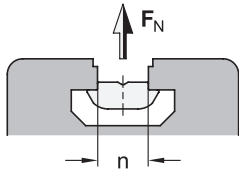


Mechanical Data (in Extrusion Direction)

- 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 $23,6 \times 10^{-6}$ 1/k
 - Modulus of elasticity $E \approx 70,000$ N/mm²
 - Hardness $\approx 75HB -2.5/187.5$

Permissible Tensile Load on the Slot

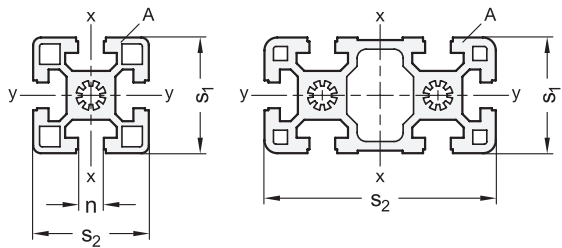
Dimensions in: millimeters / inches



n	Grid size	Profile type	F_N^*			
			With T-nuts GN 50b		With T-slot nuts GN 51b	With T-slot bolts GN 52b
			Type V / F	Type S		
8 0.31	30 1.18	heavy	562 lbf 2500 N	1349 lbf 6000 N	674 lbf 3000 N	787 lbf 3500 N
10 0.39	40 1.57	light	1686 lbf 7500 N	-	1236 lbf 5500 N	2023 lbf 9000 N
10 0.39	45 1.77	light	1686 lbf 7500 N	-	1236 lbf 5500 N	2023 lbf 9000 N
10 0.39	45 1.77	heavy	1911 lbf 8500 N	3934 lbf 17500 N	1686 lbf 7500 N	2023 lbf 9000 N

* Depending on the thread size of the T-nut / T-slot nut / T-slot bolt

Cross-Section Properties



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

GN 10b Profile type light									
s_1	s_2	n	Grid size	Bending axis x-x		Bending axis y-y		A in cm ²	m $\approx$ 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	10 0.39	40 1.57	9.06	4.53	9.06	4.53	5.61	1.51
40 1.57	80 3.15	10 0.39	40 1.57	63.2	15.8	17.2	8.61	9.86	2.67
45 1.77	45 1.77	10 0.39	45 1.77	11.7	4.89	11.7	4.89	5.73	1.55
45 1.77	90 3.54	10 0.39	45 1.77	81.8	18.2	23.5	10.5	11.3	3.05
80 3.15	80 3.15	10 0.39	40 1.57	132.6	33.2	132.6	33.2	18.5	4.98
90 3.54	90 3.54	10 0.39	45 1.77	210.5	46.8	210.5	46.8	23.5	6.34

GN 10b Profile type heavy									
s_1	s_2	n	Grid size	Bending axis x-x		Bending axis y-y		A in cm ²	m $\approx$ 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	8 0.31	30 1.18	2.77	1.85	2.77	1.85	3.14	0.85
30 1.18	60 2.36	8 0.31	30 1.18	5.09	3.39	19.7	6.55	5.53	1.49
45 1.77	45 1.77	10 0.39	45 1.77	13.9	6.91	13.9	6.91	7.5	2.03
45 1.77	60 2.36	10 0.39	45 1.77	37.6	12.5	22.7	10.1	11.1	3.01
45 1.77	90 3.54	10 0.39	45 1.77	124.1	27.6	32.3	14.3	15.2	4.12
90 3.54	90 3.54	10 0.39	45 1.77	302.0	67.1	302.0	67.1	38.9	10.5

GN 11b Profile type light									
s_1	s_2	n	Grid size	Bending axis x-x		Bending axis y-y		A in cm ²	m $\approx$ in kg/m
				I_x in cm ⁴	W_x in cm ³	I_y in cm ⁴	W_y in cm ³		
45 1.77	45 1.77	10 0.39	45 1.77	11.82	5.11	11.82	5.11	6.08	1.64