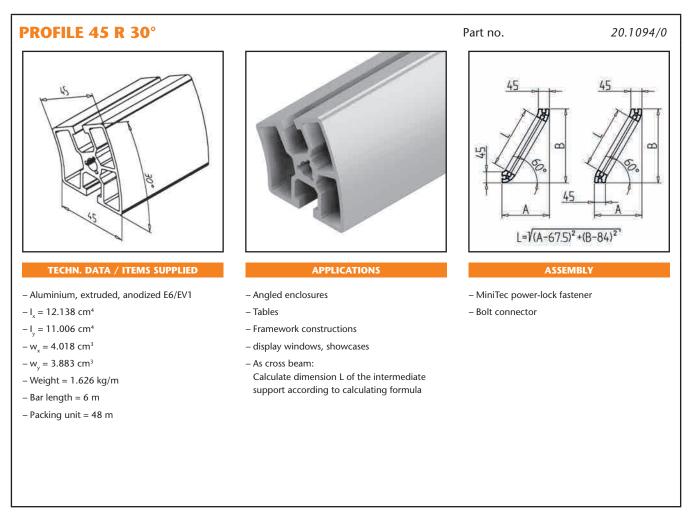


APPLICATIONS

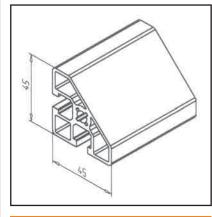
- Angled enclosures
- Tables
- Framework constructions
- display windows, showcases
- As cross beam:
- Calculate dimension L of the intermediate support according to calculating formula



- MiniTec power-lock fastener
- Bolt connector



PROFILE 45 / 45°



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $-I_x = 8.626 \text{ cm}^4$
- $-I_v = 8.626 \text{ cm}^4$
- $-w_{y} = 3.315 \text{ cm}^{3}$
- $-w_v = 3.315 \text{ cm}^3$
- Weight = 1.443 kg/m
- Bar length = 6 m

```
– Packing unit = 48 m
```



APPLICATIONS

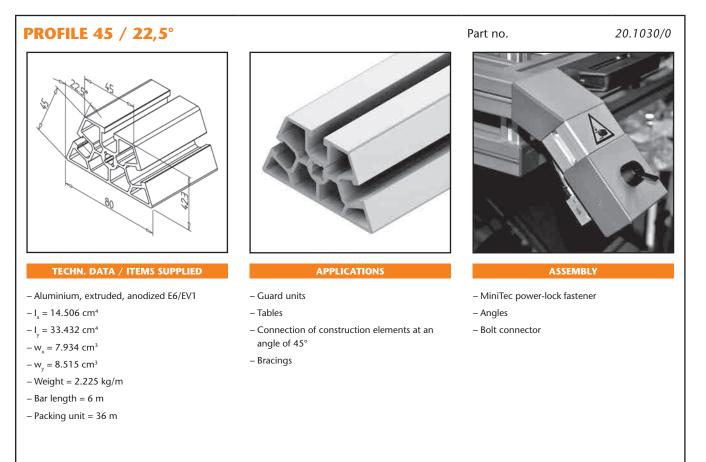
- Weight optimized constructions
- Tables
- Framework constructions
- Bracings

Part no.

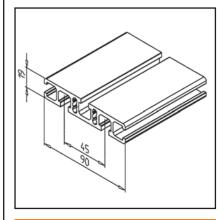
20.1029/0



- MiniTec power-lock fastener
- Angle 45°
- Mounting bracket 45 or 90
- Bolt connector



PROFILE 19 X 90



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $-I_x = 3.436 \text{ cm}^4$
- $-I_v = 45.455 \text{ cm}^4$
- $-w_x = 3.493 \text{ cm}^3$
- $-w_v = 10.101 \text{ cm}^3$
- Weight = 1.919 kg/m
- Bar length = 6 m
- Packing unit = 48 m



APPLICATIONS

- Base plates, tensioning plates
- Contact areas
- Slide plates for linear slides
- Floor fastening plates
- Showcases

Part no.

20.0995/0

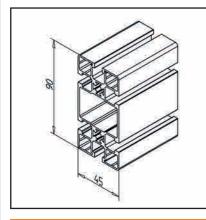


- Bolt connector
- Angles

PROFILE 90 X 32 UL 20.1066/0 Part no. TECHN. DATA / ITEMS SUPPLIED **APPLICATIONS** ASSEMBLY - Aluminium, extruded, anodized E6/EV1 - All types of constructions, with a closed profile - MiniTec power-lock fastener side $-I_{y} = 10.627 \text{ cm}^{4}$ – Angles - Weight-optimized constructions $-I_{v} = 64.889 \text{ cm}^{4}$ - Screw connection – Tables $-w_x = 5.832 \text{ cm}^3$ - closed grooves can be opened with the groove opener part no. 26.0815/0 to the – Frames $-w_v = 14.34$ cm³ desired length - Safety equipment - Weight = 2.464 kg/m – Bar length = 6 m

– Packing unit = 36 m

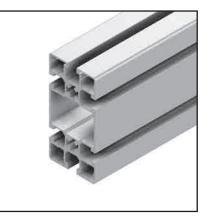
PROFILE 45 X 90 UL



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1

- $-I_x = 73.907 \text{ cm}^4$
- $-I_{v} = 19.194 \text{ cm}^{4}$
- $-w_{y} = 16.423 \text{ cm}^{3}$
- $-w_v = 8.53 \text{ cm}^3$
- Weight = 2.421 kg/m
- Bar length = 6 m
- Packing unit = 24 m

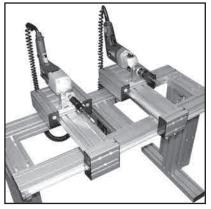


APPLICATIONS

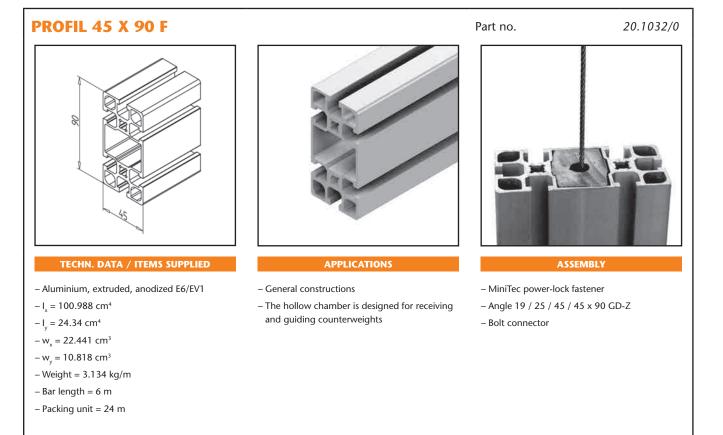
- Universal mounting for all types of weight optimised constructions
- The hollow chamber is designed for receiving and guiding counterweights

Part no.

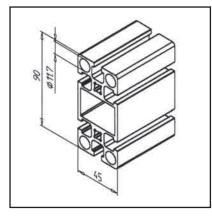
20.1067/0



- MiniTec power-lock fastener
- Angle 19 / 25 / 45 / 45 x 90 GD-Z
- Bolt connector
- Screw connection



PROFILE 45 X 90



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $-I_x = 113.205 \text{ cm}^4$
- $-I_{y} = 28.584 \text{ cm}^{4}$
- $-w_x = 25.156 \text{ cm}^3$
- $-w_v = 12.704 \text{ cm}^3$
- Weight = 3.667 kg/m
- Bar length = 6 m
- Packing unit = 24 m

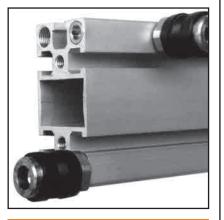


APPLICATIONS

- General heavy duty construction
- 4 cavities for compressed air piping
- Cavity is not suitable for counterweights

Part no.

20.1009/0



ASSEMBLY

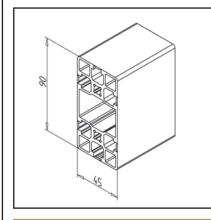
- MiniTec power-lock fastener
- Angle 25 / 45 / 90
- Bolt connector
- The Ø 11.7 mm holes can be bored with G 1/4 for holding screw plugs or pneumatic connections
- Lateral connections G 1/8" direct into the profile

50 MINITEC PROFILE SYSTEM

PROFILE 45 X 90 S 20.1017/0 Part no. 8 **TECHN. DATA / ITEMS SUPPLIED** APPLICATIONS ASSEMBL\ - Aluminium, extruded, anodized E6/EV1 - All kinds of constructions - MiniTec power-lock fastener $-I_{x} = 113.487 \text{ cm}^{4}$ - Linear guides LB as slide - Mounting bracket 45 or 90 $-I_{v} = 30.719 \text{ cm}^{4}$ - Column guides - Screw connection $-w_x = 25.219 \text{ cm}^3$ - Implementation as compressed air line with base and transport plate and sealing set $-w_v = 13.653 \text{ cm}^3$ - Central bore Ø 32 mm for ball-bushings - Weight = 3.860 kg/m LME 20, for ball-bearings 6201 or 6002, for – Bar length = 6 m compressed air piping or guiding of hydraulic – Packing unit = 24 m

add-in cylinders

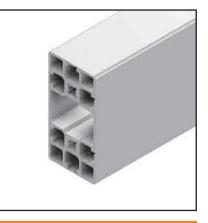
PROFILE 45 X 90 G



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1

- $-I_x = 101.241 \text{ cm}^4$
- $-I_v = 25.318 \text{ cm}^4$
- $-w_{y} = 22.498 \text{ cm}^{3}$
- $-w_v = 11.252 \text{ cm}^3$
- Weight = 3.191 kg/m
- Bar length = 6 m
- Packing unit = 24 m



APPLICATIONS

- All types of constructions, specifically for high hygiene requirements in the food industry, medical technology, bottling of beverages
- Guide for internal counterweights in a central hollow chamber

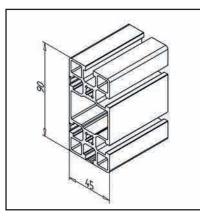
Part no.

20.1015/0



- MiniTec power-lock fastener
- All 6 grooves can be opened up to the length desired
- closed grooves can be opened with the groove opener part no. 26.0815/0 to the desired length

PROFILE 45 X 90 2 G



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $-I_{v} = 98.137 \text{ cm}^{4}$
- $-I_{v} = 24.317 \text{ cm}^{4}$
- $-w_x = 21.808 \text{ cm}^3$
- $-w_v = 10.807 \text{ cm}^3$
- Weight = 3.108 kg/m
- Bar length = 6 m
- Packing unit = 24 m



- Grooves expandable

- All types of constructions, specifically for high hygiene requirements in the food industry, medical technology, bottling of beverages
- Guide for internal counterweights in a central hollow chamber

20.1081/0

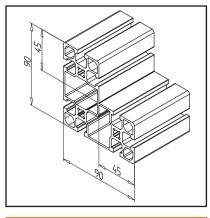
ASSEMBLY

- MiniTec power-lock fastener

Part no.

- closed grooves can be opened with the groove opener part no. 26.0815/0 to the desired length

PROFIL 90 X 90 X 45



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $-I_{v} = 127.588 \text{ cm}^{4}$
- $-I_{v} = 127.459 \text{ cm}^{4}$
- $-w_{y} = 24.971 \text{ cm}^{3}$
- $-w_v = 24.895 \text{ cm}^3$
- Weight = 4.458 kg/m
- Bar length = 6 m
- Packing unit = 12 m

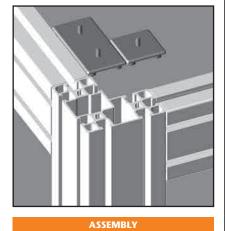


APPLICATIONS

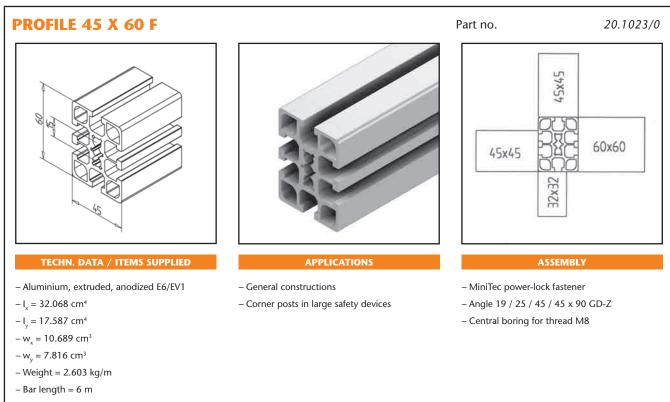
- All kinds of constructions
- Tables
- display windows, showcases
- Framework constructions
- One chamber can be used to guide counterweight 45

Part no.

20.0984/0

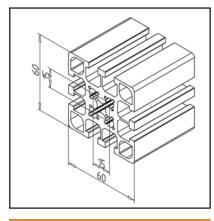


- MiniTec power-lock fastener
- Screw connection
- Mounting bracket 45 or 90
- Base and transport plate 90x90x45 part no. 21.2505/0



– Packing unit = 24 m

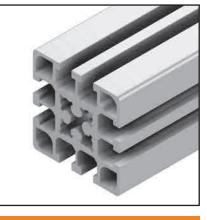
PROFILE 60 X 60 F



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1

- $-I_x = 40.715 \text{ cm}^4$
- $-I_v = 40.715 \text{ cm}^4$
- $-w_x = 13.571 \text{ cm}^3$
- $-w_v = 13.571 \text{ cm}^3$
- Weight = 3.655 kg/m
- Bar length = 6 m
- Packing unit = 24 m

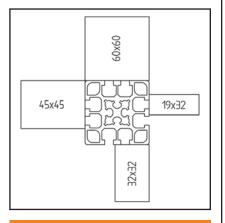


APPLICATIONS

- General constructions
- Corner posts in large safety devices

Part no.

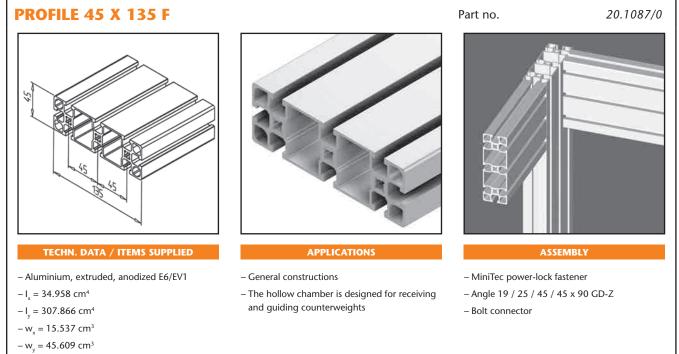




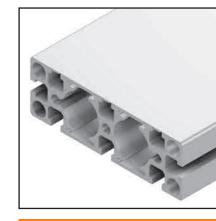
ASSEMBLY

- MiniTec power-lock fastener

- Angle 19 / 25 / 45 / 45 x 90 GD-Z
- Central boring for thread M10



- Weight = 4.319 kg/m
- Bar length = 6 m
- Packing unit = 12 m

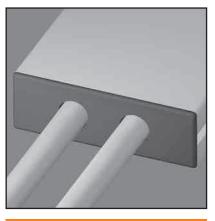


APPLICATIONS

- All types of constructions, specifically for high hygiene requirements in the food industry, medical technology, bottling of beverages
- Linear guides LB as slide
- Central bore Ø 32 mm for ball-bushings
 LME 20, for ball-bearings 6201 or 6002, for compressed air piping or guiding of hydraulic add-in cylinders



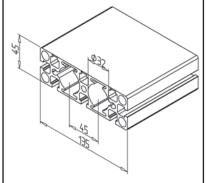




ASSEMBLY

- MiniTec power-lock fastener
- closed grooves can be opened with the groove opener part no. 26.0815/0 to the desired length

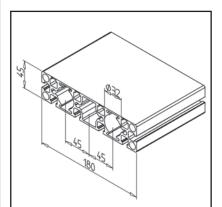
PROFILE 45 X 135 1G



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $-I_x = 47.064 \text{ cm}^4$
- $-I_y = 359.242 \text{ cm}^4$
- $-w_x = 20.618 \text{ cm}^3$
- $-w_y = 53.221 \text{ cm}^3$
- Weight = 5.570 kg/m
- Bar length = 6 m
- Packing unit = 12 m

PROFILE 45 X 180 1G



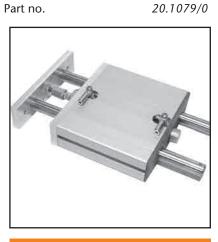
TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $-I_x = 61.015 \text{ cm}^4$
- $-I_y = 810.885 \text{ cm}^4$
- $-w_x = 26.704 \text{ cm}^3$
- $-w_y = 90.097 \text{ cm}^3$
- Weight = 6.950 kg/m
- Bar length = 6 m
- Packing unit = 12 m



APPLICATIONS

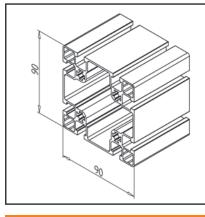
- All types of constructions, specifically for high hygiene requirements in the food industry, medical technology, bottling of beverages
- Linear guides LB as slide
- Central bore Ø 32 mm for ball-bushings LME 20, for ball-bearings 6201 or 6002, for compressed air piping or guiding of hydraulic add-in cylinders



ASSEMBLY

- MiniTec power-lock fastener
- closed grooves can be opened with the groove opener part no. 26.0815/0 to the desired length

PROFILE 90 X 90 UL



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $-I_x = 132.001 \text{ cm}^4$
- $-I_v = 132.001 \text{ cm}^4$
- $-w_{x} = 29.334 \text{ cm}^{3}$
- $-w_v = 29.334 \text{ cm}^3$
- Weight = 3.776 kg/m
- Bar length = 6 m
- Packing unit = 12 m



APPLICATIONS

- Weight optimized constructions
- Guide in the central hollow chamber for internal balancing weight for lifting doors

Part no.

20.0999/0

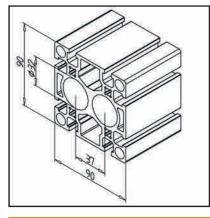


- MiniTec power-lock fastener
- Mounting bracket 45 or 90
- Screw connection
- Bolt connector



– Packing unit = 12 m

PROFILE 90 X 90 S



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $-I_x = 208.888 \text{ cm}^4$
- $-I_y = 223.949 \text{ cm}^4$
- $-w_x = 46.419 \text{ cm}^3$
- $-w_y = 49.766 \text{ cm}^3$
- Weight = 7.514 kg/m
- Bar length = 6 m

```
– Packing unit = 12 m
```



APPLICATIONS

- All types of heavy constructions
- Linear guides LB as slide
- Central bore Ø 32 mm for ball-bushings LME 20, for ball-bearings 6201 or 6002, for compressed air piping or guiding of hydraulic add-in cylinders

Part no.



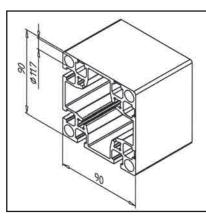
20.1019/0

- MiniTec power-lock fastener
- Mounting bracket 45 or 90
- Screw connection

PROFILE 90 X 90 G 20.1082/0 Part no. 8 Ø113 **TECHN. DATA / ITEMS SUPPLIED** APPLICATIONS ASSEMBLY - Aluminium, extruded, anodized E6/EV1 - Grooves expandable - MiniTec power-lock fastener - All types of constructions, specifically for high $-I_{x} = 195.271 \text{ cm}^{4}$ - closed grooves can be opened with the hygiene requirements in the food industry, groove opener part no. 26.0815/0 to the – I₀ = 195.271 cm⁴ medical technology, bottling of beverages desired length $-w_x = 43.393$ cm³ - Guide for internal counterweights in a central $-w_v = 43.393$ cm³ hollow chamber - Weight = 5.329 kg/m

PROFILE 90 X 90 2 G

Bar length = 6 mPacking unit = 12 m



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1

- $-I_x = 190.169 \text{ cm}^4$
- $-I_v = 190.169 \text{ cm}^4$
- $-w_{y} = 41.825 \text{ cm}^{3}$
- $-w_v = 41.825 \text{ cm}^3$
- Weight = 5.217 kg/m
- Bar length = 6 m

```
– Packing unit = 12 m
```



APPLICATIONS

- Grooves expandable
- All types of constructions, specifically for high hygiene requirements in the food industry, medical technology, bottling of beverages
- Guide for internal counterweights in a central hollow chamber

Part no.

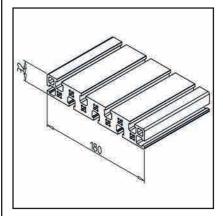
20.1044/0



- MiniTec power-lock fastener
- closed grooves can be opened with the groove opener part no. 26.0815/0 to the desired length

PROFILE 90 R 90° Part no. 20.1091/0 8 TECHN. DATA / ITEMS SUPPLIED APPLICATIONS ASSEMBLY - Aluminium, extruded, anodized E6/EV1 – Tables, frames - MiniTec power-lock fastener $-I_{y} = 113.389 \text{ cm}^{4}$ - All kinds of constructions – Angles – I₀ = 113.389 cm⁴ - Bolt connector $-w_x = 21.874$ cm³ - End cap, part no. 22.1021/1 $-w_v = 21.874 \text{ cm}^3$ - Connecting plate M10 - M20 – Weight = 4.265 kg/m - Corner Connection 90 R 90° – Bar length = 6 m – Packing unit = 12 m

PROFILE 32 X 180



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $-I_x = 33.804 \text{ cm}^4$
- $-I_y = 843.825 \text{ cm}^4$
- $-w_x = 21.068 \text{ cm}^3$
- $-w_y = 93.758 \text{ cm}^3$
- Weight = 9.539 kg/m
- Bar length = 6 m
- Packing unit = 6 m



APPLICATIONS

- Slide plate LR
- Tensioning area
- Base plates
- All types of heavy constructions

Part no.

20.1016/0

- MiniTec power-lock fastener
- Mounting bracket 45 or 90
- Screw connection

PROFIL 90 X 135

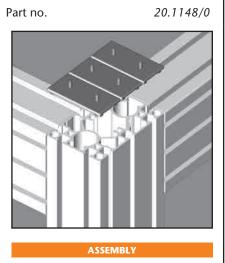
TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $-I_x = 286.480 \text{ cm}^4$
- $-I_y = 631.058 \text{ cm}^4$
- $-w_x = 63.662 \text{ cm}^3$
- $-w_y = 93.490 \text{ cm}^3$
- Weight = 8.992 kg/m
- Bar length = 6 m
- Packing unit = 6 m



APPLICATIONS

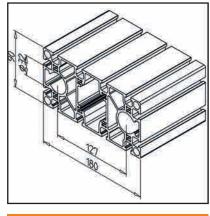
- Central bore Ø 32 mm for ball-bushings
 LME 20, for ball-bearings 6201 or 6002, for compressed air piping or guiding of hydraulic add-in cylinders
- Linear guides LB as slide
- All types of heavy constructions



– Screw connection

- MiniTec power-lock fastener
- Mounting bracket 45 or 90

PROFILE 90 X 180 S



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $-I_x = 376.784 \text{ cm}^4$
- $-I_v = 1421.865 \text{ cm}^4$
- $-w_{y} = 83.729 \text{ cm}^{3}$
- w_v = 157.983 cm³
- Weight = 11.482 kg/m
- Bar length = 6 m

```
– Packing unit = 6 m
```



APPLICATIONS

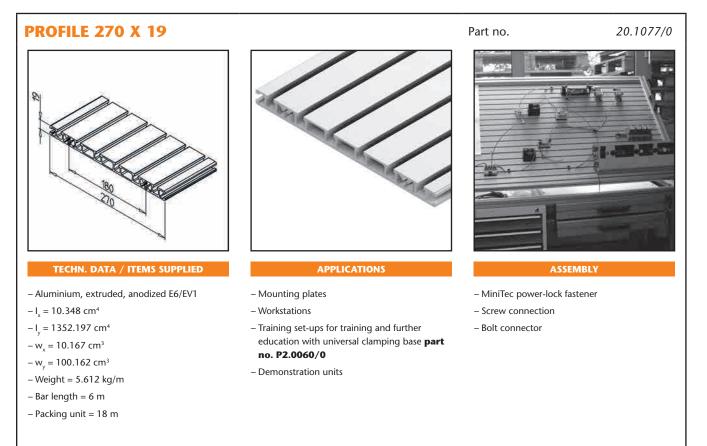
- All types of heavy constructions
- Linear guides LB as slide
- Central bore Ø 32 mm for ball-bushings LME 20, for ball-bearings 6201 or 6002, for compressed air piping or guiding of hydraulic add-in cylinders

Part no.

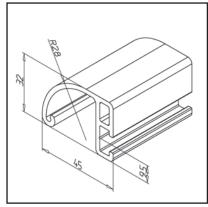
20.1013/0



- MiniTec power-lock fastener
- Mounting bracket 45 or 90
- Screw connection



HANDLE PROFILE ALUMINIUM



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $-I_x = 3.531 \text{ cm}^4$
- $-I_v = 7.654 \text{ cm}^4$
- $-w_{x} = 1.985 \text{ cm}^{3}$
- $-w_v = 2.856 \text{ cm}^3$
- Weight = 0.890 kg/m



APPLICATIONS

- Handle of diverse lengths
- Sheet edges
- Work station end points
- Cover ledge for cable, pneumatic conducts

Part no.

20.1045/0

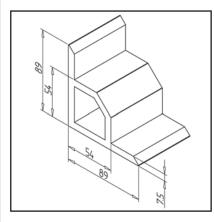


- Screw connection
- Angles
- Lateral cover with end cap left **part no.** 22.1055/0 and right part no. 22.1054/0

HANDLE PROFILE 32 20.1088/0 Part no. TECHN. DATA / ITEMS SUPPLIED **APPLICATIONS** ASSEMBLY - Aluminium, extruded, anodized E6/EV1 - Handles of different lengths for doors, - Angle 19 GD-Z, part no. 21.2078/0 drawers, handrails Bolt connector $-I_x = 2.601 \text{ cm}^4$ - Edging of surface elements or posters up to $-I_{v} = 2.636 \text{ cm}^{4}$ - Screw connection 8 mm $-w_x = 1.682 \text{ cm}^3$ - Lateral cover with end cap for handle profile - Profile section for suspending roller tracks or 32 $-w_v = 1.649 \text{ cm}^3$ similar - Weight = 0.911 kg/m – Bar length = 6 m

– Packing unit = 84 m

ANGULAR PROFILE 89 X 89



TECHN. DATA / ITEMS SUPPLIED

– Aluminium, extruded, anodized E6/EV1

- $-I_x = 105.416 \text{ cm}^4$
- $-I_y = 105.416 \text{ cm}^4$
- $-w_x = 17.413 \text{ cm}^3$
- $-w_v = 17.413 \text{ cm}^3$
- Weight = 4.868 kg/m
- Bar length = 3 m

```
– Packing unit = 12 m
```



APPLICATIONS

- Consoles

- Contact areas
- Starting material for the production of custom mounting brackets

Part no.

20.1011/0



NUSELIDET

- Screws M8 x 20 and square nuts M8

PROFILE CAPS

SELF-LOCKING PROFILE CAPS FOR ALUMINIUM PROFILES

Due to unprotected profile ends, dirt and foreign bodies can penetrate into the inside of the profiles, which can lead to hygienic problems not only in sensitive environments. All this is prevented by profile caps: The profiles remain clean and protected, the risk of cutting injuries is minimized. Last but not least, they harmoniously round off the look of the aluminium profiles. In practice, however, it is annoying for users when these functions are no longer guaranteed due to loose and falling out profile caps.

This problem is effectively solved with our self-locking profile

caps. These are permanently anchored in the profile by means of an integrated safety pin. It therefore remains at the intended location even under extreme conditions and under the toughest conditions. True to the motto "The Art of Simplicity", the Minitec profile caps are very easy to use: The locking pin is hammered flush into the profile using a plastic hammer. Nevertheless, the profile cap can be removed effortlessly: The pins are punched through with a pin four millimeters in diameter. Separately available spare pins make the profile caps reusable.







Profile stays clean and protected

Insert cap

Hammer the pin

MINITEC ALUMINIUM PROFILE CAPS FOR HEAVY LOADS



Thread M08 shape



Tighten the cap (Flat headed screw M08x10)



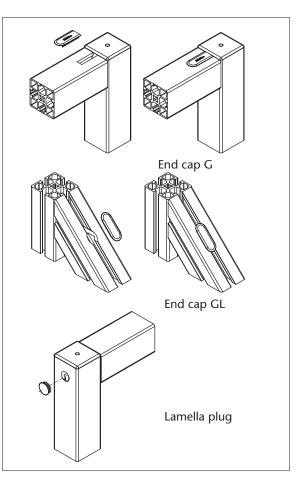
PROFILE CAPS

		Al anodized	VA
Profile sections	ABS grey	(fastening scew	
	ofile series 30 (Thickn	ess 3 mm)	1
23x16	22.0994/1 *		
16x30	22.0981/1 *		
23x23	22.0992/1 *		
23x30	22.0993/1 *		
30x30	22.1146/1 *	22.1149/2	
30R90°	22.1144/1 *		
30R60°	22.1169/1 *		
30R45°	22.1168/1 *		
30R30°	22.1167/1 *		
30x60	22.1134/1 *		
60x60x30	22.0978/1 *		
Pr	ofile series 45 (Thickr	iess 3 mm)	
19x32	22.1220/1 *	22.1060/2	
19x45	22.1001/1 *	22.1064/2	
45x19	22.1136/1 *		
32x32	22.1002/1 *	22.1062/2	
45x32	22.1003/1 *	22.1065/2	
45x32 clamp profile	22.1046/1	22.1065/2	
45x45	22.1004/1 *	22.1067/2	22.1067/5
45R4	22.1137/1 *		
45R90°	22.0996/1 *	22.0996/2	
45R60°	22.1018/1 *	22.1018/2	
45R45°	22.1017/1 *	22.1017/2	
45R30°	22.1019/1 *	22.1019/2	
Profile height adjust-	22.0979/1		
ment	22 0995/1 *		
45/45°	22.0775/1		
45/22,5°	22.1052/1		
19x90	22.1014/1		
90x32	22.0982/1		
45x90	22.1007/1 *	22.1068/2	
45x60	22.1058/1		
60x60	22.1057/1		
45x135	22.1049/1		
45x180	22.1048/1		
90x90	22.0983/1 *	22.1008/2	
90R90°	22.1021/1		
32x180	22.1059/1		
90x180	2x 22.0983/1*	2x 22.1008/2	
270x19	3x 22.1014/1		
HANDLE PROFILE	right 22.1054/0 left 22.1055/0		
HANDLE PROFILE 32	22.1162/1 *		

* With pin

ACCESSORIES	material	Part No.
Flat head screw M8x10 for fixing caps made of aluminuk or stainless steel	VA	21.1666/0
Replacement pins for caps with hammer taps (10 pack)	ABS grey	22.1009/1

Other covers	material	Part No.
End cap G for G-Profile 45	PA6 grey	22.1056/0
End cap GL for G-Profile 45	PA6 grey	22.1208/1
End cap G for G-Profile 30	PA6 grey	22.1182/1
End cap GL for G-Profil 30	PA6 grey	22.1183/1
Lamella plug 7	PE grey	22.1200/1
Plug 7	PE grey	22.1215/1
Lamella plug 9	PE grey	22.1201/1
Lamella plug 15	PE grey	22.1202/1
Lamella plug 22	PE grey	22.1209/1



SEALING	material	Part No.
Seal plate 45	Silicon	24.1117/0
Seal plate 45 with slot	Silicon	24.1116/0
Seal plate 45 with double-slot	Silicon	24.1118/0







– Seal plate 45

Seal plate 45 with slot

Seal plate 45 with double-slot

POWER-LOCK FASTENER

PROFILE CONNECTION WITHOUT MACHINING

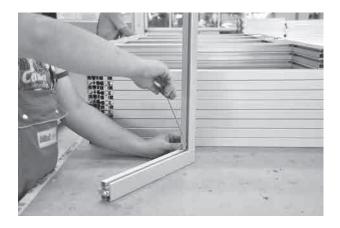


Due to recent studies there is much optimization potential especially in connection technology for profile systems. The connection must be seen as a complete system.

The total cost of a connection is composed of a number of factors:

- Design and dimensioning of bores and threads
- Providing equipment and devices
- Procurement and management of drilling and threading tools
- Work Preparation
- Working time for drilling, threading
- Internal transport

The decisive factor in this consideration is not the cost of the individual connectors. Fundamental cost factor is working time - both in design, production planning and workshop.



MiniTec power-lock fastener 45 SF

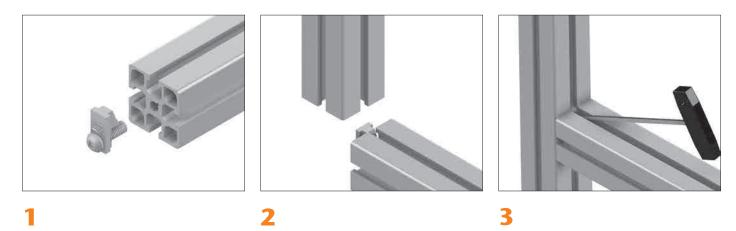
Apart from the cost and time advantages, the MiniTec power-lock fastener has numerous other advantages such as subsequent adjustment, ESD suitability, ergonomic design and optical advantages. The MiniTec power-lock fastener has become even faster with the thread-forming screws. The connector is simply screwed to the profile with the screw at the front. With a standard cordless screwdriver this whole process takes a maximum of 3 seconds. No preparation for drilling, threading, measuring or planning is required. Not only the economic superiority speaks for the MiniTec connector with self-tapping screw: Thanks to the trilobular shank shape combined with the radius profile shape of the thread flanks, the new screws develop low torques. The radius profile shape causes low material displacement and reduces the amount of forming work required. The torque moments are up to 50% lower. This ensures reliable assembly and higher clamping forces with less clamping force dispersion.





POWER-LOCK FASTENER

PROFILE CONNECTION WITHOUT MACHINING



ASSEMBLY

- 1. Slightly tighten pressure piece with screw M8 x 25 on the front side of the profile
- 2. Push profile 2 with its groove beneath the egdes of the pressure piece until the desired position is reached
- 3. Tighten ste screw M8 with hex screwdriver SW4. Recommended tightening torque approximately 12 Nm

Advantages

- The corners of the profile connection remain free for surface elements
- The joint is invisible from the outside
- Secured against rotation
- Load capacity: 6000 N (UL-Profile: 4000N)
- Cross connections can be easily implemented
- For ESD applications, the electrical conductivity of the two profiles must be produced separately for this connector. *
- Ergonomically optimized
- With the "SF" version, no thread needs to be inserted in the profile beforehand. The thread is produced automatically by screwing the screw into the central bore of the profile.

Name	Part no.	Description
Power-Lock fastener 45	21.1018/0	with filister screw M8/SW5
Power-Lock fastener 45 SF	21.0818/0	with self-tapping Torx screw M8/T40,
Power-Lock fastener 45 H	21.1018/1	Cylindrical screw M8/SW5, Corrosion resistant version version for use in corrosive environ- ments
Power-Lock fastener 45 SF short *	21.0020/0	with self-tapping Torx screw M8/T40, for profile connections with flush end cap
Power-Lock fastener30	21.0014/0	with filister screw M8/SW5
Power-Lock fastener 30 SF	21.0016/0	with self-tapping Torx screw M8/T40



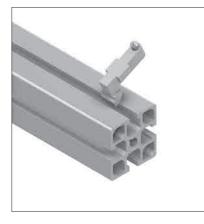
Impulse wrench **Part no. 26.0800/0** for particularly joint-gentle work.

CROSS-CONNECTOR

FRICTIONAL CONNECTION OF INTERSECTING PROFILES WITHOUT MACHINING



Both profiles are adjustable in direction of the groove. Particularly suitable for the attachment of linear axes LR / LB to machine frames.





1

3



2



ing base frame2. Insert the profile to be connected

ASSEMBLY

3. Position the brace profile

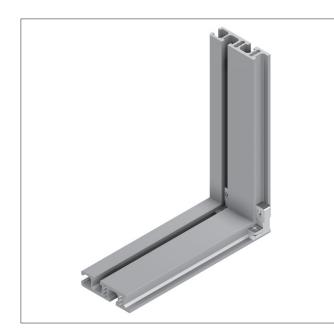
over the connector

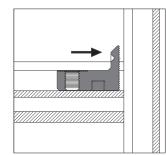
4. Tighten the set screw in the connector with a torque of 10 Nm

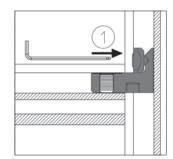
1. Swivel the connector into any exist-

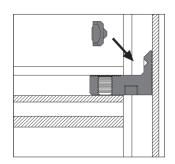
POWER-LOCK FASTENER N

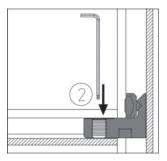
FOR SUBSEQUENT FITTING OF PROFILES INTO EXISTING FRAMES WITHOUT MACHINING

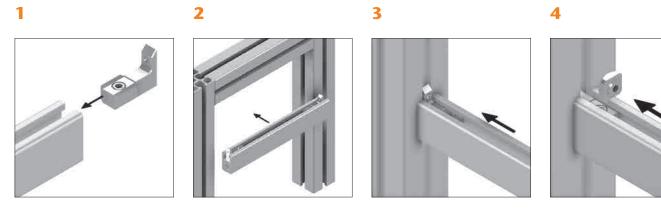










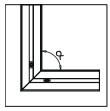


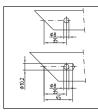
- 1. Slide the connector into the strut to be retrofitted
- 2. Position the strut in the construction
- 3. Slide connector into existing profile
- **4.** Insert square nut with pre-assembled stud into the groove, position via connector and tighten, then tighten screw in connector (both 10 Nm).

MITRE CONNECTIONS

CONSTRUCTIONS WITH HIGH VISUAL DEMANDS

Mitre connections are used for high visual requirements on design. It should be noted that the capacity of these compounds are less than standard connectors. For heavily loaded structures mitre connections should not be used!











Mitre connector for front side connection of profiles at any angle of 30° to 180°

Mitre connector N for connecting profiles with the grooves of continuous profiles at any angle of 30° to 90°

Description	Part no.	Description
Mitre connector 45 for profiles series 45	21.1400/0	Drill Ø 10.2 mm bore in the profile core bore. Drill Ø 8.2 bore at the distance 36.5 mm from the profile end. Insert the mitre connector in both open profile ends, position the M8 square nut with the set screw and tighten it.
Mitre connector 30 for profile series 30	21.1890/0	Core bore needs no machining. Other installation steps like mitre connector 45.
Mitre connector N 45 for profile series 45	21.1401/0	Drill Ø 10.2 mm bore in the profile core bore. Drill Ø 8.2 bore depending on the angle and at distance A from the profile end /see table). Insert the mitre connector in the open profile end, position the M8 square nut with the set screw and tighten it.
Mitre connector N 30 for profiles series 30	21.0945/0	Core bore needs no machining. Other installation steps like mitre connector N 45.



Drilling jig part no. 26.1050/0 for mitre connector 45 Drilling jig part no. 26.1060/0 for mitre connector N45 Drilling jig part no. 26.1063/0 for mitre connector 30 Drilling jig part no. 26.1056/0 for mitre connector N30

CONSTRUCTIONS WITH HIGH VISUAL DEMANDS

Drilling jig for mitre connector N30 / N45

Distance A (position of the lateral bore of the threaded pin) depends on the mitre angle. The exact amount is to be taken from the middle bore core drilling of the mitred profile to the middle of the drilling. To safely exclude dimensional errors and ensure the correct functioning of the connection, we recommend the use of our drilling jig for mitre connector N30, part no. 26.1056/0 or N45 part no. 26.1060/0.

Distances for common angles:

a	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°
A(mm)	21,0	22,9	24,8	25,9	27,0	27,6	28,2	28,6	29,0	29,2	29,4	29,45	29,5





Drilling jig for mitre connector 30 / 45

Distance A (position of the lateral bore of the threaded pin) for front-side connection of profiles is consitently 35 mm. The exact amount is to be taken from the middle bore core drilling of the mitred profile to the middle of the drilling. To safely exclude dimensional errors and ensure the correct junctioning of the connection, we recommend the use of our drilling jig for mitre connector 30, part no. 26.1063/0 or 45 part no. 26.1050/0.

Mitre connection N





Use of MiniTec drilling jigs

Slide jig central bore of the mitred profile to the stopper. Tighten with screw. Insert into profile with bore through the drilling guide inside the fixing screw.

BOLT AND BUTT CONNECTORS

SUBSEQUENT ASSEMBLY OF PROFILES INTO EXISTING FRAMES, EXTENSION OF PROFILES

Bolt connectors

To compensate for the lower load capacity compared to our standard connectors, bolt connectors should always be used in pairs. The weakening of the profile cross-section must be taken into account.

The correct functioning of this connection requires precise machining of the connecting bore. The distance from the end of the profile of 22.5 mm + 0.3 mm must be observed. Another criterion is the precise shape of the connecting bore. Deviations from the circular shape lead to a reduction in the load-bearing surface of the connector. It is therefore necessary to drill the connecting bore on a milling machine.

This connection is not suitable for constructions with air flow in the profile for pneumatic applications.

Butt connectors

The machining of the profiles corresponds to the machining of the connectors. For the profile extension we recommend the combination of steel butt connectors and clamping strips.

T-slot bar 90

- Profile extension
- Slide into profile groove and clamp with set screws
- No machining required
- For larger profile cross-sections or higher loads, please use several t-slot bars.
- Can be used in combination with butt connectors

Application

For rectangular connection of profiles

- Subsequent mounting of profiles into existing frames
- Adjustable
- Extension of profiles

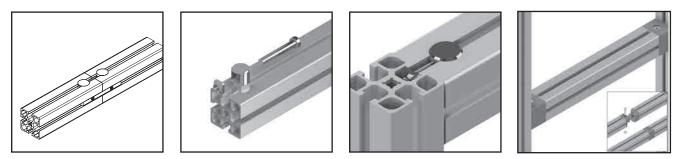
Processing

Step drilling Ø 7 / Ø 20 mm, resp. Ø 9 / Ø 15 mm, 16 mm depth: middle of the groove, 20 mm from profile end. Use drilling jig for positioning.

- 1. Insert hex screw M8 x 35 in bolt and if possible preassemble square nut into second profil.
- 2. Insert bolt in step drilling and connect with square nut.
- **3.** Pretighten with ball-headed key SW5. Final thightening with L-key 5 A/F.
- Recommended locking torque: 15 Nm
- Static load: 3500 N

Mounting bracket 45

- Profile extension
- Connection of profiles
- Subsequent insertion of profiles into existing constructions
- Removable attachments
- Movable in groove direction



Description	Part no.	Description
Bolt connector 15	21.1024/0	For profile series 32 and narrow side 19 9x15 stepped bore, 16 mm tief, 22,5 mm from the end of profile
Bolt connector 20	21.1021/0	For profile series 45 7x20 stepped bore, 16 mm deep, 22,5 mm from the end of profile
Butt connector 20	21.1020/0	For profile series 45 7x20 stepped bore, 16 mm deep, 22,5 mm from both ends of profile
T-slot bar 90	21.1029/0	For profiles with grid dimension 45 Slide into groove and fasten
Mounting bracket 45	21.1411/0	For profiles with grid dimension 45 Insert face front thread



Drilling jig part no. 26.1092/0 for correct position of the stepped bore

SCREW CONNECTION

FORM-LOCKING CONNECTION WHICH MUST BE SECURED AGAINST DISLOCATION



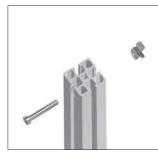
APPLICATION

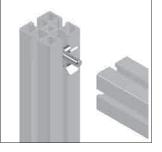
Construction with high dynamic loads

Processing

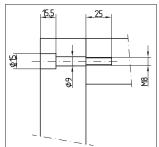
Thread M8; step drilling Ø 9 / Ø 15 mm with drilling jig M8 x 50;

- Position anti-twist lock in the groove
- Push the screw through anti-twist lock
- Screw in and tighten the screw into threaded connection profile
- Recommended locking torque: 20 Nm
- Static load: 18 000 N









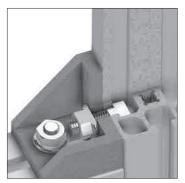
Stepped bore



Drilling jig **part no. 26.1092/0** for correct position of the stepped bore

MOUNTING ANGLES

EASY INSTALLATION WITHOUT PROCESSING



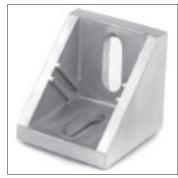
Angle aluminum die casting, powder coated, grey

- No processing
- Retrofitting of profiles possible
- Adjustable



Optional with cover

Caps made of oil resistant ABS, grey



ESD version

- Without powder coating
- With ESD square nuts Z

ASSEMBLY

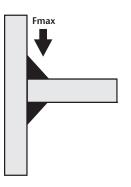
Use fastening material from fastening kit.

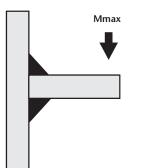
LOAD CAPACITY

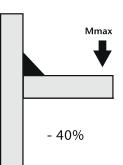
angle	Number of screws	Fmax (N)	Mmax (Nm)
Mounting angles 19	2	3.600	280
Mounting angle 25	2	3.600	280
Mounting angles 45	2	3.600	280
Mounting angles 45x90	4	7.200	560
Mounting angles 90	8	14.400	1.120

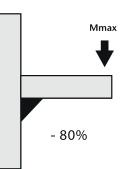
All values include double safety

These values are valid only for angles mounted in pairs if used one-sided, the load reduces as follows:



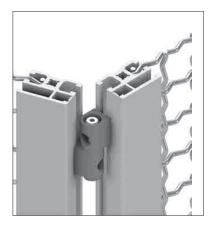




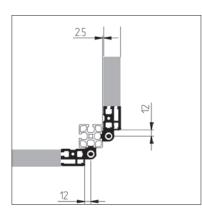


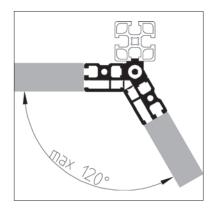
PROTECTIVE FIELD SUSPENSION, ADJUSTABLE ANGLE (part no. 21.1403/0)

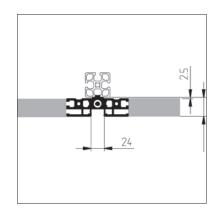
CONNECTING PROTECTION FIELDS

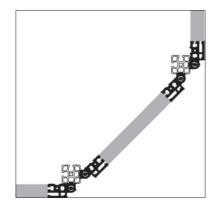


MOUNTING POSSIBILITIES









SCREWS

OTHER STANDARDS AND DIMENSIONS ARE AVAILABLE ON REQUEST

CYLINDER SCREWS

COUNTERSUNK SCREWS



I

M8 1	with	flat	head	and	hexagon	socket
------	------	------	------	-----	---------	--------

Thread	Galvanized	Stainless
M08 x 12	21.1264/0	
M08 x 16	21.1200/0	21.1200/1
M08 x 18	21.1268/0	
M08 x 20	21.1202/0	21.1202/2
M08 x 22	21.1280/0	21.2017/0
M08 x 25	21.1204/0	21.1204/1
M08 x 30	21.1206/0	21.1206/1
M08 x 35	21.1208/0	21.1208/1
M08 x 40	21.1210/0	21.1210/1
M08 x 45	21.1211/0	
M08 x 50	21.1212/0	21.1212/1
M08 x 55	21.1877/0	
M08 x 60	21.1214/0	
M08 x 65	21.1299/0	
M08 x 70	21.1282/0	
M08 x 75	21.1392/0	
M08 x 80	21.1225/0	
M08 x 90	21.1226/0	
M08 x 100	21.1662/0	

M6 with flat head and hexagon socket

Thread	Galvanized	Stainless
M06 x 12	21.1143/0	21.1143/1
M06 x 14	21.1367/0	
M06 x 16	21.1238/0	21.1238/1
M06 x 18	21.1239/0	
M06 x 20	21.1240/0	21.1340/1
M06 x 22	21.1265/0	
M06 x 25	21.1242/0	21.1242/1
M06 x 30	21.1243/0	21.1243/1
M06 x 35	21.1245/0	21.1693/0
M06 x 40	21.1247/0	21.1247/1
M06 x 45	21.1172/0	
M06 x 50	21.1171/0	21.1171/1
M06 x 55	21.1248/0	21.1248/1
M06 x 60	21.1154/0	
M06 x 65	21.1868/0	
M06 x 70	21.1591/0	

M5 with flat head and hexagon socket

Thread	Galvanized	Stainless
M05 x 08	21.1193/0	
M05 x 10	21.1279/0	
M05 x 12	21.1220/0	21.1220/1
M05 x 16	21.1235/0	
M05 x 20	21.1222/0	
M05 x 25	21.1224/0	21.1224/1
M05 x 30	21.1237/0	21.1237/1
M05 x 35	21.2195/0	
M05 x 40	21.1284/0	21.1284/1
M05 x 45	21.1219/0	
M05 x 50	21.1691/0	
M05 x 55	21.1353/0	

M8 with hexagon socket

Thread	Galvanized	Stainless
M08 x 10	21.1552/0	21.1550/0
M08 x 12	21.1263/0	
M08 x 16	21.1513/0	21.1513/1
M08 x 20	21.1514/0	21.1514/1
M08 x 25	21.1520/0	
M08 x 30	21.1516/0	
M08 x 35	21.1947/0	
M08 x 40	21.1547/0	
M08 x 45	21.1645/0	
M08 x 50	21.1517/0	21.1517/1
M08 x 55	21.1546/0	
M08 x 60	21.1523/0	
M08 x 65	21.1949/0	
M08 x 70	21.1950/0	
M08 x 90	21.1946/0	

M6 with hexagon socket

Thread	Galvanized	Stainless
M06 x 10	21.2219/0	21.2219/1
M06 x 12	21.1518/0	
M06 x 16	21.1506/0	21.1506/1
M06 x 20	21.1507/0	
M06 x 25	21.1566/0	
M06 x 30	21.1508/0	
M06 x 35	21.1509/0	
M06 x 40	21.1510/0	
M06 x 45	21.1951/0	
M06 x 50		21.2236/1
M06 x 55	21.1511/0	
M06 x 60	21.1512/0	
M06 x 65	21.2156/0	
M06 x 70	21.2134/0	

M5 with hexagon socket

	-	
Thread	Galvanized	Stainless
M05 x 10	21.1532/0	
M05 x 12	21.1543/0	21.1595/0
M05 x 14	21.1519/0	
M05 x 16	21.1503/0	21.1503/1
M05 x 18	21.1537/0	
M05 x 20	21.1504/0	
M05 x 25	21.1505/0	
M05 x 30	21.1482/0	
M05 x 35	21.2215/0	
M05 x 40	21.2127/0	
M05 x 45	21.1945/0	21.1945/1
M05 x 50	21.2123/0	

M4 with hexagon socket

	U	
Thread	Galvanized	Stainless
M04 x 08	21.1500/0	
M04 x 10	21.1557/0	
M04 x 12	21.1948/0	
M04 x 16	21.1501/0	21.1501/1
M04 x 20	21.1502/0	
M04 x 25	21.1571/0	
M04 x 30	21.1203/0	

AVAILABLE FOR M3, M4, M5, M6 AND M8



		-
Description	Galvanized	Stainless
M8	21.1570/0	-
M6	21.1569/0	-
M5	21.1568/0	-
M4	21.1567/0	-

Square nuts 30 with position-fixing, ESD-conductive

Square nuts

Description	Galvanized	Stainless
M8	21.1351/0	21.1351/1
M6	21.1330/0	21.1330/1
M5	21.1320/0	21.1320/1
M4	21.1310/0	21.1310/1
M3	21.1309/0	21.1309/1

Square nuts with position-fixing

Description	Galvanized	Stainless
M8	21.1351/2	21.1351/4
M6	21.1330/2	21.1330/4
M5	21.1320/2	21.1320/4
M4	21.1310/2	21.1310/4
M3	21.1309/2	21.1309/4



Square nuts Z, ESD conductive

Description	Galvanized	Stainless
M8	21.1390/0	-
M6	21.1391/0	-
M5	21.1627/0	-



Square nuts Z with position-fixing, ESD conductive

Description	Galvanized	Stainless
M8	21.1390/2	-
M6	21.1391/2	-
M5	21.1627/2	-

SPECIAL SCREWS

Screws for power-lock fastener



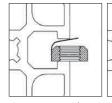
Fillister head screw Galvanized Stainless M08 x 25 21.1189/0 M08 x 25 SF* 21.1492/0

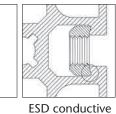
Screws for end caps VA/AL/LR

Flat head screw	Galvanized	Stainless
M08 x 10	-	21.1666/0

Square nuts can be pivoted at any point in the profile. When used in the vertical profile apply square nut with position-fixing. Can be pivoted like the standard square nut; the position-fixing holds the nut in the desired position.

Square nut Z must be used for ESD applications. Available from M5 to M8, with and without spring plate.





with position-fixing

Square nuts M8 L

Description	Galvanized	Stainless
M8	21.1368/0	-



Square nutsM8 L with position-fixing

Description	Galvanized	Stainless
M8	21.1368/2	-

Rhombus nut F (Thread M6 with pitch error for self-locking of the screw connection)

Description	Galvanized	Stainless
M6	21.1354/0	-

Square washers

Description	Galvanized	Stainless		
Square wash- ers 8	21.1360/0	21.1360/1		
Square wash- ers 6	21.1363/0	-		
Square wash- ers 5	21.1362/0	-		
Hex nut with flange, self-locking				
Description	Galvanized	Stainless		
M8	21.1334/0	-		



Screws for mounting surface elements

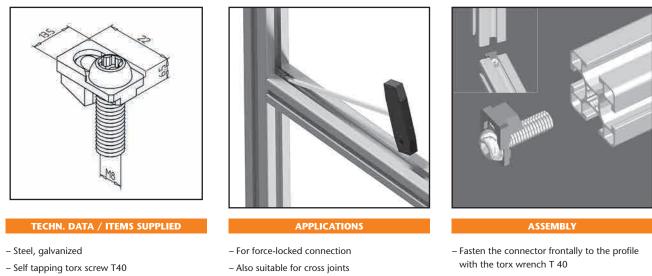
Flat head screw	Galvanized	Stainless
M06 x 12	21.2074/0	-
M06 x 16	21.1246/0	-
M06 x 20	21.1246/1	-

POWER-LOCK FASTENER 30 SF



Part no.

21.0016/0



- Appropriate for ESD implementations

- Tighten the set screw M8 with the wrench SW 4
- Recommended locking torque: 12 Nm
- For screwing in self-tapping screws for MiniTec power-lock fastener: Impulse wrench part No. 26.0800/0

- Power-Lock fastener 30 (standard) part no.

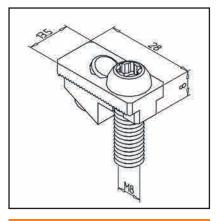
version Standard part no.. 21.0014/0100

21.1014/0 with filister head screw A/F 5

 Package size of 100 pieces in Kantainer version SF part no. 21.0016/0100

- Weight = 0.021 kg/piece

POWER-LOCK FASTENER 45 SF



TECHN. DATA / ITEMS SUPPLIED

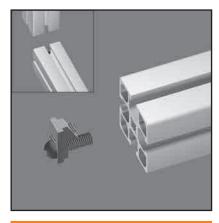
- Steel, galvanized
- Self tapping torx screw T40
- Power-lock fastener 45 (standard) part no.
 21.1018/0, with filister head screw SW 5
- Power-Lock fastener 45 H stainless version part no. 21.1018/1 with cylinder head screw A/F 5
- Package size of 100 pieces in Kantainer version SF part no. 21.0818/0100 version Standard part no. 21.1018/0100

– Weight = 0.030 kg/piece



APPLICATIONS

- Power-lock connection for all profiles, also suitable for crossjoints
- For larger profile sections several fasteners can be used
- Appropriate for ESD implementations



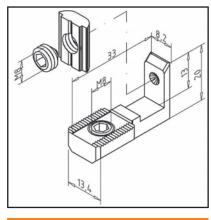
21.0818/0

- Fasten the connector frontally to the profile with the torx wrench T 40
- Tighten the set screw M8 with the wrench SW 4
- Recommended locking torque: 12 Nm
- For screwing in self-tapping screws for MiniTec power-lock fastener: Impulse wrench part No. 26.0800/0

POWER-LOCK FASTENER 45 SF SHORT Part no. 21.0020/0 ŝ TECHN. DATA / ITEMS SUPPLIED **APPLICATIONS** ASSEMBLY – Steel, galvanized - For mounting profiles with flush cover cap - Fasten the connector frontally to the profile with the torx wrench T 40 - For ESD applications of the fastener electr. - Self tapping torx screw T40 conductivity of the two profiles has to be - Tighten the set screw M8 with the wrench - Weight = 0.028 kg/piece produced. SW 4

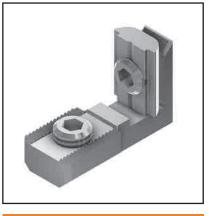
- Recommended locking torque: 12 Nm
- For screwing in self-tapping screws for MiniTec power-lock fastener: Impulse wrench part No. 26.0800/0

POWER-LOCK FASTENER N 30



TECHN. DATA / ITEMS SUPPLIED

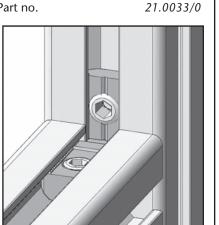
- Steel, galvanized
- Connection element with pre-assembled threaded pin M8
- 1 Slide nut M8 with pre-assembled setscrew
- Weight = 0.025 kg/piece



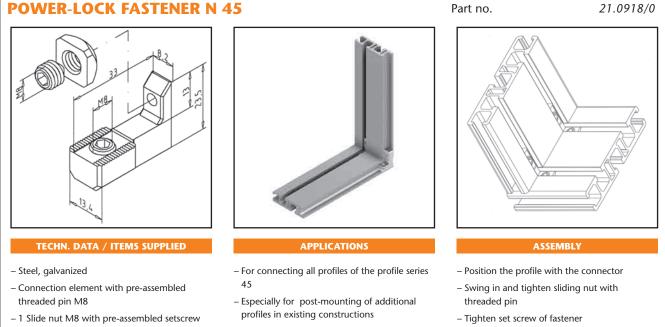
APPLICATIONS

- For force-locked connection
- Especially for post-mounting of additional profiles in existing constructions

Part no.



- Position the profile with the connector
- Swing in and tighten sliding nut with threaded pin
- Tighten set screw of fastener
- Tighten both threaded pins with SW 4 and with 10 Nm torque



- Weight = 0.036 kg/piece
- For profile sections bigger than 45 x 45 several fasteners can be used

21.0006/0

- Tighten both threaded pins with SW 4 and

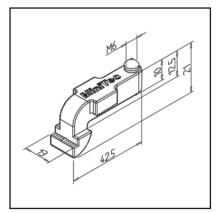
with 10 Nm torque

Part no.

ASSEMBLY

- Swing the connector into the existing frame
- Push the new profile over the connector
- Tighten set screw in connector with wrench size 3 to 10 Nm torque

CROSS-CONNECTOR 45



TECHN. DATA / ITEMS SUPPLIED

- Steel, galvanized
- Connection element with pre-assembled threaded pin M6
- Weight = 0.035 kg/piece



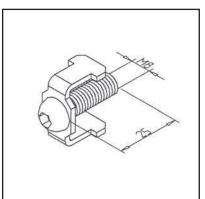
- For connecting all profiles of the profile series

- 45 – Especially for retrofitting profiles into existing
- constructions
- Suitable for ESD applications

SCREW-CONNECTION 30 N

Part no.

21.1385/0





TECHN. DATA / ITEMS SUPPLIED

- Anti-twist lock with cylinder-head screw

- Steel, galvanized

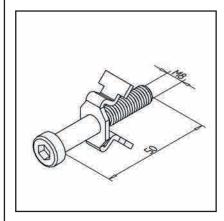
- Weight = 0.017 kg/piece

- Connection of profiles

ASSEMBLY

- Bring in the Thread M8 x 25 in the centre borehole of the profile
- Insert bore Ø 7 mm in profile 2
- Install screw and anti-rotation lock on profile
 1 and insert in groove of profile 2
- Pull through hole Ø 7 mm with Allen wrench
- Recommended locking torque: 20 Nm
- The bore Ø 7 mm can be closed with plug 7 part no. 22.1215/1, should be used with our closed t-slot profiles

SCREW CONNECTION 45



TECHN. DATA / ITEMS SUPPLIED

- Steel, galvanized
- Anti-twist lock with cylinder-head screw
- Weight = 0.027 kg/piece

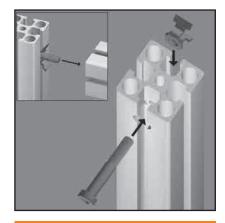


APPLICATIONS

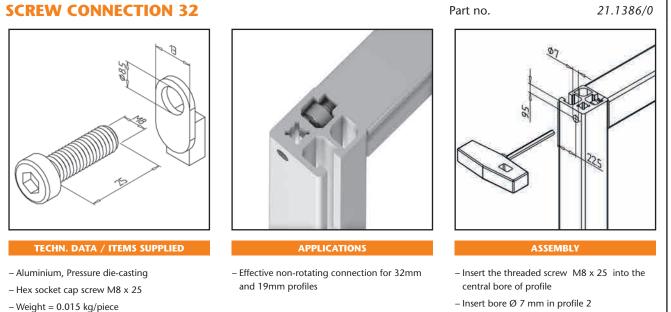
- Effective against slipping
- Secured connection of all profiles

Part no.

21.1017/0

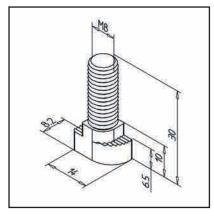


- Insert the threaded screw M8 x 25 into the central bore of profile
- Insert the stepped bore Ø 9 x 15 into profile
 2
- Insert the anti-twist lock
- Insert the screw through the anti-rotation lock into the tapped hole in profile 2, tighten
- Recommended locking torque: 20 Nm



- Fasten the screw to the profile 1 with the antitwist lock and insert it into profile 2
- Tighten the screw to 20 Nm
- The bore Ø 7 mm can be closed with plug 7 part no. 22.1215/1, should be used with our closed t-slot profiles

HAMMER SCREW



TECHN. DATA / ITEMS SUPPLIED

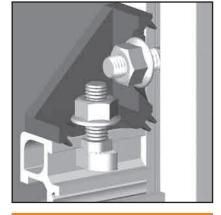
- Steel, galvanized
- Thread (d) : M 8
- Length (l) : 23.5 mm
- Weight = 0.013 kg/piece



- Simple attachment of add-on parts or accessories on profiles
- Attachment of mounting bracket: 45 x 90
 GD-Z part no. 21.1397/0, 45 GD part no.
 21.1133/0, 45 GD-Z part no. 21.1349/0, 90 GD-Z partno. 21.0978/0

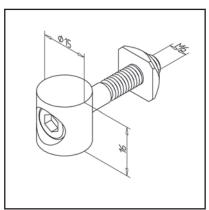
Part no.





- Insert the hammer screw in the profile groove, screw on nut M8
- When tightening the nut, the hammer head will turn crosswise
- Recommended nut: Hexagon nut selflocking with flange part no. 21.1334/0

BOLT CONNECTOR 15



TECHN. DATA / ITEMS SUPPLIED

- With fastening material steel, zinc plated

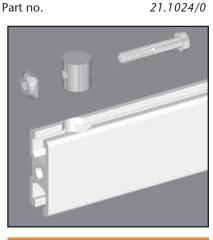
- Aluminium, anodized E6/EV1

- Weight = 0.032 kg/piece



APPLICATIONS

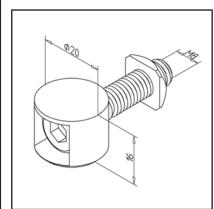
- Connection of profiles 19 and 32
- Especially for post-mounting of additional profiles in existing constructions



ASSEMBLY

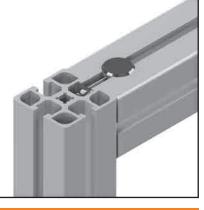
- Insert the stepped bore Ø 9 x 15, 16 mm deep, positioned 22.5 mm from the end of the profile to the center of the groove
- Insert the connector and pre-tighten the screw with the ball head wrench SW 4
- Fastening with Allen wrench
- Recommended locking torque: 15 Nm

BOLT CONNECTOR 20



TECHN. DATA / ITEMS SUPPLIED

- Zinc, Pressure die-casting, galvanized
- With fastening material steel, zinc plated
- Weight = 0.036 kg/piece

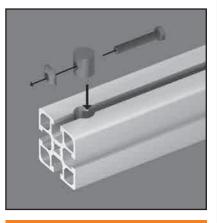


APPLICATIONS

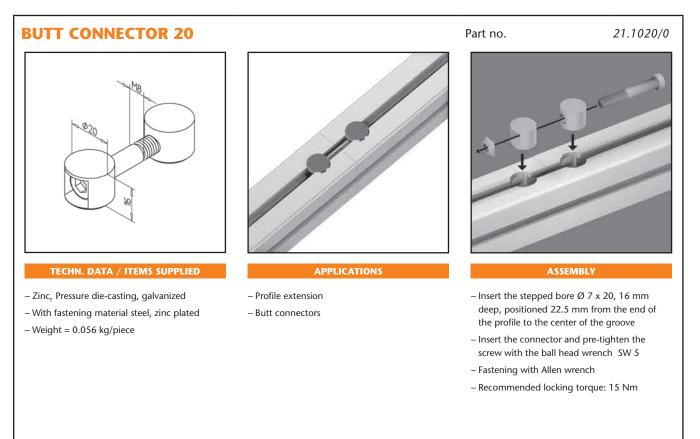
- For connecting all profiles of the profile series
 45
- Especially for post-mounting of additional profiles in existing constructions
- For connection of profile 45 x 19

Part no.

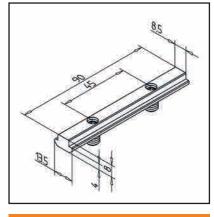
21.1021/0



- Insert the stepped bore Ø 7 x 20, 16 mm deep, positioned 22.5 mm from the end of the profile to the center of the groove
- Insert the connector and pre-tighten the screw with the ball head wrench SW 5
- Fastening with Allen wrench
- Recommended locking torque: 15 Nm



T-SLOT BAR 90



TECHN. DATA / ITEMS SUPPLIED

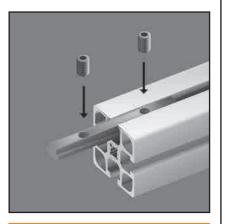
- Steel, galvanized
- 2 set screws M8, with hexagonal socket SW 4
- Stainless version part no. 21.0992/0
- Weight = 0.062 kg/piece



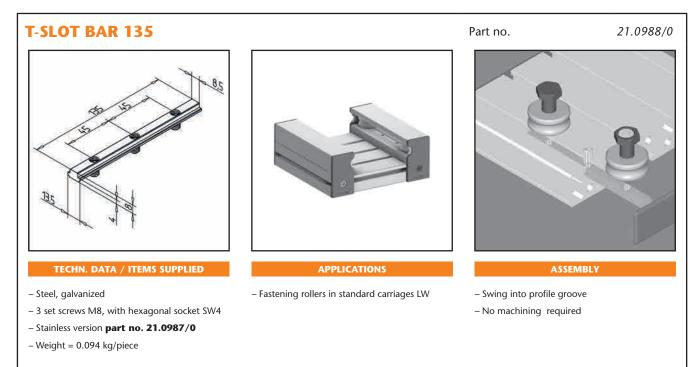
- Profile extension
- Fastening rollers in standard carriages LW

Part no.

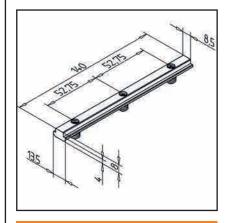
21.1029/0



- Swing into profile groove
- Clamp with set screw
- No machining required
- For larger profile cross sections or higher loads, several clamping strips must be used



T-SLOT BAR 140



TECHN. DATA / ITEMS SUPPLIED

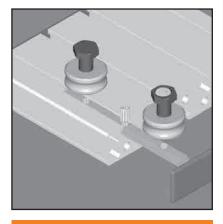
- Steel, galvanized
- 3 set screws M8, with hexagonal socket SW4
- Stainless version part no. 28.0030/0
- Weight = 0.096 kg/piece

APPLICATIONS

- Fastening of pulleys in linear slide LW 32 E

Part no.

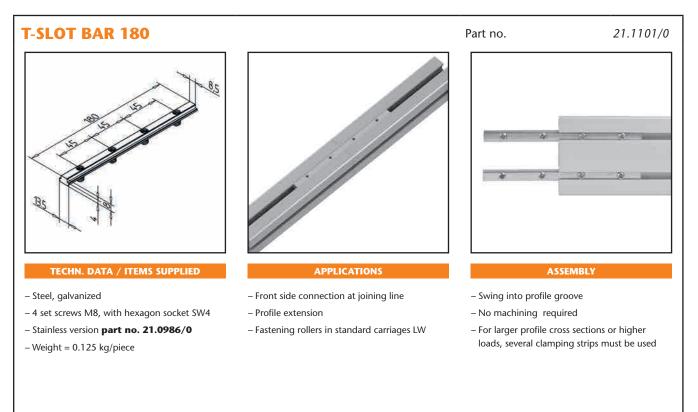
28.0026/0



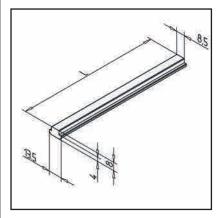
ASSEMBLY

Swing into profile groove

– No machining required



T-SLOT BAR PROFILE



TECHN. DATA / ITEMS SUPPLIED

- Steel, bright
- Stainless version part no. 21.1030/1
- Weight = 0.650 kg/m
- Bar length = 3 m



- Manufacture of terminal blocks, connecting elements in special lengths
- Production of reinforcements
- Ledges with special perforation

Part no.

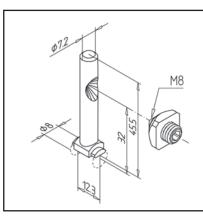


21.1030/0

ASSEMBLY

- Swing into profile groove

MITRE CONNECTOR N 30





APPLICATIONS

- Mitre connection of profiles on profile groove - For subsequent fitting in the groove



- Insert into groove and central bore
- Use a drilling jig for mitre connector N30 part no. 26.1056/0

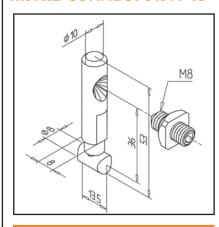
– Steel, galvanized

- With fastening material steel, zinc plated

TECHN. DATA / ITEMS SUPPLIED

- Weight = 0.023 kg/piece

MITRE CONNECTOR N 45



TECHN. DATA / ITEMS SUPPLIED

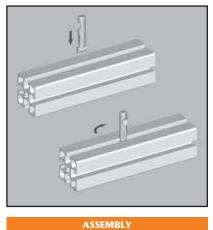
- Steel, galvanized
- With fastening material steel, zinc plated
- Weight = 0.035 kg/piece



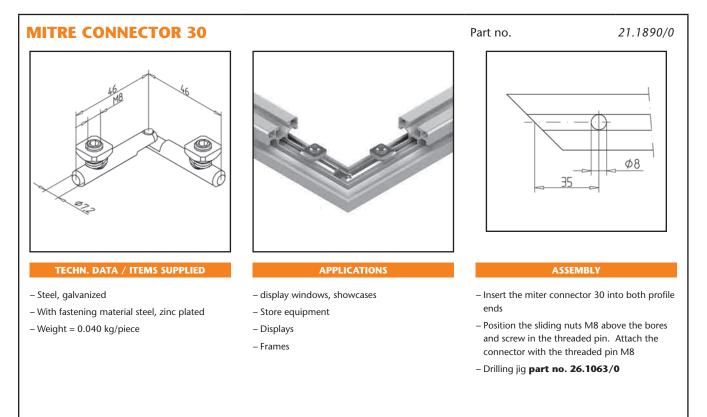
- Mitre connection of profiles on profile groove - For subsequent fitting in the groove

Part no.

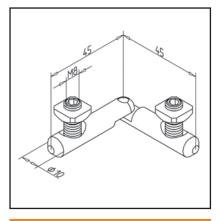
21.1401/0



- Drill profile bore of Ø 10.2 mm
- Use a drilling jig for mitre-connector N45 part no. 26.1060/0



MITRE CONNECTOR 45



TECHN. DATA / ITEMS SUPPLIED

- Steel, galvanized
- With fastening material steel, zinc plated
- Weight = 0.065 kg/piece



APPLICATIONS

- display windows, showcases
- Store equipment
- Displays
- Frames

Part no.

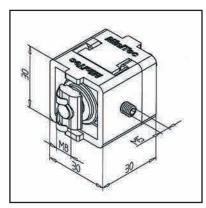
p. 21.1400/0

- Insert the miter connector into both profile ends
- Position the sliding nuts M8 above the bores and screw in the threaded pin. Attach the connector with the threaded pin M8
- Use a drilling jig for mitre-connector 45 part no. 26.1050/0

21.2068/0

Part no.

MOUNTING BRACKET 30



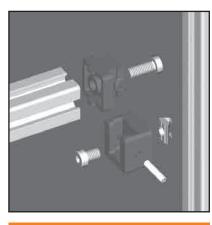
TECHN. DATA / ITEMS SUPPLIED

- PA, Injection Mould, grey
- With fastening material steel, zinc plated
- Weight = 0.041 kg/piece



APPLICATIONS

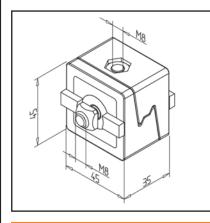
- Connection of profiles
- Profile extension
- Subsequent insertion of profiles into existing constructions, displaceable in groove direction
- Removable attachments



ASSEMBLY

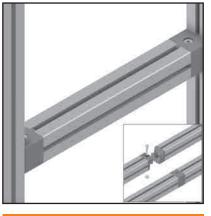
- Fasten to profiles with supplied hardware
- Insert cross-tie profile into T-solt
- For adjustment use set screw M5

MOUNTING BRACKET 45



TECHN. DATA / ITEMS SUPPLIED

- Zinc, Pressure die-casting, powder-coated, grey
- With fastening material steel, zinc plated
- Weight = 0.429 kg/piece



APPLICATIONS

- Connection of profiles
- Profile extension
- Subsequent insertion of profiles into existing constructions
- Attaching bearing surfaces
- Removable attachments
- Slidable in the groove direction



21.1411/0



- Fasten to profile groove with supplied hardware
- When retrofitting on a vertical groove, preferably use square nut M8 with nut fixation part no. 21.1351/2
- Recommended locking torque: 20 Nm

MOUNTING ANGLE 16 GD-Z Part no. 21.2077/0 **TECHN. DATA / ITEMS SUPPLIED** APPLICATIONS ASSEMBLY - Construction from profiles with width of 16 - Fasten to profile groove with supplied - Aluminium, Pressure die-casting, powdercoated, grey and 23; specifically suitable for the subsehardware quent mounting of elements in existent - With fastening material steel, zinc plated - Recommended torque: 8 Nm constructions - Removable centering tabs - Fitting end cap MW 16 GD-Z grey, part no.

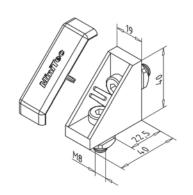
- Conductive version part no. 21.2077/6
- Weight = 0.021 kg/piece
- Fastening of surface elements, table tops
- Reinforcement of constructions made from profile series 16 or 23

21.2078/0

22.1138/1

Part no.

MOUNTING ANGLE 19 GD-Z



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, Pressure die-casting, powdercoated, grey
- With fastening material steel, zinc plated
- Package size of 50 pieces part no..
- 21.2078/050 - Conductive version part no. 21.2078/6
- Use on vertical struts part no. 21.2078/7 (square nut with position-fixing)
- Weight = 0.055 kg/piece



APPLICATIONS

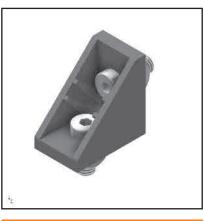
- Connection of profiles 19 and 32
- Subsequent insertion of profiles into existing constructions
- Attaching bearing surfaces
- Slidable in the groove direction

- Fasten to profile groove with supplied hardware
- Fitting end cap MW 19 GD-Z, grey, part no. 22.1139/1
- Recommended locking torque: 20 Nm

MOUNTING ANGLE 25 GD-Z

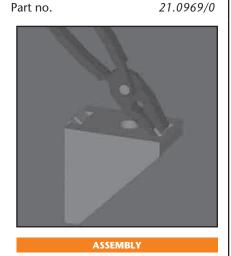
TECHN. DATA / ITEMS SUPPLIED

- Aluminium, Pressure die-casting, powdercoated, grey
- With fastening material steel, zinc plated
- Removable centering tabs
- Package size of 50 pieces part no..
 21.0969/050
- Conductive version part no. 21.0969/6
- Use on vertical struts part no. 21.0969/7 (square nut with position-fixing)
- Weight = 0.066 kg/piece



APPLICATIONS

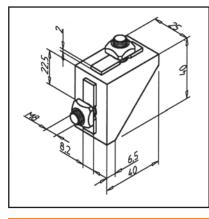
- General constructions, particularly for subsequent insertion of profilesinto existing constructions
- Fastening of surface elements, table tops
- Strengthening of profile constructions



- Fasten to profile groove with supplied

- If non-aligning grooves, break centering tabs with pliers
- Fitting end cap MW 25 GD-Z, **part no. 22.0997/1**
- Recommended locking torque: 20 Nm

MOUNTING ANGLE 25 S

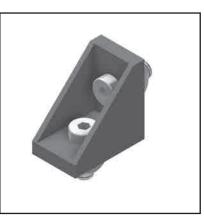


TECHN. DATA / ITEMS SUPPLIED

- Aluminium, Pressure die-casting, powdercoated, grey
- With fastening material steel, zinc plated
- With ridge as anti-twist device
- Package size of 50 pieces part no..
 21.1134/050

- Conductive version part no. 21.1134/6

- Use on vertical struts **part no. 21.1134/7** (square nut with position-fixing)
- Weight = 0.067 kg/piece



APPLICATIONS

- General constructions, particularly for subsequent insertion of profilesinto existing constructions
- Strengthening of profile constructions

Part no.

hardware

21.1134/0



- Fasten to profile groove with supplied hardware
- Recommended locking torque: 20 Nm

MOUNTING ANGLE 30 GD Part no. 21.0905/0 Image: Angle An

- Fastening of surface elements, table tops
- Recommended torque: 8 Nm
 Fitting end cap MW 30 grey, part no. 22.0989/1

MOUNTING ANGLE 45 GD

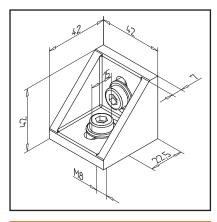
- Removable centering tabs

– Weight = 0.029 kg/piece

21.0905/050

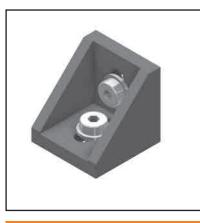
- Package size of 50 pieces part no..

- conductive version part no. 21.0905/6



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, Pressure die-casting, powdercoated, grey
- With fastening material steel, zinc plated
- Package size of 50 pieces part no..
- 21.1133/050 - Conductive version part no. 21.1133/6
- Use on vertical struts part no. 21.1133/7 (square nut with position-fixing)
- Weight = 0.114 kg/piece



APPLICATIONS

- General constructions, particularly for subsequent insertion of profilesinto existing constructions
- Fastening of surface elements, table tops
- Strengthening of profile constructions

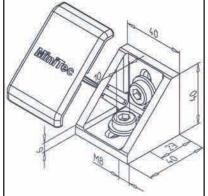
ASSEMBLY

- Fasten to profile groove with supplied hardware
- Hammer head screw part no. 21.1370/0 can be used
- Recommended locking torque: 20 Nm



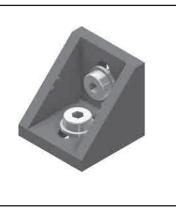
Part no.

MOUNTING ANGLE 45 GD-Z



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, Pressure die-casting, powdercoated, grey
- With fastening material steel, zinc plated
- Removable centering tabs
- Package size of 50 pieces part no..
 21.1339/050
- Package size of 50 pieces part no..
 21.1349/750
- Conductive version part no. 21.1349/8
- Use on vertical struts **part no. 21.1349/7** (square nut with position-fixing)
- Weight = 0.086 kg/piece



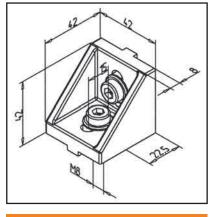
APPLICATIONS

- General constructions, particularly for subsequent insertion of profilesinto existing constructions
- Fastening of surface elements, table tops
- Strengthening of profile constructions



- Fasten to profile groove with supplied hardware
- If non-aligning grooves, break centering tabs with pliers
- Hammer head screw **part no. 21.1370/0** can be used
- Fitting end cap MW 45 GD-Z, **part no.** 22.1024/1
- Recommended locking torque: 20 Nm

MOUNTING ANGLE 45 SST



TECHN. DATA / ITEMS SUPPLIED

- Stainless steel, blasted
- Fastening kit
- Use on vertical struts part no. 21.0007/7 (square nut with position-fixing)
- Weight = 0.255 kg/piece

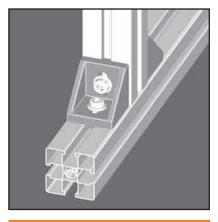


APPLICATIONS

- General constructions, particularly for subsequent insertion of profilesinto existing constructions
- Strengthening of profile constructions

Part no.

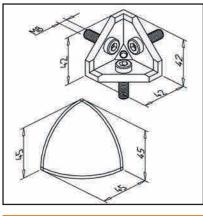
21.0007/0



- Fasten to profile groove with supplied hardware
- Recommended locking torque: 20 Nm

MOUNTING ANGLE 30 R 90° 21.2109/0 Part no. TECHN. DATA / ITEMS SUPPLIED APPLICATIONS ASSEMBLY - Aluminium, Pressure die-casting, bright - Corner fastening of profiles 30 R 90° - in the central bore of the profile with supplied hardware - With fastening material steel, zinc plated - Constructions for show cases, tables etc. – Clip the end cap - End cap MW 30 R 90° part no. 22.1143/1 - Weight = 0.043 kg/piece

MOUNTING ANGLE 45 R 90°



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, Pressure die-casting, bright
- With fastening material steel, zinc plated
- End cap MW 45 R 90° part no. 22.1033/1
- Weight = 0.098 kg/piece



- Corner fastening of profiles 45 R 90°
- Constructions for show cases, tables etc.

Part no.



- in the central bore of the profile with supplied hardware
- Clip the end cap

MOUNTING ANGLE 45°

- Aluminium, Pressure die-casting, bright
- With fastening material steel, zinc plated
- End cap 45°/3, grey part no. 22.1027/1
- Weight = 0.107 kg/piece



APPLICATIONS

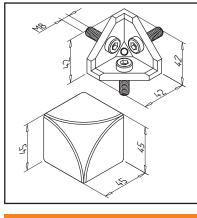
- Corner fastening of profiles 45 / 45°
- Constructions for show cases, tables etc.

 Part no.
 21.1708/1

 Image: Constraint of the system o

- in the central bore of the profile with supplied hardware
- Clip the end cap

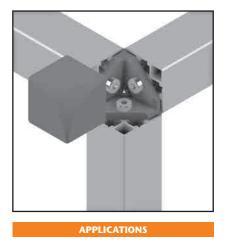
MOUNTING ANGLE 45 G



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, Pressure die-casting, bright, grey
- With fastening material steel, zinc plated
- End cap MW 45/45/45 grey part no.
 22.1177/1

- Weight = 0.121 kg/piece



- Constructions for show cases, tables etc.
- Connection of profiles 45x45, preferably G-profile

Part no.

21.2503/1



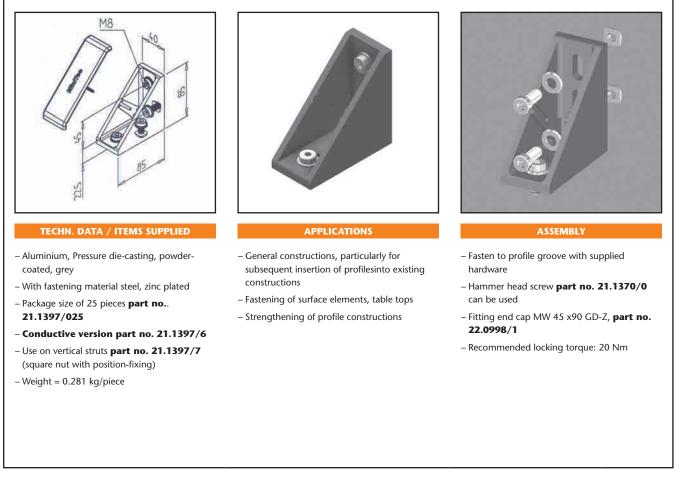
- Fasten to central profile bore with fixation material from delivery scope
- Clip the end cap

MOUNTING ANGLE 45 X 90 GD-Z

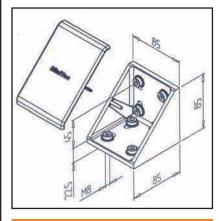
Part no.

Part no.

21.1397/0



MOUNTING ANGLE 90 GD-Z



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, Pressure die-casting, powdercoated, grey
- With fastening material steel, zinc plated
- Package size of 25 pieces part no..
 21.0978/025
- Conductive version part no. 21.0978/6
- Use on vertical struts **part no. 21.0978/7** (square nut with position-fixing)
- Weight = 0.497 kg/piece



APPLICATIONS

- For profiles 90 and 180
- General constructions, particularly for subsequent insertion of profilesinto existing constructions
- Strengthening of profile constructions

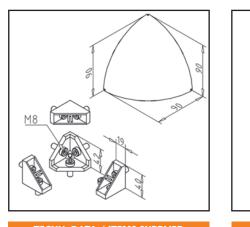
21.0978/0

- Fasten to profile groove with supplied hardware
- Hammer head screw **part no. 21.1370/0** can be used
- Matching cap MW 90 GD-Z part-No.
 22.0999/1
- Recommended locking torque: 20 Nm

CORNER CONNECTION 90 R 90°

Part no.

21.2199/0



TECHN. DATA / ITEMS SUPPLIED

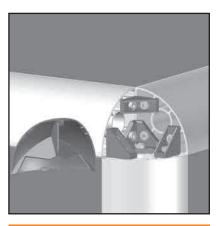
- Aluminium, Pressure die-casting, bright
- With fastening material steel, zinc plated
- End cap MW 90 R 90° part no. 22.0980/1
- Angle 45°, part no. 21.1708/2
- Mounting bracket 19 GD-Z, part no. 21.2078/2
- Weight = 0.267 kg/piece



APPLICATIONS

- Corner connections of profiles 90 R 90°

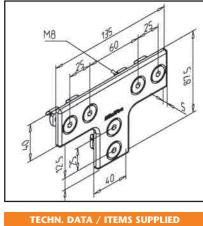
- Constructions for show cases, tables etc.



ASSEMBLY

- Fasten to central profile bore with fixation material from delivery scope
- Clip the end cap

T-SHEET SST



- Stainless steel, blasted
- Fastening kit
- Weight = 0.259 kg/piece



APPLICATIONS

- Strenthening of profile constructions

Part no.

21.0019/0



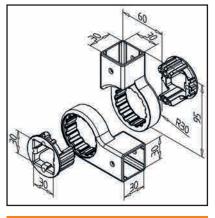
- Attach to the profile with supplied hardware
- Use power-lock fasteners if tractive forces appear

- Weight = 0.163 kg/piece
- Also suitable for cross joints (double application)

ASSEMBLY

Attach to the profile with supplied hardware
Use power-lock fasteners if tractive forces appear

MULTI CONNECTOR 30



TECHN. DATA / ITEMS SUPPLIED

- ABS, Injection Mould, grey
- With fastening material steel, zinc plated
- Weight = 0.135 kg/piece



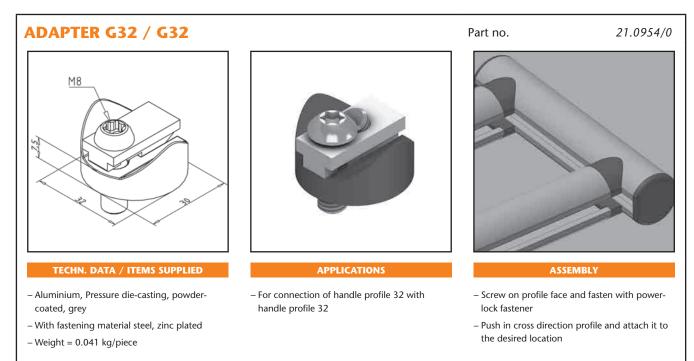
- APPLICATIONS
- Easy connection for profiles
- Angle adjustable in 22,5° raster

Part no.

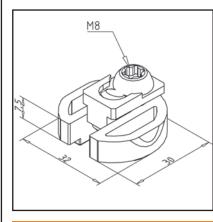




- Fix swivel arm front to profile
- Insert socket from the side
- Insert other profile into socket and position it
- Secure with 2 cylinder screws against moving



ADAPTER G32 / 30 X 30



TECHN. DATA / ITEMS SUPPLIED

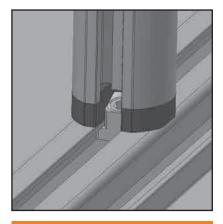
- Aluminium, Pressure die-casting, powdercoated, grey
- With fastening material steel, zinc plated
- Weight = 0.032 kg/piece



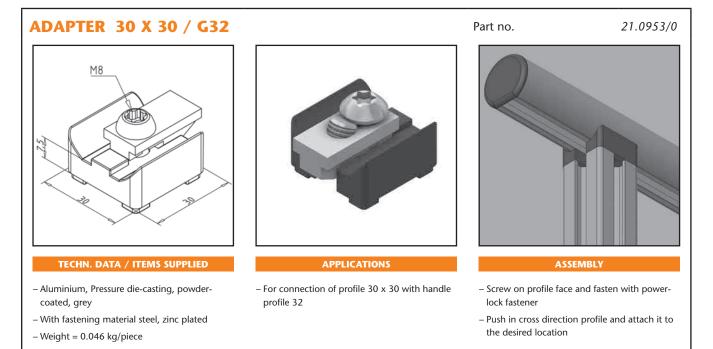
APPLICATIONS

 For connection of handle profile 32 with profiles of width 30 Part no.

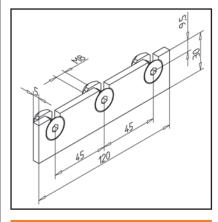
21.0955/0



- Screw on profile face and fasten with powerlock fastener
- Push in cross direction profile and attach it to the desired location



CONNECTING BAR



TECHN. DATA / ITEMS SUPPLIED

- Steel, galvanized
- With fastening material steel, zinc plated
- Weight = 0.156 kg/piece



- Connection of different profiles
- Retrofitting profiles

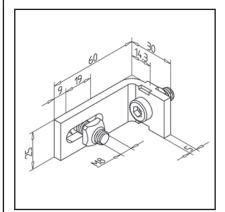
Part no.

21.1113/0



- Fasten to profile groove with supplied hardware
- No machining required

PROTECTIVE FIELD SUSPENSION 45 ST



TECHN. DATA / ITEMS SUPPLIED

- With fastening material steel, zinc plated

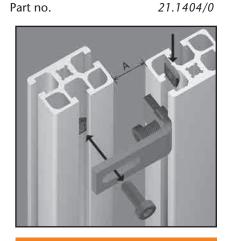
- Steel, galvanized

- Weight = 0.104 kg/piece



APPLICATIONS

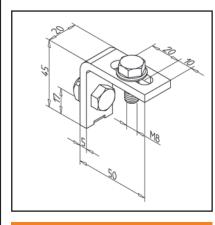
- Fixation of guard units from profile 45 x 32
- Usable in frames made from any profile
- The protective field flush fits to the column



ASSEMBLY

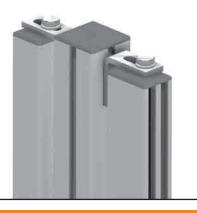
- Fasten to profile groove with supplied hardware
- No machining required
- First attach the brackets to the standing profile, then connect the protective field from the rear to the brackets
- A = 10 mm 28 mm

PROTECTIVE FIELD SUSPENSION 19



TECHN. DATA / ITEMS SUPPLIED

- Steel, galvanized
- With fastening material steel, zinc plated
- Weight = 0.089 kg/piece

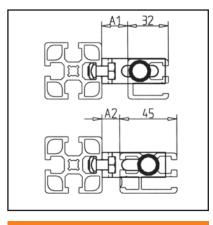


APPLICATIONS

- Fastening protective fields from clamping profile 32 x 32, 45 x 32 or standard profiles
- Attachment of protective fields at any angleWhen using clamping profile 32x32 use end
- cap **part no. 22.1032/3**
- When using clamping profile 45x32 use end cap **part no. 22.1046/3**

Part no.

21.1399/0

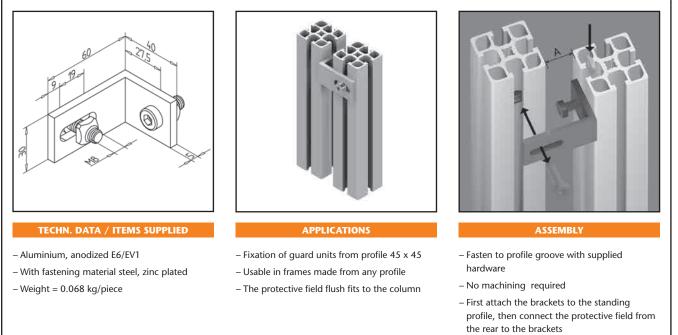


- Spread screw threads M8 x 20 into the profile ending of the protective field
- Install protective field suspension on posts
- Fix guard with screws of fastening kit
- Alternatively: For very fast assembly, the lower two threads can be fitted with the retaining pin 25 part no. 21.1758/0. Screw fastening only on the two upper threads
- A1 = 10.5 mm 30.5 mm A2 = 10.5 mm -17.5 mm

PROTECTIVE FIELD SUSPENSION 45 AL

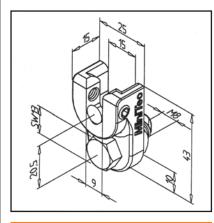
Part no.

21.1407/0



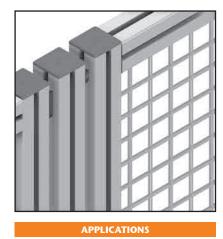
– A = 10 mm - 28 mm

PROTECTIVE FIELD SUSPENSION GD-K



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, Pressure die-casting, powdercoated, grey
- With fastening material steel, zinc plated
- Weight = 0.039 kg/piece



- Guards from all profiles
- Movable flaps
- It is also possible to mount the guards at the front when fitting the suspensions to the front of the post

 Part no.
 21.0008/0

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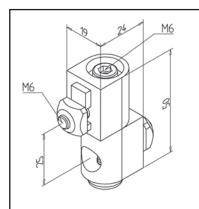
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- Fasten protective field hanger assembly in place on columns
- Guard unit with cylinder screws M8 x 25 furnished
- Hang the guard in place, and tighten the set screw using an Allen key from the rear
- A = 16 mm ± 0.75
- Guard cannot be removed from outside

PROTECTIVE FIELD SUSPENSION WITH ADJUSTABLE ANGLE

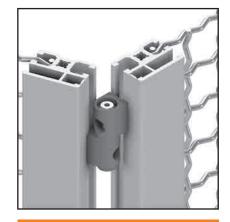
Part no.

21.1403/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, Pressure die-casting, powder-
- coated, grey
- With fastening material steel, zinc plated - Weight = 0.114 kg/piece



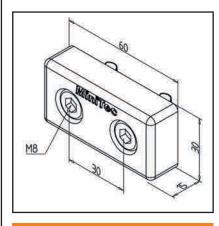
APPLICATIONS

- Connection of profile support under preferred angle
- Installation of safety fence elements at any angle

ASSEMBL

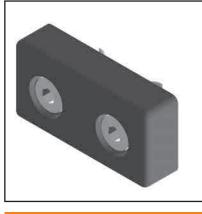
- Assemble and align lower halves onto posts
- Assemble and mount upper halves on guard unit
- Insert the cylinder head screw and tighten it with key 4 A/F. The inserted hexagon nut in the lower fixing half is secured against torsion

CONNECTING PLATE 30 X 60



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, Pressure die-casting, powdercoated, grey
- With fastening material steel, zinc plated
- Weight = 0.085 kg/piece

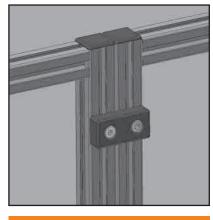


APPLICATIONS

- Connection of two guards without gap - Strengthening of guard units
- Connection of pre-assembled modules

Part no.

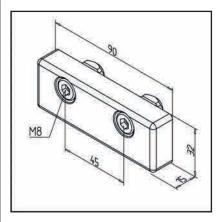
21.2113/0



ASSEMBLY

- Install to groove of protective field and posts with supplied hardware

CONNECTING PLATE 90 X 32

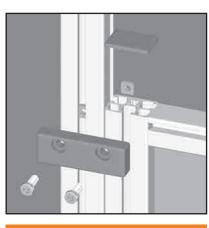


TECHN. DATA / ITEMS SUPPLIED

- Aluminium, Pressure die-casting, powdercoated, grey
- With fastening material steel, zinc plated
- Weight = 0.136 kg/piece



- Connection of two guards without gap
- Strengthening of guard units
- Connection of pre-assembled modules

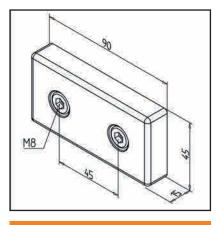


21.1346/0

ASSEMBLY

- Install to groove of protective field and posts with supplied hardware

CONNECTING PLATE 45 X 90



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, Pressure die-casting, powdercoated, grey
- With fastening material steel, zinc plated
- Weight = 0.182 kg/piece



APPLICATIONS

- Connection of two guards without gap
- Strengthening of guard units
- Connection of pre-assembled modules

Part no.

Part no.

21.1472/0



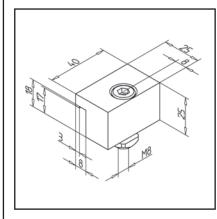
ASSEMBLY

- Install to groove of protective field and posts with supplied hardware

CONNECTING PLATE 90 X 90 21.1473/0 Part no. 20 0 ۲ 0 0 M8 **TECHN. DATA / ITEMS SUPPLIED** APPLICATIONS ASSEMBLY - Aluminium, Pressure die-casting, powder-- Connection of two guards without gap - Install to groove of protective field and posts with supplied hardware coated, grey - Strengthening of guard units - With fastening material steel, zinc plated - Connection of pre-assembled modules

CLAMPING CLAW

- Weight = 0.366 kg/piece



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, anodized E6/EV1
- With fastening material steel, zinc plated
- Weight = 0.063 kg/piece



APPLICATIONS

 Parallel connection of profiles at various angles Part no.

21.1027/0



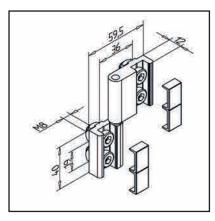
- Fasten to profile groove with supplied hardware
- No machining required

DETACHABLE HINGE 19 Part no. 21.1100/0 2 ASSEMBLY **TECHN. DATA / ITEMS SUPPLIED** APPLICATIONS - Aluminium, anodized E6/EV1 - Detachable doors, hatches, surface elements - Fasten to profile groove with supplied hardin a vertical arrangement ware. - with stainless steel shaft - If the hinges are arranged in the opposite - For fixing directly on surface elements or on - With fastening material steel, zinc plated

- End caps
- Spring plate design part no. 21.1100/7
- load capacity up to 400 N
- Weight = 0.110 kg/piece

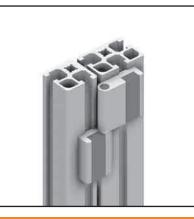
- direction, non-detachable and horizontally mounted structures can also be produced
- Connection of profiles 19 at various angles
- profile surfaces we deliver hinge 19 without fixing element part no. 21.1100/2
- 1: lift removable
- 2: Arrangement is not detachable

DETACHABLE HINGE 32



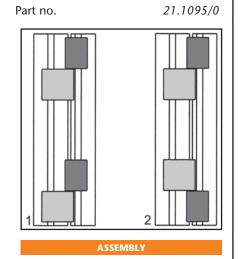
TECHN. DATA / ITEMS SUPPLIED

- Aluminium, anodized E6/EV1
- with stainless steel shaft
- With fastening material steel, zinc plated
- End caps
- Order with position fixing nuts, part no. 21.1095/7
- load capacity up to 400 N
- Weight = 0.134 kg/piece



APPLICATIONS

- Detachable doors, hatches, moving parts on profiles 32
- If the hinges are arranged in the opposite direction, non-detachable and horizontally mounted structures can also be produced
- Connecting profiles 19, 32 and 45 at any angle



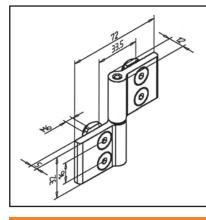
- Fasten to profile groove with supplied hardware.
- For fixing directly on surface elements or on profile surfaces we deliver hinge 32 without fixing element part no. 21.1095/2
- 1: lift removable
- 2: Arrangement is not detachable

DETACHABLE HINGE 45 Part no. 21.1096/0 2 **TECHN. DATA / ITEMS SUPPLIED** APPLICATIONS ASSEMBLY - Aluminium, anodized E6/EV1 - Detachable doors, hatches, moving parts on - Fasten to profile groove with supplied hardprofiles 45 ware. - with stainless steel shaft - Connection of profiles 45 at various angles - For fixing directly on surface elements or on - With fastening material steel, zinc plated

- End caps
- Order with position fixing nuts, **part no.** 21.1096/7
- load capacity up to 400 N
- Weight = 0.151 kg/piece

- Suspension of protective fields
- If the hinges are arranged in the opposite direction, non-detachable and horizontally mounted structures can also be produced
- For fixing directly on surface elements or on profile surfaces we deliver hinge 45 without fixing element **part no. 21.1096/2**
- 1: lift removable
- 2: Arrangement is not detachable

DETACHABLE HINGE L 19/30



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, anodized E6/EV1
- with stainless steel shaft
- With fastening material steel, zinc plated
- load capacity up to 400 N
- Weight = 0.089 kg/piece

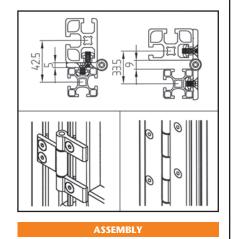


APPLICATIONS

- Detachable doors, hatches, moving parts to profiles 19, 32 and 45
- If the hinges are arranged in the opposite direction, non-detachable and horizontally mounted structures can also be produced
- Connecting profiles 19 and 30 at any angle

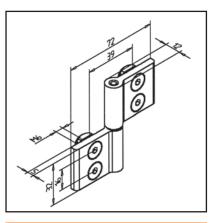
Part no.

21.1374/0



- Fasten to profile groove with supplied hard-ware.
- The hinge profile 5GB part no. 20.0093/0 (not anodized) is available for the production of hinges in variable lengths and bore spacings as well as piano hinges

DETACHABLE HINGE L 30/30



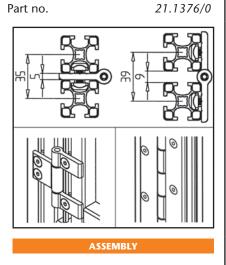
TECHN. DATA / ITEMS SUPPLIED

- Aluminium, anodized E6/EV1
- with stainless steel shaft
- With fastening material steel, zinc plated
- load capacity up to 400 N
- Weight = 0.089 kg/piece



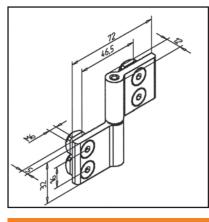
APPLICATIONS

- Detachable doors, hatches, movable attachments
- If the hinges are arranged in the opposite direction, non-detachable and horizontally mounted structures can also be produced
- Connection of profiles 30 under preferred angle



- Fasten to profile groove with supplied hard-ware.
- The hinge profile 5GB part no. 20.0093/0 (not anodized) is available for the production of hinges in variable lengths and bore spacings as well as piano hinges

DETACHABLE HINGE L 30/45



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, anodized E6/EV1
- with stainless steel shaft
- With fastening material steel, zinc plated
- load capacity up to 400 N
- Weight = 0.089 kg/piece



APPLICATIONS

- Detachable doors, hatches, movable attachments
- If the hinges are arranged in the opposite direction, non-detachable and horizontally mounted structures can also be produced
- Connection of profiles 30 and 45 at various angles

21.1377/0

Part no.

ware.

- Fasten to profile groove with supplied hard-
- The hinge profile 5GB part no. 20.0093/0 (not anodized) is available for the production of hinges in variable lengths and bore spacings as well as piano hinges

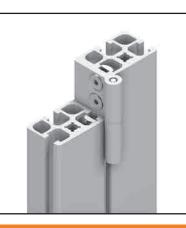
6 MINITEC PROFILE SYSTEM

106

DETACHABLE HINGE L 19/19

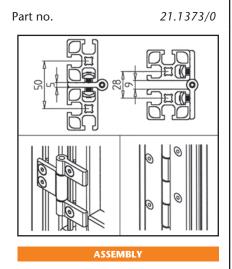
TECHN. DATA / ITEMS SUPPLIED

- Aluminium, anodized E6/EV1
- with stainless steel shaft
- With fastening material steel, zinc plated
- load capacity up to 400 N
- Weight = 0.089 kg/piece



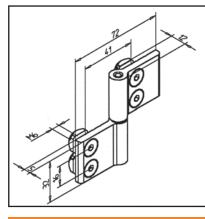
APPLICATIONS

- Detachable doors, hatches, moving parts to profiles 19 and 32
- Suspension of protective fields
- If the hinges are arranged in the opposite direction, non-detachable and horizontally mounted structures can also be produced
- Connection of profiles 19 at various angles



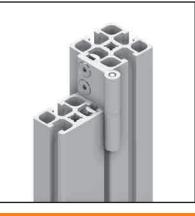
- Fasten to profile groove with supplied hardware.
- The hinge profile 5GB part no. 20.0093/0 (not anodized) is available for the production of hinges in variable lengths and bore spacings as well as piano hinges

DETACHABLE HINGE L 19/45



TECHN. DATA / ITEMS SUPPLIED

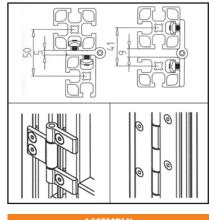
- Aluminium, anodized E6/EV1
- with stainless steel shaft
- With fastening material steel, zinc plated
- load capacity up to 400 N
- Weight = 0.089 kg/piece



APPLICATIONS

- Detachable doors, hatches, moving parts to profiles 19, 32 and 45
- Suspension of protective fields
- If the hinges are arranged in the opposite direction, non-detachable and horizontally mounted structures can also be produced
- Connecting profiles 19, 32 and 45 at any angle

Part no.



21.1375/0

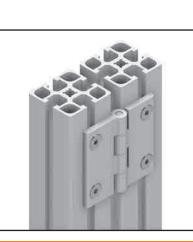
- Fasten to profile groove with supplied hardware.
- The hinge profile 5GB part no. 20.0093/0 (not anodized) is available for the production of hinges in variable lengths and bore spacings as well as piano hinges

DETACHABLE HINGE L 45/45 21.1378/0 Part no. TECHN. DATA / ITEMS SUPPLIED APPLICATIONS ASSEMBLY - Aluminium, anodized E6/EV1 - Detachable doors, hatches, moving parts on - Fasten to profile groove with supplied hardprofiles 45 ware. - with stainless steel shaft - Suspension of protective fields - The hinge profile 5GB part no. 20.0093/0 - With fastening material steel, zinc plated (not anodized) is available for the production - If the hinges are arranged in the opposite

direction, non-detachable and horizontally

mounted structures can also be produced - Connection of profiles 45 at various angles

- load capacity up to 400 N
- Weight = 0.089 kg/piece

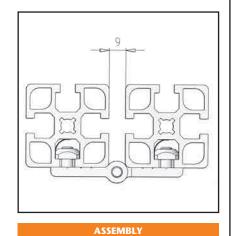


APPLICATIONS

- Suitable for large doors and lids
- Guard units
- Connection of profiles at various angles



21.0973/0



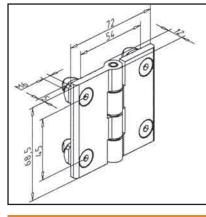
of hinges in variable lengths and bore spac-

ings as well as piano hinges

- Screw tight to the profile groove with

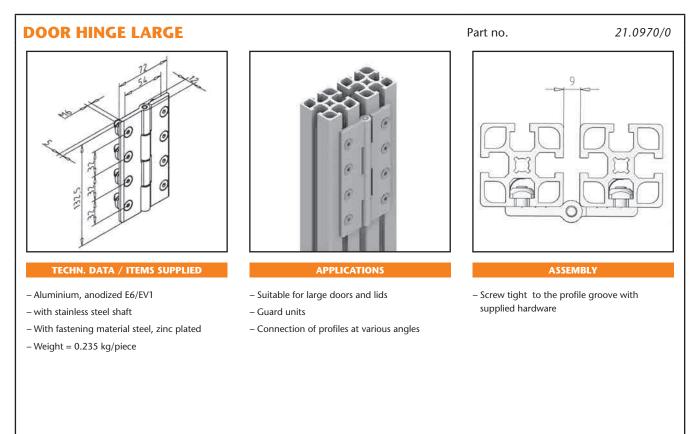
supplied hardware

DOOR HINGE SMALL

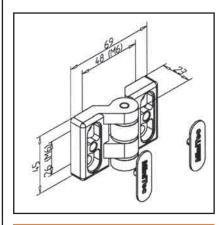


TECHN. DATA / ITEMS SUPPLIED

- Aluminium, anodized E6/EV1
- with stainless steel shaft
- With fastening material steel, zinc plated
- Weight = 0.120 kg/piece

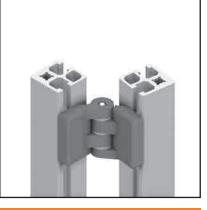


FOLDING HINGE 19 S



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, Pressure die-casting, powdercoated, grey
- Hinge pin, steel, galvanised
- End caps
- Without fastening kit
- load capacity up to 600 N
- Weight = 0.100 kg/piece

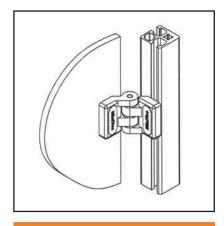


APPLICATIONS

- Suitable for larger doors and hatches of profiles 19 or 32
- Guard units
- Connection of profiles 19 and 32 at any angle

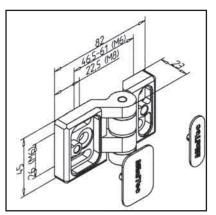
Part no.

21.1044/0



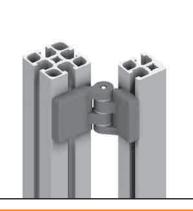
- Fasten hinge halves each with 2 screws M6
 x 18 and 2 square nut on profile, or fasten directly with screws on to surface elements according to material strength
- For heavy-duty applications use multiple hinges
- Swivel range up to 270°

FOLDING HINGE 32 S



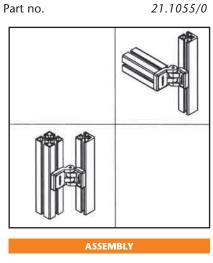
TECHN. DATA / ITEMS SUPPLIED

- Aluminium, Pressure die-casting, powdercoated, grey
- Hinge pin, steel, galvanised
- End caps
- Without fastening kit
- load capacity up to 600 N
- Weight = 0.102 kg/piece



APPLICATIONS

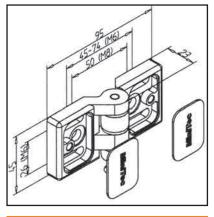
- Suitable for large doors and lids
- Guard units
- Connecting profiles 19, 32 and 45 at any angle



- Fasten hinge with 2 M6 x 18 bolts and 2 square nuts on the profile groove or with screws corresponding to the material thickness directly on the surface elements
- Fasten other hinge half onto profile 45 x 45 with screw M8 x 30 or 2 screws M6 x 18
- For heavy-duty applications use multiple hinges
- Swivel range up to 270°

Part no.

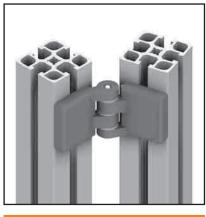
FOLDING HINGE 45 S



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, Pressure die-casting, powdercoated, grey
- Hinge pin, steel, galvanised
- End caps
- Without fastening kit
- load capacity up to 600 N

– Weight = 0.099 kg/piece



APPLICATIONS

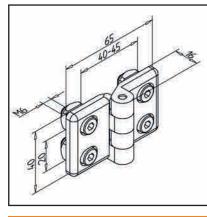
- Suitable for large doors and lids
- Guard units
- Connection of profiles at various angles
- For heavy-duty application use multiple hinges

21.1098/0

- 1: 2 screws M8 x 30
- 2: 2 screws M6 x 18, 2 square nut M6, 1 screw M8 x 30
- 3: 2 screws M6 x 18, 2 square nuts M6, for panel element 2 screws M6 according to the material thickness
- 4: 4 screws M6 x 18, 4 square nuts M6
- Swivel range up to 270°

FOLDING HINGE 30 GD 21.2532/0 Part no. 6 2 of TECHN. DATA / ITEMS SUPPLIED **APPLICATIONS** ASSEMBLY - Aluminium, Pressure die-casting, lacquered, - Suitable for all profiles of series 30 - Screw tight to the profile groove with silver supplied hardware. - Doors and lids - with stainless steel shaft - Guard units - Fastening material steel, galvanized - Connection of profiles at various angles - Load capacity up to 300 N - Weight = 0.098 kg/piece

FOLDING HINGE 45 M6



TECHN. DATA / ITEMS SUPPLIED

- PA, grey
- With fastening material steel, zinc plated
- load capacity up to 160 N
- Weight = 0.061 kg/piece



APPLICATIONS

- Suitable for light doors and lids
- Guard units
- Connection of profiles at various angles

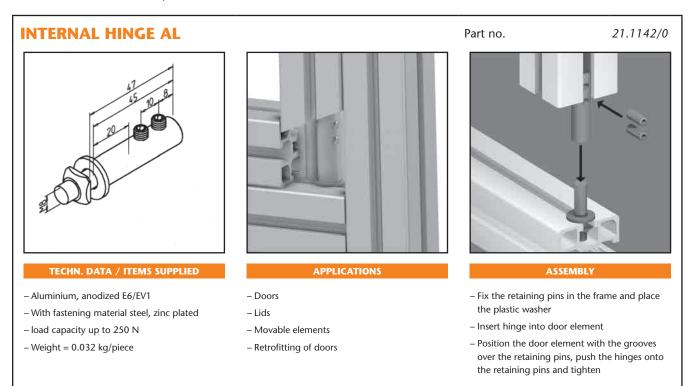
Part no.

21.1175/0

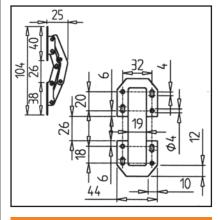


ASSEMBLY

 Screw tight to the profile groove with supplied hardware.

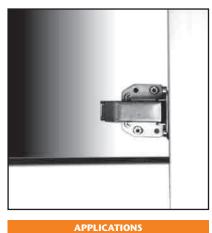


SWING-OUT HINGE



TECHN. DATA / ITEMS SUPPLIED

- Steel, galvanized
- Without fastening kit
- load capacity up to 50 N
- Weight = 0.080 kg/piece

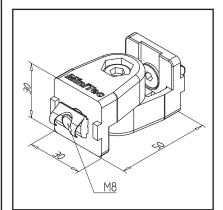


- For lightweight doors
- In windows, measuring devices, safety devices
- Doors latch gap-free either overlying outside or flush inside

Part no. 21.1187/0

- On profile grooves with screws M4 x 16 and square nut M4
- Direct fixation to panel element, screw length must thus be selected according to material strength
- Fastening directly on the profile surface

JOINT 30 S



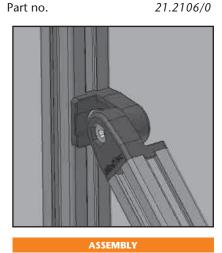
TECHN. DATA / ITEMS SUPPLIED

- Aluminium, Pressure die-casting, powdercoated, grey
- With fastening material steel, zinc plated
- Locking device against torsion
- Weight = 0.087 kg/piece



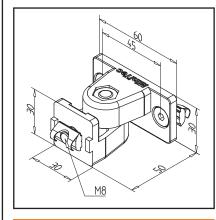
APPLICATIONS

- Connection of profile support under preferred angle
- Retrofitting reinforcement in existing racks
- Alternative: Swivel joint 30 S with slide bushing part no. 21.2222/0
- Alternative: Swivel joint 30 S with clamping lever **part no. 21.2225/0**



- the first joint half to the profile
- Attach the first joint half to the profile strut on the face side
- Fasten the second joint half to the supporting frame
- Screw both parts together on hinge point

JOINT 30 F/S



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, Pressure die-casting, powdercoated, grey
- With fastening material steel, zinc plated
- Locking device against torsion
- Weight = 0.105 kg/piece

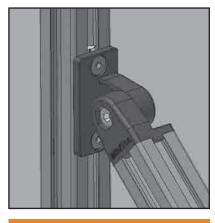


APPLICATIONS

- Connection of profile support under preferred angle
- Retrofitting reinforcement in existing racks
- Alternative: Swivel joint 30 F / S with sliding bushing: part no. 21.2221/0
- Alternatively: Swivel joint 30 F/S with clamping lever part no. 21.2224/0

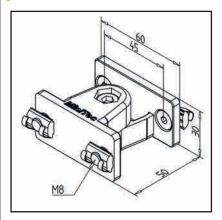
Part no.

21.2105/0



- Attach the first joint half to the profile strut on the face side
- Fasten the second joint half to the supporting frame
- Screw both parts together on hinge point

JOINT 30 F



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, Pressure die-casting, powdercoated, grey
- With fastening material steel, zinc plated

- Locking device against torsion

- Weight = 0.126 kg/piece



APPLICATIONS

- Connection of profile support under preferred angle
- Retrofitting reinforcement in existing racks
- Alternative: Swivel joint 30 F with slide bushing part no. 21.2223/0
- Alternative: Swivel joint 30 F with clamping lever **part no. 21.2226/0**

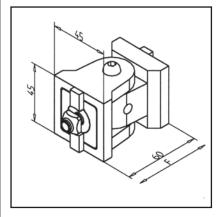
21.2111/0

- Fasten link to profile face

Part no.

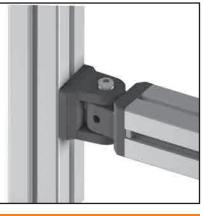
- Screw both parts together on hinge point

SWIVEL JOINT 45



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, Pressure die-casting, powdercoated, grey
- With fastening material steel, zinc plated
- Anti-rotation device AL GD
- Load Fmax 5000 N
- Use on vertical struts part no. 21.2030/1
- Weight = 0.250 kg/piece

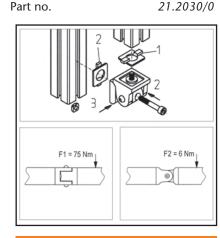


APPLICATIONS

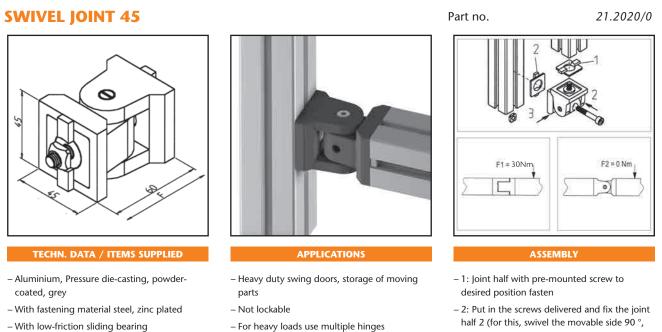
- Connection of profiles at various angles

– Bracings

- Reinforcement of frame constructions
- Not to be used as a hinge



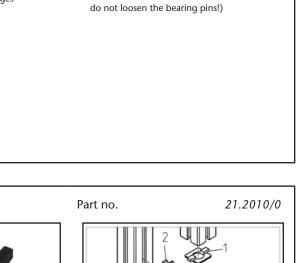
- 1: Joint half with pre-mounted screw to desired position fasten
- 2. Screw from scope of supply insert and joint half of 2 fix swivel (to it mobile side 90°)
- 3: Tighten lateral connecting screws



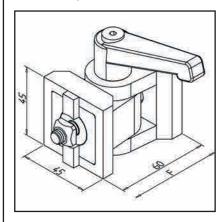
- Anti-rotation device AL GD

- Load Fmax 1500 N
- Use on vertical struts part no. 21.2020/7
- Weight = 0.240 kg/piece

- For heavy loads use multiple hinges



SWIVEL JOINT 45 WITH CLAMPING LEVER



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, Pressure die-casting, powdercoated, grey
- With fastening material steel, zinc plated
- With low-friction sliding bearing
- Anti-rotation device AL GD
- Load Fmax 1500 N
- Use on vertical struts part no. 21.2010/7
- Weight = 0.339 kg/piece



APPLICATIONS

- Heavy duty swing doors, storage of moving parts
- Clamping lever for positioning of add-on parts

as gripping shells, measuring devices

- For heavy loads use multiple hinges

- Fastening of quick-to-adjust components such - 3: Tighten clamping lever

ASSEMBLY

- 1: Joint half with pre-mounted screw to

desired position fasten

- 2: Fix with screws included

= 3 Nm

SWIVEL JOINT 45/15 21.2315/0 Part no. M8 65 F1 = 50 Nm**TECHN. DATA / ITEMS SUPPLIED** APPLICATIONS ASSEMBLY - Aluminium, Pressure die-casting, powder-- Heavy duty swing doors, storage of moving - Attach the first joint half to the profile strut on coated, grey parts the face side - With fastening material steel, zinc plated – Not lockable - Fasten the second joint half to the supporting frame

- For heavy loads use multiple hinges

- With low-friction sliding bearing - Anti-rotation device AL GD
- Load Fmax 2700 N
- Weight = 0.312 kg/piece



APPLICATIONS

- Heavy duty swing doors, storage of moving parts
- Not lockable
- For heavy loads use multiple hinges

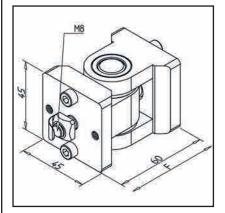
21.2034/0

Part no.

ASSEMBLY

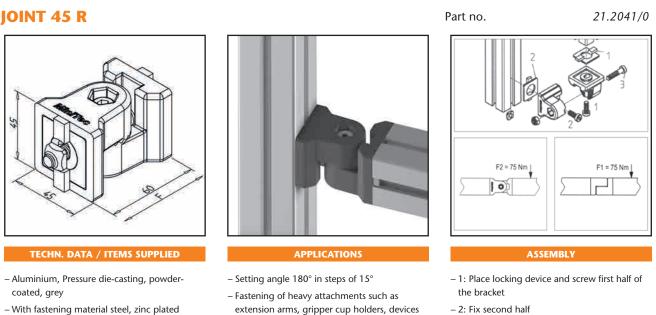
- Attach the first joint half to the profile strut on the face side
- Fasten the second joint half to the supporting frame

HEAVY DUTY JOINT 45



TECHN. DATA / ITEMS SUPPLIED

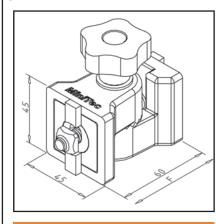
- Steel, galvanized
- With fastening material steel, zinc plated
- With low-friction sliding bearing
- Locking device against torsion
- Load Fmax 3500 N
- Load F1 max 75 Nm
- Weight = 0.680 kg/piece



- Anti-rotation device AL GD
- Load Fmax 5000 N
- Use on vertical struts part no. 21.2041/7
- Weight = 0.263 kg/piece

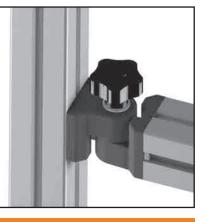
- extension arms, gripper cup holders, devices
- Safe adjustment through tooth system
- 3: Connect the 2 halves in desired angle and tighten

JOINT 45 R WITH STAR GRIP



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, Pressure die-casting, powdercoated, grey
- With fastening material steel, zinc plated
- Anti-rotation device AL GD
- Load Fmax 5000 N
- Use on vertical struts part no. 21.2230/7
- Weight = 0.279 kg/piece

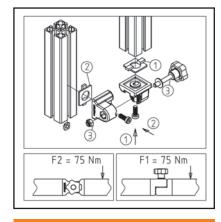


APPLICATIONS

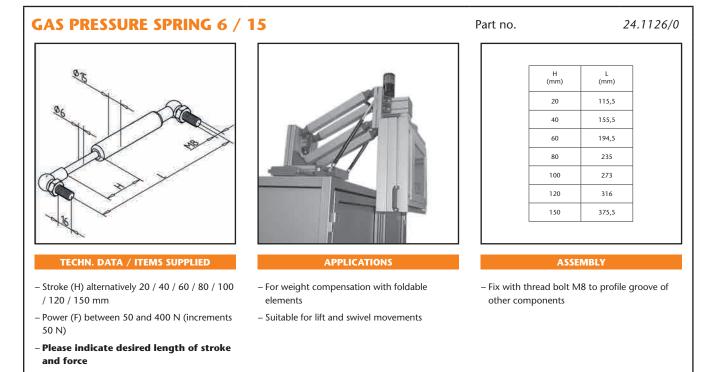
- Setting angle 180° in steps of 15°
- Fastening of heavy attachments such as extension arms, gripper cup holders, devices
- Safe adjustment through tooth system



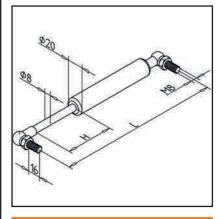
21.2230/0



- 1: Place locking device and screw first half of the bracket
- 2: Fix second half
- 3: Connect the 2 halves in desired angle and tighten



GAS PRESSURE SPRING 8 / 20



TECHN. DATA / ITEMS SUPPLIED

- Stroke (H) alternatively 57 / 80 / 100 / 120 / 140 / 160 / 180 / 200 / 220 / 250 mm
- Power (F) between 80 and 750 N (increments 50 N)
- Please indicate desired length of stroke and force



- For weight compensation with foldable

- elements
- Suitable for lift and swivel movements

Part no.

24.1127/0

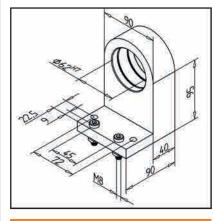
H (mm)	L (mm)
57	206
80	244
100	286
120	326
140	366
160	405
180	446
200	485,5
220	527
250	585,5

ASSEMBLY

 Fix with thread bolt M8 to profile groove of other components

GAS PRESSURE SPRING 10/22 Part no. 24.1128/0 H (mm) L (mm) 98 286 148 386 198 486 248 586 295 686 345 786 395 886 445 986 495 1086 TECHN. DATA / ITEMS SUPPLIED ASSEMBLY APPLICATIONS - Stroke (H) alternatively 100 / 150 / 200 / 250 - For weight compensation with foldable - Fix with thread bolt M8 to profile groove of / 300 / 350 / 400 mm elements other components - Power (F) between 100 and 1200 N (incre-- Suitable for lift and swivel movements ments 50 N)

- Please indicate desired length of stroke and force



UPRIGHT BEARING

TECHN. DATA / ITEMS SUPPLIED

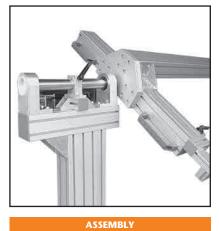
- Aluminium, bright
- With fastening material steel, zinc plated
- Without ball bearing
- Weight = 1.180 kg/piece



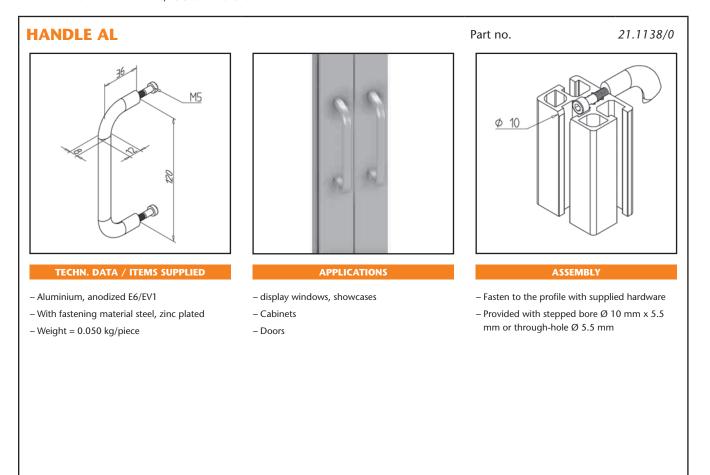
- Large swivelling frame
- Guiding of shafts, axles, drums, tires lengthwise and crosswise to the profile

Part no.

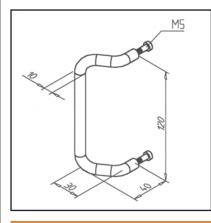
28.0158/0



- Mounting hole suitable for radial ball bearings
- 6206 2RS part no. 50.0977/1
- Fasten to the profile with supplied hardware



HANDLE AL ANGLED



TECHN. DATA / ITEMS SUPPLIED

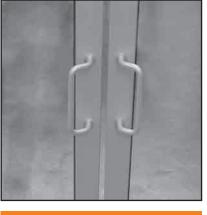
- Aluminium, anodized E6/EV1
- With fastening material steel, zinc plated
- Weight = 0.065 kg/piece



- APPLICATIONS
- display windows, showcases
- CabinetsDoors

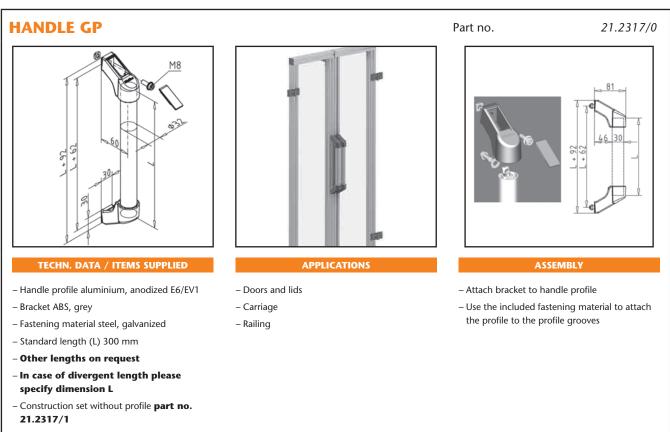
1000

Part no.



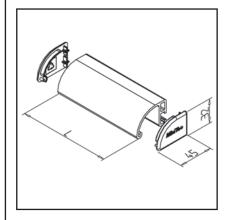
21.1348/0

- Fasten to the profile with supplied hardware
- Provided with stepped bore Ø 10 mm x 5.5 mm or through-hole Ø 5.5 mm



– Weight = 0.427 kg/piece

HAND GRIP WITH REACH PROTECTOR



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, anodized E6/EV1
- End caps
- Without fastening kit
- Standard length (L) 120 mm
- Other lengths on request
- In case of divergent length please specify dimension L
- Weight = 0.110 kg/piece



APPLICATIONS

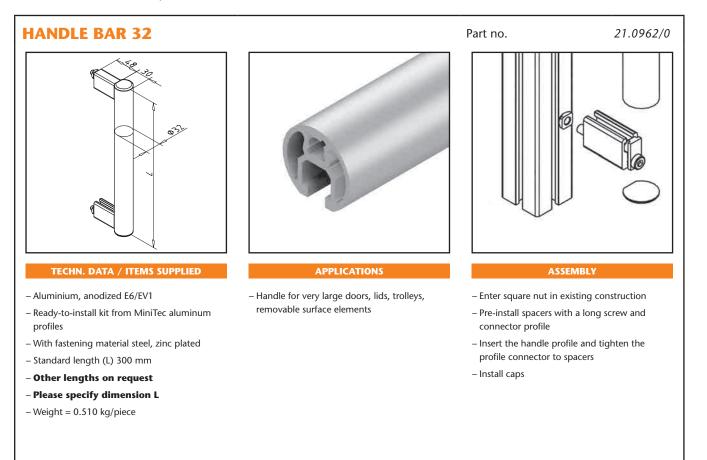
- Doors
- Lids
- Guard units
- Furniture



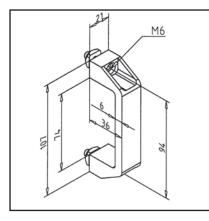
21.1048/0



- On profile groove with 2 cylinder screws M6 x 16 and square nuts M6, at 15 mm, short hex keys SW 4 required
- Directly on panel element with cylinder screw M6, length according to material thickness
- Installation is also possible from the rear, insert the square nut M6



HANDLE 90



TECHN. DATA / ITEMS SUPPLIED

- PA, grey
- With fastening material steel, zinc plated
- Use on vertical struts **part no. 21.1099/4** (square nut with position-fixing)
- Upon request, available in black, part no.
 21.1099/0
- Weight = 0.030 kg/piece



APPLICATIONS

- Doors

– Lids

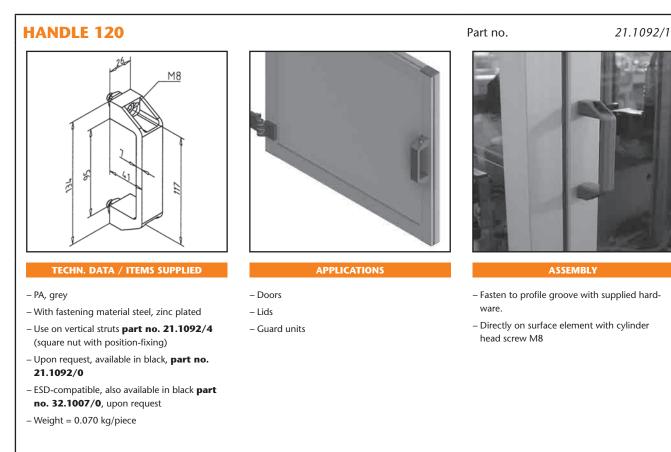
- Guard units

Part no.

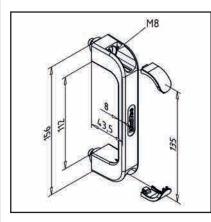
21.1099/1



- Fasten to profile groove with supplied hardware.
- Directly on panel element with cylinder screw
 M6, length according to material thickness



HANDLE 135



TECHN. DATA / ITEMS SUPPLIED

- PA, grey
- With fastening material steel, zinc plated
- Use on vertical struts part no. 21.2530/7

– Weight = 0.080 kg/piece

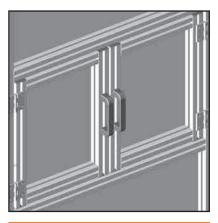


APPLICATIONS

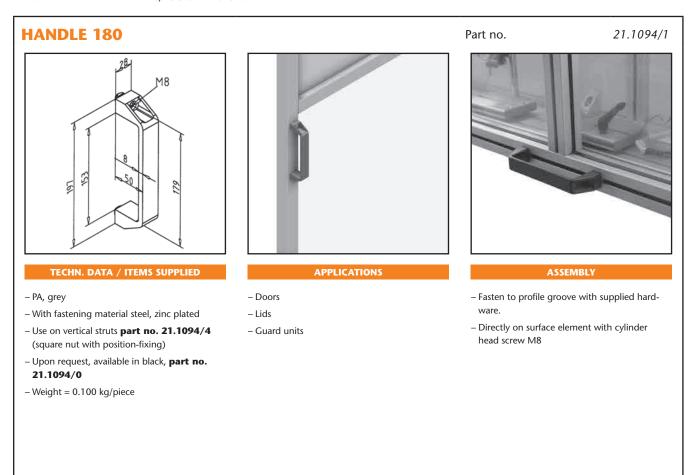
- Doors
- Lids
- Guard units

Part no.

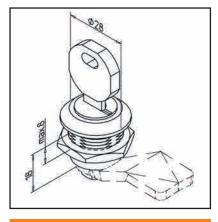
21.2530/1



- Fasten to profile groove with supplied hardware.
- Directly on surface element with cylinder head screw M8



LOCK CYLINDER



TECHN. DATA / ITEMS SUPPLIED

- Zinc, Pressure die-casting, chromed
- With fastening nut steel, galvanized
- 2 keys
- Without locks
- Weight = 0.100 kg/piece



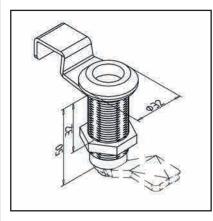
APPLICATIONS

 Light doors from surface elements up to 8 mm thickness 21.1752/0

Part no.

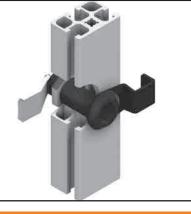
- Bore Ø 22 mm in panel element
- As an alternative to torsion-protected mounting Milling according to sketch
- Select the locking tongue suitable for the application or profiles used.
- To prevent damage to the profile grooves, additional edging and cover profiles can be used.

DEADBOLT 32 WITH ALLEN WRENCH SW 10



TECHN. DATA / ITEMS SUPPLIED

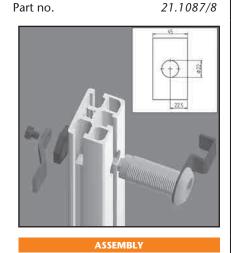
- Zinc, Pressure die-casting, black
- For Allen wrench SW 10
- With fastening nut steel, galvanized
- With opening bracket, steel, black
- Without locks
- Weight = 0.102 kg/piece



APPLICATIONS

– For profiles 32

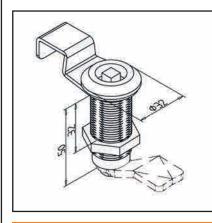
- Locking of doors and lids in guard units



– Drill hole Ø 22 mm in the centre of the

- profile, recommended: anti-twist protection F **part no.**. **21.0941/0**.
- To ensure the torsion protection, a pocket with SW 20.1 mm can alternatively be milled.
- Tighten using front handle from the back side with the fastening nut

DEADBOLT 32 WITH SQUARE KEY SW 7



TECHN. DATA / ITEMS SUPPLIED

- Zinc, Pressure die-casting, black
- With square box wrench
- With fastening nut steel, galvanized
- With opening bracket, steel, black
- Without locks
- Weight = 0.179 kg/piece



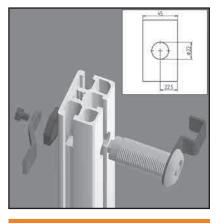
APPLICATIONS

– For profiles 32

- Locking of doors and lids in guard units

Part no.





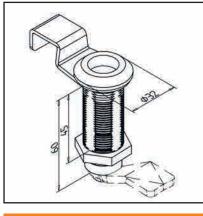
- Drill hole Ø 22 mm in the centre of the profile, recommended: anti-twist protection F part no.. 21.0941/0.
- To ensure the torsion protection, a pocket with SW 20.1 mm can alternatively be milled.
- Tighten using front handle from the back side with the fastening nut

DEADBOLT 45 WITH ALLEN WRENCH SW 10

Part no.

Part no.

21.1087/9



TECHN. DATA / ITEMS SUPPLIED

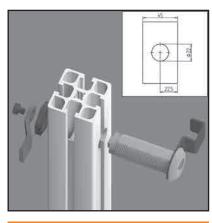
- Zinc, Pressure die-casting, black
- For Allen wrench SW 10
- With fastening nut steel, galvanized
- With opening bracket, steel, black
- Without locks
- Weight = 0.111 kg/piece



APPLICATIONS

– For profiles 45

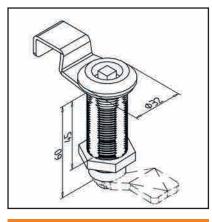
- Locking of doors and lids in guard units



ASSEMBLY

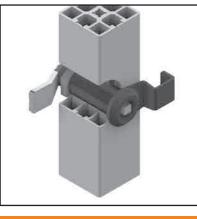
- Drill hole Ø 22 mm in the centre of the profile, recommended: anti-twist protection F part no.. 21.0941/0.
- To ensure the torsion protection, a pocket with SW 20.1 mm can alternatively be milled.
- Tighten using front handle from the back side with the fastening nut

DEADBOLT 45 WITH SQUARE KEY SW 7



TECHN. DATA / ITEMS SUPPLIED

- Zinc, Pressure die-casting, black
- With square box wrench
- With fastening nut steel, galvanized
- With opening bracket, steel, black
- Without locks
- Weight = 0.197 kg/piece



APPLICATIONS

- For profiles 45
- Locking of doors and lids in guard units

21.1087/7

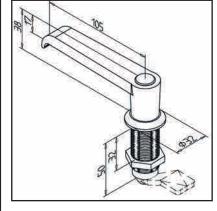
- Drill hole Ø 22 mm in the centre of the profile, recommended: anti-twist protection F part no.. 21.0941/0.
- To ensure the torsion protection, a pocket with SW 20.1 mm can alternatively be milled.
- Tighten using front handle from the back side with the fastening nut

RATCHET HANDLE 8 Part no. 21.2305/0 TECHN. DATA / ITEMS SUPPLIED **APPLICATIONS** ASSEMBLY – Handle PA, grey - Locking of doors and lids in guard units - Drill the bore according to the sketch Housing DG Zn GD Zn, grey - Using a ratchet handle, tighten the fastening - For surface elements up to 8 mm thickness - With fastening nut steel, galvanized nut from behind - Without locks - Weight = 0.145 kg/piece

RATCHET HANDLE 32 WITHOUT PROFILE CYLINDER

Part no.

21.1087/4



TECHN. DATA / ITEMS SUPPLIED

- Handle PA, grey
- Housing DG Zn GD Zn, grey
- With fastening nut steel, galvanized
- Without locks
- On request also available in black, part no.
 21.1087/2
- Weight = 0.172 kg/piece



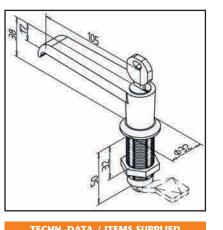
APPLICATIONS

- For profiles 32
- Locking of doors and lids in guard units



- Drill hole Ø 22 mm in the centre of the profile, recommended: anti-twist protection F part no.. 21.0941/0.
- To ensure the torsion protection, a pocket with SW 20.1 mm can alternatively be milled.
- Using a ratchet handle, tighten the fastening nut from behind

RATCHET HANDLE 32 WITH LOCK





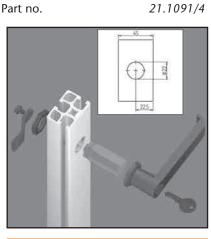
- Handle PA, grey Housing DG Zn GD Zn, grey
- With fastening nut steel, galvanized
- Without locks
- Upon request, available in black, part no. 21.1091/2
- Weight = 0.211 kg/piece



APPLICATIONS

- For profiles 32

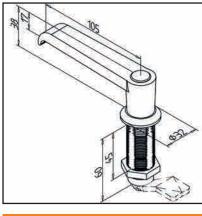
- Locking of doors and lids in guard units



ASSEMBLY

- Drill hole Ø 22 mm in the centre of the profile, recommended: anti-twist protection F part no.. 21.0941/0.
- To ensure the torsion protection, a pocket with SW 20.1 mm can alternatively be milled.
- Using a ratchet handle, tighten the fastening nut from behind

RATCHET HANDLE 45 WITHOUT LOCK



TECHN. DATA / ITEMS SUPPLIED

- Handle PA, grey Housing DG Zn GD Zn, grey
- With fastening nut steel, galvanized
- Without locks
- Upon request, available in black, part no. 21.1087/1
- Weight = 0.194 kg/piece



- For profiles 45

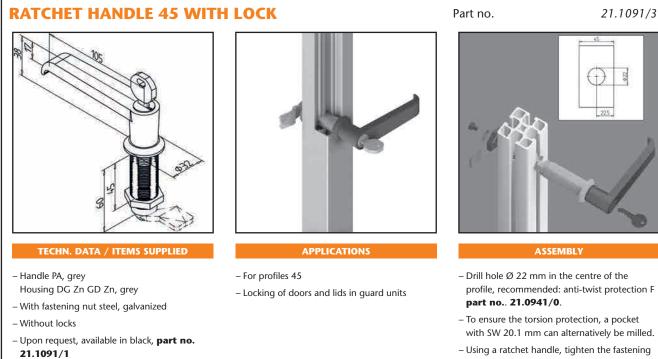
- Locking of doors and lids in guard units

629

21.1087/3

Part no.

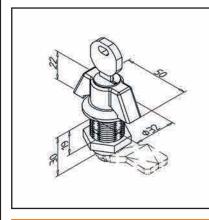
- Drill hole Ø 22 mm in the centre of the profile, recommended: anti-twist protection F part no.. 21.0941/0.
- To ensure the torsion protection, a pocket with SW 20.1 mm can alternatively be milled.
- Using a ratchet handle, tighten the fastening nut from behind



- Weight = 0.230 kg/piece



TOGGLE HANDLE 19



TECHN. DATA / ITEMS SUPPLIED

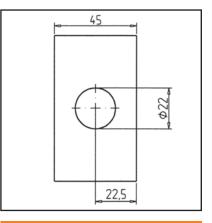
- Zinc, Pressure die-casting, chromed
- With fastening nut steel, galvanized
- Without locks
- Weight = 0.150 kg/piece



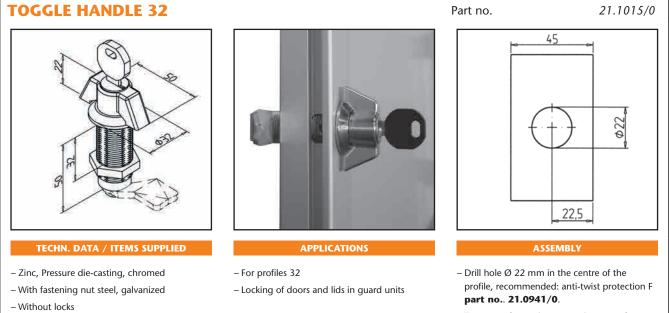
- For profiles 19
- Locking of doors and lids in guard units

Part no.

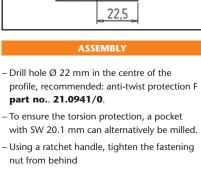
21.1015/2



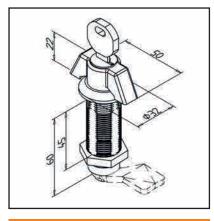
- Drill hole Ø 22 mm in the centre of the profile, recommended: anti-twist protection F part no.. 21.0941/0.
- To ensure the torsion protection, a pocket with SW 20.1 mm can alternatively be milled.
- Using a ratchet handle, tighten the fastening nut from behind



- Weight = 0.190 kg/piece



TOGGLE HANDLE 45



TECHN. DATA / ITEMS SUPPLIED

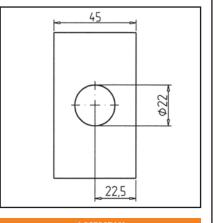
- Zinc, Pressure die-casting, chromed
- With fastening nut steel, galvanized
- Without locks
- Weight = 0.210 kg/piece



- For profiles 45
- Locking of doors and lids in guard units

Part no.

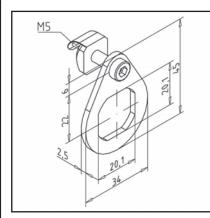




- Drill hole Ø 22 mm in the centre of the profile, recommended: anti-twist protection F part no.. 21.0941/0.
- To ensure the torsion protection, a pocket with SW 20.1 mm can alternatively be milled.
- Using a ratchet handle, tighten the fastening nut from behind

21.0941/0

TWIST PROTECTION F



TECHN. DATA / ITEMS SUPPLIED

- Stainless steel
- With fastening material steel, zinc plated
- Weight = 0.021 kg/piece



- Secure sash locks, latch handles and toggle handles against self-acting loosening or overturning
- Specifically intended for use with door stop S, **part no. 21.1767/0**

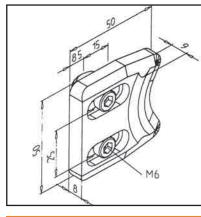


ASSEMBLY

- Install front handle, T-handle or L-handle as usual, tighten hexagon nut
- Swivel in square nut and mount twist stop
- Install the latch

Part no.

DOOR CATCH S



TECHN. DATA / ITEMS SUPPLIED

- Zinc, Pressure die-casting, black
- With fastening material steel, zinc plated
- Weight = 0.077 kg/piece

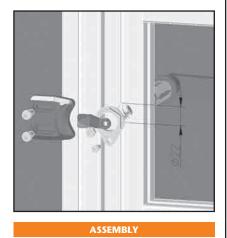


APPLICATIONS

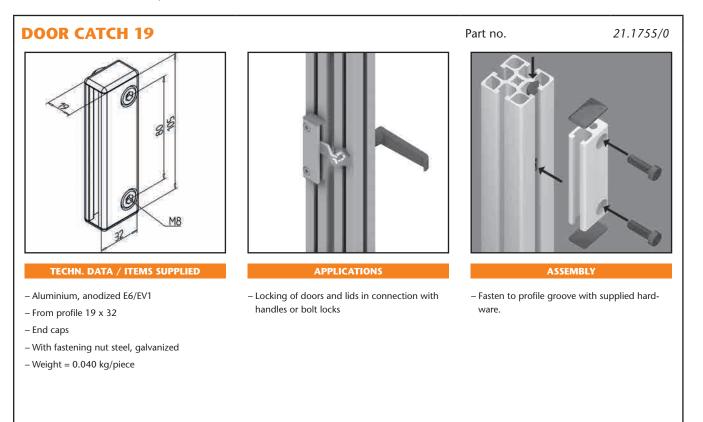
- Stop for doors and hatches
- Specifically suitable in connection with handle, T-handle and bolt lock
- Also door catch

Part no.

21.1767/0



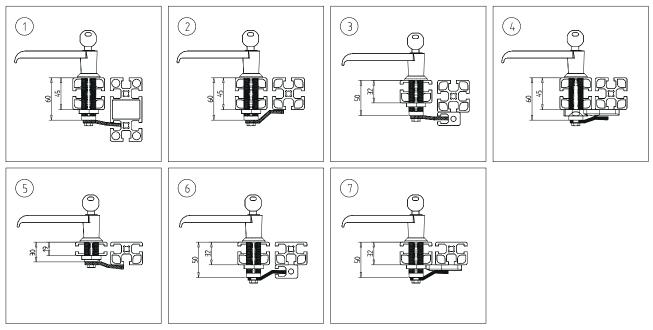
- Fasten to the posts with supplied hardware



LOCKS

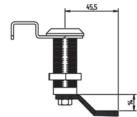
FITTING PRINCIPLES & SELECTION OF LOCKS

FITTING PRINCIPLES

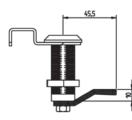


SELECTION OF LOCKS

	Door profile 45 x 45 mm	Door profile 32 x 45 mm	Door profile 19 x 45 mm	Surface element4-8 mm
Door profile	Handle, T-Handle or Bolt	Handle, T-Handle or Bolt	Handle, T-Handle or Bolt	and in shear to she
	lock 45	lock 32	lock 19	cylinder lock
		part no.	of locks	
1 - 90 x 45	21.1093/1	21.1093/0	-	21.1093/2
2 - 45 x 45	21.1093/5	21.1093/3	21.1093/4 o. /0	21.1093/2
3 - with catch 19	21.1093/4	21.1093/2	_	_
4 - with door catch S	21.1093/3	21.1093/1	_	_
5 - 32 x 45	-	-	21.1093/1	-
6 - with catch 19	-	21.1093/5	-	21.1093/0
7 - with door catch S	-	21.1093/4	21.1093/0	-

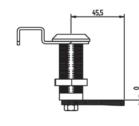


Part no. 21.1093/0

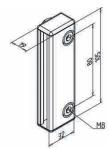


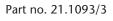
Part no. 21.1093/4

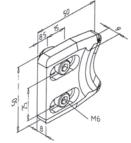
Part no. 21.1093/1



Part no. 21.1093/2







Part no. 21.1767/0

Part no. 21.1755/0

ROD LOCK

ONE OR TWO-SIDED LOCKING

Items Supplied

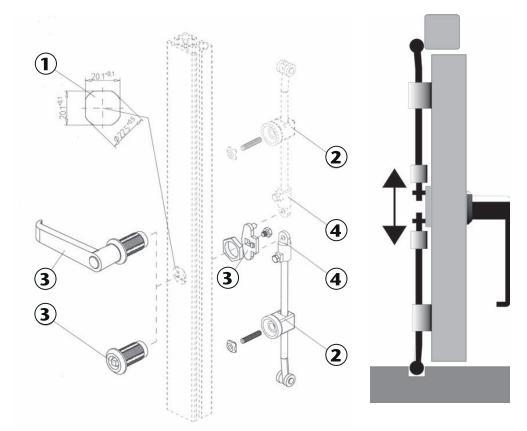
- Bolt lock, steel, black with square key
- Guiding element, steel, galvanized
- Latch with rollers (I = 1100 mm), steel, galvanized
- Rod guide, plastic, black with injected nut M6

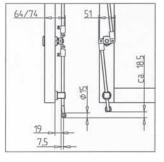
Optional

Handle with or without lock

Available versions

	Bolt lock		Han withou		Handle with cylinder lock	
PROFILE	1 rod	2 rods	1 rod	2 rods	1 rod	2 rods
32 x 45	21.1798/0	21.1798/2	21.1798/3	21.1798/4	21.1798/5	21.1798/6
45 x 45	21.1788/0	21.1788/2	21.1788/3	21.1788/4	21.1788/5	21.1788/6





Application

- For locking doors at upper or lower beam
- Use 2 rods for 2-sided locking
- Order bolt lock, handle without lock or handle with cylinder lock
- Especially suited for control boxes or double-sided doors

Assembly

- 1. Insert square recess in vertical door profile
- 2. Screw in setscrew M6 x 30 in rod guide, screw nut loose onto threaded pin, insert sliding nut in groove and tighten rod guide to position
- **3.** Tighten tongue with cam or handle
- 4. Insert the ramp in the rod guide and fix it to the tongue

BAR LOCK WITH CASTLE TRAP

TWO-SIDED LOCK WITH LOCK TRAP, PART NO. 21.1490/0

Items Supplied

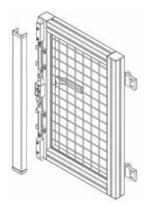
- 1. Rod lock insert
- 2. Handle
- 3. Lock latch (2 pieces)
- 4. Adapter for round bars
- 5. Round bar with eye (Lmax = 1200) (2 pieces)

Optional

Cable duct 45 AL part no. 20.1071/0 Protective cap cable duct 45 part no. 22.1117/1 Cable clip 45 part no. 22.1210/0

Assembly

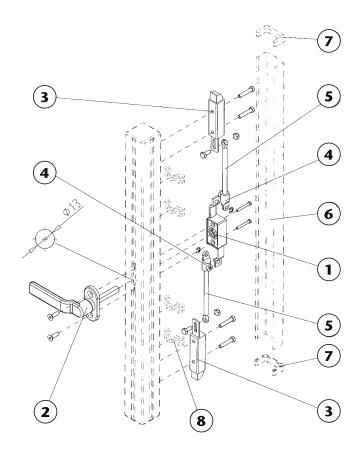
- 1. Insert hole Ø 13 mm in vertical door profile
- **2.** Attach the bar lock insert and lock latch with sliding nuts to the door profile
- **3.** Shorten the round bars to the appropriate size and connect with lock latch and bar lock insert
- 4. Insert and fix the handle with square edging
- 5. Adjust lock latch

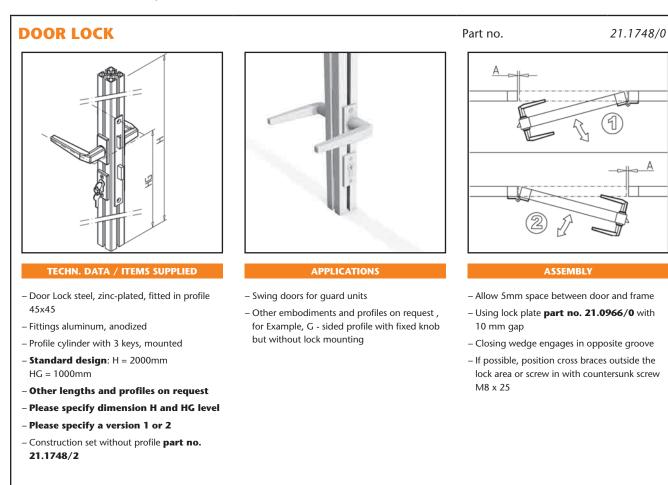




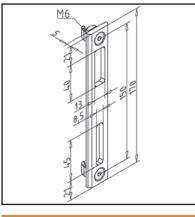
Application

- For closing doors on the upper or lower cross member
- suitable for doors in racks
- max. door height 2750 mm





LOCK PLATE FOR DOOR LOCK



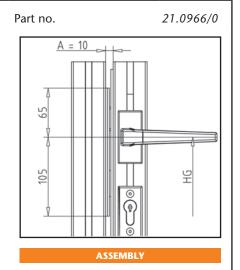
TECHN. DATA / ITEMS SUPPLIED

- Aluminium, anodized E6/EV1
- With fastening material steel, zinc plated
- Weight = 0.061 kg/piece

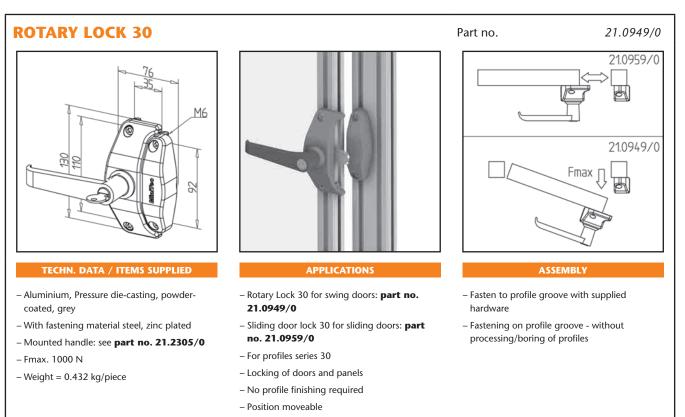


APPLICATIONS

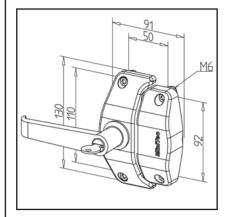
- To be used in conjunction with door lock **part no. 21.1748/0**
- No post processing on the profile groove of the door post required



- Fasten to profile groove with supplied hard-ware.
- Door gap at lock 10 mm



ROTARY LOCK 45



TECHN. DATA / ITEMS SUPPLIED

- With fastening material steel, zinc plated
- Mounted handle: see part no. 21.2305/0
- Fmax. 2200 N
- Weight = 0.476 kg/piece

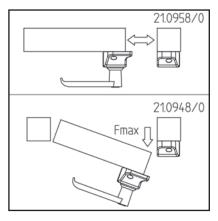


APPLICATIONS

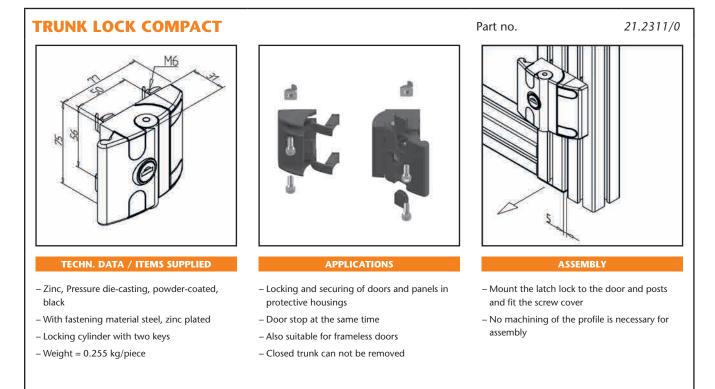
- Rotary lock 45 for swivel doors: part no. 21.0948/0
- Sliding door lock 45 for sliding doors part no. 21.0958/0
- Locking of doors and panels
- No profile finishing required
- Position moveable

Part no.

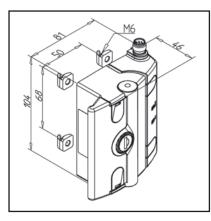
21.0948/0



- Fasten to profile groove with supplied hardware
- Fastening on profile groove without processing/boring of profiles
- No separate door stop required



TRUNK LOCK WITH AN INQUIRY



TECHN. DATA / ITEMS SUPPLIED

- Zinc, Pressure die-casting, powder-coated, black
- With fastening material steel, zinc plated
- Locking cylinder with two keys
- Reliability values according to EN ISO 13849-1 category 4 performance Level PLe
- Operating voltage DC24V ±15%
- 2 safety outputs, p-switching, short-circuit protected
- Connection type M12, 8-pin
- UL-approved
- Weight = 0.448 kg/piece

APPLICATIONS

- Locking and securing of doors and hatches
 Cat. 4/PLe thanks to integrated transponder
 coded technology
- Door stop at the same time
- Closed trunk can not be removed

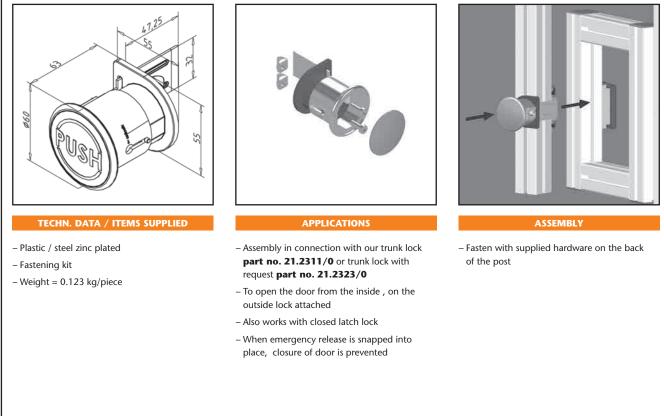
Part no. 21.2323/0

- Mount the latch lock to the door and posts and fit the screw cover
- Electrical connection can also be installed at the bottom
- No machining of the profile is necessary for assembly
- Suitable connecting cables on request

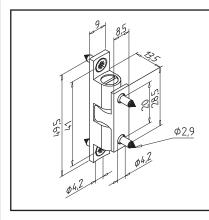
Part no.

EMERGENCY RELEASE FOR LATCH LOCK

21.2316/0

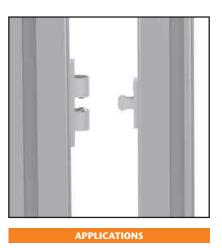


BALL CATCH 50



TECHN. DATA / ITEMS SUPPLIED

- Brass
- With fastening material steel, zinc plated
- Holding force approx. 10 N
- Weight = 0.030 kg/piece



- Stop and catch for sliding doors, swing doors, lids

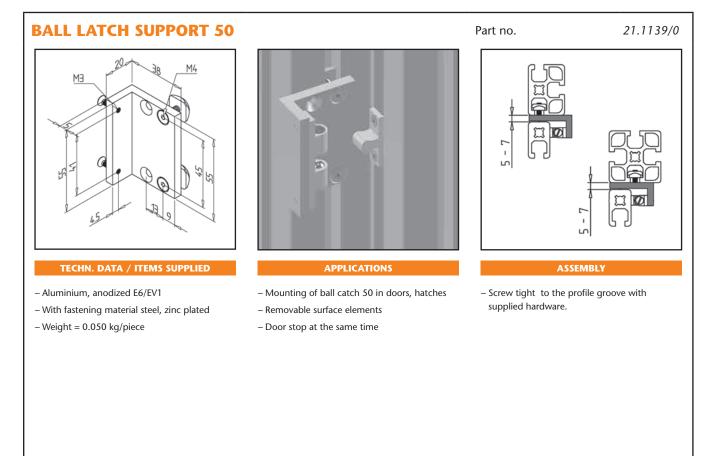
- Ball latch 50 suitable for T-slots of reworked profiles. Allows gap-free closing of sliding doors
- Doors, lids, removable surface elements

Part no.

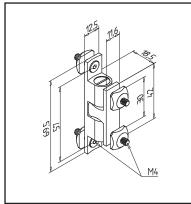
21.1763/0



- Use fastening kit to fix the ball latch on any surface
- If applicable, use carrier for catch-bearing 50 part no. 21.1139/0

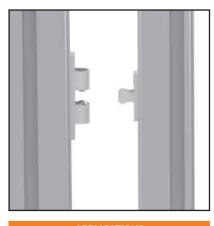


BALL CATCH 70



TECHN. DATA / ITEMS SUPPLIED

- Brass
- With fastening material steel, zinc plated
- Holding force approx. 70 N
- Use on vertical struts **part no. 21.1757/2** (square nut with position-fixing)
- Weight = 0.095 kg/piece



APPLICATIONS

- Fastening easily removable surface elements

- Stop and catch for sliding doors, swing doors, lids

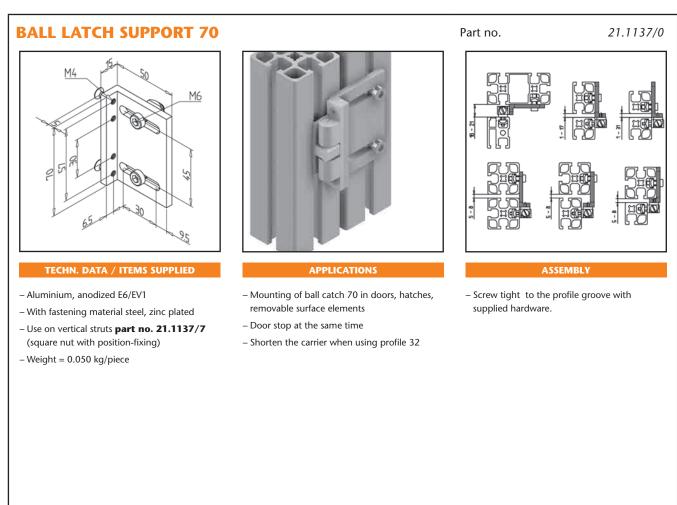
Part no.



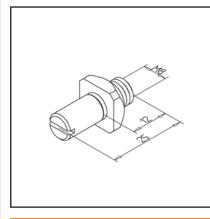


- Fasten to profile groove with supplied hardware.

If applicable, use carrier for catch-bearing 70
 part no. 21.1137/0



SNAP BOLT 25



TECHN. DATA / ITEMS SUPPLIED

- Steel, galvanized
- Stainless version part no. 21.1758/1
- Weight = 0.012 kg/piece

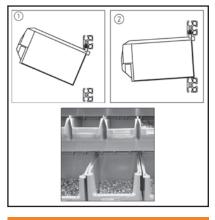


APPLICATIONS

Holder of grab containers, oddment boxesSupport plates

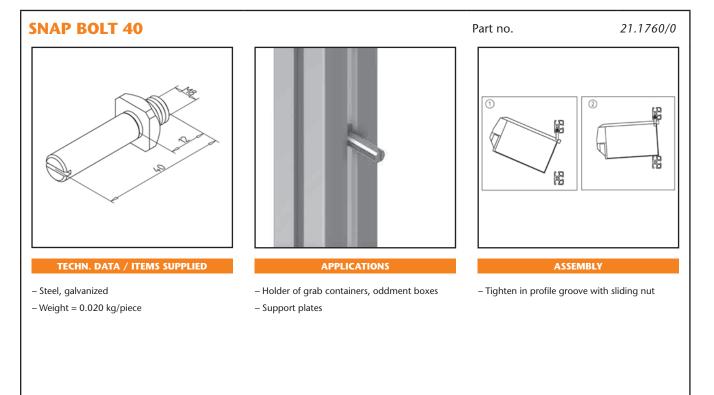
Part no.

21.1758/0

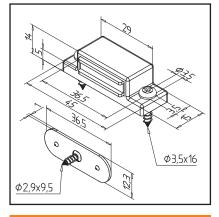


ASSEMBLY

- Tighten in profile groove with sliding nut

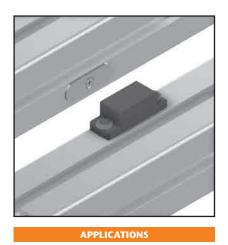


MAGNETIC CATCH

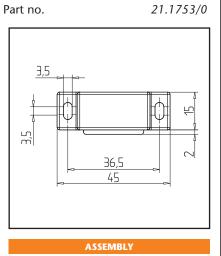


TECHN. DATA / ITEMS SUPPLIED

- PA, black
- Holding plate, steel, zinc plated
- With fastening material steel, zinc plated
- Holding force: 20 N
- Weight = 0.021 kg/piece

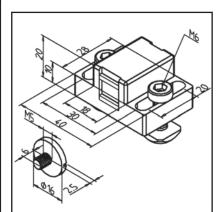


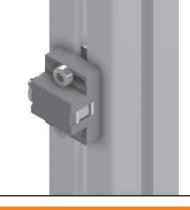
- Stop and quick-release of swing doors
- Fastening of light surface elements



- Fasten with fixing material to profile panel

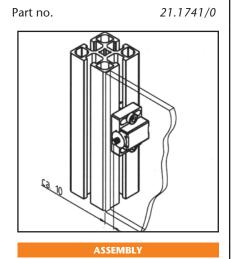
MAGNETIC CATCH N





APPLICATIONS

Stop and quick-release of swing doorsFastening of light surface elements



- Fasten with fixing material to profile groove
- Opposite plate directly on profile surface or panel element; thread M5 required

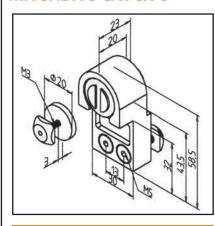
– PA, grey

- Holding plate, steel, zinc plated
- With fastening material steel, zinc plated

TECHN. DATA / ITEMS SUPPLIED

- Holding force approx.30 N
- Use on vertical struts **part no. 21.1741/5** (square nut with position-fixing)
- Weight = 0.060 kg/piece

MAGNETIC CATCH S



TECHN. DATA / ITEMS SUPPLIED

- PA, grey
- Holder plate steel, burnished
- With fastening material steel, zinc plated
- Holding force approx. 70 N
- Weight = 0.080 kg/piece

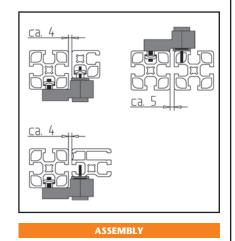


APPLICATIONS

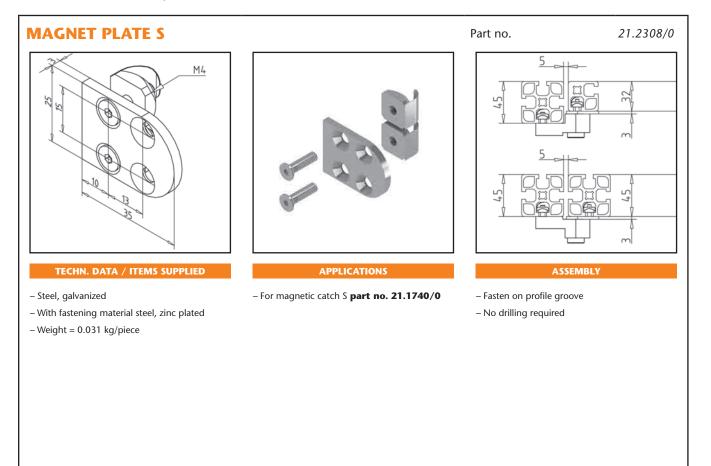
Stop and quick-release of swing doorsFastening of light surface elements

Part no.

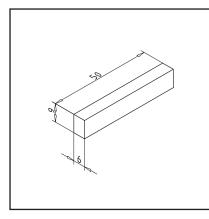
21.1740/0



- Fasten with fixing material to profile groove
- Opposite plate directly on profile surface or panel element; thread M3 required



MAGNET 6 X 9 X 50 MM



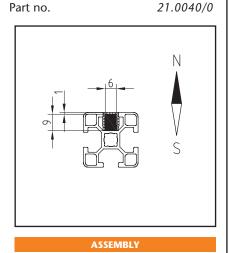
TECHN. DATA / ITEMS SUPPLIED

- NeFeB N45, nickel-plated
- Without fastening kit
- Attention: Electric- and memory devices can be faulted by the magnet
- Power density, $BHmx = 342kJ/m^3$
- Remanence, Br = 1320 mT
- coercive field strength Hcj = 955 kA/m
- max. service temperature +80 °C
- Weight = 0.023 kg/piece



APPLICATIONS

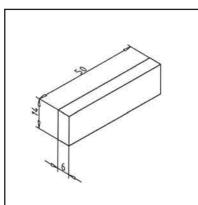
- Adhesive magnet for tools
- Use under conveyor belts as tracking, for magnetizable conveying products or at higher conveying speeds
- Fitting for all profiles of profile series 30



Snap or slip the cover profile into profile groove

- Insert magnet into t-slot
- For fastening: (mighty recommended) Use end cap AL, set screw with square nut or t-slot bar

MAGNET 6 X 14 X 50



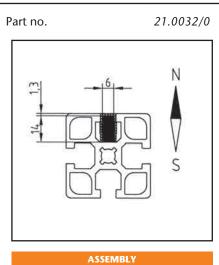
TECHN. DATA / ITEMS SUPPLIED

- NeFeB N35, nickel-plated
- Without fastening kit
- Attention: Electric- and memory devices can be faulted by the magnet
- Power density, BHmx = 263kJ/m³
- Remanence, Br = 1170 mT
- coercive field strength Hcj = 955 kA/m
- max. service temperature +80 °C
- Weight = 0.030 kg/piece



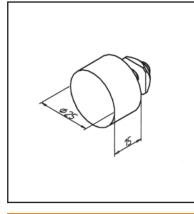
APPLICATIONS

- Adhesive magnet for tools
- Use under conveyor belts as tracking, for magnetizable conveying products or at higher conveying speeds
- Fitting for all profiles of profile series 45



- Snap or slip the cover profile into profile groove
- Insert magnet into t-slot
- For fastening: (mighty recommended) Use end cap AL, set screw with square nut or t-slot bar

STOPPER 25



TECHN. DATA / ITEMS SUPPLIED

- NBR, black
- With fastening material steel, zinc plated
- With sliding nut M6
- Weight = 0.020 kg/piece



APPLICATIONS

- Stop for doors, linear guides

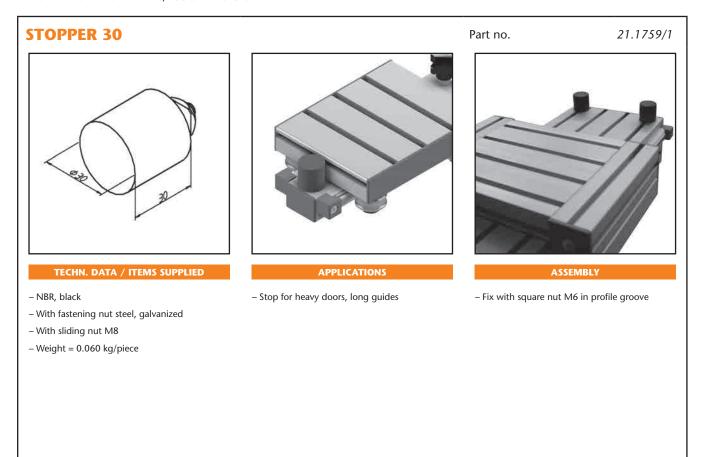


21.1759/0

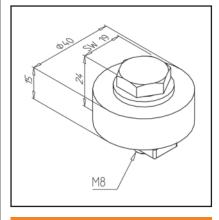


ASSEMBLY

- Fix with square nut M6 in profile groove



STOPPER 40



TECHN. DATA / ITEMS SUPPLIED

- NBR, black
- Fixation screw steel, burnished
 Nut and washer steel, galvanised
- With sliding nut M8
- Weight = 0.055 kg/piece

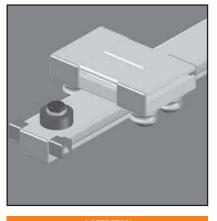


APPLICATIONS

- Stop for heavy doors, long guides

Part no.

21.2301/0



ASSEMBLY

- Fix with square nut M6 in profile groove

CONNECTING PLATES

CONNECTING PLATE 30 x 60



CONNECTING PLATE 32 x 90



CONNECTING PLATE 45 x 90



Items Supplied

- Aluminium, powder coated, grey
- Fastening kit

Application

Fixing of articulated feet and castors on profiles 30x60

Assembly

Fasten with fastening material from the scope of supply to the profile

THREAD	STRENGTH	WEIGHT	Part no.
M8	15 mm	0,085 kg	21.2114/0
M10	15 mm	0,084 kg	21.2115/0
M12	15 mm	0,082 kg	21.2116/0

Items Supplied

- Aluminium, powder coated, grey
- Fastening kit

Application

Fixing of articulated feet to profiles 90x32 UL

Assembly

Fasten with fastening material from the scope of supply to the profile

Thread	Thickness	Weight	Part no.
M8	15 mm	0,164 kg	21.1356/0
M10	15 mm	0,162 kg	21.1357/0
M12	15 mm	0,160 kg	21.1358/0

Items Supplied

- Aluminium, powder coated, grey
- Fastening kit

Application

Fixing of articulated feet and castors on profiles 45x90 Assembly

Fasten with fastening material from the scope of supply to the profile

Thread	Thickness	Weight	Part no.
M10	15 mm	0,164 kg	21.1038/0
M12	15 mm	0,162 kg	21.1039/0
M16	15 mm	0,160 kg	21.1040/0
M20	15 mm	0,156 kg	21.1047/0

CONNECTING PLATES

CONNECTING PLATE 90 x 90



CONNECTING PLATE 90 R 90°



Items Supplied

- Aluminium, powder coated, grey
- Fastening kit

Application

Fixing of articulated feet and castors on profiles 90x90

Assembly

Fasten with fastening material from the scope of supply to the profile

Thread	Thickness	Weight	Part no.
M10	15 mm	0,332 kg	21.1041/0
M12	15 mm	0,330 kg	21.1042/0
M16	15 mm	0,345 kg	21.1043/0
M20	15 mm	0,290 kg	21.1057/0

Items Supplied

- Aluminium, powder coated, grey
- Fastening kit

Application

Fixing of articulated feet and castors on profiles 90R90°

Assembly

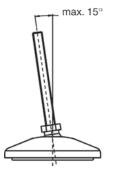
Fasten with fastening material from the scope of supply to the profile

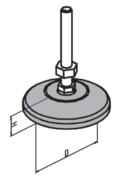
Thread	Thickness	Weight	Part no.
M10	15 mm	0,277 kg	21.0009/0
M12	15 mm	0,275 kg	21.0010/0
M16	15 mm	0,272 kg	21.0011/0
M20	15 mm	0,268 kg	21.0012/0

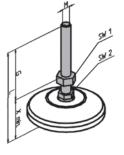
HINGED FEET

HINGED FEET PA









Items Supplied

- Plate PA, grey
- Anti slip insert NBR
- Spindle steel, galvanized
- Lock nut steel, galvanized
- All spindles fit all plates

Application

Height adjustable constructions of all kinds Protective equipment, tables, showcases Conveyors, system workstations

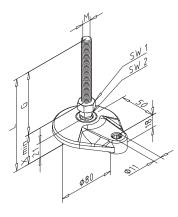
Assembly

- Direct in central drilling of the profiles (depending on profile cross-section drilled up to thread M12)
- Larger threads in connection with connection plate
- For profiles 45 x 90 and 90 x 90, a connection plate is required if the feet should be positioned centrically

Spindle	Plate						
spinule	Ø 30	Ø 45	Ø 60	Ø 80			
M8	21.1851/0	21.1871/0	21.1881/0	21.1891/0			
M10	21.1852/0	21.1872/0	21.1882/0	21.1892/0			
M12	-	21.1873/0	21.1883/0	21.1893/0			
M16	-	21.1874/0	21.1884/0	21.1894/0			

Plate					Spir	ndle		
D mm	H mm	Load capacity	М	G	Х	SW1	SW2	L
30	20	300 kg	8	33,5	38,5	13	14	72,5
45	20	500 kg	10	42	40,5	17	14	82,5
60	20	1000 kg	12	90	42,5	19	14	132,5
80	20	1000 kg	16	107	45,5	24	17	152,5

HINGED FEET PA WITH MOUNTING HOLE



Items Supplied

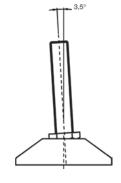
- Plate PA, grey
- Spindle Steel, galvanized
- Lock nut steel, galvanized
- Anti slip insert NBR
- Load capacity: 1000 Kg

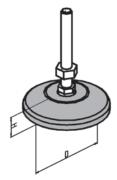
Part no.	Color	М	G	Х	SW1	SW2	L
21.2510/0	grey	08	33,5	39	13	14	72,5
21.2511/0	grey	10	42	40,5	17	14	82,5
21.2512/0	grey	12	90	42,5	19	14	132,5
21.2513/0	grey	16	107	45,5	24	17	152,5

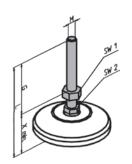
HINGED FEET

HINGED FEET GD



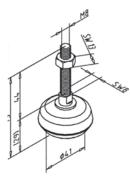






FOOT SST Part no. 21.2053/0





Items Supplied

- Plate die-cast aluminium powder-coated, grey
- Anti slip insert NBR
- Spindle Steel, galvanized
- Lock nut steel, galvanized
- All spindles fit all plates

د ام در	Plate				
Spindle	Ø 45	Ø 90			
M10	21.1842/0	21.1862/0			
M12	21.1843/0	21.1863/0			
M16	21.1844/0	21.1864/0			

Plate						
D mm	H mm	Load capacity				
45	25	3000 kg				
90	27	4000 kg				

Spindle					
М	G	Х	SW1	SW2	L
10	52,6	37,5	17	17	89,5
12	50,5	41	19	19	91,2
16	68	45,6	24	24	112,6

Items Supplied

- Plate Steel, VA
- Spindle insert steel VA
- Lock nut steel, VA
- Load capacity: 750 kg

Application

- Height adjustable constructions of all kinds
- Protective equipment, tables, showcases
- Conveyors, system workstations

Assembly

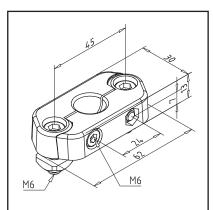
 Directly in central bore of the profiles, also in VA profile Cut thread M8, Mold in aluminum profile thread M8

150 MINITEC PROFILE SYSTEM

CLIP - BLOCK FOR BALL HEAD

Part no.

22.1181/0



TECHN. DATA / ITEMS SUPPLIED

- PA, Injection Mould, grey
- Ball Ø15 mm
- With fastening material steel, zinc plated
- Swivel area 15°
- Load capacity up to 150 kg standing vertically
- Weight = 0.054 kg/piece

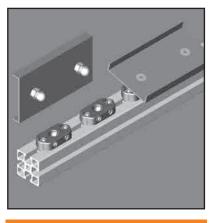


APPLICATIONS

- For the preparation of self-adjusting lines and stoppers
- Exchangeable workpiece or worktool carriers
- To be used with ball head M8 **part no.**

21.2506/0

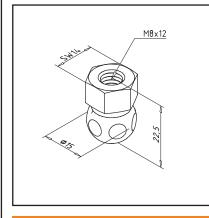
or the ball screws made of hinged feet PA



ASSEMBLY

Fasten with fixing material to profile grooveHolding force adjustable 0 - 50 N

BALL HEAD M8



TECHN. DATA / ITEMS SUPPLIED

- Steel, galvanized
- Ball Ø15 mm
- Internal thread M8x12
- Weight = 0.020 kg/piece

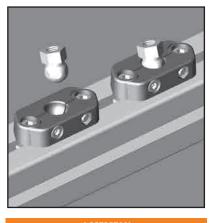


APPLICATIONS

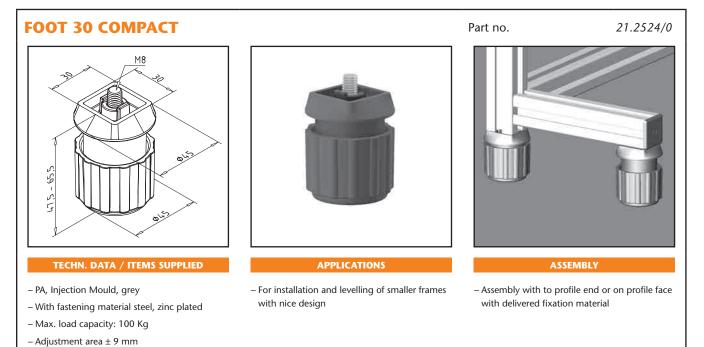
- For use in combination with Clip Block part no. 22.1181/0
- For the preparation of linings or hinged feet in special design, see hinged feet PA

Part no.

21.2506/0

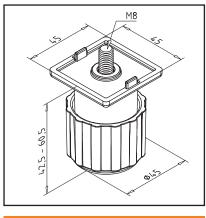


- Fasten onto preferred component with screw M8
- Use for fastening to profile groove setscrew M8x20 and square nut M8



FOOT 45 COMPACT

With anti-skid rubber damperWeight = 0.121 kg/piece



TECHN. DATA / ITEMS SUPPLIED

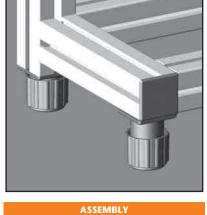
- PA, Injection Mould, grey
- With fastening material steel, zinc plated
- Max. load capacity: 100 Kg
- Adjustment area ± 9 mm
- With anti-skid rubber damper
- Weight = 0.117 kg/piece



 For installation and levelling of smaller frames with nice design

Part no.

21.2525/0

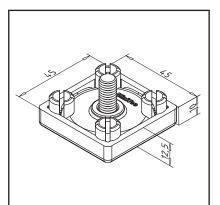


 Assembly with to profile end or on profile face with delivered fixation material

FLOOR MOUNTING PLATE 45X45 G

Part no.

22.1217/0



TECHN. DATA / ITEMS SUPPLIED

- ABS, Injection Mould, grey

- Anti-slip license NBR, black

Load capacity: 1000 kgWeight = 0.032 kg/piece

- With fastening screw M8, galvanized



APPLICATIONS

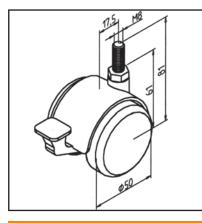
- For use with all profiles with cross section 45x45
- For non-slip installation of tables and racks
- Reduces noise and protects the floor



ASSEMBLY

- Fasten to central profile bore with fixation material from delivery scope
- then insert anti-slip certificate

FURNITURE WHEEL WITH LOCKING DEVICE



TECHN. DATA / ITEMS SUPPLIED

- PA, black
- Double role with sliding bearing
- With fastening material steel, zinc plated
- Load capacity 30 kg
- Weight = 0.080 kg/piece



APPLICATIONS

- Light movable tables
- Movable file box
- Furniture

Part no.



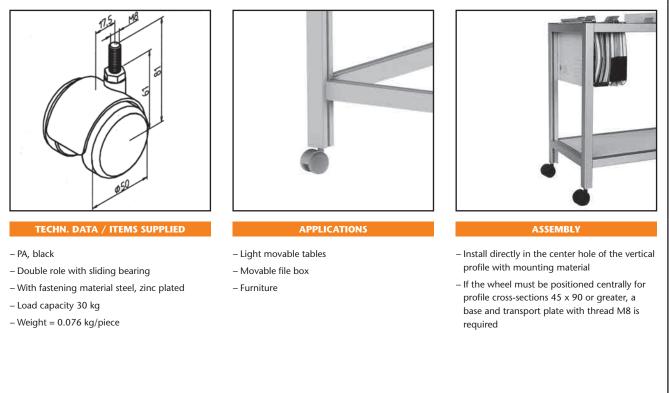


- Install directly in the center hole of the vertical profile with mounting material
- If the wheel must be positioned centrally for profile cross-sections 45 x 90 or greater, a base and transport plate with thread M8 is required

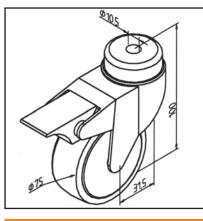
FURNITURE WHEEL WITHOUT LOCKING DEVICE



21.1105/0



SWIVELLING CASTOR WITH BRAKE D 75 X 100



TECHN. DATA / ITEMS SUPPLIED

- Steel, galvanized
- Tire, rubber, grey
- With fastening material steel, zinc plated
- Load capacity 50 kg

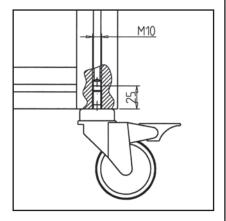
- Weight = 0.450 kg/piece

- Other versions upon request
- APPLICATIONS

- Movable tables
- Work stands
- display windows, showcases

Part no.





- Attach directly to the central bore of the vertical profile with fastening material, then drill and introduce thread M10
- A connection plate is required if the roller is to be positioned centrally with profile cross sections 45 x 90 or 90 x 90

SWIVELLING CASTOR WITHOUT BRAKE D 75 X 100

275

TECHN. DATA / ITEMS SUPPLIED

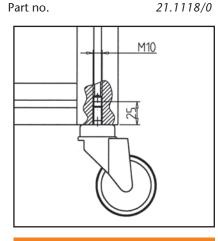
- Steel, galvanized
- Tire, rubber, grey
- With fastening material steel, zinc plated
- Load capacity 50 kg
- Other versions upon request
- Weight = 0.372 kg/piece



APPLICATIONS

Movable tables

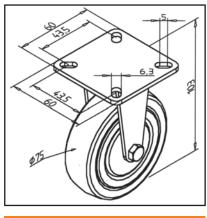
- Work stands
- display windows, showcases



ASSEMBLY

- Attach directly to the central bore of the vertical profile with fastening material, then drill and introduce thread M10
- A connection plate is required if the roller is to be positioned centrally with profile cross sections 45 x 90 or 90 x 90

FIXED CASTOR D 75 X 103



TECHN. DATA / ITEMS SUPPLIED

- Steel, galvanized
- Tire, rubber, grey
- With fastening material steel, zinc plated
- Load capacity 50 kg
- Other versions upon request
- Weight = 0.350 kg/piece



APPLICATIONS

- Work stands
- Frames
- Movable tables



21.1475/0

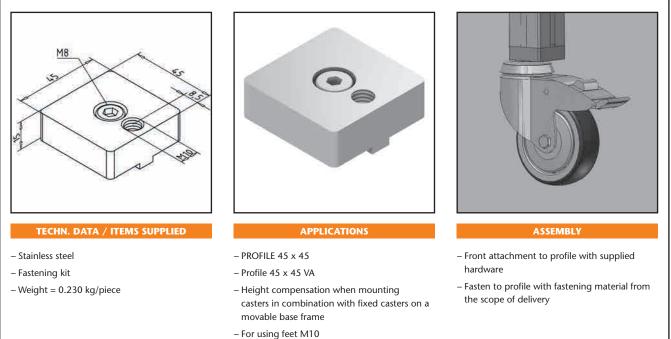


- to the profile groove with supplied hardware
- With mounting plate for castor **Part no. 21.1476/0** attach to profile

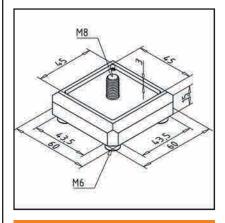
CONNECTING PLATE 45 X 45 VA M10

Part no.

21.2059/0



FASTENING PLATE 45 SST TO FIXED CASTOR



TECHN. DATA / ITEMS SUPPLIED

- Stainless steel
- Fastening kit
- Weight = 0.360 kg/piece



- PROFILE 45 x 45
- Profile 45 x 45 VA
- For attaching the fixed caster on the front side to profile 45 x 45 and 45 x 45 VA

Part no.





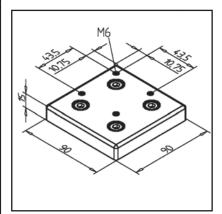
ASSEMBLY

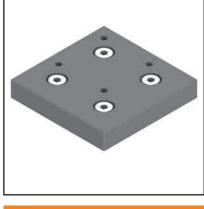
 Front attachment to profile with supplied hardware

FASTENING PLATE 90 TO FIXED CASTOR

Part no.

21.1476/0





APPLICATIONS

- To attach the castor **part no. 21.1475/0** frontally to profile 90 x 90



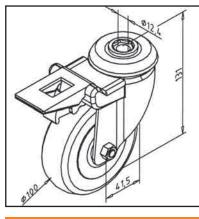
ASSEMBLY

 Fasten to the profile end with supplied hardware

TECHN. DATA / ITEMS SUPPLIED

- Aluminium, Pressure die-casting, powdercoated, grey
- With fastening material steel, zinc plated
- Weight = 0.330 kg/piece

SWIVELLING CASTOR WITH BRAKE D 100 X 131



TECHN. DATA / ITEMS SUPPLIED

- Steel, galvanized
- Tire, rubber, grey
- With fastening material steel, zinc plated
- Load capacity 100 kg
- Other versions upon request
- Weight = 0.743 kg/piece

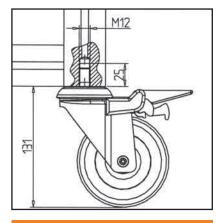


APPLICATIONS

- Movable tables
- Work stands
- display windows, showcases

Part no.

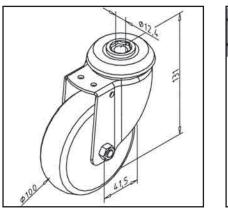
21.0031/0



- Connect directly to the central bore of the vertical profile with supplied hardware, drill and introduce thread M12
- If the roller is to be centrally positioned for profile cross sections of 45 x 90 or 90 x 90, a connection plate is required

SWIVELLING CASTOR WITHOUT BRAKE D 100 X 131

21.0030/0



TECHN. DATA / ITEMS SUPPLIED

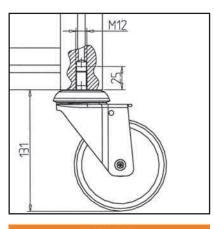
- Steel, galvanized
- Tire, rubber, grey
- With fastening material steel, zinc plated
- Load capacity 100 kg
- Other versions upon request
- Weight = 0.660 kg/piece



APPLICATIONS

Movable tables

- Work stands
- display windows, showcases



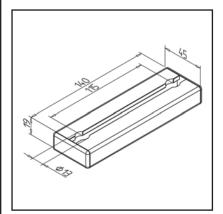
Part no.

Part no.

ASSEMBLY

- Connect directly to the central bore of the vertical profile with supplied hardware, drill and introduce thread M12
- A connection plate is required if the roller is to be positioned centrally with profile cross sections 45 x 90 or 90 x 90

FLOOR MOUNTING PLATE 45



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, anodized E6/EV1
- PROFILE 45 x 19
- With caps, grey
- Without fastening kit
- Weight = 0.130 kg/piece



APPLICATIONS

- Floor fixing of columns from profile 45 x 45



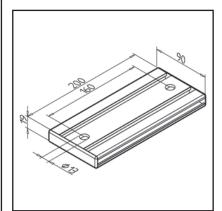
21.1730/0

- Secure profile with MiniTec profile connector
- On floor side: 2 floor anchors part no. 21.1082/0

FLOOR MOUNTING PLATE 90

Part no.

21.1733/0



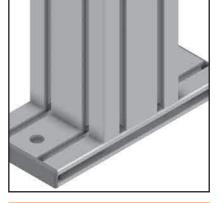
TECHN. DATA / ITEMS SUPPLIED

- Aluminium, anodized E6/EV1

- PROFILE 19 X 90

- With caps, grey

Without fastening kitWeight = 0.470 kg/piece



APPLICATIONS

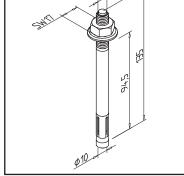
- APPLICATIO
- Floor fixing of columns from profile 45 x 90 oder 90 x 90



ASSEMBLY

- On profile side: 2 or 4 MiniTec power-lock fasteners
- On floor side: 2 floor anchors part no. 21.1082/0

FLOOR ANCHOR 10



TECHN. DATA / ITEMS SUPPLIED

- Steel, galvanized
- Ø 10
- With hexagonal nut and washer
- Weight = 0.084 kg/piece



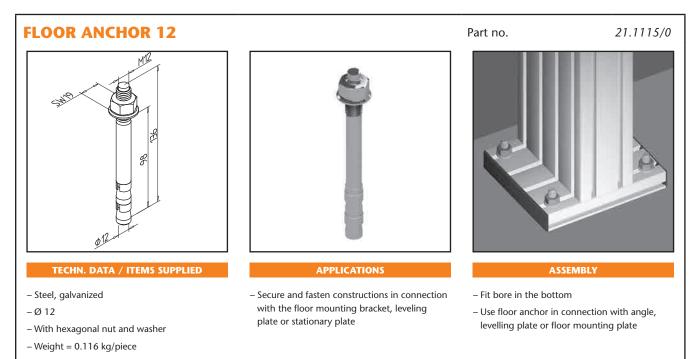
APPLICATIONS

 Secure and fasten constructions in connection with the floor mounting bracket, leveling plate or stationary plate Part no.

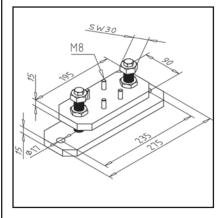
21.1082/0



- Fit bore in the bottom
- Use floor anchor in connection with angle, levelling plate or floor mounting plate



LEVELING PLATE 90 ST



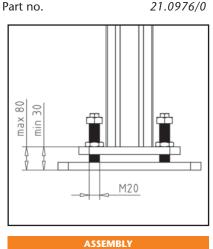
TECHN. DATA / ITEMS SUPPLIED

- Steel, galvanized
- With galvanized steel fastening material, for profile
- With leveling element
- Without dowels
- Weight = 5.146 kg/piece



APPLICATIONS

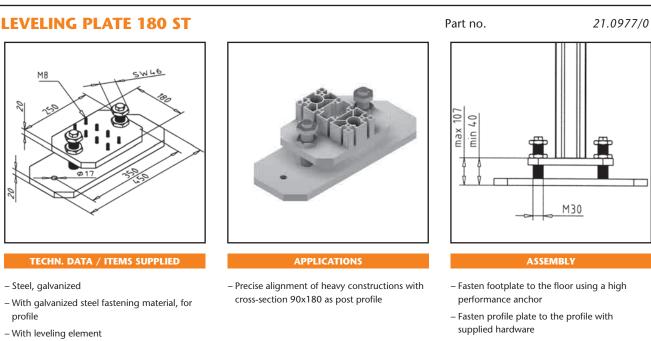
- Precise alignment of heavy constructions with cross-section 90x90 as post profile



- Fasten footplate to the floor using a high

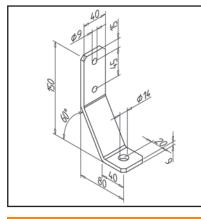
- performance anchor - Fasten profile plate to the profile with
- supplied hardware - Turn the M20 screw to set the height and secure it with the counter nut

21.0976/0



 Adjust height by turning screw M30 and secure with counternut.

FLOOR MOUNTING ANGLE



TECHN. DATA / ITEMS SUPPLIED

- Steel, powder-coated, grey
- With fastening material steel, zinc plated
- Without dowels

- Without dowels

- Weight = 20.347 kg/piece

- Weight = 0.389 kg/piece

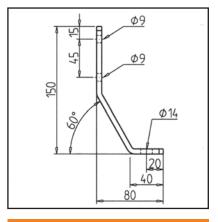


APPLICATIONS

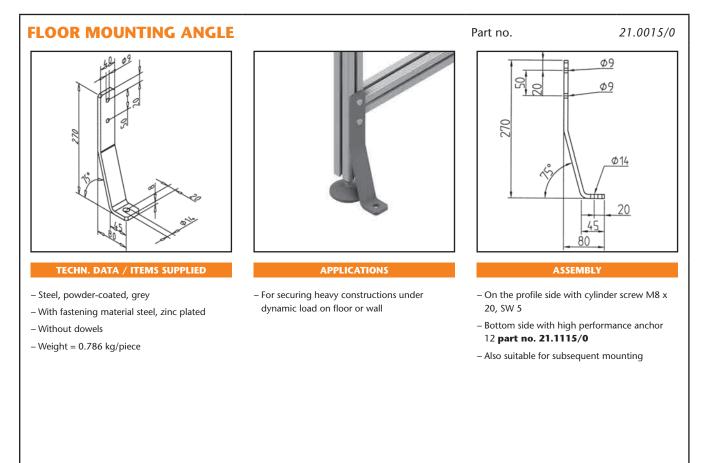
- Securing and fastening of constructions on floor or wall

Part no.

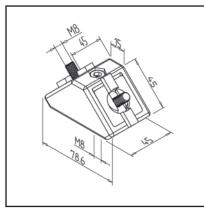
21.1112/0



- On profile side with cylinder screws M8 x 20, SW5
- Bottom side with high performance anchor 12 **part no. 21.1115/0**
- Also suitable for subsequent mounting



STRUT SOCKET 45 GD

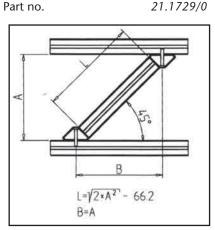


TECHN. DATA / ITEMS SUPPLIED

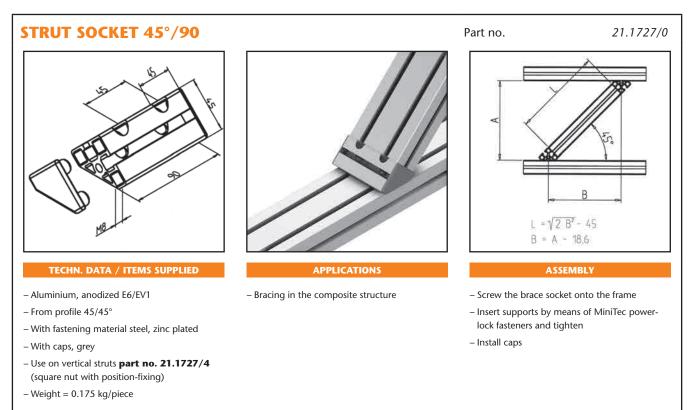
- Aluminium, Pressure die-casting, powdercoated, grey
- With fastening material steel, zinc plated
- Use on vertical struts **part no. 21.1729/7** (square nut with position-fixing)
- Weight = 0.261 kg/piece



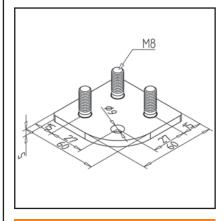
- Bracing in the composite structure



- Pre-assemble brace base and place in frame
- Screw the brace socket onto the frame

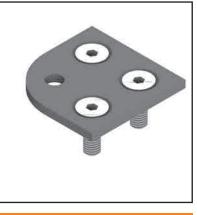


CONNECTING PLATE 60 X 60 X 30



TECHN. DATA / ITEMS SUPPLIED

- Steel, powder-coated, grey
- With fastening nut steel, galvanized
- Fastening kit
- Weight = 0.145 kg/piece



APPLICATIONS

- Profile 60 x 60 x 30 part no. 20.0982/0
- For the construction of guide rollers
- Use of hinged foot M8

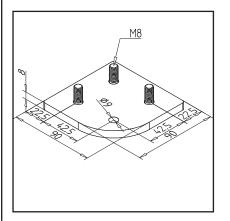
Part no.

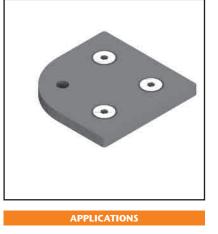
21.0038/0



- Front attachment to profile with supplied hardware
- Fasten to profile with fastening material from the scope of delivery

BASE AND TRANSPORT PLATE 90 X 90 X 45



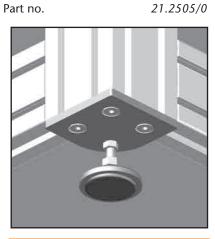


TECHN. DATA / ITEMS SUPPLIED

- Steel, powder-coated, grey
- With fastening material steel, zinc plated
- Weight = 0.488 kg/piece

- Use of hinged foot M8

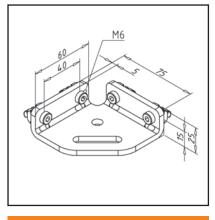
- For the construction of guide rollers
- To profile 90 x 90 x 45 part no. 20.0984/0



ASSEMBLY

 Front attachment to profile with supplied hardware

ADAPTER FLANGE 30



TECHN. DATA / ITEMS SUPPLIED

- Steel, powder-coated, grey
- With fastening material steel, zinc plated
- Weight = 0.261 kg/piece

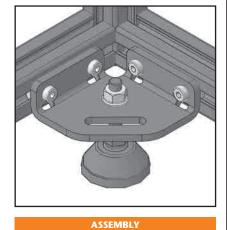


APPLICATIONS

- Strengthening of profile constructions
- Fixation of internal feet or rollers
- Floor mounting and leveling constructions

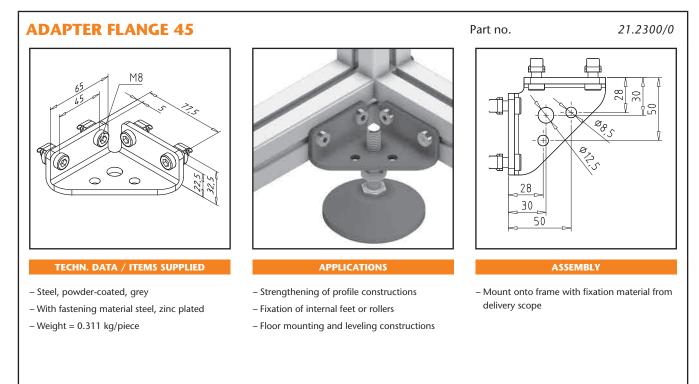
Part no.

21.2120/0

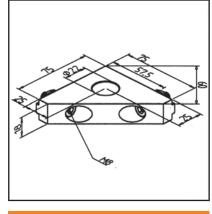


ASSEMBET

 Mount onto frame with fixation material from delivery scope



BEAM 90



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, anodized E6/EV1
- With fastening material steel, zinc plated
- Use on vertical struts part no. 21.1783/7
- Weight = 0.170 kg/piece

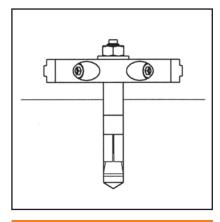


- Strengthening of constructions

- Fixation of internal feet or rollers
- Floor mounting and leveling constructions

Part no.

21.1783/0



- On profile side, with fastening kit
- On floor side, fasten with floor anchor

1 PROFILE SYSTEM 1.5 FEET, CASTORS, FLOOR FASTENINGS, SUPPORTS

BEAM 180 Part no. 21.1784/0 **TECHN. DATA / ITEMS SUPPLIED** ASSEMBLY APPLICATIONS - Aluminium, anodized E6/EV1 - Strengthening of heavy constructions - On profile side, with fastening kit - With fastening material steel, zinc plated - Fixation of internal feet or rollers - On floor side, fasten with floor anchor and levelling screw M 12

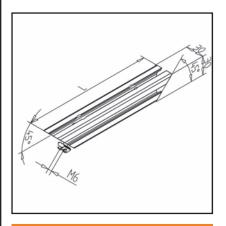
- Floor mounting and leveling heavy construc-

tions

STRENGTHENING ELEMENT 30

- Use on vertical struts part no. 21.1784/7

- Weight = 0.690 kg/piece



- TECHN. DATA / ITEMS SUPPLIED
- Aluminium, anodized E6/EV1
- Length (l) : 360 mm
- Profile 30 x 30, ready for use
- Both ends cut at 45° with counter-bores for fastening kit
- With fastening material steel, zinc plated
- Other lengths and designs under part no. 21.1761/5 on request
- Please specify dimension L

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- Weight = 0.212 kg/piece
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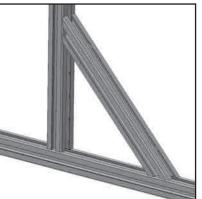
APPLICATIONS

- Reinforcement of profile constructions in "timbered structure" principle

ASSEMBLY

- Screw on the profile groove of the frame construction with supplied hardware

Part no.

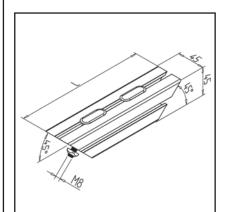


21.2110/0

STRENGTHENING ELEMENT 30 X 60 Part no. 21.2210/0 **TECHN. DATA / ITEMS SUPPLIED** APPLICATIONS ASSEMBLY - Aluminium, anodized E6/EV1 - Reinforcement of profile constructions in - Screw on the profile groove of the frame "timbered structure" principle construction with supplied hardware – Length (l) : 360 mm - Profile 30 x 60, ready for use - Both ends cut at 45° with counter-bores for fastening kit - With fastening material steel, zinc plated - Other lengths and designs under part no. 21.2210/5 on request - Please specify dimension L

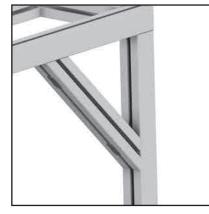
- Weight = 0.338 kg/piece

STRENGTHENING ELEMENT 45



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, anodized E6/EV1
- Length (l) : 360 mm
- Profile 45 x 45, ready for use
- Both ends cut at 45° with counter-bores for fastening kit
- With fastening material steel, zinc plated
- Use on vertical struts part no. 21.1761/7 (square nut with position-fixing)
- Other lengths and designs under part no. 21.1761/5 on request
- Please specify dimension L
- Weight = 0.870 kg/piece



APPLICATIONS

 Reinforcement of profile constructions in "timbered structure" principle Part no.

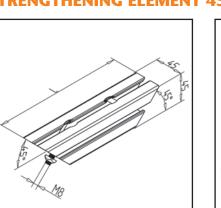




ASSEMBLY

 Screw on the profile groove of the frame construction with supplied hardware

STRENGTHENING ELEMENT 45 VA





APPLICATIONS

Reinforcement of profile constructions in
 Screw on the profile groove of the frame construction with supplied hardware

Part no.

21.1706/0

Length (I) : 360 mmProfile 45x45 VA, ready for installation

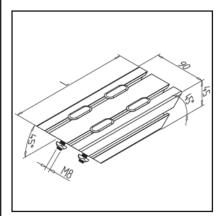
- Stainless steel

 Both ends cut at 45° with counter-bores for fastening kit

TECHN. DATA / ITEMS SUPPLIED

- Fastening kit
- Other lengths on request
- Please specify dimension L
- Weight = 0.890 kg/piece

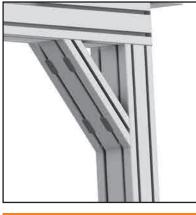
STRENGTHENING ELEMENT 90



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, anodized E6/EV1
- Length (l) : 360 mm
- Profile 45 x 90, ready for use
- Both ends cut at 45° with 4 counter-bores for fastening kit
- With fastening material steel, zinc plated
- Other lengths and designs under part no. 21.1762/5 on request
- Please specify dimension L

- Weight = 1.416 kg/piece



APPLICATIONS

 Reinforcement of profile constructions in "timbered structure" principle

Part no.

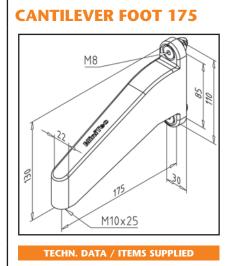
21.1762/0



ASSEMBLY

ASSEMBLY

 Screw on the profile groove of the frame construction with supplied hardware



- Aluminium, Pressure die-casting, powder-

- With fastening material steel, zinc plated

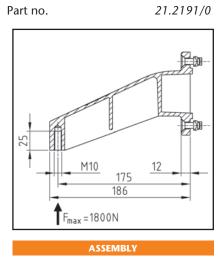
coated, grey

- Weight = 0.369 kg/piece



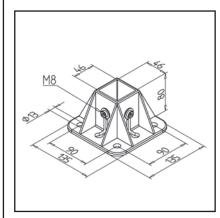
APPLICATIONS

– Placing frames and attaching stands



- Attachment to profile strut with fastening material
- Fastening of casters, articulated feet, and screws M10

SUPPORTING FOOT 45 GD



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, Pressure die-casting, powdercoated, grey
- With galvanized steel fastening material, for profile
- Package size of 10 pieces part no..
 21.1731/010
- Weight = 0.587 kg/piece

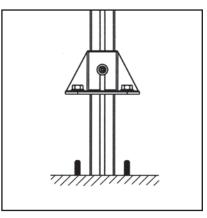


APPLICATIONS

- Suitable for profiles up to dimension 45 x 45
- Floor fastening of protective fields, signboards, racks
- As connection element for wall attachment; can be used both-sided

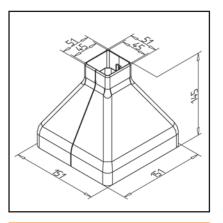
Part no.

21.1731/0



- Insert profile into foot
- Insert the square nut with spring steel sheet into the profile groove; preassemble the screws
- Fix the floor stand to the floor or wall, using the high-performance anchors or the universal pin with a hexagonal screw
- Tighten fastening screws

COVER SUPPORTING FOOT 45



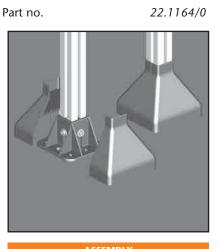
TECHN. DATA / ITEMS SUPPLIED

– ABS, grey

– Weight = 0.166 kg/pair



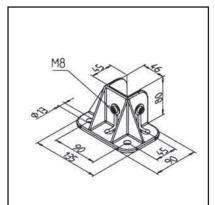
To cover the stand foot 45 GD and 45 GD open



ASSEMBLY

- Attach to profiles/stand foot

SUPPORTING FOOT 45 GD OPEN



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, Pressure die-casting, powdercoated, grey
- With galvanized steel fastening material, for profile
- Package size of 10 pieces part no..
 21.1738/010
- Weight = 0.356 kg/piece



APPLICATIONS

- Floor fastening of protective fields, signboards, racks
- As connection element for wall attachment; can be used both-sided

Part no.

21.1738/0

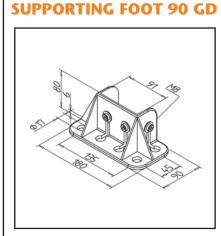


- Insert profile into foot
- Insert the square nut with spring steel sheet into the profile groove; preassemble the screws
- Fix the floor stand to the floor or wall, using the high-performance anchors or the universal pin with a hexagonal screw
- Tighten fastening screws

SUPPORTING FOOT 45 GD S Part no. 21.1723/0 **TECHN. DATA / ITEMS SUPPLIED APPLICATIONS** ASSEMBLY - Fix the floor stand to the floor or wall, using - Aluminium, Pressure die-casting, powder-- Floor fastening of protective fields, signcoated, grey boards, racks the high-performance anchors or the universal pin with a hexagonal screw - With galvanized steel fastening material, for - As connection element for wall attachment; profile can be used both-sided - Tighten fastening screws

- For all profiles

- Package size of 10 pieces part no..
 21.1723/010
- Weight = 0.499 kg/piece



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, Pressure die-casting, powdercoated, grey
- With galvanized steel fastening material, for profile
- Package size of 10 pieces part no..
 21.1737/010
- Weight = 0.465 kg/piece

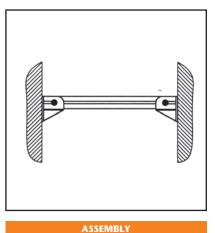


APPLICATIONS

- Fitting for profiles with maximum dimension of 45 x 90, 90 x 90 and 90 x 180
- Floor fastening of protective fields, signboards, racks
- As connection element for wall attachment; can be used both-sided

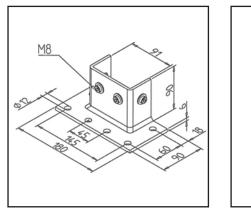
Part no.

21.1737/0



- Insert profile into foot
- Insert the square nut with spring steel sheet into the profile groove; preassemble the screws
- Fix the floor stand to the floor or wall, using the high-performance anchors or the universal pin with a hexagonal screw
- Tighten fastening screws

SUPPORTING FOOT 90 S



TECHN. DATA / ITEMS SUPPLIED

- Steel, galvanized
- With galvanized steel fastening material, for profile
- Weight = 1.438 kg/piece



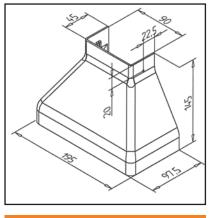
APPLICATIONS

- Fitting for profiles with maximum dimension of 45 x 90, 90 x 90 and 90 x 180
- Floor fastening of protective fields, signboards, racks
- As connection element for wall attachment; can be used both-sided



- Insert the square nut with spring steel sheet into the profile groove; preassemble the screws
- Fix the floor stand to the floor or wall, using the high-performance anchors or the universal pin with a hexagonal screw
- Tighten fastening screws

COVER SUPPORTING FOOT 90



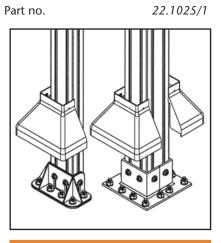
TECHN. DATA / ITEMS SUPPLIED

- ABS, grey
- Weight = 0.131 kg/piece



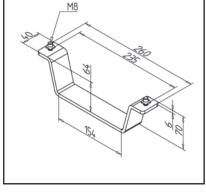
APPLICATIONS

- Suitable for foot 90 GD and 90 S
- Less dust and dirt deposit on the foot
- Easy to clean



- Expand the cover manually and clip in the slots of the profile
- Push the cover downwards
- Fasten on the side with tapping screw 3.4 x
 16, then drill hole Ø 2.5 mm at the marked location

TRANSPORT AID Part no.





APPLICATIONS

– Steel, galvanized

TECHN. DATA / ITEMS SUPPLIED

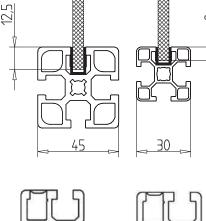
- With fastening material steel, zinc plated
- Weight = 0.708 kg/piece
- Securing of constructions when transported by forklift truck



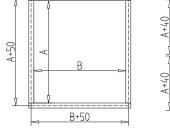
- Mount under construction with fastening material from the scope of supply to the profile groove
- Use always in pairs

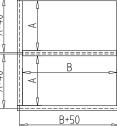
INSTALLING SURFACE ELEMENTS IN THE PROFILE GROOVE

Basically, a distinction must be made between installation in the profile groove and subsequent fastening of surface elements. For installation in the profile groove, the installation procedure must be planned accordingly. It is recommended to create complete protective fields which are inserted into a construction. This mounting method has particular advantages for large surfaces, when processing woven wire mesh and sealed constructions. The subsequent installation of panel elements is usually easier and the risk of damage is lower.









Clamp profile

Surface elements of 6 mm thickness can be combined with a clamp profile.

Install directly in the profile groove.

Allowance for surface elements in x and y direction for mounting in profile groove:

30er groove system +16 mm

45er groove system +25 mm

Clamping profile 45 x 32

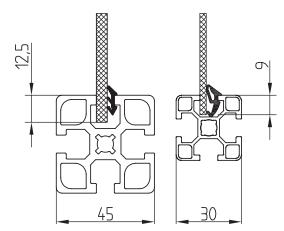
The clamping profile 45 x 32 contains the properties of the system profiles and a safe, simple fastening of surface elements integrated.

This option is particularly recommended for large protective fields and wave grid constructions. The protective fields are prefabricated and can be easily installed with protective field suspensions in the frame of the construction. Quick removal of such protective fields is also possible.

Allowance for surface elements in x and y direction for mounting in profile groove:

1)Simple frame: +50 mm

2)Frame with one or more intermediate struts: +40 mm



Plug seals

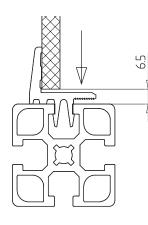
Panes of glass, PVC, composite material, acrylic or similar of 2 - 6 mm thickness can be filled with the plug-in seals 2, 4, 5 and 6 are secured and sealed in the profile. The plug-in seal is subsequently pressed into the gap between the disc and the profile groove flank. When using plug-in seal 4 on both sides, materials < 2 mm clamp.

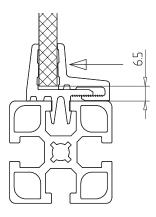
Allowance for surface elements in x and y direction for mounting in profile groove:

30 groove system +18 mm with plug-in seal 30

45 groove system +25 mm with plug-in seal 2/4/5/6

INSTALLING SURFACE ELEMENTS IN THE PROFILE GROOVE



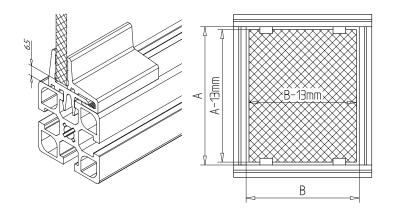


Clamping profile PVC

Optically appealing, simple and secure attachment of surface elements of all kinds, without circumferential gap between the construction profile and surface element.

Suitable for surface elements up to 8 mm thick, also for wavy grid.

Calculation of panel size: Clear opening - 13 mm

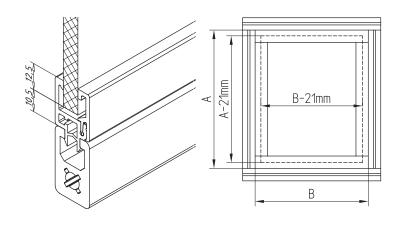


Panel holder

Extremely simple and cost-effective attachment of surface elements. The panel holders consist of 2 halves. Suitable for all surface elements up to 8 mm thickness. For corrugated gratings, please use the PVC clamping profile at this point.

Calculation of panel size:

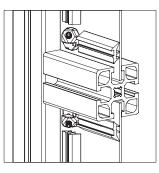
Clear opening - 13 mm (6.5 mm air circulating)

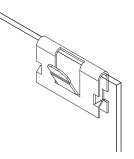


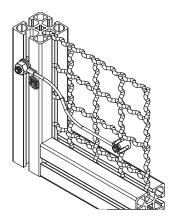
Window Edging Profile

Simple and economical installation of surface elements. Also suitable for retrofitting into existing frames. No mitre cut required. Suitable for surface elements up to 8 mm thick. Dense attachment of panels < 8 mm with the plug-in gaskets. For the subsequent installation of wave mesh, please use the PVC clamping profile.

INSTALLING SURFACE ELEMENTS IN THE PROFILE GROOVE







Earthing / conductive connection

For conductive connection of aluminum or steel sheets with the profile frame in the thickness of 1.5mm - 2.5mm please use our earthing block **part no. 22.1163/0.**

One surface block is sufficient per surface element. In connection with our insert seal 2, the sheet metal is fastened in the profile frame.

Earthing clamp part no.: E9.0141/0

For grounding sheet metal and thin-walled components with wall thickness of 0.7 - 2 mm Especially suitable for: Cable duct AL **part no. 20.1051/0** Cable duct 45 AL **part no. 20.1071/0** Cable duct 90 AL **part no. 20.1056/0**

- Attach to sheet metal edge
- Safe support and conductive connection is provided by claws
- For the connection of the earthing cable with 6 mm flat plug

Earthing cable for ESD areas

Wire line green-yellow 4mm² Length: ca. 200 mm Attach to profile groove with fixing material from scope of delivery. With standard accessory for grounding of surface elements with 8 mm

part no. 32.1013/0

Attachment with eyelet on both sides for M8 part no. 32.1016/0

Attachment with eyelet on one side for M8, other side for M6

Earthing clamp wave grid part no. E9.0143/0

Wire line green-yellow 4mm² Length: ca. 200 mm Attach to profile groove with fixing material from scope of delivery.

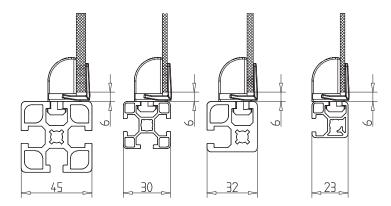
Attach grounding clip to wave grid, fasten and connect with eyelet.

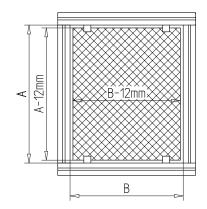
INSTALLING SURFACE ELEMENTS IN THE PROFILE GROOVE

Panel clamp

Extremely simple and cost-effective fastening of panel elements. The terminal blocks consist of a base and locking clip. Suitable for all surface elements from 2 to 6 mm thick, except wavy grid. Calculation of panel size:

Clear opening A / B - 12mm (6mm air circulating)

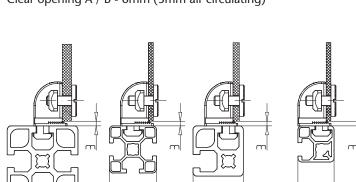




Screw block

4

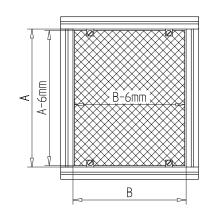
Suitable for panel material up to 6 mm thick, except for wave grid. Calculation of panel size: Clear opening A / B - 6mm (3mm air circulating)



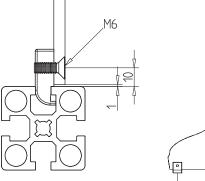
32

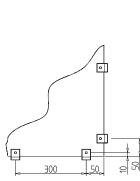
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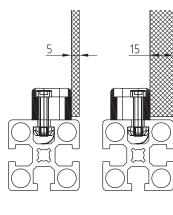
30



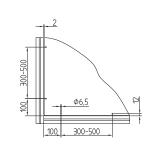
INSTALLING SURFACE ELEMENTS IN THE PROFILE GROOVE







7,5



Thread Socket

Safe and easy attachment of surface elements of all kinds except wave grid. The threaded sockets are swiveled into the profile groove at intervals of approx. 300 mm. Select screw length and screw shape according to material thickness and type of surface element.

Calculation of panel size:

Clear opening -2 mm (1 mm air circulating)

Multiblock

The multiblocks are placed in the clear opening of the frame construction at a distance of approx. 300 mm with M6 cylinder screws and sliding nuts.

Suitable for acrylic, sheet metal, aluminum wave grid.

With the Multiblock 45, material of 5 to 15 mm thickness can be fastened flush.

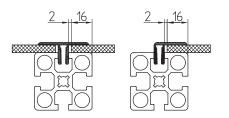
With the Multiblock 30, material up to 7.5 mm thick can be fastened flush. Select screw length and screw shape according to material thickness and type of surface element.

The hole in the surface element for the fixing screws in Ø6.5 mm and with 10 mm margin.

Calculation of panel size:

Clear opening -4 mm (~ 2 mm air circulating)

Furthermore, it is possible to mount surface elements on the Multiblock 30, so there is no air gap.

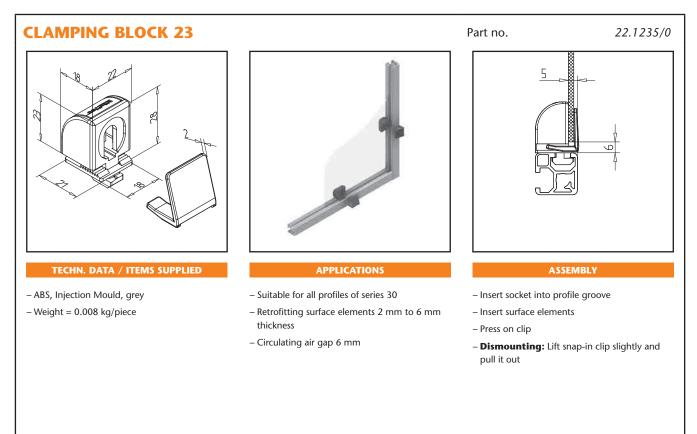


Screw Bar

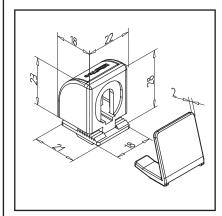
Material: PVC Fixing of surface elements or components at any place with sheet metal- or chipboard screws.

Panel Clamping Profile

Suitable for surface elements from 2 to 10 mm thick. Insert boring Ø 5.5 mm for M5 threaded pin with a spacing of ~ 250 mm into the profile groove and clamp with M5 x 16 threaded pin. For panels, woven wire mesh and pressed wire mesh



CLAMPING BLOCK 30



TECHN. DATA / ITEMS SUPPLIED

- ABS, Injection Mould, grey
- Weight = 0.008 kg/piece

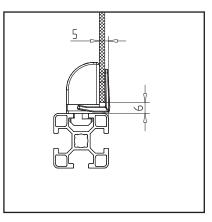


APPLICATIONS

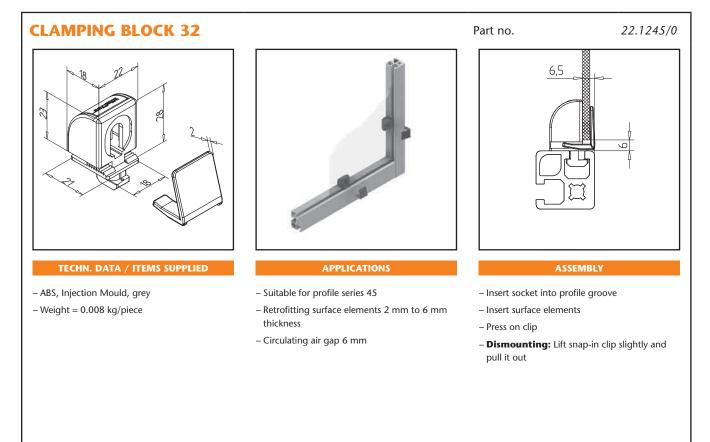
- Suitable for all profiles of series 30
- Retrofitting surface elements 2 mm to 6 mm thickness
- Circulating air gap 6 mm

Part no.

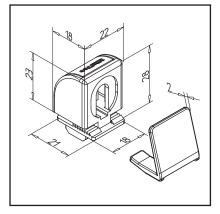
22.1230/0



- Insert socket into profile groove
- Insert surface elements
- Press on clip
- **Dismounting:** Lift snap-in clip slightly and pull it out



CLAMPING BLOCK 45

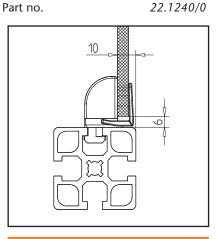


TECHN. DATA / ITEMS SUPPLIED

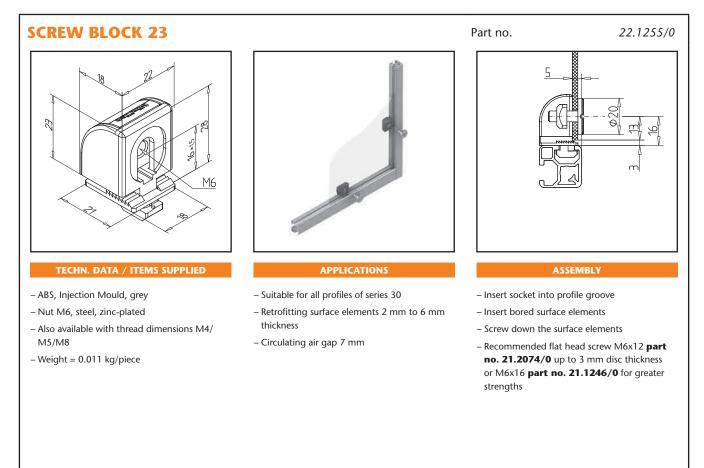
- ABS, Injection Mould, grey
- Weight = 0.008 kg/piece



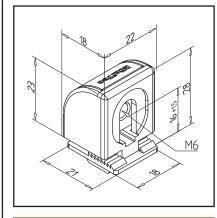
- Suitable for profile series 45
- Retrofitting surface elements 2 mm to 6 mm thickness
- Circulating air gap 6 mm



- Insert socket into profile groove
- Insert surface elements
- Press on clip
- Dismounting: Lift snap-in clip slightly and pull it out



SCREW BLOCK 30



TECHN. DATA / ITEMS SUPPLIED

- ABS, Injection Mould, grey
- Nut M6, steel, zinc-plated
- Also available with thread dimensions M4/ M5/M8
- Weight = 0.011 kg/piece

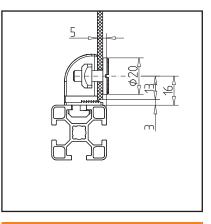


APPLICATIONS

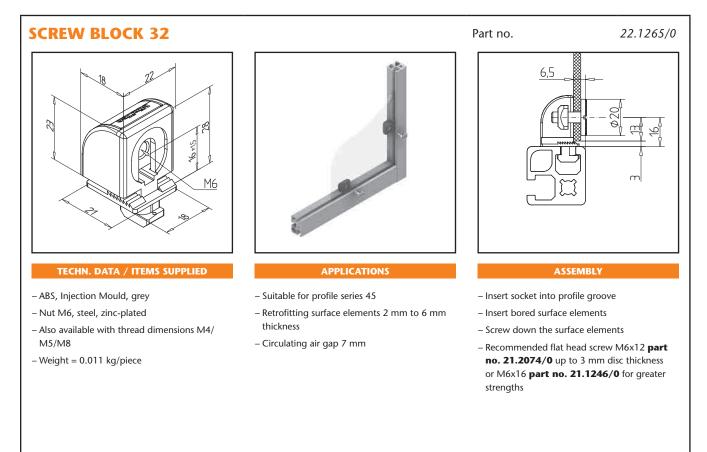
- Suitable for all profiles of series 30
- Retrofitting surface elements 2 mm to 6 mm thickness
- Circulating air gap 7 mm

Part no.

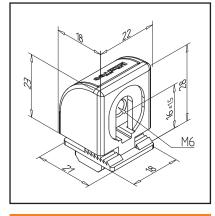
22.1250/0



- Insert socket into profile groove
- Insert bored surface elements
- Screw down the surface elements
- Recommended flat head screw M6x12 part no. 21.2074/0 up to 3 mm disc thickness or M6x16 part no. 21.1246/0 for greater strengths



SCREW BLOCK 45

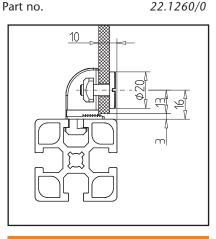


TECHN. DATA / ITEMS SUPPLIED

- ABS, Injection Mould, grey
- Nut M6, steel, zinc-plated
- Also available with thread dimensions M4/ M5/M8
- Weight = 0.011 kg/piece

APPLICATIONS

- Suitable for profile series 45
- Retrofitting surface elements 2 mm to 6 mm thickness
- Circulating air gap 7 mm

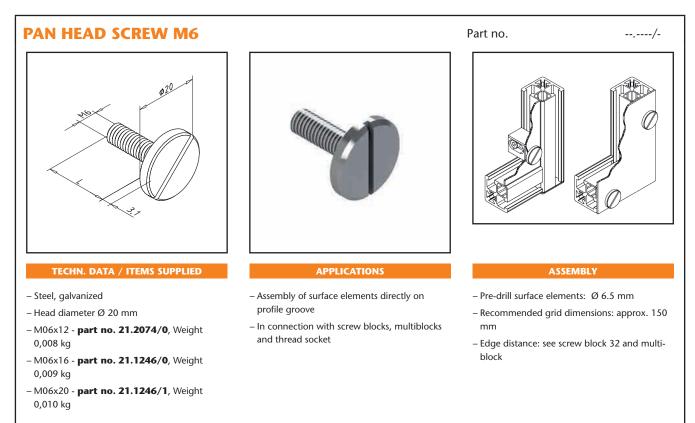


ASSEMBLY

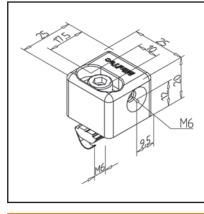
- Insert socket into profile groove
- Insert bored surface elements

strengths

Screw down the surface elements
Recommended flat head screw M6x12 part no. 21.2074/0 up to 3 mm disc thickness or M6x16 part no. 21.1246/0 for greater



MULTIBLOCK 30 GD



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, Pressure die-casting, powdercoated, grey
- With fastening material steel, zinc plated
- Without pan head screw
- Weight = 0.032 kg/piece



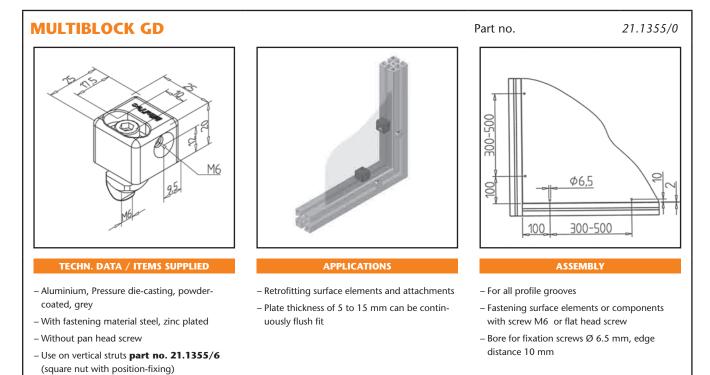
APPLICATIONS

- Retrofitting surface elements and attachments
- Plate thickness of 6 to 7 mm can be continuously flush fit
- Alternatively, surface elements can also be mounted on-the-floor, so they can also be installed without an air gap.

21.2220/0

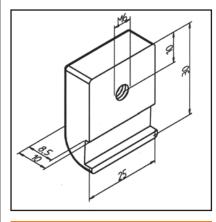
Part no.

- Fastening surface elements or components with screw M6 or flat head screw
- Determination of panel dimensions: Light opening -4mm (~2 mm circulating air)
- Bore for fixation screws Ø 6.5 mm, edge distance 10 mm



THREAD SOCKET GD

- Weight = 0.035 kg/piece



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, Pressure die-casting, powdercoated, grey
- Without pan head screw
- Weight = 0.018 kg/piece



APPLICATIONS

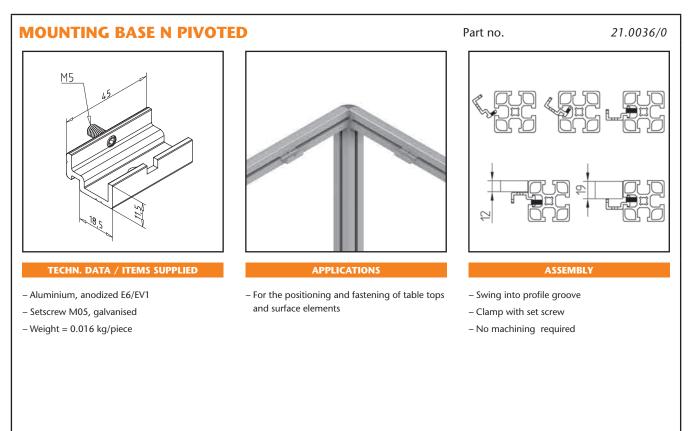
Fix surface elements in profile framesTable tops

Part no.

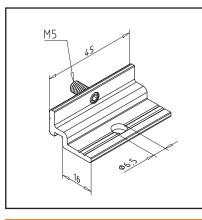




- Insert the thread socket into profile groove
- Fix element with screws M6 or flat head screw
- Distance from edge of the thread: 10 mm



MOUNTING BASE F PIVOTED



TECHN. DATA / ITEMS SUPPLIED

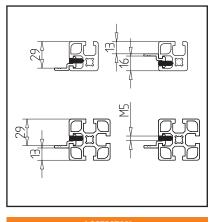
- Aluminium, anodized E6/EV1
- Setscrew M05, galvanised
- Weight = 0.014 kg/piece



APPLICATIONS

 For the positioning and fastening of table tops and surface elements Part no.

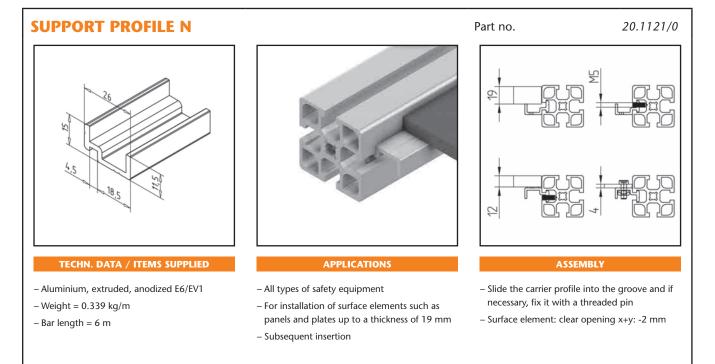
21.0041/0



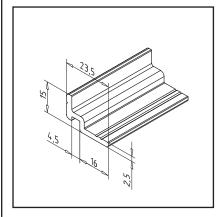
ASSEMBLY

- Swing into profile groove

- Clamp with set screw
- No machining required



SUPPORT PROFILE F



TECHN. DATA / ITEMS SUPPLIED

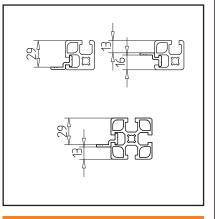
- Aluminium, extruded, anodized E6/EV1
- Weight = 0.262 kg/m
- Bar length = 6 m

ΑΡΡΙΙCΑΤΙΟΝ

- All types of safety equipment
- For installation of surface elements such as
- panels and plates up to a thickness of 19 mm
- Subsequent insertion



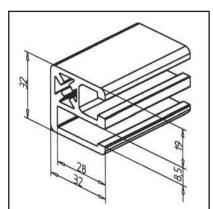
20.1149/0



ASSEMBLY

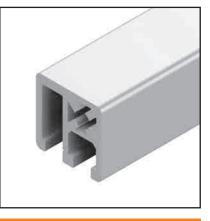
 Slide the carrier profile into the groove and if necessary, fix it with a threaded pin

CLAMPING PROFILE 32 X 32



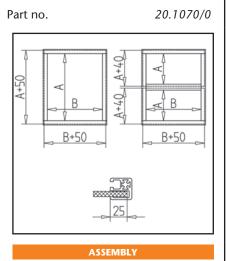
TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $-I_x = 5.024 \text{ cm}^4$
- $-I_{v} = 4.418 \text{ cm}^{4}$
- $-w_x = 3.041 \text{ cm}^3$
- $-w_v = 2.398 \text{ cm}^3$
- Weight = 1.211 kg/m
- Bar length = 6 m
- Packing unit = 48 m



APPLICATIONS

- All types of safety equipment
- For clamping of surface elements, such as woven mesh, panels, plates with a maximum strength of 8 mm
- In the case of larger protective fields, intermediate struts made of clamping profile 45 x 32 must be used in order to ensure adequate safety against pushing out of the surface elements; To do this, remove cover strips on clamping profile 45 x 32 mm
- Cut size of surface elements:
 Dimension A/B 40/50 mm depending on application



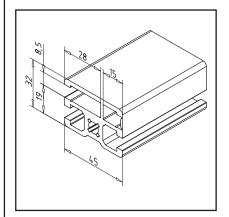
- MiniTec power-lock fastener; no bores required
- No release of panel element corners required
- Pre-assemble tripartite frame

Part no.

- Insert panel element and install last profile brace
- Press in the distance profile **part no. 22.1039/0** on the inside or drive in with a flat tool
- For panel elements < Mount 6 mm with matching plug-in seal
 or < Mount 4 mm with spacer profile and
- or < Mount 4 mm with spacer profile and additionally suitable plug-in seal on the opposite side

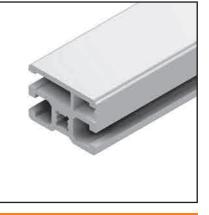
20.1053/0

CLAMPING PROFILE 45 X 32



TECHN. DATA / ITEMS SUPPLIED

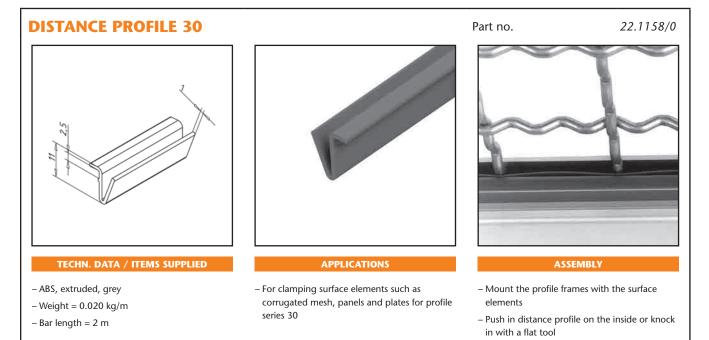
- Aluminium, extruded, anodized E6/EV1
- $-I_x = 6.465 \text{ cm}^4$
- $-I_v = 9.521 \text{ cm}^4$
- $-w_{x} = 3.999 \text{ cm}^{3}$
- $-w_{u} = 4.119 \text{ cm}^{3}$
- Weight = 1.615 kg/m
- Bar length = 6 m
- Packing unit = 48 m



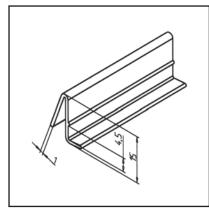
APPLICATIONS

- In the case of larger protective fields, intermediate struts made of clamping profile 45 x 32 must be used in order to ensure adequate safety against pushing out of the surface elements; To do this, remove cover strips on clamping profile 45 x 32 mm
- All types of safety equipment
- For clamping of surface elements, such as woven mesh, panels, plates with a maximum strength of 8 mm
- Cut size of surface elements:
 Dimension A/B 40/50 mm depending on application

- MiniTec power-lock fastener; no bores required
- No release of panel element corners required
- Pre-assemble tripartite frame
- Insert panel element and install last profile brace
- Press in the distance profile **part no. 22.1039/0** on the inside or drive in with a flat tool
- For panel elements < Mount 6 mm with matching plug-in seal
- or < Mount 4 mm with spacer profile and additionally suitable plug-in seal on the opposite side



DISTANCE PROFILE



TECHN. DATA / ITEMS SUPPLIED

- ABS, extruded, grey
- Weight = 0.028 kg/m
- Bar length = 2 m



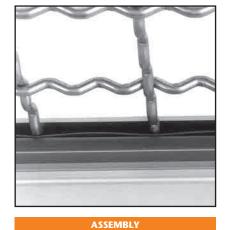
APPLICATIONS

- Use in clamping profile 45 x 32 part no. 20.1053/0 and clamping profile 32 x 32 part no. 20.1070/0 for clamping surface elements

- Also for use with all other profiles to fix surface elements

Part no.



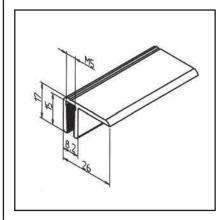


- Mount the profile frames with the surface elements
- Push in distance profile on the inside or knock in with a flat tool

SCREW SOCKET PROFILE 22.1076/0 Part no. 5 111113 TECHN. DATA / ITEMS SUPPLIED **APPLICATIONS** ASSEMBLY – PVC, extruded, grey - Fastening surface elements or components at - Clip profile into groove any location – Weight = 0.118 kg/m - Fasten element with commercial-type selftapping screws Ø 4-5 mm; Length min: 16 mm - Bar length = 2 m

- - for material thickness of 1-6 mm, sheet metal screw 3,5 x 16 mm part no. 21.1365/0

PANEL CLAMPING PROFILE



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- Weight = 0.260 kg/m
- Bar length = 6 m

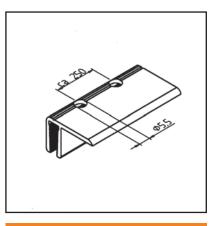


APPLICATIONS

- Fastening of surface elements
- Post fitting of facing panels
- Reception of surface elements with a maximum strength of 10 mm

Part no.

20.1025/0

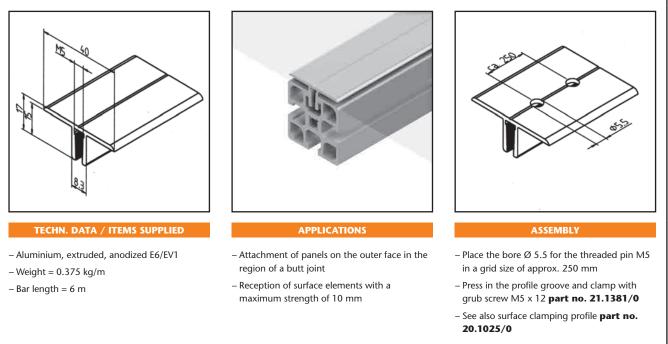


- Place the bore Ø 5.5 for the threaded pin M5 in a grid size of approx. 250 mm
- Press in the profile groove and clamp with grub screw M5 x 12 part no. 21.1381/0

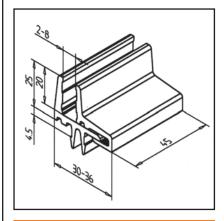
DOUBLE PANEL CLAMPING PROFILE

Part no.

20.1018/0



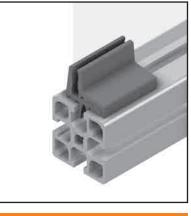
PANEL HOLDER GREY



TECHN. DATA / ITEMS SUPPLIED

- PVC, extruded, grey

- On request also available in black, part no.
 22.1090/0
- Weight = 0.011 kg/piece



APPLICATIONS

- Fixation surface elements with a maximum strength of 8 mm
- For surface elements smaller than 4 mm, a moss rubber strip must be inserted
- Windows, doors
- Not suitable for corrugated mesh

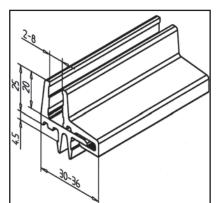
Part no. 22.1090/1

- Fold the sockets into the profile groove
- Insert the panel element
- Press clamping half firmly on socket half

22.1092/0

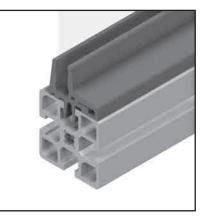
Part no.

CLAMPING PROFILE PVC



TECHN. DATA / ITEMS SUPPLIED

- PVC, extruded, grey
- On request also available in black, part no.
 22.1080/0
- Weight = 0.550 kg/m
- Bar length = 2 m



APPLICATIONS

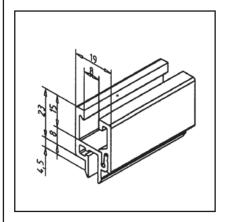
- Fixation surface elements with a maximum strength of 8 mm
- For surface elements smaller than 4 mm, a moss rubber strip must be inserted
- Windows, doors
- No free space between profile and panel element
- Also suitable for corrugated mesh



ASSEMBL

- Snap socket half into profile groove
- Insert the panel element
- Press clamping half firmly on socket half

PANEL FRAMING PROFILE



TECHN. DATA / ITEMS SUPPLIED

- ABS, extruded, grey
- On request also available in black part no. 22.1107/0
- Weight = 0.229 kg/m
- Bar length = 2 m

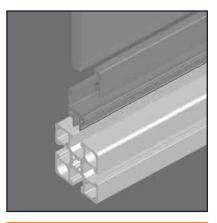


APPLICATIONS

- For retrofitting surface elements in existing profile frames
- Fixation surface elements with a maximum strength of 8 mm
- For panels up to 8 mm use additional insert seal
- For subsequent installation of corrugated mesh please use clamp profile PVC
- Windows, doors
- No free space between profile and panel element

Part no.

22.1107/1

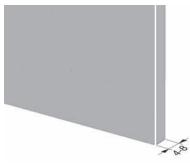


- Snap socket half into profile groove
- Insert the panel element
- Press clamping half firmly on socket half
- No mitre cut necessary

SURFACE ELEMENTS

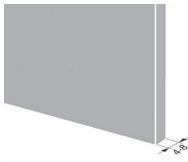
MATERIAL & CHOICES

ACRYL



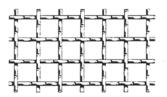
Part no.	STRENGTH	COLOUR	WEIGHT	PLATE SIZE	
21.1832/0	4 mm	smoke-coloured	4,76 kg/m ²	2050 x 3050 mm	
21.1811/0	5 mm	smoke-coloured	5,95 kg/m ²	2050 x 3050 mm	
21.1812/0	6 mm	smoke-coloured	7,14 kg/m ²	2050 x 3050 mm	
21.1813/0	8 mm	smoke-coloured	9,52 kg/m ²	2050 x 3050 mm	
21.1826/0	4 mm	crystal clear	4,76 kg/m ²	2050 x 3050 mm	
21.1836/0	5 mm	crystal clear	5,95 kg/m ²	2050 x 3050 mm	
21.1827/0	6 mm	crystal clear	7,14 kg/m ²	2050 x 3050 mm	
21.1828/0	8 mm	crystal clear	9,52 kg/m ²	2050 x 3050 mm	

POLYCARBONATE

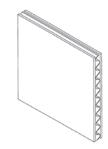


STRENGTH WEIGHT COLOUR PLATE SIZE Part no. 21.1809/0 4 mm smoke-coloured 4,76 kg/m² 2050 x 3050 mm 5,95 kg/m² 21.1808/0 2050 x 3050 mm 5 mm smoke-coloured 21.1807/0 6 mm smoke-coloured 7,20 kg/m² 2050 x 3050 mm 9,78 kg/m² 21.1821/0 2050 x 3050 mm 8 mm smoke-coloured crystal clear 21.1829/0 4,80 kg/m² 2050 x 3050 mm 4 mm 21.1833/0 5 mm crystal clear 5,95 kg/m² 2050 x 3050 mm 21.1830/0 crystal clear 7,20 kg/m² 2050 x 3050 mm 6 mm 21.1831/0 8 mm crystal clear 9,78 kg/m² 2050 x 3050 mm

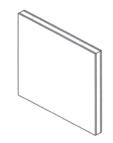
WAVE GRID



ALUMINIUM-WAVE PANEL



COMPOSITE



Part no.	WIRE STRENGTH	MESH WIDE	WEIGHT	PLATE SIZE	MATERIAL
21.1803/0	4 mm	30 mm	6,2 kg/m ²	2000 x 3000 mm	pc, galva- nized
21.1805/0	4 mm	40 mm	4,7 kg/m ²	2000 x 3000 mm	pc, galva- nized
21.1818/2	4 mm	30 mm	2,14 kg/m ²	2000 x 2000 mm	ALMg3
21.1818/1	4 mm	40 mm	1,6 kg/m ²	2000 x 2000 mm	ALMg3

Part no.	21.1853/0		
Front	0,8 mm		
Back	0,5 mm		
Aluminium Shaft	0,2 mm		
total thickness	6 mm		
Weight	4,6 kg/m ²		
Plate size	1500 x 3000 mm		
Material	Aluminum adhesive coated on both sides, paintable, printable, recyclable		

Part no.	21.1834/0	
Material outside	Aluminium (anodized)	
Material inside	Polyethylene	
total thickness	6 mm	
Weight	7,3 kg/m ²	
Plate size	1250 x 2500 mm	
Others	paintable, printable, recyclable	

ON DEMAND Aluminium sheets, steel plates, perforated sheets, plywood panels

SURFACE ELEMENTS

MATERIAL & CHOICES

Extremely scratch-resistant, water-resistant and resistant to a variety of chemicals, acids and alkalis.

HPL compact tabletop



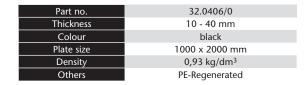
part no.	Color	Thickness	Weight	Size	ESD
32.6201/0	light grey	5	7 Kg/m²	2520 x 1280	Nein
32.6202/0	light grey	8	11,2 Kg/m²	2520 x 1280	Nein
32.6203/0	light grey	16	22,4 Kg/m ²	2520 x 1280	Nein
32.6204/0	light grey	20	30 Kg/m²	2520 x 1280	Nein
32.6205/0	light grey	8	11,2 Kg/m²	2520 x 1280	Ja
32.6206/0	light grey	10	14 Kg/m²	2520 x 1280	Ja
32.6207/0	light grey	16	22,4 Kg/m²	2520 x 1280	Ja
32.6208/0	light grey	20	30 Kg/m²	2520 x 1280	Ja

PVC-PLATE



RECYCLING-PLATE PE

21.1817/0 Part no. Thickness 20 mm grey, 7011 RAL Color Weight 28 kg/m² 1000 x 2000 mm Plate size other colours and strengths, Others Anti-static Tabletops on request



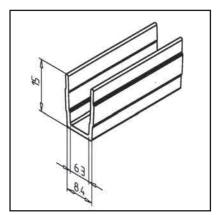
RECYCLING-PLATE PE CONFETTI



Part no.	32.0405/0
Thickness	10 - 40 mm
Colour	confetti
Plate size	1000 x 2000 mm
Density	0,93 kg/dm ³
Others	PE-Regenerated

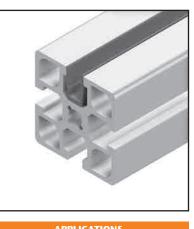
*(The colour spread may vary depending on the delivery in shape, colour and size)





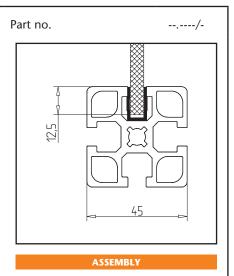
TECHN. DATA / ITEMS SUPPLIED

- PVC black part no. 22.1070/0
- PVC grey part no. 22.1070/1
- PVC light grey **part no. 22.1070/2**
- PVC blue part no. 22.1072/0
- PVC orange part no. 22.1071/0
- PVC yellow part no. 22.1074/0
- ABS silver part no. 22.1179/0
- Weight = 0.060 kg/m
- Bar length = 2 m



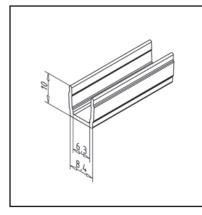
APPLICATIONS

- Mounted with groove inwards: For closing profile grooves
- Mounted with the groove to the outside:
- For the absorption of surface elements up to 6 mm thickness, dimensional compensation by silicone or sponge rubber cord **part no.** 22.1102/0



- Snap or slip into profile groove

COVER PROFILE 30



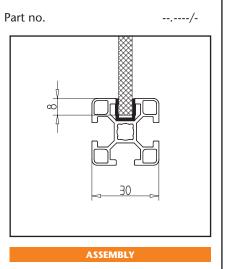
TECHN. DATA / ITEMS SUPPLIED

- PVC, extruded
- grey part no. 22.1161/1
- light grey **part no. 22.1161/2**
- Weight = 0.040 kg/m
- Bar length = 2 m

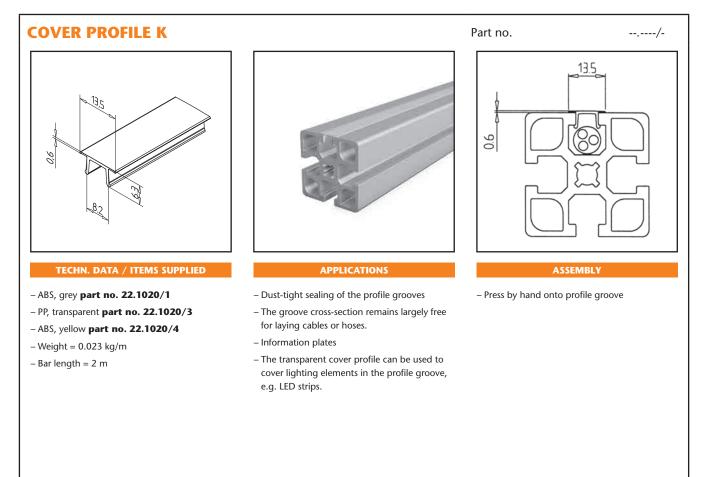


- Mounted with groove inwards: For closing profile grooves
- Mounted with the groove to the outside:

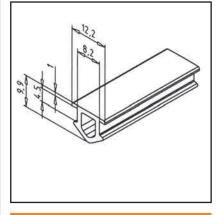
For the absorption of surface elements up to 6 mm thickness, dimensional compensation by silicone or sponge rubber cord **part no. 22.1102/0**



- Press or slide into the profile groove



COVER PROFILE G



TECHN. DATA / ITEMS SUPPLIED

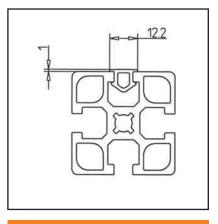
- NBR, black
- Roll length 100 m
- Hardness (Shore A) 70°
- Weight = 0.072 kg/m



- Dust-tight sealing of the profile grooves
- The groove cross-section remains largely free for laying cables or hoses.

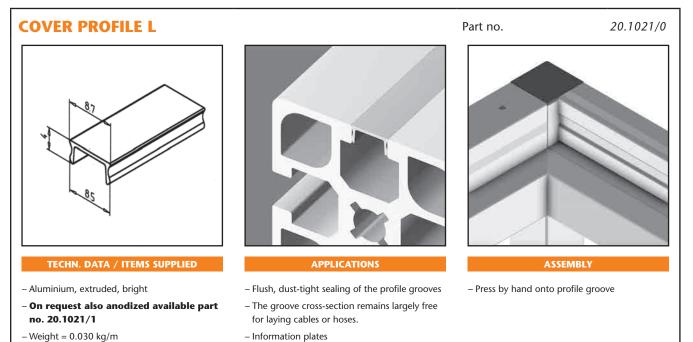
Part no.

22.1010/0



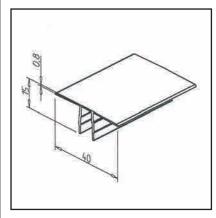
ASSEMBLY

- Press by hand onto profile groove



– Bar length = 2 m

SIGNAL PROFILE



TECHN. DATA / ITEMS SUPPLIED

- PVC, extruded
- yellow-orange **part no. 22.1097/2**
- fire red part no. 22.1097/3
- signal yellow part no. 22.1097/4
- Weight = 0.090 kg/m
- Bar length = 2 m



APPLICATIONS

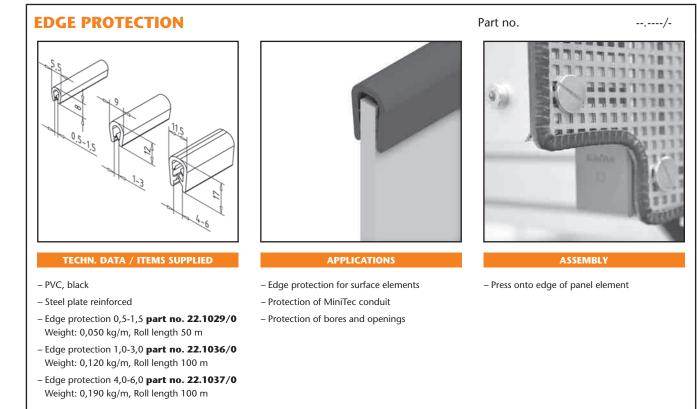
- Marking of safety relevant construction units such as doors and risk zones
- Coloured organization of constructions or parts

ASSEMBLY

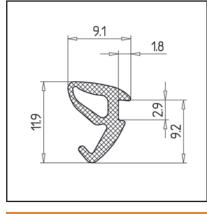
--.--/-

- Clip in profile groove

Part no.

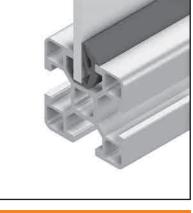


PLUG SEAL 30



TECHN. DATA / ITEMS SUPPLIED

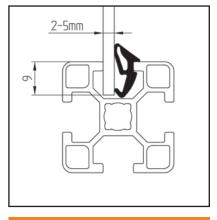
- EPDM, black
- Roll length 100 m
- Weight = 0.050 kg/m



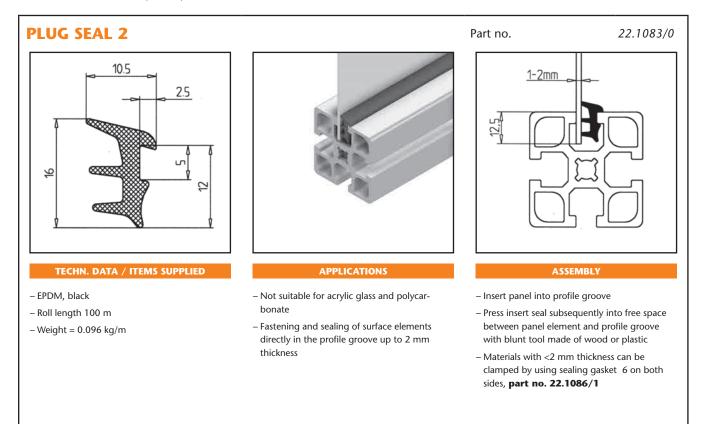
APPLICATIONS

 Fastening and sealing of panels directly in the profile groove, for panels 2-5 mm thick Part no.

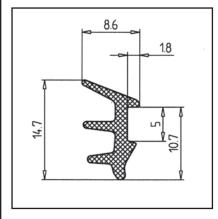
22.1174/0



- Insert panel into profile groove, next push gasket in manually or with an appropriate, wooden or plastic tool
- When using profile connectors 30 for connecting the profiles, the surface elements should be given on 2 sides instead of 9 mm only an allowance of 7.5 mm

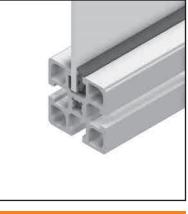


PLUG SEAL 4



TECHN. DATA / ITEMS SUPPLIED

- EPDM, black
- Roll length 100 m
- Weight = 0.070 kg/m



APPLICATIONS

- Fastening and sealing of panes directly in the profile groove, for panes 2-4 mm thick
- Also suitable for acrylic plastic and polycarbonate

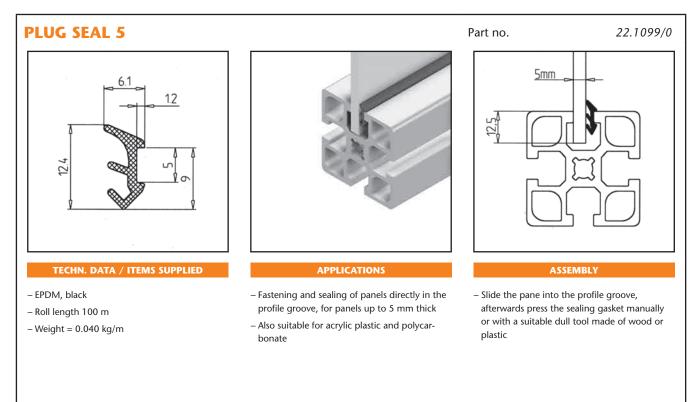
ASSEMBLY

22.1081/0

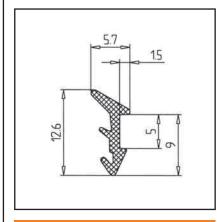
Part no.

na into tha profile ar

 Slide the pane into the profile groove, afterwards press the sealing gasket manually or with a suitable dull tool made of wood or plastic

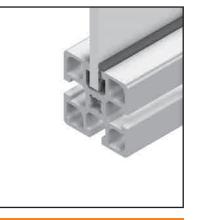


PLUG SEAL 6



TECHN. DATA / ITEMS SUPPLIED

- EPDM, black
- Oil-resistant version insert seal NBR, part no.
 22.1086/3
- Roll length 100 m
- Weight = 0.033 kg/m

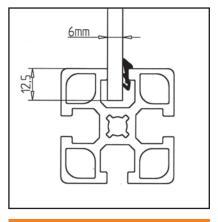


APPLICATIONS

- Fastening and sealing of panels directly in the profile groove, for panels up to 6 mm thick
- Also suitable for acrylic plastic and polycarbonate

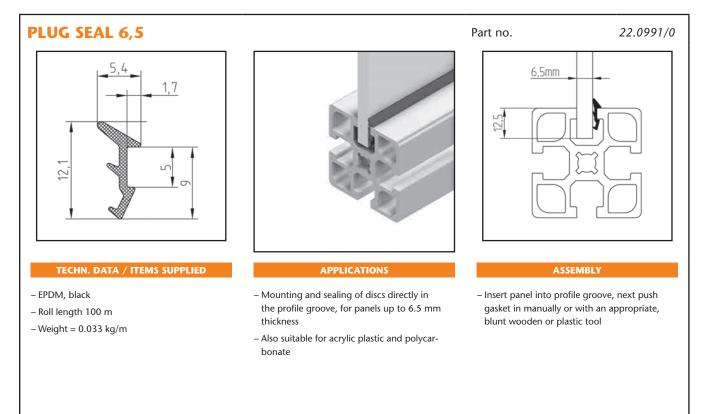
Part no.

22.1086/1

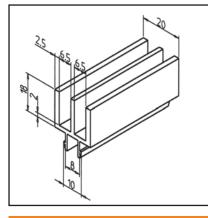


ASSEMBLY

 Slide the pane into the profile groove, afterwards press the sealing gasket manually or with a suitable dull tool made of wood or plastic

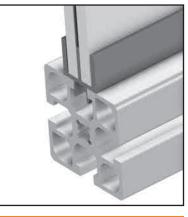


GUIDE PROFILE 2



TECHN. DATA / ITEMS SUPPLIED

- PVC, extruded, grey
- On request also available in black, part no.
 22.1073/0
- Weight = 0.270 kg/m
- Bar length = 2 m

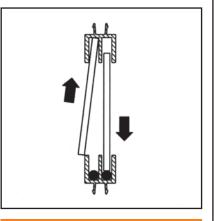


APPLICATIONS

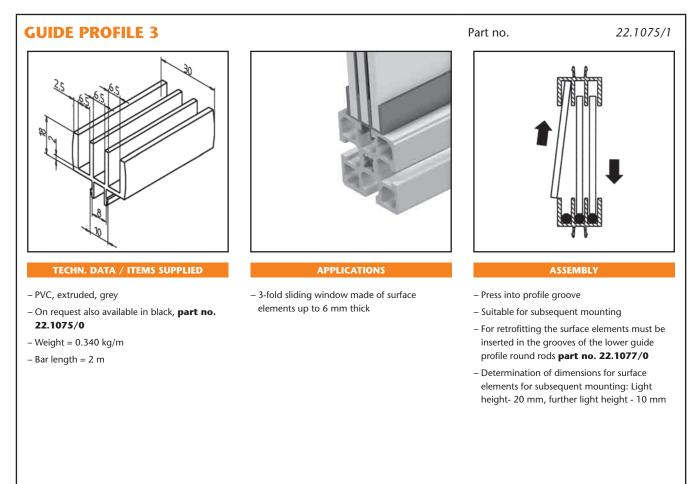
 2-fold sliding window made of surface elements up to 6 mm thick



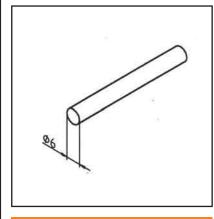




- Press into profile groove
- Suitable for subsequent mounting
- For retrofitting the surface elements must be inserted in the grooves of the lower guide profile round rods **part no. 22.1077/0**
- Determination of dimensions for surface elements for subsequent mounting: Light height- 20 mm, further light height - 10 mm



ROUND ROD



TECHN. DATA / ITEMS SUPPLIED

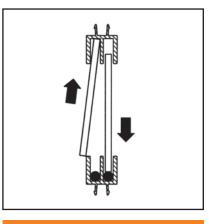
- PA, extruded
- Ø 6 mm
- Weight = 0.040 kg/m
- Bar length = 3 m



- Guiding of windows or doors in guide profiles

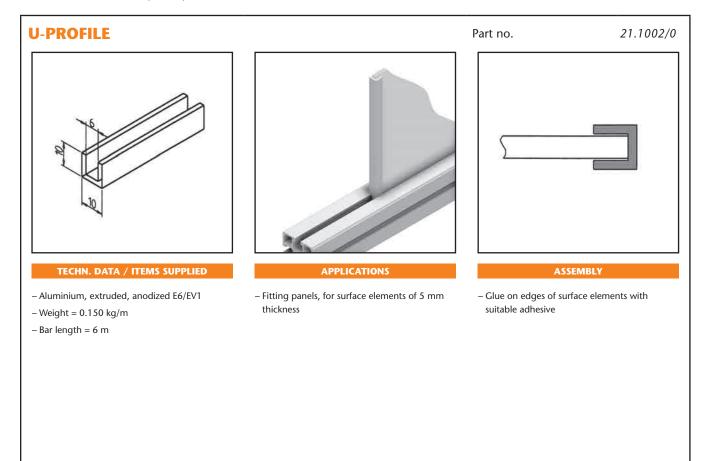
Part no.

22.1077/0

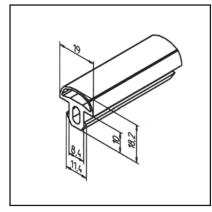


ASSEMBLY

 Insertion into lower guide grooves of guide profiles 2 and 3



SEALING STRIP



TECHN. DATA / ITEMS SUPPLIED

- NBR, black
- Hardness (Shore A) 70°
- Roll length 50 m
- Weight = 0.175 kg/m

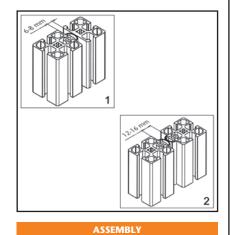


APPLICATIONS

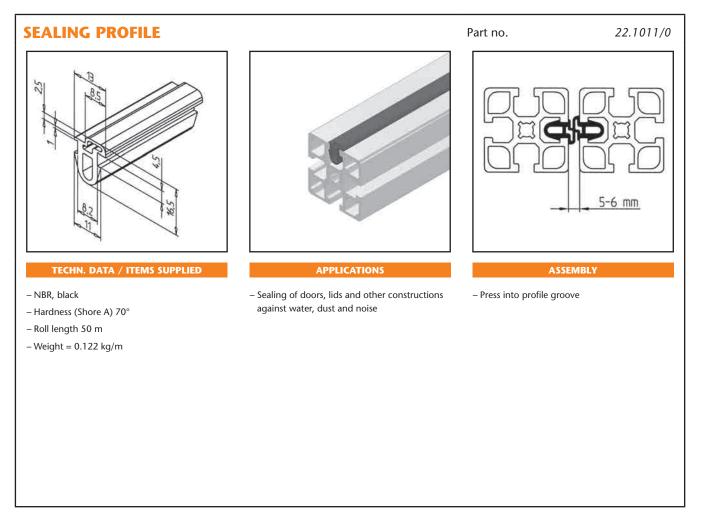
- Sealing of doors, lids and other constructions against water, dust and noise

Part no.

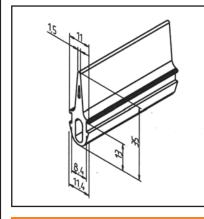




- Press into profile groove
- 1. One-sided sealing: Gap width 6 8 mm
- 2. Double-sided sealing: Gap width 12 16 mm

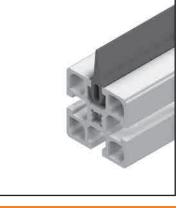


SEALING LIP PROFILE



TECHN. DATA / ITEMS SUPPLIED

- NBR, black
- Hardness (Shore A) 60°
- Roll length 75m
- Weight = 0.245 kg/m

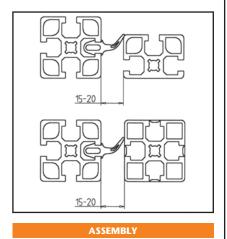


APPLICATIONS

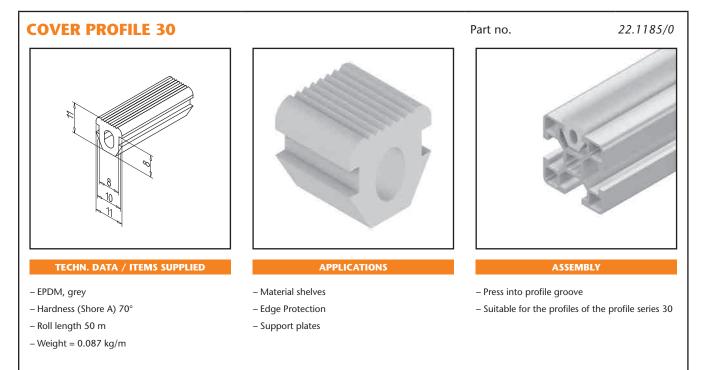
- Sealing of doors, lids and other constructions against water, dust and noise



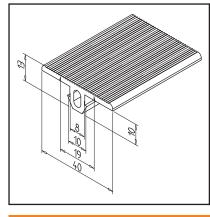
22.1038/0



- Press into profile groove

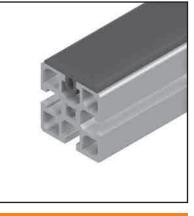


COVER PROFILE 45



TECHN. DATA / ITEMS SUPPLIED

- Hardness (Shore A) 70°
- NBR black part no. 22.1098/0
- EPDM grey part no. 22.1098/1
- Roll length 50 m
- Weight = 0.230 kg/m

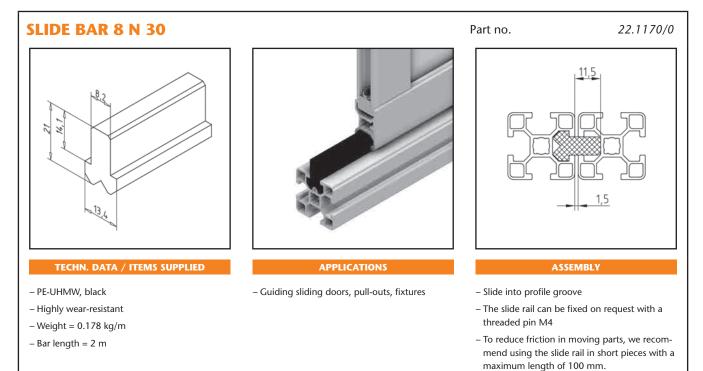


APPLICATIONS

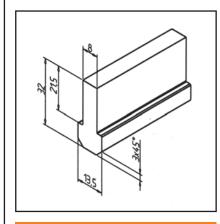
- Edge Protection
- Safety requirement step
- Ladders
- Material shelves

Part no. -----/-

- Press into profile groove
- The lower side of the profile has 2 tear-off notches for adjustment of width to the aluminium profile



SLIDE BAR 8 N 45



TECHN. DATA / ITEMS SUPPLIED

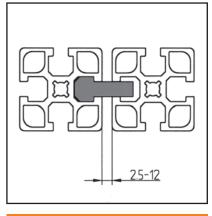
- PE-UHMW, black
- Highly wear-resistant
- Weight = 0.300 kg/m
- Bar length = 2 m



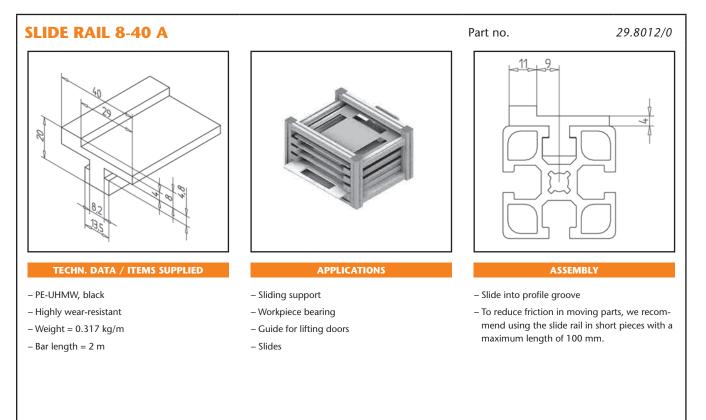
- Guiding sliding doors, pull-outs, fixtures
- Lateral guide for conveyors

Part no.

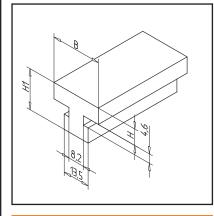




- Slide into profile groove
- To reduce friction in moving parts, we recommend using the slide rail in short pieces with a maximum length of 100 mm.



SLIDE RAIL 8



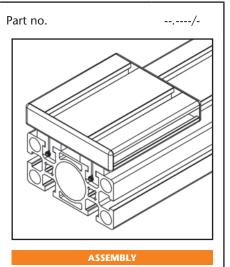
TECHN. DATA / ITEMS SUPPLIED

- PE-UHMW, black
- Highly wear-resistant
- B = 25 mm part no. **22.1088/0** H = 7,5 mm, H1 = 20 mm Weight 0,314 kg/m
- B = 40 mm part no. 22.1088/1
 H = 8 mm, H1 = 18 mm
 Weight 0,400 kg/m
- B = 45 mm part no. **22.1088/3** H = 8 mm, H1 = 18 mm Weight 0,463 kg/m
- Bar length = 2 m

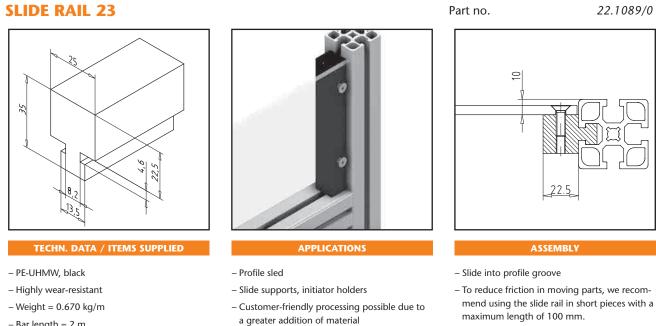


APPLICATIONS

- Sliding support
- Workpiece bearing
- Guide for lifting doors
- Slides

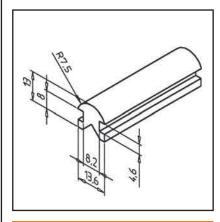


- Slide into profile groove
- To reduce friction in moving parts, we recommend using the slide rail in short pieces with a maximum length of 100 mm.



- Bar length = 2 m

SLIDE STRIP R



TECHN. DATA / ITEMS SUPPLIED

- PE, white
- Highly wear-resistant
- Weight = 0.115 kg/m
- Bar length = 2 m



APPLICATIONS

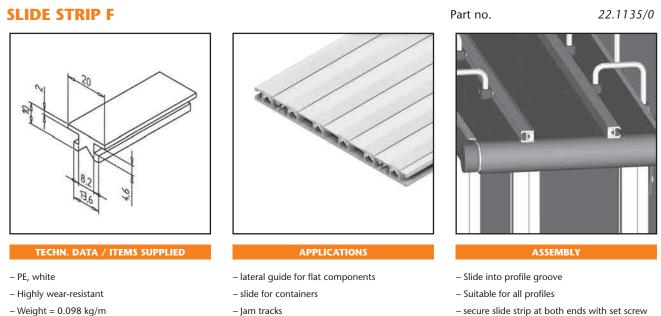
- Lateral guides
- Support plates
- Sliding distance
- Jam tracks

Part no.

22.1104/0



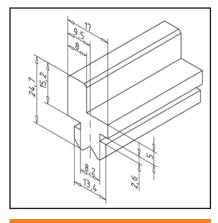
- Slide into profile groove
- Suitable for all profiles
- secure slide strip at both ends with set screw or adjustable end caps



- weight = 0.050 kg/
- Bar length = 2 m

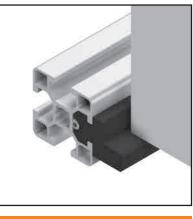


ANGULAR SLIDE RAIL 30



TECHN. DATA / ITEMS SUPPLIED

- PE-UHMW, black
- Highly wear-resistant
- Weight = 0.248 kg/m
- Bar length = 2 m



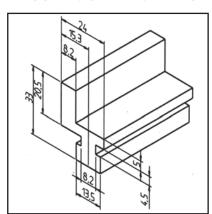
APPLICATIONS

- Guiding sliding doors, pull-outs, fixtures

Part no. 22.1171/0

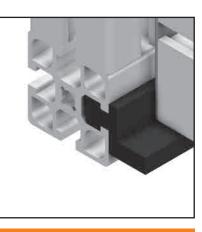
- Slide into profile groove
- The slide rail can be fixed on request with a threaded pin M4
- To reduce friction in moving parts, we recommend using the slide rail in short pieces with a maximum length of 100 mm.

ANGULAR SLIDE RAIL 45



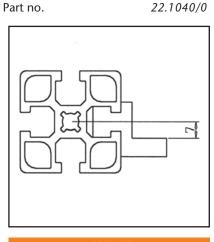
TECHN. DATA / ITEMS SUPPLIED

- PE-UHMW, black
- Highly wear-resistant
- Weight = 0.480 kg/m
- Bar length = 2 m



APPLICATIONS

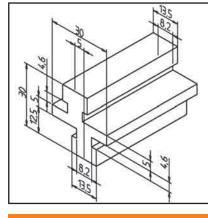
- Conveying systems
- Belt conveyors
- Side stop in conveyor sections



ASSEMBLY

- Insert in profile groove and if necessary with grub screw M6 x 16 part no. 21.1324/0 secure.
- To reduce friction in moving parts, we recommend using the slide rail in short pieces with a maximum length of 100 mm.

DOUBLE SLIDE RAIL



TECHN. DATA / ITEMS SUPPLIED

- PE-UHMW, black
- Highly wear-resistant
- Weight = 0.420 kg/m
- Bar length = 2 m

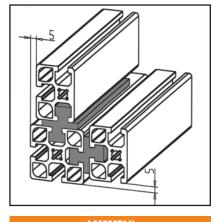


APPLICATIONS

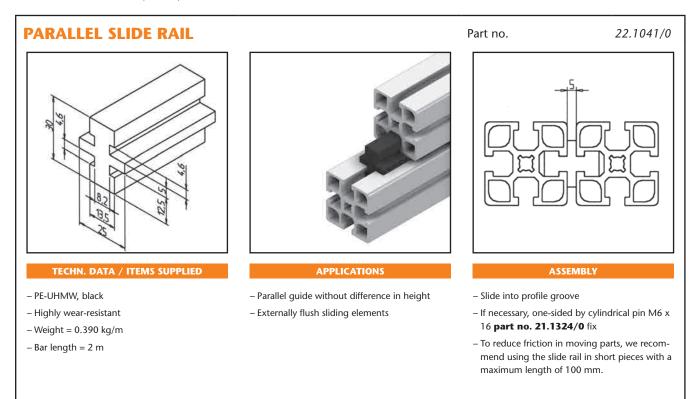
- Simple workpiece slides
- Guiding drawers in profile grooves

Part no.

22.1087/0



- Slide into profile grooves of frame and drawers
- Secure drawers against falling out by cylinder screws M8 x 16 part no. 21.1200/0 at both ends of the frame profile
- To reduce friction in moving parts, we recommend using the slide rail in short pieces with a maximum length of 100 mm.



READY-TO-INSTALL ELEMENTS FOR LIFTING AND SLIDING DOORS

All elements are already pre-assembled for you from our products. They can be very easily attached to the construction profiles with our connectors. This eliminates the need to stock individual parts and considerably shortens planning and assembly times.



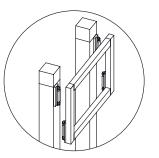
Slide-Roller element

A lifting door requires 4 elements:

- One on each of the two columns in the upper end position.
- One on each side of the door element in the lower end position.

Length determination guide column: Stroke + 180 mm min.

- 1. Insert pre-assembled slide roller element in profile groove
- 2. Fasten in the desired position with Allen wrench SW4
- 3. Tighten self-locking screws with Allen wrench SW2.5

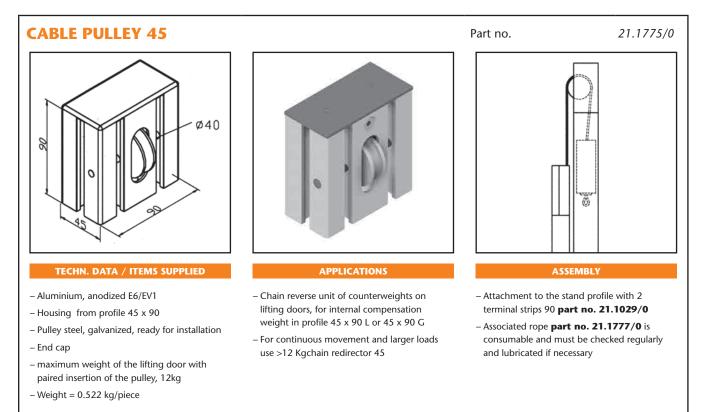


Installation possibility in front of the door pillars Gap width = 8 mm

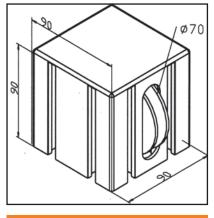


Installation possibility between the door pillars gap width = 8 mm



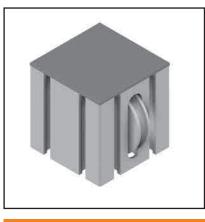


CABLE PULLEY 90



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, anodized E6/EV1
- Housing from profile 90 x 90
- Pulley steel, galvanized, ready for installation
- End cap
- maximum weight of the lifting door with paired insertion of the pulley, 30kg
- Weight = 0.680 kg/piece

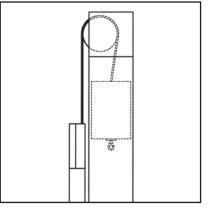


APPLICATIONS

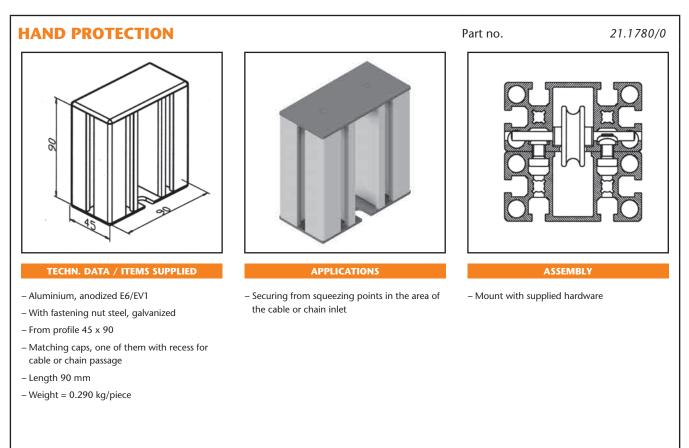
- Chain reverse unit of counterweights on lifting doors, for internal compensation weight in profile 90 x 90 L
- For continuous movement and loads use >30
 Kg chain redirector 90

Part no.

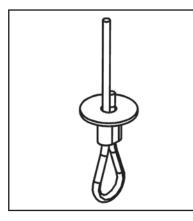




- Attachment to the stand profile with 4 terminal strips 90 part no. 21.1029/0
- Associated rope part no. 21.1777/0 is consumable and must be checked regularly and lubricated if necessary



CABLE FOR COUNTERWEIGHT



TECHN. DATA / ITEMS SUPPLIED

- Steel cable VA, 2,5 mm
- With clamping eye hook on one side, pressed
- On request also deliverable in other lengths
- Standard length 2.5 m
- Weight = 0.070 kg/piece



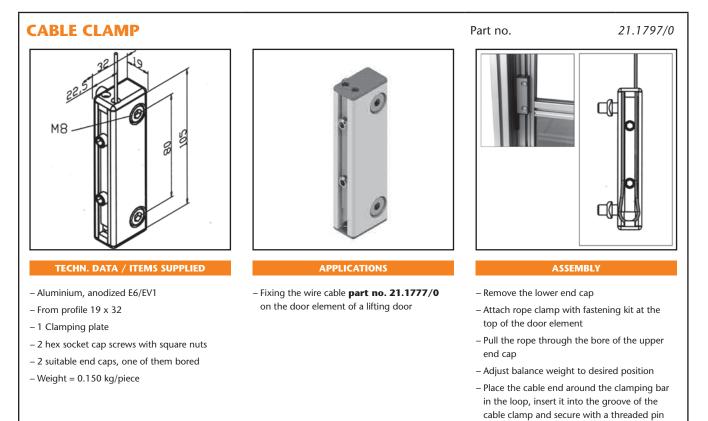
APPLICATIONS

 Use in connection with counterweight 45 or 90 and cable pulley Part no.

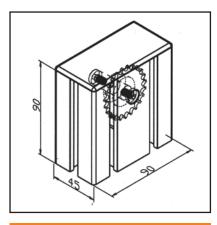
21.1777/0



- Lead the cable through the center bore and into the counterweight
- Rope with rope clamp **part no. 21.1797/0** fasten to lifting door
- Cable is a wear part and must be regularly checked and lubricated if required

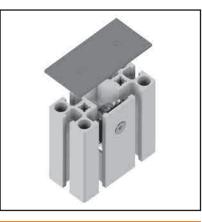


SYNCHRONOUS REVERSE UNIT 45



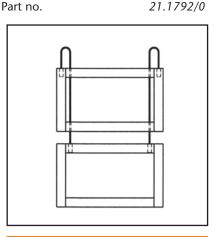
TECHN. DATA / ITEMS SUPPLIED

- Aluminium, anodized E6/EV1
- Housing from profile 45 x 90
- Sprocket galvanized steel, ready for installation
- maximum weight of the lifting door with paired insertion of the pulley, 34kg
- Weight = 0.340 kg/piece



APPLICATIONS

- Simultaneous opening and closing of two lifting doors running in the operate direction; doors are of similar weight
- Post preferably aus profile 45x90 or 90x90.
 The side profiles of the doors preferably made of profile 90x32 or 45x90 guided by sliding roll element in the post.

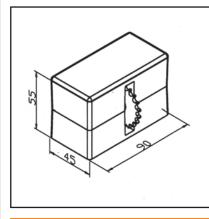


 If necessary, shorten the projecting end of the rope and replace the removed cap

- Attachment to the stand profile with 2 terminal strips 90 part no. 21.1029/0
- Chain 04 part no. 21.1713/0insert in diversion, with chain clamping door part no. 21.1712/0 attach to the two doors and insert in the stand profiles
- Chain is guided in the profile groove, thus no hand-protection is required

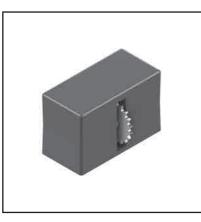
CHAIN PULLEY 32 Part no. 21.1774/0 TIII 90 40 **TECHN. DATA / ITEMS SUPPLIED** APPLICATIONS ASSEMBLY - Aluminium, anodized E6/EV1 - Chain reverse unit of counterweights on - Attachment to the stand profile with 2 lifting doors, for internal compensation terminal strips 90 part no. 21.1029/0 - Housing from profile 45 x 90 weight in profile 45 x 90 F or 45 x 90 G - Use of chain 04 part no. 21.1712/0 and - Sprocket galvanized steel, ready for installachain clamping weight part no. 21.1711/0 tion - The cable is guided in the profile groove, thus – End cap no hand-protection is required - maximum weight of the lifting door with paired insertion of the pulley, 50kg - Weight = 0.388 kg/piece

CHAIN PULLEY 45 A



TECHN. DATA / ITEMS SUPPLIED

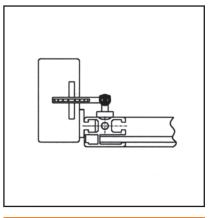
- Aluminium, Pressure die-casting, powdercoated, grey
- Sprocket galvanized steel, ready for installation
- End cap
- With fastening material steel, zinc plated
- maximum weight of the lifting door with paired insertion of the pulley, 50kg
- Weight = 0.350 kg/piece



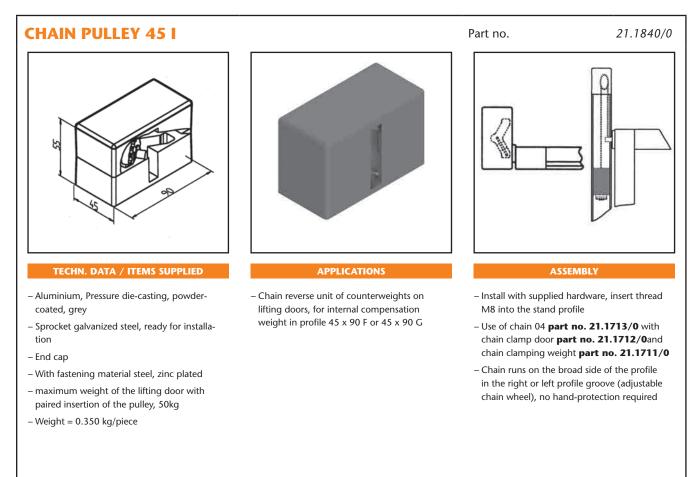
APPLICATIONS

 Chain reverse unit of counterweights on lifting doors, for internal compensation weight in profile 45 x 90 F or 45 x 90 G Part no.

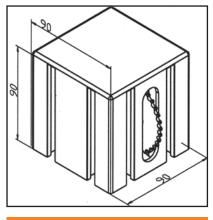
21.1838/0



- Install with supplied hardware, insert thread M8 into the stand profile
- Use of chain 04 **part no. 21.1713/0** with chain clamp door **part no. 21.1712/0**and chain clamping weight **part no. 21.1711/0**
- Chain runs outside center on wide side of profile, if necessary with hand protection part no. 21.1780/0 cover

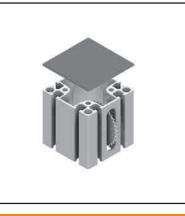


CHAIN PULLEY 90



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, anodized E6/EV1
- Housing from profile 90 x 90
- Sprocket galvanized steel, ready for installation
- End cap
- maximum weight of the lifting door with paired insertion of the pulley, 70kg
- Weight = 0.680 kg/piece



APPLICATIONS

 Chain reverse unit of counterweights on lifting doors, for internal balancing weight in profile 90 x 90 L ASSEMBLY

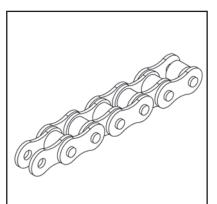
21.1839/0

Part no.

– Attachment to the stand profile with 4

- terminal strips 90 part no. 21.1029/0
- Use of chain 04 **part no. 21.1713/0** with chain clamp door **part no. 21.1712/0** and chain clamping weight **part no. 21.1711/0**
- Chain runs outside center on profile surface, if necessary with hand protection part no. 21.1780/0 cover

CHAIN 04



TECHN. DATA / ITEMS SUPPLIED

- Steel
- Size 4
- Please indicate desired length
- Breaking force min. 3000N
- Weight = 0.150 kg/m



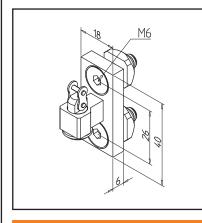
APPLICATIONS

- Use in conjunction with balancing weight 45 or 90 and chain reverse unit.
- Use in conjunction with chain clamping door part no. 21.1712/0 for attaching the chain to the door side
- Use in conjunction with chain clamp weight part no. 21.1711/0 for attaching the chain to the balance weight

Part no. 21.1713/0

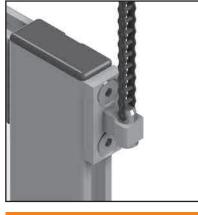
- Guide the chain through the balance weight and guide the chain clamp to the weight part no. 21.1711/0 and install the chain lock
- When mounted on door, chain by mounted chain clamp door part no. 21.1712/0 and install bolt with chain lock

DOOR CHAIN CLAMPING DEVICE



TECHN. DATA / ITEMS SUPPLIED

- Steel, galvanized
- With fastening material steel, zinc plated
- Weight = 0.060 kg/piece

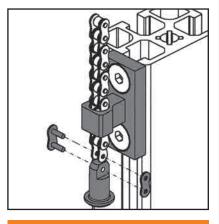


APPLICATIONS

- Use in conjunction with balancing weight 45 or 90 and chain reverse unit.
- Use in conjunction with chain 04 part no.
 21.1713/0 for fixing to door side

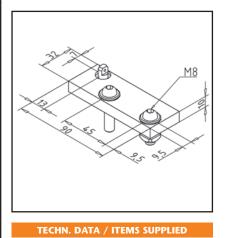
Part no.





- Guide the chain through the balance weight and guide the chain clamp to the weight part no. 21.1711/0 and install the chain lock
- When mounted on door, chain by mounted chain clamp door part no. 21.1712/0 and install bolt with chain lock
- When making lift doors, where the chain is guided in the groove, we recommend the use of our sliding roller element **part no.**21.1796/0. Here is a door gap to the post of 8 mm provided.

DOOR CHAIN CLAMPING DEVICE KV-32



– Steel, galvanized

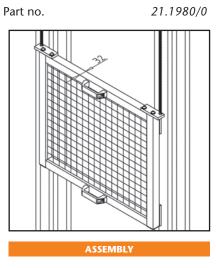
- Weight = 0.247 kg/piece

- With fastening material and chain lock



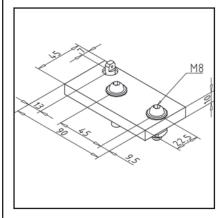
APPLICATIONS

- Use in connection with chain pulley 90 and chain 04
- Lifting plate made of profile 45x32 with sliding roller mounted in front of the posts



- Mount plate on lifting plate and secure the roller chain 04 using the supplied chain lock
- Two chain clamps are required for each lifting field

DOOR CHAIN CLAMPING DEVICE KV-45



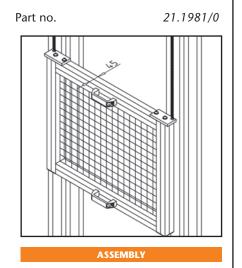
TECHN. DATA / ITEMS SUPPLIED

- Steel, galvanized
- With fastening material and chain lock
- Weight = 0.345 kg/piece



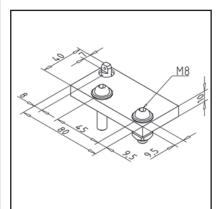
APPLICATIONS

- Use in connection with chain pulley 90 and chain 04
- Lifting plate made of profile 45x45 with sliding roller mounted in front of the posts



- Mount plate on lifting plate and secure the roller chain 04 using the supplied chain lock
- Two chain clamps are required for each lifting field

DOOR CHAIN CLAMPING DEVICE KI-32



TECHN. DATA / ITEMS SUPPLIED

- With fastening material and chain lock

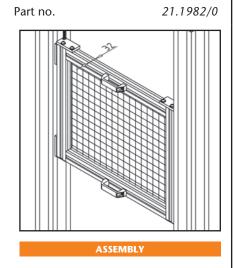
– Steel, galvanized

- Weight = 0.278 kg/piece



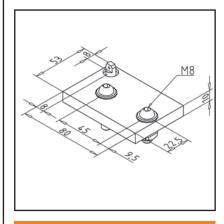
APPLICATIONS

- Use in connection with chain pulley 90 and chain 04
- Lifting plate made of profile 45x32 with sliding roller mounted between the posts



- Mount plate on lifting plate and secure the roller chain 04 using the supplied chain lock
- Two chain clamps are required for each lifting field

DOOR CHAIN CLAMPING DEVICE KI-45



TECHN. DATA / ITEMS SUPPLIED

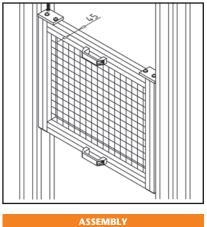
- Steel, galvanized
- With fastening material and chain lock
- Weight = 0.360 kg/piece



APPLICATIONS

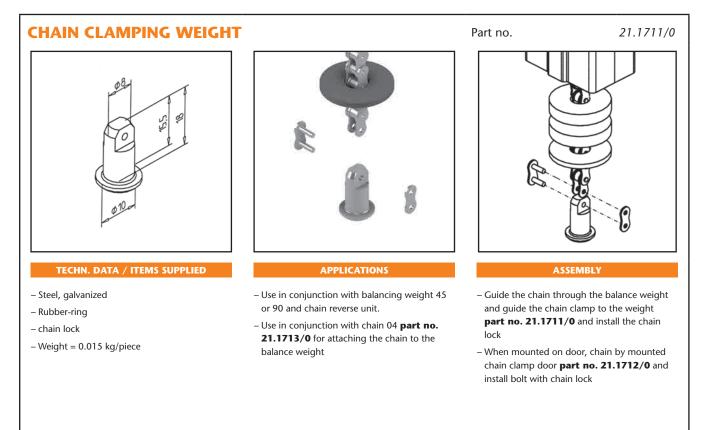
- Use in connection with chain pulley 90 and chain 04
- Lifting plate made of profile 45x45 with sliding roller mounted between the posts



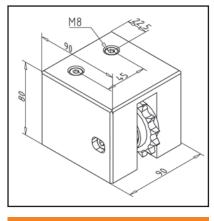


21.1983/0

- Mount plate on lifting plate and secure the roller chain 04 using the supplied chain lock
- Two chain clamps are required for each lifting field



CHAIN PULLEY 90 S

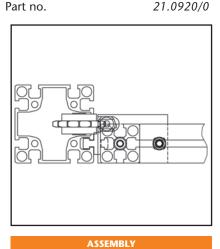


TECHN. DATA / ITEMS SUPPLIED

- Aluminium, anodized E6/EV1
- With fastening material steel, zinc plated
- maximum weight of the lifting door with paired insertion of the pulley, 150kg
- Weight = 1.748 kg/piece



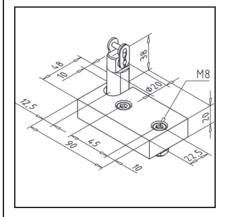
 Chain reverse unit of counterweights on lifting doors, for internal balancing weight in profile 90 x 90 L



- Use fastening kit
- Use of chain 08 part no. 29.0307/0, chain clamping weight S part no. 21.0925/0

CHAIN 08 Part no. 29.0307/0 0 0 **TECHN. DATA / ITEMS SUPPLIED** APPLICATIONS ASSEMBLY – Steel - Use in conjunction with balancing weight 45 - Attachment to the stand profile with 4 or 90 and chain clamping 90 S terminal strips Fixing with chain clamp weight – Size 8 S part no. 21.0925/0 on threaded rod - For this chain clamping weight S part no. - Breaking force min. 18,000 N M10 part no. 21.1667/0 for receiving the 21.0925/0 use - Please indicate desired length balance weights – Weight = 0.700 kg/m

DOOR CHAIN CLAMPING 90 S, AT THE FRONT



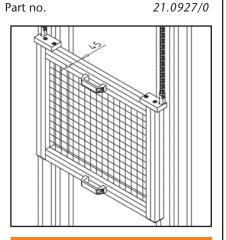
TECHN. DATA / ITEMS SUPPLIED

- Aluminium, anodized E6/EV1
- With fastening material and chain lock
- Weight = 0.381 kg/piece



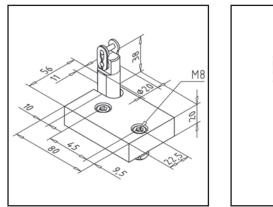
APPLICATIONS

- Use in conjunction with chain reverse 90 S and chain 08
- Add a lifting plate from Profile 45x45 with sliding roller in front of the posts



- Mount plate on lifting plate and secure the roller chain 08 using the supplied chain lock
- Each lifting plate requires 2 chain reversing unit

DOOR CHAIN CLAMPING 90 S, ON THE SIDE



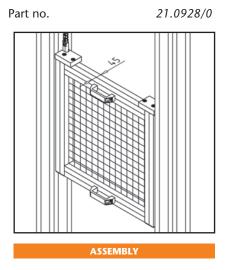
TECHN. DATA / ITEMS SUPPLIED

- Aluminium, anodized E6/EV1
- With fastening material and chain lock
- Weight = 0.368 kg/piece



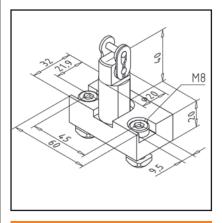
APPLICATIONS

- Use in conjunction with chain reverse 90 S and chain 08
- Add a lifting plate from Profile 45x45 with sliding roller between the posts



- Mount plate on lifting plate and secure the roller chain 08 using the supplied chain lock
- Each lifting plate requires 2 chain reversing unit

CHAIN CLAMPING 90 S CARRIAGE



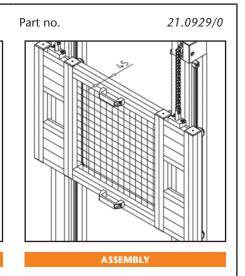
TECHN. DATA / ITEMS SUPPLIED

- Aluminium, anodized E6/EV1
- With fastening material and chain lock
- Weight = 0.375 kg/piece

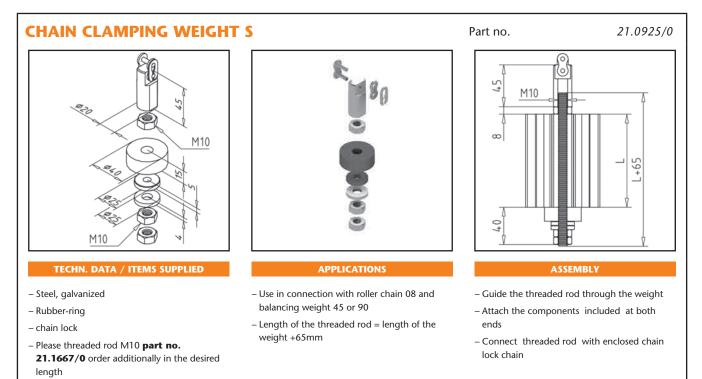


APPLICATIONS

- Use in conjunction with chain reverse 90 S and chain 08
- For mounting on slide LW 45 or LW 90

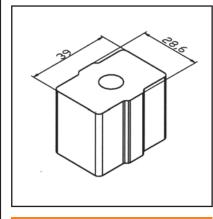


 Mount plate on carriage and secure the roller chain 08 using the supplied chain lock



COUNTERWEIGHT 45

- Weight = 0.145 kg/piece



TECHN. DATA / ITEMS SUPPLIED

- Lead
- Fitting for profile 45 x 90 F or 45 x 90 G
- Length 0,330m
- Weight = 10.000 kg/m

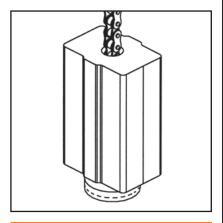


APPLICATIONS

- Weight compensation for lightweight lifting doors
- Suitable for cable or roller chain 04 or roller chain 08

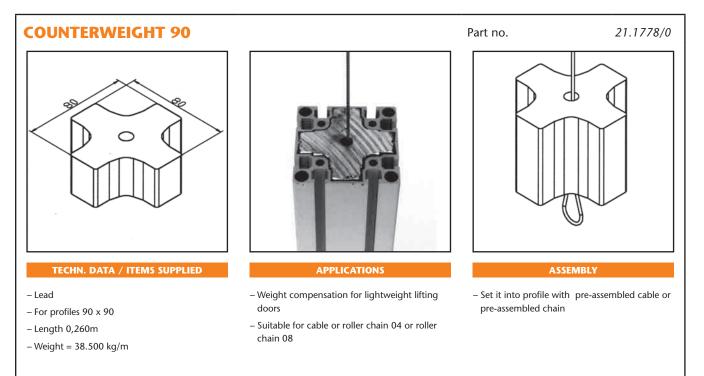
Part no.



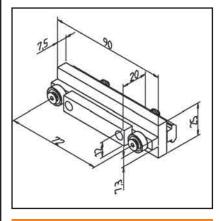


ASSEMBLY

 Set it into profile with pre-assembled cable or pre-assembled chain



SLIDE-ROLL ELEMENT



TECHN. DATA / ITEMS SUPPLIED

- PE-UHMW, black
- 1 T-slot bar, steel, zinc plated
- 2 ball bearings, pre-assembled
- Fmax. 200 N
- Weight = 0.094 kg/piece

1000

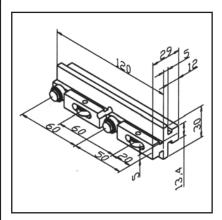
APPLICATIONS

- Guide for lifting doors in the groove of the vertical profile
- Moving parts
- Bearing of workpieces, slides, brackets

Part no. 21.1796/0

- 1. Insert pre-assembled slide roller element in profile groove
- 2. Fasten in the desired position with Allen wrench SW4
- 3. Tighten self-locking screws with Allen wrench SW2.5

GLIDE ROLL ELEMENT



TECHN. DATA / ITEMS SUPPLIED

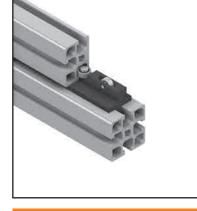
- 1 clamping screw, steel, zinc plated

– PE-UHMW, black

– Fmax. 300 N

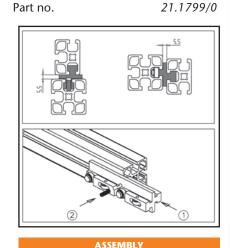
- 4 built-in ball-bearings

- Weight = 0.061 kg/piece



APPLICATIONS

- Guide for sliding doors, lifting-doors, workpiece-slides, light linear guides
- Both groove holders are arranged in parallel, for simplify the design of flush sliding doors

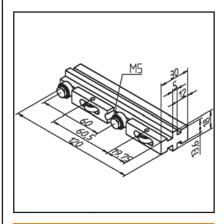


- 1: Insert the element with screw side into profile groove of movable construction part
- 2: secure with threaded pin

Part no.

 - 3: Slide the completely mounted movable part into the grooves of the guiding profiles.
 Secure the movable part against falling out with screws at both ends

GLIDE ROLL ELEMENT PARALLEL



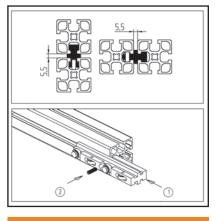
TECHN. DATA / ITEMS SUPPLIED

- PE-UHMW, black
- 1 clamping screw, steel, zinc plated
- 4 built-in ball-bearings
- Fmax. 300 N
- Weight = 0.055 kg/piece



APPLICATIONS

- Guide for sliding doors, lifting-doors, workpiece-slides, light linear guides
- Both groove holders are arranged in parallel, for simplify the design of flush sliding doors

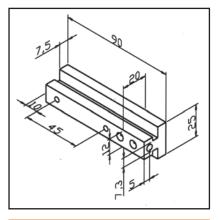


21.1714/0

- 1: Insert the element with screw side into profile groove of movable construction part
- 2: secure with threaded pin
- 3: Slide the completely mounted movable part into the grooves of the guiding profiles.
 Secure the movable part against falling out with screws at both ends

1 PROFILE SYSTEM 1.8 PRE-ASSEMBLED ELEMENTS FOR LIFTING AND SLIDING DOORS

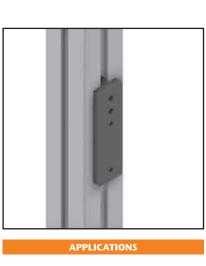
SLIDE ELEMENT



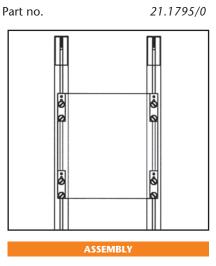
TECHN. DATA / ITEMS SUPPLIED

– PE-UHMW, black

- With fastening material steel, zinc plated
- Ready to install with cable ducting and clamping
- Weight = 0.029 kg/piece



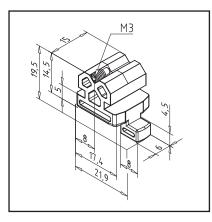
- Guide for lightweight lifting doors and simultaneous connection of door element and balancing weight
- Especially suitable for direct attachment on surface elements without frame



- Connect rope of counterweight with slide tensioning element
- Secure cable end with clamp
- Screw into the groove of the vertical profile
- Screw panel element

Part no.

GUIDE FOR SLIDING DOOR 30 V



TECHN. DATA / ITEMS SUPPLIED

- PA, black
- 1 locking screw
- For 1 door element 4 guides are necessary
- Weight = 0.004 kg/piece



APPLICATIONS

- Sliding doors
- sliding elements
- For a simultaneous guidance of 2 elements in 1 profile groove
- It is possible to retrofit sliding doors in existing constructions
- For use with door elements of profile series 30
- The outer frame construction can consist of profiles of series 45 as well as of series 30

22.1184/0

- 1: Fasten the upper guide to the frame of the door element
- 2: Insert the lower guide into the frame construction
- 3: Rotate the door element
- 4: Slide it into the lower guide and secure at desired position
- Replace the second door element
- Height of door elements:
 lichte Höhe der Einbauöffnung -11 mm
- **Door element width** (for 2 elements): (inside + 24 mm) : 2

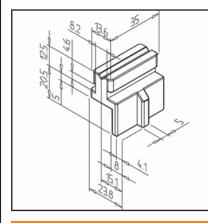
FOLDING DOORWAY SET Part no. 22.1148/0 8 -<u>M8</u> Ø44 -8 2 **TECHN. DATA / ITEMS SUPPLIED** APPLICATIONS ASSEMBLY – PE-UHMW, black - For upper and lower guidance of folding - Mount end caps onto front door profile with doors made of aluminium profile screws from delivery scope - Delivery: 1 pair - Guiding in profile grooves - Insert sliding piece in guide profile - With galvanized mounting screws M8 and end caps 45x45 AL - Insert mounted screws into drill hole of slide element - Weight = 0.082 kg/set

- Use always in pairs

Part no.

 Dimensions are for profile cross section 45x45 for the door with hinge part no. 21.1378/0

GUIDE FOR SLIDING DOOR 45



TECHN. DATA / ITEMS SUPPLIED

- PA, black
- 1 locking screw
- For 1 door element 4 guides are necessary
- Weight = 0.014 kg/piece



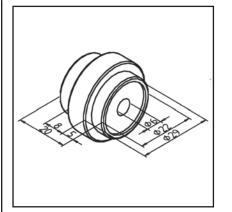
APPLICATIONS

- Sliding doors
- sliding elements
- For a simultaneous guidance of 2 elements in 1 profile groove
- It is possible to retrofit sliding doors in existing constructions

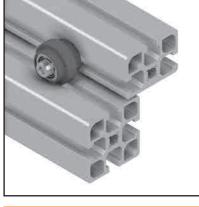
22.1079/0

- 1: Fasten the upper guide to the frame of the door element
- 2: Insert the lower guide into the frame construction
- 3: Rotate the door element
- 4: Slide it into the lower guide and secure at desired position
- Replace the second door element
- Height of door elements:
 lichte Höhe der Einbauöffnung -11 mm
- Width of door elements (with 2
 elements):
 (lichte Weite + 49 mm) : 2

ROLLER WHEEL



TECHN. DATA / ITEMS SUPPLIED



APPLICATIONS

- Guide for sliding doors, lifting doors and drawers

21.1782/0

ASSEMBLY

With cylinder head screw M6 x 35 part no.:
 21.1245/0 and sliding nut M6 on profile grooves or directly on surface element

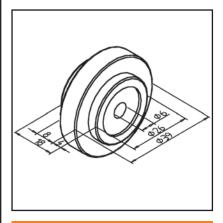
– Fmax. 200 N

- Weight = 0.030 kg/piece

- ABS, Injection Mould, grey

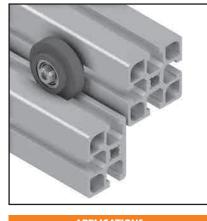
- With 2 ball-bearings 626 ZZ





TECHN. DATA / ITEMS SUPPLIED

- PA, Injection Mould, grey
- With 2 ball-bearings 626 ZZ
- Fmax. 200 N
- Weight = 0.040 kg/piece



APPLICATIONS

- Guide for sliding doors, lifting doors and drawers

Part no.

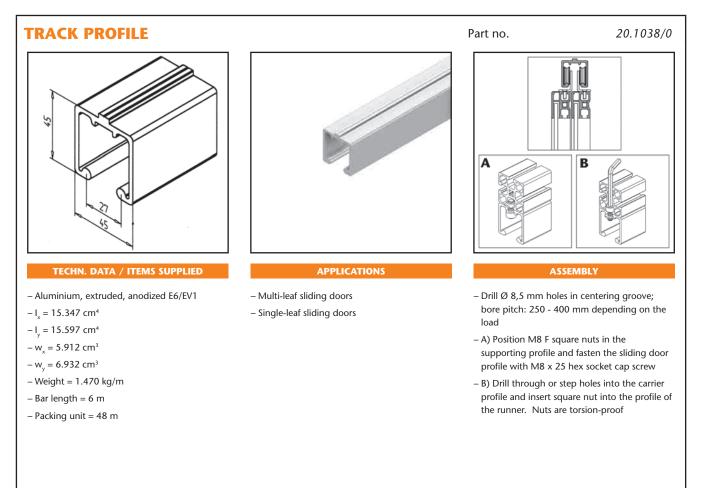
Part no.

21.1781/0

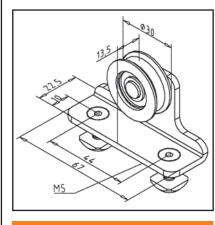


ASSEMBLY

With cylinder head screw M6 x 35 part no.:
21.1245/0 and sliding nut M6 on profile grooves or directly on surface element



ROLLER ELEMENT FOR SLIDING DOOR



TECHN. DATA / ITEMS SUPPLIED

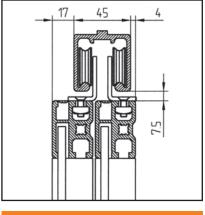
- Plastic roller with ball- bearing
- Zinc plated steel support
- With fastening material steel, zinc plated
- Weight = 0.080 kg/piece



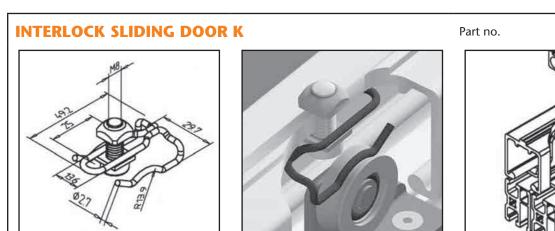
 Easy-running, multi-wing sliding doors in guard units, exhibition stands, testing units, etc. Part no.



21.2000/0



- Attach the rollers to the profile groove using the mounting kit
- Mount the doors into the track profile, slightly swing out the doors at the bottom
- Sliding door at bottom with retaining pins, sliding bar 8N part no. 22.1085/0 oder U-Führung Schiebetür part no. 21.2002/1 secure against swinging away

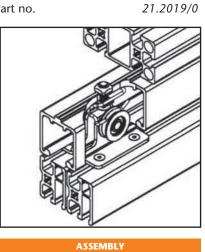


TECHN. DATA / ITEMS SUPPLIED

- Stainless steel
- Spring steel wire
- With fastening material steel, zinc plated
- Weight = 0.026 kg/piece

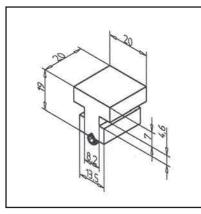


 Interlock sliding doors in their end positions (open / closed)



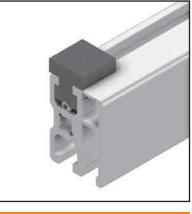
- Mark the end position of the roll
- Bore drill Ø 8,5 m in sliding door profile
- Screw into rail with carrier profile using mounting kit included

SAFETY CATCH FOR SLIDING DOOR



TECHN. DATA / ITEMS SUPPLIED

- PE-UHMW, black
- With fastening material steel, zinc plated
- Weight = 0.009 kg/piece



APPLICATIONS

- Securing of sliding doors against lift off
- Reduction of pendulum motion

Part no.

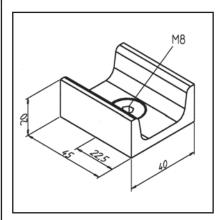
21.2003/0



- Insert the safety catch on the front side into the upper sliding door profile
- Fasten to the groove base through face-side screw using the threaded pin provided
- Install end cap

Part no.

U-BAR FOR SLIDING DOOR



TECHN. DATA / ITEMS SUPPLIED



APPLICATIONS

 Securing of sliding doors against lateral swinging



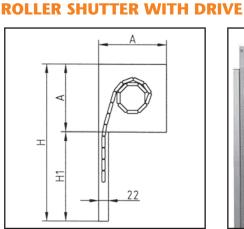
21.2002/0

ASSEMBLY

- Hang up the doors
- Mount the U-rail on the profile piece and slide it into position
- Provide doors below with edging and cover profiles, if necessary

Steel, galvanizedWith fastening material steel, zinc plated

- Weight = 0.150 kg/piece



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, powder coated, silver
- 2 sides Guide rails; roller shutter box with drive
- Electr. drive 230 V
- without switch
- Max. Width: 2,70 m
- Cable length 2 m
- Please indicate width B and dimension
- н

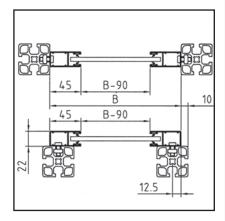
3

APPLICATIONS

- Cupboard for instruments
- Tool cabinets
- Output switch
- Computer racks
- Machine guards

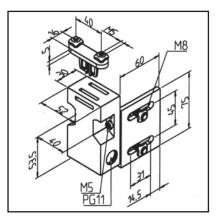
Part no.

29.0402/0



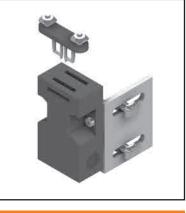
- Connect the roller shutter box to the guide rails
- Fasten the guide rails and roller shutter box to the profile frame
- Roller Shutter Case A = 152, H bis 1,70 m, part no. 29.0402/0
- Roller Shutter Case A = 167,5, H bis 2,20 m, part no. 29.0403/0
- Roller Shutter Case A = 181, H bis 2,70 m, part no. 29.0404/0
- Stroke H1: H-A

SECURITY SWITCH AZ 16 ZVRK



TECHN. DATA / ITEMS SUPPLIED

- Security switch, complete with switching pad, type B1, standard, IP 67
- 1 NC contact, 1 NO contact
- Fastening angle, aluminium, natural anodized
- Fastening kit
- Latching force 30 N
- Weight = 0.343 kg/piece

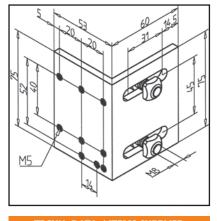


APPLICATIONS

- Protection for doors, lifting devices, panels in all types of protective installations
- Suitable for all 45er profiles

- Fasten with fastening material to profile groove
- Easy adjustment in x-, y- and z-axis by means of long holes in the angle-bracket
- For small radii, operating bars B2 part no.
 21.1110/2 or B3 part no. 21.1110/3 use

MOUNTING ANGLE BRACKET FOR SAFETY SWITCH



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, anodized E6/EV1
- With fastening material steel, zinc plated
- Use on vertical struts **part no. 21.1359/7** (square nut with position-fixing)
- Weight = 0.128 kg/piece



APPLICATIONS

For safety switch according to DIN EN 50041Adjust the switch in two directions

Part no.

21.1359/0



ASSEMBLY

- Fasten with fixing material to profile groove

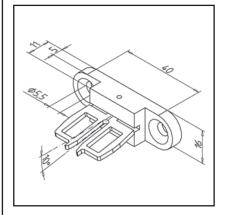
Part no.

21.1110/0

21.1110/3

Part no.

ACTUATING BOW FOR SECURITY SWITCH B3



TECHN. DATA / ITEMS SUPPLIED



- Separator guide, typ B3, for particularly small - Operating handle for small operating radii in conjunction with safety switch part no. operating radius over the narrow side of the **21.1110/0**, replaces the standard strap

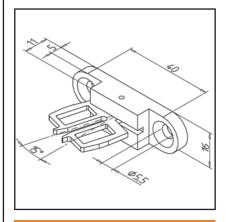
ASSEMBLY

- With fastening kit from items supplied secure the safety switch to the profile groove
- Directly on panel element with countersunk screws M5 according to material thickness

- Weight = 0.030 kg/piece

bracket

ACTUATING BOW FOR SECURITY SWITCH B2



TECHN. DATA / ITEMS SUPPLIED

- Separator guide, B2, for particularly small operating radius over the wide side of the bracket
- Weight = 0.030 kg/piece

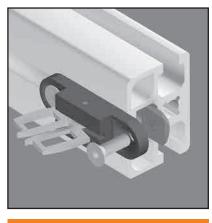


APPLICATIONS

- Operating handle for small operating radii in conjunction with safety switch part no. 21.1110/0, replaces the standard strap

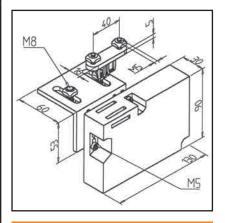
Part no.

21.1110/2



- With fastening kit from items supplied secure the safety switch to the profile groove
- Directly on panel element with countersunk screws M5 according to material thickness

SECURITY SWITCH WITH LOCK



TECHN. DATA / ITEMS SUPPLIED

- Switch, type AZM 161SK-12/12RK-024
- Thermoplastic housing, black, self-extinguishing
- Protective system IP67, nominal operating current 10 A (230 V), driving voltage 24 V AC/DC, power consumption 10 W
- Fastening kit
- Optionally also with control voltage 110 V AC or 230 V AC available
- Weight = 0.480 kg/piece



- For protective equipment with high safety requirements

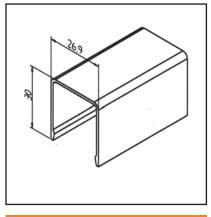


21.1766/0

ASSEMBLY

- Fasten with fixing material to profile groove
- For small radii, use actuating yoke B6 part no.. 21.1766/2.

CABLE DUCT 27 AL



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- Weight = 0.193 kg/m
- Bar length = 6 m



APPLICATIONS

- Cover for cables and pneumatic hoses

Part no.

Part no.

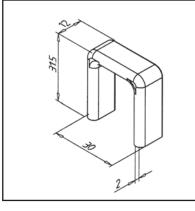




- On clamp part no. 22.1204/0 or part-no.
 22.1212/0 clipping on
- Earthing brackets for optional grounding part no. E9.0141/0 can be used

Part no. 22.1119/1END CAP CABLE DUCT 27 ALPart no. 22.1119/1Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2"TECHN DATA / ITEMS SUPPLED- ABS, Injection Mould, greg- ABS, Injection Mould, greg- ABS, Injection Mould, greg- ABS, Injection Mould, greg- All cap for conduit AL- And cap for conduit AL- All cap for conduit AL- Colspan="2">- Simply push onto the end of the cable duct

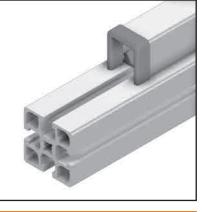
EDGE PROTECTION FOR CABLE DUCT 27 AL



TECHN. DATA / ITEMS SUPPLIED

- ABS, Injection Mould, grey

– Weight = 0.003 kg/piece

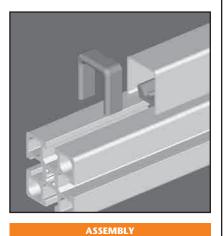


APPLICATIONS

- Edge protection for conduit AL

Part no.



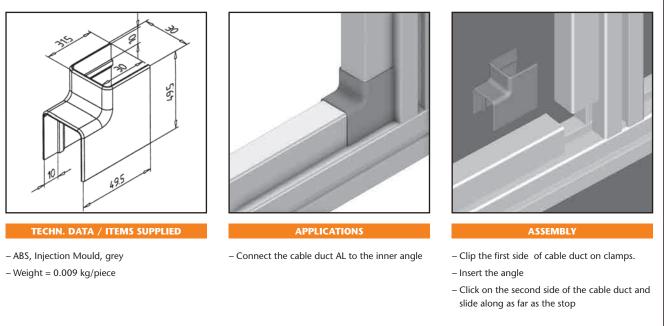


- Simply push onto the end of the cable duct

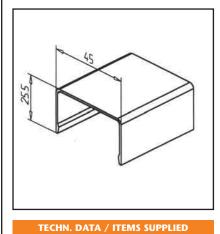
INNER ANGLE CABLE DUCT 27 AL

Part no.

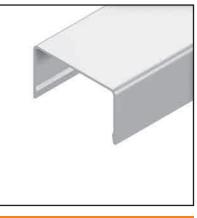
22.1121/1



CABLE DUCT 45 AL



- Aluminium, anodized E6/EV1
- Weight = 0.301 kg/m
- Bar length = 6 m



APPLICATIONS

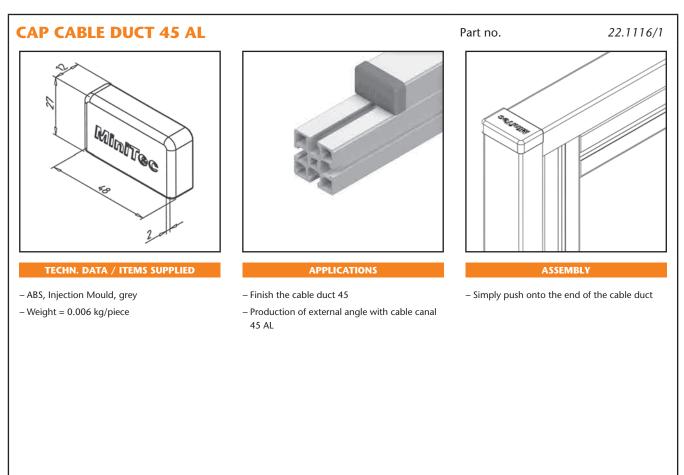
- Cover for cables and pneumatic hoses

Part no.

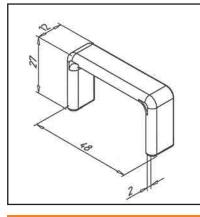
20.1071/0



- On clamp 45 **part no. 22.1210/0** clipping on
- Earthing brackets for optional grounding part no. E9.0141/0 can be used



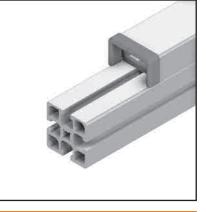
PROTECTION CAP CABLE DUCT 45 AL



TECHN. DATA / ITEMS SUPPLIED

- ABS, Injection Mould, grey

– Weight = 0.005 kg/piece

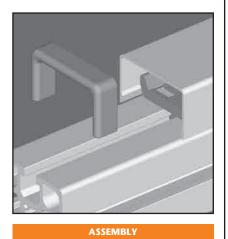


APPLICATIONS

- Edge protection for Cabel Canal 45 AL

Part no.



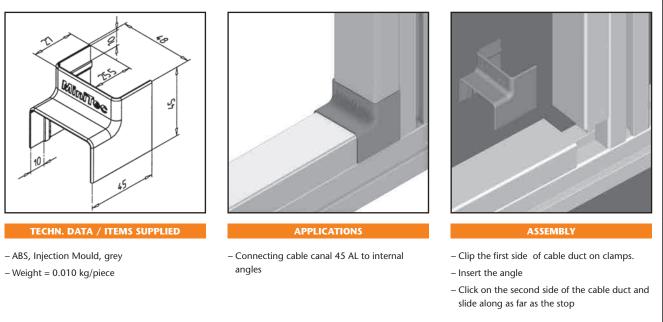


- Simply push onto the end of the cable duct

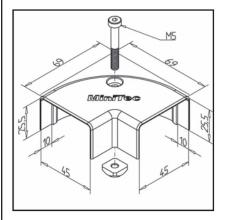
INSIDE ANGLE CABLE DUCT 45 AL

Part no.

22.1118/1



ANGLE 90° FOR CABLE DUCT 45 AL

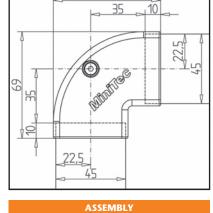


- TECHN. DATA / ITEMS SUPPLIED
- ABS, Injection Mould, grey
- Fastening kit
- Weight = 0.026 kg/piece



– Connection of cabel canal 45 AL

Part no.



69

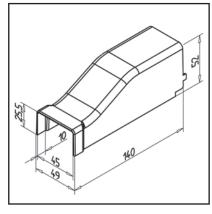
22.1156/0

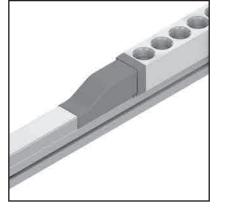
Push on both channel ends 45, tighten the screw

ADAPTER CAP CONNECTOR STRIP FOR CABLE DUCT 45 AL

Part no.

22.1154/1





TECHN. DATA / ITEMS SUPPLIED

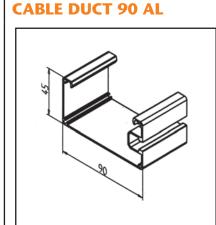
APPLICATION

ASSEMBLY

- Clip onto cable conduit 45

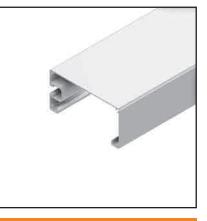
Part no.

ABS, Injection Mould, greyWeight = 0.034 kg/piece



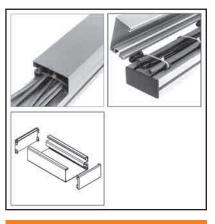
TECHN. DATA / ITEMS SUPPLIED

- Aluminium, anodized E6/EV1
- Weight = 0.971 kg/m
- Bar length = 6 m



APPLICATIONS

- Cover for cables and pneumatic hoses
- Suitable for MiniTec profiles, grid dimension:
 90
- Can also be swung open, when used with hinges
- End ledges with integrated energy supply



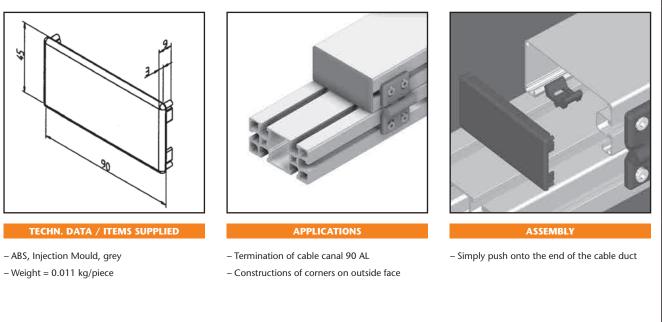
20.1056/0

- On clamp **part no. 22.1204/0** or **part-no. 22.1212/0** clipping on
- Cap part no. 22.1045/0
- Earthing brackets for optional grounding part no. E9.0141/0 can be used

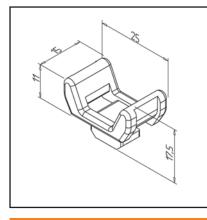
END CAP FOR CABLE DUCT 90 AL

Part no.

22.1045/0



CABLE CLIP 27-30



TECHN. DATA / ITEMS SUPPLIED

- PA, Injection Mould, grey

- Weight = 0.002 kg/piece



APPLICATIONS

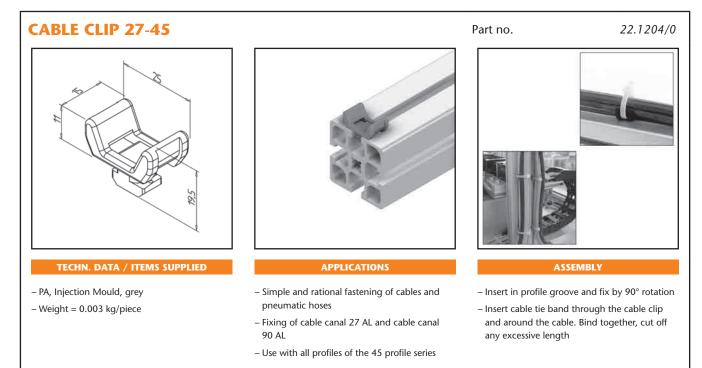
- Simple and rational fastening of cables and pneumatic hoses
- Fixing of cable canal 27 AL
- For use of all profile types of profile series 30

Part no.

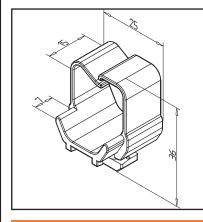




- Insert in profile groove and fix by 90° rotation
- Insert cable tie band through the cable clip and around the cable. Bind together, cut off any excessive length

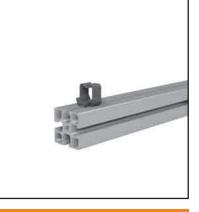


CLAMP 27-45 C



TECHN. DATA / ITEMS SUPPLIED

- PP, Injection Mould, grey
- Weight = 0.004 kg/piece



APPLICATIONS

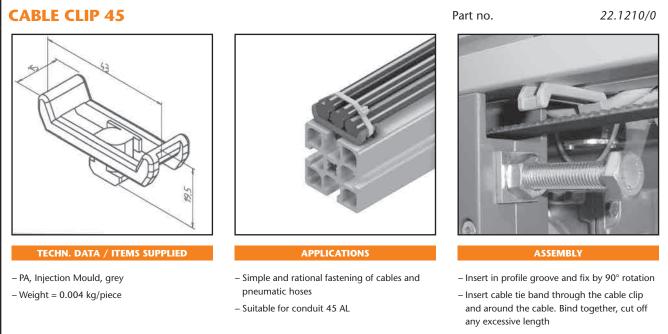
- Simple and rational fastening of cables and pneumatic hoses
- Fixing of cable canal 27 AL and cable canal 90 AL
- Use with all profiles of the 45 profile series
- Preferably to be used for laying cables and hoses overhead or for frequent changes to the installation.

Part no.

22.1216/0



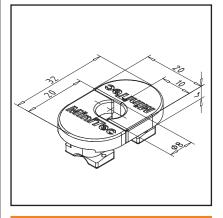
- Insert in profile groove and fix by 90° rotation
- Simply clip cables and hoses up to 8 mm diameter into the clamp. Removal is also possible.
- If necessary, fasten cables with cable ties.
 Thread the cable ties into the end of the clamp (7mm) and tighten.



- Cover of timing belt, chains etc.

Part no.

CABLE CLAMP 45



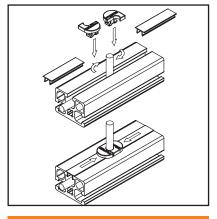
TECHN. DATA / ITEMS SUPPLIED

- ABS, Injection Mould, grey
- The cable clamp (2-part) consists of 2 identical components
- Weight = 0.028 kg/pair



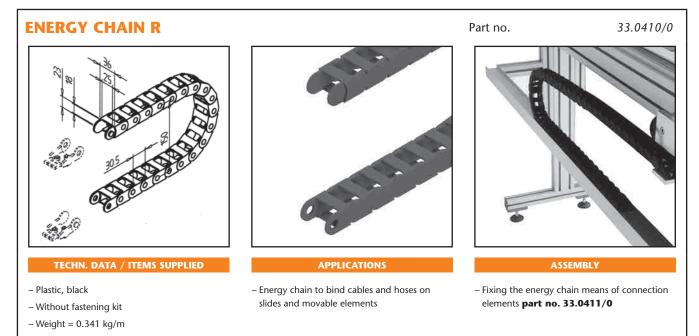
APPLICATIONS

- For fixing cables and hoses laid in the profile groove
- For cables up to 8 mm diameter
- Please note the bending radius of the cables.
- Use with all profiles of the 45 profile series

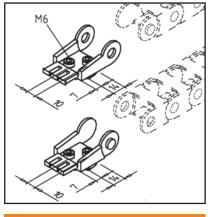


22.1270/0

- Swing both parts to the left and right of the cable into the profile groove, then push them together.
- When using cover profiles to close the grooves, this can be pushed under the cable clamp approx. 4 mm deep.



MOUNTING BRACKETS FOR ENERGY CHAIN R



TECHN. DATA / ITEMS SUPPLIED

- Plastic, black
- With fastening material steel, zinc plated
- One element to the right and to the left
- Weight = 0.058 kg/piece



APPLICATIONS

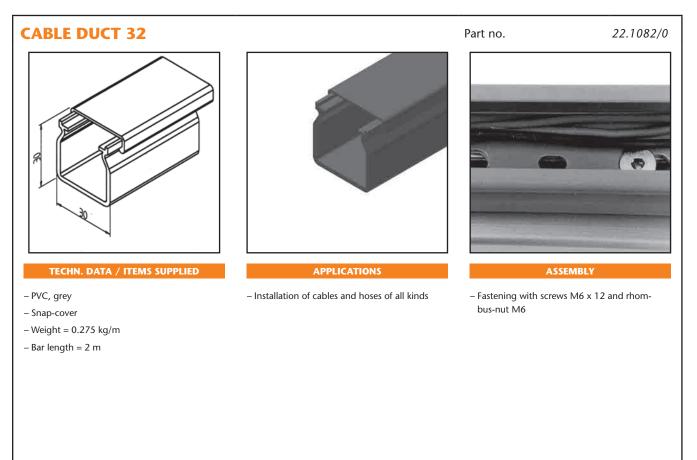
To attach the energy chain R part no.
 33.0410/0 to profile construction

Part no.

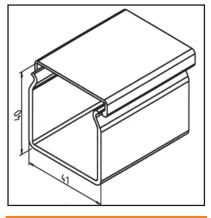
33.0411/0



- Fasten at a suitable place with supplied hardware
- Use cable tie band to fix cables and hoses



CABLE DUCT 45



TECHN. DATA / ITEMS SUPPLIED

- PVC, grey
- Snap-cover
- Weight = 0.402 kg/m
- Bar length = 2 m



- Installation of cables and hoses of all kinds

Part no.

22.1084/0



ASSEMBLY

 Fastening with screws M6 x 12 and rhombus-nut M6

28.0120/0

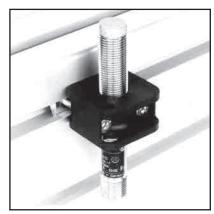
PROXIMITY SWITCH HOLDER 12 Part no.

TECHN. DATA / ITEMS SUPPLIED

- Plastic, black
- With fastening material steel, zinc plated
- –Ø12
- Weight = 0.036 kg/piece

APPLICATIONS

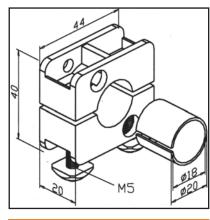
- Fastening of proximity switches Ø 12 mm in profile constructions and linear guides



ASSEMBLY

- Fasten to profile groove with supplied hardware.

PROXIMITY SWITCH HOLDER 18



TECHN. DATA / ITEMS SUPPLIED

- Plastic
- With fastening material steel, zinc plated
- Ø 18 mm
- Ø 20 mm
- Weight = 0.046 kg/piece



APPLICATIONS

- Fastening of proximity switches Ø 18 mm and Ø 20 mm in profile constructions and linear guides

Part no.

28.0121/0



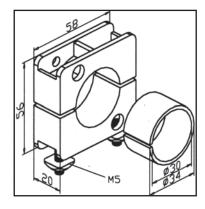
ASSEMBLY

- Fasten to profile groove with supplied hardware.

PROXIMITY SWITCH HOLDER 30

Part no.

28.0122/0



TECHN. DATA / ITEMS SUPPLIED

- Plastic, black
- With fastening material steel, zinc plated
- Ø 30 mm
- Ø 34 mm
- Weight = 0.068 kg/piece



APPLICATIONS

 Fixation of proximity switches Ø 30 and Ø 34 in profile constructions and linear axes

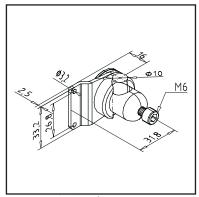
ASSEMBLY

- Fasten to profile groove with supplied hard-ware.

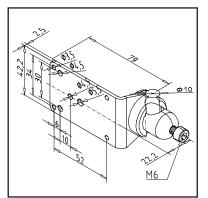
SENSOR HOLDERS

ALL SIDE SUPPORTS CAN BE COMBINED WITH ALL BEAMS

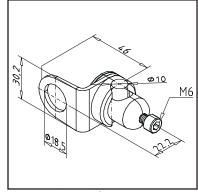
Carriers



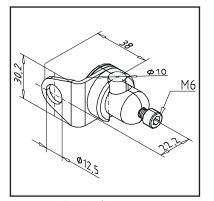
Part no. E1.0055/0



Part no. E1.0070/0

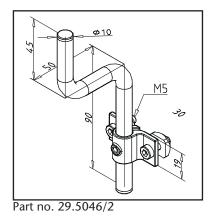


Part no. E1.0068/0

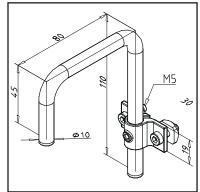


Part no. E1.0069/0

Lateral holders



Part no. 29.5047/2



Part no. 29.5048/2

DRIVE AND CONTROL TECHNOLOGY

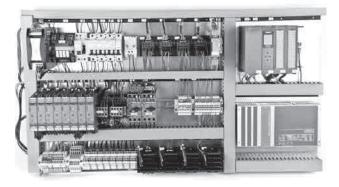
ELECTRICAL DESIGN, SWITCH CABINET PRODUCTION, SOFTWARE DEVELOPMENT AND VISUALIZATION

Comprehensive solutions from a single source

From problem analysis to commissioning: we not only offer proven components for plant construction and automation technology, but also project and implement individual overall concepts for material flow and assembly technology with our experienced team. In this way, resources are used in a targeted and effective manner. The basis for this is our flexible modular system consisting of profiles, linear technology and elements for ergonomic workplace design. These are supplemented by pneumatic and control technology components as well as conveyor systems, workpiece carrier transport systems and drives. From these parts, experienced specialists create modules which then grow together to form complete automation solutions for very individual tasks. Our goal is to develop the optimum solution for every task. Already in the planning phase, our customers benefit from our cross-industry experience. From the initial concept to commissioning, you will be expertly and seamlessly accompanied by our team.

Electrical constructions

The basis of the electrical design is the planning of the hardware. Thanks to our experience with tasks from a wide variety of industrial sectors and our many years of cooperation with all capable manufacturers, we are able to select the optimum configuration for the respective task. We create the hardware plans with the most modern CAD software E-Plan Electric P8. A meaningful documentation is thus generated for each development. As a rule, we create control concepts on a modular basis with decentralized intelligence. Different bus systems such as ProfiNet or I/O Link are used according to the requirements of our customers and the task at hand. Our specialists take over the design of the drives, taking into account the economic efficiency and the mechanics used. State-of-the-art servo technology with integrated safety functions is standard in our systems.



Switch cabinet production

Switch cabinets are assembled and wired in-house by our specialists according to the specifications of the electrical planning and approval by our customers.

An intensive in-house functional test with the latest test equipment guarantees the quality and safe functioning of our systems.



DRIVE AND CONTROL TECHNOLOGY

Software development

The sequence programs of our systems are created for PLC or PC control. Programming is carried out by our specialists using Simatic Step 7 and the TIA Portal according to IEC standards. Manufacturer independent CoDe-Sys programming is also possible.

The integration of our complete solutions into the customer's existing ERP can also be realized on request.

Visualization - safe operation and monitoring

Clear mapping of the control processes is an indispensable prerequisite for safe operation of the system. With WinCC flexible we create user interfaces that not only visualize the process, but also visually signal error messages or display help texts that are easy for the operator to understand. Our mobile HMI panels make it much easier to operate and set up complex systems. With different user levels the visualization can be activated and adapted according to the respective logged in user.



....Your partner for the complete conception:

- Consultation
- Planning
- Mechanical and electrical engineering
- Software development and visualization
- Commissioning
- CE compliant design
- Documentation
- Service such as remote maintenance

DRIVE UNITS

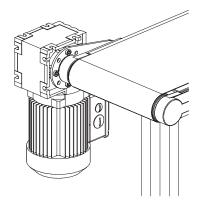
PLUG-ON DRIVE UNIT SUITABLE FOR CONVEYOR BELT SERIES 45*

Technical Data

- Nominal voltage 230 / 400 V
- 50 Hz
- Protection IP 54
- Weight ca. 6kg

For attachment to a drum bearing 45, a torque arm WA 10 **part no**. **295040/0** is required.

Optionally available with holding brake or thermocouple, also with different position of the terminal box and cable input (data sheets on request)



Туре	Part no.	Power [W]	Output speed	Output torque	Conveyor belt 45 Conveyor speed	Center drive KR Belt speed
WA10 DT56 M4 -17	33.0015/0	90	17 U/min	20 Nm	2,6 m/min	2,4 m/min
WA10 DT56 M4 - 22	33.0016/0	90	22 U/min	18 Nm	3,4 m/min	3,1 m/min
WA10 DT56 M4 - 33	33.0017/0	90	33 U/min	15 Nm	5,1 m/min	4,6 m/min
WA10 DT56 L4 – 53	33.0023/0	120	53 U/min	15 Nm	8,3 m/min	6,1 m/min
WA10 DT56 L4 – 67	33.0018/0	120	67 U/min	13 Nm	10,5 m/min	7,5 m/min
WA10 DT56 L4 – 79	33.0019/0	120	79 U/min	11 Nm	12,4 m/min	11,2 m/min
WA10 DT56 L4 - 127	33.0020/0	120	127 U/min	7,7 Nm	19,9 m/min	18,0 m/min
WA10 DT56 L4 - 159	33.0021/0	120	159 U/min	6,3 Nm	24,9 m/min	22,5 m/min

* from this motor series, other services and translations are available on request.

FLANGED GEAR MOTOR SUITABLE FOR MOTOR ATTACHMENT KIT 45* Ø20

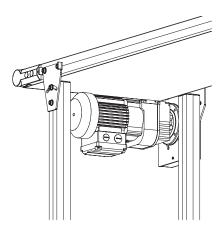
Technical Data

- Nominal voltage 230 / 400 V
- 50 Hz
- Protection IP 54
- Weight ca. 7 9 kg

Optionally available with holding brake, thermocouple or external fan, also with different position of terminal box and cable input (data sheets on request)

Туре	Part no.	Power [W]	Output speed	Output torque	Kit engine attachment 45 Conveyor Speed
DGM-120-17 / F	33.0086/0	120	17 U/min	68 Nm	3,3 m/min
DGM-120-31 / F	33.0087/0	120	31 U/min	37 Nm	6,1 m/min
DGM-120-47 / F	33.0088/0	120	47 U/min	24 Nm	9,2 m/min
DGM-180-61 / F	33.0089/0	180	61 U/min	28 Nm	11,9 m/min
DGM-180-79 / F	33.0090/0	180	79 U/min	22 Nm	15,5 m/min
DGM-250-92 / F	33.0091/0	250	92 U/min	26 Nm	18,0 m/min
DGM-370-123 / F	33.0092/0	370	123 U/min	29 Nm	24,1 m/min
DGM-370-153 / F	33.0093/0	370	153 U/min	22 Nm	30,0 m/min

* From this motor series, other services and translations are available on request.



DRIVE UNITS

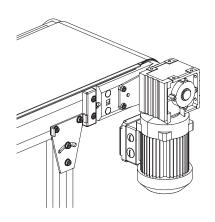
PLUG-ON DRIVE UNIT SUITABLE FOR CONVEYOR BELT SERIES 90*

Technical Data

- Nominal voltage 230 / 400 V 50 Hz
- Protection IP 54
- Weight ca. 7 13kg

For attachment to a drum bearing 90 a torque arm is required. Torque arm WA20 (part no. 295036/0) or torque arm WA30 (part no. 295037/0).

Optionally available with holding brake, thermocouple or external fan, also with different position of terminal box and cable input (data sheets on request)



Туре	Part no.	Power [W]	Output speed	Output torque	Conveyor belt 90 Conveyor speed	Torque arm
DSGM 180-15	33.0080/0	180	15 U/min	48 Nm	4,4 m/min	WA20
DSGM 250-27	33.0081/0	250	27 U/min	44 Nm	8,0 m/min	WA20
DSGM 370-35	33.0082/0	370	35 U/min	63 Nm	10,4 m/min	WA30
DSGM 370-50	33.0083/0	370	50 U/min	49 Nm	14,9 m/min	WA30
DSGM 370-71	33.0084/0	370	71 U/min	38 Nm	21,1 m/min	WA30
DSGM 550-115	33.0085/0	550	115 U/min	32 Nm	34,3 m/min	WA30

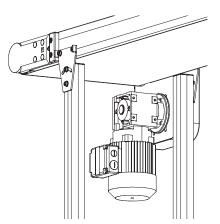
* From this motor series, other services and translations are available on request.

FLANGED GEAR MOTOR SUITABLE FOR MOTOR ATTACHMENT KIT 90*

Technical Data

- Nominal voltage 230 / 400 V
- 50 Hz
- Protection IP 54
- Weight ca. 7 13 kg

Optionally available with holding brake, thermocouple or external fan, also with different position of the terminal box and cable input (data sheets on request)



Туре	Part no.	Power [W]	Output speed	Output torque	Kit engine attachment Conveyor speed	Center drive 3R Belt speed
DSGM 180 - 15 / F	33.0080/1	180	15 U/min	48 Nm	4,4 m/min	3,8 m/min
DSGM 250 - 27 / F	33.0081/1	250	27 U/min	44 Nm	8,0 m/min	6,8 m/min
DSGM 370 - 35 / F	33.0082/1	370	35 U/min	63 Nm	10,4 m/min	8,8 m/min
DSGM 370 - 50 / F	33.0083/1	370	50 U/min	49 Nm	14,9 m/min	12,6 m/min
DSGM 370 - 71 / F	33.0084/1	370	71 U/min	38 Nm	21,1 m/min	17,8 m/min
DSGM 550 - 115 / F	33.0085/1	550	115 U/min	35 Nm	34,3 m/min	28,9 m/min

* From this motor series, other services and translations are available on request.

FREQUENCY CONVERTER FU 370 PP

Technical Data

- Built-in on / off switch
- Mode 1Q (without brake chopper)
- Mains overvoltage and undervoltage monitoring
- Engine load monitoring
- Short-circuit monitoring phase / phase, phase / earth
- Adjustable acceleration and deceleration ramp
- Adjustable voltage boost at low output frequency
- Power cord with earthing contact plug 230 V and motor cable, ELPUR, 5 m long with earthing contact plug, colour orange
- EMC filter class B
- IP 66/ NEMA-4X-casing
- Equipped as standard with an operator panel that allows operation and setup of the drives without the need for additional equipment
- Output power motor side max. Motor power 0.37 kW
- Output rated current max. 2.3 A
- Output voltage 3 x 20 250 V
- Overload 150% for 60 seconds
- Input voltage mains side rated voltage 230V
- Input current 6,7 A
- Power frequency 50 60 Hz
- Ambient temperature -10 ° C to + 40 ° C
- Heat loss at rated power 11 W
- Dimensions H / W / D: 232 x 161 x 179 mm



ART.-NR. 33.0126/0

MAGNETIC MEASURING SYSTEM

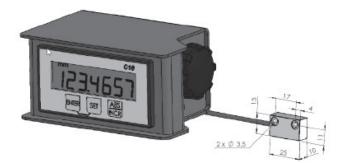
MAGNETIC MEASURING SYSTEM ML

Length or distance measurement is one of the standard tasks in mechanical engineering and construction. A modern and reasonably priced solution is the ML magnetic length measuring system with magnetic tape, magnetic sensor and measuring display. The advantages of this system are mainly in the direct measuring method, the wear-free, the simple and inexpensive installation and high possible accuracy.

At the heart of this measuring system is the magnetic tape, a flexible plastic tape filled with magnetic particles. This is glued to the profile surface and protected with a stainless steel strip, also glued. About this band is at a small distance, but non-contact, guided along a magnetic sensor and thus scanned the magnetic field. Movement direction and increments are then derived from these scanning signals and further processed in a controller or displayed by means of a measuring display.

LCD meter with battery operation incl. magnetic sensor (Part No. 33.0038/0)

- 6-digit LCD display, with 14mm digit height
- Surface-mount housing, aluminum powder-coated RAL
 5010, dimensions W = 125mm, H = 65mm, depth = 85mm
- Power supply battery C (baby 1,5V)
- Battery compartment on the right side
- With attached magnetic sensor (cable length 0.5m)
- for mounting on stop slides via brackets
- Operating temperatur -5 to +45° C
- Travel speed max. 3m / sec, counting frequency up to 1MHz
- Actual value memory / offset value, selectable
- Absolute incremental conversion
- Measuring tolerance ± 0,1 mm/m







Measuring display for 230V connection Part no. 33.0036/0

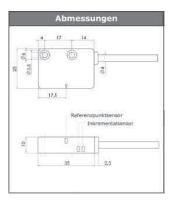
- 6-digit LED display, with 14mm digit height
- Surface-mount housing, aluminum powder-coated RAL 5010, dimensions W = 115mm, H = 70mm, depth = 120mm
- Power supply 230V AC pluggable.
- Sensor connection via SuB-D 9-pin. pluggable, TTL 5VDC
- Operating temperatur -5 to +45° C
- Travel speed max. 3m / sec, counting frequency up to 1MHz
- Actual value memory / offset value, selectable
- Magnetic sensor Part no. 33.0037/0 please order separately, specifying the desired cable length

MAGNETIC MEASURING SYSTEM



Magnetic sensor with integrated evaluation unit Part no. 33.0037/0

- Non-contact measuring scanner with integrated digital evaluation electronics.
- Detecting the magnetic signals, with index pulse, resolution 10µm
- In conjunction with the above displayed measuring display
- suitable for MiniTec profiles, connection cable integrated (2 m) and D-Sub connector (longer cable lengths on request up to 20 m).



Magnetic Tape Part no. 33.0028/0

Technical Data / delivery

- Magnetic tape for sticking to MiniTec profiles incl. Stainless steel masking tape
- Length max. 80 m, width 10 mm (option: Band width 5 mm for gluing into the profile groove)

Application

- For all MiniTec linear guides with rails made of system profiles
- Length measuring stops
- Material feed

Mounting

- Stick magnetic tape to profile surface, glue masking tape onto magnetic tape.
- Attach sensor to carriage
- Distance to the magnetic tape: 1.1 ± 0.9 mm

Please specify desired magnetic tape length (round up to full meters)



PNEUMATIC SYSTEM

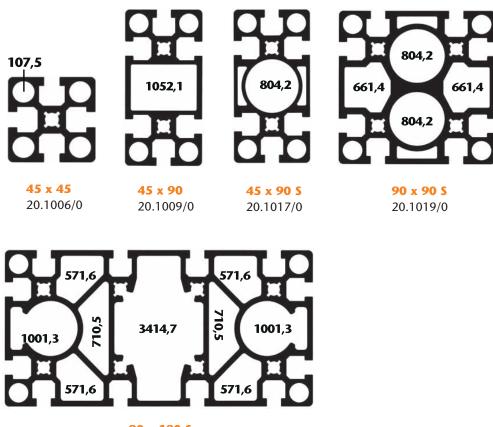
Optically attractive and economical solutions are possible with simultaneous use of the construction profiles as an air duct. The MiniTec standard profiles are particularly well suited for compressed air guidance. Commercially available connections can be used without special connection components. All standard profiles with round corner holes can be used as compressed air lines.

Bore Ø 11.7 can be drilled to G 1/4 to accommodate pneumatic connections or screw plugs. Air extraction at any point.

All MiniTec standard profiles can be used as a single or multi-chamber system. Connections are possible at any point. Maximum pressure for round chambers (Ø 11.7) 20 bar, otherwise max. 8 bar.

Usable cavities for compressed air ducts

All area information in mm²



90 x 180 S 20.1013/0

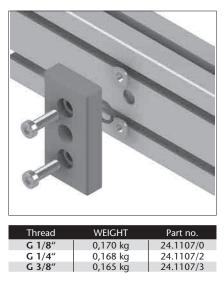


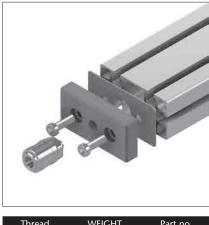
20.1079/0

45 x 135 1G 20.1078/0

PNEUMATIC SYSTEM

PNEUMATIC-PLATE 45, 45 x 90 and 90





Thread	WEIGHT	Part no.
G 1/8"	0,181 kg	24.1105/0
G 1/4"	0,178 kg	24.1105/2
G 3/8"	0,174 kg	24.1105/3



Thread	WEIGHT	Part no.
G 1/8"	0,434 kg	24.1106/0
G 1/4"	0,429 kg	24.1106/2
G 3/8"	0,421 kg	24.1106/3

PNEUMATIC-PLATE 45

Technical Data/Items Supplied

- Die-cast aluminum, powder-coated grey
- 1x O-Ring
- with fastening material

Application

Side connection for compressed air supply or removal on profiles 45 x 90 and 90 x 90

Assembly

- mount with fastening material of items supplied
- Insert bore Ø 12 mm in the center of the profile

PNEUMATIC-PLATE 45 X 90

Technical Data/Items Supplied

- Die-cast aluminum, powder-coated grey
- with sealing plate made of NBR
- with fastening material

Application

Closure of the hollow chamber ends of profiles 45 x 90 for connection of pneumatic connections

Assembly

- Apply sealing plate
- with fastening material from items supplied screw on 2 central holes Ø 7.5 mm (tightening torque 12 Nm)

PNEUMATIC PLATE 90

Technical Data/Items Supplied

- Die-cast aluminum, powder-coated grey
- with sealing plate made of NBR
- with fastening material

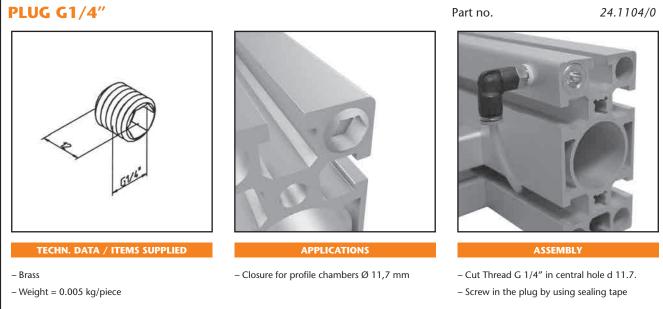
Application

Closure of the hollow chamber ends of profiles 90 x 90 for connection of pneumatic connections

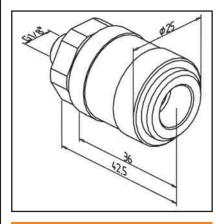
Mounting

- Apply sealing plate
- with fastening material from scope of supply screw on 4 central holes Ø 7.5 mm (tightening torque 12 Nm)

24.1104/0



QUICK CONNECTOR 1/8



TECHN. DATA / ITEMS SUPPLIED

- Brass, nickel-plated
- NW 7 mm
- Connecting thread G 1/8", SW 22
- Weight = 0.087 kg/piece



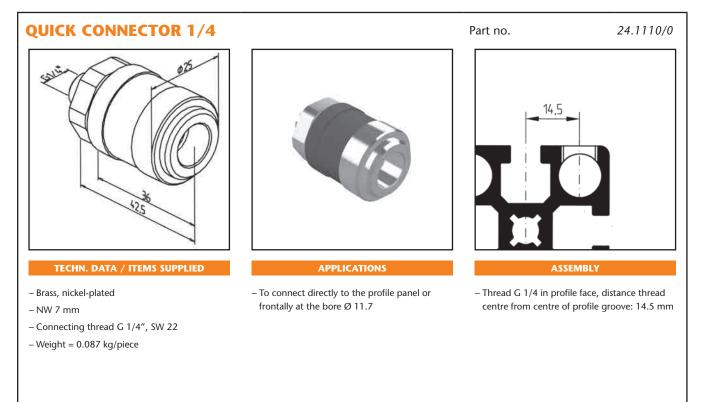
APPLICATIONS

- To connect directly to the profile panel or frontally at the bore Ø 11.7

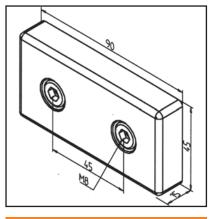
Part no. 24.1109/0 14,5

ASSEMBLY

- Thread G 1/8 in profile face, distance thread centre from centre of profile groove: 14.5 mm

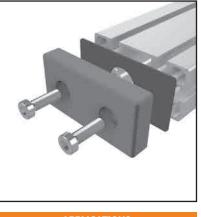


PNEUMATIC END PLATE 45 X 90



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, Pressure die-casting, powdercoated, grey
- With sealing plate of NBR, black
- Fastening kit
- Weight = 0.180 kg/piece



APPLICATIONS

- Closing of chamber ends of profiles 45 x 90

Part no.

24.1105/7



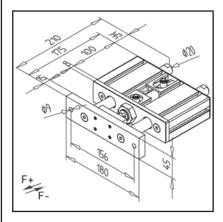
- Insert sealing plate

- Screw in with fastening material from items supplied.

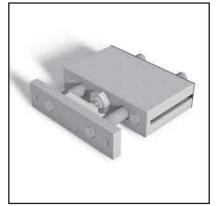
PNEUMATIC END PLATE 90 X 90 24.1106/7 Part no. 20 0 **TECHN. DATA / ITEMS SUPPLIED** APPLICATIONS ASSEMBLY - Aluminium, Pressure die-casting, powder-- Closing of chambers of profiles 90 x 90 for - Insert sealing plate coated, grey connection of pneumatic couplings - Screw in with fastening material from items - With sealing plate of NBR, black supplied. – Fastening kit

PNEUMATIC LIFTING UNIT 15

- Weight = 0.430 kg/piece



- TECHN. DATA / ITEMS SUPPLIED
- Incorporated into profile 45 x 180
- Overall cylinder size Ø 25 mm
- Guide shafts Ø 20 mm
- Fully assembled with double acting pneumatic cylinder
- F+ at 6 bar = 256 N
- F- at 6 bar = 220 N
- Stroke = 15 mm
- Weight = 3.405 kg/piece



APPLICATIONS

- Lifting and lowering of loads
- Attachment for grips or similar
- Positioning of parts

Part no.

24.1201/0



ASSEMBLY

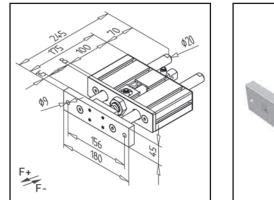
- with mounting angle bracket on profile construction
- Other stroke lengths on request

MINITEC PROFILE SYSTEM 259

PNEUMATIC LIFTING UNIT 50

Part no.

24.1205/0



TECHN. DATA / ITEMS SUPPLIED

- Incorporated into profile 45 x 180
- Overall cylinder size Ø 25 mm
- Guide shafts Ø 20 mm
- Fully assembled with double acting pneumatic cylinder
- F+ at 6 bar = 265 N
- F- at 6 bar = 220 N
- Stroke = 50 mm
- Weight = 3.452 kg/piece



APPLICATIONS

- Lifting and lowering of loads
- Attachment for grips or similar
- Positioning of parts

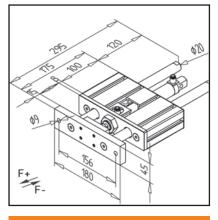


ASSEMBL

- with mounting angle bracket on profile construction
- Other stroke lengths on request

Part no.

PNEUMATIC LIFTING UNIT 100

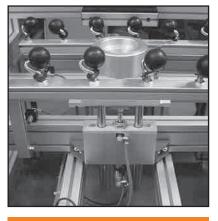


- TECHN. DATA / ITEMS SUPPLIED
- Incorporated into profile 45 x 180
- Overall cylinder size Ø 25 mm
- Guide shafts Ø 20 mm
- Fully assembled with double acting pneumatic cylinder
- F+ at 6 bar = 265 N
- F- at 6 bar = 220 N
- Stroke = 100 mm
- Weight = 3.507 kg/piece



APPLICATIONS

- Lifting and lowering of loads
- Attachment for grips or similar
- Positioning of parts



24.1210/0

- with mounting angle bracket on profile construction
- Other stroke lengths on request

HYDRAULICS

Items supplied

- Hydraulic pump for 1 to 6 cylinders
- Alternatively with hand crank or electric drive
- Add-on or built-in cylinders with 150 500 mm stroke length
- 5 mm stroke per crank revolution or 15mm/sec with electrical drive
- Hydraulic hoses PA 4 mm
- Cylinders are single-acting
- Minimum load for retraction approx. 5 kg
- Temperature range from -20°C bis + 45°C

Application

 Lifting, lowering, tilting tables, countertops, desks, workbenches, fixtures, etc.

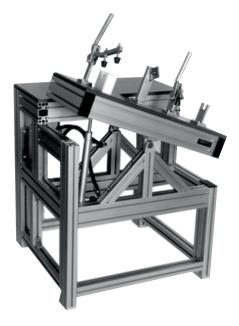
Assembly

- Tighten the pump at the appropriate place in the construction with screws M6 to the profile groove
- Mount built-in cylinder in aluminum profile"S"
- Mount the add-on cylinder to the profile groove using the adapter plate

Available special versions and equipment

- Fasteners for pumps according to customer requirements
- Mounting parts for mounting cylinder according to customer requirements
- Fastening kit 45 for installation cylinder
 part no. 27.0005/0 for all profiles with hollow chamber Ø
 32 except for profile 90 x 90 S and 90 x 180 s.
 For these, please use the fixing kit 90
 part no. 27.0006/0
- Service kit with oil, fittings, special wrench, tube cutter and filling syringe

When working on the hydraulics, great care should be taken. In order to prevent air bubbles from forming in the system, we recommend having this work carried out by us.





HYDRAULICS





Complete system with add-on cylinder LA - manual

PUMP	PA	PA	РВ	РВ	РВ	РВ
System load	150 kg	300 kg		350) kg	
Number of cylinders	1	2	3	4	5	6
LA 150 man.	27.0118/1	27.0118/2	27.0118/3	27.0118/4	27.0118/5	27.0118/6
LA 200 man.	27.0122/1	27.0122/2	27.0122/3	27.0122/4	27.0122/5	27.0122/6
LA 300 man.	27.0126/1	27.0126/2	27.0126/3	27.0126/4	27.0126/5	27.0126/6
LA 400 man.	27.0130/1	27.0130/2	27.0130/3	27.0130/4	27.0130/5	27.0130/6
LA 500 man.	27.0134/1	27.0134/2	27.0134/3	27.0134/4	27.0134/5	27.0134/6

Complete system with add-on cylinder LA - electric

LA 150 elektr.	27.0119/1	27.0119/2	27.0119/3	27.0119/4	27.0119/5	27.0119/6
LA 200 elektr.	27.0123/1	27.0123/2	27.0123/3	27.0123/4	27.0123/5	27.0123/6
LA 300 elektr.	27.0127/1	27.0127/2	27.0127/3	27.0127/4	27.0127/5	27.0127/6
LA 400 elektr.	27.0131/1	27.0131/2	27.0131/3	27.0131/4	27.0131/5	27.0131/6
LA 500 elektr.	27.0135/1	27.0135/2	27.0135/3	27.0135/4	27.0135/5	27.0135/6





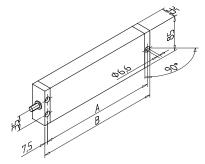
Complete system with built-in cylinder LB - manual

PUMP	PA	PA	РВ	РВ	РВ	РВ
System load	150 kg	300 kg		350) kg	
Number of cylinders	1	2	3	4	5	6
LB 150 man.	27.0120/1	27.0120/2	27.0120/3	27.0120/4	27.0120/5	27.0120/6
LB 200 man.	27.0124/1	27.0124/2	27.0124/3	27.0124/4	27.0124/5	27.0124/6
LB 300 man.	27.0128/1	27.0128/2	27.0128/3	27.0128/4	27.0128/5	27.0128/6
LB 400 man.	27.0132/1	27.0132/2	27.0132/3	27.0132/4	27.0132/5	27.0132/6
LB 500 man.	27.0136/1	27.0136/2	27.0136/3	27.0136/4	27.0136/5	27.0136/6

Complete system with built-in cylinder LB - electric

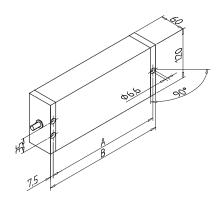
LB 150 elektr.	27.0121/1	27.0121/2	27.0121/3	27.0121/4	27.0121/5	27.0121/6
LB 200 elektr.	27.0125/1	27.0125/2	27.0125/3	27.0125/4	27.0125/5	27.0125/6
LB 300 elektr.	27.0129/1	27.0129/2	27.0129/3	27.0129/4	27.0129/5	27.0129/6
LB 400 elektr.	27.0133/1	27.0133/2	27.0133/3	27.0133/4	27.0133/5	27.0133/6
LB 500 elektr.	27.0137/1	27.0137/2	27.0137/3	27.0137/4	27.0137/5	27.0137/6

HYDRAULIC PUMPS PA FOR 1-2 CYLINDERS HYDRAULIC PUMPS PB FOR 3-6 CYLINDERS ADD-ON CYLINDER LA



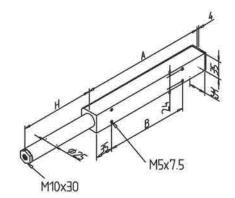
Hydraulic pumps PA for 1-2 cylinders

ТҮРЕ	Stroke H mm	Dimension A mm	Dimension B mm
PA 150	150	283,5	298,5
PA 200	200	343,5	358,5
PA 300	300	465,5	480,5
PA 400	400	585,5	600,5
PA 500	500	707,5	722,5



Hydraulic pumps PB for 3-6 cylinders

ТҮРЕ	Stroke H mm	Dimension A mm	Dimension B mm
PB 150	150	283,5	298,5
PB 200	200	343,5	358,5
PB 300	300	465,5	480,5
PB 400	400	585,5	600,5
PB 500	500	707,5	722,5



Add-on cylinder LA

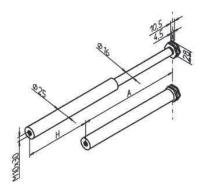
ТҮРЕ	Stroke H mm	Length A mm	Length B mm	lateral load kg max.
LA 150	150	252	165	130
LA 200	200	317	240	97
LA 300	300	442	340	65
LA 400	400	542	340	48
LA 500	500	667	450	29

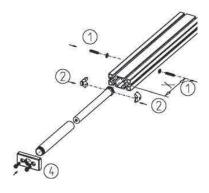
For attachment to a wide variety of constructions using adapter plates.

HYDRAULICS

MOUNTING CYLINDER LB, FASTENING KIT 45 FOR MOUNTING CYLINDER, FASTENING KIT 90 FOR MOUNTING CYLINDER

Add-on cylinder LB



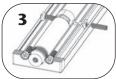


ТҮРЕ	Stroke H mm	Length A mm	lateral load kg max.	
LB 150	150	235	130	
LB 200	200	300	97	
LB 300	300	425	65	
LB 400	400	525	48	
LB 500	500	650	29	

Fastening kit 45 for installation cylinder (Part No. 27.0005/0)

Suitable for all stroke lengths as well as for profile 45x90S, 45x135G and 45x180G Assembly

- Drill profile according to measurement table (dimension X) Ø 8,5 mm
- Place 2 holders on cylinder and insert in profile chamber Ø 32
- **3.** Insert the centering hole into the mounting pieces (through hole distance X), then fix with threaded pin
- **4.** Screw guide tube into connection plate, insert in profile and fasten



Fastening kit 90 for installation cylinder (Part No. 27.0006/0)

Suitable for all stroke lengths as well as for profile 90x90s, 90x180 Assembly

- Drill profile according to measurement table (dimension X) Ø 8,5 mm
- 2. Place 2 holders on cylinder and insert in profile chamber Ø 32
- **3.** Insert the centering hole into the mounting pieces (through hole distance X), then fix with threaded pin
- **4.** Screw guide tube into connection plate, insert in profile and fasten



Measurements for fastening kit 45 and 90

Cylinder	LB 150	LB 200	LB 300	LB 400	LB 500
Dimension X (mm)	224	289	414	514	639

