ALFIX
SECURELY SCAFFOLDED

NATIONAL TECHNICAL APPROVAL

ALBLITZ MODUL

[Seal: Deutsches Institut für Bautechnik]

General construction technique permit

An institution under public law jointly funded by the German Federation and the federal states (Länder)

Approval Body for Construction Products & Techniques

Date: 30 October 2023

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Approval number:
Z-8.22-913

Period of validity:
from: **30 October 2023**
to: **9 May 2027**

Applicant:
Alfix GmbH
Langhennersdorfer Straße 15
09603 Großschirma (Germany)

Subject of approval:
Modular scaffolding system "ALBLITZ MODUL"

The above-mentioned subject matter is hereby granted general construction technique permit.
This decision comprises 34 pages, as well as Annex A (pages 1 to 4), Annex B (pages 1 to 306), Annex C (pages 1 to 6) and Annex D (pages 1 to 8).
This general construction technique permit supersedes the general construction technique permit no. Z-8.22-913 dated 16 May 2022. The building authorities first approved the subject matter under review on 10 April 2007.

[Seal: Deutsches Institut für Bautechnik]

Translation of the original German version not reviewed by *Deutsches Institut für Bautechnik*

I GENERAL PROVISIONS

1 This general construction technique permit serves to prove the applicability of the subject matter under regulation within the meaning of the building regulations of the federal states.

2 This decision does not replace statutory approvals, authorisations and certifications specified for carrying out construction works.

3 This decision is granted without prejudice to the rights of third parties, especially private property rights.

4 The manufacturer and seller of the subject matter of the decision must, without prejudice to further regulations laid out under "Special Provisions", make copies of this decision available to the persons using or applying the subject matter of the decision and must inform these persons that the decision must be present at the place of use. Upon request, copies must be provided to the relevant authorities.

5 This decision may only be reproduced in its entirety. Publication of the decision in excerpts requires the prior consent of Deutsches Institut für Bautechnik (DIBt). Text and drawings of promotional material must be consistent with this decision. Translations must include the following note: "Translation of the original German version not reviewed by Deutsches Institut für Bautechnik".

6 This decision is issued on a revocable basis. The provisions of this decision may be amended or modified at a later time, particularly if new technical knowledge requires this.

7 This decision relates to the information on the subject matter of the permit made available by the applicant during the approval process and the documents submitted. Any change made to the basic provisions of this approval is not covered by this decision and must be disclosed to Deutsches Institut für Bautechnik without delay.

II SPECIAL PROVISIONS

1 Subject matter and scope of application

Subject matter of the permit are the planning, dimensioning and execution of the modular scaffolding system "ALBLITZ MODUL", which consists of

- scaffolding components according to Table 1 and
- scaffolding components in accordance with MVV TB (Model Administrative Provisions – Technical Building Rules), Part C 2.16 according to the respective scope of application.

The modular scaffolding system is erected using standards, ledgers, diagonal braces and decks as basic components as well as scaffolding spindles (base jacks), scaffold ties, system components for the side protection, access components and supplementary components. The standards, ledgers and diagonal braces are connected to each other by means of special scaffolding (module) nodes. The scaffold nodes are available in different versions, which can be combined with each other for two different load-bearing groups according to Table 2.

The scaffold nodes consist of a connector disc (rosette) welded onto a tubular standard and connector heads welded onto tube ledgers or U-ledgers or hinged to vertical diagonal braces. The connector heads enclose the connector disc (rosette) and are wedged to the connector disc by driving a captive wedge into the connector disc (rosette) with a hammer blow in a way that the connector heads are pressed against the tubular standard.

Each connector disc (rosette) has 8 openings, allowing to connect up to 8 members.

The modular scaffolding system "ALBLITZ MODUL" may be used as service and working scaffold according to DIN EN 12811-1:2004-03 in conjunction with the "Application Guideline for Working Scaffolds in accordance with DIN EN 12811-1"[1] and DIN 4420-1:2004-03, as supporting structure in accordance with DIN EN 12812:2008-12 in conjunction with the "Application Guideline for Supporting Structures in accordance with DIN EN 12812"[2] or as any other temporary structure.

2 Provisions for planning, dimensioning and execution

2.1 Planning

2.1.1 General provisions

The Technical Building Rules [Technische Baubestimmungen] apply to the planning of scaffolds using components of the "ALBLITZ MODUL" modular system, in particular those for working and service scaffolds according to DIN EN 12811-1:2004-03 in conjunction with the "Application Guideline for Working Scaffolds in accordance with DIN EN12811-1"[1], DIN 4420-1:2004-03, the "Approval Principles for Working and Service Scaffolds – Requirements, Calculation Assumptions, Tests, Certificate of Conformity"[3]; for supporting structures DIN EN 12812:2008-12 in conjunction with the "Application Guideline for Supporting Structures in accordance with DIN EN 12812"[2]. is applicable, as well as the provisions set out below.

When using the modular scaffolding system as a temporary structure that does not fall within the scope of temporary auxiliary construction aids, application-specific requirements may need to be taken into account in the design.

The scaffolds shall be planned in accordance with engineering standards. Verifiable calculations must be prepared in accordance with the Technical Rules and Regulations [Technisches Regelwerk] and the design drawings.

1 see DIBt-Mitteilungen (notifications of the DIBt), issue 2/2006, p. 61 et seq.
2 see DIBt-Mitteilungen (notifications of the DIBt), issue 6/2009, p. 227 et seq.
3 to be obtained from Deutsches Institut für Bautechnik
(the German technical authority and service provider for the construction sector).

The modular scaffolding system "ALBLITZ MODUL" comprises the scaffold components listed in section 1. The structural differences between the scaffold nodes and components are shown as follows:

- "MODUL MULTI": Annex B, pages 2 to 7 according to Z-8.22-906
- "MODUL MULTI 4.0": Annex B, pages 151 to 154 according to Z-8.22-906
- "Allround K2000+ design": Annex B, pages 171 to 176 according to Z-8.22-64
- "Allround lightweight design": Annex B, pages 165 to 170 according to Z-8.22-939

Please refer to Annex B, pages 1 and 161 to 164 for further illustrations of the modular connector node.

Depending on the construction techniques used, a differentiation is made between the designs and load-bearing groups listed in Table 2.

Table 1: Scaffolding components for use in the "ALBLITZ MODUL" modular scaffolding system

Designation	Annex B, page	Details / components in accordance with Annex B, page	Regulations for manufacturing, marking and certificate of conformity
Vertical diagonal braces	8	3, 6	according to Z-8.22-906
Horizontal diagonal braces	9	7	
Vertical starter piece	10	2	
Standard with tube connector 200	11	2	
Standard with screwed-in tube connector 520	12	2	
Standard with screwed-in tube connector 500	13	2	
Standard 0.50 m with screwed-in tube connector 520, s=4.05 mm	14	2, 12	
Vertical starter standard	15	2	
Top standard	16	2	
Base jack	17	---	according to Z-8.1-862
Base jack AB	18	---	
Base jack AF with swivel base	19	---	
Base jack with swivel base	20	---	according to Z-8.22-906
U-head jack	21	---	
Spindle coupler	22	---	
Suspended scaffolding connector	23	3, 4, 151	
Locking device for base jack	24	3, 4, 151	
Tube ledger	25	3, 4	
Horizontal diagonal ledger	26	3, 4	
Tube ledger reinforced	27	3, 4	
Double tube ledger 1.57 m	28	3, 4	
Double tube ledger 2.07 m	29	3, 4, 28	
Double tube ledger 2.57 m	30	3, 4, 28	
Double tube ledger 3.07 m	31	3, 4, 28	
U-ledger 0.37 m; 0.39 m; 0.45 m; 0.73 m	32	3, 5, 152	
U-ledger reinforced 1.09 m and 1.40 m	33	3, 5, 27, 32	

Table 1: (continued)

Designation	Annex B, page	Details / components in accordance with Annex B, page	Regulations for manufacturing, marking and certificate of conformity
U-2-deck bearer 1.57 m	34	3, 5, 32	according to Z-8.22-906
U-2-deck bearer 2.07 m	35	3, 5, 32, 34	
U-2-deck bearer 2.57 m	36	3, 5, 32, 34	
U-2-deck bearer 3.07 m	37	3, 5, 32, 34	
Support ledger with tube fixture	40	3	
Support ledger	43	3, 32	
U-transom lattice girder 0.73 m / 1.09 m V	44	27, 32, 127	
Tube-transom lattice girder 0.73 m / 1.09 m V	45	27, 144	
MODUL lattice girder 6.14 m	46	3, 4, 151	
MODUL lattice girder 4.14 m / 5.14 m	47	3, 4, 46, 151	
MODUL lattice girder with tube fixture 6.14 m	48	3, 4, 46, 151	
MODUL lattice girder with tube fixture 4.14 m / 5.14 m	49	3, 4, 46, 48, 151	
MODUL lift-off preventer	50	---	
Aluminium frame platform with tube fixture 1.57 m; 2.07 m	51	53	
Aluminium frame platform with tube fixture 2.57 m; 3.07 m	52	53	
Aluminium access frame platform with tube fixture 3.07 m	54	53, 56, 60	
Aluminium access frame platform with tube fixture 2.57 m	55	53, 56, 60	
Aluminium access frame platform with tube fixture 1.57 m – 3.07 m without ladder	57	53, 56	
Aluminium access frame platform with tube fixture 2.57 m; 3.07 m with aluminium chequer plate	58	59, 60	
Steel deck AF with tube fixture 0.32 m	61	---	
Steel deck AF with tube fixture 0.30 m; 0.34 m	62	---	
Intermediate deck AF with tube suspension 0.16 m, 0.19 m	63	---	
Steel deck with tube fixture	64	---	
Intermediate deck with tube suspension	65	---	
Aluminium frame platform with plywood 0.50 m – 2.07 m	66	68	
Aluminium frame platform with plywood 2.57 m; 3.07 m	67	68	
Aluminium frame platform with internal hatch 2.57 m; 3.07m	69	60, 68, 71	
Aluminium frame platform with internal hatch 1.09 m – 3.07 m without ladder	70	68, 71	
Aluminium deck with plywood 2.57 m; 3.07 m	72	74	according to Z-8.1-862
Aluminium deck with plywood 1.57 m; 2.07 m	73	74	
Aluminium access deck 3.07 m with ladder	75	60, 74, 77	
Aluminium access deck 2.57 m with ladder	76	60, 74, 77	

Table 1: (continued)

Designation	Annex B, page	Details / components in accordance with Annex B, page	Regulations for manufacturing, marking and certificate of conformity
Aluminium deck with plywood 3.07 m	78	80	according to Z-8.1-862
Aluminium deck with plywood 1.57 m, 2.07 m, 2.57 m	79	80	
Aluminium access deck 3.07 m with ladder	81	60, 80, 83	
Aluminium access deck 2.57 m with ladder	82	60, 80, 83	
Steel deck AF 0.32 m	84	---	
Steel deck	85	---	
Steel deck AF 0.30 m; 0.34 m	86	---	
Steel plank 0.30 m	87	---	
Intermediate deck AF 0.16 m, 0.19 m	88	---	
Intermediate deck	89	---	
Lightweight aluminium deck 0.60 m	90	---	
Solid wood deck 48	91	---	
Solid wood deck 45	92	---	
Wooden deck	93	---	
MODUL gap cover	94	---	according to Z-8.22-906
MODUL gap cover with tube fixture	95	---	
Gap cover	96	---	according to Z-8.1-862
Aluminium stairway AF-0.62 m 2.57 m; 3.07 m	97	---	
Stair guardrail 2.57 m; 3.07 m	98	3	according to Z-8.22-906
Inner guardrail for aluminium stairway 2.00m	99	---	according to Z-8.1-862
Stair stringer fall protection 1.00 x 0.50 m	100	---	
MODUL stair guardrail holder	101	3, 4, 151	according to Z-8.22-906
MODUL swinggate	102	3, 139	
Bracket 0.39 m with tube fixture	103	3, 4, 151	
MODUL bracket 0.39 m	104	3, 5, 32, 152	
MODUL bracket 0.73 m	105	3, 5, 32, 152	
Bracket with tube fixture 0.50 m	106	3, 4, 151	
MODUL toeboard	107	---	
MODUL toeboard 4.14 m	108	---	
MODUL toeboard, aluminium	109	---	
Toeboard; End-toeboard AF	110	---	according to Z-8.1-862
Toeboard 4.14 m AF	111	---	
Toeboard; End-toeboard	112	---	
Toeboard 4.14 m	113	---	
Toeboard, aluminium; End-toeboard, aluminium AF	114	---	
Toeboard, aluminium; End-toeboard, aluminium	115	---	

Table 1: (continued)

Designation	Annex B, page	Details / components in accordance with Annex B, page	Regulations for manufacturing, marking and certificate of conformity
MODUL guard net system	116	3, 4, 25, 151, 155	according to Z-8.22-906
MODUL double end guardrail	117	3, 4, 151	
Storey ladder 2.00 x 0.40 m, steel	118	---	according to Z-8.1-847
Storey ladder 2.00 x 0.40 m, aluminium	119	---	
Scaffold retainer / wall tie	120	---	according to Z-8.1-862
Quick-release wall tie	121	---	
Wedge head coupler, swivel base	122	3, 139, 151	according to Z-8.22-906
MODUL U-tube connector	123	---	
MODUL tube connector	124	3	
Wedge-head coupler, rigid	125	3, 4, 151	
Support ledger	126	3, 4, 151	
Transom 0.73 m, 1.09 m	127	32	according to Z-8.1-862
Guardrail coupler AF	128	---	
Toeboard coupler; Halfcoupler with hook	129	---	
Squared timber coupler	130	---	
Toeboard support	131	3	
Locking pin	132	---	
Putlog coupler	133	---	
Diagonal cross brace	134	---	
Advanced guardrail post 2.00 m	135	---	
Telescopic guardrail 2.00 - 3.07 m	136	---	
MODUL advanced guardrail post	137	---	according to Z-8.22-906
Advanced end guardrail / Aluminium telescopic guardrail	138	---	according to Z-8.1-862
AB head jack “U”	140	---	according to Z-8.22-906
MODUL U-lattice girder 6.14 m, 7.71 m	141	3, 4, 5, 32, 147, 151, 152	
MODUL U-lattice girder 4.14 m; 5.14 m	142	3, 4, 5, 32, 141, 147, 151, 152	
Claw coupler	143	---	
Tube ledger, reinforced 1.09 m; 1.29 m; 1.40 m	144	3, 4, 151	
Tube ledger, reinforced, 1.57 m; 2.07 m	145	3, 4, 144, 151	
Tube ledger, reinforced, 2.57 m, 3.07 m	146	3, 4, 144, 151	
U-ledger 1.04 m; 1.09 m; 1.29 m	147	3, 5, 152	

Table 1: (continued)

Designation	Annex B, page	Details / components in accordance with Annex B, page	Regulations for manufacturing, marking and certificate of conformity
U-ledger with integrated joist 1.40 m -2.07 m	148	3, 5, 152	according to Z-8.22-906
U-ledger, reinforced 1.40 m - 2.57 m	149	3, 5, 144, 147, 152	
U-ledger, reinforced 3.07 m	150	3, 5, 144, 147, 149, 152	
Standard 4.0	153	2	
Vertical starter standard 4.0	154	2	
Tube ledger 4.0	155	3, 151	
Horizontal diagonal ledger 4.0	156	3, 151	
MODUL gap cover, T-shaped	157	---	
Standard with tube connector 200 45/5	158	2	
Platform guardrail AB 2.57; 3.07 m	159	3	
Base jack 60	178	---	according to Z-8.1-16.2
Starter piece, lightweight	179	165	according to Z-8.22-939
Standard with integrated tube connector, lightweight	180	165, 182	
Starter standard 2.21 m, lightweight	181	165, 182	
Standard without tube connector, lightweight	183	165, 182	
Tube connector for standard	184	---	
O-ledger, lightweight 0.73 – 4.35 m	185	166, 170	
O-ledger, lightweight, HD	186	166, 170	
U-ledger, lightweight 0.73 m T14	187	167, 170, 190	
U-ledger, lightweight 1.09 – 1.40 m T14	188	167, 170, 190	
U-ledger, lightweight 1.40 – 3.07 m T14, reinforced	189	167, 170, 190	
Diagonal brace “Lightweight design”	191	169, 170	
U-toeboard, wood 0.73 – 3.07 m	192	---	
U-toeboard, wood 4.14 m	193	---	
U-toeboard, steel 0.73 – 3.07 m T17	194	---	
U-toeboard, steel 0.73 – 3.07 m	195	---	
U-bracket, lightweight 0.39 m	196	168, 170, 190	
U-bracket, lightweight 0.73 m	197	168, 170, 190	
U-bracket, lightweight 0.28 m	198	168, 170, 190	
U-bracket, lightweight 0.45 m with 2 wedge heads	199	167, 170, 190	
U-bracket, lightweight 0.73 m with 2 wedge heads	200	167, 170, 190	
Bracket brace 2.05 m "Lightweight design"	201	169, 170	
U-deck lift-off preventer T8 0.39 – 1.57 m	202	---	
U-deck lift-off preventer T9 1.40 – 3.07 m	203	---	
Universal U-deck lift-off preventer	204	---	
O-lattice girder, lightweight 5.14; 6.14 x 0.5 m	205	166, 170	

Table 1: (continued)

Designation	Annex B, page	Details / components in accordance with Annex B, page	Regulations for manufacturing, marking and certificate of conformity
U-lattice girder, lightweight 2.07 – 3.07 x 0.5 m	206	166, 167, 170, 190	according to Z-8.22-939
U-lattice girder, lightweight 4.14 – 6.14 x 0.5 m	207	166, 167, 170, 190	
Plug-in tube connector for U-profile	208	---	
Tube connector for lattice girder	209	---	
U-lattice girder ledger, lightweight 0.73 m	210	190	
O-lattice girder 4.14 – 7.71 x 0.4 m "Lightweight design"	211	166, 170	
Double wedge head coupler "Lightweight design"	212	170	
Side safety meshguard, lightweight 1.57– 3.07 m	213	166, 170	
U-passageway girder, lightweight 1.57 m	214	166, 167, 170, 190	
Reinforcing post 2.6 m "Lightweight design"	215	168, 170	
U-comfort stairway 2.57; 3.07 x 2.00 x 0.64 m	216	217	
Stair guardrail 2.57; 3.07 m	218	170, 176	
KK stair guardrail 2.57 m; 3.07 m "Lightweight design"	219	168, 170	
Stair guardrail holder	220	170, 176	
Stairway guardrail 1.0 x 0.5 m	221	---	according to Z-8.1-16.2
Scaffold retainer / wall tie 0.38 – 1.75 m	222	---	
Locking pin, red Ø 11 mm	223	---	
U-protective roof bracket T7 “Lightweight design”	224	167, 170, 190	according to Z-8.22-939
U-ledger with gap cover, lightweight 0.73 – 3.07 m	225	166, 170	
Starter piece "K2000+ design"	226	171	according to Z-8.22-64
Standard with tube connector "K2000+ design"	227	171, 182	
Standard without tube connector "K2000+ design"	228	171	
O-ledger 0.73 – 4.35 m "K2000+ design"	229	172, 176	
O-ledger HD "K2000+ design"	230	172, 176	
U-ledger 0.73 m "K2000+ design"	231	173, 176, 190, 234	
U-ledger 1.09 – 1.40 m reinforced "K2000+ design"	232	173, 176, 190, 234	
U-double ledger 1.57 – 3.07 m "K2000+ design"	233	173, 176, 190, 234	
Diagonal brace "K2000+ design"	235	175, 176	
U-bracket 0.39 m "K2000+ design"	236	174, 176, 190, 234	

Table 1: (continued)

Designation	Annex B, page	Details / components in accordance with Annex B, page	Regulations for manufacturing, marking and certificate of conformity
U-bracket 0.73 m "K2000+ design"	237	174, 176, 190, 234	according to Z-8.22-64
U-bracket 0.28 m "K2000+ design"	238	174, 176, 190, 234	
U-bracket 0.45 m with two wedge-heads "K2000+ design"	239	173, 176, 190, 234	
U-bracket 0.73 m with two wedge-heads "K2000+ design"	240	173, 176, 190, 234	
Bracket brace 2.05 m "K2000+ design"	241	175, 176	
O-lattice girder 5.14; 6.14 x 0.5 m "K2000+ design"	242	172, 176	
U-lattice girder 2.07 – 3.07 x 0.5 m "K2000+ design"	243	172, 173, 176, 190, 234	
U-lattice girder 4.14 – 6.14 x 0.5 m "K2000+ design"	244	172, 173, 176, 190, 234	
O-lattice girder 4.14 – 7.14 x 0.4 m "K2000+ design"	245	172, 176	
Lattice girder coupler	246	---	according to Z-8.1-16.2
Double wedge-head coupler "K2000+ design"	247	176	according to Z-8.22-64
Side safety meshguard 1.57 – 3.07 m "K2000+ design"	248	172, 176	
U-passageway girder 1.57 m "K2000+ design"	249	172, 173, 176, 190, 234	
Tube connector with halfcoupler	250	---	according to Z-8.22-939
U-aluminium-platform stairway 2.57; 3.07 x 2.00 x 0.64 m	251	252	according to Z-8.1-16.2
KK stair guardrail 2.57; 3.07 m "K2000+ design"	253	174, 176	according to Z-8.22-64
Locking pin Ø 9 mm	254	---	according to Z-8.1-16.2
U-protective roof bracket T7 "K2000+ design"	255	173, 176, 190, 234	according to Z-8.22-64
U-ledger with gap cover 0.73 – 3.07 m "K2000+ design"	256	172, 176	
TG-60 frame 0.50 x 1.09 m "K2000+ design"	257	171	
TG-60 frame 0.71 x 1.09 m "K2000+ design"	258	171	
TG-60 frame 1.00 x 1.09 m "K2000+ design"	259	171	
Assembly guardrail, aluminium 1.57 / 2.07; 2.57 / 3.07 m	260	---	according to Z-8.1-16.2
Assembly post T5	261	---	

Table 1: (continued)

Designation	Annex B, page	Details / components in accordance with Annex B, page	Regulations for manufacturing, marking and certificate of conformity
U-deck T4 0.73 – 3.07 x 0.32 m, steel, design: point-welded	262	---	according to Z-8.1-16.2
U-deck T4 0.73 – 3.07 x 0.32 m, steel, design: hand-welded	263	---	
U-deck 0.73 – 3.07 x 0.32 m, steel, design: point-welded	264	---	
U-deck 0.73 – 3.07 x 0.32 m, steel, design: hand-welded	265	---	
U-robust deck 0.73 – 2.57 m x 0.61 m	266	---	
U-robust deck 3.07 x 0.61 m	267	---	
U-robust deck 0.73 – 3.07 m x 0.32 m	268	266	
U-steel deck with trapdoor 2.57 x 0.64 m	269	---	
Storey ladder 7 rungs T15	270	---	according to Z-8.22-939
Storey ladder 7 rungs	271	---	according to Z-8.1-16.2
U-robust deck with trapdoor with ladder 2.57 – 3.07 x 0.61 m	272	---	
U-aluminium deck with trapdoor 2.07 – 3.07 x 0.61 m	273	---	
U-aluminium deck with trapdoor 2.57 – 3.07 x 0.61 m, with ladder	274	---	
U-robust deck with trapdoor 1.57 – 3.07 x 0.61 m, trapdoor arranged offset	275	---	
U-robust deck with trapdoor with ladder 2.57 – 3.07 x 0.61 m; trapdoor arranged offset	276	---	
U-gap deck, telescopic 0.73 – 3.07 m	277	---	according to Z-8.22-939
Gap cover, steel 0.73 – 3.07 x 0.32 m	278	---	
U-deck, steel 0.73 – 3.07 x 0.19 m	279	---	according to Z-8.1-16.2
U-deck, steel 0.73 – 3.07 x 0.19 m (discontinued design)	280	---	
U-aluminium deck with trapdoor 1.00 x 0.61 m	281	---	according to Z-8.22-939
O-deck T9 0.73 – 3.07 x 0.32 m, steel, design: spot-welded / hand-welded	282	---	according to Z-8.1-919
O-deck T4 0.73 – 3.07 x 0.32 m, steel, design: spot-welded (discontinued design)	283	---	
O-deck T9 0.73 – 3.07 x 0.19 m, steel	284	---	
O-deck 0.73 – 3.07 x 0.19 m, steel (discontinued design)	285	---	
O-platform stairway, aluminium 2.57; 3.07 x 2.0 x 0.64 m	286	---	
O-Komfort stairway 2.57; 3.07 x 2.0 x 0.64 m	287	---	

Table 1: (continued)

Designation	Annex B, page	Details / components in accordance with Annex B, page	Regulations for manufacturing, marking and certificate of conformity
O-ledger with gap cover, lightweight 0.73 – 3.07 m	288	166, 170	according to Z-8.1-919
O-ledger with gap cover 0.73 - 3.07 m "K2000+ design"	289	172, 176	
O-ledger with halfcoupler 0.73 m "Lightweight design"	290	166, 170	
O-ledger with halfcoupler 0.73 m "K2000+ design"	291	172, 176	
Base jack 80, reinforced	292	---	according to Z-8.1-16.2
AGS standard, lightweight 2.00 m	293	165, 182	according to Z-8.22-939
STAR guardrail 0.73 – 3.07 m T18	294	---	according to Z-8.1-919
STAR double end guardrail 0.73 m	295	---	according to Z-8.1-919
U-deck, lightweight 0.73 – 3.07 x 0.32 m, steel, design: spot-welded / hand-welded	296	---	according to Z-8.1-16.2
O-deck, lightweight 0.73 – 3.07 x 0.32 m, steel, design: spot-welded / hand welded	297	---	according to Z-8.1-919
O-toeboard 0.73 – 3.07 m, steel	298	---	
O-toeboard 0.73 – 3.07 m T18, steel	299	---	
Deck lift-off preventer 0.37 – 3.07 m, steel	300	---	according to Z-8.22-906
MODUL bracket brace 2.05 m	301	3, 6	
Advanced end guardrail	302	3, 4	
MODUL transverse toeboard	303	---	
Stair stringer fall protection 1.00 x 0.50 m	304	---	according to Z-8.1-862
Inner guardrail for aluminium stairway 2.00 m	305	---	
MODUL U-lattice girder 1.57 m – 3.14 m	306	3, 4, 5, 32, 147, 151, 152	according to Z-8.22-906

2.1.2 Standard assembly configuration

The use of the scaffold components in facade scaffolding is described in the provisions of a standard system configuration. Proof of structural stability for said fully erected scaffolds in their standard system configuration has been furnished. Assembly configurations of facade scaffolds are considered to be standard system configuration when they comply with the provisions of Annex C and D. Any assembly configurations that deviate from the standard system configuration shall be assessable and verified in each individual case.

The standard system configuration applies to facade scaffolds with a structural height that does not exceed 24 m, not including the spindle extension length above the ground. In accordance with Annexes C and D, the scaffolding system may be used in its standard system configuration with system width $b = 0.732\ m$ and bay widths $\ell \leq 3.07\ m$ for working scaffolds with load classes ≤ 3 according to DIN EN 12811-1:2004-03, and as a brickguard and roof edge protection scaffold with a maximum falling height of class 1 (FL1) and as brickguard and roof edge protection scaffold with protective walls of class SWD 1 in accordance with DIN 4420-1:2004-03..

2.1.3 Deviations from the Standard Assembly Configurations

If assembly configurations deviate from the standard system configuration in accordance with Annex C or Annex D, proof of structural stability of the scaffoldings shall be provided for each individual configuration or by means of a structural design calculation in accordance with the Technical Building Rules [Technische Baubestimmungen] and the provisions of this decision. The characteristic values to be used for the proof of structural stability are specified in this decision.

Other anchorage patterns are possible and other nettings or tarpaulins as scaffold cladding may be used. Any increased stresses / loads (e.g. from higher dead weights and wind loads or from increased live loads) must be taken into consideration in a scaffold up to the anchors and the erection plane (ground). The impact of building hoists or other lifting equipment must also be taken into account if they are not operated independently of the scaffold.

2.2 Dimensioning

2.2.1 General provisions and system assumptions

2.2.1.1 General provisions

For the design and calculation of scaffolds to be erected by using the modular scaffolding system, unless otherwise specified in this decision, particular attention shall be paid to the Technical Building Rules [Technische Baubestimmungen], especially those for working and service scaffolds according to DIN EN 12811-1:2004-03 in conjunction with the "Application Guideline for Working Scaffolds according to DIN EN 12811-1"[1], DIN 4420-1:2004-03 the "Approval Principles for Working and Service Scaffolds – Requirements, Calculation Assumptions, Tests, Certificate of Conformity"[3] and for supporting structures DIN EN 12812:2008-12 in consideration of the "Application Guideline for Supporting Structures in accordance with DIN EN 12812"[2,4].

When using the modular scaffolding system as a temporary structure that does not fall within the scope of temporary auxiliary construction aids, application-specific requirements may need to be taken into account in the design.

Depending on the components used, the load-bearing groups (LBGs) according to Table 2 apply. If it is not certain which construction techniques will be used in a combination mix, the load-bearing capacities and stiffness of LBG "B" must be assumed when verifying the scaffolding's structural stability for the ledger connections and for the vertical diagonal braces.

If an additional proof of structural stability for the connection between the connector heads and the standard, ledger and diagonal bracing tubes (specified in the Annexes) is required for the scaffold nodes' verification, this will be referred to in the following sections.

Table 2: Load-bearing groups (LBG) for ledger and diagonal brace connection

<table>
<tr><td rowspan="2">Construction technique (design) of connector heads for ledgers and diagonal braces *)</td><td colspan="4">Construction technique (design) of the connector disc (rosette) and vertical standard</td></tr>
<tr><td>"Modul Multi"</td><td>"Modul Multi 4.0"</td><td>"K2000+"</td><td>"Allround lightweight"</td></tr>
<tr><td>"Modul Multi"</td><td colspan="2" rowspan="2">according to Z-8.22-906</td><td colspan="2">Load-bearing group "B"</td></tr>
<tr><td>"Modul Multi 4.0"</td><td colspan="2">Load-bearing group "A"</td></tr>
<tr><td>"K2000+"</td><td colspan="2">Load-bearing group "B"</td><td>according to Z-8.22-64</td><td>according to Z-8.22-949</td></tr>
<tr><td>"Allround lightweight"</td><td>Load-bearing group "A"</td><td>according to Z-8.22-949</td><td>according to Z-8.22-939</td></tr>
<tr><td colspan="5">*) For components with the connector head for the U-bracket ("lightweight design") in accordance with Annex B, page 168, the regulations according to Z-8.22-939 must be applied in full..</td></tr>
</table>

[4] Please also take into consideration the advisory results of the "Scaffold Expert Committee", the so-called "SVA Gerüste", available on the DIBt homepage.

2.2.1.2 System assumptions

The structural systems for the calculation are to be modelled in accordance with Annex A, page 3. The short members specified there from the tubular standard axis to the connectors may be assumed to be rigid. The indices specified in the following sections refer to a local coordinate system, in which the x-axis represents the ledger axis, and the z-axis – the axis of the tubular standard (cf. Annex A, page 3).

When verifying the structural stability of the scaffolding system, it must be observed that the bending moment in the ledger-tubular standard connection is related to the standard's outer edge and that the vertical component in the vertical diagonal brace connection must be taken into account with a connection eccentricity corresponding to the information provided in Annex A, page 3. The torsional moment resulting from the horizontal component at the vertical diagonal brace connection around the axis of the tubular standard is transmitted by the connector and must be verified in the ledgers.

As specified, in the connection of a ledger, transmission of axial forces, bending moments, and shear forces in the plane between the tubular standard and the ledger and in the plane at a right angle thereto is allowed. In LBG "A", O-ledgers may also transfer torsional moments. Please refer to the respective load-bearing capacities in Table 3.

When using short ledgers with $L < 0.60\ m$, the connections shall be assumed to be articulated. Shear forces may only be transmitted if they result from the (outer) loads, which are transmitted at the short rod.

If it is not ensured that only components of a single design are used in a scaffold or that their impact on structural stability is recorded by detailed calculation and design documents, the specifications of LBG "B" must be used for the verification procedure of the respective scaffold.

At the connection of a vertical and horizontal diagonal, only normal forces may be transferred. Structural proof of stability of the horizontal diagonal ledger according to Annex B, page 156 can be provided as ledgers in accordance with section 2.2.2 in connection with the Technical Building Rules [Technische Baubestimmungen].

Stiffness values and load-bearing capacities of direct connections apply to connection in the "large" or "small" opening of the connector disc (rosette), provided no additional information for connections in the small opening have been provided. The information for the deck level only applies for deck ledgers that are connected in the small opening.

In all equations in the following sections, the internal forces N and V must be given in [kN], while bending and torsional moments M must be quoted in [kNcm].

2.2.2 Ledger connection

2.2.2.1 Load-deformation behaviour

2.2.2.1.1 Bending in the vertical plane

When no articulated connection is assumed, also see section 3.2.1., depending on the design, proof of stability of a scaffolding shall be provided taking into account the ledger connections in the plane formed by the tubular standard and the ledger (vertical plane) with torsional spring fixation according to the following moment/rotation angle relationship (M_y/ϕ):

- in accordance with Annex A, Figure 1 for load-bearing group "A" or
- in accordance with Annex A, Figure 2 for load-bearing group "B"

2.2.2.1.2 Bending in the horizontal plane

When no articulated connection is assumed, regardless of the designs, proof of stability of a scaffolding must be provided taking into account the ledger connections in the plane formed by the tubular standard and the ledger (horizontal plane) with torsional spring fixation according to the following moment/rotation angle relationship (M_z/ϕ):

- in accordance with Annex A, Figure 3 for load-bearing group "A" or
- in accordance with Annex A, Figure 4 for load-bearing group "B"

2.2.2.1.3 Torsion at the tube ledger of load-bearing group “A”

When no articulated connection is assumed, proof of stability of the O-ledger of LBG "A" under torsion stresses in the ledger connection shall be calculated assuming a spring fixation that corresponds to the moment/rotation angle relationship (M_T/ϕ) in accordance with Annex A, Figure 5. As a rule, no torsion may be transmitted in the connection of U-ledgers and in LBG "B".

2.2.2.1.4 Vertical load at right angles to the axis of the ledger

For ledger lengths $> 0.7\ m$ in conjunction with vertical shear forces $V_d \leq 10\ kN$, an additional degree of freedom applied in the direction of the shearing load may be disregarded. Otherwise, an additional degree of freedom in the shear force direction of $f_{0,d} = 0.175\ cm$ must be applied.

2.2.2.1.5 Horizontal load at right angles to the axis of the ledger

For structures where the deformation influence of the ledger or bracket connection in the horizontal direction must be taken into account, proof of structural stability of the ledgers or bracket when subjected to horizontal loads V_y at right angles to the ledger or bracket axis in the ledger or bracket connection with a travel-limiting spring stiffness according to the following force-displacement relationship:

- in accordance with Annex A, Figure 6 for load-bearing group "A" or
- in accordance with Annex A, Figure 7 for load-bearing group "B"

2.2.2.2 Proof of structural stability

2.2.2.2.1 General verifications

For the connection of a ledger, proof shall be provided that the loads shall not exceed the load-bearing capacities given in Table 3.

Table 3: Design values of the load-bearing capacities in the ledger connection

Internal forces and moments of connection		Load-bearing capacity		
		Load-bearing group "A"	Load-bearing group "B"	U-bracket connection with connector head according to Annex B, page 168
Bending moment $M_{y,Rd}$	[kNcm]	± 120.0	± 101.0	
Bending moment $M_{z,Rd}$	[kNcm]	± 40.1	± 37.2	± 40.1
Vertical shear force $V_{z,Rd}$	[kN]	± 31.7	± 264	
Horizontal shear force $V_{y,Rd}$	[kN]	± 16.0	O-ledger: ± 10.0 U-ledger: ± 5.9	± 16.0
Normal force N_{Rd} [kN]	at the large opening	± 35.1	± 31.0	± 35.1
	at the small opening	± 42.1		± 42.1
Torsional moment $M_{x,Rd}$	[kNcm] only O-ledger	± 52.5	---	

2.2.2.2.2 Interaction standard / ledger connection

In accordance with the design, the following interaction relationships at the connector discs or rosettes shall be met:

Table 4: Interaction relationships

	Load-bearing group "A"	Load-bearing group "B"
Interaction relationships	$0.324 \cdot I_A + I_5 \leq 1$	$0.316 \cdot I_A + I_5 \leq 1$

Where:

I_A Load factor in ledger connection

$$I_A = \frac{M_{y,Ed}}{M_{y,Rd}} \qquad \text{(equation 1)}$$

where: $M_{y,Ed}$ Design bending moment in the ledger connection

$M_{y,Rd}$ Design value of the load bearing capacity subjected to bending moments in the ledger connection according to Table 3

I_S Vectorial coefficient of utilization in the tubular standard at loaded connector discs (rosette)

– For $v_{act} \leq 1/3$ the following applies:

$$I_S = \frac{a}{b} \qquad \text{(equation 2)}$$

a, b see figure 1, whereby b has to be calculated using the interaction relationship according to figure 1

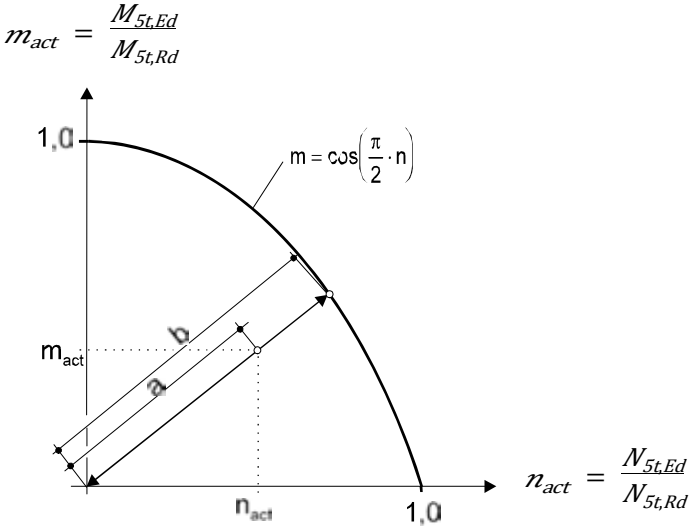


Figure 1: Vectorial coefficient of utilization in the standard

where: m_{act} is the coefficient of utilization with respect to bending moments in the standard

$M_{St,Ed}$ Bending moment in the tubular standard

$M_{St,Rd}$ Load-bearing capacity with respect to the bending moments in the tubular standard

Design "A": $M_{St,Rd} = M_{pl,d} = f_{y,d} \cdot \alpha_{pl} \cdot W_{el} = 232\ kNcm$

Design "B": $M_{St,Rd} = M_{pl,d} = f_{y,d} \cdot \alpha_{pl} \cdot W_{el} = 175\ kNcm$

n_{act} is the coefficient of utilization with respect to the normal force in the standard

$N_{St,Ed}$ Normal force in the tubular standard

$N_{St,Rd}$ Load-bearing capacity with respect to the bending moments in the tubular standard

Design "A": $N_{St,Rd} = N_{pl,d} = f_{y,d} \cdot A = 173\ kN$

Design "B": $N_{St,Rd} = N_{pl,d} = f_{y,d} \cdot A = 132\ kN$

– For $1/3 < v_{act} \leq 0.9$ the vectorial coefficient of utilization must be determined under consideration of the interaction relationship as shown in the left side of the equation, column 4 of Table 7, DIN 4420-1:1990-12.

where:

v_{act} is the coefficient of utilization with respect to the shear force in the standard

$$v_{act} = \frac{V_{St,Ed}}{V_{St,Rd}} \quad \text{(equation 3)}$$

where $V_{St,Ed}$ Design shear force in the tubular standard

$V_{St,Rd}$ Design resistance in relation to the shear force in the tubular standard

Design "A": $V_{St,Rd} = V_{pl,d} = 63.6\,kN$

Design "B": $V_{St,Rd} = V_{pl,d} = 48.5\,kN$

2.2.2.2.3 Combinations of internal forces and moments

For combinations of internal forces and moments in the connection of a ledger, the following requirements shall be met depending on the design, whereby the torsion term with MT shall only be taken into account in load-bearing group "A" with tube ledger connections:

Load-bearing group "A"

$$\frac{N_{Ed}^{(+)}}{N_{Rd}} + \frac{|M_{y,Ed}|}{M_{y,Rd}} + max\left(\frac{|V_{z,Ed}|}{V_{z,Rd}} - 0.079\ ;\ 0\right) + \frac{|M_{T,Ed}|}{M_{T,Rd}} + \frac{|M_{z,Ed}|}{M_{z,Rd}} + 0.59 \cdot \frac{|V_{y,Ed}|}{V_{y,Rd}} \leq 1 \quad \text{(equation 4)}$$

Proof of structural stability of the welding seam between the connector head and the ledger tube (O-ledger) shall also be provided:

$$\left(\frac{|N_{w,Ed}|}{117\,kN} + \frac{\sqrt{(M_{y,w,Ed})^2 + (M_{z,w,Ed})^2}}{170\,kNcm}\right)^2 + \left(\frac{|M_{T,w,Ed}|}{152\,kNcm} + \frac{\sqrt{(V_{y,w,Ed})^2 + (V_{z,w,Ed})^2}}{43.1\,kN}\right)^2 \leq 1 \quad \text{(equation 5)}$$

For load-bearing group "A", proof of structural stability of the welding seam between the connector head and the U-ledger is not required.

Load-bearing group "B"

For proof of structural stability of load-bearing group "B", only the load-bearing capacities of load-bearing group "B" according to Table 3 must be applied, irrespective of the components used.

$$\frac{N_{Ed}^{(+)}}{N_{Rd}} + \frac{|M_{y,Ed}|}{M_{y,Rd}} + \frac{max(|V_{z,Ed}| - 2.1\,kN; 0\,kN)}{V_{z,Rd}} + \frac{|V_{y,Ed}|}{16.0\,kN} + \frac{|M_{z,Ed}|}{M_{z,Rd}} \leq 1 \quad \text{(equation 6)}$$

Additionally, verification for the welding seam between ledger tube (O-ledger) and the connector head (in accordance with eq. 7). Verification of the welding seam is not required if the following conditions are met:

a) If the components used all have a tube ledger connection 4.0 in accordance with Annex B, page 151 and if shear loads in these connections fulfil $V_{z,W,Ed} \leq 30{,}5\ kN$ verification (eq. 7) is not required.
b) When exclusively using components with a tube ledger connection in accordance with Annex B, page 4, verification (eq. 7) is not required.

$$\frac{max\left(\left|N_{W,Ed}\right| - 6.4\ kN; 0\right)}{76.8\ kN} + \frac{\sqrt{\left(M_{y,W,Ed}\right)^2 + \left(M_{z,W,Ed}\right)^2}}{110.3\ kNcm} + \frac{\sqrt{\left(V_{z,W,Ed}\right)^2 + \left(V_{y,W,Ed}\right)^2}}{48.9\ kN} \leq 1$$

(equation 7)

For the welding seam between the U-ledger profile and the connector head, the following additional verification must be provided for the "K 2000+ design" in accordance with Annex B, page 173:

$$\frac{N_{W,Ed}}{71.0\ kN} + \frac{\sqrt{\left(M_{y,W,Ed}\right)^2 + \left(M_{z,W,Ed}\right)^2}}{116.4\ kN} + max\left(\frac{V_{z,W,Ed}}{58.5\ kN}; \frac{V_{y,W,Ed}}{18.0\ kN}\right) \leq 1$$

(equation 8)

Additional proof of stability of the welding connections between other U-ledgers and ledger heads is not required.

For the welding seam between the U-profile and the U-bracket connector head – "lightweight design" in accordance with Annex B, page 168, the following additional verification must be provided:

$$\frac{N_{Ed}^{(+)}}{N_{Rd}} + \frac{\left|M_{y,Ed}\right|}{M_{y,Rd}} + \frac{max\left(\left|V_{z,Ed}\right| - 2.1\ kN; 0\right)}{V_{z,Rd}} + \frac{\left|M_{z,Ed}\right|}{M_{z,Rd}} + \frac{\left|V_{y,Ed}\right|}{27.1\ kN} + \frac{\left|M_{T,Ed}\right|}{M_{T,Rd}} \leq 1$$

(equation 9)

For the welding seam between the bracket ledger and the U-bracket connector head – "lightweight design" in accordance with Annex B, page 168, verification in accordance with Z-8.22-939 must also be provided.

Where:

$M_{y,Ed}$, $V_{y,Ed}$, $V_{z,Ed}$, $M_{z,Ed}$, $M_{T,Ed}$	Design internal forces and moments in the ledger connection in [kN] or [kNcm]
$N_{Ed}^{(+)}$	Design action-effect due to tensile normal force in the ledger connection in [kN]
N_{Rd}, $M_{y,Rd}$, $V_{y,Rd}$, $V_{z,Rd}$, $M_{z,Rd}$, $M_{T,Rd}$	Design load values in accordance with the load-bearing group according to Table 3 in [kN] or [kNcm]
$N_{W,Ed}$, $M_{y,W,Ed}$, $V_{z,W,Ed}$, $V_{y,W,Ed}$, $M_{z,W,Ed}$, $M_{T,W,Ed}$	Design internal forces and moments in the welding seam in [kN] or [kNcm]

2.2.3 Connection to vertical diagonal brace

2.2.3.1 Load-deformation behaviour

When modelling the overall system in the planar model, the vertical diagonal braces – including their connections for LBG "A" and LBG "B" – must be taken into account depending on the load direction (tensile or compressive force) and the diagonal brace length with the equivalent stiffness ($E_d \cdot A_{eff}$) according to Table 5, as well as a degree of freedom in the diagonal direction of $f_{0,d} = 0.7\ cm$ (cf. Annex A, p. 4).

The deformation contributions of standard and ledger due to eccentricity ey (cf. Annex A, page 4) are included in the data provided, which means that only ex must be taken into account in the planar static model. Proof is to be provided that the node moments M^k in accordance with Annex A, page 4, are absorbed by the longitudinal ledgers and transoms fitted to the nodes.

2.2.3.2 Proof of structural stability

Depending on the direction of loading, the following proof of structural stability must be provided for the vertical diagonal braces:

$$\frac{|N_{V,Ed}|}{N_{V,Rd}} \leq 1 \qquad \text{(equation 10)}$$

Where:

$N_{V,Ed}$ Tensile or compressive forces acting in the vertical diagonal braces

$N_{V,Rd}$ Load-bearing capacity of the vertical diagonal braces with wedge-head in relation to tensile and/or compressive force in accordance with Table 5

Table 5: Characteristic values of the vertical diagonal braces

Bay length L [m]	Bay height H [m]	Compression load		Tensile load	
		$E_d \cdot A_{eff}$ [kN]	$N^{(-)}_{V,Rd}$ [kN]	$E_d \cdot A_{eff}$ [kN]	$N^{(+)}_{V,Rd}$ [kN]
3.07	2.0	2800	8.5	3153	22.9
2.57		2610	10.5	3049	23.5
2.07		2380	12.8	2969	24.3
1.57		2820	15.4	2823	22.6
1.40		3390	16.3	2808	22.0
1.29		3389	16.9	2790	21.7
1.09		3337	17.7	2763	21.2
0.73		3334	16.6	2772	18.0
3.07	1.5	1940	9.7	2695	22.0
2.57		1680	12.3	2480	22.6
2.07		1540	15.5	2342	23.3
1.57		1660	19.3	2254	24.3
1.40		2020	19.2	2204	23.5
1.29		2330	19.0	2173	22.9
1.09		3062	18.6	2124	22.0
0.73		2818	17.6	2093	19.8

Table 5: (continued)

Bay length L [m]	Bay height H [m]	Compression load		Tensile load	
		$E_d \cdot A_{eff}$ [kN]	$M_{V,Rd}^{(-)}$ [kN]	$E_d \cdot A_{eff}$ [kN]	$M_{V,Rd}^{(+)}$ [kN]
3.07	1.0	1540	10.8	2318	20.7
2.57		1250	14.0	2045	21.2
2.07		1160	16.9	1821	22.1
1.57		1160	17.9	1636	23.0
1.40		1160	18.4	1593	23.4
1.29		1160	18.8	1567	23.7
1.09		1210	19.4	1523	24.2
0.73		2130	18.5	1436	21.7
3.07	0.5	1330	11.5	2076	19.9
2.57		1170	15.2	1782	20.0
2.07		1010	15.4	1471	20.2
1.57		800	15.8	1162	20.8
1.40		730	16.1	1073	21.1
1.29		680	16.3	1015	21.4
1.09		610	16.9	916	22.1
0.73		600	18.7	800	23.6
when $E_d = (21.000 / 1.1)\ kN/cm^2$					

2.2.4 Horizontal diagonal brace connection

2.2.4.1 Horizontal diagonal brace in accordance with Annex B, page 9

2.2.4.1.1 Load-deformation behaviour

In the entire system, the horizontal diagonal braces according to Annex B, page 9, including their connections, must be taken into account dependent on the diagonal brace length and independent of the loading direction (tensile or compressive force) with the equivalent stiffness ($E_d \cdot A_{eff}$) according to Table 6 and with a travel-limiting spring in the diagonal direction according to the specifications in Annex A, figure 8.

2.2.4.1.2 Proof of structural stability

For the horizontal diagonal braces the following proof of stability is to be provided:

$$\frac{|N_{H,Ed}|}{N_{H,Rd}} \leq 1 \qquad \text{(equation 11)}$$

Where:

$N_{H,Ed}$ Tensile or compressive forces acting on the horizontal diagonal braces

$N_{H,Rd}$ Load-bearing capacity of the horizontal diagonal ledgers according to Table 6

Table 6: Characteristic values of the horizontal diagonal braces according to Annex B, page 9

Bay length L [m]	Bay width B [m]	$N_{H,Rd}$ [kN]	$E_d \cdot A_{eff}$ [kN]
0.73	0.73	3.10	2760
1.09	1.09	3.07	2970
1.57	1.57	3.03	2780
2.07	2.07	2.98	2240
2.57	2.57	2.91	1530
3.07	3.07	2.81	830

Table 6: (continued)

Bay length L [m]	Bay width B [m]	$N_{H,Rd}$ [kN]	$E_d \cdot A_{eff}$ [kN]
1.09	0.73	3.08	3160
1.40		3.07	3210
1.57		3.06	3200
2.07		3.03	3070
2.57		3.00	2850
3.07		2.96	2530
1.40	1.09	3.06	3210
1.57		3.05	3190
2.07		3.03	3040
2.57		2.99	2790
3.07		2.95	2460
1.40	1.57	3.04	3140
2.07		3.01	2910
2.57		2.98	2650
3.07		2.93	2330
1.40	2.07	3.02	2970
2.57		2.95	2450
3.07		2.90	2130
1.40	2.57	2.99	2900
3.07		2.86	1880
1.40	3.07	2.94	2380
when $E_d = (21.000 / 1.1)\ kN/cm^2$			

2.2.4.2 Connection of the horizontal diagonal braces according to Table B, page 156

Structural proof of stability of the horizontal diagonal ledgers according to Annex B, page 156, must be provided in accordance with section 2.2.2 in connection with the Technical Building Rules [Technische Baubestimmungen].

2.2.4.3 Connection of the lightweight HD horizontal diagonal brace O-ledger in accordance with Annex B, page 186

2.2.4.3.1 Load-deformation behaviour

Proof of structural stability of a scaffolding must take into account the O-ledgers HD according to Annex B, page 186 with an overall stiffness $c_{H,d}$ for the joints and the diagonal brace according to Table 7.

2.2.4.3.2 Proof of structural stability

For the O-ledgers, the following proof of stability is to be provided:

$$\frac{|N_{H,Ed}|}{N_{H,Rd}} \leq 1 \qquad \text{(equation 12)}$$

Where:

$N_{H,Ed}$ Tensile or compressive force in the O-ledger HD

$N_{H,Rd}$ Load-bearing capacity of the O-ledgers HD according to Table 7

Table 7: Characteristic values of O-ledgers in accordance with Annex B, page 186

L [mm]	B [mm]	Load-bearing capacity $N_{H,Rd}$ [kN]	Stiffness $c_{H,d}$ [kN/cm] (tensile and compressive force)
1572	1088	± 12.0	85.1
2072	732		59.4
2072	1088		67.8
2572	732		44.8
2572	1088		49.2
3072	732		28.1
3072	1088		26.1

2.2.5 Diagonal cross brace

For the proof of structural stability of the entire system, the diagonal cross braces according to Annex B, page 134 must be taken into account in connection with the equivalent stiffness and load-bearing capacities given in Table 8.

Table 8: Characteristic values of the diagonal cross brace

Scaffolding width [m]	System length [m]	Load	Stiffness $E_d \cdot A_{eff}$ [kN]	Load-bearing capacity N_{Rd} [kN]
0.732	1.95	Compression	2730	-10.2
1.088		Tension	2890	+10.2
0.732	1.77	Compression	2570	-10.2
1.088		Tension	2670	+10.2
when $E_d = (21.000 / 1.1)\ kN/cm^2$				

2.2.6 Connector disc (rosette)

2.2.6.1 Connection in directly adjacent openings of the connector disc

When two ledgers or one ledger and one vertical diagonal brace or one ledger and one horizontal diagonal brace are connected in adjacent openings, the following proof of structural stability must be provided:

$$(n^A + n^a)^2 + (v^A + v^a)^2 \leq 1 \qquad \text{(equation 13)}$$

where:

n, v is the interaction ratio according to Table 9

A Ledger A

a Ledger a or vertical or horizontal diagonal brace between A and B according to Figure 2

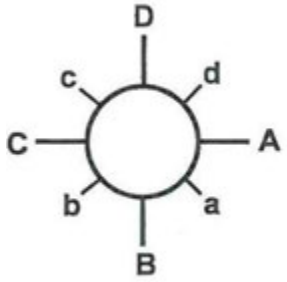


Figure 2: Allocation of the connector disc (rosette)

Table 9: Interaction ratios

Inter-action ratio	Connection ledger A/ ledger a	Connection ledger A/ vertical diagonal brace a	Connection ledger A/ horizontal diagonal brace a
n^A	$\frac{N_{Ed}^{A(+)} + \lvert M_{y,Ed}^{A}\rvert / e}{N_{Rd}^{A}}$		
n^a	$\frac{N_{Ed}^{a(+)} + \lvert M_{y,Ed}^{a}\rvert / e}{N_{Rd}^{a}}$	$\frac{0.707 \cdot N_{V,Ed}^{(+)} \cdot \sin\alpha + 1.883 \cdot \lvert N_{V,Ed}\rvert \cdot \cos\alpha}{N_{Rd}^{*}}$	$\frac{N_{H,Ed}^{(+)}}{N_{Rd}^{a}}$
v^A	$\frac{\lvert V_{z,Ed}^{A}\rvert}{V_{z,Rd}}$		
v^a	$\frac{\lvert V_{z,Ed}^{a}\rvert}{V_{z,Rd}}$	$\frac{\lvert N_{V,Ed}\rvert \cdot \cos\alpha}{V_{z,Rd}}$	0

Where:

$N_{Ed}^{A(+)}$; $N_{Ed}^{a(+)}$	Tensile force in the ledger connection (ledger A or ledger a)			
$M_{y,Ed}^{A}$; $M_{y,Ed}^{a}$	Bending in the ledger connection (ledger A or ledger a)			
$V_{z,Ed}^{A}$; $V_{z,Ed}^{a}$	Vertical lateral load in ledger connection (ledger A, Vertikaldiagonale a)			
$N_{V,Ed}$	Normal force in the vertical diagonal brace			
$N_{V,Ed}^{(+)}$	Tensile force in the vertical diagonal brace			
$N_{H,Ed}^{(+)}$	Tensile force in the horizontal diagonal brace			
e	Lever arm tube ledger connection $e = 3.3\,cm$			
			Load-bearing group "A"	**Load-bearing group "B"**
$V_{z,Rd}$	Load-bearing capacities	$V_{z,Rd}$:	31.7 kN	26.4 kN
$N_{Rd,}$	Load-bearing capacities	N_{Rd}^{A}:	42.3 kN	36.0 kN
		N_{Rd}^{a}:	35.1 kN	31.0 kN
		N_{Rd}^{*}:	51.1 kN	43.7 kN

Proof of stability shall be provided in pairs around the nodes.

2.2.6.2 Connection of ledgers and/or diagonal braces in any openings of the connector discs (rosettes)

$$\frac{\sum V_{z,Ed}}{\sum V_{z,Rd}} \leq 1 \qquad \text{(equation 14)}$$

Where:

$\sum V_{z,Ed}$ is the sum of all vertical design shear forces acting on the connector disc (including the vertical component of vertical diagonal braces)

$\sum V_{z,Rd}$ Design value of the load-bearing capacity of the connector discs (rosettes) under vertical shear forces

Load-bearing group "A": $\sum V_{z,Rd} = 117\ kN$

Load-bearing group "B": $\sum V_{z,Rd} = 106\ kN$

2.2.7 U-bracket connection

For the U-bracket "lightweight design" connection in accordance with Annex B, page 168 of the U-brackets in accordance with Annex B, pages 196 to 198, the respective regulations of sections 2.2.2 and 2.2.4 may be applied to the U-ledger connection, taking into account the regulations for the design of welded malleable cast iron components in accordance with Z-8.22-939.

For the U-bracket "K2000+ design" connection in accordance with Annex B, page 174 of the U-brackets in accordance with Annex B, pages 236 to 238, the respective regulations of sections 2.2.2 and 2.2.4 may be applied to the U-ledger connection, taking into account the regulations for the design of welded malleable cast iron components in accordance with Z-8.22-64.

2.2.8 Standard joints

2.2.8.1 General provisions

Unless otherwise specified below, the joints of the standards in the "ALBLITZ MODUL" modular scaffolding system must always be designed and verified in accordance with the applicable Technical Building Rules [Technische Baubestimmungen]; see also "Mathematical treatment of standard joints with one-sided, centrally fixed joint pins for working and service scaffolds, and for supporting structures made of steel"[5].

The decision contains various designs of tube connectors. If it is not certain which standard joint design will be used when verifying the structural stability, the most unfavourable assumptions must be applied.

If connecting means are used that deviate from the following sections, additional verification of a bolt-type connecting means for tensile force coupling (bearing of holes, bolt shearing and bolt bending) must be provided separately. When verifying the bolts' stability in tube connector joints subjected to tensile force, the bolt bending must be determined in accordance with the regulations "Mathematical treatment of standard joints with one-sided, centrically fixed butt bolts for working and service scaffolds, and for supporting structures made of steel"[5]. For the verifications of structural stability, a hole indentation of $\Delta = 5\ mm$ must be assumed for all design versions; the wall thickness of integrated tube connectors may be uniformly assumed to be $t = 3.5\ mm$.

2.2.8.2 Standard joints in **Load-bearing group "B"**

The structural stability of the standard joints in LBG "B" may be verified in the "lap joint" load-bearing model uniformly using the load-bearing capacities according to Table 10.

Table 10: Load-bearing capacities and load-deformation behaviour of the standard joints in load-bearing group "B"

Internal forces and moments	Load-bearing capacity	Load-deformation behaviour
Tensile force Z_{Rd}	$10\ kN$ *) **)	rigid
Compressive force $N_{KS,Ed}^{(-)}$ in the contact joint	63.2 kN	rigid
Bending moment $M_{DF,Rd}$	$78.5\ kNcm$ **)	see section 2.2.6.2
Torsional degree of freedom	---	$0.0260\ rad$

*) When using a Ø12-8.8 pin or larger, in which the thread is not arranged in the shear loaded joint, additional verification of structural stability of the joining means is not mandatory.

**) Separate verification of the structural stability of the tube connector's net cross-section is not necessarily required.

[5] see DIBt Newsletter 4/2017

The following verifications of structural stability must be carried out:

$$\frac{|Z_{Ed}|}{Z_{Rd}} \leq 1 \qquad \text{(equation 15)}$$

$$\frac{|N_{KS,Ed}^{(-)}|}{N_{KS,Rd}} \leq 1 \qquad \text{(equation 16)}$$

$$\frac{|M_{DF,Ed}|}{M_{DF,Rd}} \leq 1 \qquad \text{(equation 17)}$$

Where:

Z_{Ed}, $N_{KS,Ed}^{(-)}$, $M_{DF,Ed}$ Normal force loads in the standard joint

resulting bending load in the standard joint

$$M_{DF,Ed} = \sqrt{\left(M_{y,DF,Ed}\right)^2 + \left(M_{z,DF,Ed}\right)^2}$$

Z_{Rd}, $N_{K5,Rd}$, $M_{DF,Ed}$ Load-bearing capacities according to Table 10

For members subject to combined compressive force and bending moment or combined tensile force and bending moment, further verifications of interaction is not mandatory.

If the lower tubes are tubes with integrated tube connector, the least favourable torsional spring stiffness of the pressed-in connectors according to DIB-Newsletter[5] or the integrated connectors according to (eq.18) must be assumed for the system calculations.

For system calculations in the "lap joint" load-bearing model, the buckling angle due to the torsional degree of freedom may be considered uniformly in accordance with Table 10.

2.2.8.3 Standard joints in **Load-bearing group "A"**

For the joints of standards in Load-bearing group "A" with solely integrated tube connectors, it must be verified that the loads they are subjected to do not exceed the load-bearing capacities according to Table 11. When using the "lap joint" load-bearing model, the verification of structural stability must carried out as per (eq. 15), (eq. 16), and (eq. 19).

Table 11: Load-bearing capacities and load-deformation behaviour of the integrated tube connector in Load-bearing group "A"

Internal forces and moments		Load-bearing capacity	Load-deformation behaviour
Tensile force Z_{Rd}	one bolt M12, 8.8	$43.7\,kN$*) **)	rigid
	two bolts M12, 8.8	$72.1\,kN$*) **)	
Compressive force $N_{KS,Rd}$ in the contact joint		$122\,kN$	rigid
Bending moment $M_{DF,Rd}$		$122\,kNcm$**)	according to (eq. 18)
Torsional degree of freedom		---	$0.0218\,rad$

*) Applies to the use of bolts with Ø12-8.8, with threads in which the thread is not arranged in the shear loaded joint. Additional proof of structural stability of the connecting means is not mandatory.

**) Separate proof of structural stability of the net section at the tube connector is not mandatory.

In the equivalent model, the standards are assumed to be continuous up to the contact joint with a constant cross-section and in the contact joint with the following load-deformation relationship:

$$\varphi_d = \frac{M}{27000\ kNcm - 182 \cdot |M|} \qquad \text{with } M \text{ in [kNcm]} \qquad \text{(equation 18)}$$

This equivalent model also covers the structural behaviour of the internal joint bolt.

For system calculations in the "lap joint" load-bearing model, the buckling angle due to the torsional degree of freedom may be considered uniformly in accordance with Table 14.

If a tensile force and bending moment act simultaneously, the following interaction condition for the deformation range shall additionally be met:

$$\frac{M_{DF,Ed}}{M_{DF,Rd} \cdot \cos\left(\frac{\pi}{2} \cdot \frac{Z_{Ed}}{72{,}1\ kN}\right)} \leq 1 \qquad \text{(equation 19)}$$

Where:

$M_{DF,Ed}$ resulting bending capacity in the standard joint:

$$M_{DF,Ed} = \sqrt{\left(M_{y,DF,Ed}\right)^2 + \left(M_{z,DF,Ed}\right)^2}$$

$M_{DF,Rd}$ Bending capacity according to Table 14

Z_{Ed} Tensile strength in the deformation range

Z_{Rd} Tensile strength of the deformation range according to Table 14

Additional proof of structural stability for a combination of bending in the joint range and compressive force in the contact joint is not mandatory.

2.2.9 Wedge-head couplers

Wedge-head couplers (rigid or rotatable) according to Annex B, pages 122 and 125 are only to be used for connecting "free" scaffolding tubes $\varnothing\ 48{,}3 \times 3{,}2\ mm$ to the standards of the scaffolding system in conjunction with the roof edge protection (e.g. see Annex D, page 7).

Depending on the standards used, a number of connection means can be used for the connection of the double wedge-head coupler "lightweight design" according to Annex B, page 212 and the double wedge-head coupler "K2000+ design" according to Annex B, page 247. The connection values according to Table 12 shall apply.

If it is not ensured that only connections of a single design will be used in a scaffold or that their impact on structural stability is taken into account by means of detailed calculation and design documents, proof of the scaffold's structural stability must be provided in accordance with Z-8.22-64.

Table 12: Designs for the connection of double wedge-head couplers

<table>
<tr><td colspan="2">Construction technique</td><td>Double wedge-head coupler, lightweight design, according to Annex B, page 212</td><td>Double wedge-head coupler, "K2000+ design" according to Annex B, page 247</td></tr>
<tr><td>Component</td><td>according to Annex B, page</td><td colspan="2" rowspan="4">according to Z-8.22-64</td></tr>
<tr><td>Standards</td><td>11 to 16, 158, 227, 228</td></tr>
<tr><td>Starter piece</td><td>10, 226</td></tr>
<tr><td>TG 60-frame</td><td>257, 258, 259</td></tr>
<tr><td>Standards</td><td>153, 154, 180, 181, 183</td><td rowspan="2">according to Z-8.22-939</td><td rowspan="2">according to Z-8.22-64</td></tr>
<tr><td>Starter piece</td><td>179</td></tr>
</table>

2.2.10 Reinforcing post 2.6 m "Allround lightweight design"

For proof of structural stability of the reinforcing post 2.6 m "lightweight design" according to Annex B, page 215 in the scaffolding system, the connections with the connector head for U-brackets "lightweight design" according to Annex B, page 168 to the connector discs shall be assumed to be articulated. Verification of structural stability of the connections shall be provided for any other stresses according to the provisions regarding the bracket connection in sections 2.2.2 and 2.2.5. of this decision.

2.2.11 TG-60 frame

For the TG-60 frame according to Annex B, pages 257 to 259, the provisions according to Z-8.22-64 shall apply.

2.2.12 Proof of structural stability of the entire scaffolding system

2.2.12.1 Vertical load-bearing capacity of decks

Proof of structural stability for the decks of the "ALBLITZ MODUL" modular system is provided in accordance with Table 13 for live loads of the scaffold load classes according to EN 12811-1:2004-03, Table 3 and for use in brickguard and roof edge protection scaffolds with fall heights of up to 2 m according to DIN 4420-1:2004-03 (class D according to DIN EN 12810-1:2004-03).

Table 13: Assignment of decking to scaffold load classes (service classes)

Designation	Annex B, page	Bay width ℓ [m]	Use in load class (service class)
Aluminium frame platform with tube fixture	51 and 52	≤ 3.07	≤ 3
Aluminium access frame platform with tube fixture	54, 55, 57, 58	≤ 3.07	≤ 3
Steel deck AF with tube fixture Steel deck AF 0.32 m Steel deck AF 0.30 m, 0.34 m	61 and 62 84 86	4.14	≤ 3
		3.07	≤ 4
		2.57	≤ 5
		≤ 2.07	≤ 6
Intermediate deck AF with tube fixture 0.19 m Intermediate deck AF 0.19 m	63 88	4.14	≤ 3
		3.07	≤ 4
		2.57	≤ 5
		≤ 2.07	≤ 6
Intermediate deck AF with tube fixture 0.16 m Intermediate deck AF 0,16 m	63 88	3.07	≤ 4
		2.57	≤ 5
		≤ 2.07	≤ 6
Steel deck with tube fixture	64	3.07	≤ 4
		2.57	≤ 5
		≤ 2.07	≤ 6
Intermediate deck with tube fixture Intermediate deck	65 89	3.07	≤ 4
		2.57	≤ 5
		≤ 2.07	≤ 6
Aluminium frame platform	66 and 67	≤ 3.07	≤ 3
Aluminium frame platform with internal hatch	69 and 70	≤ 3.07	≤ 3
Aluminium deck with plywood	72 and 73, 78 and 79	≤ 3.07	≤ 3
Aluminium access deck with ladder	75 and 76, 81 and 82	≤ 3.07	≤ 3
Steel deck	85	≤ 3.07	≤ 4
Lightweight aluminium deck 0.60 m	90	3.07	≤ 3
		≤ 2.57	≤ 4
Solid wood deck 48 Wooden deck	91 93	3.07	≤ 3
		2.57	≤ 4
		2.07	≤ 5
		≤ 1.57	≤ 6

Table 13: (continued)

Designation	Annex B, page	Bay width ℓ [m]	Use in load class (service class)
Solid wood deck 45	92	2.57	≤ 3
		2.07	≤ 4
		≤ 1.57	≤ 5
U-deck T4 0.32 m, steel U-deck 0.32 m, steel U-deck, lightweight 0.32 m, steel	262 and 263 264 and 265 296	≤ 2.07	≤ 6
		2.57	≤ 5
		3.07	≤ 4
U-robust deck 0.61 m	266 and 267	≤ 3.07	≤ 3
U-robust deck 0.32 m	268	≤ 1.57	≤ 6
		2.07	≤ 5
		2.57	≤ 4
		3.07	≤ 3
U-trapdoor for steel deck 0.64 m	269	2.57	≤ 4
U-robust deck with trapdoor with ladder	272, 275, 276	≤ 3.07	≤ 3
U-aluminium deck with trapdoor 0.61 m	273, 274	≤ 3.07	≤ 3
U-gap deck, telescopic O-deck 0.19 m, steel	277 279, 280	≤ 2.07	≤ 6
		2.57	≤ 5
		3.07	≤ 4
U-Alu-Durchstieg 1,00 x 0,61 m	281	≤ 3.07 *)	≤ 3
O-deck T9 0.32 m, steel O-deck T4 0.32 m, steel O-deck, lightweight 0.32 m, steel	282 283 297	≤ 2.07	≤ 6
		2.57	≤ 5
		3.07	≤ 4
O-deck T9 0.19 m, steel O-deck 0.32 m, steel	284 285	≤ 2.07	≤ 6
		2.57	≤ 5
		3.07	≤ 4
*) in combination with U-support brackets and U-decks			

2.2.12.2 Elastic support of the vertical frame sections

Non-anchored nodes of standard joints in the plane perpendicular to the span direction of the decks (in case of facade scaffolding perpendicular to the facade), whereby the ledgers are connected to the small openings of the connector disc (rosette), may be assumed to be elastically supported by the horizontal level (decking), provided that the neighbouring horizontal nodes are anchored. For load classes ≤ 3 this elastic support may be taken into account by assuming a travel-limiting spring according to figure 2 in connection with the design values given in Table 14 in accordance with the system width.

Decks that are not listed may only be used as bracket deck or for applications that do not serve any bracing purpose.

Table 14: Design values of the horizontal travel springs

Deck	in accordance with Annex B, page	Scaffolding width b [m]	Bay width ℓ [m]	Clearance $f_{o,d}$ [cm]	Stiffness $c_{\perp,d}$ [kN/cm]		Load-bearing capacity of the spring load $F_{\perp,Rd}$ [kN]
					$0 < F_{\perp} \leq 1.50$ [kN]	$1.50 < F_{\perp} \leq F_{\perp,Rd}$ [kN]	
Steel deck AF with tube fixture 0.32 m	61	**0.73**	≤ 3.07	3.96	0.58	0.46	2.50
Steel deck with tube fixture	64						
Steel deck AF 0.32 m	84						
Steel deck	85						
Aluminium frame platform with tube fixture	51, 52			3.40	0.78	0.78	1.71
Aluminium frame platform	66, 67						
Aluminium deck with plywood	72, 73, 78, 79						
U-deck T4, steel	262, 263			4.41	0.54	0.54	2.33
U-deck, steel	264, 265						
U-robust deck 0.61 m	266, 267			4.90	0.58	0.48	2.50
Steel deck AF with tube fixture 0.32 m	61	**1.09**	≤ 3.07	4.39	0.79	0.79	2.46
Steel deck with tube fixture	64						
Steel deck AF 0.32 m	84						
Steel deck	85						

2.2.12.3 Elastic coupling of the vertical levels

The inner and outer vertical plane of a scaffolding may be assumed to be elastically coupled to each other by the decking in the direction of these planes (in the case of facade scaffolding parallel to the facade) when connected through the small opening of the connector disc (rosette). This elastic coupling may be taken into account for load classes ≤ 3 depending on the system width by assuming coupling springs according to figure 2 with the characteristic values specified in Table 15.

Decks that are not listed may only be used as bracket deck or for applications that do not serve any bracing purpose.

Table 15: Design values of the horizontal coupling springs

Deck	in accordance with Annex B, page	Scaffolding width b [m]	Bay width ℓ [m]	Clearance $f_{0,d}$ [cm]	Stiffness $c_{\perp,d}$ [kN/cm]		Load-bearing capacity of the spring load $F_{\perp,Rd}$ [kN]
					$0 < F_{\parallel} \leq 2{,}5$ [kN]	$2{,}5 < F_{\parallel} \leq F_{\parallel,Rd}$ [kN]	
Steel deck AF with tube fixture 0.32 m	61	**0.73**	≤ 3.07	1.40	2.58	2.58	4.50
Steel deck with tube fixture	64						
Steel deck AF 0.32 m	84						
Steel deck	85						
Aluminium frame platform with tube fixture	51, 52			0.50	1.86	1.12	3.86
Aluminium frame platform	66, 67						
Aluminium deck with plywood	72, 73, 78, 79						
U-deck T4, steel	262, 263			1.00	2.59	2.53	5.00
U-deck, steel	264, 265						
U-robust deck 0.61 m	266, 267			0.71	1.56	1.26	5.00
Steel deck AF with tube fixture 0.32 m	61	**1.09**		1.95	1.67	1.67	3.94
Steel deck with tube fixture	64						
Steel deck AF 0.32 m	84						
Steel deck	85						
Steel deck AF with tube fixture 0.32 m	61		≤ 2.57	1.95	1.39	1.39	3.28
Steel deck with tube fixture	64						
Steel deck AF 0.32 m	84						
Steel deck	85						

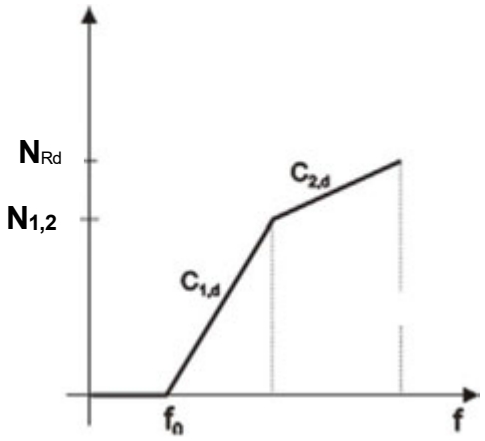


Figure 2: Representation of spring stiffness

2.2.12.4 Material parameters

For components made of S235JRH or S275J0H steel with an increased yield point ($R_{eH} \geq 320\ N/mm^2$)

- any such components are marked accordingly in the drawings in Annex A – the design value of the yield point $f_{y,d} = 291\ N/mm^2$ may be used for the calculation. All other characteristic values must be applied according to the basic material.

2.2.12.5 Tubes $Ø48.3\ mm$ made of S460MH steel in Load-bearing group "A"

Scaffold tubes $Ø48.3 \times 2.9\ mm$ and $Ø48.3 \times 2.7\ mm$ made of S460MH steel may be assigned to buckling curve “a” in LBG "A".

For the proof of structural stability, the plastic shape coefficient shall be limited to $\alpha_{pl} = 1.25$. If for the tubes $Ø48.3\ mm$ made from S460MH a calculation according to the second order theory of elasticity is carried out, the next value may be assumed as the design value of the initial curvature:

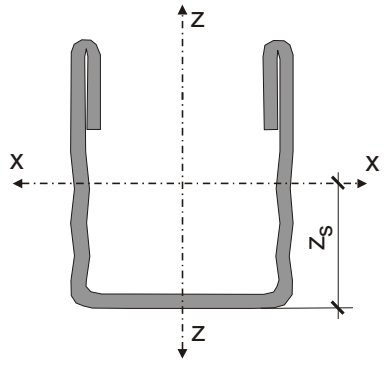
$$v_0 = \frac{\ell}{300} \qquad \text{(equation 19)}$$

The cosine interaction may be used for the pressure-with-bending interaction verification.

2.2.12.6 Cross-section properties of the U-profiles

2.2.12.6.1 U-profiles without openings

The structural stability of U-profiles used with a number of components may uniformly be verified assuming the characteristic values according to figure 3:

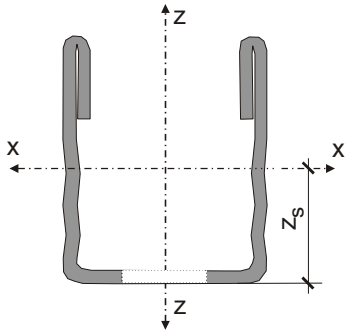


$z_S = 2.30\ cm$
$A = 4.14\ cm^2$
$I_x = 13.60\ cm^4$
$W_{x,o} = 4.70\ cm^3$
$W_{x,u} = 5.92\ cm^3$
$W_{x,pl} = 6.81\ cm^3$

Figure 3: Characteristic values of the U-profiles without openings

2.2.12.6.2 U-profile with openings

The structural stability of U-profiles used for various components may be verified uniformly using the characteristic values according to Figure 4:



$z_S = 2.64\ cm$
$A = 3.68\ cm^2$
$S_x = 2.90\ cm^2$
$I_x = 11.40\ cm^4$
$W_{x,o} = 4.30\ cm^3$
$W_{x,u} = 4.33\ cm^3$
$W_{x,pl} = 5.80\ cm^3$

Figure 4: Characteristic values of U-profiles without holes

2.2.12.7 Scaffolding spindles / base jacks

The substitute section properties for the base jacks for the stress and / or interaction analyses and calculations of deformation according to DIN 4425:2017-04 (Annex B of DIN EN 12811-1:2004-03) shall be assumed as follows:

for the base jacks according to Annex B, pages 17 and 20:

$$A = A_S = 3.52\ cm^2$$
$$I = 4.00\ cm^4$$
$$W_{el} = 2.68\ cm^3$$
$$W_{pl} = 1.25 \cdot 2.68 = 3.35\ cm^3$$

for the base jacks according to Annex B, pages 18 and 19:

$$A = A_S = 3.85\ cm^2$$
$$I = 4.27\ cm^4$$
$$W_{el} = 2.83\ cm^3$$
$$W_{pl} = 1.25 \cdot 2.83 = 3.54\ cm^3$$

for the scaffolding spindles according to Annex B, page 178:

$$A = A_S = 3.84\ cm^2$$
$$I = 3.74\ cm^4$$
$$W_{el} = 2.61\ cm^3$$
$$W_{pl} = 1.25 \cdot 2.61 = 3.26\ cm^3$$

for the scaffolding spindles according to Annex B, page 292:

$$A = A_S = 4.71\ cm^2$$
$$I = 4.29\ cm^4$$
$$W_{el} = 2.97\ cm^3$$
$$W_{pl} = 1.25 \cdot 2.97 = 3.71\ cm^3$$

The cosine interaction in accordance with DIN 4425:2017-04, section 7.1 may be used to provide proof of stability for the load-bearing capacity of the scaffolding spindles / base jacks.

2.2.12.8 Couplers

For the proof of stability of the halfcouplers attached to the various components, the load-bearing capacities and stiffness values for halfcouplers of class B shall be applied in accordance with the information provided in DIN EN 74-2:2022-09.

2.3 Design

2.3.1 General provisions

The Technical Building Rules [Technische Baubestimmungen] apply to the designing of scaffolds using components of the "ALBLITZ MODUL" modular system, in particular those for working and service scaffolds according to DIN EN 12811-1:2004-03 in conjunction with the "Application Guideline for Working Scaffolds in accordance with DIN EN12811-1"[1], DIN 4420-1:2004-03, the "Approval Principles for Working and Service Scaffolds – Requirements, Calculation Assumptions, Tests, Certificate of Conformity"[3]; for supporting structures DIN EN 12812:2008-12 in conjunction with the "Application Guideline for Supporting Structures in accordance with DIN EN 12812"[2] is applicable, as well as the provisions set out below.

When using the modular scaffolding system as a temporary structure that does not fall within the scope of temporary auxiliary construction aids, application-specific requirements may need to be taken into account in the design.

Assembly, alteration and dismantling of the scaffold must be carried out in compliance with the Instructions for Assembly and Use[6] which are not subject of this decision.

[6] In case of working and service scaffolds, the Instructions for Assembly and Use must comply with the requirements of the "Application guideline for working scaffolds according to DIN EN 12811-1", see DIBt-Mitteilungen (notifications of the DIBt) issue 2/2006.

2.3.2 Condition of components

All components shall be inspected for proper condition prior to assembly. Damaged components may not be used.

2.3.3 Structural design

2.3.3.1 Components

Scaffolds in accordance with this decision must be erected using the scaffold components listed in section 1. Such components must be marked in accordance with the regulations of the respective decisions.

The following applies when using scaffolding nodes:

- Each connector disc (rosette) allows for connecting up to 8 members.
- The connector head wedges must be fixed by driving the wedge from top to bottom to the end-stop with a 0.5 kg hammer.

2.3.3.2 Base area

The lower standards or vertical starter pieces are to be positioned and adjusted on the base jacks in a way that the working levels are horizontal. It must be ensured that the base plates of the base jacks are horizontal and supported over the entire area to absorb and transmit the forces resulting from the scaffolding in the supporting surface.

2.3.3.3 Scaffolding decks

Scaffolding decks must be secured to prevent them from accidental lift-off.

2.3.3.4 Side protection

The provisions of DIN EN 12811-1:2004-03 apply to the side protection. Primarily use components intended for this use and only exceptionally use components such as steel tubes and couplers according to DIN EN 12811-1:2004-03 as well as scaffold decks and planks according to DIN 4420-1:2004-03.

2.3.3.5 Bracing

Scaffolds must be braced.
The vertical planes are to be braced by means of longitudinal ledgers or longitudinal ledgers in conjunction with vertical diagonal braces.

Horizontal scaffolding levels are to be braced by means of ledgers and horizontal diagonal braces or by means of system decks in conjunction with transoms in accordance with Sections 2.2.12.2 and 2.2.12.3.

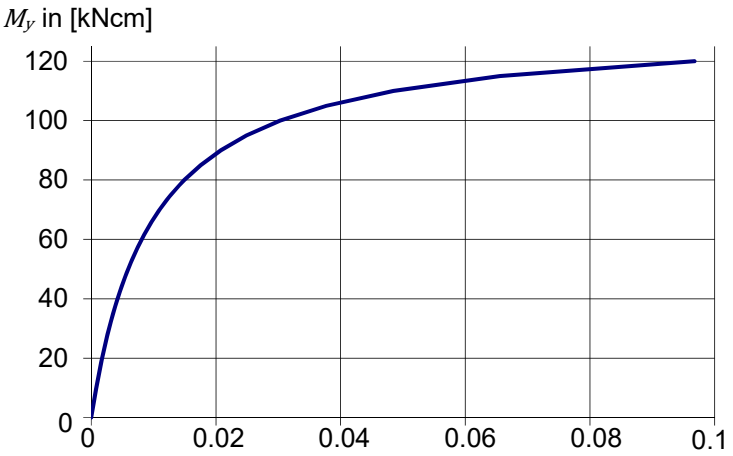
The individual bracing levels are to be erected and positioned in accordance with the structural analysis.

2.3.3.6 Anchoring

Please refer to the structural analysis for anchor forces and the anchor configuration.
The anchorage of scaffold retainers/wall ties to the facade or to other parts of the building is not covered by this decision. The user must ensure that the respective forces can be securely absorbed and transmitted from scaffold retainers/wall ties. Vertical forces must not be transmitted in this process.

2.3.3.7 Couplers

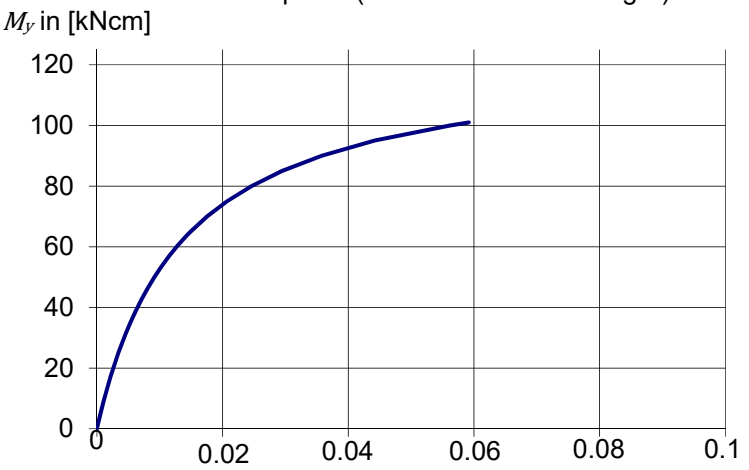
Couplers with screwed connectors must be tightened with a torque of 50 Nm when connecting to the standards; tolerances of ± 10 % are permitted. According to the manufacturer's instructions for use, bolts/screws must be easy to reposition.
Couplers with wedge-lock must be connected by driving the wedge to the end-stop with a 0.5 kg hammer (or heavier).



$$\varphi_{A,d} = \frac{M_y}{13600 - 103 \cdot |M_y|} \quad [rad]$$

with M_y in [kNcm]

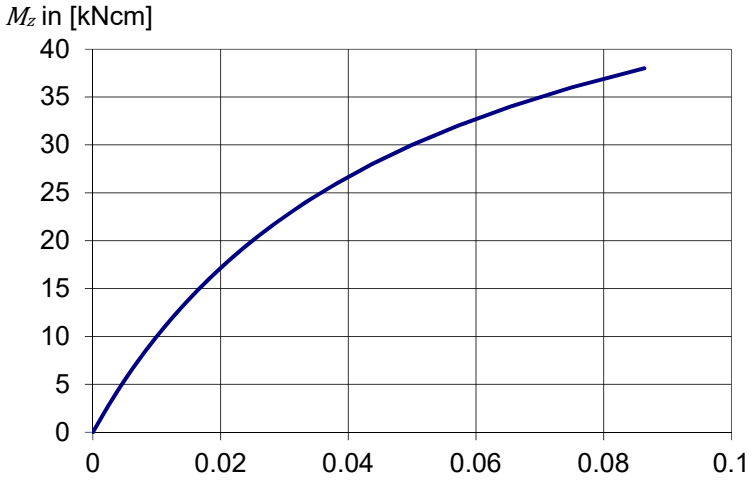
Figure 1: **Load-bearing group "A":** Torsional spring stiffness at the ledger connection in the vertical plane (tubular standard – ledger)



$$\varphi_{B,d} = \frac{M_y}{9140 - 73.6 \cdot |M_y|} \quad [rad]$$

with M_y in [kNcm]

Figure 2: **Load-bearing group "B":** Torsional spring stiffness at the ledger connection in the vertical plane (tubular standard – ledger)

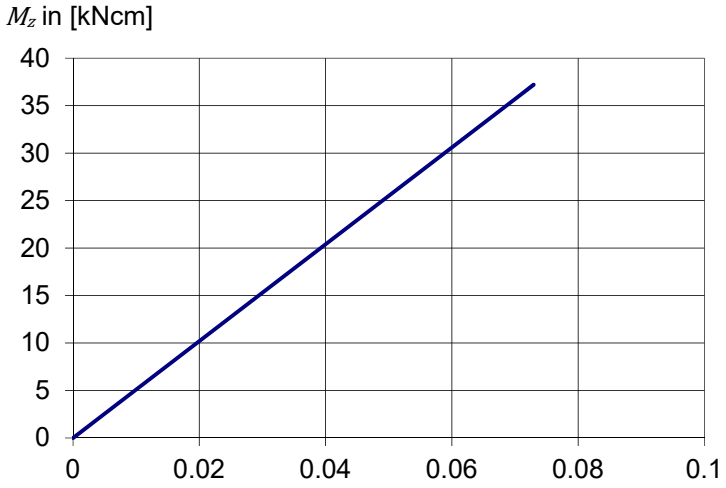


$$\varphi_{A,d} = \frac{M_z}{1200 - 20 \cdot |M_z|} \quad [rad]$$

with M_y in [kNcm]]

Figure 3: **Load-bearing group "A":** Torsional spring stiffness at the ledger connection in the horizontal plane (perpendicular to the tubular standard/ledger plane)

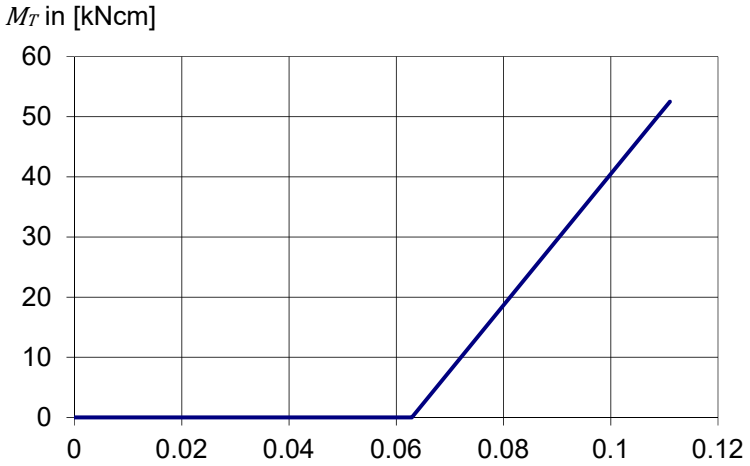
Modular scaffolding system "ALBLITZ MODUL"	Annex A, page 1
Moment-rotation relationships for the ledger connection	



$$\varphi_{B,d} = \frac{M_z}{510} \quad [rad]$$

with M_z in [kNcm]

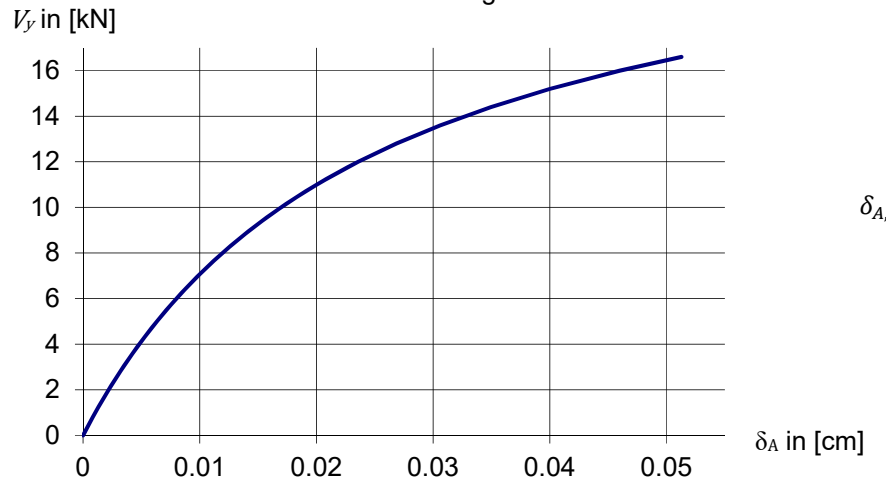
Figure 4: **Load-bearing group "B":** Torsional spring stiffness at the ledger connection in the horizontal plane (perpendicular to the tubular standard/ledger plane)



$$\varphi_{A,d} = \frac{M_T}{|M_T|} \cdot 0.0629 + \frac{M_T}{1091} [rad]$$

with M_T in [kNcm]

Figure 5: **Load-bearing group"A":** Torsional spring stiffness in the **O-ledger connection** under torsional moment at the ledger axis section.

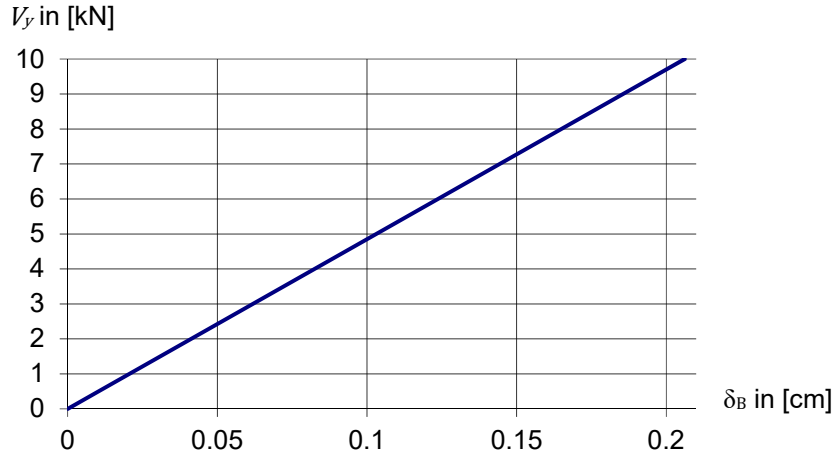


$$\delta_{A,d} = \frac{V_y}{991 - 40.2 \cdot |V_y|} \quad [cm]$$

with V_y in [kN]

Figure 6: **Load-bearing group "A"**: Force-displacement relationship in the ledger connection and the double wedge head coupler “lightweight design” subject to horizontal shear load

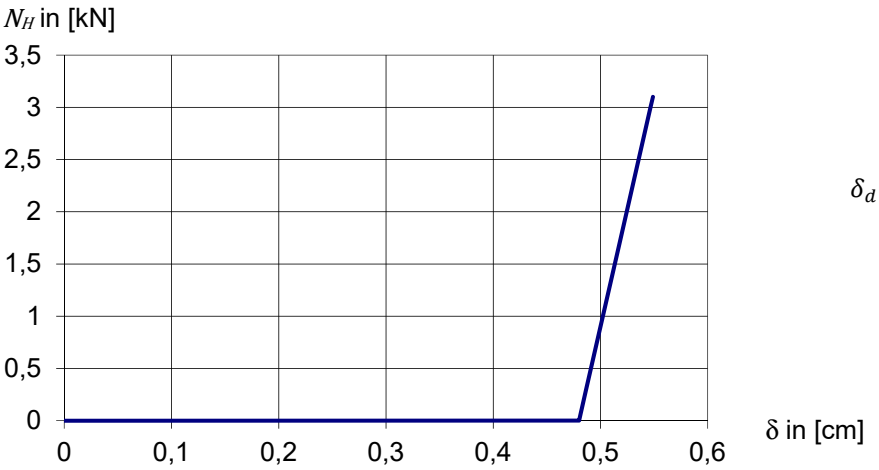
Modular scaffolding system "ALBLITZ MODUL"	Annex A, page 2
Torsional and travel-limiting spring stiffness in the ledger connection for M_z, M_T and V_y	



$$\delta_{B,d} = \frac{V_y}{48.5} \quad [cm]$$

with V_y in [kN]

Figure 7: **Load-bearing group "B"**: Force-displacement relationship in the ledger and bracket connection and the connection of a double wedge head coupler under horizontal shear load



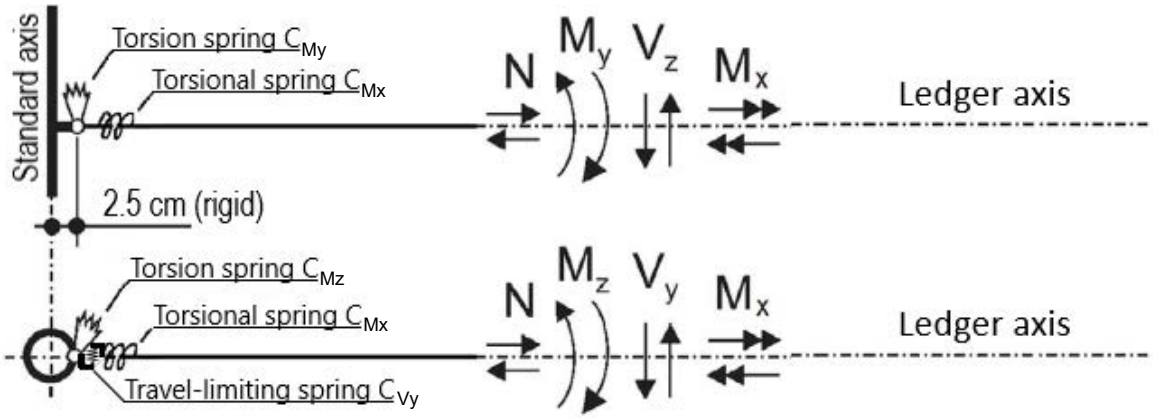
$$\delta_d = 0.48 \cdot \frac{N_H}{|N_H|} + \frac{N_H}{48} \quad [cm]$$

with N_H in [kN]

Figure 8: Travel-limiting spring stiffness in the connection of the horizontal diagonal braces according to Annex B, page 9

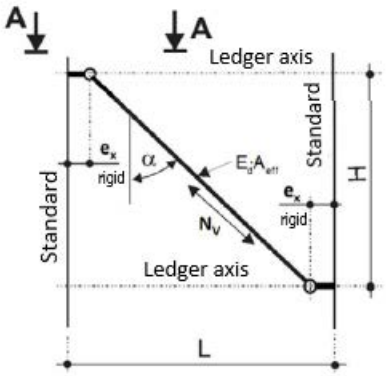
Modular scaffolding system "ALBLITZ MODUL"	Annex A, page 3
Travel-limiting spring stiffness in the ledger connection for V_y and in the connection of a horizontal diagonal brace	

Structural system ledger connection



Note: **M_x or. c_{Mx}** only applies in case of **Load-bearing group "A"** in connection with O-ledgers.

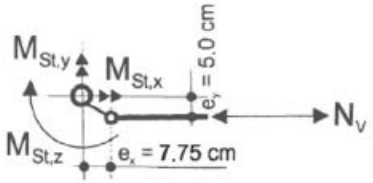
Structural system vertical diagonal brace



Additionally, the following degrees of freedom in the longitudinal direction of the diagonal braces are to be assumed:

Load-bearing group "A" &
Load-bearing group "B": $f_{0,d} = 0.70\ cm$

Sectional view A-A



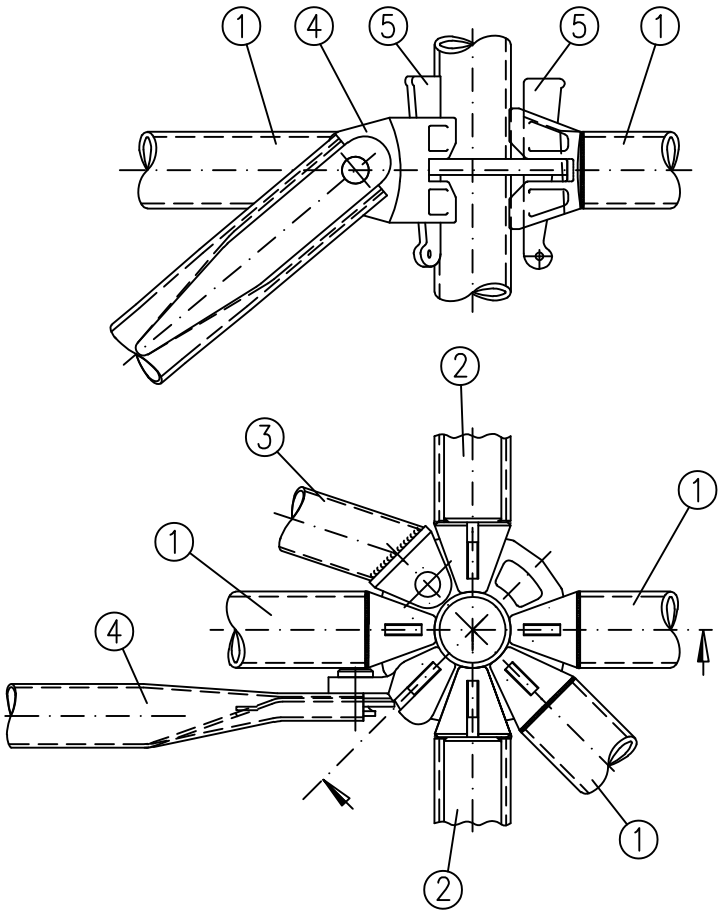
The following node moments must be absorbed by the standard and the ledgers.

Node moments due to diagonal force N_V

$$M_{St,x} = N_V \cdot \cos\alpha \cdot e_y$$
$$M_{St,y} = N_V \cdot \cos\alpha \cdot e_x$$
$$M_{St,z} = N_V \cdot \sin\alpha \cdot e_y$$

with $e_x = 7.75\ cm$ and $e_y = 5.00\ cm$

Modular scaffolding system "ALBLITZ MODUL"	Annex A, page 4
Structural systems vertical diagonal brace and ledger connection	



① Tube ledger
② U-ledger
③ Horizontal diagonal brace
④ Vertical diagonal brace
⑤ Wedge 6 mm

Possible combinations of V-standards and ledgers with load-bearing group

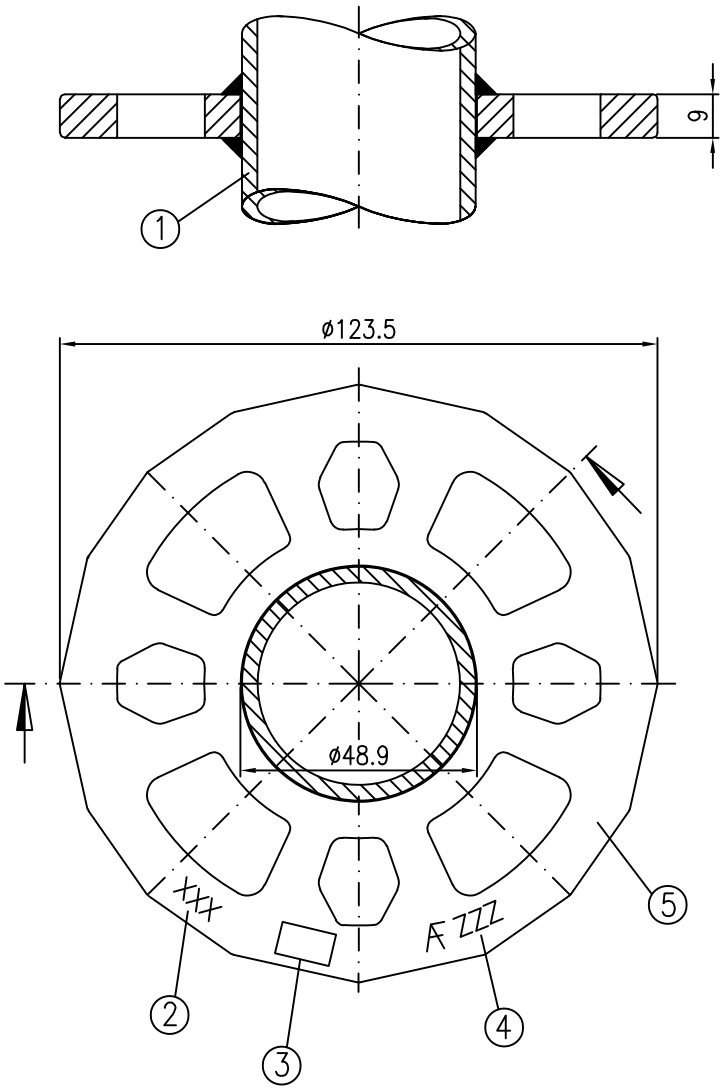
Ledger connection / V-standards	MULTI	MULTI 4.0	K2000+	LW
MULTI	Z-8.22-906 / Load-bearing group B	Z-8.22-906 / Load-bearing group B	Z-8.22-913 / Load-bearing group B	Z-8.22-913 / Load-bearing group B
MULTI 4.0	Z-8.22-906 / Load-bearing group B	Z-8.22-906 / Load-bearing group A	Z-8.22-913 / Load-bearing group B	Z-8.22-913 / Load-bearing group A
K2000+	Z-8.22-913 / Load-bearing group B	Z-8.22-913 / Load-bearing group B	Z-8.22-64 / Load-bearing group B	Z-8.22-949 / Load-bearing group B
LW	Z-8.22-913 / Load-bearing group B	Z-8.22-913 / Load-bearing group A	Z-8.22-949 / Load-bearing group B	Z-8.22-939 / Load-bearing group A

ALBLITZ MODUL

Overview of scaffolding nodes
in accordance with Z-8.22-906

M710-B101_ABM 05.2021

Annex B,
page 1



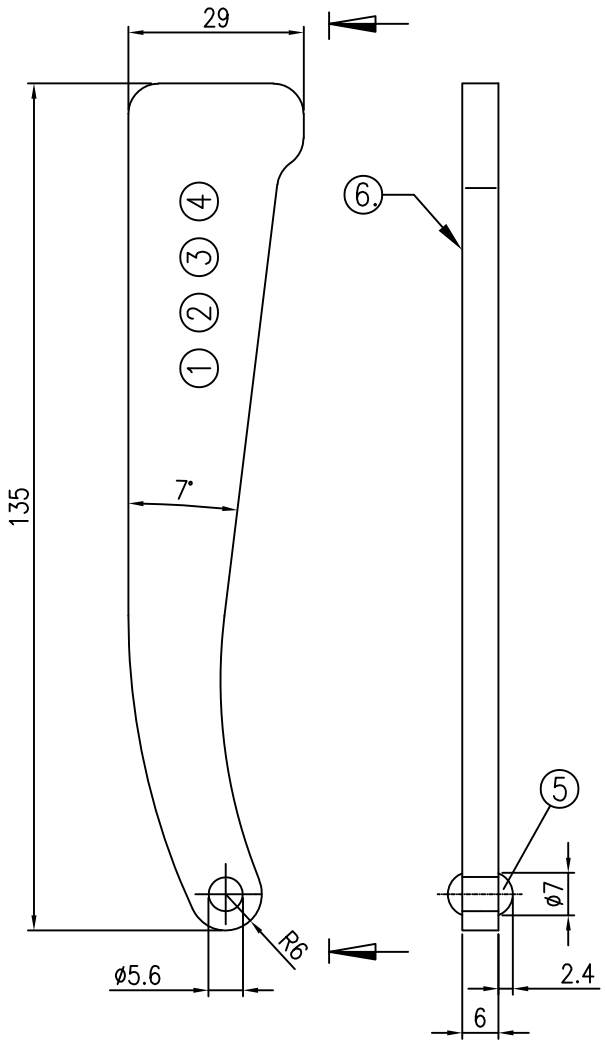
①	Circular hollow section ø48.3x3.2	DIN EN 10219–S235JRH $R_{eH} \geq 320$ N/mm²
	Circular hollow section ø48.3x2.9 (Design 4.0)	DIN EN 10219–S460MH
②	Batch number / week year	stamped 0.4
③	Company logo of the foundry	stamped 0.4
④	Ⱥ abbreviated approval number	stamped 0.4
⑤	Cast steel alternatively: Steel	Material in accordance with the documents filed at DIBt
	Material thickness = 9 mm	

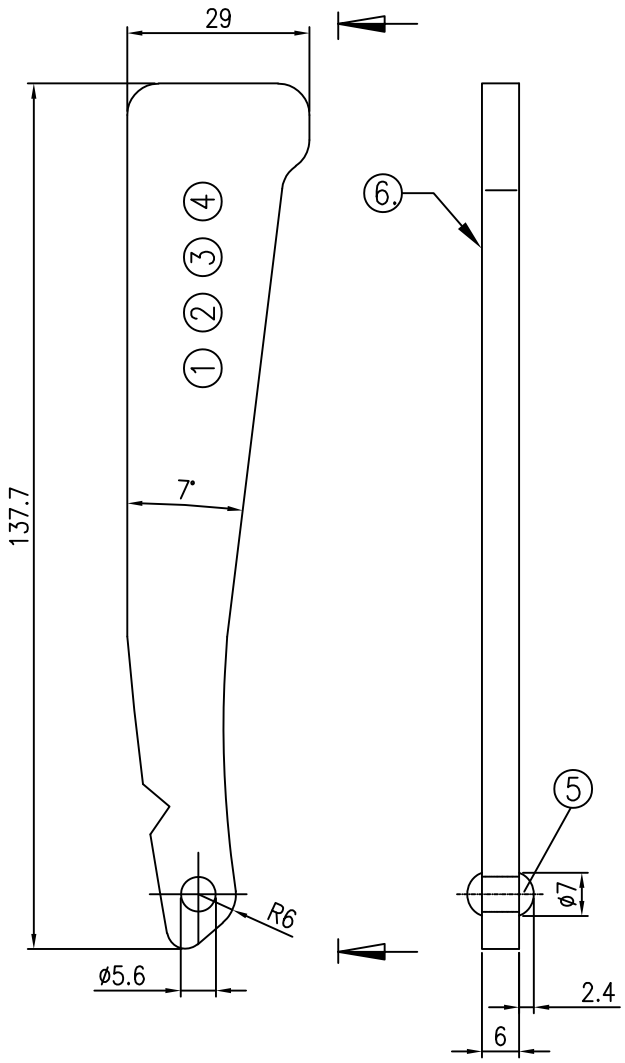
ALBLITZ MODUL

Connector disc
in accordance with Z–8.22–906

M710–B102_ABM 05.2021

Annex B,
page 2



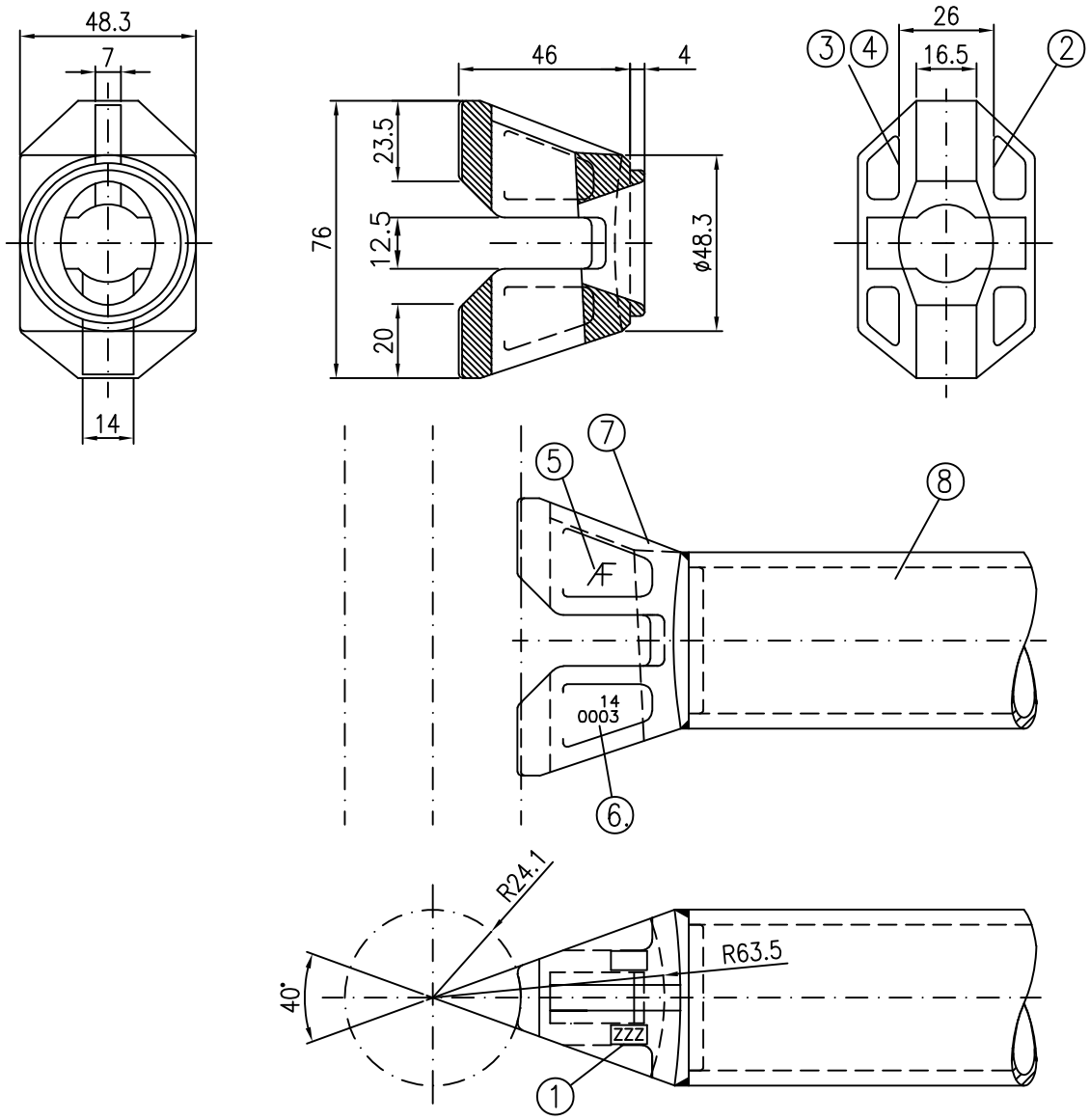


Design 4.0

① XX = Supplier number
② ZZZ/ZZZ = abbreviated approval number
③ Æ = ALFIX manufacturer's logo
④ YY = Year of manufacturing (e.g. 18=2018)
⑤ Round head rivet ø5x10 with rivet head of rivet ø4 DIN 660 QSt 32-2 electrogalvanized
⑥ Marking

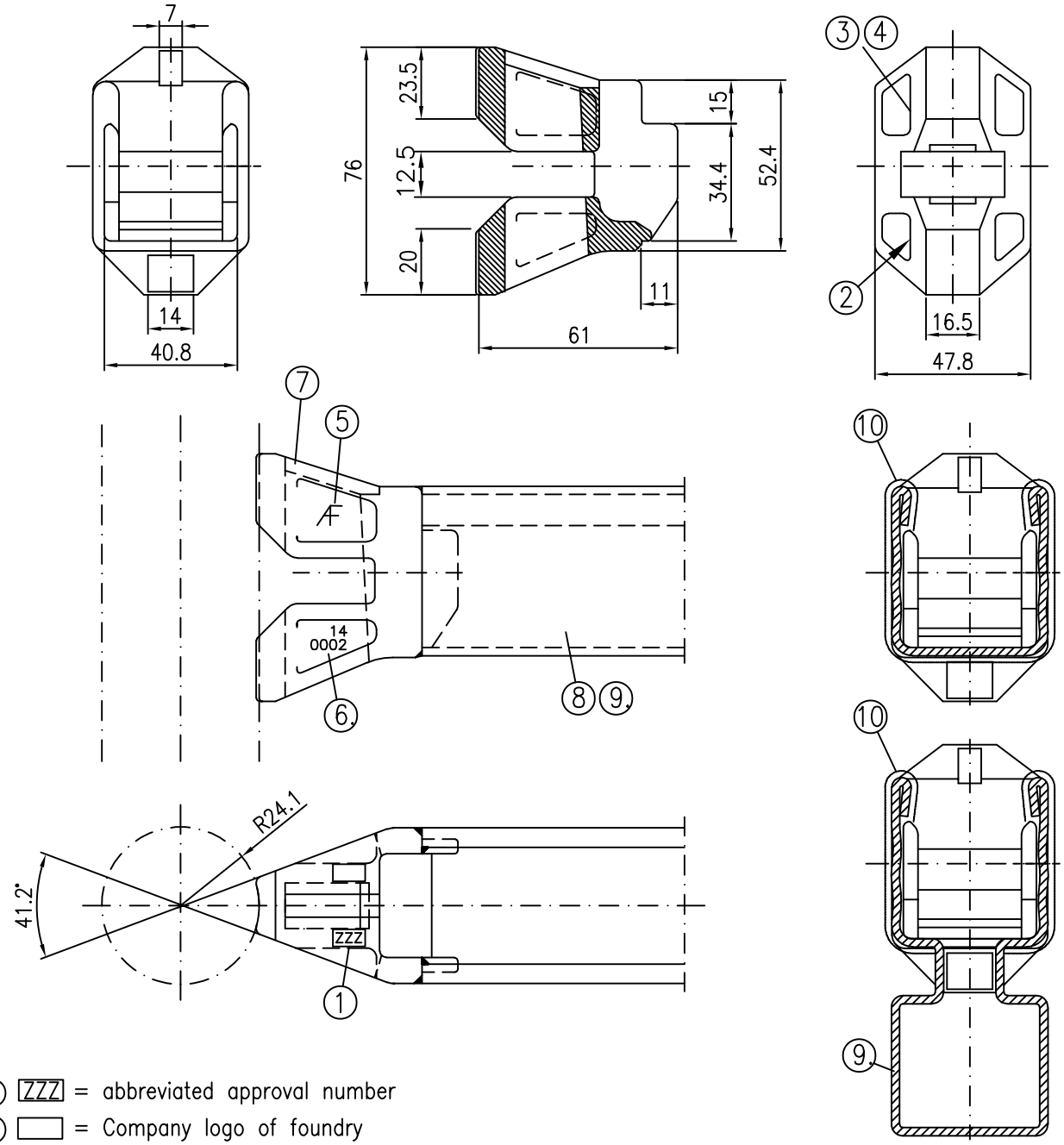
hot-dip galvanized; DIN EN 10149-S550MC

ALBLITZ MODUL	
Wedge in accordance with Z-8.22-906 M710-B103_ABM 11.2022	Annex B, page 3



① ZZZ = abbreviated approval number
② ▭ = Company logo of foundry
③ XX = Calendar week and
④ YY = Year of manufacturing (e.g. 4016=CW40/2016)
⑤ ⊀ = ALFIX manufacturer's logo
⑥ 14 0003 = Serial number
⑦ Cast steel — Material in accordance with the documents filed at DIBt
⑧ Circular hollow section ø48.3x3.2
alternatively: 48.3x2.7 — Material in accordance with the documents filed at DIBt

ALBLITZ MODUL	
Connection of tube ledger in accordance with Z-8.22-906 M710-B104_ABM 05.2021	Annex B, page 4



① ZZZ = abbreviated approval number
② ▭ = Company logo of foundry
③ XX = Calendar week and
④ YY = Year of manufacturing (e.g. 4016=CW40/2016)
⑤ ⊀ = ALFIX manufacturer's logo
⑥ 14 0002 = Serial number

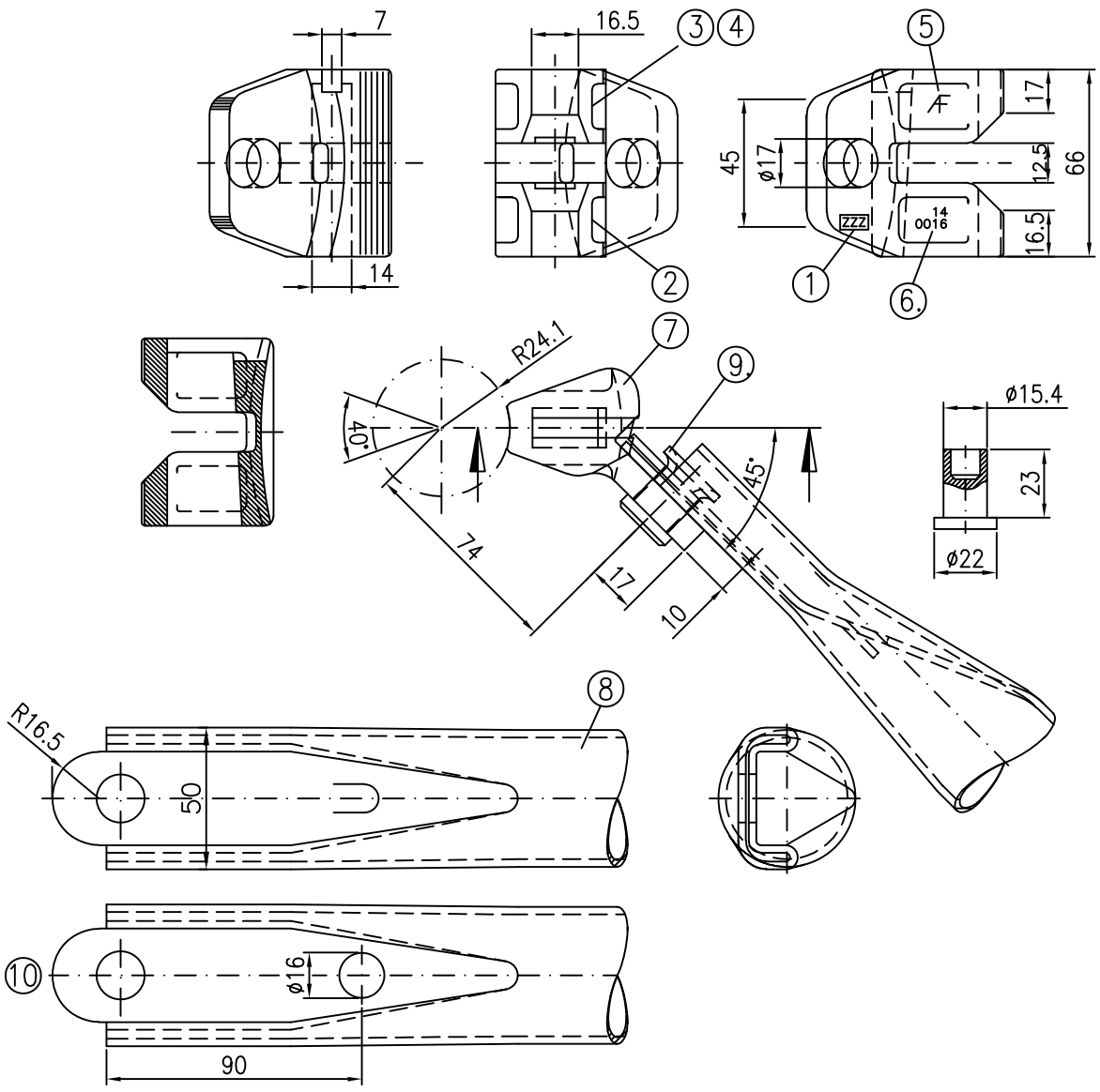
⑦ Cast steel	Material in accordance with the documents filed at DIBt
⑧ U-profile 48x52x2.5	Material in accordance with the documents filed at DIBt
⑨ Transom profile with integrated joist	Material in accordance with the documents filed at DIBt
⑩ Welding section	

ALBLITZ MODUL

Connection of U-ledger
in accordance with Z-8.22-906

M710-B105_ABM 08.2018

Annex B,
page 5



① ZZZ = abbreviated approval number
② ▭ = Company logo of foundry
③ XX = Calendar week and
④ YY = Year of manufacturing (e.g. 4016=CW40/2016)
⑤ AF = ALFIX manufacturer's logo
⑥ 14 0016 = Serial number

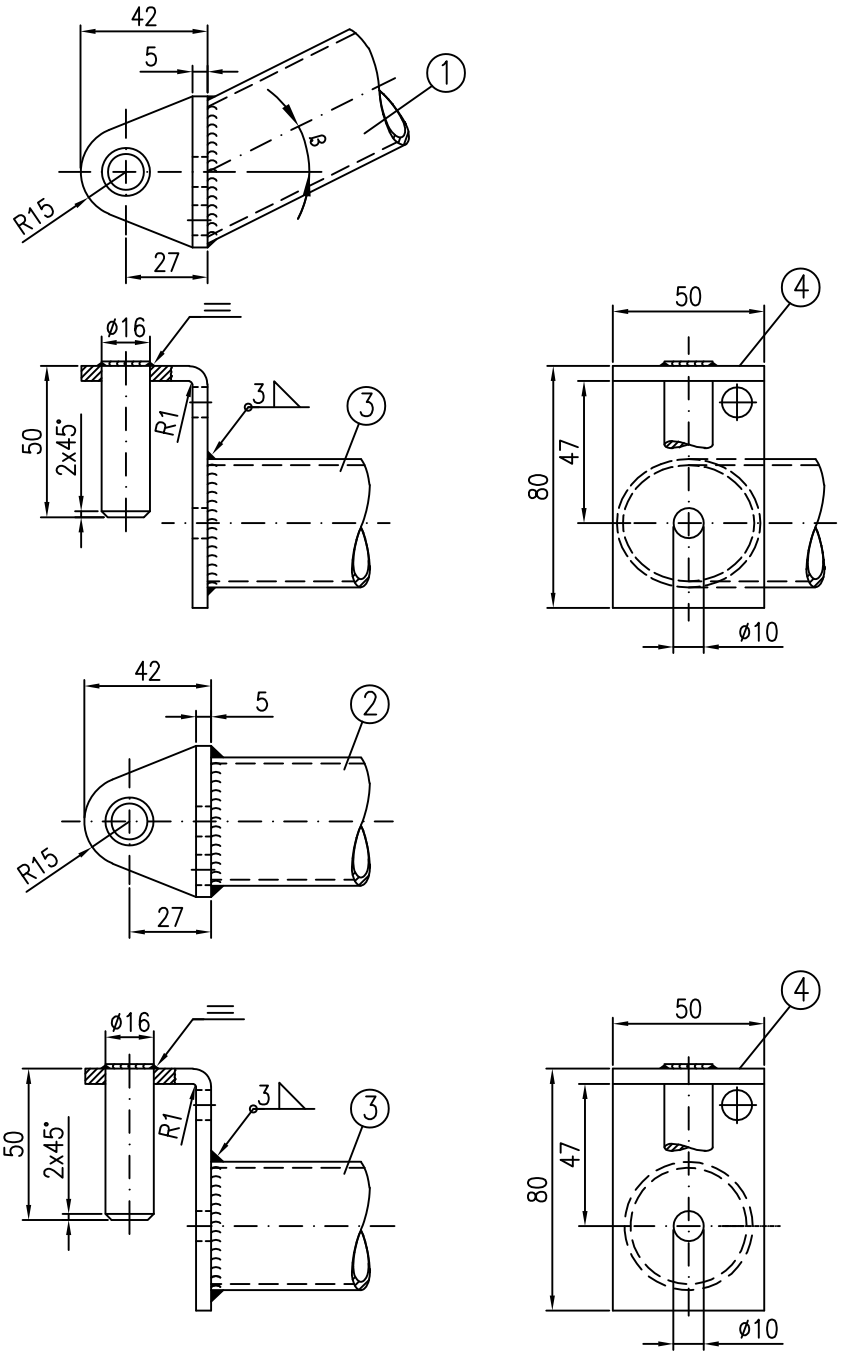
⑦ Cast steel	Material in accordance with the documents filed at DIBt	
⑧ Circular hollow section ø48.3x2.7	Material in accordance with the documents filed at DIBt	Diagonal cross brace head–right hand side
⑨ Rivet MODUL diagonal cross braces	Material in accordance with the documents filed at DIBt	Diagonal cross brace head–left hand side mirror–image
⑩ alternatively		

ALBLITZ MODUL

Connection of V–diagonal brace
in accordance with Z–8.22–906

M710–B106_ABM 05.2021

Annex B,
page 6



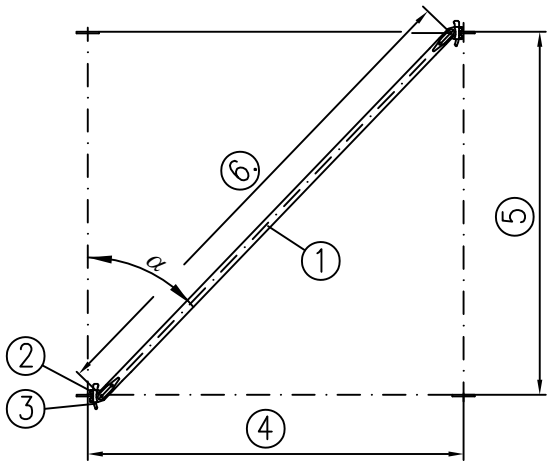
①	Form "A"	DIN EN 10025–S235JR
②	Form "B"	DIN EN 10025–S235JR
③	Circular hollow section ø42.4x2	DIN EN 10219–S235JRH
④	Marking	

ALBLITZ MODUL

Connection of H–diagonal brace
in accordance with Z–8.22–906

M710–B107_ABM 05.2021

Annex B,
page 7



④ [mm]	⑤ [mm]	⑥ [mm]	α	⑦ [kg]
732	500	769	49.5	3.8
1088	500	1065	62.0	4.7
1286	500	1243	66.3	5.2
1400	500	1348	68.2	5.5
1572	500	1509	70.7	6.0
2072	500	1988	75.5	7.4
2572	500	2475	78.4	8.8
3072	500	2966	80.3	10.0
732	1000	1158	30.3	4.9
1088	1000	1372	43.3	5.6
1286	1000	1515	48.7	6.0
1400	1000	1602	51.4	6.3
1572	1000	1740	55.0	6.5
2072	1000	2168	62.6	7.8
2572	1000	2622	67.6	9.0
3072	1000	3090	71.2	10.3
732	1500	1610	21.3	6.3
1088	1500	1770	32.1	6.8
1286	1500	1883	37.2	7.2
1400	1500	1954	39.8	7.4
1572	1500	2068	43.5	7.7
2072	1500	2440	52.1	8.8
2572	1500	2851	58.3	10.0
3072	1500	3286	62.9	11.0
732	2000	2084	16.3	7.5
1088	2000	2210	25.2	7.8
1286	2000	2301	29.7	8.2
1400	2000	2360	32.1	8.3
1572	2000	2455	35.5	8.8
2072	2000	2775	43.9	9.7
2572	2000	3143	50.5	10.9
3072	2000	3543	55.7	12.2

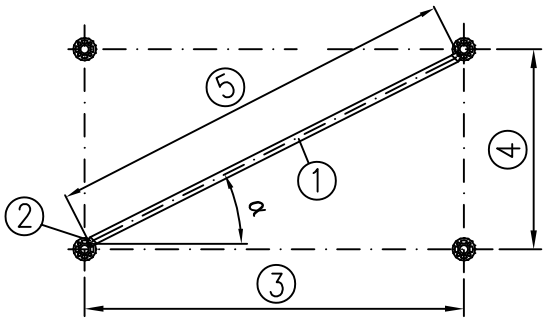
① Circular hollow section ø48.3x2.7 DIN EN 10219–S235JRH $R_{eH} \geq 320$ N/mm²
② Connection of V–diagonal brace see Annex B, page 6
③ Wedge 6 mm see Annex B, page 3
④ Bay length L
⑤ Bay height H
⑥ Rivet spacing l
⑦ Weight

ALBLITZ MODUL

Vertical diagonal braces
in accordance with Z–8.22–906

M710–B108_ABM 05.2021

Annex B,
page 8



⑥	③	④	⑤	α	⑦
	[mm]	[mm]	[mm]	[°]	[kg]
B	732	732	953	45	2.5
A	1088	732	1231	33.9	3.1
A	1286	732	1399	28	4.8
A	1400	732	1502	27.6	6.0
A	1572	732	1657	25	6.6
A	2072	732	2124	19.5	4.8
A	2572	732	2603	15.9	6.0
A	3072	732	3088	13.4	6.6
B	1088	1088	1457	45	3.6
A	1286	1088	1601	40	3.7
A	1400	1088	1692	37.8	3.9
A	1572	1088	1831	34.7	4.4
A	2072	1088	2262	27.7	5.0
A	2572	1088	2717	22.9	6.3
A	3072	1088	3185	19.5	7.8
B	1286	1286	1777	45	4.2
A	1400	1286	1817	42	4.4
A	1572	1286	1948	39	4.7
A	2072	1286	2357	31	5.6
A	2572	1286	2796	25.7	6.5
A	3072	1286	3253	22	6.9
B	1400	1400	1898	45	4.3
A	1572	1400	2023	48.3	4.6
A	2072	1400	2420	55.9	5.4
A	2572	1400	2850	61.4	6.6
A	3072	1400	3299	65.5	7.1
B	1572	1572	2141	45	5.0
A	2072	1572	2519	37.2	5.8
A	2572	1572	2935	31.4	6.7
A	3072	1572	3373	27.1	7.7
B	2072	2072	2848	45	6.6
A	2572	2072	3221	38.8	7.3
A	3072	2072	3625	34	8.2
B	2572	2572	3555	45	8.0
A	3072	2572	3925	39.9	8.6
B	3072	3072	4262	45	9.6

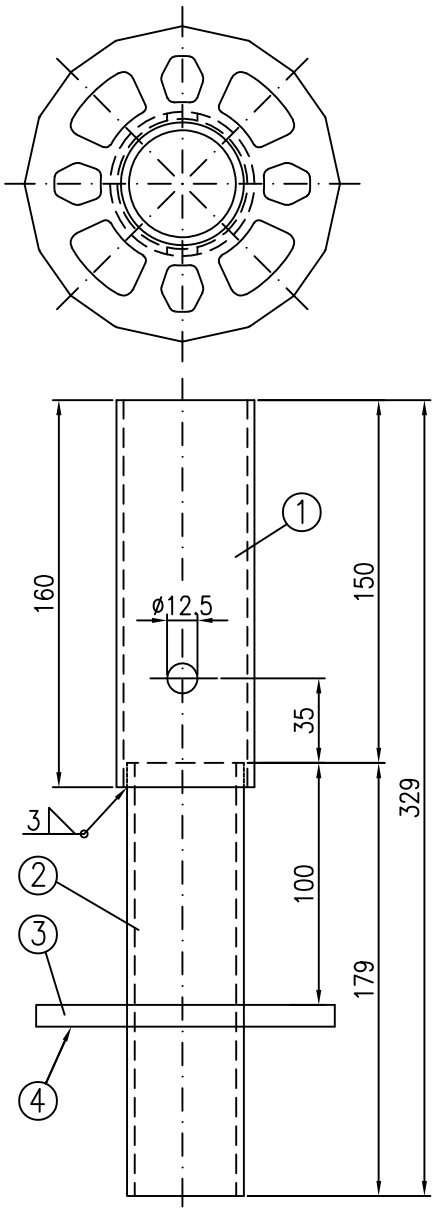
① Circular hollow section ø42.4x2 DIN EN 10219-S235JRH
② Connection of H-diagonal brace see Annex B, page 7
③ Bay length L
④ Bay width B
⑤ Bolt spacing l
⑥ Form
⑦ Weight

ALBLITZ MODUL

Horizontal diagonal braces
in accordance with Z-8.22-906

M710-B109_ABM 05.2021

Annex B,
page 9



① Circular hollow section ø57x2.9	DIN EN 10219–S235JRH	
② Circular hollow section ø48.3x3.2	DIN EN 10219–S235JRH	$R_{eH} \geq 320$ N/mm²
③ Connector disc	see Annex B, page 2	
④ Marking		
galvanised		

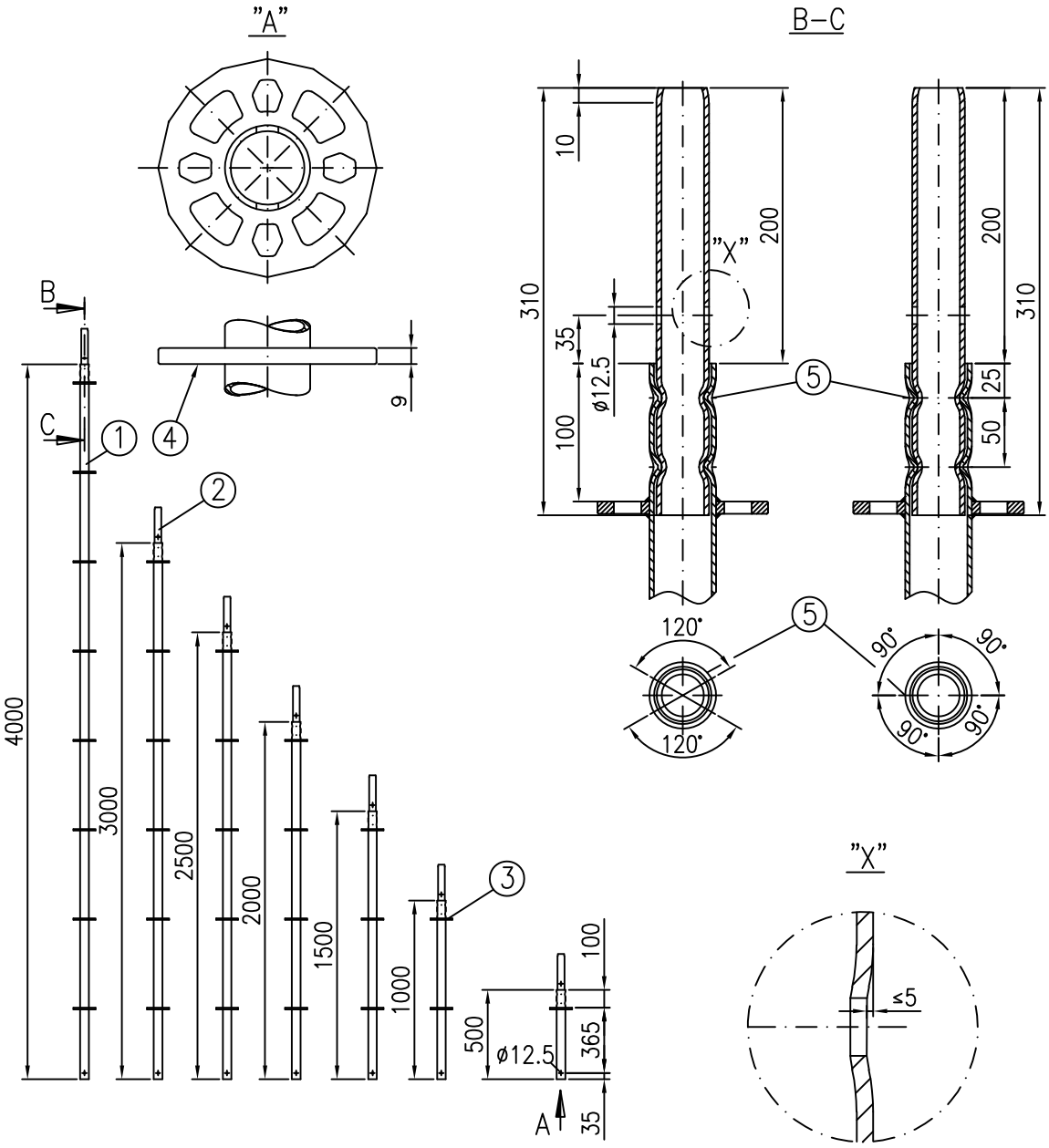
Dimens. [m]	Weight [kg]
0.41	1.8

ALBLITZ MODUL

Vertical starter piece
in accordance with Z–8.22–906

M710–B110_ABM 05.2021

Annex B,
page 10



① Circular hollow section ø48.3x3.2 DIN EN 10219–S235JRH $R_{eH} \geq 320$ N/mm²
② Circular hollow section ø38x3.6 DIN EN 10219–S235JRH $R_{eH} \geq 320$ N/mm²
③ Connector disc see Annex B, page 2
④ Marking
⑤ Linear pressed connection alternatively: 4 point–joint pressed connections
galvanised

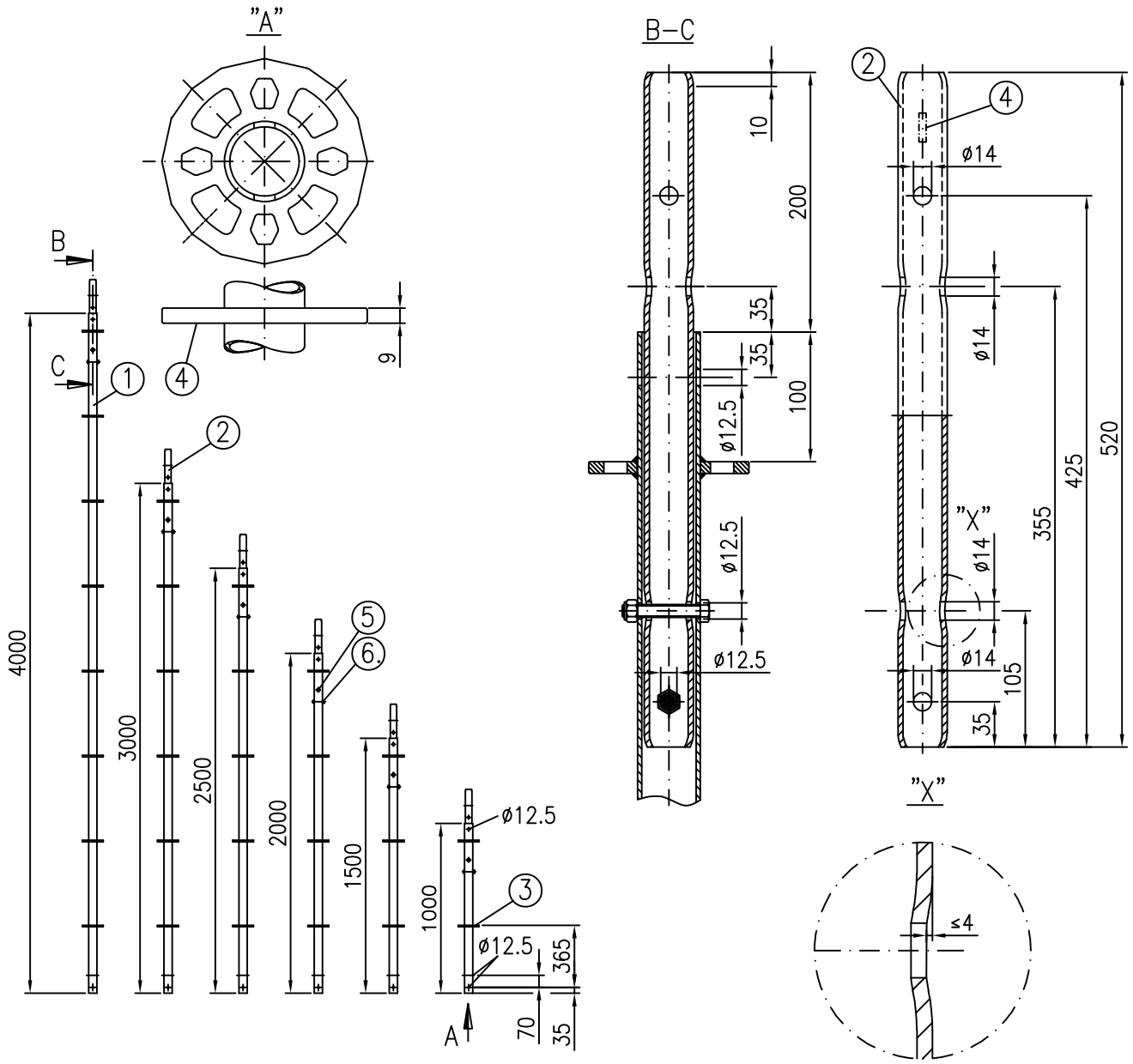
Dimens. [m]	Weight [kg]
0.50	3.2
1.00	5.5
1.50	7.7
2.00	10.1
2.50	12.3
3.00	14.6
4.00	19.2

ALBLITZ MODUL

Standard with tube connector 200
in accordance with Z–8.22–906

M710–B111_ABM 09.2023

Annex B,
page 11



① Circular hollow section ø48.3x3.2	DIN EN 10219–S235JRH	$R_{eH} \geq 320$ N/mm²
② Circular hollow section ø38x4	DIN EN 10219–S235JRH	$R_{eH} \geq 320$ N/mm²
③ Connector disc	see Annex B, page 2	
④ Marking		
⑤ Hexagon bolt	DIN EN ISO 4014–M10x60–8.8–galvanised	
alternatively:	DIN EN ISO 4014–M12x60–8.8–galvanised	
⑥ Hexagon nut, self–locking	DIN EN ISO 10511–M10–8–galvanised	
alternatively:	DIN EN ISO 10511–M12–8–galvanised	
galvanised		

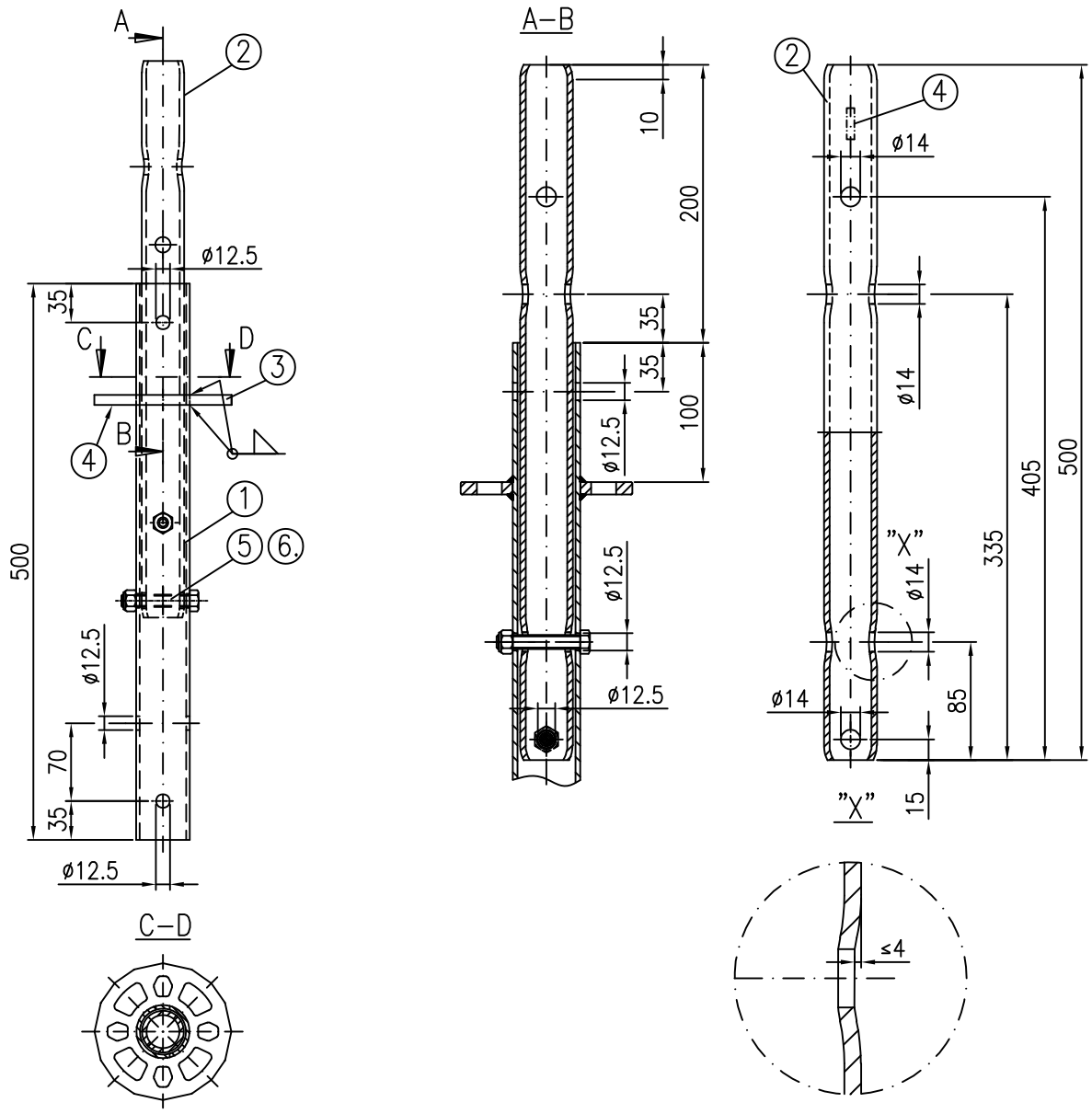
Dimens. [m]	Weight [kg]
1.00	6.2
1.50	8.5
2.00	10.8
2.50	13.0
3.00	15.3
4.00	19.9

ALBLITZ MODUL

Standard with screwed–in tube connector 520
in accordance with Z–8.22–906

M710–B112_ABM 10.2023

Annex B,
page 12



① Circular hollow section ø48.3x3.2	DIN EN 10219–S235JRH	$R_{eH} \geq 320$ N/mm²
② Circular hollow section ø38x4	DIN EN 10219–S235JRH	$R_{eH} \geq 320$ N/mm²
③ Connector disc	see Annex B, page 2	
④ Marking		
⑤ Hexagon bolt	DIN EN ISO 4014–M10x60–8.8–galvanised	
alternatively:	DIN EN ISO 4014–M12x60–8.8–galvanised	
⑥ Hexagon nut, self–locking	DIN EN ISO 10511–M10–8–galvanised	
alternatively:	DIN EN ISO 10511–M12–8–galvanised	
galvanised		

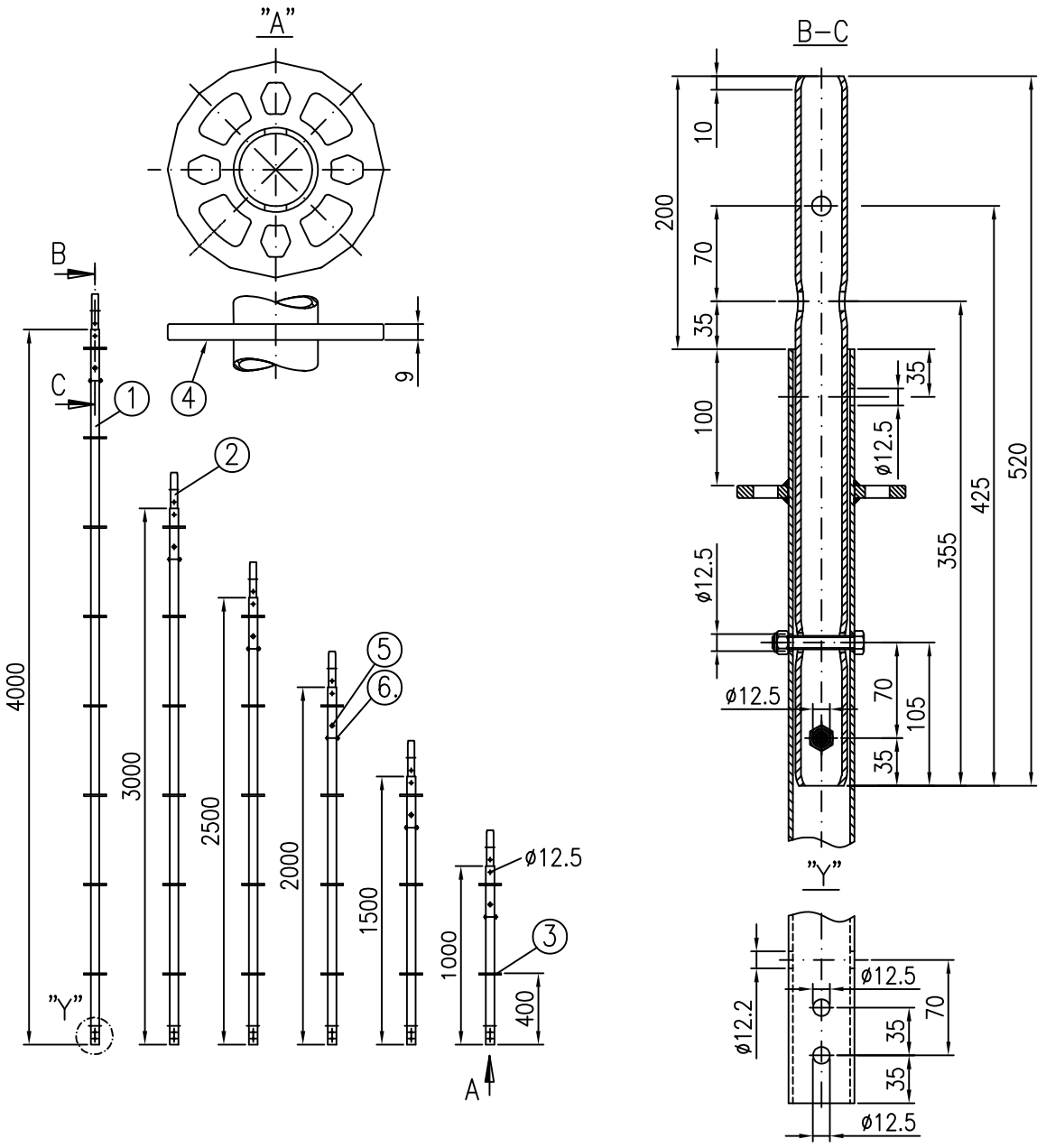
Dimens. [m]	Weight [kg]
0.50	4.0

ALBLITZ MODUL

Standard 0.50 m with screwed–in tube connector 500
in accordance with Z–8.22–906

M710–B169_ABM 10.2023

Annex B,
page 13



① Circular hollow section ø48.3x4.05	DIN EN 10219–S235JRH	$R_{eH} \geq 320$ N/mm²	
② Circular hollow section ø38x4	DIN EN 10219–S235JRH	$R_{eH} \geq 320$ N/mm²	see Annex B, page 12
③ Connector disc	see Annex B, page 2		
④ Marking			
⑤ Hexagon bolt	DIN EN ISO 4014–M10x60–8.8–galvanised		
alternatively:	DIN EN ISO 4014–M12x60–8.8–galvanised		
⑥ Hexagon nut, self–locking	DIN EN ISO 10511–M10–8–galvanised		
alternatively:	DIN EN ISO 10511–M12–8–galvanised		
galvanised			

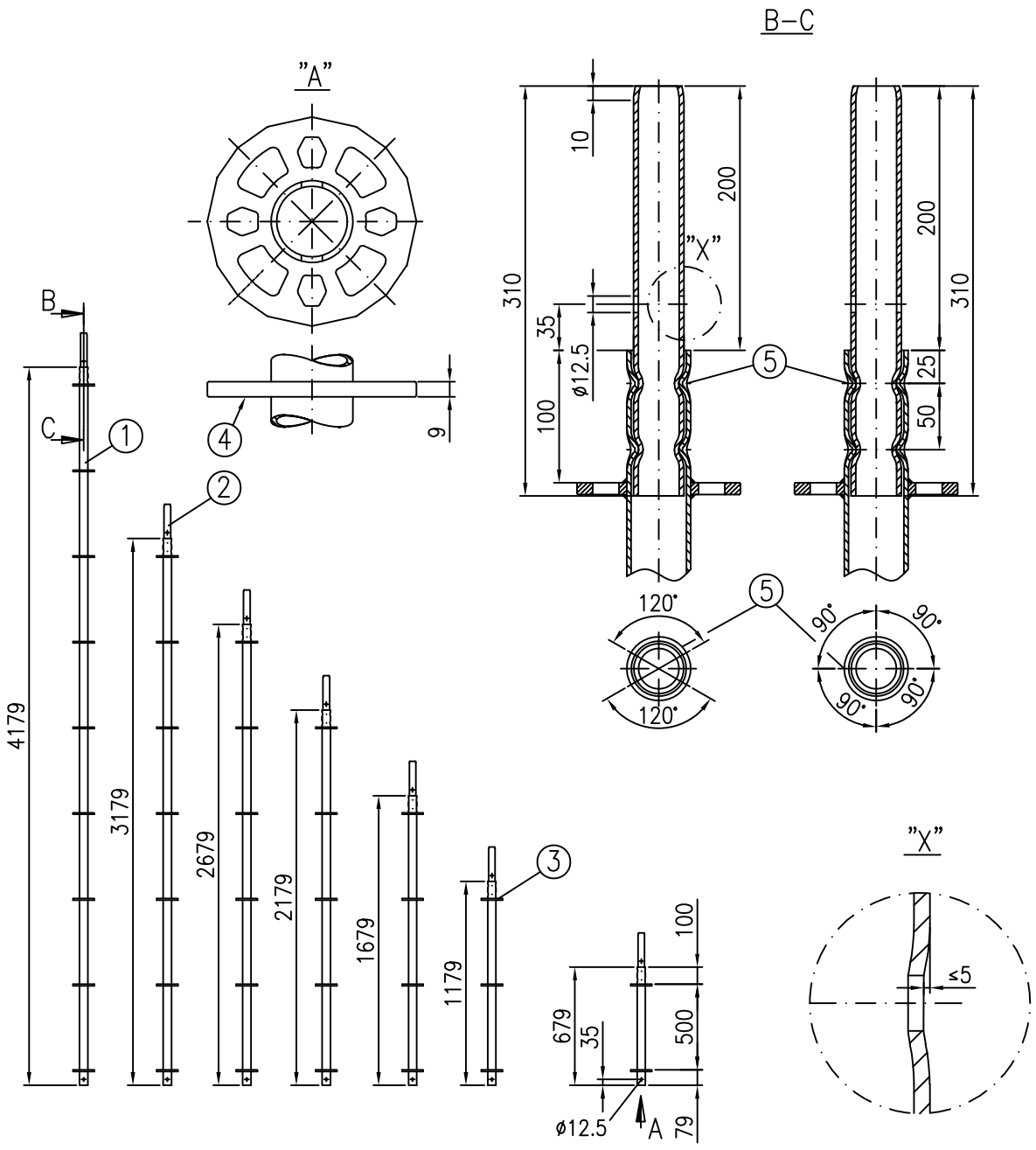
Dimens. [m]	Weight [kg]
1.00	6.9
1.50	9.5
2.00	12.2
2.50	15.0
3.00	17.6
4.00	22.6

ALBLITZ MODUL

Standard with screwed–in tube connector 520, s=4.05 mm
in accordance with Z–8.22–906

M716–B210_ABM 10.2023

Annex B,
page 14



① Circular hollow section ø48.3x3.2 DIN EN 10219–S235JRH $R_{eH} \geq 320$ N/mm²
② Circular hollow section ø38x3.6 DIN EN 10219–S235JRH $R_{eH} \geq 320$ N/mm²
③ Connector disc see Annex B, page 2
④ Marking
⑤ Linear pressed connection alternatively: 4 point–joint pressed connections
galvanised

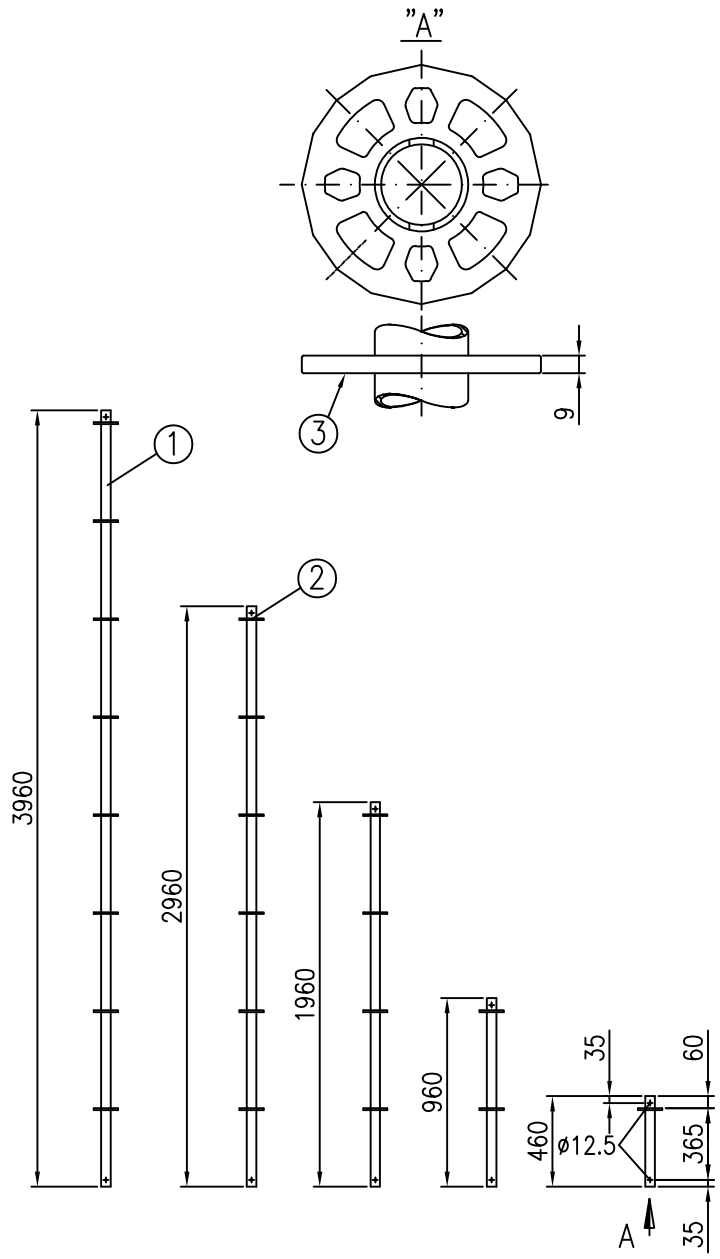
Dimens. [m]	Weight [kg]
0.66	3.9
1.16	6.0
1.66	8.0
2.16	10.2
2.66	11.7
3.16	13.8
4.16	17.7

ALBLITZ MODUL

Vertical starter standard
in accordance with Z–8.22–906

M710–B167_ABM 09.2023

Annex B,
page 15



① Circular hollow section ø48.3x3.2 DIN EN 10219–S235JRH $R_{eH} \geq 320$ N/mm²
② Connector disc see Annex B, page 2
③ Marking

galvanised

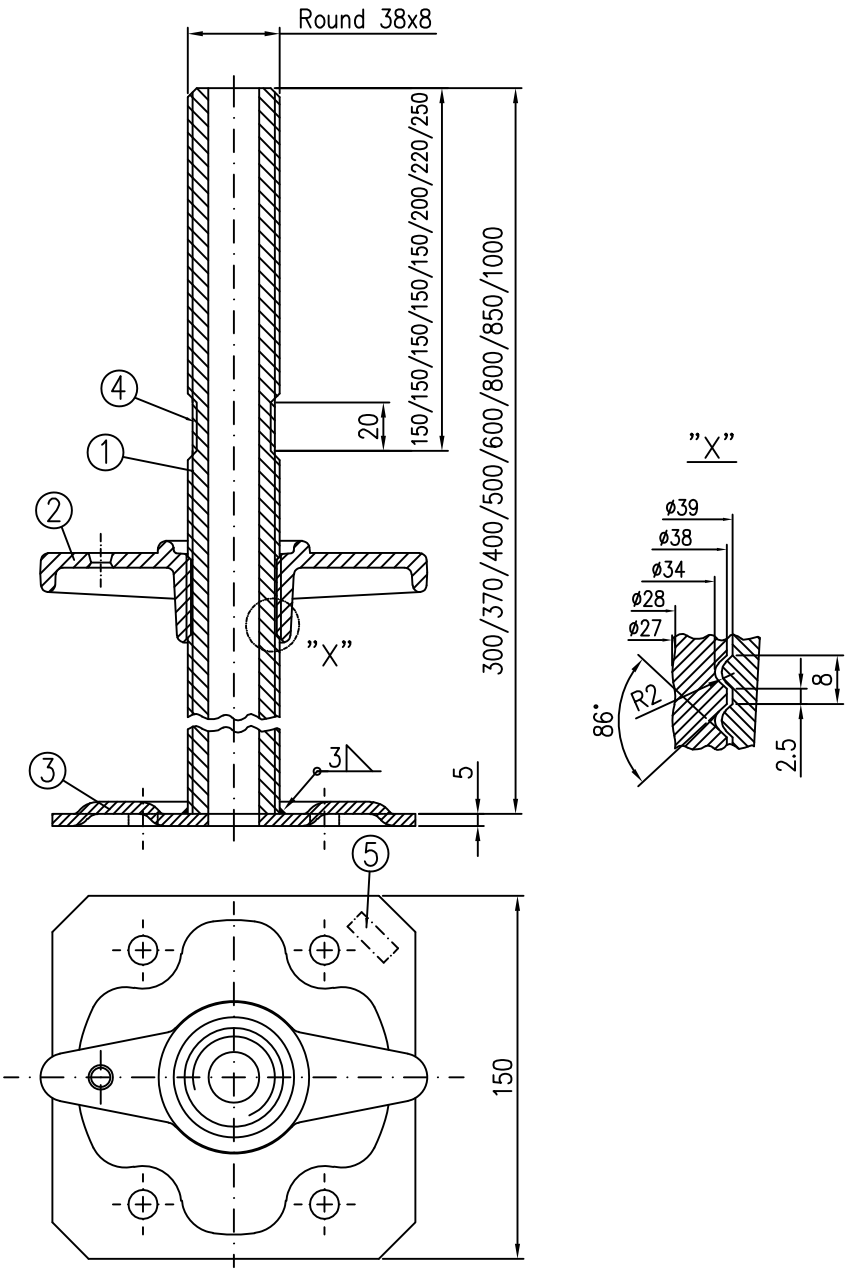
Dimens. [m]	Weight [kg]
0.46	1.9
0.96	4.0
1.96	8.3
2.96	12.5
3.96	16.8

ALBLITZ MODUL

Top standard
in accordance with Z–8.22–906

M710–B168_ABM 05.2021

Annex B,
page 16



Component no longer manufactured
–only approved for continued use–

① Thread rolled onto circular hollow section ø38x4.5 DIN EN 10219–S355J2H
② Adjusting nut DIN EN 10293–G20Mn5 electrogalvanized
③ Steel metal t=5 mm DIN EN 10025–S235JR
④ Thread with 2 notches to limit collar nut travel
⑤ Marking

galvanised

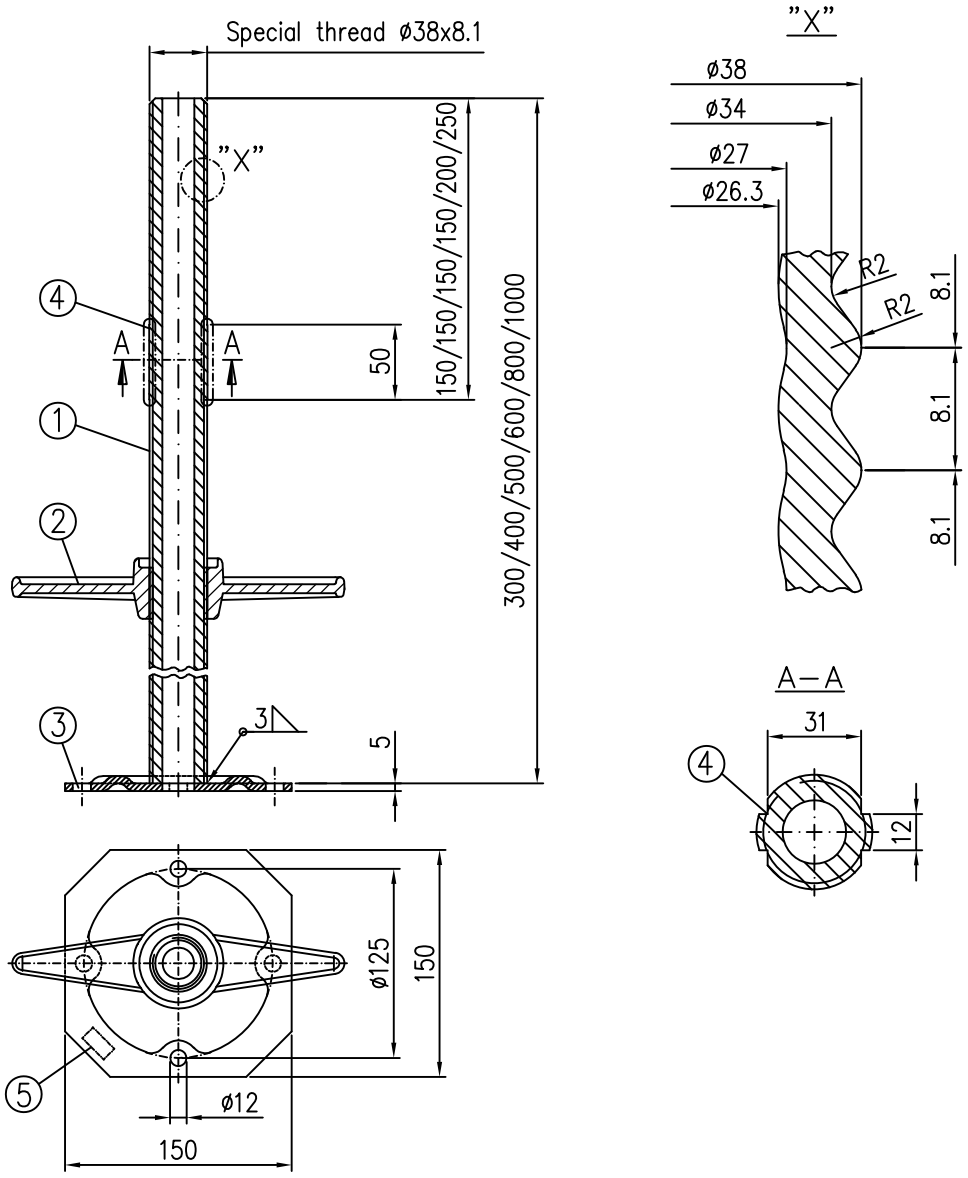
Dimens. [m]	Weight [kg]
0.30	2.5
0.40	2.9
0.50	3.2
0.60	3.6
0.80	4.3
1.00	5.0

ALBLITZ MODUL

Base jack
in accordance with Z–8.1–862

A709–A031_ABM 05.2021

Annex B,
page 17



①	Thread rolled onto circular hollow section ø38x4.5	DIN EN 10219–S235JRH
②	Wing nut	EN 1562–EN GJMW–400–S EN 1562–EN–GJMB–450–6 EN 1563–EN–GJS–400–15 EN 10293–GE240+N EN 1562–EN–GJMW–360–12
③	Steel metal t=5 mm	DIN EN 10025–S235JR
④	Thread with notches to limit collar nut travel	DIN EN 10025–S235JR
⑤	Marking	

galvanised

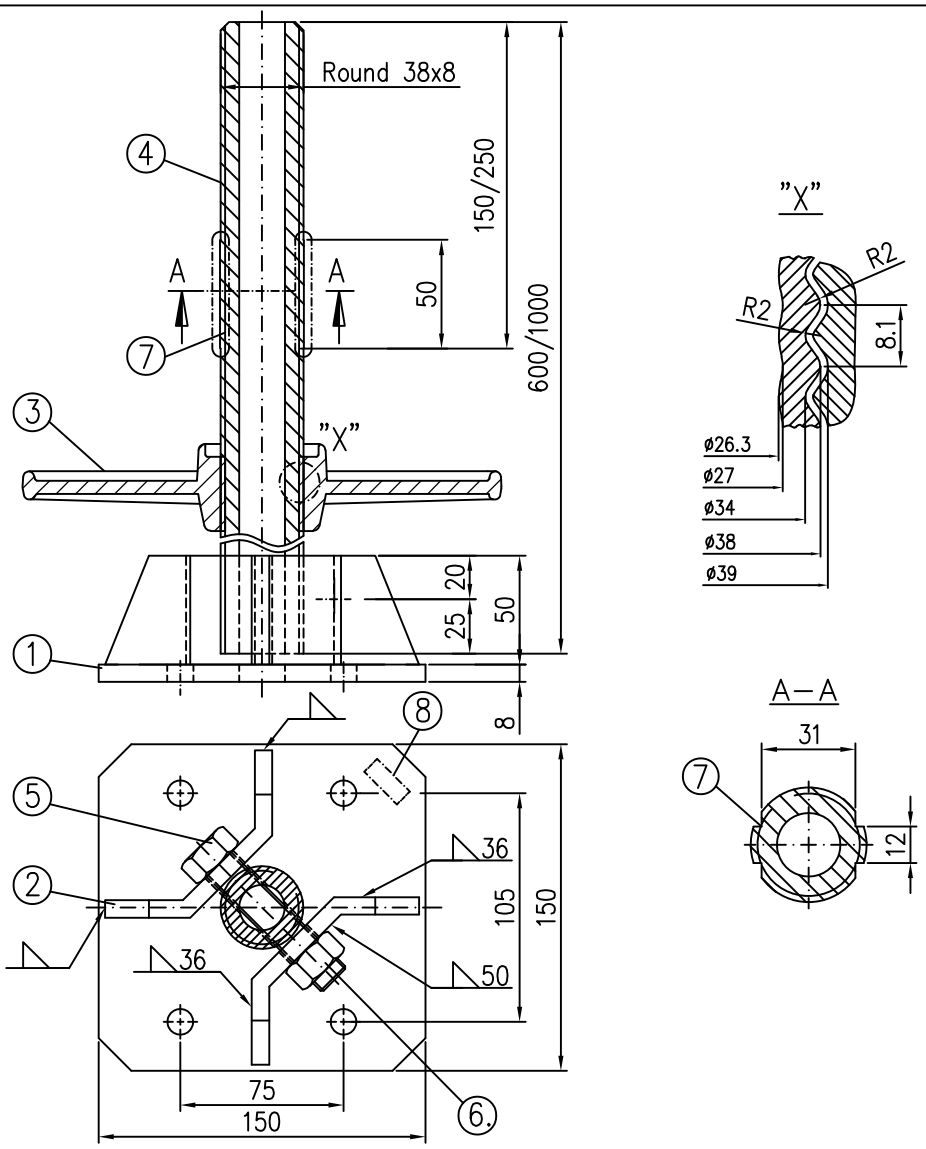
Dimens. [m]	Weight [kg]
0.30	2.6
0.40	3.0
0.50	3.4
0.60	3.6
0.80	4.4
1.00	5.2

ALBLITZ MODUL

Base jack AB
in accordance with Z–8.1–862

A713–A221_ABM 05.2021

Annex B,
page 18



①	Steel metal t=8 mm	DIN EN 10025–S235JR
②	Flat 50x8	DIN EN 10025–S235JR
③	Wing nut	EN 1562–EN GJMW–400–S EN 1562–EN–GJMB–450–6 EN 1563–EN–GJS–400–15 EN 10293–GE240+N EN 1562–EN–GJMW–360–12 EN 10025–S235JR
④	Thread rolled onto circular hollow section ø38x4.5	DIN EN 10219–S235JRH
⑤	Hexagon bolt	DIN EN ISO 4014–M16x75–8.8–galvanised
⑥	Hexagon nut, self–locking	DIN EN ISO 10511–M16–8–galvanised
⑦	Thread with 2 notches to limit collar nut travel	
⑧	Marking	

galvanised; all welding seams a=3 mm

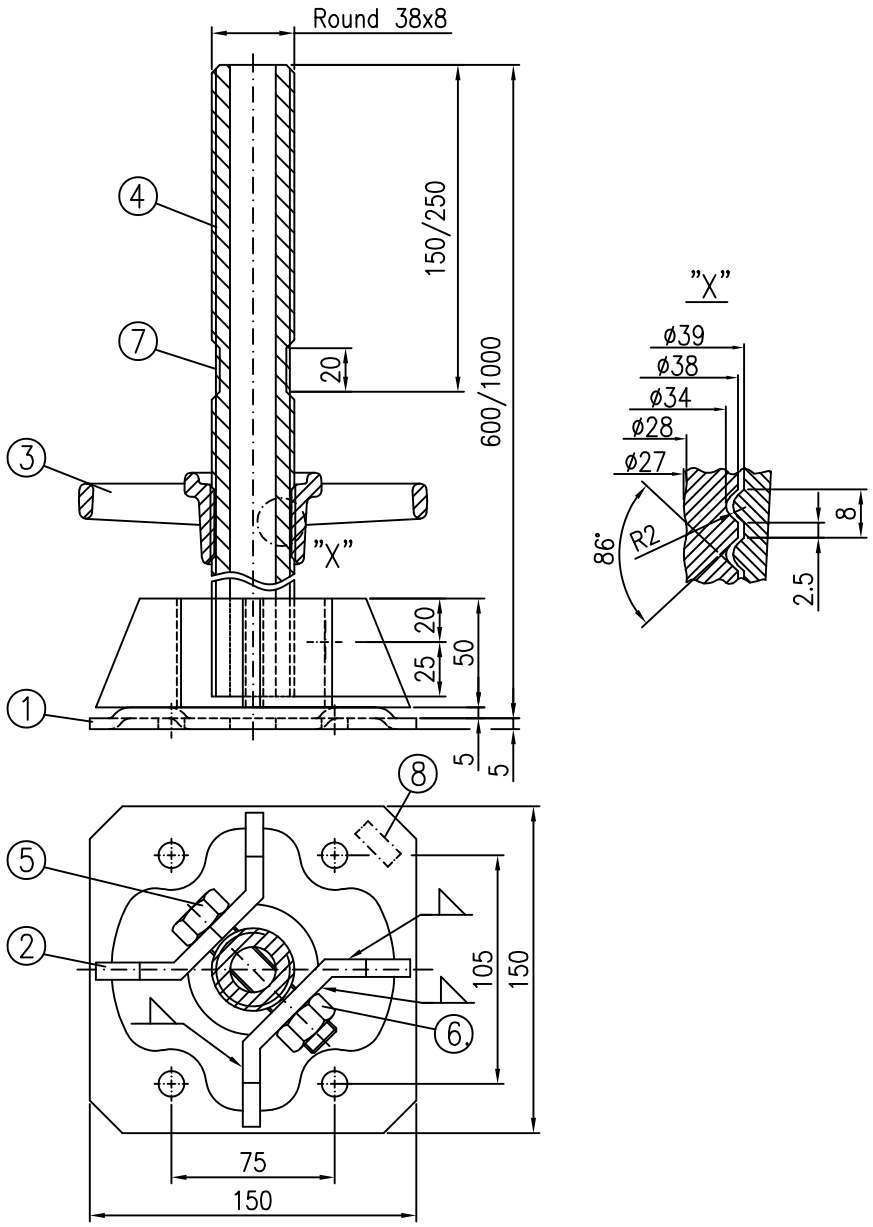
Dimens. [m]	Weight [kg]
0.60	4.5
1.00	6.6

ALBLITZ MODUL

Base jack AF with swivel base
in accordance with Z–8.1–862

A713–A222_ABM 05.2021

Annex B,
page 19



①	Steel metal t=5 mm	DIN EN 10025-S235JR
②	Flat 50x8	DIN EN 10025-S235JR
③	Adjusting nut electrogalvanized	G20Mn5 DIN EN 10293
④	Thread rolled onto circular hollow section ø38x4.5	S355J2H
⑤	Hexagon bolt	DIN EN ISO 4014-M16x75-8.8-galvanised
⑥	Hexagon nut, self-locking	DIN EN ISO 10511-M16-8-galvanised
⑦	Thread with 2 notches to limit collar nut travel	
⑧	Marking	

galvanised; all welding seams a=3 mm

Component no longer manufactured -only approved for continued use-

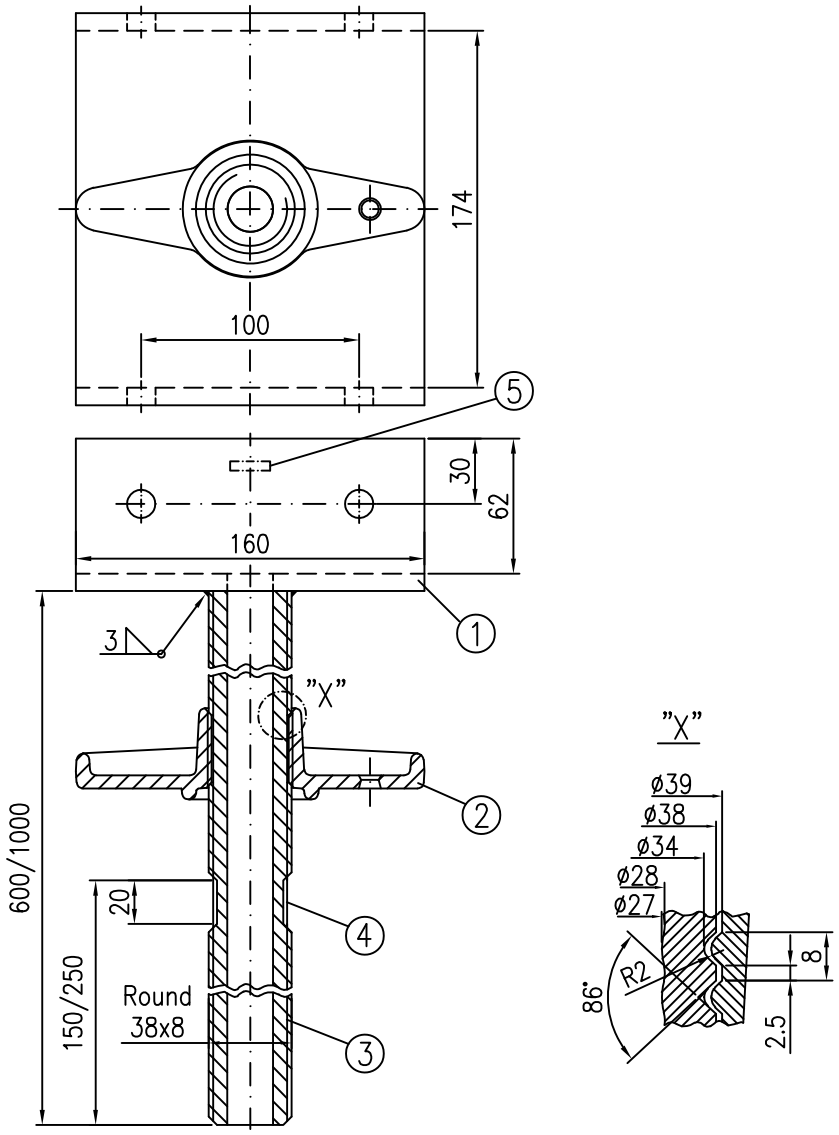
Dimens. [m]	Weight [kg]
0.60	6.0
1.00	7.0

ALBLITZ MODUL

Base jack with swivel base
in accordance with Z-8.22-906

M710-B141_ABM 05.2021

Annex B,
page 20



① Steel metal t=8mm	DIN EN 10025–S235JR
alternatively:	DIN EN 10149–S355MC
② Wing nut	EN 1562–EN GJMW–400–S
	EN 1562–EN–GJMB–450–6
	EN 1563–EN–GJS–400–15
	EN 10293–GE240+N
	EN 1562–EN–GJMW–360–12
	EN 10025–S235JR
③ Thread rolled onto circular hollow section ø38x4.5	DIN EN 10219–S355J2H
④ Thread with notches to limit collar nut travel	
⑤ Marking	
galvanised	

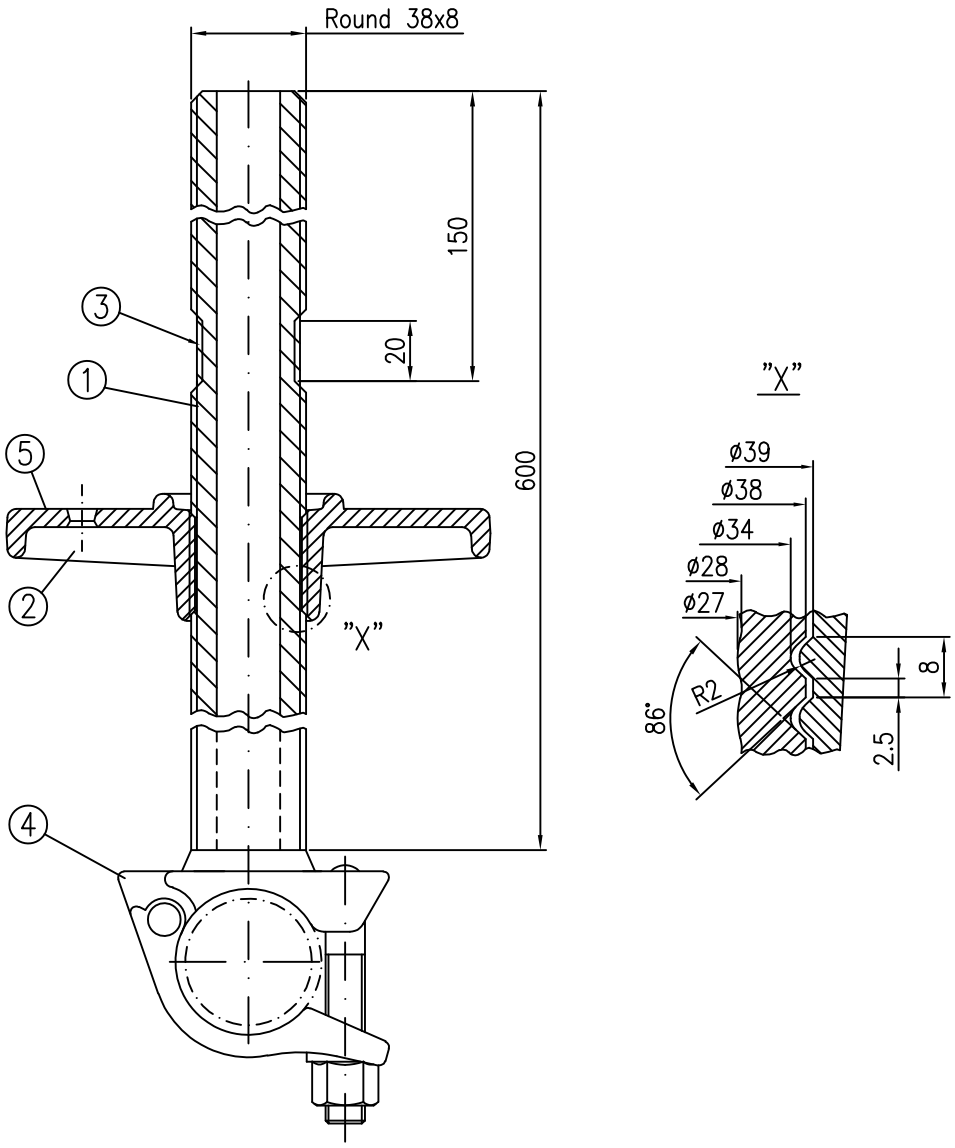
Dimens. [m]	Weight [kg]
0.60	6.0
1.00	8.0

ALBLITZ MODUL

U–head jack
in accordance with Z–8.22–906

M710–B142_ABM 05.2021

Annex B,
page 21



①	Thread rolled onto circular hollow section ø38x4.5	DIN EN 10219-S355J2H
②	Wing nut	EN 1562-EN GJMW-400-S EN 1562-EN-GJMB-450-6 EN 1563-EN-GJS-400-15 EN 10293-GE240+N EN 1562-EN-GJMW-360-12 EN 10025-S235JR
③	Thread with notches to limit collar nut travel	
④	Halfcoupler, class B	DIN EN 74-2
⑤	Marking	
	galvanised	

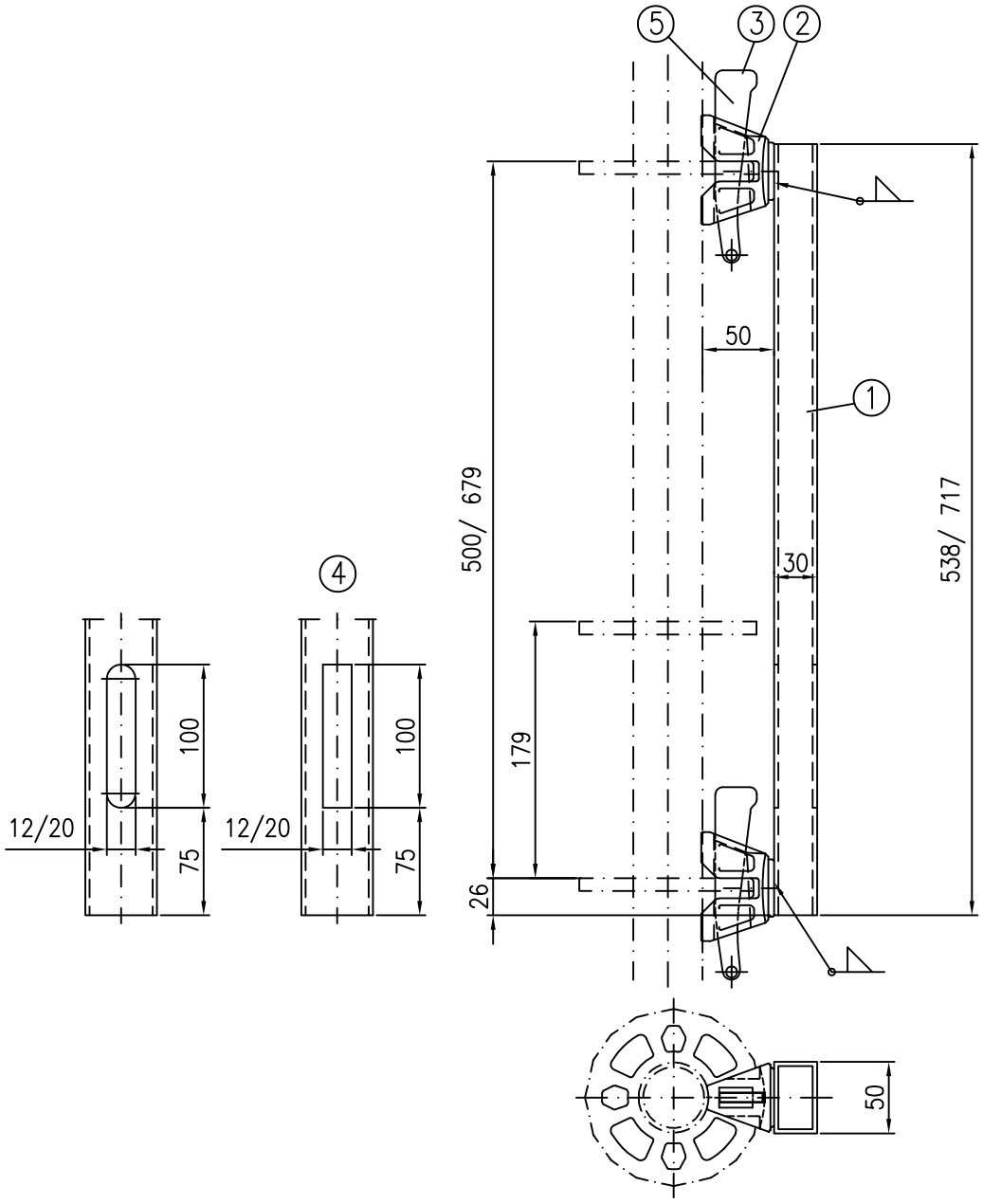
Dimens. [m]	Weight [kg]
0.60	3.2

ALBLITZ MODUL

Spindle coupler
in accordance with Z-8.22-906

M711-B201_ABM 05.2021

Annex B,
page 22



①	Rectangular hollow section 50x30x3	DIN EN 10219–S235JRH
	alternatively: Rectangular hollow section 50x30x2	DIN EN 10219–S355J2H
②	Connection of tube ledger	see Annex B, page 4
	alternatively: Connection of tube ledger 4.0	see Annex B, page 151
③	Wedge 6 mm	see Annex B, page 3
④	alternatively	
⑤	Marking	For crane handling
	galvanised; all welding seams a=3 mm	with an allowable load of up to 10 kN

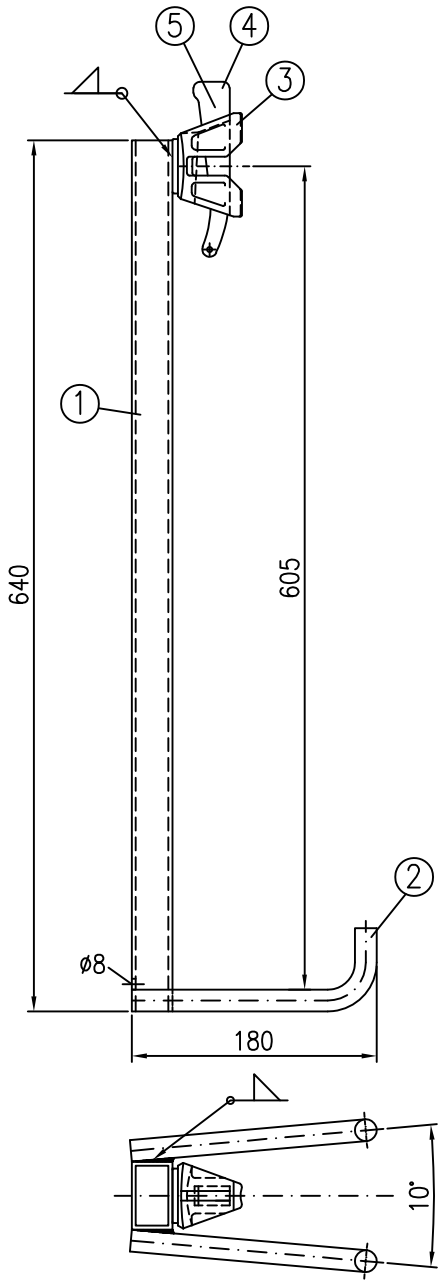
Dimens. [m]	Weight [kg]
0.60	3.0
0.80	3.6

ALBLITZ MODUL

Suspended scaffolding connector
in accordance with Z–8.22–906

M711–B205_ABM 05.2021

Annex B,
page 23



①	Rectangular hollow section 50x30x3	DIN EN 10219–S235JRH
	alternatively: Rectangular hollow section 50x30x2	DIN EN 10219–S355J2H
②	Round ø16	DIN EN 10025–S235JR
③	Connection of tube ledger	see Annex B, page 4
	alternatively: Connection of tube ledger 4.0	see Annex B, page 151
④	Wedge 6 mm	see Annex B, page 3
⑤	Marking	
	galvanised; all welding seams a=3 mm	

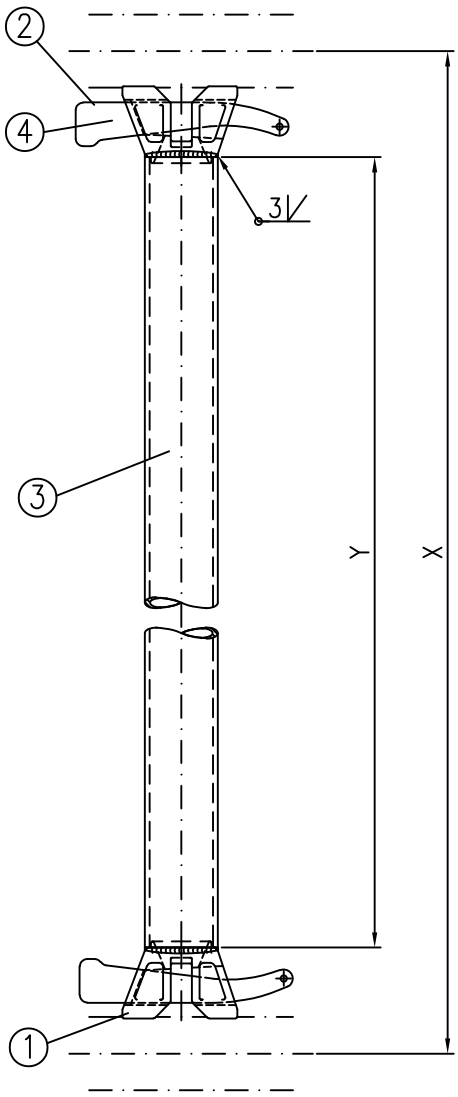
Dimens. [m]	Weight [kg]
0.65	3.5

ALBLITZ MODUL

Locking device for base jack
in accordance with Z–8.22–906

M710–B143_ABM 05.2021

Annex B,
page 24



"X" [m]	"X" [mm]	"Y" [mm]	Weight [kg]
0,36	356	215	1.8
0,37	366	225	1.8
0,39	390	249	2.0
0,45	450	309	2.3
0,50	500	359	2.5
0,73	732	591	3.2
1,04	1036	895	4.2
1,09	1088	947	4.5
1,29	1286	1145	5.0
1,40	1400	1259	5.6
1,57	1572	1431	6.3
2,07	2072	1931	8.1
2,57	2572	2431	9.9
3,07	3072	2931	11.8
4,14	4144	4003	16.5

① Connection of tube ledger — see Annex B, page 4
② Wedge 6 mm — see Annex B, page 3
③ Circular hollow section ø48.3x3.2 — DIN EN 10219-S235JRH — $R_{eH} \geq 320$ N/mm²
④ Marking

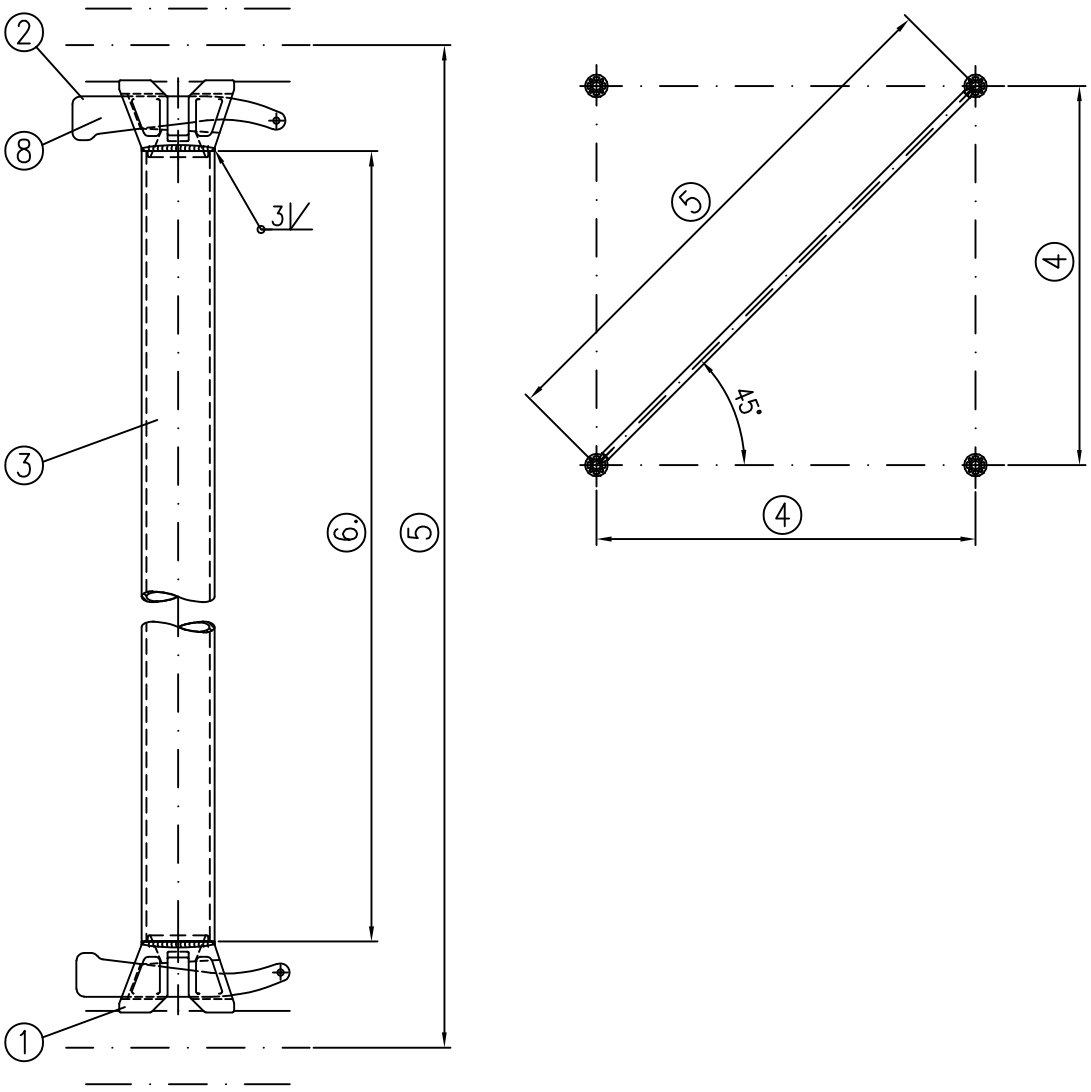
galvanised

ALBLITZ MODUL

Tube ledger
in accordance with Z-8.22-906

M710-B113_ABM 05.2021

Annex B,
page 25



① Connection of tube ledger see Annex B, page 4
② Wedge 6 mm see Annex B, page 3
③ Circular hollow section ø48.3x3.2 DIN EN 10219–S235JRH $R_{eH} \geq 320$ N/mm²
④ Bay width
⑤ Bay–diagonal brace
⑥ Length pos. 3
⑦ Weight
⑧ Marking

galvanised

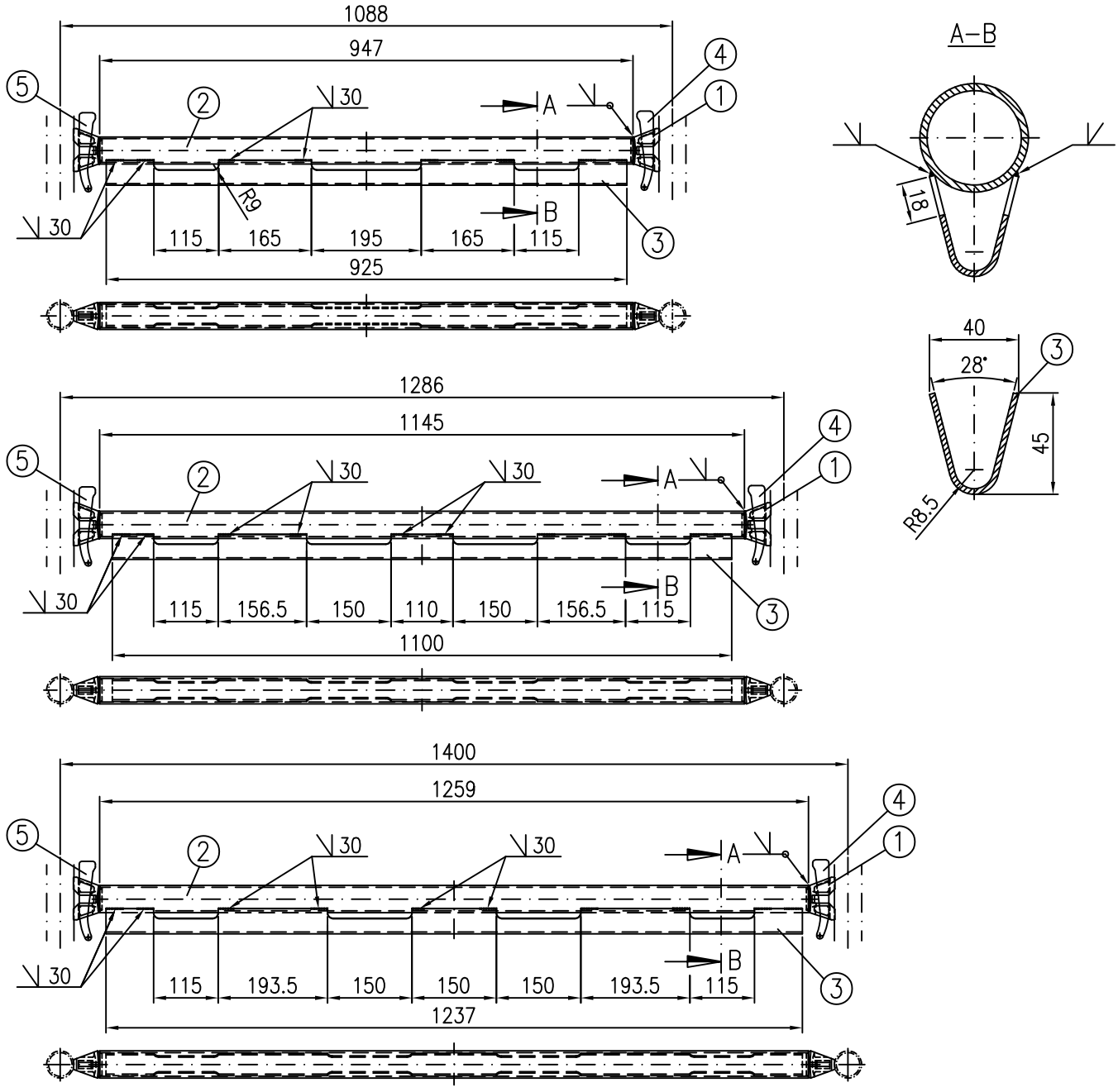
④ [m]	④ [mm]	⑤ [mm]	⑥ [mm]	⑦ [kg]
0.73	732	1035	894	4.2
1.09	1088	1539	1398	6.0
1.29	1286	1819	1678	7.0
1.40	1400	1980	1839	7.5
1.57	1572	2223	2082	8.5
2.07	2072	2930	2789	10.8
2.57	2572	3637	3496	13.3
3.07	3072	4344	4203	15.5

ALBLITZ MODUL

Horizontal diagonal ledger
in accordance with Z–8.22–906

M711–B202_ABM 05.2021

Annex B,
page 26



① Connection of tube ledger	see Annex B, page 4	
② Circular hollow section ø48.3x3.2	DIN EN 10219–S235JRH	$R_{eH} \geq 320$ N/mm²
③ Steel metal s=3 mm	DIN EN 10025–S235JR	
④ Wedge 6 mm	see Annex B, page 3	
⑤ Marking		

galvanised; all welding seams a=3 mm

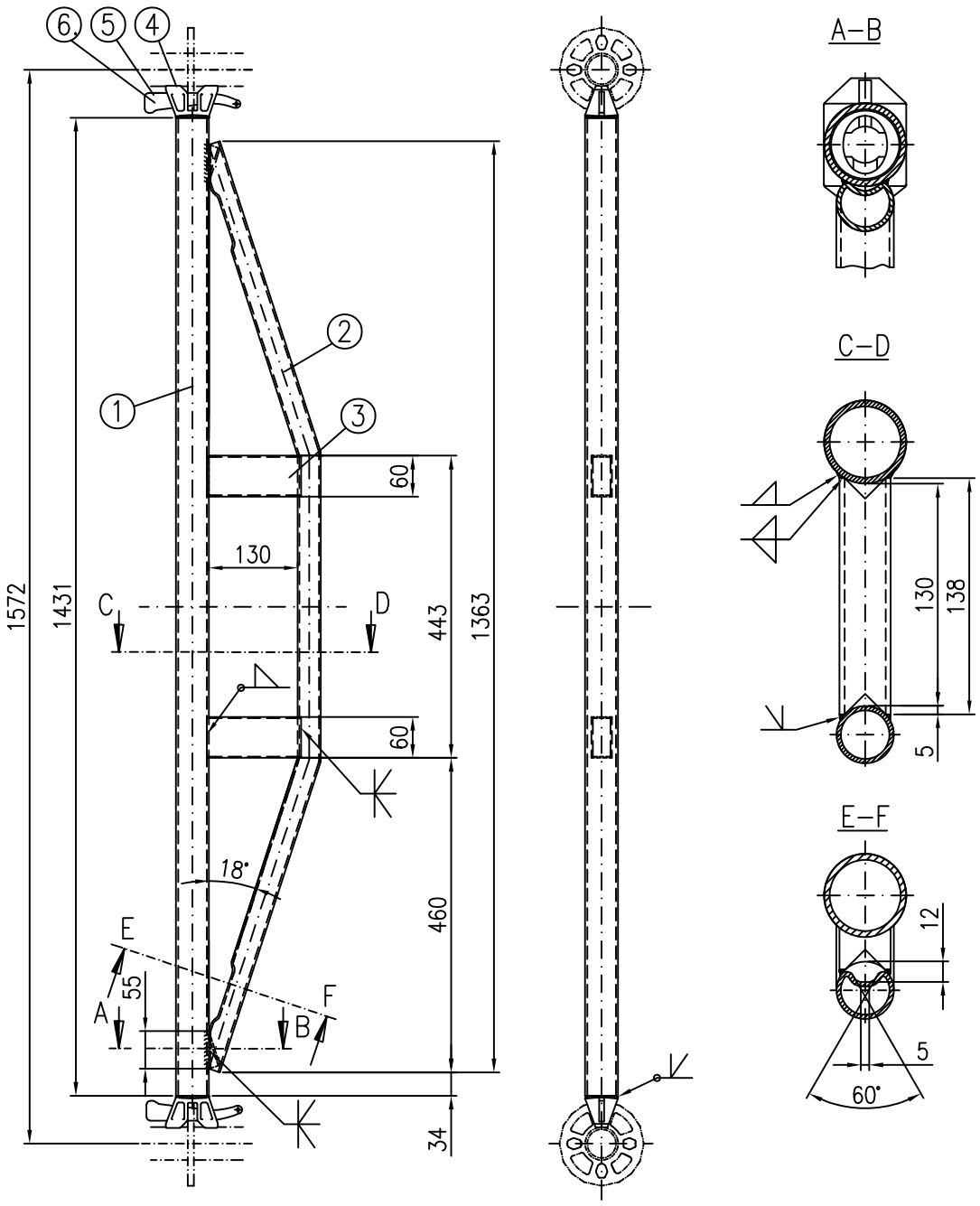
Dimens. [m]	Weight [kg]
1.09	5.9
1.29	7.1
1.40	8.0

ALBLITZ MODUL

Tube ledger reinforced
in accordance with Z–8.22–906

M710–B114_ABM 05.2021

Annex B,
page 27



① Circular hollow section ø48.3x3.2	DIN EN 10219–S235JRH	$R_{eH} \geq 320$ N/mm²
② Circular hollow section ø33.7x2.6	DIN EN 10219–S235JRH	$R_{eH} \geq 320$ N/mm²
③ Rectangular hollow section 60x30x2	DIN EN 10219–S235JRH	
④ Connection of tube ledger	see Annex B, page 4	
⑤ Wedge 6 mm	see Annex B, page 3	
⑥ Marking		

galvanised; all welding seams a=3 mm

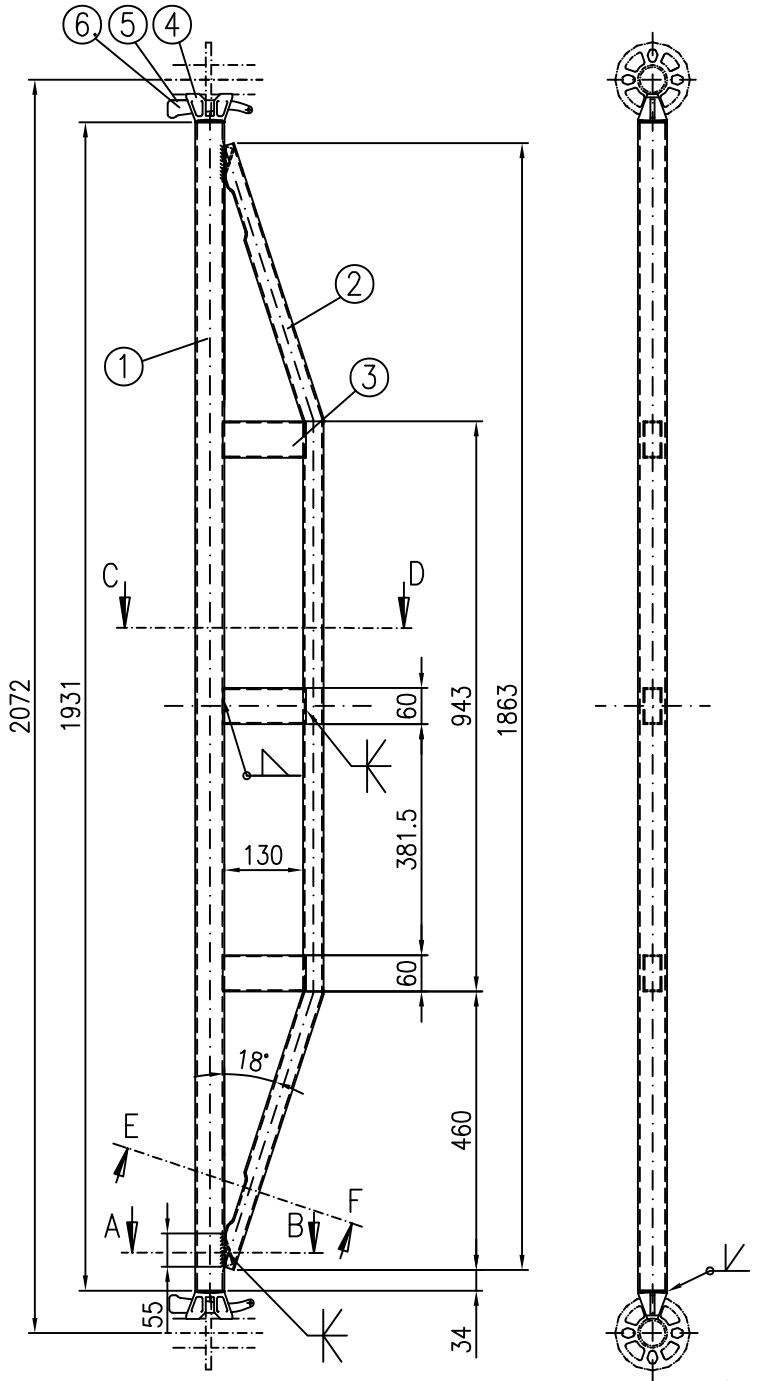
Dimens. [m]	Weight [kg]
1.57	9.8

ALBLITZ MODUL

Double tube ledger 1.57 m
in accordance with Z–8.22–906

M710–B156_ABM 05.2021

Annex B,
page 28



① Circular hollow section ø48.3x3.2	DIN EN 10219–S235JRH	$R_{eH} \geq 320$ N/mm²
② Circular hollow section ø33.7x2.6	DIN EN 10219–S235JRH	$R_{eH} \geq 320$ N/mm²
③ Rectangular hollow section 60x30x2	DIN EN 10219–S235JRH	
④ Connection of tube ledger	see Annex B, page 4	
⑤ Wedge 6 mm	see Annex B, page 3	
⑥ Marking		

galvanised; all welding seams a=3 mm For sectional views, see annex D, page 28

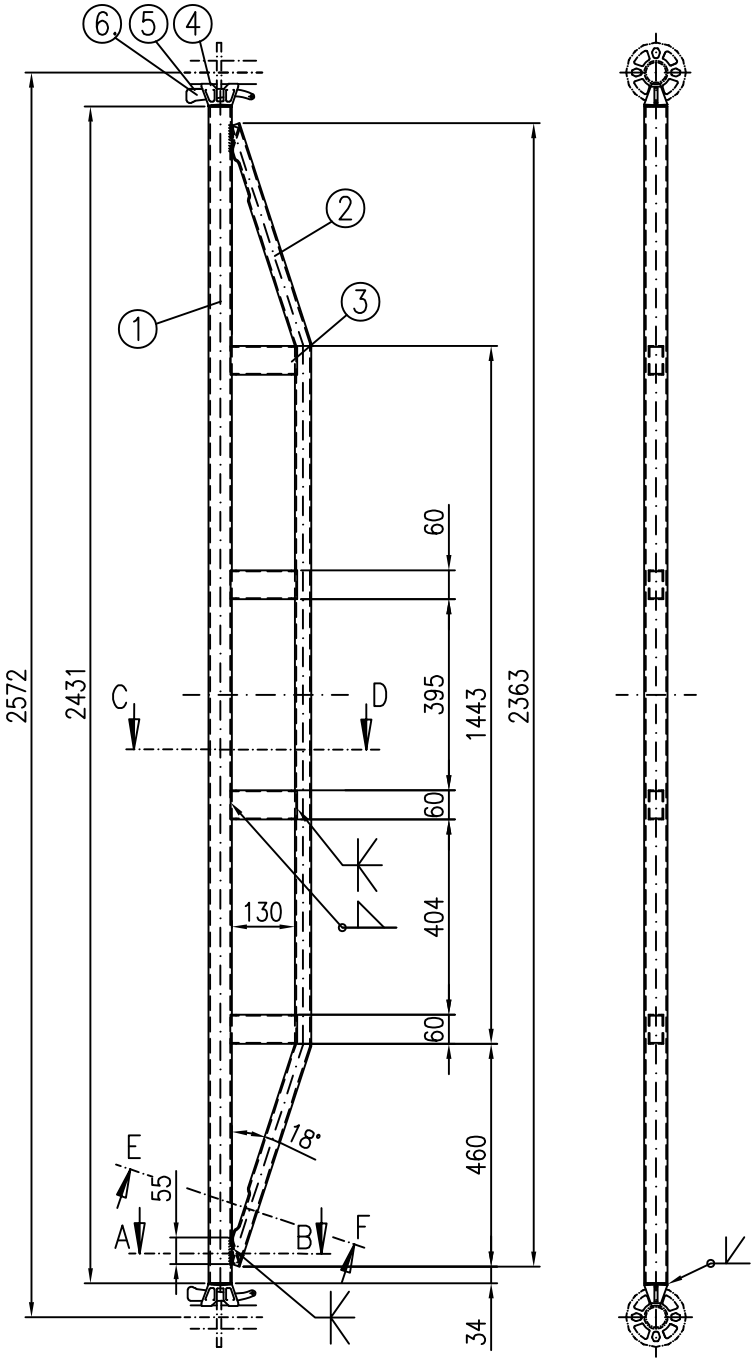
Dimens. [m]	Weight [kg]
2.07	12.7

ALBLITZ MODUL

Double tube ledger 2.07 m
in accordance with Z–8.22–906

M710–B157_ABM 05.2021

Annex B,
page 29



① Circular hollow section ø48.3x3.2	DIN EN 10219–S235JRH	$R_{eH} \geq 320$ N/mm²
② Circular hollow section ø33.7x2.6	DIN EN 10219–S235JRH	$R_{eH} \geq 320$ N/mm²
③ Rectangular hollow section 60x30x2	DIN EN 10219–S235JRH	
④ Connection of tube ledger	see Annex B, page 4	
⑤ Wedge 6 mm	see Annex B, page 3	
⑥ Marking		

galvanised; all welding seams a=3 mm For sectional views, see annex B, page 28

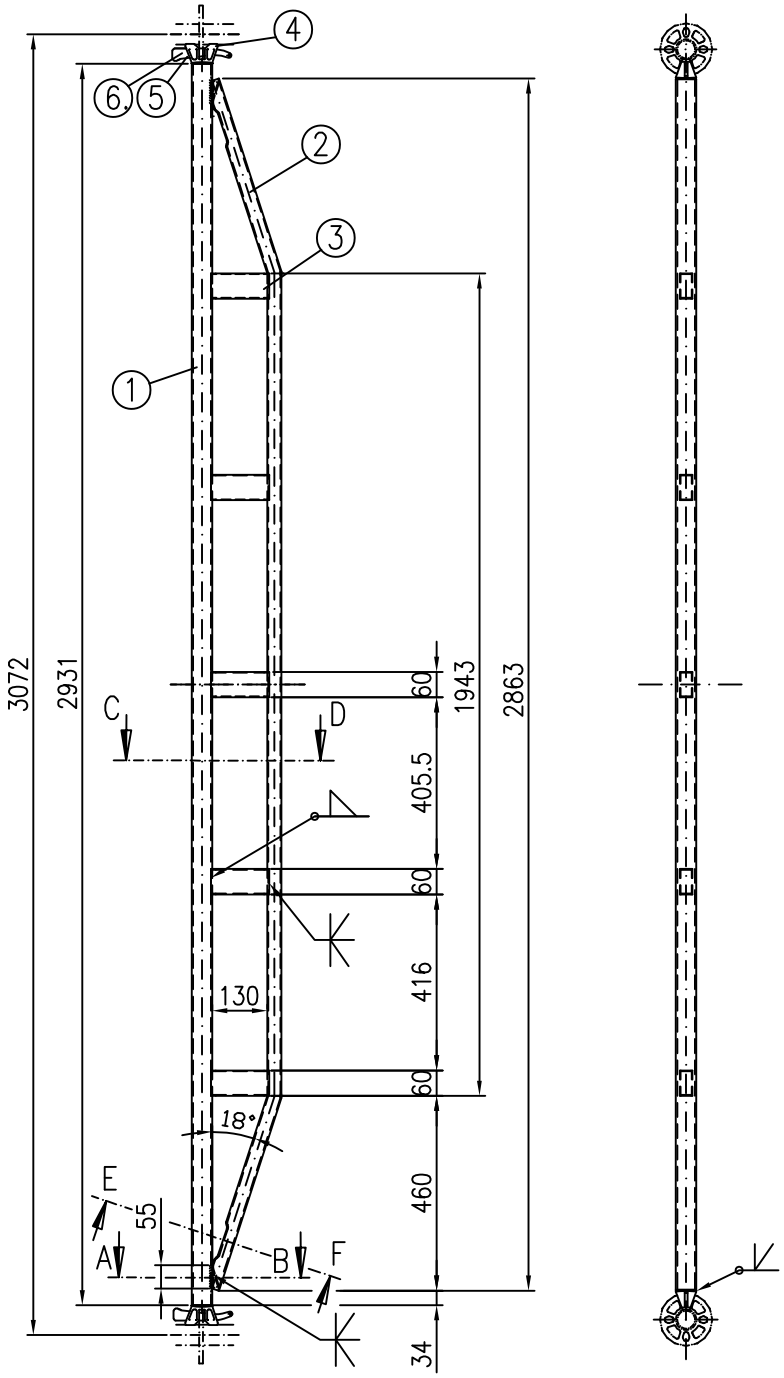
Dimens. [m]	Weight [kg]
2.57	16.4

ALBLITZ MODUL

Double tube ledger 2.57 m
in accordance with Z–8.22–906

M710–B158_ABM 05.2021

Annex B,
page 30



① Circular hollow section ø48.3x3.2	DIN EN 10219–S235JRH	$R_{eH} \geq 320$ N/mm²
② Circular hollow section ø33.7x2.6	DIN EN 10219–S235JRH	$R_{eH} \geq 320$ N/mm²
③ Rectangular hollow section 60x30x2	DIN EN 10219–S235JRH	
④ Connection of tube ledger	see Annex B, page 4	
⑤ Wedge 6 mm	see Annex B, page 3	
⑥ Marking		

galvanised; all welding seams a=3 mm For sectional views, see annex B, page 28

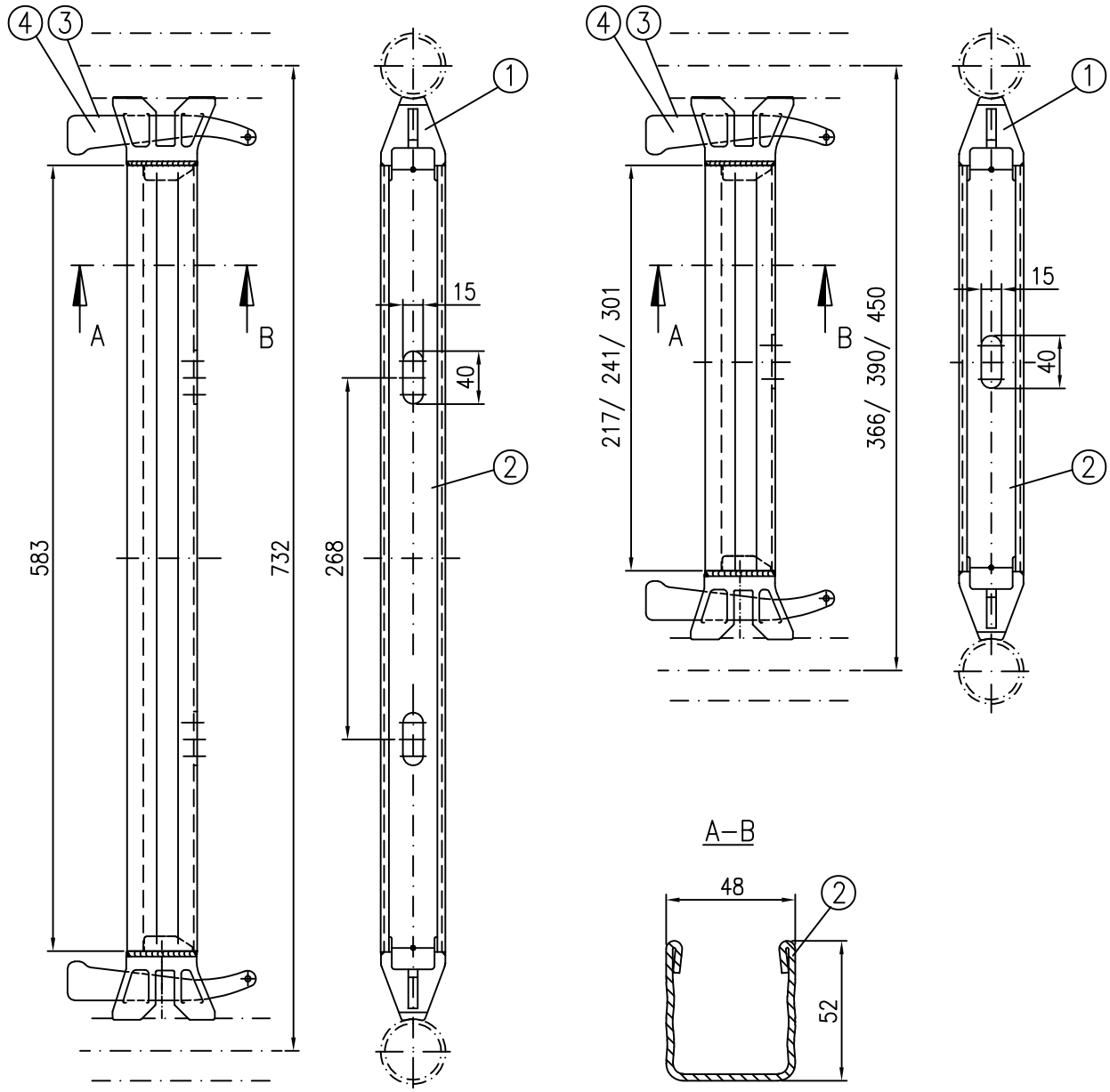
Dimens. [m]	Weight [kg]
3.07	19.5

ALBLITZ MODUL

Double tube ledger 3.07 m
in accordance with Z–8.22–906

M710–B159_ABM 05.2021

Annex B,
page 31



①	Connection of U–ledger (I)	see Annex B, page 5
	alternatively: Connection of U–ledger 4.0 (II)	see Annex B, page 152
②	U–profile 48x52x2.5 (III)	DIN EN 10025–S235JR
	alternatively: (IV)	
③	Wedge 6 mm	see Annex B, page 3
④	Marking	
	galvanised; all welding seams a=3 mm	see Annex B, page 5

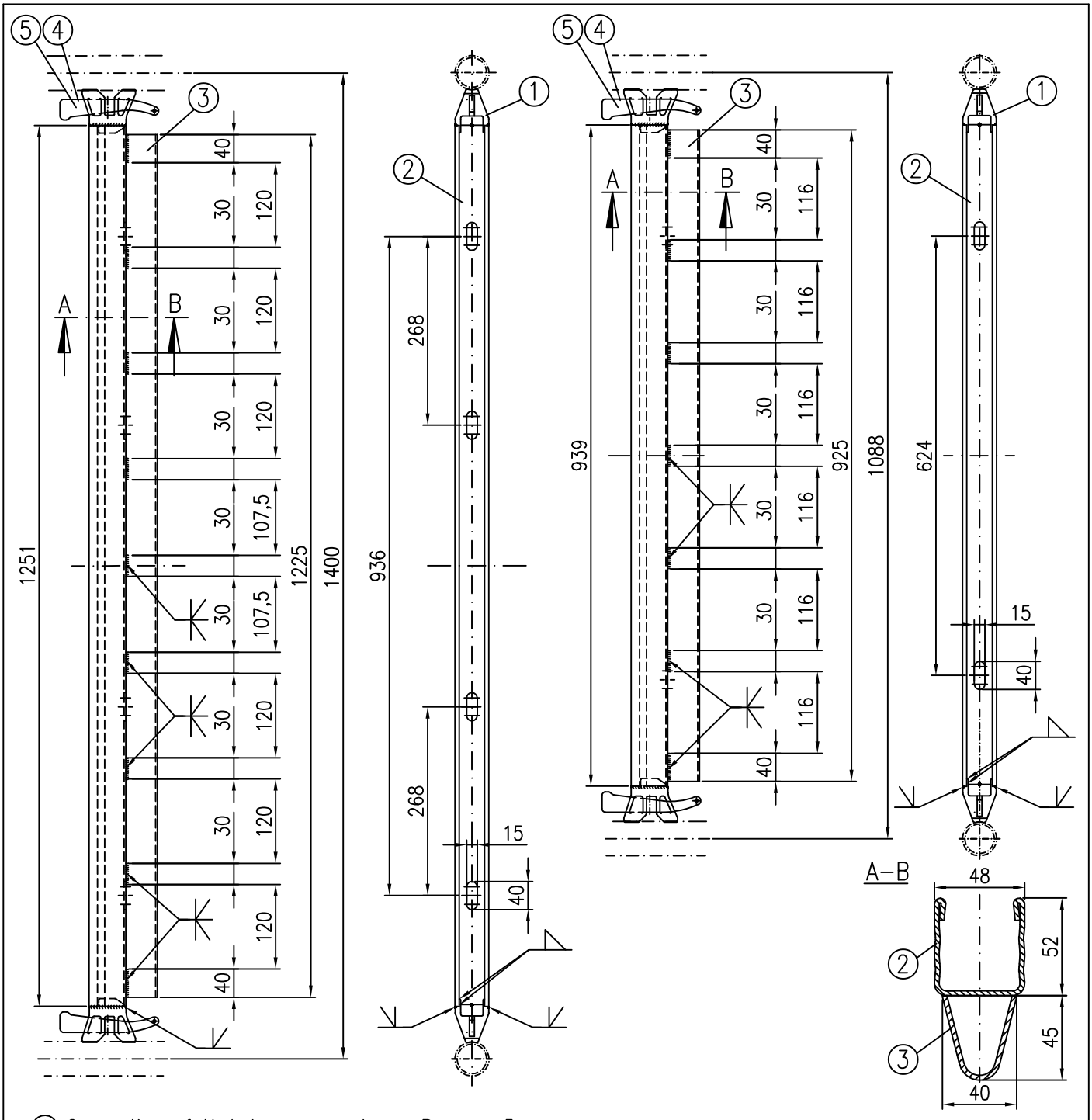
allowed combination			Dimens. [m]	Weight [kg]
	III	IV		
I	x	x	0.37	1.8
II	–	x	0.39	1.9
			0.45	2.0
			0.73	3.0

ALBLITZ MODUL

U–ledger 0.37 m; 0.39 m; 0.45 m; 0.73 m
in accordance with Z–8.22–906

M710–B115_ABM 10.2021

Annex B,
page 32



①	Connection of U–ledger	see Annex B, page 5
②	U–profile 48x52x2.5	see Annex B, page 32
③	Steel metal s=3 mm	see Annex B, page 27
④	Wedge 6 mm	see Annex B, page 3
⑤	Marking	

galvanised

Component no longer manufactured
–only for continued use–

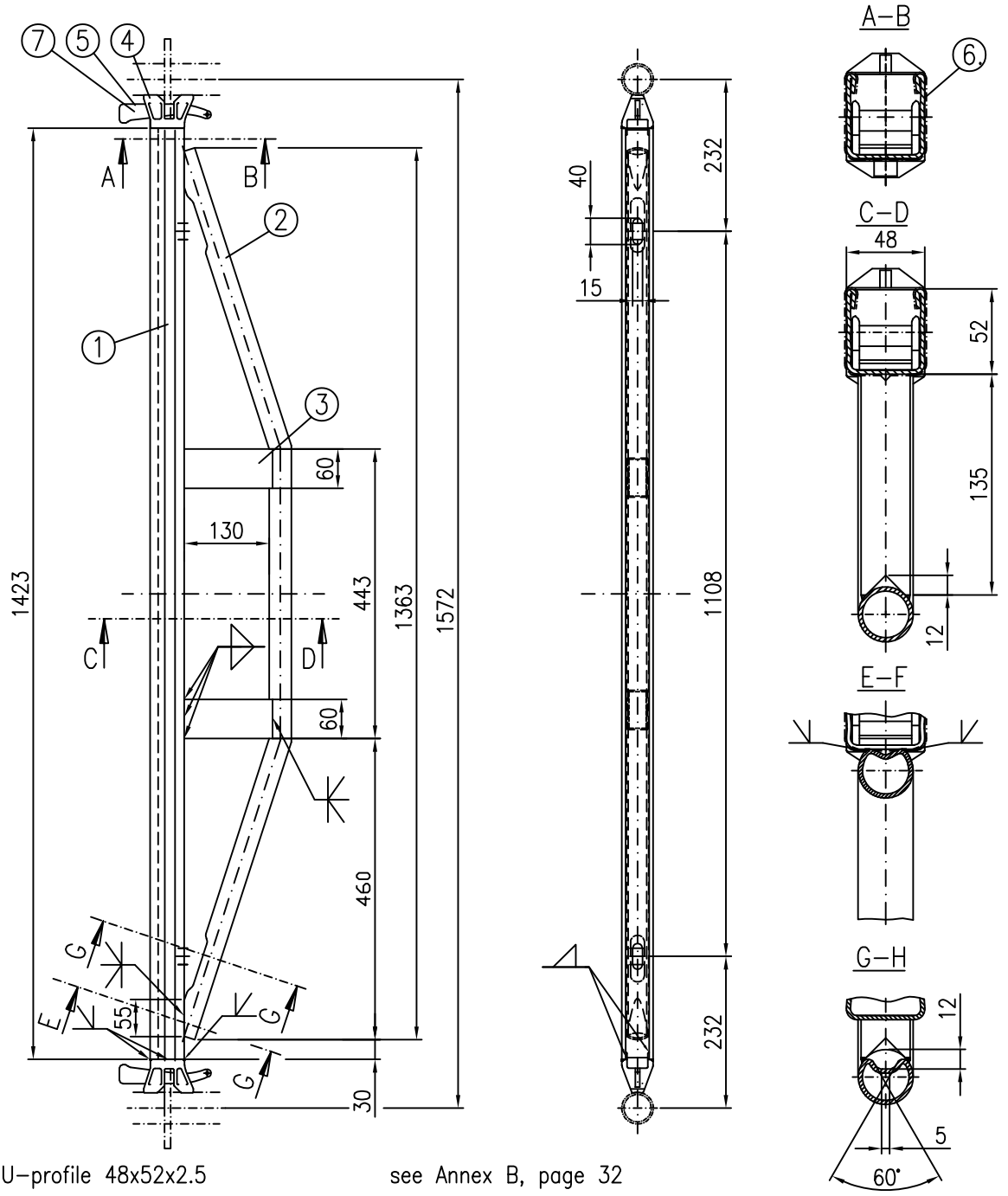
Dimens. [m]	Weight [kg]
1.09	5.3
1.40	7.9

ALBLITZ MODUL

U–ledger reinforced 1.09 m and 1.40 m
in accordance with Z–8.22–906

M710–B116_ABM 05.2021

Annex B,
page 33



① U–profile 48x52x2.5	see Annex B, page 32	
② Circular hollow section ø33.7x2.6	DIN EN 10219–S235JRH	$R_{eH} \geq 320$ N/mm²
③ Rectangular hollow section 60x30x2	DIN EN 10219–S235JRH	
④ Connection of U–ledger	see Annex B, page 5	
⑤ Wedge 6 mm	see Annex B, page 3	
⑥ Welding section		
⑦ Marking		

galvanised; all welding seams a=2.5 mm; all V–seams a=3 mm

Component no longer manufactured
–only for continued use–

Dimens. [m]	Weight [kg]
1.57	9.2

ALBLITZ MODUL

U–2–deck bearer 1.57 m
in accordance with Z–8.22–906

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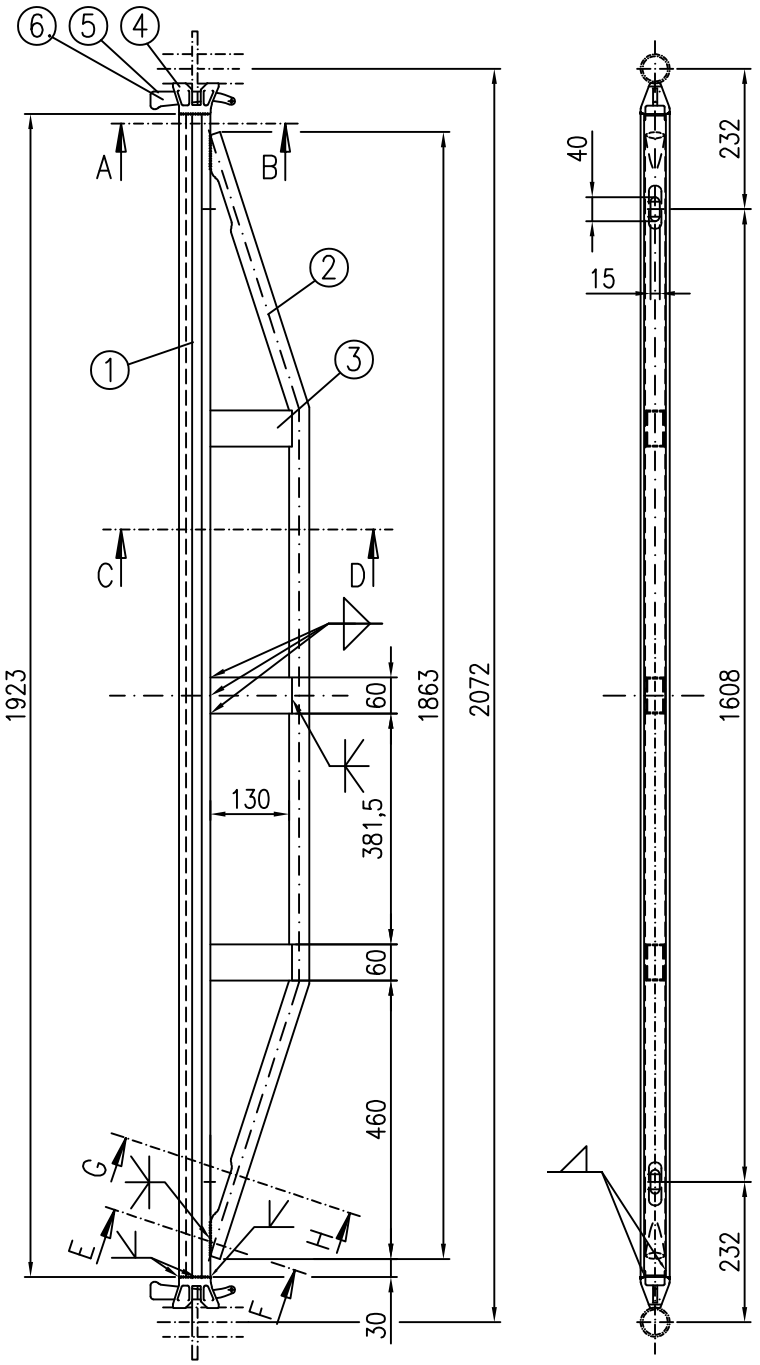
Annex B,
page 34



①	U–profile 48x52x2.5	see Annex B, page 32	
②	Circular hollow section ø33.7x2.6	DIN EN 10219–S235JRH	$R_{eH} \geq 320$ N/mm²
③	Rectangular hollow section 60x30x2	DIN EN 10219–S235JRH	
④	Connection of U–ledger	see Annex B, page 5	
⑤	Wedge 6 mm	see Annex B, page 3	
⑥	Marking	For sectional views, see annex B, page 34	

galvanised; all welding seams a=2.5 mm; all V–seams a=3 mm

Component no longer manufactured
–only for continued use–

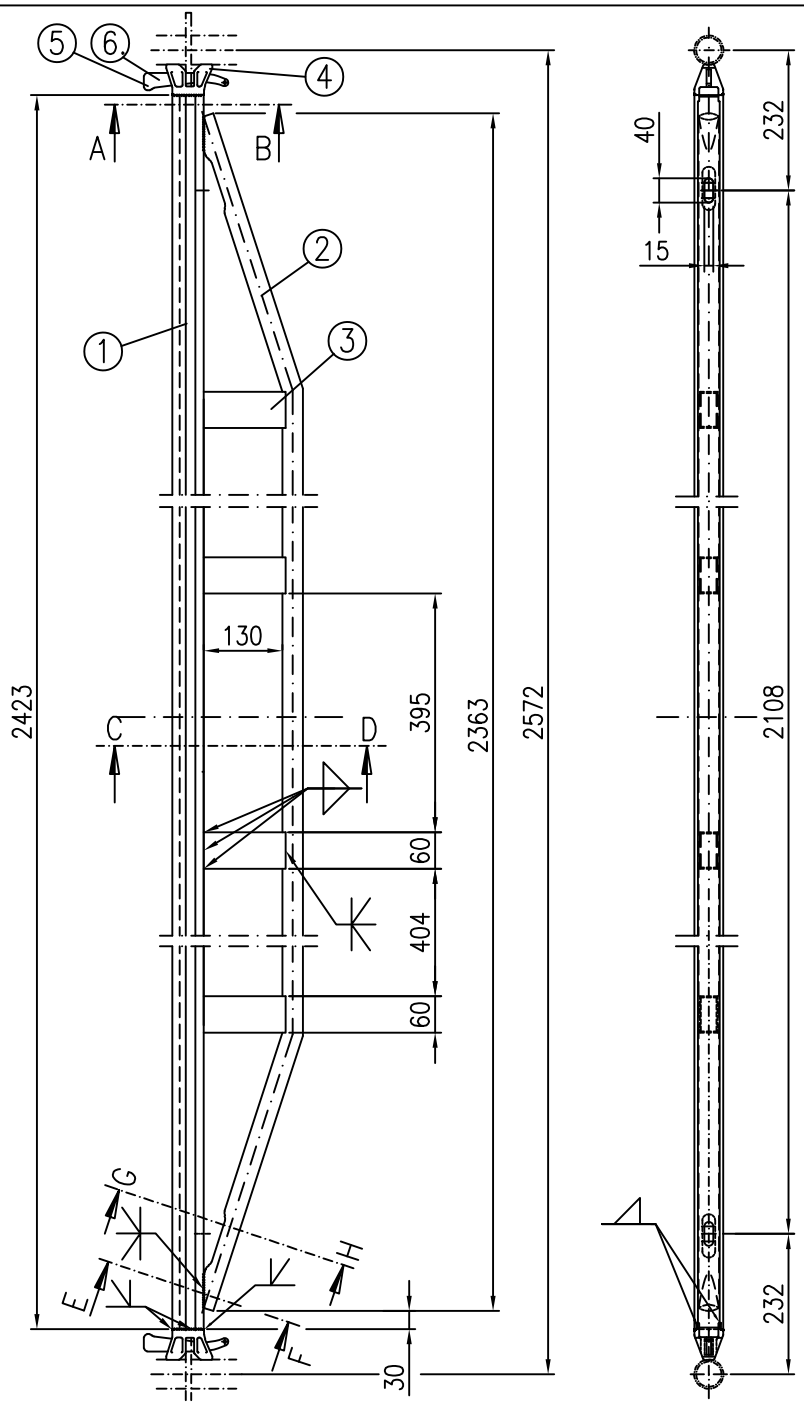
Dimens. [m]	Weight [kg]
2.07	12.4

ALBLITZ MODUL

U–2–deck bearer 2.07 m
in accordance with Z–8.22–906

M710–B153_ABM 05.2021

Annex B,
page 35



① U-profile 48x52x2.5	see Annex B, page 32	
② Circular hollow section ø33.7x2.6	DIN EN 10219-S235JRH	$R_{eH} \geq 320$ N/mm²
③ Rectangular hollow section 60x30x2	DIN EN 10219-S235JRH	
④ Connection of U-ledger	see Annex B, page 5	
⑤ Wedge 6 mm	see Annex B, page 3	
⑥ Marking	For sectional views, see annex B, page 34	

galvanised; all welding seams a=2.5 mm; all V-seams a=3 mm

Component no longer manufactured
-only for continued use-

Dimens. [m]	Weight [kg]
2.57	15.1

ALBLITZ MODUL

U-2-deck bearer 2.57 m
in accordance with Z-8.22-906

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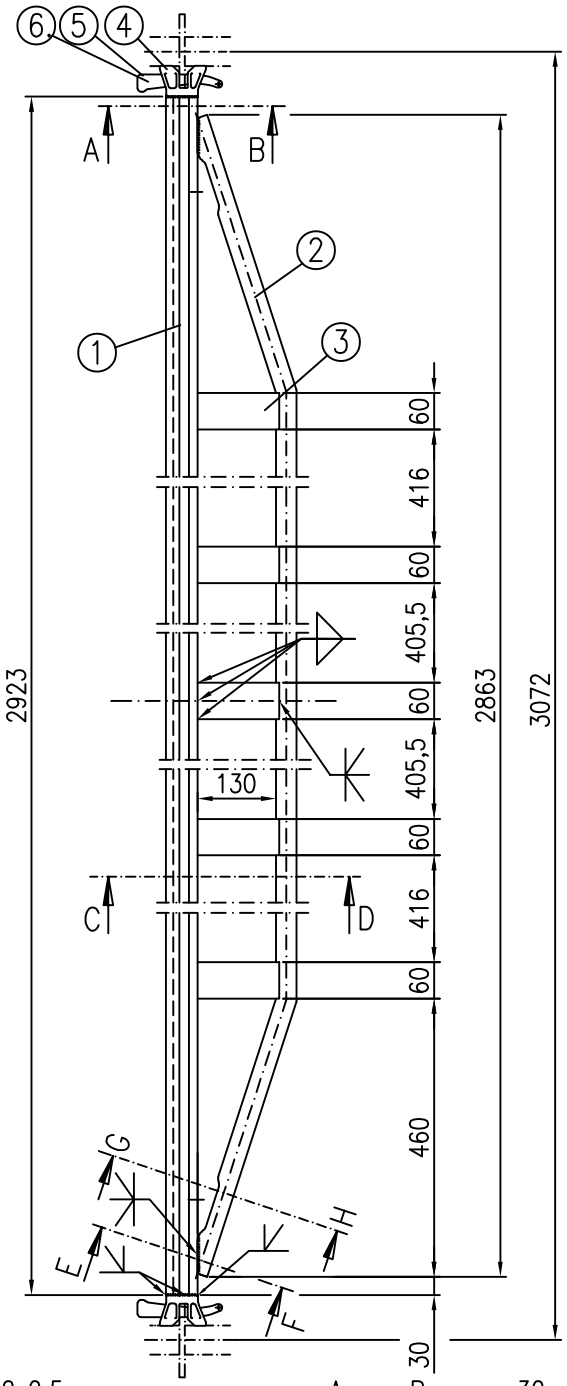
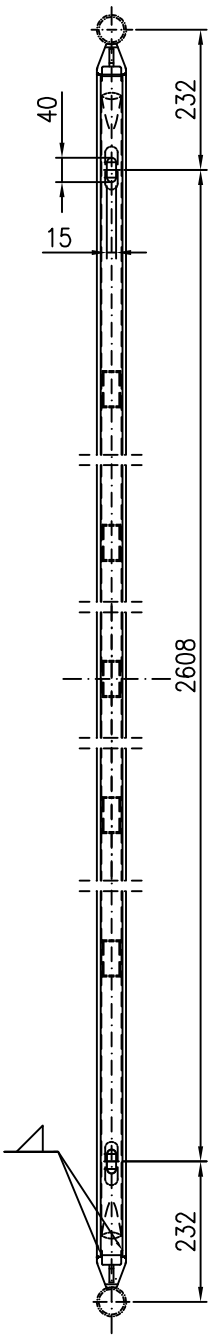
Annex B,
page 36





① U-profile 48x52x2.5	see Annex B, page 32	
② Circular hollow section ø33.7x2.6	DIN EN 10219-S235JRH	$R_{eH} \geq 320$ N/mm²
③ Rectangular hollow section 60x30x2	DIN EN 10219-S235JRH	
④ Connection of U-ledger	see Annex B, page 5	
⑤ Wedge 6 mm	see Annex B, page 3	
⑥ Marking	For sectional views, see annex B, page 34	

galvanised; all welding seams a=2.5 mm; all V-seams a=3 mm

Component no longer manufactured
-only for continued use-

Dimens. [m]	Weight [kg]
3.07	18.1

ALBLITZ MODUL

U-2-deck bearer 3.07 m
in accordance with Z-8.22-906

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Annex B,
page 37

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ALBLITZ MODUL

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Annex B,
page 38

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ALBLITZ MODUL

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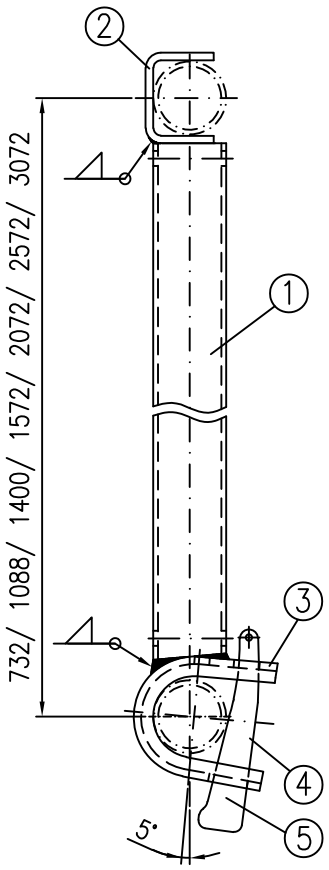
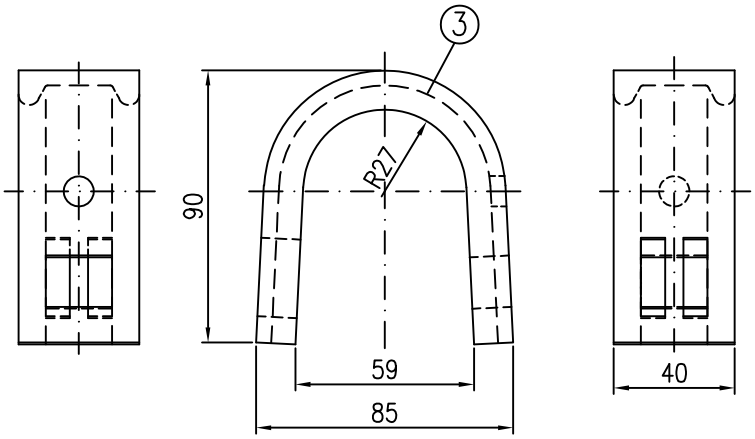
Annex B,
page 39





① Circular hollow section ø48.3x3.2	DIN EN 10219–S235JRH	$R_{eH} \geq 320$ N/mm²
alternatively: Circular hollow section ø48.3x2.7	DIN EN 10219–S460MH	
② Steel plate 50x5	DIN EN 10025–S235JR	
③ Bended profile section 40x13x5x6.5	DIN EN 10025–S235JR	
④ Wedge 6 mm	see Annex B, page 3	
⑤ Marking		
galvanised; all welding seams a=3 mm		

Dimens. [m]	Weight [kg]
0.73	3.4
1.09	4.7
1.40	6.0
1.57	7.8
2.07	9.9
2.57	12.1
3.07	14.6

ALBLITZ MODUL

Support ledger with tube fixture
in accordance with Z–8.22–906

M710–B146_ABM 05.2021

Annex B,
page 40

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ALBLITZ MODUL	
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ALBLITZ MODUL

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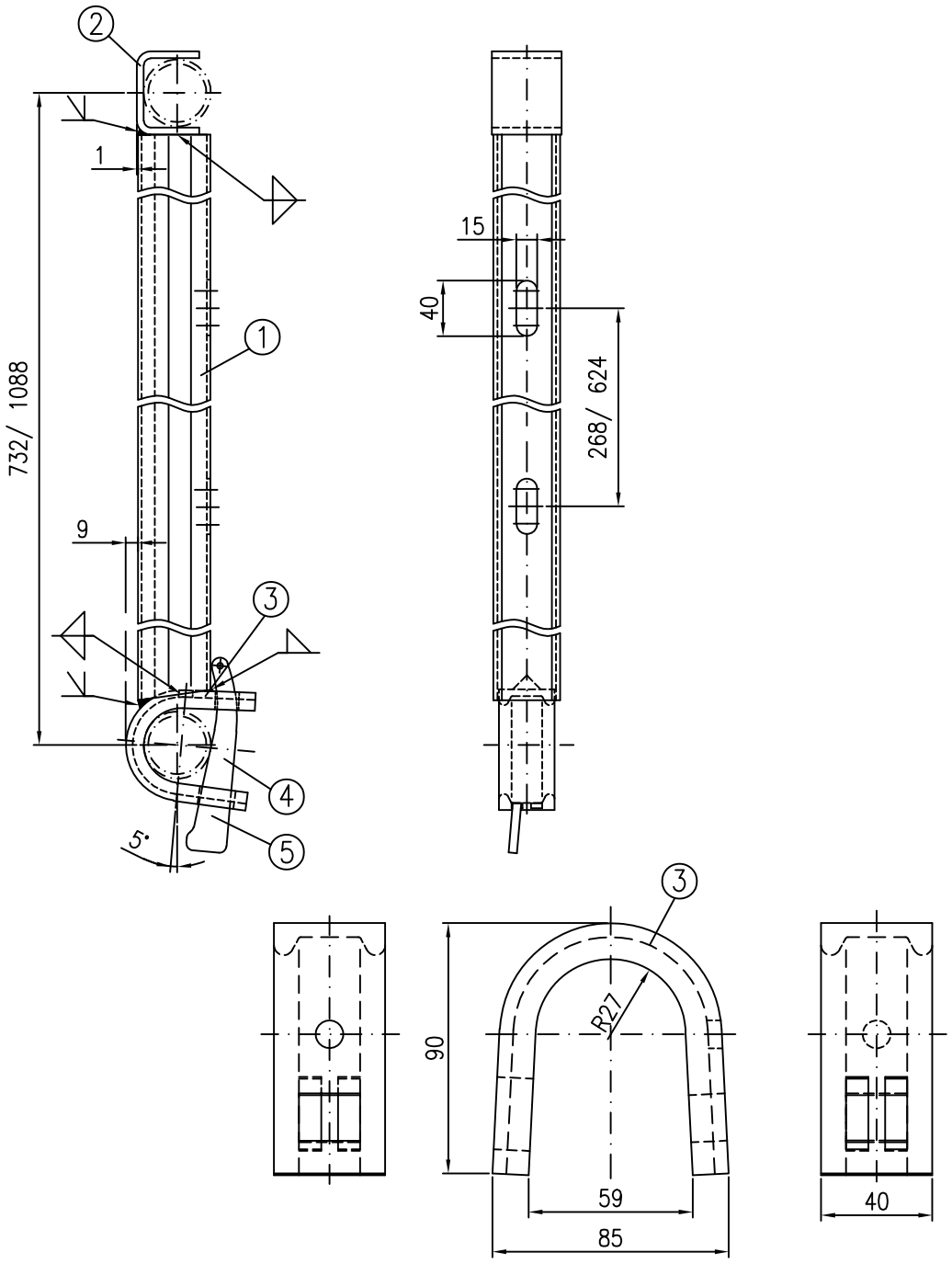
Annex B,
page 42



①	U–profile 48x52x2.5	see Annex B, page 32
②	Steel plate 50x5	DIN EN 10025–S235JR
③	Bended profile section 40x13x5x6.5	DIN EN 10025–S235JR
④	Wedge 6 mm	see Annex B, page 3
⑤	Marking	

galvanised; all welding seams a=3mm

Dimens. [m]	Weight [kg]
0.73	3.0
1.09	4.1

ALBLITZ MODUL

Support ledger
in accordance with Z–8.22–906

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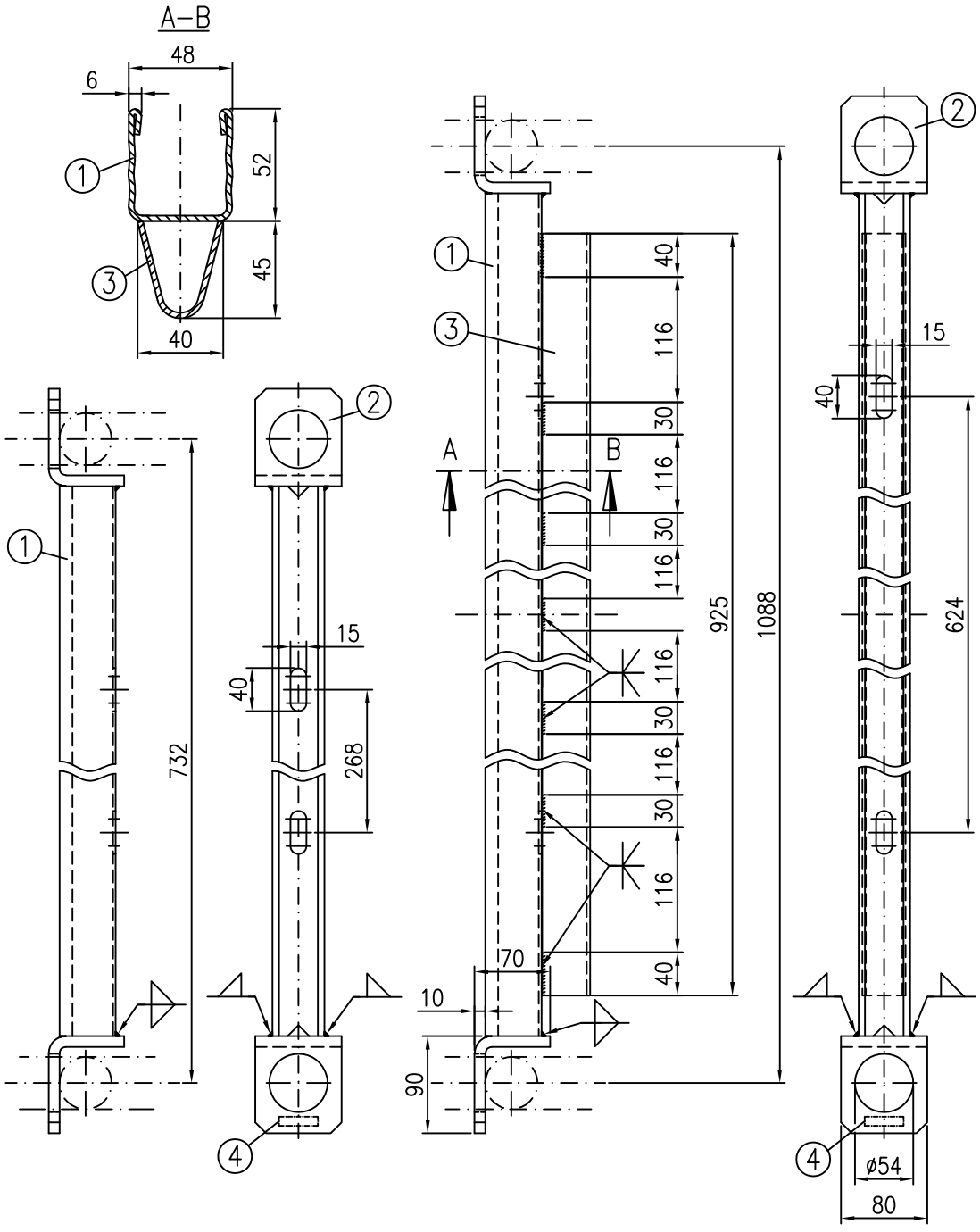
Annex B,
page 43



① U–profile 48x52x2.5 see Annex B, page 32
alternatively: at 1.09 m U–profile 48x52x2.5 without ③ see Annex B, page 127
② Flat 80x10 DIN EN 10025–S235JR
③ Steel metal s=3 mm see Annex B, page 27
④ Marking
galvanised; all welding seams a=3 mm

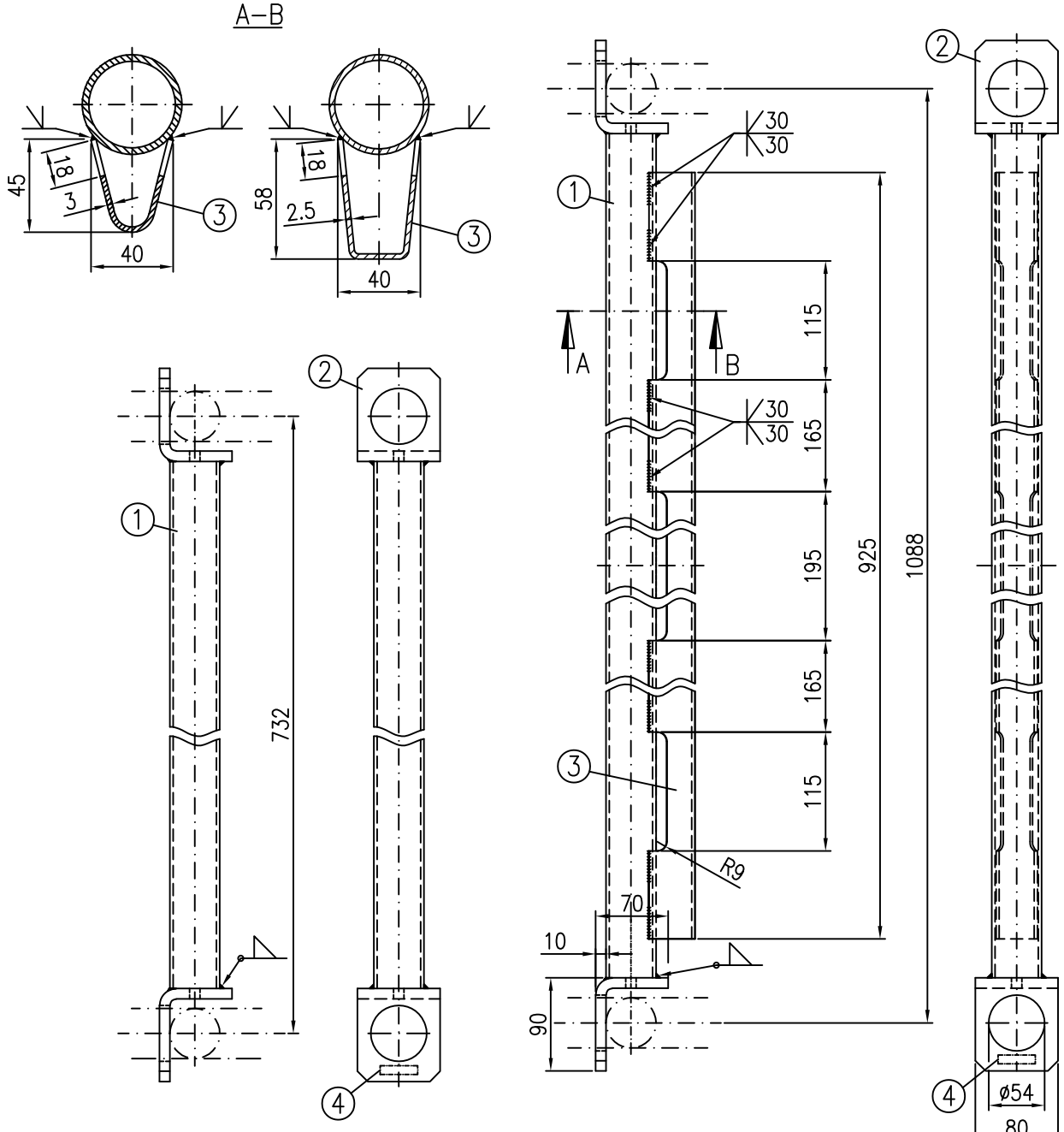
Dimens. [m]	Weight [kg]
0.73	2.2
1.09	3.3

ALBLITZ MODUL

U–transom lattice girder 0.73 m/ 1.09 m V
in accordance with Z–8.22–906

M710–B138_ABM 05.2021

Annex B,
page 44



① Circular hollow section ø48.3x3.2	DIN EN 10219–S235JRH	$R_{eH} \geq 320$ N/mm²
alternatively: Circular hollow section ø48.3x2.7	DIN EN 10219–S460MH	
② Flat 80x10	DIN EN 10025–S235JR	
③ Steel metal s=3 mm	see Annex B, page 27	
alternatively: Steel metal s=2.5 mm	see Annex B, page 144	
④ Marking		
galvanised; all welding seams a=3 mm		

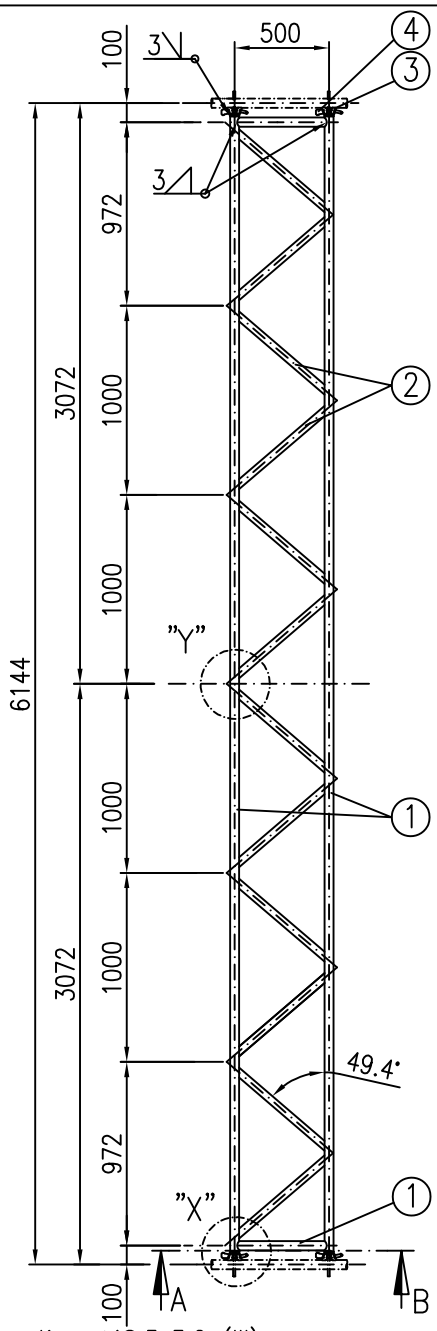
Dimens. [m]	Weight [kg]
0.73	1.6
1.09	3.6

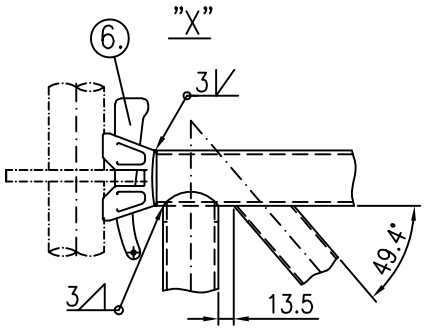
ALBLITZ MODUL

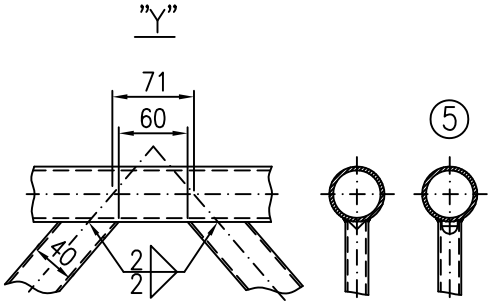
Tube–transom lattice girder 0.73 m/ 1.09 m V
in accordance with Z–8.22–906

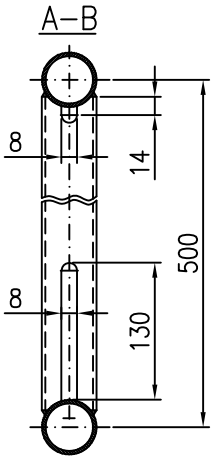
M710–B139_ABM 05.2021

Annex B,
page 45









①	Circular hollow section ø48.3x3.2 (III) alternatively: Circular hollow section ø48.3x2.7 (IV)	DIN EN 10219–S235JRH $R_{eH} \geq 320$ N/mm² DIN EN 10219–S460MH
②	Rectangular hollow section 40x20x2	DIN EN 10219–S235JRH $R_{eH} \geq 320$ N/mm²
③	Connection of tube ledger (I) alternatively: Connection of tube ledger 4.0 (II)	see Annex B, page 4 see Annex B, page 151
④	Wedge 6 mm	see Annex B, page 3
⑤	alternatively	
⑥	Marking galvanised	

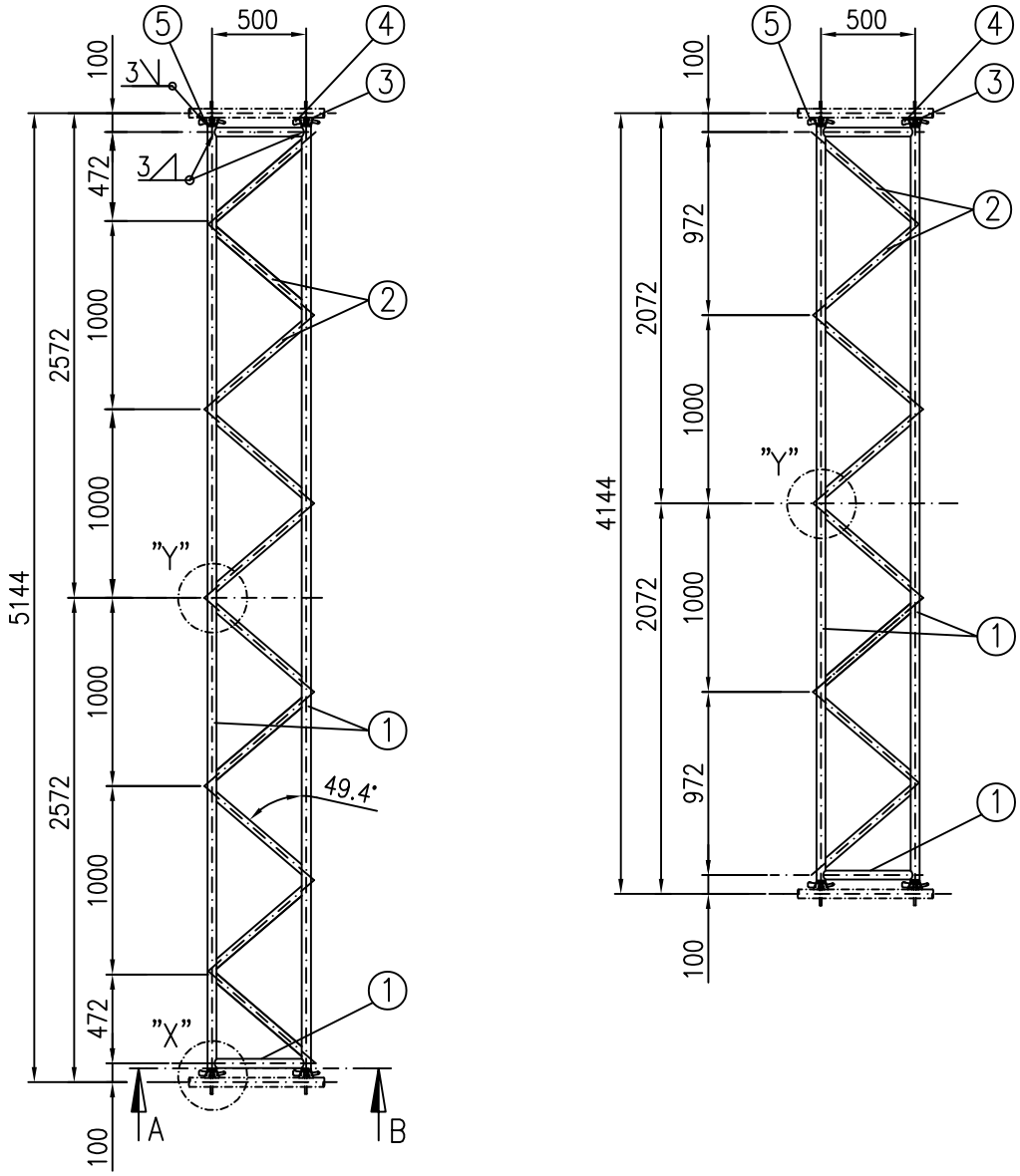
allowed combination			Dimens. [m]	Weight [kg]
	III	IV		
I	x	–	6.14	60.4
II	–	x		

ALBLITZ MODUL

MODUL lattice girder 6.14 m
in accordance with Z–8.22–906

M710–B133_ABM 10.2021

Annex B,
page 46



①	Circular hollow section ø48.3x3.2 (III)	DIN EN 10219–S235JRH $R_{eH} \geq 320$ N/mm²
	alternatively: Circular hollow section ø48.3x2.7 (IV)	DIN EN 10219–S460MH
②	Rectangular hollow section 40x20x2	DIN EN 10219–S235JRH $R_{eH} \geq 320$ N/mm²
③	Connection of tube ledger (I)	see Annex B, page 4
	alternatively: Connection of tube ledger 4.0 (II)	see Annex B, page 151
④	Wedge 6 mm	see Annex B, page 3
⑤	Marking	
	galvanised	

allowed combination			Dimens. [m]	Weight [kg]
	III	IV		
I	x	–	4.14	46.0
II	–	x	5.14	50.0

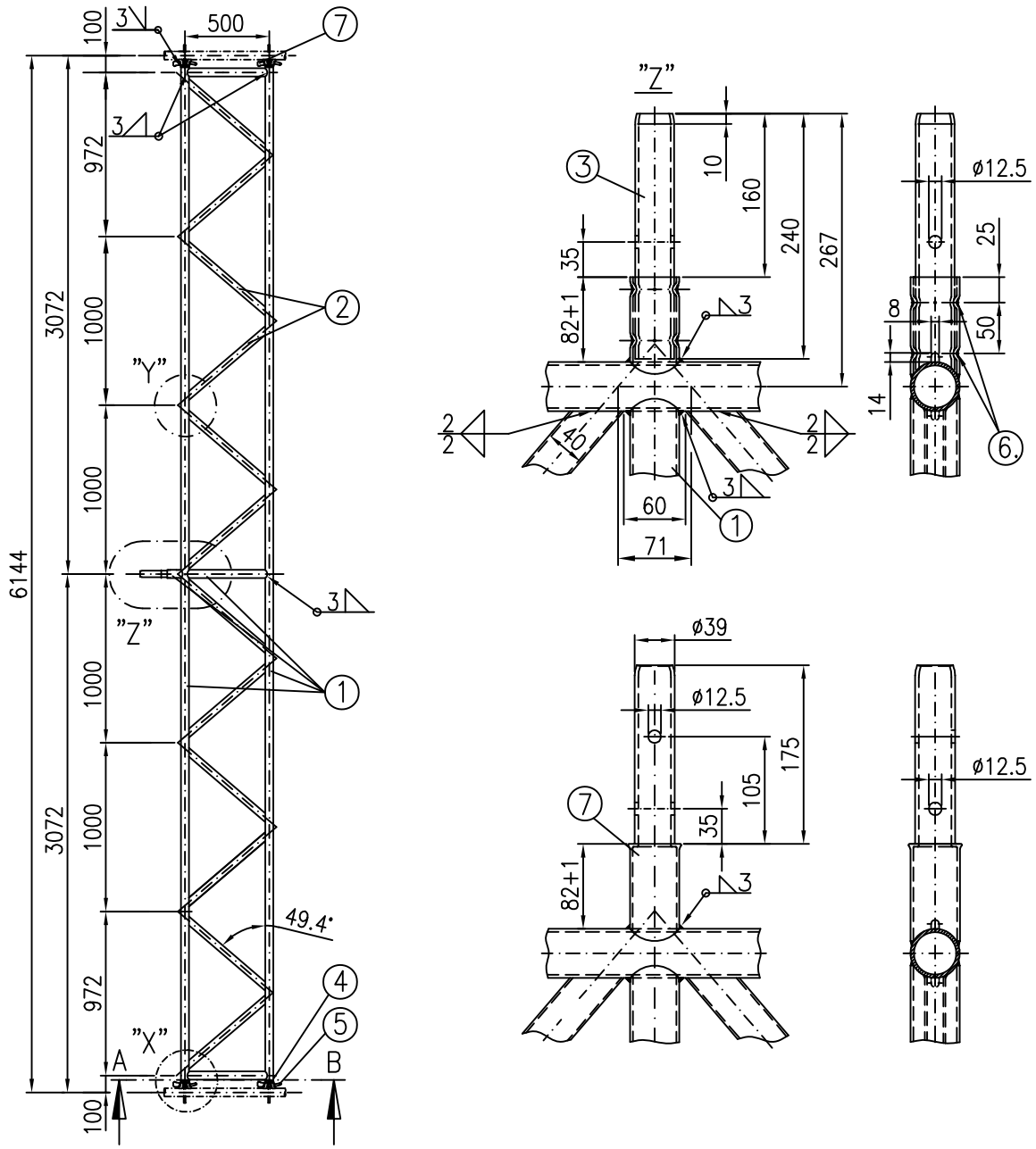
For details, please refer to annex B, page 46

ALBLITZ MODUL

MODUL lattice girder 4.14 m/ 5.14 m
in accordance with Z–8.22–906

M710–B134_ABM 10.2021

Annex B,
page 47



①	Circular hollow section ø48.3x3.2 (III)	DIN EN 10219–S235JRH $R_{eH} \geq 320$ N/mm²
	alternatively: Circular hollow section ø48.3x2.7 (IV)	DIN EN 10219–S460MH
②	Rectangular hollow section 40x20x2	DIN EN 10219–S235JRH $R_{eH} \geq 320$ N/mm²
③	Circular hollow section ø38x3.6	DIN EN 10219–S235JRH $R_{eH} \geq 320$ N/mm²
④	Connection of tube ledger (I)	see Annex B, page 4
	alternatively: Connection of tube ledger 4.0 (II)	see Annex B, page 151
⑤	Wedge 6 mm	see Annex B, page 3
⑥	4 point–joint pressed connections	
⑦	alternatively: Circular hollow section ø48.3x2.7 without galvanised	③ DIN EN 10219–S460MH

For details see annex B, page 46

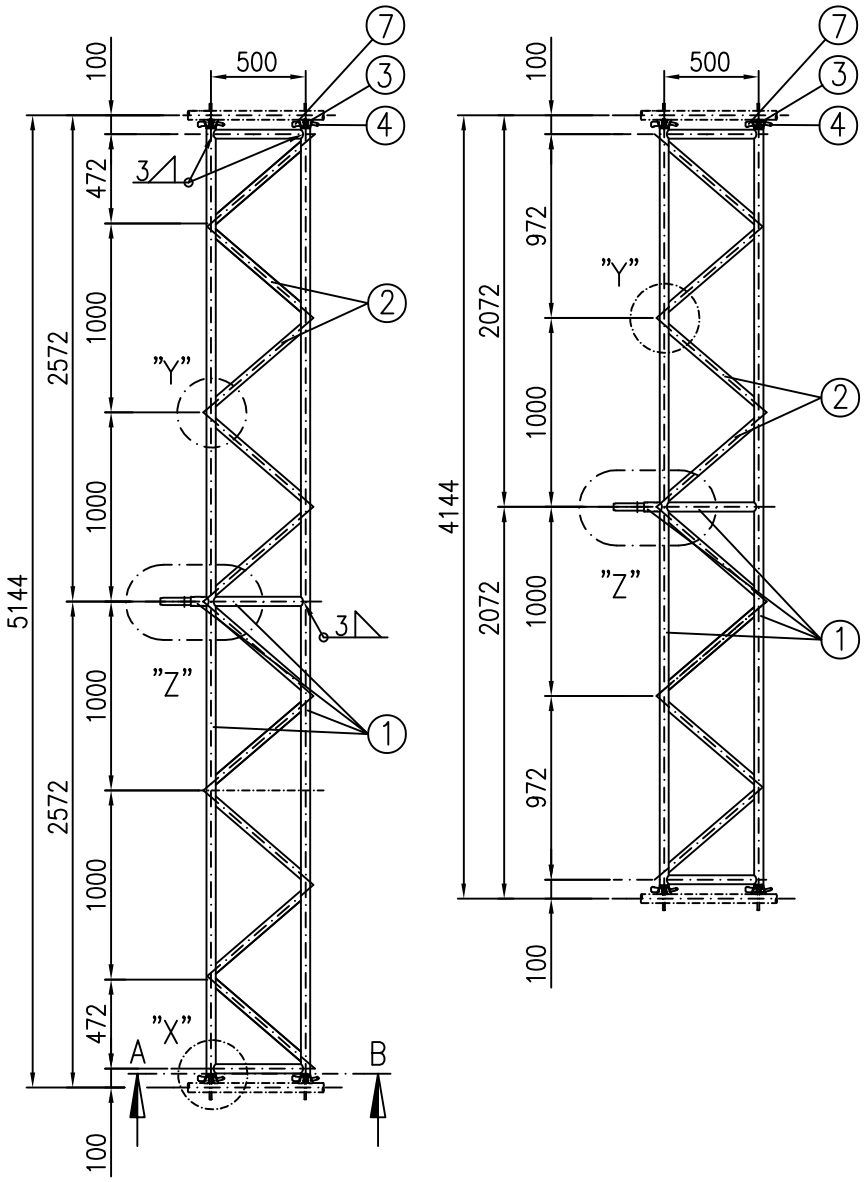
allowed combination			Dimens. [m]	Weight [kg]
	III	IV		
I	x	–	6.14	61.4
II	–	x		

ALBLITZ MODUL

MODUL lattice girder with tube fixture 6.14 m
in accordance with Z–8.22–906

M710–B135_ABM 10.2023

Annex B, page 48



① Circular hollow section ø48.3x3.2 (III)	DIN EN 10219–S235JRH	$R_{eH} \geq 320 N/mm^2$
alternatively: Circular hollow section ø48.3x2.7 (IV)	DIN EN 10219–S460MH	
② Rectangular hollow section 40x20x2	DIN EN 10219–S235JRH	$R_{eH} \geq 320 N/mm^2$
③ Circular hollow section ø38x3.6	DIN EN 10219–S235JRH	$R_{eH} \geq 320 N/mm^2$
④ Connection of tube ledger (I)	see Annex B, page 4	
alternatively: Connection of tube ledger 4.0 (II)	see Annex B, page 151	
⑤ Wedge 6 mm	see Annex B, page 3	
⑥ 4 point–joint pressed connections		
⑦ Marking		
galvanised	For details see annex B, pages 46 and 48	

allowed combination		
	III	IV
I	x	–
II	–	x

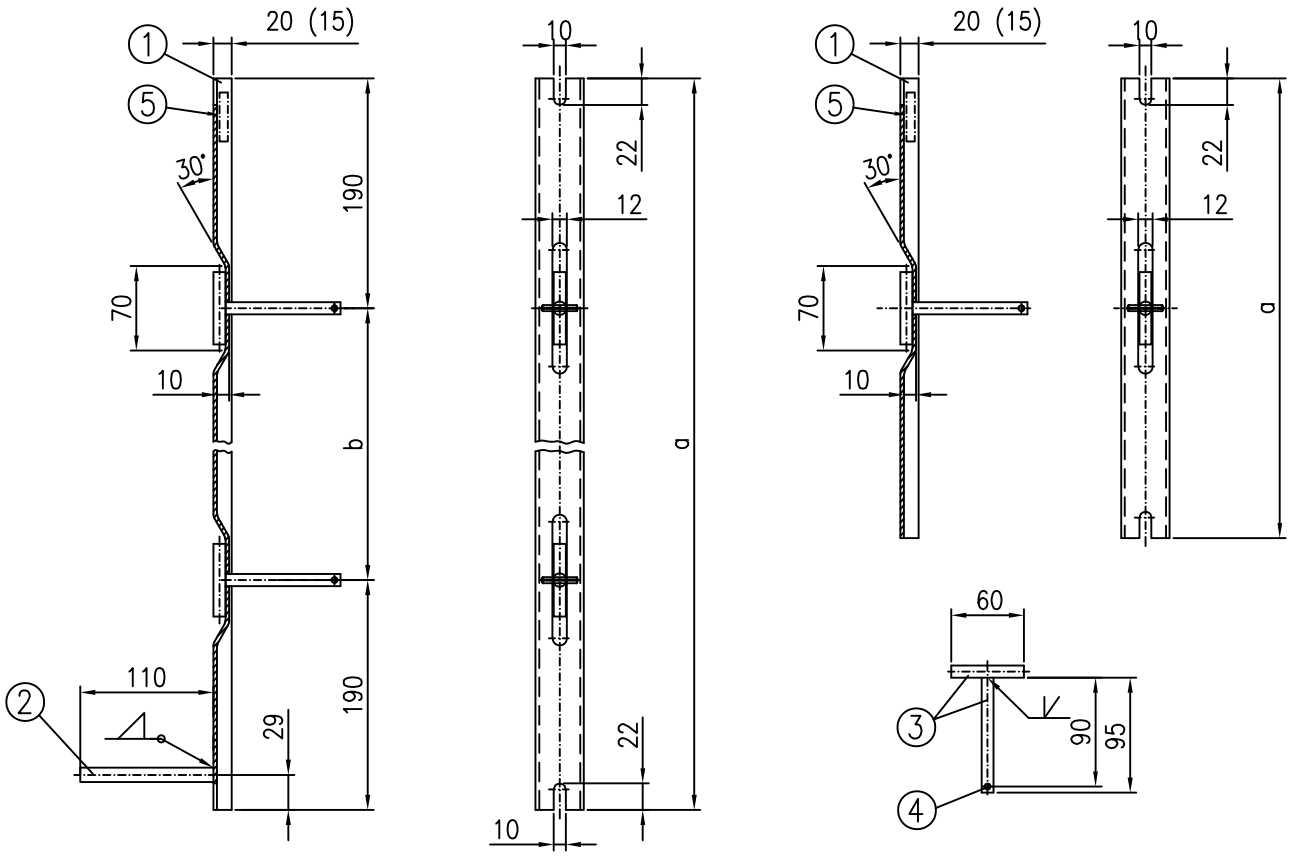
Dimens. [m]	Weight [kg]
4.14	47.0
5.14	51,0

ALBLITZ MODUL

MODUL lattice girder with tube fixture 4.14 m/ 5.14 m
in accordance with Z–8.22–906

M710–B136_ABM 10.2021

Annex B,
page 49



⑥	a (mm)	b (mm)	⑦ (kg)
390	306	–	0.7
450	366	–	0.8
732	648	268	1.4
1036	952	572	1.8
1088	1004	624	1.9
1286	1202	822	2.2
1400	1316	936	2.5
1572	1488	1108	2.9
2072	1988	1608	3.9
2572	2488	2108	4.8
3072	2988	2608	5.4

① U–profile 20 (15)x40x15x3 DIN EN 10025–S235JR
② Round ø12 (alternatively for toeboard ALFIX) DIN EN 10025–S235JR
③ Round ø10 DIN EN 10025–S235JR
④ Grooved cylindrical pin DIN EN ISO 8740–5x30–steel–galvanised
⑤ Marking
⑥ Length L (mm)

galvanised

ALBLITZ MODUL

MODUL lift–off preventer
in accordance with Z–8.22–906

M710–B130_ABM 05.2021

Annex B,
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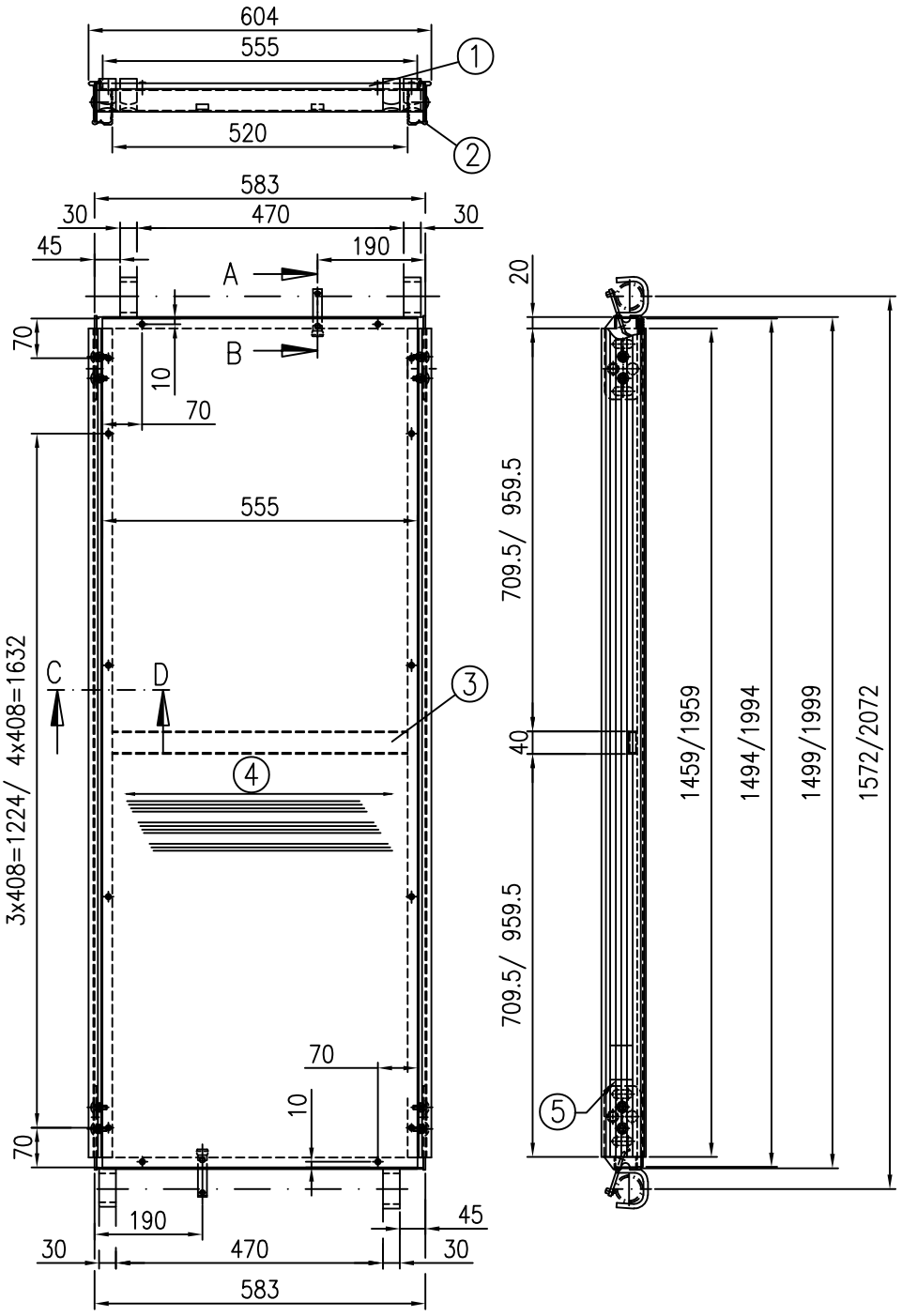


① Plywood 10x555	Plywood for use in scaffolding with national technical approval	
② Rail profile 78x42	DIN EN 755-2 EN AW-6063-T66	
③ Rectangular hollow section 40x15x2	DIN EN 755-2 EN AW-6063-T66	
④ Grain direction		
⑤ Marking	131-MIG: Type 4 (EC9) filler material	

all welding seams a=2 mm Sectional views and details see annex B, page 53 Load class 3

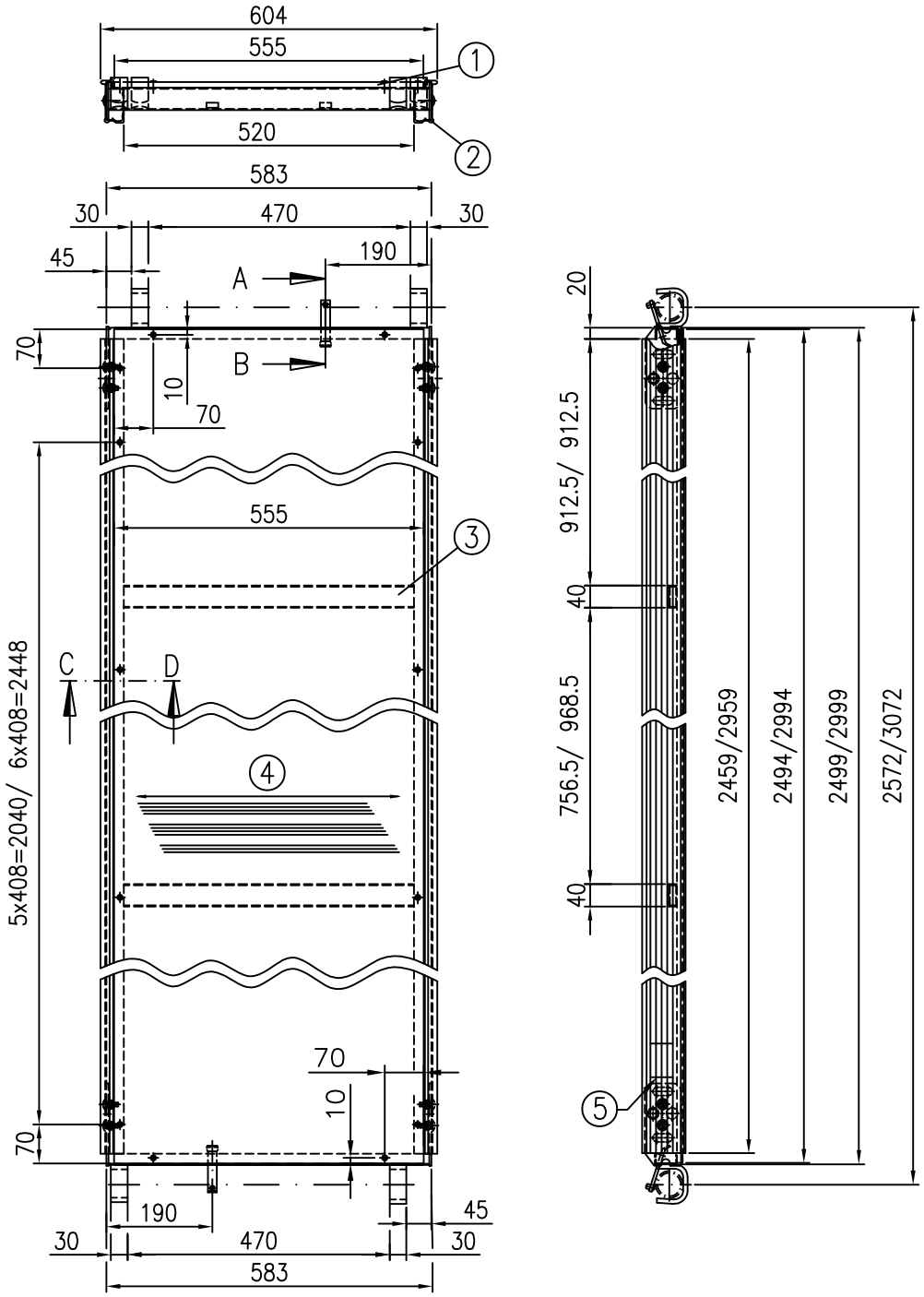
Dimension [m]	Weight [kg]
1.57x0.60	13.3
2.07x0.60	16.3

ALBLITZ MODUL

Aluminium frame platform with tube fixture 1.57 m; 2.07 m
in accordance with Z-8.22-906

M710-B117_ABM 05.2021

Annex B,
page 51



① Plywood 10x555	Plywood for use in scaffolding with national technical approval	
② Rail profile 78x42	DIN EN 755-2 EN AW-6063-T66	
③ Rectangular hollow section 40x15x2	DIN EN 755-2 EN AW-6063-T66	
④ Grain direction		
⑤ Marking	131-MIG: Type 4 (EC9) filler material	

all welding seams a=2 mm Sectional views and details see annex B, page 53 Load class 3

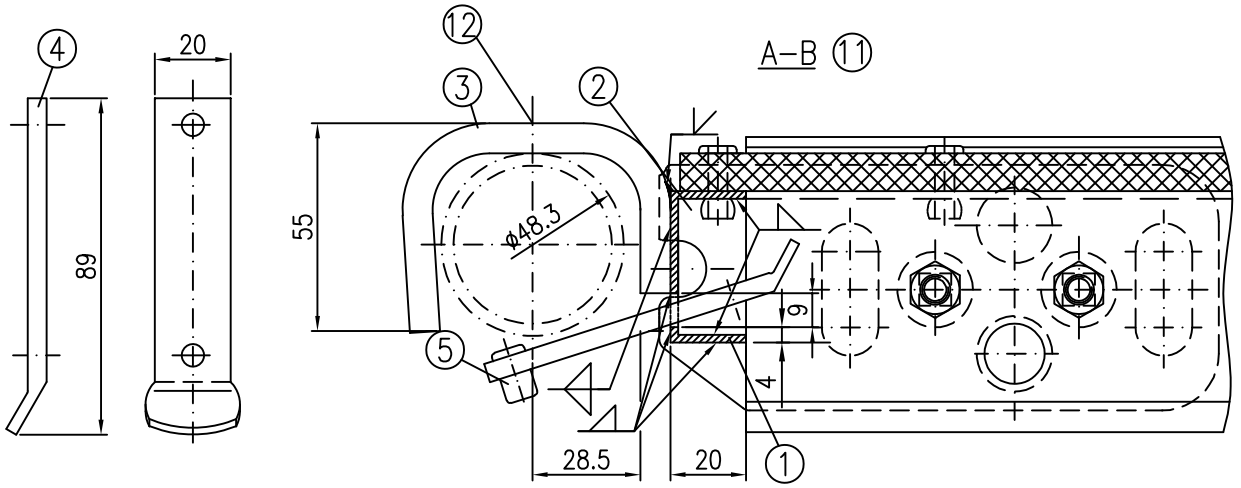
Dimension [m]	Weight [kg]
2.57x0.60	19.4
3.07x0.60	22.5

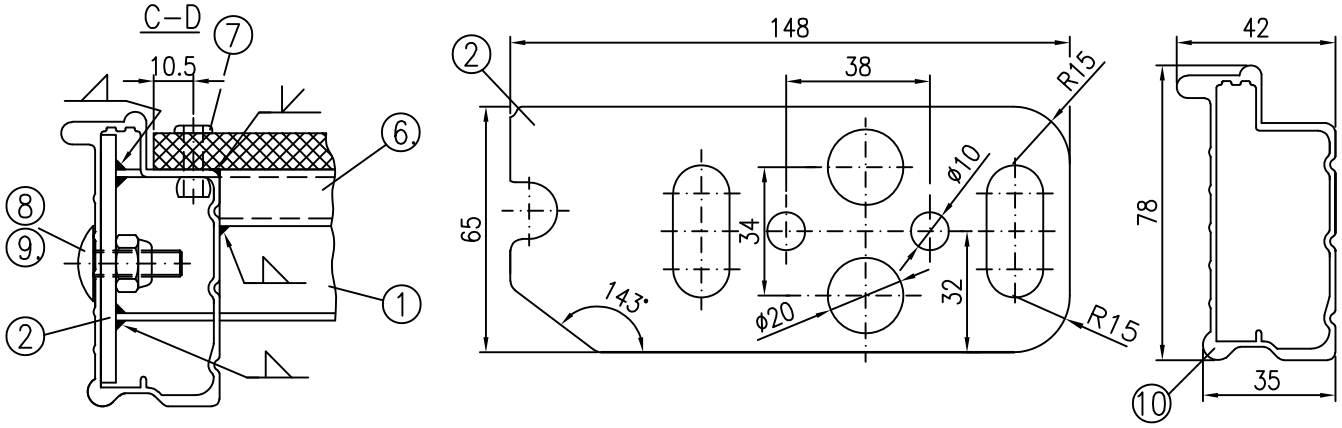
ALBLITZ MODUL

Aluminium frame platform with tube fixture 2.57 m; 3.07 m
in accordance with Z-8.22-906

M710-B118_ABM 05.2021

Annex B,
Seite 52





(1)	U–profile 40x20x2	DIN EN 10025–S235JR
(2)	Suspension lug steel metal 4x65x148	DIN EN 10025–S235JR
(3)	Steel plate 30x8	DIN EN 10025–S355J2 alternatively: DIN EN 10149–S355MC
(4)	Lift–off prevention tube fixture flat 20x5	DIN EN 10025–S235JR hot–dip galvanised
(5)	Blind rivet ø4.8x16/ 5x16	DIN EN ISO 15979 EN AW–5754 H112
(6)	Rectangular hollow section 40x15x2	DIN EN 755–2 EN AW–6063–T66
(7)	Blind rivet ø5x20	DIN EN ISO 15979 EN AW–5754 H112
(8)	Round–head screw	DIN 603–M8x20–8.8–galvanised
(9)	Hexagon nut, self–locking	DIN EN ISO 10511–M8–8–galvanised
(10)	Rail profile 78x42	DIN EN 755–2 EN AW–6063–T66
(11)	Head piece, hot–dip galvanised	
(12)	Marking	

ALBLITZ MODUL

Detailed view of aluminium frame platform with tube fixture
in accordance with Z–8.22–906

M710–B119_ABM 05.2021

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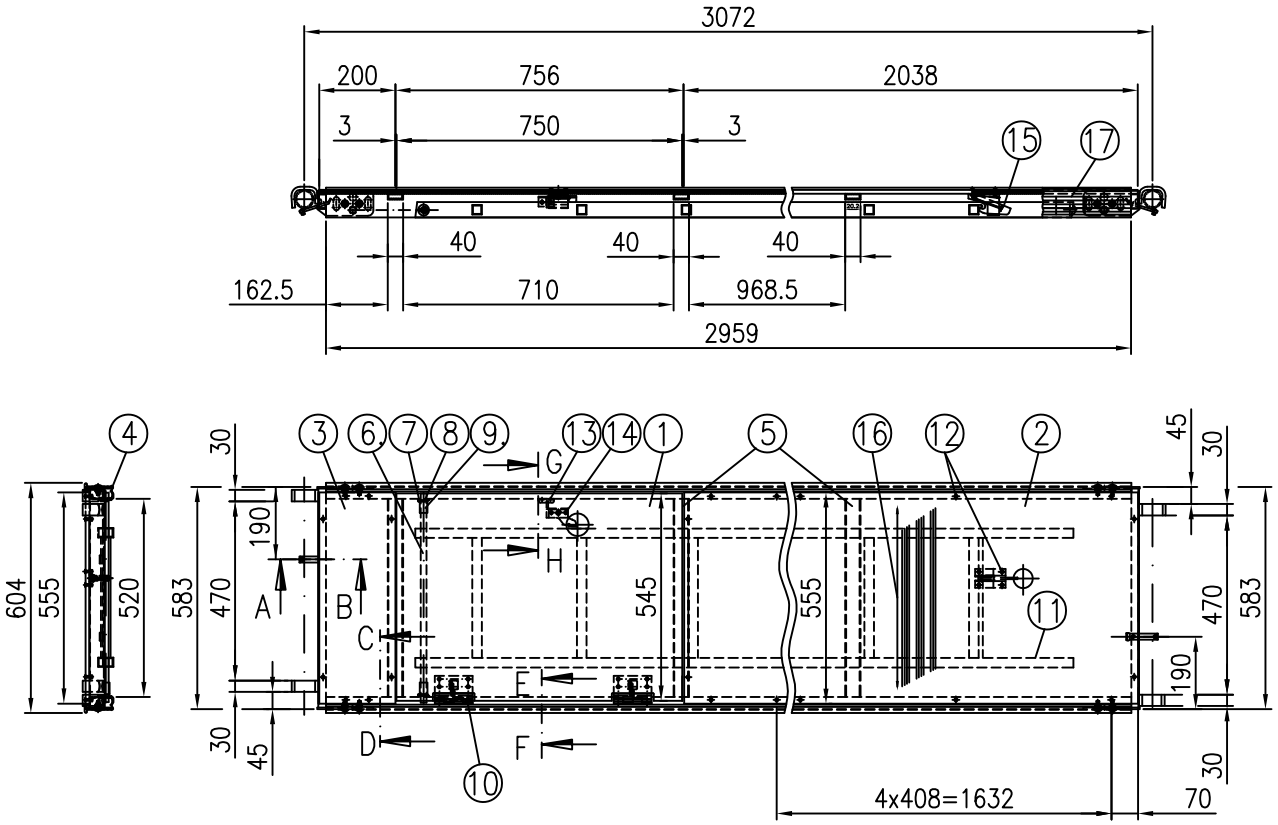
page 53



① Plywood 10x545	Plywood for use in scaffolding with national technical approval	
② Plywood 10x555	Plywood for use in scaffolding with national technical approval	
③ Plywood 10x555	Plywood for use in scaffolding with national technical approval	
④ Rail profile 78x42	DIN EN 755-2	EN AW-6063-T66
⑤ Rectangular hollow section 40x15x2	DIN EN 755-2	EN AW-6063-T66
⑥ Circular hollow section ø15x2	DIN EN 10219	S235JRH
alternatively:	DIN EN 10296-2	1.4301
⑦ Disc	DIN EN ISO 7089-A 17-steel-galvanised	
⑧ Split pin	DIN EN ISO 1234-4x25-steel-galvanised	
⑨ Spacer sleeve circular hollow section ø20x2/ ø20x1.9	PEHD	
⑩ Hinge with lever mechanism to prevent unintentional closing	DIN EN 10025	S235JR; electrogalvanized
⑪ Ladder	see Annex B, page 60	
⑫ Blind rivet ø5x20	DIN EN ISO 15979	EN AW-5754 H112
⑬ Blind rivet ø4.8x10/ ø5x10	DIN EN ISO 15979	EN AW-5754 H112
⑭ Blind rivet ø4.8x16/ ø5x18	DIN EN ISO 15979	EN AW-5754 H112
⑮ Ladder bracket	DIN EN 10025	S235JR; electrogalvanized
⑯ Grain direction		
⑰ Marking	131-MIG: Type 4 (EC9) filler material	

For details see annex B, pages 53 and 56 Load class 3

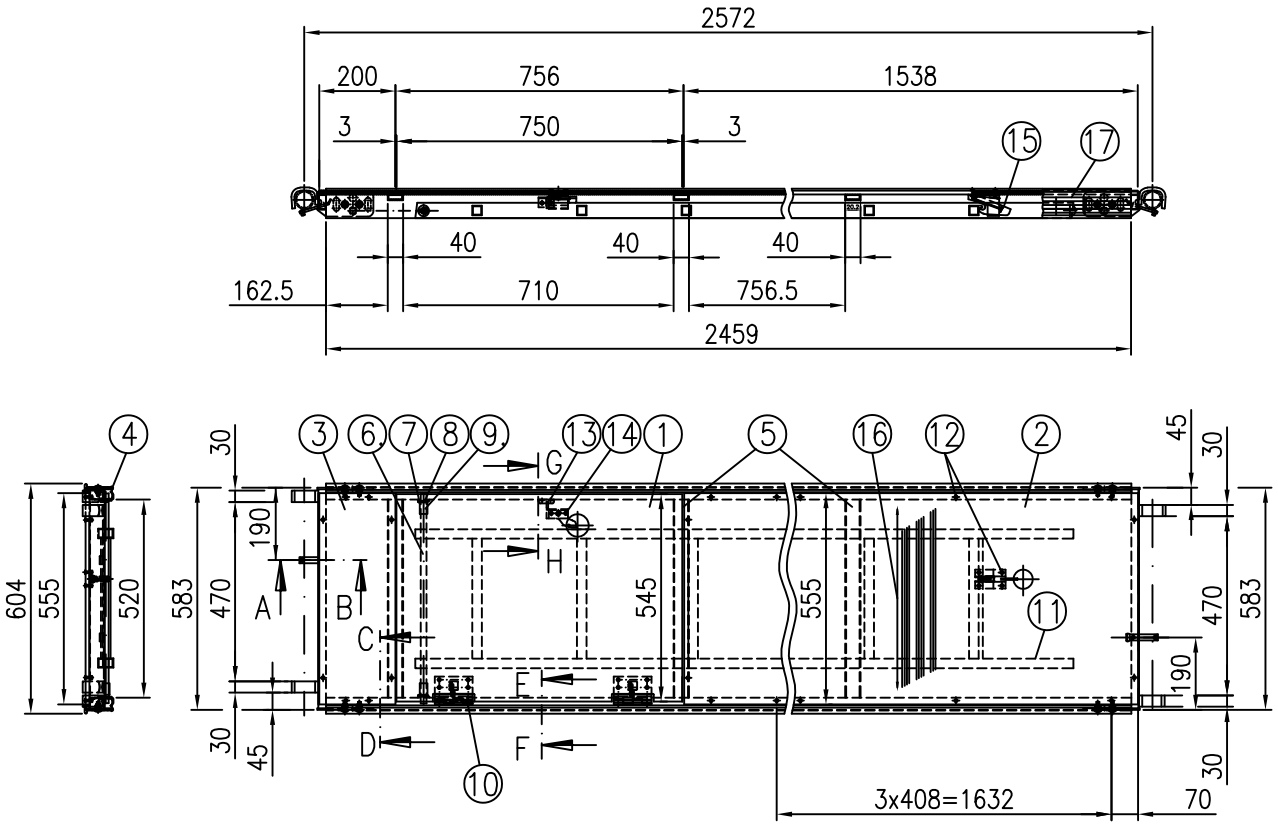
Dimension [m]	Weight [kg]
3.07x0.60	31.5

ALBLITZ MODUL

Aluminium access frame platform with tube fixture 3.07 m
in accordance with Z-8.22-906

M710-B120_ABM 05.2021

Annex B,
page 54



①	Plywood 10x545	Plywood for use in scaffolding with national technical approval
②	Plywood 10x555	Plywood for use in scaffolding with national technical approval
③	Plywood 10x555	Plywood for use in scaffolding with national technical approval
④	Rail profile 78x42	DIN EN 755-2 EN AW-6063-T66
⑤	Rectangular hollow section 40x15x2	DIN EN 755-2 EN AW-6063-T66
⑥	Circular hollow section ø15x2	DIN EN 10219 S235JRH
	alternatively:	DIN EN 10296-2 1.4301
⑦	Disc ø17	DIN EN ISO 7089-steel-galvanised
⑧	Split pin ø4x25	DIN EN ISO 1234-steel-galvanised
⑨	Spacer sleeve circular hollow section ø20x2/ ø20x1.9	PEHD
⑩	Hinge with lever mechanism to prevent unintentional closing	DIN EN 10025-S235JR-electrogalvanized
⑪	Ladder	see Annex B, page 60
⑫	Blind rivet ø5x20	DIN EN ISO 15979 EN AW-5754 H112
⑬	Blind rivet ø4.8x10/ ø5x10	DIN EN ISO 15979 EN AW-5754 H112
⑭	Blind rivet ø4.8x16/ ø5x18	DIN EN ISO 15979 EN AW-5754 H112
⑮	Ladder bracket	DIN EN 10025-S235JR-electrogalvanized
⑯	Grain direction	
⑰	Marking	131-MIG: Type 4 (EC9) filler material

Dimension [m]	Weight [kg]
2.57x0.60	28.5

For details see annex B, pages 53 and 56 Load class 3

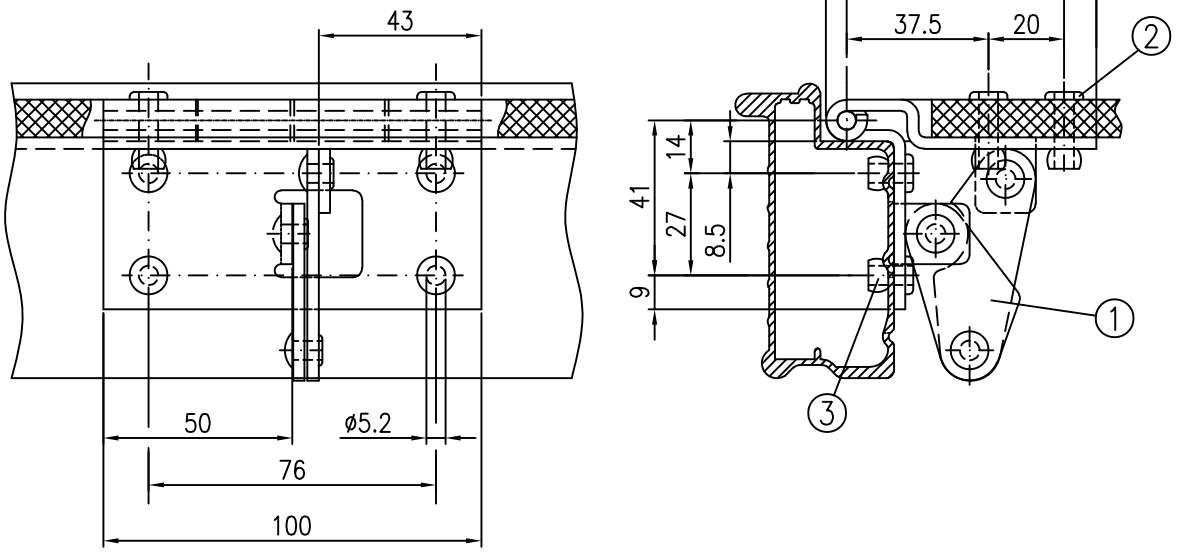
ALBLITZ MODUL

Aluminium access frame platform with tube fixture 2.57 m
in accordance with Z-8.22-906

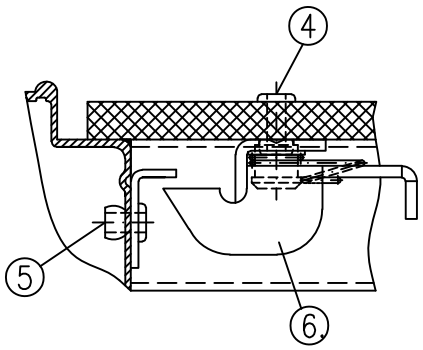
M710-B121_ABM 05.2021

Annex B,
page 55

E–F



G–H



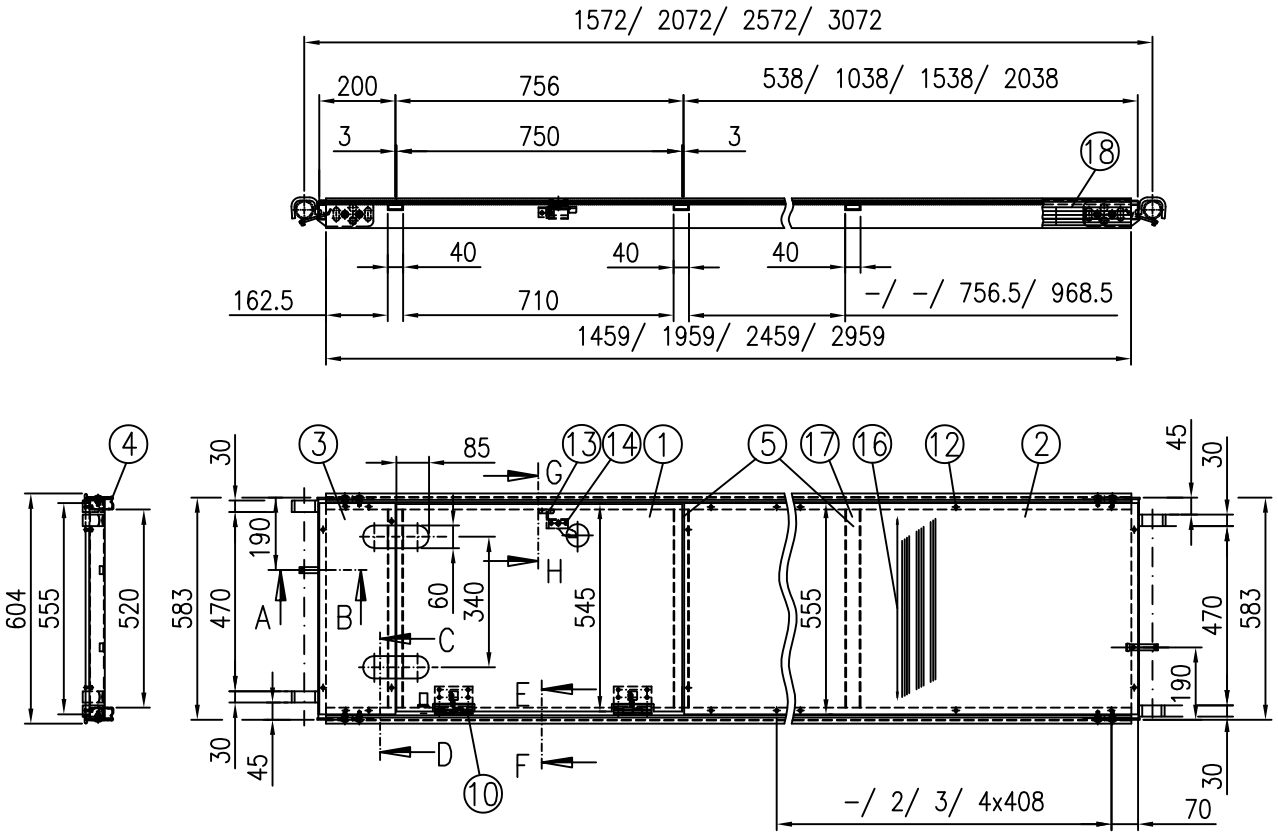
① Hinge with lever mechanism to prevent unintentional closing	DIN EN 10025–S235JR–electrogalvanized
② Blind rivet ø5x20	DIN EN ISO 15979 EN AW–5754 H112
③ Blind rivet ø5x12	DIN EN ISO 15979 EN AW–5754 H112
④ Blind rivet ø4.8x16/ø5x18	DIN EN ISO 15979 EN AW–5754 H112
⑤ Blind rivet ø4.8x10/ø5x10	DIN EN ISO 15979 EN AW–5754 H112
⑥ Ledger	DIN EN 10025–S235JR–electrogalvanized

ALBLITZ MODUL

Detailed view of aluminium access frame platform with tube fixture in accordance with Z–8.22–906

M710–B122_ABM 05.2021

Annex B, page 56



①	Plywood 10x545	Plywood for use in scaffolding with national technical approval
②	Plywood 10x555	Plywood for use in scaffolding with national technical approval
③	Plywood 10x555	Plywood for use in scaffolding with national technical approval
④	Rail profile 78x42	DIN EN 755-2 EN AW-6063-T66
⑤	Rectangular hollow section 40x15x2	DIN EN 755-2 EN AW-6063-T66
⑥	not applicable	
⑦	not applicable	
⑧	not applicable	
⑨	not applicable	
⑩	Hinge with lever mechanism to prevent unintentional closing	DIN EN 10025-S235JR-electrogalvanized
⑪	not applicable	
⑫	Blind rivet ø5x20	DIN EN ISO 15979 EN AW-5754 H112
⑬	Blind rivet ø4.8x10/ ø5x10	DIN EN ISO 15979 EN AW-5754 H112
⑭	Blind rivet ø4.8x16/ ø5x18	DIN EN ISO 15979 EN AW-5754 H112
⑮	not applicable	
⑯	Grain direction	
⑰	not applicable for 1.57 m and 2.07 m	
⑱	Marking	131-MIG: Type 4 (EC9) filler material

For details see Annex B, pages 53 and 56 Load class 3

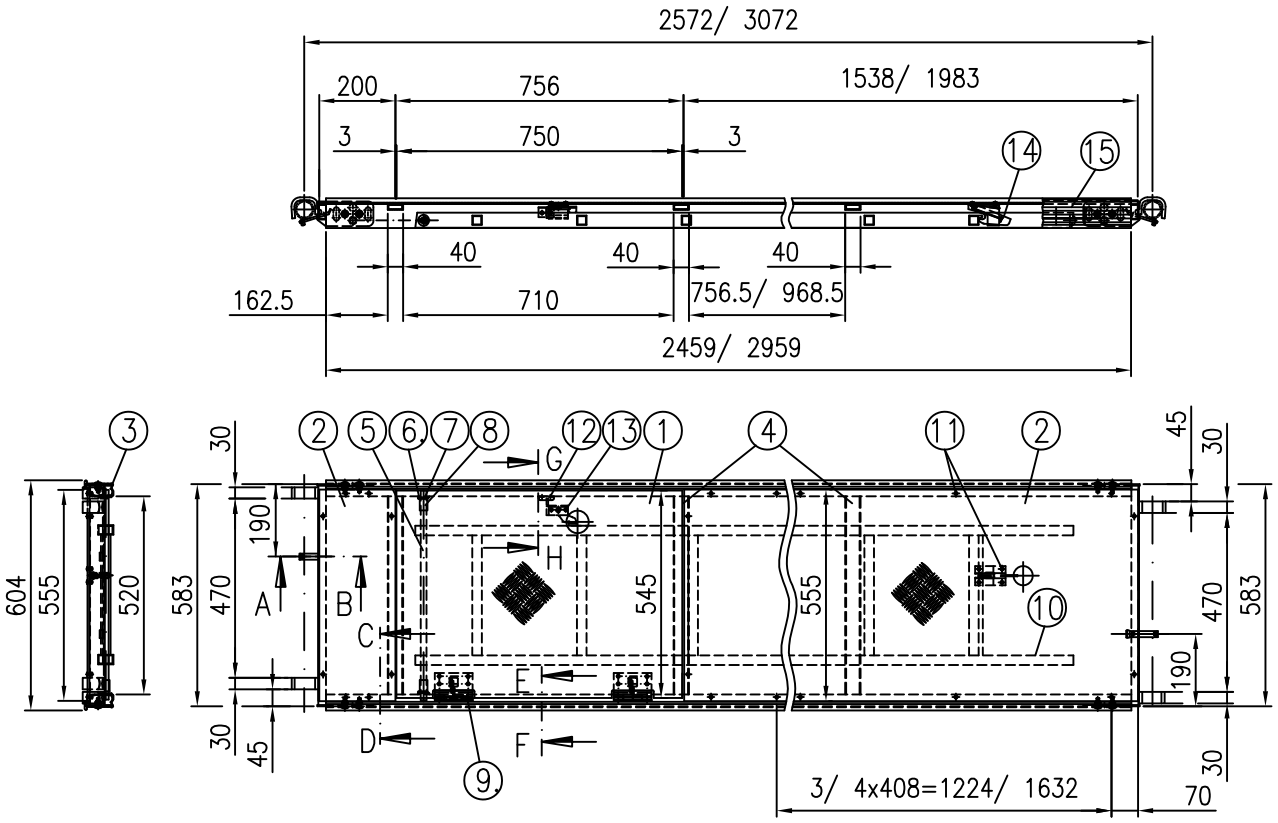
Dimension [m]	Weight [kg]
1.57x0.60	16.2
2.07x0.60	19.0
2.57x0.60	25.0
3.07x0.60	28.0

ALBLITZ MODUL

Aluminium access frame platform with tube fixture 1.57 m-3.07 m without ladder in accordance with Z-8.22-906

M716-B215_ABM 05.2021

Annex B, page 57



①	Chequer plate with 5 bar pattern t=3/4.5	DIN EN 1386	EN AW–5083 H114
	alternatively:	DIN EN 1386	EN AW–5083 H224
②	Chequer plate with 5 bar pattern t=3/4.5	DIN EN 1386	EN AW–5083
	alternatively:	DIN EN 1386	EN AW–5083
③	Holmprofil 78x42	DIN EN 755–2	EN AW–6063–T66
④	Rectangular hollow section 40x15x2	DIN EN 755–2	EN AW–6063–T66
⑤	Circular hollow section ø15x2	DIN EN 10219	S235JRH
	alternatively:	DIN EN 10296–2	1.4301
⑥	Disc ø17	DIN EN ISO 7089–steel–galvanised	
⑦	Split pin ø4x25	DIN EN ISO 1234–steel–galvanised	
⑧	Spacer sleeve circular hollow section ø20x2/ ø20x1.9	PEHD	
⑨	Hinge with lever mechanism to prevent unintentional closing	DIN EN 10025–S235JR–electrogalvanized	
⑩	Ladder	see Annex B, page 60	
⑪	Blind rivet ø5x12	DIN EN ISO 15979	EN AW–5754 H112
⑫	Blind rivet ø4.8x10/ ø5x10	DIN EN ISO 15979	EN AW–5754 H112
⑬	Blind rivet ø4.8x16/ ø5x12	DIN EN ISO 15979	EN AW–5754 H112
⑭	Ladder bracket	DIN EN 10025–S235JR–electrogalvanized	
⑮	Marking	131–MIG: Type 4 (EC9) filler material	

Dimension [m]	Weight [kg]
2.57x0.60	29.0
3.07x0.60	32.0

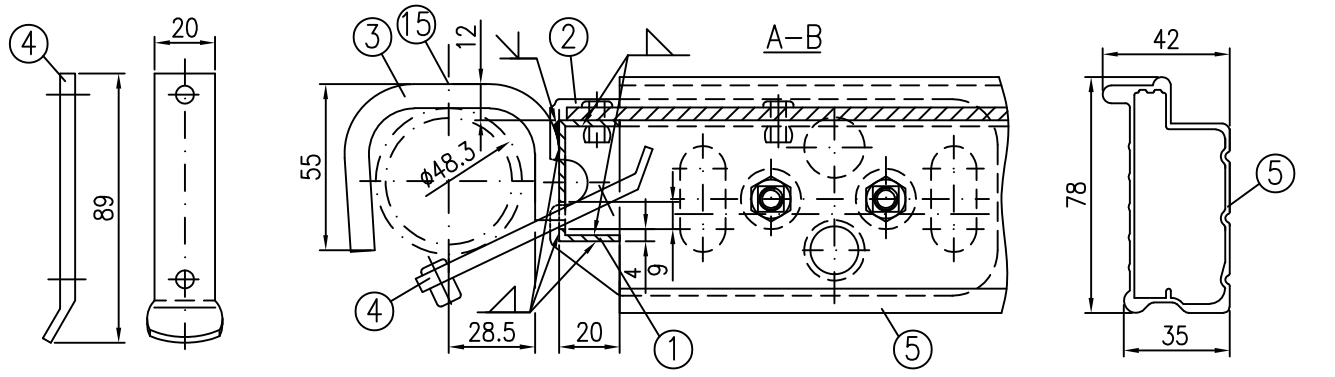
Sectional views and details see annex B, page 59 Load class 3

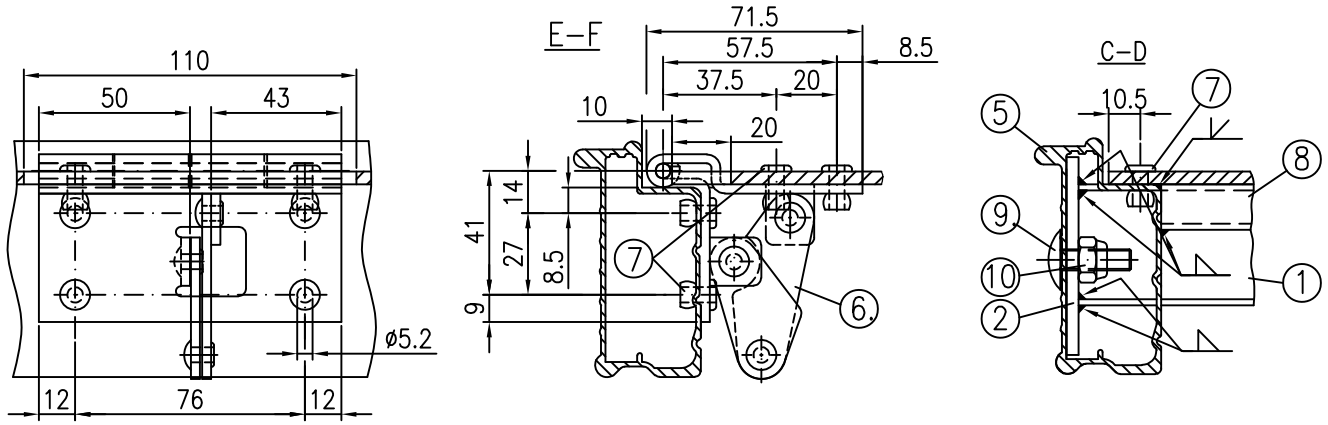
ALBLITZ MODUL

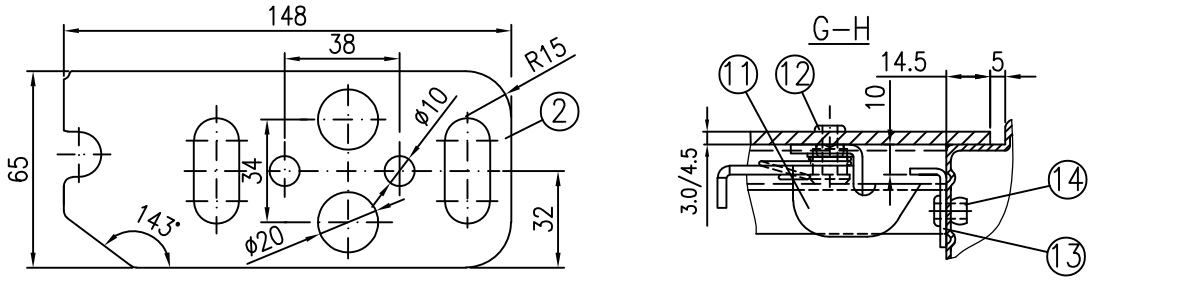
Aluminium access frame platform with tube fixture 2.57 m; 3.07 m with aluminium chequer plate
in accordance with Z–8.22–906

M716–B216_ABM 05.2021

Annex B, page 58







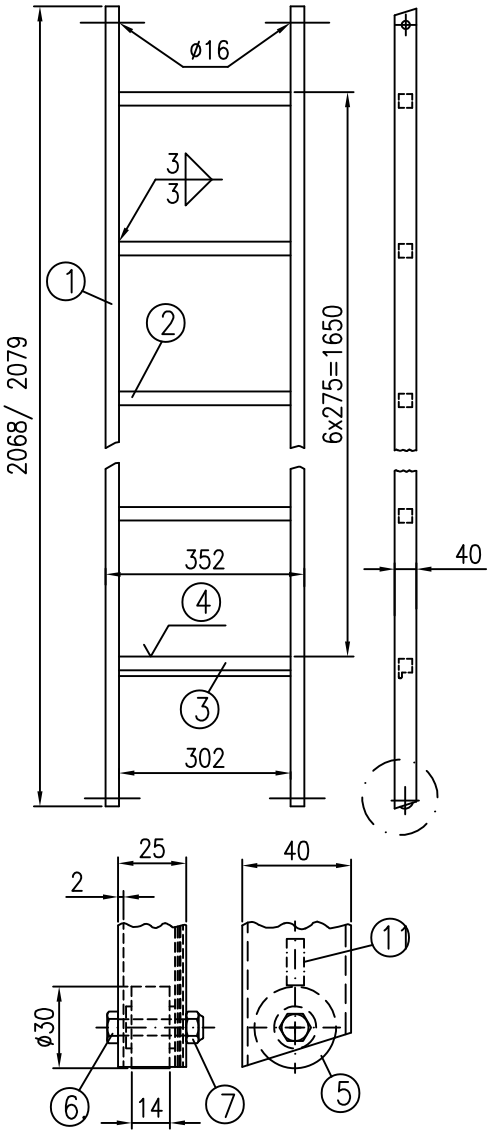
①	U–profile 40x20x2	DIN EN 10025–S235JR	
②	Suspension lug steel metal 4x65x148	DIN EN 10025–S235JRH	
③	Steel plate 30x8	DIN EN 10025–S355J2	alternatively: DIN EN 10149–S355MC
④	Lift–off prevention tube fixture flat 20x5	DIN EN 10025–S235JR	hot–dip galvanised
⑤	Rail profile 78x42	DIN EN 755–2	EN AW–6063–T66
⑥	Hinge with lever mechanism to prevent unintentional closing		DIN EN 10025–S235JR–electrogalvanized
⑦	Blind rivet ø5x12	DIN EN ISO 15979	EN AW–5754 H112
⑧	Rectangular hollow section 40x15x2	DIN EN 755–2	EN AW–6063–T66
⑨	Round–head screw	DIN 603–M8x20–8.8–galvanised	
⑩	Hexagon nut, self–locking	DIN EN ISO 10511–M8–8–galvanised	
⑪	Ledger	DIN EN 10025–S235JR–electrogalvanized	
⑫	Blind rivet ø4.8x16 /ø5x12	DIN EN ISO 15979	EN AW–5754 H112
⑬	Locking lug steel plate 40x2	DIN EN ISO 10088–2	1.4301
⑭	Blind rivet ø4.8x10/ ø5x10	DIN EN ISO 15979	EN AW–5754 H112
⑮	Marking		

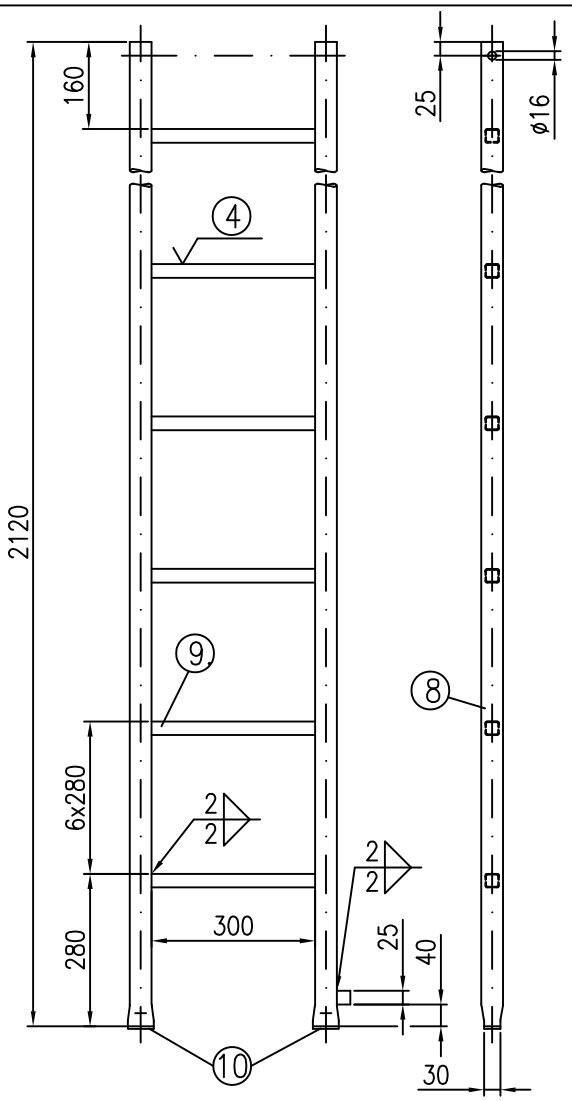
ALBLITZ MODUL

Sectional views and details of aluminium access frame platform with tube fixture with aluminium chequer plate in accordance with Z–8.22–906

M716–A217_ABM 05.2021

Annex B, page 59





Discontinued design
– only for continued use –

①	Rail profile 25x40x2	DIN EN 755–2 EN AW–6063–T66
②	Rung section 25x25x1.5	DIN EN 755–2 EN AW–6063–T66
③	Locking rung section 25x25x1.5	DIN EN 755–2 EN AW–6063–T66
④	Ribbed profile	
⑤	Rolled steel plate round ø30x18	130PA/030/011/1/6
⑥	Hexagon bolt	DIN EN ISO 4014–M6x30–8.8–galvanised
⑦	Hexagon nut, self–locking	DIN EN ISO 10511–M6–8–galvanised
⑧	Circular hollow section ø40x2	AlMgSi1F28
⑨	Rung section	AlMgSi1F28
⑩	Tube end cap PVC	
⑪	Marking	

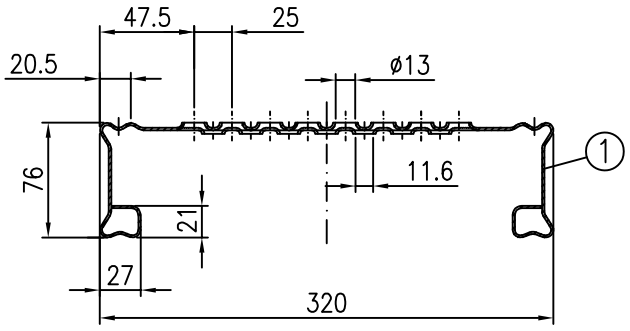
Dimens. [m]	Weight [kg]
2.00	3.5

ALBLITZ MODUL

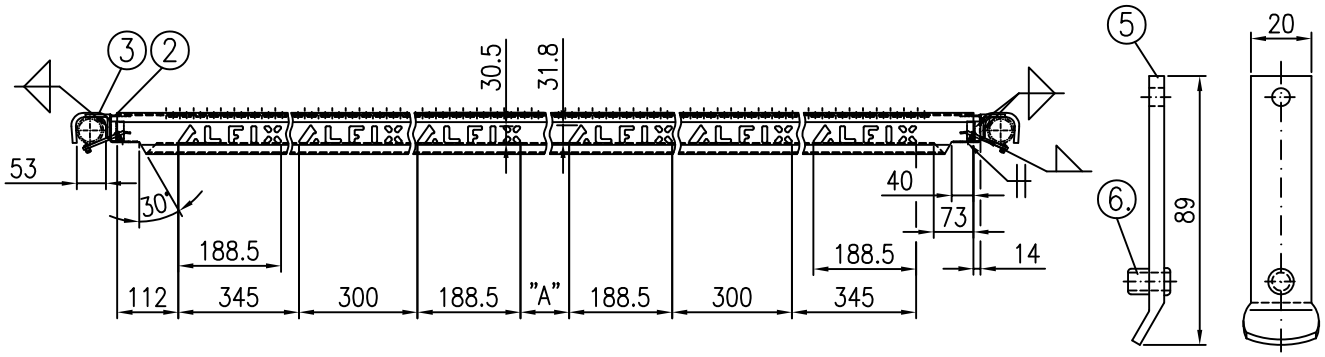
Internal ladder
in accordance with Z–8.1–862

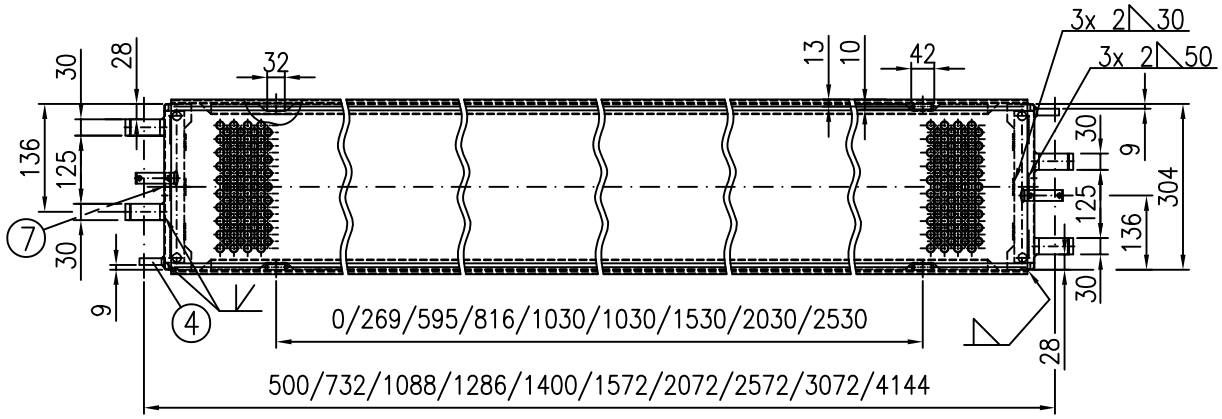
A709–A115_ABM 06.2023

Annex B,
page 60



Bay length [mm]	Number of logos [left/right]	Dimension "A" [mm]	Load class	Weight [kg]
500	1/–	–	6	5.0
732	1/1	36	6	6.1
1088	1/1	392	6	8.6
1286	1/1	590	6	9.7
1400	1/1	704	6	10.5
1572	1/1	876	6	11.9
2072	2/2	686	6	14.2
2572	2/2	1186	5	17.6
3072	3/3	1086	4	20.9
4144	3/3	2203	3	27.8





①	Steel plate 1.5 mm	DIN EN 10111–DD11 (DD12)	$R_{eH} \geq 280$ N/mm² $R_m \geq 360$ N/mm²
	alternatively:	DIN EN 10025–2 S235JR	$R_{eH} \geq 280$ N/mm² $R_m \geq 360$ N/mm²
②	Steel plate 2 mm	DIN EN 10111–DD11	$R_{eH} \geq 240$ N/mm² $R_m \geq 360$ N/mm²
③	Steel plate 30x8	DIN EN 10025–S355J2	alternatively: DIN EN 10149–S355MC
④	Angle 45x45x5	DIN EN 10025–S235JR	
⑤	Flat 20x5	DIN EN 10025–S235JR hot–dip galvanised	
⑥	Blind rivet ø4.8x16	DIN EN ISO 15979–aluminium/steel	
⑦	Marking		

galvanised; all welding seams a=2 mm

ALBLITZ MODUL

Steel deck AF with tube fixture 0.32 m
in accordance with Z–8.22–906

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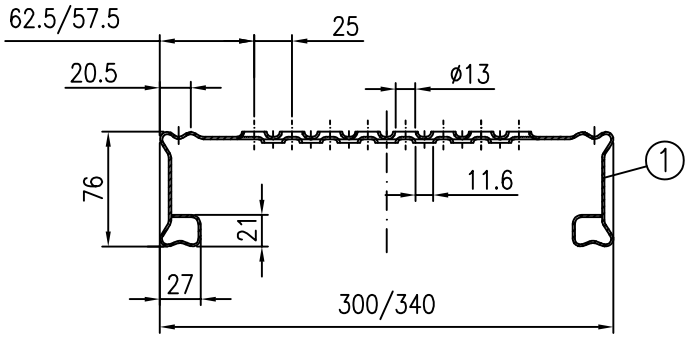
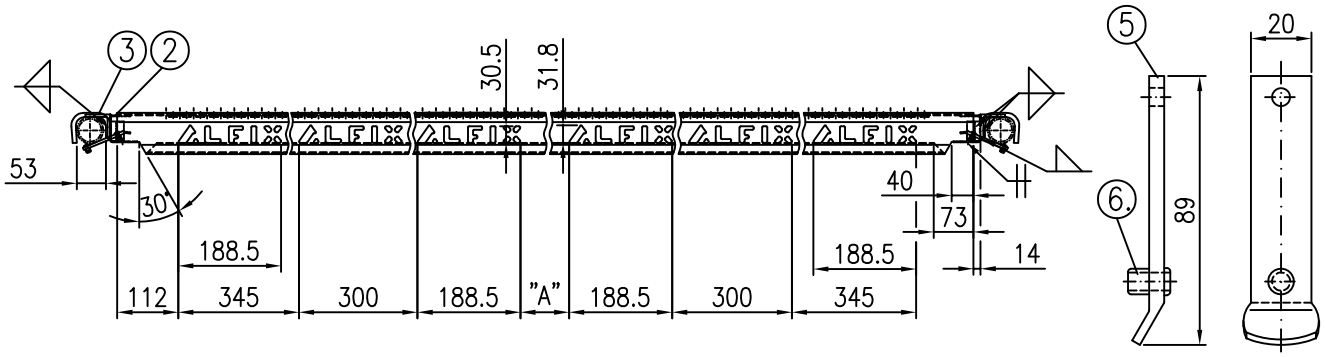
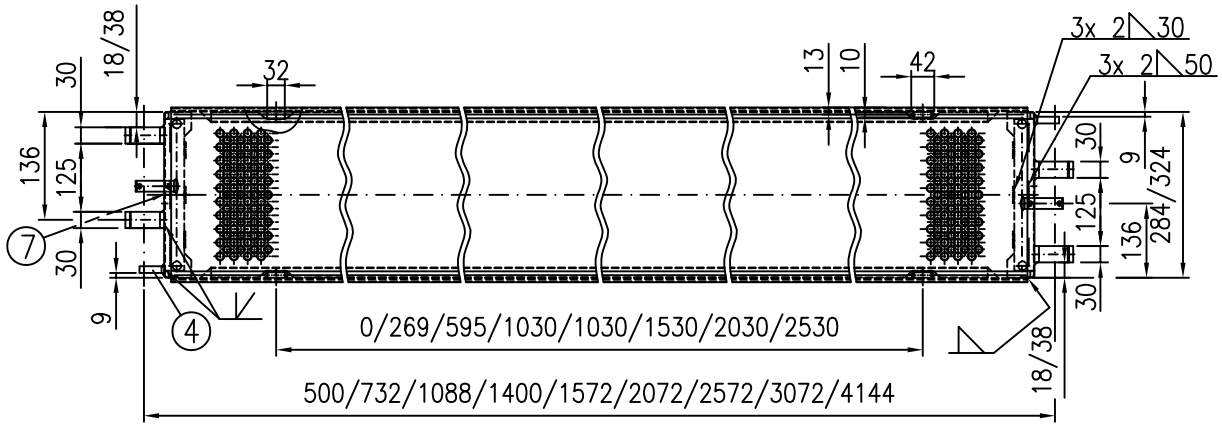
Annex B,
page 61



Bay length [mm]	Number of logos [left/right]	Dimension "A" [mm]	Load class
500	1/–	–	6
732	1/1	36	6
1088	1/1	392	6
1400	1/1	704	6
1572	1/1	876	6
2072	2/2	686	6
2572	2/2	1186	5
3072	3/3	1086	4
4144	3/3	2203	3





①	Steel plate 1.5 mm	DIN EN 10111–DD11 (DD12)	$R_{eH} \geq 280$ N/mm² $R_m \geq 360$ N/mm²
	alternatively:	DIN EN 10025–2 S235JR	$R_{eH} \geq 280$ N/mm² $R_m \geq 360$ N/mm²
②	Steel plate 2 mm	DIN EN 10111–DD11	$R_{eH} \geq 240$ N/mm² $R_m \geq 360$ N/mm²
③	Steel plate 30x8	DIN EN 10025–S355J2	alternatively: DIN EN 10149–S355MC
④	Angle 45x45x5	DIN EN 10025–S235JR	
⑤	Flat 20x5	DIN EN 10025–S235JR hot–dip galvanised	
⑥	Blind rivet ø4.8x16	DIN EN ISO 15979–aluminium/steel	
⑦	Marking		

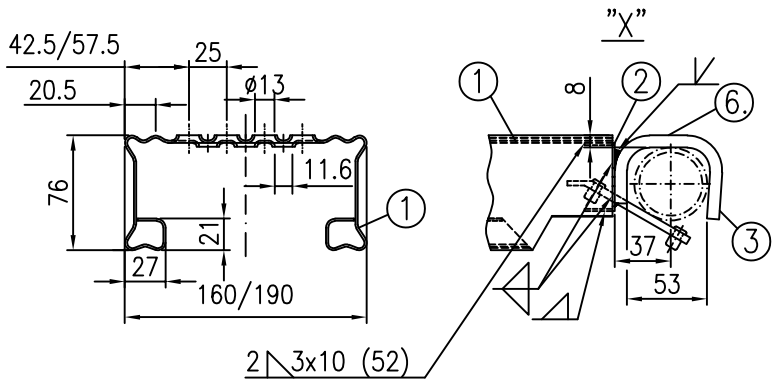
galvanised; all welding seams a=2 mm

ALBLITZ MODUL

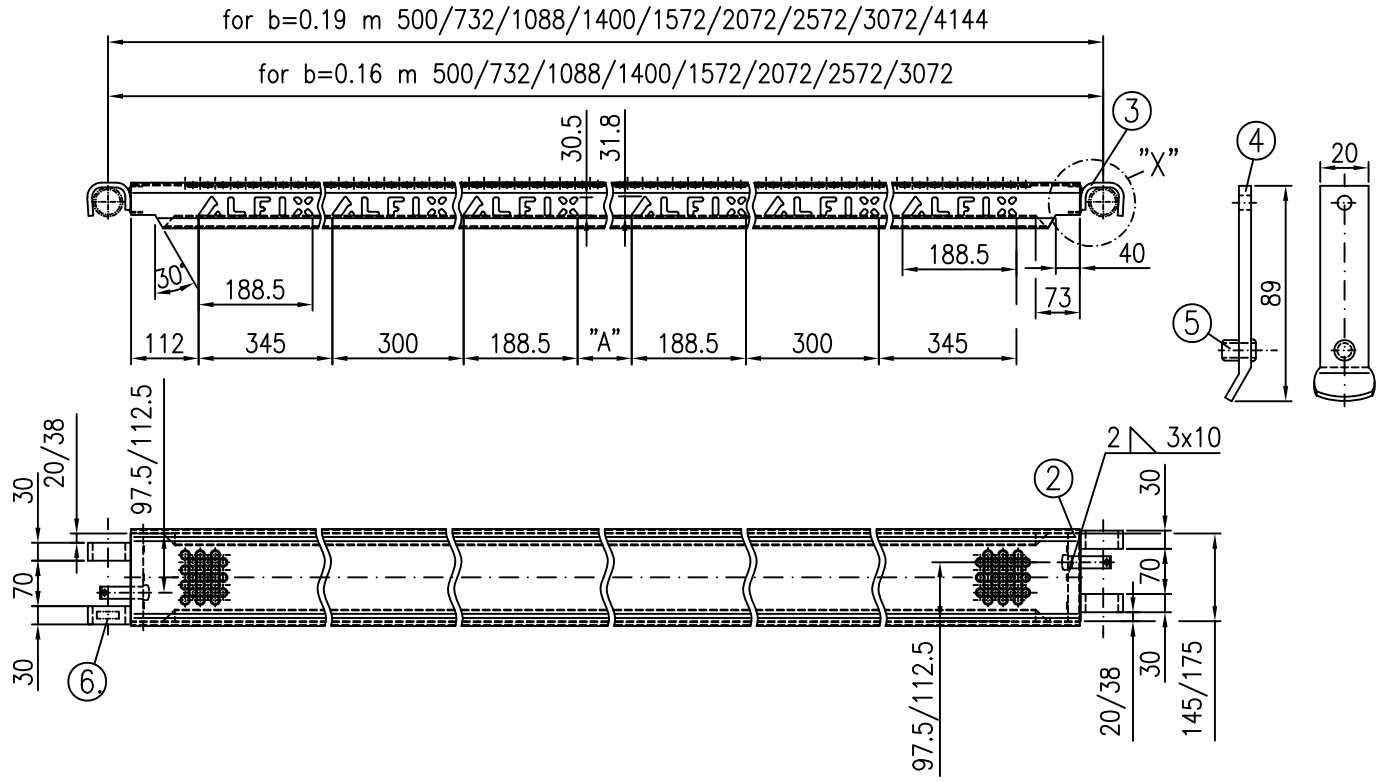
Steel deck AF with tube fixture 0.30 m; 0.34 m
in accordance with Z–8.22–906

M711–B206_ABM 05.2021

Annex B,
page 62



Bay length	Number of logos	Dimen-sion "A"	Load class	Weight 0.19 m
[mm]	[left/right]	[mm]		[kg]
500	1/–	–	6	3.0
732	1/1	61	6	4.6
1088	1/1	417	6	6.7
1400	1/1	729	6	7.4
1572	1/1	901	6	9.2
2072	2/2	711	6	11.8
2572	2/2	1211	5	14.5
3072	3/3	1111	4	17.1
4144	3/3	2228	3	20.5



① Steel plate 1.5 mm	DIN EN 10111–DD11 (DD12)	$R_{eH} \geq 280$ N/mm² $R_m \geq 360$ N/mm²
alternatively:	DIN EN 10025–2 S235JR	$R_{eH} \geq 280$ N/mm² $R_m \geq 360$ N/mm²
② U–profile 45x20x2	DIN EN 10025–2 S235JR	
alternatively: Steel metal 2	DIN EN 10111–DD11	
③ Steel plate 30x8	DIN EN 10025–S355J2	alternatively: DIN EN 10149–S355MC
④ Flat 20x5	DIN EN 10025–S235JR	hot–dip galvanised
⑤ Blind rivet ø4.8x16	DIN EN ISO 15979–aluminium/steel	
⑥ Marking		

galvanised; all welding seams a=2 mm

ALBLITZ MODUL

Intermediate deck AF with tube fixture 0.16 m; 0.19 m
in accordance with Z–8.22–906

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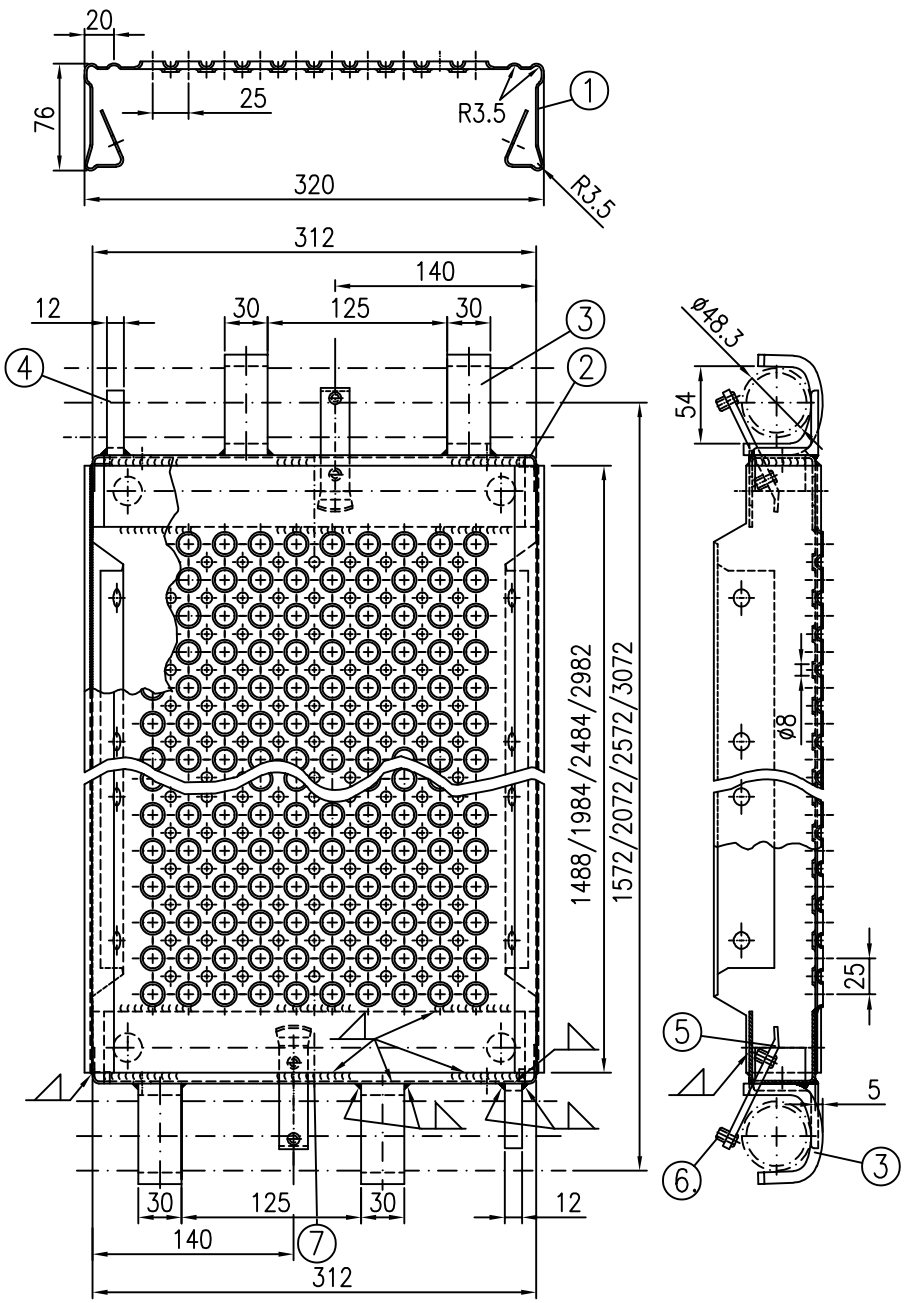
Annex B,
page 63

Bay length	Load class	Weight
[mm]		[kg]
1572	6	13.4
2072	6	16.9
2572	5	20.4
3072	4	23.9



①	Steel plate 590x1.5	DIN EN 10111–DD11	$R_{eH} \geq 280$ N/mm²
②	Steel plate 140x2	DIN EN 10111–DD11	$R_{eH} \geq 280$ N/mm²
③	Steel plate 30x8	S355J2 alternatively: S355MC	
④	L–profile 45x45x5	S235JR	
⑤	Flat 20x5	S235JR	
⑥	Blind rivet ø4.8x16	DIN 7337	
⑦	Marking	Manufacturer's logo–⌀XX–Year of manufacturing	

galvanised; all welding seams a=2 mm

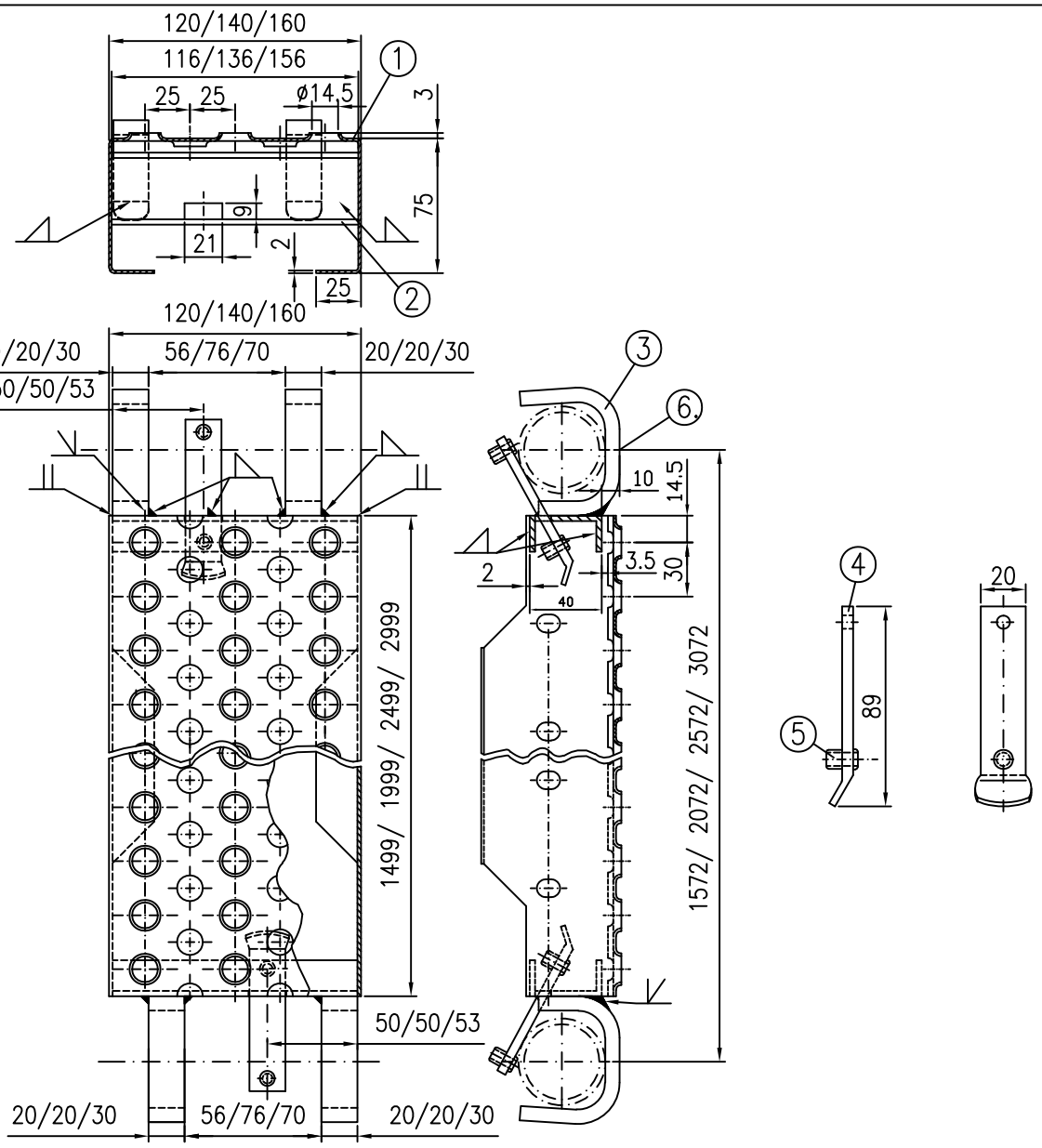
Component no longer manufactured
–only for continued use–

ALBLITZ MODUL

Steel deck with tube fixture
in accordance with Z–8.22–906

M709–B023_ABM 05.2021

Annex B,
page 64



①	Steel plate 2 mm	DIN EN 10025–S235JR	
	<u>alternatively:</u>	DIN EN 10111–DD11	$R_{eH} \geq 240$ N/mm² $R_m \geq 360$ N/mm²
	alternatively steel plate 1.5 mm	DIN EN 10025–S235JR	
		DIN EN 10111–DD11	$R_{eH} \geq 240$ N/mm² $R_m \geq 360$ N/mm²
②	U–profile 40x20x3	DIN EN 10025–S235JR	
③	Steel plate 20x8/ 30x8	DIN EN 10025–S355J2	alternatively: DIN EN 10149–S355MC
④	Flat 20x5	DIN EN 10025–S235JR	hot–dip galvanised
⑤	Blind rivet 4.8x16	DIN EN ISO 15979–aluminium/steel	
⑥	Marking		

galvanised; all welding seams a=3 mm

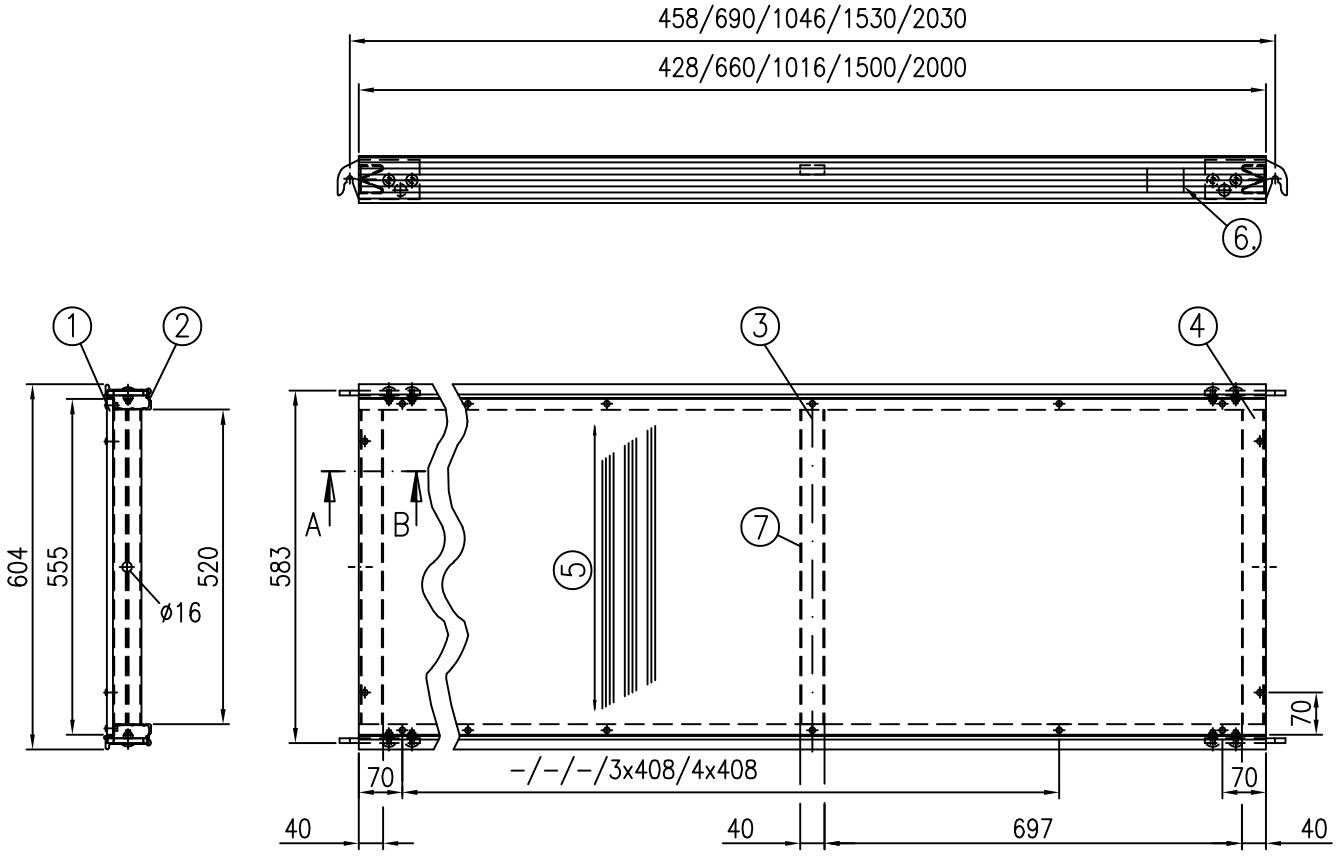
Dimension [m]	Weight [kg]
1.57x0.16	7.1
2.07x0.16	9.0
2.57x0.16	10.9
3.07x0.16	12.8

ALBLITZ MODUL

Intermediate deck with tube fixture
in accordance with Z–8.22–906

M710–B124_ABM 05.2021

Annex B,
page 65



① Plywood 10x555 — Plywood for use in scaffolding with national technical approval
② Rail profile 78x42 — DIN EN 755-2 EN AW-6063-T66
③ Rectangular hollow section 40x15x2 — DIN EN 755-2 EN AW-6063-T66
④ Grip profile; bridging deck thickness 2 mm — DIN EN 755-2 EN AW-6063-T66
⑤ Grain direction
⑥ Marking
⑦ not applicable for 0.50 m – 1.09 m
for 0.73 m and 1.09 m blind rivets in centre

Component no longer manufactured
-only for continued use-

131-MIG: Type 4 (EC9) filler material

For details see annex A, page 68

Load class 3

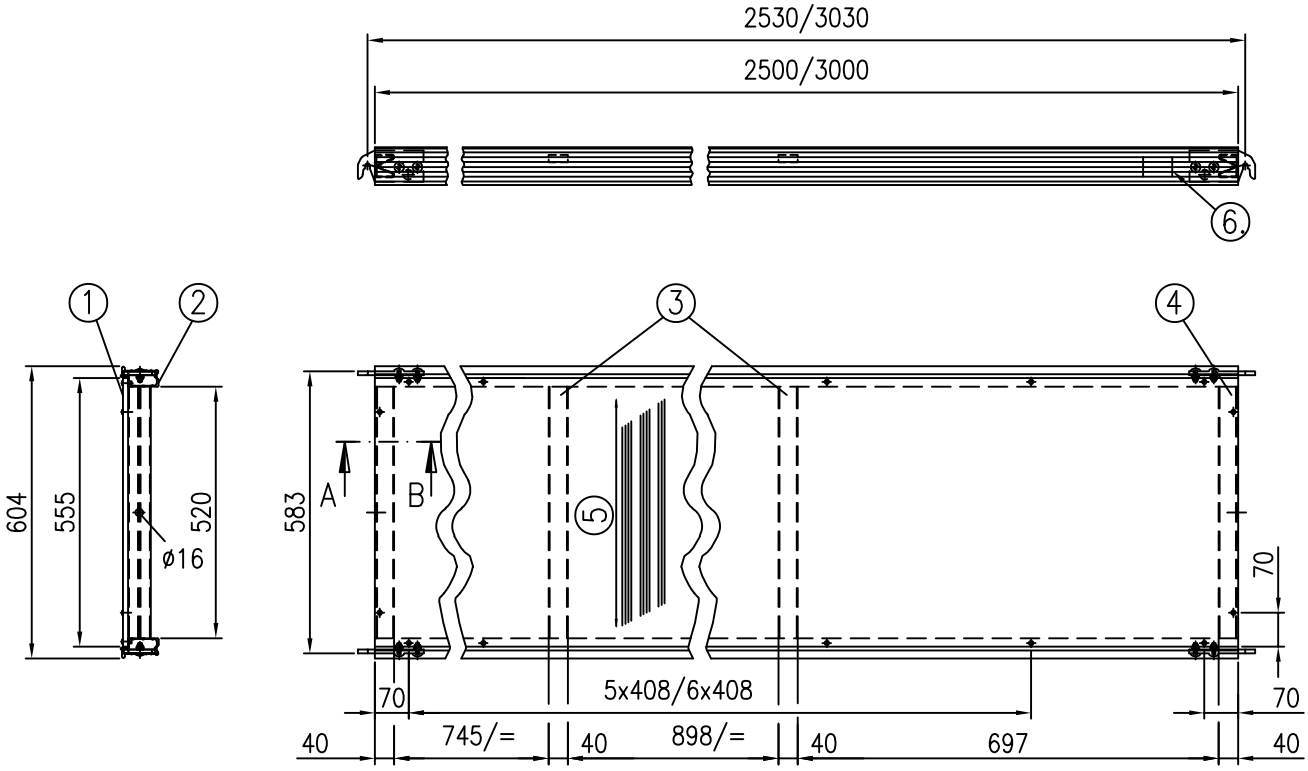
Dimens. [m]	Weight [kg]
0.50	4.8
0.73	6.8
1.09	9.5
1.57	11.5
2.07	14.5

ALBLITZ MODUL

Aluminium frame platform with plywood 0.50 m – 2.07 m
in accordance with Z-8.22-906

A713-A230_ABM 08.2021

Annex B,
page 66



① Plywood 10x555	Plywood for use in scaffolding with national technical approval	
② Rail profile 78x42	DIN EN 755–2 EN AW–6063–T66	Component no longer manufactured –only for continued use–
③ Rectangular hollow section 40x15x2	DIN EN 755–2 EN AW–6063–T66	
④ Grip profile; bridging deck thickness 2 mm	DIN EN 755–2 EN AW–6063–T66	
⑤ Grain direction		
⑥ Marking	131–MIG: Type 4 (EC9) filler material	
	For details see annex A, page 68	Load class 3

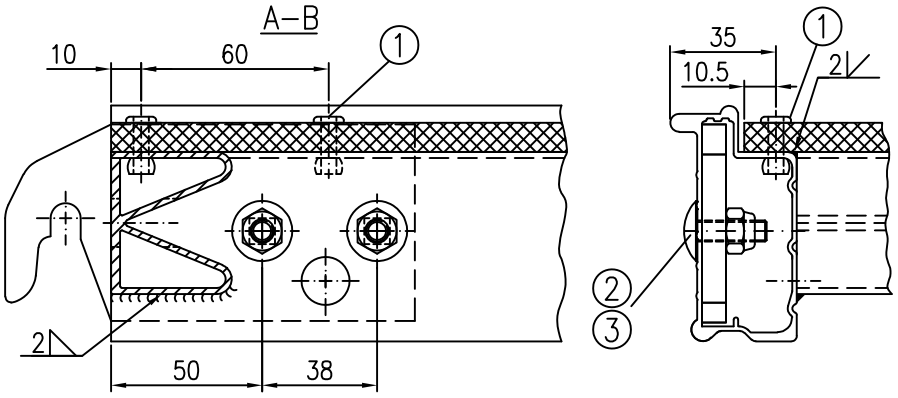
Dimens. [m]	Weight [kg]
2.57	17.6
3.07	20.7

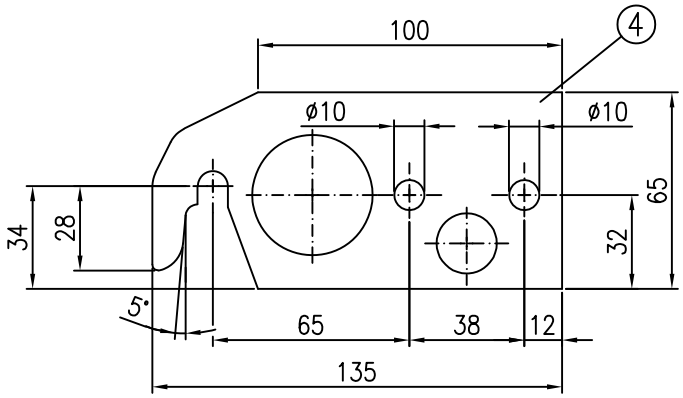
ALBLITZ MODUL

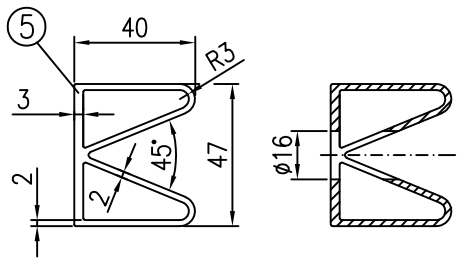
Aluminium frame platform with plywood 2.57 m; 3.07 m
in accordance with Z–8.22–906

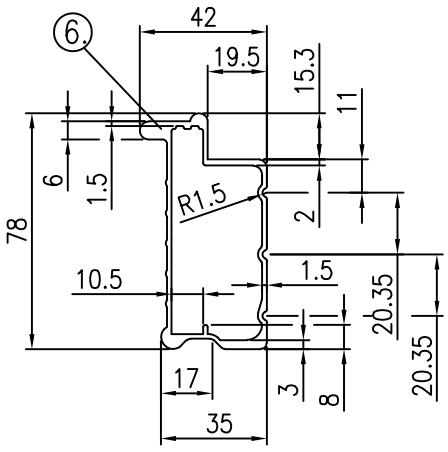
A713–A231_ABM 08.2021

Annex B,
page 67









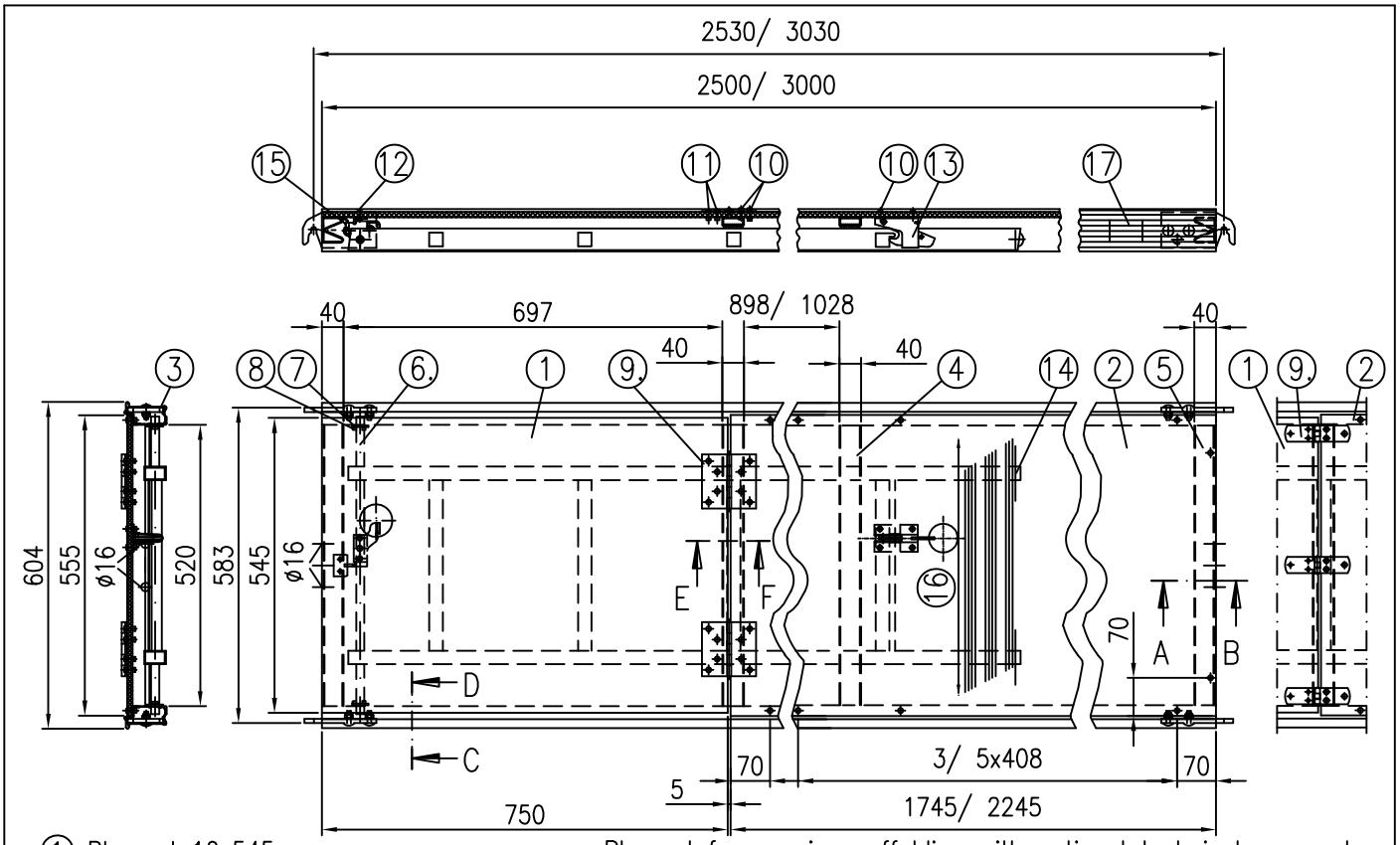
① Blind rivet ø5x20	DIN EN ISO 15979 EN AW–5754 H112	
② Round–head screw	DIN 603–M8x20–8.8–galvanised	
③ Nut, self–locking	DIN EN ISO 7042–M8–8–galvanised	
④ Suspension claw steel metal t=8 mm	DIN EN 10025 S235JR hot–dip galvanised	
⑤ Grip profile; bridging deck thickness 2 mm	DIN EN 755–2 EN AW–6063–T66	Component no longer manufactured –only for continued use–
⑥ Aluminium rail profile	DIN EN 755–2 EN AW–6063–T66	

ALBLITZ MODUL

Detailed view of aluminium frame platform
in accordance with Z–8.22–906

A713–A232_ABM 08.2021

Annex B,
page 68



① Plywood 10x545	Plywood for use in scaffolding with national technical approval	
② Plywood 10x555	Plywood for use in scaffolding with national technical approval	
③ Rail profile 78x42	DIN EN 755-2	EN AW-6063-T66
④ Rectangular hollow section 40x15x2	DIN EN 755-2	EN AW-6063-T66
⑤ Grip profile; bridging deck thickness 2 mm	DIN EN 755-2	EN AW-6063-T66
⑥ Circular hollow section 15x2	DIN EN 10219	S235JRH
alternatively:	DIN EN 10296-2	1.4301
⑦ Disc	DIN EN ISO 7089-A 17-steel-galvanised	
⑧ Split pin	DIN EN ISO 1234-4x25-steel-galvanised	
⑨ Hinge 100x100x1.6	DIN EN 10025-S235JR; electrogalvanized	
alternatively: Hinge 120x30x1.6	DIN EN 10025-S235JR; electrogalvanized	
⑩ Blind rivet ø5x20	DIN EN ISO 15979 EN AW-5754 H112	
⑪ Blind rivet ø5x18	DIN EN ISO 15979 EN AW-5754 H112	
⑫ Blind rivet ø4.8x16 alternatively: ø5x18	DIN EN ISO 15979 EN AW-5754 H112	
⑬ Ladder bracket	DIN EN 10025-S235JR; electrogalvanized	
⑭ Ladder	see Annex A, page 60	
⑮ Ledger	DIN EN 10025-S235JR; electrogalvanized	
⑯ Grain direction		
⑰ Marking	131-MIG: Type 4 (EC9) filler material	

Component no longer manufactured -only for continued use-

Dimens. [m]	Weight [kg]
2.57	24.0
3.07	27.0

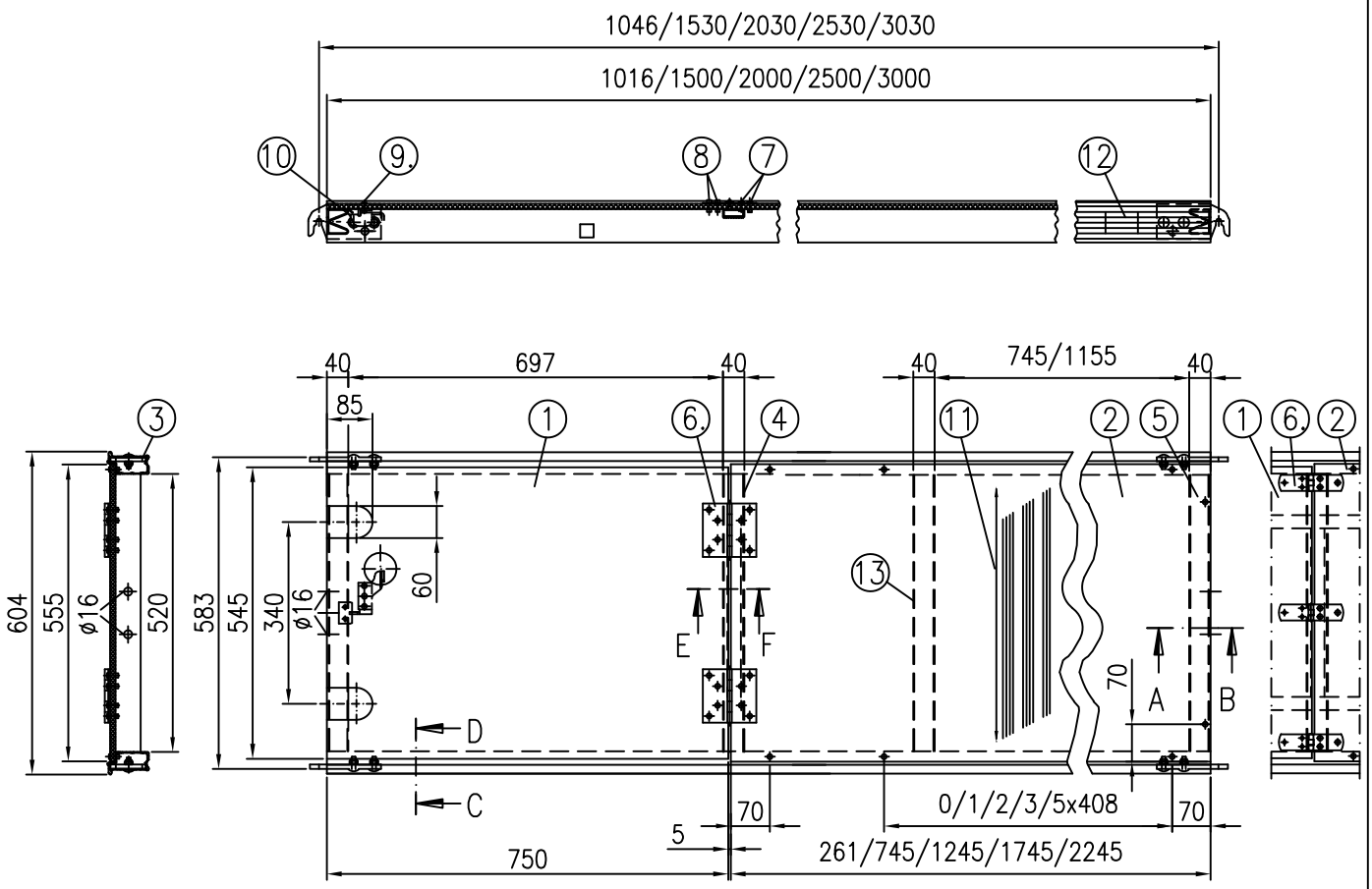
For details see annex A, pages 68 and 71 Load class 3

ALBLITZ MODUL

Aluminium frame platform with internal hatch 2.57 m; 3.07 m
in accordance with Z-8.22-906

A713-A233_ABM 08.2021

Annex B,
page 69



①	Plywood 10x545	Plywood for use in scaffolding with national technical approval
②	Plywood 10x555	Plywood for use in scaffolding with national technical approval
③	Rail profile 78x42	DIN EN 755-2 EN AW-6063-T66
④	Rectangular hollow section 40x15x2	DIN EN 755-2 EN AW-6063-T66
⑤	Grip profile; bridging deck thickness 2 mm	DIN EN 755-2 EN AW-6063-T66
⑥	Hinge 100x100x1.6	DIN EN 10025-S235JR; electrogalvanized
	alternatively: Hinge 120x30x1.6	DIN EN 10025-S235JR; electrogalvanized
⑦	Blind rivet ø5x20	DIN EN ISO 15979 EN AW-5754 H112
⑧	Blind rivet ø5x18	DIN EN ISO 15979 EN AW-5754 H112
⑨	Blind rivet ø4.8x16 alternatively: ø5x18	DIN EN ISO 15979 EN AW-5754 H112
⑩	Ledger	DIN EN 10025-S235JR; electrogalvanized
⑪	Grain direction	
⑫	Marking	
⑬	not applicable for 1.09 m – 2.07 m	

Component no longer manufactured –only for continued use–

Dimens. [m]	Weight [kg]
1.09	10.5
1.57	13.0
2.07	17.0
2.57	22.0
3.07	25.5

131-MIG: Type 4 (EC9) filler material

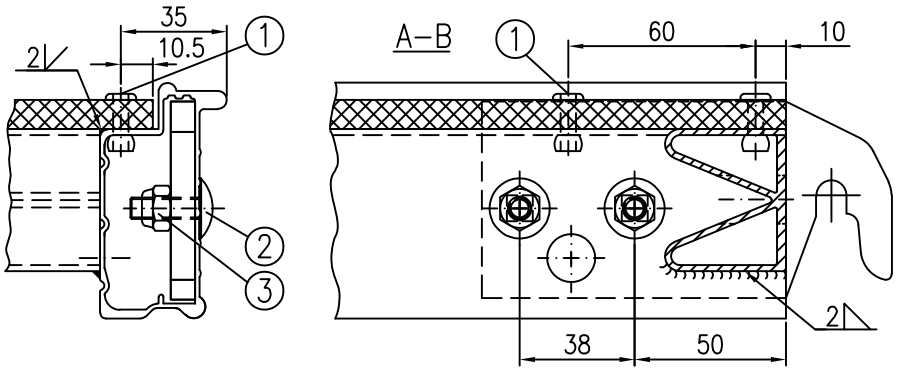
For details see annex A, pages 68 and 71 Load class 3

ALBLITZ MODUL

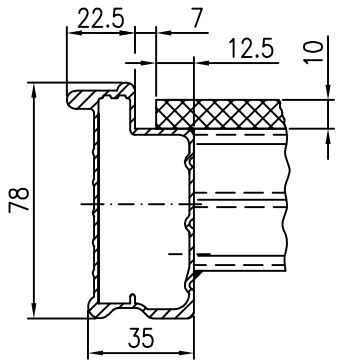
Aluminium frame platform with internal hatch 1.09 m – 3.07 m without ladder in accordance with Z-8.22-906

A713-A236_ABM 02.2023

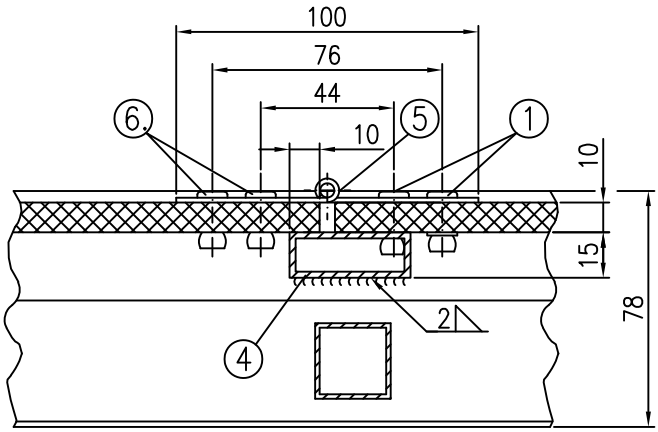
Annex B, page 70



C–D



E–F



①	Blind rivet ø5x20	DIN EN ISO 15979 EN AW–5754 H112
②	Round–head screw	DIN 603–M8x20–8.8–galvanised
③	Nut, self–locking	DIN EN ISO 7042–M8–8–galvanised
④	Rectangular hollow section 40x15x2	DIN EN 755–2 EN AW–6063–T66
⑤	Hinge 100x100x1.6	DIN EN 10025–S235JR; electrogalvanized
	alternatively: Hinge 120x30x1.6	DIN EN 10025–S235JR; electrogalvanized
⑥	Blind rivet ø5x18	DIN EN ISO 15979 EN AW–5754 H112

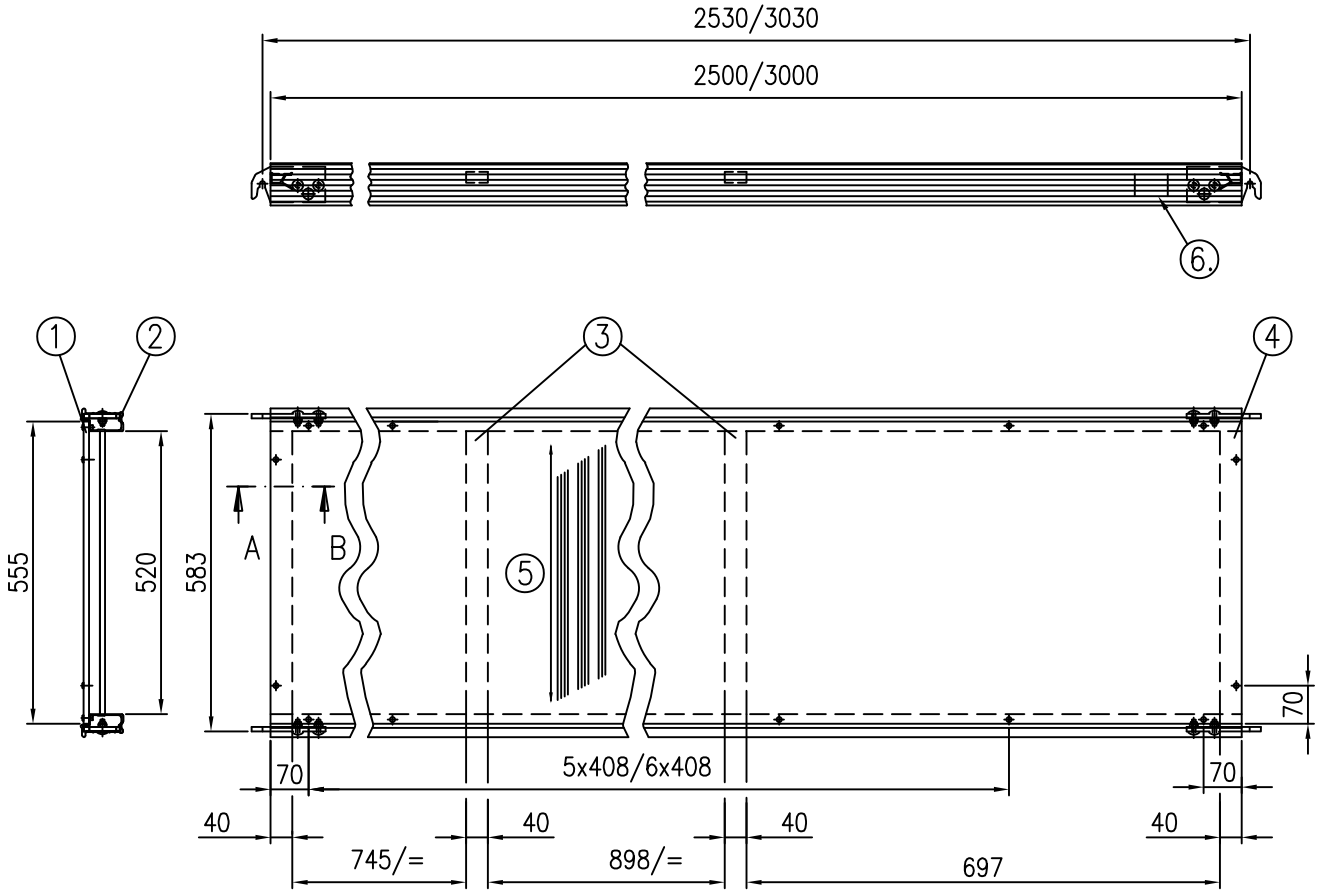
Component no longer manufactured –only for continued use–

ALBLITZ MODUL

Sectional views of aluminium frame platform with internal hatch in accordance with Z–8.22–906

A713–A235_ABM 08.2021

Annex B, page 71



① Combi Mirror WISA plywood 10x555 in accordance with Z-9.1-430 BFU 100-G
② Rail profile 78x42 EN AW-6063-T66 (AlMgSi0.5F25)
③ Tube connector 40x20x2 EN AW-6063-T66 (AlMgSi0.5F25)
④ Grip profile EN AW-6063-T66 (AlMgSi0.5F25)
⑤ Grain direction
⑥ Marking

Component no longer manufactured
-only for continued use-

Dimension [m]	Weight [kg]
2.57x0.60	17.5
3.07x0.60	21.0

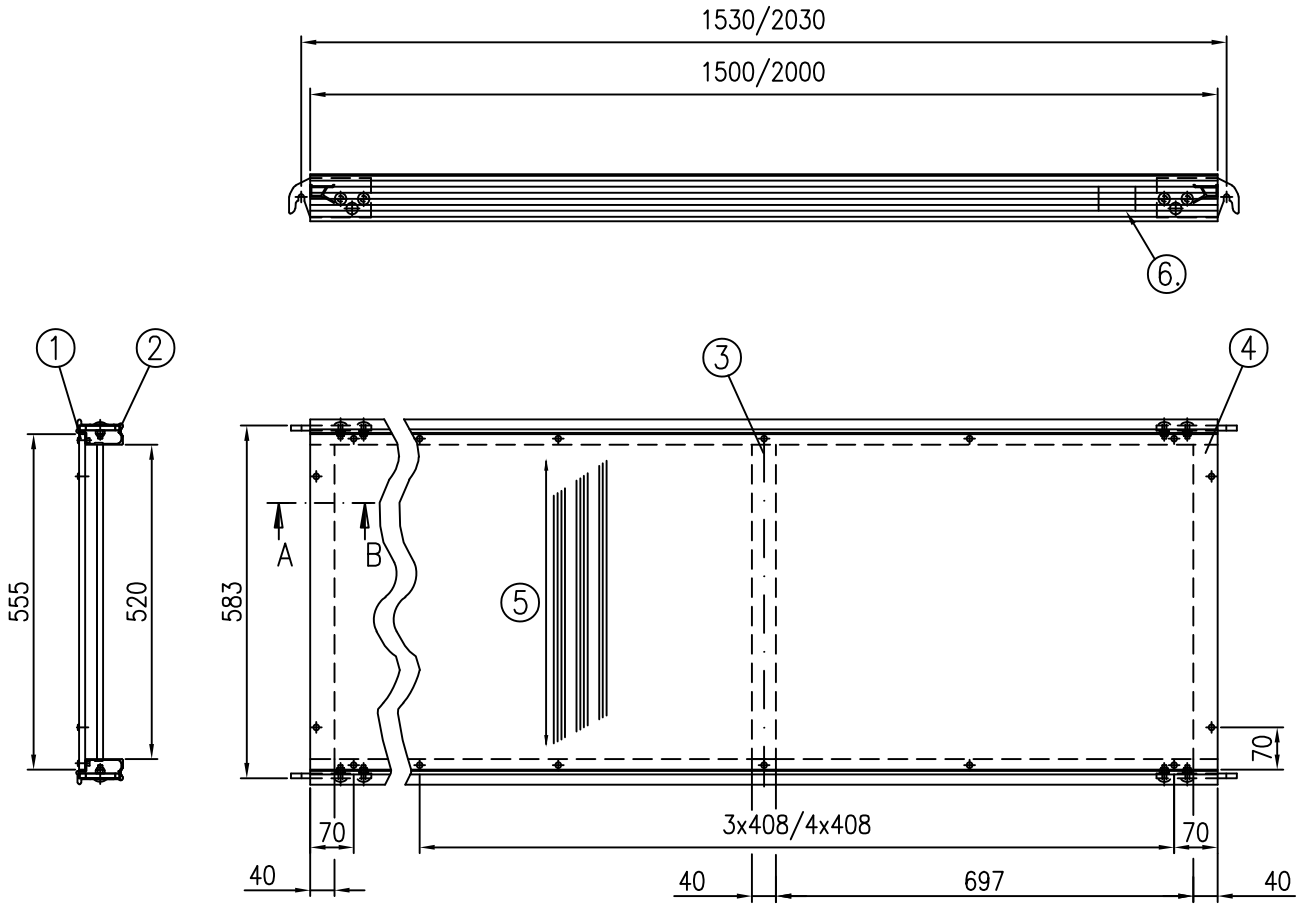
For details see annex B, page 74 Load class 3

ALBLITZ MODUL

Aluminium deck with plywood 2.57 m; 3.07 m
in accordance with Z-8.1-862

A705-A009_ABM 05.2021

Annex B,
page 72



① Combi Mirror WISA plywood 10x555 in accordance with Z-9.1-430 BFU 100-G
② Rail profile 78x42 EN AW-6063-T66 (AlMgSi0.5F25)
③ Tube connector 40x20x2 EN AW-6063-T66 (AlMgSi0.5F25)
④ Grip profile EN AW-6063-T66 (AlMgSi0.5F25)
⑤ Grain direction
⑥ Marking

Component no longer manufactured
-only for continued use-

Dimension [m]	Weight [kg]
1.57x0.60	11.0
2.07x0.60	14.5

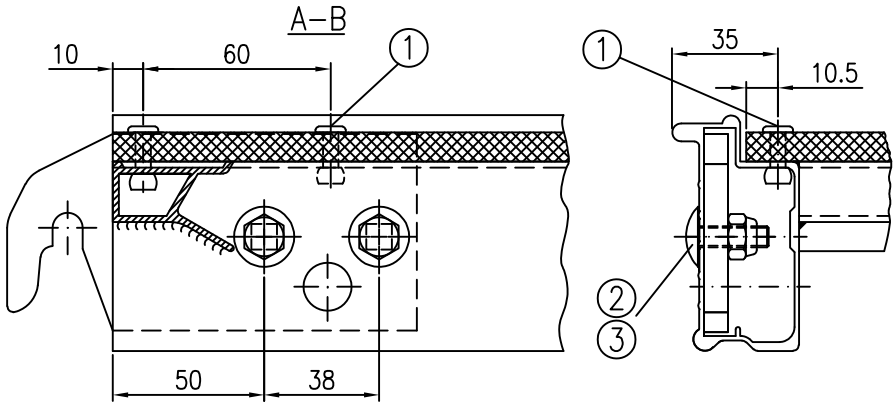
For details see annex B, page 74 Load class 3

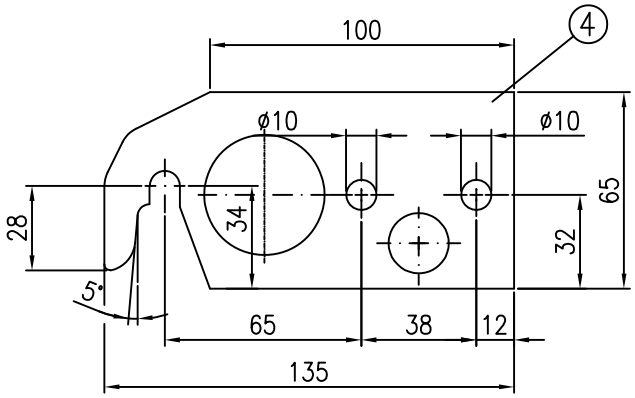
ALBLITZ MODUL

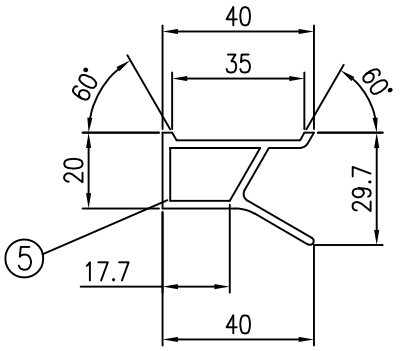
Aluminium deck with plywood 1.57 m; 2.07 m
in accordance with Z-8.1-862

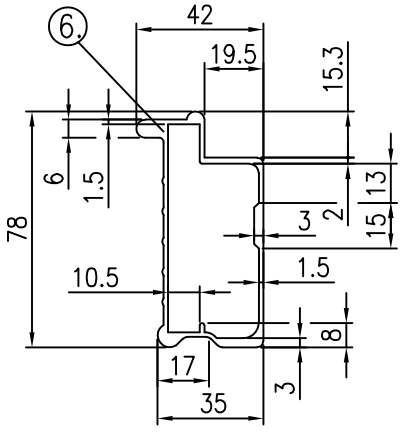
A705-A010_ABM 05.2021

Annex B,
page 73









①	Blind rivet ø5x20	EN AW–5754 H112 (AlMg3)
②	Round–head screw	M8x20 DIN 603
③	Nut, self–locking	M8 DIN 980
④	Suspension claw	Steel metal 8 S235JRG2 hot–dip galvanised
⑤	Grip profile; bridging deck thickness 2 mm	EN AW–6063–T66 (AlMgSi0.5F25)
⑥	Aluminium rail profile	EN AW–6063–T66 (AlMgSi0.5F25)

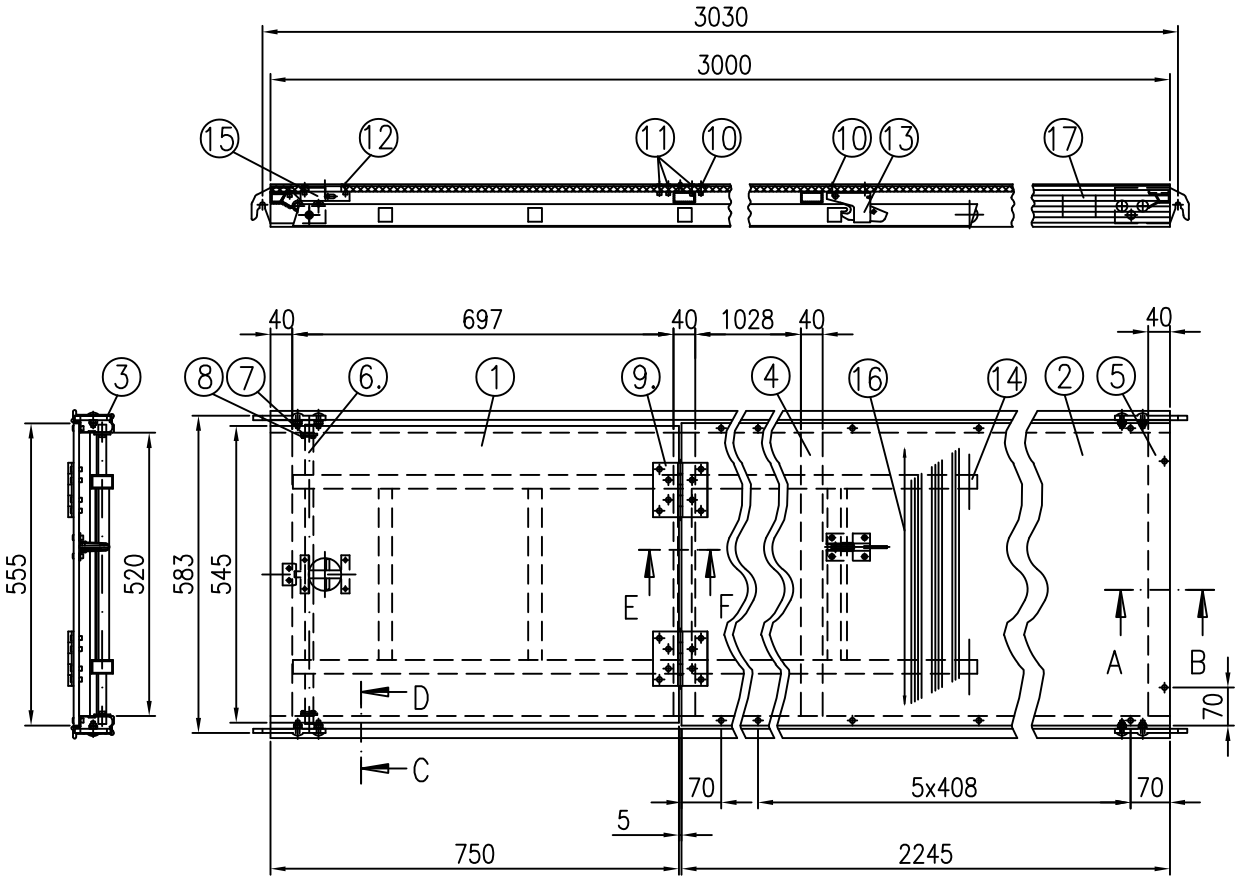
Component no longer manufactured –only for continued use–

ALBLITZ MODUL

Detailed view of aluminium deck
in accordance with Z–8.1–862

A705–A011_ABM 05.2021

Annex B,
page 74



①	Combi Mirror WISA plywood 10x545 in accordance with Z-9.1-430 BFU 100-G	
②	Combi Mirror WISA plywood 10x555 in accordance with Z-9.1-430 BFU 100-G	
③	Rail profile 78x42	EN AW-6063-T66 (AlMgSi0.5F25)
④	Tube connector 40x20x2	EN AW-6063-T66 (AlMgSi0.5F25)
⑤	Grip profile	EN AW-6063-T66 (AlMgSi0.5F25)
⑥	Tube ø15x2	S235JRH
⑦	Disc ø17	DIN 125
⑧	Split pin ø4x25	DIN 94
⑨	Hinge 100x100x1.6	
⑩	Blind rivet ø5x20	EN AW-5754 H112 (AlMg3)
⑪	Blind rivet ø4.8x18	EN AW-5754 H112 (AlMg3)
⑫	Blind rivet ø4.8x16	EN AW-5754 H112 (AlMg3)
⑬	Ladder bracket	
⑭	Ladder	see Annex B, page 60
⑮	Ledger	
⑯	Grain direction	
⑰	Marking	

Component no longer manufactured
-only for continued use-

Dimension [m]	Weight [kg]
3.07x0.60	22.5

For details see annex B, pages 74 and 77

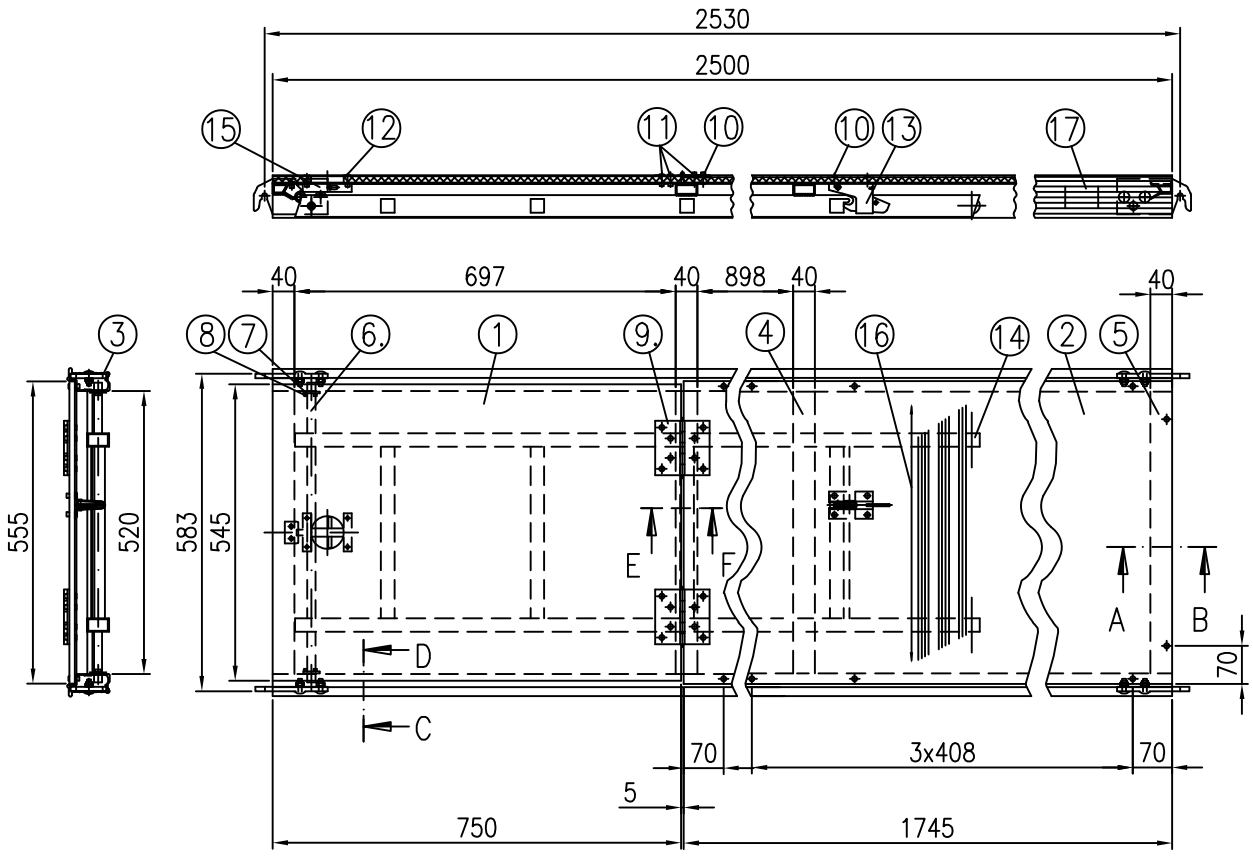
Load class 3

ALBLITZ MODUL

Aluminium access deck 3.07 m with ladder
in accordance with Z-8.1-862

A705-A012_ABM 05.2021

Annex B,
page 75



①	Combi Mirror WISA plywood 10x545 in accordance with Z-9.1-430 BFU 100-G	
②	Combi Mirror WISA plywood 10x555 in accordance with Z-9.1-430 BFU 100-G	
③	Holmprofil 78x42	EN AW-6063-T66 (AlMgSi0.5F25)
④	Tube connector 40x20x2	EN AW-6063-T66 (AlMgSi0.5F25)
⑤	Grip profile	EN AW-6063-T66 (AlMgSi0.5F25)
⑥	Tube ø15x2	S235JRH
⑦	Disc ø17	DIN 125
⑧	Split pin ø4x25	DIN 94
⑨	Hinge 100x100x1.6	
⑩	Blind rivet ø5x20	EN AW-5754 H112 (AlMg3)
⑪	Blind rivet ø4.8x18	EN AW-5754 H112 (AlMg3)
⑫	Blind rivet ø4.8x16	EN AW-5754 H112 (AlMg3)
⑬	Ladder bracket	
⑭	Ladder	see Annex B, page 60
⑮	Ledger	
⑯	Grain direction	
⑰	Marking	

Component no longer manufactured
-only for continued use-

Dimension [m]	Weight [kg]
2.57x0.60	18.5

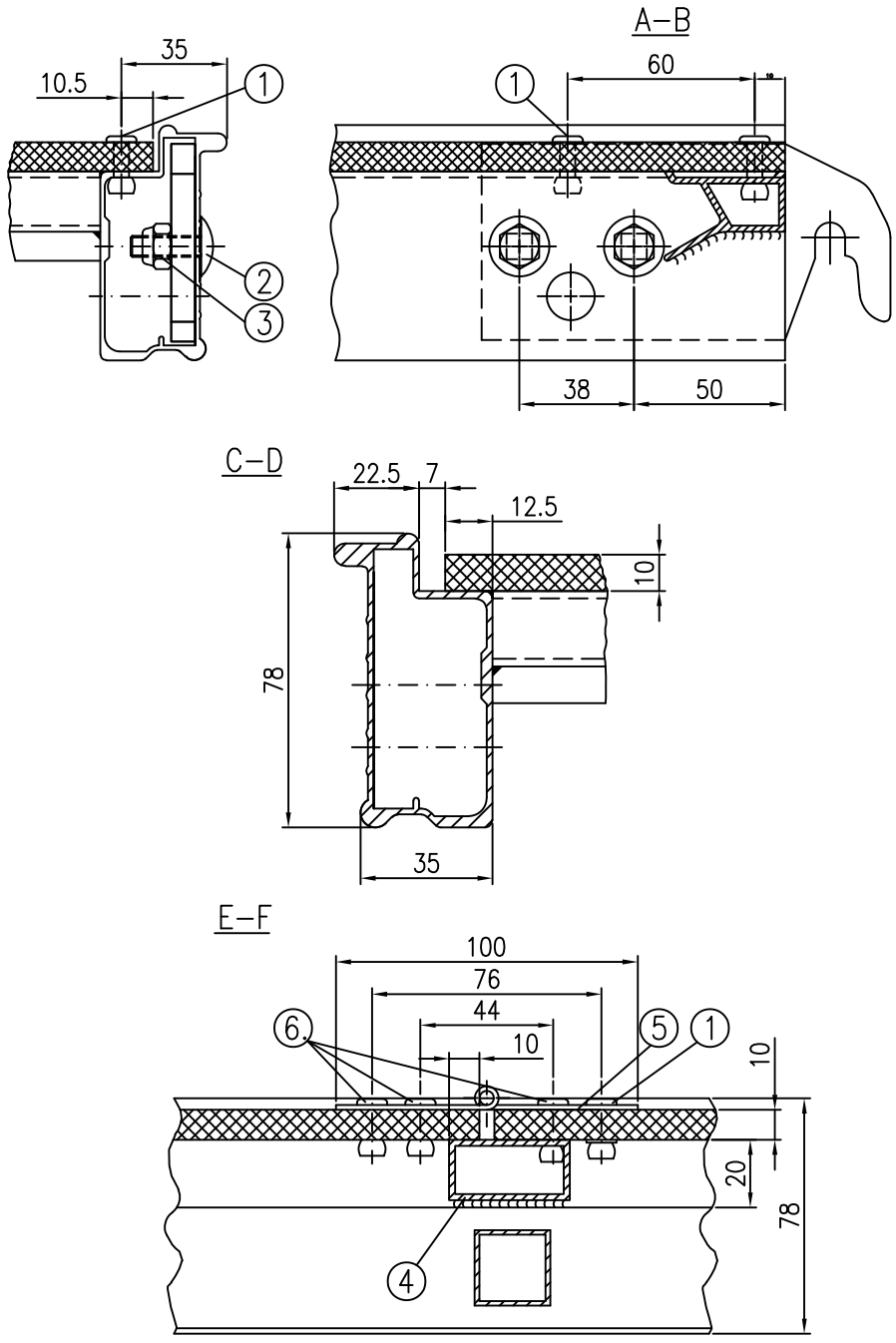
For details see annex B, pages 74 and 77 Load class 3

ALBLITZ MODUL

Aluminium access deck 2.57 m with ladder
in accordance with Z-8.1-862

A705-A013_ABM 05.2021

Annex B,
page 76



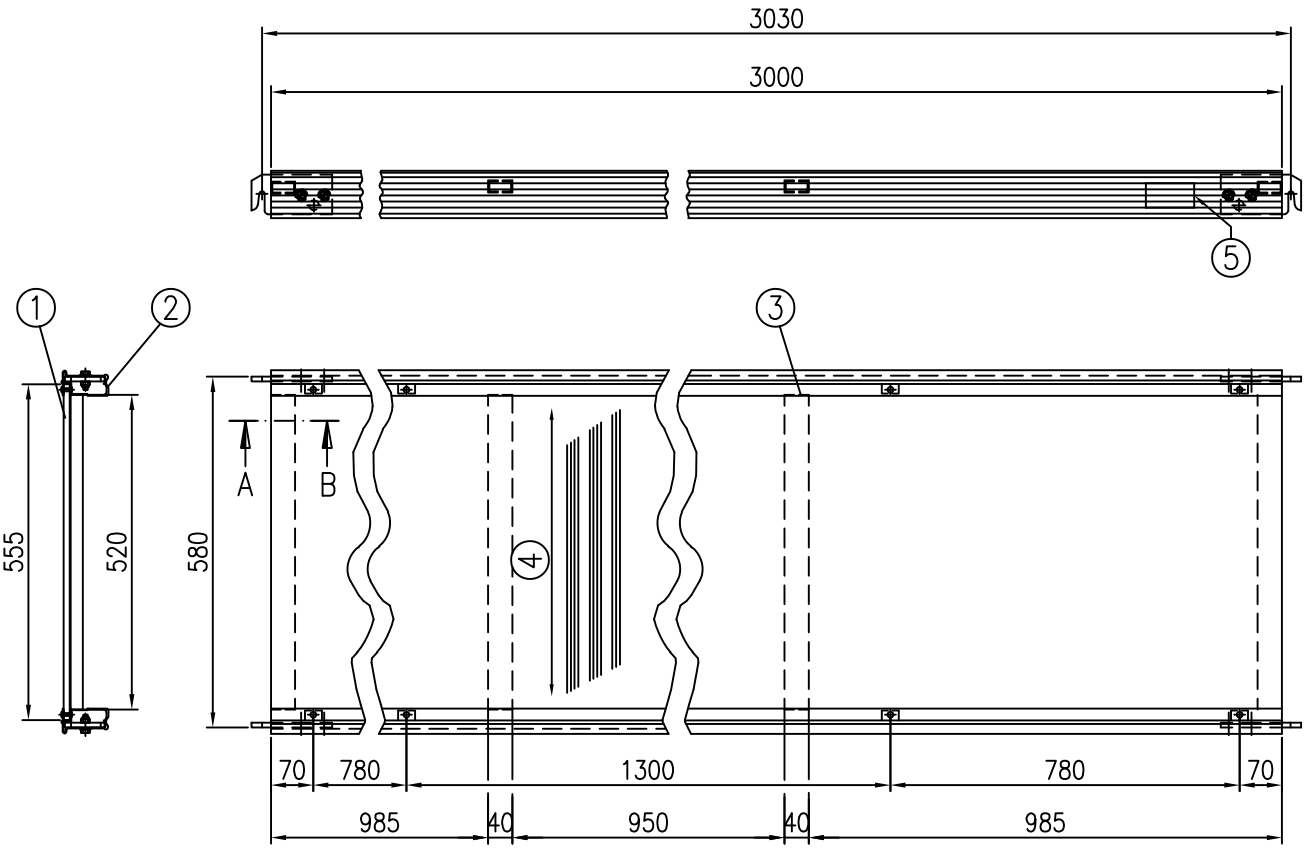
① Blind rivet ø5x20	EN AW–5754 H112 (AlMg3)	
② Round–head screw	M8x20 DIN 603	
③ Nut, self–locking	M8 DIN 980	
④ Box 40x20x2	EN AW–6063–T66 (AlMgSi0.5F25)	
⑤ Hinge 100x100x1.6		
⑥ Blind rivet ø4.8x18	EN AW–5754 H112 (AlMg3)	Component no longer manufactured –only for continued use–

ALBLITZ MODUL

Sectional views of aluminium access deck
in accordance with Z–8.1–862

A705–A014_ABM 05.2021

Annex B,
page 77



① Film-coated plywood 10x555 (BFU 100-10 DIN 68705 sheet 3) up to '97
BFU 100G-10 DIN 68705 sheet 3

② Rail profile 78x42 (35) form A AlMgSi0.5F25

③ Box 40x20x2 AlMgSi0.5F25

④ Grain direction

⑤ Marking

( ) = Discontinued design, with marking: Manufacturer's logo, year of manufacturing, Z-8.1-310. Ü

Component no longer manufactured
-only for continued use-

Dimension [m]	Weight [kg]
3.07x0.60	21.0

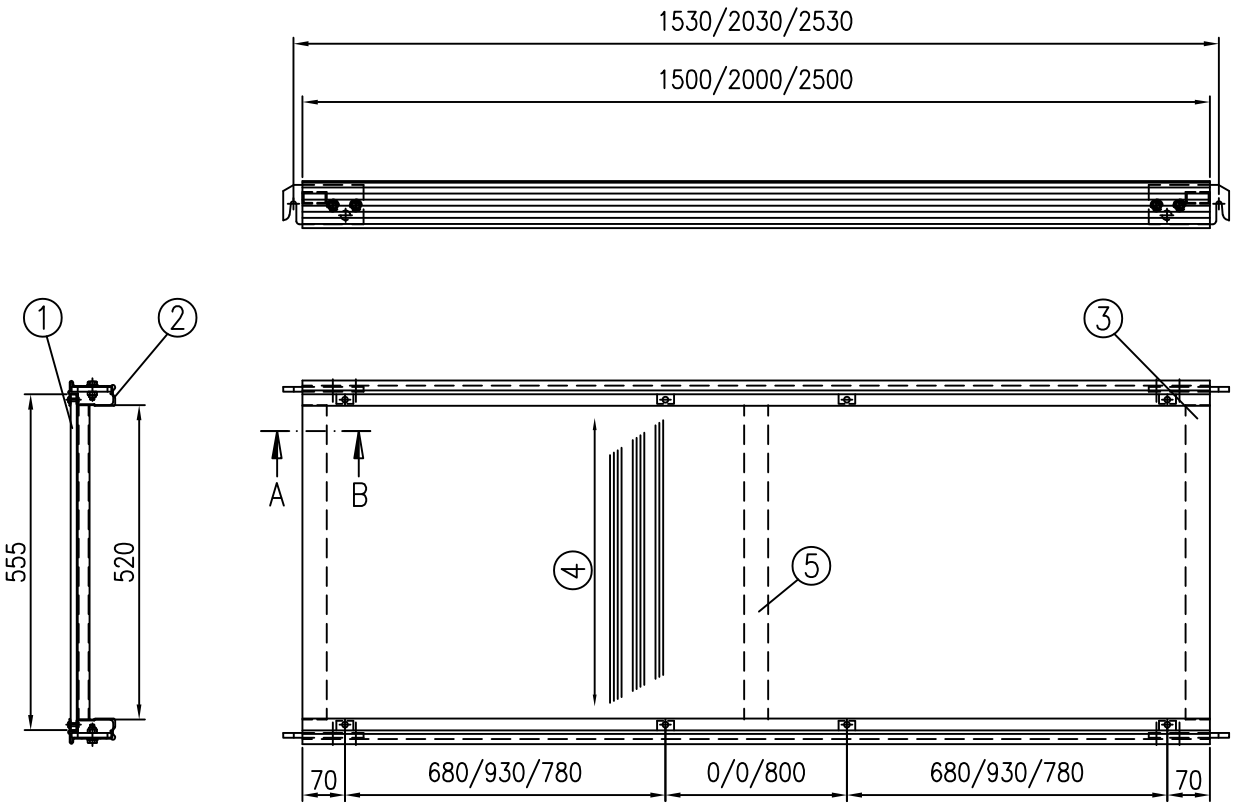
For details see annex B, page 80 Load class 3

ALBLITZ MODUL

Aluminium deck with plywood 3.07 m
in accordance with Z-8.1-862

A705-A016_ABM 05.2021

Annex B,
page 78



① Film-coated plywood 10x555 (BFU 100-10 DIN 68705 sheet 3) up to '97
BFU 100G-10 DIN 68705 sheet 3

② Rail profile 78x42 (35) form A AlMgSi0.5F25

③ Box 40x20x2 AlMgSi0.5F25

④ Grain direction

⑤ only for bay length 2.5 m

Component no longer manufactured
-only for continued use-

( ) = Discontinued design, with marking: Manufacturer's logo, year of manufacturing, Z-8.1-310. Ü

Dimension [m]	Weight [kg]
1.57x0.60	11.0
2.07x0.60	14.5
2.57x0.60	17.5

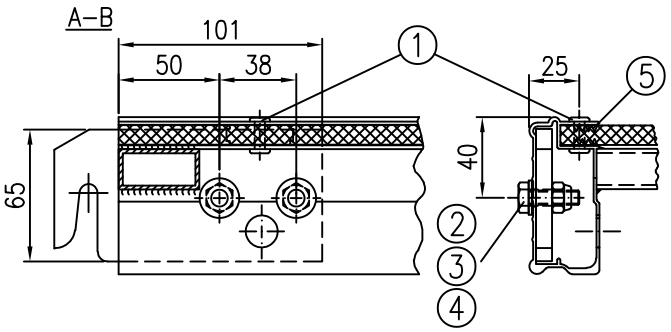
For details see annex B, page 80 Load class 3

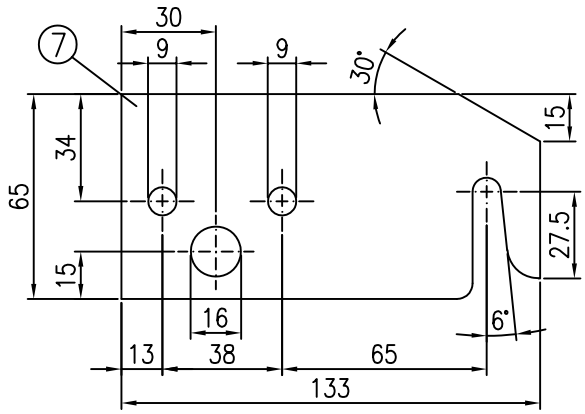
ALBLITZ MODUL

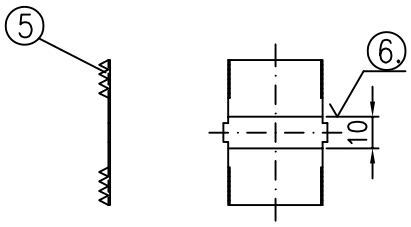
Aluminium deck with plywood 1.57 m; 2.07 m; 2.57 m
in accordance with Z-8.1-862

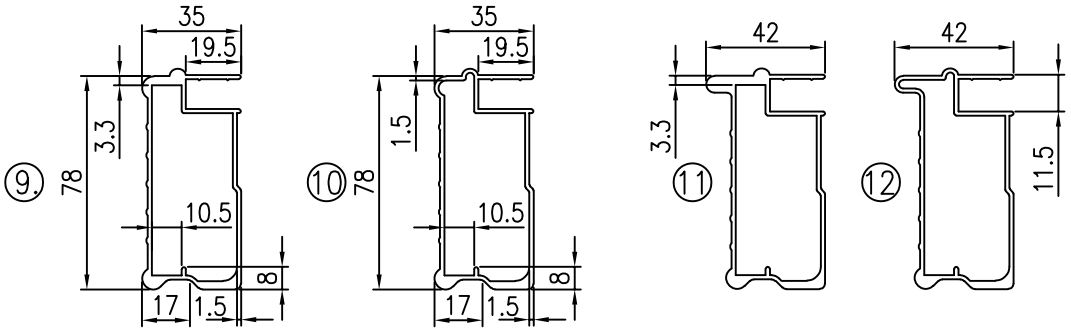
A705-A017_ABM 05.2021

Annex B,
page 79









① Rivet ø5x21	AlMg3 DIN 7337
② Screw M8x25	DIN 933
③ Disc ø8.4	DIN 125
④ Nut, self–locking M8	DIN 982
⑤ Cramp; steel metal t=0.5; year of construction 1992 or later	S235JRG2 hot–dip galvanised
⑥ Stamped for later bending	EN AW–6063–T66 (AlMgSi0.5F25)
⑦ Suspension claw; steel metal t=8	S235JRG2 hot–dip galvanised
⑧ Aluminium rails	AlMgSi0.5F25
⑨ Form A (discontinued design)	
⑩ Form B (discontinued design)	
⑪ Form A as of 01/95	
⑫ Form B as of 01/95	

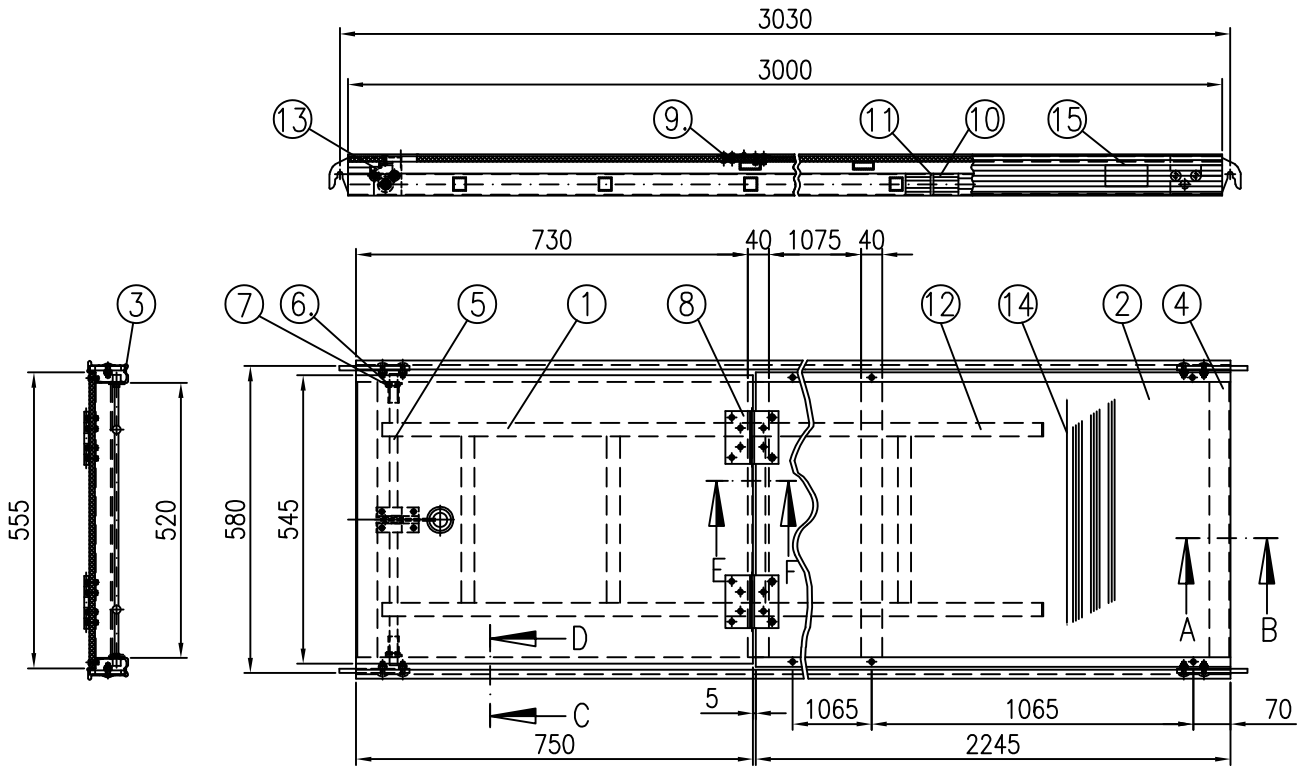
Component no longer manufactured
–only for continued use–

ALBLITZ MODUL

Detailed view of aluminium deck
in accordance with Z–8.1–862

A705–A018_ABM 05.2021

Annex B,
page 80



①	Film-coated plywood 10x545	(BFU100-12 DIN 68705 sheet 3) up to '97 BFU100G-12 DIN 68705 sheet 3
②	Film-coated plywood 10x555	(BFU100-10 DIN 68705 sheet 3) up to '97 BFU100G-10 DIN 68705 sheet 3
③	Aluminium rail 78x42(35) /A	AlMgSi0.5F25
④	Box 40x20x2	AlMgSi0.5F25
⑤	(Tube 15x1	AlMgSi0.5F25) up to '97
	Round ø15	AlMgSi0.5F22
⑥	Disc ø15	DIN 125
⑦	Split pin ø4x32	DIN 94
⑧	Hinge 100x100x1.6	
⑨	Rivet ø5x16	DIN 7337
⑩	Rivet ø5x18	DIN 7337
⑪	Ledger 100 mm	
⑫	Ladder	see Annex B, page 60
⑬	Cranked ledger with ring 100 mm	
⑭	Grain direction	
⑮	Marking	

Component no longer manufactured
-only for continued use-

Dimension [m]	Weight [kg]
3.07x0.60	22.5

( ) = Discontinued design, with marking: Manufacturer's logo, year of manufacturing, Z-8.1-310. Ü

For details see annex B, pages 80 and 83 Load class 3

ALBLITZ MODUL

Aluminium access deck 3.07 m with ladder
in accordance with Z-8.1-862

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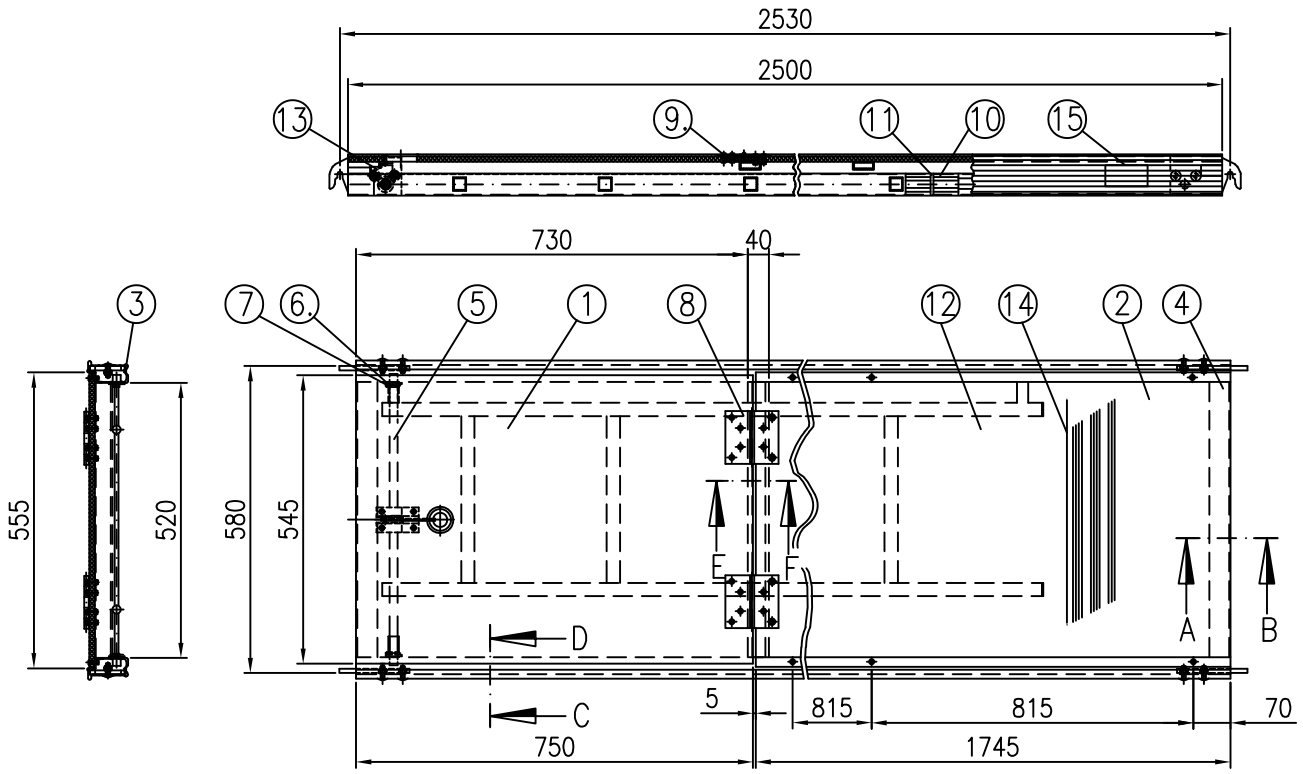
Annex B,
page 81



①	Film-coated plywood 10x545	(BFU100-12 DIN 68705 sheet 3) up to '97 BFU100G-12 DIN 68705 sheet 3
②	Film-coated plywood 10x555	(BFU100-10 DIN 68705 sheet 3) up to '97 BFU100G-10 DIN 68705 sheet 3
③	Aluminium rail 78x42(35) /A	AlMgSi0.5F25
④	Box 40x20x2	AlMgSi0.5F25
⑤	(Tube 15x1	AlMgSi0.5F25) up to '97
	Round ø15	AlMgSi0.5F22
⑥	Disc ø15	DIN 125
⑦	Split pin ø4x32	DIN 94
⑧	Hinge 100x100x1.6	
⑨	Rivet ø5x16	DIN 7337
⑩	Rivet ø5x18	DIN 7337
⑪	Ledger 100 mm	
⑫	Leiter	see Annex B, page 60
⑬	Cranked ledger with ring 100 mm	
⑭	Grain direction	
⑮	Marking	

Component no longer manufactured
-only for continued use-

Dimension [m]	Weight [kg]
2.57x0.60	18.5

( ) = Discontinued design, with marking: Manufacturer's logo, year of manufacturing, Z-8.1-310. Ü

For details see annex B, pages 80 and 83 Load class 3

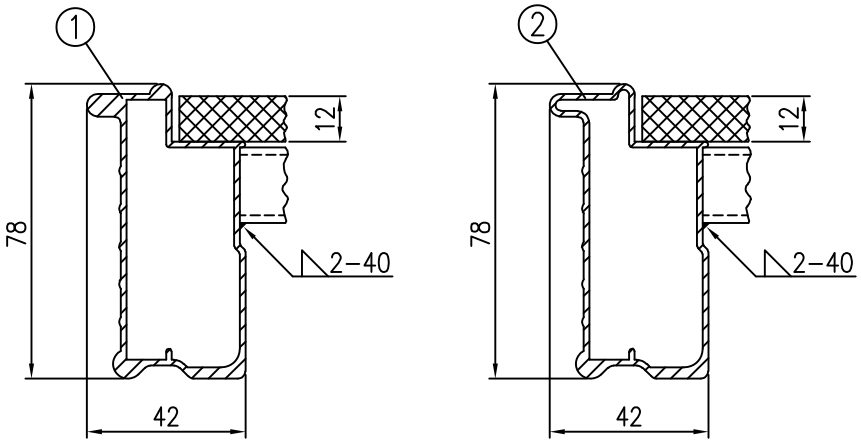
ALBLITZ MODUL

Aluminium access deck 2.57 m with ladder
in accordance with Z-8.1-862

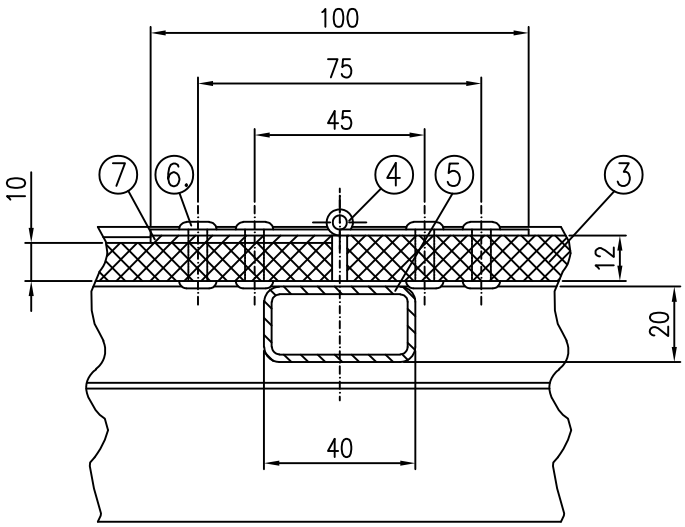
A705-A020_ABM 05.2021

Annex B,
page 82

C–D



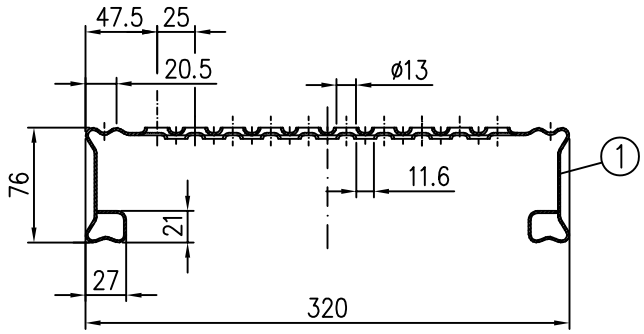
E–F



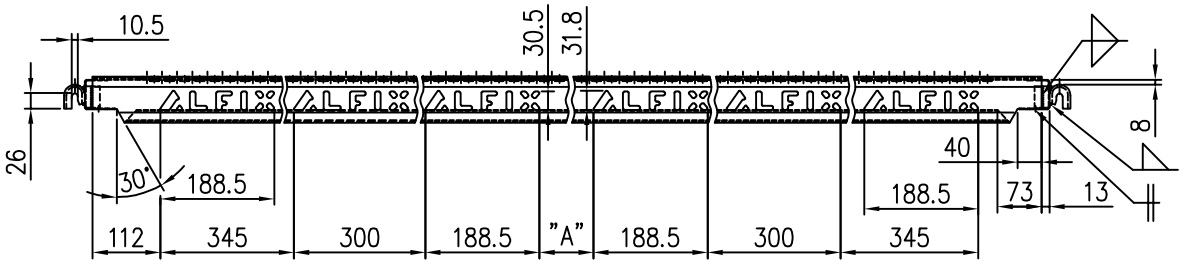
① Form A
② Form B
③ Hatch
④ Hinge 100x100x1.6
⑤ Box 40x20x2 AlMgSi0.5F25
⑥ Aluminium blind rivet ø5x16 DIN 7340
⑦ Thickness compensation

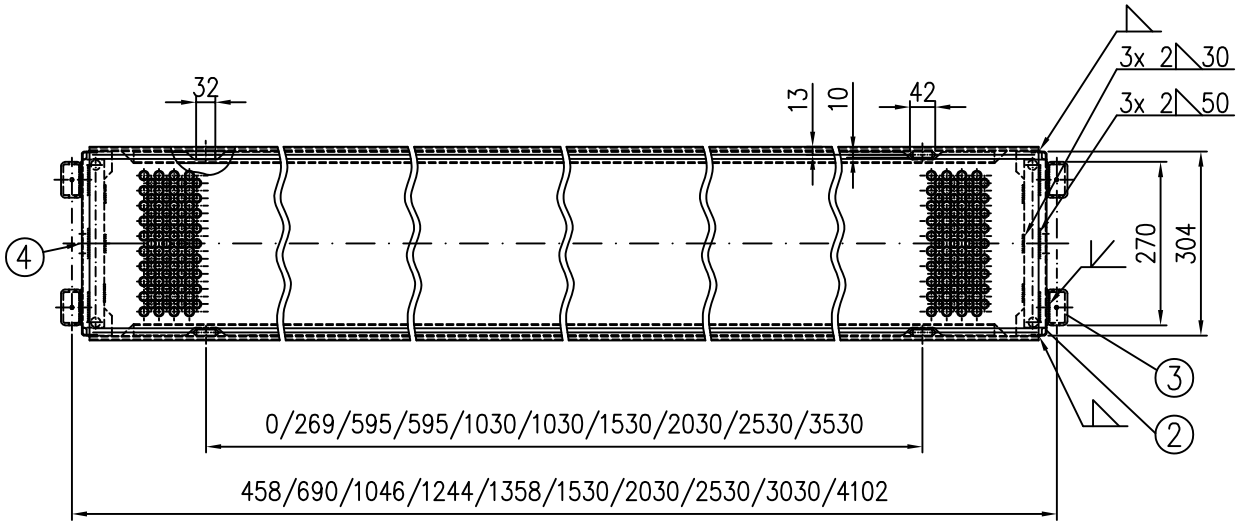
Component no longer manufactured
–only for continued use–

ALBLITZ MODUL	Annex B, page 83
Sectional views of aluminium access deck in accordance with Z–8.1–862	
A705–A021_ABM 05.2021	



Bay length [mm]	Number of logos [left/right]	Dimension "A" [mm]	Load class	Weight [kg]
500	1/–	–	6	4.1
732	1/1	36	6	5.6
1088	1/1	392	6	8.1
1286	1/1	590	6	9.5
1400	1/1	704	6	10.2
1572	1/1	876	6	11.4
2072	2/2	686	6	13.7
2572	2/2	1186	5	17.1
3072	3/3	1086	4	20.5
4144	3/3	2203	3	32.1





①	Steel plate 1.5 mm	DIN EN 10111–DD11 (DD12)	R_{eH} ≥280 N/mm²	R_m≥360 N/mm²
	alternatively:	DIN EN 10025–2 S235JR	R_{eH} ≥280 N/mm²	R_m≥360 N/mm²
②	Steel plate 1.5 mm	DIN EN 10111–DD11	R_{eH} ≥240 N/mm²	R_m≥360 N/mm²
③	Steel plate 4 mm	DIN EN 10111–DD13	R_{eH} ≥240 N/mm²	R_m≥360 N/mm²
④	Marking			

galvanised; all welding seams a=2 mm

ALBLITZ MODUL

Steel deck AF 0.32 m
in accordance with Z–8.1–862

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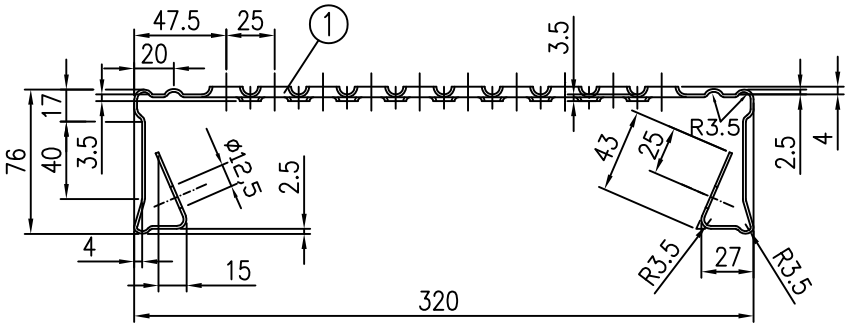
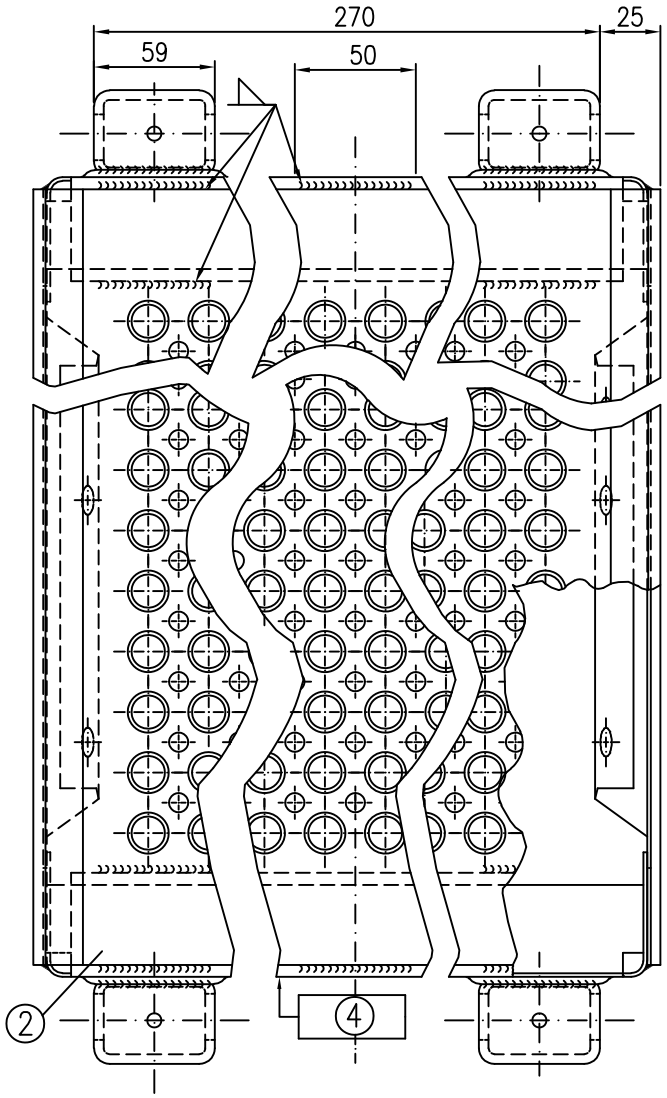
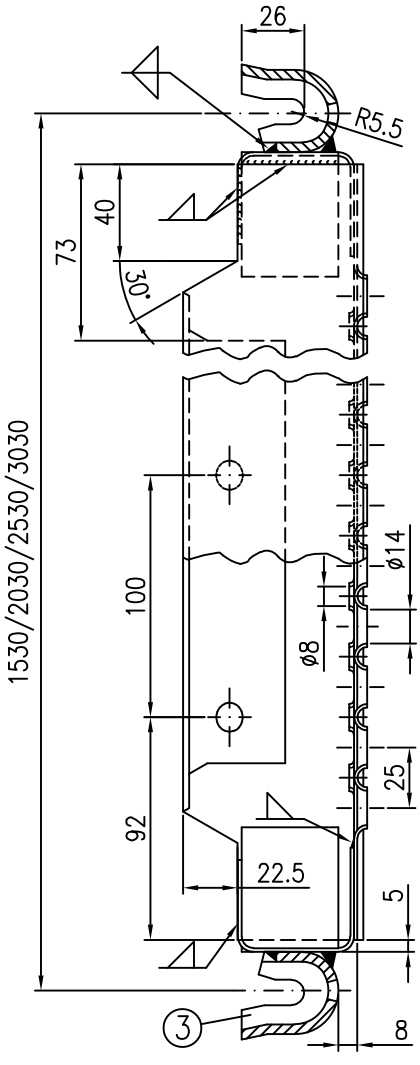
Annex B,
page 84

Bay length	Load class	Weight
[mm]		[kg]
1572	6	12.0
2072	6	15.0
2572	5	19.5
3072	4	23.0







①	Steel plate 590x1.5	DIN EN 10111–DD11	$R_{eH} \geq 280$ N/mm²
②	Steel plate 120x2; alternatively steel plate 120x1.5	DIN EN 10111–DD11	$R_{eH} \geq 240$ N/mm²
③	Steel plate 70x4	DIN EN 10111–DD13	$R_{eH} \geq 240$ N/mm²
④	Marking		

galvanised; all welding seams a=3 mm

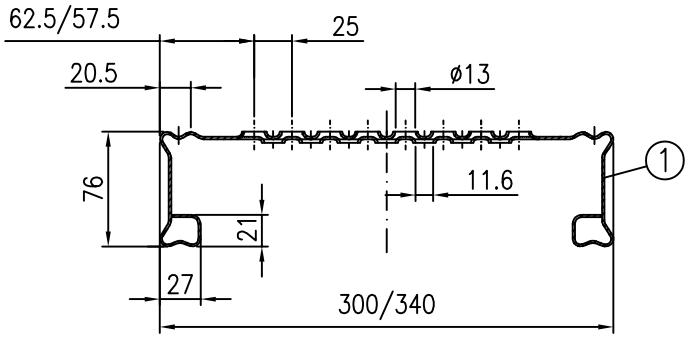
Component no longer manufactured
–only for continued use–

ALBLITZ MODUL

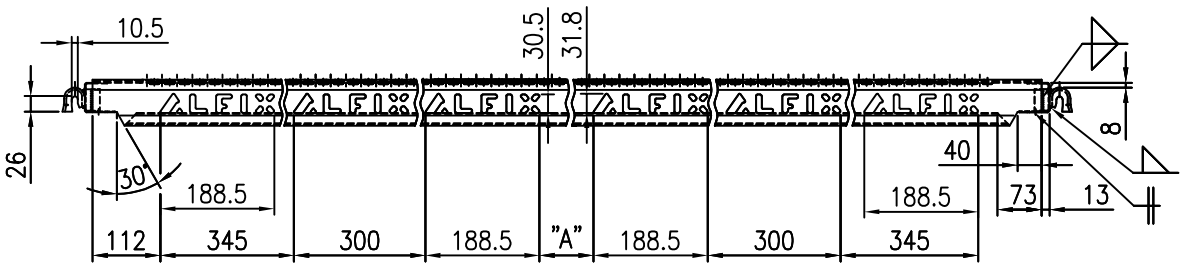
Steel deck
in accordance with Z–8.1–862

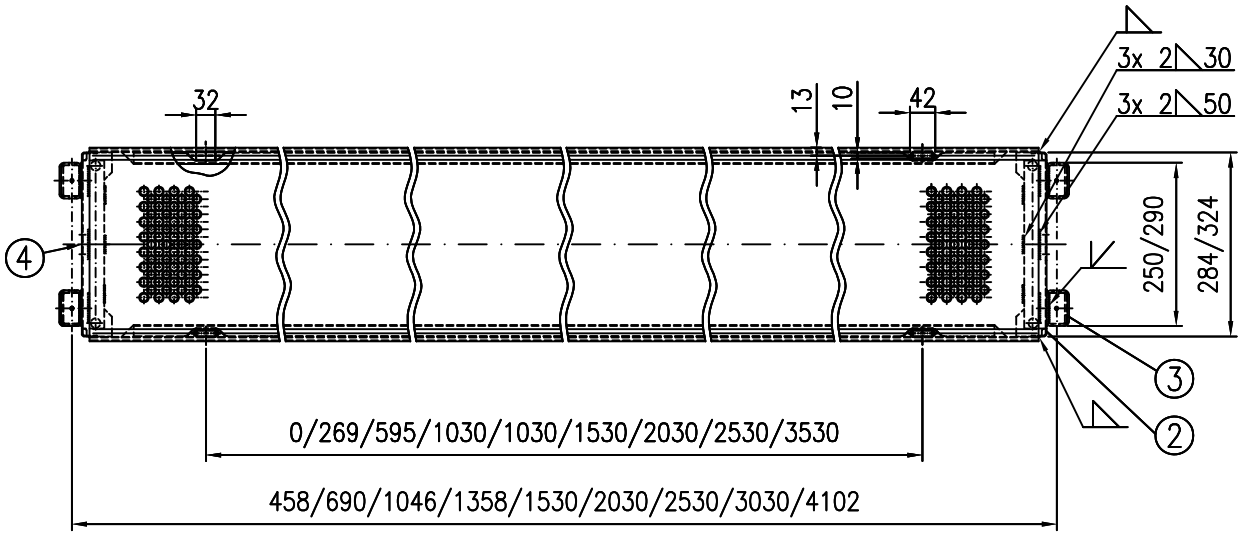
A705–A007_ABM 05.2021

Annex B,
page 85



Bay length [mm]	Number of logos [left/right]	Dimension "A" [mm]	Load class
500	1/–	–	6
732	1/1	36	6
1088	1/1	392	6
1400	1/1	704	6
1572	1/1	876	6
2072	2/2	686	6
2572	2/2	1186	5
3072	3/3	1086	4
4144	3/3	2203	3





①	Steel plate 1.5 mm	DIN EN 10111–DD11 (DD12)	R_{eH} ≥280 N/mm²	R_m ≥360 N/mm²
	alternatively:	DIN EN 10025–2 S235JR	R_{eH} ≥280 N/mm²	R_m ≥360 N/mm²
②	Steel plate 1.5 mm	DIN EN 10111–DD11	R_{eH} ≥240 N/mm²	R_m ≥360 N/mm²
③	Steel plate 4 mm	DIN EN 10111–DD13	R_{eH} ≥240 N/mm²	R_m ≥360 N/mm²
④	Marking			

galvanised; all welding seams a=2 mm

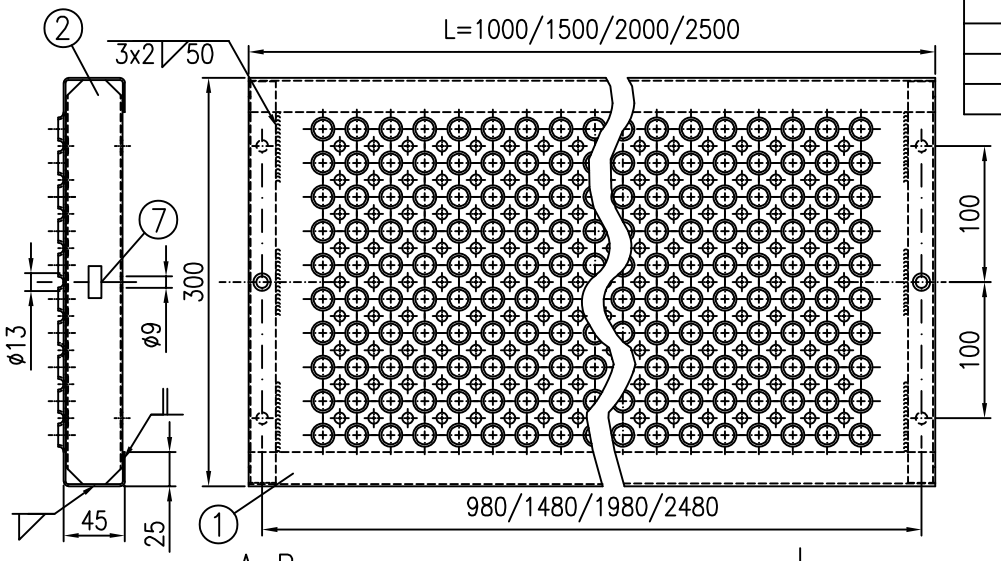
ALBLITZ MODUL

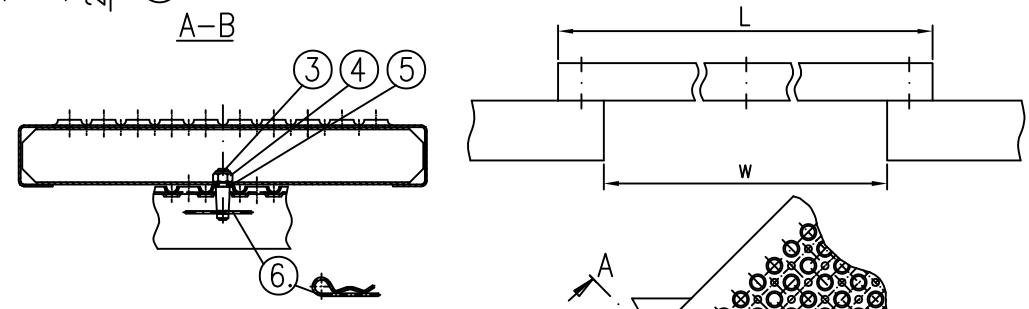
Steel deck AF 0.30 m; 0.34 m
in accordance with Z–8.1–862

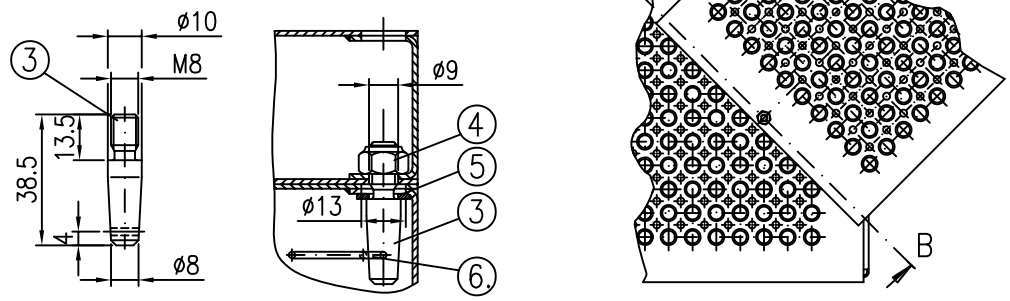
A709–A167_ABM 05.2021

Annex B,
page 86

Length L [mm]	w	Load class
1000	900	4
1500	1450	4
2000	1850	3
2500	1850	3







① Steel plate 1.5 mm	DIN EN 10111–DD11	R_{eH} ≥280 N/mm²	R_m ≥360 N/mm²
alternatively:	DIN EN 10025–S235JR	R_{eH} ≥280 N/mm²	R_m ≥360 N/mm²
② Steel plate 1.5 mm	DIN EN 10111–DD11	R_{eH} ≥280 N/mm²	R_m ≥360 N/mm²
③ Lift–off prevention	DIN EN 10025–S235JR		
④ Hexagon nut, self–locking	DIN EN ISO 10511–M8–8–galvanised		
⑤ Disc	DIN EN ISO 7089–A8.4–steel–galvanised		
⑥ Spring clip	DIN 11024–2x42–steel–galvanised		
alternatively:	DIN 11024–2x50–steel–galvanised		
⑦ Marking			
galvanised; all welding seams a=2 mm			

Dimens. [m]	Weight [kg]
1.00	5.5
1.50	8.0
2.00	10.5
2.50	12.8

ALBLITZ MODUL

Steel plank 0.30 m
in accordance with Z–8.1–862

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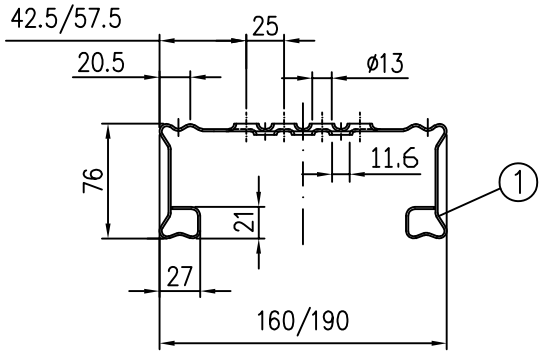
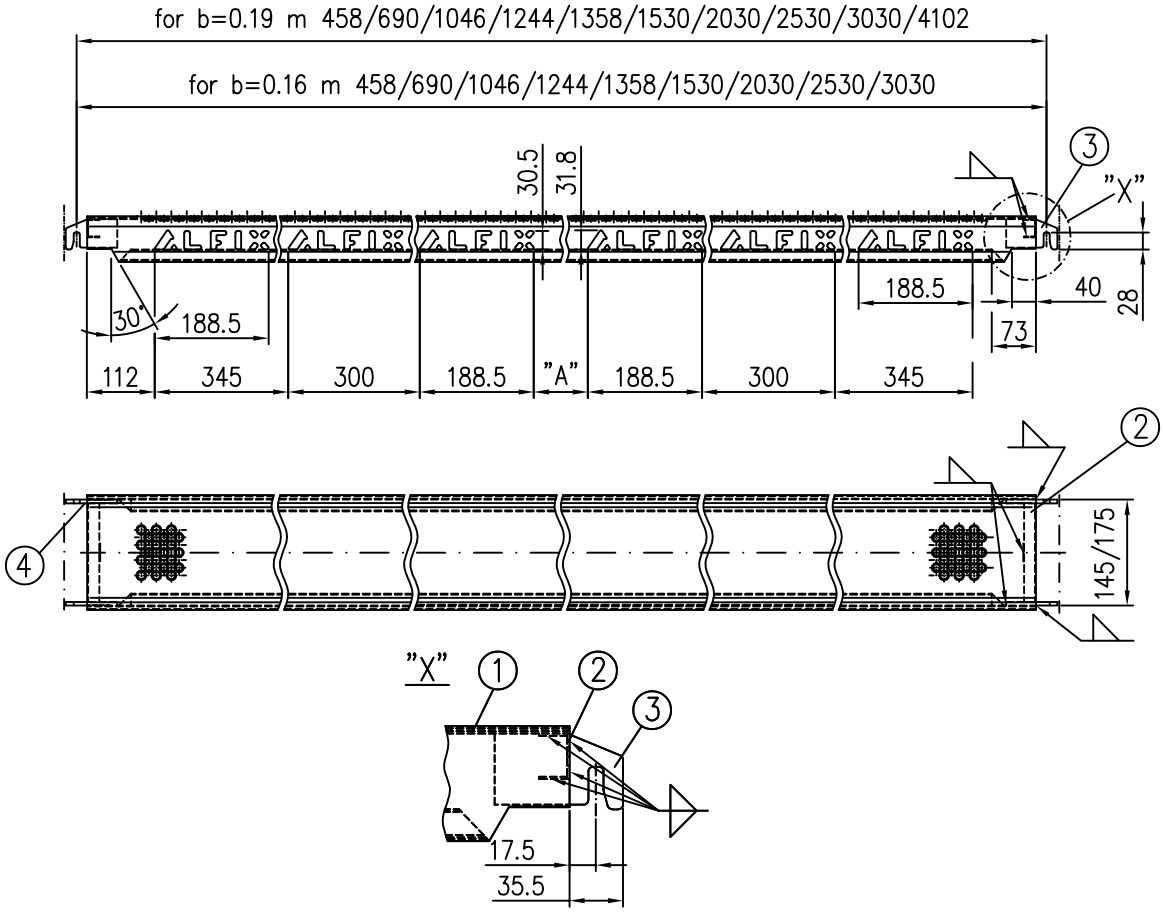
Annex B,
page 87



Bay length [mm]	Number of logos [left/right]	Dimension "A" [mm]	Load class	Weight 0.19 m [kg]
500	1/–	–	6	3.1
732	1/–	–	6	4.3
1088	1/1	417	6	6.1
1286	1/1	615	6	7.1
1400	1/1	729	6	7.7
1572	1/1	901	6	8.6
2072	2/2	711	6	11.2
2572	2/2	1211	5	13.9
3072	3/3	1111	4	16.5
4144	3/3	2228	3	22.0



① Steel plate 1.5mm	DIN EN 10111–DD11 (DD12)	R_{eH} ≥280 N/mm²	R_m≥360 N/mm²
alternatively:	DIN EN 10025–2 S235JR	R_{eH} ≥280 N/mm²	R_m≥360 N/mm²
② U–profile 30x20x1.5	DIN EN 10025–2 S235JR		
alternatively: U–profile 25x25x1.5	DIN EN 10162 S235JR		
③ Flat 50x6	DIN EN 10025–2 S235JR		
④ Marking			

galvanised; all welding seams a=2 mm

ALBLITZ MODUL

Intermediate deck AF 0.16 m; 0.19 m
in accordance with Z–8.1–862

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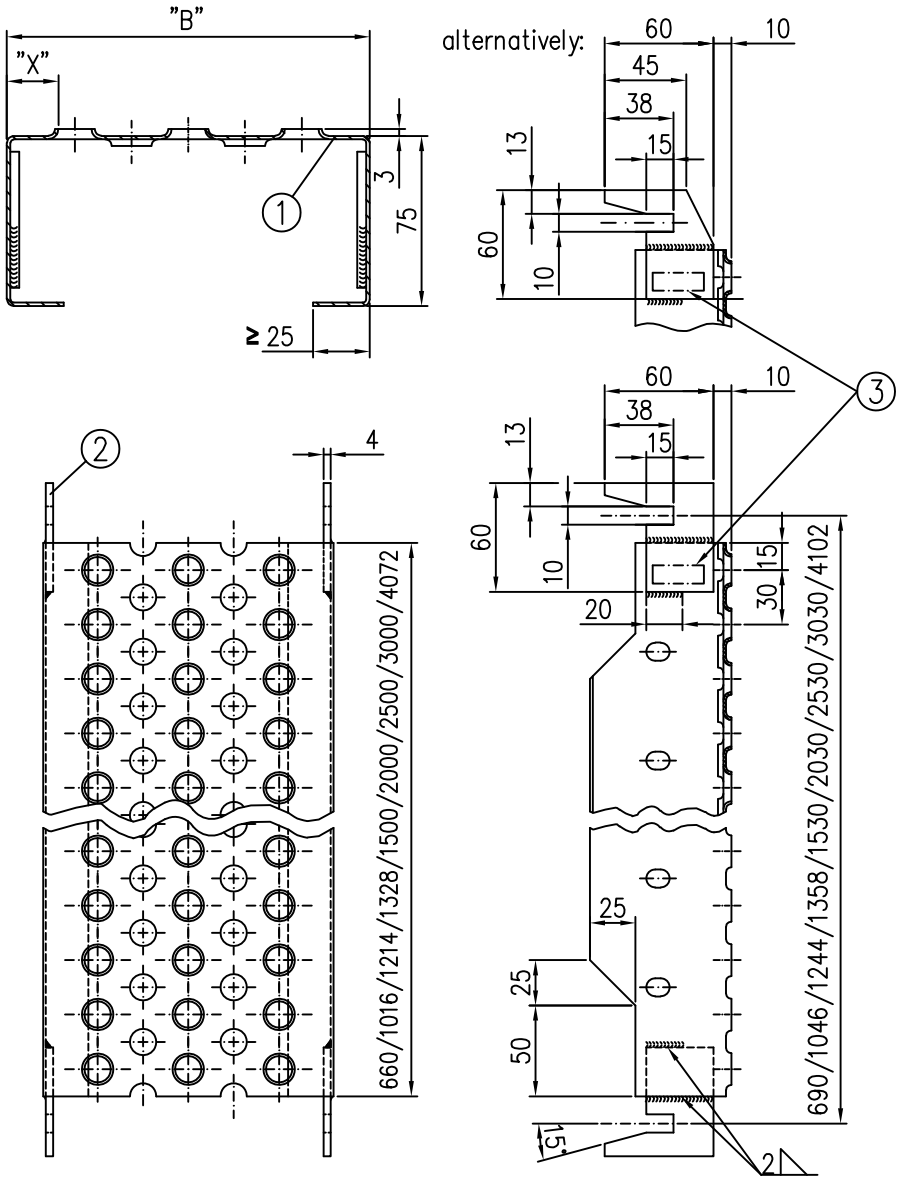
Annex B,
page 88

Bay length	Load class	Weight 0.16 m
[mm]		[kg]
732	6	4.6
1088	6	6.0
1286	6	7.2
1400	6	7.8
1572	6	8.7
2072	6	11.4
2572	5	14.2
3072	4	16.7
4144 *	3	21.5



"B"	"X"
[mm]	[mm]
120	≥13
140	≥13
160	≥18
190	≥18

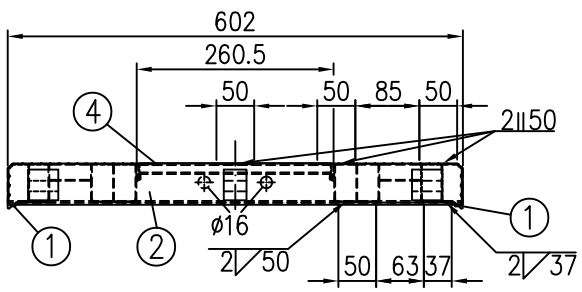
① Steel plate 2 mm	DIN EN 10025–2 S235JR	
alternatively:	DIN EN 10111–DD11	R_{eH} ≥240 N/mm² R_m≥360 N/mm²
alternatively: Steel plate 1.5 mm	DIN EN 10025–2 S235JR	
alternatively:	DIN EN 10111–DD11	R_{eH} ≥240 N/mm² R_m≥360 N/mm²
② Steel metal 4x60x60	DIN EN 10025–2 S235JR	
③ Marking		
galvanised	* for bay length 4144 mm steel plate 2 mm	

ALBLITZ MODUL

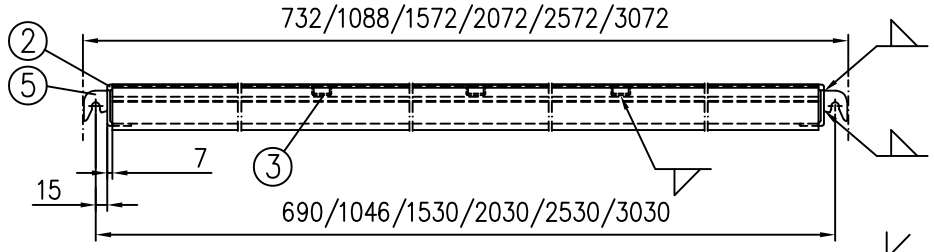
Intermediate deck
in accordance with Z–8.1–862

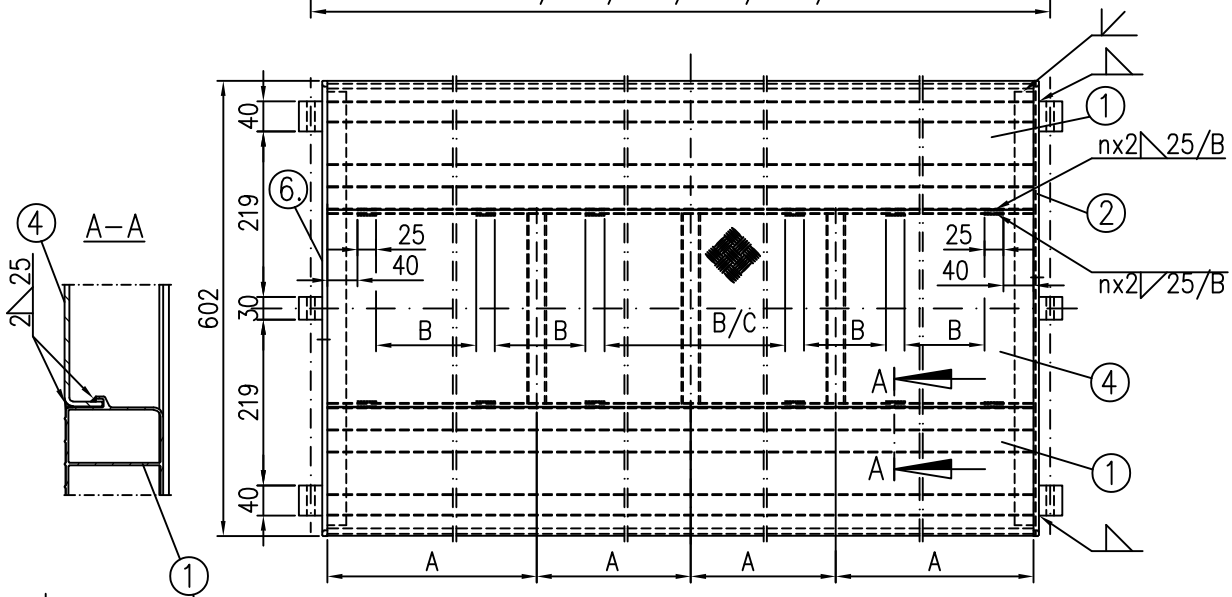
A709–A108_ABM 04.2022

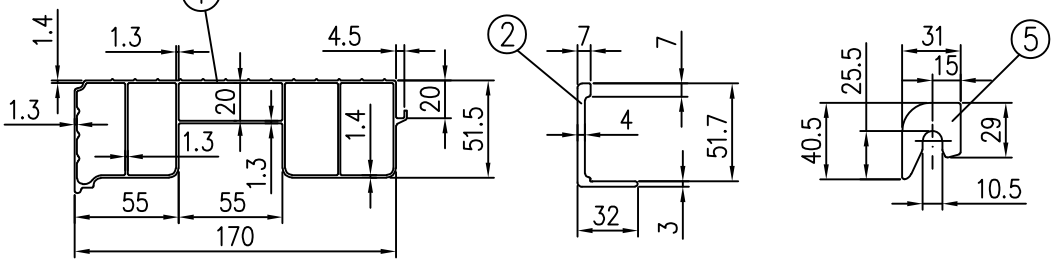
Annex B,
page 89



Bay length [mm]	Units ③	Dimension "A" [mm]	Dimension "B" [mm]	Dimension "C" [mm]	n	Load class	Weight [kg]
732	–	–	155	–	4	4	6.0
1088	–	–	274	–	4	4	8.6
1572	1	743	435	–	4	4	11.5
2072	2	662	351	–	6	4	16.7
2572	2	829	414	600	6	4	18.2
3072	3	746	551	–	6	3	21.6







① Edge section	DIN EN 755–2	EN AW–6063–T66
② Headpiece profile	DIN EN 755–2	EN AW–6063–T66
③ U–profile 12x25x12x2	DIN EN 755–2	EN AW–6063–T66
④ Chequer plate with 5 bar pattern 2/3.5	DIN EN 1386	EN AW–5083 H114
⑤ Einhängeklaue	DIN EN 755–2	EN AW–6063–T66
⑥ Marking	all welding seams a=2 mm 131–MIG: Type 5 (EC9) filler material	

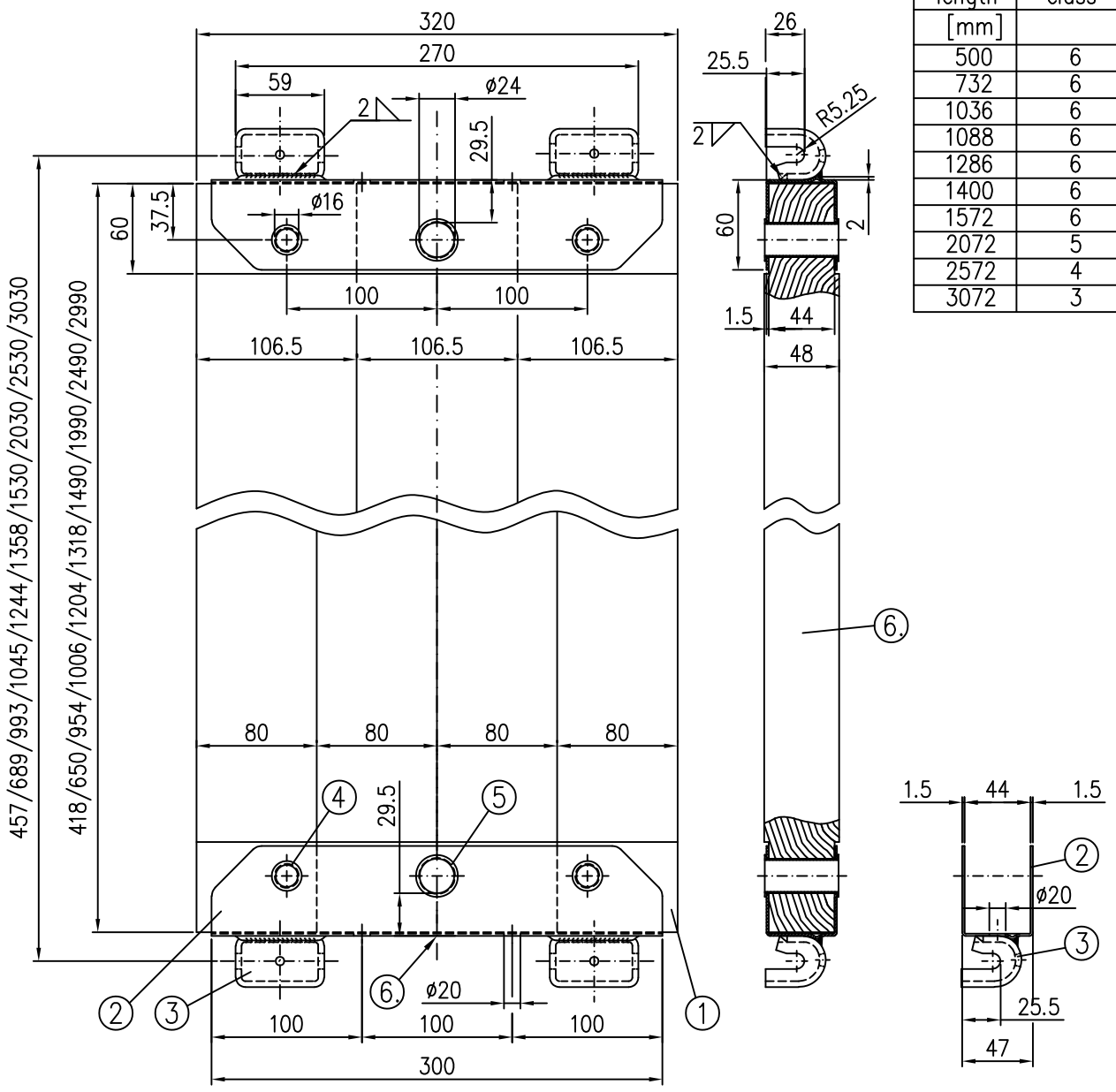
ALBLITZ MODUL

Lightweight aluminium deck 0.60 m
in accordance with Z–8.1–862

A712–A213_ABM 05.2021

Annex B,
page 90

Bay length [mm]	Load class	Weight [kg]
500	6	4.5
732	6	6.0
1036	6	8.2
1088	6	8.6
1286	6	9.7
1400	6	10.5
1572	6	11.4
2072	5	14.5
2572	4	18.6
3072	3	23.0



① Solid wood deck 4 planks 80x48; alternatively 3 planks 106.5x48	DIN 4074-1-S10/S13* or DIN EN 338 C24/C30*	
② Steel plate 162x1.5		$R_{eH} \geq 240$ N/mm²
③ Steel plate 70x4	DIN EN 10111-DD13	$R_{eH} \geq 240$ N/mm²
④ Tubular rivet	DIN 7340-B15x1x53-steel	
⑤ Tubular rivet	DIN 7340-B23x1x53-steel	
⑥ Marking		
all components made of steel – galvanised	* for 3.07 m	

ALBLITZ MODUL

Solid wood deck 48
in accordance with Z-8.1-862

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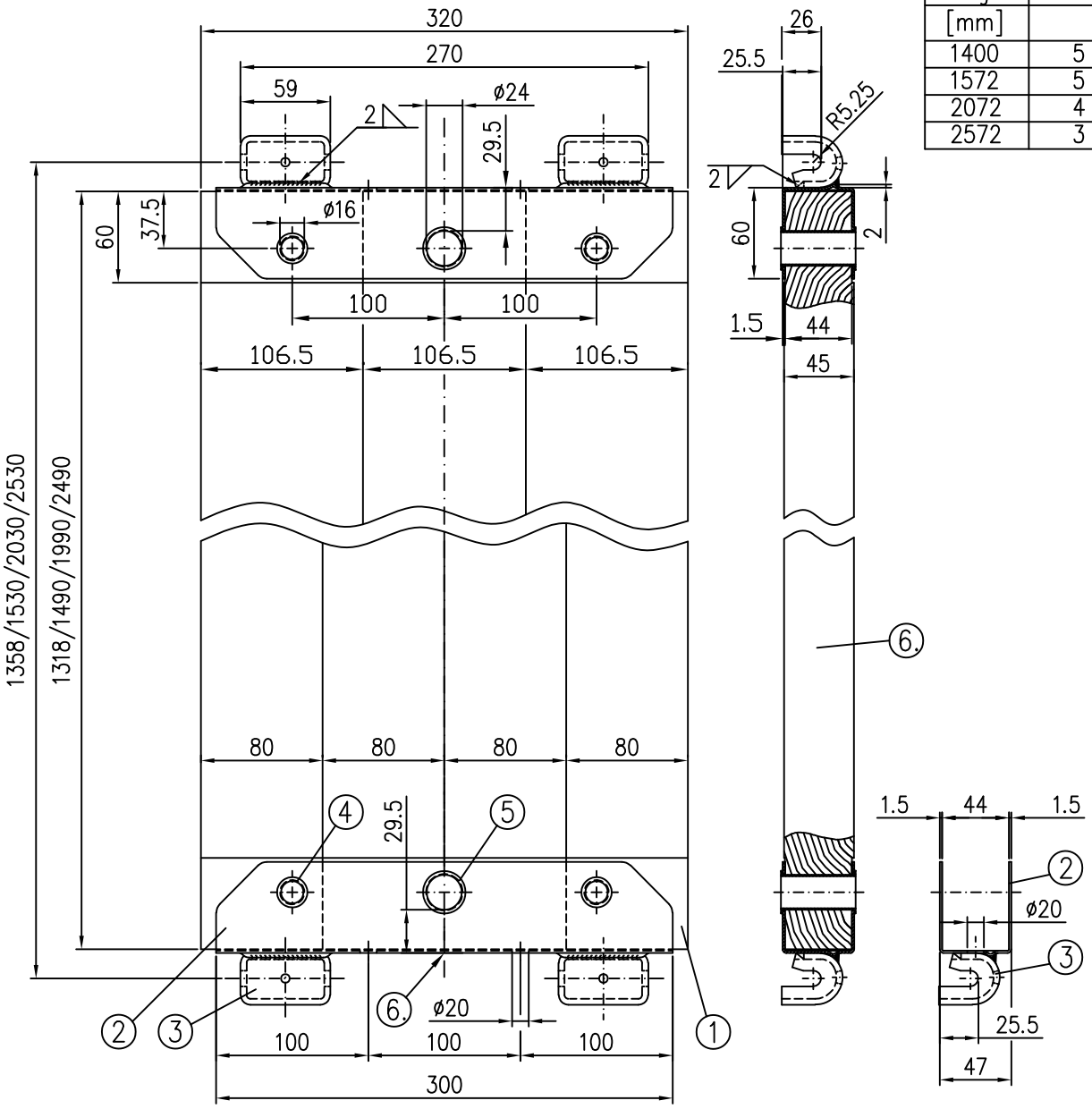
Annex B,
page 91

Bay length	Load class	Weight
[mm]		[kg]
1400	5	10.0
1572	5	11.1
2072	4	14.4
2572	3	17.6



① Solid wood deck DIN 4074-1-S10/S13 or DIN EN 338 C24/C30
4 planks 80x45; alternatively 3 planks 106.5x45

② Steel plate 162x1.5 DIN EN 10111-DD11 $R_{eH} \geq 240$ N/mm²

③ Steel plate 70x4 DIN EN 10111-DD13 $R_{eH} \geq 240$ N/mm²

④ Tubular rivet DIN 7340-B15x1x53-steel

⑤ Tubular rivet DIN 7340-B23x1x53-steel

⑥ Marking

all components made of steel – galvanised

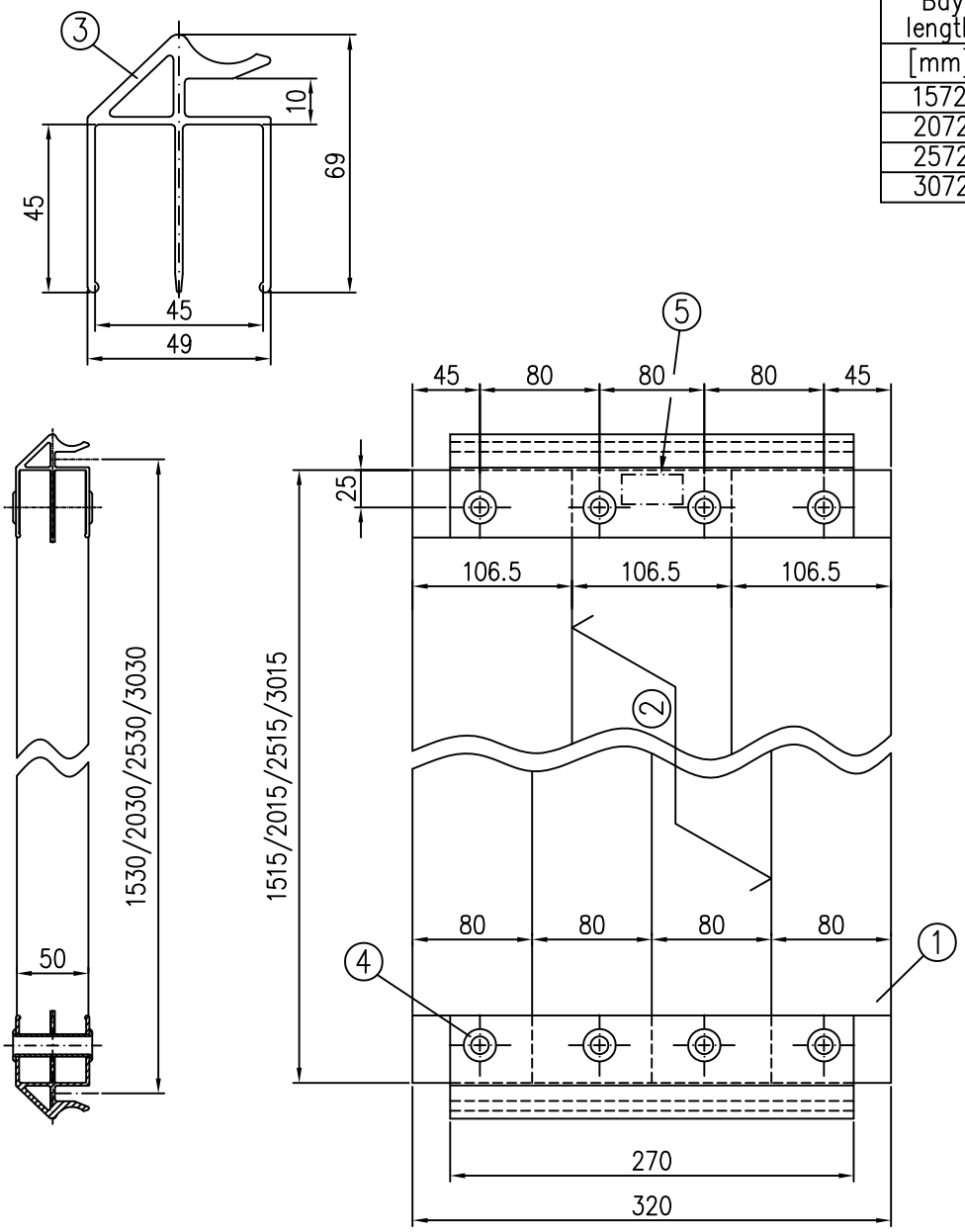
ALBLITZ MODUL

Solid wood deck 45
in accordance with Z-8.1-862

A709-A200_ABM 05.2021

Annex B,
page 92

Bay length	Load class	Weight
[mm]		[kg]
1572	6	13.0
2072	5	16.0
2572	4	19.0
3072	3	22.0



① Pine wooden deck visual strength grade S13 for bay length L=3.07 m
or S10 for bay length L = 2.57 m (single planks S10)
alternatively: – 4 planks made from wooden decks 80x50
– 3 planks made from wooden decks 106.5x50

② glued as structural component

③ Suspension section EN AW–6082–T5 (AlMgSi1F28)

④ Tubular rivet DIN 7340–B15x1x53–steel–galvanised

⑤ Marking

Component no longer manufactured
–only for continued use–

ALBLITZ MODUL

Wooden deck
in accordance with Z–8.1–862

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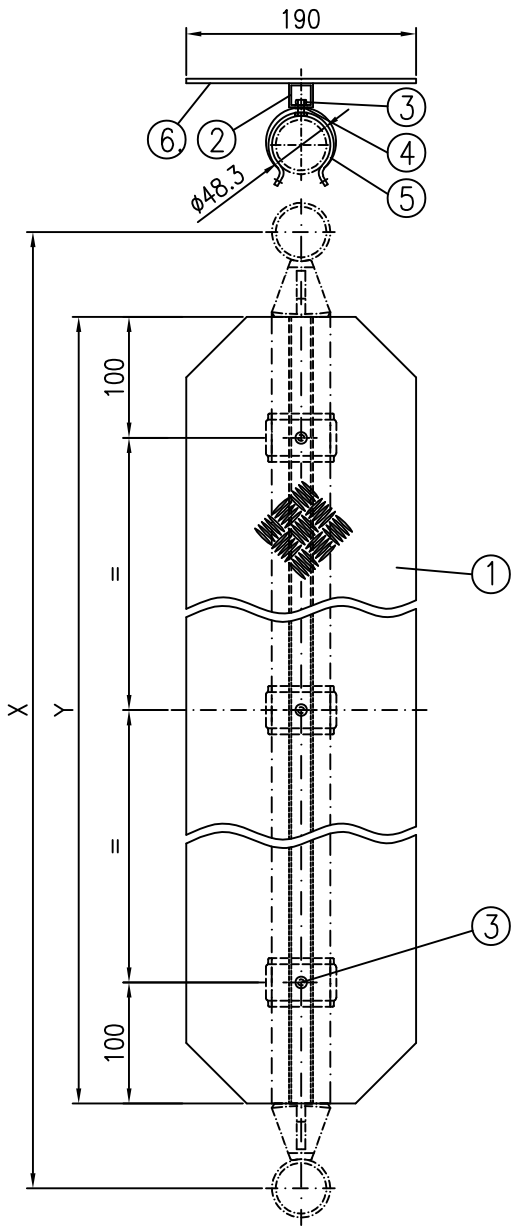
Annex B,
page 93

X [m]	X [mm]	Y [mm]	Weight [kg]
0.73	732	591	1.2
1.09	1088	947	2.0
1.29	1286	1145	2.2
1.40	1400	1259	2.4
1.57	1572	1431	3.0
2.07	2072	1931	4.0
2.57	2572	2431	5.1
3.07	3072	2931	6.1
4.14	4144	4003	7.3



① Chequer plate with 5 bar pattern 2.5/3.3x190	DIN EN 1386 EN AW-5083 H224
alternatively: Chequer plate with 5 bar pattern 2.5/4.0x190	DIN EN 1386 EN AW-5754 H111/ H114
② Rectangular hollow section 20x20x2	DIN EN 755-2 EN AW-6060-T66
③ Blind rivet	DIN EN ISO 15979-A5x12 EN AW-5754 H112
④ Disc	DIN EN ISO 7089-5.3-steel-galvanised
alternatively:	DIN EN ISO 7094-5.5-steel-galvanised
⑤ Tube clamp, hot-dip galvanised	
⑥ Marking	

ALBLITZ MODUL

MODUL gap cover
in accordance with Z-8.22-906

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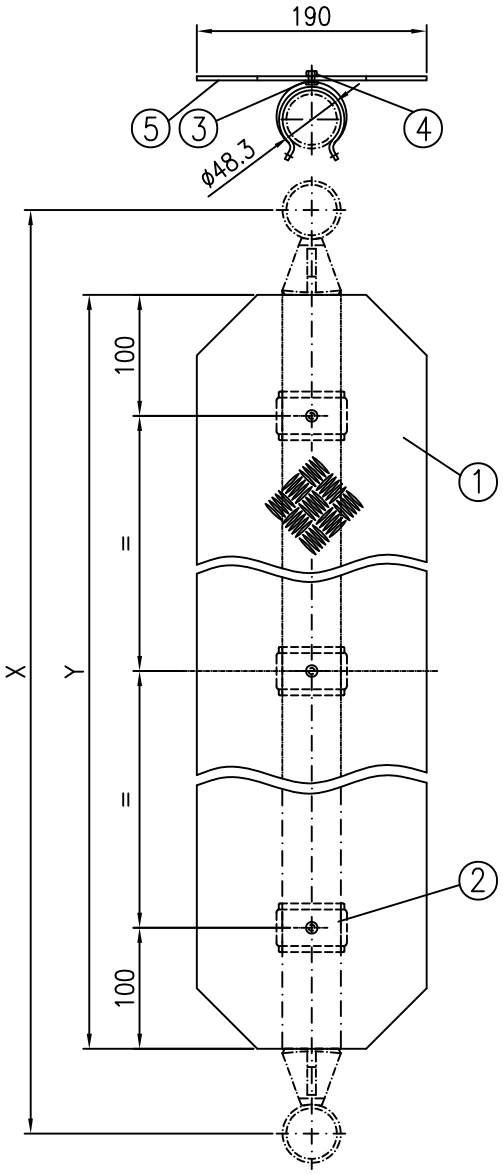
Annex B,
page 94

X [m]	X [mm]	Y [mm]	Weight [kg]
0.73	732	591	1.0
1.09	1088	947	1.6
1.29	1286	1145	1.9
1.40	1400	1259	2.1
1.57	1572	1431	2.4
2.07	2072	1931	3.3
2.57	2572	2431	4.1
3.07	3072	2931	5.0
4.14	4144	4003	6.8



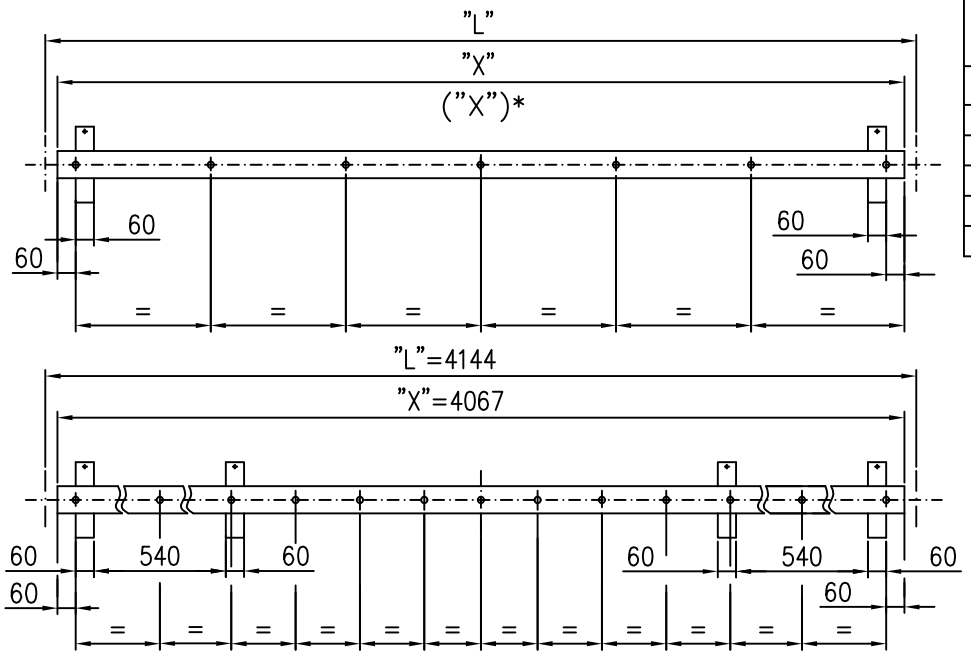
① Chequer plate with 5 bar pattern 2.5/3.3x190 DIN EN 1386 EN AW-5083 H224
alternatively: Chequer plate with 5 bar pattern 2.5/4.0x190 DIN EN 1386 EN AW-5754 H111/ H114
② Tube clamp, hot-dip galvanised
③ Disc DIN EN ISO 7089-5.3-steel-galvanised
alternatively: DIN EN ISO 7094-5.5-steel-galvanised
④ Blind rivet DIN EN ISO 15979-A5x12 EN AW-5754 H112
⑤ Marking

ALBLITZ MODUL

MODUL gap cover with tube fixture
in accordance with Z-8.22-906

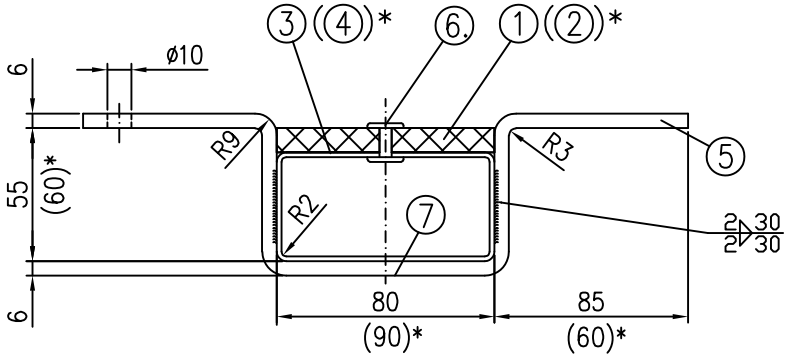
M710-B132_ABM 05.2021

Annex B,
page 95



⑧ "L"	⑨ "X"	⑩ ("X")*	⑪	⑫	(⑬)*
[mm]	[mm]	[mm]			
1572	1495	1500	6	7	7
2072	1995	2000	6	7	7
2572	2495	2500	5	7	7
3072	2995	3000	4	9	7
4144	4067	–	3	13	7

Cross section



① Plywood 10x80 — Plywood for use in scaffolding with national technical approval
(② Film-coated plywood 10x90 BFU 100G-10 DIN 68705 sheet 3)*
③ Rectangular hollow section 80x40x2 DIN EN 10219-S235JRH
(④ Rectangular hollow section 90x45x2 DIN 59411-S235JRH)*
⑤ Flat 60x6 DIN EN 10025-S235JR
⑥ Blind rivet ø5x20 DIN EN ISO 15979 EN AW-5754 H112
⑦ Marking
⑧ Bay length "L"
⑨ Length "X"
⑩ Length ("X")*
⑪ Load class
⑫ and (⑬)* Number of rivets

all components made of steel galvanised

( )* Alternative design

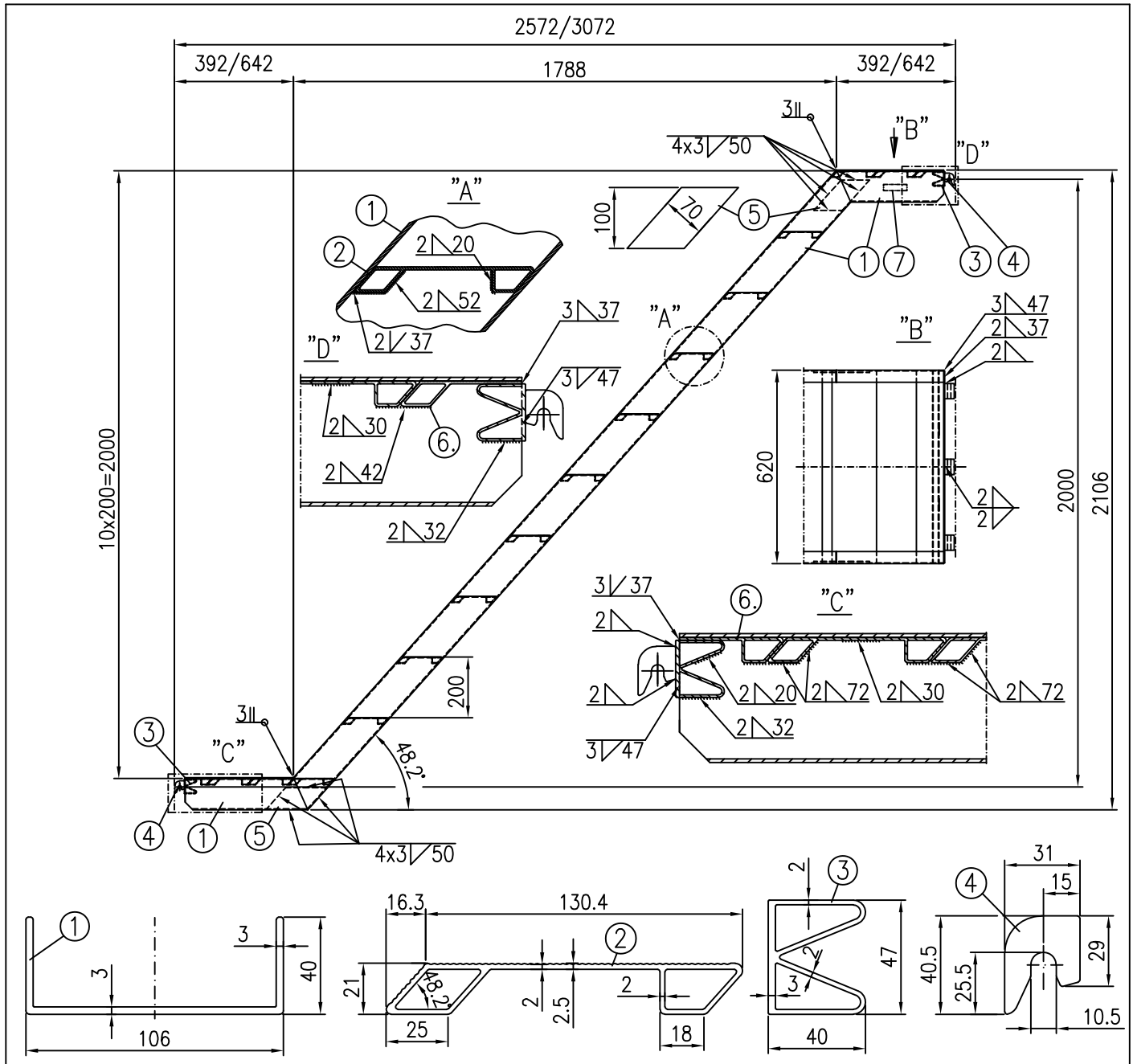
Dimens. [m]	Weight [kg]
1.57	9.0
2.07	11.2
2.57	13.5
3.07	15.8
4.14	19.8

ALBLITZ MODUL

Gap cover
in accordance with Z-8.1-862

A709-A160_ABM 05.2021

Annex B,
page 96



①	U-profile 40x106x40x3	DIN EN 755-2 EN AW-6063-T66
②	Stair tread section	DIN EN 755-2 EN AW-6063-T66
③	Grip profile; bridging deck thickness 2 mm	DIN EN 755-2 EN AW-6063-T66
④	Suspension claw	DIN EN 755-2 EN AW-6063-T66
⑤	Flat 100x5	DIN EN 485-2 EN AW-5754 H24/H34
	alternatively:	DIN EN 755-2 EN AW-6063-T66
⑥	Stair tread section reduced	DIN EN 755-2 EN AW-6063-T66
⑦	Marking	131-MIG: Type 5 (EC9) filler material

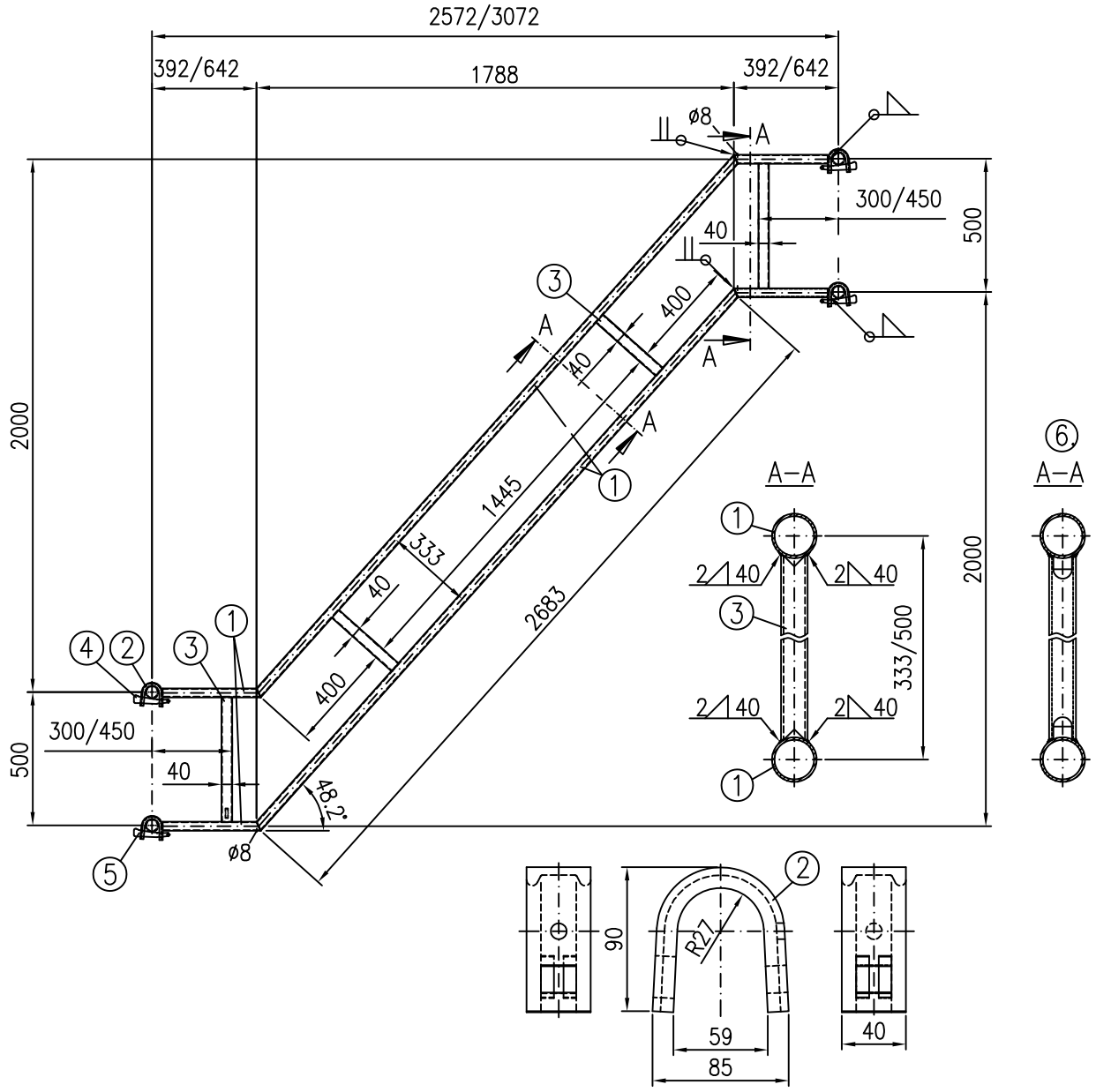
Dimension [m]	Weight [kg]
2.57x2.00	26.0
3.07x2.00	32.0

ALBLITZ MODUL

Aluminium stairway AF-0.62 m 2.57 m; 3.07 m
in accordance with Z-8.1-862

A709-A172_ABM 05.2021

Annex B,
page 97



①	Circular hollow section ø38x2	DIN EN 10219–S235JRH	$R_{eH} \geq 320$ N/mm²
	alternatively: Circular hollow section ø38x2.3	DIN EN 10219–S235JRH	
	alternatively: Circular hollow section ø33.7x2.3	DIN EN 10219–S235JRH	$R_{eH} \geq 320$ N/mm²
②	Bended profile section 40x13x5x6.5	DIN EN 10025–S235JR	
③	Rectangular hollow section 40x20x2	DIN EN 10219–S235JRH	
④	Wedge 6 mm	see Annex B, page 3	
⑤	Marking		
⑥	alternatively		

galvanised; all welding seams a=2 mm

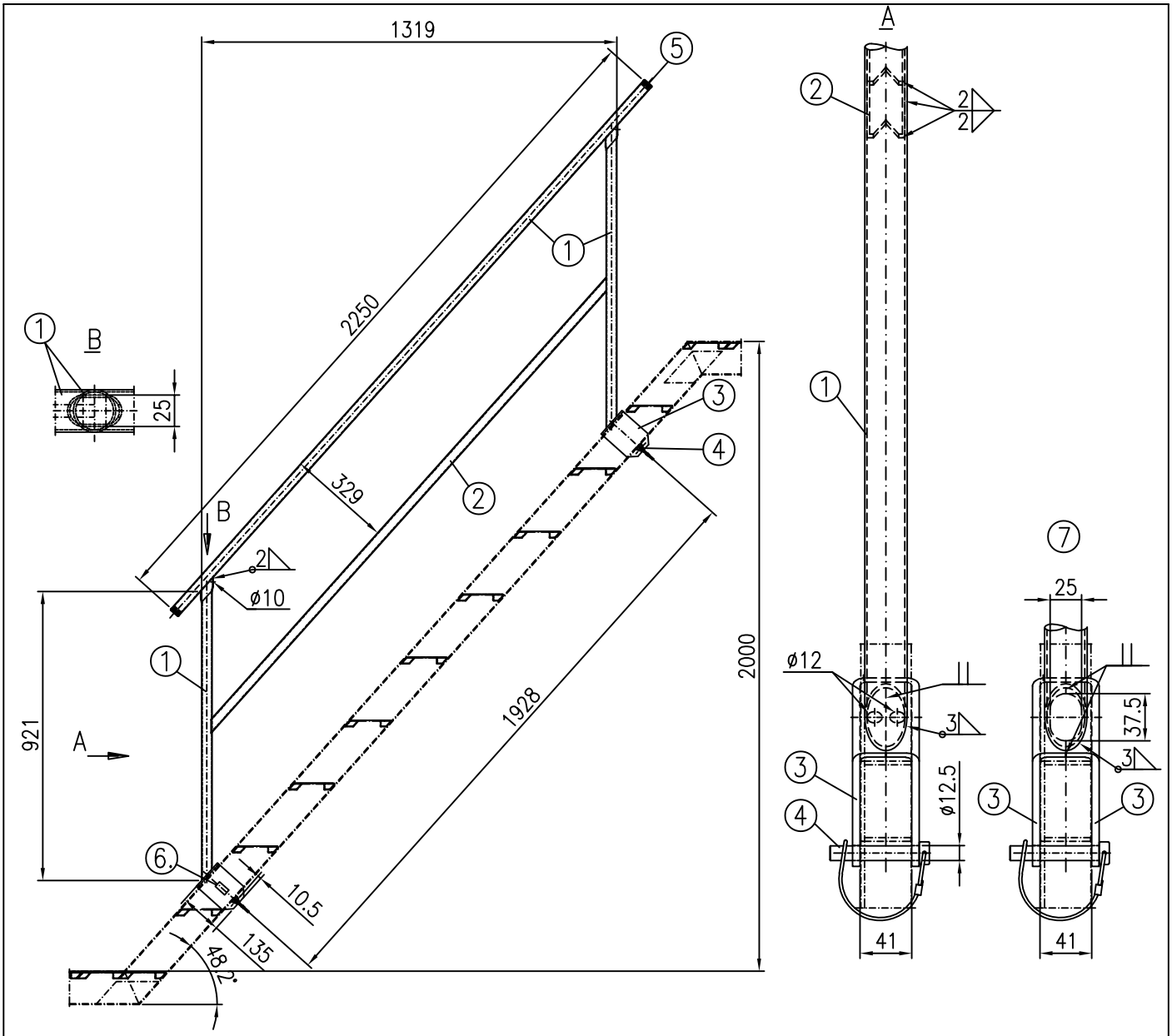
Dimension [m]	Weight [kg]
2.57x2.00	18.0
3.07x2.00	19.9

ALBLITZ MODUL

Stair guardrail 2.57; 3.07 m
in accordance with Z–8.22–906

M716–B218_ABM 05.2021

Annex B,
page 98



①	Circular hollow section ø33.7x1.8	DIN EN 10219-S235JRH $R_{eH} \geq 320$ N/mm²
	alternatively: Circular hollow section ø33.7x2.0	DIN EN 10219-S235JRH
②	Rectangular hollow section 30x30x2	DIN EN 10219-S235JRH
③	Flat 100x6	DIN EN 10025-S235JR
④	Tube linchpin RK 112 12x70 with snap-on lock	
	Pin	DIN EN 10025-S355J2
	Ring	DIN 17223 B spring steel wire
⑤	Tube end cap GL 34 S-Poly.	
⑥	Marking	
⑦	alternatively	
	galvanised	

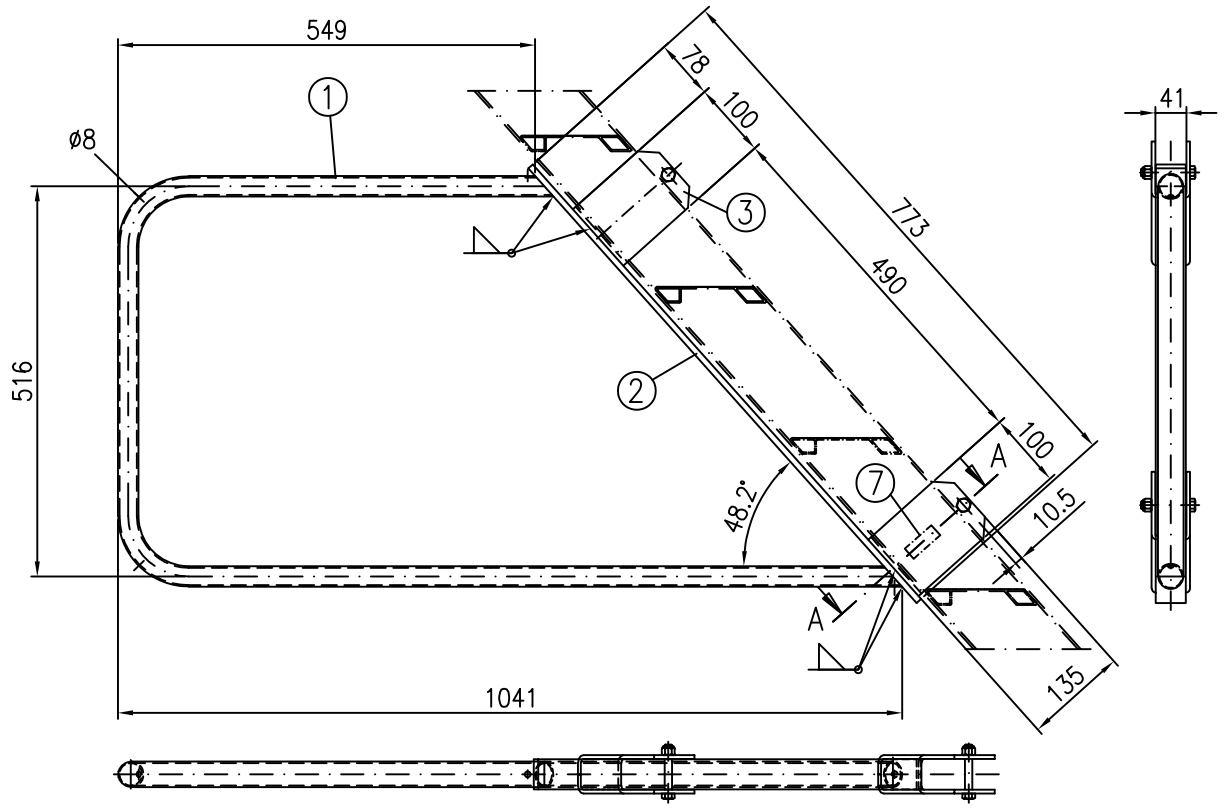
Dimens. [m]	Weight [kg]
2.00	13.3

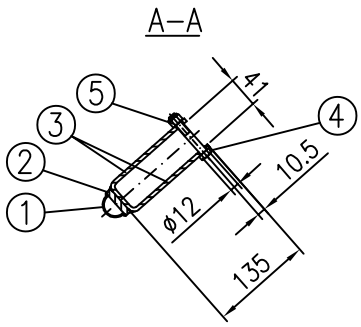
ALBLITZ MODUL

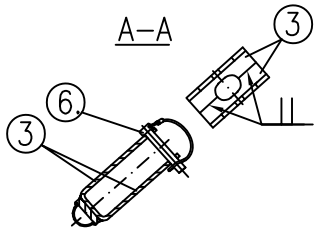
Inner guardrail for aluminium stairway 2.00 m
in accordance with Z-8.1-862

A709-A174_ABM 05.2021

Annex B,
page 99







①	Circular hollow section ø33.7x1.8	DIN EN 10219–S235JRH $R_{eH} \geq 320$ N/mm²
	alternatively: Circular hollow section ø33.7x2.0	DIN EN 10219–S235JRH
②	Flat 40x8	DIN EN 10025–S235JR
③	Flat 100x6	DIN EN 10025–S235JR
④	Hexagon bolt	DIN EN ISO 4014–M10x65–8.8–galvanised
⑤	Hexagon nut, self–locking	DIN EN ISO 10511–M10–8–galvanised
⑥	alternatively: Tube linchpin RK 112 12x70 with	snap–on lock
	Pin	DIN EN 10025–S355J2
	Ring	DIN 17223 B spring steel wire
⑦	Marking	
	galvanised; all welding seams a=3 mm	

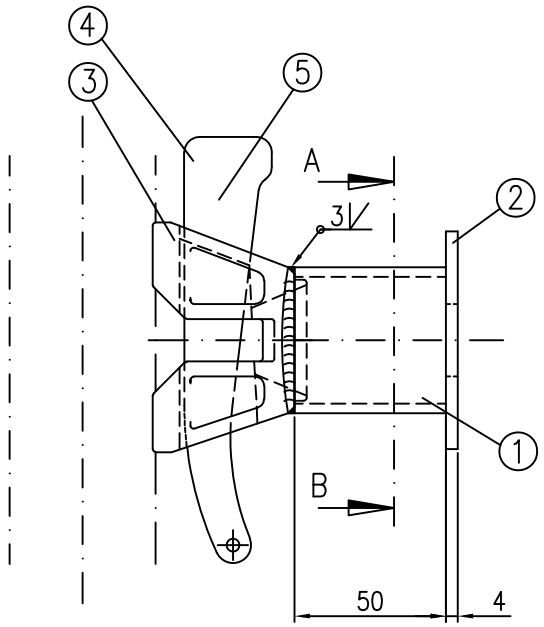
Dimension [m]	Weight [kg]
1.00 x 0.50	8.8

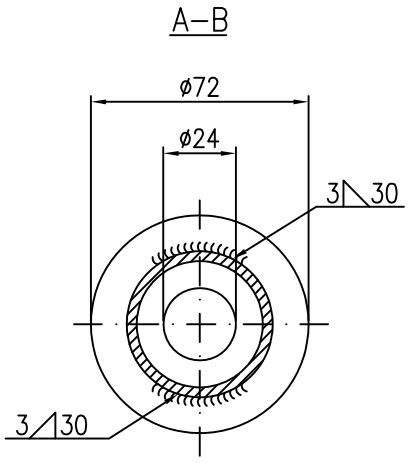
ALBLITZ MODUL

Stair stringer fall protection 1.00 x 0.50 m
in accordance with Z–8.1–862

A709–A175_ABM 05.2021

Annex B,
page 100





① Circular hollow section ø48.3x3.2	DIN EN 10219–S235JRH	$R_{eH} \geq 320$ N/mm²
alternatively: Circular hollow section ø48.3x2.7	DIN EN 10219–S460MH	
② Steel metal 4 t=4 mm	DIN EN 10025–S235JR	
alternatively: Disc	DIN EN ISO 7093–1–26x70x4–steel	
③ Connection of tube ledger	see Annex B, page 4	
alternatively: Connection of tube ledger 4.0	see Annex B, page 151	
④ Wedge 6 mm	see Annex B, page 3	
⑤ Marking		
galvanised		

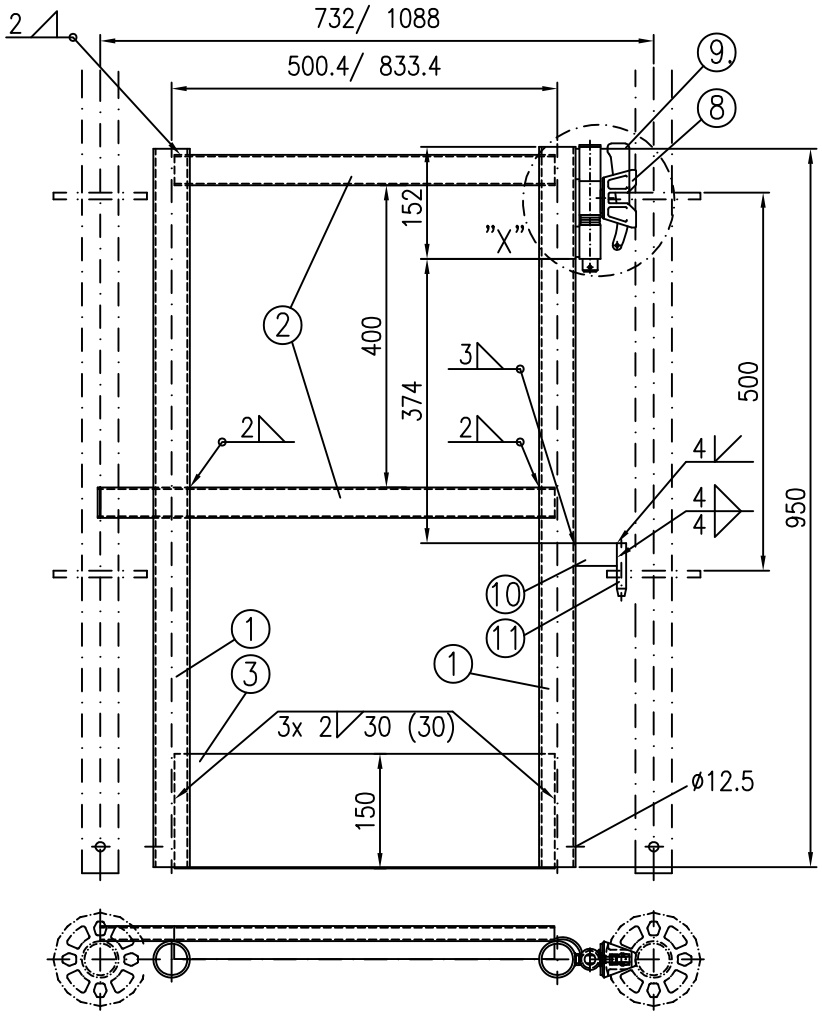
Dimens. [m]	Weight [kg]
–	0.8

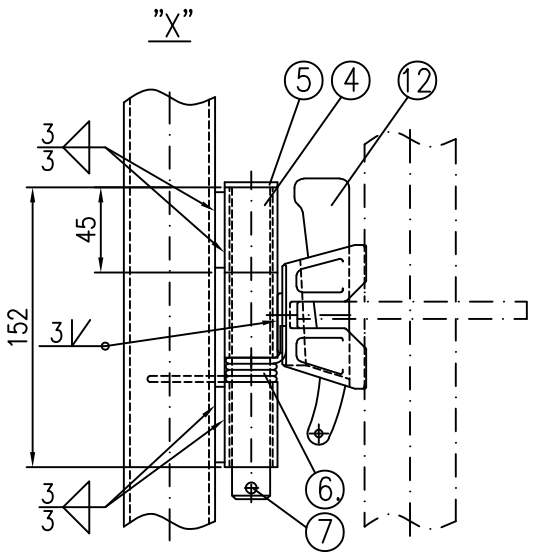
ALBLITZ MODUL

MODUL stair guardrail holder
in accordance with Z–8.22–906

M711–B209_ABM 05.2021

Annex B,
page 101





①	Circular hollow section ø48.3x2.7	DIN EN 10219–S235JRH $R_{eH} \geq 320$ N/mm²
②	Rectangular hollow section 40x20x2	DIN EN 10219–S235JRH
③	Steel metal 1.5	DIN EN 10111–DD11
④	Circular hollow section ø28x2.5	DIN EN 10305–3–E235+CR1
⑤	Hinge pin	
⑥	Spring	Spring steel
⑦	Split pin	DIN EN ISO 1234–4x40–steel–galvanised
⑧	Connecting head U–ledger PLUS, new connector design	see Annex B, page 139
⑨	Wedge 6 mm	see Annex B, page 3
⑩	Flat 30x10	DIN EN 10025–S235JR
⑪	Round ø12	DIN EN 10025–S235JR
⑫	Marking	
	galvanised	

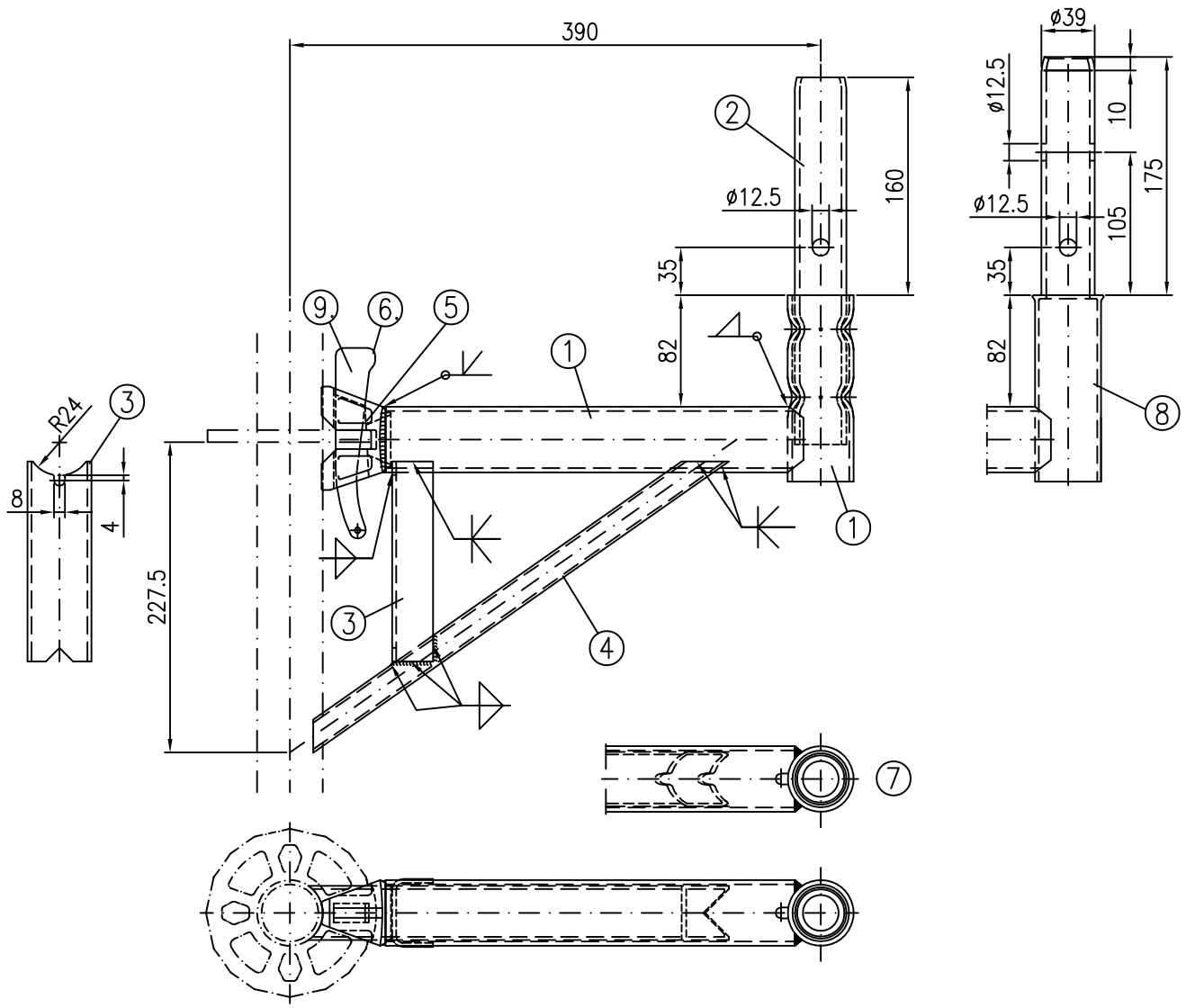
Dimens. [m]	Weight [kg]
0.70	11.8
1.00	13.8

ALBLITZ MODUL

MODUL swinggate
in accordance with Z–8.22–906

M710–B151_ABM 05.2021

Annex B,
page 102



① Circular hollow section ø48.3x3.2 (III)	DIN EN 10219–S235JRH	$R_{eH} \geq 320$ N/mm²
alternatively: Circular hollow section ø48.3x2.7 (IV)	DIN EN 10219–S460MH	
② Circular hollow section ø38x3.6	DIN EN 10219–S235JRH	$R_{eH} \geq 320$ N/mm²
③ U–profile 50x30x3 L=146	DIN EN 10025–S235JR	
alternatively: U–profile 47x30x3	DIN EN 10025–S235JR	
④ Rectangular hollow section 40x20x2	DIN EN 10219–S235JRH	
⑤ Connection of tube ledger (I)	see Annex B, page 4	
alternatively: Connection of tube ledger 4.0 (II)	see Annex B, page 151	
⑥ Wedge 6 mm	see Annex B, page 3	
⑦ alternatively		
⑧ alternatively: Circular hollow section ø48.3x2.7 without ②	DIN EN 10219–S460MH	
⑨ Marking		

galvanised; all welding seams a=3 mm

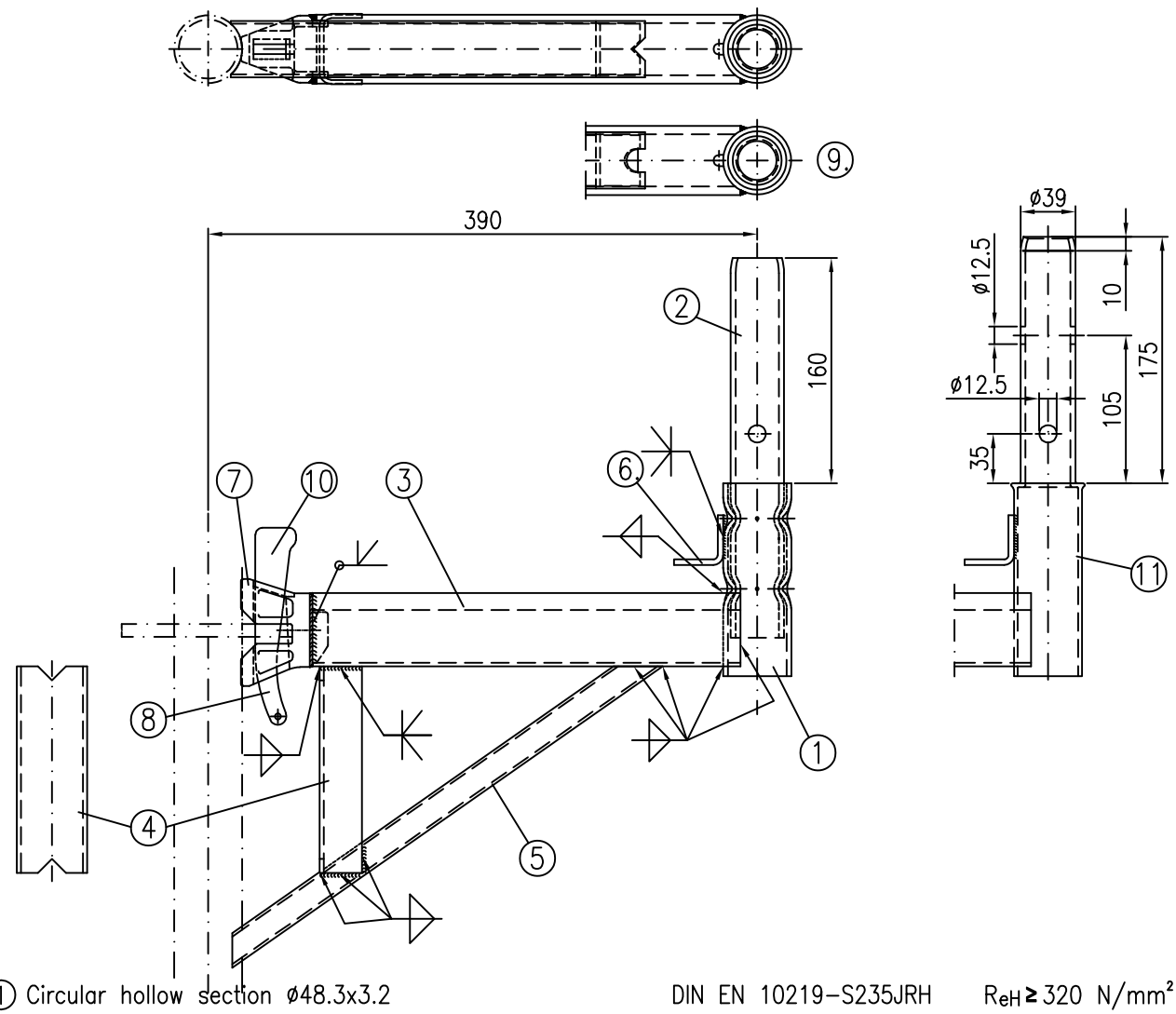
allowed combination			Dimens. [m]	Weight [kg]
	III	IV		
I	x	x	0.39	3.8
II	–	x		

ALBLITZ MODUL

Bracket 0.39 m with tube fixture
in accordance with Z–8.22–906

M710–B126_ABM 10.2023

Annex B,
page 103



①	Circular hollow section ø48.3x3.2	DIN EN 10219–S235JRH	$R_{eH} \geq 320$ N/mm²
②	Circular hollow section ø38x3.6	DIN EN 10219–S235JRH	$R_{eH} \geq 320$ N/mm²
③	U–profile 48x52x2.5 (III and IV)	see Annex B, page 32	
④	U–profile 50x30x3 L=146	DIN EN 10025–S235JR	
	alternatively: U–profile 47x30x3	DIN EN 10025–S235JR	
⑤	Rectangular hollow section 40x20x2	DIN EN 10219–S235JRH	
⑥	Steel plate 35x4	DIN EN 10025–S235JR	
⑦	Connection of U–ledger (I)	see Annex B, page 5	
	alternatively: Connection of U–ledger 4.0 (II)	see Annex B, page 152	
⑧	Wedge 6 mm	see Annex B, page 3	
⑨	alternatively		
⑩	Marking		
⑪	alternatively: Circular hollow section ø48.3x2.7 without galvanised; all welding seams a=2.5 mm	② DIN EN 10219–S460MH	

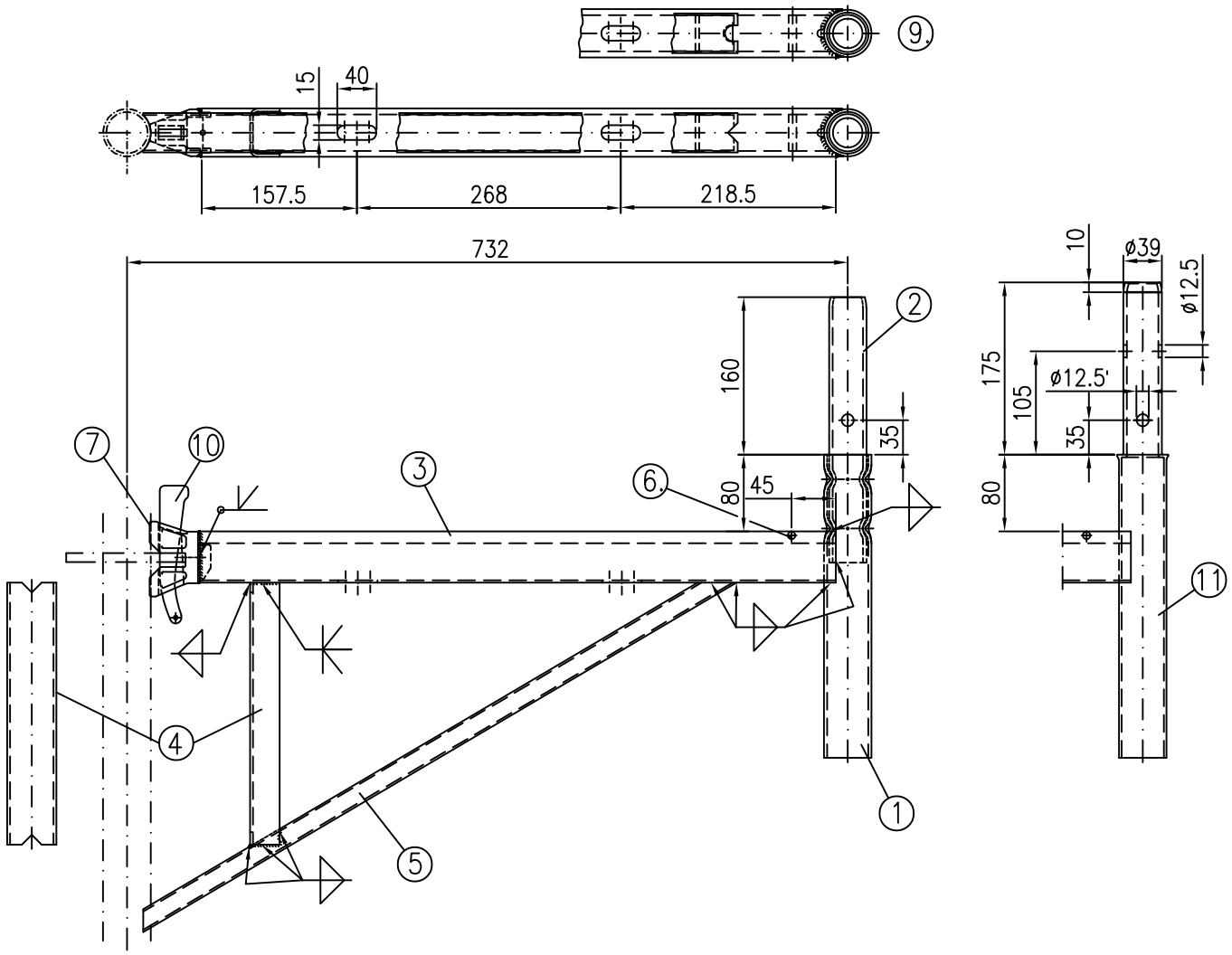
allowed combination			Dimens. [m]	Weight [kg]
	III	IV		
I	x	x	0.39	3.9
II	–	x		

ALBLITZ MODUL

MODUL bracket 0.39 m
in accordance with Z–8.22–906

M710–B127_ABM 10.2023

Annex B,
page 104



①	Circular hollow section ø48.3x3.2	DIN EN 10219-S235JRH	$R_{eH} \geq 320$ N/mm²
②	Circular hollow section ø38x3.6	DIN EN 10219-S235JRH	$R_{eH} \geq 320$ N/mm²
③	U-profile 48x52x2.5 (III and IV)	see Annex B, page 32	
④	U-profile 50x30x3 L=266	DIN EN 10025-S235JR	
	alternatively: U-profile 47x30x3	DIN EN 10025-S235JR	
⑤	Rectangular hollow section 40x20x2	DIN EN 10219-S235JRH	
⑥	Round ø8	DIN EN 10277-2-S235JRC+C	
⑦	Connection of U-ledger (I)	see Annex B, page 5	
	alternatively: Connection of U-ledger 4.0 (II)	see Annex B, page 152	
⑧	Wedge 6 mm	see Annex B, page 3	
⑨	alternatively		
⑩	Marking		
⑪	alternatively: Circular hollow section ø48.3x2.7 without galvanised; all welding seams a=2.5 mm	② DIN EN 10219-S460MH	

allowed combination		
	III	IV
I	x	x
II	–	x

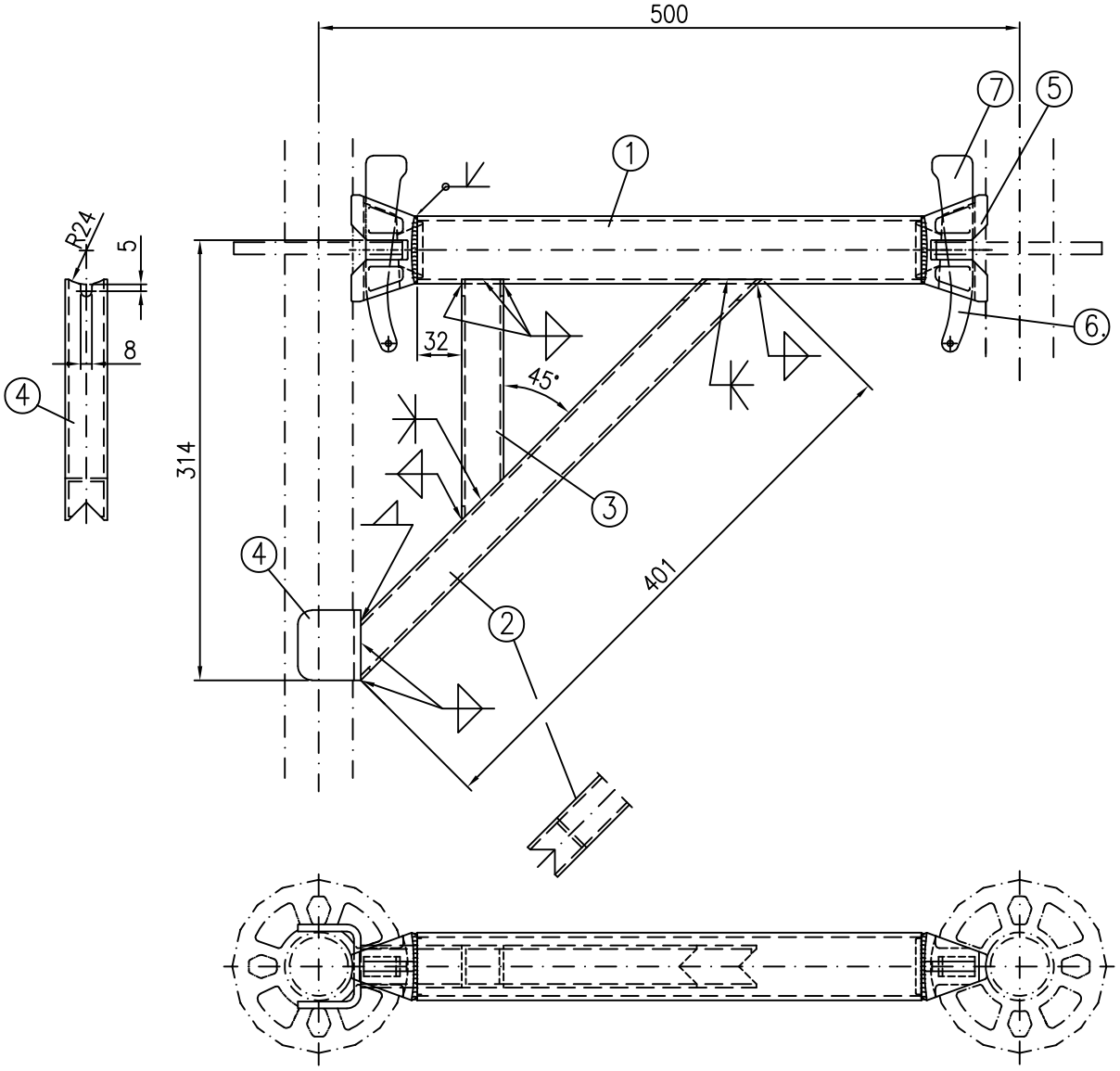
Dimens. [m]	Weight [kg]
0.73	6.4

ALBLITZ MODUL

MODUL bracket 0.73 m
in accordance with Z-8.22-906

M711-B207_ABM 10.2023

Annex B,
page 105



① Circular hollow section ø48.3x3.2 (III)	DIN EN 10219-S235JRH	$R_{eH} \geq 320$ N/mm²
alternatively: Circular hollow section ø48.3x2.7 (IV)	DIN EN 10219-S460MH	
② Rectangular hollow section 30x30x2.5	DIN EN 10219-S235JRH	
③ Rectangular hollow section 30x30x2.5	DIN EN 10219-S235JRH	
④ Steel plate 50x5	DIN EN 10025-S235JR	
⑤ Connection of tube ledger (I)	see Annex B, page 4	
alternatively: Connection of tube ledger 4.0 (II)	see Annex B, page 151	
⑥ Wedge 6 mm	see Annex B, page 3	
⑦ Marking		

galvanised; all welding seams a=3 mm

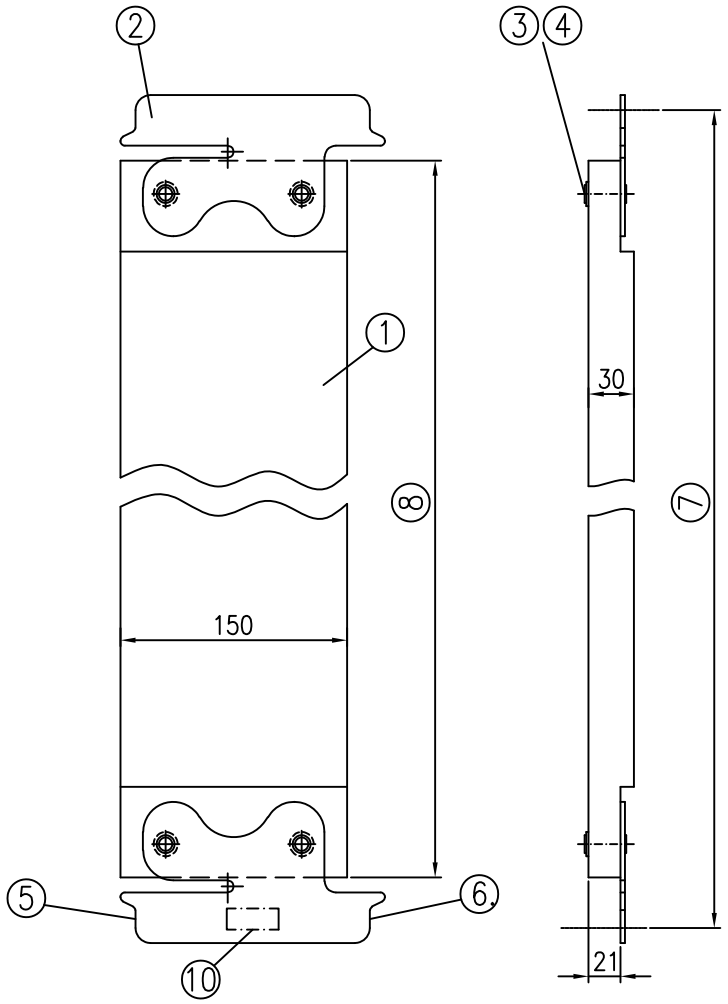
allowed combination			Dimens. [m]	Weight [kg]
	III	IV		
I	x	x	0.50	3.6
II	–	x		

ALBLITZ MODUL

Bracket with tube fixture 0.50 m
in accordance with Z-8.22-906

M711-B204_ABM 10.2021

Annex B,
page 106



⑦	⑧	⑨
[mm]	[mm]	[kg]
390	323	0.7
450	383	1.0
500	433	1.2
732	665	1.6
1088	1021	2.3
1286	1219	2.7
1400	1333	3.0
1572	1505	3.3
2072	2005	4.2
2572	2505	5.3
3072	3005	6.3

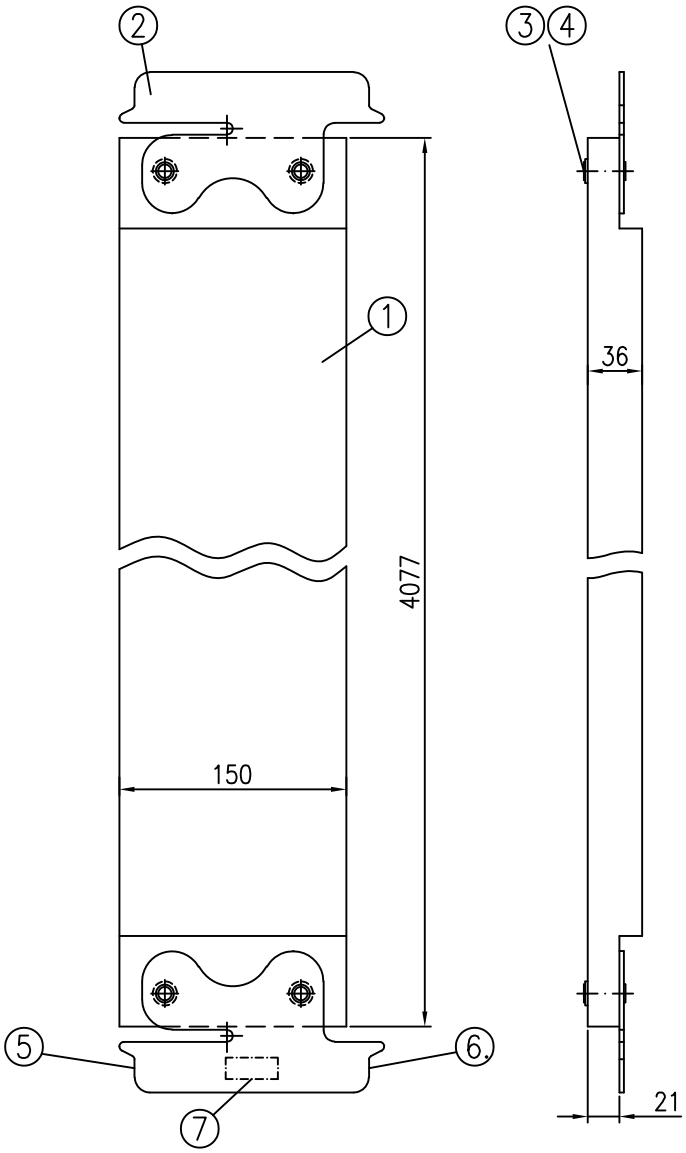
① Pine wooden deck visual strength grade S10	DIN 4074–1
② Slit strip 175x2	DIN EN 10111–DD11
alternatively:	DIN EN 10346–DX51D+Z275
③ Tubular rivet	DIN 7340–A8x0.75x28–steel–electrogalvanized
④ Disc	DIN EN ISO 7089–A8.4–steel–galvanised
⑤ Bearing surface connection of tube ledger	
⑥ Bearing surface connection of U–ledger	
⑦ Bay length	
⑧ Length L	
⑨ Weight	
⑩ Marking	

ALBLITZ MODUL

MODUL toeboard
in accordance with Z–8.22–906

M710–B125_ABM 09.2023

Annex B,
page 107



①	Pine wooden deck visual strength grade S10	DIN 4074–1
②	Slit strip 175x2	DIN EN 10111–DD11
	alternatively:	DIN EN 10346–DX51D+Z275
③	Tubular rivet	DIN 7340–A8x0.75x34–steel–electrogalvanized
④	Disc	DIN EN ISO 7089–A8.4–steel–galvanised
⑤	Bearing surface connection of tube ledger	
⑥	Bearing surface connection of U–ledger	
⑦	Marking	

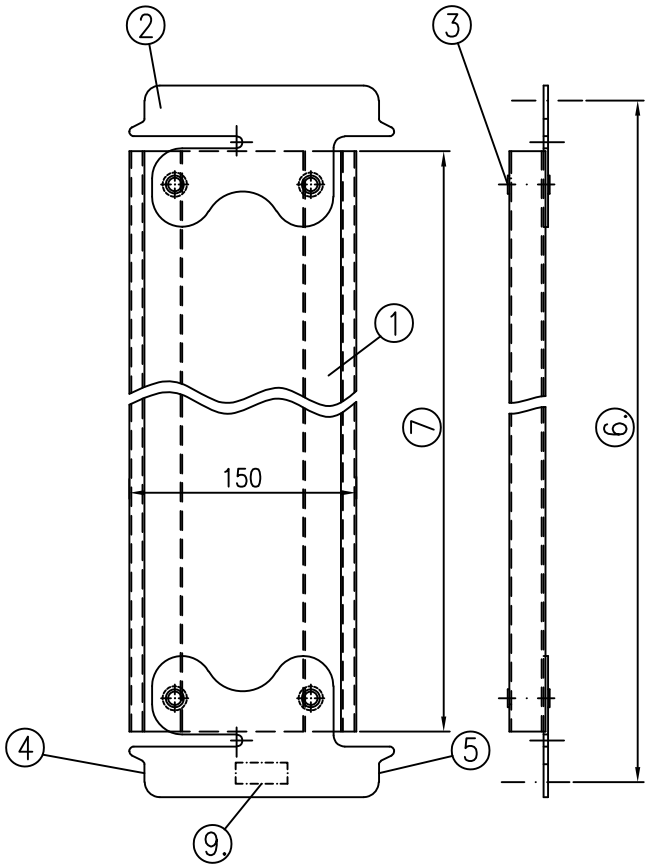
Dimens. [m]	Weight [kg]
4.14	8.1

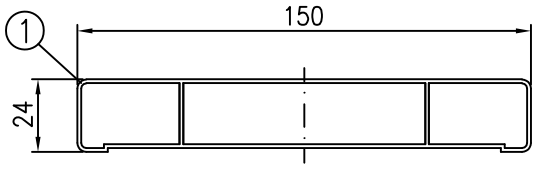
ALBLITZ MODUL

MODUL toeboard 4.14 m
in accordance with Z–8.22–906

M710–B166_ABM 09.2023

Annex B,
page 108





⑥	⑦	⑧
[mm]	[mm]	[kg]
390	323	0.6
732	665	1.2
1088	1021	1.7
1286	1219	1.9
1400	1333	2.1
1572	1505	2.3
2072	2005	3.0
2572	2505	3.6
3072	3005	4.3

① Sectional view aluminium toeboard; s=1.25 mm	DIN EN 755-2 EN AW-6063-T66
② Slit strip 175x2	DIN EN 10111-DD11 hot-dip galvanised
alternatively:	DIN EN 10346-DX51D+Z275
③ Tubular rivet	DIN 7340-A8x0.75x29-steel-galvanised
alternatively:	DIN 7340-A8x1x28-steel-galvanised

④ Bearing surface connection of tube ledger
⑤ Bearing surface connection of U-ledger
⑥ Bay length
⑦ Length L
⑧ Weight
⑨ Marking

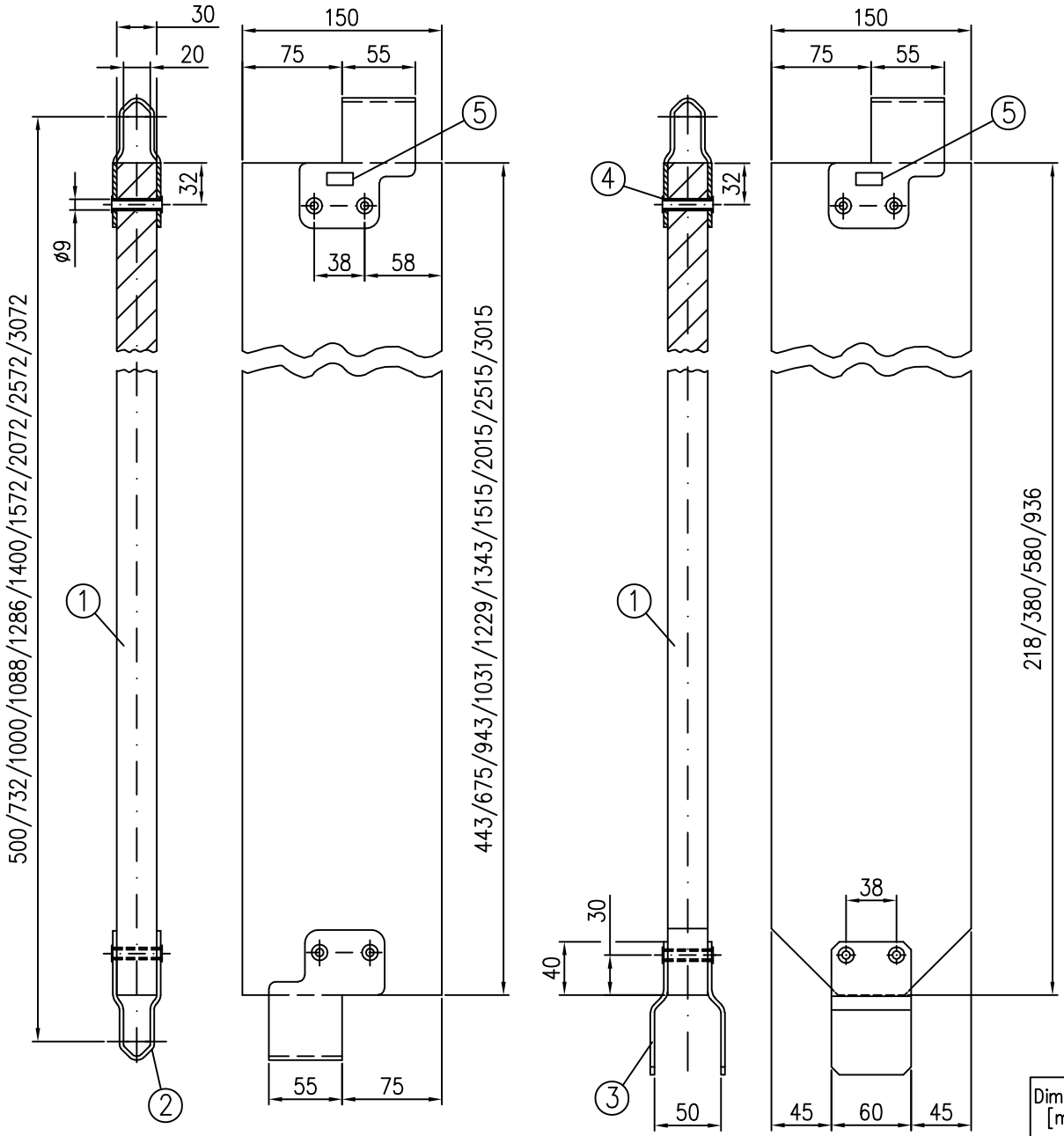
all components made of steel – galvanised

ALBLITZ MODUL

MODUL toeboard, aluminium
in accordance with Z-8.22-906

M710-B171_ABM 05.2021

Annex B,
page 109



① Pine wooden deck visual strength grade S10 DIN 4074-1

② Slit strip 90x3 DIN EN 10111-DD11 $R_{eH} \geq 240$ N/mm²
alternatively: DIN EN 10346-DX52D+Z275 $R_{eH} \geq 240$ N/mm²; $R_m \geq 360$ N/mm²

③ Slit strip 60x3 DIN EN 10111-DD11 $R_{eH} \geq 240$ N/mm²
alternatively: DIN EN 10346-DX52D+Z275 $R_{eH} \geq 240$ N/mm²; $R_m \geq 360$ N/mm²

④ Tubular rivet DIN 7340-A8x0.75x39-steel-electrogalvanized

⑤ Marking

all components made of steel – galvanised

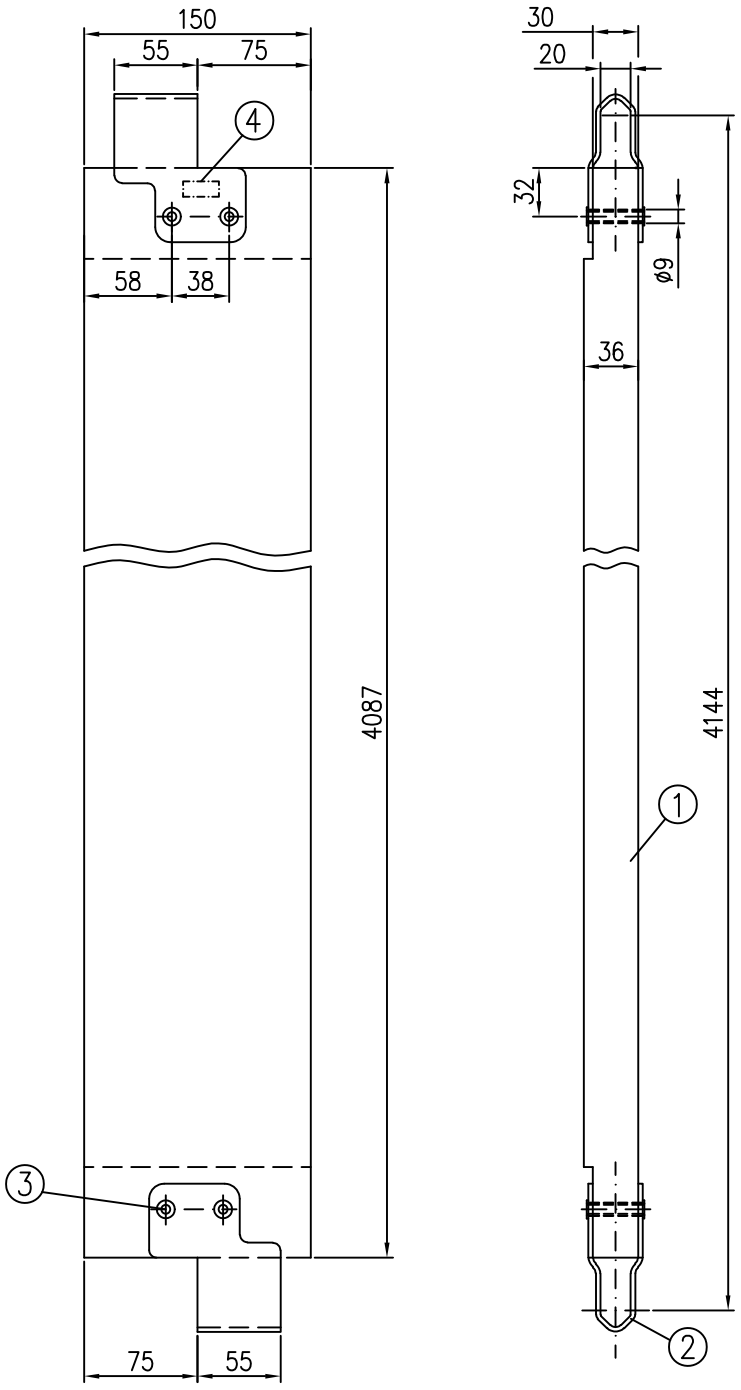
Dimens. [m]	Weight [kg]
Toeboard	
0.50	1.5
0.73	2.0
1.00	2.5
1.09	2.7
1.29	3.1
1.40	3.3
1.57	4.0
2.07	5.0
2.57	6.5
3.07	7.5
End toeboard	
0.37	1.0
0.53	1.3
0.73	1.7
1.09	2.4

ALBLITZ MODUL

Toeboard; End toeboard AF
in accordance with Z-8.1-862

A714-A224_ABM 09.2023

Annex B,
page 110



① Pine wooden deck visual strength grade S10 DIN 4074-1

② Slit strip 90x3 DIN EN 10111-DD11 $R_{eH} \geq 240$ N/mm²

alternatively: DIN EN 10346-DX52D+Z275 $R_{eH} \geq 240$ N/mm²; $R_m \geq 360$ N/mm²

③ Tubular rivet DIN 7340-A8x0.75x39-steel-electrogalvanized

④ Marking

all components made of steel – galvanised

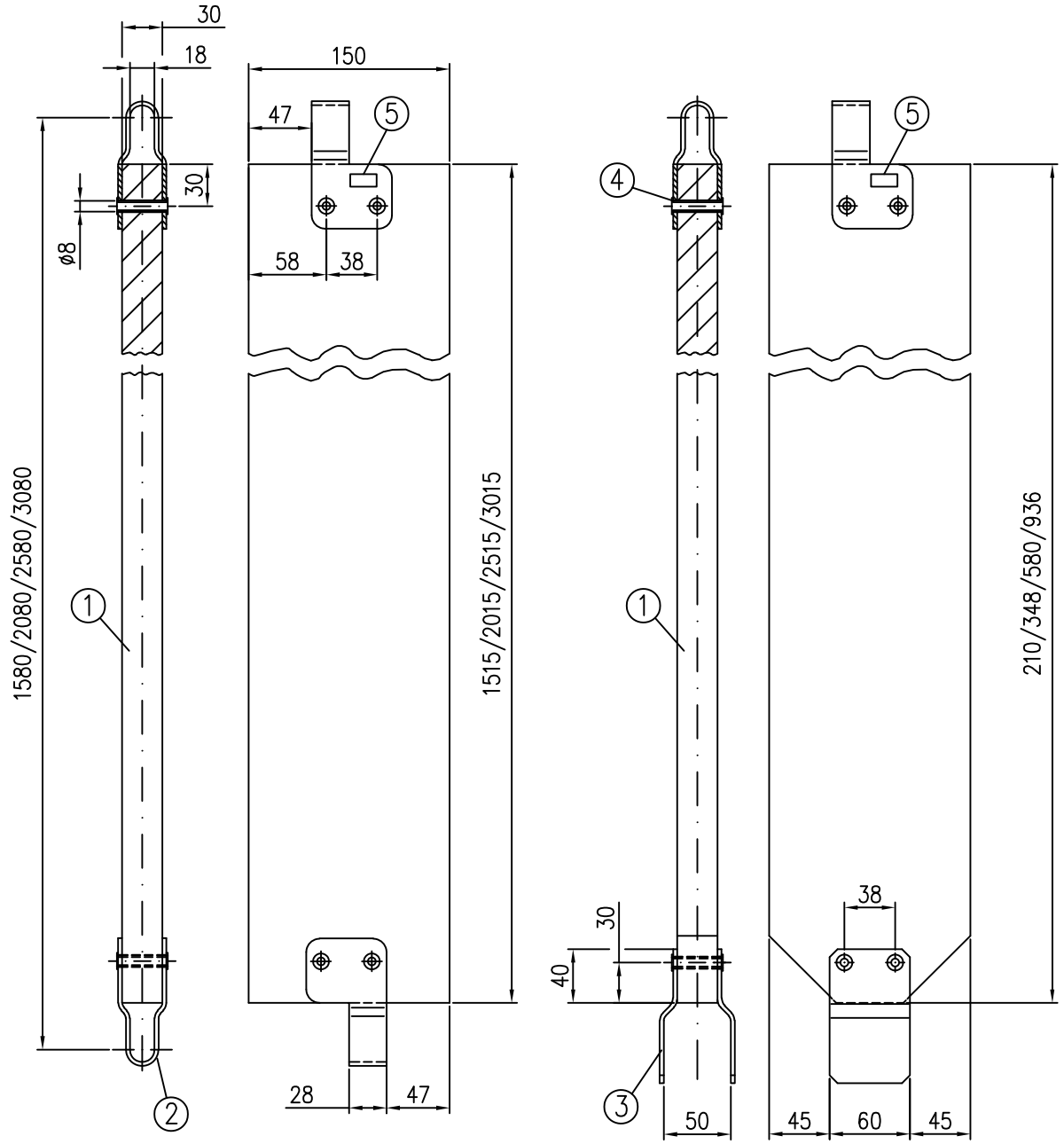
Dimens. [m]	Weight [kg]
4.14	9.0

ALBLITZ MODUL

Toeboard 4.14 m AF
in accordance with Z-8.1-862

A714-A225_ABM 09.2023

Annex B,
page 111



① Pine wooden deck visual strength grade S10

② Slit strip 60x3	DIN EN 10111–DD11	$R_{eH} \geq 240$ N/mm²	
alternatively:	DIN EN 10346–DX52D+Z275	$R_{eH} \geq 240$ N/mm²; $R_m \geq 360$ N/mm²	
③ Slit strip 60x3	DIN EN 10111–DD11	$R_{eH} \geq 240$ N/mm²	
alternatively:	DIN EN 10346–DX52D+Z275	$R_{eH} \geq 240$ N/mm²; $R_m \geq 360$ N/mm²	
④ Tubular rivet	DIN 7340–A8x0.75x39–steel–electrogalvanized		
⑤ Marking			

all components made of steel – galvanised

Component no longer manufactured
–only for continued use–

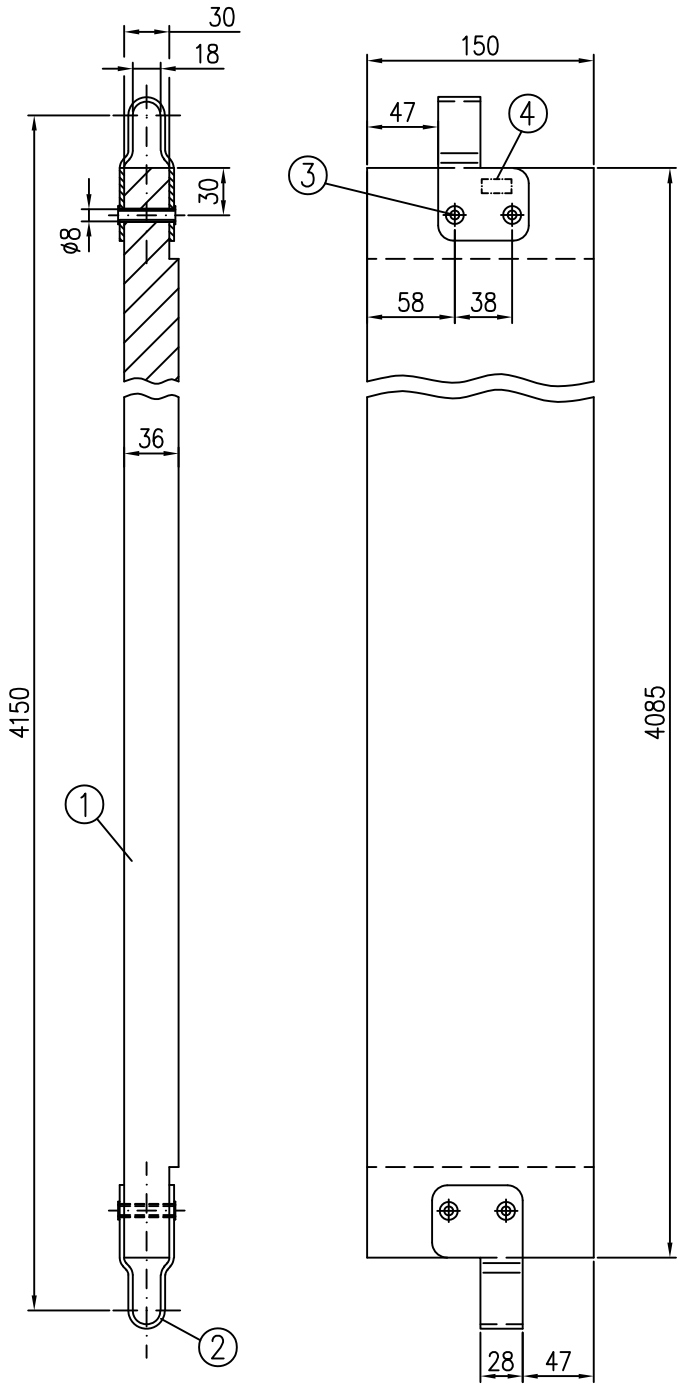
Dimens. [m]	Weight [kg]
Toeboard	
1.57	4.0
2.07	5.0
2.57	6.5
3.07	7.5
End toeboard	
0.36	0.9
0.50	1.3
0.73	1.5
1.09	2.0

ALBLITZ MODUL

Toeboard; End toeboard
in accordance with Z–8.1–862

A709–A137_ABM 05.2021

Annex B,
page 112



① Pine wooden deck visual strength grade S10

② Slit strip 60x3 DIN EN 10111–DD11 $R_{eH} \geq 240$ N/mm²

alternatively: DIN EN 10346–DX52D+Z275 $R_{eH} \geq 240$ N/mm²; $R_m \geq 360$ N/mm²

③ Tubular rivet DIN 7340–A8x0.75x39–steel–electrogalvanized

④ Marking

all components made of steel – galvanised

Component no longer manufactured
–only for continued use–

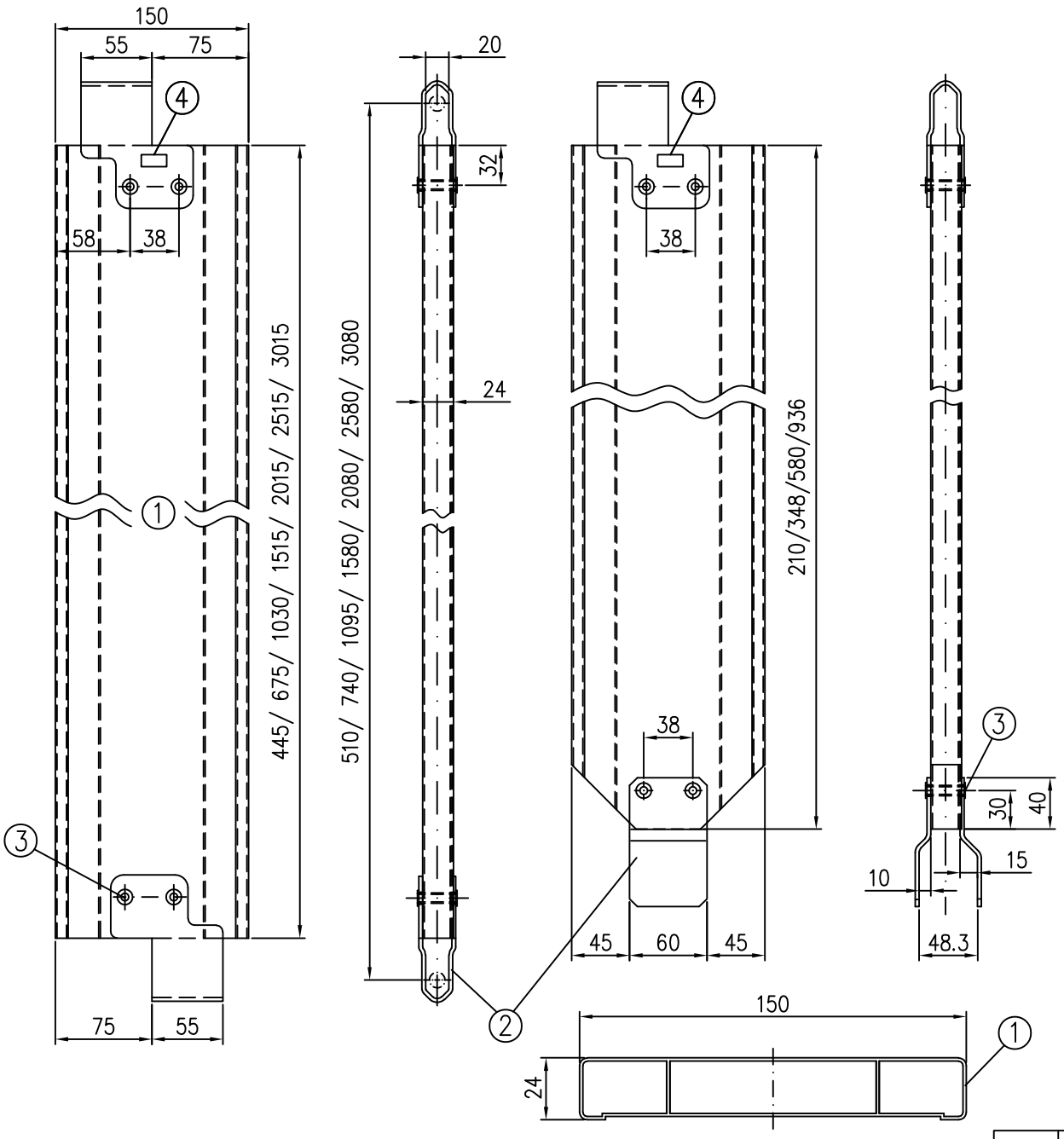
Dimens. [m]	Weight [kg]
4.14	9.0

ALBLITZ MODUL

Toeboard 4.14 m
in accordance with Z–8.1–862

A709–A169_ABM 05.2021

Annex B,
page 113



① Sectional view aluminium toeboard DIN EN 755-2 EN AW-6063-T66
s=1.25 mm

② Slit strip 60x3 DIN EN 10111-DD11 $R_{eH} \geq 240$ N/mm²
alternatively: DIN EN 10346-DX52D+Z275 $R_{eH} \geq 240$ N/mm²; $R_m \geq 360$ N/mm²

③ Tubular rivet DIN 7340-A8x0.75x33-steel-electrogalvanized

④ Marking

all components made of steel – galvanised

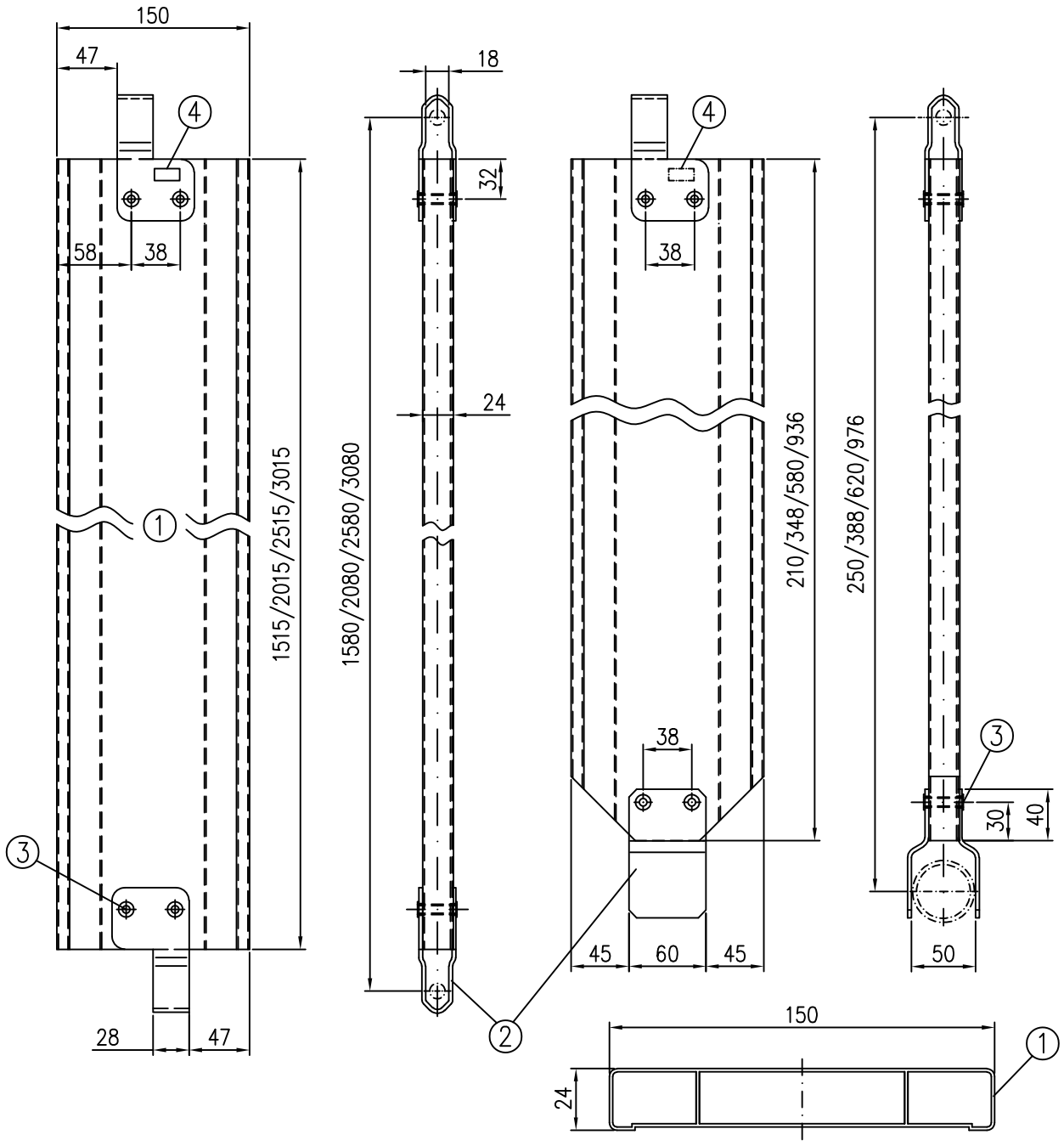
Dimens. [m]	Weight [kg]
Toeboard	
0.50	1.1
0.73	1.4
1.09	1.9
1.57	2.5
2.07	3.2
2.57	3.8
3.07	4.5
End toeboard	
0.36	0.8
0.50	0.9
0.73	1.3
1.09	1.8

ALBLITZ MODUL

Toeboard, aluminium; End-toeboard, aluminium AF
in accordance with Z-8.1-862

A714-A226_ABM 05.2021

Annex B,
page 114



①	Sectional view aluminium toeboard; s=1.25 mm	DIN EN 755-2 EN AW-6063-T66
②	Slit strip 60x3	DIN EN 10111-DD11 $R_{eH} \geq 240$ N/mm²
	alternatively:	DIN EN 10346-DX52D+Z275
		$R_{eH} \geq 240$ N/mm²; $R_m \geq 360$ N/mm²
③	Tubular rivet	DIN 7340-A8x0.75x33-steel-electrogalvanized
④	Marking	
	all components made of steel – galvanised	Component no longer manufactured –only for continued use–

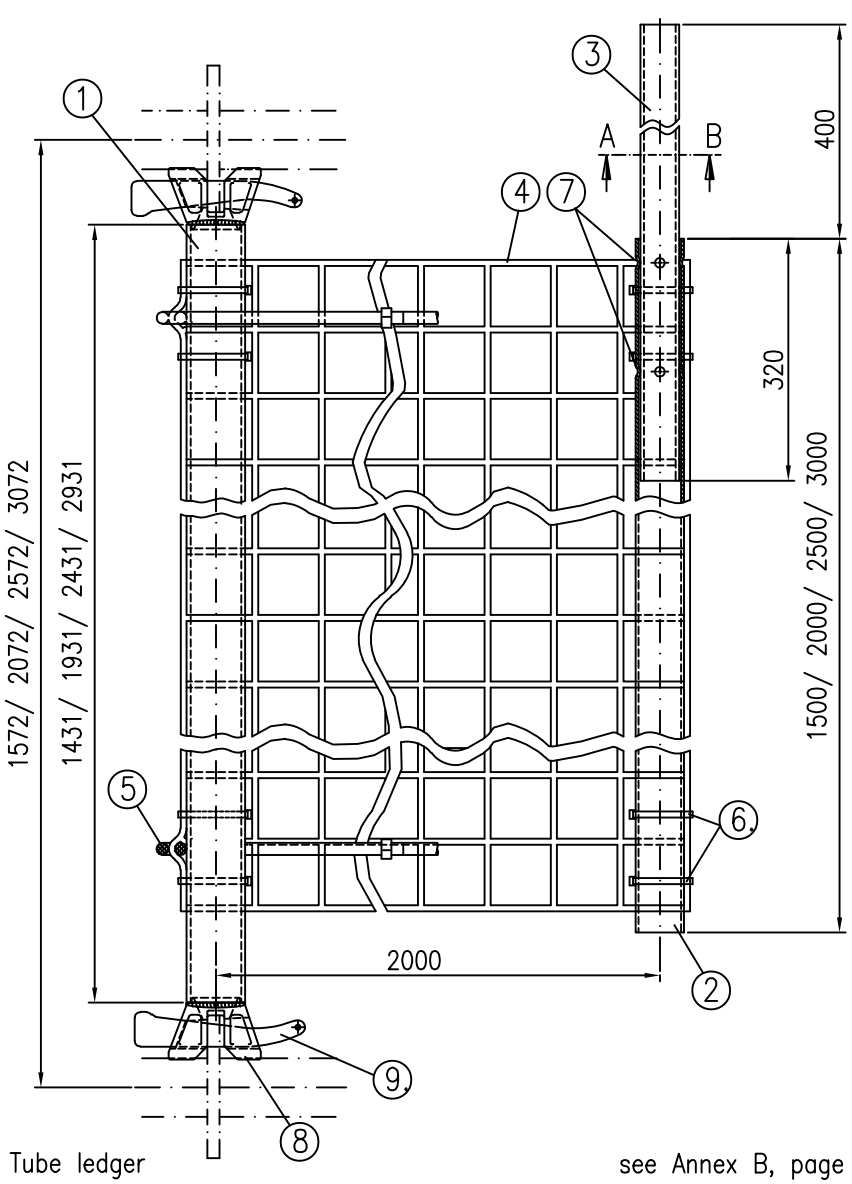
Dimens. [m]	Weight [kg]
Toeboard	
1.57	2.3
2.07	3.0
2.57	3.6
3.07	4.3
End toeboard	
0.36	0.7
0.50	0.8
0.73	1.2
1.09	1.7

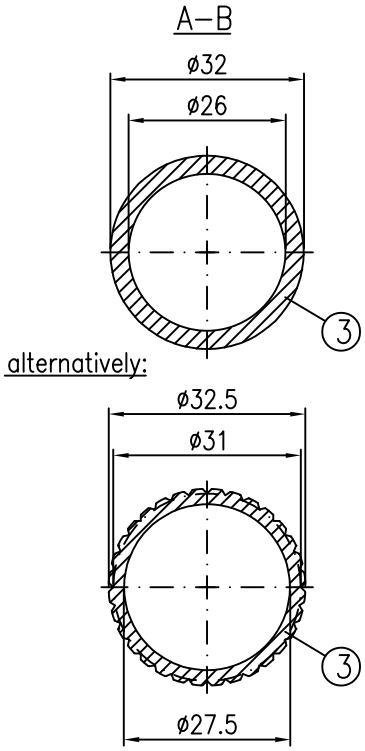
ALBLITZ MODUL

Toeboard, aluminium; End-toeboard, aluminium
in accordance with Z-8.1-862

A709-A170_ABM 05.2021

Annex B,
page 115





①	Tube ledger	see Annex B, page 25
	alternatively: Tube ledger 4.0	see Annex B, page 155
②	Circular hollow section ø40x2.5	DIN EN 755–2 EN AW–6060–T66
③	Circular hollow section ø32x3	DIN EN 755–2 EN AW–6060–T66
	alternatively: Star section 32.5	DIN EN 755–2 EN AW–6063–T66
④	Protection net	DIN EN 1263–1–U–A2–M100–Q
⑤	Rope ø8x3500	Polyamid
⑥	Cable tie 4.8x300	PE
⑦	4 pressed connections on exterior tube surface	
⑧	Connection of tube ledger	see Annex B, page 4
	alternatively: Connection of tube ledger 4.0	see Annex B, page 151
⑨	Wedge 6 mm	see Annex B, page 3

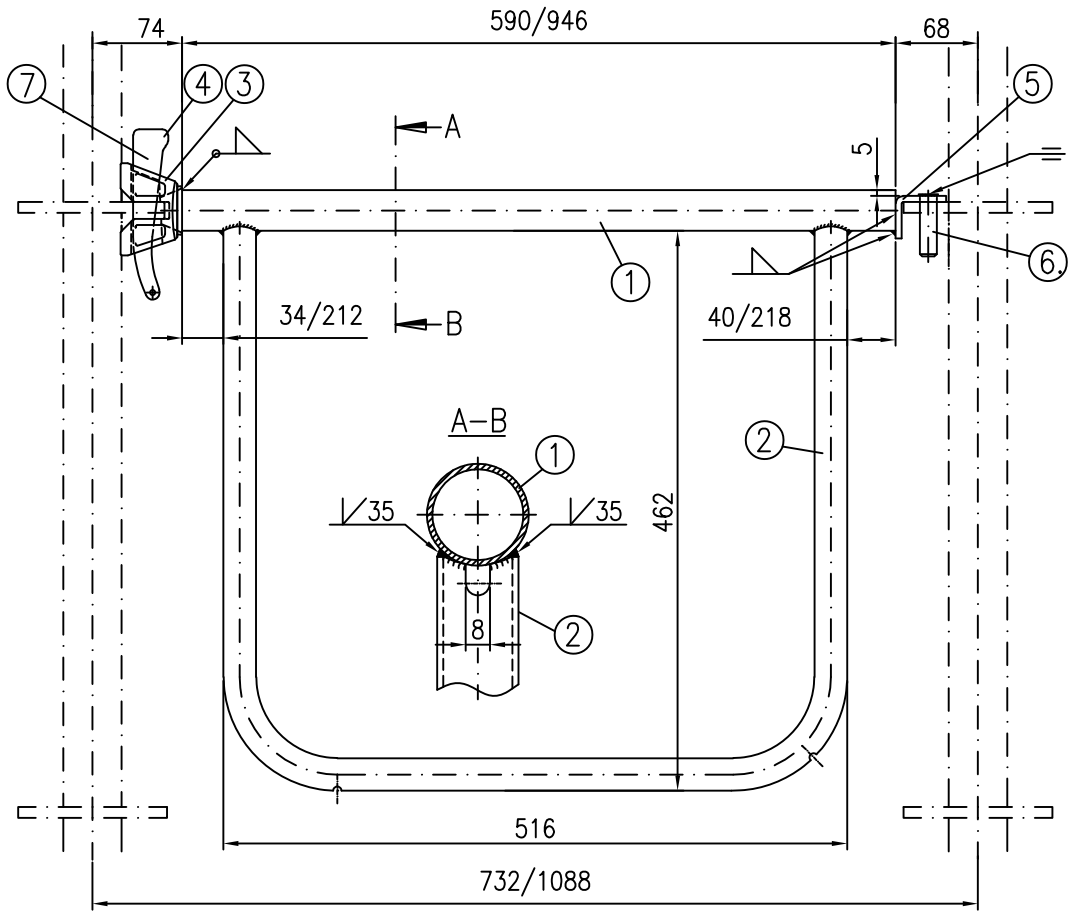
Dimension [m]	Weight [kg]
1.57x2.00	12.0
2.07x2.00	13.0
2.57x2.00	14.0
3.07x2.00	15.0

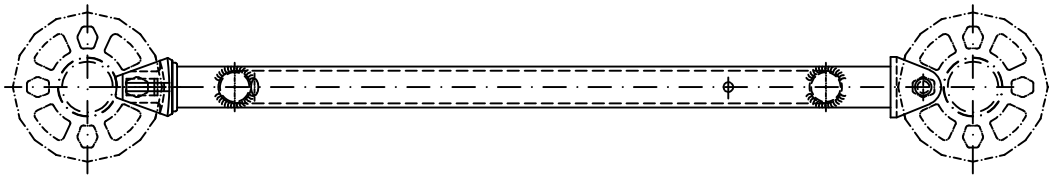
ALBLITZ MODUL

MODUL guard net system
in accordance with Z–8.22–906

M710–B128_ABM 05.2021

Annex B,
page 116





①	Circular hollow section ø33.7x1.8	DIN EN 10219–S235JRH $R_{eH} \geq 320$ N/mm²
	alternatively: Circular hollow section ø33.7x2.0	DIN EN 10219–S235JRH
②	Circular hollow section ø26.9x2	DIN EN 10219–S235JRH
③	Connection of tube ledger	see Annex B, page 4
	alternatively: Connection of tube ledger 4.0	see Annex B, page 151
④	Wedge 6 mm	see Annex B, page 3
⑤	Steel plate 50x5	DIN EN 10025–S235JR
⑥	Round ø12	DIN EN 10025–S235JR
⑦	Marking	

galvanised; all welding seams a=2.5 mm

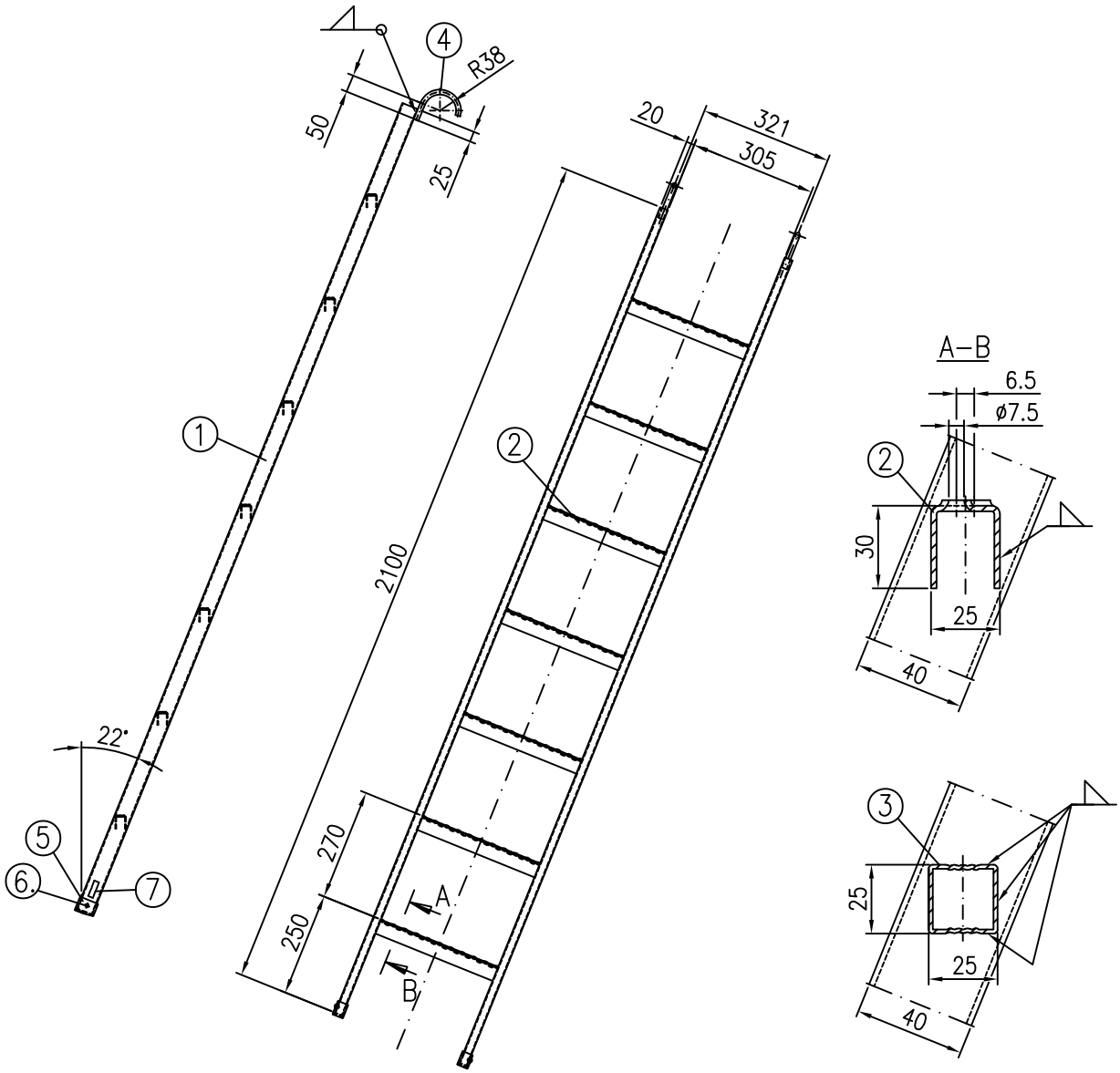
Dimens. [m]	Weight [kg]
0.73	3.5
1.09	4.2

ALBLITZ MODUL

MODUL double end guardrail
in accordance with Z–8.22–906

M711–B208_ABM 05.2021

Annex B,
page 117



① Rectangular hollow section 40x20x2	DIN EN 10219–S235JRH	$R_{eH} \geq 320$ N/mm²	
② Rung section 25x30x2 with openings	DIN EN 10111–DD11	$R_{eH} \geq 240$ N/mm²	$R_m \geq 360$ N/mm²
③ alternatively: Rung section 25x25x1.5	DIN EN 10111–DD11	$R_{eH} \geq 240$ N/mm²	$R_m \geq 360$ N/mm²
④ Round ø12	DIN EN 10025–S235JR		
⑤ Slider	Plastic		
⑥ Blind rivet 4.8x16 aluminium/steel	DIN EN ISO 15983		
⑦ Marking			

galvanised; all welding seams a=2 mm

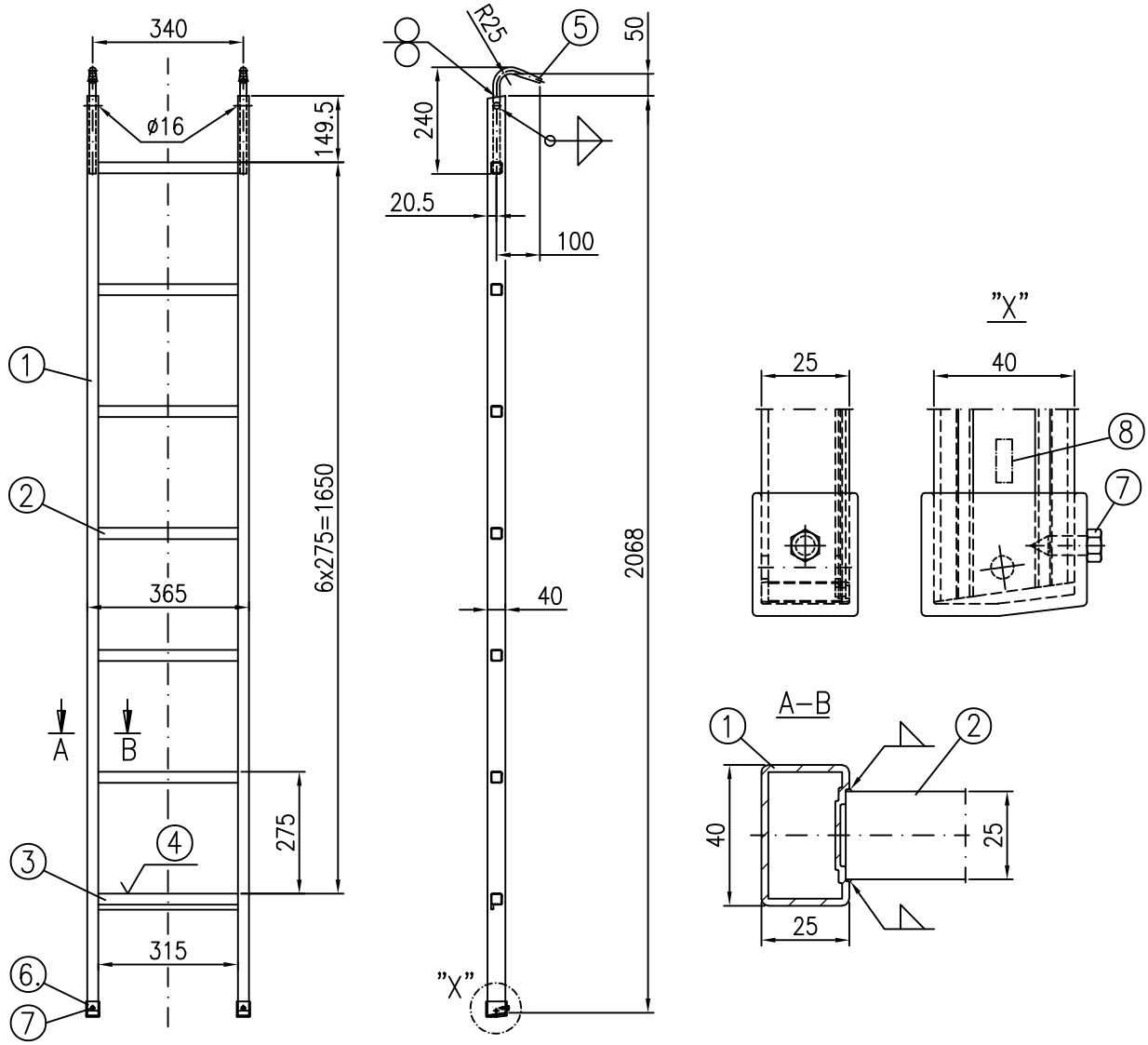
Dimension [m]	Weight [kg]
2.00x0.40	8.1

ALBLITZ MODUL

Storey ladder 2.00 x 0.40 m, steel
in accordance with Z–8.1–847

U716–A247_ABM 05.2021

Annex B,
page 118



①	Rail profile 25x40x2	DIN EN 755–2 EN AW–6063–T66
②	Rung section 25x25x1.5	DIN EN 755–2 EN AW–6063–T66
③	Locking rung section 25x25x1.5	DIN EN 755–2 EN AW–6063–T66
④	Ribbed profile	
⑤	Round ø15	DIN EN 755–2 EN AW–6060–T66
⑥	Slider	Plastic
⑦	Selfdrilling screw	DIN EN ISO 15480–ST5,5x16–K–steel–galvanised
⑧	Marking	
	all welding seams a=3 mm	131–MIG: Type 4 (EC9) filler material

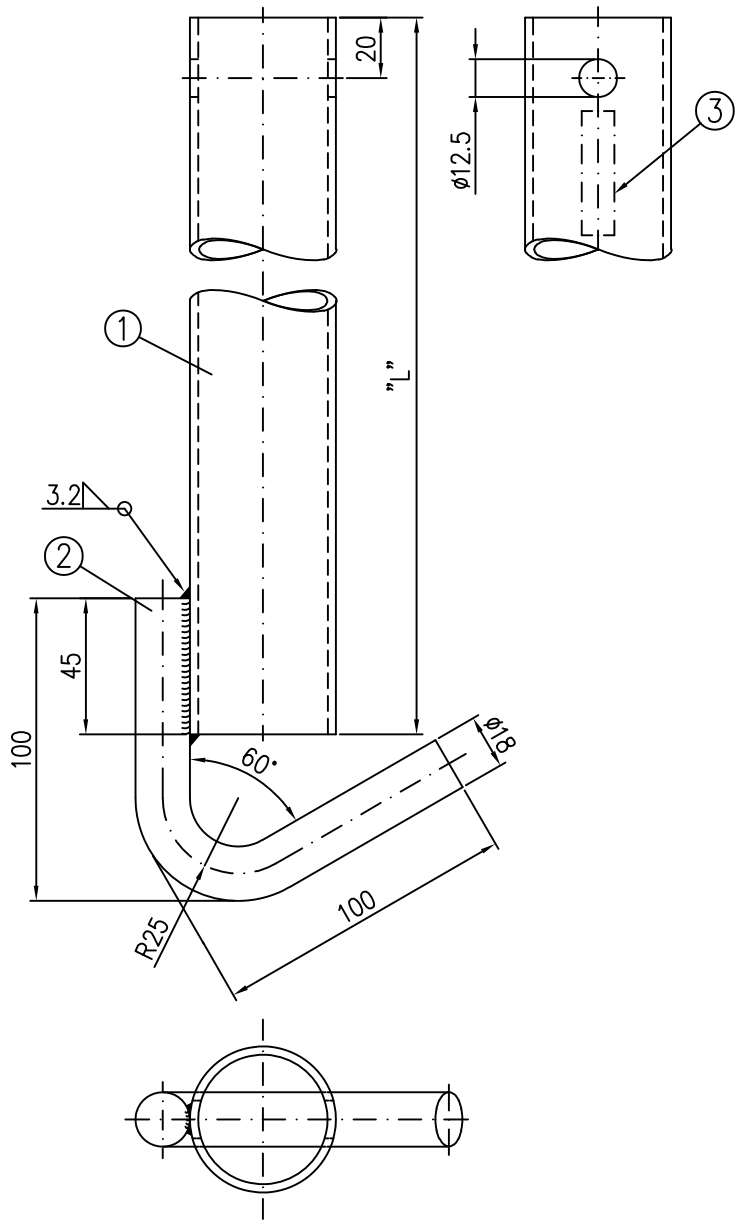
Dimension [m]	Weight [kg]
2.00x0.40	3.7

ALBLITZ MODUL

Storey ladder 2.00 x 0.40 m, aluminium
in accordance with Z–8.1–847

U716–A248_ABM 05.2021

Annex B,
page 119



"L" [m]	Weight [kg]
0.15	0.8
0.20	0.9
0.25	1.0
0.30	1.2
0.40	1.5
0.50	1.8
0.60	2.1
0.65	2.3
0.70	2.4
0.80	2.7
1.00	3.3
1.30	4.2
1.50	4.8
2.00	6.2

① Circular hollow section ø48.3xt DIN EN 10219-S235JRH $R_{eH} \geq 320$ N/mm²
t=2.7 mm; alternatively: 3.2 mm
② Round ø18 DIN EN 10025-S355J2
③ Marking

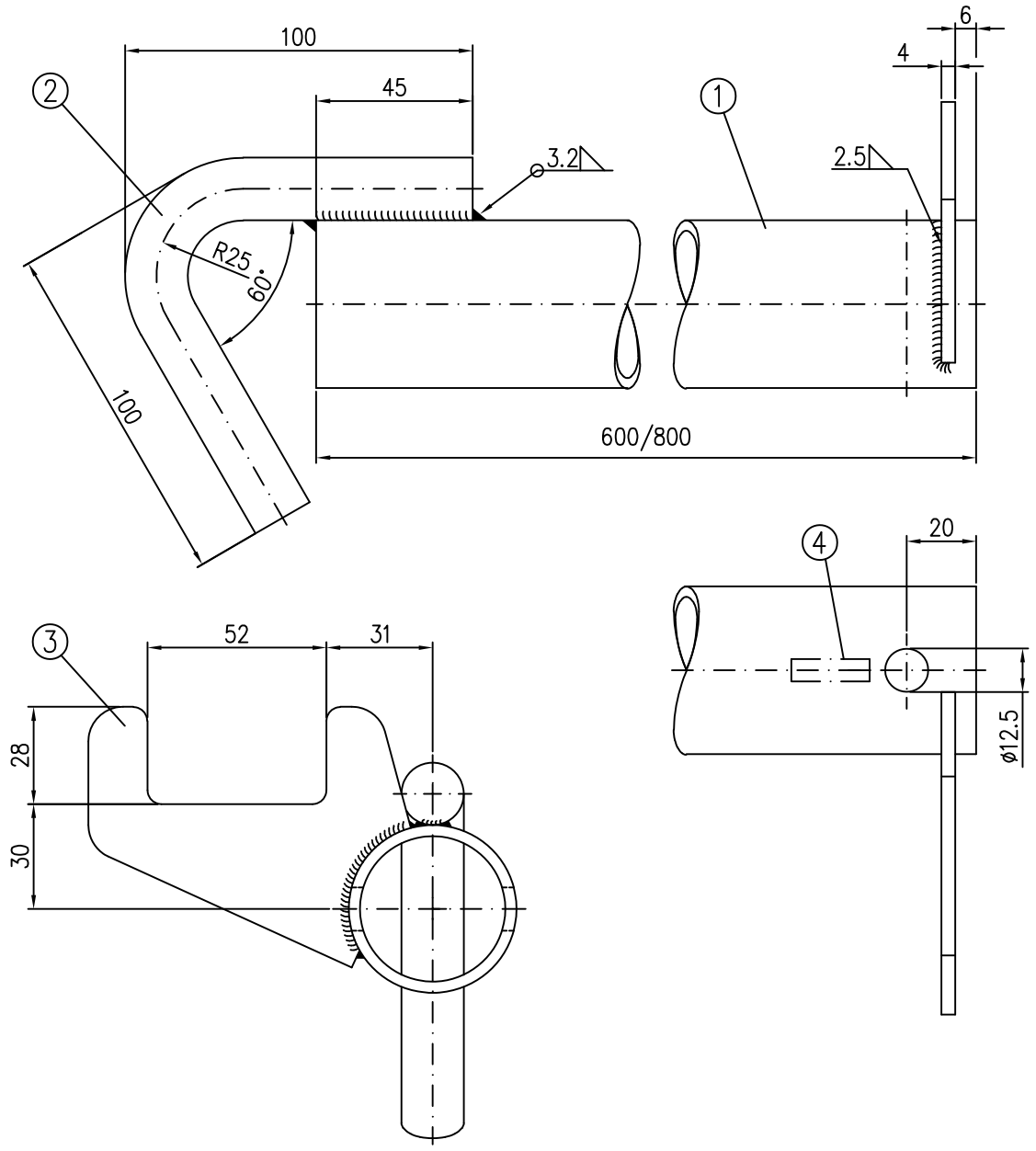
galvanised

ALBLITZ MODUL

Scaffold retainer / wall tie
in accordance with Z-8.1-862

A709-A129_ABM 05.2021

Annex B,
page 120



① Circular hollow section ø48.3xt t=2.7 mm; alternatively: 3.2 mm	DIN EN 10219–S235JRH	$R_{eH} \geq 320$ N/mm²
② Round ø18	DIN EN 10025–S355J2	
③ Steel metal 4	DIN EN 10025–S235JR	
④ Marking		
galvanised		

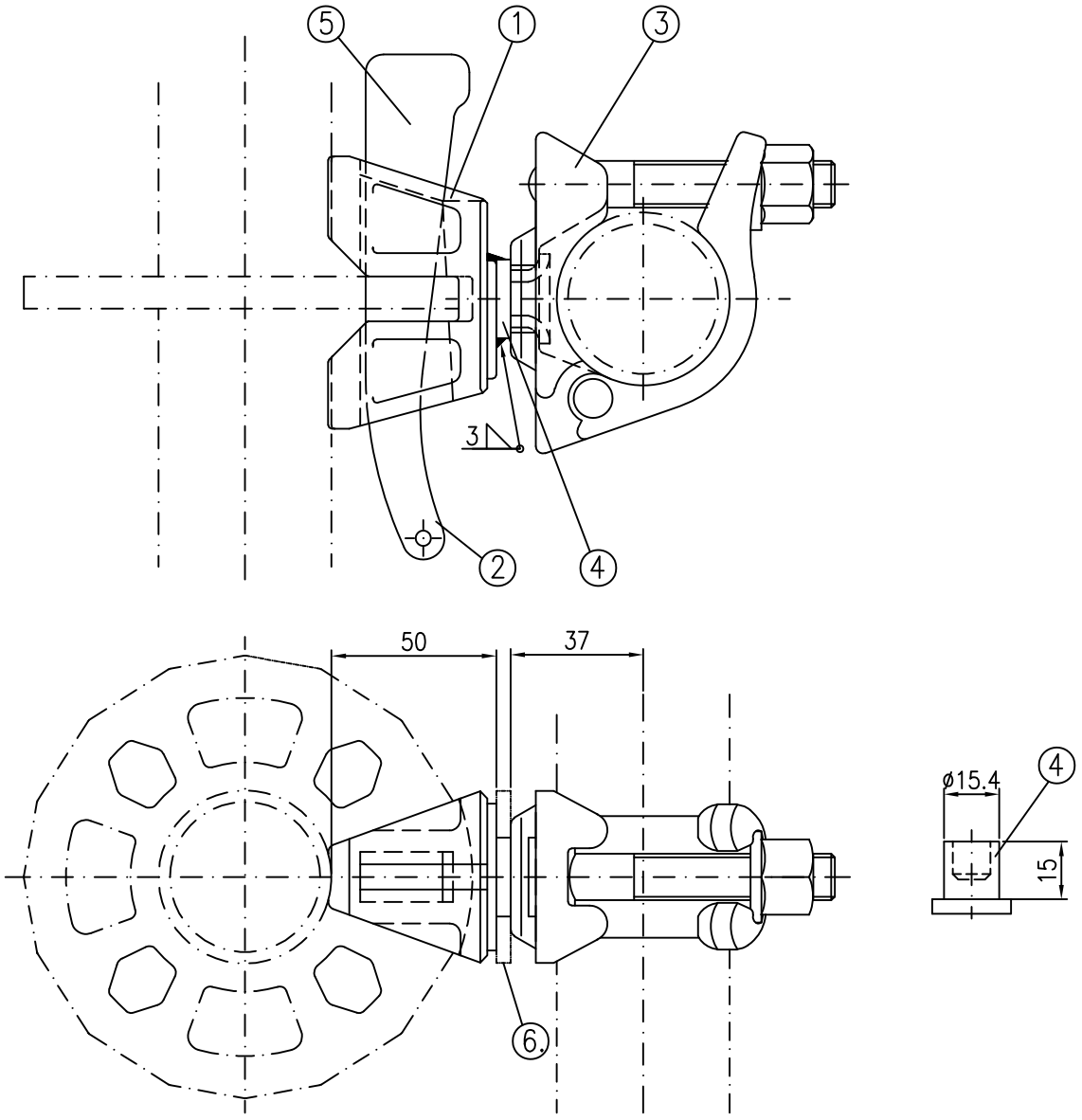
Dimens. [m]	Weight [kg]
0.65	2.3
0.80	2.8

ALBLITZ MODUL

Quick–release wall tie
in accordance with Z–8.1–862

A709–A130_ABM 05.2021

Annex B,
page 121



①	U-ledger head PLUS, new connection	see Annex B, page 139
	alternatively: Connection of tube ledger 4.0	see Annex B, page 151
②	Wedge 6 mm	see Annex B, page 3
③	Halfcoupler, class B	DIN EN 74-2
④	Rivet wedge-head coupler	DIN EN 10263-1/2-C10C+C
	alternatively:	DIN EN 10263-3-C10E2C
⑤	Marking	
⑥	optionally disc ø17/52x3	DIN EN 10025-S235JR

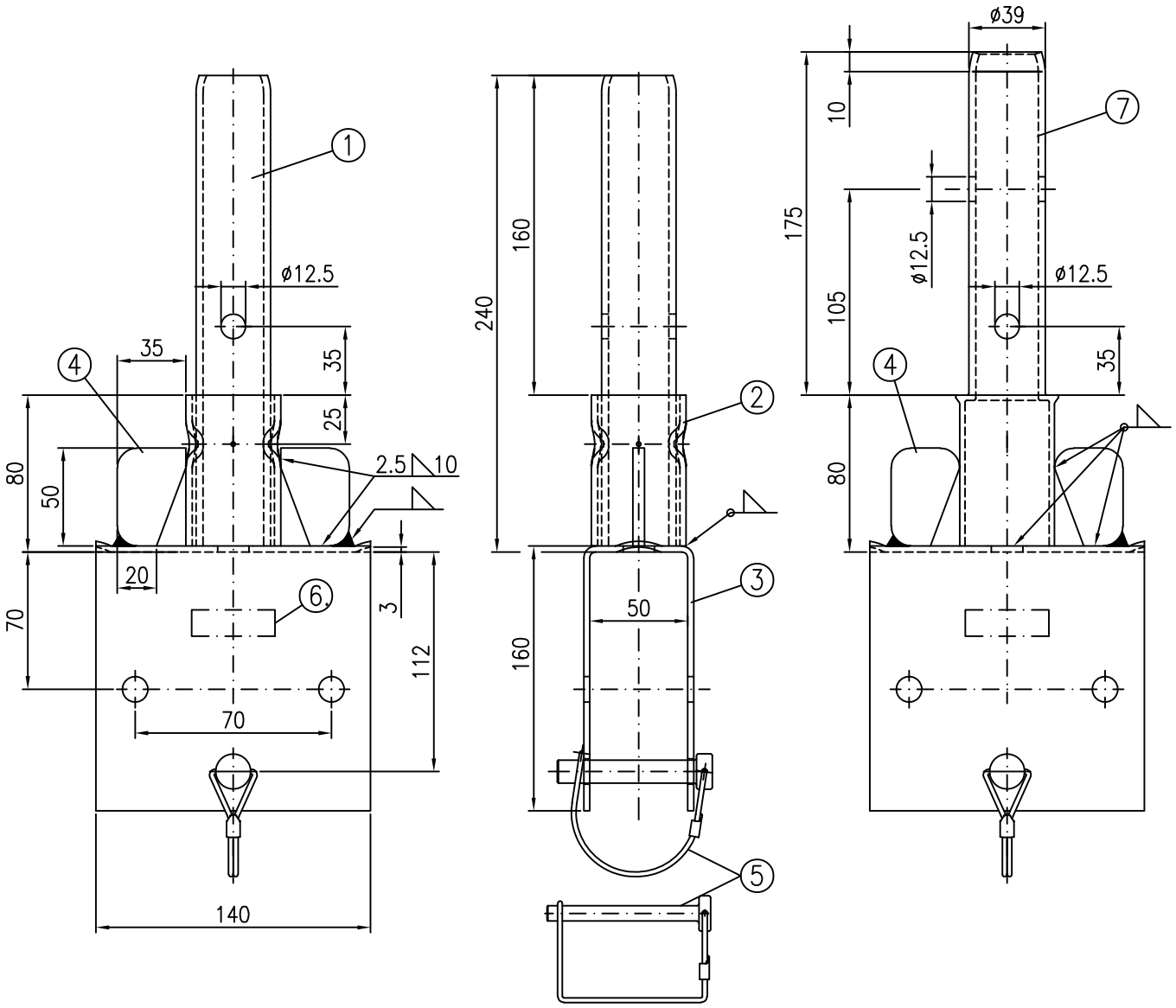
		Dimens. [m]	Weight [kg]
galvanised	Only for connecting the protective wall post	–	1.2

ALBLITZ MODUL

Wedge head coupler, swivel base
in accordance with Z-8.22-906

M710-B129_ABM 09.2023

Annex B,
page 122



① Circular hollow section ø38x3.6	DIN EN 10219–S235JRH	$R_{eH} \geq 320$ N/mm²
② Circular hollow section ø48.3x3.2	DIN EN 10219–S235JRH	$R_{eH} \geq 320$ N/mm²
③ Steel metal 3	DIN EN 10025–S235JR	
④ Steel plate 50x6	DIN EN 10025–S235JR	
⑤ Tube linchpin RK 112 12/8x70/80 with snap–on lock		
Pin	DIN EN 10025–S355J2	
Ring	DIN 17223 B spring steel wire	
⑥ Marking		
⑦ alternatively: Circular hollow section ø48.3x2.7 without ① galvanised; all welding seams a=2.5 mm	DIN EN 10219–S460MH	

Dimens. [m]	Weight [kg]
0.40	2.1

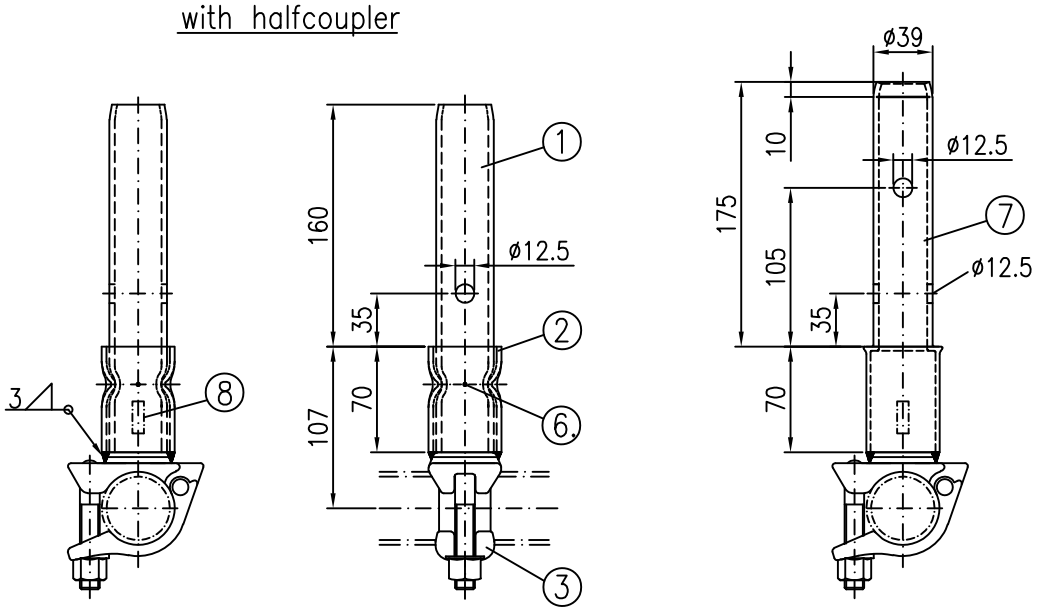
ALBLITZ MODUL

MODUL U–tube connector
in accordance with Z–8.22–906

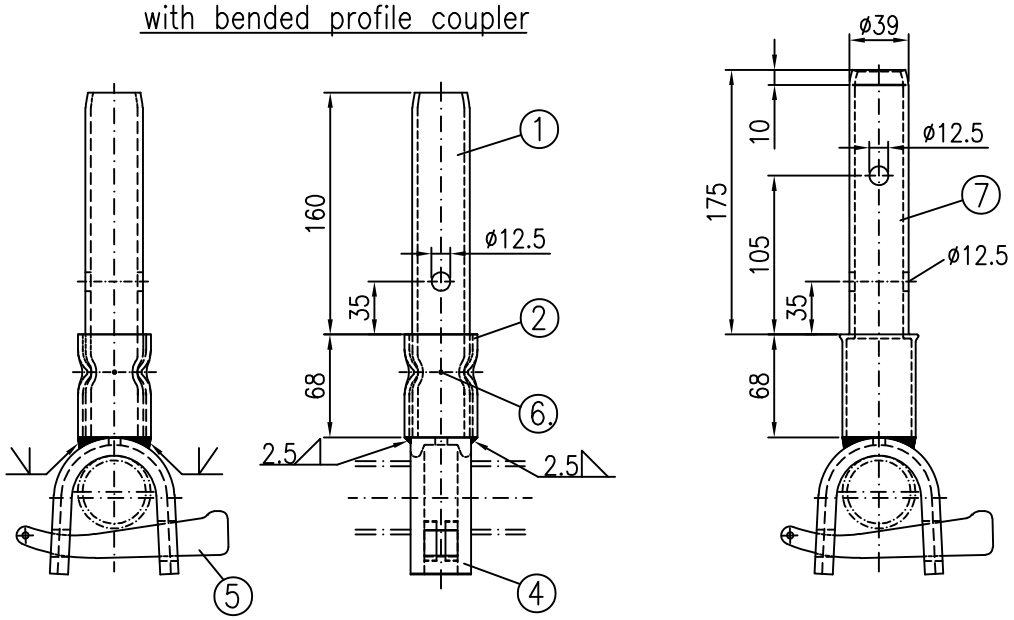
M709–B137_ABM 10.2023

Annex B,
page 123

with halfcoupler



with bended profile coupler



① Circular hollow section ø38x3.6	DIN EN 10219-S235JRH	$R_{eH} \geq 320$ N/mm²
② Circular hollow section ø48.3x3.2	DIN EN 10219-S235JRH	$R_{eH} \geq 320$ N/mm²
③ Halfcoupler, class B	DIN EN 74-2	
④ Bended profile section 40x13x5x6.5	DIN EN 10025-S235JR	
⑤ Wedge 6 mm	see Annex B, page 3	
⑥ 4 point-joint pressed connections	alternatively: 2 x spot-weld 12	
⑦ alternatively: Circular hollow section 48.3x2.7 without ①	DIN EN 10219-S460MH	
⑧ Marking		

galvanised

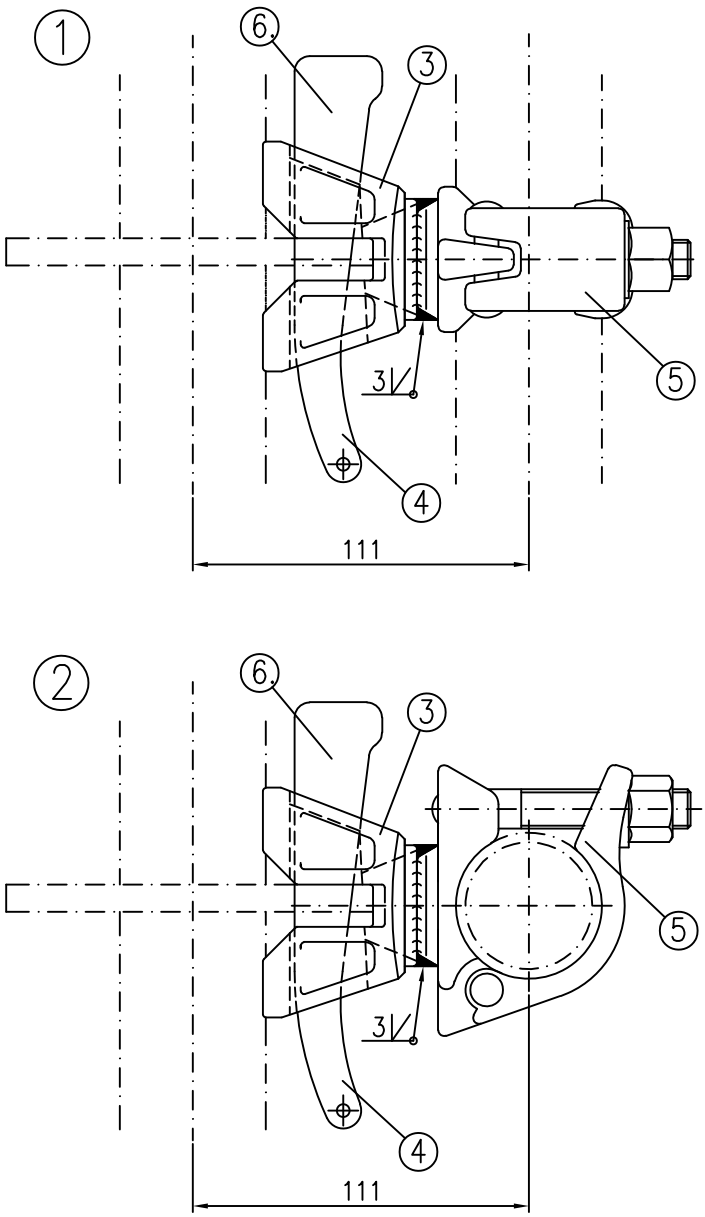
	Dimens. [m]	Weight [kg]
with halfcoupler	0.30	1.6
with bended profile coupler	0.30	1.5

ALBLITZ MODUL

MODUL tube connector
in accordance with Z-8.22-906

M709-B140_ABM 10.2023

Annex B,
page 124



① Wedge–head coupler, rigid, parallel
② Wedge–head coupler, rigid, right angle
③ Connection of tube ledger — see Annex B, page 4
alternatively: Connection of tube ledger 4.0 — see Annex B, page 151
④ Wedge 6 mm — see Annex B, page 3
⑤ Halfcoupler, class B — DIN EN 74–2
⑥ Marking

galvanised

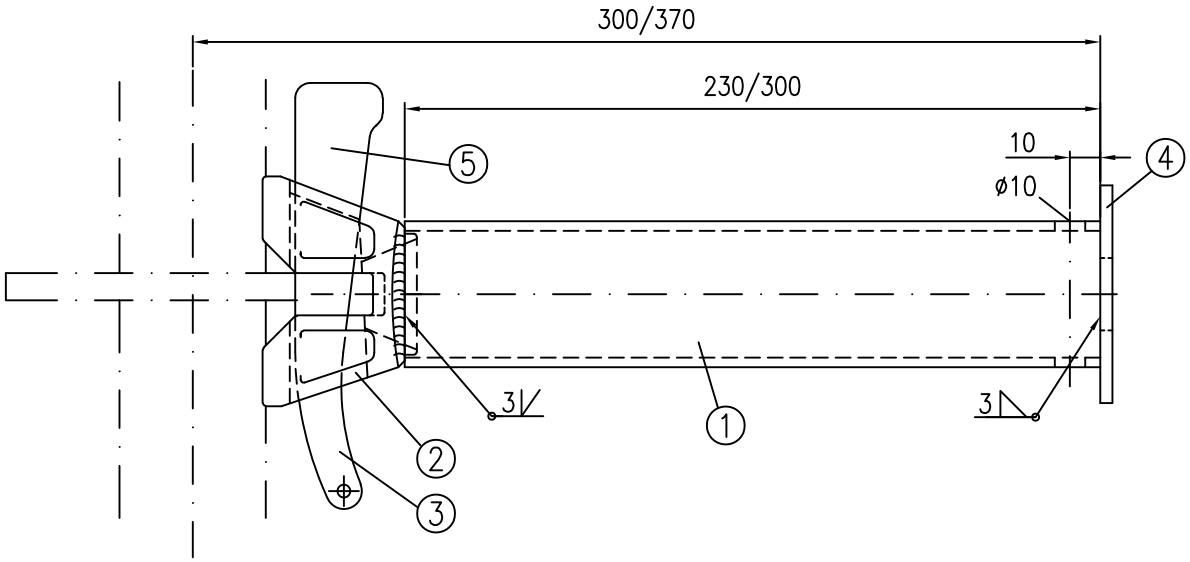
Dimens. [m]	Weight [kg]
–	1.0

ALBLITZ MODUL

Wedge–head coupler, rigid
in accordance with Z–8.22–906

M710–B150_ABM 05.2021

Annex B,
page 125



① Circular hollow section ø48.3x3.2 (III)	DIN EN 10219–S235JRH	$R_{eH} \geq 320$ N/mm²
alternatively: Circular hollow section ø48.3x2.7 (IV)	DIN EN 10219–S460MH	
② Connection of tube ledger (I)	see Annex B, page 4	
alternatively: Connection of tube ledger 4.0 (II)	see Annex B, page 151	
③ Wedge 6 mm	see Annex B, page 3	
④ Steel metal s=4 mm	DIN EN 10025–S235JR	
alternatively: Disc	DIN EN ISO 7093–1–26x70x4–steel	
⑤ Marking		
galvanised		

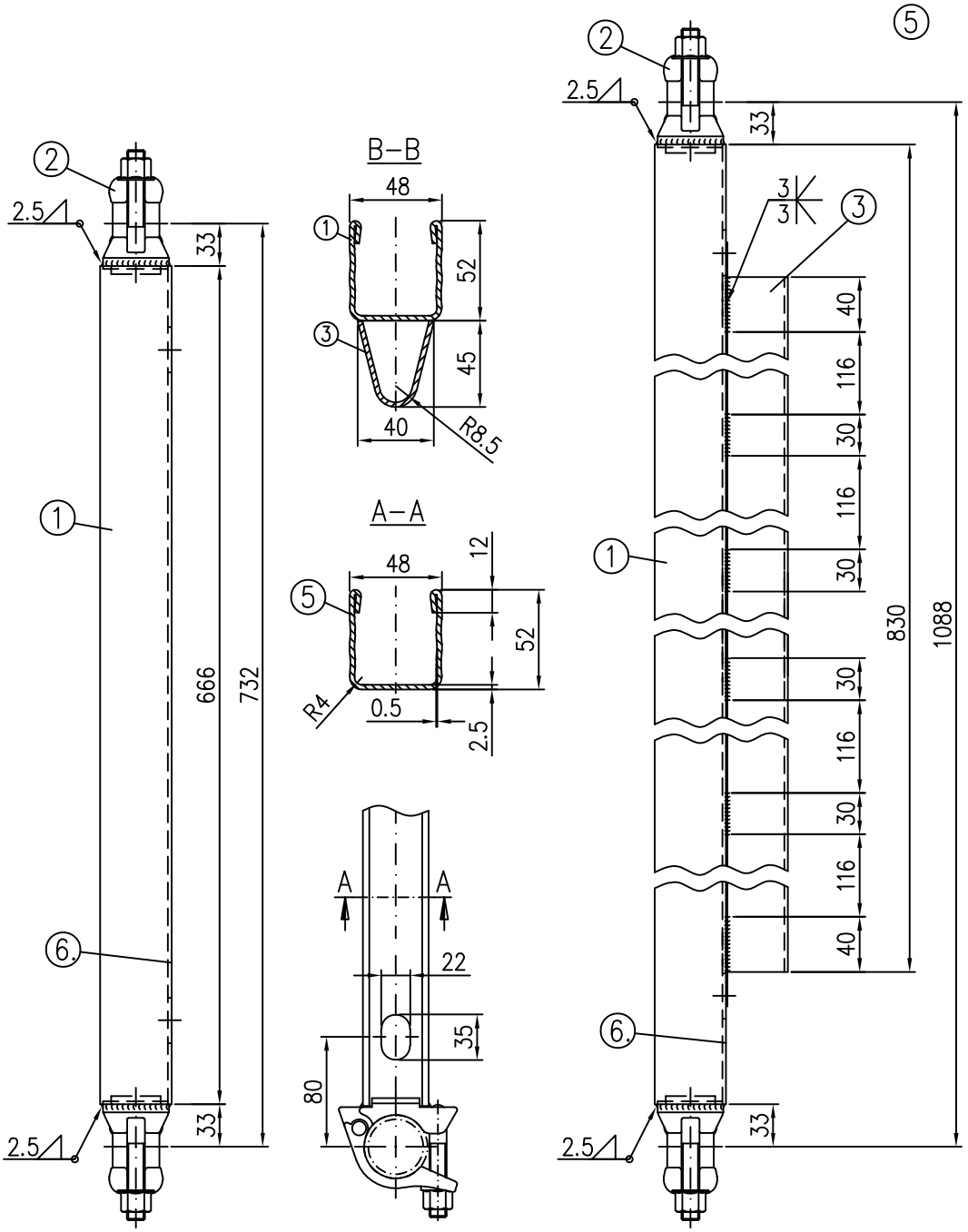
allowed combination			Dimens. [m]	Weight [kg]
	III	IV		
I	x	x	0.29	1.4
II	–	x	0.36	1.7

ALBLITZ MODUL

Support ledger
in accordance with Z–8.22–906

M711–B203_ABM 10.2021

Annex B,
page 126



①	U–profile 48x52x2.5 made of steel metal 169x2.5	DIN EN 10025–S235JR see Annex A, page 32
②	Halfcoupler, class B	DIN EN 74–2
③	Steel metal 3	DIN EN 10025–S235JR
④	U–profile 48x52x2.5	DIN EN 10025–S460MC
⑤	alternatively: at 1.09 m U–profile 48x52x2.5 without ③	DIN EN 10149–2–S460MC
⑥	Marking	
	galvanised	

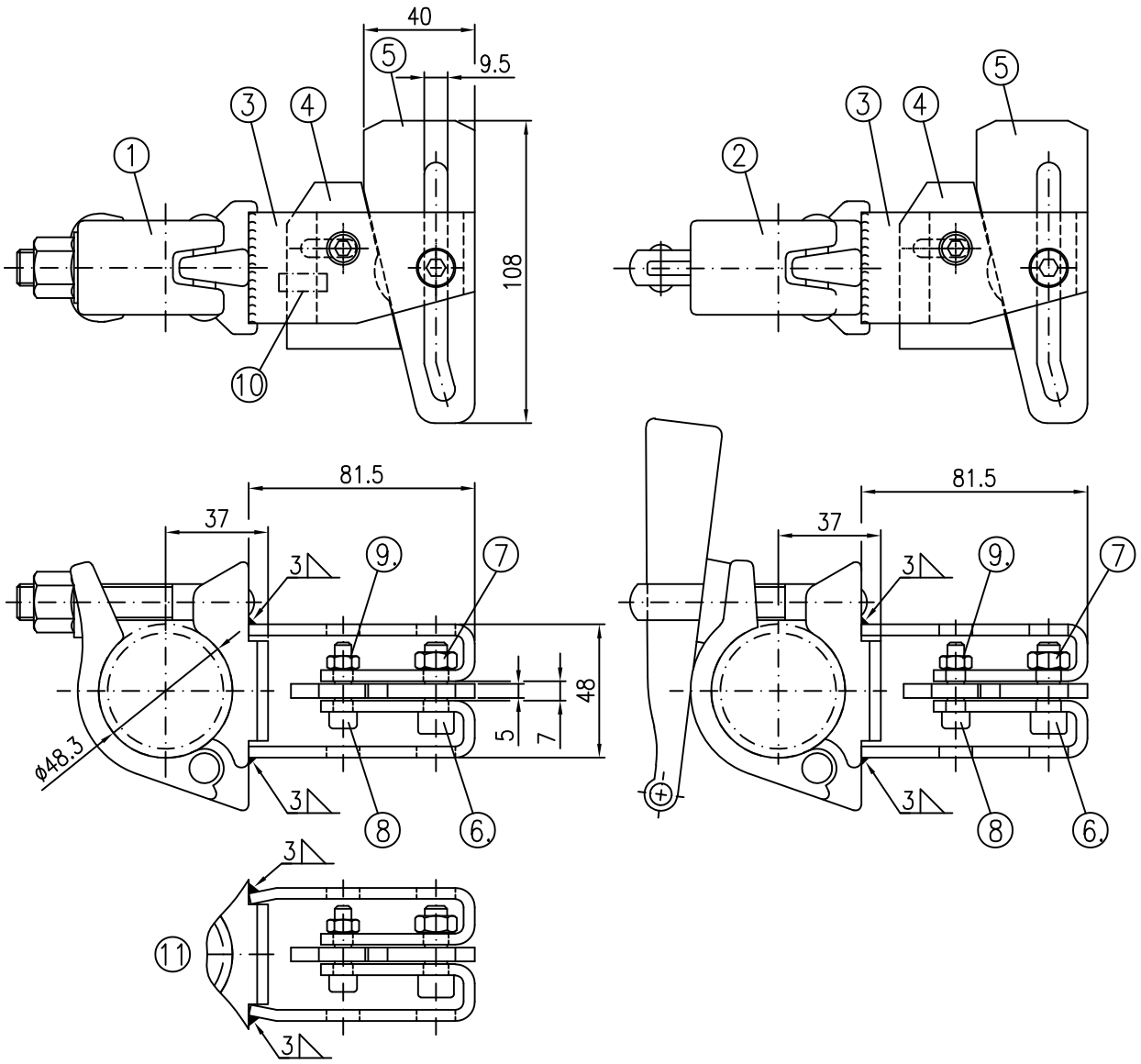
Dimens. [m]	Weight [kg]
0.73	2.8
1.09	5.4

ALBLITZ MODUL

Transom 0.73 m; 1.09 m
in accordance with Z–8.1–862

A713–A154_ABM 05.2021

Annex B,
page 127



①	Halfcoupler, class B	DIN EN 74-2
②	alternatively: Wedge coupler	DIN EN 74-2
③	Steel plate 320x4	DIN EN 10111-DD13
④	Steel plate 70x5	DIN EN 10025-S235JR
⑤	Steel plate 80x5	DIN EN 10025-S235JR
⑥	Cylinder head screw with hexagon socket	DIN EN ISO 4762-M8x25-8.8-galvanised
⑦	Hexagon nut, self-locking	DIN EN ISO 10511-M8-8-galvanised
⑧	Cylinder head screw with hexagon socket	DIN EN ISO 4762-M6x25-8.8-galvanised
⑨	Hexagon nut, self-locking	DIN EN ISO 10511-M6-8-galvanised
⑩	Marking	
⑪	alternatively	
	galvanised	

Dimens. [m]	Weight [kg]
–	1.3

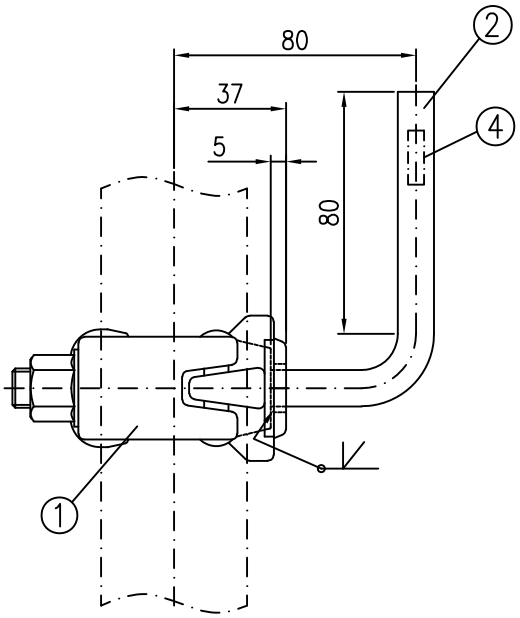
ALBLITZ MODUL

Guardrail coupler AF
in accordance with Z-8.1-862

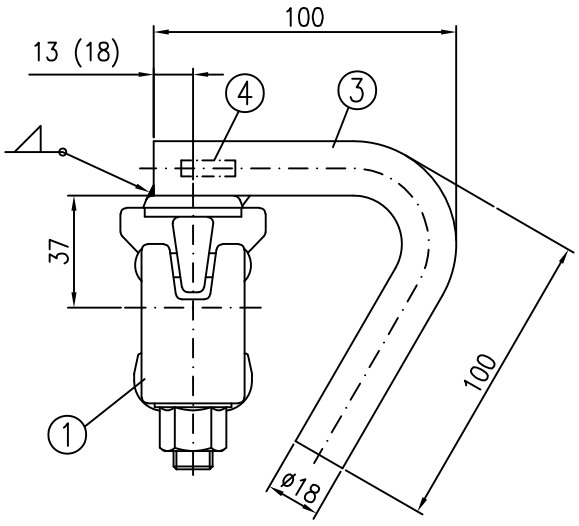
A709-A190_ABM 05.2021

Annex B,
page 128

Toeboard coupler



Halfcoupler with hook



①	Halfcoupler, class B	DIN EN 74-2
②	Round ø12	DIN EN 10025-S235JR
③	Round ø18	DIN EN 10025-S355J2
④	Marking	

galvanised; all welding seams a=3 mm ( ) = Discontinued design

Designation	Weight [kg]
Toeboard coupler	0.6
Halfcoupler with hook	0.9

ALBLITZ MODUL

Toeboard coupler; Halfcoupler with hook
in accordance with Z-8.1-862

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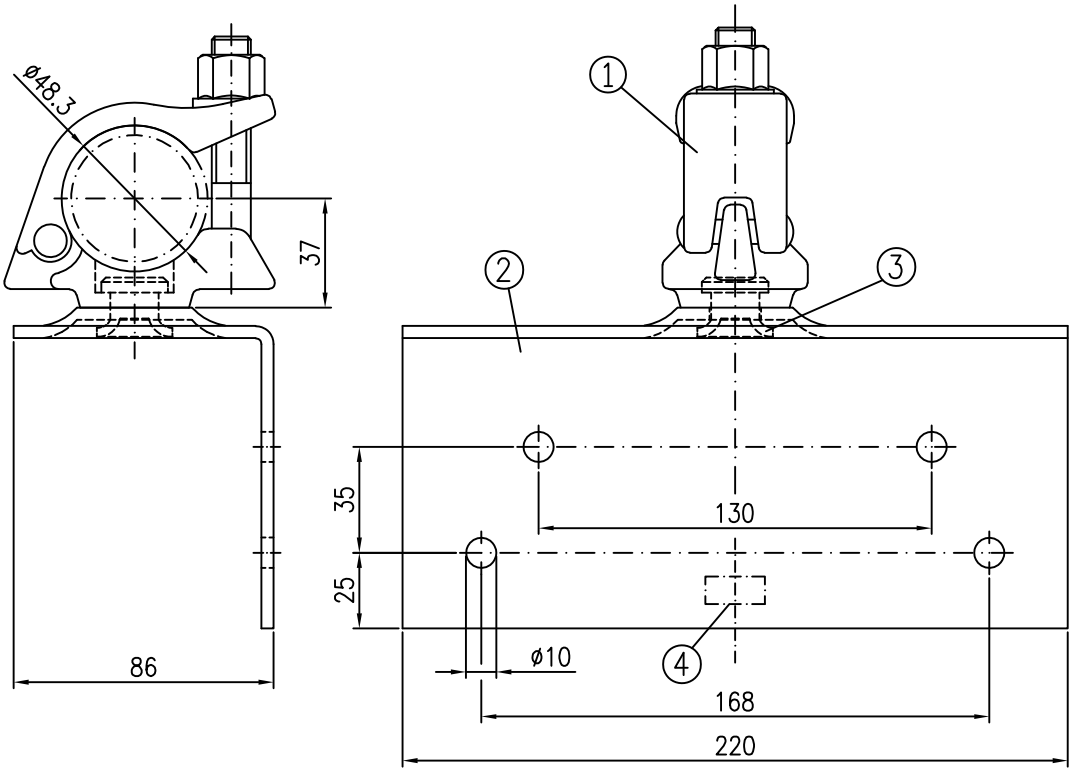
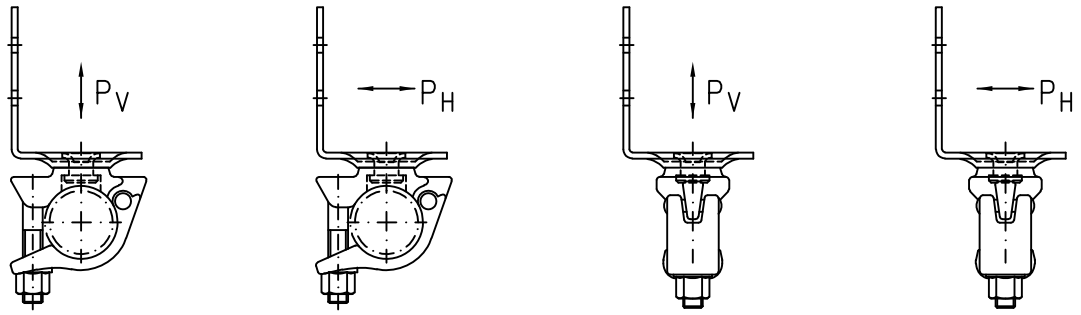
Annex B,
page 129





Maximum allowable P_V = 2 kN
Maximum allowable P_H = 1 kN

①	Halfcoupler, class B	DIN EN 74-2
②	Steel metal 4	DIN EN 10025-S235JR
③	Rivet squared timber coupler ø16	DIN EN 10263-1/2-C10C+C
	alternatively:	DIN EN 10263-3-C10E2C
④	Marking	
	galvanised	

Dimens. [m]	Weight [kg]
–	1.8

ALBLITZ MODUL

Squared timber coupler
in accordance with Z-8.1-862

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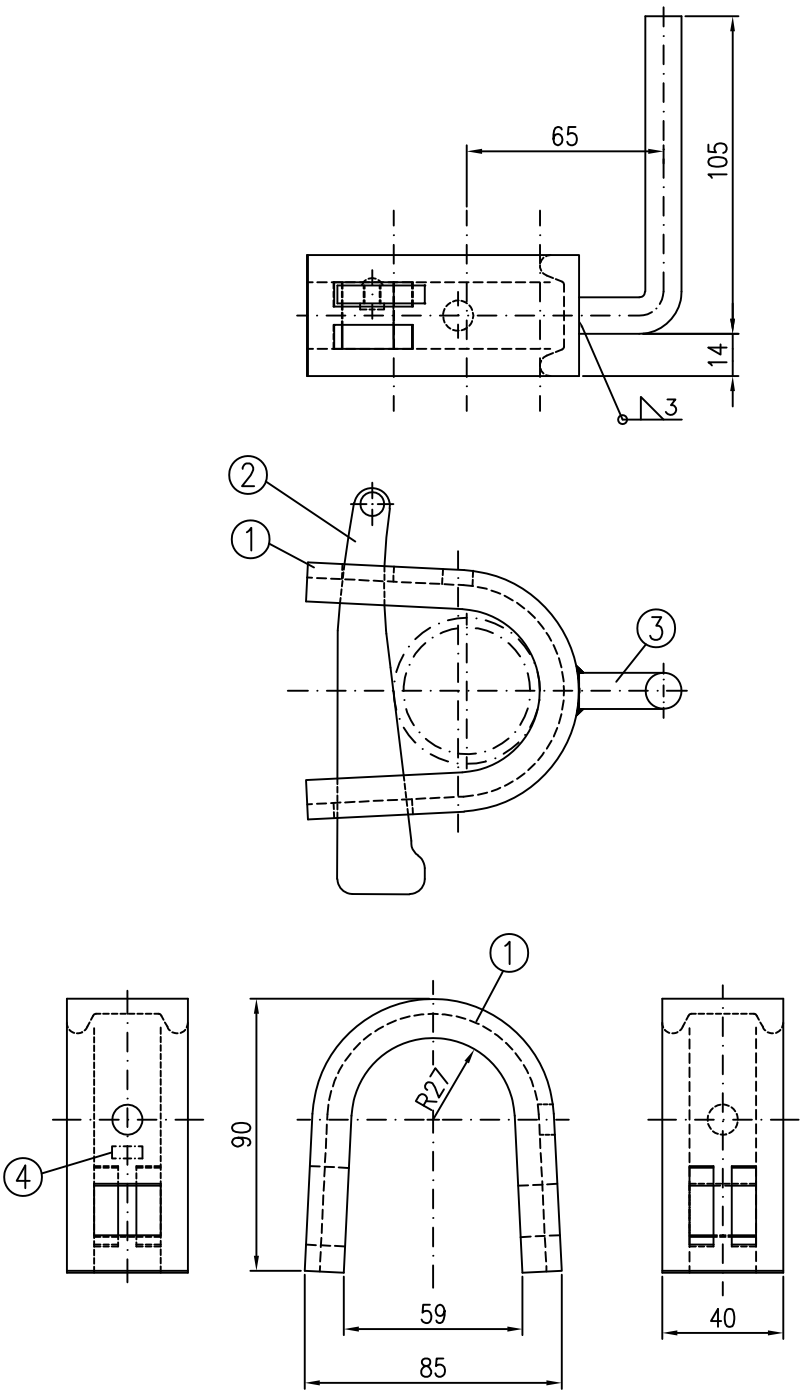
Annex B,
page 130



①	Bended profile section 40x13x5x6.5	DIN EN 10025-S235JR
②	Wedge 6 mm	see Annex B, page 3
③	Round ø12	DIN EN 10025-S235JR
④	Marking	

galvanised

Dimens. [m]	Weight [kg]
–	0.8

ALBLITZ MODUL

Toeboard support
in accordance with Z-8.1-862

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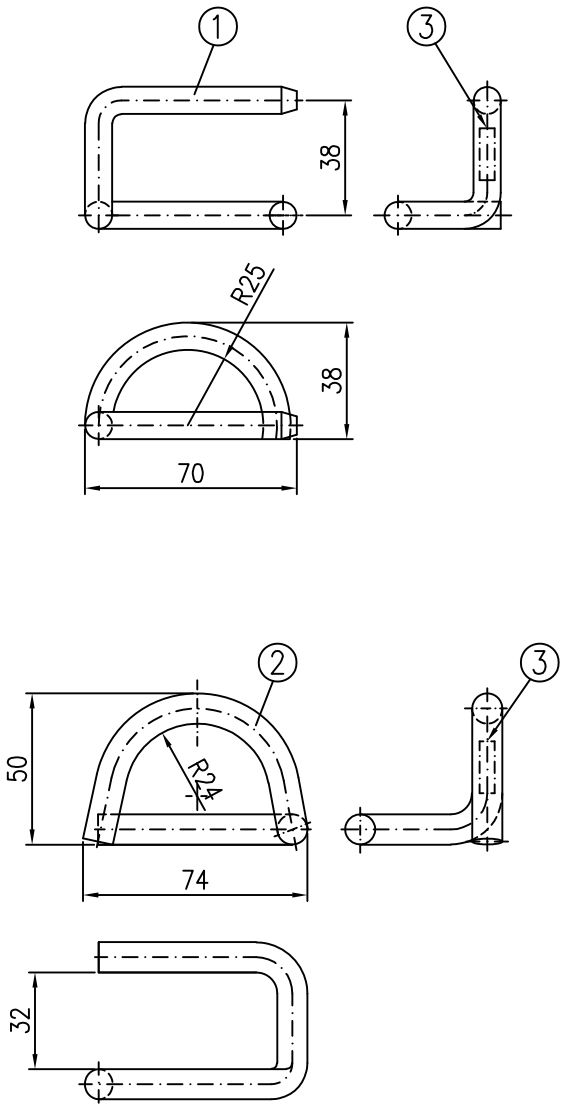
Annex B,
page 131



① Round ø9 DIN EN 10025–S235JR
② alternative design: Round ø10 DIN EN 10025–S235JR
③ Marking

galvanised

Dimens. [m]	Weight [kg]
–	0.13

ALBLITZ MODUL

Locking pin
in accordance with Z–8.1–862

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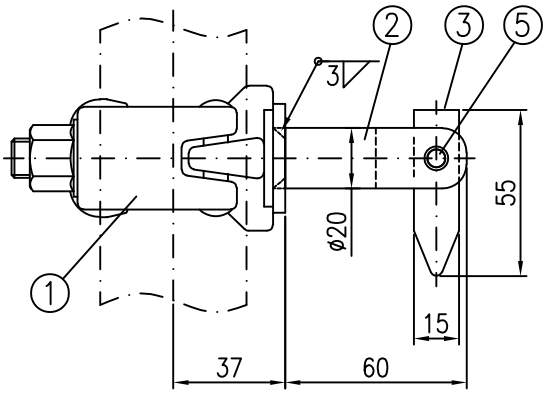
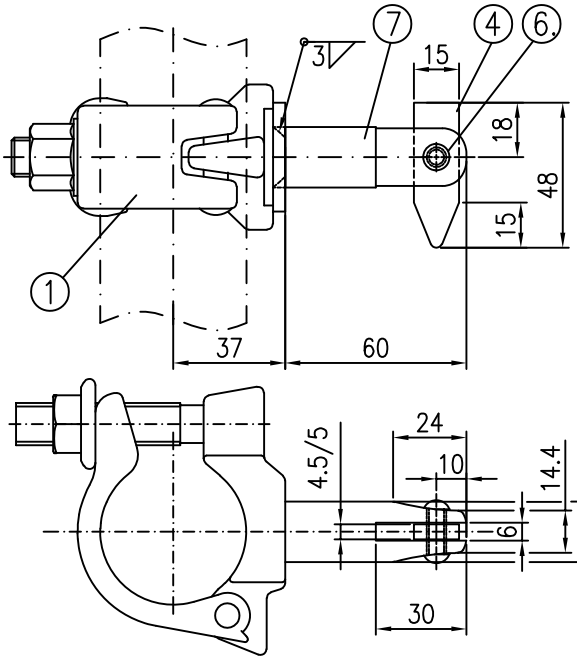
Annex B,
page 132



alternatively



①	Halfcoupler, class B	DIN EN 74-2
②	Tilting pin ø20x60 alternatively: changed design	⑦ DIN EN 10025-S235JR
③④	Locking lug; s=4 mm; hot-dip galvanised alternatively: s=4.5 mm/5 mm	DIN EN 10025-S235JR
⑤	Clamping sleeve	DIN EN ISO 8752-6x18-steel-galvanised
⑥	Blind rivet 6x18 aluminium/steel	ISO 15983

galvanised — Only for accommodating side protection components

Dimens. [m]	Weight [kg]
–	0.6

ALBLITZ MODUL

Putlog coupler
in accordance with Z-8.1-862

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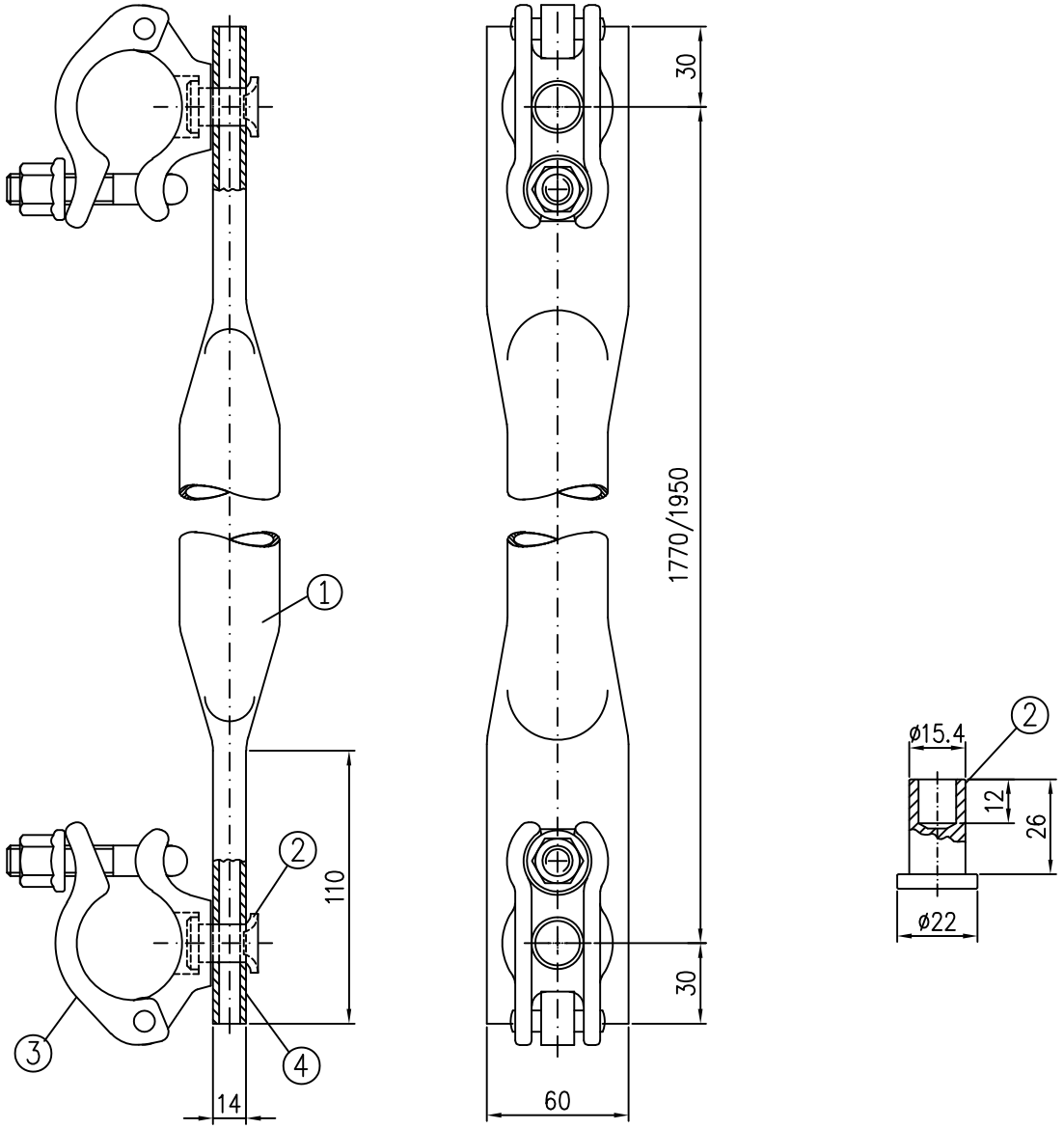
Annex B,
page 133



①	Circular hollow section ø42.4x2	DIN EN 10219–S235JRH
②	Rivet for diagonal brace	DIN EN 10263–1/2–C10C+C
	alternatively:	DIN EN 10263–3–C10E2C
③	Halfcoupler, class B	DIN EN 74–2
④	Marking	
	galvanised	

Dimens. [m]	Weight [kg]
1.77	4.8
1.95	5.2

ALBLITZ MODUL

Diagonal cross brace
in accordance with Z–8.1–862

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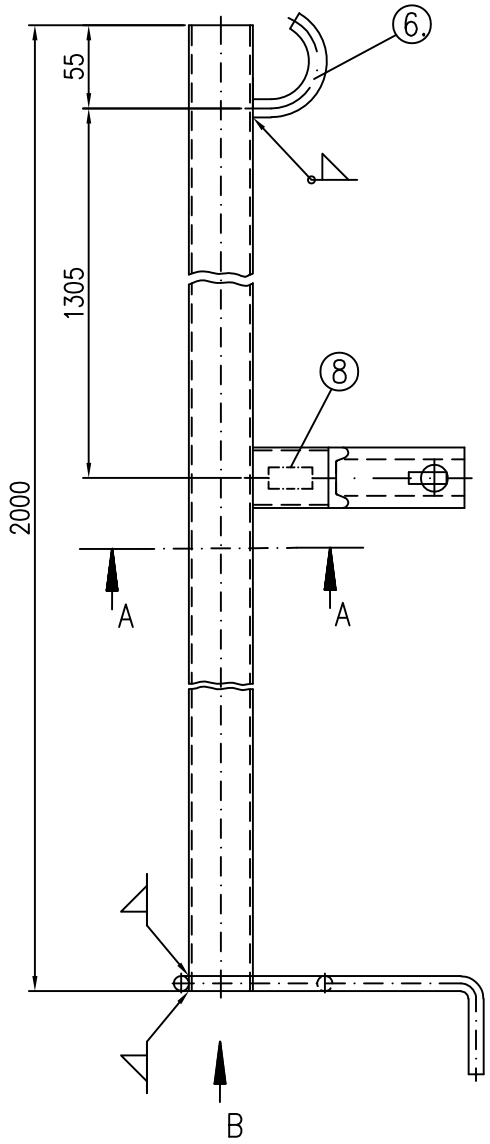
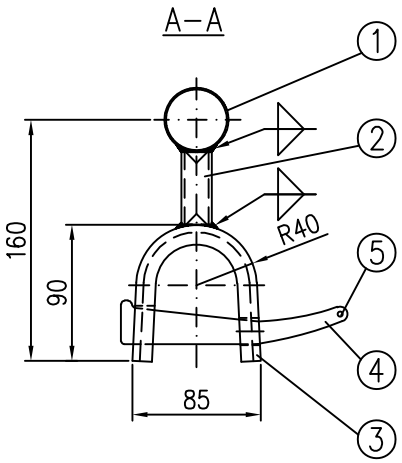
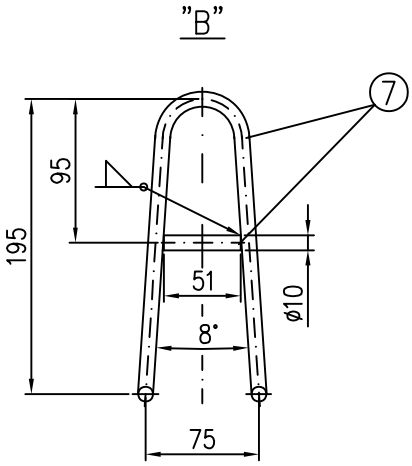
Annex B,
page 134







①	Tube 42.4x2	S235JRG2
②	Box 40x20x2	S235JRH
③	Bended profile section 40x12x5x7	S235JRH
④	Wedge plus II	S550MC
⑤	Round head rivet ø5x10 QSt 32–2	DIN 660 electrogalvanized with rivet head of rivet ø4
6.	Round ø12	S235JRG2
⑦	Round ø10	S235JRG2
⑧	Marking	

galvanised; all welding seams a=2 mm

Component no longer manufactured
–only for continued use–

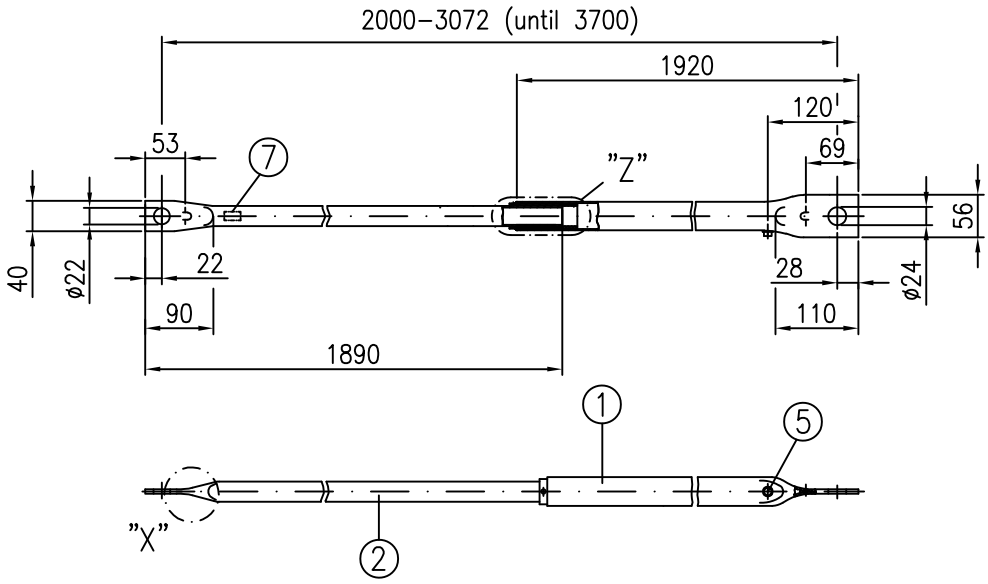
Dimens. [m]	Weight [kg]
2.00	6.2

ALBLITZ MODUL

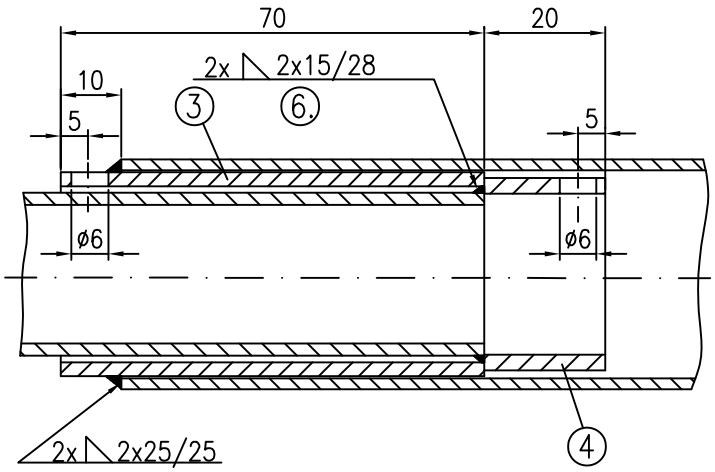
Advanced guardrail post 2.00 m
in accordance with Z–8.1–862

A705–A035_ABM 05.2021

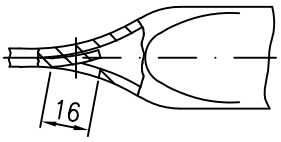
Annex B,
page 135



"Z"



"X"



①	Tube 38x2	S235JRH
②	Tube 26.9x2.6	S235JRH
③	Tube 33.7x2.3	S235JRH
④	Tube 31.8x2.6	S235JRH
⑤	Self–drilling screw ST6, 3x16	DIN 7504–K–steel–galvanised
⑥	Pos. 2 and 4: finish after welding	
⑦	Marking	

galvanised

Component no longer manufactured
–only for continued use–

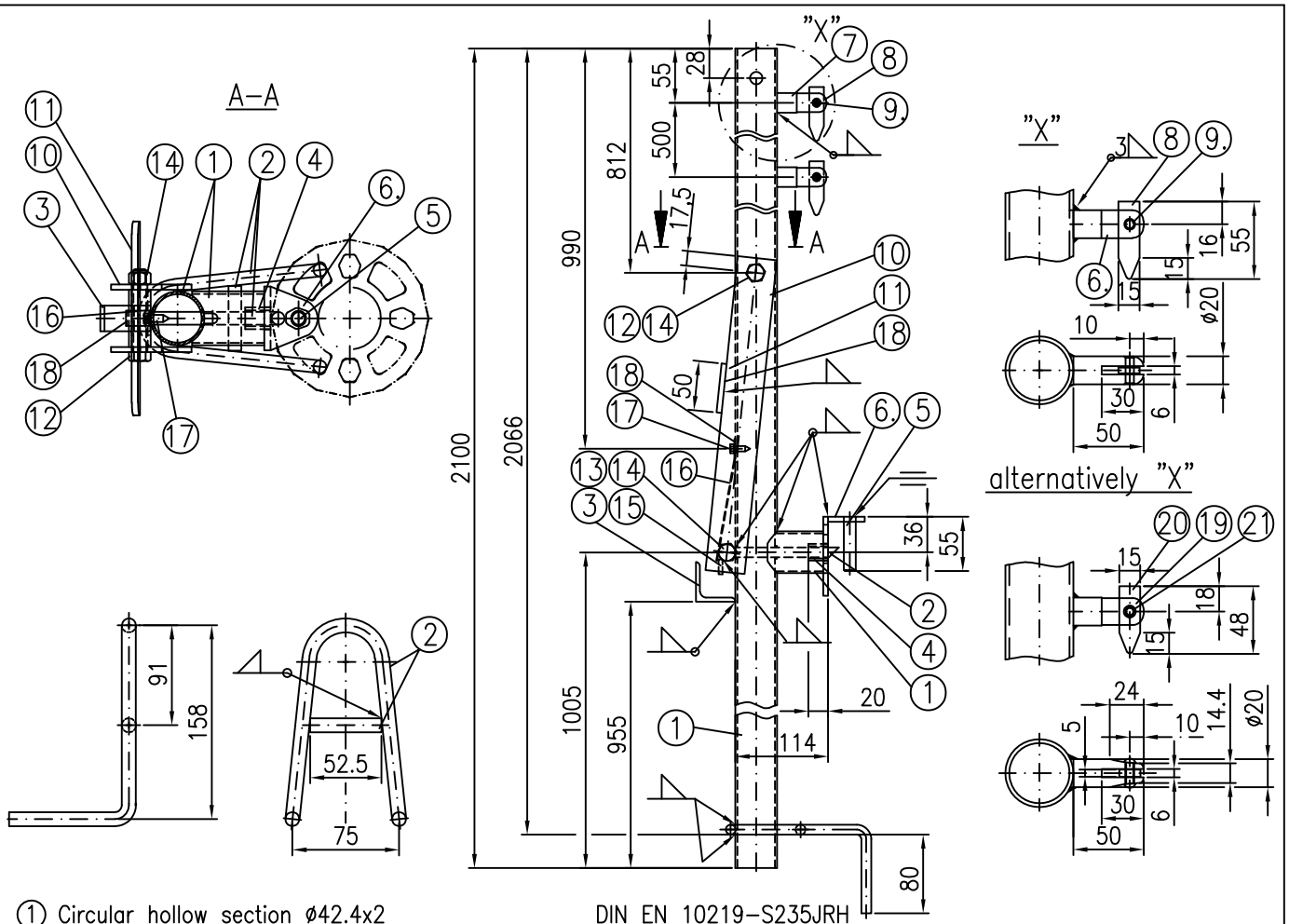
Dimension [m]	Weight [kg]
2.00–3.07	6.8

ALBLITZ MODUL

Telescopic guardrail 2.00 – 3.07 m
in accordance with Z–8.1–862

A709–A036_ABM 05.2021

Annex B,
page 136



①	Circular hollow section ø42.4x2	DIN EN 10219–S235JRH
②	Round ø10	DIN EN 10025–S235JR
③	L–profile 40x40x4	DIN EN 10056–2–S235JR
④	Circular hollow section ø17.2x2.3	DIN EN 10219–S235JRH
⑤	Round ø12	DIN EN 10025–S235JR
⑥	Steel plate 120x5	DIN EN 10025–S235JR
⑦	Tilting pin ø20x50 alternatively: ⑲	DIN EN 10025–S235JR
⑧	Locking lug t=4; alternatively: s=5 mm ⑳	DIN EN 10025–S235JR
⑨	Thread pin	DIN EN ISO–M6x18–steel–galvanised
	alternatively: Blind rivet A 6x18 aluminium/steel ㉑	DIN EN ISO–M6x18–steel–galvanised
⑩	Flat 40x4	DIN EN 10025–S235JR
⑪	Steel plate 50x5	DIN EN 10025–S235JR
⑫	Hexagon bolt	DIN EN ISO 4014–M10x70–8.8–galvanised
⑬	Hexagon bolt	DIN EN ISO 4014–M10x70–8.8–galvanised
⑭	Hexagon nut, self–locking	DIN EN ISO 10511–M10–8–galvanised
⑮	Flat 15x4	DIN EN 10025–S235JR
⑯	Leaf spring 12x1	Spring steel strip 1.4310 X10CrNi18–8
⑰	Tapping screw	ISO 1479–ST 5.5x16–K–steel–galvanised
⑱	Marking	
	galvanised; all welding seams a=2 mm	

Dimens. [m]	Weight [kg]
2.00	6.8

ALBLITZ MODUL

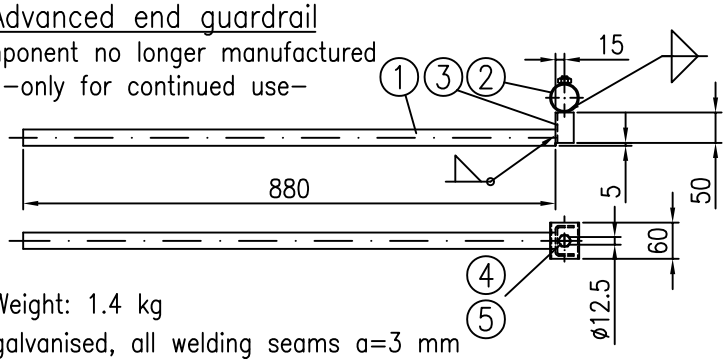
MODUL advanced guardrail post
in accordance with Z–8.22–906

M716–B211_ABM 05.2021

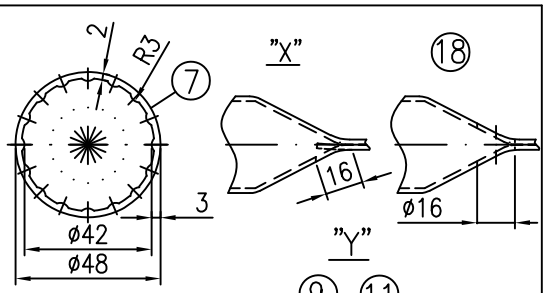
Annex B,
page 137

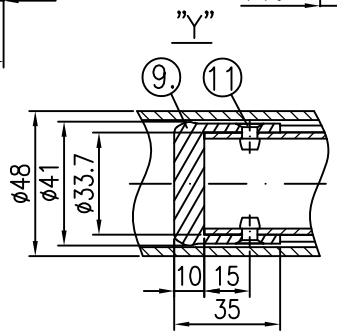
Advanced end guardrail

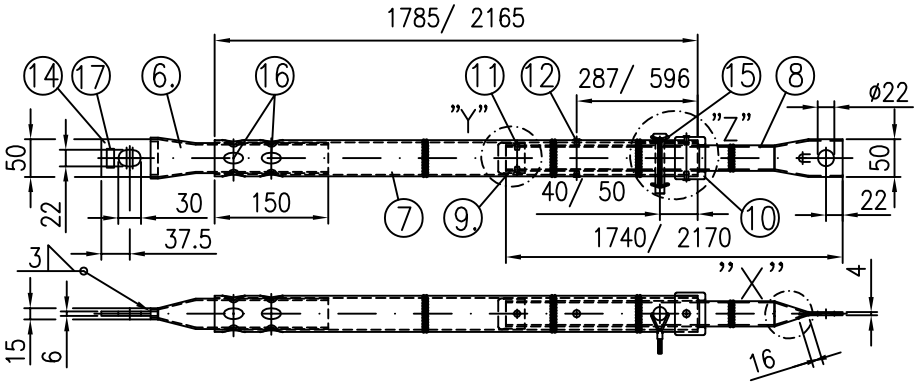
Component no longer manufactured
–only for continued use–

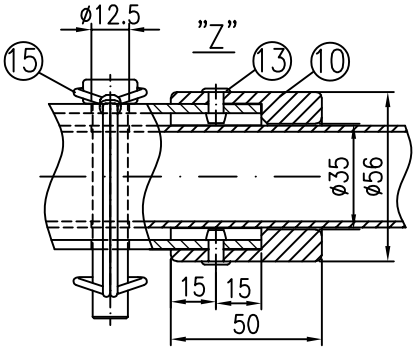


Weight: 1.4 kg
galvanised, all welding seams a=3 mm









①	Circular hollow section ø26.9x2.6	DIN EN 10219–S235JRH
②	Circular hollow section ø48.3x2.3	DIN EN 10219–S235JRH
③	U–profile 50x30x3	DIN EN 10025–2–S235JR
	alternatively: U–profile 47x30x3	DIN EN 10025–2–S235JR
④	Hexagon bolt	DIN EN ISO 4014–M10x60–8.8–galvanised
⑤	Hexagon nut, self–locking	DIN EN ISO 10511–M10–8–galvanised
⑥	Circular hollow section 40x2	DIN EN 755–2 EN AW–6060–T66
⑦	Circular hollow section special profile ø48 2/3	DIN EN 755–2 EN AW–6063–T66
⑧	Circular hollow section ø33.7x2	DIN EN 10219–S235JRH
⑨	Sleeve ø41x35	PA6
⑩	Sleeve ø56x50	PA6
⑪	Blind rivet stainless steel A2/A2 5x10	DIN EN ISO 15984
⑫	Blind rivet A 5x8	DIN EN ISO 15979 aluminium/steel
⑬	Blind rivet A 5x12	DIN EN ISO 15979 aluminium/steel
⑭	Flat 50x6	DIN EN 755–2 EN AW–6060–T66
⑮	Tube linchpin RK 11 10x50	Transport security
	alternatively: Tube linchpin RK 12 10x60	
⑯	4 point–joint pressed connections	
⑰	Marking	
⑱	alternatively	131–MIG: Type 4 (EC9) filler material
	all components made of steel galvanised	

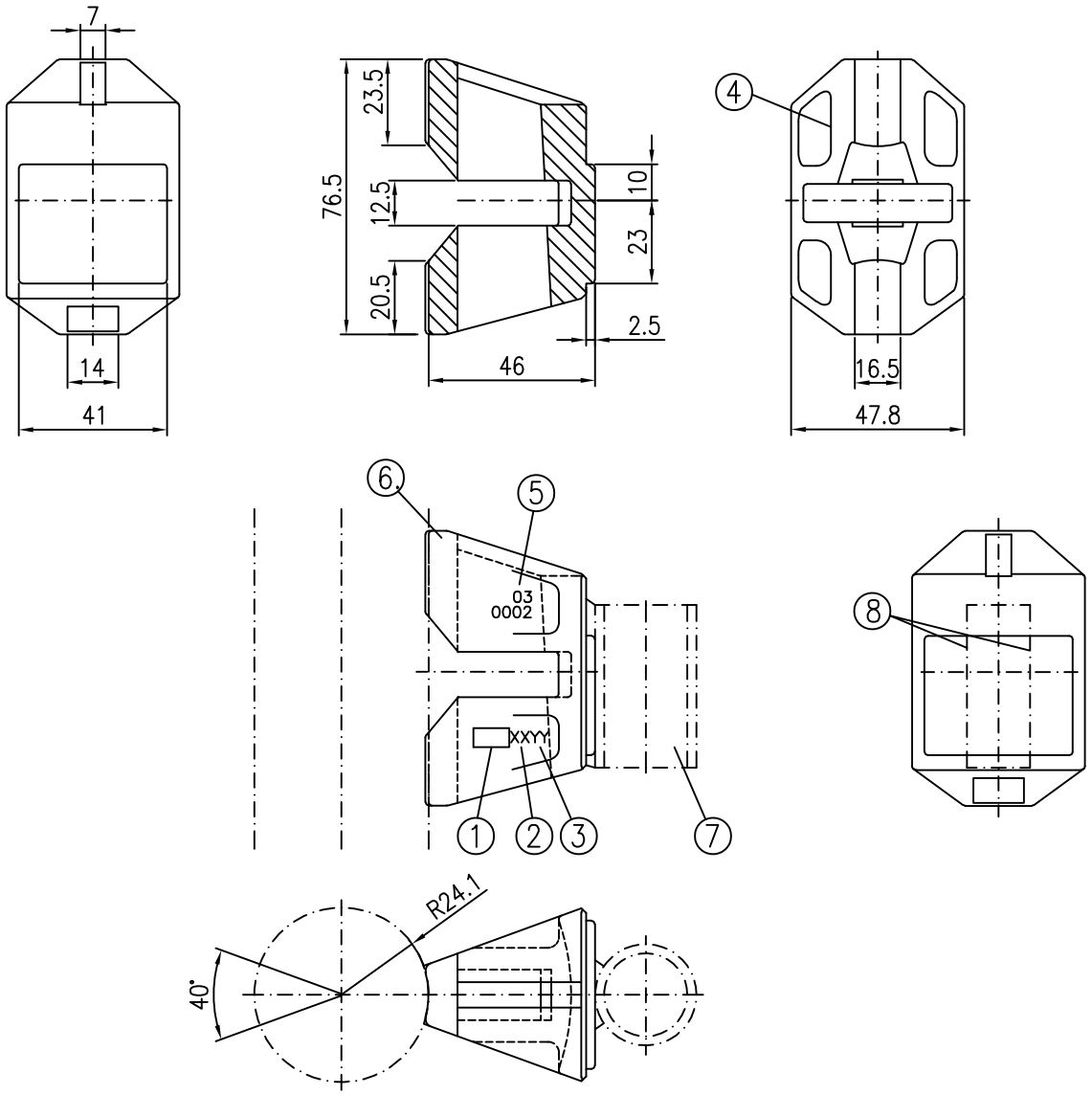
Dimension [m]	Weight [kg]
2.00–2.57	4.7
2.50–3.07	6.0

ALBLITZ MODUL

Advanced end guardrail/ Aluminium telescopic guardrail
in accordance with Z–8.1–862

A709–A136_ABM 05.2021

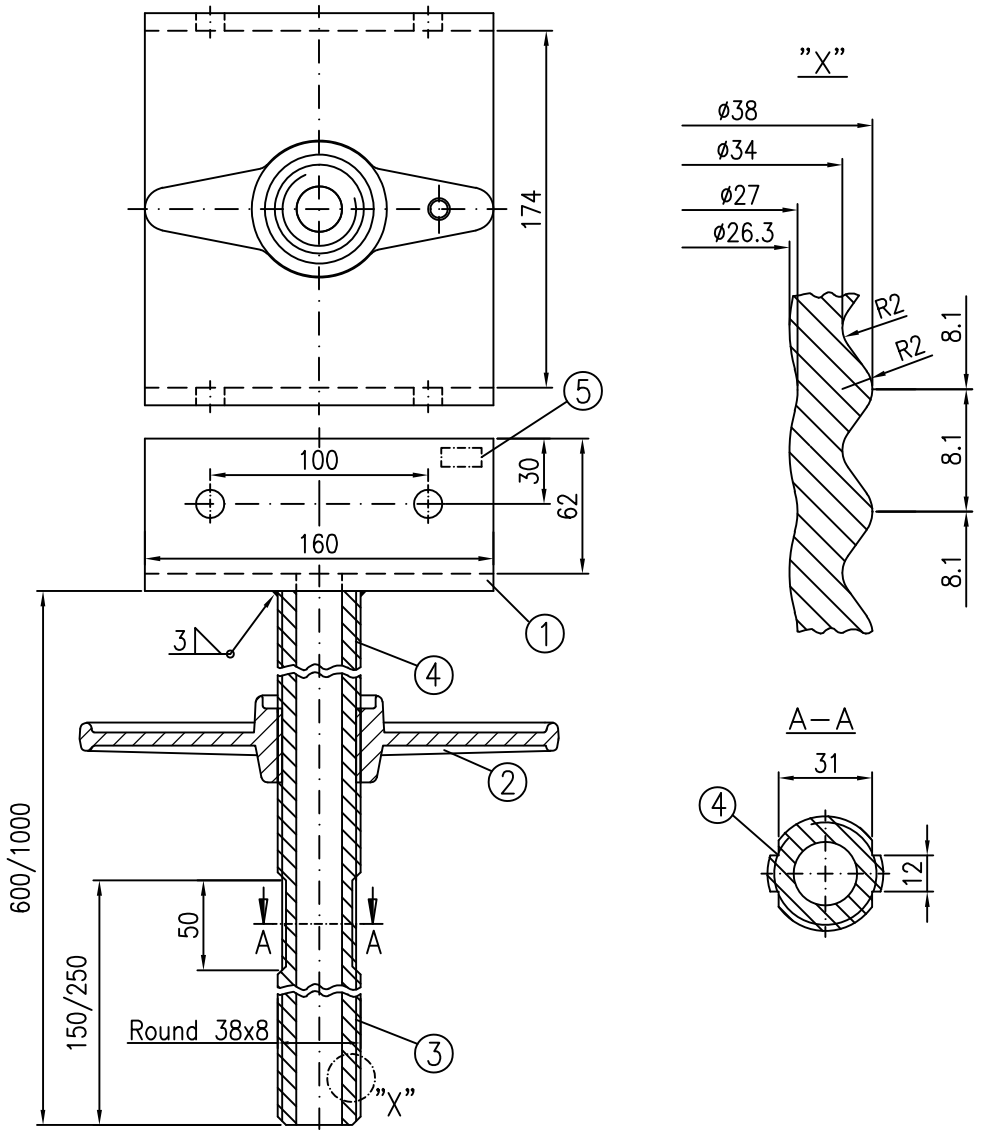
Annex B,
page 138



① ▭ = Company logo of foundry
② XX = Calendar week and
③ YY = Year of manufacturing (e.g. 4016=KW40/2016)
④ ⩘ = ALFIX manufacturer's logo
⑤ 03 0002 = Serial number
⑥ Cast steel Material in accordance with the documents filed at DIBt
⑦ Circular hollow section 28x2.5 Material in accordance with the documents filed at DIBt
⑧ Welding section

Only for use in connection with the components listed in the annexes B, pages 102 and 122

ALBLITZ MODUL	
Connecting head U-ledger PLUS, new connector design in accordance with Z-8.22-906 M716-B219_ABM 05.2021	Annex B, page 139



①	Steel metal t=8mm	DIN EN 10025–S235JR
②	Wing nut	EN 1562–EN GJMW–400–S EN 1562–EN–GJMB–450–6 EN 1563–EN–GJS–400–15 EN 10293–GE240+N EN 1562–EN–GJMW–360–12
③	Thread rolled onto circular hollow section ø38x4.5	EN 10025–S235JR DIN EN 10219–S235JRH
④	Thread with notches to limit collar nut travel	
⑤	Marking	
	galvanised	

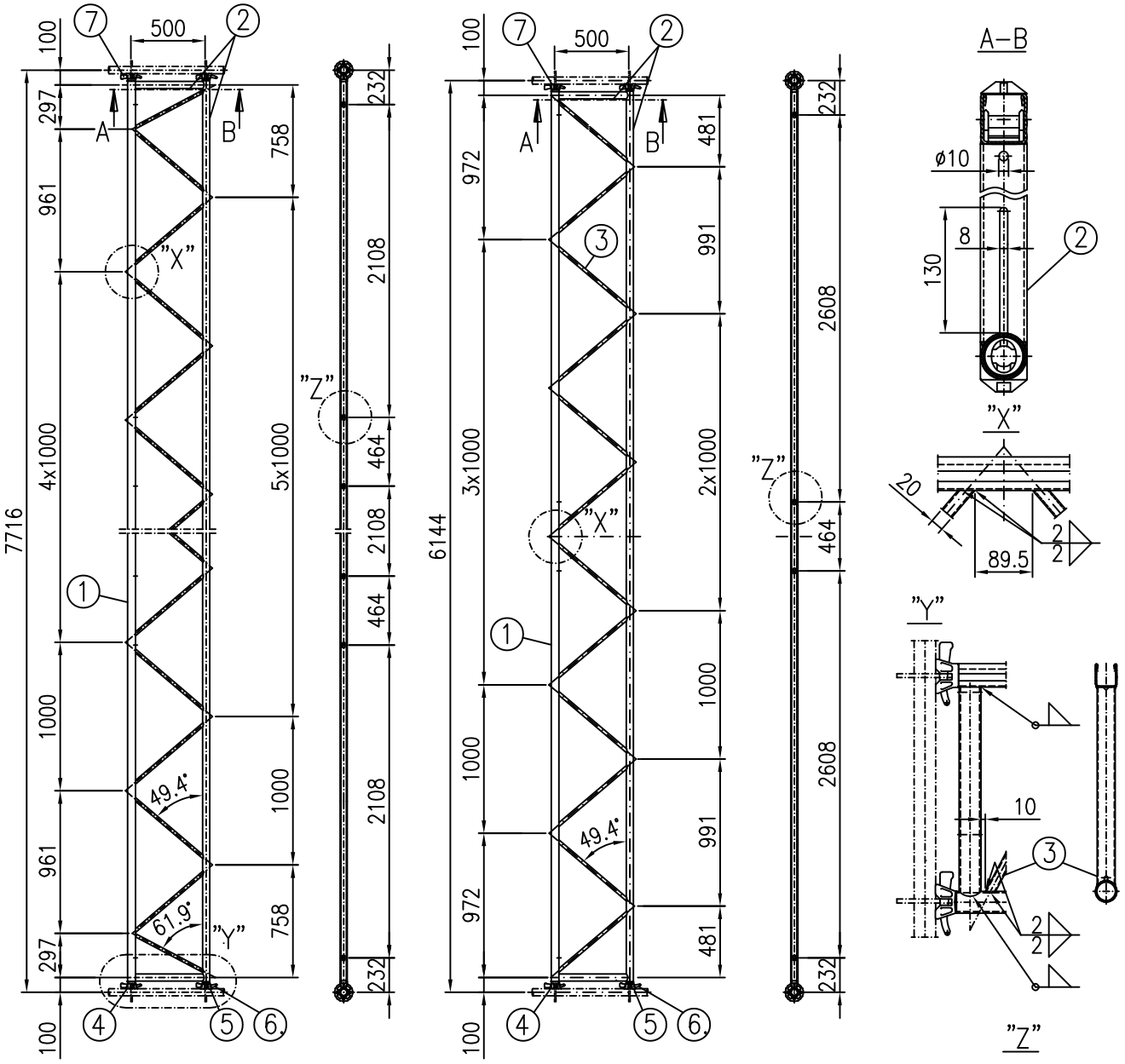
Dimens. [m]	Weight [kg]
0.60	6.0
1.00	8.0

ALBLITZ MODUL

AB head jack "U"
in accordance with Z–8.22–906

M717–B221_ABM 05.2021

Annex B,
page 140



①	U–profile 48x52x2.5 (III) alternatively: U–profile 48x52x2.5 (IV)	see Annex B, page 32 see Annex B, page 147
②	Circular hollow section ø48.3x3.2 (III) alternatively: Circular hollow section ø48.3x2.7 (IV)	DIN EN 10219–S235JRH $R_{eH} \geq 320$ N/mm² DIN EN 10219–S460MH
③	Rectangular hollow section 40x20x2	DIN EN 10219–S235JRH $R_{eH} \geq 320$ N/mm²
④	Connection of U–ledger (I) alternatively: Connection of U–ledger 4.0 (II)	see Annex B, page 5 see Annex B, page 152
⑤	Connection of tube ledger (I) alternatively: Connection of tube ledger 4.0 (II)	see Annex B, page 4 see Annex B, page 151
⑥	Wedge 6 mm	see Annex B, page 3
⑦	Marking	

galvanised; all welding seams a=3 mm

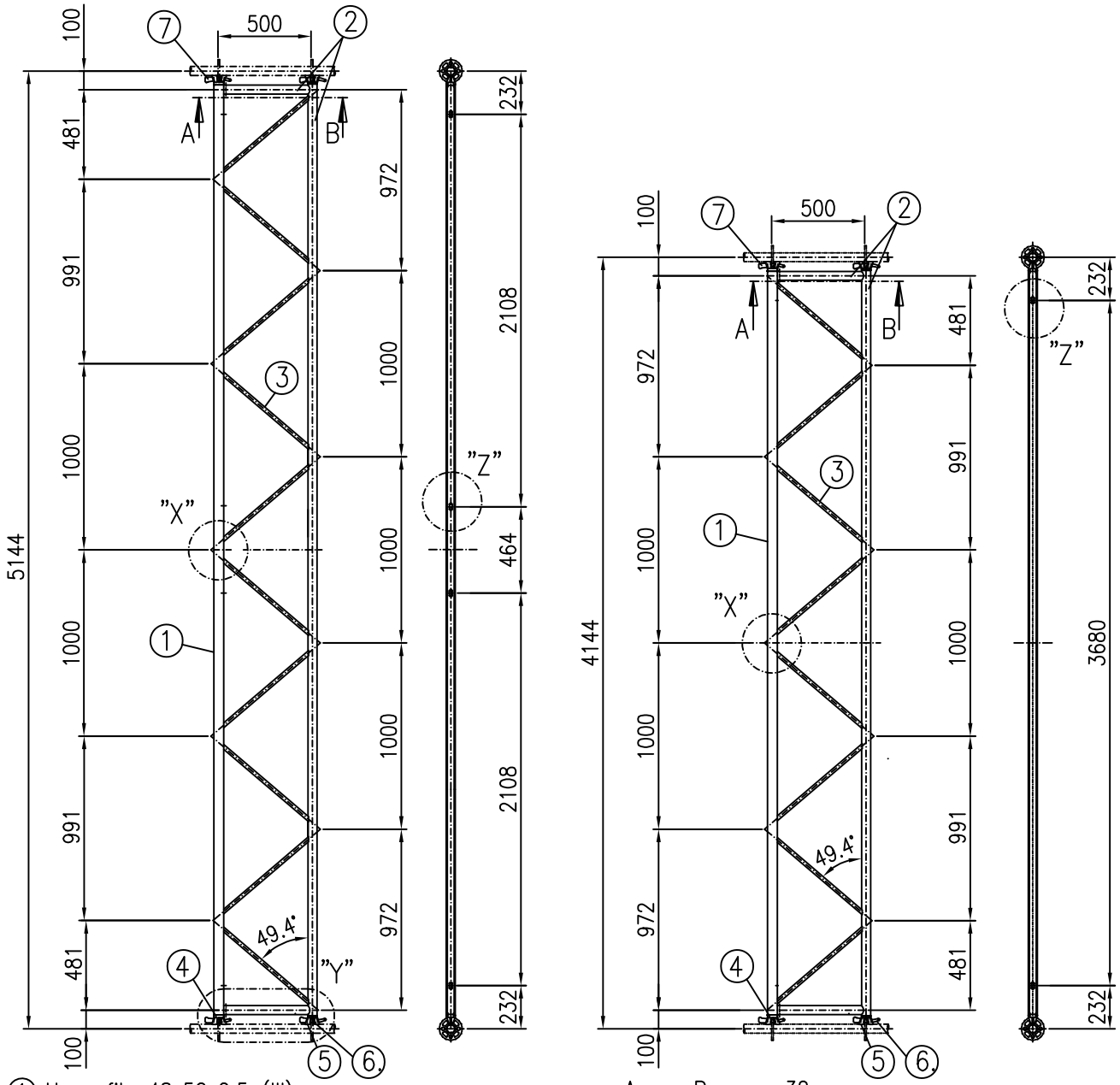
allowed combination			Dimens. [m]	Weight [kg]
	III	IV		
I	x	x	6.14	61.1
II	–	x	7.71	75.9

ALBLITZ MODUL

MODUL U–lattice girder 6.14 m; 7.71 m
in accordance with Z–8.22–906

M717–B222_ABM 10.2021

Annex B,
page 141



①	U–profile 48x52x2.5 (III)	see Annex B, page 32
	alternatively: U–profile 48x52x2.5 (IV)	see Annex B, page 147
②	Circular hollow section ø48.3x3.2 (III)	DIN EN 10219–S235JRH $R_{eH} \geq 320$ N/mm²
	alternatively: Circular hollow section ø48.3x2.7 (IV)	DIN EN 10219–S460MH
③	Rectangular hollow section 40x20x2	DIN EN 10219–S235JRH $R_{eH} \geq 320$ N/mm²
④	Connection of U–ledger (I)	see Annex B, page 5
	alternatively: Connection of U–ledger 4.0 (II)	see Annex B, page 152
⑤	Connection of tube ledger (I)	see Annex B, page 4
	alternatively: Connection of tube ledger 4.0 (II)	see Annex B, page 151
⑥	Wedge 6 mm	see Annex B, page 3
⑦	Marking	
	galvanised; all welding seams a=3 mm	For details see annex B, page 141

allowed combination		
	III	IV
I	x	x
II	–	x

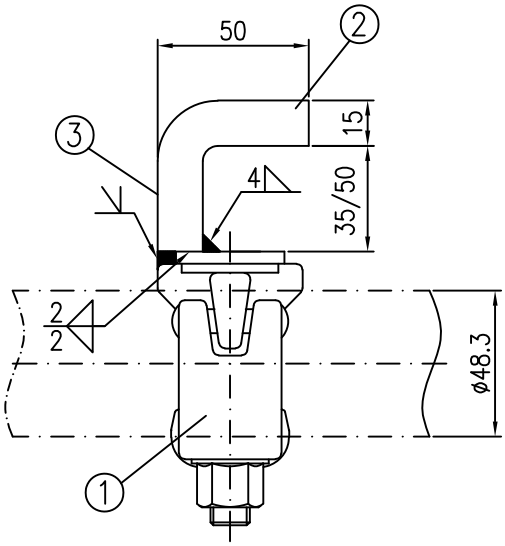
Dimens. [m]	Weight [kg]
4.14	40.5
5.15	50.9

ALBLITZ MODUL

MODUL U–lattice girder 4.14 m, 5.14 m
in accordance with Z–8.22–906

M717–B223_ABM 10.2021

Annex B,
page 142



① Halfcoupler, class B	DIN EN 74-2
② Flat 40x15	DIN EN 10025-S235JR
③ Marking	
galvanised	

Clearance [mm]	Weight [kg]
35	0.9
50	1.0

ALBLITZ MODUL

Claw coupler
in accordance with Z-8.22-906

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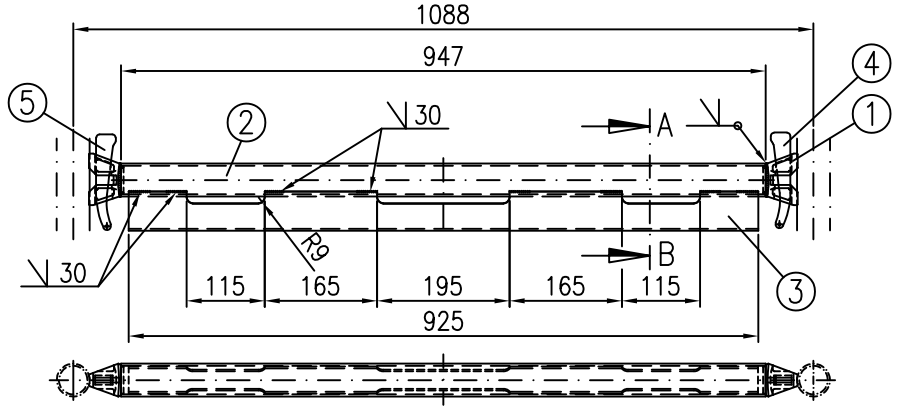
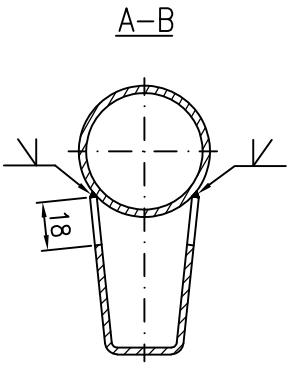
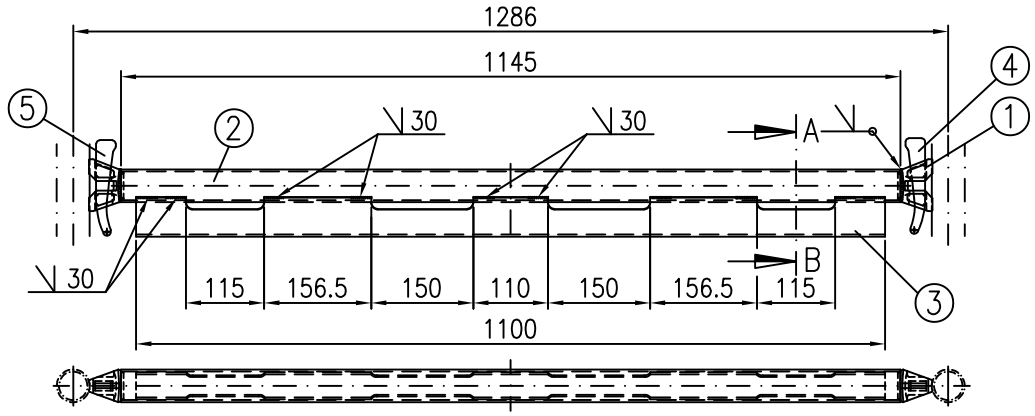
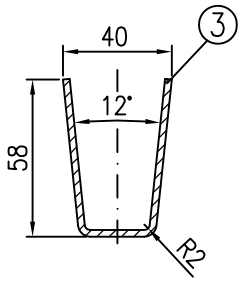
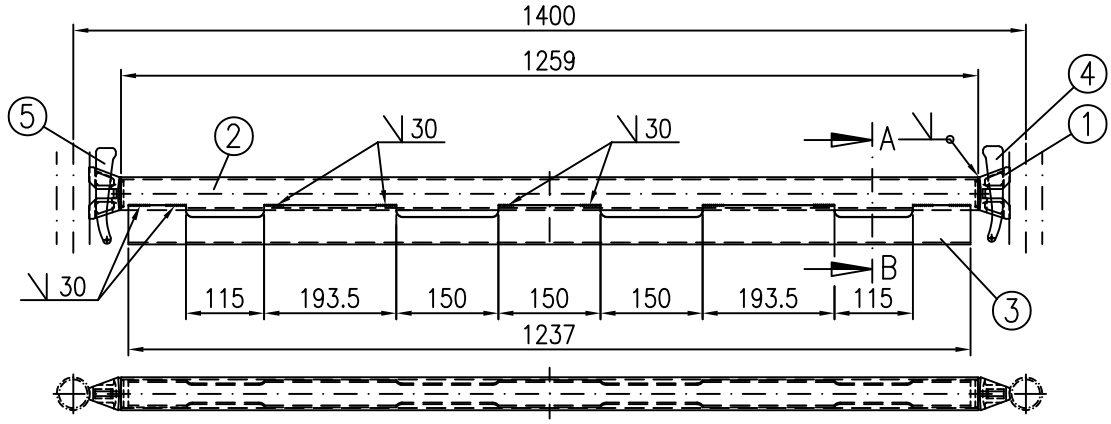
Annex B,
page 143











①	Connection of tube ledger	see Annex B, page 4
	alternativ: Connection of tube ledger 4.0	see Annex B, page 151
②	Circular hollow section ø48.3x2.7	DIN EN 10219–S460MH
③	Steel metal 2.5	DIN EN 10149–2–S460MC
④	Wedge 6 mm	see Annex B, page 3
⑤	Marking	

galvanised; all welding seams a=3 mm

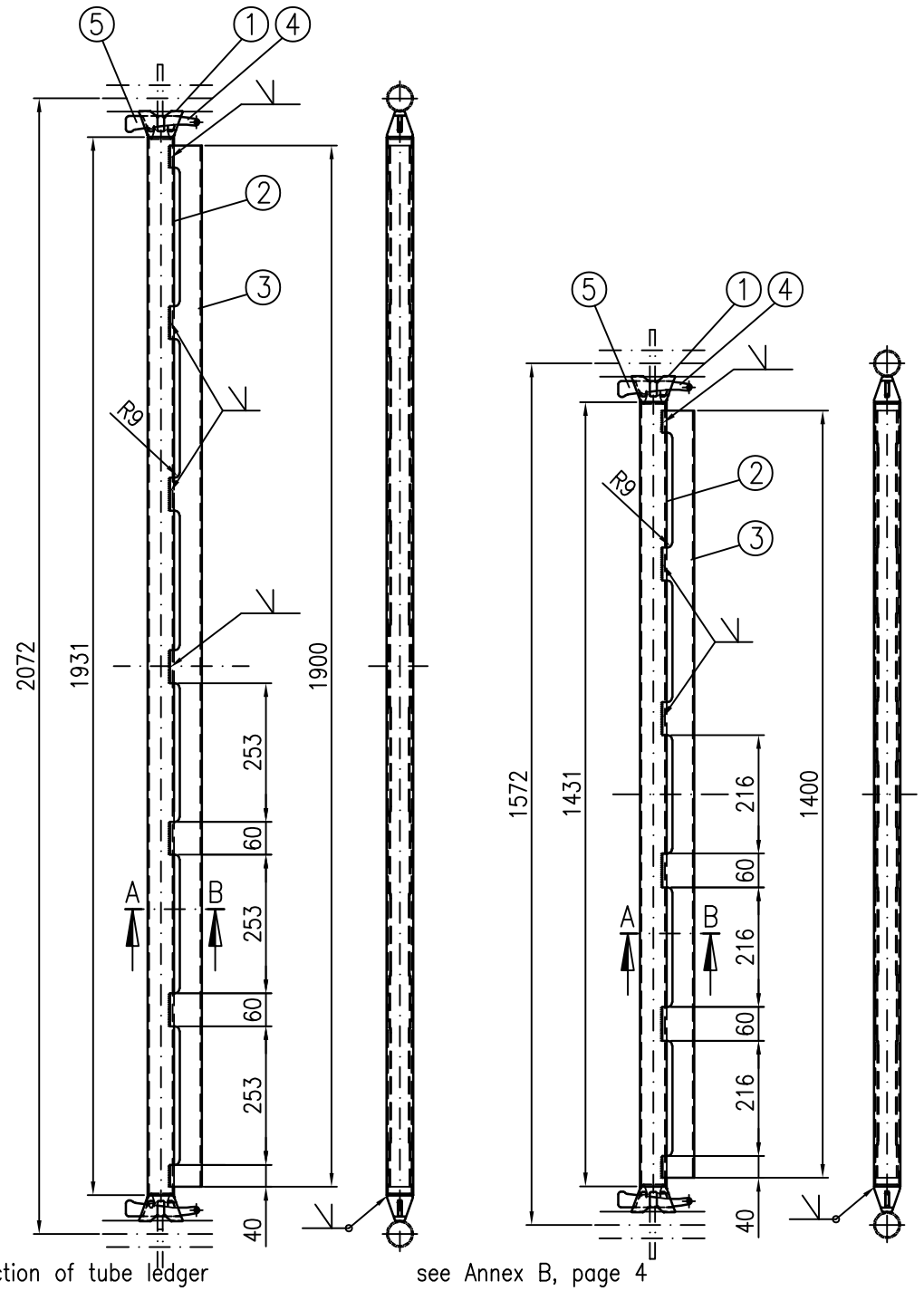
Dimens. [m]	Weight [kg]
1.09	5.9
1.29	6.9
1.40	7.6

ALBLITZ MODUL

Tube ledger, reinforced 1.09 m, 1.29 m, 1.40 m
in accordance with Z–8.22–906

M717–B231_ABM 09.2023

Annex B,
page 144



①	Connection of tube ledger	see Annex B, page 4
	alternatively: Connection of tube ledger 4.0	see Annex B, page 151
②	Circular hollow section ø48.3x2.7	DIN EN 10219–S460MH
③	Steel metal 2.5	see Annex B, page 144
④	Wedge 6 mm	see Annex B, page 3
⑤	Marking	
	galvanised; all welding seams a=3 mm	Section A–B see Annex B, page 144

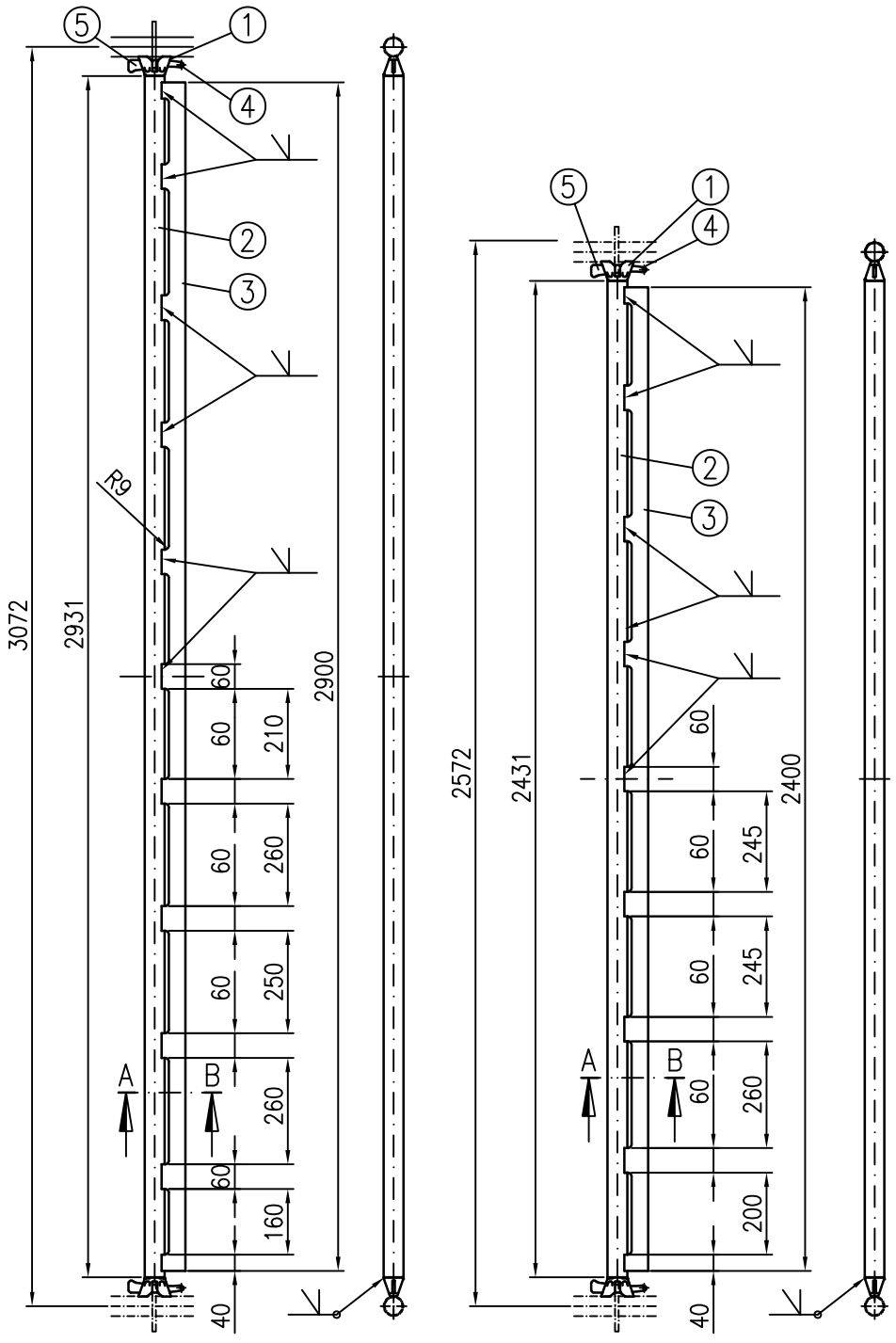
Dimens. [m]	Weight [kg]
1.57	8.1
2.07	10.6

ALBLITZ MODUL

Tube ledger, reinforced 1.57 m, 2.07 m
in accordance with Z–8.22–906

M717–B232_ABM 05.2021

Annex B,
page 145



①	Connection of tube ledger	see Annex B, page 4
	alternatively: Connection of tube ledger 4.0	see Annex B, page 151
②	Circular hollow section ø48.3x2.7	DIN EN 10219–S460MH
③	Steel metal 2.5	see Annex B, page 144
④	Wedge 6 mm	see Annex B, page 3
⑤	Marking	

galvanised; all welding seams a=3 mm

Section A–B see Annex B, page 144

Dimens. [m]	Weight [kg]
2.57	13.1
3.07	15.6

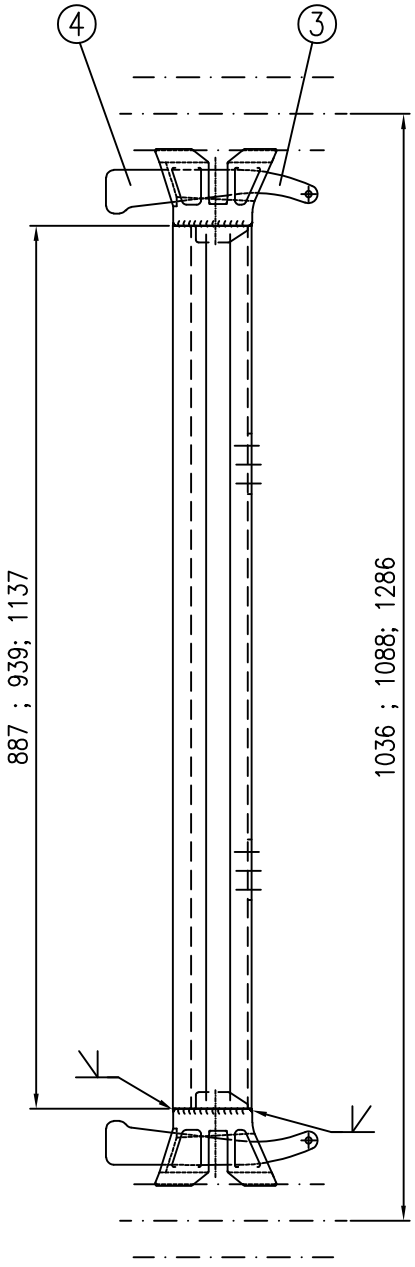
ALBLITZ MODUL

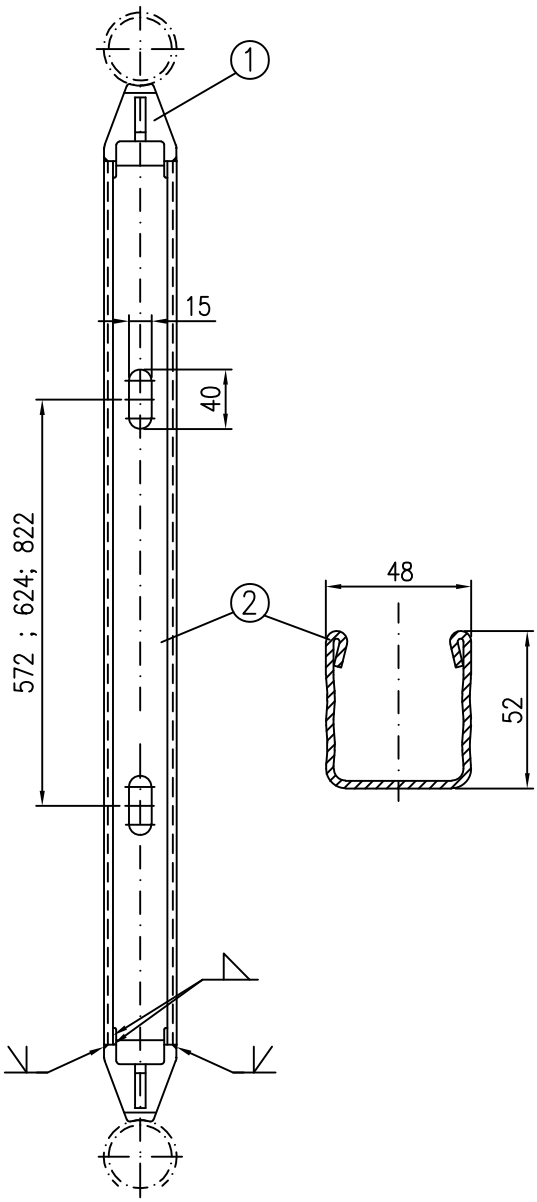
Tube ledger, reinforced 2.57 m, 3.07 m
in accordance with Z–8.22–906

M717–B233_ABM 05.2021

Annex B,
page 146

[Seal Deutsches Institut für Bautechnik]





①	Connection of U–ledger	see Annex B, page 5
	alternatively: Connection of U–ledger 4.0	see Annex B, page 152
②	U–profile 48x52x2.5	DIN EN 10149–2–S460MC
③	Wedge 6 mm	see Annex B, page 3
④	Marking	
	galvanised; all welding seams a=3 mm	

Dimens. [m]	Weight [kg]
1.04	4.2
1.09	4.4
1.29	5.1

ALBLITZ MODUL

U–ledger 1.04 m; 1.09 m; 1.29 m
in accordance with Z–8.22–906

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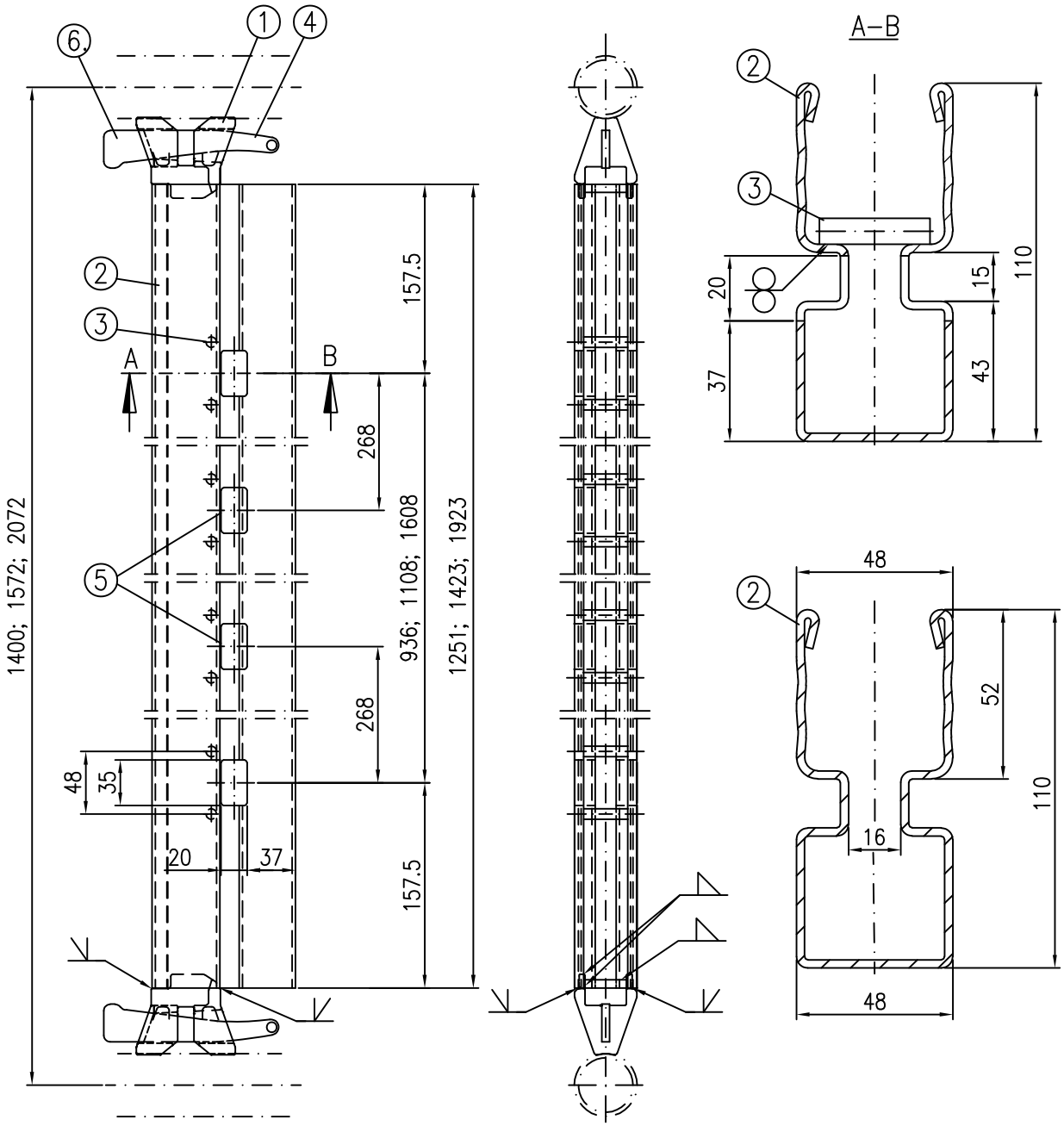
Annex B,
page 147



①	Connection of U–ledger	see Annex B, page 5
	alternatively: Connection of U–ledger 4.0	see Annex B, page 152
②	Transom profile with integrated joist	DIN EN 10149–2–S460MC
③	Round ø8	DIN EN 10025–S235JRC+C
④	Wedge 6 mm	see Annex B, page 3
⑤	only for 1.40 m	
⑥	Marking	

galvanised; all welding seams a=3 mm

Dimens. [m]	Weight [kg]
1.40	8.8
1.57	9.9
2.07	13.0

ALBLITZ MODUL

U–ledger with integrated joist 1.40 m – 2.07 m
in accordance with Z–8.22–906

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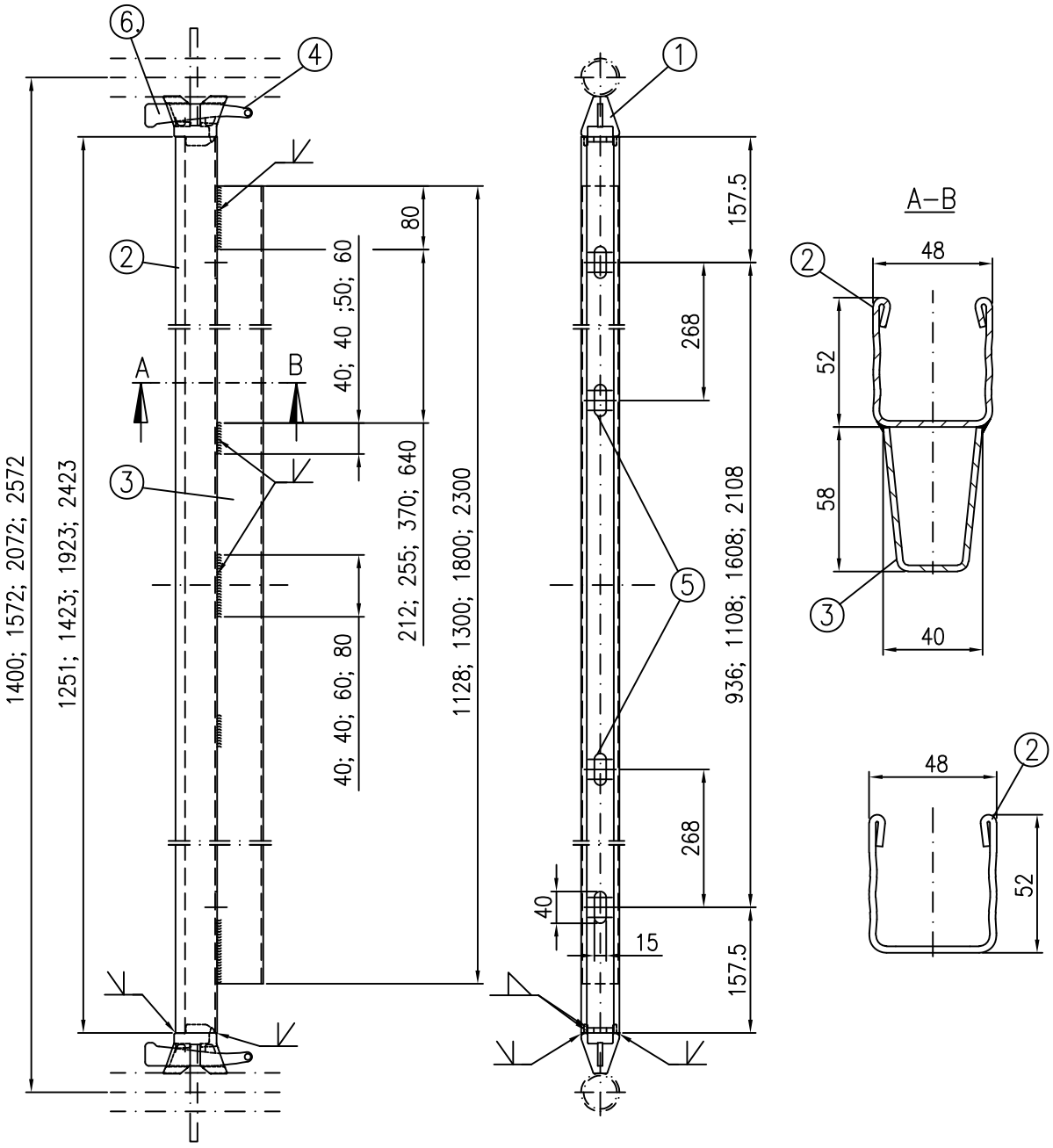
Annex B,
page 148



① Connection of U-ledger — see Annex B, page 5
alternatively: Connection of U-ledger 4.0 — see Annex B, page 152
② U-profile 48x52x2.5 — see Annex B, page 147
③ Steel plate 137x2.5 — see Annex B, page 144
④ Wedge 6 mm — see Annex B, page 3
⑤ only for 1.40 m
⑥ Marking

galvanised; all welding seams a=3 mm

Dimens. [m]	Weight [kg]
1.40	8.8
1.57	9.2
2.07	12.4
2.57	15.1

ALBLITZ MODUL

U-ledger, reinforced 1.40 m – 2.57 m
in accordance with Z-8.22-906

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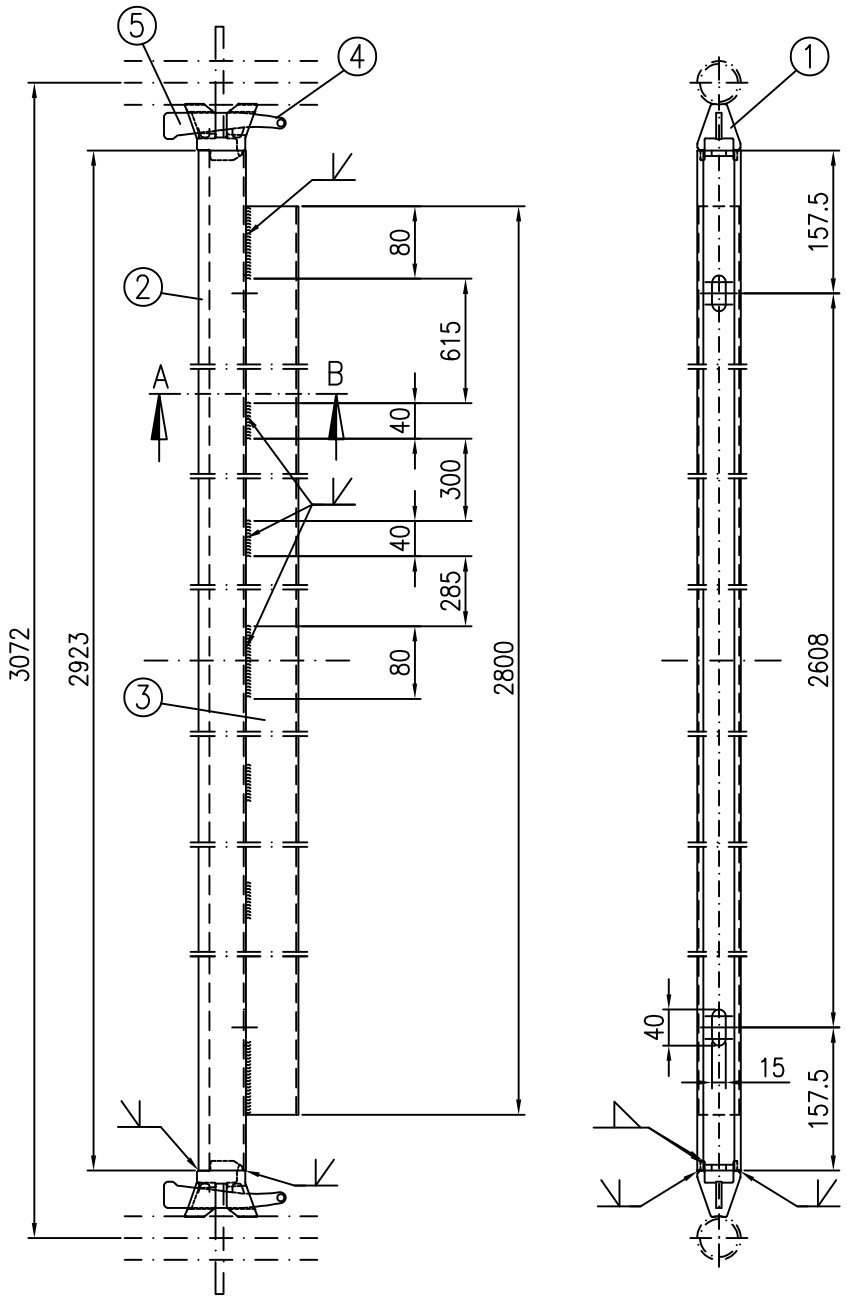
Annex B,
page 149



①	Connection of U-ledger	see Annex B, page 5
	alternatively: Connection of U-ledger 4.0	see Annex B, page 152
②	U-profile 48x52x2.5	see Annex B, page 147
③	Steel plate 137x2.5	see Annex B, page 144
④	Wedge 6 mm	see Annex B, page 3
⑤	Marking	
	galvanised; all welding seams a=3 mm	Section A-B see Annex B, page 149

Dimens. [m]	Weight [kg]
3.07	18.1

ALBLITZ MODUL

U-ledger, reinforced 3.07 m
in accordance with Z-8.22-906

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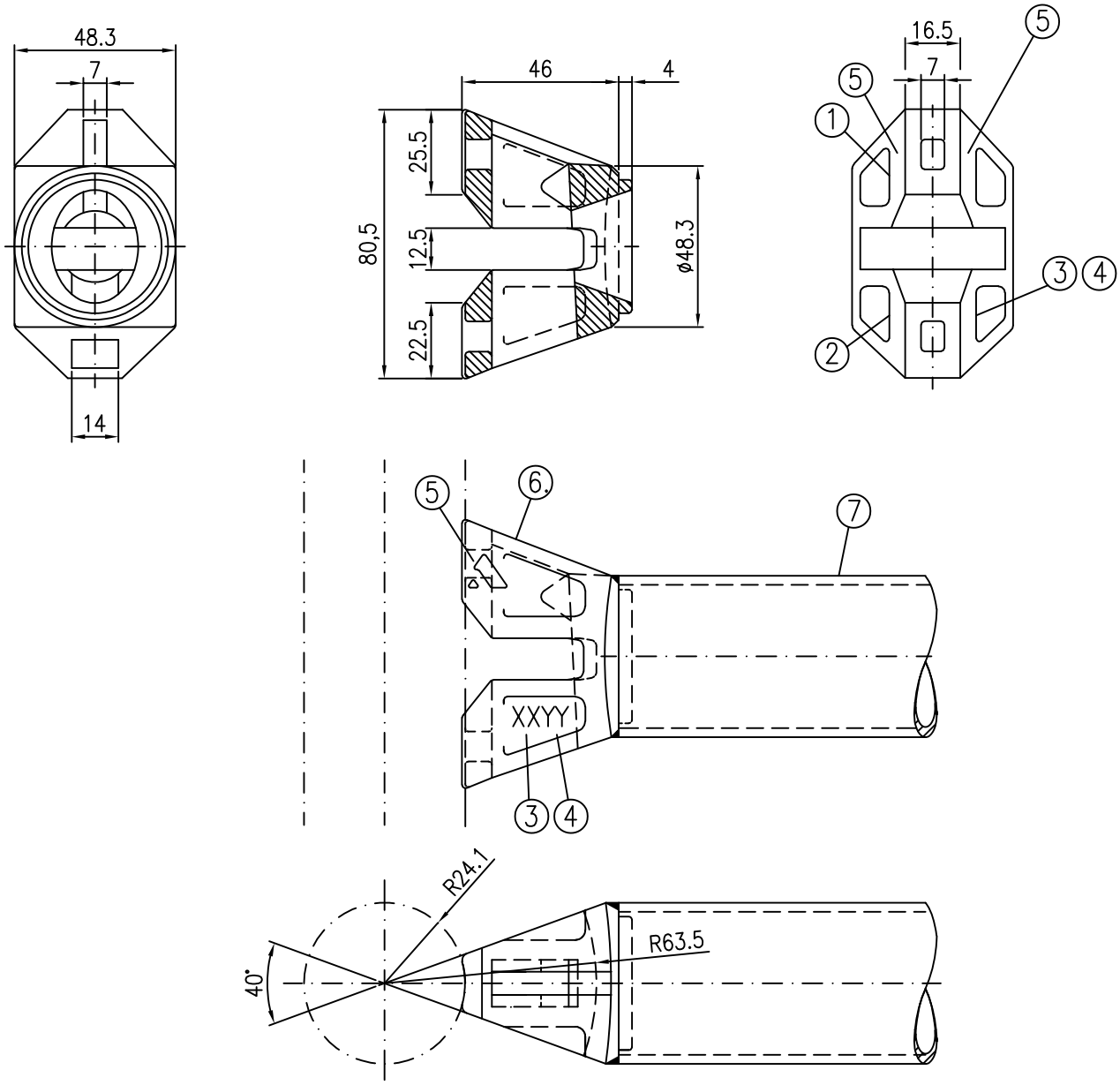
Annex B,
page 150



① ZZZ = abbreviated approval number
② ▭ = Company logo of foundry
③ XX = Calendar week and
④ YY = Year of manufacturing (e.g. 4020=CW40/2020)
⑤ ◬ = ALFIX manufacturer's logo
⑥ Cast steel
⑦ Circular hollow section ø48.3x2.7

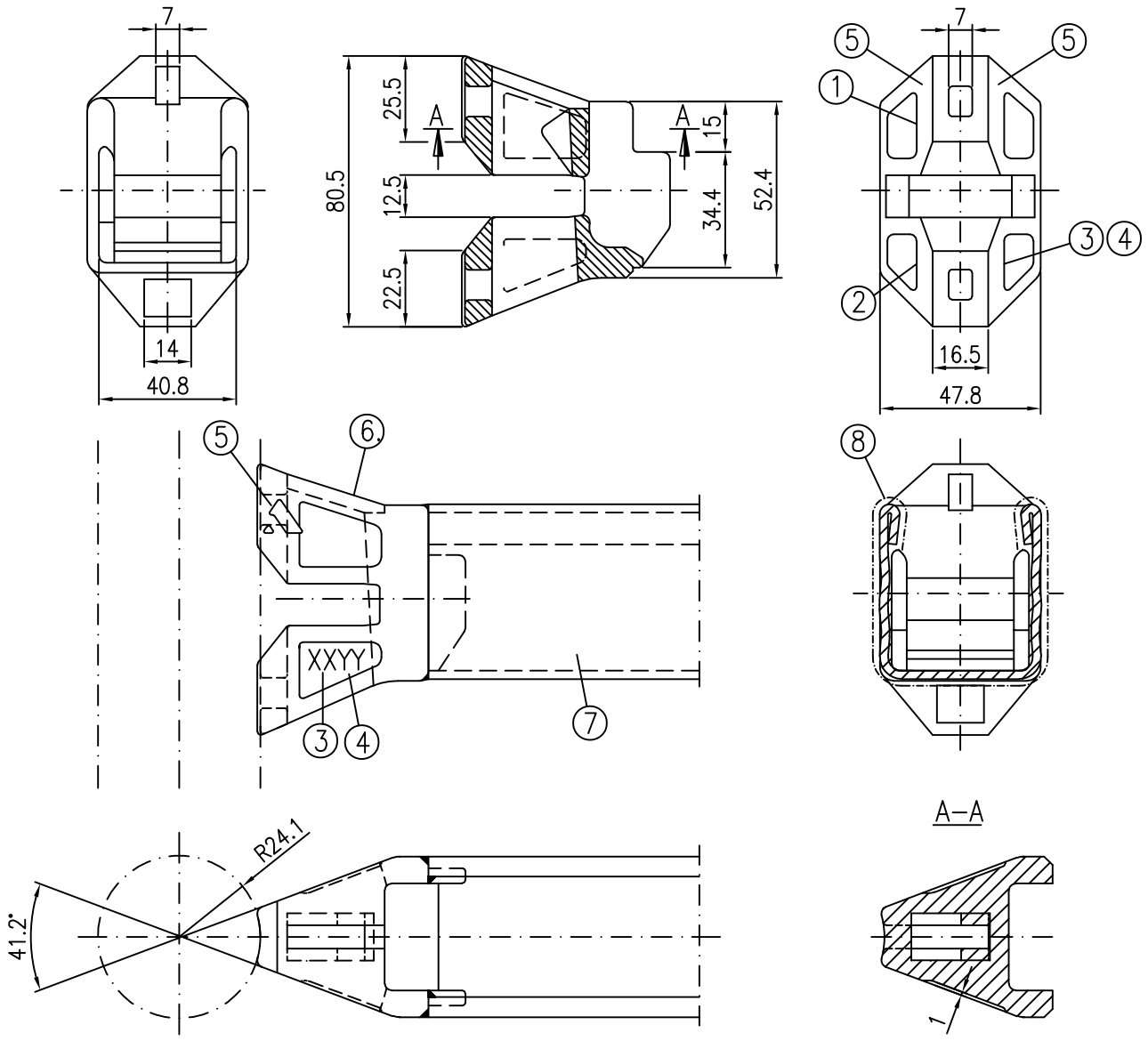
Material in accordance with the documents filed at DIBt
see Annex B, page 155

ALBLITZ MODUL

Connection of tube ledger 4.0
in accordance with Z-8.22-906

M717-B224_ABM 09.2021

Annex B,
page 151



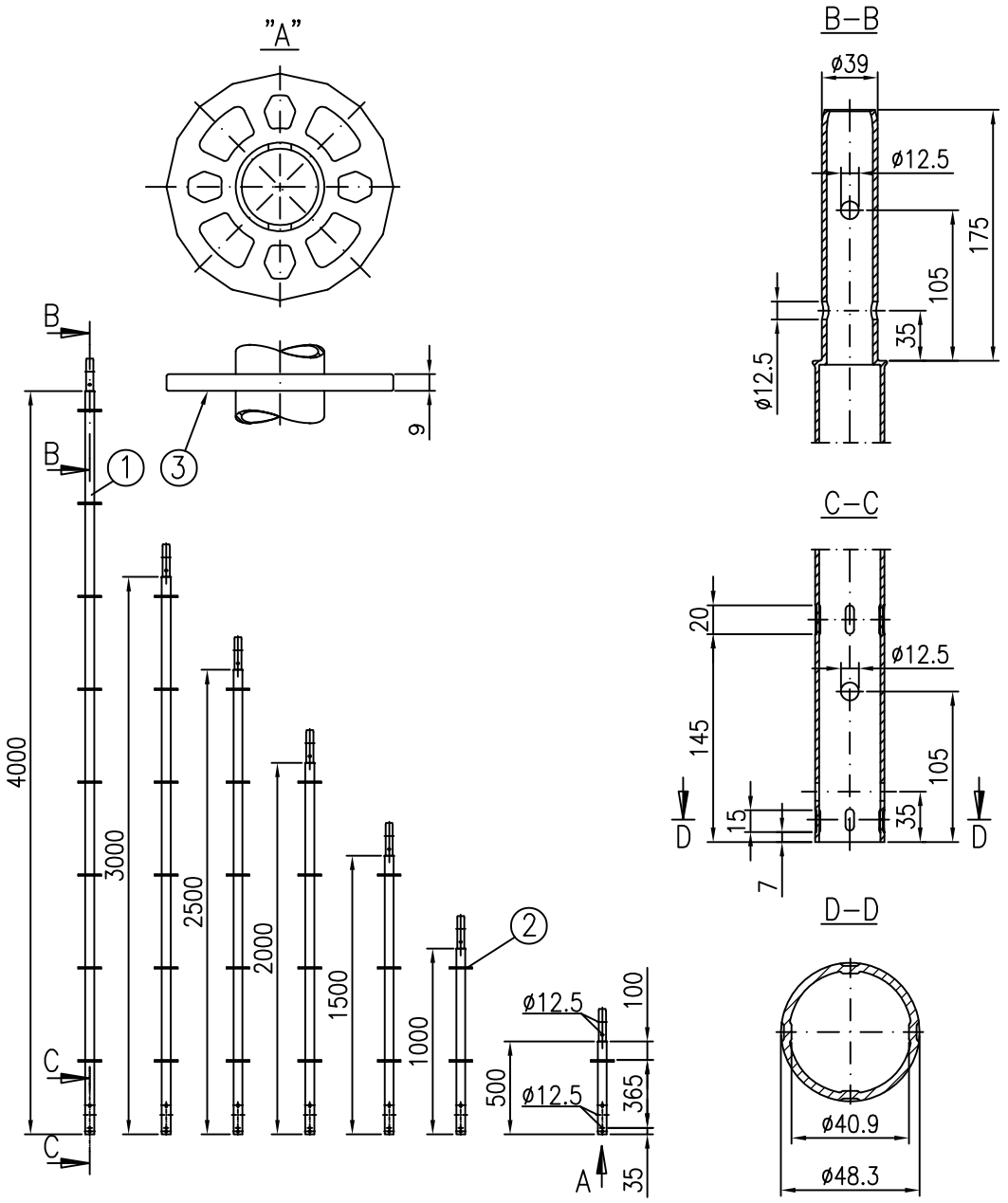
① ZZZ = abbreviated approval number
② ▭ = Company logo of foundry
③ XX = Calendar week and
④ YY = Year of manufacturing (e.g. 4020=CW40/2020)
⑤ = ALFIX manufacturer's logo
⑥ Cast steel — Material in accordance with the documents filed at DIBt
⑦ U–profile 48x52x2.5 — Material in accordance with the documents filed at DIBt
⑧ Welding section

ALBLITZ MODUL

Connection of U–ledger 4.0
in accordance with Z–8.22–906

M717–B225_ABM 10.2021

Annex B,
page 152



Dimens. [m]	Weight [kg]
0.50	1.8
1.00	4.6
1.50	6.6
2.00	8.7
2.50	10.7
3.00	12.8
4.00	16.0

① Circular hollow section ø48.3x2.9 DIN EN 10219–S460MH
② Connector disc see Annex B, page 2
③ Marking

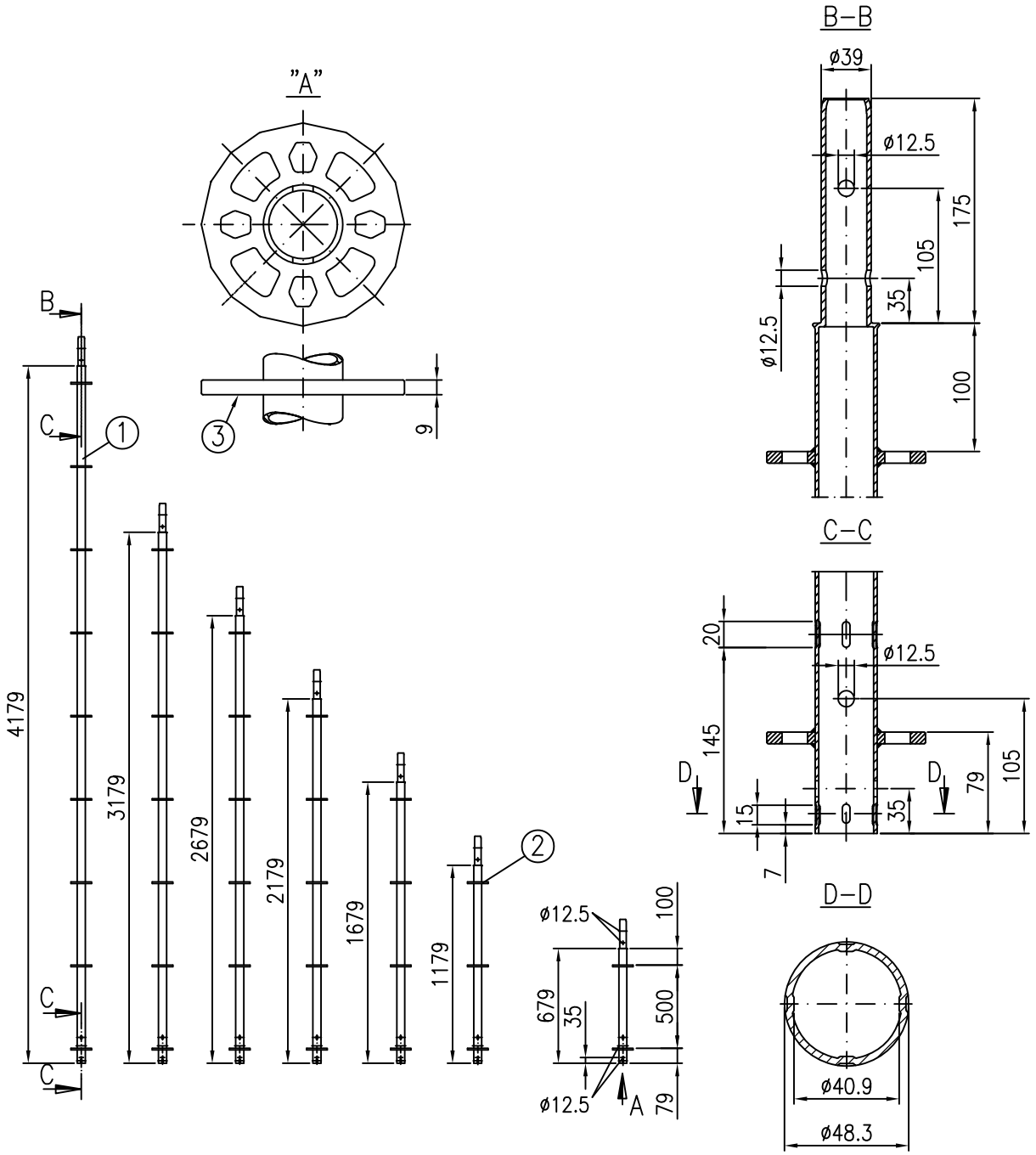
galvanised Material in accordance with the documents filed at DIBt

ALBLITZ MODUL

Standard 4.0
in accordance with Z–8.22–906

M717–B226_ABM 05.2021

Annex B,
page 153



Dimens. [m]	Weight [kg]
0.66	3.5
1.16	5.6
1.66	7.2
2.16	9.2
2.66	10.5
3.16	12.8
4.16	15.9

① Circular hollow section ø48.3x2.9 DIN EN 10219–S460MH
② Connector disc see Annex B, page 2
③ Marking

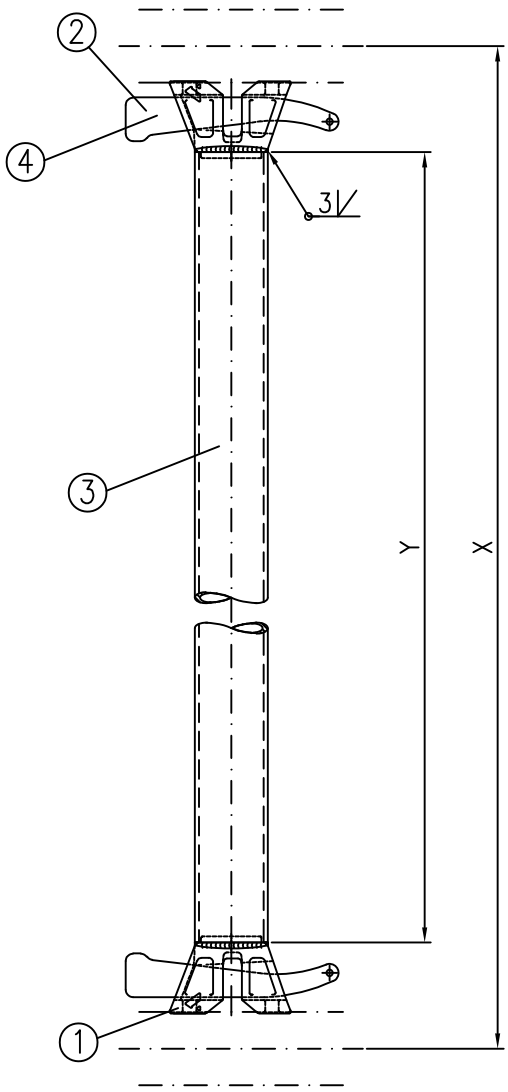
galvanised Material in accordance with the documents filed at DIBt

ALBLITZ MODUL

Vertical starter standard 4.0
in accordance with Z–8.22–906

M717–B227_ABM 05.2021

Annex B,
page 154



"X" [m]	"X" [mm]	"Y" [mm]	Weight [kg]
0.36	356	215	1.4
0.37	366	225	1.6
0.39	390	249	1.7
0.45	450	309	1.9
0.73	732	591	2.7
1.04	1036	895	3.6
1.09	1088	947	3.7
1.29	1286	1145	4.4
1.40	1400	1259	4.7
1.57	1572	1431	5.2
2.07	2072	1931	6.7
2.57	2572	2431	8.1
3.07	3072	2931	9.7
4.14	4144	4003	12.8

① Connection of tube ledger 4.0 see Annex B, page 151
② Wedge 6 mm see Annex B, page 3
③ Circular hollow section ø48.3x2.7 DIN EN 10219–S460MH
④ Marking

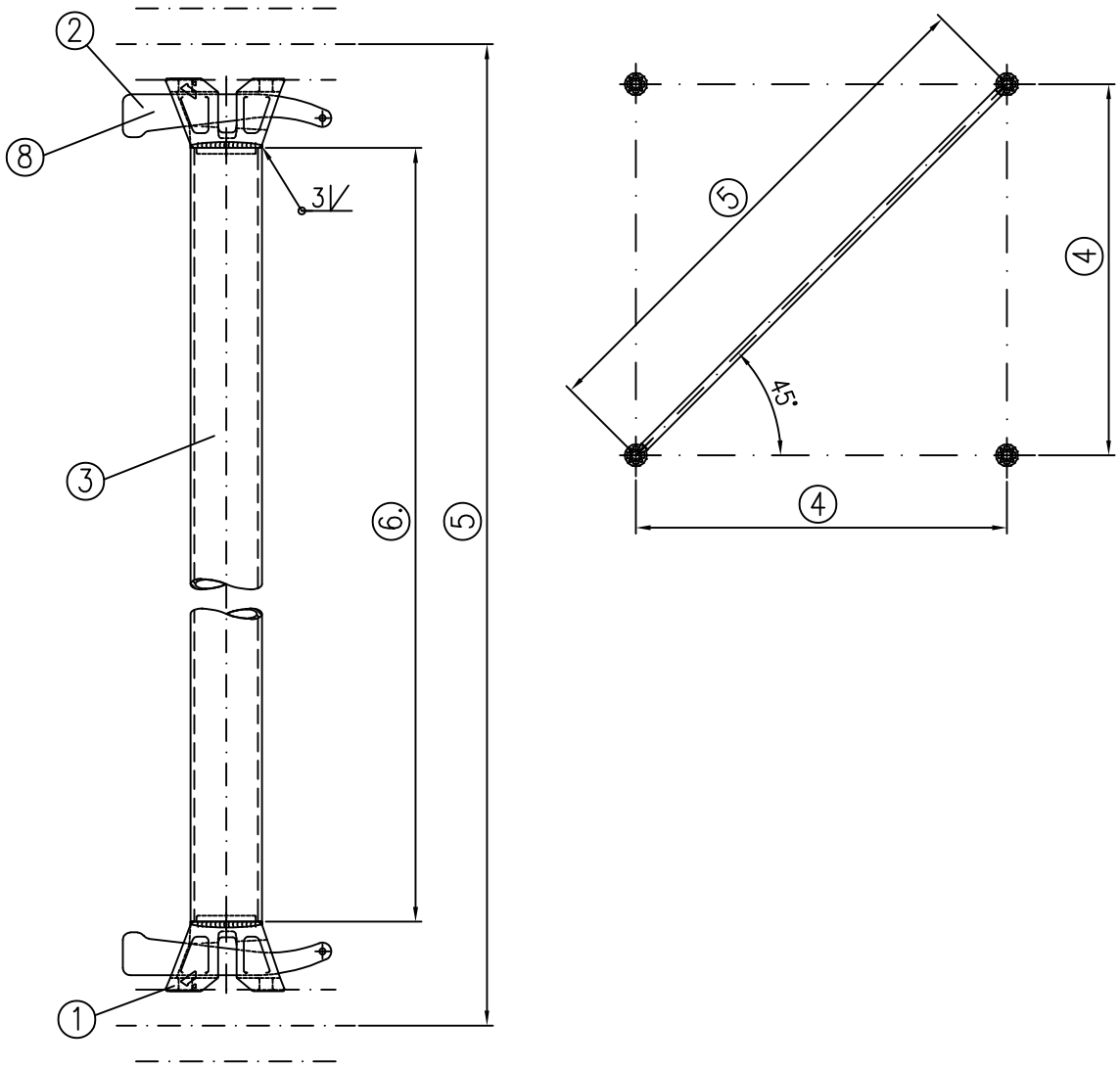
galvanised

ALBLITZ MODUL

Tube ledger 4.0
in accordance with Z–8.22–906

M717–B229_ABM 05.2021

Annex B,
page 155



①	Connection of tube ledger 4.0	see Annex B, page 151
②	Wedge 6 mm	see Annex B, page 3
③	Circular hollow section ø48.3x2.7	DIN EN 10219-S460MH
④	Bay width	
⑤	Bay-diagonal brace	
⑥	Length pos. 3	
⑦	Weight	
⑧	Marking	

galvanised

④ [m]	④ [mm]	⑤ [mm]	⑥ [mm]	⑦ [kg]
0.73	732	1035	894	3.6
1.09	1088	1539	1398	5.1
1.29	1286	1819	1678	5.9
1.40	1400	1980	1839	6.4
1.57	1572	2223	2082	7.1
2.07	2072	2930	2789	9.2
2.57	2572	3637	3496	11.3
3.07	3072	4344	4203	13.4

ALBLITZ MODUL

Horizontal diagonal ledger 4.0
in accordance with Z-8.22-906

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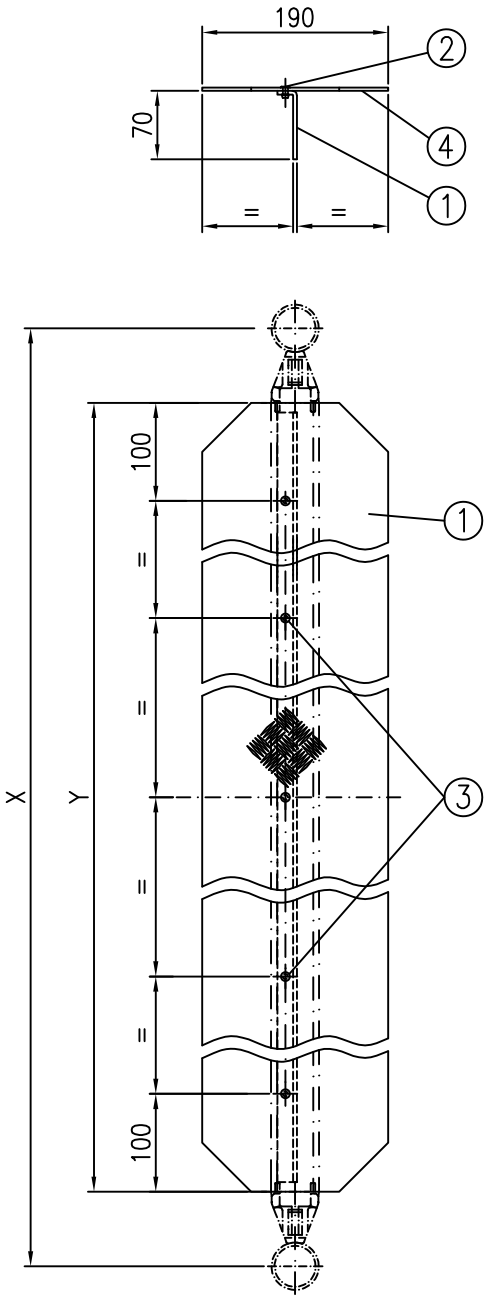
Annex B,
page 156

X [m]	X [mm]	Y [mm]	Weight [kg]
0.73	732	591	1.2
1.09	1088	947	2.0
1.29	1286	1145	2.4
1.40	1400	1259	2.6
1.57	1572	1431	3.0
2.07	2072	1931	4.0
2.57	2572	2431	5.0
3.07	3072	2931	6.0



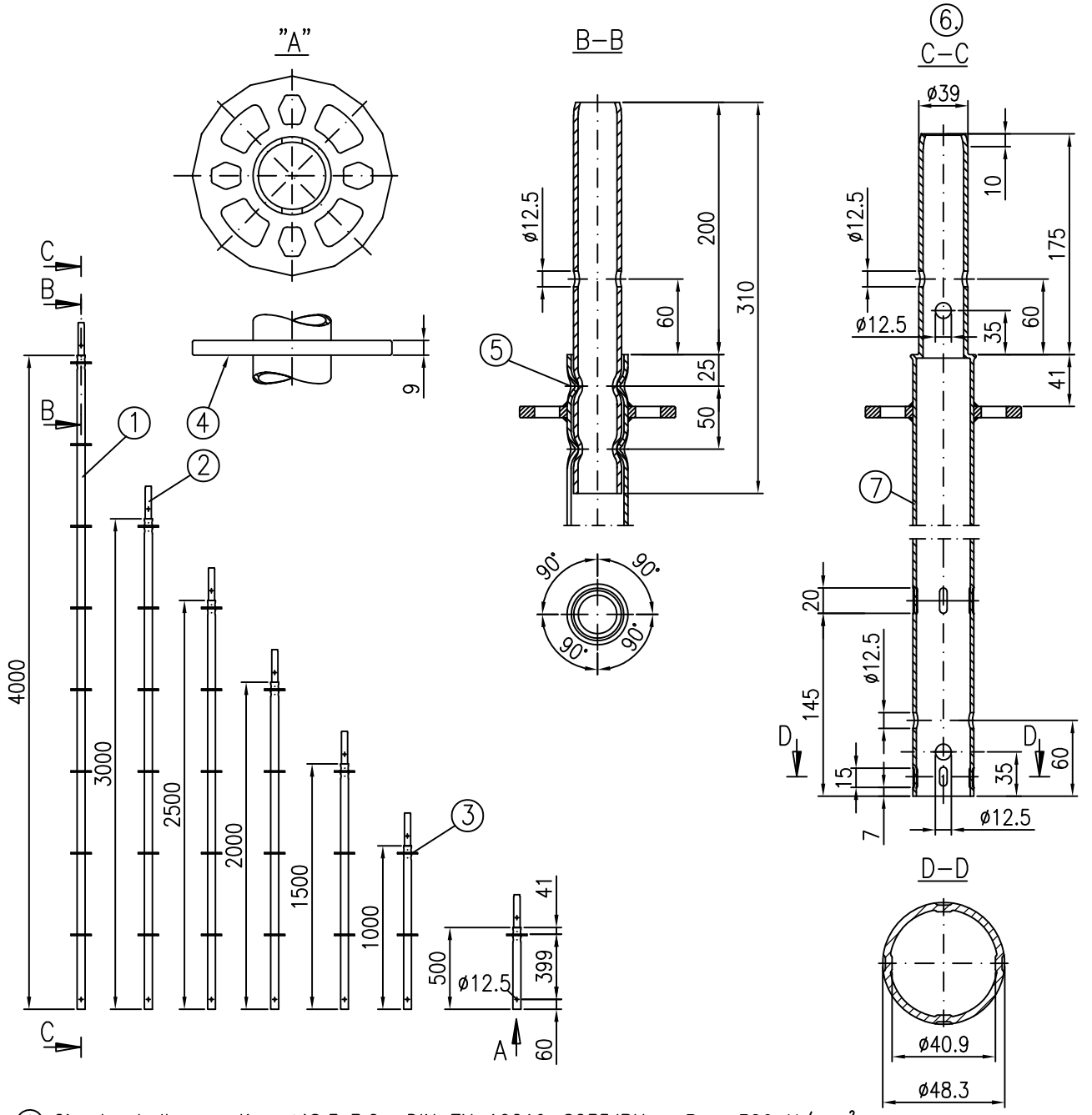
① Chequer plate with 5 bar pattern 2.5/3.3x190 DIN EN 1386 EN AW-5083 H224
alternatively: Chequer plate with 5 bar pattern 2.5/4.0x190 DIN EN 1386 EN AW-5754 H111/ H114
② Blind rivet DIN EN ISO 15979-A5x12 EN AW-5754 H112
③ only for 2.57 m and 3.07 m
④ Marking

ALBLITZ MODUL

MODUL gap cover, T-shaped
in accordance with Z-8.22-906

M719-B247_ABM 05.2021

Annex B,
page 157



① Circular hollow section ø48.3x3.2	DIN EN 10219–S235JRH	$R_{eH} \geq 320$ N/mm²
② Circular hollow section ø38x3.6	DIN EN 10219–S235JRH	$R_{eH} \geq 320$ N/mm²
③ Connector disc	see Annex B, page 2	
④ Marking		
⑤ 4 point–joint pressed connections		
⑥ alternatively		
⑦ Circular hollow section ø48.3x2.9	DIN EN 10219–S460MH	
galvanised	Material in accordance with the documents filed at DIBt	

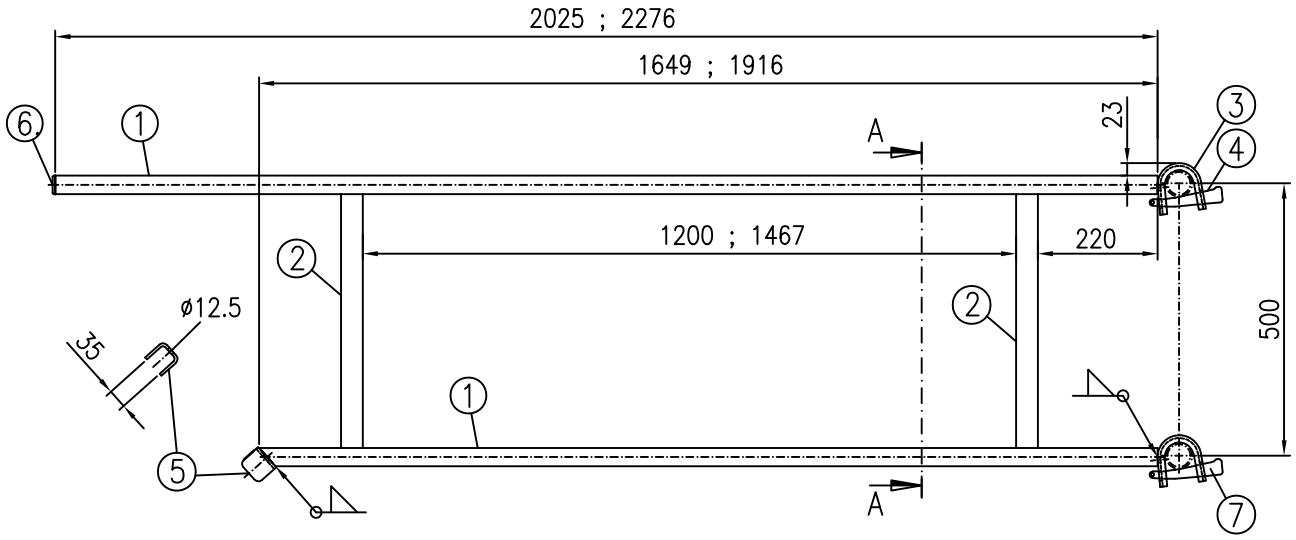
Dimens. [m]	Weight [kg]
0.50	3.2
1.00	5.5
1.50	7.7
2.00	10.1
2.50	12.3
3.00	14.6
4.00	19.2

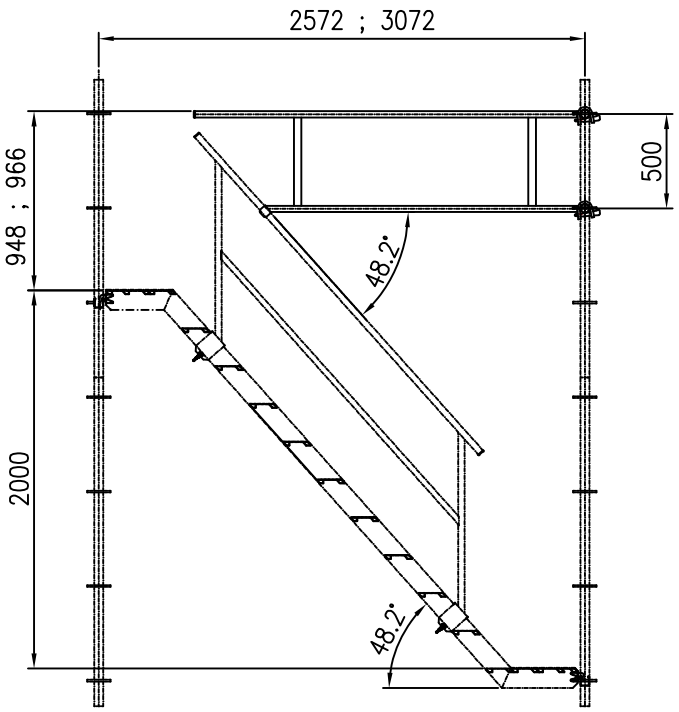
ALBLITZ MODUL

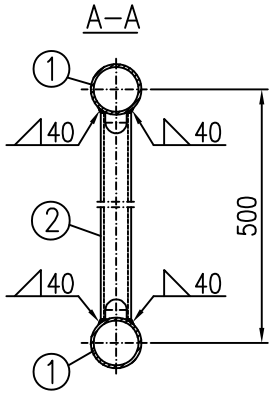
Standard with tube connector 200 45/5
in accordance with Z–8.22–906

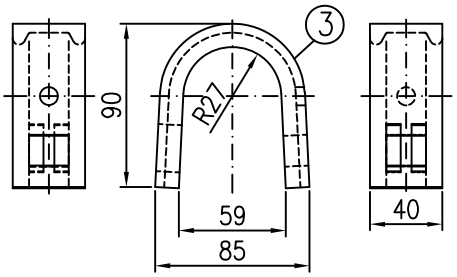
M720–B248_ABM 10.2023

Annex B,
page 158









① Circular hollow section ø33.7x2.0	DIN EN 10219–S235JRH	
alternatively: Circular hollow section ø33.7x1.8	DIN EN 10219–S235JRH	$R_{eH} \geq 320$ N/mm²
② Rectangular hollow section 40x20x2	DIN EN 10219–S235JRH	
③ Bended profile section 40x13x5x6.5	DIN EN 10025–S235JR	
④ Wedge 6 mm	see Annex B, page 3	
⑤ Steel plate 50x5	DIN EN 10025–S235JR	
⑥ Lamellar plug	Plastic	
⑦ Marking		

galvanised; all welding seams a=2 mm

Dimens. [m]	Weight [kg]
2.57	9.6
3.07	10.4

ALBLITZ MODUL

Platform guardrail AB 2.57; 3.07 m
in accordance with Z–8.22–906

M720–B249_ABM 09.2023

Annex B,
page 159

Product marking code key

XX Ü 906/932 AF XX

XX = Supplier number

Ü = Mark of conformity Ü

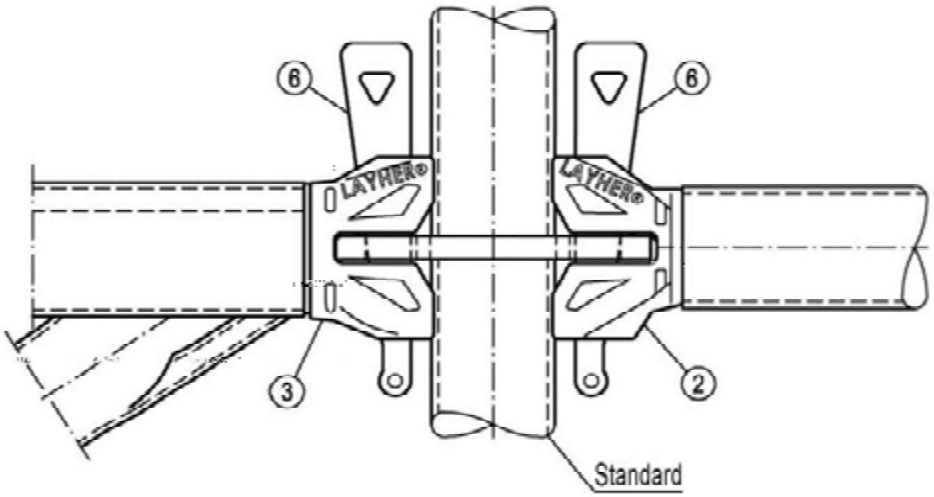
906/932 = abbreviated approval number

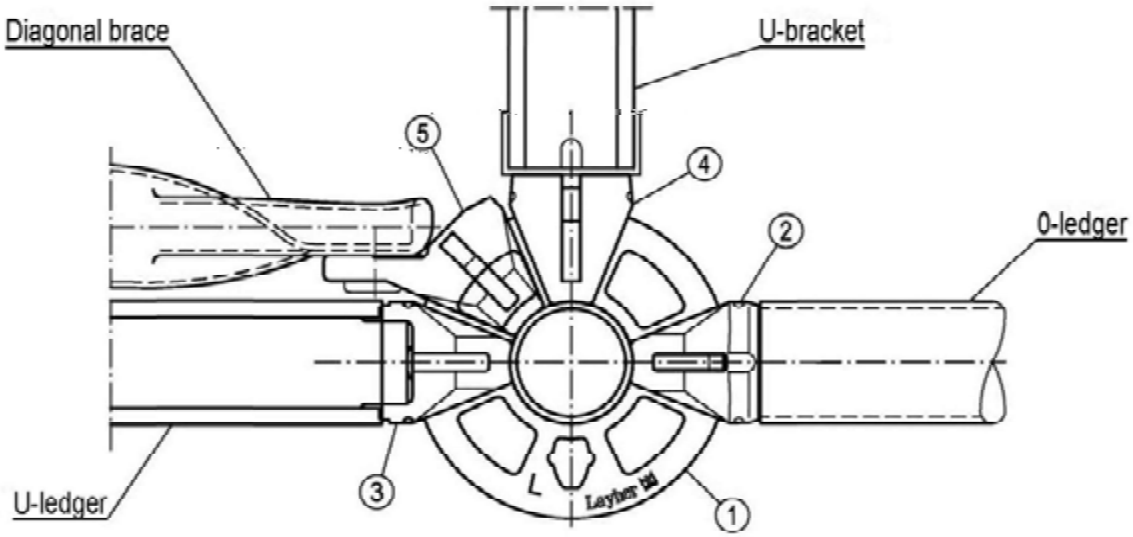
AF = ALFIX manufacturer's logo

XX = Year of manufacturing

Year	XX
2015	15
2016	16
2017	17
2018	18
2019	19
2020	20
etc.	etc.

For further marking codes, please refer to annex B, pages 2, 4–7, 151, 152





		"Lightweight design"	"K2000+ design"
① Connector disc	(in accordance with Annex B,	page 165)	page 171)
② Connector head for O-ledger	(in accordance with Annex B	page 166)	page 172)
③ Connector head for U-ledger	(in accordance with Annex B,	page 167)	page 173)
④ Connector head for U-bracket	(in accordance with Annex B,	page 168)	page 174)
⑤ Connector head for diagonal brace	(in accordance with Annex B,	page 169)	page 175)
⑥ Wedge	(in accordance with Annex B,	page 170)	page 176)

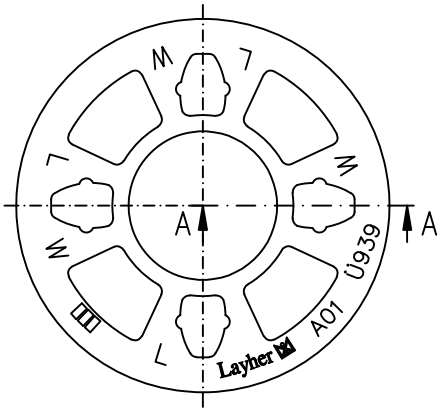
Corrosion protection: hot-dip galvanization in accordance with EN ISO 1461

ALBLITZ MODUL

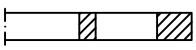
Overview nodes "lightweight design" and "K2000+ design"
in accordance with Z-8.22-949

ABM721-B001 05.2021

Annex B,
page 161

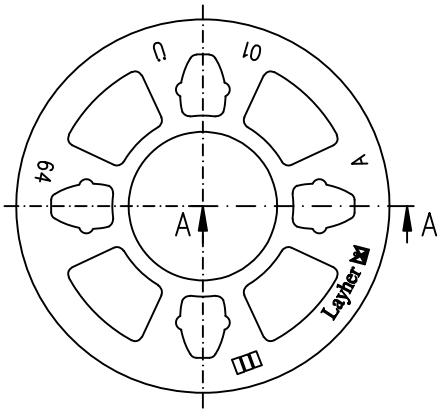


A–A

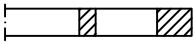


"Lightweight design"

Connector disc die-cut ø 124
in accordance with Annex B, page 165



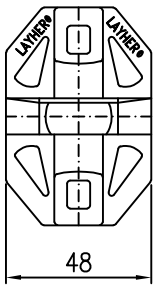
A–A

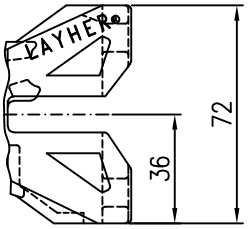


"K2000+ design"

Connector disc die-cut ø 124
in accordance with Annex B, page 171

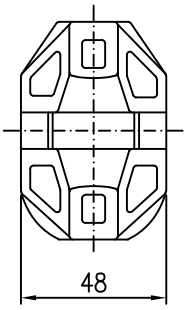
ALBLITZ MODUL	Annex B, page 162
Overview connector discs "Lightweight design" and "K2000+ design" in accordance with Z-8.22-949	
ABM721-B002 05.2021	

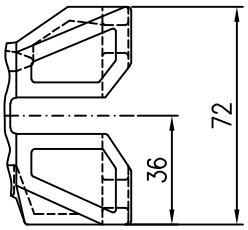




Ledger connector head:
"Lightweight design"

with recesses on the sides and
ring–shaped end faces, 72 mm high
in accordance with Annex B, pages 166, 167, 168

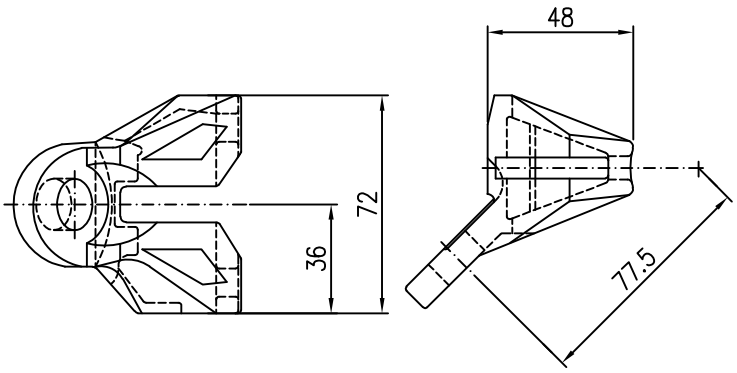




Ledger connector head:
"K2000+ design"

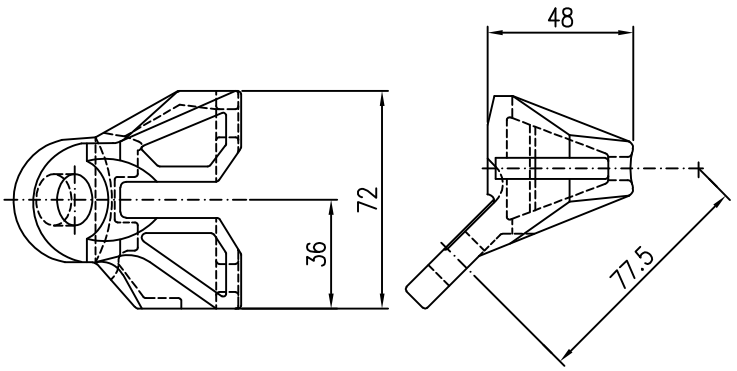
with recesses on the sides and
ring–shaped end faces, 72 mm high
in accordance with Annex B, pages 172, 173, 174

ALBLITZ MODUL	
Overview connector heads for ledgers "Lightweight design" and "K2000+ design" in accordance with Z–8.22–949 ABM721–B003 05.2021	Annex B, page 163



"Lightweight design"

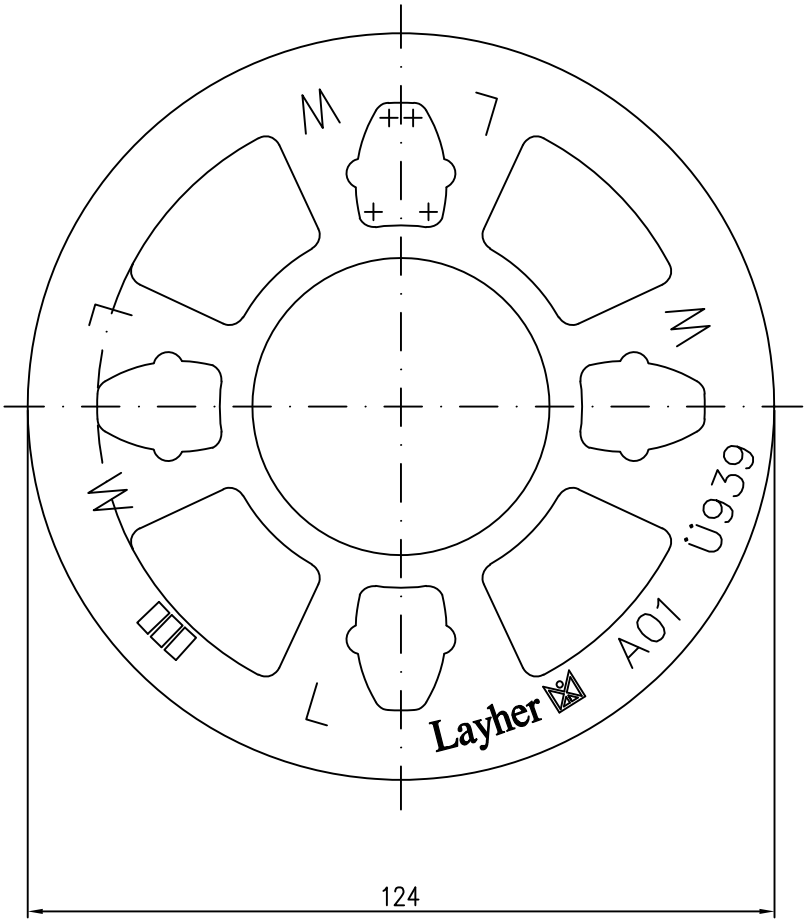
only in connection with
diagonal brace from tube ø48.3 mm
head 72 mm in height,
in accordance with Annex B, page 169

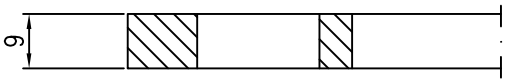


"K2000+ design"

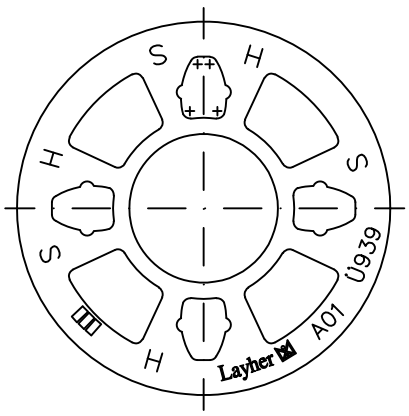
only in connection with
diagonal brace from tube ø48.3 mm
head 72 mm in height,
in accordance with Annex B, page 175

ALBLITZ MODUL	Annex B, page 164
Overview connector heads for diagonal braces "Lightweight design" and "K2000+ design" in accordance with Z-8.22-949	
ABM721-B004 05.2021	



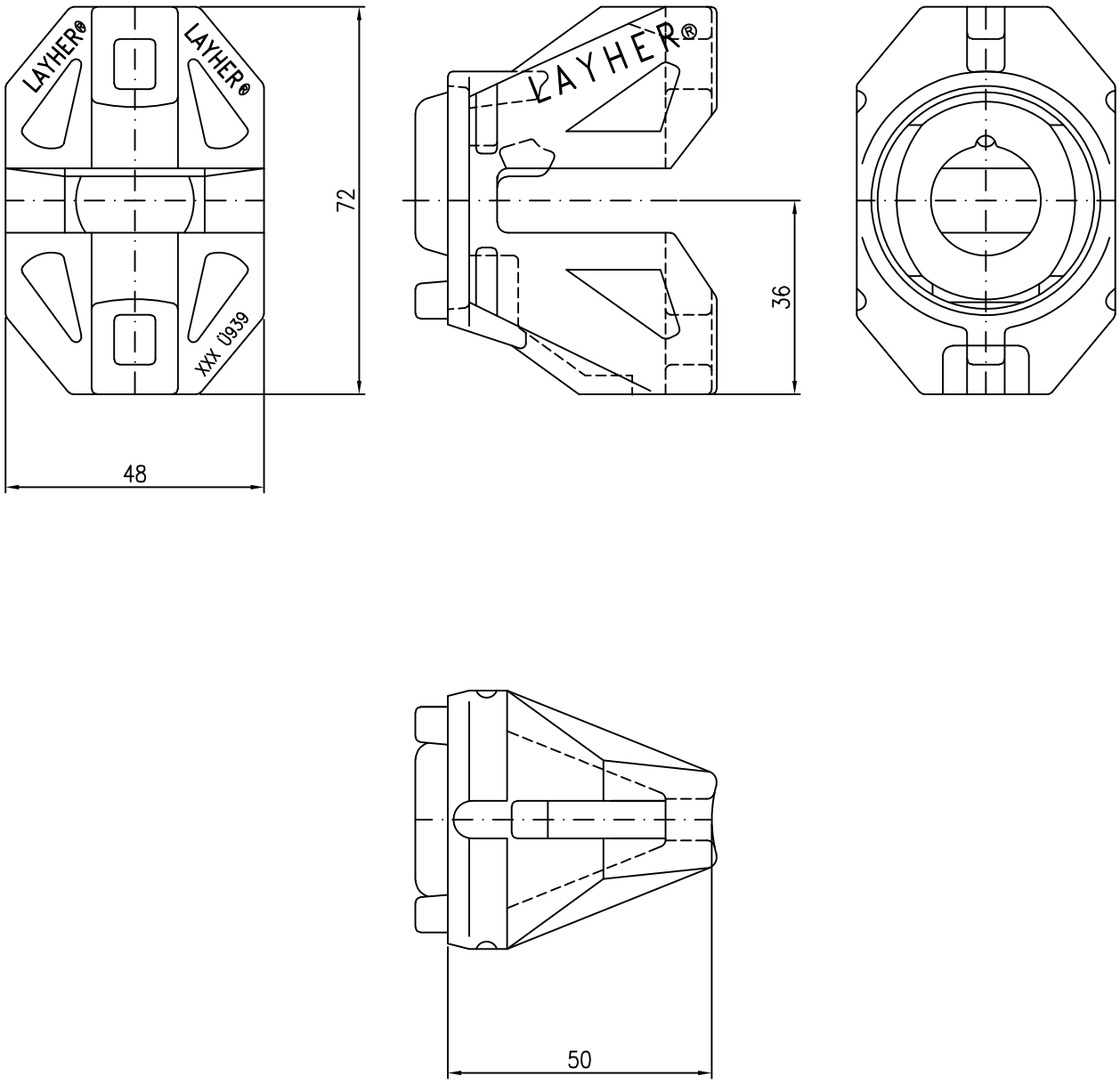


Alternatively with HS embossing



Manufactured as of April 2013

ALBLITZ MODUL	
Connector disc die-cut Ø 124 mm "Lightweight design" in accordance with Z-8.22-939 ABM721-B005 02.2023	Annex B, page 165



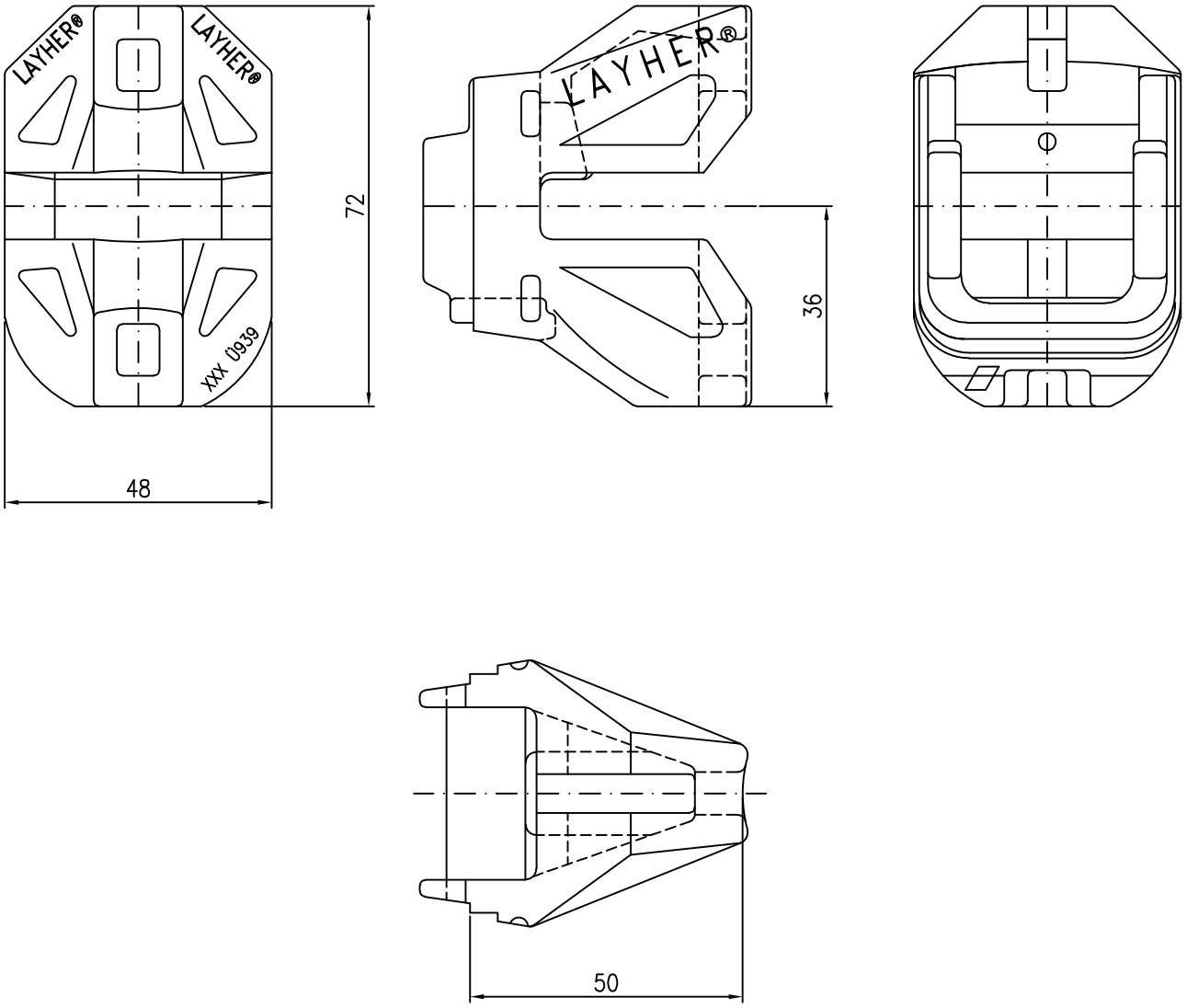
Manufactured as of April 2013

ALBLITZ MODUL

Connector head for O-ledger "Lightweight design"
in accordance with Z-8.22-939

ABM721-B006 05.2021

Annex B,
page 166



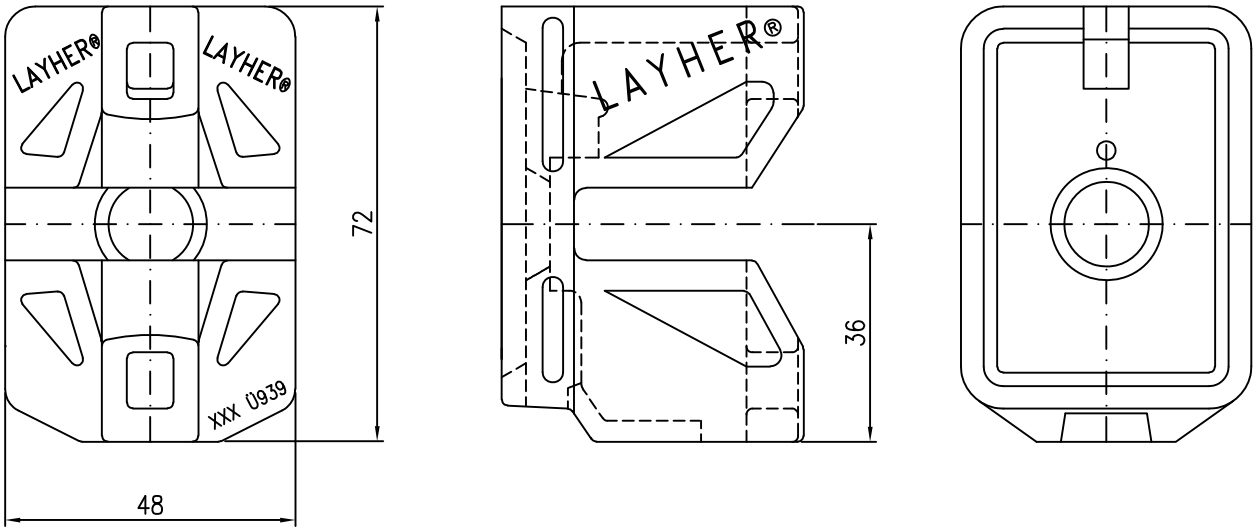
Manufactured as of April 2013

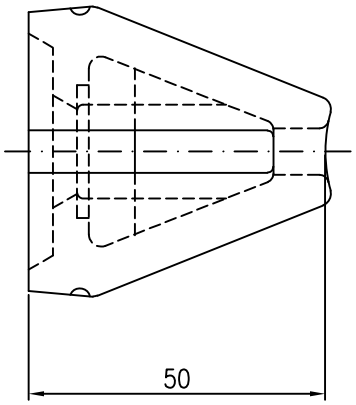
ALBLITZ MODUL

Connector head for U-ledger "Lightweight design"
in accordance with Z-8.22-939

ABM721-B007 05.2021

Annex B,
page 167





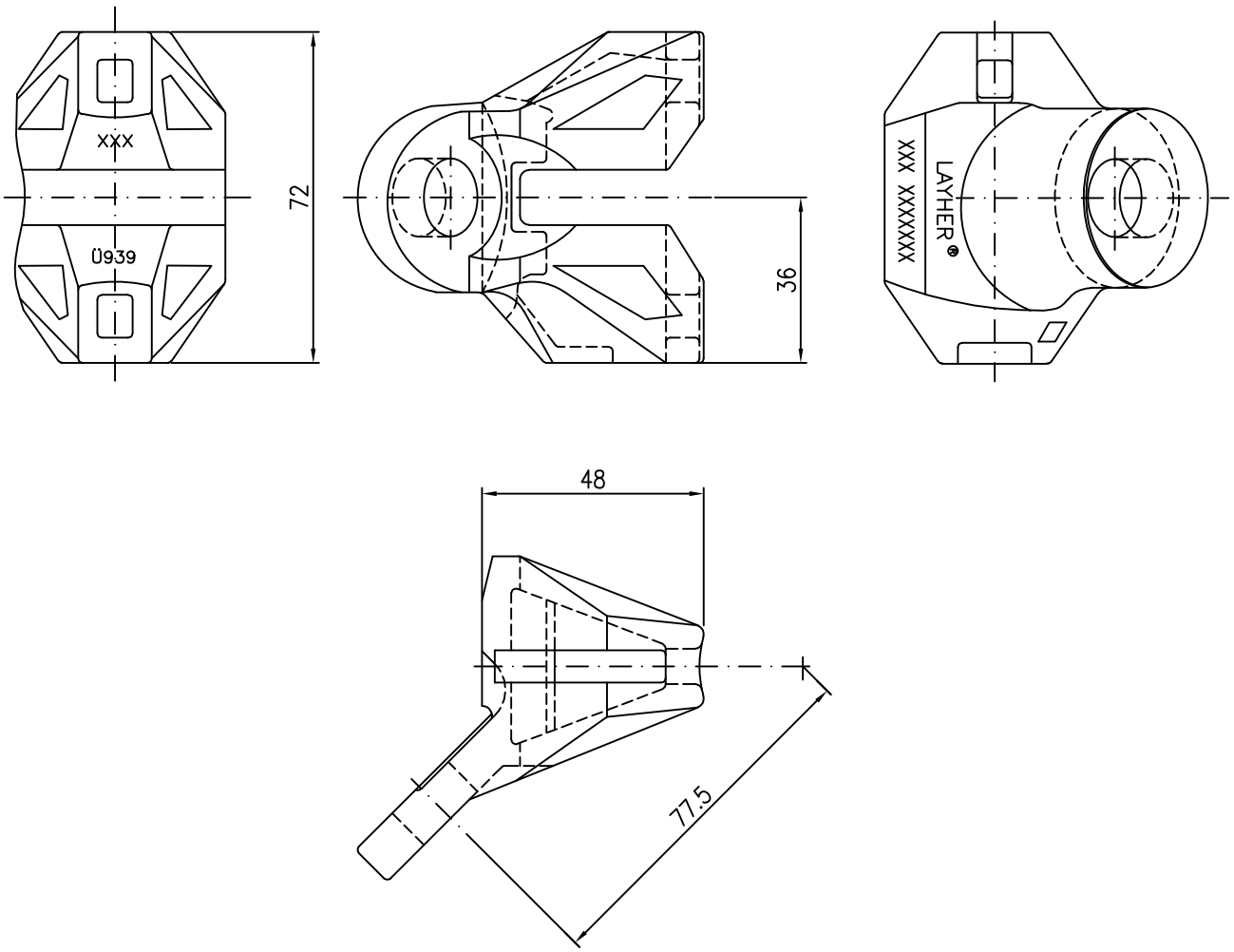
Manufactured as of April 2013

ALBLITZ MODUL

Connector head for U-bracket "Lightweight design"
in accordance with Z-8.22-939

ABM721-B008 05.2021

Annex B,
page 168



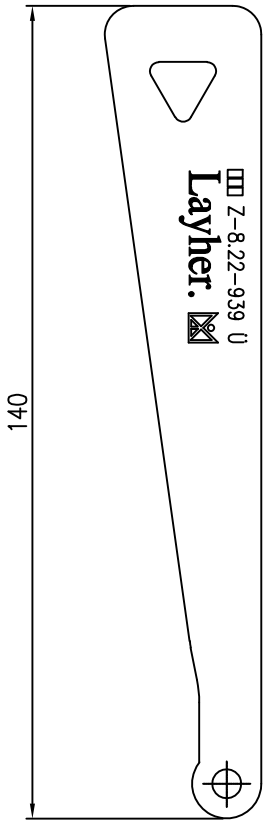
Manufactured as of April 2013

ALBLITZ MODUL

Connector head for diagonal brace "Lightweight design"
in accordance with Z-8.22-939

ABM721-B009 05.2021

Annex B,
page 169



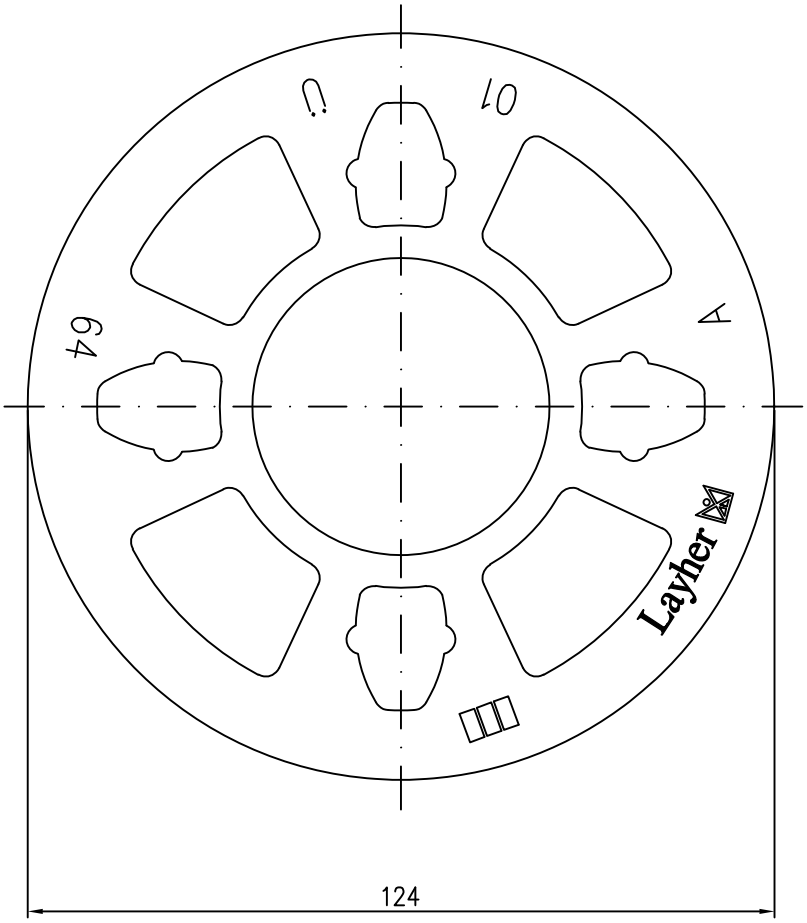
Manufactured as of April 2013

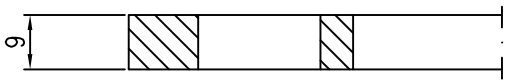
ALBLITZ MODUL

Wedge "Lightweight design"
in accordance with Z-8.22-939

ABM721-B010 05.2021

Annex B,
page 170





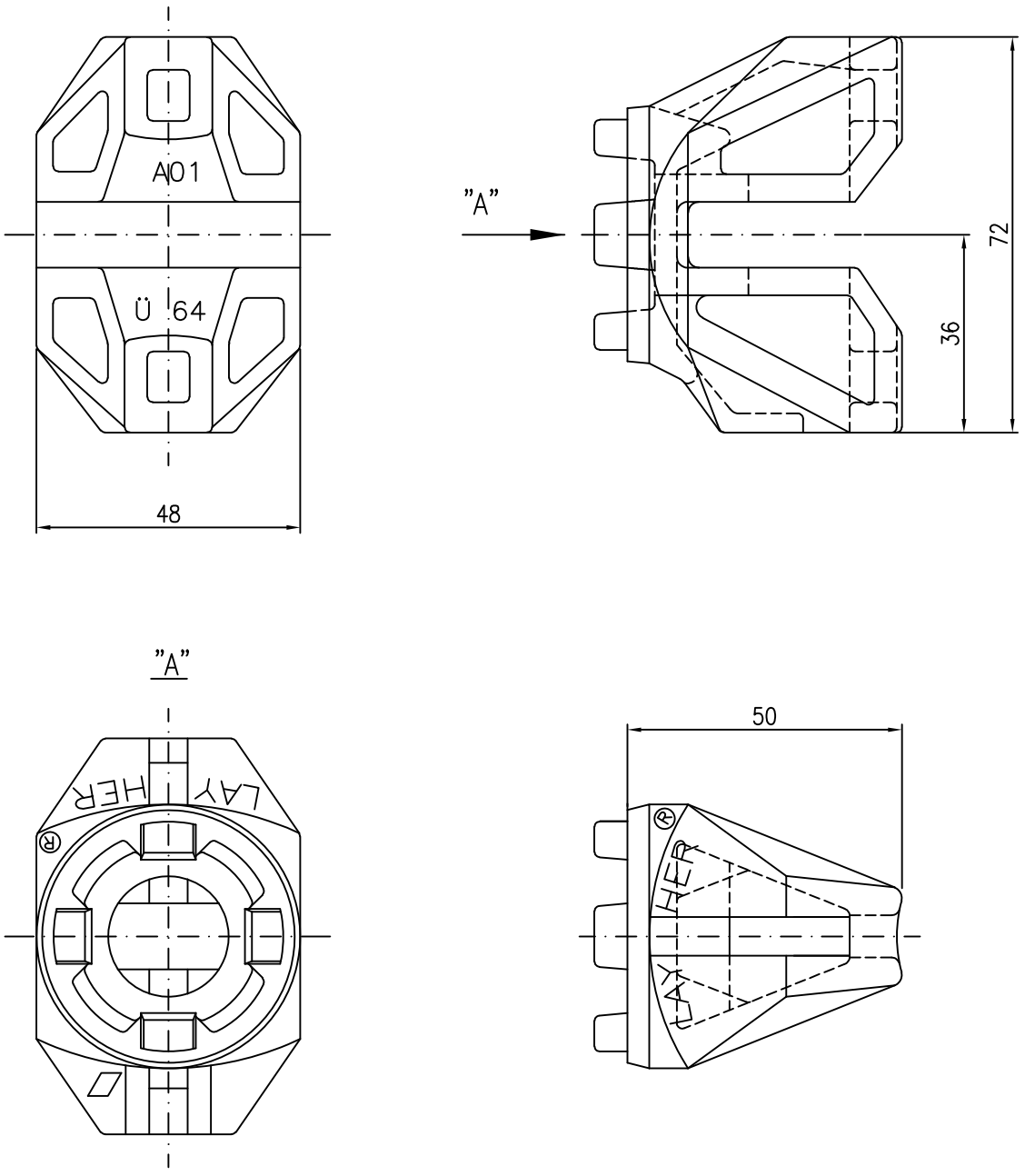
Manufactured as of 2000

ALBLITZ MODUL

Connector disc die-cut Ø 124 "K2000+ design"
in accordance with Z-8.22-64

ABM710-B105 05.2021

Annex B,
page 171



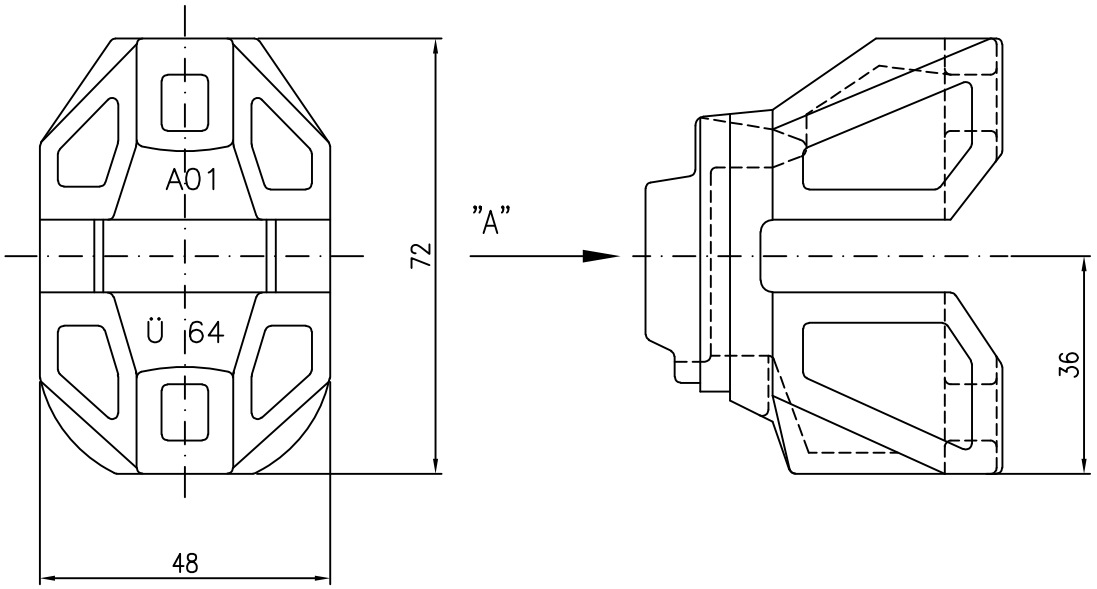
Manufactured as of 2000

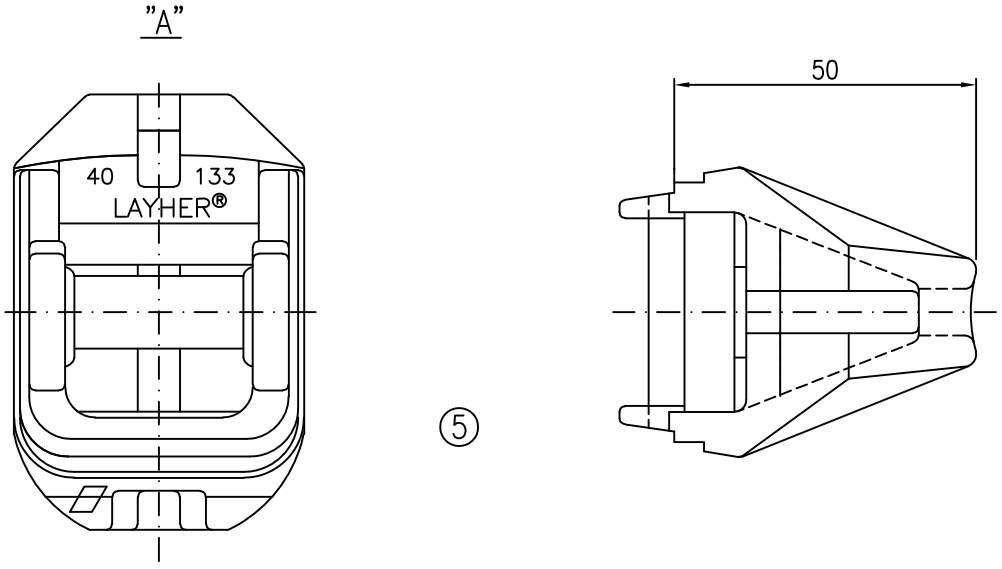
ALBLITZ MODUL

Connector disc O-ledger "K2000+ design"
in accordance with Z-8.22-64

ABM710-B106 05.2021

Annex B,
page 172





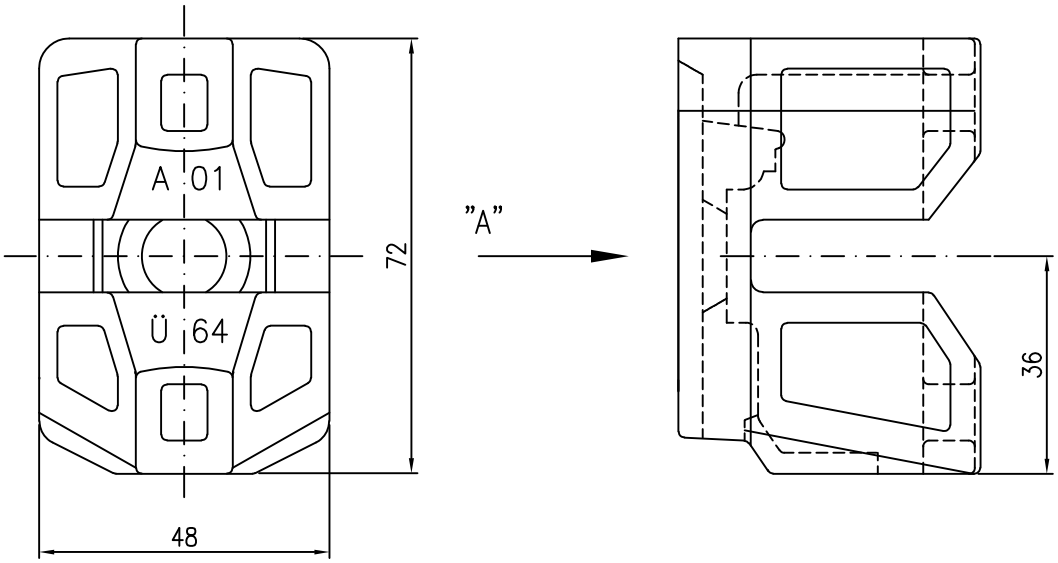
Manufactured as of 2000

ALBLITZ MODUL

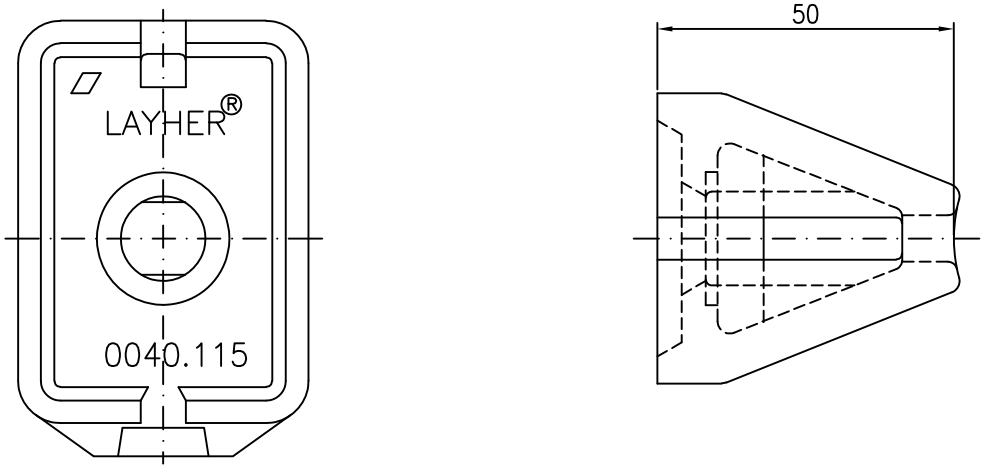
Connector head for U-ledger "K2000+ design"
in accordance with Z-8.22-64

ABM710-B107 05.2021

Annex B,
page 173



"A"



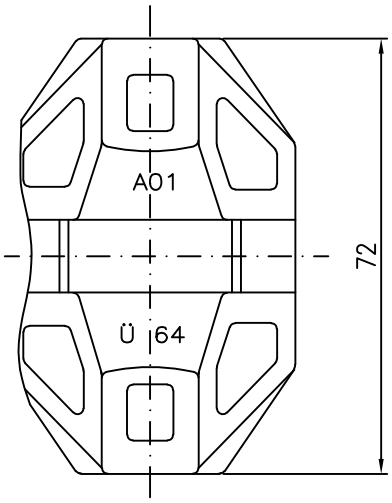
Manufactured as of 2000

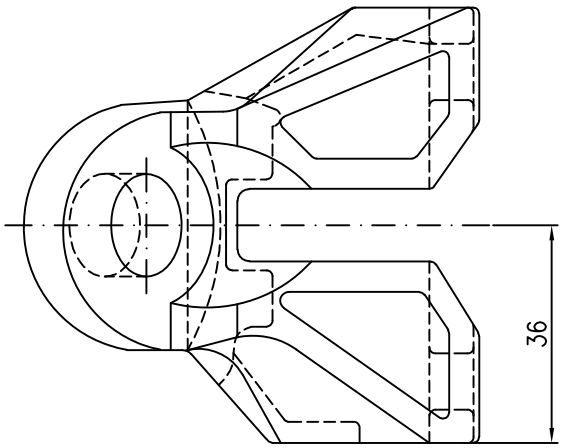
ALBLITZ MODUL

Connector head for U-bracket "K2000+ design"
in accordance with Z-8.22-64

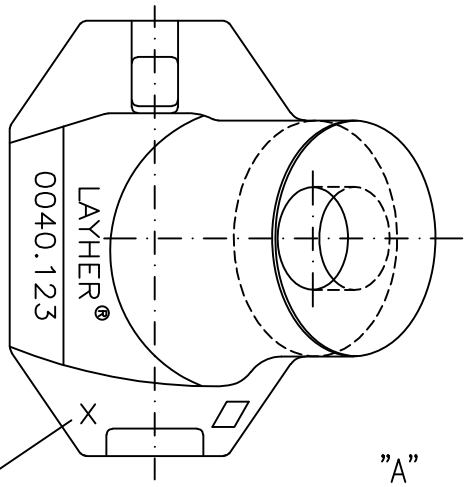
ABM710-B108 05.2021

Annex B,
page 174

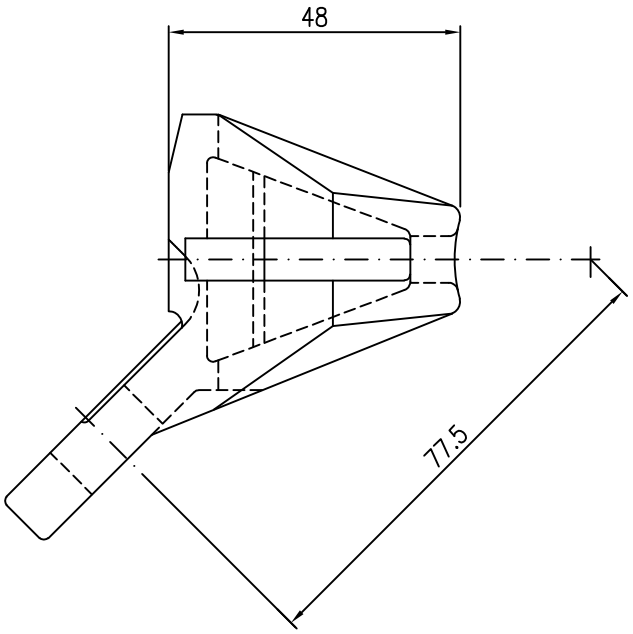




"A"



"A"



X = 1 = Design as drawn
X = 2 = Design laterally reversed

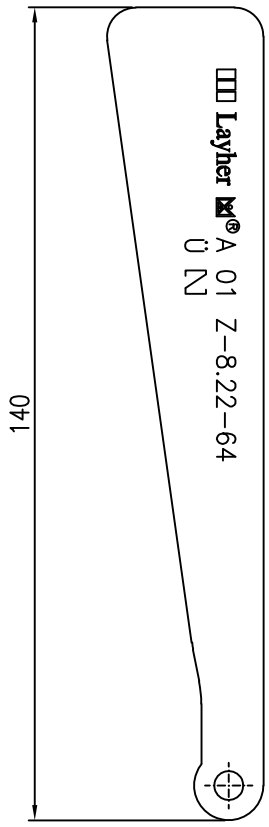
Manufactured as of 2000

ALBLITZ MODUL

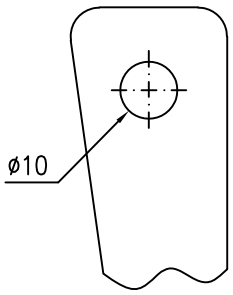
Connector head for diagonal brace "K2000+ design"
in accordance with Z-8.22-64

ABM710-B109 05.2021

Annex B,
page 175



Alternatively design
with borehole



Manufactured as of 2000

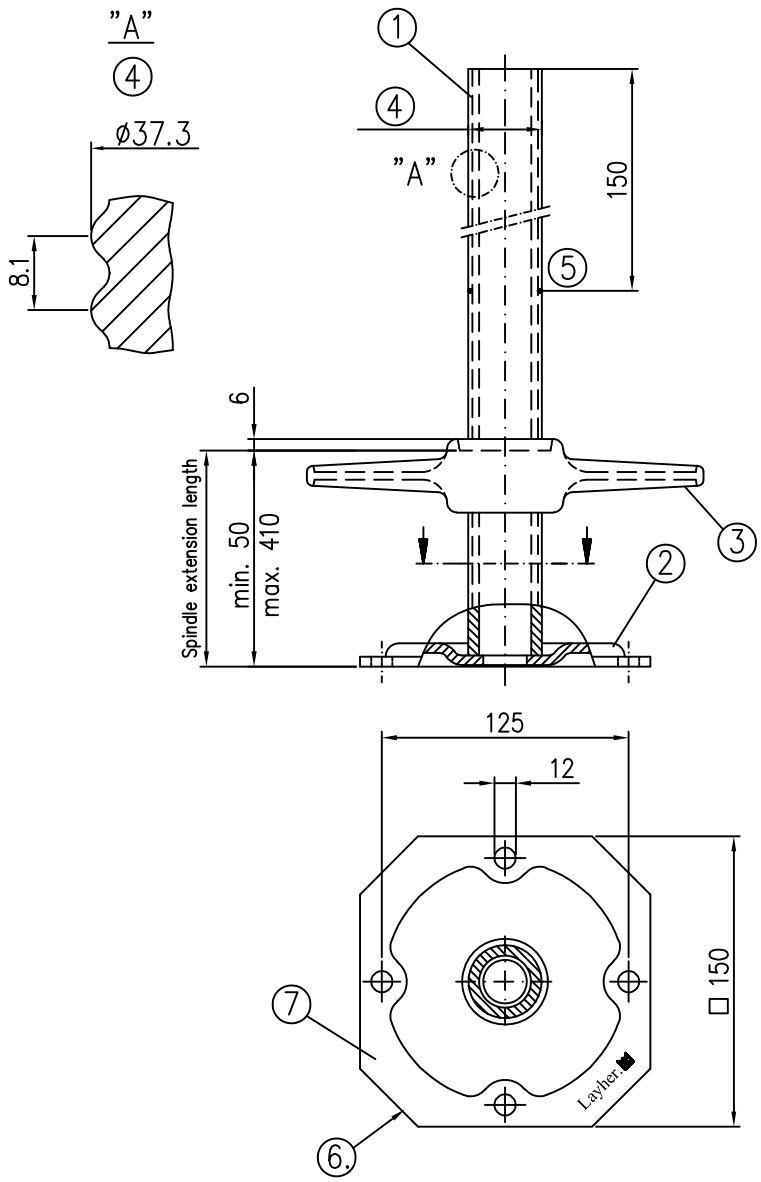
ALBLITZ MODUL	
Wedge "K2000+ design" in accordance with Z-8.22-64 ABM710-B110 05.2021	Annex B, page 176

ALBLITZ MODUL

Product marking code key
in accordance with Z-8.22-949

ABM721-B034 05.2021

Annex B,
page 177



① Tube
② Base plate
③ Spindle nut
④ Special thread ø38 x 8.1
⑤ Thread with notches to limit collar nut travel
⑥. Base plate according to EN 74-3
⑦ Marking

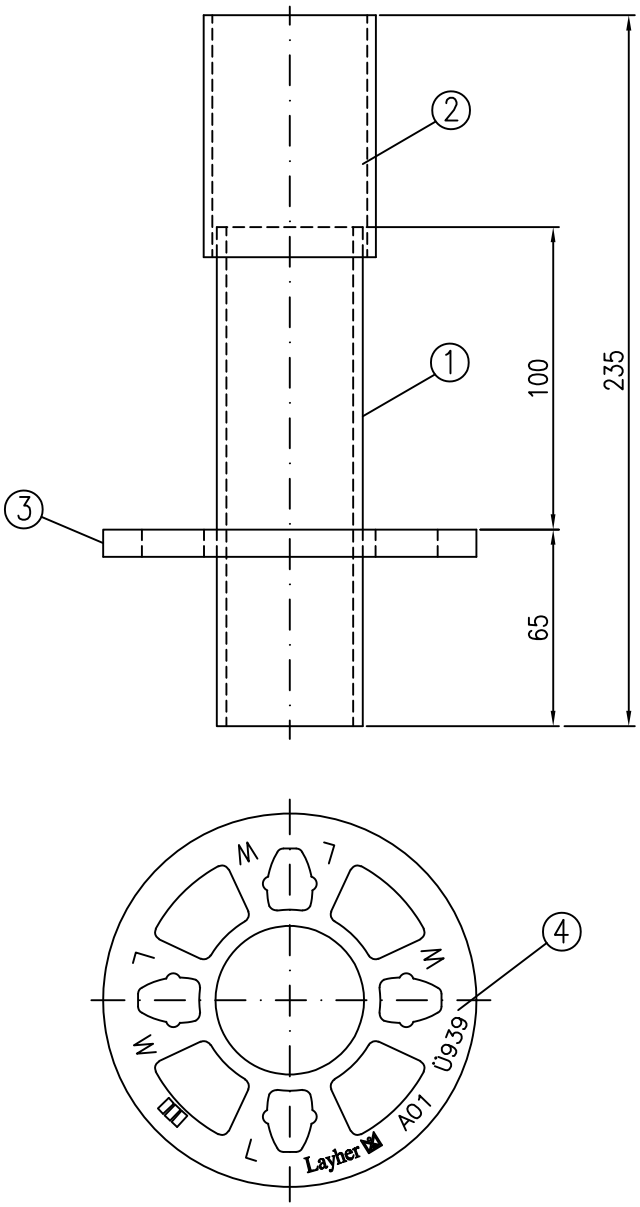
Weight [kg]
3.6

ALBLITZ MODUL

Base jack 60
in accordance with Z-8.1-16.2

ABS710-A002_ABM 05.2021

Annex B,
page 178



① Tube
② Tube
③ Connector disc "Lightweight design" see Annex B, page 165
④ Marking

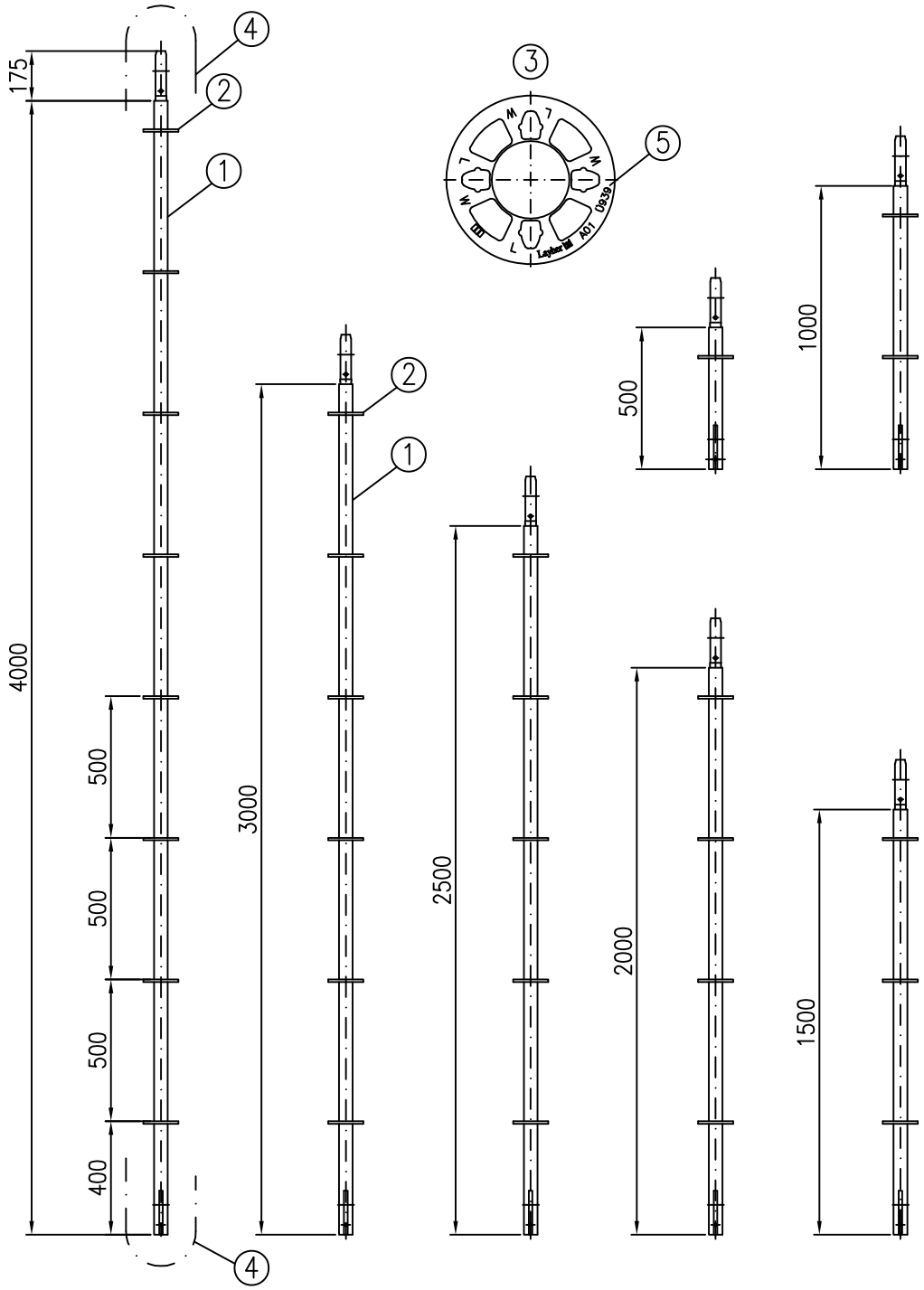
Weight [kg]
1.4

ALBLITZ MODUL

Starter piece, lightweight
in accordance with Z-8.22-939

ABM721-B036 05.2021

Annex B,
page 179



① Tube
② Connector disc "Lightweight design" see Annex B, page 165
③ All connector discs (rosettes) are identical!
④ see Annex B, page 182
⑤ Marking

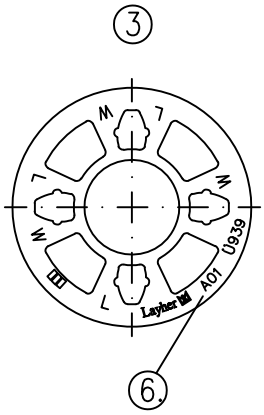
Dimens. [m]	Weight [kg]
0.50	2.7
1.00	4.9
1.50	7.1
2.00	9.3
2.50	11.5
3.00	13.7
4.00	18.1

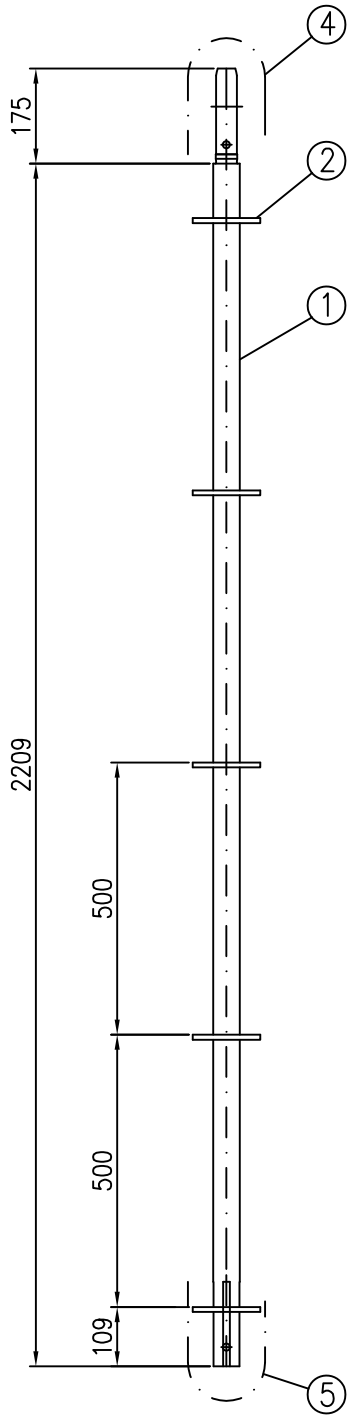
ALBLITZ MODUL

Standard with integrated tube connector, lightweight
in accordance with Z-8.22-939

ABM721-B037 05.2021

Annex B,
page 180





① Tube
② Connector disc "Lightweight design" see Annex B, page 165
③ All connector discs (rosettes) are identical!
④ see Annex B, page 182
⑤ Indentation of the tube see Annex B, page 182
⑥ Marking

Weight [kg]
10.0

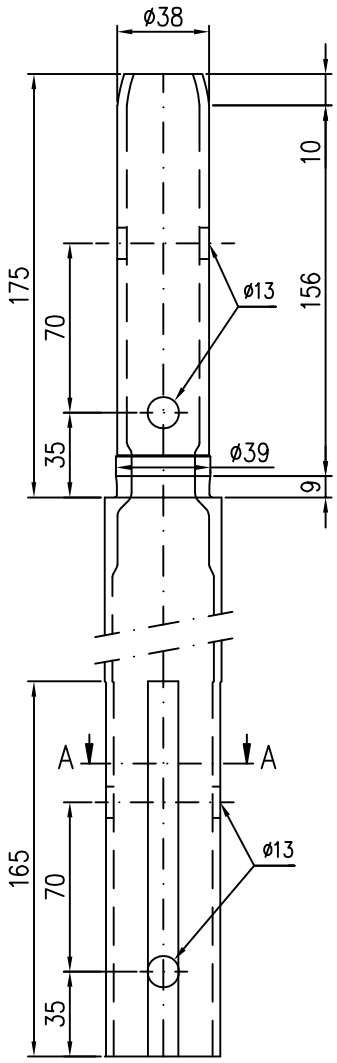
ALBLITZ MODUL

Starter standard 2.21 m, lightweight
in accordance with Z-8.22-939

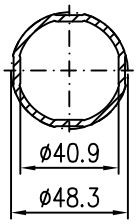
ABM721-B038 05.2021

Annex B,
page 181

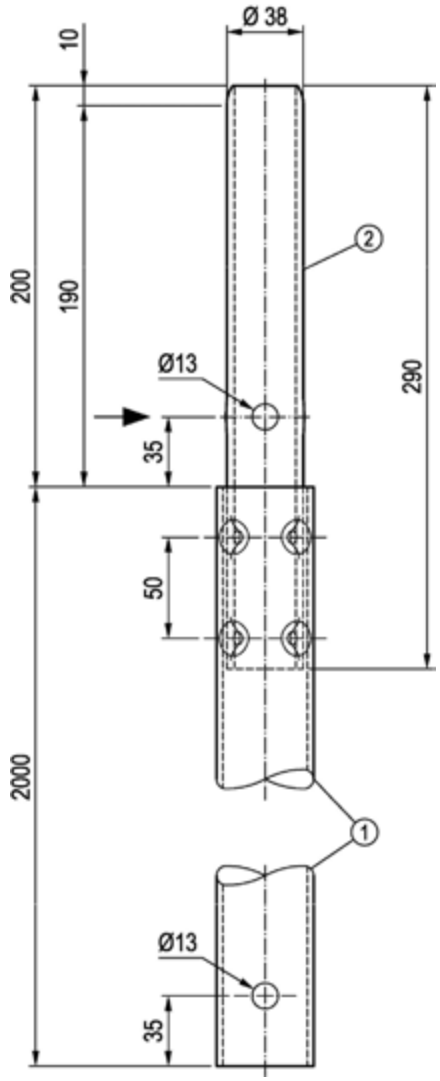
Lightweight



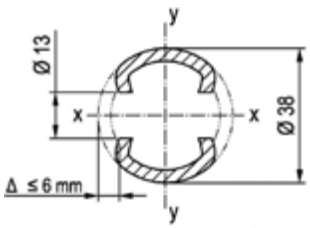
A–A

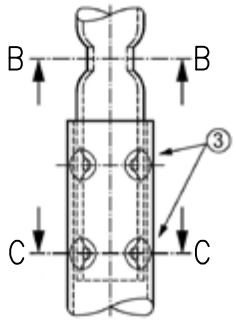


K2000+



B–B





C–C

Cross–section properties section B–B

A	=	2.74 cm²
$W_{x,pl}$	=	3.75 cm²
$W_{y,pl}$	=	2.20 cm²

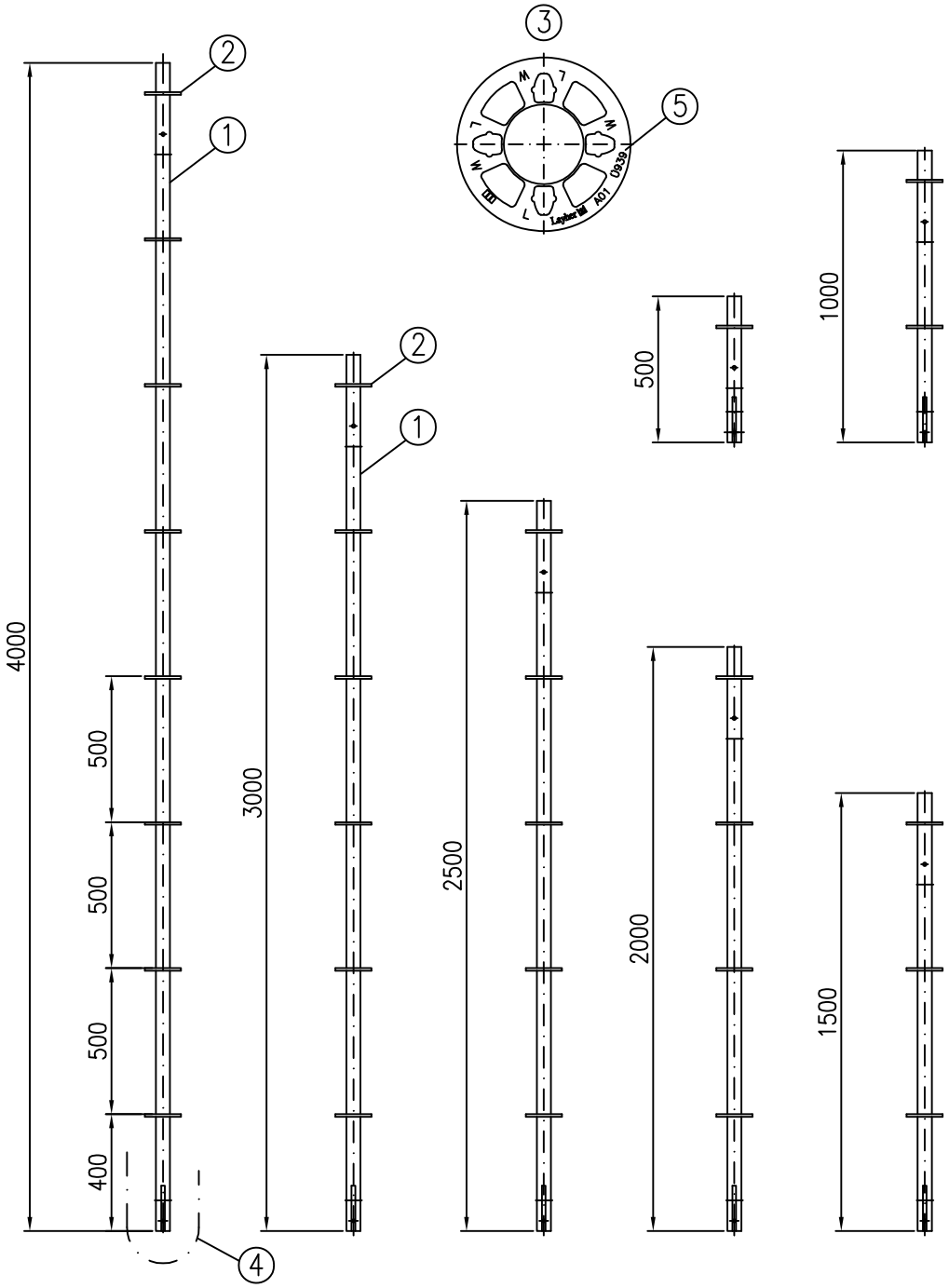
① Tube
② Tube connector
③ Tube connector pressed–in

ALBLITZ MODUL

Detailed view: Standard with integrated tube connector, lightweight / Standard with pressed–in tube connector "K200+ design"
in accordance with Z–8.22–939/Z–8.22–64

ABM721–B039 10.2023

Annex B,
page 182



① Tube
② Connector disc "Lightweight design" see Annex B, page 165
③ All connector discs (rosettes) are identical!
④ see Annex B, page 182
⑤ Marking

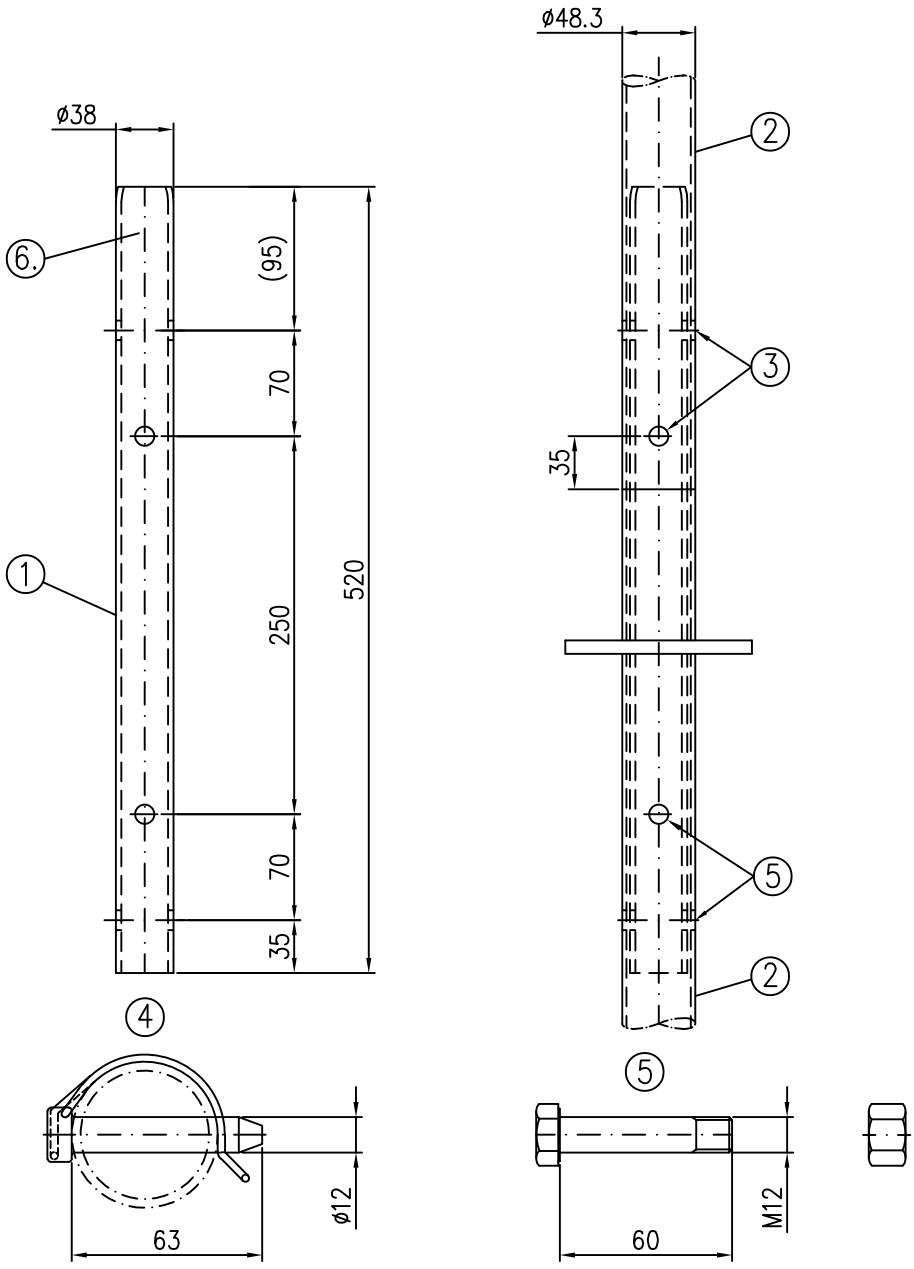
Dimens. [m]	Weight [kg]
0.50	2.2
1.00	4.4
1.50	6.6
2.00	8.8
2.50	11.0
3.00	13.2
4.00	17.6

ALBLITZ MODUL

Standard without tube connector, lightweight
in accordance with Z-8.22-939

ABM721-B040 05.2021

Annex B,
page 183



① Tube connector
② Standard
③ For connecting the standards among each other, ④ or ⑤ can be used.
④ Tube linchpin
⑤ Special bolt M12x60 with nut
⑥ Marking

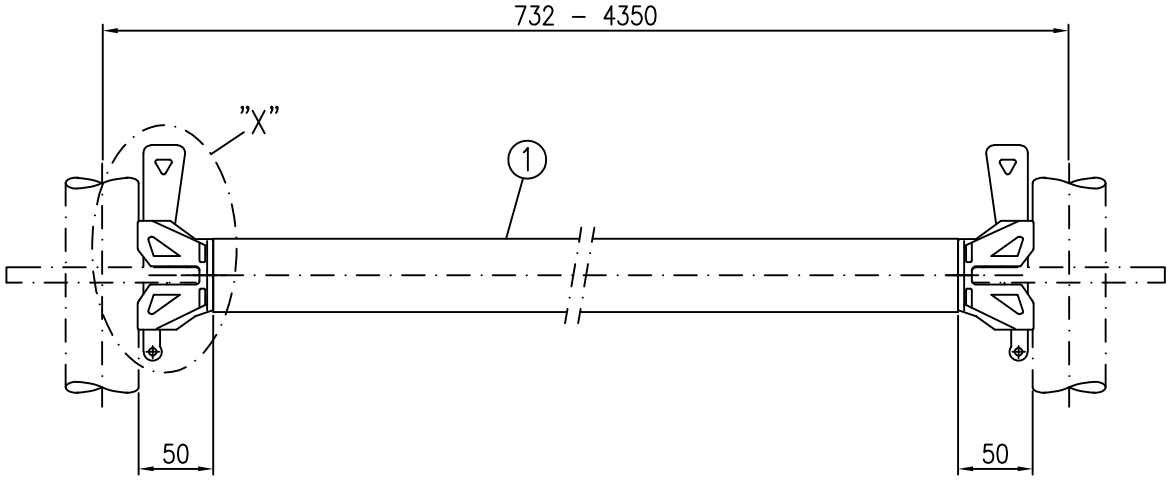
Weight [kg]
1.6

ALBLITZ MODUL

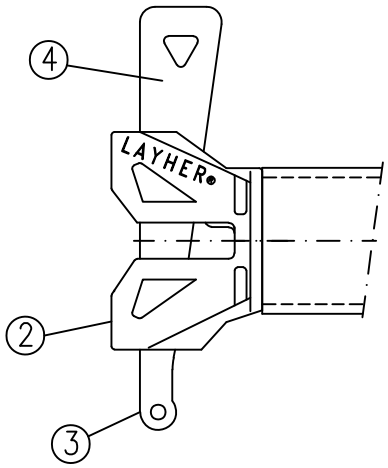
Tube connector for standard
in accordance with Z-8.22-939

ABM721-B041 05.2021

Annex B,
page 184



"X"



① Tube
② Head piece "Lightweight design" (see Annex B, page 166)
③ Wedge "Lightweight design" (see Annex B, page 170)
④ Marking

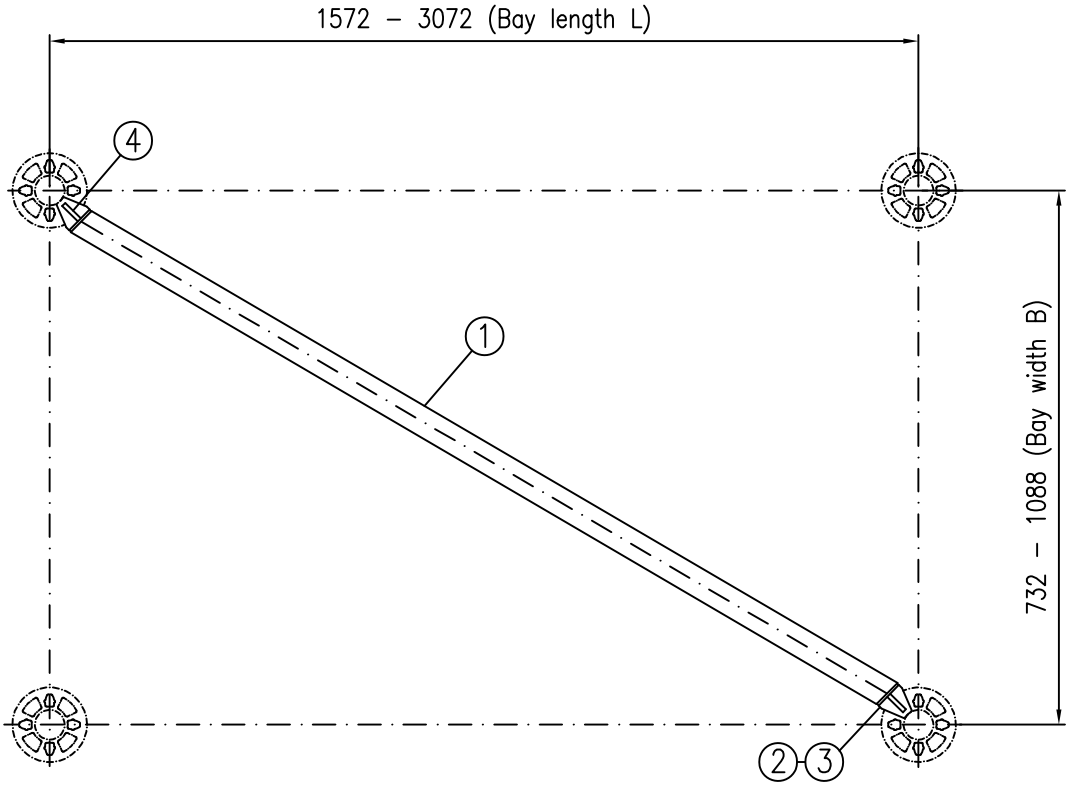
Dimens. [m]	Weight [kg]
0.73	2.9
1.09	4.0
1.57	5.5
2.07	7.0
2.57	8.5
3.07	10.1
4.14	13.4

ALBLITZ MODUL

O–ledger, lightweight 0.73 – 4.35 m
in accordance with Z–8.22–939

ABM721–B042 05.2021

Annex B,
page 185



① Tube
② Head piece "Lightweight design" (see Annex B, page 166)
③ Wedge "Lightweight design" (see Annex B, page 170)
④ Marking

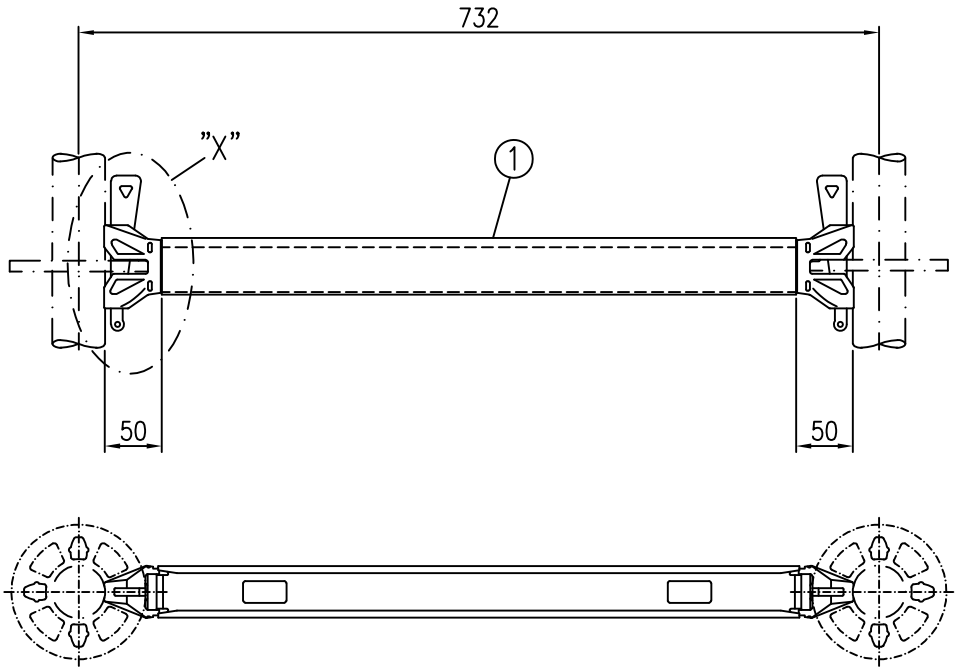
Dimension [m]	Weight [kg]
2.07 x 0.73	7.8
2.57 x 0.73	9.3
2.07 x 1.09	8.1
2.57 x 1.09	9.6

ALBLITZ MODUL

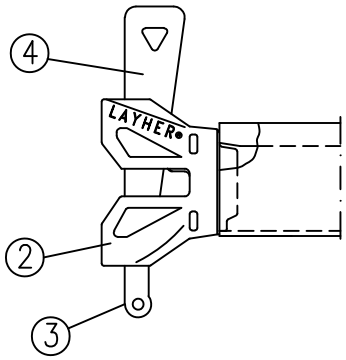
O-ledger, lightweight, HD
in accordance with Z-8.22-939

ABM721-B043 05.2021

Annex B,
page 186



"X"



① U–profile	(see Annex B, page 190)
② Head piece "Lightweight design"	(see Annex B, page 167)
③ Wedge "Lightweight design"	(see Annex B, page 170)
④ Marking	

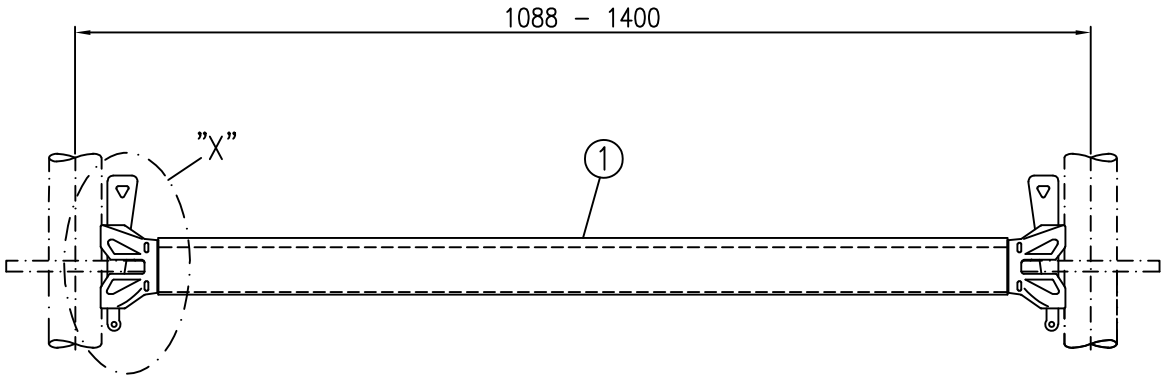
Weight [kg]
3.1

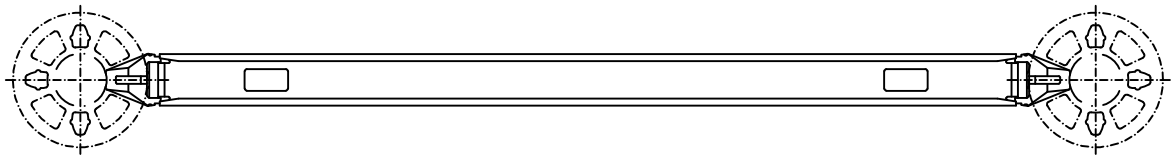
ALBLITZ MODUL

U–ledger, lightweight 0.73 m T14
in accordance with Z–8.22–939

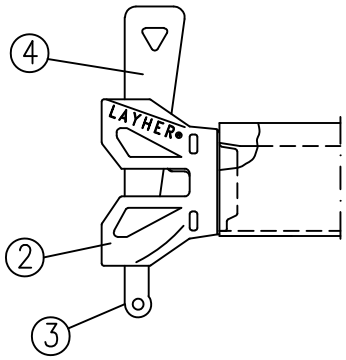
ABM721–B044 05.2021

Annex B,
page 187





"X"



① U-profile (see Annex B, page 190)
② Head piece "Lightweight design" (see Annex B, page 167)
③ Wedge "Lightweight design" (see Annex B, page 170)
④ Marking

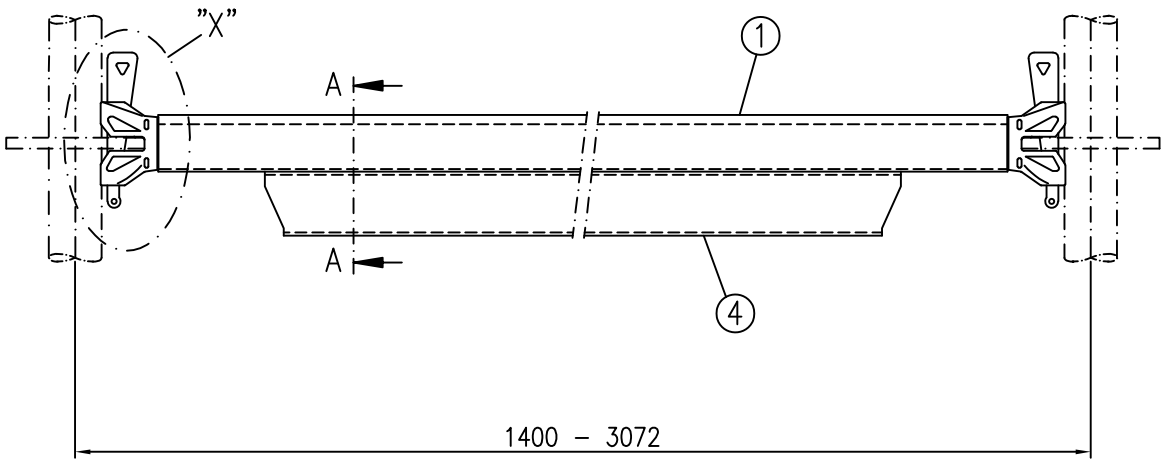
Dimens. [m]	Weight [kg]
1.09	4.4
1.40	5.4

ALBLITZ MODUL

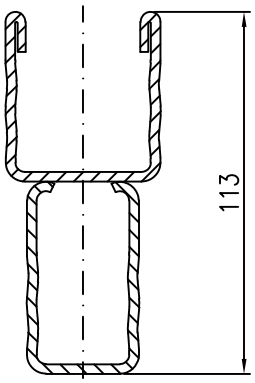
U-ledger, lightweight 1.09 – 1.40 m T14
in accordance with Z-8.22-939

ABM721-B045 05.2021

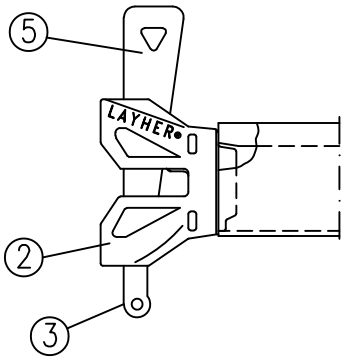
Annex B,
page 188



A–A



"X"



① U–profile (see Annex B, page 190)
② Head piece "Lightweight design" (see Annex B, page 167)
③ Wedge "Lightweight design" (see Annex B, page 170)
④ U–profile
⑤ Marking

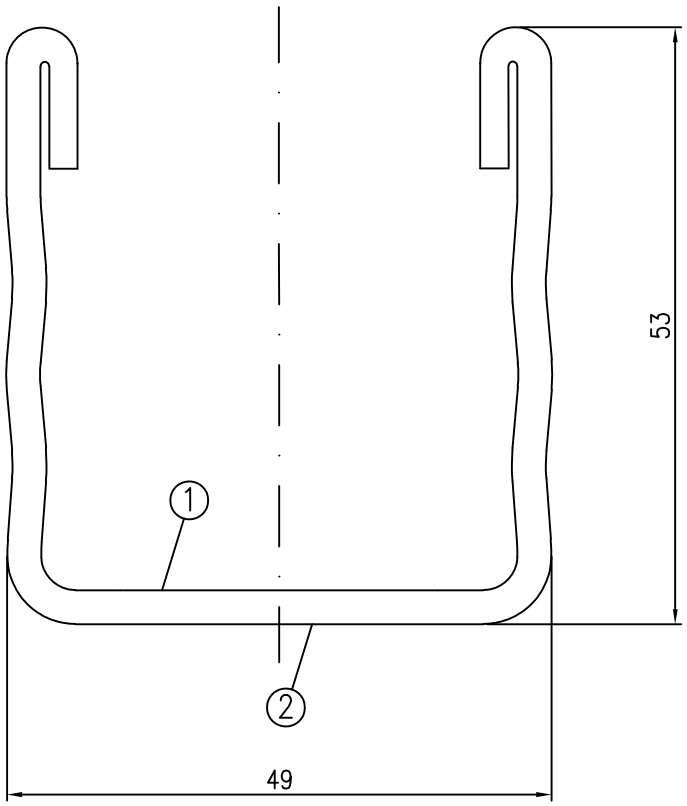
Dimens. [m]	Weight [kg]
1.40	8.9
1.57	9.4
2.07	12.7
2.57	15.7
3.07	19.0

ALBLITZ MODUL

U–ledger, lightweight 1.40 – 3.07 m T14, reinforced
in accordance with Z–8.22–939

ABM721–B046 05.2021

Annex B,
page 189



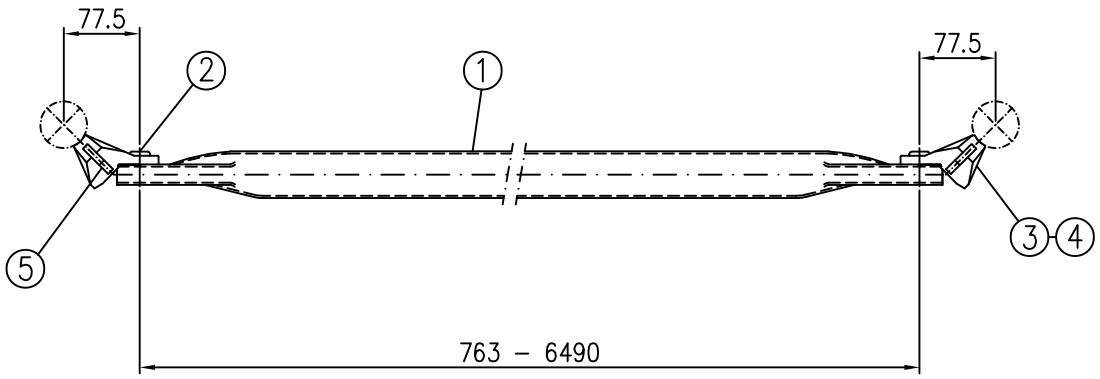
① U–profile 49 x 53 x 2.5 Material, please refer to component drawings
② Marking

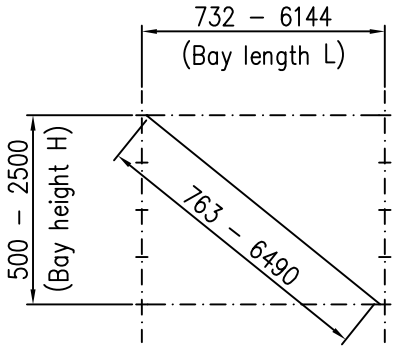
ALBLITZ MODUL

U–profile 53 T10
in accordance with Z–8.1–16.2

ABS716–A023_ABM 05.2021

Annex B,
page 190





① Tube
② Cylinder head rivet
③ Head piece "Lightweight design" (see Annex B, page 169)
④ Wedge "Lightweight design" (see Annex B, page 170)
⑤ Marking

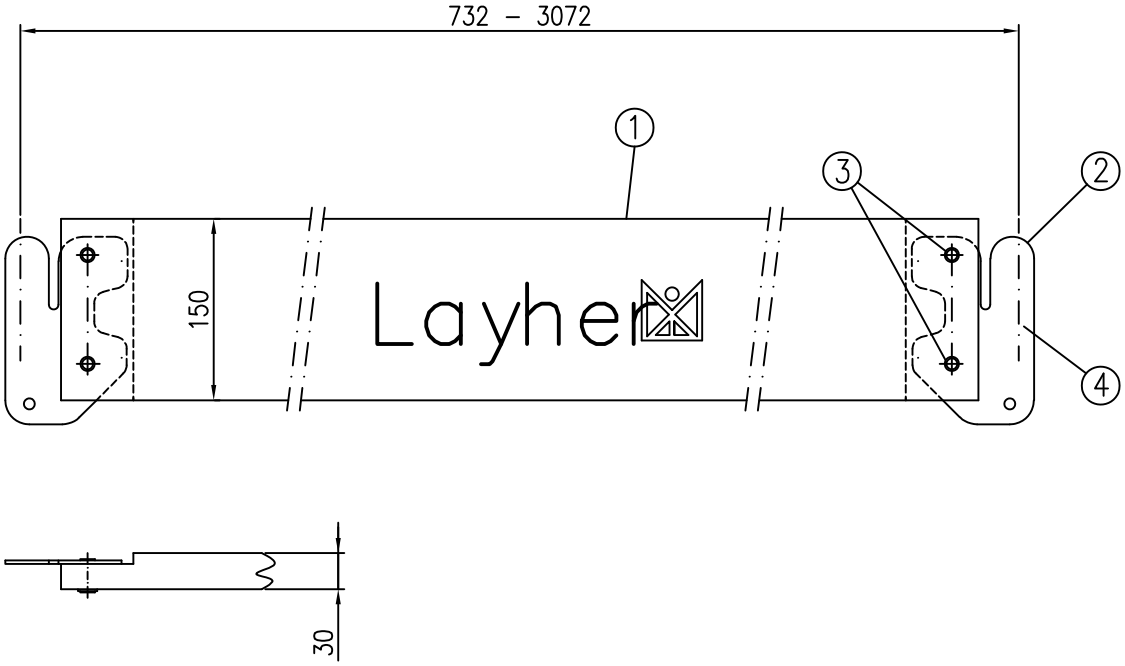
Dimension [m]	Weight [kg]
2.07 x 2.00	8.9
2.57 x 2.00	9.5
2.07 x 1.50	8.2
2.57 x 1.50	9.5

ALBLITZ MODUL

Diagonal brace "Lightweight design"
in accordance with Z–8.22–939

ABM721–B048 05.2021

Annex B,
page 191



① Wood
② Fitting
③ Flat-head rivet
④ Marking

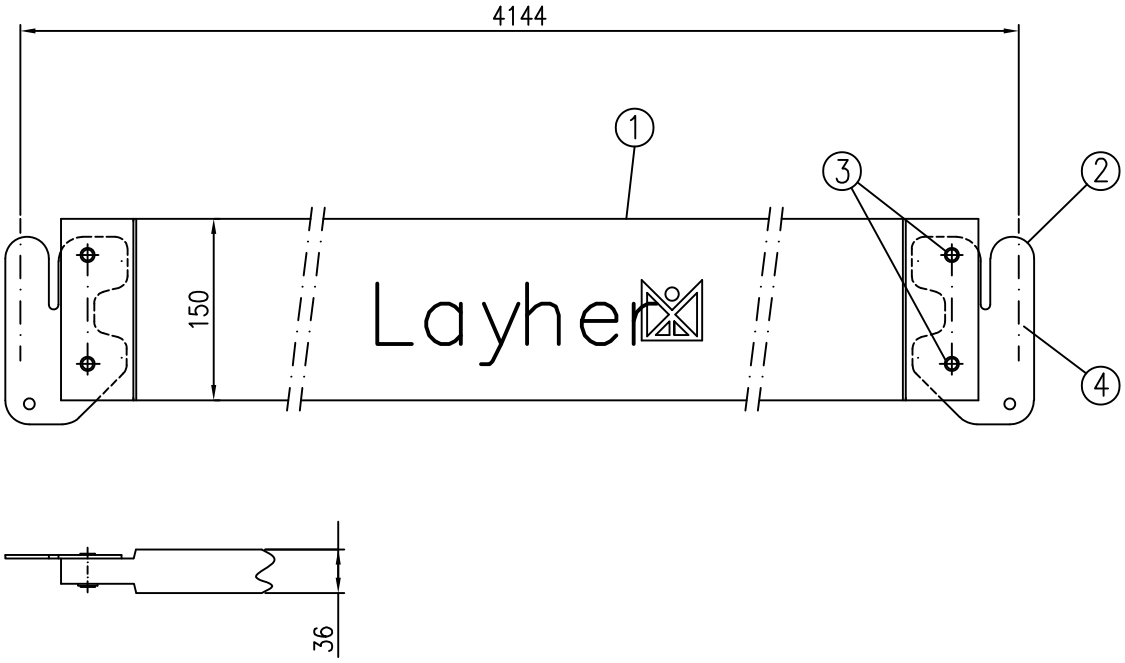
Dimens. [m]	Weight [kg]
0.73	1.5
1.09	2.5
1.57	3.5
2.07	4.6
2.57	5.7
3.07	7.1

ALBLITZ MODUL

U-toeboard, wood 0.73 – 3.07 m
in accordance with Z-8.22-939

ABM710-B038 05.2021

Annex B,
page 192



① Wood
② Fitting
③ Flat-head rivet
④ Marking

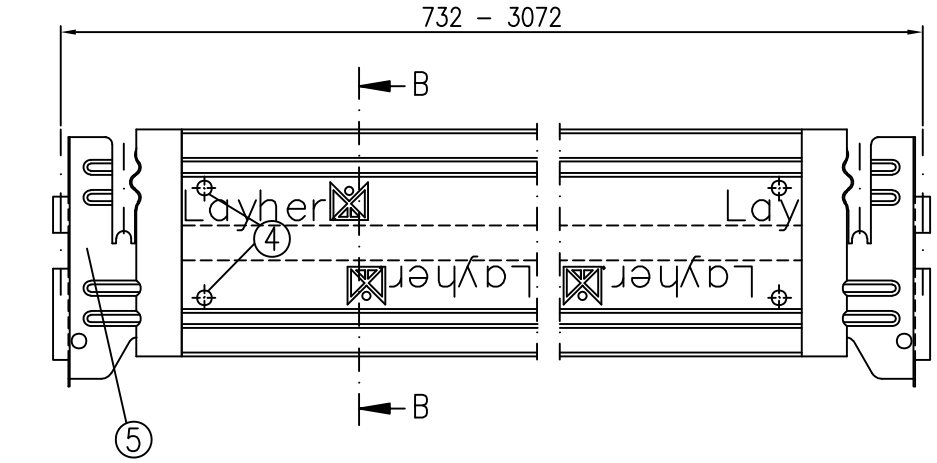
Weight [kg]
7.5

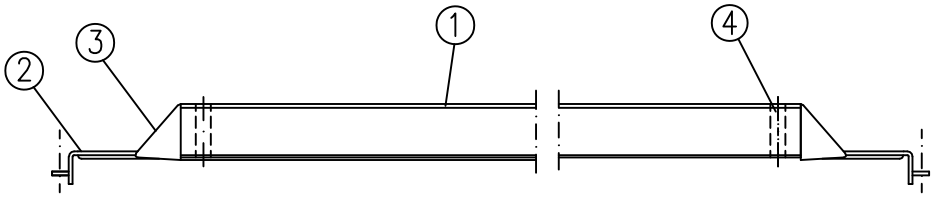
ALBLITZ MODUL

U-toeboard, wood 4.14 m
in accordance with Z-8.22-939

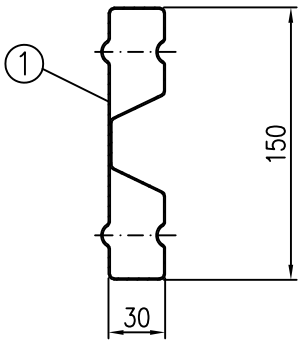
ABM721-B050 05.2021

Annex B,
page 193





B–B



① Profiled sheet metal
② Fitting
③ Plastic head piece
④ Tubular rivet
⑤ Marking

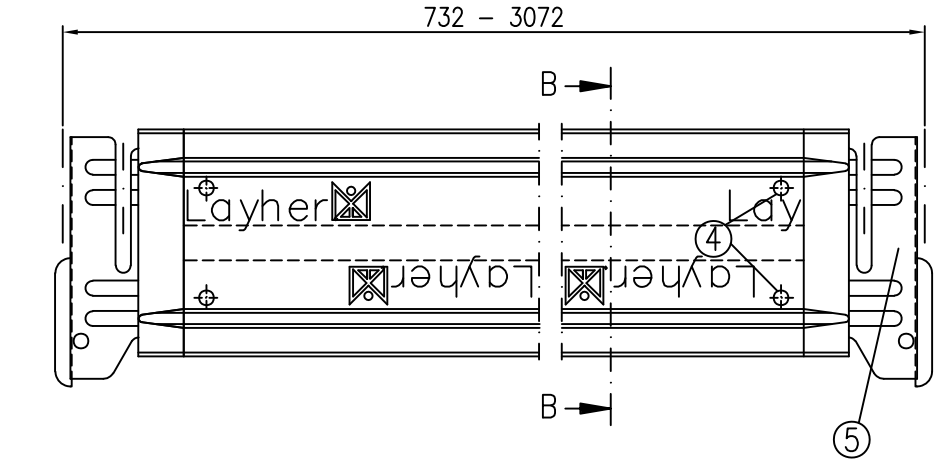
Dimens. [m]	Weight [kg]
0,73	1.8
1,09	2.5
1,57	3.4
2.07	4.4
2.57	5.4
3.07	6.3

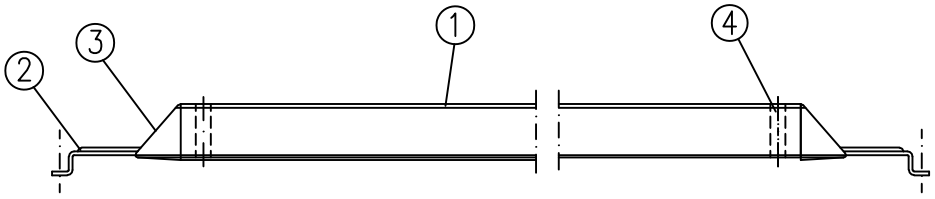
ALBLITZ MODUL

U–toeboard, steel 0.73 – 3.07 m T17
in accordance with Z–8.22–939

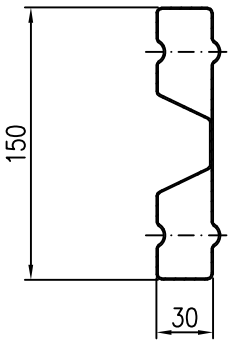
ABM721–B051 05.2021

Annex B,
page 194





B–B



① Profiled sheet metal
② Fitting
③ Plastic head piece
④ Tubular rivet
⑤ Marking

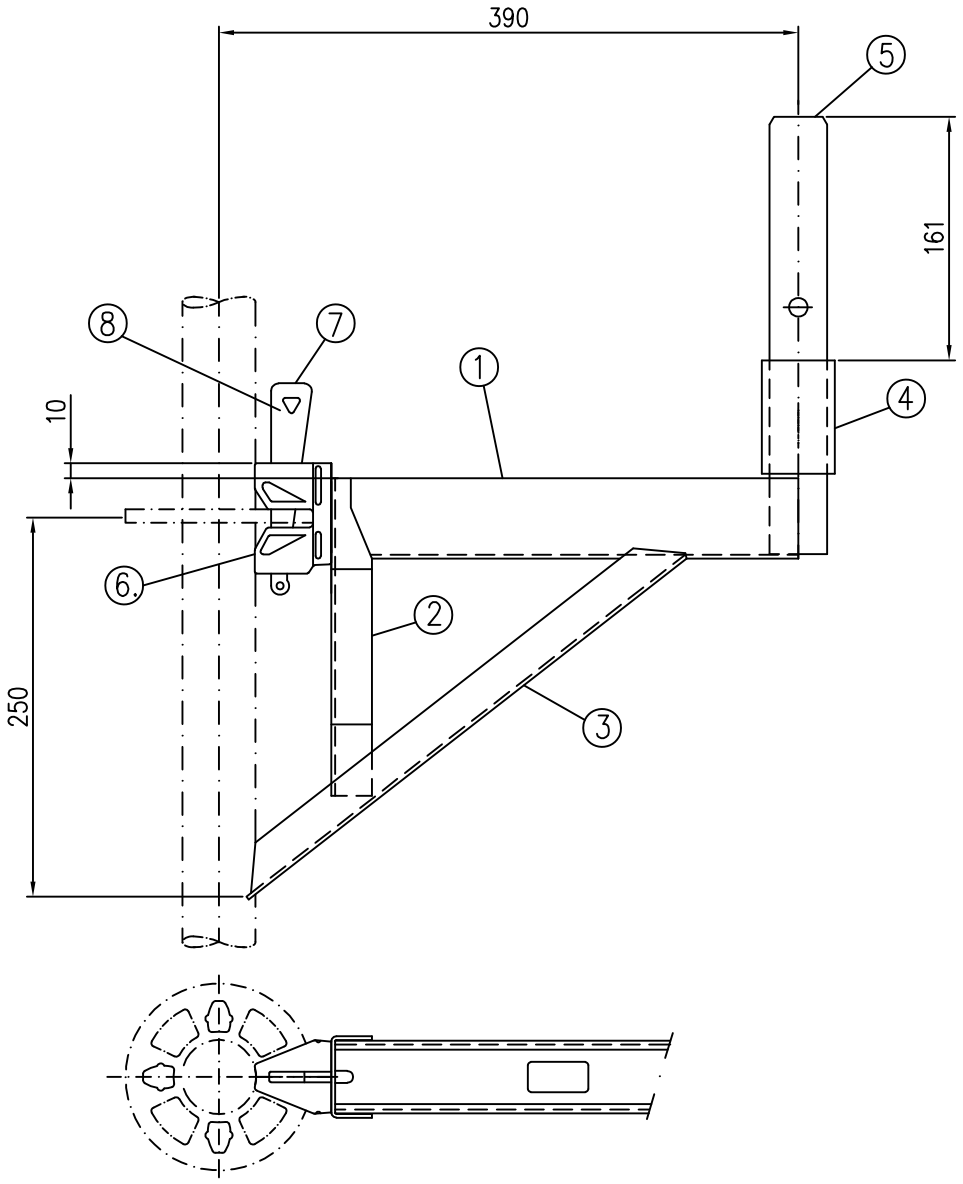
Dimens. [m]	Weight [kg]
0.73	1.8
1.09	2.5
1.57	3.4
2.07	4.4
2.57	5.4
3.07	6.3

ALBLITZ MODUL

U–toeboard, steel 0.73 – 3.07 m
in accordance with Z–8.22–939

ABM710–B039 05.2021

Annex B,
page 195



① U-profile (see Annex B, page 190)
② Support-U
③ Brace-U
④ Tube
⑤ Tube connector
⑥ Head piece "Lightweight design" (see Annex B, page 168)
⑦ Wedge "Lightweight design" (see Annex B, page 170)
⑧ Marking

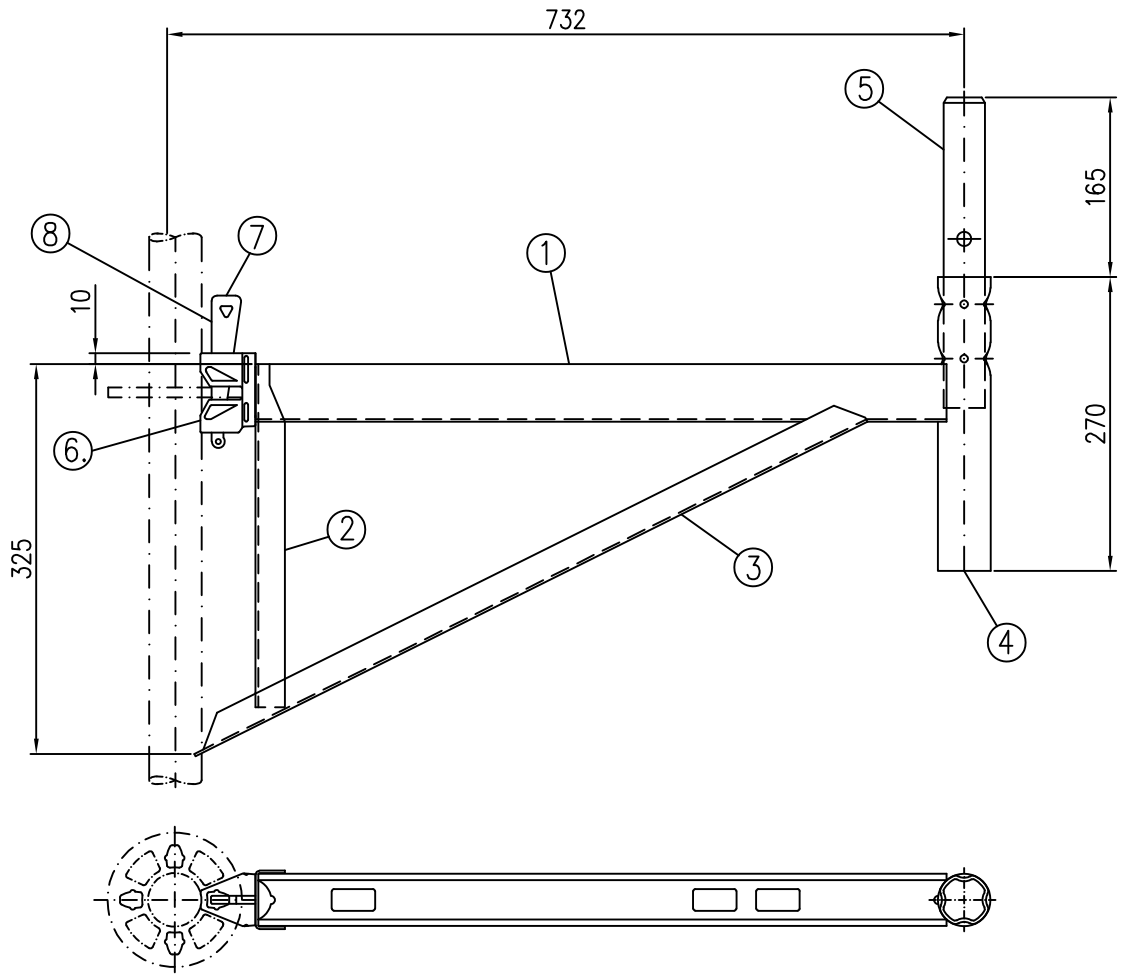
Weight [kg]
3.9

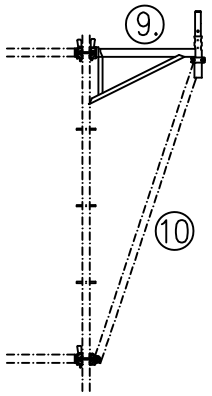
ALBLITZ MODUL

U-bracket, lightweight 0.39 m
in accordance with Z-8.22-939

ABM721-B053 05.2021

Annex B,
page 196





① U-profile (see Annex B, page 190)
② Support-U
③ Brace-U
④ Tube
⑤ Tube connector
⑥ Head piece "Lightweight design" (see Annex B, page 168)
⑦ Wedge "Lightweight design" (see Annex B, page 170)
⑧ Marking
⑨ Bracket
⑩ Bracket brace

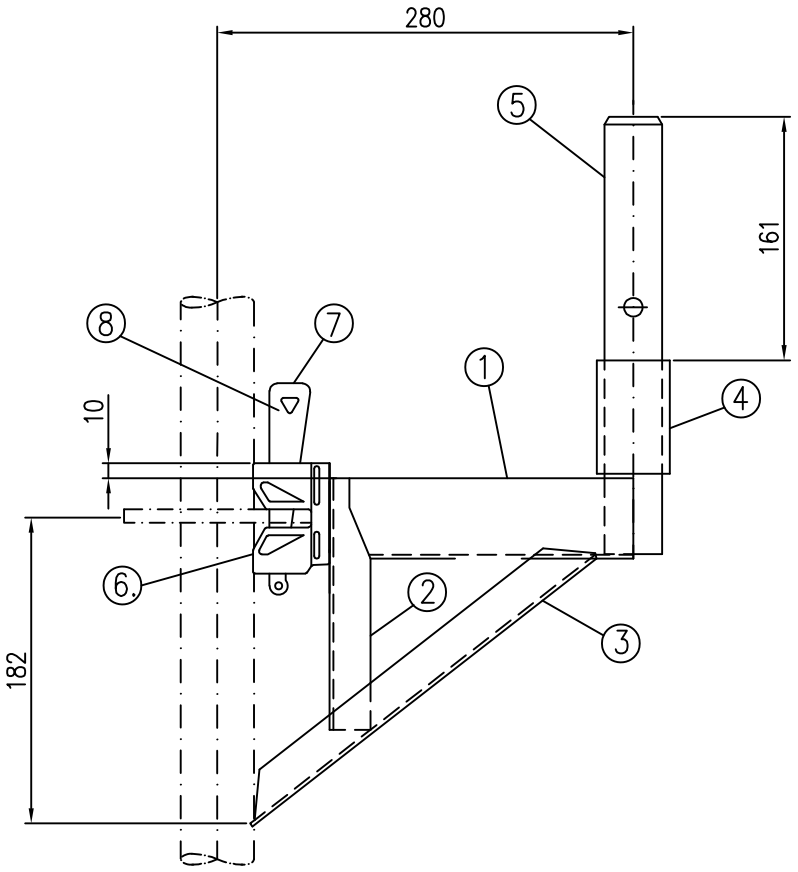
Weight [kg]
6.4

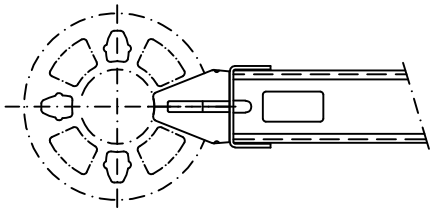
ALBLITZ MODUL

U-bracket, lightweight 0.73 m
in accordance with Z-8.22-939

ABM721-B054 05.2021

Annex B,
page 197





① U-profile (see Annex B, page 190)
② Support-U
③ Brace-U
④ Tube
⑤ Tube connector
⑥ Head piece "Lightweight design" (see Annex B, page 168)
⑦ Wedge "Lightweight design" (see Annex B, page 170)
⑧ Marking

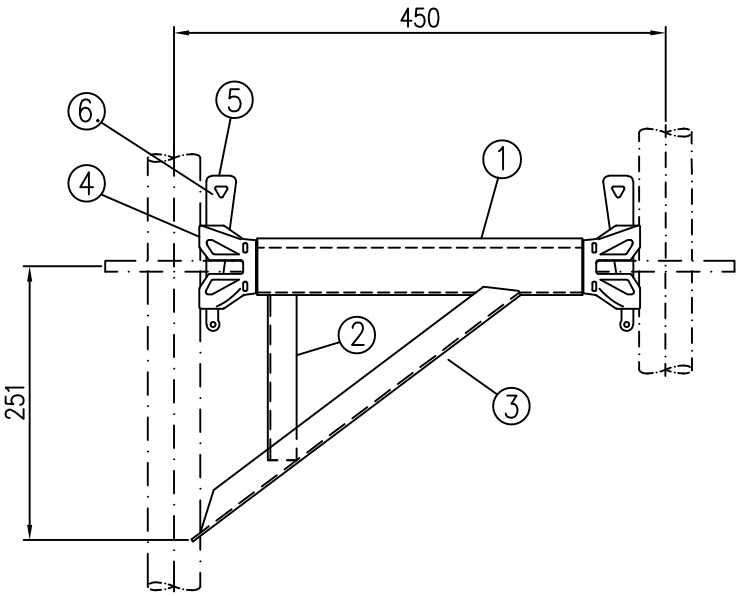
Weight [kg]
3.4

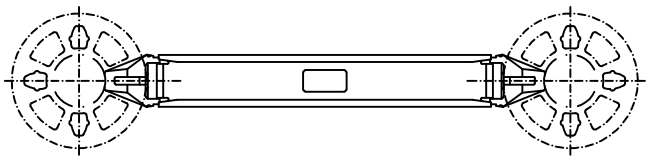
ALBLITZ MODUL

U-bracket, lightweight 0.28 m
in accordance with Z-8.22-939

ABM721-B055 05.2021

Annex B,
page 198





① U-profile (see Annex B, page 190)
② Support-U
③ Brace-U
④ Head piece "Lightweight design" (see Annex B, page 167)
⑤ Wedge "Lightweight design" (see Annex B, page 170)
⑥ Marking

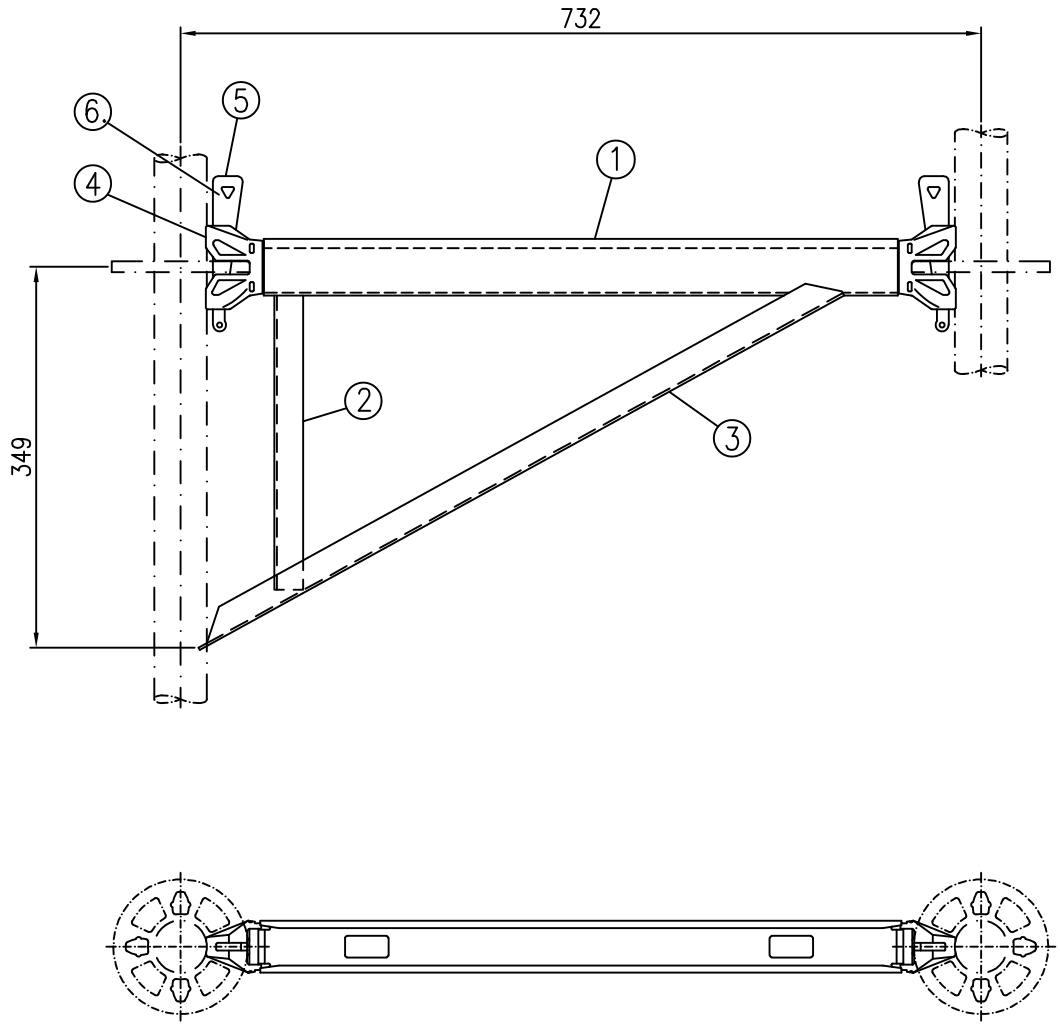
Weight [kg]
3.1

ALBLITZ MODUL

U-bracket, lightweight 0.45 m with 2 wedge heads
in accordance with Z-8.22-939

ABM721-B056 05.2021

Annex B,
page 199



① U-profile (see Annex B, page 190)
② Support-U
③ Brace-U
④ Head piece "Lightweight design" (see Annex B, page 167)
⑤ Wedge "Lightweight design" (see Annex B, page 170)
⑥ Marking

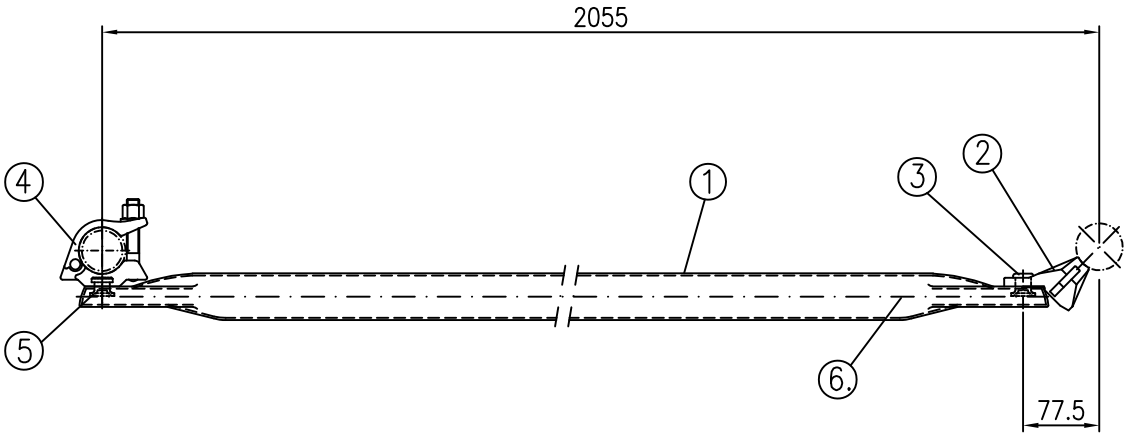
Weight [kg]
5.0

ALBLITZ MODUL

U-bracket, lightweight 0.73 m with 2 wedge heads
in accordance with Z-8.22-939

ABM721-B057 05.2021

Annex B,
page 200



①	Tube	
②	Head piece + Wedge "Lightweight design"	(see Annex B, pages 169 + 170)
③	Cylinder head rivet	swivel, riveted
④	Halfcoupler with screw top	in accordance with approval Z-8.331-882
⑤	Cylinder head rivet	swivel, riveted
⑥	Marking	

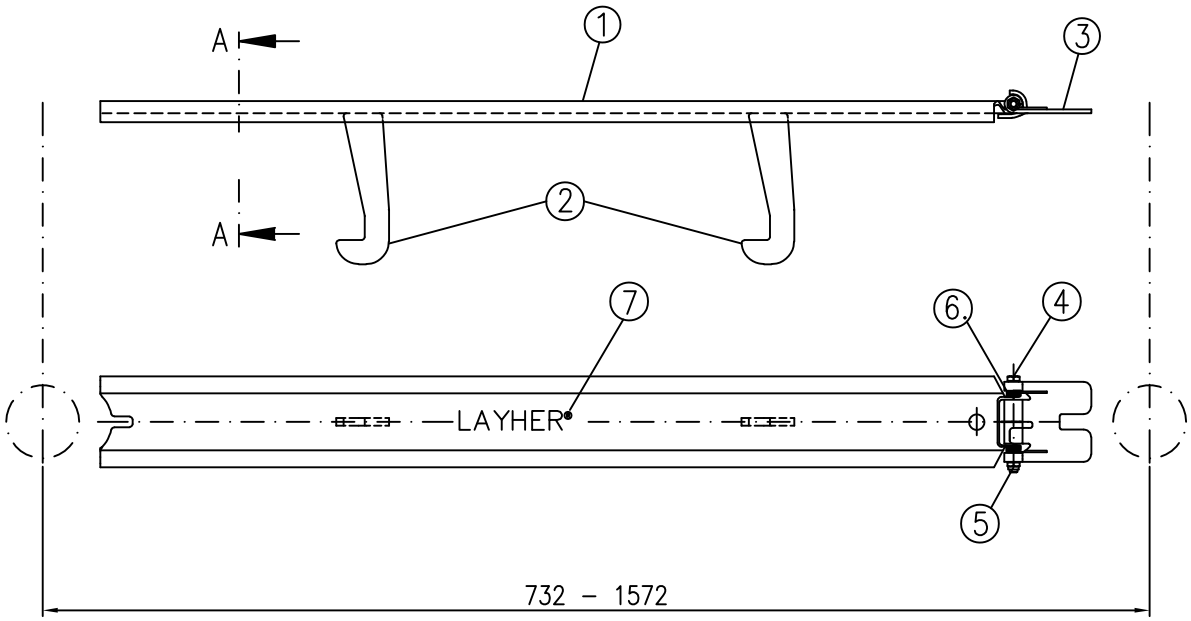
Weight [kg]
8.8

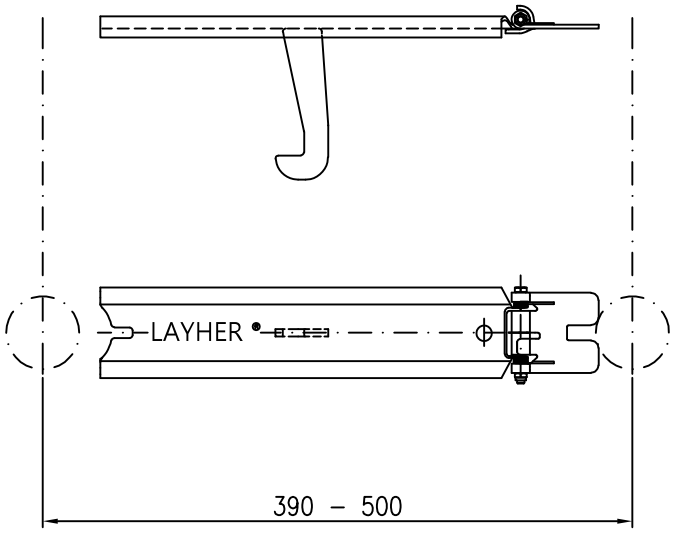
ALBLITZ MODUL

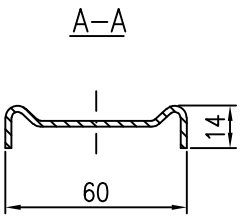
Bracket brace 2.05 m "Lightweight design"
in accordance with Z-8.22-939

ABM721-B058 02.2023

Annex B,
page 201







① Rail
② Locking hook
③ Safety cap
④ Hexagon bolt
⑤ Locknut
⑥ Leg spring
⑦ Marking

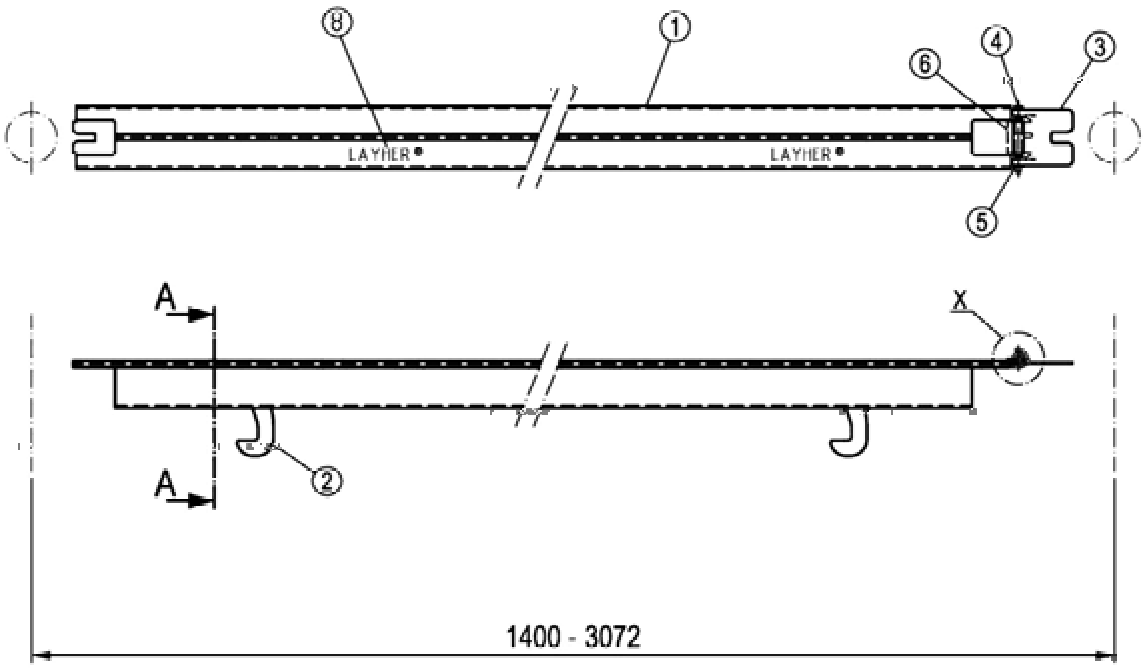
Dimens. [m]	Weight [kg]
0.39	0.6
0.45	0.7
0.73	1.3
1.09	1.8
1.57	3.0

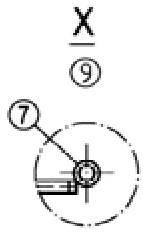
ALBLITZ MODUL

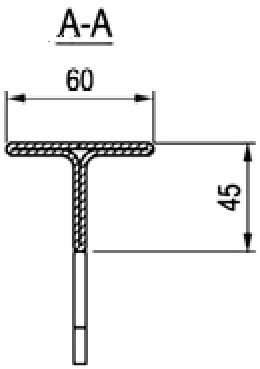
U–deck lift–off preventer T8 0.39 – 1.57 m
in accordance with Z–8.22–939

ABM721–B059 05.2021

Annex B,
page 202







① T-profile
② Locking hook
③ Safety cap
④ Hexagon bolt
⑤ Locknut
⑥ Leg spring
⑦ Tube
⑧ Marking
⑨ (without safety flap and galvanized leg spring)

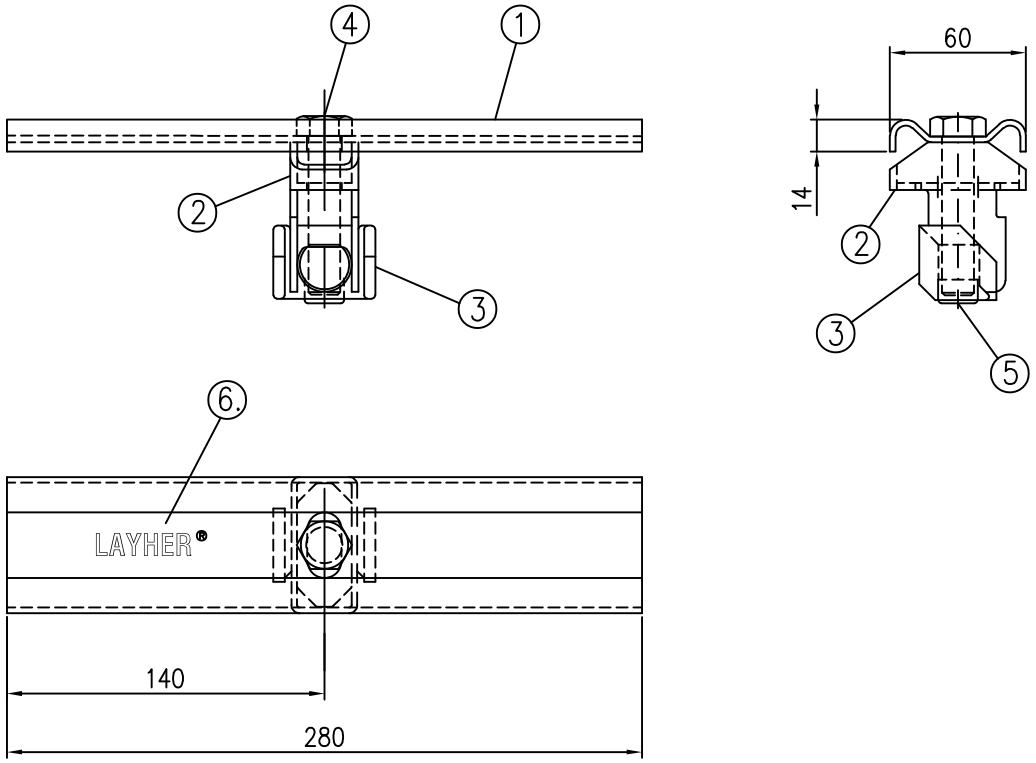
Dimens. [m]	Weight [kg]
1.40	5.3
1.57	5.9
2.07	7.9
2.57	9.9
3.07	11.9

ALBLITZ MODUL

U-deck lift-off preventer T9 1.40 – 3.07 m
in accordance with Z-8.22-939

ABM721-B060 05.2021

Annex B,
page 203



① Rail
② Rectangular tube
③ Clamp slider
④ Hexagon bolt
⑤ Blind rivet
⑥ Marking

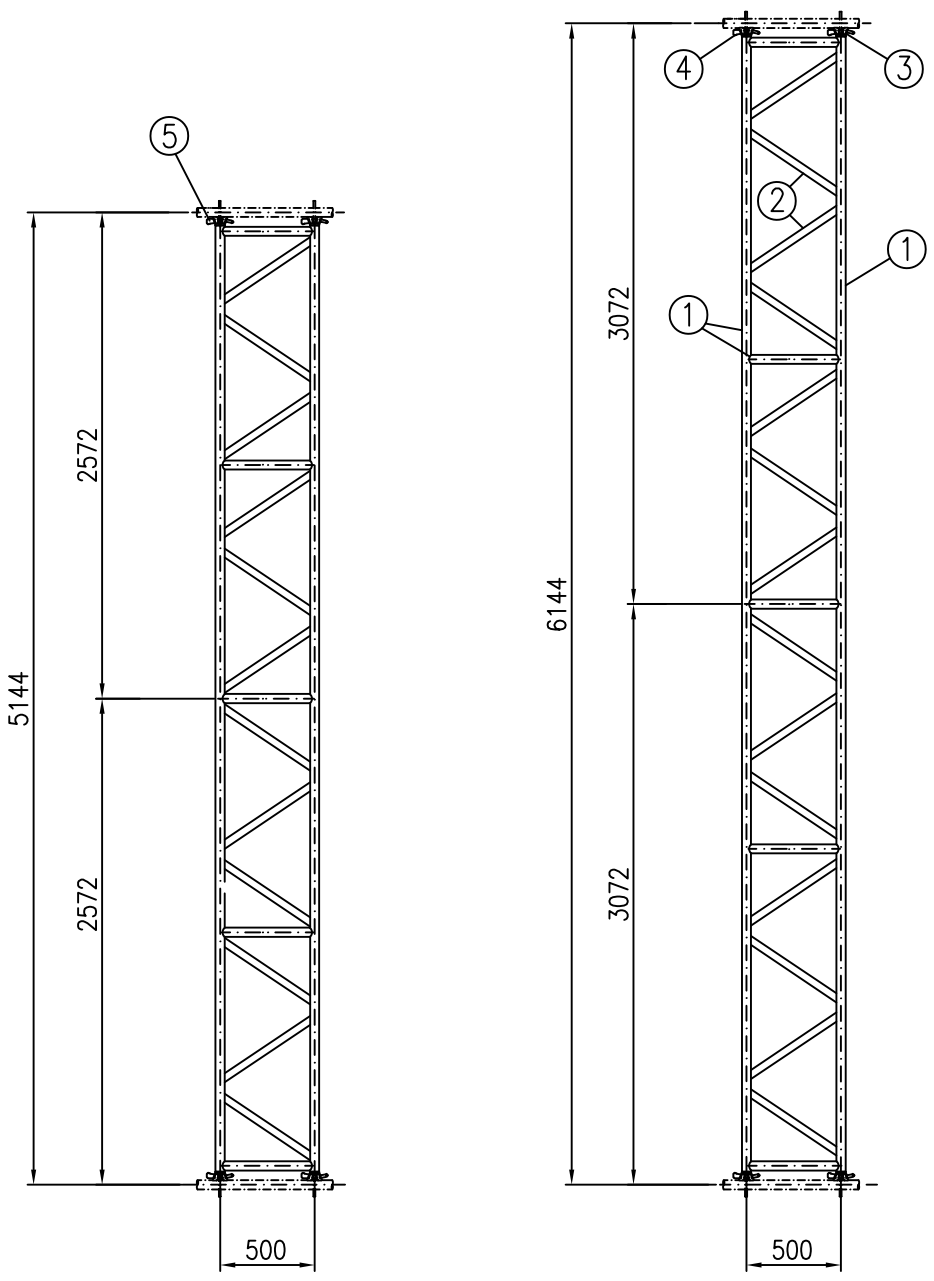
Weight [kg]
1.0

ALBLITZ MODUL

Universal U-deck lift-off preventer
in accordance with Z-8.22-939

ABS720-A066_ABM 05.2021

Annex B,
page 204



① Tube
② Rectangular tube
③ Head piece "Lightweight design" (see Annex B, page 166)
④ Wedge "Lightweight design" (see Annex B, page 170)
⑤ Marking

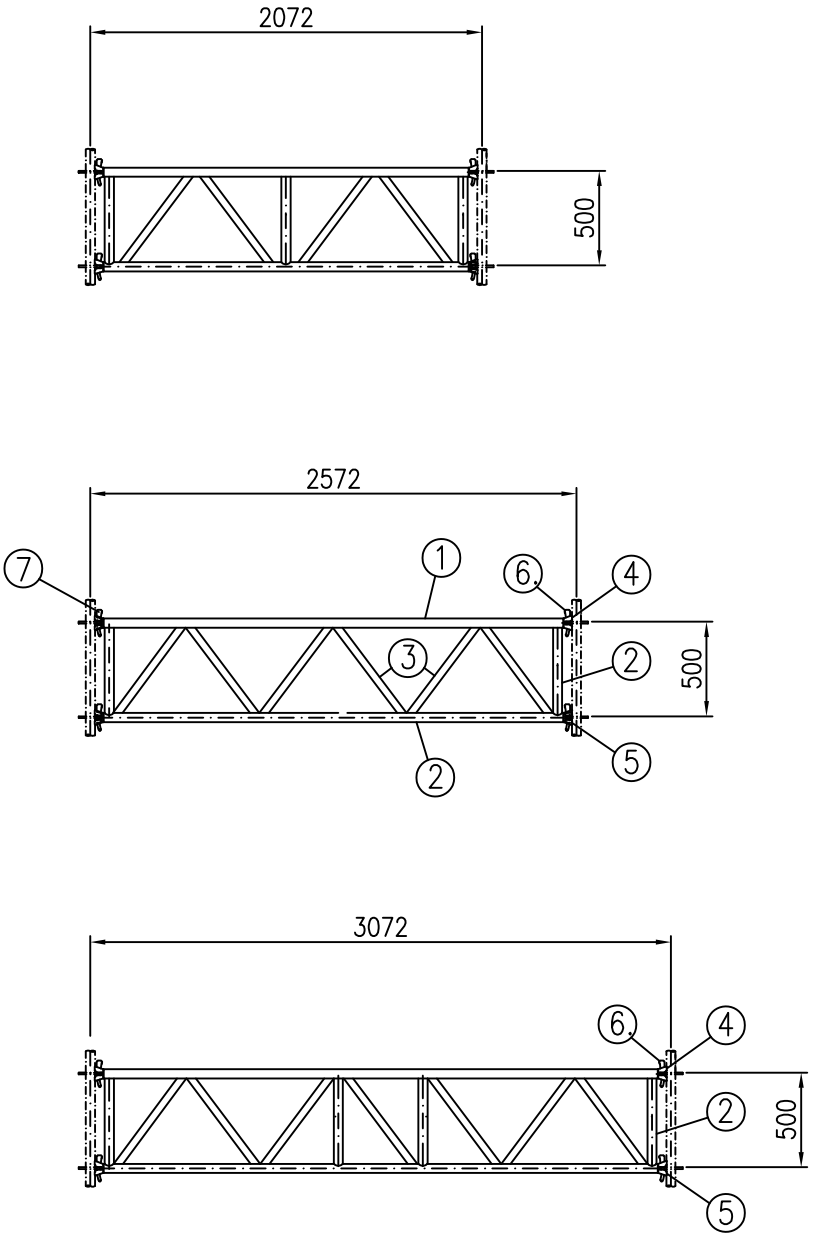
Dimens. [m]	Weight [kg]
5.14	51.2
6.14	59.2

ALBLITZ MODUL

O-lattice girder, lightweight 5.14; 6.14 x 0.5 m
in accordance with Z-8.22-939

ABM721-B062 05.2021

Annex B,
page 205



① U-profile (see Annex B, page 190)
② Tube
③ Rectangular tube
④ Head piece "Lightweight design" (see Annex B, page 167)
⑤ Head piece "Lightweight design" (see Annex B, page 166)
⑥ Wedge "Lightweight design" (see Annex B, page 170)
⑦ Marking

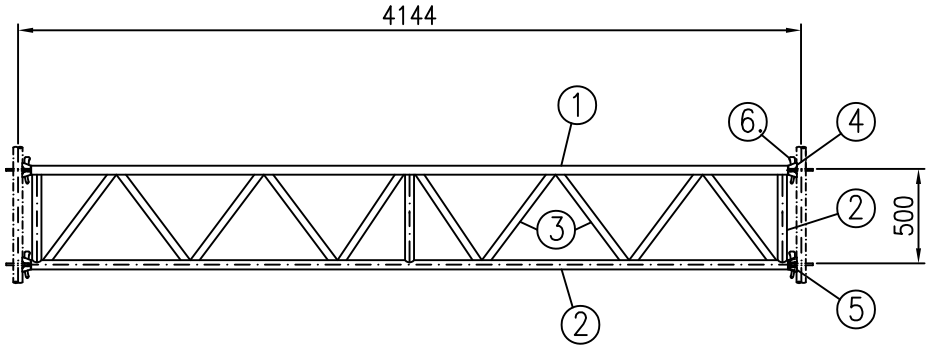
Dimens. [m]	Weight [kg]
2.07	21.4
2.57	24.9
3.07	31.9

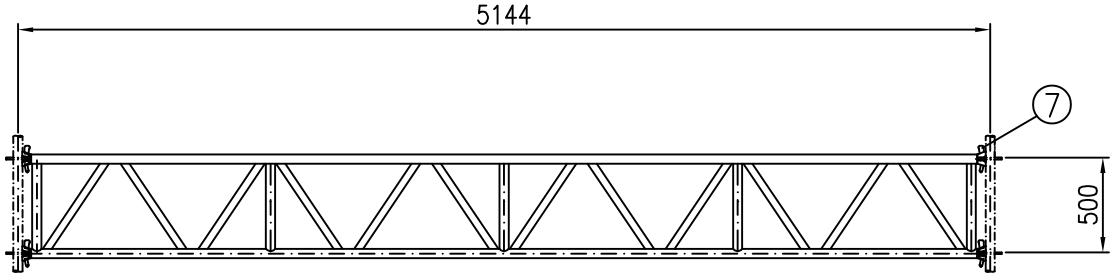
ALBLITZ MODUL

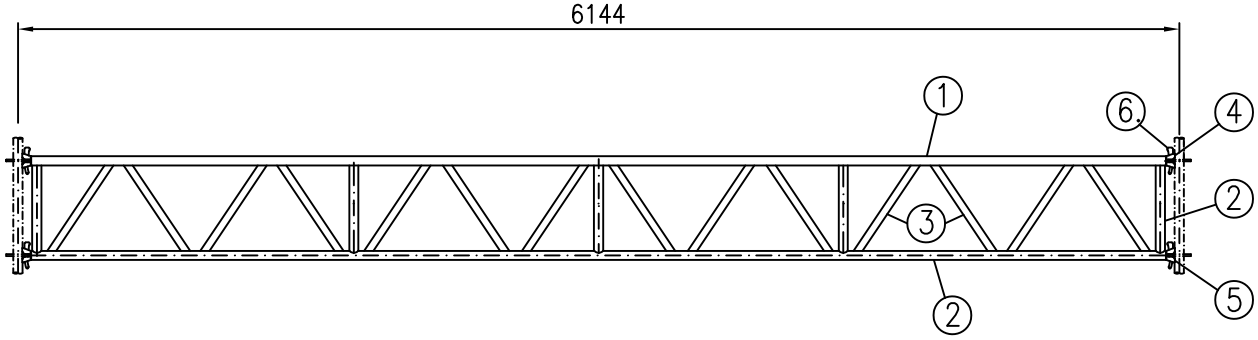
U-lattice girder, lightweight 2.07 – 3.07 x 0.5 m
in accordance with Z-8.22-939

ABM721-B063 05.2021

Annex B,
page 206







① U-profile (see Annex B, page 190)
② Tube
③ Rectangular tube
④ Head piece "Lightweight design" (see Annex B, page 167)
⑤ Head piece "Lightweight design" (see Annex B, page 166)
⑥ Wedge "Lightweight design" (see Annex B, page 170)
⑦ Marking

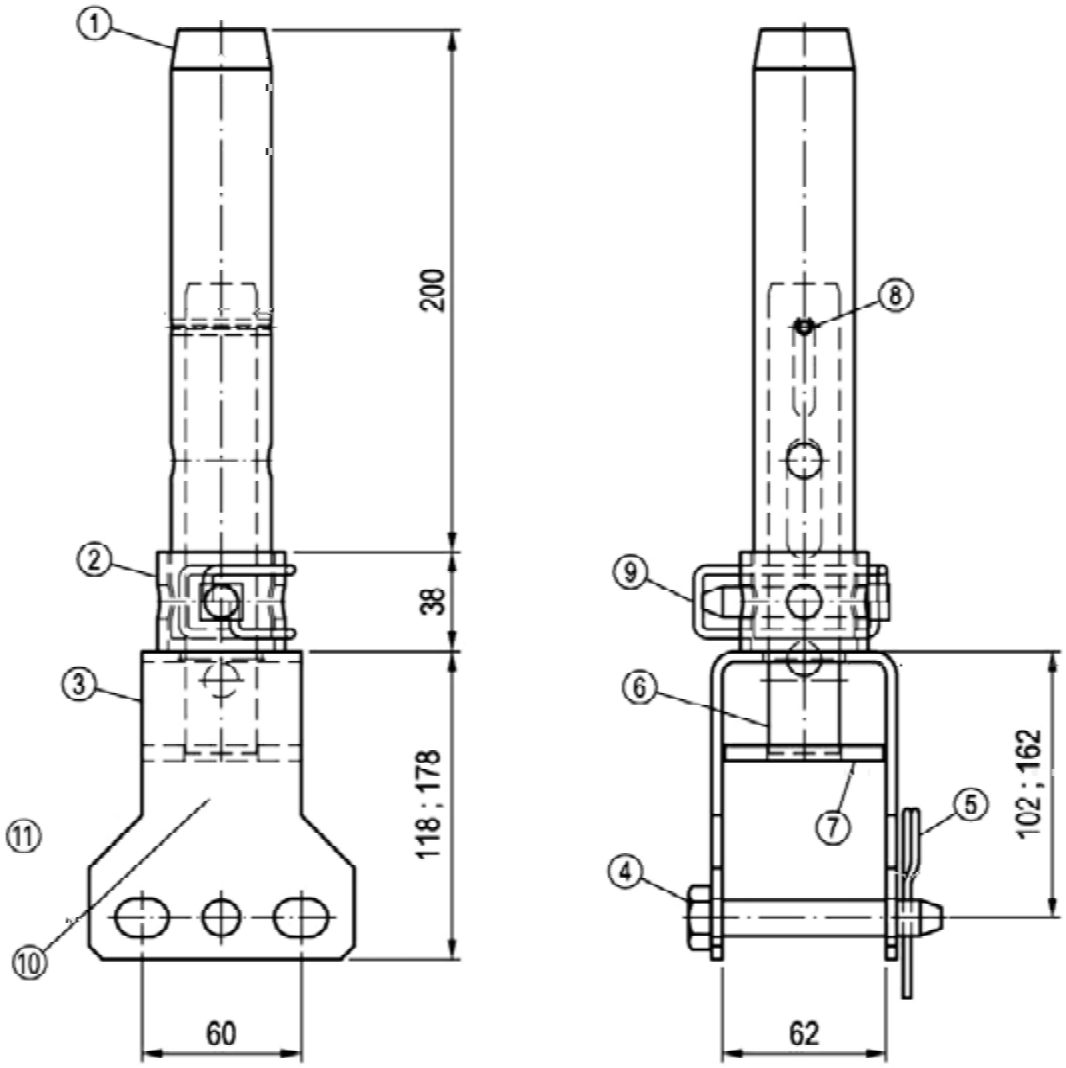
Dimens. [m]	Weight [kg]
4.14	40.0
5.14	51.2
6.14	60.5

ALBLITZ MODUL

U-lattice girder, lightweight 4.14 – 6.14 x 0.5 m
in accordance with Z-8.22-939

ABM721-B064 05.2021

Annex B,
page 207



① Tube connector
② Tube
③ U-bracket
④ Bolt
⑤ Locking pin
⑥ Tube (inner face)
⑦ Plate
⑧ Spring pin
⑨ Tube linchpin
⑩ Marking
⑪ Figure does not show bolt and locking pin!

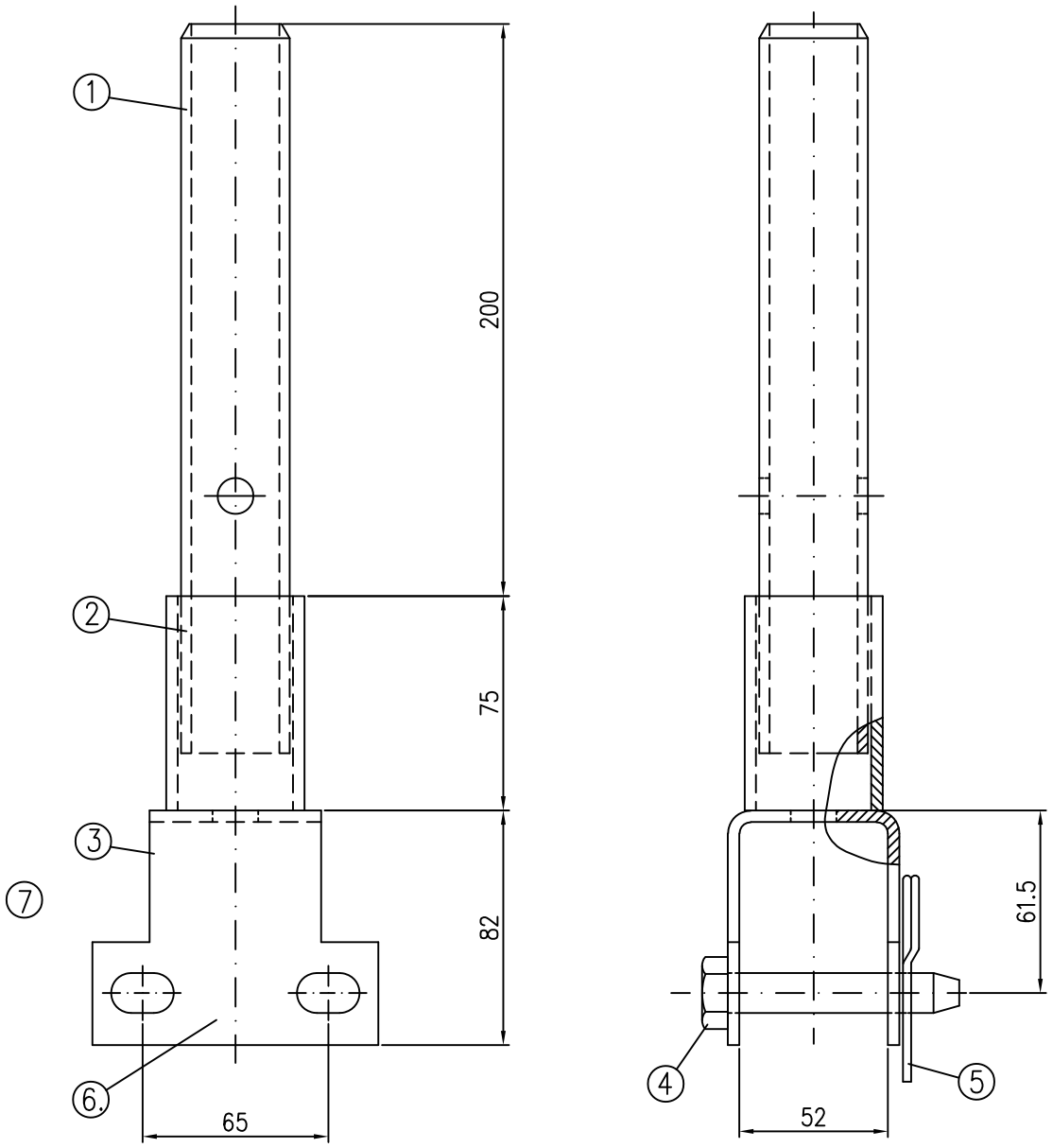
Weight [kg]
2.1

ALBLITZ MODUL

Plug-in tube connector for U-profile
in accordance with Z-8.22-939

ABM721-B065 05.2021

Annex B,
page 208



① Tube connector
② Tube
③ U–bracket
④ Bolt
⑤ Locking pin
⑥ Marking
⑦ Figure does not show bolt and locking pin!

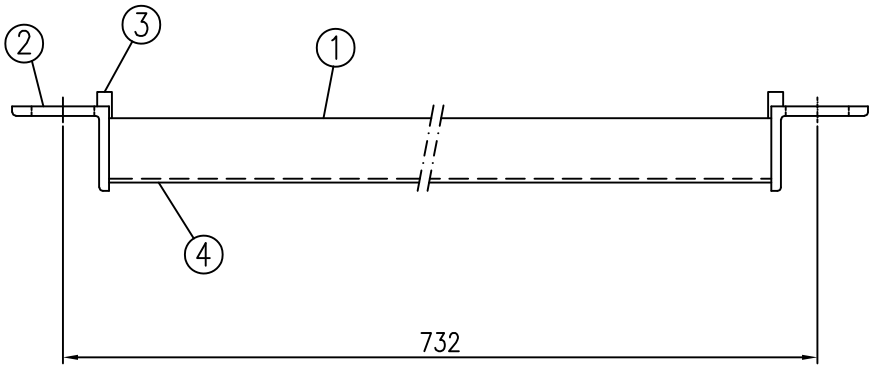
Weight [kg]
1.8

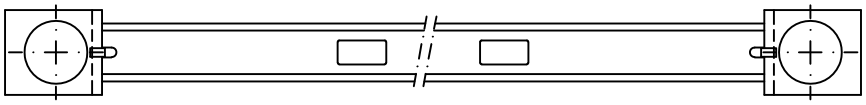
ALBLITZ MODUL

Tube connector for lattice girder
in accordance with Z–8.22–939

ABM710–B042 05.2021

Annex B,
page 209





① U-profile (see Annex A, page 190)
② Angle
③ Steel-flat
④ Marking

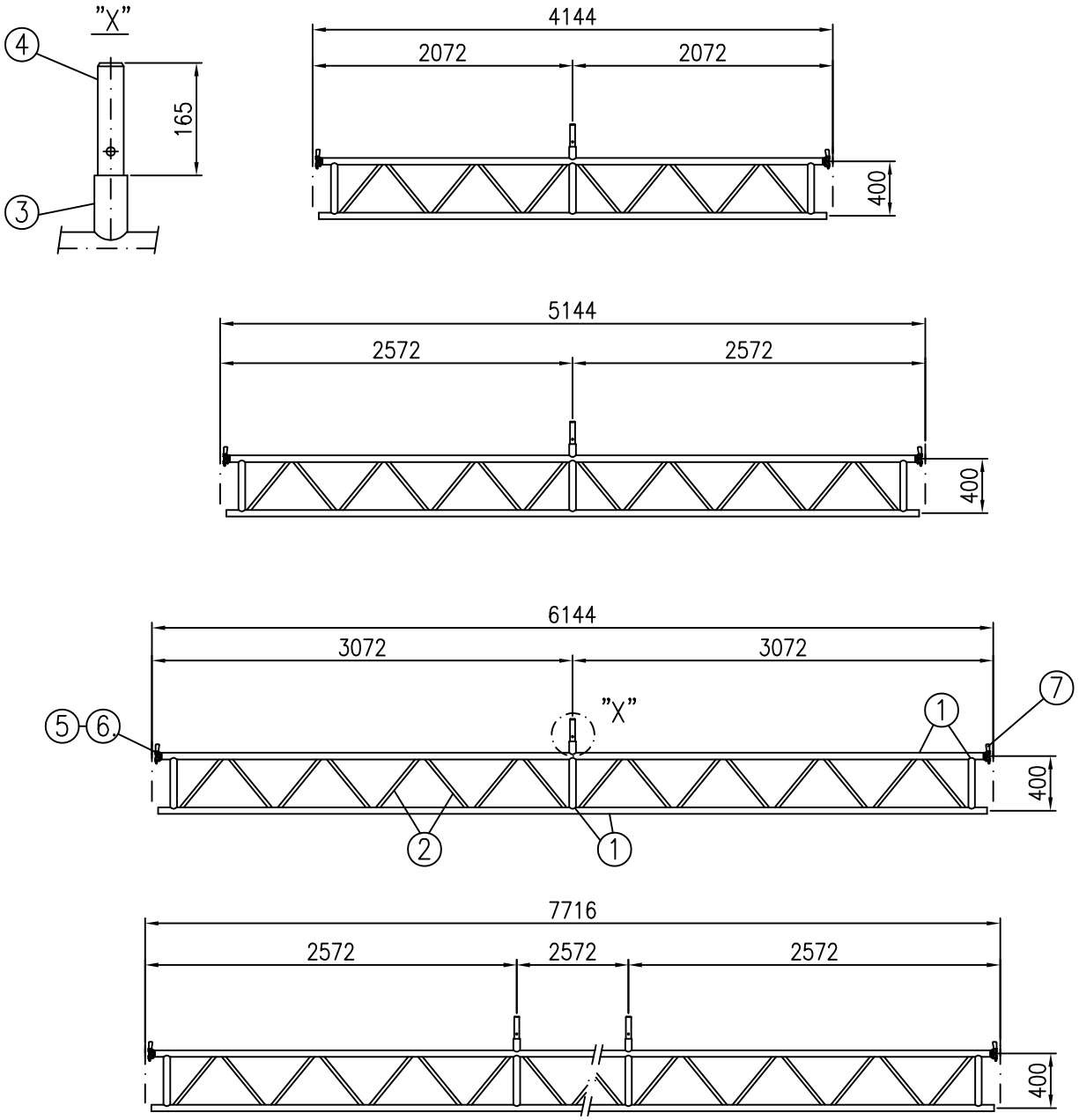
Weight [kg]
3.2

ALBLITZ MODUL

U-lattice girder ledger, lightweight 0.73 m
in accordance with Z-8.22-939

ABM721-A067 05.2021

Annex B,
page 210



① Tube
② Rectangular tube
③ Tube
④ Tube connector
⑤ Head piece "Lightweight design" (see Annex B, page 166)
⑥ Wedge "Lightweight design" (see Annex B, page 170)
⑦ Marking

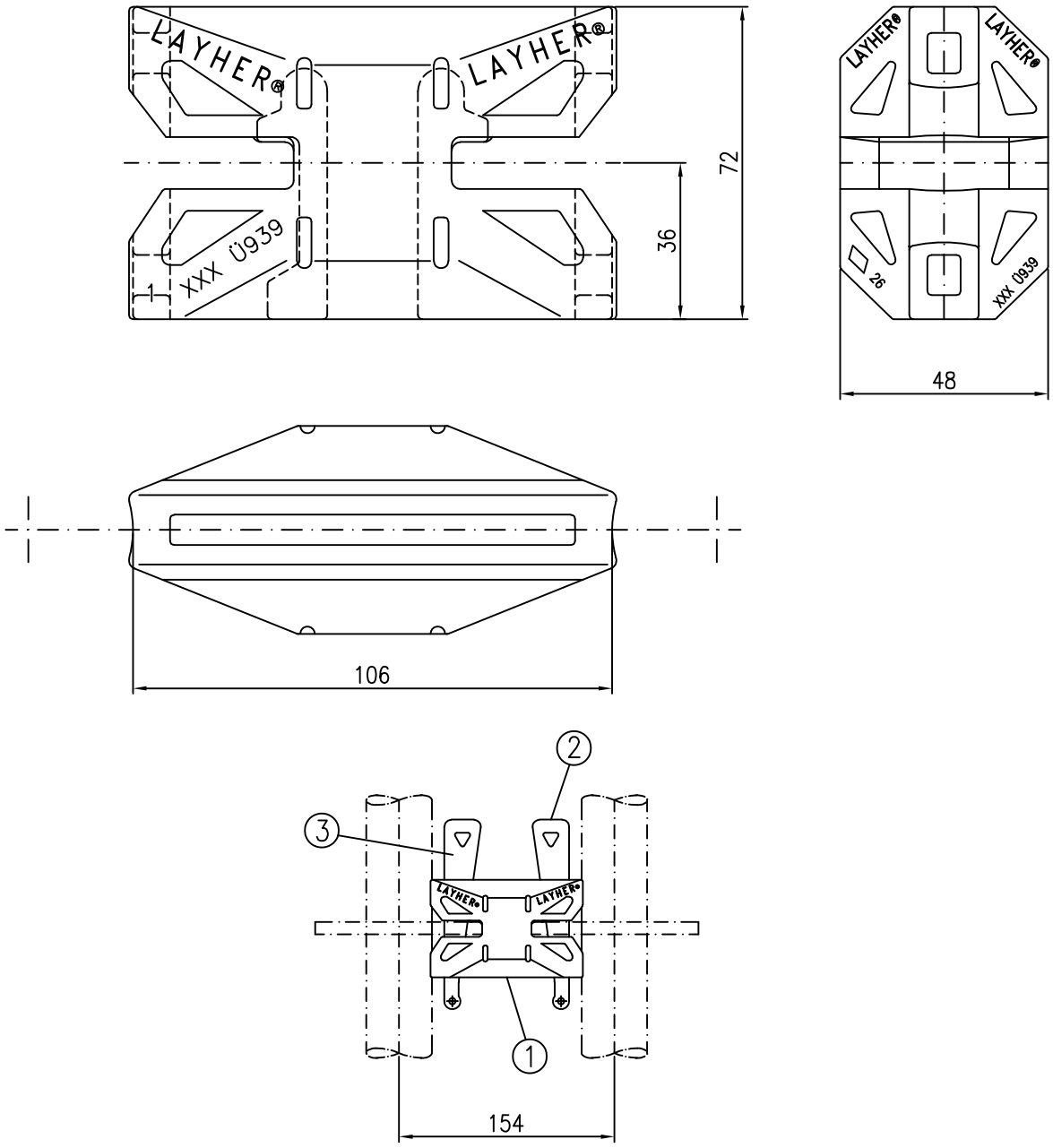
Dimens. [m]	Weight [kg]
4.14	38.1
5.14	47.3
6.14	56.5
7.71	70.7

ALBLITZ MODUL

O-lattice girder 4.14 – 7.71 x 0.4 m "Lightweight design"
in accordance with Z-8.22-939

ABM721-B068 02.2023

Annex B,
page 211



① Wedge head, double
② Wedge "Lightweight design" (see Annex B, page 170)
③ Marking

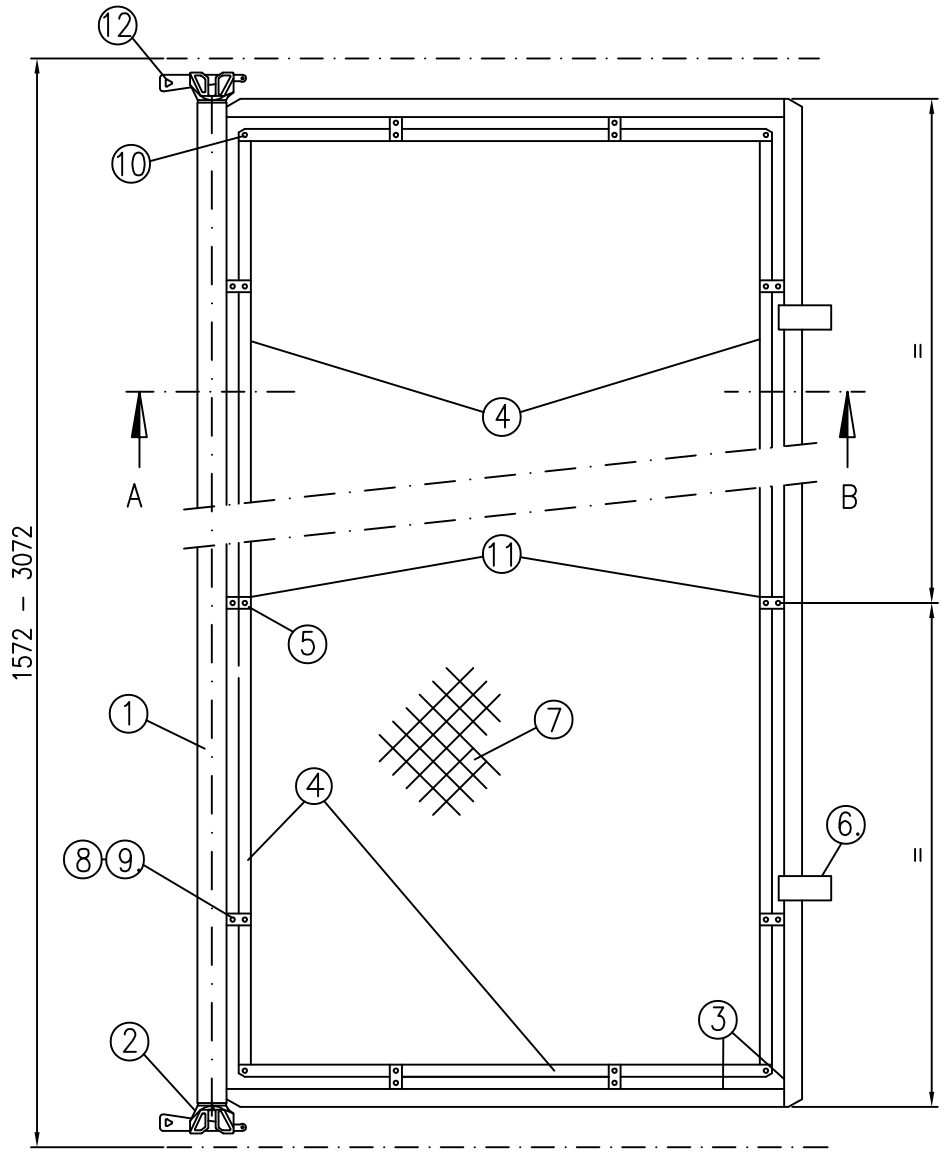
Weight [kg]
1.2

ALBLITZ MODUL

Double wedge head coupler "Lightweight design"
in accordance with Z-8.22-939

ABM721-B069 05.2021

Annex B,
page 212



① Tube
② Head piece + Wedge "Lightweight design" (see Annex B, pages 166 + 170)
③ Rectangular tube
④ Safety meshguard rod
⑤ Mount plate
⑥ Holding bracket
⑦ Wire mesh
⑧ Hexagon bolt
⑨ Hexagon nut
⑩ Stainless steel–blind rivet
⑪ no middle plate at 1.57 m
⑫ Marking

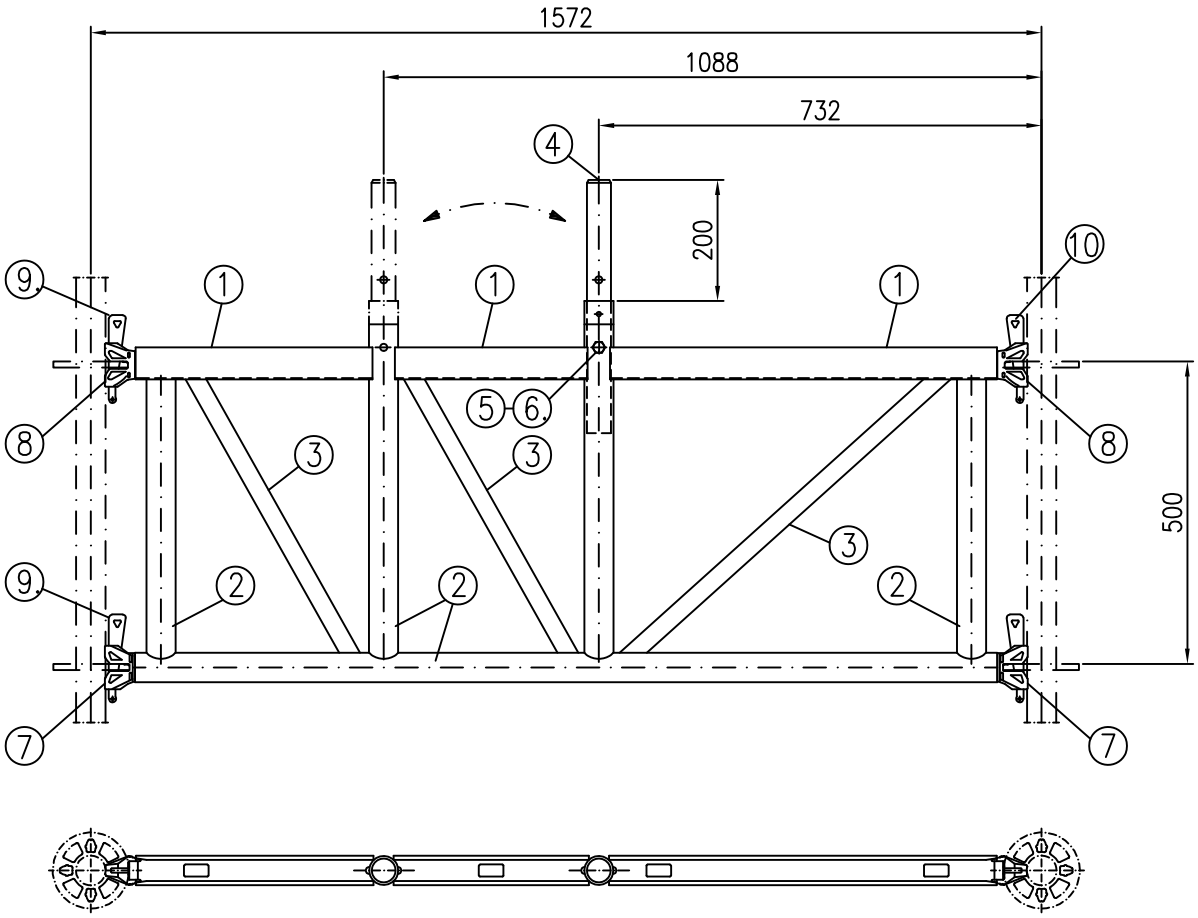
Dimens. [m]	Weight [kg]
1.57	15.9
2.07	18.6
2.57	21.9
3.07	25.0

ALBLITZ MODUL

Side safety meshguard, lightweight 1.57 – 3.07 m
in accordance with Z–8.22–939

ABM721–B070 05.2021

Annex B,
page 213



①	U–profile	(see Annex B, page 190)
②	Tube	
③	Rectangular tube	
④	Tube connector	
⑤	Hexagon bolt	
⑥	Hexagon nut	
⑦	Head piece "Lightweight design"	(see Annex B, page 166)
⑧	Head piece "Lightweight design"	(see Annex B, page 167)
⑨	Wedge "Lightweight design"	(see Annex B, page 170)
⑩	Marking	

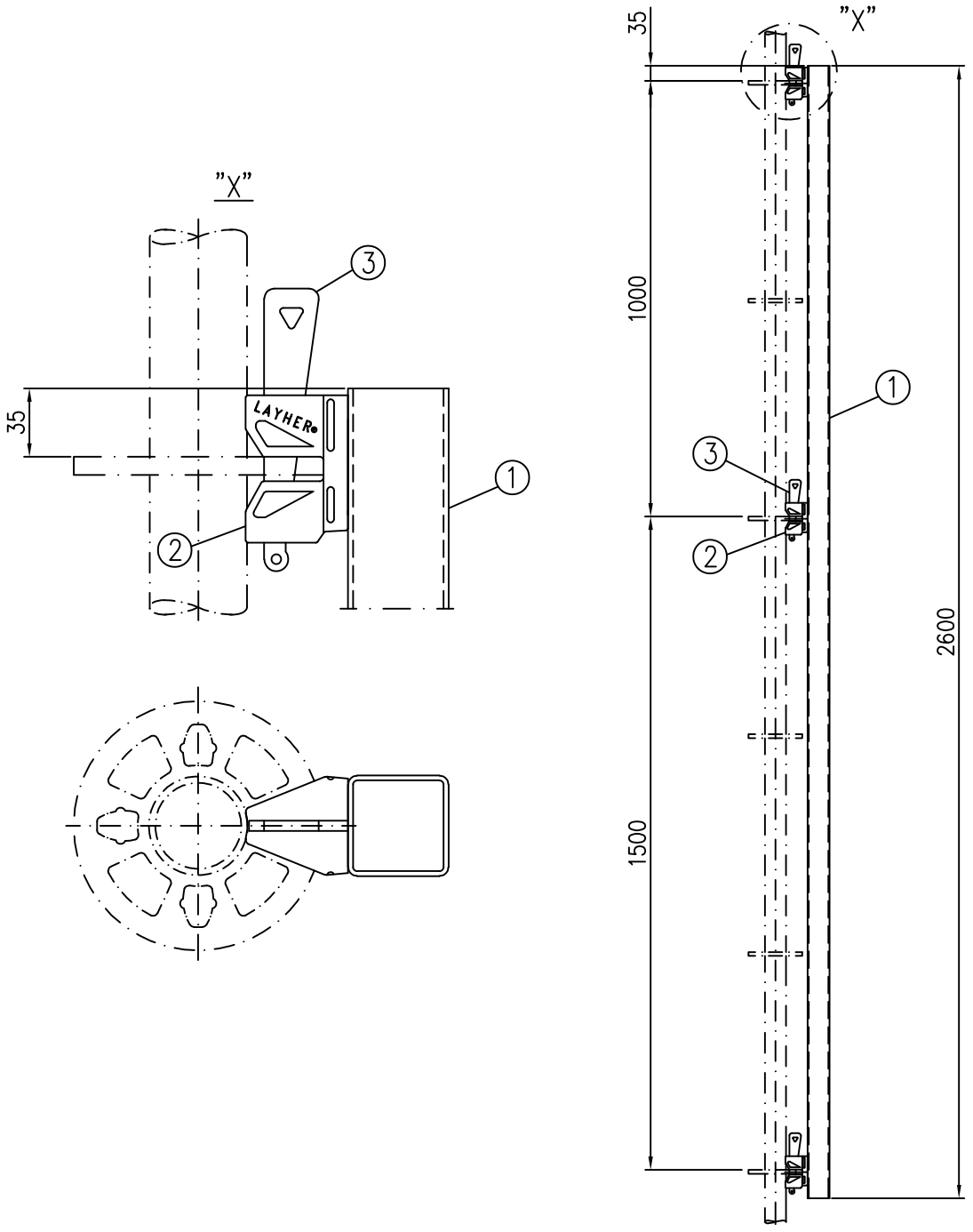
Weight [kg]
20.9

ALBLITZ MODUL

U–passageway girder, lightweight 1.57 m
in accordance with Z–8.22–939

ABM721–B071 05.2021

Annex B,
page 214



① Square tube
② Head piece "Lightweight design" (see Annex B, page 168)
③ Wedge "Lightweight design" (see Annex B, page 170)

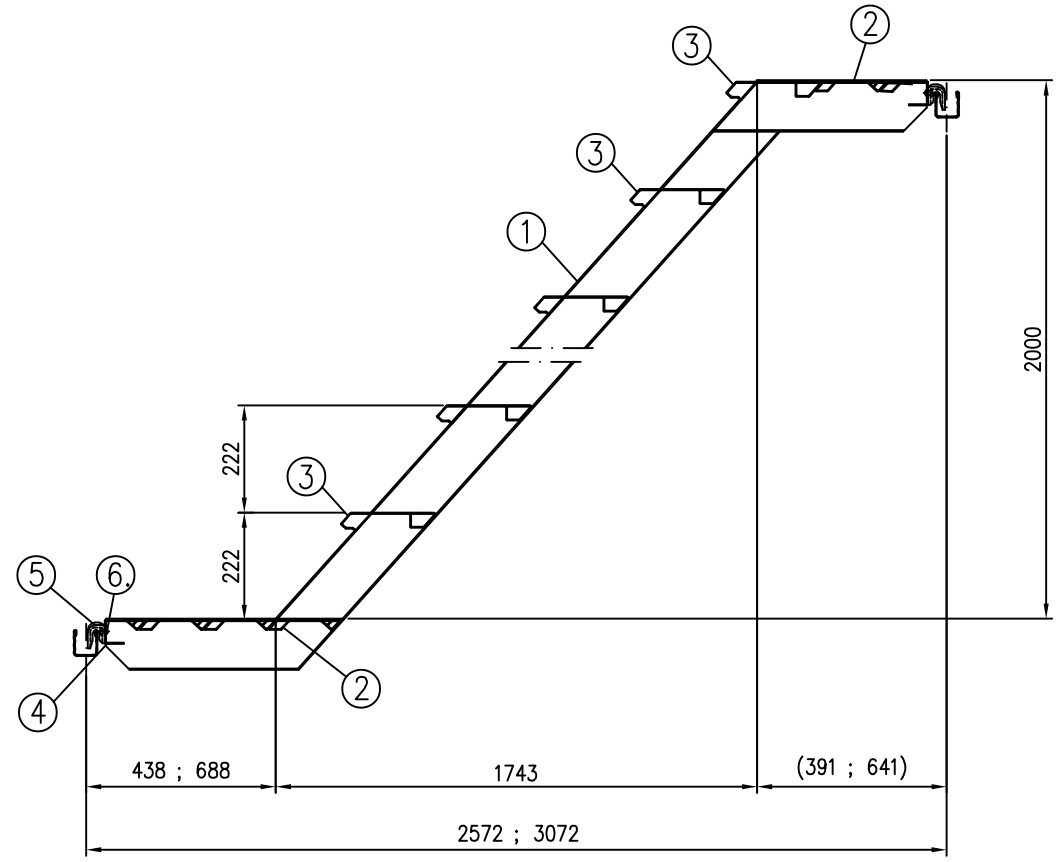
Weight [kg]
11.6

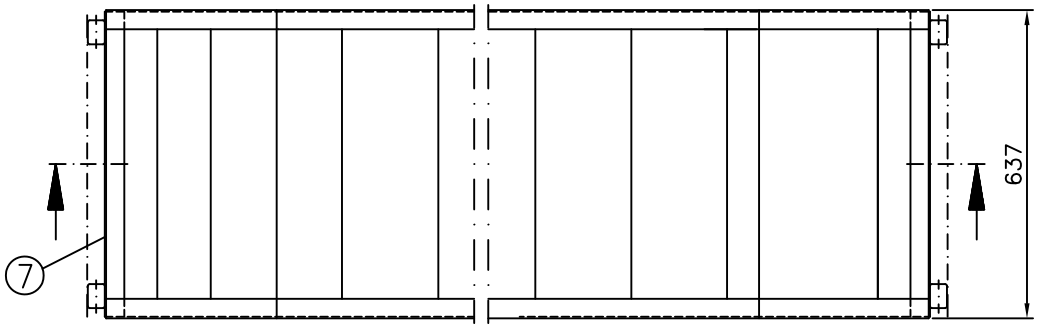
ALBLITZ MODUL

Reinforcing post 2.6 m "Lightweight design"
in accordance with Z-8.22-939

ABM721-B072 05.2021

Annex B,
page 215





① Komfort stairway stringer
② Stairway step
③ Komfort stairway step
④ U–head piece
⑤ Claw
⑥ Flat–head rivet
⑦ Marking

Detailed view stairway step; Stairway stringer with suspension see Annex B, page 217

Maximum load capacity: 2.0 kN/m²

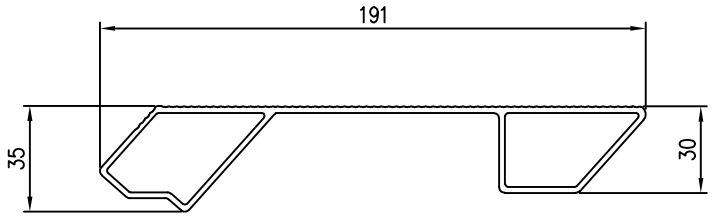
Dimens. [m]	Weight [kg]
2.57	27.0
3.07	32.0

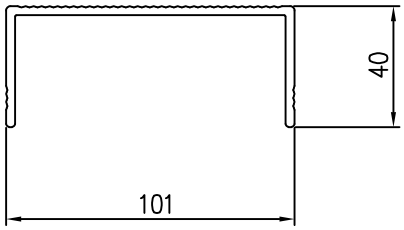
ALBLITZ MODUL

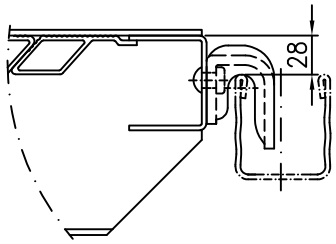
U–comfort stairway 2.57; 3.07 x 2.00 x 0.64 m
in accordance with Z–8.22–939

ABS720–A106_ABM 05.2021

Annex B,
page 216

① 

② 

③ 

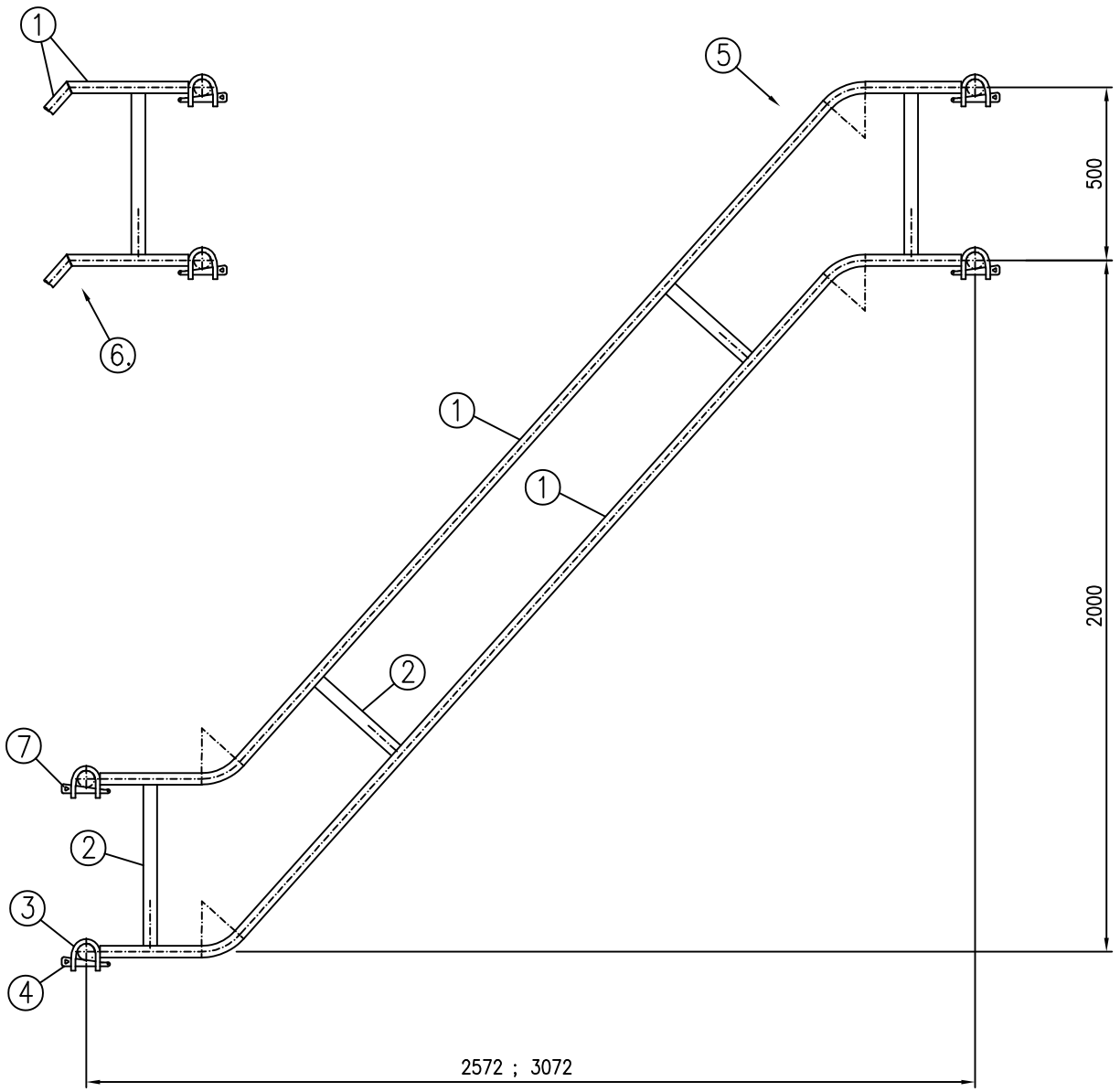
① Detailed view Komfort stairway step
② Detailed view Komfort stairway stringer
③ Detailed view U-suspension

ALBLITZ MODUL

Detailed view Komfort stairway
in accordance with Z-8.22-939

ABM721-B074 05.2021

Annex B,
page 217



① Tube
② Rectangular tube
③ Locking–U
④ Wedge "Lightweight design" (see Annex B, page 170)
"K2000+ design" (see Annex B, page 176)
⑤ Provisions for execution crooked
⑥ Provisions for execution welded
⑦ Marking

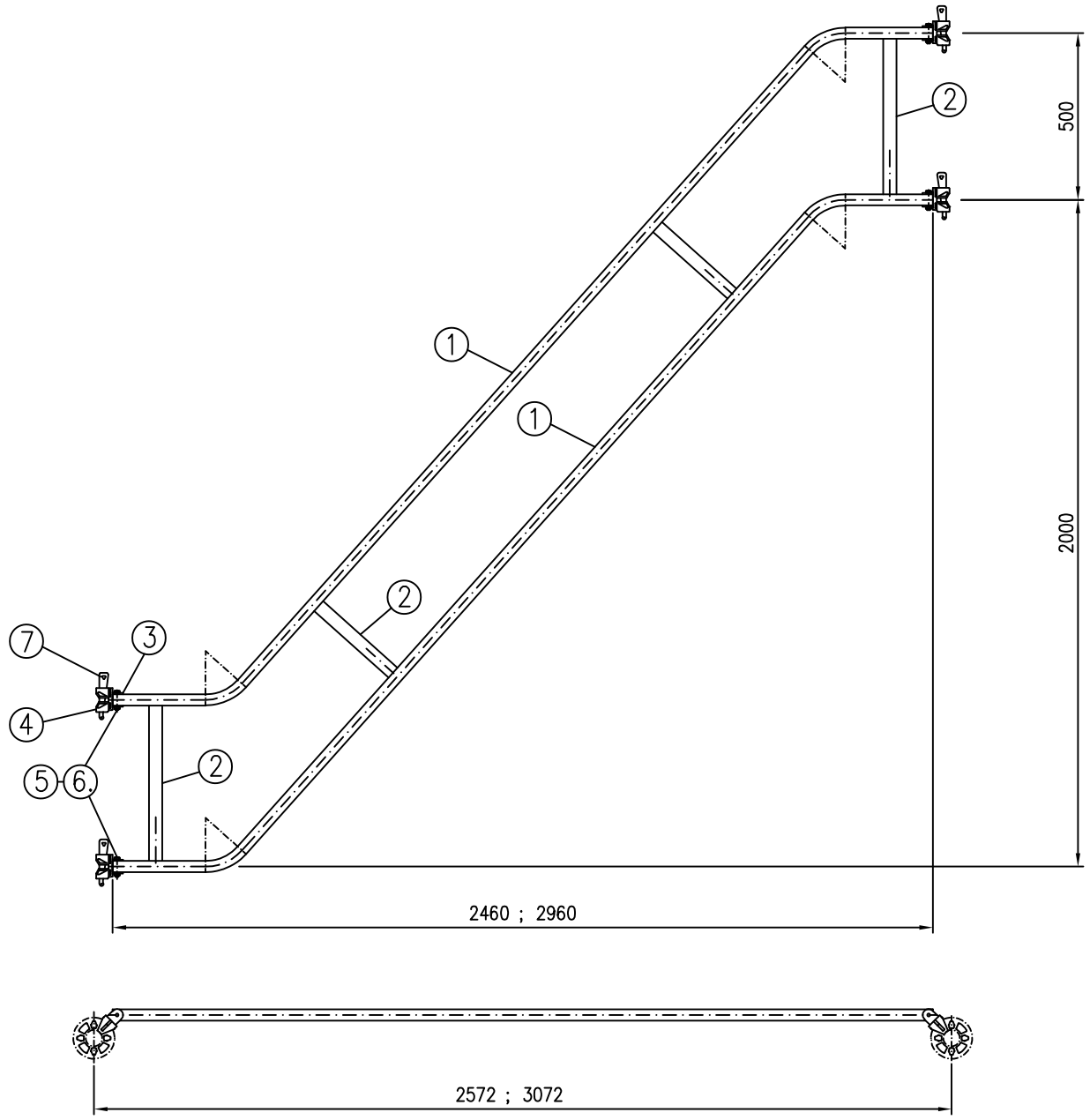
Dimens. [m]	Weight [kg]
2.57	18.1
3.07	20.1

ALBLITZ MODUL

Stair guardrail 2.57; 3.07 m
in accordance with Z–8.22–939

ABM710–B073 05.2021

Annex B,
page 218



① Tube
② Rectangular tube
③ Lug
④ Head piece + Wedge "Lightweight design" (see Annex B, page 168 + 170)
⑤ Hexagon bolt
⑥ Locknut
⑦ Marking

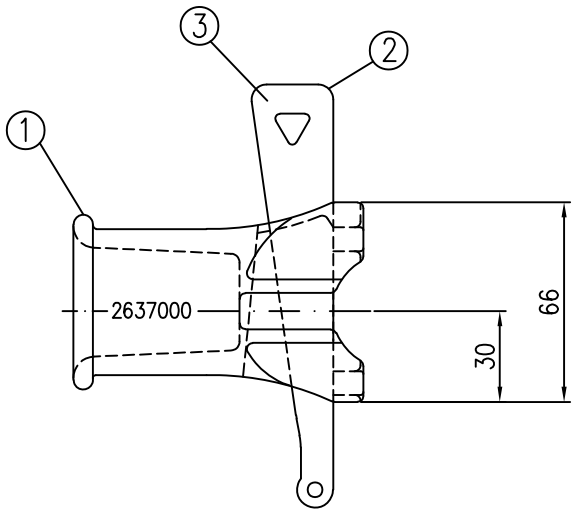
Dimens. [m]	Weight [kg]
2.57	18.0
3.07	21.0

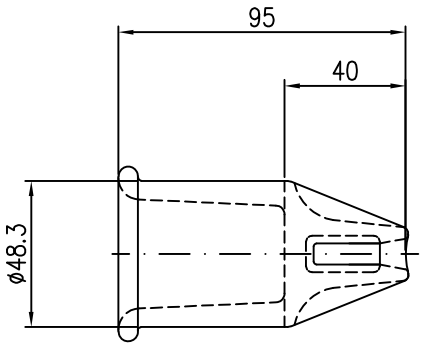
ALBLITZ MODUL

KK stair guardrail 2.57 m; 3.07 m "Lightweight design"
in accordance with Z-8.22-939

ABM721-B076 05.2021

Annex B,
page 219





① Head piece
② Wedge "Lightweight design" (see Annex B, page 170)
Wedge "K2000+ design" (see Annex B, page 176)
③ Marking

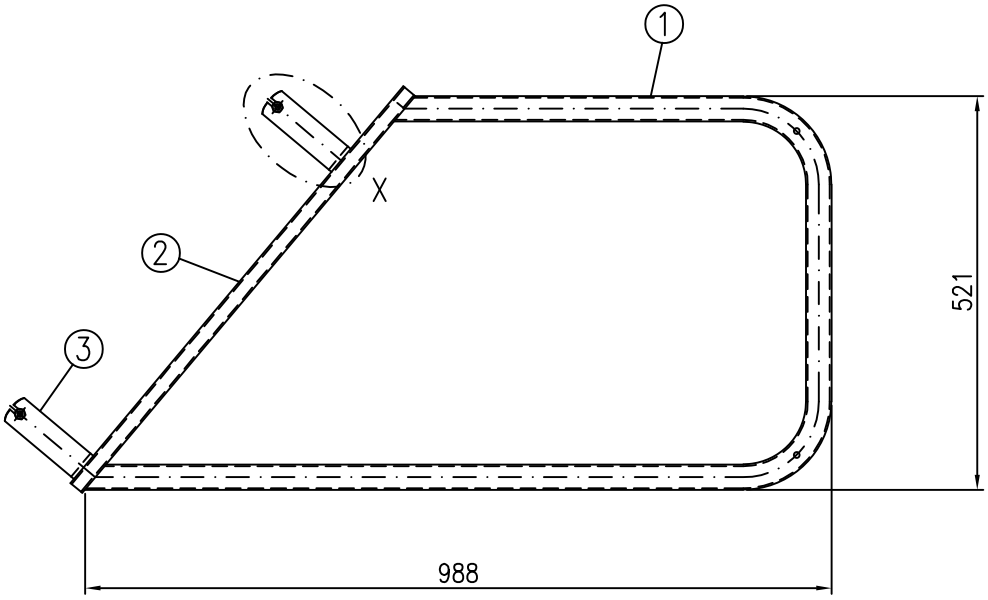
Weight [kg]
0.7

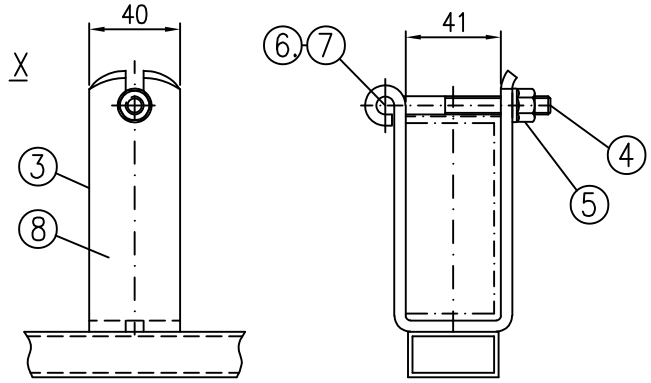
ALBLITZ MODUL

Stair guardrail holder
in accordance with Z-8.22-939

ABM710-B074 05.2017

Annex B,
page 220





① Tube
② Rectangular tube
③ U–bracket
④ Eyebolt
⑤ Collar nut
⑥ Hexagon bolt
⑦ Locknut
⑧ Marking

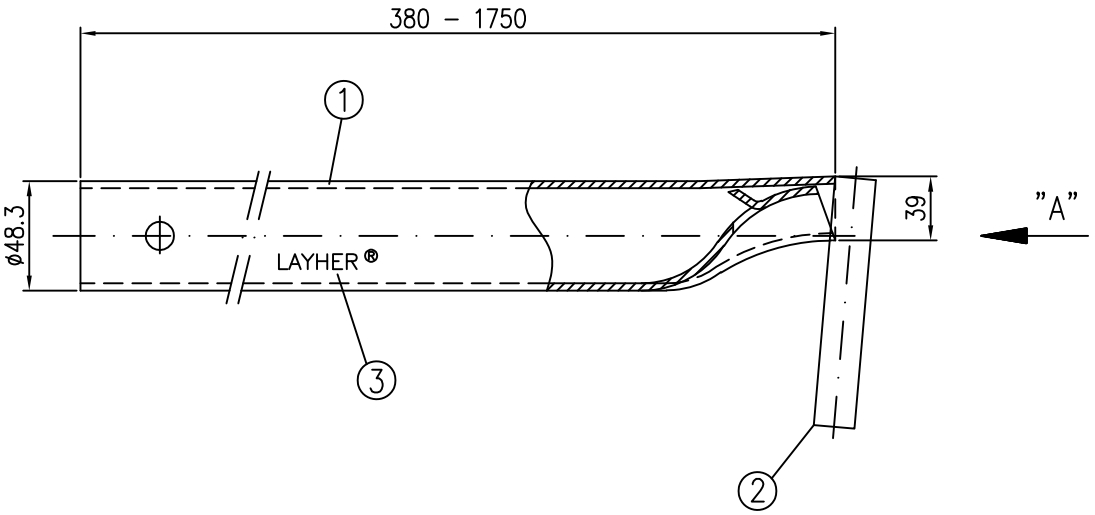
Weight [kg]
6.2

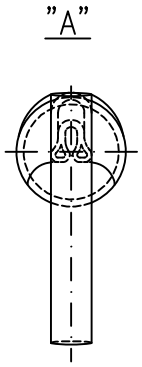
ALBLITZ MODUL

Stairway guardrail 1.0 x 0.5 m
in accordance with Z–8.1–16.2

ABS717–A207_ABM 05.2021

Annex B,
page 221





① Tube
② Hook
③ Marking

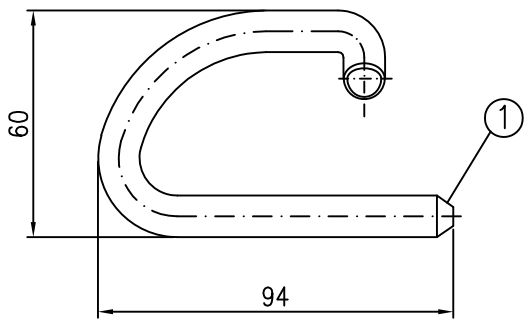
Dimens. [m]	Weight [kg]
0.38	1.6
0.69	2.8
0.95	3.7
1.45	5.7
1.75	5.8

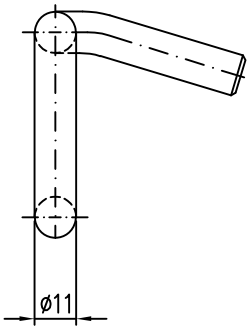
ALBLITZ MODUL

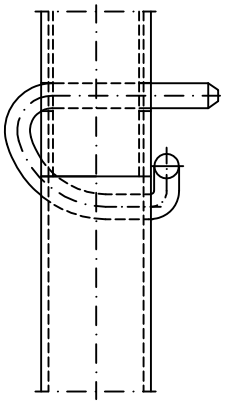
Scaffold retainer / wall tie 0.38 – 1.75 m
in accordance with Z–8.1–16.2

ABS710–A048_ABM 05.2021

Annex B,
page 222







① Locking pin

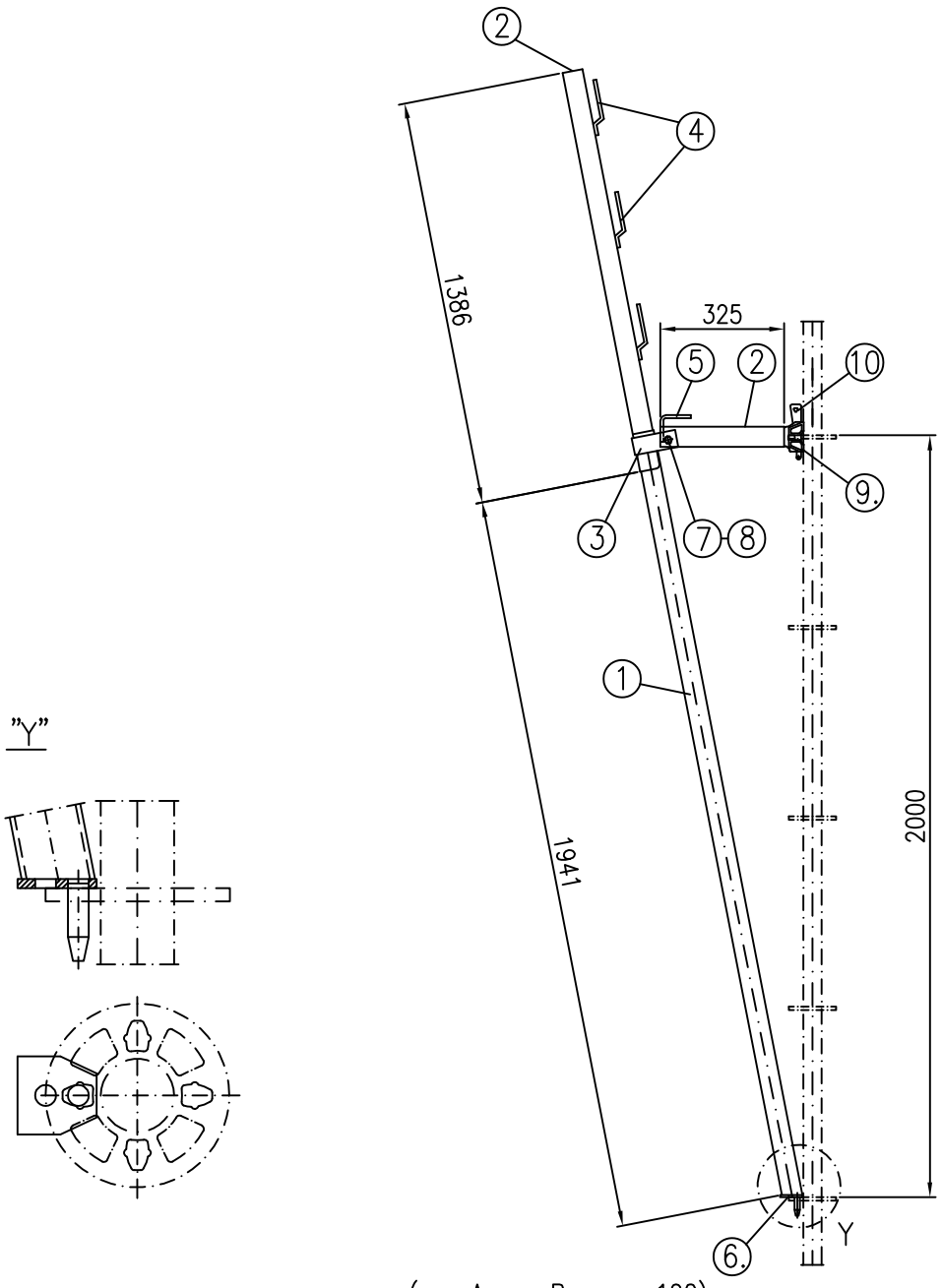
Weight [kg]
0.2

ALBLITZ MODUL

Locking pin, red ø 11 mm
in accordance with Z-8.1-16.2

Annex B,
page 223

ABS710-A009_ABM 05.2021



(see Annex B, page 190)

① Tube
② U-profile
③ U-bracket
④ Lug
⑤ Angle
⑥ Plate with bolts
⑦ Hexagon bolt
⑧ Locknut
⑨ Head piece + Wedge "Lightweight design" (see Annex B, pages 167 + 170)
⑩ Marking

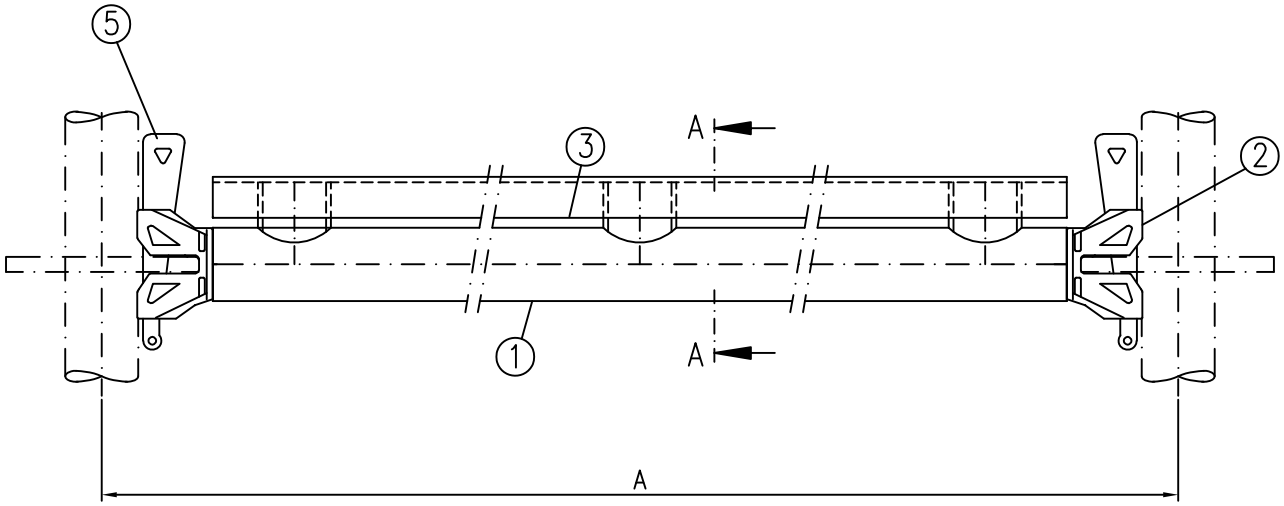
Weight [kg]
16.8

ALBLITZ MODUL

U-protective roof bracket T7 "Lightweight design"
in accordance with Z-8.22-939

ABM721-B081 05.2021

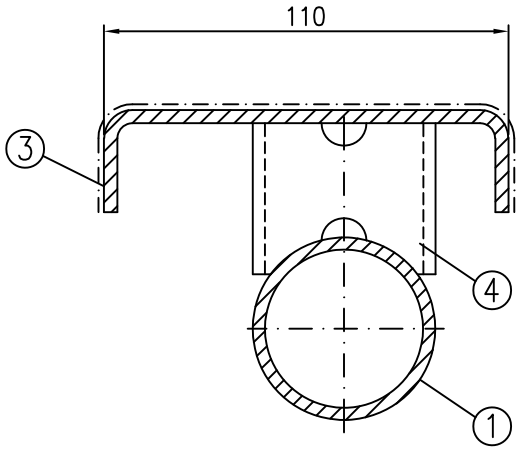
Annex B,
page 224



Dimension A [mm]	For use up to load class	Maximum allowable p *) [kN/m²]
732	6	10.0
1088		
1286		
1400		
1572		
2072		
2572		
3072		

*) acting on the entire sheet width

A–A



① Tube
② Head piece + Wedge "Lightweight design" (see Annex B, pages 166 + 170)
③ Bulb plate
④ Spacer tube
⑤ Marking

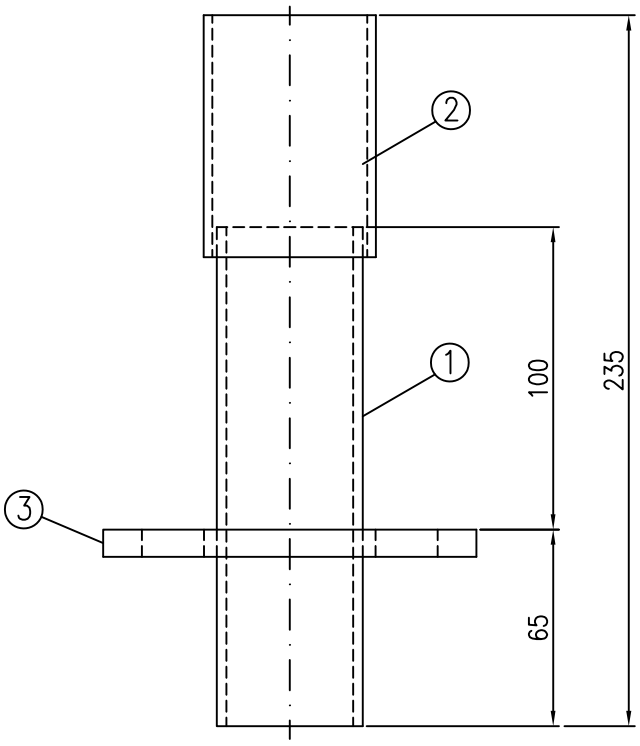
Dimens. [m]	Weight [kg]
0.73	5.2
1.09	7.6
1.29	8.9
1.40	9.7
1.57	10.8
2.07	14.2
2.57	17.6

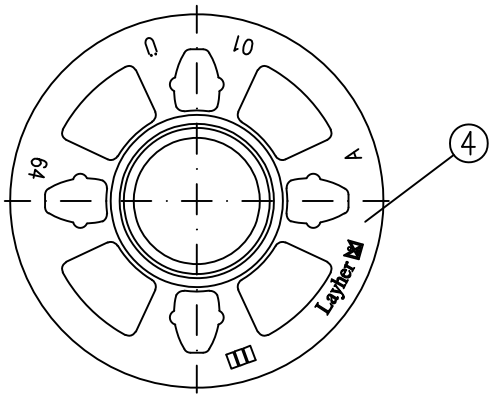
ALBLITZ MODUL

U–ledger with gap cover, lightweight 0.73 – 3.07 m
in accordance with Z–8.1–939

ABM721–B082 05.2021

Annex B,
page 225





① Tube
② Tube
③ Connector disc "K2000+ design" see Annex B, page 171
④ Marking

galvanised

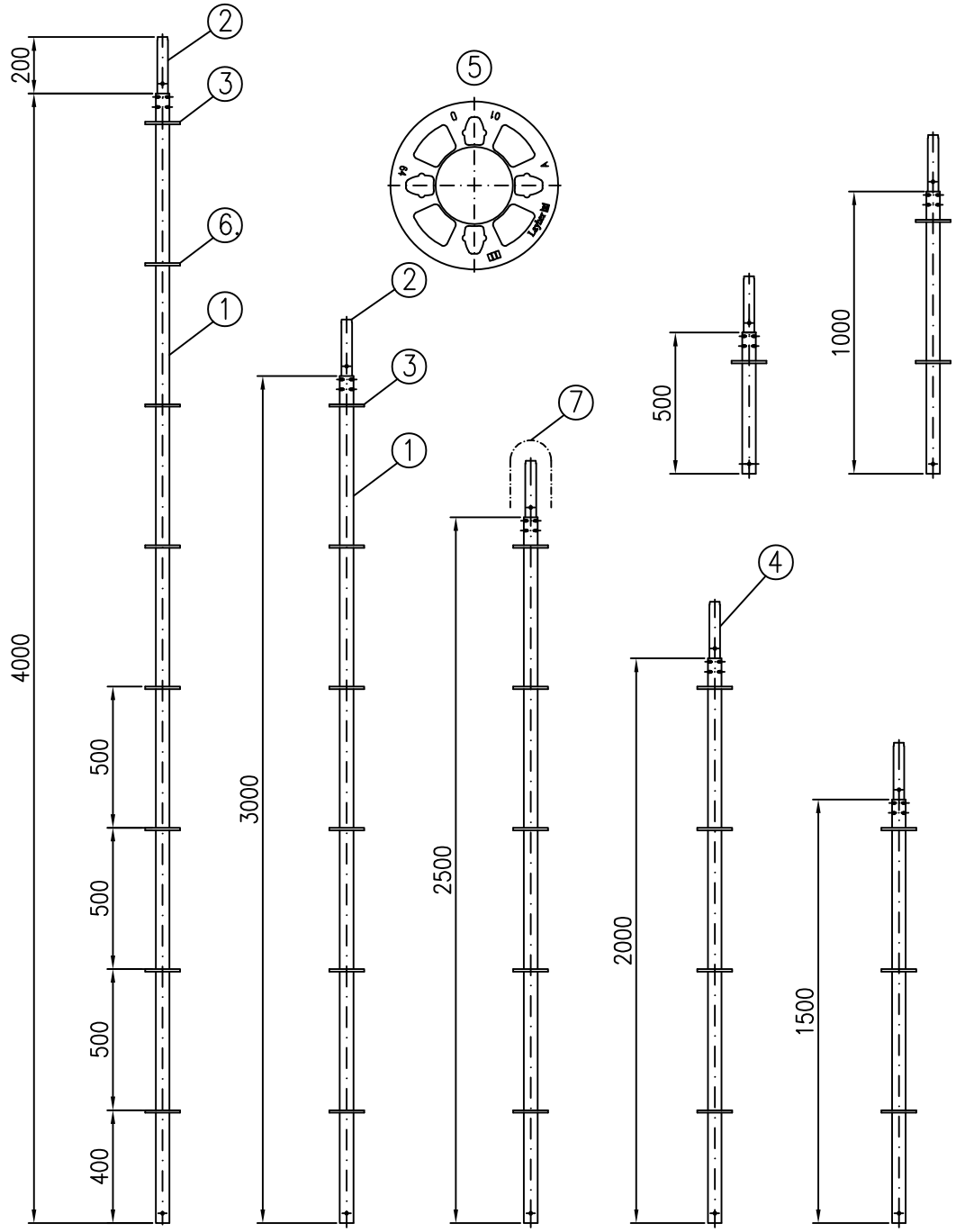
Weight [kg]
1.4

ALBLITZ MODUL

Starter piece "K2000+ design"
in accordance with Z-8.22-64

ABM710-B031 05.2021

Annex B,
page 226



see Annex B, page 171

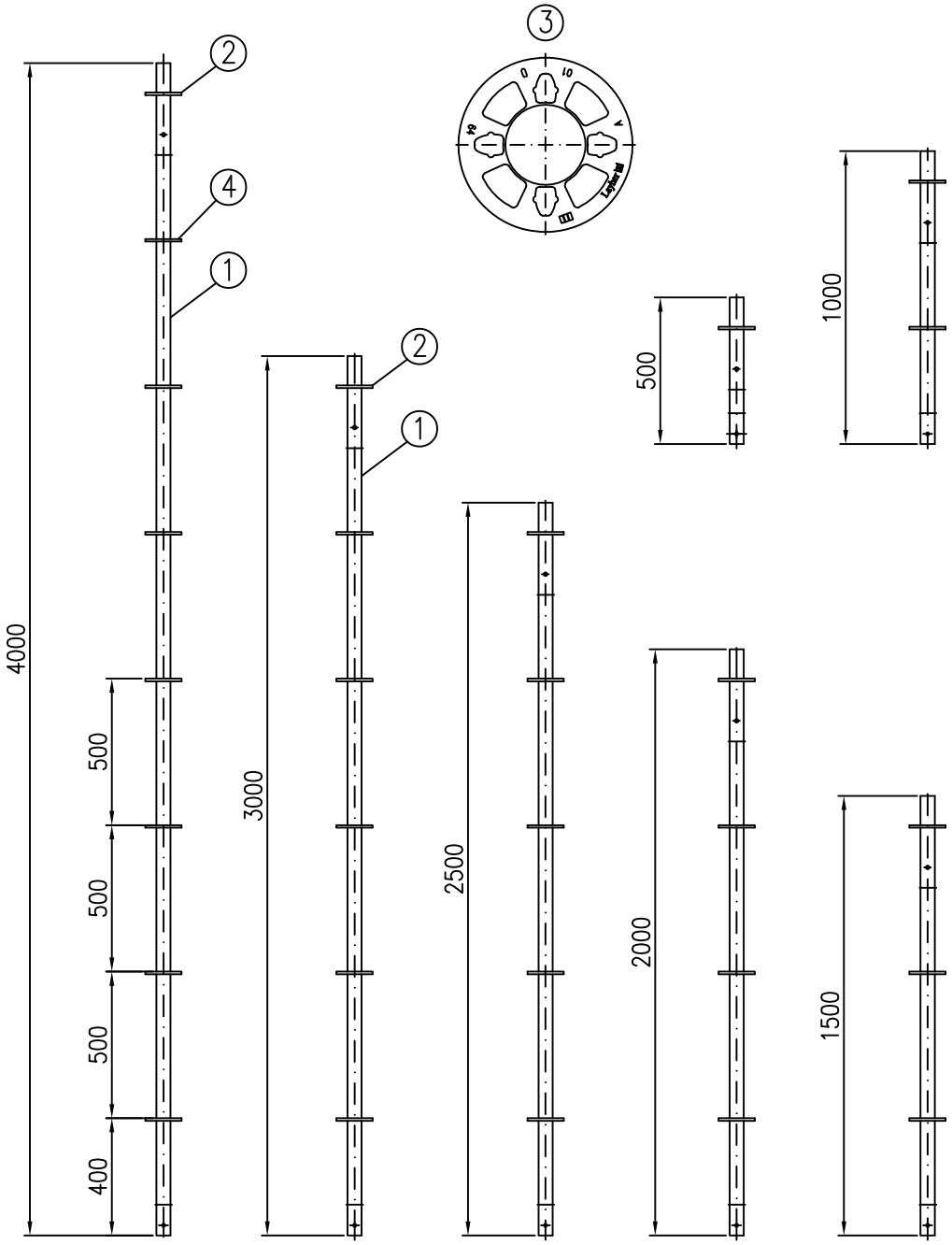
Dimens. [m]	Weight [kg]
0.50	3.2
1.00	5.5
1.50	7.8
2.00	10.1
2.50	12.4
3.00	14.6
4.00	19.2

ALBLITZ MODUL

Standard with tube connector "K2000+ design"
in accordance with Z-8.22-64

ABM710-B032 10.2023

Annex B,
page 227



① Tube
② Connector disc "K2000+ design"
③ All connector discs (rosettes) are identical!
④ Marking

see Annex B, page 171

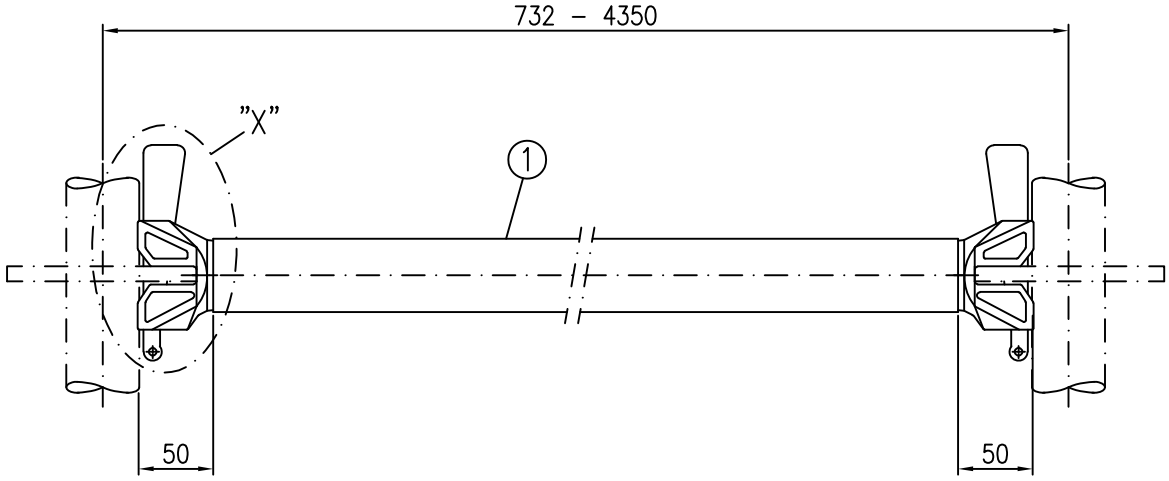
Dimens. [m]	Weight [kg]
0.50	2.5
1.00	4.6
1.50	6.8
2.00	9.0
2.50	11.7
3.00	13.7
4.00	18.1

ALBLITZ MODUL

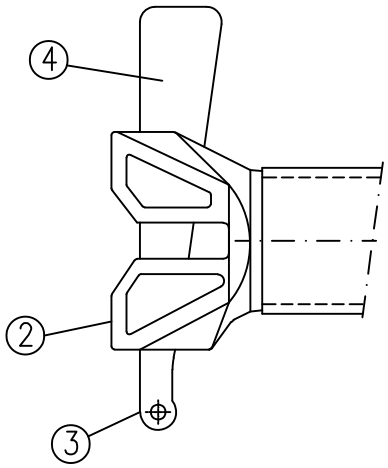
Standard without tube connector "K2000+ design"
in accordance with Z-8.22-64

ABM721-B085 05.2021

Annex B,
page 228



"X"



① Tube
② Head piece "K2000+ design" see Annex B, page 172
③ Wedge "K2000+ design" see Annex B, page 176
④ Marking

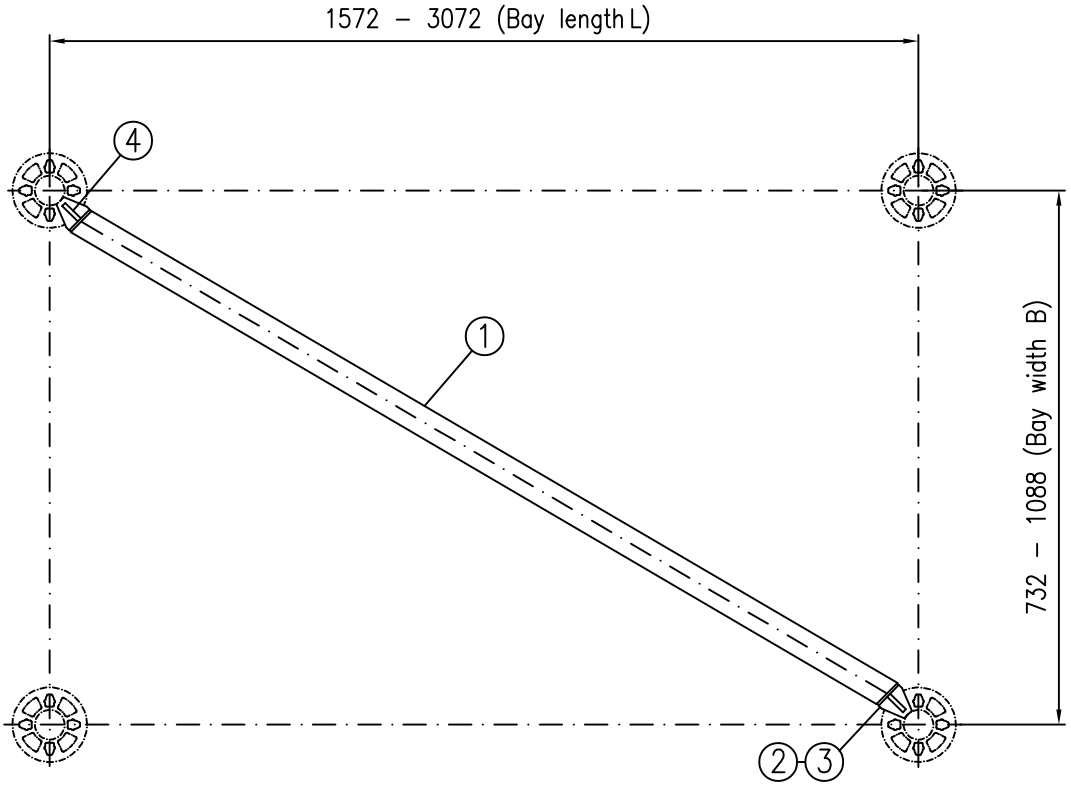
Dimens. [m]	Weight [kg]
0.73	3.2
1.09	4.4
1.57	6.1
2.07	7.9
2.57	9.6
3.07	11.5

ALBLITZ MODUL

0–ledger 0.73 – 4.35 m "K2000+ design"
in accordance with Z–8.22–64

ABM710–B033 05.2021

Annex B,
page 229



① Tube
② Head piece "K2000+ design" see Annex B, page 172
③ Wedge "K2000+ design" see Annex B, page 176
④ Marking

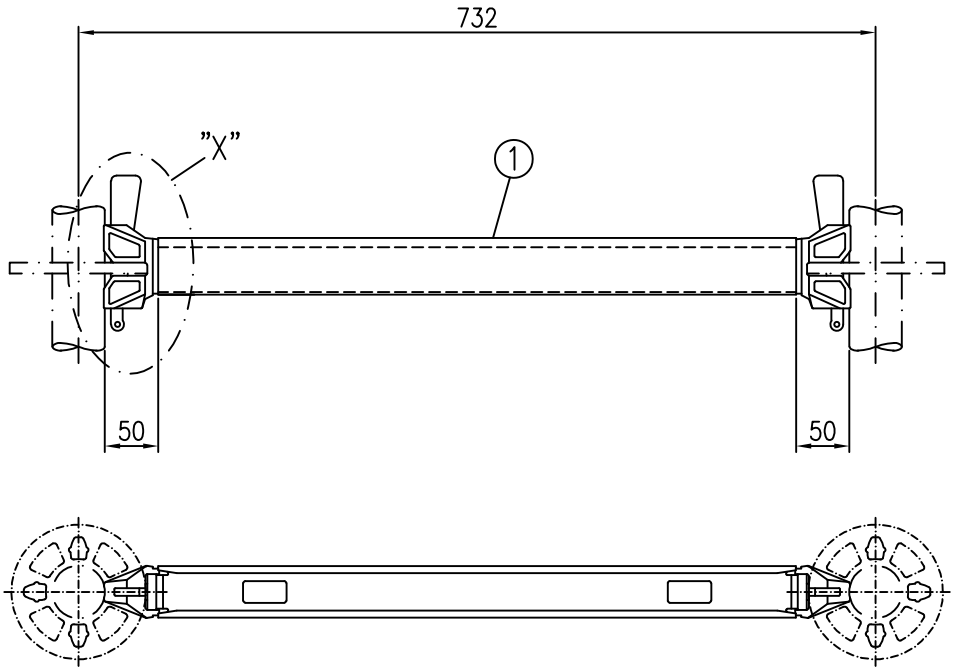
Dimension [m]	Weight [kg]
2.07 x 0.73	9.0
2.57 x 0.73	10.8
2.07 x 1.09	8.4
2.57 x 1.09	9.7

ALBLITZ MODUL

O-ledger HD "K2000+ design"
in accordance with Z-8.22-64

ABM710-B082 05.2021

Annex B,
page 230



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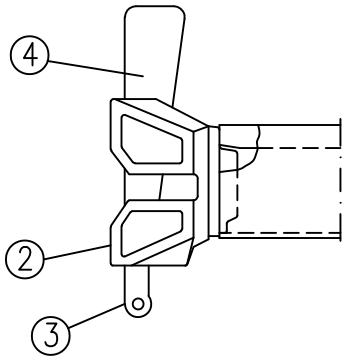


① U-profile (see Annex B, pages 234, 190)
② Head piece "K2000+ design" (see Annex B, page 173)
③ Wedge "K2000+ design" (see Annex B, page 176)
④ Marking

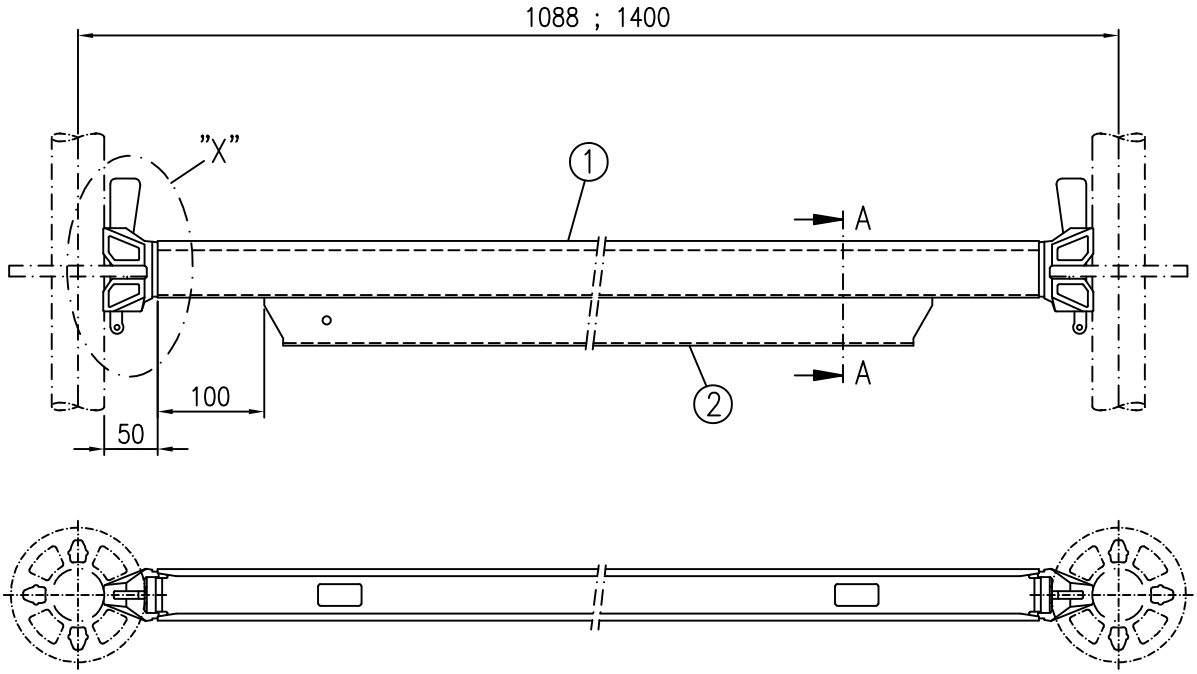
Weight [kg]
3.1

ALBLITZ MODUL

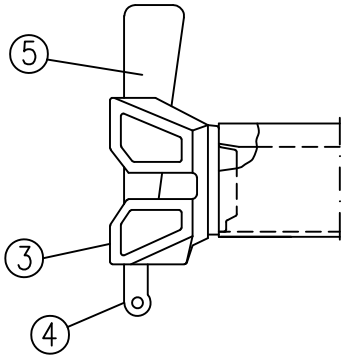
U-ledger 0.73 m "K2000+ design"
in accordance with Z-8.22-64

ABM710-B034 05.2021

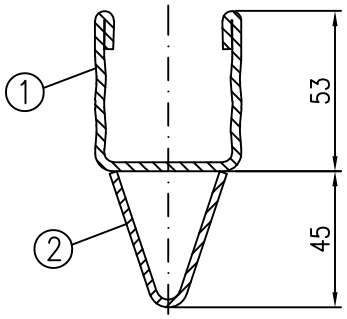
Annex B,
page 231



"X"



A–A



① U–profile (see Annex B, pages 234, 190)
② Reinforcement
③ Head piece "K2000+ design" (see Annex B, page 173)
④ Wedge "K2000+ design" (see Annex B, page 176)
⑤ Marking

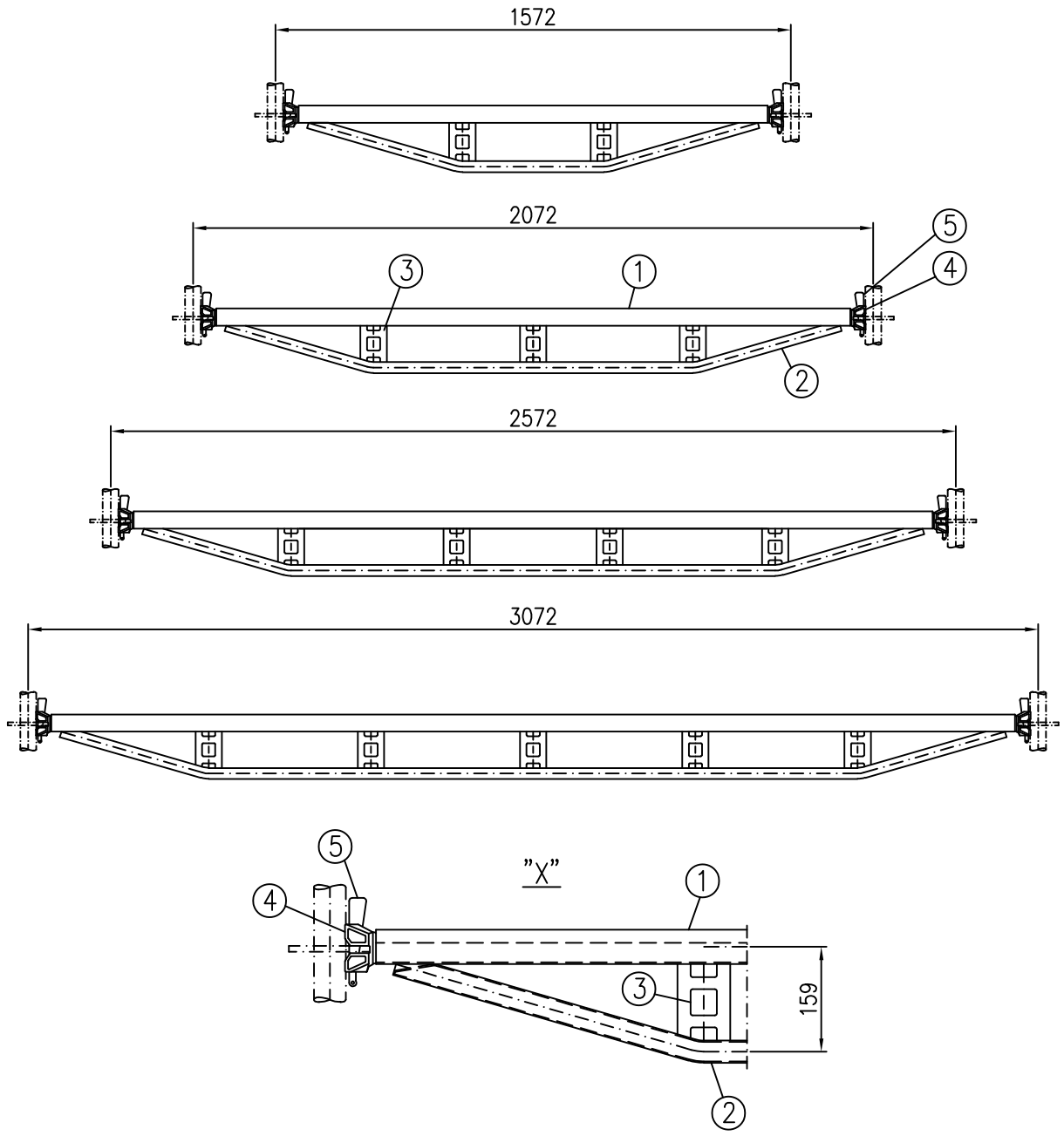
Dimens. [m]	Weight [kg]
1.09	5.7
1.40	7.5

ALBLITZ MODUL

U–ledger 1.09 – 1.40 m reinforced "K2000+ design"
in accordance with Z–8.22–64

ABM721–B089 05.2021

Annex B,
page 232



① U-profile (see Annex B, pages 234, 190)
② Tube
③ Gusset plate
④ Head piece "K2000+ design" (see Annex B, page 173)
⑤ Wedge "K2000+ design" (see Annex B, page 176)

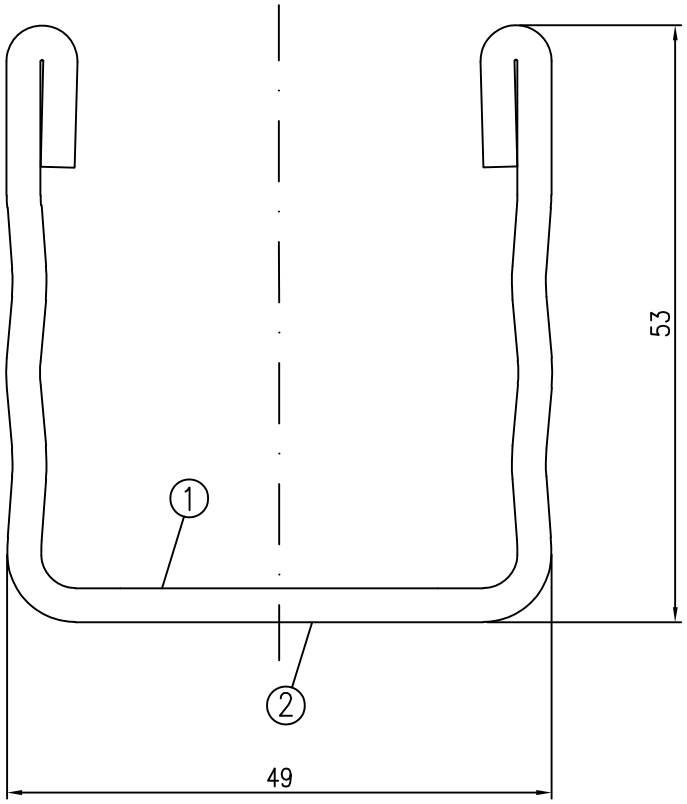
Dimens. [m]	Weight [kg]
1.57	9.4
2.07	12.1
2.57	15.2
3.07	17.6

ALBLITZ MODUL

U-double ledger 1.57 – 3.07 m "K2000+ design"
in accordance with Z-8.22-64

ABM721-B090 05.2021

Annex B,
page 233



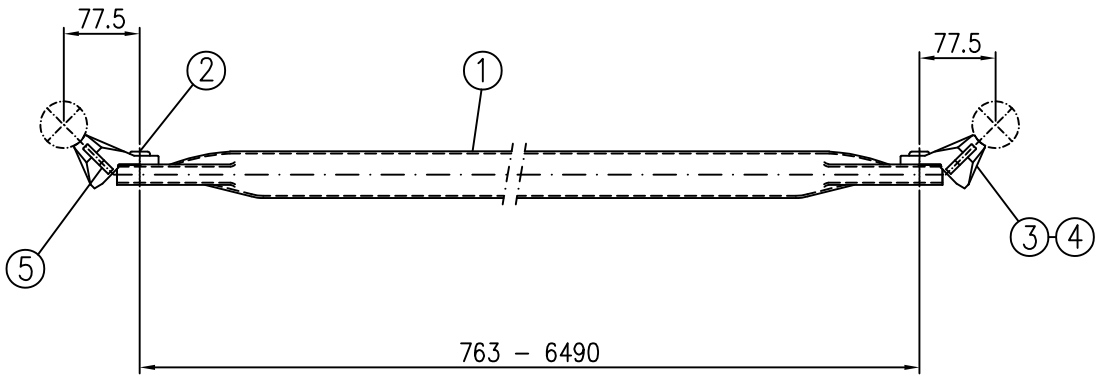
① U-profile 49 x 53 x 2.5 Material, please refer to component drawings
② Marking

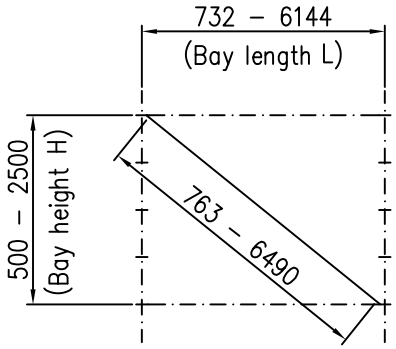
ALBLITZ MODUL

U-profile 53
in accordance with Z-8.1-16.2

ABS710-A020_ABM 05.2021

Annex B,
page 234





① Tube
② Cylinder head rivet
③ Head piece "K2000+ design" see Annex B, page 175
④ Wedge "K2000+ design" see Annex B, page 176
⑤ Marking

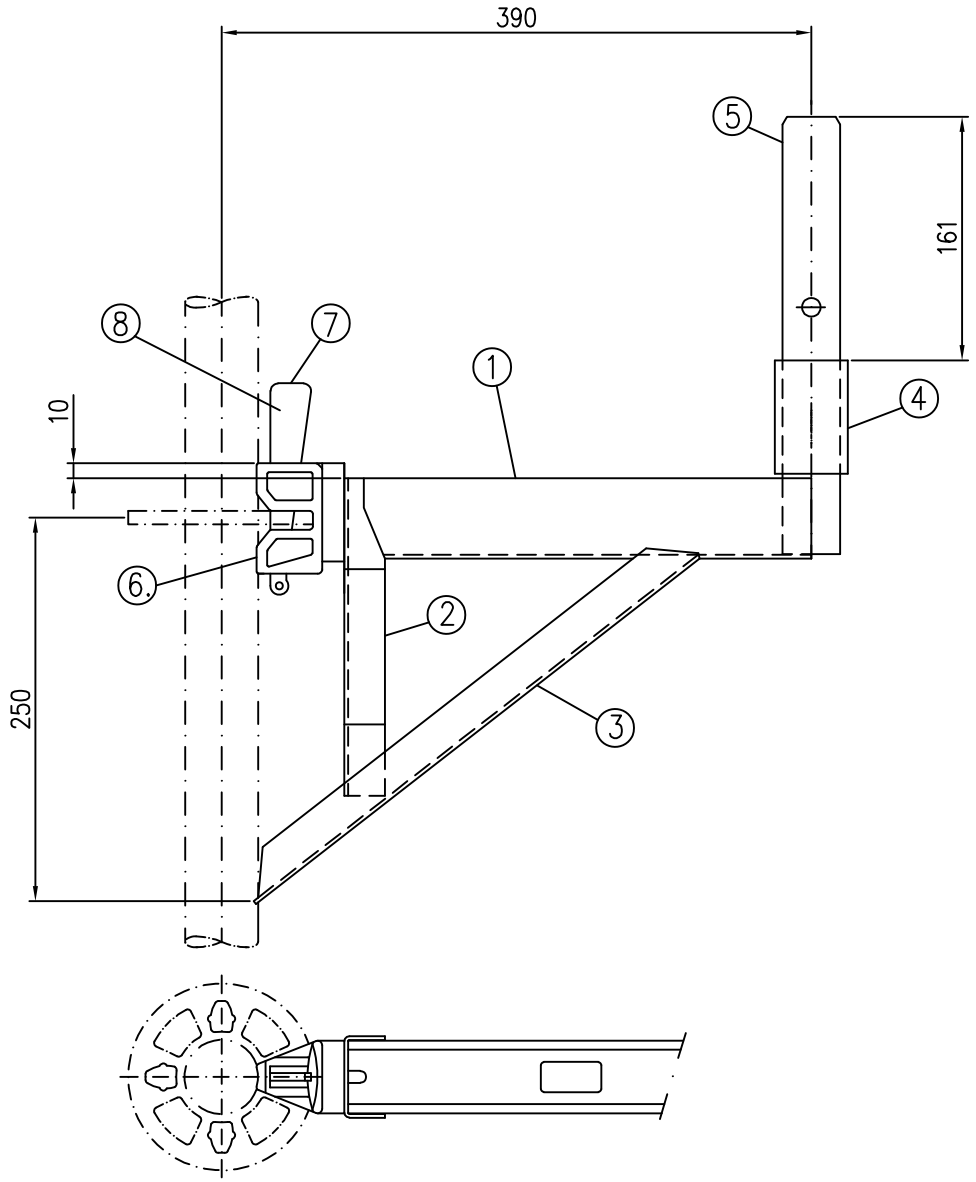
Dimension [m]	Weight [kg]
2.07 x 2.00	8.9
2.57 x 2.00	9.5
2.07 x 1.50	8.2
2.57 x 1.50	9.5

ALBLITZ MODUL

Diagonal brace "K2000+ design"
in accordance with Z–8.22–64

ABM710–B036 05.2021

Annex B,
page 235



① U-profile (see Annex B, pages 234, 190)
② Support-U
③ Brace-U
④ Tube
⑤ Tube connector
⑥ Head piece "K2000+ design" (see Annex B, page 174)
⑦ Wedge "K2000+ design" (see Annex B, page 176)
⑧ Marking

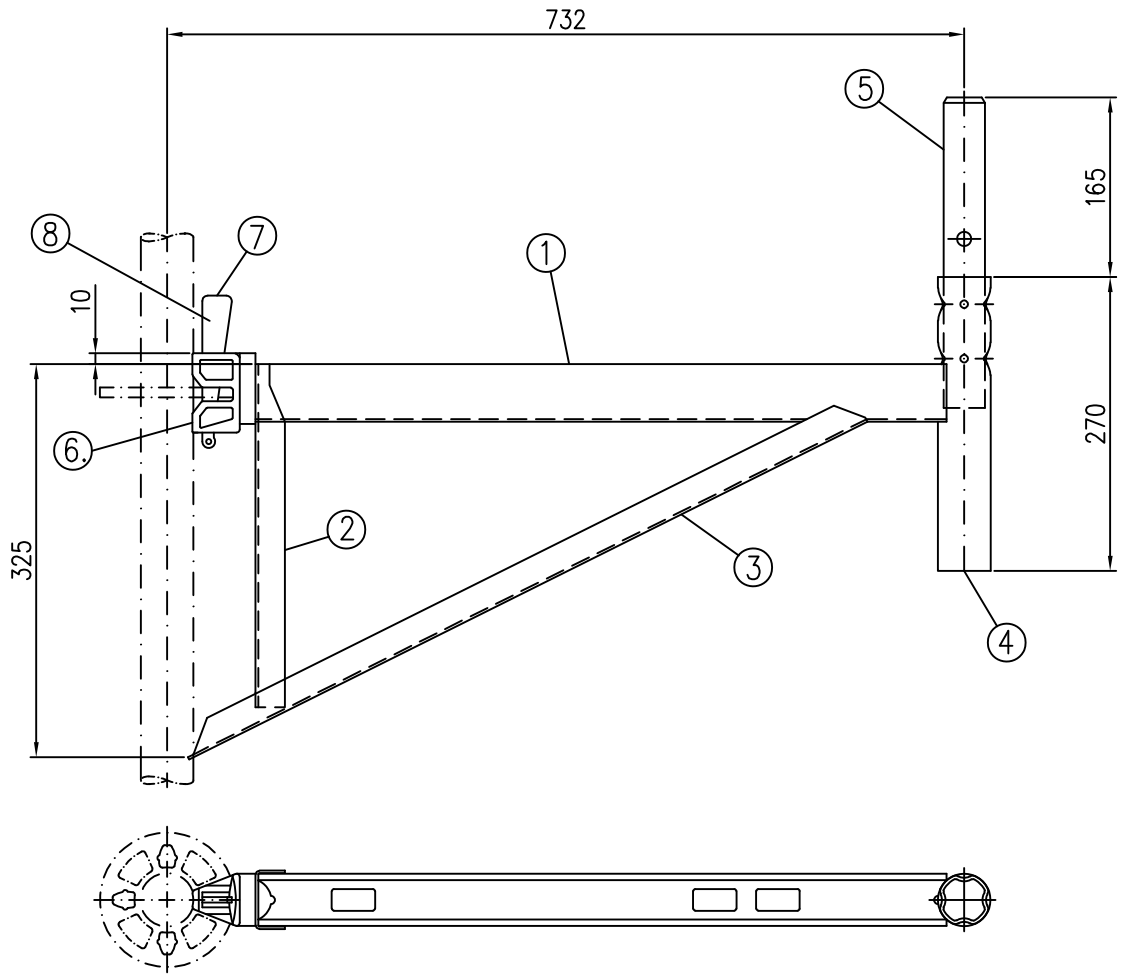
Weight [kg]
3.9

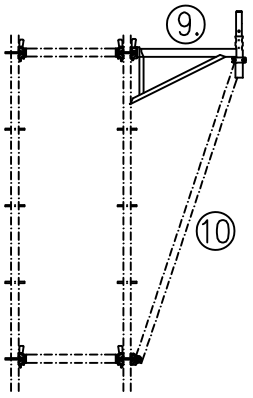
ALBLITZ MODUL

U-bracket 0.39 m "K2000+ design"
in accordance with Z-8.22-64

ABM710-B040 05.2021

Annex B,
page 236





① U–profile (see Annex B, pages 234, 190)
② Support–U
③ Brace–U
④ Tube
⑤ Tube connector
⑥ Head piece "K2000+ design" (see Annex B, page 174)
⑦ Wedge "K2000+ design" (see Annex B, page 176)
⑧ Marking
⑨ Bracket
⑩ Bracket brace

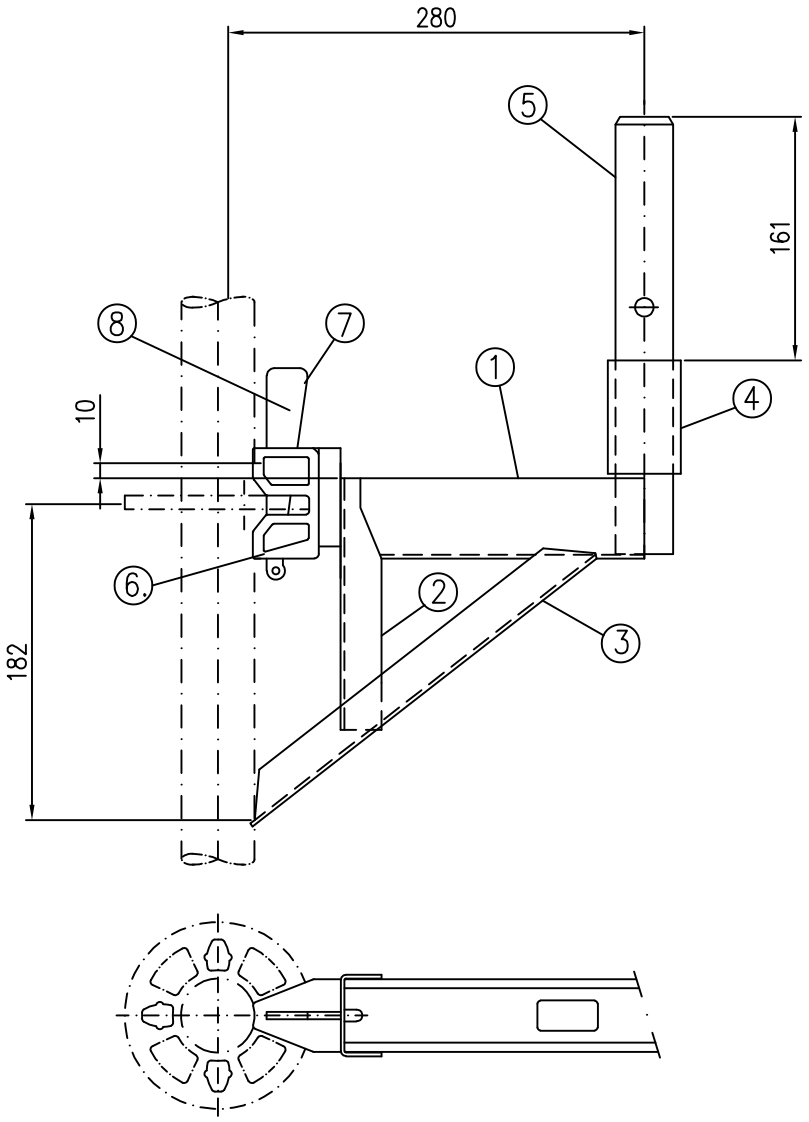
Weight [kg]
6.4

ALBLITZ MODUL

U–bracket 0.73 m "K2000+ design"
in accordance with Z–8.22–64

ABM710–B069 05.2021

Annex B,
page 237



① U-profile (see Annex B, pages 234, 190)
② Support-U
③ Brace-U
④ Tube
⑤ Tube connector
⑥ Head piece "K2000+ design" (see Annex B, page 174)
⑦ Wedge "K2000+ design" (see Annex B, page 176)
⑧ Marking

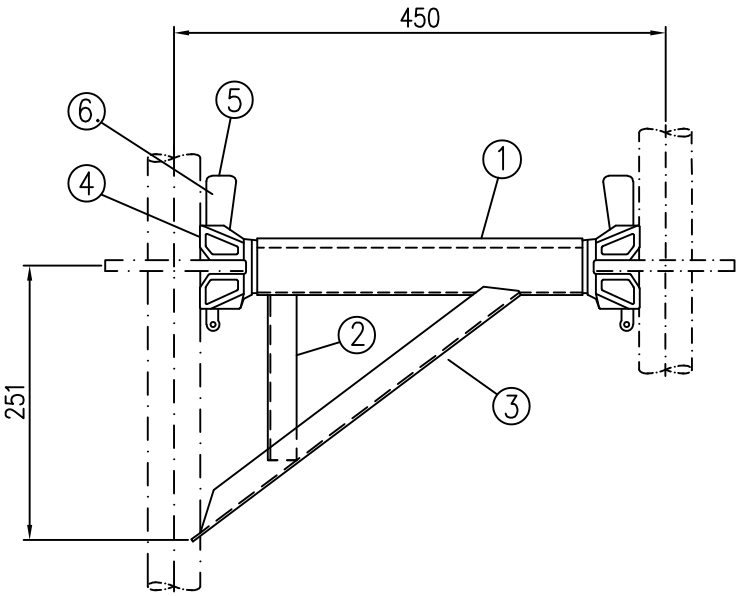
Weight [kg]
3.4

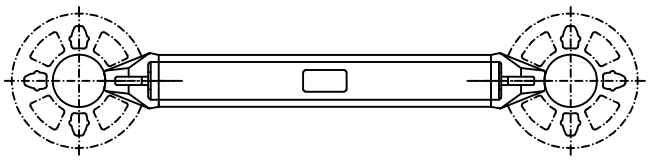
ALBLITZ MODUL

U-bracket 0.28 m "K2000+ design"
in accordance with Z-8.22-64

ABM721-B095 05.2021

Annex B,
page 238





① U-profile (see Annex B, pages 234, 190)
② Support-U
③ Brace-U
④ Head piece "K2000+ design" (see Annex B, page 173)
⑤ Wedge "K2000+ design" (see Annex B, page 176)
⑥ Marking

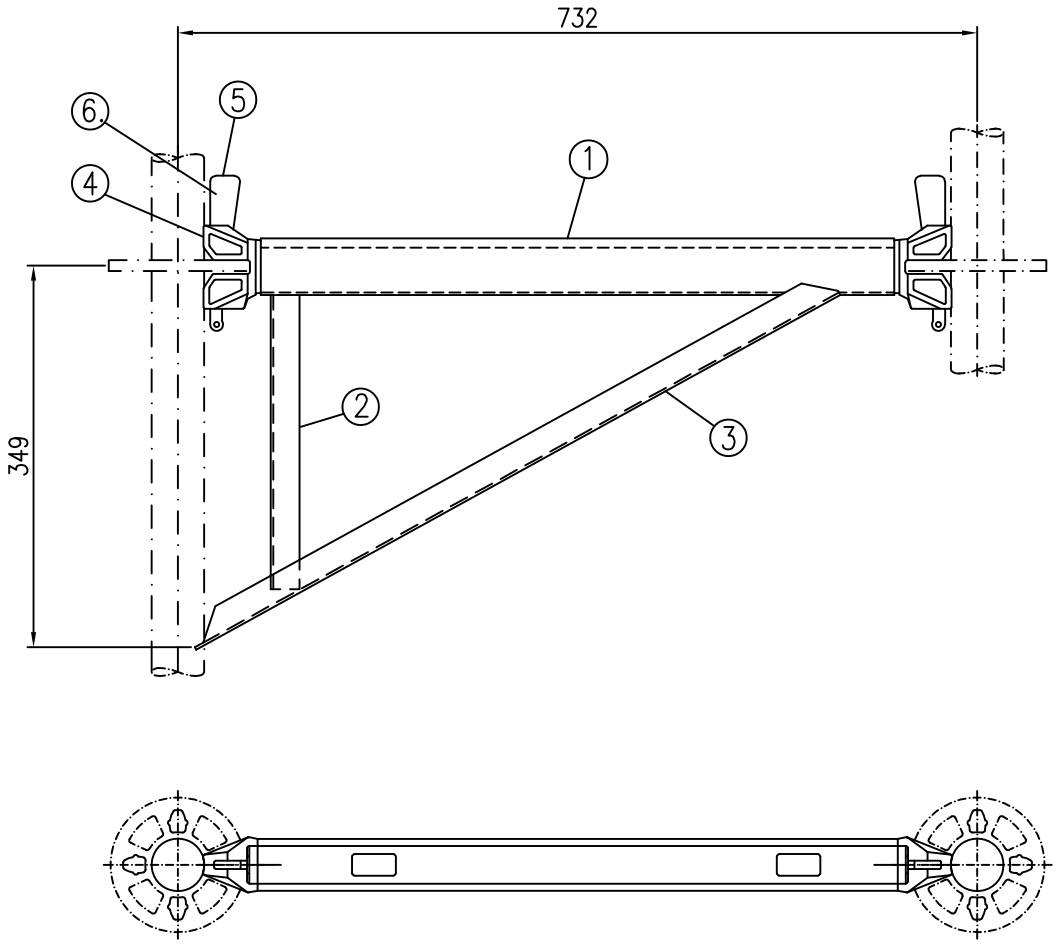
Weight [kg]
3.1

ALBLITZ MODUL

U-bracket 0.45 m with two wedge-heads "K2000+ design"
in accordance with Z-8.22-64

ABM721-B096 02.2023

Annex B,
page 239



① U-profile (see Annex B, pages 234, 190)
② Support-U
③ Brace-U
④ Head piece "K2000+ design" (see Annex B, page 173)
⑤ Wedge "K2000+ design" (see Annex B, page 176)
⑥ Marking

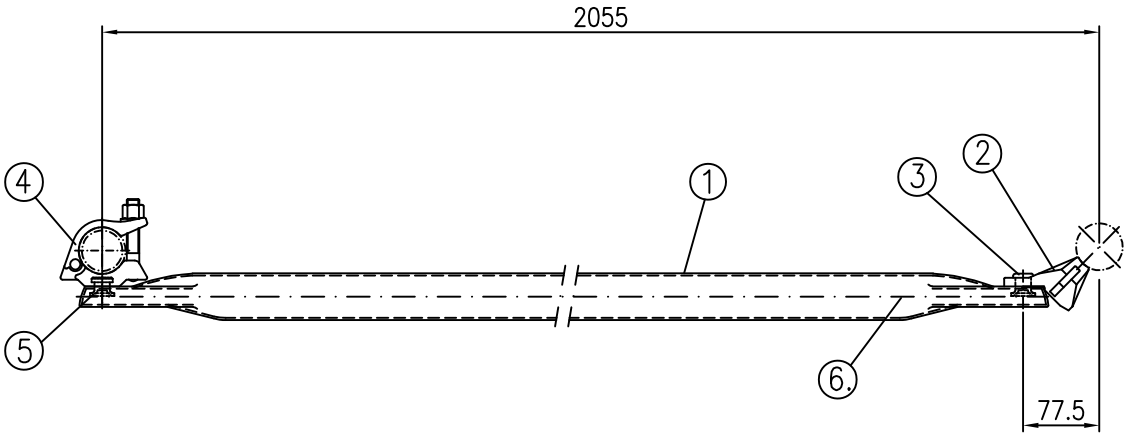
Weight [kg]
5.0

ALBLITZ MODUL

U-bracket 0.73 m with two wedge-heads "K2000+ design"
in accordance with Z-8.22-64

ABM721-B097 02.2023

Annex B,
page 240



①	Tube	
②	Head piece + Wedge "K2000+ design"	(see Annex B, pages 175 + 176)
③	Cylinder head rivet	swivel, riveted
④	Halfcoupler with screw top	in accordance with approval Z-8.331-882
⑤	Cylinder head rivet	swivel, riveted
⑥	Marking	

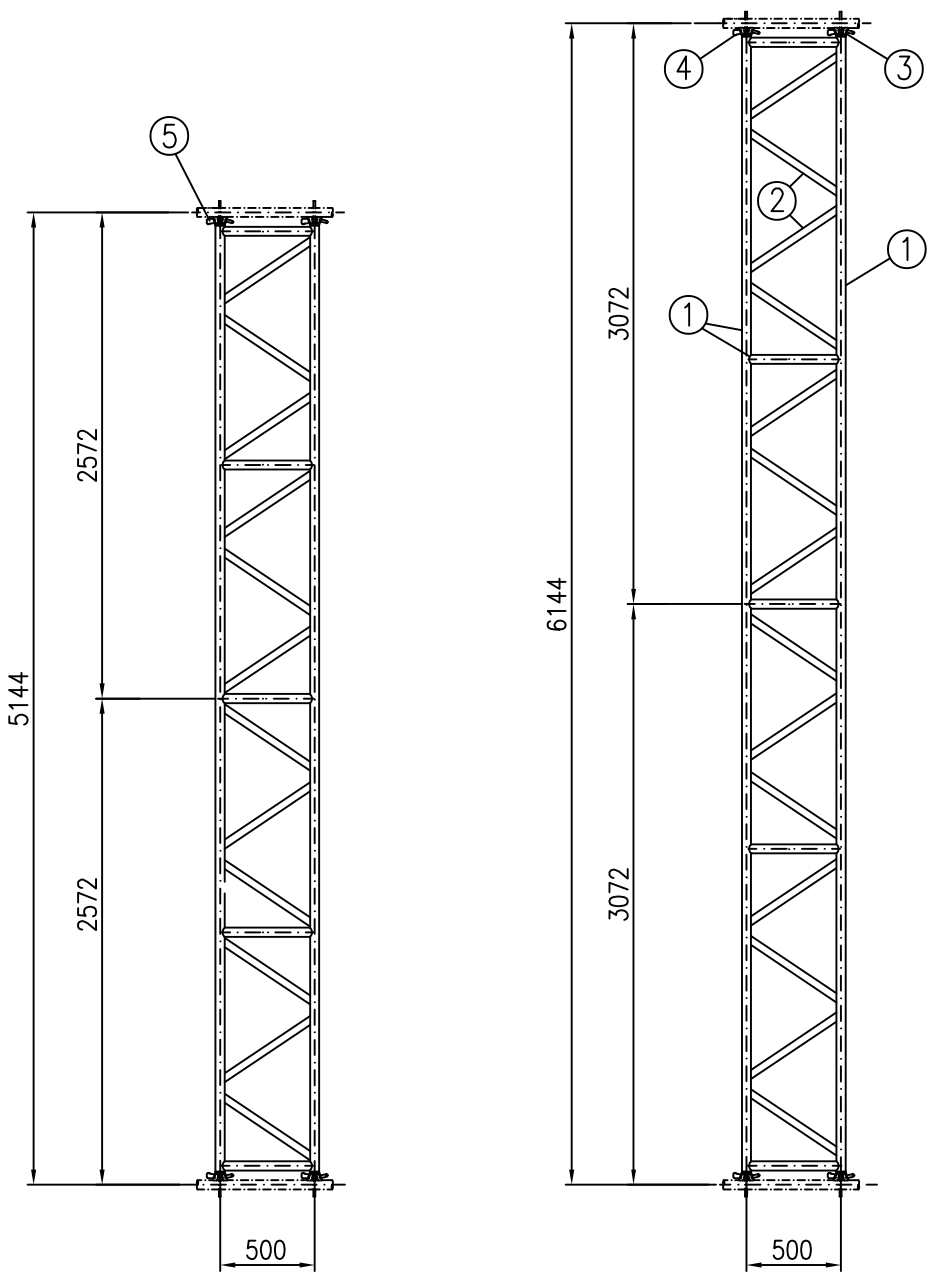
Weight [kg]
8.8

ALBLITZ MODUL

Bracket brace 2.05 m "K2000+ design"
in accordance with Z-8.22-64

ABM710-B070 05.2021

Annex B,
page 241



① Tube
② Rectangular tube
③ Head piece (see Annex B, page 172)
④ Wedge (see Annex B, page 176)
⑤ Marking

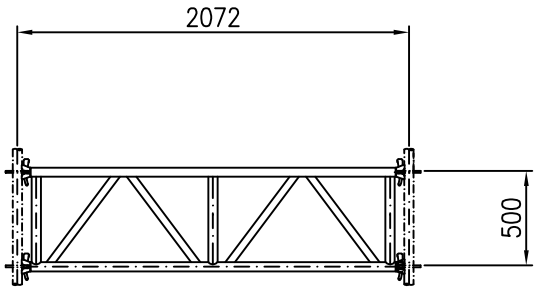
Dimens. [m]	Weight [kg]
5.14	55.2
6.14	64.2

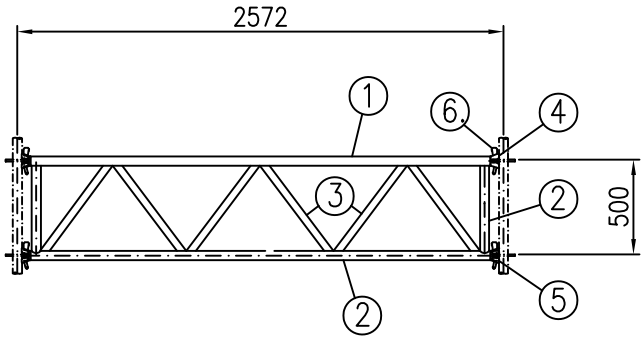
ALBLITZ MODUL

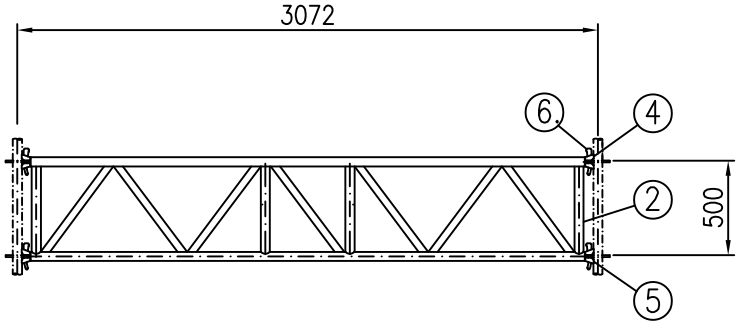
O-lattice girder 5.14; 6.14 x 0.5 m "K2000+ design"
in accordance with Z-8.22-64

ABM710-B041 05.2021

Annex B,
page 242







① U-profile (see Annex B, pages 234, 190)
② Tube
③ Rectangular tube
④ Head piece "K2000+ design" (see Annex B, page 173)
⑤ Head piece "K2000+ design" (see Annex B, page 172)
⑥ Wedge "K2000+ design" (see Annex B, page 176)

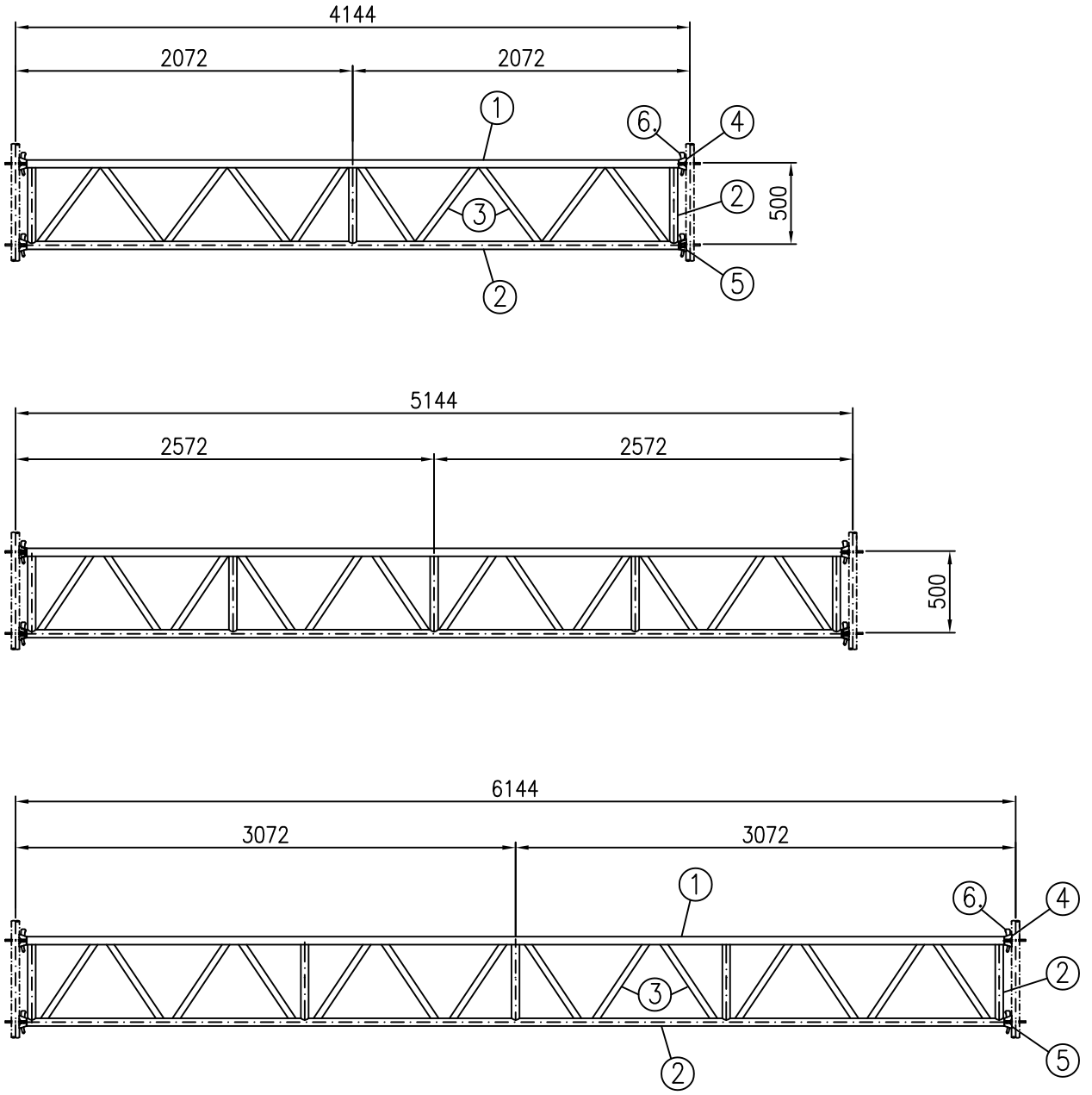
Dimens. [m]	Weight [kg]
2.07	23.4
2.57	29.5
3.07	35.6

ALBLITZ MODUL

U-lattice girder 2.07 – 3.07 x 0.5 m "K2000+ design"
in accordance with Z-8.22-64

ABM721-B101 05.2021

Annex B,
page 243



① U-profile (see Annex B, pages 234, 190)
② Tube
③ Rectangular tube
④ Head piece "K2000+ design" (see Annex B, page 173)
⑤ Head piece "K2000+ design" (see Annex B, page 172)
⑥ Wedge "K2000+ design" (see Annex B, page 176)

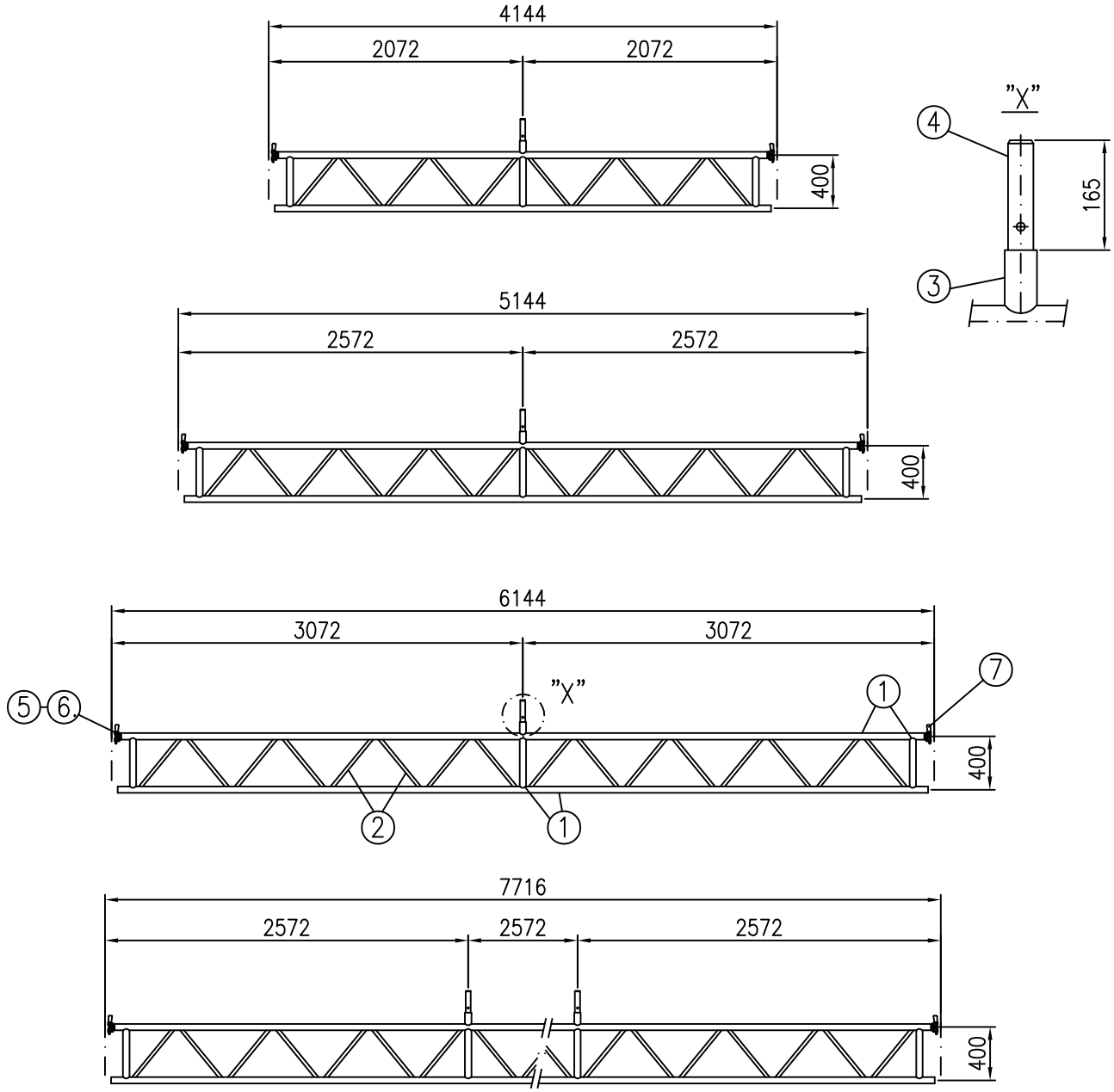
Dimens. [m]	Weight [kg]
4.14	44.0
5.14	54.1
6.14	62.5

ALBLITZ MODUL

U-lattice girder 4.14 – 6.14 x 0.5 m "K2000+ design"
in accordance with Z-8.22-64

ABM721-B102 05.2021

Annex B,
page 244



① Tube
② Rectangular tube
③ Tube
④ Tube connector
⑤ Head piece "K2000+ design" (see Annex B, page 172)
⑥ Wedge "K2000+ design" (see Annex B, page 176)
⑦ Marking

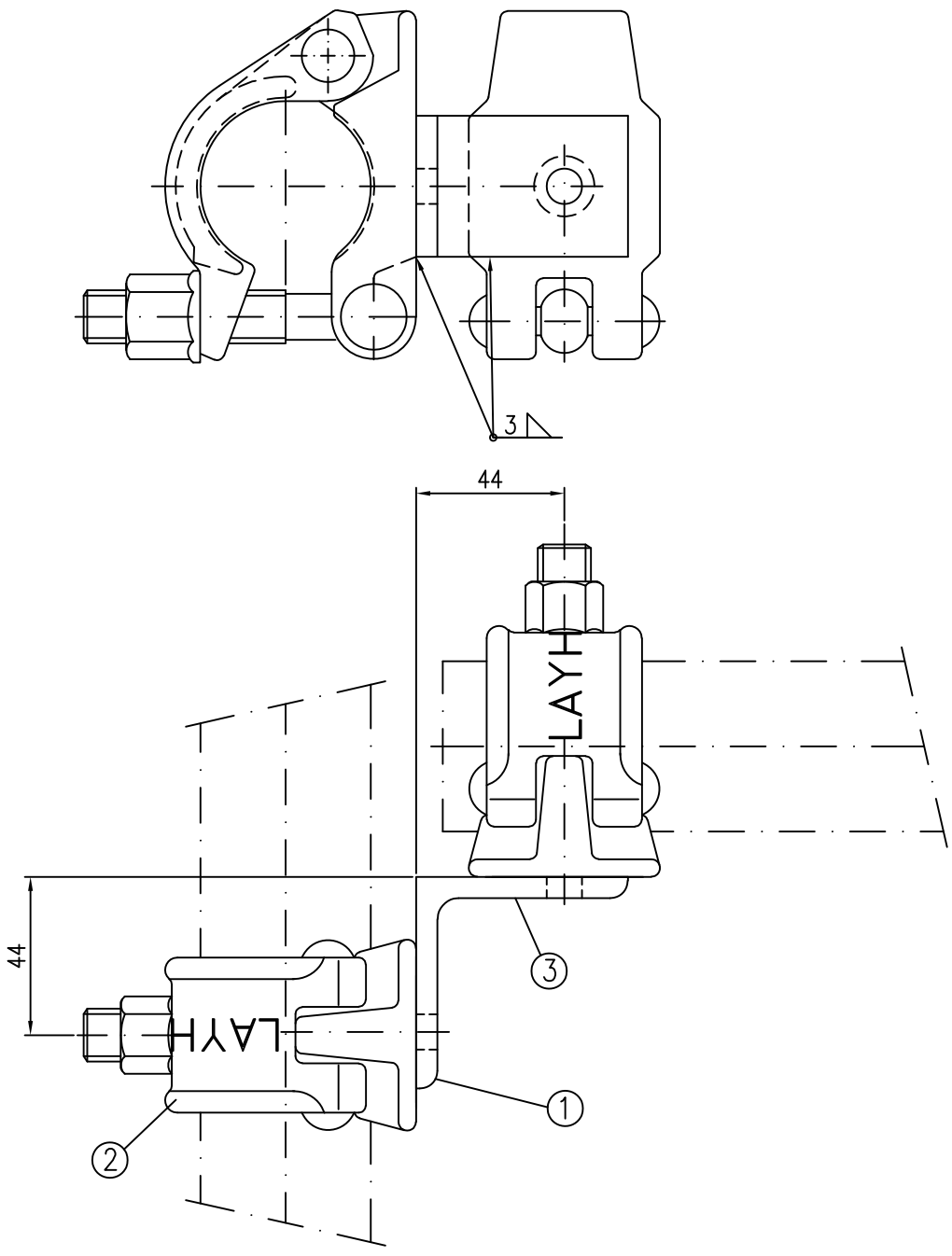
Dimens. [m]	Weight [kg]
4.14	41.6
5.14	51.5
6.14	60.0
7.71	77.0

ALBLITZ MODUL

O-lattice girder 4.14 – 7.14 x 0.4 m "K2000+ design"
in accordance with Z-8.22-64

ABM710-B071 05.2021

Annex B,
page 245



① Angle
② Halfcoupler with screw top
③ Marking

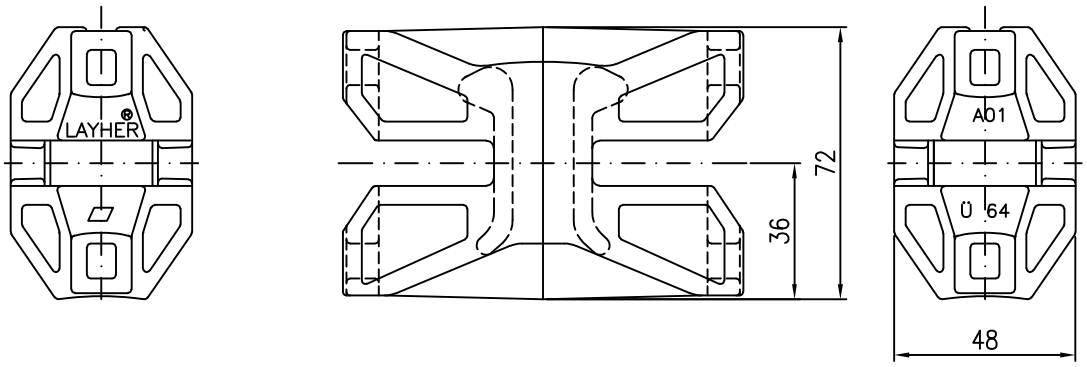
Weight [kg]
1.6

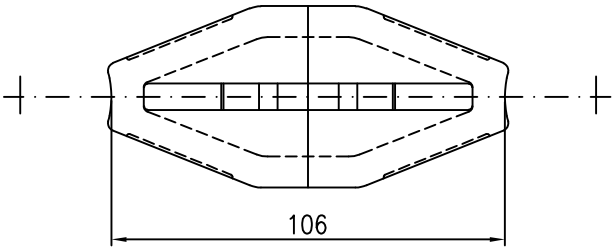
ALBLITZ MODUL

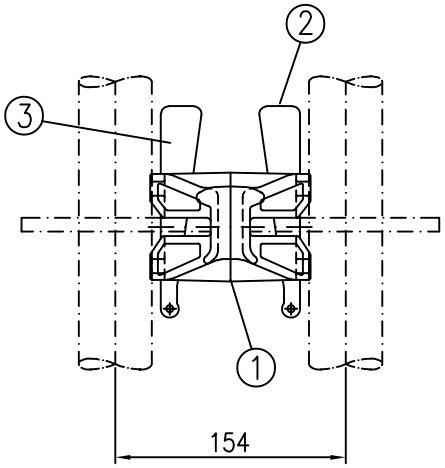
Lattice girder coupler
in accordance with Z-8.1-16.2

ABS710-A088_ABM 05.2021

Annex B,
page 246







① Wedge head, double
② Wedge "K2000+ design" (see Annex B, page 176)
③ Marking

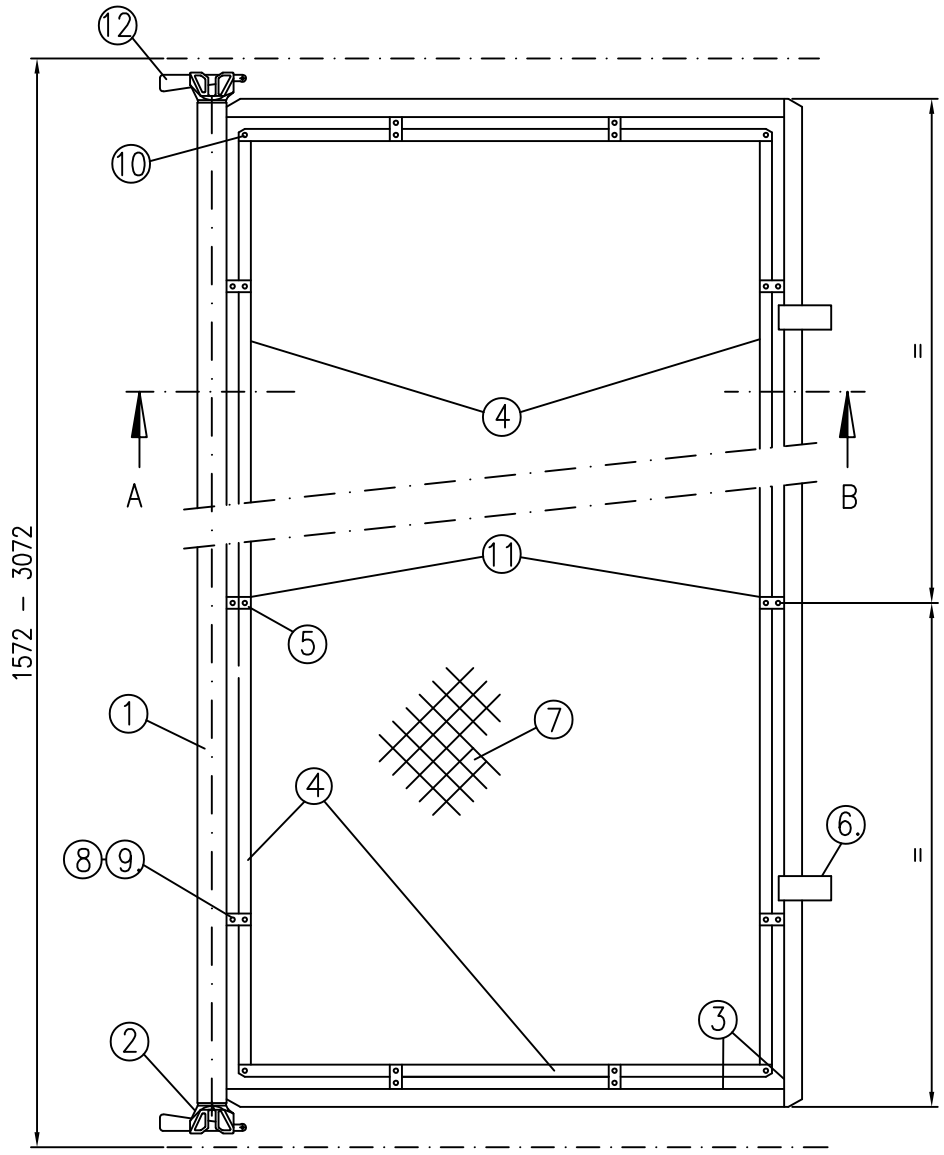
Weight [kg]
1.1

ALBLITZ MODUL

Double wedge-head coupler "K2000+ design"
in accordance with Z-8.22-64

ABM721-B105 05.2021

Annex B,
page 247



① Tube
② Head piece + Wedge "K2000+ design" (see Annex B, pages 172 + 176)
③ Rectangular tube
④ Safety meshguard rod
⑤ Mount plate
⑥ Holding bracket
⑦ Wire mesh
⑧ Hexagon bolt
⑨ Hexagon nut
⑩ Stainless steel–blind rivet
⑪ no middle plate at 1.57 m
⑫ Marking

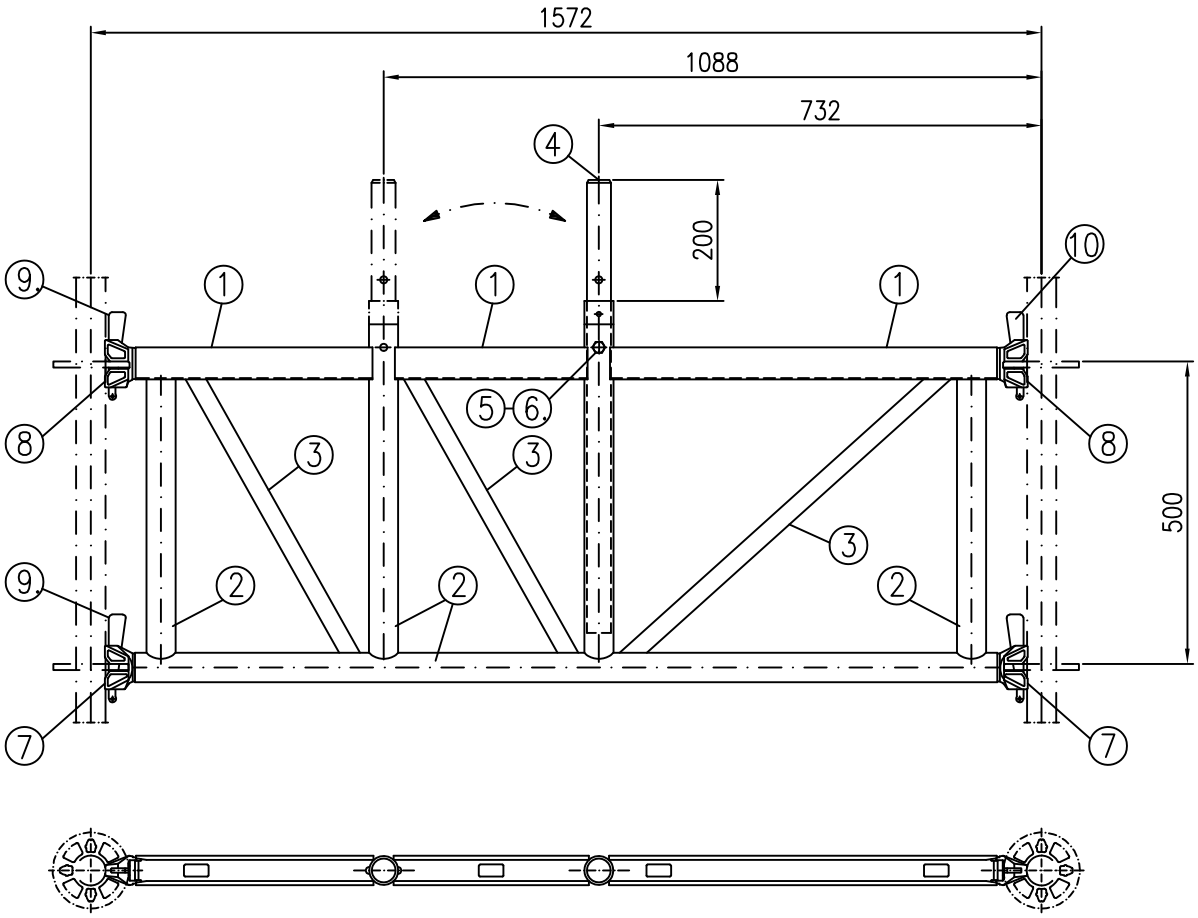
Dimens. [m]	Weight [kg]
1.57	16.5
2.07	19.5
2.57	23.0
3.07	26.3

ALBLITZ MODUL

Side safety meshguard 1.57 – 3.07 m "K2000+ design"
in accordance with Z–8.22–64

ABM710–B044 05.2021

Annex B,
page 248



①	U–profile	(see Annex B, pages 234, 190)
②	Tube	
③	Rectangular tube	
④	Tube connector	
⑤	Hexagon bolt	
⑥	Hexagon nut	
⑦	Head piece "K2000+ design"	(see Annex B, page 172)
⑧	Head piece "K2000+ design"	(see Annex B, page 173)
⑨	Wedge "K2000+ design"	(see Annex B, page 176)
⑩	Marking	

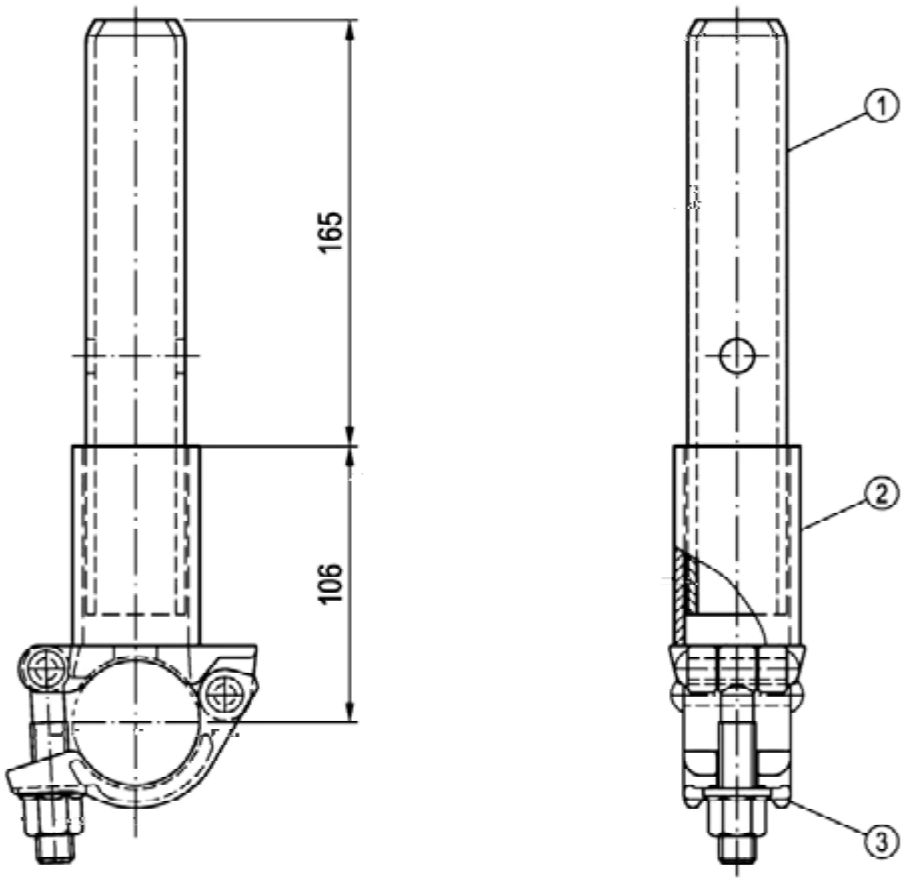
Weight [kg]
21.9

ALBLITZ MODUL

U–passageway girder 1.57 m "K2000+ design"
in accordance with Z–8.22–64

ABM710–B072 05.2021

Annex B,
page 249



① Tube connector
② Tube
③ Halfcoupler with screw top in accordance with approval Z-8.331-882

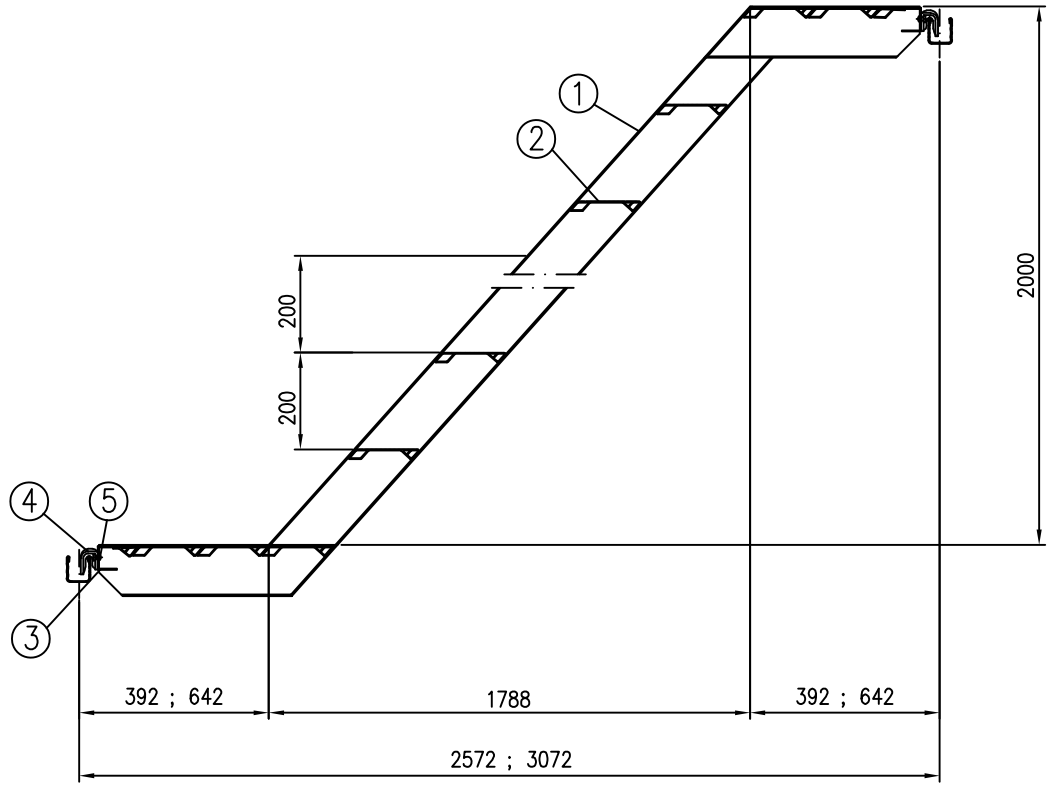
Weight [kg]
1.8

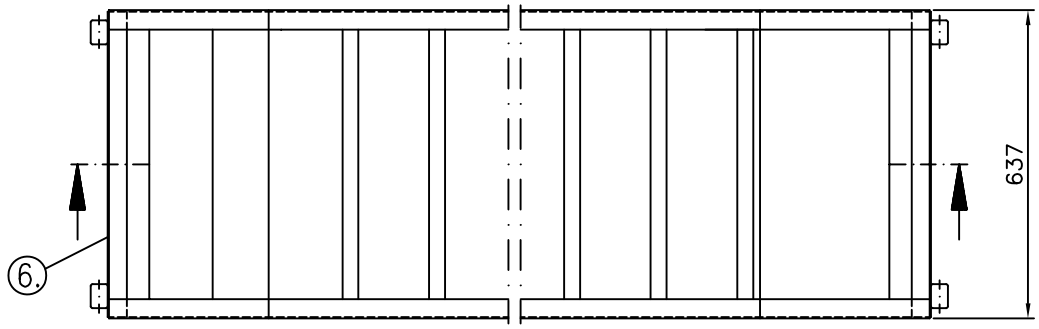
ALBLITZ MODUL

Tube connector with halfcoupler
in accordance with Z-8.22-939

ABM721-B108 05.2021

Annex B,
page 250





① Stairway stringer
② Stairway step
③ U-head piece
④ Claw
⑤ Flat-head rivet
⑥ Marking

Detailed view stairway step; Stairway stringer with suspension see Annex A, page 252

Maximum load capacity: 2.0 kN/m²

Dimens. [m]	Weight [kg]
2.57	21.9
3.07	26.3

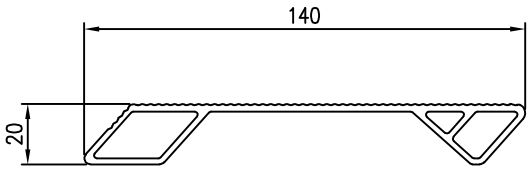
ALBLITZ MODUL

U-aluminium-platform stairway 2.57; 3.07 x 2.00 x 0.64 m
in accordance with Z-8.1-16.2

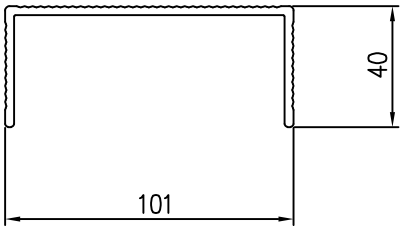
ABS710-A093_ABM 05.2021

Annex B,
page 251

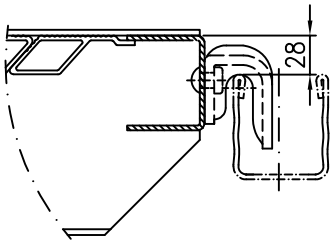
①



②



③



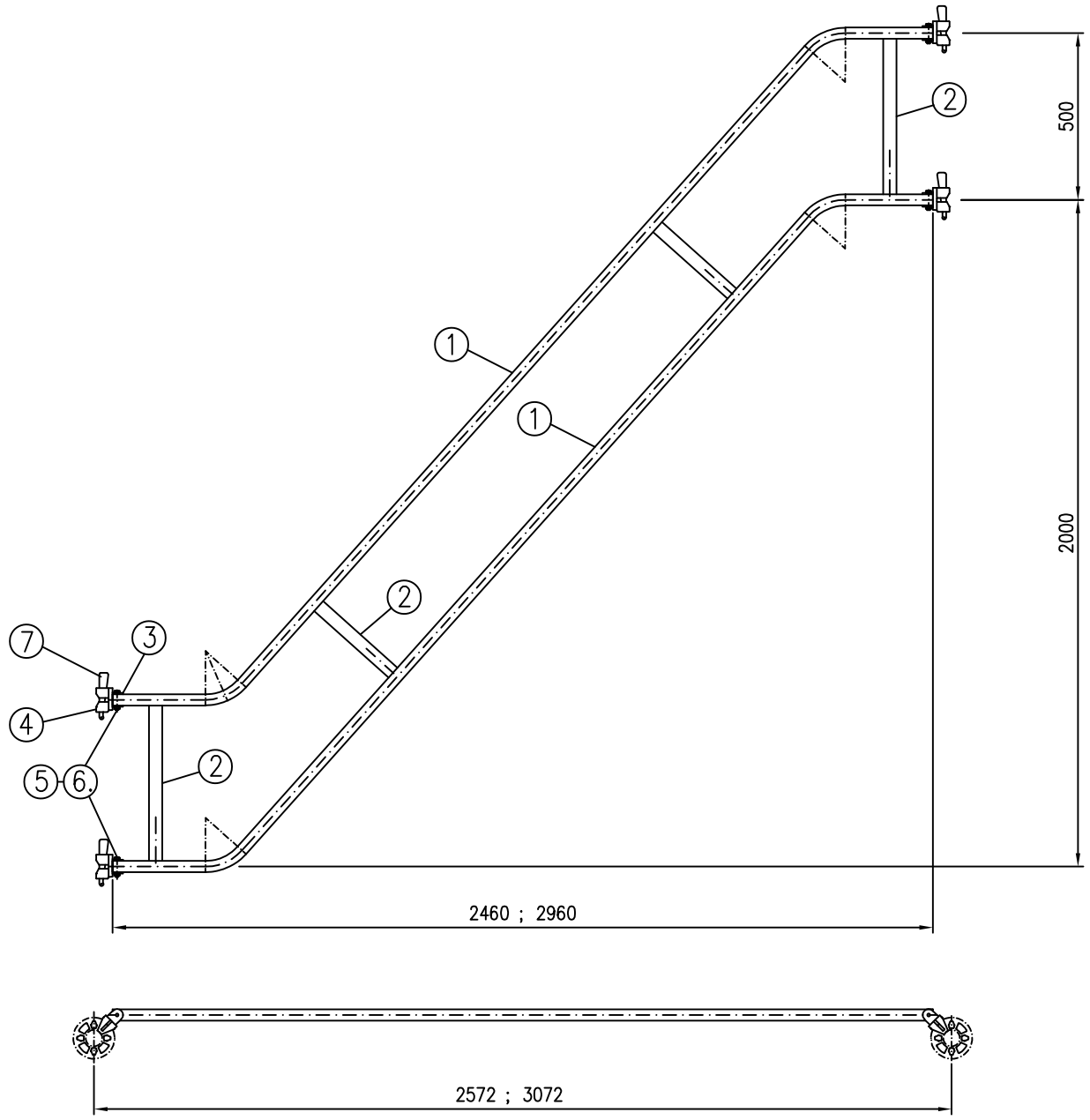
① Detailed view stairway step
② Detailed view stairway stringer
③ Detailed view suspension

ALBLITZ MODUL

Detailed view U-aluminium-platform stairway
in accordance with Z-8.1-16.2

ABS710-A094_ABM 05.2021

Annex B,
page 252



① Tube
② Rectangular tube
③ Lug
④ Head piece + Wedge "K2000+ design" (see Annex B, pages 174 + 176)
⑤ Hexagon bolt
⑥ Locknut
⑦ Marking

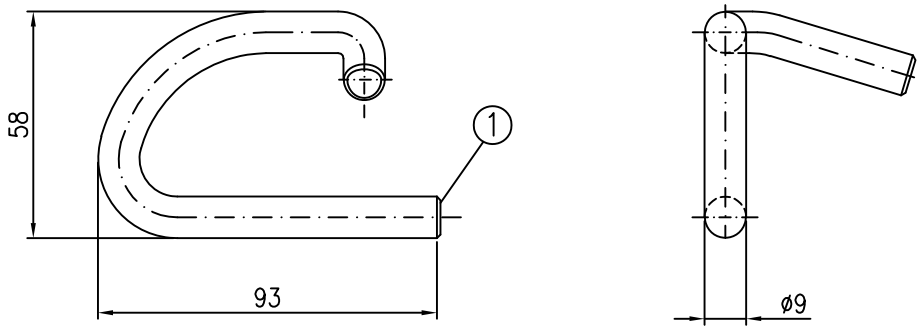
Dimens. [m]	Weight [kg]
2.57	18.0
3.07	21.0

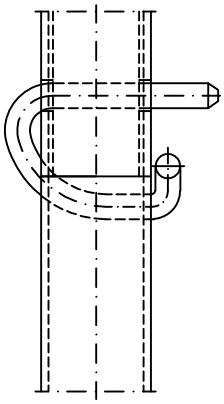
ALBLITZ MODUL

KK stair guardrail 2.57; 3.07 m "K2000+ design"
in accordance with Z-8.22-64

ABM721-B111 05.2021

Annex B,
page 253





① Locking pin

No longer manufactured, only for continued use

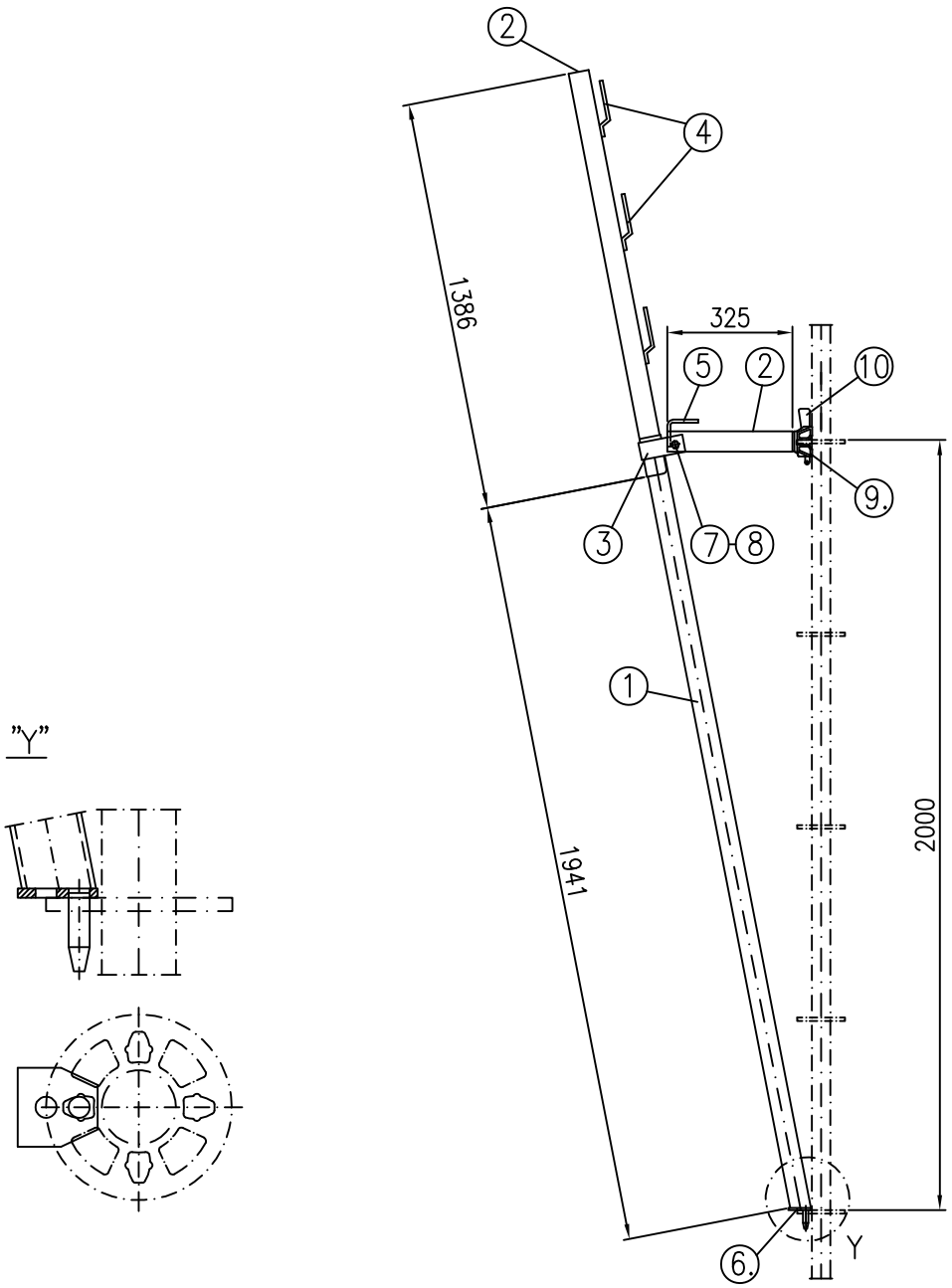
Weight [kg]
0.1

ALBLITZ MODUL

Locking pin ø 9 mm
in accordance with Z-8.1-16.2

Annex B,
page 254

ABS710-A010_ABM 05.2021



① Tube
② U-profile (see Annex B, pages 234, 190)
③ U-bracket
④ Lug
⑤ Angle
⑥ Plate with bolts
⑦ Hexagon bolt
⑧ Locknut
⑨ Head piece + Wedge "K2000+ design" (see Annex B, pages 173 + 176)
⑩ Marking

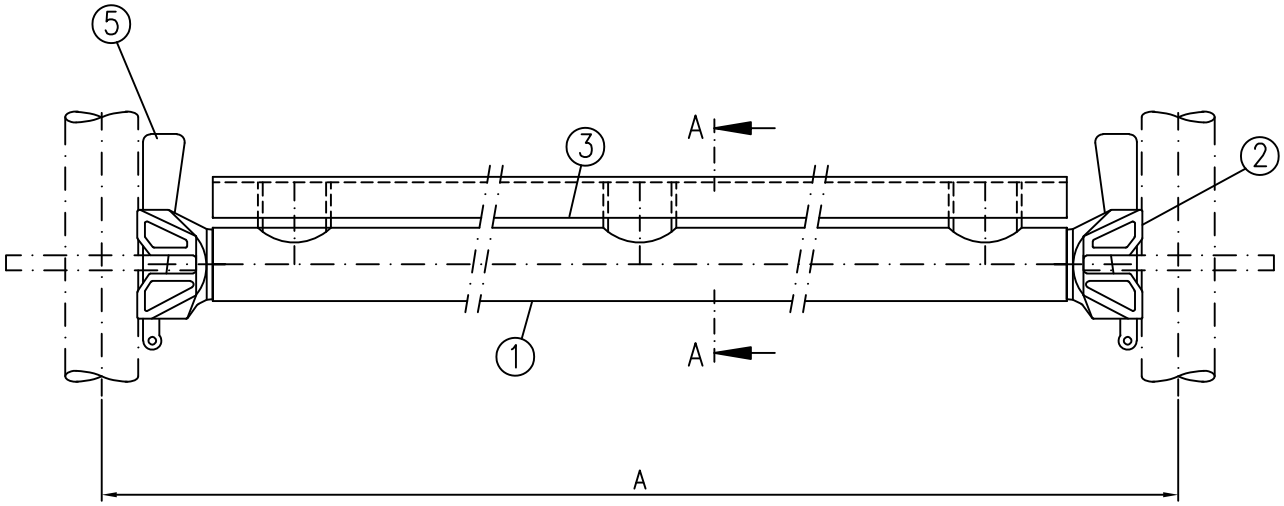
Weight [kg]
16.8

ALBLITZ MODUL

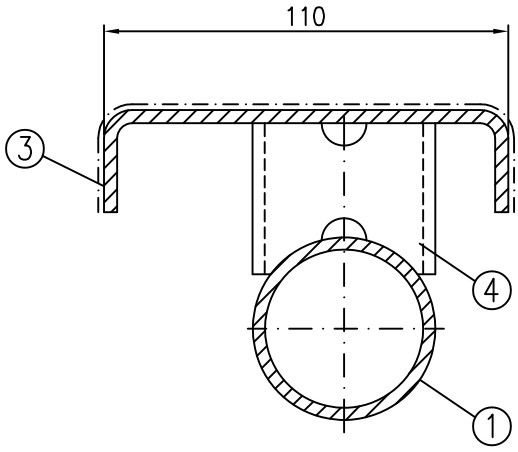
U-protective roof bracket T7 "K2000+ design"
in accordance with Z-8.22-64

ABM710-B078 05.2021

Annex B,
page 255



A–A



Dimension A [mm]	For use up to load class	Maximum allowable p *) [kN/m²]
732	6	10.0
1088		
1286		
1400		
1572		
2072		
2572	5	7.5
3072	4	5.0

*) acting on the entire sheet width

① Tube
② Head piece + Wedge "K2000+ design" (see Annex B, pages 172 + 176)
③ Bulb plate
④ Spacer tube
⑤ Marking

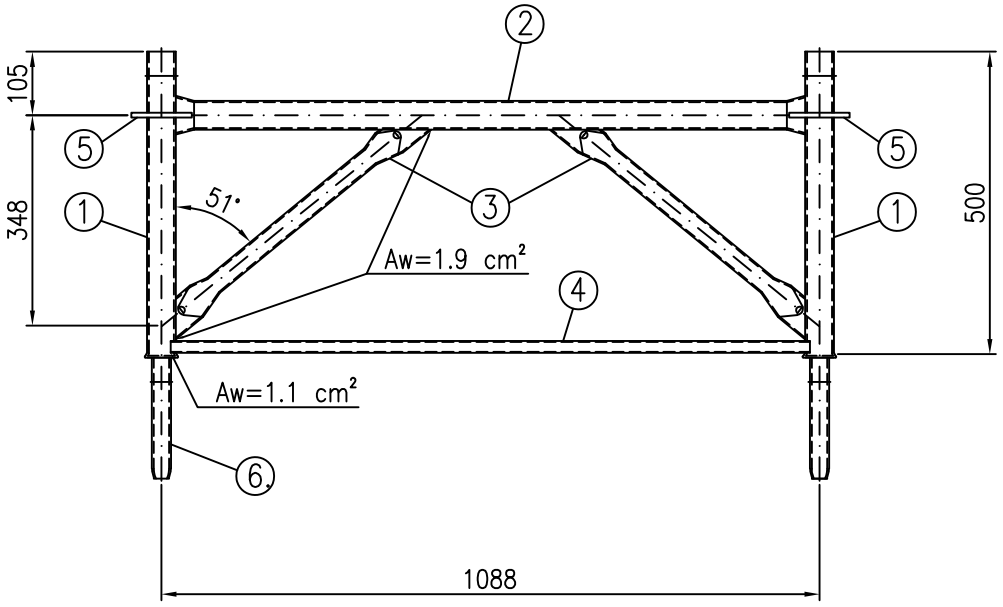
Dimens. [m]	Weight [kg]
0.73	5.7
1.09	8.3
1.29	9.9
1.40	10.0
1.57	11.9
2.07	15.2
2.57	18.6

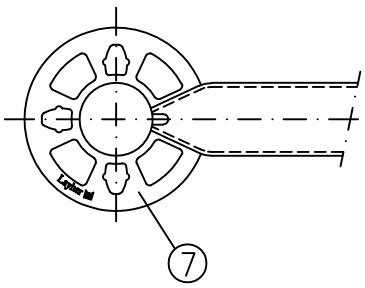
ALBLITZ MODUL

U–ledger with gap cover 0.73 – 3.07 m "K2000+ design"
in accordance with Z–8.1–64

ABM721–B114 05.2021

Annex B,
page 256





① Tube
② Tube
③ Tube
④ Rectangular tube
⑤ Connector disc "K2000+ design" (see Annex B, page 171)
⑥ Tube connector compressed (in accordance with Z-8.1-16.2)
⑦ Marking

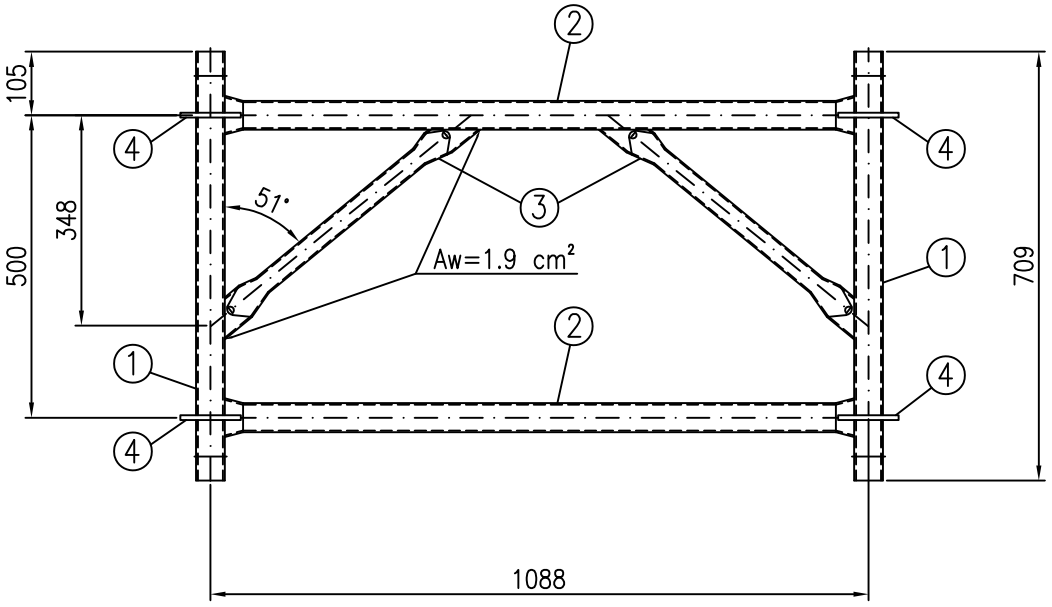
Weight [kg]
13.0

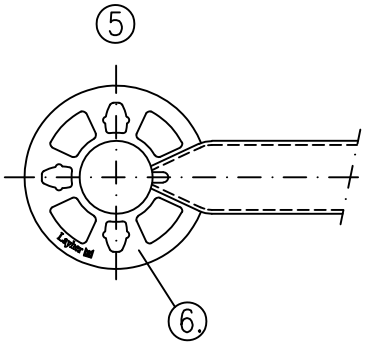
ALBLITZ MODUL

TG-60 frame 0.50 x 1.09 m "K2000+ design"
in accordance with Z-8.22-64

ABM710-B084 05.2021

Annex B,
page 257





① Tube
② Tube
③ Tube
④ Connector disc "K2000+ design" (see Annex B, page 171)
⑤ All connector discs (rosettes) are identical!
⑥ Marking

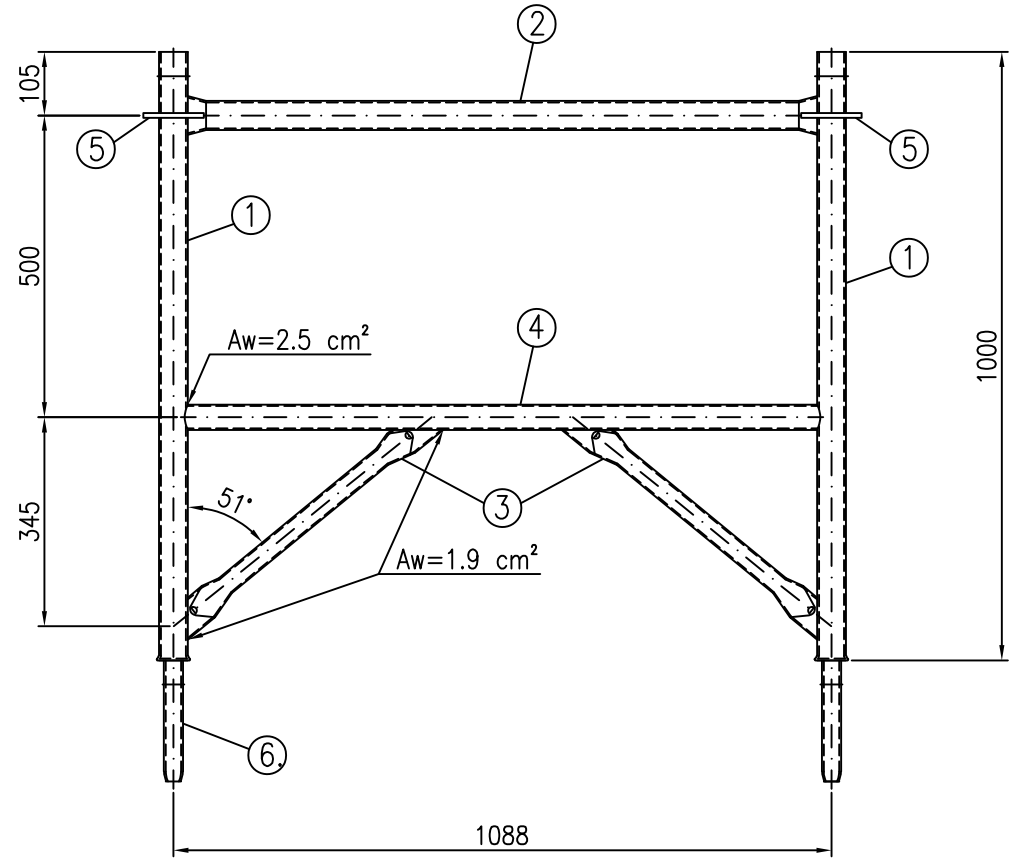
Weight [kg]
15.9

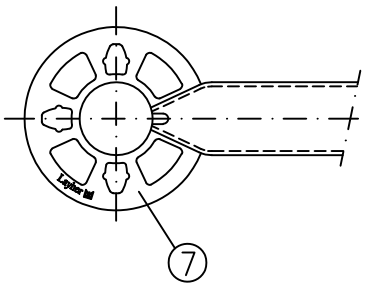
ALBLITZ MODUL

TG–60 frame 0.71 x 1.09 m "K2000+ design"
in accordance with Z–8.22–64

ABM710–B085 05.2021

Annex B,
page 258





① Tube
② Tube
③ Tube
④ Tube
⑤ Connector disc "K2000+ design" (see Annex B, page 171)
⑥ Tube connector compressed (in accordance with Z-8.1-16.2)
⑦ Marking

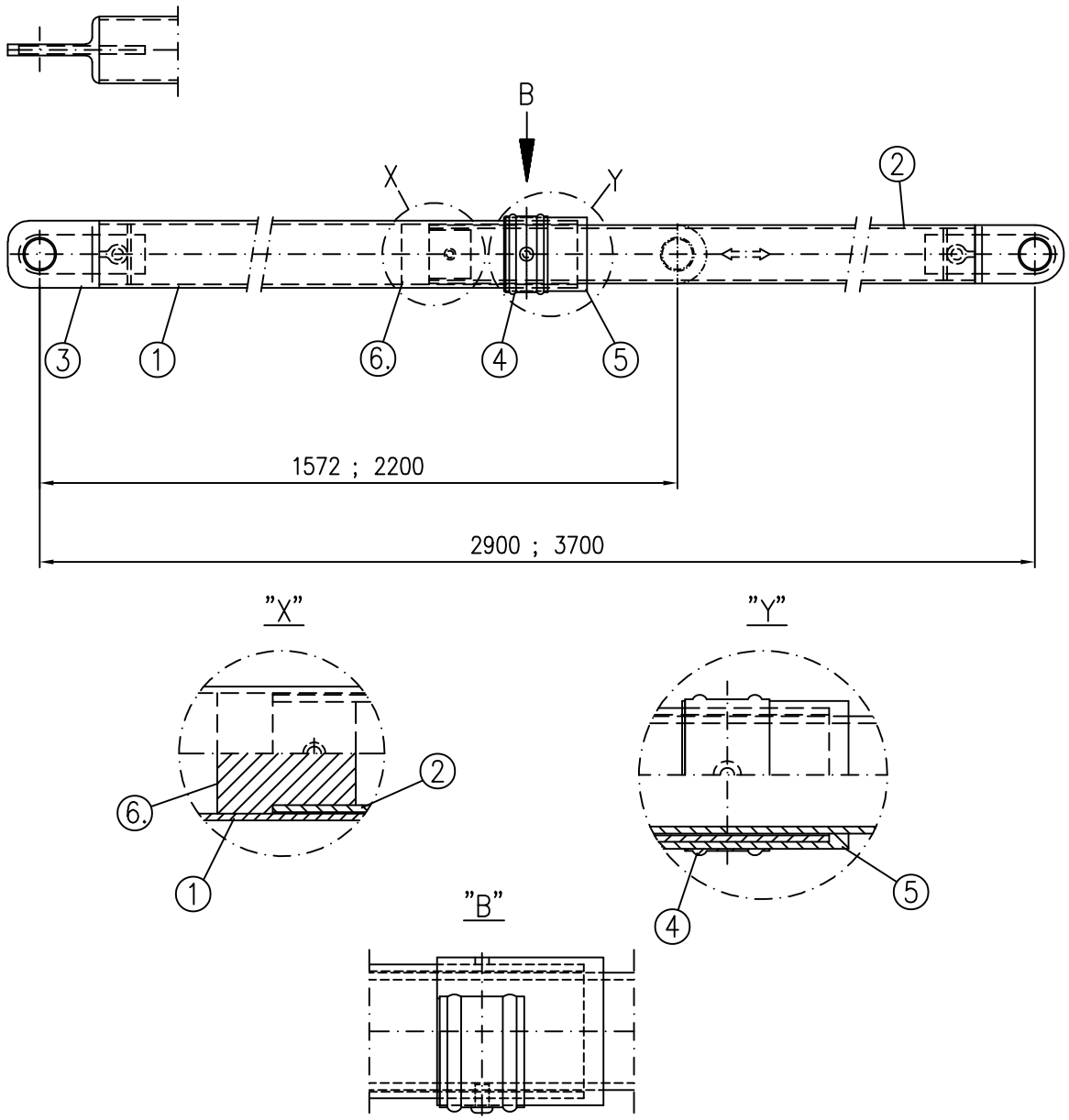
Weight [kg]
17.7

ALBLITZ MODUL

TG-60 frame 1.00 x 1.09 m "K2000+ design"
in accordance with Z-8.22-64

ABM710-B086 05.2021

Annex B,
page 259



① Tube
② Profile
③ Guardrail fixture
④ Spring clip
⑤ Guiding cap
⑥ Internal guide

Dimens. [m]	Weight [kg]
2.07	3.2
3.07	4.0

ALBLITZ MODUL

Assembly guardrail, aluminium 1.57 / 2.07; 2.57 / 3.07 m
in accordance with Z-8.1-16.2

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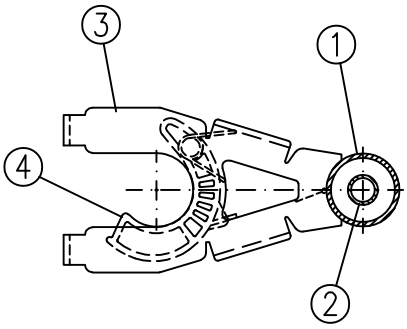
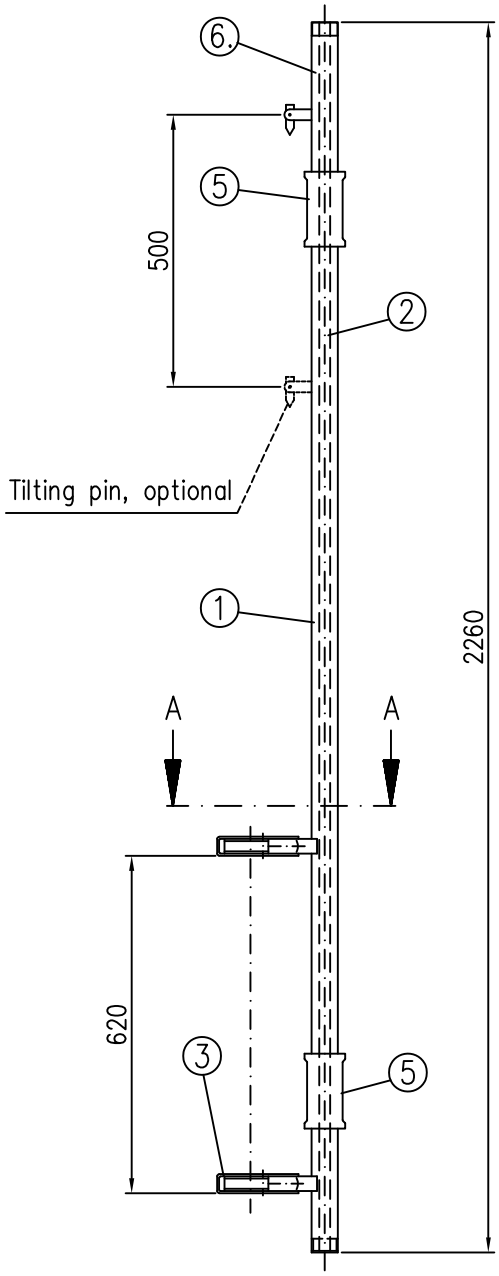
Annex B,
page 260





① External tube
② Internal tube
③ Snap in case
④ Claw finger
⑤ Handle
⑥ Marking

ALBLITZ MODUL

Assembly post T5
in accordance with Z–8.1–16.2

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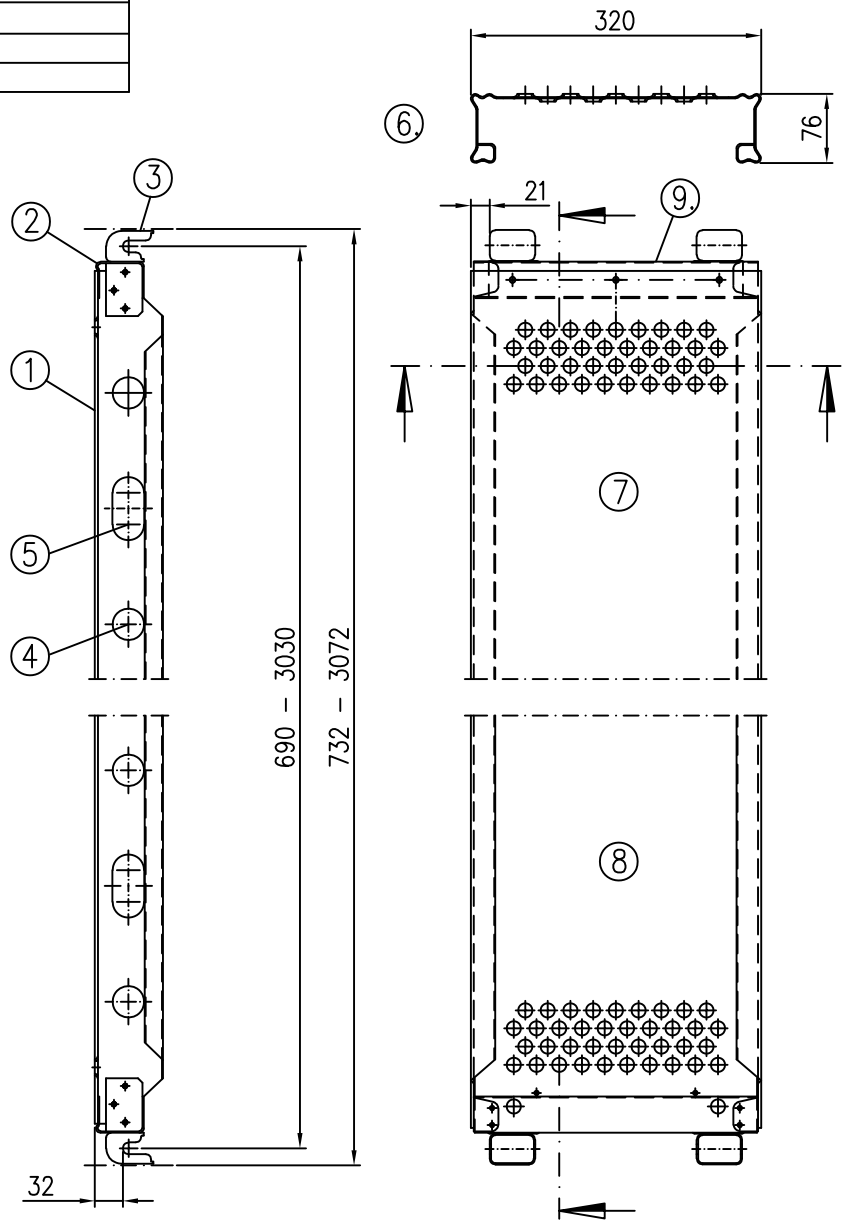
Annex B,
page 261

Bay length	For use up to load class	Maximum allowable p *) [kN/m²]
≤ 2.07 m	6	10.0
2.57 m	5	7.5
3.07 m	4	5.0

*) for the entire deck surface



Bay length	Number of openings 1	Number of openings 2
0.73 m	2	–
1.09 m	2	2
1.57 m	4	2
2.07 m	6	4
2.57 m	8	6
3.07 m	10	8

● = Weld points

① Deck sheet
② Head piece
③ Claw
④ Opening 1
⑤ Opening 2
⑥ Sectional view, head piece not shown
⑦ Top view
⑧ Bottom view
⑨ Marking

Dimens. [m]	Weight [kg]
0.73	6.0
1.09	8.3
1.57	11.9
2.07	15.0
2.57	18.2
3.07	21.5

ALBLITZ MODUL

U–deck T4 0.73 – 3.07 x 0.32 m, steel, design: point–welded
in accordance with Z–8.1–16.2

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Annex B,
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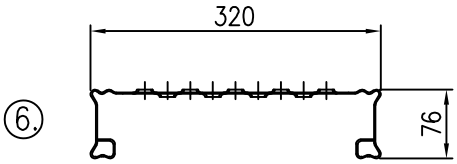
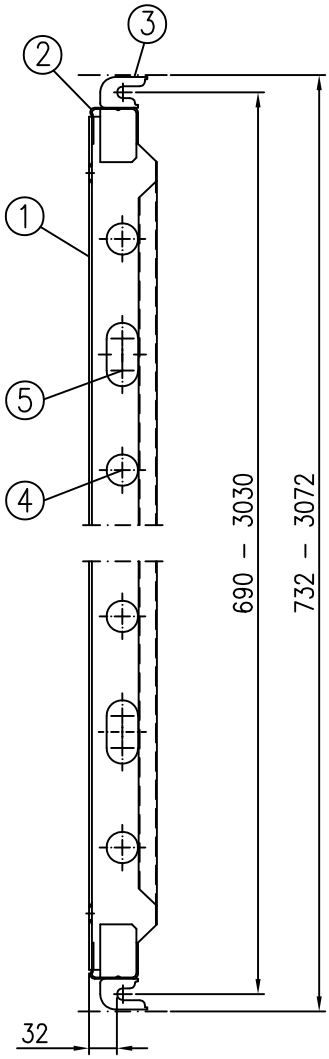
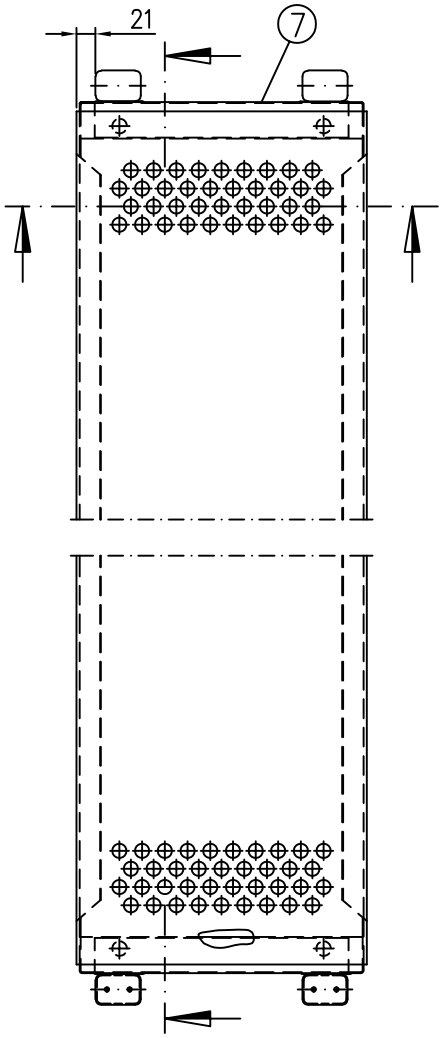
Bay length	For use up to load class	Maximum allowable p *) [kN/m²]
≤ 2.07 m	6	10.0
2.57 m	5	7.5
3.07 m	4	5.0

*) for the entire deck surface







Bay length	Number of openings 1	Number of openings 2
0.73 m	2	–
1.09 m	2	2
1.57 m	4	2
2.07 m	6	4
2.57 m	8	6
3.07 m	10	8

① Deck sheet
② Head piece
③ Claw
④ Opening 1
⑤ Opening 2
⑥ Sectional view, head piece not shown
⑦ Marking

Dimens. [m]	Weight [kg]
0.73	6.0
1.09	8.3
1.57	11.9
2.07	15.0
2.57	18.2
3.07	21.5

ALBLITZ MODUL

U–deck T4 0.73 – 3.07 x 0.32 m, steel, design: hand–welded
in accordance with Z–8.1–16.2

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Annex B,
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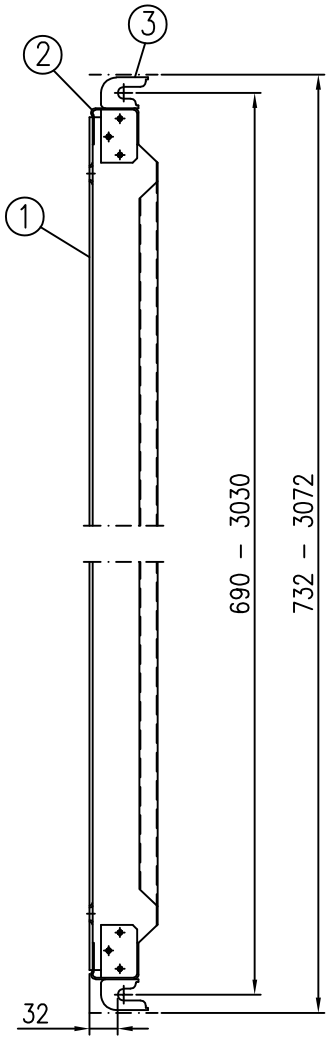
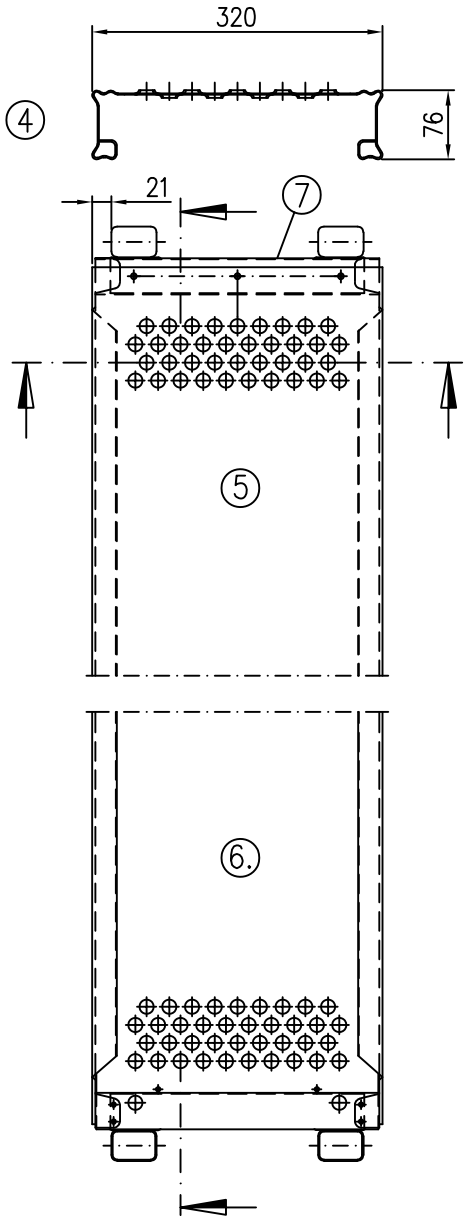
Bay length	For use up to load class	Maximum allowable p *) [kN/m²]
≤ 2.07 m	6	10.0
2.57 m	5	7.5
3.07 m	4	5.0

*) for the entire deck surface





● = Weld points

① Deck sheet
② Head piece
③ Claw
④ Sectional view, head piece not shown
⑤ Top view
⑥ Bottom view
⑦ Marking

Dimens. [m]	Weight [kg]
0.73	6.1
1.09	8.6
1.57	11.9
2.07	15.4
2.57	18.7
3.07	22.2

ALBLITZ MODUL

U–deck 0.73 – 3.07 x 0.32 m, steel, design: point–welded
in accordance with Z–8.1–16.2

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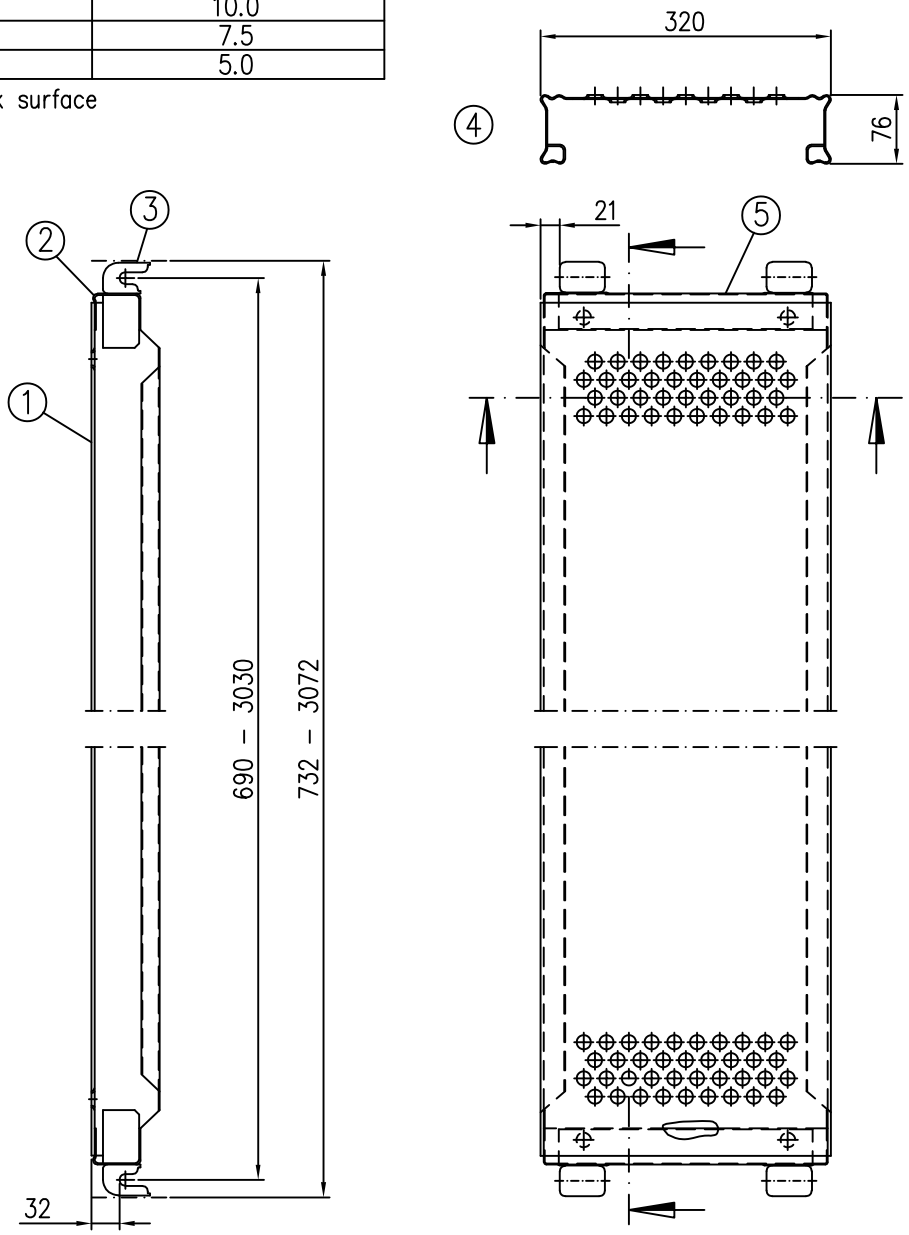
Annex B,
page 264

Bay length	For use up to load class	Maximum allowable p *) [kN/m²]
≤ 2.07 m	6	10.0
2.57 m	5	7.5
3.07 m	4	5.0

*) for the entire deck surface



① Deck sheet
② Head piece
③ Claw
④ Sectional view, head piece not shown
⑤ Marking

Dimens. [m]	Weight [kg]
0.73	6.1
1.09	8.6
1.57	11.9
2.07	15.4
2.57	18.7
3.07	22.2

ALBLITZ MODUL

U–deck 0.73 – 3.07 x 0.32 m, steel, design: hand–welded
in accordance with Z–8.1–16.2

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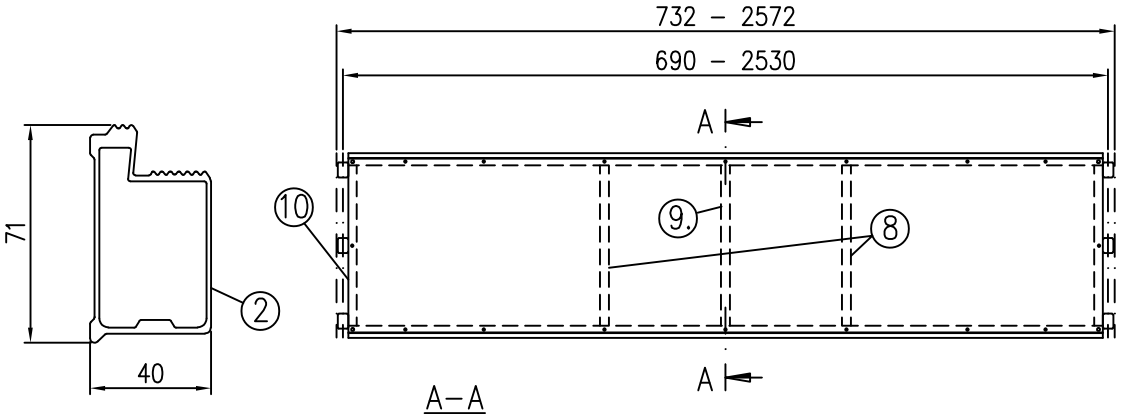
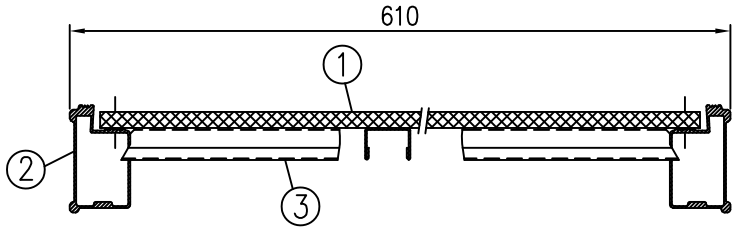
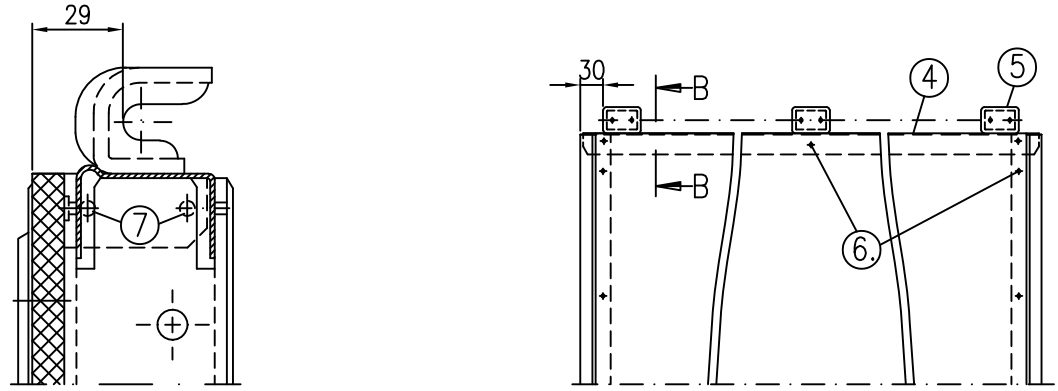
Annex B,
page 265

Bay length	For use up to load class	Maximum allowable p *) [kN/m²]
≤ 2.57 m	3	2.0

*) for the entire deck surface







① Plywood
② Rail
③ Rung
④ Head piece
⑤ Claw
⑥ Blind rivet
⑦ Blind rivet
⑧ Centre rung 2x only for 2.57 m
⑨ Centre rung 1x for 1.57 and 2.07 m
⑩ Marking

Dimens. [m]	Weight [kg]
0.73	7.5
1.09	9.7
1.57	13.1
2.07	16.4
2.57	19.3

ALBLITZ MODUL

U–robust deck 0.73 – 2.57 m x 0.61 m
in accordance with Z–8.1–16.2

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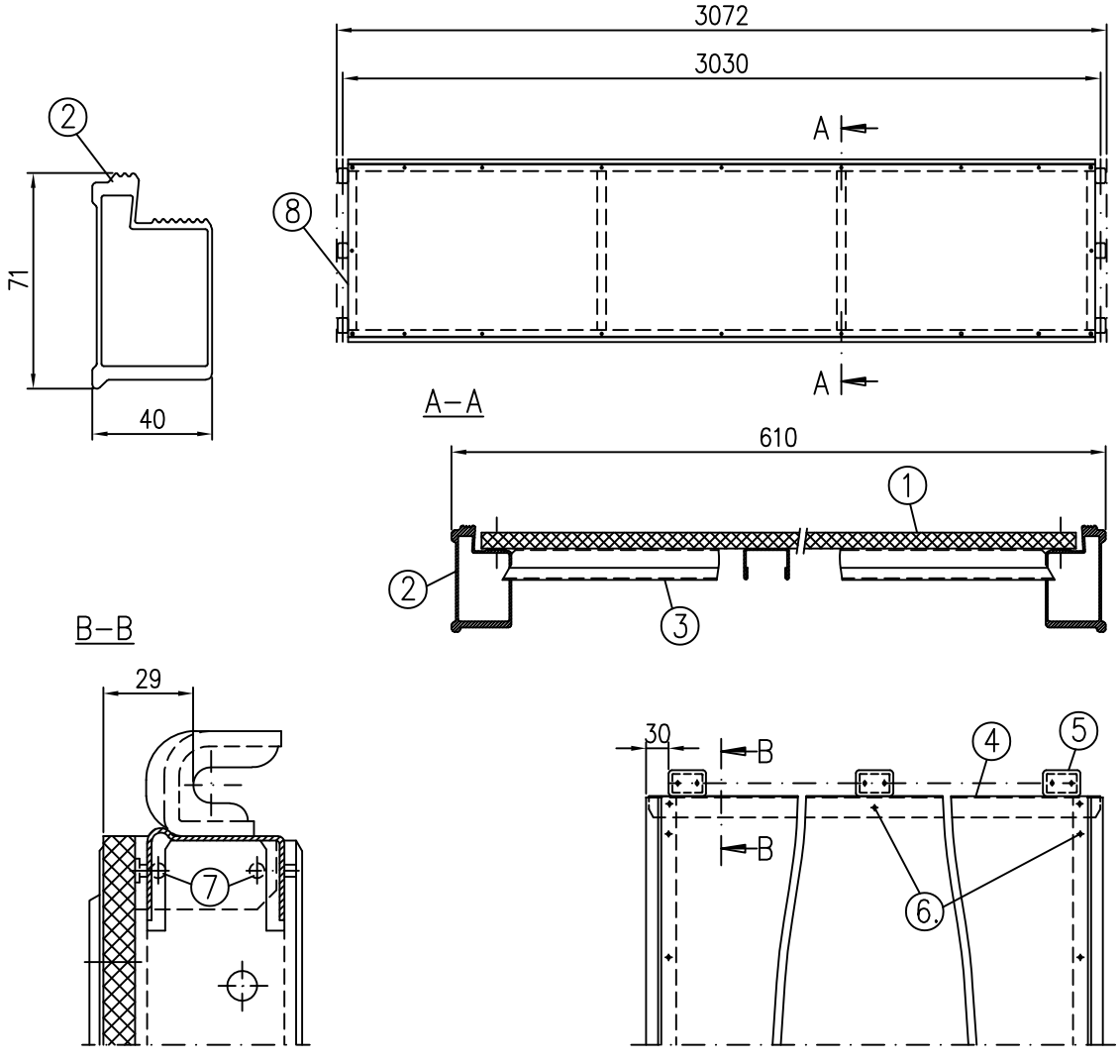
Annex B,
page 266

Bay length	For use up to load class	Maximum allowable p *) [kN/m²]
3.07 m	3	2.0

*) for the entire deck surface



① Plywood
② Rail
③ Rung
④ Head piece
⑤ Claw
⑥ Blind rivet
⑦ Blind rivet
⑧ Marking

Weight [kg]
24.2

ALBLITZ MODUL

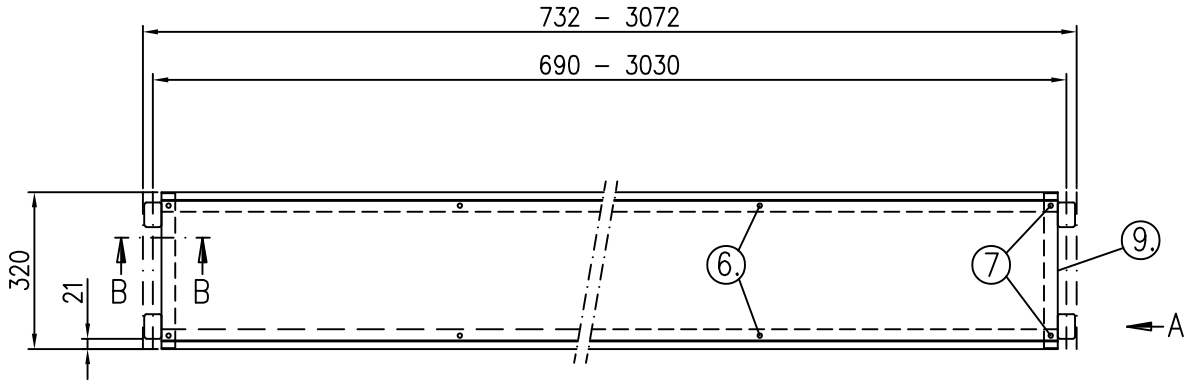
U–robust deck 3.07 x 0.61 m
in accordance with Z–8.1–16.2

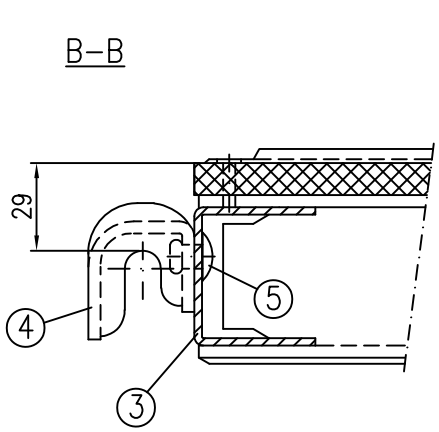
ABS710–A129_ABM 05.2021

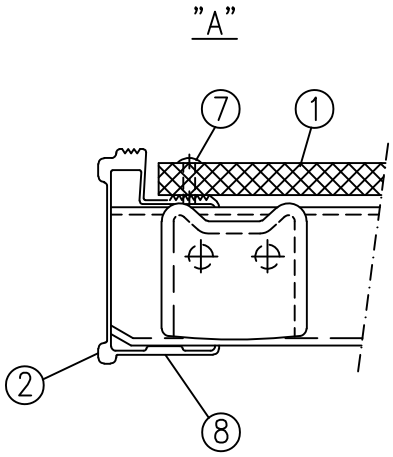
Annex B,
page 267

Bay length	For use up to load class	Maximum allowable p *) [kN/m²]	Bay length	For use up to load class	Maximum allowable p *) [kN/m²]
≤ 1.57 m	6	10.0	2.57 m	4	5.0
2.07 m	5	7.5	3.07 m	3	2.0

*) for the entire deck surface







① Plywood
② Rail
③ Head piece
④ Claw
⑤ Flat–head rivet
⑥ Blind rivet
⑦ Blind rivet
⑧ Detailed view profile (see Annex B, page 266)
⑨ Marking

Dimens. [m]	Weight [kg]
0.73	7.4
1.09	8.4
1.57	9.9
2.07	11.5
2.57	14.7
3.07	16.0

ALBLITZ MODUL

U–robust deck 0.73 – 3.07 m x 0.32 m
in accordance with Z–8.1–16.2

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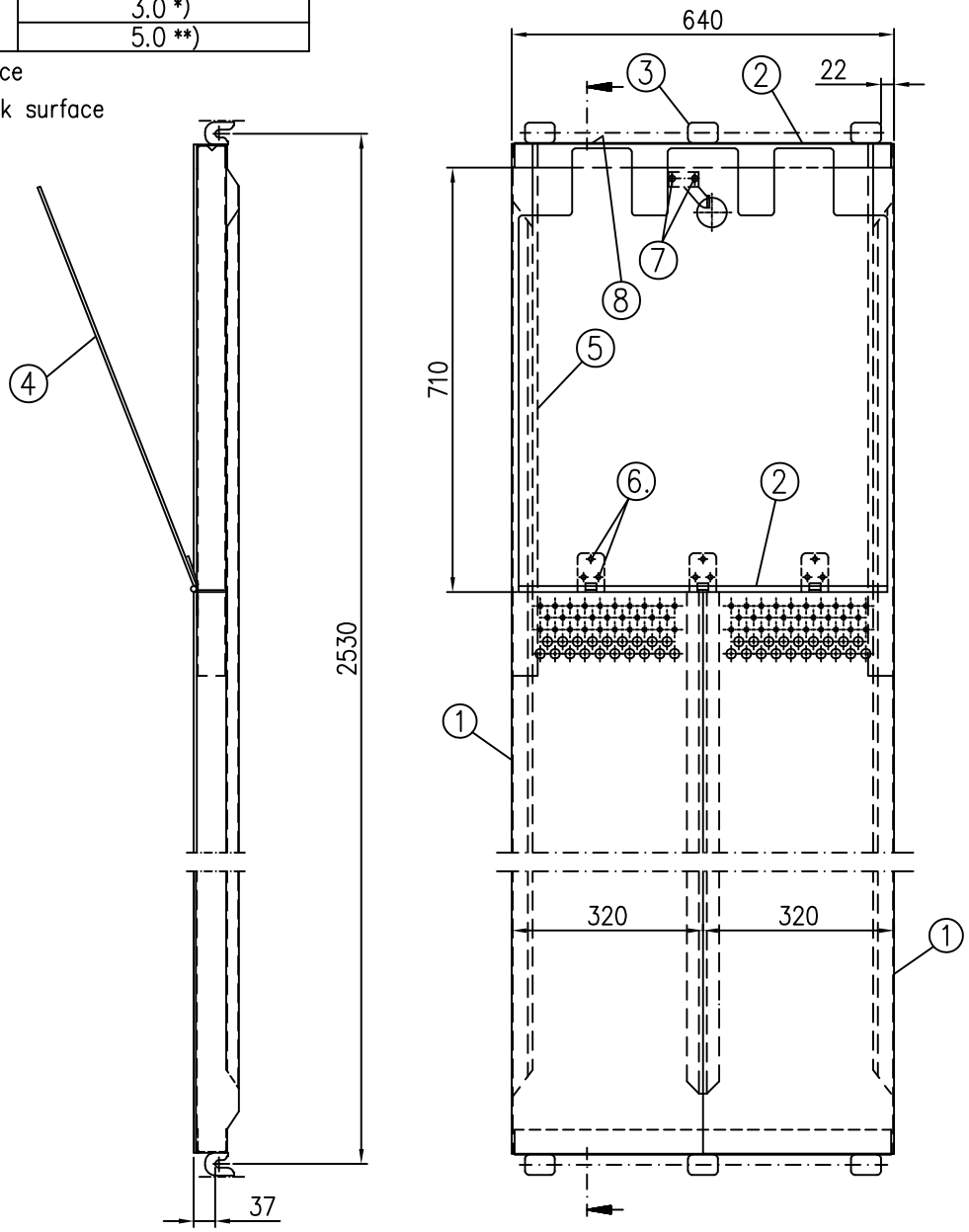
Annex B,
page 268

Bay length	For use up to load class	Maximum allowable p *) [kN/m²]
2.57 m	4	3.0 *)
		5.0 **)

*) for the entire deck surface
**) acts on 40% of the deck surface



① Deck sheet
② Head piece
③ Claw
④ Cover
⑤ Reinforcing–U
⑥ Blind rivet
⑦ Blind rivet
⑧ Marking

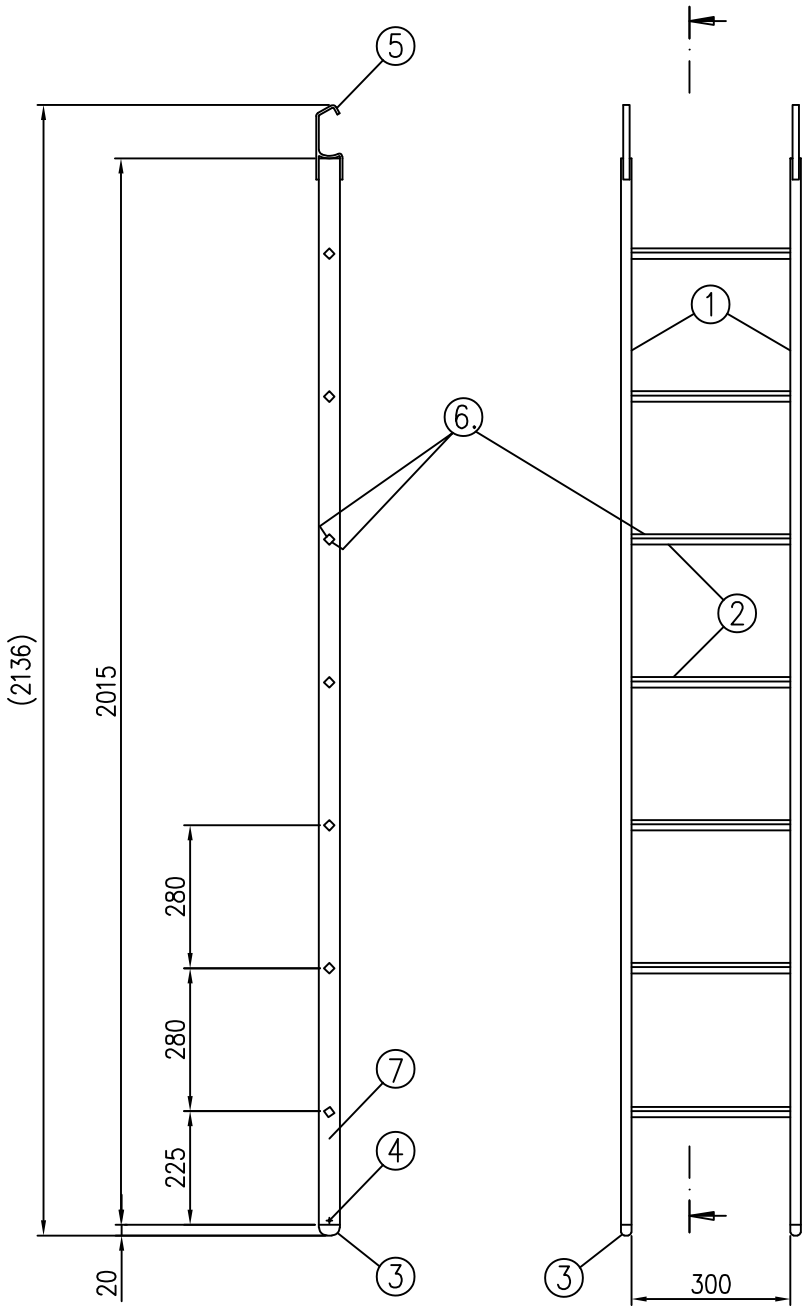
Weight [kg]
38.0

ALBLITZ MODUL

U–steel deck with trapdoor 2.57 x 0.64 m
in accordance with Z–8.1–16.2

ABS710–A119_ABM 05.2021

Annex B,
page 269



① Rail
② Rung
③ Rubber base
④ Blind rivet
⑤ Suspension hook
⑥ Ribbed profile
⑦ Marking

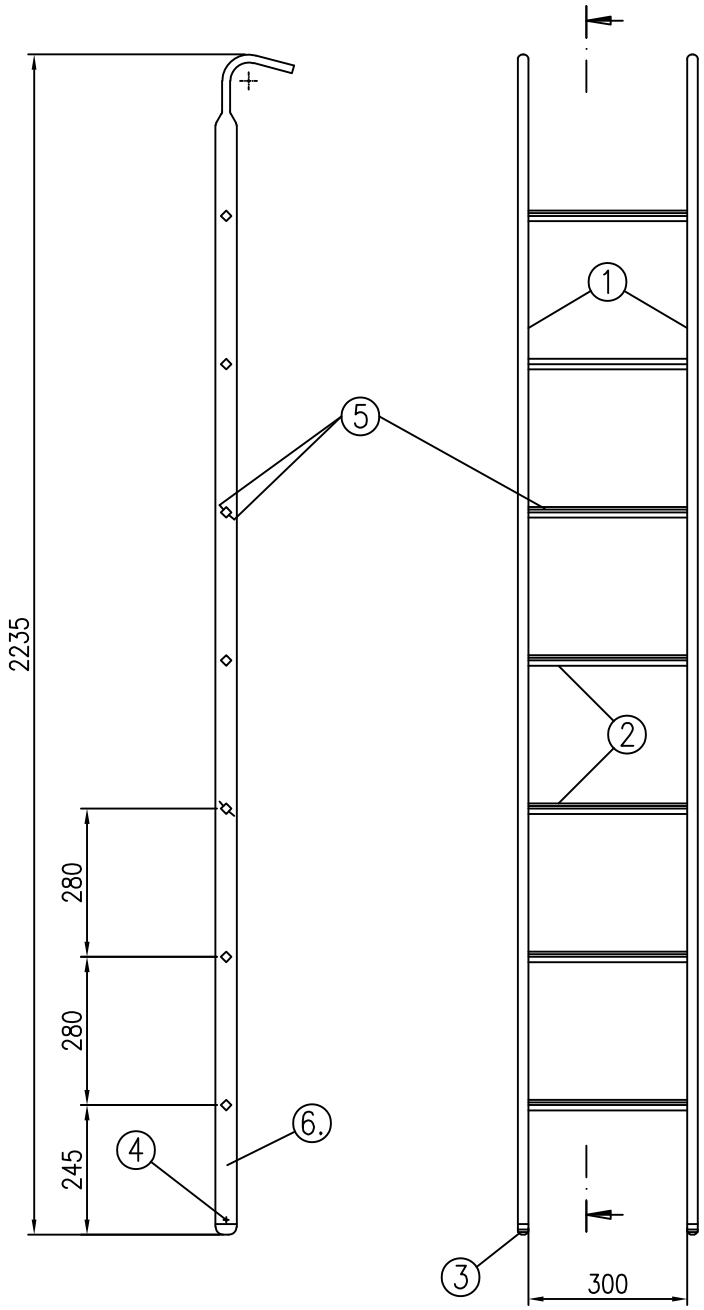
Weight [kg]
7.6

ALBLITZ MODUL

Storey ladder 7 rungs T15
in accordance with Z-8.22-939

ABS720-A084_ABM 05.2021

Annex B,
page 270



① Rail
② Rung
③ Rubber base
④ Blind rivet
⑤ Ribbed profile
⑥ Marking

Weight [kg]
7.8

ALBLITZ MODUL

Storey ladder 7 rungs
in accordance with Z-8.1-16.2

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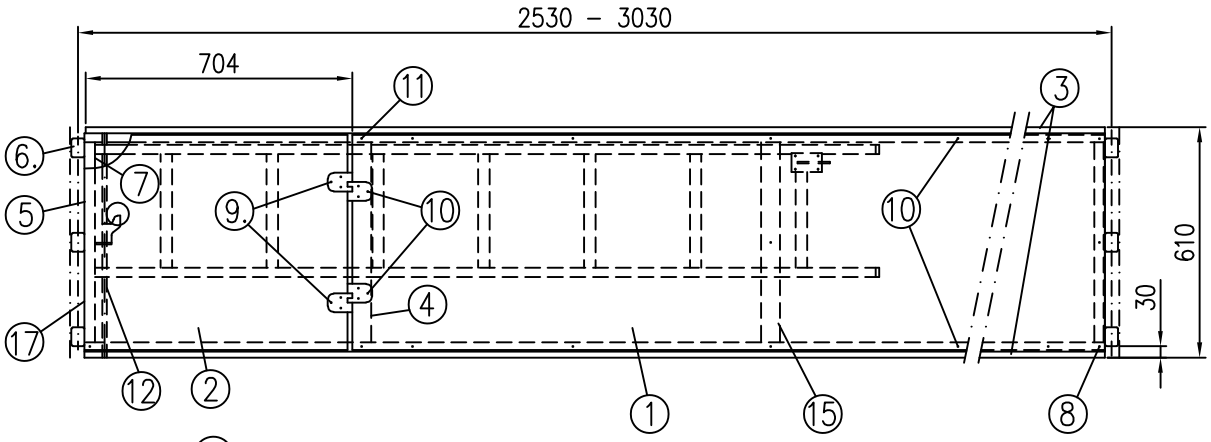
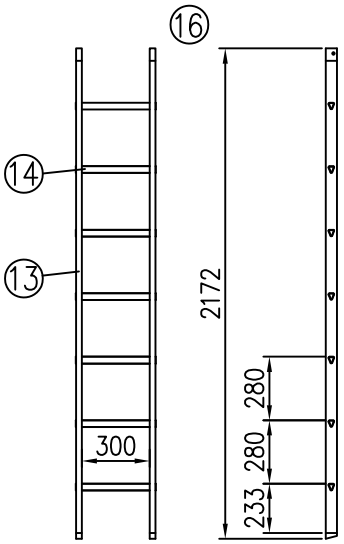
Annex B,
page 271





Bay length	For use up to load class	Maximum allowable p *) [kN/m²]
≤ 3.07 m	3	2,0

*) for the entire deck surface

① Plywood
② Cover
③ Rail
④ Reinforcement
⑤ Head piece
⑥ Claw
⑦ Reinforcement
⑧ Blind rivet
⑨ Blind rivet
⑩ Blind rivet
⑪ Blind rivet
⑫ Axis
⑬ Ladder rail
⑭ Ladder rung
⑮ Brace
⑯ Ladder according to EN 131
⑰ Marking

Dimens. [m]	Weight [kg]
2.57	24.0
3.07	27.4

ALBLITZ MODUL

U–robust deck with trapdoor with ladder 2.57 – 3.07 x 0.61 m
in accordance with Z–8.1–16.2

ABS710–A132_ABM 05.2021

Annex B,
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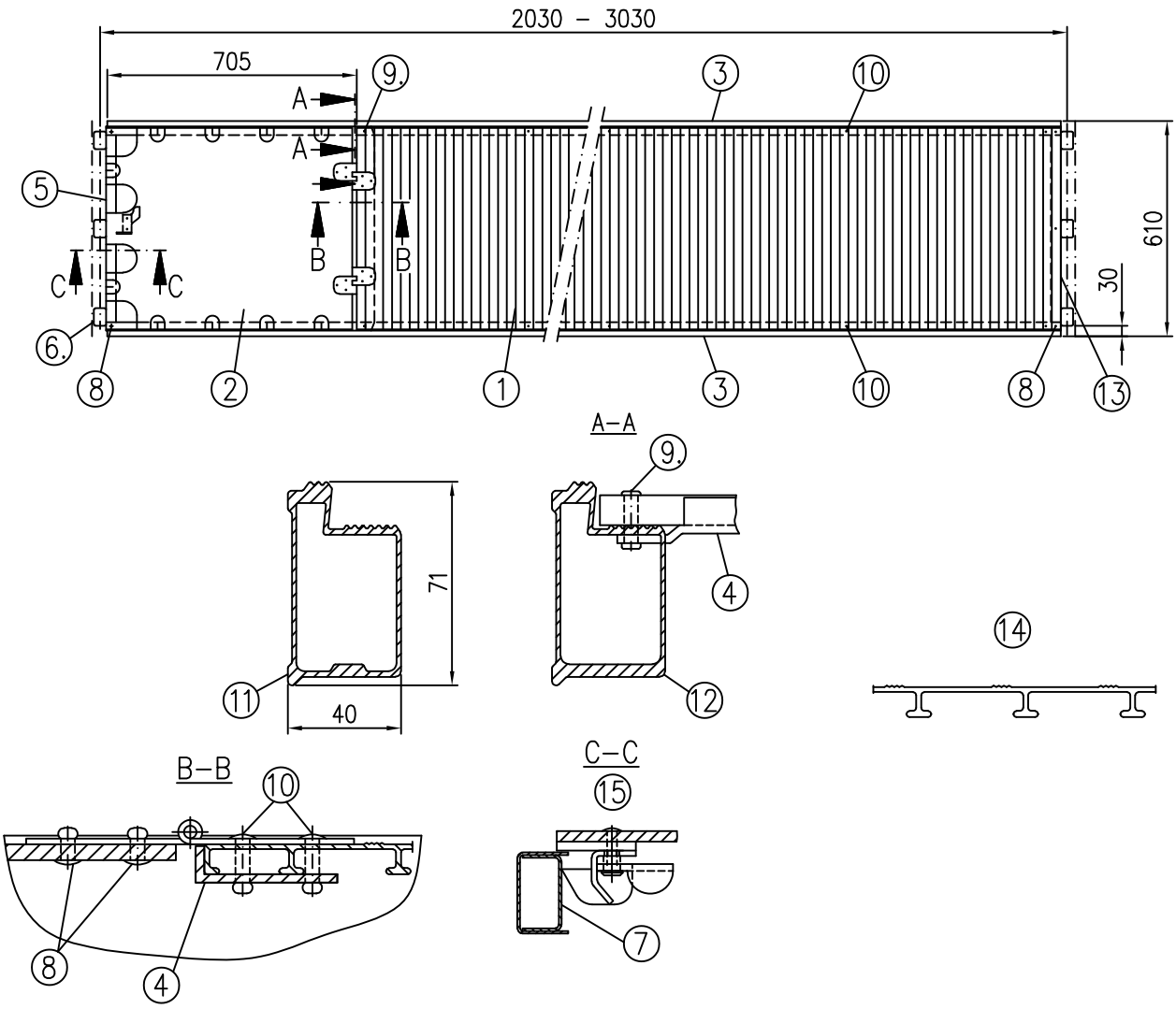

Bay length	For use up to load class	Maximum allowable p *) [kN/m²]
≤ 3.07 m	3	2,0

*) for the entire deck surface

① Transverse profile
② Cover
③ Rail
④ Reinforcement
⑤ Head piece
⑥ Claw
⑦ Reinforcement
⑧ Blind rivet
⑨ Blind rivet
⑩ Blind rivet
⑪ Profile for 2.07 and 2.57 m
⑫ Profile for 3.07 m
⑬ Marking
⑭ Cross section (Transverse profile)
⑮ (Claw not shown in drawing)

Dimens. [m]	Weight [kg]
2.07	17.0
2.57	20.0
3.07	24.5

ALBLITZ MODUL

U–aluminium deck with trapdoor 2.07 – 3.07 x 0.61 m
in accordance with Z–8.1–16.2

ABS710–A137_ABM 05.2021

Annex B,
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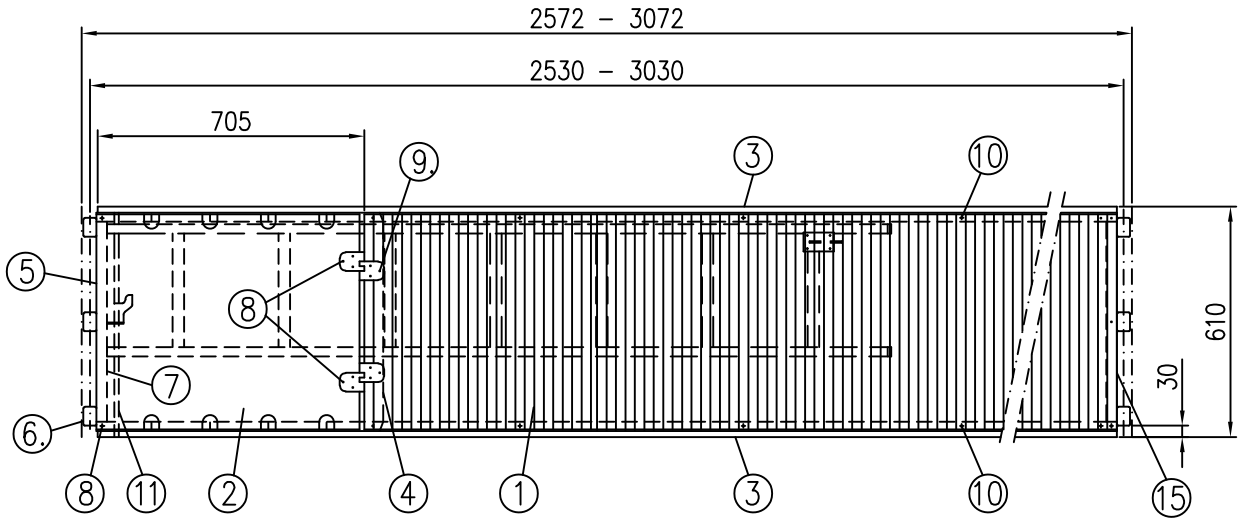
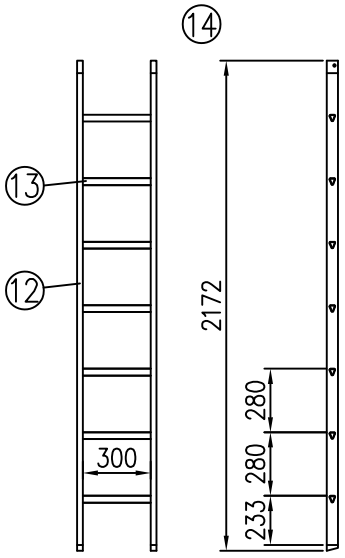




Bay length	For use up to load class	Maximum allowable p *) [kN/m²]
≤ 3.07 m	3	2.0

*) for the entire deck surface

① Transverse profile
② Cover
③ Rail
④ Reinforcement
⑤ Head piece
⑥ Claw
⑦ Reinforcement
⑧ Blind rivet
⑨ Blind rivet
⑩ Blind rivet
⑪ Axis
⑫ Ladder rail
⑬ Ladder rung
⑭ Ladder according to EN 131
⑮ Marking

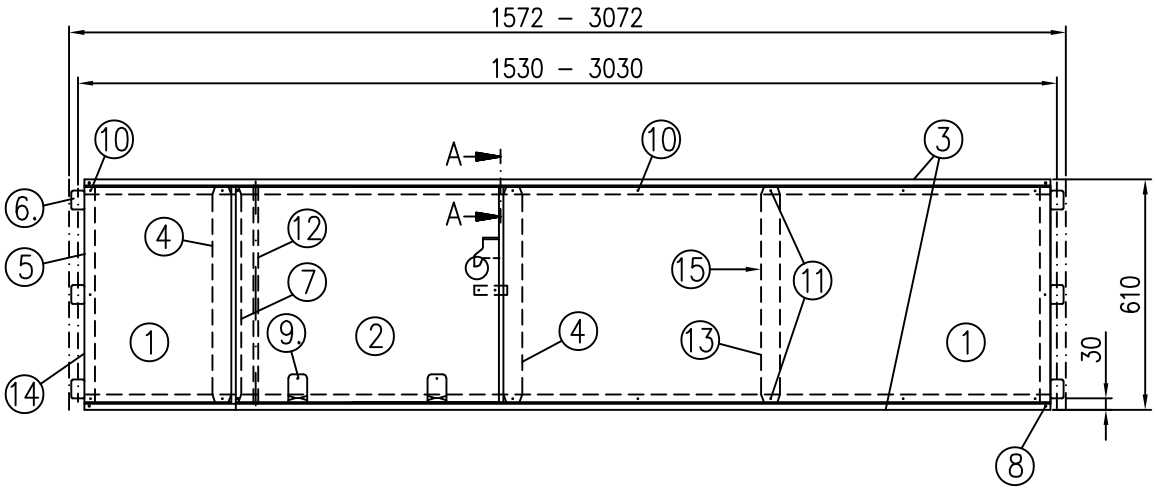
Dimens. [m]	Weight [kg]
2.57	24.0
3.07	28.0

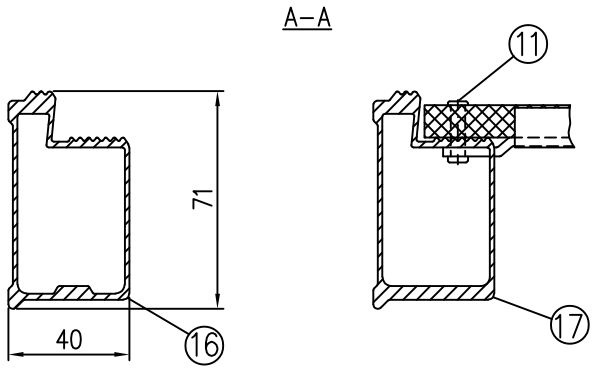
ALBLITZ MODUL

U–aluminium deck with trapdoor 2.57 – 3.07 x 0.61 m, with ladder
in accordance with Z–8.1–16.2

ABS710–A138_ABM 05.2021

Annex B,
page 274





Bay length	For use up to load class	Maximum allowable p *) [kN/m²]
≤ 3.07 m	3	2.0

*) for the entire deck surface

① Plywood
② Cover
③ Rail
④ Reinforcement
⑤ Head piece
⑥ Claw
⑦ Steel–U
⑧ Blind rivet
⑨ Blind rivet
⑩ Blind rivet
⑪ Blind rivet
⑫ Axis
⑬ Brace
⑭ Marking
⑮ only for 2.57 and 3.07 m
⑯ Profile for 1.57 to 2.57 m
⑰ Profile for 3.07 m

Dimens. [m]	Weight [kg]
1.57	14.2
2.07	17.2
2.57	20.5
3.07	24.6

ALBLITZ MODUL

U–robust deck with trapdoor 1.57 – 3.07 x 0.61 m, trapdoor arranged offset in accordance with Z–8.1–16.2

ABS710–A133_ABM 05.2021

Annex B,
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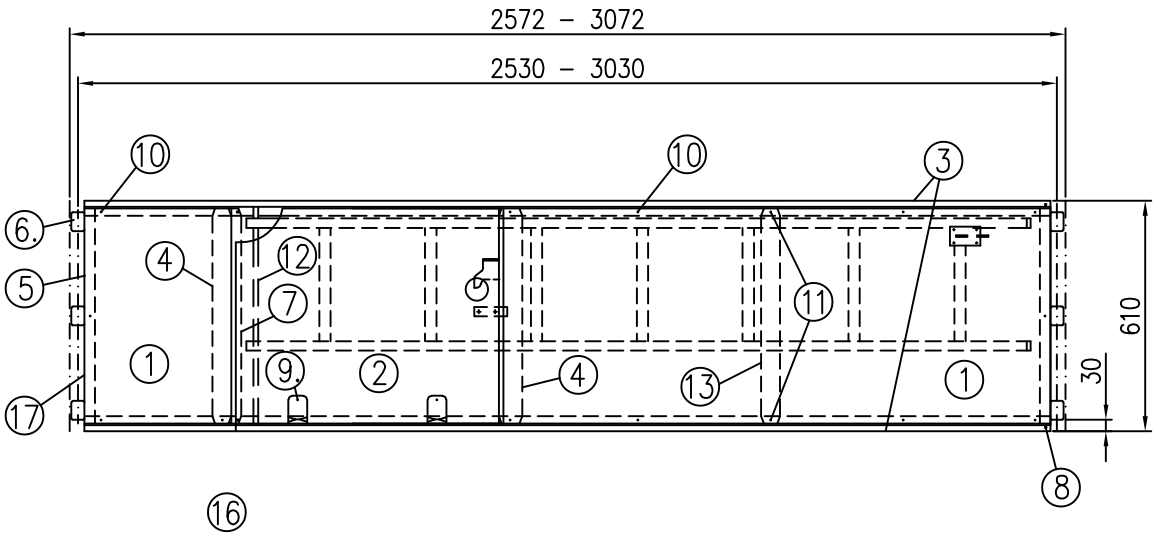
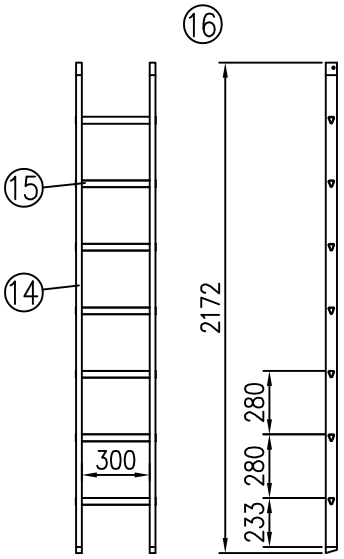




Bay length	For use up to load class	Maximum allowable p *) [kN/m²]
≤ 3.07 m	3	2.0

*) for the entire deck surface

① Plywood
② Cover
③ Rail
④ Reinforcement
⑤ Head piece
⑥ Claw
⑦ Steel–U
⑧ Blind rivet
⑨ Blind rivet
⑩ Blind rivet
⑪ Blind rivet
⑫ Axis
⑬ Brace
⑭ Ladder rail
⑮ Ladder rung
⑯ Ladder according to EN 131
⑰ Marking

Dimens. [m]	Weight [kg]
2.57	25.2
3.07	28.4

ALBLITZ MODUL

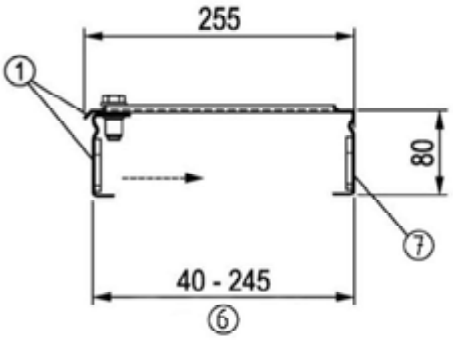
U–robust deck with trapdoor with ladder 2.57 – 3.07 x 0.61 m;
trapdoor arranged offset
in accordance with Z–8.1–16.2

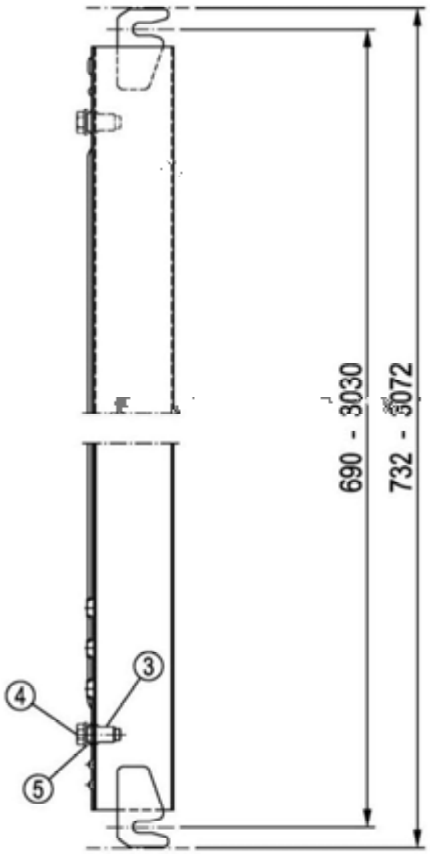
ABS710–A134_ABM 05.2021

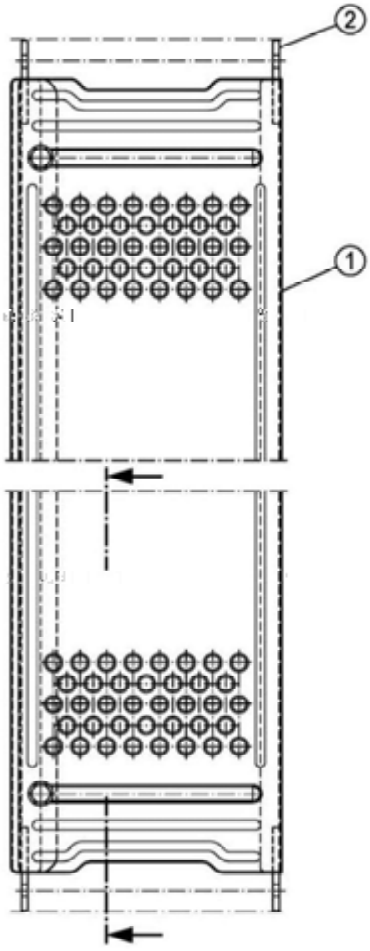
Annex B,
page 276

Bay length	For use up to load class	Maximum allowable p *) [kN/m²]
≤ 2.07 m	6	10.0
2.57 m	5	7.5
3.07 m	4	5.0

*) for the entire deck surface







① Deck sheet
② Suspension hook
③ Pop rivet nut
④ Hexagon bolt
⑤ Disc
⑥ Adjusting range
⑦ Marking

Dimens. [m]	Weight [kg]
0.73	5,2
1.09	7.8
1.57	11.4
2.07	14.9
2.57	18.6
3.07	22.3

ALBLITZ MODUL

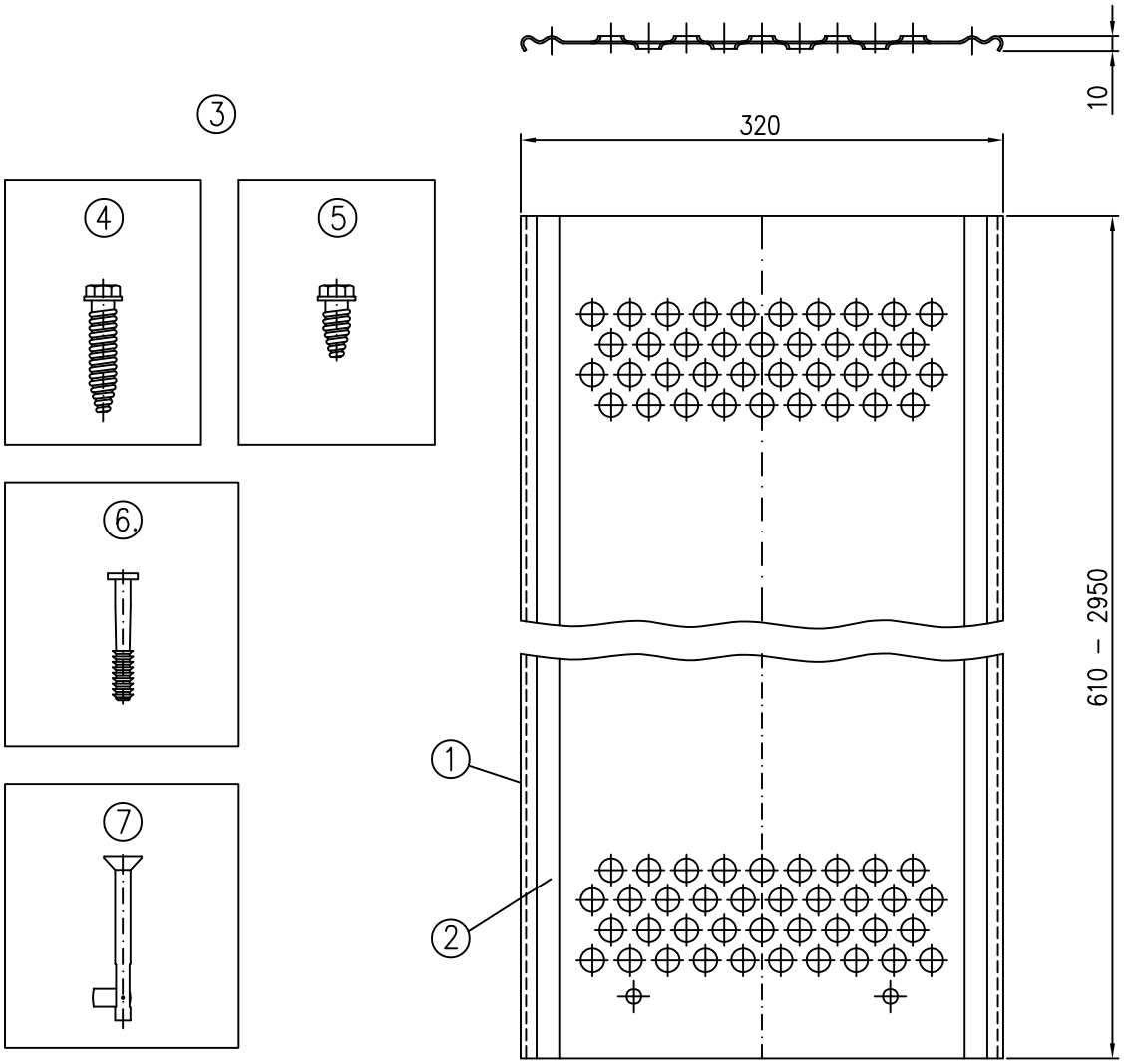
U-gap deck, telescopic 0.73 – 3.07 m
in accordance with Z-8.22-939

ABM721-B143 05.2021

Annex B,
page 277

Bay length	For use up to load class	Maximum allowable p *) [kN/m²]	
≤ 3.07 m	6	10.0	max. span 24 cm in transverse direction (clear gap width appr. 22 cm)

*) for the entire deck surface



① Deck sheet
② Marking
③ Options to secure the position
④ Locking screw long WS 19 / 22 ISO 898–1 Property class 4.6 Screw head red
⑤ Locking screw short WS 19 / 22 ISO 898–1 Property class 4.6 Screw head blue
⑥ Locking gudgeon ø11 Plastic
⑦ Steel bolt ø11 (self–locking)

Dimens. [m]	Weight [kg]
0.73	2.6
1.09	3.8
1.57	4.2
2.07	6.3
2.57	8.5
3.07	12.0

ALBLITZ MODUL

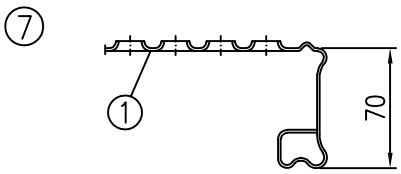
Gap cover, steel 0.73 – 3.07 x 0.32 m
in accordance with Z–8.22–939

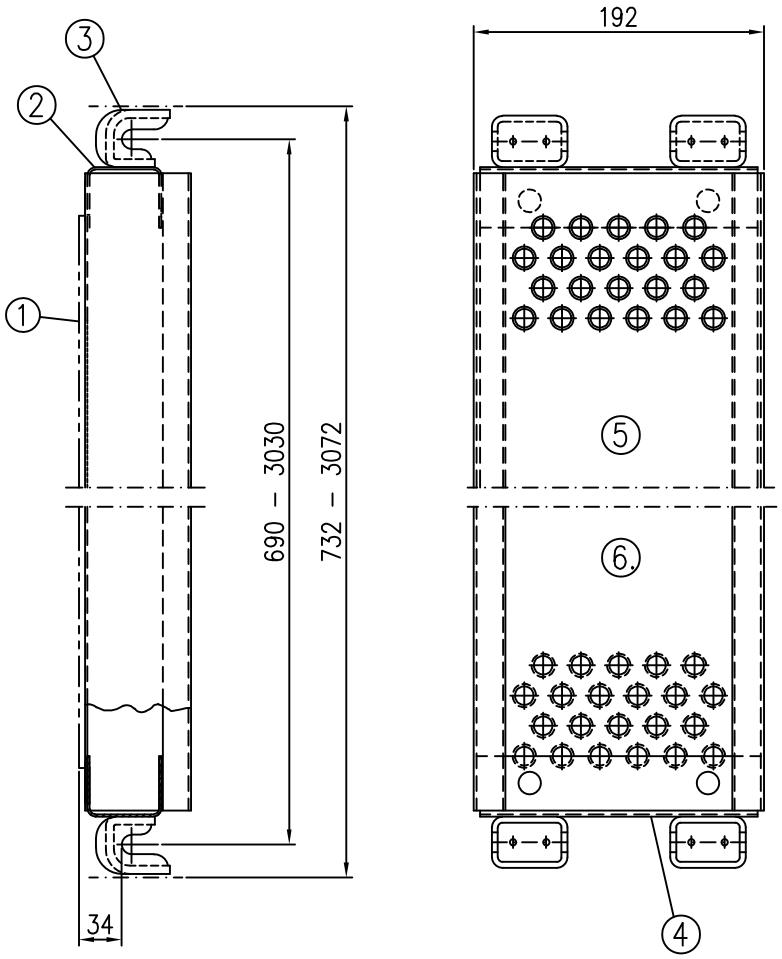
ABS720–A171_ABM 05.2021

Annex B,
page 278

Bay length	For use up to load class	Maximum allowable p *) [kN/m²]
≤ 2.07 m	6	10.0
2.57 m	5	7.5
3.07 m	4	5.0

*) for the entire deck surface





① Deck sheet
② Head piece
③ Claw
④ Marking
⑤ Top view
⑥ Bottom view
⑦ Cross section (drawing does not show suspension)

Dimens. [m]	Weight [kg]
0.73	5.1
1.09	6.4
1.57	8.5
2.07	10.2
2.57	13.2
3.07	15.3

ALBLITZ MODUL

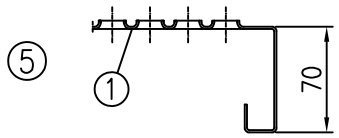
U–deck, steel 0.73 – 3.07 x 0.19 m
in accordance with Z–8.1–16.2

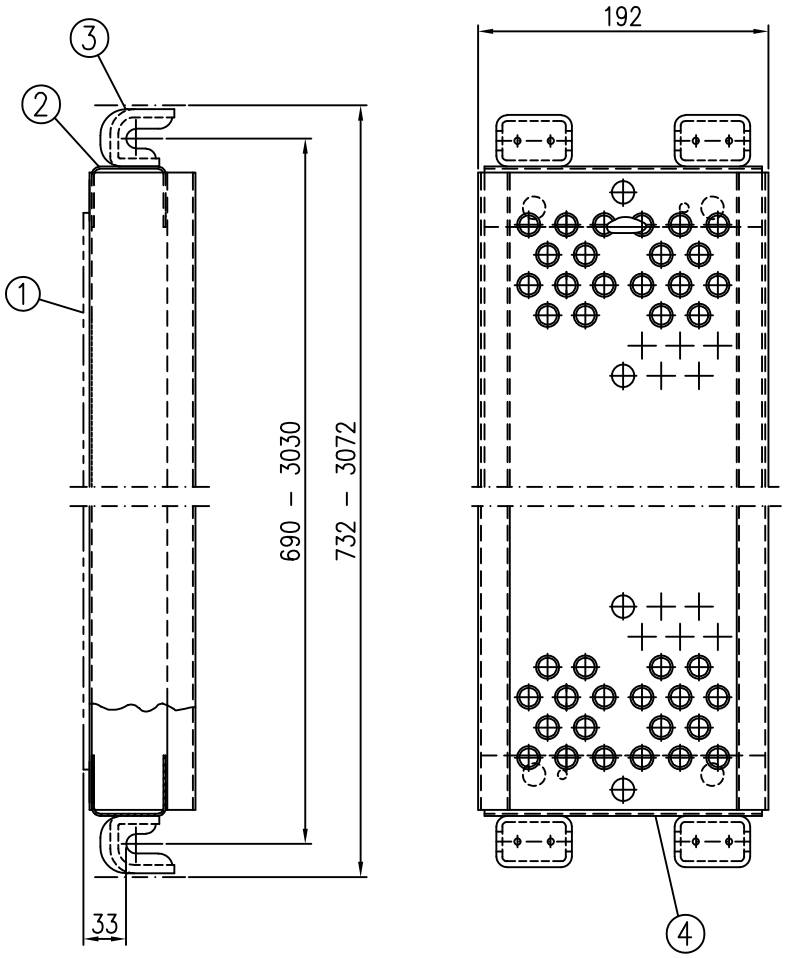
ABS710–A117_ABM 05.2021

Annex B,
page 279

Bay length	For use up to load class	Maximum allowable p *) [kN/m²]
≤ 2.07 m	6	10.0
2.57 m	5	7.5
3.07 m	4	5.0

*) for the entire deck surface





① Deck sheet
② Head piece
③ Claw
④ Marking
⑤ Cross section (drawing does not show suspension)

No longer manufactured, only for continued use

Dimens. [m]	Weight [kg]
0.73	4.5
1.09	6.0
1.57	8.5
2.07	10.2
2.57	13.2
3.07	15.3

ALBLITZ MODUL

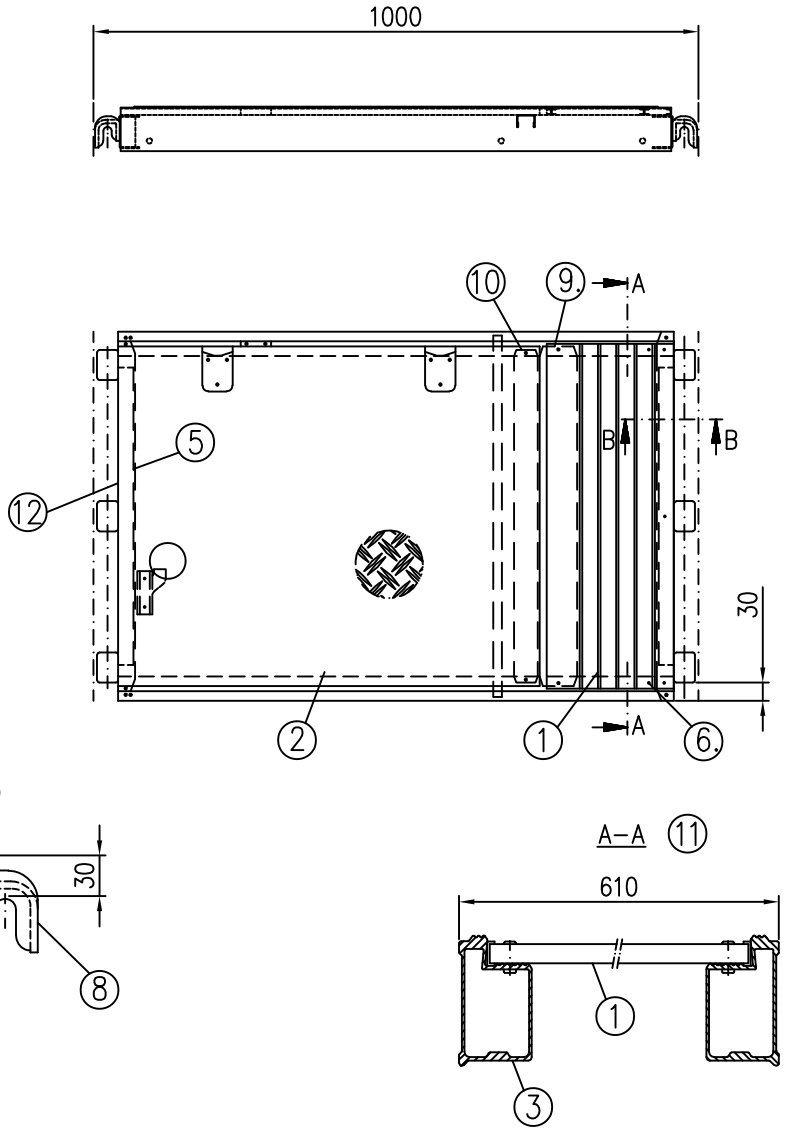
U–deck, steel 0.73 – 3.07 x 0.19 m (discontinued design)
in accordance with Z–8.1–16.2

ABS710–A118_ABM 05.2021

Annex B,
page 280

Bay length	For use up to load class	Maximum allowable p *) [kN/m²]
1.00 m	3	2.0

*) for the entire deck surface



① Transverse profile
② Cover
③ Rail
④ Head piece
⑤ Reinforcement
⑥ Blind rivet
⑦ Blind rivet
⑧ Claw
⑨ L-reinforcement
⑩ U-rung
⑪ (galvanized without head piece)
⑫ Marking

Weight [kg]
10.0

ALBLITZ MODUL

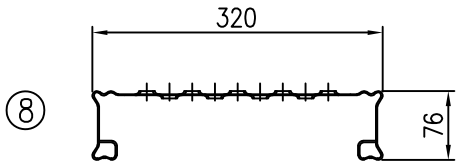
U-aluminium deck with trapdoor 1.00 x 0.61 m
in accordance with Z-8.22-939

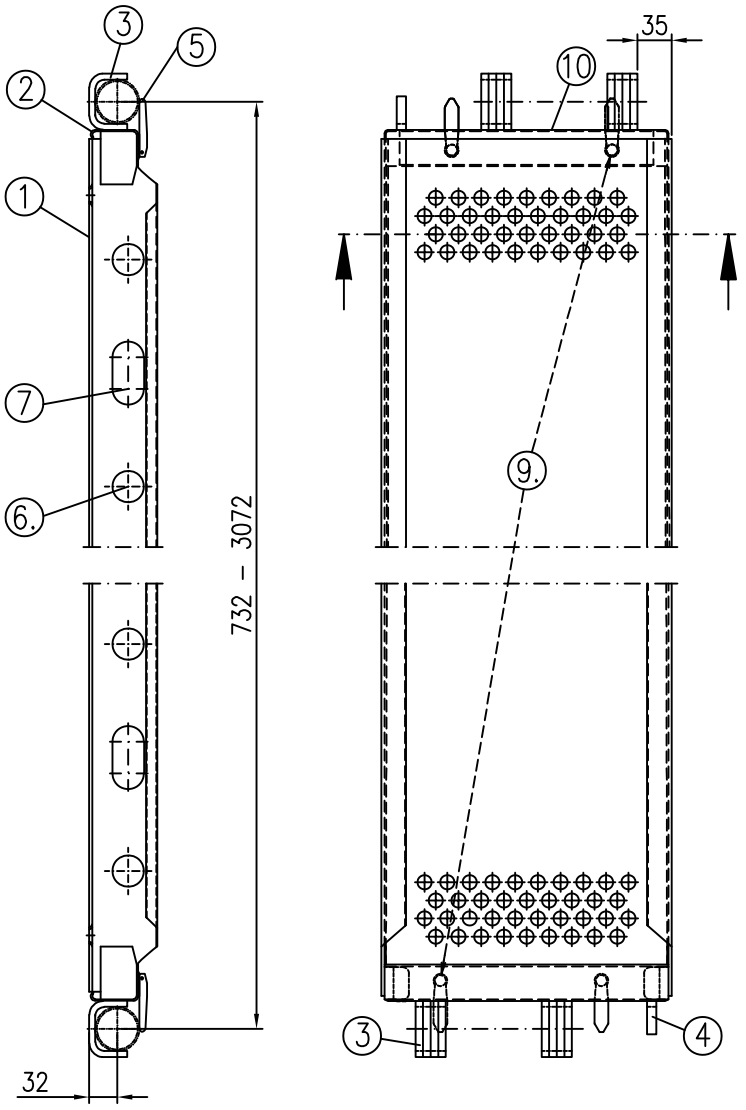
ABM721-B147 05.2021

Annex B,
page 281

Bay length	For use up to load class	Maximum allowable p *) [kN/m²]
≤ 2.07 m	6	10.0
2.57 m	5	7.5
3.07 m	4	5.0

*) for the entire deck surface





Bay length	Number of openings 1	Number of openings 2
0.73 m	2	–
1.00 m 1.09 m	2	2
1.57 m	4	2
2.07 m	6	4
2.57 m	8	6
3.07 m	10	8

① Deck sheet
② Head piece
③ Suspension–U
④ Angle
⑤ Locking ledger (red)
⑥ Opening 1
⑦ Opening 2
⑧ Sectional view, head piece not shown
⑨ alternative position locking ledger
⑩ Marking

Dimens. [m]	Weight [kg]
0.73	7.0
1.09	9.4
1.57	12.5
2.07	16.0
2.57	18.9
3.07	22.5

ALBLITZ MODUL

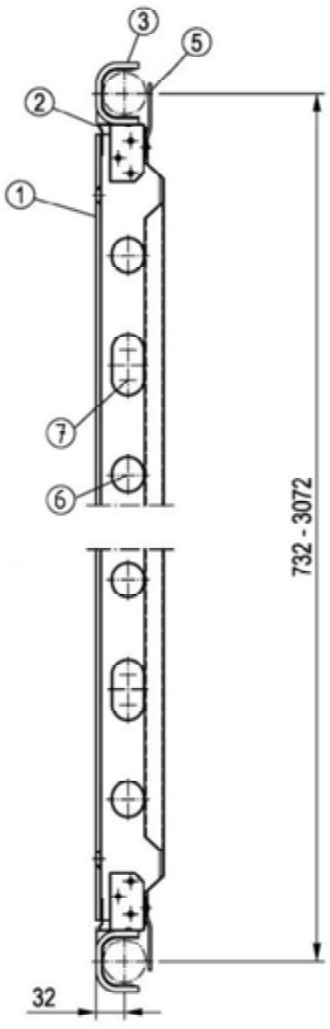
O–deck T9 0.73 – 3.07 x 0.32 m, steel
design: spot–welded / hand–welded
in accordance with Z–8.1–919

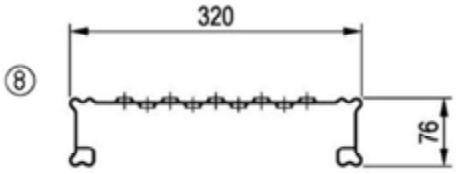
ABM721–B148 05.2021

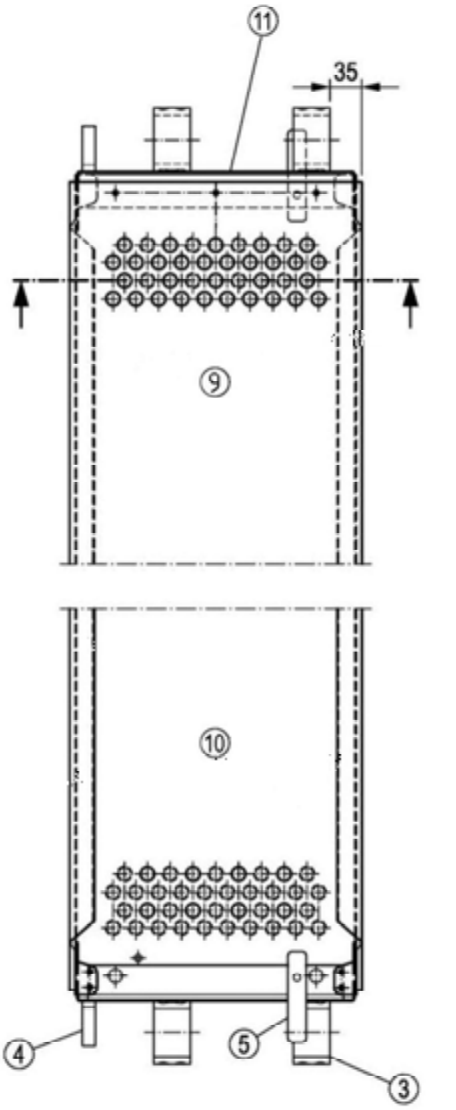
Annex B,
page 282

Bay length	For use up to load class	Maximum allowable p *) [kN/m²]
≤ 2.07 m	6	10.0
2.57 m	5	7.5
3.07 m	4	5.0

*) for the entire deck surface







Bay length	Number of openings 1	Number of openings 2
0.73 m	2	–
1.09 m	2	2
1.57 m	4	2
2.07 m	6	4
2.57 m	8	6
3.07 m	10	8

● = Weld points

① Deck sheet
② Head piece
③ Suspension–U
④ Angle
⑤ Locking plate
⑥ Opening 1
⑦ Opening 2
⑧ Sectional view, head piece not shown
⑨ Top view
⑩ Bottom view
⑪ Marking

Dimens. [m]	Weight [kg]
0.73	7.0
1.09	9.4
1.57	12.5
2.07	16.0
2.57	18.9
3.07	22.5

No longer manufactured, only for continued use

ALBLITZ MODUL

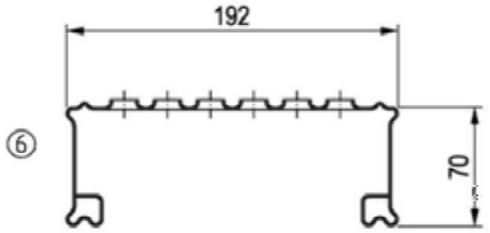
O–deck T4 0.73 – 3.07 x 0.32 m, steel design: spot–welded in accordance with Z–8.1–919 (discontinued design)

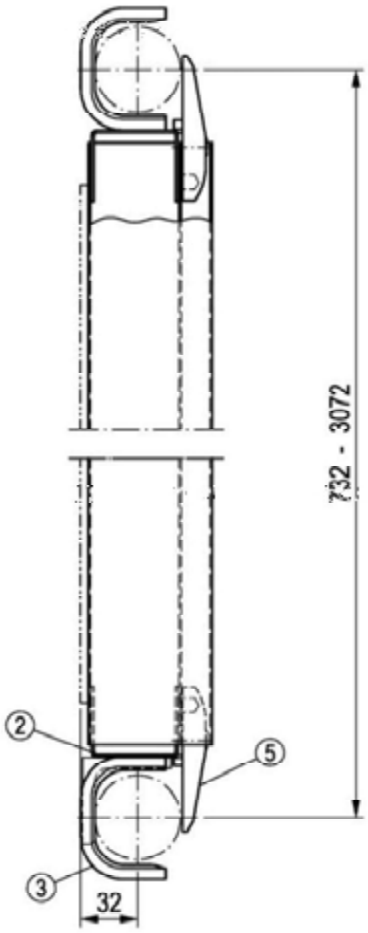
ABM721–B149 05.2021

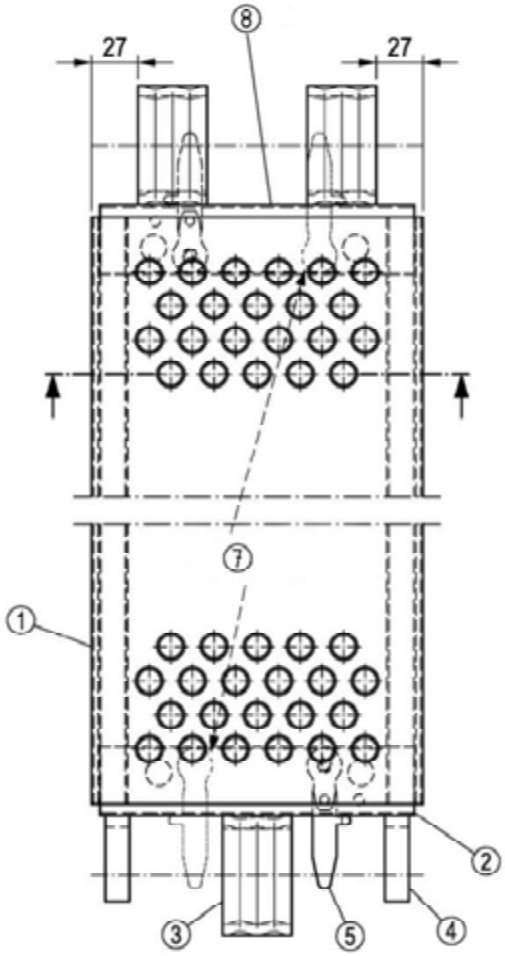
Annex B, page 283

Bay length	For use up to load class	Maximum allowable p *) [kN/m²]
≤ 2.07 m	6	10.0
2.57 m	5	7.5
3.07 m	4	5.0

*) for the entire deck surface







① Deck sheet
② Head piece
③ Suspension–U
④ Angle
⑤ Locking ledger (red) (positioned diagonally)
⑥ Sectional view, head piece not shown
⑦ alternative position locking ledger
⑧ Marking

Dimens. [m]	Weight [kg]
0.73	5.0
1.09	7.0
1.57	10.0
2.07	12.7
2.57	13.0
3.07	18.2

ALBLITZ MODUL

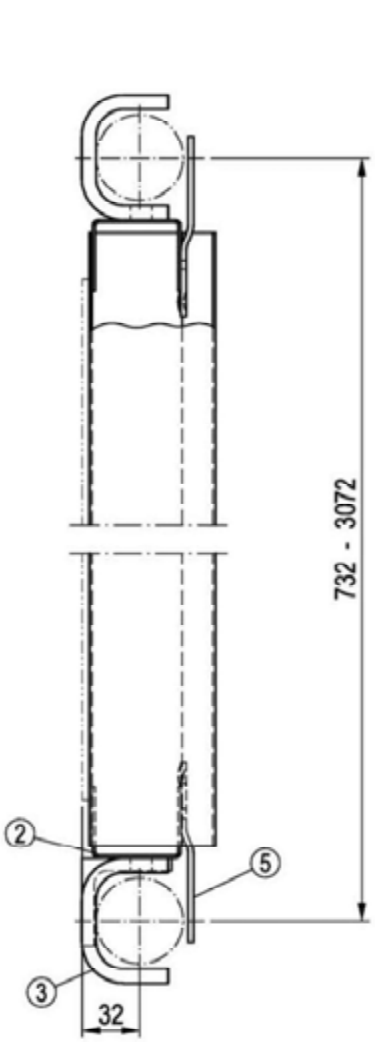
O–deck T9 0.73 – 3.07 x 0.19 m, steel
in accordance with Z–8.1–919

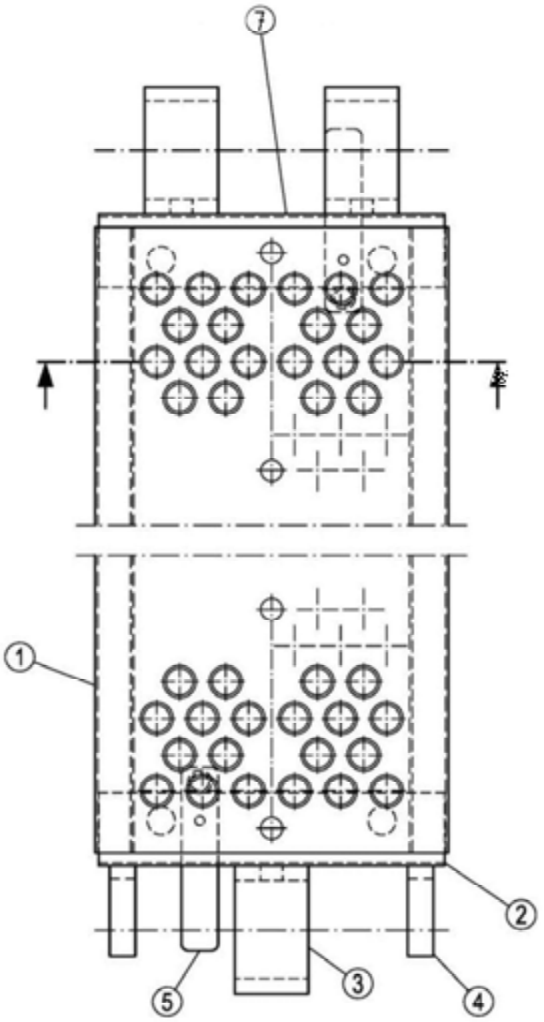
ABM721–B150 05.2021

Annex B,
page 284

Bay length	For use up to load class	Maximum allowable p *) [kN/m²]
≤ 2.07 m	6	10.0
2.57 m	5	7.5
3.07 m	4	5.0

*) for the entire deck surface





① Deck sheet
② Head piece
③ Suspension–U
④ Angle
⑤ Locking plate
⑥ Sectional view, head piece not shown
⑦ Marking

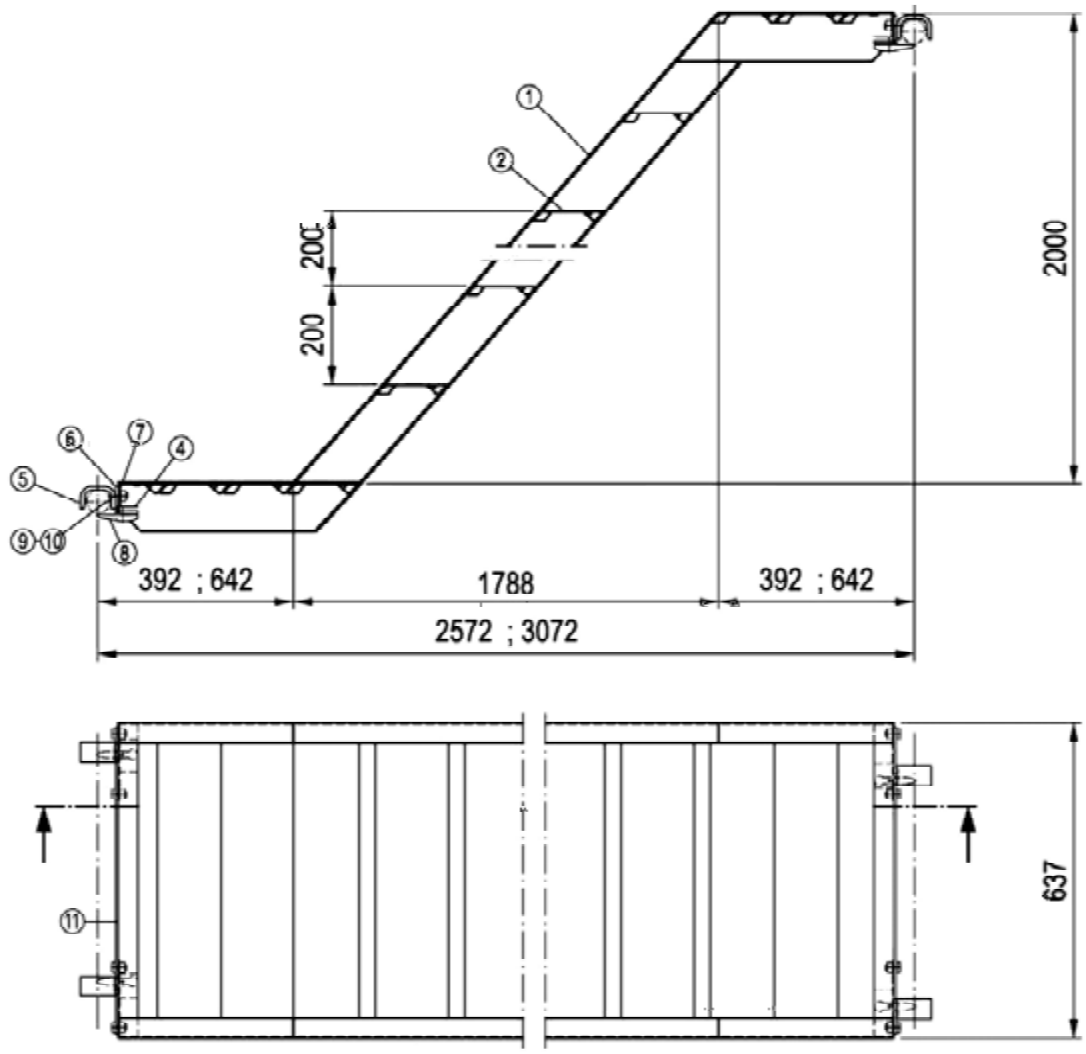
Dimens. [m]	Weight [kg]
0.73	5.0
1.09	7.0
1.57	10.0
2.07	12.7
2.57	13.0
3.07	18.2

ALBLITZ MODUL

O–deck 0.73 – 3.07 x 0.19 m, steel (discontinued design)
in accordance with Z–8.1–919

ABM721–B151 05.2021

Annex B,
page 285



① Stairway stringer
② Stairway step
④ U–head piece, aluminium
⑤ Suspension–U
⑥ L–head piece
⑦ Reinforcement place
⑧ Locking ledger (red)
⑨ Hexagon bolt
⑩ Locknut
⑪ Marking

Dimens. [m]	Weight [kg]
2.57	23.2
3.07	27.7

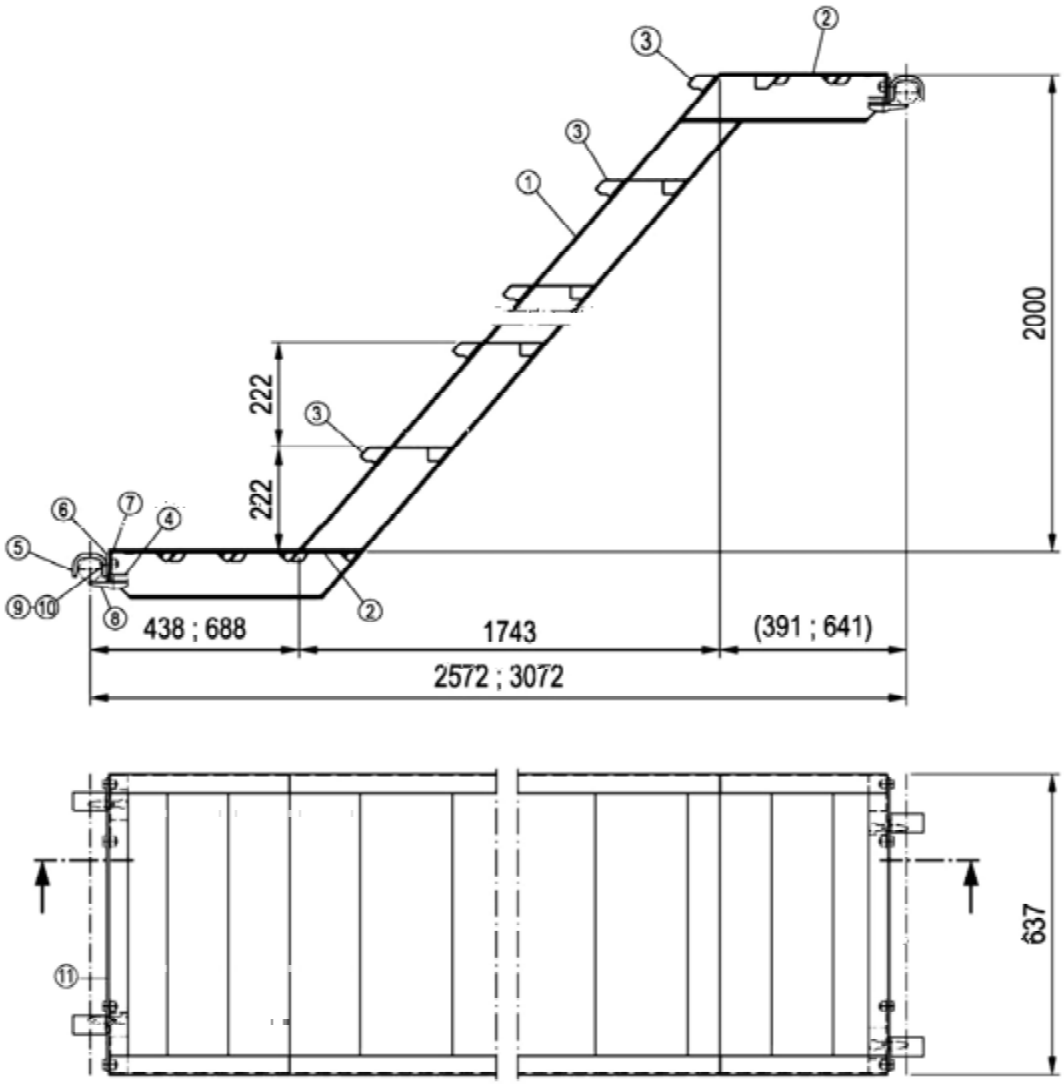
Maximum load capacity: 2.0 kN/m²

ALBLITZ MODUL

0–platform stairway, aluminium 2.57; 3.07 x 2.0 x 0.64 m
in accordance with Z–8.1–919

ABM721–B152 05.2021

Annex B,
page 286



① Komfort stairway stringer
② Stairway step
③ Komfort stairway step
④ U–head piece, aluminium
⑤ Suspension–U
⑥ L–head piece
⑦ Reinforcement place
⑧ Locking ledger (red)
⑨ Hexagon bolt
⑩ Locknut
⑪ Marking

Dimens. [m]	Weight [kg]
2.57	29.2
3.07	34.2

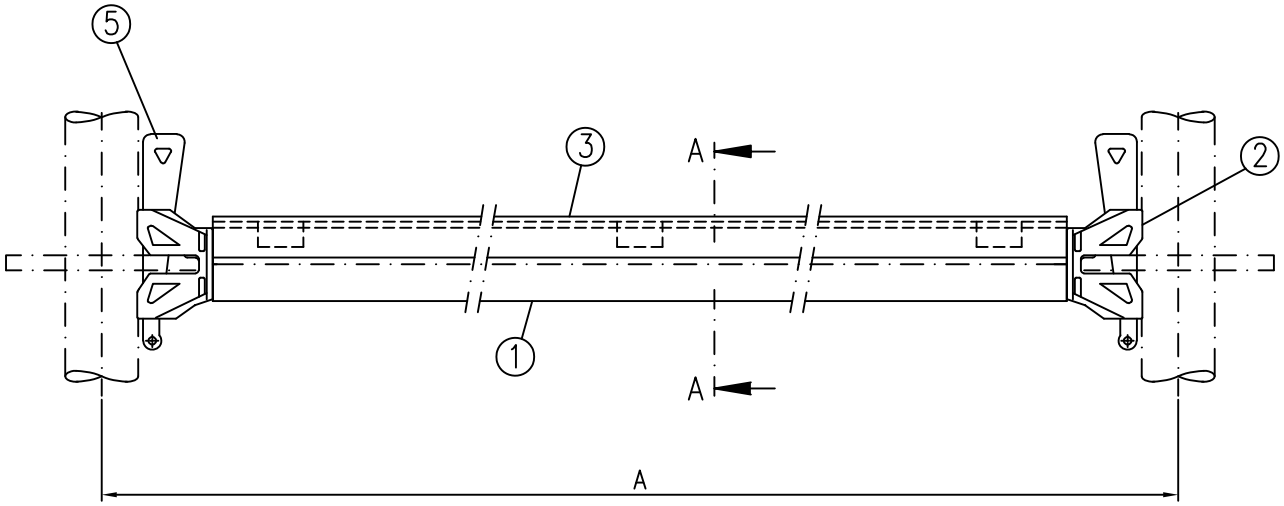
Maximum load capacity: 2.0 kN/m²

ALBLITZ MODUL

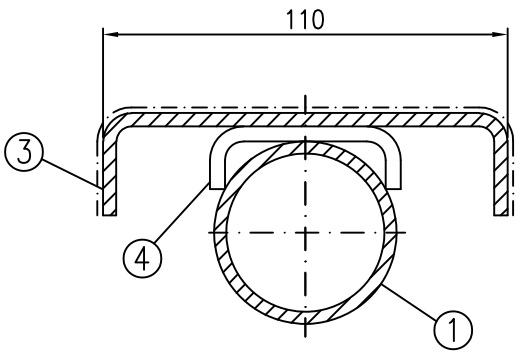
O–Komfort stairway 2.57; 3.07 x 2.0 x 0.64 m
in accordance with Z–8.1–919

ABM721–B153 05.2021

Annex B,
page 287



A–A



Dimension A [mm]	For use up to load class	Maximum allowable p *) [kN/m²]
732	6	10.0
1088		
1286		
1400		
1572		
2072		
2572		
3072		

*) acting on the entire sheet width

① Tube
② Head piece + Wedge "Lightweight design" (see Annex B, pages 166 + 170)
③ Bulb plate
④ Spacer bracket
⑤ Marking

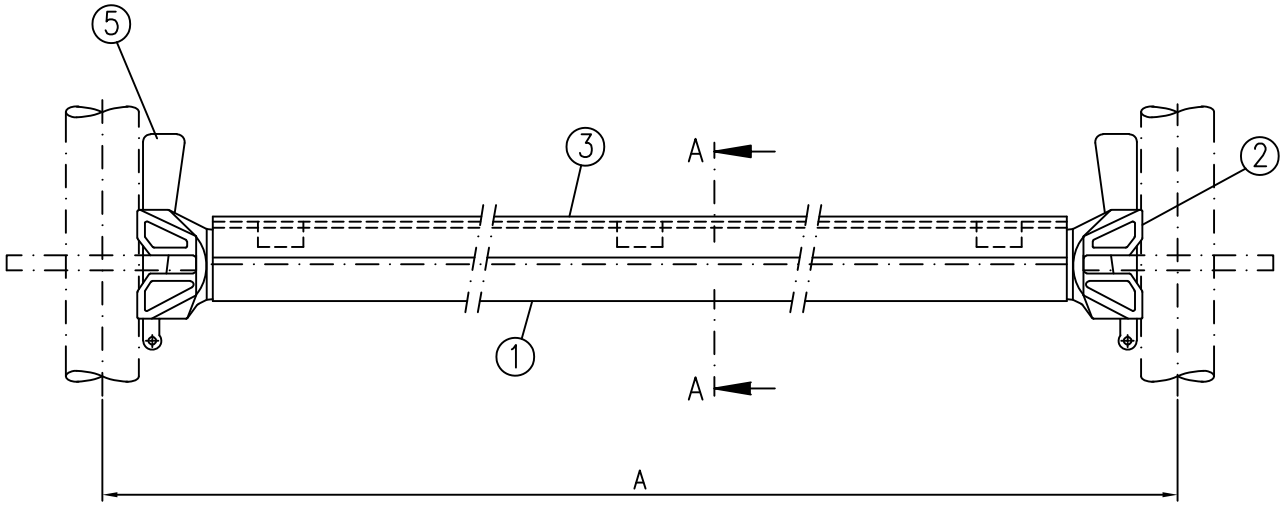
Dimens. [m]	Weight [kg]
0.73	5.2
1.09	7.5
1.29	9.0
1.40	9.4
1.57	10.8
2.07	14.1
2.57	18.1

ALBLITZ MODUL

O–ledger with gap cover, lightweight 0.73 – 3.07 m
in accordance with Z–8.1–919

ABM721–B154 05.2021

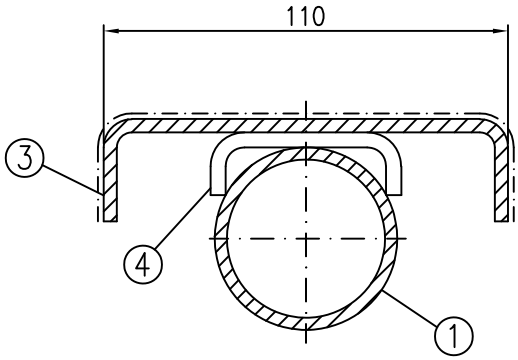
Annex B,
page 288



Dimension A [mm]	For use up to load class	Maximum allowable p *) [kN/m²]
732	6	10.0
1088		
1286		
1400		
1572		
2072		
2572	5	7.5
3072	4	5.0

*) acting on the entire sheet width

A–A



① Tube
② Head piece + Wedge "K2000+ design" (see Annex B, pages 172 + 176)
③ Bulb plate
④ Spacer bracket
⑤ Marking

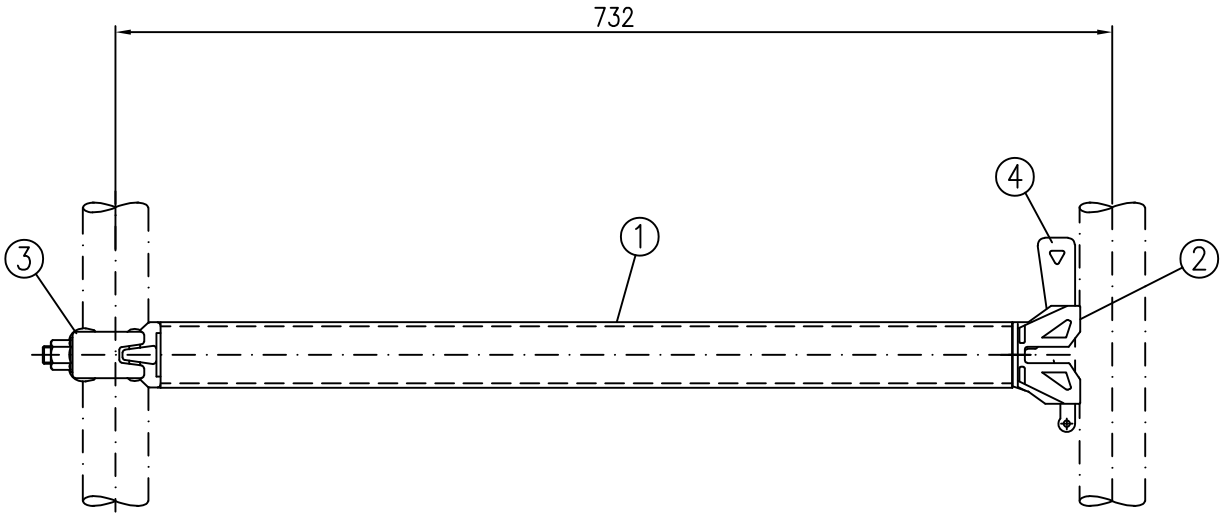
Dimens. [m]	Weight [kg]
0.73	5.3
1.09	8.0
1.29	9.6
1.40	10.0
1.57	11.7
2.07	15.0
2.57	19.2

ALBLITZ MODUL

0–ledger with gap cover 0.73 – 3.07 m "K2000+ design"
in accordance with Z–8.1–919

ABM721–B155 05.2021

Annex B,
page 289



① Tube
② Head piece + Wedge "Lightweight design" (see Annex B, pages 166 + 170)
③ Halfcoupler with screw top in accordance with approval Z-8.331-882
④ Marking

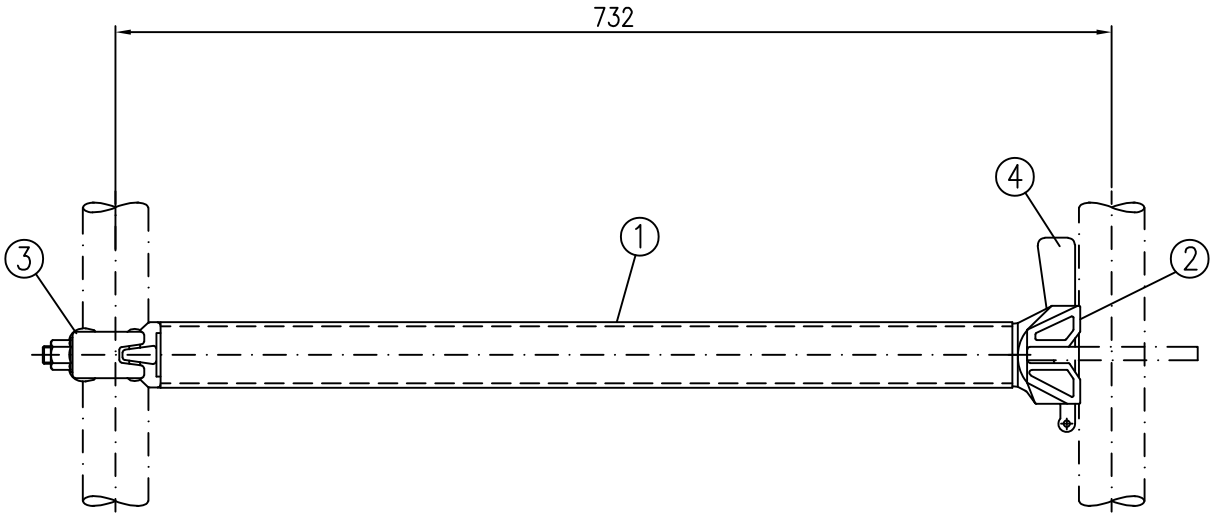
Weight [kg]
3.5

ALBLITZ MODUL

0-ledger with halfcoupler 0.73 m "Lightweight design"
in accordance with Z-8.1-919

ABM721-B156 05.2021

Annex B,
page 290



① Tube
② Head piece + Wedge "K2000+ design" (see Annex B, pages 172 + 176)
③ Halfcoupler with screw top in accordance with approval Z-8.331-882
④ Marking

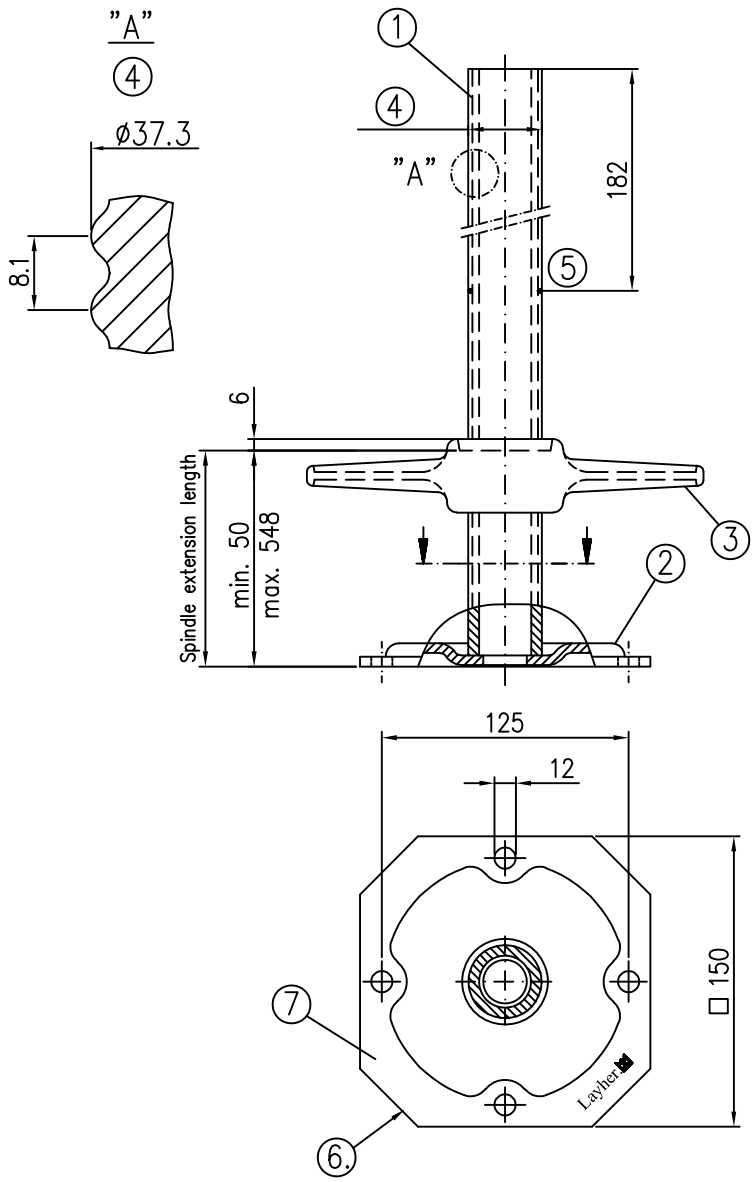
Weight [kg]
3.5

ALBLITZ MODUL

0-ledger with halfcoupler 0.73 m "K2000+ design"
in accordance with Z-8.1-919

ABM710-B079 05.2021

Annex B,
page 291



① Tube
② Base plate
③ Spindle nut
④ Special thread ø38 x 8.1 see detail
⑤ Thread with notches to limit collar nut travel
⑥ Base plate according to EN 74-3
⑦ Marking

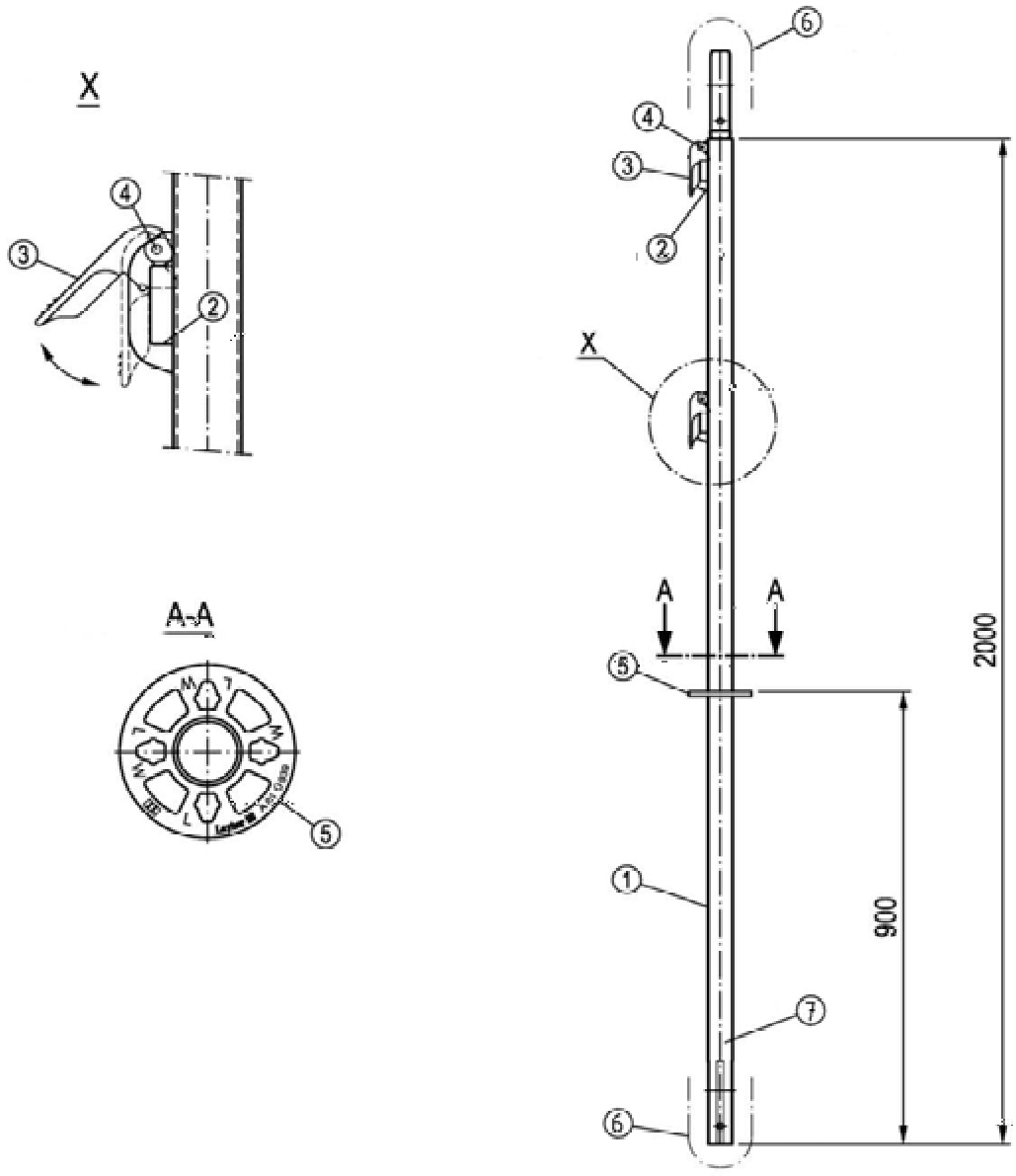
Weight [kg]
4.9

ALBLITZ MODUL

Base jack 80, reinforced
in accordance with Z-8.1-16.2

ABS710-A003_ABM 05.2021

Annex B,
page 292



① Tube
② Suspension bracket
③ Plastic bracket
④ Spring pin
⑤ Connector disc "Lightweight design" (see Annex B, page 165)
⑥ (see Annex B, page 182)
⑦ Marking

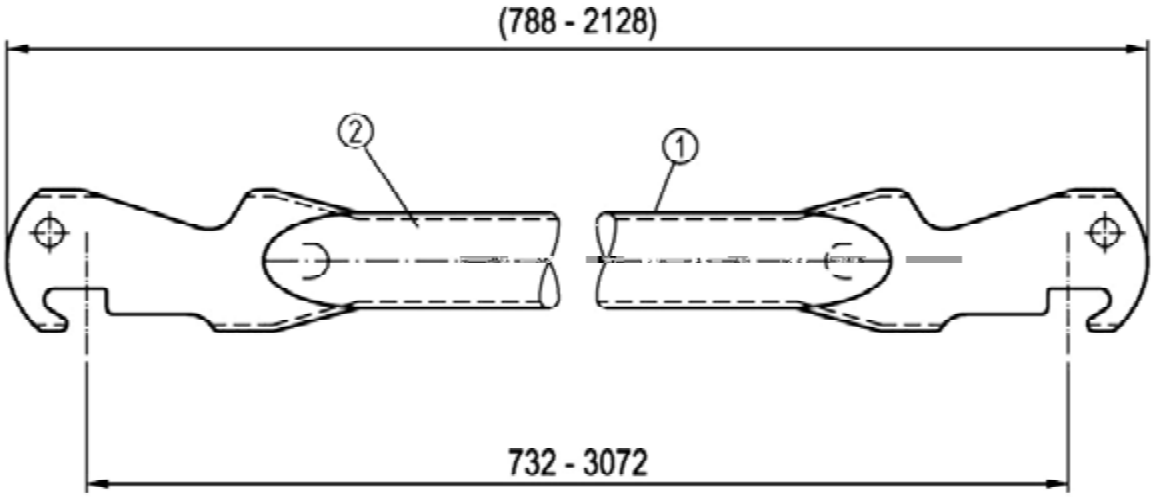
Weight [kg]
8.0

ALBLITZ MODUL

AGS standard, lightweight 2.00 m
in accordance with Z-8.22-939

ABM721-B159 05.2021

Annex B,
page 293



Dimens. [m]	Weight [kg]
0.73	1.4
1.09	2.0
1.57	2.9
2.07	3.7
2.57	4.5
3.07	5.5

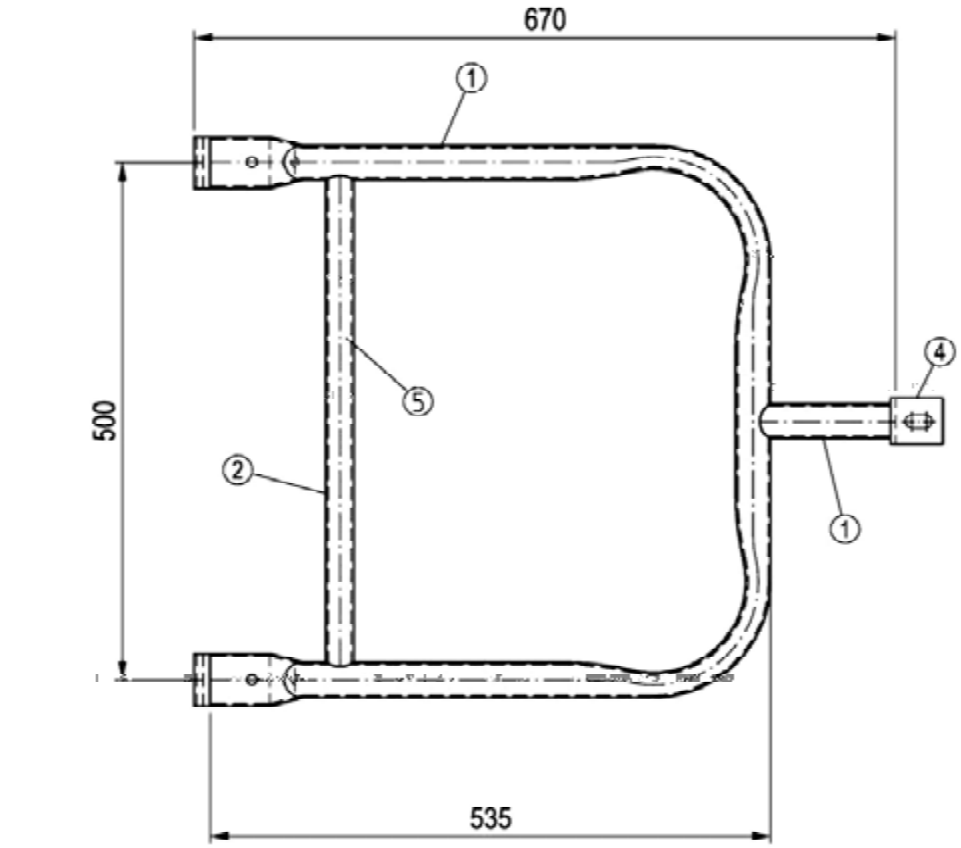
① Tube
② Marking

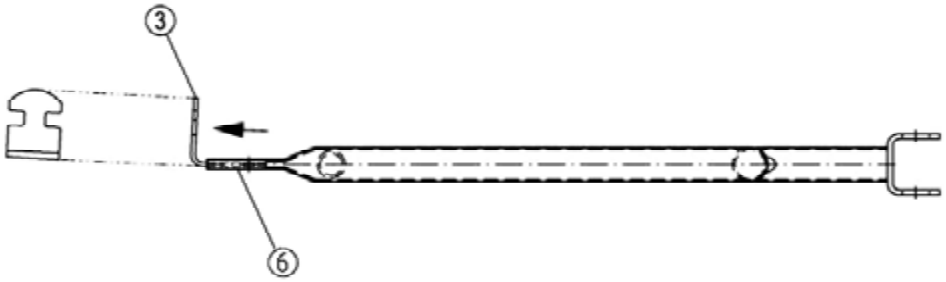
ALBLITZ MODUL

STAR guardrail 0.73 – 3.07 m T18
in accordance with Z–8.1–919

ABM721–B160 05.2021

Annex B,
page 294





① Tube
② Tube
③ Suspension
④ U-edged
⑤ Marking
⑥ pressed

Weight [kg]
4.3

ALBLITZ MODUL

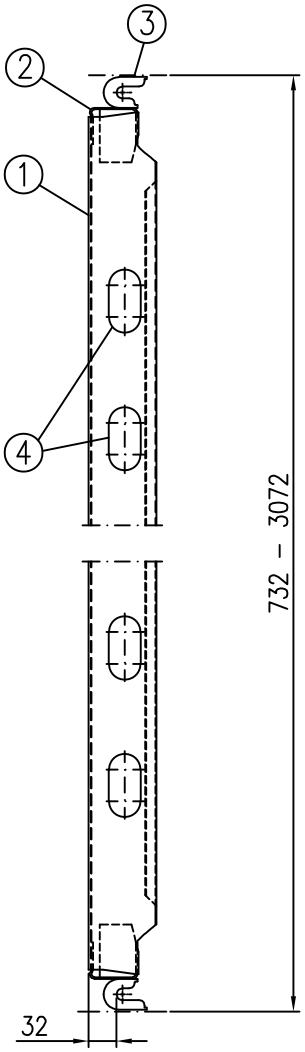
STAR double end guardrail 0.73 m
in accordance with Z-8.1-919

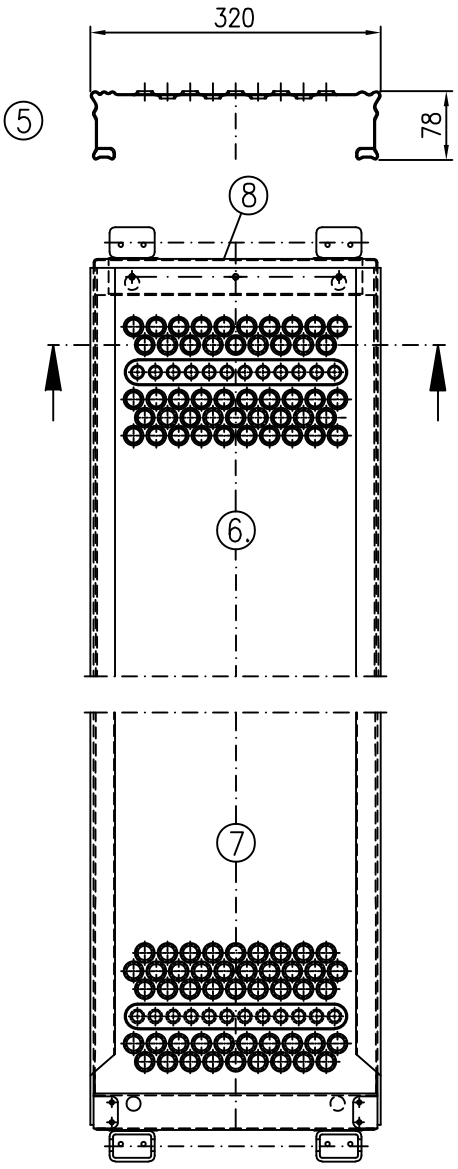
ABM721-B161 05.2021

Annex B,
page 295

Bay length	For use up to load class	Maximum allowable p *) [kN/m²]
≤ 2.07 m	6	10.0
2.57 m	5	7.5
3.07 m	4	5.0

*) for the entire deck surface





Bay length	Number of openings
0.73 m	–
1.09 m	2
1.57 m	6
2.07 m	10
2.57 m	14
3.07 m	18

① Deck sheet	Steel
② Head piece	Steel
③ Claw	Steel
④ Openings	
⑤ Sectional view, head piece not shown	
⑥ Top view	
⑦ Bottom view	
⑧ Marking	

Dimens. [m]	Weight [kg]
0.73	5.6
1.09	7.7
1.57	10.5
2.07	13.4
2.57	16.4
3.07	19.3

ALBLITZ MODUL

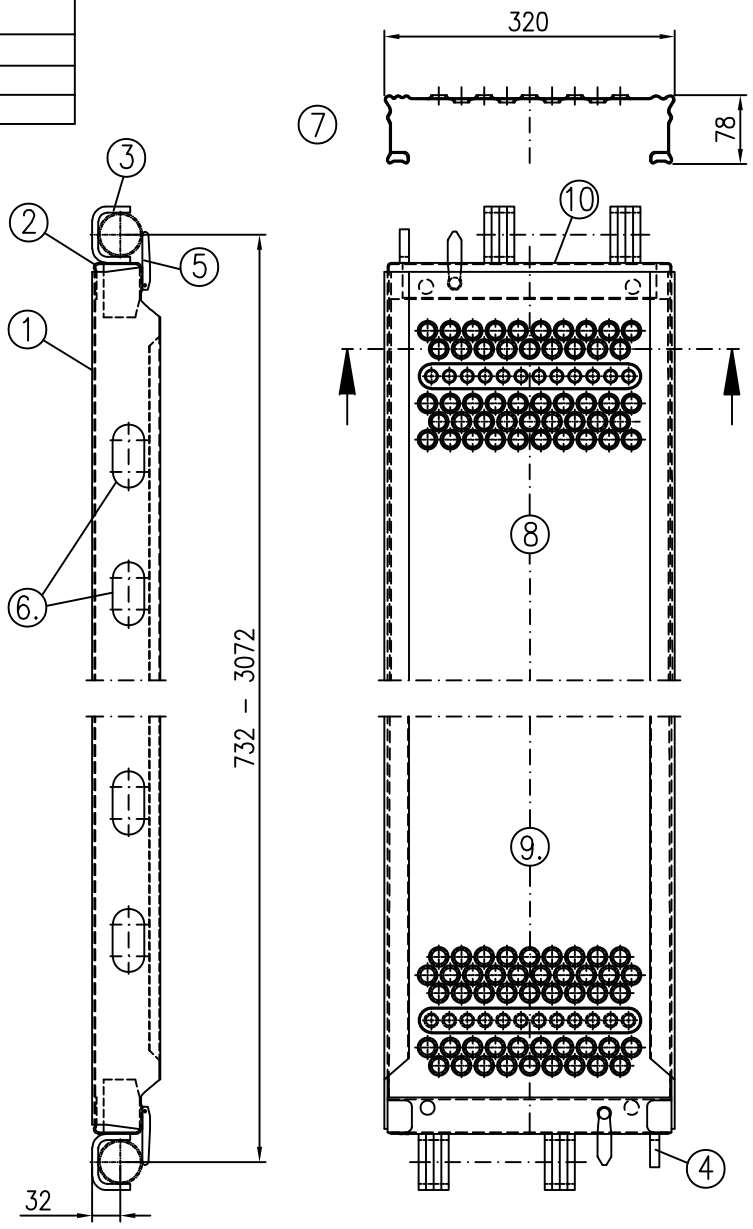
U–deck, lightweight 0.73 – 3.07 x 0.32 m, steel
design: spot–welded / hand–welded
in accordance with Z–8.1–16.2

ABS720–A126_ABM 05.2021

Annex B,
page 296

Bay length	For use up to load class	Maximum allowable p *) [kN/m²]
≤ 2.07 m	6	10.0
2.57 m	5	7.5
3.07 m	4	5.0

*) for the entire deck surface



Bay length	Number of openings
0.73 m	–
1.09 m	2
1.57 m	6
2.07 m	10
2.57 m	14
3.07 m	18

① Deck sheet	Steel
② Head piece	Steel
③ Suspension–U	Steel
④ Angle	Steel
⑤ Locking ledger (red)	Steel
⑥ Openings	
⑦ Sectional view, head piece not shown	
⑧ Top view	
⑨ Bottom view	
⑩ Marking	

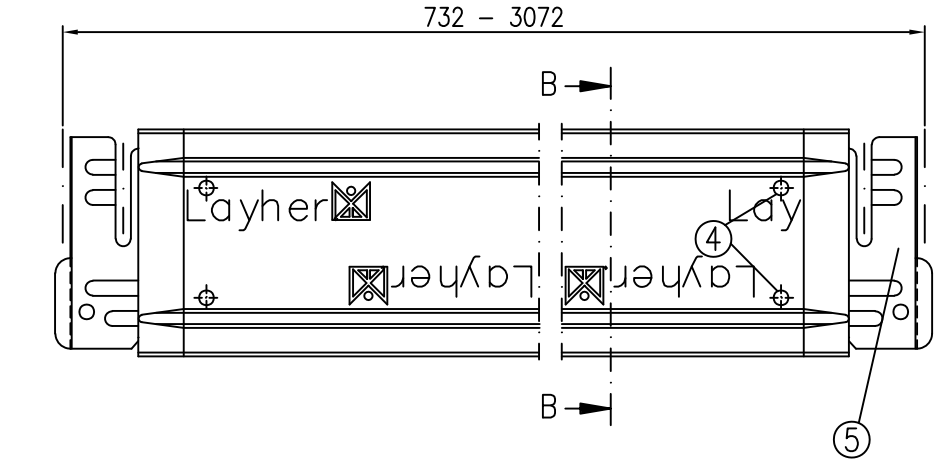
Dimens. [m]	Weight [kg]
0.73	6.4
1.09	8.5
1.57	11.3
2.07	14.2
2.57	17.2
3.07	20.1

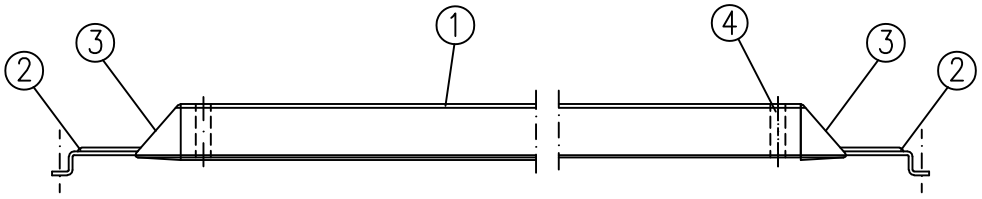
ALBLITZ MODUL

O–deck, lightweight 0.73 – 3.07 x 0.32 m, steel
design: spot–welded / hand welded
in accordance with Z–8.1–919

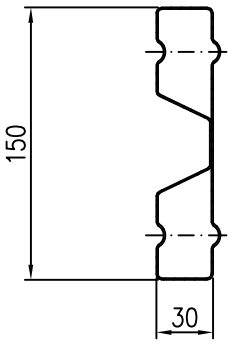
ABM721–B163 05.2021

Annex B,
page 297





B–B



① Profiled sheet metal
② Fitting
③ Plastic head piece
④ Tubular rivet
⑤ Marking

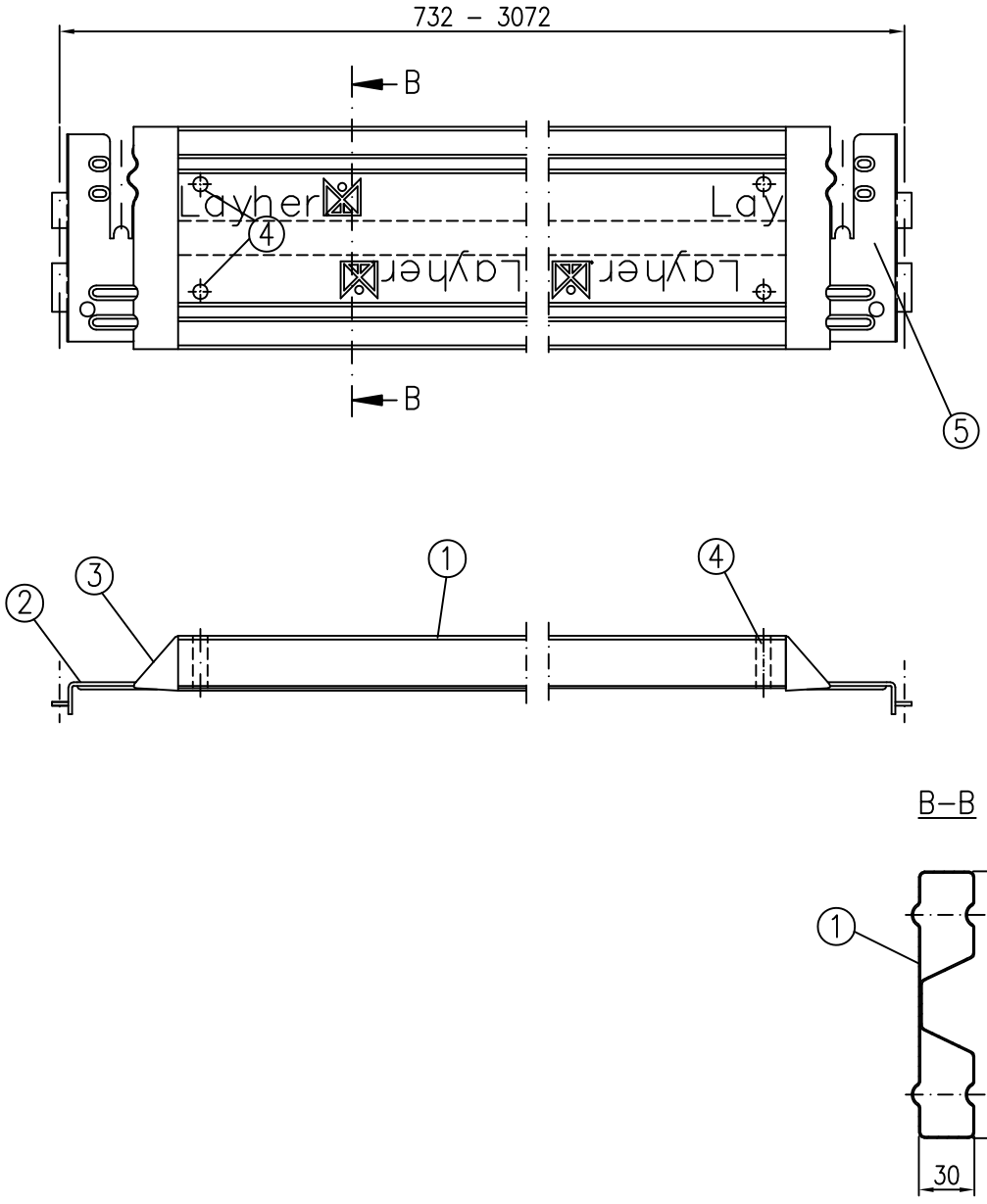
Dimens. [m]	Weight [kg]
0.73	1.7
1.09	2.4
1.57	3.3
2.07	4.3
2.57	5.3
3.07	6.2

ALBLITZ MODUL

0–toeboard 0.73 – 3.07 m, steel
in accordance with Z–8.22–919

ABM721–B164 05.2021

Annex B,
page 298



① Profiled sheet metal
② Fitting
③ Plastic head piece
④ Tubular rivet
⑤ Marking

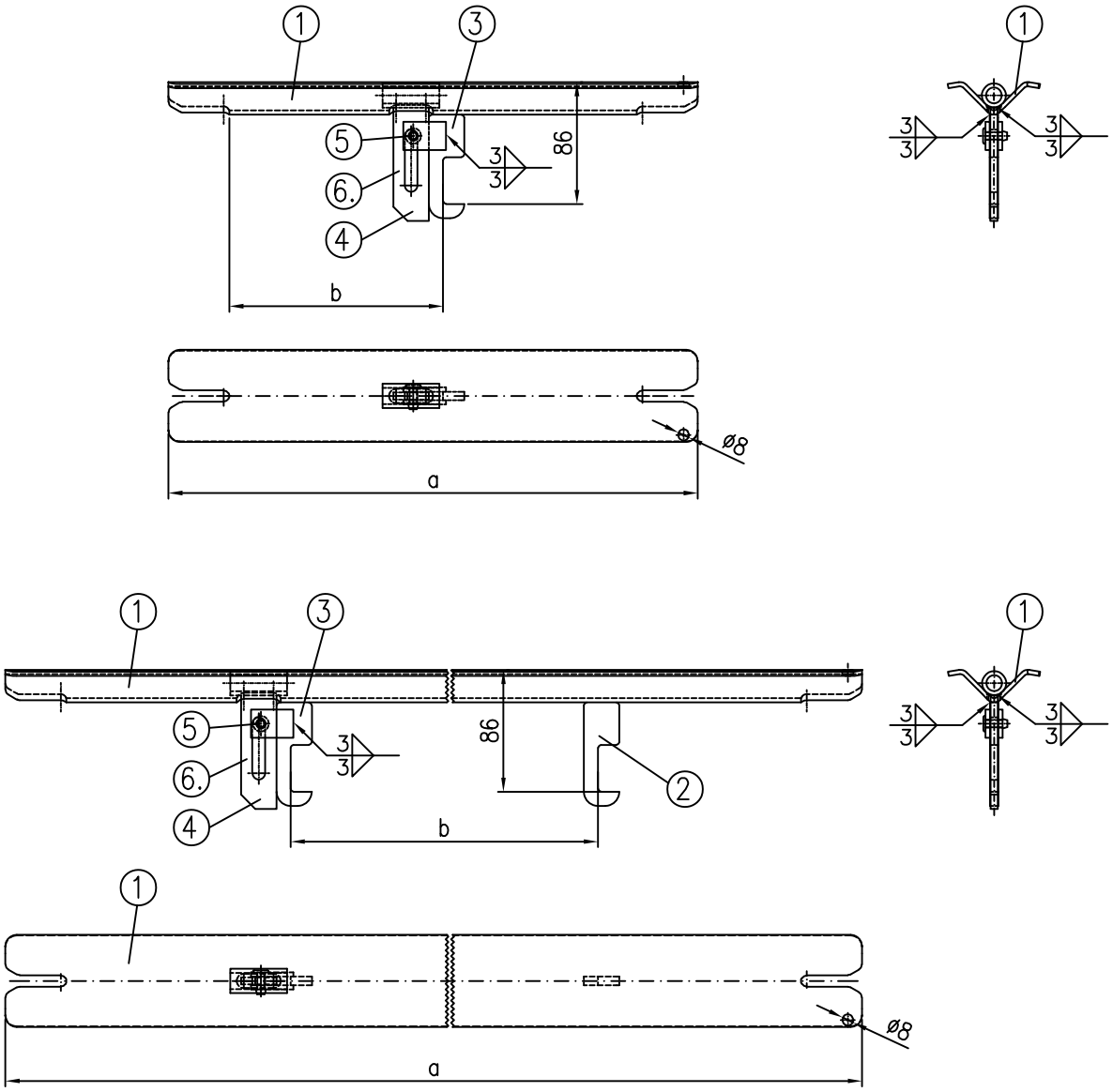
Dimens. [m]	Weight [kg]
0.73	1.7
1.09	2.4
1.57	3.3
2.07	4.3
2.57	5.3
3.07	6.2

ALBLITZ MODUL

0–toeboard 0.73 – 3.07 m T18, steel
in accordance with Z–8.22–919

ABM721–B165 05.2021

Annex B,
page 299



①	Lift-off preventer profile	DIN EN 10025-S235JR
②	Steel metal 6x25x73	DIN EN 10025-S235JR
③	Hook	DIN EN 10025-S235JR
④	Slide	DIN EN 10025-S235JR/S235JRH
⑤	Blind rivet	DIN EN ISO 15977-5x20-aluminium/steel-galvanised
⑥.	Marking	
	galvanised	

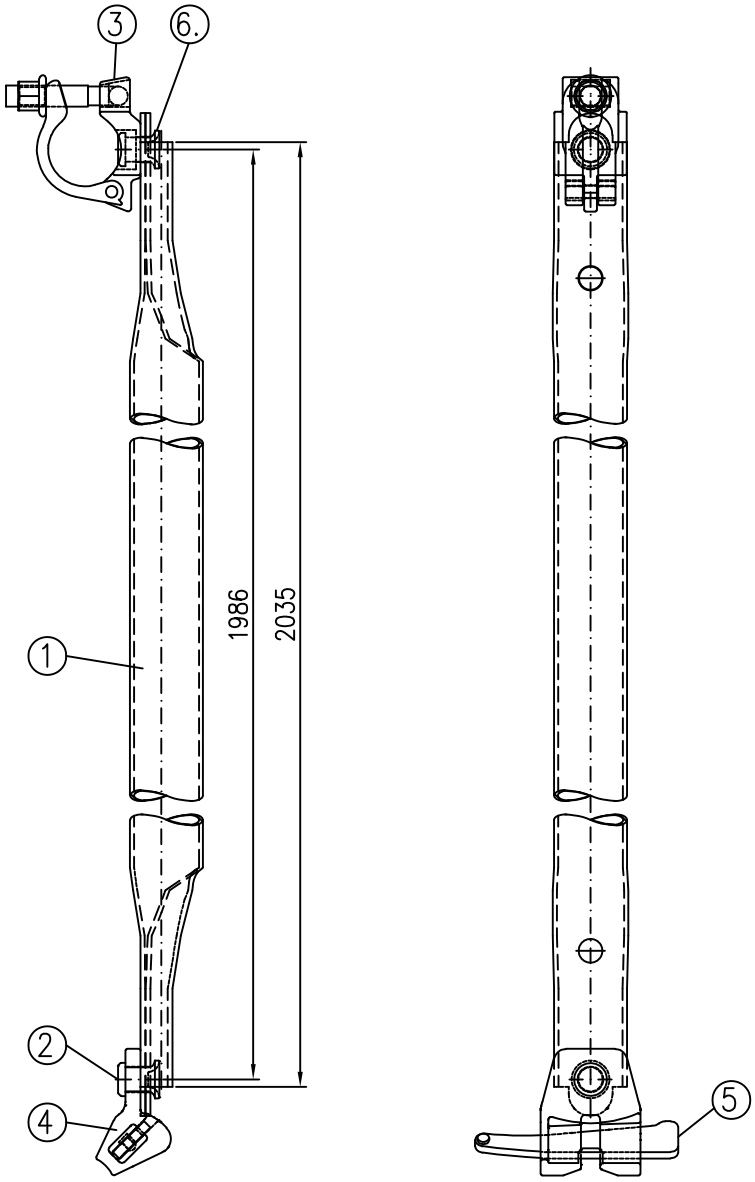
Dimens. [m]	a [mm]	b [mm]	Weight [kg]
0.37	289	108.5	0.71
0.39	313	120.5	0.75
0.45	373	150.5	0.87
0.73	655	268	1.46
1.04	959	572	2.04
1.09	1011	624	2.04
1.29	1209	822	2.51
1.40	1323	936	2.73
1.57	1495	1108	3.06
2.07	1995	1608	4.00
2.57	2495	2108	4.95
3.07	2995	2608	5.90

ALBLITZ MODUL

Deck lift-off preventer 0.37 – 3.07 m, steel
in accordance with Z-8.22-906

M722-B250_ABM 01.2022

Annex B,
page 300



① Tube ø48.3x2.7	DIN EN 10219-S235JRH	$R_{eH} \geq 320$ N/mm²
② Rivet MODUL diagonal cross braces	DIN EN 10263-1/2-C10C+C	
alternatively:	DIN EN 10263-3-C10E2C	
③ Halfcoupler, class B	DIN EN 74-2	
④ Connection of V-diagonal brace, right-hand side	see Annex B, page 6	
⑤ Wedge 6 mm	see Annex B, page 3	
⑥ Rivet Squared timber coupler ø16	DIN EN 10263-1/2-C10C+C	
alternatively:	DIN EN 10263-3-C10E2C	
galvanised		

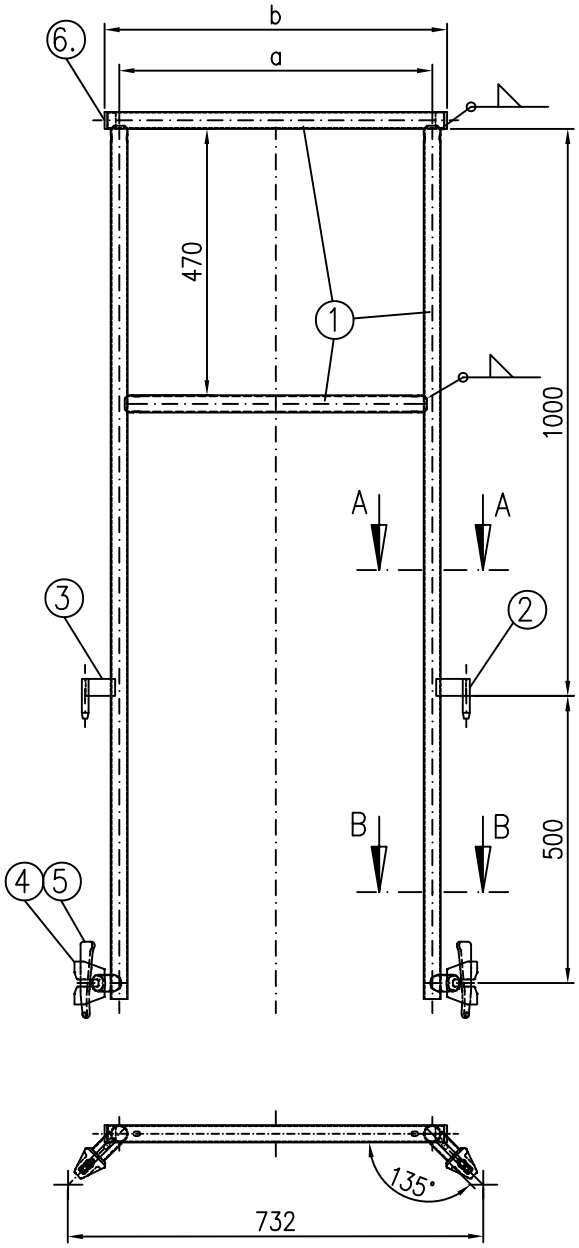
Dimens. [m]	Weight [kg]
–	8.16

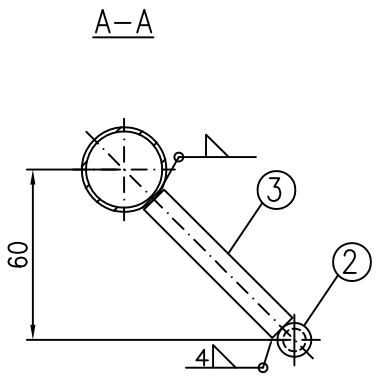
ALBLITZ MODUL

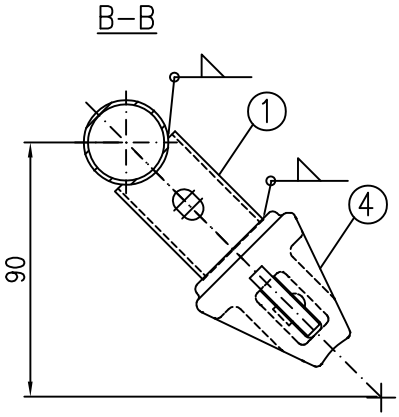
MODUL bracket brace 2.05 m
in accordance with Z-8.22-906

M723-B251_ABM 08.2023

Annex B,
page 301







①	Tube ø30x1.5	DIN EN 10219–S235JRH
②	Round ø12	DIN EN 10025–S235JR
③	Flat 30x10	DIN EN 10025–S235JR
④	Connection of tube ledger	see Annex B, page 4
⑤	Wedge 6 mm	see Annex B, page 3
⑥	Tube end cap	

galvanised; all welding seams a=2 mm

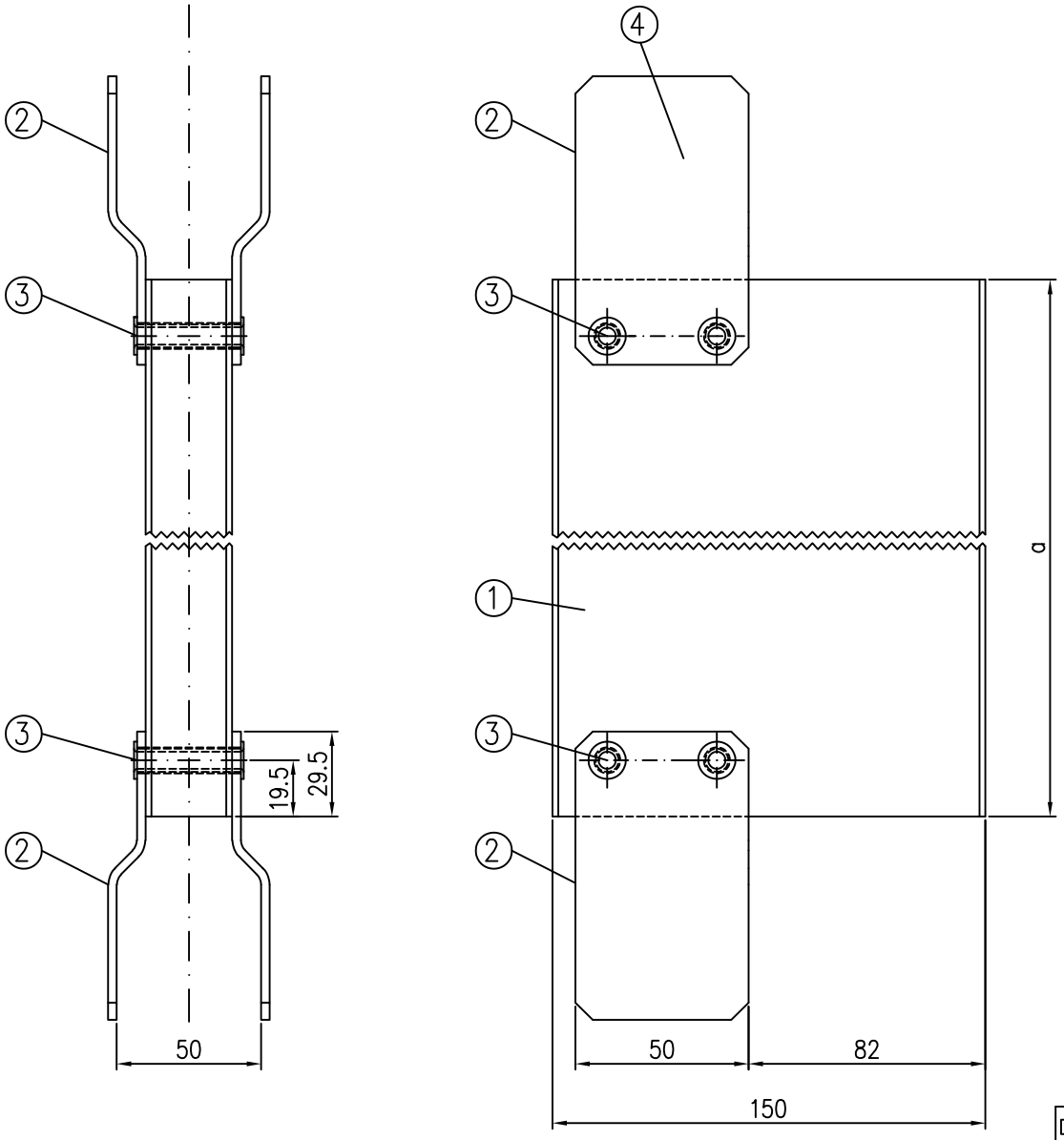
Dimens. [m]	a [mm]	b [mm]	Weight [kg]
0.45	270	312	5.38
0.73	552	594	5.97
1.09	908	950	6.72
1.40	1220	1262	7.38
1.57	1392	1434	7.73

ALBLITZ MODUL

Advanced end guardrail
in accordance with Z–8.22–906

M723–B252_ABM 08.2023

Annex B,
page 302



Dimens. [m]	a [mm]	Weight [kg]
0.37	225	1.05
0.39	249	1.10
0.45	309	1.22
0.73	591	1.79
1.04	895	2.40
1.09	947	2.51
1.29	1145	2.91
1.40	1259	3.14
1.57	1431	3.49
2.07	1931	4.50
2.57	2431	5.51
3.07	2931	6.52
for brackets		
0.28	164	0.93
0.39	274	1.15
0.73	616	1.84

① Pine wooden deck visual strength grade S10 DIN 4074-1
② Slit strip 60x3 DIN EN 10111-DD11 $R_{eH} \geq 240$ N/mm²
alternatively: DIN EN 10346-DX52D+Z275 $R_{eH} \geq 240$ N/mm²; $R_{eH} \geq 360$ N/mm²
③ Tubular rivet DIN 7340-A8x0,75x39-steel-electrogalvanized
④ Marking

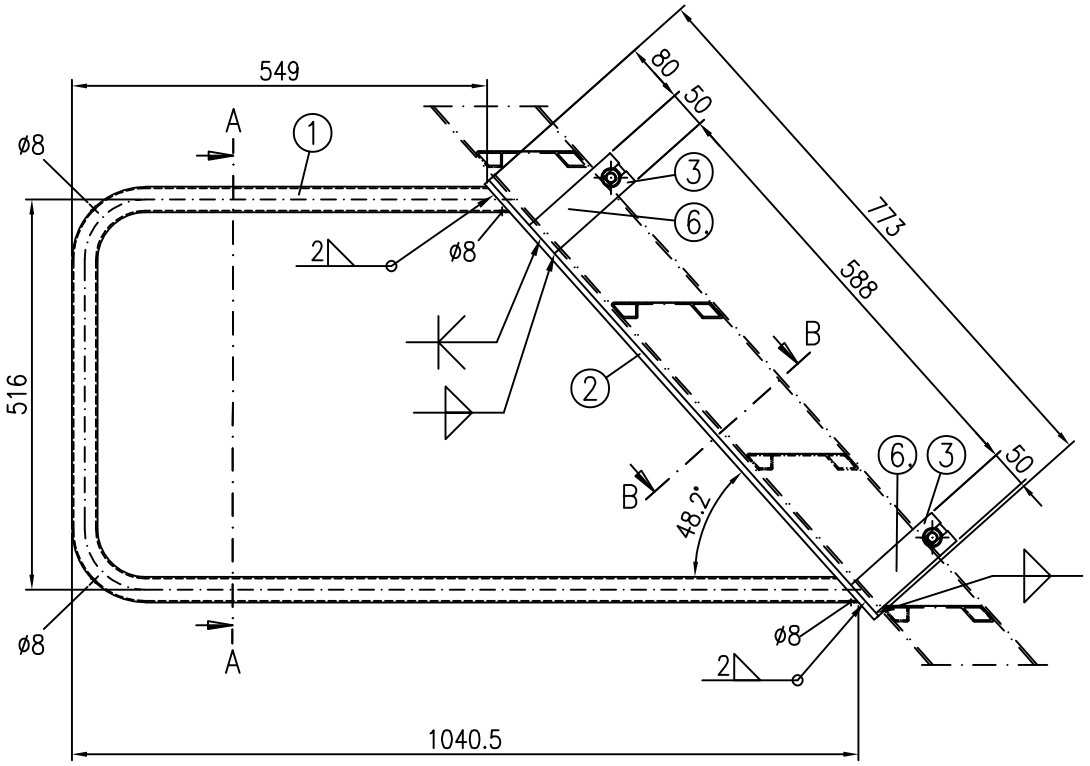
all components made of steel – galvanised

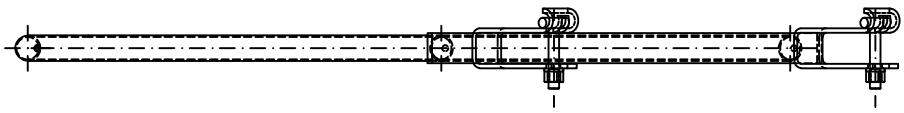
ALBLITZ MODUL

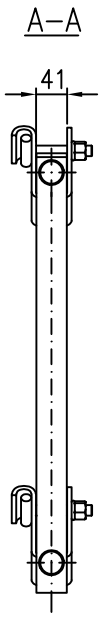
MODUL transverse toeboard
in accordance with Z-8.22-906

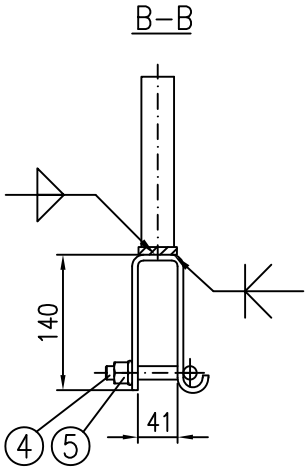
M723-B253_ABM 08.2023

Annex B,
page 303









① Circular hollow section ø33.7x2.0	DIN EN 10219–S235JRH	$R_{eH} \geq 320$ N/mm²
② Flat 40x8	DIN EN 10025–S235JR	
③ Flat 50x6	DIN EN 10025–S235JR	
④ Hammerhead screw M14 x 80 mm	hot–dip galvanized	
⑤ Collar nut M14, WS 22	galvanised	
⑥ Marking		
galvanised; all welding seams a=3 mm		

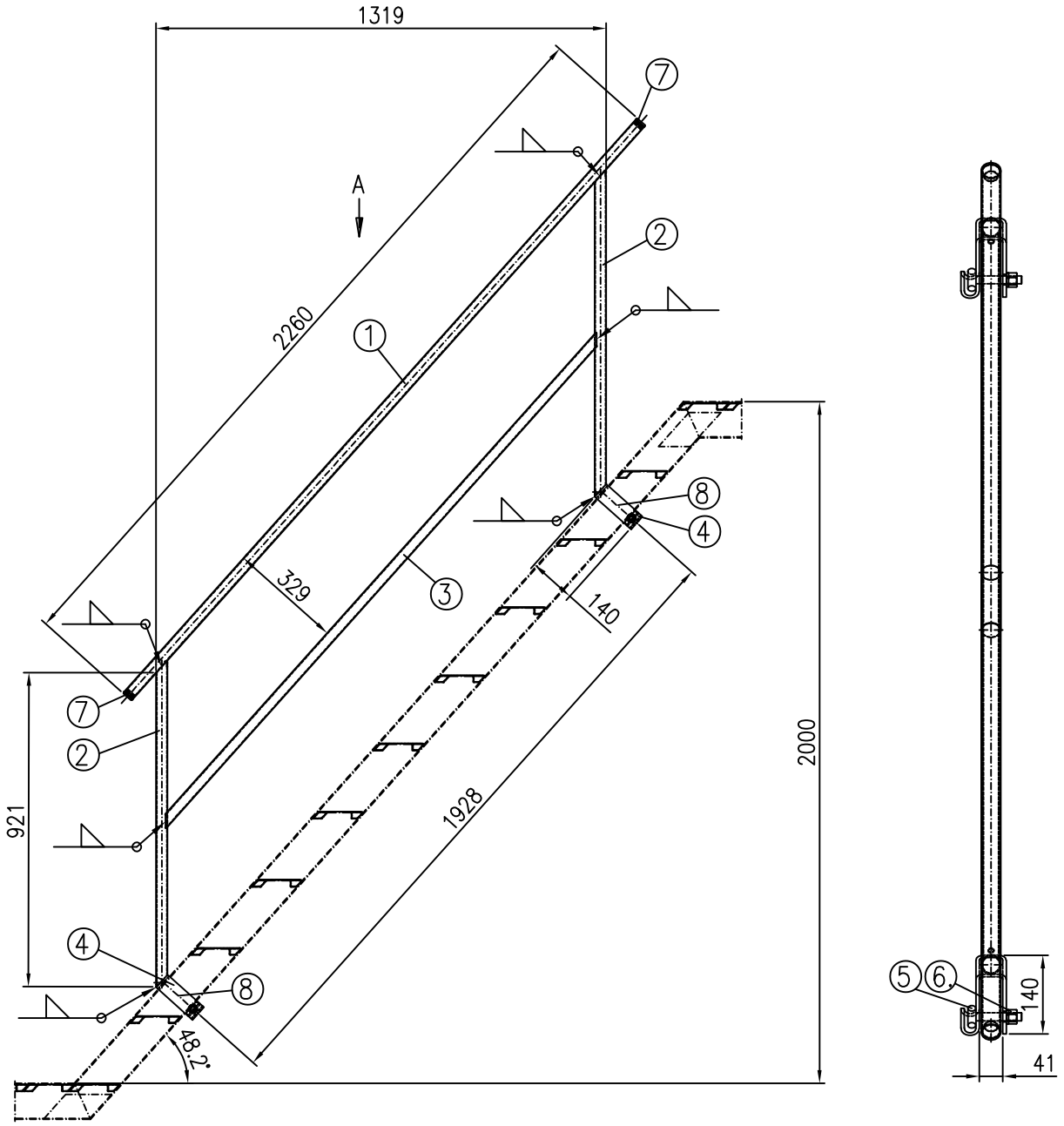
Dimension [m]	Weight [kg]
1.00 x 0.50	0.3

ALBLITZ MODUL

Stair stringer fall protection 1.00 x 0.50 m
in accordance with Z–8.1–862

A723–A281_ABM 09.2023

Annex B,
page 304



①	Circular hollow section ø33.7x2.0	DIN EN 10219–S235JRH $R_{eH} \geq 320$ N/mm²
②	Circular hollow section ø33.7x2.0	DIN EN 10219–S235JRH
③	Rectangular hollow section 30x30x2	DIN EN 10219–S235JRH
④	Flat 50x6	DIN EN 10025–S235JR
⑤	Hammerhead screw M14 x 80 mm	hot–dip galvanized
⑥	Collar nut M14, WS 22	galvanised
⑦	Tube end cap GL 34 S–Poly.	Plastic
⑧	Marking	

galvanised; all welding seams a=2 mm

Dimens. [m]	Weight [kg]
2.00	10.0

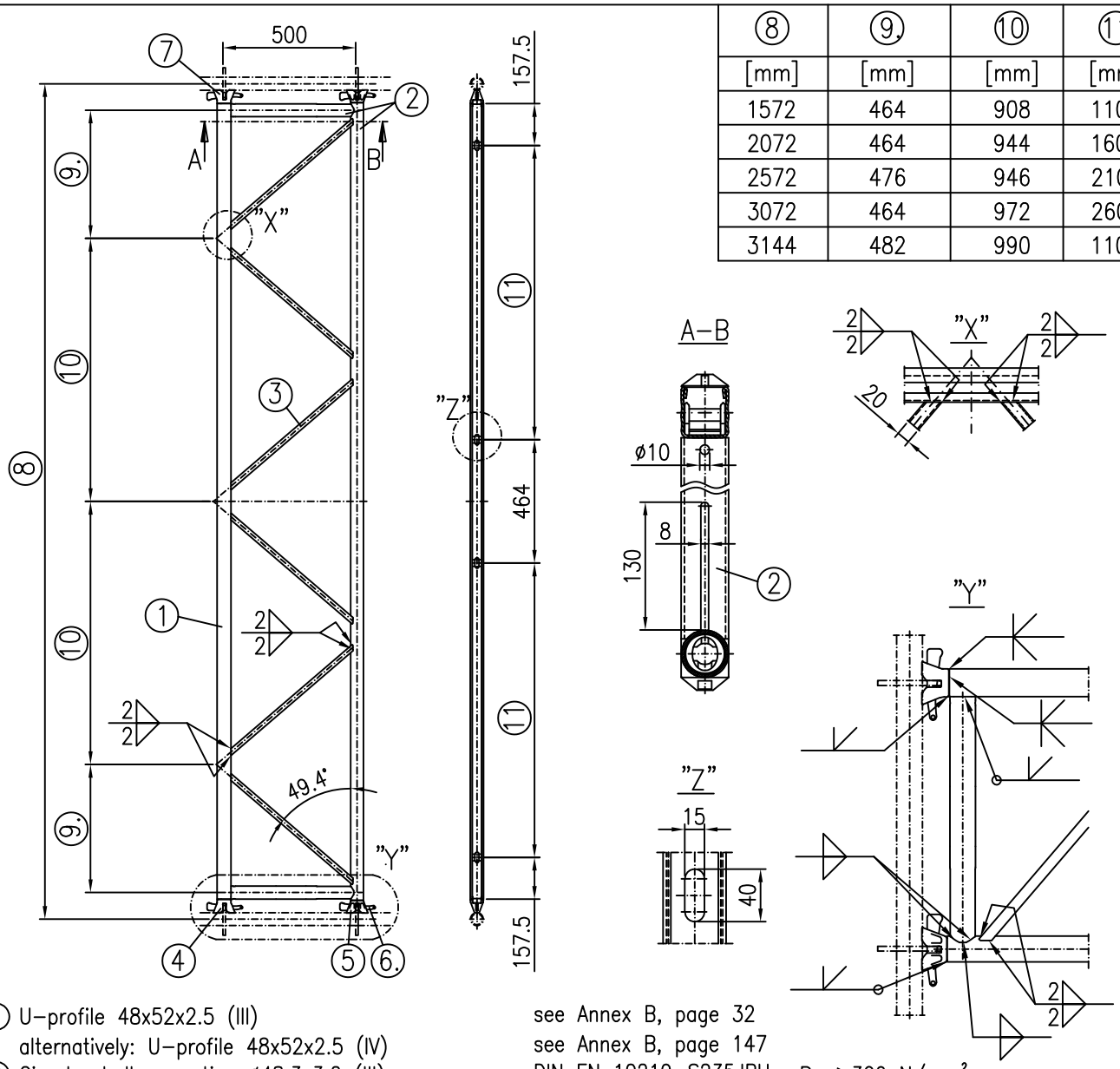
ALBLITZ MODUL

Inner guardrail for aluminium stairway 2.00 m
in accordance with Z–8.1–862

A723–A282_ABM 09.2023

Annex B,
page 305

⑧	⑨	⑩	⑪
[mm]	[mm]	[mm]	[mm]
1572	464	908	1108
2072	464	944	1608
2572	476	946	2108
3072	464	972	2608
3144	482	990	1108



① U–profile 48x52x2.5 (III)	see Annex B, page 32	
alternatively: U–profile 48x52x2.5 (IV)	see Annex B, page 147	
② Circular hollow section ø48.3x3.2 (III)	DIN EN 10219–S235JRH	$R_{eH} \geq 320$ N/mm²
alternatively: Circular hollow section ø48.3x2.7 (IV)	DIN EN 10219–S460MH	
③ Rectangular hollow section 40x20x2	DIN EN 10219–S235JRH	$R_{eH} \geq 320$ N/mm²
④ Connection of U–ledger (I)	see Annex B, page 5	
alternatively: Connection of U–ledger 4.0 (II)	see Annex B, page 152	
⑤ Connection of tube ledger	see Annex B, page 4	
alternatively: Connection of tube ledger 4.0 (II)	see Annex B, page 151	
⑥ Wedge 6 mm	see Annex B, page 3	
⑦ Marking		
⑧ Bay length		
⑨ Dimension X		
⑩ Dimension Y		
⑪ Dimension Z		

galvanised; all welding seams a=3 mm

allowed combination			Dimens. [m]	Weight [kg]
	III	IV		
I	x	x	1.57	16.8
II	–	x	2.07	21.0
			2.57	25.2
			3.07	29.3
			3.14	29.7

ALBLITZ MODUL

MODUL U–lattice girder 1.57 m – 3.14 m
in accordance with Z–8.22–906

M723–B254_ABM 09.2023

Annex B,
page 306

C.1 General provisions

In its standard assembly configuration, the scaffolding system may be used as service scaffold of load classes ≤ 3 with system width $b = 0.732\ m$ and bay widths $\ell \leq 3.07\ m$ in accordance with DIN EN 12811-1:2004-03, as a as roof fall arrest and brick guard scaffold in accordance with DIN 4420-1:2004-03.

The topmost horizontal level (working level) must not exceed 24 m above ground level, not including the spindle extension length. The standard assembly configuration of the scaffolding system is designed for use on a scaffold level in accordance with the regulations of the DIN EN 12811-1:2004-03 standard, Section 6.2.9.2 in front of a "partially open" facade with an open proportion of no more than 60%, and in front of closed facades. When determining the wind load, a service life factor of $\chi = 0.7$, assuming a maximum service life of 2 years, has been taken into account. Scaffold cladding with nets or tarpaulins has not been verified in the standard system configuration.

Without any further structural proof, the standard assembly configuration shall only be used if the loads of the bays will carry do not exceed the respective live loads in accordance with
DIN EN 12811-1:2004-03, Table 3.

For the standard system configuration of the modular scaffolding system "ALBLITZ MODUL", the following designation in accordance with DIN EN 12810-1:2004-03 must be used:

Scaffolding EN 12810 – 3D – SW06/307 – H2 – A – LA

C.2 Roof fall arrest and brick guard scaffold

In its standard assembly configuration, the scaffolding system may be used as a roof fall arrest and brick guard (service) scaffold with a top fall arresting layer of class FL 1 and as a brick guard (service scaffold) with protective walls of class SWD 1 according to DIN 4420:2004-03. Access decks must not be fitted into brackets.

The protective wall is to be installed in accordance with Annex D, page 7. Use protective nets in accordance with DIN EN 1263-1:2015-03 with a mesh size of no more than 100 mm.

C.3 Components

The components intended for use are listed in Table C.3. In addition, steel tubes $\varnothing\ 48.3 \bullet 3.2\ mm$ and couplers may be used for the horizontal bracing of bridging girders as well as right-angle couplers in accordance with DIN EN 12811-1:2004-03 for the connection of scaffold ties and V-type scaffold ties to the standards.

C.4 Bracing

For the horizontal bracing of the scaffolding, the following components must be continuously installed at vertical intervals of 2 m:

- Tube ledger 0.73 m in the small opening of the connector disc (rosette) and in each case

- one aluminium frame platform with tube fixture or	in accordance with Annex B, page 51 or 52	or
- two steel decks with tube fixture or	in accordance with Annex B, page 64	or
- two steel decks AF with tube fixture 0.32 m	in accordance with Annex B, page 61	or

- U-ledger 0.73 m in the small opening of the connector disc and

- one aluminium frame platform with plywood	in accordance with Annex B, page 66 or 67	or
- one aluminium deck with plywood	in accordance with Annex B, page 72, 73, 78 or 79	or
- two steel decks	in accordance with Annex B, page 85	or
- two steel decks AF 0.32 m	in accordance with Annex B, page 84	or
- two U- steel decks T4	in accordance with Annex B, page 262 or 263	or
- two U- steel decks	in accordance with Annex B, page 264 or 265	or
- one U-robust deck 0.61 m	in accordance with Annex B, page 266 or 267	

each. All other decks according to Table C.1 may only be used as bracket deck. When installing ladder access bays, trapdoors according to section C.8 must be used instead of platforms and decks.

Modular scaffolding system "ALBLITZ MODUL"	Annex C, page 1
Standard assembly configuration - General provisions	

Secure the platforms, decks and hatches against unintentional lift-off.

The outer vertical planes are to be braced by means of tube ledgers used as guardrails (1 m above deck level) continuously for each scaffolding bay.

Vertical starter pieces are to be installed directly above the base jacks (scaffolding spindles) and connected by means of longitudinal ledgers in the inner and outer plane parallel to the facade and by means of transoms at right angles to the facade. Next start fitting the outer planes using 3 m-posts and the inner planes using 2 m- posts.

C.5 Anchoring

Anchoring is to be provided using wall ties in accordance with Annex B, page 120.

Scaffold ties must be installed as anchor pairs at an angle of 90° (V-type scaffold tie) or as "short" scaffold ties only to the inner vertical frame standard using right-angle couplers. Depending on the assembly configuration according to Annex D, the node points that are anchored by means of V-type scaffold ties must be connected on the inner plane parallel to the facade with the adjacent standard section by means of O-ledgers (longitudinal ledgers). When using the protective wall, two (2) V-type scaffold ties must be installed per five (5) scaffold bays in the topmost plane.

The V-type scaffold ties and scaffold ties must be installed in the immediate vicinity of the node points of the tubular standards and transoms below the deck level, see Annex D, pages 5 and 6. V-type scaffold ties may not be fitted at the end sides of the scaffold.

In the configurations according to Annex D, pages 2 and 4, a longitudinal deck ledger must be fitted on the inner face on all working levels.

If a V-type scaffold tie must be arranged adjacent to an inner ladder access, another additional coupler tube (longitudinal ledger) must be fitted to the inner standards in this access bay.

The anchor forces listed in Table C.1 have been determined with the characteristic values of the actions. For the design analysis of the anchorage and the load transfer, the values given must be multiplied by the respective partial safety factor γ_F (generally $\gamma_F = 1.5$).

Each standard section must be anchored at vertical intervals of 8 m; anchoring points of neighbouring vertical frame sections must be arranged with a vertical offset of half the spacing. Standard sections at the edge of a scaffold and frame sections for ladder access bays must be anchored at vertical intervals of 4 m. In the second working level and when using the protective wall in the topmost working level, each standard section must be anchored.

Table C.1: Characteristic anchor forces of the standard system configuration

Bridging design	Type and direction	without inner brackets	with inner brackets
without bridging	V-type anchor at right angle	2.4 kN	3.0 kN
	V-type anchor parallel		
	Scaffold tie (at right angle)	3.6 kN	
with bridging	V-type anchor at right angle	2.4 kN	3.0 kN
	V-type anchor parallel		
	Scaffold tie (at right angle)	3.6 kN	

C.6 Foundation loads

Depending on the design version, the foundation loads listed in Table C.2 must be absorbed and transferred in the erection plane (ground) in accordance with figure C.1. The foundation loads are given as characteristic values. For the structural analysis of transfer of loads in the supporting surface, the values given must be multiplied by the partial safety factor γ_F (generally $\gamma_F = 1.5$).

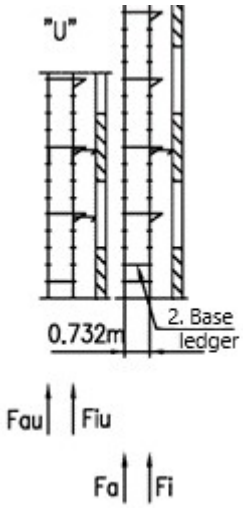


Figure C.1: Representation of the bearing loads

Table C.2: Characteristic bearing loads in the standard system configuration

Bridging design	Description	Characteristic bearing loads in [kN]					
		without inner brackets			with inner brackets		
	Scaffold height	8 m	12 m	24 m	8 m	12 m	24 m
without bridging	Outer face F_a	6.5	9.2	12.0	6.5	9.2	12.0
	Inner face F_i	4.8	6.3	7.9	10.6	13.9	17.2
with bridging	Outer face F_a	6.5	9.2	12.0	6.5	9.2	12.0
	Inner face F_i	4.8	6.3	7.9	10.6	13.9	17.2
	Adjacent to the bridging F_{au}	9.8	13.8	18.0	9.8	13.8	18.0
	Adjacent to the bridgingF_{au}	7.2	9.5	11.9	15.9	20.9	27.0

C.7 Bridging construction

The bridging girders may be used at a height of 4m to bridge gate entrances or similar openings when the working levels underneath the bridging part are omitted.
The bridging girders must be anchored in the support and centre areas and additionally stiffed by a horizontal bracing of tubes and couplers (cf. Annex D, pages 3, 4 and 8).

C.8 Ladder access

When installing internal ladder access bays, aluminium trapdoor frame platforms (with tube fixture) must be installed when using tube ledgers, or aluminium frame platforms with internal trapdoor, aluminium access frame platforms with ladder or U-robust trapdoor decks with ladders must be installed when using U-ledgers.

C.9 Widening bracket

On the inner face of the scaffolding, brackets with a width of 0.39 m may be installed in all working levels.
Fit longitudinal ledgers or gap ledgers between the main and the bracket deck.

Table C.3: Components of the standard assembly configuration

Designation	Annex B, page
Vertical starter piece	10
Standard with tube connector 200	11
Vertical starter standard 2.16 m	15
Base jack	17
Tube ledger	25
U-ledger 0.73 m	32
U-transom lattice girder 0.73 m V	44
Tube-transom lattice girder 0.73 m V	45
MODUL lattice girder 6.14 m	46
MODUL lattice girder 5.14 m	47
MODUL lattice girder with tube fixture 6.14 m	48
MODUL lattice girder with tube fixture 5.14 m	49
MODUL lift-off preventer	50
Aluminium frame platform with tube fixture 1.57 m; 2.07 m	51
Aluminium frame platform with tube fixture 2.57 m; 3.07 m	52
Aluminium access frame platform with tube fixture 3.07 m	54
Aluminium access frame platform with tube fixture 2.57 m	55
Steel deck AF with tube fixture 0.32 m; $\ell \leq 3.07$ m	61
Steel deck with tube fixture	64
Aluminium frame platform with internal hatch 2.57 m; 3.07 m	69
Aluminium deck with plywood 2.57 m; 3.07 m	72
Aluminium deck with plywood 1.57 m; 2.07 m	73
Aluminium access deck 3.07 m with ladder	75
Aluminium access deck 2.57 m with ladder	76
Aluminium deck with plywood 3.07 m	78
Aluminium deck with plywood 1.57 m; 2.07 m; 2.57 m	79
Aluminium access deck 3.07 m with ladder	81
Aluminium access deck 2.57 m with ladder	82
Steel deck AF 0.32 m; $\ell \leq 3.07$ m	84
Steel deck	85
MODUL gap cover; $\ell \leq 3.07$ m	94
MODUL gap cover with tube fixture; $\ell \leq 3.07$ m	95
Gap cover; $\ell \leq 3.07$ m	96
MODUL swinggate	102
Bracket 0.39 m with tube fixture	103
MODUL bracket 0.39 m	104
MODUL toeboard	107
MODUL toeboard, aluminium	109
Toeboard, End toeboard	112
Toeboard, aluminium; End-toeboard, aluminium	115

Table C.3: (continued)

Designation	Annex B, page
MODUL guard net system	116
MODUL double end guardrail	117
Scaffold retainer / wall tie	120
Wedge head coupler, swivel base	122
MODUL U-tube connector	123
MODUL tube connector	124
Wedge head coupler, rigid	125
Locking pin	132
Standard 4.0	153
Vertical starter standard 4.0	154
Tube ledger 4.0	155
MODUL gap cover, T-shaped	157
Base jack 60	178
Starter piece, lightweight	179
Standard with integrated tube connector, lightweight	180
Starter standard 2.21 m, lightweight	181
O-ledger, lightweight 0.73 – 4.35 m	185
U-ledger, lightweight 0.73 m T14	187
U-toeboard, wood 0.73 – 3.07 m	192
U-toeboard, steel 0.73 – 3.07 m T17	194
U-toeboard, steel 0.73 – 3.07 m	195
U-bracket, lightweight 0.39 m	196
U-deck lift-off preventer T8 0.39 – 0.73 m	202
O-lattice girder, lightweight 5.14; 6.14 x 0.5 m	205
Tube connector for lattice girder	209
U-lattice girder ledger, lightweight 0.73 m	210
Reinforcing post 2.6 m "Lightweight design"	215
Locking pin, red Ø 11 mm	223
Starter piece "K2000+ design"	226
Standard with tube connector "K2000+ design"	227
O-ledger 0.73 – 4.35 m "K2000+ design"	229
U-ledger 0.73 m "K2000+ design"	231
U-bracket 0.39 m "K2000+ design"	236
O-lattice girder 5.14; 6.14 x 0.5 m "K2000+ design"	242
Side safety meshguard 1.57 – 3.07 m "K2000+ design"	248
U-deck T4 0.73 – 3.07 x 0.32 m, steel, design: point-welded	262
U-deck T4 0.73 – 3.07 x 0.32 m, steel, design: hand-welded	263
U-deck 0.73 – 3.07 x 0.32 m, steel, design: point-welded	264
U-deck 0.73 – 3.07 x 0.32 m, steel, design: hand-welded	265
U-robust deck 0.73 – 2.57 m x 0.61 m	266

Table C.3: (continued)

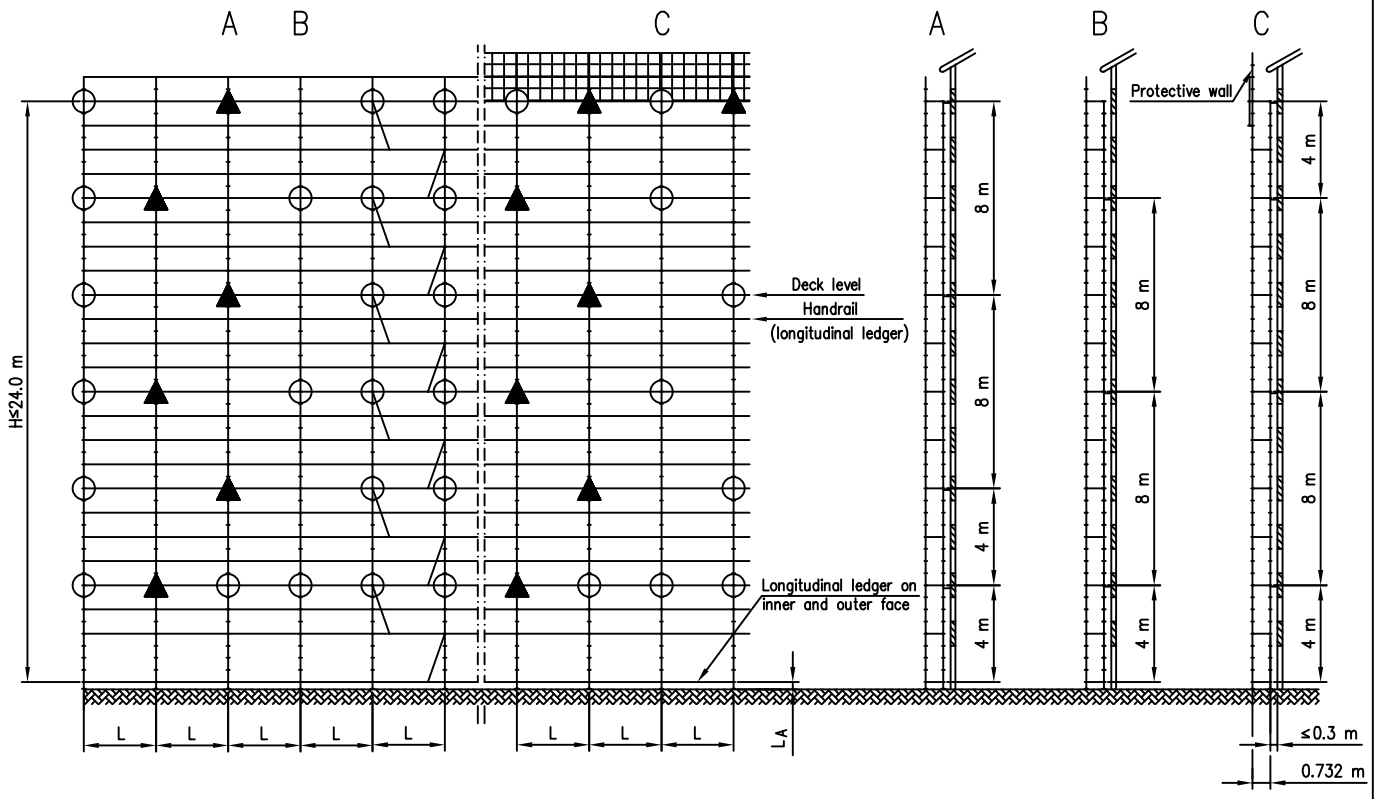
Designation	Annex B, page
U-robust deck 3.07 x 0.61 m	267
U-robust deck 0.73 – 3.07 m x 0.32 m *)	268
U-robust deck with trapdoor with ladder 2.57 – 3.07 x 0.61 m	272
Base jack 80, reinforced	292

*) may only be used as bracket deck

Standard assembly configuration without inner bracket – Bay length L ≤ 3.07 m

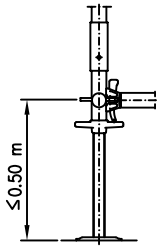
① uncladded scaffolding in front of partially open facade

② uncladded scaffolding in front of closed facade



Anchor configuration:
- 8 m vertically offset anchor configuration
- at least 1 V-type wall tie per 5 bays
- continuous row of anchorage at H=4.00 m
- Protective wall position: continuous row of anchorage with 2 V-type wall ties per 5 bays

Spindle extension:
- L_A ≤ 50 cm (Distance to foot level)



Bracing:
- Handrail as longitudinal ledger on each working level
- Longitudinal ledger on inner and outer face on foot level at H=0.00 m

Supplementary components:
- Protective wall (for details see annex D, page 7)

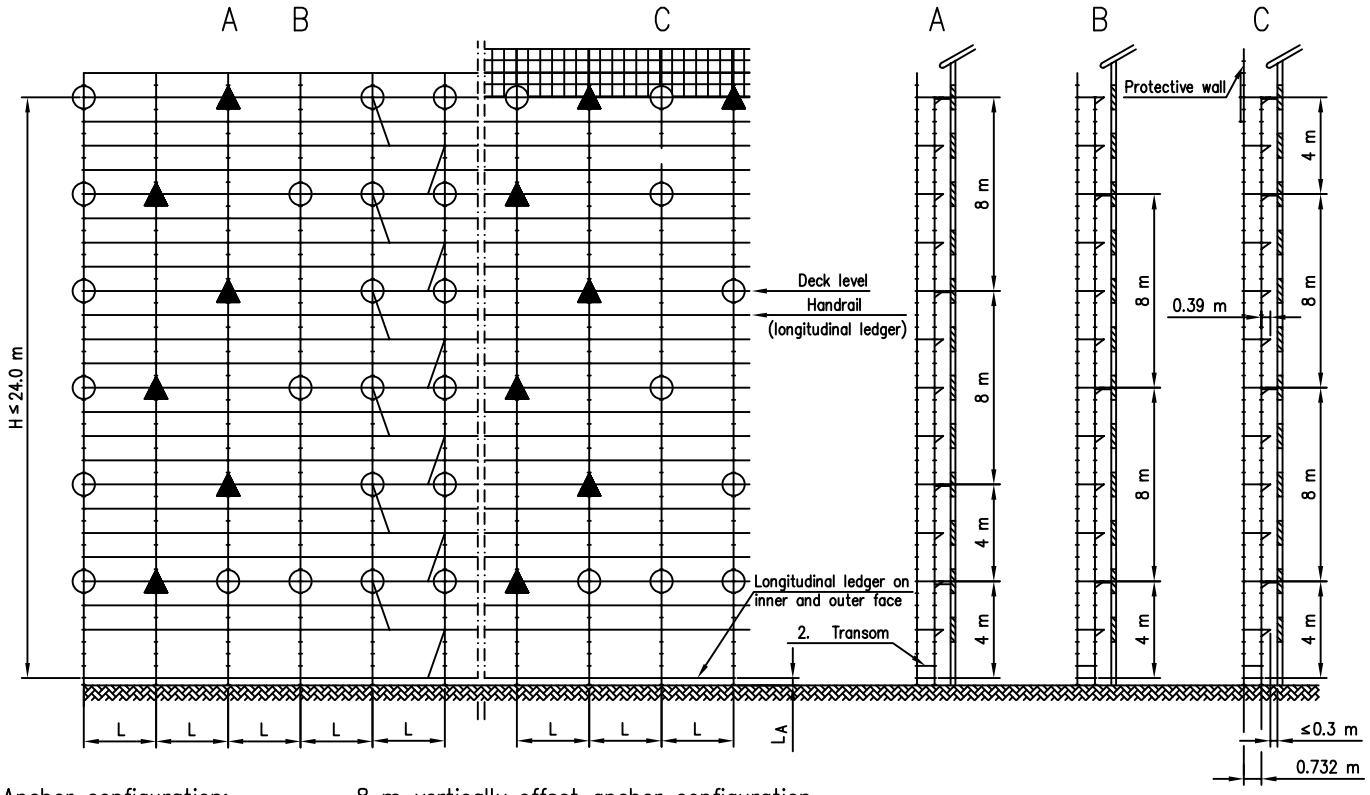
Note: Side protection components (handrail, knee guardrail, longitudinal ledger) are only shown when they are required for the structural stability.

ALBLITZ MODUL	Annex D, page 1
Standard assembly configuration without inner bracket	
MU716-D001_ABM 10.2023	

Standard assembly configuration with inner bracket – Bay length L ≤ 3.07 m

① uncladded scaffolding in front of partially open facade

② uncladded scaffolding in front of closed facade

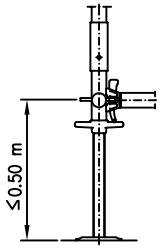


Scaffold retainer/wall tie

V-type wall tie

Anchor configuration:
- 8 m vertically offset anchor configuration
- at least 1 V-type wall tie per 5 bays
- continuous row of anchorage at H=4.00 m
- Protective wall position: continuous row of anchorage with 2 V-type wall ties per 5 bays

Spindle extension:
- L_A ≤ 50 cm (Distance to foot level)



Bracing:
- Handrail as longitudinal ledger on each working level
- Longitudinal ledger on inner and outer face on foot level at H=0.00 m
- 2. Transom at a height of 0.50 m
- Longitudinal ledgers on the inner face in each bay and each working level at deck level
- Protective wall position: Knee rails as longitudinal ledger in the access bay at H=2.50 m and 4.50 m

Supplementary components:
- Protective wall (for details see annex D, page 7)

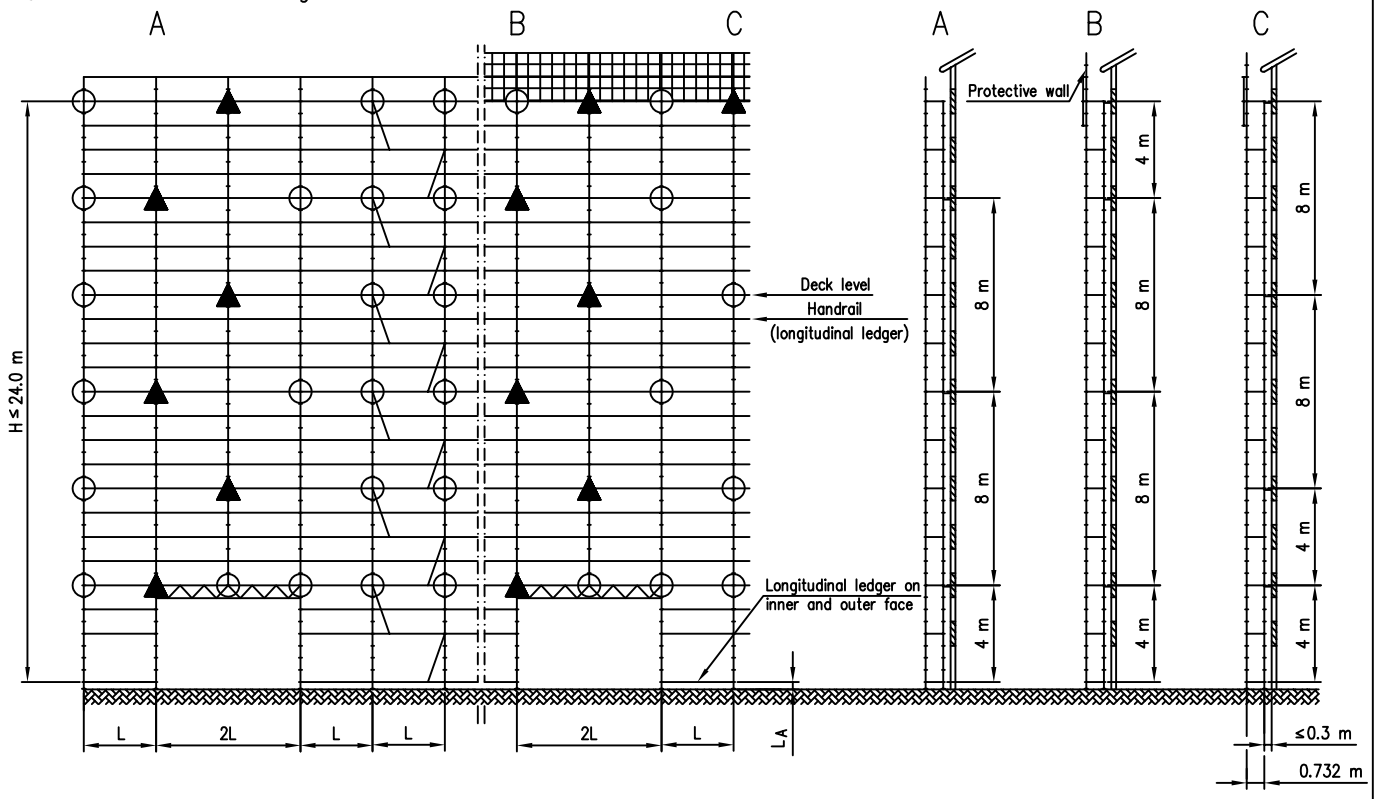
Note: Side protection components (handrail, knee guardrail, longitudinal ledger) are only shown when they are required for the structural stability.

ALBLITZ MODUL	Annex D, page 2
Standard assembly configuration with inner bracket	
MU716-D002_ABM 10.2023	

Standard assembly configuration without inner bracket with bridging girder – Bay length L ≤ 3.07 m

① uncladded scaffolding in front of partially open facade

② uncladded scaffolding in front of closed facade

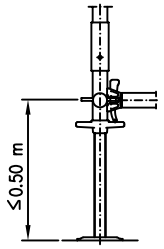


Scaffold retainer/wall tie

V-type wall tie

Anchor configuration:
- 8 m vertically offset anchor configuration
- at least 1 V-type wall tie per 5 bays
- continuous row of anchorage at H=4.00 m
- Protective wall position: continuous row of anchorage with 2 V-type wall ties per 5 bays

Spindle extension:
- L_A ≤ 50 cm (Distance to foot level)



Bracing:
- Handrail as longitudinal ledger on each working level
- Longitudinal ledger on inner and outer face on foot level at H=0.00 m

Supplementary components:
- Protective wall (for details see annex D, page 7)
- Bridging girder (for details see annex D, page 8)

Note: Side protection components (handrail, knee guardrail, longitudinal ledger) are only shown when they are required for the structural stability.

ALBLITZ MODUL

Standard assembly configuration without inner bracket with bridging girder

Annex D, page 3

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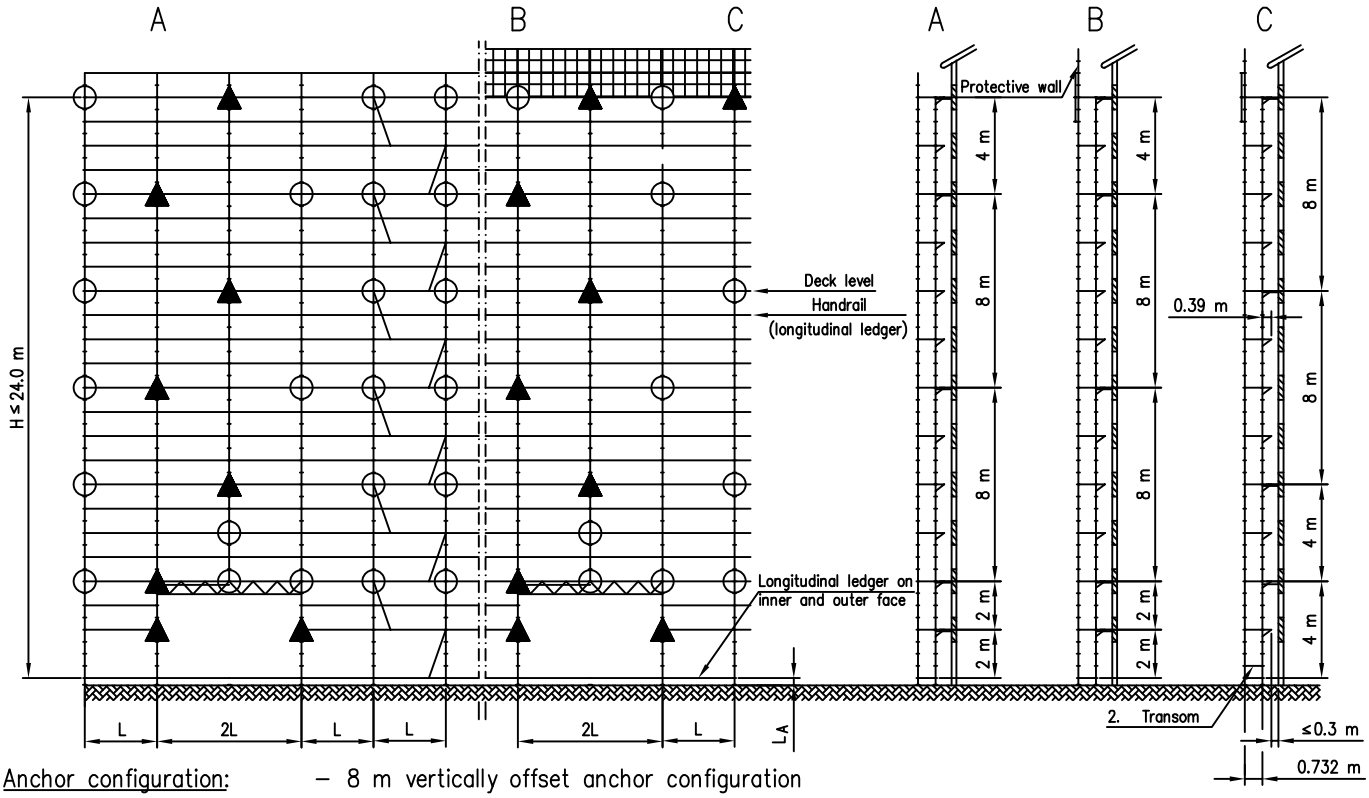
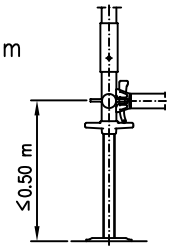
Standard assembly configuration with inner bracket with bridging girder – Bay length L ≤ 3.07 m

① uncladded scaffolding in front of partially open facade

② uncladded scaffolding in front of closed facade





Anchor configuration:
- 8 m vertically offset anchor configuration
- at least 1 V-type wall tie per 5 bays
- continuous row of anchorage at H=4.00 m
- Protective wall position: continuous row of anchorage with 2 V-type wall ties per 5 bays
- Bridging girder: 2 V-type wall ties attached to inner standard at H=2.00 m

Spindle extension:
- L_A ≤ 50 cm (Distance to foot level)

Bracing:
- Handrail as longitudinal ledger on each working level
- Longitudinal ledger on inner and outer face on foot level at H=0.00 m
- 2. Transom at a height of 0.50 m from the floor line (mandatory at standard bridging girder)
- Longitudinal ledgers on the inner face in each bay and each working level at deck level
- Protective wall position: Knee rails as longitudinal ledger in the access bay at H=2.50 m and 4.50 m

Supplementary components:
- Protective wall (for details see annex D, page 7)
- Bridging girder (for details see annex D, page 8)

Note: Side protection components (handrail, knee guardrail, longitudinal ledger) are only shown when they are required for the structural stability.

ALBLITZ MODUL

Standard assembly configuration with inner bracket with bridging girder

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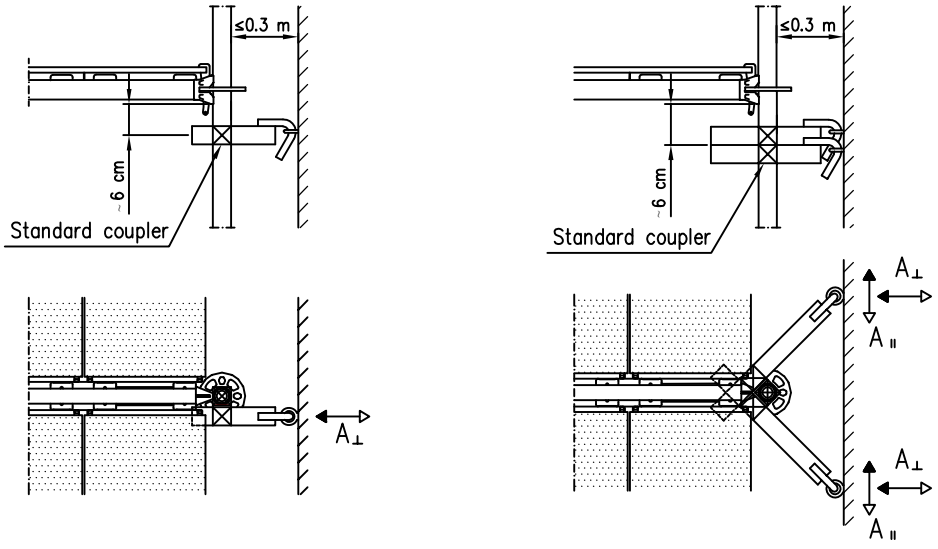
Annex D, page 4

Standard assembly configuration: Detailed view – Anchoring 1 – Scaffolding without inner bracket



Symbol Scaffold retainer/wall tie

Symbol V-type wall tie

Anchor forces $A_{\perp}$ and $A_{\parallel}$ see Annex C, Table C.2

ALBLITZ MODUL

Standard assembly configuration: Detailed view – Anchoring 1 – Scaffolding without inner bracket

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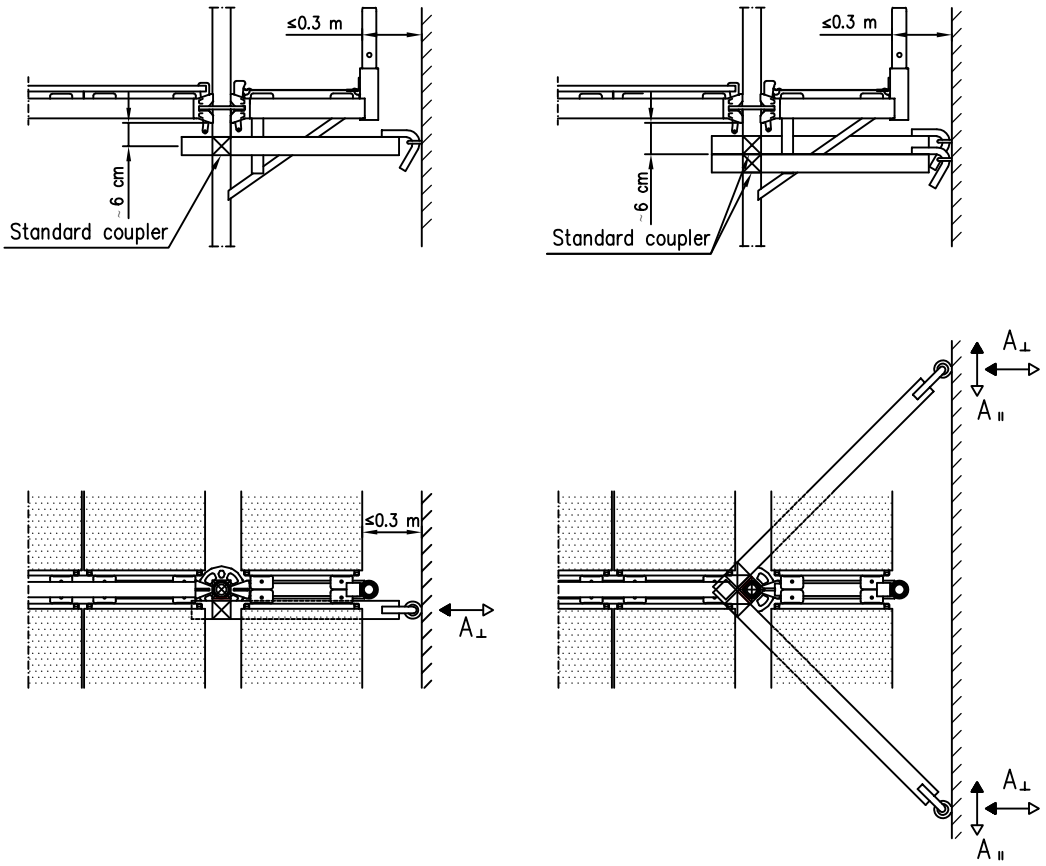
Annex D, page 5

Standard assembly configuration: Detailed view – Anchoring 2 – Scaffolding with inner bracket



Symbol — Scaffold retainer/wall tie

Symbol — V-type wall tie

Anchor forces $A_{\perp}$ and $A_{\parallel}$ see Annex C, Table C.2

ALBLITZ MODUL	
Standard assembly configuration: Detailed view – Anchoring 2 – Scaffolding with inner bracket	Annex D, page 6
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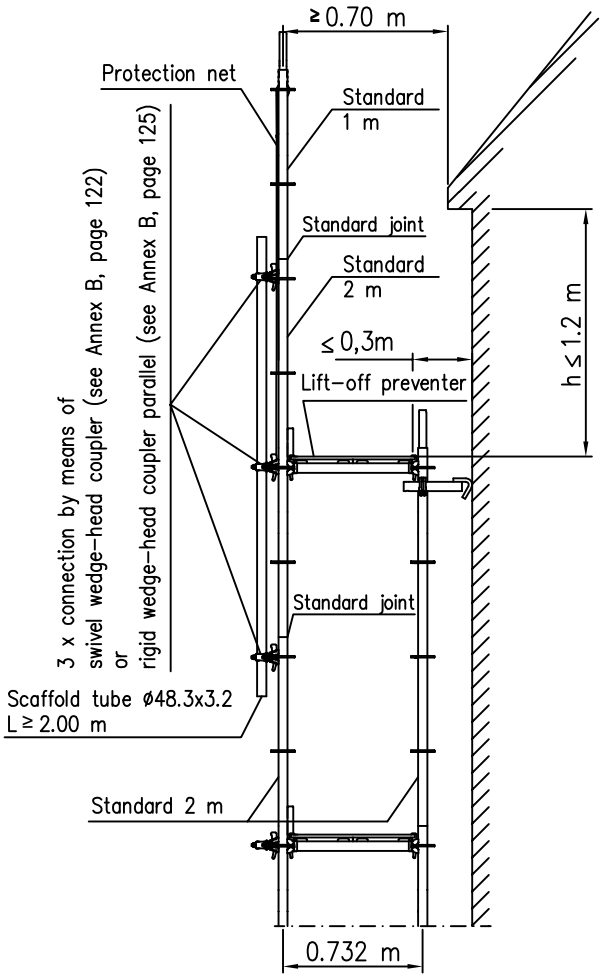
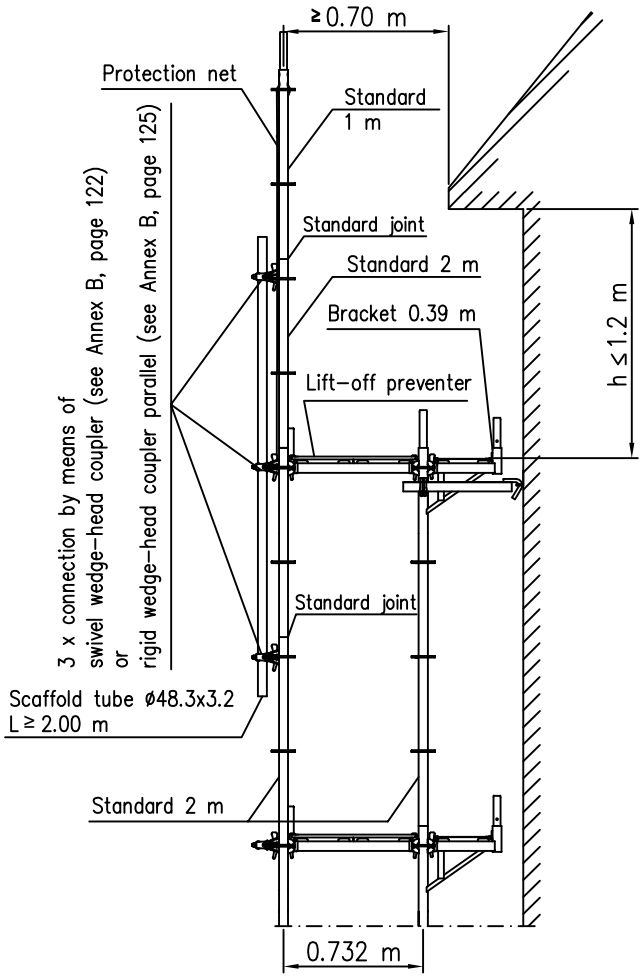
Standard assembly configuration: Detailed view – Protective wall

Protective wall without inner bracket



Protective wall with inner bracket



Note:
Longitudinal ledger on the outer face at deck level for threading the net

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Standard assembly configuration: Detailed view – Protective wall

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page 7

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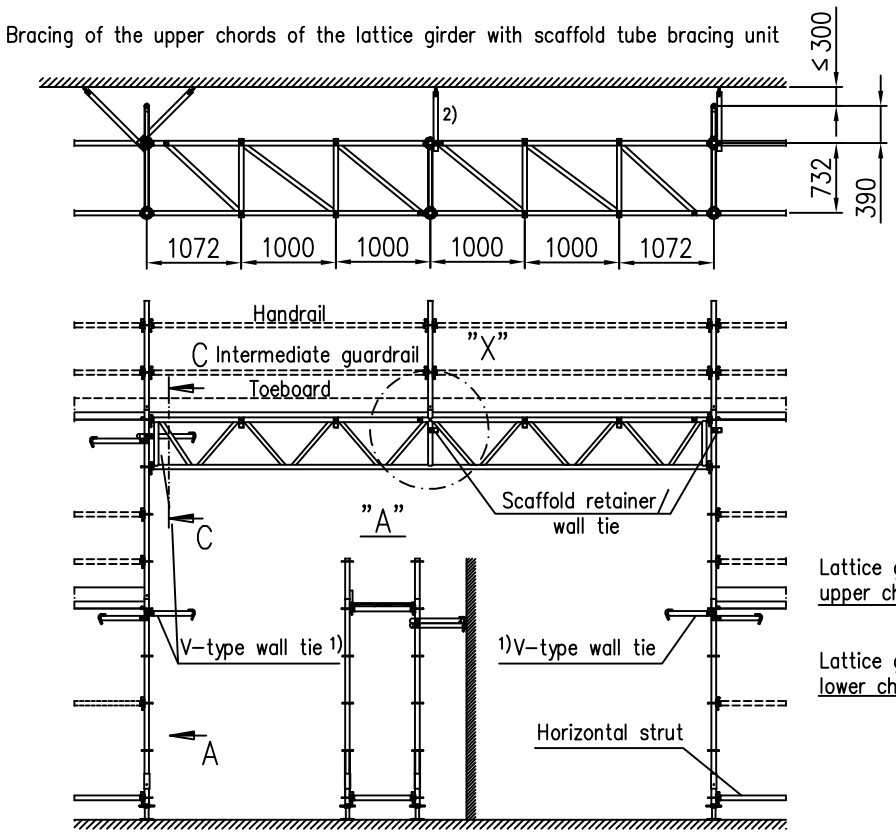
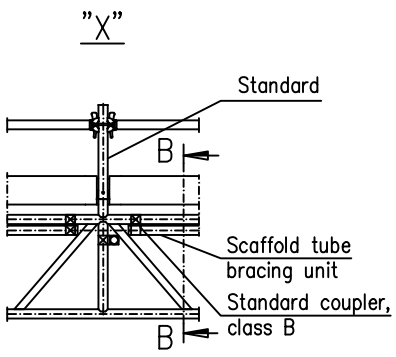
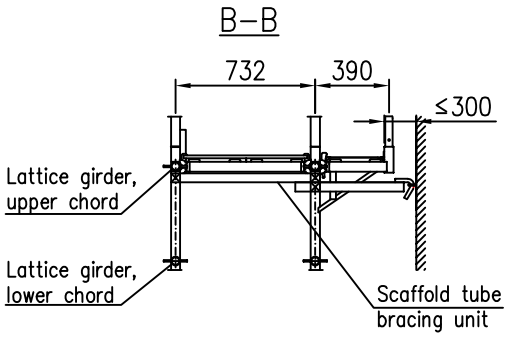
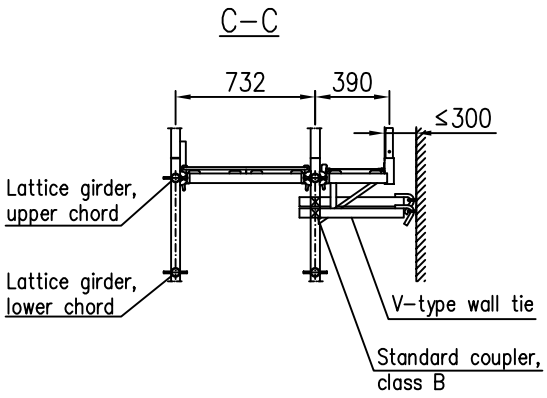
Standard assembly configuration: Detailed view – Bridging girder









1) only with inner bracket 0.39 m
2) scaffold tie (single tube attachment) at the centre inner standard, 200 cm above the bridging in the event of inner brackets

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Standard assembly configuration: Detailed view – Bridging girder

Annex D,
page 8

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