General construction alloys

Alloy data according to EN-755-2
* Alloy data according to Sapa standard

Corresponding designations	**Sapa 6060**		**Sapa 6060F22***		**Sapa 6063**		
European standards: numerical designation	EN-AW-6060		EN-AW-6060		EN-AW-6063		
chemical symbols	AlMgSi		AlMgSi		AlMg0,7Si		
USA: Aluminium Association	AA6060		AA6060		AA6063		
Swedish standards:	SS-EN-AW-6060		SS-EN-AW-6060		SS-EN-AW-6063		
Technical data Condition	**T4**	**T6**	**T4**	**T6**	**T4**	**T6**	**T66 6063F25**
t=wall thickness, mm							
Tensile strength							
Yield strength $R_{p0,2}$	t≤ 25	t≤ 3	t≤ 25	t≤ 10	t≤ 25	t≤ 10	t≤ 10
Mpa, min	60	150	65	170	65	170	200
		3< t ≤ 25		10< t ≤ 25		10< t ≤ 25	10< t ≤ 25
		140		160		160	180
Ultimate tensile strength R_m	t≤ 25	t≤ 3	t≤ 25	t≤ 10	t≤ 25	t≤ 10	t≤ 10
Mpa, min	120	190	130	215	130	215	245
		3< t ≤ 25		10< t ≤ 25		10< t ≤ 25	10< t ≤ 25
		170		195		195	225
Elongation A, % min	t≤ 25	t≤ 25	t≤ 25	t≤ 25	t≤ 25	t≤ 25	t≤ 25
	16	8	14	8	14	8	8
Hardness							
Webster B, approx.							
Value for information only	5	10	5	12	5	12	13
Enligt Vickers,							
Value for information only	40	60	45	70	45	70	80
Thermal conductivity							
At 20ºC, W/m,ºC	190	190	190	190	190	190	190
Density							
Kg/dm^3	2,7	2,7	2,7	2,7	2,7	2,7	2,7

All alloys:

Coefficient of thermal expansion:	$23*10^{-6}$ / ºC
Modulus of elasticity:	70 000 Mpa
Modulus of rigidity:	27 000 Mpa
Poisson's ratio:	0,33