



Aluminum profiles



DESIGNED
FOR ENGINEERING

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i-Modular System

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Aluminum Profiles



GN 10i
Aluminum Profiles
with Open Slots
on All Sides,
Profile Type Light / Heavy
(see page 3)



GN 11i
Aluminum Profiles
with Partially
Closed Slots,
Profile Type Light
(see page 5)

Accessories



GN 50i
T-Nuts
Steel / Stainless Steel
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GN 20i
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Steel
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GN 22i
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Zinc Die Casting,
with or without Accessory
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GN 32i
Angle Connectors
Aluminum,
Corner Installation or
Single/Double Installation
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GN 41i
**Rotating
Angle Brackets**
Zinc Die Casting
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GN 42i
**Rotating
Angle Brackets**
Zinc Die Casting
(see page 20)



GN 60i
Cover Caps
Plastic
(see page 21)



GN 70i
**Cover and
Edging Profiles**
Plastic
(see page 22)



GN 71i
Cover Profiles
Aluminum
(see page 23)



GN 80i
**Transport and
Base Plates**
Zinc Die Casting
(see page 24)

Aluminum Profiles

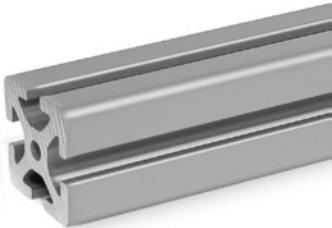
i-Modular System, with Open Slots on All Sides,
Profile Type Light / Heavy

SPECIFICATION

Profile types

- Type **L**: Light
- Type **S**: Heavy

Aluminum
Anodized, natural color **N**



INFORMATION

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

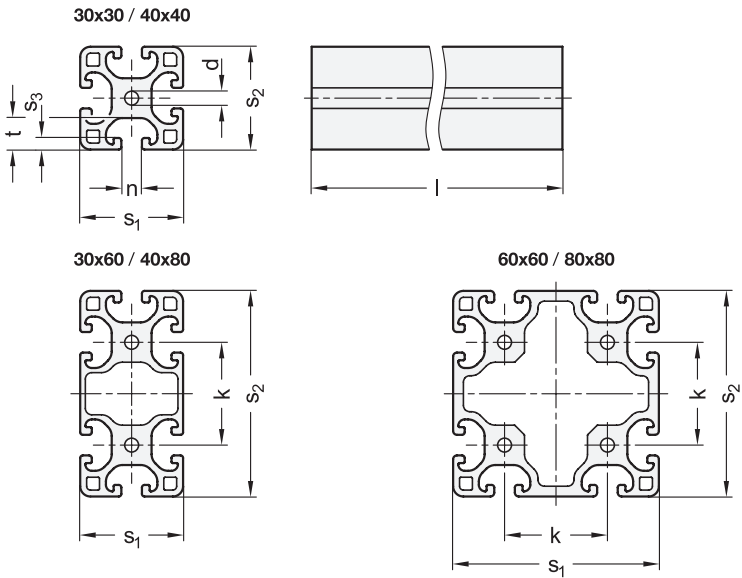
Aluminum profiles in combination with the removable and reusable accessories form a flexible modular system. Attachments can be fastened to either the slots or the end faces via the holes.

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.

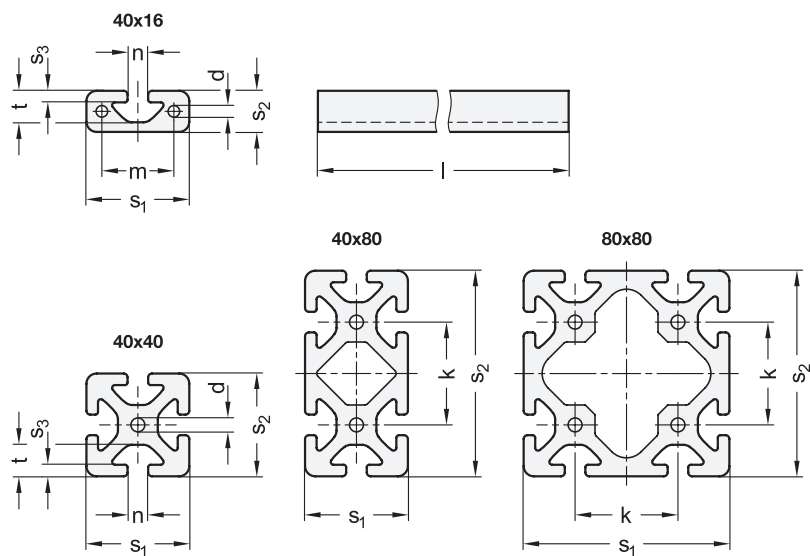
ACCESSORY

- T-Nuts GN 50i (see page 7)
- Cover Caps GN 60i (see page 21)
- Cover and Edging Profiles GN 70i (see page 22)
- Cover Profiles GN 71i (see page 23)
- Transport and Base Plates GN 80i (see page 24)



GN 10i-L

Description	s1	s2	n	Length l in m +1.5mm	Bundle Pieces	d	k	s3	t	Grid size	⚖️
GN 10i-30306L-N-2-4	30	30	6	2	4	5	-	3	9.75	30	7440
GN 10i-30306L-N-3-4	30	30	6	3	4	5	-	3	9.75	30	11160
GN 10i-30606L-N-2-2	30	60	6	2	2	5	30	3	9.75	30	6600
GN 10i-30606L-N-3-2	30	60	6	3	2	5	30	3	9.75	30	9900
GN 10i-40408L-N-2-4	40	40	8	2	4	6.8	-	4.5	12.25	40	14000
GN 10i-40408L-N-3-4	40	40	8	3	4	6.8	-	4.5	12.25	40	21000
GN 10i-40808L-N-2-2	40	80	8	2	2	6.8	40	4.5	12.25	40	12320
GN 10i-40808L-N-3-2	40	80	8	3	2	6.8	40	4.5	12.25	40	18480
GN 10i-60606L-N-2-1	60	60	6	2	1	5	30	3	9.75	30	5400
GN 10i-60606L-N-3-1	60	60	6	3	1	5	30	3	9.75	30	8100
GN 10i-80808L-N-2-1	80	80	8	2	1	6.8	40	4.5	12.25	40	10340
GN 10i-80808L-N-3-1	80	80	8	3	1	6.8	40	4.5	12.25	40	15510



GN 10i-S

Description	s1	s2	n	Length l in m +1.5mm	Bundle Pieces	d	k	m	s3	t	Grid size	⚖
GN 10i-40168S-N-2-4	40	16	8	2	4	5	-	28	4.5	12.25	40	8960
GN 10i-40168S-N-3-4	40	16	8	3	4	5	-	28	4.5	12.25	40	13440
GN 10i-40408S-N-2-4	40	40	8	2	4	6.8	-	-	4.5	12.25	40	19600
GN 10i-40408S-N-3-4	40	40	8	3	4	6.8	-	-	4.5	12.25	40	29400
GN 10i-40808S-N-2-2	40	80	8	2	2	6.8	40	-	4.5	12.25	40	18040
GN 10i-40808S-N-3-2	40	80	8	3	2	6.8	40	-	4.5	12.25	40	27060
GN 10i-80808S-N-2-1	80	80	8	2	1	6.8	40	-	4.5	12.25	40	14400
GN 10i-80808S-N-3-1	80	80	8	3	1	6.8	40	-	4.5	12.25	40	21600

Aluminum Profiles

i-Modular System, with Partially Closed Slots,
Profile Type Light

SPECIFICATION

Profile type

- Type **N**: Light, 2 sides closed, offset by 90°

Aluminum

Anodized, natural color **N**

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.

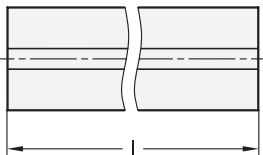
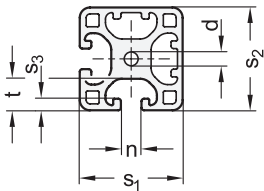
Aluminum profiles in combination with the removable and reusable accessories form a flexible modular system. Attachments can be fastened to either the slots or the end faces via the holes.

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.

ACCESSORY

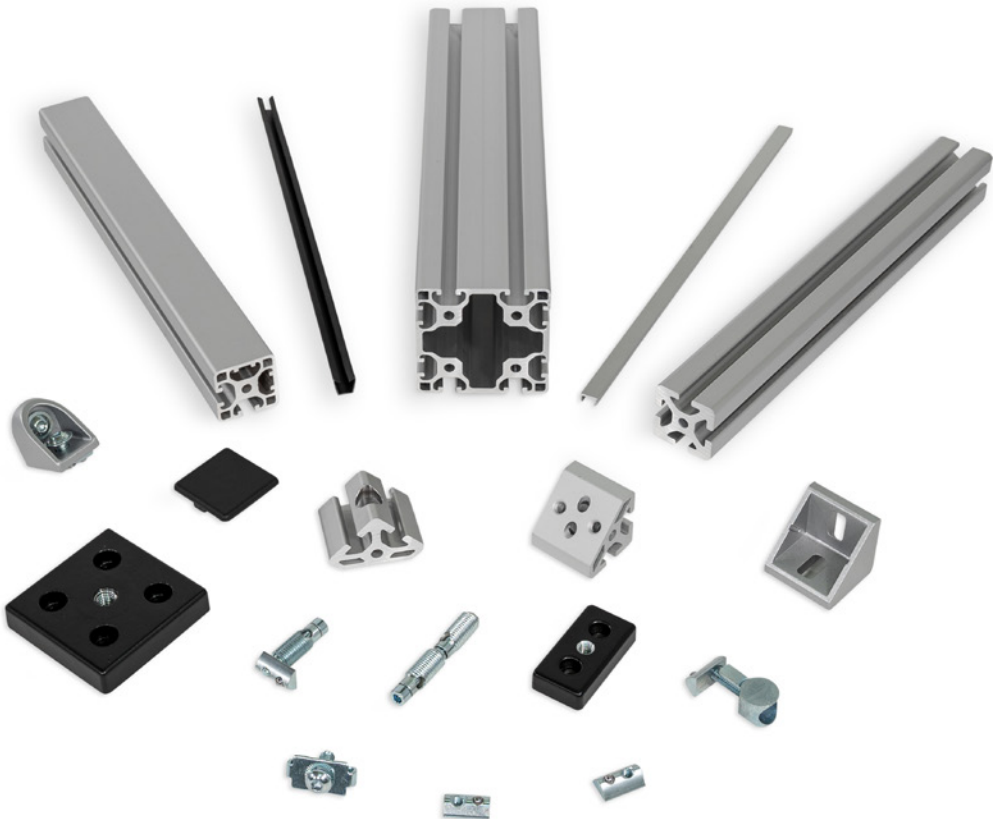
- T-Nuts GN 50i (see page 7)
- Cover Caps GN 60i (see page 21)
- Cover and Edging Profiles GN 70i (see page 22)
- Cover Profiles GN 71i (see page 23)
- Transport and Base Plates GN 80i (see page 24)



GN 11i

Description	s1	s2	n	Length l in m +1.5mm	Bundle Pieces	d	s3	t	Grid size	⚖
GN 11i-40408N-N-2-4	40	40	8	2	4	6.8	4.5	12.25	40	14640
GN 11i-40408N-N-3-4	40	40	8	3	4	6.8	4.5	12.25	40	21960

i-Modular System (item compatible)



T-Nuts

Steel / Stainless Steel, for Aluminum Profiles
(i-Modular System)

SPECIFICATION

Types

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

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

Stainless steel, plain finish **NB**

INFORMATION

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

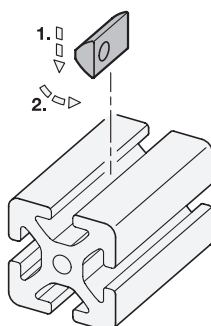
The spring-loaded ball secures the T-nut against unwanted slipping within the slot, making installation easier.

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

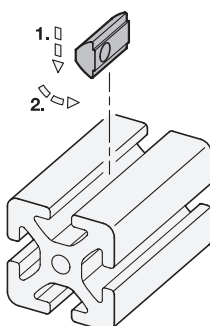


Assembly Instructions

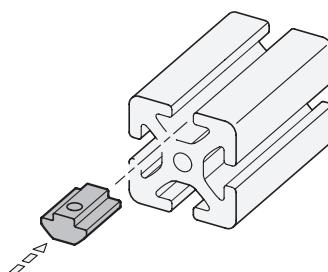
Type N

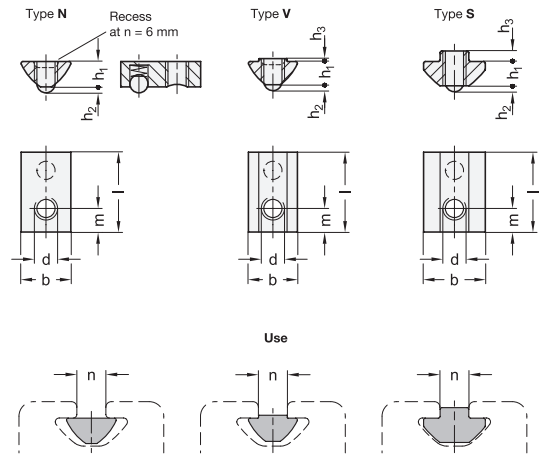


Type V



Type S





GN 50i-N

Description	n	d	b ≈	h1 ≈	h2 ≈	Length l	m ≈	⚖
GN 50i-5M3-N-SZ	5	M 3	8	4	0.8	11.5	4	4
GN 50i-5M4-N-NB	5	M 4	8	4	0.8	11.5	4	3
GN 50i-5M4-N-SZ	5	M 4	8	4	0.8	11.5	4	3
GN 50i-5M5-N-SZ	5	M 5	8	4	0.8	11.5	4	2
GN 50i-5M5-N-NB	5	M 5	8	4	0.8	11.5	4	2
GN 50i-6M3-N-SZ	6	M 3	11	6	0.9	17	5	6
GN 50i-6M4-N-SZ	6	M 4	11	6	0.9	17	5	5
GN 50i-6M5-N-SZ	6	M 5	11	6	0.9	17	5	5
GN 50i-6M6-N-SZ	6	M 6	11	6	0.9	17	5	4
GN 50i-8M4-N-SZ	8	M 4	14	7	1.6	23	7	11
GN 50i-8M4-N-NB	8	M 4	14	7	1.6	23	7	11
GN 50i-8M5-N-SZ	8	M 5	14	7	1.6	23	7	10
GN 50i-8M5-N-NB	8	M 5	14	7	1.6	23	7	10
GN 50i-8M6-N-SZ	8	M 6	14	7	1.6	23	7	9
GN 50i-8M6-N-NB	8	M 6	14	7	1.6	23	7	9
GN 50i-8M8-N-SZ	8	M 8	14	7	1.6	23	7	8
GN 50i-8M8-N-NB	8	M 8	14	7	1.6	23	7	8

GN 50i-V

Description	n	d	b ≈	h1 ≈	h2 ≈	h3 ≈	Length l	m ≈	⚖
GN 50i-5M3-V-SZ	5	M 3	8	4	0.8	0.7	11.5	4	3
GN 50i-5M4-V-SZ	5	M 4	8	4	0.8	0.7	11.5	4	2
GN 50i-5M5-V-SZ	5	M 5	8	4	0.8	0.7	11.5	4	1
GN 50i-6M3-V-SZ	6	M 3	11	6	0.9	0.5	17	5	6
GN 50i-6M4-V-SZ	6	M 4	11	6	0.9	0.5	17	5	5
GN 50i-6M5-V-SZ	6	M 5	11	6	0.9	0.5	17	5	4
GN 50i-6M5-V-NB	6	M 5	11	6	0.9	0.5	17	5	4
GN 50i-6M6-V-SZ	6	M 6	11	6	0.9	0.5	17	5	3
GN 50i-6M6-V-NB	6	M 6	11	6	0.9	0.5	17	5	3
GN 50i-8M3-V-SZ	8	M 3	14	7	1.6	0.9	23	7	15
GN 50i-8M4-V-SZ	8	M 4	14	7	1.6	0.9	23	7	14
GN 50i-8M5-V-SZ	8	M 5	14	7	1.6	0.9	23	7	13
GN 50i-8M6-V-SZ	8	M 6	14	7	1.6	0.9	23	7	12
GN 50i-8M8-V-SZ	8	M 8	14	7	1.6	0.9	23	7	10

GN 50i-S

Description	n	d	b ≈	h1 ≈	h2 ≈	h3 ≈	Length l	m ≈	⚖
GN 50i-8M4-S-SZ	8	M 4	18	7	1.6	2.8	23	7	8
GN 50i-8M5-S-SZ	8	M 5	18	7	1.6	2.8	23	7	7
GN 50i-8M6-S-SZ	8	M 6	18	7	1.6	2.8	23	7	6
GN 50i-8M8-S-SZ	8	M 8	18	7	1.6	2.8	23	7	4

Standard Connectors

Steel, for Aluminum Profiles (i-Modular System)

SPECIFICATION

Type

- Type **D**: Doubled

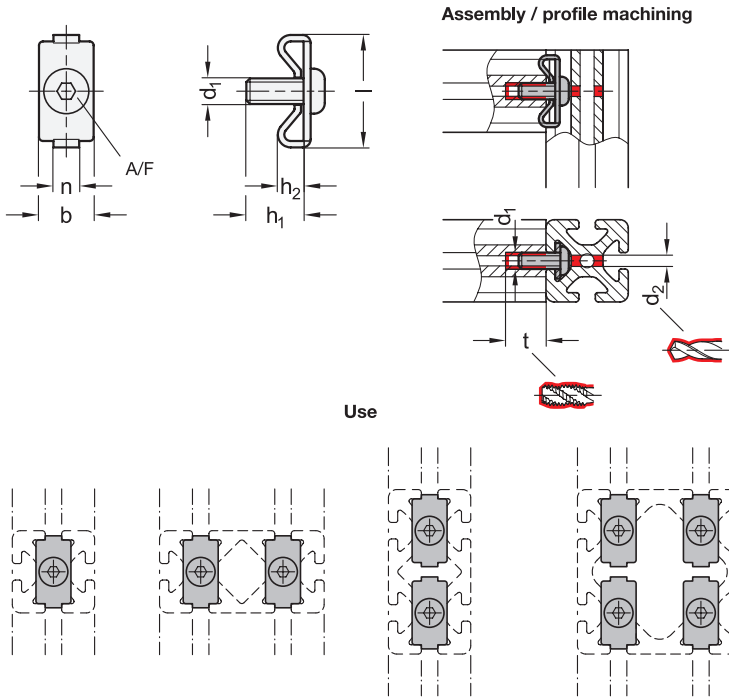
Coding

- **C**: With screw

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

INFORMATION

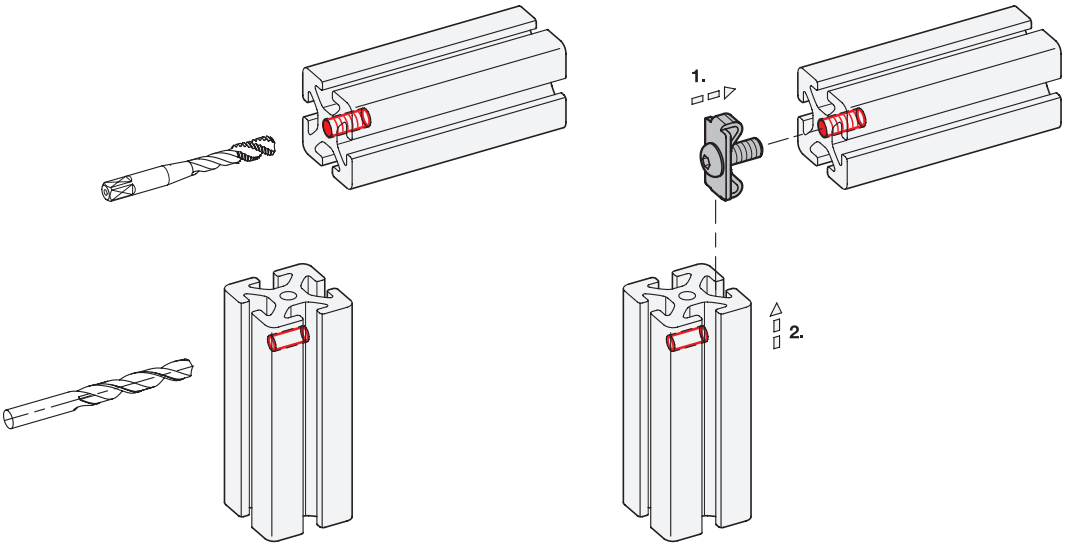
Standard connectors GN 20i fasten aluminum profiles at right angles and secure them against twisting. This requires machining of both profiles. The internal thread can be cut directly into the end face profile holes.
If panels are used in the slot, they must be suitably pocketed.
Standard connectors are supplied in bundles. The table shows the quantity included in each bundle.



GN 20i

Description	n	Bundle Pieces	b	d1	d2	h1 ≈	h2 ≈	Length l ≈	A/F	t	Tightening torque in Nm	⚖
GN 20i-6-D-C-SZ-4	6	4	13	M 6	5.5	12	7.5	28.5	4	15	10	36
GN 20i-8-D-C-SZ-4	8	4	17	M 8	7	18	10	35	5	18	25	72

Assembly Instructions / Profile Machining



Universal Connectors

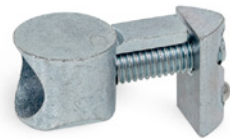
Zinc Die Casting,
for Aluminum Profiles (i-Modular System)

SPECIFICATION

Type
- Type **V**: With anti-twist protection

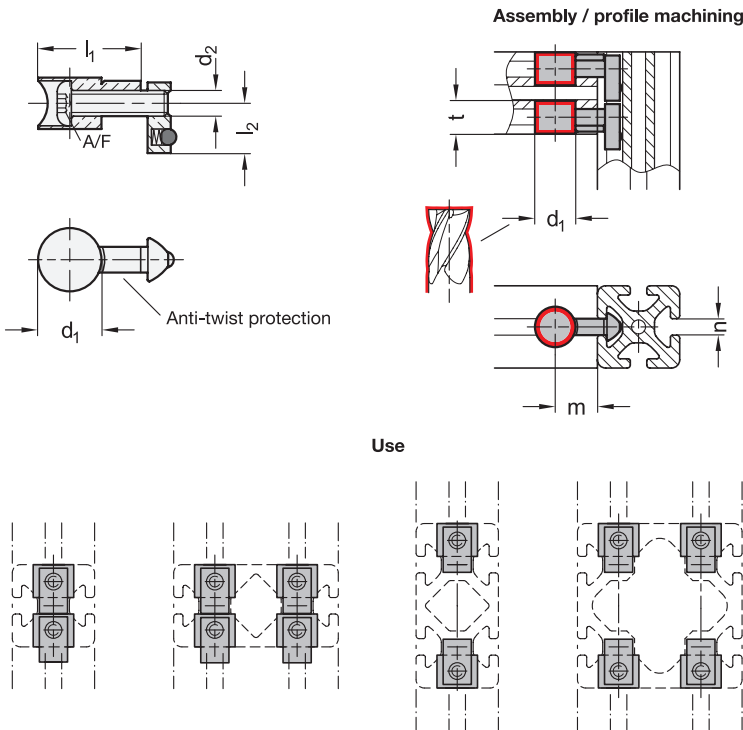
Coding
- **C**: With screw and T-nut

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



INFORMATION

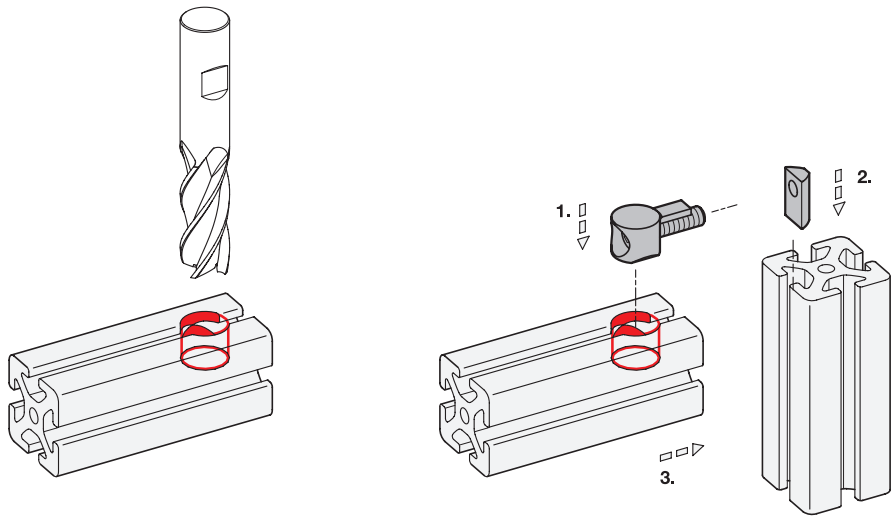
Universal connectors GN 22i fasten aluminum profiles together at right angles and, when used in pairs, secure them against twisting. Only one profile has to be machined. The connection can be freely positioned and slid along the slot. The anti-twist protection can be easily removed thanks to its predetermined 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.



GN 22i

Description	n	Bundle Pieces	d1	d2	l1	l2	m +0.5	A/F	t +0.5	Tightening torque in Nm	⚖
GN 22i-6-V-C-ZZSZ-4	6	4	16	M 6	25.5	11.5	15	4	12.7	8	72
GN 22i-8-V-C-ZZSZ-4	8	4	20	M 8	33.5	15.5	20	5	16	25	124

Assembly Instructions / Profile Machining



Automatic Connectors

**Steel, for Aluminum Profiles (i-Modular System),
Right-Angled or End Face Connection**

SPECIFICATION

Profile type

- Type **S**: Heavy

Coding

- **R**: Right-angled connection

- **S**: End face connection

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

INFORMATION

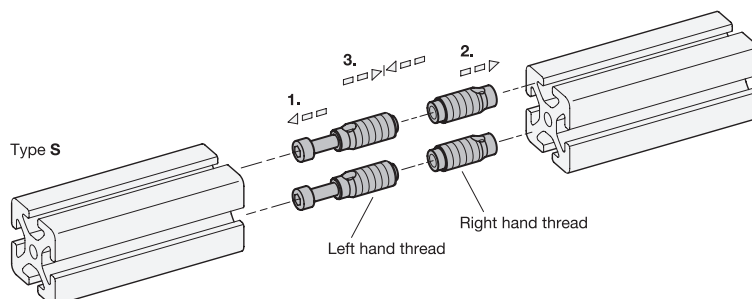
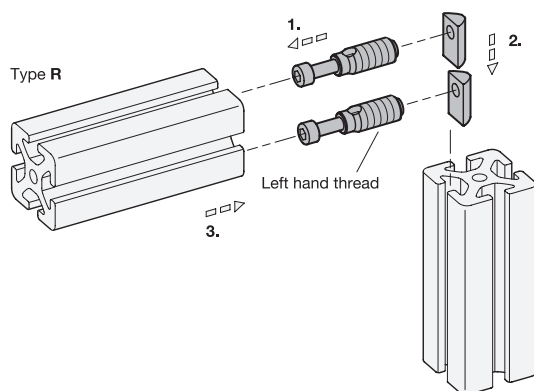
Automatic connectors GN 23i (Coding R) fasten aluminum profiles together at right angles. The connection can be freely positioned and slid along the slot. Automatic connectors GN 23i (Coding S) fasten aluminum profiles together on the end faces to extend them while securing them against twisting. Machining of the profile is not necessary.

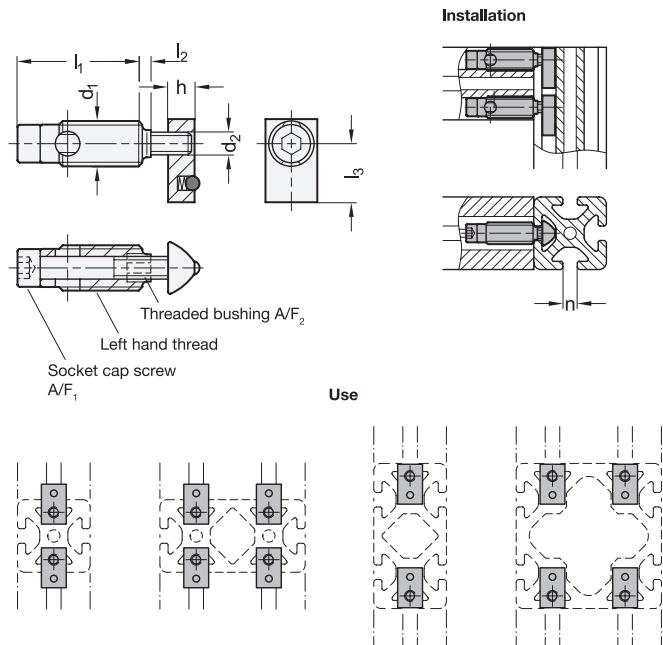
For assembly, first insert the socket cap screw along the slot and then screw in the lightly lubricated threaded bushings. Minor burr formation is possible. Automatic connectors are used in pairs opposite each other. If panels are used in the slot, they must be suitably pocketed.

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



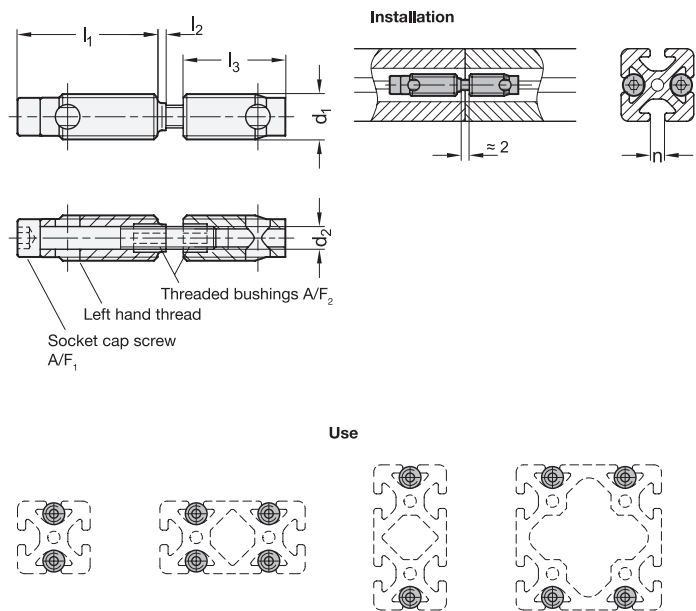
Assembly Instructions





GN 23i-R

Description	n	Bundle Pieces	d1 Self-forming thread	d2	h	l1	l2	l3	A/F1	A/F2	Tightening torque in Nm	
GN 23i-6S-R-SZ-4	6	4	S 10	M 5	6	32	-	12	4	5	8	72
GN 23i-8S-R-SZ-4	8	4	S 12	M 6	7	34.5	2.5	16	5	6	14	140



GN 23i-S

Description	n	Bundle Pieces	d1 Self-forming thread	d2	l1	l2	l3	A/F1	A/F2	Tightening torque in Nm	
GN 23i-6S-S-SZ-4	6	4	S 10	M 5	32	-	27	4	5	8	92
GN 23i-8S-S-SZ-4	8	4	S 12	M 6	34.5	2.5	30.8	5	6	14	172

Angle Brackets

Zinc Die Casting, for Aluminum Profiles (i-Modular System), with or without Accessory

SPECIFICATION

Types

- Type **A**: Without accessory
- Type **C**: With fastening set and cover cap

Angle bracket

Zinc die casting

Painted, white aluminum **ZW**

Screws and T-Nuts (only for Type C)

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

Cover cap (only for Type C)

Plastic (Polyamide PA)

Black **S**

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 (type C).

ACCESSORY (ONLY FOR TYPE A)

- T-Nuts GN 50i (see page 7)

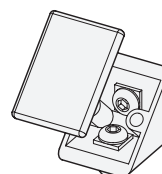
TECHNICAL INFORMATION

- Plastic Characteristics (see catalogue page A2)

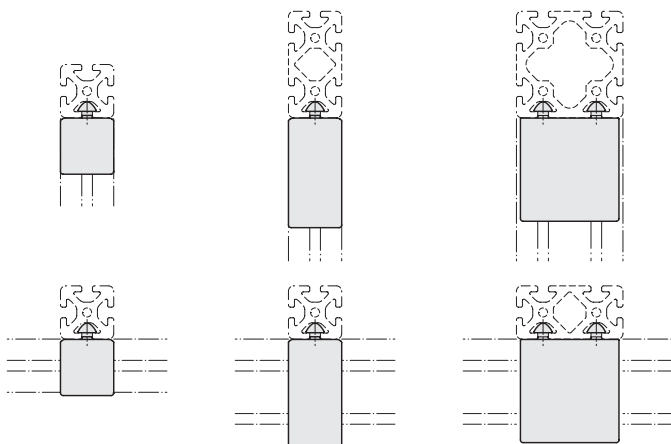


Assembly Options / Application Examples

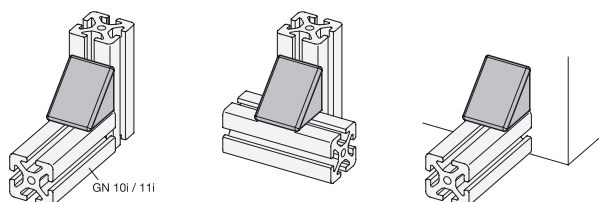
Assembly of cover cap



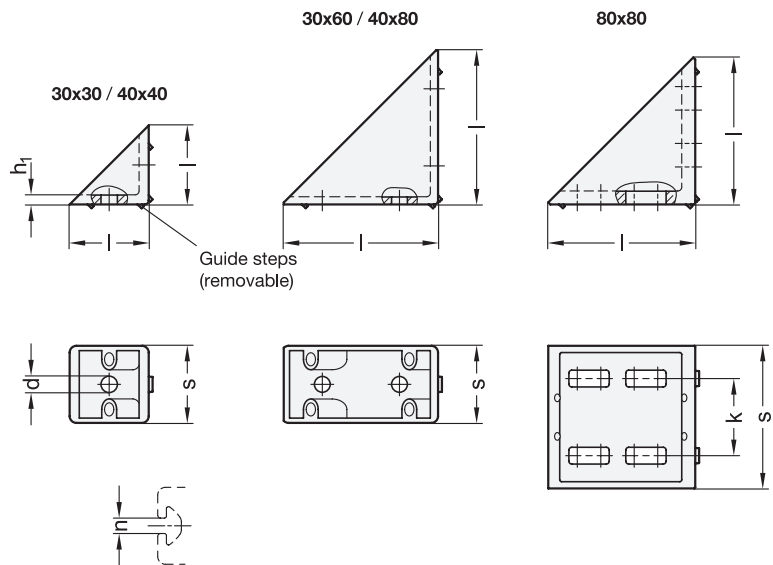
Use



Application examples

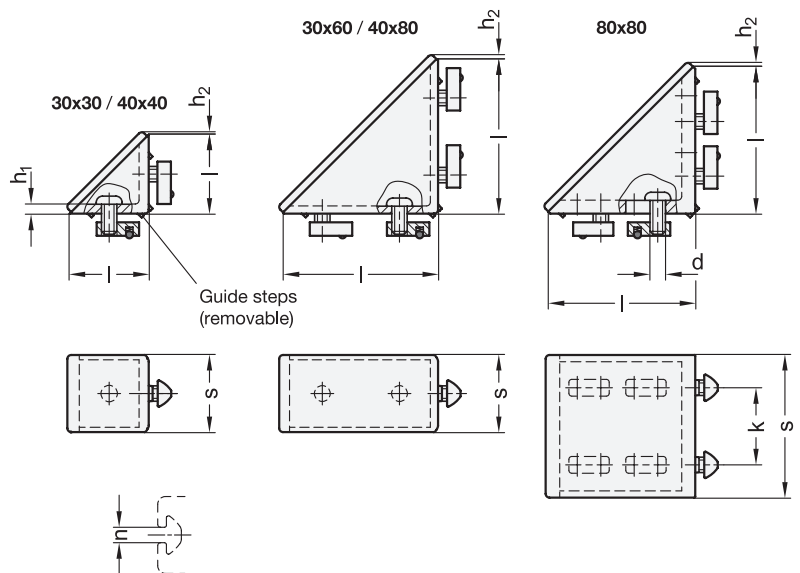


GN 10i / 11i



GN 30i-A-ZW

Description	s Nominal dimension	s Actual dimension	Length l Nominal dimension	Length l Actual dimension	n	d For screw	h ₁	k	⚖
GN 30i-30306-A-ZW	30	30	30	30	6	M 6	2.5	-	47
GN 30i-30606-A-ZW	30	30	60	60	6	M 6	3.5	-	130
GN 30i-40408-A-ZW	40	40	40	40	8	M 8	5	-	85
GN 30i-40808-A-ZW	40	40	80	80	8	M 8	5	-	271
GN 30i-80808-A-ZW	80	74	80	76	8	M 8	8	40	407



GN 30i-C-ZWSZS

Description	s Nominal dimension	s Actual dimension	Length l Nominal dimension	Length l Actual dimension	n	d	h ₁	h ₂ ≈	k	⚖
GN 30i-30306-C-ZWSZS	30	30	30	30	6	M 6	2.5	2	-	52
GN 30i-30606-C-ZWSZS	30	30	60	60	6	M 6	3.5	2	-	166
GN 30i-40408-C-ZWSZS	40	40	40	40	8	M 8	5	2	-	158
GN 30i-40808-C-ZWSZS	40	40	80	80	8	M 8	5	2	-	355
GN 30i-80808-C-ZWSZS	80	74	80	76	8	M 8	8	7	40	575

Angle Connectors

**Aluminum, for Aluminum Profiles (i-Modular System),
Corner Installation or Single / Double Installation**

SPECIFICATION

Profile type

- Type **S**: Heavy

Identification no.

- **1**: Corner installation
- **2**: Single and double installation

Type

- Type **A**: Without fastening set

Aluminum

Anodized, natural color **N**

INFORMATION

Angle connectors GN 32i (identification no. 1) fasten aluminum profiles together at right angles and are primarily used for creating corner braces at 45° angles. Angle connectors GN 32i (identification no. 2) fasten single or double braces to aluminum profiles at an angle of 45°.

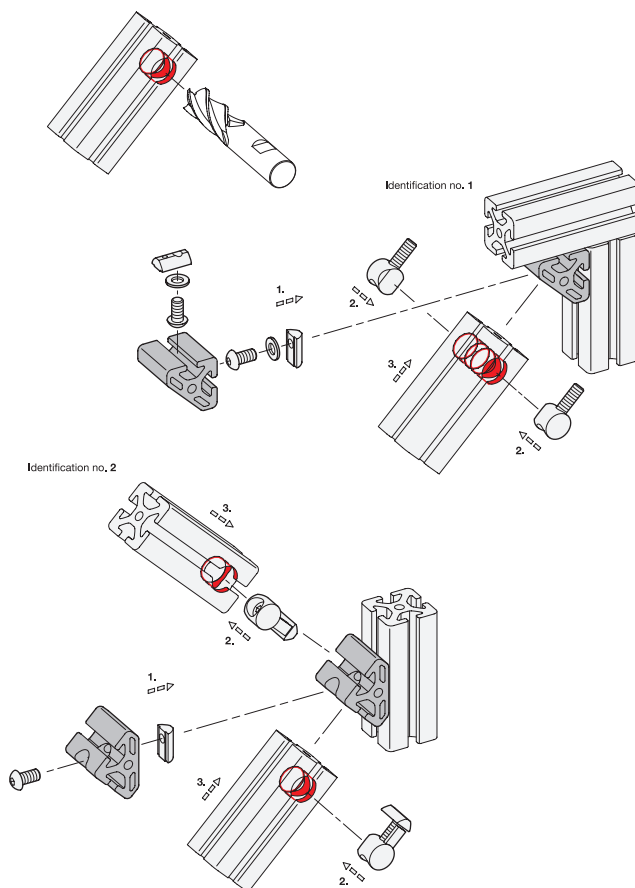
The braces are fastened with universal connectors GN 22i (see page 11). This requires their anti-twist protection to be removed (identification no. 1) and the profile to be machined (identification no. 1 and 2).

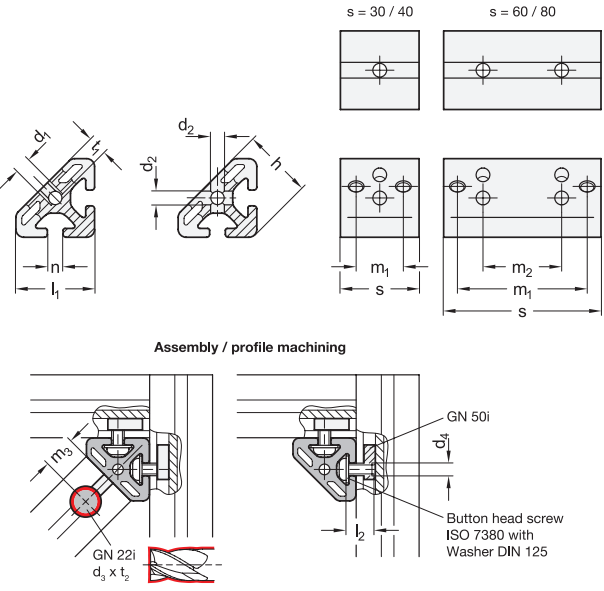
ACCESSORY

- Universal Connectors GN 22i (see page 11)
- T-Nuts GN 50i (see page 7)



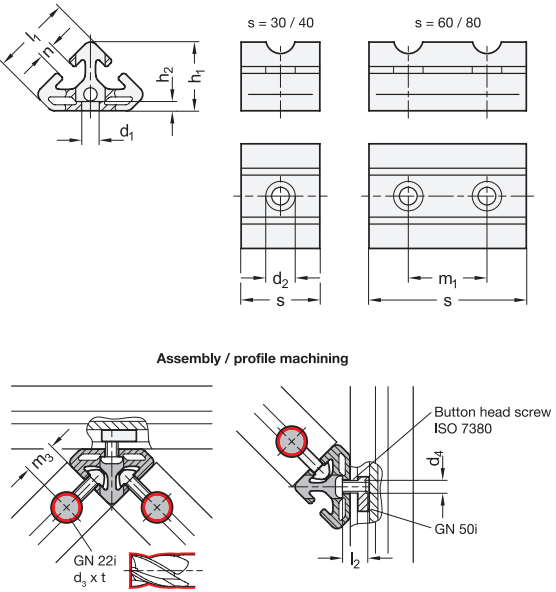
Assembly Instructions / Profile Machining





GN 32i-1

Description	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	⚖
GN 32i-30306S-1-A-N	30	30	6	M 6	5.5	16	M 6	27.4	12	17.4	-	15	6.5	12.7	23
GN 32i-40408S-1-A-N	40	40	8	M 8	6.5	20	M 8	36.6	16	24	-	20	14	16	73
GN 32i-60306S-1-A-N	60	30	6	M 6	5.5	16	M 6	27.4	12	47.4	30	15	6.5	12.7	40
GN 32i-80408S-1-A-N	80	40	8	M 8	6.5	20	M 8	36.6	16	64	40	20	14	16	148



GN 32i-2

Description	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	⚖
GN 32i-30306S-2-A-N	30	30	6	6.5	11	16	M 6	27.4	7.2	16	-	15	12.7	21
GN 32i-40408S-2-A-N	40	40	8	9	15	20	M 8	34.9	4.5	16	-	20	16	67
GN 32i-60306S-2-A-N	60	30	6	6.5	11	16	M 6	27.4	7.2	16	30	15	12.7	37
GN 32i-80408S-2-A-N	80	40	8	9	15	20	M 8	34.9	4.5	16	40	20	16	135

Rotating Angle Brackets

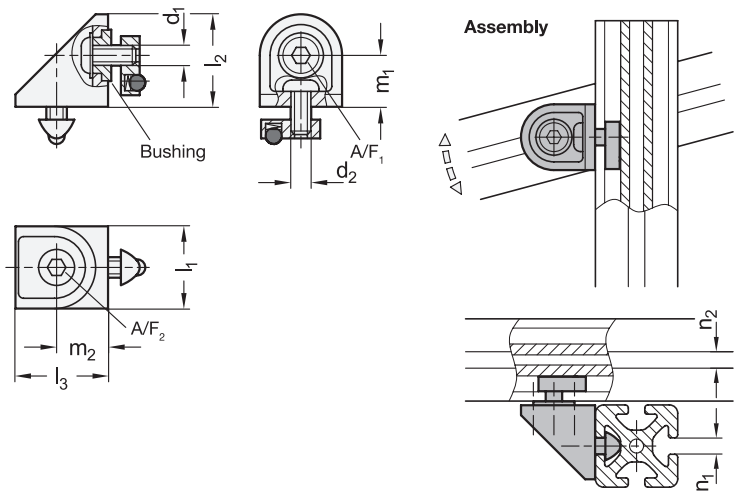
Zinc Die Casting, for Aluminum Profiles
(i-Modular System)

SPECIFICATION

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

INFORMATION

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



GN 41i

Description	l1	n1	n2	d1	d2	l2	l3	m1	m2	A/F1	A/F2	Δ
GN 41i-2466-C-ZWSZ	24	6	6	M 6	M 6	27	27	15	15	4	4	65
GN 41i-3288-C-ZWSZ	32	8	8	M 8	M 8	36	36	20	20	5	5	135

Rotating Angle Brackets

**Zinc Die Casting, for Aluminum Profiles
(i-Modular System)**

SPECIFICATION

Type

- Type **C**: With fastening set

Housing

Zinc Die Casting

Painted, white aluminum **ZW**

Fastening set

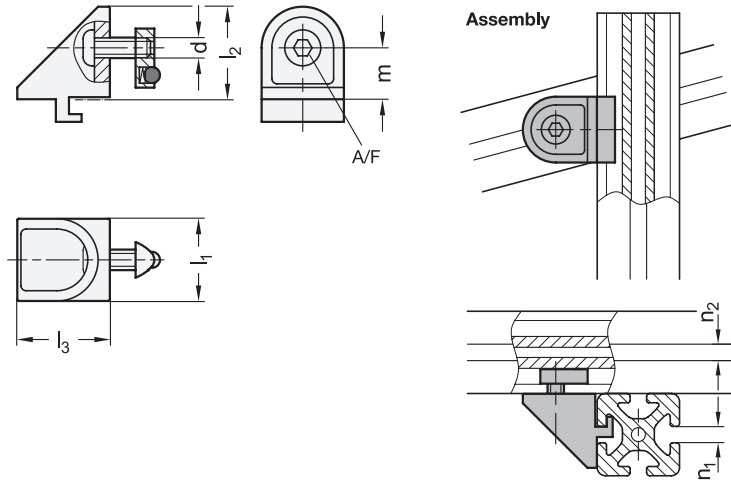
Screw and T-Nut

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

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.



GN 42i

Description	l1	n1	n2	d	l2	l3	m	A/F	△
GN 42i-2466-C-ZWSZ	24	6	6	M 6	27	27	15	4	66
GN 42i-3288-C-ZWSZ	32	8	8	M 8	36	36	20	5	130

Cover Caps

Plastic, for Aluminum Profiles (i-Modular System)

SPECIFICATION

Type

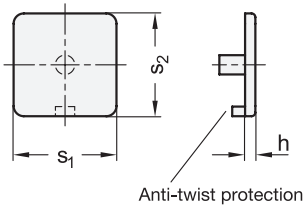
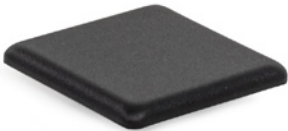
- Type **P**: Press-on type
- Plastic (Polyamide PA)
- Black **KS**

INFORMATION

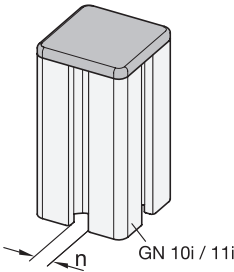
Cover caps GN 60i make a visually appealing closure for the ends of aluminum profiles, protecting against injuries from sharp cut edges and preventing the ingress of dust and dirt. They can be fitted without machining the profile.

TECHNICAL INFORMATION

- Plastic Characteristics (see catalogue page A2)



Application example



GN 60i

Description	s1	s2	n	h ≈	Grid size	
GN 60i-30306-P-KS	30	30	6	3	30	3
GN 60i-30606-P-KS	30	60	6	3	30	5
GN 60i-40168-P-KS	40	16	8	4	40	2
GN 60i-40408-P-KS	40	40	8	4	40	5
GN 60i-40808-P-KS	40	80	8	4	40	8
GN 60i-60606-P-KS	60	60	6	3	30	14
GN 60i-80808-P-KS	80	80	8	4	40	17

Cover and Edging Profiles

Plastic, for Aluminum Profiles (i-Modular System)

SPECIFICATION

Plastic (Polypropylen PP)

- Black **KS**
- Natural **KN**

INFORMATION

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

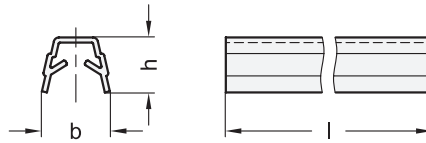
When used as a cover profile, they are installed with the closed side facing out. This way, they protect the slot from dust and dirt, cover the cables and hoses in the slot and make for visually appealing appearance.

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.

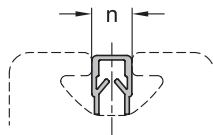
TECHNICAL INFORMATION

- Plastic Characteristics (see catalogue page A2)

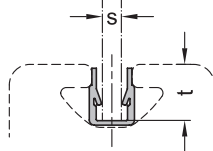


Use

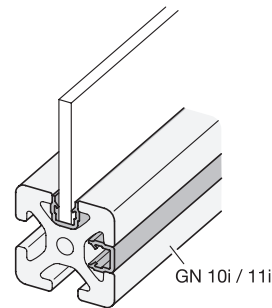
Cover profiles



Edging profiles



Application example



GN 70i

Description	n	Length l in m	Bundle Pieces	b ≈	h ≈	s Clamping range	t	⚖
GN 70i-6-KS-2-4	6	2	4	10	9	2 - 3.5	8	140
GN 70i-6-KN-2-4	6	2	4	10	9	2 - 3.5	8	140
GN 70i-8-KS-2-4	8	2	4	13	10.5	4 - 6	10.5	208
GN 70i-8-KN-2-4	8	2	4	13	10.5	4 - 6	10.5	208

Cover Profiles

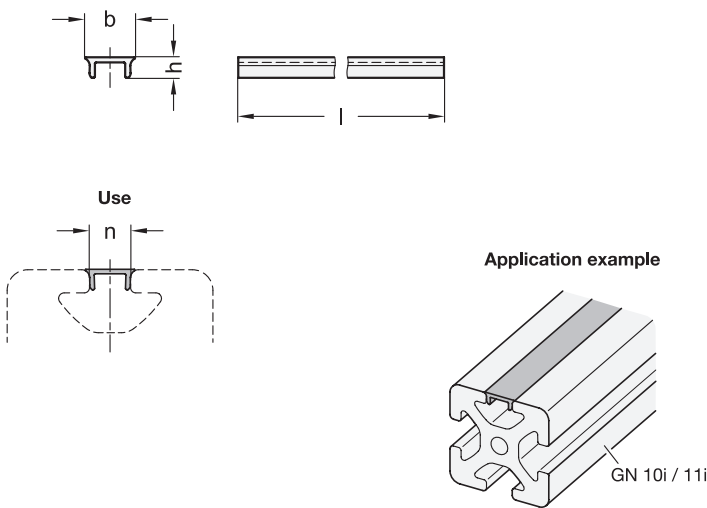
Aluminum, for Aluminum Profiles (i-Modular System)

SPECIFICATION

Aluminum
Anodized, natural color **AN**

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



GN 71i

Description	n	Length l in m	Bundle Pieces	b ≈	h ≈	
GN 71i-8-AN-2-4	8	2	4	9.7	4	220

Transport and Base Plates

**Zinc Die Casting, for Aluminum Profiles
(i-Modular System)**

SPECIFICATION

Type

- Type **A**: Without screws

Zinc die casting, black **ZS**

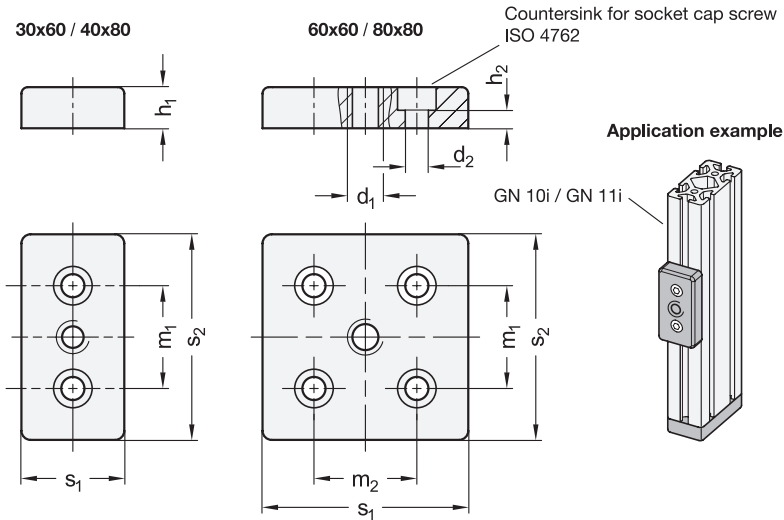
INFORMATION

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.

ACCESSORY

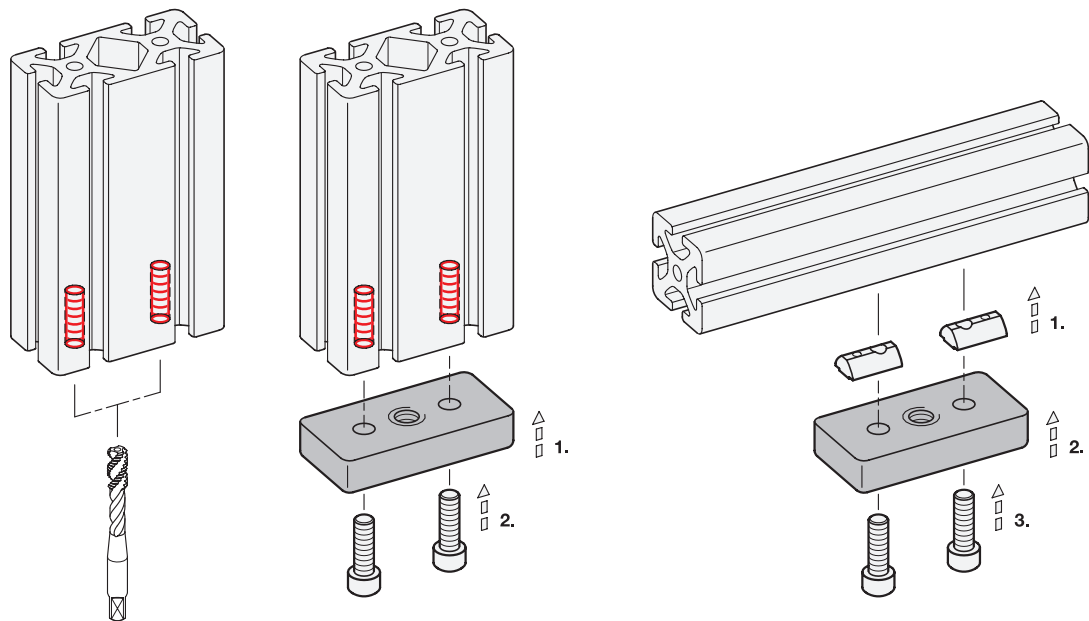
- T-Nuts GN 50i (see page 7)



GN 80i

Description	s1	s2	n	d1	d2 For screw	h1	h2	m1	m2	Grid size	
GN 80i-30606M8-A-ZS	30	60	6	M 8	M 6	12	5	30	-	30	103
GN 80i-30606M10-A-ZS	30	60	6	M 10	M 6	12	5	30	-	30	102
GN 80i-40808M10-A-ZS	40	80	8	M 10	M 8	16	6.5	40	-	40	211
GN 80i-40808M12-A-ZS	40	80	8	M 12	M 8	16	6.5	40	-	40	209
GN 80i-60606M10-A-ZS	60	60	6	M 10	M 6	12	5	30	30	30	193
GN 80i-60606M12-A-ZS	60	60	6	M 12	M 6	12	5	30	30	30	192
GN 80i-80808M12-A-ZS	80	80	8	M 12	M 8	16	6.5	40	40	40	443
GN 80i-80808M16-A-ZS	80	80	8	M 16	M 8	16	6.5	40	40	40	425

Assembly Instructions / Profile Machining



Aluminum Profiles



GN 10b
Aluminum Profiles
with Open Slots
on All Sides,
Profile Type Light / Heavy
(see page 27)

Accessories



GN 50b
T-Nuts
Steel
(see page 29)



GN 51b
T-Slot Nuts
Steel / Stainless Steel
(see page 31)



GN 52b
T-Slot Bolts
Steel / Stainless Steel
(see page 32)



GN 53b
Collar Nuts
Steel
(see page 33)



GN 21b
Central Screws
Steel
(see page 35)



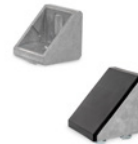
GN 23b
Automatic Connectors
Steel,
Right-Angled or
End Face Connection
(see page 37)



GN 25b
Quick Release Connectors
Steel, Asymmetrical or
Symmetrical
Mounting Stud
(see page 39)



GN 26b
Bolt Connectors
Steel
(see page 41)



GN 30b
Angle Brackets
Aluminum, with or
without Accessory
(see page 43)



GN 33b
Cube Connectors
Aluminum
(see page 46)



GN 41b
Rotating Angle Brackets
Aluminum
(see page 47)



GN 60b
Cover Caps
Plastic
(see page 48)



GN 70b
Cover and Edging Profiles
Plastic
(see page 49)



GN 71b
Cover Profiles
Aluminum
(see page 50)



GN 80b
Transport and Base Plates
Zinc Die Casting
(see page 51)

Aluminum Profiles

**b-Modular System, with Open Slots on All Sides,
Profile Type Light / Heavy**

SPECIFICATION

Profile types

- Type **L**: Light
- Type **S**: Heavy

Aluminum

Anodized, natural color **N**

INFORMATION

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

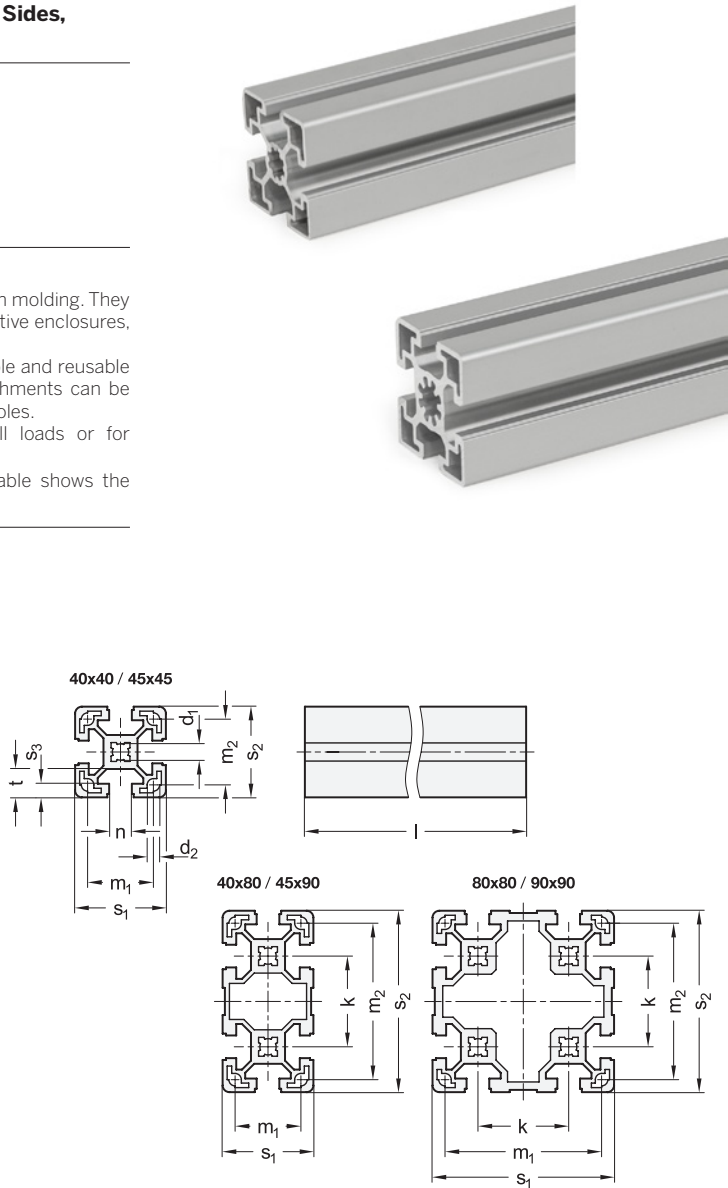
Aluminum profiles in combination with the removable and reusable accessories form a flexible modular system. Attachments can be fastened to either the slots or the end faces via the holes.

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.

ACCESSORY

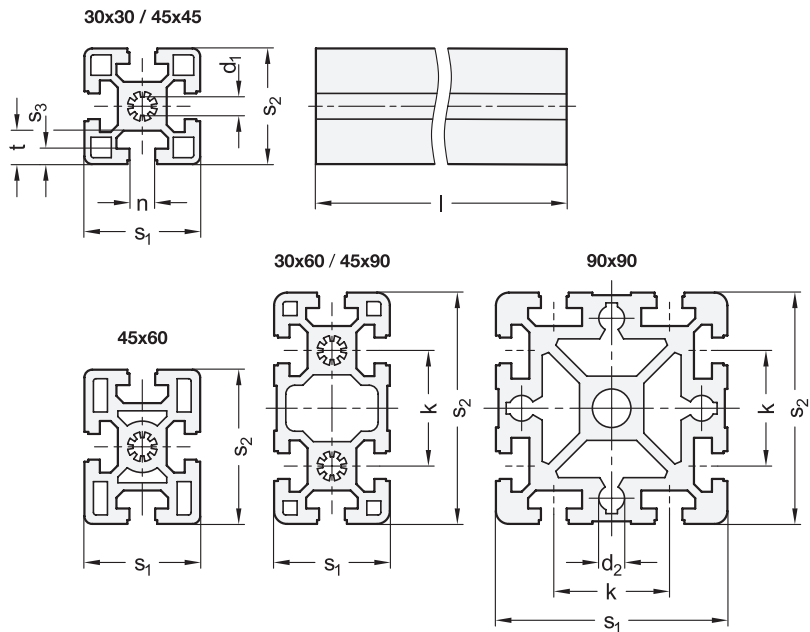
- T-Nuts GN 50b (see page 29)
- T-Slot Nuts GN 51b (see page 31)
- T-Slot Bolts GN 52b (see page 32)
- Cover Caps GN 60b (see page 48)
- Cover and Edging Profiles GN 70b (see page 49)
- Cover Profiles GN 71b (see page 50)
- Transport and Base Plates GN 80b (see page 51)



GN 10b-L

Description	s1	s2	n	Length l in m +1.5mm	Bundle Pieces	d1	d2*	k	m1	m2	s3	t	Grid size	⚖
GN 10b-404010L-N-2-4	40	40	10	2	4	10	5.5	-	29	29	6	12.5	40	12080
GN 10b-404010L-N-3-4	40	40	10	3	4	10	5.5	-	29	29	6	12.5	40	18120
GN 10b-408010L-N-2-2	40	80	10	2	2	10	5.5	40	29	69	6	12.5	40	10680
GN 10b-408010L-N-3-2	40	80	10	3	2	10	5.5	40	29	69	6	12.5	40	16020
GN 10b-454510L-N-2-4	45	45	10	2	4	10	-	-	-	-	6	14.5	45	12400
GN 10b-454510L-N-3-4	45	45	10	3	4	10	-	-	-	-	6	14.5	45	18600
GN 10b-459010L-N-2-2	45	90	10	2	2	10	-	45	-	-	6	14.5	45	12200
GN 10b-459010L-N-3-2	45	90	10	3	2	10	-	45	-	-	6	14.5	45	18300
GN 10b-808010L-N-2-1	80	80	10	2	1	10	5.5	40	69	69	6	12.5	40	9960
GN 10b-808010L-N-3-1	80	80	10	3	1	10	5.5	40	69	69	6	12.5	40	14940
GN 10b-909010L-N-2-1	90	90	10	2	1	10	-	45	-	-	6	13	45	12680
GN 10b-909010L-N-3-1	90	90	10	3	1	10	-	45	-	-	6	13	45	19020

* Bores only on grid size = 40



GN 10b-S

Description	s1	s2	n	Length l in m +1.5mm	Bundle Pieces	d1	d2	k	s3	t	Grid size	⚖
GN 10b-30308S-N-2-4	30	30	8	2	4	7.3	-	-	2.2	9	30	6800
GN 10b-30308S-N-3-4	30	30	8	3	4	7.3	-	-	2.2	9	30	10200
GN 10b-30608S-N-2-2	30	60	8	2	2	7.3	-	30	2.2	9	30	5960
GN 10b-30608S-N-3-2	30	60	8	3	2	7.3	-	30	2.2	9	30	8940
GN 10b-454510S-N-2-4	45	45	10	2	4	10	-	-	6	12.5	45	16240
GN 10b-454510S-N-3-4	45	45	10	3	4	10	-	-	6	12.5	45	24360
GN 10b-456010S-N-2-2	45	60	10	2	2	10	-	-	6	12.5	45	12040
GN 10b-456010S-N-3-2	45	60	10	3	2	10	-	-	6	12.5	45	18060
GN 10b-459010S-N-2-2	45	90	10	2	2	10	-	45	6	12.5	45	16480
GN 10b-459010S-N-3-2	45	90	10	3	2	10	-	45	6	12.5	45	24720
GN 10b-909010S-N-2-1	90	90	10	2	1	15	10	45	6	12.5	45	21020
GN 10b-909010S-N-3-1	90	90	10	3	1	15	10	45	6	12.5	45	31530

T-Nuts

Steel, for Aluminum Profiles (b-Modular System)

SPECIFICATION

Types

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

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

INFORMATION

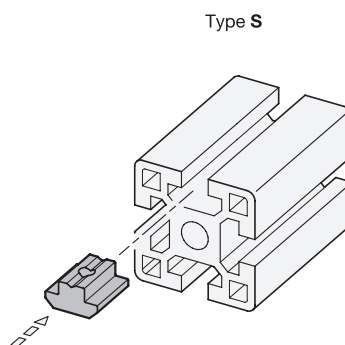
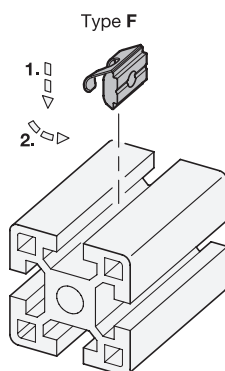
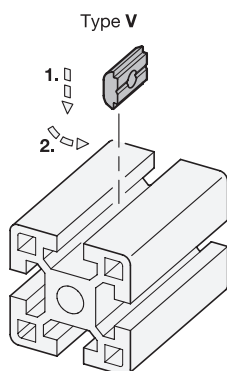
T-nuts GN 50b fasten attachments and accessories in the slot of aluminum profiles.

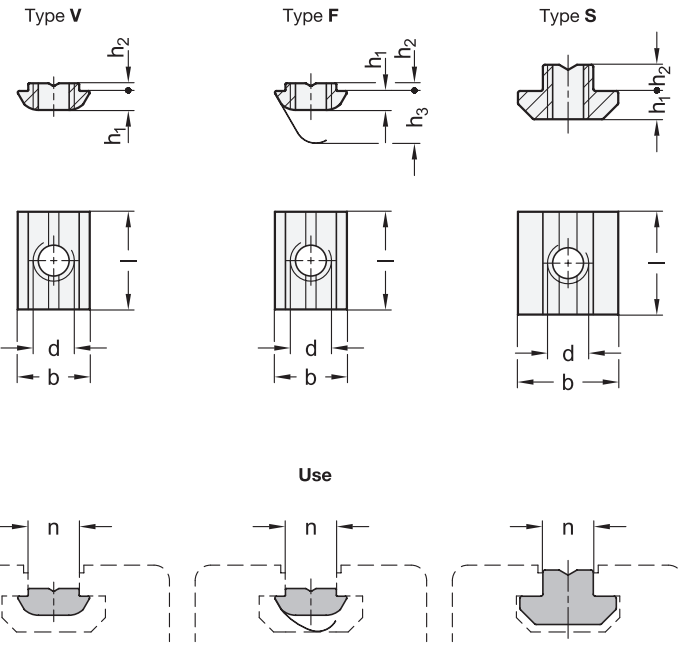
The spring of type F secures the T-nut against unwanted slipping in the groove, making installation easier.

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



Assembly Instructions





GN 50b-V

Description	n	d	b	h ₁	h ₂	Length l	⚖
GN 50b-8M4-V-SZ	8	M 4	11.6	3.8	1	16	5
GN 50b-8M5-V-SZ	8	M 5	11.6	3.8	1	16	4
GN 50b-8M6-V-SZ	8	M 6	11.6	3.8	1	16	3
GN 50b-8M8-V-SZ	8	M 8	11.6	3.8	1	16	2
GN 50b-10M4-V-SZ	10	M 4	14	3.8	1.5	20	9
GN 50b-10M5-V-SZ	10	M 5	14	3.8	1.5	20	8
GN 50b-10M6-V-SZ	10	M 6	14	3.8	1.5	20	7
GN 50b-10M8-V-SZ	10	M 8	14	3.8	1.5	20	6

GN 50b-F

Description	n	d	b	h ₁	h ₂	h ₃ ≈	Length l	⚖
GN 50b-8M4-F-SZ	8	M 4	11.6	3.8	1	8	16	5
GN 50b-8M5-F-SZ	8	M 5	11.6	3.8	1	8	16	4
GN 50b-8M6-F-SZ	8	M 6	11.6	3.8	1	8	16	3
GN 50b-8M8-F-SZ	8	M 8	11.6	3.8	1	8	16	2
GN 50b-10M4-F-SZ	10	M 4	14	3.8	1.5	12	20	10
GN 50b-10M5-F-SZ	10	M 5	14	3.8	1.5	12	20	9
GN 50b-10M6-F-SZ	10	M 6	14	3.8	1.5	12	20	8
GN 50b-10M8-F-SZ	10	M 8	14	3.8	1.5	12	20	7

GN 50b-S

Description	n	d	b	h ₁	h ₂	Length l	⚖
GN 50b-6M4-S-SZ	6	M 4	9.6	3	1	10	3
GN 50b-6M5-S-SZ	6	M 5	9.6	3	1	10	2
GN 50b-6M6-S-SZ	6	M 6	9.6	3	1	10	1
GN 50b-8M4-S-SZ	8	M 4	15.8	4	2	16	9
GN 50b-8M5-S-SZ	8	M 5	15.8	4	2	16	8
GN 50b-8M6-S-SZ	8	M 6	15.8	4	2	16	7
GN 50b-8M8-S-SZ	8	M 8	15.8	4	2	16	6
GN 50b-10M4-S-SZ	10	M 4	19.5	5.5	5	20	22
GN 50b-10M5-S-SZ	10	M 5	19.5	5.5	5	20	21
GN 50b-10M6-S-SZ	10	M 6	19.5	5.5	5	20	20
GN 50b-10M8-S-SZ	10	M 8	19.5	5.5	5	20	19

T-Slot Nuts

Steel / Stainless Steel, for Aluminum Profiles
(b-Modular System)

SPECIFICATION

Types

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

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

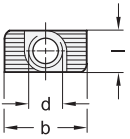
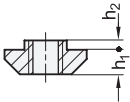
Stainless steel, plain finish **NB**

INFORMATION

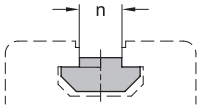
T-slot nuts GN 51b fasten attachments and accessories in the slot of aluminum profiles. They are inserted into the slot of the aluminum profile at any position and affixed by a 90° turn.

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.

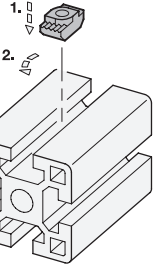
The connection is conductive.



Use



Installation



GN 51b-N

Description	n	d	b	h ₁	h ₂	Length l	⚖
GN 51b-6M4-N-SZ	6	M 4	11.5	3	1	5.9	1
GN 51b-6M4-N-NB	6	M 4	11.5	3	1	5.9	1
GN 51b-8M4-N-SZ	8	M 4	16.5	4.5	1.5	8	4
GN 51b-8M5-N-SZ	8	M 5	16.5	4.5	1.5	8	3
GN 51b-8M6-N-SZ	8	M 6	16.5	4.5	1.5	8	2
GN 51b-8M6-N-NB	8	M 6	16.5	4.5	1.5	8	2
GN 51b-10M4-N-SZ	10	M 4	19.4	5.7	3	9.8	8
GN 51b-10M5-N-SZ	10	M 5	19.4	5.7	3	9.8	7
GN 51b-10M6-N-SZ	10	M 6	19.4	5.7	3	9.8	6
GN 51b-10M6-N-NB	10	M 6	19.4	5.7	3	9.8	6
GN 51b-10M8-N-SZ	10	M 8	19.4	5.7	3	9.8	5
GN 51b-10M8-N-NB	10	M 8	19.4	5.7	3	9.8	5

GN 51b-B

Description	n	d	b	h ₁	h ₂	Length l	⚖
GN 51b-6M4-B-SZ	6	M 4	11.5	3	1	5.9	1
GN 51b-6M4-B-NB	6	M 4	11.5	3	1	5.9	1
GN 51b-8M4-B-SZ	8	M 4	16.5	4.5	1.5	8	4
GN 51b-8M5-B-SZ	8	M 5	16.5	4.5	1.5	8	3
GN 51b-8M6-B-SZ	8	M 6	16.5	4.5	1.5	8	2
GN 51b-8M6-B-NB	8	M 6	16.5	4.5	1.5	8	2
GN 51b-10M4-B-SZ	10	M 4	19.4	5.7	3	9.8	8
GN 51b-10M5-B-SZ	10	M 5	19.4	5.7	3	9.8	7
GN 51b-10M6-B-SZ	10	M 6	19.4	5.7	3	9.8	6
GN 51b-10M6-B-NB	10	M 6	19.4	5.7	3	9.8	6
GN 51b-10M8-B-SZ	10	M 8	19.4	5.7	3	9.8	5
GN 51b-10M8-B-NB	10	M 8	19.4	5.7	3	9.8	5

T-Slot Bolts

Steel / Stainless Steel, for Aluminum Profiles
(b-Modular System)

SPECIFICATION

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

Stainless steel, plain finish **NB**

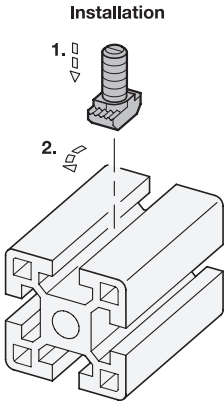
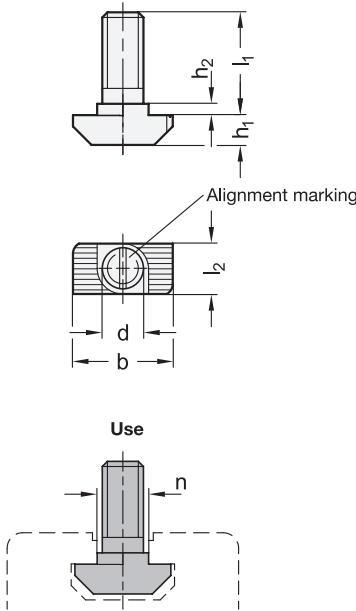
INFORMATION

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.

ACCESSORY

- Collar Nuts GN 53b (see page 33)



GN 52b

Description	n	d	h Steel	h Stainless steel	b	h1	h2	l2	⚖
GN 52b-8M616-SZ	8	M 6	16	-	16	4.5	1.5	8	6
GN 52b-8M620-SZ	8	M 6	20	-	16	4.5	1.5	8	7
GN 52b-8M625-SZ	8	M 6	25	-	16	4.5	1.5	8	8
GN 52b-8M630-SZ	8	M 6	30	-	16	4.5	1.5	8	9
GN 52b-8M640-SZ	8	M 6	40	-	16	4.5	1.5	8	10
GN 52b-8M660-SZ	8	M 6	60	-	16	4.5	1.5	8	12
GN 52b-8M820-SZ	8	M 8	20	-	16	4.5	1.5	8	9
GN 52b-8M825-SZ	8	M 8	25	-	16	4.5	1.5	8	10
GN 52b-8M830-SZ	8	M 8	30	-	16	4.5	1.5	8	12
GN 52b-10M616-SZ	10	M 6	16	-	19.5	5.5	4	8.5	6
GN 52b-10M620-SZ	10	M 6	20	-	19.5	5.5	4	8.5	7
GN 52b-10M625-SZ	10	M 6	25	-	19.5	5.5	4	8.5	8
GN 52b-10M630-SZ	10	M 6	30	-	19.5	5.5	4	8.5	9
GN 52b-10M640-SZ	10	M 6	40	-	19.5	5.5	4	8.5	10
GN 52b-10M660-SZ	10	M 6	60	-	19.5	5.5	4	8.5	11
GN 52b-10M820-SZ	10	M 8	20	-	19.5	5.5	4	8.5	14
GN 52b-10M825-SZ	10	M 8	25	-	19.5	5.5	4	8.5	10
GN 52b-10M830-SZ	10	M 8	30	-	19.5	5.5	4	8.5	17
GN 52b-10M840-SZ	10	M 8	40	-	19.5	5.5	4	8.5	20
GN 52b-10M860-SZ	10	M 8	60	-	19.5	5.5	4	8.5	26

Description	n	d	h Steel	h Stainless steel	b	h1	h2	l2	⚖
GN 52b-8M620-NB	8	M 6	-	20	16	4.5	1.5	8	8
GN 52b-8M625-NB	8	M 6	-	25	16	4.5	1.5	8	9
GN 52b-8M630-NB	8	M 6	-	30	16	4.5	1.5	8	10
GN 52b-8M640-NB	8	M 6	-	40	16	4.5	1.5	8	11
GN 52b-8M660-NB	8	M 6	-	60	16	4.5	1.5	8	14
GN 52b-10M620-NB	10	M 6	-	20	19.5	5.5	4	8.5	11
GN 52b-10M625-NB	10	M 6	-	25	19.5	5.5	4	8.5	12
GN 52b-10M630-NB	10	M 6	-	30	19.5	5.5	4	8.5	13
GN 52b-10M640-NB	10	M 6	-	40	19.5	5.5	4	8.5	15
GN 52b-10M660-NB	10	M 6	-	60	19.5	5.5	4	8.5	19
GN 52b-10M820-NB	10	M 8	-	20	19.5	5.5	4	8.5	15
GN 52b-10M825-NB	10	M 8	-	25	19.5	5.5	4	8.5	16
GN 52b-10M830-NB	10	M 8	-	30	19.5	5.5	4	8.5	18
GN 52b-10M840-NB	10	M 8	-	40	19.5	5.5	4	8.5	21
GN 52b-10M860-NB	10	M 8	-	60	19.5	5.5	4	8.5	27

Collar Nuts

Steel, for Aluminum Profiles (b-Modular System)

SPECIFICATION

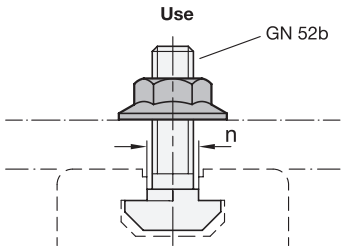
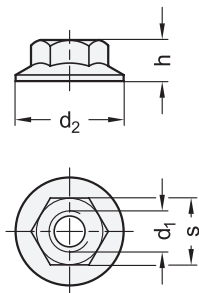
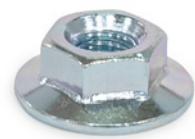
Steel, zinc plated, blue passivated **SZ**

INFORMATION

Collar nuts GN 53b fasten attachments and accessories in the slot of aluminum profiles, generally in combination with T-slot bolts GN 52b (see page 32).
The collar makes a washer unnecessary.

ACCESSORY

- T-Slot Bolts GN 52b (see page 32)



GN 53b

Description	n	d1	d2 ≈	h	s	⚖
GN 53b-8M6-SZ	8	M 6	14	6	10	3
GN 53b-10M8-SZ	10	M 8	21	8	13	6

b-Modular System (bosch compatible)



Central Screws

Steel, for Aluminum Profiles (b-Modular System)

SPECIFICATION

Type

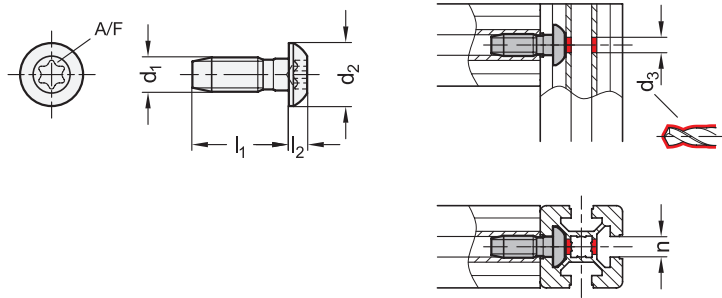
- Type **A**: Without cover cap
Steel, zinc plated, blue passivated **SZ**

INFORMATION

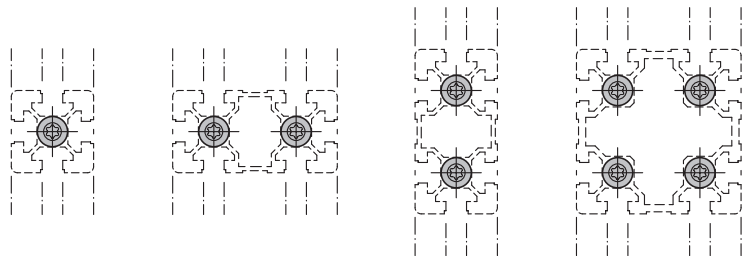
Central screws GN 21b connect aluminum profiles at right angles. Only one profile has to be machined. The thread in the end face profile hole is formed by the central screw itself. The self-forming thread should be lubricated to simplify assembly.



Assembly / profile machining



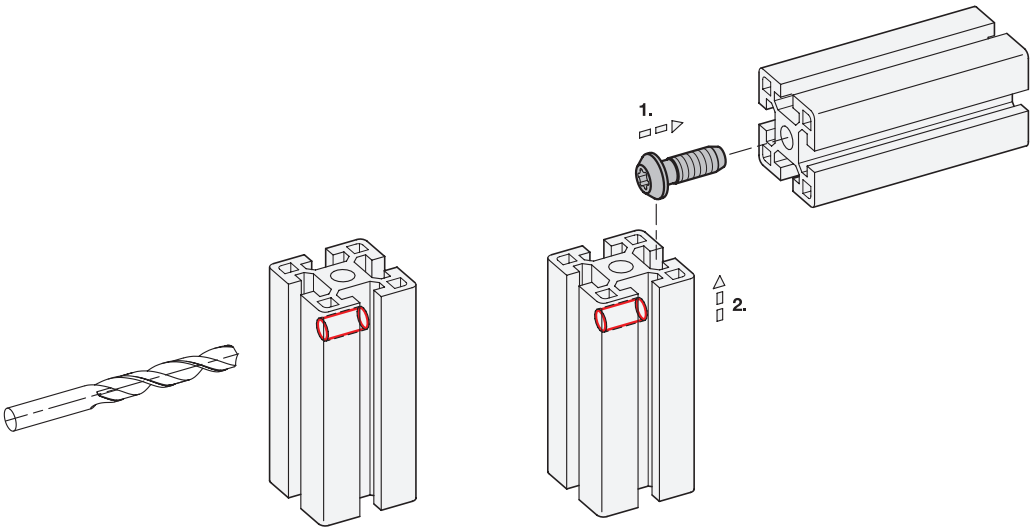
Use



GN 21b

Description	n	d1 Self-forming thread	l1	d2 ≈	d3	l2 ≈	A/F	Tightening torque in Nm	⚖
GN 21b-8S825-A-SZ	8	S 8	25	16	7.8	4.5	T40	25	12
GN 21b-10S1230-A-SZ	10	S 12	30	19	9.8	6	T50	35	26

Assembly Instructions / Profile Machining



Automatic Connectors

Steel, for Aluminum Profiles (b-Modular System),
Right-Angled or End Face Connection

SPECIFICATION

Profile types

- Type **L**: Light
- Type **S**: Heavy

Coding

- **R**: Right-angled connection
- **S**: End face connection

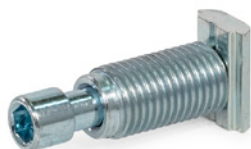
Steel, zinc plated, blue passivated **SZ**

INFORMATION

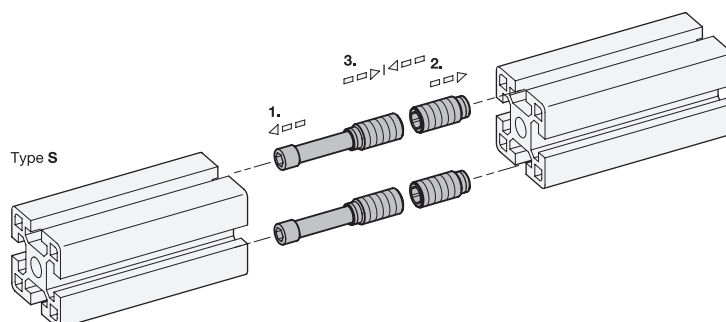
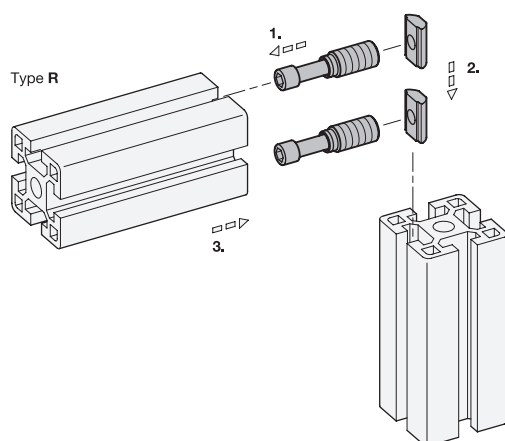
Automatic connectors GN 23b (Coding R) fasten aluminum profiles together at right angles. The connection can be freely positioned and slid along the slot. Automatic connectors GN 23b (Coding S) fasten aluminum profiles together on the end faces to extend them while securing them against twisting. Machining of the profile is not necessary.

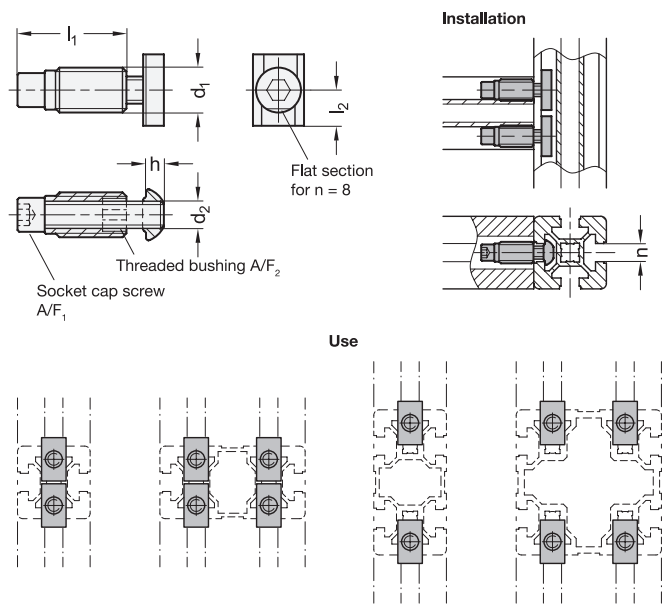
For assembly, first insert the socket cap screw along the slot and then screw in the lightly lubricated threaded bushings. Minor burr formation is possible. Automatic connectors are used in pairs opposite each other. If panels are used in the slot, they must be suitably pocketed.

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



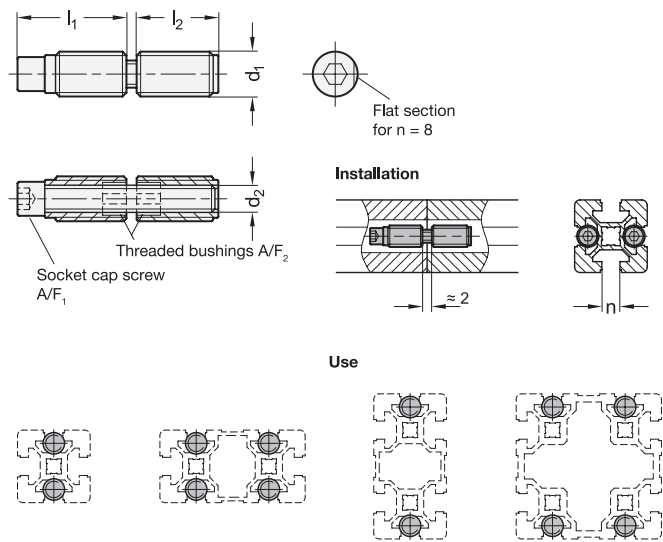
Assembly Instructions





GN 23b-R

Description	n	Bundle Pieces	d1 Self-forming thread	d2	h	l1	l2	A/F1	A/F2	⚖
GN 23b-8S-R-SZ-4	8	4	S 11	M 6	3.8	32	8	5	T40	60
GN 23b-10L-R-SZ-4	10	4	S 13	M 8	3.8	34	9.5	6	T50	148
GN 23b-10S-R-SZ-4	10	4	S 12	M 8	3.8	34	9.5	6	T50	128



GN 23b-S

Description	n	Bundle Pieces	d1 Self-forming thread	d2	l1	l2	A/F1	A/F2	⚖
GN 23b-8S-S-SZ-4	8	4	S 11	M 6	32	26	5	T40	108
GN 23b-10L-S-SZ-4	10	4	S 13	M 8	36	26	6	T50	176
GN 23b-10S-S-SZ-4	10	4	S 12	M 8	36	26	6	T50	144

Quick Release Connectors

Steel, for Aluminum Profiles (b-Modular System),
Asymmetrical or Symmetrical Mounting Stud

SPECIFICATION

Types

- Type **A**: Asymmetrical mounting stud
- Type **S**: Symmetrical mounting stud

Coding

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

Steel, zinc plated, blue passivated **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.

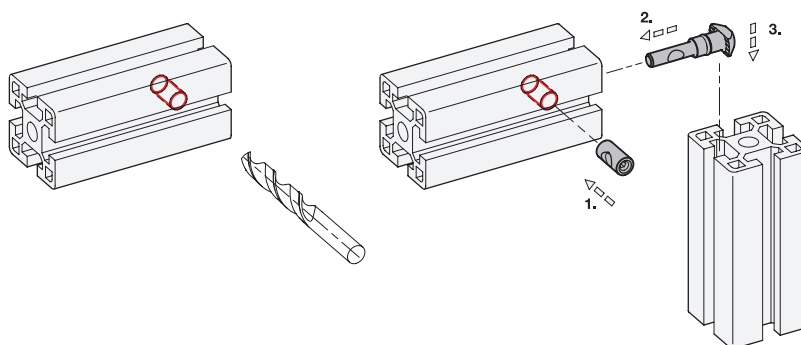
Quick release connectors of type S are used when the slot is to be closed by a cover profile.

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

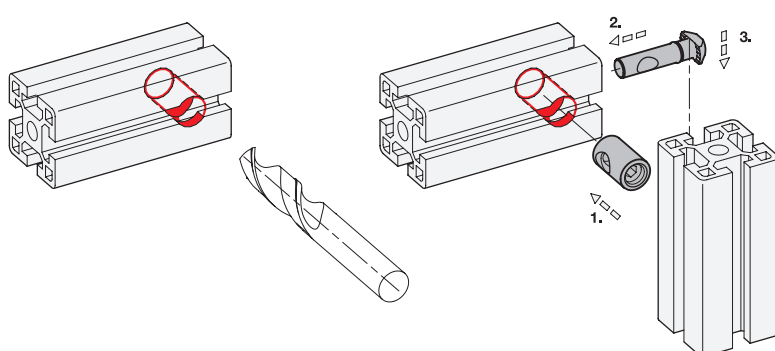


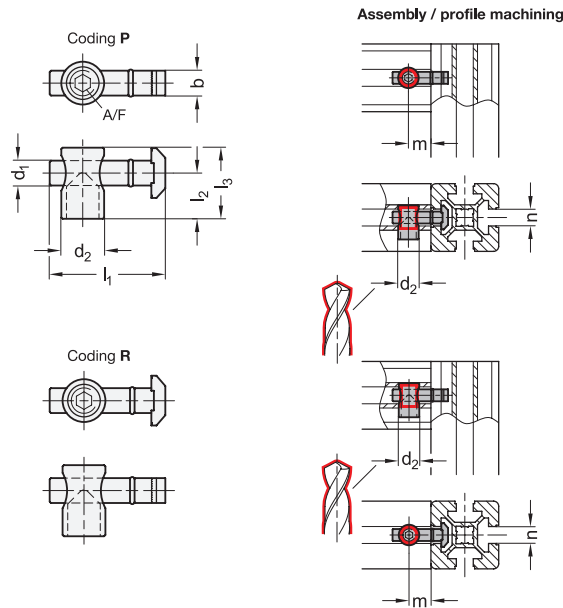
Assembly Instructions / Profile Machining

Type S



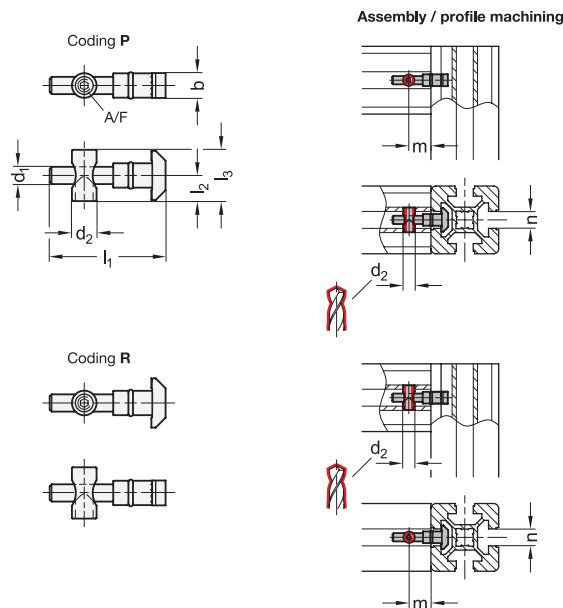
Type A





GN 25b-A

Description	n	Bundle Pieces	b	d1	d2	l1 ≈	l2 ≈	l3	m	A/F	Tightening torque in Nm	⚖
GN 25b-8-A-P-SZ-4	8	4	8	6.8	11	33	14.2	20	18	4	12	88
GN 25b-10-A-P-SZ-4	10	4	10	9.8	17	45.5	18.4	28	22.5	6	25	224
GN 25b-8-A-R-SZ-4	8	4	8	6.8	11	33	14.2	20	18	4	12	88
GN 25b-10-A-R-SZ-4	10	4	10	9.8	17	45.5	18.4	28	22.5	6	25	224



GN 25b-S

Description	n	Bundle Pieces	b	d1	d2	l1 ≈	l2	l3	m	A/F	Tightening torque in Nm	⚖
GN 25b-10-S-P-SZ-4	10	4	10	6.8	10	46	10.3	20	22.5	3	6	116
GN 25b-10-S-R-SZ-4	10	4	10	6.8	10	46	10.3	20	22.5	3	6	116

Bolt Connectors

Steel, for Aluminum Profiles (b-Modular System)

SPECIFICATION

Type

- Type **N**: Nut without increased torque

Coding

- **C**: With fastening set

Connector, screws, T-slot nuts

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

Cover cap

Plastic (Polyamid PA)

Black **S**

Guide pin

Plastic, black



INFORMATION

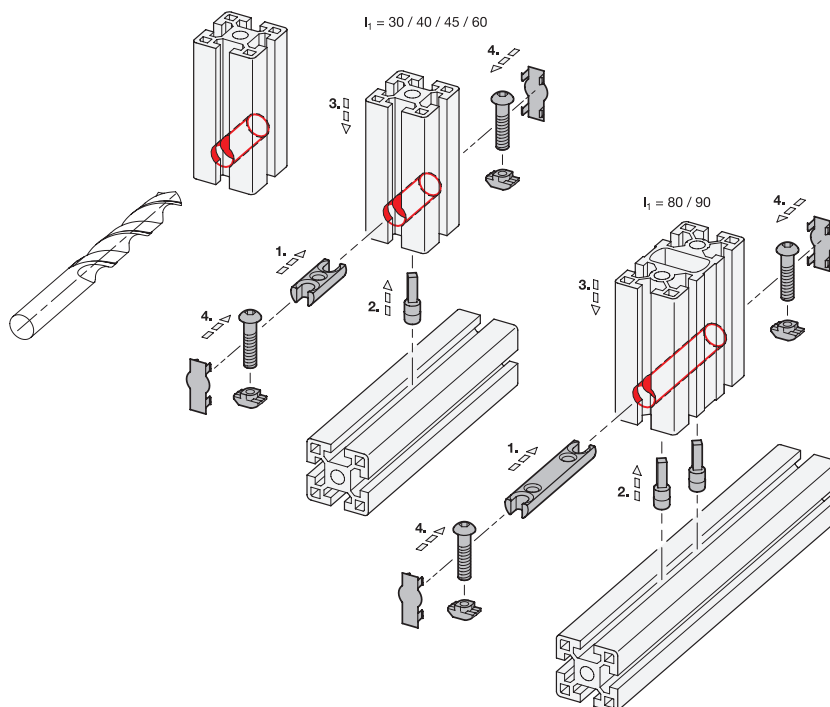
Bolt connectors GN 26b fasten aluminum profiles at right angles and secure them against twisting. Only one profile has to be machined. The connection can be freely positioned and slid along the slot. It is suitable for absorbing high loads, including torsional loads in particular.

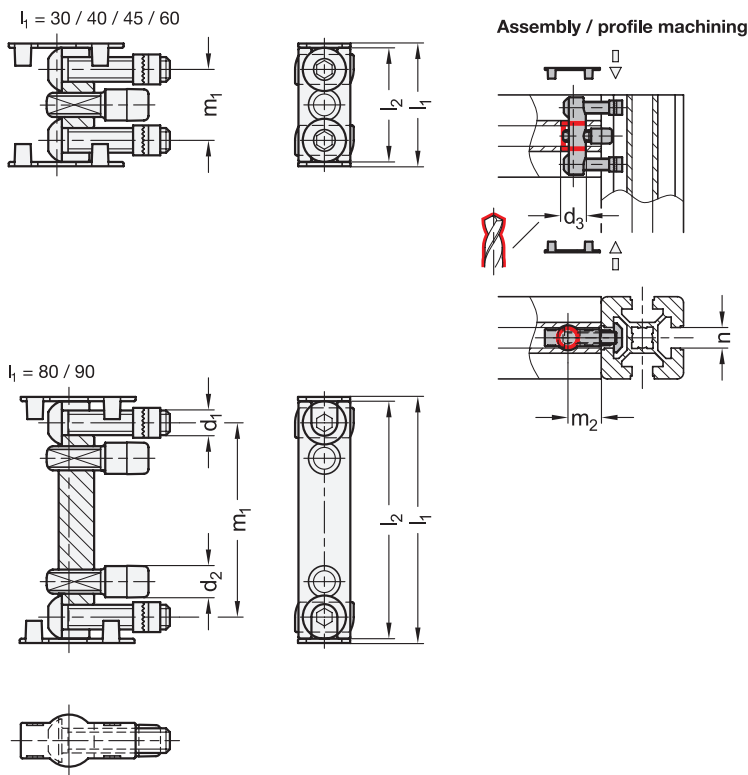
The cover caps ensure a visually appealing appearance. If panels are used, they must be suitably pocketed.

TECHNICAL INFORMATION

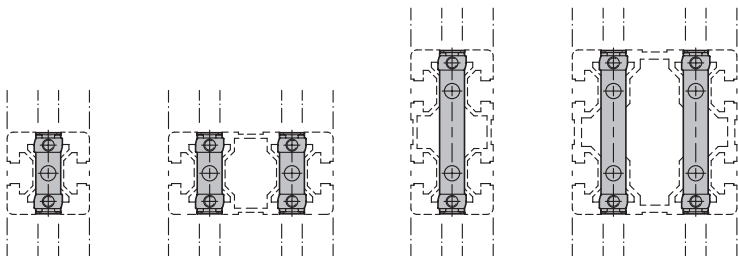
- Plastic Characteristics (see catalogue page A2)

Assembly Instructions / Profile Machining





Use



GN 26b										
Description	l1 Nominal size	n	d1	d2	d3	l2 ≈	m1	m2	Tightening torque in Nm	
GN 26b-308-N-C-SZS	30	8	M 5	7.3	11	29	18	18	6	26
GN 26b-4010-N-C-SZS	40	10	M 8	10	17	37	23	22.5	25	74
GN 26b-4510-N-C-SZS	45	10	M 8	10	17	42	28	22.5	25	78
GN 26b-6010-N-C-SZS	60	10	M 8	10	17	57	43	22.5	25	83
GN 26b-8010-N-C-SZS	80	10	M 8	10	17	77	63	22.5	25	121
GN 26b-9010-N-C-SZS	90	10	M 8	10	17	87	73	22.5	25	134

Angle Brackets

Aluminum, for Aluminum Profiles (b-Modular System), with or without Accessory

SPECIFICATION

Types

- Type **A**: Without accessory
- Type **C**: With fastening set and cover cap

Angle bracket

Aluminum

- Painted, white aluminum **AW**
- Plain finish **AB**

Fastening set (only for Type C)

- T-slot nut and socket cap screw (for $n = 8$)
- T-slot bolt and collar nut (for $n = 10$)

Steel, zinc plated **SZ** (only for Type C)

Blue / yellow passivated

Cover cap (only for Type C)

Plastic (Polyamide PA)

Black **S**



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 (type C).

ACCESSORY (ONLY FOR TYPE A)

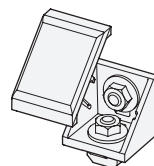
- T-Nuts GN 50b (see page 29)
- T-Slot Nuts GN 51b (see page 31)
- T-Slot Bolts GN 52b (see page 32)
- Collar Nuts GN 53b (see page 33)

TECHNICAL INFORMATION

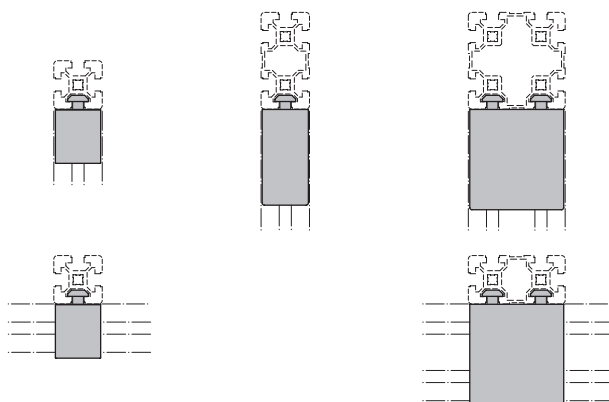
- Plastic Characteristics (see catalogue page A2)

Assembly Options / Application Examples

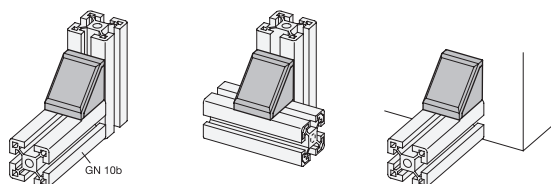
Assembly of cover cap

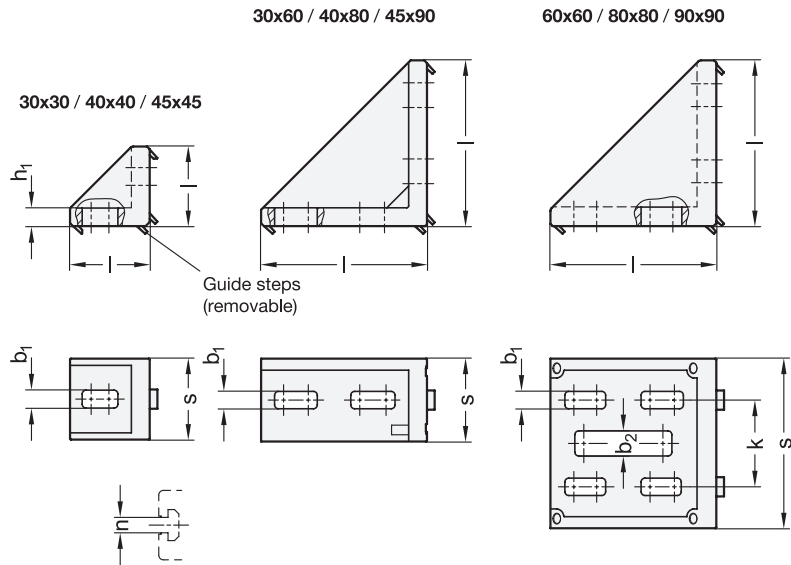


Use



Application examples





GN 30b-A-AW

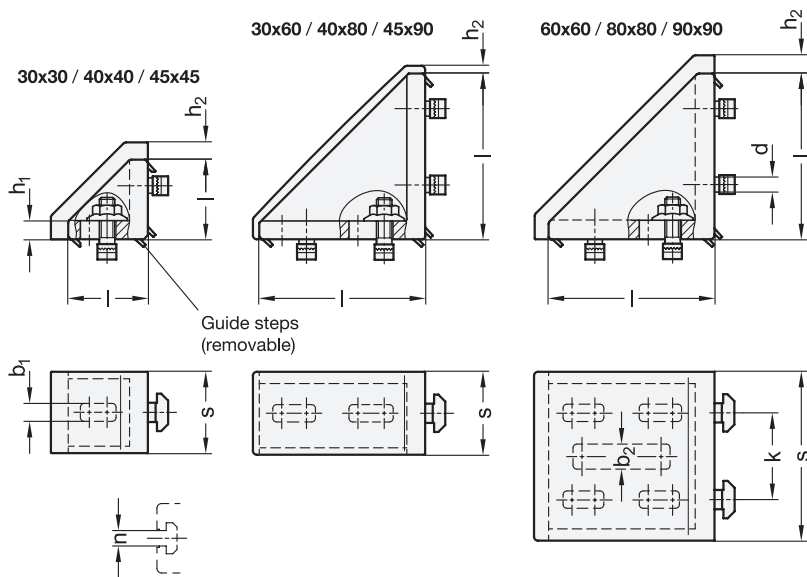
Description	s Nominal dimension	s Actual dimension	Length l Nominal dimension	Length l Actual dimension	n	b1 For screw	b2* For screw	h1	k	⚖
GN 30b-30308-A-AW	30	28	30	27	8	M 6	-	5.5	-	21
GN 30b-30608-A-AW	30	28	60	57	8**	M 6	-	6	-	57
GN 30b-404010-A-AW	40	38	40	36	10	M 8	-	5.5	-	34
GN 30b-408010-A-AW	40	36	80	80	10**	M 8	-	9	-	123
GN 30b-454510-A-AW	45	42	45	41	10	M 8	-	9	-	52
GN 30b-459010-A-AW	45	42	90	87	10**	M 8	-	9.5	-	166
GN 30b-60608-A-AW	60	56	60	57	8**	M 6	M 8	6	30	168
GN 30b-808010-A-AW	80	74	80	76	10**	M 8	-	8	40	227
GN 30b-909010-A-AW	90	88	90	86	10**	M 8	-	9.5	45	360

GN 30b-A-AB

Description	s Nominal dimension	s Actual dimension	Length l Nominal dimension	Length l Actual dimension	n	b1 For screw	b2* For screw	h1	k	⚖
GN 30b-30308-A-AB	30	28	30	27	8	M 6	-	5.5	-	21
GN 30b-30608-A-AB	30	28	60	57	8**	M 6	-	6	-	59
GN 30b-404010-A-AB	40	38	40	36	10	M 8	-	5.5	-	34
GN 30b-408010-A-AB	40	36	80	80	10**	M 8	-	9	-	119
GN 30b-454510-A-AB	45	42	45	41	10	M 8	-	9	-	50
GN 30b-459010-A-AB	45	42	90	87	10**	M 8	-	9.5	-	165
GN 30b-60608-A-AB	60	56	60	57	8**	M 6	M 8	6	30	106
GN 30b-808010-A-AB	80	74	80	76	10**	M 8	-	8	40	225
GN 30b-909010-A-AB	90	88	90	86	10**	M 8	-	9.5	45	358

* Slotted holes only on 60608

** Additional guide steps for further slot widths



GN 30b-C-AWSZS

Description	s Nominal dimension	s Actual dimension	Length l Nominal dimension	Length l Actual dimension	n	b1 For screw	b2* For screw	d	h1	h2 ≈	k	⚖
GN 30b-30308-C-AWSZS	30	28	30	27	8	M 6	-	M 6	5.5	6	-	48
GN 30b-30608-C-AWSZS	30	28	60	57	8**	M 6	-	M 6	6	3.5	-	99
GN 30b-404010-C-AWSZS	40	38	40	36	10	M 8	-	M 8	5.5	6	-	88
GN 30b-408010-C-AWSZS	40	36	80	80	10**	M 8	-	M 8	9	3.5	-	210
GN 30b-454510-C-AWSZS	45	42	45	41	10	M 8	-	M 8	9	6	-	112
GN 30b-459010-C-AWSZS	45	42	90	87	10**	M 8	-	M 8	9.5	3.5	-	300
GN 30b-60608-C-AWSZS	60	56	60	57	8**	M 6	M 8	M 6	6	6.5	30	198
GN 30b-808010-C-AWSZS	80	74	80	76	10**	M 8	-	M 8	8	6.5	40	450
GN 30b-909010-C-AWSZS	90	88	90	86	10**	M 8	-	M 8	9.5	6.5	45	592

GN 30b-C-ABSZS

Description	s Nominal dimension	s Actual dimension	Length l Nominal dimension	Length l Actual dimension	n	b1 For screw	b2* For screw	d	h1	h2 ≈	k	⚖
GN 30b-30308-C-ABSZS	30	28	30	27	8	M 6	-	M 6	5.5	6	-	41
GN 30b-30608-C-ABSZS	30	28	60	57	8**	M 6	-	M 6	6	3.5	-	96
GN 30b-404010-C-ABSZS	40	38	40	36	10	M 8	-	M 8	5.5	6	-	87
GN 30b-408010-C-ABSZS	40	36	80	80	10**	M 8	-	M 8	9	3.5	-	207
GN 30b-454510-C-ABSZS	45	42	45	41	10	M 8	-	M 8	9	6	-	112
GN 30b-459010-C-ABSZS	45	42	90	87	10**	M 8	-	M 8	9.5	3.5	-	299
GN 30b-60608-C-ABSZS	60	56	60	57	8**	M 6	M 8	M 6	6	6.5	30	181
GN 30b-808010-C-ABSZS	80	74	80	76	10**	M 8	-	M 8	8	6.5	40	454
GN 30b-909010-C-ABSZS	90	88	90	86	10**	M 8	-	M 8	9.5	6.5	45	588

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

Cube Connectors

Aluminum, for Aluminum Profiles (b-Modular System)

SPECIFICATION

Identification no.

- **2**: Connecting 2 profiles
- **3**: Connecting 3 profiles

Type

- Type **C**: With fastening set

Housing

Aluminum, plain finish **AB**

Screws

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

Cover caps

Plastic (Polyamide PA)

Black **S**



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.

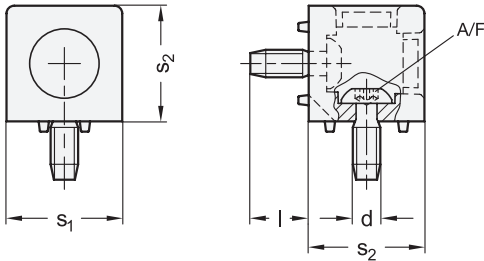
The self-forming thread of the screws should be lubricated to facilitate assembly. The end faces of the aluminum profiles are covered by the cube connectors, which ensures a visually appealing appearance.

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

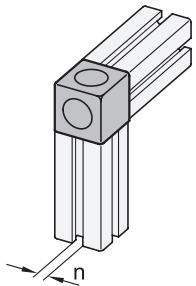
TECHNICAL INFORMATION

- Plastic Characteristics (see catalogue page A2)

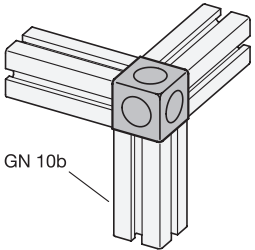
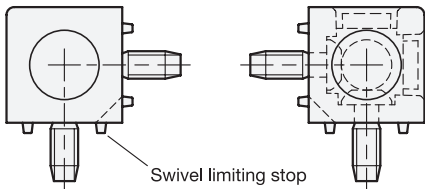
Identification no. 2



Application examples



Identification no. 3



GN 33b-2

Description	S1	S2	n	d Self-forming thread	Length l ≈	A/F	Tightening torque in Nm	⚖
GN 33b-30308-2-C-ABSZS	30	30	8	S 8	21	5	25	55
GN 33b-454510-2-C-ABSZS	45	45	10	S 12	24	T50	35	158

GN 33b-3

Description	S1	S2	n	d Self-forming thread	Length l ≈	A/F	Tightening torque in Nm	⚖
GN 33b-30308-3-C-ABSZS	30	30	8	S 8	21	5	25	55
GN 33b-454510-3-C-ABSZS	45	45	10	S 12	24	T50	35	158

Rotating Angle Brackets

Aluminum, for Aluminum Profiles (b-Modular System)

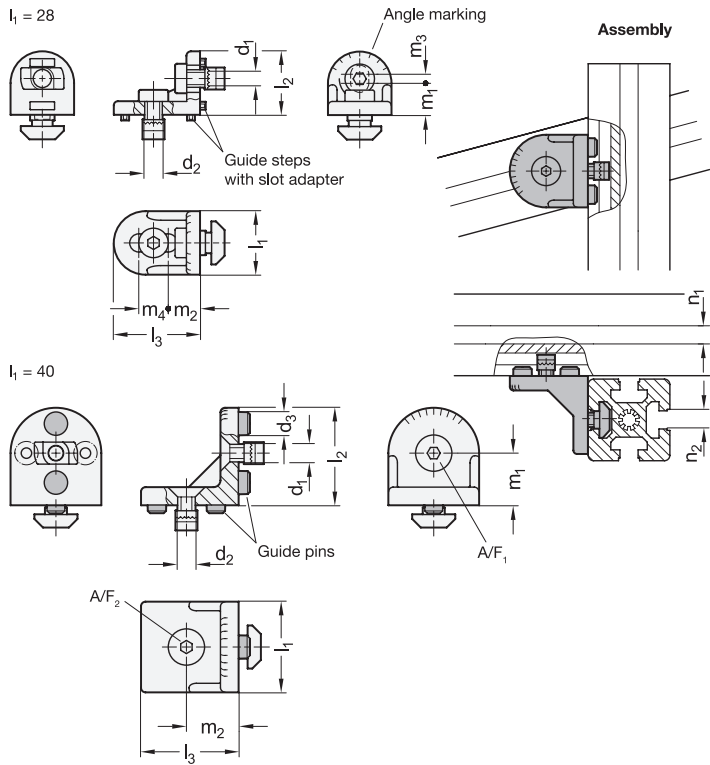
SPECIFICATION

- Type
- Type **C**: With fastening set
- 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



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.



GN 41b

Description	l1	n1	n2	d1	d2	d3	l2	l3	m1	m2	m3	m4	A/F1	A/F2	Grid size	⚖
GN 41b-281010-C-AWSZ	28	10	10	M 8	M 8	-	28	38	14.5	14.5	3.5	13	5	5	40 / 45	43
GN 41b-401010-C-AWSZ	40	10	10	M 8	M 8	10	42.5	42.5	22.5	22.5	-	-	5	5	45	77

Cover Caps

Plastic, for Aluminum Profiles (b-Modular System)

SPECIFICATION

Type

- Type **P**: Press-on type

Plastic (Polyamide PA)

Black **KS**

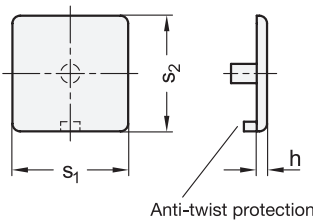
INFORMATION

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.

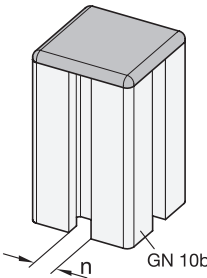
They can be fitted without machining the profile.

TECHNICAL INFORMATION

- Plastic Characteristics (see catalogue page A2)



Application example



GN 60b

Description	s1	s2	n	h ≈	Grid size	⚖
GN 60b-30308-P-KS	30	30	8	3	30	3
GN 60b-30608-P-KS	30	60	8	3	30	6
GN 60b-404010-P-KS	40	40	10	4	40	5
GN 60b-408010-P-KS	40	80	10	4	40	8
GN 60b-454510-P-KS	45	45	10	4	45	6
GN 60b-456010-P-KS	45	60	10	4	45	7
GN 60b-459010-P-KS	45	90	10	4	45	10
GN 60b-808010-P-KS	80	80	10	4	40	17
GN 60b-909010-P-KS	90*	90	10	4	45	30

* Only compatible with profile type L

Cover and Edging Profiles

Plastic, for Aluminum Profiles (b-Modular System)

SPECIFICATION

Plastic (Polypropylen PP)
Black **KS**

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.

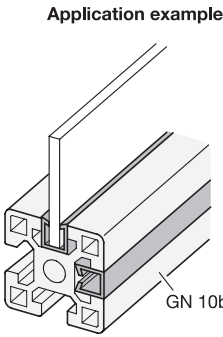
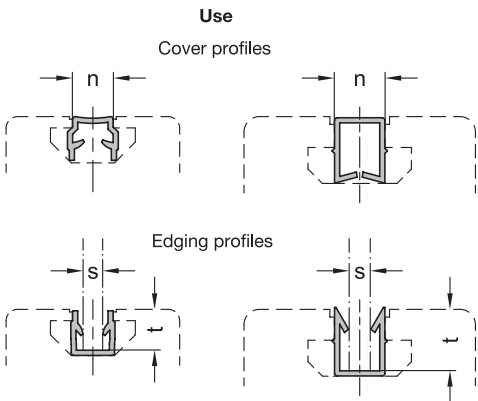
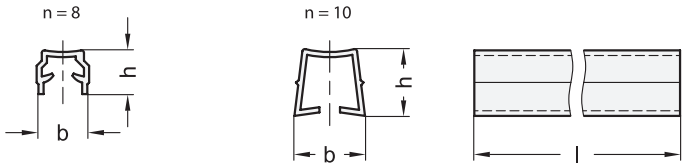
When used as an edging profile, they are installed with the open side facing out. This allows for panel elements such as panes of glass or PMMA to be fixed directly into the groove.

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



TECHNICAL INFORMATION

- Plastic Characteristics (see catalogue page A2)



GN 70b

Description	n	Length l in m	Bundle Pieces	b ≈	h ≈	s Clamping range	t	⚖
GN 70b-8-KS-2-4	8	2	4	10	8.5	4 - 6	8	34
GN 70b-10-KS-2-4	10	2	4	14	13	4 - 6	11.5*	60

* 13.5 for aluminum profile 10b-454510L + 10b-459010L

Cover Profiles

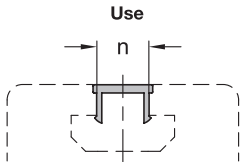
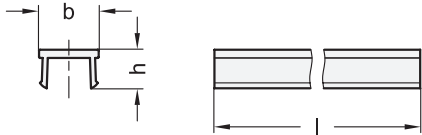
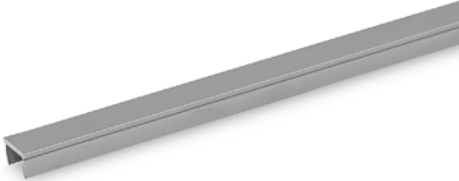
Aluminum, for Aluminum Profiles (b-Modular System)

SPECIFICATION

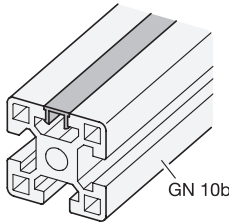
Aluminum
Anodized, natural color **AN**

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.



Application example



GN 71b

Description	n	Length l in m	Bundle Pieces	b ≈	h ≈	⚖
GN 71b-10-AN-2-4	10	2	4	11.6	7.5	652

Transport and Base Plates

Zinc Die Casting, for Aluminum Profiles
(b-Modular System)

SPECIFICATION

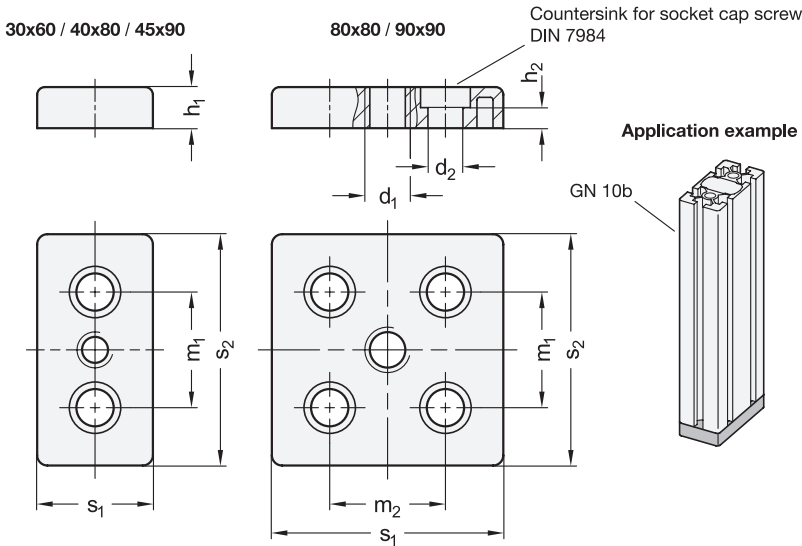
Type
- Type **A**: Without screws
Zinc die casting, black **ZS**

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.

ACCESSORY

- Central Screws GN 21b (see page 35)

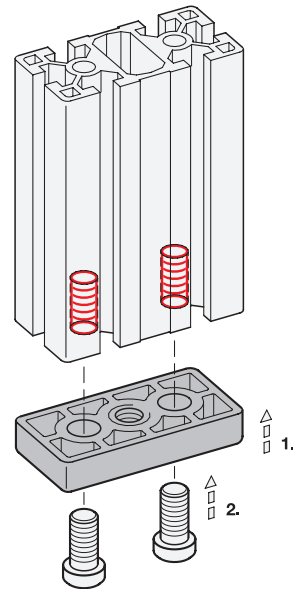
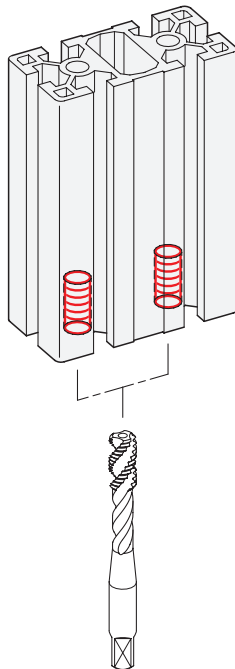


GN 80b

Description	s1	s2	n	d1	d2 For screw	h1	h2	m1	m2	Grid size	
GN 80b-30608M10-A-ZS	30	60	8	M10	M 8 / S 8	12	3.2	30	-	30	98
GN 80b-30608M12-A-ZS	30	60	8	M12	M 8 / S 8	12	3.2	30	-	30	96
GN 80b-408010M10-A-ZS	40	80	10	M10	M 12 / S 12	16	8	40	-	40	190
GN 80b-408010M12-A-ZS	40	80	10	M12	M 12 / S 12	16	8	40	-	40	188
GN 80b-459010M12-A-ZS	45	90	10	M12	M 12 / S 12	16	8	45	-	45	257
GN 80b-459010M14-A-ZS	45	90	10	M14	M 12 / S 12	16	8	45	-	45	255
GN 80b-808010M12-A-ZS	80	80	10	M12	M 12 / S 12	16	8	40	40	40	380
GN 80b-808010M16-A-ZS	80	80	10	M16	M 12 / S 12	16	8	40	40	40	376
GN 80b-909010M16-A-ZS	90*	90	10	M16	M 12 / S 12	16	8	40	40	40	471
GN 80b-909010M20-A-ZS	90*	90	10	M20	M 12 / S 12	16	8	40	40	40	463

* Only compatible with profile type L

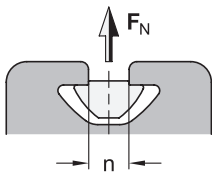
Assembly Instructions / Profile Machining



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 $\approx 75HB - 2.5/187,5$

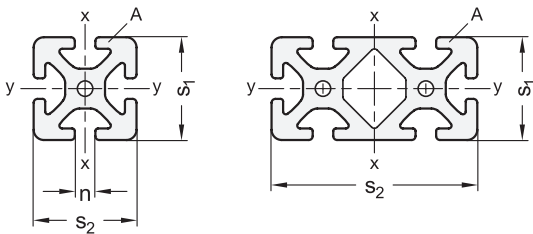
Permissible Tensile Load on the Slot



n	Grid size	Profile type	FN* in N		
			With T-Nuts 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-L Profile type light										
s1	s2	n	Grid size	Bending axis x-x		Bending axis y-y		It in cm ⁴	A in cm ²	m ≈ in kg/m
				Ix in cm ⁴	Wx in cm ³	Iy in cm ⁴	Wy 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

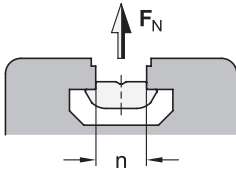
GN 10i-S Profile type heavy										
s1	s2	n	Grid size	Bending axis x-x		Bending axis y-y		It in cm ⁴	A in cm ²	m ≈ in kg/m
				Ix in cm ⁴	Wx in cm ³	Iy in cm ⁴	Wy in cm ³			
40	16	8	40	1.06	1.25	6.75	3.37	0.97	4.15	1.12
40	40	8	40	13.9	6.95	13.9	6.95	1.88	9.05	2.45
40	80	8	40	101.0	25.2	26.7	13.4	18.8	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										
s1	s2	n	Grid size	Bending axis x-x		Bending axis y-y		It in cm ⁴	A in cm ²	m ≈ in kg/m
				Ix in cm ⁴	Wx in cm ³	Iy in cm ⁴	Wy 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 $\approx 75HB - 2.5/187.5$

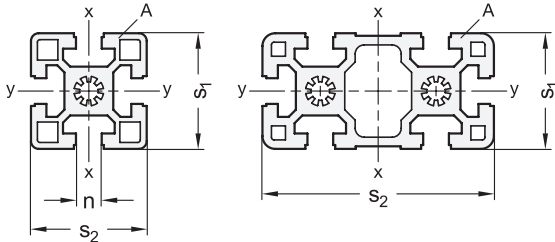
Permissible Tensile Load on the Slot



n	Grid size	Profile type	F _N * in N		
			With T-Nuts GN 50b Type V / F	With T-Slot Nuts GN 51b	With T-Slot Bolts GN 52b
8	30	Heavy	2500	6000	3000
10	40	Light	7500	-	5500
10	45	Light	7500	-	5500
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-L Profile type light									
S1	S2	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-S Profile type heavy									
S1	S2	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 Machine Elements for Profile Systems

Standard elements in this product line are compatible with the most common aluminum profile systems. Using matching assembly sets, the ELESa+GANter standard elements are easily and cost-effectively connected with the profiles without time-consuming compiling of individual parts in the order.

- Compatible with the common profile systems
- For groove widths of 6, 8 and 10 mm
- For profiles 30, 40 and 45 mm

Designed for: assembly on common profile systems for various different sectors.



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