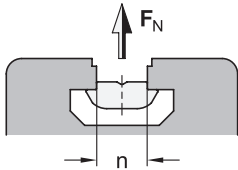


Mechanical Data (in Extrusion Direction)

- 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 ≈ 75 HB -2.5/187.5

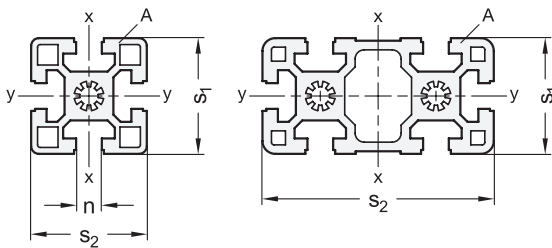
Permissible Tensile Load on the Slot



n	Grid size	Profile type	F_N^* in N			
			With T-nuts GN 50b		With T-slot nuts GN 51b	With T-slot bolts GN 52b
			Type V / F	Type S		
8	30	heavy	2500	6000	3000	3500
10	40	light	7500	-	5500	9000
10	45	light	7500	-	5500	9000
10	45	heavy	8500	17500	7500	9000

* 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	40	10	40	9,06	4,53	9,06	4,53	5,61	1,51
40	80	10	40	63,2	15,8	17,2	8,61	9,86	2,67
45	45	10	45	11,7	4,89	11,7	4,89	5,73	1,55
45	90	10	45	81,8	18,2	23,5	10,5	11,3	3,05
80	80	10	40	132,6	33,2	132,6	33,2	18,5	4,98
90	90	10	45	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	30	8	30	2,77	1,85	2,77	1,85	3,14	0,85
30	60	8	30	5,09	3,39	19,7	6,55	5,53	1,49
45	45	10	45	13,9	6,91	13,9	6,91	7,5	2,03
45	60	10	45	37,6	12,5	22,7	10,1	11,1	3,01
45	90	10	45	124,1	27,6	32,3	14,3	15,2	4,12
90	90	10	45	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	45	10	45	11,82	5,11	11,82	5,11	6,08	1,64