



MiniTec
PROFILE SYSTEM

PRODUCT CATALOG



PRODUCTS



SOLUTIONS



SERVICE

Technical data

Aluminium profile

Aluminium alloy by DIN EN 573-3

Material	EN AW-Al Mg0,7Si status T66	EN-AW-6063 T66
Specific Weight		2,75 g / cm ³
Material-N°		3.3206.72 (artificially aged)
Tenacity		min. Rm = 245 N / mm ²
0,2 % twist boundary		min. Rp 0,2 = 200 N / mm ²
Ductile yield A 5		> 10%
Ductile yield A 10		> 8%
Modulus of elasticity		E: 70000 N / mm ²
Hear modulus		G: 27000 N / mm ²
Expansion hardness		ca. 75 HB 2,5 / 187,5
Heat extension		23.8 · 10 - 6K-1

Anodizing by DIN 17611

SURFACE	Eloxal E6/EV1, natur anodized, or EURAS CO	
	Layer thickness	ca. 10 - 15 µm
	Layer hardness	250 - 350 HV
TOLERANCE	Aluminium extruded profiles	DIN EN 12020 T 1 + 2
	Outer dimensions	0,2 to 0,4 mm
	Straightness deviatin	max. 1,5 mm / 2 m

Generally we confirm half the values according to the tolerances of DIN EN 12020 part 2.

Blanks	ISO 2768-m
Angle + Length	Usually half values of ISO 2768 m

PROFILE SERIES / BASIC GRID	Profile series	30	45
	Core boring	7,5 - 0,3	
	Standard thread	M8	

All profiles of the profile series 30 and 45 are each developed from the same grid. The profile grooves are uniform in each profile series. All profiles of the respective profile series can be combined with each other. It is also possible to combine the profile series with each other.

SST-PROFILES

Material

X5 Cr Ni 18-10	stainless steel, DIN EN 10 088
Specific Weight	7,9 g / cm ³
Material-N°	1.4301 (cold rolled)
Tenacity	min. $R_m = 540 \text{ N / mm}^2$
0,2 % twist boundary	min. $R_{p0,2} = 245 \text{ N / mm}^2$
Ductile yield	> 35%
Modulus of elasticity Hear modulus	E: 200 000 N / mm ² G: 80 000 N / mm ²
Hardiness Vickers	220 - 260 HV
Heat extension	$11,5 \cdot 10^{-6} \text{ 1/K}$

SURFACE

bare

TOLERANCE

	DIN ISO 2768 - c
Outer dimensions	$\pm 0,3 \text{ mm}$
Straightness deviatin	0,001 x L
Blanks	ISO 2768-m
Angle + Length	Usually half values of ISO 2768 m

CORE BORING

Uniform 7,5 - 0,6 mm

Thread M8 is made with a tap

GRID

Basic grid 45 mm

Due to its identical groove the profile 45 x 45 SST is fully compatible with the aluminium profile system.

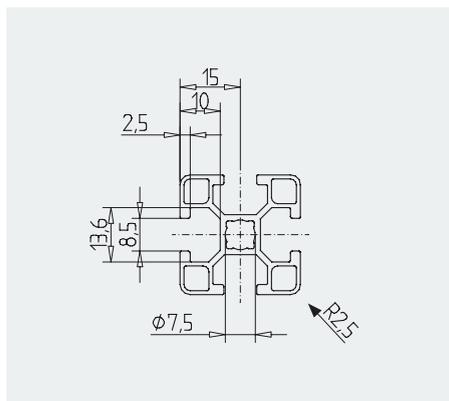
Technical data

Profile series 30

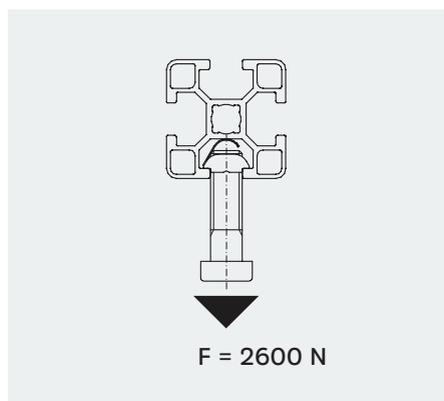
Grooves

One system for profiles 16 to 60 mm. The grooves are identical for all profiles.
Groove width: 8,5 - 0,3 mm.

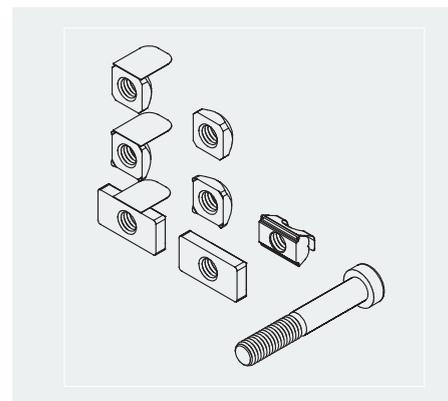
Basic dimensions



Load capacity



Nuts and screw forms used

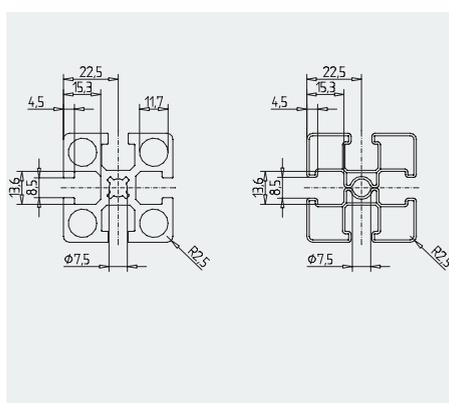


Profile series 45

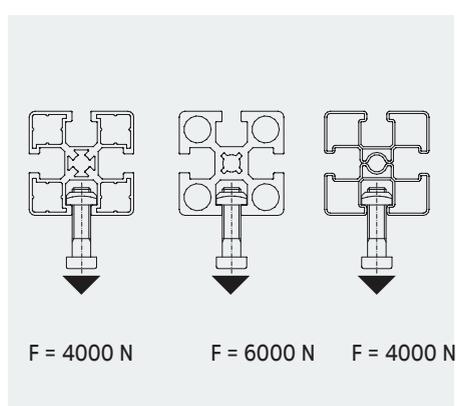
Grooves

One system for profiles from 19 to 270 mm. The grooves are identical in all profiles. Groove width: 8.5 - 0.3 mm. The grooves are designed to accept DIN M8 screws with 13 mm head diameter and 13 mm outer nuts. Square and hexagon nuts and screws are secured against rotation

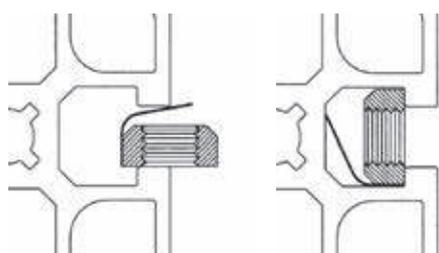
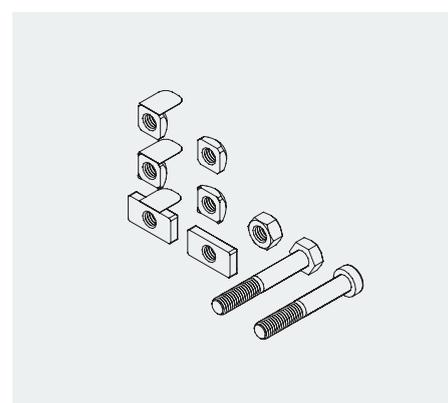
Basic dimensions



Load capacity



Nuts and screw forms used



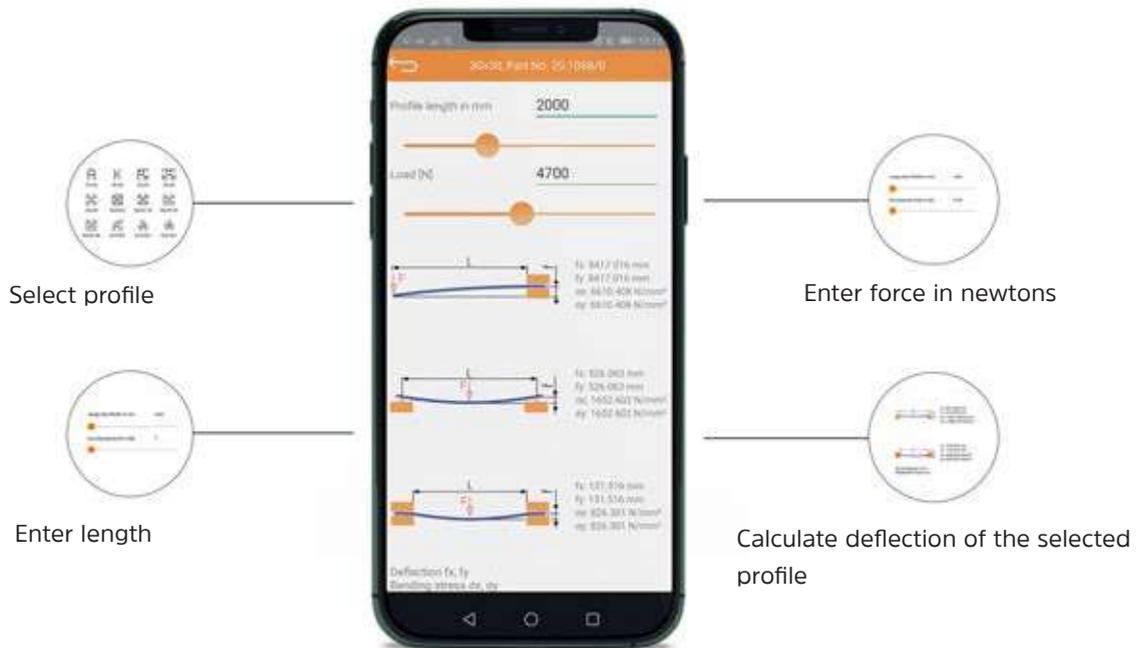
Sliding nuts can be swivelled in at any point of the profil.

Calculate deflection

The MiniTec app's calculation program immediately shows the user whether the profile or installed axis used has been correctly selected according to the application or whether the deflection is above the permissible limits - and therefore a stronger component from the current MiniTec modular system is the better choice.



This is how it works



The **Deflection calculation** is also available in the iCAD Assembler and on the website.
www.minitec.de/en/products/calculate-deflection

PROFILE SYSTEM

1.1	Aluminium profiles	14
1.2	Fastening elements	63
1.3	Hinges & Joints	104
1.4	Handle, locks, stops	120
1.5	Feet, castors, floor fastenings, supports	148
1.6	Fixing of surface elements	175
1.7	Edge, cover, sliding and sealing profiles	196
1.8	Ready-to-install elements for lifting and sliding doors	213
1.9	Electrical installation	234
1.10	Drive units and control systems	250
1.11	Pneumatic system	257
1.12	Hydraulics	263

Profile cross-sections

Profile series 30



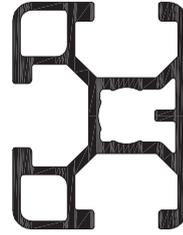
23 x 16
20.1115/0



16 x 30
20.0983/0



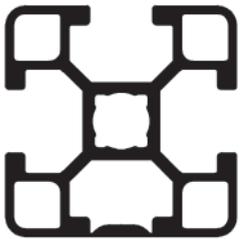
23 x 23
20.1116/0



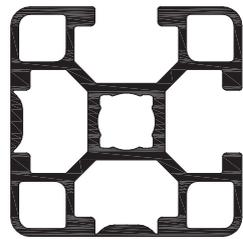
23 x 30
20.1117/0



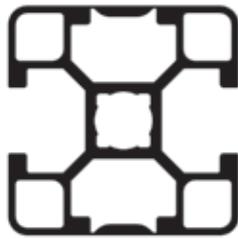
30 x 30
20.1068/0



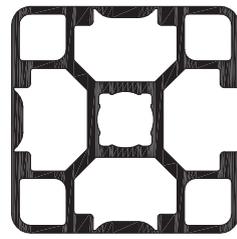
30 x 30 1G
20.1139/0



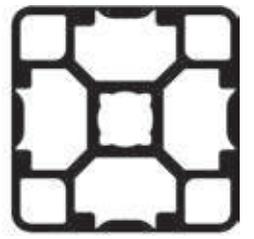
30 x 30 2G
20.1124/0



30x30 2GG
20.1156/0



30 x 30 3G
20.1085/0



30 x 30 G
20.1141/0



30 R 90°
20.1125/0



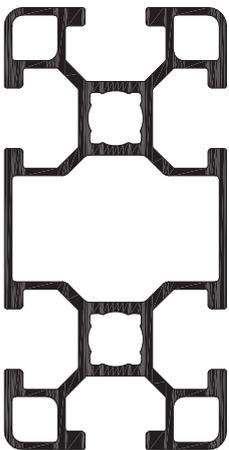
30 R 60°
20.1136/0



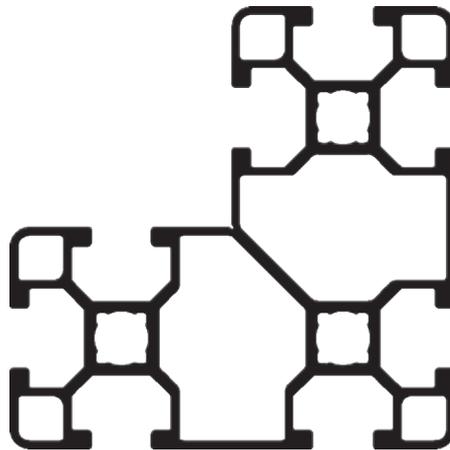
30 R 45°
20.1135/0



30 R 30°
20.1134/0



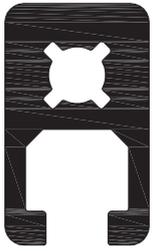
30 x 60
20.0994/0



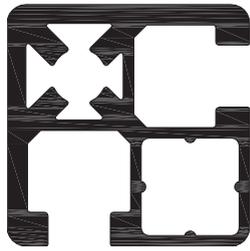
60 x 60 x 30
20.0982/0

Profile cross-sections

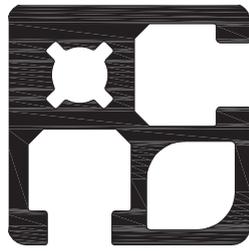
Profile series 45



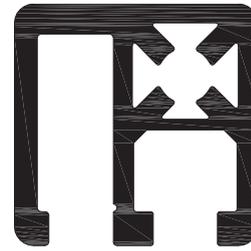
19 x 32
20.1000/0



32 x 32 UL
20.1064/0



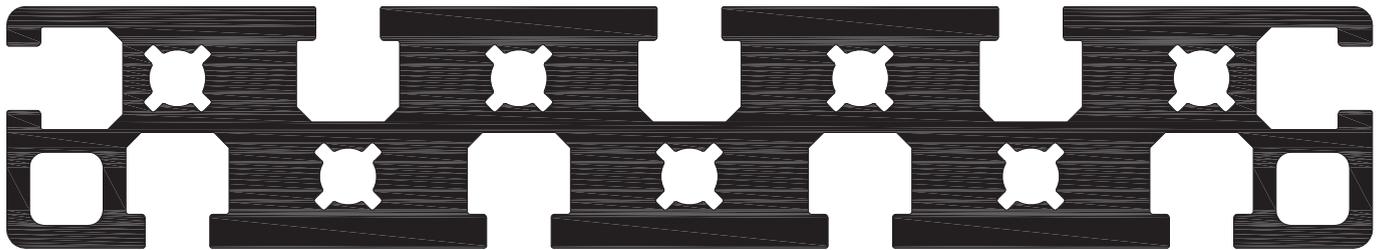
32 x 32 F
20.1054/0



**Clamping profile 32
x 32**
20.1070/0



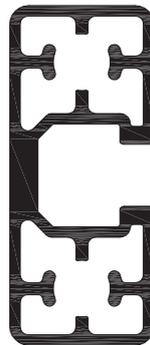
Handle profile 32
20.1088/0



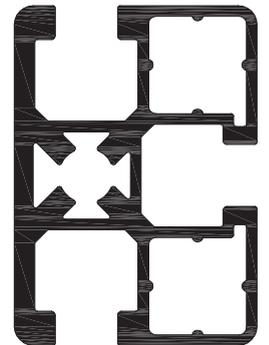
32 x 180
20.1016/0



19 x 45
20.1001/0



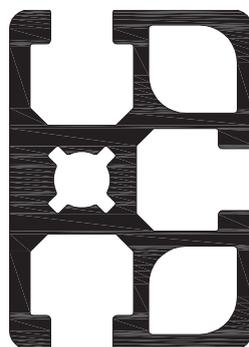
45 x 19
20.0993/0



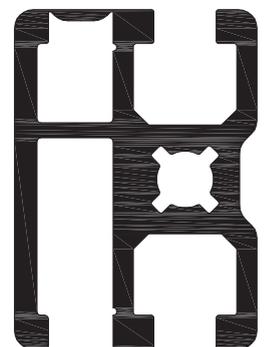
45 x 32 UL
20.1065/0



Clamp profile 45 x 45 F
20.1147/0



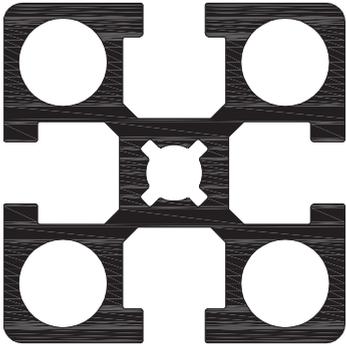
45 x 32 F
20.1055/0



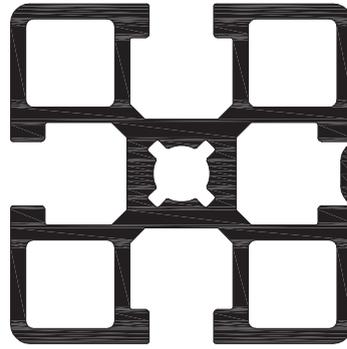
**Clamping profile 45
x 32**
20.1053/0

Profile cross-sections

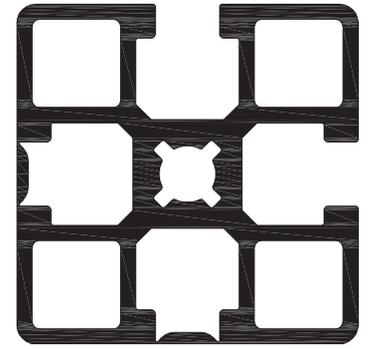
Profile series 45



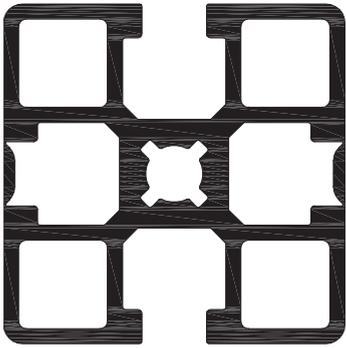
45 X 45
20.1006/0



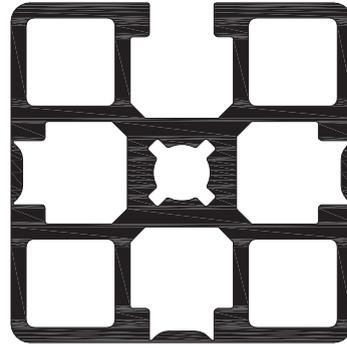
45 x 45 1G
20.1126/0



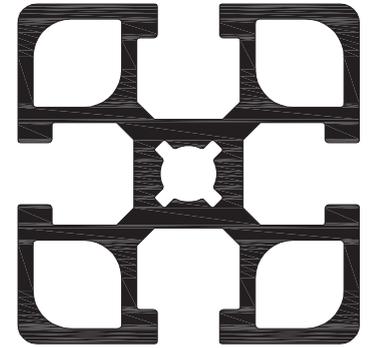
45 x 45 2G
20.1072/0



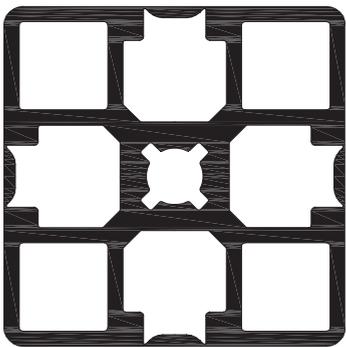
45 x 45 2GG
20.1099/0



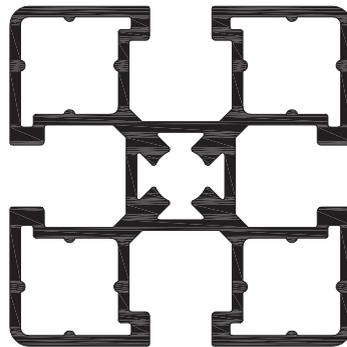
45 x 45 3G
20.1048/0



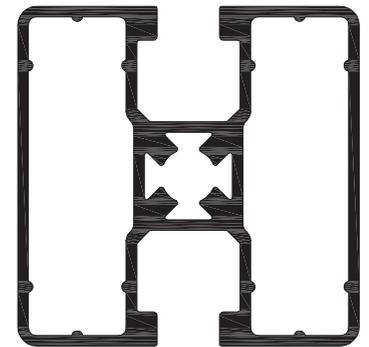
45 x 45 F
20.1033/0



45 x 45 G
20.1028/0



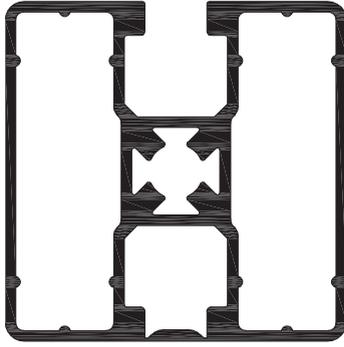
45 x 45 UL
20.1063/0



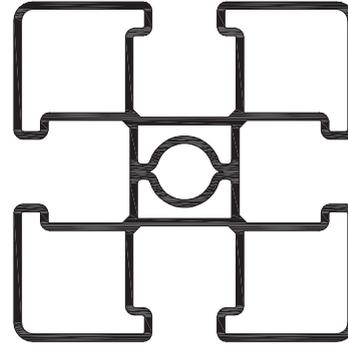
45 x 45 UL 2GG
20.1122/0

Profile cross-sections

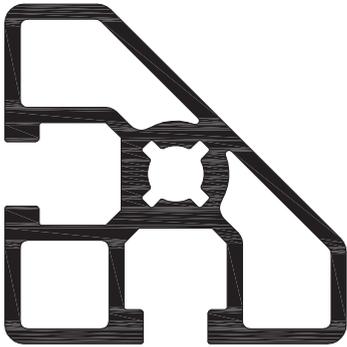
Profile series 45



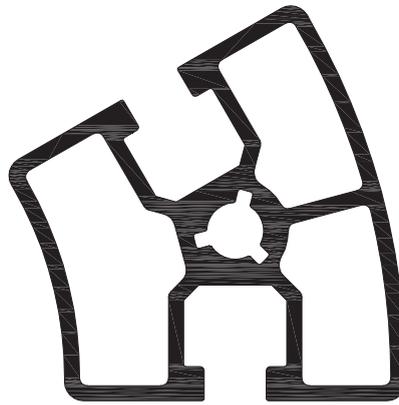
45 x 45 UL 3G
20.1123/0



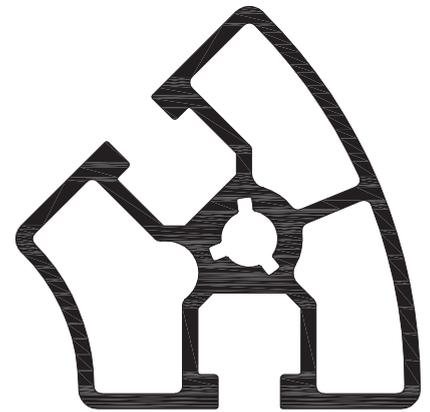
45 x 45 VA
20.2000/0



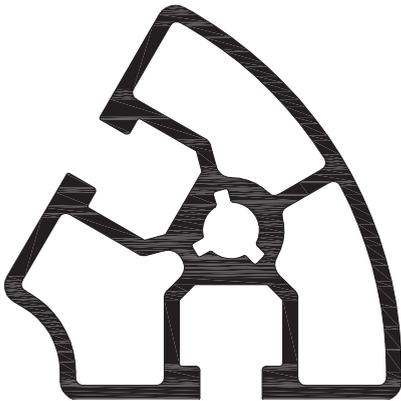
45 / 45°
20.1029/0



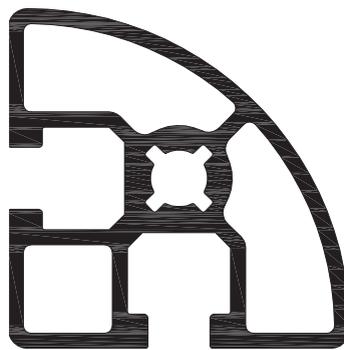
45 R 30°
20.1094/0



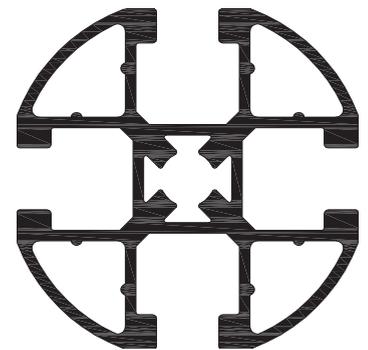
45 R 45°
20.1095/0



45 R 60°
20.1096/0



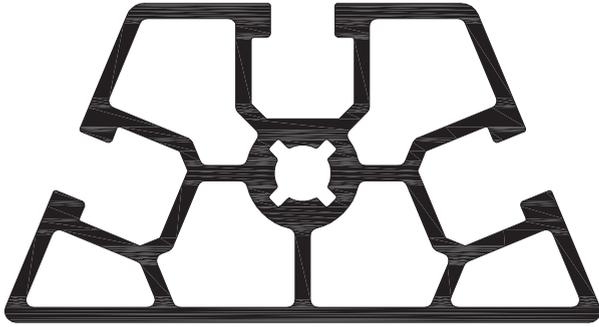
45 R 90°
20.1069/0



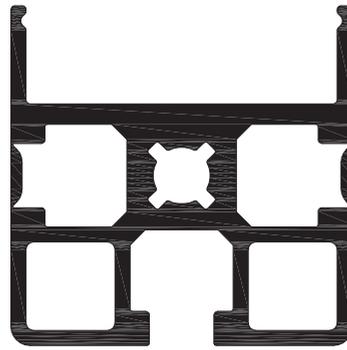
45 R4
20.1120/0

Profile cross-sections

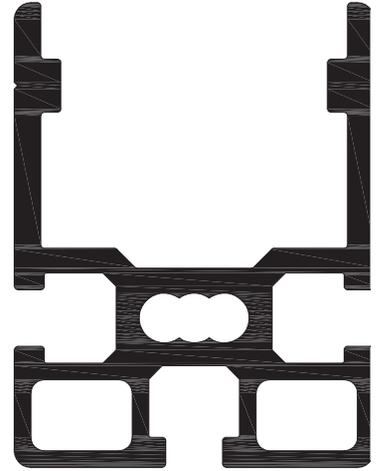
Profile series 45



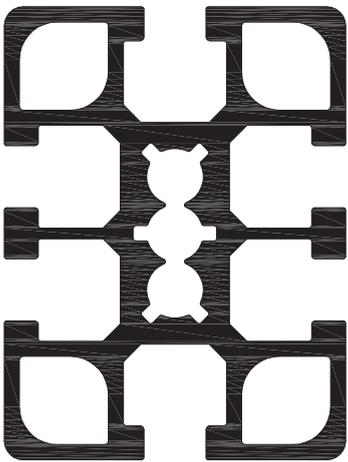
45 / 22,5°
20.1030/0



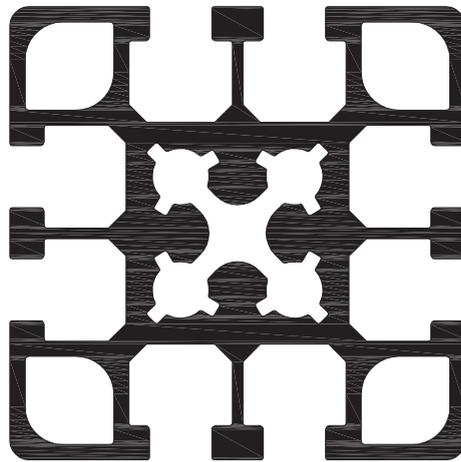
45 x 45 R
20.1046/0



Profile height adjustment
20.1143/0



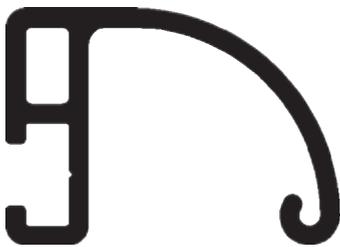
45 x 60 F
20.1023/0



60 x 60 F
20.1049/0



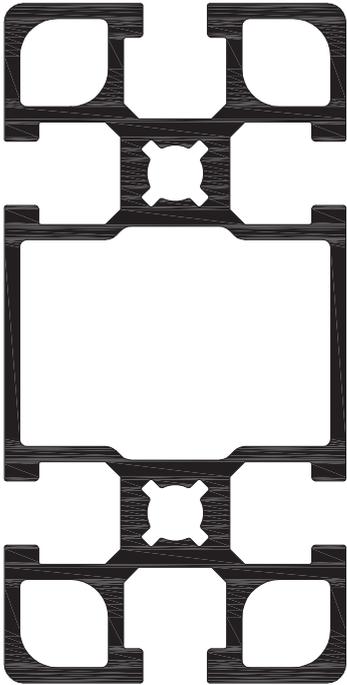
Guide rail profile
20.1038/0



Handle profile
20.1045/0

Profile cross-sections

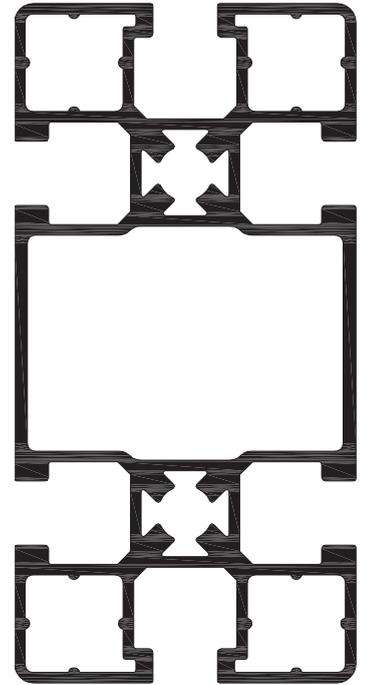
Profile series 45



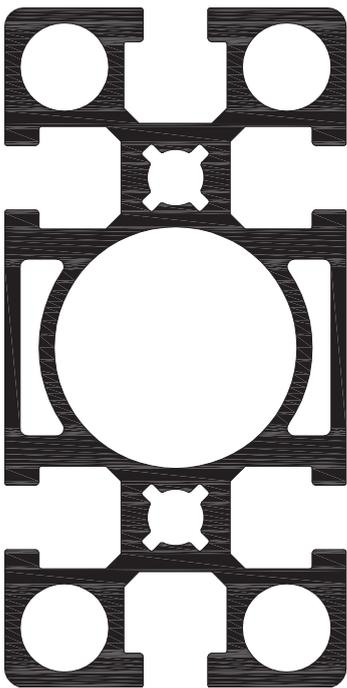
45 x 90 F
20.1032/0



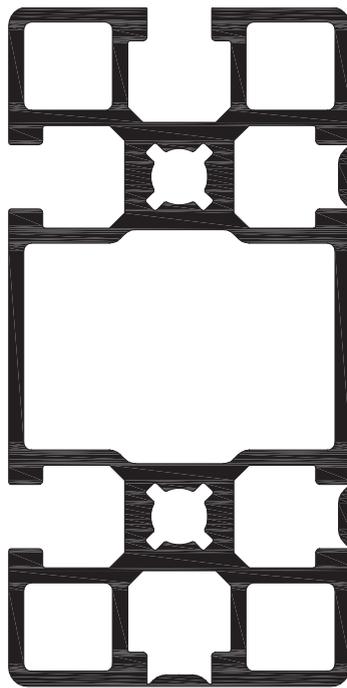
45 x 90
20.1009/0



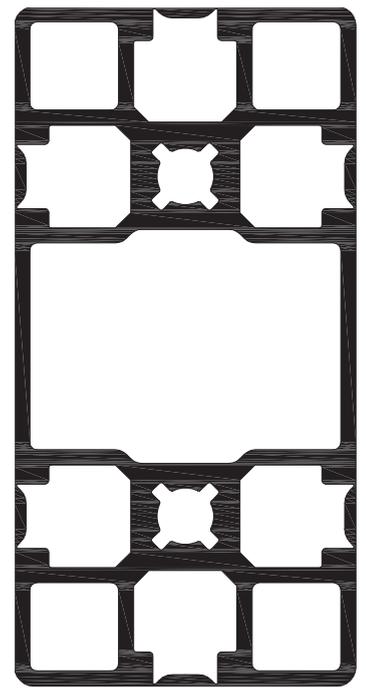
45 x 90 UL
20.1067/0



45 x 90 S
20.1017/0



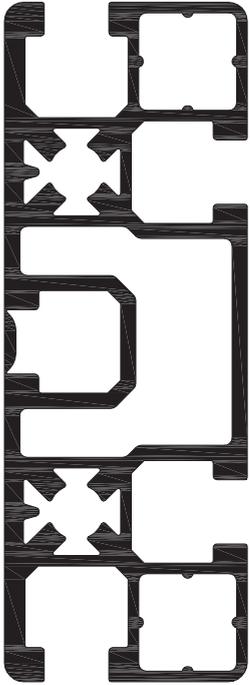
45 X 90 2G
20.1081/0



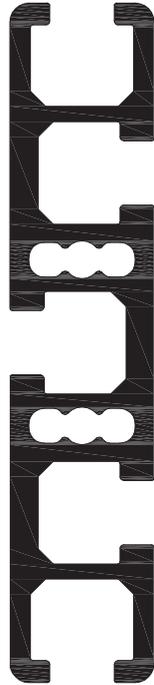
45 x 90 G
20.1015/0

Profile cross-sections

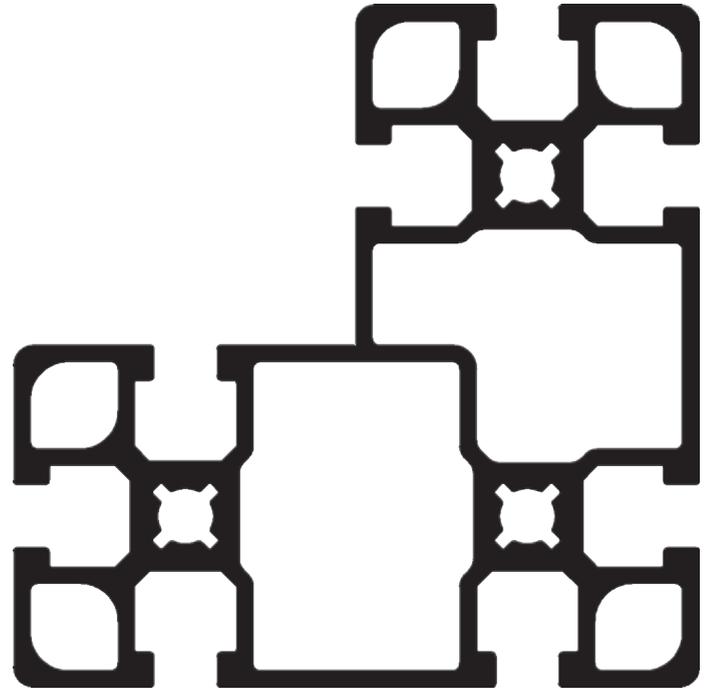
Profile series 45



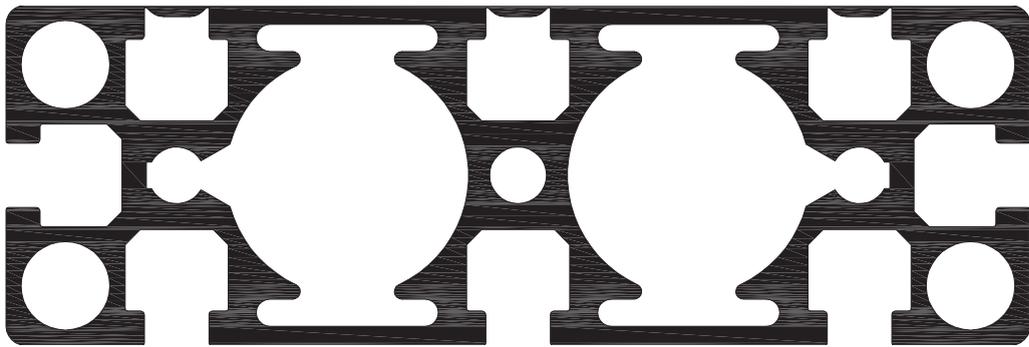
90 x 32 UL
20.1066/0



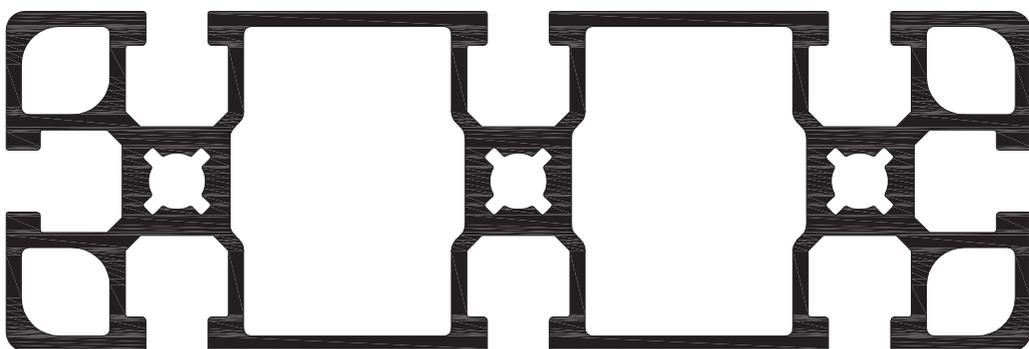
19 x 90
20.0995/0



90 x 90 x 45
20.0984/0



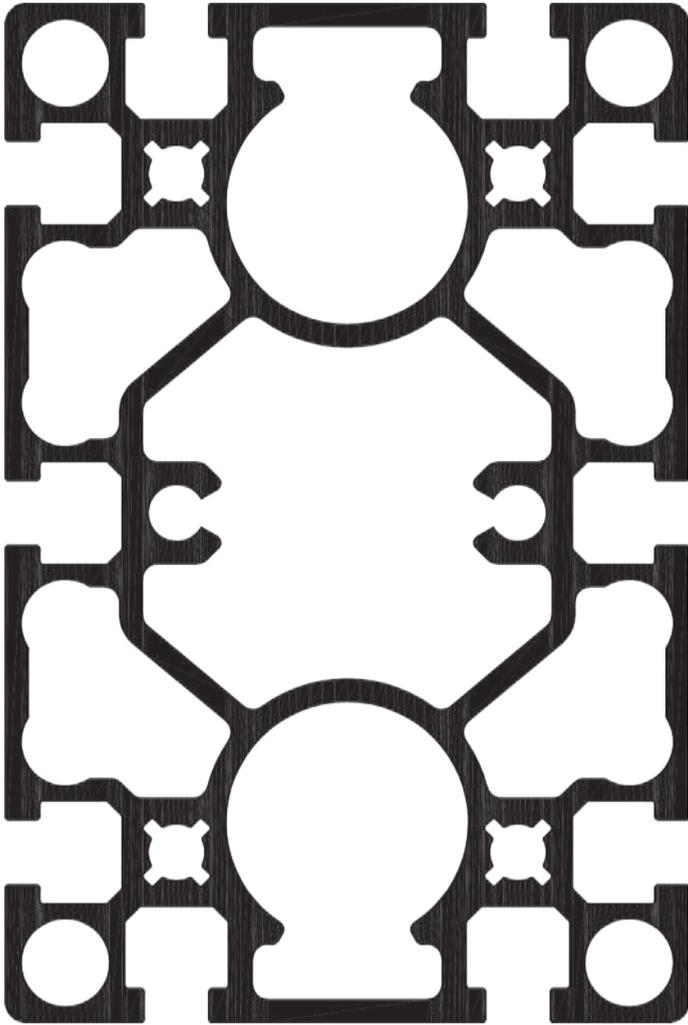
45 x 135 1G
20.1078/0



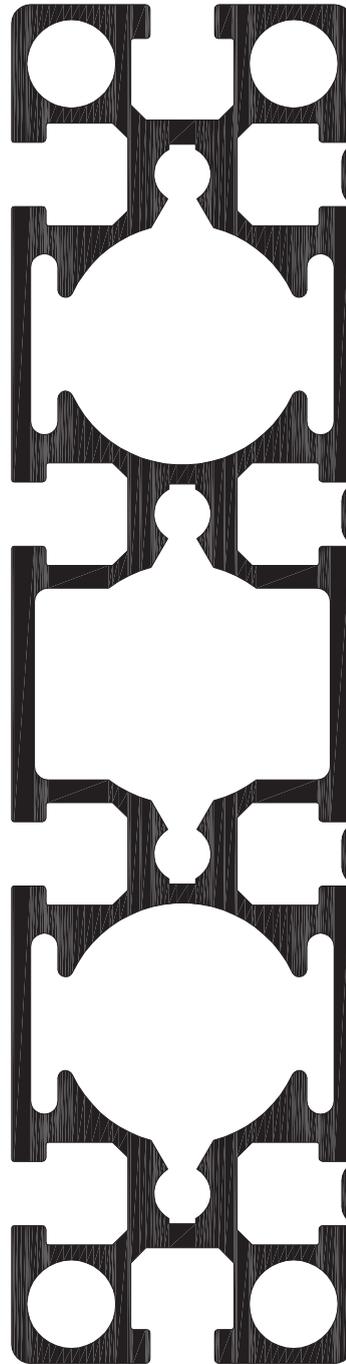
45 x 135 F
20.1087/0

Profile cross-sections

Profile series 45



90 x 135
20.1148/0



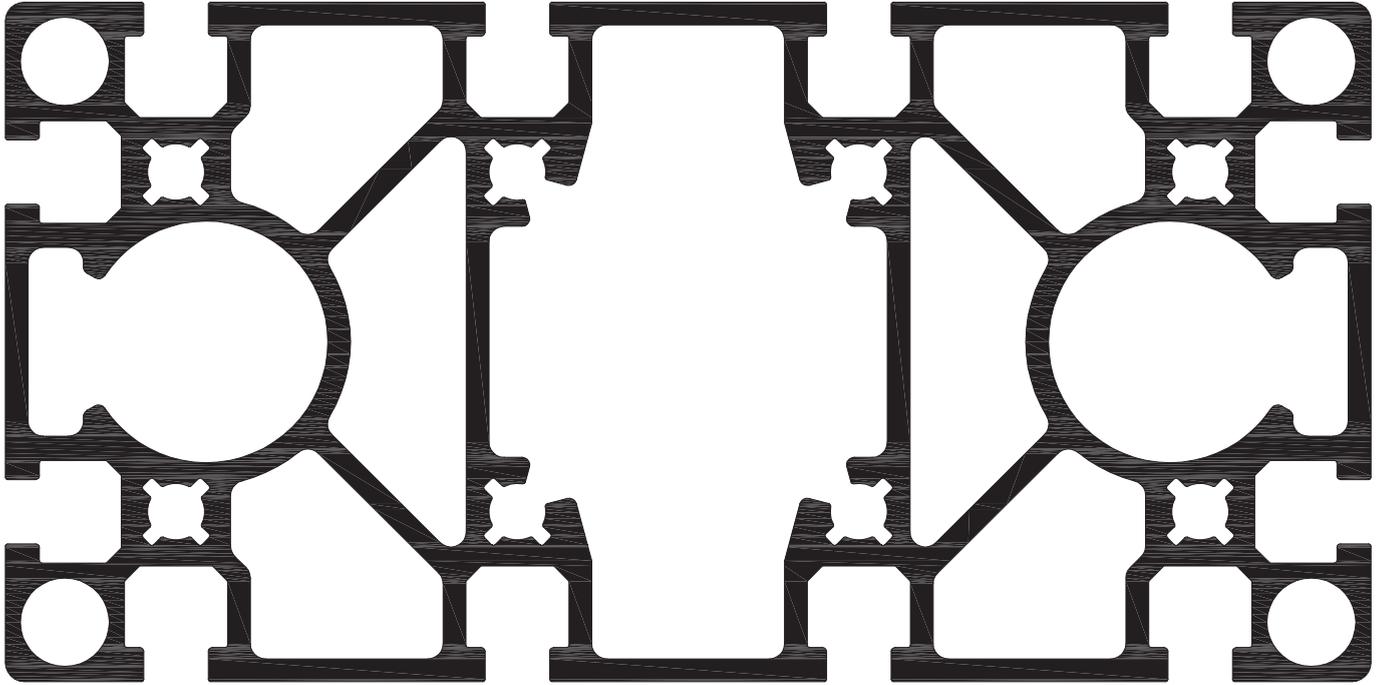
45 x 180 1G
20.1079/0



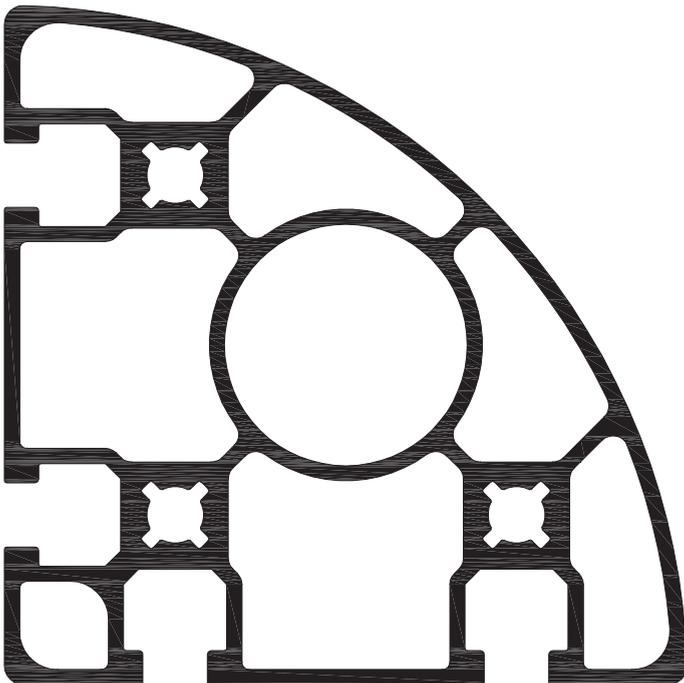
270 x 19
20.1077/0

Profile cross-sections

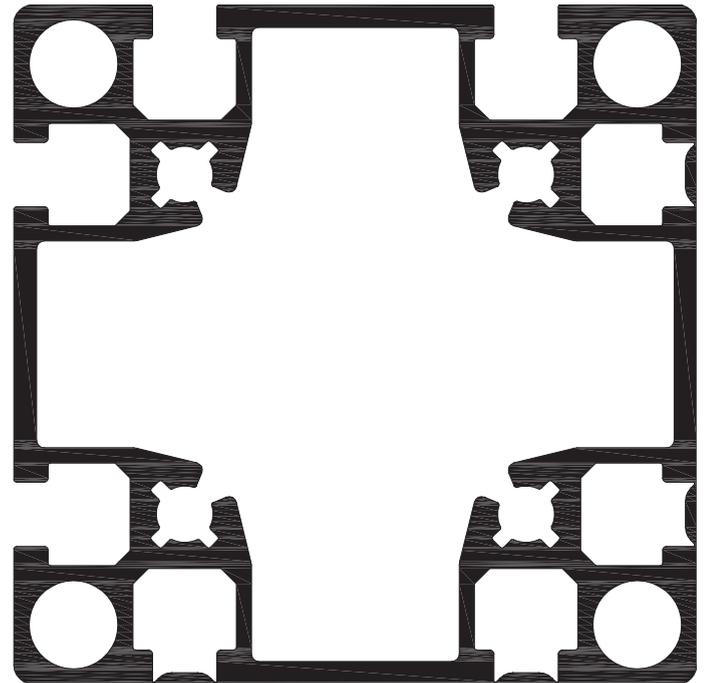
Profile series 45



90 x 180 S
20.1013/0



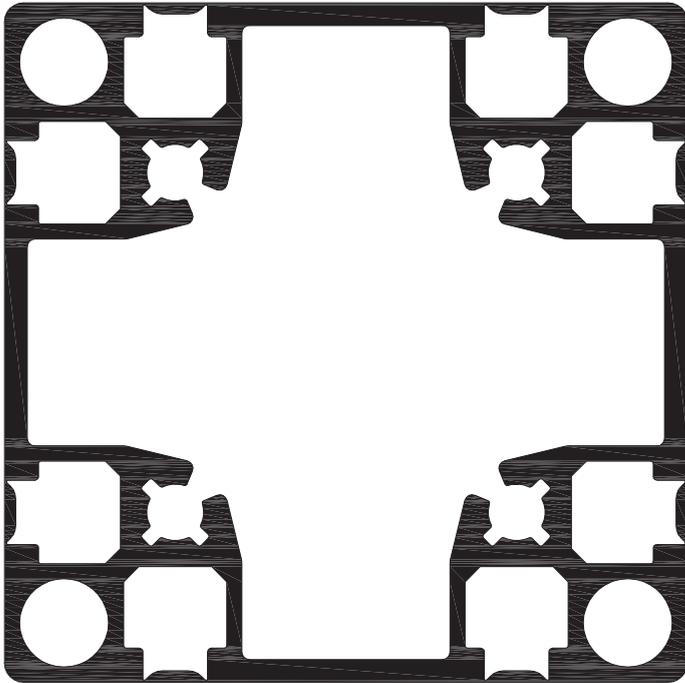
90 R 90°
20.1091/0



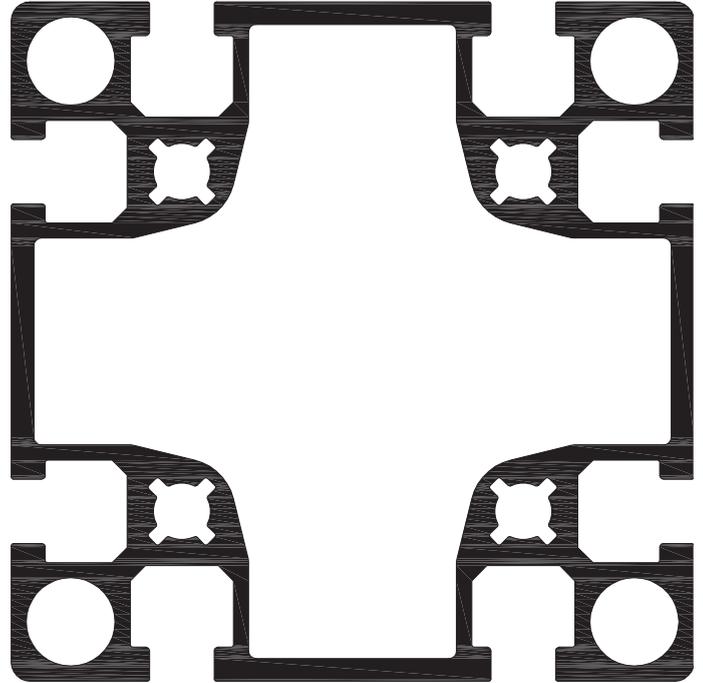
90 x 90 2G
20.1044/0

Profile cross-sections

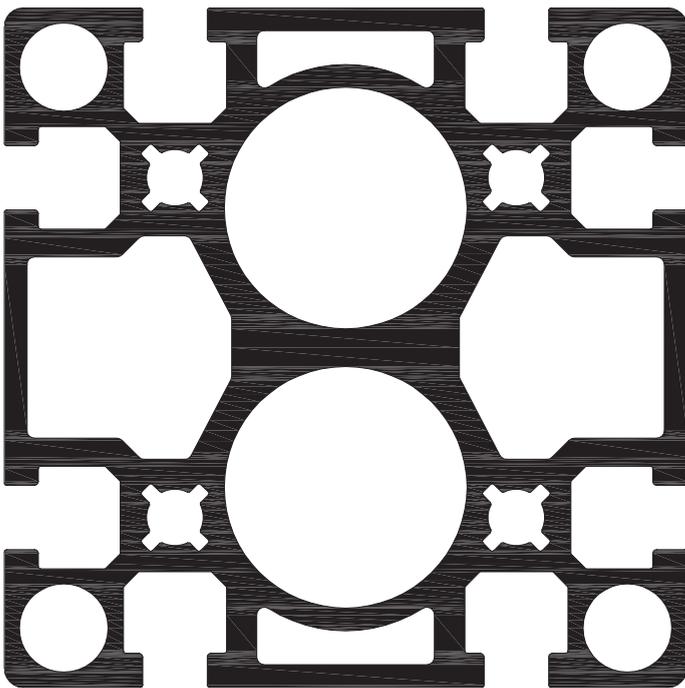
Profile series 45



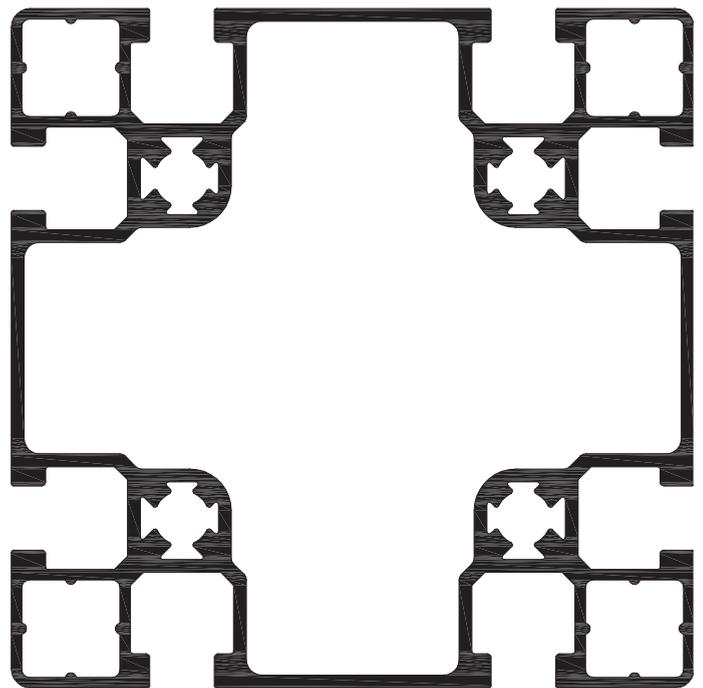
90 x 90 G
20.1082/0



90 x 90 L
20.1010/0



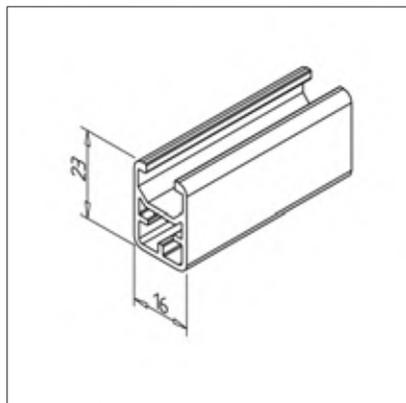
90 x 90 S
20.1019/0



90 x 90 UL
20.0999/0

Profile 23 x 16

Part No. 20.1115/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $I_x = 0.602 \text{ cm}^4$
- $I_y = 0.442 \text{ cm}^4$
- $w_x = 0.472 \text{ cm}^3$
- $w_y = 0.552 \text{ cm}^3$
- $IT = 0.483 \text{ cm}^4$
- Weight = 0.341 kg/m
- Bar length = 6 m
- Packing unit = 72 m

APPLICATIONS

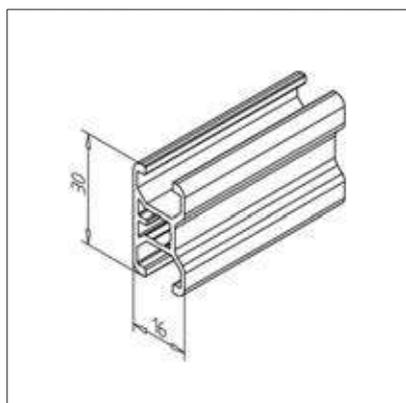
- Light constructions with protective hoods, covers, etc.

ASSEMBLY

- 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 16 x 30

Part No. 20.0983/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $I_x = 1.008 \text{ cm}^4$
- $I_y = 0.479 \text{ cm}^4$
- $w_x = 0.672 \text{ cm}^3$
- $w_y = 0.544 \text{ cm}^3$
- $IT = 1.488 \text{ cm}^4$
- Weight = 0.382 kg/m
- Bar length = 6 m
- Packing unit = 72 m

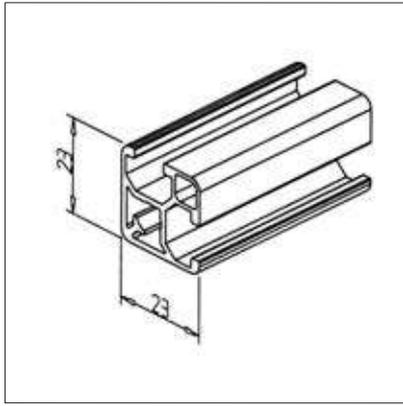
APPLICATIONS

- Light constructions with protective hoods, covers, etc.

ASSEMBLY

- 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 23



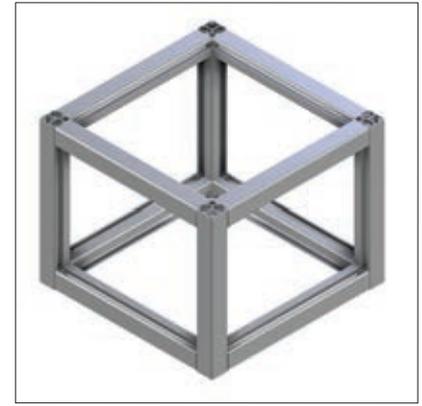
TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $I_x = 0.921 \text{ cm}^4$
- $I_y = 0.921 \text{ cm}^4$
- $w_x = 0.729 \text{ cm}^3$
- $w_y = 0.729 \text{ cm}^3$
- $IT = 0.539 \text{ cm}^4$
- Weight = 0.443 kg/m
- Bar length = 6 m
- Packing unit = 72 m



APPLICATIONS

- Light constructions with protective hoods, covers, etc.

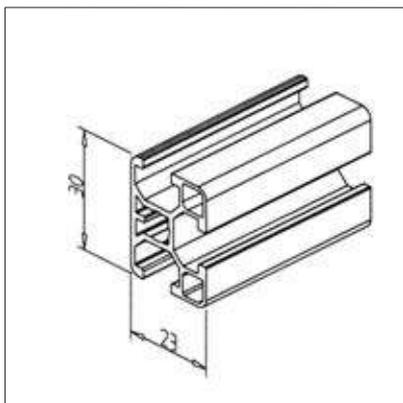


Part No. 20.1116/0

ASSEMBLY

- 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
- $I_x = 1.565 \text{ cm}^4$
- $I_y = 1.187 \text{ cm}^4$
- $w_x = 1.043 \text{ cm}^3$
- $w_y = 0.975 \text{ cm}^3$
- $IT = 0.658 \text{ cm}^4$
- Weight = 0.524 kg/m
- Bar length = 6 m
- Packing unit = 72 m



APPLICATIONS

- Light constructions with protective hoods, covers, etc.

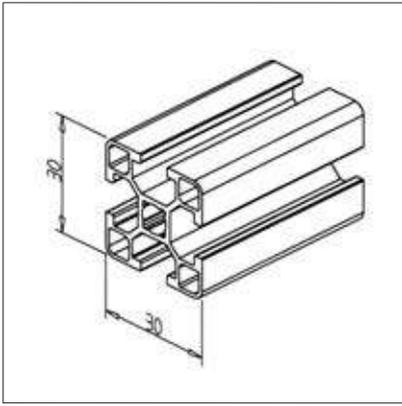


Part No. 20.1117/0

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

Profile 30 x 30



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $I_x = 2.133 \text{ cm}^4$
- $I_y = 2.133 \text{ cm}^4$
- $w_x = 1.422 \text{ cm}^3$
- $w_y = 1.422 \text{ cm}^3$
- $IT = 1.036 \text{ cm}^4$
- Weight = 0.652 kg/m
- Bar length = 6 m
- Packing unit = 54 m



APPLICATIONS

- Light constructions with protective hoods, covers, etc.

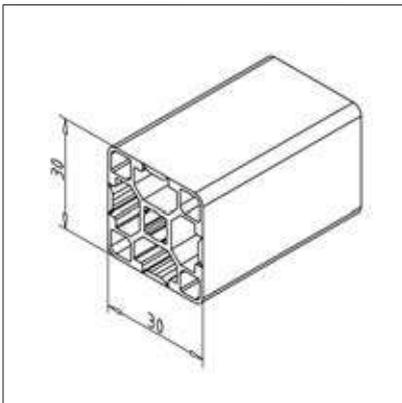
Part No. 20.1068/0



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

Profile 30 x 30 G



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $I_x = 2.554 \text{ cm}^4$
- $I_y = 2.554 \text{ cm}^4$
- $w_x = 1.702 \text{ cm}^3$
- $w_y = 1.702 \text{ cm}^3$
- $IT = 5.107 \text{ cm}^4$
- 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

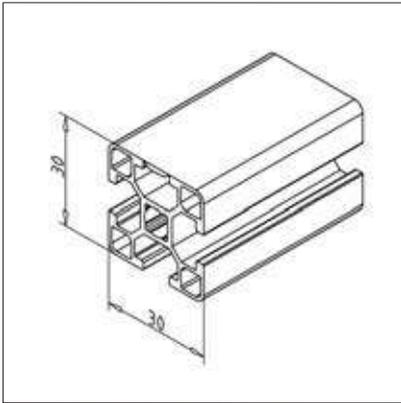
Part No. 20.1141/0



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

Profile 30 x 30 1G



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $I_x = 2.311 \text{ cm}^4$
- $I_y = 2.112 \text{ cm}^4$
- $w_x = 1.481 \text{ cm}^3$
- $w_y = 1.408 \text{ cm}^3$
- $IT = 4.423 \text{ cm}^4$
- Weight = 0.670 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

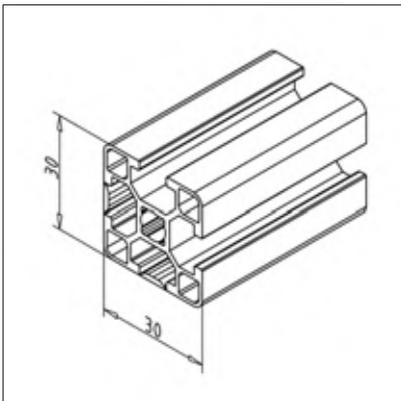


Part No. 20.1139/0

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

Profile 30 x 30 2G



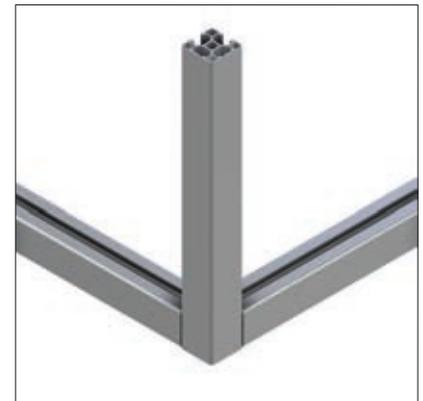
TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $I_x = 2.334 \text{ cm}^4$
- $I_y = 2.334 \text{ cm}^4$
- $w_x = 1.501 \text{ cm}^3$
- $w_y = 1.501 \text{ cm}^3$
- $IT = 4.631 \text{ cm}^4$
- 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



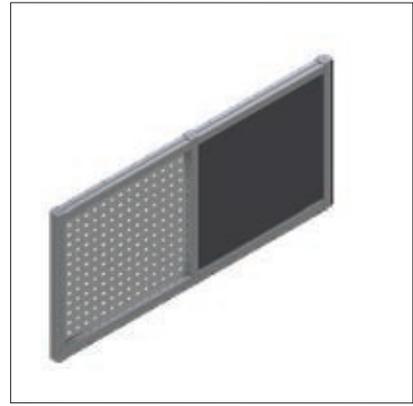
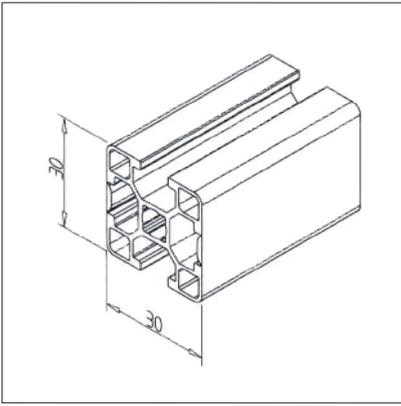
Part No. 20.1124/0

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

Profile 30 x 30 2GG

Part No. 20.1156/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $I_x = 2.113 \text{ cm}^4$
- $I_y = 2.532 \text{ cm}^4$
- $w_x = 1.409 \text{ cm}^3$
- $w_y = 1.688 \text{ cm}^3$
- $IT = 4.645 \text{ cm}^4$
- Weight = 0.689 kg/m
- Bar length = 6 m
- Packing unit = 54 m

APPLICATIONS

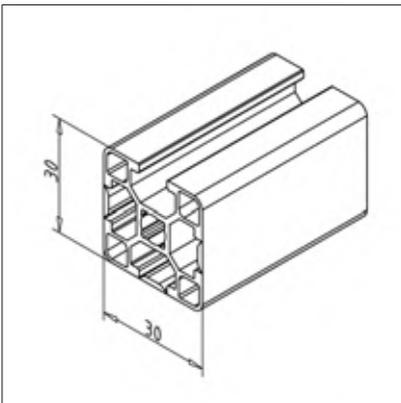
- Light constructions with protective hoods, covers, etc.
- Specifically for high hygiene requirements in the food industry, medical technology, bottling of beverages

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

Profile 30 x 30 3G

Part No. 20.1085/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $I_x = 2.321 \text{ cm}^4$
- $I_y = 2.537 \text{ cm}^4$
- $w_x = 1.493 \text{ cm}^3$
- $w_y = 1.691 \text{ cm}^3$
- $IT = 4.857 \text{ cm}^4$
- Weight = 0.722 kg/m
- Bar length = 6 m
- Packing unit = 54 m

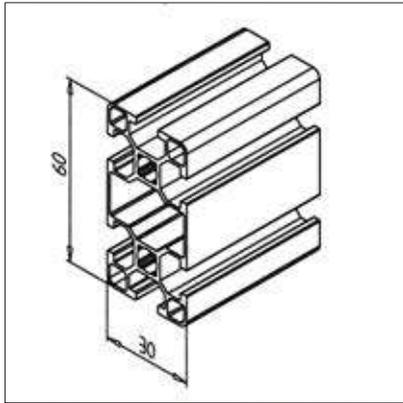
APPLICATIONS

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

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

Profile 30 x 60



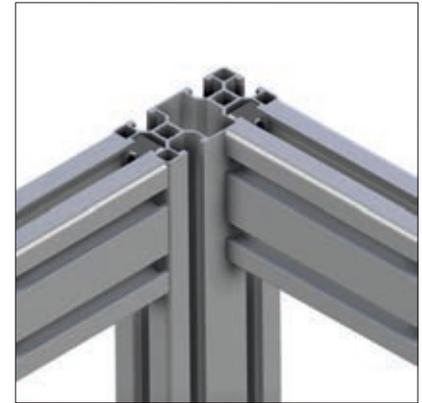
TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $I_x = 14.898 \text{ cm}^4$
- $I_y = 3.792 \text{ cm}^4$
- $w_x = 4.966 \text{ cm}^3$
- $w_y = 2.528 \text{ cm}^3$
- $IT = 7.192 \text{ cm}^4$
- Weight = 1.069 kg/m
- Bar length = 6 m
- Packing unit = 54 m



APPLICATIONS

- Light constructions with protective hoods, covers, etc.

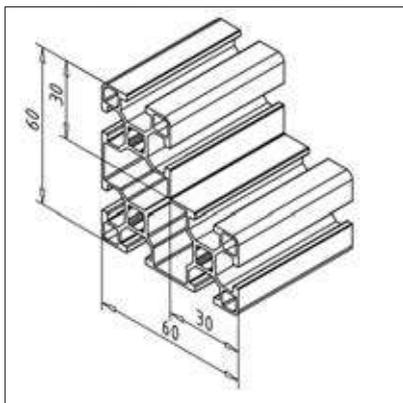


Part No. 20.0994/0

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

Profile 60 X 60 x 30



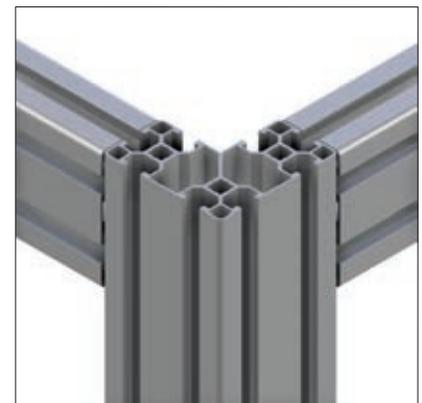
TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $I_x = 19.107 \text{ cm}^4$
- $I_y = 19.107 \text{ cm}^4$
- $w_x = 5.572 \text{ cm}^3$
- $w_y = 5.572 \text{ cm}^3$
- $IT = 38.198 \text{ cm}^4$
- Weight = 1.534 kg/m
- Bar length = 6 m
- Packing unit = 36 m



APPLICATIONS

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

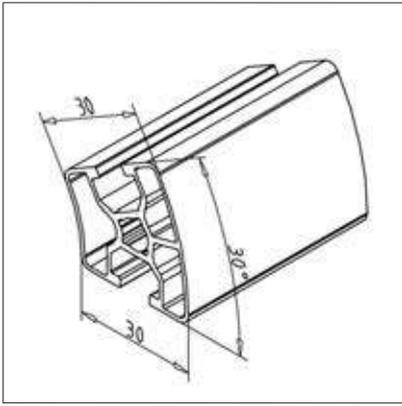


Part No. 20.0982/0

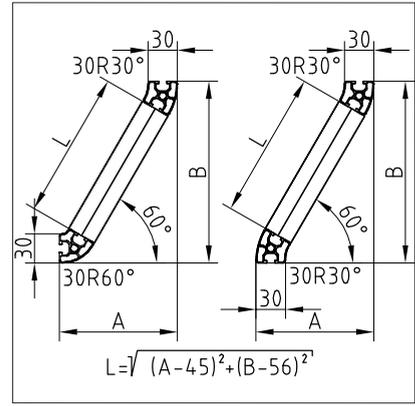
ASSEMBLY

- Power-lock fastener 30 / N 30
- Screw connection 30
- Angle 16 / 30
- Attaching accessories with sliding nut 30 M4 / M5 / M6 / M8
- Connecting plate 60x60x30 **part no. 21.0038/0**

Profile 30 R 30°



Part No. 20.1134/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $I_x = 1.939 \text{ cm}^4$
- $I_y = 1.909 \text{ cm}^4$
- $w_x = 0.982 \text{ cm}^3$
- $w_y = 1.006 \text{ cm}^3$
- $IT = 3.848 \text{ cm}^4$
- Weight = 0.601 kg/m
- Bar length = 6 m
- Packing unit = 72 m

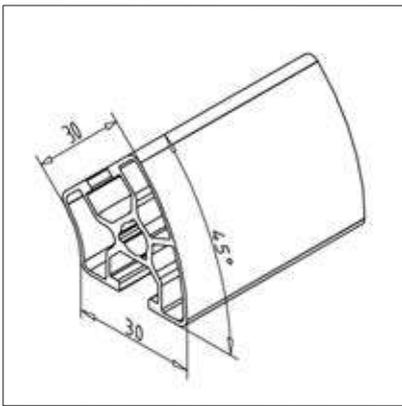
APPLICATIONS

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

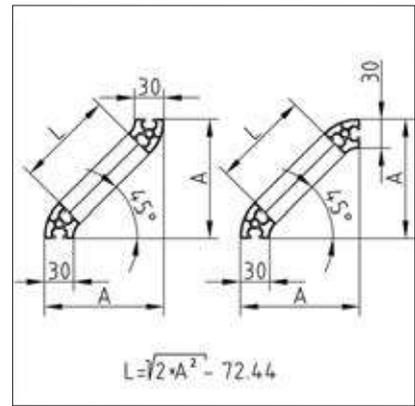
ASSEMBLY

- 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

Profile 30 R 45°



Part No. 20.1135/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $I_x = 1.909 \text{ cm}^4$
- $I_y = 1.812 \text{ cm}^4$
- $w_x = 0.924 \text{ cm}^3$
- $w_y = 0.951 \text{ cm}^3$
- $IT = 3.720 \text{ cm}^4$
- Weight = 0.601 kg/m
- Bar length = 6 m
- Packing unit = 72 m

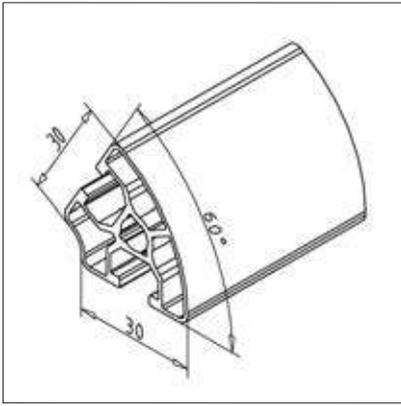
APPLICATIONS

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

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

Profile 30 R 60°



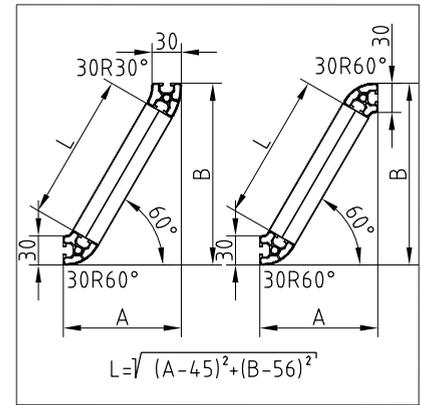
TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $I_x = 1.847 \text{ cm}^4$
- $I_y = 1.721 \text{ cm}^4$
- $w_x = 0.904 \text{ cm}^3$
- $w_y = 0.951 \text{ cm}^3$
- $IT = 3.568 \text{ cm}^4$
- Weight = 0.590 kg/m
- Bar length = 6 m
- Packing unit = 72 m



APPLICATIONS

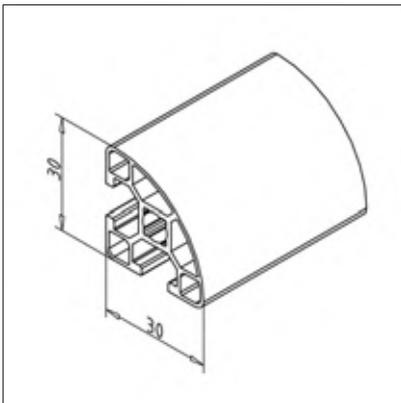
- Weight optimized constructions
- Tables
- Framework constructions
- Display windows, showcases
- As cross beam:
Calculate dimension L of the intermediate support according to calculating formular



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

Profile 30 R 90°



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $I_x = 1.847 \text{ cm}^4$
- $I_y = 1.721 \text{ cm}^4$
- $w_x = 0.904 \text{ cm}^3$
- $w_y = 0.951 \text{ cm}^3$
- $IT = 3.255 \text{ cm}^4$
- Weight = 0.580 kg/m
- Bar length = 6 m
- Packing unit = 54 m



APPLICATIONS

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

Part No. 20.1125/0

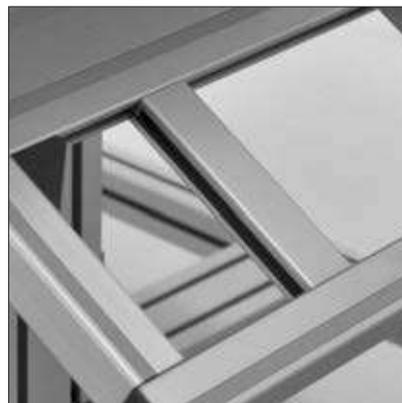
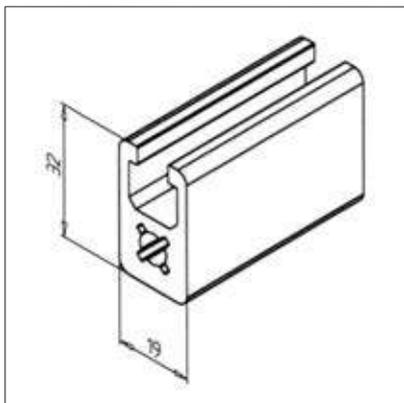


ASSEMBLY

- Power-lock fastener 30 / N 30
- Mitre connector 30
- Screw connection 30
- Angle 16 / 30 / 30 R 90°
- Attaching accessories with sliding nut 30 M4 / M5 / M6 / M8

Profile 19 x 32

Part No. 20.1000/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $I_x = 3.102 \text{ cm}^4$
- $I_y = 1.526 \text{ cm}^4$
- $w_x = 1.651 \text{ cm}^3$
- $w_y = 1.606 \text{ cm}^3$
- $IT = 1.671 \text{ cm}^4$
- Weight = 0.987 kg/m
- Bar length = 6 m
- Packing unit = 60 m

APPLICATIONS

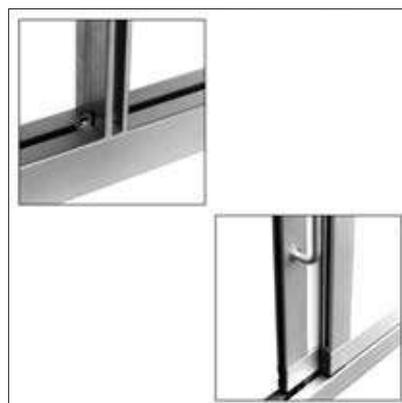
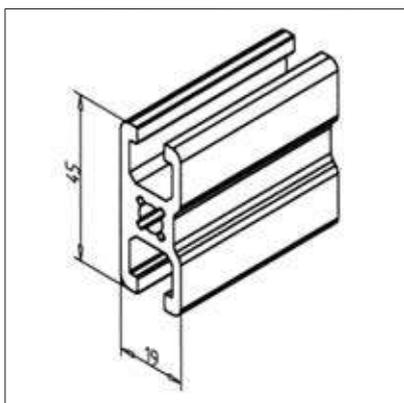
- Light constructions
- Handle bars
- Carrier for initiators, switches
- Frames

ASSEMBLY

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

Profile 19 x 45

Part No. 20.1001/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $I_x = 6.173 \text{ cm}^4$
- $I_y = 1.843 \text{ cm}^4$
- $w_x = 2.743 \text{ cm}^3$
- $w_y = 1.836 \text{ cm}^3$
- $IT = 1.435 \text{ cm}^4$
- Weight = 1.101 kg/m
- Bar length = 6 m
- Packing unit = 60 m

APPLICATIONS

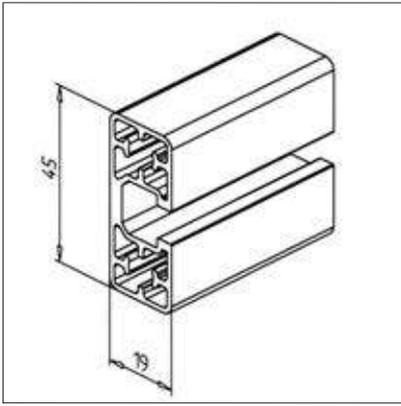
- Bracing, doors
- Guard units
- Weight optimized constructions
- Frames

ASSEMBLY

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

Profile 45 x 19

Part No. 20.0993/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $I_x = 6.106 \text{ cm}^4$
- $I_y = 1.384 \text{ cm}^4$
- $w_x = 2.71 \text{ cm}^3$
- $w_y = 1.45 \text{ cm}^3$
- $IT = 7.490 \text{ cm}^4$
- Weight = 0.814 kg/m
- Bar length = 6 m
- Packing unit = 72 m

APPLICATIONS

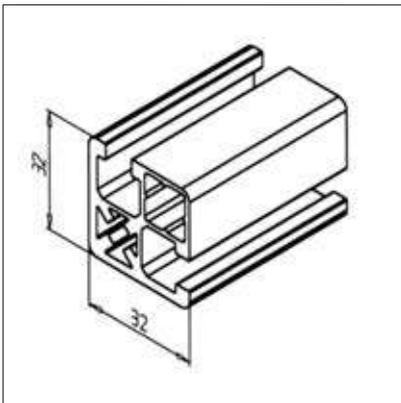
- Weight-optimized constructions
- Light constructions
- Light sliding windows
- Support plates
- Base plates

ASSEMBLY

- Side 19 with MiniTec power lock fastener, **part no. 21.0818/0**
- 45th page with angle mounting bracket, profile connector N or connector

Profile 32 x 32 UL

Part No. 20.1064/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $I_x = 4.1 \text{ cm}^4$
- $I_y = 4.1 \text{ cm}^4$
- $w_x = 2.267 \text{ cm}^3$
- $w_y = 2.267 \text{ cm}^3$
- $IT = 3.260 \text{ cm}^4$
- Weight = 1.052 kg/m
- Bar length = 6 m
- Packing unit = 48 m

APPLICATIONS

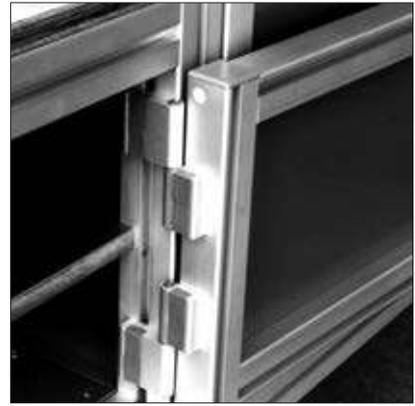
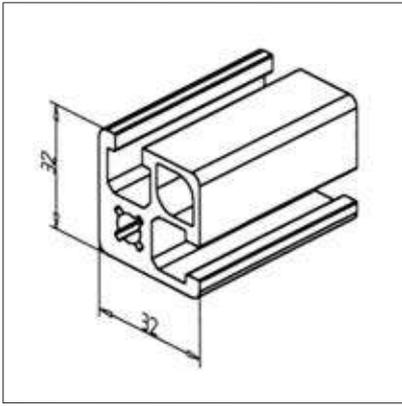
- Weight-optimized constructions
- End table
- Swivel, lifting and sliding doors
- Bracings

ASSEMBLY

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

Profile 32 x 32 F

Part No. 20.1054/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $I_x = 4.825 \text{ cm}^4$
- $I_y = 4.825 \text{ cm}^4$
- $w_x = 2.703 \text{ cm}^3$
- $w_y = 2.703 \text{ cm}^3$
- $IT = 1.426 \text{ cm}^4$
- Weight = 1.288 kg/m
- Bar length = 6 m
- Packing unit = 48 m

APPLICATIONS

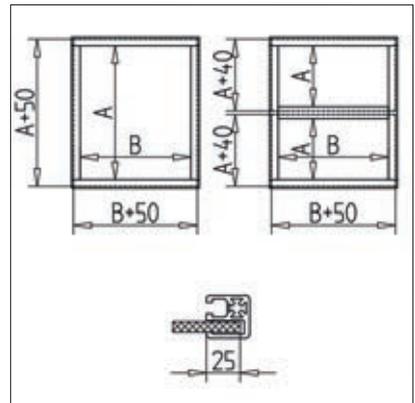
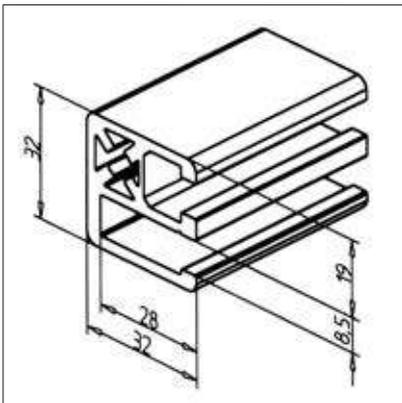
- Weight optimized constructions
- End table
- Swivel, lifting and sliding doors
- Bracings

ASSEMBLY

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

Clamp profile 32 x 32

Part No. 20.1070/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $I_x = 5.024 \text{ cm}^4$
- $I_y = 4.418 \text{ cm}^4$
- $w_x = 3.041 \text{ cm}^3$
- $w_y = 2.398 \text{ cm}^3$
- $IT = 2.322 \text{ cm}^4$
- Weight = 1.211 kg/m
- Bar length = 6 m
- Packing unit = 48 m

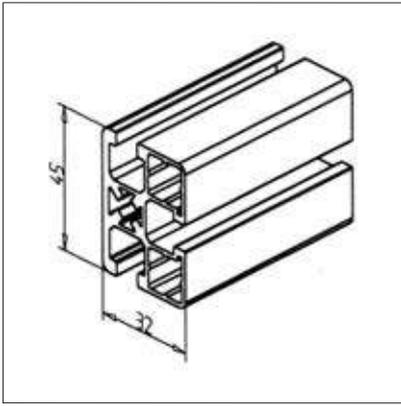
APPLICATIONS

- 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 guard units, 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

ASSEMBLY

- MiniTec power-lock fastener; no bores required
- No release of panel element corners required
- Pre-assembly 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 insert seal or < Mount 4 mm with spacer profile and additionally suitable plug-in seal on the opposite side

Profile 45 x 32 UL



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $I_x = 8.292 \text{ cm}^4$
- $I_y = 5.178 \text{ cm}^4$
- $w_x = 3.685 \text{ cm}^3$
- $w_y = 2.815 \text{ cm}^3$
- $IT = 5.516 \text{ cm}^4$
- Weight = 1.257 kg/m
- Bar length = 6 m
- Packing unit = 48 m



APPLICATIONS

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

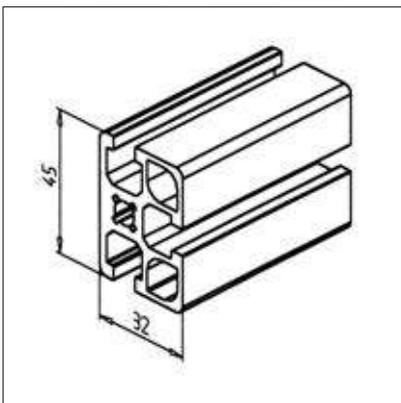


Part No. 20.1065/0

ASSEMBLY

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

Profile 45 x 32 F



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $I_x = 10.189 \text{ cm}^4$
- $I_y = 6.499 \text{ cm}^4$
- $w_x = 4.528 \text{ cm}^3$
- $w_y = 3.762 \text{ cm}^3$
- $IT = 2.494 \text{ cm}^4$
- 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



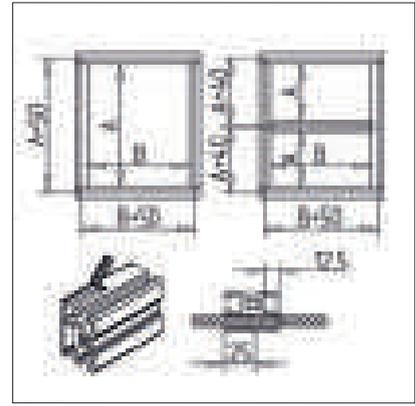
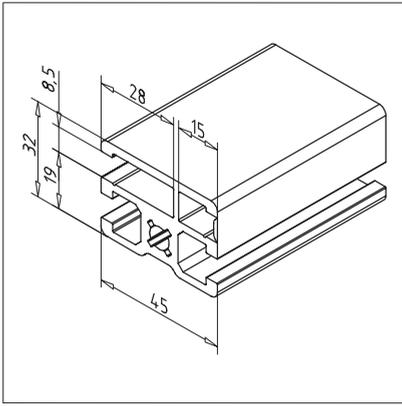
Part No. 20.1055/0

ASSEMBLY

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

Clamp profile 45 x 32

Part No. 20.1053/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $I_x = 6.465 \text{ cm}^4$
- $I_y = 9.521 \text{ cm}^4$
- $w_x = 3.999 \text{ cm}^3$
- $w_y = 4.119 \text{ cm}^3$
- $IT = 15.996 \text{ cm}^4$
- Weight = 1.615 kg/m
- Bar length = 6 m
- Packing unit = 48 m

APPLICATIONS

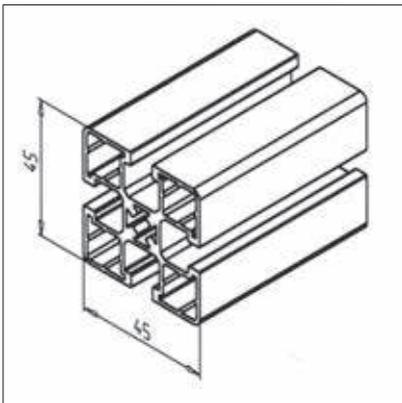
- In the case of larger guard units, intermediate struts made of clamping profile 45 x 32 must be used in order to ensure adequate safety against pushing out of the surface elements; To do this, remove cover strips on clamping profile 45 x 32 mm
- All types of safety equipment
- For clamping of surface 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 insert seal or < Mount 4 mm with spacer profile and additionally suitable plug-in seal on the opposite side

Profile 45 x 45 UL

Part No. 20.1063/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $I_x = 9.953 \text{ cm}^4$
- $I_y = 9.953 \text{ cm}^4$
- $w_x = 4.423 \text{ cm}^3$
- $w_y = 4.423 \text{ cm}^3$
- $IT = 12.256 \text{ cm}^4$
- Weight = 1.445 kg/m
- Bar length = 6 m
- Packing unit = 54 m

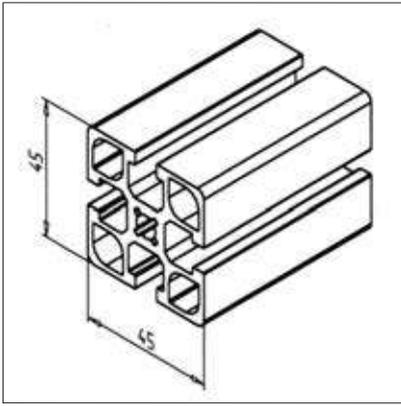
APPLICATIONS

- Weight-optimized constructions
- All kinds of constructions

ASSEMBLY

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

Profile 45 x 45 F



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $I_x = 14.172 \text{ cm}^4$
- $I_y = 14.172 \text{ cm}^4$
- $w_x = 6.298 \text{ cm}^3$
- $w_y = 6.298 \text{ cm}^3$
- $IT = 13.376 \text{ cm}^4$
- Weight = 2.005 kg/m
- Bar length = 6 m
- Packing unit = 36 m



APPLICATIONS

- All kinds of constructions

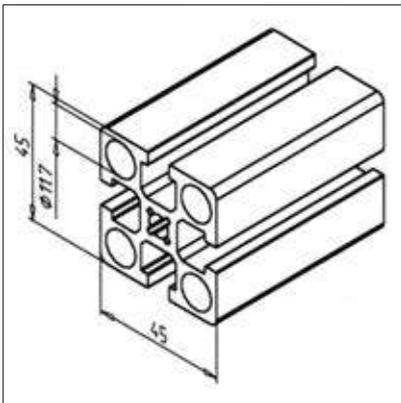


Part No. 20.1033/0

ASSEMBLY

- 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
- $I_x = 15.934 \text{ cm}^4$
- $I_y = 15.934 \text{ cm}^4$
- $w_x = 7.081 \text{ cm}^3$
- $w_y = 7.081 \text{ cm}^3$
- $IT = 13.416 \text{ cm}^4$
- Weight = 2.205 kg/m
- Bar length = 6 m
- Packing unit = 36 m



APPLICATIONS

- All kinds of constructions
- Compressed air piping
- The $\varnothing 11.7 \text{ mm}$ bores can be enlarged to G 1/4 to hold screw plugs or pneumatic connections

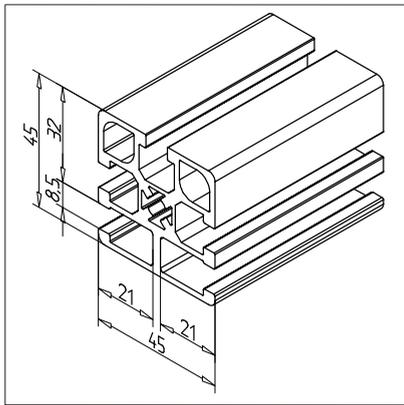


Part No. 20.1006/0

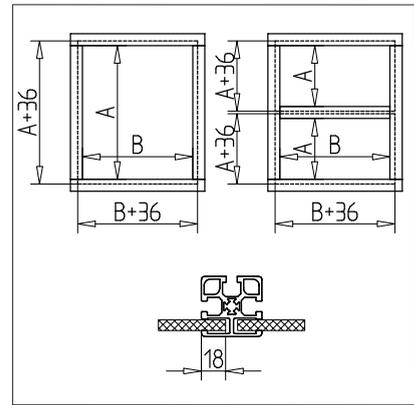
ASSEMBLY

- MiniTec power-lock fastener
- Angle 25 / 45, bolt-fastener, screw connection
- Lateral connections G 1/8" direct into the profile

Clamp profile 45 x 45 F



Part No. 20.1147/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $I_x = 13.521 \text{ cm}^4$
- $I_y = 12.308 \text{ cm}^4$
- $w_x = 5.836 \text{ cm}^3$
- $w_y = 5.470 \text{ cm}^3$
- $IT = 7.163 \text{ cm}^4$
- Weight = 1.850 kg/m
- Bar length = 6 m
- Packing unit = 36 m

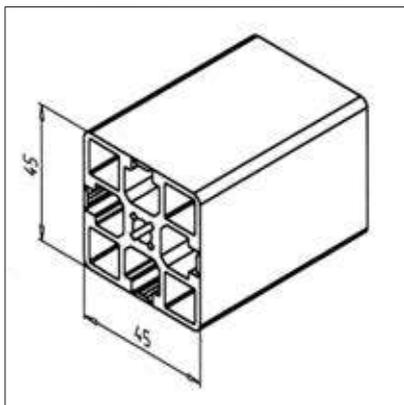
APPLICATIONS

- 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

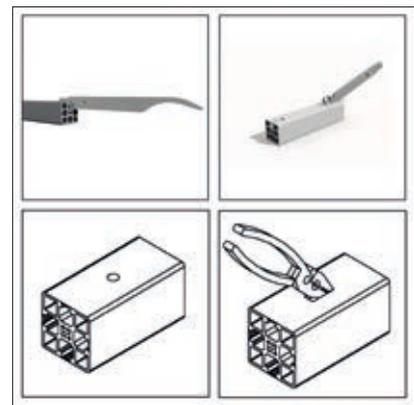
ASSEMBLY

- 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 insert seal or < Mount 4 mm with spacer profile and additionally suitable plug-in seal on the opposite side

Profile 45 x 45 G



Part No. 20.1028/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $I_x = 14.087 \text{ cm}^4$
- $I_y = 14.087 \text{ cm}^4$
- $w_x = 6.261 \text{ cm}^3$
- $w_y = 6.261 \text{ cm}^3$
- $IT = 59.182 \text{ cm}^4$
- Weight = 1.997 kg/m
- Bar length = 6 m
- Packing unit = 36 m

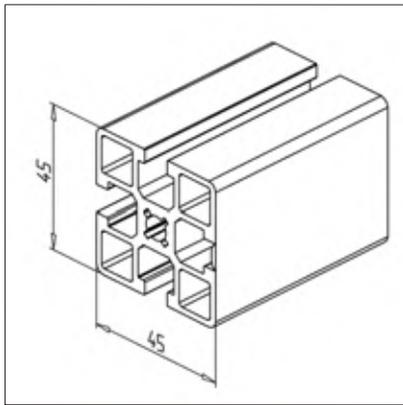
APPLICATIONS

- 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

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

Profile 45 x 45 1G



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $I_x = 13.617 \text{ cm}^4$
- $I_y = 14.091 \text{ cm}^4$
- $w_x = 6.052 \text{ cm}^3$
- $w_y = 6.262 \text{ cm}^3$
- $IT = 26.755 \text{ cm}^4$
- 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

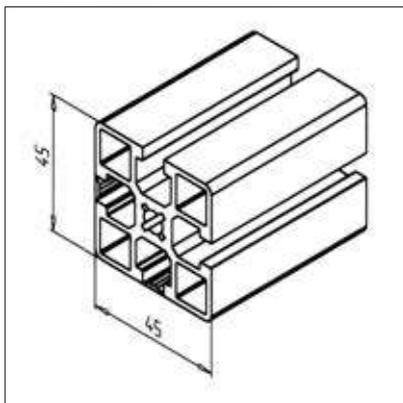
Part No. 20.1126/0



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

Profile 45 x 45 2G



TECHN. DATA / ITEMS SUPPLIED

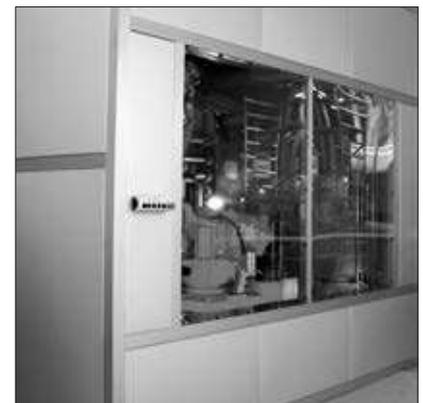
- Aluminium, extruded, anodized E6/EV1
- $I_x = 13.549 \text{ cm}^4$
- $I_y = 13.549 \text{ cm}^4$
- $w_x = 5.938 \text{ cm}^3$
- $w_y = 5.938 \text{ cm}^3$
- $IT = 30.578 \text{ cm}^4$
- Weight = 1.925 kg/m
- Bar length = 6 m
- Packing unit = 36 m



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

Part No. 20.1072/0

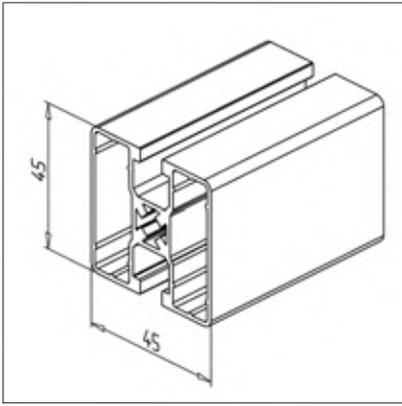


ASSEMBLY

- 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

Profile 45 x 45 UL 2GG

Part No. 20.1122/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $I_x = 9.974 \text{ cm}^4$
- $I_y = 8.553 \text{ cm}^4$
- $w_x = 4.432 \text{ cm}^3$
- $w_y = 3.801 \text{ cm}^3$
- $IT = 18.527 \text{ cm}^4$
- Weight = 1.254 kg/m
- Bar length = 6 m
- Packing unit = 54 m

APPLICATIONS

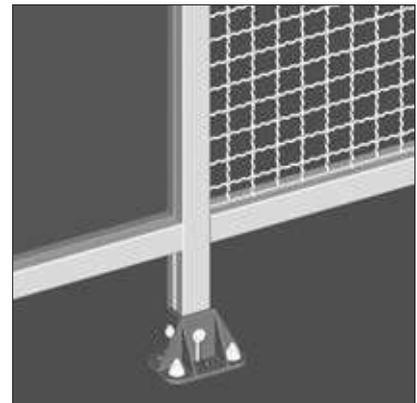
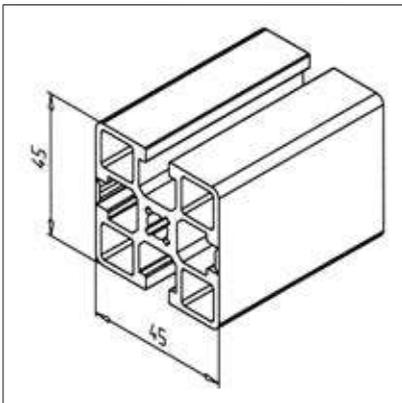
- Weight-optimized constructions
- All types of constructions, specifically for high hygiene requirements in the food industry, medical technology, bottling of beverages
- Silicon sealings for profile connections on request

ASSEMBLY

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

Profile 45 x 45 2GG

Part No. 20.1099/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $I_x = 13.069 \text{ cm}^4$
- $I_y = 14.045 \text{ cm}^4$
- $w_x = 5.808 \text{ cm}^3$
- $w_y = 6.242 \text{ cm}^3$
- $IT = 30.130 \text{ cm}^4$
- Weight = 1.925 kg/m
- Bar length = 6 m
- Packing unit = 36 m

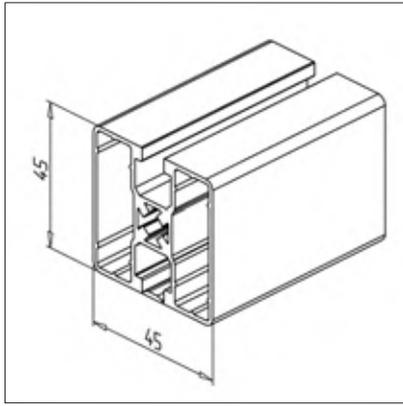
APPLICATIONS

- 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

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

Profile 45 x 45 UL 3G



Part No. 20.1123/0

TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $I_x = 10.44 \text{ cm}^4$
- $I_y = 8.557 \text{ cm}^4$
- $w_x = 4.64 \text{ cm}^3$
- $w_y = 3.803 \text{ cm}^3$
- $IT = 18.997 \text{ cm}^4$
- Weight = 1.281 kg/m
- Bar length = 6 m
- Packing unit = 54 m

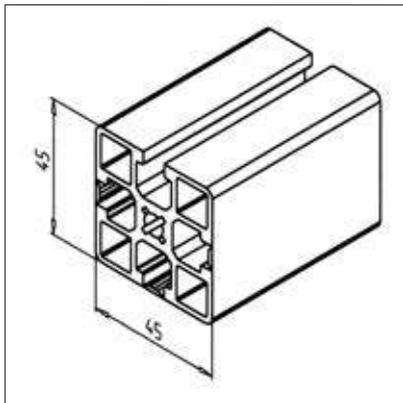
APPLICATIONS

- 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

ASSEMBLY

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

Profile 45 x 45 3G



Part No. 20.1048/0

TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $I_x = 13.554 \text{ cm}^4$
- $I_y = 14.049 \text{ cm}^4$
- $w_x = 5.941 \text{ cm}^3$
- $w_y = 6.244 \text{ cm}^3$
- $IT = 43.247 \text{ cm}^4$
- Weight = 1.953 kg/m
- Bar length = 6 m
- Packing unit = 36 m

APPLICATIONS

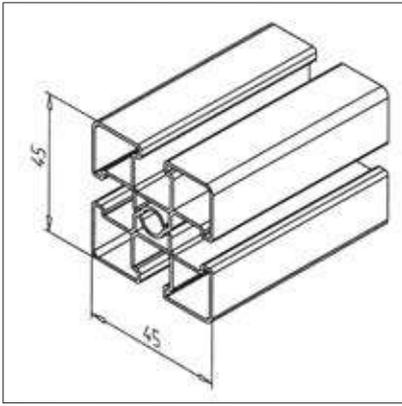
- All types of constructions, specifically for high hygiene requirements in the food industry, medical technology, bottling of beverages
- To close open grooves with the cover profile L **part no. 20.1021/0**
- Silicon sealings for profile connections on request

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

Profile 45 x 45 stainless

Part No. 20.2000/0



TECHN. DATA / ITEMS SUPPLIED

- Stainless steel, Rolled, bright
- $I_x = 6.47 \text{ cm}^4$
- $I_y = 6.47 \text{ cm}^4$
- $w_x = 2.88 \text{ cm}^3$
- $w_y = 2.88 \text{ cm}^3$
- $IT = 13.278 \text{ cm}^4$
- Material: WN DIN 1.4301(X5 Cr Ni 18-10, SUS 304)
- Weight = 2.750 kg/m
- Bar length = 6 m
- Packing unit = 24 m

APPLICATIONS

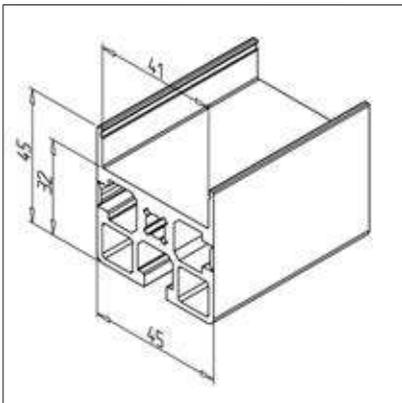
- Food and beverage industry
- Outdoor constructions
- Chemical industry
- Pharmaceutical industry
- High temperatures

ASSEMBLY

- Power-lock fastener H, **part no. 21.1018/1**
- Mounting angle VA, T-sheet VA or angle sheet VA
- Screws M8, stainless

Profile 45 X 45 R

Part No. 20.1046/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $I_x = 8.296 \text{ cm}^4$
- $I_y = 12.997 \text{ cm}^4$
- $w_x = 3.247 \text{ cm}^3$
- $w_y = 5.776 \text{ cm}^3$
- $IT = 17.332 \text{ cm}^4$
- Weight = 1.711 kg/m
- Bar length = 6 m
- Packing unit = 36 m

APPLICATIONS

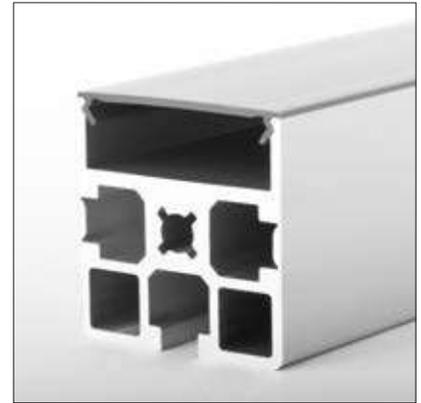
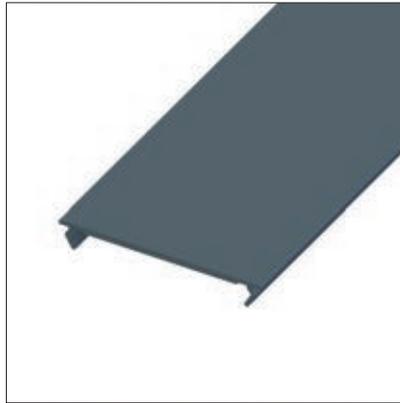
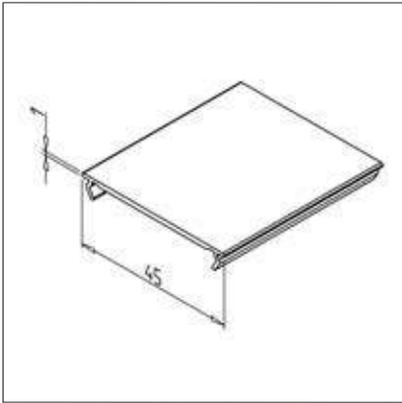
- Combination of construction element and:
- Cable duct
- Guiding groove for belt conveyor
- Storage rail
- Guide for serpentine power chains
- For the manufacture of miniature roller tracks
- For use with the following roll carriers:
roll carrier 45 x 45R with cover **part no. 22.1151/0**
Roller carrier 45 x 45R with SF cover **part no. 22.1152/0**

ASSEMBLY

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

Cover profile 45 x 45 R

Part No. 20.1037/0



TECHN. DATA / ITEMS SUPPLIED

- PVC, extruded, grey
- Weight = 0.110 kg/m
- Bar length = 2 m

APPLICATIONS

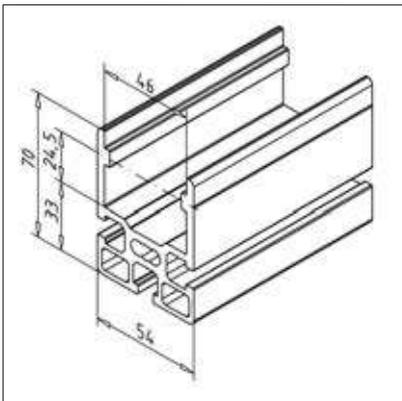
- Covering of profiles 45 x 45 R

ASSEMBLY

- Snaps onto profile

Profile height adjustment

Part No. 20.1143/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $I_x = 40.251 \text{ cm}^4$
- $I_y = 39.822 \text{ cm}^4$
- $w_x = 9.624 \text{ cm}^3$
- $w_y = 14.749 \text{ cm}^3$
- $IT = 80.08 \text{ cm}^4$
- Weight = 2.940 kg/m
- Bar length = 6 m
- Packing unit = 24 m

APPLICATIONS

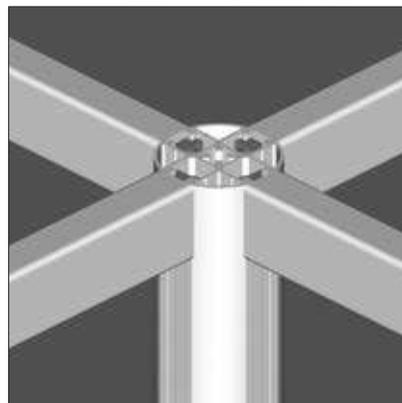
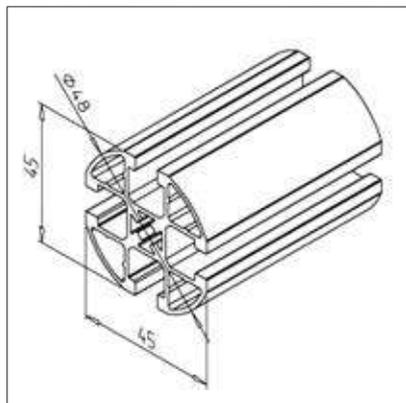
- Height adjustment
- Telescopic applications

ASSEMBLY

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

Profile 45 R4

Part No. 20.1120/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $I_x = 8.163 \text{ cm}^4$
- $I_y = 8.163 \text{ cm}^4$
- $w_x = 3.628 \text{ cm}^3$
- $w_y = 3.628 \text{ cm}^3$
- $IT = 16.200 \text{ cm}^4$
- Weight = 1.405 kg/m
- Bar length = 6 m
- Packing unit = 48 m

APPLICATIONS

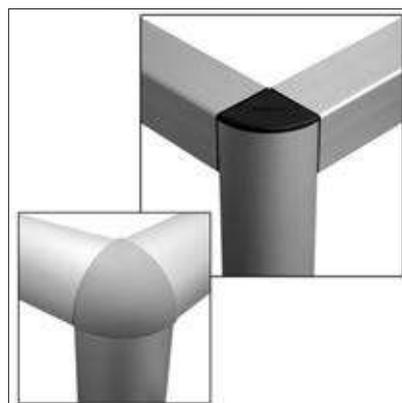
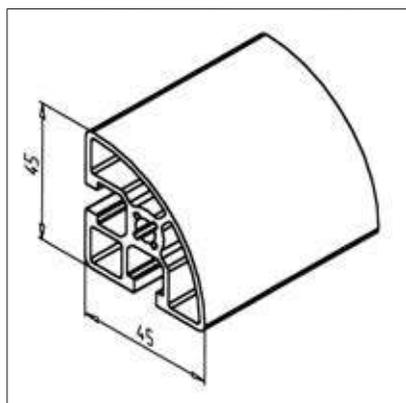
- Weight-optimized constructions
- Handrail
- Connection of profiles 19
- Handles with different length for doors and drawers

ASSEMBLY

- MiniTec power-lock fastener
- Screw connection
- Mounting angle 19 GD-Z, part no. 21.2078/0

Profile 45 R 90°

Part No. 20.1069/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $I_x = 9.138 \text{ cm}^4$
- $I_y = 9.138 \text{ cm}^4$
- $w_x = 3.581 \text{ cm}^3$
- $w_y = 3.581 \text{ cm}^3$
- $IT = 14.456 \text{ cm}^4$
- Weight = 1.478 kg/m
- Bar length = 6 m
- Packing unit = 48 m

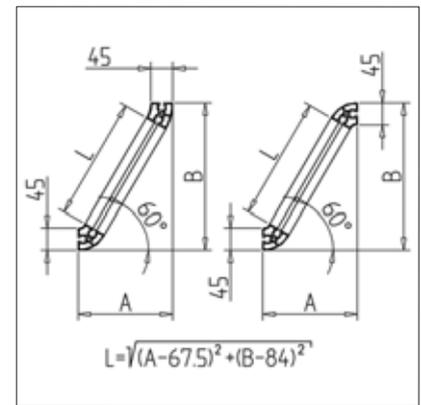
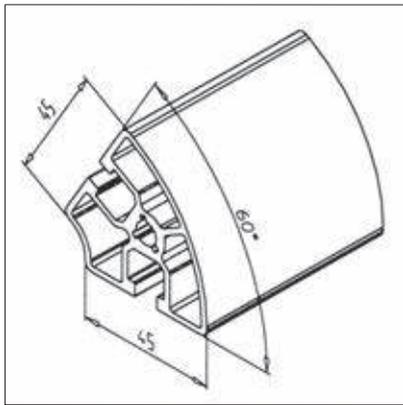
APPLICATIONS

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

ASSEMBLY

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

Profile 45 R 60°



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $I_x = 11.446 \text{ cm}^4$
- $I_y = 10.28 \text{ cm}^4$
- $w_x = 3.667 \text{ cm}^3$
- $w_y = 3.752 \text{ cm}^3$
- $IT = 21.560 \text{ cm}^4$
- Weight = 1.575 kg/m
- Bar length = 6 m
- Packing unit = 48 m

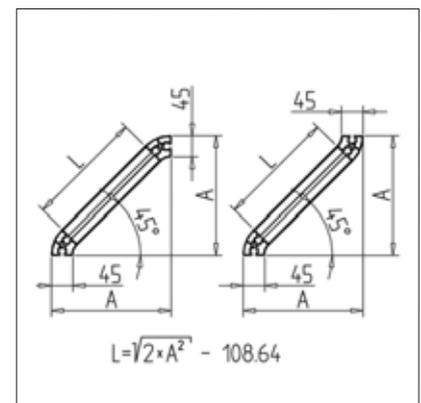
APPLICATIONS

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

ASSEMBLY

- MiniTec power-lock fastener
- Bolt connector

Profile 45 R 45°



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $I_x = 12.457 \text{ cm}^4$
- $I_y = 11.296 \text{ cm}^4$
- $w_x = 3.976 \text{ cm}^3$
- $w_y = 3.837 \text{ cm}^3$
- $IT = 24.184 \text{ cm}^4$
- 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 formular

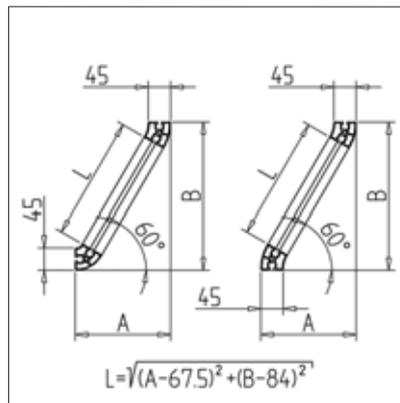
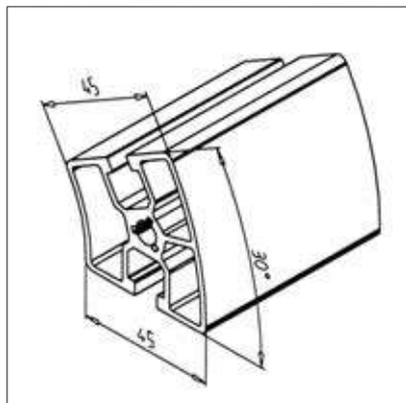
ASSEMBLY

- MiniTec power-lock fastener
- Bolt connector

Part No. 20.1095/0

Profile 45 R 30°

Part No. 20.1094/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $I_x = 12.138 \text{ cm}^4$
- $I_y = 11.006 \text{ cm}^4$
- $w_x = 4.018 \text{ cm}^3$
- $w_y = 3.883 \text{ cm}^3$
- $IT = 25.698 \text{ cm}^4$
- Weight = 1.626 kg/m
- Bar length = 6 m
- Packing unit = 48 m

APPLICATIONS

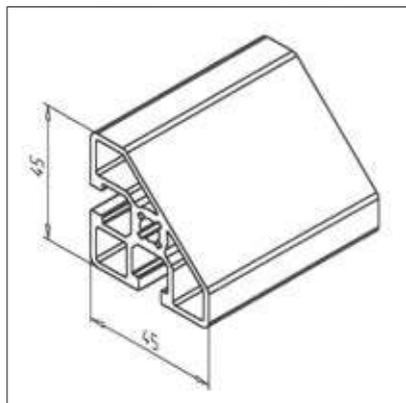
- Angled enclosures
- Tables
- Framework constructions
- Display windows, showcases
- As cross beam:
Calculate dimension L of the intermediate support according to calculating formular

ASSEMBLY

- MiniTec power-lock fastener
- Bolt connector

Profile 45/45°

Part No. 20.1029/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $I_x = 8.626 \text{ cm}^4$
- $I_y = 8.626 \text{ cm}^4$
- $w_x = 3.315 \text{ cm}^3$
- $w_y = 3.315 \text{ cm}^3$
- $IT = 10.580 \text{ cm}^4$
- Weight = 1.443 kg/m
- Bar length = 6 m
- Packing unit = 48 m

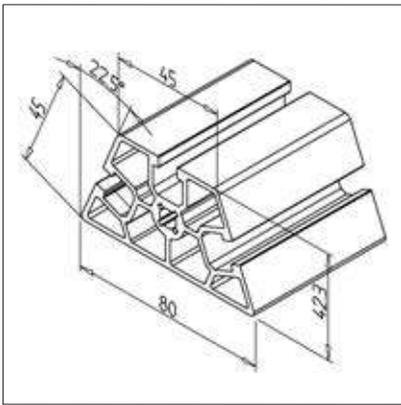
APPLICATIONS

- Weight optimized constructions
- Tables
- Framework constructions
- Bracings

ASSEMBLY

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

Profile 45/22.5°



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $I_x = 14.506 \text{ cm}^4$
- $I_y = 33.432 \text{ cm}^4$
- $w_x = 7.934 \text{ cm}^3$
- $w_y = 8.515 \text{ cm}^3$
- $IT = 42.880 \text{ cm}^4$
- Weight = 2.225 kg/m
- Bar length = 6 m
- Packing unit = 36 m



APPLICATIONS

- Guard units
- Tables
- Connection of construction elements at an angle of 45°
- Bracings

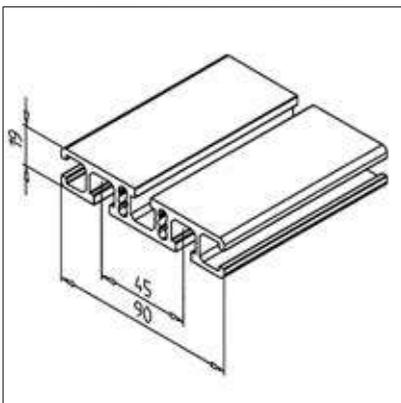
Part No. 20.1030/0



ASSEMBLY

- MiniTec power-lock fastener
- Angles
- Bolt connector

Profile 19 x 90



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $I_x = 3.436 \text{ cm}^4$
- $I_y = 45.455 \text{ cm}^4$
- $w_x = 3.493 \text{ cm}^3$
- $w_y = 10.101 \text{ cm}^3$
- $IT = 2.274 \text{ cm}^4$
- 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

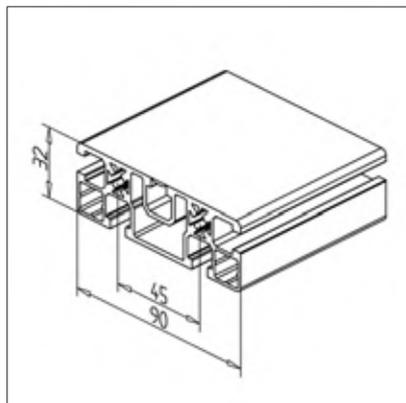


ASSEMBLY

- Bolt connector
- Angles

Profile 90 x 32 UL

Part No. 20.1066/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $I_x = 10.627 \text{ cm}^4$
- $I_y = 64.889 \text{ cm}^4$
- $w_x = 5.832 \text{ cm}^3$
- $w_y = 14.34 \text{ cm}^3$
- $IT = 25.108 \text{ cm}^4$
- Weight = 2.464 kg/m
- Bar length = 6 m
- Packing unit = 36 m

APPLICATIONS

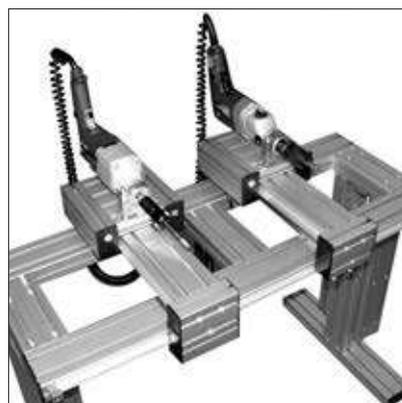
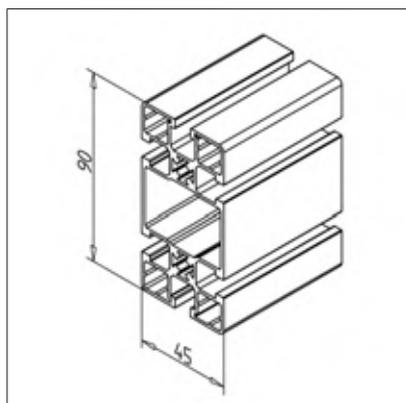
- All types of constructions, with a closed profile side
- Weight-optimized constructions
- Tables
- Frames
- Safety equipment

ASSEMBLY

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

Profile 45 x 90 UL

Part No. 20.1067/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $I_x = 73.907 \text{ cm}^4$
- $I_y = 19.194 \text{ cm}^4$
- $w_x = 16.423 \text{ cm}^3$
- $w_y = 8.53 \text{ cm}^3$
- $IT = 57.770 \text{ cm}^4$
- Weight = 2.421 kg/m
- Bar length = 6 m
- Packing unit = 24 m

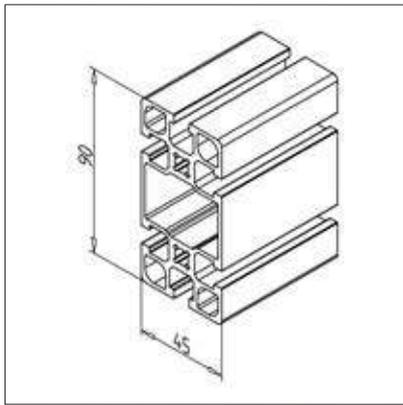
APPLICATIONS

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

ASSEMBLY

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

Profile 45 x 90 F



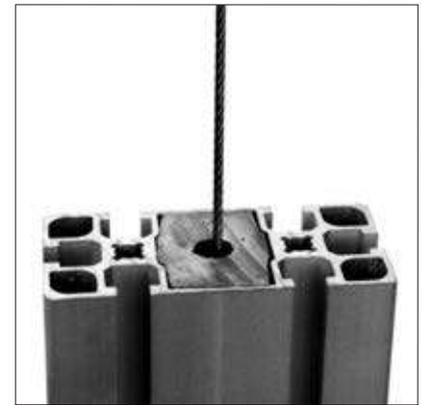
TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $I_x = 100.988 \text{ cm}^4$
- $I_y = 24.34 \text{ cm}^4$
- $w_x = 22.441 \text{ cm}^3$
- $w_y = 10.818 \text{ cm}^3$
- $IT = 60.629 \text{ cm}^4$
- Weight = 3.134 kg/m
- Bar length = 6 m
- Packing unit = 24 m



APPLICATIONS

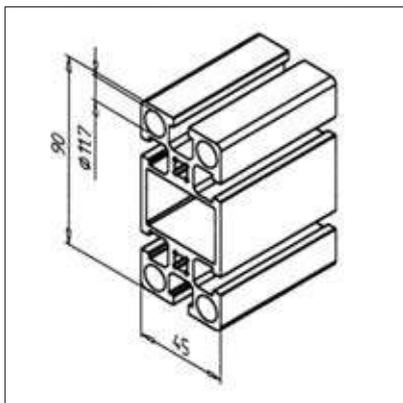
- All kinds of constructions
- The hollow chamber is designed for receiving and guiding counterweights



ASSEMBLY

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

Profile 45 x 90



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $I_x = 113.205 \text{ cm}^4$
- $I_y = 28.584 \text{ cm}^4$
- $w_x = 25.156 \text{ cm}^3$
- $w_y = 12.704 \text{ cm}^3$
- $IT = 65.358 \text{ cm}^4$
- 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

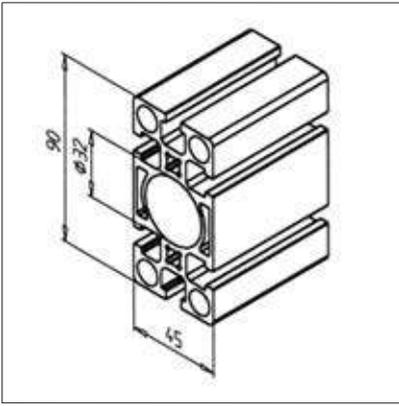


ASSEMBLY

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

Profile 45 x 90 S

Part No. 20.1017/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $I_x = 113.487 \text{ cm}^4$
- $I_y = 30.719 \text{ cm}^4$
- $w_x = 25.219 \text{ cm}^3$
- $w_y = 13.653 \text{ cm}^3$
- $IT = 70.893 \text{ cm}^4$
- Weight = 3.860 kg/m
- Bar length = 6 m
- Packing unit = 24 m

APPLICATIONS

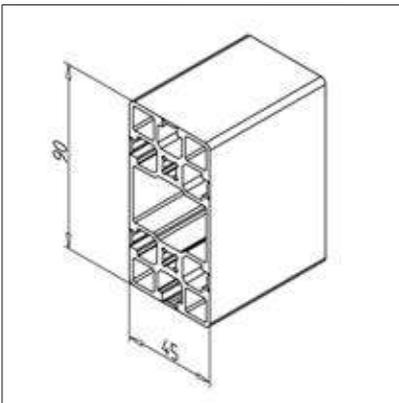
- All kinds of constructions
- Linear guides LB as slide
- Column guides
- Implementation as compressed air line with base and transport plate and sealing set
- Central bore $\varnothing 32 \text{ mm}$ for ball-bushings LME 20, for ball-bearings 6201 or 6002, for compressed air piping or guiding of hydraulic add-in cylinders

ASSEMBLY

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

Profile 45 x 90 G

Part No. 20.1015/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $I_x = 101.241 \text{ cm}^4$
- $I_y = 25.318 \text{ cm}^4$
- $w_x = 22.498 \text{ cm}^3$
- $w_y = 11.252 \text{ cm}^3$
- $IT = 174.9594 \text{ cm}^4$
- Weight = 3.191 kg/m
- Bar length = 6 m
- Packing unit = 24 m

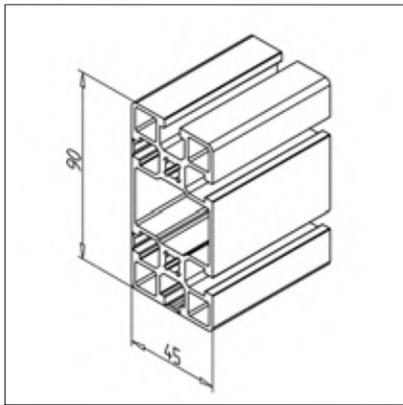
APPLICATIONS

- 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

ASSEMBLY

- 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 2G



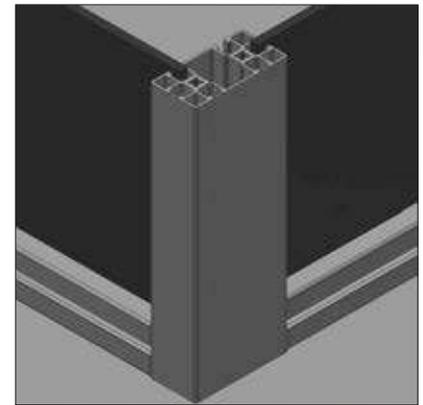
TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $I_x = 98.137 \text{ cm}^4$
- $I_y = 24.317 \text{ cm}^4$
- $w_x = 21.808 \text{ cm}^3$
- $w_y = 10.807 \text{ cm}^3$
- $IT = 122.453 \text{ cm}^4$
- Weight = 3.108 kg/m
- Bar length = 6 m
- Packing unit = 24 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

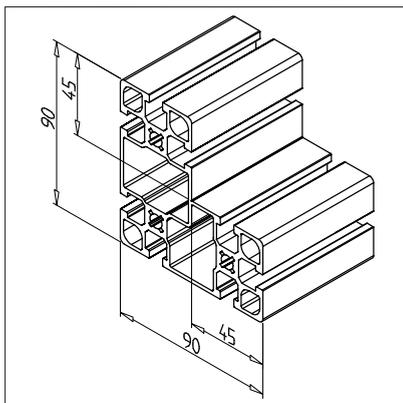


Part No. 20.1081/0

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 x 45



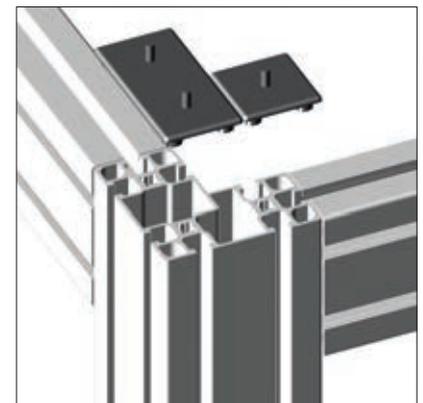
TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $I_x = 127.588 \text{ cm}^4$
- $I_y = 127.459 \text{ cm}^4$
- $w_x = 24.971 \text{ cm}^3$
- $w_y = 24.895 \text{ cm}^3$
- $IT = 182.588 \text{ cm}^4$
- 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



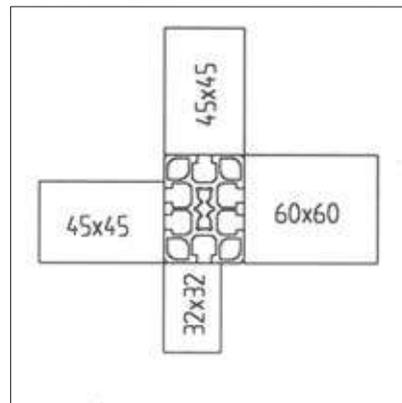
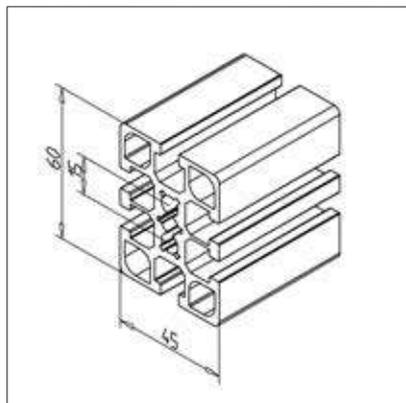
Part No. 20.0984/0

ASSEMBLY

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

Profile 45 x 60 F

Part No. 20.1023/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $I_x = 32.068 \text{ cm}^4$
- $I_y = 17.587 \text{ cm}^4$
- $w_x = 10.689 \text{ cm}^3$
- $w_y = 7.816 \text{ cm}^3$
- $IT = 19.050 \text{ cm}^4$
- Weight = 2.603 kg/m
- Bar length = 6 m
- Packing unit = 24 m

APPLICATIONS

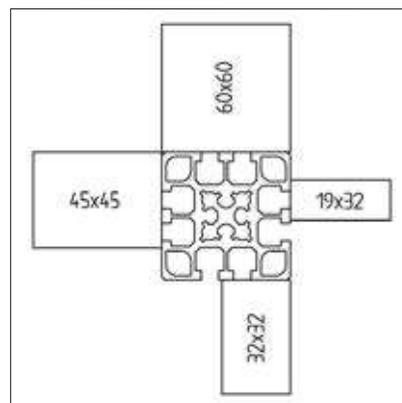
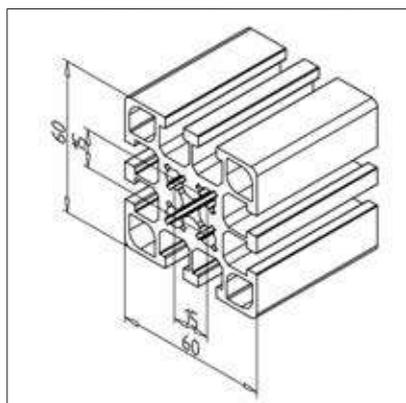
- All kinds of constructions
- Corner posts in large safety devices

ASSEMBLY

- MiniTec power-lock fastener
- Angle 19 / 25 / 45 / 45 x 90 GD-Z
- Central boring for thread M8

Profile 60 x 60 F

Part No. 20.1049/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $I_x = 40.715 \text{ cm}^4$
- $I_y = 40.715 \text{ cm}^4$
- $w_x = 13.571 \text{ cm}^3$
- $w_y = 13.571 \text{ cm}^3$
- $IT = 39.604 \text{ cm}^4$
- Weight = 3.655 kg/m
- Bar length = 6 m
- Packing unit = 24 m

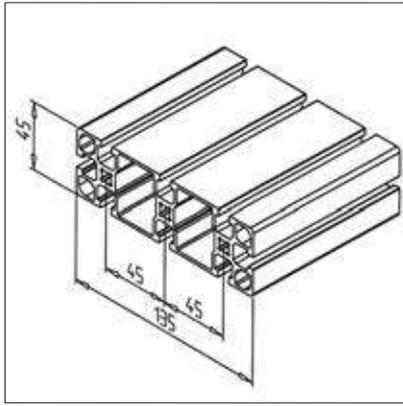
APPLICATIONS

- All kinds of constructions
- Corner posts in large safety devices

ASSEMBLY

- MiniTec power-lock fastener
- Angle 19 / 25 / 45 / 45 x 90 GD-Z
- Central boring for thread M10

Profile 45 x 135 F



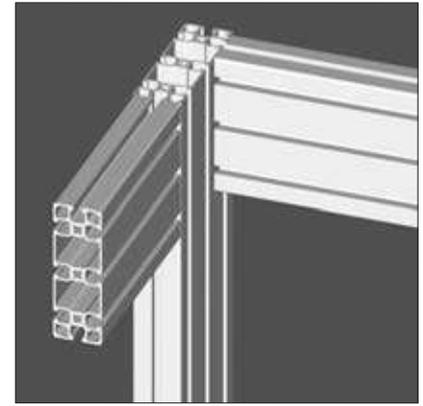
TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $I_x = 34.958 \text{ cm}^4$
- $I_y = 307.866 \text{ cm}^4$
- $w_x = 15.537 \text{ cm}^3$
- $w_y = 45.609 \text{ cm}^3$
- $IT = 119.233 \text{ cm}^4$
- Weight = 4.319 kg/m
- Bar length = 6 m
- Packing unit = 12 m



APPLICATIONS

- All kinds of constructions
- The hollow chamber is designed for receiving and guiding counterweights

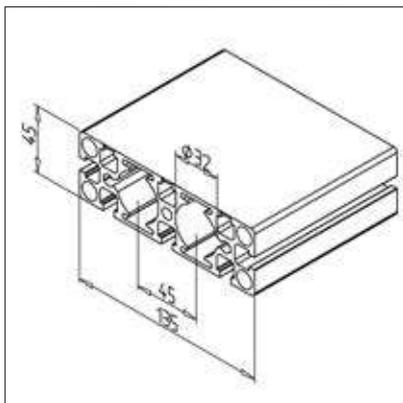


Part No. 20.1087/0

ASSEMBLY

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

Profile 45 x 135 1G



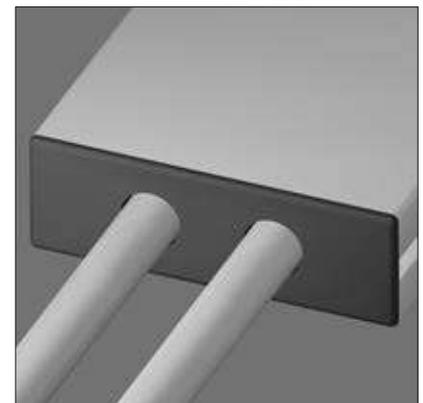
TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $I_x = 47.064 \text{ cm}^4$
- $I_y = 359.242 \text{ cm}^4$
- $w_x = 20.618 \text{ cm}^3$
- $w_y = 53.221 \text{ cm}^3$
- $IT = 189.739 \text{ cm}^4$
- Weight = 5.570 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 $\varnothing 32$ mm for ball-bushings LME 20, for ball-bearings 6201 or 6002, for compressed air piping or guiding of hydraulic add-in cylinders



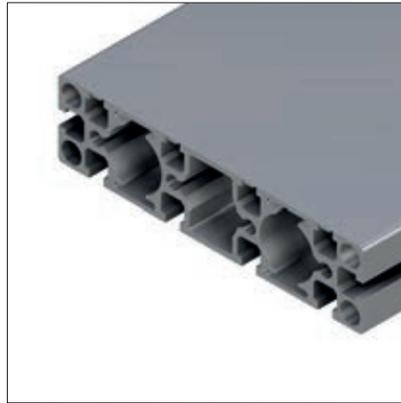
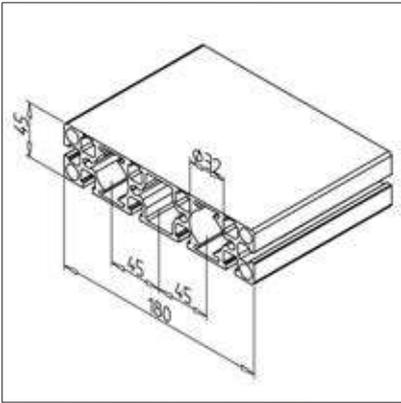
Part No. 20.1078/0

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 180 1G

Part No. 20.1079/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $I_x = 61.015 \text{ cm}^4$
- $I_y = 810.885 \text{ cm}^4$
- $w_x = 26.704 \text{ cm}^3$
- $w_y = 90.097 \text{ cm}^3$
- $IT = 271.248 \text{ cm}^4$
- Weight = 6.950 kg/m
- Bar length = 6 m
- Packing unit = 12 m

APPLICATIONS

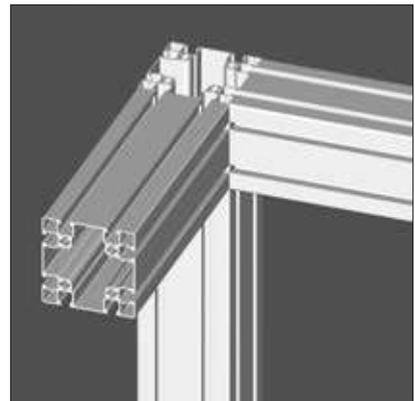
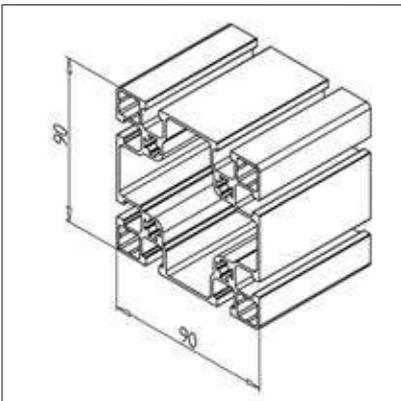
- All types of constructions, specifically for high hygiene requirements in the food industry, medical technology, bottling of beverages
- Linear guides LB as slide
- Central bore $\varnothing 32 \text{ mm}$ for ball-bushings LME 20, for ball-bearings 6201 or 6002, for compressed air piping or guiding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

Part No. 20.0999/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $I_x = 132.001 \text{ cm}^4$
- $I_y = 132.001 \text{ cm}^4$
- $w_x = 29.334 \text{ cm}^3$
- $w_y = 29.334 \text{ cm}^3$
- $IT = 343.488 \text{ cm}^4$
- Weight = 3.776 kg/m
- Bar length = 6 m
- Packing unit = 12 m

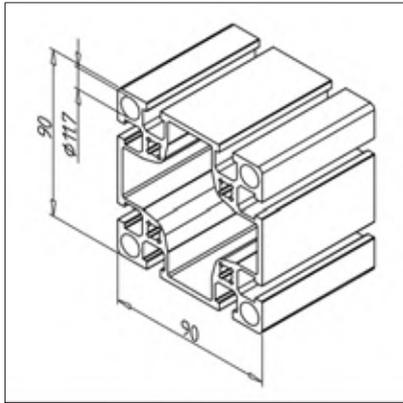
APPLICATIONS

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

ASSEMBLY

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

Profile 90 x 90 L



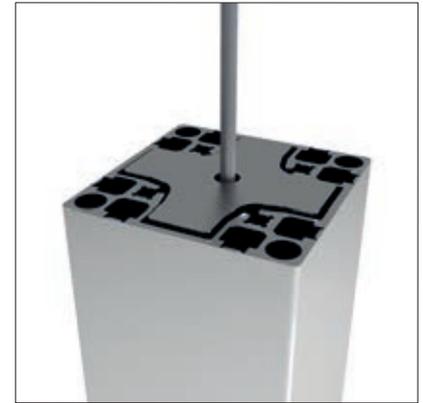
TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $I_x = 186.26 \text{ cm}^4$
- $I_y = 186.26 \text{ cm}^4$
- $w_x = 41.391 \text{ cm}^3$
- $w_y = 41.391 \text{ cm}^3$
- $IT = 378.232 \text{ cm}^4$
- Weight = 5.222 kg/m
- Bar length = 6 m
- Packing unit = 12 m



APPLICATIONS

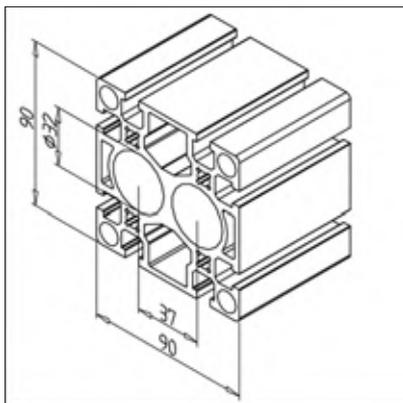
- All types of heavy constructions, designed as 4-fold compressed air line and compressed air reservoir
- Guide in the central hollow chamber for internal balancing weight for lifting doors



ASSEMBLY

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

Profile 90 x 90 S



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $I_x = 208.888 \text{ cm}^4$
- $I_y = 223.949 \text{ cm}^4$
- $w_x = 46.419 \text{ cm}^3$
- $w_y = 49.766 \text{ cm}^3$
- $IT = 569.423 \text{ cm}^4$
- 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 $\varnothing 32$ mm for ball-bushings LME 20, for ball-bearings 6201 or 6002, for compressed air piping or guiding of hydraulic add-in cylinders



ASSEMBLY

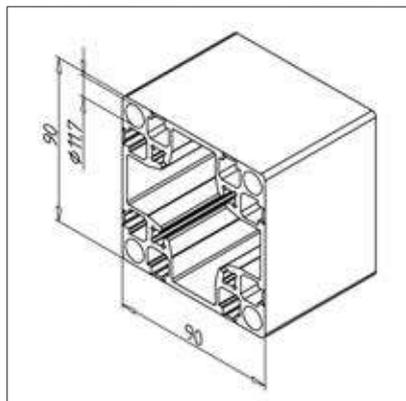
- MiniTec power-lock fastener
- Mounting bracket 45 or 90
- Screw connection

Part No. 20.1010/0

Part No. 20.1019/0

Profile 90 x 90 G

Part No. 20.1082/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $I_x = 195.271 \text{ cm}^4$
- $I_y = 195.271 \text{ cm}^4$
- $w_x = 43.393 \text{ cm}^3$
- $w_y = 43.393 \text{ cm}^3$
- $IT = 723.070 \text{ cm}^4$
- Weight = 5.329 kg/m
- Bar length = 6 m
- Packing unit = 12 m

APPLICATIONS

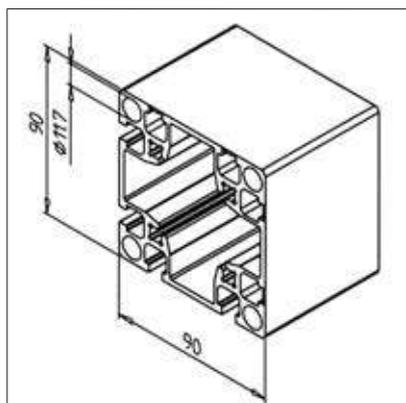
- Grooves expandable
- All types of constructions, specifically for high hygiene requirements in the food industry, medical technology, bottling of beverages
- Guide for internal counterweights in a central hollow chamber

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 2G

Part No. 20.1044/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $I_x = 190.169 \text{ cm}^4$
- $I_y = 190.169 \text{ cm}^4$
- $w_x = 41.825 \text{ cm}^3$
- $w_y = 41.825 \text{ cm}^3$
- $IT = 515.495 \text{ cm}^4$
- Weight = 5.217 kg/m
- Bar length = 6 m
- Packing unit = 12 m

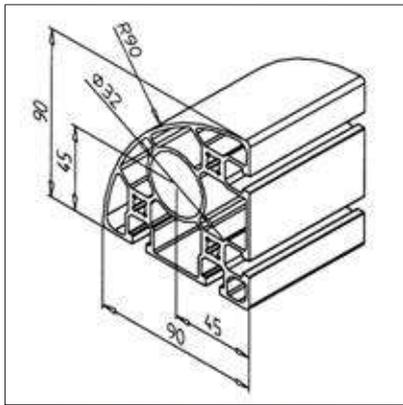
APPLICATIONS

- 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

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 R 90°



TECHN. DATA / ITEMS SUPPLIED

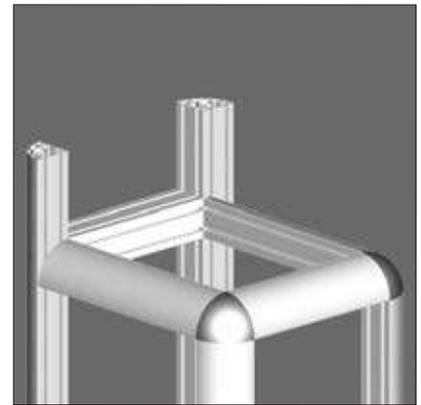
- Aluminium, extruded, anodized E6/EV1
- $I_x = 113.389 \text{ cm}^4$
- $I_y = 113.389 \text{ cm}^4$
- $w_x = 21.874 \text{ cm}^3$
- $w_y = 21.874 \text{ cm}^3$
- $IT = 378.600 \text{ cm}^4$
- Weight = 4.265 kg/m
- Bar length = 6 m
- Packing unit = 12 m



APPLICATIONS

- Tables, frames
- All kinds of constructions

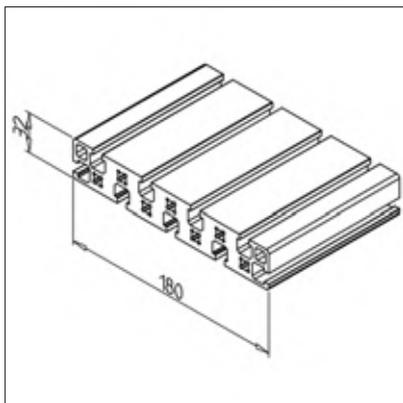
Part No. 20.1091/0



ASSEMBLY

- MiniTec power-lock fastener
- Angles
- Bolt connector
- End cap, **part no. 22.0988/1**
- Connecting plate M10 - M20
- Corner Connection 90 R 90°

Profile 32 x 180



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $I_x = 33.804 \text{ cm}^4$
- $I_y = 843.825 \text{ cm}^4$
- $w_x = 21.068 \text{ cm}^3$
- $w_y = 93.758 \text{ cm}^3$
- $IT = 66.836 \text{ cm}^4$
- 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

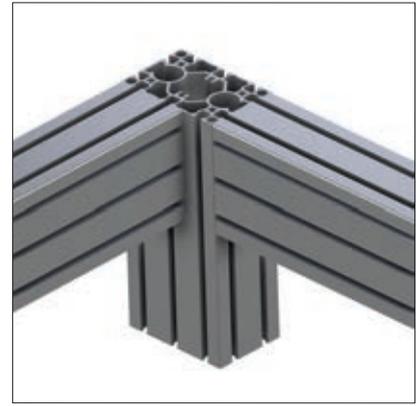
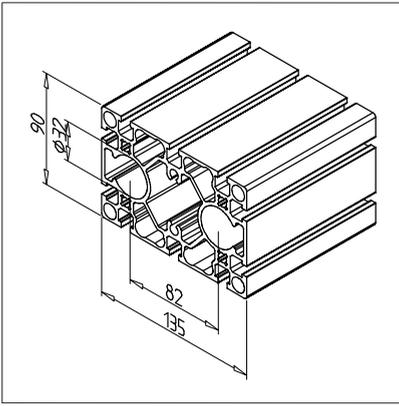


ASSEMBLY

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

Profile 90 x 135

Part No. 20.1148/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $I_x = 286.480 \text{ cm}^4$
- $I_y = 631.058 \text{ cm}^4$
- $w_x = 63.662 \text{ cm}^3$
- $w_y = 93.490 \text{ cm}^3$
- $IT = 1276.884 \text{ cm}^4$
- Weight = 8.992 kg/m
- Bar length = 6 m
- Packing unit = 6 m

APPLICATIONS

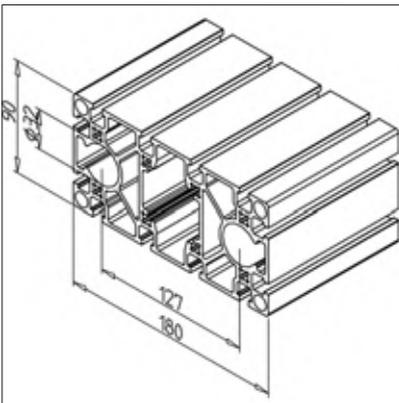
- Central bore $\varnothing 32 \text{ mm}$ for ball-bushings LME 20, for ball-bearings 6201 or 6002, for compressed air piping or guiding of hydraulic add-in cylinders
- Linear guides LB as slide
- All types of heavy constructions

ASSEMBLY

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

Profile 90 x 180 S

Part No. 20.1013/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $I_x = 376.784 \text{ cm}^4$
- $I_y = 1421.865 \text{ cm}^4$
- $w_x = 83.729 \text{ cm}^3$
- $w_y = 157.983 \text{ cm}^3$
- $IT = 2023.299 \text{ cm}^4$
- Weight = 11.482 kg/m
- Bar length = 6 m
- Packing unit = 6 m

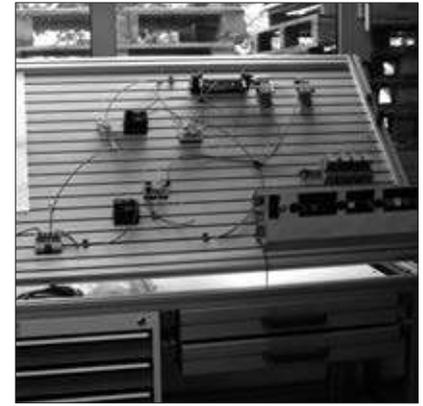
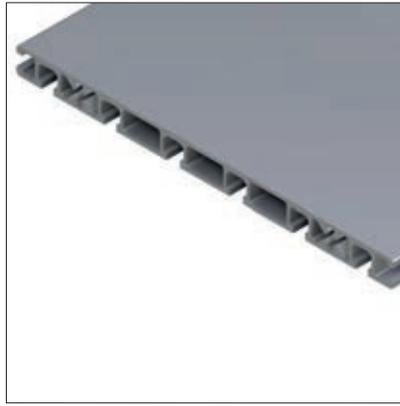
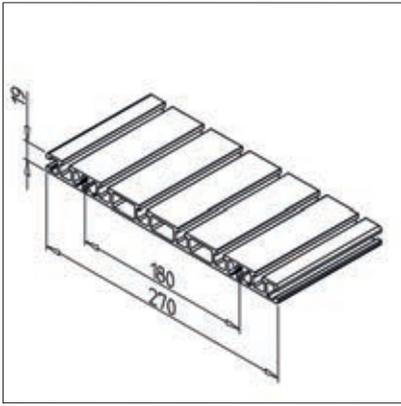
APPLICATIONS

- All types of heavy constructions
- Linear guides LB as slide
- Central bore $\varnothing 32 \text{ mm}$ 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
- Mounting bracket 45 or 90
- Screw connection

Profile 270 x 19



Part No. 20.1077/0

TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $I_x = 10.348 \text{ cm}^4$
- $I_y = 1352.197 \text{ cm}^4$
- $w_x = 10.167 \text{ cm}^3$
- $w_y = 100.162 \text{ cm}^3$
- $IT = 18.378 \text{ cm}^4$
- Weight = 5.612 kg/m
- Bar length = 6 m
- Packing unit = 18 m

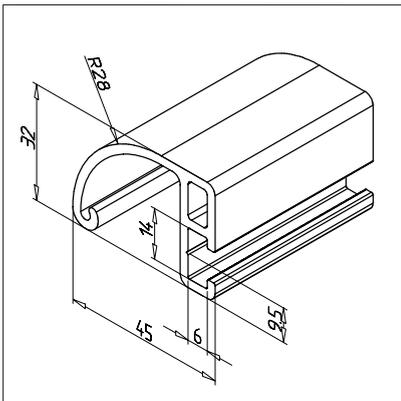
APPLICATIONS

- Mounting plates
- Workstations
- Training set-ups for training and further education with universal clamping socket **part no. P2.0060/0**
- Demonstration units

ASSEMBLY

- Angles
- Screw connection
- Bolt connector

Handle profile alu



Part No. 20.1045/0

TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $I_x = 3.531 \text{ cm}^4$
- $I_y = 7.654 \text{ cm}^4$
- $w_x = 1.985 \text{ cm}^3$
- $w_y = 2.856 \text{ cm}^3$
- $IT = 0.429 \text{ cm}^4$
- Weight = 0.890 kg/m
- Bar length = 6 m

APPLICATIONS

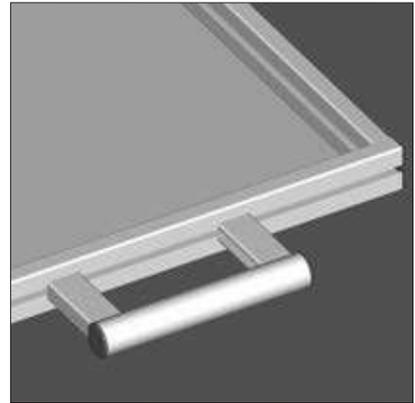
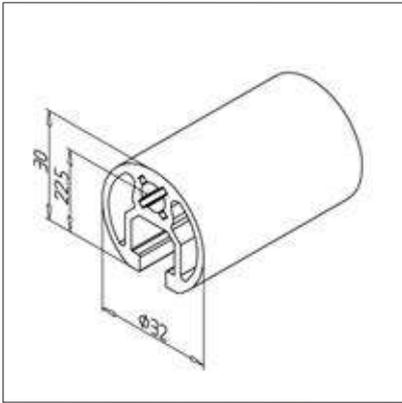
- Handle of diverse lengths
- Sheet edges
- Work station end points
- Cover ledge for cable, pneumatic conducts

ASSEMBLY

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

Handle profile 32

Part No. 20.1088/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $I_x = 2.601 \text{ cm}^4$
- $I_y = 2.636 \text{ cm}^4$
- $w_x = 1.682 \text{ cm}^3$
- $w_y = 1.649 \text{ cm}^3$
- $IT = 2.565 \text{ cm}^4$
- Weight = 0.911 kg/m
- Bar length = 6 m
- Packing unit = 84 m

APPLICATIONS

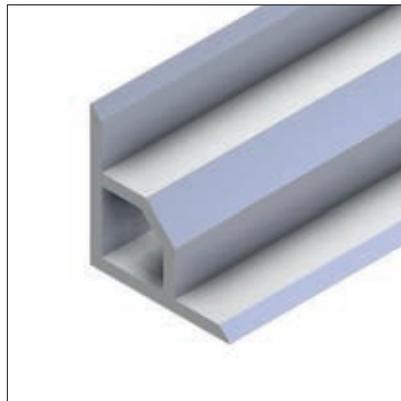
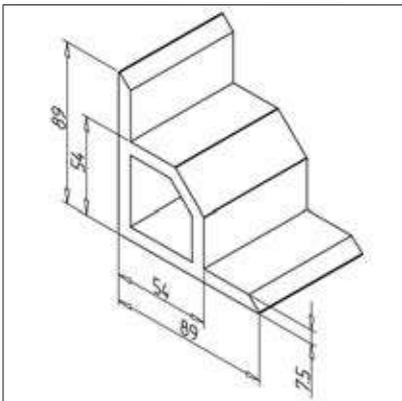
- Handles of different lengths for doors, drawers, handrails
- Edging of surface elements or posters up to 8 mm
- Profile section for suspending roller tracks or similar

ASSEMBLY

- MiniTec power-lock fastener
- Mounting angle 19 GD-Z, **part no. 21.2078/0**
- Bolt connector
- Screw connection
- Lateral cover with end cap for handle profile 32

Angular profile 89 x 89

Part No. 20.1011/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $I_x = 105.416 \text{ cm}^4$
- $I_y = 105.416 \text{ cm}^4$
- $w_x = 17.413 \text{ cm}^3$
- $w_y = 17.413 \text{ cm}^3$
- $IT = 81.036 \text{ cm}^4$
- 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

ASSEMBLY

- Screws M8 x 20 and square nuts M8

PROFILE CAPS

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.

SELF-LOCKING PROFILE CAPS FOR ALUMINIUM PROFILES



→ Insert cap



→ Hammer the pin

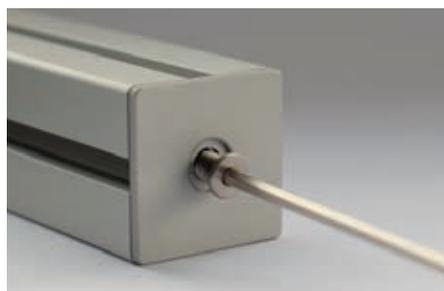


→ Profile stays clean and protected

MINITEC ALUMINIUM PROFILE CAPS FOR HEAVY LOADS



→ Thread M08 shape



→ Tighten the cap
(Flat headed screw M08x10)



PROFILE CAPS

Profile sections	ABS grey	Al anodized	VA
		(fastening screw included)	

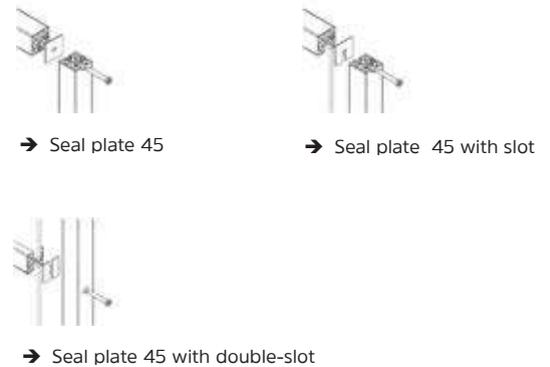
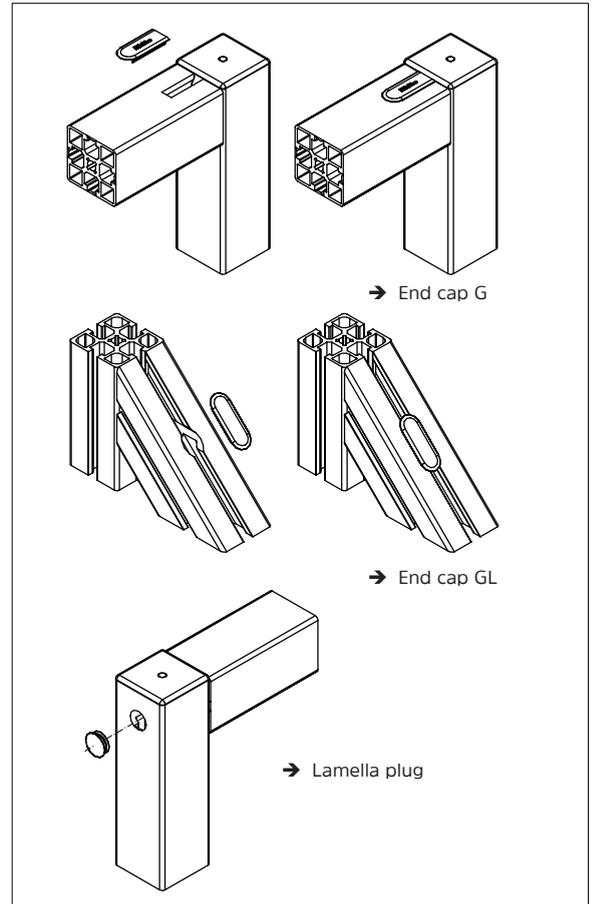
Profile series 30 (Thickness 3 mm)

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	*	

Profile series 45 (Thickness 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- ment	22.0979/1	*		
45/45°	22.0995/1	*		
45/22,5°	22.1052/1			
19x90	22.1014/1		22.1014/2	
90x32	22.0982/1	*	22.0982/2	
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		2x 22.0982/2	
90x180	2x 22.0983/1*		2x 22.1008/2	
270x19	3x 22.1014/1		22.1189/2	
Handle profile	right 22.1054/0 left 22.1055/0			
Handle profile 32	22.1162/1	*		

* With pin



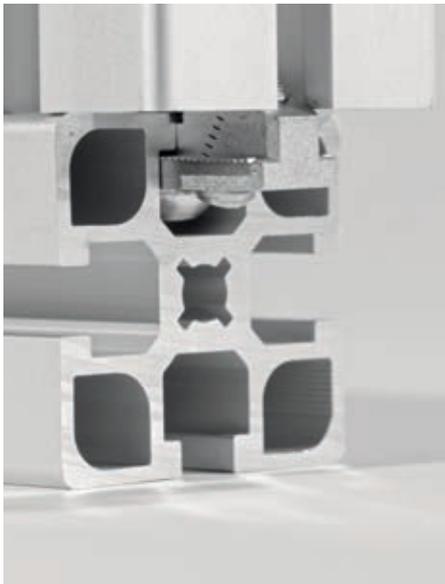
Accessories	Material	Part No.
Flat head screw M8x10 for fixing caps made of aluminum or stainless steel	VA	21.1666/0
Replacement pins for caps with hammer taps (10 pack)	ABS grey	22.1009/1

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

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-Profile 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

Power-lock fastener

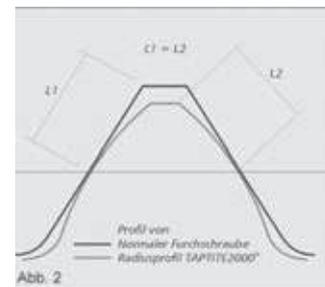
Profile connection without machining



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.

see Fig. 1 + 2



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.

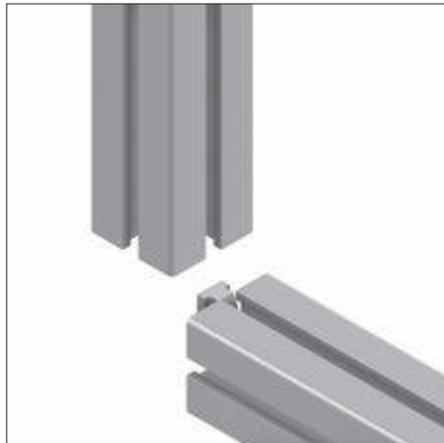
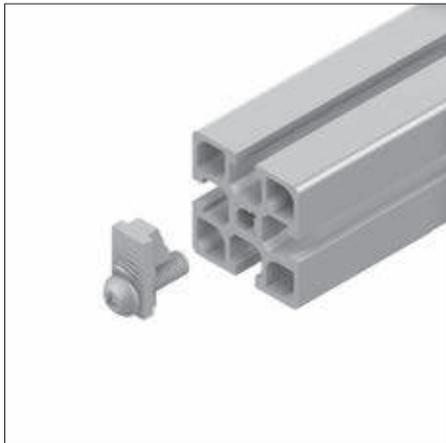
Due to recent studies there is much optimization potential especially in connection technology for profile systems. The connection must be seen as a complete system.

Here you will find all **videos on our profile system**, suitable components and their handling
www.minitec.de/en/service/videos



Power-lock fastener

Easy installation in three steps



Install power-lock connector with button head screw on profile end, then undo the screw slightly so that the connector can be slid easily into the profile groove of the 2nd profile. Make sure that the inclined setscrew does not protrude on the outside. Tighten setscrew M8 using hexagon screwdriver SW4. Recommended tightening torque approx. 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
- Ergonomically optimized
- With the "SF" version, no thread needs to be inserted into the profile beforehand. The thread is produced automatically by screwing the screw into the central bore of the profile.

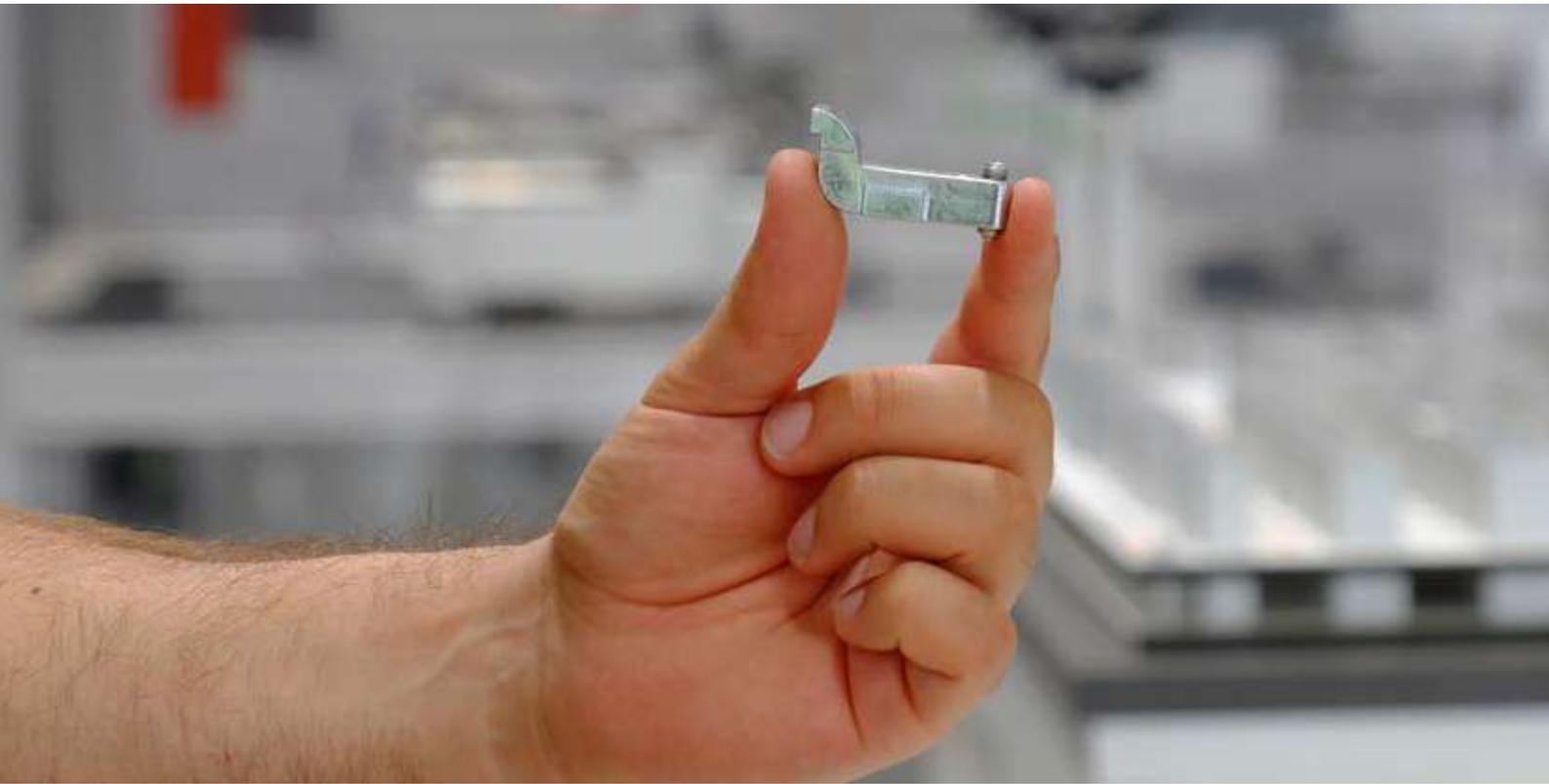
Product	Part no.	Description
Power-Lock fastener 45	21.1018/0	with filister screw M8/SW5
Power-Lock fastener 45 SF	21.0818/0	with self-tapping Torx screw M8/T40,
Power-lock fastener 45 stainless	21.1018/1	Button head screw M8/SW5, Corrosion resistant version for use in corrosive environments
Power-Lock 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,
Power-lock fastener 30 stainless	21.0042/0	with button head screw SW 5

* If this connector is used for ESD applications, the electrical conductivity of the two profiles must be established separately

Tip

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

Cross-connector



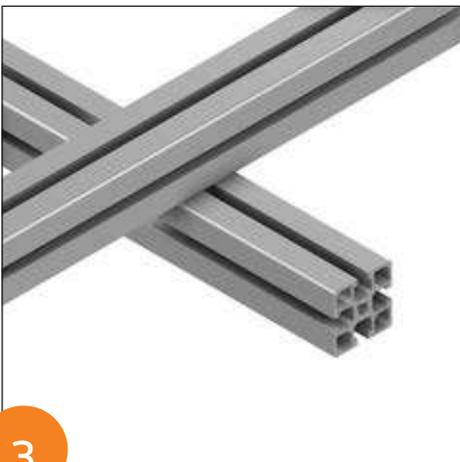
Assembly



1



2



3



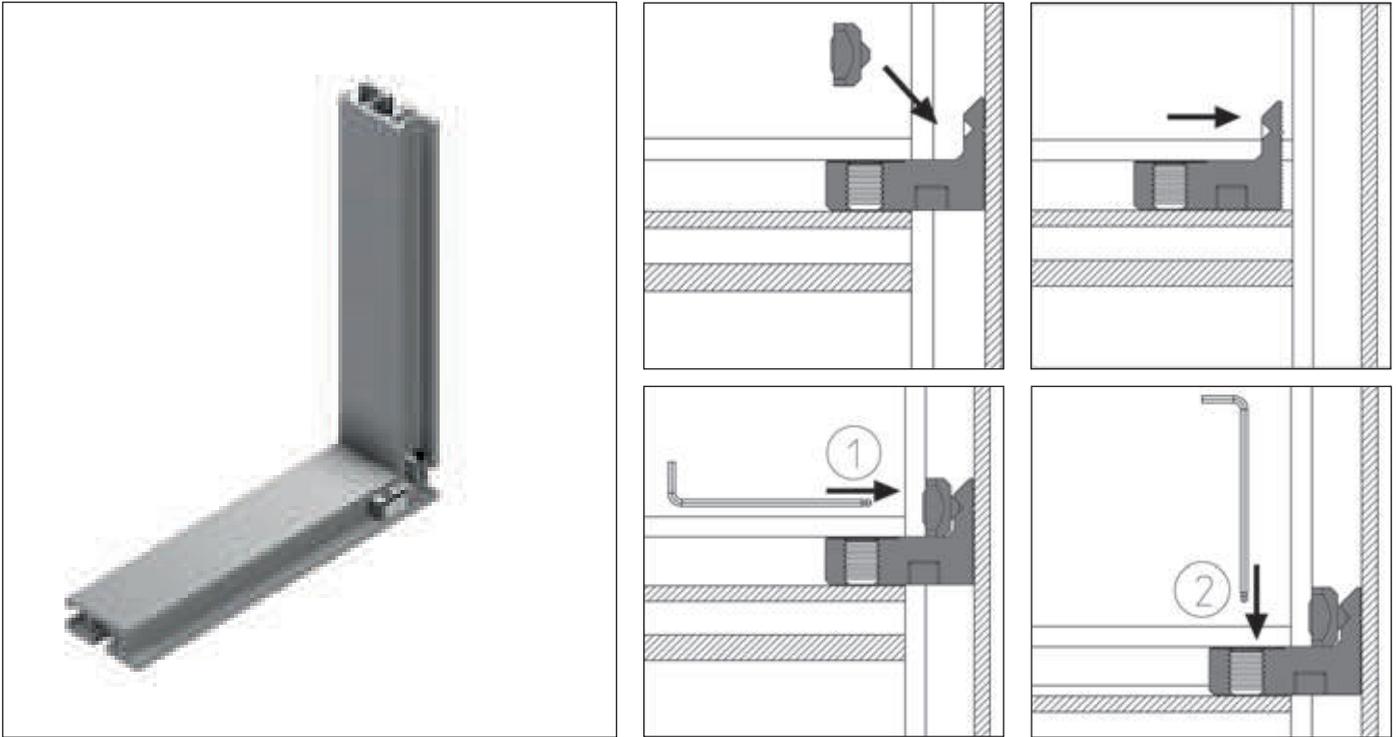
4

1. Swing the connector into the possibly existing frame
2. Push the profile to be connected over the connector
3. Position the profile struts in both directions
4. Tighten setscrew SW 3 in connector to 10 Nm torque

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

Power-lock fastener N

For subsequent fitting of profiles into existing frames without machining



Assembly



1. Slide the connector into the strut to be retrofitted

2. Position the strut in the construction

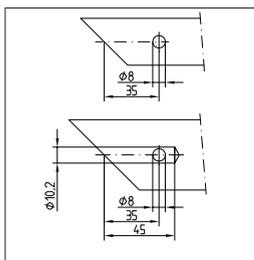
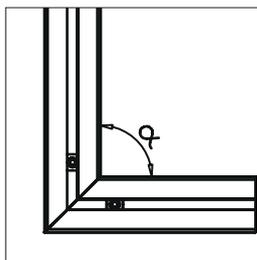
3. Slide connector into existing profile

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

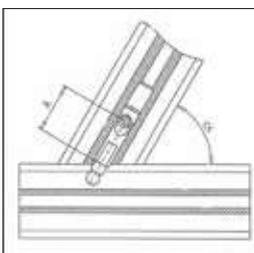
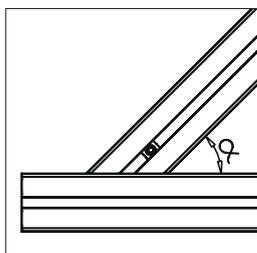
For constructions with high visual standards

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 60° 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 $\phi 10.2$ mm bore in the profile core bore. Drill $\phi 8.2$ 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 $\phi 10.2$ mm bore in the profile core bore. Drill $\phi 8.2$ 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.

TIP

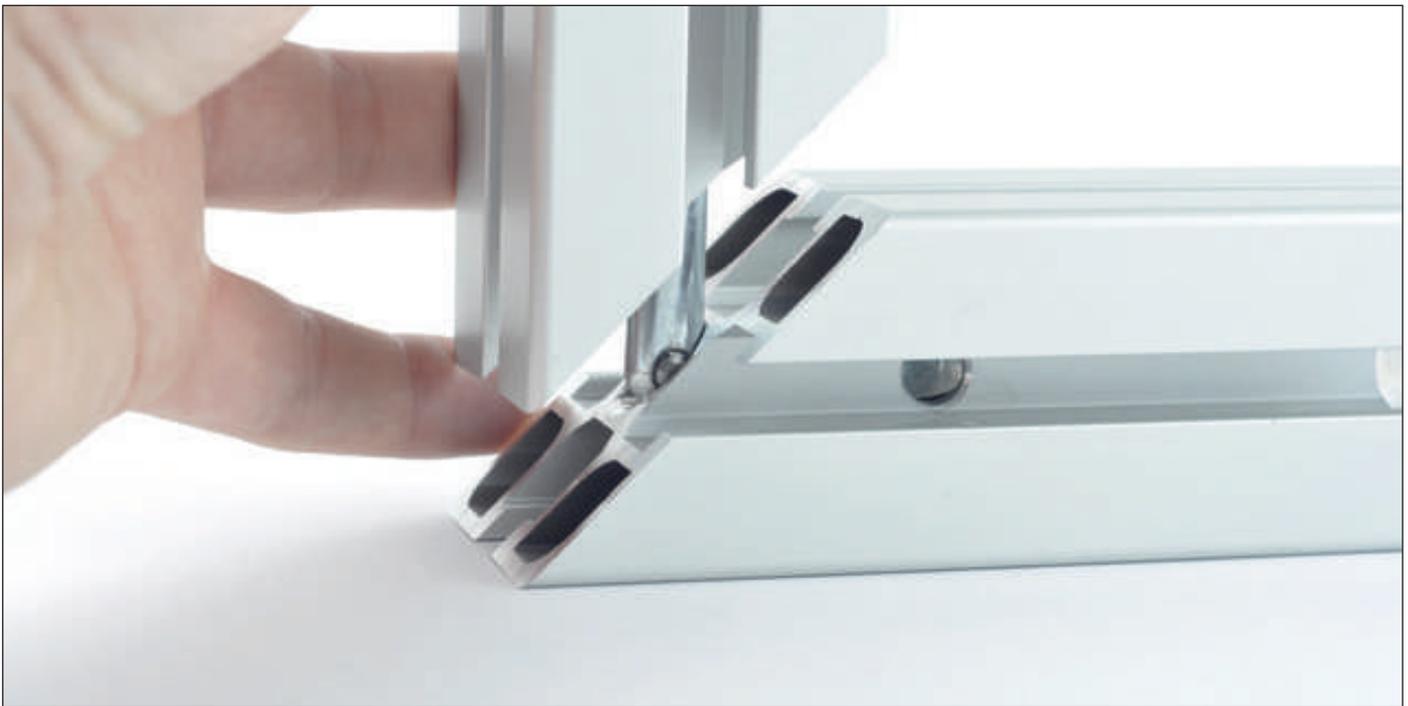
Drilling jig part no. 26.1050/0 for mitre connector 45
 Drilling jig part no. 26.1060/0 for mitre connector N45
 Drilling jig part no. 26.1063/0 for mitre connector 30
 Drilling jig part no. 26.1056/0 for mitre connector N30

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 consistently 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.

Distances for common angles:

α	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



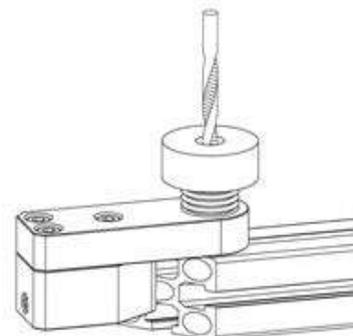
Drilling jig for mitre connector N30 / N45

Mitre connection N

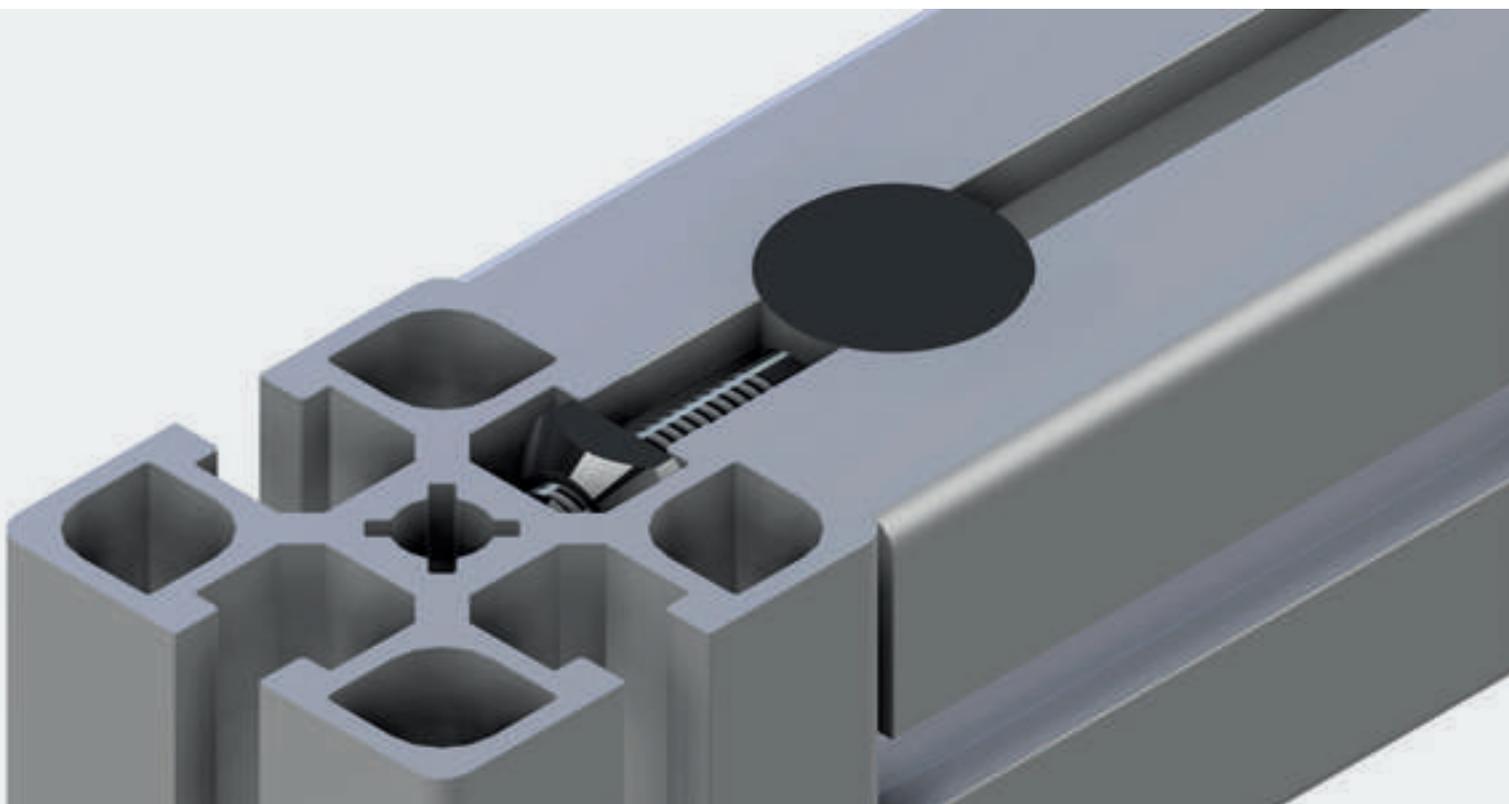
Distance A (position of the lateral bore of the threaded pin) depends on the mitre angle. The exact amount is to be taken from the middle bore core drilling of the mitred profile to the middle of the drilling. To safely exclude dimensional errors and ensure the correct functioning of the connection,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

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 \pm 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.

Application

For rectangular connection of profiles

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

Processing

Step drilling $\varnothing 7 / \varnothing 20$ mm, resp. $\varnothing 9 / \varnothing 15$ 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 tightening with L-key 5 A/F.
- Recommended locking torque: 15 Nm
 - Static load: 3500 N

Mounting bracket and T-slot bar

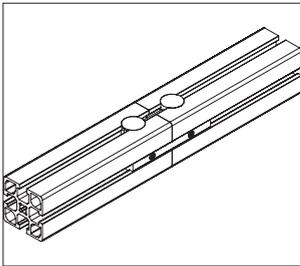
Mounting bracket 45

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

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

Butt connector



Bolt connector



Mounting bracket



T-slot bar



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

TIP

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

Screw connection

Form-locking connection secured against twisting

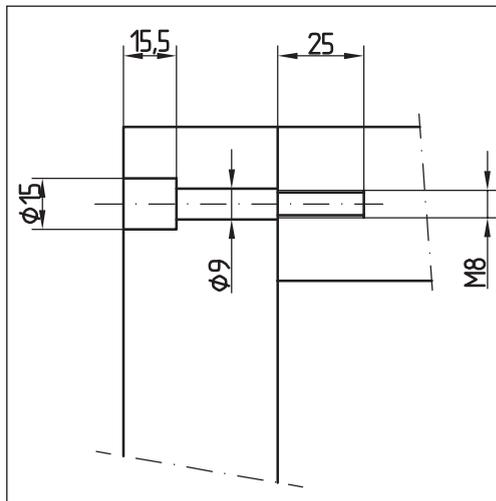
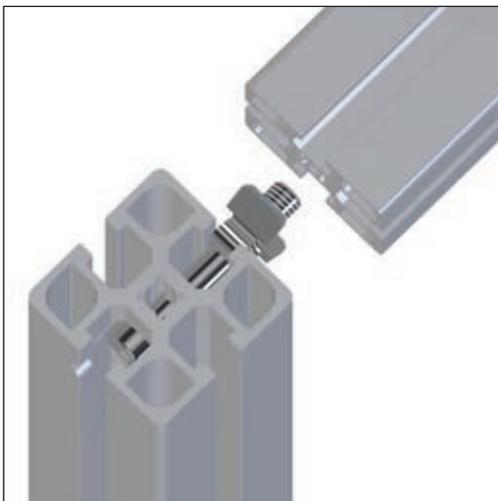
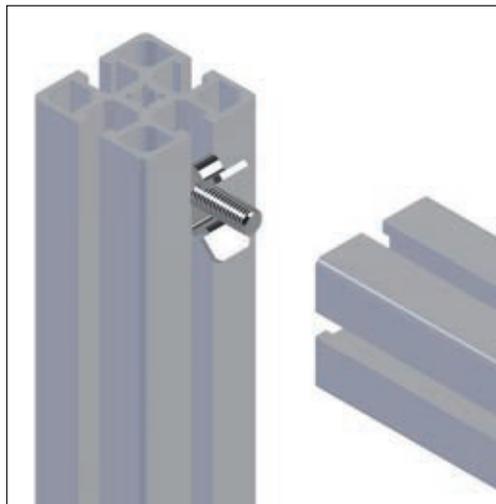
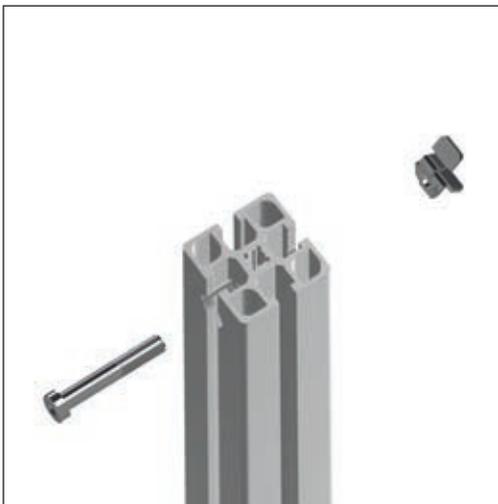


Application

- Construction with high dynamic loads

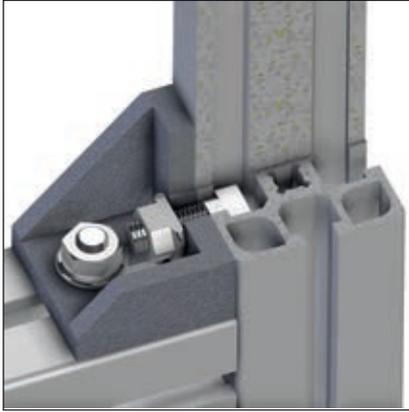
Processing

- Thread M8; step drilling $\varnothing 9 / \varnothing 15$ 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



Mounting angles

Easy installation without processing



→ Angle aluminum die casting, powder coated, grey



→ Optional with cover



→ ESD version

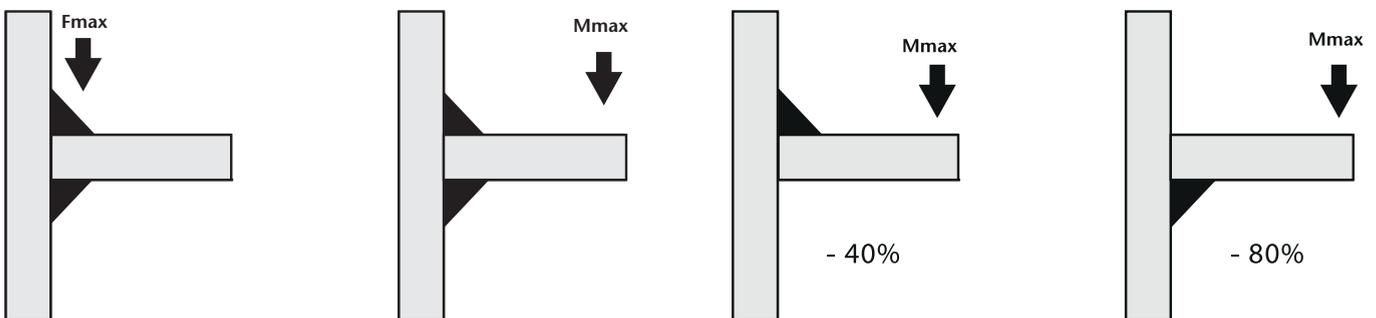
Load capacity

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

- No processing
- Retrofitting of profiles possible
- Adjustable
- Caps made of oil resistant ABS, grey
- Without powder coating
- With ESD square nuts Z

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



Screws

Cylinder screws

With flat head and hexagon socket



Thread	Galvanized	Stainless
M05 x 08	21.1193/0	
M05 x 10	21.1279/0	21.1279/1
M05 x 12	21.1220/0	21.1220/1
M05 x 16	21.1235/0	21.1144/1
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	21.1219/1
M05 x 50	21.1691/0	
M05 x 55	21.1353/0	
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	
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	

Countersunk screws

With hexagon socket



Countersunk head screws	Galvanized	Stainless
M04 x 08	21.1500/0	
M04 x 10	21.1557/0	21.2279/0
M04 x 12	21.1948/0	21.1948/1
M04 x 16	21.1501/0	21.1501/1
M04 x 20	21.1502/0	21.2447/1
M04 x 25	21.1571/0	
M04 x 30	21.1203/0	
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	21.2448/1
M05 x 25	21.1505/0	21.2449/1
M05 x 30	21.1482/0	21.1482/1
M05 x 35	21.2215/0	21.2215/1
M05 x 40	21.2127/0	
M05 x 45	21.1945/0	21.1945/1
M05 x 50	21.2123/0	
M06 x 10	21.2219/0	21.2219/1
M06 x 12	21.1518/0	21.1518/1
M06 x 16	21.1506/0	21.1506/1
M06 x 20	21.1507/0	21.1507/1
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	
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	21.2451/1
M08 x 30	21.1516/0	21.2452/1
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	

Other standards and dimensions are available on request



Square nuts, rhombus nuts and square washers

AVAILABLE FOR M3, M4, M5, M6 AND M8

Square nuts 30 with position-fixing, ESD-conductive



Description	Galvanized	Stainless
M8	21.2343/2	-
M6	21.2342/2	-
M5	21.2341/2	-
M4	21.2340/2	-

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	-
M08 x 25		21.1189/2

*self-tapping thread

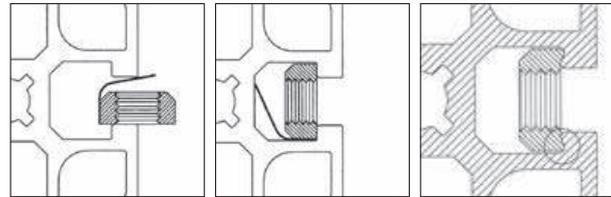
Screws for end caps VA/AL/LR



Flat head screw	Galvanized	Stainless
M08 x 10	-	21.1666/0
M06 x 10	-	21.0808/0

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

ESD conductive

Square nuts M8 L



Description	Galvanized	Stainless
M8	21.1368/0	-

Square nuts M8 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 washers 8	21.1360/0	21.1360/1
Square washers 6	21.1363/0	-
Square washers 5	21.1362/0	-

Hex nut with flange, self-locking



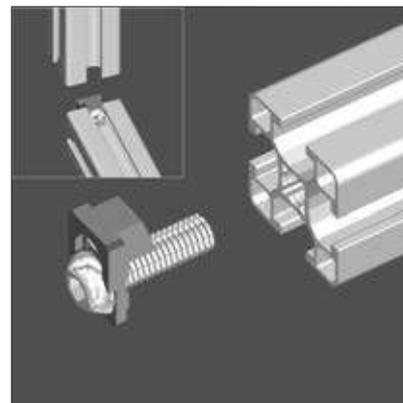
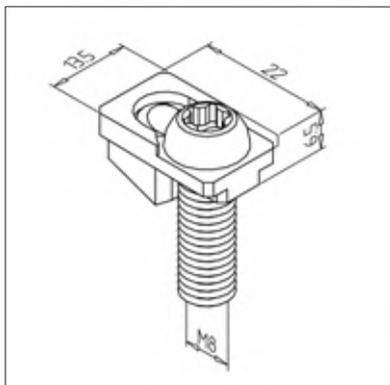
Description	Galvanized	Stainless
M8	21.1334/0	-

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

TECHN. DATA / ITEMS SUPPLIED

- Steel, galvanized
- Self tapping torx screw T40
- Power-Lock fastener 30 (standard) **part no. 21.1014/0** with filister head screw A/F 5
- Power-lock fastener 30 H - stainless **Part no.. 210042/0** with button head screw SW 5
- Package size of 100 pieces in Kantainer version SF **part no. 21.0016/0100** version Standard **part no.. 21.0014/0100**
- Weight = 0.021 kg/piece

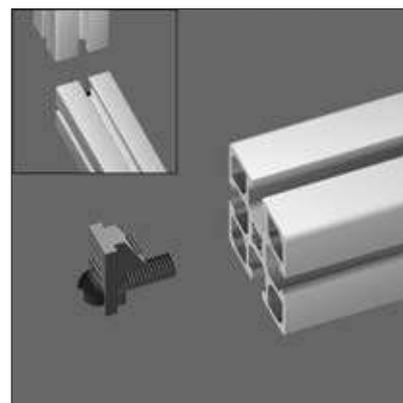
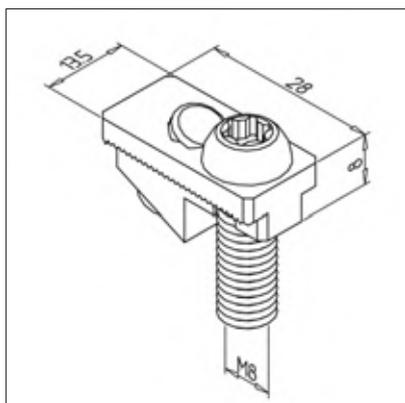
APPLICATIONS

- For force-locked connection
- Also suitable for cross joints
- Appropriate for ESD implementations

ASSEMBLY

- 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



Part No. 21.0818/0

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 button head screw SW 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

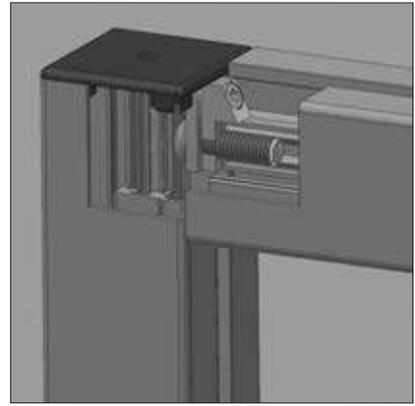
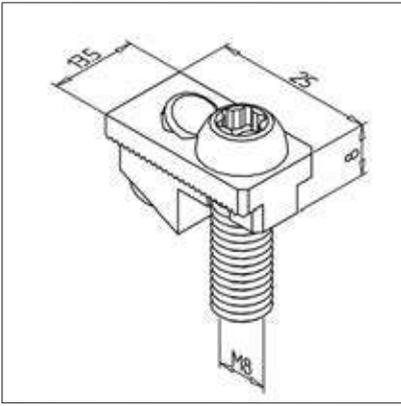
- Power-lock connection for all profiles, also suitable for crossjoints
- For larger profile sections several fasteners can be used
- Appropriate for ESD implementations

ASSEMBLY

- 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



TECHN. DATA / ITEMS SUPPLIED

- Steel, galvanized
- Self tapping torx screw T40
- Weight = 0.028 kg/piece

APPLICATIONS

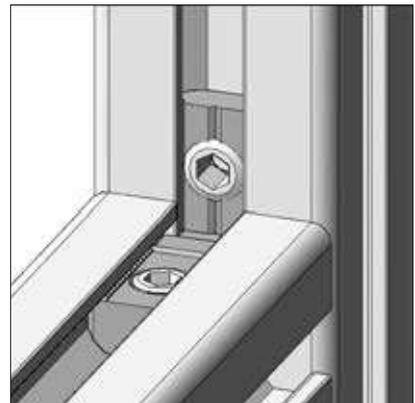
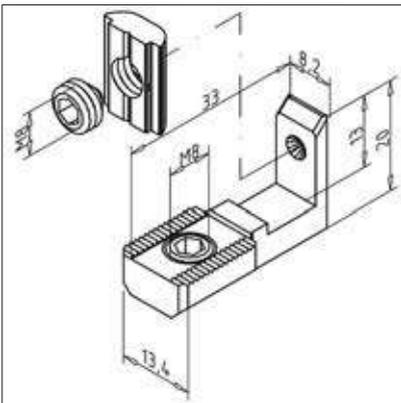
- For mounting profiles with flush cover cap
- For ESD applications of the fastener electrical conductivity of the two profiles has to be produced.

ASSEMBLY

- 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 N 30

Part No. 21.0033/0



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

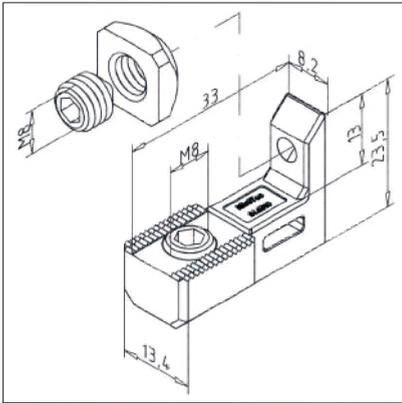
- For force-locked connection
- Especially for post-mounting of additional profiles in existing constructions

ASSEMBLY

- 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

Power-lock fastener N 45

Part No. 21.0918/0



TECHN. DATA / ITEMS SUPPLIED

- Steel, galvanized
- Connection element with pre-assembled threaded pin M8
- 1 Slide nut M8 with pre-assembled setscrew
- Weight = 0.036 kg/piece

APPLICATIONS

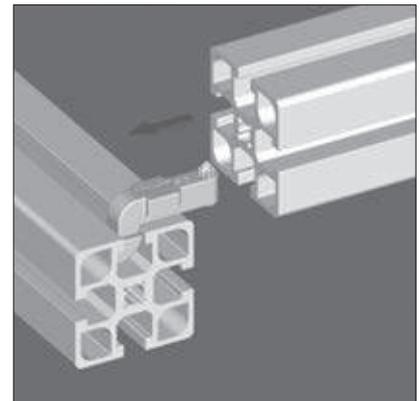
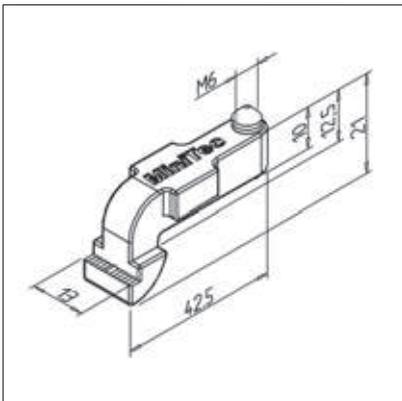
- For connecting all profiles of the profile series 45
- Especially for post-mounting of additional profiles in existing constructions
- For profile sections bigger than 45 x 45 several fasteners can be used

ASSEMBLY

- 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

Cross-connector 45

Part No. 21.0006/0



TECHN. DATA / ITEMS SUPPLIED

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

APPLICATIONS

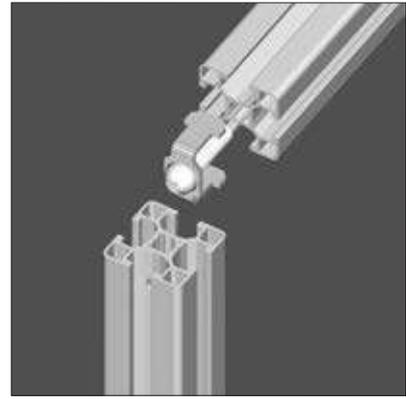
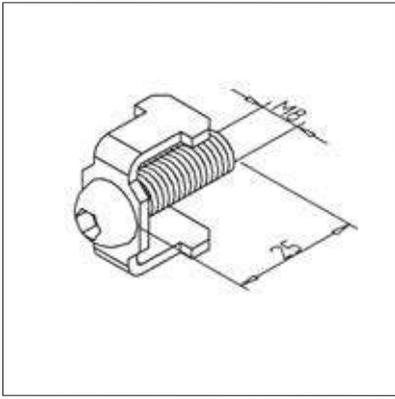
- For connecting all profiles of the profile series 45
- Especially for retrofitting profiles into existing constructions
- Appropriate for ESD implementations

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

Screw connection 30 N

Part No. 21.1385/0



TECHN. DATA / ITEMS SUPPLIED

- Steel, galvanized
- Anti-twist lock with cylinder-head screw
- Weight = 0.017 kg/piece

APPLICATIONS

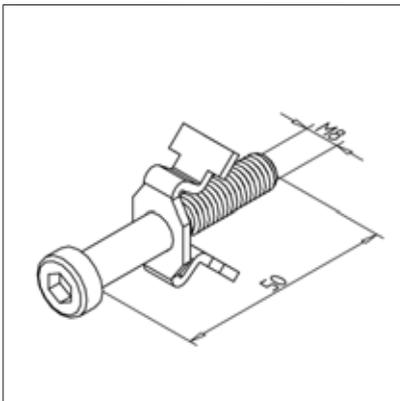
- Connection of profiles

ASSEMBLY

- Bring in the Thread M8 x 25 in the centre borehole of the profile
- Insert bore \varnothing 7 mm in profile 2
- Install screw and anti-rotation lock on profile 1 and insert in groove of profile 2
- Pull through hole \varnothing 7 mm with Allen wrench
- Recommended locking torque: 20 Nm
- The bore \varnothing 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

Part No. 21.1017/0



TECHN. DATA / ITEMS SUPPLIED

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

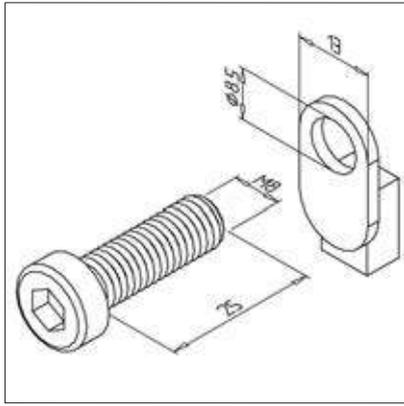
APPLICATIONS

- Effective against slipping
- Secured connection of all profiles

ASSEMBLY

- Insert the threaded screw M8 x 25 into the central bore of profile
- Insert the stepped bore \varnothing 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

Screw connection 32



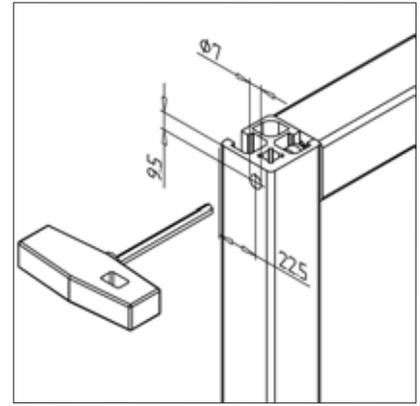
TECHN. DATA / ITEMS SUPPLIED

- Aluminium, Pressure die-casting
- Hex socket cap screw M8 x 25
- Weight = 0.015 kg/piece



APPLICATIONS

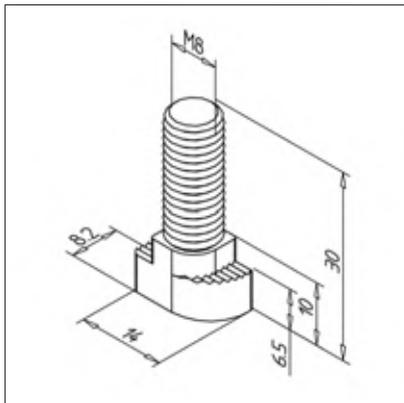
- Effective non-rotating connection for 32mm and 19mm profiles



ASSEMBLY

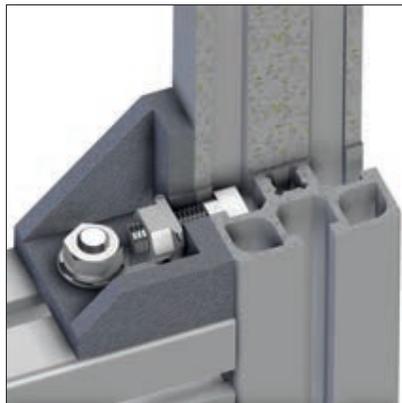
- Insert the threaded screw M8 x 25 into the central bore of profile
- Insert bore Ø 7 mm in profile 2
- Fasten the screw to the profile 1 with the anti-twist lock and insert it into profile 2
- Tighten the screw to 20 Nm
- The bore Ø 7 mm can be closed with plug 7 part no. 22.1215/1, should be used with our closed t-slot profiles

T-head bolt



TECHN. DATA / ITEMS SUPPLIED

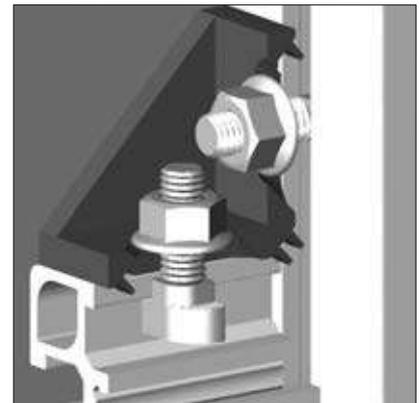
- Steel, galvanized
- Thread (d) : M 8
- Length (l) : 23.5 mm
- Weight = 0.013 kg/piece



APPLICATIONS

- Simple attachment of add-on parts or accessories on profiles
- Attachment of mounting angle: 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. 21.1370/0

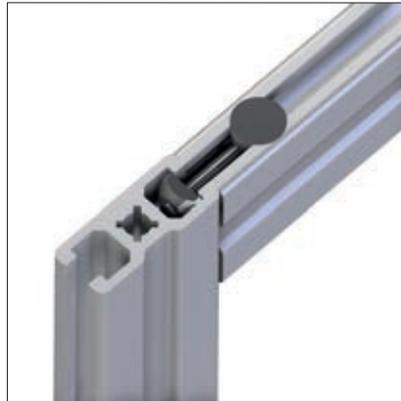
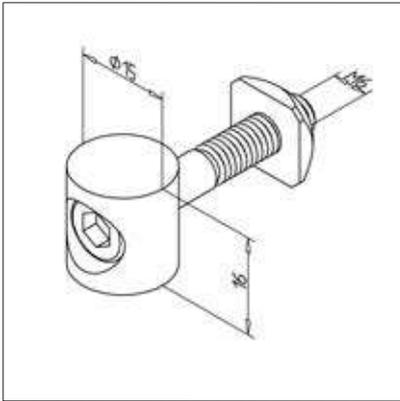


ASSEMBLY

- 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 self-locking with flange part no. 21.1334/0

Bolt connector 15

Part No. 21.1024/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, anodized E6/EV1
- With fastening material steel, zinc plated
- Weight = 0.032 kg/piece

APPLICATIONS

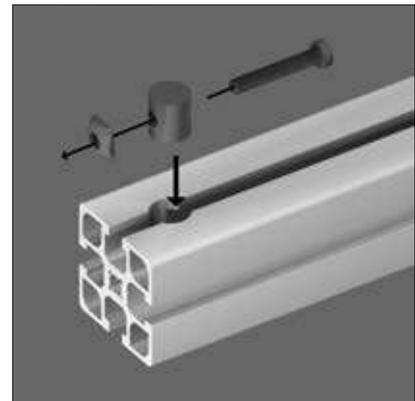
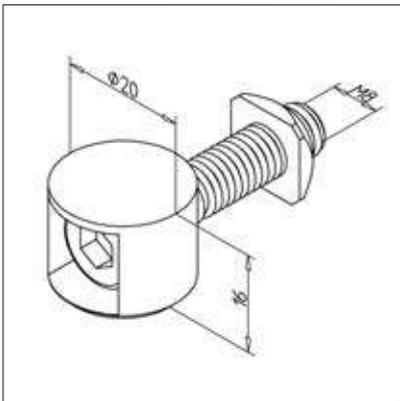
- Connection of profiles 19 and 32
- Especially for post-mounting of additional profiles in existing constructions

ASSEMBLY

- Insert the stepped bore $\varnothing 9 \times 15$, 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

Part No. 21.1021/0



TECHN. DATA / ITEMS SUPPLIED

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

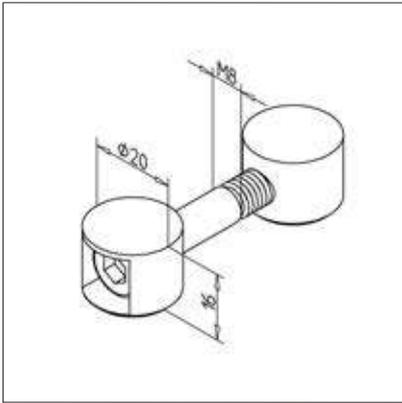
APPLICATIONS

- 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

ASSEMBLY

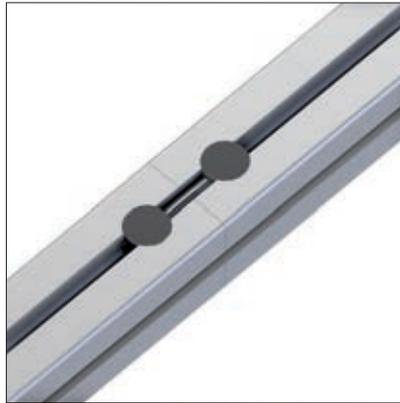
- Insert the stepped bore $\varnothing 7 \times 20$, 16 mm deep, positioned 22.5 mm from the end of the profile to the center of the groove
- Insert the connector and pre-tighten the screw with the ball head wrench SW 5
- Fastening with Allen wrench
- Recommended locking torque: 15 Nm

Butt connector 20



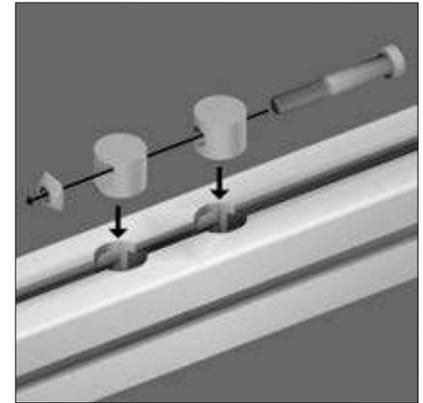
TECHN. DATA / ITEMS SUPPLIED

- Zinc, Pressure die-casting, galvanized
- With fastening material steel, zinc plated
- Weight = 0.056 kg/piece



APPLICATIONS

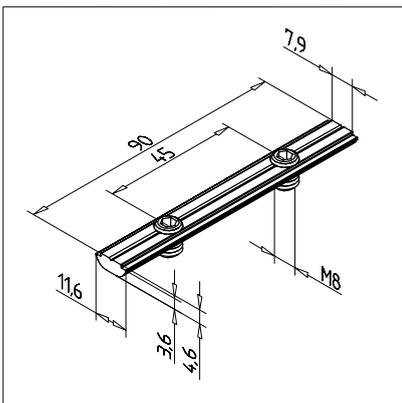
- Profile extension
- Butt connectors



ASSEMBLY

- Insert the stepped bore $\varnothing 7 \times 20, 16$ 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
- In addition, another T-slot bar can be inserted in another unused profile groove. This achieves more accurate positioning of the profiles relative to each other

T-slot bar 30 - 90



TECHN. DATA / ITEMS SUPPLIED

- Steel, galvanized
- 2 set screws M8, with hexagonal socket SW 4
- Weight = 0.033 kg/piece



APPLICATIONS

- Profile extensions for profiles of profile series 30
- For fastening components to profiles
- After loosening the grub screws, the bar is easily movable

Part No. 21.0043/0

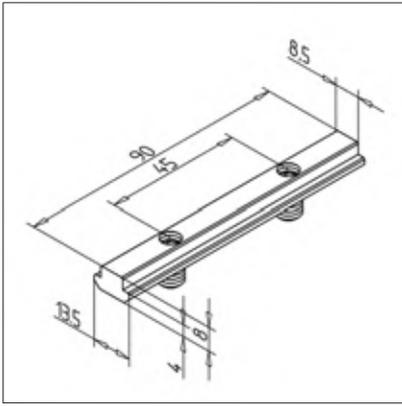


ASSEMBLY

- Swing into profile groove
- Clamp with set screw
- No machining required
- In combination with longer setscrews, can also be used on series 45 profiles

T-slot bar 90

Part No. 21.1029/0



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

APPLICATIONS

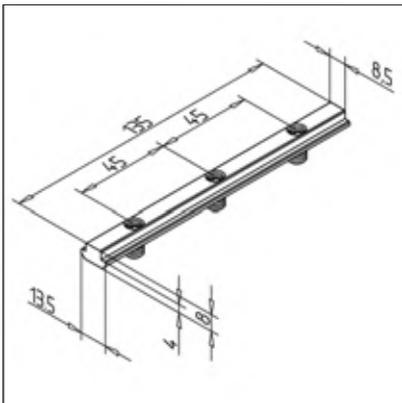
- Profile extension
- Fastening of roller elements in slide LW

ASSEMBLY

- 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
- By fixing the setscrews, the T-slot bar fits tight in the area of the groove sides

T-slot bar 135

Part No. 21.0988/0



TECHN. DATA / ITEMS SUPPLIED

- Steel, galvanized
- 3 set screws M8, with hexagonal socket SW4
- Stainless version **part no. 21.0987/0**
- Weight = 0.094 kg/piece

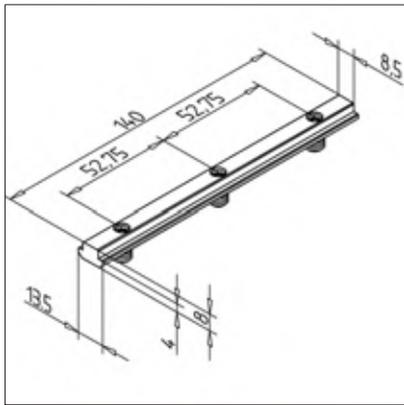
APPLICATIONS

- Profile extension
- Fastening of roller elements in slide LW

ASSEMBLY

- 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
- By fixing the setscrews, the T-slot bar fits tight in the area of the groove sides

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

- Profile extension
- Fastening of roller elements in slide LW
- Fastening of pulleys in linear slide LW 32 E

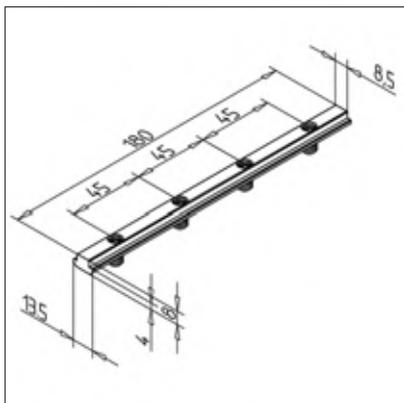


Part No. 28.0026/0

ASSEMBLY

- 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
- By fixing the setscrews, the T-slot bar fits tight in the area of the groove sides

T-slot bar 180



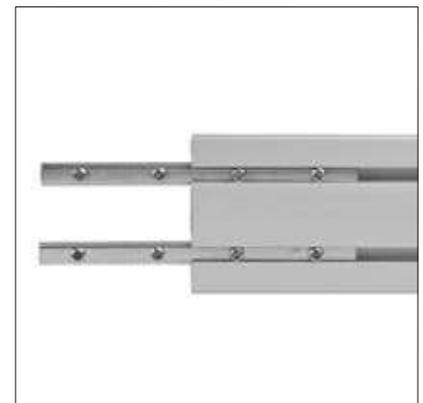
TECHN. DATA / ITEMS SUPPLIED

- Steel, galvanized
- 4 set screws M8, with hexagon socket SW4
- Stainless version **part no. 21.0986/0**
- Weight = 0.125 kg/piece



APPLICATIONS

- Front side connection at joining line
- Profile extension
- Fastening of roller elements in slide LW

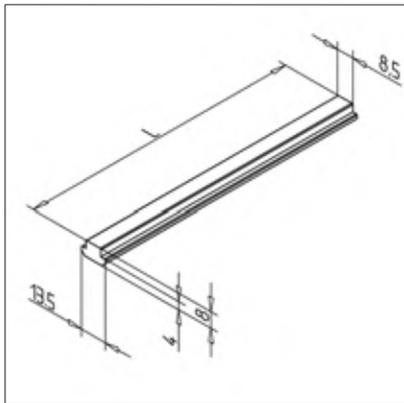


Part No. 21.1101/0

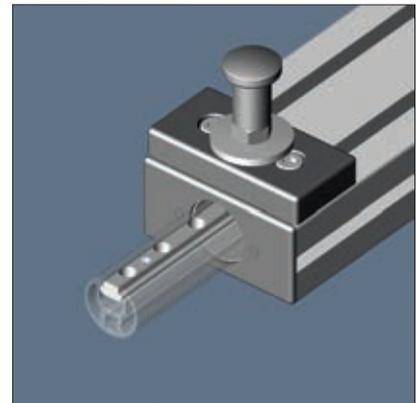
ASSEMBLY

- 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
- By fixing the setscrews, the T-slot bar fits tight in the area of the groove sides

T-slot bar profile



Part No. 21.1030/0



TECHN. DATA / ITEMS SUPPLIED

- Steel, bright
- Stainless version **part no. 21.1030/1**
- Weight = 0.650 kg/m
- Bar length = 6 m

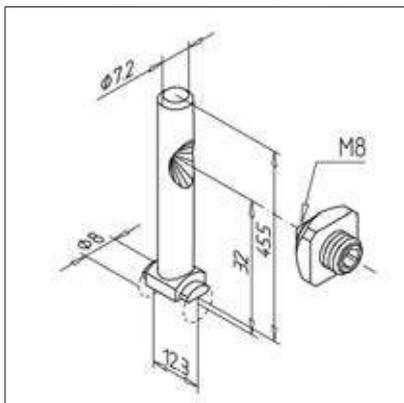
APPLICATIONS

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

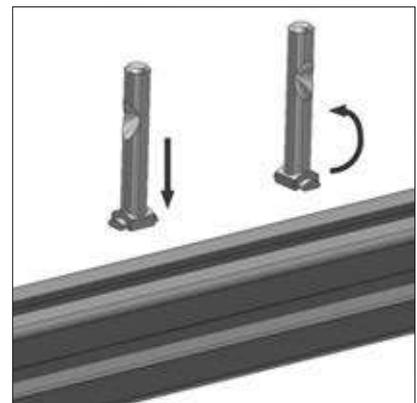
ASSEMBLY

- Swing into profile groove

Mitre connector N 30



Part No. 21.0945/0



TECHN. DATA / ITEMS SUPPLIED

- Steel, galvanized
- With fastening material steel, zinc plated
- Weight = 0.023 kg/piece

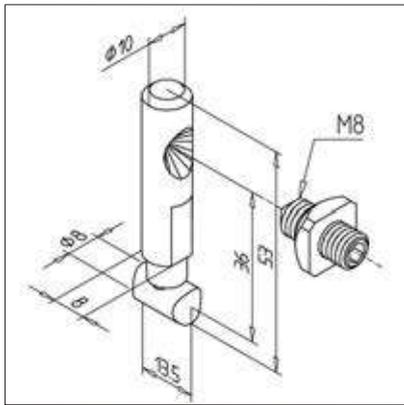
APPLICATIONS

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

ASSEMBLY

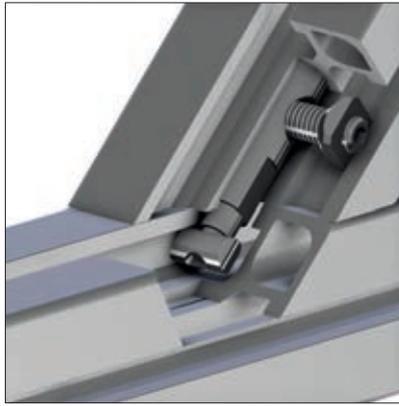
- Insert into groove and central bore
- Use a drilling jig for mitre connector N30 **part no. 26.1056/0**

Mitre connector N 45



TECHN. DATA / ITEMS SUPPLIED

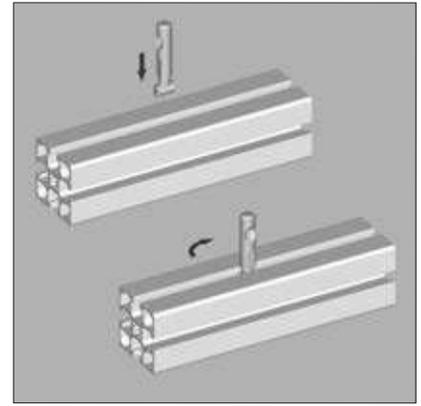
- Steel, galvanized
- With fastening material steel, zinc plated
- Weight = 0.035 kg/piece



APPLICATIONS

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

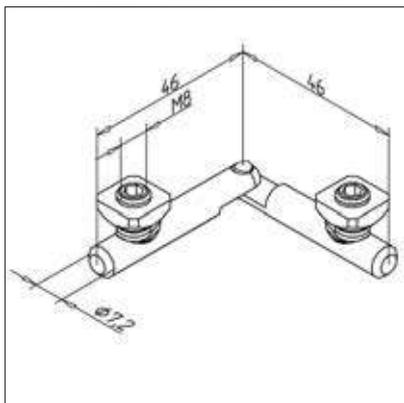
Part No. 21.1401/0



ASSEMBLY

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

Mitre connector 30



TECHN. DATA / ITEMS SUPPLIED

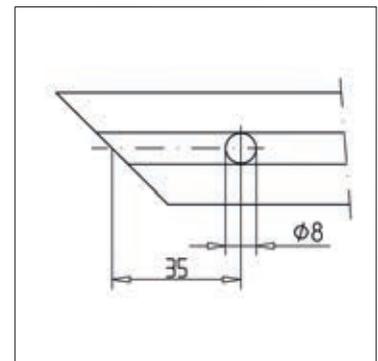
- Steel, galvanized
- With fastening material steel, zinc plated
- Weight = 0.040 kg/piece



APPLICATIONS

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

Part No. 21.1890/0

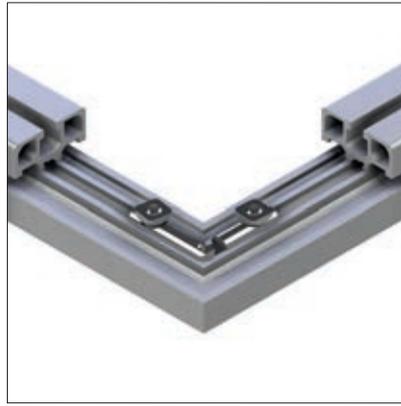
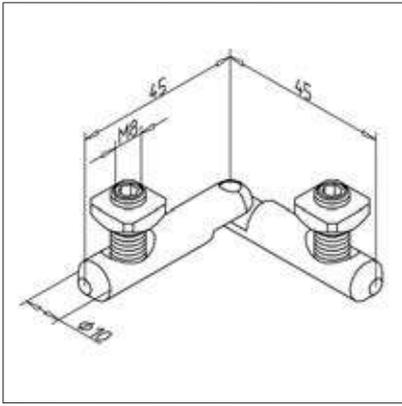


ASSEMBLY

- Insert the miter connector 30 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
- Drilling jig **part no. 26.1063/0**

Mitre connector 45

Part No. 21.1400/0



TECHN. DATA / ITEMS SUPPLIED

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

APPLICATIONS

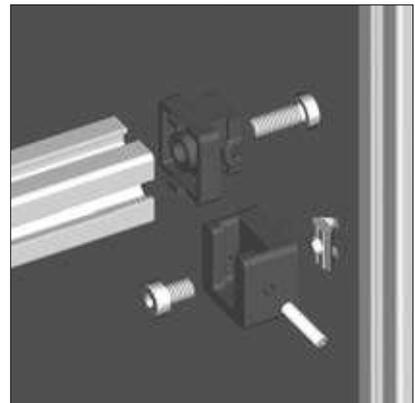
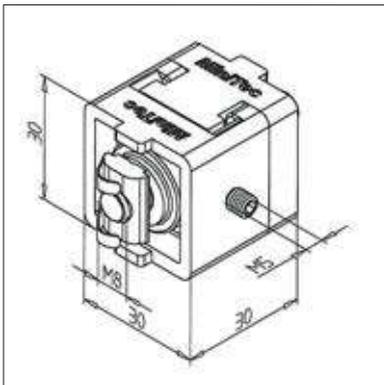
- Display windows, showcases
- Store equipment
- Displays
- Frames

ASSEMBLY

- Insert the mitre 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

Mounting bracket 30

Part No. 21.2068/0



TECHN. DATA / ITEMS SUPPLIED

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

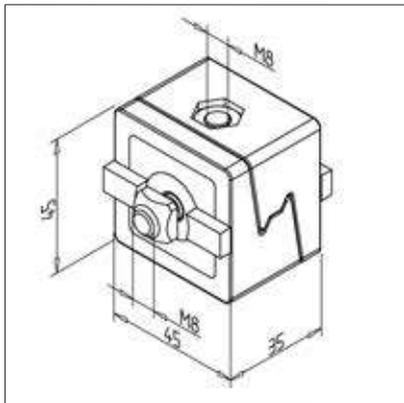
APPLICATIONS

- 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-slot
- For adjustment use set screw M5

Mounting bracket 45



TECHN. DATA / ITEMS SUPPLIED

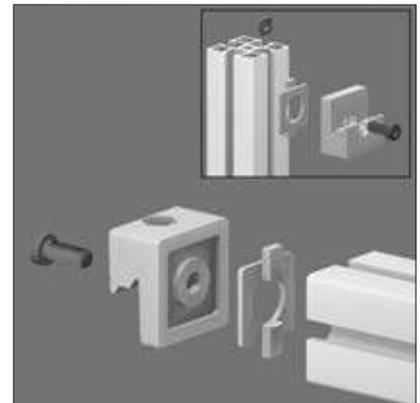
- Zinc, Pressure die-casting, powder-coated, grey
- With fastening material steel, zinc plated
- Weight = 0.429 kg/piece



APPLICATIONS

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

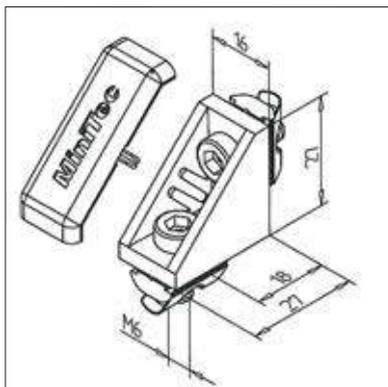
Part No. 21.1411/0



ASSEMBLY

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

Mounting angle 16 GD-Z



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, Pressure die-casting, powder-coated, grey
- With fastening material steel, zinc plated
- Removable centering tabs
- **Conductive version part no. 21.2077/6**
- Weight = 0.021 kg/piece



APPLICATIONS

- Construction from profiles with width of 16 and 23; specifically suitable for the subsequent mounting of elements in existent constructions
- Fastening of surface elements, table tops
- Reinforcement of constructions made from profile series 16 or 23

Part No. 21.2077/0

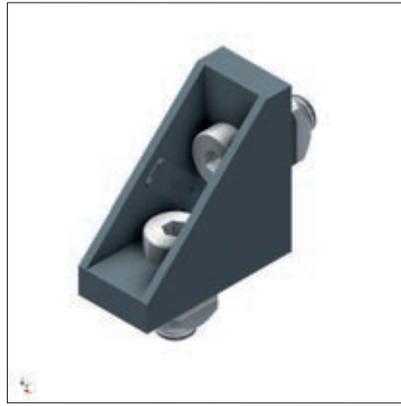
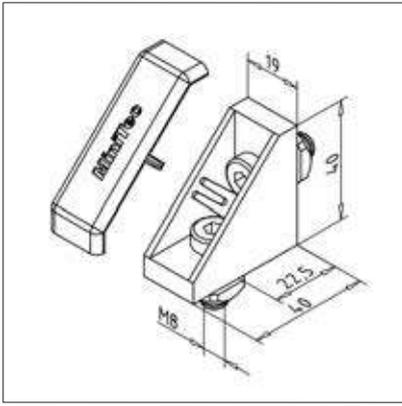


ASSEMBLY

- Fasten to profile groove with supplied hardware
- Recommended torque: 8 Nm
- Fitting end cap MW 16 GD-Z grey, **part no. 22.1138/1**

Mounting angle 19 GD-Z

Part No. 21.2078/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, Pressure die-casting, powder-coated, grey
- With fastening material steel, zinc plated
- Package size of 50 pieces **part no. 21.2078/050**
- **Conductive version part no. 21.2078/6**
- For use on vertical struts, mounting angle **part no. 21.2078/7** (square nuts with position-fixing)
- Weight = 0.055 kg/piece

APPLICATIONS

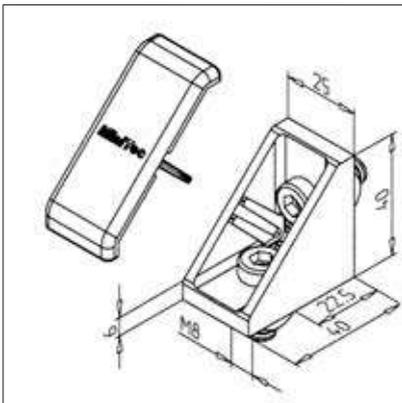
- Connection of profiles 19 and 32
- Subsequent insertion of profiles into existing constructions
- Attaching bearing surfaces
- Slidable in the groove direction

ASSEMBLY

- 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

Part No. 21.0969/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, Pressure die-casting, powder-coated, 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**
- for use on vertical struts, mounting angle **part no. 21.0969/7** (square nuts with position-fixing)
- Weight = 0.066 kg/piece

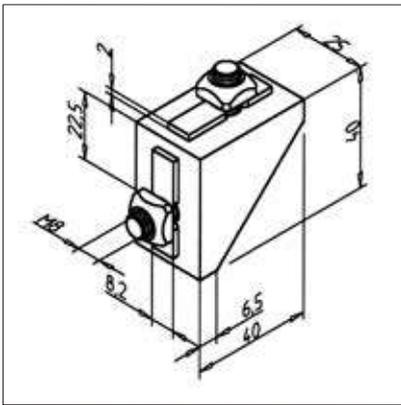
APPLICATIONS

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

ASSEMBLY

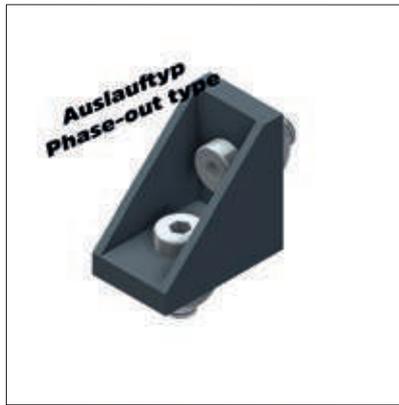
- Fasten to profile groove with supplied hardware
- If non-aligning grooves, break centering tabs with pliers
- Fitting end cap MW 25 GD-Z, **part no. 22.0997/1**
- Recommended locking torque: 20 Nm

Mounting angle 25 S



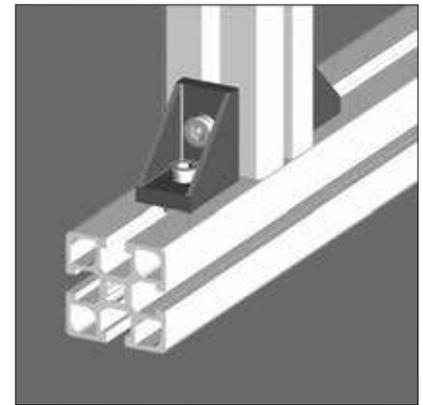
TECHN. DATA / ITEMS SUPPLIED

- Aluminium, Pressure die-casting, powder-coated, grey
- With fastening material steel, zinc plated
- With ridge as anti-twist device
- **Conductive version part no. 21.1134/6**
- For use on vertical struts, mounting angle **part no. 21.1134/7** (square nuts with position-fixing)
- Weight = 0.067 kg/piece



APPLICATIONS

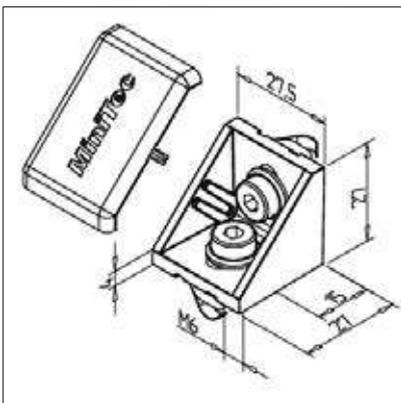
- General constructions, particularly for subsequent insertion of profiles into existing constructions
- Strengthening of profile constructions



ASSEMBLY

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

Mounting angle 30 GD-Z



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, Pressure die-casting, powder-coated, grey
- With fastening material steel, zinc plated
- Removable centering tabs
- Package size of 50 pieces **part no. 21.0905/050**
- **Conductive version part no. 21.0905/6**
- Weight = 0.029 kg/piece
- Bar length = 0.3 m



APPLICATIONS

- All types of constructions; specifically suited for the subsequent mounting of elements in existing constructions
- Fastening of surface elements, table tops



ASSEMBLY

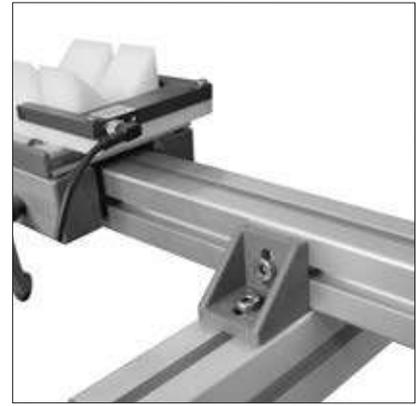
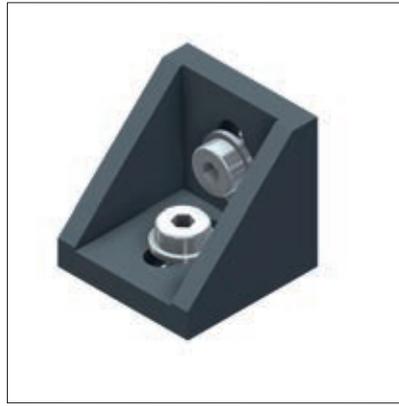
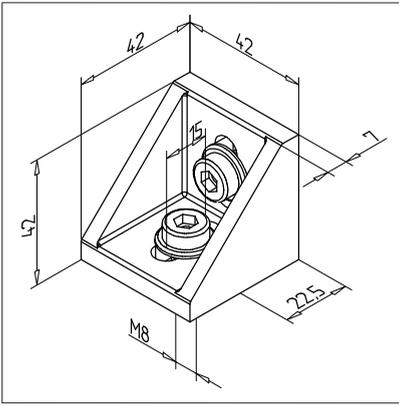
- Strengthening of profile constructions
- Fasten to profile groove with supplied hardware
- Recommended torque: 8 Nm
- Fitting end cap MW 30 grey, **part no. 22.0989/1**

Part No. 21.1134/0

Part No. 21.0905/0

Mounting angle 45 GD

Part No. 21.1133/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, Pressure die-casting, powder-coated, grey
- With fastening material steel, zinc plated
- Package size of 50 pieces **part no. 21.1133/050**
- Conductive version **part no. 21.1133/6**
- For use on vertical struts, mounting angle **part no. 21.1133/7** (square nuts with position-fixing)
- Weight = 0.114 kg/piece

APPLICATIONS

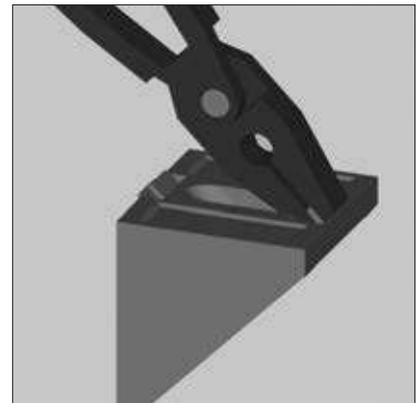
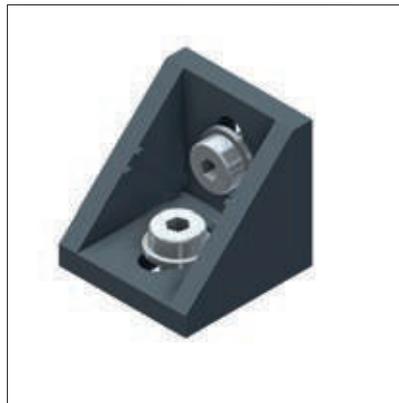
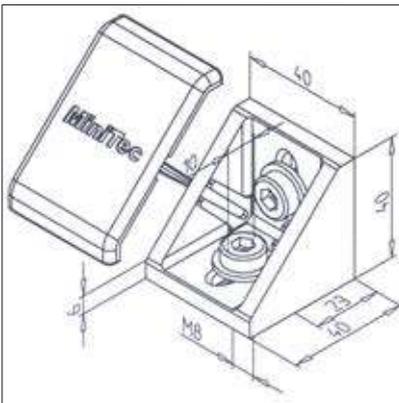
- General constructions, particularly for subsequent insertion of profiles into existing constructions
- Fastening of surface elements, table tops
- Strengthening of profile constructions

ASSEMBLY

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

Mounting angle 45 GD-Z

Part No. 21.1349/0



TECHN. DATA / ITEMS SUPPLIED

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

APPLICATIONS

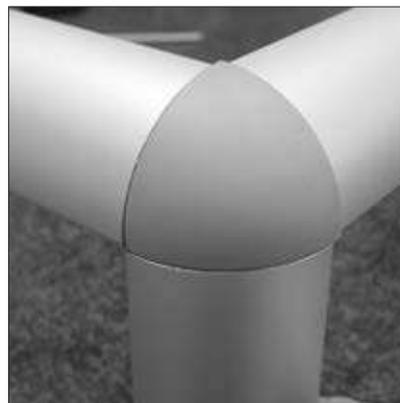
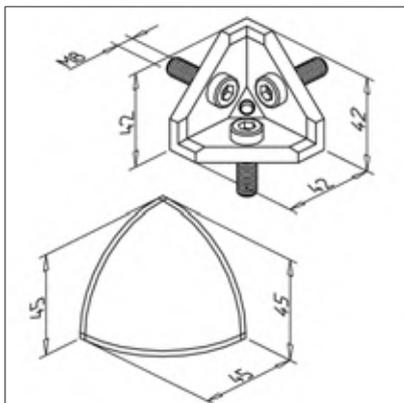
- General constructions, particularly for subsequent insertion of profiles into existing constructions
- Fastening of surface elements, table tops
- Strengthening of profile constructions

ASSEMBLY

- 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 R 90°

Part No. 21.1710/1



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

APPLICATIONS

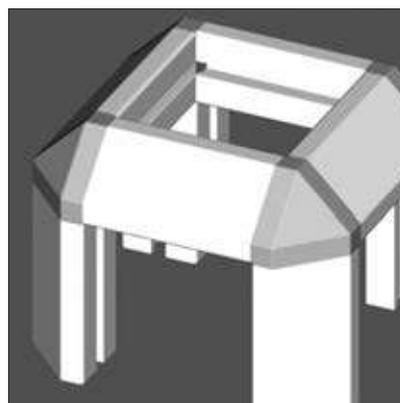
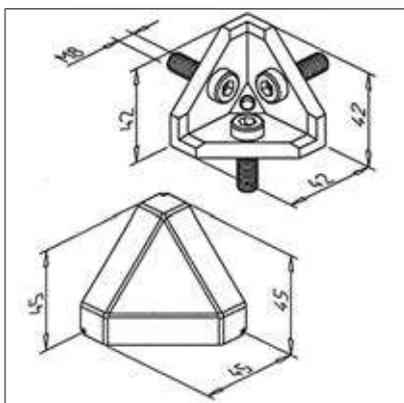
- Corner fastening of profiles 45 R 90°
- Constructions for show cases, tables etc.

ASSEMBLY

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

Mounting angle 45°

Part No. 21.1708/1



TECHN. DATA / ITEMS SUPPLIED

- 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

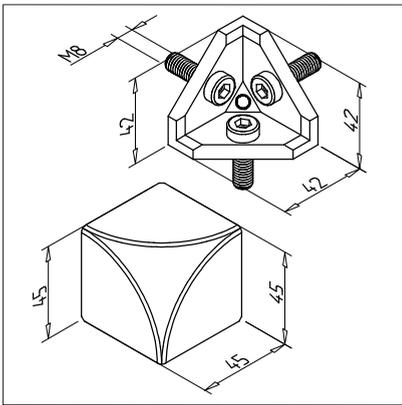
APPLICATIONS

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

ASSEMBLY

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

Mounting angle 45 G



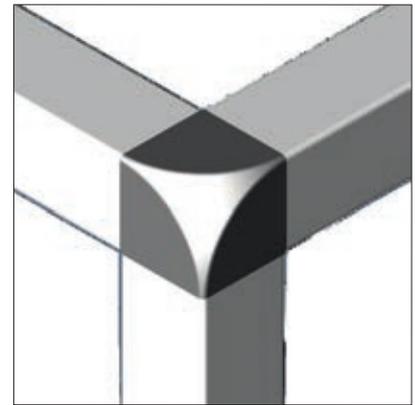
TECHN. DATA / ITEMS SUPPLIED

- 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



APPLICATIONS

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

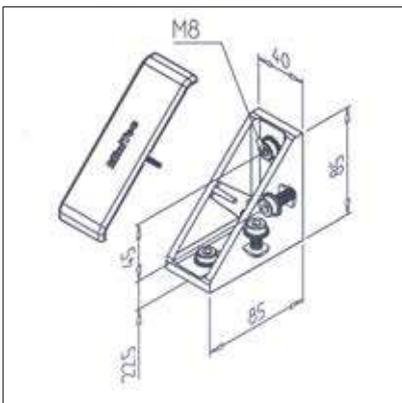


ASSEMBLY

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

Part No. 21.2503/1

Mounting angle 45 X 90 GD-Z



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, Pressure die-casting, powder-coated, grey
- With fastening material steel, zinc plated
- Package size of 25 pieces **part no. 21.1397/025**
- Conductive version part no. 21.1397/6**
- For use on vertical struts, mounting angle **part no. 21.1397/7** (square nuts with position-fixing)
- Weight = 0.281 kg/piece



APPLICATIONS

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

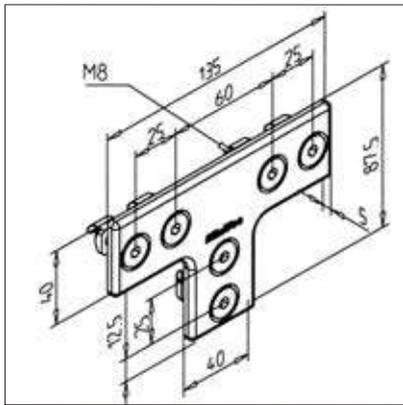


ASSEMBLY

- Fasten to profile groove with supplied hardware
- Hammer head screw **part no. 21.1370/0** can be used
- Fitting end cap MW 45 x90 GD-Z, **part no. 22.0998/1**
- Recommended locking torque: 20 Nm

Part No. 21.1397/0

T-sheet stainless



TECHN. DATA / ITEMS SUPPLIED

- Stainless steel, blasted
- With fixing material, stainless steel
- Weight = 0.259 kg/piece



APPLICATIONS

- Strengthening of profile constructions

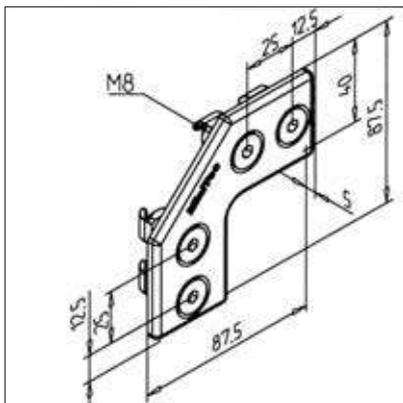


ASSEMBLY

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

Part No. 21.0019/0

Angle sheet stainless



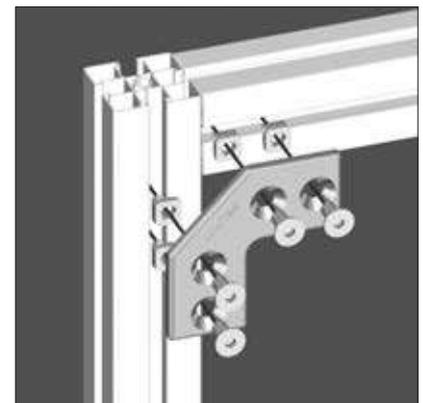
TECHN. DATA / ITEMS SUPPLIED

- Stainless steel, blasted
- With fixing material, stainless steel
- Weight = 0.163 kg/piece



APPLICATIONS

- Strengthening of profile constructions
- Also suitable for cross joints (double application)



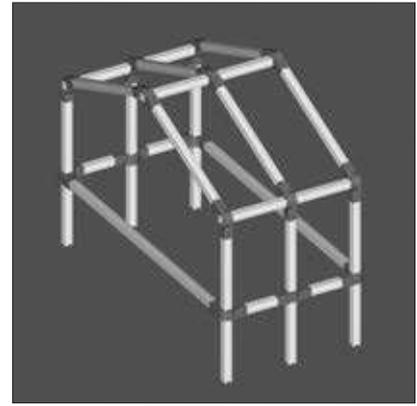
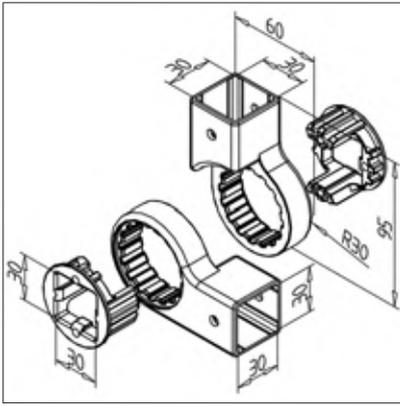
ASSEMBLY

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

Part No. 21.0018/0

Multi connector 30

Part No. 22.1140/0



TECHN. DATA / ITEMS SUPPLIED

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

APPLICATIONS

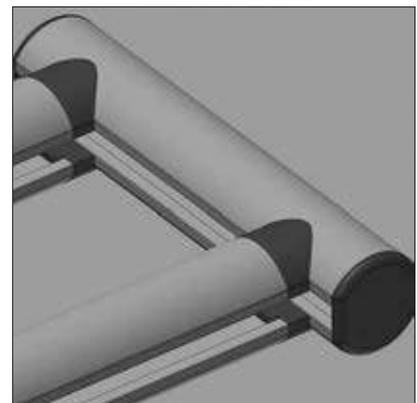
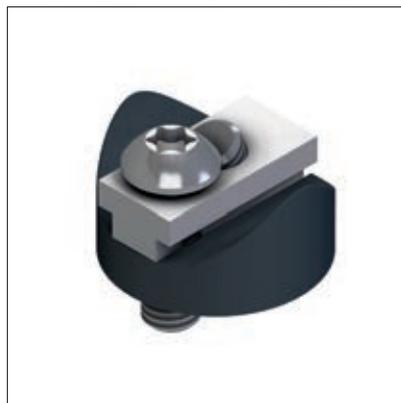
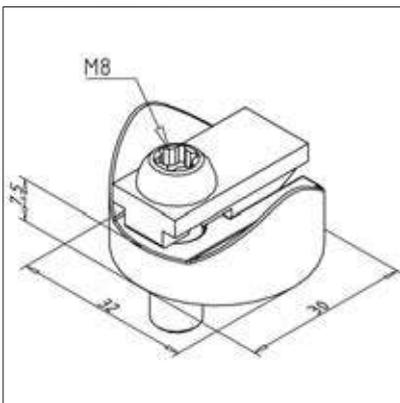
- Easy connection for profiles
- Angle adjustable in 22,5° raster

ASSEMBLY

- 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 / G32

Part No. 21.0954/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, Pressure die-casting, powder-coated, grey
- With fastening material steel, zinc plated
- Weight = 0.041 kg/piece

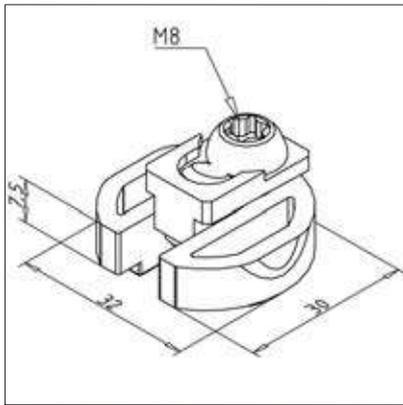
APPLICATIONS

- For connection of handle profile 32 with handle profile 32

ASSEMBLY

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

Adapter G32 / 30 x 30



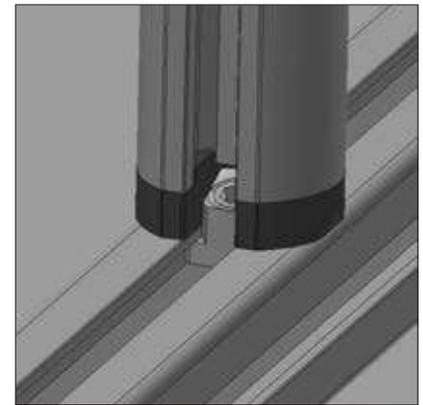
TECHN. DATA / ITEMS SUPPLIED

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



APPLICATIONS

- For connection of handle profile 32 with profiles of width 30

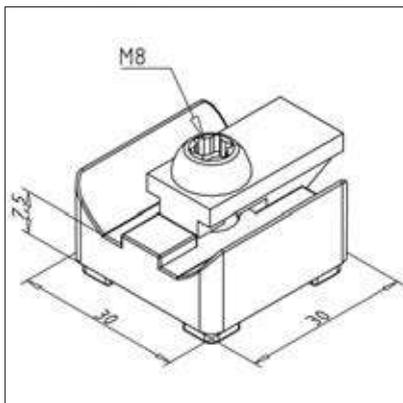


Part No. 21.0955/0

ASSEMBLY

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

Adapter 30 x 30 / G32



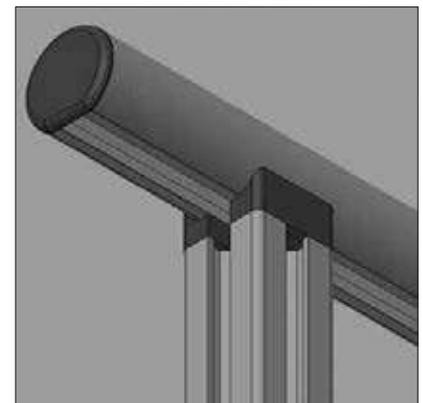
TECHN. DATA / ITEMS SUPPLIED

- Aluminium, Pressure die-casting, powder-coated, grey
- With fastening material steel, zinc plated
- Weight = 0.046 kg/piece



APPLICATIONS

- For connection of profile 30 x 30 with handle profile 32



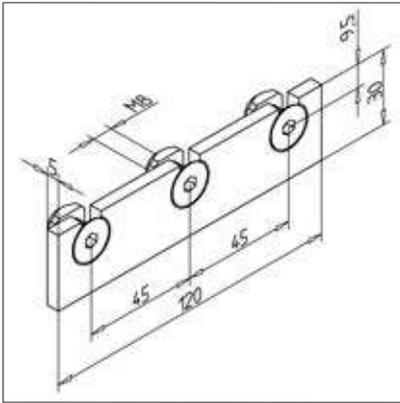
Part No. 21.0953/0

ASSEMBLY

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

Connecting bar

Part No. 21.1113/0



TECHN. DATA / ITEMS SUPPLIED

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

APPLICATIONS

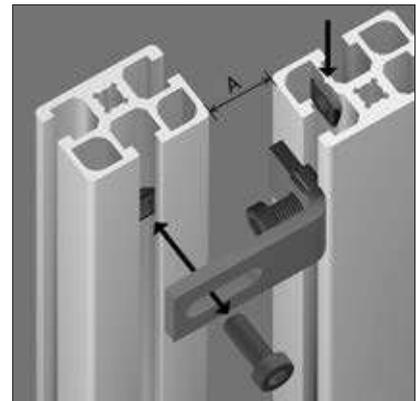
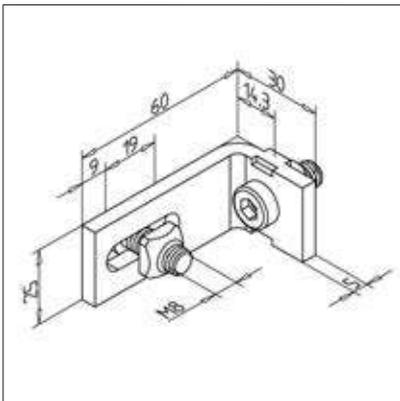
- Connection of different profiles
- Retrofitting profiles

ASSEMBLY

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

Guard unit fixing angle 45 steel

Part No. 21.1404/0



TECHN. DATA / ITEMS SUPPLIED

- Steel, galvanized
- With fastening material steel, zinc plated
- Weight = 0.104 kg/piece

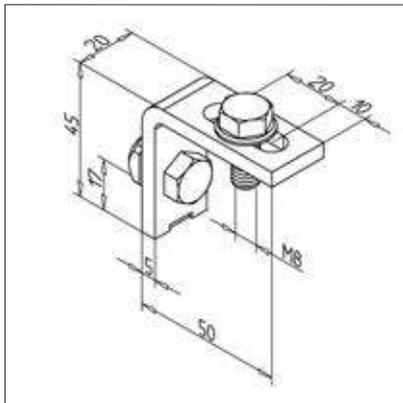
APPLICATIONS

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

ASSEMBLY

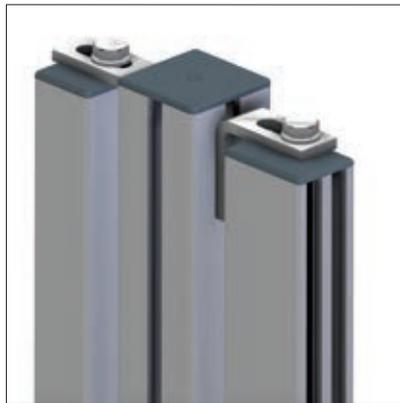
- Fasten to profile groove with supplied hardware
- No machining required
- First attach the brackets to the standing profile, then connect the guard unit from the rear to the brackets
- A = 10 mm - 28 mm

Guard unit fixing angle 19



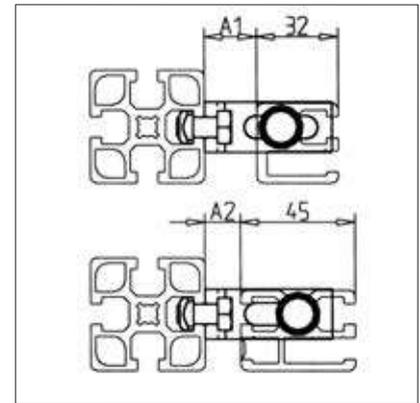
TECHN. DATA / ITEMS SUPPLIED

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



APPLICATIONS

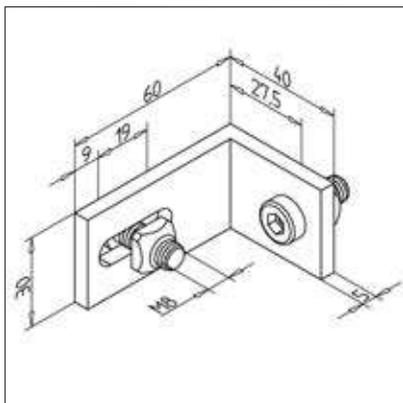
- Fastening guard units from clamping profile 32 x 32, 45 x 32 or standard profiles
- Attachment of guard units at any angle
- When using clamping profile 32x32 use end cap **part no. 22.1032/3**
- When using clamping profile 45x32 use end cap **part no. 22.1046/3**



ASSEMBLY

- Spread screw threads M8 x 20 into the profile ending of the guard unit
- Install guard unit 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

Guard unit fixing angle 45 alu



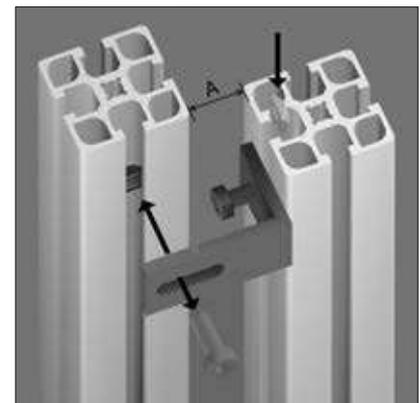
TECHN. DATA / ITEMS SUPPLIED

- Aluminium, anodized E6/EV1
- With fastening material steel, zinc plated
- Weight = 0.068 kg/piece



APPLICATIONS

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



ASSEMBLY

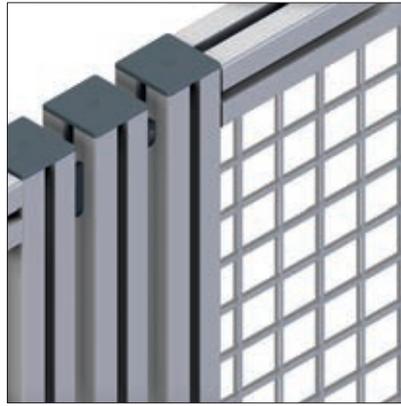
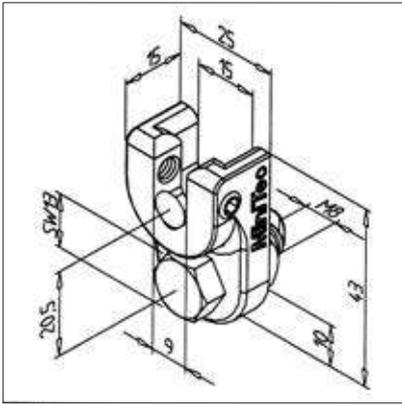
- Fasten to profile groove with supplied hardware
- No machining required
- First attach the brackets to the standing profile, then connect the guard unit from the rear to the brackets
- A = 10 mm - 28 mm

Part No. 21.1399/0

Part No. 21.1407/0

Guard unit fixing angle GD-K

Part No. 21.0008/0



TECHN. DATA / ITEMS SUPPLIED

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

APPLICATIONS

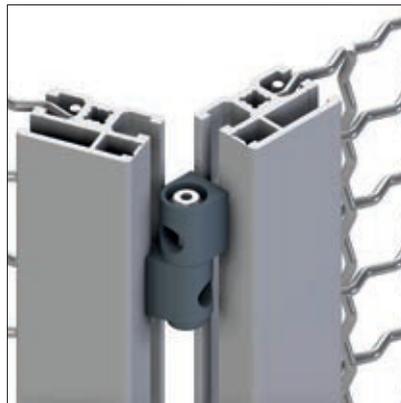
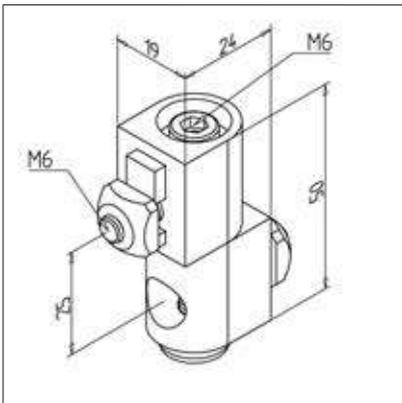
- Guards from all profiles
- Movable flaps
- It is also possible to mount the guards at the front when fitting the suspensions to the front of the post

ASSEMBLY

- Fasten guard unit 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
- $A = 16 \text{ mm} \pm 0.75$
- **Guard cannot be removed from outside**

Guard unit fixing angle 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

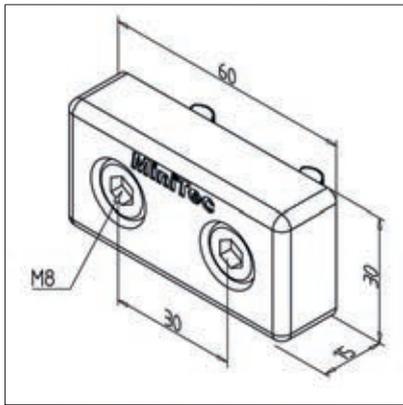
APPLICATIONS

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

ASSEMBLY

- 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



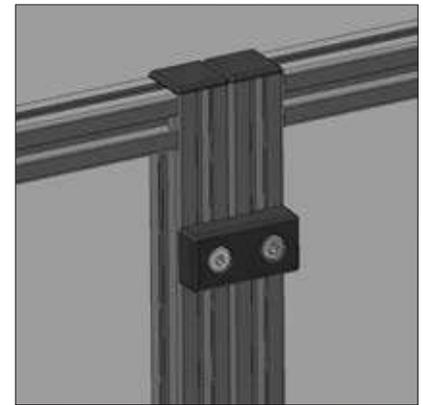
TECHN. DATA / ITEMS SUPPLIED

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



APPLICATIONS

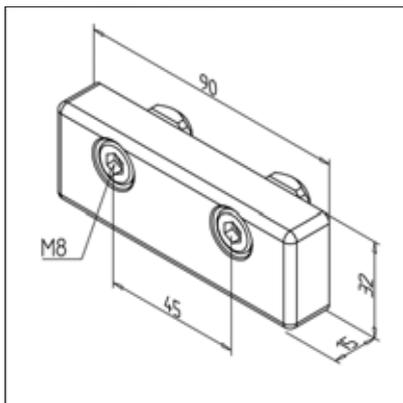
- Connection of two guards without gap
- Strengthening of guard units
- Connection of pre-assembled modules



ASSEMBLY

- Install to groove of guard unit and posts with supplied hardware

Connecting plate 90 x 32



TECHN. DATA / ITEMS SUPPLIED

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



APPLICATIONS

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

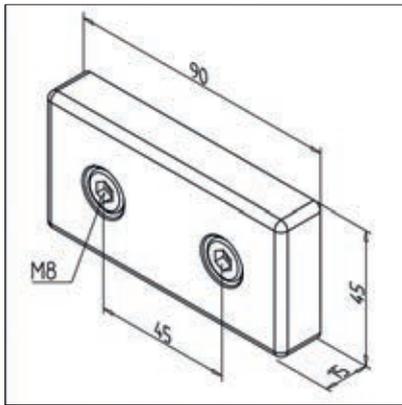


ASSEMBLY

- Install to groove of guard unit and posts with supplied hardware

Connecting plate 45 x 90

Part No. 21.1472/0



TECHN. DATA / ITEMS SUPPLIED

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

APPLICATIONS

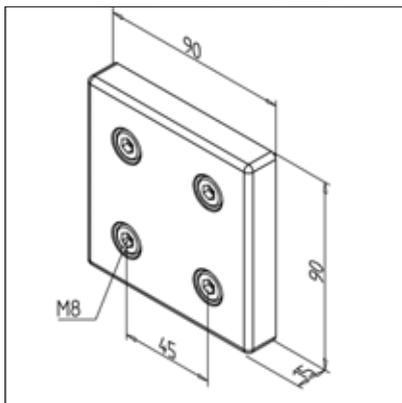
- Connection of two guards without gap
- Strengthening of guard units
- Connection of pre-assembled modules

ASSEMBLY

- Install to groove of guard unit and posts with supplied hardware

Connecting plate 90 x 90

Part No. 21.1473/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, Pressure die-casting, powder-coated, grey
- With fastening material steel, zinc plated
- Weight = 0.366 kg/piece

APPLICATIONS

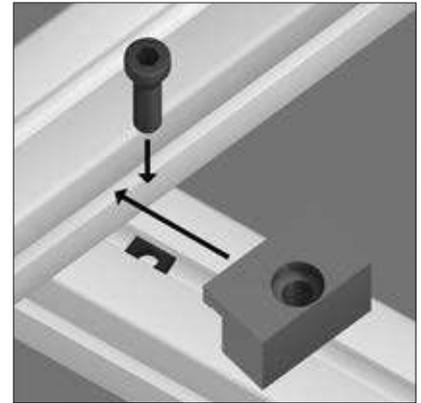
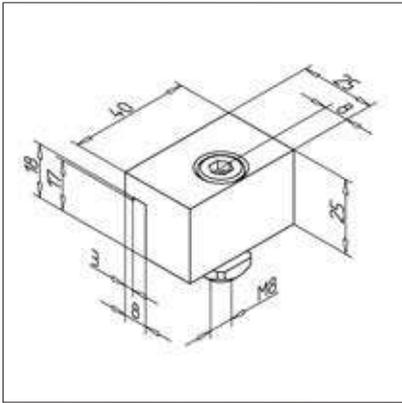
- Connection of two guards without gap
- Strengthening of guard units
- Connection of pre-assembled modules

ASSEMBLY

- Install to groove of guard unit and posts with supplied hardware

Clamping claw

Part No. 21.1027/0



TECHN. DATA / ITEMS SUPPLIED

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

APPLICATIONS

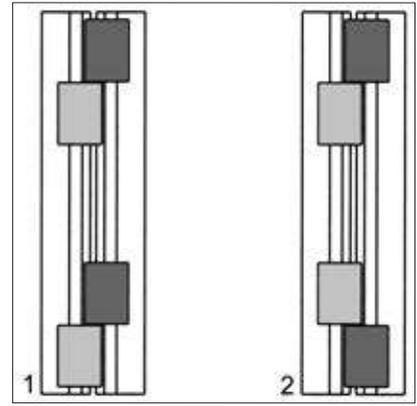
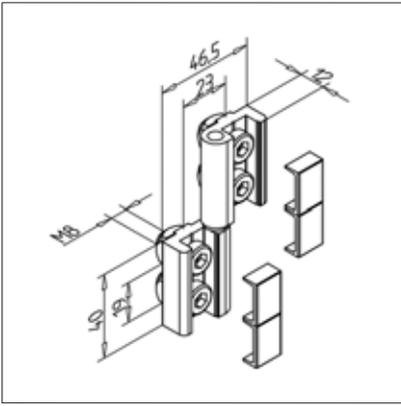
- Parallel connection of profiles at various angles

ASSEMBLY

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

Hinge 19

Part No. 21.1100/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, anodized E6/EV1
- With stainless steel shaft
- 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

APPLICATIONS

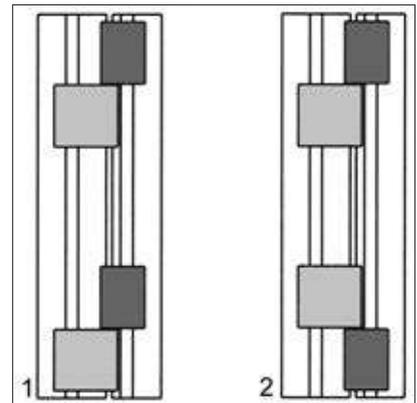
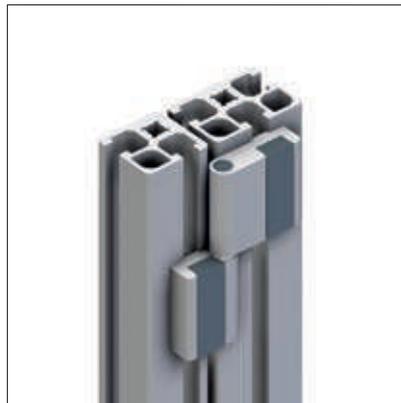
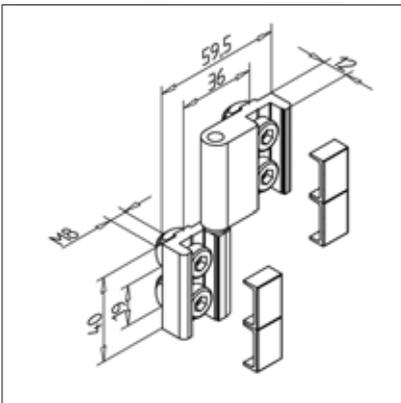
- Detachable doors, hatches, surface elements in a vertical arrangement
- If the hinges are arranged in the opposite direction, non-detachable and horizontally mounted structures can also be produced
- Connection of profiles 19 at various angles

ASSEMBLY

- Fasten to profile groove with supplied hardware
- For fixing directly on surface elements or on profile surfaces we deliver hinge 19 without fixing element **part no. 21.1100/2**
- 1: Lift removable
- 2: Arrangement is not detachable

Hinge 32

Part No. 21.1095/0



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

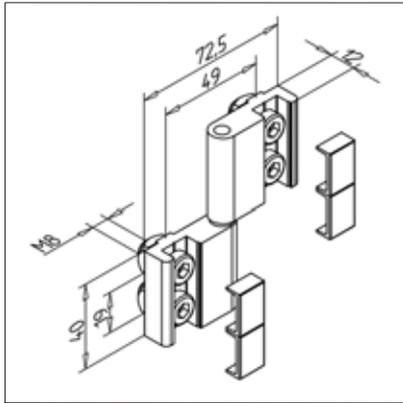
APPLICATIONS

- 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

ASSEMBLY

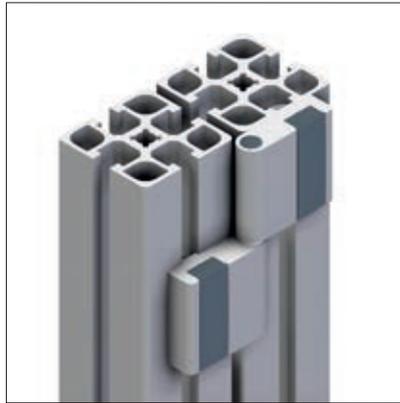
- Fasten to profile groove with supplied hardware
- For fixing directly on surface elements or on profile surfaces we deliver hinge 32 without fixing element **part no. 21.1095/2**
- 1: Lift removable
- 2: Arrangement is not detachable

Hinge 45



TECHN. DATA / ITEMS SUPPLIED

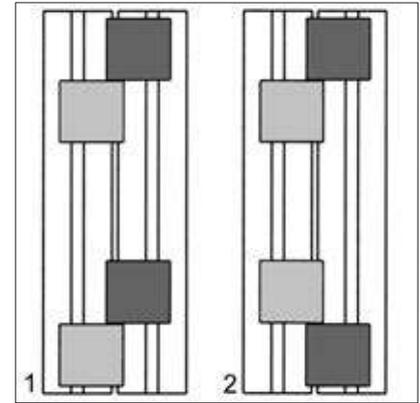
- Aluminium, anodized E6/EV1
- With stainless steel shaft
- With fastening material steel, zinc plated
- End caps
- Order with position fixing nuts, **part no. 21.1096/7**
- Load capacity up to 400 N
- Weight = 0.151 kg/piece



APPLICATIONS

- Detachable doors, hatches, moving parts on profiles 45
- Connection of profiles 45 at various angles
- Guard unit fixing angle
- If the hinges are arranged in the opposite direction, non-detachable and horizontally mounted structures can also be produced

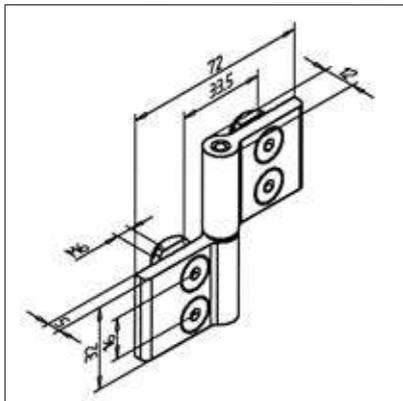
Part No. 21.1096/0



ASSEMBLY

- Fasten to profile groove with supplied hardware
- 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

Hinge L 19/30



TECHN. DATA / ITEMS SUPPLIED

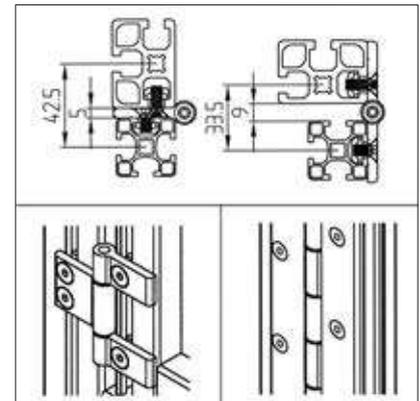
- Aluminium, anodized E6/EV1
- With stainless steel shaft
- With fastening material steel, zinc plated
- Load capacity up to 400 N
- Weight = 0.089 kg/piece



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

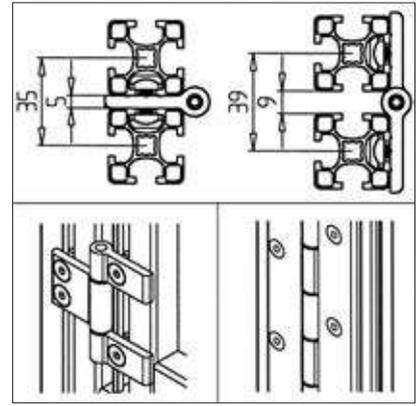
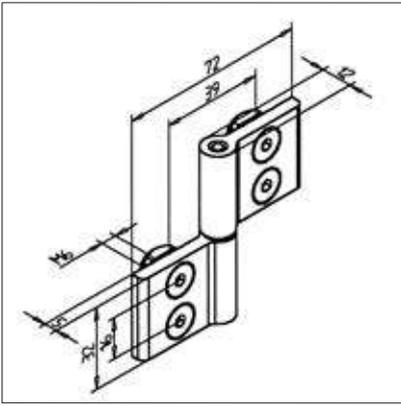


ASSEMBLY

- 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

Hinge L 30/30

Part No. 21.1376/0



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

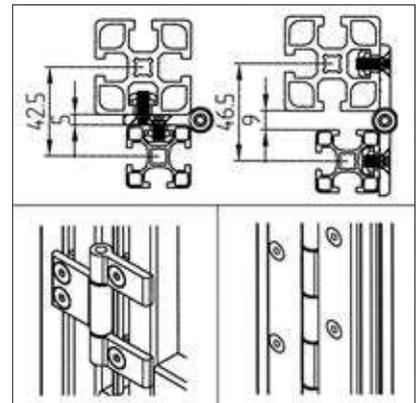
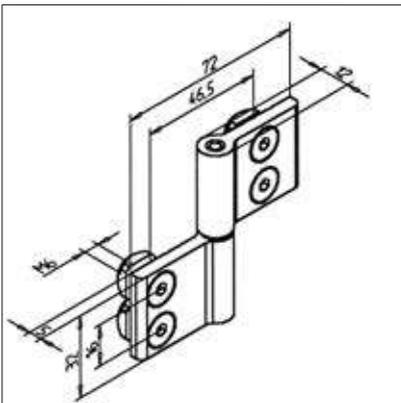
- Detachable doors, hatches, movable attachments
- If the hinges are arranged in the opposite direction, non-detachable and horizontally mounted structures can also be produced
- Connection of profiles 30 under preferred angle

ASSEMBLY

- 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

Hinge L 30/45

Part No. 21.1377/0



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

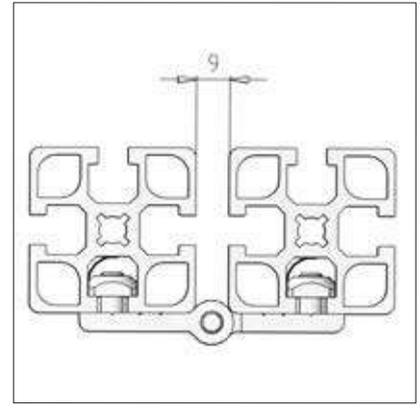
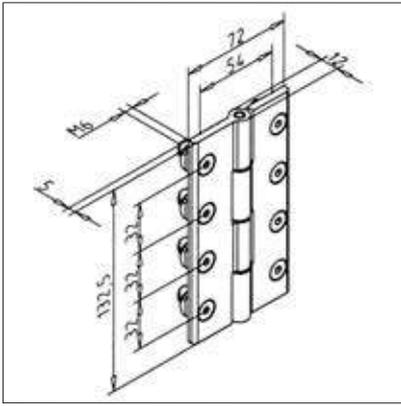
- Detachable doors, hatches, movable attachments
- If the hinges are arranged in the opposite direction, non-detachable and horizontally mounted structures can also be produced
- Connection of profiles 30 and 45 at various angles

ASSEMBLY

- 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

Door hinge large

Part No. 21.0970/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, anodized E6/EV1
- With stainless steel shaft
- With fastening material steel, zinc plated
- Weight = 0.235 kg/piece

APPLICATIONS

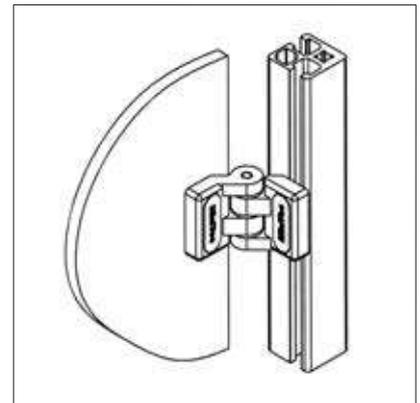
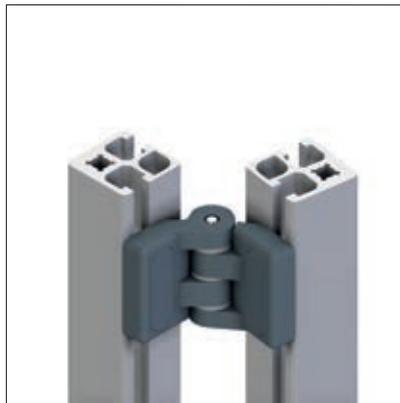
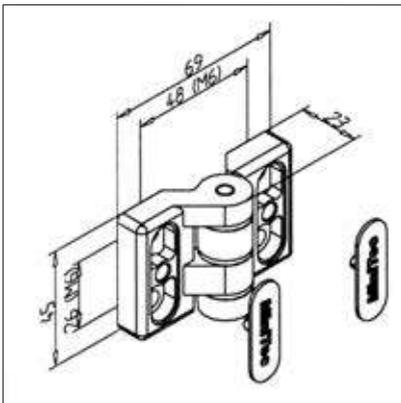
- Suitable for large doors and lids
- Guard units
- Connection of profiles at various angles

ASSEMBLY

- Screw tight to the profile groove with supplied hardware

Hinge 19 S

Part No. 21.1044/0



TECHN. DATA / ITEMS SUPPLIED

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

APPLICATIONS

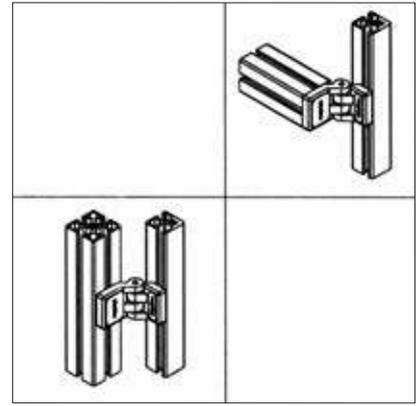
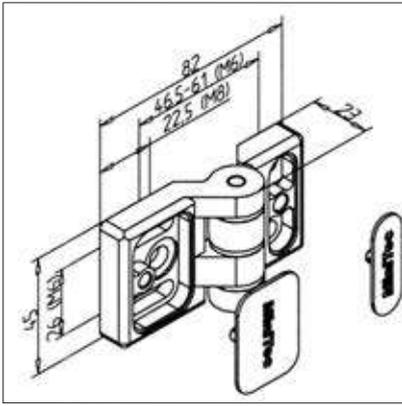
- Suitable for larger doors and hatches of profiles 19 or 32
- Guard units
- Connection of profiles 19 and 32 at any angle

ASSEMBLY

- 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°

Hinge 32 S

Part No. 21.1055/0



TECHN. DATA / ITEMS SUPPLIED

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

APPLICATIONS

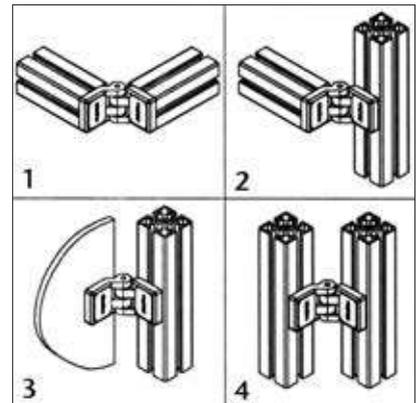
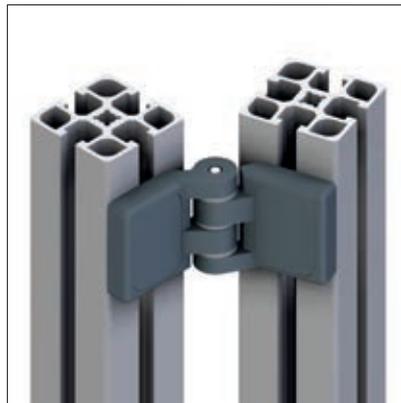
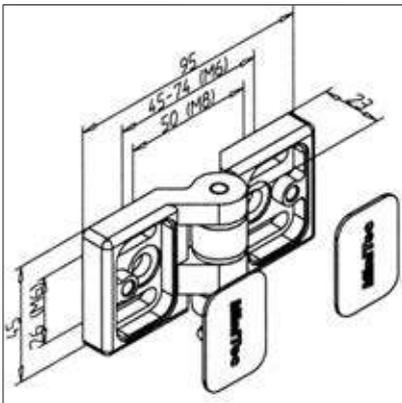
- Suitable for large doors and lids
- Guard units
- Connecting profiles 19, 32 and 45 at any angle

ASSEMBLY

- Fix short half of hinge on profile groove using 2 M6 x 18 bolts and 2 square nuts or use screws corresponding to the material thickness to fix 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°

Hinge 45 S

Part No. 21.1098/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, Pressure die-casting, powder-coated, grey
- Hinge pin, steel, galvanised
- End caps
- Without fastening kit
- Load capacity up to 600 N, static
- Weight = 0.099 kg/piece

APPLICATIONS

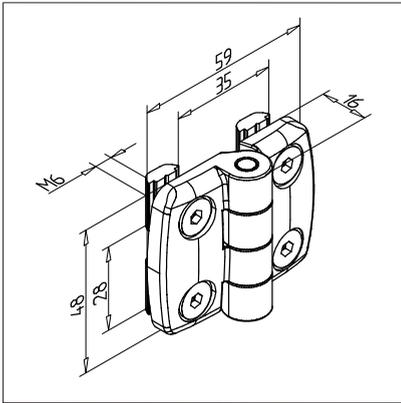
- Suitable for large doors and lids
- Guard units
- Connection of profiles at various angles
- For heavy-duty application use multiple hinges

ASSEMBLY

- 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°

Hinge 30 GD

Part No. 21.2532/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, Pressure die-casting, nickel-plated, silver
- With stainless steel shaft
- Fastening material steel, galvanized
- Load capacity up to 300 N
- Weight = 0.098 kg/piece

APPLICATIONS

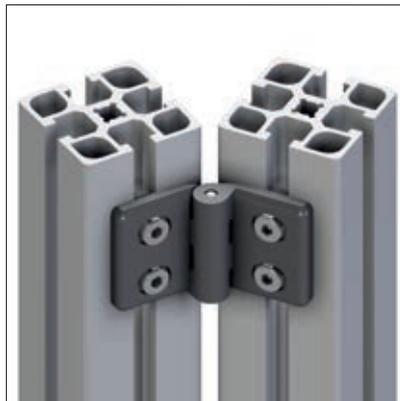
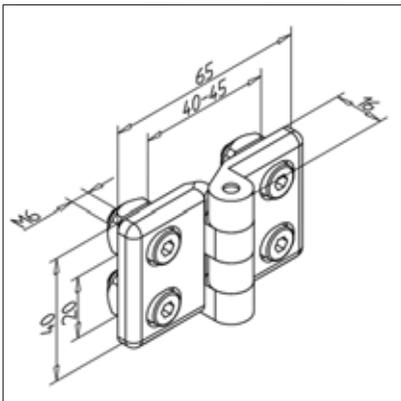
- Suitable for all profiles of series 30
- Doors and lids
- Guard units
- Connection of profiles at various angles

ASSEMBLY

- Screw tight to the profile groove with supplied hardware

Hinge 45 M6

Part No. 21.1175/0



TECHN. DATA / ITEMS SUPPLIED

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

APPLICATIONS

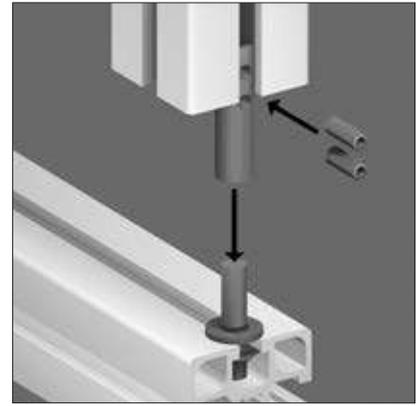
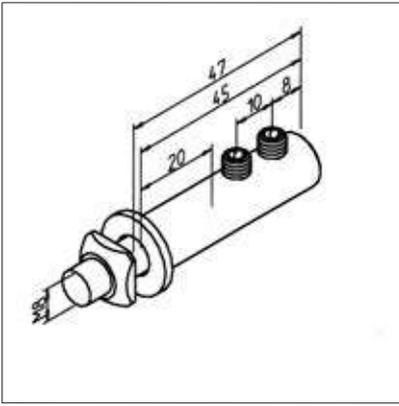
- Suitable for light doors and lids
- Guard units
- Connection of profiles at various angles

ASSEMBLY

- Screw tight to the profile groove with supplied hardware

Internal hinge alu

Part No. 21.1142/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, anodized E6/EV1
- With fastening material steel, zinc plated
- Load capacity up to 250 N
- Weight = 0.032 kg/piece

APPLICATIONS

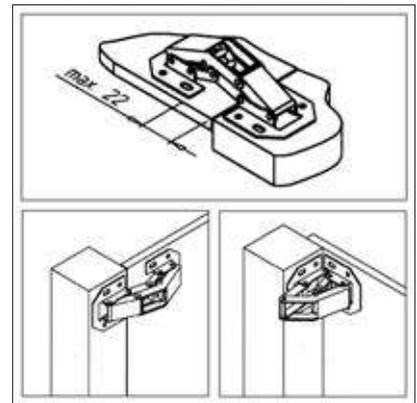
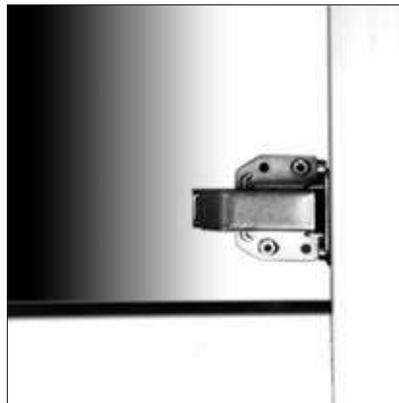
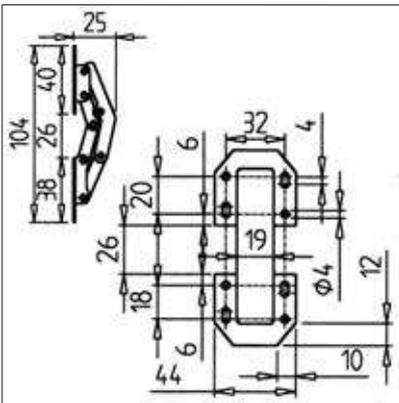
- Doors
- Lids
- Movable elements
- Retrofitting of doors

ASSEMBLY

- Fix the retaining pins in the frame and place the plastic washer
- Insert hinge into door element
- Position the door element with the grooves over the retaining pins, push the hinges onto the retaining pins and tighten

Swing-out hinge

Part No. 21.1187/0



TECHN. DATA / ITEMS SUPPLIED

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

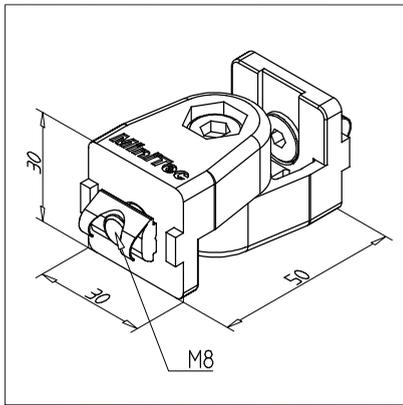
APPLICATIONS

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

ASSEMBLY

- 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

Link 30 S



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, Pressure die-casting, powder-coated, 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**

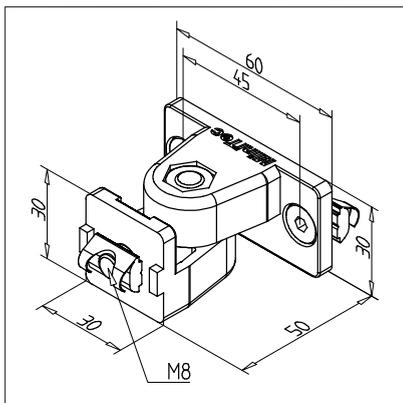
Part No. 21.2106/0



ASSEMBLY

- 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

Link 30 F/S



TECHN. DATA / ITEMS SUPPLIED

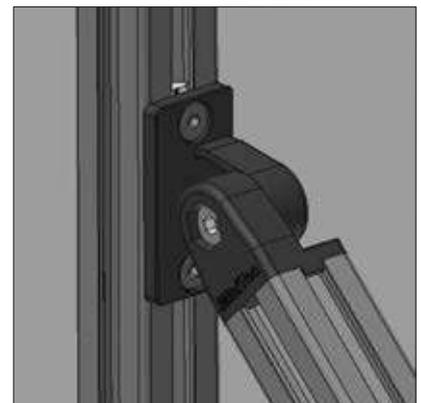
- Aluminium, Pressure die-casting, powder-coated, grey
- With fastening material steel, zinc plated
- Locking device against torsion
- Weight = 0.105 kg/piece



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**

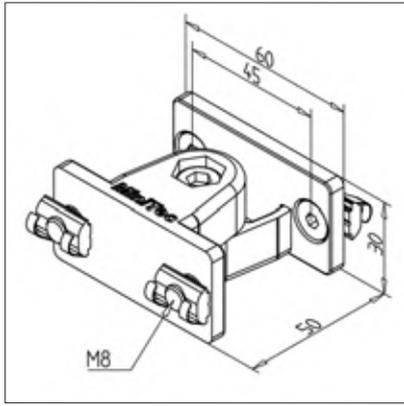
Part No. 21.2105/0



ASSEMBLY

- 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

Link 30 F



TECHN. DATA / ITEMS SUPPLIED

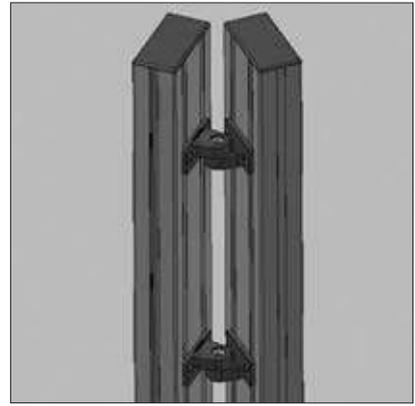
- Aluminium, Pressure die-casting, powder-coated, grey
- With fastening material steel, zinc plated
- Locking device against torsion
- Weight = 0.126 kg/piece



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**

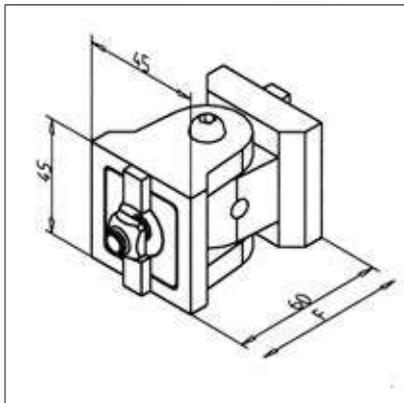
Part No. 21.2111/0



ASSEMBLY

- Fasten link to profile face
- Screw both parts together on hinge point

Link 45



TECHN. DATA / ITEMS SUPPLIED

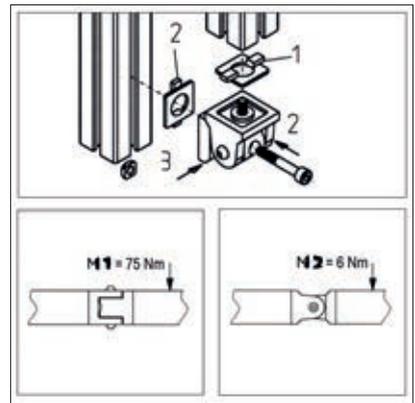
- Aluminium, Pressure die-casting, powder-coated, grey
- With fastening material steel, zinc plated
- Anti-rotation device AL GD
- Load F_{max} 5000 N
- For use on vertical struts, link **part no. 21.2030/1** (square nuts with position fixing)
- Weight = 0.250 kg/piece



APPLICATIONS

- Connection of profiles at various angles
- Bracings
- Reinforcement of frame constructions
- Not to be used as a hinge

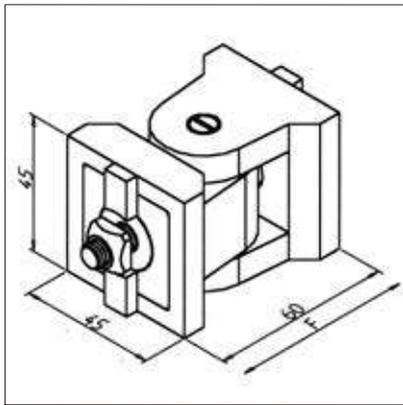
Part No. 21.2030/0



ASSEMBLY

- 1: Joint half with pre-mounted screw to desired position fasten
- 2: Insert screw from items included and fix link half 2 (to do so, swing movable side by approx. 90°)
- 3: Tighten lateral connecting screws

Swivel link 45



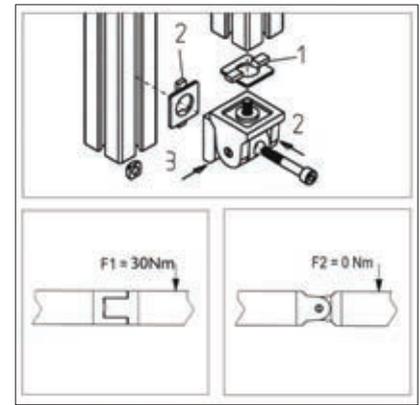
TECHN. DATA / ITEMS SUPPLIED

- Aluminium, Pressure die-casting, powder-coated, grey
- With fastening material steel, zinc plated
- With low-friction sliding bearing
- Anti-rotation device AL GD
- Load F_{max} 1500 N
- For use on vertical struts, swivel link **part no. 21.2020/7** (square nuts with position fixing)
- Weight = 0.240 kg/piece



APPLICATIONS

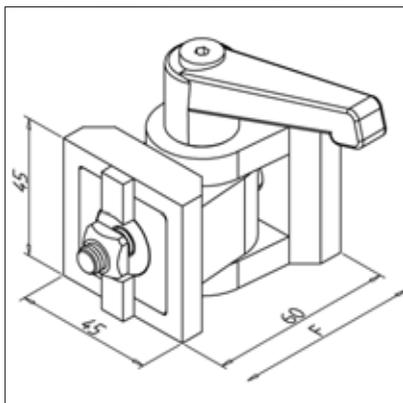
- Heavy duty swing doors, storage of moving parts
- Not lockable
- For heavy loads use multiple hinges



ASSEMBLY

- Joint half with pre-mounted screw to desired position fasten
- Insert screw from items included and fix link half 2 (to do so, swing movable side by approx. 90°, do not undo hinge pins!)

Swivel link 45 fixable



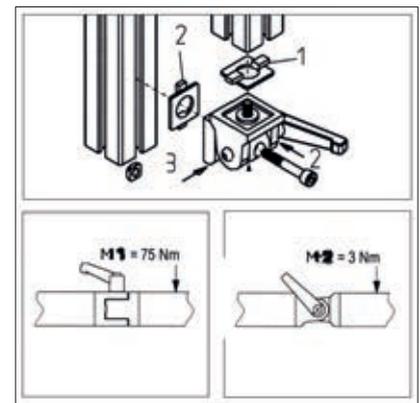
TECHN. DATA / ITEMS SUPPLIED

- Aluminium, Pressure die-casting, powder-coated, grey
- With fastening material steel, zinc plated
- With low-friction sliding bearing
- Anti-rotation device AL GD
- Load F_{max} 1500 N
- For use on vertical struts, swivel link **part no. 21.2010/7** (square nuts with position fixing)
- Weight = 0.339 kg/piece



APPLICATIONS

- Heavy duty swing doors, storage of moving parts
- Clamping lever for positioning of add-on parts
- Fastening of quick-to-adjust components such as gripping shells, measuring devices
- For heavy loads use multiple hinges

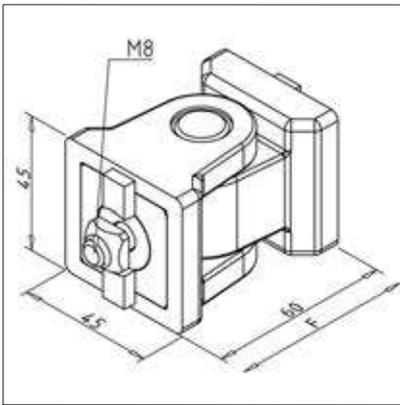


ASSEMBLY

- Joint half with pre-mounted screw to desired position fasten
- Fix with screws included
- Tighten clamping lever

Swivel link 45/15

Part No. 21.2315/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, Pressure die-casting, powder-coated, grey
- With fastening material steel, zinc plated
- With low-friction sliding bearing
- Anti-rotation device AL GD
- Load F_{max} 2700 N
- Weight = 0.312 kg/piece

APPLICATIONS

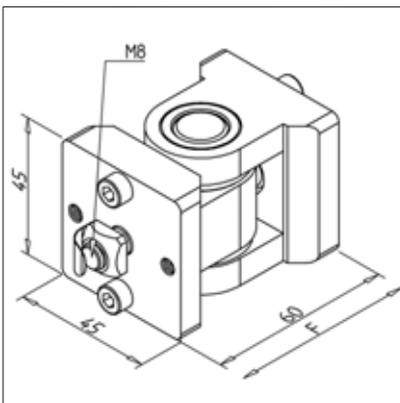
- Heavy duty swing doors, storage of moving parts
- Not lockable
- For heavy loads use multiple hinges

ASSEMBLY

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

Swivel link 45 heavy duty

Part No. 21.2034/0



TECHN. DATA / ITEMS SUPPLIED

- Steel, galvanized
- With fastening material steel, zinc plated
- With low-friction sliding bearing
- Locking device against torsion
- Load F_{max} 3500 N
- Load M1 max 75 Nm
- Weight = 0.680 kg/piece

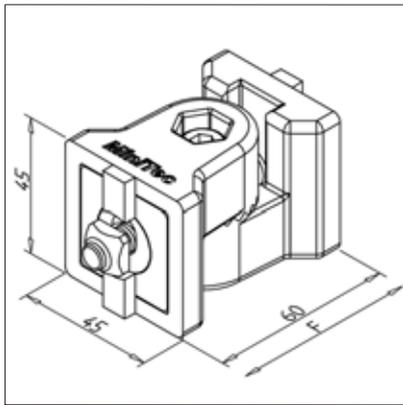
APPLICATIONS

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

ASSEMBLY

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

Link 45 R



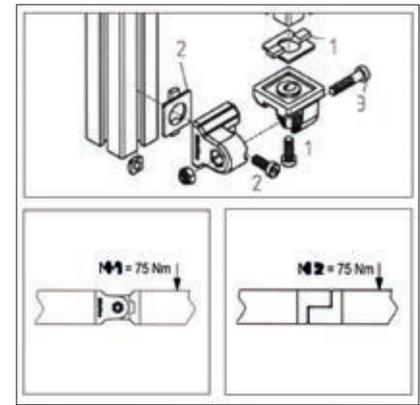
TECHN. DATA / ITEMS SUPPLIED

- Aluminium, Pressure die-casting, powder-coated, grey
- With fastening material steel, zinc plated
- Anti-rotation device AL GD
- Load F_{max} 5000 N
- Use on vertical struts **part no. 21.2041/7** (square nuts with position fixing)
- Weight = 0.263 kg/piece



APPLICATIONS

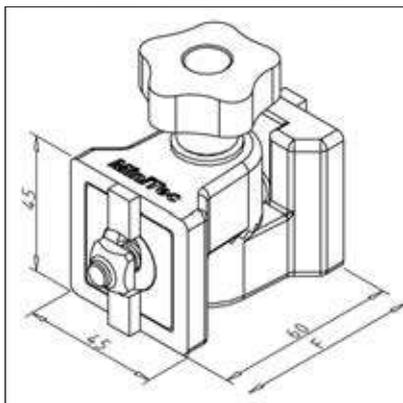
- Adjustment range approx. 180° in 15° increments
- Fastening of heavy attachments such as extension arms, gripper cup holders, devices
- Safe adjustment through tooth system



ASSEMBLY

- 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

Link 45 R with star grip



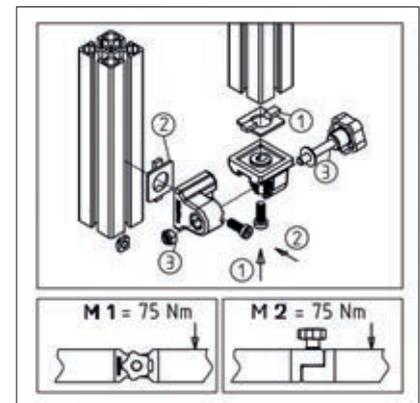
TECHN. DATA / ITEMS SUPPLIED

- Aluminium, Pressure die-casting, powder-coated, grey
- With fastening material steel, zinc plated
- Anti-rotation device AL GD
- Load F_{max} 5000 N
- Use on vertical struts **part no. 21.2230/7** (square nuts with position fixing)
- Weight = 0.279 kg/piece



APPLICATIONS

- Adjustment range approx. 180° in 15° increments
- Fastening of heavy attachments such as extension arms, gripper cup holders, devices
- Safe adjustment through tooth system

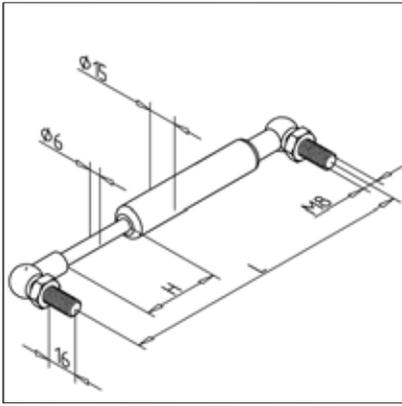


ASSEMBLY

- 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 6/15

Part No. 24.1126/0



H (mm)	L (mm)
20	115,5
40	155,5
60	194,5
80	235
100	273
120	316
150	375,5

TECHN. DATA / ITEMS SUPPLIED

- Stroke (H) alternatively 20 / 40 / 60 / 80 / 100 / 120 / 150 mm
- Power (F) between 50 and 400 N (increments 50 N)
- Please indicate desired length of stroke and force

APPLICATIONS

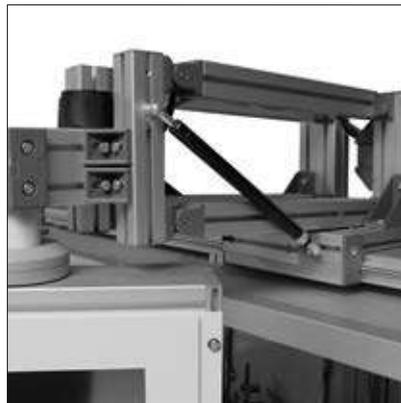
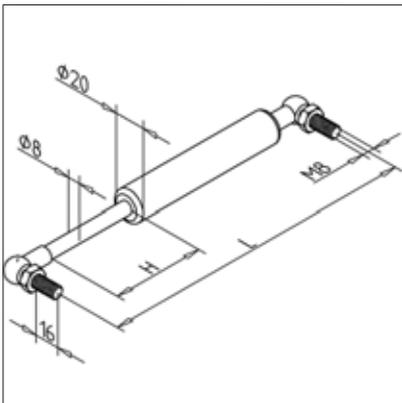
- For weight compensation with foldable elements
- Suitable for lift and swivel movements

ASSEMBLY

- Fix with thread bolt M8 to profile groove of other components

Gas pressure spring 8/20

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

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

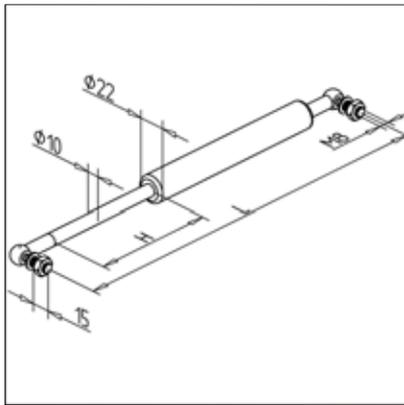
APPLICATIONS

- For weight compensation with foldable elements
- Suitable for lift and swivel movements

ASSEMBLY

- Fix with thread bolt M8 to profile groove of other components

Gas pressure spring 10/22



TECHN. DATA / ITEMS SUPPLIED

- Stroke (H) alternatively 98/ 148/ 198/ 248/ 295/ 345/ 395/ 445/ 495
- Power (F) between 100 and 1200 N (increments 50 N)
- Please indicate desired length of stroke and force



APPLICATIONS

- For weight compensation with foldable elements
- Suitable for lift and swivel movements

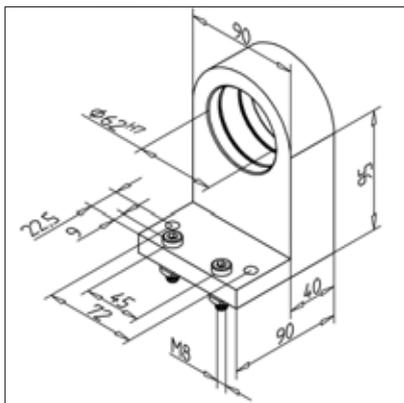
Part No. 24.1128/0

H (mm)	L (mm)
98	286
148	386
198	486
248	586
295	686
345	786
395	886
445	986
495	1086

ASSEMBLY

- Fix with thread bolt M8 to profile groove of other components

Upright bearing



TECHN. DATA / ITEMS SUPPLIED

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



APPLICATIONS

- Large swivelling frame
- Bearing of shafts, axles, rollers and rolls, lengthwise and crosswise in the profile

Part No. 28.0158/0

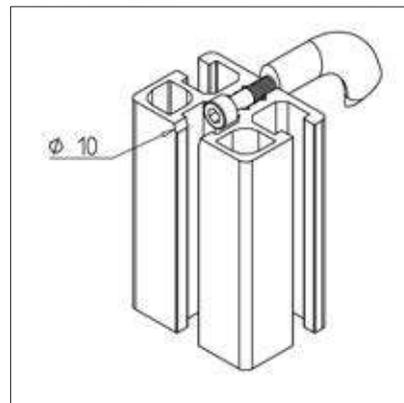
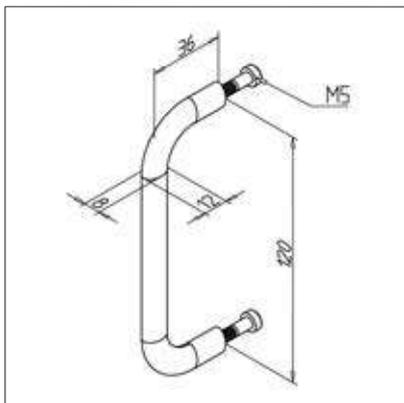


ASSEMBLY

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

Handle alu

Part No. 21.1138/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, anodized E6/EV1
- With fastening material steel, zinc plated
- Mounting thread M05x10 mm
- Weight = 0.050 kg/piece

APPLICATIONS

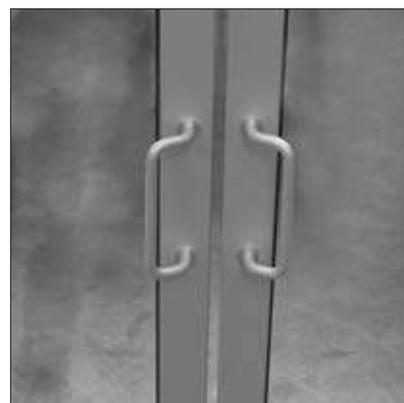
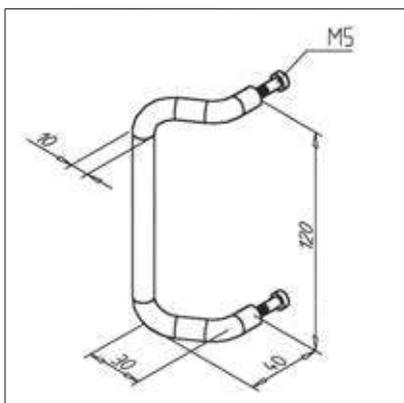
- Display windows, showcases
- Cabinets
- Doors

ASSEMBLY

- Fasten to the profile with supplied hardware
- Provided with stepped bore $\varnothing 10$ mm x 5.5 mm or through-hole $\varnothing 5.5$ mm
- Fastening kit for handle AL **Part no. 21.0898/0**

Handle AL, angled

Part No. 21.1348/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, anodized E6/EV1
- With fastening material steel, zinc plated
- Mounting thread M05x10 mm
- Weight = 0.065 kg/piece

APPLICATIONS

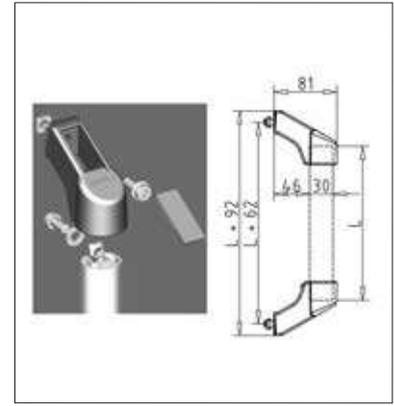
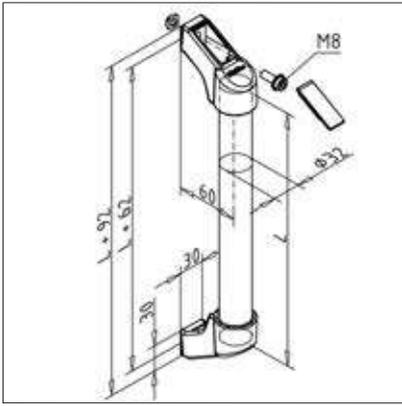
- Display windows, showcases
- Cabinets
- Doors

ASSEMBLY

- Fasten to the profile with supplied hardware
- Provided with stepped bore $\varnothing 10$ mm x 5.5 mm or through-hole $\varnothing 5.5$ mm
- Fastening kit for handle AL **Part no. 21.0898/0**

Handle GP

Part No. 21.2317/0



TECHN. DATA / ITEMS SUPPLIED

- Handle profile aluminium, anodized E6/EV1
- Bracket ABS, grey
- Fastening material steel, galvanized
- Standard length (L) 300 mm
- **Other lengths under Part no. 21.0962/9 on request**
- **In case of divergent length please specify dimension L**
- Construction set without profile **part no. 21.2317/1**
- Load max. 500 N
- Weight = 0.427 kg/piece

APPLICATIONS

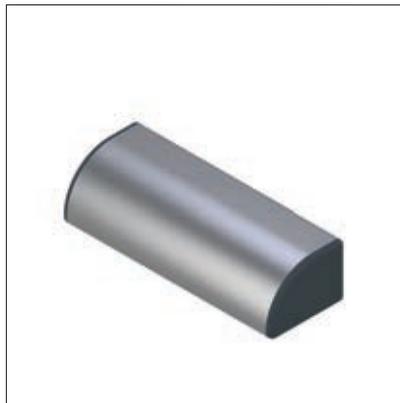
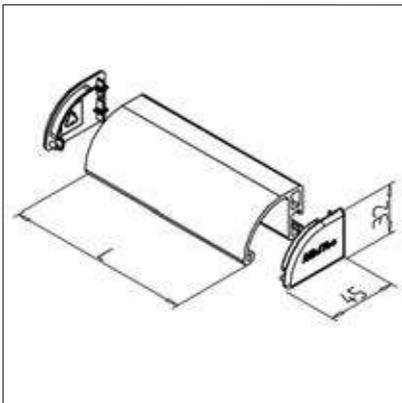
- Doors and lids
- Carriage
- Railing

ASSEMBLY

- Attach bracket to handle profile
- Use the included fastening material to attach the profile to the profile grooves
- Recommended tightening torque: 10 Nm

Closed protective handle

Part No. 21.1048/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, anodized E6/EV1
- End caps
- Without fastening kit
- Standard length (L) 120 mm
- **Other lengths under Part no. 21.1048/9 on request**
- **In case of divergent length please specify dimension L**
- Weight = 0.110 kg/piece

APPLICATIONS

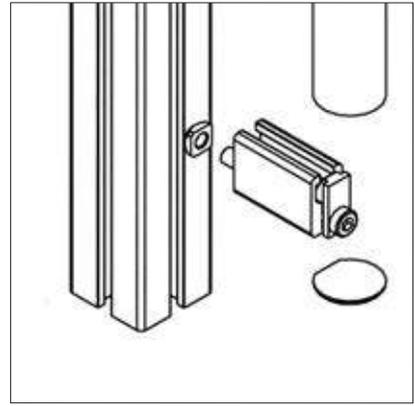
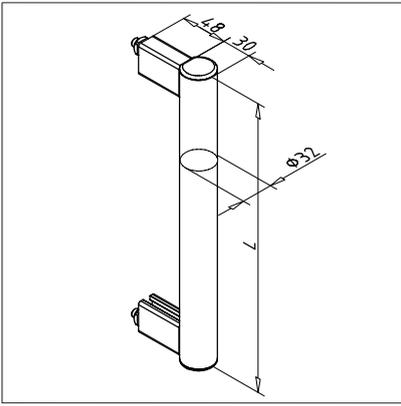
- Doors
- Lids
- Guard units
- Furniture

ASSEMBLY

- Push the square nuts into the groove on the handle and fix with corresponding screw from the back
- **Alternative:**
Drill hole in handle and fix from the front with short hex kant key and cylinder screws or hex head screws

Handle bar 32

Part No. 21.0962/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, anodized E6/EV1
- Ready-to-install kit from MiniTec aluminum profiles
- With fastening material steel, zinc plated
- Standard length (L) 300 mm
- **Other lengths on request**
- **Please specify dimension L**
- Weight = 0.500 kg/piece

APPLICATIONS

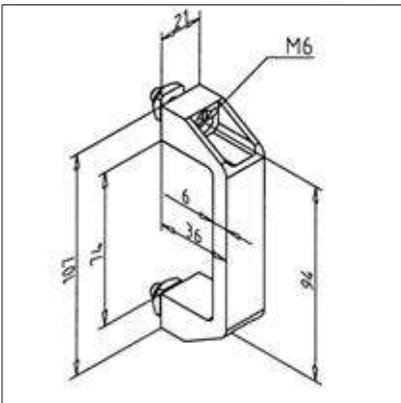
- Handle for very large doors, lids, trolleys, removable surface elements

ASSEMBLY

- Enter square nut in existing construction
- Pre-install spacers with a long screw and connector profile
- Insert the handle profile and tighten the profile connector to spacers
- Install caps

Handle 90 grey

Part No. 21.1099/1



TECHN. DATA / ITEMS SUPPLIED

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

APPLICATIONS

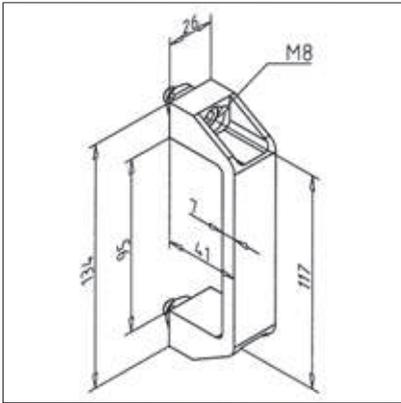
- Doors
- Lids
- Guard units

ASSEMBLY

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

Handle 120 grey

Part No. 21.1092/1



TECHN. DATA / ITEMS SUPPLIED

- PA, grey
- With fastening material steel, zinc plated
- For use on vertical struts, handle **part no. 21.1092/4** (square nuts with position-fixing)
- Upon request, available in black, **part no. 21.1092/0**
- ESD-compatible, also available in black **part no. 32.1007/0**, upon request
- Weight = 0.070 kg/piece

APPLICATIONS

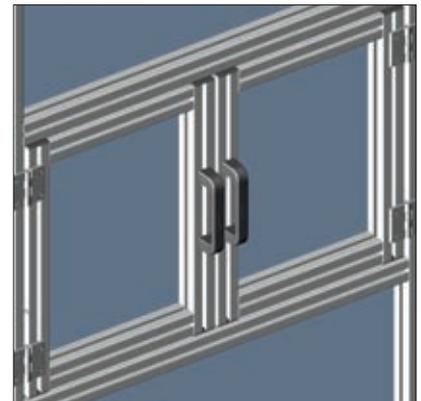
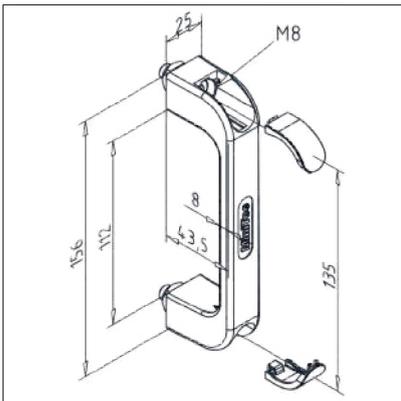
- Doors
- Lids
- Guard units

ASSEMBLY

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

Handle 135-45 grey

Part No. 21.2530/1



TECHN. DATA / ITEMS SUPPLIED

- PA, grey
- With fastening material steel, zinc plated
- For use on vertical struts, handle **part no. 21.2530/7** (square nuts with position-fixing)
- Weight = 0.080 kg/piece

APPLICATIONS

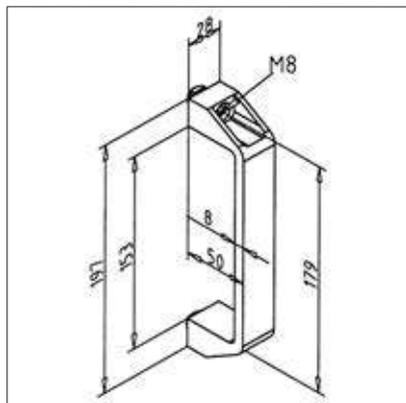
- Doors
- Lids
- Guard units

ASSEMBLY

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

Handle 180 grey

Part No. 21.1094/1



TECHN. DATA / ITEMS SUPPLIED

- PA, grey
- With fastening material steel, zinc plated
- For use on vertical struts, handle **part no.21.1094/4** (square nuts with position-fixing)
- Upon request, available in black, **part no. 21.1094/0**
- Weight = 0.100 kg/piece

APPLICATIONS

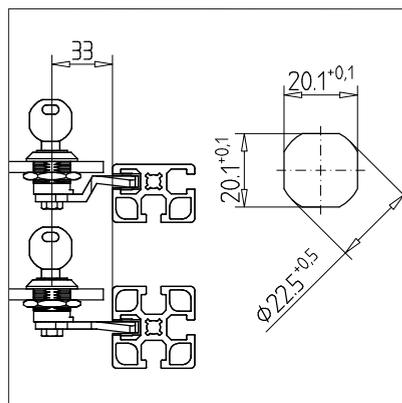
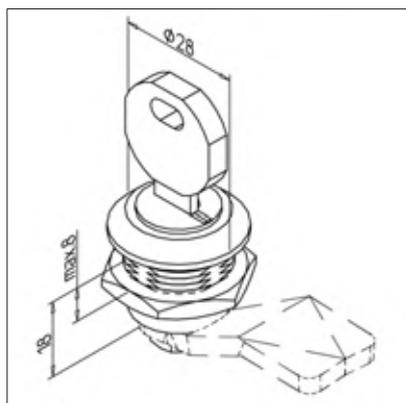
- Doors
- Lids
- Guard units

ASSEMBLY

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

Lock cylinder

Part No. 21.1752/0



TECHN. DATA / ITEMS SUPPLIED

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

APPLICATIONS

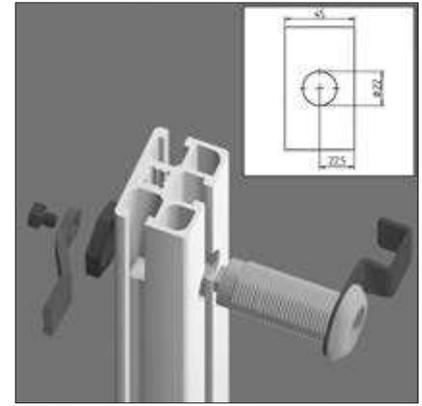
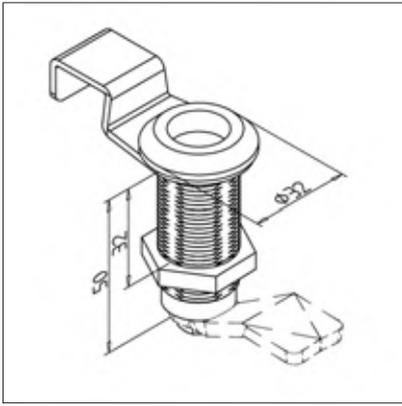
- Light doors from surface elements up to 8 mm thickness

ASSEMBLY

- Bore \varnothing 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

Bolt lock 32 socket hex head wrench 10 A/F

Part No. 21.1087/8



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

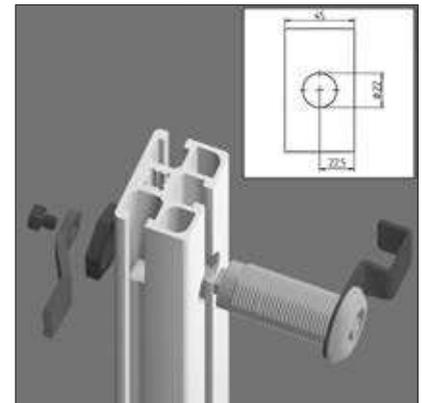
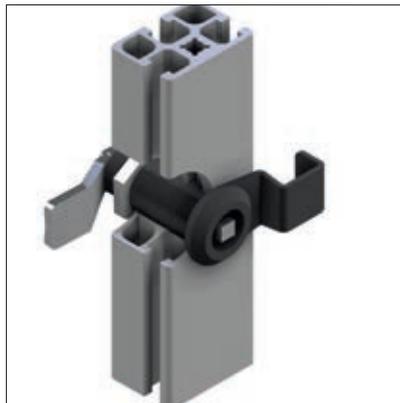
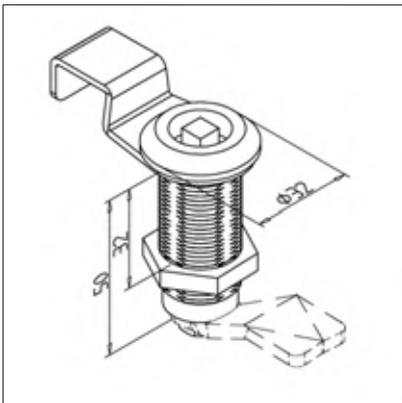
- For profiles 32
- Locking of doors and lids in guard units

ASSEMBLY

- Drill hole \varnothing 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

Bolt lock 32 with four-faced key

Part No. 21.1087/6



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

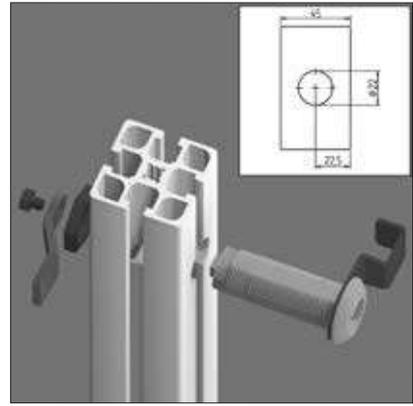
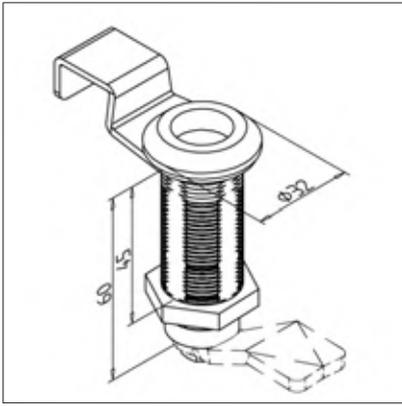
- For profiles 32
- Locking of doors and lids in guard units

ASSEMBLY

- Drill hole \varnothing 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

Bolt lock 45 socket hex head wrench 10 A/F

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

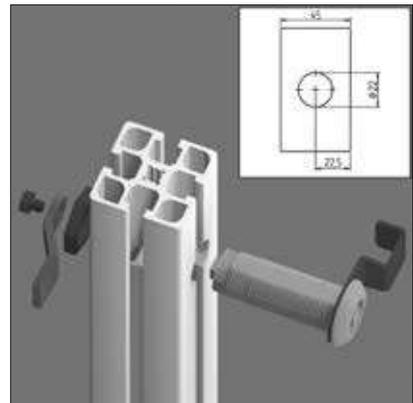
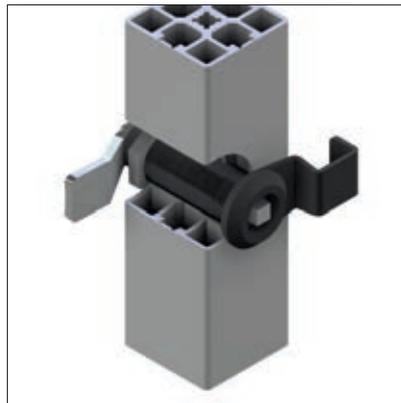
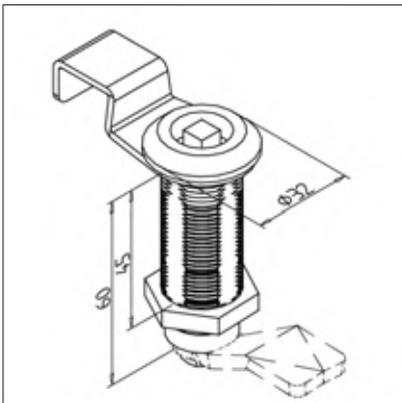
- For profiles 45
- Locking of doors and lids in guard units

ASSEMBLY

- Drill hole \varnothing 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

Bolt lock 45 with four-faced key

Part No. 21.1087/7



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

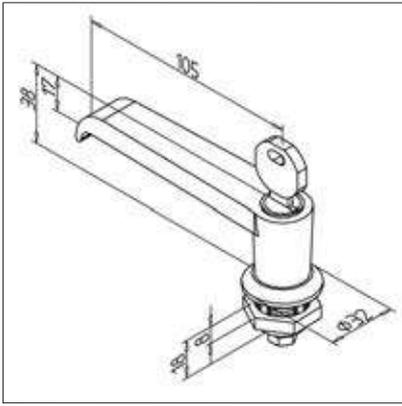
APPLICATIONS

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

ASSEMBLY

- Drill hole \varnothing 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

Handle 8 with lock grey



TECHN. DATA / ITEMS SUPPLIED

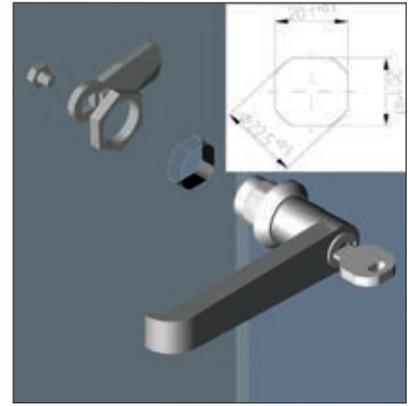
- Handle PA, grey
Housing DG Zn GD Zn, grey
- With fastening nut steel, galvanized
- Without locks
- Weight = 0.145 kg/piece



APPLICATIONS

- Locking of doors and lids in guard units
- For surface elements up to 8 mm thickness

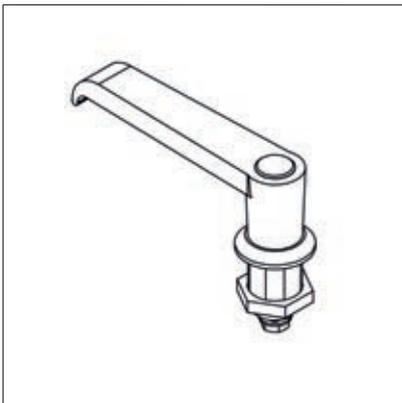
Part No. 21.2305/0



ASSEMBLY

- Drill the bore according to the sketch
- Using a ratchet handle, tighten the fastening nut from behind

Handle 19 without lock black



TECHN. DATA / ITEMS SUPPLIED

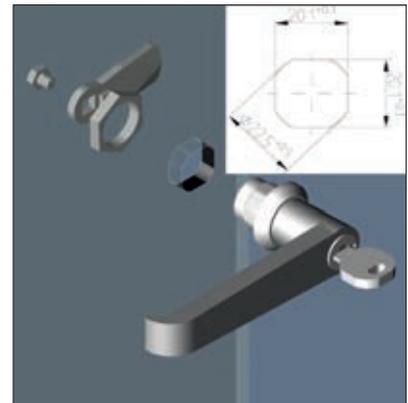
- Zinc, Pressure die-casting
- Handle PA, grey
Housing DG Zn GD Zn, grey
- With fastening nut steel, galvanized
- Without locks
- Weight = 0.168 kg/piece



APPLICATIONS

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

Part No. 21.1477/0

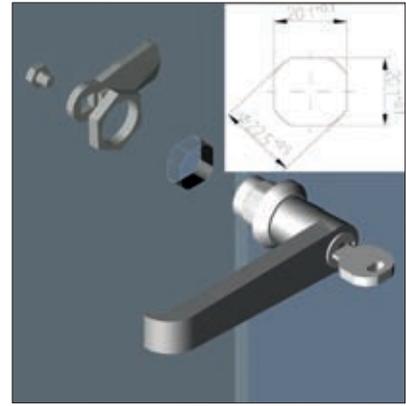
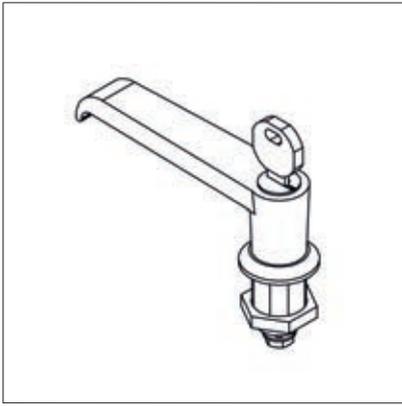


ASSEMBLY

- Drill the bore according to the sketch
- Using a ratchet handle, tighten the fastening nut from behind

Handle 19 with lock grey

Part No. 21.1478/1



TECHN. DATA / ITEMS SUPPLIED

- Zinc, Pressure die-casting
- Handle PA, grey
Housing DG Zn GD Zn, grey
- With fastening nut steel, galvanized
- Without locks
- Weight = 0.190 kg/piece

APPLICATIONS

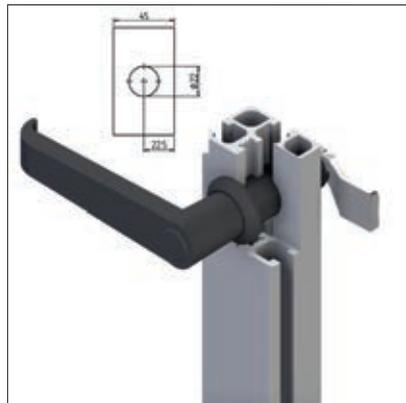
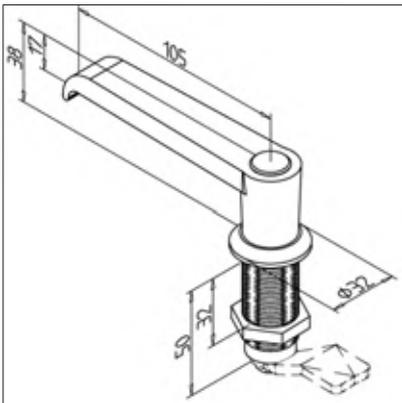
- For profiles 19
- Locking of doors and lids in guard units

ASSEMBLY

- Drill the bore according to the sketch
- Using a ratchet handle, tighten the fastening nut from behind

Handle 32 without lock grey

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

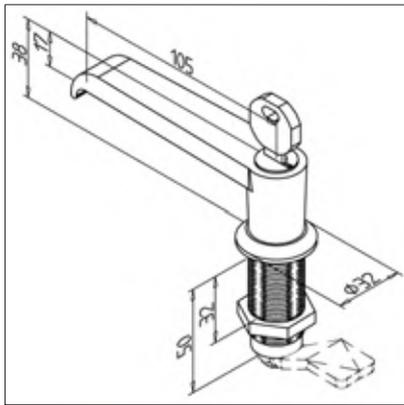
APPLICATIONS

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

ASSEMBLY

- Drill hole \varnothing 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

Handle 32 with lock grey



TECHN. DATA / ITEMS SUPPLIED

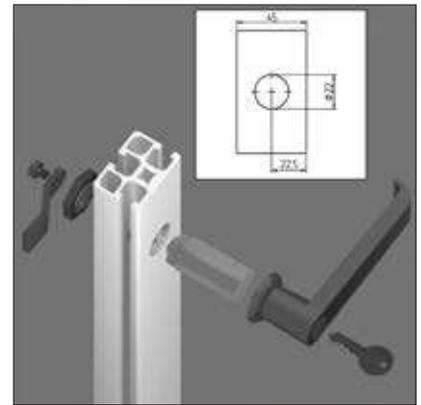
- Handle PA, grey
Housing DG Zn GD Zn, grey
- With fastening nut steel, galvanized
- Without locks
- Upon request, available in black, **part no. 21.1091/2**
- Weight = 0.211 kg/piece



APPLICATIONS

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

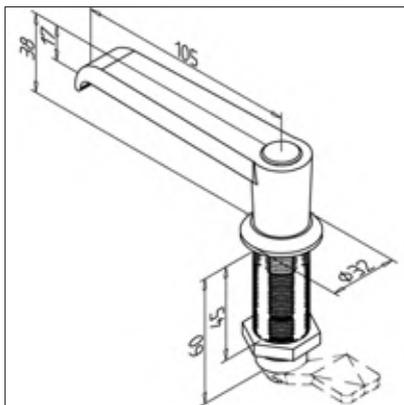
Part No. 21.1091/4



ASSEMBLY

- Drill hole \varnothing 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

Handle 45 without lock grey



TECHN. DATA / ITEMS SUPPLIED

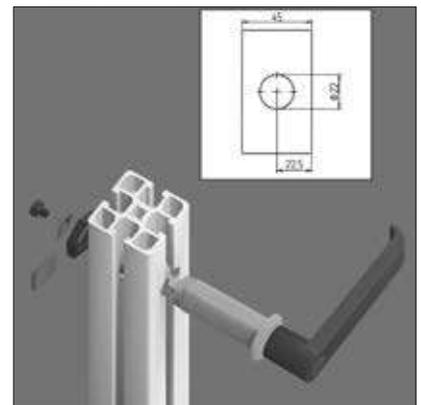
- Handle PA, grey
Housing DG Zn GD Zn, grey
- With fastening nut steel, galvanized
- Without locks
- Upon request, available in black, **part no. 21.1087/1**
- Weight = 0.194 kg/piece



APPLICATIONS

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

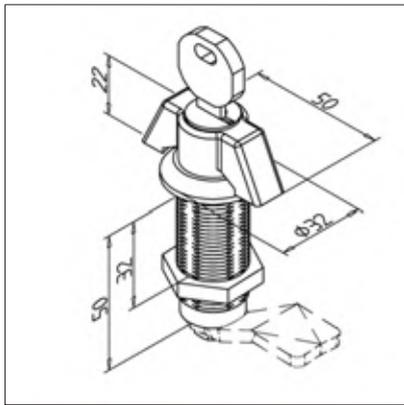
Part No. 21.1087/3



ASSEMBLY

- Drill hole \varnothing 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

T-handle 32



TECHN. DATA / ITEMS SUPPLIED

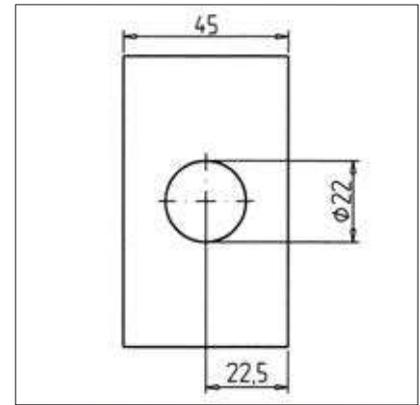
- Zinc, Pressure die-casting, chromed
- With fastening nut steel, galvanized
- Without locks
- Weight = 0.190 kg/piece



APPLICATIONS

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

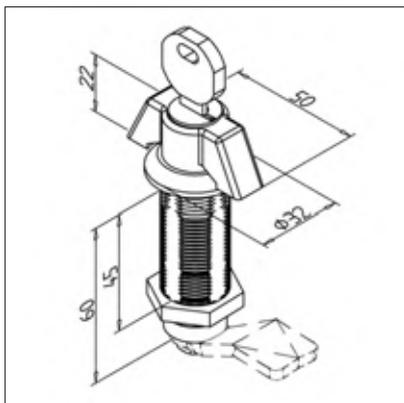
Part No. 21.1015/0



ASSEMBLY

- Drill hole \varnothing 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

T-handle 45



TECHN. DATA / ITEMS SUPPLIED

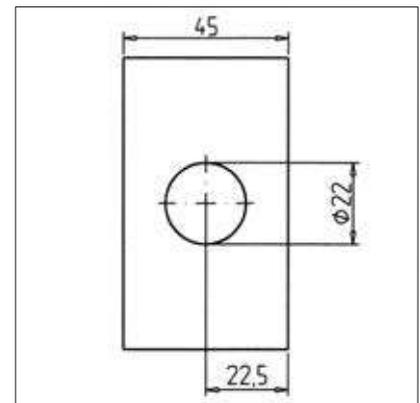
- Zinc, Pressure die-casting, chromed
- With fastening nut steel, galvanized
- Without locks
- Weight = 0.210 kg/piece



APPLICATIONS

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

Part No. 21.1015/1

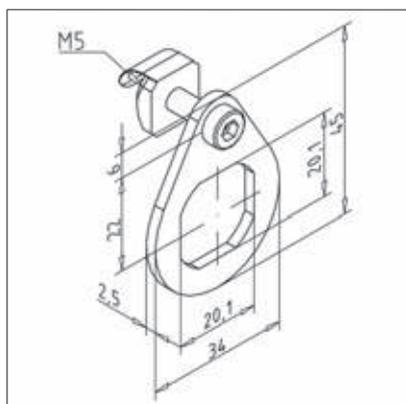


ASSEMBLY

- Drill hole \varnothing 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

Twist protection F

Part No. 21.0941/0



TECHN. DATA / ITEMS SUPPLIED

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

APPLICATIONS

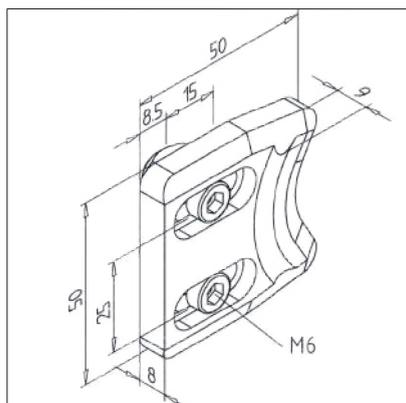
- Secure sash locks, latch handles and toggle handles against self-acting loosening or over-turning
- Specifically intended for use with door stop S, **part no. 21.1767/0**

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

Door catch S

Part No. 21.1767/0



TECHN. DATA / ITEMS SUPPLIED

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

APPLICATIONS

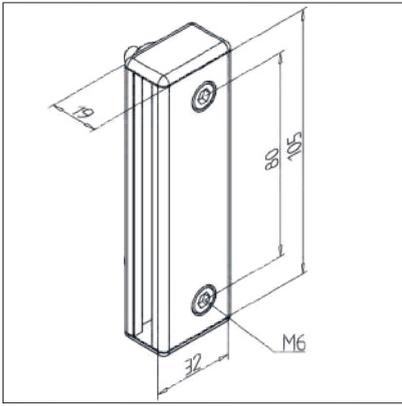
- Stop for doors and hatches
- Specifically suitable in connection with handle, T-handle and bolt lock
- Also door catch

ASSEMBLY

- Fasten to the posts with supplied hardware

Lock plate 19

Part No. 21.1755/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, anodized E6/EV1
- From profile 19 x 32
- End caps
- With fastening material steel, zinc plated
- Weight = 0.040 kg/piece

APPLICATIONS

- Locking of doors and lids in connection with handles or bolt locks

ASSEMBLY

- Fasten to profile groove with supplied hardware

Rotary rod lock

One or two sided locking

Items Supplied

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

Application

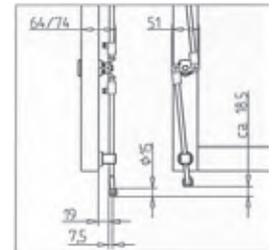
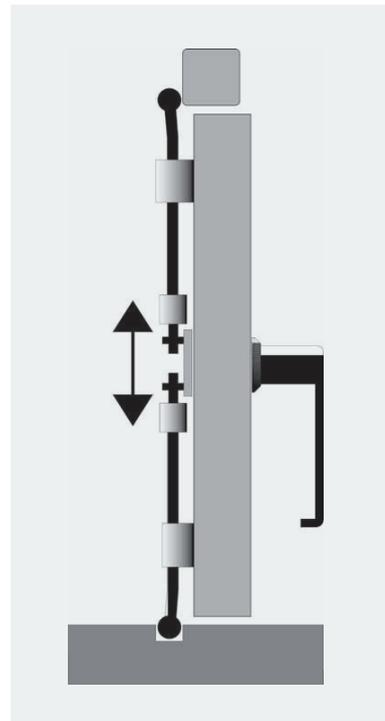
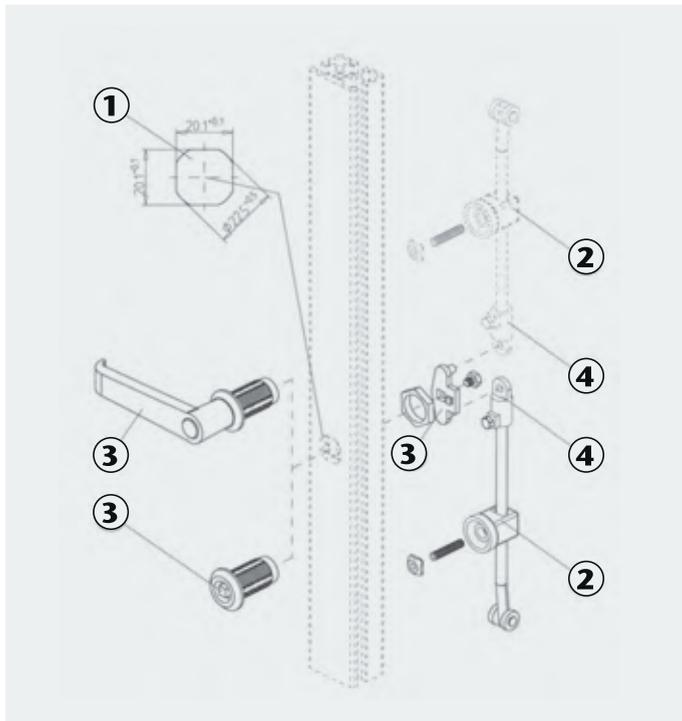
- For locking doors at upper or lower beam
- Use 2 rods for 2-sided locking
- Order bolt lock, handle without lock or handle with cylinder lock
- Especially suited for control boxes or double-sided doors

Optional

- Handle with or without lock

AVAILABLE VERSIONS

Profile	Bolt lock		Lever handle without cylinder lock		Handle with cylinder lock	
	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



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

Rod lock with lock latch

21.1490/0

Items Supplied

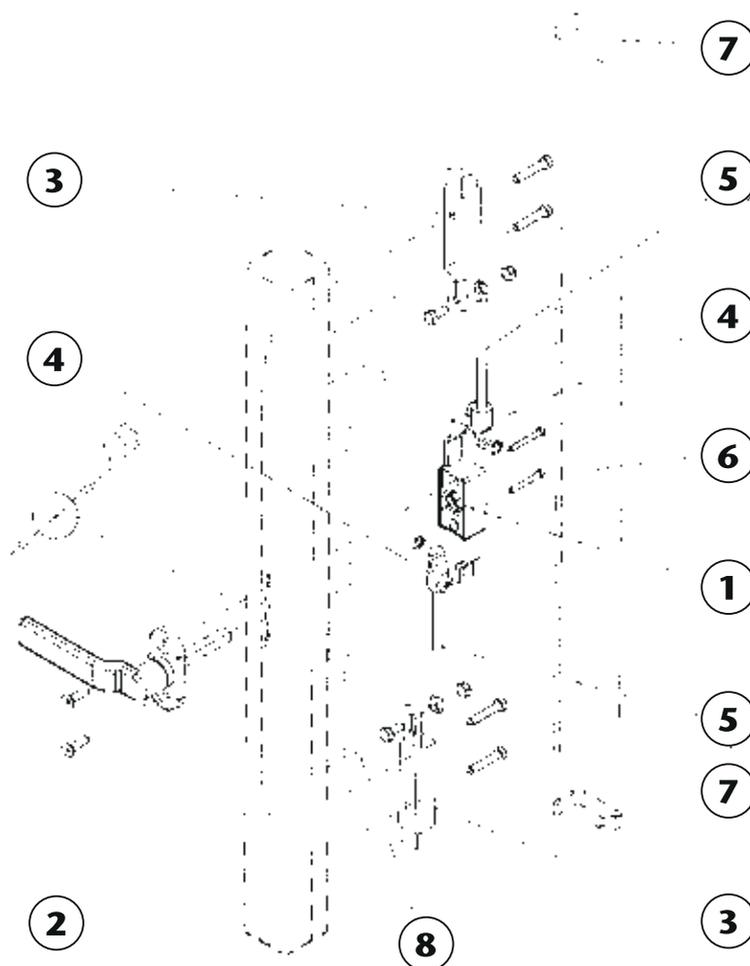
1. Rod lock insert
2. Handle
3. Lock latch (2 pieces)
4. Adapter for round bars
5. Round bar with eye (Lmax = 1200) (2 pieces)

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

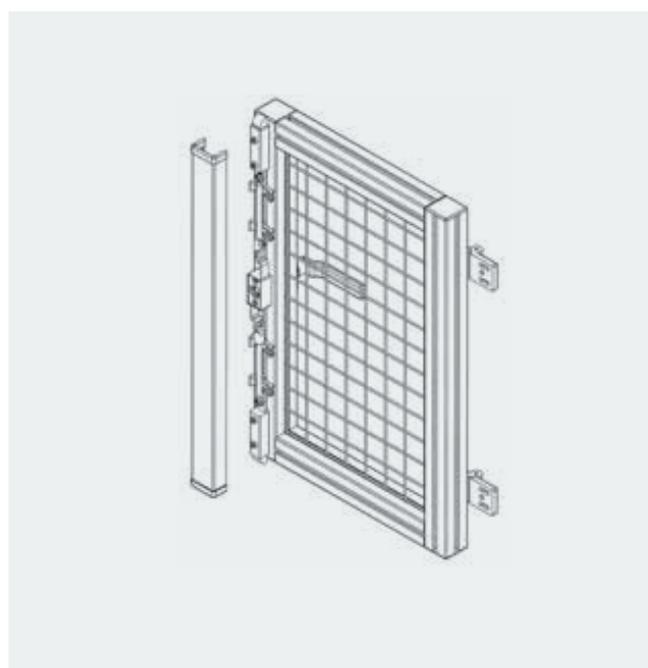


Application

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

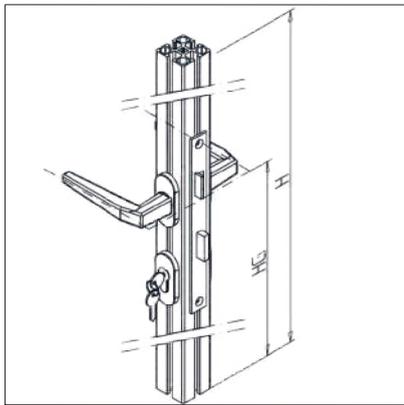
Assembly

- Insert hole \varnothing 13 mm in vertical door profile
- Attach the bar lock insert and lock latch with sliding nuts to the door profile
- Shorten the round bars to the appropriate size and connect with lock latch and bar lock insert
- Insert and fix the handle with square edging
- Adjust lock latch



→ Optional:
Rod cover with cable duct

Door lock



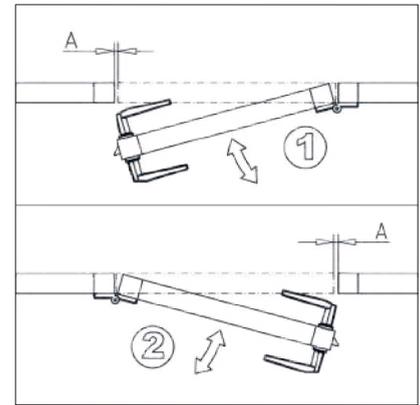
TECHN. DATA / ITEMS SUPPLIED

- Door Lock steel, zinc-plated, fitted in profile 45x45
- Fittings aluminum, anodized
- Profile cylinder with 3 keys, mounted
- **Standard design:** H = 2000mm
HG = 1000mm
- **Other lengths and profiles on request**
- **Please specify dimension H and HG level**
- **Please specify a version 1 or 2**
- Construction set without profile **part no. 21.1748/2**



APPLICATIONS

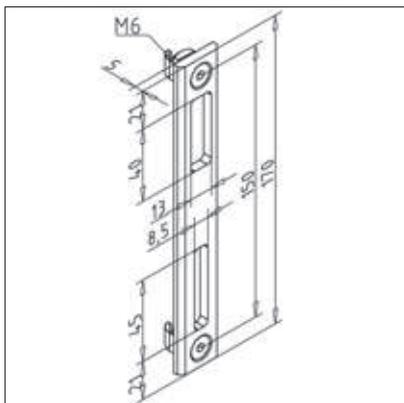
- Swing doors for guard units
- Other embodiments and profiles on request, for example, G - sided profile with fixed knob but without lock mounting



ASSEMBLY

- Allow 5mm space between door and frame
- Using lock plate **part no. 21.0966/0** with 10 mm gap
- Closing wedge engages in opposite groove
- If possible, position cross braces outside the lock area or screw in with countersunk screw M8 x 25

Lock plate for door lock



TECHN. DATA / ITEMS SUPPLIED

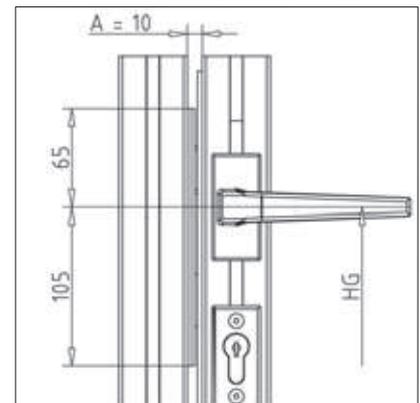
- Aluminium, anodized E6/EV1
- With fastening material steel, zinc plated
- Weight = 0.061 kg/piece



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

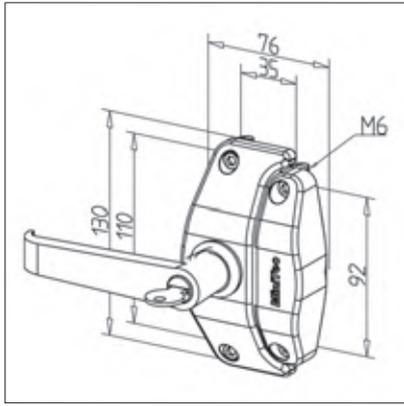
Part No. 21.0966/0



ASSEMBLY

- Fasten to profile groove with supplied hardware
- Door gap at lock 10 mm

Rotary lock 30



TECHN. DATA / ITEMS SUPPLIED

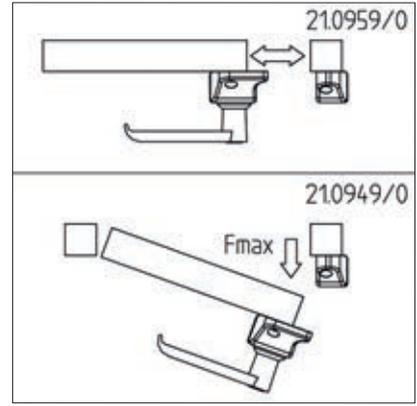
- Aluminium, Pressure die-casting, powder-coated, grey
- With fastening material steel, zinc plated
- Mounted handle: see **part no. 21.2305/0**
- Fmax. 1000 N
- Weight = 0.432 kg/piece



APPLICATIONS

- Rotary Lock 30 for swing doors: **part no. 21.0949/0**
- Sliding door lock 30 for sliding doors: **part no. 21.0959/0**
- For profiles series 30
- Locking of doors and panels
- No profile finishing required
- Position moveable

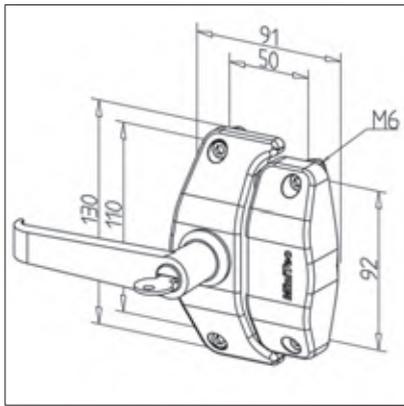
Part No. 21.0949/0



ASSEMBLY

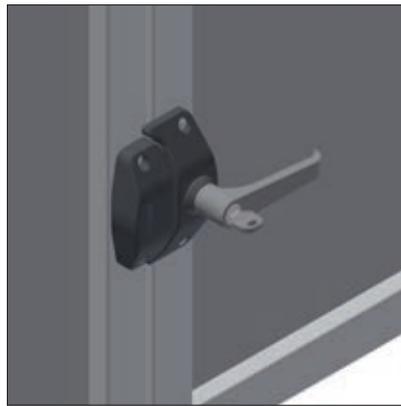
- Fasten to profile groove with supplied hardware
- Fastening on profile groove - without processing/boring of profiles

Rotary lock 45



TECHN. DATA / ITEMS SUPPLIED

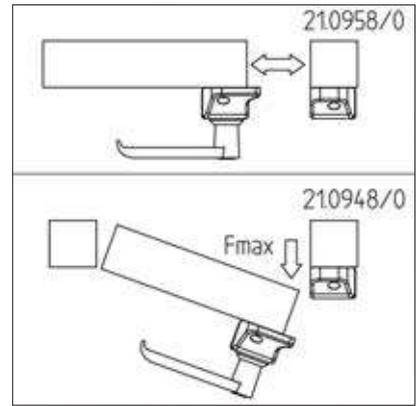
- With fastening material steel, zinc plated
- Mounted handle: see **part no. 21.2305/0**
- Fmax. 2200 N
- Weight = 0.476 kg/piece



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

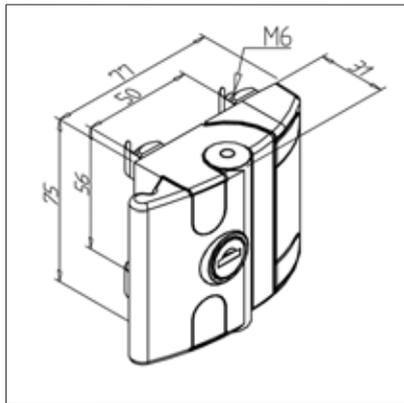
Part No. 21.0948/0



ASSEMBLY

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

Trunk lock compact



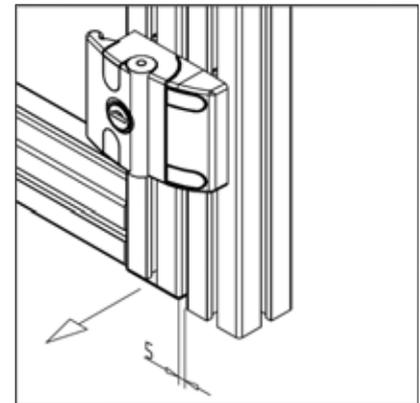
TECHN. DATA / ITEMS SUPPLIED

- Zinc, Pressure die-casting, powder-coated, black
- With fastening material steel, zinc plated
- Locking cylinder with two keys
- Weight = 0.255 kg/piece



APPLICATIONS

- Locking and securing of doors and panels in protective housings
- Door stop at the same time
- Also suitable for frameless doors
- Closed trunk can not be removed

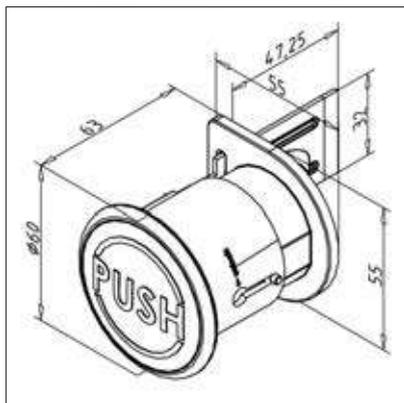


Part No. 21.2311/0

ASSEMBLY

- Mount the latch lock to the door and posts and fit the screw cover
- No machining of the profile is necessary for assembly
- Due to elongated holes, the screw spacing is variably adjustable from min. 38 mm to max. 58 mm, therefore the door gap can be adjusted accordingly

Emergency release for rim latch lock



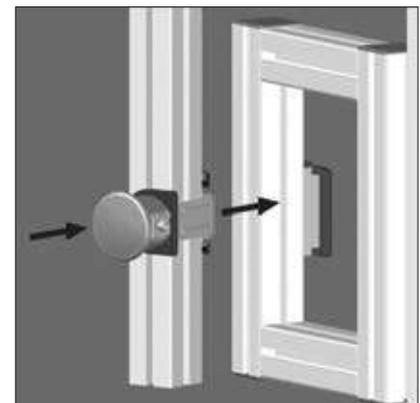
TECHN. DATA / ITEMS SUPPLIED

- Plastic / steel zinc plated
- Fastening kit
- Weight = 0.123 kg/piece



APPLICATIONS

- Assembly in connection with our trunk lock **part no. 21.2311/0** or trunk lock with request **part no. 21.2323/0**
- To open the door from the inside, on the outside lock attached
- Also works with closed latch lock
- When emergency release is snapped into place, closure of door is prevented



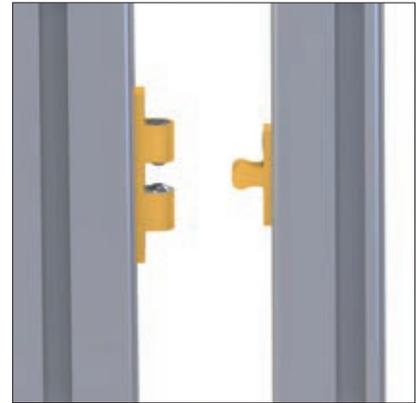
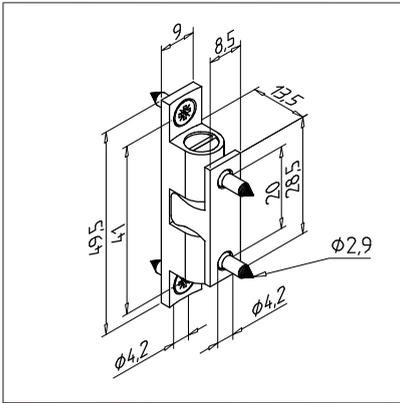
Part No. 21.2316/0

ASSEMBLY

- Fasten with supplied hardware on the back of the post

Ball latch 50

Part No. 21.1763/0



TECHN. DATA / ITEMS SUPPLIED

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

APPLICATIONS

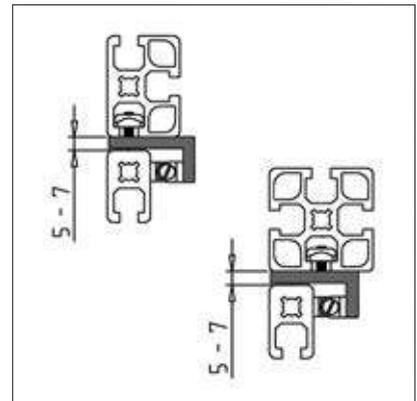
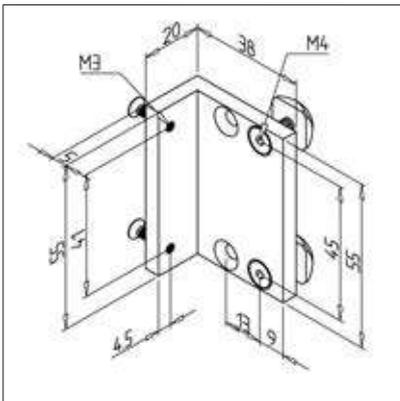
- Stop and catch for sliding doors, swing doors, lids
- Ball latch 50 suitable for T-slots of reworked profiles. Allows gap-free closing of sliding doors
- Doors, lids, removable surface elements

ASSEMBLY

- 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 latch support 50

Part No. 21.1139/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, anodized E6/EV1
- With fastening material steel, zinc plated
- Weight = 0.050 kg/piece

APPLICATIONS

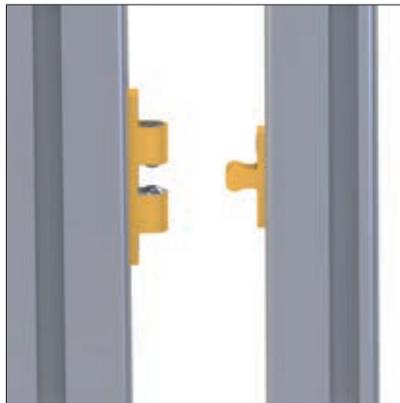
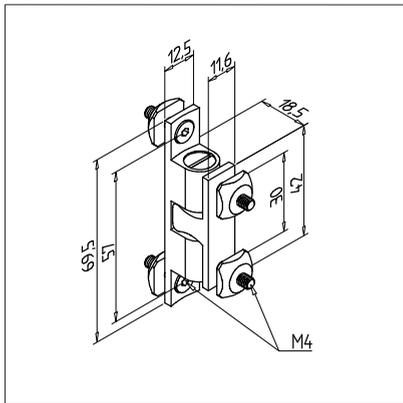
- Mounting of ball catch 50 in doors, hatches
- Removable surface elements
- Door stop at the same time

ASSEMBLY

- Screw tight to the profile groove with supplied hardware

Ball latch 70

Part No. 21.1757/0



TECHN. DATA / ITEMS SUPPLIED

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

APPLICATIONS

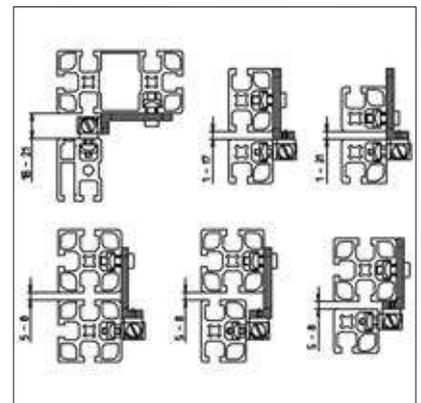
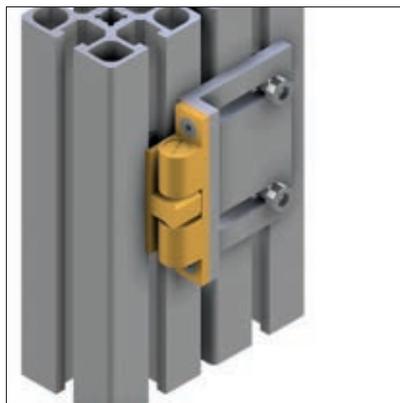
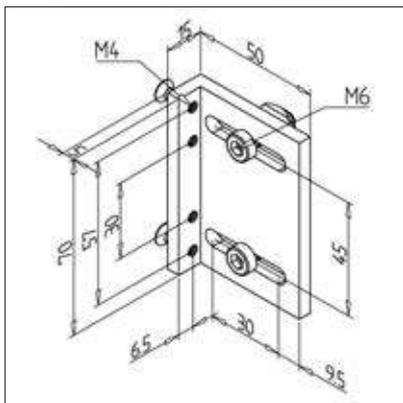
- Fastening easily removable surface elements
- Stop and catch for sliding doors, swing doors, lids

ASSEMBLY

- Fasten to profile groove with supplied hardware
- If applicable, use carrier for catch-bearing 70 **part no. 21.1137/0**

Ball latch support 70

Part No. 21.1137/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, anodized E6/EV1
- With fastening material steel, zinc plated
- For use on vertical struts, ball latch **part no.21.1137/7** (square nuts with position-fixing)
- Weight = 0.050 kg/piece

APPLICATIONS

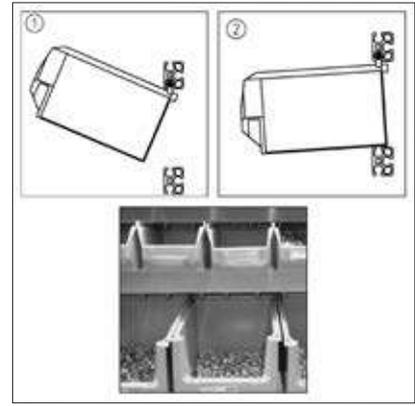
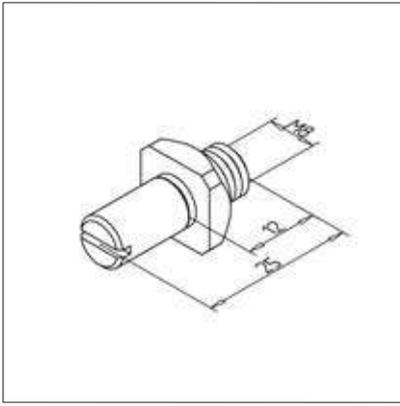
- Mounting of ball catch 70 in doors, hatches, removable surface elements
- Door stop at the same time
- Shorten the carrier when using profile 32

ASSEMBLY

- Screw tight to the profile groove with supplied hardware

Snap bolt 25

Part No. 21.1758/0



TECHN. DATA / ITEMS SUPPLIED

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

APPLICATIONS

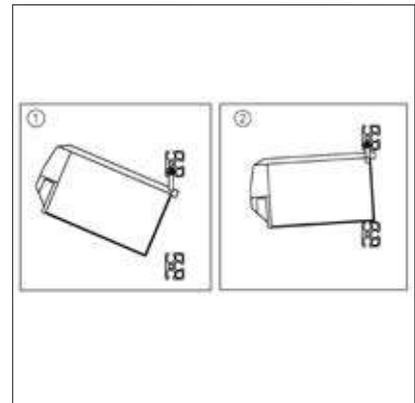
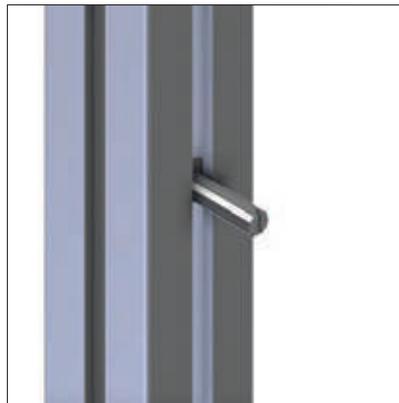
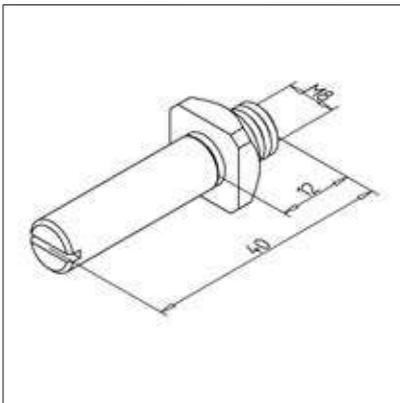
- Holder of grab containers, oddment boxes
- Support plates

ASSEMBLY

- Tighten in profile groove with sliding nut

Snap bolt 40

Part No. 21.1760/0



TECHN. DATA / ITEMS SUPPLIED

- Steel, galvanized
- Weight = 0.020 kg/piece

APPLICATIONS

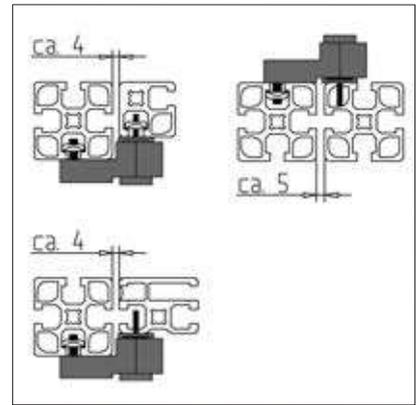
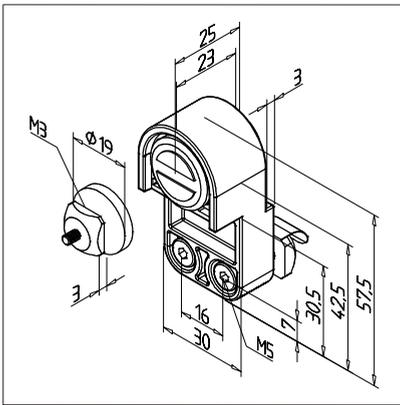
- Holder of grab containers, oddment boxes
- Support plates

ASSEMBLY

- Tighten in profile groove with sliding nut

Magnetic catch S

Part No. 21.0888/0



TECHN. DATA / ITEMS SUPPLIED

- ABS, Injection Mould, grey
- Holder plate steel, burnished
- With fastening material steel, zinc plated
- Holding force approx. 70 N
- Weight = 0.075 kg/piece

APPLICATIONS

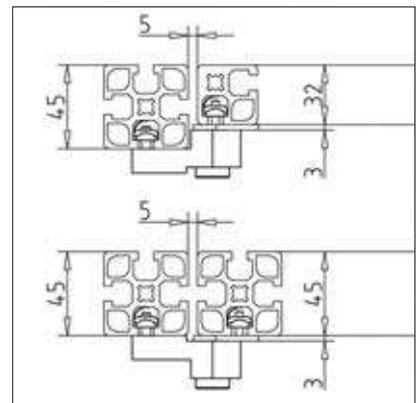
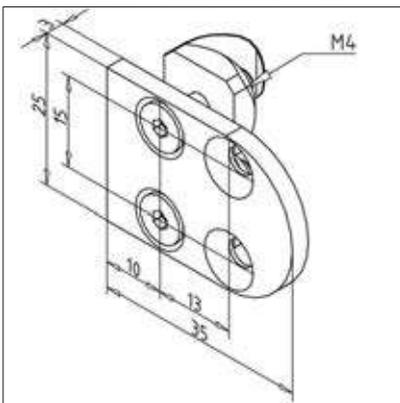
- Stop and quick-release of swing doors
- Fastening of light surface elements

ASSEMBLY

- Fasten with fixing material to profile groove
- Fit retaining plate with fastening kit in profile groove or directly on profile surface; to do so, cut thread M3

Magnetic plate S

Part No. 21.2308/0



TECHN. DATA / ITEMS SUPPLIED

- Steel, galvanized
- With fastening material steel, zinc plated
- Weight = 0.031 kg/piece

APPLICATIONS

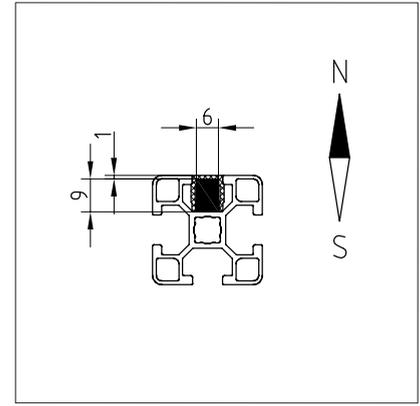
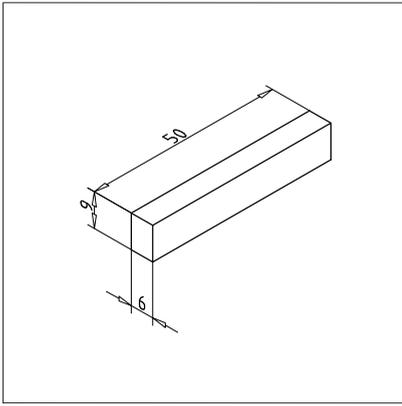
- For magnetic catch S part no. 21.0888/0

ASSEMBLY

- Fasten on profile groove
- No drilling required

Magnet 6 x 9 x 50 mm

Part No. 21.0040/0



TECHN. DATA / ITEMS SUPPLIED

- NeFeB N45, nickel-plated
- Without fastening kit
- Attention: Electric- and memory devices can be faulted by the magnet
- Power density, $BH_{mx} = 342 \text{ kJ/m}^3$
- Remanence, $B_r = 1320 \text{ mT}$
- Coercive field strength $H_{cj} = 955 \text{ kA/m}$
- Max. service temperature $+80 \text{ }^\circ\text{C}$
- Weight = 0.023 kg/piece

APPLICATIONS

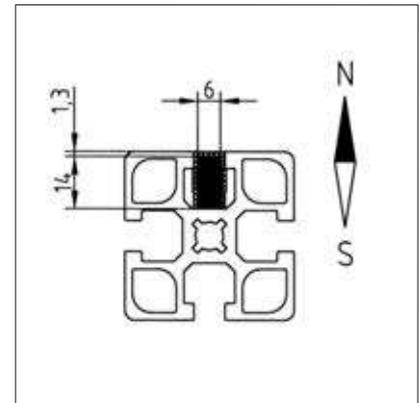
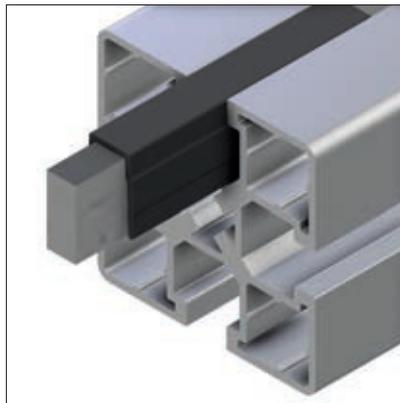
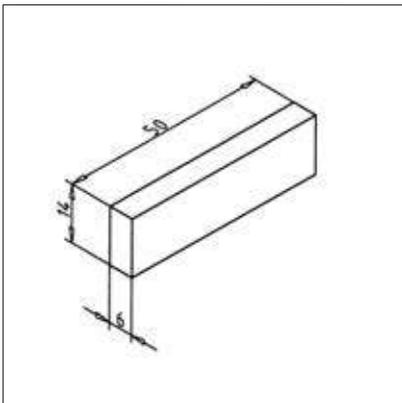
- Adhesive magnet for tools
- Use under conveyor belts as tracking, for magnetizable conveying products or at higher conveying speeds
- Fitting for all profiles of profile series 30

ASSEMBLY

- 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 mm

Part No. 21.0032/0



TECHN. DATA / ITEMS SUPPLIED

- NeFeB N35, nickel-plated
- Without fastening kit
- Attention: Electric- and memory devices can be faulted by the magnet
- Power density, $BH_{mx} = 263 \text{ kJ/m}^3$
- Remanence, $B_r = 1170 \text{ mT}$
- Coercive field strength $H_{cj} = 955 \text{ kA/m}$
- Max. service temperature $+80 \text{ }^\circ\text{C}$
- Weight = 0.030 kg/piece

APPLICATIONS

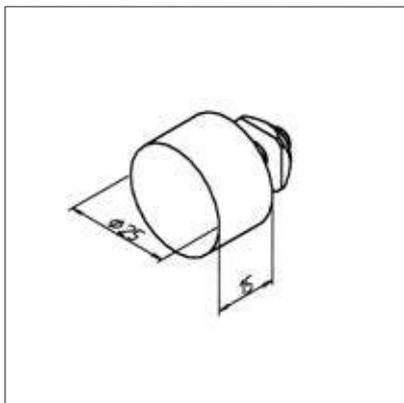
- Adhesive magnet for tools
- Use under conveyor belts as tracking, for magnetizable conveying products or at higher conveying speeds
- Fitting for all profiles of profile series 45

ASSEMBLY

- 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

Part No. 21.1759/0



TECHN. DATA / ITEMS SUPPLIED

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

APPLICATIONS

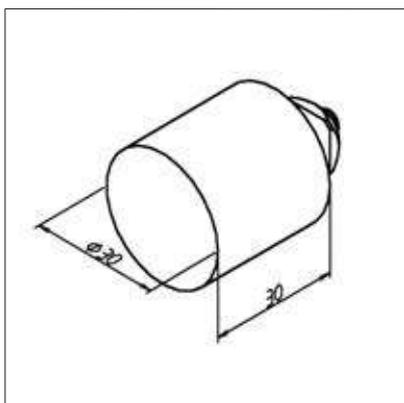
- Stop for doors, linear guides

ASSEMBLY

- Fix with square nut M6 in profile groove

Stopper 30

Part No. 21.1759/1



TECHN. DATA / ITEMS SUPPLIED

- NBR, black
- With fastening nut steel, galvanized
- With sliding nut M8
- Weight = 0.060 kg/piece

APPLICATIONS

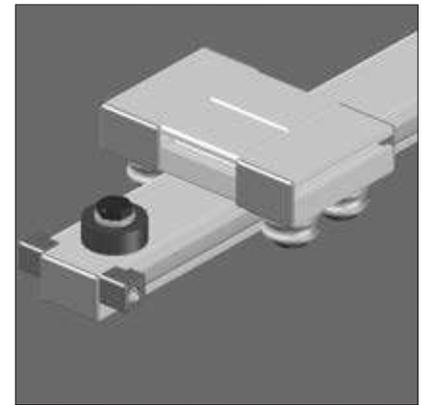
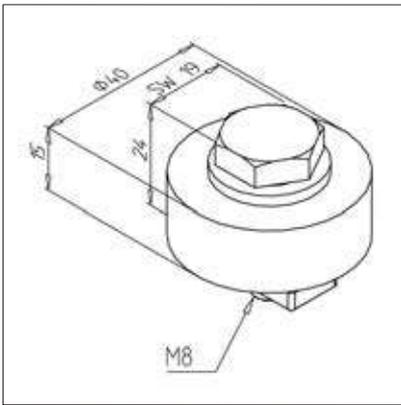
- Stop for heavy doors, long guides

ASSEMBLY

- Fix with square nut M6 in profile groove

Stopper 40

Part No. 21.2301/0



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

ASSEMBLY

- Fix with square nut M6 in profile groove

BASE PLATES

CONNECTING PLATE 30 x 60



Items Supplied

- Aluminium, powder coated, grey
- With fastening material

Application

- Fixing of articulated feet and castors on profiles 30x60

Assembly

- Fix on the end face of the profile using fastening material supplied

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

CONNECTING PLATE 90 x 32



Items supplied

- Aluminium, powder coated, grey
- With fastening material

Application

- Fixing of articulated feet to profiles 90x32 UL

Assembly

- Fix on the end face of the profile using fastening material supplied

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

CONNECTING PLATE 45 x 90



Items supplied

- Aluminium, powder coated, grey
- With fastening material

Application

- Fixing of articulated feet and castors on profiles 45x90

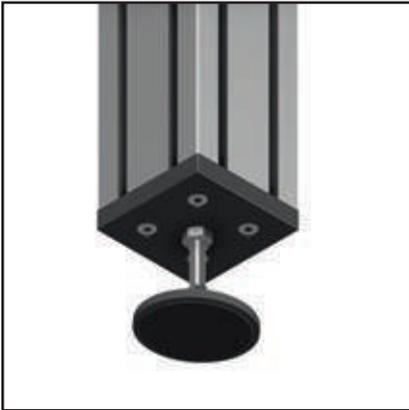
Assembly

- Fix on the end face of the profile using fastening material supplied

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

BASE PLATES

CONNECTING PLATE 90 x 90



Items supplied

- Aluminium, powder coated, grey
- With fastening material

Application

- Fixing of articulated feet and castors on profiles 90x90

Assembly

- Fix on the end face of the profile using fastening material supplied

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

CONNECTING PLATE 90 R 90°



Items supplied

- Aluminium, powder coated, grey
- With fastening material

Application

- Fixing of articulated feet and castors on profiles 90R90°

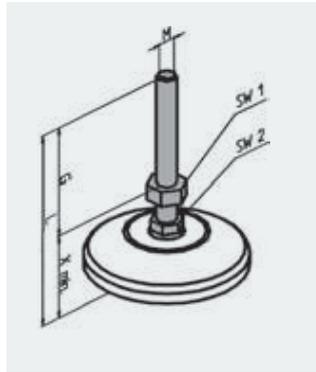
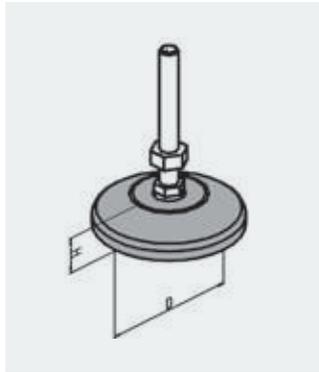
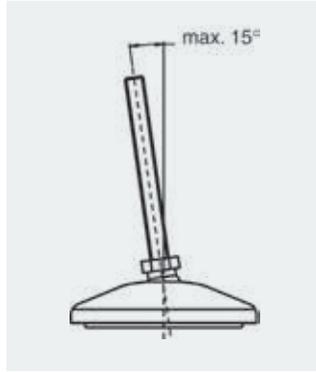
Assembly

- Fix on the end face of the profile using fastening material supplied

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

Articulated 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 devices, tables, showcases
- Conveyors, system workstations

Assembly

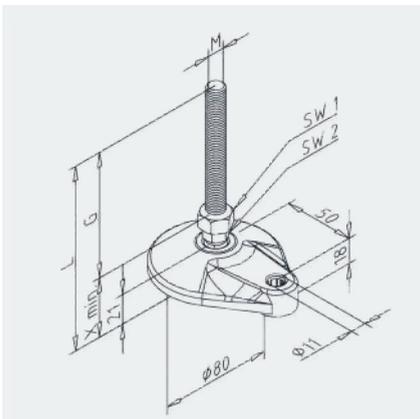
- Direct in central hole of the profiles (depending on profile cross-section, can be enlarged up to thread M12)
- Larger thread in combination with base plate
- For profiles size 45 x 90 and 90 x 90, a base plate is required if the feet are positioned centrally

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

Ø mm	Plate	
	H mm	Load capacity
30	20	300 kg
45	20	500 kg
60	20	1000 kg
80	20	1000 kg

Spindle					
M	G	X	SW1	SW2	L
8	33,5	38,5	13	14	72,5
10	42	40,5	17	14	82,5
12	90	42,5	19	14	132,5
16	107	45,5	24	17	152,5

Hinged feet PA with mounting hole

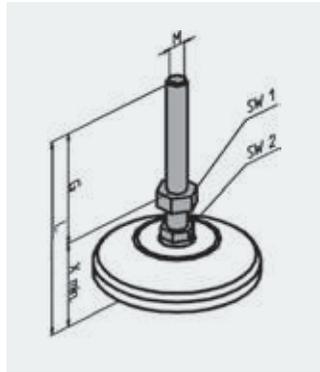
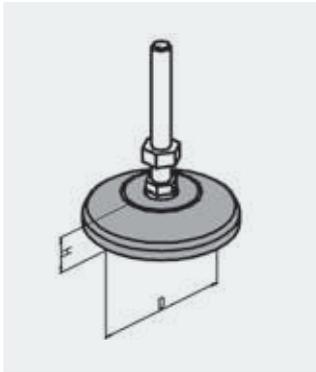
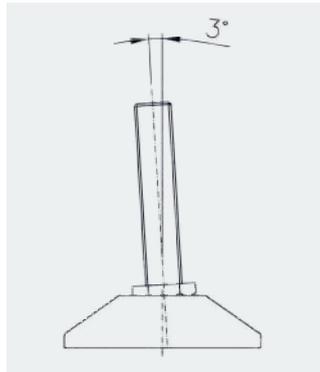


Items supplied

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

Part no.	Color	M	G	X	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 GD



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

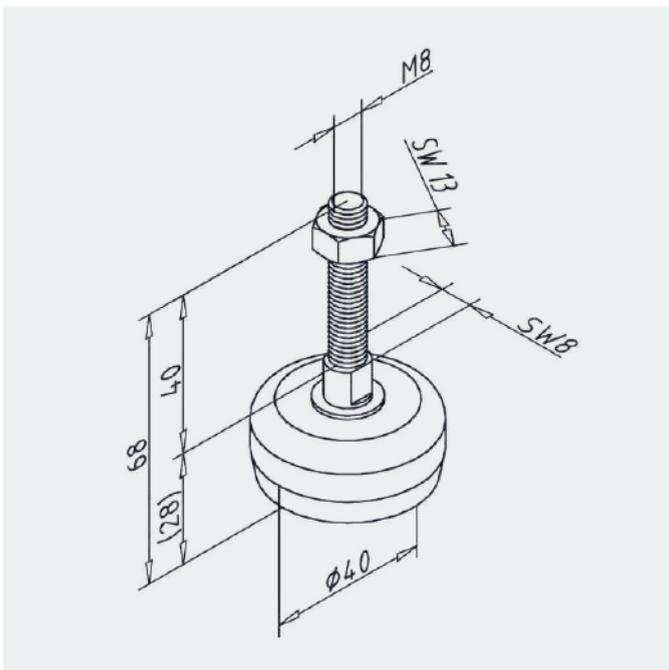
Spindle	Plate	
	Ø 45	Ø 90
M10	21.1842/0	21.1862/0
M12	21.1843/0	21.1863/0
M16	21.1844/0	21.1864/0

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

Spindle					
M	G	X	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

Foot SST

Part no. 21.2053/0



Items Supplied

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

Application

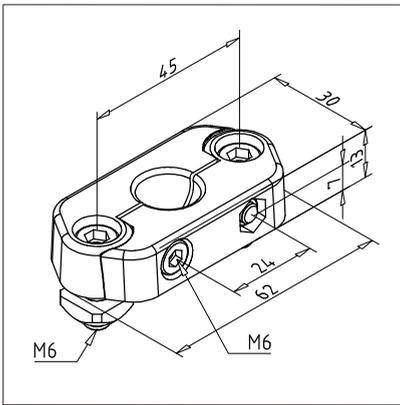
- Height adjustable constructions of all kinds
- Protective equipment, tables, showcases
- Conveyors, system workstations

Assembly

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

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

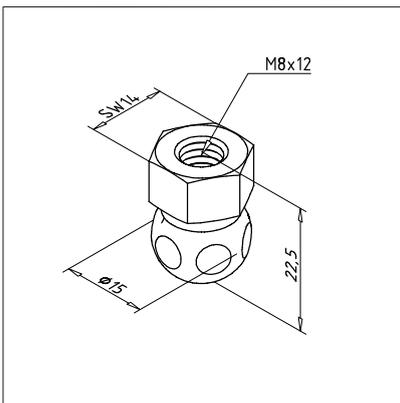
- For the preparation of self-adjusting lines and stoppers
- Exchangeable workpiece or worktool carriers
- To be used with ball head M8 **part no. 21.2506/0** or the ball screws made of hinged feet PA

ASSEMBLY

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

Ball head M8

Part No. 21.2506/0



TECHN. DATA / ITEMS SUPPLIED

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

APPLICATIONS

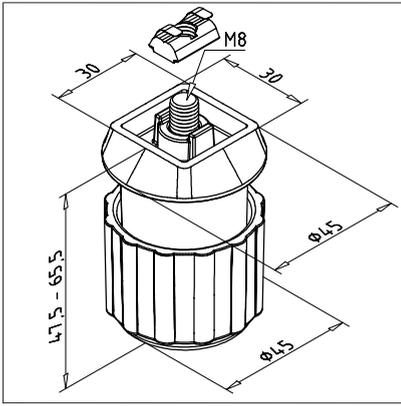
- For use in combination with Clip Block **part no. 22.1181/0**
- For the preparation of linings or hinged feet in special design, see hinged feet PA

ASSEMBLY

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

Foot 30 compact

Part No. 21.2524/0



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 = 0.121 kg/piece

APPLICATIONS

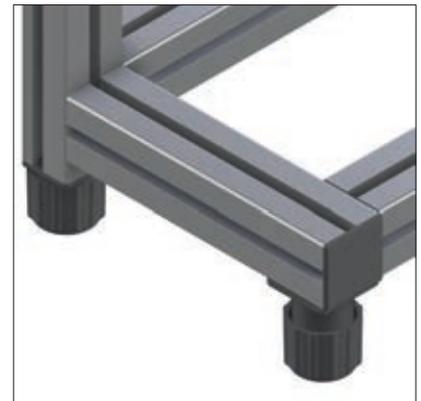
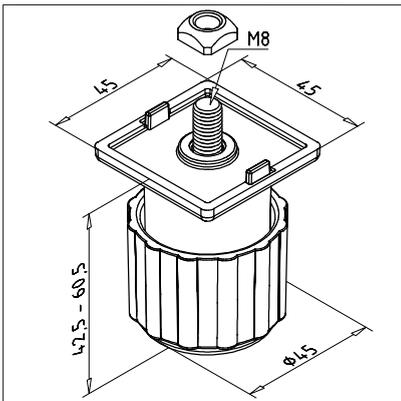
- For installation and levelling of smaller frames with nice design

ASSEMBLY

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

Foot 45 compact

Part No. 21.2525/0



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

APPLICATIONS

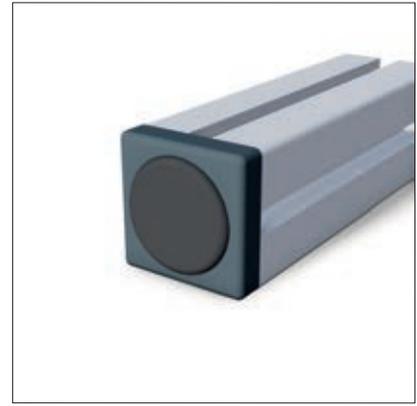
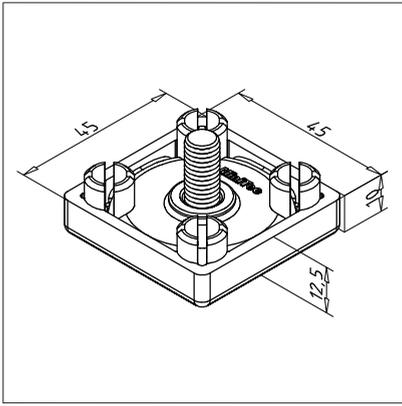
- For installation and levelling of smaller frames with nice design

ASSEMBLY

- 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
- With fastening screw M8, galvanized
- Load capacity: 1000 kg
- Weight = 0.032 kg/piece

APPLICATIONS

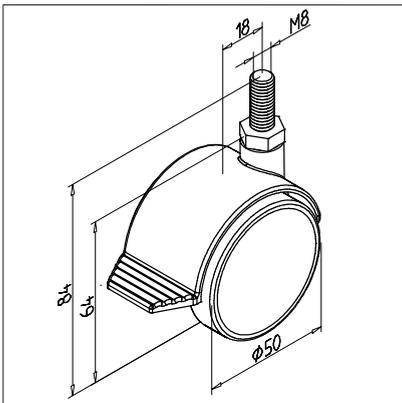
- For use with all profiles with cross section 45x45
- For non-slip installation of tables and racks
- Reduces noise and protects the floor

ASSEMBLY

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

Furniture castor with brake

Part No. 21.1153/0



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

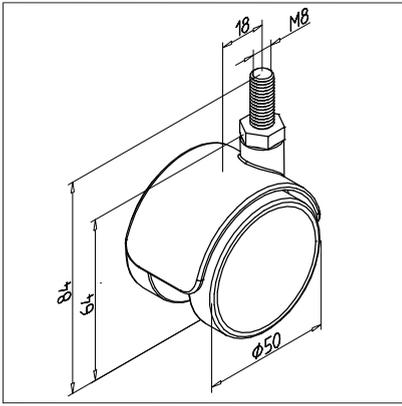
- Light movable tables
- Movable file box
- Furniture

ASSEMBLY

- 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 castor without brake

Part No. 21.1105/0



TECHN. DATA / ITEMS SUPPLIED

- PA, black
- Double role with sliding bearing
- With fastening material steel, zinc plated
- Load capacity 30 kg
- Weight = 0.076 kg/piece

APPLICATIONS

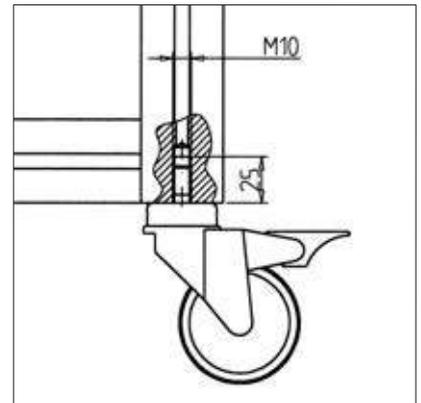
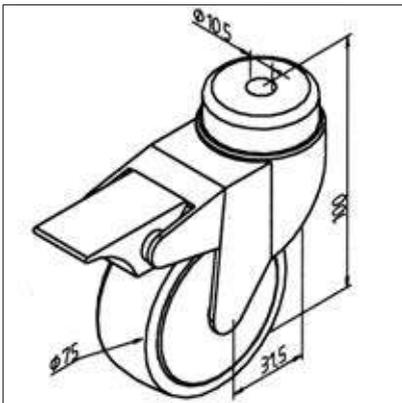
- Light movable tables
- Movable file box
- Furniture

ASSEMBLY

- 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

Swivel castor with brake D 75 x 100

Part No. 21.1120/0



TECHN. DATA / ITEMS SUPPLIED

- Steel, galvanized
- Tire, rubber, grey
- With fastening material steel, zinc plated
- Load capacity 50 kg
- Other versions upon request
- Weight = 0.450 kg/piece

APPLICATIONS

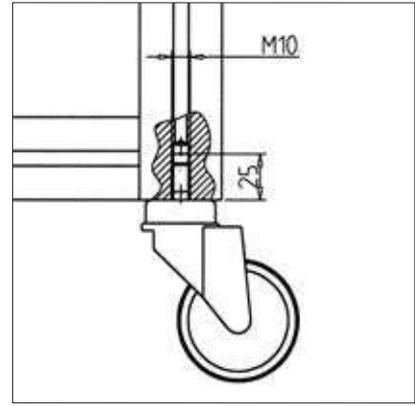
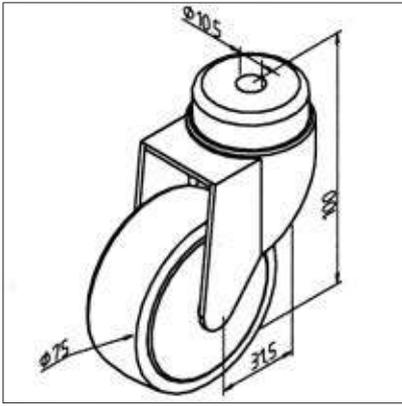
- Movable tables
- Work stands
- Display windows, showcases

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

Swivel castor without brake D 75 x 100

Part No. 21.1118/0



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

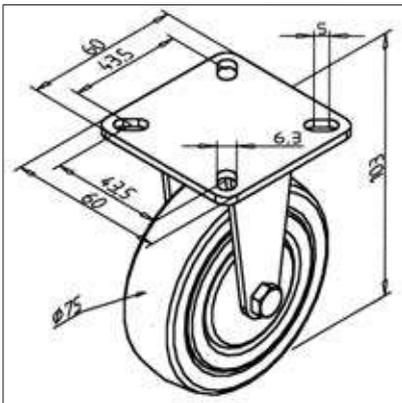
- Movable tables
- Work stands
- Display windows, showcases

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

Part No. 21.1475/0



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

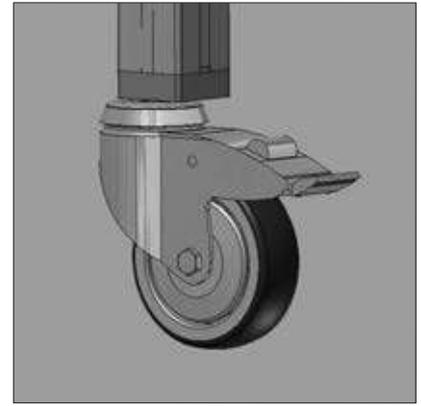
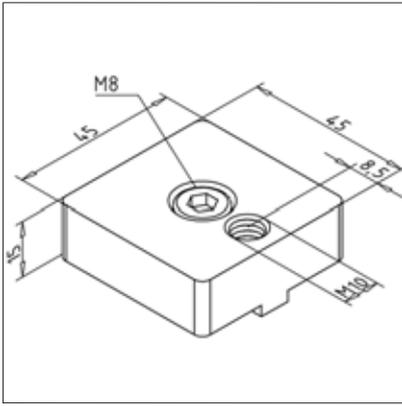
- Work stands
- Frames
- Movable tables

ASSEMBLY

- Use fixing material supplied to fix on profile groove
- With mounting plate for castor **Part no. 21.1476/0** attach to profile

Base plate 45 x 45 stainless M10

Part No. 21.2059/0



TECHN. DATA / ITEMS SUPPLIED

- Stainless steel
- Fastening kit
- Weight = 0.230 kg/piece

APPLICATIONS

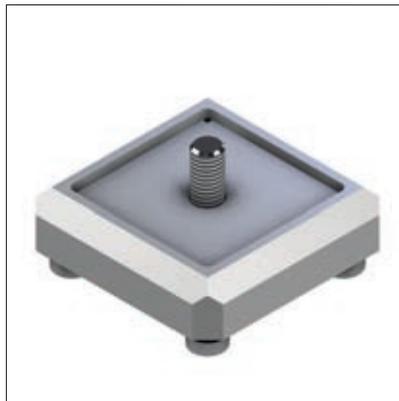
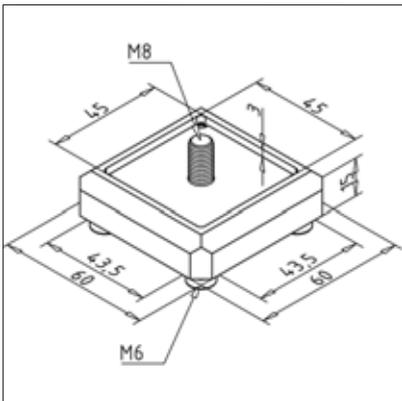
- Profile 45 x 45
- Profile 45 x 45 VA
- Height compensation when mounting casters in combination with fixed casters on a movable base frame
- For using feet M10

ASSEMBLY

- Use fixing material supplied to fix to the end face of the profile

Fastening plate 45 SS for fixed castor

Part No. 21.2058/0



TECHN. DATA / ITEMS SUPPLIED

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

APPLICATIONS

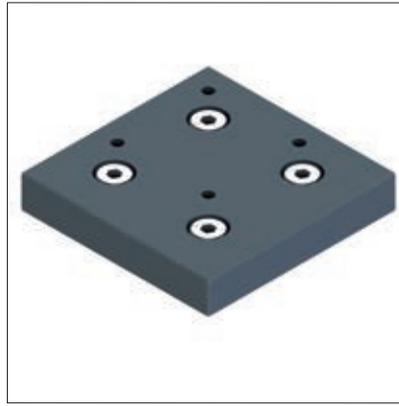
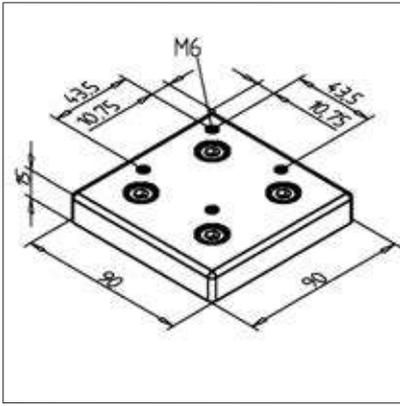
- Profile 45 x 45
- Profile 45 x 45 VA
- For attaching the fixed castor on the front side to profile 45 x 45 and 45 x 45 VA

ASSEMBLY

- Front attachment to profile with supplied hardware

Fastening plate 90 for fixed castor

Part No. 21.1476/0



TECHN. DATA / ITEMS SUPPLIED

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

APPLICATIONS

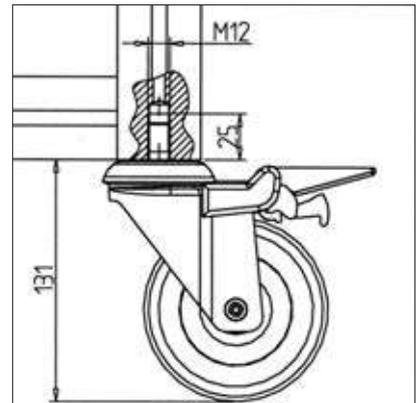
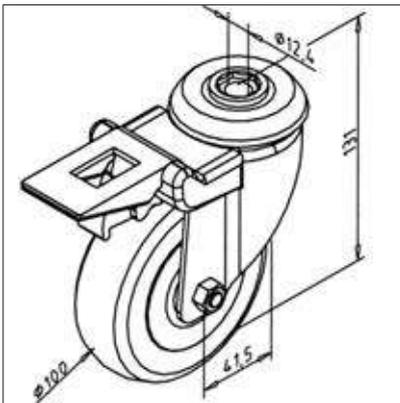
- To attach the castor **part no. 21.1475/0** frontally to profile 90 x 90

ASSEMBLY

- Fasten to the profile end with supplied hardware

Swivel castor with brake D 100 x 131

Part No. 21.0031/0



TECHN. DATA / ITEMS SUPPLIED

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

APPLICATIONS

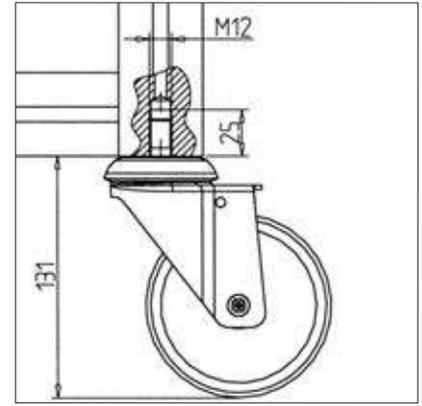
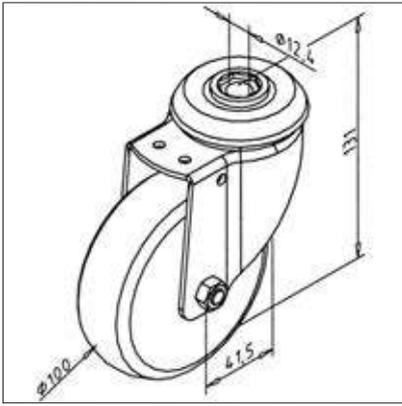
- Movable tables
- Work stands
- Display windows, showcases

ASSEMBLY

- 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

Swivel castor without brake D 100 x 131

Part No. 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

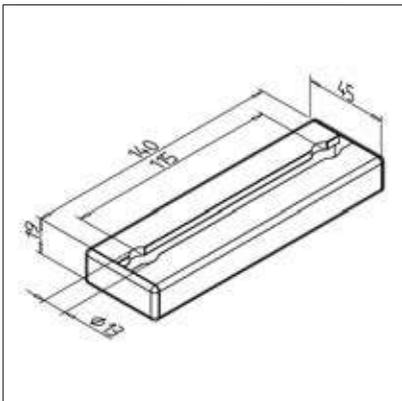
- Movable tables
- Work stands
- Display windows, showcases

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

Part No. 21.1730/0



TECHN. DATA / ITEMS SUPPLIED

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

APPLICATIONS

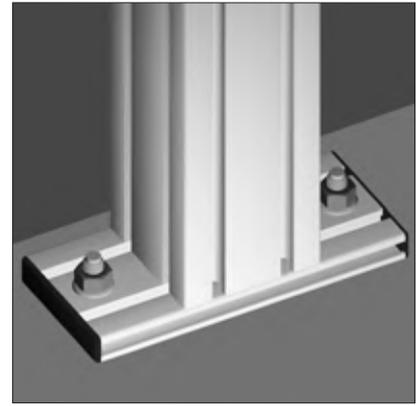
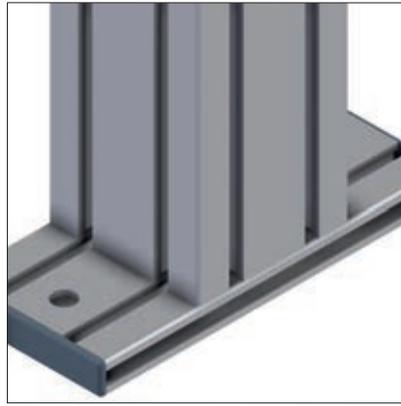
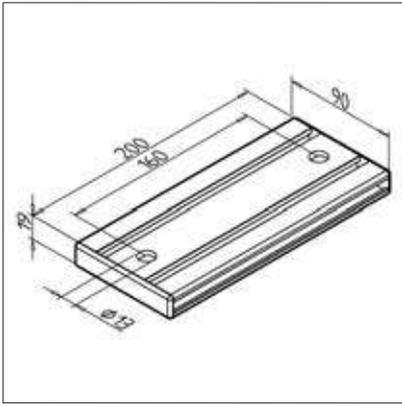
- Floor fixing of columns from profile 45 x 45

ASSEMBLY

- 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 kit
- Weight = 0.470 kg/piece

APPLICATIONS

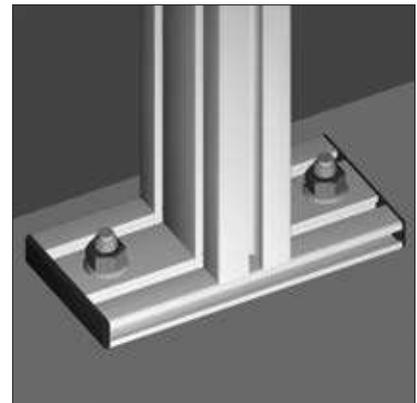
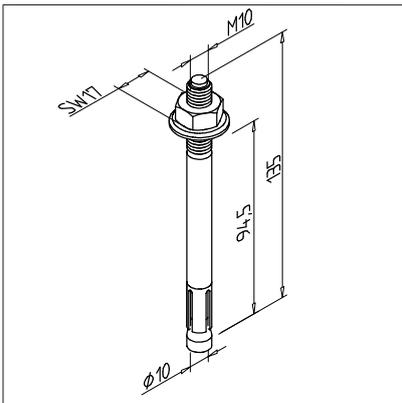
- Floor fixing of columns from profile 45 x 90 oder 90 x 90

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

Part No. 21.1082/0



TECHN. DATA / ITEMS SUPPLIED

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

APPLICATIONS

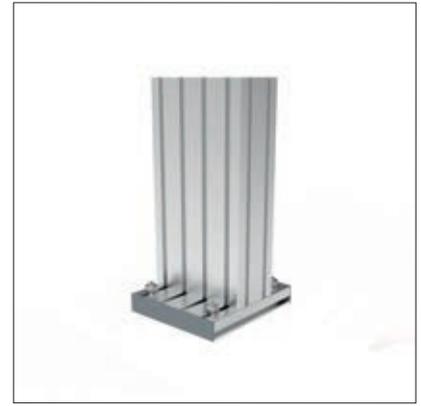
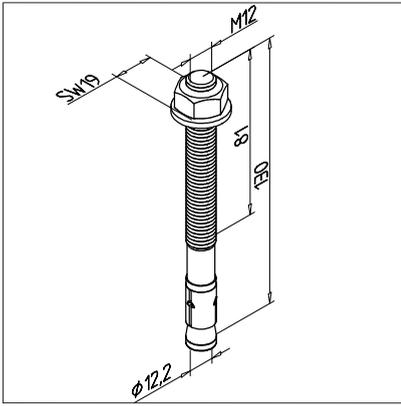
- Secure and fasten constructions in connection with the floor mounting bracket, levelling plate or stationary plate

ASSEMBLY

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

Floor anchor 12

Part No. 21.1115/0



TECHN. DATA / ITEMS SUPPLIED

- Steel, galvanized
- Ø 12 mm
- With hexagonal nut and washer
- Weight = 0.114 kg/piece

APPLICATIONS

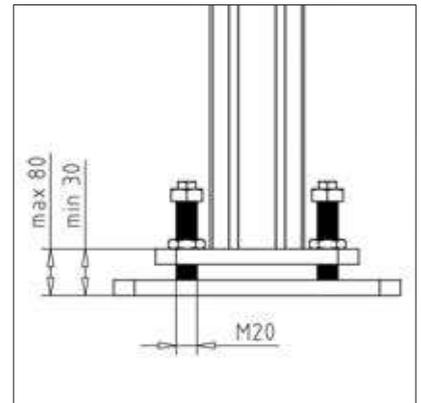
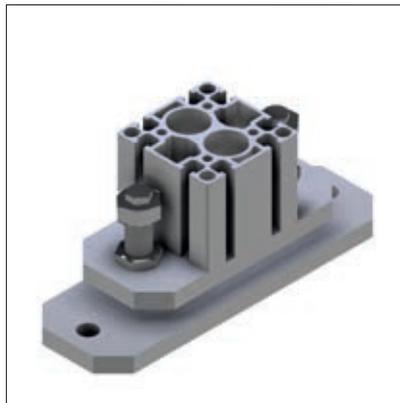
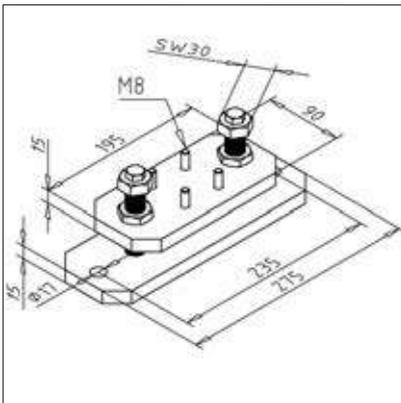
- Secure and fasten constructions in connection with the floor mounting bracket, levelling plate or stationary plate

ASSEMBLY

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

Levelling plate 90 ST

Part No. 21.0976/0



TECHN. DATA / ITEMS SUPPLIED

- Steel, galvanized
- With galvanized steel fastening material, for profile
- With leveling element
- Without dowels
- Max. load capacity 2 kN (compressive load static, vertical)
- Weight = 5.146 kg/piece

APPLICATIONS

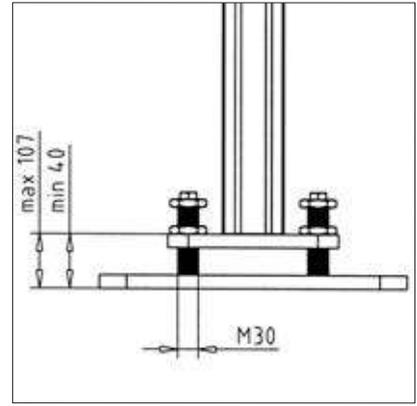
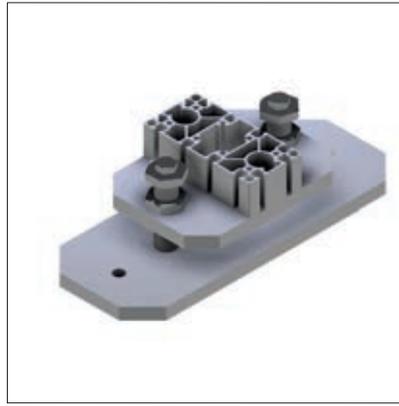
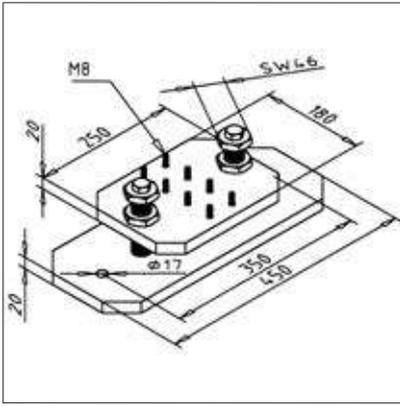
- Precise alignment of heavy constructions with cross-section 90x90 as post profile

ASSEMBLY

- 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

Levelling plate 180 ST

Part No. 21.0977/0



TECHN. DATA / ITEMS SUPPLIED

- Steel, galvanized
- With galvanized steel fastening material, for profile
- With leveling element
- Without dowels
- Max. load capacity 2 kN (compressive load static, vertical)
- Weight = 20.347 kg/piece

APPLICATIONS

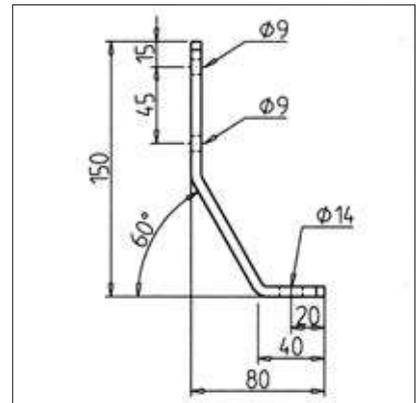
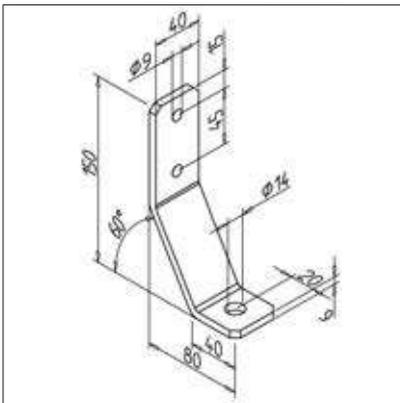
- Precise alignment of heavy constructions with cross-section 90x180 as post profile

ASSEMBLY

- Fasten footplate to the floor using a high performance anchor
- Fasten profile plate to the profile with supplied hardware
- Adjust height by turning screw M30 and secure with counter nut.

Angle bracket for floor fastening

Part No. 21.1112/0



TECHN. DATA / ITEMS SUPPLIED

- Steel, powder-coated, grey
- With fastening material steel, zinc plated
- Without dowels
- Weight = 0.389 kg/piece

APPLICATIONS

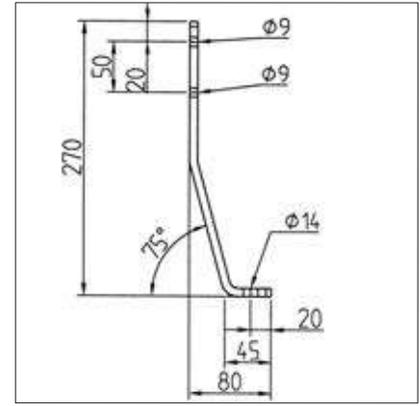
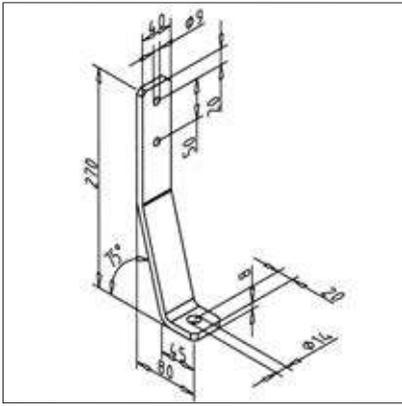
- Securing and fastening of constructions on floor or wall

ASSEMBLY

- 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

Angle bracket for floor fastening long

Part No. 21.0015/0



TECHN. DATA / ITEMS SUPPLIED

- Steel, powder-coated, grey
- With fastening material steel, zinc plated
- Without dowels
- Weight = 0.786 kg/piece

APPLICATIONS

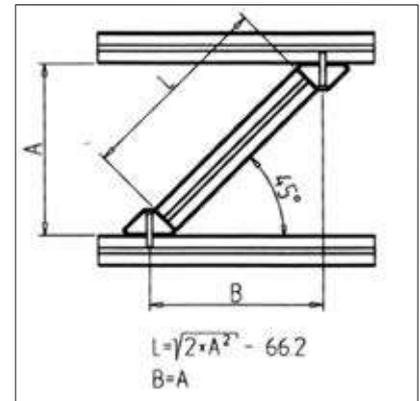
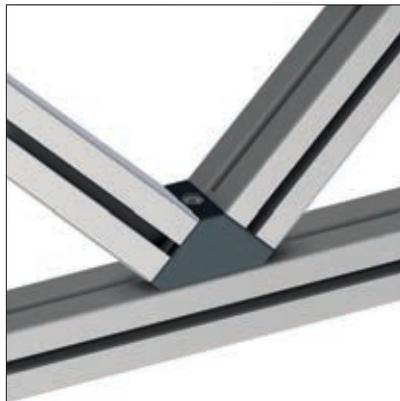
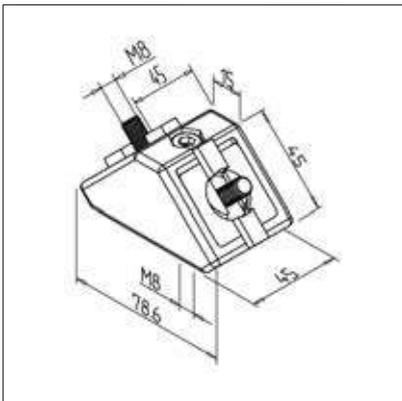
- For securing heavy constructions under dynamic load on floor or wall

ASSEMBLY

- On the profile side with cylinder screw M8 x 20, SW 5
- Bottom side with high performance anchor 12 **part no. 21.1115/0**
- Also suitable for subsequent mounting

Brace socket 45 GD

Part No. 21.1729/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, Pressure die-casting, powder-coated, grey
- With fastening material steel, zinc plated
- For use on vertical struts, strut socket **part no. 21.1729/7** (square nuts with position-fixing)
- Weight = 0.261 kg/piece

APPLICATIONS

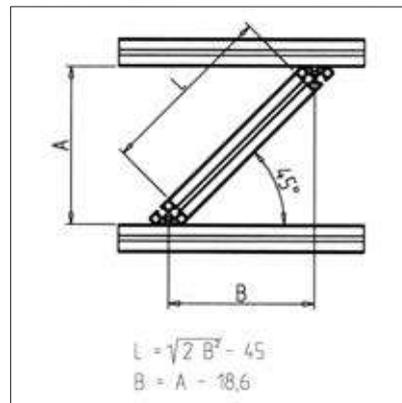
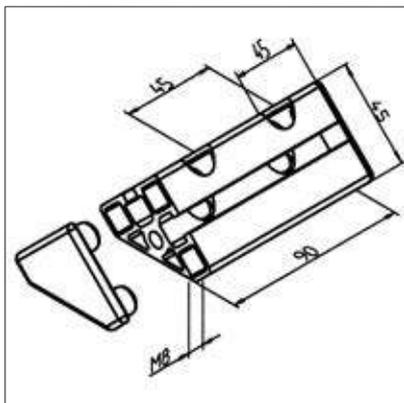
- Bracing in the composite structure

ASSEMBLY

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

Brace socket 45°/90

Part No. 21.1727/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, anodized E6/EV1
- From profile 45/45°
- With fastening material steel, zinc plated
- With caps, grey
- For use on vertical struts, strut socket **part no. 21.1727/4** (square nuts with position-fixing)
- Weight = 0.175 kg/piece

APPLICATIONS

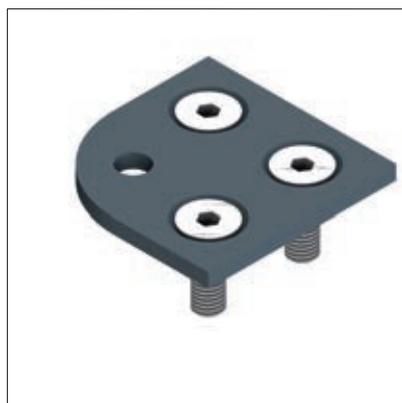
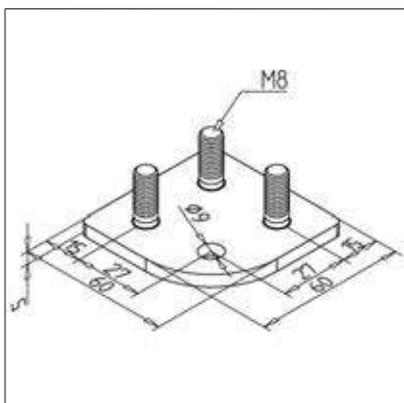
- Bracing in the composite structure

ASSEMBLY

- Screw the brace socket onto the frame
- Insert supports by means of MiniTec power-lock fasteners and tighten
- Install caps

Connecting plate 60x60x30

Part No. 21.0038/0



TECHN. DATA / ITEMS SUPPLIED

- Steel, powder-coated, grey
- Fastening material steel, galvanized
- Weight = 0.145 kg/piece

APPLICATIONS

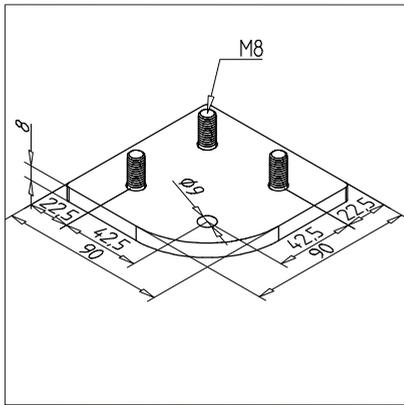
- Profile 60 x 60 x 30 **part no. 20.0982/0**
- For fixing articulated feet and rollers

ASSEMBLY

- Use fixing material supplied to fix to the end face of the profile

Connecting plate 90 x 90 x 45

Part No. 21.2505/0



TECHN. DATA / ITEMS SUPPLIED

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

APPLICATIONS

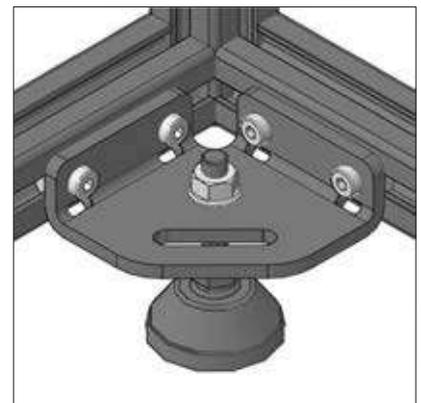
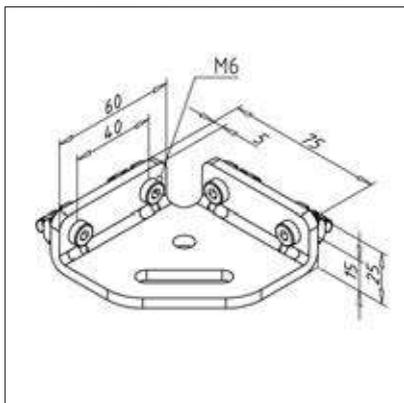
- To profile 90 x 90 x 45 **part no. 20.0984/0**
- For fixing articulated feet and rollers

ASSEMBLY

- Front attachment to profile with supplied hardware

Adapter flange 30

Part No. 21.2120/0



TECHN. DATA / ITEMS SUPPLIED

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

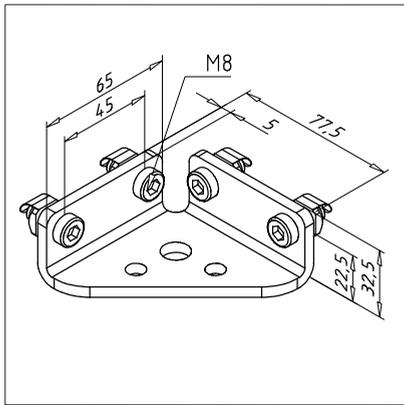
APPLICATIONS

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

ASSEMBLY

- Mount onto frame with fixation material from delivery scope

Adapter flange 45



TECHN. DATA / ITEMS SUPPLIED

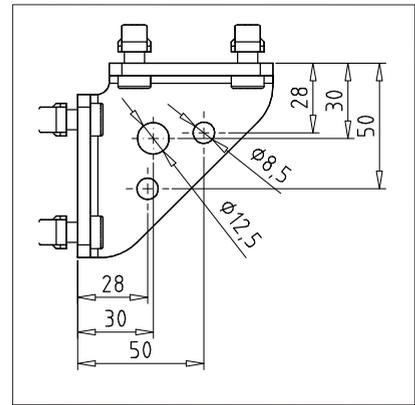
- Steel, powder-coated, grey
- With fastening material steel, zinc plated
- Weight = 0.311 kg/piece



APPLICATIONS

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

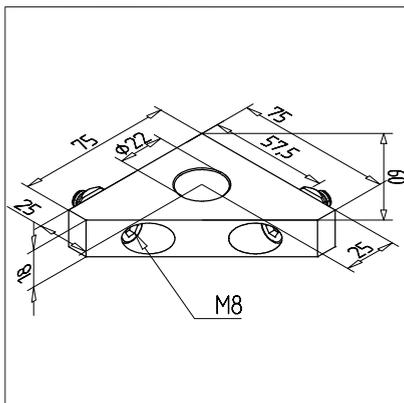
Part No. 21.2300/0



ASSEMBLY

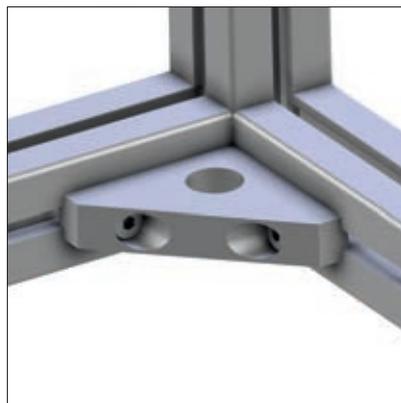
- Mount onto frame with fixation material from delivery scope

Corner 90



TECHN. DATA / ITEMS SUPPLIED

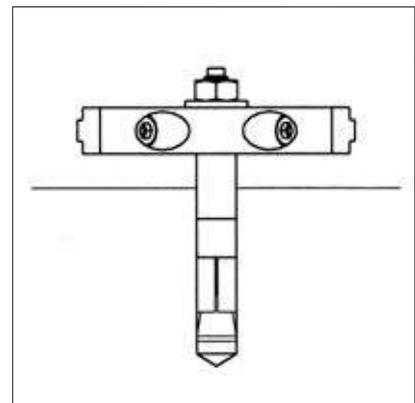
- Aluminium, anodized E6/EV1
- With fastening material steel, zinc plated
- For use on vertical struts, beam **part no.21.1783/7** (square nuts with position-fixing)
- Weight = 0.170 kg/piece



APPLICATIONS

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

Part No. 21.1783/0

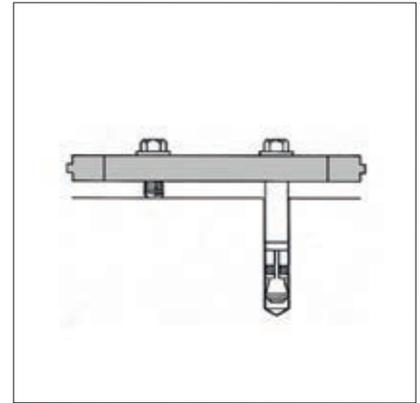
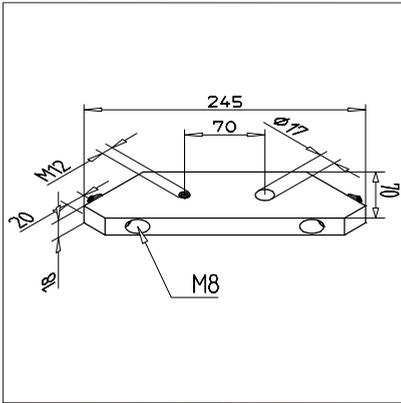


ASSEMBLY

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

Corner 180

Part No. 21.1784/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, anodized E6/EV1
- With fastening material steel, zinc plated
- For use on vertical struts, beam **part no. 21.1784/7** (square nuts with position-fixing)
- Weight = 0.690 kg/piece

APPLICATIONS

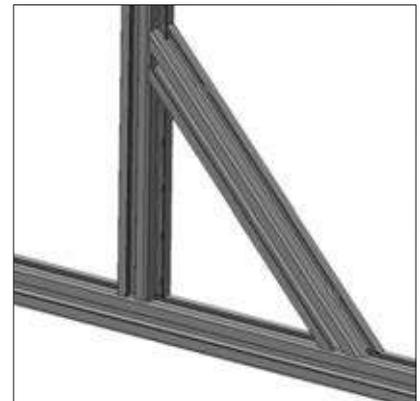
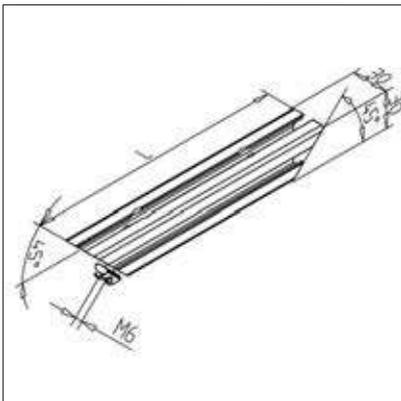
- Strengthening of heavy constructions
- Fixation of internal feet or rollers
- Floor mounting and leveling heavy constructions

ASSEMBLY

- On profile side, with fastening kit
- On floor side, fasten with floor anchor and levelling screw M 12

Strengthening element 30

Part No. 21.2110/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, anodized E6/EV1
- Length (l) : 300 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 versions under part no. 21.2110/5 on request**
- Weight = 0.212 kg/piece

APPLICATIONS

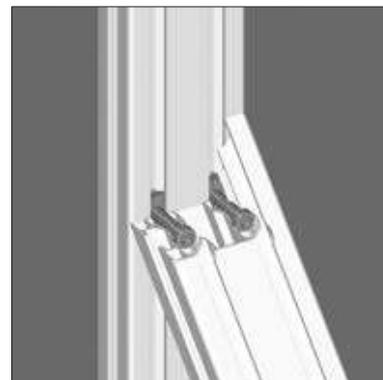
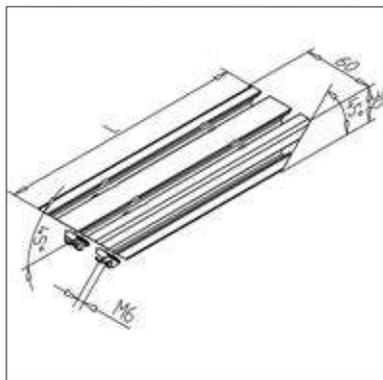
- Reinforcement of profiled superstructures according to the principle of truss construction

ASSEMBLY

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

Strengthening element 30 x 60

Part No. 21.2210/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, anodized E6/EV1
- Length (l) : 300 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
- Weight = 0.338 kg/piece

APPLICATIONS

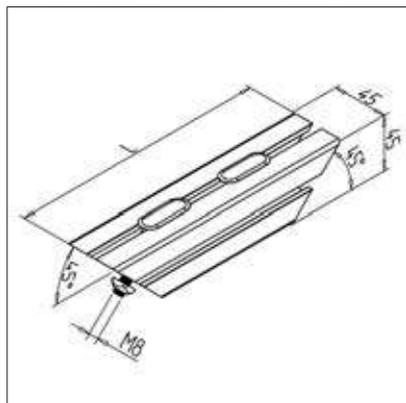
- Reinforcement of profiled superstructures according to the principle of truss construction

ASSEMBLY

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

Strengthening element 45

Part No. 21.1761/0



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
- For use on vertical struts, strengthening element **part no.21.1761/7** (square nuts with position-fixing)
- Other lengths and designs under part no. 21.1761/5 on request
- Weight = 0.870 kg/piece

APPLICATIONS

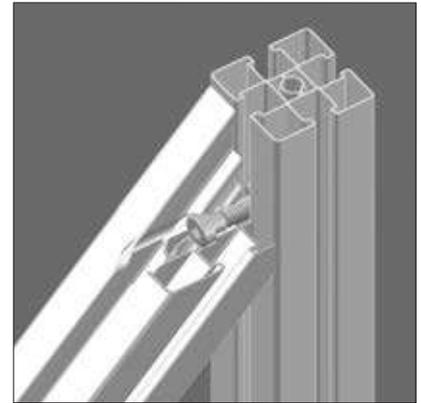
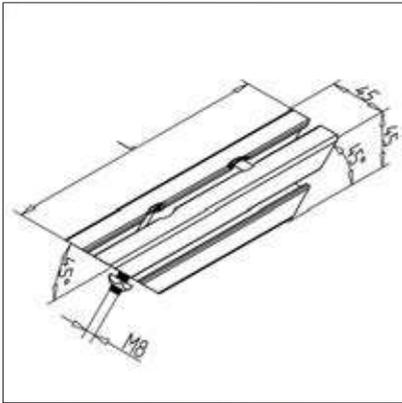
- Reinforcement of profiled superstructures according to the principle of truss construction

ASSEMBLY

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

Strengthening element 45 stainless

Part No. 21.1706/0



TECHN. DATA / ITEMS SUPPLIED

- Stainless steel
- Length (l) : 360 mm
- Profile 45x45 VA, ready for installation
- Both ends cut at 45° with counter-bores for fastening kit
- Fastening kit
- **Other lengths and designs under part no. 21.1761/5 on request**
- Weight = 0.890 kg/piece

APPLICATIONS

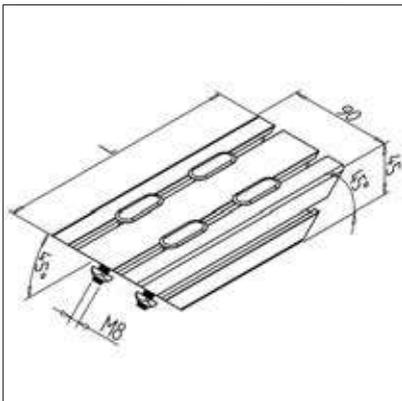
- Reinforcement of profiled superstructures according to the principle of truss construction

ASSEMBLY

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

Strengthening element 90

Part No. 21.1762/0



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**
- Weight = 1.416 kg/piece

APPLICATIONS

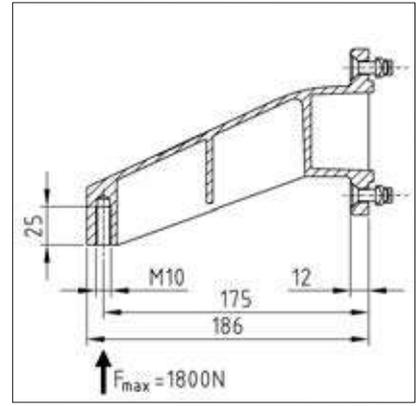
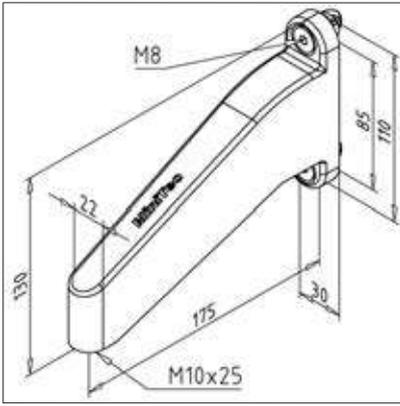
- Reinforcement of profiled superstructures according to the principle of truss construction

ASSEMBLY

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

Cantilever foot 175

Part No. 21.2191/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, Pressure die-casting, powder-coated, grey
- With fastening material steel, zinc plated
- Weight = 0.369 kg/piece

APPLICATIONS

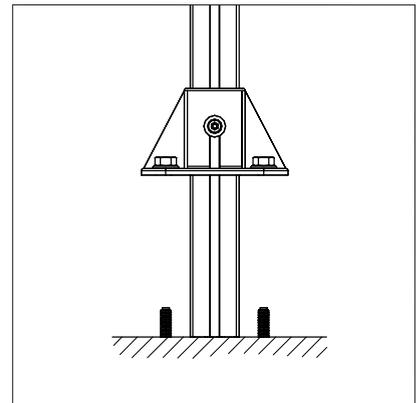
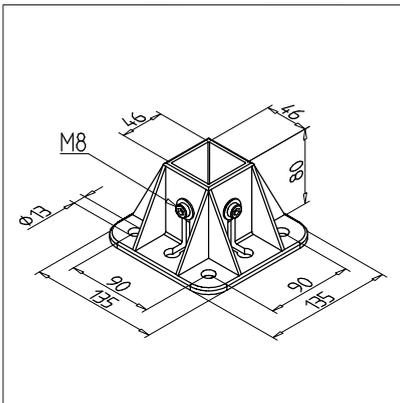
- Placing frames and attaching stands

ASSEMBLY

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

Foot 45 GD

Part No. 21.1731/0



TECHN. DATA / ITEMS SUPPLIED

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

APPLICATIONS

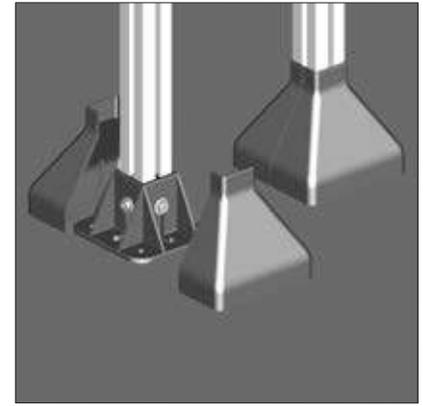
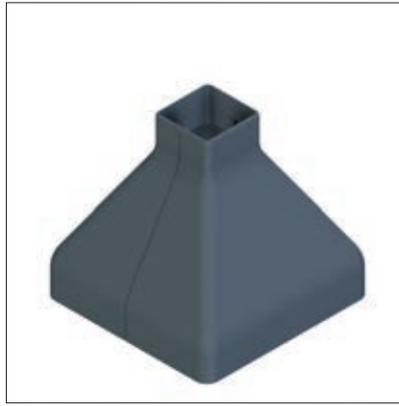
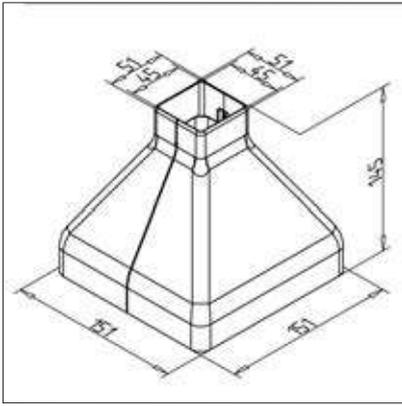
- Suitable for profiles up to dimension 45 x 45
- Floor fastening of guard units, signboards, racks
- As connection element for wall attachment; can be used both-sided

ASSEMBLY

- Insert profile into foot
- Insert the square nut with spring steel sheet into the profile groove; preassemble the screws
- Fix the foot on the floor or the wall; use the floor anchors or the universal plugs with a hexagonal head screw
- Tighten fastening screws

Cover for foot 45

Part No. 22.1164/0



TECHN. DATA / ITEMS SUPPLIED

- ABS, grey
- Weight = 0.166 kg/pair

APPLICATIONS

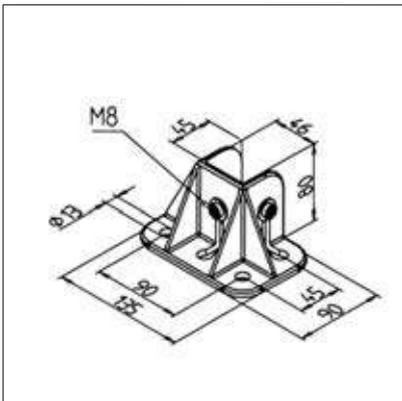
- To cover the stand foot 45 GD and 45 GD open

ASSEMBLY

- Attach to profiles/stand foot

Foot 45 GD open

Part No. 21.1738/0



TECHN. DATA / ITEMS SUPPLIED

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

APPLICATIONS

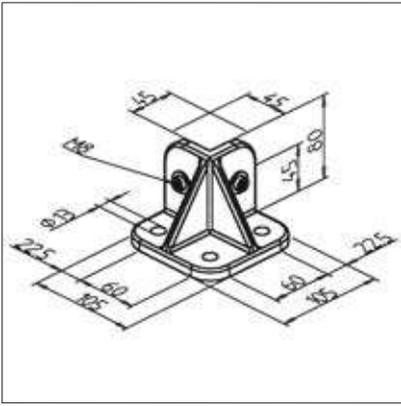
- Floor fastening of guard units, signboards, racks
- As connection element for wall attachment; can be used both-sided

ASSEMBLY

- Insert profile into foot
- Insert the square nut with spring steel sheet into the profile groove; preassemble the screws
- Fix the foot on the floor or the wall; use the floor anchors or the universal plugs with a hexagonal head screw
- Tighten fastening screws

Foot 45 GD S

Part No. 21.1723/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, Pressure die-casting, powder-coated, grey
- With galvanized steel fastening material, for profile
- Package size of 10 pieces **part no. 21.1723/010**
- Weight = 0.499 kg/piece

APPLICATIONS

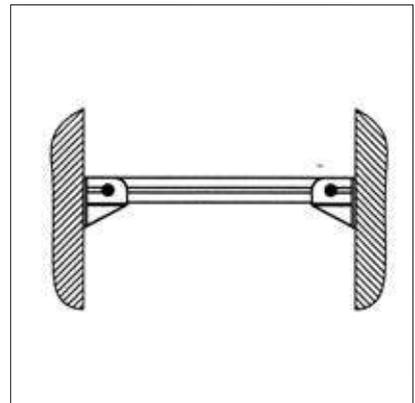
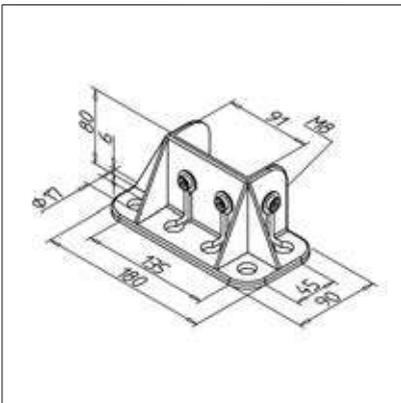
- Floor fastening of guard units, signboards, racks
- As connection element for wall attachment; can be used both-sided
- For all profiles

ASSEMBLY

- Fix the foot on the floor or the wall; use the floor anchors or the universal plugs with a hexagonal head screw
- Tighten fastening screws

Foot 90 GD

Part No. 21.1737/0



TECHN. DATA / ITEMS SUPPLIED

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

APPLICATIONS

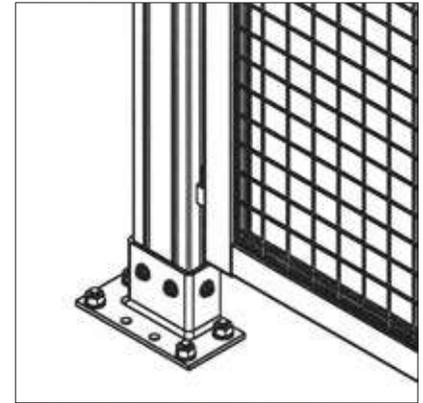
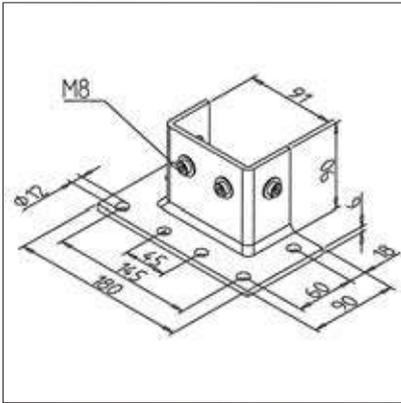
- Fitting for profiles with maximum dimension of 45 x 90, 90 x 90 and 90 x 180
- Floor fastening of guard units, signboards, racks
- As connection element for wall attachment; can be used both-sided

ASSEMBLY

- Insert profile into foot
- Insert the square nut with spring steel sheet into the profile groove; preassemble the screws
- Fix the foot on the floor or the wall; use the floor anchors or the universal plugs with a hexagonal head screw
- Tighten fastening screws

Foot 90 S

Part No. 21.1707/0



TECHN. DATA / ITEMS SUPPLIED

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

APPLICATIONS

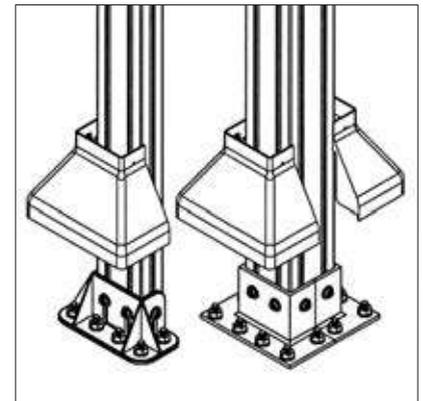
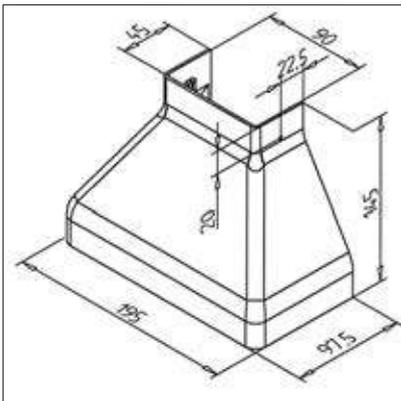
- Fitting for profiles with maximum dimension of 45 x 90, 90 x 90 and 90 x 180
- Floor fastening of guard units, signboards, racks
- As connection element for wall attachment; can be used both-sided

ASSEMBLY

- Insert the square nut with spring steel sheet into the profile groove; preassemble the screws
- Fix the foot on the floor or the wall; use the floor anchors or the universal plugs with a hexagonal head screw
- Tighten fastening screws

Cover for foot 90

Part No. 22.1025/1



TECHN. DATA / ITEMS SUPPLIED

- ABS, grey
- Weight = 0.131 kg/piece

APPLICATIONS

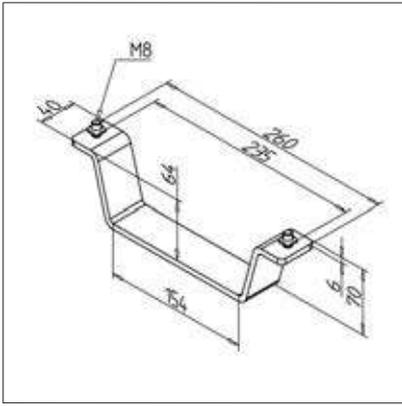
- Suitable for foot 90 GD and 90 S
- Less dust and dirt deposit on the foot
- Easy to clean

ASSEMBLY

- 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 \varnothing 2.5 mm at the marked location

Transport aid

Part No. 26.1101/0



TECHN. DATA / ITEMS SUPPLIED

- Steel, galvanized
- With fastening material steel, zinc plated
- Weight = 0.708 kg/piece

APPLICATIONS

- Securing of constructions when transported by forklift truck

ASSEMBLY

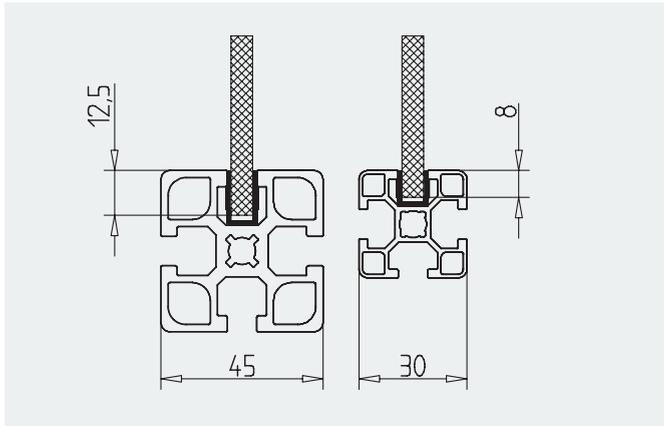
- Mount under construction with fastening material from the scope of supply to the profile groove
- Use always in pairs

Installation of surface elements

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 guard unit which are inserted into a con-

struction. 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

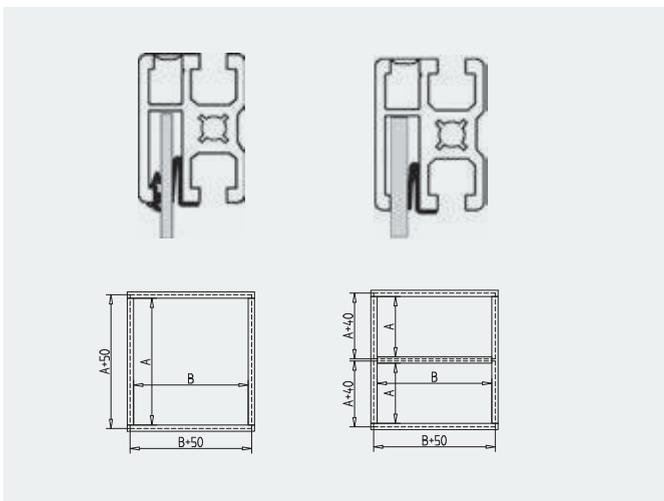
Surface elements of 6 mm thickness can be combined with a clamp profile.

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

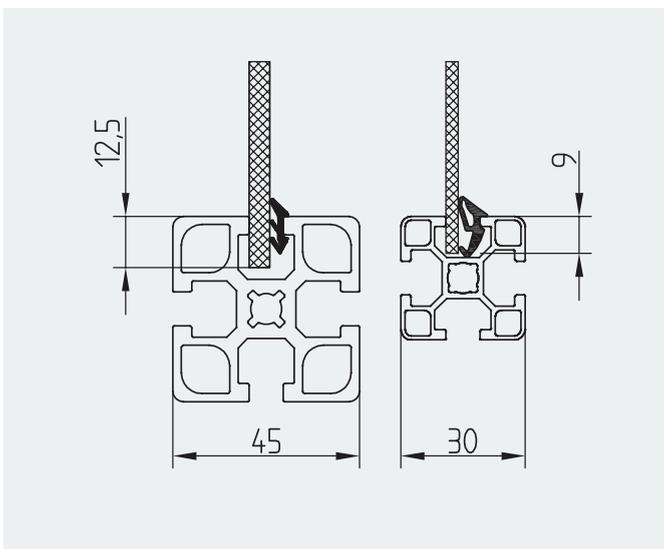
The clamping profile 45 x 32 contains the properties of the system profiles and a safe, simple fastening of surface elements integrated.

This option is particularly recommended for large guard units and wave grid constructions. The guard units are pre-fabricated and can be easily installed with guard unit fixing angle in the frame of the construction. Quick removal of such guard units 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



Insert seals

Panes of glass, PVC, composite material, acrylic or similar of 2 - 6 mm thickness can be fixed and sealed in the profile groove with the insert seals 2, 4, 5 and 6. The insert seal is subsequently pressed into the gap between the pane and the side of the profile groove. If using insert seal 4 on both sides, materials < 2 mm can be clamped. Depending on the installation length, the seals should be approx. 5-10 mm longer and slightly pressed together on installation. This prevents gaps caused by the material's shrinkage.

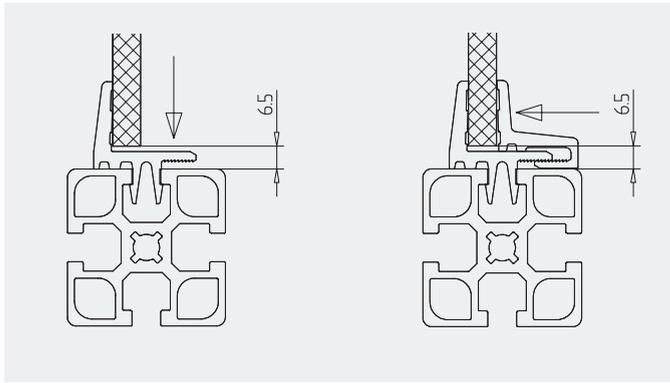
Allowance for surface elements in x and y direction for mounting in profile groove:

30 groove system +18 mm with insert seal 30

45 groove system +25 mm with insert seal 2/4/5/6

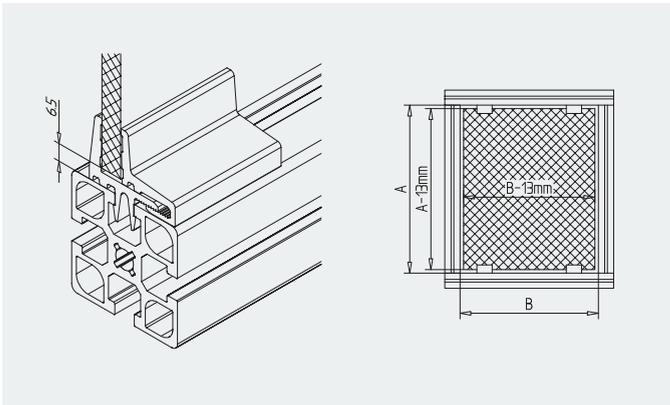
Installation of surface elements

Installing surface elements in the profile groove



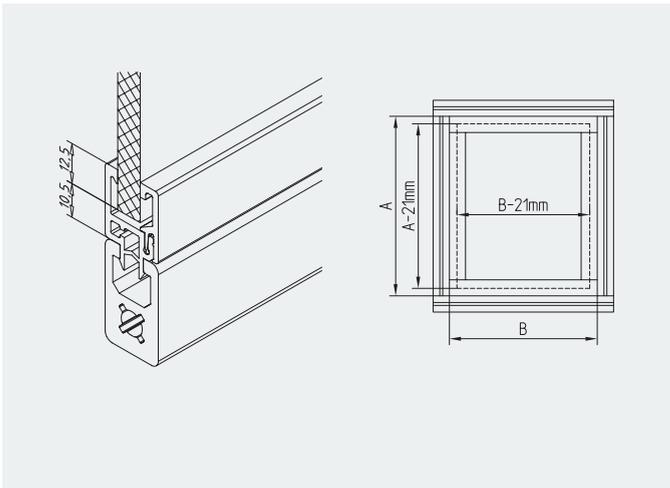
Clamping profile PVC

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 thick. For corrugated mesh, please use the PVC clamping profile. Calculation of pane size: Clear opening - 13 mm (6.5 mm gap all-round)

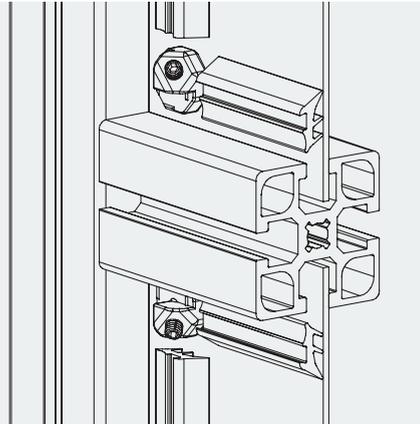


Window Edging Profile

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.

Installation of surface elements

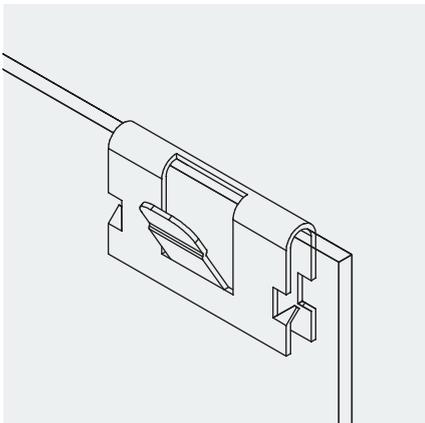
Installing surface elements in the profile groove



Earthing / conductive connection

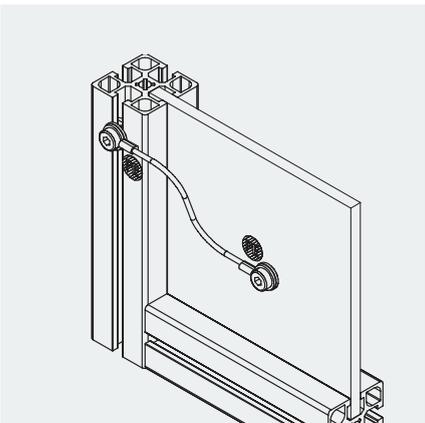
For conductive connection of aluminium or steel sheets with the 1.5mm - 2.5mm thick profile frame, please use our earthing block part no. 22.1163/0.

1 surface block is sufficient per surface element. In combination with our insert seal 2, the metal sheet is fixed 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
- Safe support and conductive connection is provided by claws
- For the connection of the earthing cable with 6 mm flat plug
- Attach to sheet metal edge



Earthing conductor for ESD areas

- Core H07V-K 4mm² Length: 200 mm

Wire line green-yellow 4mm² Length: ca. 200 mm

Attach to profile groove with fixing material from scope of delivery.

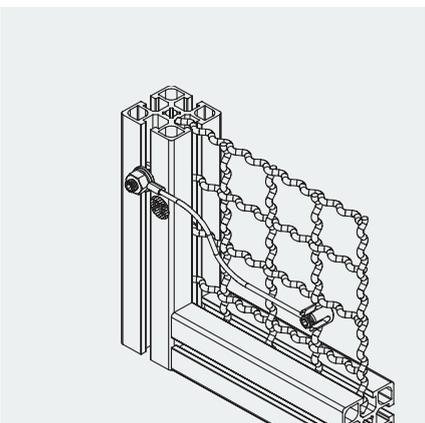
With standard accessory for grounding of surface elements with 8 mm

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.

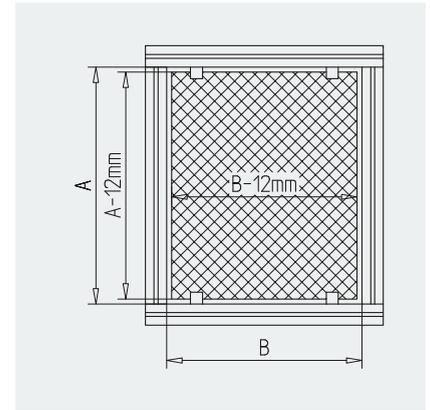
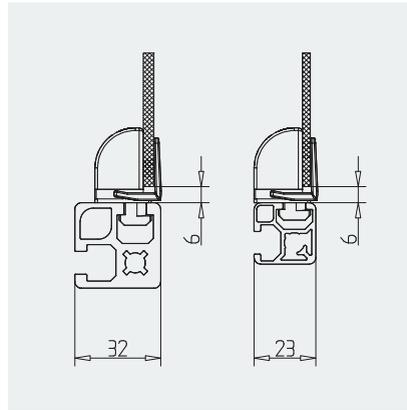
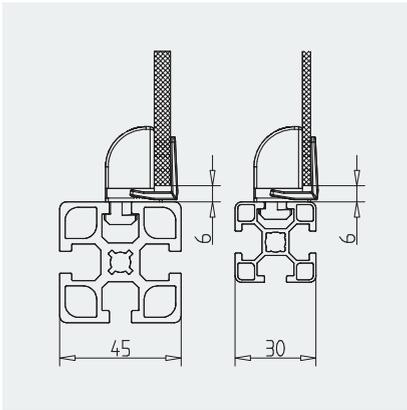
Attach grounding clip to wave grid, fasten and connect with eyelet.

Installation of surface elements

Installing surface elements in the profile groove

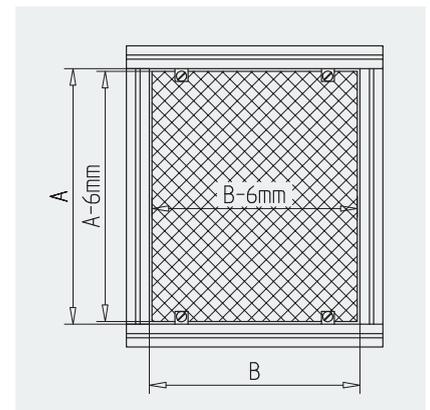
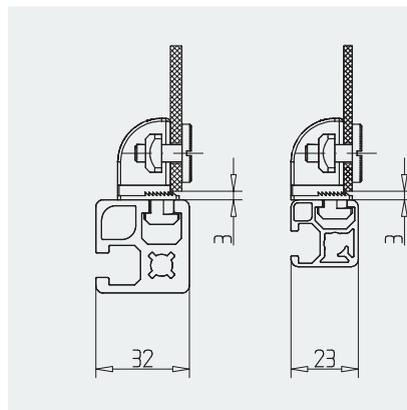
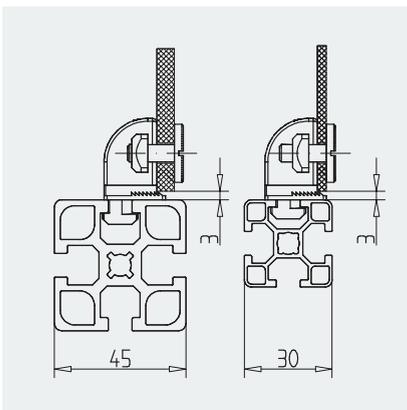
Panel clamp

- 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 $A / B - 12\text{mm}$ (6mm air circulating)



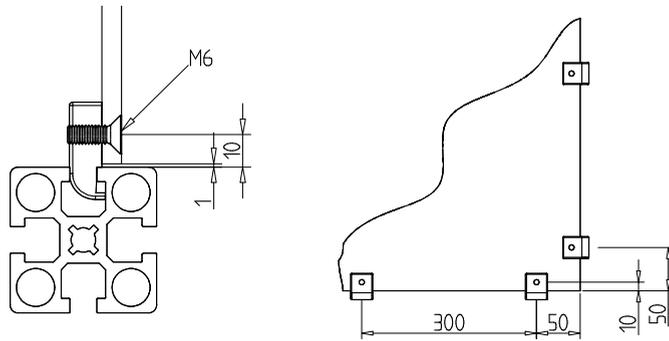
Screw block

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



Installation of surface elements

Installing surface elements in the profile groove



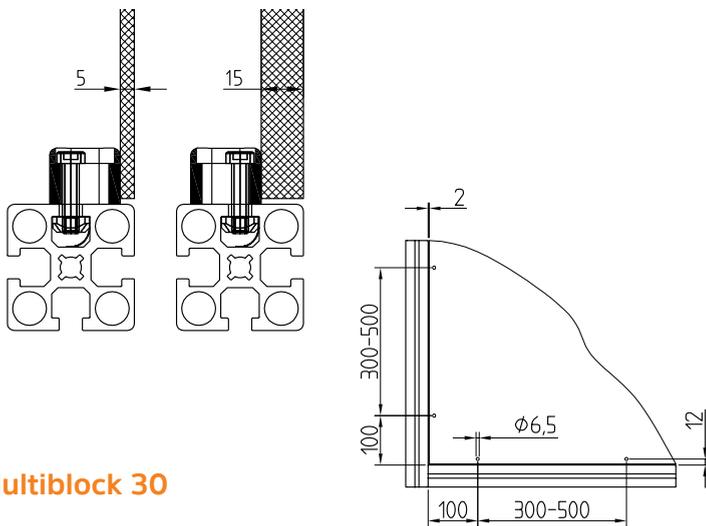
Thread Socket

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.

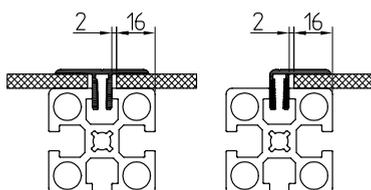
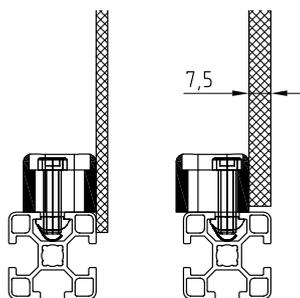
Calculation of panel size:

Clear opening -2 mm (1 mm air circulating)

Multiblock 45



Multiblock 30



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 $\text{Ø}6.5$ 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.

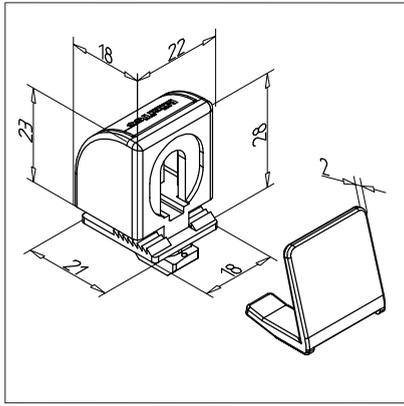
Panel Clamping Profile

Suitable for surface elements from 2 to 10 mm thick.

Insert boring $\text{Ø} 5.5$ 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 23



TECHN. DATA / ITEMS SUPPLIED

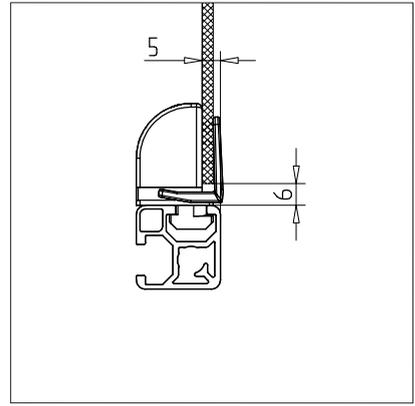
- ABS, Injection Mould, grey
- Weight = 0.008 kg/piece



APPLICATIONS

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

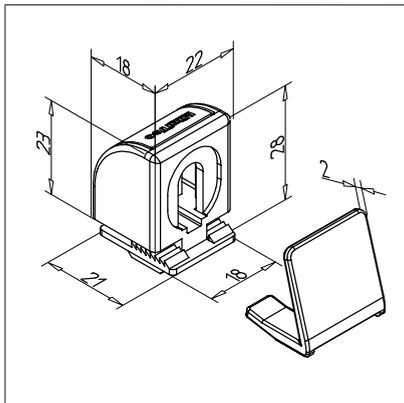
Part No. 22.1235/0



ASSEMBLY

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

Clamping block 30



TECHN. DATA / ITEMS SUPPLIED

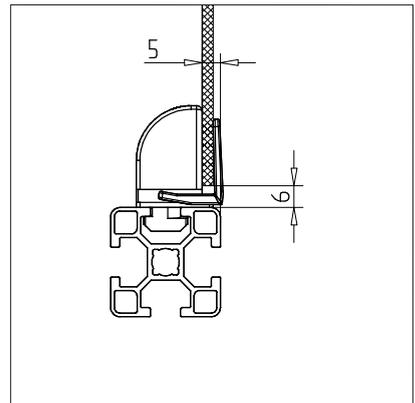
- ABS, Injection Mould, grey
- Weight = 0.008 kg/piece



APPLICATIONS

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

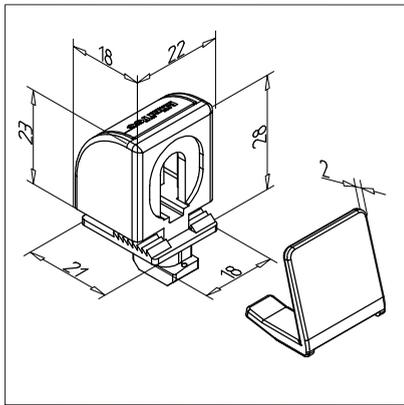
Part No. 22.1230/0



ASSEMBLY

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

Clamping block 32



TECHN. DATA / ITEMS SUPPLIED

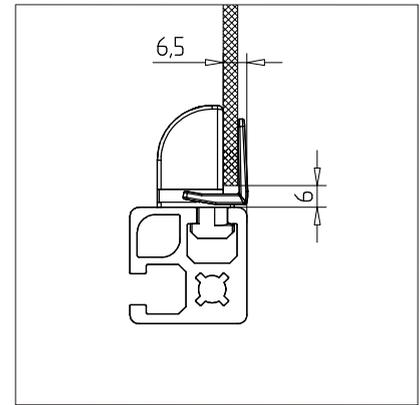
- ABS, Injection Mould, grey
- Weight = 0.008 kg/piece



APPLICATIONS

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

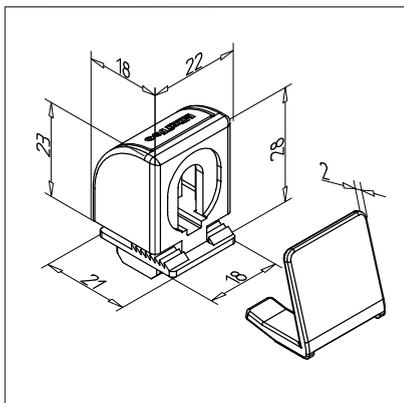
Part No. 22.1245/0



ASSEMBLY

- 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

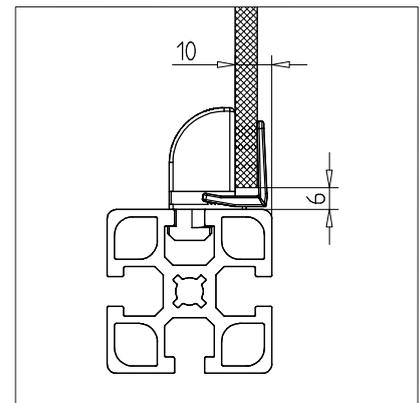
- ABS, Injection Mould, grey
- Weight = 0.008 kg/piece



APPLICATIONS

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

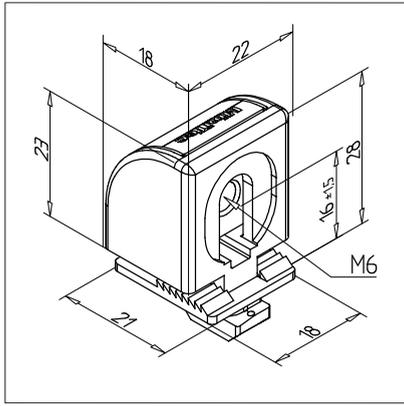
Part No. 22.1240/0



ASSEMBLY

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

Screw block 23



TECHN. DATA / ITEMS SUPPLIED

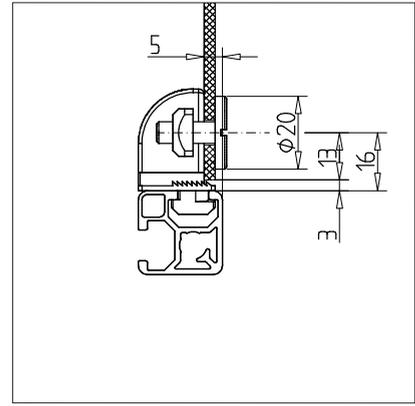
- ABS, Injection Mould, grey
- Nut M6, steel, zinc-plated
- Also available with thread dimensions M4/M5
- Weight = 0.011 kg/piece



APPLICATIONS

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

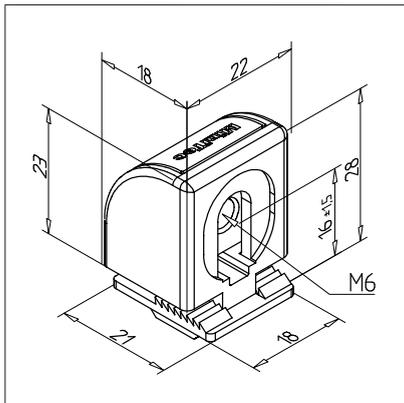
Part No. 22.1255/0



ASSEMBLY

- 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 30



TECHN. DATA / ITEMS SUPPLIED

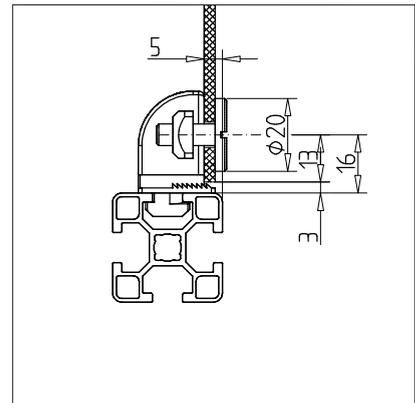
- ABS, Injection Mould, grey
- Nut M6, steel, zinc-plated
- Also available with thread dimensions M4/M5
- Weight = 0.011 kg/piece



APPLICATIONS

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

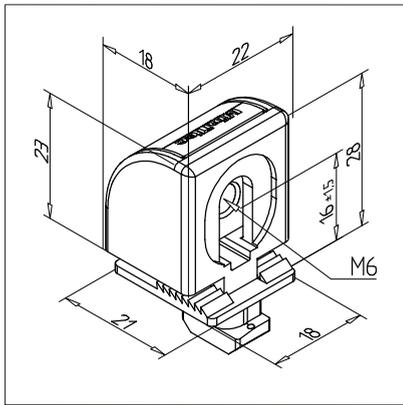
Part No. 22.1250/0



ASSEMBLY

- 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 32



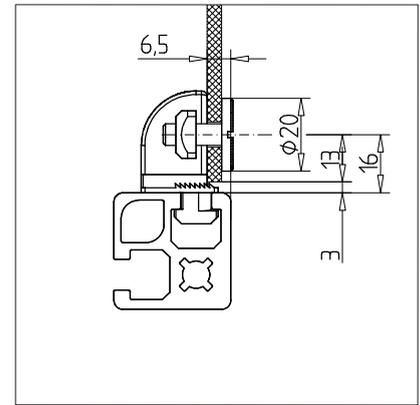
TECHN. DATA / ITEMS SUPPLIED

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



APPLICATIONS

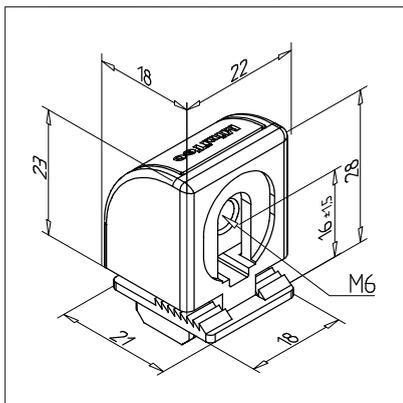
- Suitable for profile series 45
- Retrofitting surface elements 2 mm to 6 mm thickness
- Circulating air gap 7 mm



ASSEMBLY

- Insert socket into profile groove
- Insert bored surface elements
- 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



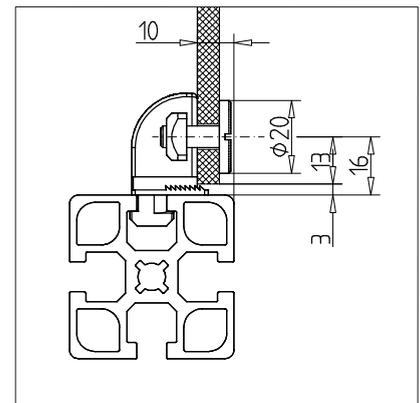
TECHN. DATA / ITEMS SUPPLIED

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



APPLICATIONS

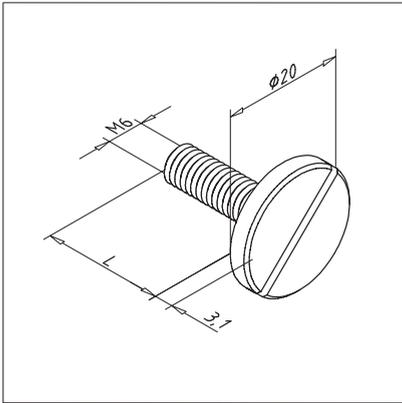
- Suitable for profile series 45
- Retrofitting surface elements 2 mm to 6 mm thickness
- Circulating air gap 7 mm



ASSEMBLY

- Insert socket into profile groove
- Insert bored surface elements
- 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

Pan head screw M6



TECHN. DATA / ITEMS SUPPLIED

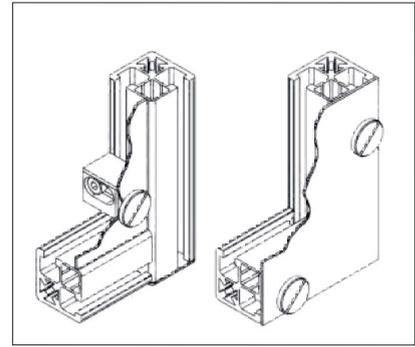
- Steel, galvanized
- Head diameter $\phi 20$ mm
- M06x12 - **part no. 21.2074/0**, Weight 0,008 kg
- M06x16 - **part no. 21.1246/0**, Weight 0,009 kg
- M06x20 - **part no. 21.1246/1**, Weight 0,010 kg



APPLICATIONS

- Assembly of surface elements directly on profile groove
- In connection with screw blocks, multi-blocks and thread socket

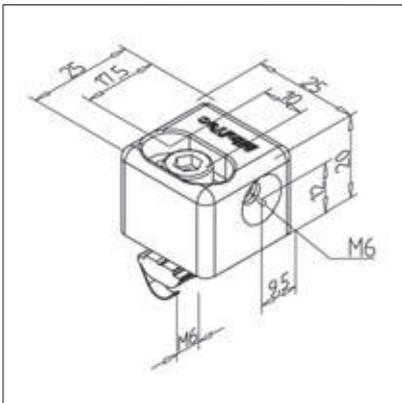
Part No. ---,----/-



ASSEMBLY

- Pre-drill surface elements: $\phi 6.5$ mm
- Recommended grid dimensions: approx. 150 mm
- Edge distance: see screw block 32 and multi-block

Multiblock 30 GD



TECHN. DATA / ITEMS SUPPLIED

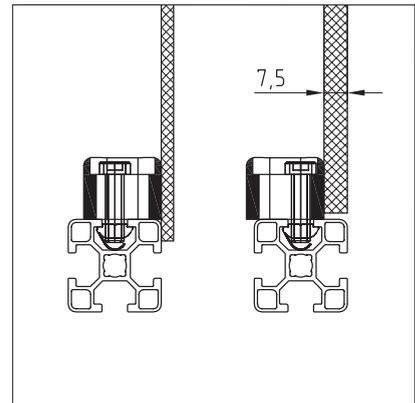
- Aluminium, Pressure die-casting, powder-coated, grey
- With fastening material steel, zinc plated
- Without pan head screw
- Weight = 0.032 kg/piece



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.

Part No. 21.2220/0

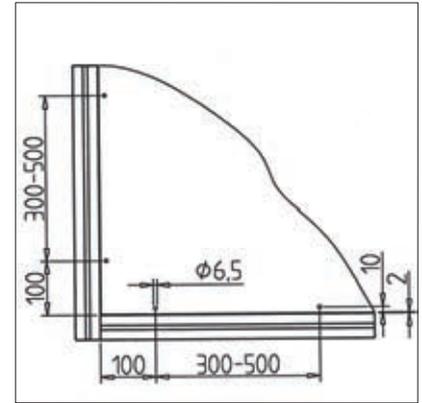
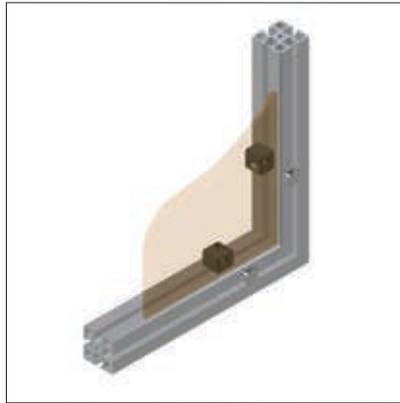
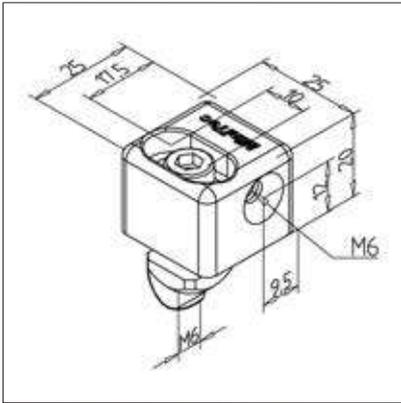


ASSEMBLY

- 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 $\phi 6.5$ mm, edge distance 10 mm

Multiblock 45 GD

Part No. 21.1355/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, Pressure die-casting, powder-coated, grey
- With fastening material steel, zinc plated
- Without pan head screw
- Weight = 0.035 kg/piece

APPLICATIONS

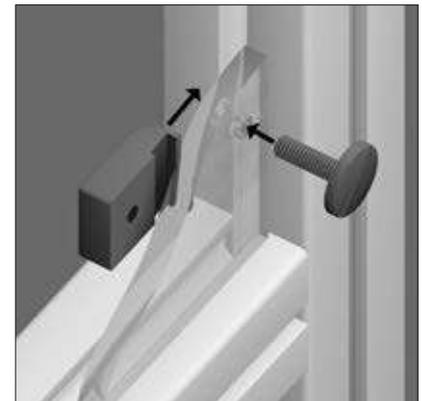
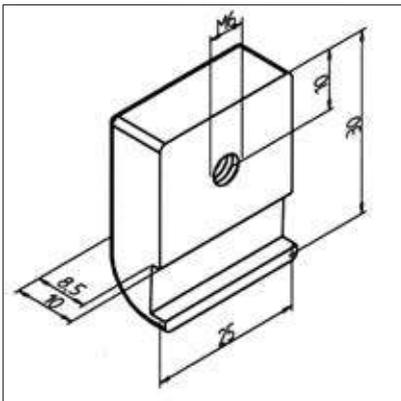
- Retrofitting surface elements and attachments
- Plate thickness of 5 to 15 mm can be continuously flush fit

ASSEMBLY

- For all profile grooves
- Fastening surface elements or components with screw M6 or flat head screw
- Bore for fixation screws $\varnothing 6.5$ mm, edge distance 10 mm

Thread socket GD

Part No. 21.1117/1



TECHN. DATA / ITEMS SUPPLIED

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

APPLICATIONS

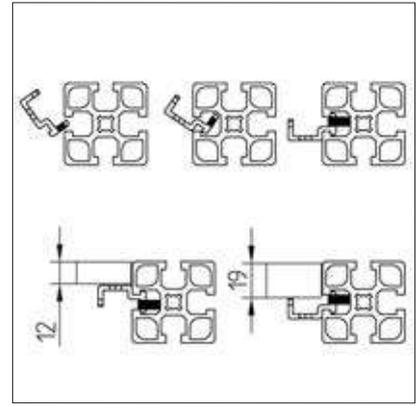
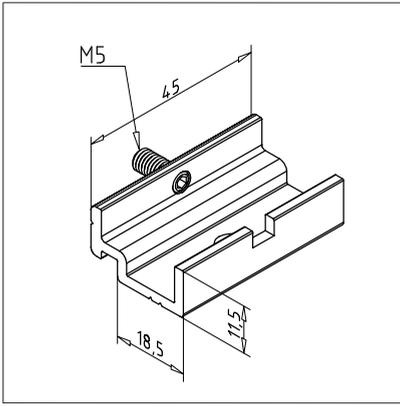
- Fix surface elements in profile frames
- Table tops

ASSEMBLY

- 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 N pivoted

Part No. 21.0036/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, anodized E6/EV1
- Mounting base N pivoted
- Weight = 0.016 kg/piece

APPLICATIONS

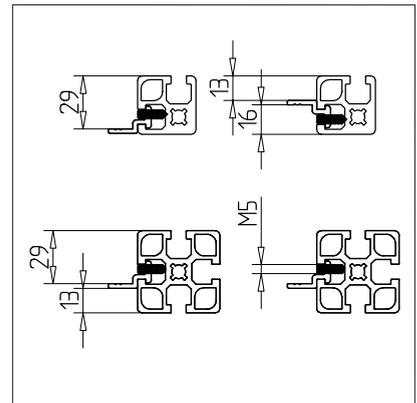
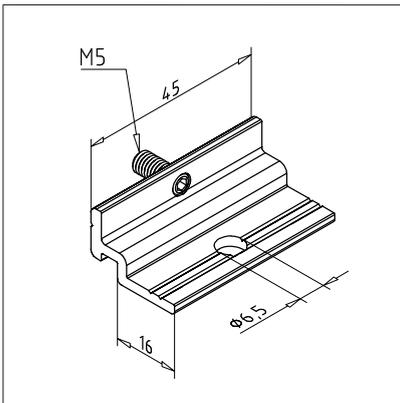
- For the positioning and fastening of table tops and surface elements

ASSEMBLY

- Swing into profile groove
- Clamp with set screw
- No machining required

Mounting base F pivoted

Part No. 21.0041/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, anodized E6/EV1
- Mounting base N pivoted
- Weight = 0.014 kg/piece

APPLICATIONS

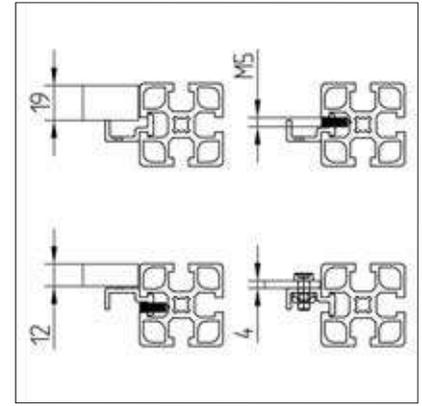
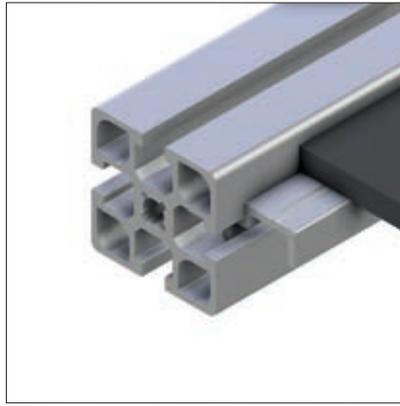
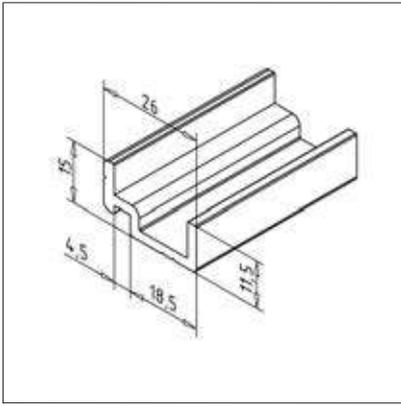
- For the positioning and fastening of table tops and surface elements

ASSEMBLY

- Swing into profile groove
- Clamp with set screw
- No machining required

Support profile N for surface elements

Part No. 20.1121/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- Weight = 0.339 kg/m
- Bar length = 6 m

APPLICATIONS

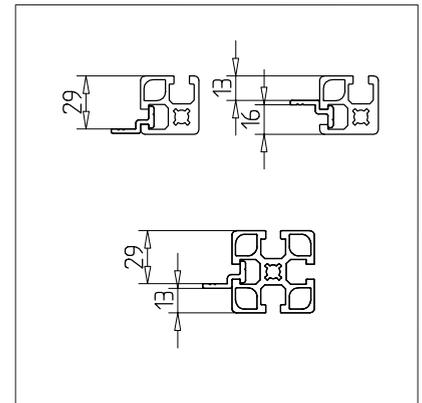
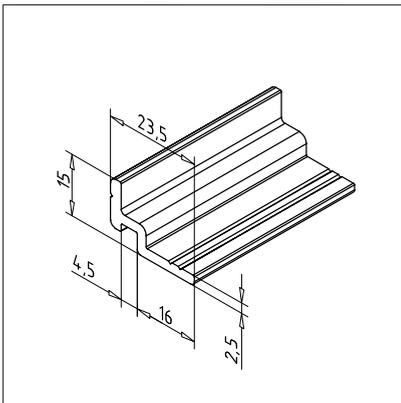
- All types of safety equipment
- For installation of surface elements such as panels and plates up to a thickness of 19 mm
- Subsequent insertion

ASSEMBLY

- Slide the carrier profile into the groove and if necessary, fix it with a threaded pin
- Surface element: clear opening x+y: -2 mm

Support profile F for surface elements

Part No. 20.1149/0



TECHN. DATA / ITEMS SUPPLIED

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

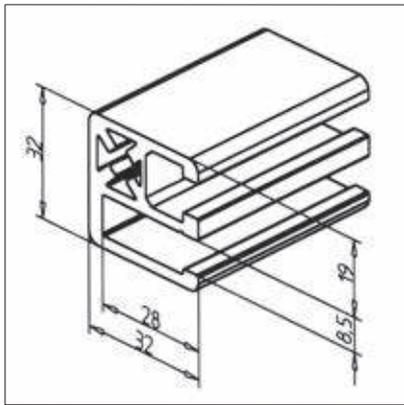
APPLICATIONS

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

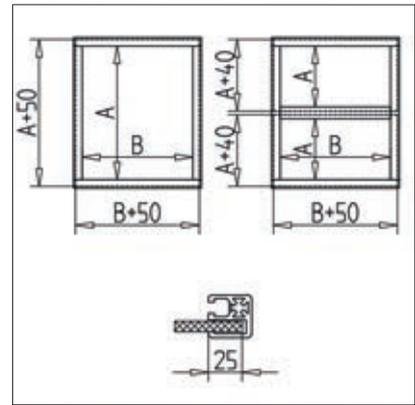
ASSEMBLY

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

Clamp profile 32 x 32



Part No. 20.1070/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $I_x = 5.024 \text{ cm}^4$
- $I_y = 4.418 \text{ cm}^4$
- $w_x = 3.041 \text{ cm}^3$
- $w_y = 2.398 \text{ cm}^3$
- $IT = 2.322 \text{ cm}^4$
- Weight = 1.211 kg/m
- Bar length = 6 m
- Packing unit = 48 m

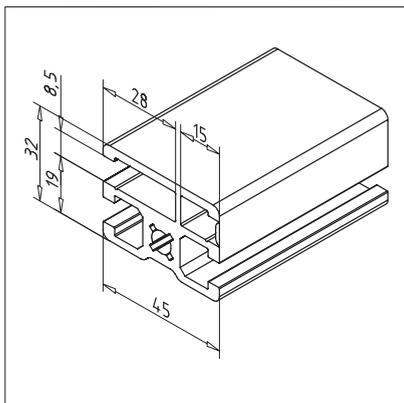
APPLICATIONS

- 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 guard units, 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

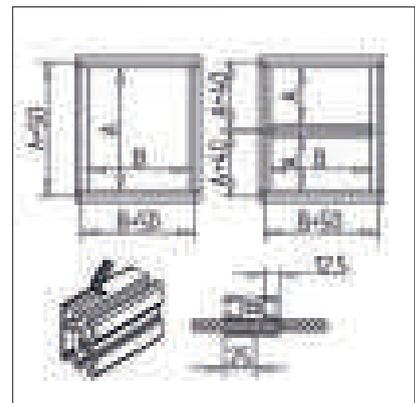
ASSEMBLY

- 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 insert seal or < Mount 4 mm with spacer profile and additionally suitable plug-in seal on the opposite side

Clamp profile 45 x 32



Part No. 20.1053/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $I_x = 6.465 \text{ cm}^4$
- $I_y = 9.521 \text{ cm}^4$
- $w_x = 3.999 \text{ cm}^3$
- $w_y = 4.119 \text{ cm}^3$
- $IT = 15.996 \text{ cm}^4$
- Weight = 1.615 kg/m
- Bar length = 6 m
- Packing unit = 48 m

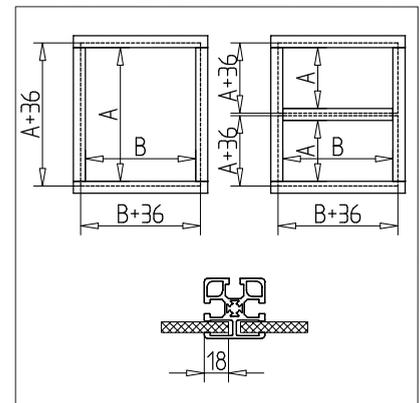
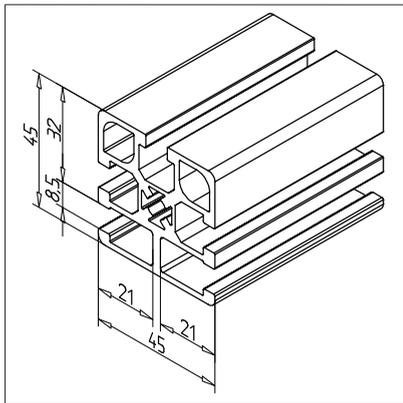
APPLICATIONS

- In the case of larger guard units, 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 insert seal or < Mount 4 mm with spacer profile and additionally suitable plug-in seal on the opposite side

Clamp profile 45 x 45 F



Part No. 20.1147/0

TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $I_x = 13.521 \text{ cm}^4$
- $I_y = 12.308 \text{ cm}^4$
- $w_x = 5.836 \text{ cm}^3$
- $w_y = 5.470 \text{ cm}^3$
- $IT = 7.163 \text{ cm}^4$
- Weight = 1.850 kg/m
- Bar length = 6 m
- Packing unit = 36 m

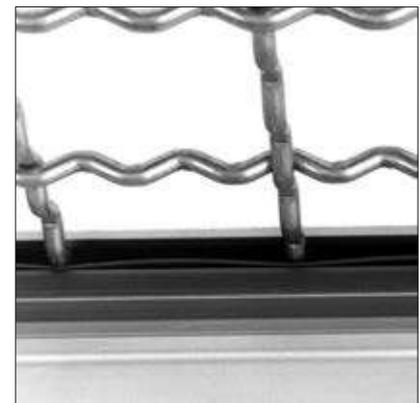
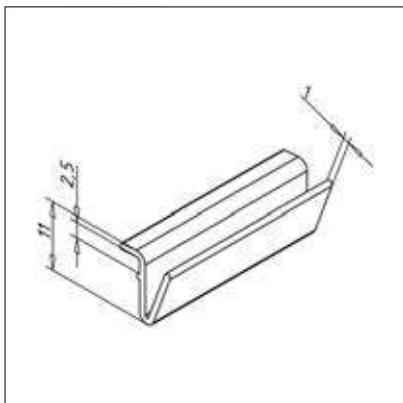
APPLICATIONS

- 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 insert seal or < Mount 4 mm with spacer profile and additionally suitable plug-in seal on the opposite side

Distance profile 30



Part No. 22.1158/0

TECHN. DATA / ITEMS SUPPLIED

- ABS, extruded, grey
- Weight = 0.020 kg/m
- Bar length = 2 m

APPLICATIONS

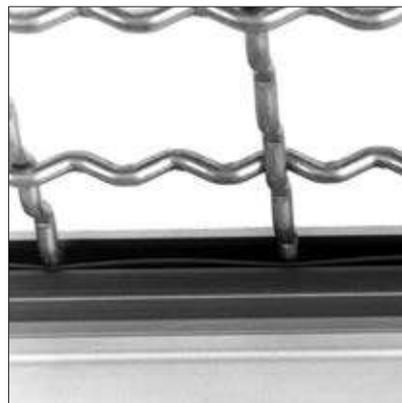
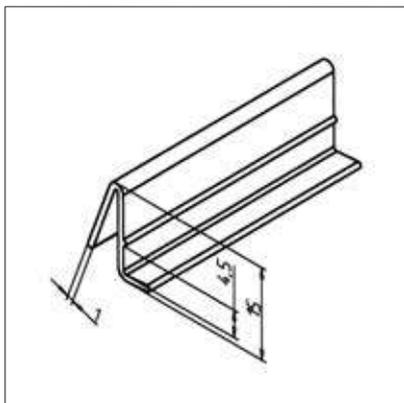
- For fixing surface elements such as corrugated mesh, panes and plates in the grooves of profile series 30

ASSEMBLY

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

Distance profile 45

Part No. 22.1039/0



TECHN. DATA / ITEMS SUPPLIED

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

APPLICATIONS

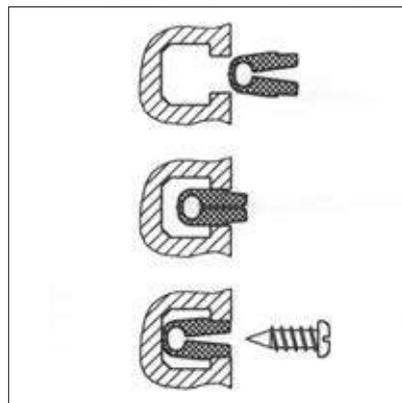
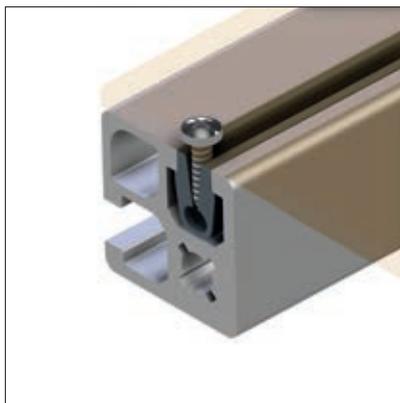
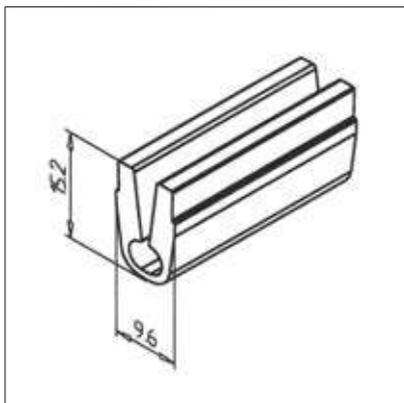
- Use in clamping profile 45 x 32 **part no. 20.1053/0** and clamping profile 32 x 32 **part no. 20.1070/0** for clamping surface elements
- Also for use with all other profiles to fix surface elements

ASSEMBLY

- 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

Part No. 22.1076/0



TECHN. DATA / ITEMS SUPPLIED

- PVC, extruded, grey
- Weight = 0.118 kg/m
- Bar length = 2 m

APPLICATIONS

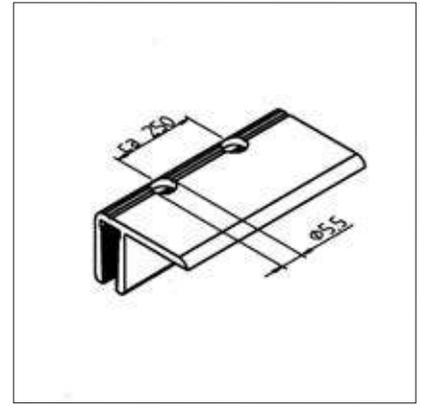
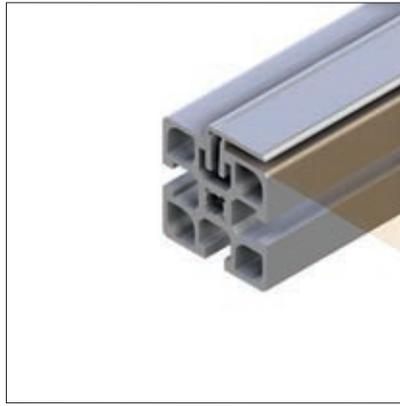
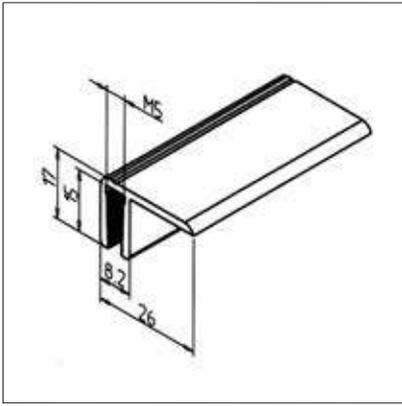
- Fastening surface elements or components at any location

ASSEMBLY

- Clip profile into groove
- Fasten element with commercial-type selftapping screws \varnothing 4-5 mm; Length min: 16 mm
- For material thickness of 1-6 mm, sheet metal screw 3,5 x 16 mm **part no. 21.1365/0**

Panel clamp profile

Part No. 20.1025/0



TECHN. DATA / ITEMS SUPPLIED

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

APPLICATIONS

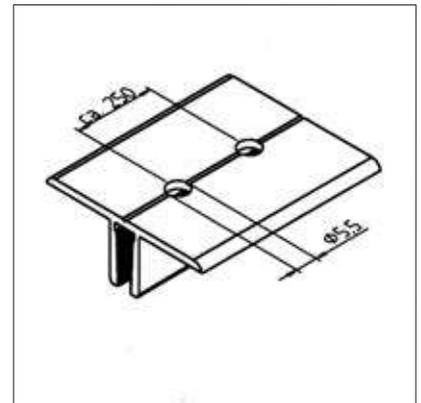
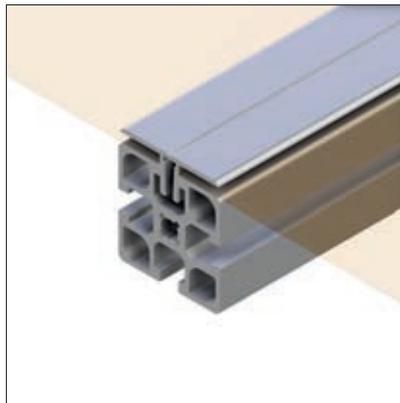
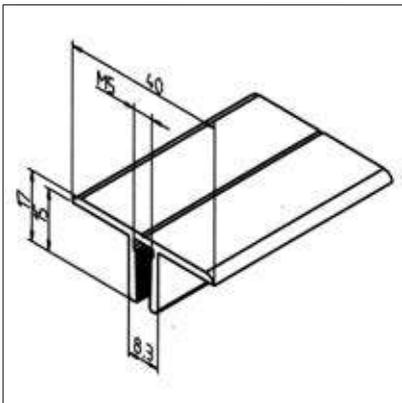
- Fastening of surface elements
- Post fitting of facing panels
- Reception of surface elements with a maximum strength of 10 mm

ASSEMBLY

- Make bore $\varnothing 5.5$ mm for setscrew M5 in 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 clamp profile

Part No. 20.1018/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- Weight = 0.375 kg/m
- Bar length = 6 m

APPLICATIONS

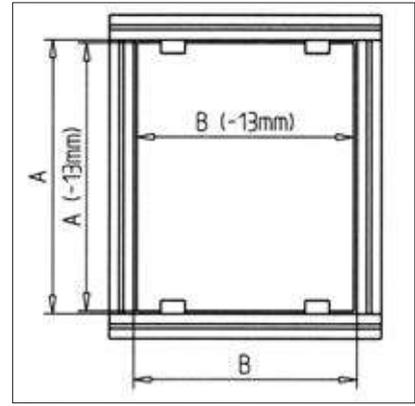
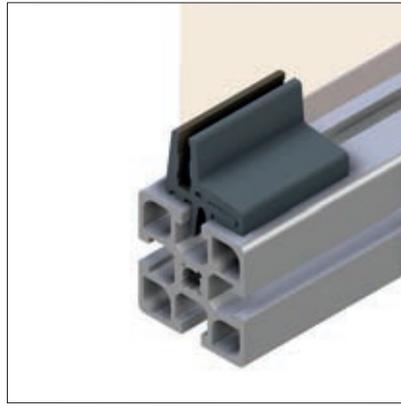
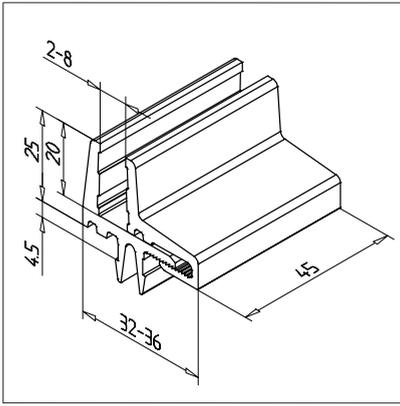
- Attachment of panels on the outer face in the region of a butt joint
- Reception of surface elements with a maximum strength of 10 mm

ASSEMBLY

- Make bore $\varnothing 5.5$ mm for setscrew M5 in grid size of approx. 250 mm
- Press in the profile groove and clamp with grub screw M5 x 12 **part no. 21.1381/0**
- See also surface clamping profile **part no. 20.1025/0**

Panel holder grey

Part No. 22.1090/1



TECHN. DATA / ITEMS SUPPLIED

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

APPLICATIONS

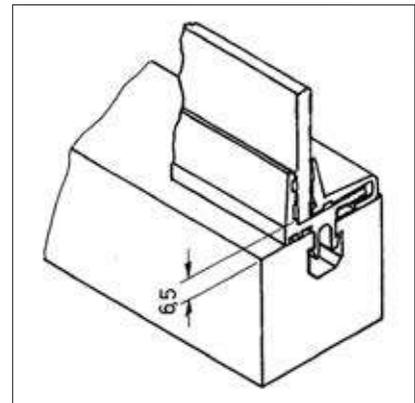
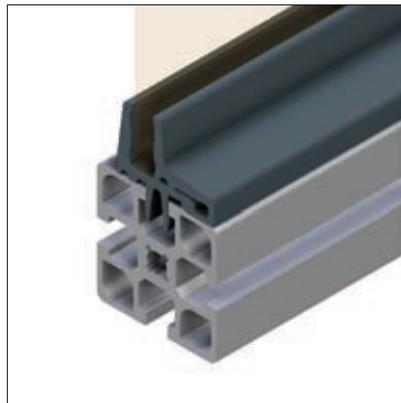
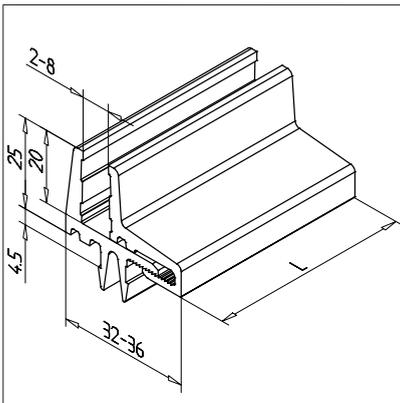
- Fixation surface elements with a maximum strength of 8 mm
- For surface elements smaller than 4 mm, a moss rubber strip must be inserted
- Windows, doors
- Not suitable for corrugated mesh

ASSEMBLY

- Fold the sockets into the profile groove
- Insert the panel element
- Press clamping half firmly on socket half
- To install surface elements less than 4 mm thick, the insertion of an additional sponge rubber strip or similar is recommended, e.g. our flat sponge rubber tape 10x3 mm, self-adhesive **Part no. 22.1129/0**

Clamp profile PVC

Part No. 22.1092/0



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

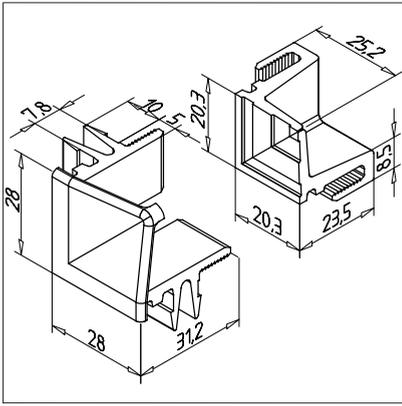
- Fixation surface elements with a maximum strength of 8 mm
- For surface elements smaller than 4 mm, a moss rubber strip must be inserted
- Windows, doors
- No free space between profile and panel element
- Also suitable for corrugated mesh

ASSEMBLY

- Snap socket half into profile groove
- Insert the panel element
- Press clamping half firmly on socket half
- To install surface elements less than 4 mm thick, the insertion of an additional sponge rubber strip or similar is recommended, e.g. our flat sponge rubber tape 10x3 mm, self-adhesive **Part no. 22.1129/0**

Corner trim clamping profile grey

Part No. 22.1221/0



TECHN. DATA / ITEMS SUPPLIED

- ABS, Injection Mould, grey
- 2-piece
1st part for fixing in the profile groove
2nd part for fitting on part 1 and clamping the surface element
- Weight = 0.013 kg/piece

APPLICATIONS

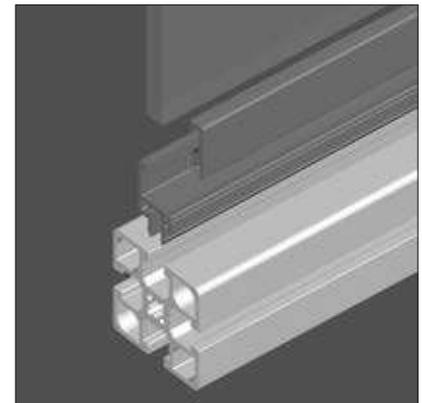
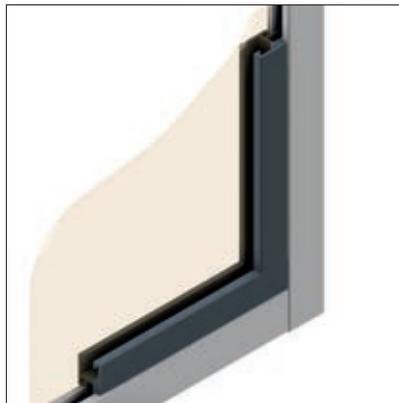
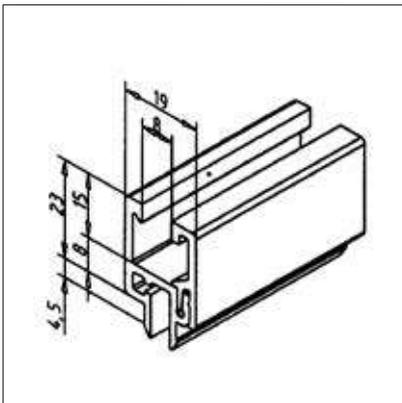
- Use for increased design standard as a replacement for mitre cuts in clamping profile PVC

ASSEMBLY

- Position part 1 in the 4 corners of the profile frame
Clip in part 1 of the clamping profile, all round between the corner pieces and insert surface element
Fit part 2 of the clamping profile and end cap and use it to tightly clamp the surface element
- Cut to size dimension of the clamping profile:
clear width of the frame - 51 mm

Panel clamping profile

Part No. 22.1107/1



TECHN. DATA / ITEMS SUPPLIED

- ABS, extruded, grey
- 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

ASSEMBLY

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

Surface elements

ACRYL



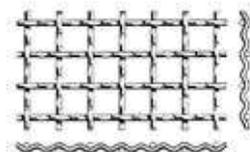
Part no.	Strength	Colour	Weight	Plate size
21.1832/0	4 mm	smoke-coloured	4,76 kg/m ²	2050 x 3050 mm
21.1811/0	5 mm	smoke-coloured	5,95 kg/m ²	2050 x 3050 mm
21.1812/0	6 mm	smoke-coloured	7,14 kg/m ²	2050 x 3050 mm
21.1813/0	8 mm	smoke-coloured	9,52 kg/m ²	2050 x 3050 mm
21.1826/0	4 mm	crystal clear	4,76 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



Part no.	Strength	Colour	Weight	Plate size
21.1809/0	4 mm	smoke-coloured	4,76 kg/m ²	2050 x 3050 mm
21.1808/0	5 mm	smoke-coloured	5,95 kg/m ²	2050 x 3050 mm
21.1807/0	6 mm	smoke-coloured	7,20 kg/m ²	2050 x 3050 mm
21.1821/0	8 mm	smoke-coloured	9,78 kg/m ²	2050 x 3050 mm
21.1829/0	4 mm	crystal clear	4,80 kg/m ²	2050 x 3050 mm
21.1833/0	5 mm	crystal clear	5,95 kg/m ²	2050 x 3050 mm
21.1830/0	6 mm	crystal clear	7,20 kg/m ²	2050 x 3050 mm
21.1831/0	8 mm	crystal clear	9,78 kg/m ²	2050 x 3050 mm

WAVE GRID



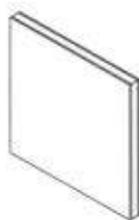
Part no.	Wire thickness approx	Clear mesh size	Weight	Plate size	Material
21.1803/0	4 mm	30 mm -3,5/+8%	6,2 kg/m ²	2000 x 3000 mm	pc, galvanized
21.1805/0	4 mm	40 mm -3/+7%	4,7 kg/m ²	2000 x 3000 mm	pc, galvanized
21.1818/2	4 mm	30 mm -3,5/+8%	2,14 kg/m ²	2000 x 2000 mm	ALMg3
21.1818/1	4 mm	40 mm -3/+7%	1,6 kg/m ²	2000 x 2000 mm	ALMg3

ALUMINIUM-WAVE PANEL



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

COMPOSITE



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

HPL compact table-top

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

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

PVC-PLATE

Part no.	21.1817/0
Thickness	20 mm
Color	grey, 7011 RAL
Weight	28 kg/m ²
Plate size	1000 x 2000 mm
Others	other colours and strengths, Anti-static Tabletops on request

RECYCLING-PLATE PE

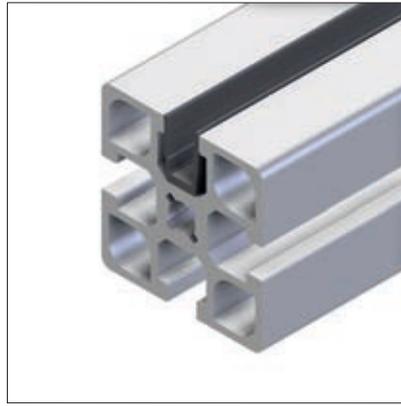
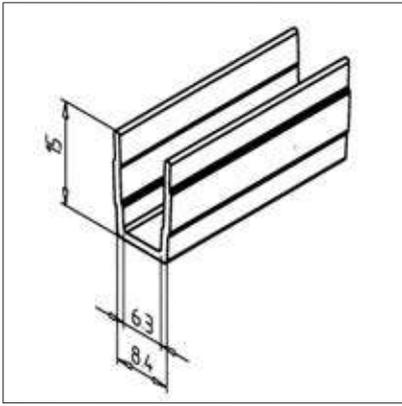
Part no.	32.0406/0
Thickness	10 - 40 mm
Colour	black
Plate size	1000 x 2000 mm
Density	0,93 kg/dm ³
Others	PE-Regenerated

RECYCLING-PLATE PE CONFETTI

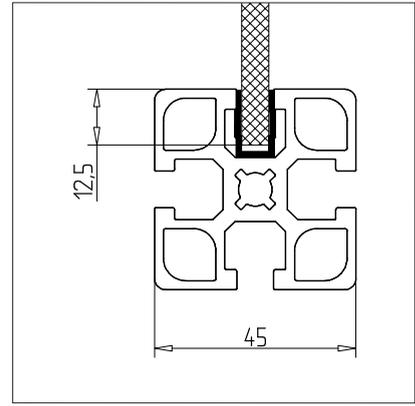
Part no.	32.0405/0
Thickness	10 - 40 mm
Colour	confetti
Plate size	1000 x 2000 mm
Density	0,93 kg/dm ³
Others	PE-Regenerated

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

Cover profile 45



Part No. ---,----/-



TECHN. DATA / ITEMS SUPPLIED

- PVC, extruded
- Traffic black **part no. 22.1070/0**
- Basalt grey **part no. 22.1070/1**
- Light grey **part no. 22.1070/2**
- Sky blue **part no. 22.1072/0**
- Pastel orange **part no. 22.1071/0**
- Zinc yellow **part no. 22.1074/0**
- Silver **part no. 22.1179/0**
- Weight = 0.060 kg/m
- Bar length = 2 m

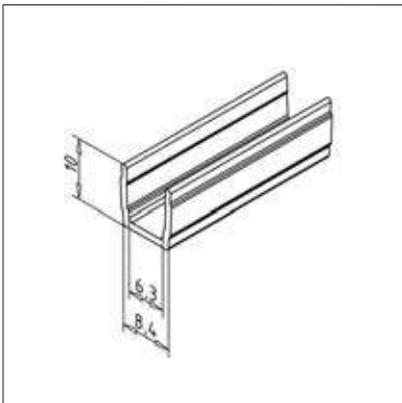
APPLICATIONS

- 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**

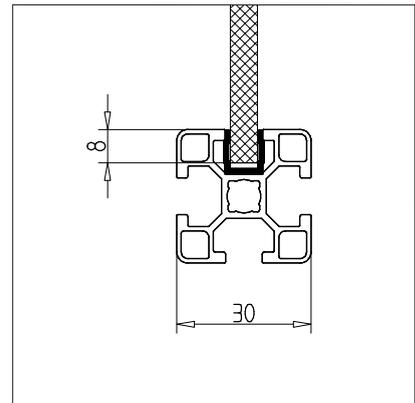
ASSEMBLY

- Snap or slip into profile groove

Cover profile 30



Part No. ---,----/-



TECHN. DATA / ITEMS SUPPLIED

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

APPLICATIONS

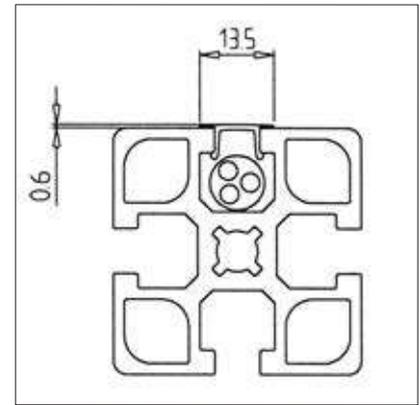
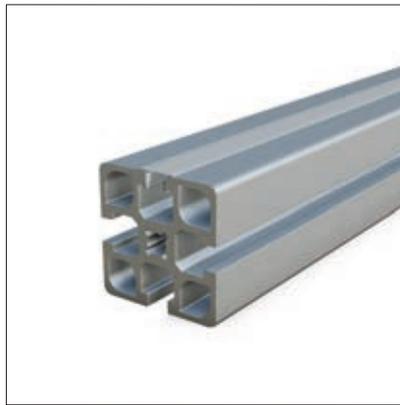
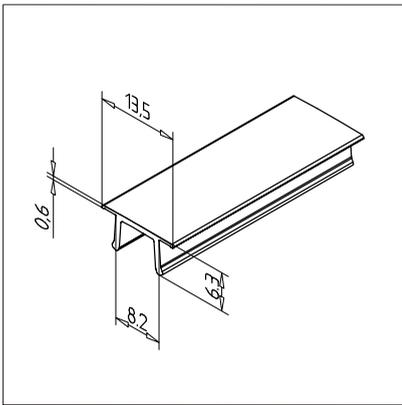
- Mounted with groove inwards: For closing profile grooves
- **Mounted with the groove to the outside:**
For the absorption of surface elements up to 6 mm thickness, dimensional compensation by silicone or sponge rubber cord **part no. 22.1102/0**

ASSEMBLY

- Press or slide into the profile groove

Cover profile K

Part No. --,----/-



TECHN. DATA / ITEMS SUPPLIED

- ABS, basalt grey **part no. 22.1020/1**
- PP, transparent **part no. 22.1020/3**
- ABS, zinc yellow **part no. 22.1020/4**
- Weight = 0.023 kg/m
- Bar length = 2 m

APPLICATIONS

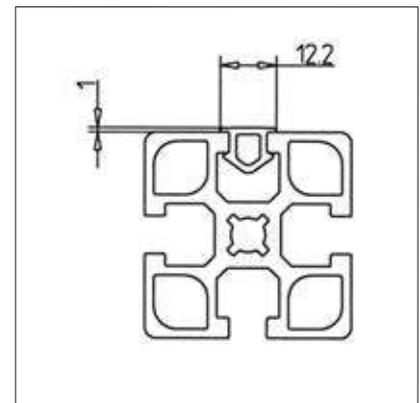
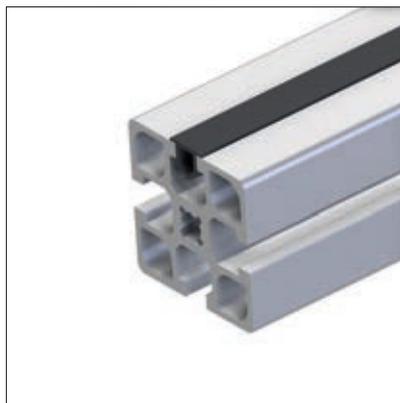
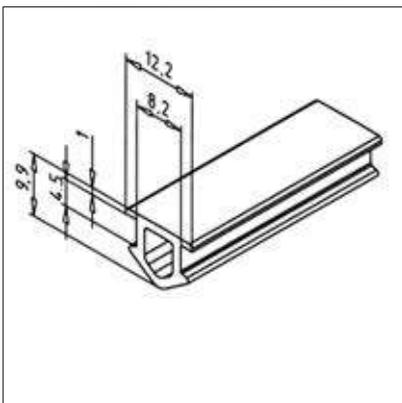
- Dust-tight sealing of the profile grooves
- The groove cross-section remains largely free for laying cables or hoses
- Information plates
- The transparent cover profile can be used to cover lighting elements in the profile groove, e.g. LED strips

ASSEMBLY

- Press by hand onto profile groove

Cover profile G

Part No. 22.1010/0



TECHN. DATA / ITEMS SUPPLIED

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

APPLICATIONS

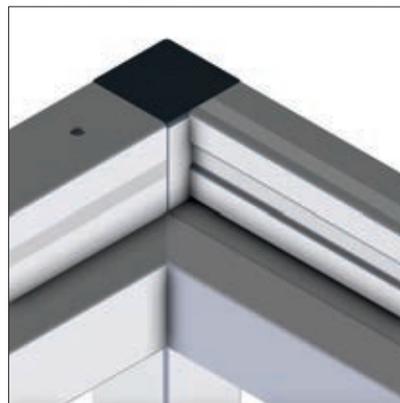
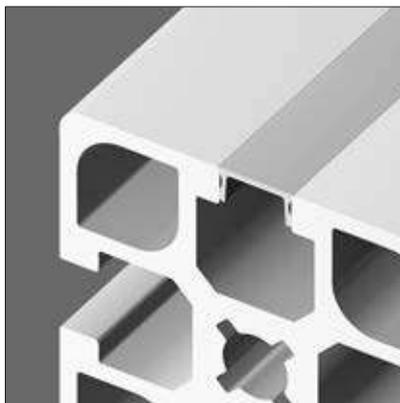
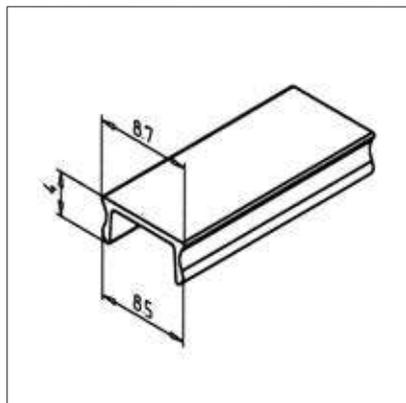
- Dust-tight sealing of the profile grooves
- The groove cross-section remains largely free for laying cables or hoses

ASSEMBLY

- Press by hand onto profile groove

Cover profile L anodized E6/EV1

Part No. 20.1021/1



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, anodized E6/EV1
- Also available non-anodised on request
Part no. 20.1021/0
- Weight = 0.030 kg/m
- Bar length = 2 m

APPLICATIONS

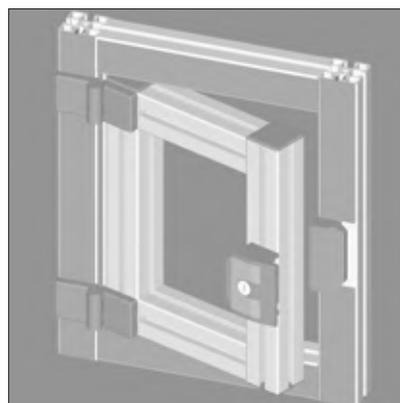
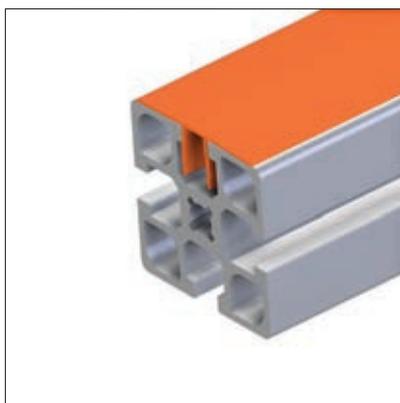
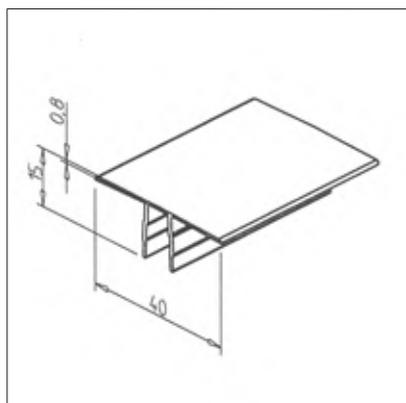
- Dust-tight sealing of the profile grooves
- The groove cross-section remains largely free for laying cables or hoses
- Information plates

ASSEMBLY

- Press by hand onto profile groove

Signal profile

Part No. --,----/-



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

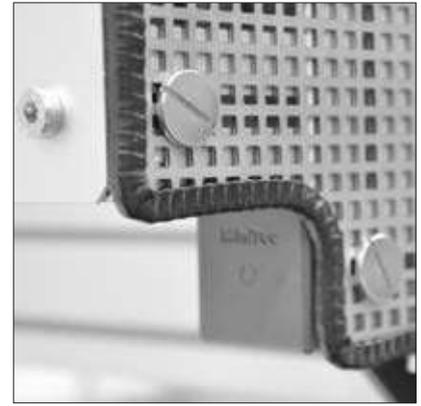
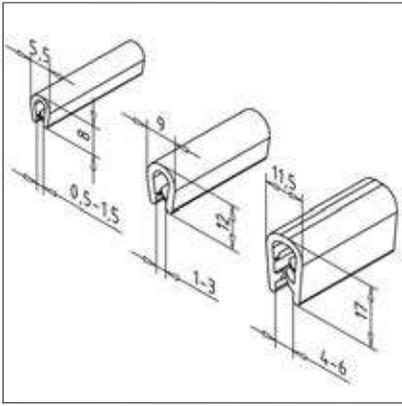
- Marking of safety relevant construction units such as doors and risk zones
- Coloured organization of constructions or parts

ASSEMBLY

- Clip in profile groove

Edge protection

Part No. --,----/-



TECHN. DATA / ITEMS SUPPLIED

- PVC, black
- Steel plate reinforced
- Edge protection 0,5-1,5 **part no. 22.1029/0**
Weight: 0,050 kg/m, Roll length 50 m
- Edge protection 1,0-3,0 **part no. 22.1036/0**
Weight: 0,120 kg/m, Roll length 100 m
- Edge protection 4,0-6,0 **part no. 22.1037/0**
Weight: 0,190 kg/m, Roll length 100 m

APPLICATIONS

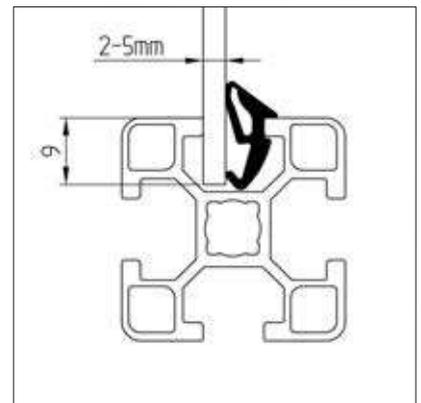
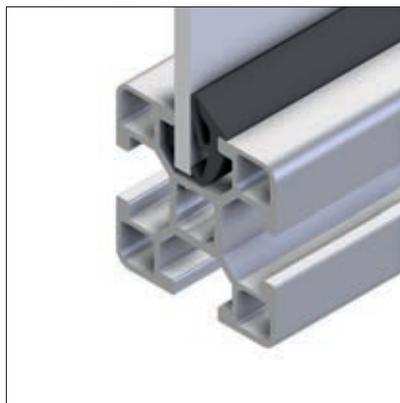
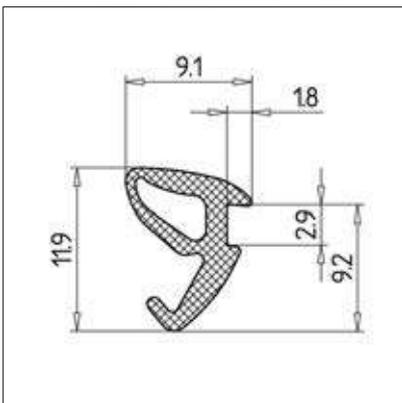
- Edge protection for surface elements
- Protection of MiniTec conduit
- Protection of bores and openings

ASSEMBLY

- Press onto edge of panel element

Insert seal 30

Part No. 22.1174/0



TECHN. DATA / ITEMS SUPPLIED

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

APPLICATIONS

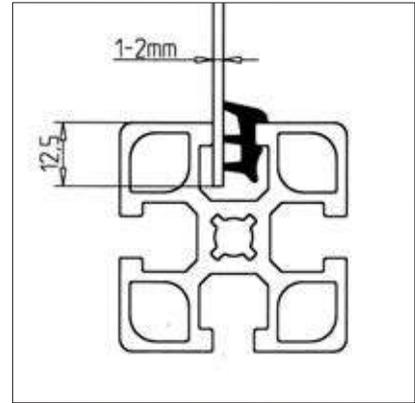
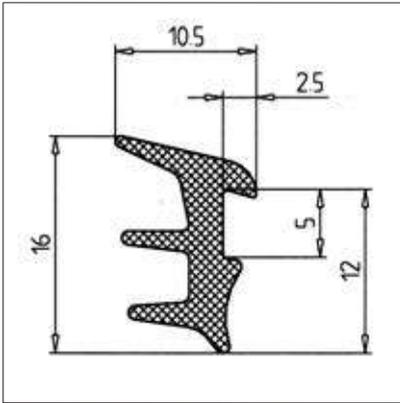
- Fastening and sealing of panels directly in the profile groove, for panels 2-5 mm thick

ASSEMBLY

- Insert panel into profile groove, next push gasket in manually or with an appropriate, wooden or plastic tool

Insert seal 2

Part No. 22.1083/0



TECHN. DATA / ITEMS SUPPLIED

- EPDM, black
- Roll length 100 m
- Weight = 0.096 kg/m

APPLICATIONS

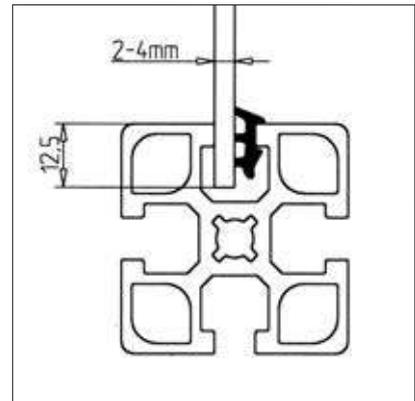
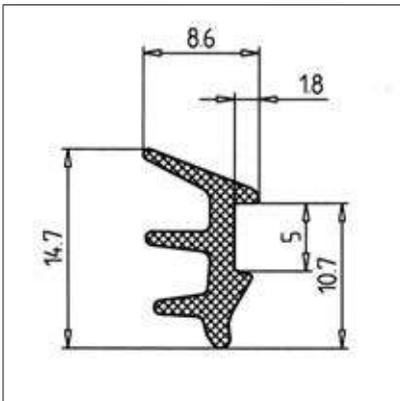
- Not suitable for acrylic glass and polycarbonate
- Fastening and sealing of surface elements directly in the profile groove up to 2 mm thickness

ASSEMBLY

- Insert panel into profile groove
- Press insert seal subsequently into free space between panel element and profile groove with blunt tool made of wood or plastic
- Materials with <2 mm thickness can be clamped by using sealing gasket 6 on both sides, **part no. 22.1086/1**

Insert seal 4

Part No. 22.1081/0



TECHN. DATA / ITEMS SUPPLIED

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

APPLICATIONS

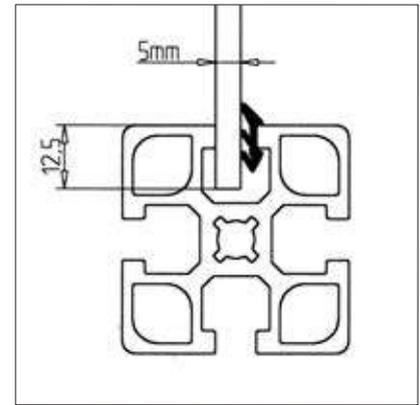
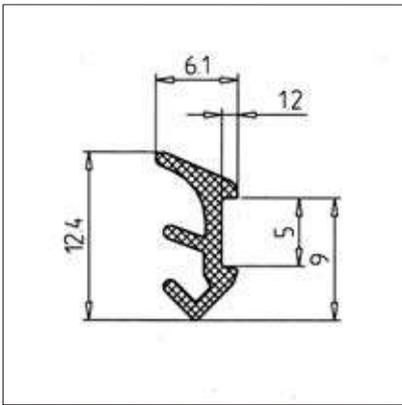
- Fastening and sealing of panes directly in the profile groove, for panes 2-4 mm thick
- Also suitable for acrylic plastic and polycarbonate

ASSEMBLY

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

Insert seal 5

Part No. 22.1099/0



TECHN. DATA / ITEMS SUPPLIED

- EPDM, black
- Roll length 100 m
- Weight = 0.040 kg/m

APPLICATIONS

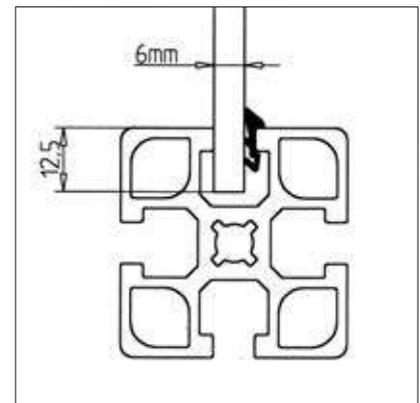
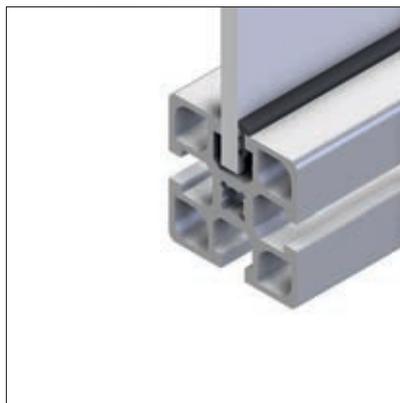
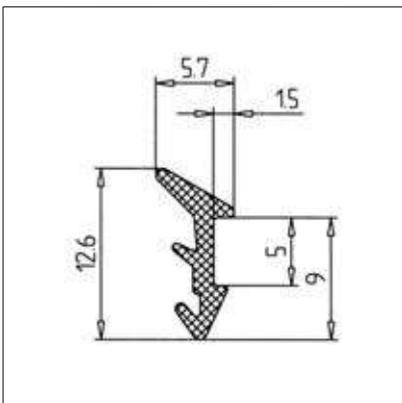
- Fastening and sealing of panels directly in the profile groove, for panels up to 5 mm thick
- Also suitable for acrylic plastic and polycarbonate

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

Insert seal 6

Part No. 22.1086/1



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

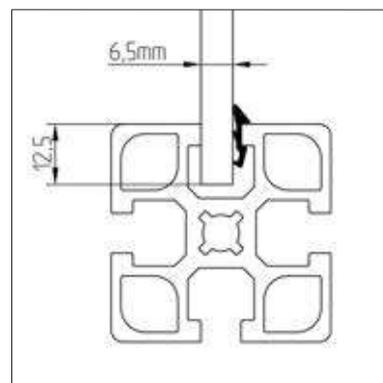
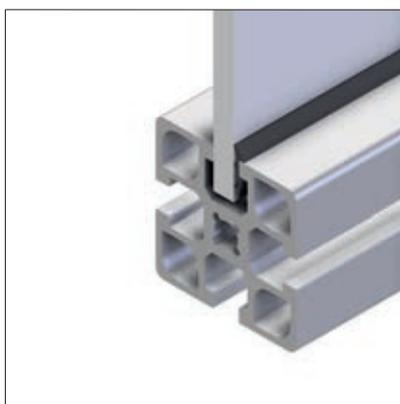
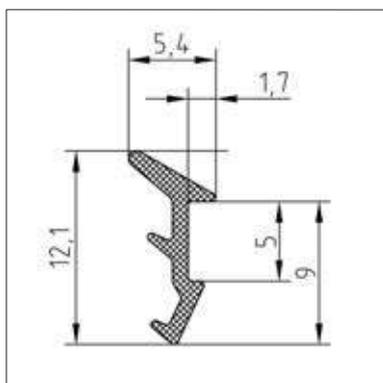
- Fastening and sealing of panels directly in the profile groove, for panels up to 6 mm thick
- Also suitable for acrylic plastic and polycarbonate

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

Insert seal 6.5

Part No. 22.0991/0



TECHN. DATA / ITEMS SUPPLIED

- EPDM, black
- Roll length 100 m
- Weight = 0.033 kg/m

APPLICATIONS

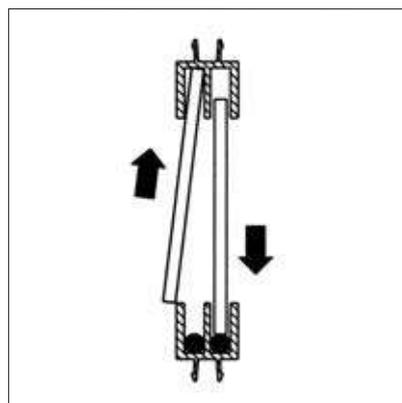
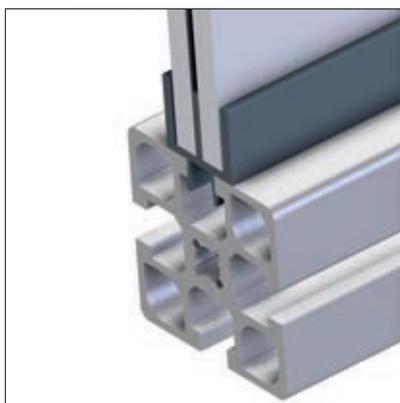
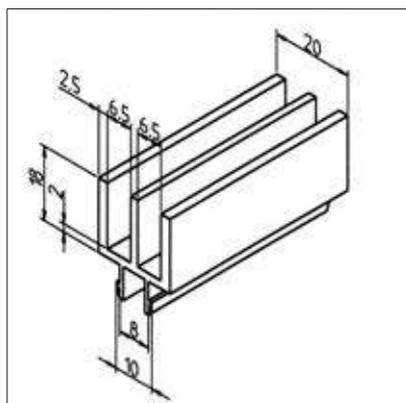
- Mounting and sealing of discs directly in the profile groove, for panels up to 6.5 mm thickness
- Also suitable for acrylic plastic and polycarbonate

ASSEMBLY

- Insert panel into profile groove, next push gasket in manually or with an appropriate, blunt wooden or plastic tool

Guide profile 2 grey

Part No. 22.1073/1



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

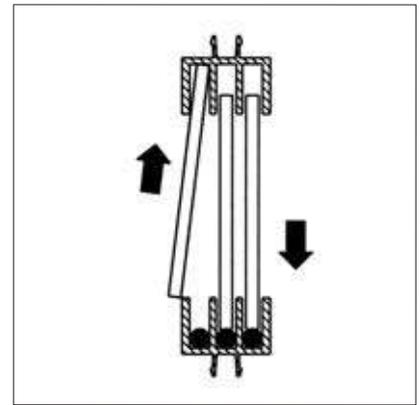
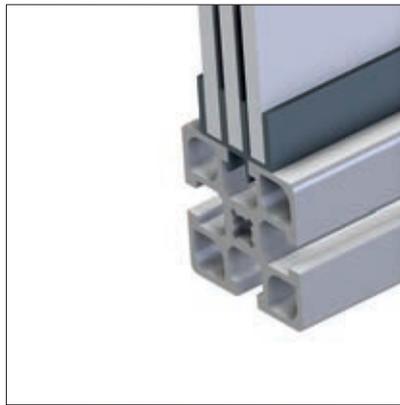
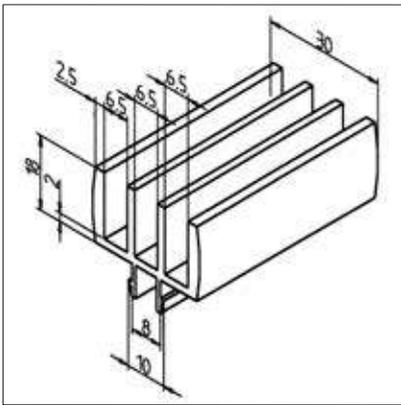
- 2-fold sliding window made of surface elements up to 6 mm thick

ASSEMBLY

- 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

Guide profile 3

Part No. 22.1075/1



TECHN. DATA / ITEMS SUPPLIED

- PVC, extruded, grey
- On request also available in black, **part no. 22.1075/0**
- Weight = 0.340 kg/m
- Bar length = 2 m

APPLICATIONS

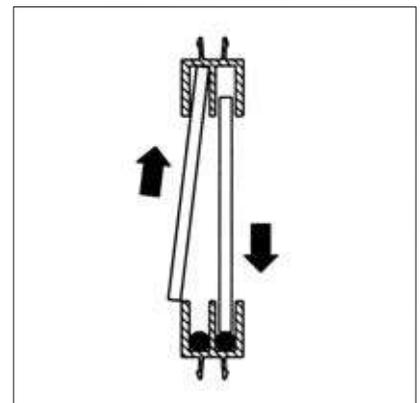
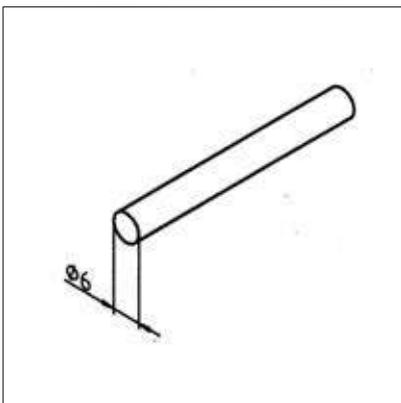
- 3-fold sliding window made of surface elements up to 6 mm thick

ASSEMBLY

- 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

Part No. 22.1077/0



TECHN. DATA / ITEMS SUPPLIED

- PA, extruded
- Ø 6 mm
- Weight = 0.040 kg/m
- Bar length = 2 m

APPLICATIONS

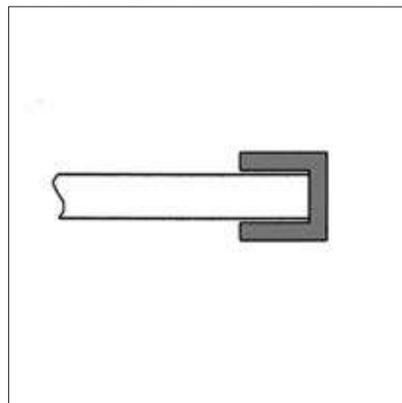
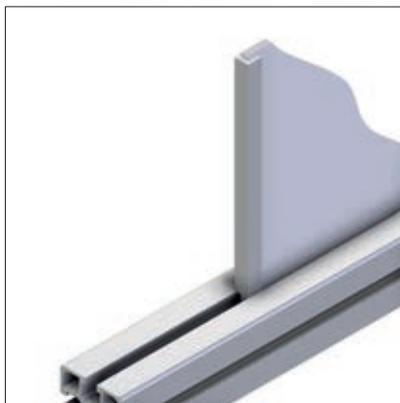
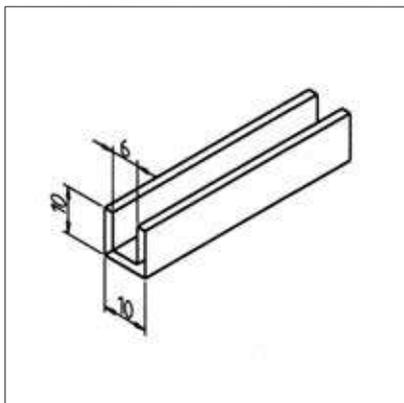
- Guiding of windows or doors in guide profiles

ASSEMBLY

- Insertion into lower guide grooves of guide profiles 2 and 3

U-profile

Part No. 21.1002/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- Weight = 0.150 kg/m
- Bar length = 6 m

APPLICATIONS

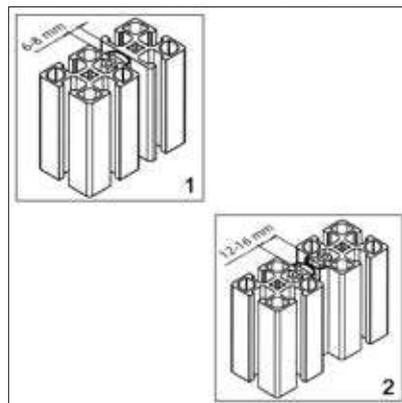
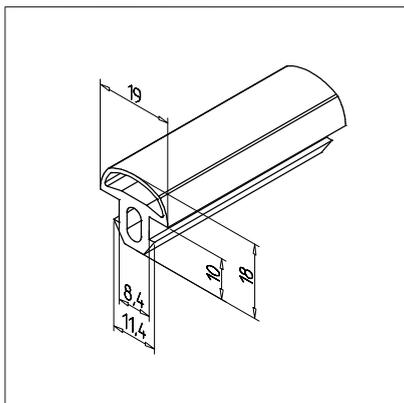
- Fitting panels, for surface elements of 5 mm thickness

ASSEMBLY

- Glue on edges of surface elements with suitable adhesive

Sealing strip

Part No. 22.1078/0



TECHN. DATA / ITEMS SUPPLIED

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

APPLICATIONS

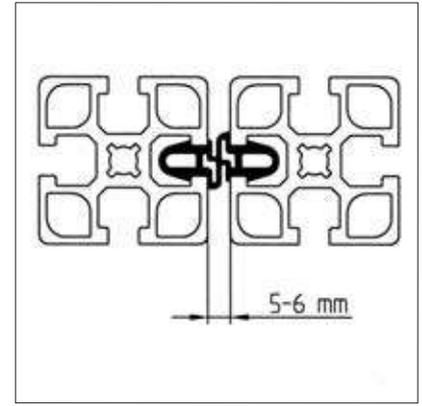
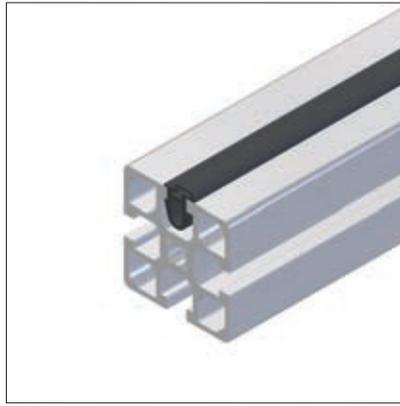
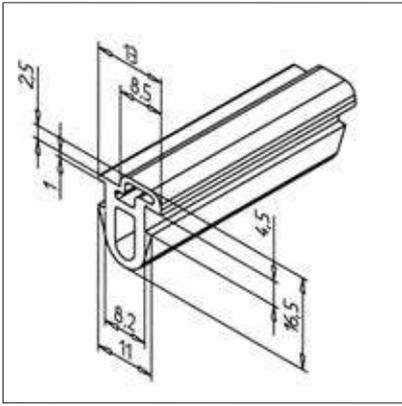
- Sealing of doors, lids and other constructions against water, dust and noise

ASSEMBLY

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

Sealing profile

Part No. 22.1011/0



TECHN. DATA / ITEMS SUPPLIED

- NBR, black
- Hardness (Shore A) 70°
- Roll length 50 m
- Weight = 0.122 kg/m

APPLICATIONS

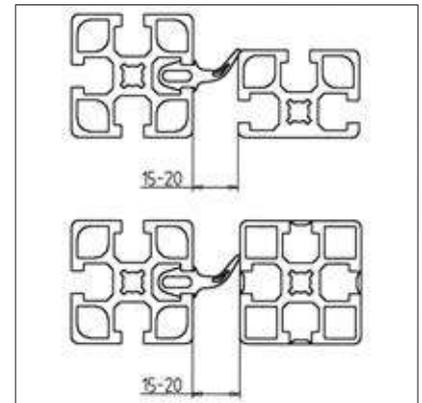
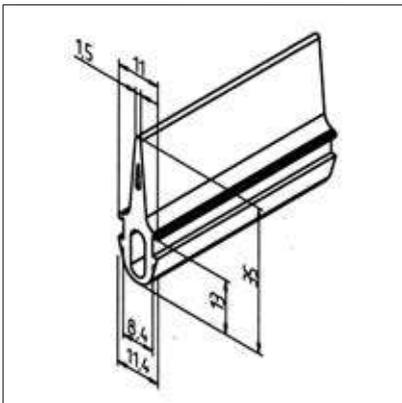
- Sealing of doors, lids and other constructions against water, dust and noise

ASSEMBLY

- Press into profile groove

Sealing lip profile

Part No. 22.1038/0



TECHN. DATA / ITEMS SUPPLIED

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

APPLICATIONS

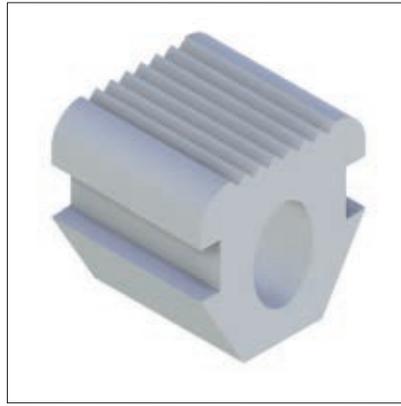
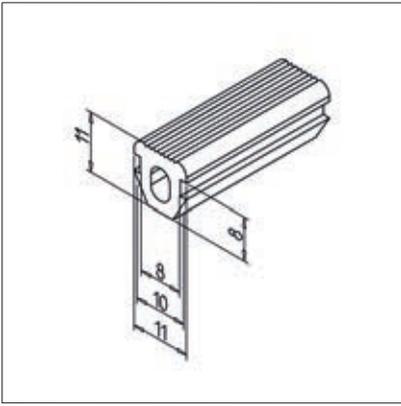
- Sealing of doors, lids and other constructions against water, dust and noise

ASSEMBLY

- Press into profile groove

Cover profile 30 grey

Part No. 22.1185/0



TECHN. DATA / ITEMS SUPPLIED

- EPDM, grey
- Hardness (Shore A) 70°
- Roll length 50 m
- Weight = 0.087 kg/m

APPLICATIONS

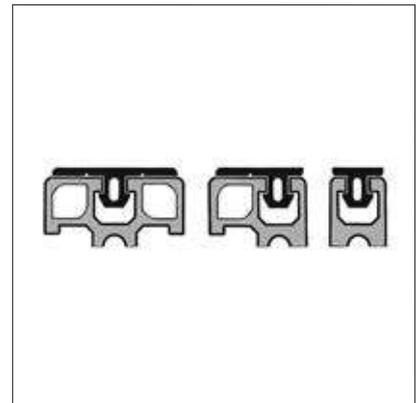
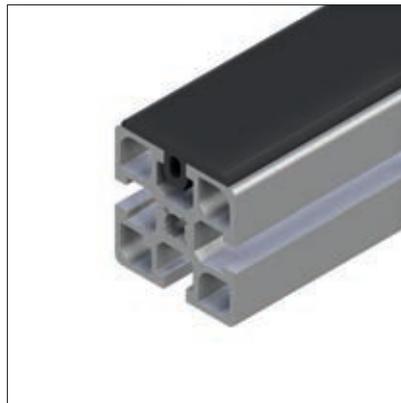
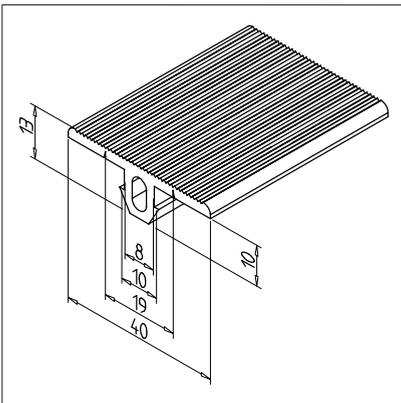
- Material shelves
- Edge Protection
- Support plates

ASSEMBLY

- Press into profile groove
- Suitable for the profiles of the profile series 30

Cover profile 45

Part No. --,----/-



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

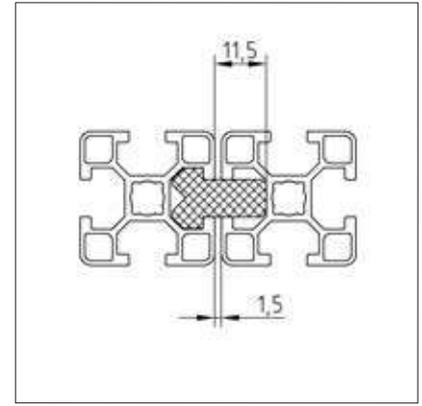
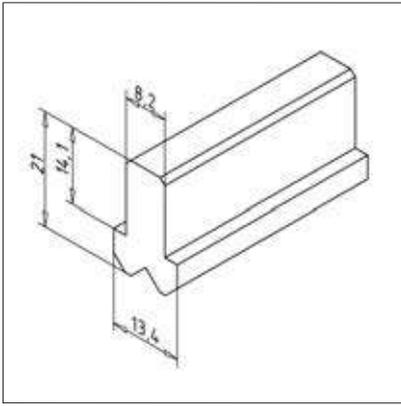
- Edge Protection
- Safety requirement step
- Ladders
- Material shelves

ASSEMBLY

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

Slide rail 8 N 30

Part No. 22.1170/0



TECHN. DATA / ITEMS SUPPLIED

- PE-UHMW, black
- Highly wear-resistant
- Weight = 0.178 kg/m
- Bar length = 2 m

APPLICATIONS

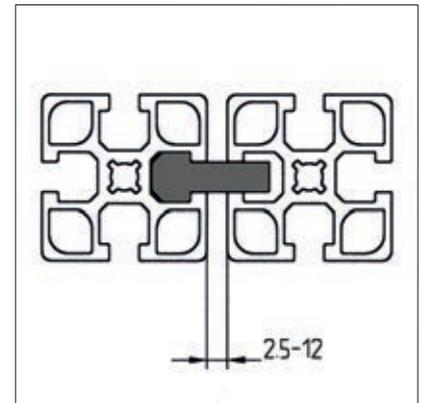
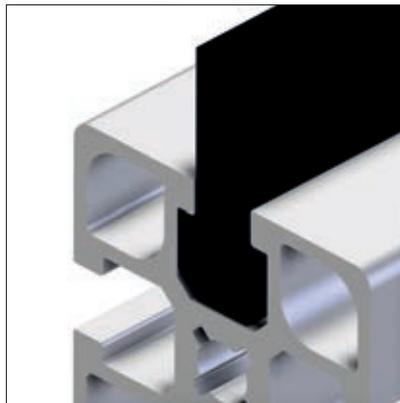
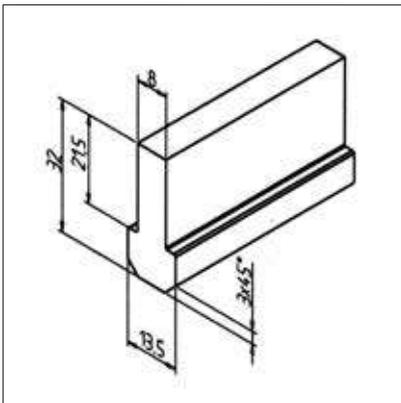
- Guiding sliding doors, pull-outs, fixtures

ASSEMBLY

- 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

Slide rail 8 N 45

Part No. 22.1085/0



TECHN. DATA / ITEMS SUPPLIED

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

APPLICATIONS

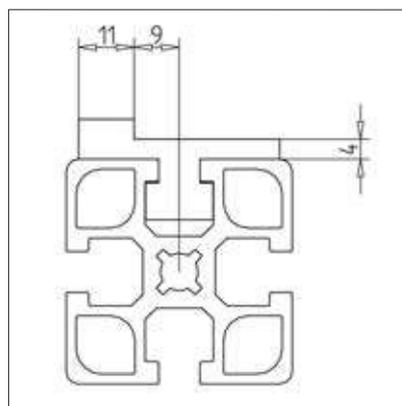
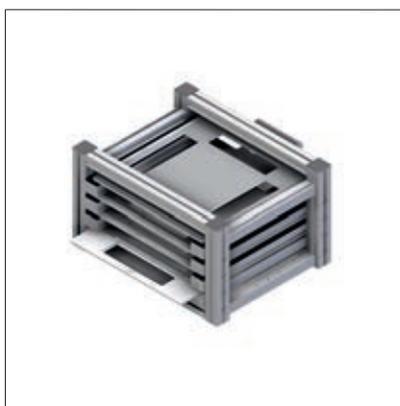
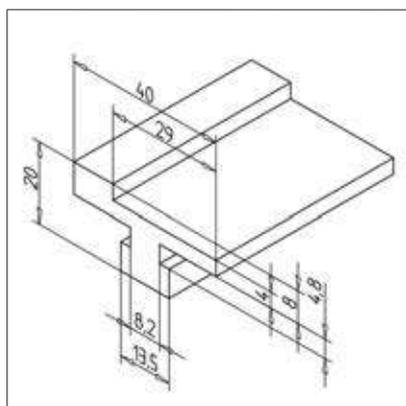
- Guiding sliding doors, pull-outs, fixtures
- Lateral guide for conveyors

ASSEMBLY

- 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 - 40 A

Part No. 29.8012/0



TECHN. DATA / ITEMS SUPPLIED

- PE-UHMW, black
- Highly wear-resistant
- Weight = 0.317 kg/m
- Bar length = 2 m

APPLICATIONS

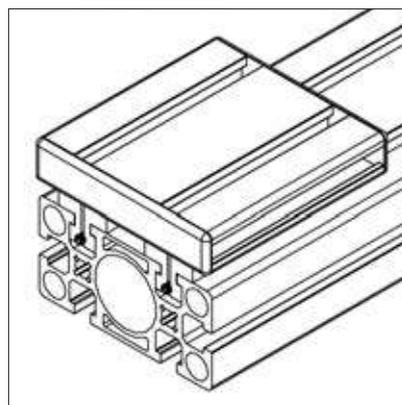
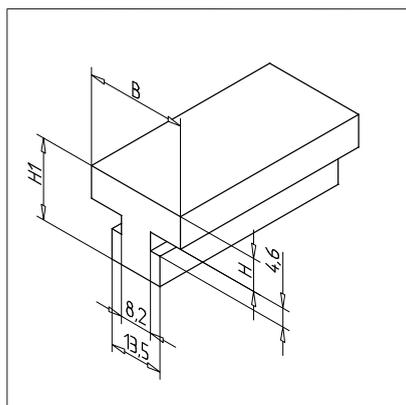
- Sliding support
- Workpiece bearing
- Guide for lifting doors
- Slides

ASSEMBLY

- 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

Part No. ---,----/-



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

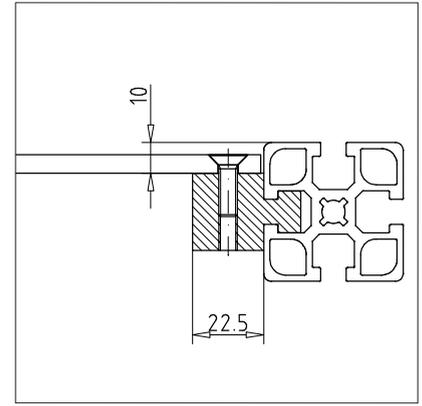
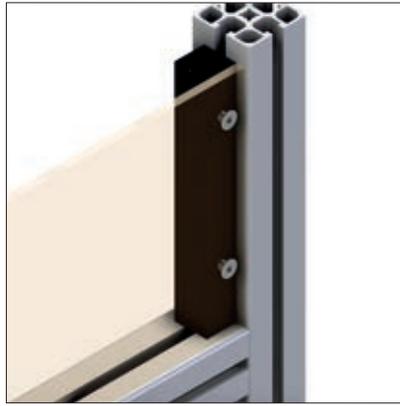
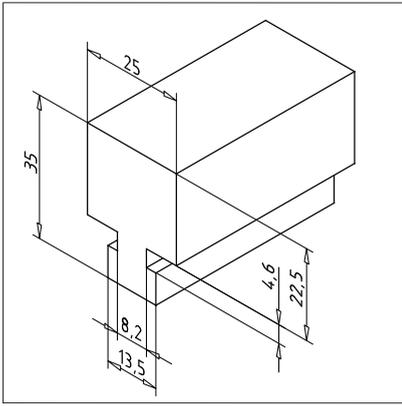
- Sliding support
- Workpiece bearing
- Guide for lifting doors
- Slides

ASSEMBLY

- 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 23

Part No. 22.1089/0



TECHN. DATA / ITEMS SUPPLIED

- PE-UHMW, black
- Highly wear-resistant
- Weight = 0.670 kg/m
- Bar length = 2 m

APPLICATIONS

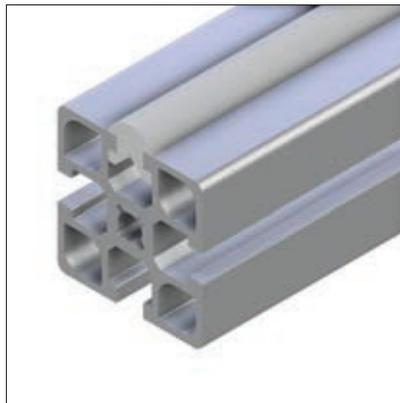
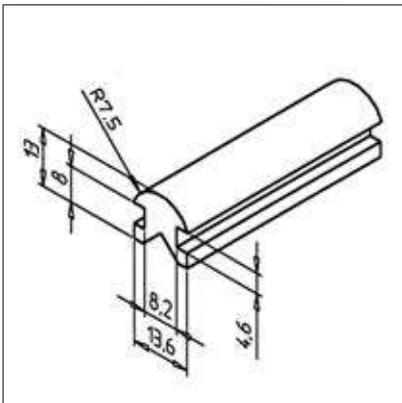
- Profile sled
- Slide supports, initiator holders
- Customer-friendly processing possible due to a greater addition of material

ASSEMBLY

- 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 bar R

Part No. 22.1104/0



TECHN. DATA / ITEMS SUPPLIED

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

APPLICATIONS

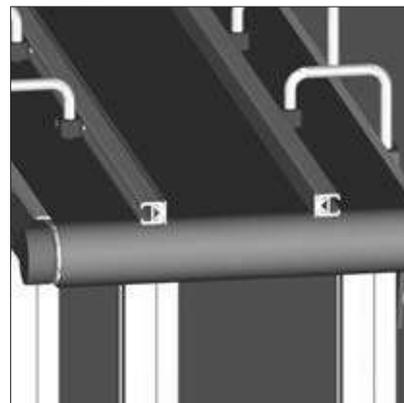
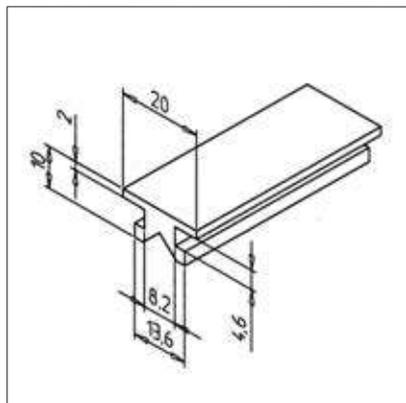
- Lateral guides
- Support plates
- Sliding distance
- Jam tracks

ASSEMBLY

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

Slide rail lateral guide flat

Part No. 22.1135/0



TECHN. DATA / ITEMS SUPPLIED

- PE, white
- Highly wear-resistant
- Weight = 0.098 kg/m
- Bar length = 2 m

APPLICATIONS

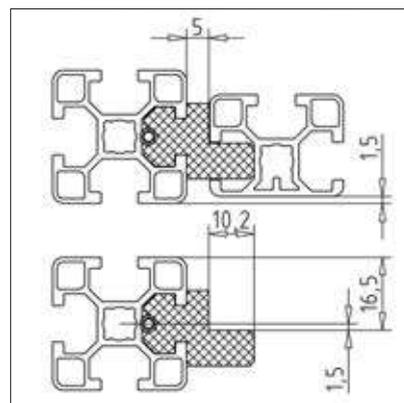
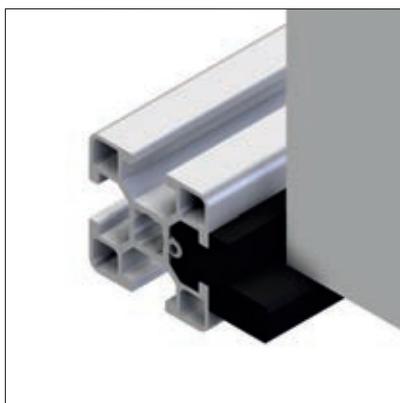
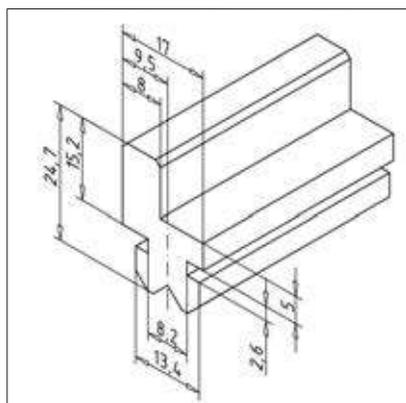
- Lateral guide for flat components
- Slide for containers
- Jam tracks

ASSEMBLY

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

Angular slide rail 30

Part No. 22.1171/0



TECHN. DATA / ITEMS SUPPLIED

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

APPLICATIONS

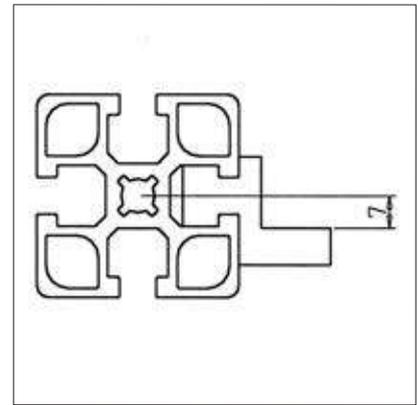
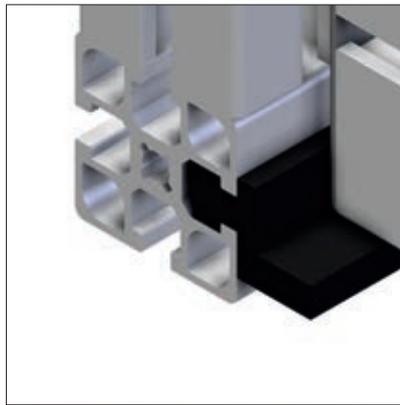
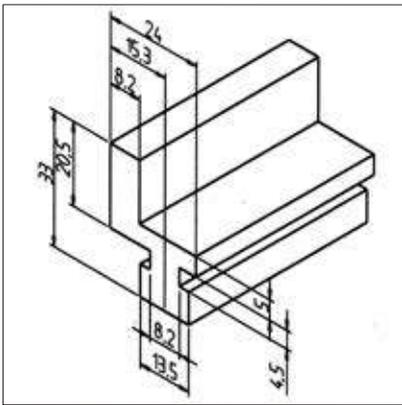
- Guiding sliding doors, pull-outs, fixtures

ASSEMBLY

- 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

Part No. 22.1040/0



TECHN. DATA / ITEMS SUPPLIED

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

APPLICATIONS

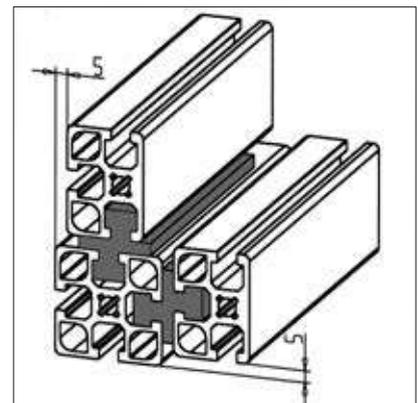
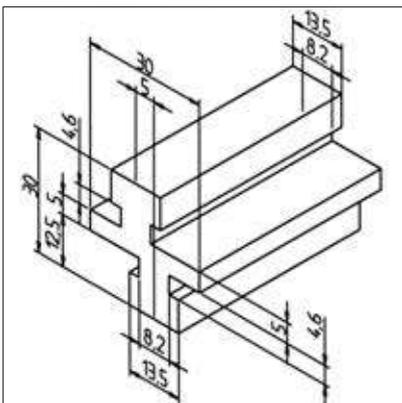
- Conveying systems
- Belt conveyors
- Side stop in conveyor sections

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

Part No. 22.1087/0



TECHN. DATA / ITEMS SUPPLIED

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

APPLICATIONS

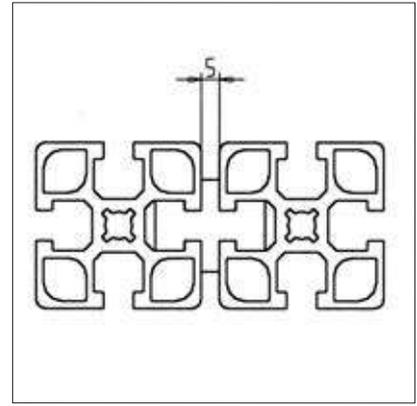
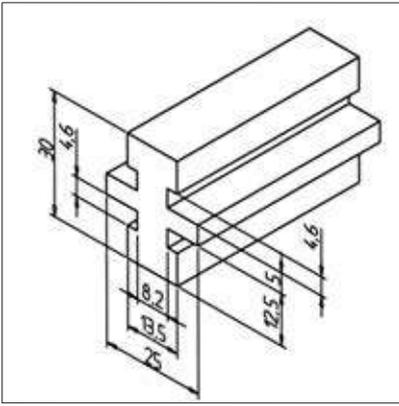
- Simple workpiece slides
- Guiding drawers in profile grooves

ASSEMBLY

- 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

Parallel slide rail

Part No. 22.1041/0



TECHN. DATA / ITEMS SUPPLIED

- PE-UHMW, black
- Highly wear-resistant
- Weight = 0.390 kg/m
- Bar length = 2 m

APPLICATIONS

- Parallel guide without difference in height
- Externally flush sliding elements

ASSEMBLY

- Slide into profile groove
- If necessary, one-sided by cylindrical pin M6 x 16 **part no. 21.1324/0** fix
- 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.



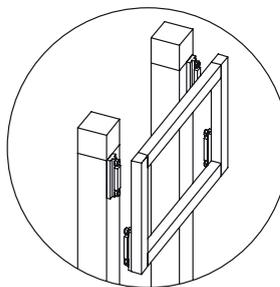
Slide-roller element

A lifting door requires 4 elements:

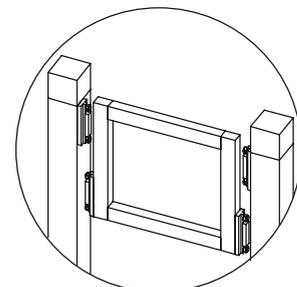
- One on each of the two columns in the upper end position.
- One on each side of the door element in the lower end position.

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



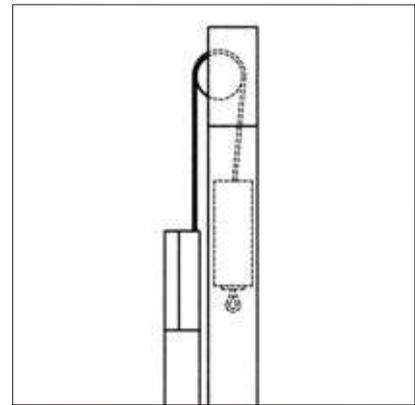
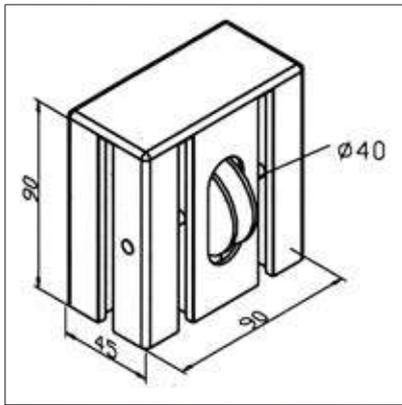
→ Installation possibility in front of the door pillars
Gap width = 8 mm



→ Installation possibility between the door pillars
gap width = 8 mm

Cable Pulley 45

Part No. 21.1775/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, anodized E6/EV1
- Housing from profile 45 x 90
- Pulley steel, galvanized, installed ready for assembly
- End cap
- maximum weight of the lifting door with paired insertion of the pulley, 12kg
- Weight = 0.522 kg/piece

APPLICATIONS

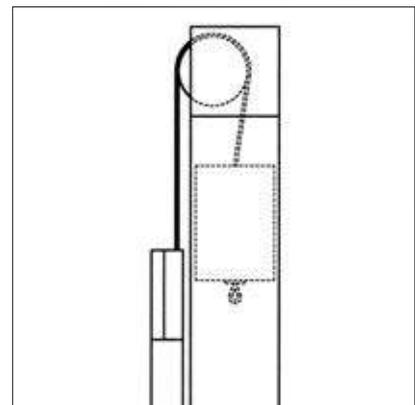
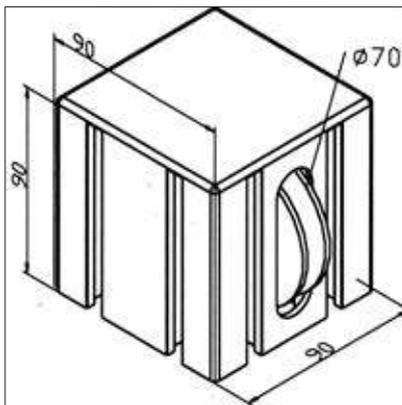
- Chain reverse unit of counterweights on lifting doors, for internal compensation weight in profile 45 x 90 L or 45 x 90 G
- For continuous movement and larger loads use >12 Kg chain redirector 45

ASSEMBLY

- Attachment to the stand profile with 2 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 pulley 90

Part No. 21.1776/0



TECHN. DATA / ITEMS SUPPLIED

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

APPLICATIONS

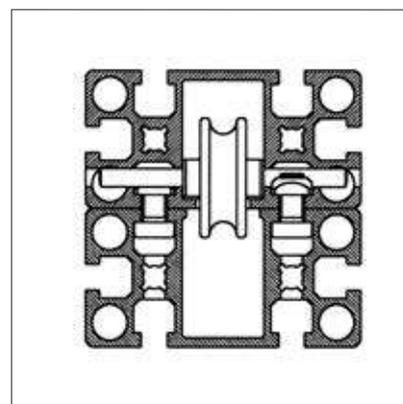
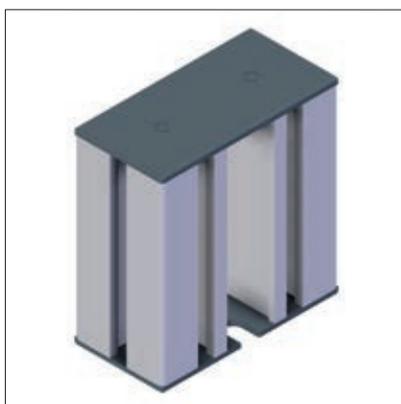
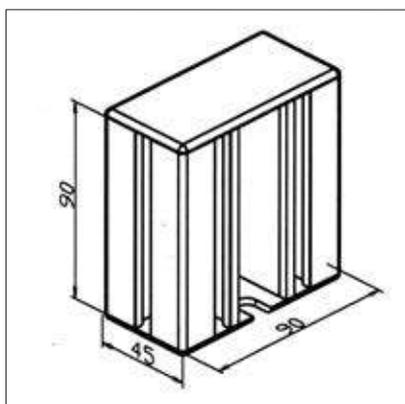
- Chain reverse unit of counterweights on lifting doors, for internal compensation weight in profile 90 x 90 L
- For continuous movement and loads use >30 Kg chain redirector 90

ASSEMBLY

- 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

Hand protection

Part No. 21.1780/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, anodized E6/EV1
- From profile 45 x 90
- Matching caps, one of them with recess for cable or chain passage
- Length 90 mm
- With fastening nut steel, galvanized
- Weight = 0.290 kg/piece

APPLICATIONS

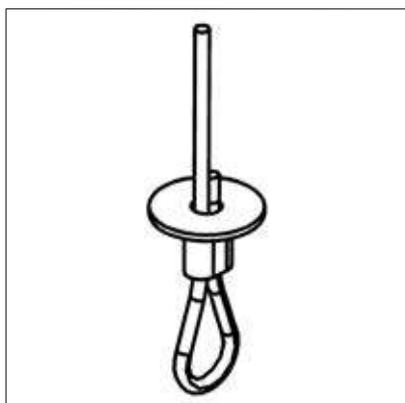
- Securing from squeezing points in the area of the cable or chain inlet

ASSEMBLY

- Mount with supplied hardware

Cable for counterweight L=2,5m

Part No. 21.1777/0



TECHN. DATA / ITEMS SUPPLIED

- Steel cable VA, 2,5 mm
- With clamping eye hook on one side, pressed
- Length 2.5 m
- Different lengths available under Art. no. 21.1777/2 on request
- Cable sold by the metre without pressed clamping eye is available under Part no. 211777/1
- Weight = 0.070 kg/piece

APPLICATIONS

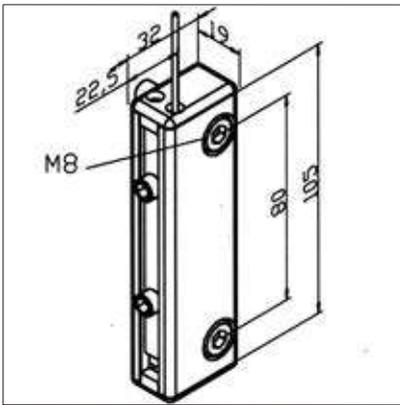
- Use in connection with counterweight 45 or 90 and cable pulley

ASSEMBLY

- 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

Rope clamp 19x32

Part No. 21.1797/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, anodized E6/EV1
- From profile 19 x 32
- 1 Clamping plate
- 2 hex socket cap screws with square nuts
- 2 suitable end caps, one of them bored
- Weight = 0.150 kg/piece

APPLICATIONS

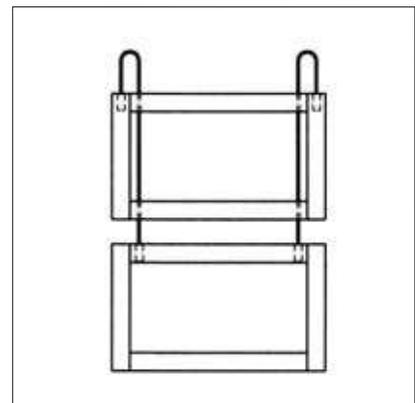
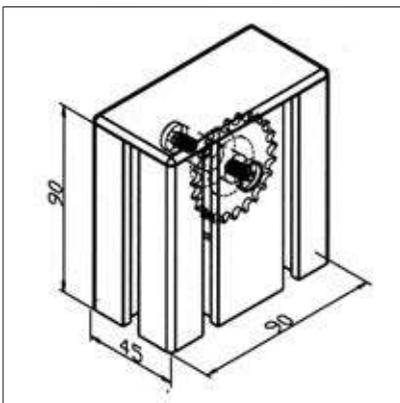
- Fixing the wire cable **part no. 21.1777/0** on the door element of a lifting door

ASSEMBLY

- Remove the lower end cap
- Attach rope clamp with fastening kit at the top of the door element
- Pull the rope through the bore of the upper end cap
- Adjust balance weight to desired position
- Place the cable end around the clamping bar in the loop, insert it into the groove of the cable clamp and secure with a threaded pin
- If necessary, shorten the projecting end of the rope and replace the removed cap

Synchronous pulley 45

Part No. 21.1792/0



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

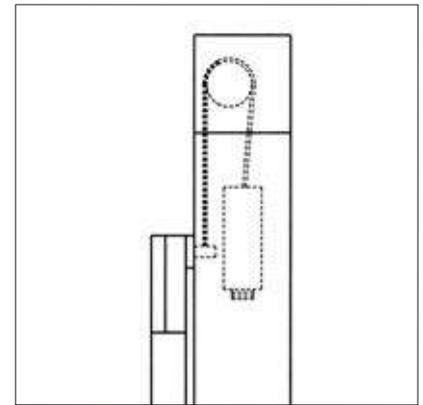
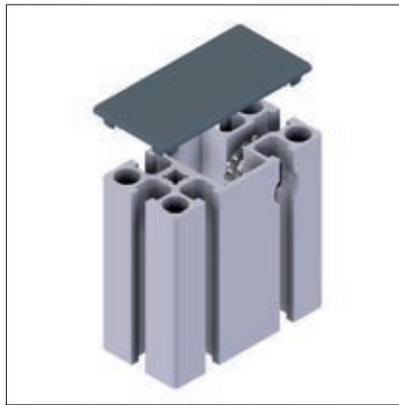
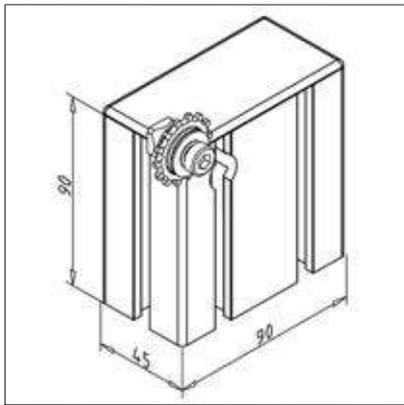
- Simultaneous opening and closing of two lifting doors running in the operate direction; doors are of similar weight
- Posts preferably made of profile 45x90 or 90x90. The lateral profiles of the doors preferably made of profile 90x32 or 45x90 guided in the mullion by means of sliding roller elements

ASSEMBLY

- Attachment to the stand profile with 2 terminal strips 90 **part no. 21.1029/0**
- Chain 04 **part no. 21.1713/0** insert 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



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, anodized E6/EV1
- Housing from profile 45 x 90
- Sprocket galvanized steel, ready for installation
- End cap
- Maximum weight of the lifting door with paired insertion of the pulley, 50 kg
- Weight = 0.388 kg/piece

APPLICATIONS

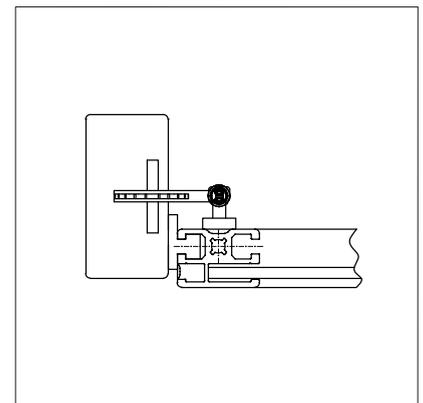
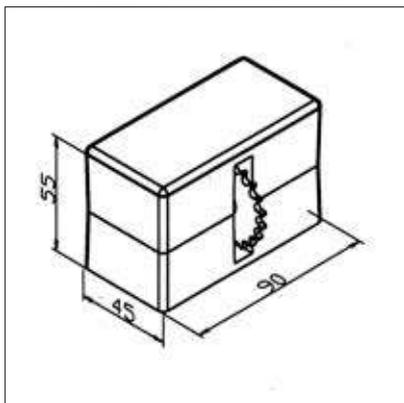
- Chain reverse unit of counterweights on lifting doors, for internal compensation weight in profile 45 x 90 F or 45 x 90 G

ASSEMBLY

- Attachment to the stand profile with 2 terminal strips 90 **part no. 21.1029/0**
- Use of chain 04 **part no. 21.1712/0** and chain clamping weight **part no. 21.1711/0**
- The cable is guided in the profile groove, thus no hand-protection is required

Chain pulley 45 A

Part No. 21.1838/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, Pressure die-casting, powder-coated, 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, 50 kg
- Weight = 0.350 kg/piece

APPLICATIONS

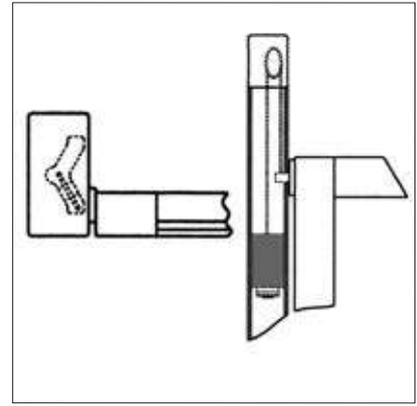
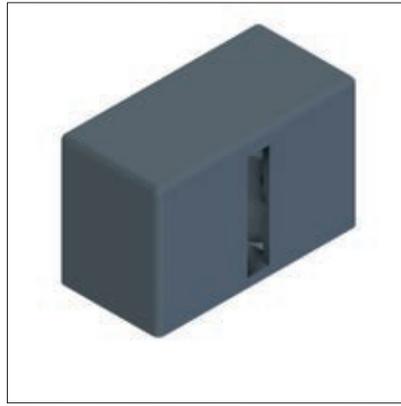
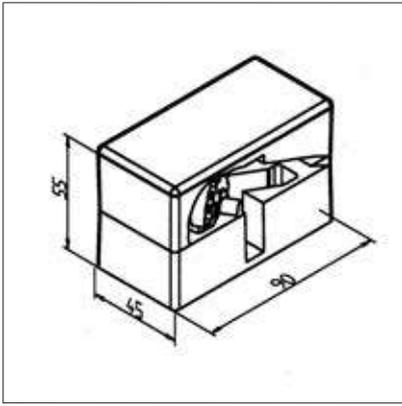
- Chain reverse unit of counterweights on lifting doors, for internal compensation weight in profile 45 x 90 F or 45 x 90 G

ASSEMBLY

- 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 45 I

Part No. 21.1840/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, Pressure die-casting, powder-coated, 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, 50 kg
- Weight = 0.350 kg/piece

APPLICATIONS

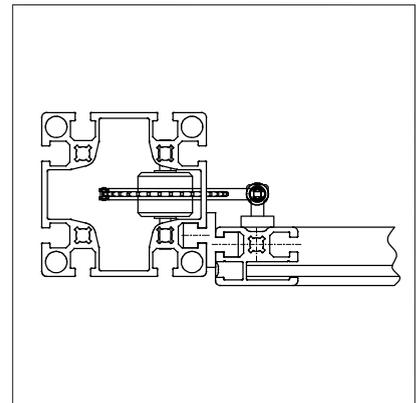
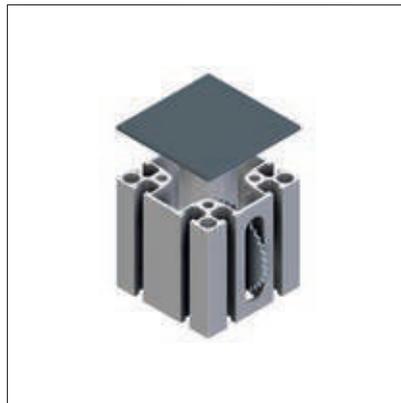
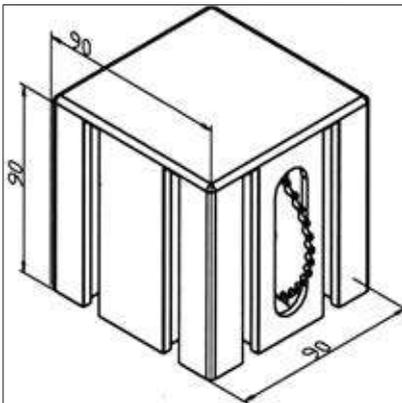
- Chain reverse unit of counterweights on lifting doors, for internal compensation weight in profile 45 x 90 F or 45 x 90 G

ASSEMBLY

- 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 on the broad side of the profile in the right or left profile groove (adjustable chain wheel), no hand-protection required

Chain pulley 90

Part No. 21.1839/0



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, 70 kg
- Weight = 0.680 kg/piece

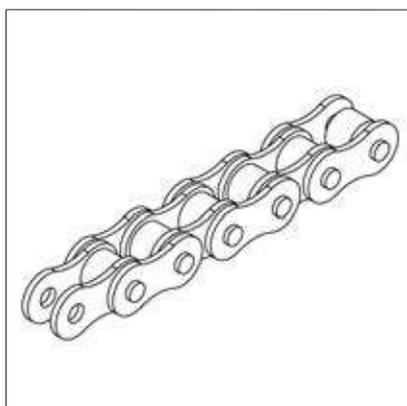
APPLICATIONS

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

ASSEMBLY

- 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

Roller chain 04



TECHN. DATA / ITEMS SUPPLIED

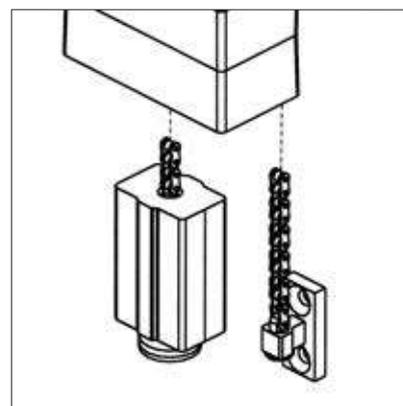
- Steel
- Size 4
- Please indicate desired length
- Breaking force min. 3000N
- Weight = 0.150 kg/m



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

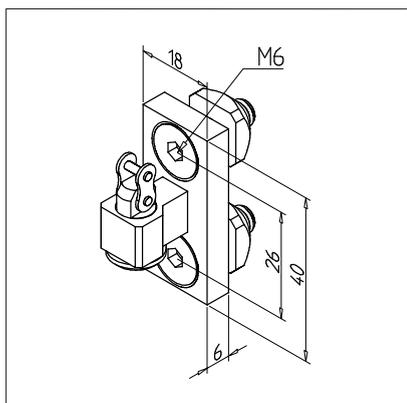
Part No. 21.1713/0



ASSEMBLY

- 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

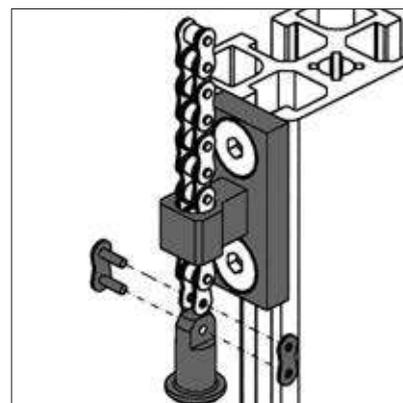
- Steel, galvanized
- With fastening material steel, zinc plated
- Weight = 0.060 kg/piece



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. 21.1712/0

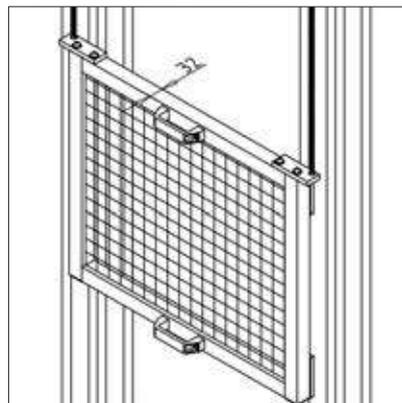
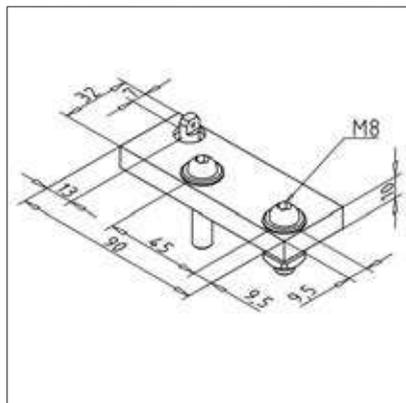


ASSEMBLY

- 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

Part No. 21.1980/0



TECHN. DATA / ITEMS SUPPLIED

- Steel, galvanized
- With fastening material and chain lock
- Weight = 0.247 kg/piece

APPLICATIONS

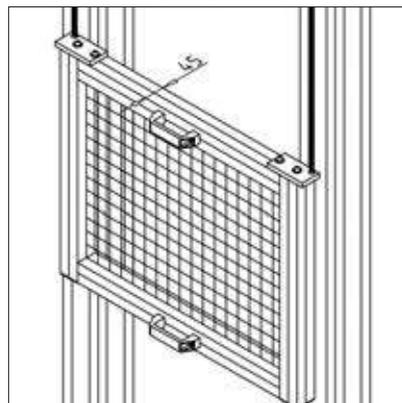
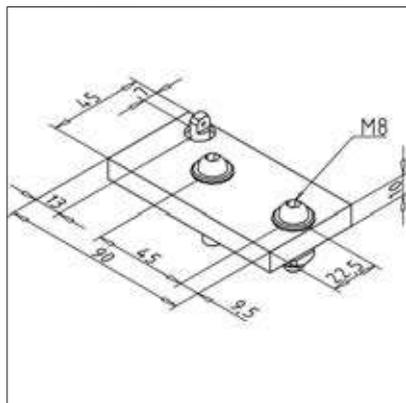
- Use in connection with chain pulley 90 and chain O4
- Lifting plate made of profile 45 x 32 with sliding roller mounted in front of the posts

ASSEMBLY

- Mount plate on lifting plate and secure the roller chain O4 using the supplied chain lock
- Two chain clamps are required for each lifting field

Door chain clamping device KV-45

Part No. 21.1981/0



TECHN. DATA / ITEMS SUPPLIED

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

APPLICATIONS

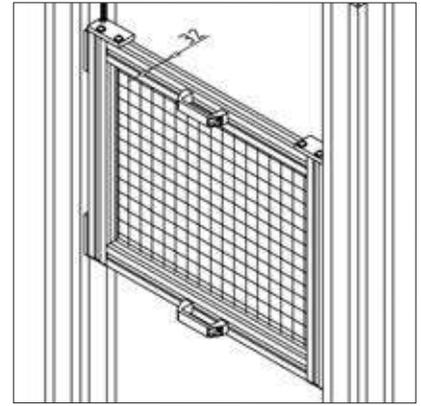
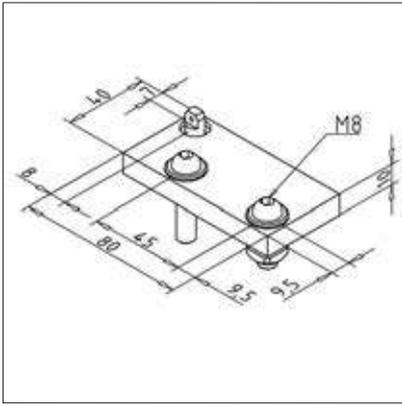
- Use in connection with chain pulley 90 and chain O4
- Lifting plate made of profile 45 x 45 with sliding roller mounted in front of the posts

ASSEMBLY

- Mount plate on lifting plate and secure the roller chain O4 using the supplied chain lock
- Two chain clamps are required for each lifting field

Door chain clamping device KI-32

Part No. 21.1982/0



TECHN. DATA / ITEMS SUPPLIED

- Steel, galvanized
- With fastening material and chain lock
- Weight = 0.278 kg/piece

APPLICATIONS

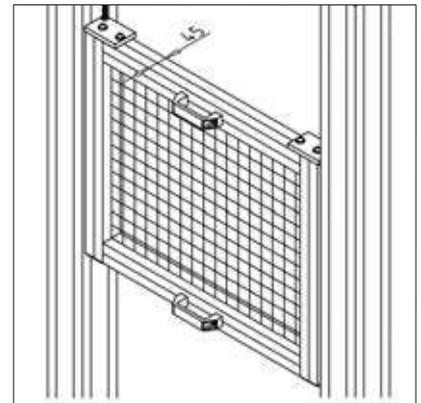
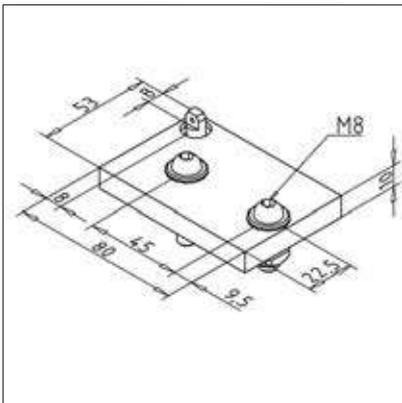
- Use in connection with chain pulley 90 and chain 04
- Lifting plate made of profile 45 x 32 with sliding roller mounted between the posts

ASSEMBLY

- 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

Part No. 21.1983/0



TECHN. DATA / ITEMS SUPPLIED

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

APPLICATIONS

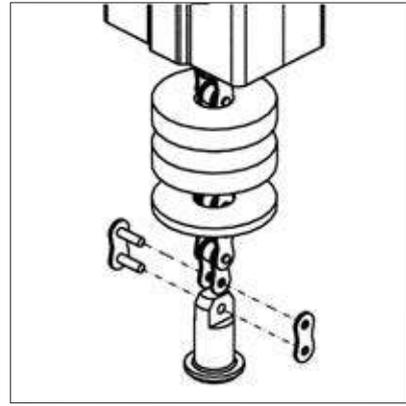
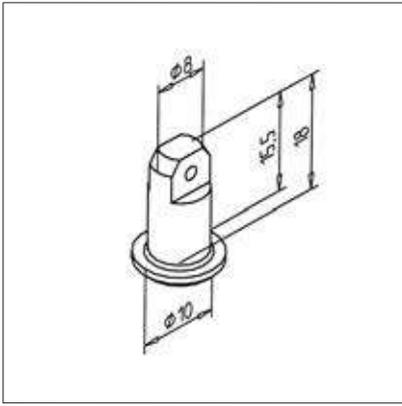
- Use in connection with chain pulley 90 and chain 04
- Lifting plate made of profile 45 x 45 with sliding roller mounted between the posts

ASSEMBLY

- 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 clamping weight

Part No. 21.1711/0



TECHN. DATA / ITEMS SUPPLIED

- Steel, galvanized
- Rubber-ring
- Chain lock
- Weight = 0.015 kg/piece

APPLICATIONS

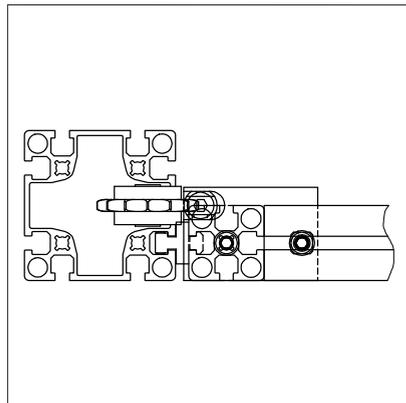
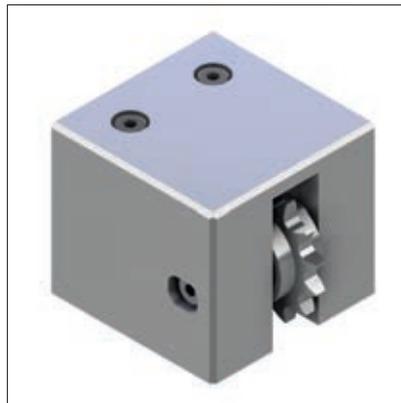
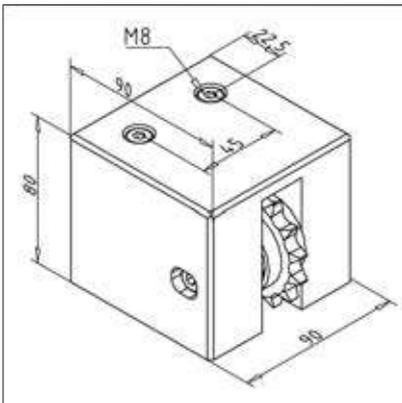
- Use in conjunction with balancing weight 45 or 90 and chain reverse unit
- Use in conjunction with chain 04 **part no. 21.1713/0** for attaching the chain to the balance weight

ASSEMBLY

- 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

Chain pulley 90 S

Part No. 21.0920/0



TECHN. DATA / ITEMS SUPPLIED

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

APPLICATIONS

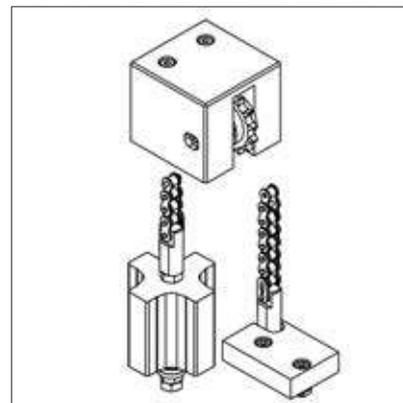
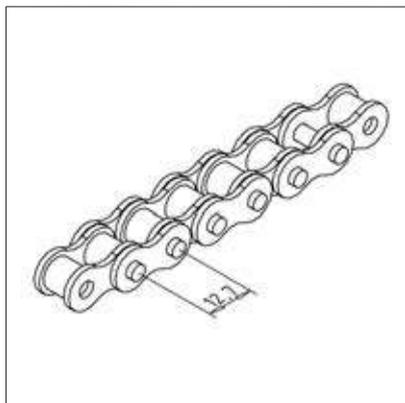
- Chain reverse unit of counterweights on lifting doors, for internal balancing weight in profile 90 x 90 L

ASSEMBLY

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

Roller chain 08

Part No. 29.0307/0



TECHN. DATA / ITEMS SUPPLIED

- Steel
- Size 8
- Breaking force min. 18,000 N
- Please indicate desired length
- Weight = 0.700 kg/m

APPLICATIONS

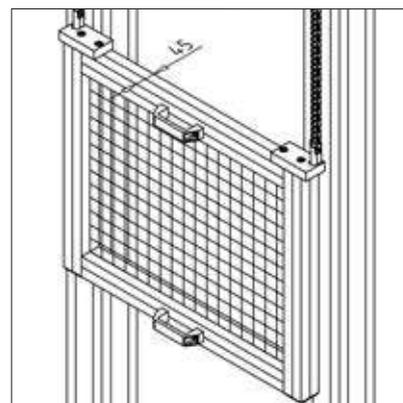
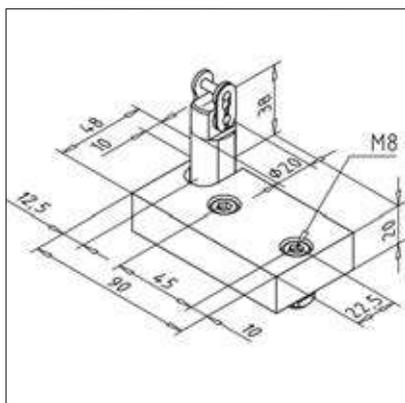
- Use in conjunction with balancing weight 45 or 90 and chain clamping 90 S
- For this chain clamping weight S **part no. 21.0925/0** use

ASSEMBLY

- Attachment to the stand profile with 4 terminal strips Fixing with chain clamp weight S **part no. 21.0925/0** on threaded rod M10 **part no. 21.1667/0** for receiving the balance weights

Door chain clamping device 90 S front

Part No. 21.0927/0



TECHN. DATA / ITEMS SUPPLIED

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

APPLICATIONS

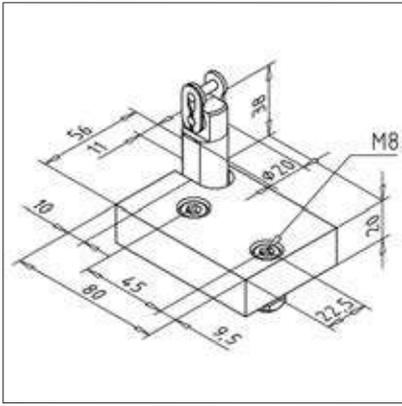
- Use in conjunction with chain reverse 90 S and chain 08
- Add a lifting plate from Profile 45 x 45 with sliding roller in front of the posts

ASSEMBLY

- 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 device 90 S side

Part No. 21.0928/0



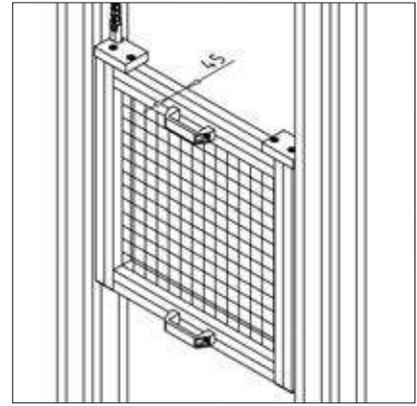
TECHN. DATA / ITEMS SUPPLIED

- 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

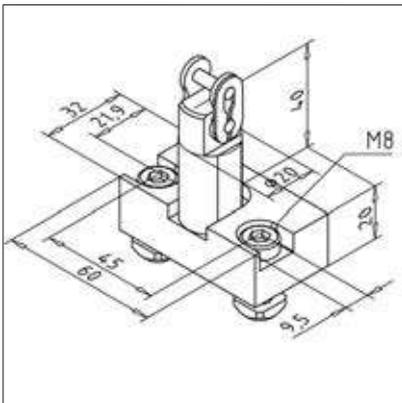


ASSEMBLY

- 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 device 90 S slide

Part No. 21.0929/0



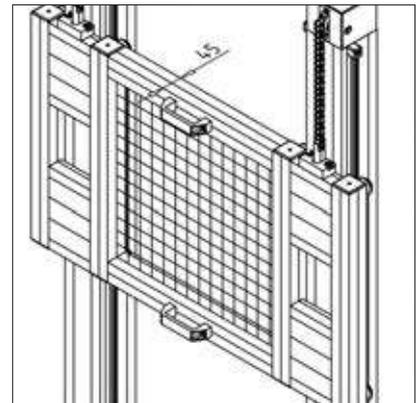
TECHN. DATA / ITEMS SUPPLIED

- 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

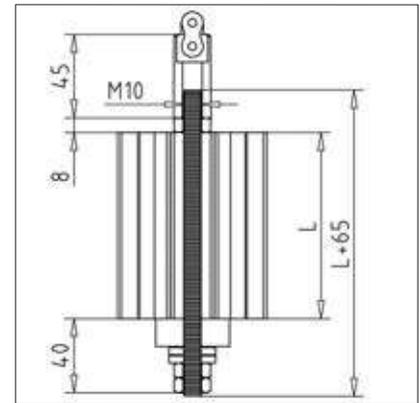
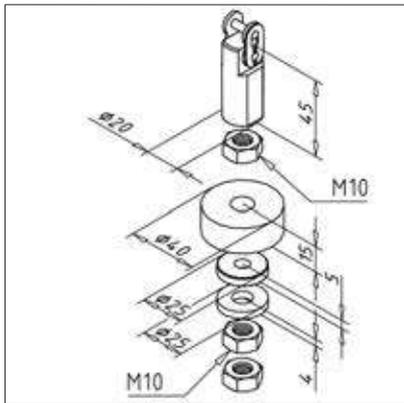


ASSEMBLY

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

Chain clamping weight S

Part No. 21.0925/0



TECHN. DATA / ITEMS SUPPLIED

- Steel, galvanized
- Rubber-ring
- Chain lock
- Please threaded rod M10 **part no. 21.1667/0** order additionally in the desired length
- Weight = 0.145 kg/piece

APPLICATIONS

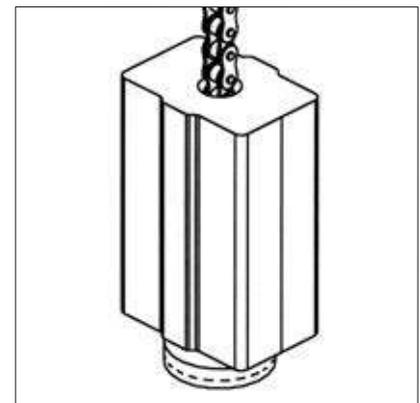
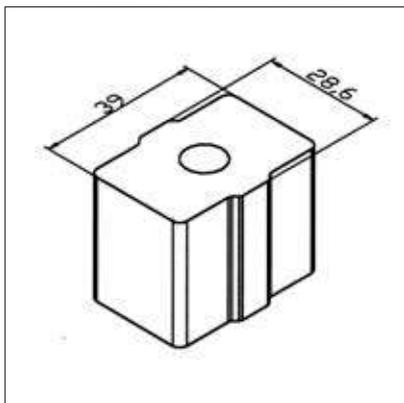
- Use in connection with roller chain 08 and balancing weight 45 or 90
- Length of the threaded rod = length of the weight +65 mm

ASSEMBLY

- Guide the threaded rod through the weight
- Attach the components included at both ends
- Connect threaded rod with enclosed chain lock chain

Counterweight 45

Part No. 21.1772/0



TECHN. DATA / ITEMS SUPPLIED

- Lead
- Fitting for profile 45 x 90 F or 45 x 90 G
- Length 0,333 m
- Weight = 10.000 kg/m

APPLICATIONS

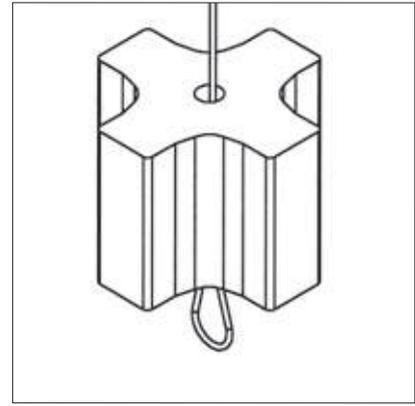
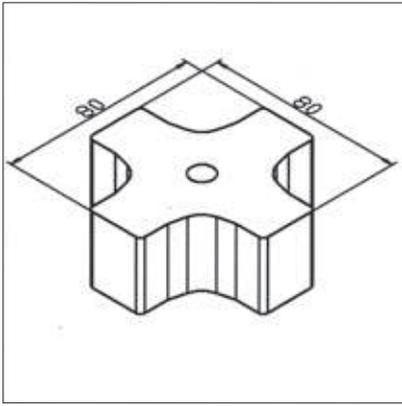
- Weight compensation for lightweight lifting doors
- Suitable for cable or roller chain 04 or roller chain 08

ASSEMBLY

- Set it into profile with pre-assembled cable or pre-assembled chain
- We recommend weighing the weights and adding a small weight allowance, this compensates for friction losses and lifting doors are somewhat easier to open

Counterweight 90

Part No. 21.1778/0



TECHN. DATA / ITEMS SUPPLIED

- Lead
- For profiles 90 x 90
- Length 0,260 m
- Weight = 38.500 kg/m

APPLICATIONS

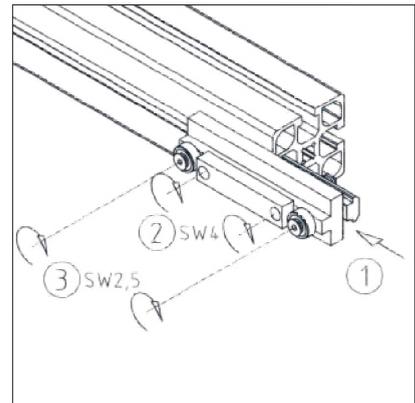
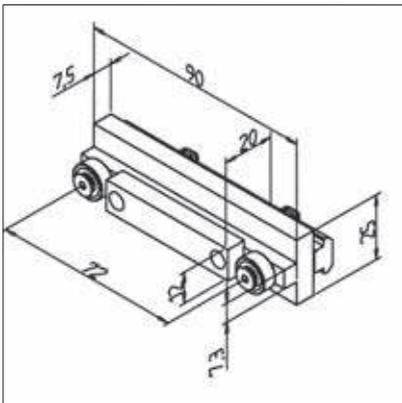
- Weight compensation for lightweight lifting doors
- Suitable for cable or roller chain 04 or roller chain 08

ASSEMBLY

- Set it into profile with pre-assembled cable or pre-assembled chain
- We recommend weighing the weights and adding a small weight allowance, this compensates for friction losses and lifting doors are somewhat easier to open

Slide-roll element

Part No. 21.1796/0



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

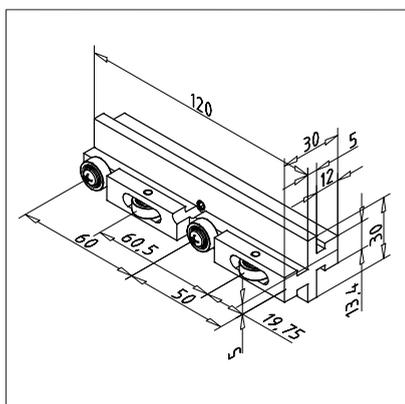
APPLICATIONS

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

ASSEMBLY

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



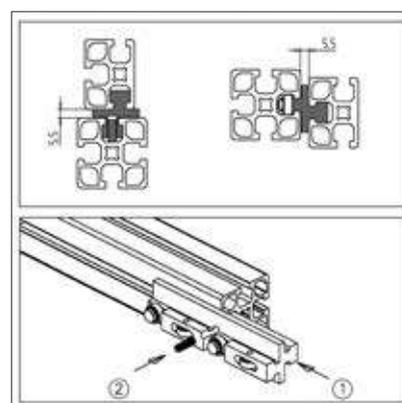
TECHN. DATA / ITEMS SUPPLIED

- PE-UHMW, black
- 1 clamping screw, steel, zinc plated
- 4 built-in ball-bearings
- Fmax. 300 N
- Weight = 0.061 kg/piece



APPLICATIONS

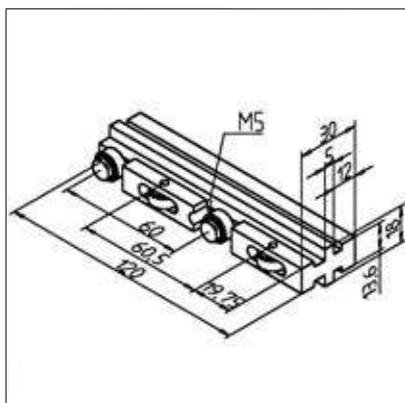
- Guide for sliding doors, lifting-doors, work-piece-slides, light linear guides
- Both groove holders are arranged in parallel, for simplify the design of flush sliding doors



ASSEMBLY

- 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

Glide-roll element parallel



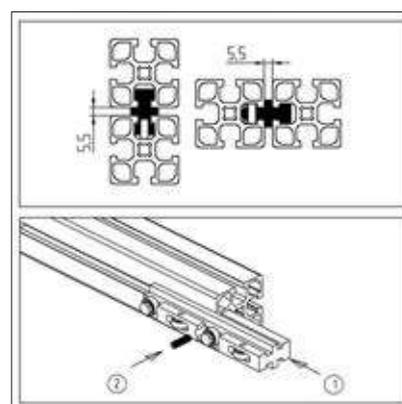
TECHN. DATA / ITEMS SUPPLIED

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

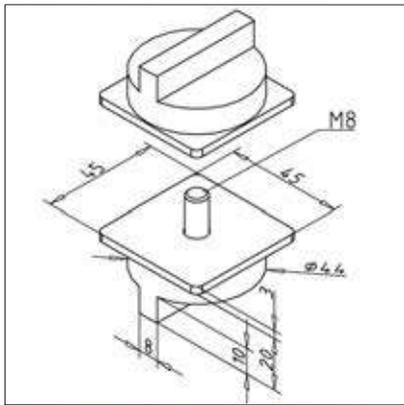


ASSEMBLY

- 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

Folding doorway set

Part No. 22.1148/0



TECHN. DATA / ITEMS SUPPLIED

- PE-UHMW, black
- Delivery: 1 pair
- With galvanized mounting screws M8 and end caps 45 x 45 AL
- Weight = 0.082 kg/set

APPLICATIONS

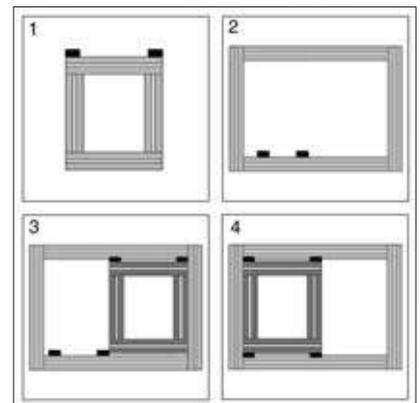
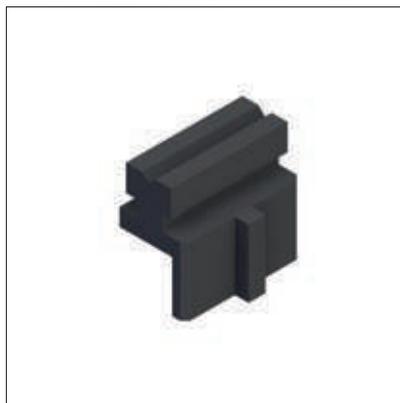
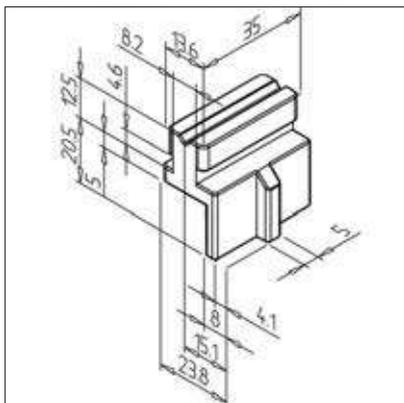
- For upper and lower guidance of folding doors made of aluminium profile
- Guiding in profile grooves

ASSEMBLY

- Mount end caps onto front door profile with screws from delivery scope
- Length of the front door profile = clear height of the outer frame - 28 mm
- Insert sliding piece in guide profile
- Insert mounted screws into drill hole of slide element
- Use always in pairs
- Dimensions are for profile cross section 45x45 for the door with hinge **part no. 21.1378/0**

Guide for sliding door 45

Part No. 22.1079/0



TECHN. DATA / ITEMS SUPPLIED

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

APPLICATIONS

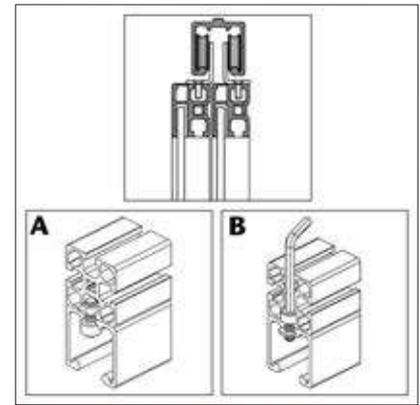
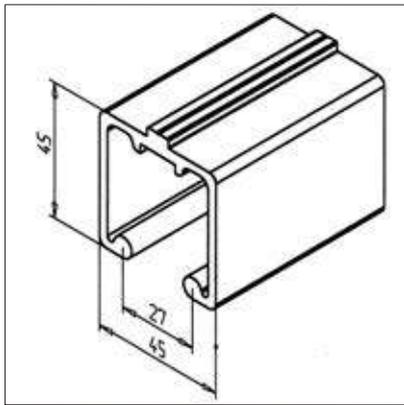
- Sliding doors
- Sliding elements
- For a simultaneous guidance of 2 elements in 1 profile groove
- It is possible to retrofit sliding doors in existing constructions

ASSEMBLY

- 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:**
clear height of the installation opening -11 mm
- **Width of door elements (with 2 elements):**
(lichte Weite + 49 mm) : 2

Sliding door profile

Part No. 20.1038/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- $I_x = 15.347 \text{ cm}^4$
- $I_y = 15.597 \text{ cm}^4$
- $w_x = 5.912 \text{ cm}^3$
- $w_y = 6.932 \text{ cm}^3$
- $IT = 0.726 \text{ cm}^4$
- Weight = 1.470 kg/m
- Bar length = 6 m
- Packing unit = 48 m

APPLICATIONS

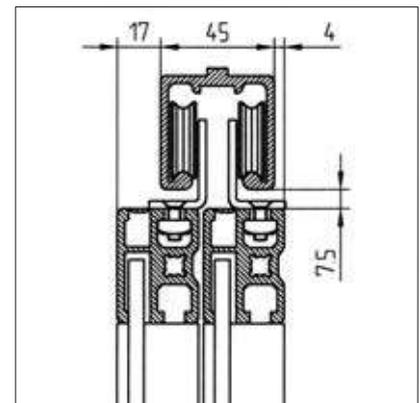
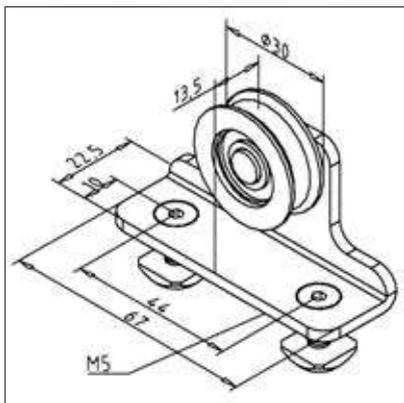
- Multi-leaf sliding doors
- Single-leaf sliding doors

ASSEMBLY

- Drill $\varnothing 8,5$ mm holes in centering groove; bore pitch: 250 - 400 mm depending on the load
- A) Position M8 F square nuts in the supporting profile and fasten the sliding door profile with M8 x 25 hex socket cap screw
- B) Drill through or step holes into the carrier profile and insert square nut into the profile of the runner. Nuts are torsion-proof

Roller element for sliding door

Part No. 21.2000/0



TECHN. DATA / ITEMS SUPPLIED

- Plastic roller with ball-bearing
- Zinc plated steel support
- With fastening material steel, zinc plated
- Weight = 0.080 kg/piece

APPLICATIONS

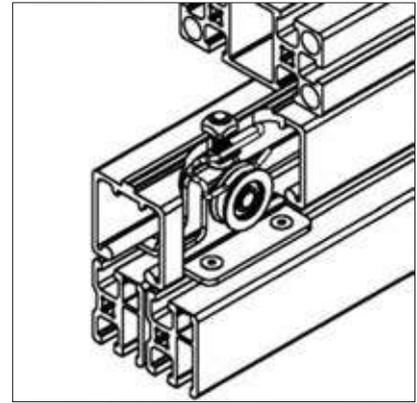
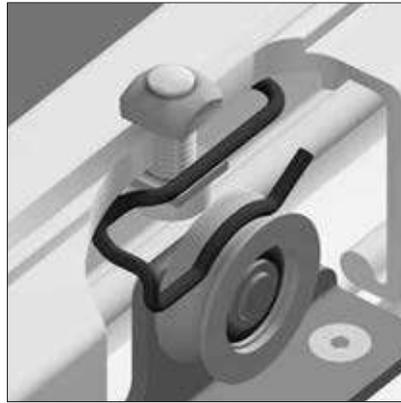
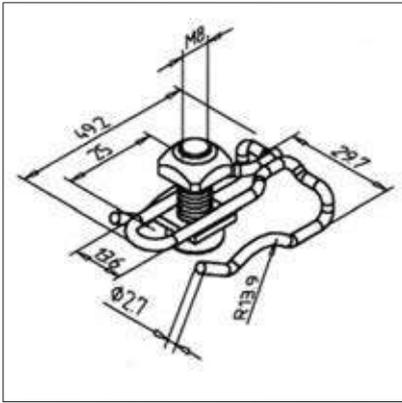
- Easy-running, multi-wing sliding doors in guard units, exhibition stands, testing units, etc.

ASSEMBLY

- 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** or U-guide sliding door **part no. 21.2002/1** secure against swinging away

Locking device, sliding door K

Part No. 21.2019/0



TECHN. DATA / ITEMS SUPPLIED

- Stainless steel
- Spring steel wire
- With fastening material steel, zinc plated
- Weight = 0.026 kg/piece

APPLICATIONS

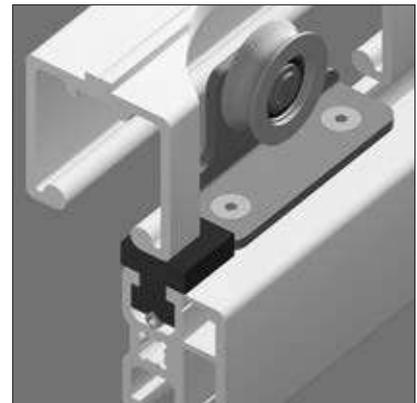
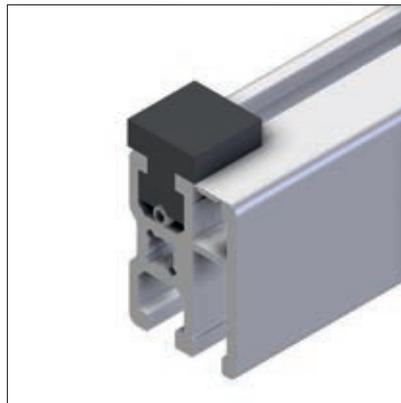
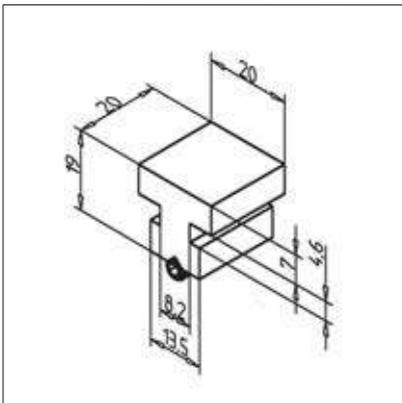
- Interlock sliding doors in their end positions (open / closed)

ASSEMBLY

- Mark the end position of the roll
- Bore drill $\varnothing 8,5$ m in sliding door profile
- Screw into rail with carrier profile using mounting kit included

Safety catch for sliding door

Part No. 21.2003/0



TECHN. DATA / ITEMS SUPPLIED

- PE-UHMW, black
- With fastening material steel, zinc plated
- Weight = 0.009 kg/piece

APPLICATIONS

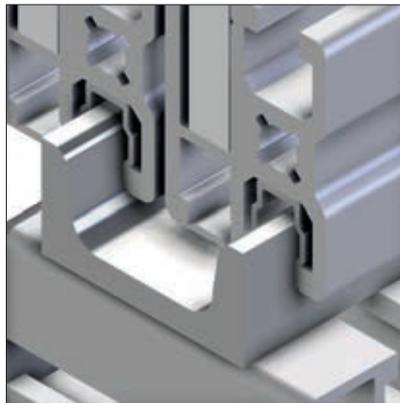
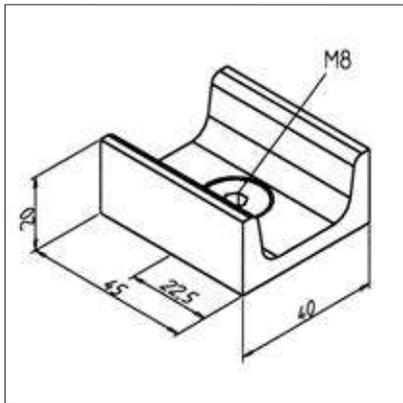
- Securing of sliding doors against lift off
- Reduction of pendulum motion

ASSEMBLY

- 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

U-bar for sliding door

Part No. 21.2002/0



TECHN. DATA / ITEMS SUPPLIED

- Steel, galvanized
- With fastening material steel, zinc plated
- Weight = 0.150 kg/piece

APPLICATIONS

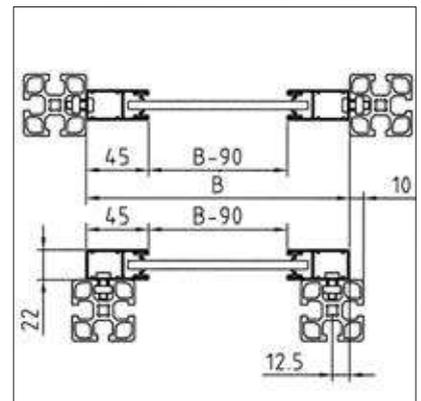
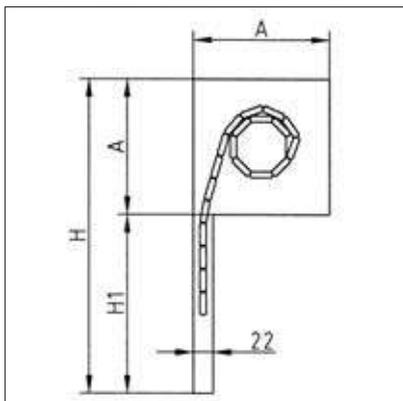
- Securing of sliding doors against lateral swinging

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

Roller shutters with drive

Part No. 29.0402/0



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 H

APPLICATIONS

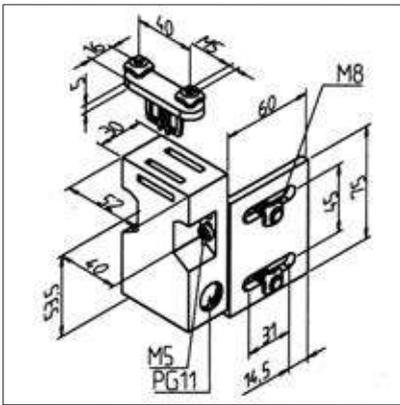
- Cupboard for instruments
- Tool cabinets
- Output switch
- Computer racks
- Machine guards

ASSEMBLY

- 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

Part No. 21.1110/0



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

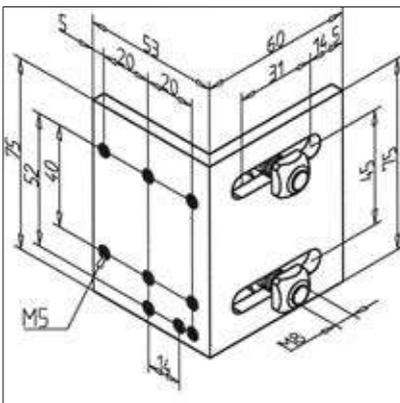
- Protection for doors, lifting devices, panels in all types of protective installations
- Suitable for all 45er profiles

ASSEMBLY

- 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

Angle bracket for security switch

Part No. 21.1359/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, anodized E6/EV1
- With fastening material steel, zinc plated
- For use on vertical struts, angle bracket **part no. 21.1359/7** (square nuts with position-fixing)
- Weight = 0.128 kg/piece

APPLICATIONS

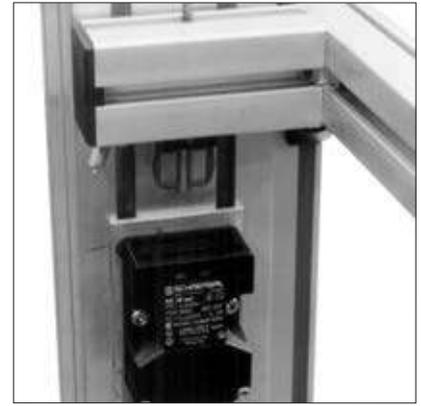
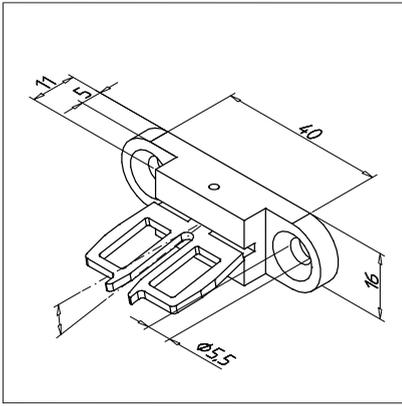
- For safety switch according to DIN EN 50041
- Switch adjustment in two directions

ASSEMBLY

- Fasten with fixing material to profile groove

Actuating bracket for security switch B3

Part No. 21.1110/3



TECHN. DATA / ITEMS SUPPLIED

- Separator guide, typ B3, for particularly small operating radius over the narrow side of the bracket
- Operating radius min. 32 mm
- Weight = 0.030 kg/piece

APPLICATIONS

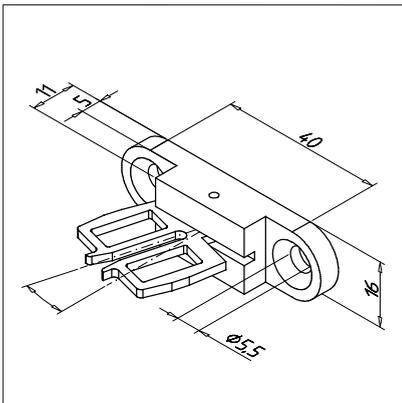
- Operating handle for small operating radii in conjunction with safety switch **part no. 21.1110/0**, replaces the standard strap

ASSEMBLY

- Use fixing material supplied to fix the safety switch on the profile groove
- Directly on panel element with countersunk screws M5 according to material thickness

Actuating bracket for security switch B2

Part No. 21.1110/2



TECHN. DATA / ITEMS SUPPLIED

- Separator guide, B2, for particularly small operating radius over the wide side of the bracket
- Operating radius min. 45 mm
- Weight = 0.030 kg/piece

APPLICATIONS

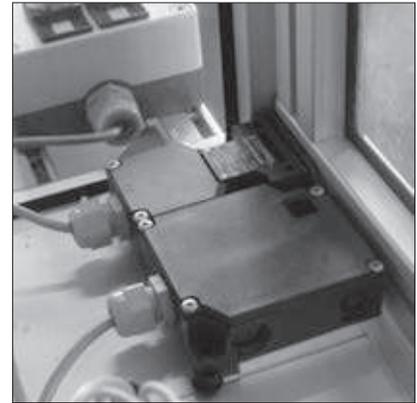
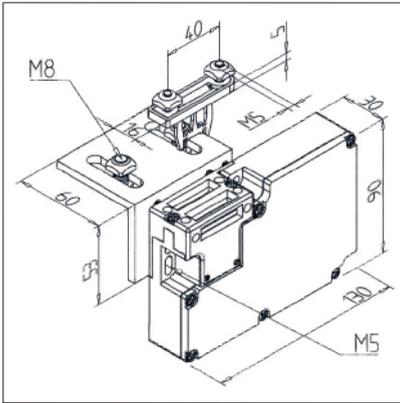
- Operating handle for small operating radii in conjunction with safety switch **part no. 21.1110/0**, replaces the standard strap

ASSEMBLY

- Use fixing material supplied to fix the safety switch on the profile groove
- Directly on panel element with countersunk screws M5 according to material thickness

Security switch with lock

Part No. 21.1766/0



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

APPLICATIONS

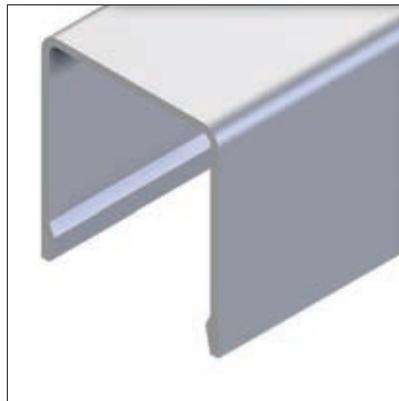
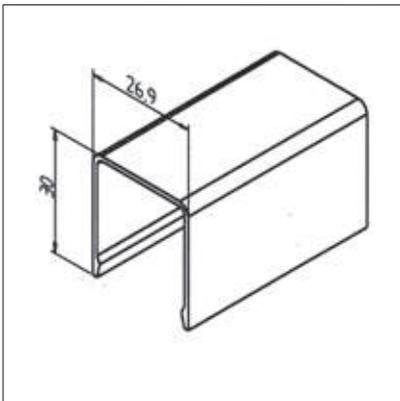
- For protective equipment with high safety requirements

ASSEMBLY

- Fasten with fixing material to profile groove
- For small radii, use actuating yoke B6 **part no.. 21.1766/2.**

Conduit 27 alu

Part No. 20.1051/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, extruded, anodized E6/EV1
- Weight = 0.193 kg/m
- Bar length = 6 m

APPLICATIONS

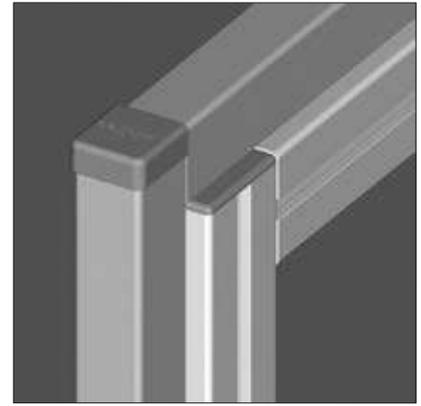
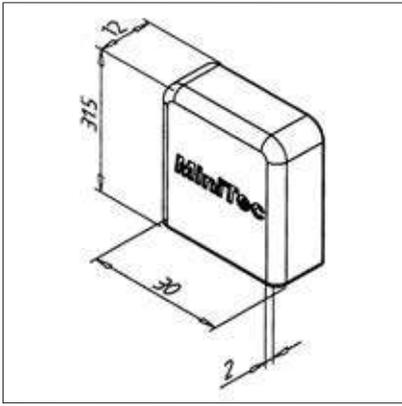
- Cover for cables and pneumatic hoses

ASSEMBLY

- 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

End cap conduit 27 alu

Part No. 22.1119/1



TECHN. DATA / ITEMS SUPPLIED

- ABS, Injection Mould, grey
- Weight = 0.004 kg/piece

APPLICATIONS

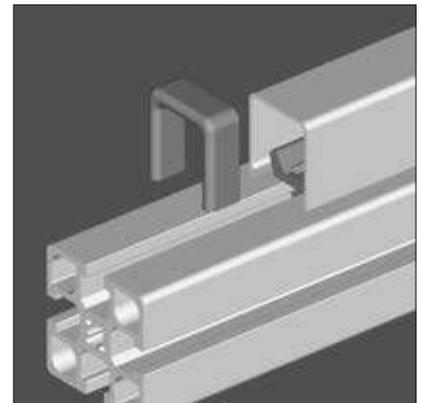
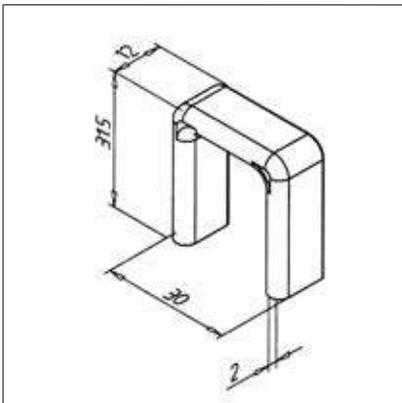
- End cap for conduit AL
- Manufacture external angles with cable duct AL

ASSEMBLY

- Simply push onto the end of the cable duct

Edge protection for conduit 27 AL

Part No. 22.1120/1



TECHN. DATA / ITEMS SUPPLIED

- ABS, Injection Mould, grey
- Weight = 0.003 kg/piece

APPLICATIONS

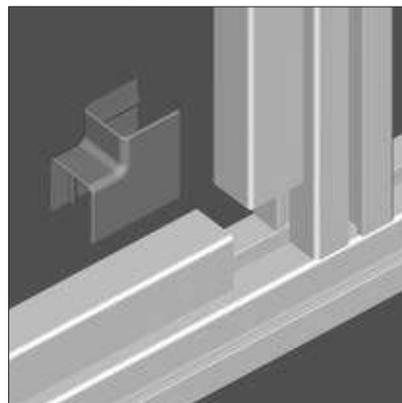
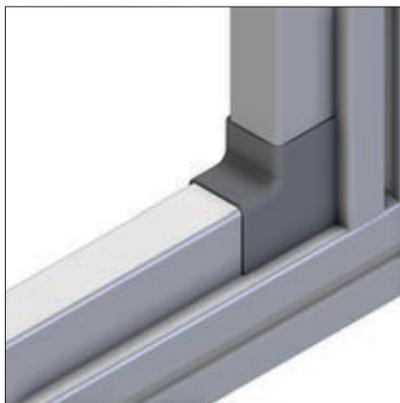
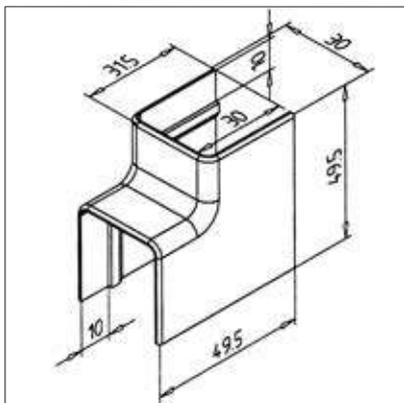
- Edge protection for conduit AL

ASSEMBLY

- Simply push onto the end of the cable duct

Inner angle for conduit 27 AL

Part No. 22.1121/1



TECHN. DATA / ITEMS SUPPLIED

- ABS, Injection Mould, grey
- Weight = 0.009 kg/piece

APPLICATIONS

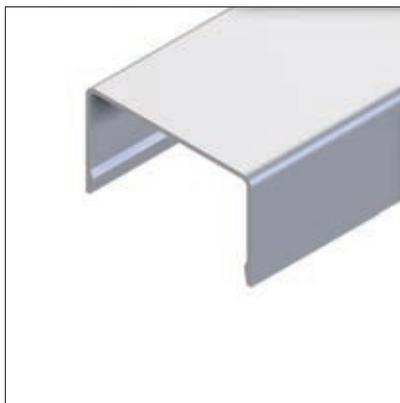
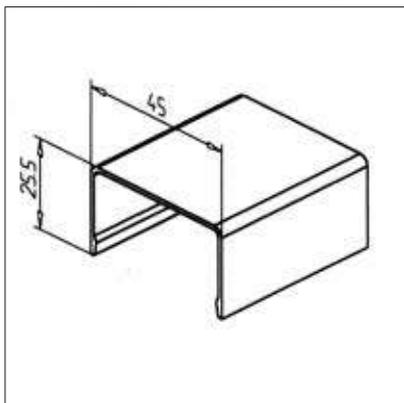
- Connect the cable duct AL to the inner angle

ASSEMBLY

- Clip the first side of cable duct on clamps.
- Insert the angle
- Clip on the second side of the cable duct and push until it stops

Conduit 45 alu

Part No. 20.1071/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, anodized E6/EV1
- Weight = 0.301 kg/m
- Bar length = 6 m

APPLICATIONS

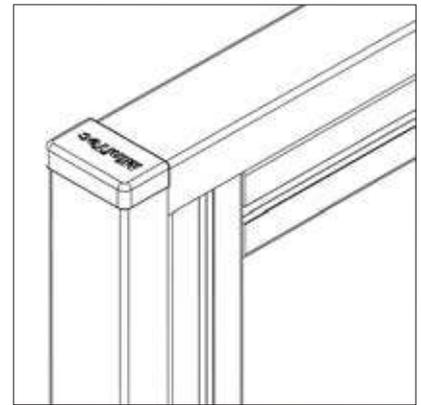
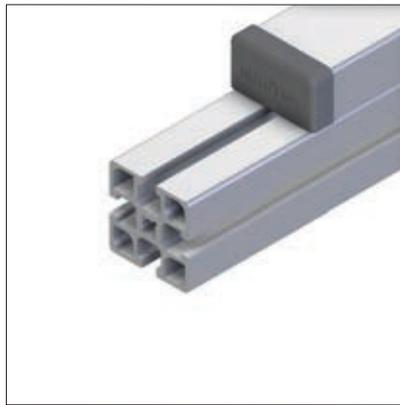
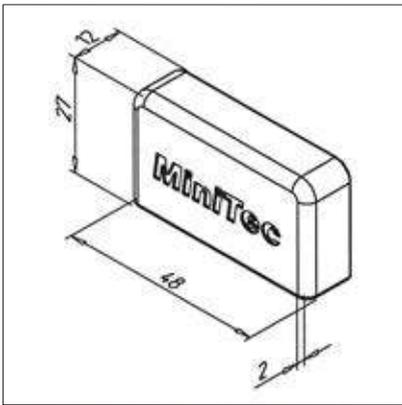
- Cover for cables and pneumatic hoses

ASSEMBLY

- On clamp 45 **part no. 22.1210/0** clipping on
- Earthing brackets for optional grounding **part no. E9.0141/0** can be used

End cap for conduit 45 AL

Part No. 22.1116/1



TECHN. DATA / ITEMS SUPPLIED

- ABS, Injection Mould, grey
- Weight = 0.006 kg/piece

APPLICATIONS

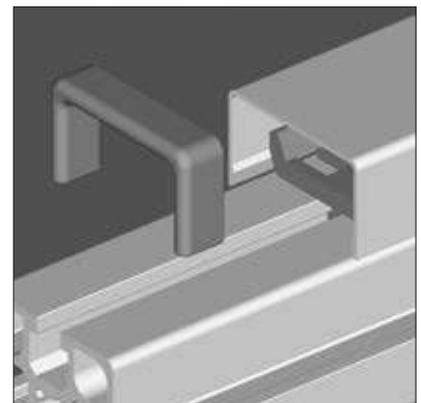
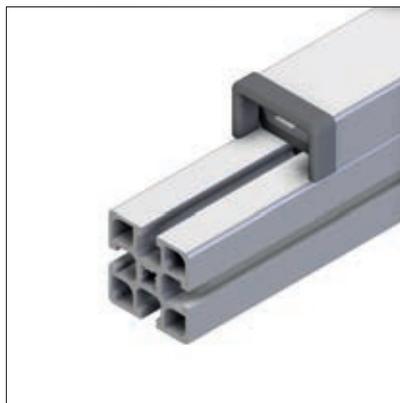
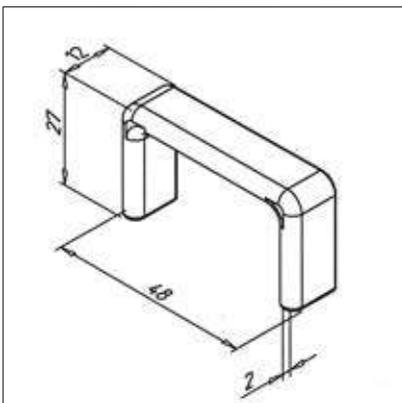
- Finish the cable duct 45
- Production of external angle with cable canal 45 AL

ASSEMBLY

- Simply push onto the end of the cable duct

Edge protection for conduit 45 AL

Part No. 22.1117/1



TECHN. DATA / ITEMS SUPPLIED

- ABS, Injection Mould, grey
- Weight = 0.005 kg/piece

APPLICATIONS

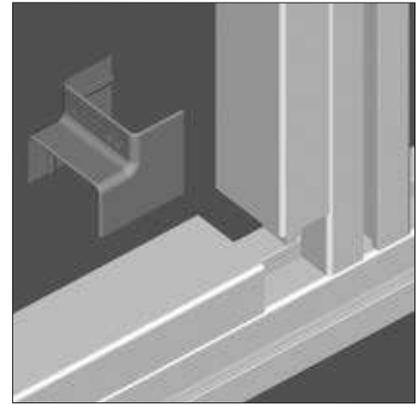
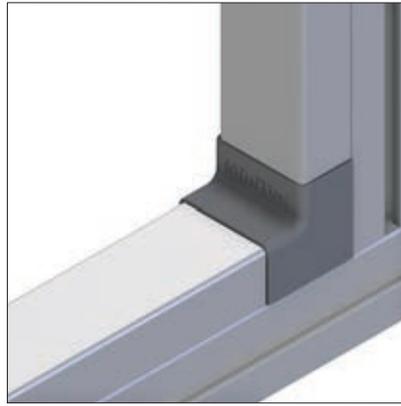
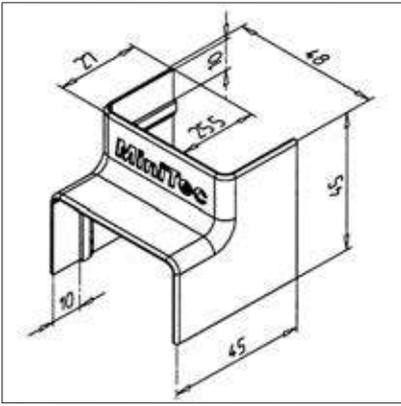
- Edge protection for Cabel Canal 45 AL

ASSEMBLY

- Simply push onto the end of the cable duct

Inner angle conduit 45 alu

Part No. 22.1118/1



TECHN. DATA / ITEMS SUPPLIED

- ABS, Injection Mould, grey
- Weight = 0.010 kg/piece

APPLICATIONS

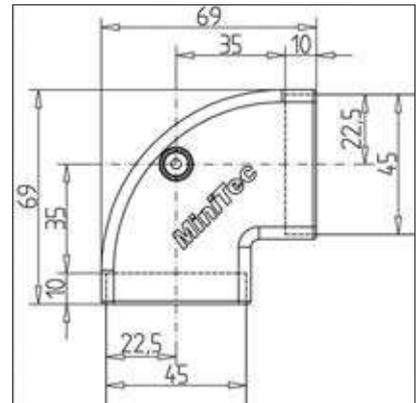
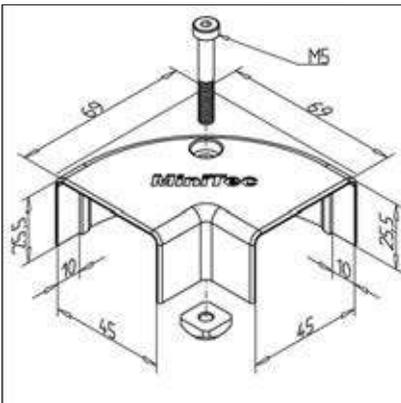
- Connecting cable canal 45 AL to internal angles

ASSEMBLY

- Clip the first side of cable duct on clamps.
- Insert the angle
- Clip on the second side of the cable duct and push until it stops

Angle 90° for conduit 45 AL

Part No. 22.1156/0



TECHN. DATA / ITEMS SUPPLIED

- ABS, Injection Mould, grey
- Fastening kit
- Weight = 0.026 kg/piece

APPLICATIONS

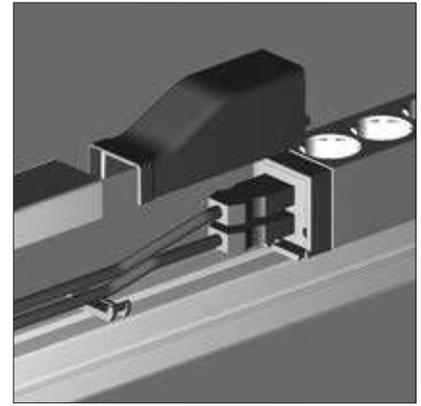
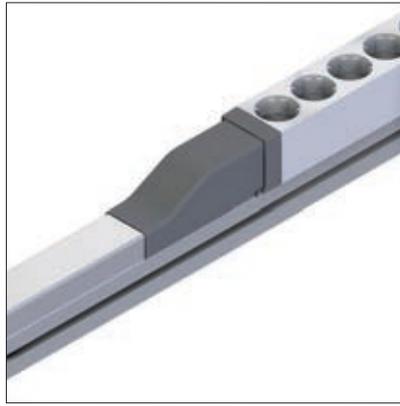
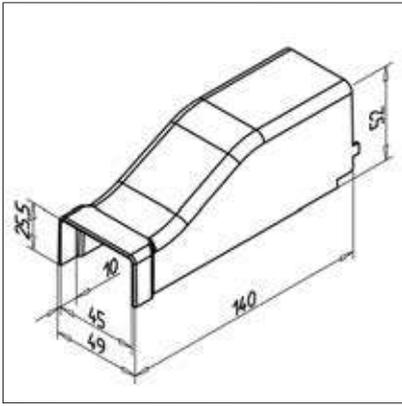
- Connection of cable canal 45 AL

ASSEMBLY

- Push on both channel ends 45, tighten the screw

Adapter cap, connector strip for conduit 45 AL

Part No. 22.1154/1



TECHN. DATA / ITEMS SUPPLIED

- ABS, Injection Mould, grey
- Weight = 0.034 kg/piece

APPLICATIONS

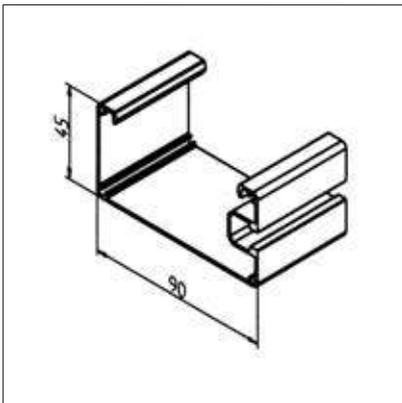
- Cover of cable canal 45 AL

ASSEMBLY

- Clip onto cable conduit 45

Conduit 90 alu

Part No. 20.1056/0



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, anodized E6/EV1
- Weight = 0.971 kg/m
- Bar length = 6 m

APPLICATIONS

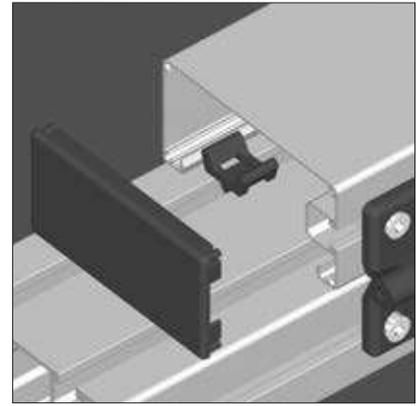
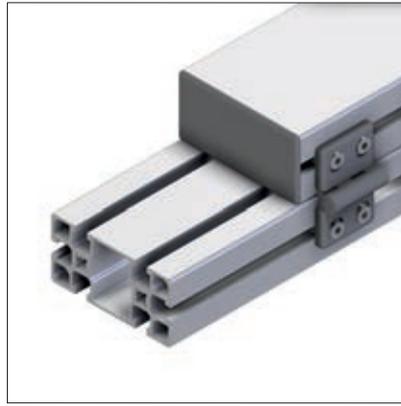
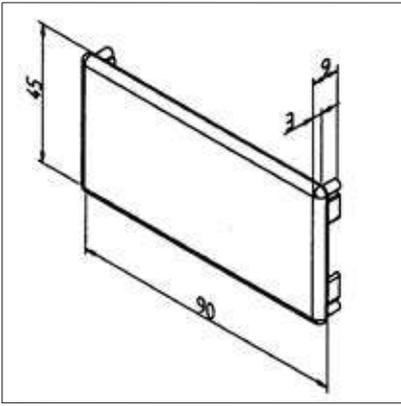
- Cover for cables and pneumatic hoses
- Suitable for MiniTec profiles, grid dimension: 90
- Can also be swung open, when used with hinges
- End ledges with integrated energy supply

ASSEMBLY

- 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 conduit 90 alu

Part No. 22.1045/0



TECHN. DATA / ITEMS SUPPLIED

- ABS, Injection Mould, grey
- Weight = 0.011 kg/piece

APPLICATIONS

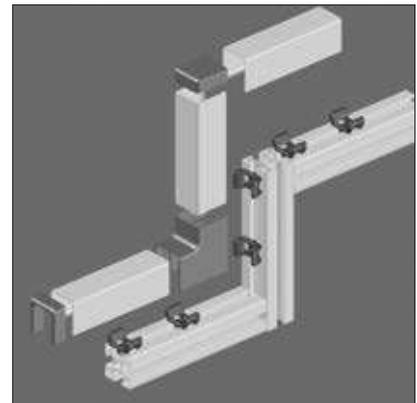
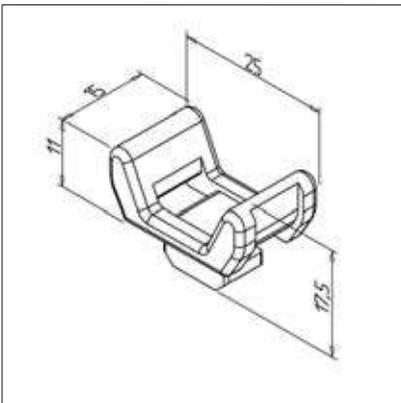
- Termination of cable canal 90 AL
- Constructions of corners on outside face

ASSEMBLY

- Simply push onto the end of the cable duct

Cable clip 27-30

Part No. 22.1212/0



TECHN. DATA / ITEMS SUPPLIED

- PA, Injection Mould, grey
- Weight = 0.002 kg/piece

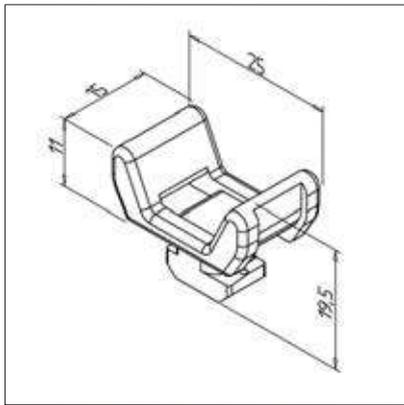
APPLICATIONS

- 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

ASSEMBLY

- 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

Cable clip 27-45



TECHN. DATA / ITEMS SUPPLIED

- PA, Injection Mould, grey
- Weight = 0.003 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

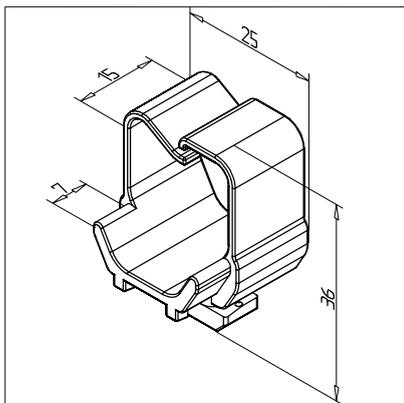
Part No. 22.1204/0



ASSEMBLY

- 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

Cable clip 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

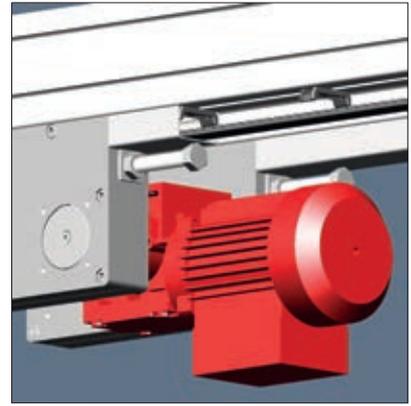
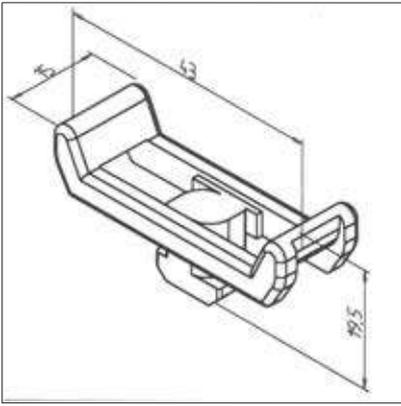


ASSEMBLY

- 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

Cable clip 45

Part No. 22.1210/0



TECHN. DATA / ITEMS SUPPLIED

- PA, Injection Mould, grey
- Weight = 0.004 kg/piece

APPLICATIONS

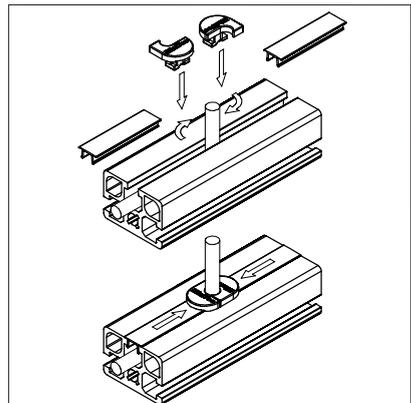
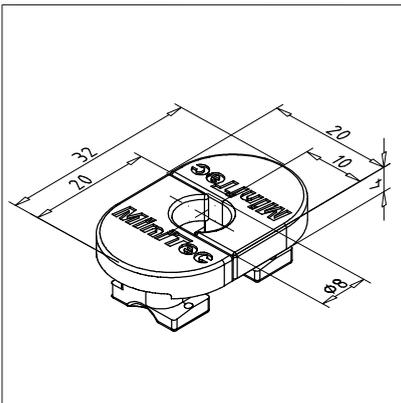
- Simple and rational fastening of cables and pneumatic hoses
- Suitable for conduit 45 AL

ASSEMBLY

- 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
- Cover of timing belt, chains etc.

Cable clamp 45

Part No. 22.1270/0



TECHN. DATA / ITEMS SUPPLIED

- ABS, Injection Mould, grey
- The cable clamp (2-part) consists of 2 identical components
- Weight = 0.028 kg/pair

APPLICATIONS

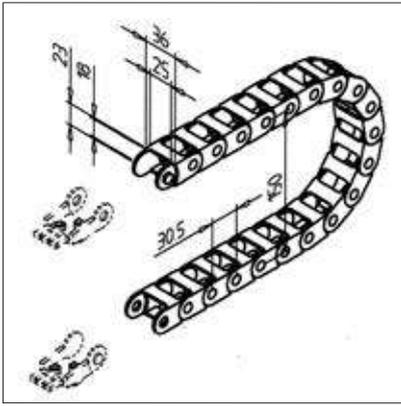
- For fixing cables and hoses laid in the profile groove
- For cables up to 8 mm diameter
- Please note the bending radius of the cables
- Use with all profiles of the 45 profile series

ASSEMBLY

- Swing both parts to the left and right of the cable into the profile groove, then push them together.
- An open-ended spanner SW 21 can be used for easier swinging in
- When using cover profiles to close the grooves, this can be pushed under the cable clamp approx. 4 mm deep

Energy chain R

Part No. 33.0410/0



TECHN. DATA / ITEMS SUPPLIED

- Plastic, black
- Without fastening kit
- Weight = 0.341 kg/m

APPLICATIONS

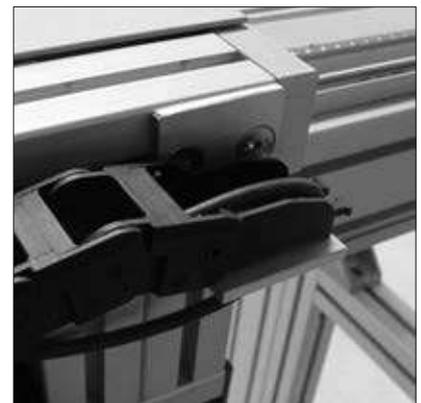
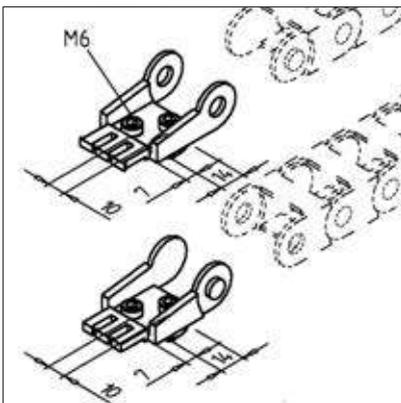
- Energy chain to bind cables and hoses on slides and movable elements

ASSEMBLY

- Fixing the energy chain means of connection elements **part no. 33.0411/0**

Mounting brackets for energy chain R

Part No. 33.0411/0



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

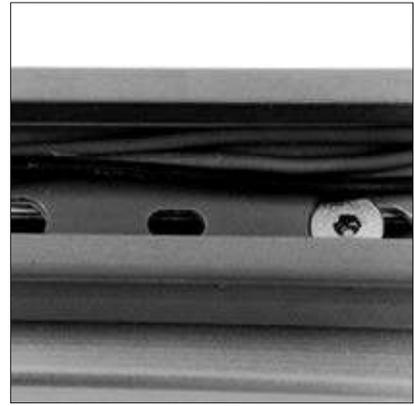
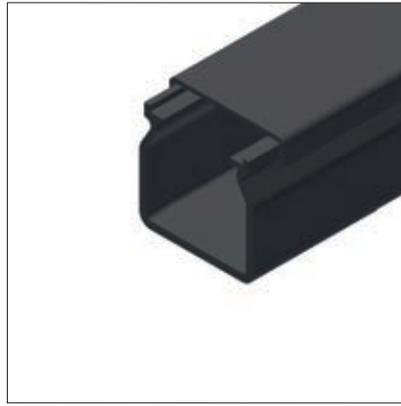
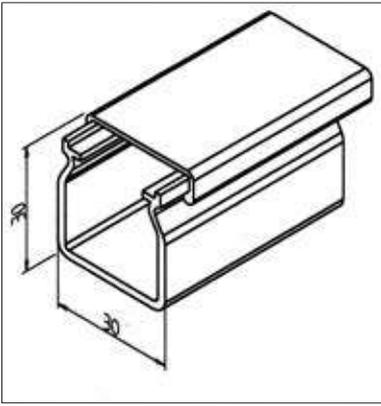
- For fixing the energy chain R **part no. 33.0410/0** on profile constructions

ASSEMBLY

- Fasten at a suitable place with supplied hardware
- Use cable tie band to fix cables and hoses

Conduit 32

Part No. 22.1082/0



TECHN. DATA / ITEMS SUPPLIED

- PVC, grey
- Snap-cover
- Weight = 0.275 kg/m
- Bar length = 2 m

APPLICATIONS

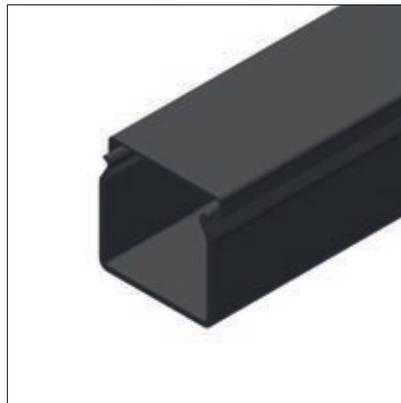
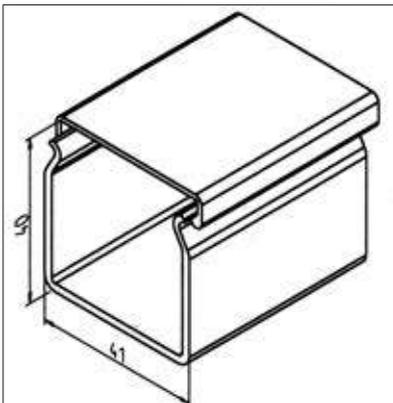
- Laying of cables and hoses in all types of construction

ASSEMBLY

- Fastening with screws M6 x 12 and rhombus-nut M6

Conduit 45

Part No. 22.1084/0



TECHN. DATA / ITEMS SUPPLIED

- PVC, grey
- Snap-cover
- Weight = 0.402 kg/m
- Bar length = 2 m

APPLICATIONS

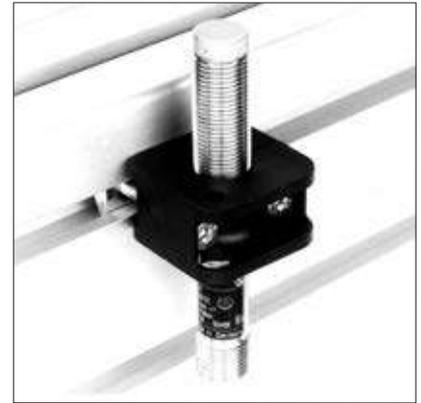
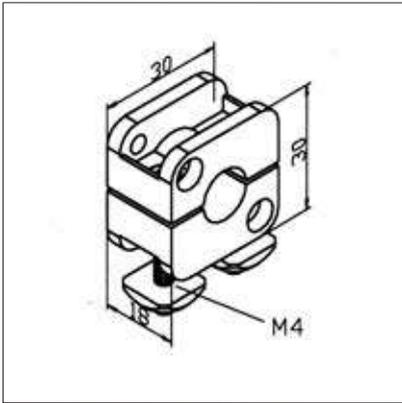
- Laying of cables and hoses in all types of construction

ASSEMBLY

- Fastening with screws M6 x 12 and rhombus-nut M6

Proximity switch holder 12

Part No. 28.0120/0



TECHN. DATA / ITEMS SUPPLIED

- Plastic, black
- With fastening material steel, zinc plated
- Ø 12 mm
- Weight = 0.036 kg/piece

APPLICATIONS

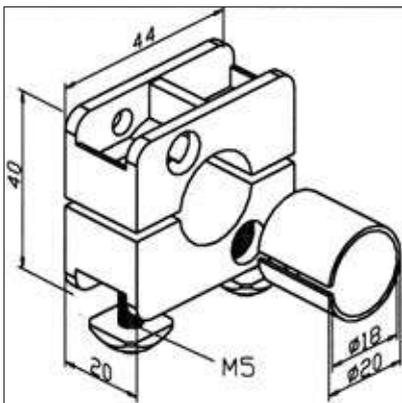
- Fixing of proximity switches Ø 12 mm in profile constructions and linear axes

ASSEMBLY

- Fasten to profile groove with supplied hardware

Proximity switch holder 18

Part No. 28.0121/0



TECHN. DATA / ITEMS SUPPLIED

- Plastic
- With fastening material steel, zinc plated
- Ø 18 mm
- Ø 20 mm
- Weight = 0.046 kg/piece

APPLICATIONS

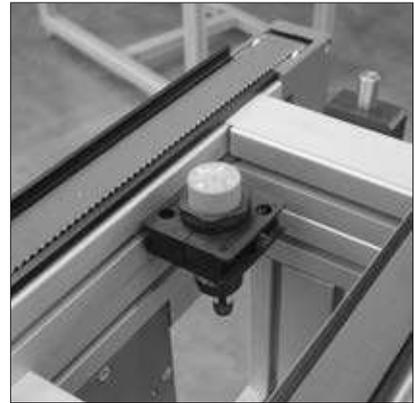
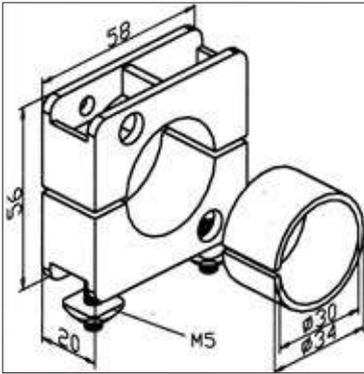
- Fixing of proximity switches Ø 18 mm and Ø 20 mm in profile constructions and linear axes

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

- Fixing of proximity switches Ø 30 mm and Ø 34 mm in profile constructions and linear axes

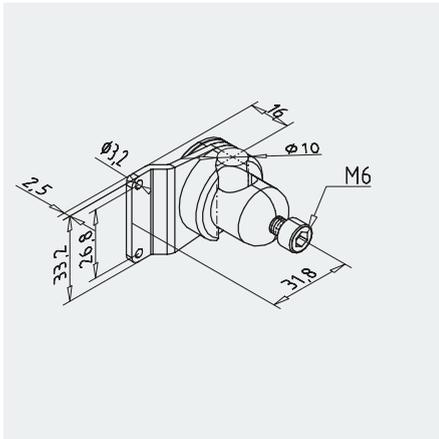
ASSEMBLY

- Fasten to profile groove with supplied hardware

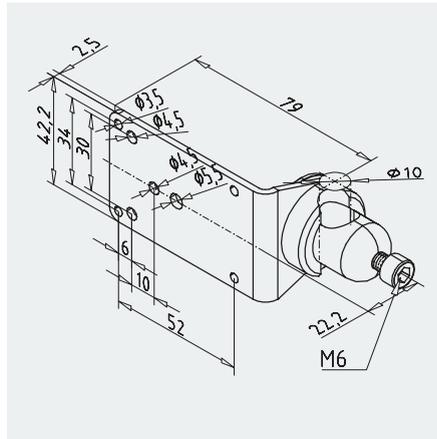
SENSOR HOLDERS

ALL SIDE SUPPORTS CAN BE COMBINED WITH ALL BEAMS

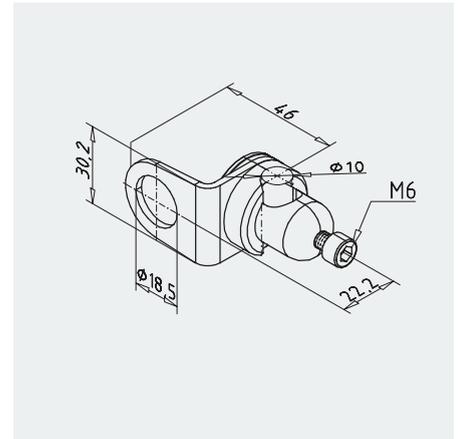
Carriers



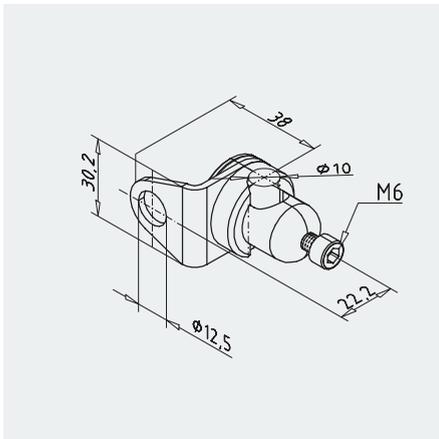
Part no. E1.0055/0
Fastened Syst. top 32



Part no. E1.0070/0
Fastened Syst. top 32

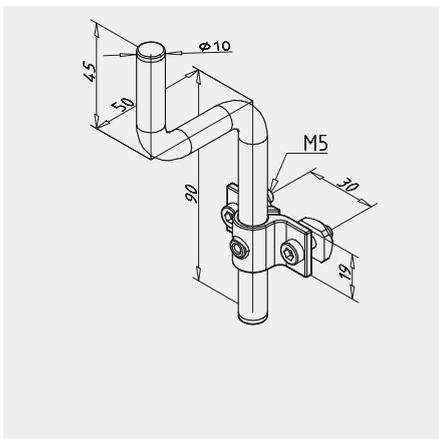


Part no. E1.0068/0
Fastened Syst. top M18

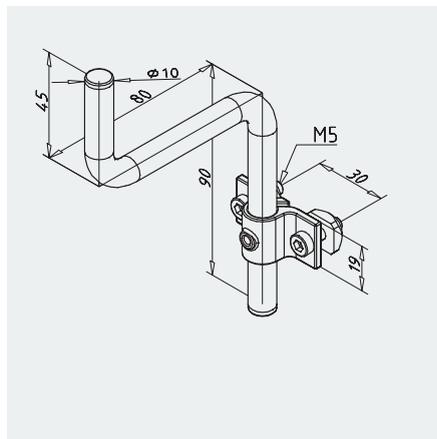


Part no. E1.0069/0
Fastened Syst. top M12

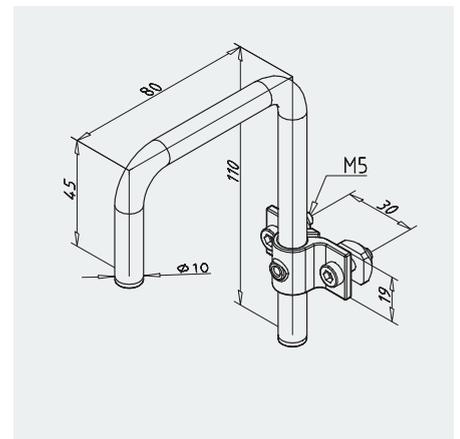
Lateral holders



Part no. 29.5046/2
Fastened below briefly



Part no. 29.5047/2
Fastened bottom long



Part no. 29.5048/2
Fastened bottom U-form

DRIVE AND CONTROL TECHNOLOGY



Electrical design, control cabinet production and software development

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.

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

Electrical designs

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.

Control cabinet production

Control 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.



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.



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.

Motors

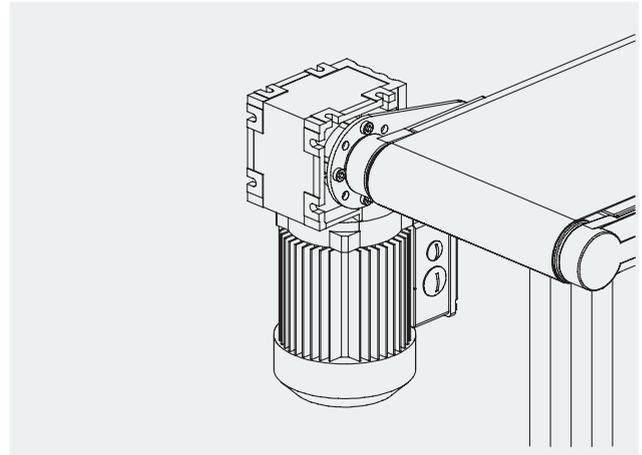
Plug-on motor suitable for conveyor belt series 45*

Technical Data

- Nominal voltage 230 / 400 V
- 50 Hz
- Degree of protection IP 54
- Weight approx. 6kg

A torque arm WA 10 part no. 295040/0 is required for attachment to a drum bearing 45.

Optionally available with holding brake or thermocouple, also with different position of the terminal box and cable inlet (data sheets on request)



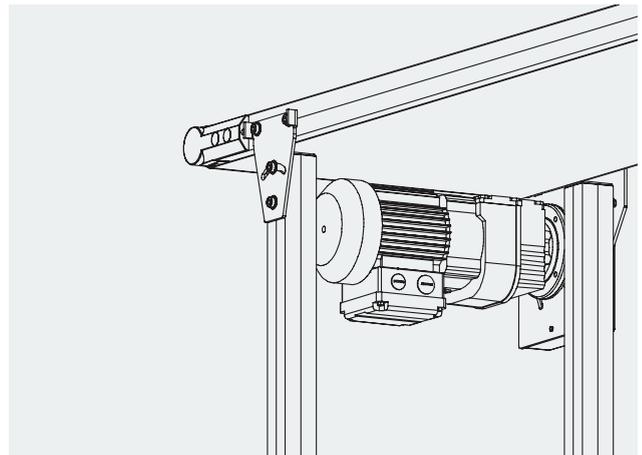
Type	Part no.	Power [W]	Output speed	Output torque	Conveyor belt 45 Conveyor speed
DSGM 90 - 18	33.0015/0	90	18 U/min	19 Nm	2,8 m/min
DSGM 90 - 23	33.0016/0	90	23 U/min	17 Nm	3,6 m/min
DSGM 90 - 35	33.0017/0	90	35 U/min	14 Nm	5,5 m/min
DSGM 120 - 50	33.0023/0	120	50 U/min	15 Nm	7,9 m/min
DSGM 120 - 71	33.0018/0	120	71 U/min	12 Nm	11,1 m/min
DSGM 120 - 84	33.0019/0	120	84 U/min	11 Nm	13,2 m/min
DSGM 120 - 135	33.0020/0	120	135 U/min	7 Nm	21,2 m/min
DSGM 120 - 168	33.0021/0	120	168 U/min	6 Nm	26,3 m/min

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)



Type	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 - 59 / F	33.0089/0	180	59 U/min	29 Nm	11,6 m/min
DGM-180 - 82 / F	33.0090/0	180	82 U/min	21 Nm	16,1 m/min
DGM-250-100 / F	33.0091/0	250	100 U/min	24 Nm	19,6 m/min
DGM-370-127 / F	33.0092/0	370	127 U/min	28 Nm	24,9 m/min
DGM-370-157 / F	33.0093/0	370	157 U/min	22 Nm	30,8 m/min

→ * from this motor series, other services and translations are available on request.

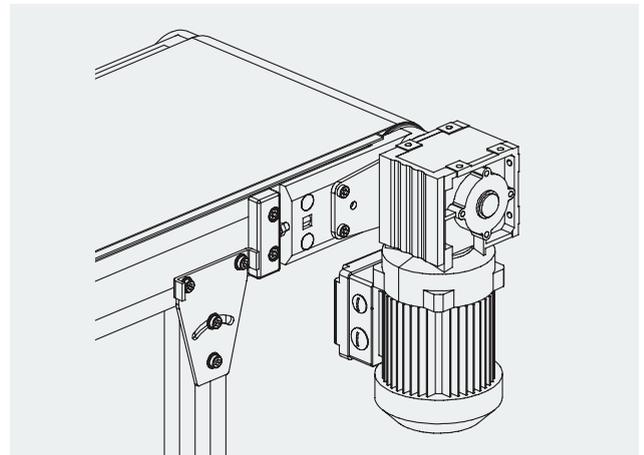
Plug-on motor suitable for conveyor belt series 90*

Technical Data

- Nominal voltage 230 / 400 V 50 Hz
- Degree of protection IP 54
- Weight approx. 7 - 13kg

A torque arm is required for attachment to a conveyor bearing 90. 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 inlet (data sheets on request)



Type	Part no.	Power [W]	Output speed	Output torque	Conveyor belt 90 Conveyor speed	Segmented chain conveyors Conveyor speed
DSGM 180 - 15	33.0080/0	180	15 U/min	47 Nm	4,5 m/min	7,5 m/min
DSGM 250 - 29	33.0081/0	250	29 U/min	42 Nm	8,7 m/min	14,8 m/min
DSGM 370 - 36	33.0082/0	370	36 U/min	62 Nm	10,7 m/min	18,3 m/min
DSGM 370-51	33.0083/0	370	51 U/min	48 Nm	15,2 m/min	14,9 m/min
DSGM 370-73	33.0084/0	370	73 U/min	38 Nm	21,8 m/min	37,1 m/min
DSGM 550-115	33.0085/0	550	115 U/min	35 Nm	34,3 m/min	58,5 m/min

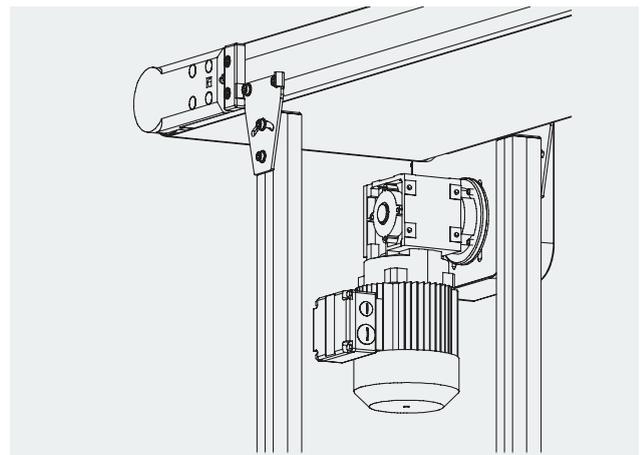
→ * From this motor series, other services and translations are available on request.

Flanged gear motor suitable for motor attachment kit 90*

Technical Data

- Nominal voltage 230 / 400 V
- 50 Hz
- Degree of protection IP 54
- Weight approx. 7 - 13 kg

Optionally available with holding brake, thermocouple or external fan, also with different position of the terminal box and cable inlet (data sheets on request)



Type	Part no.	Power [W]	Output speed	Output torque	Motor 90 attachment kit Conveyor speed	Center drive 3R Belt speed
DSGM 180 - 15 / F	33.0080/1	180	15 U/min	47 Nm	4,4 m/min	3,8 m/min
DSGM 250 - 29 / F	33.0081/1	250	29 U/min	42 Nm	8,7 m/min	7,3 m/min
DSGM 370 - 36 / F	33.0082/1	370	36 U/min	62 Nm	10,7 m/min	9,0 m/min
DSGM 370 - 51 / F	33.0083/1	370	51 U/min	48 Nm	15,2 m/min	12,8 m/min
DSGM 370 - 73 / F	33.0084/1	370	73 U/min	38 Nm	21,8 m/min	18,3 m/min
DSGM 550 - 115 / F	33.0085/1	550	115 U/min	35 Nm	34,3 m/min	28,9 m/min

Frequency converter FU 370 PP



ART.-NR. 33.0126/0

Technical Data

- Built-in on / off switch
- Mode 1Q (without brake chopper)
- Mains overvoltage and undervoltage monitoring
- Motor 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 housing
- 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
- Mains frequency 50 - 60 Hz
- Ambient temperature -20°C to + 40°C
- Heat loss at rated power 11 W
- Dimensions H / W / D: 232 x 161 x 179 mm

Magnetic measuring system

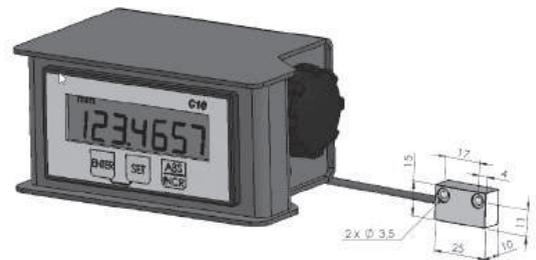
Magnetic measuring system ML

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 freedom from wear, the simple and cost-effective installation and high 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. A magnetic sensor is guided along this tape, at a small distance above it, but non-contact, and scans 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)

- Surface mounted housing, aluminium powder-coated RAL 5010, dimensions W = 125 mm, H = 65 mm, depth = 85 mm
- 6-digit LCD display, with 14mm digit height
- 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 temperature -5°C to +45° C
- Travel speed max. 3m/sec, counting frequency up to 1MHz
- Actual value memory / offset value, selectable
- Absolute - incremental switchover
- Measuring tolerance ± 0.1 mm/m



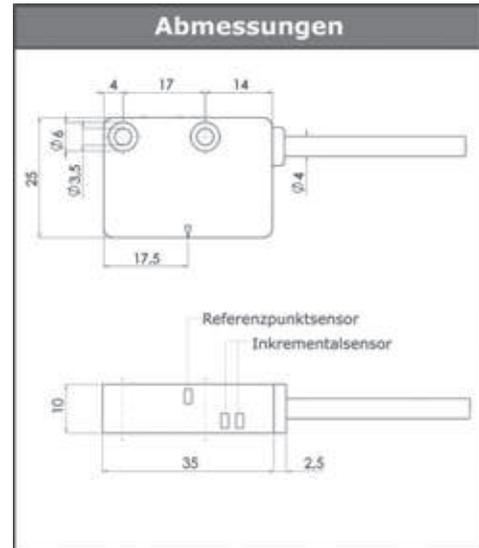
Measurement display for 230V connection Part no. 33.0036/0

- 6-digit LED display, with 14 mm digit height
- Surface mounted housing, aluminium powder-coated RAL 5010, dimensions W = 115 mm, H = 70 mm, depth = 120 mm
- Power supply 230V AC pluggable.
- Sensor connection via SuB-D 9-pin. pluggable, TTL 5VDC
- Operating temperature -5° C to +45° C
- Traversing 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 required cable length



Magnetic sensor with integrated evaluation unit Part no. 33.0037/0

- Non-contact measuring scanning unit with integrated digital evaluation electronics.
- Detection of 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 / Includes

- Magnetic tape for sticking onto MiniTec profiles incl. stainless steel masking tape
- Length max. 80 m, width 10 mm (option: tape 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 feeds

Assembly

- Stick magnetic tape onto profile surface, glue masking tape on the magnetic tape.
- Attach sensor to carriage
- Distance from the magnetic tape: 1.1 ± 0.9 mm

Note: Please specify required magnetic tape length (round up to full meter)



Pneumatic system

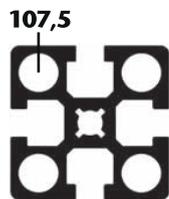
Visually attractive and economical solutions are possible with simultaneous use of the construction profiles as an air duct. The MiniTec standard profiles are particularly well suited for compressed air routing. Commercially available connections can be used without special connection components.

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 (\varnothing 11.7) 20 bar, otherwise max. 8 bar.

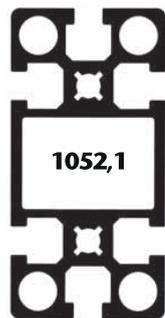
All standard profiles with round corner holes can be used as compressed air lines. Bore \varnothing 11.7 can be enlarged to G 1/4 to accommodate pneumatic connections or screw plugs. Air extraction at any point.

Usable cavities for compressed air ducts

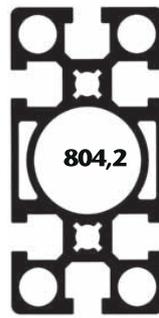
All area information in mm²



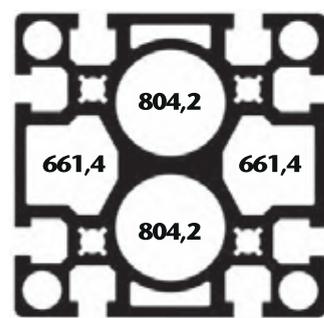
45 x 45
20.1006/0



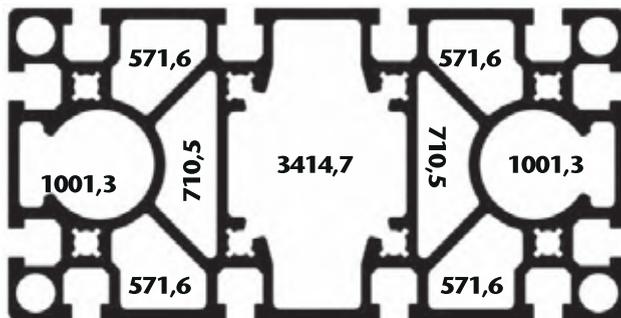
45 x 90
20.1009/0



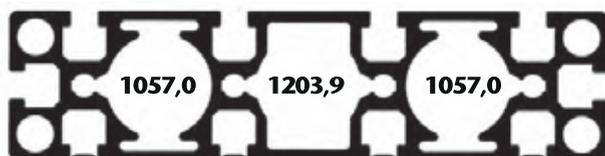
45 x 90 S
20.1017/0



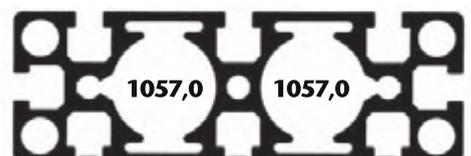
90 x 90 S
20.1019/0



90 x 180 S
20.1013/0



45 x 180 1G
20.1079/0



45 x 135 1G
20.1078/0

PNEUMATIC-PLATE 45, 45 x 90 and 90



Thread	Weight	Part no.
G 1/8"	0,170 kg	24.1107/0
G 1/4"	0,168 kg	24.1107/2
G 3/8"	0,165 kg	24.1107/3

Pneumatic plate 45

Technical Data/Items Supplied

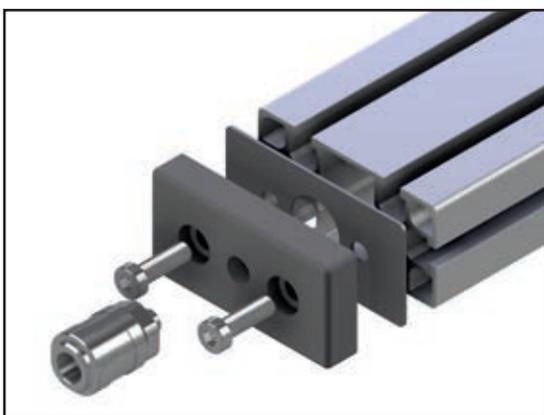
- Die-cast aluminum, powder-coated grey
- 1x O-Ring
- With fastening material

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 \varnothing 12 mm in the center of the profile



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

Pneumatic-plate 45 X 90

Technical Data/Items Supplied

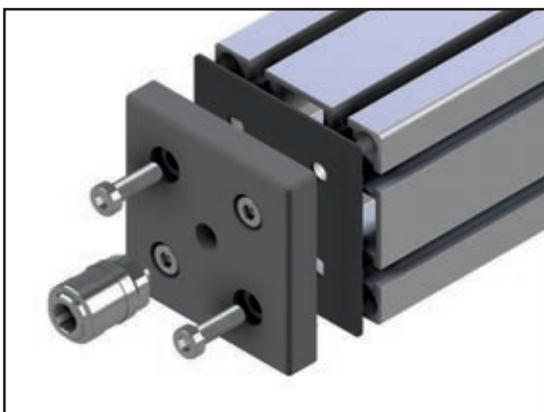
- Die-cast aluminum, powder-coated grey
- With sealing plate made of NBR
- With fastening material

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 \varnothing 7.5 mm (tightening torque 12 Nm)



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 90

Technical Data/Items Supplied

- Die-cast aluminum, powder-coated grey
- With sealing plate made of NBR
- With fastening material

Application

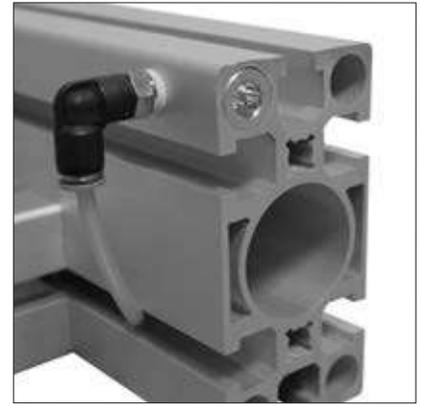
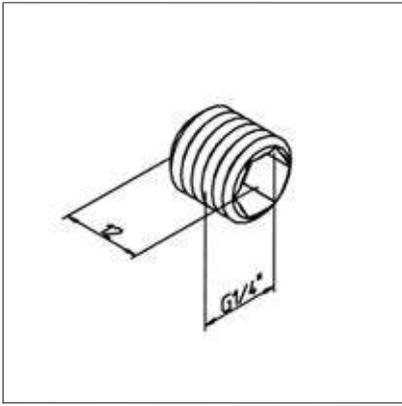
- Closure of the hollow chamber ends of profiles 90 x 90 for connection of pneumatic connections

Mounting

- Apply sealing plate
- With fastening material from scope of supply screw on 4 central holes \varnothing 7.5 mm (tightening torque 12 Nm)

Screw plug G1/4"

Part No. 24.1104/0



TECHN. DATA / ITEMS SUPPLIED

- Brass
- Weight = 0.005 kg/piece

APPLICATIONS

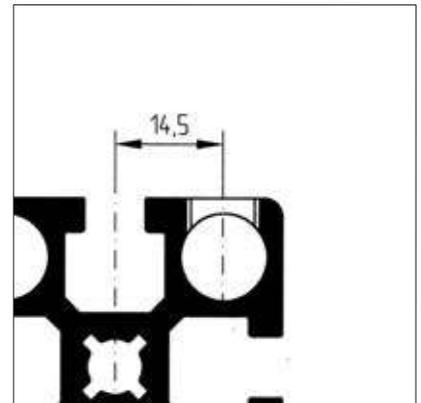
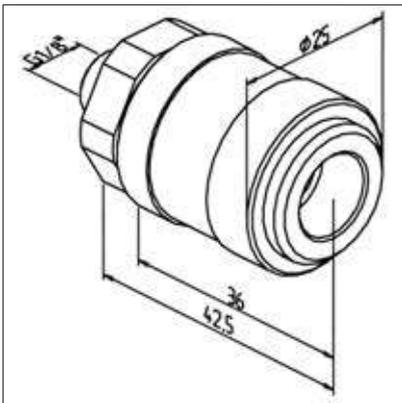
- Closure for profile chambers \varnothing 11,7 mm

ASSEMBLY

- Cut Thread G 1/4" in central hole d 11.7.
- Screw in the plug by using sealing tape

Quick connector 1/8"

Part No. 24.1109/0



TECHN. DATA / ITEMS SUPPLIED

- Brass, nickel-plated
- NW 7 mm
- Connecting thread G 1/8", SW 22
- Weight = 0.087 kg/piece

APPLICATIONS

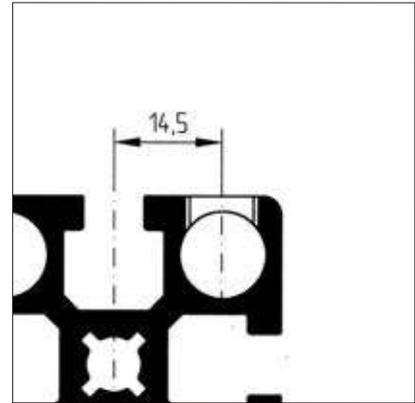
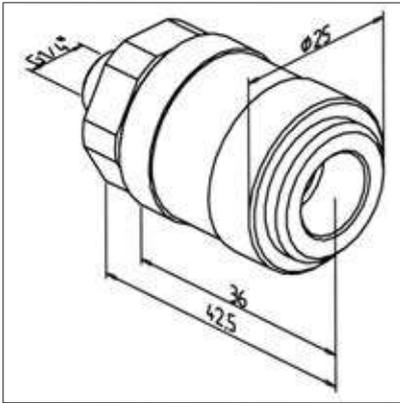
- To connect directly to the profile panel or frontally at the bore \varnothing 11.7 mm

ASSEMBLY

- Thread G 1/8 in profile face, distance thread centre from centre of profile groove: 14.5 mm

Quick connector 1/4"

Part No. 24.1110/0



TECHN. DATA / ITEMS SUPPLIED

- Brass, nickel-plated
- NW 7 mm
- Connecting thread G 1/4", SW 22
- Weight = 0.087 kg/piece

APPLICATIONS

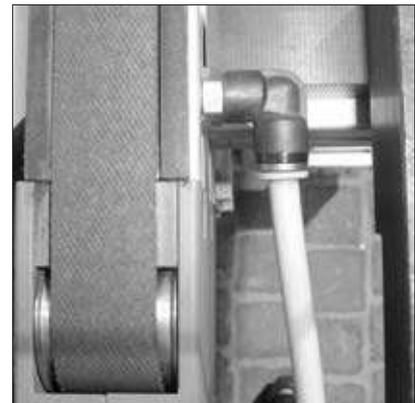
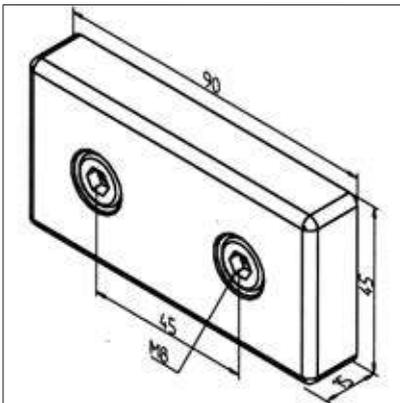
- To connect directly to the profile panel or frontally at the bore Ø 11.7 mm

ASSEMBLY

- Thread G 1/4 in profile face, distance thread centre from centre of profile groove: 14.5 mm

Pneumatic end plate 45 x 90

Part No. 24.1105/7



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, Pressure die-casting, powder-coated, grey
- With sealing plate of NBR, black
- Fastening kit
- Weight = 0.180 kg/piece

APPLICATIONS

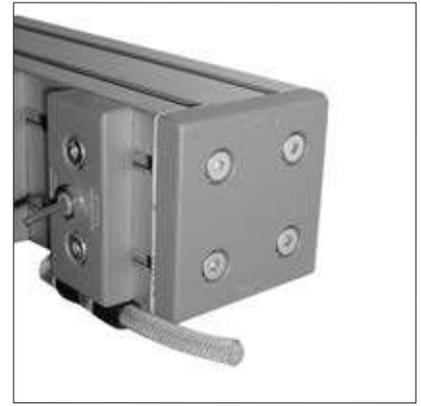
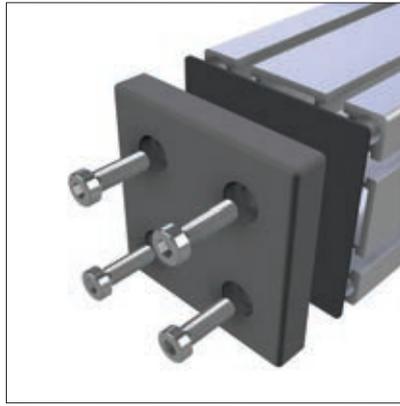
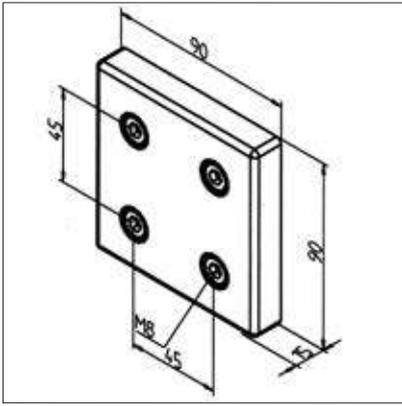
- Closing of chamber ends of profiles 45 x 90

ASSEMBLY

- Insert sealing plate
- Screw in with fastening material from items supplied

Pneumatic end plate 90 x 90

Part No. 24.1106/7



TECHN. DATA / ITEMS SUPPLIED

- Aluminium, Pressure die-casting, powder-coated, grey
- With sealing plate of NBR, black
- Fastening kit
- Weight = 0.430 kg/piece

APPLICATIONS

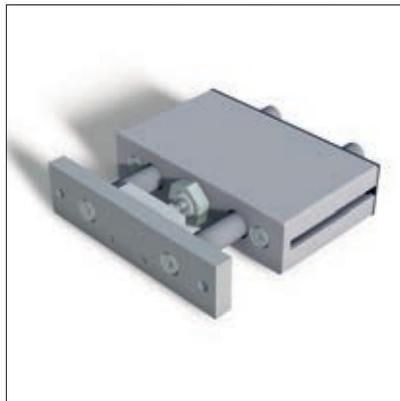
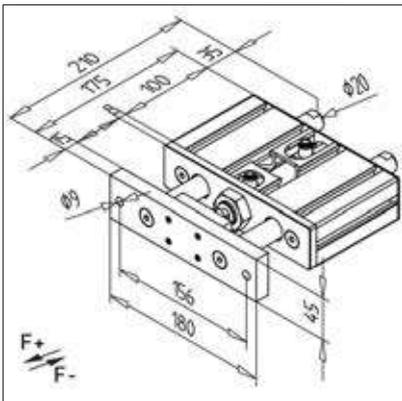
- Closing of chambers of profiles 90 x 90 for connection of pneumatic couplings

ASSEMBLY

- Insert sealing plate
- Screw in with fastening material from items supplied.

Pneumatic lifting unit 15

Part No. 24.1201/0



TECHN. DATA / ITEMS SUPPLIED

- Incorporated into profile 45 x 180
- Overall cylinder size \varnothing 25 mm
- Guide shafts \varnothing 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

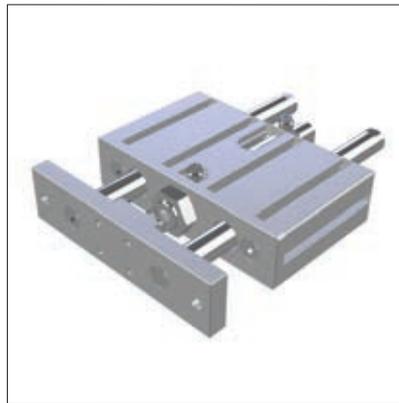
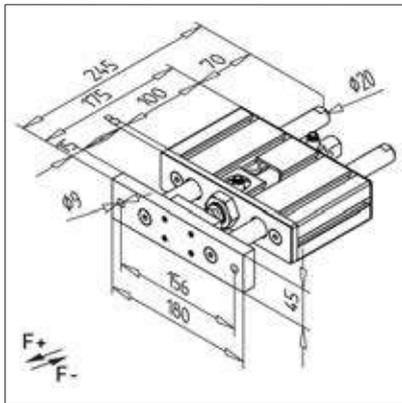
- Lifting and lowering of loads
- Attachment for grips or similar
- Positioning of parts

ASSEMBLY

- With mounting angle bracket on profile construction
- Other stroke lengths on request

Pneumatic lifting unit 50

Part No. 24.1205/0



TECHN. DATA / ITEMS SUPPLIED

- Incorporated into profile 45 x 180
- Overall cylinder size \varnothing 25 mm
- Guide shafts \varnothing 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

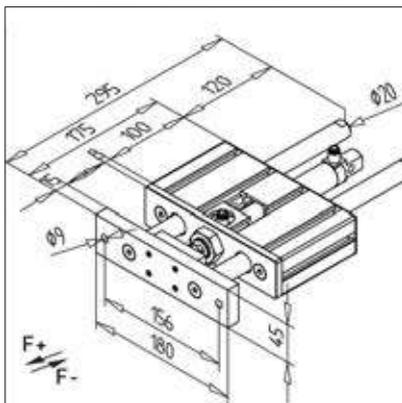
- Lifting and lowering of loads
- Attachment for grips or similar
- Positioning of parts

ASSEMBLY

- With mounting angle bracket on profile construction
- Other stroke lengths on request

Pneumatic lifting unit 100

Part No. 24.1210/0



TECHN. DATA / ITEMS SUPPLIED

- Incorporated into profile 45 x 180
- Overall cylinder size \varnothing 25 mm
- Guide shafts \varnothing 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

ASSEMBLY

- 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-action
- Minimum load for retraction approx. 7 kg per cylinder
- Temperature range from -20°C to + 45°C

Application

- Lifting, lowering, tilting tables, worktops, desks, workbenches, fixtures, etc.

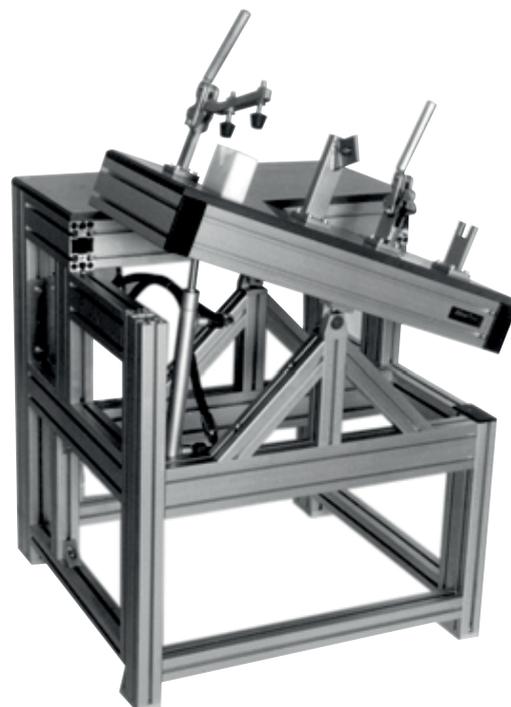
Assembly

- Use M6 screws to tightly screw the pump in a suitable place in the profile groove
- Install built-in cylinder in aluminium profile "S"
- Mount the add-on cylinder on 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 \varnothing 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.



Complete system with add-on cylinder LA / Built-in cylinder LB

Complete system with add-on cylinder LA - manual



PUMP	PA	PA	PB	PB	PB	PB
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	PB	PB	PB	PB
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

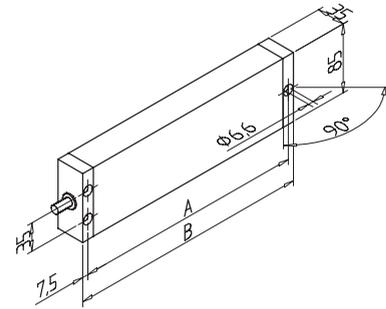
Complete system with built-in cylinder LB - electric

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

Hydraulics

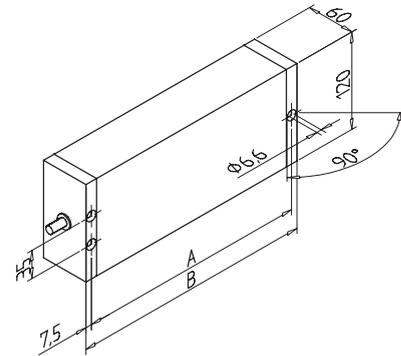
Hydraulic pumps PA for 1-2 cylinders

TYPE	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

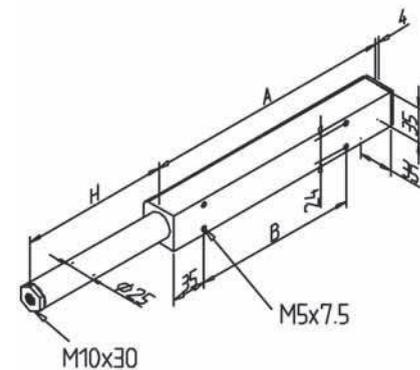
TYPE	Stroke H mm	Dimension A mm	Dimension B mm
PB 150	150	283,5	298,5
PB 200	200	343,5	358,5
PB 300	300	465,5	480,5
PB 400	400	585,5	600,5
PB 500	500	707,5	722,5



Add-on cylinder LA

TYPE	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.

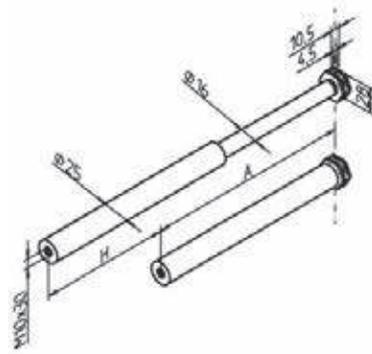


Hydraulics

Built-in cylinder LB, fastening kit 45 for built-in cylinder, fastening kit 90 for built-in cylinder

Add-on cylinder LB

TYPE	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

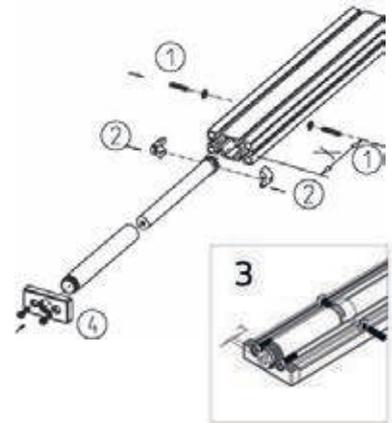


Fastening kit 45 for installation cylinder (Part No. 27.0005/0)

Suitable for all stroke lengths as well as for profile 45x90S, 45x135G and 45x180G

Assembly

1. Drill profile according to measurement table (dimension X) \varnothing 8,5 mm
2. Place 2 retainers on cylinder and push into profile chamber \varnothing 32 mm
3. Insert the centring hole into the retainers (through hole distance X), then fix with setscrew
4. Screw guide tube into base plate, push into 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

1. Drill profile according to measurement table (dimension X) \varnothing 8,5 mm
2. Place 2 holders on cylinder and insert in profile chamber \varnothing 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