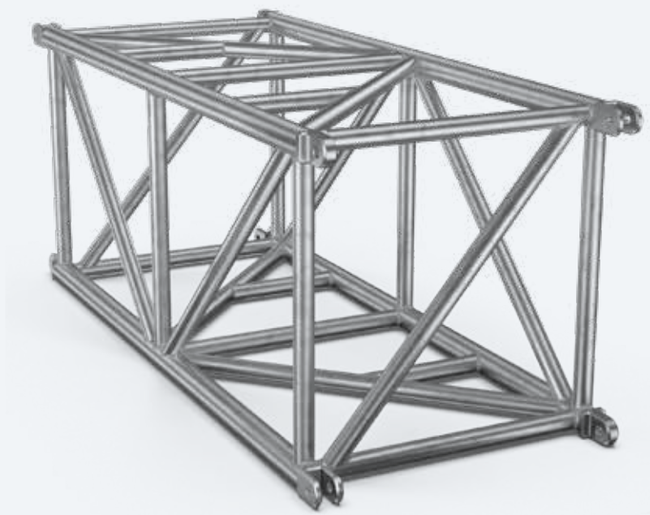
FORK TRUSS
QL85A



Square section High Load aluminium truss with 85 cm long sides.

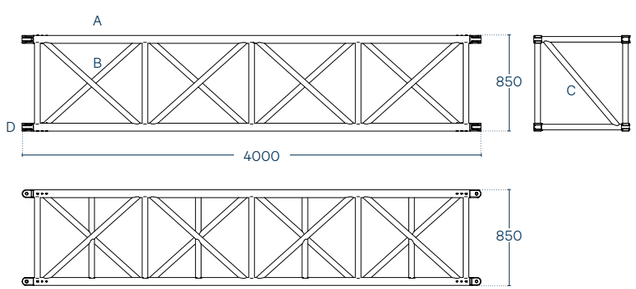
It is provided with steel fork connections and Ø 70 x 5 mm chords. Thanks to its elevated moment of inertia and resistance of its connections, it is mainly used in the composition of towers.

For further information, please refer to the LITEC Towers Catalogue, Maxitower MT85 section.

LINEAR ELEMENTS

Code	W × H × D (cm)	kg	Code	W × H × D (cm)	kg
QL85200A	85 × 85 × 200	83.6	QL85300AB	85 × 85 × 300	105.2
QL85300A	85 × 85 × 300	105.2			

Chords A	Diagonals B	Braces C	Ends D	Connection systems
Extruded tube Ø 70 × 5 mm EN AW – 6082 T6	Extruded tube Ø 50 × 4 mm EN AW – 6082 T6	Extruded tube Ø 50 × 4 mm EN AW – 6082 T6	Steel forks connector EN AW-6082 T6	KHLP: cylindrical pin + safety R-clip



Load table / Fork connection

	Unif. distributed load			Centre point load			Third point load			Quarter point load			Fifth point load		
span	Point load	Full load	Central deflection	Point load	Full load	Central deflection	Point load	Full load	Central deflection	Point load	Full load	Central deflection	Point load	Full load	Central deflection
[m]	[kg/m]	[kg]	mm	[kg]	[kg]	mm	[kg]	[kg]	mm	[kg]	[kg]	mm	[kg]	[kg]	mm
5	1072	5362	2	5362	5362	3	2681	5362	3	1787	5362	3	1340	5362	2
6	888	5329	4	5329	5329	6	2664	5329	5	1776	5329	4	1332	5329	4
7	757	5296	6	5089	5089	8	2648	5296	8	1765	5296	7	1324	5296	7
8	658	5263	8	4681	4681	12	2631	5263	11	1754	5263	10	1316	5263	10
9	581	5230	12	4329	4329	15	2615	5230	16	1743	5230	15	1307	5230	14
10	520	5197	16	4021	4021	20	2565	5130	22	1732	5197	20	1299	5197	19
11	469	5164	22	3665	3665	24	2413	4826	27	1721	5164	27	1291	5164	26
12	428	5131	28	3366	3366	29	2275	4551	34	1683	5049	35	1283	5131	34
13	392	5098	36	3098	3098	35	2150	4301	41	1549	4647	41	1274	5098	43
14	362	5064	45	2867	2867	41	2036	4072	49	1433	4300	48	1194	4778	51
15	335	5031	55	2643	2643	47	1931	3862	57	1321	3964	55	1101	4405	58
16	306	4890	66	2445	2445	54	1834	3667	67	1222	3667	63	1019	4075	66
17	267	4537	74	2268	2268	61	1701	3403	76	1134	3403	71	945	3781	75
18	234	4219	83	2110	2110	69	1582	3165	85	1055	3165	80	879	3516	84
19	207	3932	93	1966	1966	77	1475	2949	95	983	2949	89	819	3277	94
20	184	3670	103	1835	1835	86	1376	2753	105	918	2753	99	765	3059	104
21	163	3430	114	1715	1715	95	1286	2573	116	858	2573	109	715	2859	115
22	146	3209	125	1605	1605	105	1203	2407	127	802	2407	120	669	2674	126
23	131	3004	137	1502	1502	116	1127	2253	139	751	2253	132	626	2504	138
24	117	2814	150	1407	1407	127	1055	2111	152	704	2111	144	586	2345	150
25	105	2636	163	1318	1318	138	989	1977	165	659	1977	157	549	2197	164
26	95	2470	176	1235	1235	151	926	1852	179	617	1852	170	515	2058	177
27	86	2313	190	1157	1157	164	867	1735	193	578	1735	184	482	1928	191
28	77	2165	205	1083	1083	177	812	1624	208	541	1624	198	451	1804	206
29	70	2025	221	1013	1013	192	759	1519	224	506	1519	213	422	1688	222
30	63	1893	237	946	946	207	710	1419	240	473	1419	229	394	1577	238

Cantilever load table / Fork connection

	Unif. distributed load			Centre point load	
span					
[m]	[kg/m]	[kg]	mm	[kg]	mm
0.5	5494	2747	0	2747	0
1	2730	2730	0	2730	0
1.5	1809	2714	0	2714	1
2.0	1349	2697	1	2697	2
2.5	1072	2681	1	2681	3
3.0	888	2664	2	2664	5
3.5	757	2648	3	2496	8
4.0	658	2631	5	2289	11
4.5	581	2615	7	2111	15
5.0	520	2598	10	1936	19
5.5	469	2582	13	1744	23
6.0	428	2565	17	1583	27

Axial load table

span		
[m]	[kg]	[kg]
10	24548	12417
12	23038	9508
14	21323	7358
16	19490	
18	17636	
20	15842	
22	14165	
24	12631	
26	11249	

Load table has been prepared in accordance with EN 1999-1-1. When calculating the allowable loads it is assumed that the load is suspended from the bottom chord and the truss is supported from the top chord at each end.

The values shown in the table are the allowable static loads that can be applied the the truss. This is the live load or the payload.

The self weight of the truss has been taken into account when calculating the values in the table. It should be noted that this are idealised loading conditions and the User shall re-analyze the truss for the loading conditions which prevail for the application being considered.