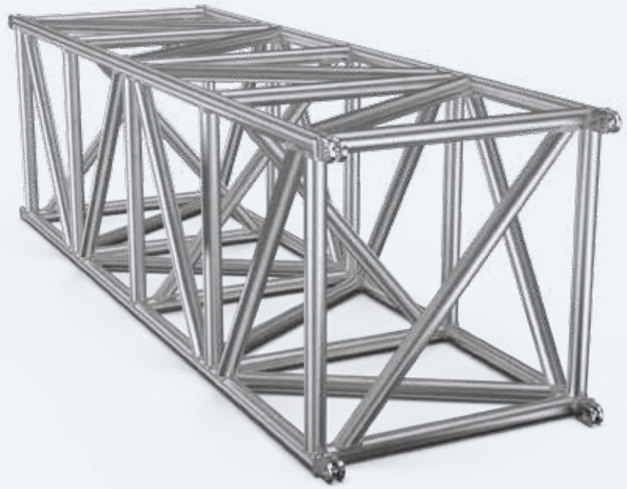
FORK TRUSS
QL76A

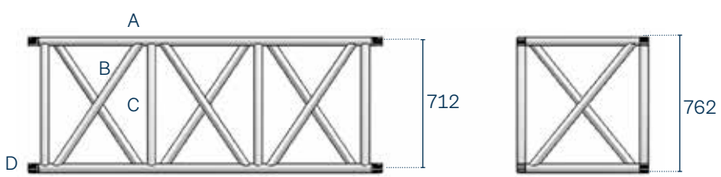


Square section High Load aluminium truss with 76 cm long sides.

It is provided with steel fork connections and Ø 50 x 4 mm chords. Thanks to its elevated moment of inertia and resistance of its connections, it is mainly used in the composition of towers (Maxitower 76).

LINEAR ELEMENTS					
Code	W × H × D (cm)	kg	Code	W × H × D (cm)	kg
QL76200A	76.2 × 76.2 × 200	56.70	QL76250A	76.2 × 76.2 × 250	68.60

Chords A	Diagonals B	Braces C	Ends D	Connection systems
Extruded tube Ø 50 × 4 mm EN AW – 6082 T6	Extruded tube Ø 50 × 3 mm EN AW – 6082 T6	Extruded tube Ø 50 × 4 mm EN AW – 6082 T6	Aluminium 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	1141	5705	5	3891	3891	5	2201	4401	5	1701	5104	5	1414	5654	5
6	947	5680	8	3388	3388	8	1972	3945	7	1544	4631	8	1295	5179	9
7	808	5654	12	2994	2994	11	1782	3565	11	1411	4233	12	1193	4771	13
8	704	5628	19	2677	2677	14	1625	3250	15	1298	3894	16	1070	4281	17
9	563	5065	24	2414	2414	19	1490	2981	20	1200	3599	22	968	3870	22
10	451	4506	30	2194	2194	24	1374	2747	25	1112	3337	28	881	3526	28
11	368	4048	36	2005	2005	29	1271	2542	31	1012	3036	34	807	3230	35
12	305	3662	43	1831	1831	35	1180	2360	38	916	2747	41	743	2972	42
13	256	3330	51	1665	1665	41	1099	2197	46	832	2497	48	686	2745	50
14	217	3041	59	1521	1521	48	1025	2050	54	760	2281	56	634	2535	59
15	186	2789	67	1395	1395	56	958	1917	64	697	2092	65	581	2324	68
16	160	2565	77	1283	1283	64	897	1795	74	641	1924	74	534	2138	77
17	139	2364	87	1182	1182	73	841	1683	85	591	1773	83	492	1970	88
18	121	2182	98	1091	1091	82	789	1578	97	546	1637	94	455	1819	98
19	106	2017	109	1009	1009	92	741	1482	109	504	1513	105	420	1681	110
20	93	1866	121	933	933	103	696	1392	123	467	1400	117	389	1555	122
21	82	1727	134	864	864	114	648	1295	136	432	1295	129	360	1439	135
22	73	1598	147	799	799	126	599	1199	150	400	1199	142	333	1332	148
23	64	1479	161	739	739	139	554	1109	164	370	1109	156	308	1232	162
24	57	1367	176	683	683	153	512	1025	179	342	1025	170	285	1139	177
25	50	1261	192	631	631	167	473	946	194	315	946	186	263	1051	193
26	45	1162	208	581	581	183	436	872	211	291	872	202	242	969	209
27	40	1069	225	534	534	199	401	802	228	267	802	218	223	891	226
28	35	980	243	490	490	216	368	735	246	245	735	236	204	817	244
29	31	896	261	448	448	234	336	672	264	224	672	254	187	747	262
30	27	815	280	408	408	253	306	612	284	204	612	274	170	680	282

Cantilever load table / Fork connection

	Unif. distributed load			Centre point load	
span					
[m]	[kg/m]	[kg]	mm	[kg]	mm
0.5	5808	2904	0	2904	0
1	2891	2891	0	2891	0
1.5	1919	2878	1	2733	1
2.0	1433	2866	1	2263	3
2.5	1141	2853	3	1927	5
3.0	894	2682	4	1675	7
3.5	691	2417	6	1477	10
4.0	549	2194	9	1317	14
4.5	445	2004	12	1186	18
5.0	368	1840	15	1075	22
5.5	308	1696	18	980	28
6.0	261	1569	22	898	33

Axial load table

span		
[m]	[kg]	[kg]
5	16788	13954
10	15087	6692
15	12178	
20	8914	
25	6307	

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.

Connections

The fork connection is secured by a 20 mm steel pin. In specific cases, bolts with nuts or bolts with lifting eyes can be used. A range of adapters with different fork orientations is also available to optimise special configurations.



KHLP

20 mm Cylindrical pin
+ 3 mm safety R-clip



KHLB

M20 screw bolt
+ spring washer



KHLD

M20 screw nut
+ spring washer



KHLF

Threaded female fork
connector + spring washer



KHLG

M20 Lifting Eye



KHLM

Male fork
connector complete



KHL180A

180° double fork aluminum
connector



KHL180S

180° double fork
steel connector



KHL90LA

90° double fork
alum. connector, left



KHL90LS

90° double fork steel
connector, left



KHL90RA

90° double fork alum.
connector, right



KHL90RS

90° double fork steel
connector, right

Accessories



MTC76F

MT76 frame with bolts



MTC76D

MT76 frame with wheels



FL76071M2HS

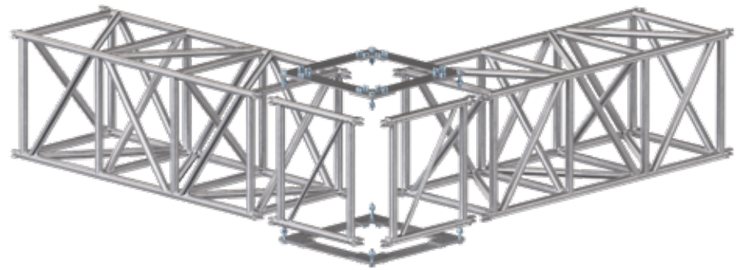
FL76 cm 71.2
+ motor support



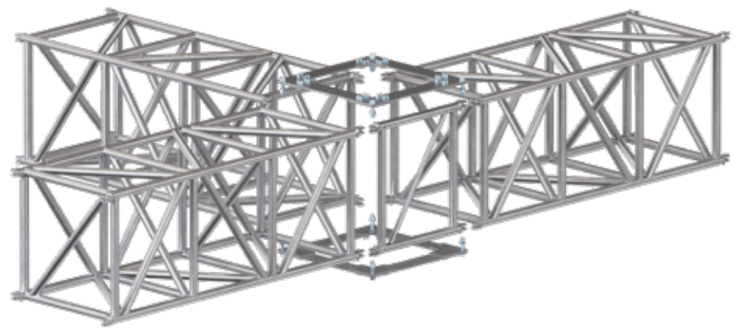
FL76071M2P

Gate - HL76 Flat truss
L = 71.2 cm

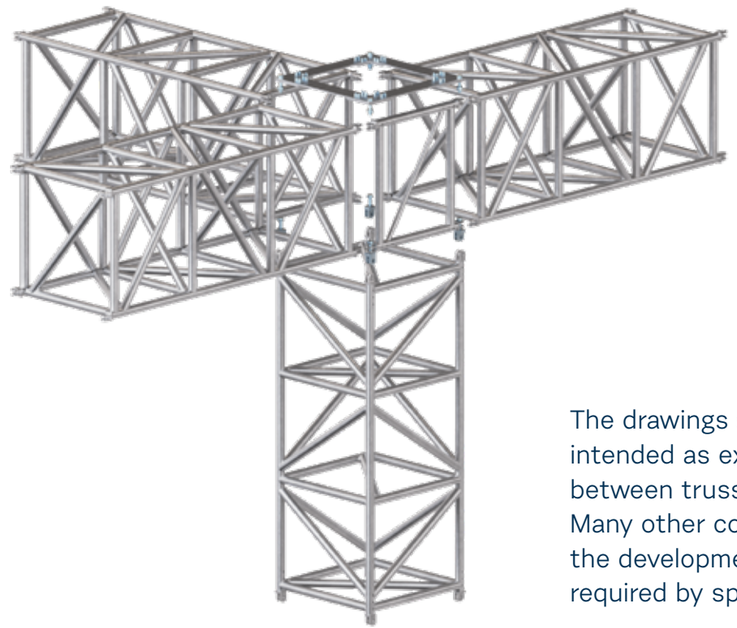
Corner Configuration Examples



2-Way Corner 90°
2 FL76071M2P
2 MTC76F



3-Way Tee
1 FL76071M2P
2 MTC76C



4-Way Corner
1 FL76071M2P
1 MTC76C
4 KHLF
4 KHLB

The drawings shown on these pages are intended as examples of possible configurations between trusses and selected accessories. Many other combinations are possible, including the development of custom accessories when required by specific project needs.