BRONMETAL

Aluminium Al

Product format:	Extruded
Technical characteristics :	Flats, rods, tubes and extruded aluminium profiles

MECHANICAL CHARACTERISTICS

ALLOYS : EN AW-1050A [Al 99,5]

Extruded bar								
Treatment status	**Measures mm**		**R_m MPa**		**$R_{p0.2}$ MPa**		**A %**	**$A_{50\ mm}$ %**
	D[1]	**S[2]**	**mín.**	**máx.**	**mín.**	**máx.**	**mín.**	**mín.**
F[4], H112	All	All	60	-	20	-	25	23
O, H111	All	All	60	95	20	-	25	23
Extruded tube								
Treatment status	**Measures mm**		**R_m MPa**		**$R_{p0.2}$ MPa**		**A %**	**$A_{50\ mm}$ %**
	e[3]		**mín.**	**máx.**	**mín.**	**máx.**	**mín.**	**mín.**
F[4], H112	All		60	-	20	-	25	23
O, H111	All		60	95	20	-	25	23
Extruded profile								
Treatment status	**Measures mm**		**R_m MPa**		**$R_{p0.2}$ MPa**		**A %**	**$A_{50\ mm}$ %**
	e[3]		**mín.**	**máx.**	**mín.**	**máx.**	**mín.**	**mín.**
F[4], H112	All		60	-	20	-	25	23

1 **D = Diameter of circular section bars.**
2 **S = Distance between faces for square bars and hexagonal bar thickness of rectangular section.**
3 **e = Wall thickness.**
4 **Treatment status “F”: The values of the characteristics are given for information only.**

ALLOYS: EN AW-1070A [Al 99,7]

Extruded bar								
Treatment status	**Measures mm**		**R_m MPa**		**$R_{p0.2}$ MPa**		**A %**	**$A_{50\ mm}$ %**
	D[1]	**S[2]**	**mín.**	**máx.**	**mín.**	**máx.**	**mín.**	**mín.**
F[4], H112	All	All	60	-	20	-	25	23
Extruded tube Unspecified								
Extruded profile Unspecified								

[1] **D = Diameter of circular section bars.**
[2] **S = Distance between faces for square bars and hexagonal bar thickness of rectangular section.**
[4] **Treatment status "F": The values of the characteristics are given for information only.**

ALLOYS: EN AW-1200A [Al 99,0]

Extruded bar								
Treatment status	Measures mm		R_m MPa		$R_{p0.2}$ MPa		A % mín.	$A_{50\ mm}$ % mín.
	D[1]	S[2]	mín.	máx.	mín.	máx.		
F[4], H112	All	All	75	-	25	-	20	18
Extruded tube								
Treatment status	Measures mm e[3]		R_m MPa		$R_{p0.2}$ MPa		A % mín.	$A_{50\ mm}$ % mín.
			mín.	máx.	mín.	máx.		
F[4], H112	All		75	-	25	-	20	18
Extruded profile								
Treatment status	Measures mm e[3]		R_m MPa		$R_{p0.2}$ MPa		A % mín.	$A_{50\ mm}$ % mín.
			mín.	máx.	mín.	máx.		
F[4], H112	All		75	-	25	-	20	18

[1] D = Diameter of circular section bars.
[2] S = Distance between faces for square bars and hexagonal bar thickness of rectangular section.
[3] e = Wall thickness.
[4] Treatment status “F”: The values of the characteristics are given for information only.

ALLOYS : EN AW-1350A [Al 99,5]

Extruded bar								
Treatment status	Measures mm		R_m MPa		$R_{p0.2}$ MPa		A % mín.	$A_{50\ mm}$ % mín.
	D[1]	S[2]	mín.	máx.	mín.	máx.		
F[4], H112	All	All	60	-	-	-	25	23
Extruded tube[11]								
Treatment status	Measures mm e[3]		R_m MPa		$R_{p0.2}$ MPa		A % mín.	$A_{50\ mm}$ % mín.
			mín.	máx.	mín.	máx.		
F[4], H112	All		60	-	-	-	25	23
Extruded profile[11]								
Treatment status	Measures mm e[3]		R_m MPa		$R_{p0.2}$ MPa		A % mín.	$A_{50\ mm}$ % mín.
			mín.	máx.	mín.	máx.		
F[4], H112	All		60	-	-	-	25	23

[1] D = Diameter of circular section bars.
[2] S = Distance between faces for square bars and hexagonal bar thickness of rectangular section.
[3] e = Wall thickness.
[4] Treatment status “F”: The values of the characteristics are given for information only.
[11] Electrical conductivity γ ≥ 35.4 MS/m

ALLOYS : EN AW-2007 [Al CU4PB MG MN]

Extruded bar								
Treatment status	Measures mm		R_m MPa		$R_{p0.2}$ MPa		A %	$A_{50\ mm}$ %
	D[1]	S[2]	mín.	máx.	mín.	máx.	mín.	mín.
T4, T4510, T4511[5]	≤ 80	≤ 80	370	-	250	-	8	6
	80 < D ≤ 200	80 < D ≤ 200	340	-	220	-	8	-
	200 < D ≤ 250	200 < D ≤ 250	330	-	210	-	7	-

Extruded tube							
Treatment status	Measures mm e[3]	R_m MPa		$R_{p0.2}$ MPa		A %	$A_{50\ mm}$ %
		mín.	máx.	mín.	máx.	mín.	mín.
T4, T4510, T4511[5]	≤ 25	370	-	250	-	8	6

Extruded profile							
Treatment status	Measures mm e[3]	R_m MPa		$R_{p0.2}$ MPa		A %	$A_{50\ mm}$ %
		mín.	máx.	mín.	máx.	mín.	mín.
T4, T4510, T4511[5]	≤ 30	370	-	250	-	8	6

[1] D = Diameter of circular section bars.
[2] S = Distance between faces for square bars and hexagonal bar thickness of rectangular section.
[3] e = Wall thickness.
[5] Features can be obtained by cooling in the press.

ALLOYS : EN AW-2011 [Al CU6 BI PI]

Extruded bar								
Treatment status	**Measures mm**		**R_m MPa**		**$R_{p0.2}$ MPa**		**A % mín.**	**$A_{50\ mm}$ % mín.**
	D[1]	**S[2]**	**mín.**	**máx.**	**mín.**	**máx.**		
T4[4]	≤ 200	≤ 60	275	-	20	-	14	12
T6[5]	≤ 75	≤ 60	310	-	230	-	8	6
	75 < D ≤ 200	-	295	-	195	-	6	-

Extruded tube							
Treatment status	**Measures mm e[3]**	**R_m MPa**		**$R_{p0.2}$ MPa**		**A % mín.**	**$A_{50\ mm}$ % mín.**
		mín.	**máx.**	**mín.**	**máx.**		
T6[5]	≤ 25	310	-	230	-	6	4

Extruded profile
Unspecified

1 **D = Diameter of circular section bars.**
2 **S = Distance between faces for square bars and hexagonal bar thickness of rectangular section.**
3 **e = Wall thickness.**
5 **Features can be obtained by cooling in the press.**

ALLOYS : EN AW-2011A [AI CU6 BI PI (A)]

Extruded bar								
Treatment status	**Measures mm**		**R_m MPa**		**$R_{p0.2}$ MPa**		**A % mín.**	**$A_{50\ mm}$ % mín.**
	D[1]	**S[2]**	**mín.**	**máx.**	**mín.**	**máx.**		
T4[4]	≤ 200	≤ 60	275	-	125	-	14	12
T6[5]	≤ 75	≤ 60	310	-	230	-	8	6
	75 < D ≤ 200	-	295	-	195	-	6	-
Extruded tube								
Treatment status	**Measures mm e[3]**		**R_m MPa**		**$R_{p0.2}$ MPa**		**A % mín.**	**$A_{50\ mm}$ % mín.**
			mín.	**máx.**	**mín.**	**máx.**		
T6[5]	≤ 25		310	-	230	-	6	4
Extruded profile Unspecified								

[1] **D = Diameter of circular section bars.**
[2] **S = Distance between faces for square bars and hexagonal bar thickness of rectangular section.**
[3] **e = Wall thickness.**
[5] **Features can be obtained by cooling in the press.**

BRONMETAL

Aluminium Al

Product format: Extruded

Technical Characteristics: Flats, rods, tubes and extruded aluminium profiles

ALLOYS : EN AW-2014 [Al Cu4 Si Mg]

Extruded bar								
Treatment status	**Measures mm**		**R_m MPa**		**$R_{p0.2}$ MPa**		**A % mín.**	**$A_{50\ mm}$ % mín.**
	D[1]	**S[2]**	**mín.**	**máx.**	**mín.**	**máx.**		
O, H111	≤ 200	≤ 200	-	250	-	135	12	10
T4, T4510, T4511	≤ 25	≤ 25	370	-	230	-	13	11
	25 < D ≤ 75	25 < S ≤ 75	410	-	270	-	12	-
	75 < D ≤ 150	75 < S ≤ 150	390	-	250	-	10	-
	150 < D ≤ 200	150 < S ≤ 200	350	-	230	-	8	-
T6, T6510, T6511	≤ 25	≤ 25	415	-	370	-	6	5
	25 < D ≤ 75	25 < S ≤ 75	460	-	415	-	7	-
	75 < D ≤ 150	75 < S ≤ 150	465	-	420	-	7	-
	150 < D ≤ 200	150 < S ≤ 200	430	-	350	-	6	-
	200 < D ≤ 250	200 < S ≤ 250	420	-	320	-	5	-

Extruded tube							
Treatment status	**Measures mm**	**R_m MPa**		**$R_{p0.2}$ MPa**		**A % mín.**	**$A_{50\ mm}$ % mín.**
	e[3]	**mín.**	**máx.**	**mín.**	**máx.**		
O, H111	≤ 20	-	250	-	135	12	10
T4, T4510, T4511	≤ 20	370	-	230	-	11	10
T6, T6510, T6511	≤ 10	415	-	370	-	7	5
	10 < e ≤ 40	450	-	400	-	6	4

Extruded profile[10]							
Treatment status	**Measures mm**	**R_m MPa**		**$R_{p0.2}$ MPa**		**A % mín.**	**$A_{50\ mm}$ % mín.**
	e[3]	**mín.**	**máx.**	**mín.**	**máx.**		
O, H111	All	-	250	-	135	12	10
T4, T4510, T4511	≤ 25	370	-	230	-	11	10
	25 < e ≤ 75	410	-	270	-	10	-
T6, T6510, T6511	≤ 25	415	-	370	-	7	5
	25 < e ≤ 75	460	-	415	-	7	-

[1] D = Diameter of circular section bars.
[2] S = Distance between faces for square bars and hexagonal bar thickness of rectangular section.
[3] e = Wall thickness.
[10] In the event that the cross section is composed of elements of different thickness for appling different mechanical characteristics especifiEachs heat should be considered as valid the entire lower section of the values specified.

ALLOYS : EN AW-2014A [Al Cu4 Si Mg (A)]

Extruded bar								
Treatment status	**Measures mm**		**R_m MPa**		**$R_{p0.2}$ MPa**		**A % mín.**	**$A_{50\ mm}$ % mín.**
	D[1]	**S[2]**	**mín.**	**máx.**	**mín.**	**máx.**		
O, H111	≤ 200	≤ 200	-	250	-	135	12	10
T4, T4510, T4511	≤ 25	≤ 25	370	-	230	-	13	11
	25 < D ≤ 75	25 < S ≤ 75	410	-	270	-	12	-
	75 < D ≤ 150	75 < S ≤ 150	390	-	250	-	10	-
	150 < D ≤ 200	150 < S ≤ 200	350	-	230	-	8	-
T6, T6510, T6511	≤ 25	≤ 25	415	-	370	-	6	5
	25 < D ≤ 75	25 < S ≤ 75	460	-	415	-	7	-
	75 < D ≤ 150	75 < S ≤ 150	465	-	420	-	7	-
	150 < D ≤ 200	150 < S ≤ 200	430	-	350	-	6	-
	200 < D ≤ 250	200 < S ≤ 250	420	-	320	-	5	-
Tubo extruid								
Treatment status	**Measures mm e[3]**		**R_m MPa**		**$R_{p0.2}$ MPa**		**A % mín.**	**$A_{50\ mm}$ % mín.**
			mín.	**máx.**	**mín.**	**máx.**		
O, H111	≤ 20		-	250	-	135	12	10
T4, T4510, T4511	≤ 20		370	-	230	-	11	10
T6, T6510, T6511	≤ 10		415	-	370	-	7	5
	10 < e ≤ 40		450	-	400	-	6	4
Extruded profile[10]								
Treatment status	**Measures mm e[3]**		**R_m MPa**		**$R_{p0.2}$ MPa**		**A % mín.**	**$A_{50\ mm}$ % mín.**
			mín.	**máx.**	**mín.**	**máx.**		
O, H111	All		-	250	-	135	12	10
T4, T4510, T4511	≤ 25		370	-	230	-	11	10
	25 < e ≤ 75		410	-	270	-	10	-
T6, T6510, T6511	≤ 25		415	-	370	-	7	5
	25 < e ≤ 75		460	-	415	-	7	-

[1] D = Diameter of circular section bars.
[2] S = Distance between faces for square bars and hexagonal bar thickness of rectangular section.
[3] e = Wall thickness.
[10] In the event that the cross section is composed of elements of different thickness for appling different mechanical characteristics especifiEachs heat should be considered as valid the entire lower section of the values specified.

Aluminium Al

Product format: Extruded

Technical Characteristics: Flats, rods, tubes and extruded aluminium profiles

ALLOYS : EN AW-2017 [Al Cu4 Mg Si (A)]

Extruded bar								
Treatment status	**Measures mm**		**R_m MPa**		**$R_{p0.2}$ MPa**		**A % mín.**	**$A_{50\ mm}$ % mín.**
	D[1]	**S[2]**	**mín.**	**máx.**	**mín.**	**máx.**		
O, H111	≤ 200	≤ 200	-	250	-	135	12	10
T4, T4510, T4511[5]	≤ 25	≤ 25	380	-	260	-	12	10
	25 < D ≤ 75	25 < S ≤ 75	400	-	270	-	10	-
	75 < D ≤ 150	75 < S ≤ 150	390	-	260	-	9	-
	150 < D ≤ 200	150 < S ≤ 200	370	-	240	-	8	-
	200 < D ≤ 250	200 < S ≤ 250	360	-	220	-	7	-

Extruded tube							
Treatment status	**Measures mm e[3]**	**R_m MPa**		**$R_{p0.2}$ MPa**		**A % mín.**	**$A_{50\ mm}$ % mín.**
		mín.	**máx.**	**mín.**	**máx.**		
O, H111	≤ 20	-	250	-	135	12	10
T4, T4510, T4511[5]	≤ 10	380	-	260	-	12	10
	10 < e ≤ 75	400	-	270	-	10	8

Extruded profile							
Treatment status	**Measures mm e[3]**	**R_m MPa**		**$R_{p0.2}$ MPa**		**A % mín.**	**$A_{50\ mm}$ % mín.**
		mín.	**máx.**	**mín.**	**máx.**		
T4, T4510, T4511[5]	≤ 30	380	-	260	-	10	8

[1] D = Diameter of circular section bars.
[2] S = Distance between faces for square bars and hexagonal bar thickness of rectangular section.
[3] e = Wall thickness.
[5] Features can be obtained by cooling in the press.

BRONMETAL

Aluminium Al

Product format: Extruded

Technical Characteristics: Flats, rods, tubes and extruded aluminium profiles

ALLOYS : EN AW-2024 [Al Cu4 Mg1]

Extruded bar								
Treatment status	**Measures mm**		**R_m MPa**		**$R_{p0.2}$ MPa**		**A % mín.**	**$A_{50\ mm}$ % mín.**
	D[1]	**S[2]**	**mín.**	**máx.**	**mín.**	**máx.**		
O, H111	≤ 200	≤ 200	-	250	-	150	12	10
T3, T3510, T3511	≤ 50	≤ 50	450	-	310	-	8	6
	50 < D ≤ 100	50 < S ≤ 100	440	-	300	-	8	-
	100 < D ≤ 200	100 < S ≤ 200	420	-	280	-	8	-
	200 < D ≤ 250	200 < S ≤ 250	400	-	270	-	8	-
T8, T8510, T8511	≤ 150	≤ 150	455	-	380	-	5	4

Extruded tube							
Treatment status	**Measures mm e[3]**	**R_m MPa**		**$R_{p0.2}$ MPa**		**A % mín.**	**$A_{50\ mm}$ % mín.**
		mín.	**máx.**	**mín.**	**máx.**		
O, H111	≤ 30	-	250	-	150	12	10
T3, T3510, T3511	≤ 30	420	-	290	-	8	6
T8, T8510, T8511	≤ 30	455	-	380	-	5	4

Extruded profile[10]							
Treatment status	**Measures mm e[3]**	**R_m MPa**		**$R_{p0.2}$ MPa**		**A % mín.**	**$A_{50\ mm}$ % mín.**
		mín.	**máx.**	**mín.**	**máx.**		
O, H111	All	-	250	-	150	12	10
T3, T3510, T3511	≤ 15	395	-	290	-	8	6
	15 < e ≤ 50	420	-	290	-	8	-
T8, T8510, T8511	≤ 50	455	-	380	-	5	4

[1] D = Diameter of circular section bars.
[2] S = Distance between faces for square bars and hexagonal bar thickness of rectangular section.
[3] e = Wall thickness.
[10] In the event that the cross section is composed of elements of different thickness for appling different mechanical characteristics especifiEachs heat should be considered as valid the entire lower section of the values specified.

Aluminium Al

Product format: Extruded

Technical Characteristics: Flats, rods, tubes and extruded aluminium profiles

ALLOYS: EN AW-2030 [Al CU4 PB MG]

Extruded bar								
Treatment status	**Measures mm**		**R_m MPa**		**$R_{p0.2}$ MPa**		**A % mín.**	**$A_{50\ mm}$ % mín.**
	D[1]	**S[2]**	**mín.**	**máx.**	**mín.**	**máx.**		
T4, T4510, T4511[5]	≤ 80	≤ 80	370	-	250	-	8	6
	80 < D ≤ 200	80 < S ≤ 200	340	-	220	-	8	-
	200 < D ≤ 250	200 < S ≤ 250	330	-	210	-	7	-

Extruded tube							
Treatment status	**Measures mm e[3]**	**R_m MPa**		**$R_{p0.2}$ MPa**		**A % mín.**	**$A_{50\ mm}$ % mín.**
		mín.	**máx.**	**mín.**	**máx.**		
T4, T4510, T4511	≤ 25	370	-	250	-	8	6

Extruded profile							
Treatment status	**Measures mm e[3]**	**R_m MPa**		**$R_{p0.2}$ MPa**		**A % mín.**	**$A_{50\ mm}$ % mín.**
		mín.	**máx.**	**mín.**	**máx.**		
T4, T4510, T4511[5]	≤ 30	370	-	250	-	8	6

[1] D = Diameter of circular section bars.
[2] S = Distance between faces for square bars and hexagonal bar thickness of rectangular section.
[3] e = Wall thickness.
[5] Features can be obtained by cooling in the press.

ALLOYS : EN AW-3003 [Al Mg 1 Cu]

Extruded bar

Treatment status	Measures mm		R_m MPa		$R_{p0.2}$ MPa		A % mín.	$A_{50\ mm}$ % mín.
	D[1]	S[2]	mín.	máx.	mín.	máx.		
F[4], H112	All	All	95	-	35	-	25	20
O, H111	All	All	95	135	35	-	25	20

Extruded tube

Treatment status	Measures mm e[3]	R_m MPa		$R_{p0.2}$ MPa		A % mín.	$A_{50\ mm}$ % mín.
		mín.	máx.	mín.	máx.		
F[4], H112	All	95	-	35	-	25	20
O, H111	All	95	135	35	-	25	20

Extruded profile

Treatment status	Measures mm e[3]	R_m MPa		$R_{p0.2}$ MPa		A % mín.	$A_{50\ mm}$ % mín.
		mín.	máx.	mín.	máx.		
F[4], H112	All	95	-	35	-	25	20

1 D = Diameter of circular section bars.
2 S = Distance between faces for square bars and hexagonal bar thickness of rectangular section.
3 e = Wall thickness.
4 Treatment status “F”: the values of the characteristics are given for information only.

ALLOYS : EN AW-3103 [Al MN 1]

Extruded bar								
Treatment status	**Measures mm**		**R_m MPa**		**$R_{p0.2}$ MPa**		**A % mín.**	**$A_{50\ mm}$ % mín.**
	D[1]	**S[2]**	**mín.**	**máx.**	**mín.**	**máx.**		
F[4], H112	All	All	95	-	35	-	25	20
O, H111	All	All	95	135	35	-	25	20
Extruded tube								
Treatment status	**Measures mm**		**R_m MPa**		**$R_{p0.2}$ MPa**		**A % mín.**	**$A_{50\ mm}$ % mín.**
	e[3]		**mín.**	**máx.**	**mín.**	**máx.**		
F[4], H112	All		95	-	35	-	25	20
O, H111	All		95	135	35	-	25	20
Extruded profile								
Treatment status	**Measures mm**		**R_m MPa**		**$R_{p0.2}$ MPa**		**A % mín.**	**$A_{50\ mm}$ % mín.**
	e[3]		**mín.**	**máx.**	**mín.**	**máx.**		
F[4], H112	All		95	-	35	-	25	20

[1] **D = Diameter of circular section bars.**
[2] **S = Distance between faces for square bars and hexagonal bar thickness of rectangular section.**
[3] **e = Wall thickness.**
[4] **Treatment status “F”: the values of the characteristics are given for information only.**

ALLOYS: EN AW-5005 [Al Mg 1 (B)]

Extruded bar								
Treatment status	**Measures mm**		**R_m MPa**		**$R_{p0.2}$ MPa**		**A % mín.**	**$A_{50\ mm}$ % mín.**
	D[1]	**S[2]**	**mín.**	**máx.**	**mín.**	**máx.**		
F[4], H112	All	All	100	-	40	-	18	16
O, H111	All	All	100	150	40	-	20	18
Extruded tube								
Treatment status	**Measures mm e[3]**		**R_m MPa**		**$R_{p0.2}$ MPa**		**A % mín.**	**$A_{50\ mm}$ % mín.**
			mín.	**máx.**	**mín.**	**máx.**		
F[4], H112	All		100	-	40	-	18	16
O, H111	All		100	150	40	-	20	18
Extruded profile								
Treatment status	**Measures mm e[3]**		**R_m MPa**		**$R_{p0.2}$ MPa**		**A % mín.**	**$A_{50\ mm}$ % mín.**
			mín.	**máx.**	**mín.**	**máx.**		
F[4], H112	All		100	-	40	-	18	16

[1] **D = Diameter of circular section bars.**
[2] **S = Distance between faces for square bars and hexagonal bar thickness of rectangular section.**
[3] **e = Wall thickness.**
[4] **Treatment status "F": the values of the characteristics are given for information only.**

ALLOYS : EN AW-5005A [Al Mg 1 (C)]

Extruded bar								
Treatment status	Measures mm		R_m MPa		$R_{p0.2}$ MPa		A % mín.	$A_{50\ mm}$ % mín.
	D[1]	S[2]	mín.	máx.	mín.	máx.		
F[4], H112	All	All	100	-	40	-	18	16
O, H111	All	All	100	150	40	-	20	18
Extruded tube								
Treatment status	Measures mm e[3]		R_m MPa		$R_{p0.2}$ MPa		A % mín.	$A_{50\ mm}$ % mín.
			mín.	máx.	mín.	máx.		
F[4], H112	All		100	-	40	-	18	16
O, H111	All		100	150	40	-	20	18
Extruded profile								
Treatment status	Measures mm e[3]		R_m MPa		$R_{p0.2}$ MPa		A % mín.	$A_{50\ mm}$ % mín.
			mín.	máx.	mín.	máx.		
F[4], H112	All		100	-	40	-	18	16

[1] D = Diameter of circular section bars.
[2] S = Distance between faces for square bars and hexagonal bar thickness of rectangular section.
[3] e = Wall thickness.
[4] Treatment status “F”: the values of the characteristics are given for information only.

ALLOYS : EN AW-5015A [Al Mg 2 (B)]

Extruded bar								
Treatment status	**Measures mm**		**R_m MPa**		**$R_{p0.2}$ MPa**		**A % mín.**	**$A_{50\ mm}$ % mín.**
	D[1]	**S[2]**	**mín.**	**máx.**	**mín.**	**máx.**		
F[4], H112	All	All	150	-	50	-	16	14
O, H111	All	All	150	200	50	-	18	16
Extruded tube								
Treatment status	**Measures mm e[3]**		**R_m MPa**		**$R_{p0.2}$ MPa**		**A % mín.**	**$A_{50\ mm}$ % mín.**
			mín.	**máx.**	**mín.**	**máx.**		
F[4], H112	All		150	-	60	-	16	14
O, H111	All		150	200	60	-	18	16
Extruded profile								
Treatment status	**Measures mm e[3]**		**R_m MPa**		**$R_{p0.2}$ MPa**		**A % mín.**	**$A_{50\ mm}$ % mín.**
			mín.	**máx.**	**mín.**	**máx.**		
F[4], H112	All		150	-	60	-	16	14

[1] D = Diameter of circular section bars.
[2] S = Distance between faces for square bars and hexagonal bar thickness of rectangular section.
[3] e = Wall thickness.
[4] Treatment status “F”: the values of the characteristics are given for information only.

ALLOYS : EN AW-5251 [Al Mg 2]

Extruded bar								
Treatment status	**Measures mm**		**R_m MPa**		**$R_{p0.2}$ MPa**		**A % mín.**	**$A_{50\ mm}$ % mín.**
	D[1]	**S[2]**	**mín.**	**máx.**	**mín.**	**máx.**		
F[4], H112	All	All	160	-	60	-	16	14
O, H111	All	All	160	220	60	-	17	15
Extruded tube								
Treatment status	**Measures mm e[3]**		**R_m MPa**		**$R_{p0.2}$ MPa**		**A % mín.**	**$A_{50\ mm}$ % mín.**
			mín.	**máx.**	**mín.**	**máx.**		
F[4], H112	All		160	-	60	-	16	14
O, H111	All		160	220	60	-	17	15
Extruded profile								
Treatment status	**Measures mm e[3]**		**R_m MPa**		**$R_{p0.2}$ MPa**		**A % mín.**	**$A_{50\ mm}$ % mín.**
			mín.	**máx.**	**mín.**	**máx.**		
F[4], H112	All		160	-	60	-	16	14

[1] D = Diameter of circular section bars.
[2] S = Distance between faces for square bars and hexagonal bar thickness of rectangular section.
[3] e = Wall thickness.
[4] Treatment status “F”: the values of the characteristics are given for information only.

ALLOYS : EN AW-5052 [Al Mg 2,5]

Extruded bar								
Treatment status	**Measures mm**		**R_m MPa**		**$R_{p0.2}$ MPa**		**A % mín.**	**$A_{50\ mm}$ % mín.**
	D[1]	**S[2]**	**mín.**	**máx.**	**mín.**	**máx.**		
F[4], H112	All	All	170	-	70	-	15	13
O, H111	All	All	170	230	70	-	17	15
Extruded tube								
Treatment status	**Measures mm e[3]**		**R_m MPa**		**$R_{p0.2}$ MPa**		**A % mín.**	**$A_{50\ mm}$ % mín.**
			mín.	**máx.**	**mín.**	**máx.**		
F[4], H112	All		170	-	70	-	15	13
O, H111	All		170	230	70	-	17	15
Extruded profile								
Treatment status	**Measures mm e[3]**		**R_m MPa**		**$R_{p0.2}$ MPa**		**A % mín.**	**$A_{50\ mm}$ % mín.**
			mín.	**máx.**	**mín.**	**máx.**		
F[4], H112	All		170	-	70	-	15	13

1 D = Diameter of circular section bars.
2 S = Distance between faces for square bars and hexagonal bar thickness of rectangular section.
3 e = Wall thickness.
4 Treatment status “F”: the values of the characteristics are given for information only.

ALLOYS : EN AW-5154 A [Al Mg 3,5 (A)]

Extruded bar								
Treatment status	Measures mm		R_m MPa		$R_{p0.2}$ MPa		A %	$A_{50\ mm}$ %
	D[1]	S[2]	mín.	máx.	mín.	máx.	mín.	mín.
F[4], H112	≤ 200	≤ 200	200	-	85	-	16	14
O, H111	≤ 200	≤ 200	200	275	85	-	18	16
Extruded tube								
Treatment status	Measures mm e[3]		R_m MPa		$R_{p0.2}$ MPa		A %	$A_{50\ mm}$ %
			mín.	máx.	mín.	máx.	mín.	mín.
F[4], H112	≤ 25		200	-	85	-	16	14
O, H111	≤ 25		200	275	85	-	18	16
Extruded profile								
Treatment status	Measures mm e[3]		R_m MPa		$R_{p0.2}$ MPa		A %	$A_{50\ mm}$ %
			mín.	máx.	mín.	máx.	mín.	mín.
F[4], H112	≤ 25		200	-	85	-	16	14

1 D = Diameter of circular section bars.
2 S = Distance between faces for square bars and hexagonal bar thickness of rectangular section.
3 e = Wall thickness.
4 Treatment status “F”: the values of the characteristics are given for information only.

ALLOYS : EN AW-5454 [Al Mg 3 Mn]

Extruded bar

Treatment status	Measures mm		R_m MPa		$R_{p0.2}$ MPa		A % mín.	$A_{50\ mm}$ % mín.
	D[1]	S[2]	mín.	máx.	mín.	máx.		
F[4], H112	≤ 200	≤ 200	200	-	85	-	16	14
O, H111	≤ 200	≤ 200	200	275	85	-	18	16

Extruded tube

Treatment status	Measures mm e[3]	R_m MPa		$R_{p0.2}$ MPa		A % mín.	$A_{50\ mm}$ % mín.
		mín.	máx.	mín.	máx.		
F[4], H112	≤ 25	200	-	85	-	16	14
O, H111	≤ 25	200	275	85	-	18	16

Extruded profile

Treatment status	Measures mm e[3]	R_m MPa		$R_{p0.2}$ MPa		A % mín.	$A_{50\ mm}$ % mín.
		mín.	máx.	mín.	máx.		
F[4], H112	≤ 25	200	-	85	-	16	**14**

1 D = Diameter of circular section bars.
2 S = Distance between faces for square bars and hexagonal bar thickness of rectangular section.
3 e = Wall thickness.
4 Treatment status “F”: the values of the characteristics are given for information only.

ALLOYS : EN AW-5754 [Al Mg 3]

Extruded bar								
Treatment status	Measures mm		R_m MPa		$R_{p0.2}$ MPa		A % mín.	$A_{50\ mm}$ % mín.
	D[1]	S[2]	mín.	máx.	mín.	máx.		
F[4], H112	≤ 150	≤ 150	180	-	80	-	14	12
	150 < D ≤ 250	150 < D ≤ 250	180	-	70	-	13	-
O, H111	≤ 150	≤ 150	180	250	80	-	17	15
Extruded tube								
Treatment status	Measures mm e[3]		R_m MPa		$R_{p0.2}$ MPa		A % mín.	$A_{50\ mm}$ % mín.
			mín.	máx.	mín.	máx.		
F[4], H112	≤ 25		180	-	80	-	14	12
O, H111	≤ 25		180	250	80	-	17	15
Extruded profile								
Treatment status	Measures mm e[3]		R_m MPa		$R_{p0.2}$ MPa		A % mín.	$A_{50\ mm}$ % mín.
			mín.	máx.	mín.	máx.		
F[4], H112	≤ 25		180	-	80	-	14	12

[1] D = Diameter of circular section bars.
[2] S = Distance between faces for square bars and hexagonal bar thickness of rectangular section.
[3] e = Wall thickness.
[4] Treatment status “F”: the values of the characteristics are given for information only.

ALLOYS : EN AW-5019 [Al Mg 5]

Extruded bar								
Treatment status	Measures mm		R_m MPa		$R_{p0.2}$ MPa		A %	$A_{50\ mm}$ %
	D[1]	S[2]	mín.	máx.	mín.	máx.	mín.	mín.
F[4], H112	≤ 200	≤ 200	250	-	110	-	14	12
O, H111	≤ 200	≤ 200	250	320	110	-	15	13

Extruded tube							
Treatment status	Measures mm e[3]	R_m MPa		$R_{p0.2}$ MPa		A %	$A_{50\ mm}$ %
		mín.	máx.	mín.	máx.	mín.	mín.
F[4], H112	≤ 30	250	-	110	-	14	12
O, H111	≤ 30	250	320	110	-	15	13

Extruded profile							
Treatment status	Measures mm e[3]	R_m MPa		$R_{p0.2}$ MPa		A %	$A_{50\ mm}$ %
		mín.	máx.	mín.	máx.	mín.	mín.
F[4], H112	≤ 30	250	-	110	-	14	12

[1] D = Diameter of circular section bars.
[2] S = Distance between faces for square bars and hexagonal bar thickness of rectangular section.
[3] e = Wall thickness.
[4] Treatment status “F”: the values of the characteristics are given for information only.

ALLOYS : EN AW-5083 [Al Mg 4,5 Mn 0,7]

Extruded bar

Treatment status	Measures mm		R_m MPa		$R_{p0.2}$ MPa		A % mín.	$A_{50\ mm}$ % mín.
	D[1]	S[2]	mín.	máx.	mín.	máx.		
F[4]	< 200	200	270	-	110	-	12	10
	200 < D < 250	200 < S < 250	260	-	100	-	12	-
O, H111	≤ 200	≤ 200	270	-	110	-	12	10
H112	≤ 200	≤ 200	270	-	125	-	12	10

Extruded tube

Treatment status	Measures mm e[3]	R_m MPa		$R_{p0.2}$ MPa		A % mín.	$A_{50\ mm}$ % mín.
		mín.	máx.	mín.	máx.		
F[4]	All	270	-	110	-	12	10
O, H111	All	270	-	110	-	12	10
H112	All	270	-	125	-	12	10

Extruded profile

Treatment status	Measures mm e[3]	R_m MPa		$R_{p0.2}$ MPa		A % mín.	$A_{50\ mm}$ % mín.
		mín.	máx.	mín.	máx.		
F[4]	All	270	-	110	-	12	10
H112	All	270	-	125	-	12	10

[1] D = Diameter of circular section bars.
[2] S = Distance between faces for square bars and hexagonal bar thickness of rectangular section.
[3] e = Wall thickness.
[4] Treatment status “F”: the values of the characteristics are given for information only.

ALLOYS : EN AW-5086 [Al Mg 4]

Extruded bar								
Treatment status	Measures mm		R_m MPa		$R_{p0.2}$ MPa		A % mín.	$A_{50\ mm}$ % mín.
	D[1]	S[2]	mín.	máx.	mín.	máx.		
F[4], H112	≤ 250	≤ 250	240	-	95	-	12	10
O, H111	≤ 250	≤ 250	240	320	95	-	18	15
Extruded tube								
Treatment status	Measures mm e[3]		R_m MPa		$R_{p0.2}$ MPa		A % mín.	$A_{50\ mm}$ % mín.
			mín.	máx.	mín.	máx.		
F[4], H112	All		240	-	95	-	12	10
O, H111	All		240	320	95	-	18	15
Extruded profile								
Treatment status	Measures mm e[3]		R_m MPa		$R_{p0.2}$ MPa		A % mín.	$A_{50\ mm}$ % mín.
			mín.	máx.	mín.	máx.		
F[4], H112	All		240	-	95	-	12	10

1 D = Diameter of circular section bars.
2 S = Distance between faces for square bars and hexagonal bar thickness of rectangular section.
3 e = Wall thickness.
4 Treatment status “F”: the values of the characteristics are given for information only.

ALLOYS : EN AW-6101 [EAl MG SI (A)]

Extruded bar								
Treatment status	Measures mm		R_m Mpa		$R_{p0.2}$ Mpa		A % mín.	$A_{50\ mm}$ % mín.
	D[1]	S[2]	mín.	máx.	mín.	máx.		
T6[5]	≤ 150	≤ 150	200	-	170	-	10	8
Extruded tube								
Treatment status	Measures mm e[3]		R_m Mpa		$R_{p0.2}$ Mpa		A % mín.	$A_{50\ mm}$ % mín.
			mín.	máx.	mín.	máx.		
T6[5]	≤ 25		200	-	170	-	10	8
Extruded profile								
Treatment status	Measures mm e[3]		R_m Mpa		$R_{p0.2}$ Mpa		A % mín.	$A_{50\ mm}$ % mín.
			mín.	máx.	mín.	máx.		
T6[5]	≤ 50		200	-	170	-	10	8

[1] **D = Diameter of circular section bars.**
[2] **S = Distance between faces for square bars and hexagonal bar thickness of rectangular section.**
[3] **e = Wall thickness.**
[5] **Features can be obtained by cooling in the press.**

ALLOYS : EN AW-6101 [EAl MG SI (B)]

Extruded bar								
Treatment status	Measures mm		R_m Mpa		$R_{p0.2}$ Mpa		A % mín.	$A_{50\ mm}$ % mín.
	D[1]	S[2]	mín.	máx.	mín.	máx.		
T6[5 6]	-	≤ 15	215	-	160	-	8	6
T7[5 7]	-	≤ 15	170	-	120	-	12	10
Extruded tube								
Treatment status	Measures mm		R_m Mpa		$R_{p0.2}$ Mpa		A % mín.	$A_{50\ mm}$ % mín.
	e[3]		mín.	máx.	mín.	máx.		
T6[5 6]	≤ 15		215	-	160	-	8	6
T7[5 7]	≤ 15		170	-	120	-	12	10
Extruded profile								
Treatment status	Measures mm e[3]		R_m Mpa		$R_{p0.2}$ Mpa		A % mín.	$A_{50\ mm}$ % mín.
			mín.	máx.	mín.	máx.		
T6[5 6]	≤ 15		215	-	160	-	8	6
T7[5 7]	≤ 15		170	-	120	-	12	10

[1] D = Diameter of circular section bars.
[2] S = Distance between faces for square bars and hexagonal bar thickness of rectangular section.
[3] e = Wall thickness.
[5] Features can be obtained by cooling in the press.
[6] Electrical conductivityγ ≥30 MS/m.
[7] Electrical conductivityγ ≥32 MS/m.

Aluminium Al

Product format: Extruded

Technical Characteristics: Flats, rods, tubes and extruded aluminium profiles

ALLOYS: EN AW-6005 [Al Si Mg]

Extruded bar								
Treatment status	Measures mm		R_m Mpa		$R_{p0.2}$ Mpa		A % mín.	$A_{50\ mm}$ % mín.
	D[1]	S[2]	mín.	máx.	mín.	máx.		
T6[5]	≤ 25	≤ 25	270	-	225	-	10	8
	25 < D ≤ 50	25 < S ≤ 50	270	-	225	-	8	-
	50 < D ≤ 100	50 < S ≤ 100	260	-	215	-	8	-
Extruded tube								
Treatment status	Measures mm e[3]		R_m Mpa		$R_{p0.2}$ Mpa		A % mín.	$A_{50\ mm}$ % mín.
			mín.	máx.	mín.	máx.		
T6[5]	≤ 5		270	-	225	-	8	6
	5 < e ≤ 10		260	-	215	-	8	6
Extruded profile[10]								
Treatment status	Measures mm e[3]		R_m Mpa		$R_{p0.2}$ Mpa		A % mín.	$A_{50\ mm}$ % mín.
			mín.	máx.	mín.	máx.		
Perfil abierto								
T4[5]	≤ 25		180	-	90	-	15	13
T6[5]	≤ 5		270	-	225	-	8	6
	5 < e ≤ 10		260	-	215	-	8	6
	10 < e ≤ 25		250	-	200	-	8	6
Perfil hueco								
T4[5]	≤ 10		180	-	90	-	15	13
T6[5]	≤ 5		255	-	215	-	8	6
	5 < e ≤ 15		250	-	200	-	8	6

[1] D = Diameter of circular section bars.
[2] S = Distance between faces for square bars and hexagonal bar thickness of rectangular section.
[3] e = Wall thickness.
[5] Features can be obtained by cooling in the press.
[10] In the event that the cross section is composed of elements of different thickness for applying different mechanical characteristics especifiEachs heat should be considered as valid for the entire lower section of the values specifiedes especificados

ALLOYS: EN AW-6005 A [AI SI MG (A)]

Extruded bar								
Treatment status	Measures mm		R_m Mpa		$R_{p0.2}$ Mpa		A % mín.	$A_{50\ mm}$ % mín.
	D[1]	S[2]	mín.	máx.	mín.	máx.		
T6[5]	≤ 25	≤ 25	270	-	225	-	10	8
	25 < D ≤ 50	25 < S ≤ 50	270	-	225	-	8	-
	50 < D ≤ 100	50 < S ≤ 100	260	-	215	-	8	-
Extruded tube								
Treatment status	Measures mm e[3]		R_m Mpa		$R_{p0.2}$ Mpa		A % mín.	$A_{50\ mm}$ % mín.
			mín.	máx.	mín.	máx.		
T6[5]	≤ 5		270	-	225	-	8	6
	5 < e ≤ 10		260	-	215	-	8	6
Extruded profile[10]								
Treatment status	Measures mm e[3]		R_m Mpa		$R_{p0.2}$ Mpa		A % mín.	$A_{50\ mm}$ % mín.
			mín.	máx.	mín.	máx.		
Perfil abierto								
T4[5]	≤ 25		180	-	90	-	15	13
T6[5]	≤ 5		270	-	225	-	8	6
	5 < e ≤ 10		260	-	215	-	8	6
	10 < e ≤ 25		250	-	200	-	8	6
Perfil hueco								
T4[5]	≤ 10		180	-	90	-	15	13
T6[5]	≤ 5		255	-	215	-	8	6
	5 < e ≤ 15		250	-	200	-	8	6

[1] D = Diameter of circular section bars.
[2] S = Distance between faces for square bars and hexagonal bar thickness of rectangular section.
[3] e = Wall thickness.
[5] Features can be obtained by cooling in the press.
[10] In the event that the cross section is composed of elements of different thickness for applying different mechanical characteristics especifiEachs heat should be considered as valid for the entire lower section of the values specifiedes especificados

ALLOYS: EN AW-6106 [Al Mg Si Mn]

Extruded bar							
Unspecified Extruded tube							
Unspecified Extruded tube							
Treatment status	**Measures mm e[3]**	**R_m Mpa**		**$R_{p0.2}$ Mpa**		**A % mín.**	**$A_{50\ mm}$ % mín.**
		mín.	**máx.**	**mín.**	**máx.**		
T6[2]	≤ 10	250	-	200	-	8	6

[1] **D = Diameter of circular section bars.**
[2] **S = Distance between faces for square bars and hexagonal bar thickness of rectangular section.**

ALLOYS : EN AW-6012 [Al Mg Si Pb]

Extruded bar								
Treatment status	Measures mm		R_m Mpa		$R_{p0.2}$ Mpa		A % mín.	$A_{50\ mm}$ % mín.
	D[1]	S[2]	mín.	máx.	mín.	máx.		
T6, T6510, T6511[5]	≤ 150	≤ 150	310	-	260	-	8	6
	150 < D ≤ 200	150 < S ≤ 200	260	-	200	-	8	-
Extruded tube								
Treatment status	Measures mm e[3]		R_m Mpa		$R_{p0.2}$ Mpa		A % mín.	$A_{50\ mm}$ % mín.
			mín.	máx.	mín.	máx.		
T6, T6510, T6511[5]	≤ 30		310	-	260	-	8	6
Extruded profile								
Treatment status	Measures mm e[3]		R_m Mpa		$R_{p0.2}$ Mpa		A % mín.	$A_{50\ mm}$ % mín.
			mín.	máx.	mín.	máx.		
T6, T6510, T6511[5]	≤ 30		310	-	260	-	8	6

[1] D = Diameter of circular section bars.
[2] S = Distance between faces for square bars and hexagonal bar thickness of rectangular section.
[3] e = Wall thickness.
[5] Features can be obtained by cooling in the press.

ALLOYS : EN AW-6018 [Al Mg 1 Si Pb Mn]

Extruded bar

Treatment status	Measures mm		R_m Mpa		$R_{p0.2}$ Mpa		A %	$A_{50\ mm}$ %
	D[1]	S[2]	mín.	máx.	mín.	máx.	mín.	mín.
T6, T6510, T6511[5]	≤ 150	≤ 150	310	-	260	-	8	6
	150 < D ≤ 200	150 < S ≤ 200	260	-	200	-	8	-

Extruded tube

Treatment status	Measures mm e[3]	R_m Mpa		$R_{p0.2}$ Mpa		A %	$A_{50\ mm}$ %
		mín.	máx.	mín.	máx.	mín.	mín.
T6, T6510, T6511[5]	≤ 30	310	-	260	-	8	6

Extruded profile

Treatment status	Measures mm e[3]	R_m Mpa		$R_{p0.2}$ Mpa		A %	$A_{50\ mm}$ %
		mín.	máx.	mín.	máx.	mín.	mín.
T6, T6510, T6511[5]	≤ 30	310	-	260	-	8	6

[1] D = Diameter of circular section bars.
[2] S = Distance between faces for square bars and hexagonal bar thickness of rectangular section.
[3] e = Wall thickness.
[5] Features can be obtained by cooling in the press.

Aluminium Al

Product format: Extruded

Technical Characteristics: Flats, rods, tubes and extruded aluminium profiles

ALLOYS : EN AW-6351 [Al Si 1 Mg 0,5 Mn]

Extruded bar

Treatment status	Measures mm		R_m Mpa		$R_{p0.2}$ Mpa		A %	$A_{50\ mm}$ %
	D[1]	S[2]	mín.	máx.	mín.	máx.	mín.	mín.
O, H111	≤ 200	≤ 200	-	160	-	110	14	12
T4[5]	≤ 200	≤ 200	205	-	110	-	14	12
T6[5]	≤ 20	≤ 20	295	-	250	-	8	6
	20 < D ≤ 75	20 < S ≤ 75	300	-	255	-	8	-
	75 < D ≤ 150	75 < S ≤ 150	310	-	260	-	8	-
	150 < D ≤ 200	150 < S ≤ 200	280	-	240	-	6	-
	200 < D ≤ 250	200 < S ≤ 250	270	-	200	-	6	-

Extruded tube

Treatment status	Measures mm e[3]	R_m Mpa		$R_{p0.2}$ Mpa		A %	$A_{50\ mm}$ %
		mín.	máx.	mín.	máx.	mín.	mín.
O, H111	≤ 25	-	160	-	110	14	12
T4[5]	≤ 25	205	-	110	-	14	12
T6[5]	≤ 5	290	-	250	-	8	6
	5 < e ≤ 25	300	-	255	-	10	8

Extruded profile[10]

Treatment status	Measures mm e[3]	R_m Mpa		$R_{p0.2}$ Mpa		A %	$A_{50\ mm}$ %
		mín.	máx.	mín.	máx.	mín.	mín.
O, H111	All	-	160	-	110	14	12
T4[5]	≤ 25	205	-	110	-	14	12
Perfil abierto							
T5	≤ 5	270	-	230	-	8	6
T6[5]	≤ 5	290	-	250	-	8	6
	5 < e ≤ 25	300	-	255	-	10	8
Perfil hueco							
T5	≤ 5	270	-	230	-	8	6
T6[5]	≤ 5	290	-	250	-	8	6
	5 < e ≤ 15	300	-	255	-	10	8

[1] D = Diameter of circular section bars.
[2] S = Distance between faces for square bars and hexagonal bar thickness of rectangular section.
[3] e = Wall thickness.
[5] Features can be obtained by cooling in the press.
[10] In the event that the cross section is composed of elements of different thickness for applying different mechanical characteristics especifiEachs heat should be considered as valid for the entire lower section of the values specifiedes especificados.

Aluminium Al

Product format: Extruded

Technical Characteristics: Flats, rods, tubes and extruded aluminium profiles

ALLOYS: EN AW-6060 [Al MG Si]

Extruded bar								
Treatment status	Measures mm		R_m Mpa		$R_{p0.2}$ Mpa		A % mín.	$A_{50\ mm}$ % mín.
	D[1]	S[2]	mín.	máx.	mín.	máx.		
T4[5]	≤ 150	≤ 150	120	-	60	-	16	14
T5	≤ 150	≤ 150	160	-	120	-	8	6
T6[5]	≤ 150	≤ 150	190	-	150	-	8	6
T64[5 8]	≤ 50	≤ 50	180	-	120	-	12	10
T66[5]	≤ 150	≤ 150	215	-	160	-	8	6
Extruded tube								
Treatment status	Measures mm		R_m Mpa		$R_{p0.2}$ Mpa		A % mín.	$A_{50\ mm}$ % mín.
	e[3]		mín.	máx.	mín.	máx.		
T4[5]	≤ 15		120	-	60	-	16	14
T5	≤ 15		160	-	120	-	8	6
T6[5]	≤ 15		190	-	150	-	8	6
T64[5 8]	≤ 15		180	-	120	-	12	10
T66[5]	≤ 15		215	-	160	-	8	6
Extruded profile[10]								
Treatment status	Measures mm e[3]		R_m Mpa		$R_{p0.2}$ Mpa		A % mín.	$A_{50\ mm}$ % mín.
			mín.	máx.	mín.	máx.		
T4[5]	≤ 25		120	-	60	-	16	14
T5	≤ 5		160	-	120	-	8	6
	5 < e ≤ 25		140	-	100	-	8	6
T6[5]	≤ 3		190	-	150	-	8	6
	3 < e ≤ 25		170	-	140	-	8	6
T64[5 8]	≤ 15		180	-	120	-	12	10
T66[5]	≤ 3		215	-	160	-	8	6
	3 < e ≤ 25		195	-	150	-	8	6

[1] D = Diameter of circular section bars.
[2] S = Distance between faces for square bars and hexagonal bar thickness of rectangular section.
[3] e = Wall thickness.
[5] Features can be obtained by cooling in the press.
[8] Quality of flexion.
[10] In the event that the cross section is composed of elements of different thickness for applying different mechanical characteristics especifiEachs heat should be considered as valid for the entire lower section of the values specifiedes especificados.

Aluminium Al

Product format: Extruded

Technical Characteristics: Flats, rods, tubes and extruded aluminium profiles

ALLOYS : EN AW-6061 [Al Mg 1 Si Cu]

Extruded bar								
Treatment status	Measures mm		R_m Mpa		$R_{p0.2}$ Mpa		A % mín.	$A_{50\ mm}$ % mín.
	D[1]	S[2]	mín.	máx.	mín.	máx.		
O, H111	≤ 200	≤ 200	-	150	-	110	16	14
T4[5]	≤ 200	≤ 200	180	-	110	-	15	13
T6[5]	≤ 200	≤ 200	260	-	240	-	8	6
Extruded tube								
Treatment status	Measures mm e[3]		R_m Mpa		$R_{p0.2}$ Mpa		A % mín.	$A_{50\ mm}$ % mín.
			mín.	máx.	mín.	máx.		
O, H111	≤ 25		-	150	-	110	16	14
T4[5]	≤ 25		180	-	110	-	15	13
T6[5]	≤ 5		260	-	240	-	8	6
	5 < e ≤ 25		260	-	240	-	10	8
Extruded profile[10]								
Treatment status	Measures mm		R_m Mpa		$R_{p0.2}$ Mpa		A % mín.	$A_{50\ mm}$ % mín.
	e[3]		mín.	máx.	mín.	máx.		
T4[5]	≤ 25		180	-	110	-	15	13
T6[5]	≤ 5		260	-	240	-	9	7
	5 < e ≤ 25		260	-	240	-	10	8

[1] D = Diameter of circular section bars.
[2] S = Distance between faces for square bars and hexagonal bar thickness of rectangular section.
[3] e = Wall thickness.
[5] Features can be obtained by cooling in the press.
[10] In the event that the cross section is composed of elements of different thickness for applying different mechanical characteristics especifiEachs heat should be considered as valid for the entire lower section of the values specifiedes especificados.

Aluminium Al

Product format: Extruded

Technical Characteristics: Flats, rods, tubes and extruded aluminium profiles

ALLOYS : EN AW-6261 [Al Mg 1 Si Cu (A)]

Extruded bar								
Treatment status	**Measures mm**		**R_m Mpa**		**$R_{p0.2}$ Mpa**		**A % mín.**	**$A_{50\ mm}$ % mín.**
	D[1]	**S[2]**	**mín.**	**máx.**	**mín.**	**máx.**		
O, H111	≤ 100	≤ 100	-	170	-	120	14	12
T4[5]	≤ 100	≤ 100	180	-	100	-	14	12
T6[5]	≤ 20	≤ 20	290	-	245	-	8	7
	20 < D ≤ 100	20 < S ≤ 100	290	-	245	-	8	-
Extruded tube								
Treatment status	**Measures mm**		**R_m Mpa**		**$R_{p0.2}$ Mpa**		**A % mín.**	**$A_{50\ mm}$ % mín.**
	e[3]		**mín.**	**máx.**	**mín.**	**máx.**		
O, H111	≤ 10		-	170	-	120	14	12
T4[5]	≤ 10		180	-	100	-	14	12
T5	≤ 5		270	-	230	-	8	7
	5 < e ≤ 10		260	-	220	-	9	8
T6[5]	≤ 5		290	-	245	-	8	7
	5 < e ≤ 10		290	-	245	-	8	8
Extruded profile[10]								
Treatment status	**Measures mm e[3]**		**R_m Mpa**		**$R_{p0.2}$ Mpa**		**A % mín.**	**$A_{50\ mm}$ % mín.**
			mín.	**máx.**	**mín.**	**máx.**		
O, H111	All		-	170	-	120	14	12
T4[5]	≤ 25		180	-	100	-	14	12
Perfil abierto T5	≤ 5		270	-	230	-	8	7
	5 < e ≤ 25		260	-	220	-	9	8
	> 25		250	-	210	-	9	-
T6[5]	≤ 5		290	-	245	-	8	7
	5 < e ≤ 25		280	-	235	-	8	7
Perfil hueco	≤ 5		270	-	230	-	8	7
T5	5 < e ≤ 10		260	-	220	-	9	8
T6[5]	≤ 5		290	-	245	-	8	7
	5 < e ≤ 10		270	-	230	-	9	8

[1] **D = Diameter of circular section bars.**
[2] **S = Distance between faces for square bars and hexagonal bar thickness of rectangular section.**
[3] **e = Wall thickness.**
[5] **Features can be obtained by cooling in the press.**
[10] **En caso de que la sección transversal esté compuesta por elementos de diferentes espesores para los que se aplican diferentes calores de características mecánicas especifiEachs, se debe considerar como válido para la sección completa el menor de los valores especificados.**

ALLOYS : EN AW-6261 [Al Mg 1 Si Pb]

Extruded bar								
Treatment status	Measures mm		R_m Mpa		$R_{p0.2}$ Mpa		A % mín.	$A_{50\ mm}$ % mín.
	D[1]	S[2]	mín.	máx.	mín.	máx.		
T6[5]	≤ 200	≤ 200	260	-	240	-	10	8
Extruded tube								
Treatment status	Measures mm e[3]		R_m Mpa		$R_{p0.2}$ Mpa		A % mín.	$A_{50\ mm}$ % mín.
			mín.	máx.	mín.	máx.		
T6[5]	≤ 25		260	-	240	-	10	8
Extruded profile								
Treatment status	Measures mm e[3]		R_m Mpa		$R_{p0.2}$ Mpa		A % mín.	$A_{50\ mm}$ % mín.
			mín.	máx.	mín.	máx.		
T6[5]	≤ 25		260	-	240	-	10	8

1 D = Diameter of circular section bars.
2 S = Distance between faces for square bars and hexagonal bar thickness of rectangular section.
3 e = Wall thickness.
5 Features can be obtained by cooling in the press.

BRONMETAL

Aluminium Al

Product format: Extruded

Technical Characteristics: Flats, rods, tubes and extruded aluminium profiles

ALLOYS : EN AW-6063 [Al Mg 0,7 Si]

Extruded bar								
Treatment status	Measures mm		R_m Mpa		$R_{p0.2}$ Mpa		A % mín.	$A_{50\ mm}$ % mín.
	D[1]	S[2]	mín.	máx.	mín.	máx.		
O, H111	≤ 200	≤ 200	-	130	-	-	18	16
T4[5]	≤ 150	≤ 150	130	-	65	-	14	12
	150 < D ≤ 200	150 < S ≤ 200	120	-	65	-	12	-
T5	≤ 200	≤ 200	175	-	130	-	8	6
T6[5]	≤ 150	≤ 150	215	-	170	-	10	8
	150 < D ≤ 200	150 < S ≤ 200	195	-	160	-	10	-
T66[5]	≤ 200	≤ 200	245	-	200	-	10	8
Extruded tube								
Treatment status	Measures mm e[3]		R_m Mpa		$R_{p0.2}$ Mpa		A % mín.	$A_{50\ mm}$ % mín.
			mín.	máx.	mín.	máx.		
O, H111	≤ 25		-	130	-	-	18	16
T4[5]	≤ 10		130	-	65	-	14	12
	10 < e ≤ 25		120	-	65	-	12	10
T5	≤ 25		175	-	130	-	8	6
T6[5]	≤ 25		215	-	170	-	10	8
T66[5]	≤ 25		245	-	200	-	10	8
Extruded profile								
Treatment status	Measures mm e[3]		R_m Mpa		$R_{p0.2}$ Mpa		A % mín.	$A_{50\ mm}$ % mín.
			mín.	máx.	mín.	máx.		
T4[5]	≤ 25		130	-	65	-	14	12
T5	≤ 3		175	-	130	-	8	6
	3 < e ≤ 25		160	-	110	-	7	5
T6[5]	≤ 10		215	-	170	-	8	6
	10 < e ≤ 25		195	-	160	-	8	6
T64[5 8]	≤ 15		180	-	120	-	12	10
T66[5]	≤ 10		245	-	200	-	8	6
	10 < e ≤ 25		225	-	180	-	8	6

[1] D = Diameter of circular section bars.
[2] S = Distance between faces for square bars and hexagonal bar thickness of rectangular section.
[3] e = Wall thickness.
[5] Features can be obtained by cooling in the press.
[8] Quality of flexion
[10] In the event that the cross section is composed of elements of different thickness for applying different mechanical characteristics especifiEachs heat should be considered as valid for the entire lower section of the values specifiedes especificados.

ALLOYS: EN AW-6063 [Al MG 0,7 SI (A)]

Extruded bar								
Treatment status	Measures mm		R_m Mpa		$R_{p0.2}$ Mpa		A % mín.	$A_{50\ mm}$ % mín.
	D[1]	S[2]	mín.	máx.	mín.	máx.		
O, H111	≤ 200	≤ 200	-	150	-	-	16	14
T4[5]	≤ 150	≤ 150	150	-	90	-	12	10
	150 < D ≤ 200	150 < S ≤ 200	140	-	90	-	10	-
T5	≤ 200	≤ 200	200	-	160	-	7	5
T6[5]	≤ 150	≤ 150	230	-	190	-	7	5
	150 < D ≤ 200	150 < S ≤ 200	220	-	160	-	7	-
Extruded tube								
Treatment status	Measures mm e[3]		R_m Mpa		$R_{p0.2}$ Mpa		A % mín.	$A_{50\ mm}$ % mín.
			mín.	máx.	mín.	máx.		
O, H111	≤ 25		-	150	-	-	16	14
T4[5]	≤ 10		150	-	90	-	12	10
	10 < e ≤ 25		140	-	90	-	10	8
T5	≤ 25		200	-	160	-	7	5
T6[5]	≤ 25		230	-	190	-	7	5
Extruded profile								
Treatment status	Measures mm e[3]		R_m Mpa		$R_{p0.2}$ Mpa		A % mín.	$A_{50\ mm}$ % mín.
			mín.	máx.	mín.	máx.		
T4[5]	≤ 25		150	-	90	-	12	10
T5	≤ 10		200	-	160	-	7	5
	10 < e ≤ 25		190	-	150	-	6	4
T6[5]	≤ 10		230	-	190	-	7	5
	10 < e ≤ 25		220	-	180	-	5	4

[1] D = Diameter of circular section bars.
[2] S = Distance between faces for square bars and hexagonal bar thickness of rectangular section.
[3] e = Wall thickness.
[5] Features can be obtained by cooling in the press.
[10] In the event that the cross section is composed of elements of different thickness for applying different mechanical characteristics especifiEachs heat should be considered as valid for the entire lower section of the values specifiedes especificados.

ALLOYS : EN AW-6463 [Al Mg 0,7 Si (B)]

Extruded bar								
Treatment status	Measures mm		R_m Mpa		$R_{p0.2}$ Mpa		A % mín.	$A_{50\ mm}$ % mín.
	D[1]	S[2]	mín.	máx.	mín.	máx.		
T4[5]	≤ 150	≤ 150	125	-	75	-	14	12
T5	≤ 150	≤ 150	150	-	110	-	8	6
T6[5]	≤ 150	≤ 150	195	-	160	-	10	8
Extruded tube								
Treatment status	Measures mm e[3]		R_m Mpa		$R_{p0.2}$ Mpa		A % mín.	$A_{50\ mm}$ % mín.
			mín.	máx.	mín.	máx.		
T6[5]	≤ 25		195	-	160	-	10	8
Extruded profile								
Treatment status	Measures mm e[3]		R_m Mpa		$R_{p0.2}$ Mpa		A % mín.	$A_{50\ mm}$ % mín.
			mín.	máx.	mín.	máx.		
T4[5]	≤ 50		125	-	75	-	14	12
T5	≤ 50		150	-	110	-	8	6
T6[5]	≤ 50		195	-	160	-	10	8

[1] D = Diameter of circular section bars.
[2] S = Distance between faces for square bars and hexagonal bar thickness of rectangular section.
[3] e = Wall thickness.
[5] Features can be obtained by cooling in the press.

ALLOYS: EN AW-6081 [Al Si 0,9 Mg Mn]

Extruded bar								
Treatment status	Measures mm		R_m Mpa		$R_{p0.2}$ Mpa		A % mín.	$A_{50\ mm}$ % mín.
	D[1]	S[2]	mín.	máx.	mín.	máx.		
T6[5]	≤ 250	≤ 250	275	-	240	-	8	6
Extruded tube								
Treatment status	Measures mm e[3]		R_m Mpa		$R_{p0.2}$ Mpa		A % mín.	$A_{50\ mm}$ % mín.
			mín.	máx.	mín.	máx.		
T6[5]	≤ 25		275	-	240	-	8	6
Extruded profile								
Treatment status	Measures mm e[3]		R_m Mpa		$R_{p0.2}$ Mpa		A % mín.	$A_{50\ mm}$ % mín.
			mín.	máx.	mín.	máx.		
Perfil abierto								
T6[5]	≤ 25		275	-	240	-	8	6
Perfil hueco								
T6[5]	≤ 15		275	-	240	-	8	6

[1] D = Diameter of circular section bars.
[2] S = Distance between faces for square bars and hexagonal bar thickness of rectangular section.
[3] e = Wall thickness.
[5] Features can be obtained by cooling in the press.

Aluminium Al

Product format: Extruded

Technical Characteristics: Flats, rods, tubes and extruded aluminium profiles

ALLOYS : EN AW-6082 [Al Si 1 Mg Mn]

Extruded bar								
Treatment status	Measures mm		R_m Mpa		$R_{p0.2}$ Mpa		A % mín.	$A_{50\ mm}$ % mín.
	D[1]	S[2]	mín.	máx.	mín.	máx.		
O, H111	≤ 200	≤ 200	-	160	-	110	14	12
T4[5]	≤ 200	≤ 200	205	-	110	-	14	12
T6[5]	≤ 20	≤ 20	295	-	250	-	8	6
	20 < D ≤ 150	20 < S ≤ 150	310	-	260	-	8	-
	150 < D ≤ 200	150 < S ≤ 200	280	-	240	-	6	-
	200 < D ≤ 250	200 < S ≤ 250	270	-	200	-	6	-
Extruded tube								
Treatment status	Measures mm e[3]		R_m Mpa		$R_{p0.2}$ Mpa		A % mín.	$A_{50\ mm}$ % mín.
			mín.	máx.	mín.	máx.		
O, H111	≤ 25		-	160	-	110	14	12
T4[5]	≤ 25		205	-	110	-	14	12
T6[5]	≤ 5		290	-	250	-	8	6
	5 < e ≤ 25		310	-	260	-	10	8
Extruded profile[10]								
Treatment status	Measures mm e[3]		R_m Mpa		$R_{p0.2}$ Mpa		A % mín.	$A_{50\ mm}$ % mín.
			mín.	máx.	mín.	máx.		
O, H111	All		-	160	-	110	14	12
T4[5]	≤ 25		205	-	110	-	14	12
Perfil abierto								
T5	≤ 5		270	-	230	-	8	6
T6[5]	≤ 5		290	-	250	-	8	6
	5 < e ≤ 25		310	-	260	-	10	8
Perfil hueco								
T5	≤ 5		270	-	230	-	8	6
T6[5]	≤ 5		290	-	250	-	8	6
	5 < e ≤ 15		310	-	260	-	10	8

[1] D = Diameter of circular section bars.
[2] S = Distance between faces for square bars and hexagonal bar thickness of rectangular section.
[3] e = Wall thickness.
[5] Features can be obtained by cooling in the press.
[10] In the event that the cross section is composed of elements of different thickness for applying different mechanical characteristics especifiEachs heat should be considered as valid for the entire lower section of the values specifiedes especificados.

ALLOYS : EN AW-7003 [Al Zn 6 Mg 0,8 Zr]

Extruded bar

Treatment status	Measures mm		R_m Mpa		$R_{p0.2}$ Mpa		A % mín.	$A_{50\ mm}$ % mín.
	D[1]	S[2]	mín.	máx.	mín.	máx.		
T5	All	All	310	-	260	-	10	8
T6[5]	≤ 50	≤ 50	350	-	290	-	10	8
	50 < D ≤ 150	50 < S ≤ 150	340	-	280	-	10	-

Extruded tube

Treatment status	Measures mm	R_m Mpa		$R_{p0.2}$ Mpa		A % mín.	$A_{50\ mm}$ % mín.
	e[3]	mín.	máx.	mín.	máx.		
T5	All	310	-	260	-	10	8
T6[5]	≤ 10	350	-	290	-	10	8
	10 < e ≤ 25	340	-	280	-	10	8

Extruded profile[10]

Treatment status	Measures mm e[3]	R_m Mpa		$R_{p0.2}$ Mpa		A % mín.	$A_{50\ mm}$ % mín.
		mín.	máx.	mín.	máx.		
T5	All	310	-	260	-	10	8
T6[5]	≤ 10	350	-	290	-	10	8
	10 < e ≤ 25	340	-	280	-	10	8

[1] D = Diameter of circular section bars.
[2] S = Distance between faces for square bars and hexagonal bar thickness of rectangular section.
[3] e = Wall thickness.
[5] Features can be obtained by cooling in the press.
[10] In the event that the cross section is composed of elements of different thickness for applying different mechanical characteristics especifiEachs heat should be considered as valid for the entire lower section of the values specifiedes especificados.

ALLOYS: EN AW-7005 [Al Zn 4,5 Mg 1,5 Mn]

Extruded bar								
Treatment status	**Measures mm**		**R_m Mpa**		**$R_{p0.2}$ Mpa**		**A % mín.**	**$A_{50\ mm}$ % mín.**
	D[1]	**S[2]**	**mín.**	**máx.**	**mín.**	**máx.**		
T6[5]	≤ 50	≤ 50	350	-	290	-	10	8
	50 < D ≤ 200	50 < S ≤ 200	340	-	270	-	10	-
Extruded tube								
Treatment status	**Measures mm e[3]**		**R_m Mpa**		**$R_{p0.2}$ Mpa**		**A % mín.**	**$A_{50\ mm}$ % mín.**
			mín.	**máx.**	**mín.**	**máx.**		
T6[5]	≤ 15		350	-	290	-	10	8
Extruded profile								
Treatment status	**Measures mm e[3]**		**R_m Mpa**		**$R_{p0.2}$ Mpa**		**A % mín.**	**$A_{50\ mm}$ % mín.**
			mín.	**máx.**	**mín.**	**máx.**		
T6[5]	≤ 40		350	-	290	-	10	8

[1] D = Diameter of circular section bars.
[2] S = Distance between faces for square bars and hexagonal bar thickness of rectangular section.
[3] e = Wall thickness.
[5] Features can be obtained by cooling in the press.

ALLOYS: EN AW-7020 [Al Zn 4,5 Mg 1]

Extruded bar								
Treatment status	Measures mm		R_m Mpa		$R_{p0.2}$ Mpa		A % mín.	$A_{50\ mm}$ % mín.
	D[1]	S[2]	mín.	máx.	mín.	máx.		
T6[5]	≤ 50	≤ 50	350	-	290	-	10	8
	50 < D ≤ 200	50 < S ≤ 200	340	-	275	-	10	-
Extruded tube								
Treatment status	Measures mm e[3]		R_m Mpa		$R_{p0.2}$ Mpa		A % mín.	$A_{50\ mm}$ % mín.
			mín.	máx.	mín.	máx.		
T6[5]	≤ 15		350	-	290	-	10	8
Extruded profile								
Treatment status	Measures mm e[3]		R_m Mpa		$R_{p0.2}$ Mpa		A % mín.	$A_{50\ mm}$ % mín.
			mín.	máx.	mín.	máx.		
T6[5]	≤ 40		350	-	290	-	10	8

1 D = Diameter of circular section bars.
2 S = Distance between faces for square bars and hexagonal bar thickness of rectangular section.
3 e = Wall thickness.
5 Features can be obtained by cooling in the press.

ALLOYS : EN AW-7022 [Al Zn 5 Mg 3 Cu]

Extruded bar								
Treatment status	Measures mm		R_m Mpa		$R_{p0.2}$ Mpa		A % mín.	$A_{50\ mm}$ % mín.
	D[1]	S[2]	mín.	máx.	mín.	máx.		
T6, T6510, T6511[5]	≤ 80	≤ 80	490	-	420	-	7	5
	80 < D ≤ 200	80 < S ≤ 200	470	-	400	-	7	-
Extruded tube								
Treatment status	Measures mm e[3]		R_m Mpa		$R_{p0.2}$ Mpa		A % mín.	$A_{50\ mm}$ % mín.
			mín.	máx.	mín.	máx.		
T6, T6510, T6511[5]	≤ 30		490	-	420	-	7	5
Extruded profile								
Treatment status	Measures mm e[3]		R_m Mpa		$R_{p0.2}$ Mpa		A % mín.	$A_{50\ mm}$ % mín.
			mín.	máx.	mín.	máx.		
T6, T6510, T6511[5]	≤ 30		490	-	420	-	7	5

[1] D = Diameter of circular section bars.
[2] S = Distance between faces for square bars and hexagonal bar thickness of rectangular section.
[3] e = Wall thickness.
[5] Features can be obtained by cooling in the press.

ALLOYS: EN AW-7049 [AI ZN 8 MG CU]

Extruded bar								
Treatment status	**Measures mm**		**R_m Mpa**		**$R_{p0.2}$ Mpa**		**A % mín.**	**$A_{50\ mm}$ % mín.**
	D[1]	**S[2]**	**mín.**	**máx.**	**mín.**	**máx.**		
T6, T6510, T6511	≤ 100	≤ 100	610	-	530	-	5	4
	100 < D ≤ 125	100 < S ≤ 125	560	-	500	-	5	-
	125 < D ≤ 150	125 < S ≤ 150	520	-	430	-	5	-
	150 < D ≤ 180	150 < S ≤ 180	450	-	400	-	3	-
Extruded tube								
Treatment status	**Measures mm e[3]**		**R_m Mpa**		**$R_{p0.2}$ Mpa**		**A % mín.**	**$A_{50\ mm}$ % mín.**
			mín.	**máx.**	**mín.**	**máx.**		
T6, T6510, T6511	≤ 30		610	-	530	-	5	4
Extruded profile								
Treatment status	**Measures mm e[3]**		**R_m Mpa**		**$R_{p0.2}$ Mpa**		**A % mín.**	**$A_{50\ mm}$ % mín.**
			mín.	**máx.**	**mín.**	**máx.**		
T6, T6510, T6511	≤ 30		610	-	530	-	5	4

[1] **D = Diameter of circular section bars.**
[2] **S = Distance between faces for square bars and hexagonal bar thickness of rectangular section.**
[3] **e = Wall thickness.**

Aluminium Al

Product format: Extruded

Technical Characteristics: Flats, rods, tubes and extruded aluminium profiles

ALLOYS: EN AW-7075 [Al Zn 5,5 Mg Cu]

Extruded bar								
Treatment status	**Measures mm**		**R_m Mpa**		**$R_{p0.2}$ Mpa**		**A % mín.**	**$A_{50\ mm}$ % mín.**
	D[1]	**S[2]**	**mín.**	**máx.**	**mín.**	**máx.**		
O, H111	≤ 200	≤ 200	-	275	-	165	10	8
T6, T6510, T6511	≤ 25	≤ 25	540	-	480	-	7	5
	25 < D ≤ 100	25 < S ≤ 100	560	-	500	-	7	-
	100 < D ≤ 150	100 < S ≤ 150	530	-	470	-	6	-
	150 < D ≤ 200	150 < S ≤ 200	470	-	400	-	5	-
T73, T73510, T73511[9]	≤ 25	≤ 25	485	-	420	-	7	5
	25 < D ≤ 75	25 < S ≤ 75	475	-	405	-	7	-
	75 < D ≤ 100	75 < S ≤ 100	470	-	390	-	6	-
	100 < D ≤ 150	100 < S ≤ 150	440	-	360	-	6	-

Extruded tube							
Treatment status	**Measures mm e[3]**	**R_m Mpa**		**$R_{p0.2}$ Mpa**		**A % mín.**	**$A_{50\ mm}$ % mín.**
		mín.	**máx.**	**mín.**	**máx.**		
O, H111	≤ 10	-	275	-	165	10	-
T6, T6510, T6511	≤ 5	540	-	485	-	8	6
	5 < e ≤ 10	560	-	505	-	7	5
	10 < e ≤ 50	560	-	495	-	6	4
T73, T73510, T73511[9]	≤ 5	470	-	400	-	7	5
	5 < e ≤ 25	485	-	420	-	8	6
	25 < e ≤ 50	475	-	405	-	8	-

Extruded profile[10]							
Treatment status	**Measures mm e[3]**	**R_m Mpa**		**$R_{p0.2}$ Mpa**		**A % mín.**	**$A_{50\ mm}$ % mín.**
		mín.	**máx.**	**mín.**	**máx.**		
T6, T6510, T6511	≤ 25	530	-	460	-	6	4
	25 < e ≤ 60	540	-	470	-	6	-
T73, T73510, T73511[9]	≤ 25	485	-	420	-	7	5

[1] D = Diameter of circular section bars.
[2] S = Distance between faces for square bars and hexagonal bar thickness of rectangular section.
[3] e = Wall thickness.
[9] When the marterial is in these states, see Annexes A and B.
[10] In the event that the cross section is composed of elements of different thickness for applying different mechanical characteristics especifiEachs heat should be considered as valid for the entire lower section of the values specifiedes especificados.