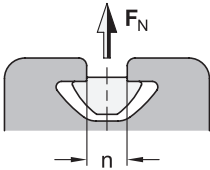


Mechanical Data (in Extrusion Direction)

- Material: Al Mg Si 0.5 F25 (EN AW – 6063)
 - Delivery condition: Artificially aged
 - Anodized coating: E6EV1 (natural color), layer thickness: 10 µm
 - Dimensional deviations as per DIN EN 12020-2
 - Tensile strength R_m min. 245 N/mm²
- Yield point $R_{p0.2}$ min. 195 N/mm²
 - Density 2.7 kg/dm³
 - Linear expansion coefficient 23.6×10^{-6} 1/k
 - Modulus of elasticity $E \approx 70,000$ N/mm²
 - Hardness $\approx 75HB -2.5/187.5$

Permissible Tensile Load on the Slot

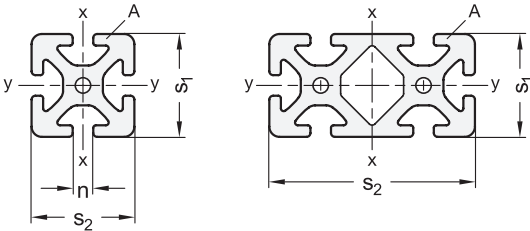
Dimensions in: millimeters / inches



n	Grid size	Profile type	F_N*		
			With T-nuts GN 50b		
			Type N	Type V	Type S
6 0.24	30 1.18	light	674 lbf 3000 N	674 lbf 3000 N	-
8 0.31	40 1.57	light	1686 lbf 7500 N	1236 lbf 5500 N	-
8 0.31	40 1.57	heavy	3372 lbf 15000 N	3372 lbf 15000 N	4271 lbf 19000 N

* Depending on the thread size of the T-nut

Cross-Section Properties



W_x, W_y = Axial resistance torque against bending
 I_x, I_y = 2nd moment of area against bending
 I_t = 2nd moment of area against torsion
 A = Cross-section area
 m = Length-related mass

GN 10i Profile type light

s ₁	s ₂	n	Grid size	Bending axis x-x		Bending axis y-y		I _t in cm ⁴	A in cm ²	m ≈ in kg/m
				I _x in cm ⁴	W _x in cm ³	I _y in cm ⁴	W _y in cm ³			
30 1.18	30 1.18	6 0.24	30 1.18	2.9	1.94	2.9	1.94	0.3	3.43	0.93
30 1.18	60 2.36	6 0.24	30 1.18	21.2	7.07	5.54	3.69	3.18	6.13	1.65
60 2.36	60 2.36	6 0.24	30 1.18	39.5	13.2	39.5	13.2	21.5	10.0	2.7
40 1.57	40 1.57	8 0.31	40 1.57	9.1	4.55	9.1	4.55	1.36	6.47	1.75
40 1.57	80 3.15	8 0.31	40 1.57	70.2	17.6	16.8	8.45	9.94	11.3	3.08
80 3.15	80 3.15	8 0.31	40 1.57	130.1	33.2	130.1	33.2	80.8	19.3	5.17

GN 10i Profile type heavy

s ₁	s ₂	n	Grid size	Bending axis x-x		Bending axis y-y		I _t in cm ⁴	A in cm ²	m ≈ in kg/m
				I _x in cm ⁴	W _x in cm ³	I _y in cm ⁴	W _y in cm ³			
40 1.57	16 0.62	8 0.31	40 1.57	1.06	1.25	6.75	3.37	0.97	4.15	1.12
40 1.57	40 1.57	8 0.31	40 1.57	13.9	6.95	13.9	6.95	1.88	9.05	2.45
40 1.57	80 3.15	8 0.31	40 1.57	101.0	25.2	26.7	13.4	18.8	16.5	4.51
80 3.15	80 3.15	8 0.31	40 1.57	187.8	46.9	187.8	46.9	128.4	26.7	7.2

GN 11i Profile type light

s ₁	s ₂	n	Grid size	Bending axis x-x		Bending axis y-y		I _t in cm ⁴	A in cm ²	m ≈ in kg/m
				I _x in cm ⁴	W _x in cm ³	I _y in cm ⁴	W _y in cm ³			
40 1.57	40 1.57	8 0.31	40 1.57	9.63	4.96	9.63	4.96	5.41	6.79	1.83