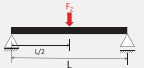
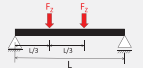
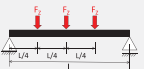
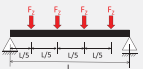


## Technical Data:

Profile	Profile weight [kg/m]	Profile cross-section [cm <sup>2</sup> ]	Moment of inertia		Resistance moment	
			I <sub>y</sub> [cm <sup>4</sup> ]	I <sub>z</sub> [cm <sup>4</sup> ]	W <sub>y</sub> [cm <sup>3</sup> ]	W <sub>z</sub> [cm <sup>3</sup> ]
27 18	0.600	0.690	0.690	0.690	0.690	0.690
28 30	1.150	1.360	1.360	1.360	1.360	1.360
38 24	1.210	1.400	1.400	1.400	1.400	1.400
38 40	1.820	2.210	2.210	2.210	2.210	2.210
40 60	3.500	4.440	4.440	4.440	4.440	4.440
40 80	4.680	5.640	5.640	5.640	5.640	5.640
38 48 H-Profile	2.430	2.790	2.790	2.790	2.790	2.790
38 80 H-Profile	3.580	4.420	4.420	4.420	4.420	4.420
40 120 H-Profile	7.000	8.880	8.880	8.880	8.880	8.880

## Load bearing capacities of profiles for bending around the y-axis [N]:

Profile	 L [m]						 L [m]					
	0.5	1	1.5	2	4	6	0.5	1	1.5	2	4	6
27 18	376	143	60	29	-	-	280	84	35	17	-	-
28 30	1099	549	303	162	-	-	814	410	178	95	-	-
38 24	1094	541	233	122	-	-	812	317	136	72	-	-
38 40	2609	1308	867	523	92	-	1927	979	559	307	54	-
40 60	7019	3537	2349	1748	467	117	5157	2643	1758	1272	274	69
40 80	11311	5733	3815	2844	1080	359	8246	4274	2852	2128	634	211
38 48 H-Profile	3100	1559	1032	753	139	-	2280	1165	772	442	82	-
38 80 H-Profile	7834	3977	2646	1971	741	235	5696	2962	1977	1475	435	138
40 120 H-Profile	22447	11542	7711	5765	2785	1353	16040	8554	5749	4307	2026	794

Profile	 L [m]						 L [m]					
	0.5	1	1.5	2	4	6	0.5	1	1.5	2	4	6
27 18	187	60	25	12	-	-	156	47	20	-	-	-
28 30	544	274	128	68	-	-	451	228	100	54	-	-
38 24	542	228	98	52	-	-	450	179	77	41	-	-
38 40	1287	652	401	220	39	-	1067	542	315	173	30	-
40 60	3444	1760	1172	873	197	49	2848	1464	976	717	154	39
40 80	5508	2847	1901	1420	455	151	4541	2365	1582	1182	357	119
38 48 H-Profile	1523	776	515	317	59	-	1260	645	429	249	46	-
38 80 H-Profile	3804	1973	1318	984	312	99	3133	1639	1097	819	245	78
40 120 H-Profile	10711	5697	3833	2873	1391	570	8763	4723	3186	2391	1141	447

### Note:

- The determined loads apply for static loads. Calculation based on Eurocode (EC3).
- The safety coefficient = 1.54 takes into account the partial and combination coefficients as well as the safety factor of the material.
- For the given values, the permissible steel stress and the maximum permissible deflection L/200 are not exceeded, taking the deadweight into consideration.