



BSI Standards Publication

Aluminium and aluminium alloys — Extruded rod/bar, tube and profiles

Part 2: Mechanical properties

National foreword

This British Standard is the UK implementation of EN 755-2:2025. It supersedes BS EN 755-2:2016, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee NFE/35, Light metals and their alloys.

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Aluminium und Aluminiumlegierungen -
Stranggepresste Stangen, Rohre und Profile - Teil 2:
Mechanische Eigenschaften

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European foreword

This document (EN 755-2:2025) has been prepared by Technical Committee CEN/TC 132 “Aluminium and aluminium alloys”, the secretariat of which is held by AFNOR.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by January 2026, and conflicting national standards shall be withdrawn at the latest by January 2026.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 755-2:2016.

Within its programme of work, Technical Committee CEN/TC 132 entrusted CEN/TC 132/WG 5 “Extruded and drawn products” to revise EN 755-2:2016.

EN 755-2:2025 includes the following significant technical changes with respect to EN 755-2:2016:

- addition of EN AW-2033, EN AW-2077, EN AW-4032, EN AW-6050 and EN AW-6061A alloys;
- addition of the terms required by the latest CCMC template;
- addition of Clause 3 compulsory from the latest CCMC template;
- deletion of former Clause 3.3 as part of the table of contents in this document;
- correction to temper of EN AW-2024 alloy.

EN 755 comprises the following parts under the general title “*Aluminium and aluminium alloys — Extruded rod/bar, tube and profiles*”:

- *Part 1: Technical conditions for inspection and delivery*
- *Part 2: Mechanical properties*
- *Part 3: Round bars, tolerances on dimensions and form*
- *Part 4: Square bars, tolerances on dimensions and form*
- *Part 5: Rectangular bars, tolerances on dimensions and form*
- *Part 6: Hexagonal bars, tolerances on dimensions and form*
- *Part 7: Seamless tubes, tolerances on dimensions and form*
- *Part 8: Porthole tubes, tolerances on dimensions and form*
- *Part 9: Profiles, tolerances on dimensions and form*

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1 Scope

This document specifies the mechanical property limits resulting from tensile testing applicable to aluminium and aluminium alloy extruded rod/bar, tube and profile.

Technical conditions for inspection and delivery, including product and testing requirements, are specified in EN 755-1. Temper designations are defined in EN 515. The chemical composition limits for these materials are given in EN 573-3.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 755-1, *Aluminium and aluminium alloys — Extruded rod/bar, tube and profiles — Part 1: Technical conditions for inspection and delivery*

3 Terms and definitions

No terms and definitions are listed in this document.

4 Mechanical property limits

4.1 General

The mechanical properties shall be in conformity with those specified in Table 1 to Table 70 or those agreed upon between supplier and purchaser and stated in the order document.

For all alloys the temper F (as fabricated) can be used, but without guaranteed mechanical properties. Definitions of tempers are provided at Annex A of this document.

Table 1 to Table 70 contain limits of mechanical property values obtained by tensile testing according to EN ISO 6892-1. Test pieces sampling, location in the specimen and preparation shall be as given in EN 755-1.

NOTE The mechanical properties refer to test pieces taken in the longitudinal direction. Mechanical properties of test pieces taken in other directions can differ from those for the longitudinal direction quoted in this standard.

Brinell hardness values given in Table 1 to Table 70 expressed as HBW values are for information only.

4.2 Elongation

If not otherwise agreed, the A value shall be used.

The A value for elongation is the % elongation measured over a gauge length of $5,65\sqrt{S_0}$ (where S_0 is the initial cross-sectional area of the test-piece), and expressed in percent.

For certain products the supplier may choose (if not otherwise specified in the order documents) to use the elongation based on $A_{50\text{mm}}$. Consequently, values for the $A_{50\text{mm}}$ are included in the following tables.

The $A_{50\text{mm}}$ value is the elongation measured over a gauge length of 50 mm and expressed in percent.

4.3 Tables of mechanical properties

Table 1 — Aluminium EN AW-1050A [Al 99,5(A)]

Extruded rod/bar									
Temper	Dimensions mm		R_m MPa		$R_{p0,2}$ MPa		A %	$A_{50\text{ mm}}$ %	HBW Typical value
	D^a	S^b	min.	max.	min.	max.	min.	min.	
F c, H112	all	all	60	-	20	-	25	23	20
O, H111	all	all	60	95	20	-	25	23	20
Extruded tube									
Temper	Wall thickness t mm		R_m MPa		$R_{p0,2}$ MPa		A %	$A_{50\text{ mm}}$ %	HBW Typical value
			min.	max.	min.	max.	min.	min	
F c, H112	all		60		20	-	25	23	20
O, H111	all		60	95	20	-	25	23	20
Extruded profile									
Temper	Wall thickness t mm		R_m MPa		$R_{p0,2}$ MPa		A %	$A_{50\text{ mm}}$ %	HBW Typical value
			min.	max.	min.	max.	min.	min	
F c, H112	all		60		20	-	25	23	20
^a D = Diameter for round bar.									
^b S = Width across flats for square and hexagonal bar, thickness for rectangular bar.									
^c F Temper: property values are for information only.									

Table 2 — Aluminium EN AW-1070A [Al 99,7(A)]

Extruded rod/bar									
Temper	Dimensions mm		R_m MPa		$R_{p0,2}$ MPa		A %	$A_{50 \text{ mm}}$ %	HBW Typical value
	D^a	S^b	min.	max.	min.	max.	min.	min.	
F ^c , H112	all	all	60	-	23		25	23	18
Extruded tube									
Not specified									
Extruded profile									
Not specified									
^a D = Diameter for round bar. ^b S = Width across flats for square and hexagonal bar, thickness for rectangular bar. ^c F Temper: property values are for information only.									

Table 3 — Aluminium EN AW-1200 [Al 99,0]

Extruded rod/bar									
Temper	Dimensions mm		R_m MPa		$R_{p0,2}$ MPa		A %	$A_{50 \text{ mm}}$ %	HBW Typical value
	D^a	S^b	min.	max.	min.	max.	min.	min.	
F ^c , H112	all	all	75	-	25	-	20	18	23
Extruded tube									
Temper	Wall thickness t mm		R_m MPa		$R_{p0,2}$ MPa		A %	$A_{50 \text{ mm}}$ %	HBW Typical value
			min.	max.	min.	max.	min.	min.	
F ^c , H112	all	all	75	-	25		20	18	23
Extruded profile									
Temper	Wall thickness t mm		R_m MPa		$R_{p0,2}$ MPa		A %	$A_{50 \text{ mm}}$ %	HBW Typical value
			min.	max.	min.	max.	min.	min.	
F ^c , H112	all		75	-	25		20	18	23
^a D = Diameter for round bar. ^b S = Width across flats for square and hexagonal bar, thickness for rectangular bar. ^c F Temper: property values are for information only.									

Table 4 — Aluminium EN AW-1350 [Al 99,5]

Extruded rod/bar ^d									
Temper	Dimensions mm		R_m MPa		$R_{p0,2}$ MPa		A %	$A_{50\text{ mm}}$ %	HBW Typical value
	D ^a	S ^b	min.	max.	min.	max.	min.	min.	
F ^c , H112	all	all	60	-	-	-	25	23	20
Extruded tube ^d									
Temper	Wall thickness t mm		R_m MPa		$R_{p0,2}$ MPa		A %	$A_{50\text{ mm}}$ %	HBW Typical value
			min.	max.	min.	max.	min.	min.	
F ^c , H112	all		60	-	-	-	25	23	20
Extruded profile ^d									
Temper	Wall thickness t mm		R_m MPa		$R_{p0,2}$ MPa		A %	$A_{50\text{ mm}}$ %	HBW Typical value
			min.	max.	min.	max.	min.	min.	
F ^c , H112	all		60	-	-	-	25	23	20

^a D = Diameter for round bar.

^b S = Width across flats for square and hexagonal bar, thickness for rectangular bar.

^c F Temper: property values are for information only.

^d Electrical conductivity $\gamma \geq 35,4$ MS/m.

Table 5 — Alloy EN AW-2007 [Al Cu4PbMgMn]

Extruded rod/bar									
Temper	Dimensions mm		R_m MPa		$R_{p0,2}$ MPa		A %	$A_{50\text{ mm}}$ %	HBW Typical value
	D^a	S^b	min.	max.	min.	max.	min.	min.	
T4, T4510, T4511 ^c	≤ 80	≤ 80	370	-	250	-	8	6	95
	$80 < D \leq 200$	$80 < S \leq 200$	340	-	220	-	8	-	
	$200 < D \leq 250$	$200 < S \leq 250$	330	-	210	-	7	-	
Extruded tube									
Temper	Wall thickness t mm		R_m MPa		$R_{p0,2}$ MPa		A %	$A_{50\text{ mm}}$ %	HBW Typical value
			min.	max.	min.	max.	min.	min.	
T4, T4510, T4511 ^c	≤ 25		370	-	250	-	8	6	95
Extruded profile									
Temper	Wall thickness t mm		R_m MPa		$R_{p0,2}$ MPa		A %	$A_{50\text{ mm}}$ %	HBW Typical value
			min.	max.	min.	max.	min.	min.	
T4, T4510, T4511 ^c	≤ 30		370	-	250	-	8	6	95
^a D = Diameter for round bar.									
^b S = Width across flats for square and hexagonal bar, thickness for rectangular bar.									
^c Properties may be obtained by press quenching.									

Table 6 — Alloy EN AW-2011 [Al Cu6BiPb]

Extruded rod/bar									
Temper	Dimensions mm		R_m MPa		$R_{p0,2}$ MPa		A %	$A_{50\text{ mm}}$ %	HBW Typical value
	D^a	S^b	min.	max.	min.	max.	min.	min.	
T4 ^c	≤ 200	≤ 60	275	-	125	-	14	12	80
T6 ^c	≤ 75	≤ 60	310	-	230	-	8	6	90
	75 < D ≤ 200	-	295	-	195	-	6	-	90
Extruded tube									
Temper	Wall thickness t mm		R_m MPa		$R_{p0,2}$ MPa		A %	$A_{50\text{ mm}}$ %	HBW Typical value
			min.	max.	min.	max.	min.	min.	
T6 ^c	≤ 25		310	-	230	-	6	4	90
Extruded profile									
Not specified									
^a D = Diameter for round bar.									
^b S = Width across flats for square and hexagonal bar, thickness for rectangular bar.									
^c Properties may be obtained by press quenching.									

Table 7 — Alloy EN AW-2011A [Al Cu6BiPb(A)]

Extruded rod/bar									
Temper	Dimensions mm		R_m MPa		$R_{p0,2}$ MPa		A %	$A_{50\text{ mm}}$ %	HBW Typical value
	D^a	S^b	min.	max.	min.	max.	min.	min.	
T4 ^c	≤ 200	≤ 60	275	-	125	-	14	12	80
T6 ^c	≤ 75	≤ 60	310	-	230	-	8	6	90
	$75 < D \leq 200$	-	295	-	195	-	6	-	90
Extruded tube									
Temper	Wall thickness t mm		R_m MPa		$R_{p0,2}$ MPa		A %	$A_{50\text{ mm}}$ %	HBW Typical value
			min.	max.	min.	max.	min.	min.	
T6 ^c	≤ 25		310	-	230	-	6	4	90
Extruded profile									
Not specified									
^a D = Diameter for round bar.									
^b S = Width across flats for square and hexagonal bar, thickness for rectangular bar.									
^c Properties may be obtained by press quenching.									

Table 8 — Alloy EN AW-2014 [Al Cu4SiMg]

Extruded rod/bar									
Temper	Dimensions mm		R_m MPa		$R_{p0,2}$ MPa		A %	$A_{50\text{ mm}}$ %	HBW Typical value
	D^a	S^b	min.	max.	min.	max.	min.	min.	
O, H111	≤ 200	≤ 200	-	250	-	135	12	10	45
T4, T4510, T4511	≤ 25	≤ 25	370	-	230	-	13	11	110
	$25 < D \leq 75$	$25 < S \leq 75$	410	-	270	-	12	-	110
	$75 < D \leq 150$	$75 < S \leq 150$	390	-	250	-	10	-	110
	$150 < D \leq 200$	$150 < S \leq 200$	350	-	230	-	8	-	110
T6, T6510, T6511	≤ 25	≤ 25	415	-	370	-	6	5	140
	$25 < D \leq 75$	$25 < S \leq 75$	460	-	415	-	7	-	140
	$75 < D \leq 150$	$75 < S \leq 150$	465	-	420	-	7	-	140
	$150 < D \leq 200$	$150 < S \leq 200$	430	-	350	-	6	-	140
	$200 < D \leq 250$	$200 < S \leq 250$	420	-	320	-	5	-	140
Extruded tube									
Temper	Wall thickness t mm		R_m MPa		$R_{p0,2}$ MPa		A %	$A_{50\text{ mm}}$ %	HBW Typical value
			min.	max.	min.	max.	min.	min.	
O, H111	≤ 20		-	250	-	135	12	10	45
T4, T4510, T4511	≤ 20		370	-	230	-	11	10	110
T6, T6510, T6511	≤ 10		415	-	370	-	7	5	140
	$10 < t \leq 40$		450	-	400	-	6	4	140
Extruded profile ^c									
Temper	Wall thickness t mm		R_m MPa		$R_{p0,2}$ MPa		A %	$A_{50\text{ mm}}$ %	HBW Typical value
			min.	max.	min.	max.	min.	min.	
O, H111	all		-	250	-	135	12	10	45
T4, T4510, T4511	≤ 25		370	-	230	-	11	10	110
	$25 < t \leq 75$		410	-	270	-	10	-	110
T6, T6510, T6511	≤ 25		415	-	370	-	7	5	140
	$25 < t \leq 75$		460	-	415	-	7	-	
^a D = Diameter for round bar.									
^b S = Width across flats for square and hexagonal bar, thickness for rectangular bar.									
^c If a profile cross section comprises different thicknesses which fall in more than one set of specified mechanical property values, the lowest specified value shall be considered as valid for the whole profile cross section.									

Table 9 — Alloy EN AW-2014A [Al Cu4SiMg(A)]

Extruded rod/bar									
Temper	Dimensions mm		R_m MPa		$R_{p0,2}$ MPa		A %	$A_{50\text{ mm}}$ %	HBW Typical value
	D^a	S^b	min.	max.	min.	max.	min.	min.	
O, H111	≤ 200	≤ 200	-	250	-	135	12	10	45
T4, T4510, T4511	≤ 25	≤ 25	370	-	230	-	13	11	110
	$25 < D \leq 75$	$25 < S \leq 75$	410	-	270	-	12	-	110
	$75 < D \leq 150$	$75 < S \leq 150$	390	-	250	-	10	-	110
	$150 < D \leq 200$	$150 < S \leq 200$	350	-	230	-	8	-	110
T6, T6510, T6511	≤ 25	≤ 25	415	-	370	-	6	5	140
	$25 < D \leq 75$	$25 < S \leq 75$	460	-	415	-	7	-	140
	$75 < D \leq 150$	$75 < S \leq 150$	465	-	420	-	7	-	140
	$150 < D \leq 200$	$150 < S \leq 200$	430	-	350	-	6	-	140
	$200 < D \leq 250$	$200 < S \leq 250$	420	-	320	-	5	-	140
Extruded tube									
Temper	Wall thickness t mm		R_m MPa		$R_{p0,2}$ MPa		A %	$A_{50\text{ mm}}$ %	HBW Typical value
			min.	max.	min.	max.	min.	min.	
O, H111	≤ 20		-	250	-	135	12	10	45
T4, T4510, T4511	≤ 20		370	-	230	-	11	10	110
T6, T6510, T6511	≤ 10		415	-	370	-	7	5	140
	$10 < t \leq 40$		450	-	400	-	6	4	140
Extruded profile ^c									
Temper	Wall thickness t mm		R_m MPa		$R_{p0,2}$ MPa		A %	$A_{50\text{ mm}}$ %	HBW Typical value
			min.	max.	min.	max.	min.	min.	
O, H111	all		-	250	-	135	12	10	45
T4, T4510, T4511	≤ 25		370	-	230	-	11	10	110
	$25 < t \leq 75$		410	-	270	-	10	-	110
T6, T6510, T6511	≤ 25		415	-	370	-	7	5	140
	$25 < t \leq 75$		460	-	415	-	7	-	

^a D = Diameter for round bar.

^b S = Width across flats for square and hexagonal bar, thickness for rectangular bar.

^c If a profile cross section comprises different thicknesses which fall in more than one set of specified mechanical property values, the lowest specified value shall be considered as valid for the whole profile cross section.

Table 10 — Alloy EN AW-2017A [Al Cu4MgSi(A)]

Extruded rod/bar									
Temper	Dimensions mm		R_m MPa		$R_{p0,2}$ MPa		A %	$A_{50\text{ mm}}$ %	HBW Typical value
	D^a	S^b	min.	max.	min.	max.	min.	min.	
O, H111	≤ 200	≤ 200	-	250	-	135	12	10	45
T4, T4510, T4511 ^c	≤ 25	≤ 25	380	-	260	-	12	10	105
	$25 < D \leq 75$	$25 < S \leq 75$	400	-	270	-	10	-	105
	$75 < D \leq 150$	$75 < S \leq 150$	390	-	260	-	9	-	105
	$150 < D \leq 200$	$150 < S \leq 200$	370	-	240	-	8	-	105
	$200 < D \leq 250$	$200 < S \leq 250$	360	-	220	-	7	-	105
Extruded tube									
Temper	Wall thickness t mm		R_m MPa		$R_{p0,2}$ MPa		A %	$A_{50\text{ mm}}$ %	HBW Typical value
			min.	max.	min.	max.	min.	min.	
O, H111	≤ 20		-	250	-	135	12	10	45
T4, T4510, T4511 ^c	≤ 10		380	-	260	-	12	10	105
	$10 < t \leq 75$		400	-	270	-	10	8	105
Extruded profile									
Temper	Wall thickness t mm		R_m MPa		$R_{p0,2}$ MPa		A %	$A_{50\text{ mm}}$ %	HBW Typical value
			min.	max.	min.	max.	min.	min.	
T4, T4510, T4511 ^c	≤ 30		380	-	260	-	10	8	105
^a D = Diameter for round bar.									
^b S = Width across flats for square and hexagonal bar, thickness for rectangular bar.									
^c Properties may be obtained by press quenching.									

Table 11 — Alloy EN AW-2618A [Al Cu2Mg1.5Ni(A)]

Extruded rod/bar									
Temper	Dimensions mm		R_m MPa		$R_{p0,2}$ MPa		A %	$A_{50\text{ mm}}$ %	HBW Typical value
	D^a	S^b	min.	max.	min.	max.	min.	min.	
T6, T6511	$D \leq 10$	$S \leq 10$	410	-	330	-	6	4	140
T6, T6511	$10 < D \leq 100$	$10 < S \leq 100$	420	-	360	-	7	5	145
Extruded tube									
Temper	Wall thickness t mm		R_m MPa		$R_{p0,2}$ MPa		A %	$A_{50\text{ mm}}$ %	HBW Typical value
			min.	max.	min.	max.	min.	min.	
T6, T6511	≤ 10		410	-	330	-	6	4	140
T6, T6511	$10 < t \leq 100$		420	-	360	-	7	5	145
Extruded profile ^c									
Temper	Wall thickness t mm		R_m MPa		$R_{p0,2}$ MPa		A %	$A_{50\text{ mm}}$ %	HBW Typical value
			min.	max.	min.	max.	min.	min.	
T6, T6511	≤ 10		410	-	330	-	6	4	140
T6, T6511	$10 < t \leq 100$		420	-	360	-	7	5	145

^a D = Diameter for round bar.

^b Width across flats for square and hexagonal bar, thickness for rectangular bar.

^c If a profile cross section comprises different thickness which fall in more than one set of specified mechanical property values, the lowest specified value shall be considered as valid for the whole profile cross section.

Table 12 — Alloy EN AW-2024 [Al Cu4Mg1]

Extruded rod/bar									
Temper	Dimensions mm		R_m MPa		$R_{p0,2}$ MPa		A %	$A_{50\text{ mm}}$ %	HBW Typical value
	D^a	S^b	min.	max.	min.	max.	min.	min.	
O, H111	≤ 200	≤ 200	-	250	-	150	12	10	47
T4, T4510, T4511	≤ 50	≤ 50	450	-	310	-	8	6	120
	$50 < D \leq 100$	$50 < S \leq 100$	440	-	300	-	8	-	120
	$100 < D \leq 200$	$100 < S \leq 200$	420	-	280	-	8	-	120
	$200 < D \leq 250$	$200 < S \leq 250$	400	-	270	-	8	-	120
T6, T6510, T6511	≤ 150	≤ 150	455	-	380	-	5	4	130
Extruded tube									
Temper	Wall thickness t mm		R_m MPa		$R_{p0,2}$ MPa		A %	$A_{50\text{ mm}}$ %	HBW Typical value
			min.	max.	min.	max.	min.	min.	
O, H111	≤ 30		-	250	-	150	12	10	47
T4, T4510, T4511	≤ 30		420	-	290	-	8	6	120
T6, T6510, T6511	≤ 30		455	-	380	-	5	4	130
Extruded profile ^c									
Temper	Wall thickness t mm		R_m MPa		$R_{p0,2}$ MPa		A %	$A_{50\text{ mm}}$ %	HBW Typical value
			min.	max.	min.	max.	min.	min.	
O, H111	all		-	250	-	150	12	10	47
T4, T4510, T4511	≤ 15		395	-	290	-	8	6	120
	$15 < t \leq 50$		420	-	290	-	8	-	120
T6, T6510, T6511	≤ 50		455	-	380	-	5	4	130
^a D = Diameter for round bar.									
^b S = Width across flats for square and hexagonal bar, thickness for rectangular bar.									
^c If a profile cross section comprises different thickness which fall in more than one set of specified mechanical property values, the lowest specified value shall be considered as valid for the whole profile cross section.									

Table 13 — Alloy EN AW-2030 [Al Cu4PbMg]

Extruded rod/bar									
Temper	Dimensions mm		R_m MPa		$R_{p0,2}$ MPa		A %	$A_{50\text{ mm}}$ %	HBW Typical value
	D^a	S^b	min.	max.	min.	max.	min.	min.	
T4, T4510, T4511 ^c	≤ 80	≤ 80	370	-	250	-	8	6	115
	$80 < D \leq 200$	$80 < S \leq 200$	340	-	220	-	8	-	115
	$200 < D \leq 250$	$200 < S \leq 250$	330	-	210	-	7	-	115
Extruded tube									
Temper	Wall thickness t mm		R_m MPa		$R_{p0,2}$ MPa		A %	$A_{50\text{ mm}}$ %	HBW Typical value
			min.	max.	min.	max.	min.	min.	
T4, T4510, T4511 ^c	≤ 25		370	-	250	-	8	6	115
Extruded profile									
Temper	Wall thickness t mm		R_m MPa		$R_{p0,2}$ MPa		A %	$A_{50\text{ mm}}$ %	HBW Typical value
			min.	max.	min.	max.	min.	min.	
T4, T4510, T4511 ^c	≤ 30		370	-	250	-	8	6	115
^a D = Diameter for round bar.									
^b S = Width across flats for square and hexagonal bar, thickness for rectangular bar.									
^c Properties may be obtained by press quenching.									

Table 14 — Alloy EN AW-2033 [Al Cu2,5MnSiMgBi]

Extruded rod/bar									
Temper	Dimensions mm		R_m MPa		$R_{p0,2}$ MPa		A %	A_{50mm} %	HBW Typical value
	D^a	S^b	min.	max.	min.	max.	min.	min.	
T6 ^c , T6510 ^c , T6511 ^c	≤ 80	≤ 80	370	-	250	-	8	-	100
	80 < D ≤ 250	80 < S ≤ 180	340		220		8	-	100
Extruded tube									
Not specified									
Extruded profile									
Temper	Wall thickness t mm		R_m MPa		$R_{p0,2}$ MPa		A %	A_{50mm} %	HBW Typical value
			min.	max.	min.	max.	min.	min.	
T6 ^c , T6510 ^c , T6511 ^c	≤ 40		340	-	220	-	8	-	100
^a D = Diameter for round bar									
^b S = Width across flats for square and hexagonal bar, thickness for rectangular bar									
^c Properties may be obtained by press quenching									

Table 15 — Alloy EN AW-2077 [Al Cu4,5MgMnSiBi]

Extruded rod/bar									
Temper	Dimensions mm		R_m MPa		$R_{p0,2}$ MPa		A %	A_{50mm} %	HBW Typical value
	D^a	S^b	min.	max.	min.	max.	min.	min.	
T4c, T4511c	≤ 75	≤ 75	400		270		10		105
	$75 < D \leq 150$	$75 < D \leq 150$	390		260		9		105
	$150 < D \leq 200$	$150 < D \leq 200$	370	-	240	-	8	-	105
	$200 < D \leq 250$	$200 < D \leq 250$	360		220		7		105
T6c, T6511c	≤ 150	≤ 150	455		380		5		130
	$150 < D \leq 200$	$150 < D \leq 200$	420	-	280	-	8	-	120
	$200 < D \leq 250$	$200 < D \leq 250$	400		270		8		110
Extruded tube									
Not specified									
Extruded profile									
Not specified									
^a D = Diameter for round bar ^b S = Width across flats for square and hexagonal bar, thickness for rectangular bar ^c Properties may be obtained by press quenching									

Table 16 — Alloy EN AW-3102 [Al Mn0,2]

Extruded rod/bar									
Temper	Dimensions mm		R_m MPa		$R_{p0,2}$ MPa		A %	$A_{50\text{ mm}}$ %	HBW Typical value
	D^a	S^b	min.	max.	min.	max.	min.	min.	
F ^c , H112	all	all	80	-	30	-	25	23	23
Extruded tube									
Temper	Wall thickness t mm		R_m MPa		$R_{p0,2}$ MPa		A %	$A_{50\text{ mm}}$ %	HBW Typical value
			min.	max.	min.	max.	min.	min.	
F ^c , H112	all		80	-	30	-	25	23	23
Extruded profile									
Temper	Wall thickness t mm		R_m MPa		$R_{p0,2}$ MPa		A %	$A_{50\text{ mm}}$ %	HBW Typical value
			min.	max.	min.	max.	min.	min.	
F ^c , H112	all		80	-	30	-	25	23	23
^a D = Diameter for round bar.									
^b S = Width across flats for square and hexagonal bar, thickness for rectangular bar.									
^c F Temper: property values are for information only.									

Table 17 — Alloy EN AW-3003 [Al Mn1Cu]

Extruded rod/bar									
Temper	Dimensions mm		R_m MPa		$R_{p0,2}$ MPa		A %	$A_{50\text{ mm}}$ %	HBW Typical value
	D^a	S^b	min.	max.	min.	max.	min.	min.	
F ^c , H112	all	all	95	-	35	-	25	20	30
O, H111	all	all	95	135	35	-	25	20	30
Extruded tube									
Temper	Wall thickness t mm		R_m MPa		$R_{p0,2}$ MPa		A %	$A_{50\text{ mm}}$ %	HBW Typical value
			min.	max.	min.	max.	min.	min.	
F ^c , H112	all		95	-	35	-	25	20	30
O, H111	all		95	135	35	-	25	20	30
Extruded profile									
Temper	Wall thickness t mm		R_m MPa		$R_{p0,2}$ MPa		A %	$A_{50\text{ mm}}$ %	HBW Typical value
			min.	max.	min.	max.	min.	min.	
F ^c , H112	all		95	-	35	-	25	20	30
^a D = Diameter for round bar.									
^b S = Width across flats for square and hexagonal bar, thickness for rectangular bar.									
^c F Temper: property values are for information only.									