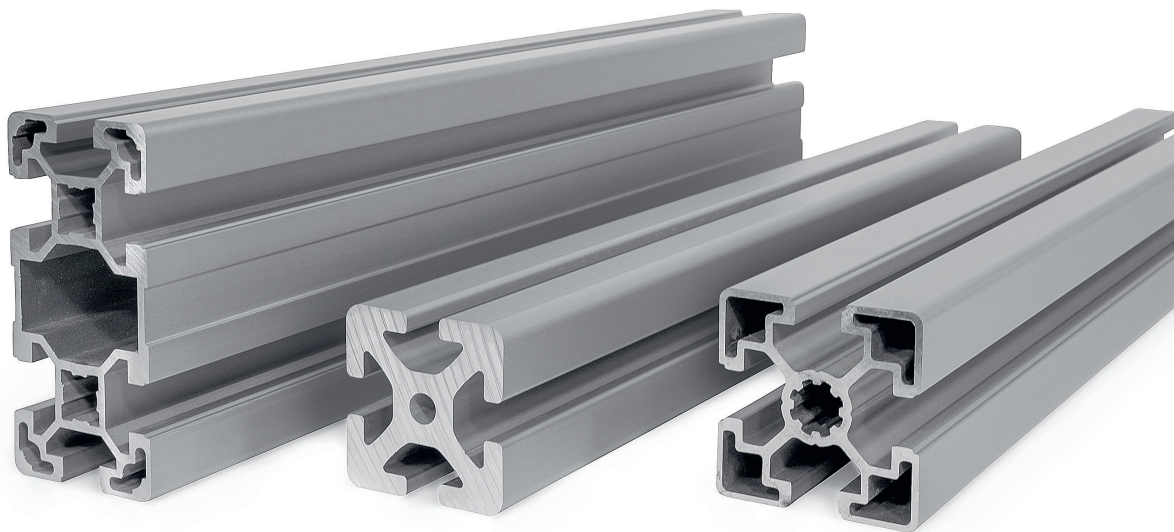




Highlights

Aluminum Profiles



Standard Parts. **Ganter.**

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b-Modular System

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With the publication of this catalogue, all previous issues become invalid. Technical details are subject to change without notice. The details given herein comply with state of the art engineering at the time of printing. We reserve the right to amend errors and to remove individual articles from the product assortment. The products listed in this catalogue have been developed as standard products with the aim of covering the widest possible spectrum of requirements. We cannot be held liable and responsible for special applications involving extraordinary or unusual uses or requirements concerning our products. Our design department will be pleased to answer questions on certain product properties such as missing tolerance, dimensional details or strength classes. All rights in the catalogue are held by Otto Ganter GmbH & Co. KG. Reprints, also in extracts, are not permitted.
Otto Ganter GmbH & Co. KG, March 2024

Product Overview i-Modular System

Aluminum Profiles



**GN 10i
Aluminum Profiles**
with Open Slots
on All Sides,
Profile Type Light
[Page 4](#)



**GN 10i
Aluminum Profiles**
with Open Slots
on All Sides,
Profile Type Heavy
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**GN 11i
Aluminum Profiles**
with Partially
Closed Slots,
Profile Type Light
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T-Nuts



**GN 50i
T-Nuts**
Steel / Stainless Steel
[Page 8](#)

Connectors



**GN 20i
Standard Connectors**
Steel
[Page 10](#)



**GN 22i
Universal Connectors**
Zinc Die Casting
[Page 12](#)



**GN 23i
Automatic Connectors**
Steel,
Right-Angled Connection
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**GN 23i
Automatic Connectors**
Steel,
End Face Connection
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Angle Brackets



**GN 30i
Angle Brackets**
Zinc Die Casting
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**GN 30i
Angle Brackets**
Zinc Die Casting,
with Fastening Set
and Cover Cap
[Page 18](#)

Angels Brackets

continued



**GN 32i
Angle Connectors**
Aluminum,
Corner Installation
[Page 20](#)



**GN 32i
Angle Connectors**
Aluminum,
Single and Double
Installation
[Page 21](#)

Joints



**GN 41i
Rotating
Angle Brackets**
Zinc Die Casting
[Page 23](#)



**GN 42i
Rotating
Angle Brackets**
Zinc Die Casting
[Page 24](#)

Cover Caps



**GN 60i
Cover Caps**
Plastic
[Page 25](#)

Cover Profiles



**GN 70i
Cover and
Edging Profiles**
Plastic
[Page 26](#)

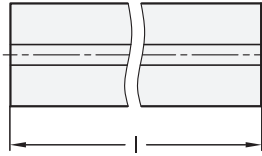
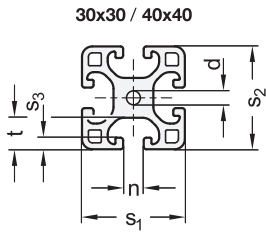


**GN 71i
Cover Profiles**
Aluminum
[Page 27](#)

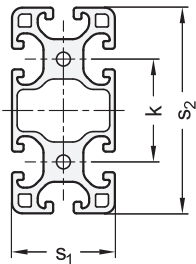
Base Plates



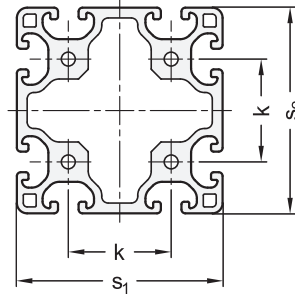
**GN 80i
Transport and
Base Plates**
Zinc Die Casting
[Page 28](#)



30x30 / 40x40



60x60 / 80x80



4 Profile type

L Light

1 s_1	2 s_2	3 n	6 Length l +1,5mm in meters		7 Bundle Pieces	d	k	s_3	t	Grid size
30	30	6	2	3	4	5	-	3	9,75	30
30	60	6	2	3	2	5	30	3	9,75	30
40	40	8	2	3	4	6,8	-	4,5	12,25	40
40	80	8	2	3	2	6,8	40	4,5	12,25	40
60	60	6	2	3	1	5	30	3	9,75	30
80	80	8	2	3	1	6,8	40	4,5	12,25	40

Specification

- Aluminum Anodized, natural color **N**
- *Technical Data* → Page 62
- **RoHS**

Accessory

- T-Nuts GN 50i → Page 8
- Cover Caps GN 60i → Page 25
- Cover and Edging Profiles GN 70i → Page 26
- Cover Profiles GN 71i → Page 27
- Transport and Base Plates GN 80i → Page 28



Information

Aluminum profiles GN 10i are produced by extrusion molding. They can be used, for example, to easily construct protective enclosures, work-place equipment or jigs.

Aluminum profiles in combination with the removable and reusable accessories form a flexible modular system. Attachments can be fastened to either the slots or the end faces via the holes.

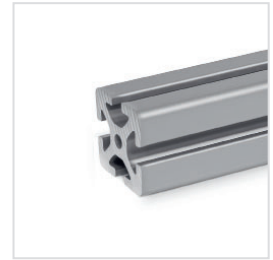
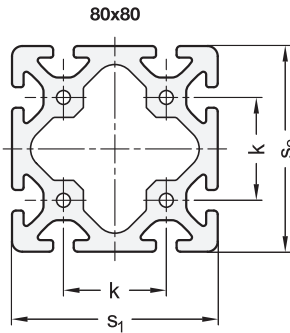
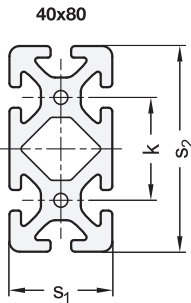
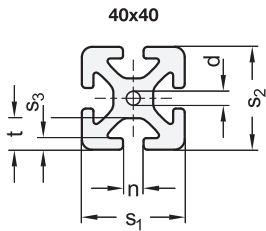
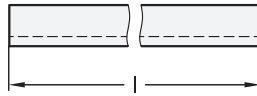
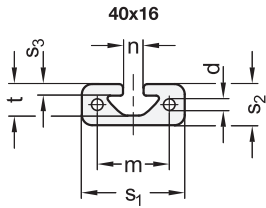
The profile type light is typically used for small loads or for weight-optimized constructions.

Aluminum profiles are supplied in bundles. The table shows the quantity included in each bundle.

How to order

1 s_1
2 s_2
3 n
4 Profile type
5 Finish
6 Length l
7 Bundle

GN 10i-4040 8 L-N-2-4



4 Profile type
S Heavy

1 s ₁	2 s ₂	3 n	6 Length l +1,5mm in meters	7 Bundle Pieces	d	k	m	s ₃	t	Grid size
40	16	8	2 3	4	5	-	28	4,5	12,25	40
40	40	8	2 3	4	6,8	-	-	4,5	12,25	40
40	80	8	2 3	2	6,8	40	-	4,5	12,25	40
80	80	8	2 3	1	6,8	40	-	4,5	12,25	40

Specification

- Aluminum
- Anodized, natural color **N**
- *Technical Data* → Page 62
- **RoHS**

Accessory

- T-Nuts GN 50i → Page 8
- Cover Caps GN 60i → Page 25
- Cover and Edging Profiles GN 70i → Page 26
- Cover Profiles GN 71i → Page 27
- Transport and Base Plates GN 80i → Page 28

Information

Aluminum profiles GN 10i are produced by extrusion molding. They can be used, for example, to easily construct protective enclosures, work-place equipment or jigs.

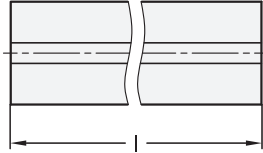
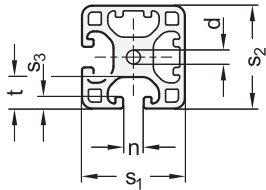
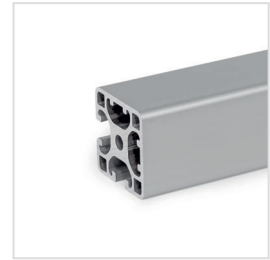
Aluminum profiles in combination with the removable and reusable accessories form a flexible modular system. Attachments can be fastened to either the slots or the end faces via the holes.

Aluminum profiles are supplied in bundles. The table shows the quantity included in each bundle.

How to order

1 s ₁
2 s ₂
3 n
4 Profile type
5 Finish
6 Length l
7 Bundle

GN 10i-4040 8 S-N-2-4



4 Profile type

N Light, 2 sides closed, offset by 90°

1 s_1	2 s_2	3 n	6 Length l +1,5 mm in meters		7 Bundle Pieces	d	s_3	t	Grid size
40	40	8	2	3	4	6,8	4,5	12,25	40

Specification

- Aluminum Anodized, natural color
- *Technical Data* → Page 62
- RoHS



● **N**

Accessory

- T-Nuts GN 50i → Page 8
- Cover Caps GN 60i → Page 25
- Cover and Edging Profiles GN 70i → Page 26
- Cover Profiles GN 71i → Page 27
- Transport and Base Plates GN 80i → Page 28

Information

Aluminum profiles GN 11i with partially closed slots are produced by extrusion molding. They can be used, for example, to easily construct protective enclosures, workplace equipment or partition walls, when an attractive appearance is required.

Aluminum profiles in combination with the removable and reusable accessories form a flexible modular system. Attachments can be fastened to either the slots or the end faces via the holes.

The closed profile sides facilitate cleaning. The profile type light is typically used for small loads or for weight-optimized constructions.

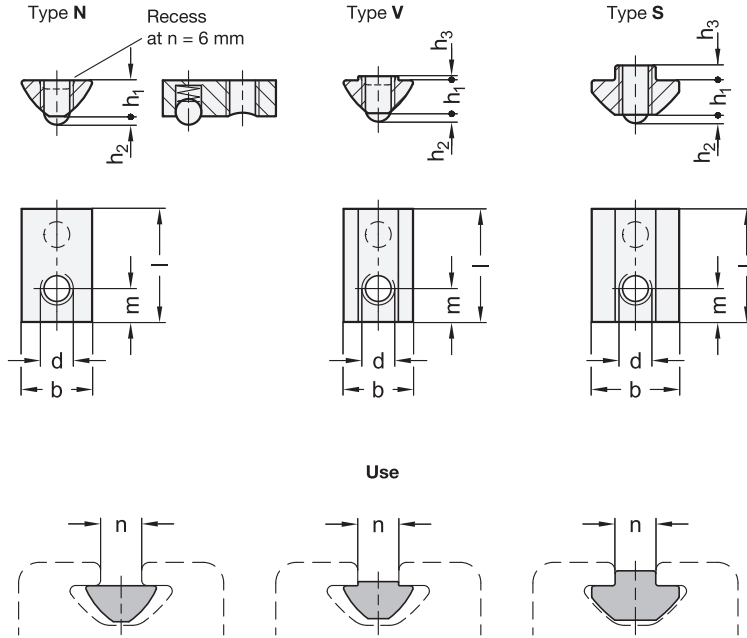
Aluminum profiles are supplied in bundles. The table shows the quantity included in each bundle.

How to order	1 s_1
	2 s_2
	3 n
	4 Profile type
	5 Finish
	6 Length l
	7 Bundle

GN 11i -4040 8 N-N-2-4



Product Overview (i-Modular System)



- 3 Type**
- N** Without anti-twist protection
 - V** With anti-twist protection
 - S** Heavy

1 2

Type N													
n	d				Stainless steel				b ≈	h ₁ ≈	h ₂ ≈	Length l	m ≈
	Steel	Steel	Steel	Steel	Steel	Steel	Steel	Steel					
5	M 3	M 4	M 5	-	M 4	M 5	-	-	8	4	0,8	11,5	4
6	M 3	M 4	M 5	M 6	-	-	-	-	11	6	0,9	17	5
8	M 4	M 5	M 6	M 8	M 4	M 5	M 6	M 8	14	7	1,6	23	7

1 2

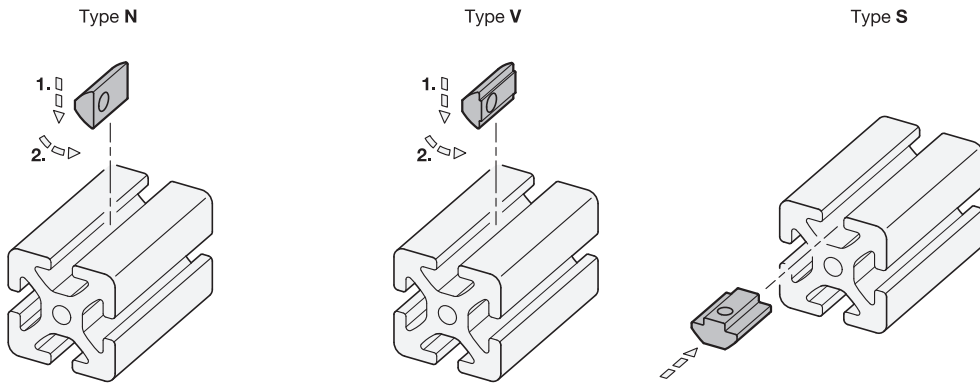
Type V														
n	d				Stainless steel				b ≈	h ₁ ≈	h ₂ ≈	h ₃ ≈	Length l	m ≈
	Steel	Steel	Steel	Steel	Steel	Steel	Steel	Steel						
5	M 3	M 4	M 5	-	-	-	-	-	8	4	0,8	0,7	11,5	4
6	M 3	M 4	M 5	M 6	-	M 5	M 6	-	11	6	0,9	0,5	17	5
8	M 3	M 4	M 5	M 6	M 8	-	-	-	14	7	1,6	0,8	23	7

1 2

Type S													
n	d				b ≈	h ₁ ≈	h ₂ ≈	h ₃ ≈	Length l	m ≈			
	Steel	Steel	Steel	Steel									
8	M 4	M 5	M 6	M 8	18	7	1,6	2,8	23	7			



Assembly Instructions



Specification

- Steel, zinc plated, blue passivated
- Stainless steel, plain finish
- RoHS



SZ
NB

Information

T-nuts GN 50i fasten attachments and accessories in the slot of aluminum profiles.

The spring-loaded ball secures the T-nut against unwanted slipping within the slot, making installation easier.

T-nuts of types N and V can be swiveled into the slot at any position.

see also...

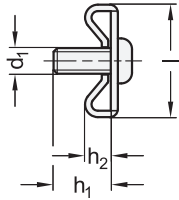
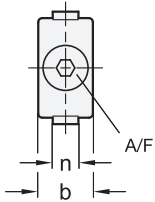
- Aluminum Profiles GN 10i (Profile Type Light) → Page 4
- Aluminum Profiles GN 10i (Profile Type Heavy) → Page 5
- Aluminum Profiles GN 11i (with Partially Closed Slots) → Page 6

How to order

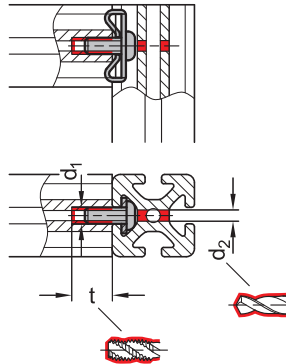
GN 50i-8M6-V-SZ



1	n
2	d ₁
3	Type
4	Material / Finish

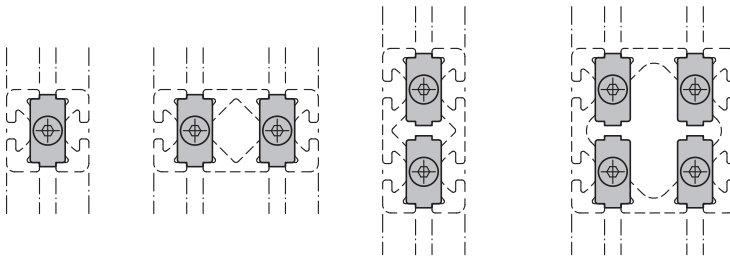


Assembly / profile machining



- 2** Type
D Doubled
- 3** Coding
C With screw

Use



1

5

n	Bundle Pieces	b	d ₁	d ₂	h ₁ ≈	h ₂ ≈	Length l ≈	A/F	t	Tightening torque in Nm
6	4	13	M 6	5,5	12	7,5	28,5	4	15	10
8	4	17	M 8	7	18	10	35	5	18	25

Specification

- Steel, zinc plated, blue passivated **SZ**
- RoHS

4

Information

Standard connectors GN 20i fasten aluminum profiles at right angles and secure them against twisting. This requires machining of both profiles. The internal thread can be cut directly into the end face profile holes.

If panels are used in the slot, they must be suitably pocketed.

Standard connectors are supplied in bundles. The table shows the quantity included in each bundle.

see also...

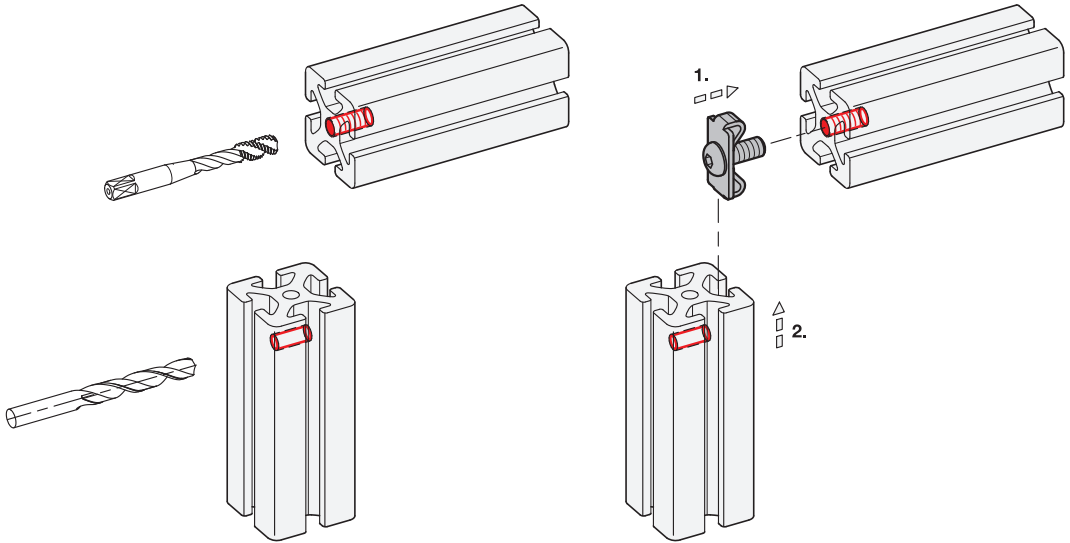
- [Assembly Instructions / Profile Machining](#) → Page 11
- [Aluminum Profiles GN 10i \(Profile Type Light\)](#) → Page 4
- [Aluminum Profiles GN 10i \(Profile Type Heavy\)](#) → Page 5
- [Aluminum Profiles GN 11i \(with Partially Closed Slots\)](#) → Page 6

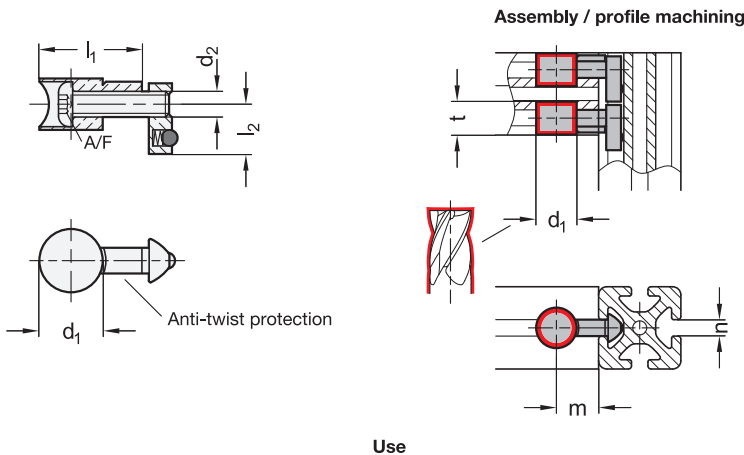
How to order

1	n
2	Type
3	Coding
4	Material / Finish
5	Bundle

GN20i-8-D-C-SZ-4

Assembly Instructions / Profile Machining





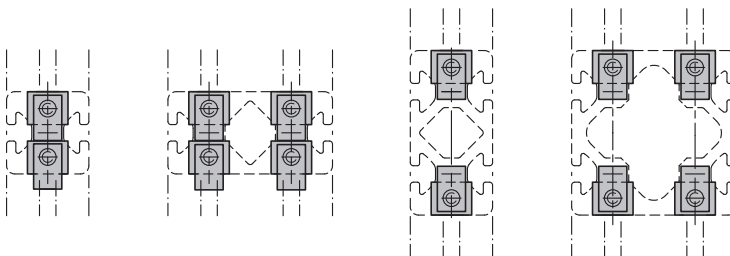
2 Type

V With anti-twist protection

3 Coding

C With screw and T-nut

Use



1

6

n	Bundle Pieces	d ₁	d ₂	l ₁	l ₂	m +0,5	A/F	t +0,5	Tightening torque in Nm
6	4	16	M 6	25,5	11,5	15	4	12,7	8
8	4	20	M 8	33,5	15,5	20	5	16	25

Specification

4 5

- Housing
Zinc die casting, zinc plated **ZZ**
- Screw and T-nut
Steel, zinc plated, blue passivated **SZ**
- RoHS

Information

Universal connectors GN 22i fasten aluminum profiles together at right angles and, when used in pairs, secure them against twisting. Only one profile has to be machined.

The connection can be freely positioned and slid along the slot. The anti-twist protection can be easily removed thanks to its predetermined breaking point, allowing installation at any angle relative to the profile slot. If panels are used in the slot, they must be suitably pocketed.

Universal connectors are supplied in bundles. The table shows the quantity included in each bundle.

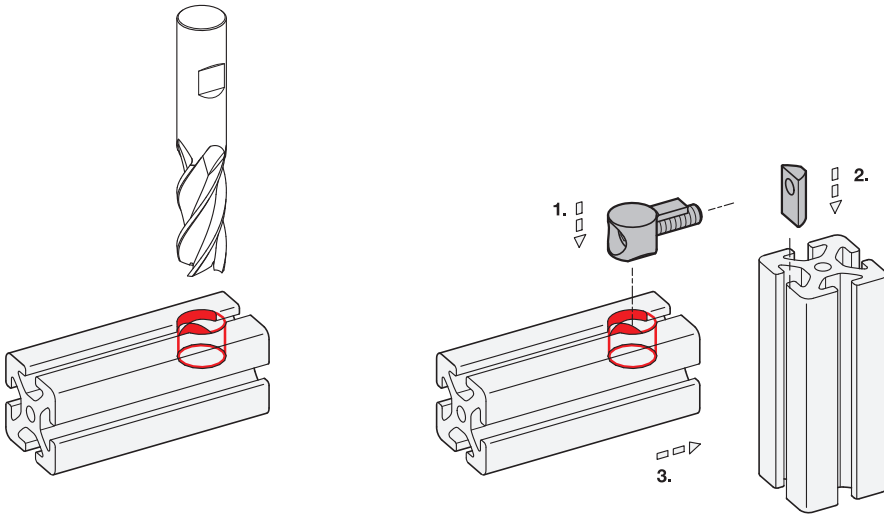
see also...

- Assembly Instructions / Profile Machining → Page 13
- Aluminum Profiles GN 10i (Profile Type Light) → Page 4
- Aluminum Profiles GN 10i (Profile Type Heavy) → Page 5

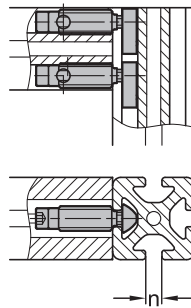
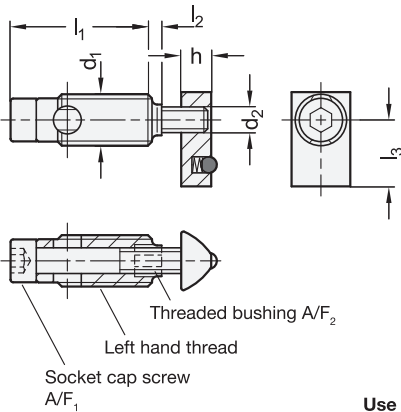
How to order	1 n
	2 Type
	3 Coding
	4 Material / Finish (Housing)
	5 Material / Finish (Screw and T-nut)
	6 Bundle

GN 22i-8-V-C-ZZSZ-4

Assembly Instructions / Profile Machining



Installation



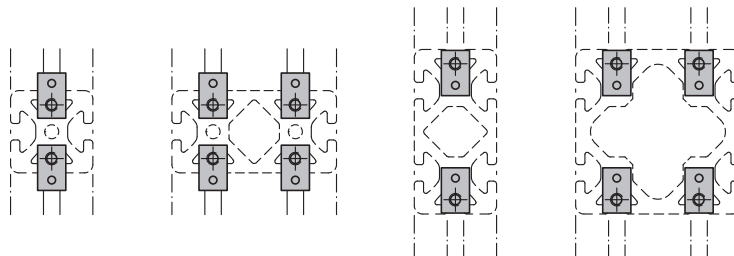
2 Profile type

S Heavy

3 Coding

R Right-angled connection

Use



1

5

n	Bundle Pieces	d ₁ Self-forming thread	d ₂	h	l ₁	l ₂	l ₃	A/F ₁	A/F ₂	Tightening torque in Nm
6	4	S 10	M 5	6	32	-	12	4	5	8
8	4	S 12	M 6	7	34,5	2,5	16	5	6	14

Specification

4

- Steel, zinc plated, blue passivated
- RoHS

SZ

Information

Automatic connectors GN 23i fasten aluminum profiles together at right angles. Machining of the profile is not necessary. The connection can be freely positioned and slid along the slot.

For assembly, first insert the socket cap screw along the slot and then screw in the lightly lubricated threaded bushing. Minor burr formation is possible. Automatic connectors are used in pairs opposite each other. If panels are used in the slot, they must be suitably pocketed.

Automatic connectors are supplied in bundles. The table shows the quantity included in each bundle.

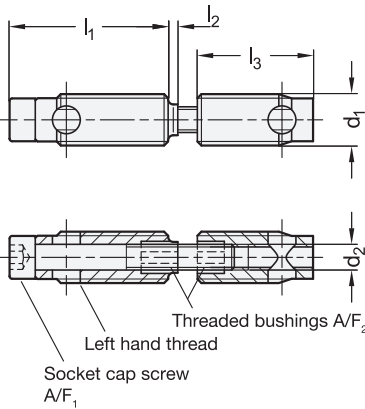
see also...

- *Assembly Instructions* → Page 15
- *Aluminum Profiles GN 10i (Profile Type Light)* → Page 4
- *Aluminum Profiles GN 10i (Profile Type Heavy)* → Page 5
- *Aluminum Profiles GN 11i (with Partially Closed Slots)* → Page 6

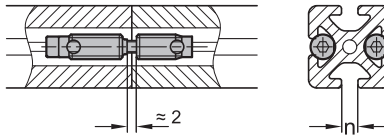
How to order

1	n
2	Profile type
3	Coding
4	Material / Finish
5	Bundle

GN 23i-8 S-R-SZ-4



Installation



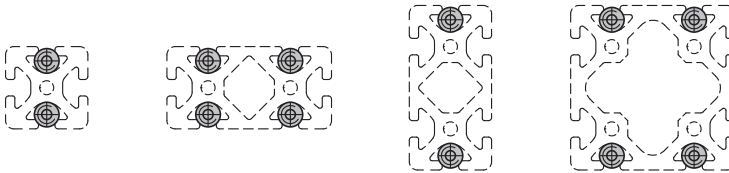
2 Profile type

S Heavy

3 Coding

S End face connection

Use



1

5

n	Bundle Pieces	d ₁ Self-forming thread	d ₂	l ₁	l ₂	l ₃	A/F ₁	A/F ₂	Tightening torque in Nm
6	4	S 10	M 5	32	-	27	4	5	8
8	4	S 12	M 6	34,5	2,5	30,8	5	6	14

Specification

- Steel, zinc plated, blue passivated
- RoHS

4

Information

Automatic connectors GN 23i fasten aluminum profiles together on the end faces to extend them while securing them against twisting. Machining of the profile is not necessary.

For assembly, first insert the socket cap screw along the slot and then screw in the lightly lubricated threaded bushings. Minor burr formation is possible. Automatic connectors are used in pairs opposite each other. If panels are used in the slot, they must be suitably pocketed.

Automatic connectors are supplied in bundles. The table shows the quantity included in each bundle.

see also...

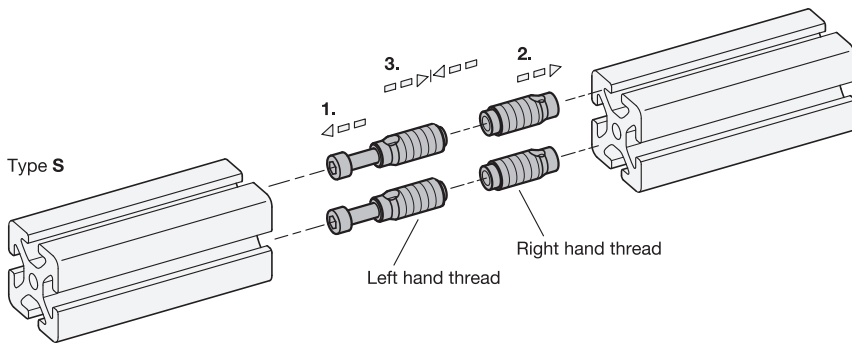
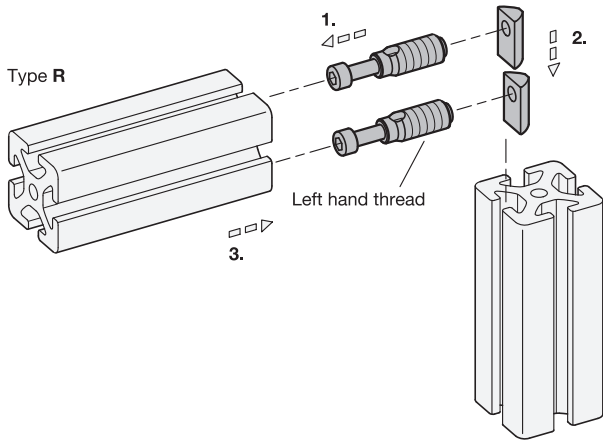
- *Assembly Instructions* → Page 15
- *Aluminum Profiles GN 10i (Profile Type Light)* → Page 4
- *Aluminum Profiles GN 10i (Profile Type Heavy)* → Page 5
- *Aluminum Profiles GN 11i (with Partially Closed Slots)* → Page 6

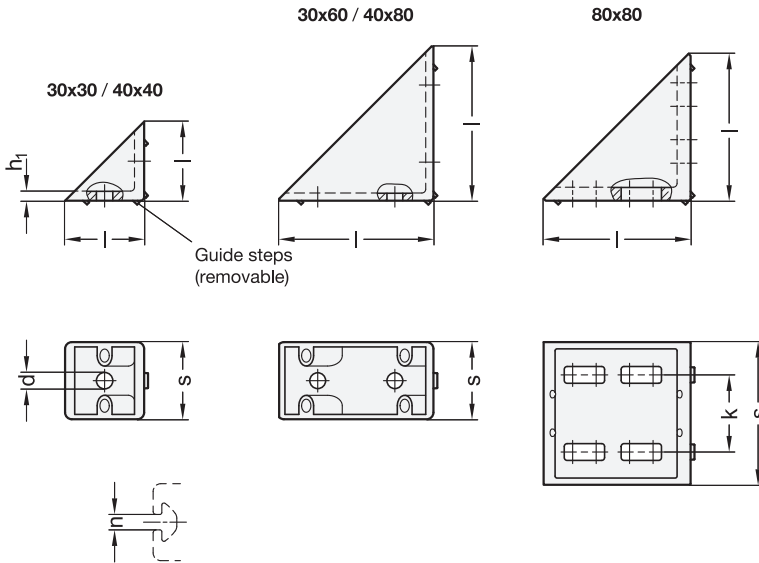
How to order

1	n
2	Profile type
3	Coding
4	Material / Finish
5	Bundle

GN 23i-8 S-S-SZ-4

Assembly Instructions





4 Type

A Without accessory

1 s		2 Length l		3 n	d	h ₁	k
Nominal dimension	Actual dimension	Nominal dimension	Actual dimension		For screw		
30	30	30	30	6	M 6	2,5	-
30	30	60	60	6	M 6	3,5	-
40	40	40	40	8	M 8	5	-
40	40	80	80	8	M 8	5	-
80	74	80	76	8	M 8	8	40

Specification

- Angle bracket
- Zinc die casting
- Painted, white aluminum



ZW

• RoHS

Accessory

- T-Nuts GN 50i → Page 8

Information

Angle brackets GN 30i fasten aluminum profiles to objects such as tables and panels or at right angles to each other. Machining of the profile is not necessary.

The connection can be freely positioned and slid along the slot. To fasten the angle brackets to a panel or transversely to an aluminum profile, the guide steps must be broken off.

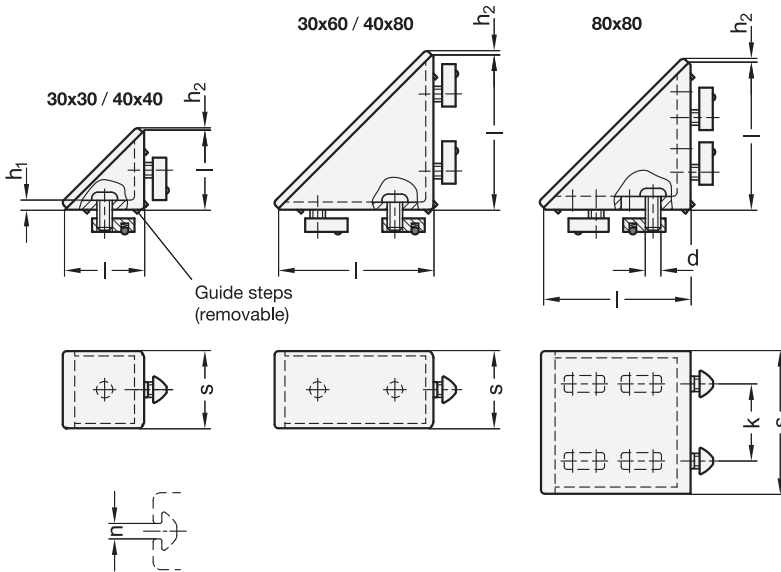
see also...

- *Assembly Instructions / Profile Machining* → Page 19
- *Aluminum Profiles GN 10i (Profile Type Light)* → Page 4
- *Aluminum Profiles GN 10i (Profile Type Heavy)* → Page 5
- *Aluminum Profiles GN 11i (with Partially Closed Slots)* → Page 6

How to order

GN 30i-40408-A-ZW

1	s
2	Length l
3	n
4	Type
5	Material / Finish



4 Type

C With fastening set and cover cap

1 s		2 Length l		3 n	d	h ₁	h ₂ ≈	k
Nominal dimension	Actual dimension	Nominal dimension	Actual dimension					
30	30	30	30	6	M 6	2,5	2	-
30	30	60	60	6	M 6	3,5	2	-
40	40	40	40	8	M 8	5	2	-
40	40	80	80	8	M 8	5	2	-
80	74	80	76	8	M 8	8	7	40

Specification

- Angle bracket
Zinc die casting
Painted, white aluminum **ZW**
- Screws and T-nuts
Steel, zinc plated, blue passivated **SZ**
- Cover cap
Plastic, Polyamide (PA)
Black ● **S**
- Plastic Characteristics → Page 2158
- RoHS

Information

Angle brackets GN 30i fasten aluminum profiles to objects such as tables and panels or at right angles to each other. Machining of the profile is not necessary.

The connection can be freely positioned and slid along the slot. To fasten the angle brackets to a panel or transversely to an aluminum profile, the guide steps must be broken off.

The cover caps ensure a visually appealing appearance and simplify cleaning.

see also...

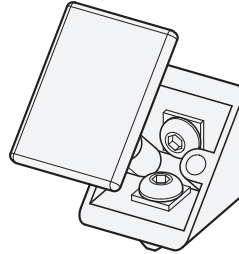
- Assembly Instructions / Profile Machining → Page 19
- Aluminum Profiles GN 10i (Profile Type Light) → Page 4
- Aluminum Profiles GN 10i (Profile Type Heavy) → Page 5
- Aluminum Profiles GN 11i (with Partially Closed Slots) → Page 6

How to order	
1	s
2	Length l
3	n
4	Type
5	Finish (Angle brackets)
6	Material (Fastening set)
7	Color of the cover cap

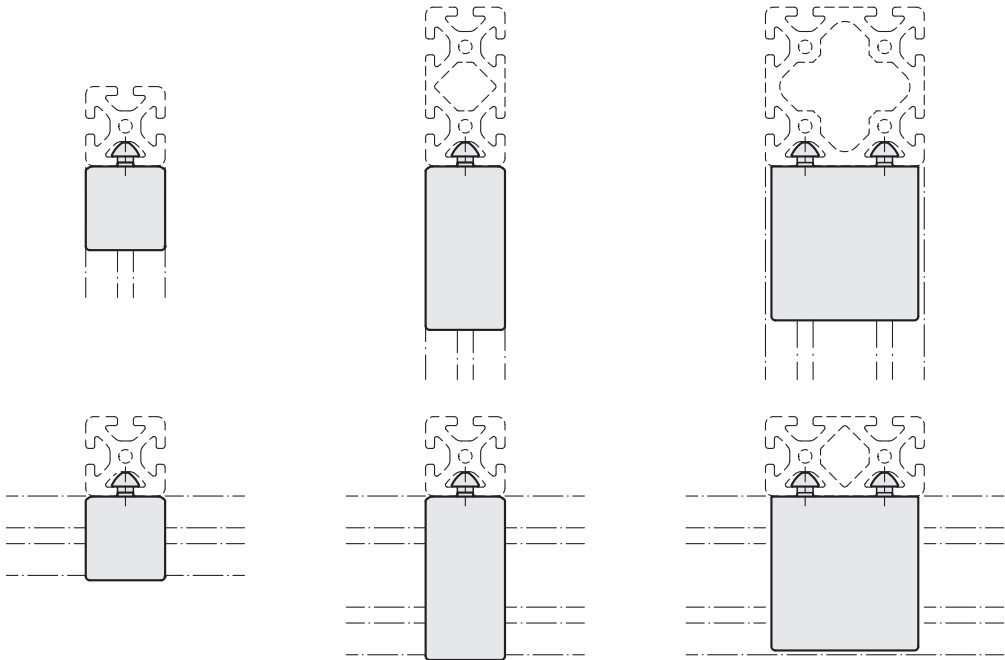
1 2 3 4 5 6 7
GN 30i-80808-C-ZWSZS

Assembly Options / Application Examples

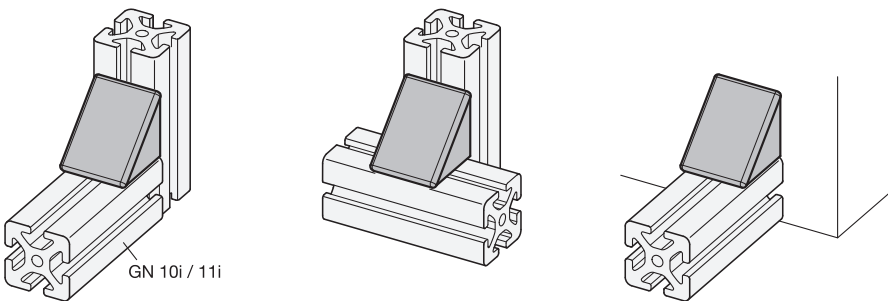
Assembly of cover cap

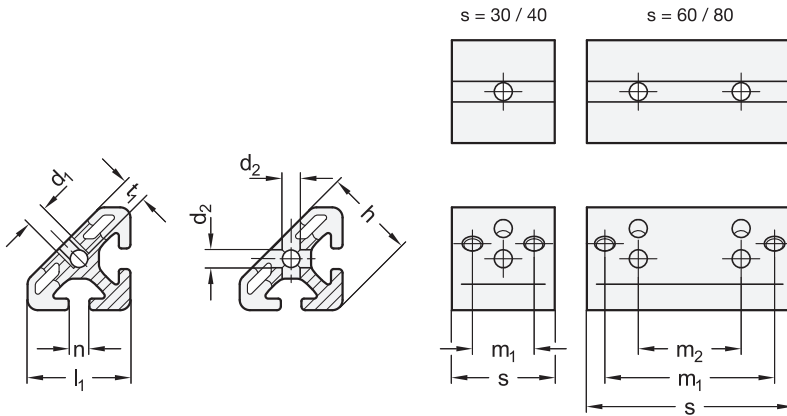


Use



Application examples





4 Profile type

S Heavy

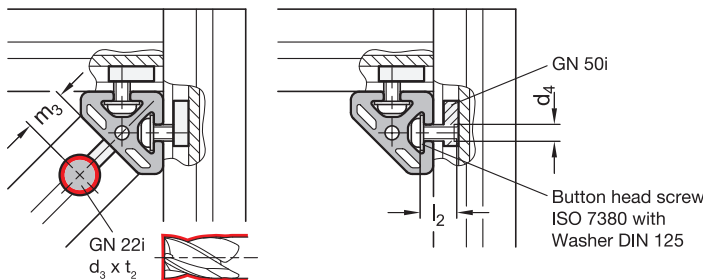
5 Identification no.

1 Corner installation

6 Type

A Without fastening set

Assembly / profile machining



- 1**
- 2**
- 3**

s	l ₁	n	d ₁	d ₂	d ₃	d ₄	h	l ₂	m ₁	m ₂	m ₃ +0,5	t ₁	t ₂ +0,5
30	30	6	M 6	5,5	16	M 6	27,4	12	17,4	-	15	6,5	12,7
40	40	8	M 8	6,5	20	M 8	36,6	16	24	-	20	14	16
60	30	6	M 6	5,5	16	M 6	27,4	12	47,4	30	15	6,5	12,7
80	40	8	M 8	6,5	20	M 8	36,6	16	64	40	20	14	16

Specification

- Aluminium
Anodized, natural color
- RoHS



Information

Angle connectors GN 32i fasten aluminum profiles together at right angles and are primarily used for creating corner braces at 45° angles.

The braces are fastened with universal connectors GN 22i, requiring their anti-twist protection to be removed. This requires the profile to be machined.

see also...

- *Assembly Instructions / Profile Machining* → Page 22
- *Aluminum Profiles GN 10i (Profile Type Light)* → Page 4
- *Aluminum Profiles GN 10i (Profile Type Heavy)* → Page 5
- *Aluminum Profiles GN 11i (with Partially Closed Slots)* → Page 6

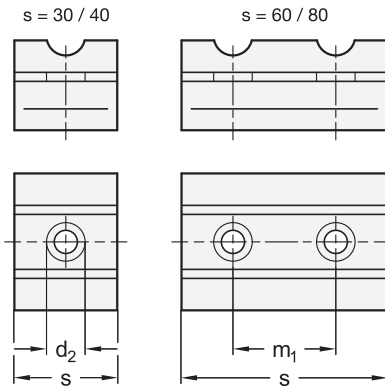
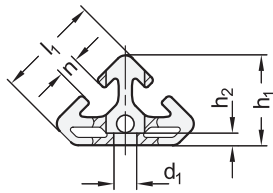
N

Accessory

- Universal Connectors GN 22i → Page 12
- T-Nuts GN 50i → Page 8

How to order	
1	s
2	l ₁
3	n
4	Profile type
5	Identification no.
6	Type
7	Finish

GN 32i-8040 8 S-1-A-N



4 Profile type

S Heavy

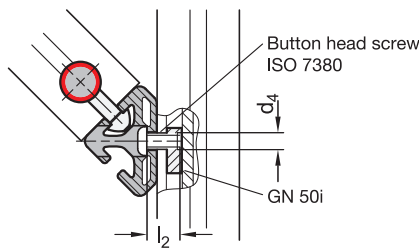
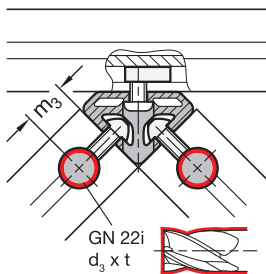
5 Identification no.

2 Single and double installation

6 Type

A Without fastening set

Assembly / profile machining



s	l ₁	n	d ₁	d ₂	d ₃	d ₄	h ₁	h ₂	l ₂	m ₁	m ₃ +0,5	t +0,5
30	30	6	6,5	11	16	M 6	27,4	7,2	16	-	15	12,7
40	40	8	9	15	20	M 8	34,9	4,5	16	-	20	16
60	30	6	6,5	11	16	M 6	27,4	7,2	16	30	15	12,7
80	40	8	9	15	20	M 8	34,9	4,5	16	40	20	16

Specification

- Aluminium Anodized, natural color
- RoHS



Information

Angle connectors GN 32i fasten single or double braces to aluminum profiles at an angle of 45°.

The braces are fastened with universal connectors GN 22i. This requires the profile to be machined.

see also...

- Assembly Instructions / Profile Machining → Page 22
- Aluminum Profiles GN 10i (Profile Type Light) → Page 4
- Aluminum Profiles GN 10i (Profile Type Heavy) → Page 5
- Aluminum Profiles GN 11i (with Partially Closed Slots) → Page 6

Accessory

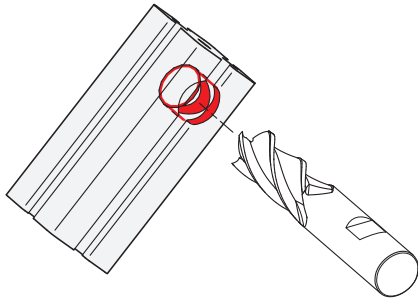
- Universal Connectors GN 22i → Page 12
- T-Nuts GN 50i → Page 8

How to order

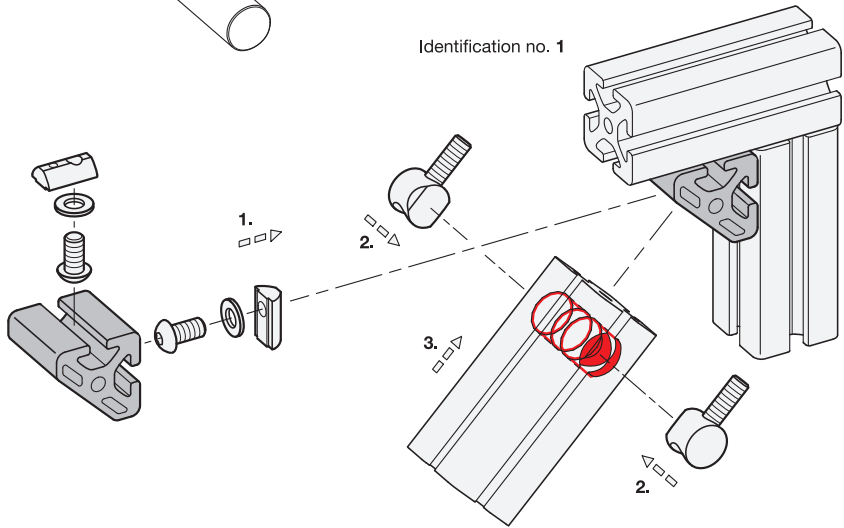
1	s
2	l ₁
3	n
4	Profile type
5	Identification no.
6	Type
7	Finish

GN 32i-3030 6 S-2-A-N

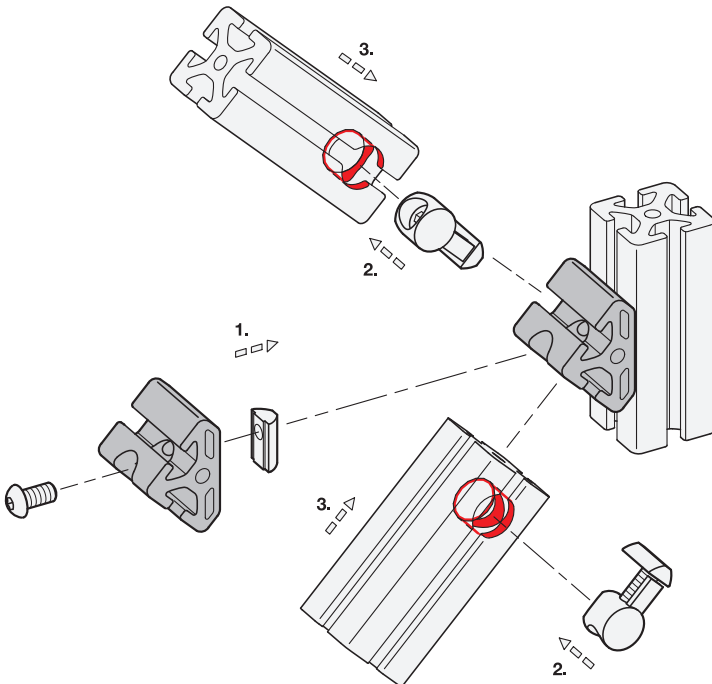
Assembly Instructions / Profile Machining

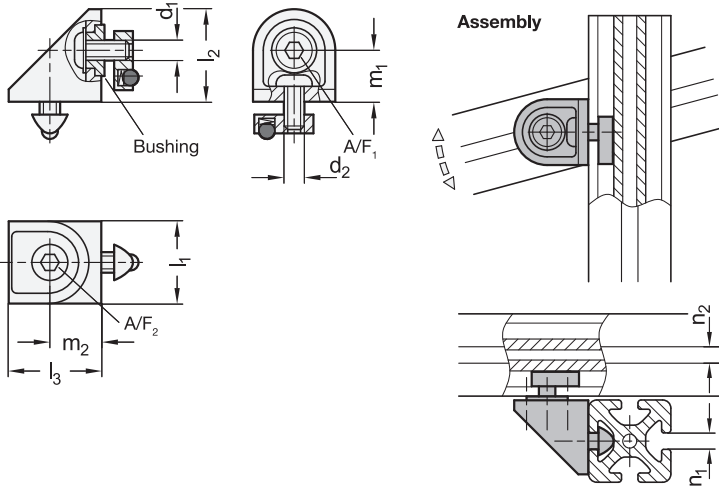


Identification no. 1



Identification no. 2





4 Type

C With fastening set

1	2	3	d₁	d₂	l₂	l₃	m₁	m₂	A/F₁	A/F₂
24	6	6	M 6	M 6	27	27	15	15	4	4
32	8	8	M 8	M 8	36	36	20	20	5	5

Specification

- 5** **6**

Housing
Zinc Die Casting
Painted, white aluminum **ZW**
- Fastening set
Screws, T-nuts and bushing
Steel, zinc plated, blue passivated **SZ**
- RoHS

Information

Rotating angle brackets GN 41i connect two intersecting aluminum profiles, rotatably mounted via a bushing. Machining of the profile is not necessary.

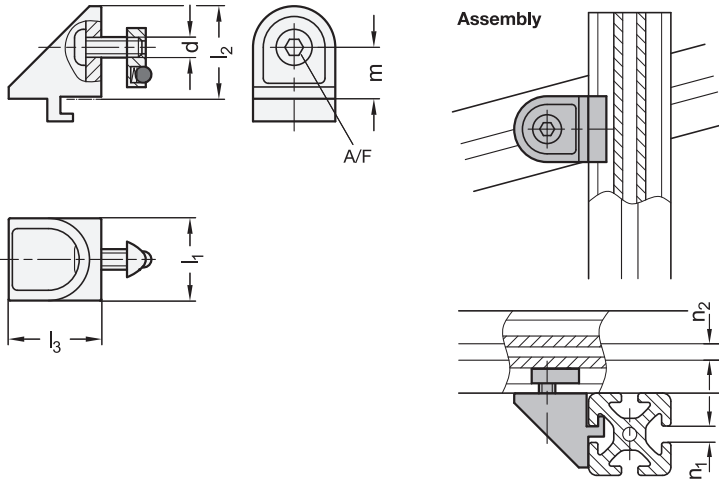
see also...

- Aluminum Profiles GN 10i (Profile Type Light) → Page 4
- Aluminum Profiles GN 10i (Profile Type Heavy) → Page 5
- Aluminum Profiles GN 11i (with Partially Closed Slots) → Page 6

How to order

1	l₁
2	n₁
3	n₂
4	Type
5	Material / Finish (Housing)
6	Material / Finish (Fastening set)

GN 41i-328 8-C-ZWSZ



4 Type

C With fastening set

1 l_1	2 n_1	3 n_2	d	l_2	l_3	m	A/F
24	6	6	M 6	27	27	15	4
32	8	8	M 8	36	36	20	5

Specification

- Housing
Zinc die casting
Painted, white aluminum **ZW**
- Fastening set
Screw and T-nut
Steel, zinc plated, blue passivated **SZ**
- **RoHS**

Information

Rotating angle brackets GN 42i connect two crossed profiles at an any angle. Machining of the profile is not necessary.

Loosening the screw simultaneously adjusts the angle and position along the grooves.

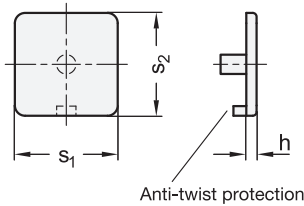
see also...

- [Aluminum Profiles GN 10i \(Profile Type Light\) → Page 4](#)
- [Aluminum Profiles GN 10i \(Profile Type Heavy\) → Page 5](#)
- [Aluminum Profiles GN 11i \(with Partially Closed Slots\) → Page 6](#)

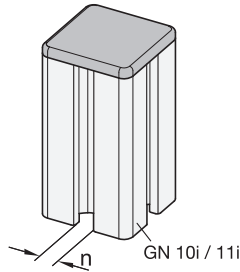
How to order

1 l_1
2 n_1
3 n_2
4 Type
5 Finish (Housing)
6 Material / Finish (Fastening set)

GN42i-3288-C-ZWSZ



Application example



4 Type

P Press-on type

1 s_1	2 s_2	3 n	$h \approx$	Grid size
30	30	6	3	30
30	60	6	3	30
40	16	8	4	40
40	40	8	4	40
40	80	8	4	40
60	60	6	3	30
80	80	8	4	40

Specification

- Plastic, Polyamide (PA)
Black
- *Plastic Characteristics* → Page QVX
- RoHS



Information

Cover caps GN 60i make a visually appealing closure for the ends of aluminum profiles, protecting against injuries from sharp cut edges and preventing the ingress of dust and dirt.

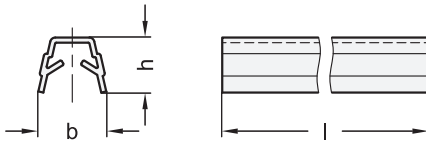
They can be fitted without machining the profile.

see also...

- *Aluminum Profiles GN 10i (Profile Type Light)* → Page 4
- *Aluminum Profiles GN 10i (Profile Type Heavy)* → Page 5
- *Aluminum Profiles GN 11i (with Partially Closed Slots)* → Page 6

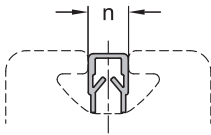
How to order	1 s_1
	2 s_2
	3 n
	4 Type
	5 Color

GN 60i-40808-P-KS

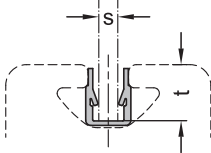


Use

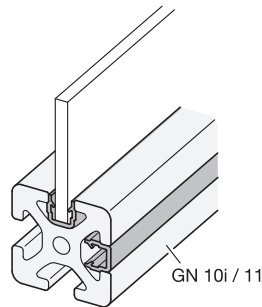
Cover profiles



Edging profiles



Application example



1 n	3 Length l in meters	4 Bundle Pieces	b ≈	h ≈	s Clamping range	t
6	2	4	10	9	2 - 3,5	8
8	2	4	13	10,5	4 - 6	10,5

Specification

- Plastic, Polypropylen (PP)
 - Black
 - Natural



• *Plastic Characteristics* → Page 2158

• **RoHS**



Information

Cover and edging profiles GN 70i are inserted into the slot of aluminum profiles.

When used as a cover profile, they are installed with the closed side facing out. This way, they protect the slot from dust and dirt, cover the cables and hoses in the slot and make for visually appealing appearance.

When used as an edging profile, they are installed with the open side facing out. This allows for panel elements such as panes of glass or PMMA to be fixed directly into the groove.

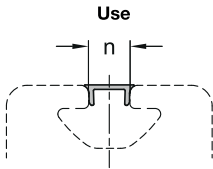
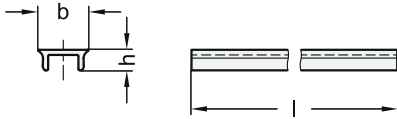
Cover and edging profiles are supplied in bundles. The table shows the quantity included in each bundle.

see also...

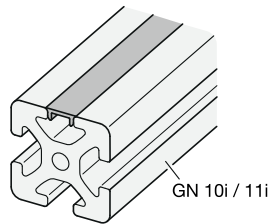
- *Aluminum Profiles GN 10i (Profile Type Light)* → Page 4
- *Aluminum Profiles GN 10i (Profile Type Heavy)* → Page 5
- *Aluminum Profiles GN 11i (with Partially Closed Slots)* → Page 6

How to order	
1	n
2	Color
3	Length l
4	Bundle

GN 70i-8-KS-2-4



Application example



¹ n	³ Length l in meters	⁴ Bundle Pieces	b ≈	h ≈
8	2	4	9,7	4

Specification

- Aluminum
- Anodized, natural color
- RoHS



Information

Cover profiles GN 71i are produced by extrusion molding and are inserted into the slot of aluminum profiles.

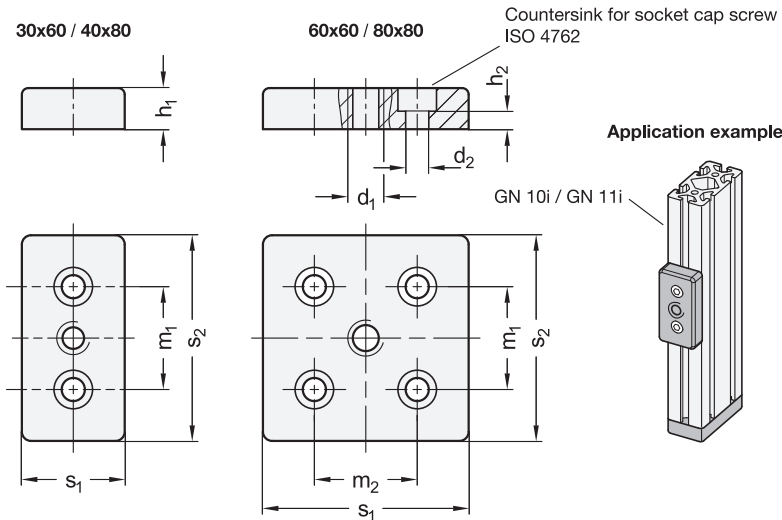
They protect the slot from dust and dirt, cover the cables and hoses in the slot and make for a visually appealing.

Cover profiles are supplied in bundles. The table shows the quantity included in each bundle.

see also...

- Aluminum Profiles GN 10i (Profile Type Light) → Page 4
- Aluminum Profiles GN 10i (Profile Type Heavy) → Page 5
- Aluminum Profiles GN 11i (with Partially Closed Slots) → Page 6

How to order ¹ ² ³ ⁴ GN 71i-8-AN-2-4	1 n
	2 Finish
	3 Length l
	4 Bundle



5 Type

A Without screws

1 s_1	2 s_2	3 n	4 d_1	d_2 For screw	h_1	h_2	m_1	m_2	Grid size
30	60	6	M 8 M 10	M 6	12	5	30	-	30
40	80	8	M 10 M 12	M 8	16	6,5	40	-	40
60	60	6	M 10 M 12	M 6	12	5	30	30	30
80	80	8	M 12 M 16	M 8	16	6,5	40	40	40

Specification

- Zinc die casting, black
- RoHS

6 ZS

Accessory

- T-Nuts GN 50i → Page QVX

Information

Transport and base plates GN 80i affix attachments such as leveling feet or castors to aluminum profiles.

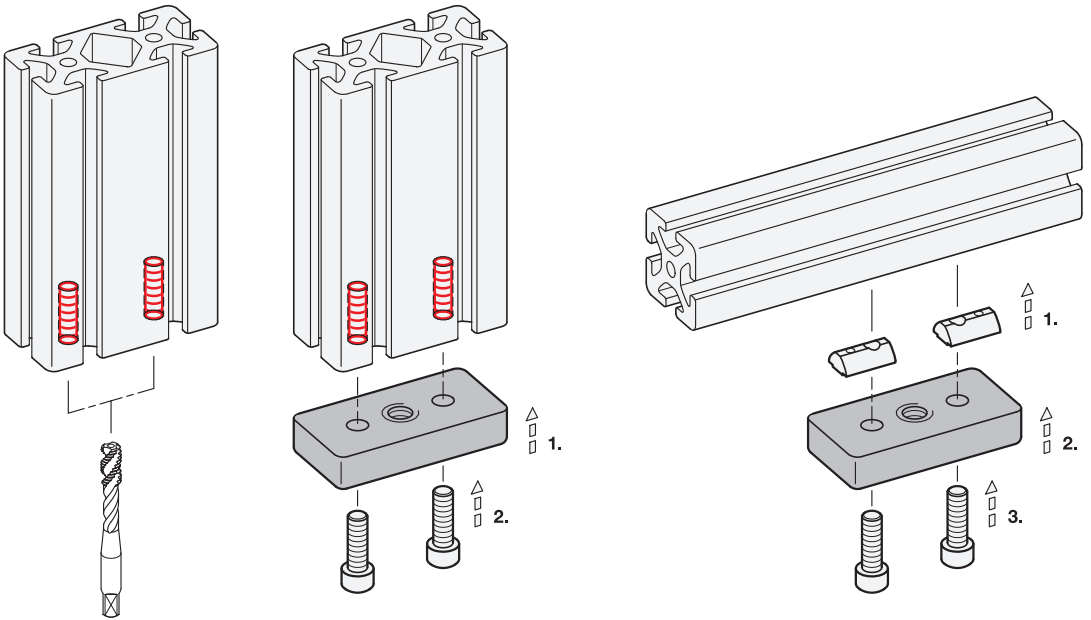
They are installed in the profile holes on the end faces using suitably tapped threaded holes or thread-forming screws. Transport and base plates can also be fastened lengthwise in the profile slot.

see also...

- Assembly Instructions / Profile Machining → Page 29
- Aluminum Profiles GN 10i (Profile Type Light) → Page 4
- Aluminum Profiles GN 10i (Profile Type Heavy) → Page 5
- Aluminum Profiles GN 11i (with Partially Closed Slots) → Page 6

How to order	1 s_1
	2 s_2
	3 n
	4 d_1
GN 80i-4080 8 M10-A-ZS	5 Type
	6 Material / Color

Assembly Instructions / Profile Machining

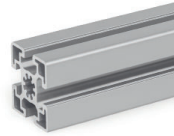


Product Overview b-Modular System

Aluminum Profiles



**GN 10b
Aluminum Profiles**
with Open Slots
on All Sides,
Profile Type Light
[Page 32](#)



**GN 10b
Aluminum Profiles**
with Open Slots
on All Sides,
Profile Type Heavy
[Page 33](#)

T-Nuts



**GN 50b
T-Nuts**
Steel
[Page 34](#)



**GN 51b
T-Slot Nuts**
Steel / Stainless Steel
[Page 36](#)



**GN 52b
T-Slot Bolts**
Steel / Stainless Steel
[Page 37](#)



**GN 53b
Collar Nuts**
Steel
[Page 38](#)

Connectors



**GN 21b
Central Screws**
Steel
[Page 40](#)



**GN 23b
Automatic Connectors**
Steel,
Right-Angled Connection
[Page 42](#)



**GN 23b
Automatic Connectors**
Steel,
End Face Connection
[Page 43](#)



**GN 25b
Quick Release
Connectors**
Steel, Asymmetrical
Mounting Studs
[Page 45](#)



**GN 25b
Quick Release
Connectors**
Steel, Symmetrical
Mounting Studs
[Page 46](#)



**GN 26b
Bolt Connectors**
Steel
[Page 48](#)

Angels Brackets



**GN 30b
Angle Brackets**
Aluminum
[Page 50](#)



**GN 30b
Angle Brackets**
Aluminum,
with Fastening Set
and Cover Cap
[Page 51](#)



**GN 33b
Cube Connectors**
Aluminum
[Page 53](#)

Joints



**GN 41b
Rotating
Angle Brackets**
Aluminum
[Page 54](#)

Cover Caps

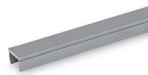


**GN 60b
Cover Caps**
Plastic
[Page 55](#)

Cover Profiles



**GN 70b
Cover and
Edging Profiles**
Plastic
[Page 56](#)

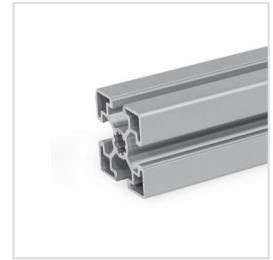
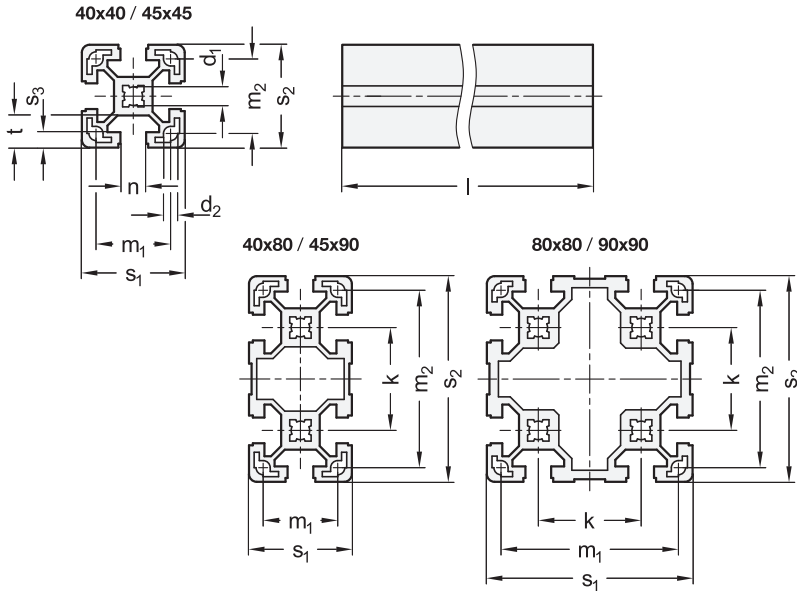


**GN 71b
Cover Profiles**
Aluminum
[Page 57](#)

Base Plates



**GN 80b
Transport and
Base Plates**
Zinc Die Casting
[Page 58](#)



4 Profile type

L Light

1 s ₁	2 s ₂	3 n	6 Length l in meters	7 Bundle Pieces	d ₁	d ₂ *	k	m ₁	m ₂	s ₃	t	Grid size
40	40	10	2 3	4	10	5,5	-	29	29	6	12,5	40
40	80	10	2 3	2	10	5,5	40	29	69	6	12,5	40
45	45	10	2 3	4	10	-	-	-	-	6	14,5	45
45	90	10	2 3	2	10	-	45	-	-	6	14,5	45
80	80	10	2 3	1	10	5,5	40	69	69	6	12,5	40
90	90	10	2 3	1	10	-	45	-	-	6	13	45

* Bores only on grid size = 40

Specification

- Aluminum
- Anodized, natural color
- *Technical Data* → Page 63
- **RoHS**



N

Accessory

- T-Nuts GN 50b → Page 34
- T-Slot Nuts GN 51b → Page 36
- T-Slot Bolts GN 52b → Page 37
- Cover Caps GN 60b → Page 55
- Cover and Edging Profiles GN 70b → Page 56
- Cover Profiles GN 71b → Page 57
- Transport and Base Plates GN 80b → Page 58

Information

Aluminum profiles GN 10b are produced by extrusion molding. They can be used, for example, to easily construct protective enclosures, work-place equipment or jigs.

Aluminum profiles in combination with the removable and reusable accessories form a flexible modular system. Attachments can be fastened to either the slots or the end faces via the holes.

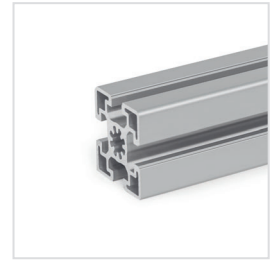
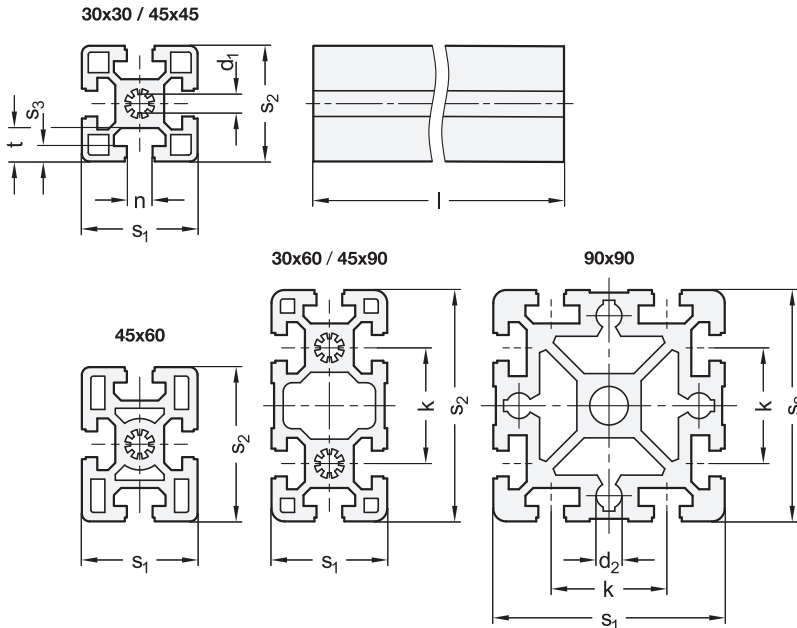
The profile type light is typically used for small loads or for weight-optimized constructions.

Aluminum profiles are supplied in bundles. The table shows the quantity included in each bundle.

How to order

1 s ₁
2 s ₂
3 n
4 Profile type
5 Finish
6 Length l
7 Bundle

GN 10b-454510L-N-2-4



4 Profile type
S Heavy

1 s ₁	2 s ₂	3 n	6 Length l +1,5mm in meters	7 Bundle Pieces	d ₁	d ₂	k	s ₃	t	Grid size
30	30	8	2 3	4	7,3	-	-	2,2	9	30
30	60	8	2 3	2	7,3	-	30	2,2	9	30
45	45	10	2 3	4	10	-	-	6	12,5	45
45	60	10	2 3	2	10	-	-	6	12,5	45
45	90	10	2 3	2	10	-	45	6	12,5	45
90	90	10	2 3	1	15	10	45	6	12,5	45

Specification

- Aluminum Anodized, natural color **N**
- *Technical Data* → Page 63
- **RoHS**

Accessory

- T-Nuts GN 50b → Page 34
- T-Slot Nuts GN 51b → Page 36
- T-Slot Bolts GN 52b → Page 37
- Cover Caps GN 60b → Page 55
- Cover and Edging Profiles GN 70b → Page 56
- Cover Profiles GN 71b → Page 57
- Transport and Base Plates GN 80b → Page 58



Information

Aluminum profiles GN 10b are produced by extrusion molding. They can be used, for example, to easily construct protective enclosures, work-place equipment or jigs.

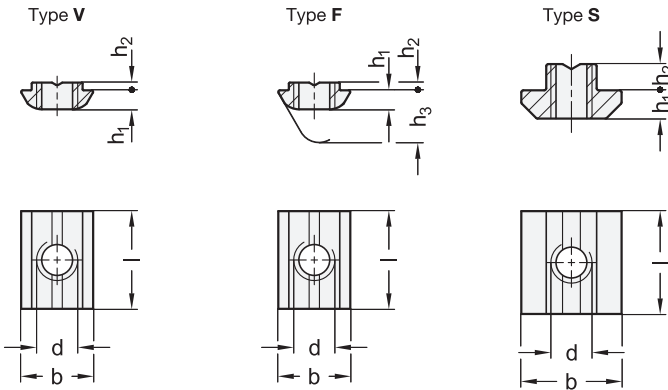
Aluminum profiles in combination with the removable and reusable accessories form a flexible modular system. Attachments can be fastened to either the slots or the end faces via the holes.

Aluminum profiles are supplied in bundles. The table shows the quantity included in each bundle.

How to order

1 s ₁
2 s ₂
3 n
4 Profile type
5 Finish
6 Length l
7 Bundle

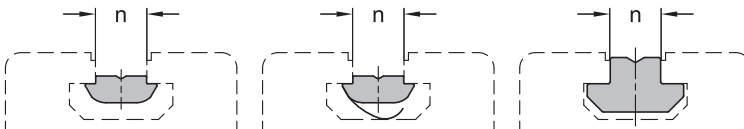
GN 10b-459010S-N-3-2



3 Type

- V** With anti-twist protection
- F** With anti-twist protection, with spring
- S** Heavy

Use



1

2

Type V								
n	d				b	h ₁	h ₂	Length l
8	M 4	M 5	M 6	M 8	11,6	3,8	1	16
10	M 4	M 5	M 6	M 8	14	3,8	1,5	20

1

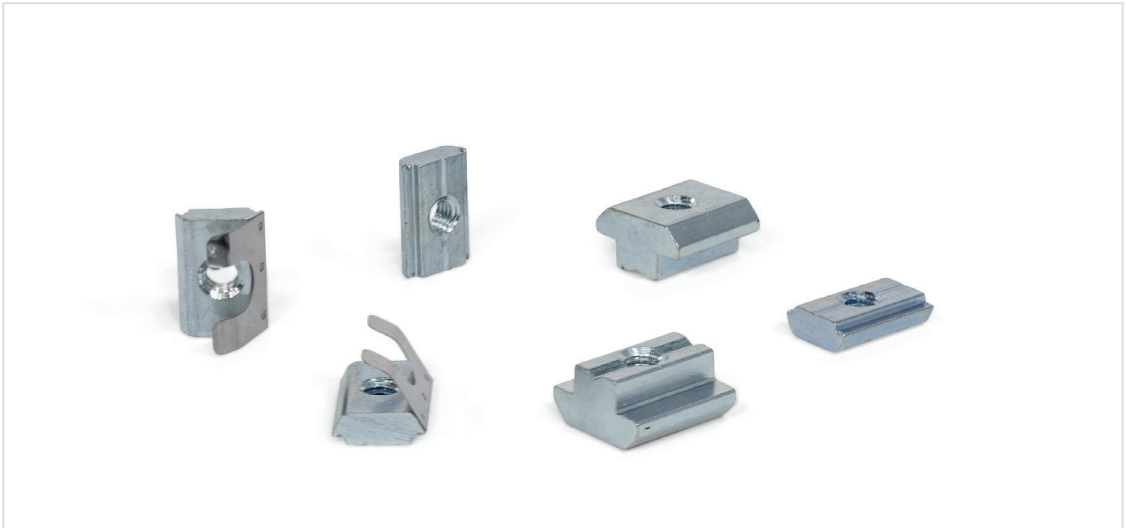
2

Type F									
n	d				b	h ₁	h ₂	h ₃ ≈	Length l
8	M 4	M 5	M 6	M 8	11,6	3,8	1	8	16
10	M 4	M 5	M 6	M 8	14	3,8	1,5	12	20

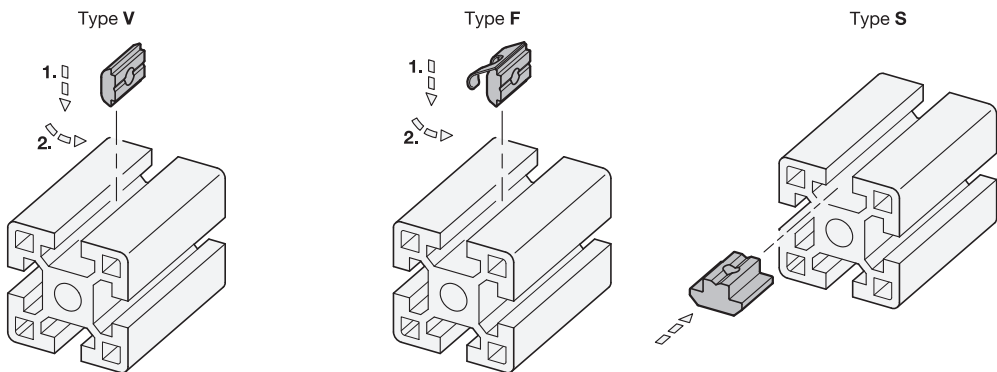
1

2

Type S								
n	d				b	h ₁	h ₂	Length l
6	M 4	M 5	M 6	-	9,6	3	1	10
8	M 4	M 5	M 6	M 8	15,8	4	2	16
10	M 4	M 5	M 6	M 8	19,5	5,5	5	20



Assembly Instructions



Specification

- Steel, zinc plated, blue passivated
- RoHS



SZ

Information

T-nuts GN 50b fasten attachments and accessories in the slot of aluminum profiles.

The spring of type F secures the T-nut against unwanted slipping in the groove, making installation easier.

T-nuts of types V and F can be swiveled into the slot at any position.

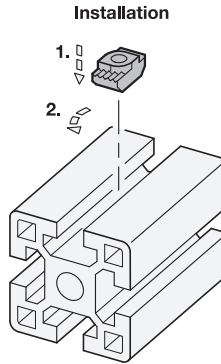
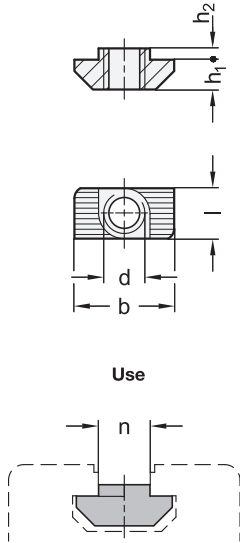
see also...

- *Aluminum Profiles GN 10b (Profile Type Light)* → Page 32
- *Aluminum Profiles GN 10b (Profile Type Heavy)* → Page 33

How to order

GN 50b-10M8-V-SZ

1	n
2	d ₁
3	Type
4	Material / Finish



3 Type

- N** Without increased torque
- B** With increased torque

n	d				Stainless steel		b	h ₁	h ₂	Length l
	Steel									
6	M 4	-	-	-	M 4	-	11,5	3	1	5,9
8	M 4	M 5	M 6	-	M 6	-	16,5	4,5	1,5	8
10	M 4	M 5	M 6	M 8	M 6	M 8	19,4	5,7	3	9,8

Specification

- Steel, zinc plated, blue passivated **SZ**
- Stainless steel, plain finish **NB**
- RoHS

Information

T-slot nuts GN 51b fasten attachments and accessories in the slot of aluminum profiles. They are inserted into the slot of the aluminum profile at any position and affixed by a 90° turn.

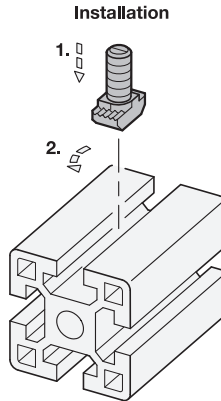
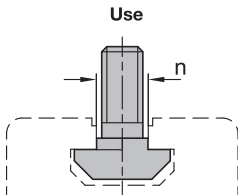
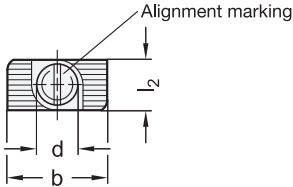
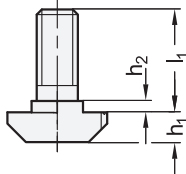
With type B, the increased torque in the nut thread ensures that the required 90° turn during installation or removal of the bolt is always reliably transmitted and the T-slot nut is aligned crosswise or lengthwise to the slot.

The connection is conductive.

see also...

- Aluminum Profiles GN 10b (Profile Type Light) → Page 32
- Aluminum Profiles GN 10b (Profile Type Heavy) → Page 33

How to order		1	n
		2	d
GN 51b-10M8-B-SZ		3	Type
		4	Material / Finish



n	d	Steel						Stainless steel						b	h ₁	h ₂	l ₂
		16	20	25	30	40	60	20	25	30	40	60					
8	M 6	16	20	25	30	40	60	20	25	30	40	60	16	4,5	1,5	8	
8	M 8	20	25	30	-	-	-	-	-	-	-	-	16	4,5	1,5	8	
10	M 6	16	20	25	30	40	60	20	25	30	40	60	19,5	5,5	4	8,5	
10	M 8	20	25	30	40	60	-	20	25	30	40	60	19,5	5,5	4	8,5	

Specification

- Steel, zinc plated, blue passivated **SZ**
- Stainless steel, plain finish **NB**
- RoHS

Accessory

- Collar Nuts GN 53b → Page QVX

Information

T-slot bolts GN 52b fasten attachments and accessories in the slot of aluminum profiles. They are inserted into the slot of the aluminum profile at any position and affixed by a 90° turn.

The connection is conductive.

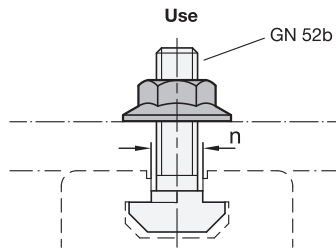
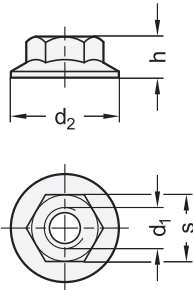
see also...

- Aluminum Profiles GN 10b (Profile Type Light) → Page 32
- Aluminum Profiles GN 10b (Profile Type Heavy) → Page 33

How to order

GN 52b-10 M8 30-SZ

1	n
2	d
3	l ₁
4	Material / Finish



¹ n	² d ₁	d ₂ ≈	h	s
8	M 6	14	6	10
10	M 8	21	8	13

Specification

- Steel, zinc plated, blue passivated
- RoHS

³

SZ

Accessory

- T-Slot Bolts GN 52b → Page 37

Information

Collar nuts GN 53b fasten attachments and accessories in the slot of aluminum profiles, generally in combination with T-slot bolts GN 52b.

The collar makes a washer unnecessary.

see also...

- Aluminum Profiles GN 10b (Profile Type Light) → Page 32
- Aluminum Profiles GN 10b (Profile Type Heavy) → Page 33

How to order

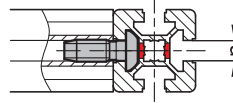
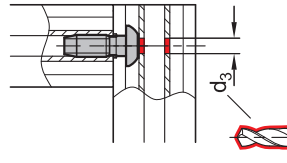
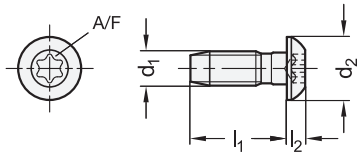
¹ ² ³
GN 53b-10 M8- SZ

¹	n
²	d ₁
³	Material / Finish



Product Overview (b-Modular System)

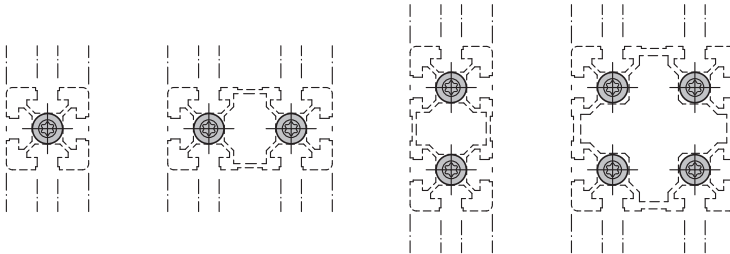
Assembly / profile machining



4 Type

A Without cover cap

Use



1 n	2 d ₁ Self-forming thread	3 l ₁	d ₂ ≈	d ₃	l ₂ ≈	A/F	Tightening torque in Nm
8	S 8	25	16	7,8	4,5	T40	25
10	S 12	30	19	9,8	6	T50	35

Specification

- Steel, zinc plated, blue passivated **SZ**
- RoHS

Information

Central screws GN 21b connect aluminum profiles at right angles. Only one profile has to be machined. The thread in the end face profile hole is formed by the central screw itself. The self-forming thread should be lubricated to simplify assembly.

see also...

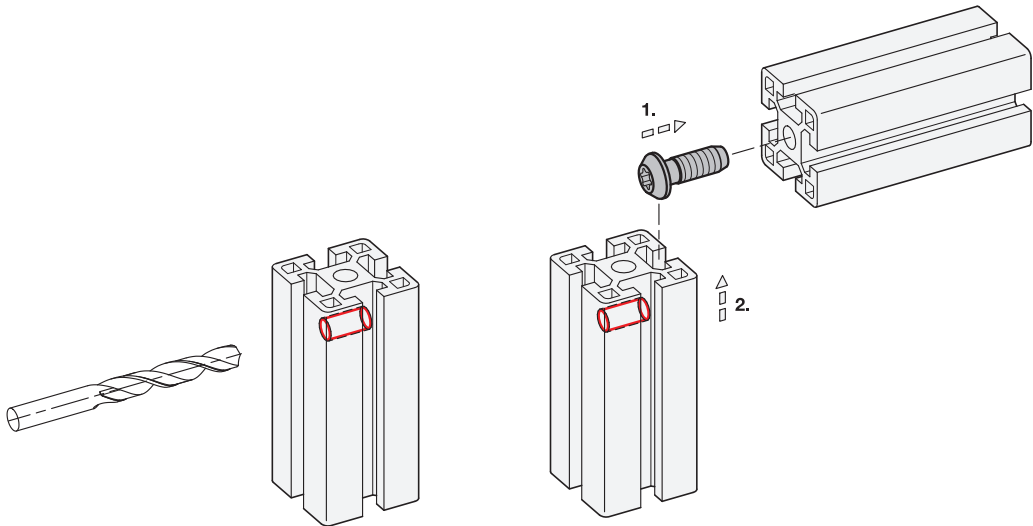
- *Assembly Instructions / Profile Machining* → Page 41
- *Aluminum Profiles GN 10b (Profile Type Light)* → Page 32
- *Aluminum Profiles GN 10b (Profile Type Heavy)* → Page 33

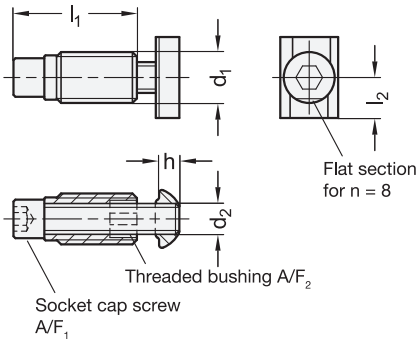
How to order

1	n
2	d ₁
3	l ₁
4	Type
5	Material / Finish

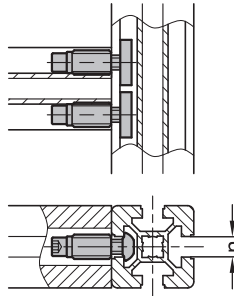
GN 21b-10 S12 30-A-SZ

Assembly Instructions / Profile Machining





Installation



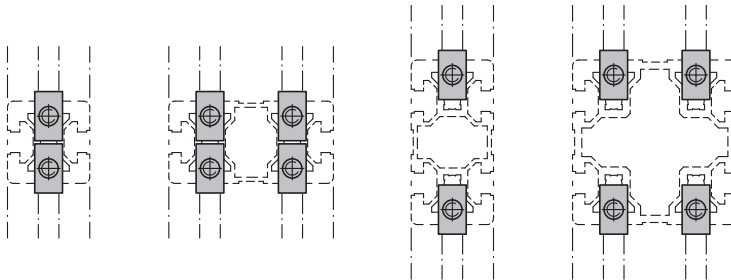
2 Profile type

- L Light
- S Heavy

3 Coding

- R Right-angled connection

Use



1

5

n		Bundle Pieces	d₁ Self-forming thread		d₂	h	l₁	l₂	A/F₁	A/F₂
Profile type L	Profile type S		Profile type L	Profile type S						
-	8	4	-	S 11	M 6	3,8	32	8	5	T40
10	10	4	S 13	S 12	M 8	3,8	34	9,5	6	T50

Specification

- Steel, zinc plated, blue passivated
- RoHS

4

SZ

Information

Automatic connectors GN 23b fasten aluminum profiles together at right angles. Machining of the profile is not necessary. The connection can be freely positioned and slid along the slot.

For assembly, first insert the socket cap screw along the slot and then screw in the lightly lubricated threaded bushing. Minor burr formation is possible. Automatic connectors are used in pairs opposite each other. If panels are used in the slot, they must be suitably pocketed.

Automatic connectors are supplied in bundles. The table shows the quantity included in each bundle.

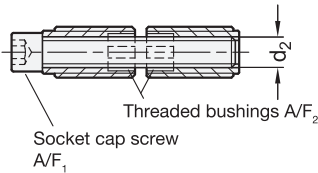
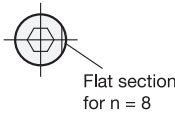
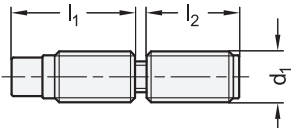
see also...

- *Assembly Instructions* → Page 44
- *Aluminum Profiles GN 10b (Profile Type Light)* → Page 32
- *Aluminum Profiles GN 10b (Profile Type Heavy)* → Page 33

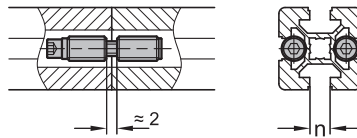
How to order

1	n
2	Profile type
3	Coding
4	Material / Finish
5	Bundle

GN 23b-8 S-R-SZ-4



Installation



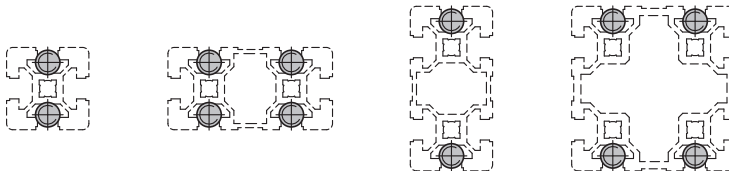
2 Profile type

- L Light
- S Heavy

3 Coding

- S End face connection

Use



1

5

n		Bundle Pieces	d ₁ Self-forming thread		d ₂	l ₁	l ₂	A/F ₁	A/F ₂
Profile type L	Profile type S		Profile type L	Profile type S					
-	8	4	-	S 11	M 6	32	26	5	T40
10	10	4	S 13	S 12	M 8	36	26	6	T50

Specification

- Steel, zinc plated, blue passivated
- RoHS

4

SZ

Information

Automatic connectors GN 23b fasten aluminum profiles together at the end faces to extend them while securing them against twisting. Machining of the profile is not necessary.

For assembly, first insert the socket cap screw along the slot and then screw in the lightly lubricated threaded bushings. Minor burr formation is possible. Automatic connectors are used in pairs opposite each other. If panels are used in the slot, they must be suitably pocketed.

Automatic connectors are supplied in bundles. The table shows the quantity included in each bundle.

see also...

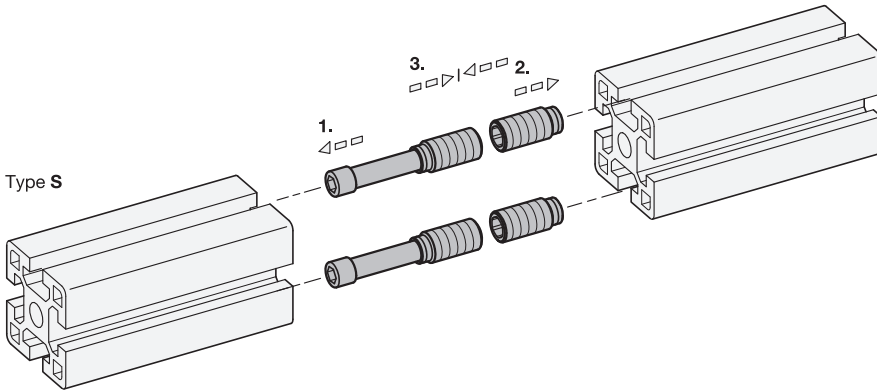
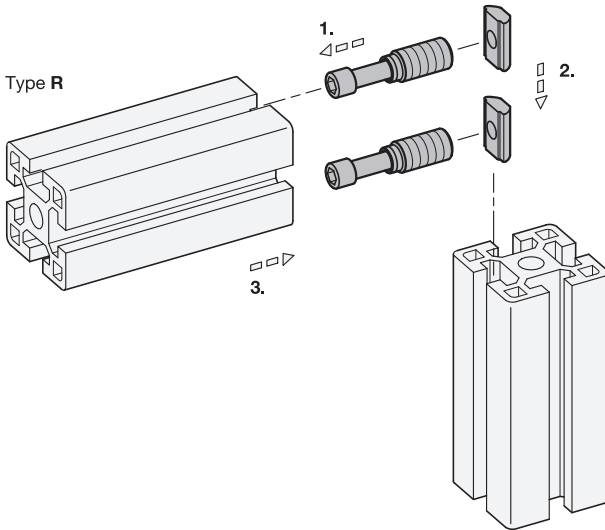
- *Assembly Instructions* → Page 44
- *Aluminum Profiles GN 10b (Profile Type Light)* → Page 32
- *Aluminum Profiles GN 10b (Profile Type Heavy)* → Page 33

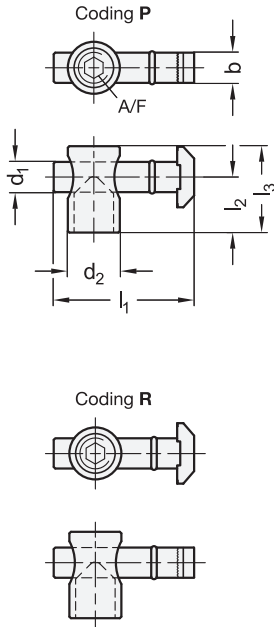
How to order

1	n
2	Profile type
3	Coding
4	Material / Finish
5	Bundle

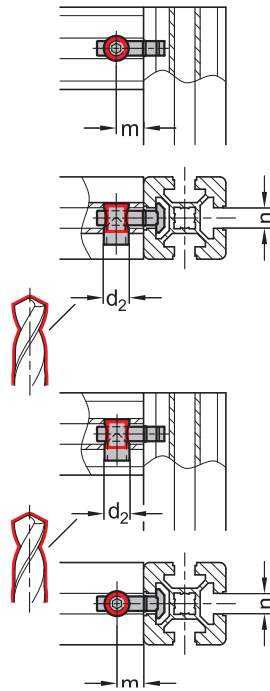
GN 23b-8 S-S-SZ-4

Assembly Instructions





Assembly / profile machining



2 Type

A Asymmetrical mounting stud

3 Coding

P Parallel T-nut
R Right-angle T-nut

1

5

n	Bundle Pieces	b	d ₁	d ₂	l ₁ ≈	l ₂ ≈	l ₃	m	A/F	Tightening torque in Nm
8	4	8	6,8	11	33	14,2	20	18	4	12
10	4	10	9,8	17	45,5	18,4	28	22,5	6	25

Specification

- Steel, zinc plated, blue passivated
- RoHS

4

SZ

Information

Quick release connectors GN 25b fasten aluminum profiles together at right angles. Only one profile has to be machined.

The connection can be freely positioned and slid along the slot. The internal hex used for clamping is situated for especially easy access.

If panels are used, they must be suitably pocketed, depending on the type, coding and installation orientation.

Quick release connectors are supplied in bundles. The table shows the quantity included in each bundle.

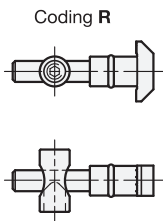
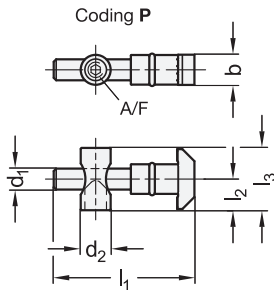
see also...

- [Assembly Instructions / Profile Machining](#) → Page 47
- [Aluminum Profiles GN 10b \(Profile Type Light\)](#) → Page 32
- [Aluminum Profiles GN 10b \(Profile Type Heavy\)](#) → Page 33

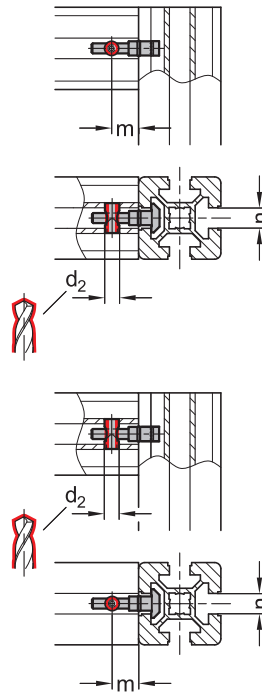
How to order

1	n
2	Type
3	Coding
4	Material / Finish
5	Bundle

GN25b-10-A-P-SZ-4



Assembly / profile machining



2 Type

S Symmetrical mounting stud

3 Coding

P Parallel T-nut
R Right-angle T-nut

1

5

n	Bundle Pieces	b	d ₁	d ₂	l ₁ ≈	l ₂	l ₃	m	A/F	Tightening torque in Nm
10	4	10	6,8	10	46	10,3	20	22,5	3	6

Specification

- Steel, zinc plated, blue passivated
- RoHS

4

SZ

Information

Quick release connectors GN 25b fasten aluminum profiles together at right angles. Only one profile has to be machined.

The connection can be freely positioned and slid along the slot. The internal hex used for clamping is situated for especially easy access.

If panels are used, they must be suitably pocketed, depending on the type, coding and installation orientation.

Quick release connectors of type S are used when the slot is to be closed by a cover profile.

Quick release connectors are supplied in bundles. The table shows the quantity included in each bundle.

see also...

- [Assembly Instructions / Profile Machining](#) → Page 47
- [Aluminum Profiles GN 10b \(Profile Type Light\)](#) → Page 32
- [Aluminum Profiles GN 10b \(Profile Type Heavy\)](#) → Page 33

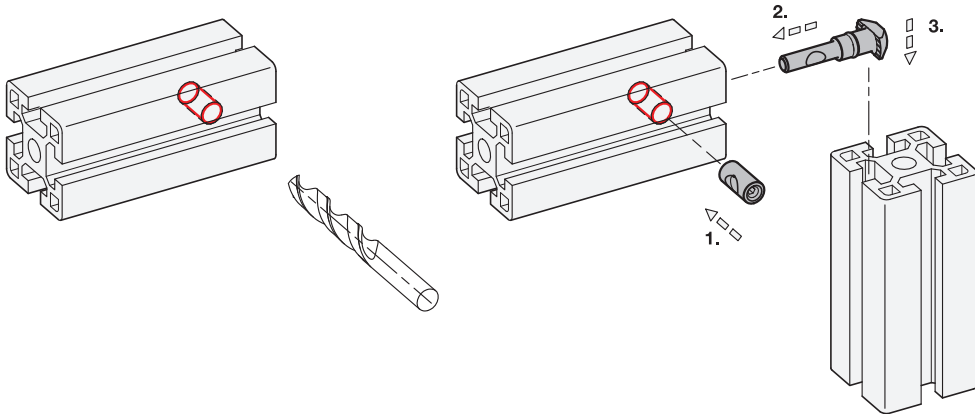
How to order

1	n
2	Type
3	Coding
4	Material / Finish
5	Bundle

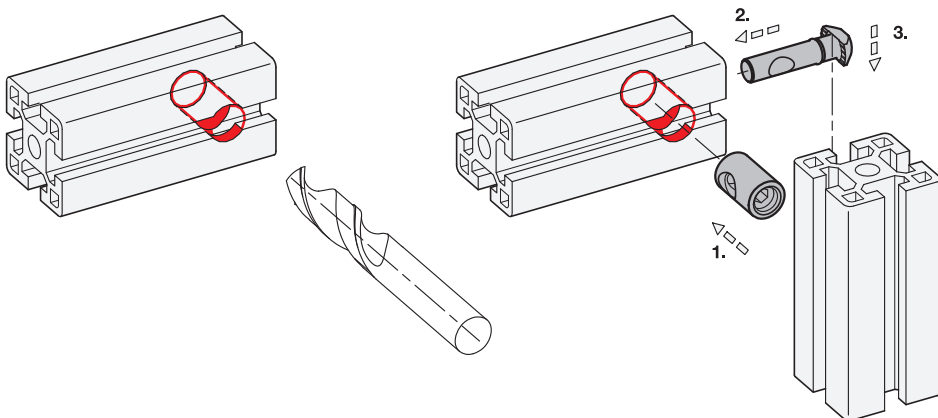
GN25b-10-S-R-SZ-4

Assembly Instructions / Profile Machining

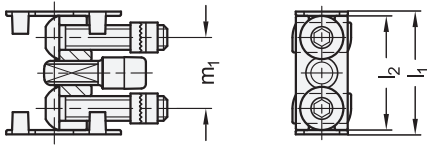
Type S



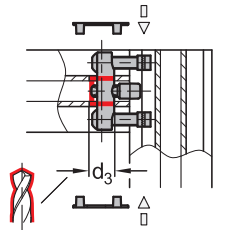
Type A



$l_1 = 30 / 40 / 45 / 60$



Assembly / profile machining



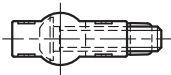
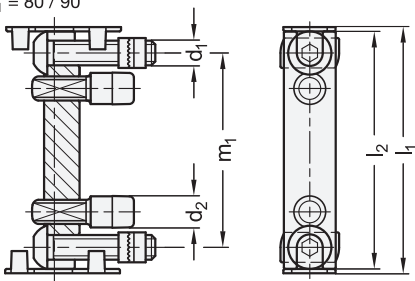
3 Type

N Nut without increased torque

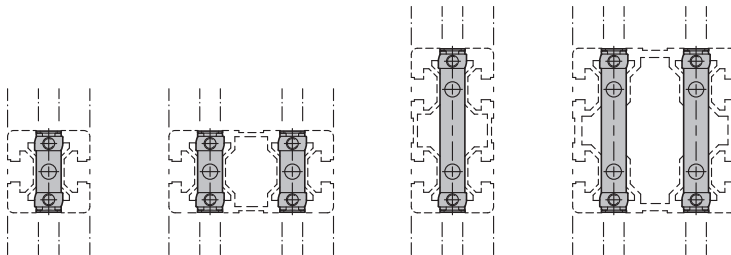
4 Coding

C With fastening set

$l_1 = 80 / 90$



Use

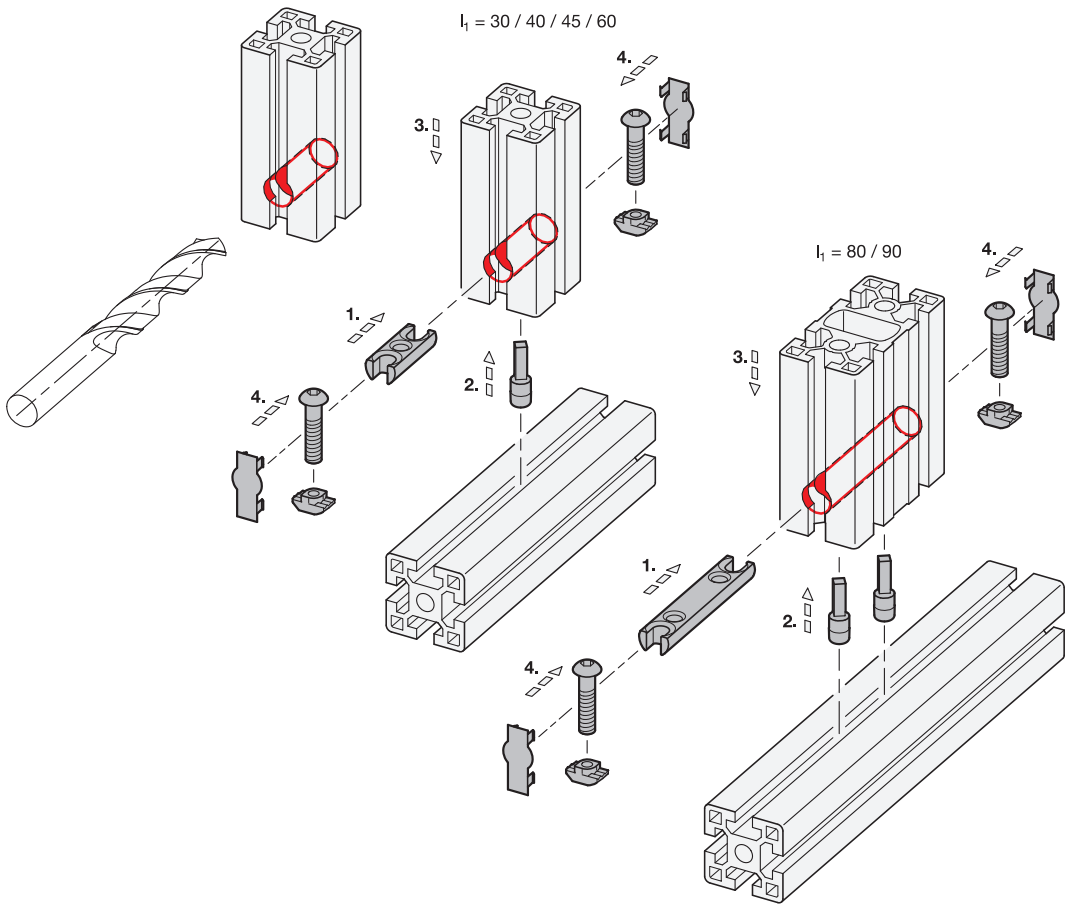


1

2

l_1 Nominal size	n	d ₁	d ₂	d ₃	$l_2 \approx$	m ₁	m ₂	Tightening torque in Nm
30	8	M 5	7,3	11	29	18	18	6
40	10	M 8	10	17	37	23	22,5	25
45	10	M 8	10	17	42	28	22,5	25
60	10	M 8	10	17	57	43	22,5	25
80	10	M 8	10	17	77	63	22,5	25
90	10	M 8	10	17	87	73	22,5	25

Assembly Instructions / Profile Machining



Specification

- Connector, screws, T-slot nuts
Steel
Zinc plated, blue passivated **SZ**
- Cover cap
Plastic, Polyamide (PA)
Black **● S**
- Guide pin
Plastic, black
- *Plastic Characteristics* → Page QVX
- [RoHS](#)

Information

Bolt connectors GN 26b fasten aluminum profiles at right angles and secure them against twisting. Only one profile has to be machined.

The connection can be freely positioned and slid along the slot. It is suitable for absorbing high loads, including torsional loads in particular.

The cover caps ensure a visually appealing appearance. If panels are used, they must be suitably pocketed.

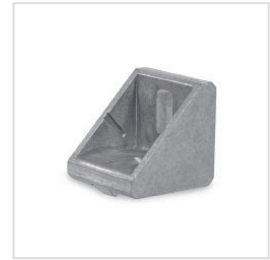
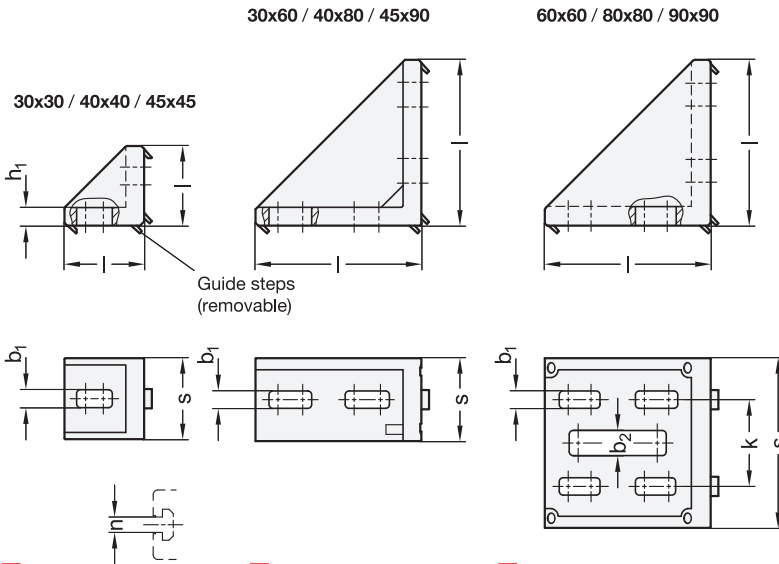
see also...

- *Aluminum Profiles GN 10b (Profile Type Light)* → Page 32
- *Aluminum Profiles GN 10b (Profile Type Heavy)* → Page 33

How to order

1	l_1
2	n
3	Type
4	Coding
5	Material / Finish
6	Color of the cover cap

GN 26b-90 10-N-C-SZ S



4 Type

A Without accessory

s		Length l		n	b ₁ For screw	b ₂ * For screw	h ₁	k
Nominal dimension	Actual dimension	Nominal dimension	Actual dimension					
30	28	30	27	8	M 6	-	5,5	-
30	28	60	57	8**	M 6	-	6	-
40	38	40	36	10	M 8	-	5,5	-
40	36	80	80	10**	M 8	-	9	-
45	42	45	41	10	M 8	-	9	-
45	42	90	87	10**	M 8	-	9,5	-
60	56	60	57	8**	M 6	M 8	6	30
80	74	80	76	10**	M 8	-	8	40
90	88	90	86	10**	M 8	-	9,5	45

* Slotted holes only on 60608, ** Additional guide steps for further slot widths

Specification

- Angle bracket
Aluminum
- Painted, white aluminum
- Plain finish
- RoHS



AW
AB

Accessory

- T-Nuts GN 50b → Page 34
- T-Slot Nuts GN 51b → Page 36
- T-Slot Bolts GN 52b → Page 37
- Collar Nuts GN 53b → Page 38

Information

Angle brackets GN 30b fasten aluminum profiles to objects such as tables and panels or at right angles to each other. Machining of the profile is not necessary.

The connection can be freely positioned and slid along the slot. To fasten the angle brackets to a panel or transversely to an aluminum profile, the guide steps must be broken off.

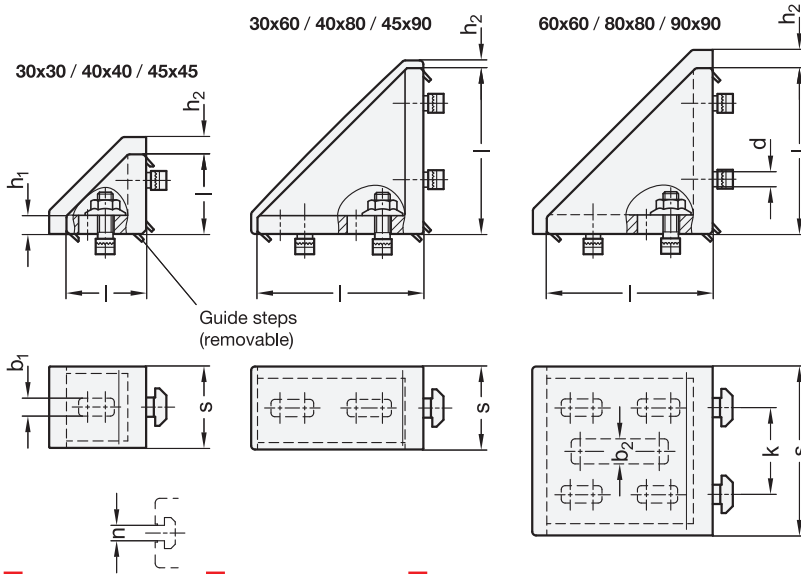
see also...

- Assembly Instructions / Profile Machining → Page 52
- Aluminum Profiles GN 10b (Profile Type Light) → Page 32
- Aluminum Profiles GN 10b (Profile Type Heavy) → Page 33

How to order

1	s
2	Length l
3	n
4	Type
5	Finish

GN 30b-30308-A-AW



4 Type

C With fastening set and cover cap

s		Length l		n	b ₁ For screw	b ₂ * For screw	d	h ₁	h ₂ ≈	k
Nominal dimension	Actual dimension	Nominal dimension	Actual dimension							
30	28	30	27	8	M 6	-	M 6	5,5	6	-
30	28	60	57	8**	M 6	-	M 6	6	3,5	-
40	38	40	36	10	M 8	-	M 8	5,5	6	-
40	36	80	80	10**	M 8	-	M 8	9	3,5	-
45	42	45	41	10	M 8	-	M 8	9	6	-
45	42	90	87	10**	M 8	-	M 8	9,5	3,5	-
60	56	60	57	8**	M 6	M 8	M 6	6	6,5	30
80	74	80	76	10**	M 8	-	M 8	8	6,5	40
90	88	90	86	10**	M 8	-	M 8	9,5	6,5	45

* Slotted holes only on 60608 ** Additional guide steps for further slot widths

Specification

- Angle bracket
Aluminum
- Painted, white aluminum **AW**
- Plain finish **AB**
- Fastening set
- T-slot nut and socket cap screw (for n = 8)
- T-slot bolt and collar nut (for n = 10)
Steel, zinc plated **SZ**
Blue / yellow passivated
- Cover cap
Plastic, Polyamide (PA)
Black **S**
- Plastic Characteristics → Page 2158
- RoHS

Information

Angle brackets GN 30b fasten aluminum profiles to objects such as tables and panels or at right angles to each other. Machining of the profile is not necessary.

The connection can be freely positioned and slid along the slot. To fasten the angle brackets to a panel or transversely to an aluminum profile, the guide steps must be broken off.

The cover caps ensure a visually appealing appearance and simplify cleaning.

see also...

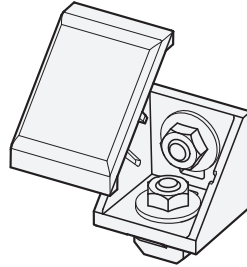
- Assembly Instructions / Profile Machining → Page 52
- Aluminum Profiles GN 10b (Profile Type Light) → Page 32
- Aluminum Profiles GN 10b (Profile Type Heavy) → Page 33

How to order	
1	s
2	Length l
3	n
4	Type
5	Finish (Angle bracket)
6	Material (Fastening set)
7	Color of the cover cap

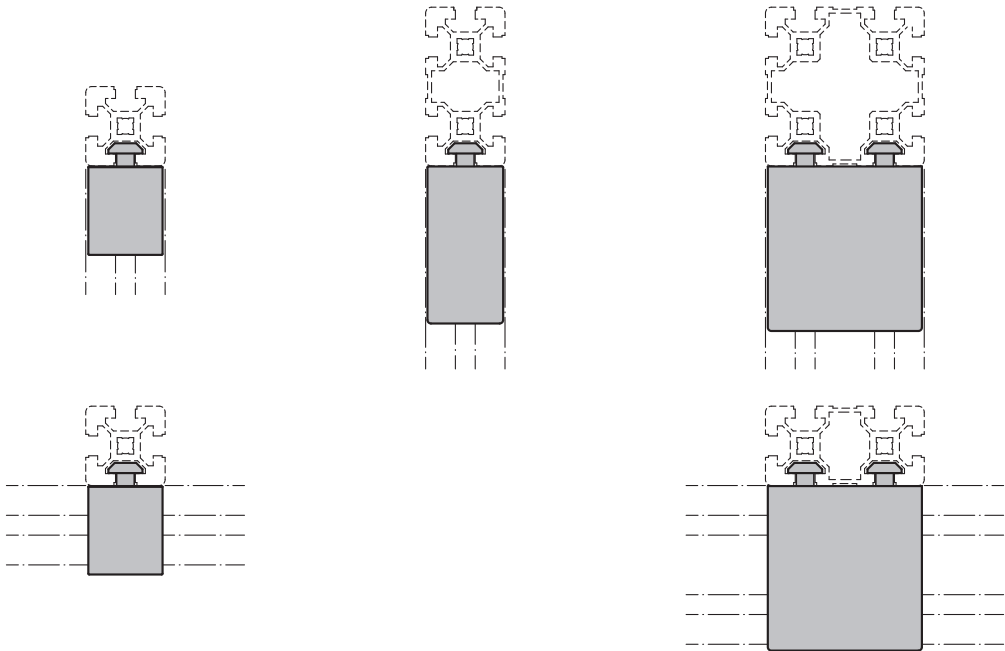
GN 30b-80 80 10-C-AWSZS

Assembly Options / Application Examples

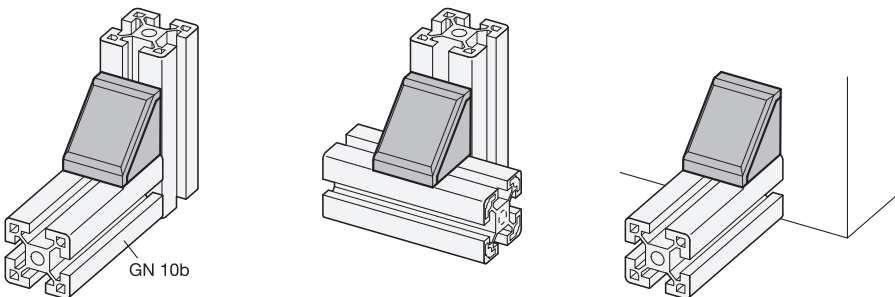
Assembly of cover cap



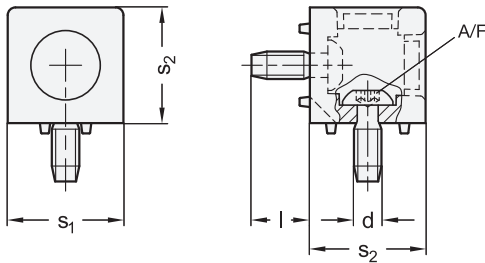
Use



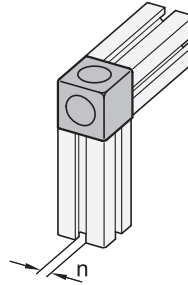
Application examples



Identification no. 2



Application examples



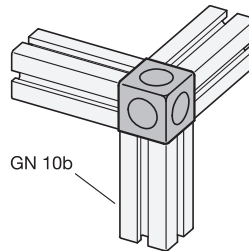
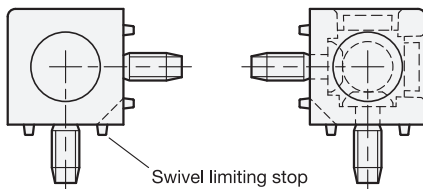
4 Identification no.

- 2 Connecting 2 profiles
- 3 Connecting 3 profiles

5 Type

- C With fastening set

Identification no. 3



1 s ₁	2 s ₂	3 n	d Self-forming thread	Length l ≈	A/F	Tightening torque in Nm
30	30	8	S 8	21	5	25
45	45	10	S 12	24	T50	35

Specification



- Housing
Aluminum, plain finish **AB**
- Screws
Steel, zinc plated, blue passivated **SZ**
- Cover caps
Plastic, Polyamide (PA)
Black **S**
- *Plastic Characteristics* → Page 2158
- **RoHS**

Information

Cube connectors GN 33b fasten two or three aluminum profiles together on their end faces, at right angles and with anti-twist protection. Machining of the profile is not necessary.

The self-forming thread of the screws should be lubricated to facilitate assembly. The end faces of the aluminum profiles are covered by the cube connectors, which ensures a visually appealing appearance.

If panels are used in the slot, they must be given a suitable corner chamfer.

see also...

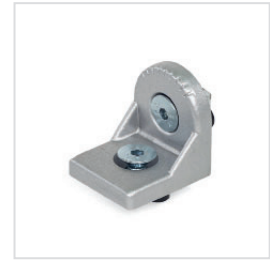
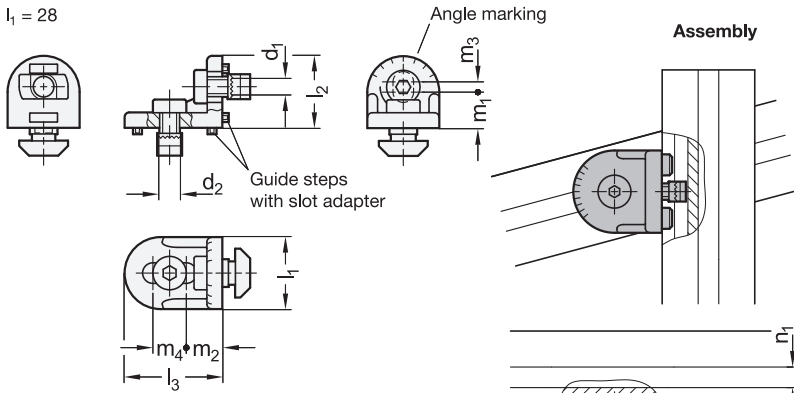
- *Aluminum Profiles GN 10b (Profile Type Light)* → Page 32
- *Aluminum Profiles GN 10b (Profile Type Heavy)* → Page 33

How to order

1	s ₁
2	s ₂
3	n
4	Identification no.
5	Type
6	Finish housing
7	Material / Finish screws
8	Color of the cover cap

GN 33b-454510-2-C-ABSZS

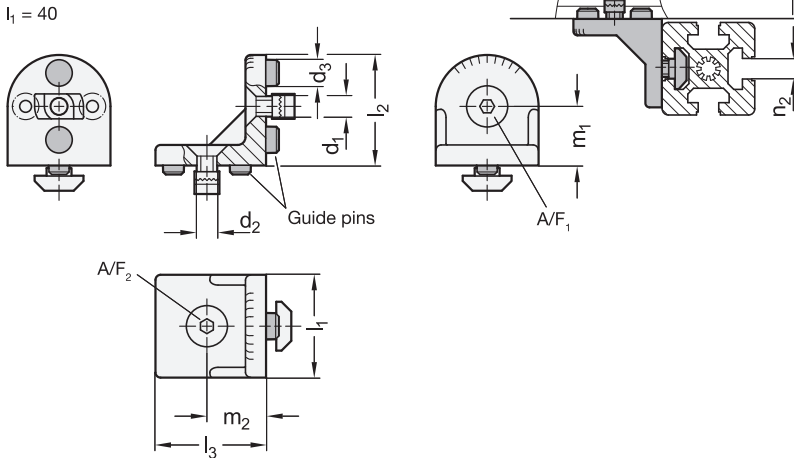
$l_1 = 28$



4 Type

C With fastening set

$l_1 = 40$



1 **2** **3**

l_1	n_1	n_2	d_1	d_2	d_3	l_2	l_3	m_1	m_2	m_3	m_4	A/F ₁	A/F ₂	Grid size
28	10	10	M 8	M 8	-	28	38	14,5	14,5	3,5	13	5	5	40 / 45
40	10	10	M 8	M 8	10	42,5	42,5	22,5	22,5	-	-	5	5	45

Specification

5 **6**

- Housing
Aluminum
Painted, white aluminum **AW**
- Fastening set
Screws and T-slot nuts
Steel, zinc plated, blue passivated **SZ**
- Slot adapter (for $l_1 = 28$)
Plastic
- Guide pins (for $l_1 = 40$)
Plastic
- RoHS

Information

Rotating angle brackets GN 41b connect two crossed aluminum profiles at an any angle. Machining of the profile is not necessary.

Depending on the installation situation for the rotating angle bracket, it may be necessary to break off the guide steps or leave out the guide pins.

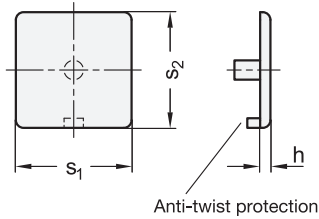
see also...

- Aluminum Profiles GN 10b (Profile Type Light) → Page 32
- Aluminum Profiles GN 10b (Profile Type Heavy) → Page 33

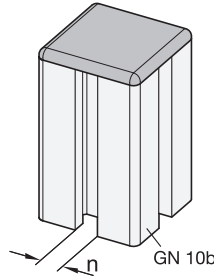
How to order

1	l_1
2	n_1
3	n_2
4	Type
5	Material / Finish (Housing)
6	Material / Finish (Fastening set)

GN 41b-401010-C-AWSZ



Application example



4 Type

P Press-on type

1 s_1	2 s_2	3 n	$h \approx$	Grid size
30	30	8	3	30
30	60	8	3	30
40	40	10	4	40
40	80	10	4	40
45	45	10	4	45
45	60	10	4	45
45	90	10	4	45
80	80	10	4	40
90*	90	10	4	45

* Only compatible with profile type L

Specification

- Plastic, Polyamide (PA)
Black **KS**
- *Plastic Characteristics* → Page 2158
- **RoHS**



Information

Cover caps GN 60b make a visually appealing closure for the end faces of aluminum profiles, protecting against injuries from sharp cut edges and preventing the ingress of dust and dirt.

They can be fitted without machining the profile.

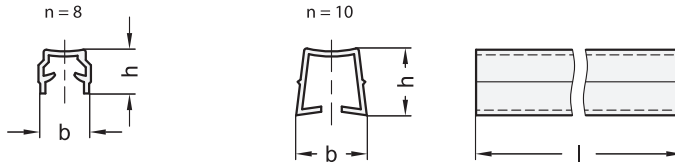
see also...

- *Aluminum Profiles GN 10b (Profile Type Light)* → Page 32
- *Aluminum Profiles GN 10b (Profile Type Heavy)* → Page 33

How to order

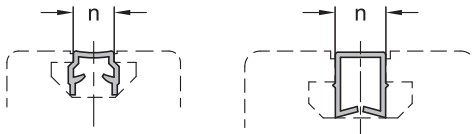
1	s_1
2	s_2
3	n
4	Type
5	Color

GN 60b-459010-P-KS

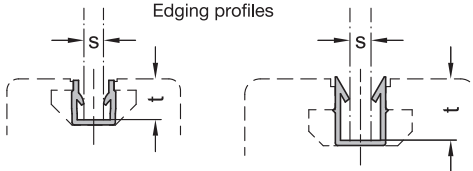


Use

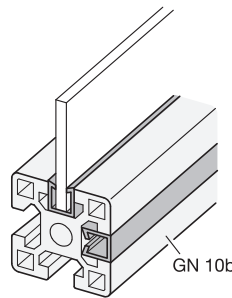
Cover profiles



Edging profiles



Application example



¹ n	³ Length l in meters	⁴ Bundle Pieces	b ≈	h ≈	s Clamping range	t
8	2	4	10	8,5	4 - 6	8
10	2	4	14	13	4 - 6	11,5*

* 13,5 for aluminum profile 10b-454510L + 10b-459010L

Specification

- Plastic, Polypropylen (PP)
Black **KS**
- *Plastic Characteristics* → Page 2158
- **RoHS**



Information

Cover and edging profiles GN 70b are inserted into the slot of aluminum profiles.

When used as a cover profile, they are installed with the closed side facing out. This way, they protect the slot from dust and dirt, cover the cables and hoses in the slot and make for visually appealing appearance.

When used as an edging profile, they are installed with the open side facing out. This allows for panel elements such as panes of glass or PMMA to be fixed directly into the groove.

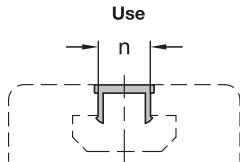
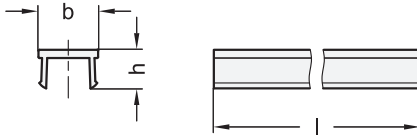
Cover and edging profiles are supplied in bundles. The table shows the quantity included in each bundle.

see also...

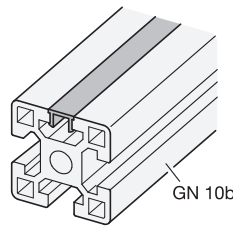
- *Aluminum Profiles GN 10b (Profile Type Light)* → Page 32
- *Aluminum Profiles GN 10b (Profile Type Heavy)* → Page 33

How to order	
¹	n
²	Color
³	Length l
⁴	Bundle

GN 70b-10-KS-2-4



Application example



¹ n	³ Length l in meters	⁴ Bundle Pieces	b ≈	h ≈
10	2	4	11,6	7,5

Specification

- Aluminum
Anodized, natural color
- RoHS



Information

Cover profiles GN 71b are produced by extrusion molding and are inserted into the slot of aluminum profiles.

They protect the slot from dust and dirt, cover the cables and hoses in the slot and make for a visually appealing appearance.

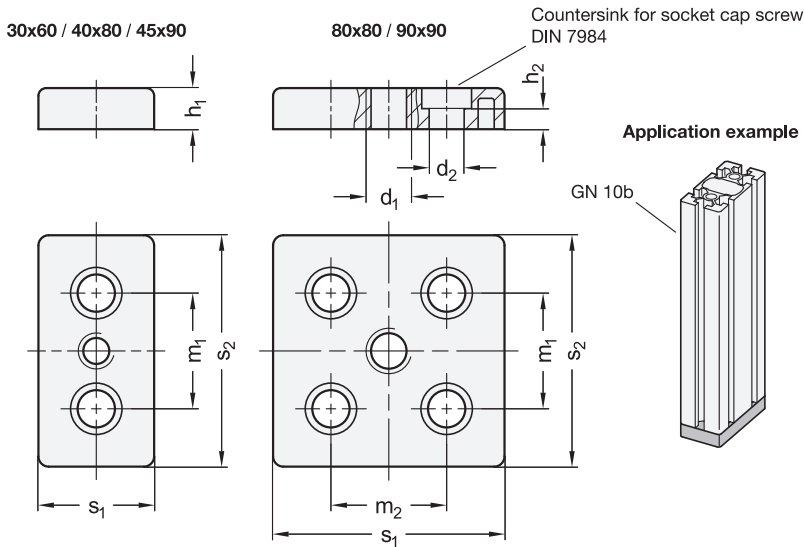
Cover profiles are supplied in bundles. The table shows the quantity included in each bundle.

see also...

- Aluminum Profiles GN 10b (Profile Type Light) → Page 32
- Aluminum Profiles GN 10b (Profile Type Heavy) → Page 33

How to order	
¹	n
²	Finish
³	Length l
⁴	Bundle

GN 71b-10-AN-2-4



5 Type

A Without screws

1 s ₁	2 s ₂	3 n	4 d ₁		d ₂ For screw	h ₁	h ₂	m ₁	m ₂	Grid size
30	60	8	M 10	M 12	M 8 / S 8	12	3,2	30	-	30
40	80	10	M 10	M 12	M 12 / S 12	16	8	40	-	40
45	90	10	M 12	M 14	M 12 / S 12	16	8	45	-	45
80	80	10	M 12	M 16	M 12 / S 12	16	8	40	40	40
90*	90	10	M 16	M 20	M 12 / S 12	16	8	45	45	45

* Only compatible with profile type L

Specification

- Zinc die casting, black
- RoHS

6 ZS

Accessory

- Central Screws GN 21b → Page 40

Information

Transport and base plates GN 80b affix attachments such as leveling feet or castors to aluminum profiles.

They are installed in the profile holes on the end faces using suitably tapped threaded holes or thread-forming screws.

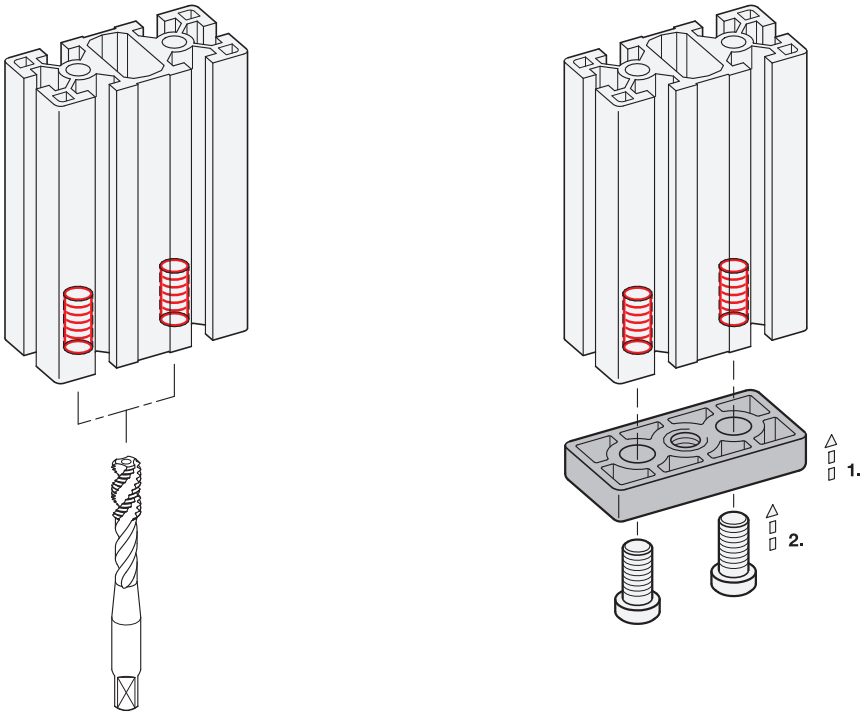
see also...

- Assembly Instructions / Profile Machining → Page 59
- Aluminum Profiles GN 10b (Profile Type Light) → Page 32
- Aluminum Profiles GN 10b (Profile Type Heavy) → Page 33

How to order	1	s ₁
	2	s ₂
	3	n
	4	d ₁
	5	Type
	6	Material / Color

GN 80b-459010M12-A-ZS

Assembly Instructions / Profile Machining



Annexe

Technical Data (i-Modular System) → *Page 62*

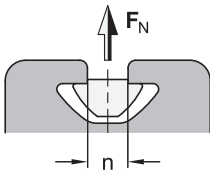
Technical Data (b-Modular System) → *Page 64*

Profile Compatible Standard Parts → *Page 66*

Mechanical Data (in Extrusion Direction)

- Material: Al Mg Si 0.5 F25 (EN AW – 6063)
- Delivery condition: Artificially aged
- Anodized coating: E6EV1 (natural color), layer thickness: 10 µm
- Dimensional deviations as per DIN EN 12020-2
- Tensile strength R_m min. 245 N/mm²
- Yield point $R_{p0,2}$ min. 195 N/mm²
- Density 2.7 kg/dm³
- Linear expansion coefficient $23,6 \times 10^{-6}$ 1/k
- Modulus of elasticity $E \approx 70,000$ N/mm²
- Hardness $\approx 75HB -2.5/187.5$

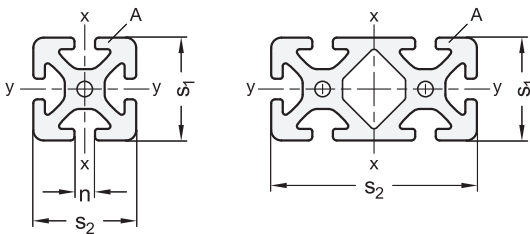
Permissible Tensile Load on the Slot



n	Grid size	Profile type	F_N^* in N With T-nut GN 50i		
			Type N	Type V	Type S
6	30	Light	3000	3000	-
8	40	Light	7500	5500	-
8	40	Heavy	15000	15000	19000

* Depending on the thread size of the T-nut

Cross-Section Properties



W_x, W_y = Axial resistance torque against bending

I_x, I_y = 2nd moment of area against bending

I_t = 2nd moment of area against torsion

A = Cross-section area

m = Length-related mass

GN 10i Profile type light										
s_1	s_2	n	Grid size	Bending axis x-x		Bending axis y-y		I_t in cm ⁴	A in cm ²	m \approx in kg/m
				I_x in cm ⁴	W_x in cm ³	I_y in cm ⁴	W_y in cm ³			
30	30	6	30	2,9	1,94	2,9	1,94	0,3	3,43	0,93
30	60	6	30	21,2	7,07	5,54	3,69	3,18	6,13	1,65
60	60	6	30	39,5	13,2	39,5	13,2	21,5	10,0	2,7
40	40	8	40	9,1	4,55	9,1	4,55	1,36	6,47	1,75
40	80	8	40	70,2	17,6	16,8	8,45	9,94	11,3	3,08
80	80	8	40	130,1	33,2	130,1	33,2	80,8	19,3	5,17

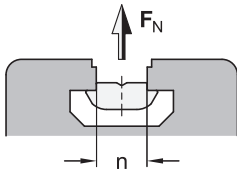
GN 10i Profile type heavy										
s_1	s_2	n	Grid size	Bending axis x-x		Bending axis y-y		I_t in cm ⁴	A in cm ²	m \approx in kg/m
				I_x in cm ⁴	W_x in cm ³	I_y in cm ⁴	W_y in cm ³			
40	16	8	40	1,06	1,25	6,75	3,37	0,97	4,15	1,12
40	40	8	40	13,9	6,95	13,9	6,95	1,88	9,05	2,45
40	80	8	40	101,0	25,2	26,7	13,4	18,8	16,5	4,51
80	80	8	40	187,8	46,9	187,8	46,9	128,4	26,7	7,2

GN 11i Profile type light										
s_1	s_2	n	Grid size	Bending axis x-x		Bending axis y-y		I_t in cm ⁴	A in cm ²	m \approx in kg/m
				I_x in cm ⁴	W_x in cm ³	I_y in cm ⁴	W_y in cm ³			
40	40	8	40	9,63	4,96	9,63	4,96	5,41	6,79	1,83

Mechanical Data (in Extrusion Direction)

- Material: Al Mg Si 0.5 F25 (EN AW – 6063)
- Delivery condition: Artificially aged
- Anodized coating: E6EV1 (natural color), layer thickness: 10 µm
- Dimensional deviations as per DIN EN 12020-2
- Tensile strength R_m min. 245 N/mm²
- Yield point $R_{p0,2}$ min. 195 N/mm²
- Density 2.7 kg/dm³
- Linear expansion coefficient $23,6 \times 10^{-6}$ 1/k
- Modulus of elasticity $E \approx 70,000$ N/mm²
- Hardness $\approx 75HB -2.5/187.5$

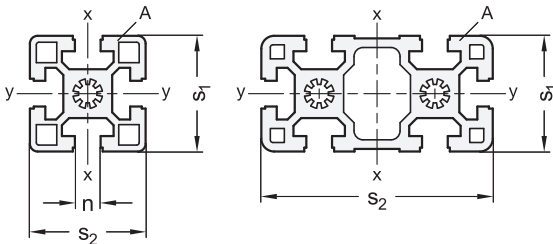
Permissible Tensile Load on the Slot



n	Grid size	Profile type	F_N^* in N		With T-slot nuts GN 51b	With T-slot bolts GN 52b
			With T-nuts GN 50b Type V / F	Type S		
8	30	heavy	2500	6000	3000	3500
10	40	light	7500	-	5500	9000
10	45	light	7500	-	5500	9000
10	45	heavy	8500	17500	7500	9000

* Depending on the thread size of the T-nut / T-slot nut / T-slot bolt

Cross-Section Properties



W_x, W_y = Axial resistance torque against bending
 I_x, I_y = 2nd moment of area against bending
 A = Cross-section area
 m = Length-related mass

GN 10b Profile type light									
s_1	s_2	n	Grid size	Bending axis x-x		Bending axis y-y		A in cm ²	m \approx in kg/m
				I_x in cm ⁴	W_x in cm ³	I_y in cm ⁴	W_y in cm ³		
40	40	10	40	9,06	4,53	9,06	4,53	5,61	1,51
40	80	10	40	63,2	15,8	17,2	8,61	9,86	2,67
45	45	10	45	11,7	4,89	11,7	4,89	5,73	1,55
45	90	10	45	81,8	18,2	23,5	10,5	11,3	3,05
80	80	10	40	132,6	33,2	132,6	33,2	18,5	4,98
90	90	10	45	210,5	46,8	210,5	46,8	23,5	6,34

GN 10b Profile type heavy									
s_1	s_2	n	Grid size	Bending axis x-x		Bending axis y-y		A in cm ²	m \approx in kg/m
				I_x in cm ⁴	W_x in cm ³	I_y in cm ⁴	W_y in cm ³		
30	30	8	30	2,77	1,85	2,77	1,85	3,14	0,85
30	60	8	30	5,09	3,39	19,7	6,55	5,53	1,49
45	45	10	45	13,9	6,91	13,9	6,91	7,5	2,03
45	60	10	45	37,6	12,5	22,7	10,1	11,1	3,01
45	90	10	45	124,1	27,6	32,3	14,3	15,2	4,12
90	90	10	45	302,0	67,1	302,0	67,1	38,9	10,5

Profile Compatible Standard Parts



GN 565.1
Cabinet U-Handles
Aluminum



GN 565.2
Inclined Cabinet U-Handles
Aluminum



GN 630.1
Cabinet U-Handles
Plastic



GN 528
Cabinet U-Handles
Plastic



GN 728
Cabinet U-Handles
Aluminum



GN 728.5
Cabinet U-Handles
Stainless Steel



GN 628
Cabinet U-Handles
Plastic



GN 629
Cabinet U-Handles
Plastic,
with Cover Cap



GN 629.1
Cabinet U-Handles
Plastic



GN 181
Fastening Sets
for Cabinet U-Handles
GN 425 / GN 425.1 / GN 426
GN 426.1 / GN 565 / GN 565.5



GN 333.1
Tubular Handles
Aluminum



GN 333
Tubular Handles
Aluminum



GN 667
Tubular Handles
Aluminum /
Stainless Steel



GN 334.1
Oval Tubular Handles
Aluminum



GN 335
Oval Tubular Handles
Aluminum



GN 630
Ledge Handles
Plastic



GN 412
Indexing Plungers
Zinc Die Casting,
with Screw-On Flange



GN 416
Spring Latches
Zinc Die Casting,
with Screw-On Flange



GN 416.1
Locators
Zinc Die Casting



GN 417.1
Locators
Zinc Die Casting /
Stainless Steel

All profile compatible standard parts can be found on www.ganternorm.com.



**GN 417
Indexing Plungers**
Zinc Die Casting /
Stainless Steel,
with Lifting Ring



**GN 417
Indexing Plungers**
Zinc Die Casting /
Stainless Steel,
with Knob



**GN 722.6
Indexing Plungers**
Steel / Stainless Steel



**GN 412.1
Mounting Blocks**
Zinc Die Casting



**GN 612.2
Cam Action
Indexing Plungers**
Steel



**GN 612.9
Cam Action
Indexing Plungers**
Zinc Die Casting



**GN 722.3
Spring Latches**
Steel / Stainless Steel



**GN 3492
Mounting Blocks**
Stainless Steel



**GN 449.1
Spring-Bolt
Door Latches**
Plastic,
with Cover



**GN 449.4
Snap Latches**
Plastic,
with Gripping Tray



**GN 936
Slam Latches**
Zinc Die Casting



**GN 4490
Ball Catches**
Zinc Die Casting,
Stainless Steel



**GN 938
Hinges**
Zinc Die Casting



**GN 239.3
Hinges**
Plastic



**GN 239.7
Hinges**
Plastic



**GN 139.2
Hinges**
Zinc Die Casting



**GN 2295
Hinge Wings**
Aluminium,
Three-Part



**GN 2295
Hinge Wings**
Aluminium,
Three-Part,
Vertically Elongated



**GN 2291
Hinge Wings**
Aluminium



**GN 159
Hinges**
Plastic

All profile compatible standard parts can be found on www.ganternorm.com.



**GN 159.1
Hinges**
Plastic



**GN 161
Hinges**
Zinc Die Casting



**GN 127
Hinges**
Zinc Die Casting /
Stainless Steel



**GN 236
Hinges**
Plastic



**GN 151.4
Hinges**
Plastic



**GN 2292
Hinges**
Aluminum



**GN 2294
Hinges**
Aluminum



**GN 139.1
Hinges with
Safety Switch**
Zinc Die Casting



**GN 139.3
Mounting Plates**
Steel,
for Hinges
GN 139.1 / GN 139.2



**GN 139.4
Mounting Plates**
Zinc Die Casting,
for Hinges
GN 139.1 / GN 139.2



**GN 239.6
Hinges with
Safety Switch**
Plastic



**GN 239.8
Mounting Plates**
Plastic,
for Hinges
GN 239.6 / GN 239.7



**GN 239.4
Hinges with Switch**
Plastic



**GN 145
Flanged
Connector Clamps**
Aluminum /
Stainless Steel



**GN 162.3
Base Plate
Connector Clamps**
Aluminum /
Stainless Steel



**GN 231
Tube Supports**
Aluminum



**GN 271
Swivel Clamp
Connector Bases**
Aluminum /
Stainless Steel



**GN 281
Swivel Clamp
Connector Joints**
Aluminum /
Stainless Steel



**GN 271.4
Sensorhalter**
Aluminum



**GN 473
Base Plate
Mounting Clamps**
Aluminum

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GN 175
Base Plate
Mounting Clamps
Plastic



GN 477
Mounting Clamps
Aluminum



GN 480
Flanged Mounting Bolts
Steel



GN 561
Fixing Angle Pieces
Plastic



GN 967
Angle Pieces, Shackles
Sheet Steel



GN 3490
Threaded Flanges
Steel Precision Casting



GN 939
Panel Support Clamps
Zinc Die Casting



GN 938.1
T-Nuts
Zinc Die Casting,
for Hinges GN 938 and
Panel Support Clamps
GN 939



GN 649
Panel Support Clamps
Plastic



GN 4470
Magnetic Catches
NdFeB,
Zinc Die Casting




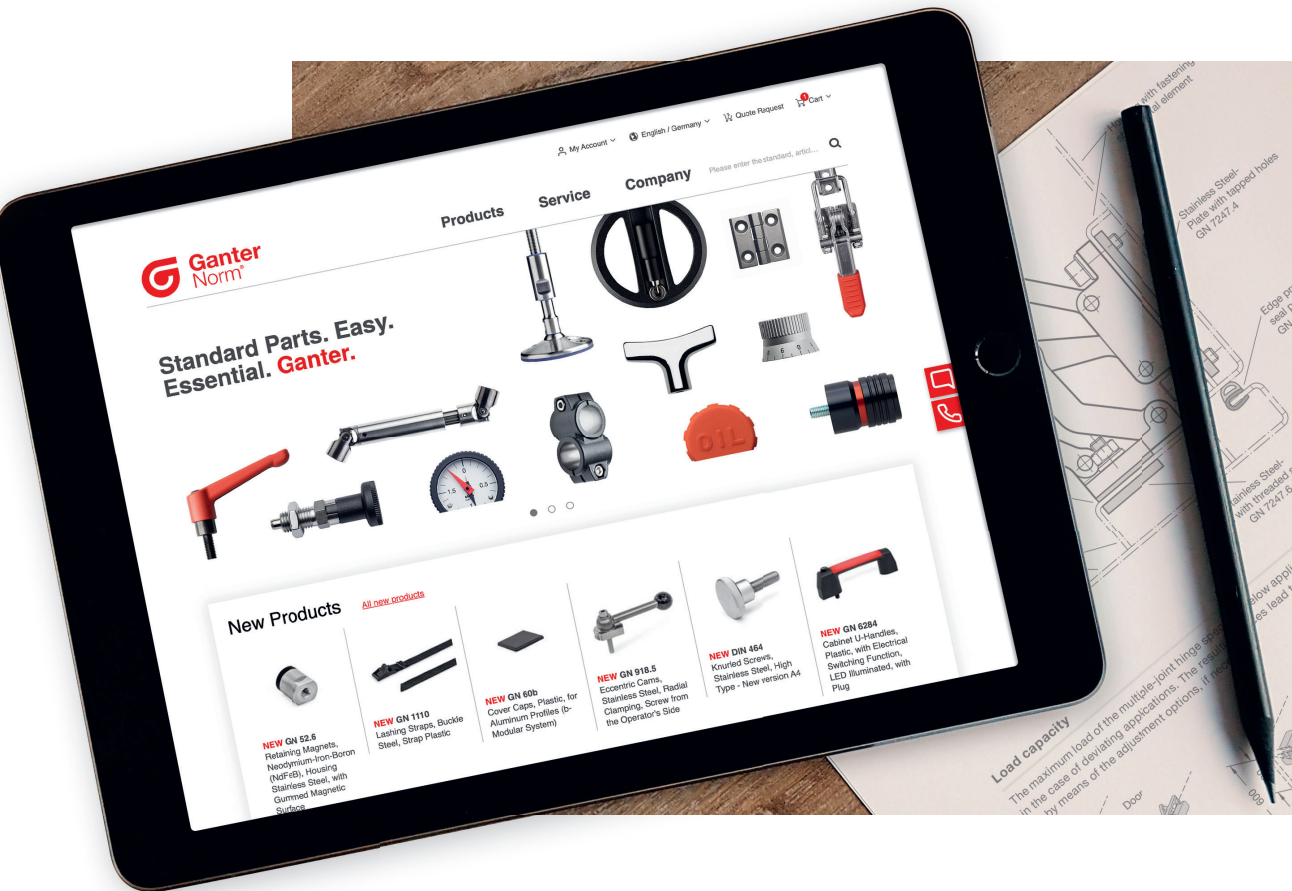
GN 56
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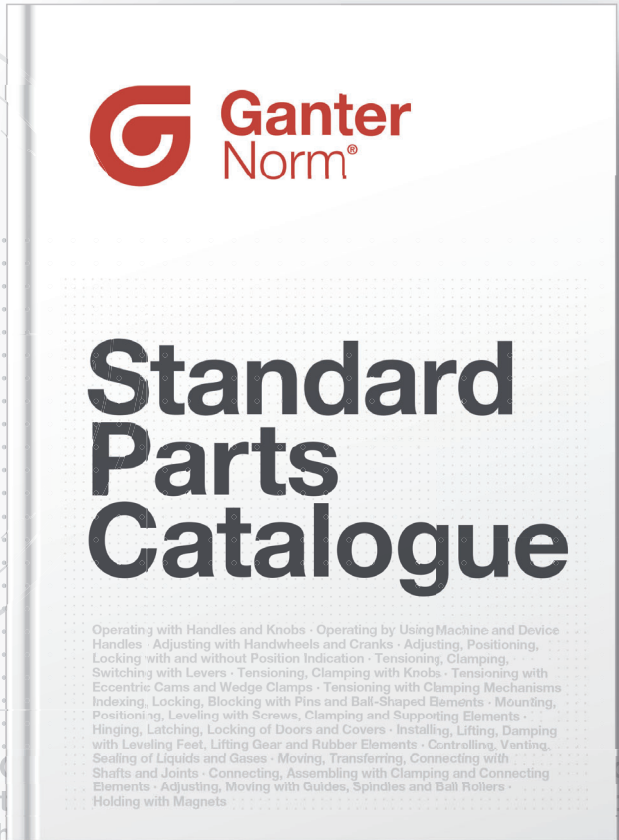
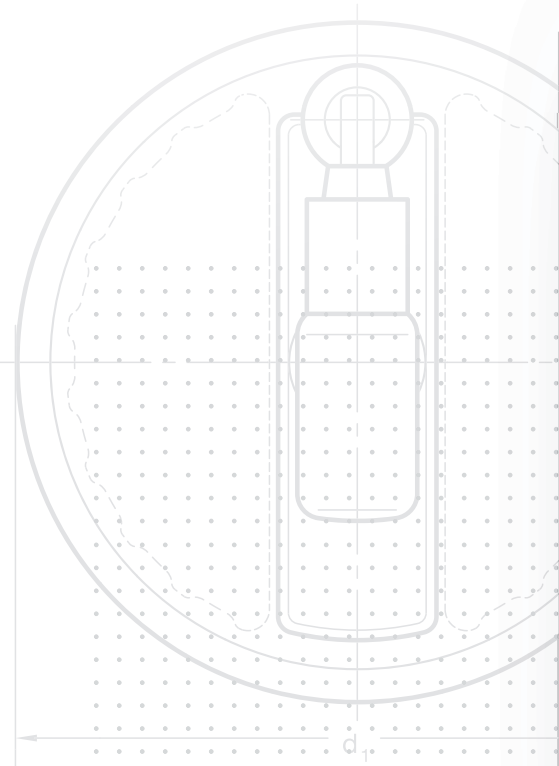
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